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ACKNOWLEDGEMENT

Contributions of the following Dayton Laboratory personnel to this project are gratefully acknowledged:

Analyses: G. Thomas
G. Pitts

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C11276

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C11277

All samples had 50 μ L of dodecane keeper added to them and then they were concentrated under a gentle stream of nitrogen and submitted for GC/MS analysis. The GC/MS analyses were conducted on a Hewlett/Packard 5987 GC/MS instrument. The analysis was conducted using a 60 m SP2330 capillary column. The mass spectrometer was operated in the selected ion monitoring mode analyzing for ions characteristic of both the native (unlabeled) 2,3,7,8-TCDD (m/z 257, 320, 322), chlorine-37 labeled 2,3,7,8-TCDD (m/z 328) and carbon-13 labeled 2,3,7,8-TCDD (m/z 332, 334).

STANDARDS

Standard solutions were prepared from standards that had been cross validated with a standard provided as a check sample by the EPA. Concentration of the internal standards conformed to the levels specified by the method.

RESULTS

The results of the analyses of the samples are given in table 1. The tables also give all pertinent QA/QC information. It should be noted that small amounts of sample may lead to erroneously high or low concentrations due to possible inhomogeneity of the sample.

*ie
see next
page*

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TCDD DATA REPORT
MONSANTO COMPANY, DAYTON LABORATORY

TABLE 1a. SWEEPINGS

GC COLUMN: SP2330
RF NATIVE: 1.000
RF SURROGATE: 1.680

EXTR MTHD	CLEAN	GRAMS		PPB TCDD	D.L.	ANALYTICAL		320		332		%		320		322		257		328+		332		334		N
		WET WGHT				DATE	TIME	322	334	ACC	320	322	334	320	322	257	328+	332	334							
DOOR	J	BC	3.570	4.68	—	9/7	0503	.84	.86	100.	18882.	22496.	8719.	41604.	28586.	30253.										
DOORH	J	BC	5.910	15.55	—	9/7	0523	.76	.74	84.	83727.	110660.	65853.	29751.	22426.	30462.										
REEN	J	BC	1.700	1.99	—	9/7	0543	.81	.87	105.	2709.	3358.	3246.	31486.	20903.	24016.										
IL	J	BC	2.010	3.87	—	9/7	0603	.80	.83	64.	10577.	13269.	6672.	32783.	34763.	41898.										
	J	BC	4.580	ND	.11	9/7	0623	****	.74	63.	0.	0.	0.	30429.	30539.	41192.	X									
R	J	BC	6.030	ND	.08	9/7	0703	****	.67	103.	0.	0.	0.	54167.	31465.	46919.	X									
DOOR	J	BC	3.940	8.24	—	9/7	0743	.75	.76	110.	84155.	111929.	75663.	111576.	65192.	85792.										
M	J	BC	2.800	13.56	—	9/7	0803	.69	.79	118.	112218.	161839.	116064.	143014.	79786.	100672.										
AIN	J	BC	4.360	12.51	—	9/7	0823	.73	.69	74.	99006.	135442.	84807.	53068.	44015.	63417.										
WNER	J	BC	810	97.74	—	9/7	0903	.67	.81	128.	97684.	146866.	67821.	66480.	34523.	42703.										
LV RF	J	BC	5.820	6.72	—	9/7	0922	.73	.72	84.	88864.	121024.	74700.	75374.	56048.	78200.										
WNER	J	BC	1.120	3.05	—	9/7	0942	.80	.69	65.	8451.	10520.	10379.	60689.	56861.	81910.										
ST CO	J	BC	1.260	ND	.29	9/7	1246	****	.73	75.	0.	0.	0.	51944.	43098.	59336.	X									
	J	BC	5.000	ND	.05	9/7	1002	****	.84	90.	0.	0.	0.	88063.	66335.	78594.	X									

ED FOR CONTRIBUTION BY NATIVE TCDD (SUBTRACT .009 OF M/E 322)

ES:
X: ISOTOPE RATIO OUT OF ACCEPTABLE RANGE
Y: % ACCURACY OUT OF ACCEPTABLE RANGE

0 BLANK
AL SCAN
ATE WEIGHING AND WORKUP
DATE (INTERLAB)
BLANK
L: NATIVE TCDD SPIKES
ND=NOT DETECTED
DL=DETECTION LIMIT
J=JAR

=TCDD94

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TCDD DATA REPORT
MONSANTO COMPANY, DAYTON LABORATORY

TABLE 1a. SWEEPINGS (Continued)

GC COLUMN: SP2330
RF NATIVE: 1.043
RF SURROGATE: .917

SAMPLE N BER	EXTR MTHD	CLEAN	GRAMS	PPB TCDD	D.L.	ANALYTICAL DATE	TIME	320		332		334		320	322	257	328+	332	334	N
			WET WGHT					% ACC	% ACC	% ACC										
BASE OF STAIRS	J	BCD	1.180	11.82	—	9/10	0844	.72	.84	131.	5514.	7629.	4749.	10773.	10345.	12251.				

+ CORRECTED FOR CONTRIBUTION BY NATIVE TCDD (SUBTRACT .009 OF M/E 322)

NOTE CODES:

X: ISOTOPE RATIO OUT OF ACCEPTABLE RANGE
Y: % ACCURACY OUT OF ACCEPTABLE RANGE

MB=METHOD BLANK
PARTIAL SCAN
SEPARATE WEIGHING AND WORKUP
D=DUPLICATE (INTERLAB)
FB=FIELD BLANK

LH=NATIVE TCDD SPIKES
ND=NOT DETECTED
DL=DETECTION LIMIT
J=JAR

FILENAME =TCDD96

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C11281

TCDD DATA REPORT
Monsanto Company, Dayton Laboratory

TABLE 1b. WIPES

GC COLUMN: SP2330
RF NATIVE: 1.000
RF SURROGATE: 1.680

SAMPLE NUMBER	EXTR MTHD	CLEAN	NG TCDD	D.L.	ANALYTICAL		320		322		SURR Z ACC		320	322	257	328+	332	334	N
					DATE	TIME	322	334											
INSIDE N WALL	J	BC	ND	.40	9/7	1022	****	.71	66.				0.	0.	0.	45008.	40353.	56919.	Y
WASSTACKER	J	BC	ND	.49	9/7	1306	****	.74	72.				0.	0.	0.	39667.	33584.	45152.	Y
EXTER	J	BC	ND	.42	9/7	1326	****	.76	74.				0.	0.	0.	48299.	40191.	53067.	Y
DRYENT VAC PMP	J	BC	ND	.44	9/7	1346	****	.72	73.				0.	0.	0.	45483.	37149.	51649.	Y
BLANK	J	BC	ND	.52	9/7	1406	****	.69	82.				0.	0.	0.	42785.	30583.	44110.	Y
	J	BC	ND	.51	9/7	1451	****	.80	93.				0.	0.	0.	49443.	33924.	42316.	Y
HIGH SPIKE	J	BC	18.15	—	9/7	1511	.72	.70	88.	18911.	26432.	17323.	39735.	26615.	38083.				
LOW SPIKE	J	BC	6.56	—	9/7	1531	.82	.83	103.	6954.	8507.	7487.	43942.	27661.	33383.				

CORRECTED FOR CONTRIBUTION BY NATIVE TCDD (SUBTRACT .009 OF M/E 322)

NOTE CODES:

Y: ISOTOPE RATIO OUT OF ACCEPTABLE RANGE

X: % ACCURACY OUT OF ACCEPTABLE RANGE

MB=METHOD BLANK

PS=PARTIAL SCAN

SS=SEPARATE WEIGHING AND WORKUP

D=DUPLICATE (INTERLARI)

FB=FIELD BLANK

LH=NATIVE TCDD SPIKES

ND=NOT DETECTED

DL=DETECTION LIMIT

J=JAW

FILENAME =TCDD95

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C11282

TABLE 2. CALIBRATION SUMMARY

$\mu\text{g/Kg}$ NATIVE TCDD	RRF (NATIVE)	DATE	TIME	RRF SURROGATE
0.534	-	9/7	0423	-
5.34	1.117	9/7	0443	-
1.335	-	9/7	0843	1.712
13.35	0.917	9/7	1042	-
133.5	0.920	9/7	1102	-
0.534	1.000	9/7	1205	-
5.34	1.045	9/7	1224	-
53.4	-	9/7	1429	1.808
1.335	-	9/7	1554	1.520
0.534	1.145	9/10	2144	0.906
5.34	1.012	9/10	2204	0.919
53.4	1.061	9/11	0005	0.848
1.335	0.999	9/11	0205	0.896
13.35	0.993	9/10	1527	0.900
133.5	1.045	9/10	1547	0.970

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C11283

TABLE 3. QUALITY CONTROL SUMMARY

ITEM	#DATA POINTS	MEAN $\pm$ S.D.
SURROGATE	23	88.9 $\pm$ 20.3
ACCURACY	4	*

* Not technically correct to report recoveries for internal standard calculated results.

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C11284

DOCUMENTATION INVENTORY FORM

Monsanto Research Corporation
Dayton Laboratory

I. Sample Information

Sample Identification: NITRO SAMPLES

Number of Samples: 16

Analyte: 2,3,7,8-TCDD

Matrix: SWEEPINGS, WIPES

Method: DETERMINATION OF 2,3,7,8-TCDD IN SOIL AND SEDIMENT

II. Documentation Control

	<u>Copies Attached</u>	<u>Initials</u>
(a) Sample Receipt Form	✓	GT
(b) Internal Sample Tracking Form	—	GT
(c) Sample Tags	—	GT
(d) Airbill (Number _____)	—	GT
(e) Chain of Custody Form	✓	GT
(f) Analysis Request (Log Number 184090501)	✓	GT
(g) Extraction/Preparation notebook pages (NBP) 2273249	✓	GT
(h) Analysis NBP 2273250, 51, 52	✓	GT
Instrument Logbook pages 156674, 75	✓	GT
Computer Data Files hard copy output	✓	GT
Chromatograms	✓	GT
(i) Data Reduction NBP SEE ANALYSIS NBP	✓	GT
(j) Final Report	✓	GT
(k) Additional Documentation	✓	GT
(note immediately upon acquisition)		
STANDARDS PREPARATION NBP		
2465473, 86, 87	File Complete	Gary Thomas (signature)

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06011

17 SEPT 84
(date)

C11285

Sample Receipt Form

Monsanto Research Corporation
Dayton Laboratory

Customer Identification: NITRO
MRC Log Number: 184-09-05-01
Airbill Number: DELIVERY BY COURIER
Date: 4 SEPT 84

Sample Receipt Information:

				Initial
(a) Shipping Containers	<u>intact</u>	damaged (describe below)	No. <u>1</u>	<u>GT</u>
(b) Custody Seals	present	<u>absent</u> (describe sealing below)	intact	<u>GT</u>
(c) Chain of Custody Forms	<u>present</u>	absent	No. <u>2</u>	<u>GT</u>
(d) Sample Tags	<u>present</u>	absent	No. <u>16</u>	<u>GT</u>
(e) Sample Containers	<u>intact</u>	damaged (describe below)	No. <u>16</u>	<u>GT</u>
(f) Agreement of Sample Documentation	<u>yes</u>	no (describe discrepancies)		<u>—</u>

Additional Description (if sample numbers not listed on chain of custody form, list here and contact SMO).

b) SEALED WITH PACKING TAPE, NO APPARENT TAMPERING

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Gary Thomas
(Signature)

UCC12

C11286

SAMPLE IDENTIFICATION LOG

MRC Job No. _____

Customer Representative Keith Miller

Contract No. _____

MRC Contract Manager _____

Plant Name or Code MCC-100 - NISRA

Team Leader _____

Sampling Location	Run Number	Date Sampled	Type of Sample & No. of Containers	Analysis Required	Sample recovered By (Initials) and Comments
<u>BUCK</u>				2378	
B-79 Dry End Bagger				2378	KSM
B-79 Dry End East Door				2378	KSM
B-79 Middle I-Beam				2378	KSM
B-79 Middle Section Dry Valve Roof				2378	KSM
B-79 Dry End 2nd Level Screen Box Top				2378	KSM
B-79 Middle East Drain				2378	KSM
B-79 Dry End Back of Stairs				2378	KSM
B-79 Middle Section South Door					KSM
B-79 Middle Section NW Corner					KSM
B-79 Thiofide Sample					KSM
B-79 Inside Dust Collector					KSM
<u>WIPE</u>					
BLANK					KSM
79-Bagger					KSM
79-Front TRANSACKER					KSM
79-Inside Filter North Wall					KSM
79-Dry End Vacuum Pump					KSM
<u>SAMPLES TAKEN 9-4-84</u>					
<u>CONFIDENTIAL</u>					
<u>SUBJECT TO PROTECTIVE ORDER</u>					

CHAIN OF CUSTODY RECORD

Rd. 88255

MRC JOB NUMBER _____

CUSTOMER REPRESENTATIVE K.S. Miller

CONTRACT NUMBER _____

MRC CONTRACT MANAGER _____

PLANT NAME OR CODE Monsanto - VITRO

MRC TEAM LEADER _____

(Specific information on samples is available on attached "Sample Identification Log")

Signatures		Date	Time	Remarks
Team Leader Verification of Collected Samples:				
Relinquished by: <u>K.S. Miller</u>	Received by:	<u>9/4/84</u>	<u>12:00 pm</u>	
Relinquished by:	Received by: <u>Gary Thomas</u>	<u>9/4/84</u>	<u>4:30 PM</u>	
Logged-in-by:				
Received for Analysis by:				
Method of Shipment: <u>Carrier</u>		Number of Containers: <u>1 cooler - 16 Samples</u>		

Special Instructions (Sample preservation, security, delivery to, etc.)

Deliver to Monsanto Research Corp.Dayton LNB1515 Nicholas RdBox 8 Dayton, OHDayton OH 45407

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C11288

ANALYSIS REQUEST		DATE 4 SEPT 84	LOG NO. 184090501	REPORT RESULTS TO: FILES AKULH MEE IVORY P. SHERMAN
ISANTO RESEARCH CORPORATION DAYTON LABORATORY		REQUESTER** NITRO/TOWNSEND	CHARGE NO.** 484.423 29	
SAMPLE DESCRIPTION	NUMBER OF BOTTLES: 16	NUMBER OF SAMPLES: 16		
B-79 DRY END BAGGER		B-79 THIOFIDE SAMPLE		ANALYSIS REQUEST FILES IVORY SHERMAN THOMAS NOBLE
B-79 DRY END EAST DOOR		B-79 INSIDE DUST COLLECTOR		
B-79 MIDDLE I-BEAM		BLANK WIPE		
B-79 MIDDLE SECTION DRY VALVE ROOF		79-BAGGER		
B-79 DRY END 2ND LEVEL SCREEN BOX TOP		79-FRONT TRANSSTACKER		
B-79 MIDDLE EAST DRAIN		79-INSIDE FILTER		
B-79 DRY END BASE OF STAIRS		NORTH WALL		
B-79 MIDDLE SECTION SOUTH DOOR		79 DRY END VACUUM PUMP		
B-79 MIDDLE SECTION NW CORNER				
RECORDED BY:				

REQUIRED ANALYSIS**

2,3,7,8-TCDD

KNOWN HEALTH HAZARD PRESENTED BY SAMPLE: ** REFERENCE TO PREVIOUS WORK (REQUEST #, JOURNAL, ETC.) ** COMPLETION DATE _____ TIME ALLOTTED FOR ANALYSES <table style="width: 100%;"> <tr> <td style="width: 33%;">ANALYST</td> <td style="width: 33%;">HOURS</td> <td style="width: 33%;">INST. TIME</td> </tr> <tr> <td colspan="3" style="text-align: center; font-size: 2em; font-weight: bold;">CONFIDENTIAL</td> </tr> <tr> <td colspan="3" style="text-align: center;">SUBJECT TO PROTECTIVE ORDER</td> </tr> </table>	ANALYST	HOURS	INST. TIME	CONFIDENTIAL			SUBJECT TO PROTECTIVE ORDER			ANALYTICAL TECHNIQUE ** <table style="width: 100%;"> <tr> <td>☐ GAS CHROMATOGRAPHY</td> <td>☐ NMR</td> </tr> <tr> <td>☐ ULTRAVIOLET</td> <td>☐ HPLC</td> </tr> <tr> <td>☐ VISIBLE</td> <td>☐ XRD</td> </tr> <tr> <td>☐ INFRARED</td> <td>☐ ICP</td> </tr> <tr> <td>☐ EMISSION</td> <td>☐ ATOMIC ABSORPTION</td> </tr> <tr> <td>☐ EDAX XRF</td> <td>☐ MASS SPEC</td> </tr> <tr> <td>☐ MICROSCOPY</td> <td>☒ GC/MS</td> </tr> <tr> <td>☐ OTHER _____</td> <td>☐ AUTO ANALYZER</td> </tr> </table> QUAL. _____ SEMIQUANT. _____ QUANT. _____ REQUIRED QA/QC 611289	☐ GAS CHROMATOGRAPHY	☐ NMR	☐ ULTRAVIOLET	☐ HPLC	☐ VISIBLE	☐ XRD	☐ INFRARED	☐ ICP	☐ EMISSION	☐ ATOMIC ABSORPTION	☐ EDAX XRF	☐ MASS SPEC	☐ MICROSCOPY	☒ GC/MS	☐ OTHER _____	☐ AUTO ANALYZER
ANALYST	HOURS	INST. TIME																								
CONFIDENTIAL																										
SUBJECT TO PROTECTIVE ORDER																										
☐ GAS CHROMATOGRAPHY	☐ NMR																									
☐ ULTRAVIOLET	☐ HPLC																									
☐ VISIBLE	☐ XRD																									
☐ INFRARED	☐ ICP																									
☐ EMISSION	☐ ATOMIC ABSORPTION																									
☐ EDAX XRF	☐ MASS SPEC																									
☐ MICROSCOPY	☒ GC/MS																									
☐ OTHER _____	☐ AUTO ANALYZER																									

SAMPLE DISPOSAL: AFTER REPORT COMPLETE

☐ DISCARD
 ☐ RETURN TO C15 HOLD FOR ☐ 30 DAYS
 ☐ 60 DAYS
 07

SUBJECT

Alto 1.84090501

JOB NO.

487.42329

PREPARED BY (SIGNATURE)

Gary Thomas

DATE

9/2/84

Date 9/5/84
 Log No. _____
 Job No. _____

Data Sheet

weighed by

C Konstantinova

spiked by

C Konstantinova

Code No.				Amt. to weigh	Actual wt.	Amt of Native Spiked	C13 (m)	C1 (m)	Comments
UT 2623	8-75 Dried Fruit/bean				3.57				USED ALL SAMPLE
UT 2624	same	High Spike			5.91	200 µl			
UT 2625	8-75 Dried Fruit/bean				1.70				USED ALL SAMPLE
UT 2626	same	Low Sp. Ke			2.01	20 µl			
UT 2627	8-75 Dried Fruit/bean				4.58				log some amount due to weighing
UT 2628	same	replicate			6.03				unplanned further USED ALL SAMPLE
UT 2629	8-75 Dried Fruit/bean				1.15				
UT 2630	8-75 Dried Fruit/bean				3.94				USED ALL SAMPLE
UT 2631	8-75 Dried Fruit/bean				2.80				USED ALL SAMPLE
UT 2632	8-75 Dried Fruit/bean				4.36				USED ALL SAMPLE
UT 2633	8-75 Dried Fruit/bean				0.81				USED ALL SAMPLE
UT 2634	8-75 Dried Fruit/bean				5.82				USED ALL SAMPLE
UT 2635	8-75 Dried Fruit/bean				1.12				USED ALL SAMPLE
UT 2636	8-75 Dried Fruit/bean				-				
UT 2637	8-75 Dried Fruit/bean	High			-				
UT 2638	8-75 Dried Fruit/bean				1.20				USED ALL SAMPLE
UT 2639	8-75 Dried Fruit/bean	Low							
UT 2640	8-75 Dried Fruit/bean	High							
UT 2641	8-75 Dried Fruit/bean	High							1.50 samples spiked
UT 2642	8-75 Dried Fruit/bean	High							with 20 µl of 10% HCl
UT 2643	8-75 Dried Fruit/bean	High							used 50 µl
UT 2644	8-75 Dried Fruit/bean	High Spike				200 µl			
UT 2645	8-75 Dried Fruit/bean	Low Spike				20 µl			

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C11290

06016

READ AND UNDERSTOOD BY

DATE

MONSANTO COMPANY

Nº 2279

SUBJECT

Nitro results 184090501

JOB NO.

484.42329

PREPARED BY (SIGNATURE)

Gary Thomas

TCD DATA REPORT
MONSANTO COMPANY - BAYTON LABORATORYGC COLUMN: SP230
OF NATIVE: 1.000
OF SURROGATE: 1.600

SAMPLE NUMBER	ELEM ANAL	CLEAN	RE TCD	D.L.	ANALYTICAL DATE	TIME	SUM		%	320	322	297	328	332	334	N
							320	322								
RESIDUE IN WALL	J	W	NO	.40	9/7	1022	0000	.71	66.	0.	0.	0.	45000.	40051.	56919.	1
THINSTACKER	J	W	NO	.49	9/7	1306	0000	.74	72.	0.	0.	0.	39667.	32584.	45152.	1
BAGGER	J	W	NO	.62	9/7	1326	0000	.74	74.	0.	0.	0.	40299.	40191.	53067.	1
DIFFER. WGT. PIP	J	W	NO	.64	9/7	1346	0000	.72	73.	0.	0.	0.	45483.	37149.	51449.	1
BLANK	J	W	NO	.57	9/7	1406	0000	.69	82.	0.	0.	0.	42781.	30583.	44110.	1
NO	J	W	NO	.51	9/7	1451	0000	.80	93.	0.	0.	0.	49648.	33924.	42716.	1
HTON SPIKE	J	W	NO	18.15	9/7	1511	.72	.70	88.	18911.	26472.	17023.	39735.	26415.	35940.	
LOW SPIKE	J	W	NO	6.56	9/7	1531	.82	.83	103.	4954.	8507.	7487.	43942.	27441.	33083.	

* CORRECTED FOR CONTRIBUTION BY NATIVE TCD (SUBTRACT .009 OF N/E 322)

NOTE CODES:

N: ISOTOPE RATIO OUT OF ACCEPTABLE RANGE
Y: % ACCURACY OUT OF ACCEPTABLE RANGENON-METHOD BLANK
P-PORTAL SEAM
IN-SEPARATE WEIGHING AND MONOP
DUPLICATE (INTERLAN)
FIELD BLANKL-IMMUTATIVE TCD SPIKES
N-REACT DETECTED
DL-DETECTION LIMIT
J-NO

FILENAME = TCD0001

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C

READ AND UNDERSTOOD BY

00017

MONSANTO COMPANY

Nº 2273252

SUBJECT

From Previous page

OS NO.

484.42329

PREPARED BY (SIGNATURE)

Gary Thomas

DATE

9/1/84

TCD DATA REPORT
MONSANTO COMPANY - BAYTEX LABORATORYGC COLUMN SP2300
REF. MATERIAL 1.043
REF. SUBSTRATE 1.007

SAMPLE NUMBER	CSTR ATMO	CSTR CLEAN	CSTR NET	PPB TCD	D.L.	ANALYTICAL DATE	TCD TYPE	SURF		320	322	257	328+	332	334	H
								ACC	ACC							
BASE OF STAIRS J	800	1.180	11.82	—	9/10	0844	.72	.04	131.	3314.	7629.	4749.	10773.	10045.	12251.	

* CORRECTED FOR CONTRIBUTION BY NATIVE TCD (SUBTRACT .004 OF AVE 322)

NOTE CODES:

Y: ISOTOPE RATIO OUT OF ACCEPTABLE RANGE
 Y: % ACCURACY OUT OF ACCEPTABLE RANGE

POSSIBLE BLANK
 INCOMPLETE SCAN
 INADEQUATE WEIGHING AND WORKUP
 DUPLICATE/INTERLAB
 FIELD BLANK

UNNATURAL TCD SPIKES
 NOT DETECTED
 DETECTION LIMIT
 J-100

FILENAME ATCD06

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C11293

READ AND UNDERSTOOD BY

DATE

00019

MONSANTO RESEARCH CORPORATION
DAYTON LABORATORY

SUBJECT _____ DATE _____ 19____ READ AND UNDERSTOOD BY ML
SIGNATURE _____ DATE _____ 19____
JOB NO. _____

MRC-DA
Nº 15667.

Date	Analyst	Job Number	Net Time	Time of Day	CRN	AR	7920 Disc Pock	FRN	Volume (ul)	Sample Identification	Comments	ALS Bottle Number	GC Conditions	Run Time	MS Conditions				
															Mult	Thres	ADC	Mass R	Del
6/24/84	GT	487-43329			01			282839	2	20.09/48/1.9	282839 GT, 502380		100-1/3/250	20					
								30		NOPELWE									
								1		12 Mix									
								2		10.68/18/1.9									
								3		1.068/18/1.9									
								4		07-3438									
								5		?									
								6		Y00									
								7		1									
								8		2									
								9		10.68/18/1.9									
								10		07-3438									
								11		4									
								12		5									
								13		20.09/18/1.9									
								14		20.09/18/1.9									
								15		20.09/18/1.9									
								16		20.09/18/1.9									
15/07/84	GT	487-43321			01			282847	2	20.09/18/1.9									
								17		20.09/18/1.9									
								18		20.09/18/1.9									
15/07/84	GT	487-43329			01			282850	2	20.09/18/1.9	282850 GT, 502380		100-1/3/250	200					
								1		12 Mix									
								2		10.68/18/1.9									
								3		1.068/18/1.9									
								4		07-3438									

Samples
re-run due
to poor
sensitivity

SUBJECT TO PROTECTIVE ORDER.

06020

MONSANTO RESEARCH CORPORATION
DAYTON LABORATORY

SUBJECT _____ DATE _____ 19 ____ READ AND UNDERSTOOD BY ME
SIGNATURE _____ DATE _____ 19 ____
JOB NO. _____

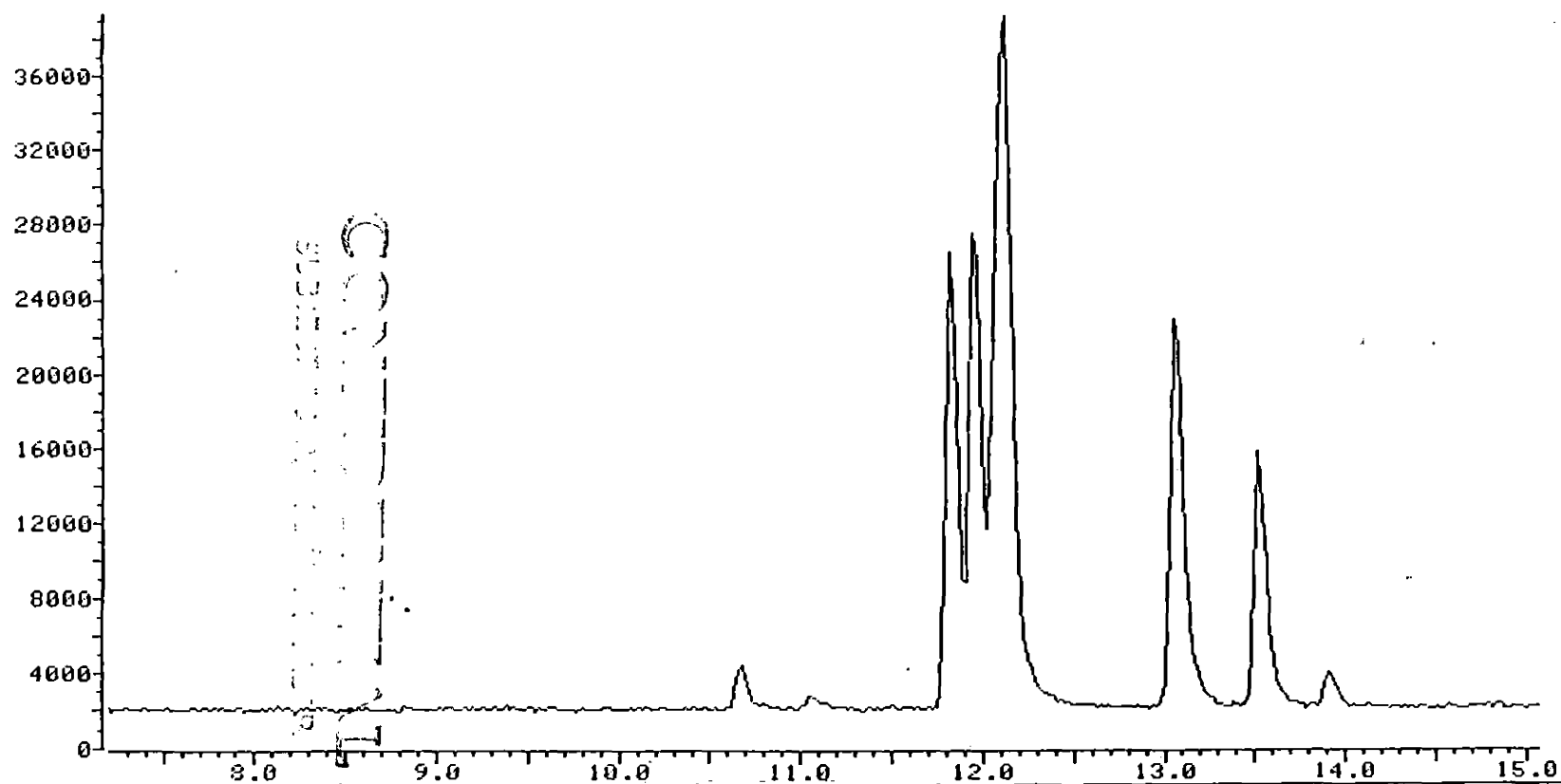
Date	Analyst	Job Number	Net Time	Time of Day	CRN	AR	7920 Disc Pack	FRN	Volume (L)	Sample Identification	Comments	ALS Bottle Number	GC Conditions	Run Time	MS Conditions			
															Mult	Thres	ADC	Mass R/D
10/27/84	GT	93172329			01			750379	2	10-2041	HAIRY GT 572310		200-1/5/250	200				
								79		10-2041			175-1/6/300	25				
								80		10-2041			175-1/6/300	25				
								81		10-2041			175-1/6/300	25				
								82		10-2041			175-1/6/300	25				
								83		10-2041			175-1/6/300	25				
								84		10-2041			175-1/6/300	25				
								85		10-2041			175-1/6/300	25				
								86		10-2041			175-1/6/300	25				
								87		10-2041			175-1/6/300	25				
								88		10-2041			175-1/6/300	25				
								89		10-2041			175-1/6/300	25				
								90		10-2041			175-1/6/300	25				
								91		10-2041			175-1/6/300	25				
								92		10-2041			175-1/6/300	25				
								93		10-2041			175-1/6/300	25				
								94		10-2041			175-1/6/300	25				
								95		10-2041			175-1/6/300	25				
								96		10-2041			175-1/6/300	25				
								97		10-2041			175-1/6/300	25				
								98		10-2041			175-1/6/300	25				
								99		10-2041			175-1/6/300	25				
								100		10-2041			175-1/6/300	25				

SUBJECT TO PROTECTIVE ORDER
00022

File >B2850 321.6-322.6 amu, 2UL PE MIX
EIP

SP2330 200-1/3/250

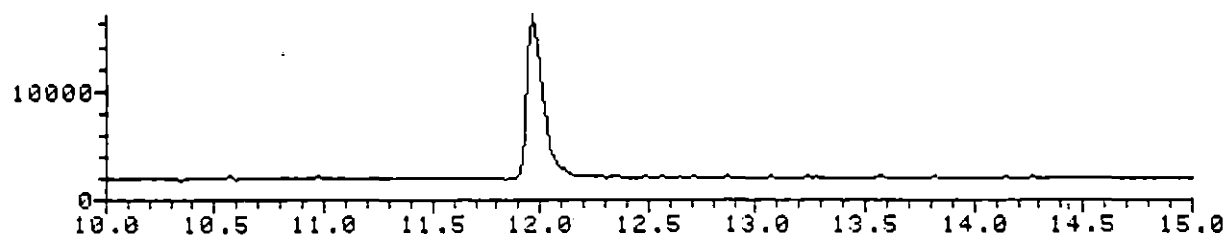
BTL#01



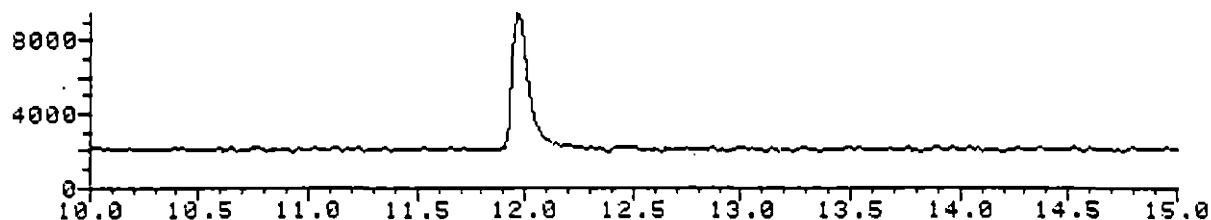
06023

C11297

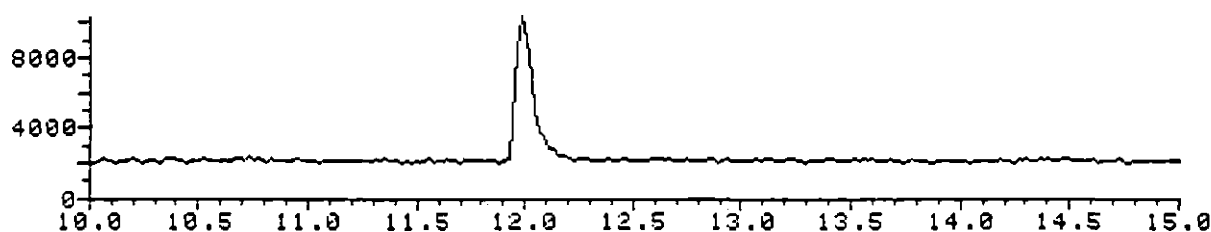
File >B2851 333.6-334.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



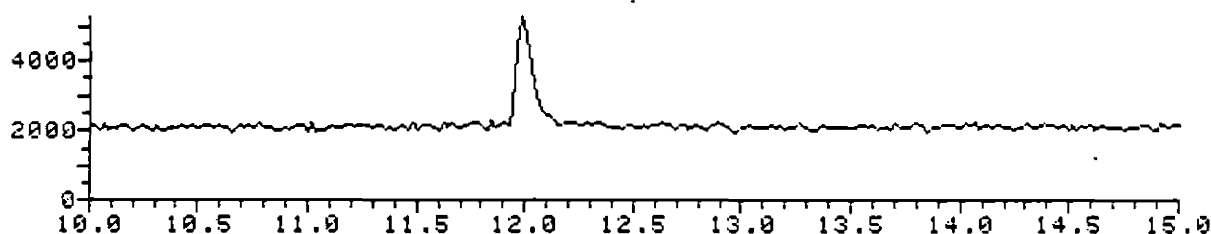
File >B2851 331.6-332.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



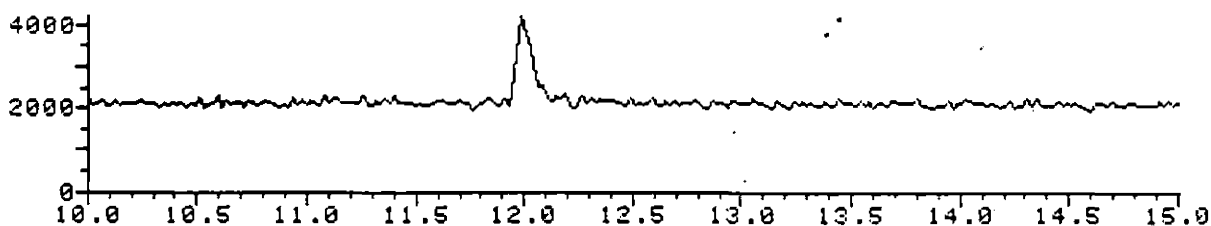
File >B2851 327.6-328.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



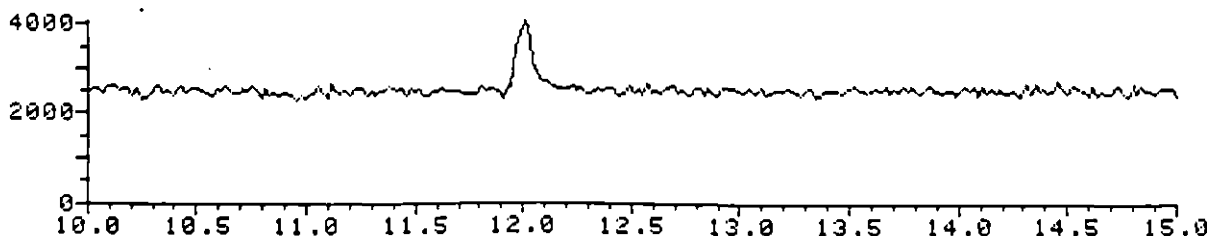
File >B2851 321.6-322.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



File >B2851 319.6-320.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



File >B2851 256.7-257.7 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



CONFIDENTIAL
PROTECTIVE ORDER

00024

C11298

GC/MS default file: >B2851::01

MS data file header from : >B2851

Sample: 2UL .1068/.48/.19 Operator: GARY MS 9/07/84 4:23:
Misc : SP2330 200-1/3/250 BTL#03 BTL# 3
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.965	231	238	241	10	77189	55769	100.00
2	11.965	231	238	241	10	77189	32164	57.67

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.965	196	238	282	86	212076	39044	100.00
2	11.965	196	238	282	86	212076	34185	97.56

332/334 CALCULATION

R-Global(0) = .7001

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.985	234	239	252	18	77420	40394	100.00
2	11.985	234	239	252	18	77420	38612	95.59

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.985	236	239	244	8	31404	14244	100.00
2	11.985	236	239	244	8	31404	12784	89.75

CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER

00025

C11290

S

M/Z = 319.9

>B2851

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.985	236	239	245	9	29683	11035	100.00
2	11.985	236	239	245	9	29683	10288	93.23

320/322 CALCULATION

R-Global(1) = .7747

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.005	237	240	248	11	36930	8869	100.00
2	12.005	237	240	248	11	36930	8456	95.34

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .2666

(328)/(332 + 334) CALCULATION

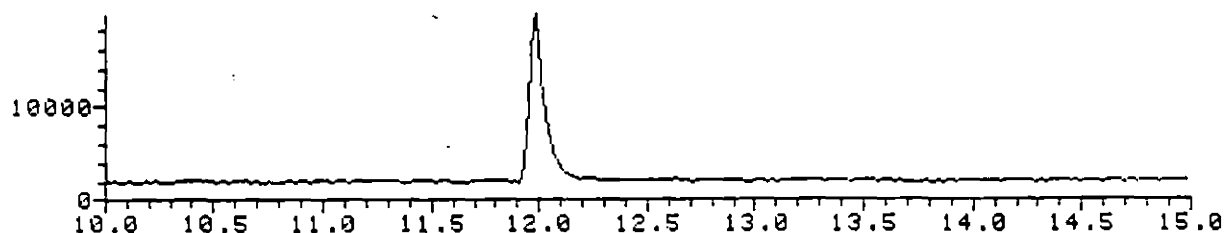
R-Global(3) = .4247

CONFIDENTIAL
 SUBJECT TO PROTECTIVE ORDER

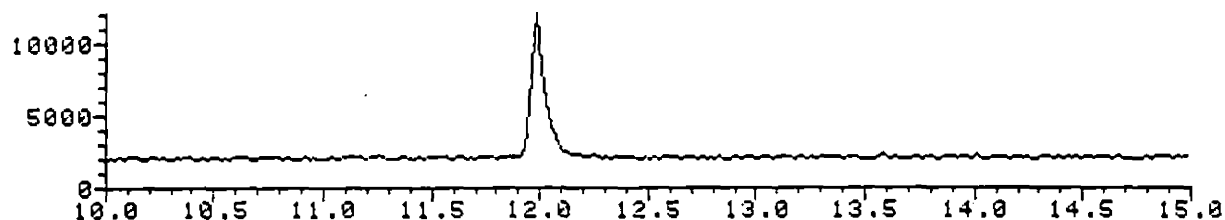
06026

C11300

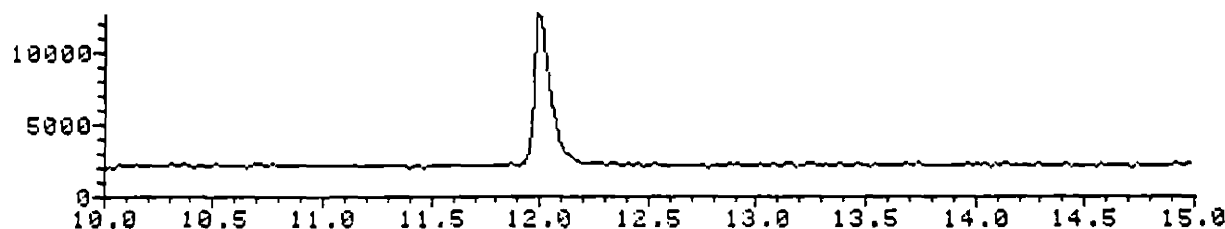
File >B2852 333.6-334.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



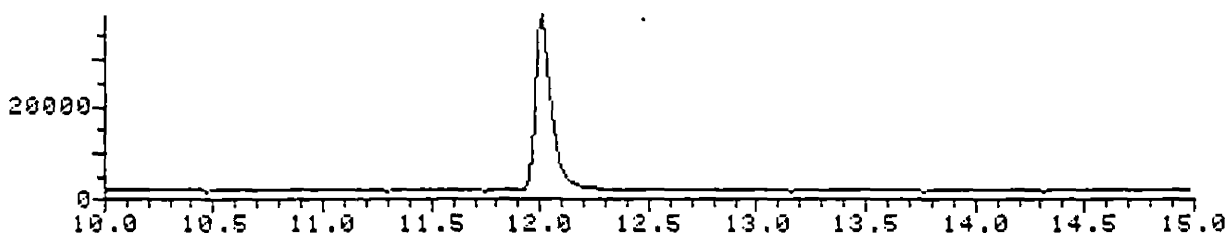
File >B2852 331.6-332.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



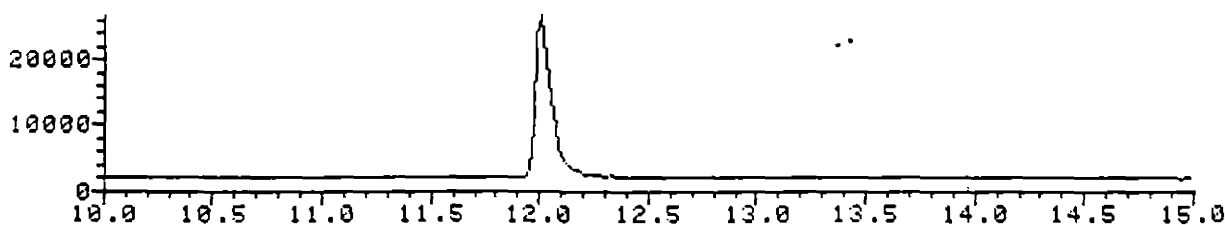
File >B2852 327.6-328.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



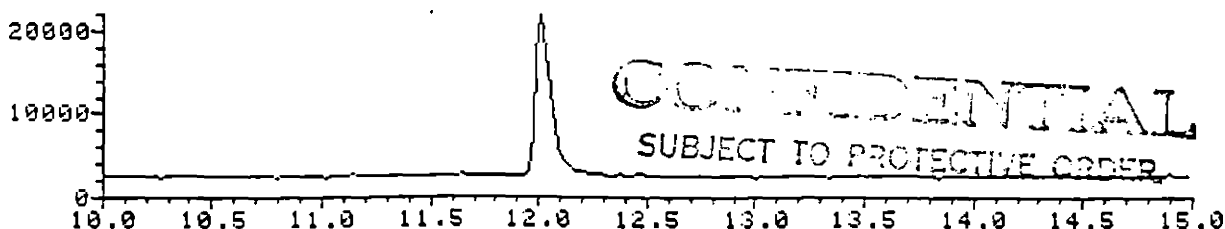
File >B2852 321.6-322.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



File >B2852 319.6-320.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



File >B2852 256.7-257.7 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER

00027

C11301

GC/MS default file: >B2852:01

MS data file header from : >B2852

Sample: 2UL 1.068/.48/.19 Operator: GARY MS 9/07/84--4:43
Misc : SP2330 200-1/3/250 BTL#05 BTL# 5
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	233	238	240	7	78765	64562	100.00
2	11.990	233	238	240	7	78765	40461	62.67

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	202	238	277	75	196550	44750	100.00
2	11.990	202	238	277	75	196550	35862	80.14

332/334 CALCULATION

R-Global(0) = .6931

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	232	238	251	19	89087	46052	100.00
2	11.990	232	238	251	19	89087	45909	99.69

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	233	239	251	18	198299	161525	100.00
2	12.010	233	239	251	18	198299	156530	96.91

00028

C11302

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SUBJECT TO PROTECTIVE ORDER

S

M/Z = 319.9

>B7007

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	237	241	253	16	119567	83727	100.00
2	12.051	237	241	253	16	119567	83623	99.88

320/322 CALCULATION

R-Global(1) = .7566

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	237	241	248	11	111239	65853	100.00
2	12.051	237	241	248	11	111239	65338	99.21

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 3.6754

(328)/(332 + 334) CALCULATION

R-Global(3) = .5625

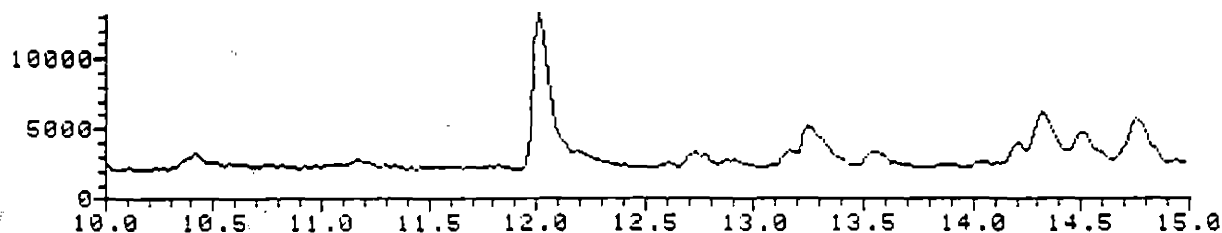
CONFIDENTIAL
 SUBJECT TO PROTECTIVE ORDER.

00035

C11309

File >B2855 333.6-334.6 amu.2UL UT-2625

SP2330 200-1/3/250 RWN BT



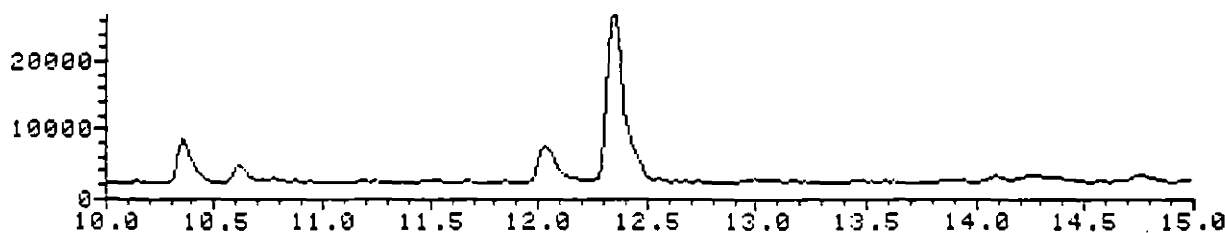
File >B2855 331.6-332.6 amu.2UL UT-2625

SP2330 200-1/3/250 RWN BT



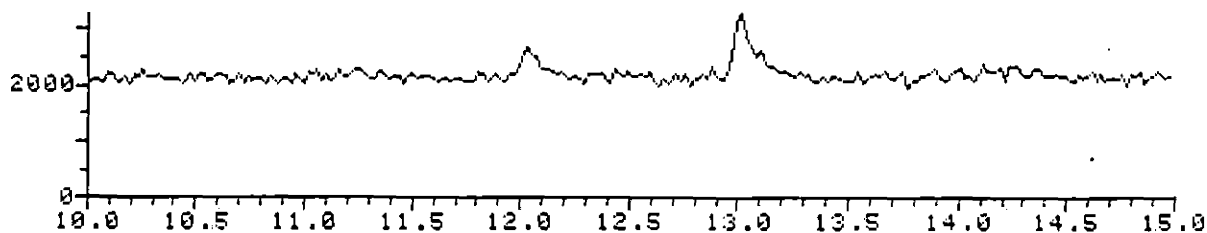
File >B2855 327.6-328.6 amu.2UL UT-2625

SP2330 200-1/3/250 RWN BT



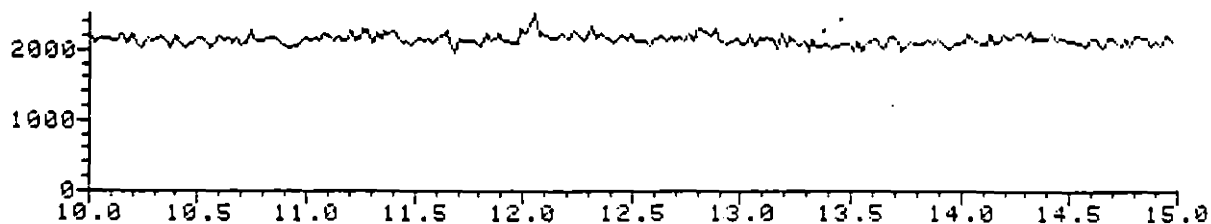
File >B2855 321.6-322.6 amu.2UL UT-2625

SP2330 200-1/3/250 RWN BT



File >B2855 319.6-320.6 amu.2UL UT-2625

SP2330 200-1/3/250 RWN BT



File >B2855 256.7-257.7 amu.2UL UT-2625

SP2330 200-1/3/250 RWN BT



CONFIDENTIAL

SUBJECT TO PROTECTIVE ORDER

00036

C11310

S

>B2855

M/Z = 319.9

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.050	239	241	242	3	9363	2709	100.00
2	12.050	239	241	242	3	9363	2659	98.15

320/322 CALCULATION

R-Global(1) = .8067

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.050	240	241	242	2	9286	3246	100.00
2	12.050	240	241	242	2	9286	3187	98.18

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .1354

(328)/(332 + 334) CALCULATION

R-Global(3) = .7025

CONFIDENTIAL
 SUBJECT TO PROTECTIVE ORDER

00038

C11312

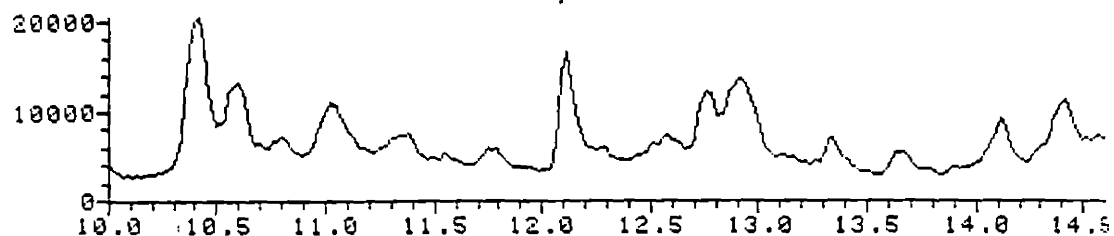
GC/M

MS c

Samp
Misc
Sys.
Me
Sou.

File >B2856 333.6-334.6 amu.2UL UT-2626

SP2330 200-1/3/250 F



File >B2856 331.6-332.6 amu.2UL UT-2626

SP2330 200-1/3/250

M/Z

Fin
Seco

Peak
#

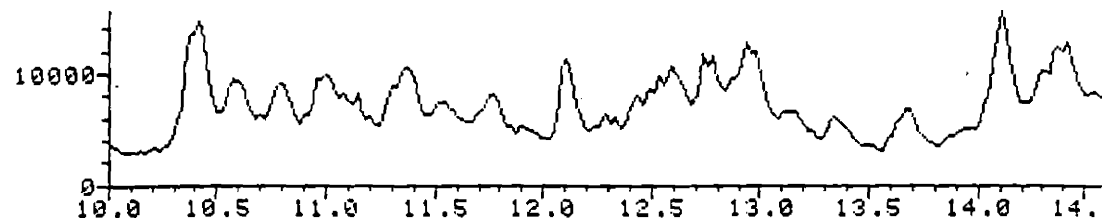
1
2

M/Z :

Fin
Seco

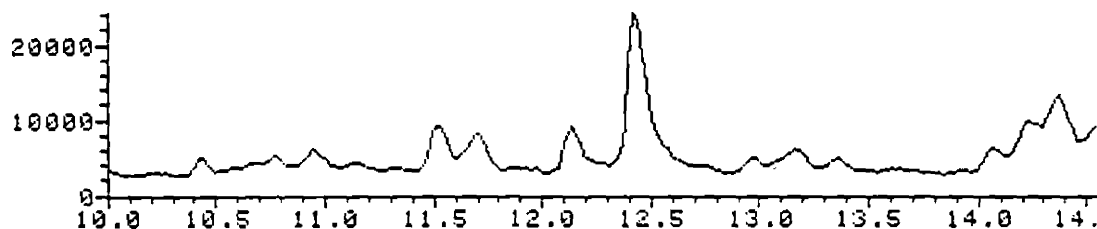
Peak
#

1
2



File >B2856 327.6-328.6 amu.2UL UT-2626

SP2330 200-1/3/250



File >B2856 321.6-322.6 amu.2UL UT-2626

SP2330 200-1/3/250



332/3

R-Glo

M/Z =

Fin
Seco

Peak
#

1
2

M/Z =

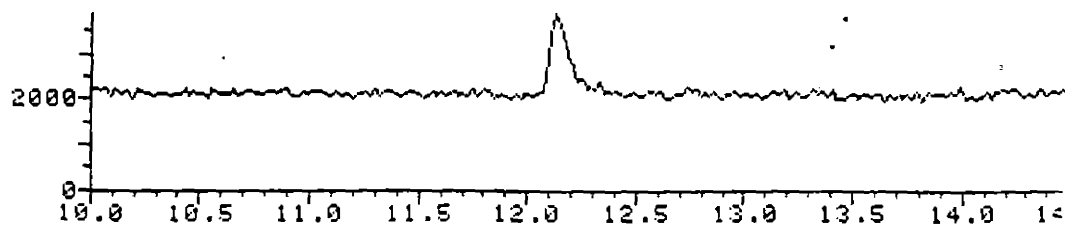
Fin
Seco

Peak
#

1
2

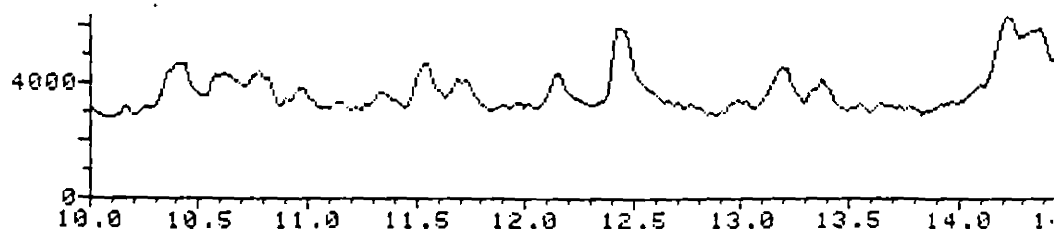
File >B2856 319.6-320.6 amu.2UL UT-2626

SP2330 200-1/3/250



File >B2856 256.7-257.7 amu.2UL UT-2626

SP2330 200-1/3/250



CONFIDENTIAL

SUBJECT TO PROTECTIVE ORDER

00639

C

S

>B2856

M/Z = 319.9

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.132	241	245	252	11	33743	10577	100.00
2	12.132	241	245	252	11	33743	9829	92.93

320/322 CALCULATION

R-Global(1) = .7971

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.152	243	246	251	8	33832	6672	100.00
2	12.152	243	246	251	8	33832	6624	99.28

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .3111

(328)/(332 + 334) CALCULATION

R-Global(3) = .4276

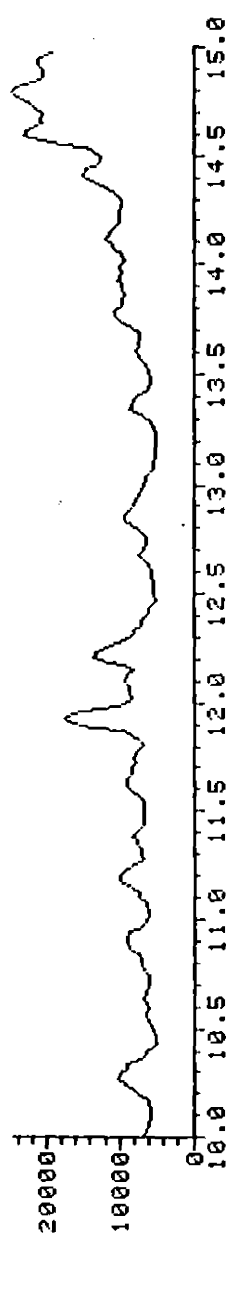
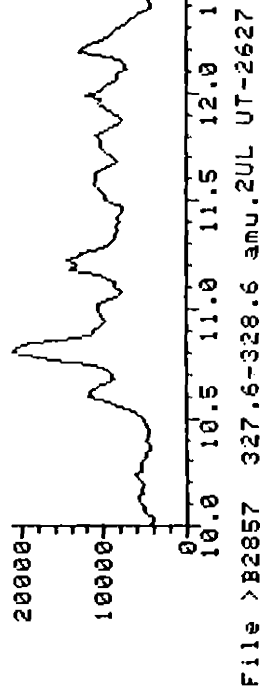
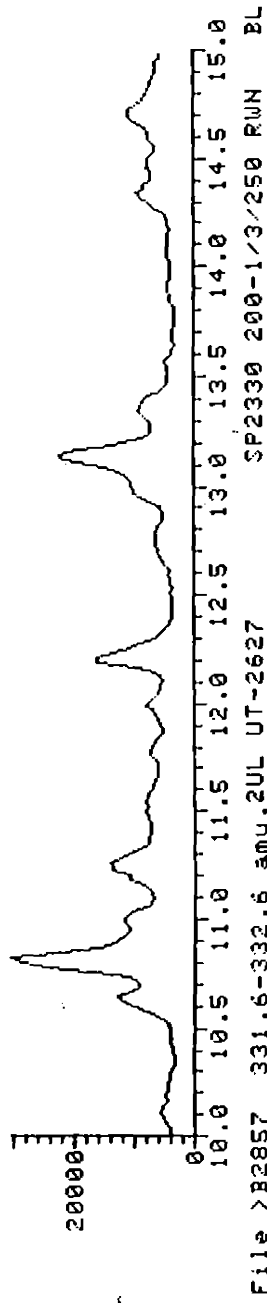
CONFIDENTIAL
 SUBJECT TO PROTECTIVE ORDER.

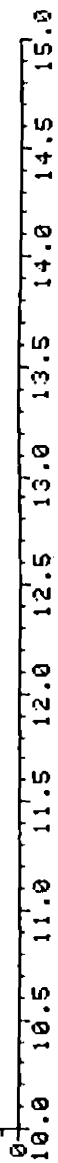
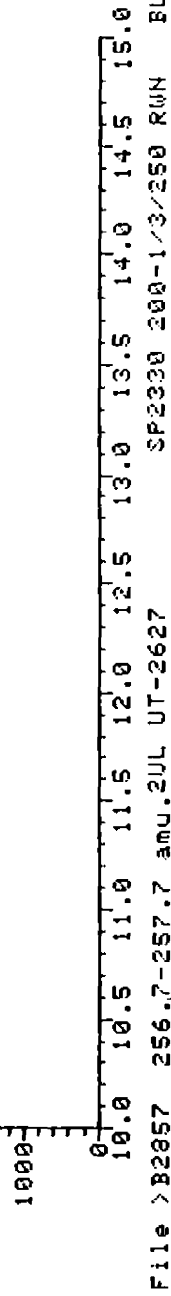
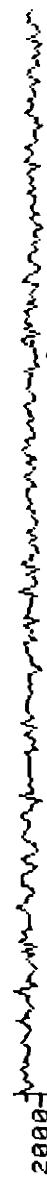
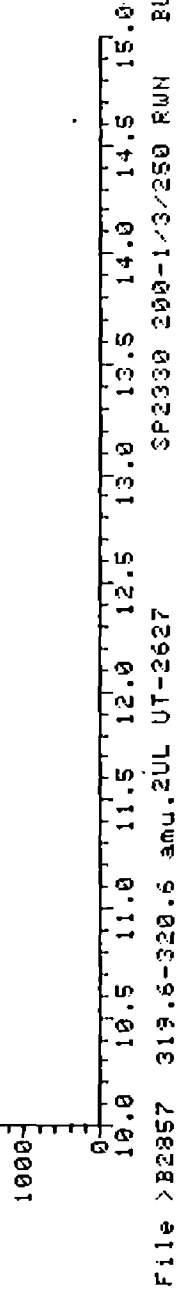
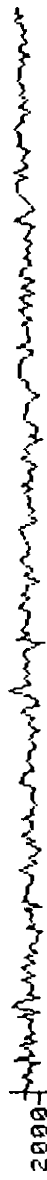
06041

C11315

File >B2857 333.6-334.6 amu.2UL UT-2627

SP2330 200-1/3/250 RUN BL





CONFIDENTIAL

00042

C11316

SUBJECT TO PROTECTIVE ORDER

GC/MS default file: >B2857::01

MS data file header from : >B2857

Sample: 2UL UT-2627 Operator: GARY MS 9/07/84 6:23...
Misc : SP2330 200-1/3/250 RWN BLT#15 BTL#15
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.212	246	249	253	7	92187	41192	100.00
2	12.212	246	249	253	7	92187	39683	96.34

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.192	245	248	254	9	97418	30539	100.00
2	12.192	245	248	254	9	97418	29922	97.98

332/334 CALCULATION

R-Global(0) = .7414

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.212	246	249	253	7	87136	30429	100.00
2	12.212	246	249	253	7	87136	25973	85.36

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	254	0	253	-1	0	2196	100.00
2	0.000	254	0	253	-1	0	2196	100.00

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M/Z = 319.9

>B2857

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	254	0	253	-1	0	2190	100.00
2	0.000	254	0	253	-1	0	2190	100.00

320/322 CALCULATION

R-Global(1) = .9975

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	254	0	253	-1	0	4259	100.00
2	0.000	254	0	253	-1	0	4259	100.00

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .0612

(328)/(332 + 334) CALCULATION

R-Global(3) = .4239

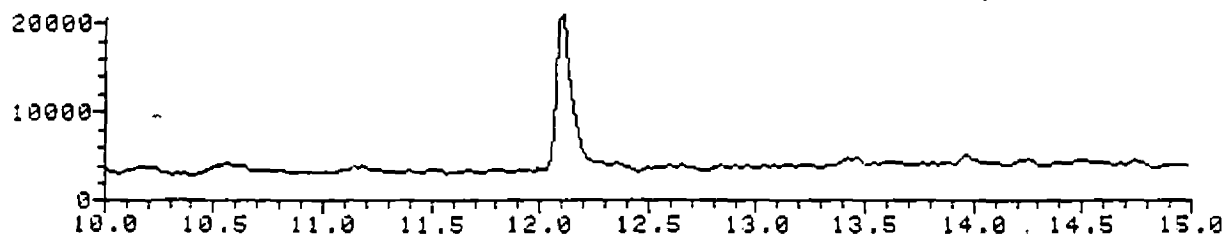
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06044

C11318

File >B2859 333.6-334.6 amu.2UL UT-2628

SP2330 200-1/3/250 RWN BT



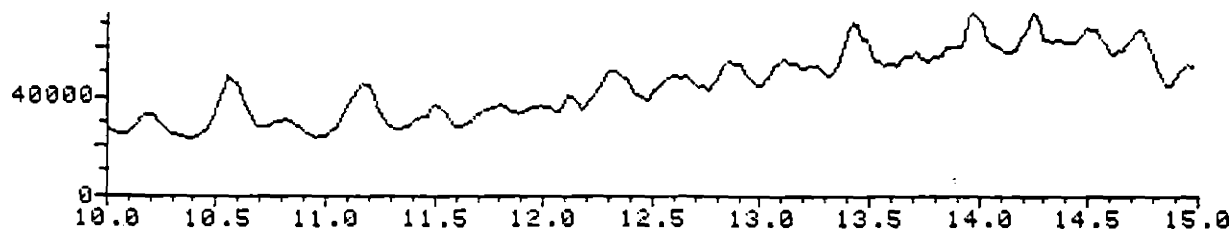
File >B2859 331.6-332.6 amu.2UL UT-2628

SP2330 200-1/3/250 RWN BT



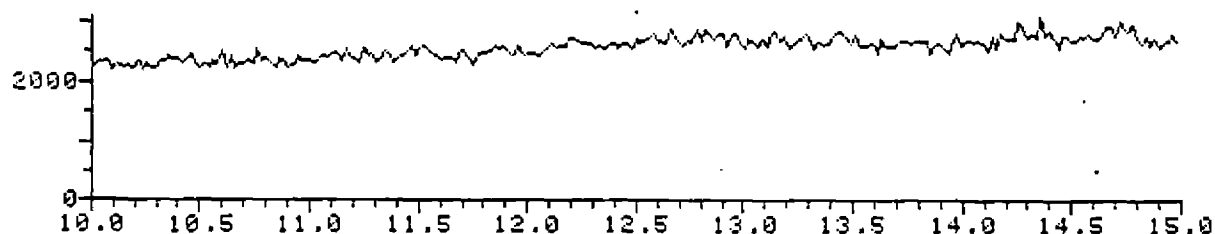
File >B2859 327.6-328.6 amu.2UL UT-2628

SP2330 200-1/3/250 RWN BT



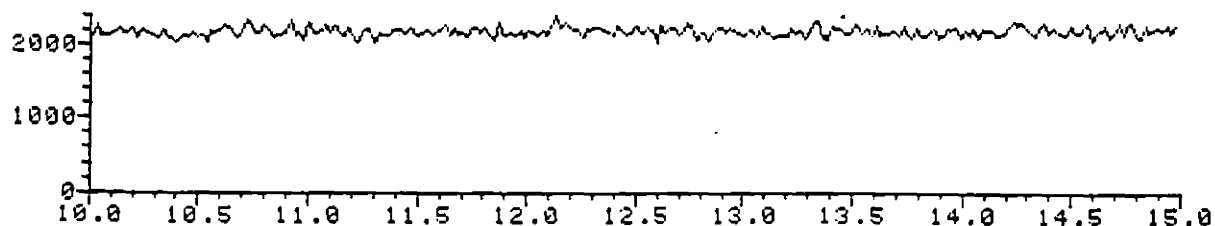
File >B2859 321.6-322.6 amu.2UL UT-2628

SP2330 200-1/3/250 RWN BT



File >B2859 319.6-320.6 amu.2UL UT-2628

SP2330 200-1/3/250 RWN BT



File >B2859 256.7-257.7 amu.2UL UT-2628

SP2330 200-1/3/250 RWN BT



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C11319

GC/MS default file: >B2859::01

MS data file header from : >B2859

Sample: 2UL UT-2628 Operator: GARY MS 9/07/84 17:03...
Misc : SP2330 200-1/3/250 RWN BTL#19 BTL#19
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.112	242	244	247	5	84884	46919	100.00
2	12.112	242	244	247	5	84884	36026	76.78

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.112	242	244	246	4	81589	31465	100.00
2	12.112	242	244	246	4	81589	29057	92.35

332/334 CALCULATION

R-Global(0) = .6706

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.112	242	244	247	5	222328	54167	100.00
2	12.112	242	244	247	5	222328	50527	93.28

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	248	0	247	-1	0	2667	100.00
2	0.000	248	0	247	-1	0	2667	100.00

C11320

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782859

M/Z = 319.9

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	248	0	247	-1	0	2280	100.00
2	0.000	248	0	247	-1	0	2280	100.00

320/322 CALCULATION

R-Global(1) = .8547

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	248	0	247	-1	0	16042	100.00
2	0.000	248	0	247	-1	0	16042	100.00

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .0631

(328)/(332 + 334) CALCULATION

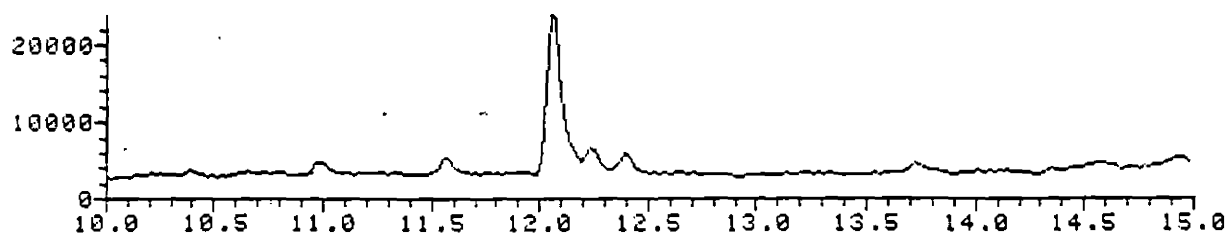
R-Global(3) = .6907

00047

C11321

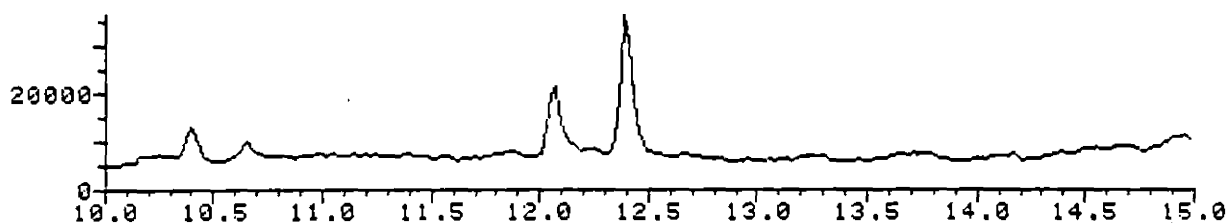
File >B2861 333.6-334.6 amu.2UL UT-2630

SP2330 200-1/3/250 RWN BT



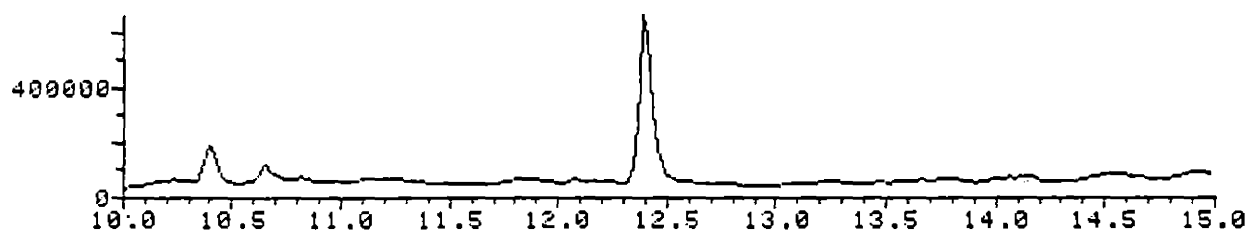
File >B2861 331.6-332.6 amu.2UL UT-2630

SP2330 200-1/3/250 RWN BT



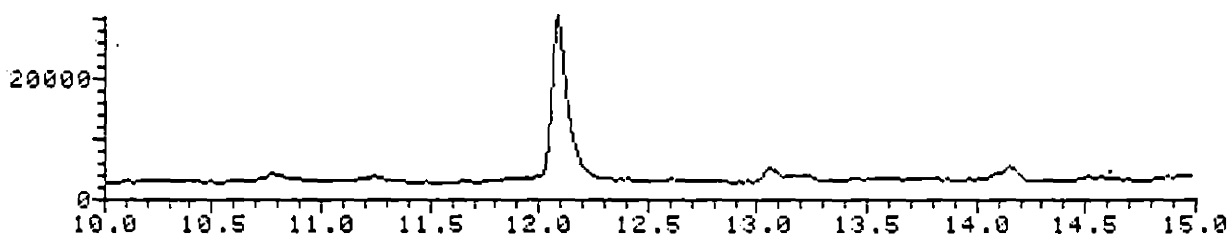
File >B2861 327.6-328.6 amu.2UL UT-2630

SP2330 200-1/3/250 RWN BT



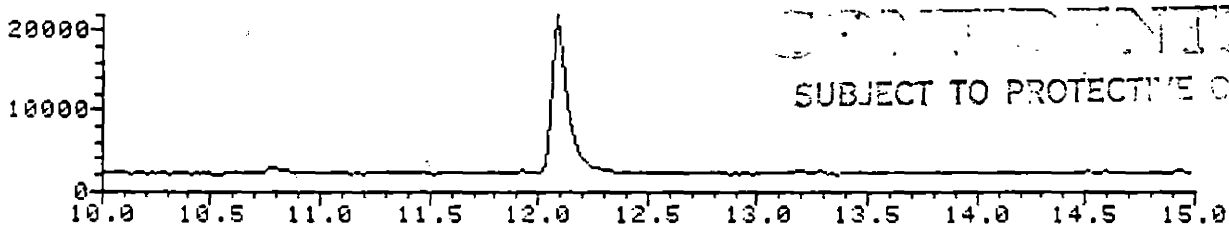
File >B2861 321.6-322.6 amu.2UL UT-2630

SP2330 200-1/3/250 RWN BT



File >B2861 319.6-320.6 amu.2UL UT-2630

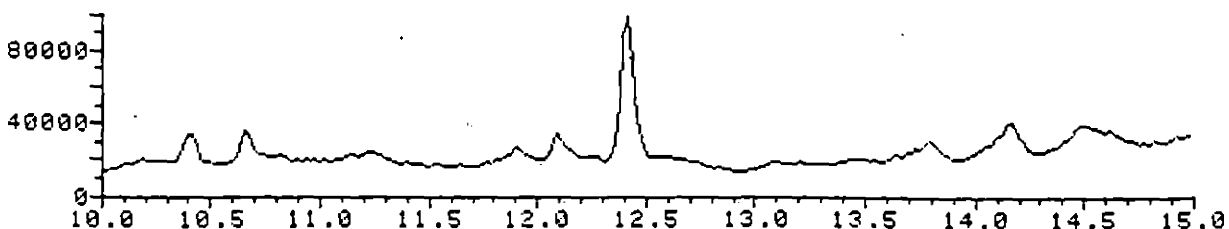
SP2330 200-1/3/250 RWN BT



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File >B2861 256.7-257.7 amu.2UL UT-2630

SP2330 200-1/3/250 RWN BT



00048

C11322

GC/MS default file: >B2861::01

MS data file header from : >B2861

Sample: 2UL UT-2630 Operator: GARY MS 9/07/84 7:43..
Misc : SP2330 200-1/3/250 RWH BTL#23 BTL#23
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 252 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	238	241	247	9	116086	85792	100.00
2	12.051	238	241	247	9	116086	77314	90.12

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.071	237	242	248	11	139156	65192	100.00
2	12.071	237	242	248	11	139156	58449	89.66

332/334 CALCULATION

R-Global(0) = .7599

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	239	243	247	8	522313	112583	100.00
2	12.091	239	243	247	8	522313	85895	76.29

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	238	243	252	14	166613	111929	100.00
2	12.091	238	243	252	14	166613	111474	99.59

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C11323

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M/Z = 319.9

>B2861

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	236	243	254	18	125285	84155	100.00
2	12.091	236	243	254	18	125285	81356	96.67

320/322 CALCULATION

R-Global(1) = .7519

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	240	243	248	8	237648	75663	100.00
2	12.091	240	243	248	8	237648	69135	91.37

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 1.2987

(328)/(332 + 334) CALCULATION

R-Global(3) = .7390

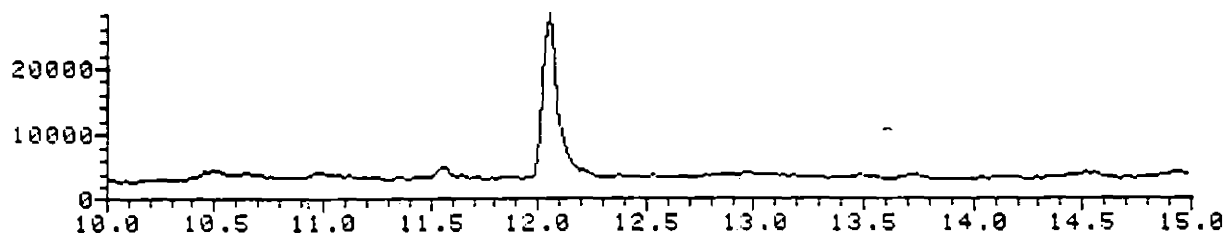
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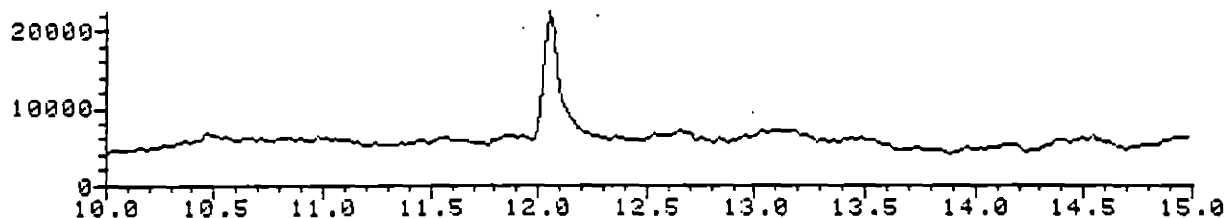
File >B2862 333.6-334.6 amu.2UL UT-2631

SP2330 200-1/3/250 RWN BT



File >B2862 331.6-332.6 amu.2UL UT-2631

SP2330 200-1/3/250 RWN BT



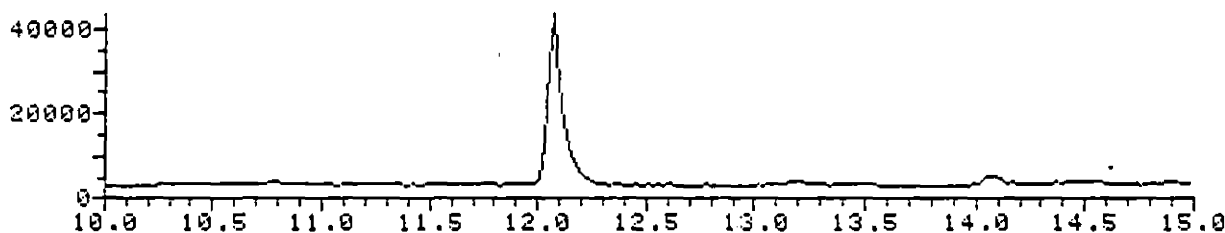
File >B2862 327.6-328.6 amu.2UL UT-2631

SP2330 200-1/3/250 RWN BT



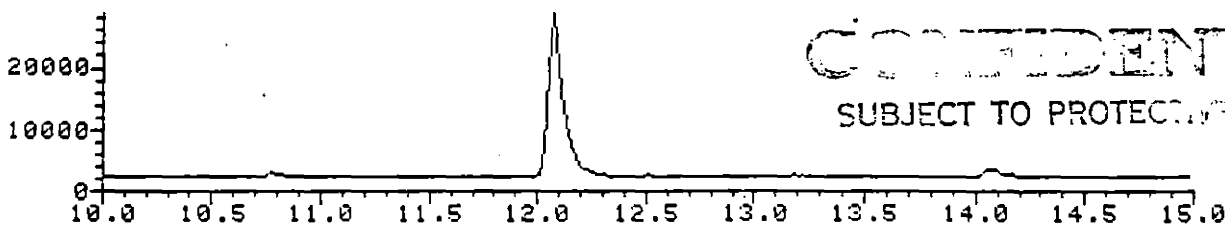
File >B2862 321.6-322.6 amu.2UL UT-2631

SP2330 200-1/3/250 RWN BT



File >B2862 319.6-320.6 amu.2UL UT-2631

SP2330 200-1/3/250 RWN BT



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File >B2862 256.7-257.7 amu.2UL UT-2631

SP2330 200-1/3/250 RWN BT



00051

C11325

MS data file header from : >B2862

Sample: 2UL UT-2631 Operator: GARY MS 9/07/84 18:03...
Misc : SP2330 200-1/3/250 RWN BTL#25 BTL#25
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 252 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.

Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	237	241	249	12	140692	100672	100.00
2	12.051	237	241	249	12	140692	94366	93.74

M/Z = 331.9

First peak is baseline drop corrected area.

Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	237	241	253	16	172058	79786	100.00
2	12.051	237	241	253	16	172058	75698	94.88

332/334 CALCULATION

R-Global(0) = .7925

M/Z = 327.9

First peak is baseline drop corrected area.

Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.071	238	242	247	9	624209	144471	100.00
2	12.071	238	242	247	9	624209	112899	78.15

M/Z = 321.9

First peak is baseline drop corrected area.

Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.071	237	242	256	19	226344	161839	100.00
2	12.071	237	242	256	19	226344	159587	98.61

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>B2862

M/Z = 319.9

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.071	236	242	257	21	158796	112218	100.00
2	12.071	236	242	257	21	158796	110695	98.64

320/322 CALCULATION

R-Global(1) = .6934

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.071	239	242	251	12	365857	116064	100.00
2	12.071	239	242	251	12	365857	114768	98.88

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 1.5187

(328)/(332 + 334) CALCULATION

R-Global(3) = .7925

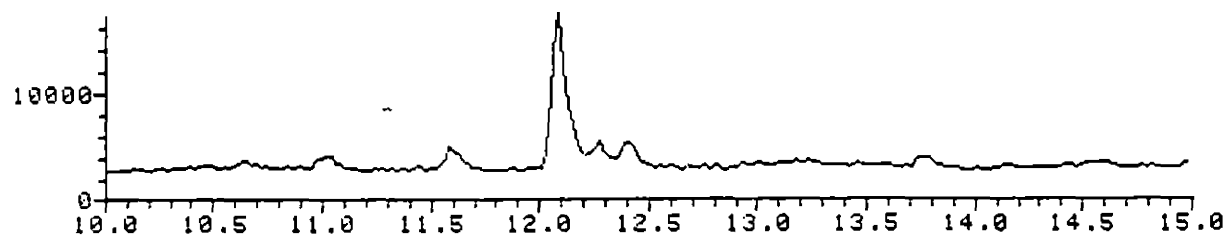
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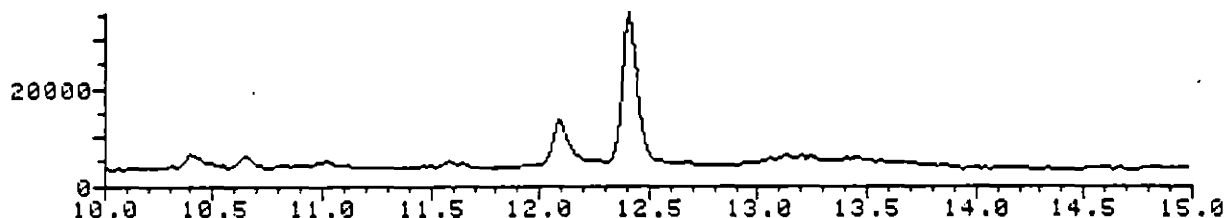
File >B2863 333.6-334.6 amu.2UL UT-2632

SP2330 200-1/3/250 RWN BT



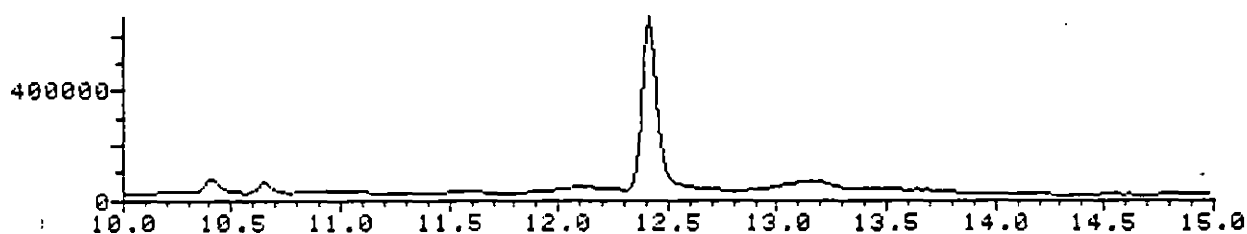
File >B2863 331.6-332.6 amu.2UL UT-2632

SP2330 200-1/3/250 RWN BT



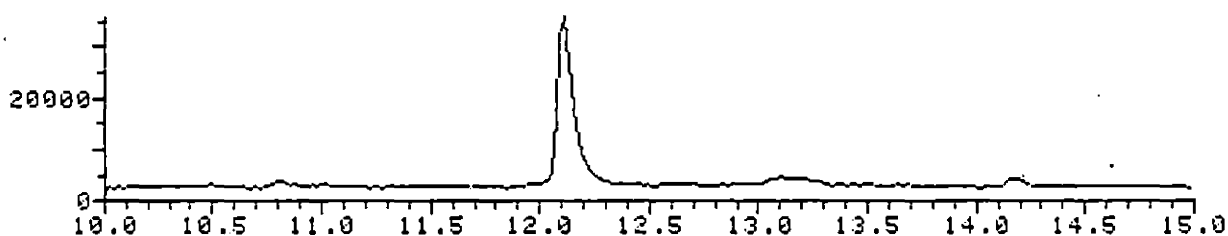
File >B2863 327.6-328.6 amu.2UL UT-2632

SP2330 200-1/3/250 RWN BT



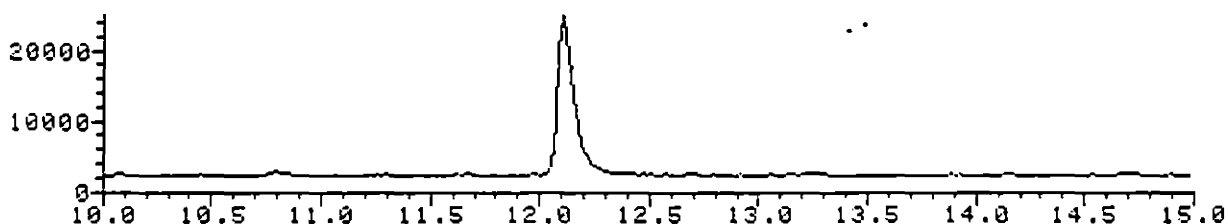
File >B2863 321.6-322.6 amu.2UL UT-2632

SP2330 200-1/3/250 RWN BT



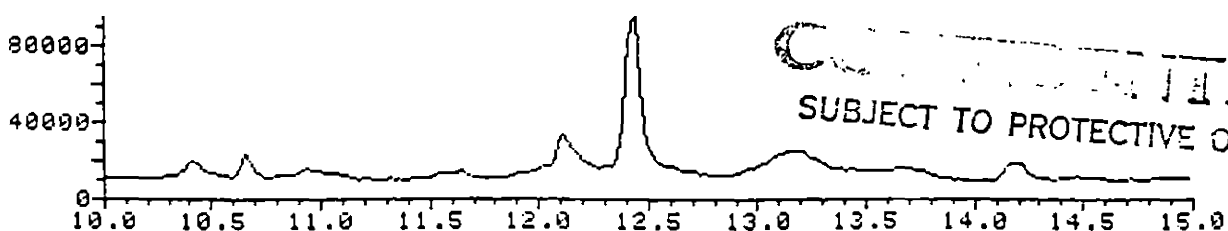
File >B2863 319.6-320.6 amu.2UL UT-2632

SP2330 200-1/3/250 RWN BT



File >B2863 256.7-257.7 amu.2UL UT-2632

SP2330 200-1/3/250 RWN BT



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C11328

MS data file header from : >B2863

Sample: 2UL UT-2632 Operator: GARY MS 9/07/84 8:23 ..
Misc : SP2330 200-1/3/250 RWN BTL#27 BTL#27
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0 ..

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	238	243	249	11	95515	63417	100.00
2	12.091	238	243	249	11	95515	57070	89.99

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	238	243	250	12	97163	44015	100.00
2	12.091	238	243	250	12	97163	39011	88.63

332/334 CALCULATION

R-Global(0) = .6941

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.111	243	244	245	2	154992	54287	100.00
2	12.111	243	244	245	2	154992	53495	98.54

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.111	240	244	253	13	184673	135442	100.00
2	12.111	240	244	253	13	184673	134675	99.43

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C11329

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M/Z = 319.9

>B2063

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.111	239	244	257	18	143106	99006	100.00
2	12.111	239	244	257	18	143106	98016	99.00

320/322 CALCULATION

R-Global(1) = .7310

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.111	241	244	251	10	257768	84807	100.00
2	12.111	241	244	251	10	257768	83287	98.21

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 2.1823

(328)/(332 + 334) CALCULATION

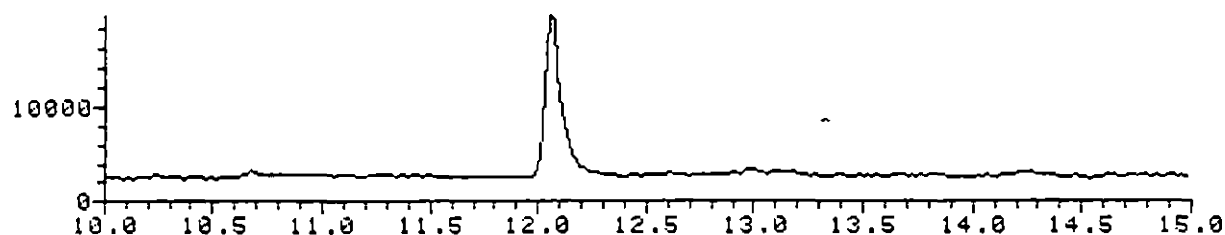
R-Global(3) = .4940

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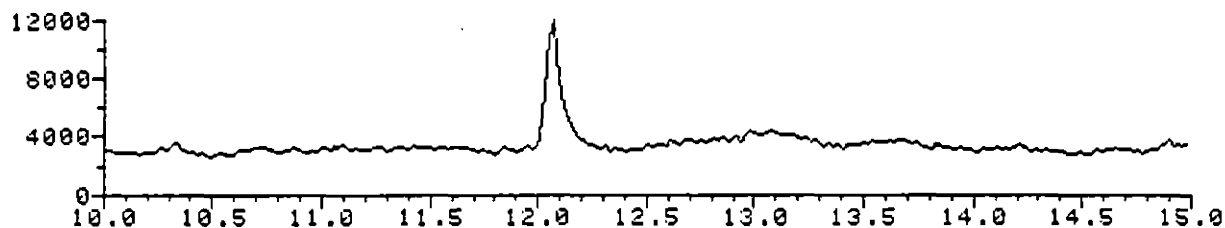
00056

C11330

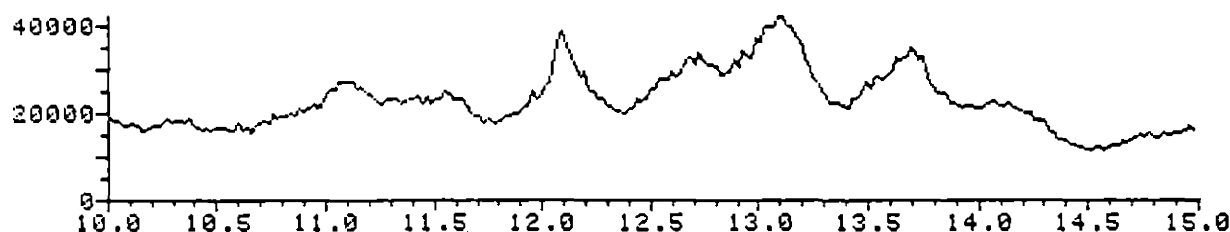
File >B2864 333.6-334.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



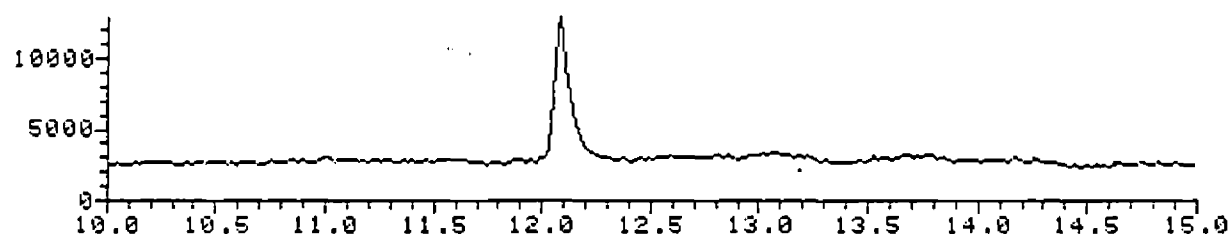
File >B2864 331.6-332.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



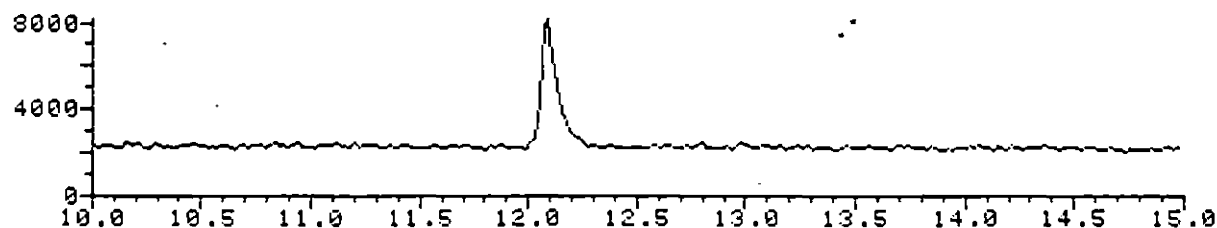
File >B2864 327.6-328.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



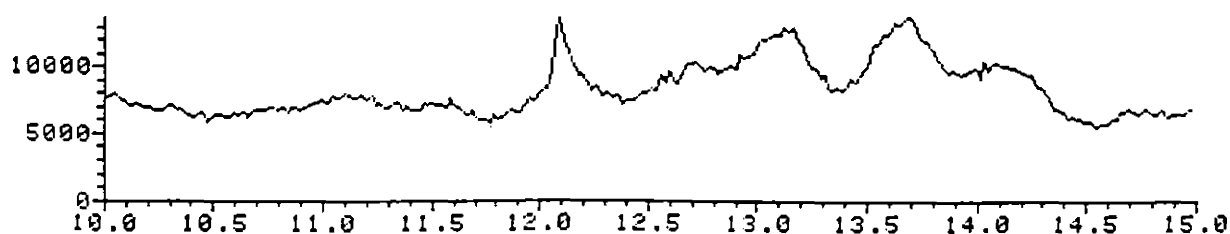
File >B2864 321.6-322.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2864 319.6-320.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2864 256.7-257.7 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



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00057

C11331

GC/MS default file: >B2864::01

MS data file header from : >B2864

Sample: 2UL .2669/.48/.19 Operator: GARY MS 9/07/84 -8:43...
Misc : SP2330 200-1/3/250 RWN BTL#29 BTL#29
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.

Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	239	241	247	8	93249	57993	100.00
2	12.051	239	241	247	8	93249	57461	99.08

M/Z = 331.9

First peak is baseline drop corrected area.

Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.071	237	242	251	14	85374	41946	100.00
2	12.071	237	242	251	14	85374	39741	94.74

332/334 CALCULATION

R-Global(0) = .7233

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M/Z = 327.9

First peak is baseline drop corrected area.

Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	241	243	247	6	236832	68111	100.00
2	12.091	241	243	247	6	236832	50903	74.74

M/Z = 321.9

First peak is baseline drop corrected area.

Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	238	243	252	14	85830	42934	100.00
2	12.091	238	243	252	14	85830	42402	98.76

00058

011332

S

M/Z = 319.9

>B2864

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	238	243	252	14	59564	29450	100.00
2	12.091	238	243	252	14	59564	28659	97.31

320/322 CALCULATION

R-Global(1) = .6859

M/Z = 257.0

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.091	241	243	247	6	79116	22764	100.00
2	12.091	241	243	247	6	79116	21423	94.11

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .7243

(328)/(332 + 334) CALCULATION

R-Global(3) = .6777

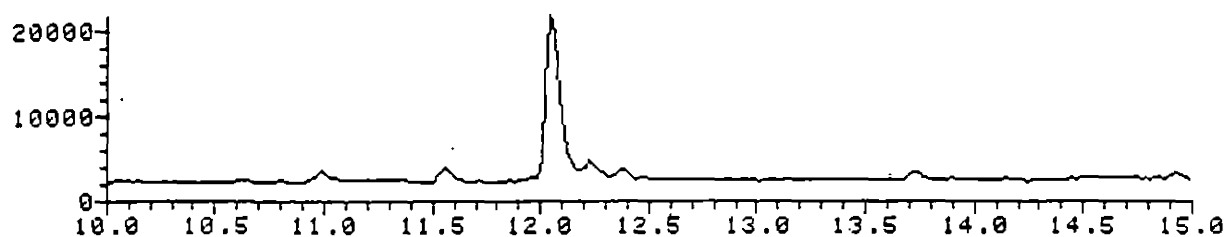
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00059

C11333

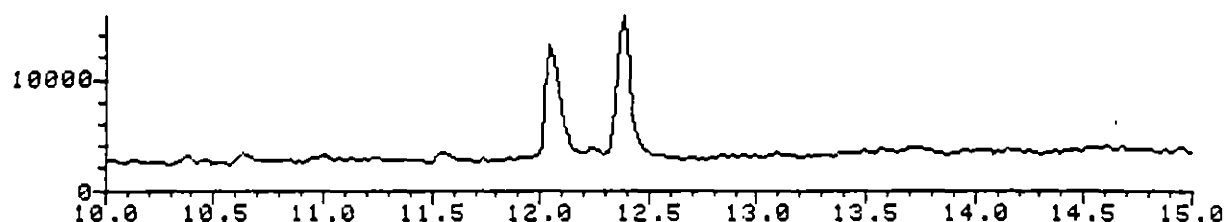
File >B2865 333.6-334.6 amu.2UL UT-2633

SP2330 200-1/3/250 RWN BT



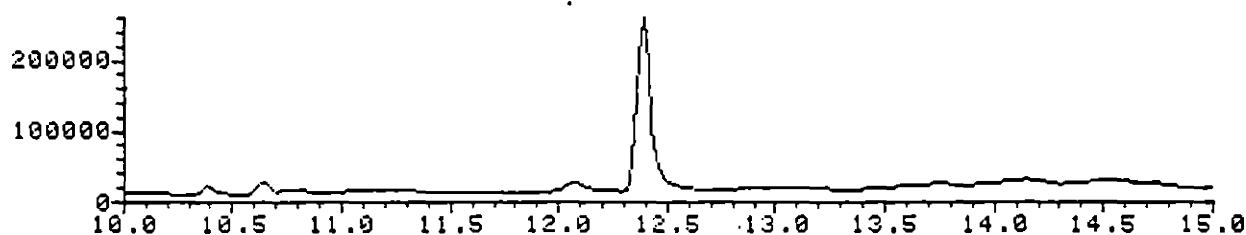
File >B2865 331.6-332.6 amu.2UL UT-2633

SP2330 200-1/3/250 RWN BT



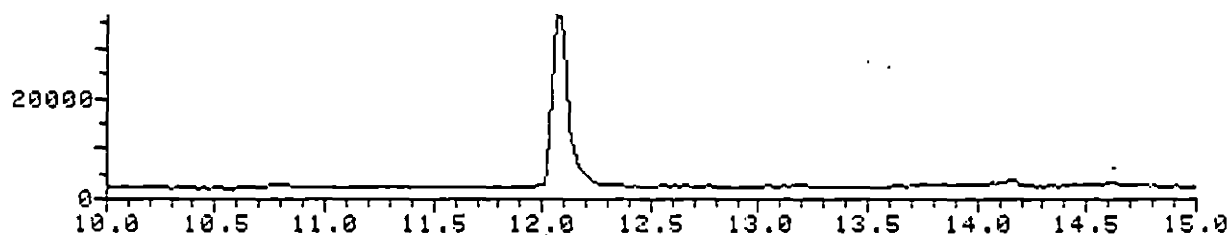
File >B2865 327.6-328.6 amu.2UL UT-2633

SP2330 200-1/3/250 RWN BT



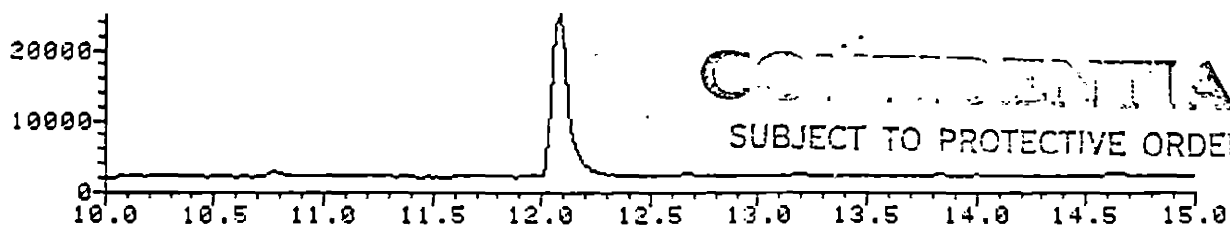
File >B2865 321.6-322.6 amu.2UL UT-2633

SP2330 200-1/3/250 RWN BT



File >B2865 319.6-320.6 amu.2UL UT-2633

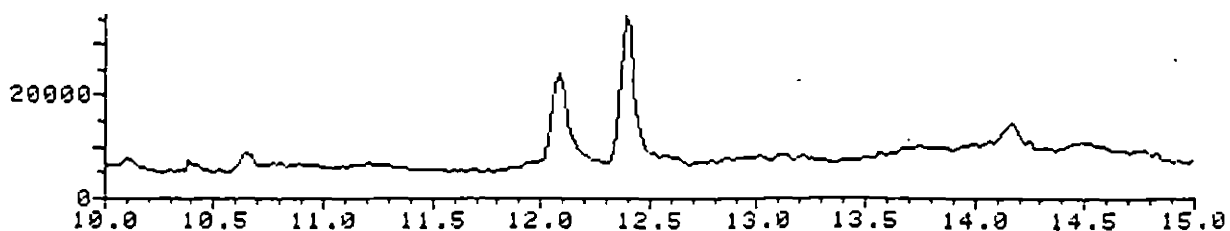
SP2330 200-1/3/250 RWN BT



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File >B2865 256.7-257.7 amu.2UL UT-2633

SP2330 200-1/3/250 RWN BT



00060

C11334

GC/MS default file: >B2865::01

MS data file header from : >B2865

Sample: 2UL UT-2633 Operator: GARY MS 9/07/84 12:03:..
Misc : SP2330 200-1/3/250 RWN BTL#31 BTL#31
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.044	243	244	247	4	75275	42703	100.00
2	12.044	243	244	247	4	75275	31329	73.36

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.044	242	244	248	6	57725	34523	100.00
2	12.044	242	244	248	6	57725	30395	88.04

332/334 CALCULATION

R-Global(0) = .8084

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.065	242	245	249	7	171017	67802	100.00
2	12.065	242	245	249	7	171017	57949	85.47

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.065	239	245	258	19	196646	146866	100.00
2	12.065	239	245	258	19	196646	143408	97.65

C11335

06004

S

M/Z = 319.9

>B2965

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.085	241	246	255	14	129212	97684	100.00
2	12.085	241	246	255	14	129212	95332	97.59

320/322 CALCULATION

R-Global(1) = .6651

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.085	243	246	250	7	126026	67821	100.00
2	12.085	243	246	250	7	126026	62536	92.21

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 3.1667

(328)/(332 + 334) CALCULATION

R-Global(3) = .8609

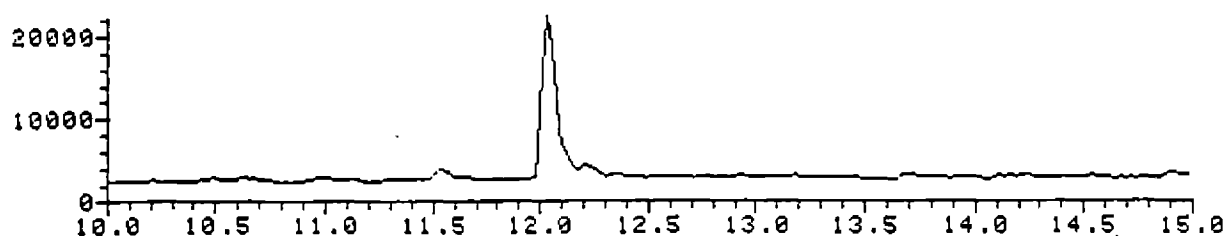
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00062

C11336

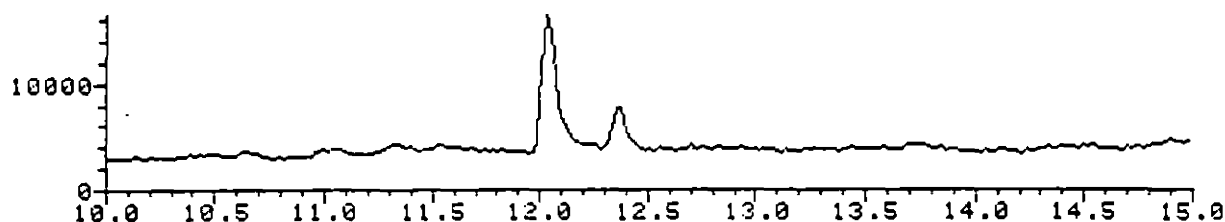
File >B2866 333.6-334.6 amu.2UL UT-2634

SP2330 200-1/3/250 RWN BT



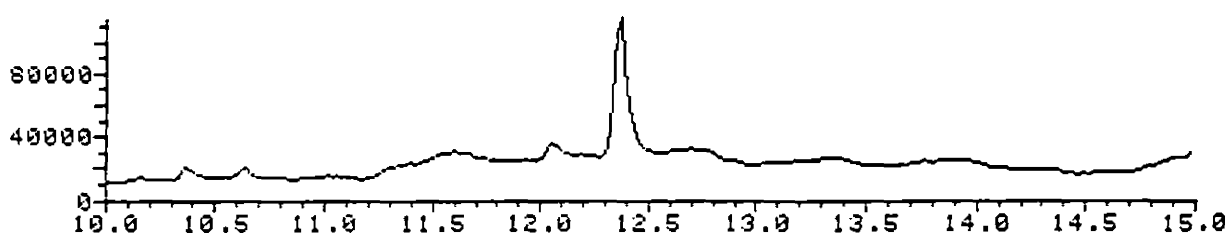
File >B2866 331.6-332.6 amu.2UL UT-2634

SP2330 200-1/3/250 RWN BT



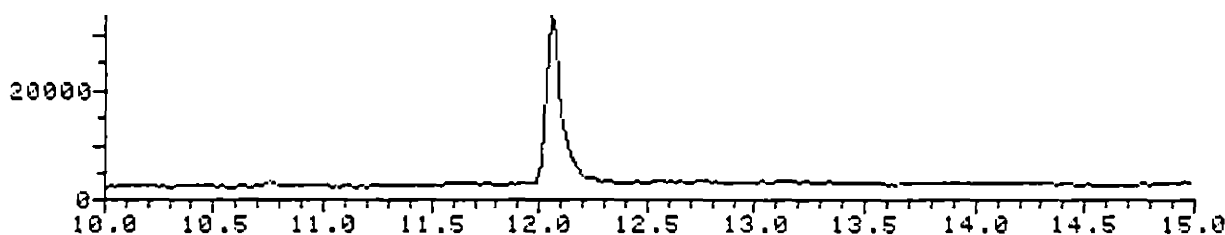
File >B2866 327.6-328.6 amu.2UL UT-2634

SP2330 200-1/3/250 RWN BT



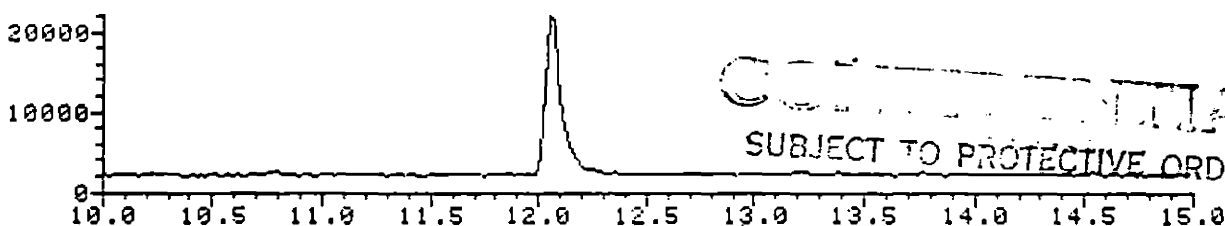
File >B2866 321.6-322.6 amu.2UL UT-2634

SP2330 200-1/3/250 RWN BT



File >B2866 319.6-320.6 amu.2UL UT-2634

SP2330 200-1/3/250 RWN BT



File >B2866 256.7-257.7 amu.2UL UT-2634

SP2330 200-1/3/250 RWN BT



06063

C11337

GC/MS default file: >B2866::01

MS data file header from : >B2866

Sample: 2UL UT-2634 Operator: GARY MS 9/07/84 9:22...
Misc : SP2330 200-1/3/250 RWN BTL#33 BTL#33
Sys. #: 1 MS model: 87 SW/HW rev.: CR ALS # : 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 252 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.031	236	240	246	10	105110	78200	100.00
2	12.031	236	240	246	10	105110	70850	90.60

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.031	237	240	248	11	95197	56048	100.00
2	12.031	237	240	248	11	95197	51785	92.39

332/334 CALCULATION

R-Global(0) = .7167

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	237	241	246	9	298800	76463	100.00
2	12.051	237	241	246	9	298800	60119	78.62

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	238	241	247	9	150832	121024	100.00
2	12.051	238	241	247	9	150832	109243	90.27

06064

011338

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>B2866

M/Z = 319.9

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	236	241	256	20	133584	88864	100.00
2	12.051	236	241	256	20	133584	86054	96.84

320/322 CALCULATION

R-Global(1) = .7343

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.071	238	242	247	9	152622	74700	100.00
2	12.071	238	242	247	9	152622	63855	85.48

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 1.5634

(328)/(332 + 334) CALCULATION

R-Global(3) = .5615

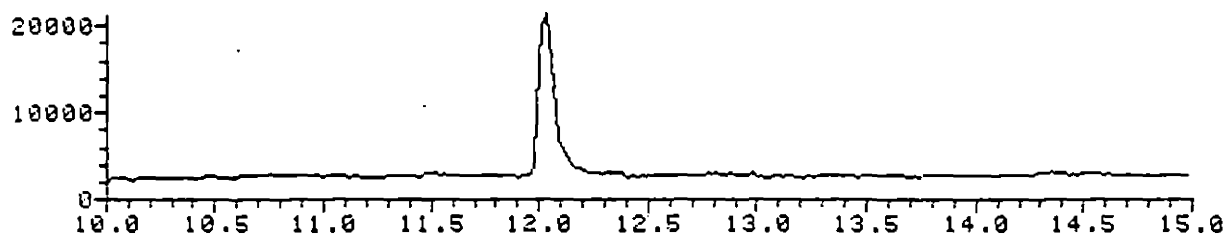
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- 00065

C11339

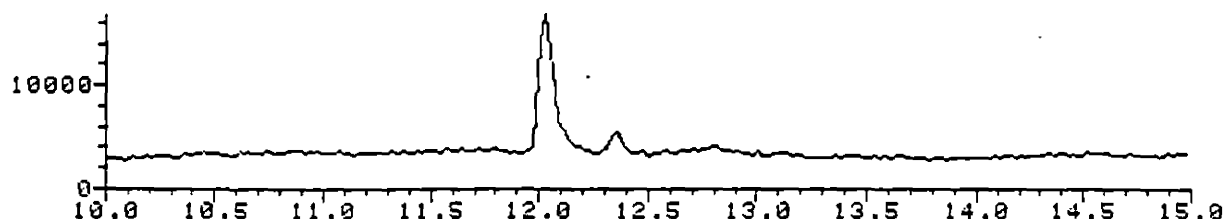
File >B2867 333.6-334.6 amu.2UL UT-2635

SP2330 200-1/3/250 RWN BT



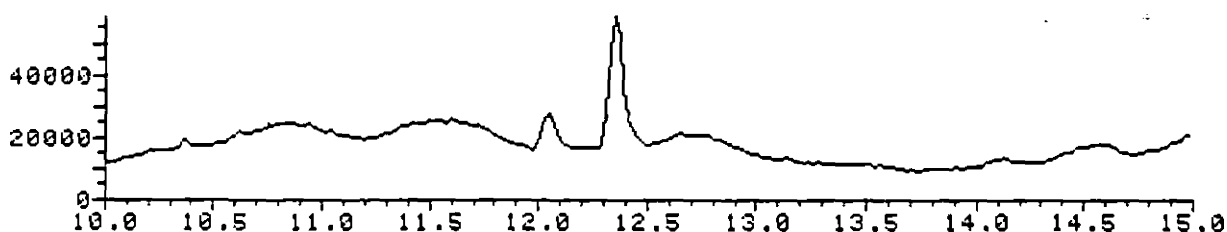
File >B2867 331.6-332.6 amu.2UL UT-2635

SP2330 200-1/3/250 RWN BT



File >B2867 327.6-328.6 amu.2UL UT-2635

SP2330 200-1/3/250 RWN BT



File >B2867 321.6-322.6 amu.2UL UT-2635

SP2330 200-1/3/250 RWN BT



File >B2867 319.6-320.6 amu.2UL UT-2635

SP2330 200-1/3/250 RWN BT



File >B2867 256.7-257.7 amu.2UL UT-2635

SP2330 200-1/3/250 RWN BT



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00066

C11340

MS data file header from : >B2867

Sample: 2UL UT-2635 Operator: GARY MS 9/07/84 .9:42...
Misc : SP2330 200-1/3/250 RWN BTL#35 BTL#35
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.030	234	240	252	18	130366	81910	100.00
2	12.030	234	240	252	18	130366	78688	96.07

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.030	236	240	251	15	108161	56861	100.00
2	12.030	236	240	251	15	108161	55758	98.06

332/334 CALCULATION

R-Global(0) = .6942

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M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	237	241	246	9	203074	60784	100.00
2	12.051	237	241	246	9	203074	56904	93.62

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	238	241	246	8	34928	10520	100.00
2	12.051	238	241	246	8	34928	9928	94.37

00067

C11341

S

M/Z = 319.9

>B2867

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	238	241	247	9	28746	8451	100.00
2	12.051	238	241	247	9	28746	7780	92.06

320/322 CALCULATION

R-Global(1) = .8033

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.051	239	241	244	5	46929	10379	100.00
2	12.051	239	241	244	5	46929	10161	97.90

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .1367

(328)/(332 + 334) CALCULATION

R-Global(3) = .4373

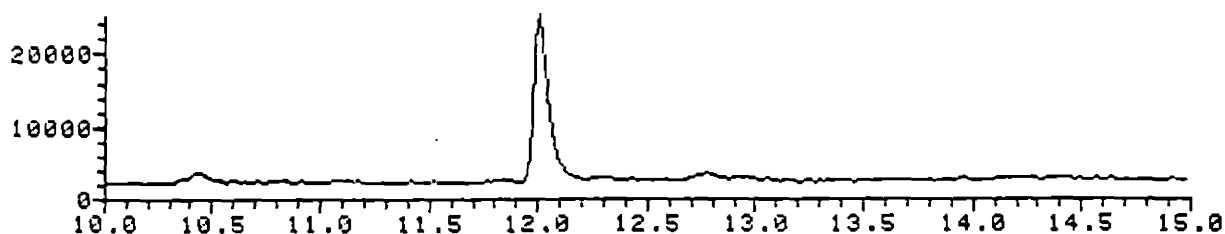
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00068

C11342

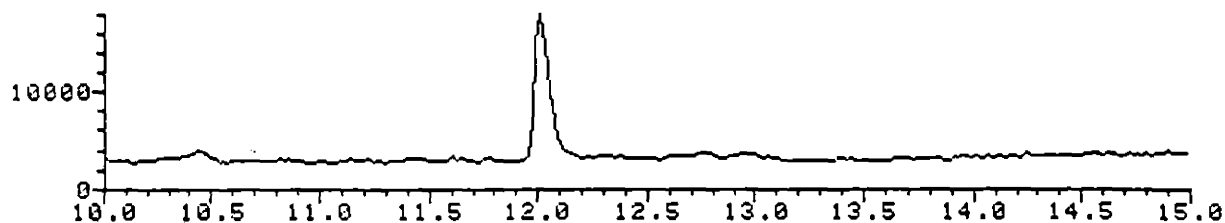
File >B2868 333.6-334.6 amu.2UL UT-2636

SP2330 200-1/3/250 RWN BT



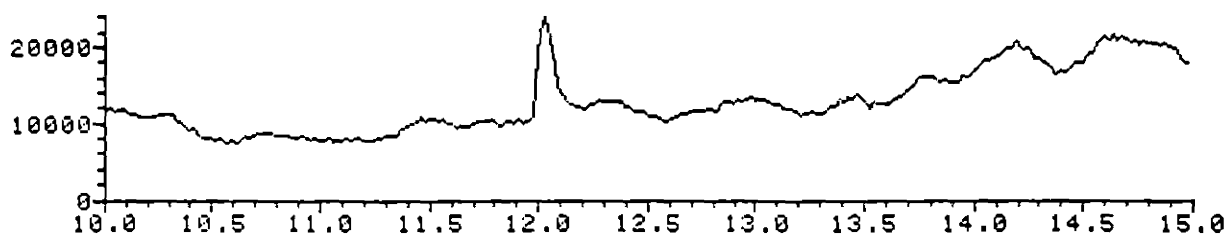
File >B2868 331.6-332.6 amu.2UL UT-2636

SP2330 200-1/3/250 RWN BT



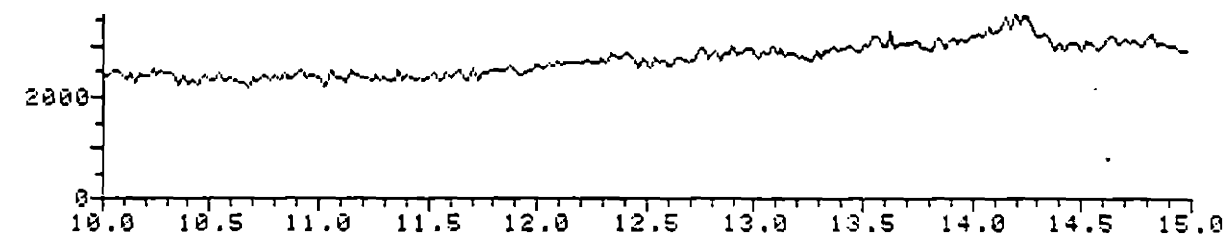
File >B2868 327.6-328.6 amu.2UL UT-2636

SP2330 200-1/3/250 RWN BT



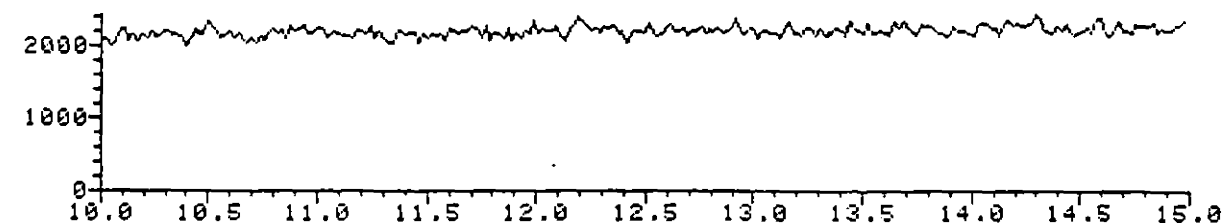
File >B2868 321.6-322.6 amu.2UL UT-2636.

SP2330 200-1/3/250 RWN BT



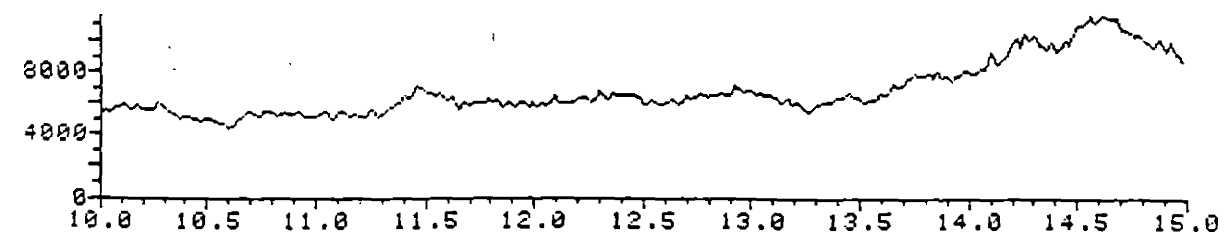
File >B2868 319.6-320.6 amu.2UL UT-2636

SP2330 200-1/3/250 RWN BT



File >B2868 256.7-257.7 amu.2UL UT-2636

SP2330 200-1/3/250 RWN BT



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00069

C11343

MS data file header from : >B2868

Sample: 2UL UT-2636 Operator: GARY MS 9/07/84 10:02
Misc : SP2930 200-1/3/250 RWN BTL#37 BTL#37
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	236	239	244	8	107248	78584	100.00
2	12.010	236	239	244	8	107248	74548	94.86

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	231	239	256	25	139010	66335	100.00
2	12.010	231	239	256	25	139010	62047	93.54

332/334 CALCULATION

R-Global(0) = .8441

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.030	229	240	252	23	318017	88063	100.00
2	12.030	229	240	252	23	318017	53839	61.14

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	253	0	252	-1	0	2708	100.00
2	0.000	253	0	252	-1	0	2708	100.00

06070

C11344

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S

M/Z = 319.9

>B2868

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	253	0	252	-1	0	2193	100.00
2	0.000	253	0	252	-1	0	2193	100.00

320/322 CALCULATION

R-Global(1) = .0100

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	253	0	252	-1	0	6477	100.00
2	0.000	253	0	252	-1	0	6477	100.00

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .0338

(328)/(332 + 334) CALCULATION

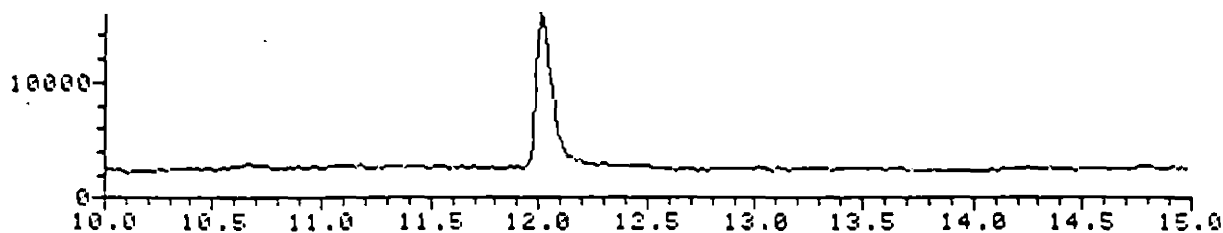
R-Global(3) = .6075

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C11345

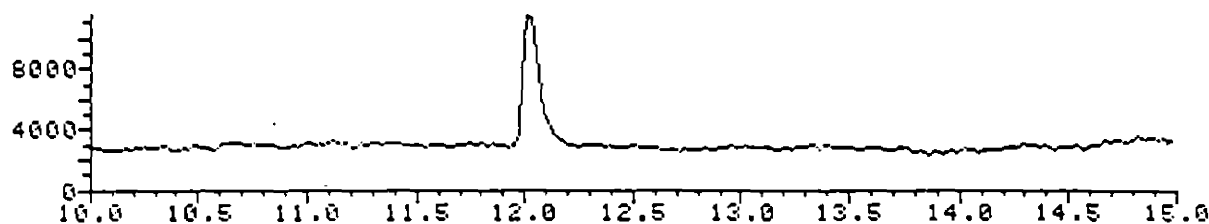
File >B2869 333.6-334.6 amu.2UL UT-2637

SP2330 200-1/3/250 RWN BT



File >B2869 331.6-332.6 amu.2UL UT-2637

SP2330 200-1/3/250 RWN BT



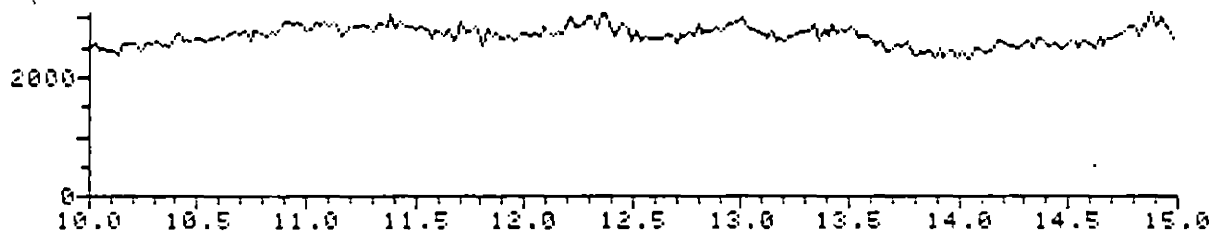
File >B2869 327.6-328.6 amu.2UL UT-2637

SP2330 200-1/3/250 RWN BT



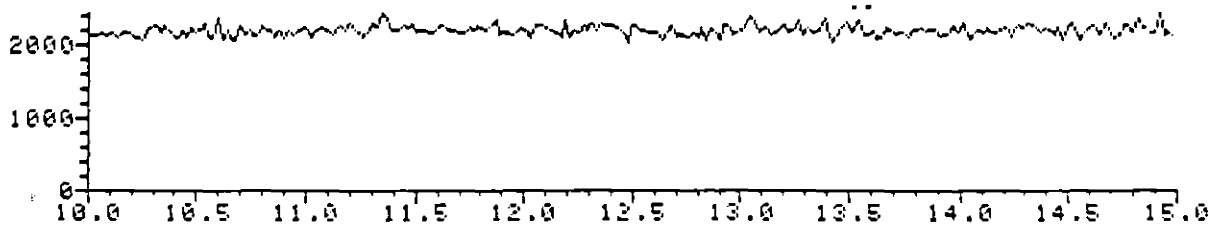
File >B2869 321.6-322.6 amu.2UL UT-2637

SP2330 200-1/3/250 RWN BT



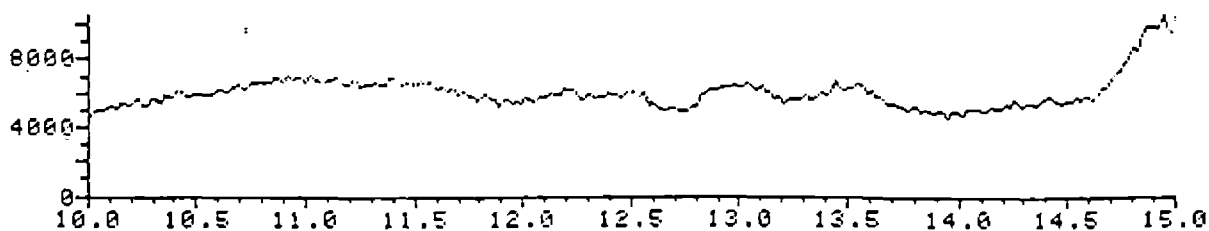
File >B2869 319.6-320.6 amu.2UL UT-2637

SP2330 200-1/3/250 RWN BT



File >B2869 256.7-257.7 amu.2UL UT-2637

SP2330 200-1/3/250 RWN BT



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00072

C11346

a file header from : >B2869

: 2UL UT-2637 Operator: GARY MS 9/07/84 10:22 ..
: SP2330 200-1/3/250 RWN BTL#39 BTL#39
: 1 MS model: 87 SW/HW rev.: CA ALS # : 0
od file: SP2330 Tuning file: APEI01 No. of extra records: 2
e temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

333.9

peak is baseline drop corrected area.
1 peak is tangent skimmed corrected area.

R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
12.010	233	239	247	14	93767	56919	100.00
12.010	233	239	247	14	93767	53699	94.34

331.9

1 peak is baseline drop corrected area.
d peak is tangent skimmed corrected area.

R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
12.010	231	239	253	22	104329	40353	100.00
12.010	231	239	253	22	104329	38571	95.58

334 CALCULATION

0bal(0) = .7090

= 327.9

st peak is baseline drop corrected area.
nd peak is tangent skimmed corrected area.

R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
12.051	237	241	245	8	133144	45008	100.00
12.051	237	241	245	8	133144	37980	84.38

= 321.9

st peak is baseline drop corrected area.
nd peak is tangent skimmed corrected area.

R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1 0.000	246	0	245	-1	0	2725	100.00
2 0.000	246	0	245	-1	0	2725	100.00

00073

C11347

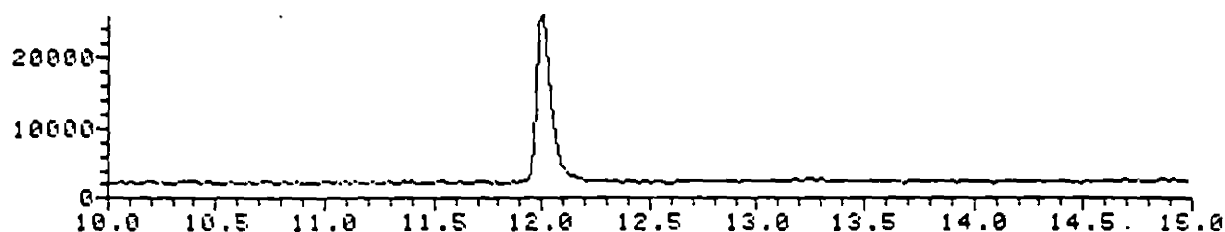
18

RESEARCH CHARTS GRAPHIC LABORATORIES CORPORATION BUFFALO NEW YORK

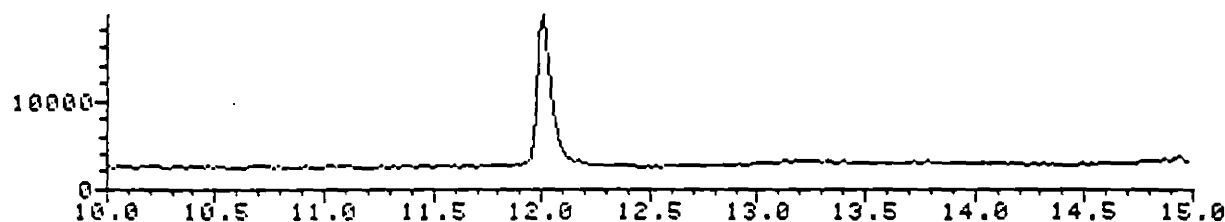
NO. 111 027000000

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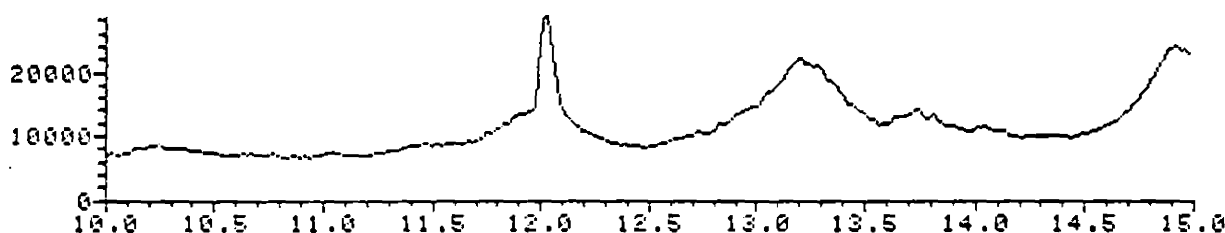
File >B2870 333.6-334.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



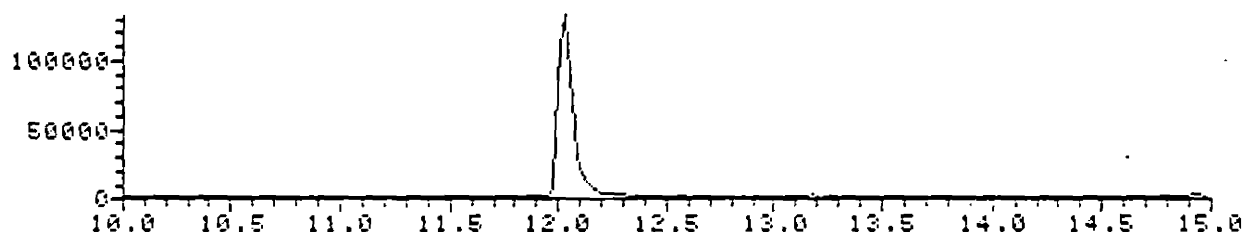
File >B2870 331.6-332.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



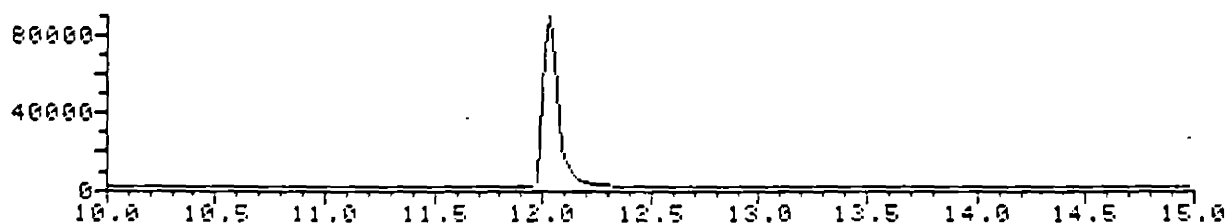
File >B2870 327.6-328.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



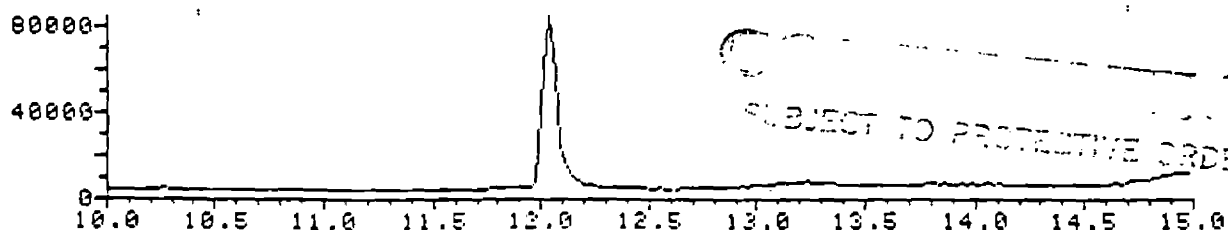
File >B2870 321.6-322.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2870 319.6-320.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2870 256.7-257.7 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



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C11349

MS data file header from : >B2870

Sample: 2UL 2.669/.48/.19 Operator: GARY MS 9/07/84 10:42:00
Misc : SP2330 200-1/3/250 RWN BTL#41 BTL#41
Sys. #: 1 MS model: 87 SW/HW rev.: CR ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.011	234	239	249	15	130146	95136	100.00
2	12.011	234	239	249	15	130146	93606	98.39

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.011	234	239	249	15	107070	68550	100.00
2	12.011	234	239	249	15	107070	66667	97.25

332/334 CALCULATION

R-Global(0) = .7205

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M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.031	237	240	243	6	147271	60493	100.00
2	12.031	237	240	243	6	147271	58330	96.42

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.031	236	240	248	12	531792	496500	100.00
2	12.031	236	240	248	12	531792	480168	96.71

C11350

NO. 11111111

BUFFALO NEW YORK

RECORDING CHARTS GRAPHIC CONTROL'S CORPORATION

NO. 11111111

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M/2 = 319.9

>B2870

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.031	235	240	248	13	366230	337682	100.00
2	12.031	235	240	248	13	366230	323096	95.68

320/322 CALCULATION

R-Global(1) = .6801

M/2 = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.031	235	240	246	10	355837	300237	100.00
2	12.031	236	240	246	10	355837	282357	94.04

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 5.0962

(328)/(332 + 334) CALCULATION

R-Global(3) = .3423

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C11351

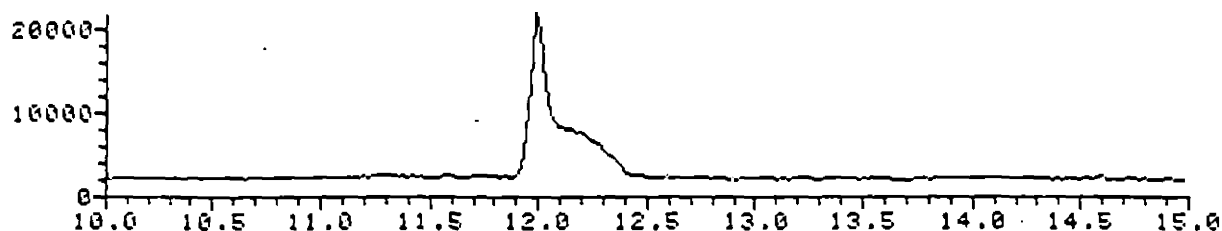
FORM 10-10-10-10-10

BUREAU NEW YORK

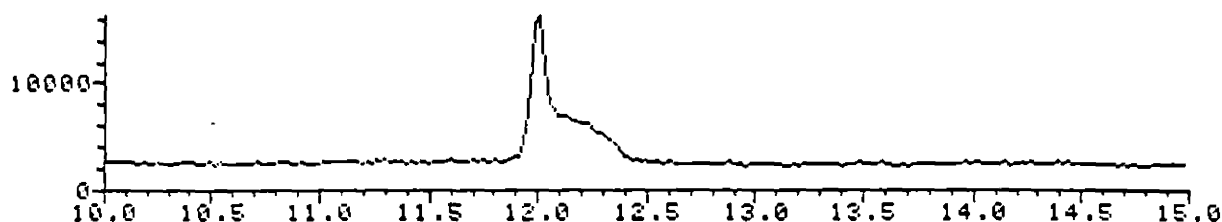
FURNISHING CHARTS CHAPMAN LINDHOLM'S CONFIRMATION

NO 10-10-10-10-10

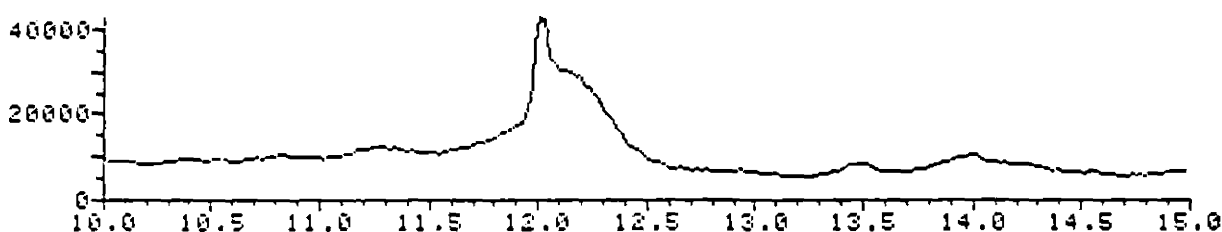
File >B2871 333.6-334.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RMN BT



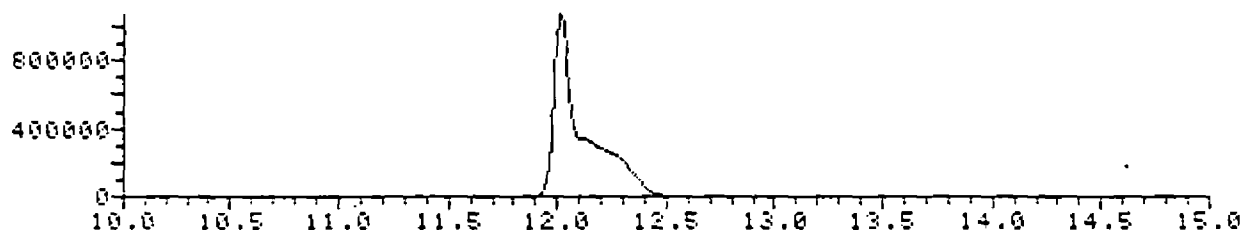
File >B2871 331.6-332.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RMN BT



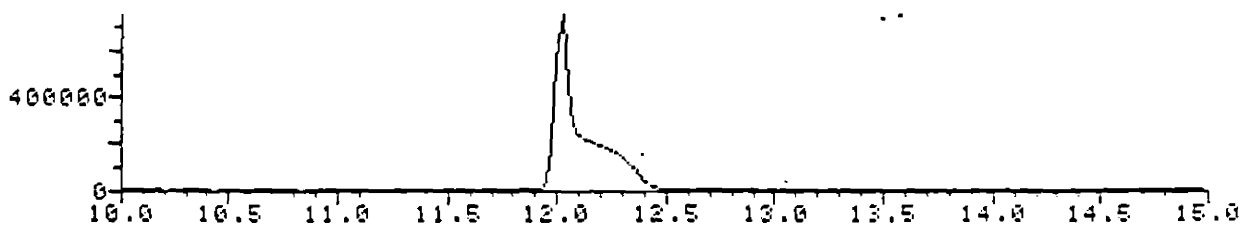
File >B2871 327.6-328.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RMN BT



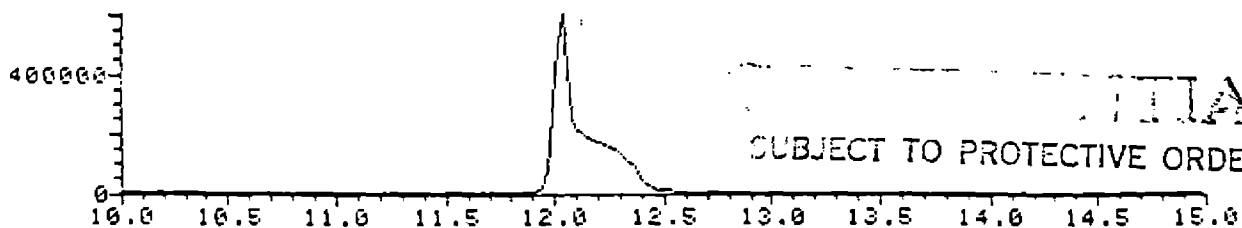
File >B2871 321.6-322.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RMN BT



File >B2871 319.6-320.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RMN BT



File >B2871 256.7-257.7 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RMN BT



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HEREIN IS UNCLASSIFIED
DATE 02-27-2008 BY 60320 UCBAW

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C11352

MS data file header from : >B2871

Sample: 2UL 26.69/.48/.19 Operator: GARY MS 9/07/84 11:02
Misc : SP2330 200-1/3/250 RWN BTL#43 BTL#43
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	233	238	243	10	119581	95141	100.00
2	11.990	233	238	243	10	119581	65461	68.80

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	234	239	243	9	93295	65854	100.00
2	12.010	234	239	243	9	93295	47858	72.67

332/334 CALCULATION

R-Global(0) = .6922

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	232	239	248	16	483585	220032	100.00
2	12.010	232	239	248	16	483585	119551	54.33

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	235	239	244	9	4944280	4816579	100.00
2	12.010	235	239	244	9	4944280	3347396	69.50

00079

011353

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RECORDING DEPT. CHAIRMAN LINCOLN'S CORPORATION

NO 111 07 200540

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M/Z = 319.9

>B2871

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.030	235	240	245	10	3495898	3421448	100.00
2	12.030	235	240	245	10	3495898	2367786	69.20

320/322 CALCULATION

R-Global(1) = .7103

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.030	235	240	245	10	2899085	2808645	100.00
2	12.030	235	240	245	10	2899085	1870499	66.60

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 51.1695

(328)/(332 + 334) CALCULATION

R-Global(3) = 1.0974

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C11354

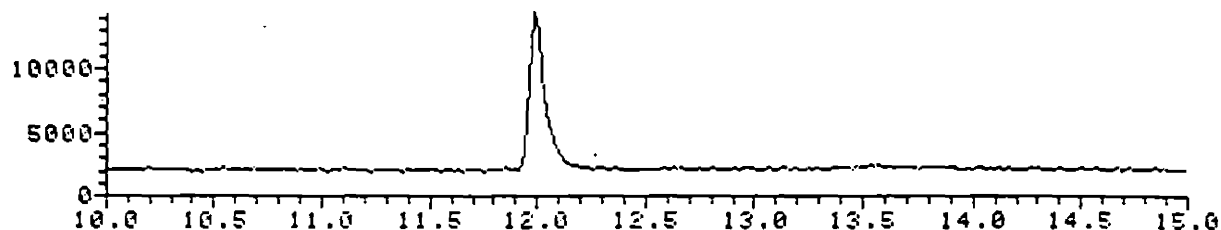
RECEIVED 10 10 8 8

RECEIVED 10 10 8 8

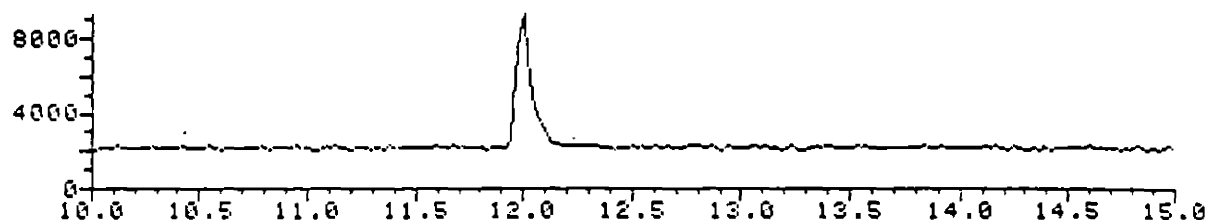
RECEIVED 10 10 8 8

RECEIVED 10 10 8 8

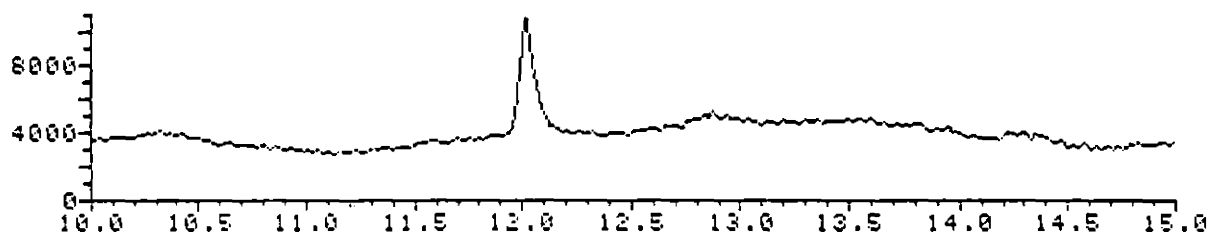
File >B2874 333.6-334.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



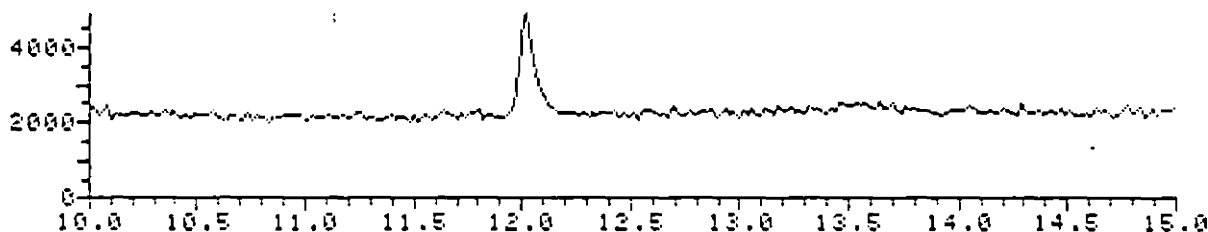
File >B2874 331.6-332.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



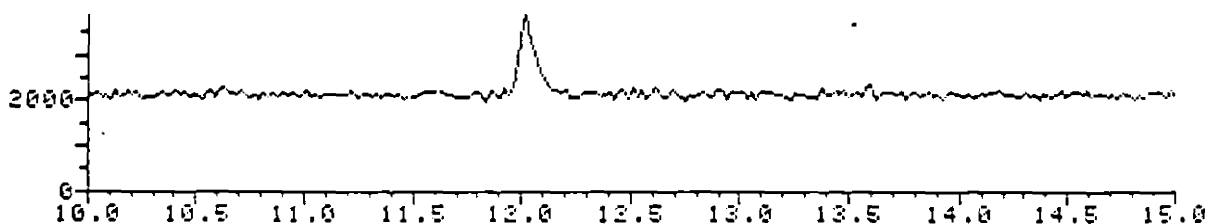
File >B2874 327.6-328.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



File >B2874 321.6-322.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



File >B2874 319.6-320.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



File >B2874 256.7-257.7 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



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C11356

MS data file header from : >B2874

Sample: 2UL .1068/.48/.19 Operator: GARY MS 9/07/84-12:05
Misc : SP2330 200-1/3/250 BTL#03 BTL# 3
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.984	239	241	246	7	64648	40526	100.00
2	11.984	239	241	246	7	64648	39133	96.56

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.004	237	242	250	13	59914	31392	100.00
2	12.004	237	242	250	13	59914	29949	95.40

332/334 CALCULATION

R-Global(0) = .7746

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.004	237	242	251	14	88029	35389	100.00
2	12.004	237	242	251	14	88029	34003	96.08

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.024	241	243	246	5	23343	9083	100.00
2	12.024	241	243	246	5	23343	7598	83.65

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C11357

RECORDING CHARTS GRAPHIC UNITS'S IDENTIFICATION BUFFALO NEW YORK NY 110 02/20/84

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M/Z = 319.9

>B2874

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.024	241	243	247	6	22029	6989	100.00
2	12.024	241	243	247	6	22029	5748	83.20

320/322 CALCULATION

R-Global(1) = .7607

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.024	238	243	248	10	39676	9536	100.00
2	12.024	238	243	248	10	39676	8586	90.04

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .2224

(320)/(332 + 334) CALCULATION

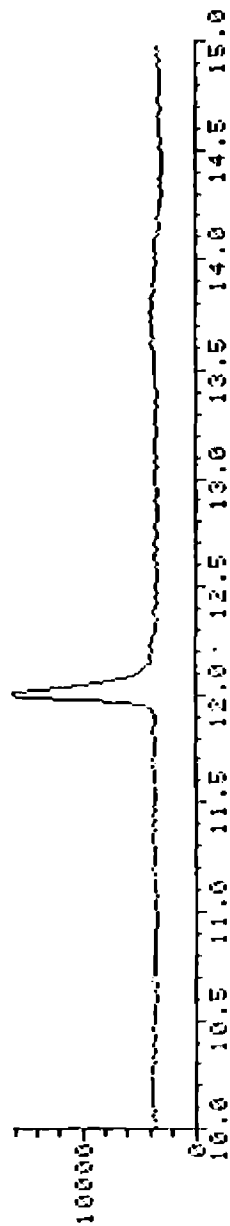
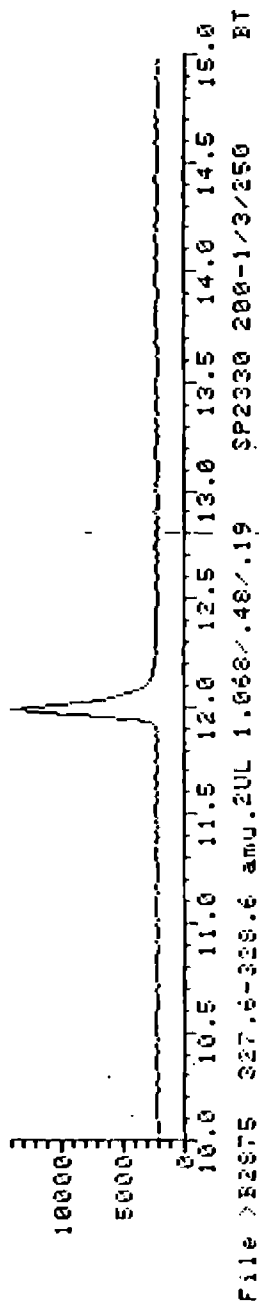
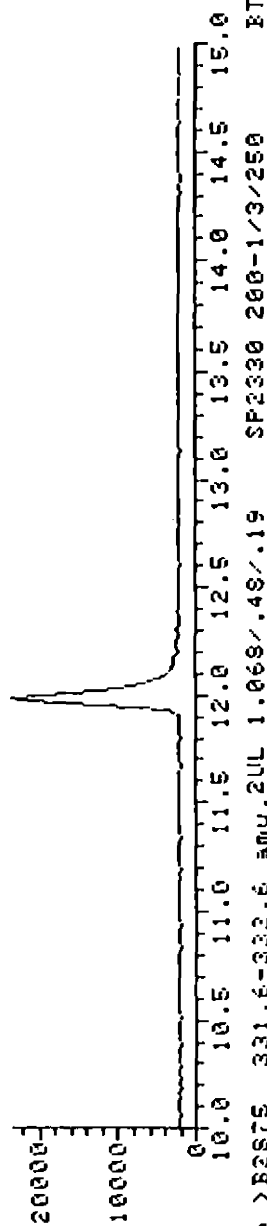
R-Global(3) = .4989

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 NO DISSEMINATION
 WITHOUT AUTHORITY

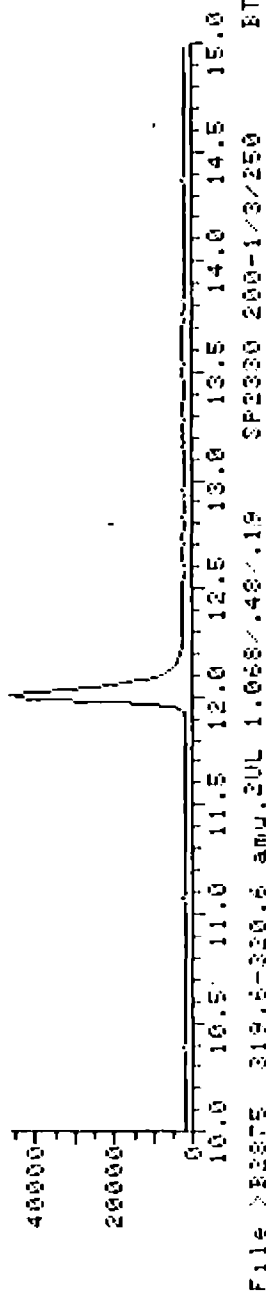
00034

C11358

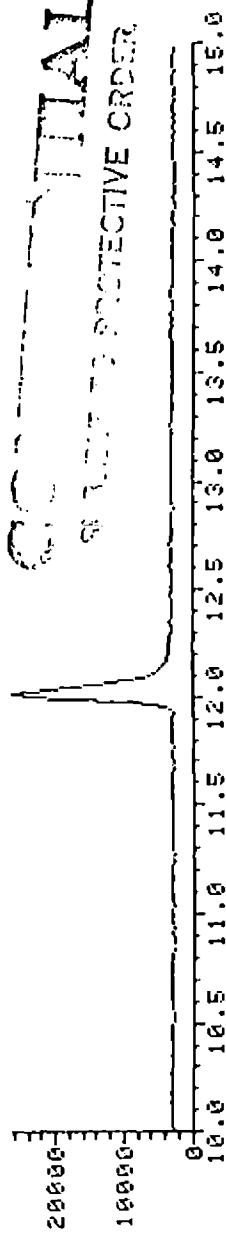
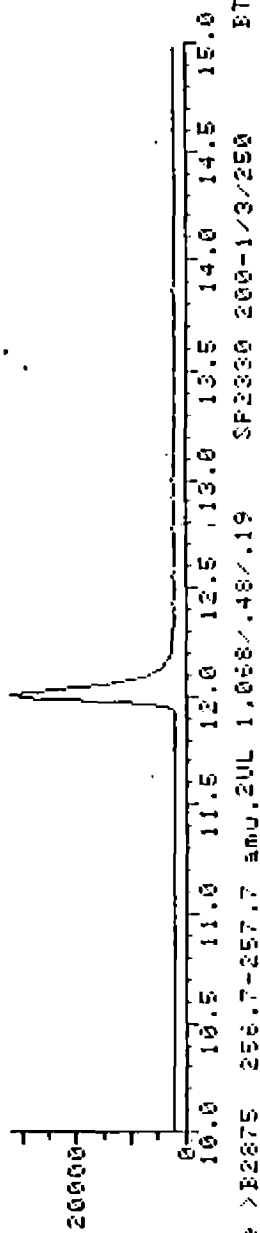
File >B2975 333.6-334.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



File >E2875 321.6-322.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 ET



File >E2875 256.7-257.7 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 ET



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DEPARTMENT OF JUSTICE

C11359

SECRET

data file header from : >B2875

File: 2UL 1.068/.48/.19 Operator: GARY MS 9/07/84-12:24
: : SP2330 200-1/3/250 BTL#05 BTL# 5
#: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Inlet temp.: 252 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

= 333.9

1st peak is baseline drop corrected area.
2nd peak is tangent skimmed corrected area.

pk	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	237	238	242	5	82220	56745	100.00
2	11.990	237	238	242	5	82220	15262	26.90

= 331.9

1st peak is baseline drop corrected area.
2nd peak is tangent skimmed corrected area.

pk	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	235	238	244	9	66175	42136	100.00
2	11.990	235	238	244	9	66175	41195	97.77

2/334 CALCULATION

Global(0) = .7426

Z = 327.9

1st peak is baseline drop corrected area.
2nd peak is tangent skimmed corrected area.

pk	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	234	239	246	12	98382	56154	100.00
2	12.010	234	239	246	12	98382	54390	96.86

Z = 321.9

1st peak is baseline drop corrected area.
2nd peak is tangent skimmed corrected area.

pk	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	237	239	243	6	180719	127919	100.00
2	12.010	237	239	243	6	180719	95278	74.48

C11360

MS data file header from : >B2876

Sample: 2UL UT-2638 Operator: GARY MS 9/07/84-12:46=
Misc : SP2330 200-1/3/250 RWN BTL#45 BTL#45
Sys. #: 1 MS model: 67 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.970	236	237	242	6	86132	59336	100.00
2	11.970	236	237	242	6	86132	38648	65.13

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.970	233	237	246	13	70827	43098	100.00
2	11.970	233	237	246	13	70827	41590	96.50

332/334 CALCULATION

R-Global(0) = .7263

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	235	238	248	13	93453	51944	100.00
2	11.990	235	238	248	13	93453	49747	95.77

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	249	0	248	-1	0	2224	100.00
2	0.000	249	0	248	-1	0	2224	100.00

C11363

CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER

S

M/Z = 319.9

>B2876

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	249	0	248	-1	0	2144	100.00
2	0.000	249	0	248	-1	0	2144	100.00

320/322 CALCULATION

R-Global(1) = .9640

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	249	0	248	-1	0	2759	100.00
2	0.000	249	0	248	-1	0	2759	100.00

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .0426

(320)/(332 + 334) CALCULATION

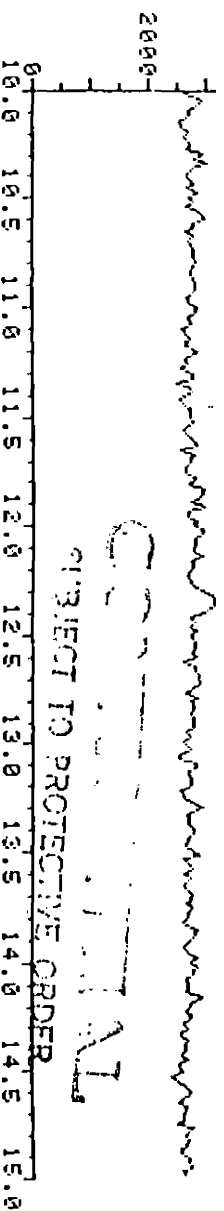
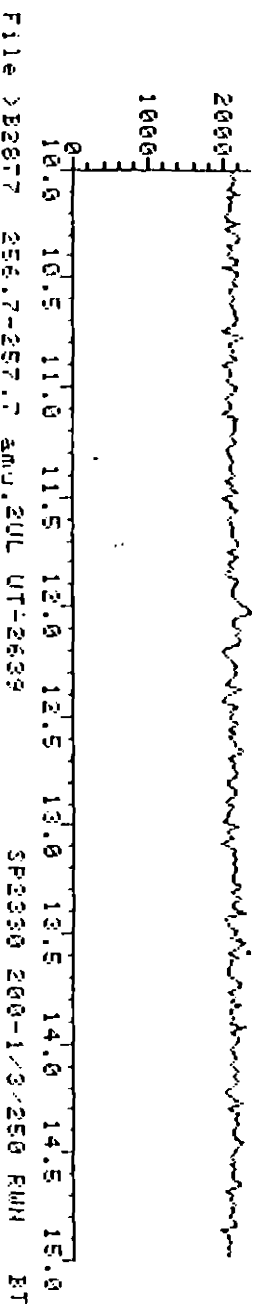
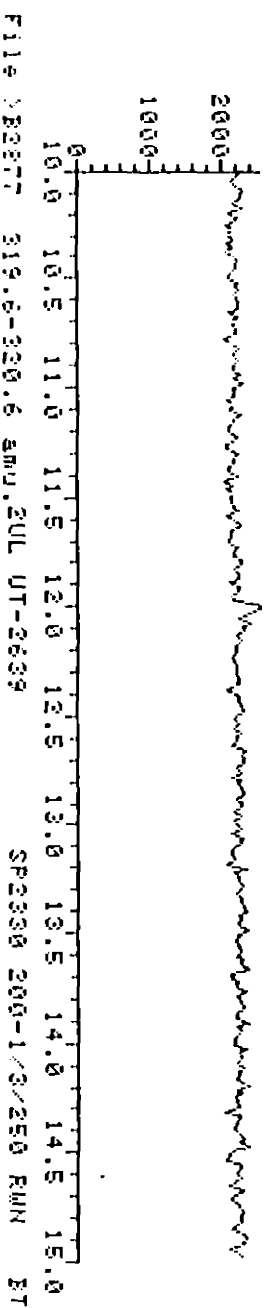
R-Global(3) = .5069

CONFIDENTIAL
 SUBJECT TO PROTECTIVE ORDER

06090

C11364

File >B2677 321.6-322.6 amu.2UL UT-2639 SP2330 200-1/3/250 RUN BT

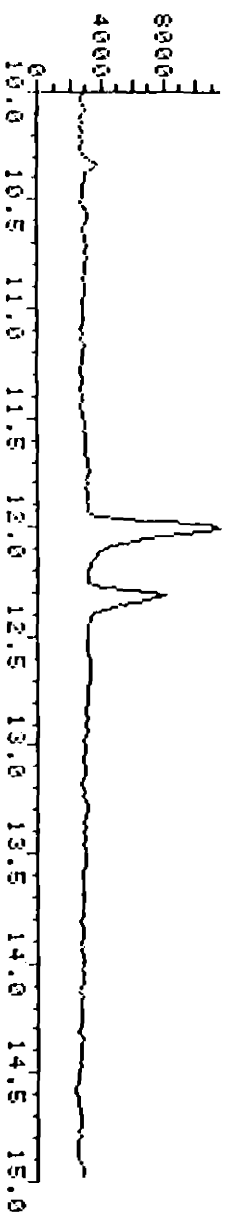
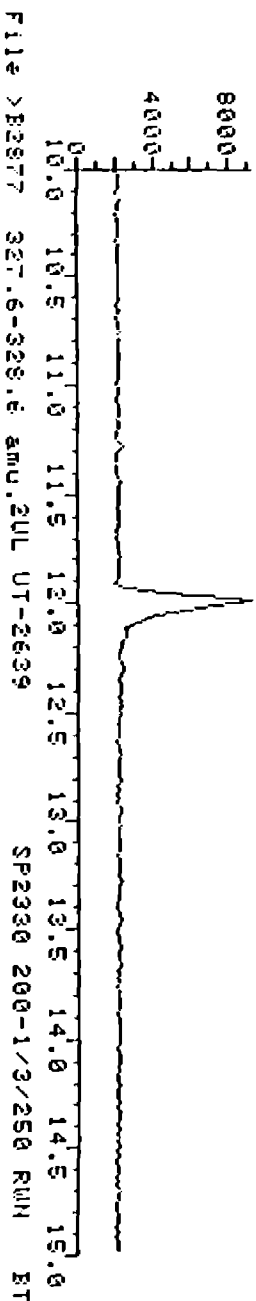
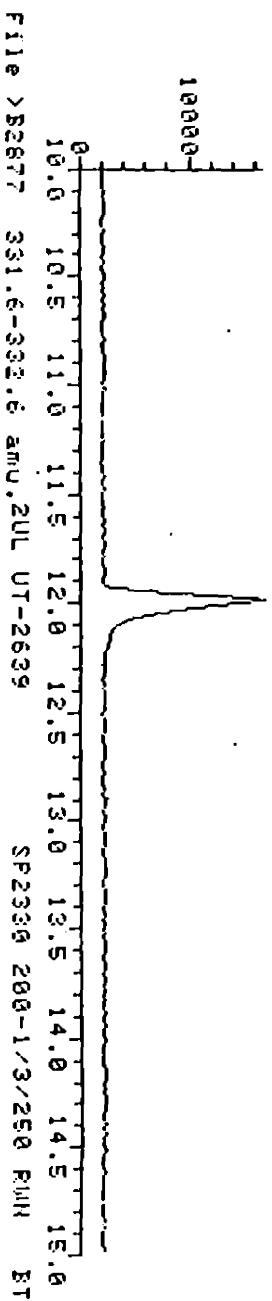


OBJECT TO PROTECTIVE ORDER

06.004

C11365

File >B2677 333.6-334.6 amu.2UL UT-2639 SP2330 200-1/3/250 RUN BT



MS data file header from : >B2877

Sample: 2UL UT-2639 Operator: GARY MS 9/07/84-13:06
Misc : SP2330 200-1/3/250 RWN BTL#47 BTL#47
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APE101 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	236	238	242	6	71474	45152	100.00
2	11.990	236	238	242	6	71474	33140	73.40

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	234	238	244	10	52794	33584	100.00
2	11.990	234	238	244	10	52794	30404	90.53

332/334 CALCULATION

R-Global(0) = .7438

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	235	239	249	14	83067	39667	100.00
2	12.010	235	239	249	14	83067	39492	99.56

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	250	0	249	-1	0	2178	100.00
2	0.000	250	0	249	-1	0	2178	100.00

CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER

C11366

00092

BUFFALO NEW YORK

RECORDING CHARTS GRAPHIC (UNITED STATES)

NO. 107 02700640

S

M/Z = 319.9

>B2877

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	250	0	249	-1	0	2047	100.00
2	0.000	250	0	249	-1	0	2047	100.00

320/322 CALCULATION

R-Global(1) = .9399

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	250	0	249	-1	0	2717	100.00
2	0.000	250	0	249	-1	0	2717	100.00

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .0537

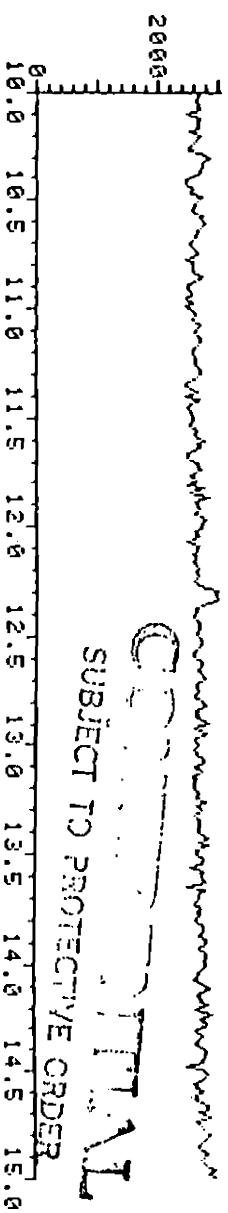
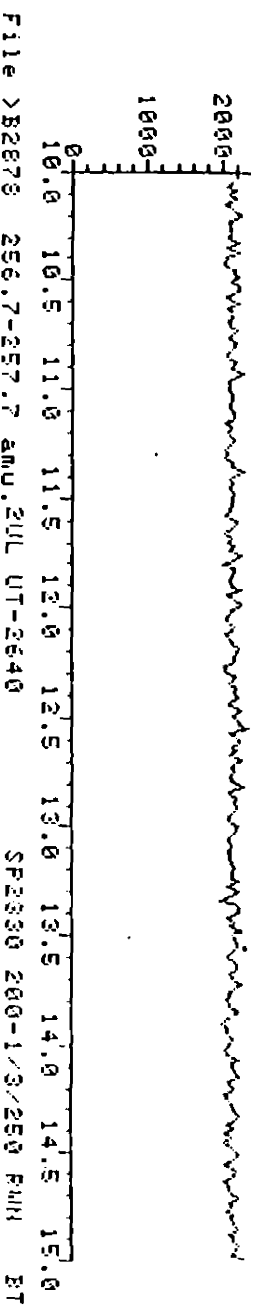
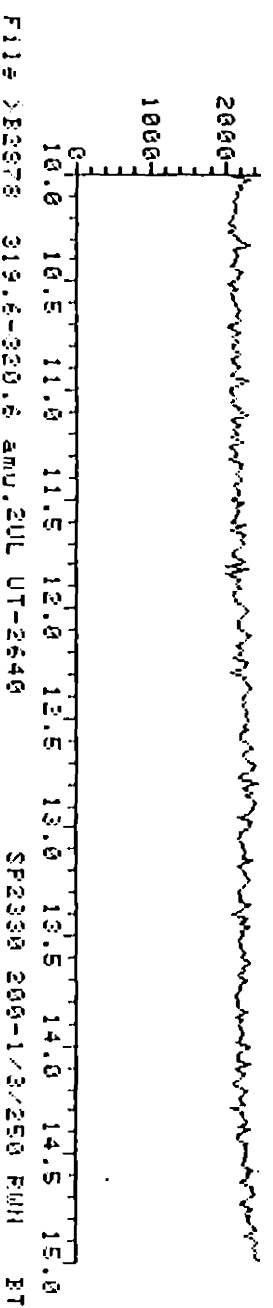
(320)/(332 + 334) CALCULATION

R-Global(3) = .5035

CONFIDENTIAL
 SUBJECT TO PROTECTIVE ORDER

C11367

00093

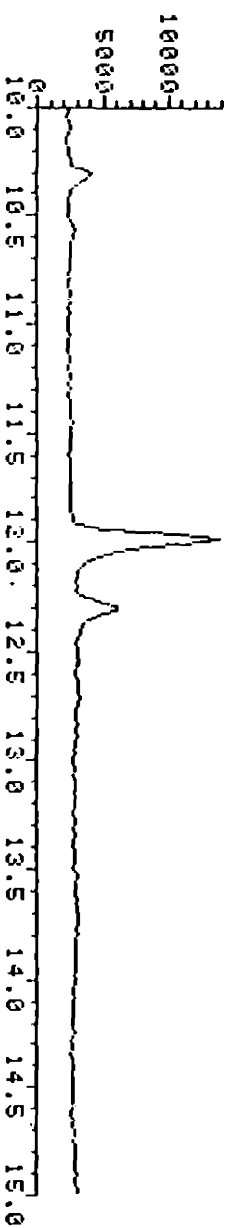
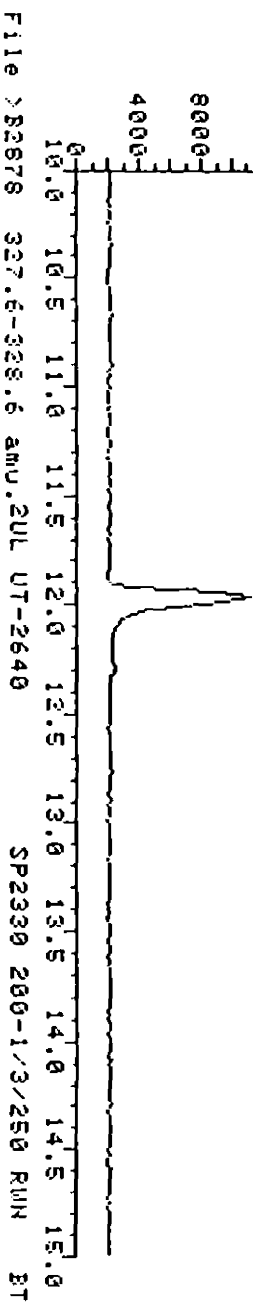
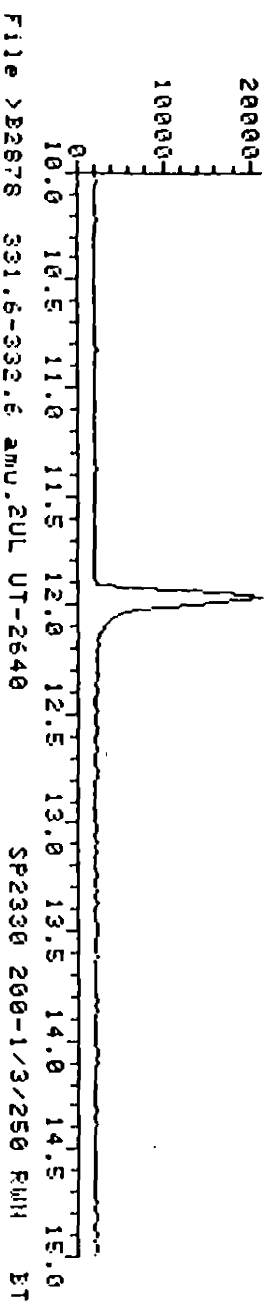


SUBJECT TO PROTECTIVE ORDER

00094

C11368

File >B2678 333.6-334.6 amu.2UL UT-2640 SP2330 200-1/3/250 RUN BT



File >B2678 321.6-322.6 amu.2UL UT-2640 SP2330 200-1/3/250 RUN BT

MS data file header from : >B2878

Sample: 2UL UT-2640 Operator: GARY MS 9/07/84-13:26:--
Misc : SP2330 200-1/3/250 RWN BTL#49 BTL#49
Sys. #: 1 MS model: 87 SW/HW rev.: CR ALS #: 0
Method file: SP2330 Tuning file: RPEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.964	238	240	244	6	82683	53067	100.00
2	11.964	238	240	244	6	82683	48456	91.31

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.964	235	240	250	15	69906	40191	100.00
2	11.964	235	240	250	15	69906	37866	94.22

332/334 CALCULATION

R-Global(0) = .7574

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.984	237	241	250	13	81982	48299	100.00
2	11.984	237	241	250	13	81982	45575	94.36

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	251	0	250	-1	0	2192	100.00
2	0.000	251	0	250	-1	0	2192	100.00

00095

C11369

>B2878

= 319.9

1st peak is baseline drop corrected area.
2nd peak is tangent skimmed corrected area.

	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.186	251	251	251	0	2216	2216	100.00
2	12.186	251	251	251	0	2216	2216	100.00

322 CALCULATION

Global(1) = 1.0107

= 257.0

1st peak is baseline drop corrected area.
2nd peak is tangent skimmed corrected area.

pk #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	252	0	251	-1	0	2692	100.00
2	0.000	252	0	251	-1	0	2692	100.00

20 + 322)/(332 + 334) CALCULATION

Global(3) = .0473

28)/(332 + 334) CALCULATION

Global(3) = .5177

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00096

C11370

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UNITED STATES DEPARTMENT OF JUSTICE

U.S. DEPARTMENT OF JUSTICE

C11372

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M/Z = 319.9

>B2879

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	249	0	248	-1	0	2100	100.00
2	0.000	249	0	248	-1	0	2100	100.00

320/322 CALCULATION

R-Global(1) = 1.0074

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	249	0	248	-1	0	2651	100.00
2	0.000	249	0	248	-1	0	2651	100.00

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .0489

(328)/(332 + 334) CALCULATION

R-Global(3) = .5120

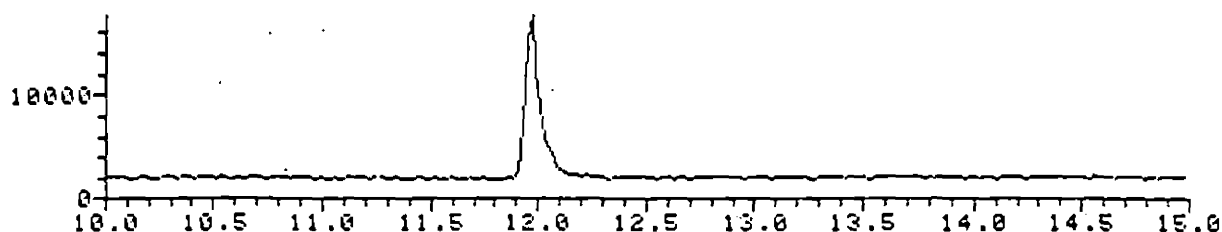
COPIED FROM ORIGINAL
 SUBJECT TO PROTECTIVE ORDER

00099

C11373

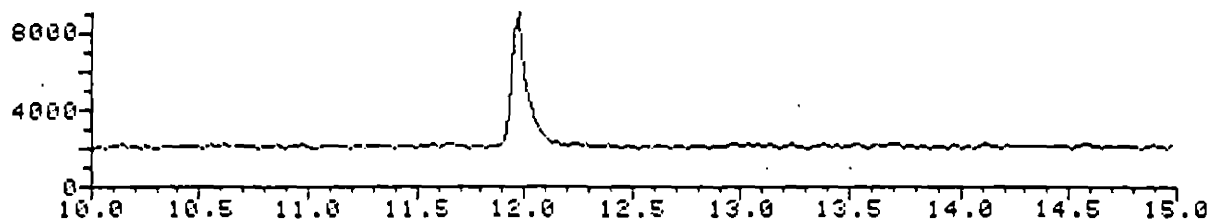
File >B2880 333.6-334.6 amu.2UL UT-2642

SP2330 200-1/3/250 RWN BT



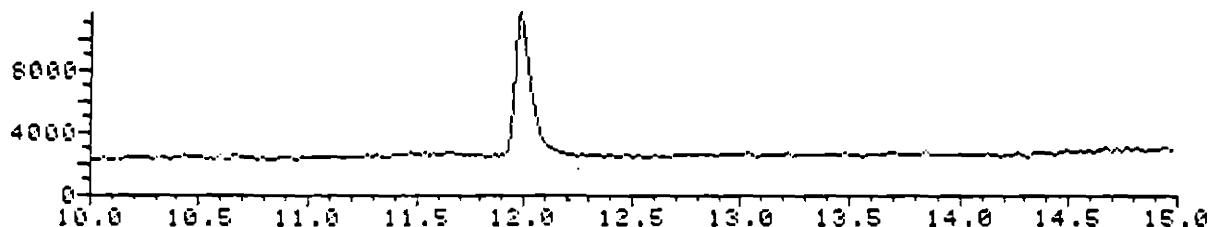
File >B2880 331.6-332.6 amu.2UL UT-2642

SP2330 200-1/3/250 RWN BT



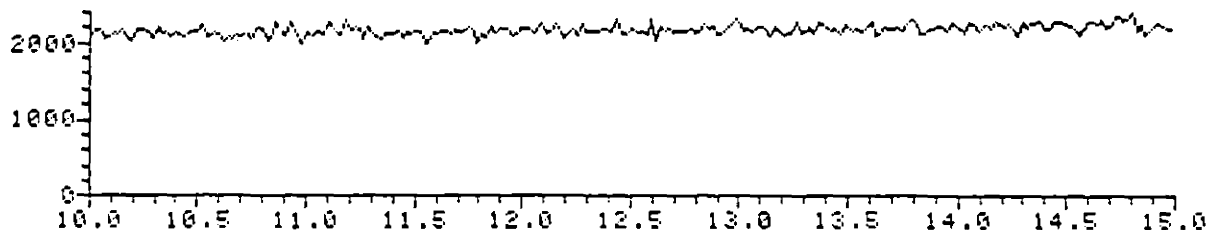
File >B2880 327.6-328.6 amu.2UL UT-2642

SP2330 200-1/3/250 RWN BT



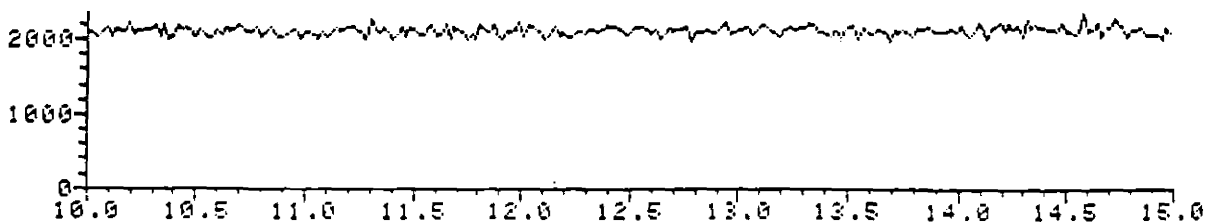
File >B2880 321.6-322.6 amu.2UL UT-2642

SP2330 200-1/3/250 RWN BT



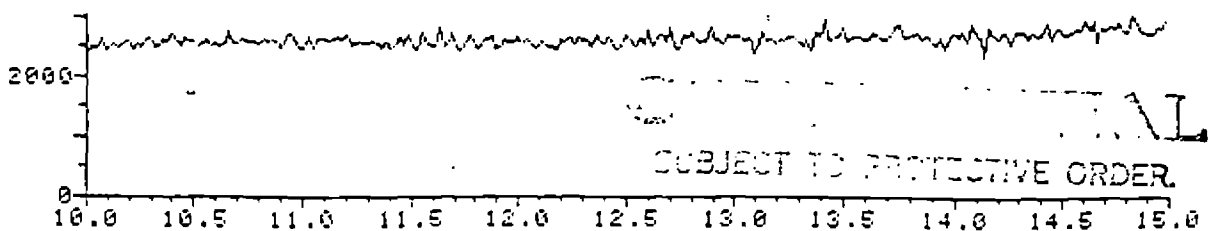
File >B2880 319.6-320.6 amu.2UL UT-2642

SP2330 200-1/3/250 RWN BT



File >B2880 256.7-257.7 amu.2UL UT-2642

SP2330 200-1/3/250 RWN BT



ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED
DATE 05-08-2006 BY 60320

ORIGINAL
SUBJECT TO PROTECTIVE ORDER.

MS data file header from : >B2880

Sample: 2UL UT-2642 Operator: GARY MS 9/07/84-14:06-
Misc : SP2330 200-1/3/250 RWN BTL#53 BTL#53
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.970	235	237	241	6	71890	44110	100.00
2	11.970	235	237	241	6	71890	37189	84.31

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.970	233	237	246	13	57077	30583	100.00
2	11.970	233	237	246	13	57077	29023	94.90

332/334 CALCULATION

R-Global(0) = .6933

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	234	238	249	15	80120	42785	100.00
2	11.990	234	238	249	15	80120	42425	99.16

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	250	0	249	-1	0	2146	100.00
2	0.000	250	0	249	-1	0	2146	100.00

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C11375

RECORDING CHARTS GRAPHIC LUNING'S CORPORATION BUFFALO, N.Y. 14203

NOV 11 02 2006

S

M/Z = 319.9

>B2880

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	250	0	249	-1	0	2025	100.00
2	0.000	250	0	249	-1	0	2025	100.00

320/322 CALCULATION

R-Global(1) = .9434

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	250	0	249	-1	0	2635	100.00
2	0.000	250	0	249	-1	0	2635	100.00

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .05581

(328)/(332 + 334) CALCULATION

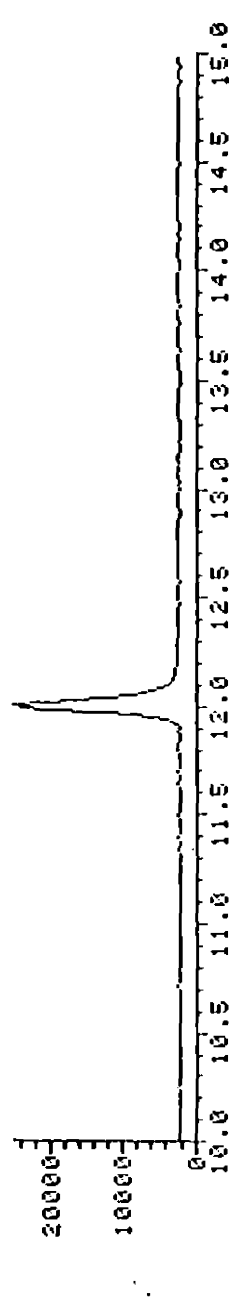
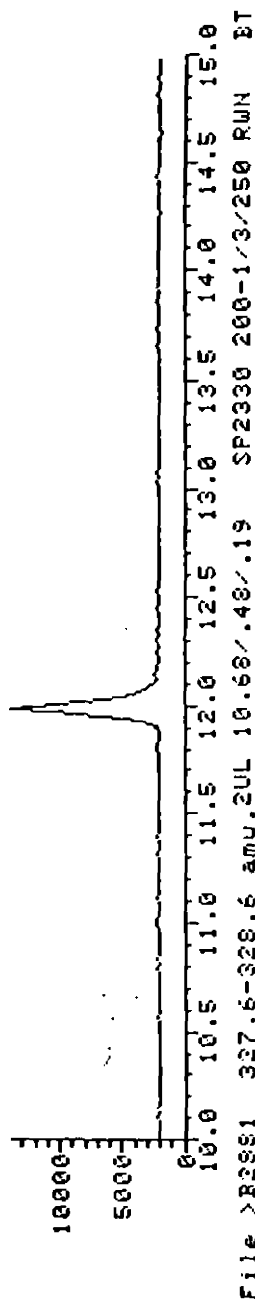
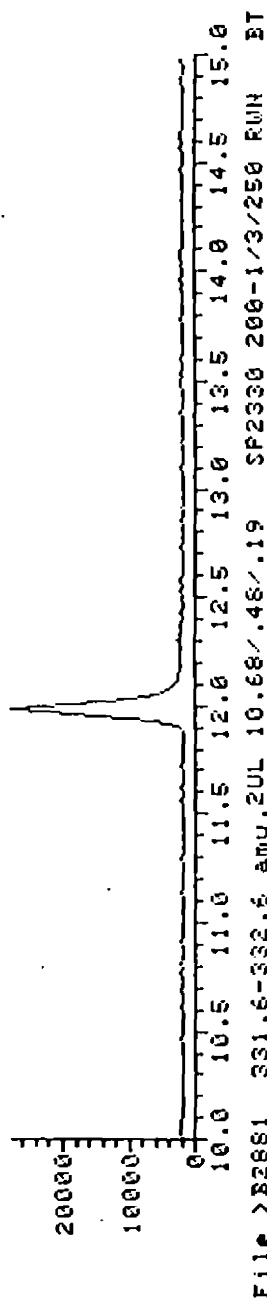
R-Global(3) = .5726

SUBJECT

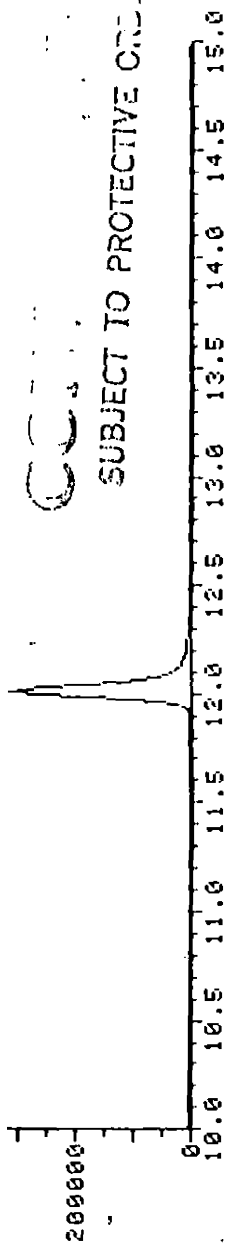
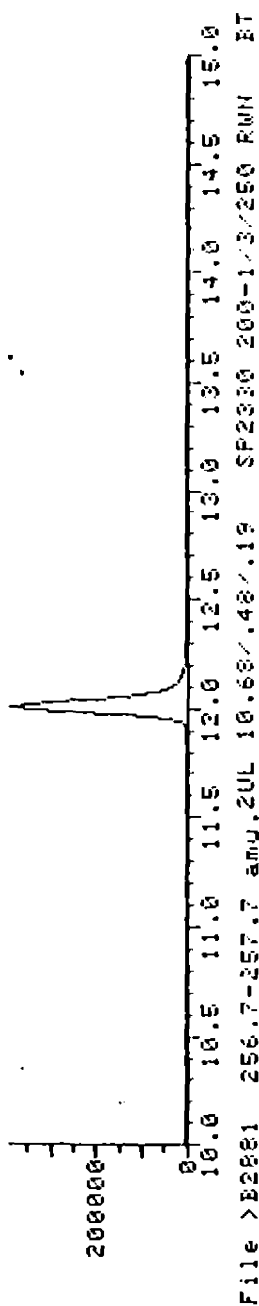
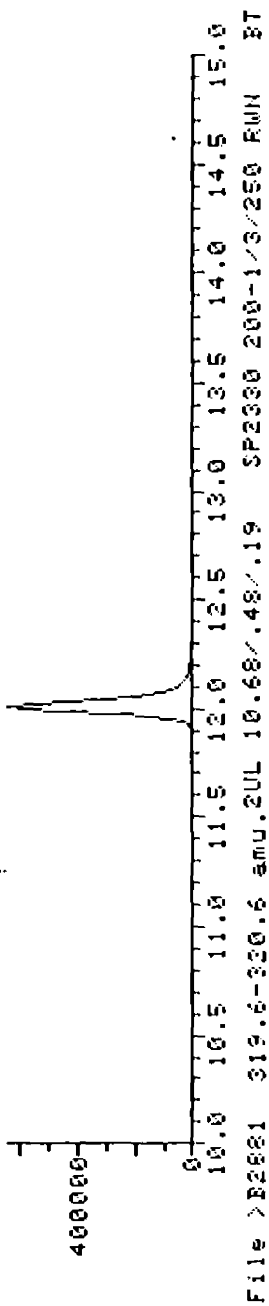
06102

C11376

File >B2881 333.6-334.6 amu.2UL 10.68/.48/.19 SP2330 200-1/3/250 RUN ET



File >B2881 321.6-322.6 amu.2UL 10.68/.48/.19 SP2330 200-1/3/250 RUN ET



06103

C11377

GC/MS default file: >B2881::01

MS data file header from : >B2881

Sample: 2UL 10.68/.48/.19 Operator: GARY MS 9/07/84 14:29
Misc : SP2330 200-1/3/250 RWN BTL#17 BTL#17
Sys. #: 1 MS model: 87 SW/HW rev.: CR ALS #: 0
Method file: SP2330 Tuning file: APE101 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	236	238	240	4	92020	54400	100.00
2	11.990	236	238	240	4	92020	44332	81.49

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	235	238	246	11	68116	42409	100.00
2	11.990	235	238	246	11	68116	36254	85.49

332/334 CALCULATION

R-Global(0) = .7796

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	233	239	247	14	120057	85295	100.00
2	12.010	233	239	247	14	120057	82537	95.77

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	236	239	243	7	2264061	1781339	100.00
2	12.010	236	239	243	7	2264061	1746367	98.84

00104

C11378

RECORDING CHARTS

GRAPHIC CONTROL & COMPARISON

SUSPECT TO PROTECTIVE ORDER

NO. 110-4270 (10-60)

S
M/Z = 319.9

>B2881

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	235	239	252	17	1500291	1425933	100.00
2	12.010	235	239	252	17	1500291	1412435	99.05

320/322 CALCULATION

R-Global(1) = .8005

M/Z = 257.0

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	234	239	250	16	1201846	1160166	100.00
2	12.010	234	239	250	16	1201846	1137966	98.09

(320 + 322)/(332 + 334) CALCULATION

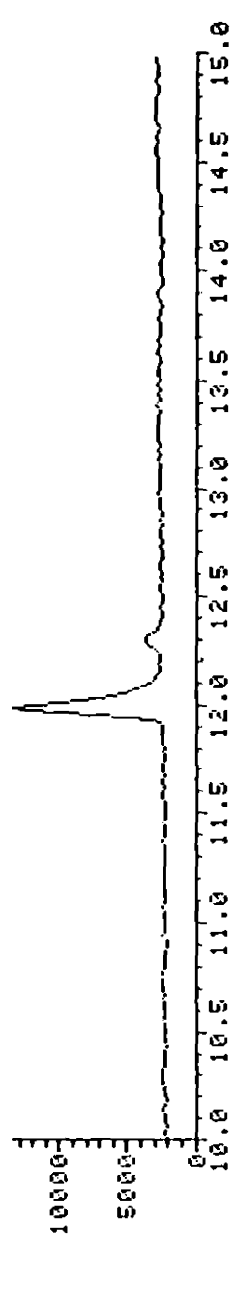
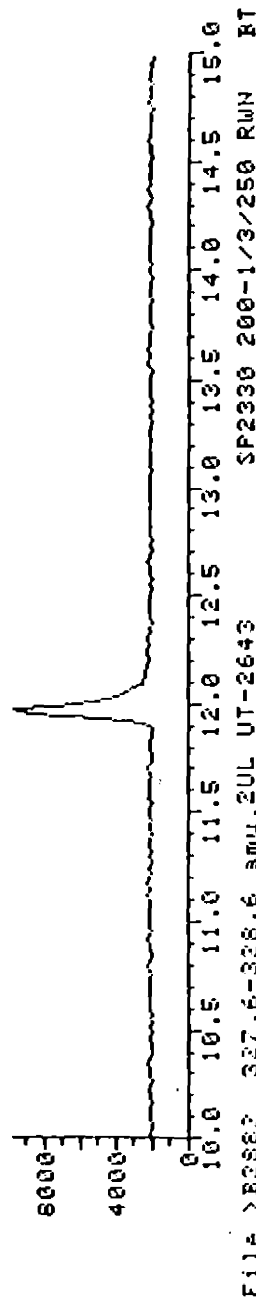
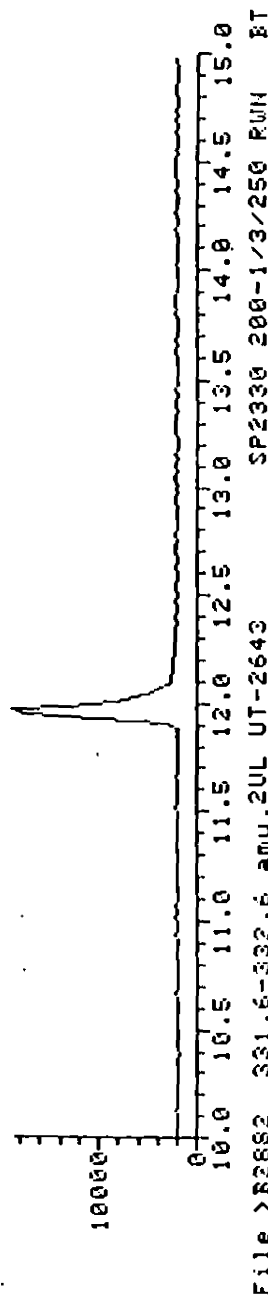
R-Global(3) = 33.1299

(320)/(332 + 334) CALCULATION

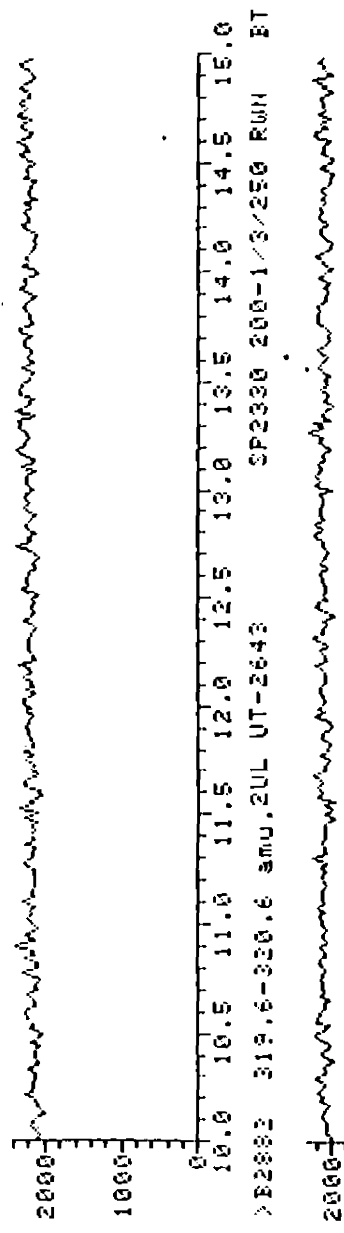
R-Global(3) = .7155

SUBJECT TO PROTECTIVE ORDER

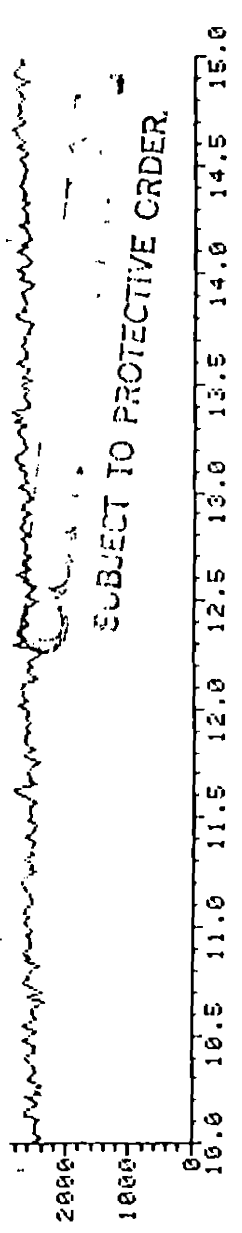
File >B26S2 333.6-334.6 amu.2UL UT-2643 SP2330 200-1/3/250 RUN BT



File > E2882 321.6-322.6 amu, 2UL UT-2643 SP2330 200-1/3/250 RUN BT



File > E2882 256.7-257.7 amu, 2UL UT-2643 SP2330 200-1/3/250 RUN BT



SUBJECT TO PROTECTIVE ORDER.

GC/MS default file: >B2882:101

MS data file header from : >B2882

Sample: 2UL UT-2643 Operator: GARY MS 9/07/84 14:51..
Misc : SP2330 200-1/3/250 RWN BTL#55 BTL#55
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.969	235	237	240	5	73051	42316	100.00
2	11.969	235	237	240	5	73051	32978	77.93

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.969	233	237	248	15	64164	33924	100.00
2	11.969	233	237	248	15	64164	32559	95.98

332/334 CALCULATION

R-Global(0) = .8017

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	233	238	248	15	85508	49448	100.00
2	11.990	233	238	248	15	85508	47153	95.36

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	P.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	249	0	248	-1	0	2233	100.00
2	0.000	249	0	248	-1	0	2233	100.00

C11381

S

M/Z = 319.9

>B2882

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	249	0	248	-1	0	2162	100.00
2	0.000	249	0	248	-1	0	2162	100.00

320/322 CALCULATION

R-Global(1) = .9682

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	0.000	249	0	248	-1	0	2557	100.00
2	0.000	249	0	248	-1	0	2557	100.00

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .0576

(328)/(332 + 334) CALCULATION

R-Global(3) = .6483

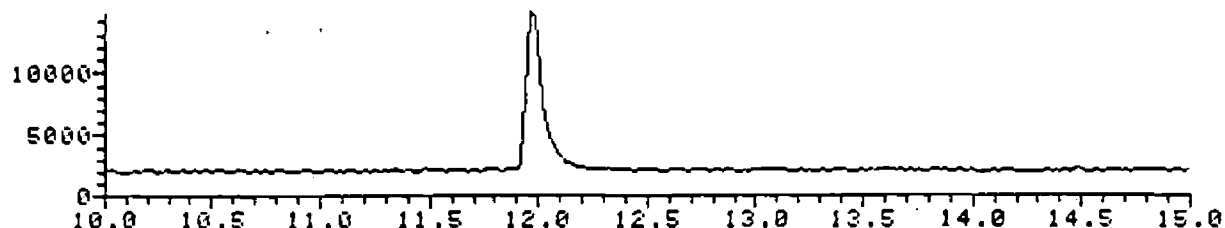
CONFIDENTIAL
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00108

C11382

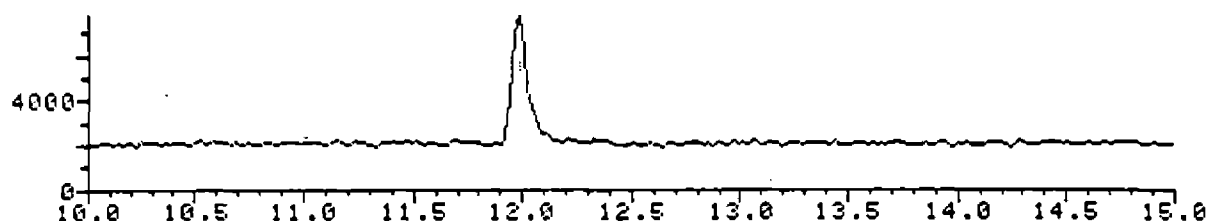
File >B2883 333.6-334.6 amu.2UL UT-2644

SP2330 200-1/3/250 RWH BT



File >B2883 331.6-332.6 amu.2UL UT-2644

SP2330 200-1/3/250 RWH BT



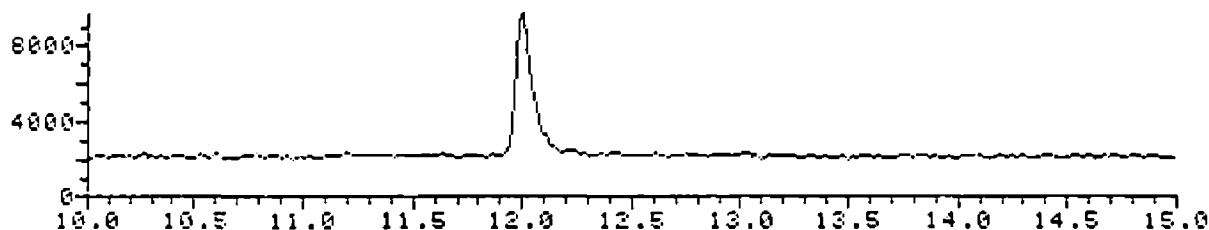
File >B2883 327.6-328.6 amu.2UL UT-2644

SP2330 200-1/3/250 RWH BT



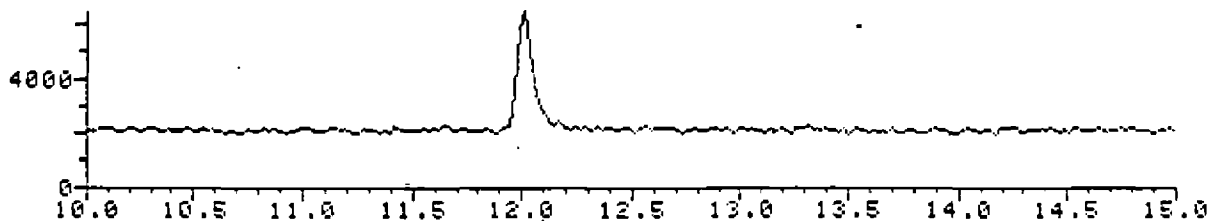
File >B2883 321.6-322.6 amu.2UL UT-2644

SP2330 200-1/3/250 RWH BT



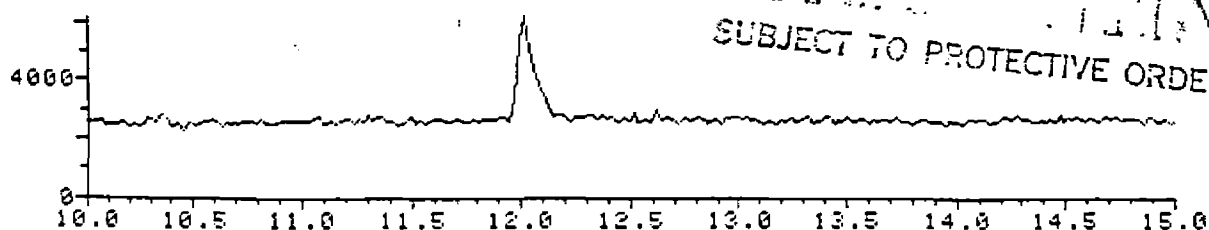
File >B2883 319.6-320.6 amu.2UL UT-2644

SP2330 200-1/3/250 RWH BT



File >B2883 256.7-257.7 amu.2UL UT-2644

SP2330 200-1/3/250 RWH BT



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00109

C11383

GC/MS default file: >B2083:101

MS data file header from : >B2083

Sample: 2UL UT-2644 Operator: GARY MS 9/07/84 15:11...
Misc : SP2330 200-1/3/250 RWN BTL#57 BTL#57
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.963	239	240	245	6	64015	38083	100.00
2	11.963	239	240	245	6	64015	27307	71.70

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.984	235	241	251	16	59207	26615	100.00
2	11.984	235	241	251	16	59207	25775	96.84

332/334 CALCULATION

R-Global(0) = .6989

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.004	238	242	251	13	72187	39973	100.00
2	12.004	238	242	251	13	72187	38348	95.93

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.004	240	242	247	7	49469	26432	100.00
2	12.004	240	242	247	7	49469	19372	73.29

06110

C11384

S

M/Z = 319.9

>B2883

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.004	240	242	249	9	39755	18911	100.00
2	12.004	240	242	249	9	39755	13560	71.70

320/322 CALCULATION

R-Global(1) = .7155

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.004	240	242	249	9	41947	17323	100.00
2	12.004	240	242	249	9	41947	14335	82.75

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .7088

(328)/(332 + 334) CALCULATION

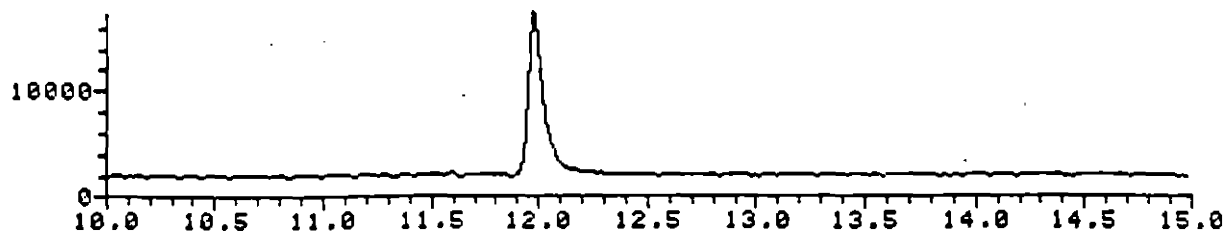
R-Global(3) = .6142

00111

C11385

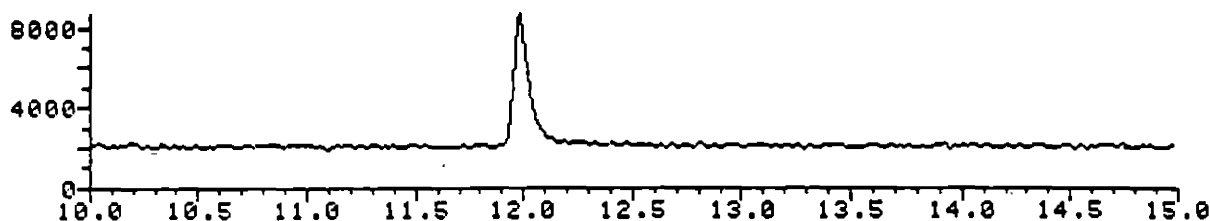
File >B2884 333.6-334.6 amu.2UL UT-2645

SP2330 200-1/3/250 RWN BT



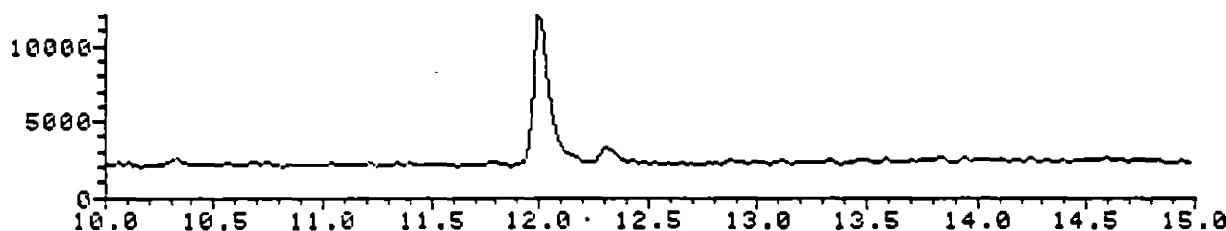
File >B2884 331.6-332.6 amu.2UL UT-2645

SP2330 200-1/3/250 RWN BT



File >B2884 327.6-328.6 amu.2UL UT-2645

SP2330 200-1/3/250 RWN BT



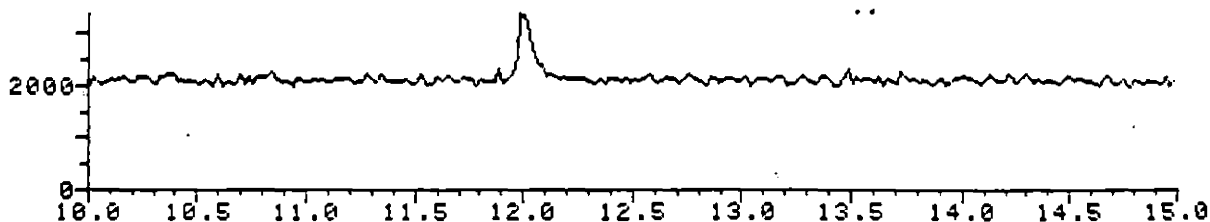
File >B2884 321.6-322.6 amu.2UL UT-2645

SP2330 200-1/3/250 RWN BT



File >B2884 319.6-320.6 amu.2UL UT-2645

SP2330 200-1/3/250 RWN BT



File >B2884 256.7-257.7 amu.2UL UT-2645

SP2330 200-1/3/250 RWN BT



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00112

C11386

RECEIVED 10/1/84

RECEIVED 10/1/84

RECEIVED 10/1/84

RECEIVED 10/1/84

GC/MS default file: >B2884:01

MS data file header from : >B2884

Sample: 2UL UT-2645 Operator: GARY MS 9/07/84 15:31...
Misc : SP2330 200-1/3/250 RWN BTL#59 BTL#59
Sys. #: 1 MS model: 87 SW/HW rev.: CR ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.969	236	237	240	4	63191	33383	100.00
2	11.969	236	237	240	4	63191	28653	85.83

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	235	238	246	11	52378	27661	100.00
2	11.990	235	238	246	11	52378	26385	95.39

332/334 CALCULATION

R-Global(0) = .8286

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	235	238	248	13	73204	44019	100.00
2	11.990	235	238	248	13	73204	42550	96.66

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	237	239	243	6	23045	8507	100.00
2	12.010	237	239	243	6	23045	6206	72.95

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C11387

06113

S

M/Z = 319.9

>B2884

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	235	238	245	10	28464	6954	100.00
2	11.990	235	238	245	10	28464	6474	93.10

320/322 CALCULATION

R-Global(1) = .8174

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	235	239	245	10	31687	7487	100.00
2	12.010	235	239	245	10	31687	6737	89.98

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .2533

(328)/(332 + 334) CALCULATION

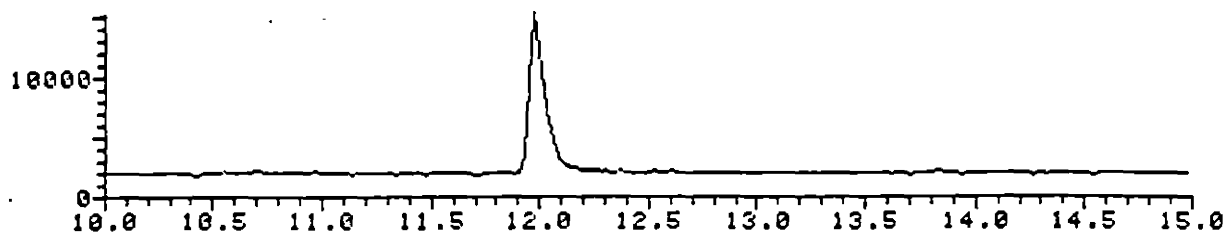
R-Global(3) = .7198

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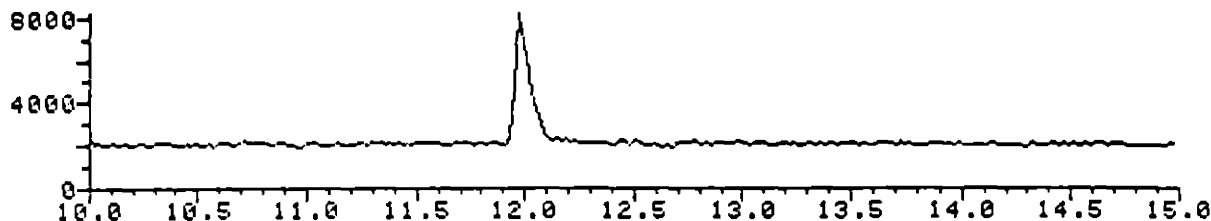
C11388

00114

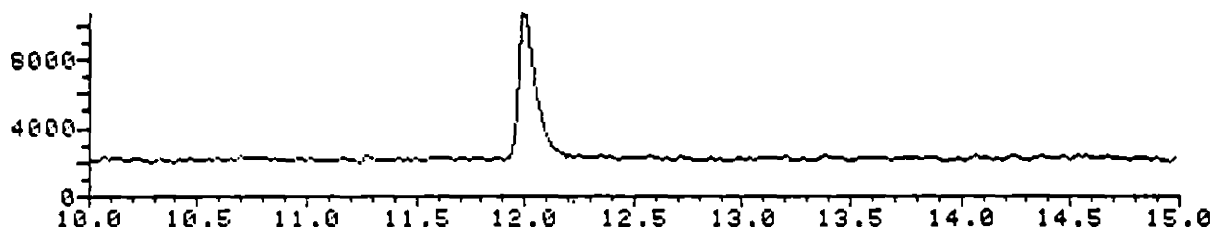
→ File >B2885 333.6-334.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



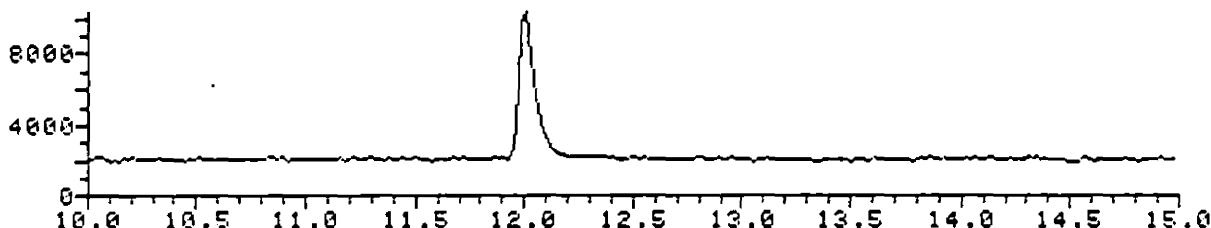
File >B2885 331.6-332.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



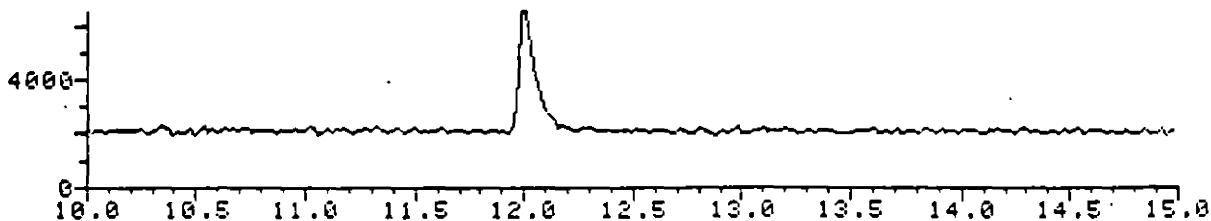
File >B2885 327.6-328.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2885 321.6-322.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2885 319.6-320.6 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2885 256.7-257.7 amu.2UL .2669/.48/.19 SP2330 200-1/3/250 RWN BT



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00115

C11389

GC/MS default file: >B2885:101

MS data file header from : >B2885

Sample: 2UL .2669/.48/.19 Operator: GARY MS 9/07/84 15:54
Misc : SP2330 200-1/3/250 RWN BTL#29 BTL#29
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.969	236	237	242	6	66036	41466	100.00
2	11.969	236	237	242	6	66036	25473	61.43

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.969	227	237	255	28	85164	29164	100.00
2	11.969	227	237	255	28	85164	27330	93.71

332/334 CALCULATION

R-Global(0) = .7033

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	231	238	251	20	85511	42731	100.00
2	11.990	231	238	251	20	85511	41161	96.33

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	237	239	243	6	47193	25605	100.00
2	12.010	237	239	243	6	47193	18531	72.37

00116

C11390

RECEIVED IN 11-4

RECEIVED NEW YORK

RECORDING CHARTS GRAPHIC CONTROLS CORPORATION

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M/Z = 319.9

>B2885

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.990	235	238	247	12	46973	22229	100.00
2	11.990	235	238	247	12	46973	21065	94.76

320/322 CALCULATION

R-Global(1) = .8682

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	12.010	235	239	246	11	45806	18933	100.00
2	12.010	235	239	246	11	45806	17981	94.97

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .6772

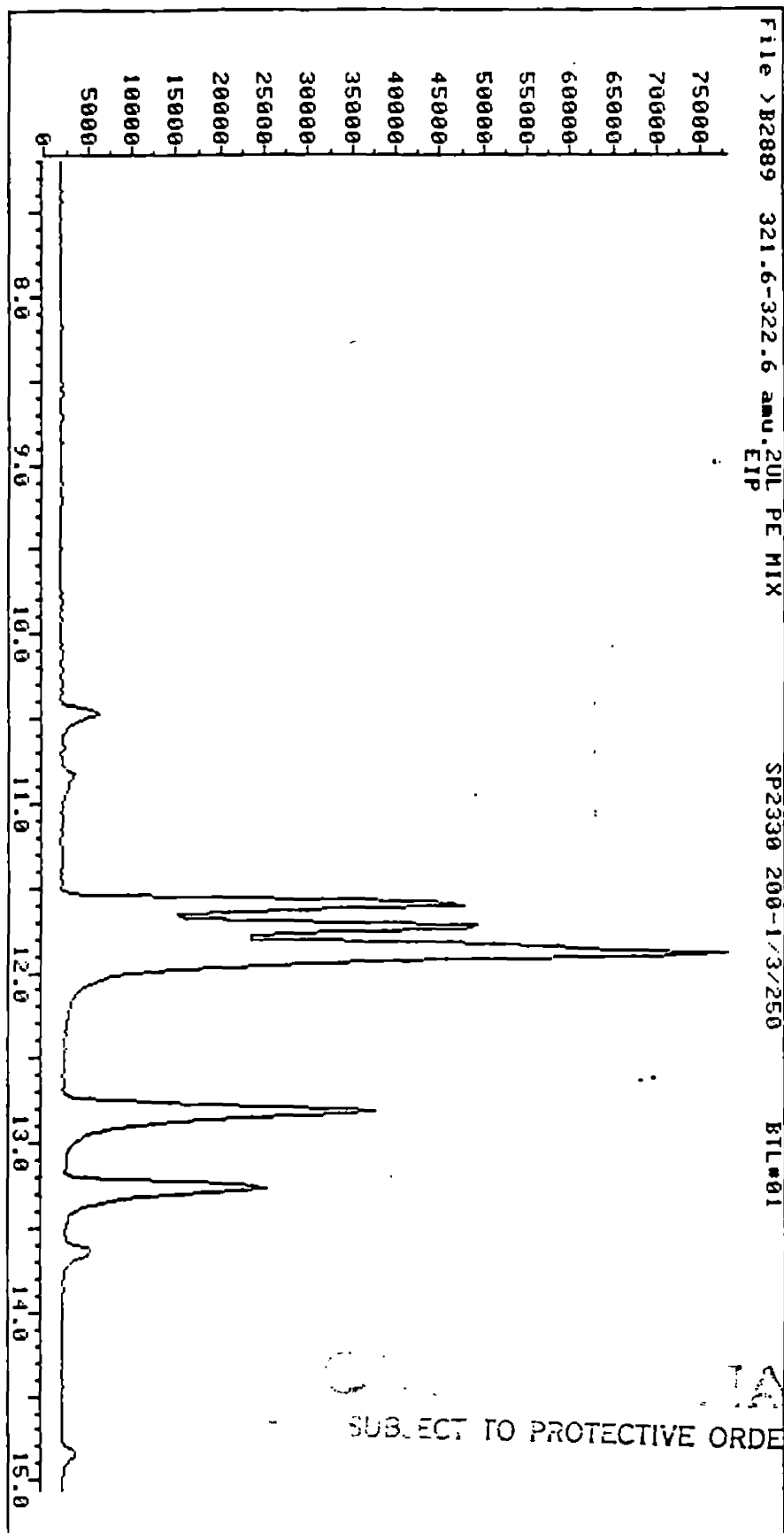
(328)/(332 + 334) CALCULATION

R-Global(3) = .6017

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00117

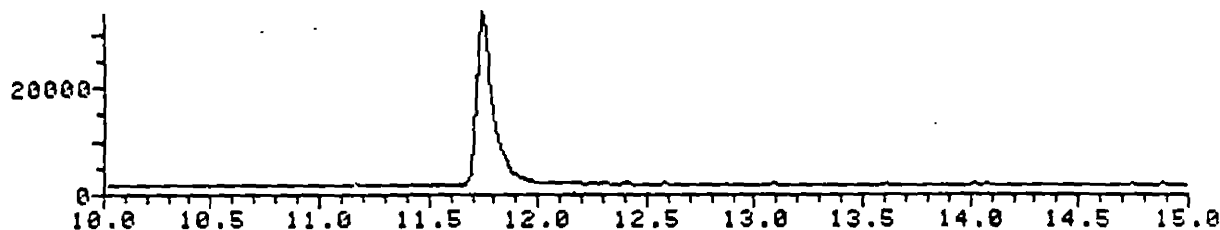
G11391



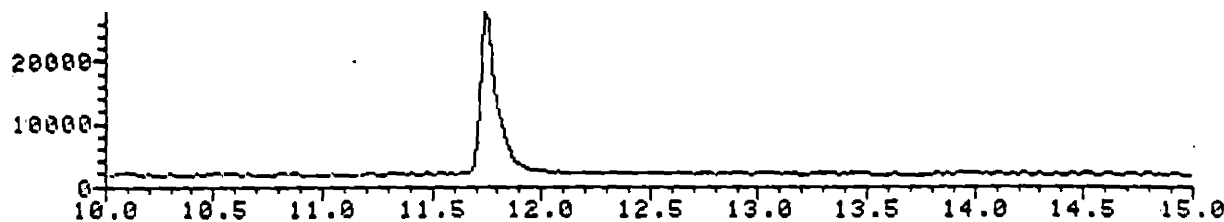
00118

C11392

e >B2890 333.6-334.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



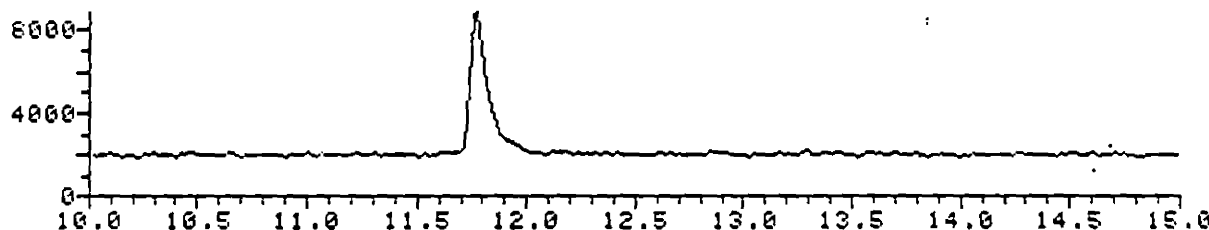
e >B2890 331.6-332.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



le >B2890 327.6-328.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



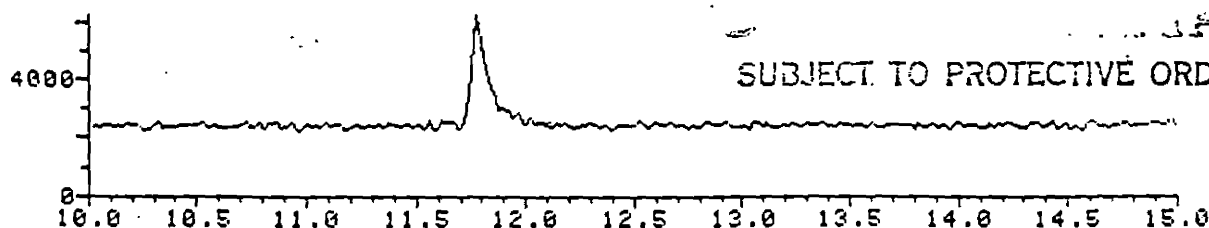
le >B2890 321.6-322.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



ile >B2890 319.6-320.6 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



ile >B2890 256.7-257.7 amu.2UL .1068/.48/.19 SP2330 200-1/3/250 BT



SUBJECT TO PROTECTIVE ORDER

00119

C11393

S
M/Z = 319.9

>32890

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.777	218	225	238	20	71761	30181	100.00
2	11.777	218	225	238	20	71761	29711	98.44

320/322 CALCULATION

R-Global(1) = .8200

M/Z = 257.0

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.777	219	225	237	18	64139	19013	100.00
2	11.777	219	225	237	18	64139	17528	92.19

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .2547

(328)/(332 + 334) CALCULATION

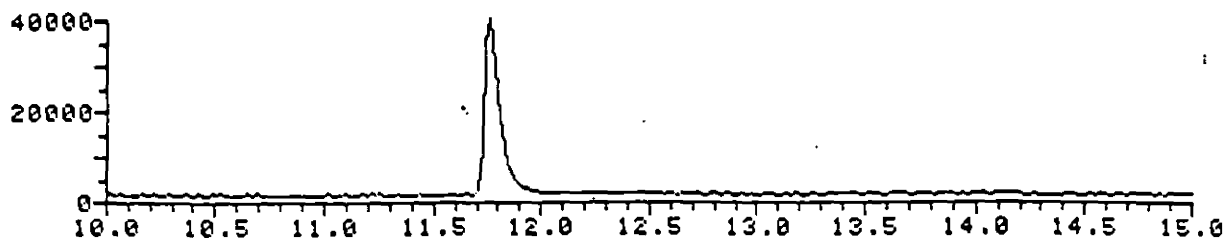
R-Global(3) = .3587

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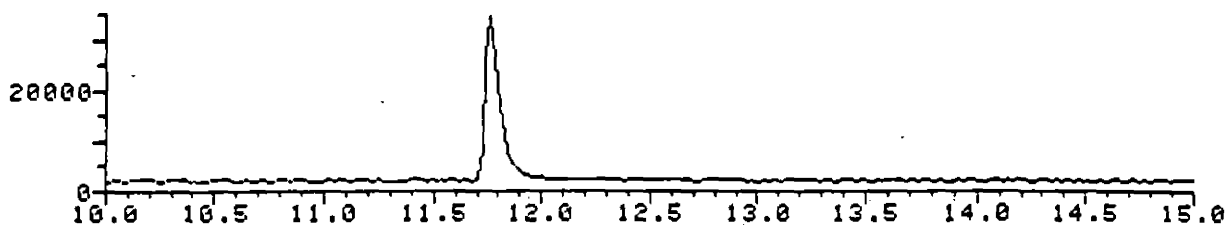
00121

C11395

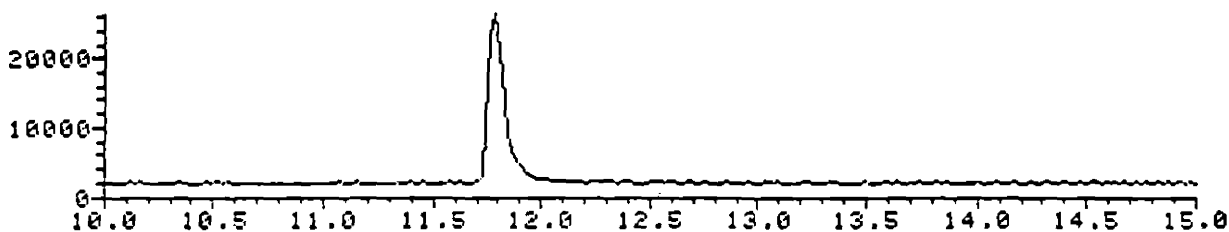
File >B2891 333.6-334.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



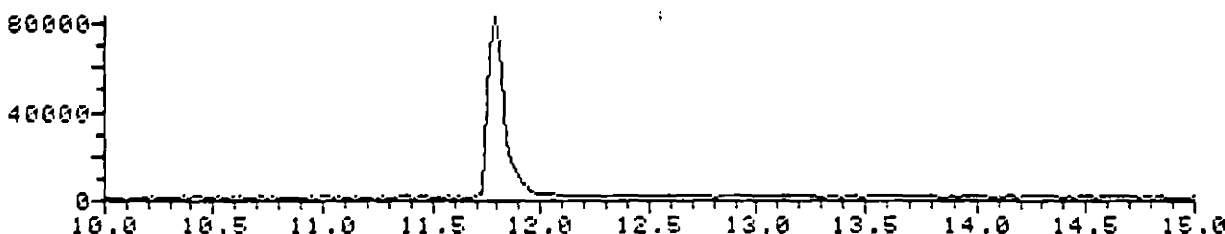
File >B2891 331.6-332.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



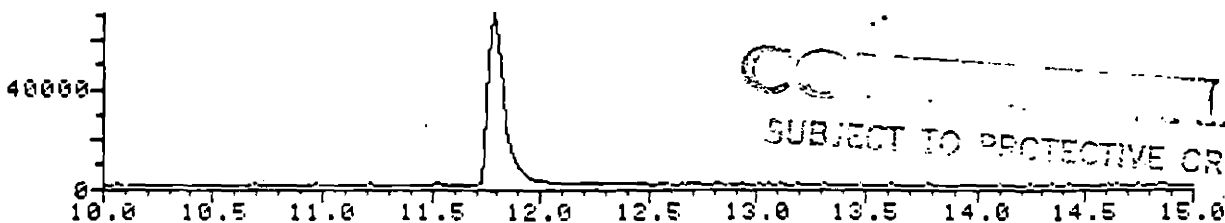
File >B2891 327.6-328.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



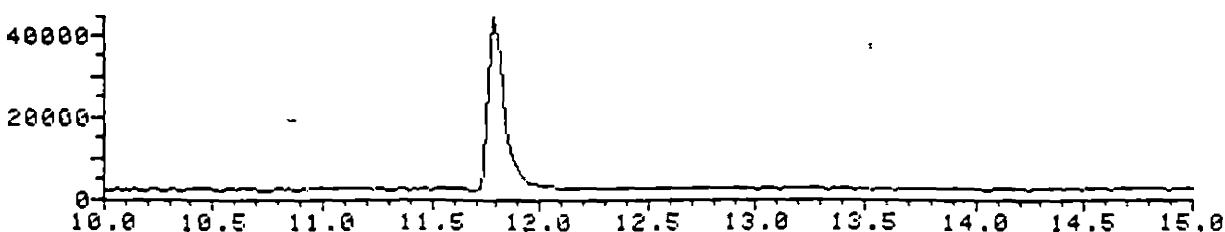
File >B2891 321.6-322.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



File >B2891 319.6-320.6 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



File >B2891 256.7-257.7 amu.2UL 1.068/.48/.19 SP2330 200-1/3/250 BT



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SUBJECT TO PROTECTIVE ORDER.

06122

C11396

MS data file header from : >B2891

Sample: 2UL 1.068/.48/.19 Operator: GARY MS 9/10/84 22:04
Misc : SP2330 200-1/3/250 BTL#05 BTL# 5
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.764	223	229	254	31	225099	166447	100.00
2	11.764	223	229	254	31	225099	162045	97.36

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.764	223	229	243	20	172067	130947	100.00
2	11.764	223	229	243	20	172067	128637	98.24

332/334 CALCULATION

R-Global(0) = .7867

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.785	223	230	246	23	158160	111378	100.00
2	11.785	223	230	246	23	158160	108813	97.70

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.785	225	230	246	21	401804	359909	100.00
2	11.785	225	230	246	21	401804	351278	97.60

C11397

>B2891

S

M/Z = 319.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.785	219	230	256	37	380462	309718	100.00
2	11.785	219	230	256	37	380462	300357	96.98

320/322 CALCULATION

R-Global(1) = .8605

M/Z = 257.0

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.785	224	230	251	27	252992	185114	100.00
2	11.785	224	230	251	27	252992	182400	98.53

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 2.2516

(328)/(332 + 334) CALCULATION

R-Global(3) = .3636

SUBJECT TO PROTECTIVE ORDER

06123

C11398

le >B2897 333.6-334.6 amu.2UL 10.68/.48/.19 SP2330 200-1/3/250 RWN BT



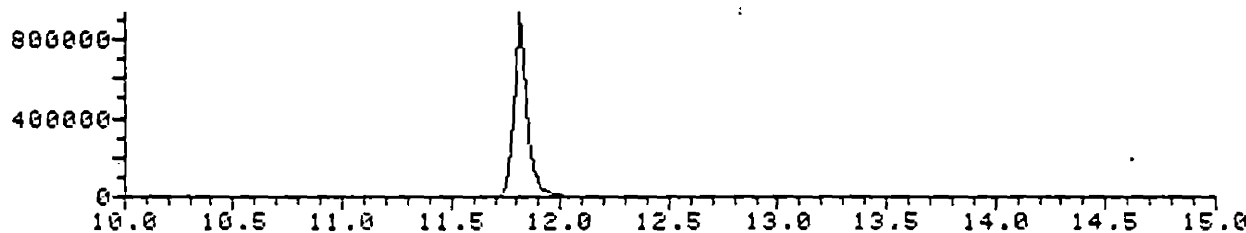
ile >B2897 331.6-332.6 amu.2UL 10.68/.48/.19 SP2330 200-1/3/250 RWN BT



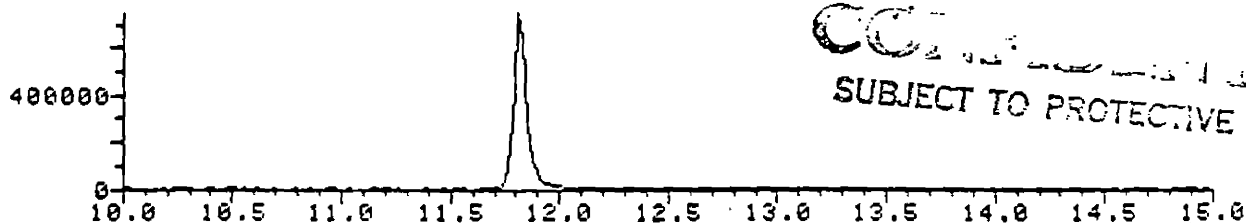
ile >B2897 327.6-328.6 amu.2UL 10.68/.48/.19 SP2330 200-1/3/250 RWN BT



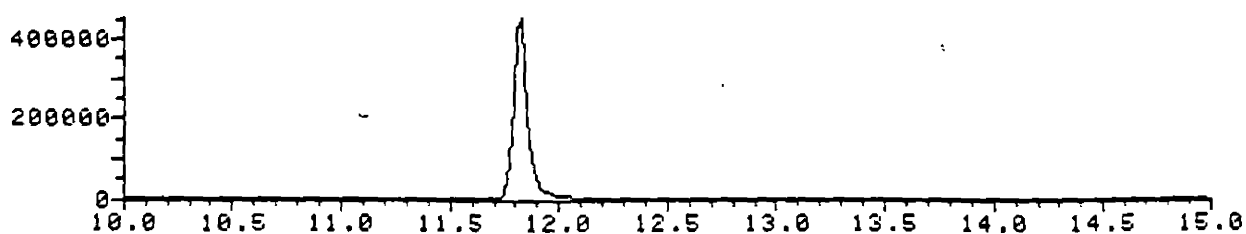
ile >B2897 321.6-322.6 amu.2UL 10.68/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2897 319.6-320.6 amu.2UL 10.68/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2897 256.7-257.7 amu.2UL 10.68/.48/.19 SP2330 200-1/3/250 RWN BT



RECEIVED

RECEIVED

RECEIVED

RECEIVED

RECEIVED

CC-0
SUBJECT TO PROTECTIVE ORDER.

00124

C11399

S

M/Z = 319.9

>32897

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.810	213	229	253	40	2778746	2694226	100.00
2	11.810	213	229	253	40	2778746	2668846	99.06

320/322 CALCULATION

R-Global(1) = .8272

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.830	216	230	249	33	1801888	1722160	100.00
2	11.830	216	230	249	33	1801888	1693268	98.32

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 23.6167

(328)/(332 + 334) CALCULATION

R-Global(3) = .3356

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00126

C11401

RECEIVED IN 11-4

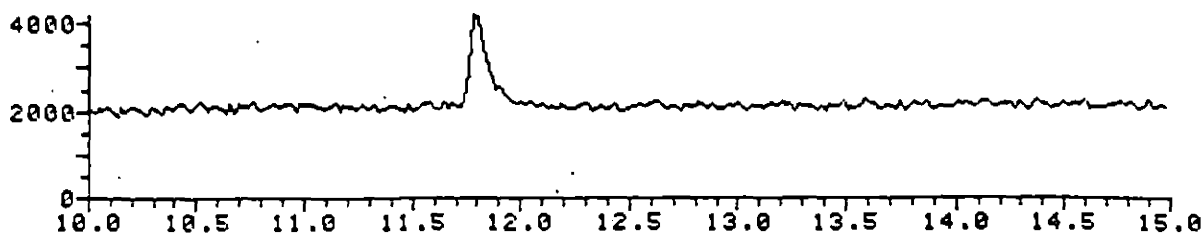
BUFFALO NEW YORK

RECORDING CHARTER GRAPHIC CONTROLS CORPORATION

NO 11 9270 0640

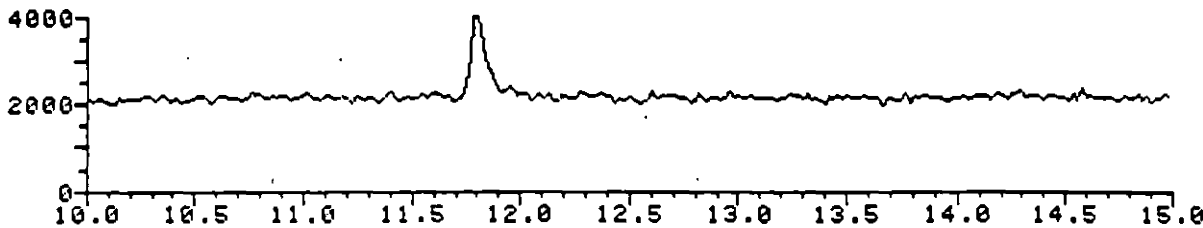
File >B2899 333.6-334.6 amu.2UL UT-2629D

SP2330 200-1/3/250 RWN BT



File >B2899 331.6-332.6 amu.2UL UT-2629D

SP2330 200-1/3/250 RWN BT



File >B2899 327.6-328.6 amu.2UL UT-2629D

SP2330 200-1/3/250 RWN BT



File >B2899 321.6-322.6 amu.2UL UT-2629D

SP2330 200-1/3/250 RWN BT



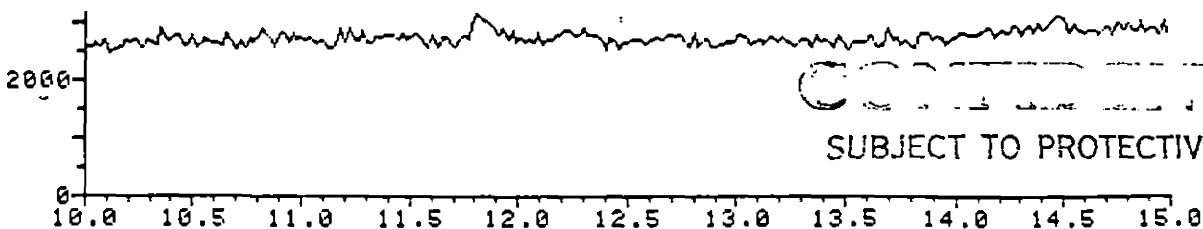
File >B2899 319.6-320.6 amu.2UL UT-2629D

SP2330 200-1/3/250 RWN BT



File >B2899 256.7-257.7 amu.2UL UT-2629D

SP2330 200-1/3/250 RWN BT



SUBJECT TO PROTECTIVE ORDER

00127

C11402

GC/MS default file: >B2899:101

MS data file header from : >B2899

Sample: 2UL UT-2629D Operator: GARY MS 9/11/84 01.44...
Misc : SP2330 200-1/3/250 RWH BTL#21 BTL#21
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0 ...

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.789	225	228	238	13	39408	12251	100.00
2	11.789	225	228	238	13	39408	11952	97.56

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.809	224	229	234	10	31155	18345	100.00
2	11.809	224	229	234	10	31155	9205	88.98

332/334 CALCULATION

R-Global(0) = .8444

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.809	226	229	237	11	42324	10842	100.00
2	11.809	226	229	237	11	42324	10039	92.59

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.809	225	229	239	14	35923	7629	100.00
2	11.809	225	229	239	14	35923	7104	93.12

00128

C11403

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NO HP 9270 0640

RECORDING CHARTS GRAPHIC CONTROLS CORPORATION BUFFALO NEW YORK

>B2899

S

M/Z = 319.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.830	225	230	234	9	24198	5514	100.00
2	11.830	225	230	234	9	24198	4443	80.58

320/322 CALCULATION

R-Global(1) = .7228

M/Z = 257.0

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.809	227	229	233	6	20973	4749	100.00
2	11.809	227	229	233	6	20973	4060	85.91

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .5817

(328)/(332 + 334) CALCULATION

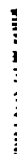
R-Global(3) = .4768

CONFIDENTIAL
SUBJECT TO PROTECTIVE ORDER

00129

C11404

4-15-2011 08:00 PM



Free Sample: CHAIRS **Chairing Time: 10:00 AM**



12



COLLEGE MATERIAL
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C11405

MS data file header from : >B2903

Sample: 2UL .2669/.48/.19 Operator: GARY MS 9/11/84 2:05
Misc : SP2330 200-1/3/250 RWN- BTL#29 BTL#29
Sys. #1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APE101 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.763	219	225	241	22	154286	109670	100.00
2	11.763	219	225	241	22	154286	105347	96.06

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.763	221	225	241	20	132155	92415	100.00
2	11.763	221	225	241	20	132155	86415	95.67

332/334 CALCULATION

R-Global(0) = .8427

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.783	221	226	242	21	110839	72240	100.00
2	11.783	221	226	242	21	110839	68670	95.06

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.783	221	226	241	20	101979	61939	100.00
2	11.783	221	226	241	20	101979	60189	97.17

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SUBJECT TO PROTECTIVE ORDER

C11406

S

M/Z = 319.9

>82903

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.803	222	227	240	18	88129	50347	100.00
2	11.803	222	227	240	18	88129	50275	99.86

320/322 CALCULATION

R-Global(1) = .8128

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.803	223	227	239	16	76579	35907	100.00
2	11.803	223	227	239	16	76579	35211	98.06

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = .5556

(328)/(332 + 334) CALCULATION

R-Global(3) = .3547

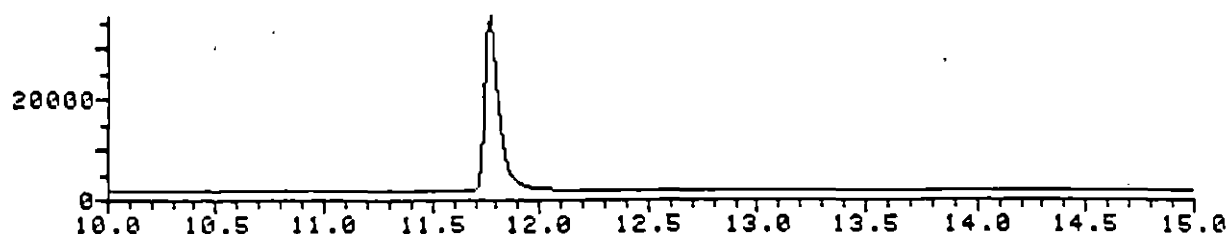
CONFIDENTIAL

SUBJECT TO PROTECTIVE ORDER

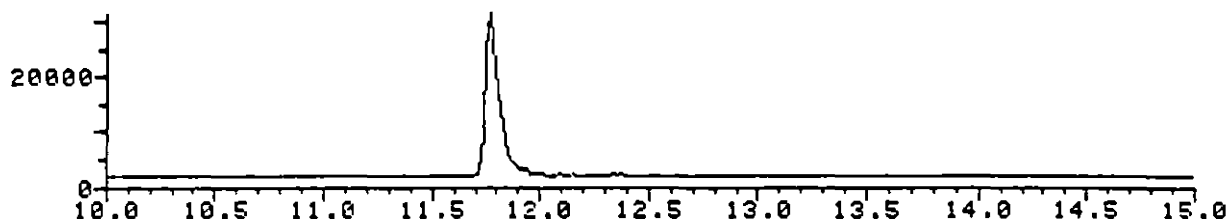
C11407

00132

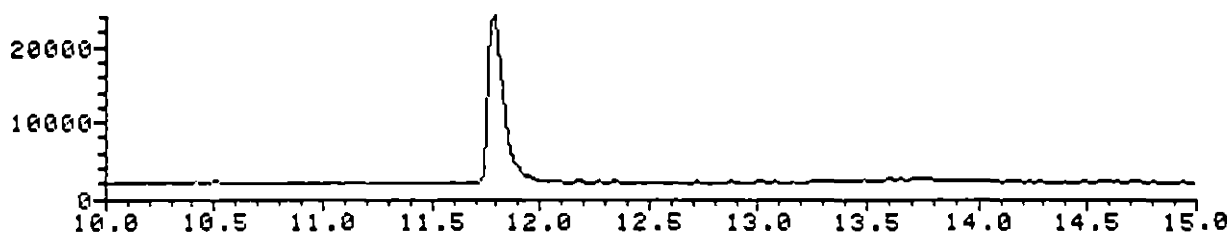
File >B2907 333.6-334.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



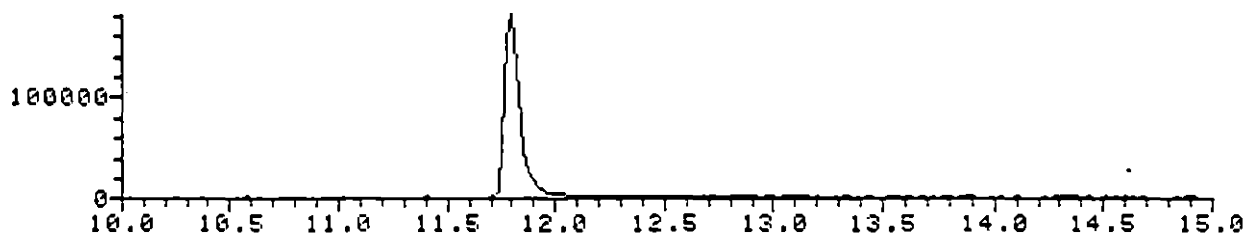
File >B2907 331.6-332.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



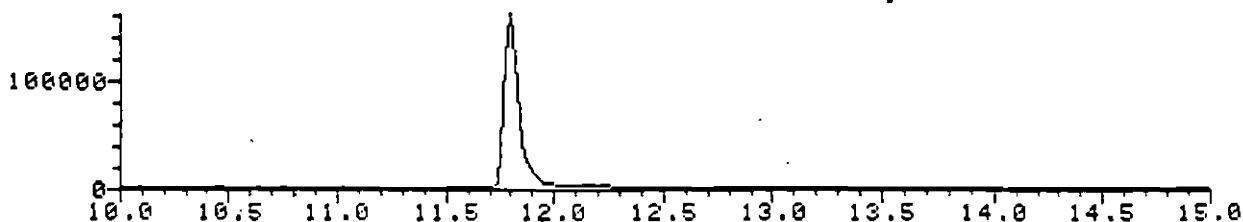
File >B2907 327.6-328.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



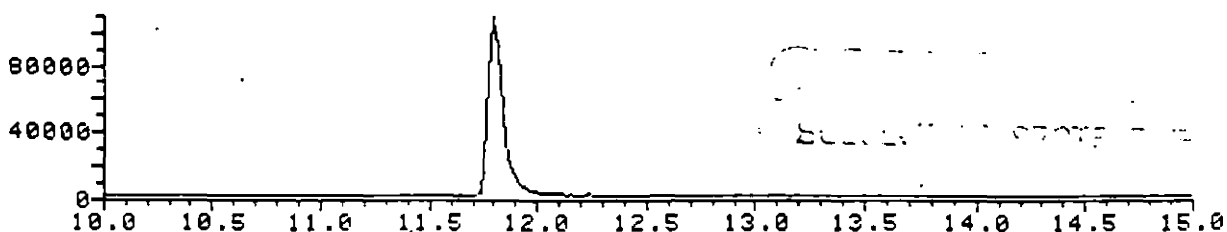
File >B2907 321.6-322.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2907 319.6-320.6 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2907 256.7-257.7 amu.2UL 2.669/.48/.19 SP2330 200-1/3/250 RWN BT



C11408

MS data file header from : >B2907

Sample: 2UL 2.669/.48/.19 Operator: GARY MS 9/11/84-15:27
Misc : SP2330 200-1/3/250 RWN BTL#41 BTL#41
Sys. #: 1 MS model: 87 SW/HW rev.: CA ALS #: 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.774	216	229	250	34	205931	134089	100.00
2	11.774	216	229	250	34	205931	133953	99.90

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.774	216	229	248	32	177960	112232	100.00
2	11.774	216	229	248	32	177960	108600	96.76

332/334 CALCULATION

R-Global(0) = .8370

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

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Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.794	220	230	251	31	160851	94325	100.00
2	11.794	220	230	251	31	160851	94170	99.84

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.794	215	230	248	33	800755	735019	100.00
2	11.794	215	230	248	33	800755	717677	97.64

00124

C11409

RECORDED CHARTS GRAPHIC LUNELUX CORPORATION BUFFALO NEW YORK

NO TOP 0270 (05/81)

S

M/Z = 319.9

>B2907

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.794	223	230	257	34	694491	624893	100.00
2	11.794	223	230	257	34	694491	616699	98.69

320/322 CALCULATION

R-Global(1) = .8502

M/Z = 257.0

First peak is baseline drop corrected area.
 Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.794	224	230	252	28	504553	434217	100.00
2	11.794	224	230	252	28	504553	425355	97.96

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 5.5209

(328)/(332 + 334) CALCULATION

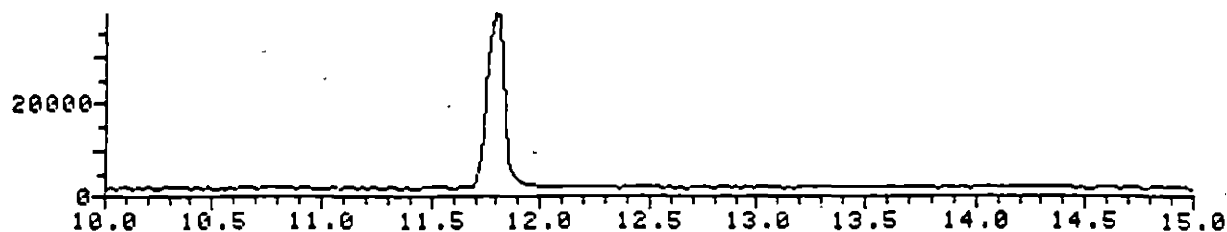
R-Global(3) = .3561

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 SUBJECT TO PROTECTIVE ORDER

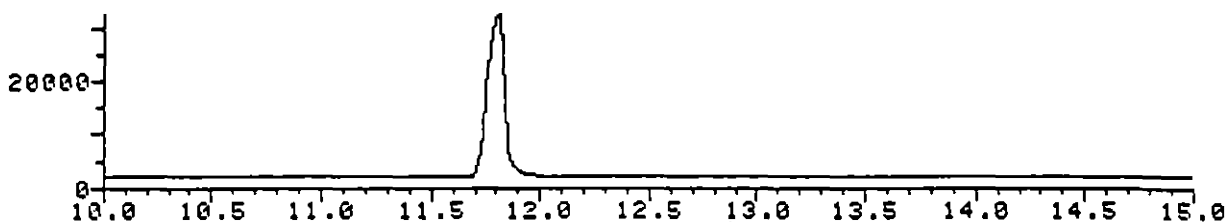
00135

C11410

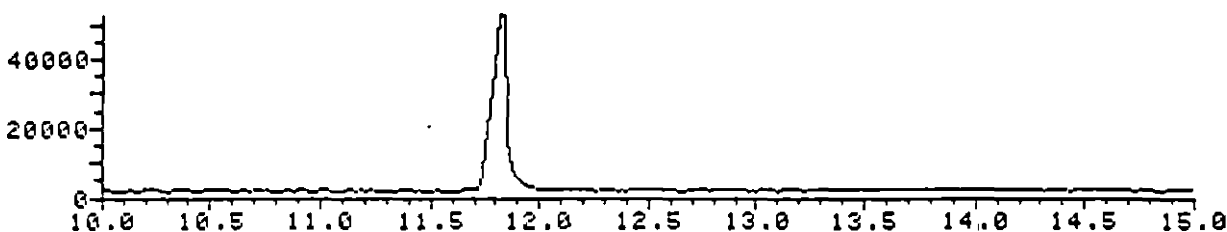
File >B2908 333.6-334.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RWN BT



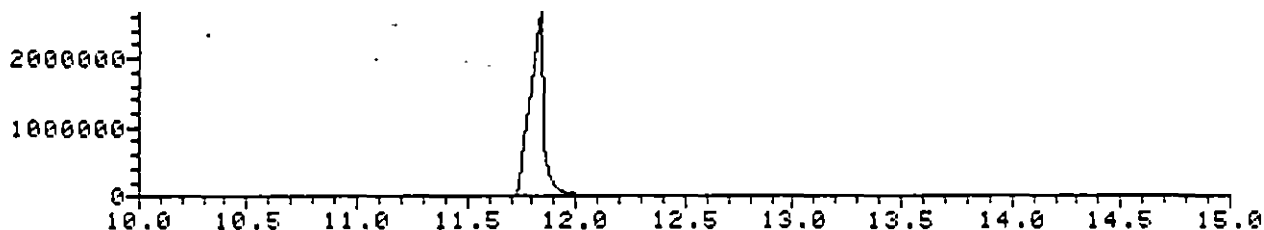
File >B2908 331.6-332.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RWN BT



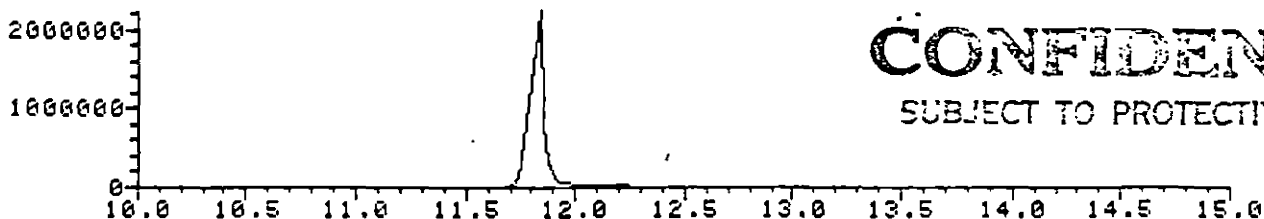
File >B2908 327.6-328.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RWN BT



File >B2908 321.6-322.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RWN BT

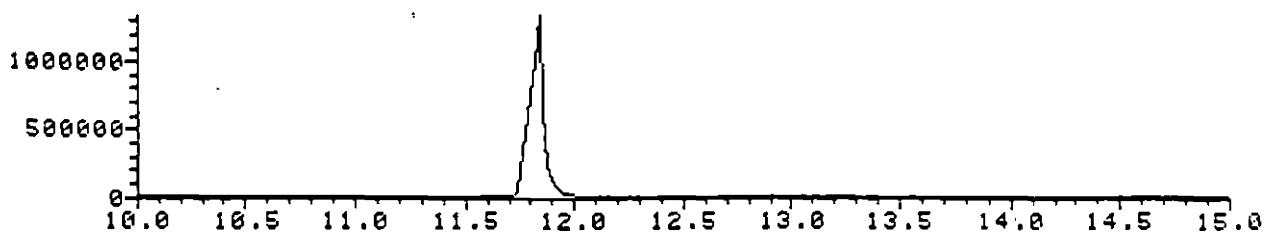


File >B2908 319.6-320.6 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RWN BT



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SUBJECT TO PROTECTIVE ORDER

File >B2908 256.7-257.7 amu.2UL 26.69/.48/.19 SP2330 200-1/3/250 RWN BT



MS data file header from : >B2908

Sample: 2UL 26.69/.48/.19 Operator: GARY MS 9/11/84 15:47...
Misc : SP2330 200-1/3/250 RWN BTL#43 BTL#43
Sys. #1 1 MS model: 87 SW/HW rev.: CA ALS # : 0
Method file: SP2330 Tuning file: APEI01 No. of extra records: 2
Source temp.: 250 Analyzer temp.: 0 Transfer line temp.: 0 ...

Chromatographic temperatures : 50. 300. 0. 0. 0.
Chromatographic times, min. : 0.0 2.0 0.0 0.0 0.0
Chromatographic rate, deg/min: 20.0 0.0 0.0 0.0 0.0

M/Z = 333.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.796	219	231	252	33	242219	171830	100.00
2	11.796	219	231	252	33	242219	171401	99.75

M/Z = 331.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.816	224	232	244	20	181045	139325	100.00
2	11.816	224	232	244	20	181045	139225	99.93

332/334 CALCULATION

R-Global(0) = .8108

M/Z = 327.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.837	226	233	242	16	243276	208908	100.00
2	11.837	226	233	242	16	243276	205100	98.18

M/Z = 321.9

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.837	222	233	248	26	9985550	9930924	100.00
2	11.837	222	233	248	26	9985550	9824702	98.93

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M/2 = 319.9

>B2908

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.837	219	233	250	31	8208857	8147167	100.00
2	11.837	219	233	250	31	8208857	8056957	98.89

320/322 CALCULATION

R-Global(1) = .8204

M/2 = 257.0

First peak is baseline drop corrected area.
Second peak is tangent skimmed corrected area.

Peak #	R.T. min.	first scan	max scan	last scan	peak width	raw area	corr. area	corr. %
1	11.837	224	233	246	22	5182106	5128184	100.00
2	11.837	224	233	246	22	5182106	5047290	98.42

(320 + 322)/(332 + 334) CALCULATION

R-Global(3) = 58.1000

(328)/(332 + 334) CALCULATION

R-Global(3) = .3841

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MONSANTO COMPANY

Nº 2465473

B11 T

Standards Prep

JO NO.

309.101011

PREPARED BY (SIGNATURE)

Gary Thomas

DATE

29 FEB 84

~~Active TCDD Stock. Cahn balance .9977 mg (true wt.) vs. .9975 (observed wt.). 0.4969 mg TCDD diluted to 10ml in o-xylene. GT 4/84~~

Active TCDD stock: Using Cahn microbalance NBS wt from Mound
Recorded wt 0.9976 mg, actual wt 0.9974 mg, Weight of TCDD = 0.5337 mg
Diluted to 10ml with o-xylene, final conc. 53.37 µg/ml.

The following dilutions of the stock ¹²⁵I-TCDD solution were made.

- 1) 1 ml ¹²⁵I stock diluted to 10ml with dodecane. Final conc. 5.337 µg/ml
- 2) 1 ml of 5.337 µg/ml diluted to 10ml with dodecane. Final conc. 0.5337 µg/ml
- 3) 2 ml of 53.37 µg/ml TCDD diluted to 5ml with dodecane. Final conc. 21.35 µg/ml
- 4) 2 ml of 5.337 µg/ml TCDD diluted to 5ml with dodecane. Final conc. 2.135 µg/ml
- 5) 2 ml of 0.5337 µg/ml TCDD diluted to 5ml with dodecane. Final conc. 0.2135 µg/ml

¹³C and ¹⁴C intermediate stock solution: prepared 7.2465469) conc. = 1 µg/ml ¹³C and 0.4 µg/ml ¹⁴C TCDD solution. There was only enough of this solution to make 4 analytical solutions. 0.5ml of this mixed labeled solution was combined with 0.5ml of solutions # 1, 4, 5 and the stock solution (53.37 µg/ml).

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READ AND UNDERSTOOD BY

John W. Doolittle

DATE

7/3/84

MONSANTO COMPANY

Nº 2465486

SU. ECT

Prep of Standards - TCDD

S NO.

309.10011

PREPARED BY (SIGNATURE)

Dany Thomas

DATE

APR 84

^{13}C stock 53.37 $\mu\text{g/ml}$ (see p. 2465473)
 ^2H stock 13 $\mu\text{g/ml}$ - freshly made
 ^3Cl stock 2.4 $\mu\text{g/ml}$

^{13}C and ^3Cl intermediate stock solution (for 1:1 dilution with ^{13}C analytical standards) in deca-
 2 ml ^{13}C stock and 4 ml ^3Cl stock diluted to 25 ml. Final
 conc. 0.096 $\mu\text{g/ml}$ ^{13}C / 0.38 $\mu\text{g/ml}$ ^3Cl

^{13}C and ^3Cl internal standard spiking solution. 2 ml ^{13}C stock and 4 ml
 ^3Cl stock diluted to 100 ml with iso-octane. Final conc.
 0.34 $\mu\text{g/ml}$ ^{13}C / 0.096 $\mu\text{g/ml}$ ^3Cl .

^{13}C spiking solution. 2 ml ^{13}C stock diluted to 100 ml with iso-octane
 Final conc. 0.24 $\mu\text{g/ml}$.

^{13}C spiking solution. 0.5 ml ^{13}C stock diluted to 100 ml with iso-octane
 Final conc. 0.2669 $\mu\text{g/ml}$

^{13}C intermediate stock solutions for 1:1 dilution with ^{13}C and ^3Cl intermediate stock
 solution prepared above.

- 1 ml of 53.37 $\mu\text{g/ml}$ ^{13}C diluted to 10 ml with decacone, final conc. 5.337 $\mu\text{g/ml}$

- 1 ml of 5.337 $\mu\text{g/ml}$ ^{13}C diluted to 10 ml with decacone. Final conc. 0.5337 $\mu\text{g/ml}$

- 2 ml of 53.37 $\mu\text{g/ml}$ ^{13}C diluted to 5 ml with decacone. Final conc. 21.35 $\mu\text{g/ml}$

- 2 ml of 5.337 $\mu\text{g/ml}$ ^{13}C diluted to 5 ml with decacone. Final conc. 2.135 $\mu\text{g/ml}$

- 2 ml of 0.5337 $\mu\text{g/ml}$ ^{13}C diluted to 5 ml with decacone. Final conc. 0.2135 $\mu\text{g/ml}$

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W. H. J. O.

7/5/84

ES CT

From previous page

J. IND.

PREPARED BY (SIGNATURE)

Mary Thomas

DATE

APR 84

Preparation of analytical standards

1 ml of 55.37 ng/l ^{12}C and 1 ml ^{13}C and ^{37}Cl intermediate stock solution.
Final conc. 20.69 ^{12}C / .48 ^{13}C / .19 ^{37}Cl .

1 ml of 55.37 ng/l ^{12}C and 1 ml ^{13}C and ^{37}Cl intermediate stock soln.
Final conc. 20.69 ^{12}C / .48 ^{13}C / .19 ^{37}Cl .

1 ml of 55.37 ng/l ^{12}C and 1 ml ^{13}C and ^{37}Cl intermediate stock soln.
Final conc. 20.69 ^{12}C / .48 ^{13}C / .19 ^{37}Cl .

1 ml of 55.37 ng/l ^{12}C and 1 ml ^{13}C and ^{37}Cl intermediate stock soln.
Final conc. 10.65 ^{12}C / .48 ^{13}C / .19 ^{37}Cl .

1 ml of 155.21 ng/l ^{12}C and 1 ml ^{13}C and ^{37}Cl intermediate stock soln.
Final conc. 10.65 ^{12}C / .48 ^{13}C / .19 ^{37}Cl .

1 ml of 235 ng/l ^{12}C and 1 ml ^{13}C and ^{37}Cl intermediate stock soln.
Final conc. 10.65 ^{12}C / .48 ^{13}C / .19 ^{37}Cl .

Prep of simulated spikes

10.68 ng ^{12}C	} taken to 50 µl	Final conc. (ng/l)	
24 ng ^{13}C		0.2136	SS-1
9.6 ng ^{37}Cl		0.48	SS-2
		0.192	SS-3

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Simulated spikes above were re-made and named SS-4, SS-5, SS-6.

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READ AND UNDERSTOOD BY

S. M. Wells

DATE

7/3/84