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CLIENT: **TETRA TECH, INC.**

PROJECT: **LMC BEAUMONT SITE 1**

SDG: **08G177**

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** - Not Requested

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax:(310) 618-0818

Date: 08-19-2008
EMAX Batch No.: 08G177

Attn: Michael Wilson

Tetra Tech, Inc.
348 W Hospitality Lane, Ste 100
San Bernardino CA 92408

Subject: Laboratory Report
Project: LMC Beaumont Site 1

Enclosed is the Laboratory report for samples received on 07/17/08.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
H-EB7162008	G177-01	07/16/08	WATER	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T10-0.5	G177-02	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T10-2.5	G177-03	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T10-5.0	G177-04	07/16/08	SOIL	HOLD
H-T10-0.10.0	G177-05	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)

Sample ID	Control #	Col Date	Matrix	Analysis
				METALS CAM
				MERCURY
H-T9-0.5	G177-06	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T9-2.5	G177-07	07/16/08	SOIL	HOLD
H-T9-5.0	G177-08	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T9-11	G177-09	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T9-11DUP	G177-10	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T8-0.5	G177-11	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T8-2.5	G177-12	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-T8A-0.5	G177-13	07/16/08	SOIL	HOLD
H-T8A-4.0	G177-14	07/16/08	SOIL	HOLD
H-T8-6.0	G177-15	07/16/08	SOIL	HOLD
H-T8-11	G177-16	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY

Sample ID	Control #	Col Date	Matrix	Analysis
H-T5A-0.5	G177-17	07/16/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				METALS CAM
				MERCURY
H-EB7162008	G177-18	07/16/08	WATER	PCDDS AND PCDFS
H-T5A-2.0	G177-19	07/16/08	SOIL	PCDDS AND PCDFS

Note: PCDDS AND PCDFS was subcontracted to Columbia Analytical Services, Inc and will be submitted at a later date.

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

for

Caspar J. Pang
Acting Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that the results included in this report meet all NELAC requirements unless noted in the Case Narrative.

EMAX LABORATORIES, INC.

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill	ECN 08 G177
☐ EMAX Courier		Recepient I PATEL
☐ Client Delivery		Date 7-17-08
☐ Third Party Top Line Courier		Time 1515

COC Inspection

☐ Client Name	☐ Client PM/FC	☐ Sampler Name	☐ Sampling Date/Time/Location	☐ Sample ID	☐ Matrix
☐ Address	☐ Tel # / Fax #	☐ Courier Signature	☐ Analysis Required	☐ Preservative (if any)	☐ TAT

Safety Issues

☐ None ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

Packaging Inspection

Container	☐ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☐ Intact	☐ Damaged		
Packaging	☐ Bubble Pack	☐ Styrofoam	☐ Popcorn	☐ Sufficient	☐ Plastic Bag
Temperatures	☐ Cooler 1 3.3 °C	☐ Cooler 2 3.5 °C	☐ Cooler 3 ____ °C	☐ Cooler 4 ____ °C	☐ Cooler 5 ____ °C
	☐ Cooler 6 ____ °C	☐ Cooler 7 ____ °C	☐ Cooler 8 ____ °C	☐ Cooler 9 ____ °C	☐ Cooler 10 ____ °C

Comments: ☐ **PM was informed on non-compliant coolers imediately.**

DISCREPANCIES

LSID	LSCID	Sample Label ID/COC ID	Discrepancy Code	Corrective Action Code
01 TO 019			A2	R2
01			Rec'd (2) Ambers only for 8270 & 8082 But we Needs (5)	R2 (analyses)
04		time 9:30	D3 (Time)	R2
01-08, 10-17		~~DT~~ (DATE) 7-16-08 7-17-	D1 (DATE)	R5
018-019		7-16-08 DATE	D1 (DATE)	R5

REVIEWS

Sample Labeling ____ Date 7-17-08

SRF ____ Date 7/17/08

PM Cwong/mh for Date 7/18/08

LEGEND:

Code	Description- Sample Management
A1	Analysis is not indicated in COC
A2	Analysis is not indicated in label
A3	Analysis is inconsistent in COC vis-à-vis label
B1	Sample ID is not indicated in COC
B2	Sample ID is not indicated in label
B3	Sample ID is inconsistent in COC vis-à-vis label
C1	Wrong container
C2	Broken container
C3	Leaking container
D1	Date and/or time is not indicated in COC
D2	Date and/or time is not indicated in label
D3	Date and/or time is inconsistent in COC vis-à-vis label

Code	Description-Sample Management
E1	Preservative needed; sample has no preservative
E2	Preservative not needed but sample is preserved
F1	Not enough quantity of samples
F2	Bubble is> 6mm
G1	Temperature is out of range (4 +_ 2°C)
G2	Out of Holding Time
G3	>20 % solid particle
H1	
H2	

Code	Description-Project Management
R1	Hold sample(s); wait for further instructions
R2	Proceed as indicated in COC
R3	Refer to attached instruction
R4	Cancel the analysis
R5	Login as 7/16/08
R6	

DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

TE.0618

08G177

CHAIN OF CUSTODY RECORD

TETRA TECH, INC.
348 W. Hospitality Lane, Suite 100
San Bernardino, California 92408
Telephone: (909) 381-1674
FAX: (909) 889-1391

SHIP TO: EMAX Labs

DATE 7/16/08 PAGE 1 OF 3

CLIENT: Lockheed Martin Corp.
PROJECT NAME: Beaumont Site 1 Sanitary LF
PROJECT MANAGER: Bill Mader
TC #: 20305-01
SAMPLERS (Signature): Christie Espinoza

LINE ITEM	SAMPLE NO.	DATE	TIME	Perchlorate (SW6850)	CAM Metals (6010/7000)	Cr6 (7196)	TPH (8015)	FILTERED/UNFILTERED	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	PRESERVATIVE	OBSERVATIONS/COMMENTS
1.	~~H-TB-7/16/2008~~		~~950~~						W	G	1		C.C.
2.	H-EB7162008		855	X			X		W	P	2		
3.	H-EB7162008		855		X	X			W	G	5		
4.	H-T10-0.5		905	X	X	X	X		S	G	1		
5.	H-T10-2.5		915	X	X	X	X		S	G	1		
6.	H-T10-5.0		930	X	X	X	X		S	G	1		hold
7.	H-T10-10.0		945	X	X	X	X		S	G	1		
8.	H-T9-0.5		1052	X	X	X	X		S	G	1		
9.	H-T9-2.5		1103	X	X	X	X		S	G	1		hold
10.	H-T9-5.0		1115	X	X	X	X		S	G	1		

TURN-AROUND TIME: STANDARD

FILTERING: ☐ FILTERED ☐ UNFILTERED

MATRIX TYPE: S - Soil; M - Sediment; W - Water

CONTAINER TYPE: G - Glass Bottle/Jar; SB - Brass Sleeve; SS - Stainless Steel Sleeve; P - Plastic Bottle/Jar

PRESERVATIVES: (Water Only) HCL; NaOH; NR (None required); H_2SO_4

RELINQUISHED BY	SIGNATURE	COMPANY	DATE	TIME	TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY: 14
Christie Espinoza	Christie Espinoza	TETRA TECH, INC.	7/16/08		
RECEIVED BY	SIGNATURE	COMPANY	DATE	TIME	METHOD OF SHIPMENT/SHIPMENT NO.
Bolden Ecford	Bolden Ecford	Top Line	7/17/08	11:15	
RELINQUISHED BY	SIGNATURE	COMPANY	DATE	TIME	Special Shipping/Handling/Storage Requirements:
Bolden Ecford	Bolden Ecford	Top Line	7/17/08	3:15	$T_1 = 3.3°C$ cooler #1
RECEIVED BY	SIGNATURE	COMPANY	DATE	TIME	$T_2 = 3.5°C$ cooler #2
INDRA PATEL		EMAX	7/17/08	1515	

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DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

DISTRIBUTION: White and Pink – Tetra Tech, Inc. Canary – Laboratory

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CHAIN OF CUSTODY RECORD

TETRA TECH, INC.
348 W. Hospitality Lane, Suite 100
San Bernardino, California 92408
Telephone: (909) 381-1674
FAX: (909) 889-1391

SHIP TO: EMAX Labs

DATE 7/16/08 PAGE 2 OF 3

CLIENT: Lockheed Martin Corp.
PROJECT NAME: Beaumont Site 1 Sanitary Landfill
PROJECT MANAGER: Bill Muir
TC #: 20305-01
SAMPLERS (Signatures): Christie Esquivel

LINE ITEM	C.E.	SAMPLE NO.	DATE	TIME	Perchlorate (314.1)	VOCs (8260)	PCBs (8082)	Title 22 Metals (6010/7000)	Dioxins/Furans	FILTERED/UNFILTERED	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	PRESERVATIVE	OBSERVATIONS/COMMENTS
9	1.	H-T9-11	7/16/08	1142	X	X	X	X			S	G	1		
10	2.	H-T9-11dup		1145	X	X	X	X			S	G	1		
11	3.	H-T8-0.5		1248	X	X	X	X			S	G	1		
12	4.	H-T8-2.5		1259	X	X	X	X			S	G	1		
13	5.	H-T8A-0.5		128	X	X	X	X			S	G	1		hold
14	6.	H-T8A-4.0		135	X	X	X	X			S	G	1		hold
15	7.	H-T8-6.0		158	X	X	X	X			S	G	1		hold
16	8.	H-T8-11		2:15	X	X	X	X			S	G	1		
17	9.	H-T5A-0.5		353	X	X	X	X			S	G	1		
	10.	MATRIX C.E.		~~1405~~											C.E.

TURN-AROUND TIME: STANDARD

FILTERING: ☐ FILTERED ☐ UNFILTERED

MATRIX TYPE: S - Soil; M - Sediment; W - Water

CONTAINER TYPE: G - Glass Bottle/Jar; SB - Brass Sleeve; SS - Stainless Steel Sleeve; P - Plastic Bottle/Jar

PRESERVATIVES: (Water Only) HCL; NaOH; NR (None required); H_2SO_4

RELINQUISHED BY	SIGNATURE	COMPANY	DATE	TIME	TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY:
Christie Esquivel	Christie Esquivel	TETRA TECH, INC.	7/16/08		9
RECEIVED BY: Bolden Eckford	Bolden Eckford	Top Line	7/17/08	11:15	METHOD OF SHIPMENT/SHIPMENT NO.
RELINQUISHED BY: Bolden Eckford	Bolden Eckford	Top Line	7-17-08	3:15 PM	Special Shipping/Handling/Storage Requirements:
RECEIVED BY: INDRA PATEL		EMAX	7-17-08	1515	

1365

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DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

08G177

CHAIN OF CUSTODY RECORD

TETRA TECH, INC.
348 W. Hospitality Lane, Suite 100
San Bernardino, California 92408
Telephone: (909) 381-1674
FAX: (909) 889-1391

SHIP TO: Envirolabs

DATE 7/16/08 PAGE 3 OF 3

CLIENT: Lockheed Martin Corp.
PROJECT NAME: Beaumont Site 1 Sanitary Landfill
PROJECT MANAGER: Bill Muir
TC #: 20305-01
SAMPLERS (Signatures): Christie Espinoza

LINE ITEM	SAMPLE NO.	DATE	TIME	Dioxins/Furans	FILTERED/UNFILTERED	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	PRESERVATIVE
18 1.	H-EB71162008		435	X		W	G	1	
19 2.	H-T5A-2.0		440	X		S	G	2	
3.									
4.									
5.									
6.									
7.									
8.									
9.									
10.									

PARAMETERS

TURN-AROUND TIME: STANDARD

OBSERVATIONS/COMMENTS

FILTERING: ☐ FILTERED ☐ UNFILTERED

MATRIX TYPE: S - Soil; M - Sediment; W - Water

CONTAINER TYPE: G - Glass Bottle/Jar; SB - Brass Sleeve; SS - Stainless Steel Sleeve; P - Plastic Bottle/Jar

PRESERVATIVES: (Water Only) HCL; NaOH; NR (None required); H_2SO_4

RELINQUISHED BY	SIGNATURE		DATE	TIME	TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY: 3
Christie Espinoza	Christie Espinoza	TETRA TECH, INC.	7/16/08		
RECEIVED BY	SIGNATURE	COMPANY	DATE	TIME	METHOD OF SHIPMENT/SHIPMENT NO.
Bolden Eckford	Bolden Eckford	Top Line	7/17/08	11:45	
RELINQUISHED BY	SIGNATURE	COMPANY	DATE	TIME	Special Shipping/Handling/Storage Requirements:
Bolden Eckford	Bolden Eckford	Top Line	7/17/08	3:15	
RECEIVED BY	SIGNATURE	COMPANY	DATE	TIME	
INDRA BATES		ENVIX	7-17-08	1515	

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DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

TETRA TECH, INC.

LMC BEAUMONT SITE 1

METHOD 314.0
PERCHLORATE

SDG#: 08G188

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G188

METHOD 314.0
PERCHLORATE

One (1) water sample and sixteen (16) soil samples were received on 07/18/08 for Perchlorate analysis by Method 314.0 in accordance with "Method for Determination of Perchlorate by Ion Chromatography", EPA 600/98-118.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blank was free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control sample results were within QC limits.

4. **Duplicate**

   Sample G188-07 was analyzed for duplicate. %RPD was within QC limit.

5. **Matrix Spike**

   Sample G188-07 was spiked. %Recovery was within QC limit.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SAMPLE

METHOD 314.0
PERCHLORATE

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
Batch No. : 08G188

Matrix : WATER
Instrument ID : I57

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	PCG012WB	ND	1	NA	2.00	0.500	07/22/0813:00	NA	JG22002	JG22001	PCG012W	NA	NA
LCS1W	PCG012WL	25.2	1	NA	2.00	0.500	07/22/0813:42	NA	JG22004	JG22001	PCG012W	NA	NA
LCD1W	PCG012WC	25.6	1	NA	2.00	0.500	07/22/0814:03	NA	JG22005	JG22001	PCG012W	NA	NA
H-EB7172008	G188-01	ND	1	NA	2.00	0.500	07/22/0819:24	NA	JG22015	JG22012	PCG012W	07/17/0809:05	07/18/08

8956

METHOD 314.0
PERCHLORATE

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
Batch No. : 08G188

Matrix : SOIL
Instrument ID : I57

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/kg)	DLF	MOIST	RL (ug/kg)	MDL (ug/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	PCG014SB	ND	1	NA	20.0	10.0	07/23/0814:43	07/22/0813:50	JG23002	JG23001	PCG014S	NA	07/22/08
LCS1S	PCG014SL	267	1	NA	20.0	10.0	07/23/0815:25	07/22/0813:50	JG23004	JG23001	PCG014S	NA	07/22/08
LCD1S	PCG014SC	269	1	NA	20.0	10.0	07/23/0815:46	07/22/0813:50	JG23005	JG23001	PCG014S	NA	07/22/08
H-T1-0.5	G188-02	39.5	1	1.2	20.2	10.1	07/23/0816:07	07/22/0813:50	JG23006	JG23001	PCG014S	07/17/0810:13	07/18/08
H-T1-7.0	G188-04	ND	1	8.0	21.7	10.9	07/23/0816:28	07/22/0813:50	JG23007	JG23001	PCG014S	07/17/0810:51	07/18/08
H-T1-11	G188-05	ND	1	10.0	22.2	11.1	07/23/0817:56	07/22/0813:50	JG23009	JG23008	PCG014S	07/17/0811:12	07/18/08
H-T2-0.5	G188-06	ND	1	1.8	20.4	10.2	07/23/0818:17	07/22/0813:50	JG23010	JG23008	PCG014S	07/17/0812:35	07/18/08
H-T2-2.5	G188-07	ND	1	7.2	21.6	10.8	07/23/0818:38	07/22/0813:50	JG23011	JG23008	PCG014S	07/17/0812:51	07/18/08
H-T2-2.5DUP	G188-07D	ND	1	7.2	21.6	10.8	07/23/0819:41	07/22/0813:50	JG23014	JG23013	PCG014S	07/17/0812:51	07/18/08
H-T2-2.5MS	G188-07M	110	1	7.2	21.6	10.8	07/23/0820:03	07/22/0813:50	JG23015	JG23013	PCG014S	07/17/0812:51	07/18/08
H-T2-10	G188-10	ND	1	18.6	24.6	12.3	07/23/0820:24	07/22/0813:50	JG23016	JG23013	PCG014S	07/17/0813:18	07/18/08
H-T2-10DUP	G188-11	ND	1	18.5	24.5	12.3	07/23/0820:45	07/22/0813:50	JG23017	JG23013	PCG014S	07/17/0813:20	07/18/08
H-T3-0.5	G188-12	ND	1	1.0	20.2	10.1	07/23/0821:06	07/22/0813:50	JG23018	JG23013	PCG014S	07/17/0814:12	07/18/08
H-T3-5.0	G188-14	ND	1	8.1	21.8	10.9	07/23/0821:27	07/22/0813:50	JG23019	JG23013	PCG014S	07/17/0814:30	07/18/08
H-T3-10.0	G188-15	ND	1	14.4	23.4	11.7	07/23/0821:48	07/22/0813:50	JG23020	JG23013	PCG014S	07/17/0814:52	07/18/08
H-T4-0.5	G188-16	ND	1	1.2	20.2	10.1	07/23/0822:09	07/22/0813:50	JG23021	JG23013	PCG014S	07/17/0815:43	07/18/08
H-T4-2.0	G188-17	ND	1	1.8	20.4	10.2	07/23/0822:30	07/22/0813:50	JG23022	JG23013	PCG014S	07/17/0815:50	07/18/08
H-T6-0.5	G188-18	ND	1	1.4	20.3	10.1	07/23/0823:33	07/22/0813:50	JG23025	JG23024	PCG014S	07/17/0816:18	07/18/08
H-T6-0.5DUP	G188-19	ND	1	1.2	20.2	10.1	07/23/0823:54	07/22/0813:50	JG23026	JG23024	PCG014S	07/17/0816:20	07/18/08
H-T6-5.0	G188-21	ND	1	19.1	24.7	12.4	07/24/0800:15	07/22/0813:50	JG23027	JG23024	PCG014S	07/17/0816:45	07/18/08
H-T6-10	G188-22	ND	1	11.6	22.6	11.3	07/24/0800:36	07/22/0813:50	JG23028	JG23024	PCG014S	07/17/0816:57	07/18/08

9002

QC SUMMARY

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 314.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	PCG012WB	PCG012WL	PCG012WC		
LAB FILE ID:	JG22002	JG22004	JG22005		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/22/0813:00	07/22/0813:42	07/22/0814:03	DATE RECEIVED:	NA
PREP. BATCH:	PCG012W	PCG012W	PCG012W		
CALIB. REF:	JG22001	JG22001	JG22001		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Perchlorate	ND	25.0	25.2	101	25.0	25.6	102	2	85-115	20

5555

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 314.0

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	PCG014SB	PCG014SL	PCG014SC		
LAB FILE ID:	JG23002	JG23004	JG23005		
DATE EXTRACTED:	07/22/0813:50	07/22/0813:50	07/22/0813:50	DATE COLLECTED:	NA
DATE ANALYZED:	07/23/0814:43	07/23/0815:25	07/23/0815:46	DATE RECEIVED:	07/22/08
PREP. BATCH:	PCG014S	PCG014S	PCG014S		
CALIB. REF:	JG23001	JG23001	JG23001		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Perchlorate	ND	250	267	107	250	269	108	1	85-115	20

J998

EMAX QUALITY CONTROL DATA
MS ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 314.0

MATRIX:	SOIL		% MOISTURE:	7.2
DILUTION FACTOR:	1	1		
SAMPLE ID:	H-T2-2.5			
LAB SAMP ID:	G188-07	G188-07M		
LAB FILE ID:	JG23011	JG23015		
DATE EXTRACTED:	07/22/0813:50	07/22/0813:50	DATE COLLECTED:	07/17/08 12:51
DATE ANALYZED:	07/23/0818:38	07/23/0820:03	DATE RECEIVED:	07/18/08
PREP. BATCH:	PCG014S	PCG014S		
CALIB. REF:	JG23008	JG23013		

ACCESSION:

PARAMETER	SMPL RSLT (ug/kg)	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	QC LIMIT (%)
Perchlorate	ND	108	110	102	80-120

6555

EMAX QUALITY CONTROL DATA
DUPLICATE SAMPLE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 314.0

MATRIX:	SOIL		% MOISTURE:	7.2
DILUTION FACTOR:	1	1		
SAMPLE ID:	H-T2-2.5			
EMAX SAMP ID:	G188-07	G188-07D		
LAB FILE ID:	JG23011	JG23014		
DATE EXTRACTED:	07/22/0813:50	07/22/0813:50	DATE COLLECTED:	07/17/08 12:51
DATE ANALYZED:	07/23/0818:38	07/23/0819:41	DATE RECEIVED:	07/18/08
PREP. BATCH:	PCG014S	PCG014S		
CALIB. REF:	JG23008	JG23013		

ACCESSION:

PARAMETER	SMPL RSLT (ug/kg)	DUPL RSLT (ug/kg)	RPD RSLT %	QC LIMIT (%)
Perchlorate	ND	ND	0	20

6956

INITIAL CALIBRATION

IC SEQ FORM (ESD)

LFID	LSID	SELCOMP	METHOD	DateTime	DF
JG03001	IPCS	P	IC57G03	07/03/0815:25	1
JG03002	PCG004WB	P	IC57G03	07/03/0815:46	1
JG03003	MRL	P	IC57G03	07/03/0816:07	1
JG03004	PCG004WL	P	IC57G03	07/03/0816:28	1
JG03005	PCG004WC	P	IC57G03	07/03/0816:49	1
JG03006	PCG004WX	P	IC57G03	07/03/0817:10	1
JG03007	PCG004WY	P	IC57G03	07/03/0817:31	1
JG03008	CCV15	P	IC57G03	07/03/0818:44	1
JG03009	IB	P	IC57G03	07/03/0819:05	1
JG03010	S-0	P	IC57G03	07/03/0819:26	1
JG03011	S-1	P	IC57G03	07/03/0819:47	1
JG03012	S-2	P	IC57G03	07/03/0820:08	1
JG03013	S-3	P	IC57G03	07/03/0820:29	1
JG03014	S-4	P	IC57G03	07/03/0820:50	1
JG03015	S-5	P	IC57G03	07/03/0821:11	1
JG03016	ICV	P	IC57G03	07/03/0821:32	1
JG03017	RINSE	P	IC57G03	07/03/0821:53	1
JG03018	ICB	P	IC57G03	07/03/0822:14	1
JG03019	CCV30	P	IC57G03	07/03/0822:35	1

AA 7/9/08

Method : c:\ezchrom\methods\ic57g03.met
Printed : Jul 07, 2008 10:11:11
Channel : A
Peak : PERCHLORATE

* - Replicate Not Used

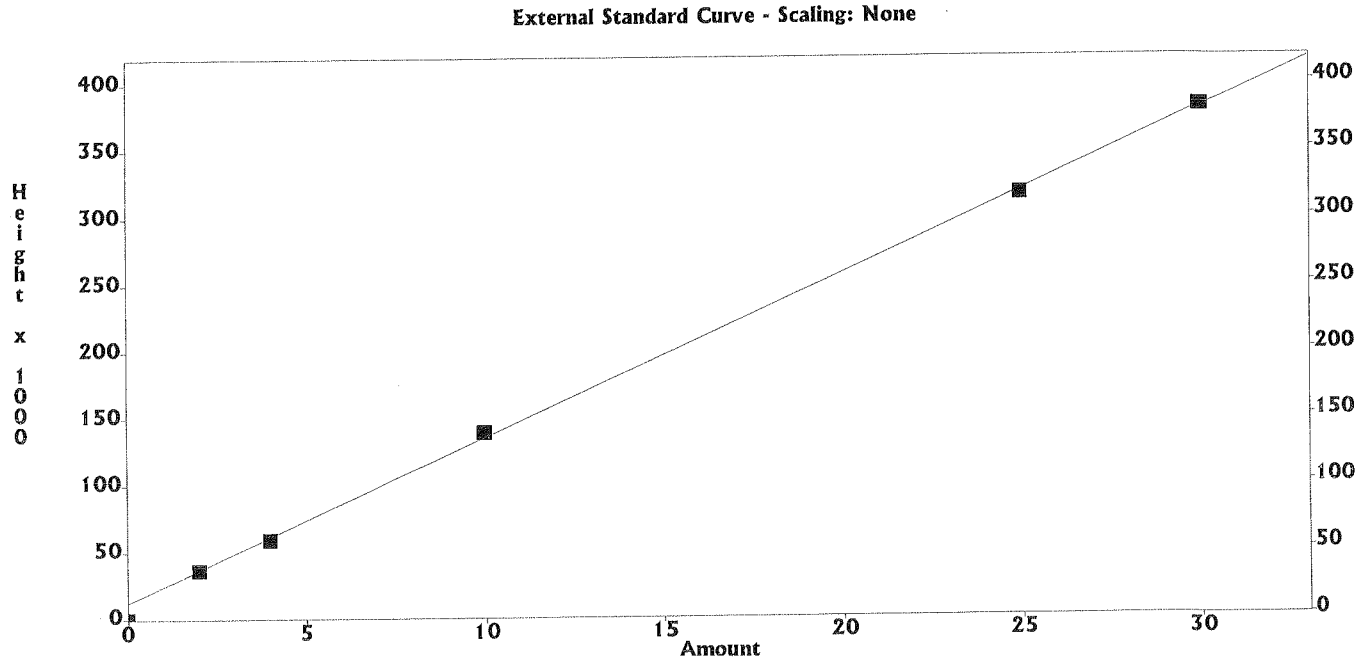
Level	Height	Amount	RF	Rep Hgt 1	Rep Hgt 2	Rep Hgt 3	Rep Hgt 4	Rep Hgt 5	Replic STD	Replic %RSD	Old Height
2	36462	2	18231.00	36462							0
3	59179	4	14794.75	59179							0
4	139045	10	13904.50	139045							0
5	316372	25	12654.88	316372							0
6	380960	30	12698.67	380960							0

Calib Flag: Replace

Average RF: 14456.8
RF StdDev: 2291.39
RF %RSD: 15.850

RF Definition: Height / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 8.15797e-005 x Height - 1.00674
R^2 = 0.999701



4x 7/9/08

8012

SECOND SOURCE

IC RESULT FORM CalVersion: PCHLO314.G03

LFID	LSID	SELCOMP	PERCHLORATE	DateTime	Df
JG03001	IPCS	P	86.4%	07/03/0815:25	1
JG03002	PCG004WB	P	.000	07/03/0815:46	1
JG03003	MRL	P	124%	07/03/0816:07	1
JG03004	PCG004WL	P	25.8	07/03/0816:28	1
JG03005	PCG004WC	P	26.3	07/03/0816:49	1
JG03006	PCG004WX	P	25.9	07/03/0817:10	1
JG03007	PCG004WY	P	26.3	07/03/0817:31	1
JG03008	CCV15	P	105%	07/03/0818:44	1
JG03009	IB	P	.000	07/03/0819:05	1
JG03010	S-0	P	.0000	07/03/0819:26	1
JG03011	S-1	P	2	07/03/0819:47	1
JG03012	S-2	P	4	07/03/0820:08	1
JG03013	S-3	P	10	07/03/0820:29	1
JG03014	S-4	P	25	07/03/0820:50	1
JG03015	S-5	P	30	07/03/0821:11	1
JG03016	ICV	P	99.9%	07/03/0821:32	1
JG03017	RINSE	P	.000	07/03/0821:53	1
JG03018	ICB	P	.000	07/03/0822:14	1
JG03019	CCV30	P	102%	07/03/0822:35	1

AS
7/9/08

DAILY CALIBRATION

IC RESULT FORM CalVersion: PCHLO314.G03

LFID	LSID	SELCOMP	PERCHLORATE	DateTime	Df
JG22001	IPCS	P	83.5%	07/22/0812:37	1
JG22002	PCG012WB	P	.000	07/22/0813:00	1
JG22003	MRL	P	86.5%	07/22/0813:21	1
JG22004	PCG012WL	P	25.2	07/22/0813:42	1
JG22005	PCG012WC	P	25.6	07/22/0814:03	1
JG22006	G112-05	P	71.4	07/22/0814:48	4
JG22007	G112-06	P	143	07/22/0815:09	8
JG22008	G131-01I	P	528	07/22/0815:30	40
JG22009	G131-02I	P	231	07/22/0816:09	20
JG22010	G131-03I	P	384	07/22/0816:30	20
JG22011	G131-04I	P	53	07/22/0816:51	10
JG22012	CCV16-30	P	103%	07/22/0818:21	1
JG22013	G131-06I	P	252	07/22/0818:42	20
JG22014	G131-11I	P	478	07/22/0819:03	20
JG22015	G188-01	P	.000	07/22/0819:24	1
JG22016	G195-01	P	.000	07/22/0819:45	1
JG22017	G146-02	*	35.1E	07/22/0820:06	1
JG22018	G146-03	P	438	07/22/0820:27	20
JG22019	G146-04	P	68.5	07/22/0820:48	10
JG22020	G146-05R	P	22.6	07/22/0821:09	1
JG22021	G146-05Z	P	22.1	07/22/0821:30	1
JG22022	RINSE	P	.000	07/22/0821:51	1
JG22023	CCV17-15	P	101%	07/22/0822:12	1
JG22024	G146-05G	*	32.5E	07/22/0822:33	1
JG22025	G146-07	P	493	07/22/0822:54	20
JG22026	G146-08	*	89.1E	07/22/0823:15	2
JG22027	RINSE	P	1.21	07/22/0823:36	1
JG22028	CCV18-30	P	107%	07/22/0823:57	1
JG22029	IPCS	P	86.2%	07/23/0800:18	1
JG22030	PCG013SB	P	.000	07/23/0800:39	1
JG22031	PCG013SL	P	26.5	07/23/0801:00	1
JG22032	PCG013SC	P	25.9	07/23/0801:21	1
JG22033	G177-02	P	23.5	07/23/0801:42	1
JG22034	G177-02D	P	23.7	07/23/0802:03	1
JG22035	G177-02M	P	33.6E	07/23/0802:24	1
JG22036	G177-03	P	4.16	07/23/0802:45	1
JG22037	G177-05	*	70.5E	07/23/0803:06	1
JG22038	RINSE	P	.000	07/23/0803:27	1
JG22039	CCV19-15	P	100%	07/23/0803:48	1
JG22040	G177-06	P	1.73	07/23/0804:10	1
JG22041	G177-08	P	.000	07/23/0804:31	1
JG22042	G177-09	P	1.82	07/23/0804:52	1
JG22043	G177-10	P	.000	07/23/0805:13	1
JG22044	G177-11	P	.000	07/23/0805:34	1
JG22045	G177-12	P	.000	07/23/0805:55	1
JG22046	G177-16	P	2.75	07/23/0806:16	1
JG22047	G177-17	*	52.5E	07/23/0806:37	1
JG22048	RINSE	P	.000	07/23/0806:58	1
JG22049	CCV20-30	P	104%	07/23/0807:19	1
JG22050	MRL	P	110%	07/23/0808:10	1
JG22051	G177-17	P	60	07/23/0808:38	2
JG22052	G177-05	P	105	07/23/0808:59	10
JG22053	G146-02	P	30.1	07/23/0810:00	5
JG22054	G146-08	P	66.7	07/23/0810:22	10
JG22055	G146-04	P	134	07/23/0810:47	10
JG22056	G146-02	*	39.8E	07/23/0811:12	1
JG22057	G146-08	P	88.4	07/23/0812:00	10
JG22058	G146-08	*	71.9E	07/23/0812:21	1
JG22059	RINSE	P	.000	07/23/0812:42	1
JG22060	CCV21-15	P	108%	07/23/0813:03	1

IC RESULT FORM CalVersion: PCHLO314.G03

LFID	LSID	SELCOMP	PERCHLORATE	DateTime	Df
JG23001	IPCS	P	88%	07/23/0814:18	1
JG23002	PCG014SB	P	.000	07/23/0814:43	1
JG23003	MRL	P	116%	07/23/0815:04	1
JG23004	PCG014SL	P	26.7	07/23/0815:25	1
JG23005	PCG014SC	P	26.9	07/23/0815:46	1
JG23006	G188-02	P	3.9	07/23/0816:07	1
JG23007	G188-04	P	.000	07/23/0816:28	1
JG23008	CCV22-15	P	106%	07/23/0817:35	1
JG23009	G188-05	P	.000	07/23/0817:56	1
JG23010	G188-06	P	.000	07/23/0818:17	1
JG23011	G188-07	P	.000	07/23/0818:38	1
JG23012	RINSE	P	.000	07/23/0818:59	1
JG23013	CCV23-30	P	108%	07/23/0819:20	1
JG23014	G188-07D	P	.000	07/23/0819:41	1
JG23015	G188-07M	P	10.2	07/23/0820:03	1
JG23016	G188-10	P	.000	07/23/0820:24	1
JG23017	G188-11	P	.000	07/23/0820:45	1
JG23018	G188-12	P	.000	07/23/0821:06	1
JG23019	G188-14	P	.000	07/23/0821:27	1
JG23020	G188-15	P	.000	07/23/0821:48	1
JG23021	G188-16	P	.000	07/23/0822:09	1
JG23022	G188-17	P	.000	07/23/0822:30	1
JG23023	RINSE	P	.924	07/23/0822:51	1
JG23024	CCV24-15	P	106%	07/23/0823:12	1
JG23025	G188-18	P	.000	07/23/0823:33	1
JG23026	G188-19	P	.000	07/23/0823:54	1
JG23027	G188-21	P	.000	07/24/0800:15	1
JG23028	G188-22	P	.000	07/24/0800:36	1
JG23029	RINSE	P	.000	07/24/0800:57	1
JG23030	CCV25-30	P	106%	07/24/0801:18	1

ANALYTICAL LOG

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

NaOH: SW9A -03-013

(JG22-019)

- Sample: G146-04, DF=10, Bad Injection, Not Evaluated.

- JG22-058, -056, ~~-057~~ ad 07/23/08, -037, & -0487 ad 07/23/08: For confirmation

- JG22-054: Bad injection; not used.

Book #:	A57-017
Instrument No.:	57
Analytical Sequence:	JG22
Method File:	jm 7/23/08 ~~PCG012~~ IC57903
Analytical Batch:	PCG012W, PCG0133

SOP #	Rev. #
☐ EMAX-300.0	3
☐ EMAX-300.0M	0
☑ EMAX-314.0	1
☐ EMAX-9056	2
☐ EMAX-	

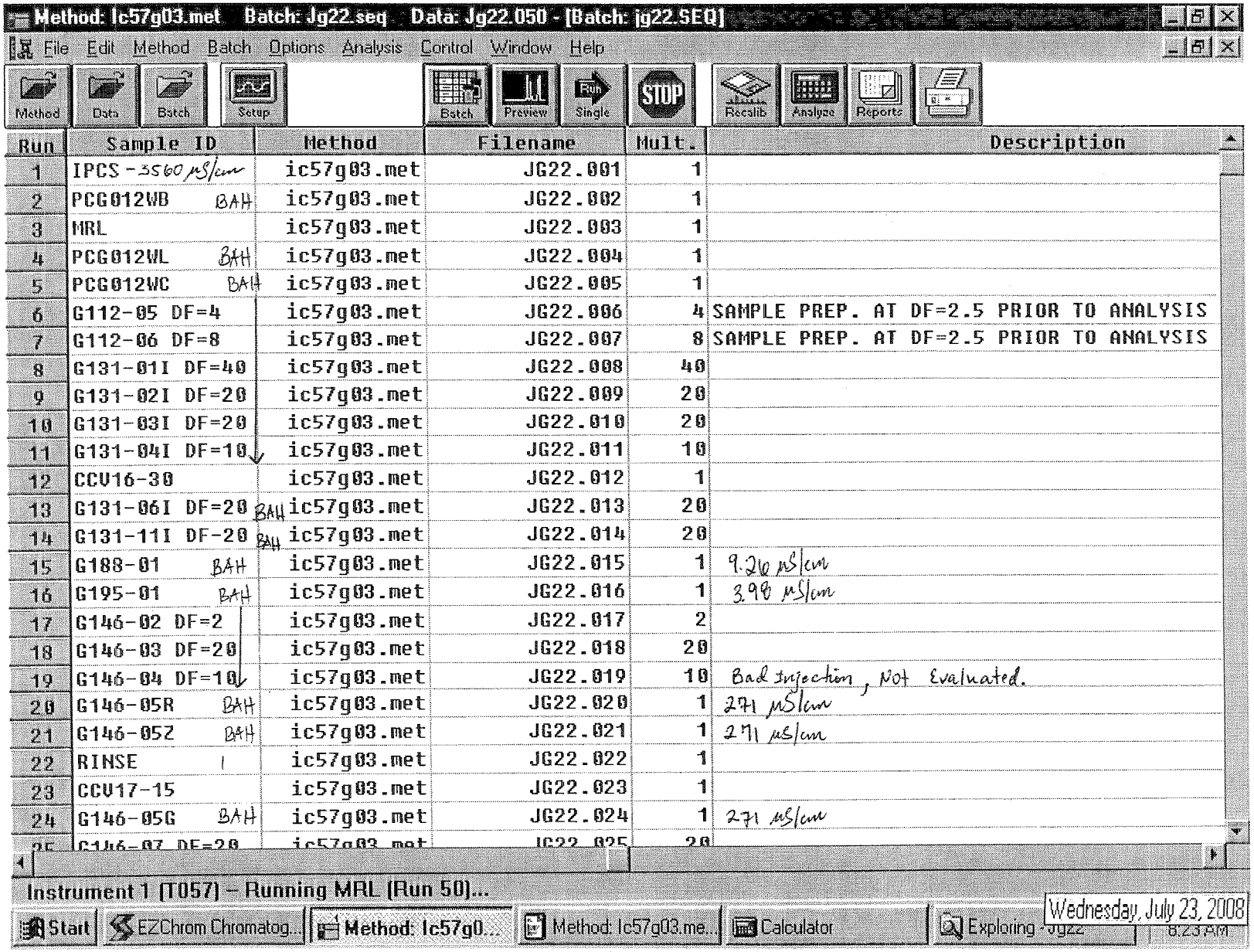
STANDARDS ID	
ICAL	SW8B -02-1130
ICV	-1133
CCV-15	-1140
CCV-30	-1137
LCS	-1133
MS	-1126
IPC	-1138
CMC	SW1-01-101
MRL	SW8B-02-1134

CMC Reading (µS/cm)	QC Criteria (µS/cm)	Temp. (°C)
96.5 µS/cm	(±) 30	20°C

ELECTRONIC DATA ARCHIVAL	
Location	Date
☑ EZ-CHROM	
☐	

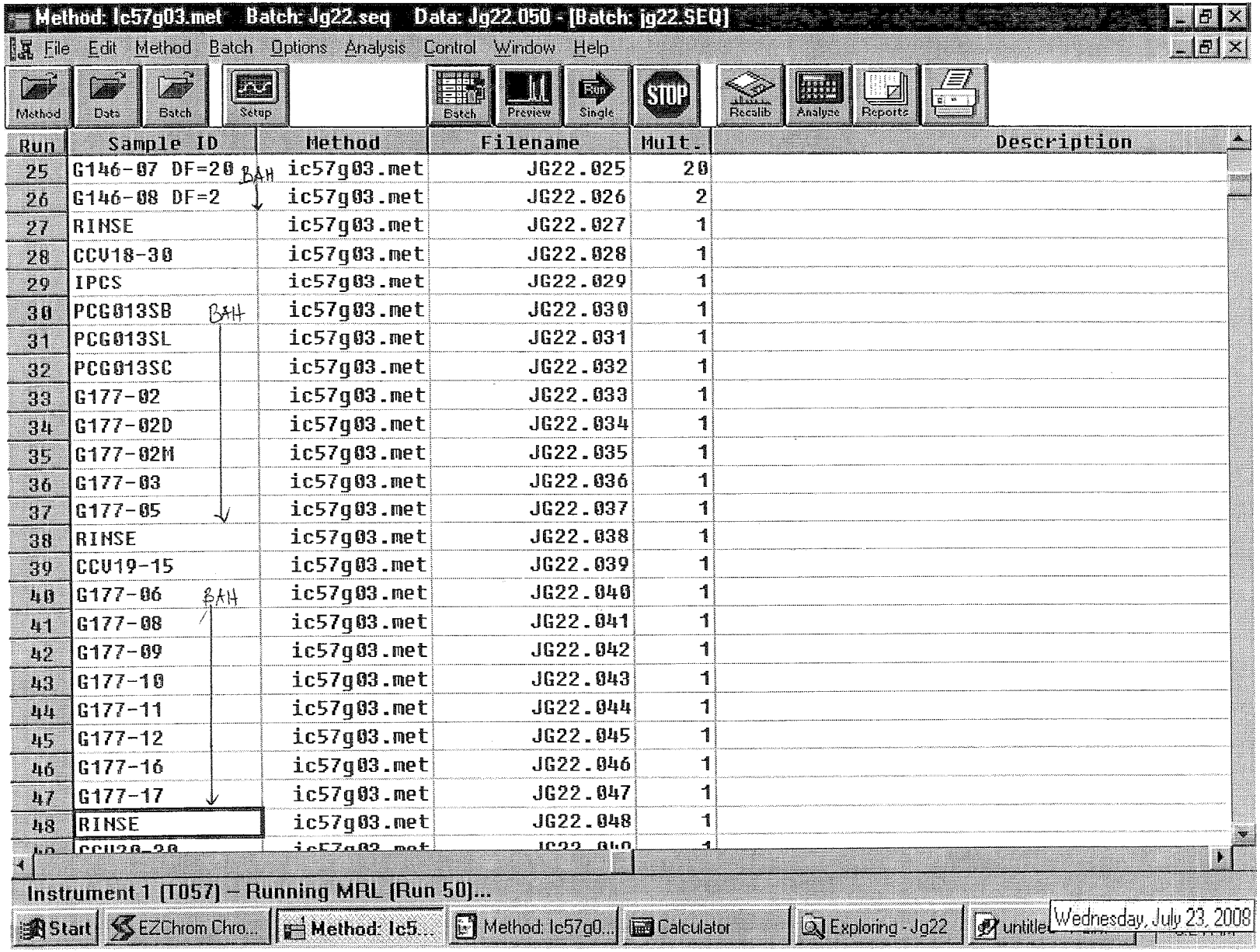
Analyzed By: jm / ad

Date: 07/22/08


Method: lc57g03.met Batch: Jg22.seq Data: Jg22.050 - [Batch: jg22.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 | IPCS - 3560 µS/cm | ic57g03.met | JG22.001 | 1 |
2 | PCG012WB BAH | ic57g03.met | JG22.002 | 1 |
3 | MRL | ic57g03.met | JG22.003 | 1 |
4 | PCG012WL BAH | ic57g03.met | JG22.004 | 1 |
5 | PCG012WC BAH | ic57g03.met | JG22.005 | 1 |
6 | G112-05 DF=4 | ic57g03.met | JG22.006 | 4 | SAMPLE PREP. AT DF=2.5 PRIOR TO ANALYSIS
7 | G112-06 DF=8 | ic57g03.met | JG22.007 | 8 | SAMPLE PREP. AT DF=2.5 PRIOR TO ANALYSIS
8 | G131-01I DF=40 | ic57g03.met | JG22.008 | 40 |
9 | G131-02I DF=20 | ic57g03.met | JG22.009 | 20 |
10 | G131-03I DF=20 | ic57g03.met | JG22.010 | 20 |
11 | G131-04I DF=10 | ic57g03.met | JG22.011 | 10 |
12 | CCV16-30 | ic57g03.met | JG22.012 | 1 |
13 | G131-06I DF=20 BAH | ic57g03.met | JG22.013 | 20 |
14 | G131-11I DF-20 BAH | ic57g03.met | JG22.014 | 20 |
15 | G188-01 BAH | ic57g03.met | JG22.015 | 1 | 9.26 µS/cm
16 | G195-01 BAH | ic57g03.met | JG22.016 | 1 | 3.98 µS/cm
17 | G146-02 DF=2 | ic57g03.met | JG22.017 | 2 |
18 | G146-03 DF=20 | ic57g03.met | JG22.018 | 20 |
19 | G146-04 DF=10 | ic57g03.met | JG22.019 | 10 | Bad injection, Not Evaluated.
20 | G146-05R BAH | ic57g03.met | JG22.020 | 1 | 271 µS/cm
21 | G146-05Z BAH | ic57g03.met | JG22.021 | 1 | 271 µS/cm
22 | RINSE | ic57g03.met | JG22.022 | 1 |
23 | CCV17-15 | ic57g03.met | JG22.023 | 1 |
24 | G146-05G BAH | ic57g03.met | JG22.024 | 1 | 271 µS/cm
Instrument 1 (T057) - Running MRL (Run 50)...
Start EZChrom Chromatog... Method: lc57g0... Method: lc57g03.me... Calculator Exploring - Jg22
Wednesday, July 23, 2008 8:23 AM

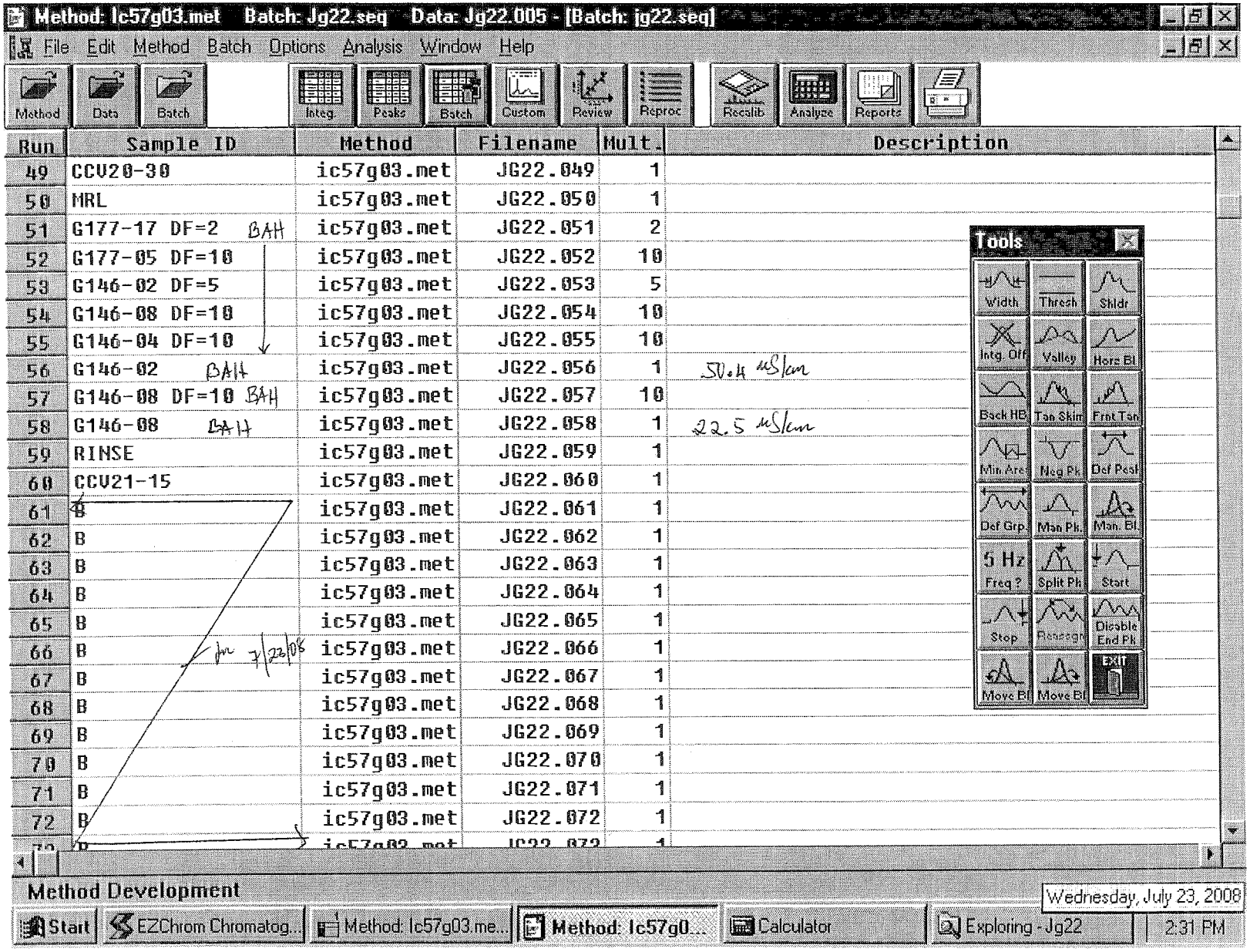
8020

FINAL


Method: lc57g03.met Batch: Jg22.seq Data: Jg22.050 - [Batch: jg22.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
25 G146-07 DF=20 BAH ic57g03.met JG22.025 20
26 G146-08 DF=2 ic57g03.met JG22.026 2
27 RINSE ic57g03.met JG22.027 1
28 CCV18-30 ic57g03.met JG22.028 1
29 IPCS ic57g03.met JG22.029 1
30 PCG013SB BAH ic57g03.met JG22.030 1
31 PCG013SL ic57g03.met JG22.031 1
32 PCG013SC ic57g03.met JG22.032 1
33 G177-02 ic57g03.met JG22.033 1
34 G177-02D ic57g03.met JG22.034 1
35 G177-02M ic57g03.met JG22.035 1
36 G177-03 ic57g03.met JG22.036 1
37 G177-05 ic57g03.met JG22.037 1
38 RINSE ic57g03.met JG22.038 1
39 CCV19-15 ic57g03.met JG22.039 1
40 G177-06 BAH ic57g03.met JG22.040 1
41 G177-08 ic57g03.met JG22.041 1
42 G177-09 ic57g03.met JG22.042 1
43 G177-10 ic57g03.met JG22.043 1
44 G177-11 ic57g03.met JG22.044 1
45 G177-12 ic57g03.met JG22.045 1
46 G177-16 ic57g03.met JG22.046 1
47 G177-17 ic57g03.met JG22.047 1
48 RINSE ic57g03.met JG22.048 1
Instrument 1 [T057] – Running MRL [Run 50]...
Start EZChrom Chro... Method: lc5... Method: lc57g0... Calculator Exploring - Jg22 untitle...
Wednesday, July 23, 2008

8021

FINAL


Method: Ic57g03.met Batch: Jg22.seq Data: Jg22.005 - [Batch: jg22.seq]
File Edit Method Batch Options Analysis Window Help
Method Data Batch Integ Peaks Batch Custom Review Reproc Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
49 | CCV20-30 | ic57g03.met | JG22.049 | 1
50 | MRL | ic57g03.met | JG22.050 | 1
51 | G177-17 DF=2 BAH | ic57g03.met | JG22.051 | 2
52 | G177-05 DF=10 | ic57g03.met | JG22.052 | 10
53 | G146-02 DF=5 | ic57g03.met | JG22.053 | 5
54 | G146-08 DF=10 | ic57g03.met | JG22.054 | 10
55 | G146-04 DF=10 | ic57g03.met | JG22.055 | 10
56 | G146-02 BAH | ic57g03.met | JG22.056 | 1 | 50.4 uS/cm
57 | G146-08 DF=10 BAH | ic57g03.met | JG22.057 | 10
58 | G146-08 BAH | ic57g03.met | JG22.058 | 1 | 22.5 uS/cm
59 | RINSE | ic57g03.met | JG22.059 | 1
60 | CCV21-15 | ic57g03.met | JG22.060 | 1
61 | B | ic57g03.met | JG22.061 | 1
62 | B | ic57g03.met | JG22.062 | 1
63 | B | ic57g03.met | JG22.063 | 1
64 | B | ic57g03.met | JG22.064 | 1
65 | B | ic57g03.met | JG22.065 | 1
66 | B | ic57g03.met | JG22.066 | 1
67 | B | ic57g03.met | JG22.067 | 1
68 | B | ic57g03.met | JG22.068 | 1
69 | B | ic57g03.met | JG22.069 | 1
70 | B | ic57g03.met | JG22.070 | 1
71 | B | ic57g03.met | JG22.071 | 1
72 | B | ic57g03.met | JG22.072 | 1
7/23/08
Tools
Width Thresh Shldr
Intg. Off Valley Horz Bl
Back HB Tan Skim Frnt Tan
Min Area Neg Pk Def Pkst
Def Grp Man Pk Man. Bl
5 Hz Freq ? Split Pk Start
Stop Reassign Disable End Pk
Move Bl Move Bl EXIT
Method Development
Start EZChrom Chromatog... Method: Ic57g03.me... Method: Ic57g0... Calculator Exploring - Jg22 2:31 PM
Wednesday, July 23, 2008

6922

FINAL

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

NaOH: SW9A -03-013

Book #:	A57-017
Instrument No.:	57
Analytical Sequence:	JG23
Method File:	IC57G03
Analytical Batch:	PCG0145

SOP #	Rev. #
☐ EMAX-300.0	3
☐ EMAX-300.0M	0
☑ EMAX-314.0	1
☐ EMAX-9056	2
☐ EMAX-	

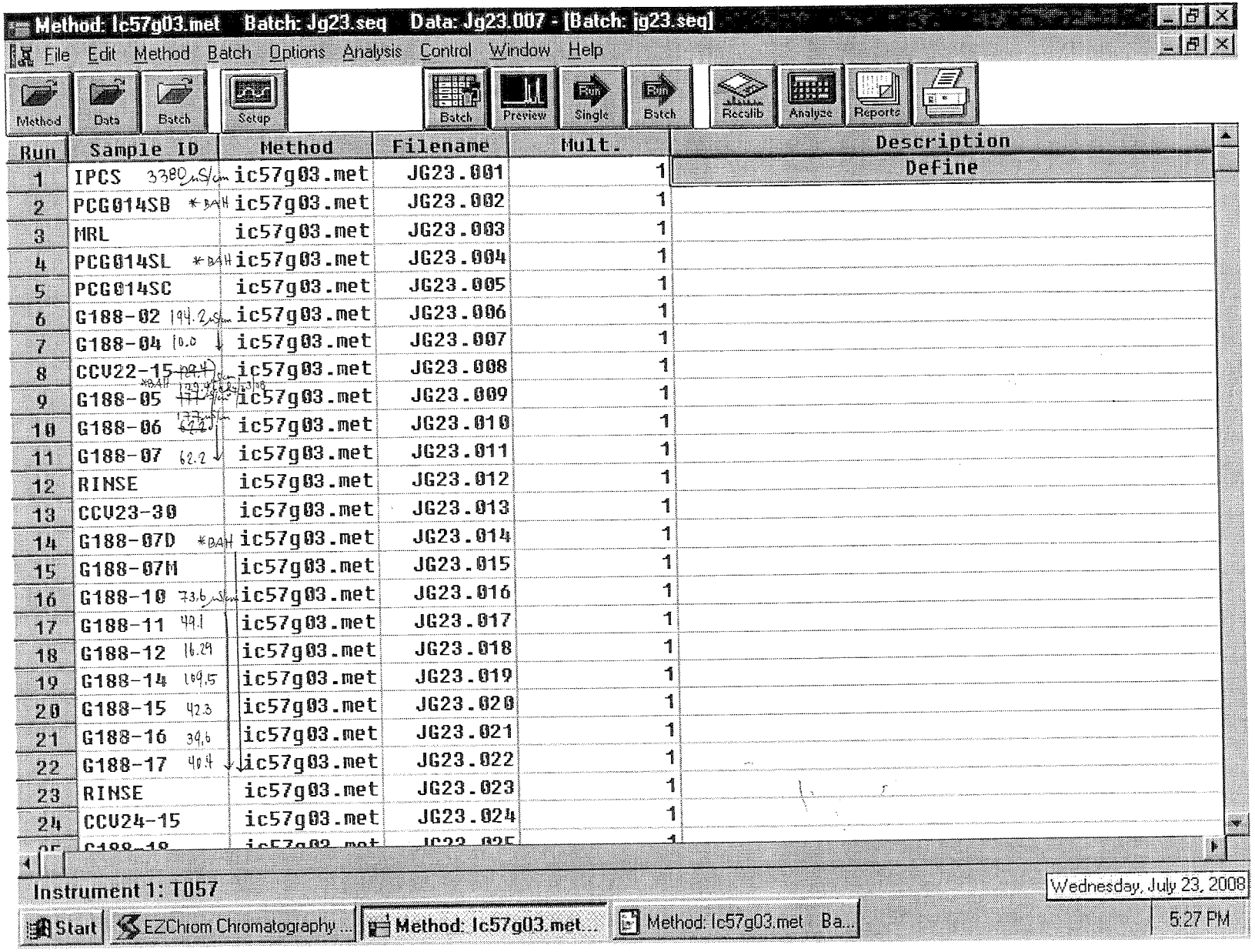
STANDARDS ID	
ICAL	SW8B - 02 - 1130
ICV	1133
CCV-15	1140
CCV-30	1137
LCS	1139
MS	1126
IPC	1138
CMC	SW1 - 01 - 101
MRL	SW8B - 02 - 1141

CMC Reading (µS/cm)	QC Criteria (µS/cm)	Temp. (°C)
98.1	(±) 30	20°C

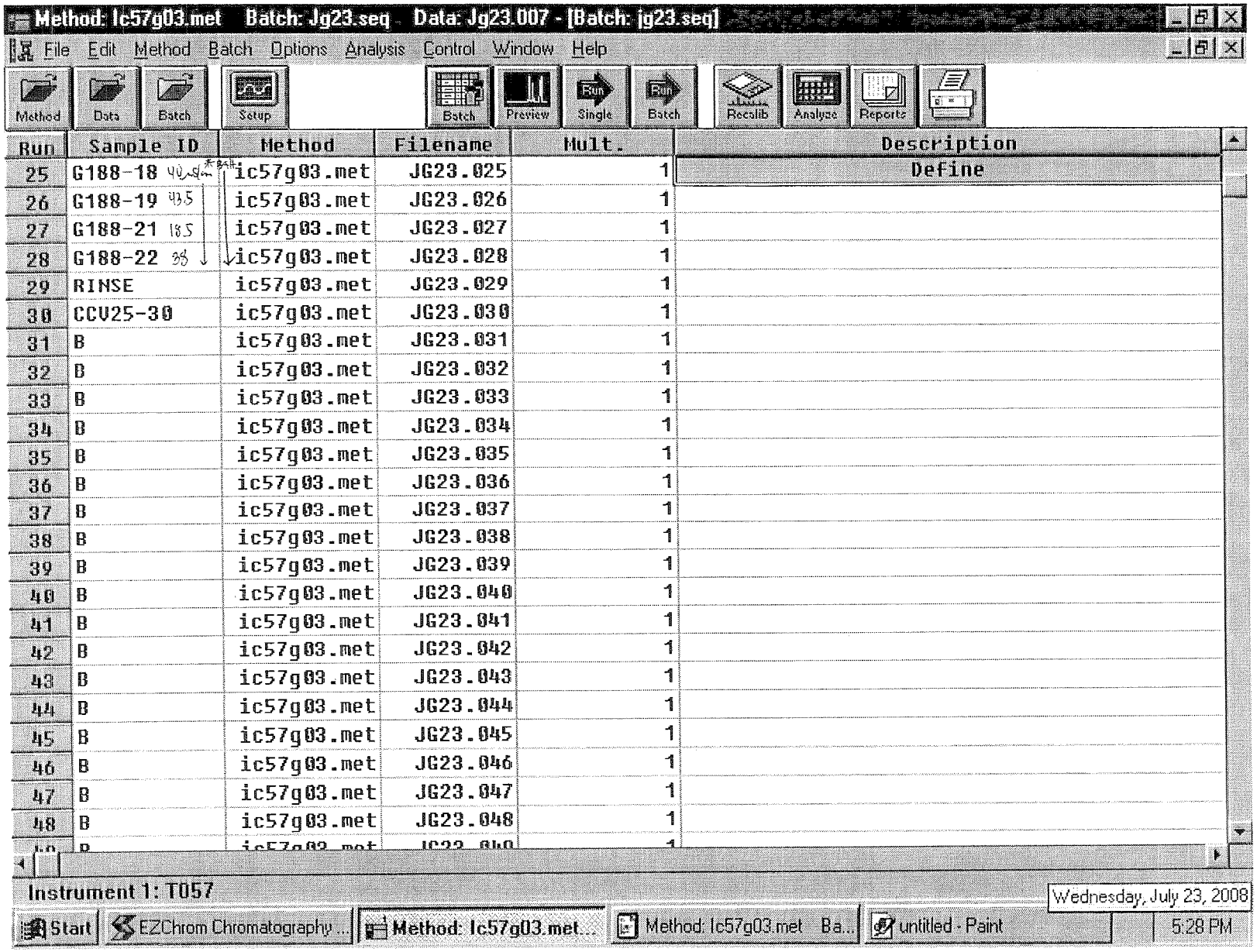
ELECTRONIC DATA ARCHIVAL	
Location	Date
☑ EZ-CHROM	
☐	

Analyzed By: aq

Date: 07/23/08


Method: Ic57g03.met Batch: Jg23.seq Data: Jg23.007 - [Batch: jg23.seq]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single Batch Recalib Analyze Reports
Run Sample ID Method Filename Mult. Description
Define
1 IPCS 3380 uS/cm ic57g03.met JG23.001 1
2 PCG014SB *BAH ic57g03.met JG23.002 1
3 MRL ic57g03.met JG23.003 1
4 PCG014SL *BAH ic57g03.met JG23.004 1
5 PCG014SC ic57g03.met JG23.005 1
6 G188-02 194.2 ic57g03.met JG23.006 1
7 G188-04 10.0 ic57g03.met JG23.007 1
8 CCV22-15 ic57g03.met JG23.008 1
9 G188-05 ic57g03.met JG23.009 1
10 G188-06 ic57g03.met JG23.010 1
11 G188-07 62.2 ic57g03.met JG23.011 1
12 RINSE ic57g03.met JG23.012 1
13 CCV23-30 ic57g03.met JG23.013 1
14 G188-07D *BAH ic57g03.met JG23.014 1
15 G188-07M ic57g03.met JG23.015 1
16 G188-10 73.6 ic57g03.met JG23.016 1
17 G188-11 49.1 ic57g03.met JG23.017 1
18 G188-12 16.29 ic57g03.met JG23.018 1
19 G188-14 169.5 ic57g03.met JG23.019 1
20 G188-15 42.3 ic57g03.met JG23.020 1
21 G188-16 34.6 ic57g03.met JG23.021 1
22 G188-17 40.4 ic57g03.met JG23.022 1
23 RINSE ic57g03.met JG23.023 1
24 CCV24-15 ic57g03.met JG23.024 1
Instrument 1: T057
Wednesday, July 23, 2008
Start EZChrom Chromatography... Method: Ic57g03.met... Method: Ic57g03.met Ba... 5:27 PM

FINAL


Method: Ic57g03.met Batch: Jg23.seq Data: Jg23.007 - [Batch: jg23.seq]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single Batch Reclib Analyze Reports
Run Sample ID Method Filename Mult. Description
Define
25 G188-18 ic57g03.met JG23.025 1
26 G188-19 ic57g03.met JG23.026 1
27 G188-21 ic57g03.met JG23.027 1
28 G188-22 ic57g03.met JG23.028 1
29 RINSE ic57g03.met JG23.029 1
30 CCV25-30 ic57g03.met JG23.030 1
31 B ic57g03.met JG23.031 1
32 B ic57g03.met JG23.032 1
33 B ic57g03.met JG23.033 1
34 B ic57g03.met JG23.034 1
35 B ic57g03.met JG23.035 1
36 B ic57g03.met JG23.036 1
37 B ic57g03.met JG23.037 1
38 B ic57g03.met JG23.038 1
39 B ic57g03.met JG23.039 1
40 B ic57g03.met JG23.040 1
41 B ic57g03.met JG23.041 1
42 B ic57g03.met JG23.042 1
43 B ic57g03.met JG23.043 1
44 B ic57g03.met JG23.044 1
45 B ic57g03.met JG23.045 1
46 B ic57g03.met JG23.046 1
47 B ic57g03.met JG23.047 1
48 B ic57g03.met JG23.048 1
Instrument 1: T057
Wednesday, July 23, 2008
Start EZChrom Chromatography ... Method: Ic57g03.met... Method: Ic57g03.met Ba... untitled - Paint 5:28 PM

8825

FINAL

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

NaOH : SW9A-03-013

Book #:	A57-017
Instrument No.:	57
Analytical Sequence:	JG03
Method File:	IC57g03
Analytical Batch:	PCG0040

SOP #	Rev. #
☐ EMAX-300.0	3
☐ EMAX-300.0M	0
☑ EMAX-314.0	1
☐ EMAX-9056	2
☐ EMAX-	

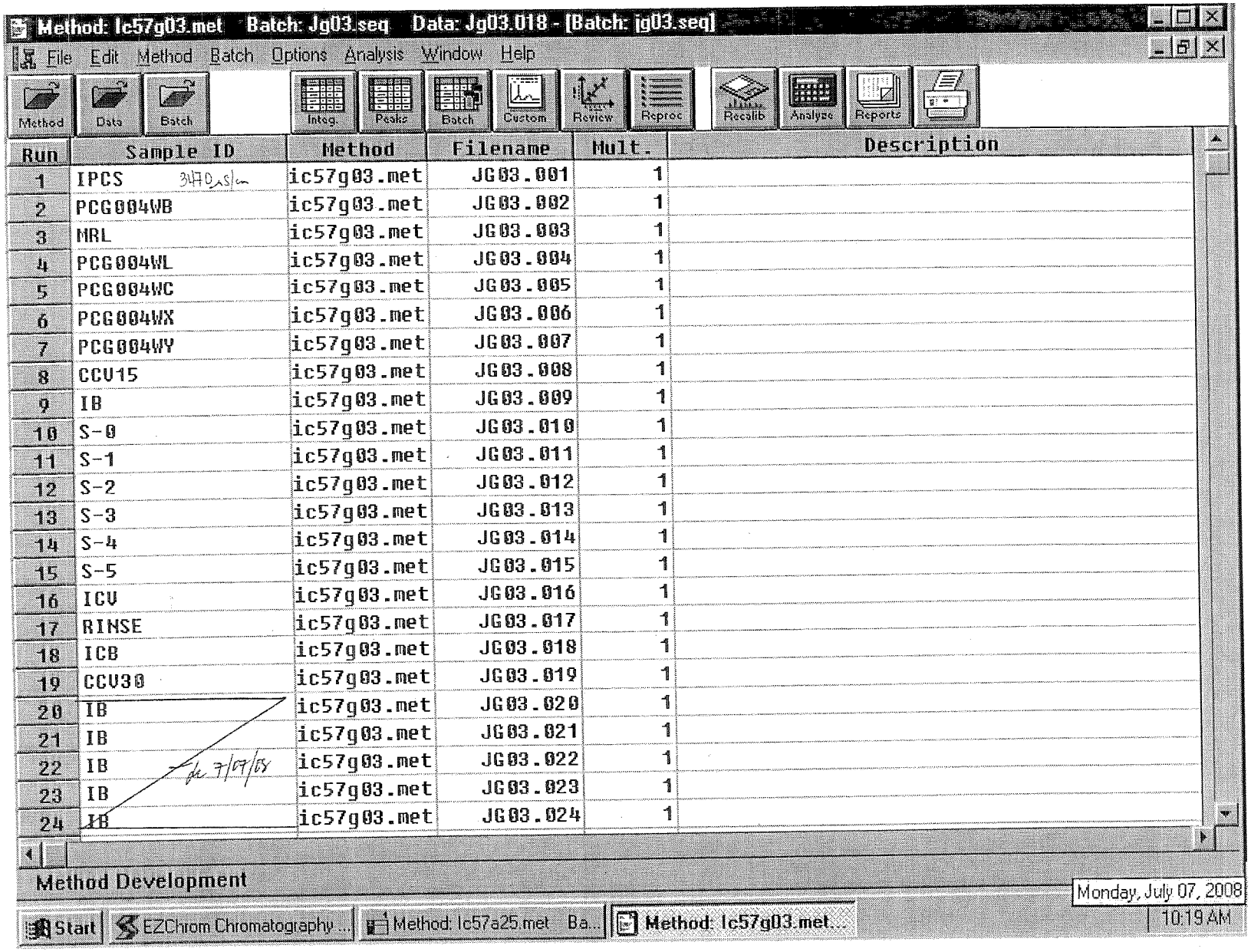
STANDARDS ID	
ICAL	SW813-07-1130
ICV	-1127
CCV-15	-1131
CCV-30	-1132
LCS	-1128
MS	~~1125~~ 1 7/07/08
IPC	-1125
CMC	SW1-01-095
MRL	SW813-02-1114

CMC Reading (µS/cm)	QC Criteria (µS/cm)	Temp. (°C)
925 µS/cm	(±) 30	20°C

ELECTRONIC DATA ARCHIVAL	
Location	Date
☑ EZ-CHROM	
☐	

Analyzed By: [signature]

Date: 7/07/08


Method: Ic57g03.met Batch: Jg03.seq Data: Jg03.018 - [Batch: jg03.seq]
File Edit Method Batch Options Analysis Window Help
Method Data Batch Integ. Peaks Batch Custom Review Reproc Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 | IPCS 3470 as/cm | ic57g03.met | JG03.001 | 1
2 | PCG004WB | ic57g03.met | JG03.002 | 1
3 | MRL | ic57g03.met | JG03.003 | 1
4 | PCG004WL | ic57g03.met | JG03.004 | 1
5 | PCG004WC | ic57g03.met | JG03.005 | 1
6 | PCG004WX | ic57g03.met | JG03.006 | 1
7 | PCG004WY | ic57g03.met | JG03.007 | 1
8 | CCV15 | ic57g03.met | JG03.008 | 1
9 | IB | ic57g03.met | JG03.009 | 1
10 | S-0 | ic57g03.met | JG03.010 | 1
11 | S-1 | ic57g03.met | JG03.011 | 1
12 | S-2 | ic57g03.met | JG03.012 | 1
13 | S-3 | ic57g03.met | JG03.013 | 1
14 | S-4 | ic57g03.met | JG03.014 | 1
15 | S-5 | ic57g03.met | JG03.015 | 1
16 | ICV | ic57g03.met | JG03.016 | 1
17 | RINSE | ic57g03.met | JG03.017 | 1
18 | ICB | ic57g03.met | JG03.018 | 1
19 | CCV30 | ic57g03.met | JG03.019 | 1
20 | IB | ic57g03.met | JG03.020 | 1
21 | IB | ic57g03.met | JG03.021 | 1
22 | IB 7/07/08 | ic57g03.met | JG03.022 | 1
23 | IB | ic57g03.met | JG03.023 | 1
24 | IB | ic57g03.met | JG03.024 | 1
Method Development
Monday, July 07, 2008
Start EZChrom Chromatography ... Method: Ic57a25.met Ba... Method: Ic57g03.met...
10:19 AM

FINAL

EXTRACTION LOG

SAMPLE PREPARATION LOG FOR ORGANIC ACID/PERCHLORATE

SOP ☑ EMAX-314.0 ☐ EMAX-300.0M Book # E0P-002

Matrix Start Date 7/22/08 Time ~~07~~ 13 : 50 End Date 7/22/08 Time ~~02~~ 14 : 30

PREPARATION BATCH # PCG 0145

Sample Prep ID	Lab Sample ID	Sample Amount (g)	Dilution Volume (ml)	Extract Volume (ml) ak 07/23/08	Notes
*01	PCG 0145B	10.000g	100ml	100ml	
*02	PCG 0145L	↓	↓	↓	
*03	PCG 0145C				
*04	G188-02				
*05	-04				
*06	-05				
*07	-06				
*08	-07				
*09	-10				
*10	-11				
*11	-12				
*12	-14				
*13	-15				
*14	-16				
*15	-17				
*16	-18				
*17	-19				
*18	-21				
*19	-22				
*20	G188-07D				
*21	G188-07M	↓	↓	↓	jm 7/22/08 Error
*22					
*23					ak 07/22/08
*24					
*25					

Standards	ID ak 07/22/08	Amount Added (ml)
Acetate		
Butyrate		
Lactate		
Propionate		
Pyruvate		
Perchlorate MS/LCS	SW88-02-1126	1.0ml / 2.5 ml

Reagent	Lot # / ID
H_2SO_4	
Nanopure	DI H2O

Legend:

Color	Texture	Clarity	Artifacts
Bu = Blue Bl = Black	Cs = Coarse	Cr = Clear	Rk = Rocks
Bn = Brown Gn = Green	Md = Medium	Cy = Cloudy	Sl = Shale
Og = Orange Rd = Red	Fn = Fine	Td = turbid	Vg= Vegetation
Yw = Yellow			

Comments:

Prepared By: jm / ak

Standard Added By: jm / ak

Checked By:

MAXXAM LABORATORIES, INC. 1835 W. 205th St. Torrance, CA 90501

LABORATORY REPORT FOR

TETRA TECH, INC.

LMC BEAUMONT SITE 1

METHOD 3520C/3550B/8082
PCBs

SDG#: 08G188

5000

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G188

METHOD 3520C/3550B/8082
PCBs

One (1) water and sixteen (16) soil samples were received on 07/18/08 for PCBs analysis by Method 3520C/3550B/8082 in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition and DOD QSM, v.3.

1. Holding Time

Analytical holding time was met.

2. Instrument Performance and Calibration

Initial calibration was calibrated for PCB-1016 and PCB-1260, all RSDs were within 20%. All continue calibrations were analyzed at 12 hour interval and all recoveries were within 85-115%.

3. Method Blank

Method blanks were free of contamination at half of reporting limit.

4. Surrogate Recovery

Recoveries were within QC limit.

5. Lab Control Sample/Lab Control Sample Duplicate

All recoveries were within QC limits.

6. Matrix Spike/Matrix Spike Duplicate

Sample G188-04 was spiked. All recoveries were within QC limit.

7. Sample Analysis

Samples were analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
PCBs

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1

SDG NO. : 08G188
Instrument ID : GCT071

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	CPG029WB	1	NA	07/25/0801:24	07/21/0813:30	KG24028A	KG24026A	CPG029W	Method Blank
LCS1W	60G029WL	1	NA	07/25/0801:45	07/21/0813:30	KG24029A	KG24026A	CPG029W	Lab Control Sample (LCS)
LCD1W	60G029WC	1	NA	07/25/0802:06	07/21/0813:30	KG24030A	KG24026A	CPG029W	LCS Duplicate
H-EB7172008	G188-01	0.95	NA	07/25/0802:27	07/21/0813:30	KG24031A	KG24026A	CPG029W	Field Sample

SOIL

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1S	60G035SB	1	NA	07/25/0802:48	07/24/0812:15	KG24032A	KG24026A	60G035S	Method Blank
LCS1S	60G035SL	1	NA	07/25/0803:10	07/24/0812:15	KG24033A	KG24026A	60G035S	Lab Control Sample (LCS)
H-T1-0.5	G188-02	1	1.2	07/25/0803:31	07/24/0812:15	KG24034A	KG24026A	60G035S	Field Sample
H-T1-7.0	G188-04	1	8.0	07/25/0803:51	07/24/0812:15	KG24035A	KG24026A	60G035S	Field Sample
H-T1-7.0MS	G188-04M	1	8.0	07/25/0804:13	07/24/0812:15	KG24036A	KG24026A	60G035S	Matrix Spike Sample (MS)
H-T1-7.0MSD	G188-04S	1	8.0	07/25/0804:34	07/24/0812:15	KG24037A	KG24026A	60G035S	MS Duplicate (MSD)
H-T1-11	G188-05	1	10.0	07/25/0804:55	07/24/0812:15	KG24038A	KG24026A	60G035S	Field Sample
H-T2-0.5	G188-06	1	1.8	07/25/0805:16	07/24/0812:15	KG24039A	KG24026A	60G035S	Field Sample
H-T2-2.5	G188-07	1	7.2	07/25/0805:37	07/24/0812:15	KG24040A	KG24026A	60G035S	Field Sample
H-T2-10	G188-10	1	18.6	07/25/0805:58	07/24/0812:15	KG24041A	KG24026A	60G035S	Field Sample
H-T2-10DUP	G188-11	1	18.5	07/25/0806:19	07/24/0812:15	KG24042A	KG24026A	60G035S	Field Sample
H-T3-0.5	G188-12	1	1.0	07/25/0806:40	07/24/0812:15	KG24043A	KG24026A	60G035S	Field Sample
H-T3-5.0	G188-14	1	8.1	07/25/0807:01	07/24/0812:15	KG24044A	KG24026A	60G035S	Field Sample
H-T3-10.0	G188-15	1	14.4	07/25/0807:22	07/24/0812:15	KG24045A	KG24026A	60G035S	Field Sample
H-T4-0.5	G188-16	1	1.2	07/25/0807:43	07/24/0812:15	KG24046A	KG24026A	60G035S	Field Sample
H-T4-2.0	G188-17	1	1.8	07/25/0808:04	07/24/0812:15	KG24047A	KG24026A	60G035S	Field Sample
H-T6-0.5	G188-18	1	1.4	07/25/0808:25	07/24/0812:15	KG24048A	KG24026A	60G035S	Field Sample
H-T6-0.5DUP	G188-19	1	1.2	07/25/0808:46	07/24/0812:15	KG24049A	KG24026A	60G035S	Field Sample
H-T6-5.0	G188-21	1	19.1	07/25/0809:07	07/24/0812:15	KG24050A	KG24026A	60G035S	Field Sample
H-T6-10	G188-22	1	11.6	07/25/0809:28	07/24/0812:15	KG24051A	KG24026A	60G035S	Field Sample

FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 13:30
Sample ID: H-EB7172008	Date Analyzed: 07/25/08 02:27
Lab Samp ID: G188-01	Dilution Factor: 0.95
Lab File ID: KG24031A	Matrix : WATER
Ext Btch ID: CPG029W	% Moisture : NA
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
PCB-1016	(ND)|ND	0.95	0.48|0.48
PCB-1221	(ND)|ND	0.95	0.48|0.48
PCB-1232	(ND)|ND	0.95	0.48|0.48
PCB-1242	(ND)|ND	0.95	0.48|0.48
PCB-1248	(ND)|ND	0.95	0.48|0.48
PCB-1254	(ND)|ND	0.95	0.48|0.48
PCB-1260	(ND)|ND	0.95	0.48|0.48

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	103|(125)	30-140
DECACHLOROBIPHENYL	(104)|102	40-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T1-0.5	Date Analyzed: 07/25/08 03:31
Lab Samp ID: G188-02	Dilution Factor: 1
Lab File ID: KG24034A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 1.2
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND)|ND	51	20|20
PCB-1221	(ND)|ND	51	20|20
PCB-1232	(ND)|ND	51	20|20
PCB-1242	(ND)|ND	51	20|20
PCB-1248	(ND)|ND	51	20|20
PCB-1254	(ND)|ND	51	20|20
PCB-1260	(ND)|ND	51	20|20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	112|(123)	10-160
DECACHLOROBIPHENYL	(109)|108	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T1-7.0	Date Analyzed: 07/25/08 03:51
Lab Samp ID: G188-04	Dilution Factor: 1
Lab File ID: KG24035A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 8.0
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	54	22 | 22
PCB-1221	(ND) | ND	54	22 | 22
PCB-1232	(ND) | ND	54	22 | 22
PCB-1242	(ND) | ND	54	22 | 22
PCB-1248	(ND) | ND	54	22 | 22
PCB-1254	(ND) | ND	54	22 | 22
PCB-1260	(ND) | ND	54	22 | 22

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	111 | (128)	10-160
DECACHLOROBIPHENYL	(110) | 105	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T1-11	Date Analyzed: 07/25/08 04:55
Lab Samp ID: G188-05	Dilution Factor: 1
Lab File ID: KG24038A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 10.0
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	56	22 | 22
PCB-1221	(ND) | ND	56	22 | 22
PCB-1232	(ND) | ND	56	22 | 22
PCB-1242	(ND) | ND	56	22 | 22
PCB-1248	(ND) | ND	56	22 | 22
PCB-1254	(ND) | ND	56	22 | 22
PCB-1260	(ND) | ND	56	22 | 22

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	108 | (124)	10-160
DECACHLOROBIPHENYL	(112) | 108	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T2-0.5	Date Analyzed: 07/25/08 05:16
Lab Samp ID: G188-06	Dilution Factor: 1
Lab File ID: KG24039A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 1.8
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	51	20 | 20
PCB-1221	(ND) | ND	51	20 | 20
PCB-1232	(ND) | ND	51	20 | 20
PCB-1242	(ND) | ND	51	20 | 20
PCB-1248	(ND) | ND	51	20 | 20
PCB-1254	(ND) | ND	51	20 | 20
PCB-1260	(ND) | ND	51	20 | 20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	108 | (122)	10-160
DECACHLOROBIPHENYL	(112) | 108	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T2-2.5	Date Analyzed: 07/25/08 05:37
Lab Samp ID: G188-07	Dilution Factor: 1
Lab File ID: KG24040A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 7.2
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	54	22 | 22
PCB-1221	(ND) | ND	54	22 | 22
PCB-1232	(ND) | ND	54	22 | 22
PCB-1242	(ND) | ND	54	22 | 22
PCB-1248	(ND) | ND	54	22 | 22
PCB-1254	(ND) | ND	54	22 | 22
PCB-1260	(ND) | ND	54	22 | 22

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	102 | (117)	10-160
DECACHLOROBIPHENYL	(110) | 105	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T2-10	Date Analyzed: 07/25/08 05:58
Lab Samp ID: G188-10	Dilution Factor: 1
Lab File ID: KG24041A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 18.6
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	61	25 | 25
PCB-1221	(ND) | ND	61	25 | 25
PCB-1232	(ND) | ND	61	25 | 25
PCB-1242	(ND) | ND	61	25 | 25
PCB-1248	(ND) | ND	61	25 | 25
PCB-1254	(ND) | ND	61	25 | 25
PCB-1260	(ND) | ND	61	25 | 25

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	112 | (130)	10-160
DECACHLOROBIPHENYL	(112) | 110	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T2-10DUP	Date Analyzed: 07/25/08 06:19
Lab Samp ID: G188-11	Dilution Factor: 1
Lab File ID: KG24042A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 18.5
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	61	25 | 25
PCB-1221	(ND) | ND	61	25 | 25
PCB-1232	(ND) | ND	61	25 | 25
PCB-1242	(ND) | ND	61	25 | 25
PCB-1248	(ND) | ND	61	25 | 25
PCB-1254	(ND) | ND	61	25 | 25
PCB-1260	(ND) | ND	61	25 | 25

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	109 | (125)	10-160
DECACHLOROBIPHENYL	(109) | 105	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T3-0.5	Date Analyzed: 07/25/08 06:40
Lab Samp ID: G188-12	Dilution Factor: 1
Lab File ID: KG24043A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 1.0
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	51	20 | 20
PCB-1221	(ND) | ND	51	20 | 20
PCB-1232	(ND) | ND	51	20 | 20
PCB-1242	(ND) | ND	51	20 | 20
PCB-1248	(ND) | ND	51	20 | 20
PCB-1254	(ND) | ND	51	20 | 20
PCB-1260	(ND) | ND	51	20 | 20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	109 | (130)	10-160
DECACHLOROBIPHENYL	(115) | 112	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T3-5.0	Date Analyzed: 07/25/08 07:01
Lab Samp ID: G188-14	Dilution Factor: 1
Lab File ID: KG24044A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 8.1
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	54	22 | 22
PCB-1221	(ND) | ND	54	22 | 22
PCB-1232	(ND) | ND	54	22 | 22
PCB-1242	(ND) | ND	54	22 | 22
PCB-1248	(ND) | ND	54	22 | 22
PCB-1254	(ND) | ND	54	22 | 22
PCB-1260	(ND) | ND	54	22 | 22

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	115 | (132)	10-160
DECACHLOROBIPHENYL	(115) | 110	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T3-10.0	Date Analyzed: 07/25/08 07:22
Lab Samp ID: G188-15	Dilution Factor: 1
Lab File ID: KG24045A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 14.4
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	58	23 | 23
PCB-1221	(ND) | ND	58	23 | 23
PCB-1232	(ND) | ND	58	23 | 23
PCB-1242	(ND) | ND	58	23 | 23
PCB-1248	(ND) | ND	58	23 | 23
PCB-1254	(ND) | ND	58	23 | 23
PCB-1260	(ND) | ND	58	23 | 23

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	116 | (133)	10-160
DECACHLOROBIPHENYL	(116) | 111	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T4-0.5	Date Analyzed: 07/25/08 07:43
Lab Samp ID: G188-16	Dilution Factor: 1
Lab File ID: KG24046A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 1.2
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	51	20 | 20
PCB-1221	(ND) | ND	51	20 | 20
PCB-1232	(ND) | ND	51	20 | 20
PCB-1242	(ND) | ND	51	20 | 20
PCB-1248	(ND) | ND	51	20 | 20
PCB-1254	(ND) | ND	51	20 | 20
PCB-1260	(ND) | ND	51	20 | 20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	114 | (130)	10-160
DECACHLOROBIPHENYL	(112) | 108	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/24/08 12:15
Sample ID:	H-T4-2.0	Date Analyzed:	07/25/08 08:04
Lab Samp ID:	G188-17	Dilution Factor:	1
Lab File ID:	KG24047A	Matrix :	SOIL
Ext Btch ID:	60G035S	% Moisture :	1.8
Calib. Ref.:	KG24026A	Instrument ID :	GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	51	20 | 20
PCB-1221	(ND) | ND	51	20 | 20
PCB-1232	(ND) | ND	51	20 | 20
PCB-1242	(ND) | ND	51	20 | 20
PCB-1248	(ND) | ND	51	20 | 20
PCB-1254	(ND) | ND	51	20 | 20
PCB-1260	(ND) | ND	51	20 | 20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	111 | (130)	10-160
DECACHLOROBIPHENYL	(114) | 112	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/24/08 12:15
Sample ID:	H-T6-0.5	Date Analyzed:	07/25/08 08:25
Lab Samp ID:	G188-18	Dilution Factor:	1
Lab File ID:	KG24048A	Matrix :	SOIL
Ext Btch ID:	60G035S	% Moisture :	1.4
Calib. Ref.:	KG24026A	Instrument ID :	GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	51	20 | 20
PCB-1221	(ND) | ND	51	20 | 20
PCB-1232	(ND) | ND	51	20 | 20
PCB-1242	(ND) | ND	51	20 | 20
PCB-1248	(ND) | ND	51	20 | 20
PCB-1254	(ND) | ND	51	20 | 20
PCB-1260	(ND) | ND	51	20 | 20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	115 | (128)	10-160
DECACHLOROBIPHENYL	(113) | 110	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/24/08 12:15
Sample ID:	H-T6-0.5DUP	Date Analyzed:	07/25/08 08:46
Lab Samp ID:	G188-19	Dilution Factor:	1
Lab File ID:	KG24049A	Matrix :	SOIL
Ext Btch ID:	60G035S	% Moisture :	1.2
Calib. Ref.:	KG24026A	Instrument ID :	GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	51	20 | 20
PCB-1221	(ND) | ND	51	20 | 20
PCB-1232	(ND) | ND	51	20 | 20
PCB-1242	(ND) | ND	51	20 | 20
PCB-1248	(ND) | ND	51	20 | 20
PCB-1254	(ND) | ND	51	20 | 20
PCB-1260	(ND) | ND	51	20 | 20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	116 | (130)	10-160
DECACHLOROBIPHENYL	(113) | 109	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T6-5.0	Date Analyzed: 07/25/08 09:07
Lab Samp ID: G188-21	Dilution Factor: 1
Lab File ID: KG24050A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 19.1
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	62	25 | 25
PCB-1221	(ND) | ND	62	25 | 25
PCB-1232	(ND) | ND	62	25 | 25
PCB-1242	(ND) | ND	62	25 | 25
PCB-1248	(ND) | ND	62	25 | 25
PCB-1254	(ND) | ND	62	25 | 25
PCB-1260	(ND) | ND	62	25 | 25

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	105 | (119)	10-160
DECACHLOROBIPHENYL	(114) | 109	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: H-T6-10	Date Analyzed: 07/25/08 09:28
Lab Samp ID: G188-22	Dilution Factor: 1
Lab File ID: KG24051A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : 11.6
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	57	23 | 23
PCB-1221	(ND) | ND	57	23 | 23
PCB-1232	(ND) | ND	57	23 | 23
PCB-1242	(ND) | ND	57	23 | 23
PCB-1248	(ND) | ND	57	23 | 23
PCB-1254	(ND) | ND	57	23 | 23
PCB-1260	(ND) | ND	57	23 | 23

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	115 | (132)	10-160
DECACHLOROBIPHENYL	(112) | 110	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

QC SUMMARIES

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/24/08
Batch No. : 08G188	Date Extracted: 07/24/08 12:15
Sample ID: MBLK1S	Date Analyzed: 07/25/08 02:48
Lab Samp ID: 60G035SB	Dilution Factor: 1
Lab File ID: KG24032A	Matrix : SOIL
Ext Btch ID: 60G035S	% Moisture : NA
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	50	20 | 20
PCB-1221	(ND) | ND	50	20 | 20
PCB-1232	(ND) | ND	50	20 | 20
PCB-1242	(ND) | ND	50	20 | 20
PCB-1248	(ND) | ND	50	20 | 20
PCB-1254	(ND) | ND	50	20 | 20
PCB-1260	(ND) | ND	50	20 | 20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	114 | (129)	40-130
DECACHLOROBIPHENYL	(113) | 108	40-160

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3550B/8082

MATRIX: SOIL % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1S
LAB SAMP ID: 60G035SB 60G035SL
LAB FILE ID: KG24032A KG24033A
DATE EXTRACTED: 07/24/0812:15 07/24/0812:15 DATE COLLECTED: NA
DATE ANALYZED: 07/25/0802:48 07/25/0803:10 DATE RECEIVED: 07/24/08
PREP. BATCH: 60G035S 60G035S
CALIB. REF: KG24026A KG24026A

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	QC LIMIT (%)
PCB-1016	(ND) | ND	167	188 | (202)	113 | (121)	50-130
PCB-1260	(ND) | ND	167	197 | (208)	118 | (125)	70-150

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	QC LIMIT (%)
Tetrachloro-m-xylene	13.3	15.1 | (17.2)	113 | (129)	40-130
Decachlorobiphenyl	13.3	(15.2) | 14.5	(114) | 109	40-160

METHOD 3520C/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/21/08
Batch No. : 08G188	Date Extracted: 07/21/08 13:30
Sample ID: MBLK1W	Date Analyzed: 07/25/08 01:24
Lab Samp ID: CPG029WB	Dilution Factor: 1
Lab File ID: KG24028A	Matrix : WATER
Ext Btch ID: CPG029W	% Moisture : NA
Calib. Ref.: KG24026A	Instrument ID : GCT071

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
PCB-1016	(ND) | ND	1.0	0.50 | 0.50
PCB-1221	(ND) | ND	1.0	0.50 | 0.50
PCB-1232	(ND) | ND	1.0	0.50 | 0.50
PCB-1242	(ND) | ND	1.0	0.50 | 0.50
PCB-1248	(ND) | ND	1.0	0.50 | 0.50
PCB-1254	(ND) | ND	1.0	0.50 | 0.50
PCB-1260	(ND) | ND	1.0	0.50 | 0.50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	111 | (127)	30-130
DECACHLOROBIPHENYL	(107) | 106	40-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3520C/8082

MATRIX: WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	CPG029WB	60G029WL	60G029WC		
LAB FILE ID:	KG24028A	KG24029A	KG24030A		
DATE EXTRACTED:	07/21/0813:30	07/21/0813:30	07/21/0813:30	DATE COLLECTED:	NA
DATE ANALYZED:	07/25/0801:24	07/25/0801:45	07/25/0802:06	DATE RECEIVED:	07/21/08
PREP. BATCH:	CPG029W	CPG029W	CPG029W		
CALIB. REF:	KG24026A	KG24026A	KG24026A		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
PCB-1016	(ND) | ND	5.00	5.30 | (5.76)	106 | (115)	5.00	5.04 | (5.71)	101 | (114)	5 | (1)	50-130	30
PCB-1260	(ND) | ND	5.00	5.65 | (5.76)	113 | (115)	5.00	5.83 | (6.07)	117 | (121)	3 | (5)	70-150	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
Tetrachloro-m-xylene	0.400	0.436 | (0.458)	109 | (114)	0.400	0.378 | (0.424)	94 | (106)	30-130
Decachlorobiphenyl	0.400	(0.426) | 0.413	(107) | 103	0.400	(0.423) | 0.418	(106) | 105	40-150

USEPA

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3550B/8082

MATRIX: SOIL % MOISTURE: 8.0

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	H-T1-7.0				
LAB SAMP ID:	G188-04	G188-04M	G188-04S		
LAB FILE ID:	KG24035A	KG24036A	KG24037A		
DATE EXTRACTED:	07/24/0812:15	07/24/0812:15	07/24/0812:15	DATE COLLECTED:	07/17/08
DATE ANALYZED:	07/25/0803:51	07/25/0804:13	07/25/0804:34	DATE RECEIVED:	07/18/08
PREP. BATCH:	60G035S	60G035S	60G035S		
CALIB. REF:	KG24026A	KG24026A	KG24026A		

ACCESSION:

PARAMETER	SMPL RSLT (ug/kg)	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	SPIKE AMT (ug/kg)	MSD RSLT (ug/kg)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
PCB-1016	(ND) | ND	181	183 | (202)	101 | (111)	181	196 | (201)	108 | (111)	7 | (0)	20-160	50
PCB-1260	(ND) | ND	181	207 | (214)	114 | (118)	181	212 | (222)	117 | (123)	2 | (4)	20-160	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	SPIKE AMT (ug/kg)	MSD RSLT (ug/kg)	MSD % REC	QC LIMIT (%)
Tetrachloro-m-xylene	14.5	15.4 | (17.9)	106 | (124)	14.5	14.9 | (16.5)	103 | (114)	10-160
Decachlorobiphenyl	14.5	(16.2) | 15.7	(112) | 108	14.5	(16.2) | 15.5	(112) | 107	30-150

* : Outside of QC limits

INITIAL CALIBRATIONS

INITIAL CALIBRATION
METHOD EPA 8082

Lab Name : EMAX Inc
Instrument ID : GCTO71 HP-5890
GC Columm : ZB-MULTIRESIDUE-1
Column size ID : .32MMX30M
LFID & Datetime: KF04027A 06/04/08 18:26
LFID & Datetime: KF04029A 06/04/08 19:07
LFID & Datetime: KF04028A 06/04/08 18:47
LFID & Datetime: KF04030A 06/04/08 19:26
LFID & Datetime: KF04031A 06/04/08 19:51
LFID & Datetime: KF04032A 06/04/08 20:16
CONC UNIT: PPB

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	2.50X	5.00X	7.50X	10.00X	20.00X	MEAN	%RSD
PCB1016-1	20.00	1696.15	1508.10	1408.19	1343.54	1301.19	1159.68	1402.808	13.1
PCB1016-2	20.00	2075.85	2038.12	1922.29	1836.33	1784.65	1623.89	1880.188	9.0
PCB1016-3	20.00	5821.00	5202.44	4800.51	4564.53	4403.00	3965.26	4792.792	13.6
PCB1016-4	20.00	2662.15	2446.94	2297.55	2154.30	2074.17	1859.76	2249.145	12.6
PCB1016-5	20.00	1505.10	1458.84	1419.40	1346.40	1318.07	1223.76	1378.595	7.5
PCB1260-1	20.00	3787.10	3298.26	2991.15	2788.22	2679.30	2401.11	2990.858	16.5
PCB1260-2	20.00	5996.80	5120.78	4831.92	4668.78	4527.95	4169.50	4885.956	12.9
PCB1260-3	20.00	3504.45	3107.80	2875.91	2767.25	2667.88	2516.15	2906.571	12.2
PCB1260-4	20.00	7233.45	6911.70	6624.10	6316.21	6140.07	5484.73	6451.711	9.6
PCB1260-5	20.00	4059.60	3927.14	3809.74	3728.95	3627.89	3496.66	3774.996	5.4
SURROGATE	X	1.00X	2.50X	5.00X	7.50X	10.00X	20.00X	MEAN	%RSD
TCX	5.00	11096	10527	10310	10227	10291	10000	10408.5	3.6
DCB	5.00	18531	17267	16739	16011	15594	14199	16390.1	9.1

6/9/08

INITIAL CALIBRATION
METHOD EPA 8082

Lab Name : EMAX Inc
Instrument ID : GCTO71 HP-5890
GC Column : ZB-MULTIRESIDUE-2
Column size ID : .32MMX30M
LFID & Datetime: KF04027B 06/04/08 18:26
LFID & Datetime: KF04029B 06/04/08 19:07
LFID & Datetime: KF04028B 06/04/08 18:47
LFID & Datetime: KF04030B 06/04/08 19:26
LFID & Datetime: KF04031B 06/04/08 19:51
LFID & Datetime: KF04032B 06/04/08 20:16
CONC UNIT: PPB

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	2.50X	5.00X	7.50X	10.00X	20.00X	MEAN	%RSD
PCB1016-1	20.00	2601.70	2907.02	2749.70	2527.33	2452.34	2235.92	2579.002	9.1
PCB1016-2	20.00	6968.15	6114.44	5629.62	5195.23	4997.90	4522.41	5571.292	15.7
PCB1016-3	20.00	4109.55	3807.82	3658.56	3295.77	3195.52	2971.01	3506.372	12.1
PCB1016-4	20.00	8725.15	8612.06	7950.24	7220.31	7054.62	6592.64	7692.504	11.4
PCB1016-5	20.00	2941.65	2689.36	2660.92	2397.10	2378.45	2330.05	2566.255	9.3
PCB1260-1	20.00	6956.85	6062.30	5574.02	5244.50	5034.77	4533.77	5567.703	15.3
PCB1260-2	20.00	7024.05	6339.64	6042.76	5781.47	5633.38	5225.72	6007.836	10.4
PCB1260-3	20.00	8275.55	7469.30	7136.46	6863.45	6704.07	6225.59	7112.404	9.9
PCB1260-4	20.00	5622.95	5028.42	4806.12	4650.39	4530.06	4228.29	4811.039	10.0
PCB1260-5	20.00	10618.25	9768.16	8948.21	8686.77	8446.45	7928.64	9066.079	10.7
SURROGATE	X	1.00X	2.50X	5.00X	7.50X	10.00X	20.00X	MEAN	%RSD
TCX	5.00	19149	20376	20231	20095	19979	19496	19887.7	2.4
DCB	5.00	28944	26117	24590	23621	22607	20206	24347.3	12.3

RC 6/9/08

5023

SECOND SOURCE VERIFICATION

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO71 HP-5890
GC Column : ZB-MULTIRESIDUE-1
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: KF04029A 06/04/2008 19:07
Conc Cont LFID & Datetime: KF04033A 06/04/2008 20:41
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			512.453	2		15
PCB1260				500.0			508.136	2		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
TCX	2.383	2.357	2.409	25.0	10408.5	260873	25.06	0		15
DCB	13.092	12.998	13.186	25.0	16390.1	396618	24.20	-3		15

6/9/08

5031

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT071 HP-5890
GC Column : ZB-MULTIRESIDUE-2
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: KF04029B 06/04/2008 19:07
Conc Cont LFID & Datetime: KF04033B 06/04/2008 20:41
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			516.128	3		15
PCB1260				500.0			485.382	3		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
TCX	1.792	1.763	1.821	25.0	19887.7	509720	25.63	3		15
DCB	10.483	10.418	10.548	25.0	24347.3	590385	24.25	-3		15

6/19/08

5832

DAILY CALIBRATIONS

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO71 HP-5890
GC Columm : ZB-MULTIRESIDUE-1
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: KF04028A 06/04/2008 18:47
Conc Cont LFID & Datetime: KG24026A 07/25/2008 00:42
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			526.498	5		15
PCB1260				500.0			529.715	6		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
TCX	2.525	2.499	2.551	25.0	10408.5	277057	26.62	6		15
DCB	13.525	13.431	13.619	25.0	16390.1	432453	26.39	6		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT071 HP-5890
GC Column : ZB-MULTIRESIDUE-2
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: KF04028B 06/04/2008 18:47
Conc Cont LFID & Datetime: KG24026B 07/25/2008 00:42
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			573.362	15		15
PCB1260				500.0			569.521	14		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
TCX	1.900	1.871	1.929	25.0	19887.7	611835	30.76	23	*	15
DCB	10.733	10.668	10.798	25.0	24347.3	630263	25.89	4		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO71 HP-5890
GC Column : ZB-MULTIRESIDUE-1
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: KF04028A 06/04/2008 18:47
Conc Cont LFID & Datetime: KG24053A 07/25/2008 10:11
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			533.045	7		15
PCB1260				500.0			539.254	8		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
TCX	2.525	2.499	2.551	25.0	10408.5	279608	26.86	7		15
DCB	13.533	13.439	13.627	25.0	16390.1	426790	26.04	4		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT071 HP-5890
GC Columm : ZB-MULTIRESIDUE-2
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: KF04028B 06/04/2008 18:47
Conc Cont LFID & Datetime: KG24053B 07/25/2008 10:11
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			542.820	9		15
PCB1260				500.0			560.551	12		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	1.892	1.863	1.921	25.0	19887.7	617285	31.04	24	*	15
DCB	10.742	10.677	10.807	25.0	24347.3	670215	27.53	10		15

ANALYTICAL LOG

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A071- 022

Instrument No.: 71

Analytical Sequence: KF04

Method File: CP71F04, 7071F04, 6071F04, 5471F04

Analytical Batch: KF04011 CP71F04, 4871F04, 6271

SOP #	Rev. #
☑ EMAX-8081	4
☑ EMAX-8082	1
☐ EMAX-608	0
☐ EMAX-CLP-PEST	
☐ EMAX-	

ICAL REFERENCE

ICAL ID	BATCH	DATE
CP71F04	KF04	6-04-98
7071F04		
CP71F04		
6071F04, 6271F04		
5471F04, 4871F04		

STANDARDS ID		Conc (µg/L)
Hexane	47197	NA
PEST ICAL	SS1B-05-96-2	80-800 ppb
PEST ICV	SS1B-05-96-1	200/2000 ppb
TOX ICAL	SS1B-05-97-1	100-2000 ppb
TOX ICV	SS1B-05-97-2	
CHLO ICAL	SS1B-05-94-2	
CHLO ICAL	SS1B-05-94-3	
166C ICAL	SS1B-05-99-1	
1660 ICV	SS1B-05-93-2	
1254 ICAL	SS1B-05-96-3	
1254 ICV	SS1B-05-93-3	
PEM	SS1C-05-45-3	100/100

Column	A. RTX CLPEST I B. RTX CLPEST II

ELECTRONIC DATA ARCHIVAL

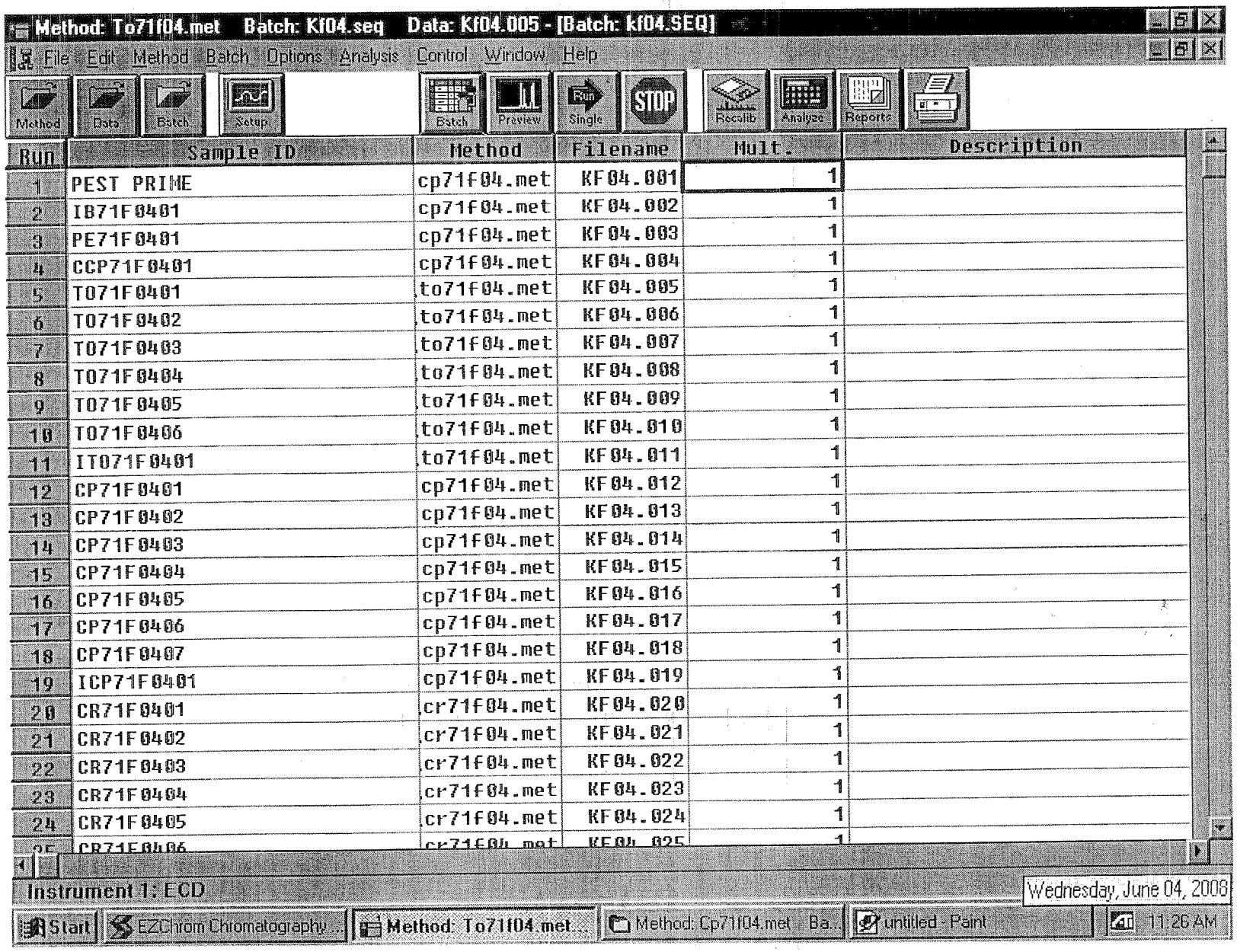
Location	Date
☐ EZC_4_Pesticides	
☑ EZC_10_Pesticides	

Analyzed By: SD Date: 6-4-98

Date Disposed: Disposed By:

This page is checked during data review.

1248 ICAL SS1B-05-97-3 100-2000ppb
1248 ICV SS1B-05-98-1
1262 ICAL SS1B-05-89-2
1262 ICV SS1B-05-98-2
1016 ICAL SS1B-05-98-3
1221 ICAL SS1B-05-85-3
1232 ICAL SS1B-05-91-3
1242 ICAL SS1B-05-90-3
1260 ICAL SS1B-05-94-1
1268 ICAL SS1B-05-89-3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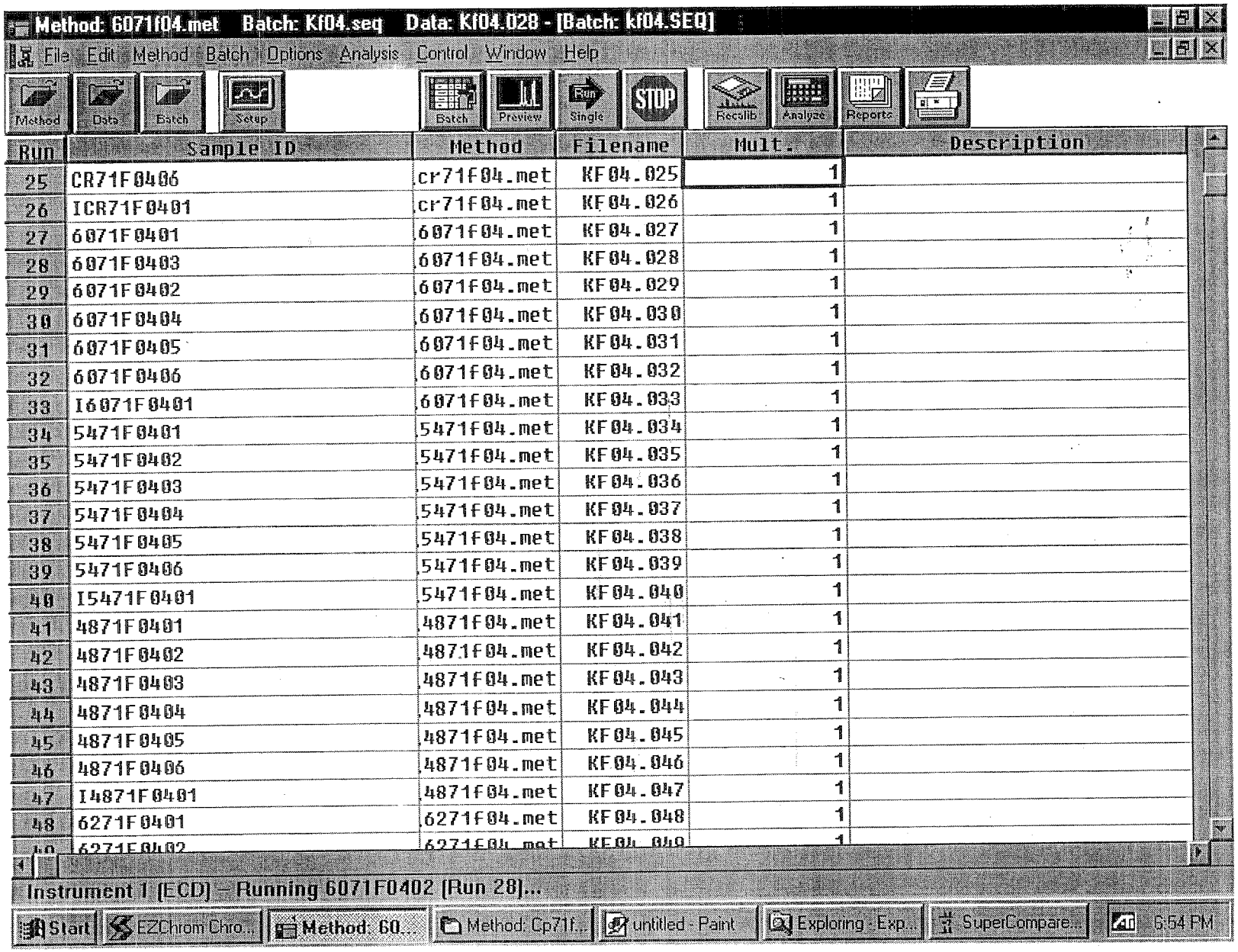
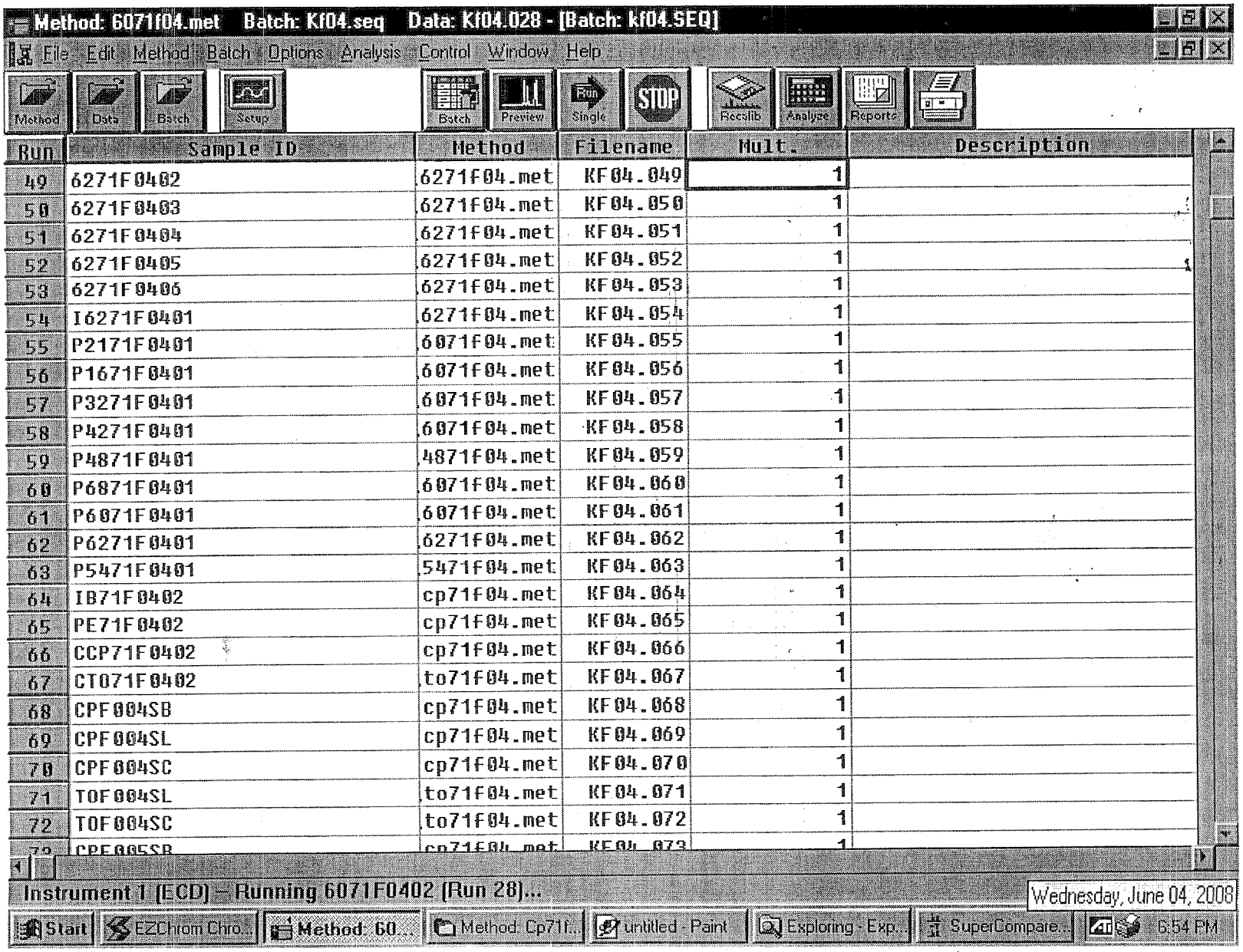
File Edit Method Batch Options Analysis Control Window Help
Method
Data
Batch
Setup
Batch
Preview
Run Single
STOP
Recalib
Analyze
Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 | PEST PRIME | cp71f04.met | KF04.001 | 1
2 | IB71F0401 | cp71f04.met | KF04.002 | 1
3 | PE71F0401 | cp71f04.met | KF04.003 | 1
4 | CCP71F0401 | cp71f04.met | KF04.004 | 1
5 | TO71F0401 | to71f04.met | KF04.005 | 1
6 | TO71F0402 | to71f04.met | KF04.006 | 1
7 | TO71F0403 | to71f04.met | KF04.007 | 1
8 | TO71F0404 | to71f04.met | KF04.008 | 1
9 | TO71F0405 | to71f04.met | KF04.009 | 1
10 | TO71F0406 | to71f04.met | KF04.010 | 1
11 | ITO71F0401 | to71f04.met | KF04.011 | 1
12 | CP71F0401 | cp71f04.met | KF04.012 | 1
13 | CP71F0402 | cp71f04.met | KF04.013 | 1
14 | CP71F0403 | cp71f04.met | KF04.014 | 1
15 | CP71F0404 | cp71f04.met | KF04.015 | 1
16 | CP71F0405 | cp71f04.met | KF04.016 | 1
17 | CP71F0406 | cp71f04.met | KF04.017 | 1
18 | CP71F0407 | cp71f04.met | KF04.018 | 1
19 | ICP71F0401 | cp71f04.met | KF04.019 | 1
20 | CR71F0401 | cr71f04.met | KF04.020 | 1
21 | CR71F0402 | cr71f04.met | KF04.021 | 1
22 | CR71F0403 | cr71f04.met | KF04.022 | 1
23 | CR71F0404 | cr71f04.met | KF04.023 | 1
24 | CR71F0405 | cr71f04.met | KF04.024 | 1
Instrument 1; ECD
Wednesday, June 04, 2008
Start
EZChrom Chromatography ...
Method: To71f04.met ...
Method: Cp71f04.met - Ba...
untitled - Paint
11:26 AM


Method: 6071f04.met Batch: Kf04.seq Data: Kf04.028 - [Batch: kf04.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method
Data
Batch
Setup
Batch
Preview
Single
STOP
Recalib
Analyze
Reports
Run | Sample ID | Method | Filename | Mult. | Description
25 | CR71F0406 | cr71f04.met | KF04.025 | 1
26 | ICR71F0401 | cr71f04.met | KF04.026 | 1
27 | 6071F0401 | 6071f04.met | KF04.027 | 1
28 | 6071F0403 | 6071f04.met | KF04.028 | 1
29 | 6071F0402 | 6071f04.met | KF04.029 | 1
30 | 6071F0404 | 6071f04.met | KF04.030 | 1
31 | 6071F0405 | 6071f04.met | KF04.031 | 1
32 | 6071F0406 | 6071f04.met | KF04.032 | 1
33 | I6071F0401 | 6071f04.met | KF04.033 | 1
34 | 5471F0401 | 5471f04.met | KF04.034 | 1
35 | 5471F0402 | 5471f04.met | KF04.035 | 1
36 | 5471F0403 | 5471f04.met | KF04.036 | 1
37 | 5471F0404 | 5471f04.met | KF04.037 | 1
38 | 5471F0405 | 5471f04.met | KF04.038 | 1
39 | 5471F0406 | 5471f04.met | KF04.039 | 1
40 | I5471F0401 | 5471f04.met | KF04.040 | 1
41 | 4871F0401 | 4871f04.met | KF04.041 | 1
42 | 4871F0402 | 4871f04.met | KF04.042 | 1
43 | 4871F0403 | 4871f04.met | KF04.043 | 1
44 | 4871F0404 | 4871f04.met | KF04.044 | 1
45 | 4871F0405 | 4871f04.met | KF04.045 | 1
46 | 4871F0406 | 4871f04.met | KF04.046 | 1
47 | I4871F0401 | 4871f04.met | KF04.047 | 1
48 | 6271F0401 | 6271f04.met | KF04.048 | 1
Instrument 1 [ECD] - Running 6071F0402 [Run 28]...
Start
EZChrom Chro...
Method: 60...
Method: Cp71f...
untitled - Paint
Exploring - Exp...
SuperCompare...
6:54 PM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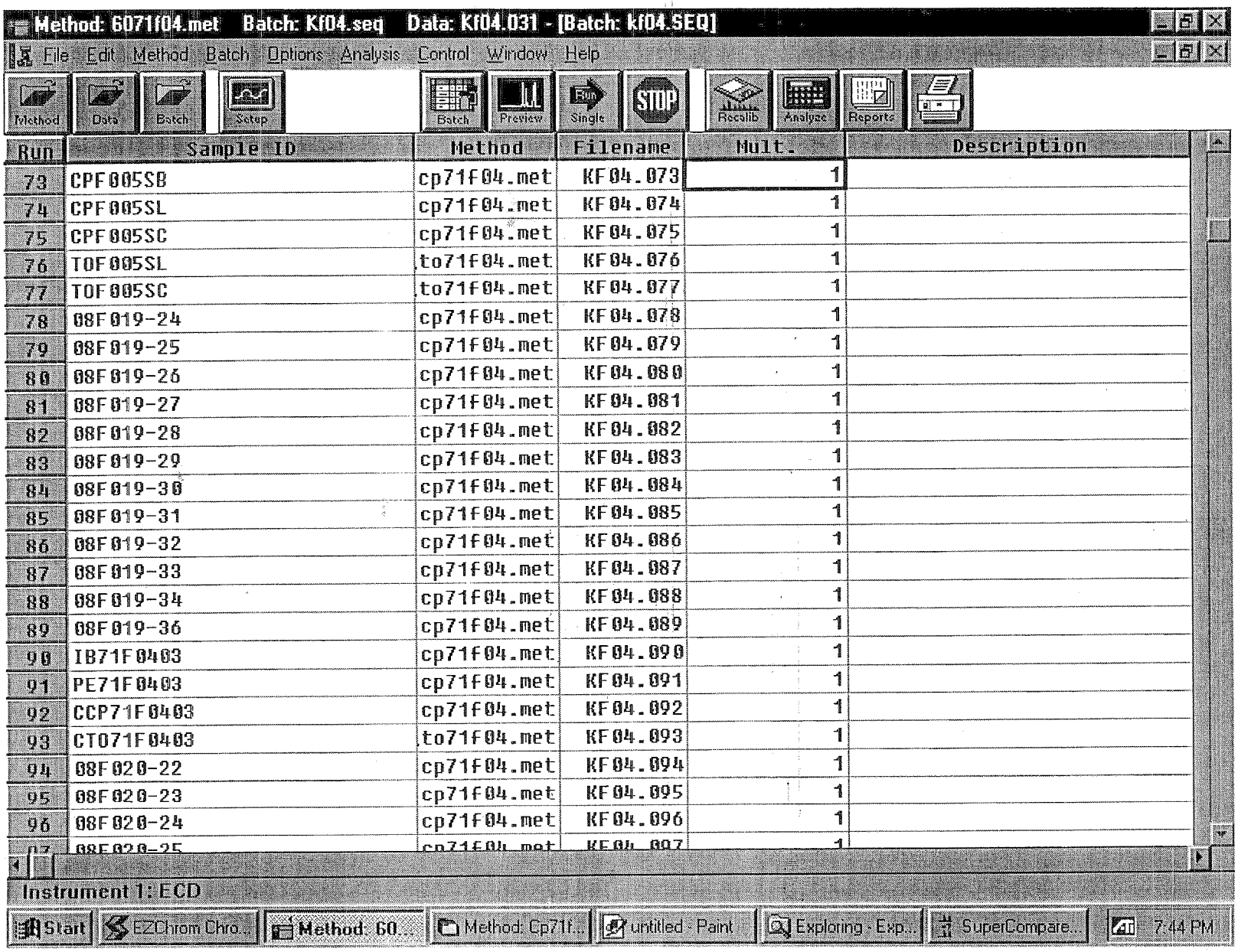
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run Sample ID Method Filename Mult. Description
49 6271F0402 6271f04.met KF04.049 1
50 6271F0403 6271f04.met KF04.050 1
51 6271F0404 6271f04.met KF04.051 1
52 6271F0405 6271f04.met KF04.052 1
53 6271F0406 6271f04.met KF04.053 1
54 I6271F0401 6271f04.met KF04.054 1
55 P2171F0401 6071f04.met KF04.055 1
56 P1671F0401 6071f04.met KF04.056 1
57 P3271F0401 6071f04.met KF04.057 1
58 P4271F0401 6071f04.met KF04.058 1
59 P4871F0401 4871f04.met KF04.059 1
60 P6871F0401 6071f04.met KF04.060 1
61 P6071F0401 6071f04.met KF04.061 1
62 P6271F0401 6271f04.met KF04.062 1
63 P5471F0401 5471f04.met KF04.063 1
64 IB71F0402 cp71f04.met KF04.064 1
65 PE71F0402 cp71f04.met KF04.065 1
66 CCP71F0402 cp71f04.met KF04.066 1
67 CT071F0402 to71f04.met KF04.067 1
68 CPF004SB cp71f04.met KF04.068 1
69 CPF004SL cp71f04.met KF04.069 1
70 CPF004SC cp71f04.met KF04.070 1
71 TOF004SL to71f04.met KF04.071 1
72 TOF004SC to71f04.met KF04.072 1
Instrument 1 (ECD) - Running 6071F0402 (Run 28)...
Wednesday, June 04, 2008
Start EZChrom Chro... Method: 60... Method: Cp71f... untitled - Paint Exploring - Exp... SuperCompare... 6:54 PM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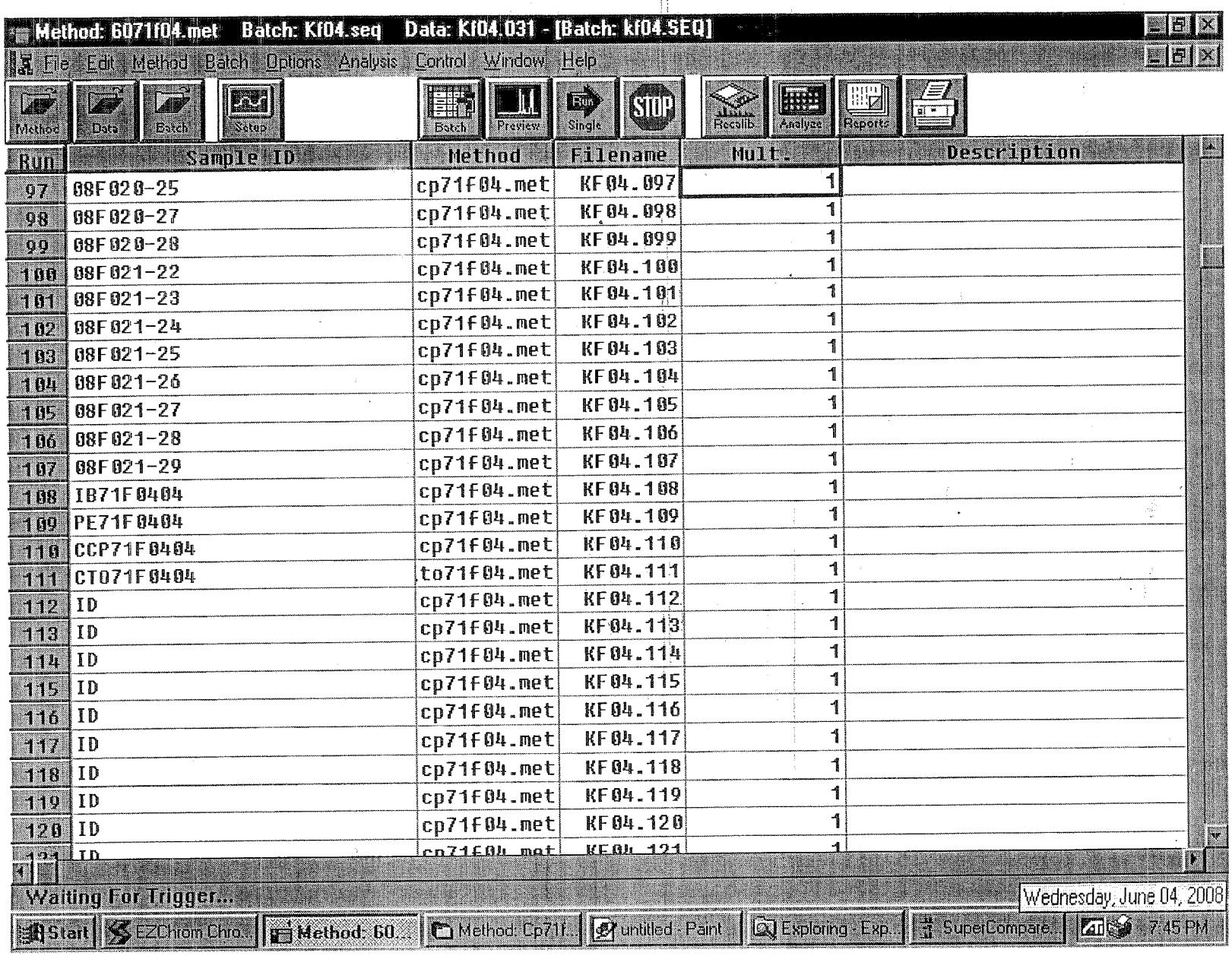
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run Sample ID Method Filename Mult. Description
73 CPF005SB cp71f04.met KF04.073 1
74 CPF005SL cp71f04.met KF04.074 1
75 CPF005SC cp71f04.met KF04.075 1
76 TOF005SL to71f04.met KF04.076 1
77 TOF005SC to71f04.met KF04.077 1
78 08F019-24 cp71f04.met KF04.078 1
79 08F019-25 cp71f04.met KF04.079 1
80 08F019-26 cp71f04.met KF04.080 1
81 08F019-27 cp71f04.met KF04.081 1
82 08F019-28 cp71f04.met KF04.082 1
83 08F019-29 cp71f04.met KF04.083 1
84 08F019-30 cp71f04.met KF04.084 1
85 08F019-31 cp71f04.met KF04.085 1
86 08F019-32 cp71f04.met KF04.086 1
87 08F019-33 cp71f04.met KF04.087 1
88 08F019-34 cp71f04.met KF04.088 1
89 08F019-36 cp71f04.met KF04.089 1
90 IB71F0403 cp71f04.met KF04.090 1
91 PE71F0403 cp71f04.met KF04.091 1
92 CCP71F0403 cp71f04.met KF04.092 1
93 CTO71F0403 to71f04.met KF04.093 1
94 08F020-22 cp71f04.met KF04.094 1
95 08F020-23 cp71f04.met KF04.095 1
96 08F020-24 cp71f04.met KF04.096 1
08F020-25 cp71f04.met KF04.097 1
Instrument 1: ECD
Start EZChrom Chro... Method: 60... Method: Cp71f... untitled - Paint Exploring - Exp... SuperCompare... 7:44 PM

S9 of S9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File Edit Method Batch Options Analysis Control Window Help
Method
Data
Batch
Setup
Batch
Preview
Run
Single
STOP
Recalib
Analyze
Reports
Run | Sample ID | Method | Filename | Mult. | Description
97 | 08F020-25 | cp71f04.met | KF04.097 | 1
98 | 08F020-27 | cp71f04.met | KF04.098 | 1
99 | 08F020-28 | cp71f04.met | KF04.099 | 1
100 | 08F021-22 | cp71f04.met | KF04.100 | 1
101 | 08F021-23 | cp71f04.met | KF04.101 | 1
102 | 08F021-24 | cp71f04.met | KF04.102 | 1
103 | 08F021-25 | cp71f04.met | KF04.103 | 1
104 | 08F021-26 | cp71f04.met | KF04.104 | 1
105 | 08F021-27 | cp71f04.met | KF04.105 | 1
106 | 08F021-28 | cp71f04.met | KF04.106 | 1
107 | 08F021-29 | cp71f04.met | KF04.107 | 1
108 | IB71F0404 | cp71f04.met | KF04.108 | 1
109 | PE71F0404 | cp71f04.met | KF04.109 | 1
110 | CCP71F0404 | cp71f04.met | KF04.110 | 1
111 | CTO71F0404 | to71f04.met | KF04.111 | 1
112 | ID | cp71f04.met | KF04.112 | 1
113 | ID | cp71f04.met | KF04.113 | 1
114 | ID | cp71f04.met | KF04.114 | 1
115 | ID | cp71f04.met | KF04.115 | 1
116 | ID | cp71f04.met | KF04.116 | 1
117 | ID | cp71f04.met | KF04.117 | 1
118 | ID | cp71f04.met | KF04.118 | 1
119 | ID | cp71f04.met | KF04.119 | 1
120 | ID | cp71f04.met | KF04.120 | 1
Waiting For Trigger...
Wednesday, June 04, 2008
Start
EZChrom Chro...
Method: 60...
Method: Cp71f...
untitled - Paint
Exploring - Exp...
SupelCompare...
7:45 PM

ANALYSIS RUN LOG
for
PESTICIDES/PCBs

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #:	A071-23
Instrument No.:	71
Analytical Sequence:	KG24
Method File:	6071F04 5471F04
Analytical Batch:	KG24002

SOP #	Rev. #
☐ EMAX-8081	6
☑ EMAX-8082	2
☐ EMAX-608	0
☐ EMAX-CLP-PEST	
☐ EMAX-	

ICAL REFERENCE

ICAL ID	BATCH	DATE
6071F04	KF04	6-04-08
5471F04	↓	↓

STANDARDS ID	Conc (µg/L)
Hexane 4 7 1 97	N.A.
1660 ICAL SSIB-05-99-1	100 /2000
1254 ICAL SSIB-05-96-3	↓

Column	A. RTX CLPEST I B. RTX CLPEST II

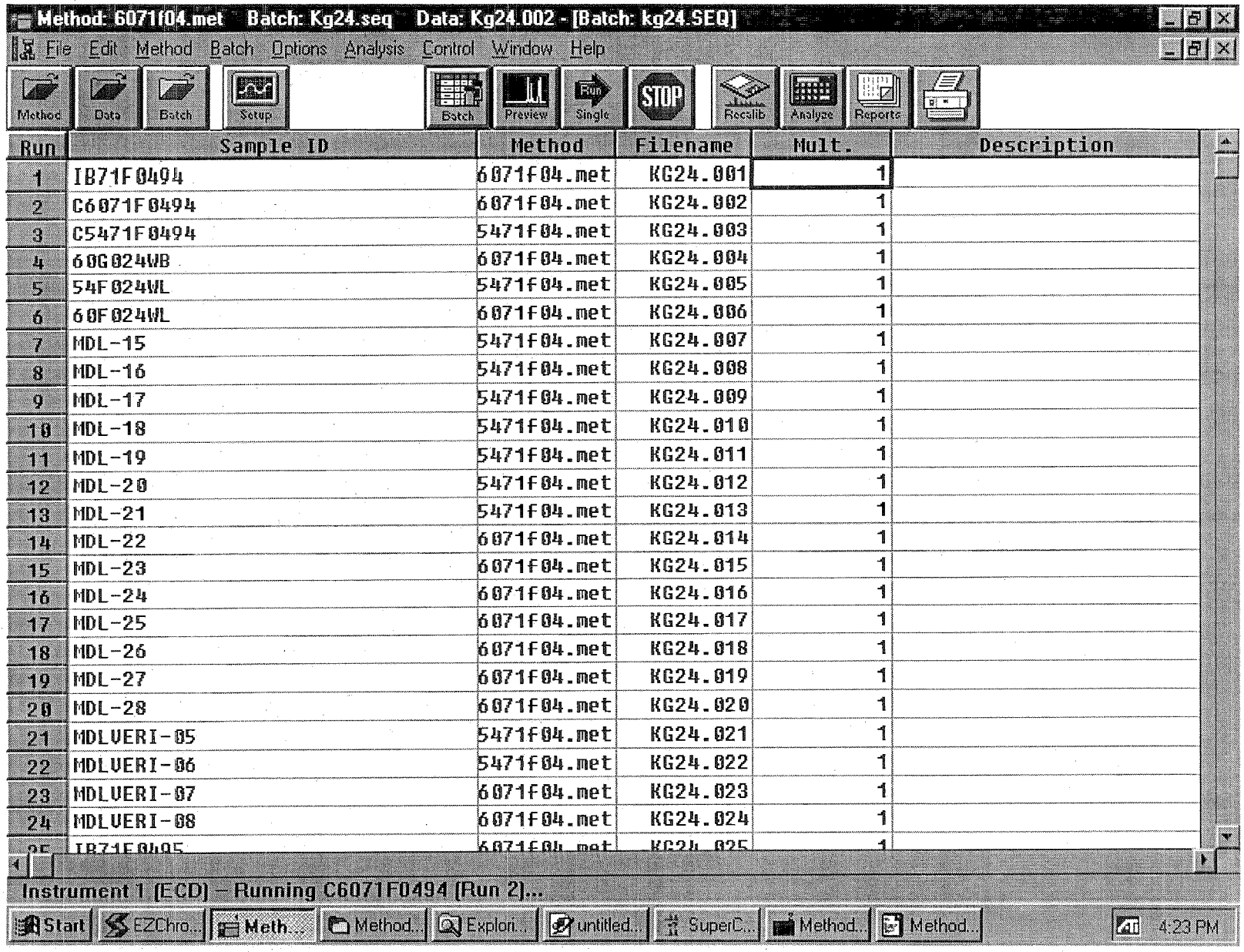
ELECTRONIC DATA ARCHIVAL

Location	Date
☐ EZC_4_Pesticides	
☑ EZC_10_Pesticides	

Analyzed By: SD Date: 7/24/08

Date Disposed: Disposed By:

This page is checked during data review.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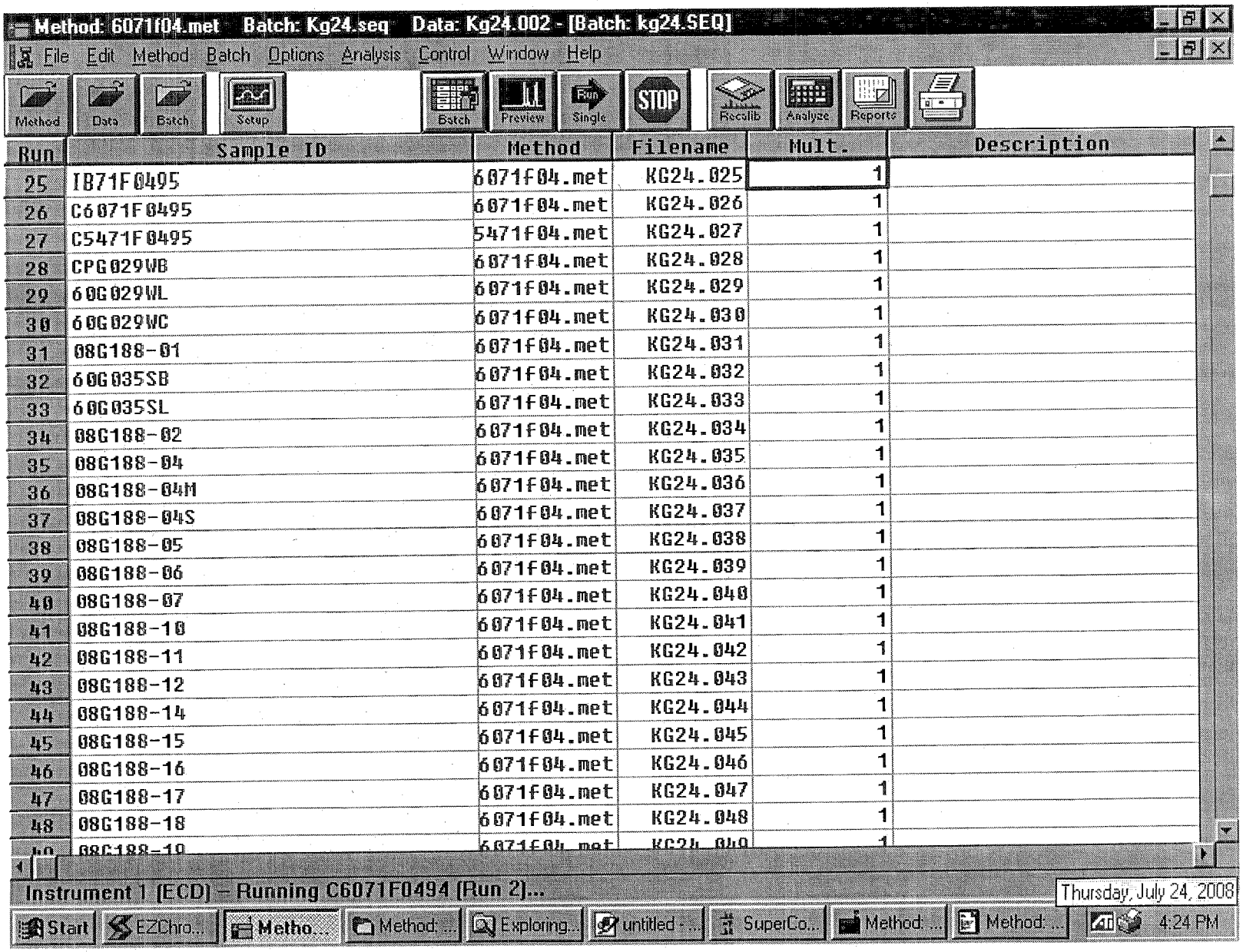
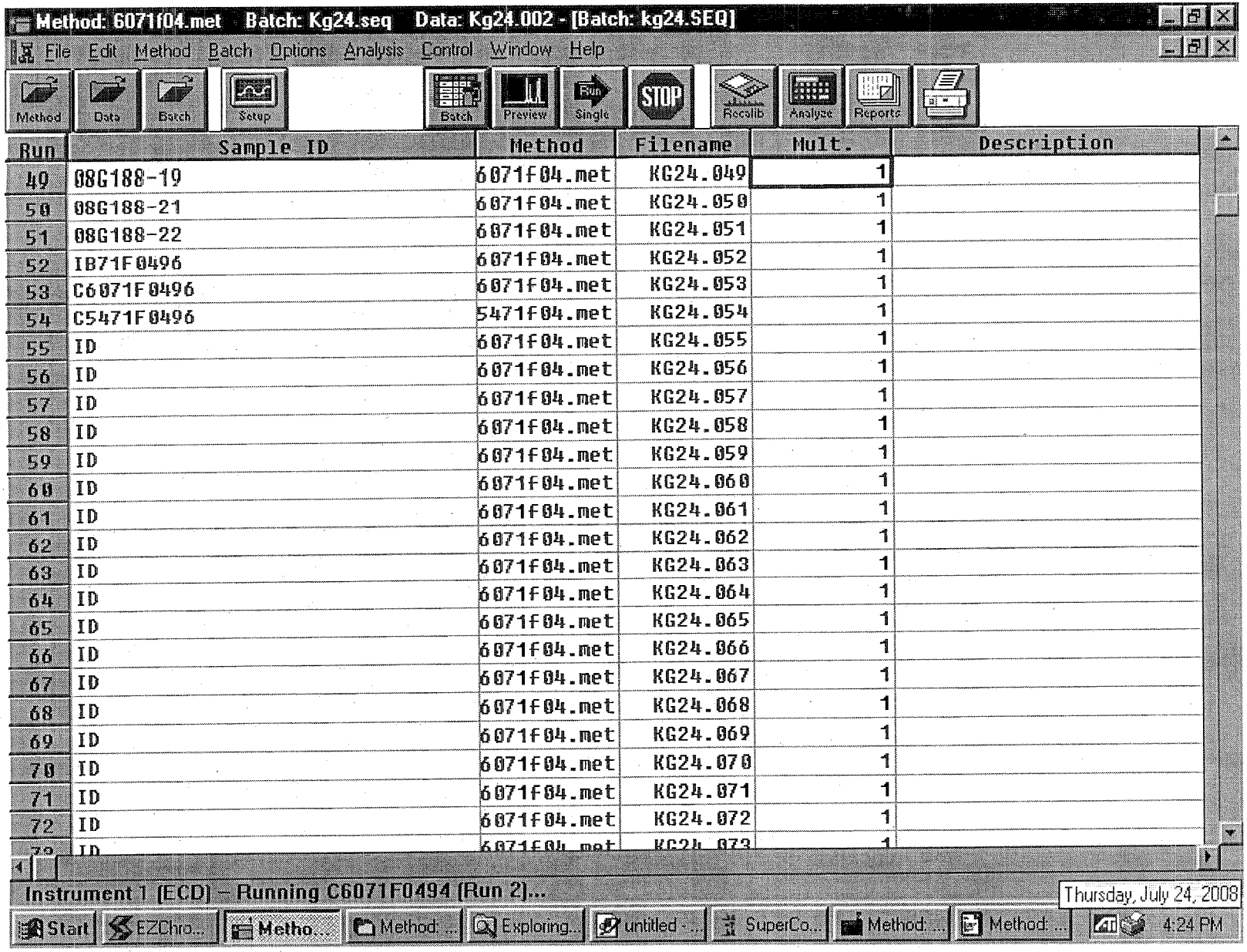
File Edit Method Batch Options Analysis Control Window Help
Method
Data
Batch
Setup
Batch
Preview
Run
Single
STOP
Recalib
Analyze
Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 | IB71F0494 | 6071f04.met | KG24.001 | 1
2 | C6071F0494 | 6071f04.met | KG24.002 | 1
3 | C5471F0494 | 5471f04.met | KG24.003 | 1
4 | 60G024WB | 6071f04.met | KG24.004 | 1
5 | 54F024WL | 5471f04.met | KG24.005 | 1
6 | 60F024WL | 6071f04.met | KG24.006 | 1
7 | MDL-15 | 5471f04.met | KG24.007 | 1
8 | MDL-16 | 5471f04.met | KG24.008 | 1
9 | MDL-17 | 5471f04.met | KG24.009 | 1
10 | MDL-18 | 5471f04.met | KG24.010 | 1
11 | MDL-19 | 5471f04.met | KG24.011 | 1
12 | MDL-20 | 5471f04.met | KG24.012 | 1
13 | MDL-21 | 5471f04.met | KG24.013 | 1
14 | MDL-22 | 6071f04.met | KG24.014 | 1
15 | MDL-23 | 6071f04.met | KG24.015 | 1
16 | MDL-24 | 6071f04.met | KG24.016 | 1
17 | MDL-25 | 6071f04.met | KG24.017 | 1
18 | MDL-26 | 6071f04.met | KG24.018 | 1
19 | MDL-27 | 6071f04.met | KG24.019 | 1
20 | MDL-28 | 6071f04.met | KG24.020 | 1
21 | MDLVERI-05 | 5471f04.met | KG24.021 | 1
22 | MDLVERI-06 | 5471f04.met | KG24.022 | 1
23 | MDLVERI-07 | 6071f04.met | KG24.023 | 1
24 | MDLVERI-08 | 6071F04.met | KG24.024 | 1
Instrument 1 (ECD) - Running C6071F0494 (Run 2)...
Start
EZChro...
Meth...
Method...
Explori...
untitled...
SuperC...
Method...
Method...
4:23 PM


Method: 6071f04.met Batch: Kg24.seq Data: Kg24.002 - [Batch: kg24.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method
Data
Batch
Setup
Batch
Preview
Single
STOP
Recalib
Analyze
Reports
Run | Sample ID | Method | Filename | Mult. | Description
25 | IB71F0495 | 6071f04.met | KG24.025 | 1
26 | C6071F0495 | 6071f04.met | KG24.026 | 1
27 | C5471F0495 | 5471f04.met | KG24.027 | 1
28 | CPG029WB | 6071f04.met | KG24.028 | 1
29 | 60G029WL | 6071f04.met | KG24.029 | 1
30 | 60G029WC | 6071f04.met | KG24.030 | 1
31 | 08G188-01 | 6071f04.met | KG24.031 | 1
32 | 60G035SB | 6071f04.met | KG24.032 | 1
33 | 60G035SL | 6071f04.met | KG24.033 | 1
34 | 08G188-02 | 6071f04.met | KG24.034 | 1
35 | 08G188-04 | 6071f04.met | KG24.035 | 1
36 | 08G188-04M | 6071f04.met | KG24.036 | 1
37 | 08G188-04S | 6071f04.met | KG24.037 | 1
38 | 08G188-05 | 6071f04.met | KG24.038 | 1
39 | 08G188-06 | 6071f04.met | KG24.039 | 1
40 | 08G188-07 | 6071f04.met | KG24.040 | 1
41 | 08G188-10 | 6071f04.met | KG24.041 | 1
42 | 08G188-11 | 6071f04.met | KG24.042 | 1
43 | 08G188-12 | 6071f04.met | KG24.043 | 1
44 | 08G188-14 | 6071f04.met | KG24.044 | 1
45 | 08G188-15 | 6071f04.met | KG24.045 | 1
46 | 08G188-16 | 6071f04.met | KG24.046 | 1
47 | 08G188-17 | 6071f04.met | KG24.047 | 1
48 | 08G188-18 | 6071f04.met | KG24.048 | 1
Instrument 1 [ECD] - Running C6071F0494 [Run 2]...
Thursday, July 24, 2008
Start
EZChro...
Metho...
Method: ...
Exploring...
untitled - ...
SuperCo...
Method: ...
Method: ...
4:24 PM


Method: 6071f04.met Batch: Kg24.seq Data: Kg24.002 - [Batch: kg24.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method
Data
Batch
Setup
Batch
Preview
Run Single
STOP
Recalib
Analyze
Reports
Run | Sample ID | Method | Filename | Mult. | Description
40 | 08G188-19 | 6071f04.met | KG24.049 | 1
50 | 08G188-21 | 6071f04.met | KG24.050 | 1
51 | 08G188-22 | 6071f04.met | KG24.051 | 1
52 | IB71F0496 | 6071f04.met | KG24.052 | 1
53 | C6071F0496 | 6071f04.met | KG24.053 | 1
54 | C5471F0496 | 5471f04.met | KG24.054 | 1
55 | ID | 6071f04.met | KG24.055 | 1
56 | ID | 6071f04.met | KG24.056 | 1
57 | ID | 6071f04.met | KG24.057 | 1
58 | ID | 6071f04.met | KG24.058 | 1
59 | ID | 6071f04.met | KG24.059 | 1
60 | ID | 6071f04.met | KG24.060 | 1
61 | ID | 6071f04.met | KG24.061 | 1
62 | ID | 6071f04.met | KG24.062 | 1
63 | ID | 6071f04.met | KG24.063 | 1
64 | ID | 6071f04.met | KG24.064 | 1
65 | ID | 6071f04.met | KG24.065 | 1
66 | ID | 6071f04.met | KG24.066 | 1
67 | ID | 6071f04.met | KG24.067 | 1
68 | ID | 6071f04.met | KG24.068 | 1
69 | ID | 6071f04.met | KG24.069 | 1
70 | ID | 6071f04.met | KG24.070 | 1
71 | ID | 6071f04.met | KG24.071 | 1
72 | ID | 6071f04.met | KG24.072 | 1
Instrument 1 (ECD) - Running C6071F0494 (Run 2)...
Thursday, July 24, 2008
Start
EZChro...
Metho...
Method: ...
Exploring...
untitled - ...
SuperCo...
Method: ...
Method: ...
4:24 PM

EXTRACTION LOG

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Sulfur

EXTRACTION LOG FOR PESTICIDES

EMAX LABORATORIES, INC.

SOP ☒ EMAX-3520 Rev. No.: 2 ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3545 Rev. No.: 1 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 2 ☐ EMAX-3580 Rev. No.: 0 ☐ EMAX-CLP-PEST

Matrix: WATER Starting Date: 7/21/08 Time: 13:30 Ending Date: 7/22/08 Time: 7:30 Book # ECP-038

PREPARATION BATCH * CPG029W

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [S]	Notes
*01	CPG029-WB	N/A	1000	—	10		
*02	-WL		1000	—	10		
*03	-WC		1000	—	10		
*04	GOG029-WL		1600	—	10		
*05	-WC		1000	—	10		
*06	08G171-01		1060	5	10		
*07	-02		1060	7	10		
*08	08G172-01		1060	7	10		
*09	08G173-01		1060	7	10		
*10	08G177-01		1050	5	10		
*11	08G188-01		1050	5	10		
*12	08G195-01		1000	5	10		
*13							
*14							
*15							
*16							
*17							
*18					7/22/08 JM		
*19							
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							
*29							
*30							

Standards	ID	Amount Added (ml)
Surrogate	SVIC-05-50-1	1.0
LCS/MS	FALL LIST (PEST 1) SVIC-05-50-2	1.0
LCS (PCB 2)	SVIC-05-49-2	0.5

Reagent	Lot# / ID
CH_2Cl_2	48064
Hexane	48119
Na_2SO_4	G10648
H_2SO_4	
NaOH	—
Silica Sand	—

TUNING

Sonicator #	Reading
	N/A

Concentrator Water Bath Temp.(oC)		
1	35	35
2	35	35
3		
4		
5	60	60

Comments: Test thermometer = T_1

Prepared By: JM Checked By: ML

Witnessed By: VS Received By: 7/22/08

Standard Added By: JM Disposed By:

Extract Location: VE02-9 Disposal Date:

This page is checked during data review.

5959

EXTRACTION LOG FOR PESTICIDES

SOP ☐ EMAX-3520 Rev. No.: 2 ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3545 Rev. No.: 1 ☐ EMAX-3510 Rev. No.: 1 ☑ EMAX-3550 Rev. No.: 2 ☐ EMAX-3580 Rev. No.: 0 ☐ EMAX-CLP-PEST

Matrix: SOIL Starting Date: 7/24/08 Time: 12:15 Ending Date: 7/24/08 Time: 15:30 Book # ECP-038

PREPARATION BATCH * 60G0358

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [S]	Notes
*01	60G0358 -SB	1	30.01		10	ACID	
*02	-SL	1	30.02		10		
*03	08G0188 -02	3	30.01		10		
*04	-04	3	30.03		10		
*05	-05	1	30.02		10		
*06	-06	3	30.02		10		
*07	-07	3	30.01		10		
*08	-10	3	30.03		10		
*09	-11	3	30.00		10		
*10	-12	1	30.02		10		
*11	-14	3	30.01		10		
*12	-15	3	30.03		10		
*13	-16	1	30.01		10		
*14	-17	3	30.02		10		
*15	-18	3	30.02		10		
*16	-19	1	30.01		10		
*17	-21	3	30.03		10		
*18	-22	3	30.02		10		
*19	-04M	3	30.01		10		
*20	-04S	3	30.03		10		
*21							
*22							
*23							
*24							
*25			JV	7/24/08			
*26							
*27							
*28							
*29							
*30							

Standards	ID	Amount Added (ml)
Surrogate	SSIC-05-50-1	1.0
LCS/MS(PCB)	SSIC-05-49-2	0.5

Reagent	Lot# / ID
CH_2Cl_2	28064
Hexane	48919
Na_2SO_4	010648
H_2SO_4	26137
NaOH	-
Silica Sand	4735/807

TUNING

Sonicator #	Reading
1	N/A
3	95%

Concentrator Water Bath Temp.(oC)		
1	35	35
2	35	35
3	35	35
4	35	35
5	60	60

Comments: Test thermometer = T_1

Prepared By: JV Checked By: ML

Witnessed By: JM Received By: SD 7/24/08

Standard Added By: JV Disposed By:

Extract Location: SE02 # 16 Disposal Date:

This page is checked during data review.

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Sulfur

5951

LABORATORY REPORT FOR

TETRA TECH, INC.

LMC BEAUMONT SITE 1

METHOD 3520C/3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

SDG#: 08G188

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G188

METHOD 3520C/3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

One (1) water and sixteen (16) soil samples were received on 07/18/08 for Semi Volatile Organic analysis by Method 3520C/3550B/8270C in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample G188-05 was spiked. All recoveries were within QC limit.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   One analyte was manually reintegrated in sample G188-05M/S to correct for improper integration. Chromatograms of before and after integration were kept on file for review.

LAB CHRONICLE
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1

SDG NO. : 08G188
Instrument ID : T-0E2

SOIL

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1S	SVG035SB	1	NA	07/22/0812:43	07/21/0816:45	RGG211	RFG137	SVG035S	Method Blank
H-T1-0.5	G188-02	1	1.2	07/22/0814:40	07/21/0816:45	RGG217	RFG137	SVG035S	Field Sample
H-T1-7.0	G188-04	1	8.0	07/22/0815:00	07/21/0816:45	RGG218	RFG137	SVG035S	Field Sample
H-T1-11	G188-05	1	10.0	07/22/0815:19	07/21/0816:45	RGG219	RFG137	SVG035S	Field Sample
H-T2-0.5	G188-06	1	1.8	07/22/0815:39	07/21/0816:45	RGG220	RFG137	SVG035S	Field Sample
H-T2-2.5	G188-07	1	7.2	07/22/0815:59	07/21/0816:45	RGG221	RFG137	SVG035S	Field Sample
H-T2-10	G188-10	1	18.6	07/22/0816:18	07/21/0816:45	RGG222	RFG137	SVG035S	Field Sample
H-T2-10DUP	G188-11	1	18.5	07/22/0816:38	07/21/0816:45	RGG223	RFG137	SVG035S	Field Sample
H-T3-0.5	G188-12	1	1.0	07/22/0816:57	07/21/0816:45	RGG224	RFG137	SVG035S	Field Sample
H-T3-5.0	G188-14	1	8.1	07/22/0817:17	07/21/0816:45	RGG225	RFG137	SVG035S	Field Sample
H-T3-10.0	G188-15	1	14.4	07/22/0817:37	07/21/0816:45	RGG226	RFG137	SVG035S	Field Sample
H-T4-0.5	G188-16	1	1.2	07/22/0817:56	07/21/0816:45	RGG227	RFG137	SVG035S	Field Sample
H-T4-2.0	G188-17	1	1.8	07/22/0818:16	07/21/0816:45	RGG228	RFG137	SVG035S	Field Sample
H-T6-0.5	G188-18	1	1.4	07/22/0818:35	07/21/0816:45	RGG229	RFG137	SVG035S	Field Sample
H-T6-0.5DUP	G188-19	1	1.2	07/22/0818:55	07/21/0816:45	RGG230	RFG137	SVG035S	Field Sample
H-T6-5.0	G188-21	1	19.1	07/22/0819:15	07/21/0816:45	RGG231	RFG137	SVG035S	Field Sample
H-T6-10	G188-22	1	11.6	07/22/0819:34	07/21/0816:45	RGG232	RFG137	SVG035S	Field Sample
LCS1S	SVG035SX	1	NA	07/25/0820:14	07/21/0816:45	RGG283	RFG137	SVG035S	Lab Control Sample (LCS)
LCD1S	SVG035SY	1	NA	07/25/0820:34	07/21/0816:45	RGG284	RFG137	SVG035S	LCS Duplicate
MBLK2S!	SVG048SB	1	NA	07/31/0818:29	07/30/0811:30	RGZ381	RGZ193	SVG048S	Method Blank
LCS2S!	SVG048SL	1	NA	07/31/0818:48	07/30/0811:30	RGZ382	RGZ193	SVG048S	Lab Control Sample (LCS)
LCD2S!	SVG048SC	1	NA	07/31/0819:07	07/30/0811:30	RGZ383	RGZ193	SVG048S	LCS Duplicate
H-T1-11RE!	G188-05R	1	10.0	07/31/0819:26	07/30/0811:30	RGZ384	RGZ193	SVG048S	Field Sample
H-T1-11MS!	G188-05M	1	10.0	07/31/0819:45	07/30/0811:30	RGZ385	RGZ193	SVG048S	Matrix Spike Sample (MS)
H-T1-11MSD!	G188-05S	1	10.0	07/31/0820:04	07/30/0811:30	RGZ386	RGZ193	SVG048S	MS Duplicate (MSD)

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	SVG033WB	1	NA	07/23/0816:47	07/21/0816:00	RGG238	RFG137	SVG033W	Method Blank
LCS1W	SVG033WL	1	NA	07/23/0817:07	07/21/0816:00	RGG239	RFG137	SVG033W	Lab Control Sample (LCS)
LCD1W	SVG033WC	1	NA	07/23/0817:27	07/21/0816:00	RGG240	RFG137	SVG033W	LCS Duplicate
H-EB7172008	G188-01	.95	NA	07/23/0820:03	07/21/0816:00	RGG248	RFG137	SVG033W	Field Sample

! Instrument ID : T-048
FN - Filename
% Moist - Percent Moisture

SAMPLE RESULTS

METHOD 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:00
Sample ID: H-EB7172008	Date Analyzed: 07/23/08 20:03
Lab Samp ID: G188-01	Dilution Factor: .95
Lab File ID: RGG248	Matrix : WATER
Ext Btch ID: SVG033W	% Moisture : NA
Calib. Ref.: RFG137	Instrument ID : T-OE2

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	9.5	4.8
1,2-DICHLOROBENZENE	ND	9.5	4.8
1,3-DICHLOROBENZENE	ND	9.5	4.8
1,4-DICHLOROBENZENE	ND	9.5	4.8
2,4,5-TRICHLOROPHENOL	ND	9.5	4.8
2,4,6-TRICHLOROPHENOL	ND	9.5	4.8
2,4-DICHLOROPHENOL	ND	9.5	4.8
2,4-DIMETHYLPHENOL	ND	9.5	4.8
2,4-DINITROPHENOL	ND	19	4.8
2,4-DINITROTOLUENE	ND	9.5	4.8
2,6-DINITROTOLUENE	ND	9.5	4.8
2-CHLORONAPHTHALENE	ND	9.5	4.8
2-CHLOROPHENOL	ND	9.5	4.8
2-METHYLNAPHTHALENE	ND	9.5	4.8
2-METHYLPHENOL	ND	9.5	4.8
2-NITROANILINE	ND	9.5	4.8
2-NITROPHENOL	ND	9.5	4.8
3,3'-DICHLOROBENZIDINE	ND	9.5	4.8
3-NITROANILINE	ND	9.5	4.8
4,6-DINITRO-2-METHYLPHENOL	ND	19	4.8
4-BROMOPHENYL-PHENYL ETHER	ND	9.5	4.8
4-CHLORO-3-METHYLPHENOL	ND	9.5	4.8
4-CHLOROANILINE	ND	9.5	4.8
4-CHLOROPHENYL-PHENYL ETHER	ND	9.5	4.8
4-METHYLPHENOL (1)	ND	9.5	4.8
4-NITROANILINE	ND	9.5	4.8
4-NITROPHENOL	ND	19	4.8
ACENAPHTHENE	ND	9.5	4.8
ACENAPHTHYLENE	ND	9.5	4.8
ANTHRACENE	ND	9.5	4.8
BENZO(A)ANTHRACENE	ND	9.5	4.8
BENZO(A)PYRENE	ND	9.5	4.8
BENZO(B)FLUORANTHENE	ND	9.5	4.8
BENZO(K)FLUORANTHENE	ND	9.5	4.8
BENZO(G,H,I)PERYLENE	ND	9.5	4.8
BIS(2-CHLOROETHOXY)METHANE	ND	9.5	4.8
BIS(2-CHLOROETHYL)ETHER	ND	9.5	4.8
BIS(2-CHLOROISOPROPYL)ETHER	ND	9.5	4.8
BIS(2-ETHYLHEXYL)PHTHALATE	ND	9.5	4.8
BUTYLBENZYLPHTHALATE	ND	9.5	4.8
CHRYSENE	ND	9.5	4.8
DI-N-BUTYLPHTHALATE	ND	9.5	4.8
DI-N-OCTYLPHTHALATE	ND	9.5	4.8
DIBENZO(A,H)ANTHRACENE	ND	9.5	4.8
DIBENZOFURAN	ND	9.5	4.8
DIETHYLPHTHALATE	ND	9.5	4.8
DIMETHYLPHTHALATE	ND	9.5	4.8
FLUORANTHENE	ND	9.5	4.8
FLUORENE	ND	9.5	4.8
HEXACHLOROBENZENE	ND	9.5	4.8
HEXACHLOROBUTADIENE	ND	9.5	4.8
HEXACHLOROCYCLOPENTADIENE	ND	9.5	4.8
HEXACHLOROETHANE	ND	9.5	4.8
INDENO(1,2,3-CD)PYRENE	ND	9.5	4.8
ISOPHORONE	ND	9.5	4.8
N-NITROSO-DI-N-PROPYLAMINE	ND	9.5	4.8
N-NITROSODIPHENYLAMINE (2)	ND	9.5	4.8
NAPHTHALENE	ND	9.5	4.8
NITROBENZENE	ND	9.5	4.8
PENTACHLOROPHENOL	ND	19	4.8
PHENANTHRENE	ND	9.5	4.8
PHENOL	ND	9.5	4.8
PYRENE	ND	9.5	4.8

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	82	30-150
2-FLUOROBIPHENYL	66	30-130
2-FLUOROPHENOL	56	20-130
NITROBENZENE-D5	71	30-130
PHENOL-D5	56	30-130
TERPHENYL-D14	87	30-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-T1-0.5	Date Analyzed:	07/22/08 14:40
Lab Samp ID:	G188-02	Dilution Factor:	1
Lab File ID:	RGG217	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 1.2
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	190
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	330	170
2,4-DINITROTOLUENE	ND	670	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	330	170
4-BROMOPHENYL-PHENYL ETHER	ND	670	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	330	170
ACENAPHTHENE	ND	670	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	670	180
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	87	20-140
2-FLUOROBIPHENYL	69	30-130
2-FLUOROPHENOL	47	20-130
NITROBENZENE-D5	67	20-130
PHENOL-D5	54	20-130
TERPHENYL-D14	98	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-T1-7.0	Date Analyzed:	07/22/08 15:00
Lab Samp ID:	G188-04	Dilution Factor:	1
Lab File ID:	RGG218	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 8.0
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	360	180
1,2-DICHLOROBENZENE	ND	360	180
1,3-DICHLOROBENZENE	ND	360	180
1,4-DICHLOROBENZENE	ND	360	180
2,4,5-TRICHLOROPHENOL	ND	360	180
2,4,6-TRICHLOROPHENOL	ND	360	200
2,4-DICHLOROPHENOL	ND	360	180
2,4-DIMETHYLPHENOL	ND	360	180
2,4-DINITROPHENOL	ND	720	180
2,4-DINITROTOLUENE	ND	360	180
2,6-DINITROTOLUENE	ND	360	180
2-CHLORONAPHTHALENE	ND	360	180
2-CHLOROPHENOL	ND	360	180
2-METHYLNAPHTHALENE	ND	360	180
2-METHYLPHENOL	ND	360	180
2-NITROANILINE	ND	360	180
2-NITROPHENOL	ND	360	180
3,3'-DICHLOROBENZIDINE	ND	360	180
3-NITROANILINE	ND	360	180
4,6-DINITRO-2-METHYLPHENOL	ND	720	180
4-BROMOPHENYL-PHENYL ETHER	ND	360	180
4-CHLORO-3-METHYLPHENOL	ND	360	180
4-CHLOROANILINE	ND	360	180
4-CHLOROPHENYL-PHENYL ETHER	ND	360	180
4-METHYLPHENOL (1)	ND	360	180
4-NITROANILINE	ND	360	180
4-NITROPHENOL	ND	720	180
ACENAPHTHENE	ND	360	180
ACENAPHTHYLENE	ND	360	180
ANTHRACENE	ND	360	180
BENZO(A)ANTHRACENE	ND	360	180
BENZO(A)PYRENE	ND	360	180
BENZO(B)FLUORANTHENE	ND	360	180
BENZO(K)FLUORANTHENE	ND	360	180
BENZO(G,H,I)PERYLENE	ND	360	180
BIS(2-CHLOROETHOXY)METHANE	ND	360	180
BIS(2-CHLOROETHYL)ETHER	ND	360	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	360	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	360	180
BUTYLBENZYLPHTHALATE	ND	360	180
CHRYSENE	ND	360	180
DI-N-BUTYLPHTHALATE	ND	360	180
DI-N-OCTYLPHTHALATE	ND	360	180
DIBENZO(A,H)ANTHRACENE	ND	360	180
DIBENZOFURAN	ND	360	180
DIETHYLPHTHALATE	ND	360	180
DIMETHYLPHTHALATE	ND	360	180
FLUORANTHENE	ND	360	180
FLUORENE	ND	360	180
HEXACHLOROBENZENE	ND	360	180
HEXACHLOROBUTADIENE	ND	360	210
HEXACHLOROCYCLOPENTADIENE	ND	360	180
HEXACHLOROETHANE	ND	360	180
INDENO(1,2,3-CD)PYRENE	ND	360	180
ISOPHORONE	ND	360	180
N-NITROSO-DI-N-PROPYLAMINE	ND	360	180
N-NITROSODIPHENYLAMINE (2)	ND	360	180
NAPHTHALENE	ND	360	180
NITROBENZENE	ND	360	180
PENTACHLOROPHENOL	ND	720	190
PHENANTHRENE	ND	360	180
PHENOL	ND	360	180
PYRENE	ND	360	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	87	20-140
2-FLUOROBIPHENYL	72	30-130
2-FLUOROPHENOL	65	20-130
NITROBENZENE-D5	80	20-130
PHENOL-D5	68	20-130
TERPHENYL-D14	101	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:45
Sample ID: H-T1-11	Date Analyzed: 07/22/08 15:19
Lab Samp ID: G188-05	Dilution Factor: 1
Lab File ID: RGG219	Matrix : SOIL
Ext Btch ID: SVG035S	% Moisture : 10.0
Calib. Ref.: RFG137	Instrument ID : T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	370	190
1,2-DICHLOROBENZENE	ND	370	190
1,3-DICHLOROBENZENE	ND	370	190
1,4-DICHLOROBENZENE	ND	370	190
2,4,5-TRICHLOROPHENOL	ND	370	190
2,4,6-TRICHLOROPHENOL	ND	370	200
2,4-DICHLOROPHENOL	ND	370	190
2,4-DIMETHYLPHENOL	ND	370	190
2,4-DINITROPHENOL	ND	730	190
2,4-DINITROTOLUENE	ND	370	190
2,6-DINITROTOLUENE	ND	370	190
2-CHLORONAPHTHALENE	ND	370	190
2-CHLOROPHENOL	ND	370	190
2-METHYLNAPHTHALENE	ND	370	190
2-METHYLPHENOL	ND	370	190
2-NITROANILINE	ND	370	190
2-NITROPHENOL	ND	370	190
3,3'-DICHLOROBENZIDINE	ND	370	190
3-NITROANILINE	ND	370	190
4,6-DINITRO-2-METHYLPHENOL	ND	730	190
4-BROMOPHENYL-PHENYL ETHER	ND	370	190
4-CHLORO-3-METHYLPHENOL	ND	370	190
4-CHLOROANILINE	ND	370	190
4-CHLOROPHENYL-PHENYL ETHER	ND	370	190
4-METHYLPHENOL (1)	ND	370	190
4-NITROANILINE	ND	370	190
4-NITROPHENOL	ND	730	190
ACENAPHTHENE	ND	370	190
ACENAPHTHYLENE	ND	370	190
ANTHRACENE	ND	370	190
BENZO(A)ANTHRACENE	ND	370	190
BENZO(A)PYRENE	ND	370	190
BENZO(B)FLUORANTHENE	ND	370	190
BENZO(K)FLUORANTHENE	ND	370	190
BENZO(G,H,I)PERYLENE	ND	370	190
BIS(2-CHLOROETHOXY)METHANE	ND	370	190
BIS(2-CHLOROETHYL)ETHER	ND	370	190
BIS(2-CHLOROISOPROPYL)ETHER	ND	370	190
BIS(2-ETHYLHEXYL)PHTHALATE	ND	370	190
BUTYLBENZYLPHTHALATE	ND	370	190
CHRYSENE	ND	370	190
DI-N-BUTYLPHTHALATE	ND	370	190
DI-N-OCTYLPHTHALATE	ND	370	190
DIBENZO(A,H)ANTHRACENE	ND	370	190
DIBENZOFURAN	ND	370	190
DIETHYLPHTHALATE	ND	370	190
DIMETHYLPHTHALATE	ND	370	190
FLUORANTHENE	ND	370	190
FLUORENE	ND	370	190
HEXACHLOROBENZENE	ND	370	190
HEXACHLOROBUTADIENE	ND	370	210
HEXACHLOROCYCLOPENTADIENE	ND	370	190
HEXACHLOROETHANE	ND	370	190
INDENO(1,2,3-CD)PYRENE	ND	370	190
ISOPHORONE	ND	370	190
N-NITROSO-DI-N-PROPYLAMINE	ND	370	190
N-NITROSODIPHENYLAMINE (2)	ND	370	190
NAPHTHALENE	ND	370	190
NITROBENZENE	ND	370	190
PENTACHLOROPHENOL	ND	730	190
PHENANTHRENE	ND	370	190
PHENOL	ND	370	190
PYRENE	ND	370	190

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	84	20-140
2-FLUOROBIPHENYL	70	30-130
2-FLUOROPHENOL	73	20-130
NITROBENZENE-D5	76	20-130
PHENOL-D5	79	20-130
TERPHENYL-D14	98	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/30/08 11:30
Sample ID: H-T1-11RE	Date Analyzed: 07/31/08 19:26
Lab Samp ID: G188-05R	Dilution Factor: 1
Lab File ID: RGZ384	Matrix : SOIL
Ext Btch ID: SVG048S	% Moisture : 10.0
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	370	190
1,2-DICHLOROBENZENE	ND	370	190
1,3-DICHLOROBENZENE	ND	370	190
1,4-DICHLOROBENZENE	ND	370	190
2,4,5-TRICHLOROPHENOL	ND	370	190
2,4,6-TRICHLOROPHENOL	ND	370	200
2,4-DICHLOROPHENOL	ND	370	190
2,4-DIMETHYLPHENOL	ND	370	190
2,4-DINITROPHENOL	ND	730	190
2,4-DINITROTOLUENE	ND	370	190
2,6-DINITROTOLUENE	ND	370	190
2-CHLORONAPHTHALENE	ND	370	190
2-CHLOROPHENOL	ND	370	190
2-METHYLNAPHTHALENE	ND	370	190
2-METHYLPHENOL	ND	370	190
2-NITROANILINE	ND	370	190
2-NITROPHENOL	ND	370	190
3,3'-DICHLOROBENZIDINE	ND	370	190
3-NITROANILINE	ND	370	190
4,6-DINITRO-2-METHYLPHENOL	ND	730	190
4-BROMOPHENYL-PHENYL ETHER	ND	370	190
4-CHLORO-3-METHYLPHENOL	ND	370	190
4-CHLOROANILINE	ND	370	190
4-CHLOROPHENYL-PHENYL ETHER	ND	370	190
4-METHYLPHENOL (1)	ND	370	190
4-NITROANILINE	ND	370	190
4-NITROPHENOL	ND	730	190
ACENAPHTHENE	ND	370	190
ACENAPHTHYLENE	ND	370	190
ANTHRACENE	ND	370	190
BENZO(A)ANTHRACENE	ND	370	190
BENZO(A)PYRENE	ND	370	190
BENZO(B)FLUORANTHENE	ND	370	190
BENZO(K)FLUORANTHENE	ND	370	190
BENZO(G,H,I)PERYLENE	ND	370	190
BIS(2-CHLOROETHOXY)METHANE	ND	370	190
BIS(2-CHLOROETHYL)ETHER	ND	370	190
BIS(2-CHLOROISOPROPYL)ETHER	ND	370	190
BIS(2-ETHYLHEXYL)PHTHALATE	ND	370	190
BUTYLBENZYLPHTHALATE	ND	370	190
CHRYSENE	ND	370	190
DI-N-BUTYLPHTHALATE	ND	370	190
DI-N-OCTYLPHTHALATE	ND	370	190
DIBENZO(A,H)ANTHRACENE	ND	370	190
DIBENZOFURAN	ND	370	190
DIETHYLPHTHALATE	ND	370	190
DIMETHYLPHTHALATE	ND	370	190
FLUORANTHENE	ND	370	190
FLUORENE	ND	370	190
HEXACHLOROBENZENE	ND	370	190
HEXACHLOROBUTADIENE	ND	370	210
HEXACHLOROCYCLOPENTADIENE	ND	370	190
HEXACHLOROETHANE	ND	370	190
INDENO(1,2,3-CD)PYRENE	ND	370	190
ISOPHORONE	ND	370	190
N-NITROSO-DI-N-PROPYLAMINE	ND	370	190
N-NITROSODIPHENYLAMINE (2)	ND	370	190
NAPHTHALENE	ND	370	190
NITROBENZENE	ND	370	190
PENTACHLOROPHENOL	ND	730	190
PHENANTHRENE	ND	370	190
PHENOL	ND	370	190
PYRENE	ND	370	190

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	72	20-140
2-FLUOROBIPHENYL	59	30-130
2-FLUOROPHENOL	70	20-130
NITROBENZENE-D5	59	20-130
PHENOL-D5	62	20-130
TERPHENYL-D14	97	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:45
Sample ID: H-T2-0.5	Date Analyzed: 07/22/08 15:39
Lab Samp ID: G188-06	Dilution Factor: 1
Lab File ID: RGG220	Matrix : SOIL
Ext Btch ID: SVG035S	% Moisture : 1.8
Calib. Ref.: RFG137	Instrument ID : T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	340	170
1,2-DICHLOROBENZENE	ND	340	170
1,3-DICHLOROBENZENE	ND	340	170
1,4-DICHLOROBENZENE	ND	340	170
2,4,5-TRICHLOROPHENOL	ND	340	170
2,4,6-TRICHLOROPHENOL	ND	340	190
2,4-DICHLOROPHENOL	ND	340	170
2,4-DIMETHYLPHENOL	ND	340	170
2,4-DINITROPHENOL	ND	670	170
2,4-DINITROTOLUENE	ND	340	170
2,6-DINITROTOLUENE	ND	340	170
2-CHLORONAPHTHALENE	ND	340	170
2-CHLOROPHENOL	ND	340	170
2-METHYLNAPHTHALENE	ND	340	170
2-METHYLPHENOL	ND	340	170
2-NITROANILINE	ND	340	170
2-NITROPHENOL	ND	340	170
3,3'-DICHLOROBENZIDINE	ND	340	170
3-NITROANILINE	ND	340	170
4,6-DINITRO-2-METHYLPHENOL	ND	670	170
4-BROMOPHENYL-PHENYL ETHER	ND	340	170
4-CHLORO-3-METHYLPHENOL	ND	340	170
4-CHLOROANILINE	ND	340	170
4-CHLOROPHENYL-PHENYL ETHER	ND	340	170
4-METHYLPHENOL (1)	ND	340	170
4-NITROANILINE	ND	340	170
4-NITROPHENOL	ND	670	170
ACENAPHTHENE	ND	340	170
ACENAPHTHYLENE	ND	340	170
ANTHRACENE	ND	340	170
BENZO(A)ANTHRACENE	ND	340	170
BENZO(A)PYRENE	ND	340	170
BENZO(B)FLUORANTHENE	ND	340	170
BENZO(K)FLUORANTHENE	ND	340	170
BENZO(G,H,I)PERYLENE	ND	340	170
BIS(2-CHLOROETHOXY)METHANE	ND	340	170
BIS(2-CHLOROETHYL)ETHER	ND	340	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	340	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	340	170
BUTYLBENZYLPHTHALATE	ND	340	170
CHRYSENE	ND	340	170
DI-N-BUTYLPHTHALATE	ND	340	170
DI-N-OCTYLPHTHALATE	ND	340	170
DIBENZO(A,H)ANTHRACENE	ND	340	170
DIBENZOFURAN	ND	340	170
DIETHYLPHTHALATE	ND	340	170
DIMETHYLPHTHALATE	ND	340	170
FLUORANTHENE	ND	340	170
FLUORENE	ND	340	170
HEXACHLOROBENZENE	ND	340	170
HEXACHLOROBUTADIENE	ND	340	190
HEXACHLOROCYCLOPENTADIENE	ND	340	170
HEXACHLOROETHANE	ND	340	170
INDENO(1,2,3-CD)PYRENE	ND	340	170
ISOPHORONE	ND	340	170
N-NITROSO-DI-N-PROPYLAMINE	ND	340	170
N-NITROSODIPHENYLAMINE (2)	ND	340	170
NAPHTHALENE	ND	340	170
NITROBENZENE	ND	340	170
PENTACHLOROPHENOL	ND	670	180
PHENANTHRENE	ND	340	170
PHENOL	ND	340	170
PYRENE	ND	340	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	98	20-140
2-FLUOROBIPHENYL	68	30-130
2-FLUOROPHENOL	59	20-130
NITROBENZENE-D5	64	20-130
PHENOL-D5	69	20-130
TERPHENYL-D14	101	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-T2-2.5	Date Analyzed:	07/22/08 15:59
Lab Samp ID:	G188-07	Dilution Factor:	1
Lab File ID:	RGG221	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 7.2
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	360	180
1,2-DICHLOROBENZENE	ND	360	180
1,3-DICHLOROBENZENE	ND	360	180
1,4-DICHLOROBENZENE	ND	360	180
2,4,5-TRICHLOROPHENOL	ND	360	180
2,4,6-TRICHLOROPHENOL	ND	360	200
2,4-DICHLOROPHENOL	ND	360	180
2,4-DIMETHYLPHENOL	ND	360	180
2,4-DINITROPHENOL	ND	710	180
2,4-DINITROTOLUENE	ND	360	180
2,6-DINITROTOLUENE	ND	360	180
2-CHLORONAPHTHALENE	ND	360	180
2-CHLOROPHENOL	ND	360	180
2-METHYLNAPHTHALENE	ND	360	180
2-METHYLPHENOL	ND	360	180
2-NITROANILINE	ND	360	180
2-NITROPHENOL	ND	360	180
3,3'-DICHLOROBENZIDINE	ND	360	180
3-NITROANILINE	ND	360	180
4,6-DINITRO-2-METHYLPHENOL	ND	710	180
4-BROMOPHENYL-PHENYL ETHER	ND	360	180
4-CHLORO-3-METHYLPHENOL	ND	360	180
4-CHLOROANILINE	ND	360	180
4-CHLOROPHENYL-PHENYL ETHER	ND	360	180
4-METHYLPHENOL (1)	ND	360	180
4-NITROANILINE	ND	360	180
4-NITROPHENOL	ND	710	180
ACENAPHTHENE	ND	360	180
ACENAPHTHYLENE	ND	360	180
ANTHRACENE	ND	360	180
BENZO(A)ANTHRACENE	ND	360	180
BENZO(A)PYRENE	ND	360	180
BENZO(B)FLUORANTHENE	ND	360	180
BENZO(K)FLUORANTHENE	ND	360	180
BENZO(G,H,I)PERYLENE	ND	360	180
BIS(2-CHLOROETHOXY)METHANE	ND	360	180
BIS(2-CHLOROETHYL)ETHER	ND	360	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	360	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	360	180
BUTYLBENZYLPHTHALATE	ND	360	180
CHRYSENE	ND	360	180
DI-N-BUTYLPHTHALATE	ND	360	180
DI-N-OCTYLPHTHALATE	ND	360	180
DIBENZO(A,H)ANTHRACENE	ND	360	180
DIBENZOFURAN	ND	360	180
DIETHYLPHTHALATE	ND	360	180
DIMETHYLPHTHALATE	ND	360	180
FLUORANTHENE	ND	360	180
FLUORENE	ND	360	180
HEXACHLOROBENZENE	ND	360	180
HEXACHLOROBUTADIENE	ND	360	200
HEXACHLOROCYCLOPENTADIENE	ND	360	180
HEXACHLOROETHANE	ND	360	180
INDENO(1,2,3-CD)PYRENE	ND	360	180
ISOPHORONE	ND	360	180
N-NITROSO-DI-N-PROPYLAMINE	ND	360	180
N-NITROSODIPHENYLAMINE (2)	ND	360	180
NAPHTHALENE	ND	360	180
NITROBENZENE	ND	360	180
PENTACHLOROPHENOL	ND	710	190
PHENANTHRENE	ND	360	180
PHENOL	ND	360	180
PYRENE	ND	360	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	79	20-140
2-FLUOROBIPHENYL	64	30-130
2-FLUOROPHENOL	53	20-130
NITROBENZENE-D5	68	20-130
PHENOL-D5	58	20-130
TERPHENYL-D14	96	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:45
Sample ID: H-T2-10	Date Analyzed: 07/22/08 16:18
Lab Samp ID: G188-10	Dilution Factor: 1
Lab File ID: RGG222	Matrix : SOIL
Ext Btch ID: SVG035S	% Moisture : 18.6
Calib. Ref.: RFG137	Instrument ID : T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	410	210
1,2-DICHLOROBENZENE	ND	410	210
1,3-DICHLOROBENZENE	ND	410	210
1,4-DICHLOROBENZENE	ND	410	210
2,4,5-TRICHLOROPHENOL	ND	410	210
2,4,6-TRICHLOROPHENOL	ND	410	230
2,4-DICHLOROPHENOL	ND	410	210
2,4-DIMETHYLPHENOL	ND	410	210
2,4-DINITROPHENOL	ND	810	210
2,4-DINITROTOLUENE	ND	410	210
2,6-DINITROTOLUENE	ND	410	210
2-CHLORONAPHTHALENE	ND	410	210
2-CHLOROPHENOL	ND	410	210
2-METHYLNAPHTHALENE	ND	410	210
2-METHYLPHENOL	ND	410	210
2-NITROANILINE	ND	410	210
2-NITROPHENOL	ND	410	210
3,3'-DICHLOROBENZIDINE	ND	410	210
3-NITROANILINE	ND	410	210
4,6-DINITRO-2-METHYLPHENOL	ND	810	210
4-BROMOPHENYL-PHENYL ETHER	ND	410	210
4-CHLORO-3-METHYLPHENOL	ND	410	210
4-CHLOROANILINE	ND	410	210
4-CHLOROPHENYL-PHENYL ETHER	ND	410	210
4-METHYLPHENOL (1)	ND	410	210
4-NITROANILINE	ND	410	210
4-NITROPHENOL	ND	810	210
ACENAPHTHENE	ND	410	210
ACENAPHTHYLENE	ND	410	210
ANTHRACENE	ND	410	210
BENZO(A)ANTHRACENE	ND	410	210
BENZO(A)PYRENE	ND	410	210
BENZO(B)FLUORANTHENE	ND	410	210
BENZO(K)FLUORANTHENE	ND	410	210
BENZO(G,H,I)PERYLENE	ND	410	210
BIS(2-CHLOROETHOXY)METHANE	ND	410	210
BIS(2-CHLOROETHYL)ETHER	ND	410	210
BIS(2-CHLOROISOPROPYL)ETHER	ND	410	210
BIS(2-ETHYLHEXYL)PHTHALATE	ND	410	210
BUTYLBENZYLPHTHALATE	ND	410	210
CHRYSENE	ND	410	210
DI-N-BUTYLPHTHALATE	ND	410	210
DI-N-OCTYLPHTHALATE	ND	410	210
DIBENZO(A,H)ANTHRACENE	ND	410	210
DIBENZOFURAN	ND	410	210
DIETHYLPHTHALATE	ND	410	210
DIMETHYLPHTHALATE	ND	410	210
FLUORANTHENE	ND	410	210
FLUORENE	ND	410	210
HEXACHLOROBENZENE	ND	410	210
HEXACHLOROBUTADIENE	ND	410	230
HEXACHLOROCYCLOPENTADIENE	ND	410	210
HEXACHLOROETHANE	ND	410	210
INDENO(1,2,3-CD)PYRENE	ND	410	210
ISOPHORONE	ND	410	210
N-NITROSO-DI-N-PROPYLAMINE	ND	410	210
N-NITROSODIPHENYLAMINE (2)	ND	410	210
NAPHTHALENE	ND	410	210
NITROBENZENE	ND	410	210
PENTACHLOROPHENOL	ND	810	210
PHENANTHRENE	ND	410	210
PHENOL	ND	410	210
PYRENE	ND	410	210

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	50	20-140
2-FLUOROBIPHENYL	37	30-130
2-FLUOROPHENOL	37	20-130
NITROBENZENE-D5	42	20-130
PHENOL-D5	38	20-130
TERPHENYL-D14	81	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-12-10DUP	Date Analyzed:	07/22/08 16:38
Lab Samp ID:	G188-11	Dilution Factor:	1
Lab File ID:	RGG223	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 18.5
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	400	200
1,2-DICHLOROBENZENE	ND	400	200
1,3-DICHLOROBENZENE	ND	400	200
1,4-DICHLOROBENZENE	ND	400	200
2,4,5-TRICHLOROPHENOL	ND	400	200
2,4,6-TRICHLOROPHENOL	ND	400	230
2,4-DICHLOROPHENOL	ND	400	200
2,4-DIMETHYLPHENOL	ND	400	200
2,4-DINITROPHENOL	ND	810	200
2,4-DINITROTOLUENE	ND	400	200
2,6-DINITROTOLUENE	ND	400	200
2-CHLORONAPHTHALENE	ND	400	200
2-CHLOROPHENOL	ND	400	200
2-METHYLNAPHTHALENE	ND	400	200
2-METHYLPHENOL	ND	400	200
2-NITROANILINE	ND	400	200
2-NITROPHENOL	ND	400	200
3,3'-DICHLOROBENZIDINE	ND	400	200
3-NITROANILINE	ND	400	200
4,6-DINITRO-2-METHYLPHENOL	ND	810	200
4-BROMOPHENYL-PHENYL ETHER	ND	400	200
4-CHLORO-3-METHYLPHENOL	ND	400	200
4-CHLOROANILINE	ND	400	200
4-CHLOROPHENYL-PHENYL ETHER	ND	400	210
4-METHYLPHENOL (1)	ND	400	200
4-NITROANILINE	ND	400	200
4-NITROPHENOL	ND	810	200
ACENAPHTHENE	ND	400	200
ACENAPHTHYLENE	ND	400	200
ANTHRACENE	ND	400	200
BENZO(A)ANTHRACENE	ND	400	200
BENZO(A)PYRENE	ND	400	200
BENZO(B)FLUORANTHENE	ND	400	200
BENZO(K)FLUORANTHENE	ND	400	200
BENZO(G,H,I)PERYLENE	ND	400	200
BIS(2-CHLOROETHOXY)METHANE	ND	400	200
BIS(2-CHLOROETHYL)ETHER	ND	400	200
BIS(2-CHLOROISOPROPYL)ETHER	ND	400	200
BIS(2-ETHYLHEXYL)PHTHALATE	ND	400	200
BUTYLBENZYLPHTHALATE	ND	400	200
CHRYSENE	ND	400	200
DI-N-BUTYLPHTHALATE	ND	400	200
DI-N-OCTYLPHTHALATE	ND	400	200
DIBENZO(A,H)ANTHRACENE	ND	400	200
DIBENZOFURAN	ND	400	200
DIETHYLPHTHALATE	ND	400	200
DIMETHYLPHTHALATE	ND	400	200
FLUORANTHENE	ND	400	200
FLUORENE	ND	400	200
HEXACHLOROBENZENE	ND	400	200
HEXACHLOROBUTADIENE	ND	400	230
HEXACHLOROCYCLOPENTADIENE	ND	400	200
HEXACHLOROETHANE	ND	400	200
INDENO(1,2,3-CD)PYRENE	ND	400	200
ISOPHORONE	ND	400	200
N-NITROSO-DI-N-PROPYLAMINE	ND	400	200
N-NITROSODIPHENYLAMINE (2)	ND	400	200
NAPHTHALENE	ND	400	200
NITROBENZENE	ND	400	200
PENTACHLOROPHENOL	ND	810	210
PHENANTHRENE	ND	400	200
PHENOL	ND	400	200
PYRENE	ND	400	200

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	95	20-140
2-FLUOROBIPHENYL	70	30-130
2-FLUOROPHENOL	62	20-130
NITROBENZENE-D5	80	20-130
PHENOL-D5	66	20-130
TERPHENYL-D14	106	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-T3-0.5	Date Analyzed:	07/22/08 16:57
Lab Samp ID:	G188-12	Dilution Factor:	1
Lab File ID:	RGG224	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 1.0
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	190
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	670	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	670	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	670	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	670	180
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	92	20-140
2-FLUOROBIPHENYL	76	30-130
2-FLUOROPHENOL	61	20-130
NITROBENZENE-D5	78	20-130
PHENOL-D5	66	20-130
TERPHENYL-D14	95	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:45
Sample ID: H-T3-5.0	Date Analyzed: 07/22/08 17:17
Lab Samp ID: G188-14	Dilution Factor: 1
Lab File ID: RGG225	Matrix : SOIL
Ext Btch ID: SVGG035S	% Moisture : 8.1
Calib. Ref.: RFG137	Instrument ID : T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	360	180
1,2-DICHLOROBENZENE	ND	360	180
1,3-DICHLOROBENZENE	ND	360	180
1,4-DICHLOROBENZENE	ND	360	180
2,4,5-TRICHLOROPHENOL	ND	360	180
2,4,6-TRICHLOROPHENOL	ND	360	200
2,4-DICHLOROPHENOL	ND	360	180
2,4-DIMETHYLPHENOL	ND	360	180
2,4-DINITROPHENOL	ND	720	180
2,4-DINITROTOLUENE	ND	360	180
2,6-DINITROTOLUENE	ND	360	180
2-CHLORONAPHTHALENE	ND	360	180
2-CHLOROPHENOL	ND	360	180
2-METHYLNAPHTHALENE	ND	360	180
2-METHYLPHENOL	ND	360	180
2-NITROANILINE	ND	360	180
2-NITROPHENOL	ND	360	180
3,3'-DICHLOROBENZIDINE	ND	360	180
3-NITROANILINE	ND	360	180
4,6-DINITRO-2-METHYLPHENOL	ND	720	180
4-BROMOPHENYL-PHENYL ETHER	ND	360	180
4-CHLORO-3-METHYLPHENOL	ND	360	180
4-CHLOROANILINE	ND	360	180
4-CHLOROPHENYL-PHENYL ETHER	ND	360	180
4-METHYLPHENOL (1)	ND	360	180
4-NITROANILINE	ND	360	180
4-NITROPHENOL	ND	720	180
ACENAPHTHENE	ND	360	180
ACENAPHTHYLENE	ND	360	180
ANTHRACENE	ND	360	180
BENZO(A)ANTHRACENE	ND	360	180
BENZO(A)PYRENE	ND	360	180
BENZO(B)FLUORANTHENE	ND	360	180
BENZO(K)FLUORANTHENE	ND	360	180
BENZO(G,H,I)PERYLENE	ND	360	180
BIS(2-CHLOROETHOXY)METHANE	ND	360	180
BIS(2-CHLOROETHYL)ETHER	ND	360	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	360	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	360	180
BUTYLBENZYLPHTHALATE	ND	360	180
CHRYSENE	ND	360	180
DI-N-BUTYLPHTHALATE	ND	360	180
DI-N-OCTYLPHTHALATE	ND	360	180
DIBENZO(A,H)ANTHRACENE	ND	360	180
DIBENZOFURAN	ND	360	180
DIETHYLPHTHALATE	ND	360	180
DIMETHYLPHTHALATE	ND	360	180
FLUORANTHENE	ND	360	180
FLUORENE	ND	360	180
HEXACHLOROBENZENE	ND	360	180
HEXACHLOROBUTADIENE	ND	360	210
HEXACHLOROCYCLOPENTADIENE	ND	360	180
HEXACHLOROETHANE	ND	360	180
INDENO(1,2,3-CD)PYRENE	ND	360	180
ISOPHORONE	ND	360	180
N-NITROSO-DI-N-PROPYLAMINE	ND	360	180
N-NITROSODIPHENYLAMINE (2)	ND	360	180
NAPHTHALENE	ND	360	180
NITROBENZENE	ND	360	180
PENTACHLOROPHENOL	ND	720	190
PHENANTHRENE	ND	360	180
PHENOL	ND	360	180
PYRENE	ND	360	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	86	20-140
2-FLUOROBIPHENYL	70	30-130
2-FLUOROPHENOL	70	20-130
NITROBENZENE-D5	75	20-130
PHENOL-D5	77	20-130
TERPHENYL-D14	97	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-T3-10.0	Date Analyzed:	07/22/08 17:37
Lab Samp ID:	G188-15	Dilution Factor:	1
Lab File ID:	RGG226	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 14.4
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	390	200
1,2-DICHLOROBENZENE	ND	390	200
1,3-DICHLOROBENZENE	ND	390	200
1,4-DICHLOROBENZENE	ND	390	200
2,4,5-TRICHLOROPHENOL	ND	390	200
2,4,6-TRICHLOROPHENOL	ND	390	210
2,4-DICHLOROPHENOL	ND	390	200
2,4-DIMETHYLPHENOL	ND	390	200
2,4-DINITROPHENOL	ND	770	200
2,4-DINITROTOLUENE	ND	390	200
2,6-DINITROTOLUENE	ND	390	200
2-CHLORONAPHTHALENE	ND	390	200
2-CHLOROPHENOL	ND	390	200
2-METHYLNAPHTHALENE	ND	390	200
2-METHYLPHENOL	ND	390	200
2-NITROANILINE	ND	390	200
2-NITROPHENOL	ND	390	200
3,3'-DICHLOROBENZIDINE	ND	390	200
3-NITROANILINE	ND	390	200
4,6-DINITRO-2-METHYLPHENOL	ND	770	200
4-BROMOPHENYL-PHENYL ETHER	ND	390	200
4-CHLORO-3-METHYLPHENOL	ND	390	200
4-CHLOROANILINE	ND	390	200
4-CHLOROPHENYL-PHENYL ETHER	ND	390	200
4-METHYLPHENOL (1)	ND	390	200
4-NITROANILINE	ND	390	200
4-NITROPHENOL	ND	770	200
ACENAPHTHENE	ND	390	200
ACENAPHTHYLENE	ND	390	200
ANTHRACENE	ND	390	200
BENZO(A)ANTHRACENE	ND	390	200
BENZO(A)PYRENE	ND	390	200
BENZO(B)FLUORANTHENE	ND	390	200
BENZO(K)FLUORANTHENE	ND	390	200
BENZO(G,H,I)PERYLENE	ND	390	200
BIS(2-CHLOROETHOXY)METHANE	ND	390	200
BIS(2-CHLOROETHYL)ETHER	ND	390	200
BIS(2-CHLOROISOPROPYL)ETHER	ND	390	200
BIS(2-ETHYLHEXYL)PHTHALATE	ND	390	200
BUTYLBENZYLPHTHALATE	ND	390	200
CHRYSENE	ND	390	200
DI-N-BUTYLPHTHALATE	ND	390	200
DI-N-OCTYLPHTHALATE	ND	390	200
DIBENZO(A,H)ANTHRACENE	ND	390	200
DIBENZOFURAN	ND	390	200
DIETHYLPHTHALATE	ND	390	200
DIMETHYLPHTHALATE	ND	390	200
FLUORANTHENE	ND	390	200
FLUORENE	ND	390	200
HEXACHLOROBENZENE	ND	390	200
HEXACHLOROBUTADIENE	ND	390	220
HEXACHLOROCYCLOPENTADIENE	ND	390	200
HEXACHLOROETHANE	ND	390	200
INDENO(1,2,3-CD)PYRENE	ND	390	200
ISOPHORONE	ND	390	200
N-NITROSO-DI-N-PROPYLAMINE	ND	390	200
N-NITROSODIPHENYLAMINE (2)	ND	390	200
NAPHTHALENE	ND	390	200
NITROBENZENE	ND	390	200
PENTACHLOROPHENOL	ND	770	200
PHENANTHRENE	ND	390	200
PHENOL	ND	390	200
PYRENE	ND	390	200

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	85	20-140
2-FLUOROBIPHENYL	66	30-130
2-FLUOROPHENOL	64	20-130
NITROBENZENE-D5	73	20-130
PHENOL-D5	67	20-130
TERPHENYL-D14	98	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-T4-0.5	Date Analyzed:	07/22/08 17:56
Lab Samp ID:	G188-16	Dilution Factor:	1
Lab File ID:	RGG227	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 1.2
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	190
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	670	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	670	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	670	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	670	180
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	96	20-140
2-FLUOROBIPHENYL	77	30-130
2-FLUOROPHENOL	68	20-130
NITROBENZENE-D5	81	20-130
PHENOL-D5	73	20-130
TERPHENYL-D14	100	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:45
Sample ID: H-T4-2.0	Date Analyzed: 07/22/08 18:16
Lab Samp ID: G188-17	Dilution Factor: 1
Lab File ID: RGG228	Matrix : SOIL
Ext Btch ID: SVG035S	% Moisture : 1.8
Calib. Ref.: RFG137	Instrument ID : T-OE2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	340	170
1,2-DICHLOROBENZENE	ND	340	170
1,3-DICHLOROBENZENE	ND	340	170
1,4-DICHLOROBENZENE	ND	340	170
2,4,5-TRICHLOROPHENOL	ND	340	170
2,4,6-TRICHLOROPHENOL	ND	340	190
2,4-DICHLOROPHENOL	ND	340	170
2,4-DIMETHYLPHENOL	ND	340	170
2,4-DINITROPHENOL	ND	670	170
2,4-DINITROTOLUENE	ND	340	170
2,6-DINITROTOLUENE	ND	340	170
2-CHLORONAPHTHALENE	ND	340	170
2-CHLOROPHENOL	ND	340	170
2-METHYLNAPHTHALENE	ND	340	170
2-METHYLPHENOL	ND	340	170
2-NITROANILINE	ND	340	170
2-NITROPHENOL	ND	340	170
3,3'-DICHLOROBENZIDINE	ND	340	170
3-NITROANILINE	ND	340	170
4,6-DINITRO-2-METHYLPHENOL	ND	670	170
4-BROMOPHENYL-PHENYL ETHER	ND	340	170
4-CHLORO-3-METHYLPHENOL	ND	340	170
4-CHLOROANILINE	ND	340	170
4-CHLOROPHENYL-PHENYL ETHER	ND	340	170
4-METHYLPHENOL (1)	ND	340	170
4-NITROANILINE	ND	340	170
4-NITROPHENOL	ND	670	170
ACENAPHTHENE	ND	340	170
ACENAPHTHYLENE	ND	340	170
ANTHRACENE	ND	340	170
BENZO(A)ANTHRACENE	ND	340	170
BENZO(A)PYRENE	ND	340	170
BENZO(B)FLUORANTHENE	ND	340	170
BENZO(K)FLUORANTHENE	ND	340	170
BENZO(G,H,I)PERYLENE	ND	340	170
BIS(2-CHLOROETHOXY)METHANE	ND	340	170
BIS(2-CHLOROETHYL)ETHER	ND	340	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	340	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	340	170
BUTYLBENZYLPHTHALATE	350	340	170
CHRYSENE	ND	340	170
DI-N-BUTYLPHTHALATE	ND	340	170
DI-N-OCTYLPHTHALATE	ND	340	170
DIBENZO(A,H)ANTHRACENE	ND	340	170
DIBENZOFURAN	ND	340	170
DIETHYLPHTHALATE	ND	340	170
DIMETHYLPHTHALATE	ND	340	170
FLUORANTHENE	ND	340	170
FLUORENE	ND	340	170
HEXACHLOROBENZENE	ND	340	170
HEXACHLOROBUTADIENE	ND	340	190
HEXACHLOROCYCLOPENTADIENE	ND	340	170
HEXACHLOROETHANE	ND	340	170
INDENO(1,2,3-CD)PYRENE	ND	340	170
ISOPHORONE	ND	340	170
N-NITROSO-DI-N-PROPYLAMINE	ND	340	170
N-NITROSODIPHENYLAMINE (2)	ND	340	170
NAPHTHALENE	ND	340	170
NITROBENZENE	ND	340	170
PENTACHLOROPHENOL	ND	670	180
PHENANTHRENE	ND	340	170
PHENOL	ND	340	170
PYRENE	ND	340	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	96	20-140
2-FLUOROBIPHENYL	74	30-130
2-FLUOROPHENOL	64	20-130
NITROBENZENE-D5	68	20-130
PHENOL-D5	74	20-130
TERPHENYL-D14	101	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-T6-0.5	Date Analyzed:	07/22/08 18:35
Lab Samp ID:	G188-18	Dilution Factor:	1
Lab File ID:	RGG229	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 1.4
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	190
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	670	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	670	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	670	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	670	180
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	95	20-140
2-FLUOROBIPHENYL	77	30-130
2-FLUOROPHENOL	75	20-130
NITROBENZENE-D5	76	20-130
PHENOL-D5	81	20-130
TERPHENYL-D14	98	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/17/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	H-T6-0.5DUP	Date Analyzed:	07/22/08 18:55
Lab Samp ID:	G188-19	Dilution Factor:	1
Lab File ID:	RGG230	Matrix	: SOIL
Ext Btch ID:	SVG035S	% Moisture	: 1.2
Calib. Ref.:	RFG137	Instrument ID	: T-QE2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	190
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	670	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	670	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	670	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	670	180
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	89	20-140
2-FLUOROBIPHENYL	73	30-130
2-FLUOROPHENOL	71	20-130
NITROBENZENE-D5	74	20-130
PHENOL-D5	77	20-130
TERPHENYL-D14	93	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:45
Sample ID: H-T6-5.0	Date Analyzed: 07/22/08 19:15
Lab Samp ID: G188-21	Dilution Factor: 1
Lab File ID: RGG231	Matrix : SOIL
Ext Btch ID: SVG035S	% Moisture : 19.1
Calib. Ref.: RFG137	Instrument ID : T-0E2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	410	210
1,2-DICHLOROBENZENE	ND	410	210
1,3-DICHLOROBENZENE	ND	410	210
1,4-DICHLOROBENZENE	ND	410	210
2,4,5-TRICHLOROPHENOL	ND	410	210
2,4,6-TRICHLOROPHENOL	ND	410	230
2,4-DICHLOROPHENOL	ND	410	210
2,4-DIMETHYLPHENOL	ND	410	210
2,4-DINITROPHENOL	ND	820	210
2,4-DINITROTOLUENE	ND	410	210
2,6-DINITROTOLUENE	ND	410	210
2-CHLORONAPHTHALENE	ND	410	210
2-CHLOROPHENOL	ND	410	210
2-METHYLNAPHTHALENE	ND	410	210
2-METHYLPHENOL	ND	410	210
2-NITROANILINE	ND	410	210
2-NITROPHENOL	ND	410	210
3,3'-DICHLOROBENZIDINE	ND	410	210
3-NITROANILINE	ND	410	210
4,6-DINITRO-2-METHYLPHENOL	ND	820	210
4-BROMOPHENYL-PHENYL ETHER	ND	410	210
4-CHLORO-3-METHYLPHENOL	ND	410	210
4-CHLOROANILINE	ND	410	210
4-CHLOROPHENYL-PHENYL ETHER	ND	410	210
4-METHYLPHENOL (1)	ND	410	210
4-NITROANILINE	ND	410	210
4-NITROPHENOL	ND	820	210
ACENAPHTHENE	ND	410	210
ACENAPHTHYLENE	ND	410	210
ANTHRACENE	ND	410	210
BENZO(A)ANTHRACENE	ND	410	210
BENZO(A)PYRENE	ND	410	210
BENZO(B)FLUORANTHENE	ND	410	210
BENZO(K)FLUORANTHENE	ND	410	210
BENZO(G,H,I)PERYLENE	ND	410	210
BIS(2-CHLOROETHOXY)METHANE	ND	410	210
BIS(2-CHLOROETHYL)ETHER	ND	410	210
BIS(2-CHLOROISOPROPYL)ETHER	ND	410	210
BIS(2-ETHYLHEXYL)PHTHALATE	ND	410	210
BUTYLBENZYLPHTHALATE	ND	410	210
CHRYSENE	ND	410	210
DI-N-BUTYLPHTHALATE	ND	410	210
DI-N-OCTYLPHTHALATE	ND	410	210
DIBENZO(A,H)ANTHRACENE	ND	410	210
DIBENZOFURAN	ND	410	210
DIETHYLPHTHALATE	ND	410	210
DIMETHYLPHTHALATE	ND	410	210
FLUORANTHENE	ND	410	210
FLUORENE	ND	410	210
HEXACHLOROBENZENE	ND	410	210
HEXACHLOROBUTADIENE	ND	410	230
HEXACHLOROCYCLOPENTADIENE	ND	410	210
HEXACHLOROETHANE	ND	410	210
INDENO(1,2,3-CD)PYRENE	ND	410	210
ISOPHORONE	ND	410	210
N-NITROSO-DI-N-PROPYLAMINE	ND	410	210
N-NITROSODIPHENYLAMINE (2)	ND	410	210
NAPHTHALENE	ND	410	210
NITROBENZENE	ND	410	210
PENTACHLOROPHENOL	ND	820	220
PHENANTHRENE	ND	410	210
PHENOL	ND	410	210
PYRENE	ND	410	210

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	67	20-140
2-FLUOROBIPHENYL	39	30-130
2-FLUOROPHENOL	42	20-130
NITROBENZENE-D5	43	20-130
PHENOL-D5	44	20-130
TERPHENYL-D14	97	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/17/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:45
Sample ID: H-T6-10	Date Analyzed: 07/22/08 19:34
Lab Samp ID: G188-22	Dilution Factor: 1
Lab File ID: RGG232	Matrix : SOIL
Ext Btch ID: SVG035S	% Moisture : 11.6
Calib. Ref.: RFG137	Instrument ID : T-QE2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	370	190
1,2-DICHLOROBENZENE	ND	370	190
1,3-DICHLOROBENZENE	ND	370	190
1,4-DICHLOROBENZENE	ND	370	190
2,4,5-TRICHLOROPHENOL	ND	370	190
2,4,6-TRICHLOROPHENOL	ND	370	210
2,4-DICHLOROPHENOL	ND	370	190
2,4-DIMETHYLPHENOL	ND	370	190
2,4-DINITROPHENOL	ND	750	190
2,4-DINITROTOLUENE	ND	370	190
2,6-DINITROTOLUENE	ND	370	190
2-CHLORONAPHTHALENE	ND	370	190
2-CHLOROPHENOL	ND	370	190
2-METHYLNAPHTHALENE	ND	370	190
2-METHYLPHENOL	ND	370	190
2-NITROANILINE	ND	370	190
2-NITROPHENOL	ND	370	190
3,3'-DICHLOROBENZIDINE	ND	370	190
3-NITROANILINE	ND	370	190
4,6-DINITRO-2-METHYLPHENOL	ND	750	190
4-BROMOPHENYL-PHENYL ETHER	ND	370	190
4-CHLORO-3-METHYLPHENOL	ND	370	190
4-CHLOROANILINE	ND	370	190
4-CHLOROPHENYL-PHENYL ETHER	ND	370	190
4-METHYLPHENOL (1)	ND	370	190
4-NITROANILINE	ND	370	190
4-NITROPHENOL	ND	750	190
ACENAPHTHENE	ND	370	190
ACENAPHTHYLENE	ND	370	190
ANTHRACENE	ND	370	190
BENZO(A)ANTHRACENE	ND	370	190
BENZO(A)PYRENE	ND	370	190
BENZO(B)FLUORANTHENE	ND	370	190
BENZO(K)FLUORANTHENE	ND	370	190
BENZO(G,H,I)PERYLENE	ND	370	190
BIS(2-CHLOROETHOXY)METHANE	ND	370	190
BIS(2-CHLOROETHYL)ETHER	ND	370	190
BIS(2-CHLOROISOPROPYL)ETHER	ND	370	190
BIS(2-ETHYLHEXYL)PHTHALATE	ND	370	190
BUTYLBENZYLPHTHALATE	ND	370	190
CHRYSENE	ND	370	190
DI-N-BUTYLPHTHALATE	ND	370	190
DI-N-OCTYLPHTHALATE	ND	370	190
DIBENZO(A,H)ANTHRACENE	ND	370	190
DIBENZOFURAN	ND	370	190
DIETHYLPHTHALATE	ND	370	190
DIMETHYLPHTHALATE	ND	370	190
FLUORANTHENE	ND	370	190
FLUORENE	ND	370	190
HEXACHLOROBENZENE	ND	370	190
HEXACHLOROBUTADIENE	ND	370	210
HEXACHLOROCYCLOPENTADIENE	ND	370	190
HEXACHLOROETHANE	ND	370	190
INDENO(1,2,3-CD)PYRENE	ND	370	190
ISOPHORONE	ND	370	190
N-NITROSO-DI-N-PROPYLAMINE	ND	370	190
N-NITROSODIPHENYLAMINE (2)	ND	370	190
NAPHTHALENE	ND	370	190
NITROBENZENE	ND	370	190
PENTACHLOROPHENOL	ND	750	200
PHENANTHRENE	ND	370	190
PHENOL	ND	370	190
PYRENE	ND	370	190

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	88	20-140
2-FLUOROBIPHENYL	75	30-130
2-FLUOROPHENOL	64	20-130
NITROBENZENE-D5	83	20-130
PHENOL-D5	71	20-130
TERPHENYL-D14	102	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

QC SUMMARIES

METHOD 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/21/08
Batch No. : 08G188	Date Extracted: 07/21/08 16:00
Sample ID: MBLK1W	Date Analyzed: 07/23/08 16:47
Lab Samp ID: SVG033WB	Dilution Factor: 1
Lab File ID: RGG238	Matrix : WATER
Ext Btch ID: SVG033W	% Moisture : NA
Calib. Ref.: RFG137	Instrument ID : T-QE2

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	10	5.0
1,2-DICHLOROBENZENE	ND	10	5.0
1,3-DICHLOROBENZENE	ND	10	5.0
1,4-DICHLOROBENZENE	ND	10	5.0
2,4,5-TRICHLOROPHENOL	ND	10	5.0
2,4,6-TRICHLOROPHENOL	ND	10	5.0
2,4-DICHLOROPHENOL	ND	10	5.0
2,4-DIMETHYLPHENOL	ND	10	5.0
2,4-DINITROPHENOL	ND	20	5.0
2,4-DINITROTOLUENE	ND	10	5.0
2,6-DINITROTOLUENE	ND	10	5.0
2-CHLORONAPHTHALENE	ND	10	5.0
2-CHLOROPHENOL	ND	10	5.0
2-METHYLNAPHTHALENE	ND	10	5.0
2-METHYLPHENOL	ND	10	5.0
2-NITROANILINE	ND	10	5.0
2-NITROPHENOL	ND	10	5.0
3,3'-DICHLOROBENZIDINE	ND	10	5.0
3-NITROANILINE	ND	10	5.0
4,6-DINITRO-2-METHYLPHENOL	ND	20	5.0
4-BROMOPHENYL-PHENYL ETHER	ND	10	5.0
4-CHLORO-3-METHYLPHENOL	ND	10	5.0
4-CHLOROANILINE	ND	10	5.0
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5.0
4-METHYLPHENOL (1)	ND	10	5.0
4-NITROANILINE	ND	10	5.0
4-NITROPHENOL	ND	20	5.0
ACENAPHTHENE	ND	10	5.0
ACENAPHTHYLENE	ND	10	5.0
ANTHRACENE	ND	10	5.0
BENZO(A)ANTHRACENE	ND	10	5.0
BENZO(A)PYRENE	ND	10	5.0
BENZO(B)FLUORANTHENE	ND	10	5.0
BENZO(K)FLUORANTHENE	ND	10	5.0
BENZO(G,H,I)PERYLENE	ND	10	5.0
BIS(2-CHLOROETHOXY)METHANE	ND	10	5.0
BIS(2-CHLOROETHYL)ETHER	ND	10	5.0
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5.0
BIS(2-ETHYLHEXYL)PHTHALATE	ND	10	5.0
BUTYLBENZYLPHTHALATE	ND	10	5.0
CHRYSENE	ND	10	5.0
DI-N-BUTYLPHTHALATE	ND	10	5.0
DI-N-OCTYLPHTHALATE	ND	10	5.0
DIBENZO(A,H)ANTHRACENE	ND	10	5.0
DIBENZOFURAN	ND	10	5.0
DIETHYLPHTHALATE	ND	10	5.0
DIMETHYLPHTHALATE	ND	10	5.0
FLUORANTHENE	ND	10	5.0
FLUORENE	ND	10	5.0
HEXACHLOROBENZENE	ND	10	5.0
HEXACHLOROBUTADIENE	ND	10	5.0
HEXACHLOROCYCLOPENTADIENE	ND	10	5.0
HEXACHLOROETHANE	ND	10	5.0
INDENO(1,2,3-CD)PYRENE	ND	10	5.0
ISOPHORONE	ND	10	5.0
N-NITROSO-DI-N-PROPYLAMINE	ND	10	5.0
N-NITROSODIPHENYLAMINE (2)	ND	10	5.0
NAPHTHALENE	ND	10	5.0
NITROBENZENE	ND	10	5.0
PENTACHLOROPHENOL	ND	20	5.0
PHENANTHRENE	ND	10	5.0
PHENOL	ND	10	5.0
PYRENE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	74	40-140
2-FLUOROBIPHENYL	66	40-130
2-FLUOROPHENOL	66	30-130
NITROBENZENE-D5	70	40-130
PHENOL-D5	67	30-130
TERPHENYL-D14	92	50-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3520C/8270C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVG033WB	SVG033WL	SVG033WC		
LAB FILE ID:	RGG238	RGG239	RGG240		
DATE EXTRACTED:	07/21/0816:00	07/21/0816:00	07/21/0816:00	DATE COLLECTED:	NA
DATE ANALYZED:	07/23/0816:47	07/23/0817:07	07/23/0817:27	DATE RECEIVED:	07/21/08
PREP. BATCH:	SVG033W	SVG033W	SVG033W		
CALIB. REF:	RFG137	RFG137	RFG137		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	80.0	41.1	51	80.0	44.2	55	7	30-130	30
1,4-Dichlorobenzene	ND	80.0	38.9	49	80.0	47.9	60	21	30-130	30
2,4-Dinitrotoluene	ND	80.0	64.1	80	80.0	68.1	85	6	40-130	30
2-Chlorophenol	ND	80.0	37.8	47	80.0	47.3	59	22	30-130	30
4-Chloro-3-Methylphenol	ND	80.0	48.7	61	80.0	53.1	66	9	40-130	30
4-Nitrophenol	ND	80.0	52.8	66	80.0	53.2	67	1	30-130	30
Acenaphthene	ND	80.0	48.4	61	80.0	52.8	66	9	40-130	30
n-Nitroso-di-n-propylamine	ND	80.0	39.8	50	80.0	48.7	61	20	30-130	30
Pentachlorophenol	ND	80.0	48.9	61	80.0	49.2	61	1	30-130	30
Phenol	ND	80.0	36.4	45	80.0	45.6	57	23	20-130	30
Pyrene	ND	80.0	63.4	79	80.0	65.4	82	3	50-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	150	110	74	150	128	85	40-140
2-Fluorobiphenyl	50.0	24.3	49	50.0	28.0	56	40-130
2-Fluorophenol	150	63.2	42	150	80.2	53	30-130
Nitrobenzene-d5	50.0	25.9	52	50.0	29.0	58	40-130
Phenol-d5	150	65.8	44	150	82.8	55	30-130
Terphenyl-d14	50.0	38.4	77	50.0	40.5	81	50-130

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	NA
Project	: LMC BEAUMONT SITE 1	Date Received:	07/21/08
Batch No.	: 08G188	Date Extracted:	07/21/08 16:45
Sample ID:	MBLK1S	Date Analyzed:	07/22/08 12:43
Lab Samp ID:	SVG035SB	Dilution Factor:	1
Lab File ID:	RGG211	Matrix :	SOIL
Ext Btch ID:	SVG035S	% Moisture :	NA
Calib. Ref.:	RFG137	Instrument ID :	T-OE2

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	180
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	660	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	660	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	660	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	660	170
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	73	40-130
2-FLUOROBIPHENYL	62	30-130
2-FLUOROPHENOL	59	30-130
NITROBENZENE-D5	67	30-130
PHENOL-D5	61	30-130
TERPHENYL-D14	98	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3550B/8270C

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	SVG035SB	SVG035SX	SVG035SY		
LAB FILE ID:	RGG211	RGG283	RGG284		
DATE EXTRACTED:	07/21/0816:45	07/21/0816:45	07/21/0816:45	DATE COLLECTED:	NA
DATE ANALYZED:	07/22/0812:43	07/25/0820:14	07/25/0820:34	DATE RECEIVED:	07/21/08
PREP. BATCH:	SVG035S	SVG035S	SVG035S		
CALIB. REF:	RFG137	RFG137	RFG137		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	2670	2190	82	2670	2070	77	6	30-130	50
1,4-Dichlorobenzene	ND	2670	2030	76	2670	1970	74	3	30-130	50
2,4-Dinitrotoluene	ND	2670	2640	99	2670	2720	102	3	30-130	50
2-Chlorophenol	ND	2670	2070	78	2670	1800	67	14	30-130	50
4-Chloro-3-Methylphenol	ND	2670	2480	93	2670	2500	94	1	30-130	50
4-Nitrophenol	ND	2670	2410	91	2670	2430	91	1	20-130	50
Acenaphthene	ND	2670	2430	91	2670	2340	88	4	30-130	50
n-Nitroso-di-n-propylamine	ND	2670	2590	97	2670	2180	82	17	30-130	50
Pentachlorophenol	ND	2670	2120	80	2670	2180	82	3	20-130	50
Phenol	ND	2670	2100	79	2670	1750	66	18	30-130	50
Pyrene	ND	2670	2470	93	2670	2560	96	3	30-130	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	5000	4840	97	5000	4890	98	40-130
2-Fluorobiphenyl	1670	1310	78	1670	1280	77	30-130
2-Fluorophenol	5000	3430	69	5000	2810	56	30-130
Nitrobenzene-d5	1670	1300	78	1670	1300	78	30-130
Phenol-d5	5000	3700	74	5000	3180	64	30-130
Terphenyl-d14	1670	1520	91	1670	1600	96	40-130

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected	: NA
Project	: LMC BEAUMONT SITE 1	Date Received	: 07/30/08
Batch No.	: 08G188	Date Extracted	: 07/30/08 11:30
Sample ID	: MBLK2S	Date Analyzed	: 07/31/08 18:29
Lab Samp ID	: SVG048SB	Dilution Factor	: 1
Lab File ID	: RGZ381	Matrix	: SOIL
Ext Btch ID	: SVG048S	% Moisture	: NA
Calib. Ref.	: RGZ193	Instrument ID	: T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	180
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	660	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	660	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	660	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	660	170
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	92	40-130
2-FLUOROBIPHENYL	87	30-130
2-FLUOROPHENOL	92	30-130
NITROBENZENE-D5	95	30-130
PHENOL-D5	92	30-130
TERPHENYL-D14	104	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3550B/8270C

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2S				
LAB SAMP ID:	SVG048SB	SVG048SL	SVG048SC		
LAB FILE ID:	RGZ381	RGZ382	RGZ383		
DATE EXTRACTED:	07/30/0811:30	07/30/0811:30	07/30/0811:30	DATE COLLECTED:	NA
DATE ANALYZED:	07/31/0818:29	07/31/0818:48	07/31/0819:07	DATE RECEIVED:	07/30/08
PREP. BATCH:	SVG048S	SVG048S	SVG048S		
CALIB. REF:	RGZ193	RGZ193	RGZ193		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	2670	2280	85	2670	2250	84	1	30-130	50
1,4-Dichlorobenzene	ND	2670	2080	78	2670	2080	78	0	30-130	50
2,4-Dinitrotoluene	ND	2670	2290	86	2670	2400	90	5	30-130	50
2-Chlorophenol	ND	2670	2100	79	2670	2200	83	5	30-130	50
4-Chloro-3-Methylphenol	ND	2670	2160	81	2670	2110	79	2	30-130	50
4-Nitrophenol	ND	2670	1790	67	2670	2380	89	28	20-130	50
Acenaphthene	ND	2670	2250	84	2670	2240	84	0	30-130	50
n-Nitroso-di-n-propylamine	ND	2670	2240	84	2670	2370	89	6	30-130	50
Pentachlorophenol	ND	2670	1970	74	2670	2060	77	5	20-130	50
Phenol	ND	2670	2120	79	2670	2120	79	0	30-130	50
Pyrene	ND	2670	2410	90	2670	2540	95	5	30-130	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	5000	4770	95	5000	5190	104	40-130
2-Fluorobiphenyl	1670	1510	90	1670	1590	96	30-130
2-Fluorophenol	5000	4630	93	5000	5080	102	30-130
Nitrobenzene-d5	1670	1510	90	1670	1450	87	30-130
Phenol-d5	5000	4320	86	5000	4340	87	30-130
Terphenyl-d14	1670	1790	107	1670	1720	103	40-130

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3550B/8270C

MATRIX: SOIL % MOISTURE: 10.0

DILUTION FACTOR:	1	1	1
SAMPLE ID:	H-T1-11RE		
LAB SAMP ID:	G188-05R	G188-05M	G188-05S
LAB FILE ID:	RGZ384	RGZ385	RGZ386
DATE EXTRACTED:	07/30/0811:30	07/30/0811:30	07/30/0811:30
DATE ANALYZED:	07/31/0819:26	07/31/0819:45	07/31/0820:04
PREP. BATCH:	SVG048S	SVG048S	SVG048S
CALIB. REF:	RGZ193	RGZ193	RGZ193

DATE COLLECTED: 07/17/08
DATE RECEIVED: 07/18/08

ACCESSION:

PARAMETER	SMPL RSLT (ug/kg)	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	SPIKE AMT (ug/kg)	MSD RSLT (ug/kg)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	2960	1580	53	2960	953	32	50	10-130	50
1,4-Dichlorobenzene	ND	2960	1410	48	2960	804	27	55*	10-130	50
2,4-Dinitrotoluene	ND	2960	2110	71	2960	2460	83	15	20-130	50
2-Chlorophenol	ND	2960	1480	50	2960	905	31	48	20-130	50
4-Chloro-3-Methylphenol	ND	2960	1690	57	2960	1560	53	8	30-130	50
4-Nitrophenol	ND	2960	1920	65	2960	2390	81	22	20-130	50
Acenaphthene	ND	2960	1790	60	2960	1570	53	13	20-130	50
n-Nitroso-di-n-propylamine	ND	2960	1670	56	2960	1100	37	41	20-130	50
Pentachlorophenol	ND	2960	1750	59	2960	1840	62	5	20-130	50
Phenol	ND	2960	1650	56	2960	972	33	52*	20-130	50
Pyrene	ND	2960	2230	75	2960	2460	83	10	10-160	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	SPIKE AMT (ug/kg)	MSD RSLT (ug/kg)	MSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	5560	4570	82	5560	4860	87	20-140
2-Fluorobiphenyl	1860	1160	63	1860	861	46	30-130
2-Fluorophenol	5560	3190	57	5560	2130	38	20-130
Nitrobenzene-d5	1860	1120	60	1860	602	32	20-130
Phenol-d5	5560	3400	61	5560	2000	36	20-130
Terphenyl-d14	1860	1640	88	1860	1680	91	40-130

INITIAL CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG129
Instrument ID: T-OE2

Project: ICAL
SDG No.: 08G188
DFTPP Injection Date: 06/30/08
DFTPP Injection Time: 09:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.92
68	Less than 2% of mass 69	0.53(1.7)1
69	Relative abundance of mass 198	32.18
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	49.78
197	Less than 1.0% of mass 198	0.26
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.72
275	10.0 - 30.0% of mass 198	25.44
365	Greater than 1.00% of mass 198	3.24
441	Present, but less than mass 443	15.93
442	Greater than 40.0% of mass 198	94.86
443	17.0 - 23.0% of mass 442	17.86(18.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD00.5	SVE2F302	RFG131	06/30/08	10:26
2	STD0001	SVE2F303	RFG132	06/30/08	10:46
3	SSTD002	SVE2F304	RFG133	06/30/08	11:05
4	SSTD005	SVE2F305	RFG134	06/30/08	11:25
5	SSTD010	SVE2F306	RFG135	06/30/08	11:44
6	SSTD020	SVE2F307	RFG136	06/30/08	12:04
7	SSTD050	SVE2F308	RFG137	06/30/08	12:24
8	SSTD080	SVE2F309	RFG138	06/30/08	12:43
9	SSTD100	SVE2F3010	RFG139	06/30/08	13:03
10	SSTD120	SVE2F3011	RFG140	06/30/08	13:23
11	SSTD160	SVE2F3012	RFG141	06/30/08	13:42
12	SSTD050	ISVE2F301	RFG142	06/30/08	14:02

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :E2
Beginning DateTime :06/30/08 10:26
Spike Units :PPM
IC File :RFG137

Column Spec :DB-5.625 ID :0.18
Ending DateTime :06/30/08 13:4
HPChem Method :SVE2F30

IDX	Parameters	.5 10:26 RFG131	1 10:46 RFG132	2 11:05 RFG133	5 11:25 RFG134	10 11:44 RFG135	20 12:04 RFG136	50 12:24 RFG137	80 12:43 RFG138	100 13:03 RFG139	120 13:23 RFG140	160 13:42 RFG141	Av_RRF	%_RSD	Av_Rt
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	1	1	1	1	1	0	2.95
2	N-nitrosodimethylamine	0.445	0.507	0.506	0.515	0.527	0.508	0.520	0.511	0.498	------	------	0.504	4.71	1.39
3	Pyridine	0.793	0.864	0.892	1.001	1.000	0.984	1.019	1.012	0.981	------	------	0.950	8.41	1.42
4	2-Fluorophenol	1.194	1.061	1.065	1.087	1.108	1.094	1.113	1.118	1.108	1.034	1.016	1.091	4.38	2.01
5	Phenol-d5	1.205	1.241	1.187	1.261	1.232	1.237	1.268	1.277	1.269	1.165	1.144	1.226	3.66	2.60
6	Phenol	1.135	1.312	1.318	1.326	1.299	1.270	1.315	1.325	1.302	------	------	1.289	4.67	2.61
7	Aniline	1.469	1.360	1.398	1.499	1.464	1.444	1.465	1.462	1.432	------	------	1.444	2.92	2.67
8	bis(2-chloroethyl) ether	1.060	0.940	0.942	0.946	0.921	0.906	0.912	0.913	0.895	------	------	0.937	5.27	2.70
9	2-Chlorophenol	1.285	1.410	1.337	1.555	1.555	1.547	1.487	1.531	1.492	------	------	1.467	6.84	2.77
10	1,3-Dichlorobenzene	1.581	1.649	1.524	1.546	1.528	1.499	1.529	1.541	1.528	------	------	1.547	2.85	2.90
11	1,2-Dichlorobenzene-d4	1.058	0.965	0.885	0.969	0.949	0.927	0.925	0.933	0.930	0.889	0.875	0.937	5.42	3.08
12	1,4-Dichlorobenzene	1.635	1.647	1.570	1.587	1.589	1.547	1.781	1.795	1.830	------	------	1.665	6.49	2.96
13	Benzyl alcohol	0.762	0.635	0.699	0.766	0.754	0.729	0.762	0.774	0.762	------	------	0.738	6.12	3.04
14	1,2-Dichlorobenzene	1.562	1.489	1.435	1.523	1.507	1.485	1.479	1.494	1.465	------	------	1.493	2.39	3.10
15	2-Methylphenol	0.793	0.891	0.908	0.931	0.954	0.905	0.938	0.941	0.933	------	------	0.911	5.31	3.12
16	bis(2-chloroisopropyl)ether	2.115	2.109	2.025	2.028	2.006	1.942	1.959	1.964	1.982	------	------	2.015	3.11	3.16
17	4-Methylphenol	1.206	1.322	1.336	1.405	1.400	1.378	1.398	1.405	1.389	------	------	1.360	4.78	3.26
18	N-Nitroso-di-n-propylamine	0.496	0.496	0.491	0.538	0.547	0.537	0.552	0.551	0.544	------	------	0.528	4.88	3.28
19	Hexachloroethane	0.491	0.564	0.569	0.568	0.566	0.561	0.572	0.570	0.576	------	------	0.559	4.68	3.40
20	Naphthalene-d8	1	1	1	1	1	1	1	1	1	1	1	1	0	4.17
21	Nitrobenzene-d5	0.235	0.239	0.238	0.251	0.250	0.249	0.263	0.260	0.256	0.242	0.244	0.248	3.69	3.44
22	Nitrobenzene	0.264	0.264	0.249	0.250	0.249	0.244	0.254	0.252	0.250	------	------	0.253	2.69	3.46
23	Isophorone	0.415	0.391	0.398	0.403	0.394	0.397	0.422	0.417	0.411	------	------	0.405	2.73	3.68
24	2-Nitrophenol	0.166	0.155	0.168	0.159	0.173	0.176	0.191	0.191	0.191	------	------	0.175	7.95	3.7
25	2,4-Dimethylphenol	0.297	0.281	0.302	0.286	0.292	0.283	0.300	0.298	0.296	------	------	0.293	2.65	3.7
26	Benzoic acid	------	------	------	0.057	0.106	0.150	0.210	0.228	0.229	------	------	0.163	43.68	3.8
27	bis(2-Chloroethoxy)methane	0.317	0.315	0.325	0.321	0.318	0.311	0.326	0.323	0.347	------	------	0.323	3.18	3.8
28	2,4-Dichlorophenol	0.222	0.267	0.290	0.273	0.280	0.284	0.301	0.300	0.299	------	------	0.280	8.84	4.0
29	1,2,4-Trichlorobenzene	0.349	0.356	0.324	0.324	0.318	0.308	0.326	0.322	0.317	------	------	0.327	4.73	4.1
30	Naphthalene	1.157	1.081	1.053	1.037	1.033	1.014	1.063	1.042	1.029	------	------	1.056	4.01	4.2
31	4-Chloroaniline	0.376	0.378	0.408	0.424	0.412	0.412	0.431	0.426	0.419	------	------	0.410	4.89	4.2
32	Hexachlorobutadiene	0.197	0.196	0.186	0.188	0.184	0.176	0.188	0.187	0.185	------	------	0.187	3.37	4.3
33	4-Chloro-3-methylphenol	0.226	0.219	0.229	0.243	0.241	0.239	0.258	0.256	0.256	------	------	0.241	5.89	4.7
34	2-Methylnaphthalene	0.693	0.679	0.683	0.690	0.679	0.669	0.705	0.697	0.686	------	------	0.687	1.58	4.9
35	1-Methylnaphthalene	0.692	0.673	0.650	0.640	0.650	0.622	0.664	0.652	0.643	------	------	0.654	3.07	5.0
36	Acenaphthene-d10	1	1	1	1	1	1	1	1	1	1	1	1	0	6.2
37	Hexachlorocyclopentadiene	------	0.152	0.197	0.271	0.303	0.332	0.393	0.410	0.410	------	------	0.308	31.59	5.1
38	2,4,6-Trichlorophenol	0.327	0.327	0.348	0.377	0.374	0.381	0.404	0.405	0.408	------	------	0.372	8.55	5.2
39	2,4,5-Trichlorophenol	0.308	0.341	0.381	0.391	0.409	0.415	0.440	0.438	0.439	------	------	0.396	11.66	5.3
40	2-Fluorobiphenyl	1.520	1.371	1.419	1.407	1.395	1.369	1.433	1.414	1.420	1.298	1.341	1.399	4.06	5.3
41	2-Chloronaphthalene	1.373	1.198	1.296	1.263	1.224	1.195	1.241	1.229	1.227	------	------	1.249	4.46	5.5
42	2-Nitroaniline	0.194	0.211	0.214	0.237	0.250	0.254	0.271	0.275	0.275	------	------	0.242	12.41	5.6
43	Dimethylphthalate	1.484	1.333	1.353	1.390	1.379	1.342	1.439	1.424	1.423	------	------	1.396	3.60	5.8
44	2,6-Dinitrotoluene	0.233	0.229	0.249	0.273	0.276	0.273	0.305	0.310	0.308	------	------	0.273	11.45	5.9
45	Acenaphthylene	2.040	1.992	2.010	2.030	2.027	1.971	2.099	2.071	2.062	------	------	2.034	1.96	6.0
46	3-Nitroaniline	0.230	0.266	0.298	0.329	0.339	0.340	0.367	0.367	0.366	------	------	0.322	15.06	6.1
47	Acenaphthene	1.433	1.400	1.348	1.345	1.336	1.285	1.365	1.342	1.337	------	------	1.355	3.10	6.2
48	2,4-Dinitrophenol	------	------	------	0.050	0.084	0.102	0.155	0.168	0.173	------	------	0.122	41.49	6.2
49	4-Nitrophenol	------	------	0.081	0.115	0.124	0.137	0.155	0.163	0.163	------	------	0.134	22.30	6.3
50	2,4-Dinitrotoluene	0.259	0.290	0.310	0.349	0.383	0.378	0.413	0.412	0.416	------	------	0.357	16.33	6.4
51	Dibenzofuran	1.957	1.750	1.813	1.767	1.749	1.696	1.802	1.759	1.770	------	------	1.785	4.07	6.4
52	2,3,4,6-Tetrachlorophenol	------	0.135	0.201	0.206	0.228	0.237	0.268	0.266	0.270	------	------	0.227	20.25	6.5
53	Diethylphthalate	1.459	1.594	1.365	1.614	1.599	1.506	1.590	1.546	1.575	------	------	1.539	5.35	6.7
54	Fluorene	1.440	1.354	1.384	1.359	1.374	1.326	1.555	1.537	1.521	------	------	1.428	6.17	6.8
55	4-Chlorophenyl-phenylether	0.655	0.654	0.646	0.629	0.609	0.607	0.713	0.706	0.701	------	------	0.658	6.17	6.8
56	4-Nitroaniline	0.222	0.274	0.342	0.364	0.383	0.390	0.378	0.264	------	------	------	0.327	19.70	6.8
57	Phenanthrene-d10	1	1	1	1	1	1	1	1	1	1	1	1	0	7.
58	4,6-Dinitro-2-methylphenol	------	------	0.055	0.081	0.102	0.115	0.135	0.145	0.144	------	------	0.111	30.62	6.

7/2/08

59	N-Nitrosodiphenylamine	0.535	0.519	0.536	0.543	0.534	0.522	0.551	0.552	0.548	------	------	0.538	2.20	7.00
60	Azobenzene	0.579	0.530	0.581	0.576	0.576	0.571	0.596	0.592	0.594	------	------	0.577	3.44	7.05
61	2,4,6-Tribromophenol	------	0.091	0.099	0.108	0.116	0.119	0.125	0.141	0.140	0.118	0.122	0.118	13.49	7.14
62	4-Bromophenyl-phenylether	0.244	0.225	0.236	0.224	0.224	0.227	0.240	0.240	0.239	------	------	0.233	3.45	7.44
63	Hexachlorobenzene	0.262	0.259	0.262	0.268	0.257	0.252	0.266	0.266	0.269	------	------	0.262	2.11	7.50
64	Pentachlorophenol	------	------	0.082	0.130	0.148	0.164	0.199	0.210	0.212	------	------	0.164	29.26	7.73
65	Phenanthrene	1.359	1.239	1.213	1.214	1.167	1.156	1.201	1.198	1.186	------	------	1.215	4.91	7.96
66	Anthracene	1.286	1.196	1.202	1.185	1.188	1.155	1.213	1.204	1.195	------	------	1.202	2.93	8.02
67	Carbazole	1.111	1.051	1.054	1.091	1.051	1.025	1.049	1.044	1.051	------	------	1.058	2.48	8.20
68	Di-n-butylphthalate	1.428	1.284	1.313	1.346	1.345	1.354	1.456	1.443	1.458	------	------	1.381	4.79	8.59
69	Fluoranthene	1.224	1.214	1.220	1.241	1.239	1.220	1.287	1.579	1.571	------	------	1.310	11.57	9.24
70	Chrysene-d12	1	1	1	1	1	1	1	1	1	1	1	1	0	10.72
71	Benzidine	------	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.00
72	Pyrene	1.405	1.337	1.423	1.402	1.399	1.378	1.449	1.409	1.472	------	------	1.408	2.76	9.48
73	Terphenyl-d14	0.807	0.740	0.765	0.824	0.805	0.802	0.850	0.844	0.866	0.865	0.882	0.823	5.36	9.64
74	Butylbenzylphthalate	0.555	0.545	0.569	0.613	0.627	0.638	0.683	0.693	0.720	------	------	0.627	10.04	10.15
75	3,3'-Dichlorobenzidine	0.445	0.436	0.427	0.454	0.443	0.445	0.472	0.491	0.490	------	------	0.456	5.08	10.68
76	Benzo(a)anthracene	1.561	1.407	1.330	1.329	1.296	1.286	1.353	1.319	1.342	------	------	1.358	6.17	10.71
77	bis(2-Ethylhexyl)phthalate	0.873	0.871	0.920	0.960	0.996	0.989	1.060	1.060	1.075	------	------	0.978	8.03	10.73
78	Chrysene	1.343	1.237	1.273	1.266	1.227	1.209	1.252	1.226	1.240	------	------	1.253	3.15	10.75
79	Perylene-d12	1	1	1	1	1	1	1	1	1	1	1	1	0	12.14
80	Di-n-octylphthalate	1.505	1.493	1.617	1.675	1.758	1.762	1.982	1.948	2.023	------	------	1.752	11.37	11.35
81	Benzo(b)fluoranthene	1.298	1.290	1.308	1.328	1.304	1.294	1.421	1.390	1.504	------	------	1.349	5.51	11.74
82	Benzo(k)fluoranthene	1.382	1.395	1.354	1.337	1.390	1.354	1.453	1.393	1.390	------	------	1.383	2.43	11.77
83	Benzo(a)pyrene	1.369	1.320	1.296	1.305	1.317	1.309	1.410	1.376	1.439	------	------	1.349	3.82	12.08
84	Indeno(1,2,3-cd)pyrene	1.611	1.541	1.518	1.540	1.541	1.508	1.652	1.594	1.657	------	------	1.574	3.59	13.46
85	Dibenzo(a,h)anthracene	1.212	1.125	1.095	1.095	1.094	1.103	1.199	1.165	1.212	------	------	1.144	4.60	13.48
86	Benzo(g,h,i)perylene	1.440	1.342	1.297	1.323	1.333	1.295	1.399	1.337	1.372	------	------	1.349	3.53	13.86

Ave_%RSD : 7.9 Max_%RSD : 43.7

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
26	Benzoic acid	-0.02802	0.23653	0.9981
37	Hexachlorocyclopentadiene	-0.01007	0.40379	0.9981
46	3-Nitroaniline	-0.00246	0.36495	0.9997
48	2,4-Dinitrophenol	-0.02047	0.17560	0.9968
49	4-Nitrophenol	-0.00554	0.16228	0.9991
50	2,4-Dinitrotoluene	-0.00319	0.41189	0.9996
52	2,3,4,6-Tetrachlorophenol	-0.00434	0.26759	0.9993
56	4-Nitroaniline	0.00019	0.32363	0.9825*
58	4,6-Dinitro-2-methylphenol	-0.00641	0.14373	0.9984
64	Pentachlorophenol	-0.00906	0.20979	0.9983

Use Quadratic Regression for comps of linear reg of inverse conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
56	4-Nitroaniline	-0.01445	0.52831	-0.12641	0.9975

pe 7-2-08

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :E2 — Column Spec :DB-5.625 ID :0.18MM
Beginning DateTime :06/30/08 10:26 — Ending DateTime :06/30/08 13:42
IC File :RFG137 — HPChem Method :SVE2F30

WATER Init. Vol. (ml) : 1000 — Final Vol. (ml) : 2
SOIL Init. Weight (gm) : 30 — Final Vol. (ml) : 2

IDX	Parameters	ON COL MG/L	WATER UG/L	SOIL MG/KG	R_FILE
1	1,4-Dichlorobenzene-d4	IntSTD	IntSTD	IntSTD	IntSTD
2	N-nitrosodimethylamine	.5	1	.03333	RFG131
3	Pyridine	.5	1	.03333	RFG131
4	2-Fluorophenol	.5	1	.03333	RFG131
5	Phenol-d5	.5	1	.03333	RFG131
6	Phenol	.5	1	.03333	RFG131
7	Aniline	.5	1	.03333	RFG131
8	bis(2-chloroethyl) ether	.5	1	.03333	RFG131
9	2-Chlorophenol	.5	1	.03333	RFG131
10	1,3-Dichlorobenzene	.5	1	.03333	RFG131
11	1,2-Dichlorobenzene-d4	.5	1	.03333	RFG131
12	1,4-Dichlorobenzene	.5	1	.03333	RFG131
13	Benzyl alcohol	.5	1	.03333	RFG131
14	1,2-Dichlorobenzene	.5	1	.03333	RFG131
15	2-Methylphenol	.5	1	.03333	RFG131
16	bis(2-chloroisopropyl)ether	.5	1	.03333	RFG131
17	4-Methylphenol	.5	1	.03333	RFG131
18	N-Nitroso-di-n-propylamine	.5	1	.03333	RFG131
19	Hexachloroethane	.5	1	.03333	RFG131
20	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
21	Nitrobenzene-d5	.5	1	.03333	RFG131
22	Nitrobenzene	.5	1	.03333	RFG131
23	Isophorone	.5	1	.03333	RFG131
24	2-Nitrophenol	.5	1	.03333	RFG131
25	2,4-Dimethylphenol	.5	1	.03333	RFG131
26	Benzoic acid	5	10	.3333	RFG134
27	bis(2-Chloroethoxy)methane	.5	1	.03333	RFG131
28	2,4-Dichlorophenol	.5	1	.03333	RFG131
29	1,2,4-Trichlorobenzene	.5	1	.03333	RFG131
30	Naphthalene	.5	1	.03333	RFG131
31	4-Chloroaniline	.5	1	.03333	RFG131
32	Hexachlorobutadiene	.5	1	.03333	RFG131
33	4-Chloro-3-methylphenol	.5	1	.03333	RFG131
34	2-Methylnaphthalene	.5	1	.03333	RFG131
35	1-Methylnaphthalene	.5	1	.03333	RFG131
36	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
37	Hexachlorocyclopentadiene	1	2	.06667	RFG132
38	2,4,6-Trichlorophenol	.5	1	.03333	RFG131
39	2,4,5-Trichlorophenol	.5	1	.03333	RFG131
40	2-Fluorobiphenyl	.5	1	.03333	RFG131
41	2-Chloronaphthalene	.5	1	.03333	RFG131
42	2-Nitroaniline	.5	1	.03333	RFG131
43	Dimethylphthalate	.5	1	.03333	RFG131
44	2,6-Dinitrotoluene	.5	1	.03333	RFG131
45	Acenaphthylene	.5	1	.03333	RFG131
46	3-Nitroaniline	.5	1	.03333	RFG131
47	Acenaphthene	.5	1	.03333	RFG131
48	2,4-Dinitrophenol	5	10	.3333	RFG134
49	4-Nitrophenol	2	4	.1333	RFG133
50	2,4-Dinitrotoluene	.5	1	.03333	RFG131
51	Dibenzofuran	.5	1	.03333	RFG131
52	2,3,4,6-Tetrachlorophenol	1	2	.06667	RFG132
53	Diethylphthalate	.5	1	.03333	RFG131
54	Fluorene	.5	1	.03333	RFG131
55	4-Chlorophenyl-phenylether	.5	1	.03333	RFG131
56	4-Nitroaniline	.5	1	.03333	RFG131
57	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
58	4,6-Dinitro-2-methylphenol	2	4	.1333	RFG133
59	N-Nitrosodiphenylamine	.5	1	.03333	RFG131
60	Azobenzene	.5	1	.03333	RFG131
61	2,4,6-Tribromophenol	1	2	.06667	RFG132
62	4-Bromophenyl-phenylether	.5	1	.03333	RFG131
63	Hexachlorobenzene	.5	1	.03333	RFG131
64	Pentachlorophenol	2	4	.1333	RFG133
65	Phenanthrene	.5	1	.03333	RFG131
66	Anthracene	.5	1	.03333	RFG131
67	Carbazole	.5	1	.03333	RFG131
68	Di-n-butylphthalate	.5	1	.03333	RFG131
69	Fluoranthene	.5	1	.03333	RFG131
70	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
71	Benzidine	NA	NA	NA	NA
72	Pyrene	.5	1	.03333	RFG131
73	Terphenyl-d14	.5	1	.03333	RFG131
74	Butylbenzylphthalate	.5	1	.03333	RFG131
75	3,3'-Dichlorobenzidine	.5	1	.03333	RFG131
76	Benzo(a)anthracene	.5	1	.03333	RFG131
77	bis(2-Ethylhexyl)phthalate	.5	1	.03333	RFG131
78	Chrysene	.5	1	.03333	RFG131
79	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
80	Di-n-octylphthalate	.5	1	.03333	RFG131
81	Benzo(b)fluoranthene	.5	1	.03333	RFG131
82	Benzo(k)fluoranthene	.5	1	.03333	RFG131
83	Benzo(a)pyrene	.5	1	.03333	RFG131
84	Indeno(1,2,3-cd)pyrene	.5	1	.03333	RFG131
85	Dibenzo(a,h)anthracene	.5	1	.03333	RFG131
86	Benzo(g,h,i)perylene	.5	1	.03333	RFG131

JL 7-2-08

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ188
Instrument ID: T-048

Project: ICAL
SDG No.: 08G188
DFTPP Injection Date: 07/16/08
DFTPP Injection Time: 10:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.83
68	Less than 2% of mass 69	0.08(0.2)1
69	Relative abundance of mass 198	44.01
70	Less than 2.0% of mass 69	0.06(0.1)1
127	40.0 - 60.0% of mass 198	47.50
197	Less than 1.0% of mass 198	0.48
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.45
275	10.0 - 30.0% of mass 198	17.49
365	Greater than 1.00% of mass 198	1.82
441	Present, but less than mass 443	15.11
442	Greater than 40.0% of mass 198	86.66
443	17.0 - 23.0% of mass 442	19.43(22.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD02	SV48G161	RGZ189	07/16/08	10:16
2	SSTD05	SV48G162	RGZ190	07/16/08	10:37
3	SSTD010	SV48G163	RGZ191	07/16/08	10:57
4	SSTD020	SV48G164	RGZ192	07/16/08	11:16
5	SSTD050	SV48G165	RGZ193	07/16/08	11:35
6	SSTD080	SV48G166	RGZ194	07/16/08	11:54
7	SSTD100	SV48G167	RGZ195	07/16/08	12:13
8	SSTD120	SV48G168	RGZ196	07/16/08	12:32
9	SSTD160	SV48G169	RGZ197	07/16/08	12:51
10	SSTD050	ISV48G161	RGZ198	07/16/08	13:11

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :TO48
Beginning DateTime :07/16/08 10:16
Spike Units :PPM
IC File :RGZ193

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :07/16/08 12:51
HPChem Method :SV48G16

IDX	Parameters	2 10:16 RGZ189	5 10:37 RGZ190	10 10:57 RGZ191	20 11:16 RGZ192	50 11:35 RGZ193	80 11:54 RGZ194	100 12:13 RGZ195	120 12:32 RGZ196	160 12:51 RGZ197	Av_RRF	%_RSD	Av_Rt_M
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	1	1	1	0	2.8158
2	N-Nitrosodimethylamine	0.624	0.676	0.690	0.658	0.816	0.608	0.750	------	------	0.689	10.57	1.2643
3	Pyridine	1.055	1.143	1.214	1.361	1.522	1.482	1.163	------	------	1.277	14.06	1.2857
4	2-Fluorophenol	1.039	1.029	1.164	1.229	1.209	1.283	1.248	1.116	1.232	1.172	7.84	1.8945
5	Phenol	1.651	1.601	1.609	1.619	1.679	1.815	1.578	------	------	1.650	4.83	2.5583
6	Aniline	1.418	1.523	1.546	1.694	1.779	1.781	1.736	------	------	1.640	8.74	2.5738
7	Bis(2-chloroethyl)ether	1.398	1.294	1.212	1.305	1.243	1.253	1.343	------	------	1.292	4.92	2.6274
8	Phenol-d5	1.443	1.446	1.622	1.551	1.567	1.483	1.616	1.351	1.549	1.514	5.94	2.5454
9	2-Chlorophenol	1.117	1.336	1.426	1.402	1.455	1.507	1.372	------	------	1.374	9.17	2.6524
10	1,3-Dichlorobenzene	1.430	1.374	1.470	1.448	1.548	1.500	1.555	------	------	1.475	4.40	2.7691
11	1,4-Dichlorobenzene	1.565	1.530	1.528	1.557	1.505	1.607	1.469	------	------	1.537	2.90	2.8309
12	Benzyl alcohol	0.577	0.727	0.714	0.769	0.815	0.811	0.843	------	------	0.751	12.00	2.9500
13	1,2-Dichlorobenzene-d4	0.975	0.903	0.885	0.891	0.934	0.922	0.892	0.877	0.839	0.902	4.25	2.9398
14	1,2-Dichlorobenzene	1.457	1.427	1.455	1.463	1.509	1.418	1.483	------	------	1.459	2.14	2.9524
15	2-Methylphenol	0.788	0.915	0.975	1.008	1.027	1.026	1.091	------	------	0.976	10.12	3.0441
16	Bis(2-chloroisopropyl)ether	3.060	3.059	3.027	3.041	3.144	3.282	3.169	------	------	3.112	2.96	3.0607
17	4-Methylphenol	1.243	1.406	1.427	1.500	1.433	1.472	1.491	------	------	1.425	6.13	3.1786
18	N-Nitroso-di-n-propylamine	0.640	0.675	0.691	0.714	0.772	0.800	0.700	------	------	0.713	7.82	3.1750
19	Hexachloroethane	0.762	0.728	0.667	0.716	0.707	0.711	0.700	------	------	0.713	4.01	3.2309
20	Naphthalene-d8	1	1	1	1	1	1	1	1	1	1	0	3.9250
21	Nitrobenzene-d5	0.310	0.280	0.286	0.285	0.298	0.320	0.320	0.297	0.319	0.302	5.33	3.2926
22	Nitrobenzene	0.288	0.274	0.275	0.283	0.299	0.333	0.315	------	------	0.295	7.41	3.3095
23	Isophorone	0.539	0.492	0.492	0.503	0.542	0.563	0.553	------	------	0.526	5.69	3.5274
24	2-Nitrophenol	0.113	0.127	0.154	0.169	0.202	0.223	0.217	------	------	0.172	25.22	3.5881
25	2,4-Dimethylphenol	0.238	0.240	0.254	0.268	0.298	0.311	0.294	------	------	0.272	10.79	3.6512
26	bis(2-Chloroethoxy)methane	0.409	0.385	0.389	0.405	0.433	0.438	0.470	------	------	0.418	7.25	3.7417
27	Benzoic Acid	------	0.102	0.138	0.161	0.204	0.224	0.227	------	------	0.176	28.76	3.7861
28	2,4-Dichlorophenol	0.143	0.212	0.211	0.232	0.256	0.280	0.271	------	------	0.229	20.44	3.8107
29	1,2,4-Trichlorobenzene	0.271	0.261	0.266	0.266	0.285	0.302	0.301	------	------	0.279	6.15	3.8774
30	Naphthalene	0.954	0.972	0.981	0.929	0.997	1.089	1.007	------	------	0.990	5.13	3.9441
31	4-Chloroaniline	0.353	0.370	0.397	0.393	0.453	0.478	0.461	------	------	0.415	11.75	4.0203
32	Hexachlorobutadiene	0.111	0.115	0.127	0.131	0.133	0.145	0.141	------	------	0.129	9.63	4.0655
33	4-Chloro-3-methylphenol	0.170	0.231	0.237	0.238	0.264	0.271	0.287	------	------	0.243	15.70	4.5012
34	2-Methylnaphthalene	0.531	0.542	0.547	0.559	0.590	0.632	0.589	------	------	0.570	6.19	4.6047
35	1-Methylnaphthalene	0.523	0.552	0.543	0.515	0.538	0.598	0.536	------	------	0.544	4.95	4.6953
36	Acenaphthene-d10	1	1	1	1	1	1	1	1	1	1	0	5.6092
37	Hexachlorocyclopentadiene	0.157	0.194	0.227	0.284	0.361	0.389	0.421	------	------	0.290	35.25	4.7524
38	2,4,6-Trichlorophenol	0.188	0.263	0.338	0.350	0.368	0.389	0.365	------	------	0.323	22.27	4.8905
39	2,4,5-Trichlorophenol	0.198	0.263	0.330	0.351	0.422	0.431	0.415	------	------	0.344	25.65	4.9191
40	2-Fluorobiphenyl	1.159	1.268	1.296	1.277	1.329	1.334	1.384	1.194	1.340	1.287	5.63	4.9759
41	2-Chloronaphthalene	0.962	1.172	1.204	1.202	1.220	1.288	1.224	------	------	1.182	8.72	5.0703
42	2-Nitroaniline	0.232	0.300	0.304	0.316	0.335	0.333	0.348	------	------	0.310	12.42	5.2000
43	Dimethylphthalate	1.083	1.236	1.226	1.287	1.369	1.369	1.260	------	------	1.261	7.78	5.4000
44	2,6-Dinitrotoluene	0.186	0.222	0.269	0.305	0.340	0.353	0.288	------	------	0.280	21.57	5.4500
45	Acenaphthylene	1.766	2.018	1.969	2.001	2.091	2.195	1.992	------	------	2.005	6.51	5.4691
46	3-Nitroaniline	0.247	0.319	0.364	0.388	0.442	0.470	0.391	------	------	0.374	19.96	5.6083
47	Acenaphthene	1.071	1.144	1.098	1.106	1.160	1.192	1.081	------	------	1.122	3.97	5.6429
48	2,4-Dinitrophenol	------	0.049	0.103	0.123	0.191	0.206	0.207	------	------	0.147	44.39	5.7167
49	4-Nitrophenol	------	0.102	0.106	0.114	0.140	0.143	0.126	------	------	0.122	14.13	5.8125
50	Dibenzofuran	1.458	1.564	1.602	1.657	1.769	1.679	1.723	------	------	1.636	6.39	5.8167
51	2,4-Dinitrotoluene	0.202	0.312	0.344	0.384	0.460	0.470	0.393	------	------	0.366	25.14	5.8429
52	2,3,4,6-Tetrachlorophenol	0.119	0.188	0.183	0.202	0.235	0.256	0.234	------	------	0.203	22.52	5.9476
53	Diethylphthalate	1.164	1.287	1.295	1.369	1.393	1.454	1.294	------	------	1.322	7.07	6.1000
54	Fluorene	1.109	1.205	1.195	1.190	1.243	1.303	1.174	------	------	1.203	4.98	6.1512
55	4-Chlorophenyl-phenylether	0.465	0.519	0.522	0.543	0.554	0.545	0.573	------	------	0.532	6.54	6.1750
56	4-Nitroaniline	0.135	0.277	0.333	0.374	0.412	0.430	0.389	------	------	0.336	30.43	6.2107
57	4,6-Dinitro-2-methylphenol	------	0.084	0.156	0.187	0.225	0.251	0.228	------	------	0.188	32.47	6.2389
58	N-Nitrosodiphenylamine	0.611	0.769	0.815	0.829	0.858	0.859	0.787	------	------	0.790	10.83	6.3012
59	Azobenzene	1.435	1.537	1.514	1.575	1.656	1.623	1.575	------	------	1.559	4.67	6.3345
60	2,4,6-Tribromophenol	0.133	0.187	0.220	0.248	0.296	0.308	0.306	0.264	0.292	0.250	24.11	6.3870
61	Phenanthrene-d10	1	1	1	1	1	1	1	1	1	1	0	7.1074
62	4-Bromophenyl-phenylether	0.189	0.311	0.220	0.213	0.240	0.256	0.248	------	------	0.239	16.22	6.6607
63	Hexachlorobenzene	0.334	0.287	0.308	0.320	0.339	0.363	0.346	------	------	0.328	7.69	6.6929
64	Pentachlorophenol	0.128	0.173	0.171	0.173	0.216	0.229	0.233	------	------	0.189	20.22	6.9226
65	Phenanthrene	1.160	1.177	1.179	1.154	1.184	1.229	1.204	------	------	1.184	2.18	7.1345
66	Anthracene	1.112	1.261	1.163	1.150	1.194	1.238	1.164	------	------	1.183	4.38	7.1845
67	Carbazole	0.923	1.046	1.063	1.050	1.140	1.118	1.173	------	------	1.073	7.65	7.3738
68	Di-n-butylphthalate	1.351	1.558	1.526	1.552	1.688	1.653	1.592	------	------	1.560	6.97	7.7738

MC 7-17-08

69	Fluoranthene	1.024	1.016	1.011	1.026	1.058	1.112	1.004	------	------	1.036	3.65	8.2941
70	Chrysene-d12	1	1	1	1	1	1	1	1	1	1	0	9.5768
71	Benzidine	------	------	------	------	------	------	------	------	------	0.000	0.00	0.0000
72	Pyrene	1.378	1.426	1.472	1.477	1.608	1.479	1.666	------	------	1.501	6.75	8.5000
73	Terphenyl-d14	0.763	0.829	0.842	0.826	0.892	0.878	0.941	0.911	0.916	0.866	6.48	8.6787
74	Butylbenzylphthalate	0.467	0.663	0.760	0.809	0.935	0.896	0.970	------	------	0.786	22.44	9.1441
75	3,3'-Dichlorobenzidine	0.220	0.348	0.372	0.385	0.476	0.471	0.485	------	------	0.394	24.05	9.5726
76	Benzo(a)anthracene	1.244	1.185	1.235	1.252	1.227	1.192	1.178	------	------	1.216	2.48	9.5691
77	Chrysene	1.072	1.135	1.193	1.171	1.220	1.186	1.114	------	------	1.156	4.44	9.6012
78	bis(2-Ethylhexyl)phthalate	0.824	0.999	1.070	1.159	1.326	1.325	1.358	------	------	1.152	17.38	9.6524
79	Perylene-d12	1	1	1	1	1	1	1	1	1	1	0	10.7167
80	Di-n-octylphthalate	1.394	1.620	1.870	2.012	2.307	2.554	2.607	------	------	2.052	22.51	10.1774
81	Benzo(b)fluoranthene	1.088	1.253	1.122	1.303	1.286	1.477	1.442	------	------	1.282	11.41	10.4309
82	Benzo(k)fluoranthene	1.084	1.122	1.211	1.114	1.343	1.018	1.168	------	------	1.151	9.06	10.4536
83	Benzo(a)pyrene	1.069	1.125	1.197	1.168	1.242	1.248	1.363	------	------	1.202	7.93	10.6714
84	Indeno(1,2,3-cd)pyrene	0.956	1.187	1.252	1.327	1.437	1.465	1.539	------	------	1.309	15.16	11.4500
85	Dibenzo(a,h)anthracene	0.726	0.859	0.932	1.017	1.091	1.202	1.191	------	------	1.003	17.56	11.4619
86	Benzo(g,h,i)perylene	1.020	1.089	1.103	1.200	1.296	1.267	1.338	------	------	1.188	10.05	11.6226

Ave_%RSD : 11.9 Max_%RSD : 44.4

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
24	2-Nitrophenol	-0.00874	0.21668	0.9974
27	Benzoic Acid	-0.02049	0.22961	0.9982
28	2,4-Dichlorophenol	-0.00850	0.27262	0.9988
33	4-Chloro-3-methylphenol	-0.00690	0.27790	0.9989
37	Hexachlorocyclopentadiene	-0.02123	0.39866	0.9945*
38	2,4,6-Trichlorophenol	-0.01096	0.37899	0.9994
39	2,4,5-Trichlorophenol	-0.01586	0.42506	0.9988
44	2,6-Dinitrotoluene	-0.00871	0.32490	0.9950
46	3-Nitroaniline	-0.01138	0.43235	0.9959
48	2,4-Dinitrophenol	-0.02569	0.21377	0.9972
51	2,4-Dinitrotoluene	-0.01402	0.43789	0.9956
52	2,3,4,6-Tetrachlorophenol	-0.00796	0.24317	0.9980
56	4-Nitroaniline	-0.01546	0.41483	0.9987
57	4,6-Dinitro-2-methylphenol	-0.02186	0.24568	0.9983
60	2,4,6-Tribromophenol	-0.01076	0.29383	0.9978
62	4-Bromophenyl-phenylether	-0.00158	0.24751	0.9976
64	Pentachlorophenol	-0.00760	0.22759	0.9975
74	Butylbenzylphthalate	-0.03115	0.94463	0.9989
75	3,3'-Dichlorobenzidine	-0.01705	0.48083	0.9988
78	bis(2-Ethylhexyl)phthalate	-0.03802	1.34551	0.9992
80	Di-n-octylphthalate	-0.09460	2.53431	0.9974
84	Indeno(1,2,3-cd)pyrene	-0.03726	1.49913	0.9992
85	Dibenzo(a,h)anthracene	-0.03475	1.17992	0.9987

Use Quadratic Regression for comps of linear reg of inverse conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
37	Hexachlorocyclopentadiene	-0.01454	0.30090	0.04989	0.9998

pc 7-17-08

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :TO48 Column Spec :ZB-5MS ID :0.18MM
Beginning DateTime :07/16/08 10:16 Ending DateTime :07/16/08 12:51
IC File :RGZ193 HPChem Method :SV48G16

WATER Init. Vol. (ml) : 1000 Final Vol. (ml) : 2
SOIL Init. Weight (gm) : 30 Final Vol. (ml) : 2

IDX	Parameters	ON COL MG/L	WATER UG/L	SOIL MG/KG	R_FILE
1	1,4-Dichlorobenzene-d4	IntSTD	IntSTD	IntSTD	IntSTD
2	N-Nitrosodimethylamine	2	4	.1333	RGZ189
3	Pyridine	2	4	.1333	RGZ189
4	2-Fluorophenol	2	4	.1333	RGZ189
5	Phenol	2	4	.1333	RGZ189
6	Aniline	2	4	.1333	RGZ189
7	Bis(2-chloroethyl)ether	2	4	.1333	RGZ189
8	Phenol-d5	2	4	.1333	RGZ189
9	2-Chlorophenol	2	4	.1333	RGZ189
10	1,3-Dichlorobenzene	2	4	.1333	RGZ189
11	1,4-Dichlorobenzene	2	4	.1333	RGZ189
12	Benzyl alcohol	2	4	.1333	RGZ189
13	1,2-Dichlorobenzene-d4	2	4	.1333	RGZ189
14	1,2-Dichlorobenzene	2	4	.1333	RGZ189
15	2-Methylphenol	2	4	.1333	RGZ189
16	Bis(2-chloroisopropyl)ether	2	4	.1333	RGZ189
17	4-Methylphenol	2	4	.1333	RGZ189
18	N-Nitroso-di-n-propylamine	2	4	.1333	RGZ189
19	Hexachloroethane	2	4	.1333	RGZ189
20	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
21	Nitrobenzene-d5	2	4	.1333	RGZ189
22	Nitrobenzene	2	4	.1333	RGZ189
23	Isophorone	2	4	.1333	RGZ189
24	2-Nitrophenol	2	4	.1333	RGZ189
25	2,4-Dimethylphenol	2	4	.1333	RGZ189
26	bis(2-Chloroethoxy)methane	2	4	.1333	RGZ189
27	Benzoic Acid	5	10	.3333	RGZ190
28	2,4-Dichlorophenol	2	4	.1333	RGZ189
29	1,2,4-Trichlorobenzene	2	4	.1333	RGZ189
30	Naphthalene	2	4	.1333	RGZ189
31	4-Chloroaniline	2	4	.1333	RGZ189
32	Hexachlorobutadiene	2	4	.1333	RGZ189
33	4-Chloro-3-methylphenol	2	4	.1333	RGZ189
34	2-Methylnaphthalene	2	4	.1333	RGZ189
35	1-Methylnaphthalene	2	4	.1333	RGZ189
36	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
37	Hexachlorocyclopentadiene	2	4	.1333	RGZ189
38	2,4,6-Trichlorophenol	2	4	.1333	RGZ189
39	2,4,5-Trichlorophenol	2	4	.1333	RGZ189
40	2-Fluorobiphenyl	2	4	.1333	RGZ189
41	2-Chloronaphthalene	2	4	.1333	RGZ189
42	2-Nitroaniline	2	4	.1333	RGZ189
43	Dimethylphthalate	2	4	.1333	RGZ189
44	2,6-Dinitrotoluene	2	4	.1333	RGZ189
45	Acenaphthylene	2	4	.1333	RGZ189
46	3-Nitroaniline	2	4	.1333	RGZ189
47	Acenaphthene	2	4	.1333	RGZ189
48	2,4-Dinitrophenol	5	10	.3333	RGZ190
49	4-Nitrophenol	5	10	.3333	RGZ190
50	Dibenzofuran	2	4	.1333	RGZ189
51	2,4-Dinitrotoluene	2	4	.1333	RGZ189
52	2,3,4,6-Tetrachlorophenol	2	4	.1333	RGZ189
53	Diethylphthalate	2	4	.1333	RGZ189
54	Fluorene	2	4	.1333	RGZ189
55	4-Chlorophenyl-phenylether	2	4	.1333	RGZ189
56	4-Nitroaniline	2	4	.1333	RGZ189
57	4,6-Dinitro-2-methylphenol	5	10	.3333	RGZ190
58	N-Nitrosodiphenylamine	2	4	.1333	RGZ189
59	Azobenzene	2	4	.1333	RGZ189
60	2,4,6-Tribromophenol	2	4	.1333	RGZ189
61	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
62	4-Bromophenyl-phenylether	2	4	.1333	RGZ189
63	Hexachlorobenzene	2	4	.1333	RGZ189
64	Pentachlorophenol	2	4	.1333	RGZ189
65	Phenanthrene	2	4	.1333	RGZ189
66	Anthracene	2	4	.1333	RGZ189
67	Carbazole	2	4	.1333	RGZ189
68	Di-n-butylphthalate	2	4	.1333	RGZ189
69	Fluoranthene	2	4	.1333	RGZ189
70	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
71	Benzidine	NA	NA	NA	NA
72	Pyrene	2	4	.1333	RGZ189
73	Terphenyl-d14	2	4	.1333	RGZ189
74	Butylbenzylphthalate	2	4	.1333	RGZ189
75	3,3'-Dichlorobenzidine	2	4	.1333	RGZ189
76	Benzo(a)anthracene	2	4	.1333	RGZ189
77	Chrysene	2	4	.1333	RGZ189
78	bis(2-Ethylhexyl)phthalate	2	4	.1333	RGZ189
79	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
80	Di-n-octylphthalate	2	4	.1333	RGZ189
81	Benzo(b)fluoranthene	2	4	.1333	RGZ189
82	Benzo(k)fluoranthene	2	4	.1333	RGZ189
83	Benzo(a)pyrene	2	4	.1333	RGZ189
84	Indeno(1,2,3-cd)pyrene	2	4	.1333	RGZ189
85	Dibenzo(a,h)anthracene	2	4	.1333	RGZ189
86	Benzo(g,h,i)perylene	2	4	.1333	RGZ189

7-17-08

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :E2
IC_Beginning DateTime :06/30/08 10:26
Spike Amount :50 PPM
CC/CV File :RFG142
IC File :RFG137

Column Spec :DB-5.625 ID :0.18MM
IC_Ending DateTime :06/30/08 13:42
HPChem Method :SVE2F30
Date_Time :06/30/08 14 : 02

M_IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
1	1,4-Dichlorobenzene-d4	40.000	0	215715	1	1	2.950	2.951	0				
2	N-nitrosodimethylamine	49.148	-1.7	133627	0.496	0.504	1.395	1.399	4.71				
3	Pyridine	50.516	1.0	258690	0.959	0.950	1.425	1.429	8.41				
4	2-Fluorophenol												
5	Phenol-d5												
6	Phenol	47.937	-4.1	333273	1.236	1.289	2.613	2.614	4.67				
7	Aniline	49.185	-1.6	382982	1.420	1.444	2.676	2.678	2.92				
8	bis(2-chloroethyl) ether	46.991	-6.0	237544	0.881	0.937	2.709	2.707	5.27				
9	2-Chlorophenol	48.866	-2.3	386496	1.433	1.467	2.775	2.775	6.84				
10	1,3-Dichlorobenzene	47.742	-4.5	398357	1.477	1.547	2.905	2.906	2.85				
11	1,2-Dichlorobenzene-d4												
12	1,4-Dichlorobenzene	53.244	6.5	477950	1.773	1.665	2.965	2.966	6.49				
13	Benzyl alcohol	48.555	-2.9	193278	0.717	0.738	3.050	3.044	6.12				
14	1,2-Dichlorobenzene	48.219	-3.6	388296	1.440	1.493	3.099	3.100	2.39				
15	2-Methylphenol	49.016	-2.0	240702	0.893	0.911	3.126	3.124	5.31				
16	bis(2-chloroisopropyl)ether	48.320	-3.4	524948	1.947	2.015	3.164	3.160	3.11				
17	4-Methylphenol	48.394	-3.2	354887	1.316	1.360	3.267	3.263	4.78				
18	N-Nitroso-di-n-propylamine	49.683	-0.6	141489	0.525	0.528	3.289	3.285	4.88				
19	Hexachloroethane	49.550	-0.9	149498	0.554	0.559	3.408	3.408	4.68				
20	Naphthalene-d8	40.000	0	834713	1	1	4.180	4.179	0				
21	Nitrobenzene-d5												
22	Nitrobenzene	46.771	-6.5	246661	0.236	0.253	3.462	3.462	2.69				
23	Isophorone	47.397	-5.2	400762	0.384	0.405	3.691	3.689	2.73				
24	2-Nitrophenol	50.439	0.9	183707	0.176	0.175	3.776	3.774	7.95				
25	2,4-Dimethylphenol	46.837	-6.3	286186	0.274	0.293	3.795	3.793	2.65				
26	Benzoic acid	44.550	-10.9	196512	0.188	0.163	3.903	3.891	43.68	-0.0280	0.2365		0.9981
27	bis(2-Chloroethoxy)methane	47.241	-5.5	317961	0.305	0.323	3.899	3.898	3.18				
28	2,4-Dichlorophenol	50.550	1.1	294900	0.283	0.280	4.016	4.017	8.84				
29	1,2,4-Trichlorobenzene	46.598	-6.8	318221	0.305	0.327	4.115	4.113	4.73				
30	Naphthalene	46.796	-6.4	1031665	0.989	1.056	4.205	4.202	4.01				
31	4-Chloroaniline	49.282	-1.4	421357	0.404	0.410	4.250	4.249	4.89				
32	Hexachlorobutadiene	46.840	-6.3	183038	0.175	0.187	4.328	4.325	3.37				
33	4-Chloro-3-methylphenol	48.996	-2.0	245963	0.236	0.241	4.782	4.780	5.89				
34	2-Methylnaphthalene	47.741	-4.5	684172	0.656	0.687	4.973	4.971	1.58				
35	1-Methylnaphthalene	49.898	-0.2	680955	0.653	0.654	5.087	5.084	3.07				
36	Acenaphthene-d10	40.000	0	440807	1	1	6.204	6.201	0				
37	Hexachlorocyclopentadiene	45.613	-8.8	198530	0.360	0.308	5.149	5.146	31.59	-0.0101	0.4038		0.9981
38	2,4,6-Trichlorophenol	49.516	-1.0	203111	0.369	0.372	5.292	5.293	8.55				
39	2,4,5-Trichlorophenol	50.933	1.9	222224	0.403	0.396	5.334	5.334	11.66				
40	2-Fluorobiphenyl												
41	2-Chloronaphthalene	46.313	-7.4	637709	1.157	1.249	5.539	5.538	4.46				
42	2-Nitroaniline	51.631	3.3	137831	0.250	0.242	5.658	5.656	12.41				
43	Dimethylphthalate	47.619	-4.8	732757	1.330	1.396	5.884	5.880	3.60				
44	2,6-Dinitrotoluene	50.877	1.8	152981	0.278	0.273	5.957	5.953	11.45				
45	Acenaphthylene	47.744	-4.5	1070071	1.942	2.034	6.035	6.030	1.96				
46	3-Nitroaniline	45.662	-8.7	182561	0.331	0.322	6.154	6.151	15.06	-0.0025	0.3650		0.9997
47	Acenaphthene	46.351	-7.3	691939	1.256	1.355	6.241	6.240	3.10				
48	2,4-Dinitrophenol	43.578	-12.8	75306	0.137	0.122	6.282	6.282	41.49	-0.0205	0.1756		0.9968
49	4-Nitrophenol	46.709	-6.6	81091	0.147	0.134	6.360	6.360	22.30	-0.0055	0.1623		0.9991
50	2,4-Dinitrotoluene	46.433	-7.1	209357	0.380	0.357	6.442	6.438	16.33	-0.0032	0.4119		0.9996
51	Dibenzofuran	46.450	-7.1	913567	1.658	1.785	6.451	6.449	4.07				
52	2,3,4,6-Tetrachlorophenol	45.219	-9.6	131437	0.239	0.227	6.598	6.597	20.25	-0.0043	0.2676		0.9993
53	Diethylphthalate	48.967	-2.1	830295	1.507	1.539	6.742	6.739	5.35				
54	Fluorene	50.536	1.1	795190	1.443	1.428	6.865	6.863	6.17				
55	4-Chlorophenyl-phenylether	44.539	-10.9	322850	0.586	0.658	6.872	6.869	6.17				
56	4-Nitroaniline	54.439	8.9	207364	0.376	0.327	6.898	6.883	19.70	-0.0144	0.5283	-0.1264	0.9975
57	Phenanthrene-d10	40.000	0	760309	1	1	7.944	7.941	0				
58	4,6-Dinitro-2-methylphenol	45.750	-8.5	120115	0.126	0.111	6.935	6.933	30.62	-0.0064	0.1437		0.9984
59	N-Nitrosodiphenylamine	47.870	-4.3	489296	0.515	0.538	7.013	7.010	2.20				
60	Azobenzene	48.761	-2.5	535035	0.563	0.577	7.059	7.057	3.44				
61	2,4,6-Tribromophenol												
62	4-Bromophenyl-phenylether	47.567	-4.9	210865	0.222	0.233	7.442	7.440	3.45				
63	Hexachlorobenzene	47.467	-5.1	236575	0.249	0.262	7.502	7.502	2.11				
64	Pentachlorophenol	43.621	-12.8	167052	0.176	0.164	7.728	7.730	29.26	-0.0091	0.2098		0.9983
65	Phenanthrene	46.165	-7.7	1065938	1.122	1.215	7.972	7.968	4.91				
66	Anthracene	47.296	-5.4	1080996	1.137	1.202	8.028	8.025	2.93				
67	Carbazole	47.533	-4.9	956331	1.006	1.058	8.206	8.204	2.48				
68	Di-n-butylphthalate	48.765	-2.5	1279885	1.347	1.381	8.595	8.591	4.79				
69	Fluoranthene	51.841	3.7	1291174	1.359	1.310	9.251	9.248	11.57				
70	Chrysene-d12	40.000	0	691739	1	1	10.730	10.728	0				
71	Benzidine												
72	Pyrene	48.473	-3.1	1180515	1.365	1.408	9.487	9.485	2.76				
73	Terphenyl-d14												
74	Butylbenzylphthalate	51.912	3.8	562761	0.651	0.627	10.153	10.152	10.04				
75	3,3'-Dichlorobenzidine	50.024	0.0	394331	0.456	0.456	10.688	10.688	5.08				
76	Benzo(a)anthracene	46.868	-6.3	1100724	1.273	1.358	10.720	10.716	6.17				
77	bis(2-Ethylhexyl)phthalate	50.770	1.5	858919	0.993	0.978	10.734	10.732	8.03				
78	Chrysene	46.820	-6.4	1014284	1.173	1.253	10.757	10.753	3.15				
79	Perylene-d12	40.000	0	617528	1	1	12.144	12.147	0				
80	Di-n-octylphthalate	53.238	6.5	1439593	1.865	1.752	11.359	11.357	11.37				
81	Benzo(b)fluoranthene	50.084	0.2	1042776	1.351	1.349	11.753	11.749	5.51				
82	Benzo(k)fluoranthene	48.030	-3.9	1025460	1.328	1.383	11.781	11.777	2.43				
83	Benzo(a)pyrene	49.009	-2.0	1020633	1.322	1.349	12.089	12.084	3.82				
84	Indeno(1,2,3-cd)pyrene	50.011	0.0	1214991	1.574	1.574	13.476	13.468	3.59				
85	Dibenzo(a,h)anthracene	55.132	10.3	973962	1.262	1.144	13.498	13.487	4.60				
86	Benzo(g,h,i)perylene	48.660	-2.7	1013026	1.312	1.349	13.880	13.867	3.53				

MC 7-2-08

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :T048
IC_Beginning DateTime :07/16/08 10:16
Spike Amount :50 PPM
CC/CV File :RGZ198
IC File :RGZ193

Column Spec :ZB-5MS ID :0.18MM
IC_Ending DateTime :07/16/08 12:51
HPChem Method :SV48G16
Date_Time :07/16/08 13:11

M IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
1	1,4-Dichlorobenzene-d4	40.000	0	325921	1	1	2.817	2.816	0				
2	N-Nitrosodimethylamine	58.874	17.7	330575	0.811	0.689	1.233	1.264	10.57				
3	Pyridine	54.607	9.2	568238	1.395	1.277	1.250	1.286	14.06				
4	2-Fluorophenol												
5	Phenol	47.997	-4.0	645371	1.584	1.650	2.558	2.558	4.83				
6	Aniline	51.753	3.5	691413	1.697	1.640	2.567	2.574	8.74				
7	Bis(2-chloroethyl)ether	47.337	-5.3	498512	1.224	1.292	2.625	2.627	4.92				
8	Phenol-d5												
9	2-Chlorophenol	48.310	-3.4	540699	1.327	1.374	2.650	2.652	9.17				
10	1,3-Dichlorobenzene	48.701	-2.6	585221	1.436	1.475	2.767	2.769	4.40				
11	1,4-Dichlorobenzene	50.101	0.2	627564	1.540	1.537	2.833	2.831	2.90				
12	Benzyl alcohol	50.921	1.8	311518	0.765	0.751	2.950	2.950	12.00				
13	1,2-Dichlorobenzene-d4												
14	1,2-Dichlorobenzene	48.888	-2.2	581089	1.426	1.459	2.950	2.952	2.14				
15	2-Methylphenol	50.603	1.2	402335	0.988	0.976	3.042	3.044	10.12				
16	Bis(2-chloroisopropyl)ether	47.432	-5.1	1202597	2.952	3.112	3.058	3.061	2.96				
17	4-Methylphenol	47.629	-4.7	552885	1.357	1.425	3.183	3.179	6.13				
18	N-Nitroso-di-n-propylamine	49.946	-0.1	290232	0.712	0.713	3.175	3.175	7.82				
19	Hexachloroethane	46.574	-6.9	270652	0.664	0.713	3.233	3.231	4.01				
20	Naphthalene-d8	40.000	0	1164611	1	1	3.925	3.925	0				
21	Nitrobenzene-d5												
22	Nitrobenzene	52.143	4.3	448318	0.308	0.295	3.308	3.309	7.41				
23	Isophorone	47.557	-4.9	728664	0.501	0.526	3.525	3.527	5.69				
24	2-Nitrophenol	46.067	-7.9	280434	0.193	0.172	3.583	3.588	25.22	-0.0087	0.2167		0.9974
25	2,4-Dimethylphenol	49.166	-1.7	389222	0.267	0.272	3.650	3.651	10.79				
26	bis(2-Chloroethoxy)methane	50.984	2.0	621123	0.427	0.418	3.742	3.742	7.25				
27	Benzoic Acid	43.061	-13.9	264015	0.181	0.176	3.800	3.786	28.76	-0.0205	0.2296		0.9982
28	2,4-Dichlorophenol	46.062	-7.9	355713	0.244	0.229	3.808	3.811	20.44	-0.0085	0.2726		0.9988
29	1,2,4-Trichlorobenzene	49.381	-1.2	400968	0.275	0.279	3.875	3.877	6.15				
30	Naphthalene	48.940	-2.1	1410377	0.969	0.990	3.942	3.944	5.13				
31	4-Chloroaniline	49.630	-0.7	599515	0.412	0.415	4.017	4.020	11.75				
32	Hexachlorobutadiene	55.591	11.2	208828	0.143	0.129	4.067	4.065	9.63				
33	4-Chloro-3-methylphenol	44.834	-10.3	354723	0.244	0.243	4.500	4.501	15.70	-0.0069	0.2779		0.9989
34	2-Methylnaphthalene	48.862	-2.3	810928	0.557	0.570	4.600	4.605	6.19				
35	1-Methylnaphthalene	52.830	5.7	836156	0.574	0.544	4.700	4.695	4.95				
36	Acenaphthene-d10	40.000	0	475435	1	1	5.608	5.609	0				
37	Hexachlorocyclopentadiene	51.227	2.5	215198	0.362	0.290	4.750	4.752	35.25	-0.0145	0.3009	0.0499	0.9998
38	2,4,6-Trichlorophenol	48.063	-3.9	211297	0.356	0.323	4.892	4.891	22.27	-0.0110	0.3790		0.9994
39	2,4,5-Trichlorophenol	44.867	-10.3	219135	0.369	0.344	4.917	4.919	25.65	-0.0159	0.4251		0.9988
40	2-Fluorobiphenyl												
41	2-Chloronaphthalene	51.050	2.1	716992	1.206	1.182	5.067	5.070	8.72				
42	2-Nitroaniline	50.472	0.9	185728	0.313	0.310	5.200	5.200	12.42				
43	Dimethylphthalate	48.000	-4.0	719597	1.211	1.261	5.400	5.400	7.78				
44	2,6-Dinitrotoluene	45.590	-8.8	171917	0.289	0.280	5.450	5.450	21.57	-0.0087	0.3249		0.9950
45	Acenaphthylene	46.587	-6.8	1110057	1.868	2.005	5.467	5.469	6.51				
46	3-Nitroaniline	47.257	-5.5	237438	0.400	0.374	5.608	5.608	19.96	-0.0114	0.4324		0.9959
47	Acenaphthene	46.262	-7.5	616800	1.038	1.122	5.642	5.643	3.97				
48	2,4-Dinitrophenol	40.443	-19.1	90542	0.152	0.147	5.708	5.717	44.39	-0.0257	0.2138		0.9972
49	4-Nitrophenol	47.892	-4.2	69278	0.117	0.122	5.808	5.813	14.13				
50	Dibenzofuran	49.514	-1.0	962868	1.620	1.636	5.817	5.817	6.39				
51	2,4-Dinitrotoluene	45.584	-8.8	230585	0.388	0.366	5.842	5.843	25.14	-0.0140	0.4379		0.9956
52	2,3,4,6-Tetrachlorophenol	42.493	-15.0	119035	0.200	0.203	5.950	5.948	22.52	-0.0080	0.2432		0.9980
53	Diethylphthalate	46.507	-7.0	730942	1.230	1.322	6.100	6.100	7.07				
54	Fluorene	46.315	-7.4	662007	1.114	1.203	6.150	6.151	4.98				
55	4-Chlorophenyl-phenylether	48.090	-3.8	303838	0.511	0.532	6.175	6.175	6.54				
56	4-Nitroaniline	44.892	-10.2	213997	0.360	0.336	6.208	6.211	30.43	-0.0155	0.4148		0.9987
57	4,6-Dinitro-2-methylphenol	43.028	-13.9	115256	0.194	0.188	6.233	6.239	32.47	-0.0219	0.2457		0.9983
58	N-Nitrosodiphenylamine	47.733	-4.5	448019	0.754	0.790	6.300	6.301	10.83				
59	Azobenzene	47.369	-5.3	877963	1.477	1.559	6.333	6.334	4.67				
60	2,4,6-Tribromophenol												
61	Phenanthrene-d10	40.000	0	639302	1	1	7.108	7.107	0				
62	4-Bromophenyl-phenylether	47.272	-5.5	185994	0.233	0.239	6.658	6.661	16.22	-0.0016	0.2475		0.9976
63	Hexachlorobenzene	50.261	0.5	263440	0.330	0.328	6.692	6.693	7.69				
64	Pentachlorophenol	45.716	-8.6	161435	0.202	0.189	6.925	6.923	20.22	-0.0076	0.2276		0.9975
65	Phenanthrene	46.722	-6.6	884057	1.106	1.184	7.133	7.135	2.18				
66	Anthracene	46.398	-7.2	877442	1.098	1.183	7.183	7.185	4.38				
67	Carbazole	50.280	0.6	862526	1.079	1.073	7.375	7.374	7.65				
68	Di-n-butylphthalate	49.169	-1.7	1226044	1.534	1.560	7.775	7.774	6.97				
69	Fluoranthene	48.799	-2.4	808003	1.011	1.036	8.300	8.294	3.65				
70	Chrysene-d12	40.000	0	455183	1	1	9.583	9.577	0				
71	Benzidine												
72	Pyrene	48.647	-2.7	830885	1.460	1.501	8.500	8.500	6.75				
73	Terphenyl-d14												
74	Butylbenzylphthalate	43.216	-13.6	450369	0.792	0.786	9.150	9.144	22.44	-0.0312	0.9446		0.9989
75	3,3'-Dichlorobenzidine	49.161	-1.7	261231	0.459	0.394	9.575	9.573	24.05	-0.0170	0.4808		0.9988
76	Benzo(a)anthracene	49.268	-1.5	681844	1.198	1.216	9.575	9.569	2.48				
77	Chrysene	45.592	-8.8	599636	1.054	1.156	9.600	9.601	4.44				
78	bis(2-Ethylhexyl)phthalate	44.059	-11.9	657303	1.155	1.152	9.658	9.652	17.38	-0.0380	1.3455		0.9992
79	Perylene-d12	40.000	0	410484	1	1	10.725	10.717	0				
80	Di-n-octylphthalate	45.729	-8.5	1150445	2.242	2.052	10.183	10.177	22.51	-0.0946	2.5343		0.9974
81	Benzo(b)fluoranthene	48.574	-2.9	638876	1.245	1.282	10.442	10.431	11.41				
82	Benzo(k)fluoranthene	47.372	-5.3	559744	1.091	1.151	10.458	10.454	9.06				
83	Benzo(a)pyrene	50.618	1.2	624201	1.217	1.202	10.683	10.671	7.93				
84	Indeno(1,2,3-cd)pyrene	49.269	-1.5	742664	1.447	1.309	11.475	11.450	15.16	-0.0373	1.4991		0.9992
85	Dibenzo(a,h)anthracene	51.348	2.7	607480	1.184	1.003	11.483	11.462	17.56	-0.0347	1.1799		0.9987
86	Benzo(g,h,i)perylene	55.269	10.5	673568	1.313	1.188	11.650	11.623	10.05				

7-17-08

DAILY CALIBRATIONS

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGG207
Instrument ID: T-0E2

Project: LMC BEAUMONT SITE 1
SDG No.: 08G188
DFTPP Injection Date: 07/22/08
DFTPP Injection Time: 11:24

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	30.08
68	Less than 2% of mass 69	0.39(1.3)1
69	Relative abundance of mass 198	30.21
70	Less than 2.0% of mass 69	0.08(0.3)1
127	40.0 - 60.0% of mass 198	47.01
197	Less than 1.0% of mass 198	0.21
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.76
275	10.0 - 30.0% of mass 198	26.38
365	Greater than 1.00% of mass 198	3.49
441	Present, but less than mass 443	15.10
442	Greater than 40.0% of mass 198	95.42
443	17.0 - 23.0% of mass 442	17.58(18.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	CSVE2F3010	RGG208	07/22/08	11:35
2	MBLK1S	SVG035SB	RGG211	07/22/08	12:43
3	H-T1-0.5	G188-02	RGG217	07/22/08	14:40
4	H-T1-7.0	G188-04	RGG218	07/22/08	15:00
5	H-T1-11	G188-05	RGG219	07/22/08	15:19
6	H-T2-0.5	G188-06	RGG220	07/22/08	15:39
7	H-T2-2.5	G188-07	RGG221	07/22/08	15:59
8	H-T2-10	G188-10	RGG222	07/22/08	16:18
9	H-T2-10DUP	G188-11	RGG223	07/22/08	16:38
10	H-T3-0.5	G188-12	RGG224	07/22/08	16:57
11	H-T3-5.0	G188-14	RGG225	07/22/08	17:17
12	H-T3-10.0	G188-15	RGG226	07/22/08	17:37
13	H-T4-0.5	G188-16	RGG227	07/22/08	17:56
14	H-T4-2.0	G188-17	RGG228	07/22/08	18:16
15	H-T6-0.5	G188-18	RGG229	07/22/08	18:35
16	H-T6-0.5DUP	G188-19	RGG230	07/22/08	18:55
17	H-T6-5.0	G188-21	RGG231	07/22/08	19:15
18	H-T6-10	G188-22	RGG232	07/22/08	19:34

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG137
Instrument ID: T-0E2

Project:LMC BEAUMONT SITE 1
SDG No.: 08G188
Date Analyzed: 06/30/08
Time Analyzed: 12:24

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	242978	2.95	915325	4.18	481654	6.20
	UPPER LIMIT	485956	3.45	1830650	4.68	963308	6.70
	LOWER LIMIT	121489	2.45	457663	3.68	240827	5.70
	SAMPLE ID						
1	SSTD050	221320	2.95	837075	4.17	456019	6.20
2	MBLK1S	223468	2.94	745663	4.17	410968	6.19
3	H-T1-0.5	242746	2.95	780151	4.17	432491	6.20
4	H-T1-7.0	242819	2.95	782659	4.17	436336	6.20
5	H-T1-11	206849	2.95	799552	4.17	445436	6.19
6	H-T2-0.5	207011	2.95	788008	4.17	443251	6.19
7	H-T2-2.5	245362	2.95	788783	4.17	437970	6.20
8	H-T2-10	238707	2.95	808984	4.17	443948	6.19
9	H-T2-10DUP	258661	2.95	806148	4.17	444486	6.19
10	H-T3-0.5	258266	2.95	836491	4.17	460963	6.19
11	H-T3-5.0	208926	2.95	799010	4.17	449022	6.20
12	H-T3-10.0	232352	2.95	789679	4.17	438963	6.20
13	H-T4-0.5	235717	2.95	800890	4.17	447699	6.19
14	H-T4-2.0	206565	2.95	781956	4.17	432187	6.19
15	H-T6-0.5	201492	2.95	781765	4.17	434334	6.19
16	H-T6-0.5DUP	216870	2.95	840201	4.17	470075	6.19
17	H-T6-5.0	209311	2.95	797752	4.17	445499	6.19
18	H-T6-10	233481	2.95	774298	4.17	431020	6.19

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG137
Instrument ID: T-OE2

Project:LMC BEAUMONT SITE 1
SDG No.: 08G188
Date Analyzed: 06/30/08
Time Analyzed: 12:24

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	840051		7.94		765923		10.73		679066		12.15	
	UPPER LIMIT	1680102		8.44		1531846		11.23		1358132		12.65	
	LOWER LIMIT	420026		7.44		382962		10.23		339533		11.65	
	SAMPLE ID												
1	SSTD050	808186		7.94		737934		10.73		676718		12.15	
2	MBLK1S	725418		7.93		685752		10.73		633225		12.15	
3	H-T1-0.5	764608		7.93		703702		10.72		623286		12.14	
4	H-T1-7.0	767339		7.93		708309		10.72		628544		12.14	
5	H-T1-11	781881		7.93		720909		10.72		634130		12.14	
6	H-T2-0.5	781002		7.93		713375		10.72		628406		12.14	
7	H-T2-2.5	768542		7.93		710760		10.72		633220		12.14	
8	H-T2-10	790082		7.94		732951		10.72		648288		12.14	
9	H-T2-10DUP	784950		7.93		719701		10.72		639552		12.14	
10	H-T3-0.5	807723		7.93		744767		10.71		652046		12.13	
11	H-T3-5.0	791044		7.93		749632		10.72		684669		12.13	
12	H-T3-10.0	767708		7.93		714209		10.72		641795		12.14	
13	H-T4-0.5	792380		7.93		728572		10.72		651167		12.13	
14	H-T4-2.0	759393		7.93		695878		10.72		608142		12.13	
15	H-T6-0.5	765642		7.93		709969		10.72		626386		12.13	
16	H-T6-0.5DUP	831487		7.94		759267		10.71		681402		12.13	
17	H-T6-5.0	785442		7.94		729142		10.71		646927		12.13	
18	H-T6-10	752545		7.94		712974		10.71		632386		12.13	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

Data File : D:\Data\08G22\RGG208.D
Acq On : 22 Jul 2008 11:35
Sample : CSVE2F30$10 SW 8/5/08
Misc :
Integrator: RTE
Quant Time: Jul 22 12:04:43 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	91	0.00
2	T	N-nitrosodimethylamine	50.000	48.285	3.4	85	0.00
3	T	Pyridine	50.000	52.488	-5.0	89	0.00
4	S	2-Fluorophenol	50.000	52.550	-5.1	94	0.00
5	S	Phenol-d5	50.000	54.545	-9.1	96	0.00
6	C	Phenol	50.000	51.451	-2.9	92	0.00
7	T	Aniline	50.000	48.376	3.2	87	0.00
8	T	bis(2-chloroethyl) ether	50.000	48.769	2.5	91	0.00
9	T	2-Chlorophenol	50.000	49.919	0.2	90	0.00
10	T	1,3-Dichlorobenzene	50.000	49.214	1.6	91	0.00
11	S	1,2-Dichlorobenzene-d4	50.000	50.574	-1.1	93	0.00
12	C	1,4-Dichlorobenzene	50.000	55.476	-11.0	94	0.00
13	T	Benzyl alcohol	50.000	51.810	-3.6	91	0.00
14	T	1,2-Dichlorobenzene	50.000	49.810	0.4	92	0.00
15	T	2-Methylphenol	50.000	52.562	-5.1	93	0.00
16	T	bis(2-chloroisopropyl)ether	50.000	36.142	27.7#	68	0.00
17	T	4-Methylphenol	50.000	52.942	-5.9	94	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	47.183	5.6	82	0.00
19	T	Hexachloroethane	50.000	49.567	0.9	88	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	91	0.00
21	S	Nitrobenzene-d5	50.000	52.532	-5.1	91	0.00
22	T	Nitrobenzene	50.000	48.874	2.3	89	0.00
23	T	Isophorone	50.000	50.972	-1.9	90	0.00
24	C	2-Nitrophenol	50.000	56.012	-12.0	94	0.00
25	T	2,4-Dimethylphenol	50.000	51.624	-3.2	92	0.00
26	T	Benzoic acid	50.000	21.861	56.3#	35	-0.04
27	T	bis(2-Chloroethoxy)methane	50.000	50.785	-1.6	92	0.00
28	C	2,4-Dichlorophenol	50.000	54.583	-9.2	93	0.00
29	T	1,2,4-Trichlorobenzene	50.000	51.382	-2.8	94	-0.01
30	T	Naphthalene	50.000	49.391	1.2	90	0.00
31	T	4-Chloroaniline	50.000	52.220	-4.4	91	0.00
32	C	Hexachlorobutadiene	50.000	50.162	-0.3	91	0.00
33	C	4-Chloro-3-methylphenol	50.000	54.328	-8.7	93	0.00
34	T	2-Methylnaphthalene	50.000	51.605	-3.2	92	-0.01
35	T	1-Methylnaphthalene	50.000	50.976	-2.0	92	-0.01
36	I	Acenaphthene-d10	40.000	40.000	0.0	95	0.00
37	P	Hexachlorocyclopentadiene	50.000	39.735	20.5#	75	0.00
38	C	2,4,6-Trichlorophenol	50.000	55.188	-10.4	96	0.00
39	T	2,4,5-Trichlorophenol	50.000	56.236	-12.5	96	0.00
40	S	2-Fluorobiphenyl	50.000	50.777	-1.6	94	0.00
41	T	2-Chloronaphthalene	50.000	50.362	-0.7	96	0.00
42	T	2-Nitroaniline	50.000	51.859	-3.7	88	0.00
43	T	Dimethylphthalate	50.000	50.923	-1.8	94	0.00
44	T	2,6-Dinitrotoluene	50.000	56.747	-13.5	96	0.00
45	T	Acenaphthylene	50.000	50.285	-0.6	92	0.00
46	T	3-Nitroaniline	50.000	49.544	0.9	93	0.00
47	C	Acenaphthene	50.000	49.341	1.3	93	0.00
48	P	2,4-Dinitrophenol	50.000	32.134	35.7#	59	0.00
49	P	4-Nitrophenol	50.000	43.975	12.0	84	0.00

Data File : D:\Data\08G22\RGG208.D
Acq On : 22 Jul 2008 11:35
Sample : CSVE2F30/10 SM 8/5/08
Misc :
Integrator: RTE
Quant Time: Jul 22 12:04:43 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
50	T	2,4-Dinitrotoluene	50.000	50.609	-1.2	95	0.00
51	T	Dibenzofuran	50.000	50.254	-0.5	94	-0.01
52	T	2,3,4,6-Tetrachlorophenol	50.000	50.243	-0.5	94	0.00
53	T	Diethylphthalate	50.000	51.845	-3.7	95	0.00
54	T	Fluorene	50.000	53.622	-7.2	93	0.00
55	T	4-Chlorophenyl-phenylether	50.000	54.238	-8.5	95	0.00
56	T	4-Nitroaniline	50.000	56.845	-13.7	96	0.00
57	I	Phenanthrene-d10	40.000	40.000	0.0	96	0.00
58	T	4,6-Dinitro-2-methylphenol	50.000	37.105	25.8#	72	0.00
59	C	N-Nitrosodiphenylamine	50.000	52.015	-4.0	98	0.00
60	T	Azobenzene	50.000	47.104	5.8	88	0.00
61	S	2,4,6-Tribromophenol	50.000	57.376	-14.8	104	0.00
62	T	4-Bromophenyl-phenylether	50.000	50.446	-0.9	94	0.00
63	T	Hexachlorobenzene	50.000	50.876	-1.8	97	0.00
64	C	Pentachlorophenol	50.000	50.564	-1.1	99	0.00
65	T	Phenanthrene	50.000	49.857	0.3	97	0.00
66	T	Anthracene	50.000	49.986	0.0	95	0.00
67	T	Carbazole	50.000	52.796	-5.6	103	0.00
68	T	Di-n-butylphthalate	50.000	51.844	-3.7	95	0.00
69	C	Fluoranthene	50.000	56.698	-13.4	111	0.00
70	I	Chrysene-d12	40.000	40.000	0.0	96	0.00
71	T	Benzidine	-1.000	0.000	0.0	0	0.00
72	T	Pyrene	50.000	50.776	-1.6	95	0.00
73	S	Terphenyl-d14	50.000	56.523	-13.0	105	0.00
74	T	Butylbenzylphthalate	50.000	54.797	-9.6	97	0.00
75		3,3'-Dichlorobenzidine	50.000	54.121	-8.2	101	0.00
76	T	Benzo(a)anthracene	50.000	49.803	0.4	96	0.02
77	T	bis(2-Ethylhexyl)phthalate	50.000	52.500	-5.0	93	0.00
78	T	Chrysene	50.000	50.591	-1.2	98	0.00
79	I	Perylene-d12	40.000	40.000	0.0	100	0.00
80	C	Di-n-octylphthalate	50.000	54.416	-8.8	96	0.00
81	T	Benzo(b)fluoranthene	50.000	51.924	-3.8	98	0.05
82	T	Benzo(k)fluoranthene	50.000	51.286	-2.6	97	0.00
83	C	Benzo(a)pyrene	50.000	51.124	-2.2	98	0.00
84	T	Indeno(1,2,3-cd)pyrene	50.000	53.494	-7.0	102	0.00
85	T	Dibenzo(a,h)anthracene	50.000	60.571	-21.1#	115	0.00
86	T	Benzo(g,h,i)perylene	50.000	51.738	-3.5	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : D:\Data\08G22\RGG208.D
Acq On : 22 Jul 2008 11:35
Sample : CSVE2F30/10 5u 8/5/08
Misc :
Integrator: RTE
Quant Time: Jul 22 12:04:43 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	91	0.00
2	T	N-nitrosodimethylamine	0.504	0.487	3.4	85	0.00
3	T	Pyridine	0.950	0.997	-4.9	89	0.00
4	S	2-Fluorophenol	1.091	1.146	-5.0	94	0.00
5	S	Phenol-d5	1.226	1.338	-9.1	96	0.00
6	C	Phenol	1.289	1.327	-2.9	92	0.00
7	T	Aniline	1.444	1.397	3.3	87	0.00
8	T	bis(2-chloroethyl) ether	0.937	0.914	2.5	91	0.00
9	T	2-Chlorophenol	1.467	1.464	0.2	90	0.00
10	T	1,3-Dichlorobenzene	1.547	1.523	1.6	91	0.00
11	S	1,2-Dichlorobenzene-d4	0.937	0.948	-1.2	93	0.00
12	C	1,4-Dichlorobenzene	1.665	1.847	-10.9	94	0.00
13	T	Benzyl alcohol	0.738	0.765	-3.7	91	0.00
14	T	1,2-Dichlorobenzene	1.493	1.488	0.3	92	0.00
15	T	2-Methylphenol	0.911	0.957	-5.0	93	0.00
16	T	bis(2-chloroisopropyl)ether	2.015	1.456	27.7#	68	0.00
17	T	4-Methylphenol	1.360	1.440	-5.9	94	0.00
18	P	N-Nitroso-di-n-propylamine	0.528	0.498	5.7	82	0.00
19	T	Hexachloroethane	0.559	0.555	0.7	88	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	91	0.00
21	S	Nitrobenzene-d5	0.248	0.260	-4.8	91	0.00
22	T	Nitrobenzene	0.253	0.247	2.4	89	0.00
23	T	Isophorone	0.405	0.413	-2.0	90	0.00
24	C	2-Nitrophenol	0.175	0.196	-12.0	94	0.00
25	T	2,4-Dimethylphenol	0.293	0.302	-3.1	92	0.00
26	T	Benzoic acid	0.163	0.081	50.3#	35#	-0.04
27	T	bis(2-Chloroethoxy)methane	0.323	0.328	-1.5	92	0.00
28	C	2,4-Dichlorophenol	0.280	0.305	-8.9	93	0.00
29	T	1,2,4-Trichlorobenzene	0.327	0.336	-2.8	94	-0.01
30	T	Naphthalene	1.056	1.044	1.1	90	0.00
31	T	4-Chloroaniline	0.410	0.428	-4.4	91	0.00
32	C	Hexachlorobutadiene	0.187	0.188	-0.5	91	0.00
33	C	4-Chloro-3-methylphenol	0.241	0.261	-8.3	93	0.00
34	T	2-Methylnaphthalene	0.687	0.709	-3.2	92	-0.01
35	T	1-Methylnaphthalene	0.654	0.667	-2.0	92	-0.01
36	I	Acenaphthene-d10	1.000	1.000	0.0	95	0.00
37	P	Hexachlorocyclopentadiene	0.308	0.313	-1.6	75	0.00
38	C	2,4,6-Trichlorophenol	0.372	0.411	-10.5	96	0.00
39	T	2,4,5-Trichlorophenol	0.396	0.445	-12.4	96	0.00
40	S	2-Fluorobiphenyl	1.399	1.420	-1.5	94	0.00
41	T	2-Chloronaphthalene	1.249	1.259	-0.8	96	0.00
42	T	2-Nitroaniline	0.242	0.251	-3.7	88	0.00
43	T	Dimethylphthalate	1.396	1.422	-1.9	94	0.00
44	T	2,6-Dinitrotoluene	0.273	0.310	-13.6	96	0.00
45	T	Acenaphthylene	2.034	2.045	-0.5	92	0.00
46	T	3-Nitroaniline	0.322	0.360	-11.8	93	0.00
47	C	Acenaphthene	1.355	1.337	1.3	93	0.00
48	P	2,4-Dinitrophenol	0.122	0.096	21.3#	59	0.00
49	P	4-Nitrophenol	0.134	0.138	-3.0	84	0.00

Data File : D:\Data\08G22\RGG208.D
Acq On : 22 Jul 2008 11:35
Sample : CSVE2F30$10 SM 8/5/08
Misc :
Integrator: RTE
Quant Time: Jul 22 12:04:43 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
50	T	2,4-Dinitrotoluene	0.357	0.414	-16.0	95	0.00
51	T	Dibenzofuran	1.785	1.794	-0.5	94	-0.01
52	T	2,3,4,6-Tetrachlorophenol	0.227	0.265	-16.7	94	0.00
53	T	Diethylphthalate	1.539	1.595	-3.6	95	0.00
54	T	Fluorene	1.428	1.531	-7.2	93	0.00
55	T	4-Chlorophenyl-phenylether	0.658	0.714	-8.5	95	0.00
56	T	4-Nitroaniline	0.327	0.385	-17.7	96	0.00
57	I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00
58	T	4,6-Dinitro-2-methylphenol	0.111	0.102	8.1	72	0.00
59	C	N-Nitrosodiphenylamine	0.538	0.559	-3.9	98	0.00
60	T	Azobenzene	0.577	0.544	5.7	88	0.00
61	S	2,4,6-Tribromophenol	0.118	0.135	-14.4	104	0.00
62	T	4-Bromophenyl-phenylether	0.233	0.235	-0.9	94	0.00
63	T	Hexachlorobenzene	0.262	0.267	-1.9	97	0.00
64	C	Pentachlorophenol	0.164	0.205	-25.0#	99	0.00
65	T	Phenanthrene	1.215	1.211	0.3	97	0.00
66	T	Anthracene	1.202	1.202	0.0	95	0.00
67	T	Carbazole	1.058	1.118	-5.7	103	0.00
68	T	Di-n-butylphthalate	1.381	1.432	-3.7	95	0.00
69	C	Fluoranthene	1.310	1.486	-13.4	111	0.00
70	I	Chrysene-d12	1.000	1.000	0.0	96	0.00
71	T	Benzidine	0.000	0.000#	0.0	0#	0.00
72	T	Pyrene	1.408	1.430	-1.6	95	0.00
73	S	Terphenyl-d14	0.823	0.930	-13.0	105	0.00
74	T	Butylbenzylphthalate	0.627	0.687	-9.6	97	0.00
75		3,3'-Dichlorobenzidine	0.456	0.493	-8.1	101	0.00
76	T	Benzo(a)anthracene	1.358	1.353	0.4	96	0.02
77	T	bis(2-Ethylhexyl)phthalate	0.978	1.027	-5.0	93	0.00
78	T	Chrysene	1.253	1.268	-1.2	98	0.00
79	I	Perylene-d12	1.000	1.000	0.0	100	0.00
80	C	Di-n-octylphthalate	1.752	1.906	-8.8	96	0.00
81	T	Benzo(b)fluoranthene	1.349	1.401	-3.9	98	0.05
82	T	Benzo(k)fluoranthene	1.383	1.419	-2.6	97	0.00
83	C	Benzo(a)pyrene	1.349	1.379	-2.2	98	0.00
84	T	Indeno(1,2,3-cd)pyrene	1.574	1.684	-7.0	102	0.00
85	T	Dibenzo(a,h)anthracene	1.144	1.386	-21.2#	115	0.00
86	T	Benzo(g,h,i)perylene	1.349	1.395	-3.4	99	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGG234
Instrument ID: T-OE2

Project: LMC BEAUMONT SITE 1
SDG No.: 08G188
DFTPP Injection Date: 07/23/08
DFTPP Injection Time: 15:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.97
68	Less than 2% of mass 69	0.34(1.0)1
69	Relative abundance of mass 198	34.21
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	51.93
197	Less than 1.0% of mass 198	0.36
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.04
275	10.0 - 30.0% of mass 198	25.00
365	Greater than 1.00% of mass 198	3.36
441	Present, but less than mass 443	15.01
442	Greater than 40.0% of mass 198	83.64
443	17.0 - 23.0% of mass 442	17.03(20.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	CSVE2F3011	RGG235	07/23/08	15:47
2	MBLK1W	SVG033WB	RGG238	07/23/08	16:47
3	LCS1W	SVG033WL	RGG239	07/23/08	17:07
4	LCD1W	SVG033WC	RGG240	07/23/08	17:27
5	H-EB7172008	G188-01	RGG248	07/23/08	20:03

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG137
Instrument ID: T-0E2

Project:LMC BEAUMONT SITE 1
SDG No.: 08G188
Date Analyzed: 06/30/08
Time Analyzed: 12:24

	IS1(DCB) AREA #	IS1(DCB) RT #	IS2(NPT) AREA #	IS2(NPT) RT #	IS3(ANT) AREA #	IS3(ANT) RT #
12 HOUR STD	242978	2.95	915325	4.18	481654	6.20
UPPER LIMIT	485956	3.45	1830650	4.68	963308	6.70
LOWER LIMIT	121489	2.45	457663	3.68	240827	5.70
SAMPLE ID						
1 SSTD050	208600	2.95	798013	4.17	411962	6.20
2 MBLK1W	174312	2.94	659597	4.17	340842	6.19
3 LCS1W	201953	2.94	702434	4.17	359465	6.19
4 LCD1W	147230	2.94	579304	4.17	290581	6.19
5 H-EB7172008	239503	2.94	796896	4.17	405130	6.19

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG137
Instrument ID: T-OE2

Project:LMC BEAUMONT SITE 1
SDG No.: 08G188
Date Analyzed: 06/30/08
Time Analyzed: 12:24

		IS4(PHN)		IS5(CRY)		IS6(PRY)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	840051	7.94	765923	10.73	679066	12.15
	UPPER LIMIT	1680102	8.44	1531846	11.23	1358132	12.65
	LOWER LIMIT	420026	7.44	382962	10.23	339533	11.65
	SAMPLE ID						
1	SSTD050	738216	7.94	643948	10.73	579697	12.14
2	MBLK1W	591074	7.93	611814	10.72	627839	12.13
3	LCS1W	616679	7.93	616110	10.72	634309	12.14
4	LCD1W	513474	7.93	517612	10.72	533341	12.13
5	H-EB7172008	702153	7.93	731470	10.71	748663	12.13

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

Data File : D:\Data\08G23\RGG235.D
Acq On : 23 Jul 2008 15:47
Sample : CSVE2F3011
Misc :
Integrator: RTE
Quant Time: Jul 23 16:04:00 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	86	0.00
2	T	N-nitrosodimethylamine	50.000	49.270	1.5	82	0.00
3	T	Pyridine	50.000	50.267	-0.5	80	0.00
4	S	2-Fluorophenol	50.000	51.203	-2.4	86	0.00
5	S	Phenol-d5	50.000	51.992	-4.0	86	0.00
6	C	Phenol	50.000	50.123	-0.2	84	0.00
7	T	Aniline	50.000	46.912	6.2	79	0.00
8	T	bis(2-chloroethyl) ether	50.000	47.911	4.2	85	0.00
9	T	2-Chlorophenol	50.000	51.140	-2.3	87	0.00
10	T	1,3-Dichlorobenzene	50.000	49.332	1.3	86	0.00
11	S	1,2-Dichlorobenzene-d4	50.000	50.270	-0.5	87	0.00
12	C	1,4-Dichlorobenzene	50.000	55.389	-10.8	89	0.00
13	T	Benzyl alcohol	50.000	50.837	-1.7	85	0.00
14	T	1,2-Dichlorobenzene	50.000	50.903	-1.8	88	-0.01
15	T	2-Methylphenol	50.000	51.064	-2.1	85	0.00
16	T	bis(2-chloroisopropyl)ether	50.000	45.621	8.8	81	0.00
17	T	4-Methylphenol	50.000	51.648	-3.3	86	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	50.022	-0.0	82	-0.01
19	T	Hexachloroethane	50.000	49.990	0.0	84	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	87	0.00
21	S	Nitrobenzene-d5	50.000	51.735	-3.5	85	0.00
22	T	Nitrobenzene	50.000	50.461	-0.9	88	0.00
23	T	Isophorone	50.000	50.451	-0.9	85	0.00
24	C	2-Nitrophenol	50.000	55.019	-10.0	88	0.00
25	T	2,4-Dimethylphenol	50.000	50.613	-1.2	86	0.00
26	T	Benzoic acid	50.000	34.518	31.0#	59	-0.02
27	T	bis(2-Chloroethoxy)methane	50.000	53.926	-7.9	93	0.00
28	C	2,4-Dichlorophenol	50.000	53.273	-6.5	86	0.00
29	T	1,2,4-Trichlorobenzene	50.000	49.717	0.6	87	0.00
30	T	Naphthalene	50.000	49.827	0.3	86	0.00
31	T	4-Chloroaniline	50.000	52.317	-4.6	87	0.00
32	C	Hexachlorobutadiene	50.000	48.724	2.6	85	0.00
33	C	4-Chloro-3-methylphenol	50.000	53.087	-6.2	86	0.00
34	T	2-Methylnaphthalene	50.000	51.079	-2.2	87	0.00
35	T	1-Methylnaphthalene	50.000	50.028	-0.1	86	0.00
36	I	Acenaphthene-d10	40.000	40.000	0.0	86	0.00
37	P	Hexachlorocyclopentadiene	50.000	41.425	17.2	71	0.00
38	C	2,4,6-Trichlorophenol	50.000	54.765	-9.5	86	0.00
39	T	2,4,5-Trichlorophenol	50.000	55.042	-10.1	85	0.00
40	S	2-Fluorobiphenyl	50.000	51.853	-3.7	87	0.00
41	T	2-Chloronaphthalene	50.000	50.859	-1.7	88	0.00
42	T	2-Nitroaniline	50.000	56.153	-12.3	86	0.00
43	T	Dimethylphthalate	50.000	52.552	-5.1	87	0.00
44	T	2,6-Dinitrotoluene	50.000	57.990	-16.0	89	0.00
45	T	Acenaphthylene	50.000	52.417	-4.8	87	0.00
46	T	3-Nitroaniline	50.000	51.397	-2.8	87	0.00
47	C	Acenaphthene	50.000	51.556	-3.1	88	0.00
48	P	2,4-Dinitrophenol	50.000	45.845	8.3	80	0.00
49	P	4-Nitrophenol	50.000	47.282	5.4	82	0.00

Data File : D:\Data\08G23\RGG235.D
Acq On : 23 Jul 2008 15:47
Sample : CSVE2F3011
Misc :
Integrator: RTE
Quant Time: Jul 23 16:04:00 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
50	T	2,4-Dinitrotoluene	50.000	51.751	-3.5	88	0.00
51	T	Dibenzofuran	50.000	51.457	-2.9	87	0.00
52	T	2,3,4,6-Tetrachlorophenol	50.000	52.096	-4.2	88	0.00
53	T	Diethylphthalate	50.000	54.591	-9.2	90	0.00
54	T	Fluorene	50.000	55.188	-10.4	87	0.00
55	T	4-Chlorophenyl-phenylether	50.000	54.534	-9.1	86	0.00
56	T	4-Nitroaniline	50.000	58.952	-17.9	89	0.00
57	I	Phenanthrene-d10	40.000	40.000	0.0	88	0.00
58	T	4,6-Dinitro-2-methylphenol	50.000	45.740	8.5	82	0.00
59	C	N-Nitrosodiphenylamine	50.000	51.731	-3.5	89	0.00
60	T	Azobenzene	50.000	51.536	-3.1	88	0.00
61	S	2,4,6-Tribromophenol	50.000	52.317	-4.6	87	0.00
62	T	4-Bromophenyl-phenylether	50.000	49.356	1.3	84	0.00
63	T	Hexachlorobenzene	50.000	49.198	1.6	85	0.00
64	C	Pentachlorophenol	50.000	50.141	-0.3	90	0.00
65	T	Phenanthrene	50.000	49.847	0.3	89	0.00
66	T	Anthracene	50.000	50.971	-1.9	89	0.00
67	T	Carbazole	50.000	52.040	-4.1	92	0.00
68	T	Di-n-butylphthalate	50.000	53.913	-7.8	90	0.00
69	C	Fluoranthene	50.000	57.758	-15.5	103	0.00
70	I	Chrysene-d12	40.000	40.000	0.0	84	0.00
71	T	Benzidine	-1.000	0.000	0.0	0	0.00
72	T	Pyrene	50.000	53.290	-6.6	87	0.00
73	S	Terphenyl-d14	50.000	58.054	-16.1	94	0.00
74	T	Butylbenzylphthalate	50.000	59.200	-18.4	91	-0.01
75		3,3'-Dichlorobenzidine	50.000	53.868	-7.7	88	0.00
76	T	Benzo(a)anthracene	50.000	50.065	-0.1	85	0.01
77	T	bis(2-Ethylhexyl)phthalate	50.000	58.093	-16.2	90	0.00
78	T	Chrysene	50.000	50.837	-1.7	86	0.00
79	I	Perylene-d12	40.000	40.000	0.0	85	0.00
80	C	Di-n-octylphthalate	50.000	59.730	-19.5	90	0.00
81	T	Benzo(b)fluoranthene	50.000	52.995	-6.0	86	0.05
82	T	Benzo(k)fluoranthene	50.000	51.294	-2.6	83	0.00
83	C	Benzo(a)pyrene	50.000	51.917	-3.8	85	0.00
84	T	Indeno(1,2,3-cd)pyrene	50.000	51.965	-3.9	85	0.00
85	T	Dibenzo(a,h)anthracene	50.000	57.615	-15.2	94	0.00
86	T	Benzo(g,h,i)perylene	50.000	50.142	-0.3	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

3054

Data File : D:\Data\08G23\RGG235.D
Acq On : 23 Jul 2008 15:47
Sample : CSVE2F3011
Misc :
Integrator: RTE
Quant Time: Jul 23 16:04:00 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	0.00
2	T	N-nitrosodimethylamine	0.504	0.497	1.4	82	0.00
3	T	Pyridine	0.950	0.955	-0.5	80	0.00
4	S	2-Fluorophenol	1.091	1.117	-2.4	86	0.00
5	S	Phenol-d5	1.226	1.275	-4.0	86	0.00
6	C	Phenol	1.289	1.292	-0.2	84	0.00
7	T	Aniline	1.444	1.355	6.2	79	0.00
8	T	bis(2-chloroethyl) ether	0.937	0.898	4.2	85	0.00
9	T	2-Chlorophenol	1.467	1.500	-2.2	87	0.00
10	T	1,3-Dichlorobenzene	1.547	1.527	1.3	86	0.00
11	S	1,2-Dichlorobenzene-d4	0.937	0.942	-0.5	87	0.00
12	C	1,4-Dichlorobenzene	1.665	1.844	-10.8	89	0.00
13	T	Benzyl alcohol	0.738	0.750	-1.6	85	0.00
14	T	1,2-Dichlorobenzene	1.493	1.520	-1.8	88	-0.01
15	T	2-Methylphenol	0.911	0.930	-2.1	85	0.00
16	T	bis(2-chloroisopropyl)ether	2.015	1.838	8.8	81	0.00
17	T	4-Methylphenol	1.360	1.405	-3.3	86	0.00
18	P	N-Nitroso-di-n-propylamine	0.528	0.528	0.0	82	-0.01
19	T	Hexachloroethane	0.559	0.559	0.0	84	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	87	0.00
21	S	Nitrobenzene-d5	0.248	0.257	-3.6	85	0.00
22	T	Nitrobenzene	0.253	0.255	-0.8	88	0.00
23	T	Isophorone	0.405	0.409	-1.0	85	0.00
24	C	2-Nitrophenol	0.175	0.192	-9.7	88	0.00
25	T	2,4-Dimethylphenol	0.293	0.296	-1.0	86	0.00
26	T	Benzoic acid	0.163	0.141	13.5	59	-0.02
27	T	bis(2-Chloroethoxy)methane	0.323	0.348	-7.7	93	0.00
28	C	2,4-Dichlorophenol	0.280	0.298	-6.4	86	0.00
29	T	1,2,4-Trichlorobenzene	0.327	0.325	0.6	87	0.00
30	T	Naphthalene	1.056	1.053	0.3	86	0.00
31	T	4-Chloroaniline	0.410	0.429	-4.6	87	0.00
32	C	Hexachlorobutadiene	0.187	0.182	2.7	85	0.00
33	C	4-Chloro-3-methylphenol	0.241	0.255	-5.8	86	0.00
34	T	2-Methylnaphthalene	0.687	0.702	-2.2	87	0.00
35	T	1-Methylnaphthalene	0.654	0.654	0.0	86	0.00
36	I	Acenaphthene-d10	1.000	1.000	0.0	86	0.00
37	P	Hexachlorocyclopentadiene	0.308	0.326	-5.8	71	0.00
38	C	2,4,6-Trichlorophenol	0.372	0.408	-9.7	86	0.00
39	T	2,4,5-Trichlorophenol	0.396	0.436	-10.1	85	0.00
40	S	2-Fluorobiphenyl	1.399	1.451	-3.7	87	0.00
41	T	2-Chloronaphthalene	1.249	1.271	-1.8	88	0.00
42	T	2-Nitroaniline	0.242	0.272	-12.4	86	0.00
43	T	Dimethylphthalate	1.396	1.468	-5.2	87	0.00
44	T	2,6-Dinitrotoluene	0.273	0.316	-15.8	89	0.00
45	T	Acenaphthylene	2.034	2.132	-4.8	87	0.00
46	T	3-Nitroaniline	0.322	0.373	-15.8	87	0.00
47	C	Acenaphthene	1.355	1.397	-3.1	88	0.00
48	P	2,4-Dinitrophenol	0.122	0.145	-18.9	80	0.00
49	P	4-Nitrophenol	0.134	0.149	-11.2	82	0.00

Data File : D:\Data\08G23\RGG235.D
Acq On : 23 Jul 2008 15:47
Sample : CSVE2F3011
Misc :
Integrator: RTE
Quant Time: Jul 23 16:04:00 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
50	T	2,4-Dinitrotoluene	0.357	0.424	-18.8	88	0.00
51	T	Dibenzofuran	1.785	1.837	-2.9	87	0.00
52	T	2,3,4,6-Tetrachlorophenol	0.227	0.275	-21.1#	88	0.00
53	T	Diethylphthalate	1.539	1.680	-9.2	90	0.00
54	T	Fluorene	1.428	1.576	-10.4	87	0.00
55	T	4-Chlorophenyl-phenylether	0.658	0.717	-9.0	86	0.00
56	T	4-Nitroaniline	0.327	0.392	-19.9	89	0.00
57	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00
58	T	4,6-Dinitro-2-methylphenol	0.111	0.126	-13.5	82	0.00
59	C	N-Nitrosodiphenylamine	0.538	0.556	-3.3	89	0.00
60	T	Azobenzene	0.577	0.595	-3.1	88	0.00
61	S	2,4,6-Tribromophenol	0.118	0.123	-4.2	87	0.00
62	T	4-Bromophenyl-phenylether	0.233	0.230	1.3	84	0.00
63	T	Hexachlorobenzene	0.262	0.258	1.5	85	0.00
64	C	Pentachlorophenol	0.164	0.203	-23.8#	90	0.00
65	T	Phenanthrene	1.215	1.211	0.3	89	0.00
66	T	Anthracene	1.202	1.226	-2.0	89	0.00
67	T	Carbazole	1.058	1.102	-4.2	92	0.00
68	T	Di-n-butylphthalate	1.381	1.489	-7.8	90	0.00
69	C	Fluoranthene	1.310	1.514	-15.6	103	0.00
70	I	Chrysene-d12	1.000	1.000	0.0	84	0.00
71	T	Benzidine	0.000	0.000#	0.0	0#	0.00
72	T	Pyrene	1.408	1.501	-6.6	87	0.00
73	S	Terphenyl-d14	0.823	0.955	-16.0	94	0.00
74	T	Butylbenzylphthalate	0.627	0.742	-18.3	91	-0.01
75		3,3'-Dichlorobenzidine	0.456	0.491	-7.7	88	0.00
76	T	Benzo(a)anthracene	1.358	1.360	-0.1	85	0.01
77	T	bis(2-Ethylhexyl)phthalate	0.978	1.137	-16.3	90	0.00
78	T	Chrysene	1.253	1.274	-1.7	86	0.00
79	I	Perylene-d12	1.000	1.000	0.0	85	0.00
80	C	Di-n-octylphthalate	1.752	2.092	-19.4	90	0.00
81	T	Benzo(b)fluoranthene	1.349	1.429	-5.9	86	0.05
82	T	Benzo(k)fluoranthene	1.383	1.419	-2.6	83	0.00
83	C	Benzo(a)pyrene	1.349	1.401	-3.9	85	0.00
84	T	Indeno(1,2,3-cd)pyrene	1.574	1.635	-3.9	85	0.00
85	T	Dibenzo(a,h)anthracene	1.144	1.319	-15.3	94	0.00
86	T	Benzo(g,h,i)perylene	1.349	1.352	-0.2	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGG270
Instrument ID: T-0E2

Project: LMC BEAUMONT SITE 1
SDG No.: 08G188
DFTPP Injection Date: 07/25/08
DFTPP Injection Time: 16:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.70
68	Less than 2% of mass 69	0.00(0.0)1
69	Relative abundance of mass 198	33.76
70	Less than 2.0% of mass 69	0.20(0.6)1
127	40.0 - 60.0% of mass 198	49.98
197	Less than 1.0% of mass 198	0.82
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.55
275	10.0 - 30.0% of mass 198	24.19
365	Greater than 1.00% of mass 198	3.29
441	Present, but less than mass 443	13.46
442	Greater than 40.0% of mass 198	80.72
443	17.0 - 23.0% of mass 442	15.11(18.7)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	CSVE2F3012	RGG271	07/25/08	16:17
2	LCS1S	SVG035SX	RGG283	07/25/08	20:14
3	LCD1S	SVG035SY	RGG284	07/25/08	20:34

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG137
Instrument ID: T-OE2

Project:LMC BEAUMONT SITE 1
SDG No.: 08G188
Date Analyzed: 06/30/08
Time Analyzed: 12:24

		IS1(DCB)		IS2(NPT)		IS3(ANT)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	242978	2.95	915325	4.18	481654	6.20
	UPPER LIMIT	485956	3.45	1830650	4.68	963308	6.70
	LOWER LIMIT	121489	2.45	457663	3.68	240827	5.70
	SAMPLE ID						
1	SSTD050	194459	2.95	759836	4.17	404886	6.19
2	LCS1S	209208	2.94	808391	4.17	410856	6.19
3	LCD1S	212078	2.94	737877	4.17	384293	6.19

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG137
Instrument ID: T-OE2

Project:LMC BEAUMONT SITE 1
SDG No.: 08G188
Date Analyzed: 06/30/08
Time Analyzed: 12:24

	IS4(PHN) AREA #		RT #	IS5(CRY) AREA #		RT #	IS6(PRY) AREA #		RT #
	12 HOUR STD		840051	7.94		765923	10.73		679066	12.15	
	UPPER LIMIT		1680102	8.44		1531846	11.23		1358132	12.65	
	LOWER LIMIT		420026	7.44		382962	10.23		339533	11.65	
	SAMPLE ID										
1	SSTD050		706943	7.93		640325	10.72		593266	12.14	
2	LCS1S		711018	7.93		718548	10.72		735790	12.13	
3	LCD1S		661877	7.93		671554	10.72		711388	12.13	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

Data File : D:\Data\08G25\RGG271.D
Acq On : 25 Jul 2008 16:17
Sample : CSVE2F3012
Misc :
Integrator: RTE
Quant Time: Jul 25 16:31:54 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	80	0.00
2	T	N-nitrosodimethylamine	50.000	52.516	-5.0	81	0.00
3	T	Pyridine	50.000	52.352	-4.7	78	0.00
4	S	2-Fluorophenol	50.000	49.444	1.1	78	0.00
5	S	Phenol-d5	50.000	52.931	-5.9	82	0.00
6	C	Phenol	50.000	49.707	0.6	78	0.00
7	T	Aniline	50.000	46.645	6.7	74	0.00
8	T	bis(2-chloroethyl) ether	50.000	49.255	1.5	81	0.00
9	T	2-Chlorophenol	50.000	51.138	-2.3	81	0.00
10	T	1,3-Dichlorobenzene	50.000	49.896	0.2	81	0.00
11	S	1,2-Dichlorobenzene-d4	50.000	51.156	-2.3	83	0.00
12	C	1,4-Dichlorobenzene	50.000	57.921	-15.8	87	0.00
13	T	Benzyl alcohol	50.000	50.208	-0.4	78	0.00
14	T	1,2-Dichlorobenzene	50.000	50.028	-0.1	81	0.00
15	T	2-Methylphenol	50.000	52.223	-4.4	81	0.00
16	T	bis(2-chloroisopropyl)ether	50.000	50.029	-0.1	82	0.00
17	T	4-Methylphenol	50.000	51.974	-3.9	81	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	54.505	-9.0	84	0.00
19	T	Hexachloroethane	50.000	52.714	-5.4	83	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	83	0.00
21	S	Nitrobenzene-d5	50.000	54.571	-9.1	86	0.00
22	T	Nitrobenzene	50.000	53.156	-6.3	88	0.00
23	T	Isophorone	50.000	52.907	-5.8	84	0.00
24	C	2-Nitrophenol	50.000	55.221	-10.4	84	0.00
25	T	2,4-Dimethylphenol	50.000	51.052	-2.1	83	0.00
26	T	Benzoic acid	50.000	44.465	11.1	74	0.00
27	T	bis(2-Chloroethoxy)methane	50.000	48.991	2.0	80	0.00
28	C	2,4-Dichlorophenol	50.000	54.102	-8.2	83	0.00
29	T	1,2,4-Trichlorobenzene	50.000	49.385	1.2	82	-0.01
30	T	Naphthalene	50.000	49.159	1.7	81	0.00
31	T	4-Chloroaniline	50.000	51.573	-3.1	81	0.00
32	C	Hexachlorobutadiene	50.000	51.411	-2.8	85	0.00
33	C	4-Chloro-3-methylphenol	50.000	54.477	-9.0	84	0.00
34	T	2-Methylnaphthalene	50.000	51.058	-2.1	83	-0.01
35	T	1-Methylnaphthalene	50.000	50.897	-1.8	83	-0.01
36	I	Acenaphthene-d10	40.000	40.000	0.0	84	-0.01
37	P	Hexachlorocyclopentadiene	50.000	40.221	19.6	68	0.00
38	C	2,4,6-Trichlorophenol	50.000	53.745	-7.5	83	0.00
39	T	2,4,5-Trichlorophenol	50.000	55.229	-10.5	84	0.00
40	S	2-Fluorobiphenyl	50.000	50.963	-1.9	84	-0.01
41	T	2-Chloronaphthalene	50.000	49.991	0.0	85	-0.01
42	T	2-Nitroaniline	50.000	57.799	-15.6	87	0.00
43	T	Dimethylphthalate	50.000	52.097	-4.2	85	-0.01
44	T	2,6-Dinitrotoluene	50.000	57.028	-14.1	86	0.00
45	T	Acenaphthylene	50.000	50.933	-1.9	83	-0.01
46	T	3-Nitroaniline	50.000	50.807	-1.6	84	0.00
47	C	Acenaphthene	50.000	49.815	0.4	83	-0.01
48	P	2,4-Dinitrophenol	50.000	50.539	-1.1	87	0.00
49	P	4-Nitrophenol	50.000	49.645	0.7	85	0.00

Data File : D:\Data\08G25\RGG271.D
Acq On : 25 Jul 2008 16:17
Sample : CSVE2F3012
Misc :
Integrator: RTE
Quant Time: Jul 25 16:31:54 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
50	T	2,4-Dinitrotoluene	50.000	51.826	-3.7	86	0.00
51	T	Dibenzofuran	50.000	50.057	-0.1	83	-0.01
52	T	2,3,4,6-Tetrachlorophenol	50.000	50.836	-1.7	84	0.00
53	T	Diethylphthalate	50.000	54.860	-9.7	89	-0.01
54	T	Fluorene	50.000	54.794	-9.6	85	-0.01
55	T	4-Chlorophenyl-phenylether	50.000	48.129	3.7	75	0.00
56	T	4-Nitroaniline	50.000	61.910	-23.8#	89	0.00
57	I	Phenanthrene-d10	40.000	40.000	0.0	84	0.00
58	T	4,6-Dinitro-2-methylphenol	50.000	50.910	-1.8	88	0.00
59	C	N-Nitrosodiphenylamine	50.000	51.651	-3.3	85	-0.01
60	T	Azobenzene	50.000	53.713	-7.4	88	0.00
61	S	2,4,6-Tribromophenol	50.000	50.200	-0.4	80	0.00
62	T	4-Bromophenyl-phenylether	50.000	52.238	-4.5	85	0.00
63	T	Hexachlorobenzene	50.000	51.420	-2.8	85	0.00
64	C	Pentachlorophenol	50.000	50.487	-1.0	87	0.00
65	T	Phenanthrene	50.000	50.010	-0.0	85	0.00
66	T	Anthracene	50.000	51.203	-2.4	85	-0.01
67	T	Carbazole	50.000	53.243	-6.5	90	0.00
68	T	Di-n-butylphthalate	50.000	54.243	-8.5	87	0.00
69	C	Fluoranthene	50.000	58.893	-17.8	101	0.00
70	I	Chrysene-d12	40.000	40.000	0.0	84	0.00
71	T	Benzidine	-1.000	0.000	0.0	0	0.00
72	T	Pyrene	50.000	52.689	-5.4	86	0.00
73	S	Terphenyl-d14	50.000	57.378	-14.8	93	0.00
74	T	Butylbenzylphthalate	50.000	57.403	-14.8	88	0.00
75		3,3'-Dichlorobenzidine	50.000	54.721	-9.4	88	0.00
76	T	Benzo(a)anthracene	50.000	50.539	-1.1	85	0.00
77	T	bis(2-Ethylhexyl)phthalate	50.000	56.594	-13.2	87	0.00
78	T	Chrysene	50.000	51.869	-3.7	87	0.00
79	I	Perylene-d12	40.000	40.000	0.0	87	0.00
80	C	Di-n-octylphthalate	50.000	57.010	-14.0	88	0.00
81	T	Benzo(b)fluoranthene	50.000	52.315	-4.6	87	0.05
82	T	Benzo(k)fluoranthene	50.000	51.827	-3.7	86	0.00
83	C	Benzo(a)pyrene	50.000	51.252	-2.5	86	0.00
84	T	Indeno(1,2,3-cd)pyrene	50.000	50.951	-1.9	85	0.00
85	T	Dibenzo(a,h)anthracene	50.000	57.085	-14.2	95	0.00
86	T	Benzo(g,h,i)perylene	50.000	49.495	1.0	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : D:\Data\08G25\RGG271.D
Acq On : 25 Jul 2008 16:17
Sample : CSVE2F3012
Misc :
Integrator: RTE
Quant Time: Jul 25 16:31:54 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	80	0.00
2	T	N-nitrosodimethylamine	0.504	0.530	-5.2	81	0.00
3	T	Pyridine	0.950	0.994	-4.6	78	0.00
4	S	2-Fluorophenol	1.091	1.079	1.1	78	0.00
5	S	Phenol-d5	1.226	1.298	-5.9	82	0.00
6	C	Phenol	1.289	1.282	0.5	78	0.00
7	T	Aniline	1.444	1.347	6.7	74	0.00
8	T	bis(2-chloroethyl) ether	0.937	0.923	1.5	81	0.00
9	T	2-Chlorophenol	1.467	1.500	-2.2	81	0.00
10	T	1,3-Dichlorobenzene	1.547	1.544	0.2	81	0.00
11	S	1,2-Dichlorobenzene-d4	0.937	0.958	-2.2	83	0.00
12	C	1,4-Dichlorobenzene	1.665	1.928	-15.8	87	0.00
13	T	Benzyl alcohol	0.738	0.741	-0.4	78	0.00
14	T	1,2-Dichlorobenzene	1.493	1.494	-0.1	81	0.00
15	T	2-Methylphenol	0.911	0.951	-4.4	81	0.00
16	T	bis(2-chloroisopropyl)ether	2.015	2.016	-0.0	82	0.00
17	T	4-Methylphenol	1.360	1.414	-4.0	81	0.00
18	P	N-Nitroso-di-n-propylamine	0.528	0.576	-9.1	84	0.00
19	T	Hexachloroethane	0.559	0.590	-5.5	83	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	83	0.00
21	S	Nitrobenzene-d5	0.248	0.271	-9.3	86	0.00
22	T	Nitrobenzene	0.253	0.269	-6.3	88	0.00
23	T	Isophorone	0.405	0.429	-5.9	84	0.00
24	C	2-Nitrophenol	0.175	0.193	-10.3	84	0.00
25	T	2,4-Dimethylphenol	0.293	0.299	-2.0	83	0.00
26	T	Benzoic acid	0.163	0.188	-15.3	74	0.00
27	T	bis(2-Chloroethoxy)methane	0.323	0.316	2.2	80	0.00
28	C	2,4-Dichlorophenol	0.280	0.302	-7.9	83	0.00
29	T	1,2,4-Trichlorobenzene	0.327	0.323	1.2	82	-0.01
30	T	Naphthalene	1.056	1.039	1.6	81	0.00
31	T	4-Chloroaniline	0.410	0.423	-3.2	81	0.00
32	C	Hexachlorobutadiene	0.187	0.193	-3.2	85	0.00
33	C	4-Chloro-3-methylphenol	0.241	0.262	-8.7	84	0.00
34	T	2-Methylnaphthalene	0.687	0.701	-2.0	83	-0.01
35	T	1-Methylnaphthalene	0.654	0.666	-1.8	83	-0.01
36	I	Acenaphthene-d10	1.000	1.000	0.0	84	-0.01
37	P	Hexachlorocyclopentadiene	0.308	0.317	-2.9	68	0.00
38	C	2,4,6-Trichlorophenol	0.372	0.400	-7.5	83	0.00
39	T	2,4,5-Trichlorophenol	0.396	0.437	-10.4	84	0.00
40	S	2-Fluorobiphenyl	1.399	1.426	-1.9	84	-0.01
41	T	2-Chloronaphthalene	1.249	1.249	0.0	85	-0.01
42	T	2-Nitroaniline	0.242	0.280	-15.7	87	0.00
43	T	Dimethylphthalate	1.396	1.455	-4.2	85	-0.01
44	T	2,6-Dinitrotoluene	0.273	0.311	-13.9	86	0.00
45	T	Acenaphthylene	2.034	2.072	-1.9	83	-0.01
46	T	3-Nitroaniline	0.322	0.369	-14.6	84	0.00
47	C	Acenaphthene	1.355	1.350	0.4	83	-0.01
48	P	2,4-Dinitrophenol	0.122	0.161	-32.0#	87	0.00
49	P	4-Nitrophenol	0.134	0.157	-17.2	85	0.00

Data File : D:\Data\08G25\RGG271.D
Acq On : 25 Jul 2008 16:17
Sample : CSVE2F3012
Misc :
Integrator: RTE
Quant Time: Jul 25 16:31:54 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
50	T	2,4-Dinitrotoluene	0.357	0.424	-18.8	86	0.00
51	T	Dibenzofuran	1.785	1.787	-0.1	83	-0.01
52	T	2,3,4,6-Tetrachlorophenol	0.227	0.269	-18.5	84	0.00
53	T	Diethylphthalate	1.539	1.688	-9.7	89	-0.01
54	T	Fluorene	1.428	1.565	-9.6	85	-0.01
55	T	4-Chlorophenyl-phenylether	0.658	0.633	3.8	75	0.00
56	T	4-Nitroaniline	0.327	0.400	-22.3#	89	0.00
57	I	Phenanthrene-d10	1.000	1.000	0.0	84	0.00
58	T	4,6-Dinitro-2-methylphenol	0.111	0.141	-27.0#	88	0.00
59	C	N-Nitrosodiphenylamine	0.538	0.556	-3.3	85	-0.01
60	T	Azobenzene	0.577	0.620	-7.5	88	0.00
61	S	2,4,6-Tribromophenol	0.118	0.118	0.0	80	0.00
62	T	4-Bromophenyl-phenylether	0.233	0.244	-4.7	85	0.00
63	T	Hexachlorobenzene	0.262	0.270	-3.1	85	0.00
64	C	Pentachlorophenol	0.164	0.205	-25.0#	87	0.00
65	T	Phenanthrene	1.215	1.215	0.0	85	0.00
66	T	Anthracene	1.202	1.231	-2.4	85	-0.01
67	T	Carbazole	1.058	1.127	-6.5	90	0.00
68	T	Di-n-butylphthalate	1.381	1.498	-8.5	87	0.00
69	C	Fluoranthene	1.310	1.543	-17.8	101	0.00
70	I	Chrysene-d12	1.000	1.000	0.0	84	0.00
71	T	Benzidine	0.000	0.000#	0.0	0#	0.00
72	T	Pyrene	1.408	1.484	-5.4	86	0.00
73	S	Terphenyl-d14	0.823	0.944	-14.7	93	0.00
74	T	Butylbenzylphthalate	0.627	0.720	-14.8	88	0.00
75		3,3'-Dichlorobenzidine	0.456	0.499	-9.4	88	0.00
76	T	Benzo(a)anthracene	1.358	1.373	-1.1	85	0.00
77	T	bis(2-Ethylhexyl)phthalate	0.978	1.107	-13.2	87	0.00
78	T	Chrysene	1.253	1.300	-3.8	87	0.00
79	I	Perylene-d12	1.000	1.000	0.0	87	0.00
80	C	Di-n-octylphthalate	1.752	1.997	-14.0	88	0.00
81	T	Benzo(b)fluoranthene	1.349	1.411	-4.6	87	0.05
82	T	Benzo(k)fluoranthene	1.383	1.434	-3.7	86	0.00
83	C	Benzo(a)pyrene	1.349	1.383	-2.5	86	0.00
84	T	Indeno(1,2,3-cd)pyrene	1.574	1.604	-1.9	85	0.00
85	T	Dibenzo(a,h)anthracene	1.144	1.306	-14.2	95	0.00
86	T	Benzo(g,h,i)perylene	1.349	1.335	1.0	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ378
Instrument ID: T-048

Project: LMC BEAUMONT SITE 1
SDG No.: 08G188
DFTPP Injection Date: 07/31/08
DFTPP Injection Time: 17:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	31.00
68	Less than 2% of mass 69	0.05(0.2)1
69	Relative abundance of mass 198	43.88
70	Less than 2.0% of mass 69	0.19(0.4)1
127	40.0 - 60.0% of mass 198	43.91
197	Less than 1.0% of mass 198	0.77
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.43
275	10.0 - 30.0% of mass 198	17.90
365	Greater than 1.00% of mass 198	1.07
441	Present, but less than mass 443	16.62
442	Greater than 40.0% of mass 198	92.82
443	17.0 - 23.0% of mass 442	20.42(22.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	CSV48G1609	RGZ379	07/31/08	17:51
2	MBLK2S	SVG048SB	RGZ381	07/31/08	18:29
3	LCS2S	SVG048SL	RGZ382	07/31/08	18:48
4	LCD2S	SVG048SC	RGZ383	07/31/08	19:07
5	H-T1-11RE	G188-05R	RGZ384	07/31/08	19:26
6	H-T1-11MS	G188-05M	RGZ385	07/31/08	19:45
7	H-T1-11MSD	G188-05S	RGZ386	07/31/08	20:04

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ193
Instrument ID: T-048

Project:LMC BEAUMONT SITE 1
SDG No.: 08G188
Date Analyzed: 07/16/08
Time Analyzed: 11:35

	SAMPLE ID	IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	296750	2.82	1136590	3.92	469649	5.61
	UPPER LIMIT	593500	3.32	2273180	4.43	939298	6.11
	LOWER LIMIT	148375	2.32	568295	3.42	234825	5.11
1	SSTD050	318216	2.81	1156970	3.92	479934	5.60
2	MBLK2S	310377	2.80	1058452	3.91	447879	5.60
3	LCS2S	369084	2.81	1243551	3.92	495958	5.60
4	LCD2S	367555	2.81	1276942	3.92	486834	5.60
5	H-T1-11RE	348605	2.81	1172008	3.92	475867	5.60
6	H-T1-11MS	370392	2.80	1276586	3.91	516816	5.60
7	H-T1-11MSD	374924	2.81	1308629	3.92	491289	5.60

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ193
Instrument ID: T-048

Project:LMC BEAUMONT SITE 1
SDG No.: 08G188
Date Analyzed: 07/16/08
Time Analyzed: 11:35

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	683193		7.11		483414		9.57		449667		10.72	
	UPPER LIMIT	1366386		7.61		966828		10.07		899334		11.22	
	LOWER LIMIT	341597		6.61		241707		9.07		224834		10.22	
	SAMPLE ID												
1	SSTD050	651866		7.10		463926		9.57		402122		10.69	
2	MBLK2S	592206		7.09		462657		9.57		438880		10.69	
3	LCS2S	596372		7.09		431184		9.57		401689		10.69	
4	LCD2S	606764		7.10		439464		9.57		425289		10.69	
5	H-T1-11RE	596092		7.10		463363		9.57		468855		10.69	
6	H-T1-11MS	617746		7.09		445538		9.57		416846		10.69	
7	H-T1-11MSD	626772		7.10		458539		9.57		471125		10.69	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	107	0.00
2	T	N-Nitrosodimethylamine	50.000	59.802	-19.6	108	0.00
3	T	Pyridine	50.000	53.736	-7.5	97	0.00
4	S	2-Fluorophenol	50.000	51.191	-2.4	106	0.00
5	C	Phenol	50.000	49.638	0.7	105	0.00
6	T	Aniline	50.000	45.630	8.7	90	0.00
7	T	Bis(2-chloroethyl)ether	50.000	46.754	6.5	104	0.00
8	S	Phenol-d5	50.000	53.396	-6.8	111	0.00
9	T	2-Chlorophenol	50.000	51.250	-2.5	104	0.00
10	T	1,3-Dichlorobenzene	50.000	49.941	0.1	102	0.00
11	C	1,4-Dichlorobenzene	50.000	51.036	-2.1	112	0.00
12	T	Benzyl alcohol	50.000	57.030	-14.1	113	0.00
13	S	1,2-Dichlorobenzene-d4	50.000	52.029	-4.1	108	0.00
14	T	1,2-Dichlorobenzene	50.000	48.157	3.7	100	0.00
15	T	2-Methylphenol	50.000	51.954	-3.9	106	0.00
16	T	Bis(2-chloroisopropyl)ether	50.000	45.971	8.1	98	0.00
17	T	4-Methylphenol	50.000	55.671	-11.3	119	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	52.046	-4.1	103	0.00
19	T	Hexachloroethane	50.000	48.714	2.6	105	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	102	0.00
21	S	Nitrobenzene-d5	50.000	48.987	2.0	101	0.00
22	T	Nitrobenzene	50.000	50.580	-1.2	102	0.00
23	T	Isophorone	50.000	49.205	1.6	97	0.00
24	C	2-Nitrophenol	50.000	47.328	5.3	100	0.00
25	T	2,4-Dimethylphenol	50.000	49.825	0.3	93	0.00
26	T	bis(2-Chloroethoxy)methane	50.000	51.250	-2.5	101	0.00
27	T	Benzoic Acid	50.000	41.229	17.5	86	0.00
28	C	2,4-Dichlorophenol	50.000	49.091	1.8	104	0.00
29	T	1,2,4-Trichlorobenzene	50.000	49.621	0.8	99	0.00
30	T	Naphthalene	50.000	51.159	-2.3	103	0.00
31	T	4-Chloroaniline	50.000	45.488	9.0	85	0.00
32	C	Hexachlorobutadiene	50.000	57.086	-14.2	112	0.00
33	C	4-Chloro-3-methylphenol	50.000	46.231	7.5	97	0.00
34	T	2-Methylnaphthalene	50.000	50.911	-1.8	100	0.00
35	T	1-Methylnaphthalene	50.000	50.617	-1.2	104	0.00
36	I	Acenaphthene-d10	40.000	40.000	0.0	102	0.00
37	P	Hexachlorocyclopentadiene	50.000	45.892	8.2	90	0.00
38	C	2,4,6-Trichlorophenol	50.000	50.813	-1.6	104	0.00
39	T	2,4,5-Trichlorophenol	50.000	48.777	2.4	97	0.00

(#) = Out of Range

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial : 3
Operator : KV
Inst : TO48
Multiplr : 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	S	2-Fluorobiphenyl	50.000	50.726	-1.5	100	0.00
41	T	2-Chloronaphthalene	50.000	54.734	-9.5	108	0.00
42	T	2-Nitroaniline	50.000	53.193	-6.4	100	0.00
43	T	Dimethylphthalate	50.000	51.930	-3.9	98	0.00
44	T	2,6-Dinitrotoluene	50.000	47.896	4.2	91	0.00
45	T	Acenaphthylene	50.000	49.511	1.0	97	0.00
46	T	3-Nitroaniline	50.000	45.758	8.5	89	0.00
47	C	Acenaphthene	50.000	47.115	5.8	93	0.00
48	P	2,4-Dinitrophenol	50.000	44.472	11.1	91	0.00
49	P	4-Nitrophenol	50.000	57.726	-15.5	103	0.00
50	T	Dibenzofuran	50.000	51.680	-3.4	98	0.00
51	T	2,4-Dinitrotoluene	50.000	47.923	4.2	91	0.00
52	T	2,3,4,6-Tetrachlorophenol	50.000	48.747	2.5	100	0.00
53	T	Diethylphthalate	50.000	50.281	-0.6	98	0.00
54	T	Fluorene	50.000	49.104	1.8	97	0.00
55	T	4-Chlorophenyl-phenylether	50.000	50.952	-1.9	100	0.00
56	T	4-Nitroaniline	50.000	47.649	4.7	95	0.00
57	T	4,6-Dinitro-2-methylphenol	50.000	46.694	6.6	96	0.00
58	C	N-Nitrosodiphenylamine	50.000	48.921	2.2	92	0.00
59	T	Azobenzene	50.000	47.082	5.8	91	0.00
60	S	2,4,6-Tribromophenol	50.000	51.672	-3.3	102	0.00
61	I	Phenanthrene-d10	40.000	40.000	0.0	95	0.00
62	T	4-Bromophenyl-phenylether	50.000	50.345	-0.7	99	0.00
63	T	Hexachlorobenzene	50.000	53.592	-7.2	99	0.00
64	C	Pentachlorophenol	50.000	50.866	-1.7	100	0.00
65	T	Phenanthrene	50.000	48.575	2.8	93	0.00
66	T	Anthracene	50.000	47.208	5.6	89	0.00
67	T	Carbazole	50.000	53.880	-7.8	97	0.00
68	T	Di-n-butylphthalate	50.000	54.262	-8.5	96	0.00
69	C	Fluoranthene	50.000	49.412	1.2	92	0.00
70	I	Chrysene-d12	40.000	40.000	0.0	96	0.00
71	T	Benzidine	-1.000	0.000	0.0	0	0.00
72	T	Pyrene	50.000	50.733	-1.5	91	0.00
73	S	Terphenyl-d14	50.000	50.397	-0.8	94	0.00
74	T	Butylbenzylphthalate	50.000	45.553	8.9	86	0.00
75	T	3,3'-Dichlorobenzidine	50.000	46.973	6.1	88	0.00
76	T	Benzo(a)anthracene	50.000	49.137	1.7	93	0.00
77	T	Chrysene	50.000	46.195	7.6	84	0.00
78	T	bis(2-Ethylhexyl)phthalate	50.000	45.211	9.6	86	0.00

(#) = Out of Range

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial : 3
Operator : KV
Inst : TO48
Multiplr : 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
79	I	Perylene-d12	40.000	40.000	0.0	89	-0.03
80	C	Di-n-octylphthalate	50.000	45.496	9.0	86	0.00
81	T	Benzo(b)fluoranthene	50.000	52.920	-5.8	94	-0.02
82	T	Benzo(k)fluoranthene	50.000	50.369	-0.7	77	-0.02
83	C	Benzo(a)pyrene	50.000	49.635	0.7	86	-0.02
84	T	Indeno(1,2,3-cd)pyrene	50.000	46.761	6.5	85	-0.06
85	T	Dibenzo(a,h)anthracene	50.000	49.072	1.9	93	-0.06
86	T	Benzo(g,h,i)perylene	50.000	51.186	-2.4	84	-0.07

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
2	T	N-Nitrosodimethylamine	0.689	0.824	-19.6	108	0.00
3	T	Pyridine	1.277	1.373	-7.5	97	0.00
4	S	2-Fluorophenol	1.172	1.200	-2.4	106	0.00
5	C	Phenol	1.650	1.638	0.7	105	0.00
6	T	Aniline	1.640	1.496	8.8	90	0.00
7	T	Bis(2-chloroethyl)ether	1.292	1.209	6.4	104	0.00
8	S	Phenol-d5	1.514	1.617	-6.8	111	0.00
9	T	2-Chlorophenol	1.374	1.408	-2.5	104	0.00
10	T	1,3-Dichlorobenzene	1.475	1.473	0.1	102	0.00
11	C	1,4-Dichlorobenzene	1.537	1.569	-2.1	112	0.00
12	T	Benzyl alcohol	0.751	0.856	-14.0	113	0.00
13	S	1,2-Dichlorobenzene-d4	0.902	0.939	-4.1	108	0.00
14	T	1,2-Dichlorobenzene	1.459	1.405	3.7	100	0.00
15	T	2-Methylphenol	0.976	1.014	-3.9	106	0.00
16	T	Bis(2-chloroisopropyl)ether	3.112	2.861	8.1	98	0.00
17	T	4-Methylphenol	1.425	1.586	-11.3	119	0.00
18	P	N-Nitroso-di-n-propylamine	0.713	0.742	-4.1	103	0.00
19	T	Hexachloroethane	0.713	0.695	2.5	105	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00
21	S	Nitrobenzene-d5	0.302	0.295	2.3	101	0.00
22	T	Nitrobenzene	0.295	0.299	-1.4	102	0.00
23	T	Isophorone	0.526	0.518	1.5	97	0.00
24	C	2-Nitrophenol	0.172	0.198	-15.1	100	0.00
25	T	2,4-Dimethylphenol	0.272	0.271	0.4	93	0.00
26	T	bis(2-Chloroethoxy)methane	0.418	0.429	-2.6	101	0.00
27	T	Benzoic Acid	0.176	0.173	1.7	86	0.00
28	C	2,4-Dichlorophenol	0.229	0.261	-14.0	104	0.00
29	T	1,2,4-Trichlorobenzene	0.279	0.277	0.7	99	0.00
30	T	Naphthalene	0.990	1.013	-2.3	103	0.00
31	T	4-Chloroaniline	0.415	0.377	9.2	85	0.00
32	C	Hexachlorobutadiene	0.129	0.147	-14.0	112	0.00
33	C	4-Chloro-3-methylphenol	0.243	0.251	-3.3	97	0.00
34	T	2-Methylnaphthalene	0.570	0.580	-1.8	100	0.00
35	T	1-Methylnaphthalene	0.544	0.550	-1.1	104	0.00
36	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00
37	P	Hexachlorocyclopentadiene	0.290	0.317	-9.3	90	0.00
38	C	2,4,6-Trichlorophenol	0.323	0.376	-16.4	104	0.00
39	T	2,4,5-Trichlorophenol	0.344	0.402	-16.9	97	0.00

(#) = Out of Range

3070

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	S	2-Fluorobiphenyl	1.287	1.306	-1.5	100	0.00
41	T	2-Chloronaphthalene	1.182	1.294	-9.5	108	0.00
42	T	2-Nitroaniline	0.310	0.329	-6.1	100	0.00
43	T	Dimethylphthalate	1.261	1.310	-3.9	98	0.00
44	T	2,6-Dinitrotoluene	0.280	0.304	-8.6	91	0.00
45	T	Acenaphthylene	2.005	1.985	1.0	97	0.00
46	T	3-Nitroaniline	0.374	0.387	-3.5	89	0.00
47	C	Acenaphthene	1.122	1.057	5.8	93	0.00
48	P	2,4-Dinitrophenol	0.147	0.170	-15.6	91	0.00
49	P	4-Nitrophenol	0.122	0.141	-15.6	103	0.00
50	T	Dibenzofuran	1.636	1.691	-3.4	98	0.00
51	T	2,4-Dinitrotoluene	0.366	0.408	-11.5	91	0.00
52	T	2,3,4,6-Tetrachlorophenol	0.203	0.231	-13.8	100	0.00
53	T	Diethylphthalate	1.322	1.330	-0.6	98	0.00
54	T	Fluorene	1.203	1.181	1.8	97	0.00
55	T	4-Chlorophenyl-phenylether	0.532	0.542	-1.9	100	0.00
56	T	4-Nitroaniline	0.336	0.383	-14.0	95	0.00
57	T	4,6-Dinitro-2-methylphenol	0.188	0.212	-12.8	96	0.00
58	C	N-Nitrosodiphenylamine	0.790	0.773	2.2	92	0.00
59	T	Azobenzene	1.559	1.468	5.8	91	0.00
60	S	2,4,6-Tribromophenol	0.250	0.295	-18.0	102	0.00
61	I	Phenanthrene-d10	1.000	1.000	0.0	95	0.00
62	T	4-Bromophenyl-phenylether	0.239	0.248	-3.8	99	0.00
63	T	Hexachlorobenzene	0.328	0.352	-7.3	99	0.00
64	C	Pentachlorophenol	0.189	0.225	-19.0	100	0.00
65	T	Phenanthrene	1.184	1.150	2.9	93	0.00
66	T	Anthracene	1.183	1.117	5.6	89	0.00
67	T	Carbazole	1.073	1.157	-7.8	97	0.00
68	T	Di-n-butylphthalate	1.560	1.693	-8.5	96	0.00
69	C	Fluoranthene	1.036	1.024	1.2	92	0.00
70	I	Chrysene-d12	1.000	1.000	0.0	96	0.00
71	T	Benzidine	0.000	0.000#	0.0	0#	0.00
72	T	Pyrene	1.501	1.523	-1.5	91	0.00
73	S	Terphenyl-d14	0.866	0.873	-0.8	94	0.00
74	T	Butylbenzylphthalate	0.786	0.836	-6.4	86	0.00
75	T	3,3'-Dichlorobenzidine	0.394	0.438	-11.2	88	0.00
76	T	Benzo(a)anthracene	1.216	1.195	1.7	93	0.00
77	T	Chrysene	1.156	1.068	7.6	84	0.00
78	T	bis(2-Ethylhexyl)phthalate	1.152	1.186	-3.0	86	0.00

(#) = Out of Range

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
79	I	Perylene-d12	1.000	1.000	0.0	89	-0.03
80	C	Di-n-octylphthalate	2.052	2.230	-8.7	86	0.00
81	T	Benzo(b)fluoranthene	1.282	1.357	-5.9	94	-0.02
82	T	Benzo(k)fluoranthene	1.151	1.160	-0.8	77	-0.02
83	C	Benzo(a)pyrene	1.202	1.193	0.7	86	-0.02
84	T	Indeno(1,2,3-cd)pyrene	1.309	1.372	-4.8	85	-0.06
85	T	Dibenzo(a,h)anthracene	1.003	1.130	-12.7	93	-0.06
86	T	Benzo(g,h,i)perylene	1.188	1.216	-2.4	84	-0.07

ANALYTICAL LOG

EMAX LABORATORIES, INC.

ANALYSIS LOG FOR SEMIVOLATILES

SOP ☑ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A48- 20

Method File: SV48G16 Tune File: DFTPP Start Date/Time: 7/16/08 10:02 End Date/Time: 7/16/08 15:44

ANALYTICAL BATCH SV48D165

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
NA	RG2187	IB48G1601				
↓	188	DFT48G1601	1			
↓	189	SV48G16 1	↓			2 ppm 8270
↓	190	↓ 2	↓			5
↓	191	↓ 3	↓			10
↓	192	↓ 4	↓			20
↓	193	↓ 5	↓			50
↓	194	↓ 6	↓			80
↓	195	↓ 7	↓			100
↓	196	↓ 8	↓			120
↓	197	↓ 9	↓			160
↓	198	ISV48G161	↓			ICV
↓	199	SV48G16A 1	↓			2ppm Benzidine
↓	200	↓ 2	↓			5
↓	201	↓ 3	↓			10
↓	202	↓ 4	↓			50
↓	203	↓ 5	↓			100
↓	204	↓ 6	↓			120
↓	205	↓ 7	↓			160
↓	206	ISV48G16A1	↓			ICV

KV 7/16/08

Instrument No:	48

INITIAL CALIBRATION REFERENCE	
Date	7/16/08
ICAL ID	SV48G16 & SV48G16A

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-36-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-34-1	2000
ICV	SS2C-05-73-3	50

Solvent	ID	
CH_2Cl_2	48064	

DATA FILE	08G16

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T048	7/17/08

Comments: Benzidine ID
SS2C-05-75-1 50ppm DCC
SS2C-05-75-2 50ppm ICV

Analyzed By: KV
Date Disposed: 7/17/08
Disposed by: KV

This page is checked during data review.

ANALYSIS LOG FOR SEMIVOLATILES

EMAX LABORATORIES, INC.

SOP ☑ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A48- 20

Method File: SV48G18 Tune File: DFTPP Start Date/Time: 7/31/08 17:19 End Date/Time: 7/31/08 23:36

ANALYTICAL BATCH CSV 48G16 ☑

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RG2376	IB48G1609				
	377	DFT48G1609				Tailing
	378	DFT48G1609A				ok
	379	CSV48G1609				
	380	CSV48G16A09				Benzidine
SVG0485	381	SVG0485B	1	X		
	382	SL				
	383	SC				
	384	08G168-05R				
	385	05M				*
	386	05S				*
	387	08G195-06R				
	388	06M				*
	389	06S	↓	↓		*
SVG0486W	390	SVG0486WB	1	X	X	KV 7/31/08
	391	WL				
	392	WC				
	393	08G486-03R	↓		↓	
SVG039W	394	SVG039WB	1		X	
	395	WL				
	396	WC				
	397	08G419-01R	↓		↓	
						KV 7/31/08

Instrument No:	48
INITIAL CALIBRATION REFERENCE	
Date	7/16/08
ICAL ID	SV48G16 & SV48G16A

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-36-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-37-1	2000
Benzidine	SS2C-05-75-1	50

Solvent	ID
CH_2Cl_2	48064

DATA FILE	08G31

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T048	8/1/08

Comments: * client requested for MS/MSD later

Analyzed By: KV

Date Disposed: 8/1/08

Disposed by: KV

This page is checked during data review.

ANALYSIS LOG FOR SEMIVOLATILES

SOP ☑ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #AE2- 001

Method File: SVE2F30 Tune File: DFTPP Start Date/Time: 6/30/08 End Date/Time: 6/30/08 14:21

ANALYTICAL BATCH SVE2F308

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
NA	RFG128	IBE2F3001				
	129	DFTE2F3001	1			
	130	SVE2F3011				0.15 ppm
	131	2				0.5
	132	3				1
	133	4				2
	134	5				5
	135	6				10
	136	7				20
	137	8				50
	138	9				80
	139	10				100
	140	11				120
	141	12				160
	142	ISVE2F3011				ICV
	143	50 ppm				Benzidine check KV 6/30/08

Instrument No:	E2

INITIAL CALIBRATION REFERENCE	
Date	6/30/08
ICAL ID	SVE2F30

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-28-3	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-34-1	200
ICV	SS2C-05-74-1	50

Solvent	ID
CH_2Cl_2	48064

DATA FILE	08F30

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T0E2	7/1/08

Comments:

low: SS2C-05-72-3 0.15 ppm

Benzidine: SS2C-05-75-1 50ppm

Analyzed By: KV

Date Disposed: NA

Disposed by: NA

This page is checked during data review.

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ANALYSIS LOG FOR SEMIVOLATILES

SOP ☑ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #AE2- 001

Method File: SVE2F30S Tune File: DFTPP Start Date/Time: 7/22/08 11:24 End Date/Time: 7/22/08 19:3

ANALYTICAL BATCH CSVE2F3010

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RGG 206	IBE2F3010				
	207	DFTE2F3010				
	208	CSVE2F3010				
	209	CSVE2G1604				App 9
	210	CSVE2D21A15				Benzidine
SVG0355	211	SVG035SB	1	X		
	212	SL				
	213	SC				
	214	08G066-17	✓			
	215	08G165-02	2			Dark
	216	08G192-17	1			
	217	08G188-02				
	218	04				
	219	05				
	220	06				
	221	07				
	222	10				
	223	11				
	224	12				
	225	14				
	226	15				
	227	16				
	228	17				
	229	18				
	230	19				
	231	21				
	232	22				
						KV 7/22/08

	Instrument No:	E2
INITIAL CALIBRATION REFERENCE		
Date	6/30/08	5/21/08 6/16/08
ICAL ID	SVE2F30	SVE2D21A SVE2G1

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-36-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-34-1	2000
Benzidine	SS2C-05-75-1	50
App 9	SS2C-05-78-1	50
Solvent	ID	
CH_2Cl_2	48064	

DATA FILE	08G22

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T0E2	

Comments:

Analyzed By: KV

Date Disposed: 7/23/08

Disposed by: KV

This page is checked during data review.

ANALYSIS LOG FOR SEMIVOLATILES

SOP ☑ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #AE2- 001

Method File: SVE2F30S Tune File: DFTPP Start Date/Time: 7/23/08 15:36 End Date/Time: 7/24/08 2:35

ANALYTICAL BATCH SVE2F30 11

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RGG233	IDE2F30 11				
	234	DFTE2F3011				
	235	CSVE2F30 11				
	236	CSVE2G16 05				App 9
	237	CSVE2 D21A 16				Benzidine
SVG033W	238	SV G0 33 WB	1		x	
↓	239	WL	↓		↓	
	240	WC				
	241	TXG0 11 5B				
	242	08G 166 -09				
	243	08G146 -01				
	244	08G167 - 18				x
	245	08G177 - 01				
	246	08G186 - 02				
	247	08G187 - 01				
	248	08G188 - 01				
↓	249	08G195 - 01	↓		↓	
SVG034W	250	SVG034 WB	1		x	
↓	251	WL	↓		↓	
	252	WC				
	253	08G534-01				
↓	254	02	↓		↓	
SVG027S	255	SVG027SB	1	x		
↓	256	SL	↓	↓		
	257	SC				
	258	08G146 -02				
	259	03				
	260	05				
	261	07				
↓	262	08	↓	↓		

Instrument No:	E2

INITIAL CALIBRATION REFERENCE			
Date	6/30/08	7/21/08	6/16/08
ICAL ID	SVE2F30	SVE2D21A	SVE2G16

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-36-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-34-1	50
Benzidine	SS2C-05-75-1	50
App 9	SS2C-05-78-1	50

Solvent	ID	
CH_2Cl_2	48054	

DATA FILE	08G23

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T0E2	

Comments:

Analyzed By: KL

Date Disposed: 7/24/08

Disposed by: KL

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ANALYSIS LOG FOR SEMIVOLATILES

SOP ☐ ~~EMAX-8270~~ Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #AE2- 001

Method File: SVE2F30 Tune File: DFTPP Start Date/Time: 7/25/08 16:07 End Date/Time: 7/25/08 20:34

ANALYTICAL BATCH CSVE2F3012

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RGG 269	IBE2F3012				
	270	DFTE2F3012				
	271	CSVE2F3012				
	272	CSVE2D21A17				
SVG038 W	273	SVG038 WB	1		x	
↓	274	WL	↓		↓	
↓	295	WC	↓		↓	
↓	276	08G602-02	↓		↓	
↓	277	↓ 02T	5		↓	
SVG027S	278	08G146-04	1	x		
SVG041S	279	SVG041 SB	1	x		
↓	280	SL	↓	↓		
↓	281	SC	↓	↓		
↓	282	08G234-01	↓	↓		
SVG035S	283	SVG035 SX	1	x		
↓	284	↓ SX	1	x		
						KV 5/25/08

Instrument No:	E2

INITIAL CALIBRATION REFERENCE		
Date	6/30/08	4/21/08
ICAL ID	SVE2F30	SVE2D21A

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-36-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-37-1	2000
Benidine	SS2C-05-75-1	50

Solvent	ID	
CH_2Cl_2	480 46	

DATA FILE	05G25

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T0E2	

Comments:

Analyzed By: KV

Date Disposed:

Disposed by:

This page is checked during data review.

EXTRACTION LOG

EXTRACTION LOG SEMIVOLATILES

EMAX LABORATORIES, INC.

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 2 ☒ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-044

Matrix: WATER Init.Start Date/Time: 7/21/08 16:00 End Date/Time: 7/22/08 10:00 Final Start Date/Time: 7/22/08 12:00 End Date/Time: 7/23/08 6:30

TCLP EXTRACT

PREPARATION BATCH: * SVG033W

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVG033 – WB	N/A	1000	–	2		
*02	– WL		1000	–	2		
*03	– WC		1000	–	2		
*04	TXG011 – SB		100	–	2		TCLP EXTRACT
*05	08G166 – 09		100		2		
*06	08G146 – 01		1060	5	2		
*07	08G167 – 18		1060	5	2		
*08	08G177 – 01		1050	5	2		
*09	08G186 – 02		930	7	2		
*10	08G187 – 01		1050	7	2		
*11	08G188 – 01		1050	5	2		
*12	08G195 – 01		1000	5	2		
*13							
*14							
*15							
*16							
*17							
*18							
*19			7/23/08				
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	VP2A-05-163	1.0
LCS/MS FINAL ST	VP2A-05-94	0.5
Micropipette Check		

Reagent	Lot# / ID
CH_2Cl_2	48064
Na_2SO_4	G10648
H_2SO_4	46137
NaOH	VP1B-03-021
Silica Sand	

TUNING

Sonicator #	Reading
	N/A

Concentrator	Water Bath Temperature Setting (°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3		
4		
5		
6		

Comments: Thermometer ID = T_1

Prepared By: JM Witnessed By: JK

Standard Added By: JM

Checked By: ML

Extract Received by: KU 7/23/08 Location: F603-8

Disposed by: Disposed on:

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Silica

2008

EXTRACTION LOG SEMIVOLATILES

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☑ EMAX-3550 Rev. No.: 2 ☐ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-044

Matrix: SOIL Init.Start Date/Time: 7/21/08 16:45 End Date/Time: Final Start Date/Time: End Date/Time: 7/21/08 19:00

PREPARATION BATCH: * SVG035 SS

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVG035 -SB	1	30.00		2		
*02	-SL	3	30.01		2		
*03	-SC	3	30.03		2		
*04	08 G066 -17	1	30.02		2		
*05	08 G165 -02	3	30.02		2		
*06	08 G192 -17	3	30.00		2		
*07	08 G188 -02	3	30.01		2		
*08	-04	3	30.03		2		
*09	-05	1	30.02		2		
*10	-06	1	30.02		2		
*11	-07	3	30.03		2		
*12	-10	3	30.01		2		
*13	-11	1	30.03		2		
*14	-12	3	30.03		2		
*15	-14	3	30.03		2		
*16	-15	1	30.01		2		
*17	-16	3	30.02		2		
*18	-17	3	30.01		2		
*19	-18	1	30.01		2		
*20	-19	3	30.03		2		
*21	-21	3	30.02		2		
*22	-22	1	30.03		2		
*23							
*24							
*25			JW	7/21/08			
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	SS2A-05-168	1.0
LCS/MS	SS2A-05-94 (FULL LIST)	0.4
Micropipette Check		

Reagent	Lot# / ID
CH_2Cl_2	4/8064
Na_2SO_4	G10648
H_2SO_4	-
NaOH	-
Silica Sand	4735/807

TUNING

Sonicator #	Reading
1	N/A
3	95%

Concentrator	Water Bath Temperature Setting (°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3	35	35
4	35	35
5		
6	60	60

Comments: Thermometer ID = T_1

Prepared By: JW Witnessed By: SS

Standard Added By: JW

Checked By: ML

Extract Received by: KV 7/22/08 Location: SE02#09

Disposed by: Disposed on:

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Silica

EXTRACTION LOG SEMIVOLATILES

EMAX LABORATORIES, INC.

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☑ EMAX-3550 Rev. No.: 2 ☐ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-044

Matrix: SOIL Init.Start Date/Time: 7/30/08 / 11:30 End Date/Time: Final Start Date/Time: End Date/Time: 7/30/08 / 1800

PREPARATION BATCH: * SVG0485

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVG0485 -SB	1	30.00		2		
*02	-SL	3	30.01		2		
*03	-SC	3	30.03		2		
*04	08G188 -05R	1	30.03		2		
*05	-05M	3	30.02		2		
*06	-05S	3	30.00		2		
*07	08G195 -06	1	30.01		2		
*08	-06M	3	30.03		2		
*09	-06S	3	30.02		2		
*10							
*11							
*12			JW	7/30/08			
*13							
*14							
*15							
*16							
*17							
*18							
*19							
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	SS2A-05-163	1.0
LCS/MS	SS2A-05-155 (FULL LIST)	0.4
Micropipette Check		

Reagent	Lot# / ID
CH_2Cl_2	4/8064
Na_2SO_4	JW 7/30/8 ~~G1080B~~ @ 1064B
H_2SO_4	
NaOH	
Silica Sand	4735/807

TUNING

Sonicator #	Reading
1	N/A
3	95%

Concentrator	Water Bath Temperature Setting (°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3		
4		
5		
6		

Comments: Thermometer ID = T_1

Prepared By: JW Witnessed By: SS

Standard Added By: JW

Checked By: ML

Extract Received by: KV 7/30/08 Location: SEQ # 2

Disposed by: Disposed on: 4mL VIAL

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Silica

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G188

METHOD 7470A/7471A
MERCURY BY COLD VAPOR

One (1) water and sixteen (16) soil samples were received on 07/18/08 for Mercury analysis by Method 7470A/7471A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Continuing Calibrations (CCV's)**

   CCV's were analyzed at a frequency specified by the project. All project requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

4. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

5. **Serial Dilution/Post-Analytical Spike**

   Sample G188-02 and sample G511-01 from another SDG were analyzed for serial dilution and post-analytical spike. All QC requirements were met.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample G188-02 was spiked. All recoveries were within QC limit.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
MERCURY BY COLD VAPOR

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1

SDG NO. : 08G188
Instrument ID : TI047

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	HGG037WB	1	NA	07/22/0819:16	07/22/0814:30	M47G022038	M47G022032	HGG037W	Method Blank
LCS1W	HGG037WL	1	NA	07/22/0819:18	07/22/0814:30	M47G022039	M47G022032	HGG037W	Lab Control Sample (LCS)
LCD1W	HGG037WC	1	NA	07/22/0819:20	07/22/0814:30	M47G022040	M47G022032	HGG037W	LCS Duplicate
SKID RINSE PLUSAS	G511-01A	1	NA	07/22/0819:23	07/22/0814:30	M47G022041	M47G022032	HGG037W	Analytical Spike Sample
SKID RINSE PLUS	G511-01	1	NA	07/22/0819:25	07/22/0814:30	M47G022042	M47G022032	HGG037W	Field Sample
SKID RINSE PLUSDL	G511-01J	5	NA	07/22/0819:27	07/22/0814:30	M47G022043	M47G022032	HGG037W	Diluted Sample
H-EB7172008	G188-01	1	NA	07/22/0819:44	07/22/0814:30	M47G022051	M47G022044	HGG037W	Field Sample

SOIL

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1S	HGG041SB	1	NA	07/24/0819:35	07/24/0813:30	M47G025059	M47G025056	HGG041S	Method Blank
LCS1S	HGG041SL	1	NA	07/24/0819:37	07/24/0813:30	M47G025060	M47G025056	HGG041S	Lab Control Sample (LCS)
LCD1S	HGG041SC	1	NA	07/24/0819:39	07/24/0813:30	M47G025061	M47G025056	HGG041S	LCS Duplicate
H-T1-0.5AS	G188-02A	1	1.2	07/24/0819:41	07/24/0813:30	M47G025062	M47G025056	HGG041S	Analytical Spike Sample
H-T1-0.5	G188-02	1	1.2	07/24/0819:43	07/24/0813:30	M47G025063	M47G025056	HGG041S	Field Sample
H-T1-0.5DL	G188-02J	5	1.2	07/24/0819:45	07/24/0813:30	M47G025064	M47G025056	HGG041S	Diluted Sample
H-T1-0.5MS	G188-02M	1	1.2	07/24/0819:47	07/24/0813:30	M47G025065	M47G025056	HGG041S	Matrix Spike Sample (MS)
H-T1-0.5MSD	G188-02S	1	1.2	07/24/0819:50	07/24/0813:30	M47G025066	M47G025056	HGG041S	MS Duplicate (MSD)
H-T1-7.0	G188-04	1	8.0	07/24/0819:52	07/24/0813:30	M47G025067	M47G025056	HGG041S	Field Sample
H-T1-11	G188-05	1	10.0	07/24/0819:58	07/24/0813:30	M47G025070	M47G025068	HGG041S	Field Sample
H-T2-0.5	G188-06	1	1.8	07/24/0820:00	07/24/0813:30	M47G025071	M47G025068	HGG041S	Field Sample
H-T2-2.5	G188-07	1	7.2	07/24/0820:02	07/24/0813:30	M47G025072	M47G025068	HGG041S	Field Sample
H-T2-10	G188-10	1	18.6	07/24/0820:04	07/24/0813:30	M47G025073	M47G025068	HGG041S	Field Sample
H-T2-10DUP	G188-11	1	18.5	07/24/0820:06	07/24/0813:30	M47G025074	M47G025068	HGG041S	Field Sample
H-T3-0.5	G188-12	1	1.0	07/24/0820:08	07/24/0813:30	M47G025075	M47G025068	HGG041S	Field Sample
H-T3-5.0	G188-14	1	8.1	07/24/0820:11	07/24/0813:30	M47G025076	M47G025068	HGG041S	Field Sample
H-T3-10.0	G188-15	1	14.4	07/24/0820:13	07/24/0813:30	M47G025077	M47G025068	HGG041S	Field Sample
H-T4-0.5	G188-16	1	1.2	07/24/0820:15	07/24/0813:30	M47G025078	M47G025068	HGG041S	Field Sample
H-T4-2.0	G188-17	1	1.8	07/24/0820:17	07/24/0813:30	M47G025079	M47G025068	HGG041S	Field Sample
H-T6-0.5	G188-18	1	1.4	07/24/0820:24	07/24/0813:30	M47G025082	M47G025080	HGG041S	Field Sample
H-T6-0.5DUP	G188-19	1	1.2	07/24/0820:26	07/24/0813:30	M47G025083	M47G025080	HGG041S	Field Sample
H-T6-5.0	G188-21	1	19.1	07/24/0820:28	07/24/0813:30	M47G025084	M47G025080	HGG041S	Field Sample
H-T6-10	G188-22	1	11.6	07/24/0820:30	07/24/0813:30	M47G025085	M47G025080	HGG041S	Field Sample

FN - Filename
% Moist - Percent Moisture

12-2-2

METHOD 7470A
MERCURY BY COLD VAPOR

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
Batch No. : 08G188

Matrix : WATER
Instrument ID : TI047

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGG037WB	ND	1	NA	0.500	0.100	07/22/0819:16	07/22/0814:30	M47G022038	M47G022032	HGG037W	NA	07/22/08
LCS1W	HGG037WL	5.43	1	NA	0.500	0.100	07/22/0819:18	07/22/0814:30	M47G022039	M47G022032	HGG037W	NA	07/22/08
LCD1W	HGG037WC	5.48	1	NA	0.500	0.100	07/22/0819:20	07/22/0814:30	M47G022040	M47G022032	HGG037W	NA	07/22/08
SKID RINSE PLUSAS	G511-01A	2.26	1	NA	0.500	0.100	07/22/0819:23	07/22/0814:30	M47G022041	M47G022032	HGG037W	07/14/08	07/17/08
SKID RINSE PLUS	G511-01	ND	1	NA	0.500	0.100	07/22/0819:25	07/22/0814:30	M47G022042	M47G022032	HGG037W	07/14/08	07/17/08
SKID RINSE PLUSDL	G511-01J	0.535J	5	NA	2.50	0.500	07/22/0819:27	07/22/0814:30	M47G022043	M47G022032	HGG037W	07/14/08	07/17/08
H-EB7172008	G188-01	ND	1	NA	0.500	0.100	07/22/0819:44	07/22/0814:30	M47G022051	M47G022044	HGG037W	07/17/08	07/18/08

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 7470A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	HGG037WB	HGG037WL	HGG037WC		
LAB FILE ID:	M47G022038	M47G022039	M47G022040		
DATIME EXTRCTD:	07/22/0814:30	07/22/0814:30	07/22/0814:30	DATE COLLECTED:	NA
DATIME ANALYZD:	07/22/0819:16	07/22/0819:18	07/22/0819:20	DATE RECEIVED:	07/22/08
PREP. BATCH:	HGG037W	HGG037W	HGG037W		
CALIB. REF:	M47G022032	M47G022032	M47G022032		

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	5.00	5.43	109	5.00	5.48	110	1	80-120	20

G2F4

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 7470A

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	SKID RINSE PLUS	SKID RINSE PLUSDL		
EMAX SAMP ID:	G511-01	G511-01J		
LAB FILE ID:	M47G022042	M47G022043		
DATE EXTRACTED:	07/22/0814:30	07/22/0814:30	DATE COLLECTED:	07/14/08
DATE ANALYZED:	07/22/0819:25	07/22/0819:27	DATE RECEIVED:	07/17/08
PREP. BATCH:	HGG037W	HGG037W		
CALIB. REF:	M47G022032	M47G022032		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	0.535J	NA	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 7470A

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: SKID RINSE PLUS
CONTROL NO.: G511-01 G511-01A
LAB FILE ID: M47G022042 M47G022041
DATIME EXTRCTD: 07/22/0814:30 07/22/0814:30 DATE COLLECTED: 07/14/08
DATIME ANALYZD: 07/22/0819:25 07/22/0819:23 DATE RECEIVED: 07/17/08
PREP. BATCH: HGG037W HGG037W
CALIB. REF: M47G022032 M47G022032

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Mercury	ND	2.00	2.26	113	85-115

G2T2

METHOD 7471A
MERCURY BY COLD VAPOR

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
Batch No. : 08G188

Matrix : SOIL
Instrument ID : TI047

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/kg)	DLF	MOIST	RL (mg/kg)	MDL (mg/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	HGG041SB	ND	1	NA	0.100	0.0330	07/24/0819:35	07/24/0813:30	M47G025059	M47G025056	HGG041S	NA	07/24/08
LCS1S	HGG041SL	0.808	1	NA	0.100	0.0330	07/24/0819:37	07/24/0813:30	M47G025060	M47G025056	HGG041S	NA	07/24/08
LCD1S	HGG041SC	0.790	1	NA	0.100	0.0330	07/24/0819:39	07/24/0813:30	M47G025061	M47G025056	HGG041S	NA	07/24/08
H-T1-0.5AS	G188-02A	0.294	1	1.2	0.101	0.0334	07/24/0819:41	07/24/0813:30	M47G025062	M47G025056	HGG041S	07/17/08	07/18/08
H-T1-0.5	G188-02	ND	1	1.2	0.101	0.0334	07/24/0819:43	07/24/0813:30	M47G025063	M47G025056	HGG041S	07/17/08	07/18/08
H-T1-0.5DL	G188-02J	ND	5	1.2	0.506	0.167	07/24/0819:45	07/24/0813:30	M47G025064	M47G025056	HGG041S	07/17/08	07/18/08
H-T1-0.5MS	G188-02M	0.806	1	1.2	0.101	0.0334	07/24/0819:47	07/24/0813:30	M47G025065	M47G025056	HGG041S	07/17/08	07/18/08
H-T1-0.5MSD	G188-02S	0.808	1	1.2	0.101	0.0334	07/24/0819:50	07/24/0813:30	M47G025066	M47G025056	HGG041S	07/17/08	07/18/08
H-T1-7.0	G188-04	ND	1	8.0	0.109	0.0359	07/24/0819:52	07/24/0813:30	M47G025067	M47G025056	HGG041S	07/17/08	07/18/08
H-T1-11	G188-05	ND	1	10.0	0.111	0.0367	07/24/0819:58	07/24/0813:30	M47G025070	M47G025068	HGG041S	07/17/08	07/18/08
H-T2-0.5	G188-06	ND	1	1.8	0.102	0.0336	07/24/0820:00	07/24/0813:30	M47G025071	M47G025068	HGG041S	07/17/08	07/18/08
H-T2-2.5	G188-07	ND	1	7.2	0.108	0.0356	07/24/0820:02	07/24/0813:30	M47G025072	M47G025068	HGG041S	07/17/08	07/18/08
H-T2-10	G188-10	ND	1	18.6	0.123	0.0405	07/24/0820:04	07/24/0813:30	M47G025073	M47G025068	HGG041S	07/17/08	07/18/08
H-T2-10DUP	G188-11	ND	1	18.5	0.123	0.0405	07/24/0820:06	07/24/0813:30	M47G025074	M47G025068	HGG041S	07/17/08	07/18/08
H-T3-0.5	G188-12	ND	1	1.0	0.101	0.0333	07/24/0820:08	07/24/0813:30	M47G025075	M47G025068	HGG041S	07/17/08	07/18/08
H-T3-5.0	G188-14	ND	1	8.1	0.109	0.0359	07/24/0820:11	07/24/0813:30	M47G025076	M47G025068	HGG041S	07/17/08	07/18/08
H-T3-10.0	G188-15	ND	1	14.4	0.117	0.0386	07/24/0820:13	07/24/0813:30	M47G025077	M47G025068	HGG041S	07/17/08	07/18/08
H-T4-0.5	G188-16	0.137	1	1.2	0.101	0.0334	07/24/0820:15	07/24/0813:30	M47G025078	M47G025068	HGG041S	07/17/08	07/18/08
H-T4-2.0	G188-17	0.351	1	1.8	0.102	0.0336	07/24/0820:17	07/24/0813:30	M47G025079	M47G025068	HGG041S	07/17/08	07/18/08
H-T6-0.5	G188-18	ND	1	1.4	0.101	0.0335	07/24/0820:24	07/24/0813:30	M47G025082	M47G025080	HGG041S	07/17/08	07/18/08
H-T6-0.5DUP	G188-19	ND	1	1.2	0.101	0.0334	07/24/0820:26	07/24/0813:30	M47G025083	M47G025080	HGG041S	07/17/08	07/18/08
H-T6-5.0	G188-21	ND	1	19.1	0.124	0.0408	07/24/0820:28	07/24/0813:30	M47G025084	M47G025080	HGG041S	07/17/08	07/18/08
H-T6-10	G188-22	ND	1	11.6	0.113	0.0373	07/24/0820:30	07/24/0813:30	M47G025085	M47G025080	HGG041S	07/17/08	07/18/08

SDG

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 7471A

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1S				
CONTROL NO.:	HGG041SB	HGG041SL	HGG041SC		
LAB FILE ID:	M47G025059	M47G025060	M47G025061		
DATIME EXTRCTD:	07/24/0813:30	07/24/0813:30	07/24/0813:30	DATE COLLECTED:	NA
DATIME ANALYZD:	07/24/0819:35	07/24/0819:37	07/24/0819:39	DATE RECEIVED:	07/24/08
PREP. BATCH:	HGG041S	HGG041S	HGG041S		
CALIB. REF:	M47G025056	M47G025056	M47G025056		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	0.833	0.808	97	0.833	0.790	95	2	80-120	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 7471A

MATRIX:	SOIL			% MOISTURE:	1.2
DILTN FACTR:	1	1	1		
SAMPLE ID:	H-T1-0.5				
CONTROL NO.:	G188-02	G188-02M	G188-02S		
LAB FILE ID:	M47G025063	M47G025065	M47G025066		
DATIME EXTRCTD:	07/24/0813:30	07/24/0813:30	07/24/0813:30	DATE COLLECTED:	07/17/08
DATIME ANALYZD:	07/24/0819:43	07/24/0819:47	07/24/0819:50	DATE RECEIVED:	07/18/08
PREP. BATCH:	HGG041S	HGG041S	HGG041S		
CALIB. REF:	M47G025056	M47G025056	M47G025056		

ACCESSION:

PARAMETER	SMPL RSLT mg/kg	SPIKE AMT mg/kg	MS RSLT mg/kg	MS % REC	SPIKE AMT mg/kg	MSD RSLT mg/kg	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	0.843	0.806	96	0.843	0.808	96	0	75-125	20

7123

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 7471A

MATRIX:	SOIL		% MOISTURE:	1.2
DILUTION FACTOR:	1	5		
SAMPLE ID:	H-T1-0.5	H-T1-0.5DL		
EMAX SAMP ID:	G188-02	G188-02J		
LAB FILE ID:	M47G025063	M47G025064		
DATE EXTRACTED:	07/24/0813:30	07/24/0813:30	DATE COLLECTED:	07/17/08
DATE ANALYZED:	07/24/0819:43	07/24/0819:45	DATE RECEIVED:	07/18/08
PREP. BATCH:	HGG041S	HGG041S		
CALIB. REF:	M47G025056	M47G025056		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	ND	0	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 7471A

MATRIX:	SOIL		% MOISTURE:	1.2
DILTN FACTR:	1	1		
SAMPLE ID:	H-T1-0.5			
CONTROL NO.:	G188-02	G188-02A		
LAB FILE ID:	M47G025063	M47G025062		
DATIME EXTRCTD:	07/24/0813:30	07/24/0813:30	DATE COLLECTED:	07/17/08
DATIME ANALYZD:	07/24/0819:43	07/24/0819:41	DATE RECEIVED:	07/18/08
PREP. BATCH:	HGG041S	HGG041S		
CALIB. REF:	M47G025056	M47G025056		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Mercury	ND	0.337	0.294	87	85-115

0671

ANALYSIS RUN LOG
for
MERCURY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/22/08 **Start Time:** 17:58

End Date: 7/22/08 **End Time:** 19:50

Book #: A47-59

Instrument No.: 47

Analytical Sequence/Batch: M47G022

Method File: Hg

Comments:

QC OK

G204-05A was out of QC limit.
For Confirmation

SOP #	Rev. #
☑ EMAX-7470	4
☐ EMAX-7471	4
☐ EMAX-CLP-245.5	1
☐ EMAX-CLP-245.1	0
☐ EMAX-	

STANDARDS ID	
S1	BLANK
S2	SM3B-08-137
S3	
S4	
S5	
S6	
ICV	SM3B-08-138
CCV	
LCS	
Analytical Spike	SM3B-08-100

Analyzed By: NT

Date: 7/22/08

"M47G022"

EMAXlfid	EMAXlsid	conc	Raw_resp	rsd/rf	adatetime	DF
M47G022000	STD1REP1	0	4951		07/22/0817:58	1
M47G022001	STD2REP1	.2	13282		07/22/0818:00	1
M47G022002	STD3REP1	1	58743		07/22/0818:02	1
M47G022003	STD4REP1	2	110155		07/22/0818:04	1
M47G022004	STD5REP1	5	282585		07/22/0818:06	1
M47G022005	STD6REP1	10	541895		07/22/0818:08	1
M47G022006	ICV	2.02	113901	0	07/22/0818:10	1
M47G022007	ICB	-.001	4541	0	07/22/0818:12	1
M47G022008	CCV1	5.55	304652	0	07/22/0818:14	1
M47G022009	CCB1	-.05	1888	0	07/22/0818:16	1
M47G022010	HGG036WB	-.049	1939	0	07/22/0818:18	1
M47G022011	HGG036WL	5.53	303653	0	07/22/0818:20	1
M47G022012	HGG036WC	5.57	305804	0	07/22/0818:23	1
M47G022013	TXG012SB	-.028	3083	0	07/22/0818:25	1
M47G022014	G204-05A	2.33	130794	0	07/22/0818:26	1
M47G022015	G204-05	.014	5308	0	07/22/0818:29	1
M47G022016	G204-05J	-.003	4431	0	07/22/0818:31	5
M47G022017	G204-05M	5.63	309156	0	07/22/0818:33	1
M47G022018	G204-05S	5.52	303060	0	07/22/0818:35	1
M47G022019	G204-01	-.017	3662	0	07/22/0818:37	1
M47G022020	CCV2	5.55	304465	0	07/22/0818:39	1
M47G022021	CCB2	-.052	1740	0	07/22/0818:41	1
M47G022022	G204-02	.049	7220	0	07/22/0818:43	1
M47G022023	G204-03	.251	18137	0	07/22/0818:45	1
M47G022024	G204-04	-.012	3907	0	07/22/0818:47	1
M47G022025	G203-01	-.073	623	0	07/22/0818:50	1
M47G022026	TXG008SB	-.007	4205	0	07/22/0818:52	1
M47G022027	G483-01	-.048	1986	0	07/22/0818:54	1
M47G022028	G483-02	-.035	2699	0	07/22/0818:56	1
M47G022029	TXG009WB	.004	4783	0	07/22/0818:58	1
M47G022030	G483-04A	2.15	120662	0	07/22/0819:00	1
M47G022031	G483-04	-.024	3267	0	07/22/0819:02	1
M47G022032	CCV3	5.51	302514	0	07/22/0819:04	1
M47G022033	CCB3	-.021	3464	0	07/22/0819:06	1
M47G022034	G483-04J	-.011	4004	0	07/22/0819:08	5
M47G022035	G483-04M	4.3	236916	0	07/22/0819:10	1
M47G022036	G483-04S	4.21	232133	0	07/22/0819:12	1
M47G022037	G483-03	-.112	-1504	0	07/22/0819:14	1
M47G022038	HGG037WB	-.006	4255	0	07/22/0819:16	1
M47G022039	HGG037WL	5.43	298170	0	07/22/0819:18	1
M47G022040	HGG037WC	5.48	301100	0	07/22/0819:20	1
M47G022041	G511-01A	2.26	126900	0	07/22/0819:23	1
M47G022042	G511-01	-.037	2596	0	07/22/0819:25	1
M47G022043	G511-01J	.107	10353	0	07/22/0819:27	5
M47G022044	CCV4	5.56	305246	0	07/22/0819:29	1
M47G022045	CCB4	.06	7811	0	07/22/0819:31	1
M47G022046	G511-02	-.018	3602	0	07/22/0819:34	1
M47G022047	G511-03	.039	6676	0	07/22/0819:36	1
M47G022048	G511-04	-.076	492	0	07/22/0819:38	1
M47G022049	G511-05	-.056	1524	0	07/22/0819:40	1
M47G022050	G486-01	.035	6468	0	07/22/0819:42	1
M47G022051	G188-01	-.044	2184	0	07/22/0819:44	1
M47G022052	G195-01	-.07	785	0	07/22/0819:46	1
M47G022053	CCV5	5.35	293907	0	07/22/0819:48	1
M47G022054	CCB5	-.037	2603	0	07/22/0819:50	1
**********	**********	**********	**********	**********	**********	***
EMAXlfid	EMAXlsid	Xint	Yint	rrf	adatetime	DF
M47G022000	BLANK	-8.581136E-02	4638.436	.9998143	07/22/0819:50	1

RunProt: HGCOM

RunFold: M47G0ZZ Seq: 6 Batch:

Prnt: R/T On Pump: On

Rev: 4.2 18:08:50 22 Jul 2008 Xmit: Off Gas: 0.35 LPM

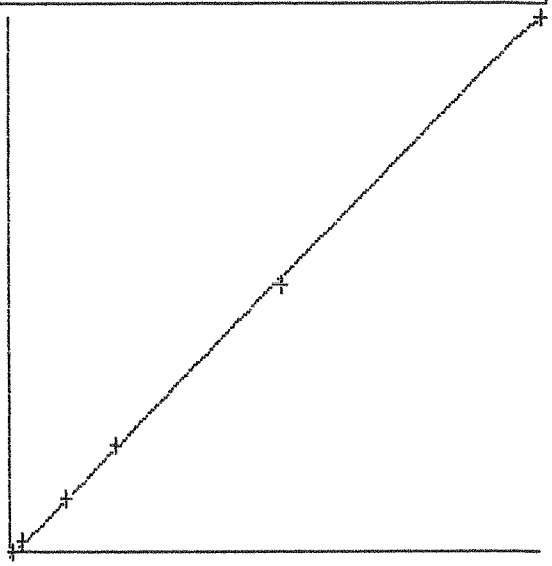
State: Idle User: MT\TH A/S: On

CALIBRATION: Line proto: HGCOM

	Hg Conc.	Calc.	Dev.	Accepted liNear
S1	.000	.007	.007	Quadratic
S2	.200	.161	-.039	->wtdlinear
S3	1.00	1.00	.002	C
S4	2.00	1.95	-.048	Accept o
S5	5.00	5.14	.141	n
S6	10.0	9.94	-.063	c

A .0000000 r .999814

B 1.84932e-5 C -8.46531e-2



Relative Absorbance

	Mean		
S1	4951	0 SD	4951
S2	13282	0 %RSD	13282
S3	58743	0 %RSD	58743
S4	110155	0 %RSD	110155
S5	282585	0 %RSD	282585
S6	541895	0 %RSD	541895

New cal coefficients stored

ANALYSIS RUN LOG
for
MERCURY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/24/08 **Start Time:** 17:25

End Date: 7/24/08 **End Time:** 20:34

Comments:

QC OK

Book #: A47-59

Instrument No.: 47

Analytical Sequence/Batch: M47G025

Method File: Hg

SOP #	Rev. #
☐ EMAX-7470	4
☑ EMAX-7471	4
☐ EMAX-CLP-245.5	1
☐ EMAX-CLP-245.1	0
☐ EMAX-	

STANDARDS ID	
S1	BLANK
S2	SM3B-08-145
S3	↓
S4	
S5	
S6	
ICV	SM3B-08-146
CCV	↓
LCS	
Analytical Spike	
SM3B-08-141	

Analyzed By: NT

Date: 7/24/08

"M47G025"

EMAXlfid	EMAXlsid	conc	Raw_resp	rsd/rf	adatetime	DF
M47G025000	STD1REP1	0	9021		07/24/0817:25	1
M47G025001	STD2REP1	.2	27601		07/24/0817:27	1
M47G025002	STD3REP1	1	102286		07/24/0817:29	1
M47G025003	STD4REP1	2	190479		07/24/0817:31	1
M47G025004	STD5REP1	5	461133		07/24/0817:33	1
M47G025005	STD6REP1	10	893129		07/24/0817:35	1
M47G025006	ICV	2.02	190894	0	07/24/0817:44	1
M47G025007	ICB	-.14	-81	0	07/24/0817:46	1
M47G025008	CCV1	4.96	450810	0	07/24/0817:48	1
M47G025009	CCB1	-.047	8110	0	07/24/0817:50	1
M47G025010	HGG039SB	-.095	3919	0	07/24/0817:52	1
M47G025011	HGG039SL	5.02	456704	0	07/24/0817:55	1
M47G025012	HGG039SC	5.07	460896	0	07/24/0817:57	1
M47G025013	G167-01A	1.79	171045	0	07/24/0817:59	1
M47G025014	G167-01	-.037	8998	0	07/24/0818:01	1
M47G025015	G167-01J	-.086	4681	0	07/24/0818:03	5
M47G025016	G167-02	-.039	8857	0	07/24/0818:05	1
M47G025017	G167-03	-.038	8939	0	07/24/0818:07	1
M47G025018	G167-04	-.011	11309	0	07/24/0818:09	1
M47G025019	G167-05	-.036	9099	0	07/24/0818:12	1
M47G025020	CCV2	4.91	446597	0	07/24/0818:14	1
M47G025021	CCB2	-.096	3823	0	07/24/0818:17	1
M47G025022	G167-06	.038	15610	0	07/24/0818:19	1
M47G025023	G167-07	.004	12675	0	07/24/0818:21	1
M47G025024	G167-08	-.054	7505	0	07/24/0818:23	1
M47G025025	G167-09	-.023	10269	0	07/24/0818:25	1
M47G025026	G167-10	-.054	7473	0	07/24/0818:27	1
M47G025027	G167-11	-.051	7776	0	07/24/0818:29	1
M47G025028	G167-12	.015	13644	0	07/24/0818:31	1
M47G025029	G167-13	-.015	10977	0	07/24/0818:33	1
M47G025030	G167-14	-.053	7632	0	07/24/0818:35	1
M47G025031	G167-15	.008	12990	0	07/24/0818:37	1
M47G025032	CCV3	4.86	442126	0	07/24/0818:39	1
M47G025033	CCB3	-.091	4256	0	07/24/0818:41	1
M47G025034	G167-16	.039	15727	0	07/24/0818:43	1
M47G025035	G167-17	-.038	8921	0	07/24/0818:45	1
M47G025036	HGG040SB	-.079	5279	0	07/24/0818:47	1
M47G025037	HGG040SL	4.9	445755	0	07/24/0818:49	1
M47G025038	HGG040SC	4.88	444382	0	07/24/0818:51	1
M47G025039	G177-02A	1.98	187033	0	07/24/0818:53	1
M47G025040	G177-02	.216	31378	0	07/24/0818:55	1
M47G025041	G177-02J	-.026	9946	0	07/24/0818:57	5
M47G025042	G177-02M	4.98	453106	0	07/24/0818:59	1
M47G025043	G177-02S	4.9	445769	0	07/24/0819:02	1
M47G025044	CCV4	4.82	438586	0	07/24/0819:04	1
M47G025045	CCB4	-.069	6212	0	07/24/0819:06	1
M47G025046	G177-03	-.048	8057	0	07/24/0819:08	1
M47G025047	G177-05	-.037	9004	0	07/24/0819:11	1
M47G025048	G177-06	.022	14200	0	07/24/0819:13	1
M47G025049	G177-08	-.049	7949	0	07/24/0819:15	1
M47G025050	G177-09	-.022	10374	0	07/24/0819:17	1
M47G025051	G177-10	-.001	12169	0	07/24/0819:19	1
M47G025052	G177-11	.009	13081	0	07/24/0819:21	1
M47G025053	G177-12	-.059	7058	0	07/24/0819:23	1
M47G025054	G177-16	-.041	8686	0	07/24/0819:25	1
M47G025055	G177-17	.591	64564	0	07/24/0819:27	1
M47G025056	CCV5	4.75	432592	0	07/24/0819:29	1
M47G025057	CCB5	-.106	2887	0	07/24/0819:31	1
M47G025058	G234-01	.213	31111	0	07/24/0819:33	1
M47G025059	HGG041SB	-.071	6021	0	07/24/0819:35	1
M47G025060	HGG041SL	4.85	441050	0	07/24/0819:37	1
M47G025061	HGG041SC	4.74	432014	0	07/24/0819:39	1
M47G025062	G188-02A	1.74	166542	0	07/24/0819:41	1
M47G025063	G188-02	-.003	11988	0	07/24/0819:43	1
M47G025064	G188-02J	-.077	5472	0	07/24/0819:45	5
M47G025065	G188-02M	4.78	435236	0	07/24/0819:47	1
M47G025066	G188-02S	4.79	436045	0	07/24/0819:50	1
M47G025067	G188-04	-.08	5178	0	07/24/0819:52	1
M47G025068	CCV6	4.7	427613	0	07/24/0819:54	1
M47G025069	CCB6	-.131	712	0	07/24/0819:56	1
M47G025070	G188-05	-.064	6664	0	07/24/0819:58	1
M47G025071	G188-06	-.003	12015	0	07/24/0820:00	1
M47G025072	G188-07	-.047	8154	0	07/24/0820:02	1
M47G025073	G188-10	-.027	9903	0	07/24/0820:04	1

M47G025074	G188-11	-.023	10221	0	07/24/0820:06	1
M47G025075	G188-12	-.047	8155	0	07/24/0820:08	1
M47G025076	G188-14	-.055	7463	0	07/24/0820:11	1
M47G025077	G188-15	-.06	6967	0	07/24/0820:13	1
M47G025078	G188-16	.815	84423	0	07/24/0820:15	1
M47G025079	G188-17	2.07	195123	0	07/24/0820:17	1
M47G025080	CCV7	4.7	427903	0	07/24/0820:19	1
M47G025081	CCB7	-.131	709	0	07/24/0820:22	1
M47G025082	G188-18	.151	25659	0	07/24/0820:24	1
M47G025083	G188-19	.16	26399	0	07/24/0820:26	1
M47G025084	G188-21	-.014	11084	0	07/24/0820:28	1
M47G025085	G188-22	-.037	9027	0	07/24/0820:30	1
M47G025086	CCV8	4.57	416234	0	07/24/0820:32	1
M47G025087	CCB8	-.117	1925	0	07/24/0820:34	1
**********	**********	**********	**********	**********	**********	***
EMAXlfid	EMAXlsid	Xint	Yint	rrf	adatetime	DF
M47G025000	BLANK	-.1393443	12324.34	.999934	07/24/0820:34	1

RunProt: HGCOM

RunFold: M47G025 Seq: 6 Batch:

Prnt: R/T On Pump: On

Rev: 4.2 17:42:44 24 Jul 2008 Xmit: Off Gas: 0.35 LPM

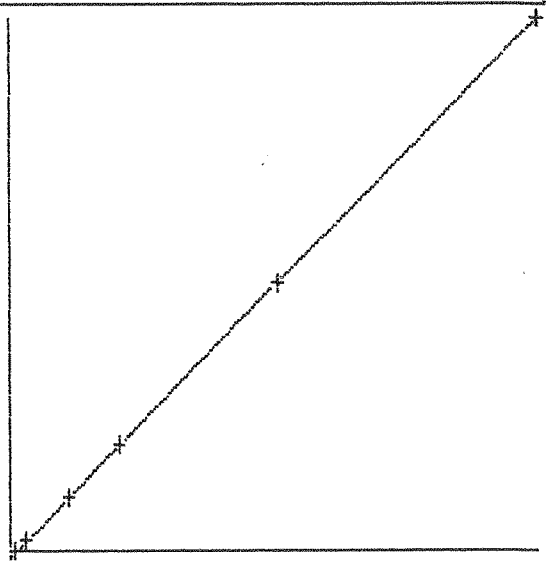
State: Idle User: MT\TH A/S: On

CALIBRATION: Line proto: HGCOM

	Hg Conc.	Calc.	Dev.	Accepted linear
S1	.000	-.037	-.037	Quadratic
S2	.200	.173	-.027	->wtdlinear
S3	1.00	1.02	.017	C
S4	2.00	2.01	.014	Accept o
S5	5.00	5.07	.074	n
S6	10.0	9.96	-.042	c

A .0000000 r .999934

B 1.13049e-5 C -1.38926e-1



Relative Absorbance

	Mean		
S1	9021	0 SD	9021
S2	27601	0 %RSD	27601
S3	102286	0 %RSD	102286
S4	190479	0 %RSD	190479
S5	461133	0 %RSD	461133
S6	893129	0 %RSD	893129

New cal coefficients stored

DIGESTION LOG FOR MERCURY

EMAX LABORATORIES, INC.

SOP ☑ EMAX-7470 Rev. No.4 ☐ EMAX-7471 Rev. No.4 ☐ EMAX-CLP-245.5 ☐ EMAX-CLP-245.1 ☐ EMAX EPA 245.2 ☐

Matrix: Water Start Date: 7/22/08 Time: 14:30 Ending Date: 7/22/08 Time: 17:00 Book # E47-064

BATCH: HGG037W

Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Sample Amount (g | ml)	Dry Weight	pH	Extract Volume (ml)	Matrix Description: Color	Matrix Description: Clarity
01	0	Cr	Cr	N/A	0	N/A	N/A	75	Cr	Cr
02	0.2	↓	↓	↓	0.2	↓	↓	↓	↓	↓
03	1				1					
04	2				2					
05	5				5					
06	10				10					
07	ICV				2					
08	ICB				0					
09	CCV				5					
10	CCB				0					
11	HGG037WB				50					
12	WL				↓					
13	WC						↓			
14	G511-01				5		<2			
15	02				↓		<2			
16	03						<2			
17	04						<2			
18	05						<2			
19	G486-01						<2			
20	G188-01						<2			
21	G195-01	↓	↓	↓	↓	↓	<2	↓	↓	↓
22										
23										
24							NT			
25							7/22/08			
26										
27										
28										

Standards	ID	Conc. (µg/L)	Amount Added (ml)
ICAL	SMSB-08-137	50	0.2, 1, 2, 5, 10
ICV	SMSB-08-138	↓	2
CCV/MS	↓	↓	5
LCS	↓	↓	5
Reagent	Lot# / ID		
HNO_3	SWIA-03-721		
HCl	N/A		
H_2SO_4	SWIA-03-669		
$KMnO_4$	SMSB-02-85		
$K_2S_2O_8$	↓	82	
$NH_2OH.HCl$	↓	83	
$SnCl_2$	↓	84	

Temp of Digestion Bath: 95 °C

Legend

Color			
Bu = blue	Cs = Coarse	Cr = Clear	Rk = rocks
Bk = black	Md = Medium	Cy = Cloudy	Sl = Shale
Bn = Brown	Fn = Fine	Td = Turbid	Vg=Vegetation
Gn = Green			
Og = Orange			
Rd = Red			
Yw = Yellow			

Comments:

Prepared By: NT

Standard Added By: NT Witnessed By: TH

Checked By:

Disposed By: Date Disposed:

EMAX LABORATORIES, INC.

DIGESTION LOG FOR MERCURY

SOP ☐ EMAX-7470 Rev. No.4 ☑ EMAX-7471 Rev. No.4 ☐ EMAX-CLP-245.5 ☐ EMAX-CLP-245.1 ☐ EMAX EPA 245.2 ☐

Matrix: Soil Start Date: 7/24/08 Time: 13:30 Ending Date: 7/24/08 Time: 14:30 Book # E47-064

BATCH: HG0415

Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Sample Amount (g | ml)	Dry Weight	pH	Extract Volume (ml)	Matrix Description: Color	Matrix Description: Clarity
01	S-0	Cr	Cr	N/A	0	N/A	N/A	100	Cr	Cr
02	0.2	↓	↓	↓	0.2	↓	↓	↓	↓	↓
03	1				1					
04	2				2					
05	5				5					
06	10				10					
07	ICV				2					
08	ICB				0					
09	CCV				5					
10	CCB				0					
11	HG0415B				0.600g					
12	SL				0.600					
13	SC	↓	↓		0.600					
14	G188-02	Bn	Fn		0.600					
15	02M				0.601					
16	025				0.603					
17	04				0.601					
18	05				0.601					
19	06				0.602					
20	07				0.601					
21	10				0.601					
22	11				0.602					
23	12				0.604					
24	14				0.604					
25	15				0.603					
26	16				0.603					
27	17				0.602					
28	18	↓	↓	↓	0.602	↓	↓	↓	↓	↓

Standards	ID	Conc. (µg/L)	Amount Added (ml)
ICAL SM	3B-08-145	100	0.2,1,2,5,10
ICV SM	3B-08-146	↓	2
CCV/MS	↓	↓	5
LCS	↓	↓	5
Reagent	Lot# / ID		
HNO_3 / aqua	SW1A-03-721		
HCl / regia	SW1A-03-699		
H_2SO_4	N/A		
$KMnO_4$	SM5B-02-85		
$K_2S_2O_8$	N/A		
$NH_2OH.HCl$	SM5B-02-83		
$SnCl_2$	↓ 84		

Temp of Digestion Bath: 95 °C

Legend

Color			
Bu = blue	Cs = Coarse	Cr = Clear	Rk = rocks
Bk = black	Md = Medium	Cy = Cloudy	Sl = Shale
Bn = Brown	Fn = Fine	Td = Turbid	Vg=Vegetation
Gn = Green			
Og = Orange			
Rd = Red			
Yw = Yellow			

Comments:

Prepared By: NT

Standard Added By: NT Witnessed By: TH

Checked By:

Disposed By: Date Disposed:

DIGESTION LOG FOR MERCURY

EMAX LABORATORIES, INC.

SOP ☐ EMAX-7470 Rev. No.4 ☑ EMAX-7471 Rev. No.4 ☐ EMAX-CLP-245.5 ☐ EMAX-CLP-245.1 ☐ EMAX EPA 245.2 ☐

Matrix: Soil **Start Date:** 7/24/08 **Time:** 13:30 **Ending Date:** 7/24/08 **Time:** 14:30 **Book #** E47-064

BATCH: HG0415

Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Sample Amount (g / ml)	Dry Weight	pH	Extract Volume (ml)	Matrix Description: Color	Matrix Description: Clarity
01	G188-19	Bn	Fn	N/A	0.601	N/A	N/A	100	Cr	Cr
02	21	↓	↓	↓	0.601	↓	↓	↓	↓	↓
03	22	↓	↓	↓	0.603	↓	↓	↓	↓	↓
04										
05										
06										
07										
08										
09										
10										
11						↓				
12						NT				
13						7/24/08				
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										

Standards	ID	Conc. (µg/L)	Amount Added (ml)
ICAL			
ICV			
CCV/MS			
LCS			

Reagent	Lot# / ID
HNO_3	
HCl	
H_2SO_4	
$KMnO_4$	
$K_2S_2O_8$	
$NH_2OH.HCl$	
$SnCl_2$	

CAME 45 PAGE 53

Temp of Digestion Bath: °C

Legend

Color			
Bu = blue	Cs = Coarse	Cr = Clear	Rk = rocks
Bk = black	Md = Medium	Cy = Cloudy	Sl = Shale
Bn = Brown	Fn = Fine	Td = Turbid	Vg=Vegetation
Gn = Green			
Og = Orange			
Rd = Red			
Yw = Yellow			

Comments:

Prepared By: NT

Standard Added By: NT Witnessed By: TH

Checked By:

Disposed By: Date Disposed:

LABORATORY REPORT FOR

TETRA TECH, INC.

LMC BEAUMONT SITE 1

METALS / MERCURY

SDG#: 08G188

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G188

METHOD 3010A/3050B/6010B
METALS BY ICP

One (1) water sample and sixteen (16) soil samples were received on 07/18/08 for Metals analysis by Method 3010A/3050B/6010B in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition and DOD QSM, v.3.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Continuing Calibrations (CCV's) and ICSA/ICSAB**

   CCV's and ICSA/ICSAB were analyzed at a frequency specified by the project. All project requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at half of reporting limit.

4. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

5. **Serial Dilution/Post-Analytical Spike**

   Sample G188-02 and samples G195- 06 and G234-03 from another SDG were analyzed for serial dilution and post-analytical spike. All QC requirements were met.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample G188-05 was spiked. All recoveries were within QC limit except two elements in MS and three elements in MSD were out of the limits.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met with the aforementioned exception.

LAB CHRONICLE
METALS BY ICP

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1

SDG NO. : 08G188
Instrument ID : T-ID8

SOIL

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1S	IPG067SB	1	NA	07/29/0815:51	07/22/0813:50	ID8G034051	ID8G034049	IPG067S	Method Blank
LCS1S	IPG067SL	1	NA	07/29/0815:57	07/22/0813:50	ID8G034052	ID8G034049	IPG067S	Lab Control Sample (LCS)
LCD1S	IPG067SC	1	NA	07/29/0816:02	07/22/0813:50	ID8G034053	ID8G034049	IPG067S	LCS Duplicate
H-T1-0.5AS	G188-02A	1	1.2	07/29/0816:07	07/22/0813:50	ID8G034054	ID8G034049	IPG067S	Analytical Spike Sample
H-T1-0.5	G188-02	1	1.2	07/29/0816:12	07/22/0813:50	ID8G034055	ID8G034049	IPG067S	Field Sample
H-T1-0.5DL	G188-02J	5	1.2	07/29/0816:17	07/22/0813:50	ID8G034056	ID8G034049	IPG067S	Diluted Sample
H-T1-7.0	G188-04	1	8.0	07/29/0816:22	07/22/0813:50	ID8G034057	ID8G034049	IPG067S	Field Sample
H-T2-0.5	G188-06	1	1.8	07/29/0816:32	07/22/0813:50	ID8G034059	ID8G034049	IPG067S	Field Sample
H-T2-2.5	G188-07	1	7.2	07/29/0816:52	07/22/0813:50	ID8G034063	ID8G034061	IPG067S	Field Sample
H-T2-10	G188-10	1	18.6	07/29/0816:58	07/22/0813:50	ID8G034064	ID8G034061	IPG067S	Field Sample
H-T2-10DUP	G188-11	1	18.5	07/29/0817:03	07/22/0813:50	ID8G034065	ID8G034061	IPG067S	Field Sample
H-T3-0.5	G188-12	1	1.0	07/29/0817:08	07/22/0813:50	ID8G034066	ID8G034061	IPG067S	Field Sample
H-T3-5.0	G188-14	1	8.1	07/29/0817:13	07/22/0813:50	ID8G034067	ID8G034061	IPG067S	Field Sample
H-T3-10.0	G188-15	1	14.4	07/29/0817:18	07/22/0813:50	ID8G034068	ID8G034061	IPG067S	Field Sample
H-T4-0.5	G188-16	1	1.2	07/29/0817:23	07/22/0813:50	ID8G034069	ID8G034061	IPG067S	Field Sample
H-T4-2.0	G188-17	1	1.8	07/29/0817:28	07/22/0813:50	ID8G034070	ID8G034061	IPG067S	Field Sample
H-T6-0.5	G188-18	1	1.4	07/29/0817:33	07/22/0813:50	ID8G034071	ID8G034061	IPG067S	Field Sample
H-T6-0.5DUP	G188-19	1	1.2	07/29/0817:53	07/22/0813:50	ID8G034075	ID8G034073	IPG067S	Field Sample
H-T6-5.0	G188-21	1	19.1	07/29/0817:58	07/22/0813:50	ID8G034076	ID8G034073	IPG067S	Field Sample
H-T6-10	G188-22	1	11.6	07/29/0818:03	07/22/0813:50	ID8G034077	ID8G034073	IPG067S	Field Sample
MBLK2S	IPG092SB	1	NA	07/31/0820:30	07/31/0809:45	ID8G037073	ID8G037071	IPG092S	Method Blank
LCS2S	IPG092SL	1	NA	07/31/0820:35	07/31/0809:45	ID8G037074	ID8G037071	IPG092S	Lab Control Sample (LCS)
LCD2S	IPG092SC	1	NA	07/31/0820:40	07/31/0809:45	ID8G037075	ID8G037071	IPG092S	LCS Duplicate
H-T11-10.0DUPAS	G195-06A	1	5.9	07/31/0820:55	07/31/0809:45	ID8G037078	ID8G037071	IPG092S	Analytical Spike Sample
H-T11-10.0DUP	G195-06	1	5.9	07/31/0820:59	07/31/0809:45	ID8G037079	ID8G037071	IPG092S	Field Sample
H-T11-10.0DUPDL	G195-06J	5	5.9	07/31/0821:04	07/31/0809:45	ID8G037080	ID8G037071	IPG092S	Diluted Sample
H-T1-11MS	G188-05M	1	10.0	07/31/0821:24	07/31/0809:45	ID8G037084	ID8G037082	IPG092S	Matrix Spike Sample (MS)
H-T1-11MSD	G188-05S	1	10.0	07/31/0821:29	07/31/0809:45	ID8G037085	ID8G037082	IPG092S	MS Duplicate (MSD)
H-T1-11	G188-05	1	10.0	07/31/0821:34	07/31/0809:45	ID8G037086	ID8G037082	IPG092S	Field Sample

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	IPG068WB	1	NA	07/24/0823:20	07/23/0812:00	ID8G029081	ID8G029079	IPG068W	Method Blank
LCS1W	IPG068WL	1	NA	07/24/0823:25	07/23/0812:00	ID8G029082	ID8G029079	IPG068W	Lab Control Sample (LCS)
LCD1W	IPG068WC	1	NA	07/24/0823:30	07/23/0812:00	ID8G029083	ID8G029079	IPG068W	LCS Duplicate
H-EB7172008	G188-01	1	NA	07/25/0800:21	07/23/0812:00	ID8G029093	ID8G029091	IPG068W	Field Sample
03831GW120AS	G234-03A	1	NA	07/25/0820:29	07/23/0812:00	ID8G031067	ID8G031065	IPG068W	Analytical Spike Sample
03831GW120	G234-03	1	NA	07/25/0820:34	07/23/0812:00	ID8G031068	ID8G031065	IPG068W	Field Sample
03831GW120DL	G234-03J	5	NA	07/25/0820:39	07/23/0812:00	ID8G031069	ID8G031065	IPG068W	Diluted Sample

FN - Filename
% Moist - Percent Moisture

2007

METHOD 3010A/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 09:05
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/23/08 12:00
Sample ID:	H-EB7172008	Date Analyzed:	07/25/08 00:21
Lab Samp ID:	G188-01	Dilution Factor:	1
Lab File ID:	ID8G029093	Matrix :	WATER
Ext Btch ID:	IPG068W	% Moisture :	NA
Calib. Ref.:	ID8G029091	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Antimony	ND	0.100	0.0400
Arsenic	ND	0.0100	0.00500
Barium	ND	0.0100	0.00200
Beryllium	ND	0.0100	0.00100
Cadmium	ND	0.0100	0.00200
Chromium	ND	0.0100	0.00500
Cobalt	ND	0.0100	0.00500
Copper	ND	0.0100	0.00500
Lead	ND	0.0100	0.00300
Molybdenum	ND	0.0500	0.0100
Nickel	ND	0.0200	0.0100
Selenium	ND	0.0100	0.00500
Silver	ND	0.0100	0.00500
Thallium	ND	0.0100	0.00500
Vanadium	ND	0.0100	0.00500
Zinc	ND	0.0100	0.00500

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 10:13
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T1-0.5	Date Analyzed:	07/29/08 16:12
Lab Samp ID:	G188-02	Dilution Factor:	1
Lab File ID:	ID8G034055	Matrix	: SOIL
Ext Btch ID:	IPG067S	% Moisture	: 1.2
Calib. Ref.:	ID8G034049	Instrument ID	: EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.1	2.02
Arsenic	2.08	1.01	0.405
Barium	119	1.01	0.202
Beryllium	0.398J	1.01	0.202
Cadmium	ND	1.01	0.506
Chromium	10.8	2.02	1.01
Cobalt	5.66	2.02	1.01
Copper	0.813J	2.02	0.506
Lead	6.69	1.01	0.202
Molybdenum	ND	5.06	0.506
Nickel	7.67	2.02	1.01
Selenium	ND	1.01	0.506
Silver	ND	2.02	0.506
Thallium	0.704J	1.01	0.506
Vanadium	28.7	2.02	0.506
Zinc	57.9	2.02	0.506

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 10:51
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T1-7.0	Date Analyzed:	07/29/08 16:22
Lab Samp ID:	G188-04	Dilution Factor:	1
Lab File ID:	ID8G034057	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	8.0
Calib. Ref.:	ID8G034049	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.9	2.17
Arsenic	2.23	1.09	0.435
Barium	144	1.09	0.217
Beryllium	0.288J	1.09	0.217
Cadmium	ND	1.09	0.543
Chromium	9.86	2.17	1.09
Cobalt	5.47	2.17	1.09
Copper	5.42	2.17	0.543
Lead	4.11	1.09	0.217
Molybdenum	ND	5.43	0.543
Nickel	7.85	2.17	1.09
Selenium	ND	1.09	0.543
Silver	ND	2.17	0.543
Thallium	ND	1.09	0.543
Vanadium	26.0	2.17	0.543
Zinc	40.2	2.17	0.543

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 11:12
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/31/08 09:45
Sample ID:	H-T1-11	Date Analyzed:	07/31/08 21:34
Lab Samp ID:	G188-05	Dilution Factor:	1
Lab File ID:	ID8G037086	Matrix :	SOIL
Ext Btch ID:	IPG092S	% Moisture :	10.0
Calib. Ref.:	ID8G037082	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	11.1	2.22
Arsenic	3.43	1.11	0.444
Barium	177	1.11	0.222
Beryllium	0.479J	1.11	0.222
Cadmium	ND	1.11	0.556
Chromium	13.4	2.22	1.11
Cobalt	7.16	2.22	1.11
Copper	7.70	2.22	0.556
Lead	5.29	1.11	0.222
Molybdenum	ND	5.56	0.556
Nickel	9.19	2.22	1.11
Selenium	0.763J	1.11	0.556
Silver	ND	2.22	0.556
Thallium	1.06J	1.11	0.556
Vanadium	36.3	2.22	0.556
Zinc	61.7	2.22	0.556

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 12:35
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T2-0.5	Date Analyzed:	07/29/08 16:32
Lab Samp ID:	G188-06	Dilution Factor:	1
Lab File ID:	ID8G034059	Matrix	: SOIL
Ext Btch ID:	IPG067S	% Moisture	: 1.8
Calib. Ref.:	ID8G034049	Instrument ID	: EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.2	2.04
Arsenic	2.11	1.02	0.407
Barium	135	1.02	0.204
Beryllium	0.363J	1.02	0.204
Cadmium	ND	1.02	0.509
Chromium	11.7	2.04	1.02
Cobalt	6.21	2.04	1.02
Copper	1.57J	2.04	0.509
Lead	7.06	1.02	0.204
Molybdenum	ND	5.09	0.509
Nickel	8.13	2.04	1.02
Selenium	ND	1.02	0.509
Silver	ND	2.04	0.509
Thallium	0.998J	1.02	0.509
Vanadium	33.3	2.04	0.509
Zinc	60.3	2.04	0.509

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 12:51
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T2-2.5	Date Analyzed:	07/29/08 16:52
Lab Samp ID:	G188-07	Dilution Factor:	1
Lab File ID:	ID8G034063	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	7.2
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.8	2.16
Arsenic	2.23	1.08	0.431
Barium^	281	1.08	0.216
Beryllium	0.247J	1.08	0.216
Cadmium	ND	1.08	0.539
Chromium	7.19	2.16	1.08
Cobalt	5.61	2.16	1.08
Copper	3.67	2.16	0.539
Lead	2.80	1.08	0.216
Molybdenum	ND	5.39	0.539
Nickel	5.83	2.16	1.08
Selenium	ND	1.08	0.539
Silver	ND	2.16	0.539
Thallium	1.33	1.08	0.539
Vanadium	27.2	2.16	0.539
Zinc	39.2	2.16	0.539

^ : Analyzed on 07/28/08 22:46 | File ID8G033053

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 13:18
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T2-10	Date Analyzed:	07/29/08 16:58
Lab Samp ID:	G188-10	Dilution Factor:	1
Lab File ID:	ID8G034064	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	18.6
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	12.3	2.46
Arsenic	5.67	1.23	0.491
Barium^	448	1.23	0.246
Beryllium	0.833J	1.23	0.246
Cadmium	ND	1.23	0.614
Chromium	28.6	2.46	1.23
Cobalt	16.1	2.46	1.23
Copper	14.1	2.46	0.614
Lead	11.2	1.23	0.246
Molybdenum	ND	6.14	0.614
Nickel	21.0	2.46	1.23
Selenium	1.10J	1.23	0.614
Silver	ND	2.46	0.614
Thallium	0.845J	1.23	0.614
Vanadium	76.8	2.46	0.614
Zinc	116	2.46	0.614

^ : Analyzed on 07/28/08 22:51 | File ID8G033054

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 13:20
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T2-10DUP	Date Analyzed:	07/29/08 17:03
Lab Samp ID:	G188-11	Dilution Factor:	1
Lab File ID:	ID8G034065	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	18.5
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	12.3	2.45
Arsenic	6.77	1.23	0.491
Barium^	309	1.23	0.245
Beryllium	0.751J	1.23	0.245
Cadmium	ND	1.23	0.613
Chromium	24.1	2.45	1.23
Cobalt	16.8	2.45	1.23
Copper	13.7	2.45	0.613
Lead	10.7	1.23	0.245
Molybdenum	ND	6.13	0.613
Nickel	17.3	2.45	1.23
Selenium	0.904J	1.23	0.613
Silver	ND	2.45	0.613
Thallium	0.876J	1.23	0.613
Vanadium	68.8	2.45	0.613
Zinc	102	2.45	0.613

^ : Analyzed on 07/28/08 22:57 | File ID8G033055

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 14:12
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T3-0.5	Date Analyzed:	07/29/08 17:08
Lab Samp ID:	G188-12	Dilution Factor:	1
Lab File ID:	ID8G034066	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	1.0
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.1	2.02
Arsenic	1.64	1.01	0.404
Barium^	104	1.01	0.202
Beryllium	0.254J	1.01	0.202
Cadmium	ND	1.01	0.505
Chromium	7.66	2.02	1.01
Cobalt	4.14	2.02	1.01
Copper	2.21	2.02	0.505
Lead	4.63	1.01	0.202
Molybdenum	ND	5.05	0.505
Nickel	5.52	2.02	1.01
Selenium	ND	1.01	0.505
Silver	ND	2.02	0.505
Thallium	ND	1.01	0.505
Vanadium	21.8	2.02	0.505
Zinc	45.3	2.02	0.505

^ : Analyzed on 07/28/08 23:02 | File ID8G033056

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 14:30
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T3-5.0	Date Analyzed:	07/29/08 17:13
Lab Samp ID:	G188-14	Dilution Factor:	1
Lab File ID:	ID8G034067	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	8.1
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.9	2.18
Arsenic	3.56	1.09	0.435
Barium^	213	1.09	0.218
Beryllium	0.373J	1.09	0.218
Cadmium	ND	1.09	0.544
Chromium	13.1	2.18	1.09
Cobalt	7.39	2.18	1.09
Copper	7.58	2.18	0.544
Lead	5.72	1.09	0.218
Molybdenum	ND	5.44	0.544
Nickel	8.99	2.18	1.09
Selenium	ND	1.09	0.544
Silver	ND	2.18	0.544
Thallium	0.613J	1.09	0.544
Vanadium	37.8	2.18	0.544
Zinc	55.0	2.18	0.544

^ : Analyzed on 07/28/08 23:07 | File ID8G033057

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 14:52
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T3-10.0	Date Analyzed:	07/29/08 17:18
Lab Samp ID:	G188-15	Dilution Factor:	1
Lab File ID:	ID8G034068	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	14.4
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	11.7	2.34
Arsenic	2.51	1.17	0.467
Barium^	188	1.17	0.234
Beryllium	0.495J	1.17	0.234
Cadmium	ND	1.17	0.584
Chromium	16.1	2.34	1.17
Cobalt	11.0	2.34	1.17
Copper	3.60	2.34	0.584
Lead	5.48	1.17	0.234
Molybdenum	ND	5.84	0.584
Nickel	10.6	2.34	1.17
Selenium	ND	1.17	0.584
Silver	ND	2.34	0.584
Thallium	ND	1.17	0.584
Vanadium	40.3	2.34	0.584
Zinc	76.7	2.34	0.584

^ : Analyzed on 07/28/08 23:12 | File ID8G033058

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 15:43
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T4-0.5	Date Analyzed:	07/29/08 17:23
Lab Samp ID:	G188-16	Dilution Factor:	1
Lab File ID:	ID8G034069	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	1.2
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.1	2.02
Arsenic	1.42	1.01	0.405
Barium^	104	1.01	0.202
Beryllium	0.315J	1.01	0.202
Cadmium	ND	1.01	0.506
Chromium	9.07	2.02	1.01
Cobalt	4.52	2.02	1.01
Copper	1.72J	2.02	0.506
Lead	7.28	1.01	0.202
Molybdenum	ND	5.06	0.506
Nickel	5.86	2.02	1.01
Selenium	ND	1.01	0.506
Silver	ND	2.02	0.506
Thallium	0.623J	1.01	0.506
Vanadium	19.7	2.02	0.506
Zinc	52.2	2.02	0.506

^ : Analyzed on 07/28/08 23:17 | File ID8G033059

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 15:50
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T4-2.0	Date Analyzed:	07/29/08 17:28
Lab Samp ID:	G188-17	Dilution Factor:	1
Lab File ID:	ID8G034070	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	1.8
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.2	2.04
Arsenic	1.67	1.02	0.407
Barium^	87.3	1.02	0.204
Beryllium	0.265J	1.02	0.204
Cadmium	1.38	1.02	0.509
Chromium	13.4	2.04	1.02
Cobalt	5.02	2.04	1.02
Copper	5.32	2.04	0.509
Lead	19.0	1.02	0.204
Molybdenum	1.48J	5.09	0.509
Nickel	11.3	2.04	1.02
Selenium	ND	1.02	0.509
Silver	0.697J	2.04	0.509
Thallium	0.672J	1.02	0.509
Vanadium	18.1	2.04	0.509
Zinc	67.4	2.04	0.509

^ : Analyzed on 07/28/08 23:22 | File ID8G033060

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 16:18
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T6-0.5	Date Analyzed:	07/29/08 17:33
Lab Samp ID:	G188-18	Dilution Factor:	1
Lab File ID:	ID8G034071	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	1.4
Calib. Ref.:	ID8G034061	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.1	2.03
Arsenic	1.36	1.01	0.406
Barium^	90.4	1.01	0.203
Beryllium	0.287J	1.01	0.203
Cadmium	ND	1.01	0.507
Chromium	7.96	2.03	1.01
Cobalt	4.54	2.03	1.01
Copper	1.35J	2.03	0.507
Lead	7.96	1.01	0.203
Molybdenum	ND	5.07	0.507
Nickel	5.41	2.03	1.01
Selenium	ND	1.01	0.507
Silver	ND	2.03	0.507
Thallium	0.744J	1.01	0.507
Vanadium	18.3	2.03	0.507
Zinc	47.8	2.03	0.507

^ : Analyzed on 07/28/08 23:27 | File ID8G033061

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 16:20
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T6-0.5DUP	Date Analyzed:	07/29/08 17:53
Lab Samp ID:	G188-19	Dilution Factor:	1
Lab File ID:	ID8G034075	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	1.2
Calib. Ref.:	ID8G034073	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.1	2.02
Arsenic	1.33	1.01	0.405
Barium^	100	1.01	0.202
Beryllium	0.302J	1.01	0.202
Cadmium	ND	1.01	0.506
Chromium	8.35	2.02	1.01
Cobalt	4.76	2.02	1.01
Copper	1.18J	2.02	0.506
Lead	7.51	1.01	0.202
Molybdenum	ND	5.06	0.506
Nickel	5.69	2.02	1.01
Selenium	ND	1.01	0.506
Silver	ND	2.02	0.506
Thallium	0.787J	1.01	0.506
Vanadium	19.0	2.02	0.506
Zinc	48.5	2.02	0.506

^ : Analyzed on 07/28/08 23:47 | File ID8G033065

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 16:45
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T6-5.0	Date Analyzed:	07/29/08 17:58
Lab Samp ID:	G188-21	Dilution Factor:	1
Lab File ID:	ID8G034076	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	19.1
Calib. Ref.:	ID8G034073	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	12.4	2.47
Arsenic	0.964J	1.24	0.494
Barium^	73.9	1.24	0.247
Beryllium	ND	1.24	0.247
Cadmium	ND	1.24	0.618
Chromium	8.25	2.47	1.24
Cobalt	3.71	2.47	1.24
Copper	ND	2.47	0.618
Lead	2.84	1.24	0.247
Molybdenum	ND	6.18	0.618
Nickel	4.54	2.47	1.24
Selenium	ND	1.24	0.618
Silver	ND	2.47	0.618
Thallium	ND	1.24	0.618
Vanadium	19.9	2.47	0.618
Zinc	37.6	2.47	0.618

^ : Analyzed on 07/28/08 23:52 | File ID8G033066

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/17/08 16:57
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	H-T6-10	Date Analyzed:	07/29/08 18:03
Lab Samp ID:	G188-22	Dilution Factor:	1
Lab File ID:	ID8G034077	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	11.6
Calib. Ref.:	ID8G034073	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	11.3	2.26
Arsenic	1.75	1.13	0.452
Barium^	235	1.13	0.226
Beryllium	0.493J	1.13	0.226
Cadmium	ND	1.13	0.566
Chromium	15.9	2.26	1.13
Cobalt	9.58	2.26	1.13
Copper	12.4	2.26	0.566
Lead	7.35	1.13	0.226
Molybdenum	ND	5.66	0.566
Nickel	15.0	2.26	1.13
Selenium	ND	1.13	0.566
Silver	ND	2.26	0.566
Thallium	1.20	1.13	0.566
Vanadium	45.6	2.26	0.566
Zinc	59.0	2.26	0.566

^ : Analyzed on 07/28/08 23:57 | File ID8G033067

METHOD 3010A/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	NA
Project	: LMC BEAUMONT SITE 1	Date Received:	07/23/08
SDG NO.	: 08G188	Date Extracted:	07/23/08 12:00
Sample ID:	MBLK1W	Date Analyzed:	07/24/08 23:20
Lab Samp ID:	IPG068WB	Dilution Factor:	1
Lab File ID:	ID8G029081	Matrix :	WATER
Ext Btch ID:	IPG068W	% Moisture :	NA
Calib. Ref.:	ID8G029079	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Antimony	ND	0.100	0.0400
Arsenic	ND	0.0100	0.00500
Barium	ND	0.0100	0.00200
Beryllium	ND	0.0100	0.00100
Cadmium	ND	0.0100	0.00200
Chromium	ND	0.0100	0.00500
Cobalt	ND	0.0100	0.00500
Copper	ND	0.0100	0.00500
Lead	ND	0.0100	0.00300
Molybdenum	ND	0.0500	0.0100
Nickel	ND	0.0200	0.0100
Selenium	ND	0.0100	0.00500
Silver	ND	0.0100	0.00500
Thallium	ND	0.0100	0.00500
Vanadium	ND	0.0100	0.00500
Zinc	ND	0.0100	0.00500

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 3010A/6010B

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	IPG068WB	IPG068WL	IPG068WC		
LAB FILE ID:	ID8G029081	ID8G029082	ID8G029083		
DATIME EXTRCTD:	07/23/0812:00	07/23/0812:00	07/23/0812:00	DATE COLLECTED:	NA
DATIME ANALYZD:	07/24/0823:20	07/24/0823:25	07/24/0823:30	DATE RECEIVED:	07/23/08
PREP. BATCH:	IPG068W	IPG068W	IPG068W		
CALIB. REF:	ID8G029079	ID8G029079	ID8G029079		

ACCESSION:

PARAMETER	BLNK RSLT mg/L	SPIKE AMT mg/L	BS RSLT mg/L	BS % REC	SPIKE AMT mg/L	BSD RSLT mg/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	5	4.92	98	5	5	100	2	80-120	20
Arsenic	ND	1	1.07	107	1	1.11	111	3	80-120	20
Barium	ND	1	1.02	102	1	1.06	106	5	80-120	20
Beryllium	ND	1	1.01	101	1	1.04	104	4	80-120	20
Cadmium	ND	1	1.05	105	1	1.09	109	4	80-120	20
Chromium	ND	1	1.0	100	1	1.04	104	4	80-120	20
Cobalt	ND	1	1.01	101	1	1.05	105	4	80-120	20
Copper	ND	1	.99	99	1	1.03	103	4	80-120	20
Lead	ND	1	.998	100	1	1.04	104	4	80-120	20
Molybdenum	ND	1	1.04	104	1	1.05	105	1	80-120	20
Nickel	ND	1	1.02	102	1	1.06	106	4	80-120	20
Selenium	ND	1	1.03	103	1	1.07	107	4	80-120	20
Silver	ND	1	.978	98	1	1.02	102	4	80-120	20
Thallium	ND	1	.91	91	1	.94	94	3	80-120	20
Vanadium	ND	1	1.1	110	1	1.14	114	4	80-120	20
Zinc	ND	1	1.06	106	1	1.09	109	3	80-120	20

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	NA
Project	: LMC BEAUMONT SITE 1	Date Received:	07/22/08
SDG NO.	: 08G188	Date Extracted:	07/22/08 13:50
Sample ID:	MBLK1S	Date Analyzed:	07/29/08 15:51
Lab Samp ID:	IPG067SB	Dilution Factor:	1
Lab File ID:	ID8G034051	Matrix :	SOIL
Ext Btch ID:	IPG067S	% Moisture :	NA
Calib. Ref.:	ID8G034049	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.0	2.00
Arsenic	ND	1.00	0.400
Barium	ND	1.00	0.200
Beryllium	ND	1.00	0.200
Cadmium	ND	1.00	0.500
Chromium	ND	2.00	1.00
Cobalt	ND	2.00	1.00
Copper	ND	2.00	0.500
Lead	ND	1.00	0.200
Molybdenum	ND	5.00	0.500
Nickel	ND	2.00	1.00
Selenium	ND	1.00	0.500
Silver	ND	2.00	0.500
Thallium	ND	1.00	0.500
Vanadium	ND	2.00	0.500
Zinc	ND	2.00	0.500

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 3050B/6010B

MATRIX: SOIL % MOISTURE: NA
DILTN FACTR: 1 1 1
SAMPLE ID: MBLK1S
CONTROL NO.: IPG067SB IPG067SL IPG067SC
LAB FILE ID: ID8G034051 ID8G034052 ID8G034053
DATIME EXTRCTD: 07/22/0813:50 07/22/0813:50 07/22/0813:50 DATE COLLECTED: NA
DATIME ANALYZD: 07/29/0815:51 07/29/0815:57 07/29/0816:02 DATE RECEIVED: 07/22/08
PREP. BATCH: IPG067S IPG067S IPG067S
CALIB. REF: ID8G034049 ID8G034049 ID8G034049

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	500	462	92	500	461	92	0	80-120	20
Arsenic	ND	100	96.2	96	100	95.7	96	0	80-120	20
Barium	ND	100	92.9	93	100	94.4	94	2	80-120	20
Beryllium	ND	100	102	102	100	104	104	2	80-120	20
Cadmium	ND	100	103	103	100	104	104	0	80-120	20
Chromium	ND	100	95.1	95	100	95.7	96	1	80-120	20
Cobalt	ND	100	99.6	100	100	100	100	0	80-120	20
Copper	ND	100	94.6	95	100	95.8	96	1	80-120	20
Lead	ND	100	96.8	97	100	97.2	97	0	80-120	20
Molybdenum	ND	100	103	103	100	103	103	0	80-120	20
Nickel	ND	100	100	100	100	101	101	0	80-120	20
Selenium	ND	100	92.4	92	100	91.6	92	1	80-120	20
Silver	ND	100	93.4	93	100	94.1	94	1	80-120	20
Thallium	ND	100	94.6	95	100	94.9	95	0	80-120	20
Vanadium	ND	100	107	107	100	107	107	0	80-120	20
Zinc	ND	100	102	102	100	102	102	0	80-120	20

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	NA
Project	: LMC BEAUMONT SITE 1	Date Received:	07/31/08
SDG NO.	: 08G188	Date Extracted:	07/31/08 09:45
Sample ID:	MBLK2S	Date Analyzed:	07/31/08 20:30
Lab Samp ID:	IPG092SB	Dilution Factor:	1
Lab File ID:	ID8G037073	Matrix :	SOIL
Ext Btch ID:	IPG092S	% Moisture :	NA
Calib. Ref.:	ID8G037071	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.0	2.00
Arsenic	ND	1.00	0.400
Barium	ND	1.00	0.200
Beryllium	ND	1.00	0.200
Cadmium	ND	1.00	0.500
Chromium	ND	2.00	1.00
Cobalt	ND	2.00	1.00
Copper	ND	2.00	0.500
Lead	ND	1.00	0.200
Molybdenum	ND	5.00	0.500
Nickel	ND	2.00	1.00
Selenium	ND	1.00	0.500
Silver	ND	2.00	0.500
Thallium	ND	1.00	0.500
Vanadium	ND	2.00	0.500
Zinc	ND	2.00	0.500

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK2S				
CONTROL NO.:	IPG092SB	IPG092SL	IPG092SC		
LAB FILE ID:	ID8G037073	ID8G037074	ID8G037075		
DATIME EXTRCTD:	07/31/0809:45	07/31/0809:45	07/31/0809:45	DATE COLLECTED:	NA
DATIME ANALYZD:	07/31/0820:30	07/31/0820:35	07/31/0820:40	DATE RECEIVED:	07/31/08
PREP. BATCH:	IPG092S	IPG092S	IPG092S		
CALIB. REF:	ID8G037071	ID8G037071	ID8G037071		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	500	493	99	500	487	97	1	80-120	20
Arsenic	ND	100	99.6	100	100	97	97	3	80-120	20
Barium	ND	100	97.8	98	100	99.6	100	2	80-120	20
Beryllium	ND	100	102	102	100	104	104	2	80-120	20
Cadmium	ND	100	101	101	100	101	101	0	80-120	20
Chromium	ND	100	95.8	96	100	94.7	95	1	80-120	20
Cobalt	ND	100	99.3	99	100	98.7	99	1	80-120	20
Copper	ND	100	97.1	97	100	98.4	98	1	80-120	20
Lead	ND	100	96.9	97	100	96.7	97	0	80-120	20
Molybdenum	ND	100	101	101	100	102	102	1	80-120	20
Nickel	ND	100	98.6	99	100	98.4	98	0	80-120	20
Selenium	ND	100	97.5	98	100	95.2	95	2	80-120	20
Silver	ND	100	96.5	96	100	95.9	96	1	80-120	20
Thallium	ND	100	95.8	96	100	96	96	0	80-120	20
Vanadium	ND	100	107	107	100	109	109	1	80-120	20
Zinc	ND	100	99.2	99	100	98	98	1	80-120	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL			% MOISTURE:	10.0
DILTN FACTR:	1	1	1		
SAMPLE ID:	H-T1-11				
CONTROL NO.:	G188-05	G188-05M	G188-05S		
LAB FILE ID:	ID8G037086	ID8G037084	ID8G037085		
DATIME EXTRCTD:	07/31/0809:45	07/31/0809:45	07/31/0809:45	DATE COLLECTED:	07/17/08 11:12
DATIME ANALYZD:	07/31/0821:34	07/31/0821:24	07/31/0821:29	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG092S	IPG092S	IPG092S		
CALIB. REF:	ID8G037082	ID8G037082	ID8G037082		

ACCESSION:

PARAMETER	SMPL RSLT mg/kg	SPIKE AMT mg/kg	MS RSLT mg/kg	MS % REC	SPIKE AMT mg/kg	MSD RSLT mg/kg	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	556	92.5	17*	556	85.1	15*	8	75-125	20
Arsenic	3.43	111	108	95	111	99.6	87	9	75-125	20
Barium	177	111	335	142*	111	305	116	9	75-125	20
Beryllium	.479J	111	106	95	111	96.7	87	10	75-125	20
Cadmium	ND	111	100	90	111	91.7	83	9	75-125	20
Chromium	13.4	111	111	87	111	102	80	8	75-125	20
Cobalt	7.16	111	104	87	111	95.3	79	9	75-125	20
Copper	7.7	111	107	89	111	96.9	80	10	75-125	20
Lead	5.29	111	102	87	111	93.3	79	9	75-125	20
Molybdenum	ND	111	90.2	81	111	82.3	74*	9	75-125	20
Nickel	9.19	111	106	87	111	96.8	79	9	75-125	20
Selenium	.763J	111	103	92	111	94.7	85	8	75-125	20
Silver	ND	111	101	91	111	92.7	83	9	75-125	20
Thallium	1.06J	111	91.4	81	111	82.8	74*	10	75-125	20
Vanadium	36.3	111	144	97	111	131	85	9	75-125	20
Zinc	61.7	111	163	91	111	149	79	9	75-125	20

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3010A/6010B

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	03831GW120	03831GW120DL		
EMAX SAMP ID:	G234-03	G234-03J		
LAB FILE ID:	ID8G031068	ID8G031069		
DATE EXTRACTED:	07/23/0812:00	07/23/0812:00	DATE COLLECTED:	07/22/08 17:20
DATE ANALYZED:	07/25/0820:34	07/25/0820:39	DATE RECEIVED:	07/23/08
PREP. BATCH:	IPG068W	IPG068W		
CALIB. REF:	ID8G031065	ID8G031065		

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SERIAL DIL RSLT (mg/L)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Arsenic	0.833	0.771	8	10
Barium	0.136	0.137	1	10
Beryllium	ND	ND	0	10
Cadmium	ND	ND	0	10
Chromium	ND	ND	0	10
Cobalt	ND	ND	0	10
Copper	ND	ND	0	10
Lead	0.00321J	ND	NA	10
Molybdenum	ND	ND	0	10
Nickel	0.0450	ND	NA	10
Selenium	0.0132	ND	NA	10
Silver	ND	ND	0	10
Thallium	ND	ND	0	10
Vanadium	0.120	0.118	2	10
Zinc	0.00584J	ND	NA	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL		% MOISTURE:	1.2
DILUTION FACTOR:	1	5		
SAMPLE ID:	H-T1-0.5	H-T1-0.5DL		
EMAX SAMP ID:	G188-02	G188-02J		
LAB FILE ID:	ID8G034055	ID8G034056		
DATE EXTRACTED:	07/22/0813:50	07/22/0813:50	DATE COLLECTED:	07/17/08 10:13
DATE ANALYZED:	07/29/0816:12	07/29/0816:17	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG067S	IPG067S		
CALIB. REF:	ID8G034049	ID8G034049		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Arsenic	2.08	2.25J	NA	10
Barium	119	119	0	10
Beryllium	0.398J	ND	NA	10
Cadmium	ND	ND	0	10
Chromium	10.8	10.9	1	10
Cobalt	5.66	5.54J	NA	10
Copper	0.813J	3.58J	NA	10
Lead	6.69	6.88	3	10
Molybdenum	ND	ND	0	10
Nickel	7.67	7.58J	NA	10
Selenium	ND	ND	0	10
Silver	ND	ND	0	10
Thallium	0.704J	ND	NA	10
Vanadium	28.7	28.9	1	10
Zinc	57.9	57.8	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G188
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL		% MOISTURE:	5.9
DILUTION FACTOR:	1	5		
SAMPLE ID:	H-T11-10.0DUP	H-T11-10.0DUPDL		
EMAX SAMP ID:	G195-06	G195-06J		
LAB FILE ID:	ID8G037079	ID8G037080		
DATE EXTRACTED:	07/31/0809:45	07/31/0809:45	DATE COLLECTED:	07/18/08 09:35
DATE ANALYZED:	07/31/0820:59	07/31/0821:04	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG092S	IPG092S		
CALIB. REF:	ID8G037071	ID8G037071		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Arsenic	2.89	2.73J	NA	10
Barium	85.1	90.3	6	10
Beryllium	0.271J	ND	NA	10
Cadmium	ND	ND	0	10
Chromium	4.89	ND	NA	10
Cobalt	3.31	ND	NA	10
Copper	ND	ND	0	10
Lead	2.35	2.50J	NA	10
Molybdenum	ND	ND	0	10
Nickel	2.69	ND	NA	10
Selenium	0.578J	ND	NA	10
Silver	ND	ND	0	10
Thallium	ND	ND	0	10
Vanadium	20.0	20.6	3	10
Zinc	42.8	42.6	0	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 3010A/6010B

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	03831GW120			
CONTROL NO.:	G234-03	G234-03A		
LAB FILE ID:	ID8G031068	ID8G031067		
DATIME EXTRCTD:	07/23/0812:00	07/23/0812:00	DATE COLLECTED:	07/22/08 17:20
DATIME ANALYZD:	07/25/0820:34	07/25/0820:29	DATE RECEIVED:	07/23/08
PREP. BATCH:	IPG068W	IPG068W		
CALIB. REF:	ID8G031065	ID8G031065		

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	AS RSLT (mg/L)	AS % REC	QC LIMIT (%)
Antimony	ND	5	5.18	104	75-125
Arsenic	.833	1	1.93	110	75-125
Barium	.136	1	1.13	99	75-125
Beryllium	ND	1	.995	99	75-125
Cadmium	ND	1	1.08	108	75-125
Chromium	ND	1	.994	99	75-125
Cobalt	ND	1	1.01	101	75-125
Copper	ND	1	.989	99	75-125
Lead	.00321J	1	1.01	101	75-125
Molybdenum	ND	1	1.01	101	75-125
Nickel	.045	1	1.05	101	75-125
Selenium	.0132	1	1.18	116	75-125
Silver	ND	1	.882	88	75-125
Thallium	ND	1	.952	95	75-125
Vanadium	.12	1	1.23	111	75-125
Zinc	.00584J	1	1.07	106	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL		% MOISTURE:	1.2
DILTN FACTR:	1	1		
SAMPLE ID:	H-T1-0.5			
CONTROL NO.:	G188-02	G188-02A		
LAB FILE ID:	ID8G034055	ID8G034054		
DATIME EXTRCTD:	07/22/0813:50	07/22/0813:50	DATE COLLECTED:	07/17/08 10:13
DATIME ANALYZD:	07/29/0816:12	07/29/0816:07	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG067S	IPG067S		
CALIB. REF:	ID8G034049	ID8G034049		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Antimony	ND	506	467	92	75-125
Arsenic	2.08	101	103	100	75-125
Barium	119	101	218	98	75-125
Beryllium	.398J	101	105	104	75-125
Cadmium	ND	101	109	108	75-125
Chromium	10.8	101	109	97	75-125
Cobalt	5.66	101	111	104	75-125
Copper	.813J	101	103	101	75-125
Lead	6.69	101	107	99	75-125
Molybdenum	ND	101	105	103	75-125
Nickel	7.67	101	112	103	75-125
Selenium	ND	101	96.8	96	75-125
Silver	ND	101	98.4	97	75-125
Thallium	.704J	101	97.4	96	75-125
Vanadium	28.7	101	140	110	75-125
Zinc	57.9	101	163	104	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G188
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL		% MOISTURE:	5.9
DILTN FACTR:	1	1		
SAMPLE ID:	H-T11-10.0DUP			
CONTROL NO.:	G195-06	G195-06A		
LAB FILE ID:	ID8G037079	ID8G037078		
DATIME EXTRCTD:	07/31/0809:45	07/31/0809:45	DATE COLLECTED:	07/18/08 09:35
DATIME ANALYZD:	07/31/0820:59	07/31/0820:55	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG092S	IPG092S		
CALIB. REF:	ID8G037071	ID8G037071		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Antimony	ND	531	518	98	75-125
Arsenic	2.89	106	114	105	75-125
Barium	85.1	106	191	99	75-125
Beryllium	.271J	106	110	103	75-125
Cadmium	ND	106	111	104	75-125
Chromium	4.89	106	110	99	75-125
Cobalt	3.31	106	113	103	75-125
Copper	ND	106	108	101	75-125
Lead	2.35	106	109	100	75-125
Molybdenum	ND	106	105	99	75-125
Nickel	2.69	106	111	102	75-125
Selenium	.578J	106	109	102	75-125
Silver	ND	106	110	103	75-125
Thallium	ND	106	104	98	75-125
Vanadium	20	106	137	110	75-125
Zinc	42.8	106	150	101	75-125

TRACE-LOW ICP QC CHECK TABLE

QC	ICV HIGH	ICV	CCV	ICSAB	ICSA
Limit%	95-105	90-110	90-110	80-120	80-120
Comp	mg/L	mg/L	mg/L	mg/L	mg/L
Al	10	5	5	500	500
Sb	1	0.5	0.5	1	0
As	1	0.5	0.5	1	0
Ba	1	0.5	0.5	0.5	0
Be	1	0.5	0.5	0.5	0
B	1	0.5	0.5	0.5	0
Cd	1	0.5	0.5	1	0
Ca	100	50	50	500	500
Cr	1	0.5	0.5	0.5	0
Co	1	0.5	0.5	0.5	0
Cu	1	0.5	0.5	0.5	0
Fe	10	5	5	200	200
Pb	1	0.5	0.5	1	0
Li	1	0.5	0.5	0.5	0
Mg	100	50	50	500	500
Mn	1	0.5	0.5	0.5	0
Mo	1	0.5	0.5	1	0
Ni	1	0.5	0.5	1	0
K	100	50	50	75	0
Se	1	0.5	0.5	1	0
Si	1	0.5	0.5	1	0
Ag	1	0.5	0.5	1	0
Na	100	50	50	75	0
Sr	1	0.5	0.5	0.5	0
Tl	1	0.5	0.5	1	0
Sn	1	0.5	0.5	1	0
Ti	1	0.5	0.5	1	0
U	10	5	5	1	0
V	1	0.5	0.5	0.5	0
Zn	1	0.5	0.5	1	0

ANALYSIS RUN LOG
for
ICP

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/24/08 16:38

End Date: 7/25/08 9:07

Comments:

- CCB16,17,18 Zn 73X IDL
- Associated samples - Zn result greater than 10X Zn contamination level.

Book #:	AD8-006
Instrument No.:	D8
Analytical Batch:	ID86029
Analytical Sequence:	S_6086010(v45)
Method File:	6086010(v45)

SOP #	Rev. #
☑ EMAX-6010	5
☐ EMAX-200.7	0
☐ EMAX-	

STANDARDS ID	
S0	SmIB11·32·01
S1	NA
S2	SmIB11·29.04
S3	NA
S4	NA
S5	SmIB11·19·06
S6	NA
S7	NA
S8	SmIB11·28·02
S9	NA
S11	SmIB11·29.04
S17	·29.05
ICV	·28·03
CCV	·33·04
ICSA	·32·02
ICSAB	·30.02
CRI/MRL MRL2 Bumplow	SmIB11.25·01
MRL Fuhion	·29·02

Analyzed By: JC

Date: 7/25/08

SEQUENCE FILE : ID8G029

4-18	19-33	34-43	44-53	54-63
LFID	LSID	TIME	DATE	DF
ID8G029001	Blank	16:38	07/24/08	1.000
ID8G029002	S2	16:43	07/24/08	1.000
ID8G029003	S5	16:48	07/24/08	1.000
ID8G029004	S8	16:53	07/24/08	1.000
ID8G029005	S11	16:58	07/24/08	1.000
ID8G029006	S17	17:03	07/24/08	1.000
ID8G029007	ICV	17:08	07/24/08	1.000
ID8G029008	ICB	17:13	07/24/08	1.000
ID8G029009	MRL	17:18	07/24/08	1.000
ID8G029010	ICSA	17:23	07/24/08	1.000
ID8G029011	ICSAB	17:29	07/24/08	1.000
ID8G029012	CCV1	17:34	07/24/08	1.000
ID8G029013	CCB1	17:39	07/24/08	1.000
ID8G029014	MRL2	17:44	07/24/08	1.000
ID8G029015	IPG056WB	17:49	07/24/08	1.000
ID8G029016	IPG056WL	17:54	07/24/08	1.000
ID8G029017	IPG056WC	17:59	07/24/08	1.000
ID8G029018	G153-02M	18:04	07/24/08	1.000
ID8G029019	G153-02S	18:09	07/24/08	1.000
ID8G029020	G153-02A	18:14	07/24/08	1.000
ID8G029021	G153-02	18:19	07/24/08	1.000
ID8G029022	G153-02J	18:24	07/24/08	5.000
ID8G029023	BLANK	18:29	07/24/08	1.000
ID8G029024	CCV2	18:34	07/24/08	1.000
ID8G029025	CCB2	18:39	07/24/08	1.000
ID8G029026	G153-03	18:44	07/24/08	1.000
ID8G029027	G153-05	18:49	07/24/08	1.000
ID8G029028	G153-06	18:54	07/24/08	1.000
ID8G029029	G153-07	19:00	07/24/08	1.000
ID8G029030	G153-08	19:05	07/24/08	1.000
ID8G029031	G146-01	19:10	07/24/08	1.000
ID8G029032	G194-01	19:15	07/24/08	1.000
ID8G029033	BLANK	19:20	07/24/08	1.000
ID8G029034	CCV3	19:25	07/24/08	1.000
ID8G029035	CCB3	19:30	07/24/08	1.000
ID8G029036	IPG066SB	19:35	07/24/08	1.000
ID8G029037	IPG066SL	19:40	07/24/08	1.000
ID8G029038	IPG066SC	19:45	07/24/08	1.000
ID8G029039	G485-01A	19:50	07/24/08	1.000
ID8G029040	G485-01	19:54	07/24/08	1.000
ID8G029041	G485-01J	19:59	07/24/08	5.000
ID8G029042	G485-02	20:05	07/24/08	1.000
ID8G029043	G485-03	20:10	07/24/08	1.000
ID8G029044	G485-04	20:15	07/24/08	1.000
ID8G029045	BLANK	20:20	07/24/08	1.000
ID8G029046	CCV4	20:25	07/24/08	1.000
ID8G029047	CCB4	20:30	07/24/08	1.000
ID8G029048	G485-05	20:35	07/24/08	1.000
ID8G029049	G485-06	20:40	07/24/08	1.000
ID8G029050	G485-07	20:45	07/24/08	1.000
ID8G029051	G485-08	20:50	07/24/08	1.000
ID8G029052	G485-09	20:55	07/24/08	1.000
ID8G029053	G485-10	21:00	07/24/08	1.000

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SCOL

ID8G029054	G485-11	21:05	07/24/08	1.000
ID8G029055	G485-12	21:10	07/24/08	1.000
ID8G029056	G485-13	21:15	07/24/08	1.000
ID8G029057	BLANK	21:20	07/24/08	1.000
ID8G029058	CCV5	21:25	07/24/08	1.000
ID8G029059	CCB5	21:30	07/24/08	1.000
ID8G029060	IPG069SB	21:35	07/24/08	1.000
ID8G029061	IPG069SL	21:40	07/24/08	1.000
ID8G029062	IPG069SC	21:45	07/24/08	1.000
ID8G029063	G195-02A	21:50	07/24/08	1.000
ID8G029064	G195-02	21:55	07/24/08	1.000
ID8G029065	G195-02J	22:00	07/24/08	5.000
ID8G029066	G195-04	22:05	07/24/08	1.000
ID8G029067	G195-05	22:10	07/24/08	1.000
ID8G029068	BLANK	22:15	07/24/08	1.000
ID8G029069	CCV6	22:20	07/24/08	1.000
ID8G029070	CCB6	22:25	07/24/08	1.000
ID8G029071	G195-06	22:30	07/24/08	1.000
ID8G029072	G195-07	22:35	07/24/08	1.000
ID8G029073	G195-08	22:40	07/24/08	1.000
ID8G029074	G195-09	22:45	07/24/08	1.000
ID8G029075	G195-12	22:50	07/24/08	1.000
ID8G029076	G195-14	22:55	07/24/08	1.000
ID8G029077	G234-01	23:00	07/24/08	1.000
ID8G029078	BLANK	23:05	07/24/08	1.000
ID8G029079	CCV7	23:10	07/24/08	1.000
ID8G029080	CCB7	23:15	07/24/08	1.000
ID8G029081	IPG068WB	23:20	07/24/08	1.000
ID8G029082	IPG068WL	23:25	07/24/08	1.000
ID8G029083	IPG068WC	23:30	07/24/08	1.000
ID8G029084	G234-03A	23:35	07/24/08	1.000
ID8G029085	G234-03	23:40	07/24/08	1.000
ID8G029086	G234-03J	23:45	07/24/08	5.000
ID8G029087	G234-03	23:50	07/24/08	1.000
ID8G029088	G234-02	23:55	07/24/08	1.000
ID8G029089	G234-02	00:01	07/25/08	5.000
ID8G029090	BLANK	00:06	07/25/08	1.000
ID8G029091	CCV8	00:11	07/25/08	1.000
ID8G029092	CCB8	00:16	07/25/08	1.000
ID8G029093	G188-01	00:21	07/25/08	1.000
ID8G029094	G195-01	00:26	07/25/08	1.000
ID8G029095	G511-01	00:31	07/25/08	1.000
ID8G029096	G511-02	00:36	07/25/08	1.000
ID8G029097	G511-03	00:41	07/25/08	1.000
ID8G029098	G511-04	00:46	07/25/08	1.000
ID8G029099	G511-05	00:52	07/25/08	1.000
ID8G029100	BLANK	00:57	07/25/08	1.000
ID8G029101	CCV9	01:02	07/25/08	1.000
ID8G029102	CCB9	01:07	07/25/08	1.000
ID8G029103	IPG065SB	01:12	07/25/08	1.000
ID8G029104	IPG065SL	01:17	07/25/08	1.000
ID8G029105	IPG065SC	01:22	07/25/08	1.000
ID8G029106	G521-01A	01:27	07/25/08	1.000
ID8G029107	G521-01	01:31	07/25/08	1.000
ID8G029108	G521-01J	01:36	07/25/08	5.000
ID8G029109	G521-02	01:41	07/25/08	1.000

not used

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ID8G029110	G521-03	01:46	07/25/08	1.000
ID8G029111	G521-04	01:51	07/25/08	1.000
ID8G029112	BLANK	01:56	07/25/08	1.000
ID8G029113	CCV10	02:01	07/25/08	1.000
ID8G029114	CCB10	02:06	07/25/08	1.000
ID8G029115	G521-05	02:11	07/25/08	1.000
ID8G029116	G521-06	02:16	07/25/08	1.000
ID8G029117	G521-07	02:21	07/25/08	1.000
ID8G029118	G521-08	02:26	07/25/08	1.000
ID8G029119	G521-09	02:31	07/25/08	1.000
ID8G029120	G521-10	02:36	07/25/08	1.000
ID8G029121	G521-11	02:41	07/25/08	1.000
ID8G029122	G521-12	02:46	07/25/08	1.000
ID8G029123	G521-13	02:51	07/25/08	1.000
ID8G029124	BLANK	02:56	07/25/08	1.000
ID8G029125	CCV11	03:01	07/25/08	1.000
ID8G029126	CCB11	03:06	07/25/08	1.000
ID8G029127	G521-14	03:11	07/25/08	1.000
ID8G029128	G521-15	03:16	07/25/08	1.000
ID8G029129	G521-16	03:21	07/25/08	1.000
ID8G029130	G521-17	03:26	07/25/08	1.000
ID8G029131	G521-18	03:31	07/25/08	1.000
ID8G029132	BLANK	03:36	07/25/08	1.000
ID8G029133	CCV12	03:41	07/25/08	1.000
ID8G029134	CCB12	03:46	07/25/08	1.000
ID8G029135	IPG064WB	03:51	07/25/08	1.000
ID8G029136	IPG064WL	03:56	07/25/08	1.000
ID8G029137	IPG064WC	04:00	07/25/08	1.000
ID8G029138	TXG009WB	04:05	07/25/08	1.000
ID8G029139	G483-04A	04:10	07/25/08	5.000
ID8G029140	G483-04	04:15	07/25/08	5.000
ID8G029141	G483-04J	04:20	07/25/08	25.00
ID8G029142	BLANK	04:25	07/25/08	1.000
ID8G029143	BLANK	04:31	07/25/08	1.000
ID8G029144	BLANK	04:36	07/25/08	1.000
ID8G029145	CCV13	04:41	07/25/08	1.000
ID8G029146	CCB13	04:45	07/25/08	1.000
ID8G029147	G483-04A	04:51	07/25/08	10.00
ID8G029148	G483-04	04:55	07/25/08	10.00
ID8G029149	G483-04J	05:00	07/25/08	50.00
ID8G029150	BLANK	05:05	07/25/08	1.000
ID8G029151	BLANK	05:11	07/25/08	1.000
ID8G029152	BLANK	05:16	07/25/08	1.000
ID8G029153	CCV14	05:21	07/25/08	1.000
ID8G029154	CCB14	05:25	07/25/08	1.000
ID8G029155	G481-16	05:31	07/25/08	50.00
ID8G029156	G481-21A	05:36	07/25/08	10.00
ID8G029157	G481-21	05:41	07/25/08	10.00
ID8G029158	G481-21J	05:46	07/25/08	50.00
ID8G029159	G481-48	05:51	07/25/08	10.00
ID8G029160	G482-23	05:56	07/25/08	10.00
ID8G029161	G482-26	06:01	07/25/08	10.00
ID8G029162	G482-39	06:06	07/25/08	50.00
ID8G029163	BLANK	06:11	07/25/08	1.000
ID8G029164	BLANK	06:16	07/25/08	1.000
ID8G029165	CCV15	06:21	07/25/08	1.000

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ID8G029166	CCB15	06:26	07/25/08	1.000
ID8G029167	G482-67	06:31	07/25/08	10.00
ID8G029168	G482-71	06:36	07/25/08	10.00
ID8G029169	G482-74	06:41	07/25/08	100.0
ID8G029170	G482-110	06:46	07/25/08	50.00
ID8G029171	G482-112	06:51	07/25/08	50.00
ID8G029172	G482-115	06:56	07/25/08	50.00
ID8G029173	G482-116	07:01	07/25/08	10.00
ID8G029174	BLANK	07:06	07/25/08	1.000
ID8G029175	BLANK	07:11	07/25/08	1.000
ID8G029176	CCV16	07:16	07/25/08	1.000
ID8G029177	CCB16	07:21	07/25/08	1.000
ID8G029178	IPG073WB	07:26	07/25/08	1.000
ID8G029179	IPG073WL	07:31	07/25/08	1.000
ID8G029180	IPG073WC	07:36	07/25/08	1.000
ID8G029181	WTG006SB	07:41	07/25/08	1.000
ID8G029182	G531-03A	07:46	07/25/08	5.000
ID8G029183	G531-03	07:51	07/25/08	5.000
ID8G029184	G531-03J	07:56	07/25/08	25.00
ID8G029185	BLANK	08:01	07/25/08	1.000
ID8G029186	BLANK	08:06	07/25/08	1.000
ID8G029187	BLANK	08:11	07/25/08	1.000
ID8G029188	CCV17	08:16	07/25/08	1.000
ID8G029189	CCB17	08:21	07/25/08	1.000
ID8G029190	G531-03M	08:26	07/25/08	5.000
ID8G029191	G531-03S	08:31	07/25/08	5.000
ID8G029192	G531-01	08:36	07/25/08	5.000
ID8G029193	G531-02	08:41	07/25/08	5.000
ID8G029194	BLANK	08:47	07/25/08	1.000
ID8G029195	BLANK	08:52	07/25/08	1.000
ID8G029196	BLANK	08:57	07/25/08	1.000
ID8G029197	CCV18	09:02	07/25/08	1.000
ID8G029198	CCB18	09:07	07/25/08	1.000

8260J

SDG : 056188 UNIT : % SUMMARY of ICV and CCV : ID8G029 DATE : 07/24/08

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	98	100	102	95	96	101	99	97	100	95	97	98	97	94	101	100	97	100	98	97	95	97	103
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	88	----	----	----	----	----	93	----	----	----	86	----	98	----	----	----	----	----	----	----	----	----	----
ICSAB	88	104	106	104	95	105	93	94	101	103	89	96	99	92	109	100	105	105	110	103	93	99	103
CCV1	100	102	102	100	97	105	99	97	104	99	96	99	98	96	105	103	99	101	99	100	98	101	104
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	98	103	103	103	101	106	102	97	105	100	95	100	99	100	106	104	103	102	99	102	100	103	105
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G146-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G194-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	97	102	102	100	97	106	99	98	105	99	96	100	98	97	106	104	100	101	100	100	98	102	105
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	100	102	104	103	101	107	103	98	105	100	97	100	101	101	106	104	103	103	100	102	99	103	107
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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G485-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	100	102	104	101	98	106	101	99	104	100	98	100	100	97	106	103	100	103	101	101	97	103	106	
CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	99	103	109	100	99	105	103	102	102	99	102	100	106	97	104	102	96	109	101	101	93	103	107	
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	102	103	107	103	99	105	102	100	103	100	102	100	104	97	105	102	98	106	102	103	93	102	105	
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	100	102	109	102	97	105	101	101	102	99	103	100	105	95	106	102	96	109	101	103	91	102	106	
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	101	101	106	102	94	104	97	100	103	100	102	100	101	90	107	103	95	106	102	104	92	101	104	
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G521-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	102	102	108	105	98	105	101	101	102	100	103	100	104	95	106	102	99	108	102	105	92	103	106	
CCB10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	101	102	107	103	95	105	98	100	103	100	102	100	100	91	106	103	98	107	101	104	92	102	105	
CCB11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	95	106	110	102	94	105	98	97	104	97	94	101	98	91	106	104	106	111*	98	107	95	100	107	
CCB12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG009WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	100	101	105	103	93	105	97	99	104	100	100	100	98	90	107	103	98	104	101	104	93	101	104	
CCB13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	100	102	106	103	95	105	98	100	104	100	100	100	99	91	106	103	98	106	101	105	93	102	105	
CCB14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-48	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-39	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	101	102	106	106	96	106	99	99	104	101	100	100	99	93	107	104	101	105	101	106	96	102	105	

T+B J.

CCB15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-74	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-110	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-112	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-115	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-116	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV16	99	101	105	102	94	105	97	100	104	100	100	101	98	90	107	103	98	105	101	104	94	101	105	
CCB16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WTG006SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV17	100	101	105	103	94	105	97	100	103	100	100	101	98	90	107	103	99	105	101	105	94	101	105	
CCB17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV18	99	101	106	103	96	104	99	100	103	99	99	100	99	91	106	102	101	105	101	105	93	101	105	
CCB18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

2104

SDG : 08G168 UNIT : UG/L SUMMARY of CALIBRATION BLANKS : ID8G029 (WATER) DATE : 07/24/08 1

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	-2.19	-.090	-.980	-.080	.210	.130	16.4	.130	.060	-.090	-.660	.220	16.8	.340	.230	.010	-83.1	-1.11	.200	.280	-.490	.170	-.200
MRL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	----	-1.99	-1.75	-.220	-.050	-1.02	----	.230	-1.16	2.47	----	1.66	----	-.470	-3.24	3.72	14.3	4.04	.420	91.1	6.04	.330	5.11
ICSAB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	34.8	.320	-.510	.260	.230	.120	122	.140	-.010	.200	13.6	-.200	41.0	.400	.360	.080	-101	-.230	.320	12.6	.580	.290	2.57
MRL2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	3.91	1.37	-.870	.250	.430	.090	46.7	.200	.000	.250	1.63	.640	37.5	.310	.290	.020	-37.1	.040	.200	66.1	.280	.350	-.030
G153-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G146-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G194-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	4.49	.560	-.500	.340	.450	.080	55.4	.200	.110	.360	3.56	.310	33.9	.510	.220	-.050	-50.1	-.220	.390	85.5	.120	.360	.480
IPG066SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	1.62	.980	-.650	.110	.360	.130	40.5	.160	-.020	.400	1.51	.260	25.9	.650	.370	.040	-23.6	.330	.400	50.9	.210	.460	.020
G485-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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G485-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB5	.740	.870	-.960	.310	.550	.070	55.6	.160	-.040	.250	1.62	.150	28.0	.770	.190	-.100	-55.4	-1.03	.280	52.7	-.080	.490	.000	
IPG069SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	-1.05	1.08	-1.10	.270	.410	.120	55.7	.390	.030	.330	-.330	.850	23.0	.760	.210	.060	39.1	-.560	.160	40.7	.700	.410	.950	
G195-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	-1.98	-.830	-1.05	-.080	.040	.060	8.94	.110	-.100	.370	.100	.180	-3.81	.060	.050	.110	-5.33	-2.22	.050	-.540	.570	.100	.200	
IPG068WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	-6.54	.370	-.660	-.310	.080	.000	.050	.040	-.020	.260	-6.73	.300	-9.47	.090	.130	.020	-5.82	-.490	.170	62.1	.250	.160	-.050	
G188-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	-3.08	.520	-.600	.160	.450	.100	40.9	.270	-.020	.830	-.550	.750	37.4	.650	.150	.350	-16.0	-.650	.270	119	-.290	.430	.300	
IPG065SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G521-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB10	-2.53	1.59	-.590	.000	.430	.090	42.6	.280	-.110	.610	-6.25	.420	43.8	.510	.250	.010	-10.9	-1.05	.100	84.0	-.090	.380	.020	
G521-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB11	-3.08	-.910	-2.18	.190	.390	.060	45.5	.190	.000	.420	.000	-.040	21.5	.680	.150	.010	21.1	-1.36	.200	60.2	.220	.490	.500	
G521-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB12	-4.50	-.840	-1.32	-.170	.320	.070	26.3	.120	.030	.440	.020	.540	31.2	.460	.120	.090	-1.51	.370	.180	43.6	.960	.450	1.04	
IPG064WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG009WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB13	-1.23	.020	-1.24	.100	.460	.090	156	.190	.040	.450	1.53	.140	35.1	.580	.160	.050	6.46	-.740	.200	52.1	-.190	.560	5.26	
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB14	-1.78	.400	-1.01	.100	.390	.070	149	.260	-.090	.560	-.490	.690	39.3	.580	.260	.100	5.76	-1.11	.230	52.3	.970	.390	5.22	
G481-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-48	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-39	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CCB15	.640	.000	-1.47	.050	.360	.030	159	.150	.040	.410	-.260	.720	22.3	.880	.210	.010	-16.4	-.450	.250	37.9	-.100	.500	6.35
G482-67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-74	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-110	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-112	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-115	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-116	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB16	-.860	.070	-1.94	.140	.350	.070	133	.060	.110	.630	-1.49	.820	23.7	.410	.150	.080	-15.6	-.430	.160	39.5	-.140	.390	4.81
IPG073WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WTG006SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB17	-1.09	-.730	-.830	-.130	.290	.090	150	.090	.020	.180	.660	.260	8.87	.360	.250	.120	33.1	-1.25	.170	131	-.210	.330	6.11
G531-03M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB18	-2.98	1.35	-1.76	.220	.510	.090	49.8	.220	.020	.350	-1.68	.610	25.2	.640	.220	.120	12.7	-.360	.270	144	.610	.310	.190

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

J9519

manual (V45) exported ~~ID8G029~~ results to ID8G028.txt

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dil'n Factor	CorrFact	Check	Check Table	Fail Action
1	0	Unk	S0		ID8G029001			1	☐		Continue
2	0	Unk	S2		ID8G029002			1	☐		Continue
3	0	Unk	S5		ID8G029003			1	☐		Continue
4	0	Unk	S8		ID8G029004			1	☐		Continue
5	0	Unk	S11		ID8G029005			1	☐		Continue
6	0	Unk	S17		ID8G029006			1	☐		Continue
7	1	QC	ICV		ID8G029007			1	☒	ICV	Continue
8	2	QC	ICB	Be	ID8G029008			1	☒	3XIDL	Continue
9	3	Unk	MRL	CATIONS	ID8G029009			1	☐		Continue
10	4	QC	ICSA		ID8G029010			1	☒	ICSA	Continue
11	5	QC	ICSAB		ID8G029011			1	☒	ICSAB	Continue
12	6	QC	CCV1		ID8G029012			1	☒	CCV	Continue
13	7	QC	CCB1	Al Be Co Fe 0.2i	ID8G029013			1	☒	3XIDL	Continue
14	169	Unk	MRL2	BGMP LOW	ID8G029014			1	☐		Continue
15	8	QC	IPG056WB		ID8G029015			1	☒	CCB1	Continue
16	9	QC	IPG056WL		ID8G029016			1	☒	LCS	Continue
17	10	QC	IPG056WC		ID8G029017			1	☒	LCS	Continue
18	11	Unk	G153-02M		ID8G029018			1	☐		Continue
19	12	Unk	G153-02S		ID8G029019			1	☐		Continue
20	13	Unk	G153-02A		ID8G029020			1	☐		Continue
21	14	Unk	G153-02		ID8G029021			1	☐		Continue
22	15	Unk	G153-02J		ID8G029022			1	☐		Continue
23	17	Unk	BLANK		ID8G029023			1	☐		Continue
24	18	QC	CCV2	Be B Li	ID8G029024			1	☒	CCV	Continue
25	19	QC	CCB2		ID8G029025			1	☒	3XIDL	Continue
26	16	Unk	G153-03		ID8G029026			1	☐		Continue
27	20	Unk	G153-05		ID8G029027			1	☐		Continue
28	21	Unk	G153-06		ID8G029028			1	☐		Continue
29	22	Unk	G153-07		ID8G029029			1	☐		Continue
30	23	Unk	G153-08		ID8G029030			1	☐		Continue
31	24	Unk	G146-01		ID8G029031			1	☐		Continue
32	25	Unk	G194-01		ID8G029032			1	☐		Continue
33	26	Unk	BLANK		ID8G029033			1	☐		Continue
34	27	QC	CCV3		ID8G029034			1	☒	CCV	Continue
35	28	QC	CCB3	Be Na	ID8G029035			1	☒	3XIDL	Continue
36	29	QC	IPG066SB		ID8G029036			1	☒	CCB1	Continue
37	30	QC	IPG066SL		ID8G029037			1	☒	LCS	Continue
38	31	QC	IPG066SC		ID8G029038			1	☒	LCS	Continue
39	32	Unk	G485-01A		ID8G029039			1	☐		Continue
40	33	Unk	G485-01		ID8G029040			1	☐		Continue
41	34	Unk	G485-01J		ID8G029041			1	☐		Continue
42	35	Unk	G485-02		ID8G029042			1	☐		Continue
43	36	Unk	G485-03		ID8G029043			1	☐		Continue
44	37	Unk	G485-04		ID8G029044			1	☐		Continue
45	38	Unk	BLANK		ID8G029045			1	☐		Continue
46	39	QC	CCV4		ID8G029046			1	☒	CCV	Continue

:15:42

2.10.2

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
47	40	QC	CCB4	Be Na	ID8G029047			1	☒	3XIDL	Continue
48	41	Unk	G485-05		ID8G029048			1	☐		Continue
49	42	Unk	G485-06		ID8G029049			1	☐		Continue
50	43	Unk	G485-07		ID8G029050			1	☐		Continue
51	44	Unk	G485-08		ID8G029051			1	☐		Continue
52	45	Unk	G485-09		ID8G029052			1	☐		Continue
53	46	Unk	G485-10		ID8G029053			1	☐		Continue
54	47	Unk	G485-11		ID8G029054			1	☐		Continue
55	48	Unk	G485-12		ID8G029055			1	☐		Continue
56	49	Unk	G485-13		ID8G029056			1	☐		Continue
57	50	Unk	BLANK		ID8G029057			1	☐		Continue
58	51	QC	CCV5		ID8G029058			1	☒	CCV	Continue
59	52	QC	CCB5	Be Na	ID8G029059			1	☒	3XIDL	Continue
60	53	QC	IPG069SB	K	ID8G029060			1	☒	CCB1	Continue
61	54	QC	IPG069SL		ID8G029061			1	☒	LCS	Continue
62	55	QC	IPG069SC		ID8G029062			1	☒	LCS	Continue
63	56	Unk	G195-02A		ID8G029063			1	☐		Continue
64	57	Unk	G195-02		ID8G029064			1	☐		Continue
65	58	Unk	G195-02J		ID8G029065			1	☐		Continue
66	59	Unk	G195-04		ID8G029066			1	☐		Continue
67	60	Unk	G195-05		ID8G029067			1	☐		Continue
68	61	Unk	BLANK		ID8G029068			1	☐		Continue
69	62	QC	CCV6		ID8G029069			1	☒	CCV	Continue
70	63	QC	CCB6	Be	ID8G029070			1	☒	3XIDL	Continue
71	64	Unk	G195-06		ID8G029071			1	☐		Continue
72	65	Unk	G195-07		ID8G029072			1	☐		Continue
73	66	Unk	G195-08		ID8G029073			1	☐		Continue
74	67	Unk	G195-09		ID8G029074			1	☐		Continue
75	68	Unk	G195-12		ID8G029075			1	☐		Continue
76	69	Unk	G195-14		ID8G029076			1	☐		Continue
77	70	Unk	G234-01		ID8G029077			1	☐		Continue
78	71	Unk	BLANK		ID8G029078			1	☐		Continue
79	72	QC	CCV7		ID8G029079			1	☒	CCV	Continue
80	73	QC	CCB7		ID8G029080			1	☒	3XIDL	Continue
81	74	QC	IPG068WB		ID8G029081			1	☒	CCB1	Continue
82	75	QC	IPG068WL		ID8G029082			1	☒	LCS	Continue
83	76	QC	IPG068WC		ID8G029083			1	☒	LCS	Continue
84	77	Unk	G234-03A	TOT	ID8G029084			1	☐		Continue
85	78	Unk	G234-03	TOT	ID8G029085			1	☐		Continue
86	79	Unk	G234-03J	TOT	ID8G029086			1	☐		Continue
87	80	Unk	G234-03	DISS	ID8G029087			1	☐		Continue
88	81	Unk	G234-02		ID8G029088			1	☐		Continue
89	82	Unk	G234-02	5X	ID8G029089			1	☐		Continue
90	83	Unk	BLANK		ID8G029090			1	☐		Continue
91	84	QC	CCV8		ID8G029091			1	☒	CCV	Continue
92	85	QC	CCB8		ID8G029092			1	☒	3XIDL	Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
93	86	Unk	G188-01		ID8G029093			1	☐		Continue
94	87	Unk	G195-01		ID8G029094			1	☐		Continue
95	88	Unk	G511-01		ID8G029095			1	☐		Continue
96	89	Unk	G511-02	OR Cu. Pb=52	ID8G029096			1	☐		Continue
97	90	Unk	G511-03	OR Cu Zn=52 Ni=138	ID8G029097			1	☐		Continue
98	91	Unk	G511-04	OR Ni=62	ID8G029098			1	☐		Continue
99	92	Unk	G511-05		ID8G029099			1	☐		Continue
100	93	Unk	BLANK		ID8G029100			1	☐		Continue
101	94	QC	CCV9		ID8G029101			1	☒	CCV	Continue
102	95	QC	CCB9		ID8G029102			1	☒	3XIDL	Continue
103	161	QC	IPG065SB		ID8G029103			1	☒	CCB1	Continue
104	162	QC	IPG065SL		ID8G029104			1	☒	LCS	Continue
105	163	QC	IPG065SC		ID8G029105			1	☒	LCS	Continue
106	164	Unk	G521-01A		ID8G029106			1	☐		Continue
107	165	Unk	G521-01		ID8G029107			1	☐		Continue
108	166	Unk	G521-01J		ID8G029108			1	☐		Continue
109	167	Unk	G521-02		ID8G029109			1	☐		Continue
110	168	Unk	G521-03		ID8G029110			1	☐		Continue
111	170	Unk	G521-04		ID8G029111			1	☐		Continue
112	171	Unk	BLANK		ID8G029112			1	☐		Continue
113	172	QC	CCV10		ID8G029113			1	☒	CCV	Continue
114	173	QC	CCB10		ID8G029114			1	☒	3XIDL	Continue
115	174	Unk	G521-05		ID8G029115			1	☐		Continue
116	175	Unk	G521-06		ID8G029116			1	☐		Continue
117	176	Unk	G521-07		ID8G029117			1	☐		Continue
118	177	Unk	G521-08		ID8G029118			1	☐		Continue
119	178	Unk	G521-09		ID8G029119			1	☐		Continue
120	179	Unk	G521-10		ID8G029120			1	☐		Continue
121	180	Unk	G521-11		ID8G029121			1	☐		Continue
122	181	Unk	G521-12		ID8G029122			1	☐		Continue
123	182	Unk	G521-13		ID8G029123			1	☐		Continue
124	183	Unk	BLANK		ID8G029124			1	☐		Continue
125	184	QC	CCV11		ID8G029125			1	☒	CCV	Continue
126	185	QC	CCB11		ID8G029126			1	☒	3XIDL	Continue
127	186	Unk	G521-14		ID8G029127			1	☐		Continue
128	187	Unk	G521-15		ID8G029128			1	☐		Continue
129	188	Unk	G521-16		ID8G029129			1	☐		Continue
130	189	Unk	G521-17	OR Zn=52	ID8G029130			1	☐		Continue
131	190	Unk	G521-18	OR Zn=38	ID8G029131			1	☐		Continue
132	191	Unk	BLANK		ID8G029132			1	☐		Continue
133	192	QC	CCV12		ID8G029133			1	☒	CCV	Continue
134	193	QC	CCB12		ID8G029134			1	☒	3XIDL	Continue
135	96	QC	IPG064WB	Zn?	ID8G029135			1	☒	CCB1	Continue
136	97	QC	IPG064WL		ID8G029136			1	☒	LCS	Continue
137	98	QC	IPG064WC		ID8G029137			1	☒	LCS	Continue
138	99	QC	TXG009WB	TCLP	ID8G029138			1	☒	CCB1	Continue

:15:42

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilu Factor	CorrFact	Check	Check Table	Fail Action
139	100	Unk	G483-04A	5X TCLP AS✓	ID8G029139			1	☐		Continue
140	101	Unk	G483-04	5X TCLP Zn=0.03328	ID8G029140			1	☐		Continue
141	102	Unk	G483-04J	25X TCLP	ID8G029141			1	☐		Continue
142	103	Unk	BLANK		ID8G029142			1	☐		Continue
143	104	Unk	BLANK		ID8G029143			1	☐		Continue
144	105	Unk	BLANK		ID8G029144			1	☐		Continue
145	106	QC	CCV13		ID8G029145			1	☒	CCV	Continue
146	107	QC	CCB13	Zn=0.00526	ID8G029146			1	☒	3XIDL	Continue
147	108	Unk	G483-04A	10X TCLP AS✓ SO✓	ID8G029147			1	☐		Continue
148	109	Unk	G483-04	10X TCLP TH	ID8G029148			1	☐		Continue
149	110	Unk	G483-04J	50X TCLP 7/24/08✓	ID8G029149			1	☐		Continue
150	111	Unk	BLANK		ID8G029150			1	☐		Continue
151	112	Unk	BLANK		ID8G029151			1	☐		Continue
152	113	Unk	BLANK		ID8G029152			1	☐		Continue
153	114	QC	CCV14		ID8G029153			1	☒	CCV	Continue
154	115	QC	CCB14	Zn=0.00522	ID8G029154			1	☒	3XIDL	Continue
155	116	Unk	G481-16	50X	ID8G029155			1	☐		Continue
156	117	Unk	G481-21A	10X	ID8G029156			1	☐		Continue
157	118	Unk	G481-21	10X	ID8G029157			1	☐		Continue
158	119	Unk	G481-21J	50X	ID8G029158			1	☐		Continue
159	120	Unk	G481-48	10X	ID8G029159			1	☐		Continue
160	121	Unk	G482-23	10X	ID8G029160			1	☐		Continue
161	122	Unk	G482-26	10X	ID8G029161			1	☐		Continue
162	123	Unk	G482-39	50X	ID8G029162			1	☐		Continue
163	124	Unk	BLANK		ID8G029163			1	☐		Continue
164	125	Unk	BLANK		ID8G029164			1	☐		Continue
165	126	QC	CCV15		ID8G029165			1	☒	CCV	Continue
166	127	QC	CCB15	Zn=0.00635	ID8G029166			1	☒	3XIDL	Continue
167	128	Unk	G482-67	10X	ID8G029167			1	☐		Continue
168	129	Unk	G482-71	10X	ID8G029168			1	☐		Continue
169	130	Unk	G482-74	100X	ID8G029169			1	☐		Continue
170	131	Unk	G482-110	50X	ID8G029170			1	☐		Continue
171	132	Unk	G482-12 112	50X	ID8G029171			1	☐		Continue
172	133	Unk	G482-115 TH 7/24/08	50X	ID8G029172			1	☐		Continue
173	134	Unk	G482-116	10X	ID8G029173			1	☐		Continue
174	135	Unk	BLANK		ID8G029174			1	☐		Continue
175	136	Unk	BLANK		ID8G029175			1	☐		Continue
176	137	QC	CCV16		ID8G029176			1	☒	CCV	Continue
177	138	QC	CCB16	Zn=0.00481	ID8G029177			1	☒	3XIDL	Continue
178	139	QC	IPG073WB		ID8G029178			1	☒	CCB1	Continue
179	140	QC	IPG073WL		ID8G029179			1	☒	LCS	Continue
180	141	QC	IPG073WC		ID8G029180			1	☒	LCS	Continue
181	142	QC	WTG006SB	STLC	ID8G029181			1	☒	CCB1	Continue
182	143	Unk	G531-03A	5X STLC	ID8G029182			1	☐		Continue
183	144	Unk	G531-03	5X STLC Zn=0.61414	ID8G029183			1	☐		Continue
184	145	Unk	G531-03J	25X STLC	ID8G029184			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilu Factor	CorrFact	Check	Check Table	Fail Action
185	146	Unk	BLANK		ID8G029185			1	☐		Continue
186	147	Unk	BLANK		ID8G029186			1	☐		Continue
187	148	Unk	BLANK	TH 7/29/08	ID8G029187			1	☐		Continue
188	149	QC	CCV17	must run 90%	ID8G029188			1	☒	CCV	Continue
189	150	QC	CCB17	Zn = 0.006	ID8G029189			1	☒	3XIDL	Continue
190	151	Unk	G531-03M	5X STLC	ID8G029190			1	☐		Continue
191	152	Unk	G531-03S	5X STLC	ID8G029191			1	☐		Continue
192	153	Unk	G531-01	5X STLC	ID8G029192			1	☐		Continue
193	154	Unk	G531-02	5X STLC	ID8G029193			1	☐		Continue
194	155	Unk	BLANK		ID8G029194			1	☐		Continue
195	156	Unk	BLANK		ID8G029195			1	☐		Continue
196	157	Unk	BLANK		ID8G029196			1	☐		Continue
197	158	QC	CCV18		ID8G029197			1	☒	CCV	Continue
198	159	QC	CCB18		ID8G029198			1	☒	3XIDL	Continue

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T 6SJ

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/25/08 14:46

End Date: 7/26/08 01:26

Comments:

CCV5 Cu ↓

CCV 12 Zn ↑

Book #:	AD8-006
Instrument No.:	D8
Analytical Batch:	1D86031
Analytical Sequence:	S_G086010(V49)
Method File:	G086010(V49)

SOP #	Rev. #
☑ EMAX-6010	5
☐ EMAX-200.7	0
☐ EMAX-	

STANDARDS ID	
S0	SM1B11.32.01
S1	NA
S2	SM1B11.29.03
S3	NA
S4	NA
S5	SM1B11.19.06
S6	NA
S7	NA
S8	SM1B11-28.02
S9	NA
S11	SM1B11.29.04
S17	29-05
ICV	28.03
CCV	33.04
ICSA	32.02
ICSAB	30.02
CRI/MRL	NA

Analyzed By: TH

Date:

SEQUENCE FILE : ID8G031

4-18 LFID	19-33 LSID	34-43 TIME	44-53 DATE	54-63 DF
ID8G031001	Blank	14:46	07/25/08	1.000
ID8G031002	S2	14:51	07/25/08	1.000
ID8G031003	S5	14:56	07/25/08	1.000
ID8G031004	S8	15:01	07/25/08	1.000
ID8G031005	S11	15:07	07/25/08	1.000
ID8G031006	S17	15:12	07/25/08	1.000
ID8G031007	ICV	15:17	07/25/08	1.000
ID8G031008	ICB	15:22	07/25/08	1.000
ID8G031009	ICSA	15:27	07/25/08	1.000
ID8G031010	ICSAB	15:32	07/25/08	1.000
ID8G031011	CCV1	15:37	07/25/08	1.000
ID8G031012	CCB1	15:42	07/25/08	1.000
ID8G031013	IPG075SB	15:47	07/25/08	1.000
ID8G031014	IPG075SL	15:52	07/25/08	1.000
ID8G031015	IPG075SC	15:57	07/25/08	1.000
ID8G031016	G560-01A	16:02	07/25/08	1.000
ID8G031017	G560-01	16:07	07/25/08	1.000
ID8G031018	G560-01J	16:12	07/25/08	5.000
ID8G031019	G243-01	16:17	07/25/08	1.000
ID8G031020	G527-03	16:22	07/25/08	1.000
ID8G031021	G527-06	16:27	07/25/08	1.000
ID8G031022	BLANK	16:32	07/25/08	1.000
ID8G031023	CCV2	16:37	07/25/08	1.000
ID8G031024	CCB2	16:42	07/25/08	1.000
ID8G031025	IPG076WB	16:47	07/25/08	1.000
ID8G031026	IPG076WL	16:52	07/25/08	1.000
ID8G031027	IPG076WC	16:57	07/25/08	1.000
ID8G031028	G201-01A	17:02	07/25/08	1.000
ID8G031029	G201-01	17:07	07/25/08	1.000
ID8G031030	G201-01J	17:12	07/25/08	5.000
ID8G031031	G201-02	17:17	07/25/08	1.000
ID8G031032	G201-03	17:22	07/25/08	1.000
ID8G031033	G201-04	17:27	07/25/08	1.000
ID8G031034	BLANK	17:32	07/25/08	1.000
ID8G031035	CCV3	17:48	07/25/08	1.000
ID8G031036	CCB3	17:53	07/25/08	1.000
ID8G031037	G201-01	17:58	07/25/08	1.000
ID8G031038	G201-02	18:03	07/25/08	1.000
ID8G031039	BLANK	18:08	07/25/08	1.000
ID8G031040	G201-03	18:13	07/25/08	1.000
ID8G031041	BLANK	18:18	07/25/08	1.000
ID8G031042	BLANK	18:23	07/25/08	1.000
ID8G031043	BLANK	18:28	07/25/08	1.000
ID8G031044	CCV4	18:33	07/25/08	1.000
ID8G031045	CCB4	18:38	07/25/08	1.000
ID8G031046	G201-02	18:43	07/25/08	20.00
ID8G031047	G201-03	18:48	07/25/08	20.00
ID8G031048	G201-02	18:53	07/25/08	20.00
ID8G031049	G201-03	18:58	07/25/08	20.00
ID8G031050	BLANK	19:04	07/25/08	1.000
ID8G031051	BLANK	19:09	07/25/08	1.000
ID8G031052	BLANK	19:14	07/25/08	1.000
ID8G031053	CCV5	19:19	07/25/08	1.000

ID8G031054	CCB5	19:24	07/25/08	1.000
ID8G031055	G518-13	19:29	07/25/08	1.000
ID8G031056	G521-17	19:34	07/25/08	5.000
ID8G031057	G521-18	19:39	07/25/08	5.000
ID8G031058	G511-01	19:43	07/25/08	5.000
ID8G031059	G511-02	19:49	07/25/08	5.000
ID8G031060	G511-03	19:54	07/25/08	5.000
ID8G031061	G511-01	19:59	07/25/08	20.00
ID8G031062	G511-02	20:04	07/25/08	20.00
ID8G031063	G511-03	20:09	07/25/08	20.00
ID8G031064	BLANK	20:14	07/25/08	1.000
ID8G031065	CCV6	20:19	07/25/08	1.000
ID8G031066	CCB6	20:24	07/25/08	1.000
ID8G031067	G234-03A	20:29	07/25/08	1.000
ID8G031068	G234-03	20:34	07/25/08	1.000
ID8G031069	G234-03J	20:39	07/25/08	5.000
ID8G031070	G234-03A	20:44	07/25/08	5.000
ID8G031071	G234-03	20:49	07/25/08	5.000
ID8G031072	G234-03J	20:54	07/25/08	25.00
ID8G031073	BLANK	20:59	07/25/08	1.000
ID8G031074	CCV7	21:04	07/25/08	1.000
ID8G031075	CCB7	21:09	07/25/08	1.000
ID8G031076	IPG074WB	21:14	07/25/08	1.000
ID8G031077	IPG074WL	21:19	07/25/08	1.000
ID8G031078	IPG074WC	21:23	07/25/08	1.000
ID8G031079	TXG013SB	21:28	07/25/08	1.000
ID8G031080	G518-14A	21:33	07/25/08	1.000
ID8G031081	G518-14	21:38	07/25/08	1.000
ID8G031082	G518-14J	21:43	07/25/08	5.000
ID8G031083	BLANK	21:49	07/25/08	1.000
ID8G031084	BLANK	21:54	07/25/08	1.000
ID8G031085	BLANK	21:59	07/25/08	1.000
ID8G031086	CCV8	22:04	07/25/08	1.000
ID8G031087	CCB8	22:09	07/25/08	1.000
ID8G031088	G518-14M	22:14	07/25/08	1.000
ID8G031089	G518-14S	22:19	07/25/08	1.000
ID8G031090	G518-02	22:24	07/25/08	1.000
ID8G031091	G518-05	22:29	07/25/08	1.000
ID8G031092	G518-06	22:34	07/25/08	1.000
ID8G031093	G518-07	22:39	07/25/08	1.000
ID8G031094	G518-08	22:44	07/25/08	1.000
ID8G031095	BLANK	22:49	07/25/08	1.000
ID8G031096	BLANK	22:54	07/25/08	1.000
ID8G031097	BLANK	22:59	07/25/08	1.000
ID8G031098	CCV9	23:04	07/25/08	1.000
ID8G031099	CCB9	23:09	07/25/08	1.000
ID8G031100	G518-09	23:14	07/25/08	1.000
ID8G031101	G518-11	23:19	07/25/08	1.000
ID8G031102	G518-12	23:24	07/25/08	1.000
ID8G031103	G243-01	23:30	07/25/08	1.000
ID8G031104	G520-01	23:35	07/25/08	1.000
ID8G031105	G530-01	23:40	07/25/08	1.000
ID8G031106	BLANK	23:45	07/25/08	1.000
ID8G031107	BLANK	23:50	07/25/08	1.000
ID8G031108	BLANK	23:55	07/25/08	1.000
ID8G031109	CCV10	00:00	07/26/08	1.000

ID8G031110	CCB10	00:05	07/26/08	1.000
ID8G031111	TXG014WB	00:10	07/26/08	1.000
ID8G031112	G518-01A	00:15	07/26/08	1.000
ID8G031113	G518-01	00:20	07/26/08	1.000
ID8G031114	G518-01J	00:25	07/26/08	5.000
ID8G031115	G518-03	00:30	07/26/08	1.000
ID8G031116	BLANK	00:36	07/26/08	1.000
ID8G031117	BLANK	00:41	07/26/08	1.000
ID8G031118	BLANK	00:46	07/26/08	1.000
ID8G031119	CCV11	00:51	07/26/08	1.000
ID8G031120	CCB11	00:56	07/26/08	1.000
ID8G031121	G481-01A	01:01	07/26/08	1.000
ID8G031122	G481-01	01:06	07/26/08	1.000
ID8G031123	G481-01J	01:11	07/26/08	5.000
ID8G031124	BLANK	01:16	07/26/08	1.000
ID8G031125	CCV12	01:21	07/26/08	1.000
ID8G031126	CCB12	01:26	07/26/08	1.000

SDG : 086188 UNIT : % SUMMARY of ICV and CCV : ID8G031 DATE : 07/25/08

ANALYTE	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	96	101	103	97	99	109	102	100	99	100	94	99	99	98	96	101	101	98	100	98	98	95	97	103
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	87	----	----	----	----	----	----	97	----	----	----	91	----	102	----	----	----	----	----	----	----	----	----	----
ICSAB	86	105	108	107	99	110	108	95	97	101	100	91	98	101	94	111	101	108	107	110	106	90	100	106
CCV1	96	101	103	101	102	107	107	100	101	104	96	98	100	100	100	106	104	101	102	98	101	97	102	106
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	96	102	103	99	102	108	107	100	101	104	96	98	100	99	101	105	103	102	102	99	101	97	102	108
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	95	101	102	101	104	108	107	101	101	103	96	97	100	100	102	105	103	103	102	99	102	97	103	107
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	94	101	102	99	103	107	107	100	101	104	96	97	101	99	101	105	103	103	101	99	102	98	103	107
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	90	96	97	93	96	101	101	94	95	98	89*	92	95	94	94	98	97	97	96	93	96	92	96	100

SGS

CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	95	101	104	101	103	108	107	100	102	103	97	98	101	99	102	105	103	105	102	99	103	96	103	107	
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	96	101	103	103	104	108	107	102	101	103	97	99	100	101	102	106	103	106	102	99	104	96	103	107	
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG013SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	96	103	106	100	101	109	107	102	102	103	96	100	101	101	99	105	103	106	105	99	104	96	102	108	
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	97	102	105	101	102	109	107	102	102	103	96	100	100	101	100	105	103	107	104	100	105	95	102	107	
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G520-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G530-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	96	102	105	101	101	109	107	101	101	103	96	99	101	100	99	105	103	107	105	99	105	96	102	107	

CCB10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG014WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	97	103	106	101	102	110	107	102	102	103	97	100	100	100	99	105	103	107	105	100	105	95	102	108	
CCB11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	97	101	103	102	103	108	106	103	102	102	96	100	100	102	100	105	102	108	102	99	106	94	102	111*	
CCB12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

QC limit of each parameter are listed in a table attached next to all the ICP check forms

* : Out of QC Limit

SDG : 08G188 UNIT : UG/L

SUMMARY of CALIBRATION BLANKS : ID8G031 (WATER)

DATE : 07/25/08

ANALYTE	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	-1.40	-.440	1.19	.000	.110	-1.00	.140	16.3	.280	.110	-.090	-1.52	-.190	8.78	.000	.160	.090	7.57	.000	.040	4.69	-.130	.150	.370
ICSA	----	-1.09	-3.75	.470	.120	-1.19	-.480	----	.400	-1.36	2.70	----	-.160	----	-1.35	-2.73	-.410	69.0	4.85	.680	103	-9.79	-.030	6.55
ICSAB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	49.5	-1.00	1.18	.150	.330	-1.34	.040	110	.180	.100	-.220	14.9	-.040	106	-.220	.090	-.090	63.8	-.380	.090	29.1	.340	.070	.130
IPG075SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	-.460	-1.03	-.230	.360	.390	-1.08	.060	40.0	.230	.120	.230	-2.12	.380	26.4	.820	.120	.060	65.8	-1.58	.070	23.7	.590	.130	.350
IPG076WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	2.15	-.600	1.03	.650	.500	-1.45	.120	70.9	.370	.090	.110	-4.06	-.040	64.6	.670	.130	.020	61.1	-1.69	.240	139	.340	.210	1.08
G201-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	1.63	-1.06	.380	.450	.490	-1.42	.100	51.1	.430	.100	-.040	-2.87	.460	36.4	.350	.010	-.080	33.6	.120	.140	154	-.440	.160	.050
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

GSJ

CCB5	-1.31	-1.29	.860	.600	.480	-1.92	.070	51.3	.330	.160	-.440	-3.58	-.100	48.0	.790	.160	-.120	69.2	-1.12	.160	92.3	.230	.170	.320
G518-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	.400	-1.06	.240	.600	.460	-1.29	.080	45.3	.590	.050	.460	.330	.820	47.3	.580	.030	-.040	28.7	-.230	.070	71.8	-1.34	.220	.380
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	-.300	.330	.010	.610	.590	-1.28	.090	96.7	.210	.040	.180	-3.93	.070	67.6	.550	.110	.110	72.2	-.600	.330	88.8	.420	.210	2.76
IPG074WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG013SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	-2.85	-1.03	-.330	.690	.480	-1.32	.060	44.6	.080	.080	.380	-1.99	.340	33.9	.480	.090	-.170	78.2	1.11	.260	95.1	-.740	.180	.170
G518-14M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	.490	-.190	-.670	.420	.560	-1.41	.070	61.2	.310	-.010	.010	1.26	-.220	60.2	.530	.150	.010	77.1	-.230	.130	159	.110	.230	2.50
G518-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G520-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G530-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CCB10	-2.15	-.940	1.02	.530	.240	-1.52	.070	51.4	.170	.120	.160	1.15	-.720	17.3	.750	.170	.010	58.8	.370	.180	109	-.590	.060	1.78
TXG014WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB11	-1.38	-.890	.430	.310	.480	-1.70	.070	52.9	.190	-.030	.070	-1.15	-.010	56.3	-.280	.180	-.120	86.1	-.470	.190	174	.230	.070	5.41
G481-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB12	-.360	-.030	1.20	.690	.300	-1.68	.050	49.4	.290	.150	.040	-1.21	.180	30.2	.260	.120	.010	55.9	.220	.060	73.7	.190	-.020	11.4

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilu Factor	CorrFact	Check	Check Table	Fail Action
1	0	Unk	S0		ID8G031001			1	☐		Continue
2	0	Unk	S2		ID8G031002			1	☐		Continue
3	0	Unk	S5		ID8G031003			1	☐		Continue
4	0	Unk	S8		ID8G031004			1	☐		Continue
5	0	Unk	S11		ID8G031005			1	☐		Continue
6	0	Unk	S17		ID8G031006			1	☐		Continue
7	1	QC	ICV		ID8G031007			1	☒	ICV	Continue
8	2	QC	ICB		ID8G031008			1	☒	3XIDL	Continue
9	3	QC	ICSA		ID8G031009			1	☒	ICSA	Continue
10	4	QC	ICSAB		ID8G031010			1	☒	ICSAB	Continue
11	5	QC	CCV1		ID8G031011			1	☒	CCV	Continue
12	6	QC	CCB1	Na Li Be B Ca Fe Mg	ID8G031012			1	☒	3XIDL	Continue
13	25	QC	~~IPG025SB~~ IPG075SB		ID8G031013			1	☒	CCB1	Continue
14	26	QC	~~IPG025SL~~ IPG075SL		ID8G031014			1	☒	LCS	Continue
15	27	QC	~~IPG025SC~~ IPG075SC		ID8G031015			1	☒	LCS	Continue
16	28	Unk	G560-01A		ID8G031016			1	☐		Continue
17	29	Unk	G560-01		ID8G031017			1	☐		Continue
18	30	Unk	G560-01J		ID8G031018			1	☐		Continue
19	31	Unk	G243-01		ID8G031019			1	☐		Continue
20	32	Unk	G527-03		ID8G031020			1	☐		Continue
21	33	Unk	G527-06		ID8G031021			1	☐		Continue
22	34	Unk	BLANK		ID8G031022			1	☐		Continue
23	35	QC	CCV2		ID8G031023			1	☒	CCV	Continue
24	36	QC	CCB2	Be	ID8G031024			1	☒	3XIDL	Continue
25	7	QC	IPG076WB		ID8G031025			1	☒	CCB1	Continue
26	8	QC	IPG076WL		ID8G031026			1	☒	LCS	Continue
27	9	QC	IPG076WC		ID8G031027			1	☒	LCS	Continue
28	10	Unk	G201-01A	TOT	ID8G031028			1	☐		Continue
29	11	Unk	G201-01	TOT	ID8G031029			1	☐		Continue
30	12	Unk	G201-01J	TOT	ID8G031030			1	☐		Continue
31	13	Unk	G201-02	TOT	ID8G031031			1	☐		Continue
32	14	Unk	G201-03	TOT	ID8G031032			1	☐		Continue
33	15	Unk	G201-04	TOT	ID8G031033			1	☐		Continue
34	16	Unk	BLANK		ID8G031034			1	☐		Continue
35	17	QC	CCV3		ID8G031035			1	☒	CCV	Continue
36	18	QC	CCB3	Be Ca Mg Mn	ID8G031036			1	☒	3XIDL	Continue
37	19	Unk	G201-01	DISS	ID8G031037			1	☐		Continue
38	20	Unk	G201-02	DISS	ID8G031038			1	☐		Continue
39	112	Unk	BLANK		ID8G031039			1	☐		Continue
40	21	Unk	G201-03	DISS	ID8G031040			1	☐		Continue
41	113	Unk	BLANK		ID8G031041			1	☐		Continue
42	114	Unk	BLANK		ID8G031042			1	☐		Continue
43	22	Unk	BLANK		ID8G031043			1	☐		Continue
44	23	QC	CCV4		ID8G031044			1	☒	CCV	Continue
45	24	QC	CCB4	Be Na	ID8G031045			1	☒	3XIDL	Continue
46	103	Unk	G201-02	20X TOT	ID8G031046			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
47	104	Unk	G201-03	20X TOT	ID8G031047			1	☐		Continue
48	105	Unk	G201-02	20X DISS	ID8G031048			1	☐		Continue
49	106	Unk	G201-03	20X DISS	ID8G031049			1	☐		Continue
50	107	Unk	BLANK		ID8G031050			1	☐		Continue
51	108	Unk	BLANK		ID8G031051			1	☐		Continue
52	109	Unk	BLANK		ID8G031052			1	☐		Continue
53	110	QC	CCV5	Al 90% Cut	ID8G031053			1	☒	CCV	Continue
54	111	QC	CCB5	Be Na	ID8G031054			1	☒	3XIDL	Continue
55	37	Unk	G518-13		ID8G031055			1	☐		Continue
56	38	Unk	G521-17	5X Zn	ID8G031056			1	☐		Continue
57	39	Unk	G521-18	5X Zn	ID8G031057			1	☐		Continue
58	40	Unk	G511-01	5X	ID8G031058			1	☐		Continue
59	41	Unk	G511-02	5X	ID8G031059			1	☐		Continue
60	42	Unk	G511-03	5X	ID8G031060			1	☐		Continue
61	43	Unk	G511-01	20X	ID8G031061			1	☐		Continue
62	44	Unk	G511-02	20X	ID8G031062			1	☐		Continue
63	45	Unk	G511-03	20X	ID8G031063			1	☐		Continue
64	46	Unk	BLANK		ID8G031064			1	☐		Continue
65	47	QC	CCV6		ID8G031065			1	☒	CCV	Continue
66	48	QC	CCB6	Be Na	ID8G031066			1	☒	3XIDL	Continue
67	94	Unk	G234-01A 03	TOT	ID8G031067			1	☐		Continue
68	95	Unk	G234-01		ID8G031068			1	☐		Continue
69	96	Unk	G234-01J		ID8G031069			1	☐		Continue
70	97	Unk	G234-01A	5X	ID8G031070			1	☐		Continue
71	98	Unk	G234-01	5X	ID8G031071			1	☐		Continue
72	99	Unk	G234-01J	25X	ID8G031072			1	☐		Continue
73	100	Unk	BLANK		ID8G031073			1	☐		Continue
74	101	QC	CCV7		ID8G031074			1	☒	CCV	Continue
75	102	QC	CCB7	Be	ID8G031075			1	☒	3XIDL	Continue
76	49	QC	IPG074WB		ID8G031076			1	☒	CCB1	Continue
77	50	QC	IPG074WL		ID8G031077			1	☒	LCS	Continue
78	51	QC	IPG074WC		ID8G031078			1	☒	LCS	Continue
79	52	QC	TXG013SB	TCLP	ID8G031079			1	☒	CCB1	Continue
80	53	Unk	G518-14A	TCLP	ID8G031080			1	☐		Continue
81	54	Unk	G518-14	TCLP	ID8G031081			1	☐		Continue
82	55	Unk	G518-14J	TCLP	ID8G031082			1	☐		Continue
83	56	Unk	BLANK		ID8G031083			1	☐		Continue
84	57	Unk	BLANK		ID8G031084			1	☐		Continue
85	58	Unk	BLANK		ID8G031085			1	☐		Continue
86	59	QC	CCV8		ID8G031086			1	☒	CCV	Continue
87	60	QC	CCB8		ID8G031087			1	☒	3XIDL	Continue
88	61	Unk	G518-14M	TCLP	ID8G031088			1	☐		Continue
89	62	Unk	G518-14S	TCLP	ID8G031089			1	☐		Continue
90	63	Unk	G518-02	TCLP	ID8G031090			1	☐		Continue
91	64	Unk	G518-05	TCLP	ID8G031091			1	☐		Continue
92	65	Unk	G518-06	TCLP	ID8G031092			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
93	66	Unk	G518-07	TCLP	ID8G031093			1	☐		Continue
94	67	Unk	G518-08	TCLP	ID8G031094			1	☐		Continue
95	68	Unk	BLANK		ID8G031095			1	☐		Continue
96	69	Unk	BLANK		ID8G031096			1	☐		Continue
97	70	Unk	BLANK		ID8G031097			1	☐		Continue
98	71	QC	CCV9		ID8G031098			1	☒	CCV	Continue
99	72	QC	CCB9		ID8G031099			1	☒	3XIDL	Continue
100	73	Unk	G518-09	TCLP	ID8G031100			1	☐		Continue
101	74	Unk	G518-11	TCLP	ID8G031101			1	☐		Continue
102	75	Unk	G518-12	TCLP	ID8G031102			1	☐		Continue
103	76	Unk	G243-01	TCLP	ID8G031103			1	☐		Continue
104	77	Unk	G520-01	TCLP	ID8G031104			1	☐		Continue
105	78	Unk	G530-01	TCLP	ID8G031105			1	☐		Continue
106	79	Unk	BLANK		ID8G031106			1	☐		Continue
107	80	Unk	BLANK		ID8G031107			1	☐		Continue
108	81	Unk	BLANK		ID8G031108			1	☐		Continue
109	82	QC	CCV10		ID8G031109			1	☒	CCV	Continue
110	83	QC	CCB10		ID8G031110			1	☒	3XIDL	Continue
111	84	QC	TXG014WB	TCLP	ID8G031111			1	☒	CCB1	Continue
112	85	Unk	G518-01A	TCLP	ID8G031112			1	☐		Continue
113	86	Unk	G518-01	TCLP	ID8G031113			1	☐		Continue
114	87	Unk	G518-01J	TCLP	ID8G031114			1	☐		Continue
115	88	Unk	G518-03	TCLP	ID8G031115			1	☐		Continue
116	89	Unk	BLANK		ID8G031116			1	☐		Continue
117	90	Unk	BLANK		ID8G031117			1	☐		Continue
118	91	Unk	BLANK		ID8G031118			1	☐		Continue
119	92	QC	CCV11		ID8G031119			1	☒	CCV	Continue
120	93	QC	CCB11		ID8G031120			1	☒	3XIDL	Continue
121	115	Unk	G481-01A		ID8G031121			1	☐		Continue
122	116	Unk	G481-01		ID8G031122			1	☐		Continue
123	117	Unk	G481-01J		ID8G031123			1	☐		Continue
124	118	Unk	BLANK		ID8G031124			1	☐		Continue
125	119	QC	CCV12		ID8G031125			1	☒	CCV	Continue
126	120	QC	CCB12		ID8G031126			1	☒	3XIDL	Continue

EMAX LABORATORIES, INC.

ANALYSIS RUN LOG
for
ICP

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/28/08 18:28

End Date: 7/29/08 8:28

Comments:

CCV6 TIL

CCV10 TIL

Book #: AD8-006

Instrument No.: D8

Analytical Batch: D86033

Analytical Sequence: S-6086010(V53)

Method File: 6086010(V53)

SOP #	Rev. #
☑ EMAX-6010	5
☐ EMAX-200.7	0
☐ EMAX-	

STANDARDS ID	
S0	SM1B11.35.02
S1	NA
S2	SM1B11.29.03
S3	NA
S4	NA
S5	SM1B11.35.01
S6	NA
S7	NA
S8	SM1B11.28.02
S9	NA
S11	SM1B11.29.04
S17	29.05
ICV	28.03
CCV	33.04
ICSA	32.02
ICSAB	30.02
CRI/MRL	NA

Analyzed By: TH

Date: 7/29/08

SEQUENCE FILE : ID8G033

4-18	19-33	34-43	44-53	54-63
LFID	LSID	TIME	DATE	DF
ID8G033001	Blank	18:28	07/28/08	1.000
ID8G033002	S2	18:33	07/28/08	1.000
ID8G033003	S5	18:38	07/28/08	1.000
ID8G033004	S8	18:43	07/28/08	1.000
ID8G033005	S11	18:48	07/28/08	1.000
ID8G033006	S17	18:53	07/28/08	1.000
ID8G033007	ICV	18:58	07/28/08	1.000
ID8G033008	ICB	19:03	07/28/08	1.000
ID8G033009	ICSA1	19:08	07/28/08	1.000
ID8G033010	ICSAB1	19:13	07/28/08	1.000
ID8G033011	CCV1	19:18	07/28/08	1.000
ID8G033012	CCB1	19:23	07/28/08	1.000
ID8G033013	IPG081WB	19:28	07/28/08	1.000
ID8G033014	IPG081WL	19:33	07/28/08	1.000
ID8G033015	IPG081WC	19:38	07/28/08	1.000
ID8G033016	G063-01A	19:43	07/28/08	1.000
ID8G033017	G063-01	19:48	07/28/08	1.000
ID8G033018	G063-01J	19:53	07/28/08	5.000
ID8G033019	G063-02	19:58	07/28/08	1.000
ID8G033020	G063-05	20:03	07/28/08	1.000
ID8G033021	G063-06	20:08	07/28/08	1.000
ID8G033022	BLANK	20:13	07/28/08	1.000
ID8G033023	CCV2	20:18	07/28/08	1.000
ID8G033024	CCB2	20:22	07/28/08	1.000
ID8G033025	G064-01A	20:27	07/28/08	1.000
ID8G033026	G064-01	20:32	07/28/08	1.000
ID8G033027	G064-01J	20:37	07/28/08	5.000
ID8G033028	G064-02	20:42	07/28/08	1.000
ID8G033029	G064-05	20:47	07/28/08	1.000
ID8G033030	G064-06	20:52	07/28/08	1.000
ID8G033031	G064-11	20:57	07/28/08	1.000
ID8G033032	G064-12	21:02	07/28/08	1.000
ID8G033033	BLANK	21:07	07/28/08	1.000
ID8G033034	CCV3	21:12	07/28/08	1.000
ID8G033035	CCB3	21:17	07/28/08	1.000
ID8G033036	G063-01S	21:22	07/28/08	1.000
ID8G033037	G064-01S	21:27	07/28/08	1.000
ID8G033038	BLANK	21:32	07/28/08	1.000
ID8G033039	CCV4	21:37	07/28/08	1.000
ID8G033040	CCB4	21:42	07/28/08	1.000
ID8G033041	IPG067SB	21:47	07/28/08	1.000
ID8G033042	IPG067SL	21:52	07/28/08	1.000
ID8G033043	IPG067SC	21:57	07/28/08	1.000
ID8G033044	G188-02A	22:01	07/28/08	1.000
ID8G033045	G188-02	22:06	07/28/08	1.000
ID8G033046	G188-02J	22:11	07/28/08	5.000
ID8G033047	G188-04	22:16	07/28/08	1.000
ID8G033048	G188-05	22:21	07/28/08	1.000
ID8G033049	G188-06	22:26	07/28/08	1.000
ID8G033050	BLANK	22:31	07/28/08	1.000
ID8G033051	CCV5	22:36	07/28/08	1.000
ID8G033052	CCB5	22:41	07/28/08	1.000
ID8G033053	G188-07	22:46	07/28/08	1.000

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ID8G033054	G188-10	22:51	07/28/08	1.000
ID8G033055	G188-11	22:57	07/28/08	1.000
ID8G033056	G188-12	23:02	07/28/08	1.000
ID8G033057	G188-14	23:07	07/28/08	1.000
ID8G033058	G188-15	23:12	07/28/08	1.000
ID8G033059	G188-16	23:17	07/28/08	1.000
ID8G033060	G188-17	23:22	07/28/08	1.000
ID8G033061	G188-18	23:27	07/28/08	1.000
ID8G033062	BLANK	23:32	07/28/08	1.000
ID8G033063	CCV6	23:37	07/28/08	1.000
ID8G033064	CCB6	23:42	07/28/08	1.000
ID8G033065	G188-19	23:47	07/28/08	1.000
ID8G033066	G188-21	23:52	07/28/08	1.000
ID8G033067	G188-22	23:57	07/28/08	1.000
ID8G033068	G194-01	00:02	07/29/08	1.000
ID8G033069	BLANK	00:07	07/29/08	1.000
ID8G033070	CCV7	00:12	07/29/08	1.000
ID8G033071	CCB7	00:17	07/29/08	1.000
ID8G033072	G511-01	00:22	07/29/08	20.00
ID8G033073	G511-02	00:27	07/29/08	20.00
ID8G033074	G511-03	00:32	07/29/08	20.00
ID8G033075	G243-01	00:37	07/29/08	5.000
ID8G033076	G521-17	00:42	07/29/08	1.000
ID8G033077	G521-18	00:47	07/29/08	1.000
ID8G033078	BLANK	00:52	07/29/08	1.000
ID8G033079	CCV8	00:57	07/29/08	1.000
ID8G033080	CCB8	01:02	07/29/08	1.000
ID8G033081	IPG076WB	01:07	07/29/08	1.000
ID8G033082	IPG076WL	01:12	07/29/08	1.000
ID8G033083	IPG076WC	01:16	07/29/08	1.000
ID8G033084	G236-02M	01:21	07/29/08	1.000
ID8G033085	G236-02S	01:26	07/29/08	1.000
ID8G033086	G236-02A	01:31	07/29/08	1.000
ID8G033087	G236-02	01:36	07/29/08	1.000
ID8G033088	G236-02J	01:41	07/29/08	5.000
ID8G033089	G236-03	01:46	07/29/08	1.000
ID8G033090	BLANK	01:51	07/29/08	1.000
ID8G033091	CCV9	01:56	07/29/08	1.000
ID8G033092	CCB9	02:00	07/29/08	1.000
ID8G033093	G236-04	02:05	07/29/08	1.000
ID8G033094	G236-05	02:10	07/29/08	1.000
ID8G033095	G236-06	02:16	07/29/08	1.000
ID8G033096	G236-07	02:21	07/29/08	1.000
ID8G033097	G236-08	02:26	07/29/08	1.000
ID8G033098	G236-09	02:31	07/29/08	1.000
ID8G033099	BLANK	02:36	07/29/08	1.000
ID8G033100	CCV10	02:41	07/29/08	1.000
ID8G033101	CCB10	02:46	07/29/08	1.000
ID8G033102	IPG079WB	02:51	07/29/08	1.000
ID8G033103	IPG079WL	02:56	07/29/08	1.000
ID8G033104	IPG079WC	03:00	07/29/08	1.000
ID8G033105	TXG015SB	03:05	07/29/08	1.000
ID8G033106	G256-08A	03:10	07/29/08	1.000
ID8G033107	G256-08	03:15	07/29/08	1.000
ID8G033108	G256-08J	03:20	07/29/08	5.000
ID8G033109	BLANK	03:26	07/29/08	1.000

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ID8G033110	BLANK	03:31	07/29/08	1.000
ID8G033111	BLANK	03:36	07/29/08	1.000
ID8G033112	CCV11	03:41	07/29/08	1.000
ID8G033113	CCB11	03:46	07/29/08	1.000
ID8G033114	G256-08M	03:51	07/29/08	1.000
ID8G033115	G256-08S	03:56	07/29/08	1.000
ID8G033116	G256-01	04:00	07/29/08	1.000
ID8G033117	G256-03	04:06	07/29/08	1.000
ID8G033118	G256-04	04:11	07/29/08	1.000
ID8G033119	G256-05	04:16	07/29/08	1.000
ID8G033120	G256-06	04:21	07/29/08	1.000
ID8G033121	G256-07	04:26	07/29/08	1.000
ID8G033122	BLANK	04:32	07/29/08	1.000
ID8G033123	BLANK	04:37	07/29/08	1.000
ID8G033124	CCV12	04:42	07/29/08	1.000
ID8G033125	CCB12	04:47	07/29/08	1.000
ID8G033126	IPG080SB	04:52	07/29/08	1.000
ID8G033127	IPG080SL	04:57	07/29/08	1.000
ID8G033128	IPG080SC	05:02	07/29/08	1.000
ID8G033129	G527-04A	05:06	07/29/08	1.000
ID8G033130	G527-04	05:11	07/29/08	1.000
ID8G033131	G527-04J	05:16	07/29/08	5.000
ID8G033132	G527-05	05:21	07/29/08	1.000
ID8G033133	BLANK	05:26	07/29/08	1.000
ID8G033134	CCV13	05:31	07/29/08	1.000
ID8G033135	CCB13	05:36	07/29/08	1.000
ID8G033136	G546-34	05:41	07/29/08	1.000
ID8G033137	G546-35	05:46	07/29/08	1.000
ID8G033138	G546-36	05:51	07/29/08	1.000
ID8G033139	G546-37	05:56	07/29/08	1.000
ID8G033140	G546-38	06:01	07/29/08	1.000
ID8G033141	G546-39	06:07	07/29/08	1.000
ID8G033142	G546-40	06:12	07/29/08	1.000
ID8G033143	G546-41	06:17	07/29/08	1.000
ID8G033144	G546-42	06:22	07/29/08	1.000
ID8G033145	BLANK	06:27	07/29/08	1.000
ID8G033146	CCV14	06:32	07/29/08	1.000
ID8G033147	CCB14	06:37	07/29/08	1.000
ID8G033148	G546-43	06:42	07/29/08	1.000
ID8G033149	G546-44	06:47	07/29/08	1.000
ID8G033150	G546-45	06:52	07/29/08	1.000
ID8G033151	G546-46	06:57	07/29/08	1.000
ID8G033152	G546-47	07:02	07/29/08	1.000
ID8G033153	G548-01	07:08	07/29/08	1.000
ID8G033154	G548-02	07:12	07/29/08	1.000
ID8G033155	G548-03	07:17	07/29/08	1.000
ID8G033156	BLANK	07:23	07/29/08	1.000
ID8G033157	CCV15	07:28	07/29/08	1.000
ID8G033158	CCB15	07:32	07/29/08	1.000
ID8G033159	G512-01	07:38	07/29/08	5.000
ID8G033160	G486-01	07:43	07/29/08	5.000
ID8G033161	G518-04	07:48	07/29/08	5.000
ID8G033162	G525-01	07:53	07/29/08	5.000
ID8G033163	G525-02	07:58	07/29/08	5.000
ID8G033164	G525-03	08:03	07/29/08	5.000
ID8G033165	G525-04	08:08	07/29/08	5.000

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ID8G033166	G525-05	08:13	07/29/08	5.000
ID8G033167	BLANK	08:18	07/29/08	5.000
ID8G033168	CCV16	08:23	07/29/08	1.000
ID8G033169	CCB16	08:28	07/29/08	1.000

SDG : 08G188 UNIT : % SUMMARY of ICV and CCV : ID8G033 DATE : 07/28/08

ANALYTE	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	98	103	105	97	100	105	102	103	100	101	98	101	99	102	97	103	101	101	104	101	101	95	99	104
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA1	89	----	----	----	----	----	----	94	----	----	----	93	----	102	----	----	----	----	----	----	----	----	----	----
ICSAB1	88	108	111	105	98	103	104	95	98	99	104	94	95	102	92	108	99	106	110	111	105	90	101	104
CCV1	97	102	103	98	99	102	104	101	99	101	97	100	98	100	94	104	101	99	103	99	101	93	101	103
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	95	102	104	100	99	102	105	100	100	102	98	100	98	100	94	104	102	99	105	99	101	93	102	105
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	94	104	105	101	100	103	103	100	100	100	97	101	98	102	95	104	100	98	105	99	103	91	101	103
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	94	104	105	100	100	103	103	100	100	100	97	101	98	101	94	104	101	99	105	99	103	91	101	104
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	94	105	106	101	99	103	104	98	100	101	98	101	98	98	91	105	101	99	107	99	103	91	102	104
CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

7078

G188-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	95	107	107	104	100	104	104	98	101	101	98	103	98	99	92	105	101	100	107	100	107	89*	102	104	
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-22	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G194-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	95	105	105	106	98	103	104	96	99	101	98	101	98	97	91	105	101	102	106	100	109	91	101	103	
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	95	105	107	105	98	104	104	97	100	101	98	102	98	97	91	105	101	103	108	99	109	91	102	104	
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	95	106	107	106	99	104	104	97	100	101	98	102	98	98	92	105	101	104	108	100	110	91	102	104	
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	96	107	108	107	100	105	104	97	101	101	98	104	98	99	93	105	101	104	109	100	111*	89*	102	105	
CCB10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG079WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG079WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG079WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG015SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	95	106	107	108	99	104	105	97	101	102	99	102	99	97	92	106	102	106	108	100	112*	91	102	105	
CCB11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	96	106	106	109	99	104	105	97	100	102	100	103	99	98	93	106	102	108	107	100	114*	92	103	104	
CCB12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG080SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG080SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG080SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	96	106	106	110	99	104	104	97	101	102	99	103	99	99	94	106	102	108	106	101	116*	91	102	105	
CCB13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-34	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-35	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-36	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-37	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-38	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-39	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-40	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-41	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-42	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	98	103	105	111*	97	103	105	97	99	102	101	100	99	98	96	106	102	113*	104	100	116*	94	103	105	
CCB14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-43	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-44	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-45	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-46	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-47	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G548-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G548-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G548-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	96	105	104	110	102	103	104	100	100	102	99	101	99	105	101	106	102	115*	104	100	119*	92	102	104	
CCB15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G512-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G486-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

2/16/95

G525-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV16	95	105	107	110	101	103	105	100	101	102	100	102	99	105	100	106	102	116*	106	100	119*	92	103	105	
CCB16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

5/5/2

SDG : 08G188 UNIT : UG/L SUMMARY of CALIBRATION BLANKS : ID8G033 (SOIL) DATE : 07/28/08

ANALYTE	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	-40.7	-.280	-1.05	.020	.180	.420	.060	4.53	.100	.100	.040	-18.5	-.350	-15.1	.210	.180	.070	-10.3	1.36	-.050	-.680	.640	.490	.610
ICSA1	----	5.34	-2.91	-.380	-.140	-16.4	-3.90	----	.220	-1.22	2.61	----	-.430	----	-.480	-2.92	4.00	84.1	5.68	.300	88.9	3.53	.330	3.93
ICSAB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	2.28	.260	-.260	.340	.210	.360	.010	28.5	.130	.000	-.030	-1.27	.050	42.8	.240	.180	-.120	37.8	.000	-.130	8.44	-.550	.340	-.730
IPG081WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	-46.7	-.430	-.770	.270	.250	1.37	.030	-25.4	.050	-.080	-.180	-18.0	-.780	-17.1	.310	.170	.040	16.9	1.21	.040	2.39	1.13	.420	-.440
G064-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	-48.7	-1.23	.110	.210	.300	1.52	.000	-24.0	.180	.050	-.030	-15.8	-.090	-17.4	.320	.140	.090	2.73	.940	.350	-2.43	.750	.340	-.650
G063-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	-50.3	.340	-.270	.300	.230	2.23	.010	-26.4	.030	.000	-.200	-15.0	.310	-2.77	.630	.180	-.020	25.8	.180	.100	-5.06	.260	.300	-.730
IPG067SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB5	-53.1	.920	-.180	.170	.240	1.62	.070	-26.4	.040	.120	-.040	-15.5	-.380	-3.76	.260	.190	-.040	13.6	.060	-.100	-12.9	.530	.390	-.820
G188-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

FORM I

G188-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	-53.9	-.340	-.660	.310	.250	.690	.020	-25.6	.010	-.010	.000	-13.8	.410	-2.86	.380	.210	.020	6.29	-.360	-.150	-19.0	.100	.390	-.770
G188-19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-22	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G194-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	-47.1	1.63	-.010	.170	.220	.700	.040	20.4	.130	.130	-.050	-15.6	-.020	-5.00	.470	.180	.150	43.7	-.760	-.110	-15.9	.280	.590	1.45
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	-52.9	.540	-1.29	.140	.220	.490	-.010	17.7	-.030	.080	-.020	-16.6	.100	-12.4	.550	.140	-.020	30.4	-.790	-.010	-7.62	.800	.330	1.86
IPG076WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	-53.6	3.52	1.09	.100	.250	1.000	.060	16.6	.020	.100	-.130	-17.8	-.230	3.30	.520	.280	.050	32.9	.150	.100	10.9	.630	.190	1.03
G236-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G236-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB10	-54.4	1.54	-1.17	.330	.200	.660	.040	9.93	-.120	.060	-.050	-16.5	.040	-14.5	.400	.260	.020	30.2	-.730	-.220	24.8	.710	.370	1.15
IPG079WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG079WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG079WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG015SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB11	-54.8	1.89	-.620	.260	.200	.940	.060	6.30	.150	.000	-.030	-17.8	-.010	-11.0	.290	.180	.060	22.5	-.990	-.270	26.0	.260	.230	.960		
G256-08M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-08S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G256-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB12	-54.3	2.03	-2.73	.140	.060	.700	-.020	-1.21	.000	.040	-.060	-20.0	.070	-29.1	-.080	.270	-.030	66.1	.760	-.220	71.4	.320	.100	.840		
IPG080SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG080SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG080SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB13	-53.3	.460	-.950	.560	.110	.990	.000	85.7	.070	.020	-.080	-18.2	.260	-19.9	.320	.280	.040	74.9	-.340	-.250	32.9	.850	.230	4.72		
G546-34	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-35	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-36	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-37	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-38	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-39	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-40	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-41	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-42	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB14	-47.9	1.74	-.820	.660	.270	.540	.050	43.4	.110	.010	.080	-15.1	.460	-17.0	.450	.160	.050	115	.320	.040	55.1	-.060	.480	4.39		
G546-43	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-44	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-45	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-46	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-47	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G548-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G548-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G548-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB15	-49.3	2.42	1.01	.560	.250	.540	.080	28.6	.110	.080	-.170	-16.6	.550	-2.94	.510	.310	-.140	90.2	.440	-.020	32.1	.050	.310	3.31		
G512-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G486-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G525-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB16	-51.3	.770	-.740	.370	.260	.840	.070	22.9	.010	.070	.080	-18.0	.040	-15.6	.130	.250	.050	55.2	.160	.030	44.5	-.100	.560	1.85	

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

7617

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
1	0	Unk	S0		ID8G033001			1	☐		Continue
2	0	Unk	S2		ID8G033002			1	☐		Continue
3	0	Unk	S5		ID8G033003			1	☐		Continue
4	0	Unk	S8		ID8G033004			1	☐		Continue
5	0	Unk	S11		ID8G033005			1	☐		Continue
6	0	Unk	S17		ID8G033006			1	☐		Continue
7	1	QC	ICV		ID8G033007			1	☒	ICV	Continue
8	2	QC	ICB	Al B Fe	ID8G033008			1	☒	3XIDL	Continue
9	3	QC	ICSA1		ID8G033009			1	☒	ICSA	Continue
10	4	QC	ICSAB1		ID8G033010			1	☒	ICSAB	Continue
11	5	QC	CCV1		ID8G033011			1	☒	CCV	Continue
12	6	QC	CCB1	Be	ID8G033012			1	☒	3XIDL	Continue
13	7	QC	IPG081WB		ID8G033013			1	☒	CCB1	Continue
14	8	QC	IPG081WL		ID8G033014			1	☒	LCS	Continue
15	9	QC	IPG081WC		ID8G033015			1	☒	LCS	Continue
16	10	Unk	G063-01A		ID8G033016			1	☐		Continue
17	11	Unk	G063-01		ID8G033017			1	☐		Continue
18	12	Unk	G063-01J		ID8G033018			1	☐		Continue
19	13	Unk	G063-02		ID8G033019			1	☐		Continue
20	14	Unk	G063-05		ID8G033020			1	☐		Continue
21	15	Unk	G063-06		ID8G033021			1	☐		Continue
22	16	Unk	BLANK		ID8G033022			1	☐		Continue
23	17	QC	CCV2		ID8G033023			1	☒	CCV	Continue
24	18	QC	CCB2	Al Be B Fe	ID8G033024			1	☒	3XIDL	Continue
25	19	Unk	G064-01A		ID8G033025			1	☐		Continue
26	20	Unk	G064-01		ID8G033026			1	☐		Continue
27	21	Unk	G064-01J		ID8G033027			1	☐		Continue
28	22	Unk	G064-02		ID8G033028			1	☐		Continue
29	23	Unk	G064-05		ID8G033029			1	☐		Continue
30	24	Unk	G064-06		ID8G033030			1	☐		Continue
31	25	Unk	G064-11		ID8G033031			1	☐		Continue
32	26	Unk	G064-12		ID8G033032			1	☐		Continue
33	27	Unk	BLANK		ID8G033033			1	☐		Continue
34	28	QC	CCV3		ID8G033034			1	☒	CCV	Continue
35	29	QC	CCB3	Al Be B Fe	ID8G033035			1	☒	3XIDL	Continue
36	30	Unk	G063-01S	synthetic	ID8G033036			1	☐		Continue
37	31	Unk	G064-01S	synthetic	ID8G033037			1	☐		Continue
38	32	Unk	BLANK		ID8G033038			1	☐		Continue
39	33	QC	CCV4		ID8G033039			1	☒	CCV	Continue
40	34	QC	CCB4	Al Be B Fe	ID8G033040			1	☒	3XIDL	Continue
41	35	QC	IPG067SB		ID8G033041			1	☒	CCB1	Continue
42	36	QC	IPG067SL		ID8G033042			1	☒	LCS	Continue
43	37	QC	IPG067SC		ID8G033043			1	☒	LCS	Continue
44	38	Unk	G188-02A		ID8G033044			1	☐		Continue
45	39	Unk	G188-02		ID8G033045			1	☐		Continue
46	40	Unk	G188-02J		ID8G033046			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
47	41	Unk	G188-04		ID8G033047			1	☐		Continue
48	42	Unk	G188-05		ID8G033048			1	☐		Continue
49	43	Unk	G188-06		ID8G033049			1	☐		Continue
50	44	Unk	BLANK		ID8G033050			1	☐		Continue
51	45	QC	CCV5		ID8G033051			1	☒	CCV	Continue
52	46	QC	CCB5	Al Be B Fe	ID8G033052			1	☒	3XIDL	Continue
53	47	Unk	G188-07		ID8G033053			1	☐		Continue
54	48	Unk	G188-10		ID8G033054			1	☐		Continue
55	49	Unk	G188-11		ID8G033055			1	☐		Continue
56	50	Unk	G188-12		ID8G033056			1	☐		Continue
57	51	Unk	G188-14		ID8G033057			1	☐		Continue
58	52	Unk	G188-15		ID8G033058			1	☐		Continue
59	53	Unk	G188-16		ID8G033059			1	☐		Continue
60	54	Unk	G188-17		ID8G033060			1	☐		Continue
61	55	Unk	G188-18		ID8G033061			1	☐		Continue
62	56	Unk	BLANK		ID8G033062			1	☐		Continue
63	57	QC	CCV6	Tl↓	ID8G033063			1	☒	CCV	Continue
64	58	QC	CCB6	Al Be Fe	ID8G033064			1	☒	3XIDL	Continue
65	59	Unk	G188-19		ID8G033065			1	☐		Continue
66	60	Unk	G188-21		ID8G033066			1	☐		Continue
67	61	Unk	G188-22		ID8G033067			1	☐		Continue
68	62	Unk	G194-01		ID8G033068			1	☐		Continue
69	63	Unk	BLANK		ID8G033069			1	☐		Continue
70	64	QC	CCV7		ID8G033070			1	☒	CCV	Continue
71	65	QC	CCB7	Al Be Fe	ID8G033071			1	☒	3XIDL	Continue
72	66	Unk	G511-01	20X	ID8G033072			1	☐		Continue
73	67	Unk	G511-02	20X	ID8G033073			1	☐		Continue
74	68	Unk	G511-03	20X	ID8G033074			1	☐		Continue
75	69	Unk	G243-01	5X	ID8G033075			1	☐		Continue
76	70	Unk	G521-17		ID8G033076			1	☐		Continue
77	71	Unk	G521-18		ID8G033077			1	☐		Continue
78	72	Unk	BLANK		ID8G033078			1	☐		Continue
79	73	QC	CCV8		ID8G033079			1	☒	CCV	Continue
80	74	QC	CCB8	Al Be Fe	ID8G033080			1	☒	3XIDL	Continue
81	75	QC	IPG076WB		ID8G033081			1	☒	CCB1	Continue
82	76	QC	IPG076WL		ID8G033082			1	☒	LCS	Continue
83	77	QC	IPG076WC		ID8G033083			1	☒	LCS	Continue
84	78	Unk	G236-02M		ID8G033084			1	☐		Continue
85	79	Unk	G236-02S		ID8G033085			1	☐		Continue
86	80	Unk	G236-02A		ID8G033086			1	☐		Continue
87	81	Unk	G236-02		ID8G033087			1	☐		Continue
88	82	Unk	G236-02J		ID8G033088			1	☐		Continue
89	83	Unk	G236-03		ID8G033089			1	☐		Continue
90	84	Unk	BLANK		ID8G033090			1	☐		Continue
91	85	QC	CCV9		ID8G033091			1	☒	CCV	Continue
92	86	QC	CCB9	Al Be Fe	ID8G033092			1	☒	3XIDL	Continue

:06:41

6/30/08

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
93	87	Unk	G236-04		ID8G033093			1	☐		Continue
94	88	Unk	G236-05		ID8G033094			1	☐		Continue
95	89	Unk	G236-06		ID8G033095			1	☐		Continue
96	90	Unk	G236-07		ID8G033096			1	☐		Continue
97	91	Unk	G236-08		ID8G033097			1	☐		Continue
98	92	Unk	G236-09		ID8G033098			1	☐		Continue
99	93	Unk	BLANK		ID8G033099			1	☐		Continue
100	94	QC	CCV10	Na Ti	ID8G033100			1	☒	CCV	Continue
101	95	QC	CCB10	Al Fe	ID8G033101			1	☒	3XIDL	Continue
102	96	QC	IPG079WB		ID8G033102			1	☒	CCB1	Continue
103	97	QC	IPG079WL		ID8G033103			1	☒	LCS	Continue
104	98	QC	IPG079WC		ID8G033104			1	☒	LCS	Continue
105	99	QC	TXG015SB	TCLP	ID8G033105			1	☒	CCB1	Continue
106	100	Unk	G256-08A	TCLP	ID8G033106			1	☐		Continue
107	101	Unk	G256-08	TCLP	ID8G033107			1	☐		Continue
108	102	Unk	G256-08J	TCLP	ID8G033108			1	☐		Continue
109	103	Unk	BLANK		ID8G033109			1	☐		Continue
110	104	Unk	BLANK		ID8G033110			1	☐		Continue
111	105	Unk	BLANK		ID8G033111			1	☐		Continue
112	106	QC	CCV11	Na	ID8G033112			1	☒	CCV	Continue
113	107	QC	CCB11	Al Fe	ID8G033113			1	☒	3XIDL	Continue
114	108	Unk	G256-08M	TCLP	ID8G033114			1	☐		Continue
115	109	Unk	G256-08S	TCLP	ID8G033115			1	☐		Continue
116	110	Unk	G256-01	TCLP	ID8G033116			1	☐		Continue
117	111	Unk	G256-03	TCLP	ID8G033117			1	☐		Continue
118	112	Unk	G256-04	TCLP	ID8G033118			1	☐		Continue
119	113	Unk	G256-05	TCLP	ID8G033119			1	☐		Continue
120	114	Unk	G256-06	TCLP	ID8G033120			1	☐		Continue
121	115	Unk	G256-07	TCLP	ID8G033121			1	☐		Continue
122	116	Unk	BLANK		ID8G033122			1	☐		Continue
123	117	Unk	BLANK		ID8G033123			1	☐		Continue
124	118	QC	CCV12	Na	ID8G033124			1	☒	CCV	Continue
125	119	QC	CCB12	Al Fe Na	ID8G033125			1	☒	3XIDL	Continue
126	120	QC	IPG080SB		ID8G033126			1	☒	CCB1	Continue
127	121	QC	IPG080SL		ID8G033127			1	☒	LCS	Continue
128	122	QC	IPG080SC		ID8G033128			1	☒	LCS	Continue
129	123	Unk	G527-04A		ID8G033129			1	☐		Continue
130	124	Unk	G527-04		ID8G033130			1	☐		Continue
131	125	Unk	G527-04J		ID8G033131			1	☐		Continue
132	126	Unk	G527-05		ID8G033132			1	☐		Continue
133	127	Unk	BLANK		ID8G033133			1	☐		Continue
134	128	QC	CCV13	Na	ID8G033134			1	☒	CCV	Continue
135	129	QC	CCB13	Al Ca Fe Ba	ID8G033135			1	☒	3XIDL	Continue
136	130	Unk	G546-34		ID8G033136			1	☐		Continue
137	131	Unk	G546-35		ID8G033137			1	☐		Continue
138	132	Unk	G546-36		ID8G033138			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
139	133	Unk	G546-37		ID8G033139			1	☐		Continue
140	134	Unk	G546-38		ID8G033140			1	☐		Continue
141	135	Unk	G546-39		ID8G033141			1	☐		Continue
142	136	Unk	G546-40		ID8G033142			1	☐		Continue
143	137	Unk	G546-41		ID8G033143			1	☐		Continue
144	138	Unk	G546-42		ID8G033144			1	☐		Continue
145	139	Unk	BLANK		ID8G033145			1	☐		Continue
146	140	QC	CCV14	Ba↑ K↑ Na↑	ID8G033146			1	☒	CCV	Continue
147	141	QC	CCB14	Al Ba Fe Na Sr↓	ID8G033147			1	☒	3XIDL	Continue
148	142	Unk	G546-43		ID8G033148			1	☐		Continue
149	143	Unk	G546-44		ID8G033149			1	☐		Continue
150	144	Unk	G546-45		ID8G033150			1	☐		Continue
151	145	Unk	G546-46		ID8G033151			1	☐		Continue
152	146	Unk	G546-47		ID8G033152			1	☐		Continue
153	147	Unk	G548-01		ID8G033153			1	☐		Continue
154	148	Unk	G548-02		ID8G033154			1	☐		Continue
155	149	Unk	G548-03		ID8G033155			1	☐		Continue
156	150	Unk	BLANK		ID8G033156			1	☐		Continue
157	151	QC	CCV15	Ba Al Sr↓ K↑ Na↑	ID8G033157			1	☒	CCV	Continue
158	152	QC	CCB15	Al Ba Fe	ID8G033158			1	☒	3XIDL	Continue
159	153	Unk	G512-01	200.7 5X	ID8G033159			1	☐		Continue
160	154	Unk	G486-01	200.7 5X	ID8G033160			1	☐		Continue
161	155	Unk	G518-04	200.7 5X	ID8G033161			1	☐		Continue
162	156	Unk	G525-01	200.7 5X	ID8G033162			1	☐		Continue
163	157	Unk	G525-02	200.7 5X	ID8G033163			1	☐		Continue
164	158	Unk	G525-03	200.7 5X	ID8G033164			1	☐		Continue
165	159	Unk	G525-04	200.7 5X	ID8G033165			1	☐		Continue
166	160	Unk	G525-05	200.7 5X	ID8G033166			1	☐		Continue
167	161	Unk	BLANK		ID8G033167			1	☐		Continue
168	162	QC	CCV16	Ba Al Sr↓ K↑ Na↑	ID8G033168			1	☒	CCV	Continue
169	163	QC	CCB16	Al Ba Fe Na	ID8G033169			1	☒	3XIDL	Continue

ANALYSIS RUN LOG
for
ICP

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/29/08 11:20

End Date: 7/30/08 06:16

Comments:

- 200.7 : ICV, CCV1 TI 94%
- CCV7 : Ba ↓
- CCV11-CCV16 : Mn ↓

Book #: AD8-006

Instrument No.: D8

Analytical Batch: ID8B1034

Analytical Sequence: S-G 08600 (V56)

Method File: G08B90 (V56)

SOP #	Rev. #
☑ EMAX-6010	5
☑ EMAX-200.7	0
☐ EMAX-	

STANDARDS ID	
S0	SM1B11.35.02
S1	NA
S2	SM1B11.29.03
S3	NA
S4	NA
S5	SM1B1135.01
S6	NA
S7	NA
S8	SM1B11.28.02
S9	NA
S11	SM1B11.29.04
S17	29.05
ICV	28.03
CCV	33.04
ICSA	32.02
ICSAB	30.02
CRI/MRL	NA

Analyzed By: TH

Date: 7/30/08

SEQUENCE FILE : ID8G034

4-18	19-33	34-43	44-53	54-63
LFID	LSID	TIME	DATE	DF
ID8G034001	Blank	11:20	07/29/08	1.000
ID8G034002	S2	11:25	07/29/08	1.000
ID8G034003	S5	11:30	07/29/08	1.000
ID8G034004	S8	11:35	07/29/08	1.000
ID8G034005	S11	11:40	07/29/08	1.000
ID8G034006	S17	11:59	07/29/08	1.000
ID8G034007	ICV	12:04	07/29/08	1.000
ID8G034008	ICB	12:08	07/29/08	1.000
ID8G034009	ICSA	12:13	07/29/08	1.000
ID8G034010	ICSAB	12:19	07/29/08	1.000
ID8G034011	CCV1	12:24	07/29/08	1.000
ID8G034012	CCB1	12:28	07/29/08	1.000
ID8G034013	IPG081WB	12:34	07/29/08	1.000
ID8G034014	IPG081WL	12:39	07/29/08	1.000
ID8G034015	IPG081WC	12:43	07/29/08	1.000
ID8G034016	G064-01	12:48	07/29/08	1.000
ID8G034017	G064-01J	13:01	07/29/08	5.000
ID8G034018	G064-01S	13:06	07/29/08	1.000
ID8G034019	G064-02	13:11	07/29/08	1.000
ID8G034020	G064-05	13:16	07/29/08	1.000
ID8G034021	G064-06	13:21	07/29/08	1.000
ID8G034022	BLANK	13:26	07/29/08	1.000
ID8G034023	CCV2	13:31	07/29/08	1.000
ID8G034024	CCB2	13:35	07/29/08	1.000
ID8G034025	ZZZZZ	13:40	07/29/08	1.000
ID8G034026	ZZZZZ	13:45	07/29/08	1.000
ID8G034027	ZZZZZ	13:51	07/29/08	1.000
ID8G034028	ZZZZZ	13:56	07/29/08	1.000
ID8G034029	G063-01S	14:01	07/29/08	1.000
ID8G034030	ZZZZZ	14:06	07/29/08	1.000
ID8G034031	ZZZZZ	14:11	07/29/08	1.000
ID8G034032	ZZZZZ	14:16	07/29/08	1.000
ID8G034033	BLANK	14:21	07/29/08	1.000
ID8G034034	CCV3	14:26	07/29/08	1.000
ID8G034035	CCB3	14:31	07/29/08	1.000
ID8G034036	ICSA2	14:36	07/29/08	1.000
ID8G034037	ICSAB2	14:42	07/29/08	1.000
ID8G034038	CCV4	14:47	07/29/08	1.000
ID8G034039	CCB4	14:51	07/29/08	1.000
ID8G034040	G546-37	14:56	07/29/08	10.00
ID8G034041	G546-38	15:02	07/29/08	10.00
ID8G034042	G518-01A	15:06	07/29/08	5.000
ID8G034043	G518-01	15:11	07/29/08	5.000
ID8G034044	G518-01J	15:16	07/29/08	25.00
ID8G034045	ZZZZZZ	15:21	07/29/08	10.00
ID8G034046	ZZZZZZ	15:26	07/29/08	10.00
ID8G034047	ZZZZZZ	15:31	07/29/08	50.00
ID8G034048	BLANK	15:36	07/29/08	1.000
ID8G034049	CCV5	15:42	07/29/08	1.000
ID8G034050	CCB5	15:46	07/29/08	1.000
ID8G034051	IPG067SB nil	15:51	07/29/08	1.000
ID8G034052	IPG067SL ↓	15:57	07/29/08	1.000
ID8G034053	IPG067SC	16:02	07/29/08	1.000

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ID8G034054	G188-02A	16:07	07/29/08	1.000
ID8G034055	G188-02	16:12	07/29/08	1.000
ID8G034056	G188-02J	16:17	07/29/08	5.000
ID8G034057	G188-04	16:22	07/29/08	1.000
ID8G034058	G188-05	16:27	07/29/08	1.000
ID8G034059	G188-06	16:32	07/29/08	1.000
ID8G034060	BLANK	16:37	07/29/08	1.000
ID8G034061	CCV6	16:43	07/29/08	1.000
ID8G034062	CCB6	16:47	07/29/08	1.000
ID8G034063	G188-07	16:52	07/29/08	1.000
ID8G034064	G188-10	16:58	07/29/08	1.000
ID8G034065	G188-11	17:03	07/29/08	1.000
ID8G034066	G188-12	17:08	07/29/08	1.000
ID8G034067	G188-14	17:13	07/29/08	1.000
ID8G034068	G188-15	17:18	07/29/08	1.000
ID8G034069	G188-16	17:23	07/29/08	1.000
ID8G034070	G188-17	17:28	07/29/08	1.000
ID8G034071	G188-18	17:33	07/29/08	1.000
ID8G034072	BLANK	17:38	07/29/08	1.000
ID8G034073	CCV7	17:43	07/29/08	1.000
ID8G034074	CCB7	17:48	07/29/08	1.000
ID8G034075	G188-19	17:53	07/29/08	1.000
ID8G034076	G188-21	17:58	07/29/08	1.000
ID8G034077	G188-22	18:03	07/29/08	1.000
ID8G034078	BLANK	18:08	07/29/08	1.000
ID8G034079	CCV8	18:13	07/29/08	1.000
ID8G034080	CCB8	18:18	07/29/08	1.000
ID8G034081	IPG085SB	18:23	07/29/08	1.000
ID8G034082	IPG085SL	18:28	07/29/08	1.000
ID8G034083	IPG085SC	18:33	07/29/08	1.000
ID8G034084	G285-01A	18:38	07/29/08	1.000
ID8G034085	G285-01	18:42	07/29/08	1.000
ID8G034086	G285-01J	18:48	07/29/08	5.000
ID8G034087	G566-01	18:52	07/29/08	1.000
ID8G034088	G567-01	18:58	07/29/08	1.000
ID8G034089	G561-01	19:03	07/29/08	1.000
ID8G034090	BLANK	19:08	07/29/08	1.000
ID8G034091	CCV9	19:13	07/29/08	1.000
ID8G034092	CCB9	19:18	07/29/08	1.000
ID8G034093	G581-01	19:23	07/29/08	1.000
ID8G034094	G558-01	19:28	07/29/08	1.000
ID8G034095	G558-02	19:33	07/29/08	1.000
ID8G034096	BLANK	19:39	07/29/08	1.000
ID8G034097	CCV10	19:44	07/29/08	1.000
ID8G034098	CCB10	19:48	07/29/08	1.000
ID8G034099	IPG087WB	19:54	07/29/08	1.000
ID8G034100	IPG087WL	19:59	07/29/08	1.000
ID8G034101	IPG087WC	20:04	07/29/08	1.000
ID8G034102	G169-01A	20:08	07/29/08	1.000
ID8G034103	G169-01	20:13	07/29/08	1.000
ID8G034104	G169-01J	20:18	07/29/08	5.000
ID8G034105	G582-01	20:23	07/29/08	1.000
ID8G034106	BLANK	20:28	07/29/08	1.000
ID8G034107	CCV11	20:34	07/29/08	1.000
ID8G034108	CCB11	20:38	07/29/08	1.000
ID8G034109	IPG078WB	20:44	07/29/08	1.000

all

all

not used

all except not used for Ba

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ID8G034110	IPG078WL	20:49	07/29/08	1.000
ID8G034111	IPG078WC	20:53	07/29/08	1.000
ID8G034112	G254-09M	20:58	07/29/08	1.000
ID8G034113	G254-09S	21:03	07/29/08	1.000
ID8G034114	G254-09A	21:08	07/29/08	1.000
ID8G034115	G254-09	21:12	07/29/08	1.000
ID8G034116	G254-09J	21:17	07/29/08	5.000
ID8G034117	G254-10	21:23	07/29/08	1.000
ID8G034118	BLANK	21:28	07/29/08	1.000
ID8G034119	CCV12	21:33	07/29/08	1.000
ID8G034120	CCB12	21:37	07/29/08	1.000
ID8G034121	G254-02	21:43	07/29/08	1.000
ID8G034122	G254-03	21:48	07/29/08	1.000
ID8G034123	G254-04	21:53	07/29/08	1.000
ID8G034124	G254-05	21:58	07/29/08	1.000
ID8G034125	G254-06	22:03	07/29/08	1.000
ID8G034126	G254-07	22:08	07/29/08	1.000
ID8G034127	G254-08	22:13	07/29/08	1.000
ID8G034128	G252-03	22:18	07/29/08	1.000
ID8G034129	G252-04	22:23	07/29/08	1.000
ID8G034130	BLANK	22:28	07/29/08	1.000
ID8G034131	CCV13	22:33	07/29/08	1.000
ID8G034132	CCB13	22:38	07/29/08	1.000
ID8G034133	G252-06	22:43	07/29/08	1.000
ID8G034134	G252-08	22:48	07/29/08	1.000
ID8G034135	G258-01	22:53	07/29/08	1.000
ID8G034136	G258-02	22:58	07/29/08	1.000
ID8G034137	G258-03	23:04	07/29/08	1.000
ID8G034138	G258-04M	23:09	07/29/08	1.000
ID8G034139	G258-04S	23:14	07/29/08	1.000
ID8G034140	G258-04	23:19	07/29/08	1.000
ID8G034141	BLANK	23:24	07/29/08	1.000
ID8G034142	CCV14	23:29	07/29/08	1.000
ID8G034143	CCB14	23:34	07/29/08	1.000
ID8G034144	IPG070WB	23:39	07/29/08	1.000
ID8G034145	IPG070WL	23:44	07/29/08	1.000
ID8G034146	IPG070WC	23:49	07/29/08	1.000
ID8G034147	G486-01A	23:53	07/29/08	5.000
ID8G034148	G486-01	23:58	07/29/08	5.000
ID8G034149	G486-01J	00:03	07/30/08	25.00
ID8G034150	G512-01	00:08	07/30/08	5.000
ID8G034151	G518-04	00:14	07/30/08	1.000
ID8G034152	BLANK	00:19	07/30/08	1.000
ID8G034153	BLANK	00:24	07/30/08	1.000
ID8G034154	CCV15	00:29	07/30/08	1.000
ID8G034155	CCB15	00:34	07/30/08	1.000
ID8G034156	G525-01	00:39	07/30/08	5.000
ID8G034157	G525-02	00:44	07/30/08	5.000
ID8G034158	G525-03	00:49	07/30/08	5.000
ID8G034159	G525-04	00:54	07/30/08	5.000
ID8G034160	G525-05	00:59	07/30/08	5.000
ID8G034161	ZZZZZZZ	01:04	07/30/08	10.00
ID8G034162	G525-03	01:09	07/30/08	10.00
ID8G034163	BLANK	01:14	07/30/08	1.000
ID8G034164	ICSA3	01:19	07/30/08	1.000
ID8G034165	ICSAB3	01:24	07/30/08	1.000

ID8G034166	CCV16	01:30	07/30/08	1.000
ID8G034167	CCB16	01:34	07/30/08	1.000
ID8G034168	IPG083WB	01:39	07/30/08	1.000
ID8G034169	IPG083WL	01:45	07/30/08	1.000
ID8G034170	IPG083WC	01:49	07/30/08	1.000
ID8G034171	WTG007SB	01:54	07/30/08	1.000
ID8G034172	G567-01A	01:59	07/30/08	5.000
ID8G034173	G567-01	02:04	07/30/08	5.000
ID8G034174	G567-01J	02:09	07/30/08	25.00
ID8G034175	BLANK	02:14	07/30/08	1.000
ID8G034176	BLANK	02:20	07/30/08	1.000
ID8G034177	BLANK	02:25	07/30/08	1.000
ID8G034178	CCV17	02:30	07/30/08	1.000
ID8G034179	CCB17	02:35	07/30/08	1.000
ID8G034180	G567-01M	02:40	07/30/08	5.000
ID8G034181	G567-01S	02:45	07/30/08	5.000
ID8G034182	G558-01	02:50	07/30/08	5.000
ID8G034183	G558-02	02:55	07/30/08	5.000
ID8G034184	G566-01	03:00	07/30/08	5.000
ID8G034185	G511-04	03:05	07/30/08	5.000
ID8G034186	BLANK	03:10	07/30/08	1.000
ID8G034187	BLANK	03:15	07/30/08	1.000
ID8G034188	BLANK	03:20	07/30/08	1.000
ID8G034189	CCV18	03:25	07/30/08	1.000
ID8G034190	CCB18	03:30	07/30/08	1.000
ID8G034191	IPG084SB	03:35	07/30/08	1.000
ID8G034192	IPG084SL	03:40	07/30/08	1.000
ID8G034193	IPG084SC	03:45	07/30/08	1.000
ID8G034194	G547-01A	03:50	07/30/08	1.000
ID8G034195	G547-01	03:55	07/30/08	1.000
ID8G034196	G547-01J	04:00	07/30/08	5.000
ID8G034197	G547-02	04:05	07/30/08	1.000
ID8G034198	G547-03	04:10	07/30/08	1.000
ID8G034199	G547-04	04:15	07/30/08	1.000
ID8G034200	BLANK	04:20	07/30/08	1.000
ID8G034201	CCV19	04:25	07/30/08	1.000
ID8G034202	CCB19	04:30	07/30/08	1.000
ID8G034203	G547-05	04:35	07/30/08	1.000
ID8G034204	G547-06	04:40	07/30/08	1.000
ID8G034205	G547-07	04:45	07/30/08	1.000
ID8G034206	G547-08	04:50	07/30/08	1.000
ID8G034207	G547-09	04:55	07/30/08	1.000
ID8G034208	G547-10	05:01	07/30/08	1.000
ID8G034209	G547-11	05:06	07/30/08	1.000
ID8G034210	G547-12	05:11	07/30/08	1.000
ID8G034211	G547-13	05:16	07/30/08	1.000
ID8G034212	BLANK	05:21	07/30/08	1.000
ID8G034213	CCV20	05:26	07/30/08	1.000
ID8G034214	CCB20	05:31	07/30/08	1.000
ID8G034215	G547-14	05:36	07/30/08	1.000
ID8G034216	G547-15	05:41	07/30/08	1.000
ID8G034217	G547-16	05:46	07/30/08	1.000
ID8G034218	G547-17	05:51	07/30/08	1.000
ID8G034219	G547-18	05:56	07/30/08	1.000
ID8G034220	G547-19	06:01	07/30/08	1.000
ID8G034221	BLANK	06:06	07/30/08	1.000

7/9/09

ID8G034222	CCV21	06:11	07/30/08	1.000
ID8G034223	CCB21	06:16	07/30/08	1.000

SDG : 08G188 UNIT : % SUMMARY of ICV and CCV : ID8G034 DATE : 07/29/08

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	Sn	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	97	97	99	98	100	101	99	98	100	96	99	98	98	97	102	100	99	96	98	99	94	100	97	101
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	91	----	----	----	----	----	93	----	----	----	93	----	100	----	----	----	----	----	----	----	----	----	----	----
ICSAB	90	104	108	107	103	106	94	98	100	104	93	97	101	97	110	100	107	106	110	105	90	102	100	104
CCV1	98	98	99	98	103	105	101	99	102	98	99	98	100	99	105	102	101	99	98	101	94	102	100	103
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	95	97	99	98	103	105	100	99	102	98	97	98	99	99	105	102	100	99	98	100	94	103	101	103
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	95	96	100	97	101	105	98	98	102	97	96	98	97	98	104	102	99	99	98	99	95	103	101	103
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA2	86	----	----	----	----	----	92	----	----	----	87	----	96	----	----	----	----	----	----	----	----	----	----	----
ICSAB2	88	99	103	101	97	103	89	94	98	99	88	93	95	90	106	97	104	101	107	101	89	100	98	101
CCV4	99	96	100	96	103	106	98	99	103	97	98	99	97	98	105	103	99	99	98	98	97	104	102	104
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-37	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-38	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	94	94	97	96	102	105	97	97	102	97	94	98	95	97	105	102	99	96	97	97	96	103	100	103
CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

7/29/08

G188-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	93	93	97	94	103	105	95	97	103	97	93	98	91	96	105	102	95	96	97	93	97	103	100	102	
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	95	92	97	89*	97	105	92	96	103	95	93	98	87*	89*	104	102	91	96	97	88*	98	104	101	102	
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-22	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	93	91	96	90	98	105	92	96	103	96	92	98	86*	89*	104	102	90	95	96	88*	98	104	100	102	
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG085SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG085SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG085SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G285-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G285-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G285-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G566-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G561-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	92	92	96	92	95	105	88*	97	103	96	92	98	82*	88*	104	102	88*	95	96	85*	99	104	100	102	
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G581-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G558-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G558-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	92	92	96	93	94	106	87*	97	104	96	92	98	82*	87*	105	103	89*	95	96	86*	99	104	100	102	
CCB10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG087WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG087WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG087WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G169-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G169-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G169-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G582-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	94	94	98	92	93	106	87*	97	103	95	94	98	83*	85*	104	102	89*	98	97	86*	98	105	101	103	
CCB11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG078WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

IPG078WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG078WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	93	95	98	93	93	106	89*	98	103	95	94	98	84*	86*	104	102	90	98	97	88*	97	104	101	104	
CCB12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G252-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G252-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	93	95	98	95	96	106	91	98	103	98	95	98	86*	88*	105	103	91	97	98	89*	96	103	100	103	
CCB13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G252-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G252-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-04M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-04S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	93	95	100	95	94	106	88*	98	103	96	95	98	84*	87*	104	103	92	99	97	90	96	104	101	104	
CCB14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG070WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG070WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG070WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G486-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G486-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G486-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G512-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	93	96	100	98	97	106	91	99	103	97	97	99	87*	89*	105	103	94	100	98	91	96	103	101	104	
CCB15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA3	89	----	----	----	----	----	87	----	----	----	91	----	90	----	----	----	----	----	----	----	----	----	----	----	----
ICSAB3	88	100	105	107	96	105	88	96	100	103	91	96	90	87	110	100	103	103	109	98	91	101	99	104	

CCV16	96	96	99	100	97	106	94	99	103	97	97	99	91	91	105	103	97	98	98	95	95	103	101	103
CCB16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG083WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG083WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG083WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WTG007SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV17	93	94	99	101	97	106	91	98	103	96	95	99	89*	91	104	103	96	98	97	95	97	104	101	104
CCB17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G558-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G558-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G566-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV18	93	94	99	101	98	106	92	98	103	96	95	99	91	91	104	103	97	98	97	96	97	104	101	103
CCB18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG084SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG084SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG084SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV19	93	95	99	102	100	106	95	98	103	96	96	98	93	92	104	103	98	98	97	98	96	103	101	104
CCB19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV20	94	94	99	101	103	106	98	99	103	96	97	98	96	94	104	103	98	99	97	98	96	104	101	105
CCB20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CCV21	92	95	100	100	106	106	98	99	102	96	96	98	95	95	104	102	95	100	97	96	95	103	100	104
CCB21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

7691

SDG : 086188 UNIT : UG/L SUMMARY of CALIBRATION BLANKS : ID8G034 (SOIL) DATE : 07/29/08

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	Sn	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	5.61	.250	-.380	-.110	.180	.030	-28.3	.310	.200	-.150	-3.20	-.360	19.8	.730	.250	-.200	38.1	.470	.090	38.9	.750	.080	.370	-1.93
ICSA	----	3.08	-.320	-.640	.030	-2.73	----	.160	-1.27	2.22	----	.740	----	-.390	-2.30	-.380	48.3	4.41	.720	129	-9.43	.000	.380	3.50
ICSAB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	50.6	-.260	.460	-.070	.260	.050	31.9	.130	.230	-.400	12.9	.270	84.0	.280	.380	-.160	36.9	.110	.260	50.0	1.30	-.200	.440	-2.45
IPG081WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG081WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G064-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	7.40	-.380	1.06	.080	.320	-.010	-6.90	.200	.190	-.370	-3.62	-.250	39.6	.770	.310	-.260	28.8	.360	.990	38.7	.850	1.02	.320	-1.47
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G063-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ZZZZZ	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	2.78	.530	.800	.000	.310	.050	-11.7	.030	.160	-.210	-1.74	-.280	35.4	.520	.270	-.110	24.0	-.510	.060	33.7	.060	.320	.350	-1.68
ICSA2	----	2.72	2.15	-.340	.030	-1.77	----	.200	-.950	1.91	----	.050	----	-.690	-2.24	-.520	61.6	2.86	.560	114	-8.46	.580	.330	7.64
ICSAB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	35.4	-.390	.560	-.060	.170	.000	30.3	.000	.040	-.120	8.23	-.100	71.9	.470	.420	-.070	30.7	1.35	-.030	39.2	.260	.060	.130	-1.63
G546-37	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G546-38	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB5	8.24	.810	1.55	-.030	.310	.080	113	.290	.170	-.350	-.130	-.090	35.7	1.01	.350	-.150	49.8	-.900	.270	47.1	.530	-.010	.380	5.36
IPG067SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG067SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CSM2

G188-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	7.52	.170	-.130	-.070	.320	.040	37.4	.250	.240	-.420	-1.88	-.390	39.9	.340	.240	-.250	65.7	-.410	.080	31.5	.370	.200	.450	.650
G188-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	9.86	-.490	.900	-.110	.360	.090	45.8	.370	.100	-.370	.510	.000	33.7	.410	.290	-.050	61.0	-.390	-.010	23.7	1.03	.180	.470	1.63
G188-19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-22	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	10.1	-.770	1.63	-.180	.290	.080	16.5	.150	.350	-.520	1.63	-.170	32.4	.580	.240	-.230	77.1	-.730	.340	33.3	.870	.090	.460	-.250
IPG085SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG085SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG085SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G285-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G285-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G285-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G566-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G561-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	6.58	.350	1.11	.020	.200	.060	-73.7	.340	.140	-.570	-1.15	.070	31.5	.360	.270	-.280	60.4	-.020	.240	31.2	.150	1.45	.290	-4.20
G581-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G558-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G558-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB10	8.32	-.240	.570	.190	.270	.030	-63.4	.440	.120	-.450	-.020	.330	35.3	.760	.210	-.170	132	-.230	.140	60.7	.720	1.29	.550	-4.06
IPG087WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG087WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG087WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G169-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G169-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G169-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G582-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB11	4.89	1.03	.750	.000	.390	.040	-71.6	.090	.210	-.420	-.160	.040	36.5	.520	.240	-.080	101	-.540	.430	69.0	.410	2.21	.410	-4.19
IPG078WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

IPG078WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG078WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-09J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB12	5.40	3.83	.670	-.010	.250	.020	1.40	.270	.180	-.540	-.490	.240	31.5	.160	.470	-.270	86.7	.030	.420	67.9	.530	.950	.640	-.690	
G254-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G254-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G252-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G252-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB13	4.63	.710	1.21	-.040	.240	.040	-2.53	.340	.190	-.350	-1.20	-.160	34.5	.960	.260	-.060	96.1	-.600	.180	90.1	.310	.160	.360	-.780	
G252-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G252-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-04M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-04S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G258-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB14	4.10	4.13	-.080	.090	.310	.050	-4.38	.290	.160	-.260	-.990	.370	34.9	.230	.410	-.290	147	-.500	.130	318	.790	.160	.440	-.900	
IPG070WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG070WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG070WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G486-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G486-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G486-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G512-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB15	4.01	1.01	.550	.060	.340	.030	-32.6	.110	.180	-.370	-3.59	.230	38.4	.970	.380	-.180	94.9	.350	.070	184	.560	1.40	.140	-2.17	
G525-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G525-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA3	----	4.55	.680	-.200	.020	-2.80	----	.350	-1.07	3.29	----	-1.69	----	-.400	-2.50	.010	321	5.60	.610	284	-9.42	.600	.450	1.95	
ICSAB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CCV16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB16	49.3	1.41	1.34	.120	.310	.060	.690	.180	.210	-.270	17.2	-.320	95.6	.600	.420	-.100	52.7	-.480	.250	103	.750	1.58	.400	-3.37
IPG083WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG083WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG083WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WTG007SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB17	3.63	.480	.690	-.060	.240	.020	-72.2	.200	.090	-.530	-3.60	-.260	46.8	.690	.350	-.070	69.4	-1.19	.180	135	.790	1.48	.340	-4.06
G567-01M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G567-01S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G558-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G558-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G566-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB18	4.73	-.060	-.610	.310	.330	.060	-75.0	.270	.300	-.400	-2.28	-.190	35.0	.770	.290	-.080	84.1	.620	-.100	133	.780	1.38	.430	-4.18
IPG084SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG084SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG084SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB19	5.03	-.300	.970	.180	.290	.030	-38.4	.040	.140	-.430	-3.37	-.460	30.1	.360	.250	-.190	127	.090	.290	113	.440	.860	.350	-2.39
G547-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV20	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB20	4.24	.540	.450	.270	.350	.020	-23.4	.190	.110	-.390	1.75	-.310	36.6	.760	.240	.130	85.1	.630	.380	104	1.24	.750	.370	-.010
G547-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G547-19	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CCV21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB21	.990	-1.29	.720	.160	.380	.060	-6.90	.140	.100	-.500	-.530	-.030	34.8	.540	.210	-.190	95.6	-.510	.240	98.1	-.120	-.120	.310	.350

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

7095T

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
1	0	Unk	S0		ID8G034001			1	☐		Continue
2	0	Unk	S2		ID8G034002			1	☐		Continue
3	0	Unk	S5		ID8G034003			1	☐		Continue
4	0	Unk	S8		ID8G034004			1	☐		Continue
5	0	Unk	S11		ID8G034005			1	☐		Continue
6	0	Unk	S17		ID8G034006			1	☐		Continue
7	1	QC	ICV		ID8G034007			1	☒	ICV	Continue
8	2	QC	ICB		ID8G034008			1	☒	CCB1	Continue
9	3	QC	ICSA		ID8G034009			1	☒	ICSA	Continue
10	4	QC	ICSAB		ID8G034010			1	☒	ICSAB	Continue
11	5	QC	CCV1		ID8G034011			1	☒	CCV	Continue
12	6	QC	CCB1		ID8G034012			1	☒	CCB1	Continue
13	7	QC	IPG081WB		ID8G034013			1	☒	CCB1	Continue
14	8	QC	IPG081WL		ID8G034014			1	☒	LCS	Continue
15	9	QC	IPG081WC		ID8G034015			1	☒	LCS	Continue
16	10	Unk	G064-01		ID8G034016			1	☐		Continue
17	11	Unk	G064-01J		ID8G034017			1	☐		Continue
18	12	Unk	G064-01S	SYNTHETIC	ID8G034018			1	☐		Continue
19	13	Unk	G064-02		ID8G034019			1	☐		Continue
20	14	Unk	G064-05		ID8G034020			1	☐		Continue
21	15	Unk	G064-06		ID8G034021			1	☐		Continue
22	16	Unk	BLANK		ID8G034022			1	☐		Continue
23	17	QC	CCV2		ID8G034023			1	☒	CCV	Continue
24	18	QC	CCB2		ID8G034024			1	☒	CCB1	Continue
25	19	Unk	ZZZZZ		ID8G034025			1	☐		Continue
26	20	Unk	ZZZZZ		ID8G034026			1	☐		Continue
27	21	Unk	ZZZZZ		ID8G034027			1	☐		Continue
28	22	Unk	ZZZZZ		ID8G034028			1	☐		Continue
29	23	Unk	G063-01S	SYNTHETIC	ID8G034029			1	☐		Continue
30	24	Unk	ZZZZZ		ID8G034030			1	☐		Continue
31	25	Unk	ZZZZZ		ID8G034031			1	☐		Continue
32	26	Unk	ZZZZZ		ID8G034032			1	☐		Continue
33	27	Unk	BLANK		ID8G034033			1	☐		Continue
34	28	QC	CCV3		ID8G034034			1	☒	CCV	Continue
35	29	QC	CCB3		ID8G034035			1	☒	CCB1	Continue
36	30	QC	ICSA2		ID8G034036			1	☒	ICSA	Continue
37	31	QC	ICSAB2		ID8G034037			1	☒	ICSAB	Continue
38	32	QC	CCV4		ID8G034038			1	☒	CCV	Continue
39	33	QC	CCB4		ID8G034039			1	☒	CCB1	Continue
40	34	Unk	G546-37	10X Pb	ID8G034040			1	☐		Continue
41	35	Unk	G546-38	10X Pb	ID8G034041			1	☐		Continue
42	36	Unk	G518-01A	5X	ID8G034042			1	☐		Continue
43	37	Unk	G518-01	5X	ID8G034043			1	☐		Continue
44	38	Unk	G518-01J	25X	ID8G034044			1	☐		Continue
45	39	Unk	G518-01A	10X	ID8G034045			1	☐		Continue
46	40	Unk	G518-01	10X	ID8G034046			1	☐		Continue

:29:34

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
47	41	Unk	G518-01J	50X	ID8G034047			1	☐		Continue
48	42	Unk	BLANK		ID8G034048			1	☐		Continue
49	43	QC	CCV5		ID8G034049			1	☒	CCV	Continue
50	44	QC	CCB5		ID8G034050			1	☒	3XIDL	Continue
51	45	QC	IPG067SB		ID8G034051			1	☒	CCB1	Continue
52	46	QC	IPG067SL		ID8G034052			1	☒	LCS	Continue
53	47	QC	IPG067SC		ID8G034053			1	☒	LCS	Continue
54	48	Unk	G188-02A		ID8G034054			1	☐		Continue
55	49	Unk	G188-02		ID8G034055			1	☐		Continue
56	50	Unk	G188-02J		ID8G034056			1	☐		Continue
57	51	Unk	G188-04		ID8G034057			1	☐		Continue
58	52	Unk	G188-05		ID8G034058			1	☐		Continue
59	53	Unk	G188-06		ID8G034059			1	☐		Continue
60	54	Unk	BLANK		ID8G034060			1	☐		Continue
61	55	QC	CCV6		ID8G034061			1	☒	CCV	Continue
62	56	QC	CCB6		ID8G034062			1	☒	3XIDL	Continue
63	57	Unk	G188-07		ID8G034063			1	☐		Continue
64	58	Unk	G188-10		ID8G034064			1	☐		Continue
65	59	Unk	G188-11		ID8G034065			1	☐		Continue
66	60	Unk	G188-12		ID8G034066			1	☐		Continue
67	61	Unk	G188-14		ID8G034067			1	☐		Continue
68	62	Unk	G188-15		ID8G034068			1	☐		Continue
69	63	Unk	G188-16		ID8G034069			1	☐		Continue
70	64	Unk	G188-17		ID8G034070			1	☐		Continue
71	65	Unk	G188-18		ID8G034071			1	☐		Continue
72	66	Unk	BLANK		ID8G034072			1	☐		Continue
73	67	QC	CCV7	Bad	ID8G034073			1	☒	CCV	Continue
74	68	QC	CCB7		ID8G034074			1	☒	3XIDL	Continue
75	69	Unk	G188-19		ID8G034075			1	☐		Continue
76	70	Unk	G188-21		ID8G034076			1	☐		Continue
77	71	Unk	G188-22		ID8G034077			1	☐		Continue
78	72	Unk	BLANK		ID8G034078			1	☐		Continue
79	73	QC	CCV8		ID8G034079			1	☒	CCV	Continue
80	74	QC	CCB8		ID8G034080			1	☒	3XIDL	Continue
81	157	QC	IPG085SB		ID8G034081			1	☒	CCB1	Continue
82	158	QC	IPG085SL		ID8G034082			1	☒	LCS	Continue
83	159	QC	IPG085SC		ID8G034083			1	☒	LCS	Continue
84	160	Unk	G285-01A		ID8G034084			1	☐		Continue
85	161	Unk	G285-01		ID8G034085			1	☐		Continue
86	162	Unk	G285-01J		ID8G034086			1	☐		Continue
87	163	Unk	G566-01		ID8G034087			1	☐		Continue
88	164	Unk	G567-01		ID8G034088			1	☐		Continue
89	165	Unk	G561-01		ID8G034089			1	☐		Continue
90	166	Unk	BLANK		ID8G034090			1	☐		Continue
91	167	QC	CCV9		ID8G034091			1	☒	CCV	Continue
92	168	QC	CCB9		ID8G034092			1	☒	3XIDL	Continue

:29:34

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
93	169	Unk	G581-01		ID8G034093			1	☐		Continue
94	170	Unk	G558-01		ID8G034094			1	☐		Continue
95	171	Unk	G558-02		ID8G034095			1	☐		Continue
96	172	Unk	BLANK		ID8G034096			1	☐		Continue
97	173	QC	CCV10		ID8G034097			1	☒	CCV	Continue
98	174	QC	CCB10		ID8G034098			1	☒	3XIDL	Continue
99	175	QC	IPG087WB		ID8G034099			1	☒	CCB1	Continue
100	176	QC	IPG087WL		ID8G034100			1	☒	LCS	Continue
101	177	QC	IPG087WC		ID8G034101			1	☒	LCS	Continue
102	178	Unk	G169-01A		ID8G034102			1	☐		Continue
103	179	Unk	G169-01		ID8G034103			1	☐		Continue
104	180	Unk	G169-01J		ID8G034104			1	☐		Continue
105	181	Unk	G582-01		ID8G034105			1	☐		Continue
106	182	Unk	BLANK		ID8G034106			1	☐		Continue
107	183	QC	CCV11	mnl	ID8G034107			1	☒	CCV	Continue
108	184	QC	CCB11		ID8G034108			1	☒	3XIDL	Continue
109	75	QC	IPG078WB		ID8G034109			1	☒	CCB1	Continue
110	76	QC	IPG078WL		ID8G034110			1	☒	LCS	Continue
111	77	QC	IPG078WC		ID8G034111			1	☒	LCS	Continue
112	78	Unk	G254-09M		ID8G034112			1	☐		Continue
113	79	Unk	G254-09S		ID8G034113			1	☐		Continue
114	80	Unk	G254-09A		ID8G034114			1	☐		Continue
115	81	Unk	G254-09		ID8G034115			1	☐		Continue
116	82	Unk	G254-09J		ID8G034116			1	☐		Continue
117	83	Unk	G254-10		ID8G034117			1	☐		Continue
118	84	Unk	BLANK		ID8G034118			1	☐		Continue
119	85	QC	CCV12	Mnd	ID8G034119			1	☒	CCV	Continue
120	86	QC	CCB12		ID8G034120			1	☒	3XIDL	Continue
121	87	Unk	G254-02		ID8G034121			1	☐		Continue
122	88	Unk	G254-03		ID8G034122			1	☐		Continue
123	89	Unk	G254-04		ID8G034123			1	☐		Continue
124	90	Unk	G254-05		ID8G034124			1	☐		Continue
125	91	Unk	G254-06		ID8G034125			1	☐		Continue
126	92	Unk	G254-07		ID8G034126			1	☐		Continue
127	93	Unk	G254-08		ID8G034127			1	☐		Continue
128	94	Unk	G252-03		ID8G034128			1	☐		Continue
129	95	Unk	G252-04		ID8G034129			1	☐		Continue
130	96	Unk	BLANK		ID8G034130			1	☐		Continue
131	97	QC	CCV13	mnd	ID8G034131			1	☒	CCV	Continue
132	98	QC	CCB13		ID8G034132			1	☒	3XIDL	Continue
133	99	Unk	G252-06		ID8G034133			1	☐		Continue
134	100	Unk	G252-08		ID8G034134			1	☐		Continue
135	101	Unk	G258-01		ID8G034135			1	☐		Continue
136	102	Unk	G258-02		ID8G034136			1	☐		Continue
137	103	Unk	G258-03		ID8G034137			1	☐		Continue
138	104	Unk	G258-04M		ID8G034138			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dil'n Factor	CorrFact	Check	Check Table	Fail Action
139	105	Unk	G258-04S		ID8G034139			1	☐		Continue
140	106	Unk	G258-04		ID8G034140			1	☐		Continue
141	107	Unk	BLANK		ID8G034141			1	☐		Continue
142	108	QC	CCV14	mnl	ID8G034142			1	☒	CCV	Continue
143	109	QC	CCB14		ID8G034143			1	☒	3XIDL	Continue
144	110	QC	IPG070WB		ID8G034144			1	☒	CCB1	Continue
145	111	QC	IPG070WL		ID8G034145			1	☒	LCS	Continue
146	112	QC	IPG070WC		ID8G034146			1	☒	LCS	Continue
147	113	Unk	G486-01A	5X	ID8G034147			1	☐		Continue
148	114	Unk	G486-01	5X	ID8G034148			1	☐		Continue
149	115	Unk	G486-01J	25X	ID8G034149			1	☐		Continue
150	116	Unk	G512-01	5X	ID8G034150			1	☐		Continue
151	117	Unk	G518-04		ID8G034151			1	☐		Continue
152	118	Unk	BLANK		ID8G034152			1	☐		Continue
153	119	Unk	BLANK		ID8G034153			1	☐		Continue
154	120	QC	CCV15	mnl	ID8G034154			1	☒	CCV	Continue
155	121	QC	CCB15		ID8G034155			1	☒	3XIDL	Continue
156	122	Unk	G525-01	5X	ID8G034156			1	☐		Continue
157	123	Unk	G525-02	5X	ID8G034157			1	☐		Continue
158	124	Unk	G525-03	5X	ID8G034158			1	☐		Continue
159	125	Unk	G525-04	5X	ID8G034159			1	☐		Continue
160	126	Unk	G525-05	5X	ID8G034160			1	☐		Continue
161	127	Unk	G525-02	20X 10X TH	ID8G034161			1	☐		Continue
162	128	Unk	G525-03	20X 10X 7/30/08	ID8G034162			1	☐		Continue
163	129	Unk	BLANK		ID8G034163			1	☐		Continue
164	130	QC	ICSA3		ID8G034164			1	☒	ICSA	Continue
165	131	QC	ICSAB3		ID8G034165			1	☒	ICSAB	Continue
166	132	QC	CCV16	mnl	ID8G034166			1	☒	CCV	Continue
167	133	QC	CCB16		ID8G034167			1	☒	3XIDL	Continue
168	134	QC	IPG083WB		ID8G034168			1	☒	CCB1	Continue
169	135	QC	IPG083WL		ID8G034169			1	☒	LCS	Continue
170	136	QC	IPG083WC		ID8G034170			1	☒	LCS	Continue
171	137	Unk	WTG007SB	STLC	ID8G034171			1	☐		Continue
172	138	Unk	G567-01A	5X STLC	ID8G034172			1	☐		Continue
173	139	Unk	G567-01	5X STLC	ID8G034173			1	☐		Continue
174	140	Unk	G567-01J	25X STLC	ID8G034174			1	☐		Continue
175	141	Unk	BLANK		ID8G034175			1	☐		Continue
176	142	Unk	BLANK		ID8G034176			1	☐		Continue
177	143	Unk	BLANK		ID8G034177			1	☐		Continue
178	144	QC	CCV17		ID8G034178			1	☒	CCV	Continue
179	145	QC	CCB17		ID8G034179			1	☒	3XIDL	Continue
180	146	Unk	G567-01M	5X STLC	ID8G034180			1	☐		Continue
181	147	Unk	G567-01S	5X STLC	ID8G034181			1	☐		Continue
182	148	Unk	G558-01	5X STLC	ID8G034182			1	☐		Continue
183	149	Unk	G558-02	5X STLC	ID8G034183			1	☐		Continue
184	150	Unk	G566-01	5X STLC	ID8G034184			1	☐		Continue

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	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
185	151	Unk	G511-04	5X Ni	ID8G034185			1	☐		Continue
186	152	Unk	BLANK		ID8G034186			1	☐		Continue
187	153	Unk	BLANK		ID8G034187			1	☐		Continue
188	154	Unk	BLANK		ID8G034188			1	☐		Continue
189	155	QC	CCV18		ID8G034189			1	☒	CCV	Continue
190	156	QC	CCB18		ID8G034190			1	☒	3XIDL	Continue
191	185	QC	IPG084SB		ID8G034191			1	☒	CCB1	Continue
192	186	QC	IPG084SL		ID8G034192			1	☒	LCS	Continue
193	187	QC	IPG084SC		ID8G034193			1	☒	LCS	Continue
194	188	Unk	G547-01A		ID8G034194			1	☐		Continue
195	189	Unk	G547-01		ID8G034195			1	☐		Continue
196	190	Unk	G547-01J		ID8G034196			1	☐		Continue
197	191	Unk	G547-02		ID8G034197			1	☐		Continue
198	192	Unk	G547-03		ID8G034198			1	☐		Continue
199	193	Unk	G547-04		ID8G034199			1	☐		Continue
200	194	Unk	BLANK		ID8G034200			1	☐		Continue
201	195	QC	CCV19		ID8G034201			1	☒	CCV	Continue
202	196	QC	CCB19		ID8G034202			1	☒	3XIDL	Continue
203	197	Unk	G547-05		ID8G034203			1	☐		Continue
204	198	Unk	G547-06		ID8G034204			1	☐		Continue
205	199	Unk	G547-07		ID8G034205			1	☐		Continue
206	200	Unk	G547-08		ID8G034206			1	☐		Continue
207	201	Unk	G547-09		ID8G034207			1	☐		Continue
208	202	Unk	G547-10		ID8G034208			1	☐		Continue
209	203	Unk	G547-11		ID8G034209			1	☐		Continue
210	204	Unk	G547-12		ID8G034210			1	☐		Continue
211	205	Unk	G547-13		ID8G034211			1	☐		Continue
212	206	Unk	BLANK		ID8G034212			1	☐		Continue
213	207	QC	CCV20		ID8G034213			1	☒	CCV	Continue
214	208	QC	CCB20		ID8G034214			1	☒	3XIDL	Continue
215	209	Unk	G547-14		ID8G034215			1	☐		Continue
216	210	Unk	G547-15		ID8G034216			1	☐		Continue
217	211	Unk	G547-16		ID8G034217			1	☐		Continue
218	212	Unk	G547-17		ID8G034218			1	☐		Continue
219	213	Unk	G547-18		ID8G034219			1	☐		Continue
220	214	Unk	G547-19		ID8G034220			1	☐		Continue
221	215	Unk	BLANK		ID8G034221			1	☐		Continue
222	216	QC	CCV21		ID8G034222			1	☒	CCV	Continue
223	217	QC	CCB21		ID8G034223			1	☒	3XIDL	Continue

ANALYSIS RUN LOG
for
ICP

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/31/08 14:29

End Date: 8/1/08 2:23

Comments:

QC OK.

Book #:	AD8-006
Instrument No.:	D8
Analytical Batch:	ID86037
Analytical Sequence:	S-G086010(V61)
Method File:	G086010(V61)

SOP #	Rev. #
☑ EMAX-6010	5
☑ EMAX-200.7	0
☐ EMAX-	

STANDARDS ID	
S0	SM1B11.35.02
S1	NA
S2	SM1B11.29.03
S3	NA
S4	NA
S5	SM1B11.35.01
S6	NA
S7	NA
S8	SM1B11.28.02
S9	NA
S11	SM1B11.29.04
S17	↓ 29.05
ICV ICV-2 ICV-5	SM1B11.33.05 ~~SM1B11.33.04~~ 32.04 TH 8/1/08
CCV CCV-2 CCV-5	SM1B11.34.01 ↓ 32.06
ICSA	SM1B11.32.02
ICSAB	↓ 30.02
CRI/MRL	NA
CCV	SM1B11.33.04

Analyzed By: TH

Date: 8/1/08

SEQUENCE FILE : ID8G037

4-18	19-33	34-43	44-53	54-63
LFID	LSID	TIME	DATE	DF
ID8G037001	Blank	14:29	07/31/08	1.000
ID8G037002	S2	14:34	07/31/08	1.000
ID8G037003	S5	14:39	07/31/08	1.000
ID8G037004	S8	14:44	07/31/08	1.000
ID8G037005	S11	14:49	07/31/08	1.000
ID8G037006	S17	14:54	07/31/08	1.000
ID8G037007	ICV-2	14:59	07/31/08	1.000
ID8G037008	ICV-5	15:04	07/31/08	1.000
ID8G037009	ICB	15:09	07/31/08	1.000
ID8G037010	CCV-2	15:14	07/31/08	1.000
ID8G037011	CCV-5	15:19	07/31/08	1.000
ID8G037012	CCB	15:24	07/31/08	1.000
ID8G037013	ICSA1	15:29	07/31/08	1.000
ID8G037014	ICSAB1	15:34	07/31/08	1.000
ID8G037015	CCV1	15:39	07/31/08	1.000
ID8G037016	CCB1	15:44	07/31/08	1.000
ID8G037017	IPG091WB	15:49	07/31/08	1.000
ID8G037018	IPG091WL	15:54	07/31/08	1.000
ID8G037019	IPG091WC	15:59	07/31/08	1.000
ID8G037020	G511-05A	16:04	07/31/08	1.000
ID8G037021	G511-05	16:09	07/31/08	1.000
ID8G037022	G511-05J	16:14	07/31/08	5.000
ID8G037023	BLANK	16:19	07/31/08	1.000
ID8G037024	BLANK	16:24	07/31/08	1.000
ID8G037025	CCV2	16:29	07/31/08	1.000
ID8G037026	CCB2	16:34	07/31/08	1.000
ID8G037027	G511-01	16:39	07/31/08	20.00
ID8G037028	G511-02	16:44	07/31/08	20.00
ID8G037029	G511-03	16:49	07/31/08	20.00
ID8G037030	G511-04	16:55	07/31/08	20.00
ID8G037031	G511-01	17:00	07/31/08	5.000
ID8G037032	G511-02	17:05	07/31/08	5.000
ID8G037033	G511-03	17:10	07/31/08	5.000
ID8G037034	BLANK	17:15	07/31/08	1.000
ID8G037035	BLANK	17:20	07/31/08	1.000
ID8G037036	CCV3	17:25	07/31/08	1.000
ID8G037037	CCB3	17:30	07/31/08	1.000
ID8G037038	G511-01	17:35	07/31/08	1.000
ID8G037039	G511-02	17:40	07/31/08	1.000
ID8G037040	G511-03	17:45	07/31/08	1.000
ID8G037041	G511-04	17:50	07/31/08	1.000
ID8G037042	BLANK	17:56	07/31/08	1.000
ID8G037043	BLANK	18:01	07/31/08	1.000
ID8G037044	ICSA2	18:06	07/31/08	1.000
ID8G037045	ICSAB2	18:11	07/31/08	1.000
ID8G037046	BLANK	18:16	07/31/08	1.000
ID8G037047	CCV4	18:21	07/31/08	1.000
ID8G037048	CCB4	18:26	07/31/08	1.000
ID8G037049	IPG088SB	18:31	07/31/08	1.000
ID8G037050	IPG088SL	18:36	07/31/08	1.000
ID8G037051	IPG088SC	18:41	07/31/08	1.000
ID8G037052	G549-01A	18:45	07/31/08	1.000
ID8G037053	G549-01	18:50	07/31/08	1.000

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ID8G037054	G549-01J	18:55	07/31/08	5.000
ID8G037055	G549-02	19:00	07/31/08	1.000
ID8G037056	G549-03	19:05	07/31/08	1.000
ID8G037057	G549-04	19:10	07/31/08	1.000
ID8G037058	BLANK	19:15	07/31/08	1.000
ID8G037059	CCV5	19:20	07/31/08	1.000
ID8G037060	CCB5	19:25	07/31/08	1.000
ID8G037061	G549-05	19:30	07/31/08	1.000
ID8G037062	G549-06	19:35	07/31/08	1.000
ID8G037063	G549-07	19:40	07/31/08	1.000
ID8G037064	G549-13	19:45	07/31/08	1.000
ID8G037065	G563-08	19:50	07/31/08	1.000
ID8G037066	G564-01	19:55	07/31/08	1.000
ID8G037067	G528-01	20:00	07/31/08	1.000
ID8G037068	G528-02	20:05	07/31/08	1.000
ID8G037069	G593-01	20:10	07/31/08	1.000
ID8G037070	BLANK	20:15	07/31/08	1.000
ID8G037071	CCV6	20:20	07/31/08	1.000
ID8G037072	CCB6	20:25	07/31/08	1.000
ID8G037073	IPG092SB	20:30	07/31/08	1.000
ID8G037074	IPG092SL	20:35	07/31/08	1.000
ID8G037075	IPG092SC	20:40	07/31/08	1.000
ID8G037076	G195-06M	20:45	07/31/08	1.000
ID8G037077	G195-06S	20:50	07/31/08	1.000
ID8G037078	G195-06A	20:55	07/31/08	1.000
ID8G037079	G195-06	20:59	07/31/08	1.000
ID8G037080	G195-06J	21:04	07/31/08	5.000
ID8G037081	BLANK	21:09	07/31/08	1.000
ID8G037082	CCV7	21:14	07/31/08	1.000
ID8G037083	CCB7	21:19	07/31/08	1.000
ID8G037084	G188-05M	21:24	07/31/08	1.000
ID8G037085	G188-05S	21:29	07/31/08	1.000
ID8G037086	G188-05	21:34	07/31/08	1.000
ID8G037087	G559-27	21:39	07/31/08	1.000
ID8G037088	BLANK	21:44	07/31/08	1.000
ID8G037089	CCV8	21:49	07/31/08	1.000
ID8G037090	CCB8	21:54	07/31/08	1.000
ID8G037091	G314-01	21:59	07/31/08	1.000
ID8G037092	G314-02	22:05	07/31/08	1.000
ID8G037093	G314-03	22:10	07/31/08	1.000
ID8G037094	G314-04	22:15	07/31/08	1.000
ID8G037095	G314-05	22:20	07/31/08	1.000
ID8G037096	G314-06	22:25	07/31/08	1.000
ID8G037097	G314-07	22:30	07/31/08	1.000
ID8G037098	G314-08	22:35	07/31/08	1.000
ID8G037099	BLANK	22:40	07/31/08	1.000
ID8G037100	CCV9	22:45	07/31/08	1.000
ID8G037101	CCB9	22:50	07/31/08	1.000
ID8G037102	IPG086WB	22:55	07/31/08	1.000
ID8G037103	IPG086WL	23:00	07/31/08	1.000
ID8G037104	IPG086WC	23:05	07/31/08	1.000
ID8G037105	G545-01A	23:10	07/31/08	5.000
ID8G037106	G545-01	23:15	07/31/08	5.000
ID8G037107	G545-01J	23:20	07/31/08	25.00
ID8G037108	G543-01	23:25	07/31/08	5.000
ID8G037109	BLANK	23:30	07/31/08	1.000

SGS TL

ID8G037110	BLANK	23:35	07/31/08	1.000
ID8G037111	CCV10	23:40	07/31/08	1.000
ID8G037112	CCB10	23:45	07/31/08	1.000
ID8G037113	G563-01	23:50	07/31/08	5.000
ID8G037114	G563-02	23:55	07/31/08	5.000
ID8G037115	G563-03	00:00	08/01/08	5.000
ID8G037116	G563-04	00:05	08/01/08	5.000
ID8G037117	BLANK	00:11	08/01/08	1.000
ID8G037118	BLANK	00:16	08/01/08	1.000
ID8G037119	CCV11	00:21	08/01/08	1.000
ID8G037120	CCB11	00:26	08/01/08	1.000
ID8G037121	G511-05A	00:31	08/01/08	5.000
ID8G037122	G511-05	00:36	08/01/08	5.000
ID8G037123	G511-05J	00:40	08/01/08	25.00
ID8G037124	BLANK	00:45	08/01/08	1.000
ID8G037125	BLANK	00:51	08/01/08	1.000
ID8G037126	BLANK	00:56	08/01/08	1.000
ID8G037127	ICSA3	01:01	08/01/08	1.000
ID8G037128	ICSAB3	01:06	08/01/08	1.000
ID8G037129	BLANK	01:11	08/01/08	1.000
ID8G037130	CCV13	01:16	08/01/08	1.000
ID8G037131	CCB13	01:21	08/01/08	1.000
ID8G037132	F315-01	01:26	08/01/08	1.000
ID8G037133	F315-02	01:32	08/01/08	1.000
ID8G037134	F315-03	01:37	08/01/08	1.000
ID8G037135	BLANK	01:43	08/01/08	1.000
ID8G037136	BLANK	01:48	08/01/08	1.000
ID8G037137	BLANK	01:53	08/01/08	1.000
ID8G037138	BLANK	01:58	08/01/08	1.000
ID8G037139	BLANK	02:03	08/01/08	1.000
ID8G037140	ICSA4	02:08	08/01/08	1.000
ID8G037141	ICSAB4	02:13	08/01/08	1.000
ID8G037142	CCV14	02:18	08/01/08	1.000
ID8G037143	CCB14	02:23	08/01/08	1.000

7165

SDG : 08G188 UNIT : % SUMMARY of ICV and CCV : ID8G037 DATE : 07/31/08 I

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	Sn	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV-2	0*	0*	0*	103	99	102	0*	102	101	100	1*	101	0*	100	0*	102	0*	0*	101	-1*	101	0*	99	0*
ICV-5	-1*	98	98	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	98	0*	0*	98	0*	-1*	0*	0*	0*	97
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV-2	0*	0*	0*	102	97	101	0*	100	101	99	1*	100	0*	98	0*	101	0*	0*	101	-1*	101	0*	98	-1*
CCV-5	-1*	98	98	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	98	0*	0*	98	0*	-1*	0*	0*	0*	97
CCB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA1	100	----	----	----	----	----	93	----	----	----	89	----	99	----	----	----	----	----	----	----	----	----	----	----
ICSAB1	100	102	105	106	98	99	92	94	96	103	88	94	97	91	103	94	104	105	110	103	91	98	97	97
CCV1	103	96	99	97	98	101	98	97	100	95	97	97	95	94	100	99	96	101	98	96	96	100	97	100
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG091WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG091WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG091WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	101	97	100	97	99	101	98	98	100	96	97	97	96	94	100	99	96	101	99	97	96	100	99	100
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	100	95	97	99	100	101	97	97	100	98	95	97	96	94	100	99	97	98	98	97	96	100	99	99
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA2	98	----	----	----	----	----	91	----	----	----	88	----	96	----	----	----	----	----	----	----	----	----	----	----
ICSAB2	98	99	101	105	98	99	90	92	96	103	87	94	95	88	103	95	104	102	109	102	93	99	97	95
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	100	94	98	97	98	101	97	97	100	95	96	96	94	90	99	99	97	99	98	97	97	101	98	99
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG088SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG088SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG088SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G549-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	100	94	97	98	99	101	96	96	100	96	95	97	93	91	100	99	97	97	98	98	97	100	98	98	
CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G564-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G528-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G528-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G593-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	100	96	97	101	102	101	97	97	101	98	94	97	96	94	101	99	98	97	99	99	96	100	100	99	
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG092SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG092SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG092SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	101	97	99	98	98	101	96	97	100	97	95	97	92	90	100	99	98	100	99	98	96	100	98	99	
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G559-27	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	102	101	105	98	103	101	102	101	98	95	98	97	99	95	98	98	99	105	100	99	92	99	100	102	
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	102	101	101	104	102	101	99	99	99	99	94	97	96	96	101	99	103	102	100	103	93	99	101	100	
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG086WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG086WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG086WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G543-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	103	101	102	103	101	101	98	99	99	98	95	97	95	95	101	98	102	104	100	103	92	99	100	100	
CCB10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	103	101	102	103	99	100	97	98	98	97	94	96	94	94	100	97	103	103	99	104	91	98	99	99	
CCB11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA3	100	----	----	----	----	----	90	----	----	----	85	----	92	----	----	----	----	----	----	----	----	----	----	----	----
ICSAB3	100	106	106	109	96	97	89	93	93	101	85	92	92	88	101	92	109	107	109	108	84	94	95	95	
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	103	102	103	104	100	100	97	98	98	97	94	96	94	94	100	98	104	103	99	105	90	98	99	99	
CCB13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F315-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F315-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F315-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA4	99	----	----	----	----	----	93	----	----	----	89	----	95	----	----	----	----	----	----	----	----	----	----	----	----
ICSAB4	99	106	108	115	97	96	90	96	91	99	88	92	93	88	99	91	120	107	108	117	83	95	98	97	
CCV14	102	100	100	112*	99	100	96	100	97	97	95	96	95	93	100	97	115*	100	99	115*	90	98	103	101	
CCB14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

SDG : 08G188 UNIT : UG/L SUMMARY of CALIBRATION BLANKS : ID8G037 (SOIL) DATE : 07/31/08 I

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	Sn	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV-2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV-5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	-5.43	1.75	.840	-.080	.020	-.020	-63.1	.040	.030	-.100	-.400	-.810	-4.40	.280	.170	-.120	-94.1	.250	-.010	-268	-1.07	.820	.010	-2.70
CCV-2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV-5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB	-7.25	2.36	-.410	.060	-.060	.040	-65.8	-.180	-.070	-.230	-1.23	-.820	3.53	.160	.140	.010	-92.3	-.090	.130	-283	.140	.810	-.040	-2.79
ICSA1	----	3.76	-.470	-.840	.020	-3.66	----	-.550	-.850	2.65	----	8.15	----	-.880	-2.26	.620	-33.3	6.06	.600	-76.4	-7.73	-.230	.080	6.40
ICSAB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	19.1	1.62	.170	.110	.050	.040	197	.030	.070	.090	16.3	-.690	55.5	.440	.120	.070	-44.3	.380	.130	-245	-.060	.960	.070	5.04
IPG091WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG091WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG091WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	-2.55	2.74	-1.30	.050	.090	.070	-24.8	-.020	.110	.100	4.11	-.110	22.9	.000	.100	.080	-48.6	-.270	.350	-263	.380	1.03	.110	-1.46
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	-.450	2.54	1.29	.110	.160	.080	-26.4	.180	.020	.280	2.92	-.510	34.8	.070	.150	.020	-59.7	.550	.160	-306	.310	1.38	.150	-1.55
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA2	----	7.04	.830	-1.07	-.070	-3.78	----	-.480	-.940	4.28	----	9.34	----	-.510	-2.58	1.99	-31.8	4.22	1.13	18.4	-8.72	2.71	.060	16.9
ICSAB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	2.53	1.74	.690	.140	.120	.080	-28.8	-.060	.110	-.260	5.08	-.610	37.5	.070	.130	-.050	-95.3	-.150	.110	-262	.280	1.42	.010	-1.94
IPG088SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG088SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG088SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G549-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB5	.720	2.20	1.89	.170	.100	.020	-27.0	-.010	.120	-.290	4.61	-.400	32.3	-.110	.150	.000	-66.1	1.86	.220	-303	-.490	.960	.040	-1.56
G549-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G564-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G528-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G528-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G593-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	-2.76	1.28	.090	.370	.120	.040	-26.0	.130	.130	-.110	2.63	-.560	17.4	.000	.170	-.100	-61.2	.100	-.080	-321	.920	1.15	.100	-1.96
IPG092SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG092SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG092SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	-4.26	3.55	-.310	.480	.160	.070	-32.4	.080	.080	-.040	5.38	-.370	30.4	-.130	.150	-.130	-53.0	.260	.020	-317	-.230	.530	.080	-2.05
G188-05M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G559-27	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	-6.37	2.77	.070	.200	.100	.080	-32.9	.070	-.080	-.010	6.35	-.330	24.7	-.070	.080	-.070	-16.6	1.30	.140	-331	-1.43	.760	.140	-2.18
G314-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	-9.82	1.86	1.24	.480	.160	.080	-30.2	-.070	.060	.110	2.49	-.290	13.4	.060	.110	-.120	-87.4	.540	.040	-361	.050	.600	-.030	-1.93
IPG086WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG086WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG086WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G543-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB10	-9.21	2.26	.170	.450	.070	.060	-36.1	-.090	.100	-.220	3.96	-.300	23.2	.260	.110	-.280	-50.2	2.15	.270	-359	-.810	.810	-.090	-2.03
G563-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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CCV11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB11	-5.84	2.43	-1.16	.270	.160	.130	70.5	-.010	.100	.470	5.66	-.090	30.9	.090	.190	.150	-57.8	2.06	.020	-292	-.610	.910	-.050	1.70
G511-05A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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ICSA3	----	6.35	.070	-.650	.030	-2.54	----	-.810	-.870	2.74	----	9.50	----	-.690	-2.22	.150	-80.3	8.54	.440	-231	-9.45	-.210	.020	7.56
ICSAB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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CCV13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB13	-2.34	2.36	.190	.430	.140	.070	78.8	-.120	.070	.110	6.47	-.840	32.3	.230	.110	.210	-83.0	1.45	.040	-299	.110	1.11	.070	1.97
F315-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F315-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
F315-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
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ICSA4	----	7.11	-2.23	-.300	-.110	-5.12	----	-.540	-1.23	2.67	----	7.46	----	-.620	-2.41	.980	42.4	5.12	.260	1657	-8.83	-.500	-.130	8.02
ICSAB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB14	31.8	3.73	-.750	.690	.110	.080	226	-.080	-.200	.570	16.0	-.720	38.6	.910	.200	.250	-109	1.66	.500	404	-.060	.670	.000	7.45

QC limit of each parameter are listed in a table attached next to all the ICP check forms

* : Out of QC Limit

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
1	0	Unk	S0		ID8G037001			1	☐		Continue
2	0	Unk	S2		ID8G037002			1	☐		Continue
3	0	Unk	S5		ID8G037003			1	☐		Continue
4	0	Unk	S8		ID8G037004			1	☐		Continue
5	0	Unk	S11		ID8G037005			1	☐		Continue
6	0	Unk	S17		ID8G037006			1	☐		Continue
7	1	QC	ICV-2		ID8G037007			1	☒	ICV-2	Continue
8	2	QC	ICV-5		ID8G037008			1	☒	ICV-5	Continue
9	3	QC	ICB		ID8G037009			1	☒	CCB1	Continue
10	4	QC	CCV-2		ID8G037010			1	☒	CCV-2	Continue
11	5	QC	CCV-5		ID8G037011			1	☒	CCV-5	Continue
12	6	QC	~~ICB~~ CCB 7.8.08		ID8G037012			1	☒	CCB1	Continue
13	7	QC	ICSA1		ID8G037013			1	☒	ICSA	Continue
14	8	QC	ICSAB1		ID8G037014			1	☒	ICSAB	Continue
15	9	QC	CCV1		ID8G037015			1	☒	CCV	Continue
16	10	QC	CCB1		ID8G037016			1	☒	CCB1	Continue
17	11	QC	IPG091WB		ID8G037017			1	☒	CCB1	Continue
18	12	QC	IPG091WL		ID8G037018			1	☒	LCS	Continue
19	13	QC	IPG091WC		ID8G037019			1	☒	LCS	Continue
20	14	Unk	G511-05A		ID8G037020			1	☐		Continue
21	15	Unk	G511-05		ID8G037021			1	☐		Continue
22	16	Unk	G511-05J		ID8G037022			1	☐		Continue
23	17	Unk	BLANK		ID8G037023			1	☐		Continue
24	18	Unk	BLANK		ID8G037024			1	☐		Continue
25	19	QC	CCV2		ID8G037025			1	☒	CCV	Continue
26	20	QC	CCB2		ID8G037026			1	☒	CCB1	Continue
27	21	Unk	G511-01	20X Cu, Ni	ID8G037027			1	☐		Continue
28	22	Unk	G511-02	20X Cu, Zn, Ni	ID8G037028			1	☐		Continue
29	23	Unk	G511-03	20X Cu, Zn, Ni	ID8G037029			1	☐		Continue
30	24	Unk	G511-04	20X Ni	ID8G037030			1	☐		Continue
31	25	Unk	G511-01	5X	ID8G037031			1	☐		Continue
32	26	Unk	G511-02	5X	ID8G037032			1	☐		Continue
33	27	Unk	G511-03	5X	ID8G037033			1	☐		Continue
34	28	Unk	BLANK		ID8G037034			1	☐		Continue
35	29	Unk	BLANK		ID8G037035			1	☐		Continue
36	30	QC	CCV3		ID8G037036			1	☒	CCV	Continue
37	31	QC	CCB3		ID8G037037			1	☒	CCB1	Continue
38	32	Unk	G511-01		ID8G037038			1	☐		Continue
39	33	Unk	G511-02		ID8G037039			1	☐		Continue
40	34	Unk	G511-03		ID8G037040			1	☐		Continue
41	35	Unk	G511-04		ID8G037041			1	☐		Continue
42	36	Unk	BLANK		ID8G037042			1	☐		Continue
43	37	Unk	BLANK		ID8G037043			1	☐		Continue
44	38	QC	ICSA2		ID8G037044			1	☒	ICSA	Continue
45	39	QC	ICSAB2		ID8G037045			1	☒	ICSAB	Continue
46	40	Unk	BLANK		ID8G037046			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
47	41	QC	CCV4		ID8G037047			1	☒	CCV	Continue
48	42	QC	CCB4		ID8G037048			1	☒	3XIDL	Continue
49	55	QC	IPG088SB		ID8G037049			1	☒	CCB1	Continue
50	56	QC	IPG088SL		ID8G037050			1	☒	LCS	Continue
51	57	QC	IPG088SC		ID8G037051			1	☒	LCS	Continue
52	58	Unk	G549-01A		ID8G037052			1	☐		Continue
53	59	Unk	G549-01		ID8G037053			1	☐		Continue
54	60	Unk	G549-01J		ID8G037054			1	☐		Continue
55	61	Unk	G549-02		ID8G037055			1	☐		Continue
56	62	Unk	G549-03		ID8G037056			1	☐		Continue
57	63	Unk	G549-04		ID8G037057			1	☐		Continue
58	64	Unk	BLANK		ID8G037058			1	☐		Continue
59	65	QC	CCV5		ID8G037059			1	☒	CCV	Continue
60	66	QC	CCB5		ID8G037060			1	☒	3XIDL	Continue
61	67	Unk	G549-05		ID8G037061			1	☐		Continue
62	68	Unk	G549-06		ID8G037062			1	☐		Continue
63	69	Unk	G549-07		ID8G037063			1	☐		Continue
64	70	Unk	G549-13		ID8G037064			1	☐		Continue
65	71	Unk	G563-08		ID8G037065			1	☐		Continue
66	72	Unk	G564-01		ID8G037066			1	☐		Continue
67	73	Unk	G528-01		ID8G037067			1	☐		Continue
68	74	Unk	G528-02		ID8G037068			1	☐		Continue
69	75	Unk	G593-01		ID8G037069			1	☐		Continue
70	76	Unk	BLANK		ID8G037070			1	☐		Continue
71	77	QC	CCV6		ID8G037071			1	☒	CCV	Continue
72	78	QC	CCB6		ID8G037072			1	☒	3XIDL	Continue
73	79	QC	IPG092SB		ID8G037073			1	☒	CCB1	Continue
74	80	QC	IPG092SL		ID8G037074			1	☒	LCS	Continue
75	81	QC	IPG092SC		ID8G037075			1	☒	LCS	Continue
76	82	Unk	G195-06M		ID8G037076			1	☐		Continue
77	83	Unk	G195-06S		ID8G037077			1	☐		Continue
78	84	Unk	G195-06A		ID8G037078			1	☐		Continue
79	85	Unk	G195-06		ID8G037079			1	☐		Continue
80	86	Unk	G195-06J		ID8G037080			1	☐		Continue
81	87	Unk	BLANK		ID8G037081			1	☐		Continue
82	88	QC	CCV7		ID8G037082			1	☒	CCV	Continue
83	89	QC	CCB7		ID8G037083			1	☒	3XIDL	Continue
84	90	Unk	G188-05M		ID8G037084			1	☐		Continue
85	91	Unk	G188-05S		ID8G037085			1	☐		Continue
86	92	Unk	G188-05		ID8G037086			1	☐		Continue
87	93	Unk	G559-27		ID8G037087			1	☐		Continue
88	94	Unk	BLANK		ID8G037088			1	☐		Continue
89	95	QC	CCV8		ID8G037089			1	☒	CCV	Continue
90	96	QC	CCB8		ID8G037090			1	☒	3XIDL	Continue
91	97	Unk	G314-01		ID8G037091			1	☐		Continue
92	98	Unk	G314-02		ID8G037092			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dil'n Factor	CorrFact	Check	Check Table	Fail Action
93	99	Unk	G314-03		ID8G037093			1	☐		Continue
94	100	Unk	G314-04		ID8G037094			1	☐		Continue
95	101	Unk	G314-05		ID8G037095			1	☐		Continue
96	102	Unk	G314-06		ID8G037096			1	☐		Continue
97	103	Unk	G314-07		ID8G037097			1	☐		Continue
98	104	Unk	G314-08		ID8G037098			1	☐		Continue
99	105	Unk	BLANK		ID8G037099			1	☐		Continue
100	106	QC	CCV9		ID8G037100			1	☒	CCV	Continue
101	107	QC	CCB9		ID8G037101			1	☒	3XIDL	Continue
102	108	QC	IPG086WB		ID8G037102			1	☒	CCB1	Continue
103	109	QC	IPG086WL		ID8G037103			1	☒	LCS	Continue
104	110	QC	IPG086WC		ID8G037104			1	☒	LCS	Continue
105	111	Unk	G545-01A	5X	ID8G037105			1	☐		Continue
106	112	Unk	G545-01	5X	ID8G037106			1	☐		Continue
107	113	Unk	G545-01J	25X	ID8G037107			1	☐		Continue
108	114	Unk	G543-01	5X	ID8G037108			1	☐		Continue
109	115	Unk	BLANK		ID8G037109			1	☐		Continue
110	116	Unk	BLANK		ID8G037110			1	☐		Continue
111	117	QC	CCV10		ID8G037111			1	☒	CCV	Continue
112	118	QC	CCB10		ID8G037112			1	☒	CCB1	Continue
113	119	Unk	G563-01	5X	ID8G037113			1	☐		Continue
114	120	Unk	G563-02	5X	ID8G037114			1	☐		Continue
115	121	Unk	G563-03	5X	ID8G037115			1	☐		Continue
116	122	Unk	G563-04	5X	ID8G037116			1	☐		Continue
117	123	Unk	BLANK		ID8G037117			1	☐		Continue
118	124	Unk	BLANK		ID8G037118			1	☐		Continue
119	125	QC	CCV11		ID8G037119			1	☒	CCV	Continue
120	126	QC	CCB11		ID8G037120			1	☒	CCB1	Continue
121	127	Unk	G511-05A	5X As, Se	ID8G037121			1	☐		Continue
122	128	Unk	G511-05	5X As, Se	ID8G037122			1	☐		Continue
123	129	Unk	G511-05J	25X As, Se	ID8G037123			1	☐		Continue
124	130	Unk	BLANK		ID8G037124			1	☐		Continue
125	131	Unk	BLANK		ID8G037125			1	☐		Continue
126	132	Unk	BLANK		ID8G037126			1	☐		Continue
127	133	QC	ICSA3		ID8G037127			1	☒	ICSA	Continue
128	134	QC	ICSAB3		ID8G037128			1	☒	ICSAB	Continue
129	135	Unk	BLANK		ID8G037129			1	☐		Continue
130	136	QC	CCV13		ID8G037130			1	☒	CCV	Continue
131	137	QC	CCB13		ID8G037131			1	☒	CCB1	Continue
132	43	Unk	F315-01		ID8G037132			1	☐		Continue
133	44	Unk	F315-02		ID8G037133			1	☐		Continue
134	45	Unk	F315-03		ID8G037134			1	☐		Continue
135	46	Unk	BLANK		ID8G037135			1	☐		Continue
136	47	Unk	BLANK		ID8G037136			1	☐		Continue
137	48	Unk	BLANK		ID8G037137			1	☐		Continue
138	49	Unk	BLANK		ID8G037138			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
139	50	Unk	BLANK		ID8G037139			1	☐		Continue
140	51	QC	ICSA4		ID8G037140			1	☒	ICSA	Continue
141	52	QC	ICSAB4		ID8G037141			1	☒	ICSAB	Continue
142	53	QC	CCV14	Sal Kim	ID8G037142			1	☒	CCV	Continue
143	54	QC	CCB14		ID8G037143			1	☒	CCB1	Continue

:11:33

DIGESTION LOG FOR ICP METALS

EMAX LABORATORIES, INC.

SOP ☐ EMAX-3005 Rev. No.4 ☐ EMAX-3010 Rev. No. 3 ☑ EMAX-3050 Rev. No. 3 ☐ EMAX-CLP-TAL ☐ Book # EIP-070

Matrix: SOIL Start Date: 7-22-08 Time: 13:50 Temp: 90C Ending Date: 7-22-08 Time: 17.50 Temp.: 90C

BATCH: IPG067-S

Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Turbidity <1 NTU	Sample Amount (g | ml)	pH	Extract Volume (ml)	Digestate Description: Color	Digestate Description: Clarity
01	IPG067-SB					—	N/A	100		
02	SL					—		100		
03	SC					—		100		
04	G188-02					1.002		100		
05	-04					1.003		100		
06	-05					1.001		100		
07	-06					1.003		100		
08	-07					1.001		100		
09	-10					1.000		100		
10	-11					1.001		100		
11	-12					1.003		100		
12	-14					1.002		100		
13	-15					1.000		100		
14	-16					1.001		100		
15	-17					1.003		100		
16	-18					1.002		100		
17	-19					1.001		100		
18	-21					1.002		100		
19	-22					1.003	✓	100		
20										
21										
22										
23										
24										
25										
26										
27										

7-22-08 mc

Standards	ID	Amount Added (ml)
LCS -1	SMIA -11 -20	1.0
LCS -2	SMIA -11 -21	1.0
LCS -3	SMIA -11 -22	1.0
MS	N/A	
Reagent	Lot# / ID	Amount Added (ml)
HNO_3	SWIA -03 -740	10.0
HCl	SWIA -03 -724	10.0
H_2O_2	SWIA -03-622	10.0
HNO3 (1:1)	SMSB 02-80	10.0
Digestate Location	ICP	
Extract Location		

Legend:

Texture	Cs = Coarse	Md = Medium	Fn = Fine
Clarity	Cr = Clear	Cy = Cloudy	Td = Turbid
Artifacts	Rk = rocks	Sl = Shale	Vg=Vegetation
Color	Bu = blue	Bk = Black	Bn = Brown
	Gn = Green	Og = Orange	Rd = Red
	Yw = Yellow	Cl = Colorless	

Comments: Samples for Methods 200.7 or 200.8 Analyses

If turbidity ≤ 1 NTU no digestion is required unless otherwise required by the project

Prepared By: mc Standard Added By: mc

Witnessed By: TH Extracts Rcvd. By: TH 7/22/8

Checked By: TH

Date Disposed: Disposed by:

DIGESTION LOG FOR ICP METALS

EMAX LABORATORIES, INC.

SOP ☐ EMAX-3005 Rev. No.4 ☑ EMAX-3010 Rev. No. 3 ☐ EMAX-3050 Rev. No. 3 ☐ EMAX-CLP-TAL ☐ Book # EIP-070

Matrix: WATER Start Date: 7-22-08 Time: 12:00 Temp: 90 °C Ending Date: 7-23-08 Time: 16:00 Temp.: 90 °C

BATCH: IPG068-WB

	Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Turbidity <1 NTU	Sample Amount (g / ml)	pH	Extract Volume (ml)	Digestate Description: Color	Digestate Description: Clarity
01		IPG068-WB					50	~	50		
02		-WC					50	—	50		
03		-WC					50	—	50		
04		G188-01					50	42	50		
05		G195-01					50		50		
06		G511-01					50		50		
07		-02					50		50		
08		-03					50		50		
09		-04					50		50		
10		-05					50		50		
11		G525-01					50		50		
12		-02					50		50		
13		-03					50		50		
14		-04					50		50		
15		-05					50		50		
16		G234-02					50		50		
17		-03 TOTAL #007					50		50		
18		-03 DISS #006					50	↓	50		
19											
20											
21											
22											
23											
24											
25											
26											
27											

7-22-08 MC

Standards	ID	Amount Added (ml)
LCS -1	SM1A -11 -20	0.5
LCS -2	SM1A -11 -21	0.5
LCS -3	SM1A -11 -22	0.5
MS		

Reagent	Lot# / ID	Amount Added (ml)
HNO_3	SW1A -03 -740	1.5+1.5
HCl	SW1A-03-724	2.5
H_2O_2		
HNO3 (1:1)		

Digestate Location: ICP

Extract Location:

Legend:

Texture	Cs = Coarse	Md = Medium	Fn = Fine
Clarity	Cr = Clear	Cy = Cloudy	Td = Turbid
Artifacts	Rk = rocks	Sl = Shale	Vg=Vegetation
Color	Bu = blue	Bk = Black	Bn = Brown
	Gn = Green	Og = Orange	Rd = Red
	Yw = Yellow	Cl = Colorless	

Comments: Samples for Methods 200.7 or 200.8 Analyses

If turbidity ≤ 1 NTU no digestion is required unless otherwise required by the project

Prepared By: MC Standard Added By: MC

Witnessed By: TH Extracts Revd. By: TH 7/23/8

Checked By: TH

Date Disposed: Disposed by:

7118

DIGESTION LOG FOR ICP METALS

EMAX LABORATORIES, INC.

SOP ☐ EMAX-3005 Rev. No.4 ☐ EMAX-3010 Rev. No. 3 ☐ EMAX-3050 Rev. No. 3 ☐ EMAX-CLP-TAL ☐ Book # EIP-070

Matrix: SOIL Start Date: 7-31-08 Time: 9:45 Temp: 90 °C Ending Date: 7-31-08 Time: 13:45 Temp.: 90 °C

BATCH: IPG092-S

Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Turbidity <1 NTU	Sample Amount (g)	pH	Extract Volume (ml)	Digestate Description: Color	Digestate Description: Clarity
01	IPG092-SB					—	N/A	100		
02	-SL					—		100		
03	-SC					—		100		
04	G314-01					1.003		100		
05	-02					1.002		100		
06	-03					1.001		100		
07	-04					1.000		100		
08	-05					1.002		100		
09	-06					1.001		100		
10	-07					1.003		100		
11	-08					1.002		100		
12	G188-05					1.001		100		
13	-05M					1.002		100		
14	-05S					1.003		100		
15	G195-06					1.000		100		
16	-06M					1.003		100		
17	-06S					1.003	↓	100		
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										

7-31-08 MC

Standards	ID	Amount Added (ml)
LCS -1	SM1A-11-20	1.0
LCS -2	SM1A-11-21	1.0
LCS -3	SM1A-11-22	1.0
MS		

Reagent	Lot# / ID	Amount Added (ml)
HNO_3	SW1A-03-740	10.0
HCl	SW1A-03-724	10.0
H_2O_2	SM1A-03-622	10.0
HNO3 (1:1)	SM5B-02-87	10.0
Digestate Location	ICP	
Extract Location		

Legend:

Texture	Cs = Coarse	Md = Medium	Fn = Fine
Clarity	Cr = Clear	Cy = Cloudy	Td = Turbid
Artifacts	Rk = rocks	Sl = Shale	Vg=Vegetation
Color	Bu = blue	Bk = Black	Bn = Brown
	Gn = Green	Og = Orange	Rd = Red
	Yw = Yellow	Cl = Colorless	

Comments: Samples for Methods 200.7 or 200.8 Analyses

If turbidity ≤ 1 NTU no digestion is required unless otherwise required by the project

Prepared By: MC Standard Added By: MC

Witnessed By: TH Extracts Revd. By: TH 7/31/08

Checked By: TH

Date Disposed: Disposed by:

7119

Columbia Analytical Services
19408 Park Row, Suite 320, Houston, TX 77084 | 713.266.1599 | www.caslab.com

August 18, 2008 Service Request No: E0800705

Ye Myint
Emax Laboratories, Incorporated
1835 205th St.
Torrance, CA 90501

Laboratory Results for: LMC Beaumont Site 1/08G188

Dear Ye:

Enclosed are the results of the sample(s) submitted to our laboratory on July 22, 2008. For your reference, these analyses have been assigned our service request number **E0800705**.

All analyses were performed according to our laboratory's quality assurance program. The test results meet requirements of the NELAP standards except as noted in the case narrative report. All results are intended to be considered in their entirety, and Columbia Analytical Services, Inc. (CAS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report. In accordance to the NELAC 2003 Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Please contact me if you have any questions. My extension is 2960. You may also contact me via email at KVerschoor@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Karen Verschoor
Project Manager

Columbia Analytical Services INC

Certificate of Analysis

19408 Park Row, Suite 320, Houston, TX 77084
Phone (713)266-1599 Fax (713)266-0130
www.caslab.com

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COLUMBIA ANALYTICAL SERVICES, INC

Client:	Emax Laboratories, Inc.	**Service Request No.:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Received:**	07/22/08
Sample Matrix:	Solid/Aqueous		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

One solid sample and one aqueous sample were received for analysis at Columbia Analytical Services on 07/22/08.

The following discrepancies were noted upon initial sample inspection: no custody seals on cooler(s). The exceptions are also noted on the cooler receipt and preservation form included in this data package.

The samples were received at 0°C in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

B flags – Method Blanks

The Method Blank EQ0800314-01/P100163 contained low levels of 1234678-HpCDD, 1234678-HpCDF and OCDF at or below the Method Reporting Limit (MRL). One compound, OCDD, was above the MRL (CRQL). CAS/Houston follows the ***EPA National Functional Guidelines for CDDs and CDFs, September 2005,*** which states on page 31, "The concentration of OCDD/OCDF in the method blank must be <3x the CRQL (MRL.) "

The Method Blank EQ0800317-01/P200040 contained low levels of 1234678-HpCDD, OCDD, 1234678-HpCDF and OCDF at or below the Method Reporting Limit (MRL).

The associated compounds in the samples are flagged with 'B' flags.

MS/DMS

EQ0800314: Laboratory Control Spike (LCS) sample was analyzed in addition to an MS/DMS for this extraction batch. The batch quality control criteria were met. The batch precision (MS/DMS) measurements were determined on another order in the extraction batch and are not included in this report.

EQ0800317: Laboratory Control Spike (LCS) sample was analyzed in addition to an MS/DMS for this extraction batch. The batch quality control criteria were met. The batch precision (MS/DMS) measurements were determined on another order in the extraction batch and are not included in this report.

Approved by: **Date:** 08/19/08

Xiangqiu Liang, Laboratory Director

K flags

EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

Detection Limits

Detection limits are calculated for each congener in each sample by measuring the height of the noise level for each quantitation ion for the associated labeled standard. The concentration equivalent to 2.5 times the height of the noise is then calculated using the appropriate response factor and the weight of the sample. The calculated concentration equals the detection limit.

The TEQ results for each sample have been calculated by CAS/Houston to include:

- WHO-2005 TEFs ("The 2005 World Health Organization Reevaluation of Human and Mammalian Toxic Equivalency Factors for Dioxins and Dioxin-Like Compounds", M. Van den Berg et al., Toxicological Sciences 93(2):223-241, 2006)
- 2378-TCDF from the DB-225 column, when confirmation required
- Non-detected compounds are not included in the 'Total'

Approved by: **Date:** 08/19/08

Xiangqiu Liang, Laboratory Director

Client: Emax Laboratories, Incorporated **Service Request:** E0800705
Project: LMC Beaumont Site 1/08G188

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E0800705-001	H-EB7172008	07/17/08	09:05
E0800705-002	H-T1-2.0	07/17/08	10:31

Superset Summary

Service Request: E0800705 **SuperSet Reference:** 08-0000080220 rev 00

8290/PCDD PCDF

Calibrations: 04/02/07 07/02/08 07/18/08 08/01/08
12/10/07

Data Files:

Raw Data	*Begin CCAL*	*Method Blank*	*Lab ID*
P100163	P100162	P100163	EQ0800314-01
P200021	P200017	P100163	E0800705-001
P200040	P200039	P200040	EQ0800317-01
P200043	P200039	P200040	E0800705-002
U129320	U129311	P200040	EQ0800317-02
U217136	U217127	P100163	EQ0800314-02

Abbreviations, Acronyms & Definitions

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

Data Qualifier Flags – Dioxin/Furans

- **B** Indicates the associated analyte is found in the method blank, as well as in the sample

- **C** Confirmation of the TCDF compound: When 2378-TCDF is detected on the DB-5 column, confirmation analyses are performed on a second column (DB-225). The results from both the DB-5 column and the DB-225 column are included in this data package. The results from the DB-225 analyses should be used to evaluate the 2378-TCDF in the samples. The confirmed result should be used in determining the TEQ value for TCDF.

- **E** Indicates an estimated value – used when the analyte concentration exceeds the upper end of the linear calibration range

- **J** Indicates an estimated value – used when the analyte concentration is below the method reporting limit (MRL) and above the estimated detection limit (EDL)

- **K** EMPC - When the ion abundance ratios associated with a particular compound are outside the QC limits, samples are flagged with a 'K' flag. A 'K' flag indicates an estimated maximum possible concentration for the associated compound.

- **U** Indicates the compound was analyzed and not detected

- **Y** Samples that had recoveries of labeled standards outside the acceptance limits are flagged with 'Y'. In all cases, the signal-to-noise ratios are greater than 10:1, making these data acceptable.

- **ND** Indicates concentration is reported as 'Not Detected'

- **S** Peak is saturated; data not reportable

- **Q** Lock-mass interference by ether compounds

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID: ECHO 705

First Level - Data Processing - to be filled by person generating the forms

Date	08/11/08	Person 1	
Date		Person 2	

Second Level - Data Review – to be filled by person doing peer review

Date	8/13/08	Primary Data Reviewer	(001)
Date		Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	8/19/08	Reviewer	

CAS/HOU - Form Production, Peer Review & Project Review Signatures

SR# Unique ID: FC4OO 705

First Level - Data Processing - to be filled by person generating the forms

Date	08/14/08	Person 1	
Date		Person 2	

Second Level - Data Review – to be filled by person doing peer review

Date	08/12/08	Primary Data Reviewer	LL
Date		Secondary Data Reviewer	

Project Level - Review - to be filled by person doing project compliance review

Date	8/19/08	Reviewer	

Columbia Analytical Services INC

Analytical Results

19408 Park Row, Suite 320, Houston, TX 77084
Phone (713)266-1599 Fax (713)266-0130
www.caslab.com

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Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	07/17/2008
Sample Matrix:	Water	**Date Received:**	07/22/2008
Sample Name:	H-EB7172008	**Units:**	pg/L
Lab Code:	E0800705-001	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	7/31/08 11:37:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	1050mL	**Instrument Name:**	E-HRMS-04
		GC Column:	DB-5
Data File Name:	P200021	**Blank File Name:**	P100163
ICAL Name:	07/18/08	**Cal Ver. File Name:**	P200017

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.593	9.52			1
1,2,3,7,8-PeCDD	ND	U	0.835	23.8			1
1,2,3,4,7,8-HxCDD	ND	U	0.359	23.8			1
1,2,3,6,7,8-HxCDD	ND	U	0.324	23.8			1
1,2,3,7,8,9-HxCDD	ND	U	0.354	23.8			1
1,2,3,4,6,7,8-HpCDD	ND	U	0.533	23.8			1
OCDD	**4.16**	BJ	0.718	47.6	0.83	1.000	1
2,3,7,8-TCDF	ND	U	0.530	9.52			1
1,2,3,7,8-PeCDF	ND	U	0.356	23.8			1
2,3,4,7,8-PeCDF	ND	U	0.350	23.8			1
1,2,3,4,7,8-HxCDF	ND	U	0.316	23.8			1
1,2,3,6,7,8-HxCDF	ND	U	0.312	23.8			1
1,2,3,7,8,9-HxCDF	ND	U	0.410	23.8			1
2,3,4,6,7,8-HxCDF	ND	U	0.344	23.8			1
1,2,3,4,6,7,8-HpCDF	ND	U	0.366	23.8			1
1,2,3,4,7,8,9-HpCDF	ND	U	0.522	23.8			1
OCDF	ND	U	1.41	47.6			1
Total Tetra-Dioxins	ND	U	0.593	9.52			1
Total Penta-Dioxins	ND	U	0.835	23.8			1
Total Hexa-Dioxins	ND	U	0.324	23.8			1
Total Hepta-Dioxins	ND	U	0.533	23.8			1
Total Tetra-Furans	ND	U	0.530	9.52			1
Total Penta-Furans	ND	U	0.350	23.8			1
Total Hexa-Furans	**1.51**	J	0.312	23.8	1.35		1
Total Hepta-Furans	ND	U	0.366	23.8			1

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	07/17/2008
Sample Matrix:	Water	**Date Received:**	07/22/2008
Sample Name:	H-EB7172008	**Units:**	Percent
Lab Code:	E0800705-001	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	7/31/08 11:37:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	1050mL	**Instrument Name:**	E-HRMS-04
		GC Column:	DB-5
Data File Name:	P200021	**Blank File Name:**	P100163
ICAL Name:	07/18/08	**Cal Ver. File Name:**	P200017

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	590.921	59		40-135	0.77	1.007
13C-1,2,3,7,8-PeCDD	1000	563.477	56		40-135	1.61	1.165
13C-1,2,3,6,7,8-HxCDD	2500	1976.841	79		40-135	1.26	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1862.230	74		40-135	1.05	1.069
13C-OCDD	5000	2654.681	53		40-135	0.90	1.149
13C-2,3,7,8-TCDF	1000	511.494	51		40-135	0.77	0.978
13C-1,2,3,7,8-PeCDF	1000	579.566	58		40-135	1.62	1.128
13C-1,2,3,4,7,8-HxCDF	2500	1761.972	70		40-135	0.51	0.972
13C-1,2,3,4,6,7,8-HpCDF	2500	1779.220	71		40-135	0.42	1.044
37Cl-2,3,7,8-TCDD	800	634.490	79		40-135	NA	1.008

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	07/17/2008
Sample Matrix:	Water	**Date Received:**	07/22/2008
Sample Name:	H-EB7172008	**Units:**	pg/L
Lab Code:	E0800705-001	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.593	1	1	
1,2,3,7,8-PeCDD	ND	0.835	1	1	
1,2,3,4,7,8-HxCDD	ND	0.359	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.324	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.354	1	0.1	
1,2,3,4,6,7,8-HpCDD	ND	0.533	1	0.01	
OCDD	**4.16**	0.718	1	0.0003	0.00125
2,3,7,8-TCDF	ND	0.530	1	0.1	
1,2,3,7,8-PeCDF	ND	0.356	1	0.03	
2,3,4,7,8-PeCDF	ND	0.350	1	0.3	
1,2,3,4,7,8-HxCDF	ND	0.316	1	0.1	
1,2,3,6,7,8-HxCDF	ND	0.312	1	0.1	
1,2,3,7,8,9-HxCDF	ND	0.410	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.344	1	0.1	
1,2,3,4,6,7,8-HpCDF	ND	0.366	1	0.01	
1,2,3,4,7,8,9-HpCDF	ND	0.522	1	0.01	
OCDF	ND	1.41	1	0.0003	
		Total TEQ			0.00125

2005 WHO TEFs, ND = 0

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	07/17/2008
Sample Matrix:	Soil	**Date Received:**	07/22/2008
Sample Name:	H-T1-2.0	**Units:**	ng/Kg
Lab Code:	E0800705-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/4/08 16:06:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	10.305g	**Instrument Name:**	E-HRMS-04
Percent Solids:	81.2	**GC Column:**	DB-5
Data File Name:	P200043	**Blank File Name:**	P200040
ICAL Name:	08/01/08	**Cal Ver. File Name:**	P200039

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0675	1.20			1
1,2,3,7,8-PeCDD	ND	U	0.0361	2.99			1
1,2,3,4,7,8-HxCDD	ND	U	0.0239	2.99			1
1,2,3,6,7,8-HxCDD	ND	U	0.0212	2.99			1
1,2,3,7,8,9-HxCDD	ND	U	0.0229	2.99			1
1,2,3,4,6,7,8-HpCDD	**0.807**	BJ	0.0550	2.99	1.16	1.000	1
OCDD	**9.11**	B	0.0551	5.98	0.88	1.000	1
2,3,7,8-TCDF	ND	U	0.0596	1.20			1
1,2,3,7,8-PeCDF	ND	U	0.0298	2.99			1
2,3,4,7,8-PeCDF	ND	U	0.0294	2.99			1
1,2,3,4,7,8-HxCDF	ND	U	0.0283	2.99			1
1,2,3,6,7,8-HxCDF	ND	U	0.0272	2.99			1
1,2,3,7,8,9-HxCDF	ND	U	0.0354	2.99			1
2,3,4,6,7,8-HxCDF	ND	U	0.0304	2.99			1
1,2,3,4,6,7,8-HpCDF	**0.234**	BJ	0.0263	2.99	0.91	1.001	1
1,2,3,4,7,8,9-HpCDF	ND	U	0.0359	2.99			1
OCDF	**0.919**	BJ	0.0808	5.98	0.87	1.004	1
Total Tetra-Dioxins	ND	U	0.0675	1.20			1
Total Penta-Dioxins	ND	U	0.0361	2.99			1
Total Hexa-Dioxins	ND	U	0.0212	2.99			1
Total Hepta-Dioxins	**0.807**	J	0.0550	2.99	1.16		1
Total Tetra-Furans	ND	U	0.0596	1.20			1
Total Penta-Furans	ND	U	0.0294	2.99			1
Total Hexa-Furans	ND	U	0.0272	2.99			1
Total Hepta-Furans	**0.590**	J	0.0263	2.99	0.91		1

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	07/17/2008
Sample Matrix:	Soil	**Date Received:**	07/22/2008
Sample Name:	H-T1-2.0	**Units:**	Percent
Lab Code:	E0800705-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/4/08 16:06:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	10.305g	**Instrument Name:**	E-HRMS-04
Percent Solids:	81.2	**GC Column:**	DB-5
Data File Name:	P200043	**Blank File Name:**	P200040
ICAL Name:	08/01/08	**Cal Ver. File Name:**	P200039

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	698.421	70		40-135	0.79	1.007
13C-1,2,3,7,8-PeCDD	1000	1007.919	101		40-135	1.59	1.166
13C-1,2,3,6,7,8-HxCDD	2500	1898.944	76		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	1913.254	77		40-135	1.04	1.068
13C-OCDD	5000	3729.347	75		40-135	0.90	1.149
13C-2,3,7,8-TCDF	1000	646.795	65		40-135	0.78	0.978
13C-1,2,3,7,8-PeCDF	1000	872.220	87		40-135	1.58	1.128
13C-1,2,3,4,7,8-HxCDF	2500	1503.778	60		40-135	0.52	0.972
13C-1,2,3,4,6,7,8-HpCDF	2500	1619.801	65		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	731.831	91		40-135	NA	1.008

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	07/17/2008
Sample Matrix:	Soil	**Date Received:**	07/22/2008
Sample Name:	H-T1-2.0	**Units:**	ng/Kg
Lab Code:	E0800705-002	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method: 8290
Prep Method: Method

Analyte Name	Result	DL	Dilution Factor	TEF	TEF - Adjusted Concentration
2,3,7,8-TCDD	ND	0.0675	1	1	
1,2,3,7,8-PeCDD	ND	0.0361	1	1	
1,2,3,4,7,8-HxCDD	ND	0.0239	1	0.1	
1,2,3,6,7,8-HxCDD	ND	0.0212	1	0.1	
1,2,3,7,8,9-HxCDD	ND	0.0229	1	0.1	
1,2,3,4,6,7,8-HpCDD	**0.807**	0.0550	1	0.01	0.00807
OCDD	**9.11**	0.0551	1	0.0003	0.00273
2,3,7,8-TCDF	ND	0.0596	1	0.1	
1,2,3,7,8-PeCDF	ND	0.0298	1	0.03	
2,3,4,7,8-PeCDF	ND	0.0294	1	0.3	
1,2,3,4,7,8-HxCDF	ND	0.0283	1	0.1	
1,2,3,6,7,8-HxCDF	ND	0.0272	1	0.1	
1,2,3,7,8,9-HxCDF	ND	0.0354	1	0.1	
2,3,4,6,7,8-HxCDF	ND	0.0304	1	0.1	
1,2,3,4,6,7,8-HpCDF	**0.234**	0.0263	1	0.01	0.00234
1,2,3,4,7,8,9-HpCDF	ND	0.0359	1	0.01	
OCDF	**0.919**	0.0808	1	0.0003	0.000276
		Total TEQ			0.0134

2005 WHO TEFs, ND = 0

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	pg/L
Lab Code:	EQ0800314-01	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/1/08 10:05:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P100163	**Blank File Name:**	P100163
ICAL Name:	07/02/08	**Cal Ver. File Name:**	P100162

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.289	10.0			1
1,2,3,7,8-PeCDD	ND	U	0.379	25.0			1
1,2,3,4,7,8-HxCDD	ND	U	0.275	25.0			1
1,2,3,6,7,8-HxCDD	ND	U	0.225	25.0			1
1,2,3,7,8,9-HxCDD	ND	U	0.246	25.0			1
1,2,3,4,6,7,8-HpCDD	**8.04**	J	0.515	25.0	1.07	1.000	1
OCDD	**72.3**		0.656	50.0	0.93	1.000	1
2,3,7,8-TCDF	ND	U	0.268	10.0			1
1,2,3,7,8-PeCDF	ND	U	0.244	25.0			1
2,3,4,7,8-PeCDF	ND	U	0.238	25.0			1
1,2,3,4,7,8-HxCDF	ND	U	0.221	25.0			1
1,2,3,6,7,8-HxCDF	ND	U	0.206	25.0			1
1,2,3,7,8,9-HxCDF	ND	U	0.253	25.0			1
2,3,4,6,7,8-HxCDF	ND	U	0.233	25.0			1
1,2,3,4,6,7,8-HpCDF	**0.870**	J	0.295	25.0	0.88	1.000	1
1,2,3,4,7,8,9-HpCDF	ND	U	0.390	25.0			1
OCDF	**2.82**	J	0.575	50.0	0.82	1.004	1
Total Tetra-Dioxins	ND	U	0.289	10.0			1
Total Penta-Dioxins	ND	U	0.379	25.0			1
Total Hexa-Dioxins	**0.859**	J	0.225	25.0	1.30		1
Total Hepta-Dioxins	**15.1**	J	0.515	25.0	1.13		1
Total Tetra-Furans	ND	U	0.268	10.0			1
Total Penta-Furans	ND	U	0.238	25.0			1
Total Hexa-Furans	ND	U	0.206	25.0			1
Total Hepta-Furans	ND	U	0.295	25.0			1

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	EQ0800314-01	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/1/08 10:05:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-03
		GC Column:	DB-5
Data File Name:	P100163	**Blank File Name:**	P100163
ICAL Name:	07/02/08	**Cal Ver. File Name:**	P100162

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	576.009	58		40-135	0.78	1.006
13C-1,2,3,7,8-PeCDD	1000	697.486	70		40-135	1.60	1.154
13C-1,2,3,6,7,8-HxCDD	2500	1840.459	74		40-135	1.26	0.993
13C-1,2,3,4,6,7,8-HpCDD	2500	1565.914	63		40-135	1.05	1.068
13C-OCDD	5000	2475.043	50		40-135	0.90	1.151
13C-2,3,7,8-TCDF	1000	530.981	53		40-135	0.80	0.980
13C-1,2,3,7,8-PeCDF	1000	690.069	69		40-135	1.60	1.118
13C-1,2,3,4,7,8-HxCDF	2500	1554.729	62		40-135	0.53	0.973
13C-1,2,3,4,6,7,8-HpCDF	2500	1539.663	62		40-135	0.45	1.044
37Cl-2,3,7,8-TCDD	800	596.099	75		40-135	NA	1.007

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	ng/Kg
Lab Code:	EQ0800317-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/4/08 12:59:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	10.000g	**Instrument Name:**	E-HRMS-04
Percent Solids:		**GC Column:**	DB-5
Data File Name:	P200040	**Blank File Name:**	P200040
ICAL Name:	08/01/08	**Cal Ver. File Name:**	P200039

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	ND	U	0.0588	1.00			1
1,2,3,7,8-PeCDD	ND	U	0.0417	2.50			1
1,2,3,4,7,8-HxCDD	ND	U	0.0238	2.50			1
1,2,3,6,7,8-HxCDD	ND	U	0.0211	2.50			1
1,2,3,7,8,9-HxCDD	ND	U	0.0230	2.50			1
1,2,3,4,6,7,8-HpCDD	**0.165**	J	0.0280	2.50	1.15	1.000	1
OCDD	**0.673**	J	0.0464	5.00	0.77	1.000	1
2,3,7,8-TCDF	ND	U	0.0605	1.00			1
1,2,3,7,8-PeCDF	ND	U	0.0342	2.50			1
2,3,4,7,8-PeCDF	ND	U	0.0339	2.50			1
1,2,3,4,7,8-HxCDF	ND	U	0.0246	2.50			1
1,2,3,6,7,8-HxCDF	ND	U	0.0237	2.50			1
1,2,3,7,8,9-HxCDF	ND	U	0.0308	2.50			1
2,3,4,6,7,8-HxCDF	ND	U	0.0264	2.50			1
1,2,3,4,6,7,8-HpCDF	**0.114**	J	0.0253	2.50	1.02	1.000	1
1,2,3,4,7,8,9-HpCDF	ND	U	0.0345	2.50			1
OCDF	**0.176**	JK	0.0853	5.00	0.58	1.004	1
Total Tetra-Dioxins	ND	U	0.0588	1.00			1
Total Penta-Dioxins	ND	U	0.0417	2.50			1
Total Hexa-Dioxins	ND	U	0.0211	2.50			1
Total Hepta-Dioxins	**0.165**	J	0.0280	2.50	1.15		1
Total Tetra-Furans	ND	U	0.0605	1.00			1
Total Penta-Furans	ND	U	0.0339	2.50			1
Total Hexa-Furans	ND	U	0.0237	2.50			1
Total Hepta-Furans	**0.114**	J	0.0253	2.50	1.02		1

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	Percent
Lab Code:	EQ0800317-01	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/4/08 12:59:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	10.000g	**Instrument Name:**	E-HRMS-04
Percent Solids:		**GC Column:**	DB-5
Data File Name:	P200040	**Blank File Name:**	P200040
ICAL Name:	08/01/08	**Cal Ver. File Name:**	P200039

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	745.554	75		40-135	0.78	1.007
13C-1,2,3,7,8-PeCDD	1000	1083.977	108		40-135	1.57	1.165
13C-1,2,3,6,7,8-HxCDD	2500	2375.872	95		40-135	1.25	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	2277.950	91		40-135	1.03	1.068
13C-OCDD	5000	4466.577	89		40-135	0.91	1.148
13C-2,3,7,8-TCDF	1000	678.385	68		40-135	0.78	0.978
13C-1,2,3,7,8-PeCDF	1000	965.698	97		40-135	1.58	1.128
13C-1,2,3,4,7,8-HxCDF	2500	1789.782	72		40-135	0.52	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	1989.626	80		40-135	0.44	1.044
37Cl-2,3,7,8-TCDD	800	746.443	93		40-135	NA	1.007

Comments:

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COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Analyzed:**	08/14/2008
Sample Matrix:	Water		

Lab Control Sample Summary

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Sample Name:	Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ0800314-02	**Basis:**	NA
Analytical Method:	8290	**Extraction Lot:**	70789
Prep Method:	Method		

	Lab Control Sample			% Rec
Analyte Name	**Result**	**Expected**	**% Rec**	**Limits**
2,3,7,8-TCDD	234	200	117	88 - 135
1,2,3,7,8-PeCDD	523	500	105	91 - 135
1,2,3,4,7,8-HxCDD	529	500	106	76 - 140
1,2,3,6,7,8-HxCDD	562	500	112	84 - 129
1,2,3,7,8,9-HxCDD	496	500	99	66 - 140
1,2,3,4,6,7,8-HpCDD	599	500	120	92 - 136
OCDD	1260	1000	126	101 - 151
2,3,7,8-TCDF	207	200	103	95 - 126
1,2,3,7,8-PeCDF	544	500	109	92 - 130
2,3,4,7,8-PeCDF	578	500	116	68 - 151
1,2,3,4,7,8-HxCDF	581	500	116	77 - 137
1,2,3,6,7,8-HxCDF	616	500	123	80 - 148
1,2,3,7,8,9-HxCDF	595	500	119	62 - 147
2,3,4,6,7,8-HxCDF	597	500	119	75 - 137
1,2,3,4,6,7,8-HpCDF	563	500	113	86 - 151
1,2,3,4,7,8,9-HpCDF	621	500	124	86 - 151
OCDF	1460	1000	146	81 - 201

Comments:

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Analyzed:**	08/04/2008
Sample Matrix:	Soil		

Lab Control Sample Summary
Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ0800317-02	**Basis:**	Dry
Analytical Method:	8290	**Extraction Lot:**	70770
Prep Method:	Method		

	Lab Control Sample			% Rec
Analyte Name	**Result**	**Expected**	**% Rec**	**Limits**
2,3,7,8-TCDD	26.9	20.0	135	87 - 135
1,2,3,7,8-PeCDD	62.8	50.0	126	88 - 135
1,2,3,4,7,8-HxCDD	65.2	50.0	130	81 - 138
1,2,3,6,7,8-HxCDD	61.7	50.0	123	82 - 136
1,2,3,7,8,9-HxCDD	59.9	50.0	120	77 - 135
1,2,3,4,6,7,8-HpCDD	66.0	50.0	132	93 - 144
OCDD	153	100	153	93 - 162
2,3,7,8-TCDF	25.9	20.0	129	82 - 141
1,2,3,7,8-PeCDF	62.2	50.0	124	92 - 139
2,3,4,7,8-PeCDF	64.8	50.0	130	74 - 145
1,2,3,4,7,8-HxCDF	64.6	50.0	129	86 - 142
1,2,3,6,7,8-HxCDF	68.1	50.0	136	88 - 162
1,2,3,7,8,9-HxCDF	68.5	50.0	137	66 - 156
2,3,4,6,7,8-HxCDF	71.1	50.0	142	80 - 150
1,2,3,4,6,7,8-HpCDF	65.2	50.0	130	91 - 131
1,2,3,4,7,8,9-HpCDF	74.2	50.0	148	69 - 169
OCDF	153	100	153	82 - 200

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	pg/L
Lab Code:	EQ0800314-02	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/14/08 15:49:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-02
		GC Column:	DB-5
Data File Name:	U217136	**Blank File Name:**	P100163
ICAL Name:	12/10/07	**Cal Ver. File Name:**	U217127

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	**234**		1.08	10.0	0.77	1.001	1
1,2,3,7,8-PeCDD	**523**		1.01	25.0	1.61	1.000	1
1,2,3,4,7,8-HxCDD	**529**		2.02	25.0	1.27	0.998	1
1,2,3,6,7,8-HxCDD	**562**		2.00	25.0	1.29	1.000	1
1,2,3,7,8,9-HxCDD	**496**		2.03	25.0	1.30	1.008	1
1,2,3,4,6,7,8-HpCDD	**599**		2.58	25.0	1.02	1.000	1
OCDD	**1260**		1.67	50.0	0.88	1.000	1
2,3,7,8-TCDF	**207**		0.830	10.0	0.76	1.001	1
1,2,3,7,8-PeCDF	**544**		0.918	25.0	1.58	1.001	1
2,3,4,7,8-PeCDF	**578**		0.902	25.0	1.56	1.023	1
1,2,3,4,7,8-HxCDF	**581**		2.15	25.0	1.25	1.000	1
1,2,3,6,7,8-HxCDF	**616**		2.25	25.0	1.24	1.003	1
1,2,3,7,8,9-HxCDF	**595**		2.78	25.0	1.26	1.036	1
2,3,4,6,7,8-HxCDF	**597**		2.38	25.0	1.26	1.017	1
1,2,3,4,6,7,8-HpCDF	**563**		1.65	25.0	1.03	1.000	1
1,2,3,4,7,8,9-HpCDF	**621**		2.16	25.0	1.05	1.034	1
OCDF	**1460**		2.92	50.0	0.94	1.004	1
Total Tetra-Dioxins	**234**		1.08	10.0	0.77		1
Total Penta-Dioxins	**523**		1.01	25.0	1.61		1
Total Hexa-Dioxins	**1590**		2.00	25.0	1.27		1
Total Hepta-Dioxins	**612**		2.58	25.0	0.95		1
Total Tetra-Furans	**207**		0.830	10.0	0.76		1
Total Penta-Furans	**1130**		0.902	25.0	1.37		1
Total Hexa-Furans	**2390**		2.25	25.0	1.25		1
Total Hepta-Furans	**1190**		1.65	25.0	1.03		1

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	Percent
Lab Code:	EQ0800314-02	**Basis:**	NA

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/14/08 15:49:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	1000mL	**Instrument Name:**	E-HRMS-02
		GC Column:	DB-5
Data File Name:	U217136	**Blank File Name:**	P100163
ICAL Name:	12/10/07	**Cal Ver. File Name:**	U217127

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	662.194	66		40-135	0.79	1.008
13C-1,2,3,7,8-PeCDD	1000	767.216	77		40-135	1.55	1.167
13C-1,2,3,6,7,8-HxCDD	2500	2006.813	80		40-135	1.24	0.992
13C-1,2,3,4,6,7,8-HpCDD	2500	2014.429	81		40-135	1.04	1.070
13C-OCDD	5000	3328.905	67		40-135	0.90	1.152
13C-2,3,7,8-TCDF	1000	679.091	68		40-135	0.81	0.979
13C-1,2,3,7,8-PeCDF	1000	774.483	77		40-135	1.54	1.130
13C-1,2,3,4,7,8-HxCDF	2500	1787.772	72		40-135	0.53	0.971
13C-1,2,3,4,6,7,8-HpCDF	2500	2189.514	88		40-135	0.45	1.045
37Cl-2,3,7,8-TCDD	800	526.149	66		40-135	NA	1.009

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	ng/Kg
Lab Code:	EQ0800317-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/4/08 16:38:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	10.000g	**Instrument Name:**	E-HRMS-01
Percent Solids:		**GC Column:**	DB-5
Data File Name:	U129320	**Blank File Name:**	P200040
ICAL Name:	04/02/07	**Cal Ver. File Name:**	U129311

Analyte Name	Result	Q	EDL	MRL	Ion Ratio	RRT	Dilution Factor
2,3,7,8-TCDD	**26.9**		0.0267	1.00	0.76	1.001	1
1,2,3,7,8-PeCDD	**62.8**		0.0456	2.50	1.54	1.000	1
1,2,3,4,7,8-HxCDD	**65.2**		0.0522	2.50	1.25	0.998	1
1,2,3,6,7,8-HxCDD	**61.7**		0.0500	2.50	1.25	1.000	1
1,2,3,7,8,9-HxCDD	**59.9**		0.0526	2.50	1.24	1.008	1
1,2,3,4,6,7,8-HpCDD	**66.0**		0.105	2.50	1.03	1.000	1
OCDD	**153**		0.237	5.00	0.87	1.000	1
2,3,7,8-TCDF	**25.9**		0.0368	1.00	0.80	1.001	1
1,2,3,7,8-PeCDF	**62.2**		0.0249	2.50	1.51	1.000	1
2,3,4,7,8-PeCDF	**64.8**		0.0241	2.50	1.58	1.022	1
1,2,3,4,7,8-HxCDF	**64.6**		0.0367	2.50	1.24	1.000	1
1,2,3,6,7,8-HxCDF	**68.1**		0.0364	2.50	1.26	1.003	1
1,2,3,7,8,9-HxCDF	**68.5**		0.0516	2.50	1.24	1.035	1
2,3,4,6,7,8-HxCDF	**71.1**		0.0406	2.50	1.21	1.016	1
1,2,3,4,6,7,8-HpCDF	**65.2**		0.100	2.50	0.99	1.000	1
1,2,3,4,7,8,9-HpCDF	**74.2**		0.149	2.50	1.00	1.033	1
OCDF	**153**		0.100	5.00	0.90	1.004	1
Total Tetra-Dioxins	**26.9**		0.0267	1.00	0.76		1
Total Penta-Dioxins	**62.9**		0.0456	2.50	1.37		1
Total Hexa-Dioxins	**187**		0.0500	2.50	1.25		1
Total Hepta-Dioxins	**66.0**		0.105	2.50	1.03		1
Total Tetra-Furans	**26.2**		0.0368	1.00	0.84		1
Total Penta-Furans	**127**		0.0241	2.50	1.51		1
Total Hexa-Furans	**272**		0.0364	2.50	1.24		1
Total Hepta-Furans	**139**		0.100	2.50	0.99		1

Comments:

Client:	Emax Laboratories, Incorporated	**Service Request:**	E0800705
Project:	LMC Beaumont Site 1/08G188	**Date Collected:**	NA
Sample Matrix:	Soil	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	Percent
Lab Code:	EQ0800317-02	**Basis:**	Dry

Polychlorinated Dibenzodioxins and Polychlorinated Dibenzofurans by HRGC/HRMS

Analytical Method:	8290	**Date Analyzed:**	8/4/08 16:38:00
Prep Method:	Method	**Date Extracted:**	7/24/08
Sample Amount:	10.000g	**Instrument Name:**	E-HRMS-01
Percent Solids:		**GC Column:**	DB-5
Data File Name:	U129320	**Blank File Name:**	P200040
ICAL Name:	04/02/07	**Cal Ver. File Name:**	U129311

Labeled Compounds	Spike Conc.(pg)	Conc. Found (pg)	%Rec	Q	Control Limits	Ion Ratio	RRT
13C-2,3,7,8-TCDD	1000	713.984	71		40-135	0.74	1.008
13C-1,2,3,7,8-PeCDD	1000	921.761	92		40-135	1.50	1.164
13C-1,2,3,6,7,8-HxCDD	2500	2219.398	89		40-135	1.23	0.993
13C-1,2,3,4,6,7,8-HpCDD	2500	2316.030	93		40-135	1.04	1.067
13C-OCDD	5000	3889.177	78		40-135	0.90	1.146
13C-2,3,7,8-TCDF	1000	690.058	69		40-135	0.77	0.979
13C-1,2,3,7,8-PeCDF	1000	843.300	84		40-135	1.49	1.127
13C-1,2,3,4,7,8-HxCDF	2500	1803.969	72		40-135	0.51	0.972
13C-1,2,3,4,6,7,8-HpCDF	2500	2173.443	87		40-135	0.43	1.044
37Cl-2,3,7,8-TCDD	800	711.905	89		40-135	NA	1.008

Comments:

Columbia Analytical Services INC

Chain of Custody

19408 Park Row, Suite 320, Houston, TX 77084
Phone (713)266-1599 Fax (713)266-0130
www.caslab.com

An Employee Owned Company

CHAIN OF CUSTODY

EMAX LABORATORIES, INC.
Tel#: 310-618-8889 FAX#: 310-618-0818
email: info@emaxlabs.com

EMAX CONTROL NO	08G177
PROJECT CODE	TT_0618
TURN-AROUND-TIME	Standard

SEND REPORT TO:
EMAX LABORATORIES, INC.
1835 W. 205TH ST. CA 90501

ATTN: Ye

CLIENT: Tetra Tech, Inc.
PROJECT: LMC Beaumont Site 1

SEND SAMPLES TO:

CAS-Columbia Lab
19408 Park Row. Suite # 320
Houston, TX 77084

EMAX Sample ID	Client Sample ID	Collection Date	CollectionTime	Matrix	Method		COMMENTS
G177-18	H-EB7162008	7/16/2008	4:35:00 PM	WATER	SW8290	PCDDs and PCDFs	
G177-19	H-T5A-2.0	7/16/2008	4:40:00 PM	SOIL	SW8290	PCDDs and PCDFs	

INSTRUCTION: A cross reference table for Client Sample ID and EMAX Sample ID must be included in the final report.

COOLER TEMPERATURE

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	7/21/08	1600	7/22 10:30 0°C		

Please send 1 amber for # 18

Please send 2 jars for # 19.

CHAIN OF CUSTODY

EMAX LABORATORIES, INC.
Tel#: 310-618-8889 FAX#: 310-618-0818
email: info@emaxlabs.com

EMAX CONTROL NO	08G188
PROJECT CODE	TT_0618
TURN-AROUND-TIME	STANDARD

SEND REPORT TO:
EMAX LABORATORIES, INC.
1835 W. 205TH ST. CA 90501

ATTN: Ye

CLIENT: Tetra Tech, Inc.
PROJECT: LMC Beaumont Site 1

SEND SAMPLES TO:

CAS-Columbia Lab
19408 Park Row. Suite # 320
Houston, TX 77084

EMAX Sample ID	Client Sample ID	Collection Date	CollectionTime	Matrix	Method		COMMENTS
G188-01	H-EB7172008	7/17/2008	9:05:00 AM	WATER	SW8290	PCDDs and PCDFs	
G188-03	H-T1-2.0	7/17/2008	10:31:00 AM	SOIL	SW8290	PCDDs and PCDFs	

INSTRUCTION: A cross reference table for Client Sample ID and EMAX Sample ID must be included in the final report.

COOLER TEMPERATURE

RELINQUISHED BY	DATE	TIME	RECEIVED BY	DATE	TIME
	7/21/08	1600	7/22 10:30 0°c		

Please send 1 amber for #1.

Please send 2 jars for #3.

LP 7/21/08

G188-03 is HT1-2.0 no TI

Columbia Analytical Services, Inc.
Cooler Receipt Form

Client/Project: EMAX Service Request: E0800705

Received: 7/22/08 Opened (Date/Time): 1030 By: SSM

1. Samples were received via? ☐*US Mail* ☑*Fedex* ☐*UPS* ☐*DHL* ☐*Courier* ☐*Hand Delivered*
2. Samples were received in: (circle) ☑*Cooler* ☐*Box* ☐ *Other*_____ ☐*NA*
3. Were custody seals present on coolers? ☐Y ☑N If yes, how many and where?_____
   If present, were custody seals intact? ☐Y ☐N If present, were they signed and dated? ☐Y ☐N
4. Is shipper's air-bill filed? ☐NA ☐Y ☐N If not, record air bill number:_____
5. Temperature of cooler(s) upon receipt (°C): 0
6. If applicable, list Chain of Custody numbers: _____
7. Were custody papers properly filled our (ink, signed, etc.)? ☐NA ☑Y ☐N
8. Packing material used: ☐*Inserts* ☐*Bubble Wrap* ☐*Blue Ice* ☑*Wet Ice* ☐*Sleeves* ☐*Other*_____
9. Were the correct types of bottles used for the tests indicated? ☑Y ☐N
   Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* ☑Y ☐N

Sample ID	Bottle Count	Bottle Type	Out of Temp	Broken	Initials
			☐	☐	
			☐	☐	
			☐	☐	
			☐	☐	
			☐	☐	
			☐	☐	
			☐	☐	

10. Were all bottle labels complete (i.e. analysis, ID, etc.)? ☑Y ☐N
    Did all bottle labels and tags agree with custody papers? *Indicate in the table below.* ☑Y ☐N

Sample ID on Bottle	Sample ID on COC		Sample ID on Bottle	Sample ID on COC

11. Additional notes, discrepancies, and resolutions:

Page 1 of: ☐1 ☐2

Sample Acceptance Policy

Custody Seals (desirable, mandatory if specified in SAP):

- ✓ On outside of cooler
- ✓ Seals intact, signed and dated

Chain-of-Custody documentation (mandatory):

- ✓ Properly filled out in ink & signed by the client
- ✓ Sign and date the coc for CAS/HOU upon cooler receipt
- ✓ Coc must list method number
- ✓ If no coc was submitted with the samples, complete a CAS/HOU coc for the client

Sample Integrity (mandatory):

- ✓ Sample containers must arrive in good condition (not broken or leaking)
- ✓ Sample IDs on the bottles must match the sample IDs on the coc
- ✓ The correct type of sample bottle must be used for the method requested
- ✓ The correct number of sample containers received must agree with the documentation on the coc
- ✓ The correct sample matrix must appear on the coc
- ✓ An appropriate sample volume or weight must be received

Temperature Preservatives (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6°C
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10°C
- ✓ Air samples can be shipped and stored at ambient temperature, ~23°C
- ✓ The sample temperature must be recorded on the coc
- ✓ Notify a Project Chemist if any samples are outside the acceptance temperature or have compromised sample integrity – the client must decide re: replacement sample submittal or continue with the analysis

Cooler Receipt Form, CRF (mandatory):

- ✓ Cooler receipt forms must be completed for each coc & SR#
- ✓ Sample integrity issues must be documented on the CRF
- ✓ A scan of the carrier and the airbill number must be recorded in CAS LIMS

Sample Integrity Issues/Resolutions (mandatory):

- ✓ Sample integrity issues are documented on the CRF and given to the Project Chemist for resolution with the client
- ✓ Client resolution is documented in writing (typically email or on the CRF) and filed in the project folder(s)

Service Request Summary

Folder #: **E0800705**
Client Name: Emax Laboratories, Incorporated
Project Name: LMC Beaumont Site 1
Project Number: 08G188

Report To: Ye Myint
Emax Laboratories, Incorporated
1835 205th St.
Torrance, CA 90501
Phone Number: 310-618-8889 Ext. 121
Cell Number:
Fax Number: 310-618-0818
E-mail: YMyint@emaxlabs.com

Project Chemist: Karen Verschoor
Originating Lab: HOUSTON
Logged By: SMALHOTRA
Date Received: 07/22/2008
Internal Due Date: 08/05/2008
QAPP: LAB QAP
Qualifier Set: CAS Standard
Formset: AFCEE
Merged?: N
Report to MDL?: Y
P.O. Number: 08G188
EDD: No EDD Specified

2 - 4 oz-Glass Jar WM CLEAR Teflon Liner Unpreserved
1 - 1000 ml-Glass Bottle NM AMBER Teflon Liner Unpreserved

Location: E-WIC-02, E-Disposed

CAS Samp No.	Client Samp No.	Matrix	Collected		SVM: PCDD PCDF/ 8290	SVM: Total Solids/ 8290
E0800705-001	H-EB7172008	Water	7/17/08	0905	IV	
E0800705-002	H-T1-2.0	Soil	7/17/08	1031	IV	IV

Preparation Information Benchsheet

Prep Run#: 70789 **Prep WorkFlow:** OrgExtDioxAq-30 **Status:** Draft

Team: Semivoa GCMS/NBROWN **Prep Method:** Method **Prep Date/Time:** 07/22/2008 03:51 PM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Sample Description
1	EQ0800314-01	MB		8290/PCDD PCDF		Liquid	1000mL	
2	EQ0800314-02	LCS		8290/PCDD PCDF		Liquid	1000mL	
3	EQ0800314-03	INCGSB120708 MS	.01	8290/PCDD PCDF		Liquid	900mL	
4	EQ0800314-05	EST-MW1-033 MS	.01	8290/PCDD PCDF		Liquid	550mL	
5	EQ0800314-04	INCGSB120708 DMS	.01	8290/PCDD PCDF		Liquid	910mL	
6	EQ0800314-06	EST-MW1-033 DMS	.01	8290/PCDD PCDF		Liquid	520mL	
7	E0800703-002	H-EB7162008	.01	8290/PCDD PCDF		Water	1050mL	Clear, colorless liquid
8	E0800704-001	H-EB7182008	.01	8290/PCDD PCDF		Water	1000mL	Clear, colorless liquid
9	E0800705-001	H-EB7172008	.01	8290/PCDD PCDF		Water	1050mL	Clear, colorless liquid
10	E0800715-001	INCGSB010708	.01	8290/PCDD PCDF		Water	850mL	Brown, clear liquid
11	E0800715-002	INCHSB010708	.01	8290/PCDD PCDF		Water	870mL	Light brown, clear liquid
12	E0800715-003	INCGSB110708	.01	8290/PCDD PCDF		Water	870mL	Light gray, clear liquid
13	E0800715-004	INCGSB120708	.01	8290/PCDD PCDF		Water	960mL	Tinted, clear liquid
14	E0800715-005	INCGSB040708	.01	8290/PCDD PCDF		Water	940mL	Brown, cloudy liquid
15	E0800716-001	EST-MW9-030	.01	8290/PCDD PCDF		Water	1000mL	Brown, clear liquid
16	E0800716-002	EST-MW16-030	.01	8290/PCDD PCDF		Water	1000mL	Clear liquid
17	E0800716-003	EST-MW4-030	.01	8290/PCDD PCDF		Water	1000mL	Tinted, cloudy liquid
18	E0800716-004	EST-MW1-033	.01	8290/PCDD PCDF		Water	1000mL	Tinted, clear liquid
19	E0800716-005	EST-MW2-030	.01	8290/PCDD PCDF		Water	530mL	Tinted, clear liquid
20	E0800716-006	EST-MW12-030	.01	8290/PCDD PCDF		Water	550mL	Tinted, clear liquid
21	E0800716-007	EST-MW3-030	.01	8290/PCDD PCDF		Water	630mL	Tinted, clear liquid
22	E0800716-008	EST-MW11-030	.01	8290/PCDD PCDF		Water	940mL	Tinted, clear liquid
23	E0800716-009	EST-MW11-035	.01	8290/PCDD PCDF		Water	1000mL	Clear, colorless liquid
24	K0806614-032	PB17-GW-071708	.10	8290/PCDD PCDF		Water	1000mL	Orange, cloudy liquid

Preparation Information Benchsheet

Prep Run#: 70789 **Prep WorkFlow:** OrgExtDioxAq-30 **Status:** Draft

Team: Semivoa GCMS/NBROWN **Prep Method:** Method **Prep Date/Time:** 07/22/2008 03:51 PM

Spiking Solutions

Name:	8290 Internal Working Standard	Inventory ID	4549	Logbook Ref:	D9-69-3A	Expires On:	01/14/2009

E0800703-002	100.00uL	E0800704-001	100.00uL	E0800705-001	100.00uL	E0800715-001	100.00uL	E0800715-002	100.00uL	E0800715-003	100.00uL
E0800715-004	100.00uL	E0800715-005	100.00uL	E0800716-001	100.00uL	E0800716-002	100.00uL	E0800716-003	100.00uL	E0800716-004	100.00uL
E0800716-005	100.00uL	E0800716-006	100.00uL	E0800716-007	100.00uL	E0800716-008	100.00uL	E0800716-009	100.00uL	EQ0800314-01	100.00uL
EQ0800314-02	100.00uL	EQ0800314-03	100.00uL	EQ0800314-04	100.00uL	EQ0800314-05	100.00uL	EQ0800314-06	100.00uL	K0806614-032	100.00uL

Name:	8290 Matrix Working Standard	Inventory ID	4551	Logbook Ref:	D9-69-4A	Expires On:	01/14/2009

EQ0800314-02	100.00uL	EQ0800314-03	100.00uL	EQ0800314-04	100.00uL	EQ0800314-05	100.00uL	EQ0800314-06	100.00uL

Name:	8290/1613B Cleanup Working Standard	Inventory ID	4562	Logbook Ref:	D9-70-4A/B	Expires On:	01/18/2009

E0800703-002	100.00uL	E0800704-001	100.00uL	E0800705-001	100.00uL	E0800715-001	100.00uL	E0800715-002	100.00uL	E0800715-003	100.00uL
E0800715-004	100.00uL	E0800715-005	100.00uL	E0800716-001	100.00uL	E0800716-002	100.00uL	E0800716-003	100.00uL	E0800716-004	100.00uL
E0800716-005	100.00uL	E0800716-006	100.00uL	E0800716-007	100.00uL	E0800716-008	100.00uL	E0800716-009	100.00uL	EQ0800314-01	100.00uL
EQ0800314-02	100.00uL	EQ0800314-03	100.00uL	EQ0800314-04	100.00uL	EQ0800314-05	100.00uL	EQ0800314-06	100.00uL	K0806614-032	100.00uL

Preparation Materials

Sand Reagent Grade	C1-99-1 (345)	Silica Gel Reagent Grade	C2-6-004 (3305)	Carbon, High Purity	C2-9-004 (3628)
Glass Wool	C2-1-004 (3060)	Acetone 99.5% Minimum	C1-124-004 (3063)	Nonane (n-Nonane) 99%	C2-4-003 (3304)
Sodium Chloride Reagent Grade NaCl	C1-104-2 (3306)	Sodium Sulfate Anhydrous Reagent G	C2-10-001 (3635)	Dichloromethane (Methylene Chloride	C2-9-007 (3629)
Toluene 99.9% Minimum	C2-9-005 (3634)	Ethyl Acetate 99.9% Minimum EtOAc	C2-1-005 (3059)	Hexane (n-Hexane) 98.5% Minimum	C2-9-006 (3631)
Tridecane (n-Tridecane)	C2-7-002 (3360)	Sulfuric Acid Reagent Grade H2SO4	C2-7-005 (3357)		

Preparation Steps

Step:

Started:

Finished:

By:

Comments: _____

_____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____

Received By: _____ Date: _____

Extracts Examined

Yes No

Preparation Information Benchsheet

Prep Run#: 70770 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped

Team: Semivoa GCMS/NBROWN **Prep Method:** Method **Prep Date/Time:** 07/24/2008 03:00 PM

#	Lab Code	Client ID	B#	Method /Test	pH	Matrix	Amt. Ext.	Sample Description
1	EQ0800317-01	MB		8290/PCDD PCDF		Solid	10.000g	
2	EQ0800317-02	LCS		8290/PCDD PCDF		Solid	10.000g	
3	EQ0800317-03	INCSSB0420 MS	.01	8290/PCDD PCDF		Solid	10.704g	
4	EQ0800317-04	INCSSB0420 DMS	.01	8290/PCDD PCDF		Solid	10.410g	
5	E0800697-008	INCSSB0112	.01	8290/PCDD PCDF		Soil	10.861g	Caramel mud
6	E0800697-018	INCSSB0625	.01	8290/PCDD PCDF		Soil	10.915g	Brown mud
7	E0800697-019	INCSSB0201	.01	8290/PCDD PCDF		Soil	10.769g	Brown mud
8	E0800697-020	INCSSB0420	.01	8290/PCDD PCDF		Soil	10.548g	Caramel mud
9	E0800703-001	H-T5A-2.0	.01	8290/PCDD PCDF		Soil	10.462g	Grainy dirt
10	E0800704-003	H-T5-3.0DUP	.01	8290/PCDD PCDF		Soil	10.444g	Beige grainy dirt
11	E0800705-002	H-TI-2.0	.01	8290/PCDD PCDF		Soil	10.305g	Beige grainy dirt
12	E0800710-001	cak071808SQC	.01	8290/PCDD PCDF		Sludge, Solid	10.986g	Dark mud
13	E0800714-001	INCSSB0515	.01	8290/PCDD PCDF		Soil	10.801g	Beige mud
14	E0800714-002	INCSSB0401	.01	8290/PCDD PCDF		Soil	10.524g	Brown rocky mud

Spiking Solutions

Name: 8290 Internal Working Standard Inventory ID 4549 Logbook Ref: D9-69-3A Expires On: 01/14/2009

E0800697-008	100.00uL	E0800697-018	100.00uL	E0800697-019	100.00uL	E0800697-020	100.00uL	E0800703-001	100.00uL	E0800704-003	100.00uL
E0800705-002	100.00uL	E0800710-001	100.00uL	E0800714-001	100.00uL	E0800714-002	100.00uL	EQ0800317-01	100.00uL	EQ0800317-02	100.00uL
EQ0800317-03	100.00uL	EQ0800317-04	100.00uL								

Name: 8290 Matrix Working Standard Inventory ID 4551 Logbook Ref: D9-69-4A Expires On: 01/14/2009

EQ0800317-02	100.00uL	EQ0800317-03	100.00uL	EQ0800317-04	100.00uL

Name: 8290/1613B Cleanup Working Standard Inventory ID 4562 Logbook Ref: D9-70-4A/B Expires On: 01/18/2009

E0800697-008	100.00uL	E0800697-018	100.00uL	E0800697-019	100.00uL	E0800697-020	100.00uL	E0800703-001	100.00uL	E0800704-003	100.00uL
E0800705-002	100.00uL	E0800710-001	100.00uL	E0800714-001	100.00uL	E0800714-002	100.00uL	EQ0800317-01	100.00uL	EQ0800317-02	100.00uL
EQ0800317-03	100.00uL	EQ0800317-04	100.00uL								

Preparation Materials

Sand Reagent Grade	C1-99-1 (345)	Silica Gel Reagent Grade	C2-6-004 (3305)	Carbon, High Purity	C2-9-004 (3628)
Glass Wool	C2-1-004 (3060)	Acetone 99.5% Minimum	C1-124-004 (3063)	Nonane (n-Nonane) 99%	C2-4-003 (3304)
Sodium Chloride Reagent Grade NaCl	C1-104-2 (3306)	Sodium Sulfate Anhydrous Reagent G	C2-10-001 (3635)	Dichloromethane (Methylene Chloride	C2-9-007 (3629)
Toluene 99.9% Minimum	C2-9-005 (3634)	Ethyl Acetate 99.9% Minimum EtOAc	C2-1-005 (3059)	Hexane (n-Hexane) 98.5% Minimum	C2-9-006 (3631)
Tridecane (n-Tridecane)	C2-7-002 (3360)	Sulfuric Acid Reagent Grade H2SO4	C2-7-005 (3357)	Extraction Thimbles 43 x123 mm	(1577)

Preparation Information Benchsheet

Prep Run#: 70770 **Prep WorkFlow:** OrgExtDioxS(30) **Status:** Prepped

Team: Semivoa GCMS/NBROWN **Prep Method:** Method **Prep Date/Time:** 07/24/2008 03:00 PM

Preparation Steps

Step:	Extraction	Step:	Acid Clean	Step:	Silica Gel Clean	Step:	Final Volume
Started:	7/24/08 15:00	Started:	7/31/08 11:30	Started:	7/31/08 14:00	Started:	8/1/08 10:00
Finished:	7/24/08 17:30	Finished:	7/31/08 13:00	Finished:	7/31/08 18:00	Finished:	8/1/08 12:00
By:	NBROWN	By:	NBROWN	By:	NBROWN	By:	NBROWN

Comments: _____

Reviewed By: _____ Date: _____

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

COLUMBIA ANALYTICAL SERVICES, INC.

Total Solids, (Gravimetric, Dried at 110 Deg C)

Group ID: 71531

Analyst: NBROWN

Date Acquired: 07/24/2008

Reviewed By: _____

Date Reviewed: _____

Lab Code	Client Sample Name	Test	Tare Weight	Wet Weight + Tare	Dry Weight + Tare	Percent Solids
E0800697-018	INCSSB0625	8290/Total Solids	12.9310g	26.6940g	24.0090g	80.5
E0800697-019	INCSSB0201	8290/Total Solids	12.9230g	26.7020g	24.0450g	80.7
E0800697-020	INCSSB0420	8290/Total Solids	13.3020g	28.6010g	25.3990g	79.1
E0800703-001	H-T5A-2.0	8290/Total Solids	13.2760g	26.8080g	26.1460g	95.1
E0800704-002	H-T5-3.0	8290/Total Solids	12.9210g	26.8040g	25.6880g	92.0
E0800704-003	H-T5-3.0DUP	8290/Total Solids	13.3480g	29.1790g	27.7200g	90.8
E0800705-002	H-TI-2.0	8290/Total Solids	13.3980g	22.2410g	20.5820g	81.2
E0800710-001	cak071808SQC	8290/Total Solids	13.2460g	17.4050g	13.9560g	17.1
E0800714-001	INCSSB0515	8290/Total Solids	12.9560g	28.4700g	25.8400g	83.0
E0800714-002	INCSSB0401	8290/Total Solids	13.3560g	24.8880g	23.0640g	84.2

Columbia Analytical Services INC

Chromatograms and Selected Ion Monitoring

19408 Park Row, Suite 320, Houston, TX 77084
Phone (713)266-1599 Fax (713)266-0130
www.caslab.com

An Employee Owned Company

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
H-EB7172008

Run #6 Filename P200021 Samp: 1 Inj: 1 Acquired: 31-JUL-08 11:37:38
Processed: 11-AUG-08 13:25:18 LAB. ID: E0800705-001

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	NotFnd	*	*	*	no	no	0.863
2	Unk	1,2,3,7,8-PeCDF	NotFnd	*	*	*	no	no	0.845
3	Unk	2,3,4,7,8-PeCDF	NotFnd	*	*	*	no	no	0.861
4	Unk	1,2,3,4,7,8-HxCDF	NotFnd	*	*	*	no	no	1.093
5	Unk	1,2,3,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.106
6	Unk	2,3,4,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.006
7	Unk	1,2,3,7,8,9-HxCDF	NotFnd	*	*	*	no	no	0.846
8	Unk	1,2,3,4,6,7,8-HpCDF	NotFnd	*	*	*	no	no	1.360
9	Unk	1,2,3,4,7,8,9-HpCDF	NotFnd	*	*	*	no	no	0.953
10	Unk	OCDF	NotFnd	*	*	*	no	no	0.990
11	Unk	2,3,7,8-TCDD	NotFnd	*	*	*	no	no	0.944
12	Unk	1,2,3,7,8-PeCDD	NotFnd	*	*	*	no	no	0.858
13	Unk	1,2,3,4,7,8-HxCDD	NotFnd	*	*	*	no	no	0.886
14	Unk	1,2,3,6,7,8-HxCDD	NotFnd	*	*	*	no	no	0.983
15	Unk	1,2,3,7,8,9-HxCDD	NotFnd	*	*	*	no	no	0.897
16	Unk	1,2,3,4,6,7,8-HpCDD	NotFnd	*	*	*	no	yes	0.836
17	Unk	OCDD	43:11	1.107e+01	1.340e+01	0.83	yes	yes	0.947
18	IS	13C-2,3,7,8-TCDF	28:36	5.130e+03	6.688e+03	0.77	yes	no	1.290
19	IS	13C-1,2,3,7,8-PeCDF	32:58	8.217e+03	5.085e+03	1.62	yes	no	1.282
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	8.553e+03	1.668e+04	0.51	yes	no	1.094
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	5.589e+03	1.318e+04	0.42	yes	no	0.806
22	IS	13C-2,3,7,8-TCDD	29:26	4.521e+03	5.905e+03	0.77	yes	no	0.985
23	IS	13C-1,2,3,7,8-PeCDD	34:04	6.151e+03	3.809e+03	1.61	yes	no	0.987
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	1.423e+04	1.133e+04	1.26	yes	no	0.988
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	9.544e+03	9.132e+03	1.05	yes	no	0.766
26	IS	13C-OCDD	43:11	1.398e+04	1.558e+04	0.90	yes	no	0.851
27	RS/RT	13C-1,2,3,4-TCDD	29:14	7.849e+03	1.006e+04	0.78	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:35	7.344e+03	5.744e+03	1.28	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	1.083e+04					0.954
					SUM AREA				
30	Tot	Total Tetra-Furans	NotFnd		*	*	no		0.863
31	Tot	Total Tetra-Dioxins	NotFnd		*	*	no		0.944
32	Tot	Total Penta-Furans	NotFnd		*	*	no		0.853
33	Tot	Total Penta-Dioxins	NotFnd		*	*	no		0.858
34	Tot	Total Hexa-Furans	36:52		1.618e+01	1.35	yes		1.013
35	Tot	Total Hexa-Dioxins	NotFnd		*	*	no		0.922
36	Tot	Total Hepta-Furans	NotFnd		*	*	no		1.156
37	Tot	Total Hepta-Dioxins	NotFnd		*	*	no		0.836

---Sample Calculation---

$$OCDD = \frac{(1.107e+01 + 1.340e+01) \times 5000\ pg}{(1.398e+04 + 1.558e+04) \times (\sim\sim g) \times (100 - \sim\sim)/100 \times \sim\sim 0.95 \sim\sim} = 4.16\ pg/L$$

1.050 L

0.947

8/14/08 gc

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary H-EB7172008

Run #6 Filename P200021 #1 Samp: 1 Inj: 1 Acquired: 31-JUL-08 11:37:38

Processed: 11-AUG-08 13:25:18 LAB. ID: E0800705-001

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	*	1.52e+02	*	*	2.36e+02	*
2	1,2,3,7,8-PeCDF	*	7.20e+01	*	*	2.60e+02	*
3	2,3,4,7,8-PeCDF	*	7.20e+01	*	*	2.60e+02	*
4	1,2,3,4,7,8-HxCDF	*	1.88e+02	*	*	1.36e+02	*
5	1,2,3,6,7,8-HxCDF	*	1.88e+02	*	*	1.36e+02	*
6	2,3,4,6,7,8-HxCDF	*	1.88e+02	*	*	1.36e+02	*
7	1,2,3,7,8,9-HxCDF	*	1.88e+02	*	*	1.36e+02	*
8	1,2,3,4,6,7,8-HpCDF	*	1.88e+02	*	*	1.52e+02	*
9	1,2,3,4,7,8,9-HpCDF	*	1.88e+02	*	*	1.52e+02	*
10	OCDF	*	1.96e+02	*	*	3.28e+02	*
11	2,3,7,8-TCDD	*	3.12e+02	*	*	1.36e+02	*
12	1,2,3,7,8-PeCDD	*	4.60e+02	*	*	1.52e+02	*
13	1,2,3,4,7,8-HxCDD	*	1.40e+02	*	*	1.60e+02	*
14	1,2,3,6,7,8-HxCDD	*	1.40e+02	*	*	1.60e+02	*
15	1,2,3,7,8,9-HxCDD	*	1.40e+02	*	*	1.60e+02	*
16	1,2,3,4,6,7,8-HpCDD	*	1.88e+02	*	*	9.60e+01	*
17	OCDD	1.85e+03	1.12e+02	1.6e+01	2.11e+03	1.44e+02	1.5e+01
18	13C-2,3,7,8-TCDF	8.78e+05	7.92e+02	1.1e+03	1.13e+06	4.28e+02	2.6e+03
19	13C-1,2,3,7,8-PeCDF	1.61e+06	1.20e+02	1.3e+04	1.01e+06	1.76e+02	5.7e+03
20	13C-1,2,3,4,7,8-HxCDF	1.88e+06	1.12e+02	1.7e+04	3.67e+06	2.08e+02	1.8e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.21e+06	5.96e+02	2.0e+03	2.83e+06	5.64e+02	5.0e+03
22	13C-2,3,7,8-TCDD	8.24e+05	9.28e+02	8.9e+02	1.07e+06	1.44e+02	7.4e+03
23	13C-1,2,3,7,8-PeCDD	1.25e+06	2.20e+02	5.7e+03	7.75e+05	1.92e+02	4.0e+03
24	13C-1,2,3,6,7,8-HxCDD	3.08e+06	8.80e+01	3.5e+04	2.50e+06	1.84e+02	1.4e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.92e+06	3.16e+02	6.1e+03	1.86e+06	1.96e+02	9.5e+03
26	13C-OCDD	2.12e+06	1.72e+02	1.2e+04	2.35e+06	9.60e+01	2.4e+04
27	13C-1,2,3,4-TCDD	1.44e+06	9.28e+02	1.5e+03	1.83e+06	1.44e+02	1.3e+04
28	13C-1,2,3,7,8,9-HxCDD	1.59e+06	8.80e+01	1.8e+04	1.26e+06	1.84e+02	6.8e+03
29	37Cl-2,3,7,8-TCDD	1.93e+06	1.20e+02	1.6e+04			

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Columbia Analytical Services, Inc.
Peak List Summary

CLIENT ID.
H-EB7172008

Entry: 34 Totals Name: Total Hexa-Furans

Run: 6 File: P200021 Sample:1 Injection:1 Function:3

Acquired: 31-JUL-08 11:37:38 Processed: 11-AUG-08 13:25:18

Mass:373.821 375.818 Response:

#	RT	Resp	Resp Ratio	Meet	Tot Resp	Name	Mod?
1	36:52	9.30e+00	6.88e+00 1.35	yes	1.62e+01		y

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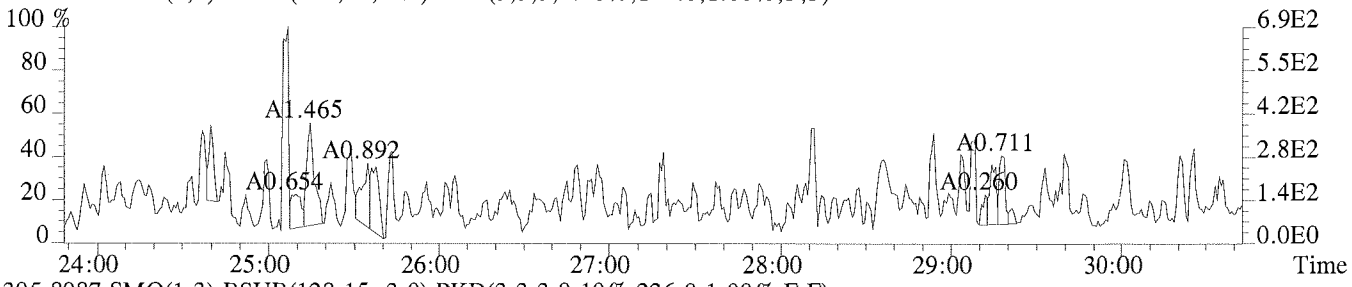
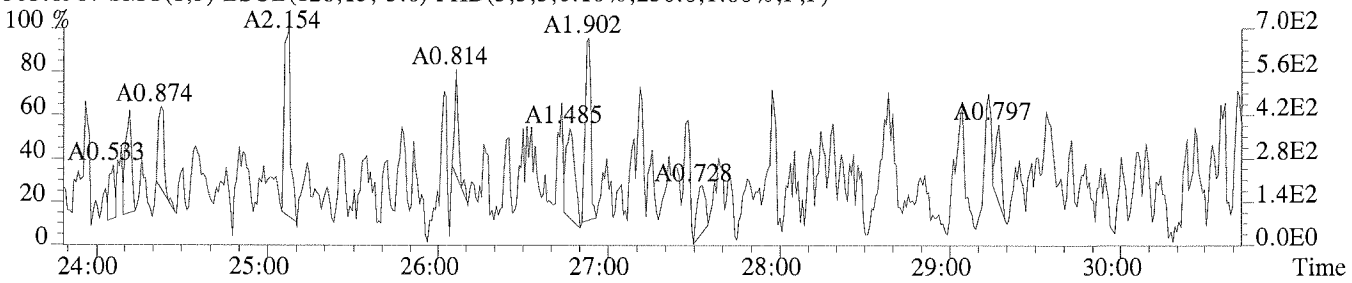
File:P200021 #1-576 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008

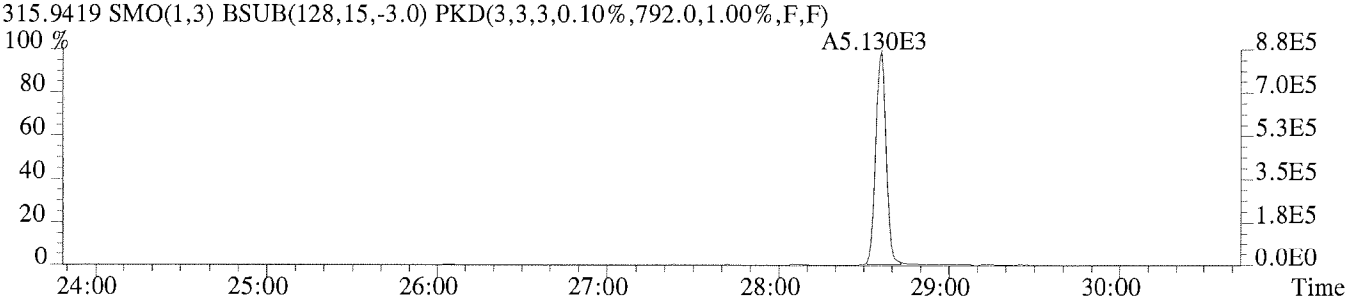
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,152.0,1.00%,F,F)



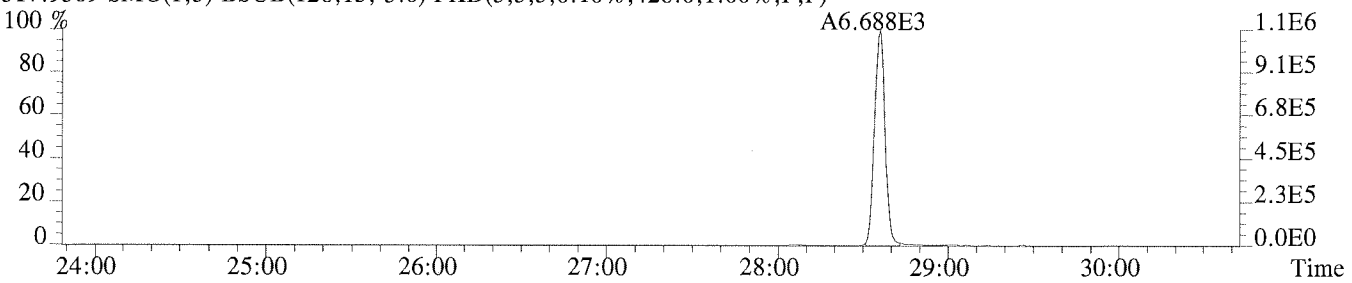
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,236.0,1.00%,F,F)



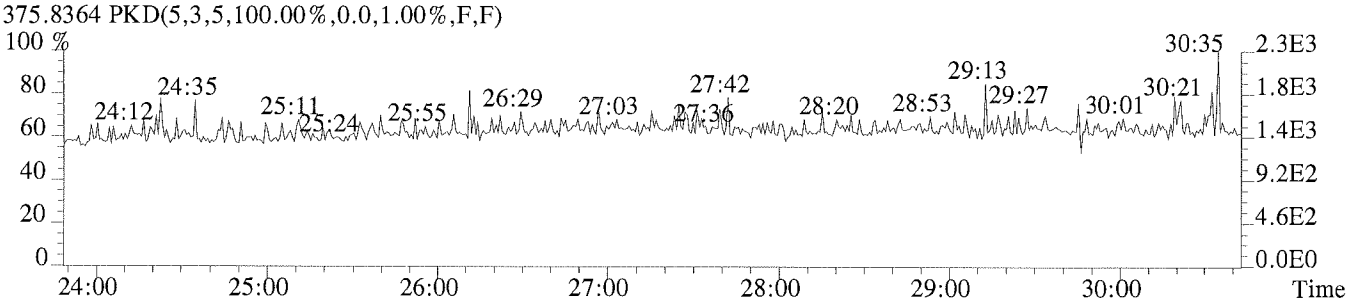
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,792.0,1.00%,F,F)



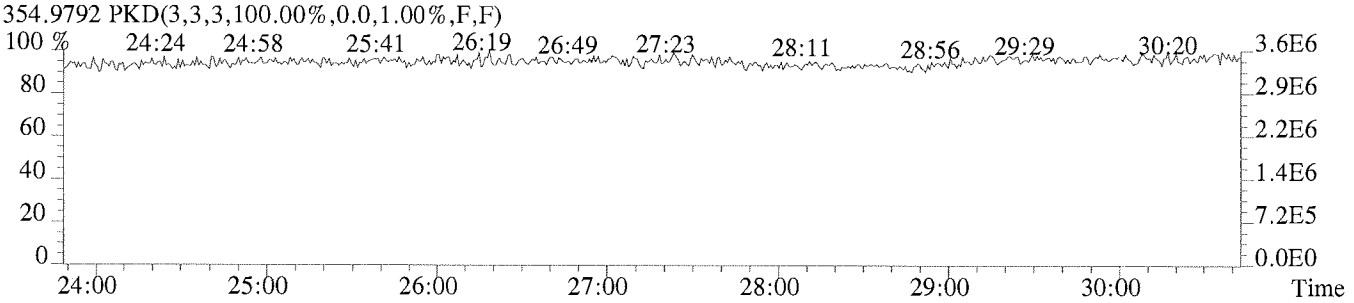
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,428.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

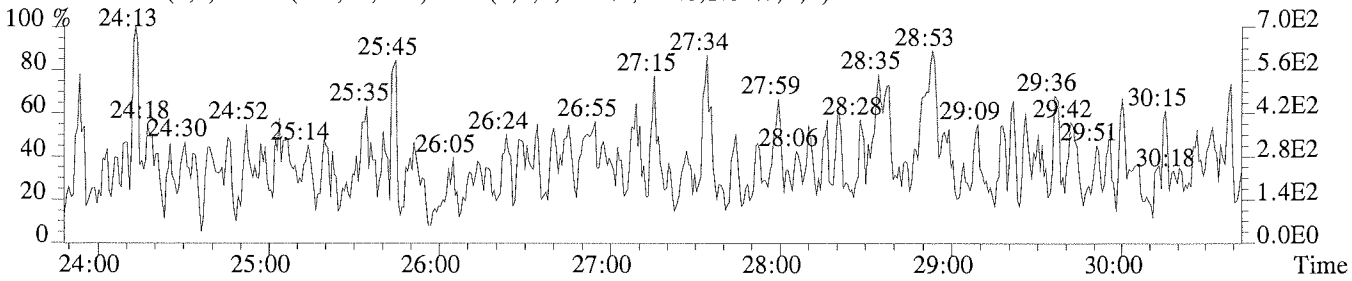


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

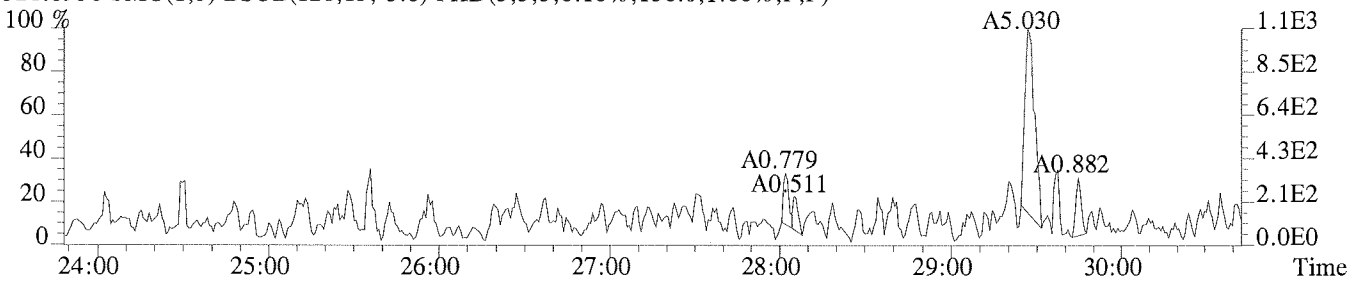


File:P200021 #1-576 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008

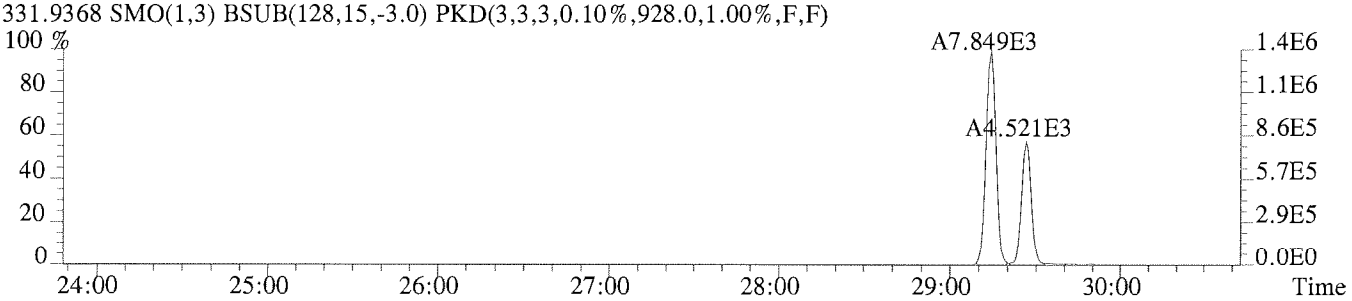
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,312.0,1.00%,F,F)



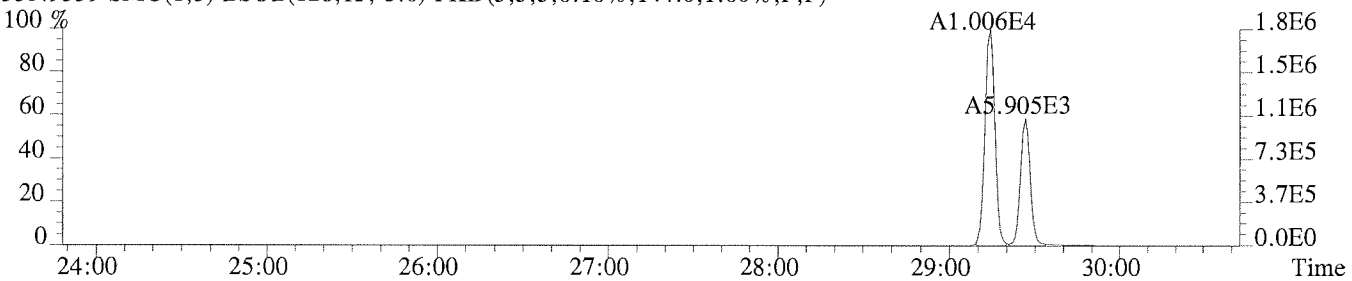
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,136.0,1.00%,F,F)



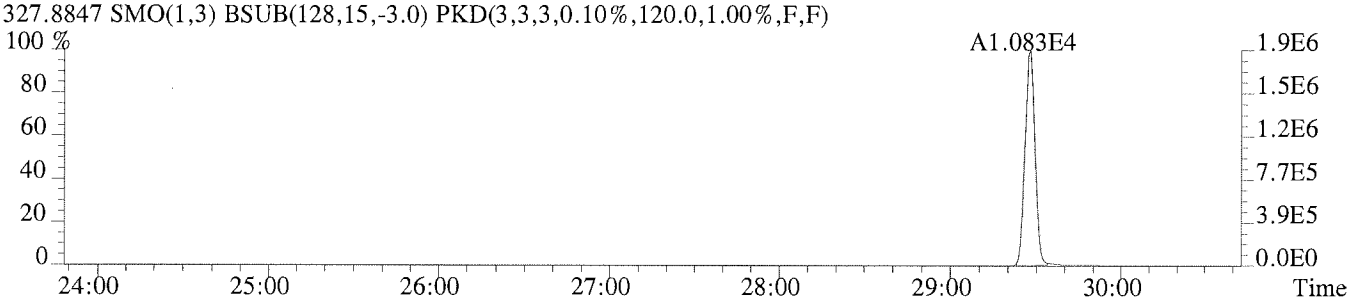
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,928.0,1.00%,F,F)



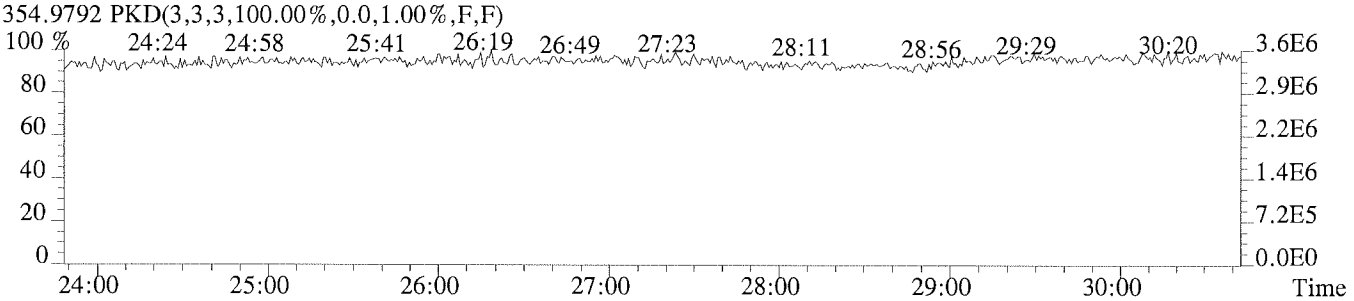
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,144.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,120.0,1.00%,F,F)

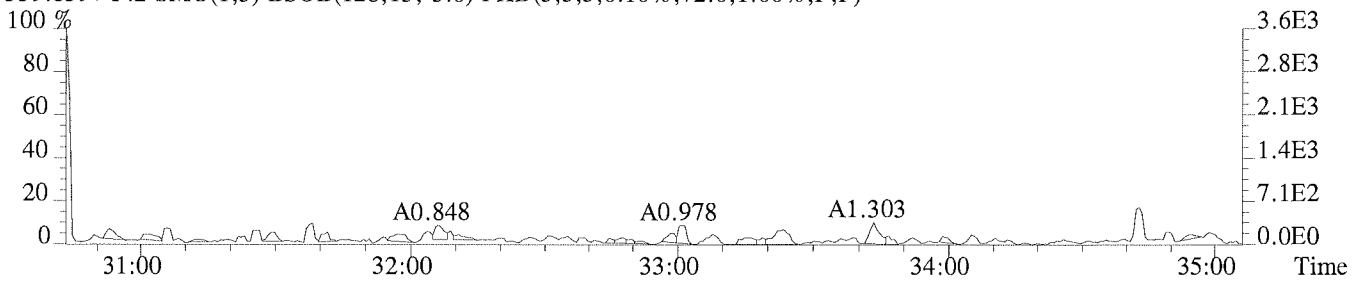


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

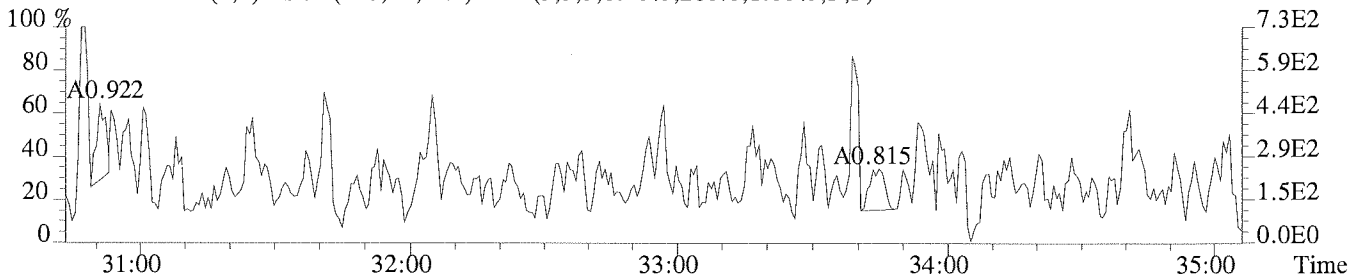


File:P200021 #1-398 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008

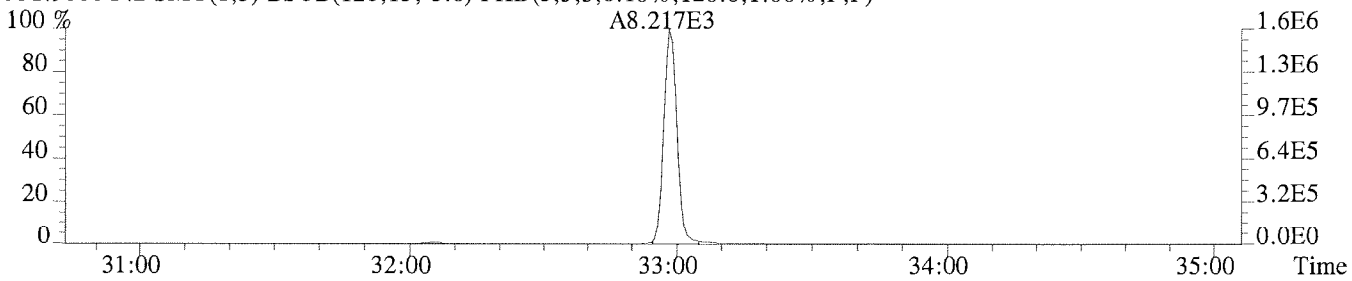
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,72.0,1.00%,F,F)



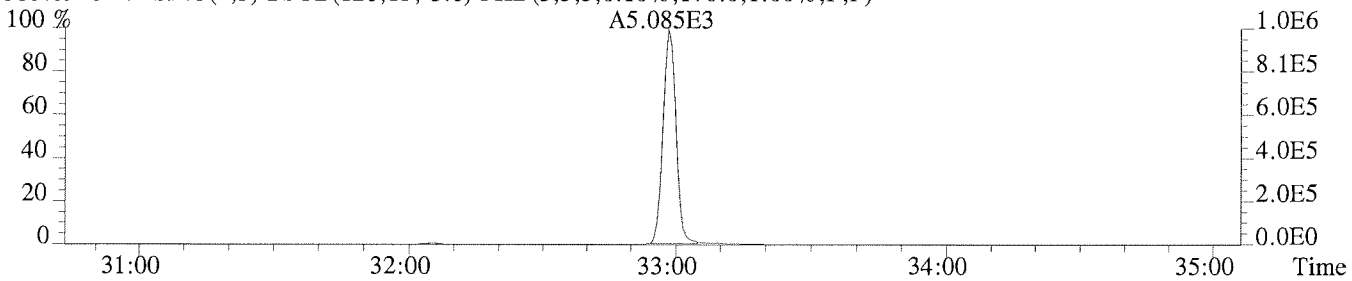
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,260.0,1.00%,F,F)



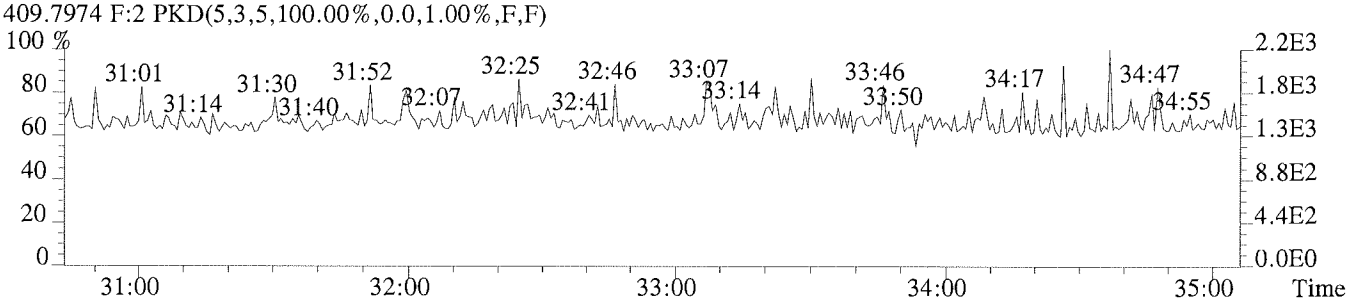
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,120.0,1.00%,F,F)



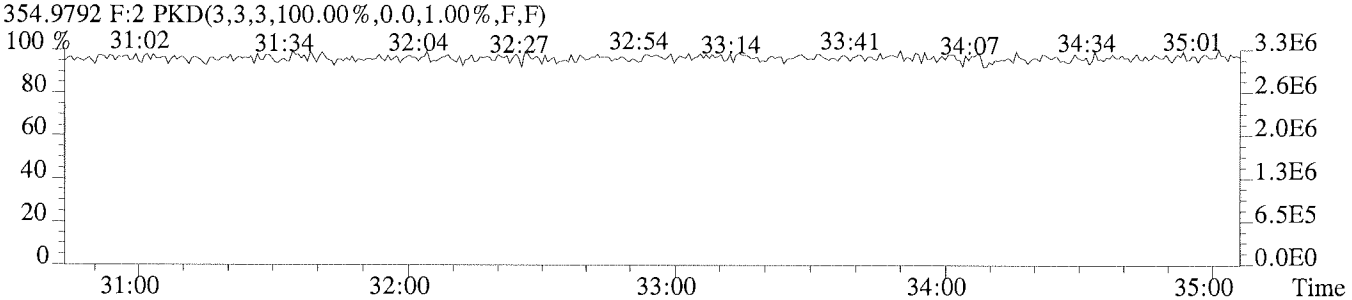
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,176.0,1.00%,F,F)



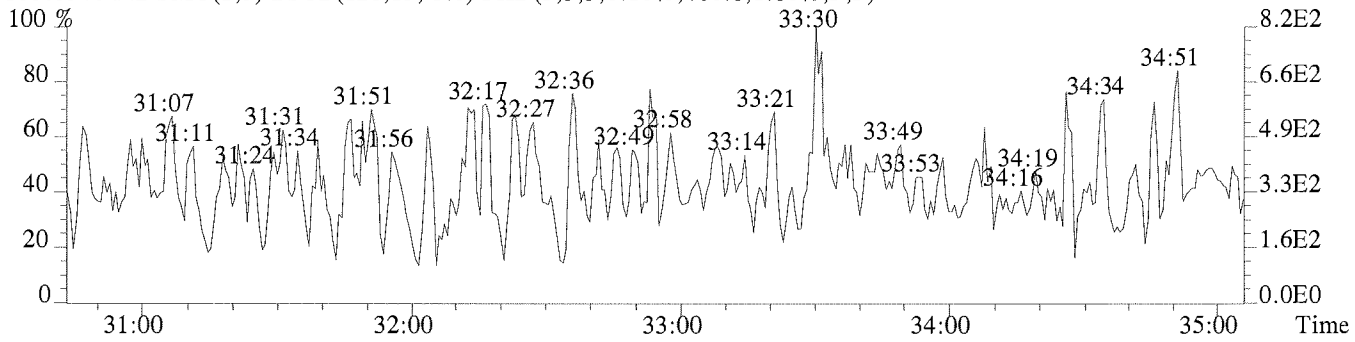
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



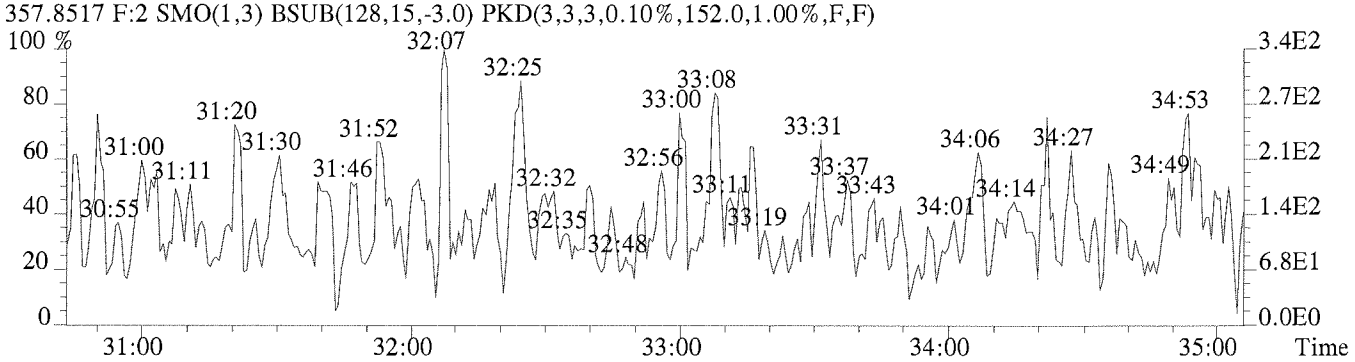
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



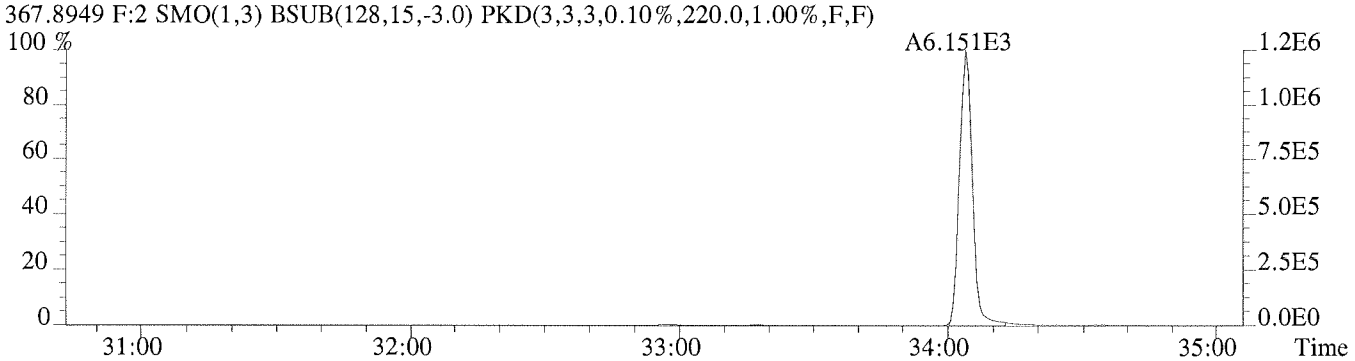
File:P200021 #1-398 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,460.0,1.00%,F,F)



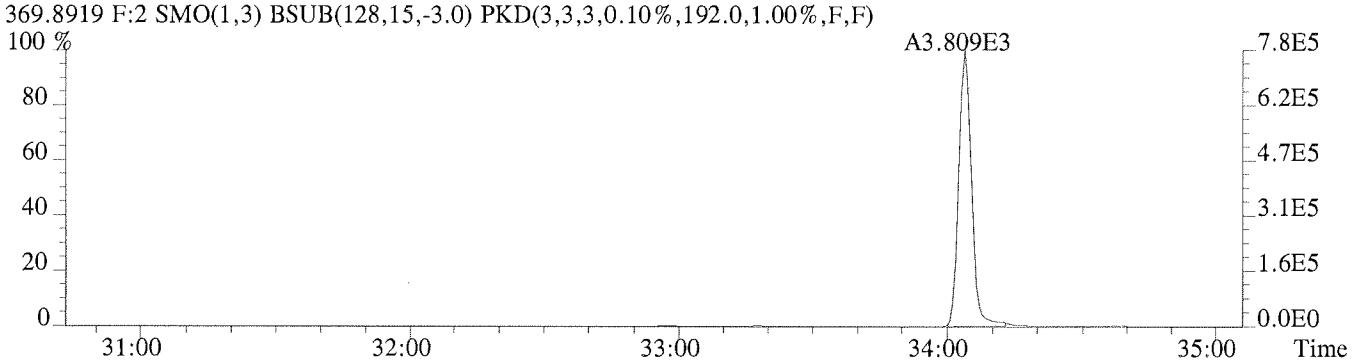
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,152.0,1.00%,F,F)



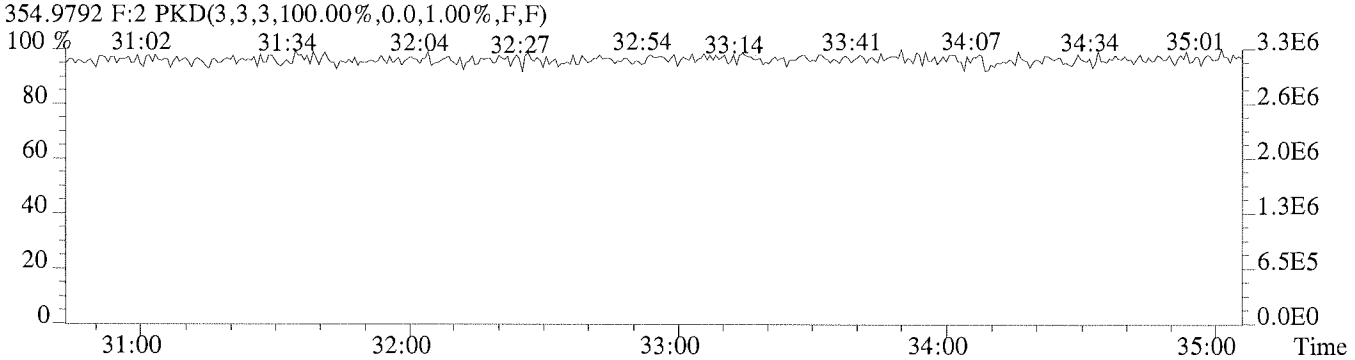
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,220.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,192.0,1.00%,F,F)

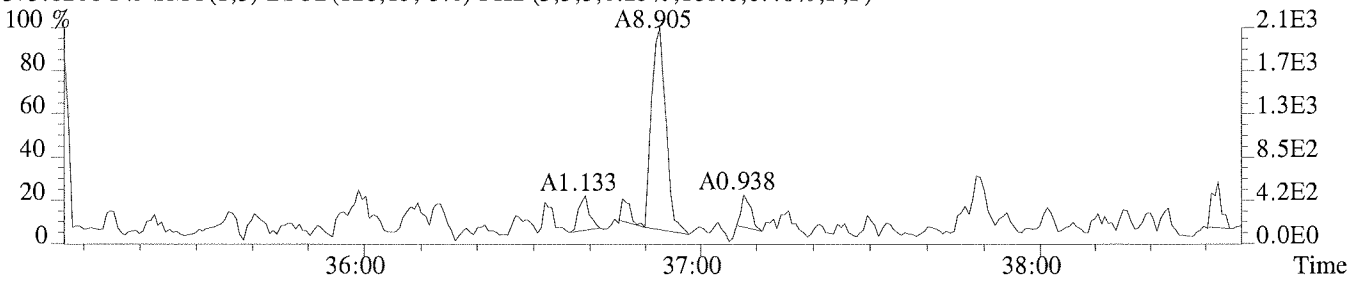


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

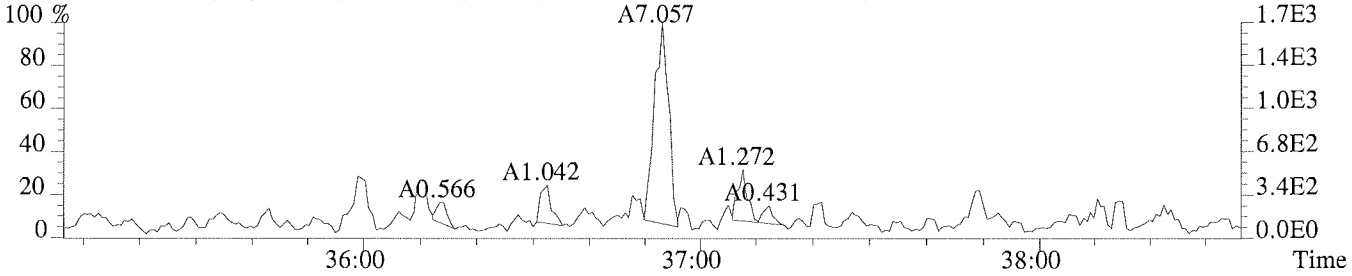


File:P200021 #1-318 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008

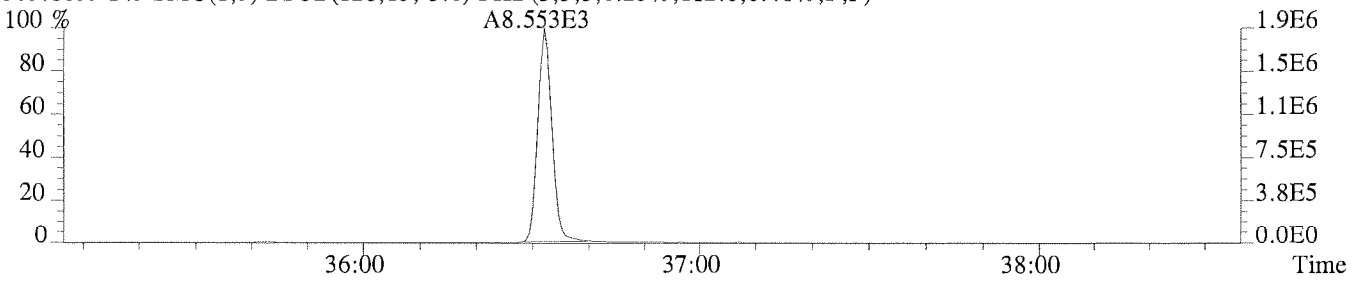
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,188.0,0.40%,F,F)



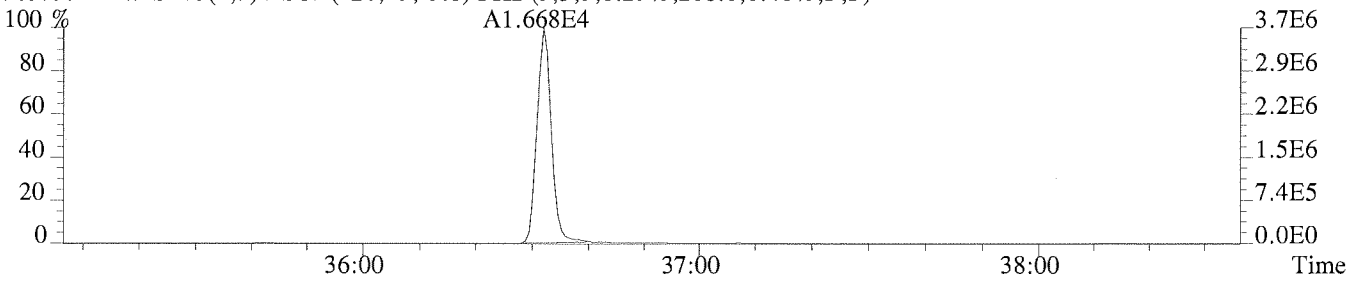
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,136.0,0.40%,F,F)



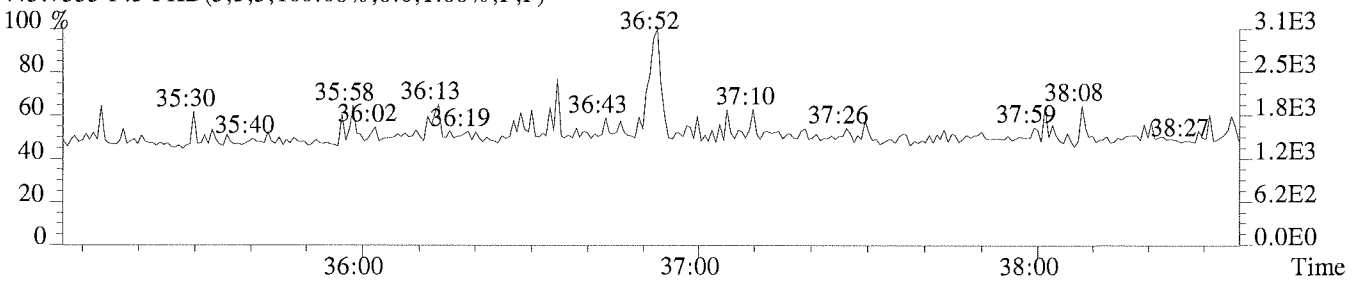
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,112.0,0.40%,F,F)



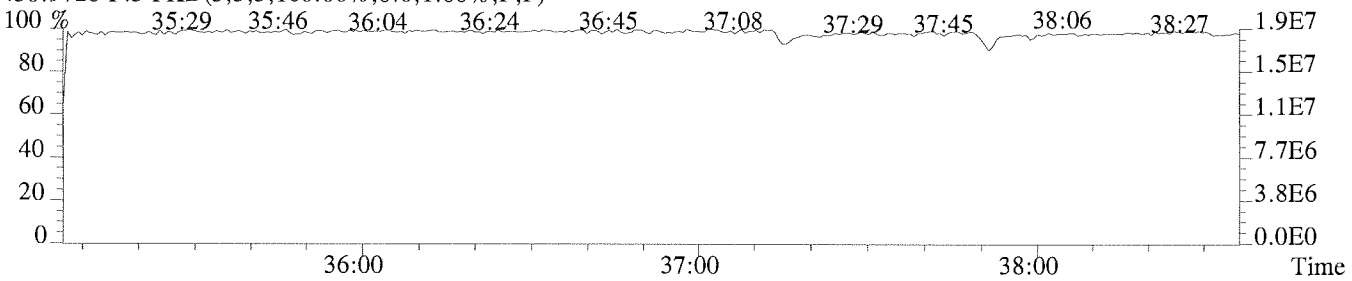
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,208.0,0.40%,F,F)



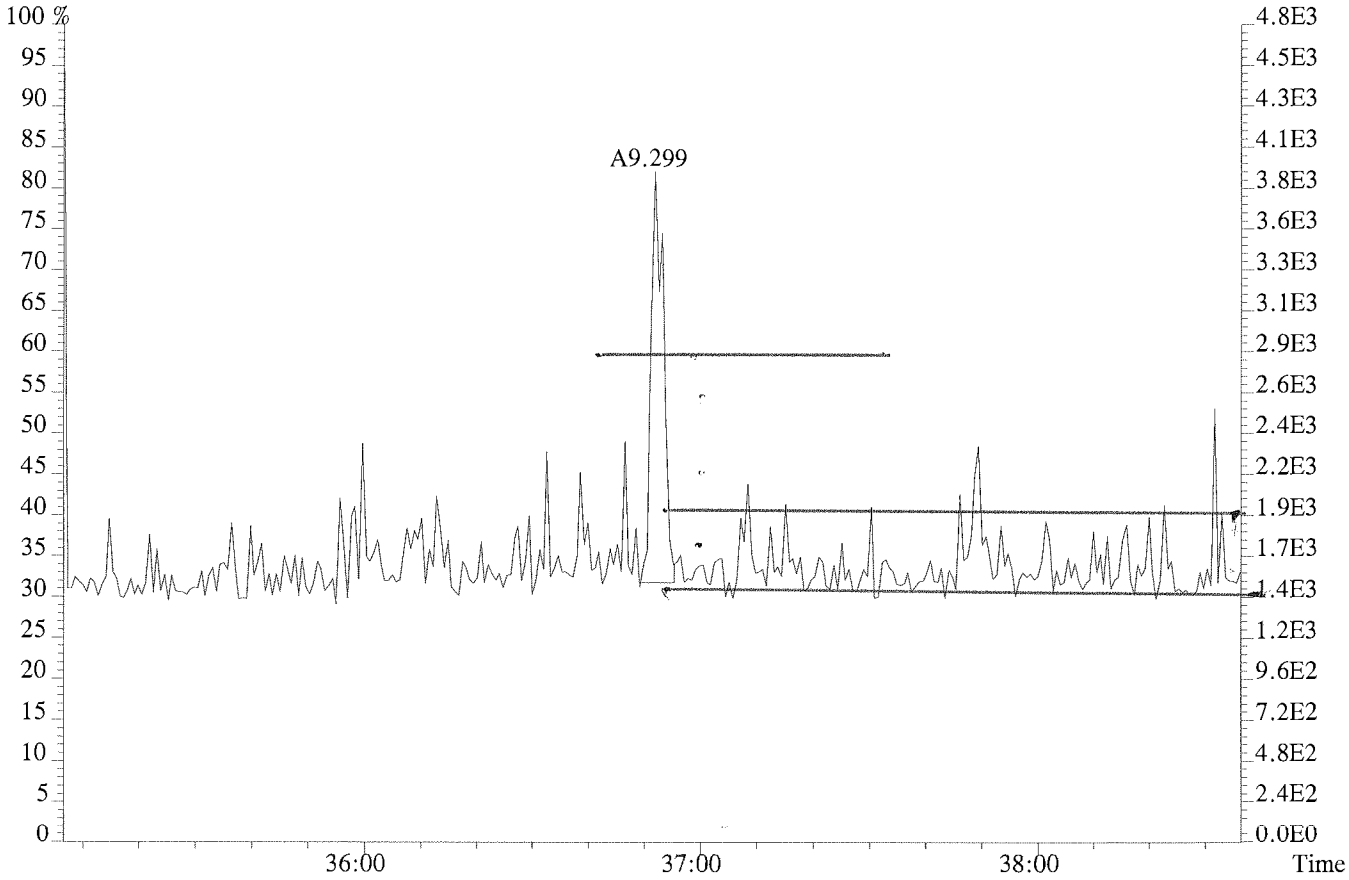
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



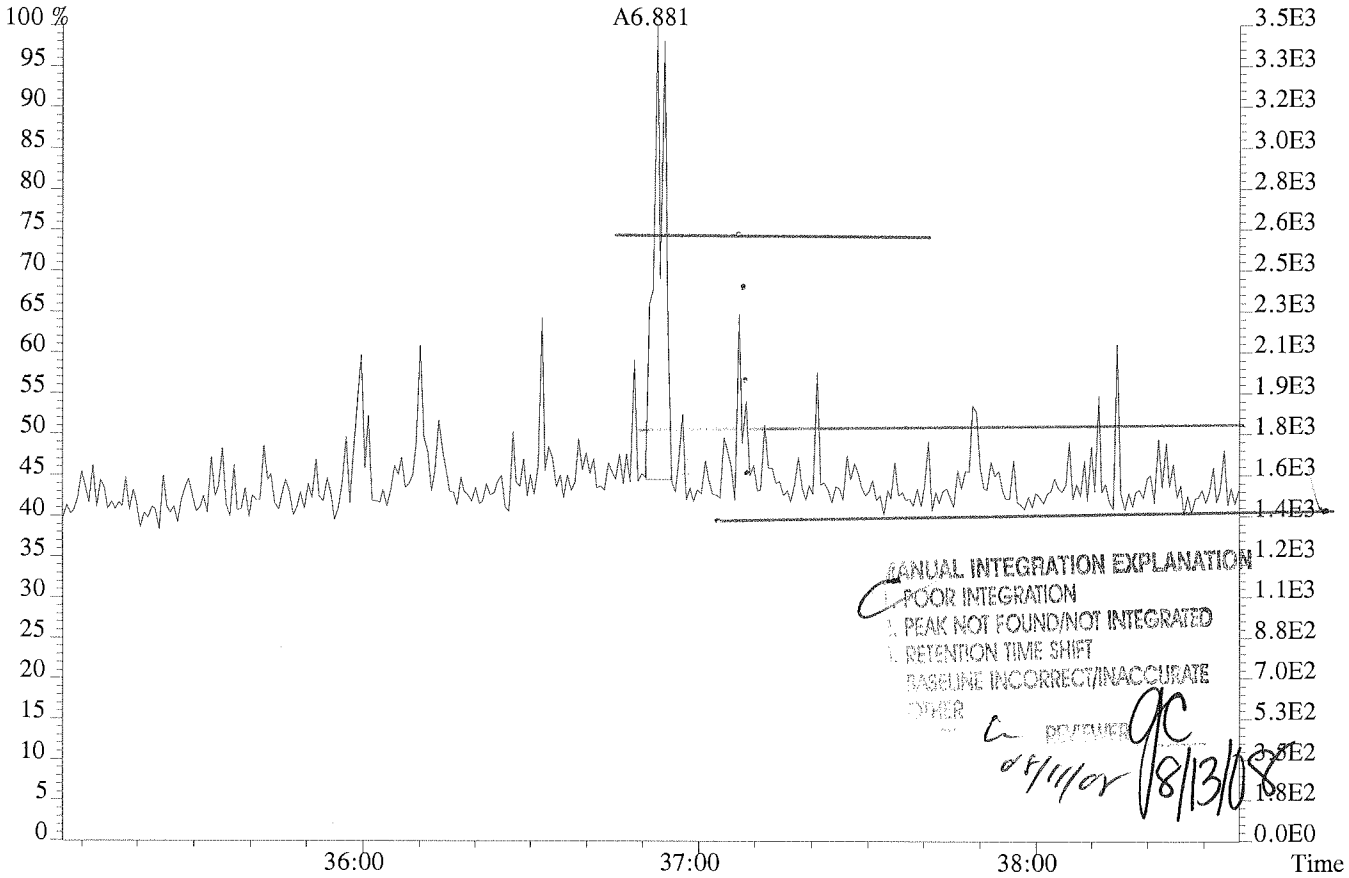
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P200021 #1-318 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008
373.8208 F:3



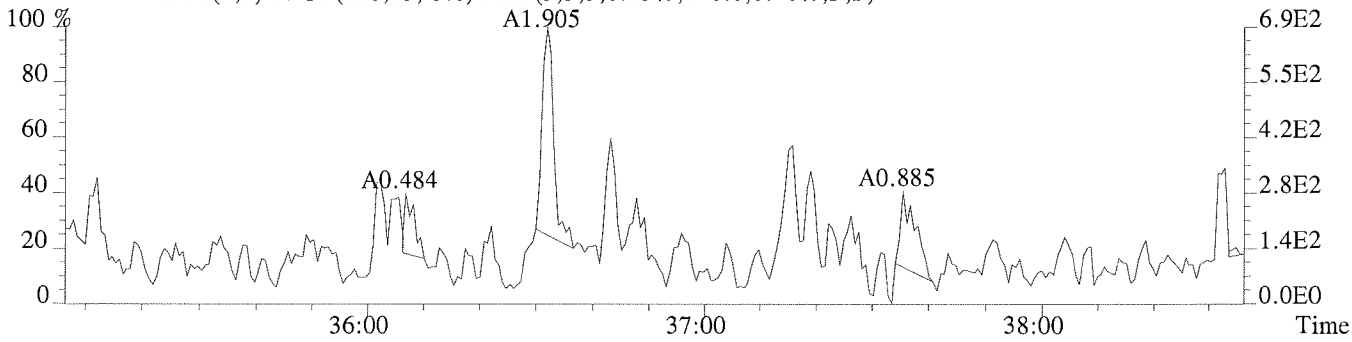
375.8178 F:3



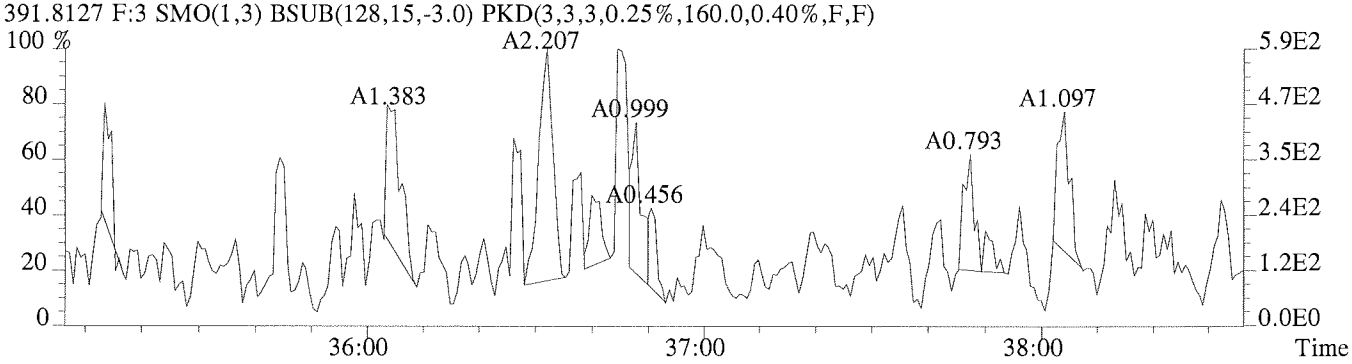
MANUAL INTEGRATION EXPLANATION
POOR INTEGRATION
PEAK NOT FOUND/NOT INTEGRATED
RETENTION TIME SHIFT
BASELINE INCORRECT/INACCURATE
OTHER
REVIEWER
QC
8/13/08

File:P200021 #1-318 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008

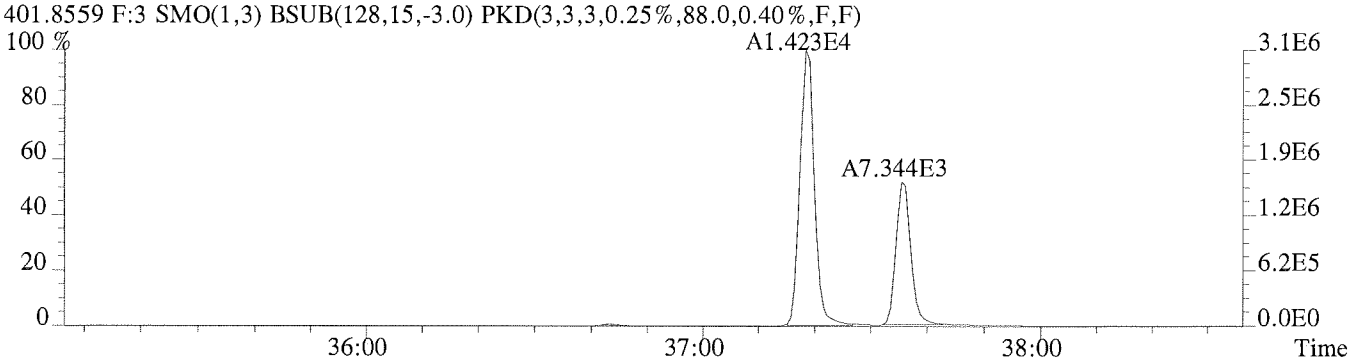
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,140.0,0.40%,F,F)



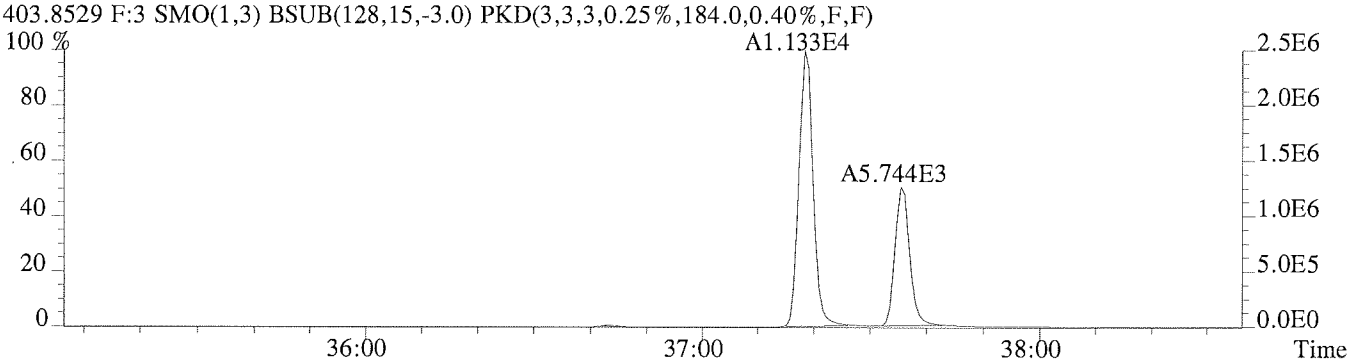
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,160.0,0.40%,F,F)



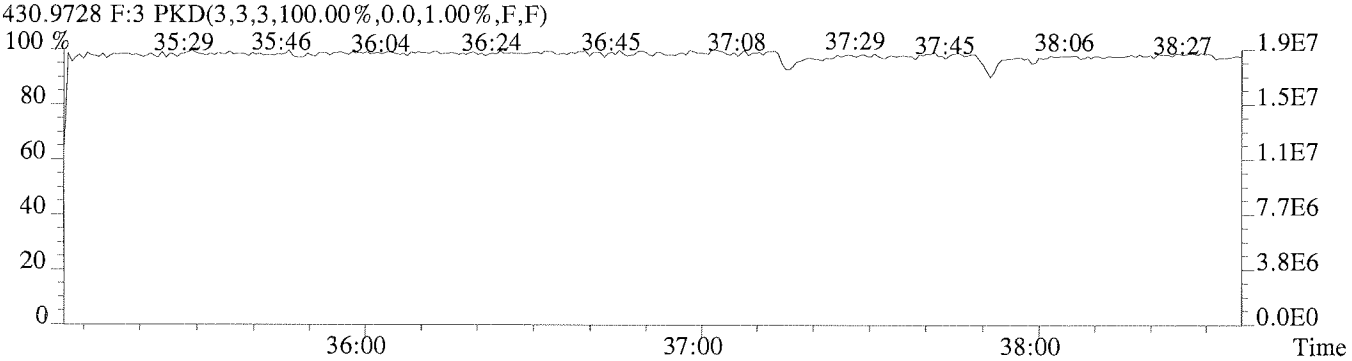
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,88.0,0.40%,F,F)



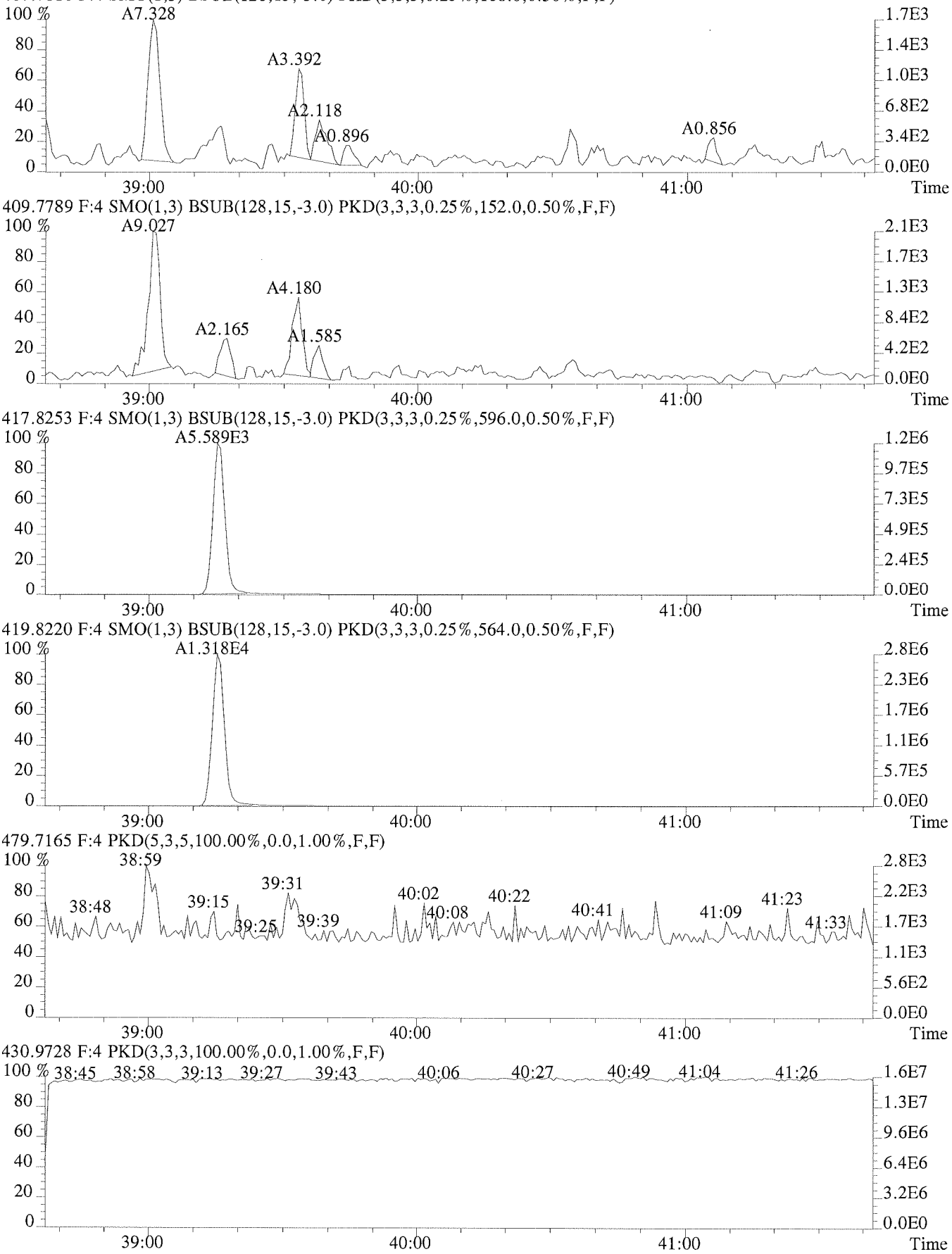
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,184.0,0.40%,F,F)



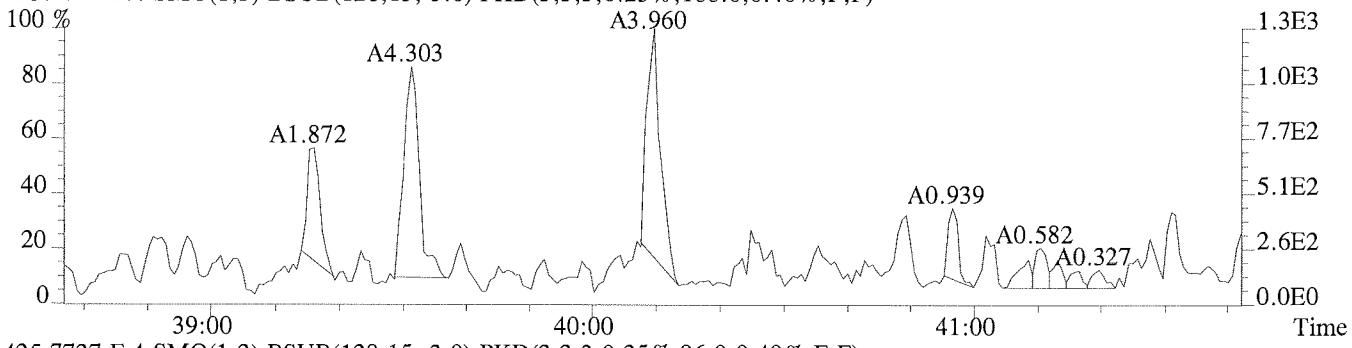
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



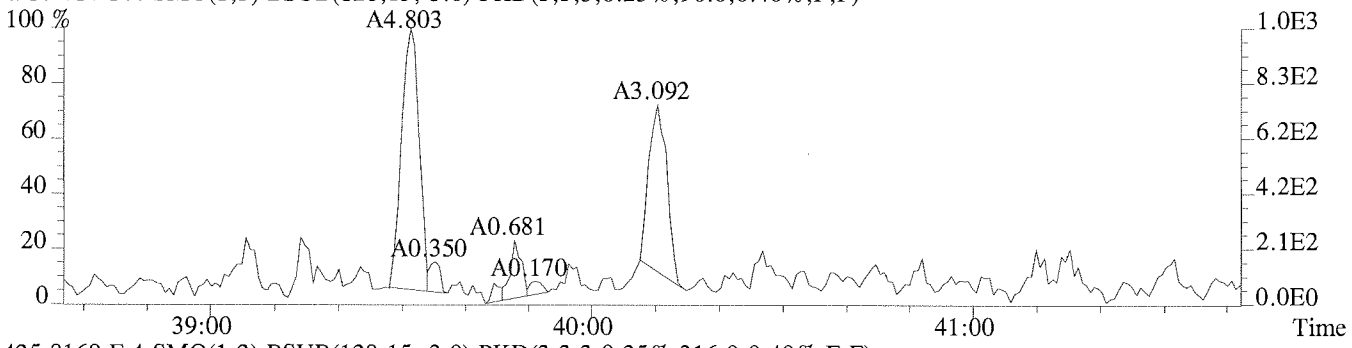
File:P200021 #1-281 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008



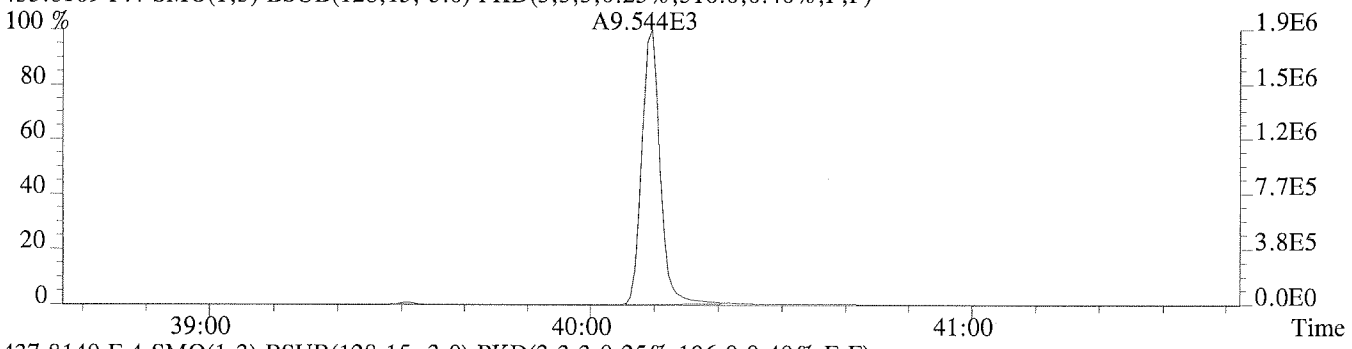
File:P200021 #1-281 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,188.0,0.40%,F,F)



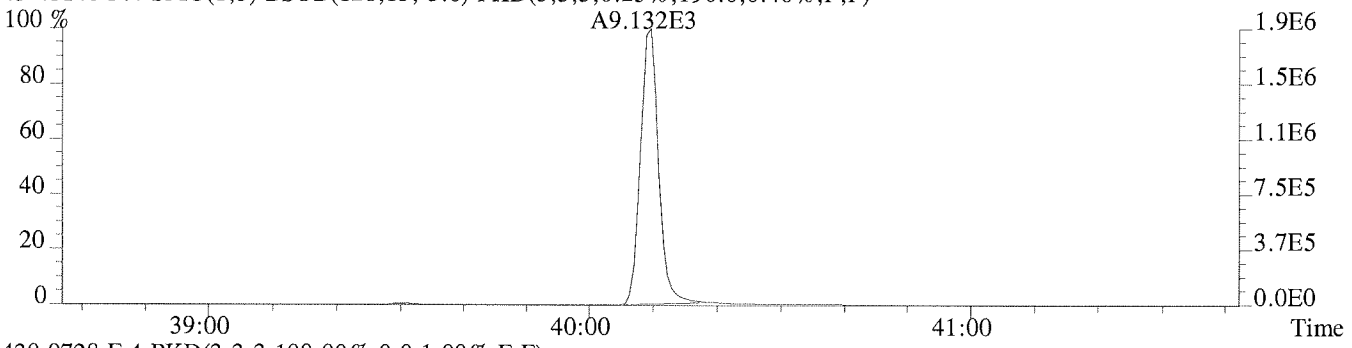
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,96.0,0.40%,F,F)



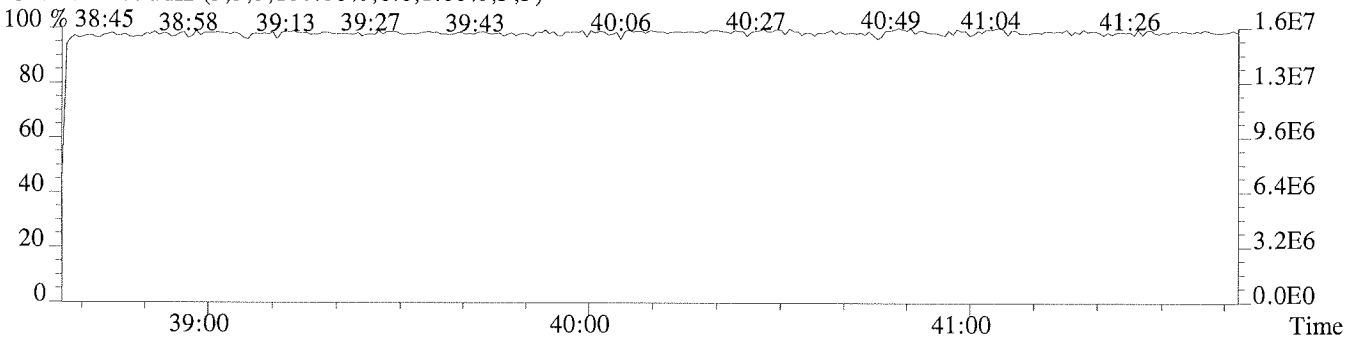
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,316.0,0.40%,F,F)



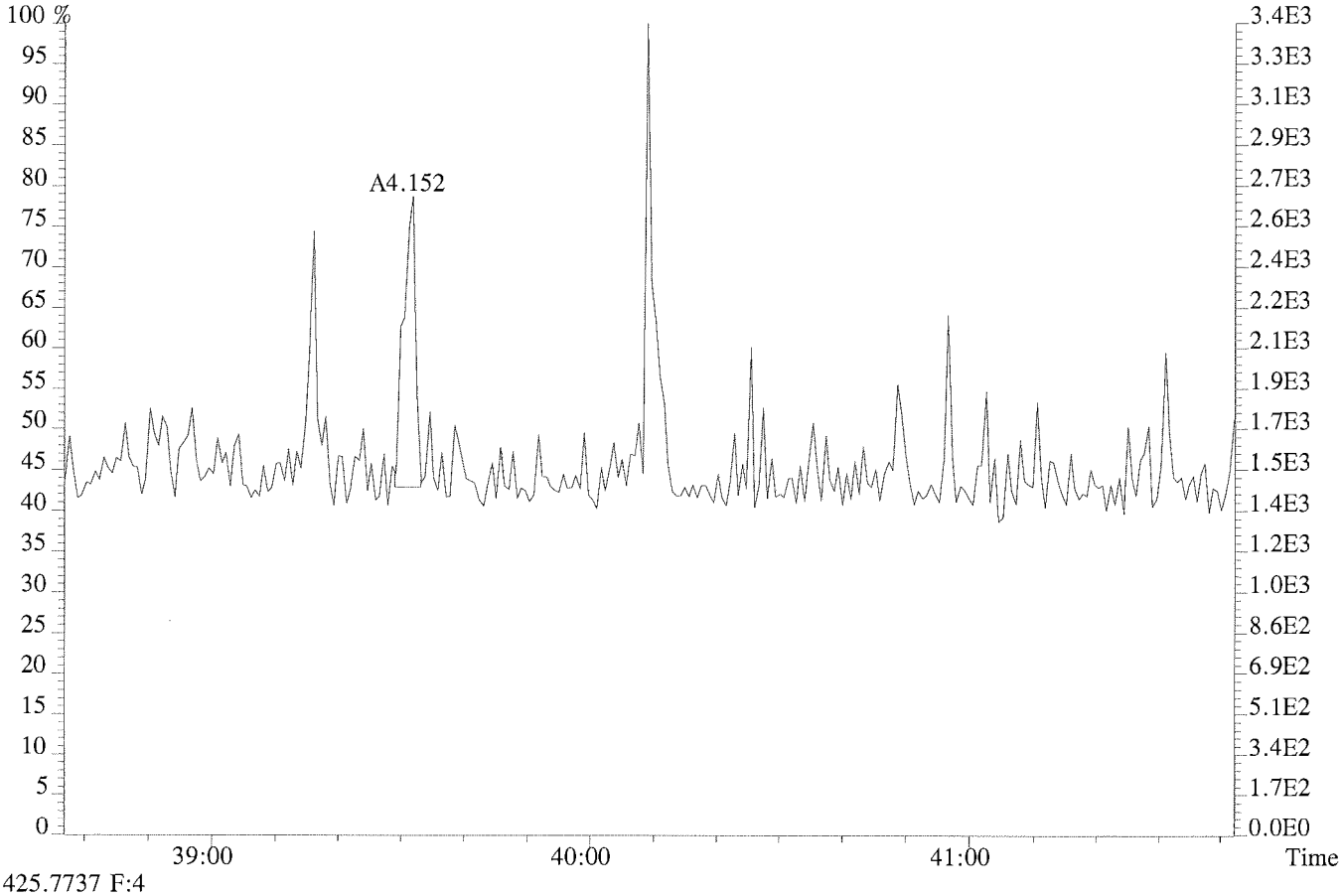
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,196.0,0.40%,F,F)



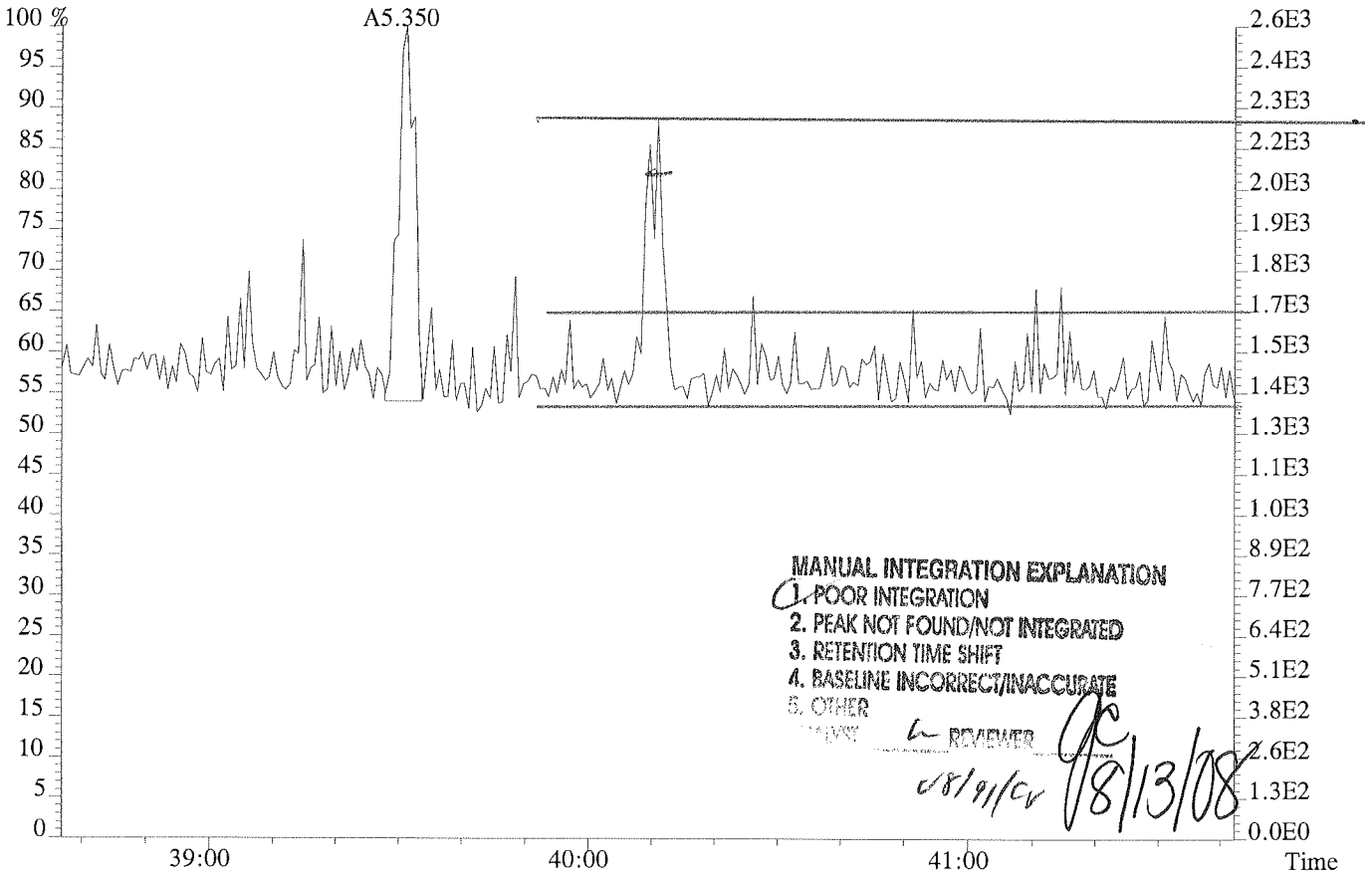
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P200021 #1-281 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008
423.7766 F:4



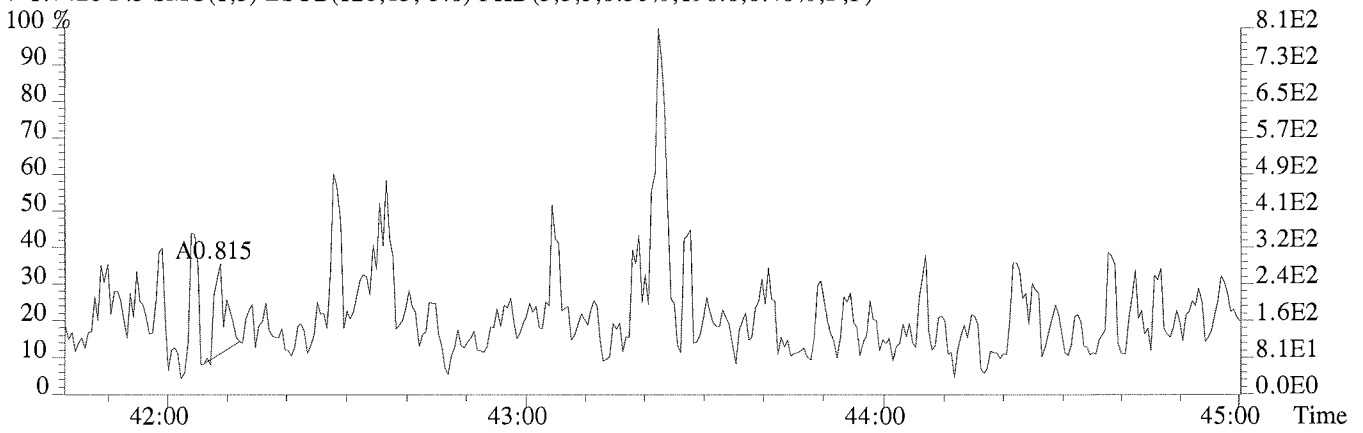
425.7737 F:4



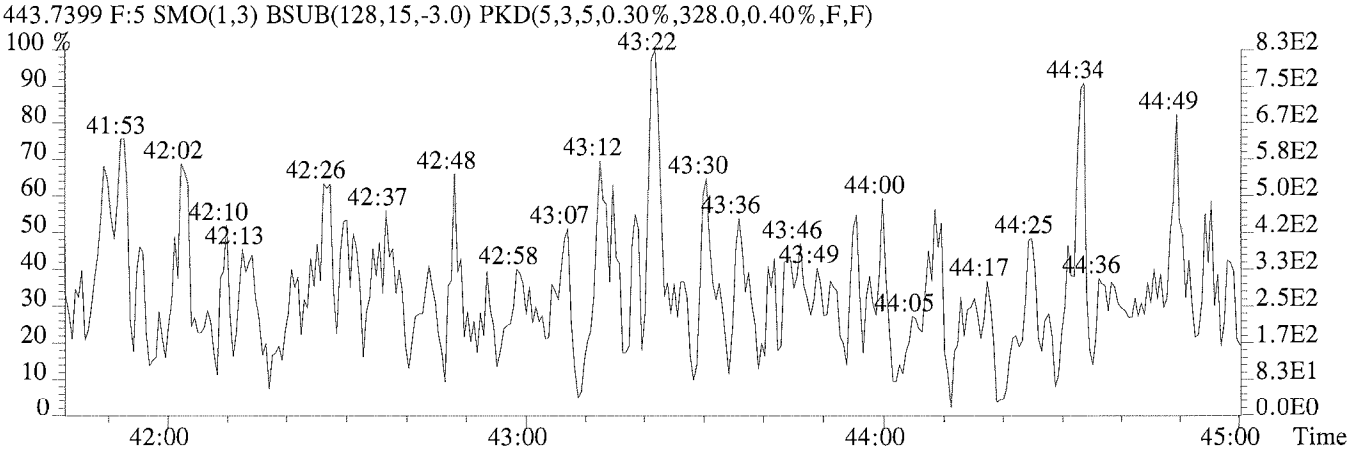
MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
REVIEWER
8/8/11/08
8/13/08

File:P200021 #1-364 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008

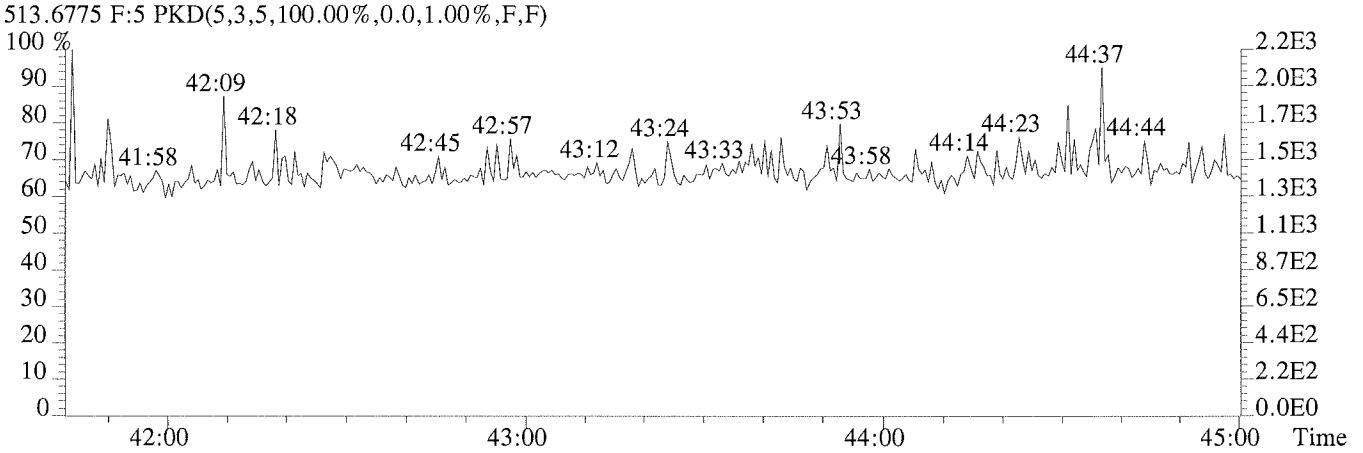
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,196.0,0.40%,F,F)



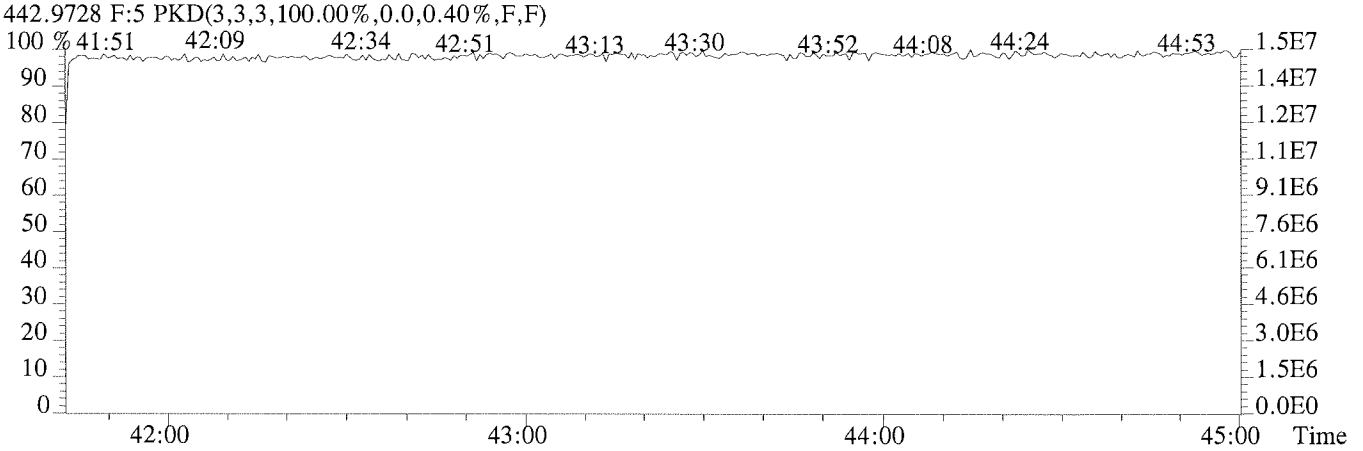
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,328.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

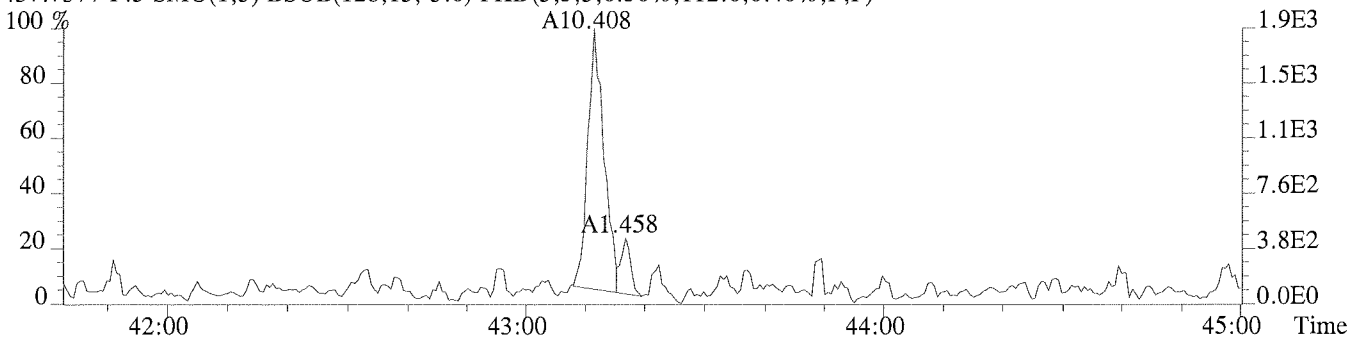


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

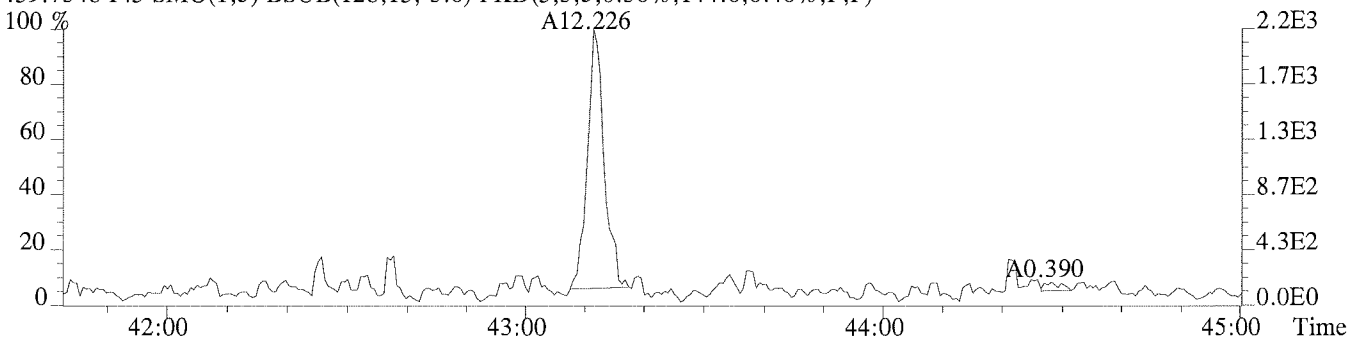


File:P200021 #1-364 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-001 H-EB7172008

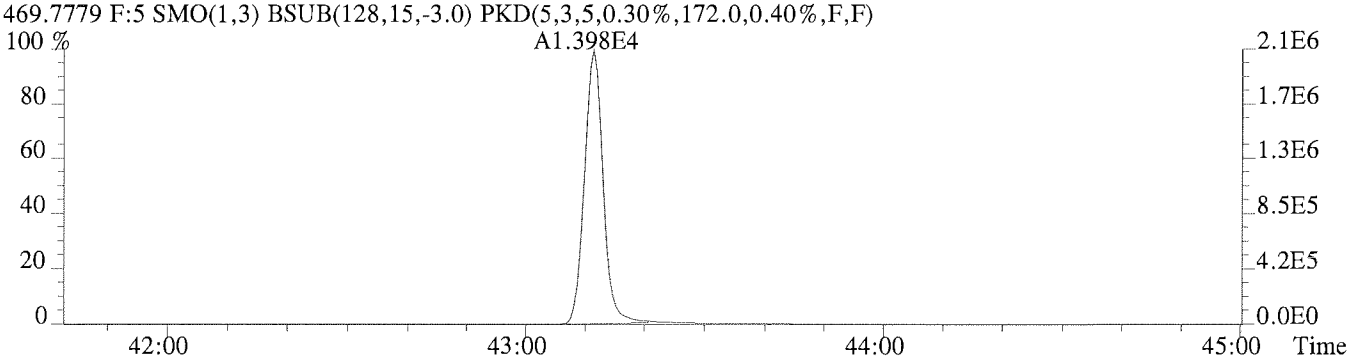
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,112.0,0.40%,F,F)



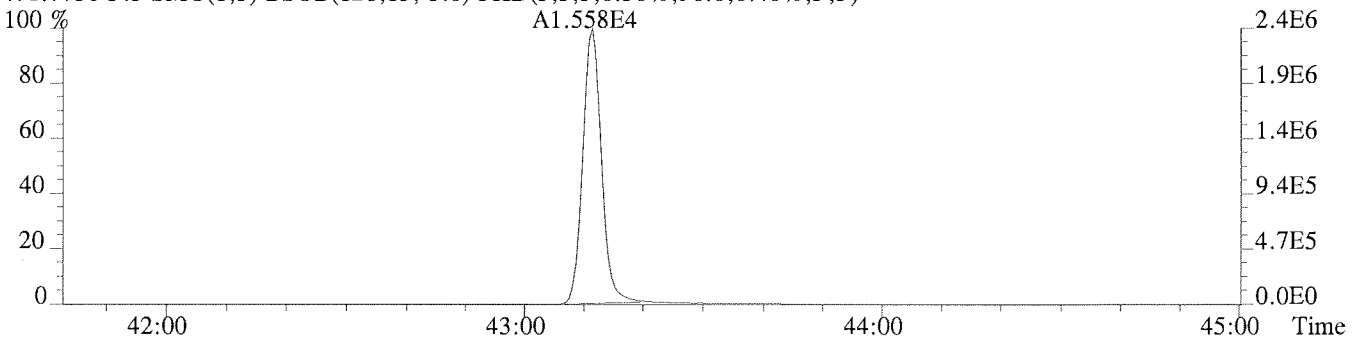
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,144.0,0.40%,F,F)



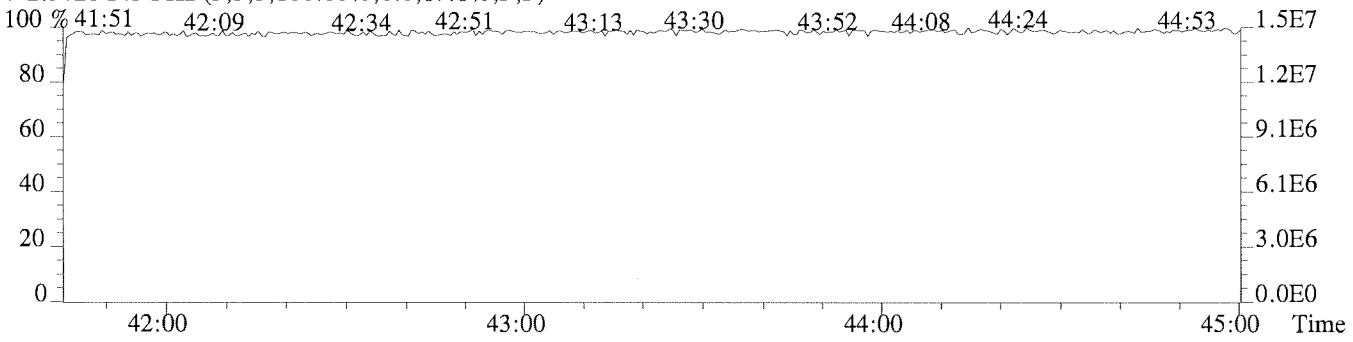
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,172.0,0.40%,F,F)



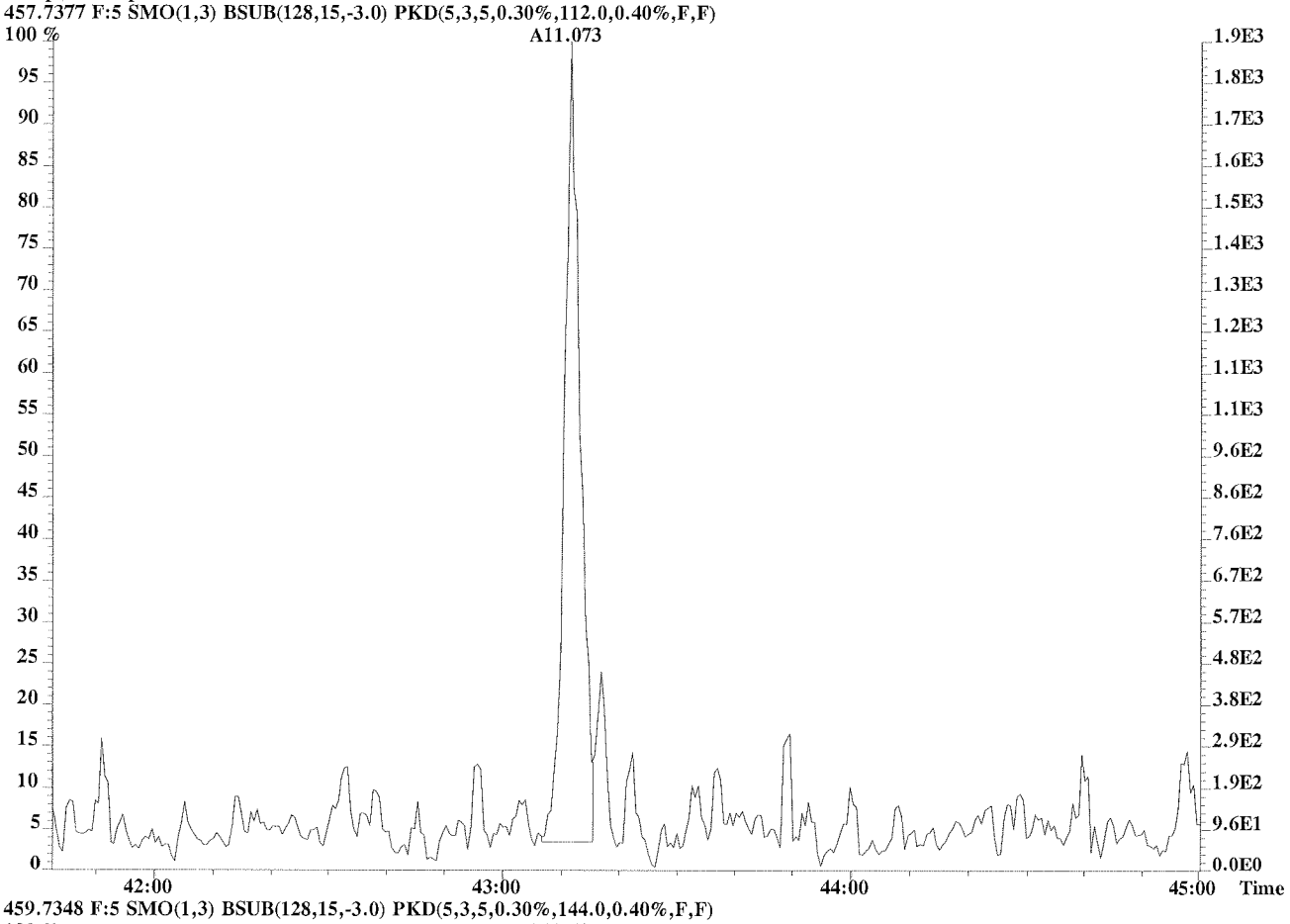
471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,96.0,0.40%,F,F)



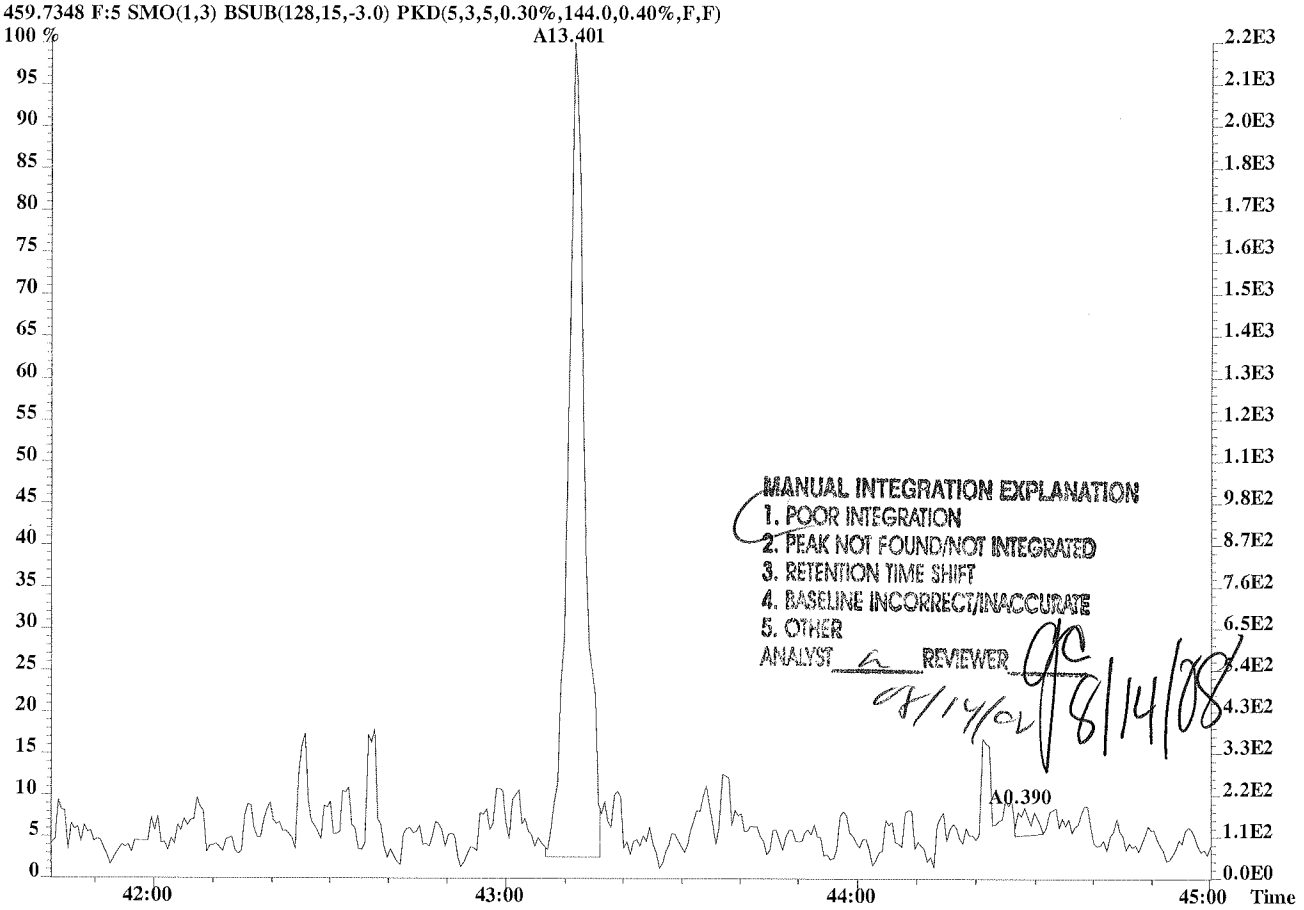
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



File:P200021 #1-364 Acq:31-JUL-2008 11:37:38 Probe EI+ Magnet SIR VG BioTech Mass spectrom
Sample#1 Exp:E0800705-001 H-EB7172008
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,112.0,0.40%,F,F)



459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,144.0,0.40%,F,F)



MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST _____ REVIEWER _____
8/14/08 8/14/08

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
H-T1-2.0

Run #10 Filename P200043 Samp: 1 Inj: 1 Acquired: 4-AUG-08 16:06:26
Processed: 12-AUG-08 08:24:45 LAB. ID: E0800705-002

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	NotFnd	*	*	*	no	no	0.831
2	Unk	1,2,3,7,8-PeCDF	NotFnd	*	*	*	no	no	0.840
3	Unk	2,3,4,7,8-PeCDF	NotFnd	*	*	*	no	no	0.849
4	Unk	1,2,3,4,7,8-HxCDF	NotFnd	*	*	*	no	no	1.085
5	Unk	1,2,3,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.129
6	Unk	2,3,4,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.011
7	Unk	1,2,3,7,8,9-HxCDF	NotFnd	*	*	*	no	no	0.867
8	Unk	1,2,3,4,6,7,8-HpCDF	39:17	1.070e+02	1.176e+02	0.91	yes	yes	1.318
9	Unk	1,2,3,4,7,8,9-HpCDF	NotFnd	*	*	*	no	no	0.966
10	Unk	OCDF	43:22	3.221e+02	3.691e+02	0.87	yes	yes	1.109
11	Unk	2,3,7,8-TCDD	NotFnd	*	*	*	no	no	0.921
12	Unk	1,2,3,7,8-PeCDD	NotFnd	*	*	*	no	no	0.872
13	Unk	1,2,3,4,7,8-HxCDD	NotFnd	*	*	*	no	no	0.934
14	Unk	1,2,3,6,7,8-HxCDD	NotFnd	*	*	*	no	no	1.054
15	Unk	1,2,3,7,8,9-HxCDD	NotFnd	*	*	*	no	no	0.969
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	3.041e+02	2.615e+02	1.16	yes	no	0.883
17	Unk	OCDD	43:12	2.786e+03	3.169e+03	0.88	yes	no	0.964
18	IS	13C-2,3,7,8-TCDF	28:35	5.187e+04	6.678e+04	0.78	yes	no	1.421
19	IS	13C-1,2,3,7,8-PeCDF	32:58	8.692e+04	5.510e+04	1.58	yes	no	1.262
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	9.777e+04	1.891e+05	0.52	yes	no	1.279
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	6.646e+04	1.513e+05	0.44	yes	no	0.901
22	IS	13C-2,3,7,8-TCDD	29:26	4.185e+04	5.292e+04	0.79	yes	no	1.051
23	IS	13C-1,2,3,7,8-PeCDD	34:04	6.931e+04	4.366e+04	1.59	yes	no	0.868
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	1.572e+05	1.260e+05	1.25	yes	no	1.000
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	1.210e+05	1.162e+05	1.04	yes	no	0.831
26	IS	13C-OCDD	43:12	1.919e+05	2.135e+05	0.90	yes	no	0.729
27	RS/RT	13C-1,2,3,4-TCDD	29:13	5.708e+04	7.199e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	8.344e+04	6.575e+04	1.27	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:27	9.264e+04					0.981
					SUM AREA				
30	Tot	Total Tetra-Furans	NotFnd		*	*	no		0.831
31	Tot	Total Tetra-Dioxins	NotFnd		*	*	no		0.921
32	Tot	Total Penta-Furans	NotFnd		*	*	no		0.845
33	Tot	Total Penta-Dioxins	NotFnd		*	*	no		0.872
34	Tot	Total Hexa-Furans	NotFnd		*	*	no		1.023
35	Tot	Total Hexa-Dioxins	NotFnd		*	*	no		0.985
36	Tot	Total Hepta-Furans	39:17		5.207e+02	0.91	yes		1.142
37	Tot	Total Hepta-Dioxins	40:10		5.656e+02	1.16	yes		0.883

---Sample Calculation---

$$OCDD = \frac{(2.786e+03 + 3.169e+03) \times 5000\ pg}{(1.919e+05 + 2.135e+05) \times (10.305\ g) \times (100 - 81.2)/100 \times 0.96} = 9.143\ \frac{ng}{Kg}$$

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LL
08/13/08

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary H-T1-2.0

Run #10 Filename P200043 #1 Samp: 1 Inj: 1 Acquired: 4-AUG-08 16:06:26

Processed: 12-AUG-08 08:24:45 LAB. ID: E0800705-002

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	*	8.88e+02	*	*	2.50e+03	*
2	1,2,3,7,8-PeCDF	*	7.64e+02	*	*	1.56e+03	*
3	2,3,4,7,8-PeCDF	*	7.64e+02	*	*	1.56e+03	*
4	1,2,3,4,7,8-HxCDF	*	1.55e+03	*	*	1.10e+03	*
5	1,2,3,6,7,8-HxCDF	*	1.55e+03	*	*	1.10e+03	*
6	2,3,4,6,7,8-HxCDF	*	1.55e+03	*	*	1.10e+03	*
7	1,2,3,7,8,9-HxCDF	*	1.55e+03	*	*	1.10e+03	*
8	1,2,3,4,6,7,8-HpCDF	2.23e+04	1.45e+03	1.5e+01	2.39e+04	7.96e+02	3.0e+01
9	1,2,3,4,7,8,9-HpCDF	*	1.45e+03	*	*	7.96e+02	*
10	OCDF	4.62e+04	1.47e+03	3.1e+01	5.62e+04	2.39e+03	2.4e+01
11	2,3,7,8-TCDD	*	2.50e+03	*	*	1.01e+03	*
12	1,2,3,7,8-PeCDD	*	1.87e+03	*	*	5.72e+02	*
13	1,2,3,4,7,8-HxCDD	*	9.68e+02	*	*	9.68e+02	*
14	1,2,3,6,7,8-HxCDD	*	9.68e+02	*	*	9.68e+02	*
15	1,2,3,7,8,9-HxCDD	*	9.68e+02	*	*	9.68e+02	*
16	1,2,3,4,6,7,8-HpCDD	6.06e+04	1.87e+03	3.2e+01	5.65e+04	1.36e+03	4.1e+01
17	OCDD	4.46e+05	1.00e+03	4.4e+02	4.95e+05	1.29e+03	3.8e+02
18	13C-2,3,7,8-TCDF	8.91e+06	5.28e+03	1.7e+03	1.14e+07	4.28e+03	2.7e+03
19	13C-1,2,3,7,8-PeCDF	1.70e+07	1.04e+03	1.6e+04	1.07e+07	1.23e+03	8.7e+03
20	13C-1,2,3,4,7,8-HxCDF	2.20e+07	9.12e+02	2.4e+04	4.24e+07	2.71e+03	1.6e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.46e+07	8.26e+03	1.8e+03	3.38e+07	5.06e+03	6.7e+03
22	13C-2,3,7,8-TCDD	7.41e+06	6.94e+03	1.1e+03	9.37e+06	1.36e+03	6.9e+03
23	13C-1,2,3,7,8-PeCDD	1.42e+07	2.27e+03	6.2e+03	8.90e+06	1.58e+03	5.6e+03
24	13C-1,2,3,6,7,8-HxCDD	3.58e+07	1.18e+03	3.0e+04	2.88e+07	1.53e+03	1.9e+04
25	13C-1,2,3,4,6,7,8-HpCDD	2.55e+07	1.99e+03	1.3e+04	2.42e+07	1.72e+03	1.4e+04
26	13C-OCDD	3.03e+07	1.01e+03	3.0e+04	3.39e+07	9.12e+02	3.7e+04
27	13C-1,2,3,4-TCDD	1.02e+07	6.94e+03	1.5e+03	1.29e+07	1.36e+03	9.4e+03
28	13C-1,2,3,7,8,9-HxCDD	1.87e+07	1.18e+03	1.6e+04	1.48e+07	1.53e+03	9.7e+03
29	37Cl-2,3,7,8-TCDD	1.68e+07	6.16e+02	2.7e+04			

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Columbia Analytical Services, Inc.
Peak List Summary

CLIENT ID.
H-T1-2.0

Entry: 36 Totals Name: Total Hepta-Furans

Run: 10 File: P200043 Sample:1 Injection:1 Function:4

Acquired: 4-AUG-08 16:06:26 Processed: 12-AUG-08 08:24:45

#	RT	Resp	Mass:407.782 Resp	409.779 Resp Ratio	Response: Meet	Tot Resp	Name	Mod?
1	39:17	1.07e+02	1.18e+02	0.91	yes	2.25e+02	1,2,3,4,6,7,8-HpCDF	y
2	39:38	1.47e+02	1.49e+02	0.98	yes	2.96e+02		y

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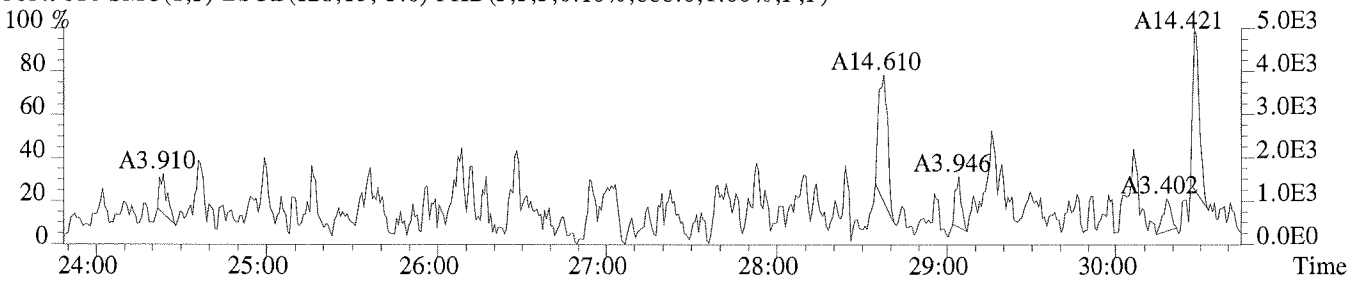
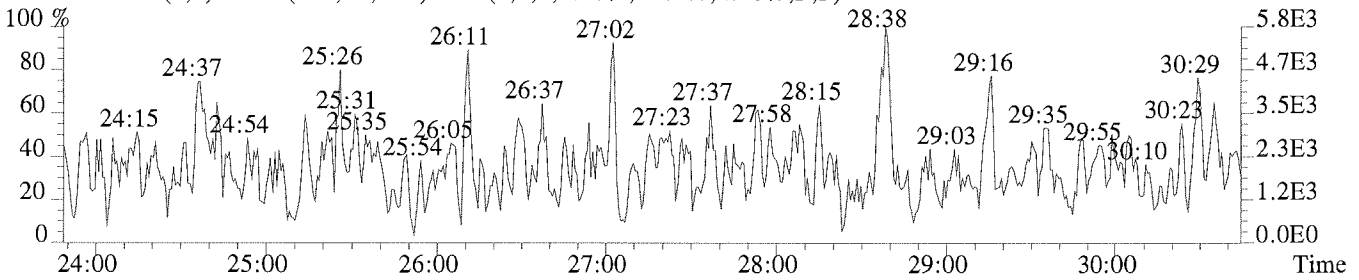
File:P200043 #1-578 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0

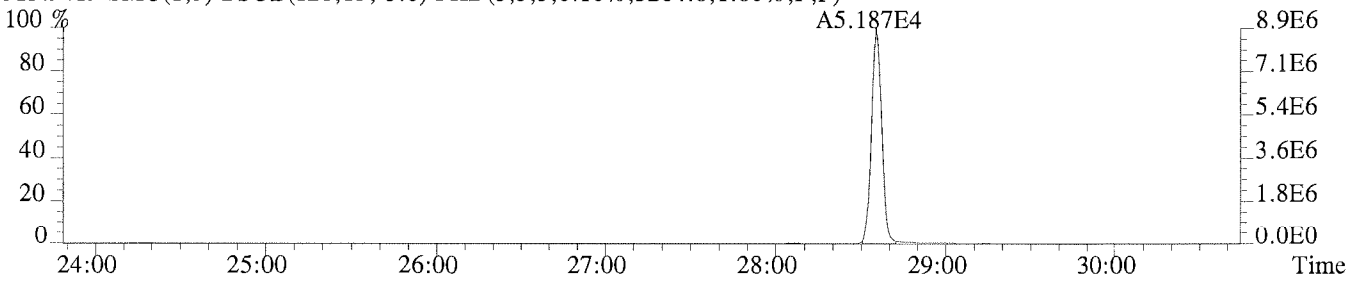
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,888.0,1.00%,F,F)



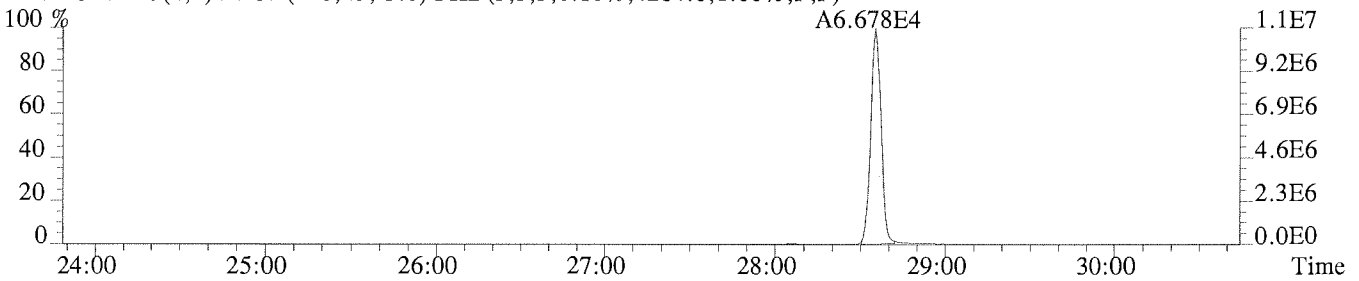
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2504.0,1.00%,F,F)



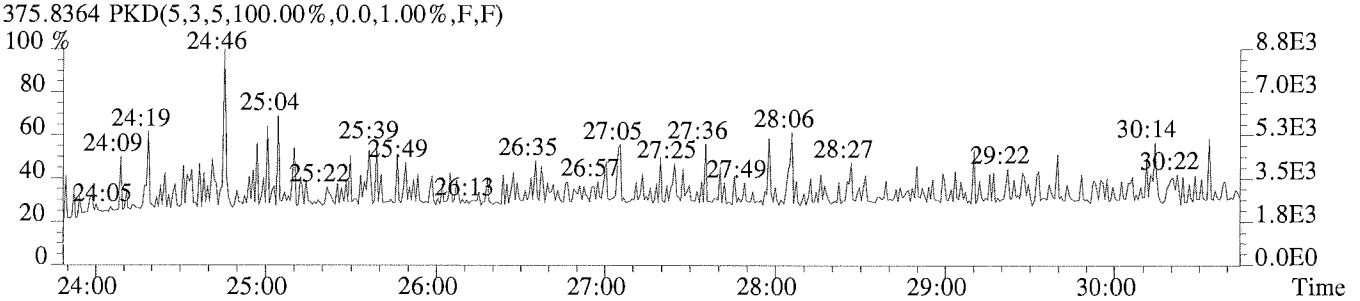
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5284.0,1.00%,F,F)



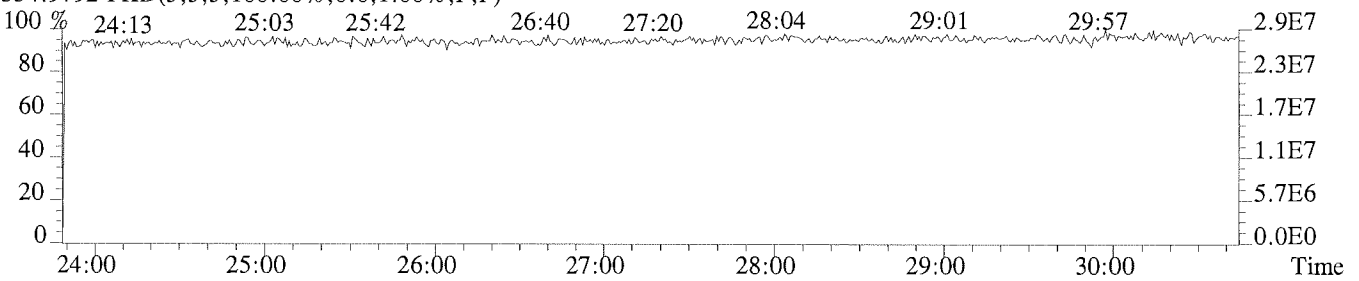
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,4284.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

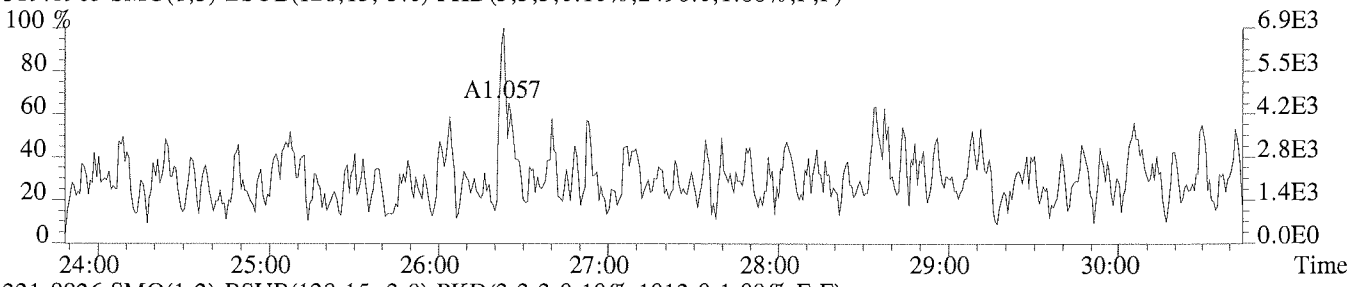


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

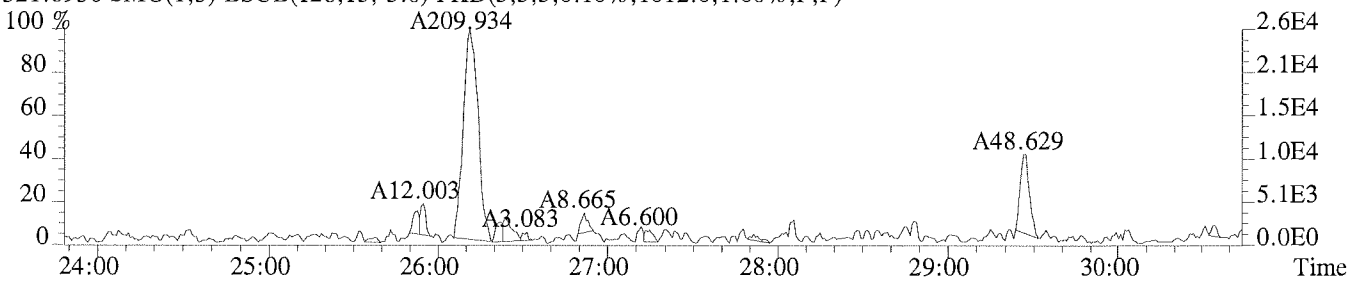


File:P200043 #1-578 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spectf
Sample#1 Exp:E0800705-002 H-TI-2.0

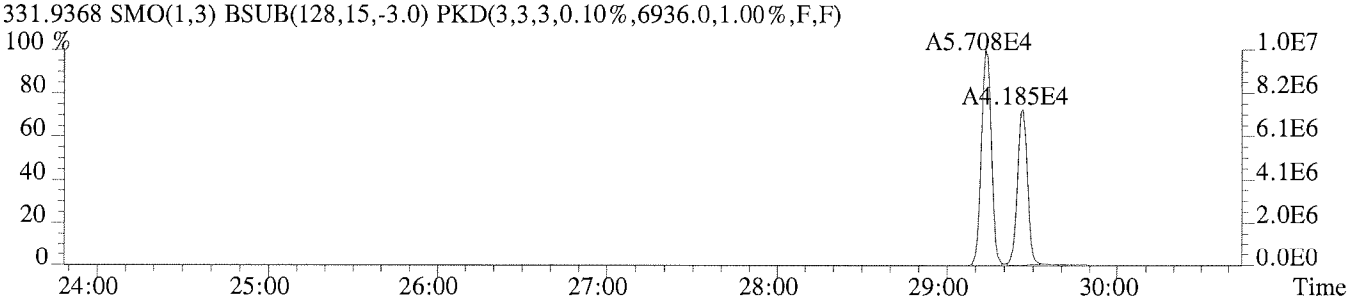
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2496.0,1.00%,F,F)



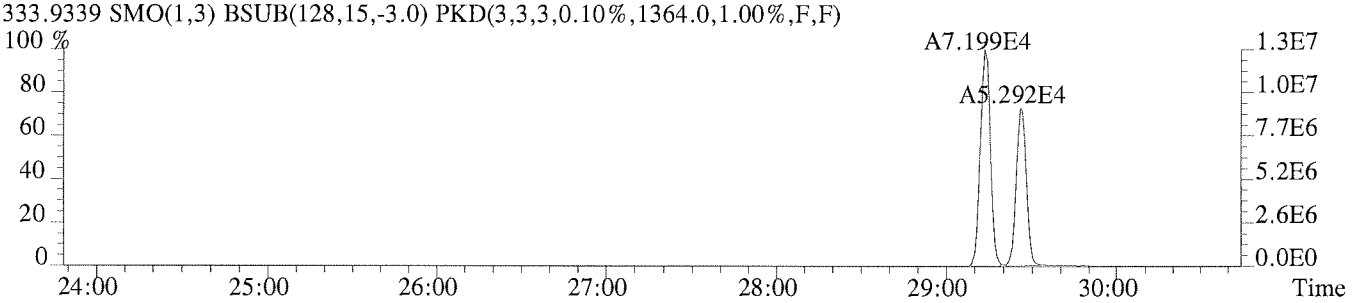
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1012.0,1.00%,F,F)



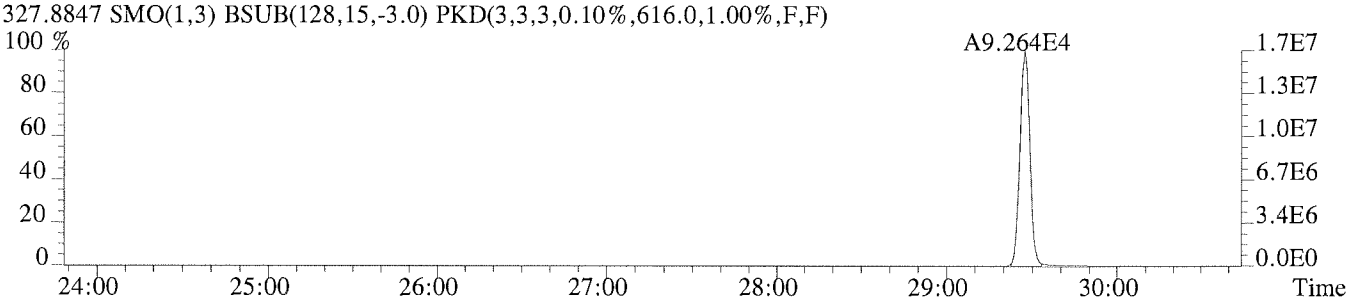
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,6936.0,1.00%,F,F)



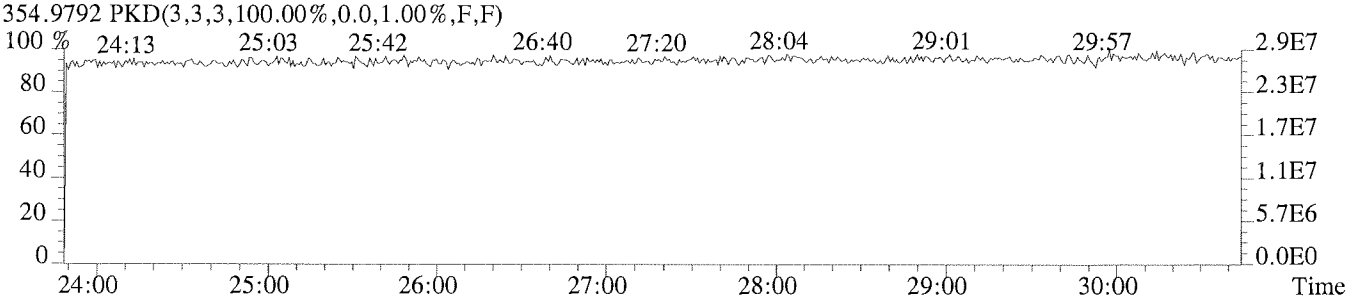
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1364.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,616.0,1.00%,F,F)

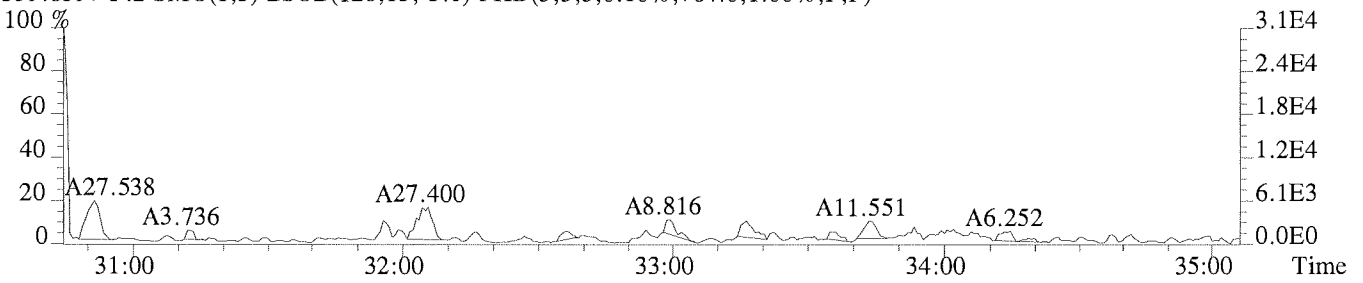


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

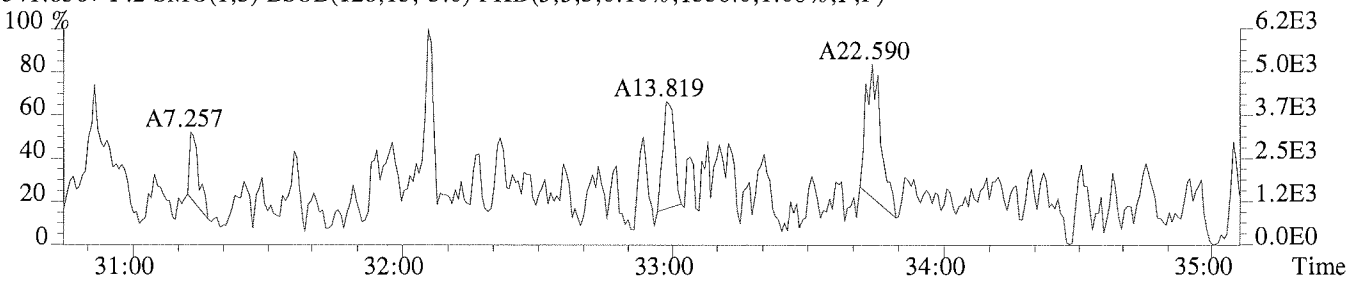


File:P200043 #1-396 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0

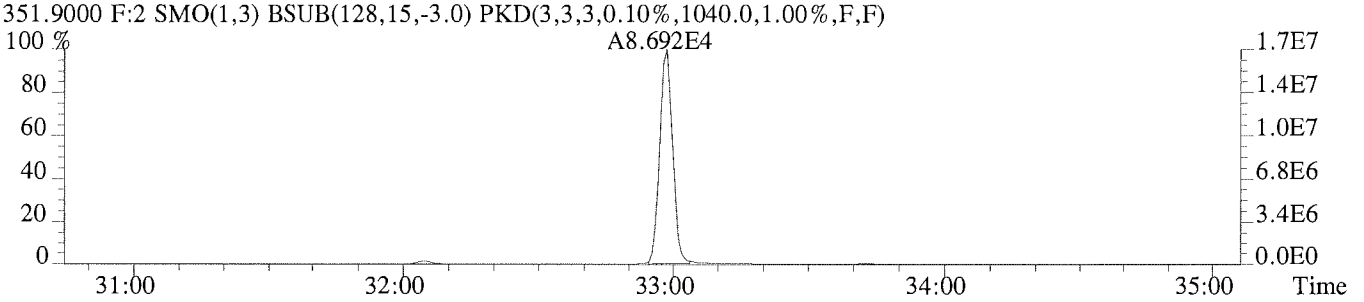
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,764.0,1.00%,F,F)



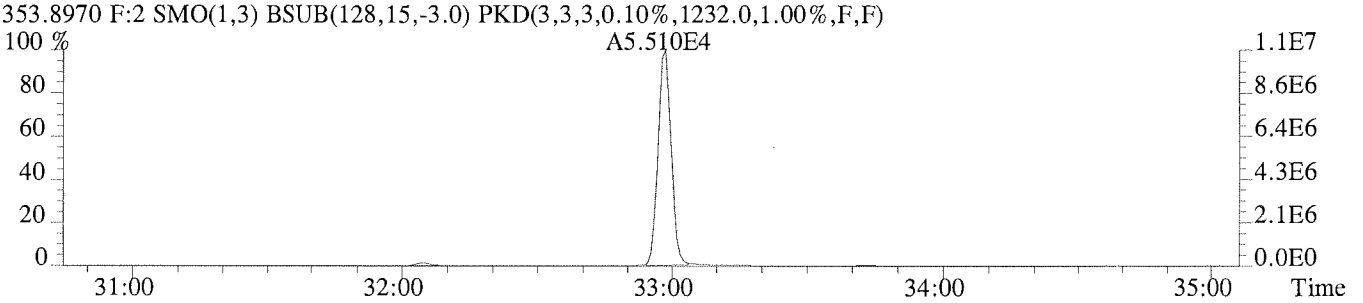
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1556.0,1.00%,F,F)



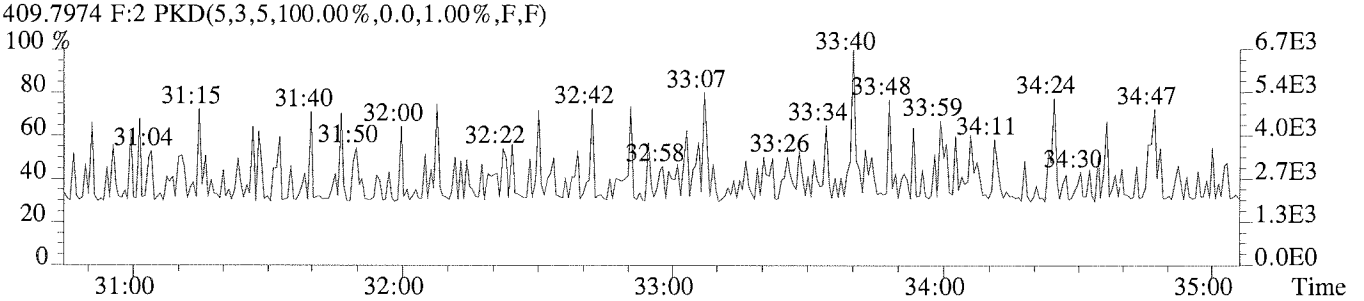
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1040.0,1.00%,F,F)



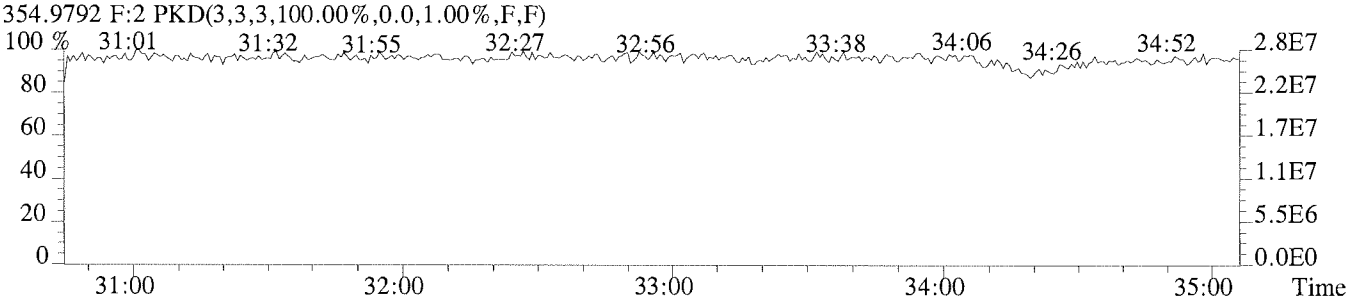
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1232.0,1.00%,F,F)



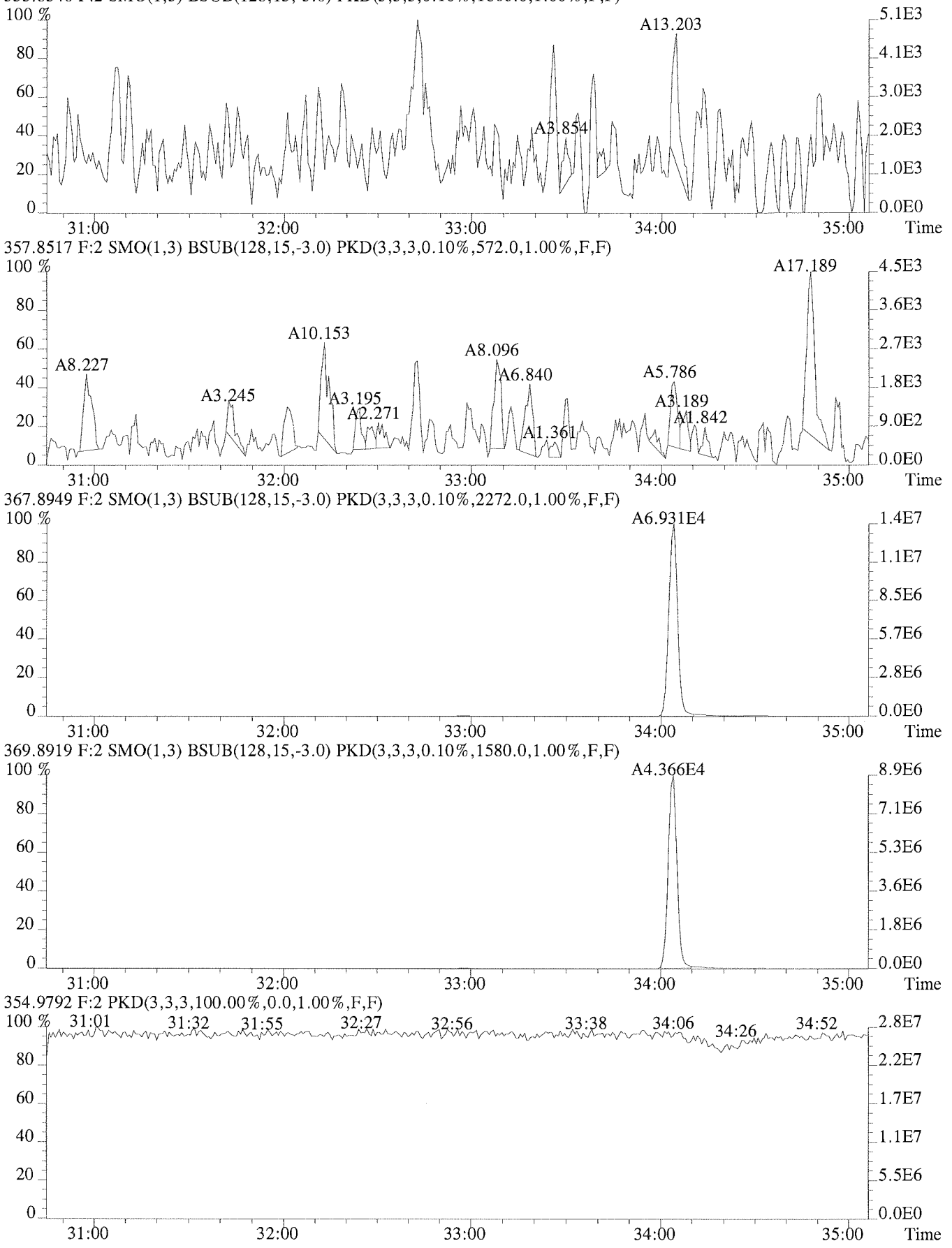
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

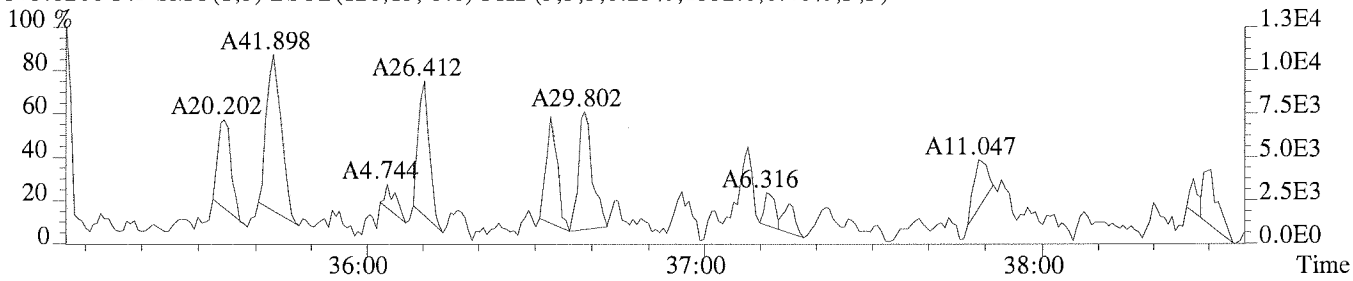


File:P200043 #1-396 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0

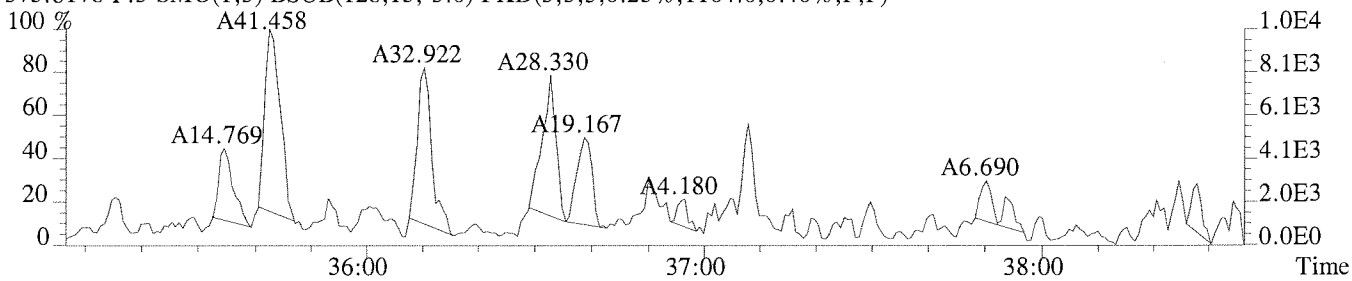


File:P200043 #1-318 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0

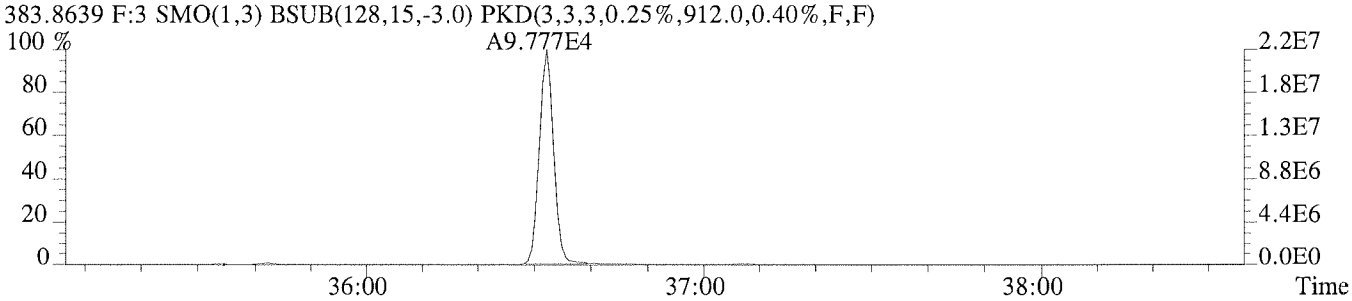
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1552.0,0.40%,F,F)



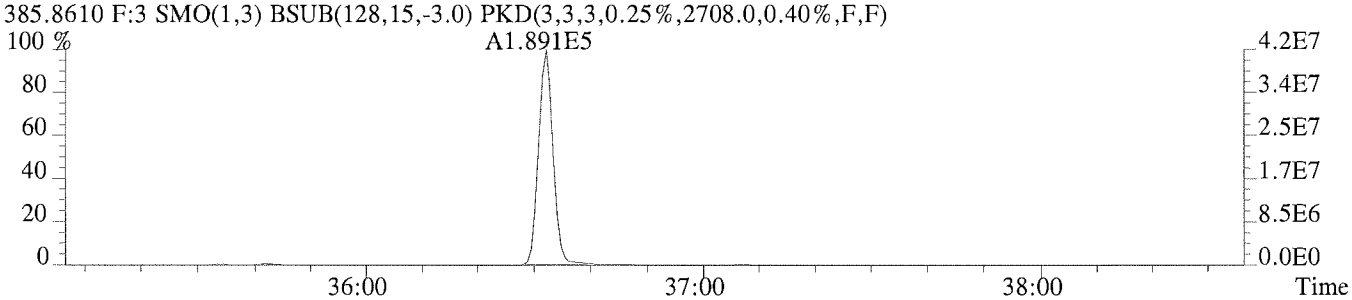
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1104.0,0.40%,F,F)



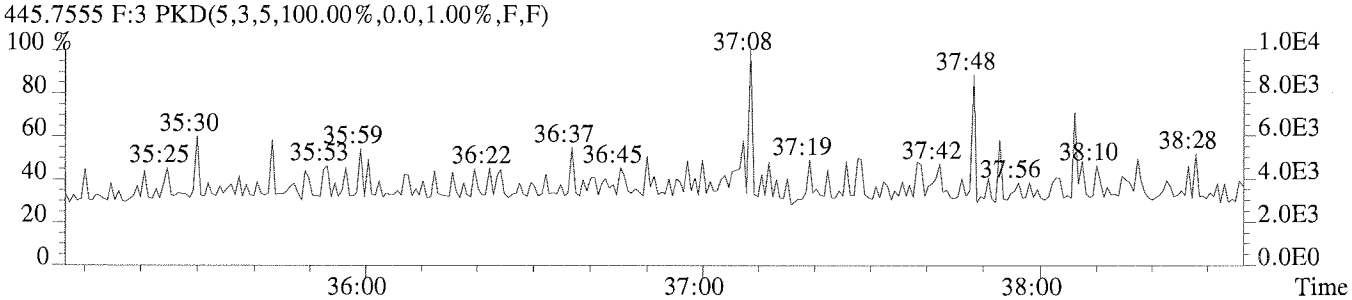
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,912.0,0.40%,F,F)



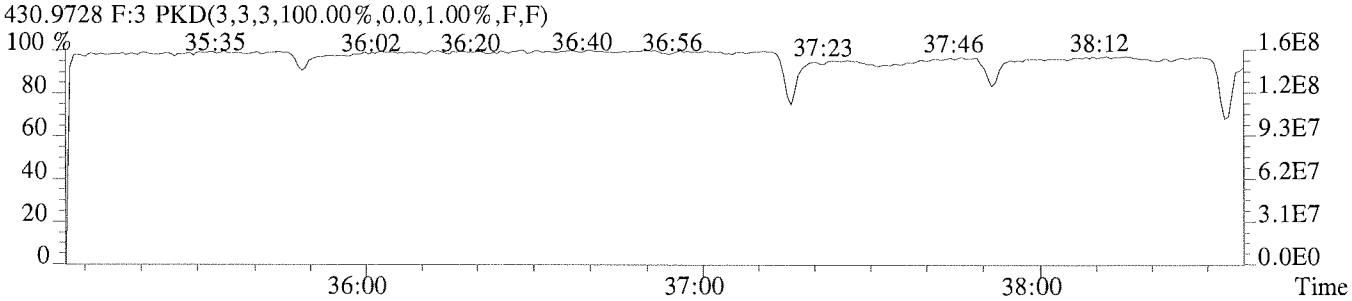
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2708.0,0.40%,F,F)



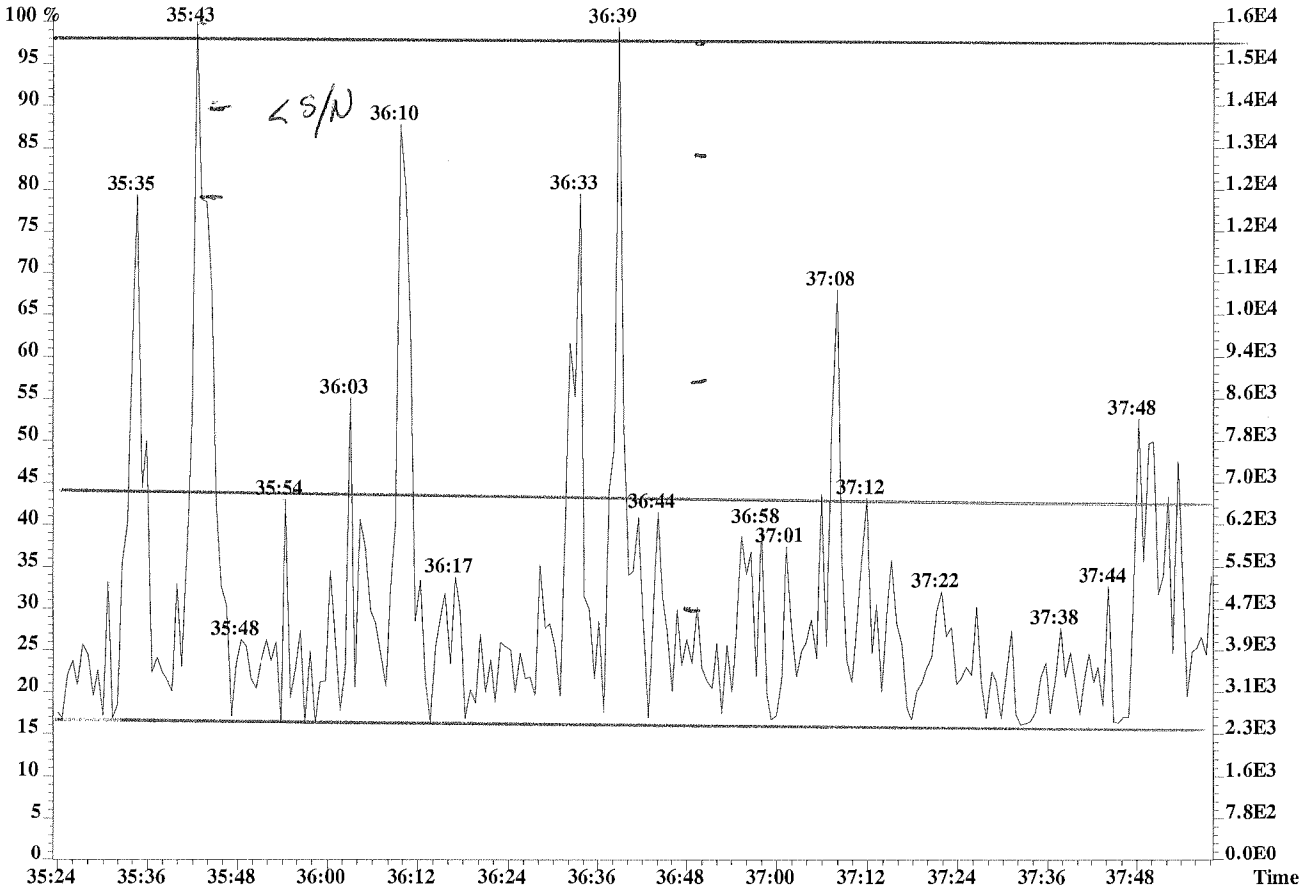
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



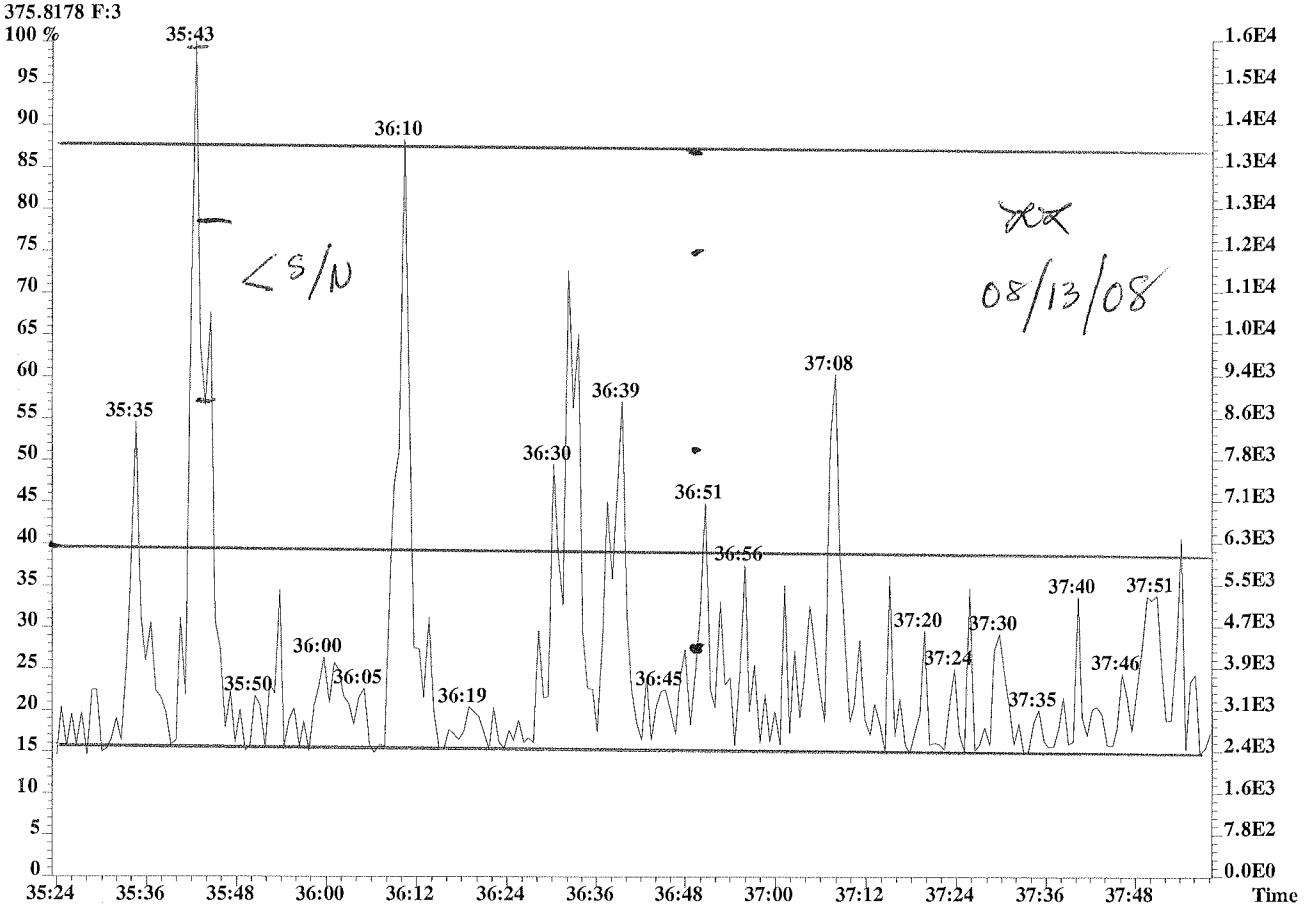
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



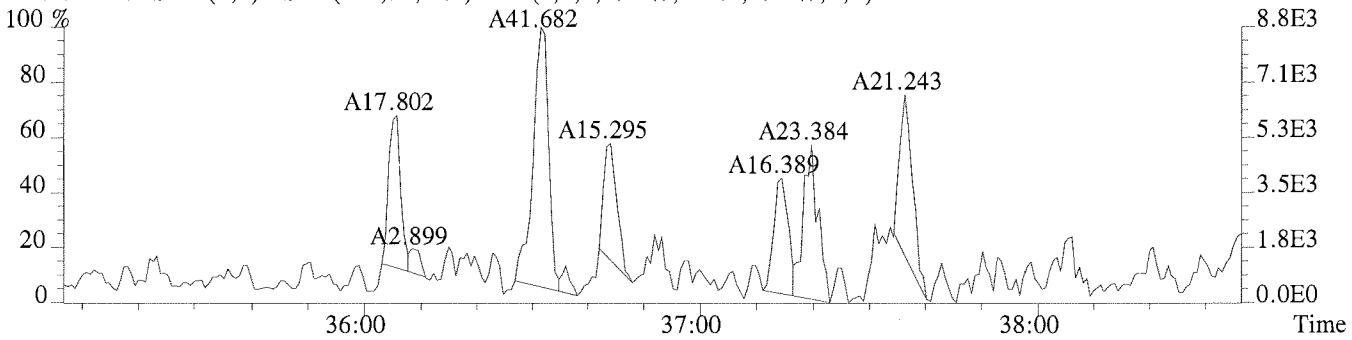
File:P200043 #1-318 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spectrom
Sample#1 Exp:E0800705-002 H-TI-2.0
373.8208 F:3



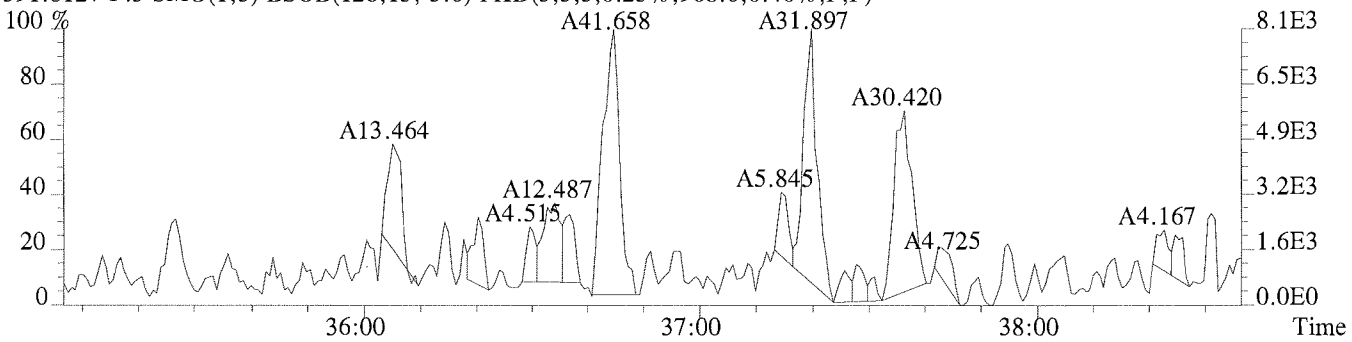
375.8178 F:3



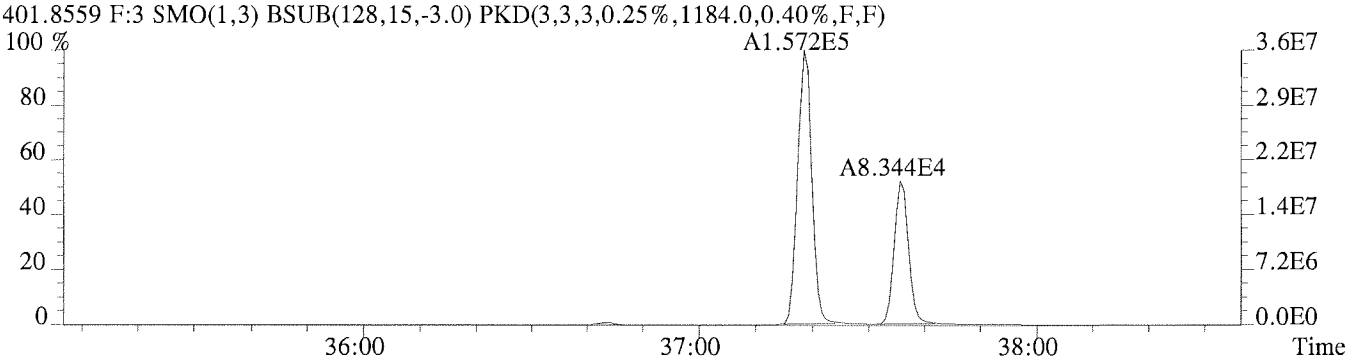
File:P200043 #1-318 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,968.0,0.40%,F,F)



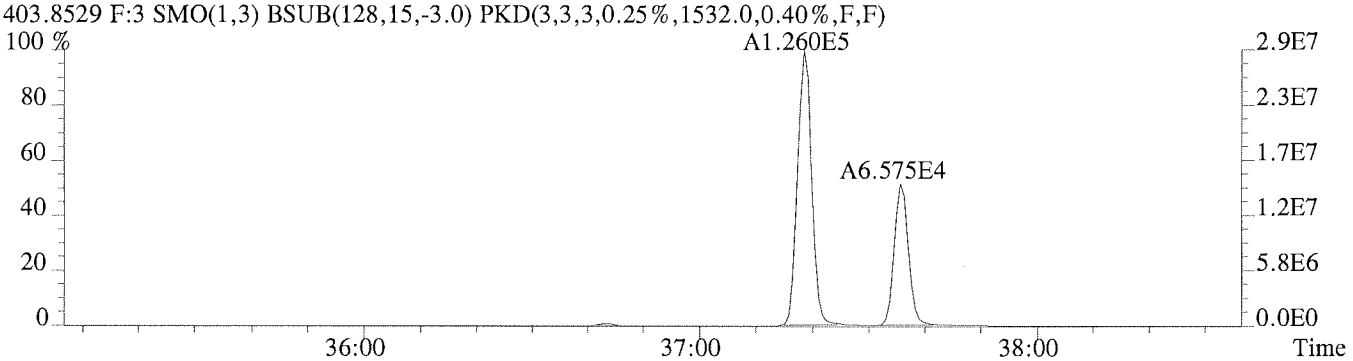
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,968.0,0.40%,F,F)



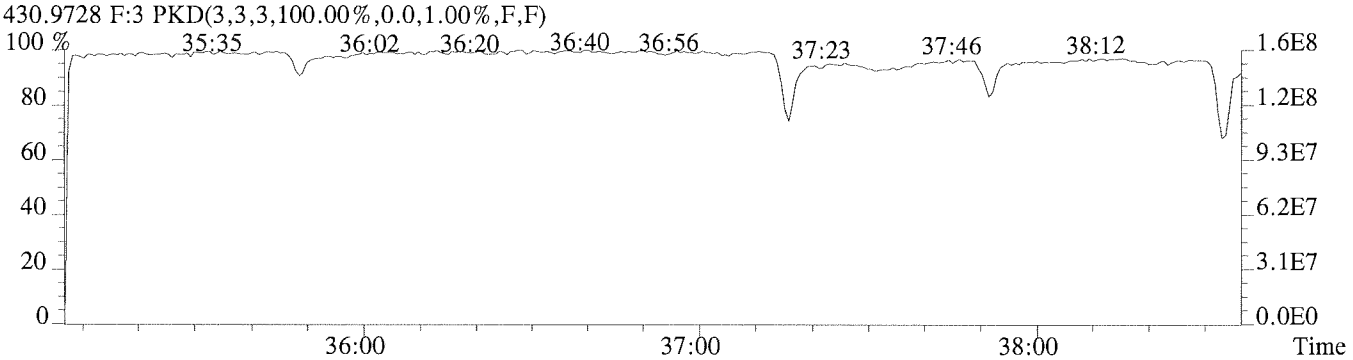
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1184.0,0.40%,F,F)



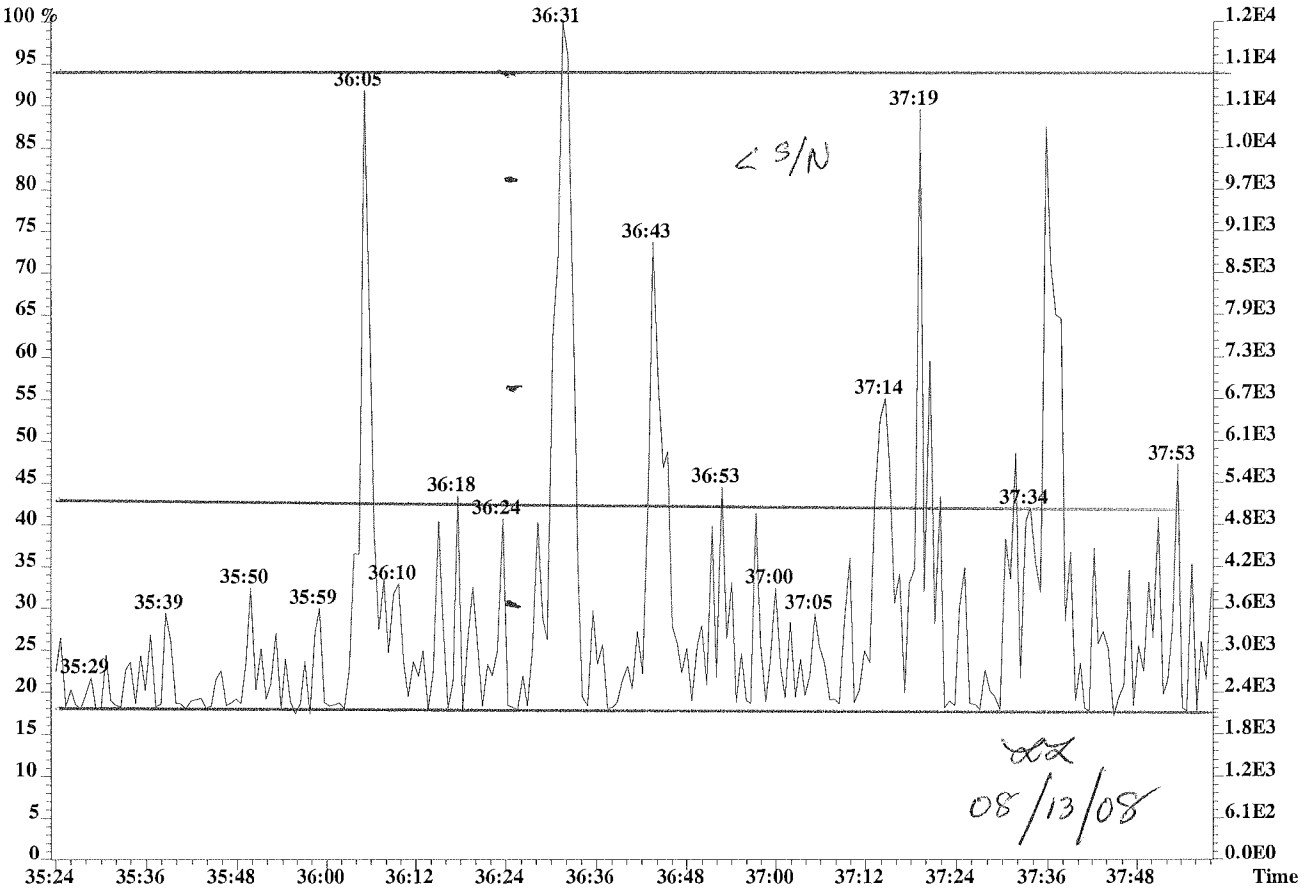
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1532.0,0.40%,F,F)



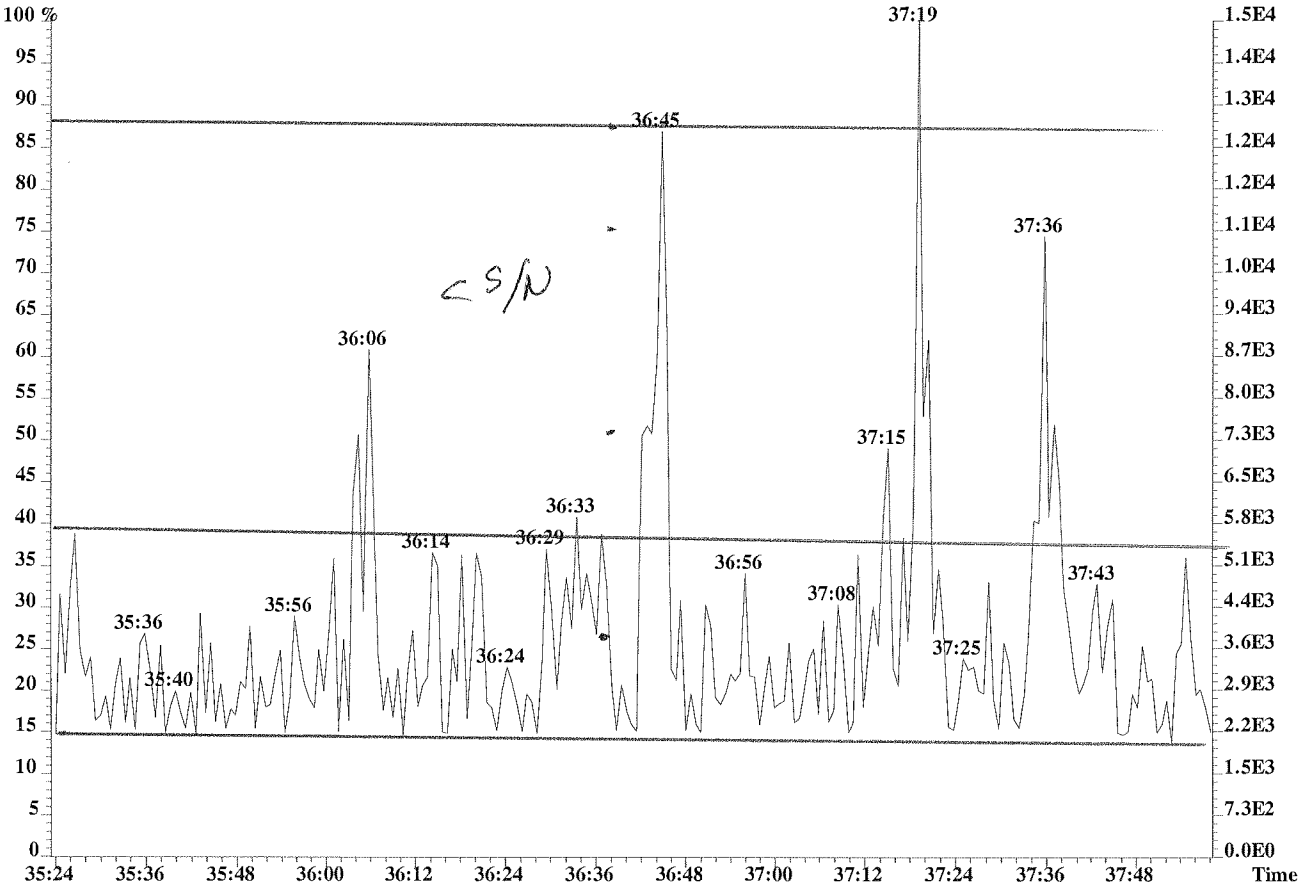
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P200043 #1-318 Acq: 4-AUG-2008 16:06:26 Probe EI+ Maguet SIR VG BioTech Mass spectrom
Sample#1 Exp:E0800705-002 H-TI-2.0
389.8157 F:3

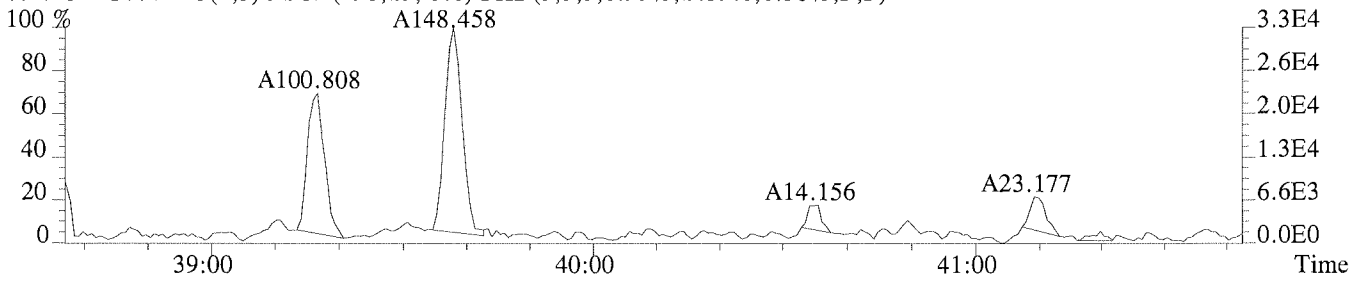


391.8127 F:3

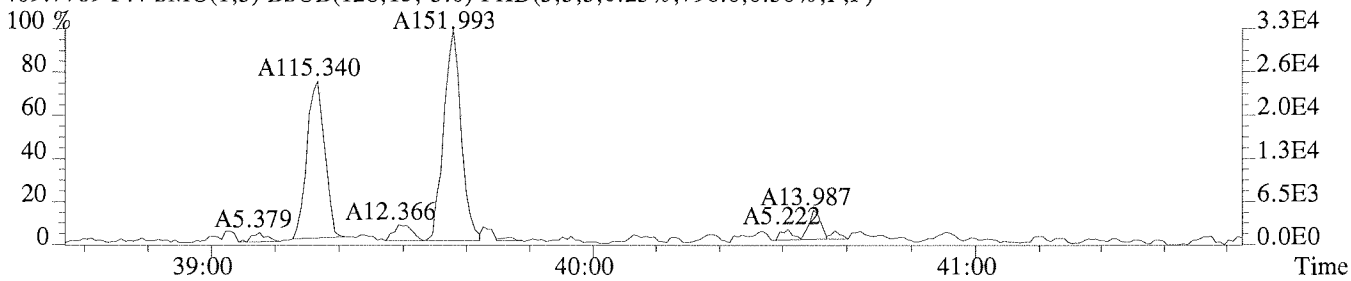


File:P200043 #1-281 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0

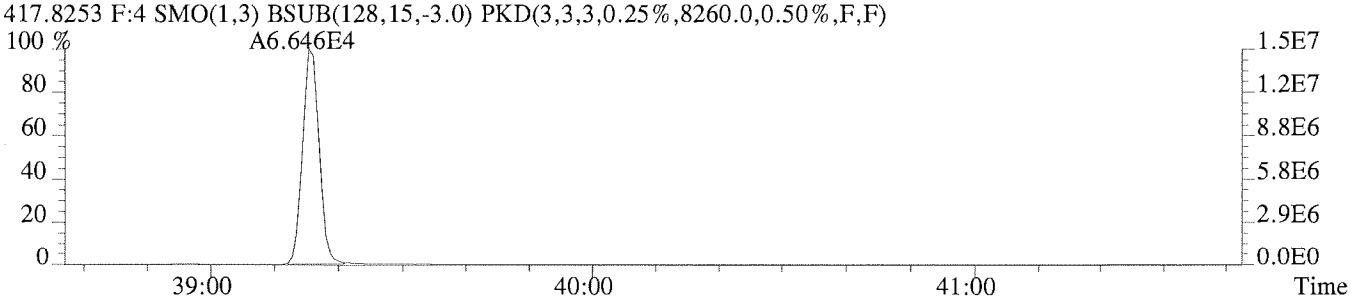
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1452.0,0.50%,F,F)



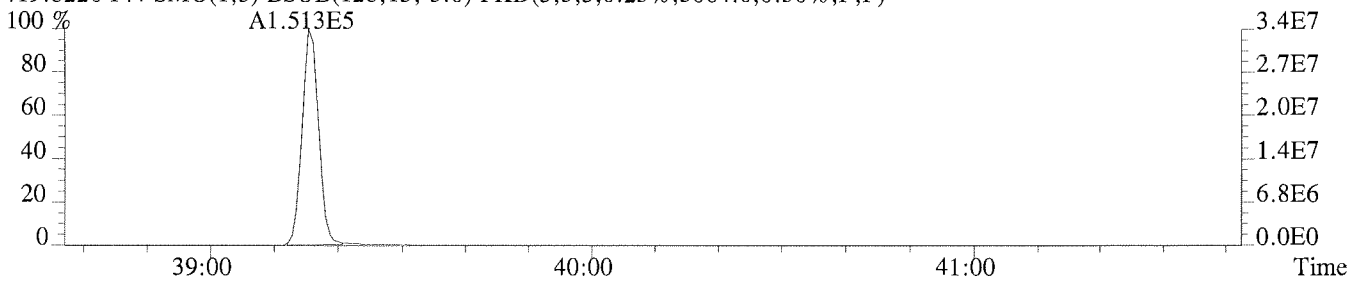
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,796.0,0.50%,F,F)



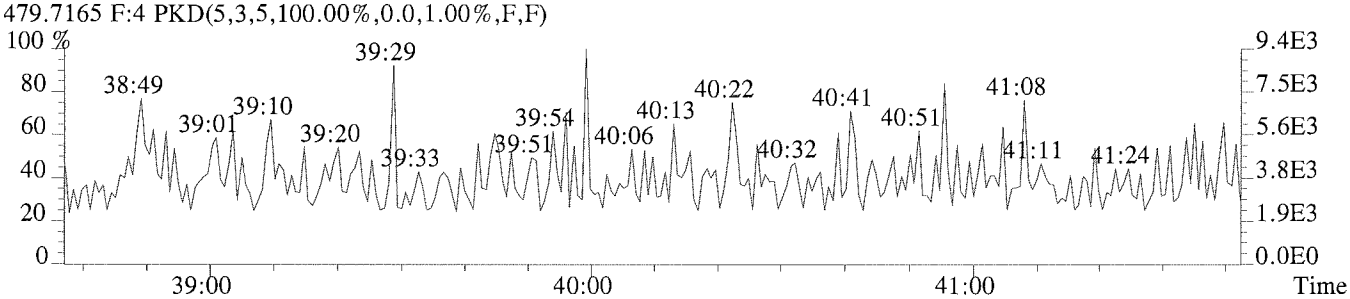
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,8260.0,0.50%,F,F)



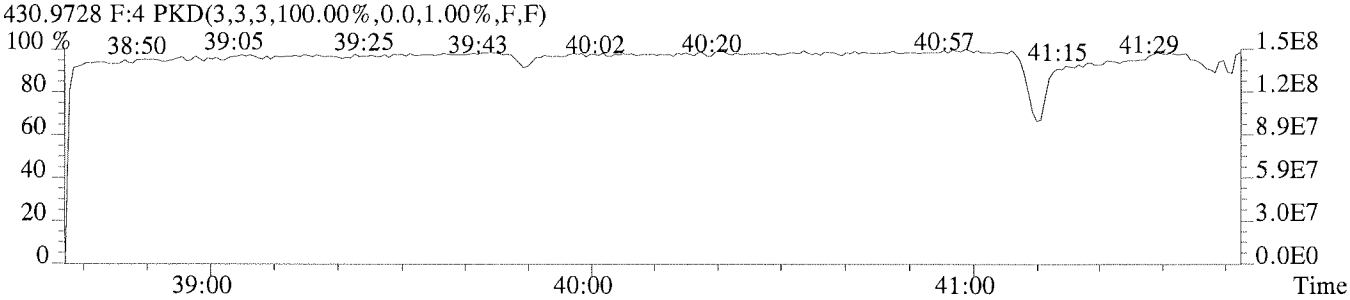
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5064.0,0.50%,F,F)



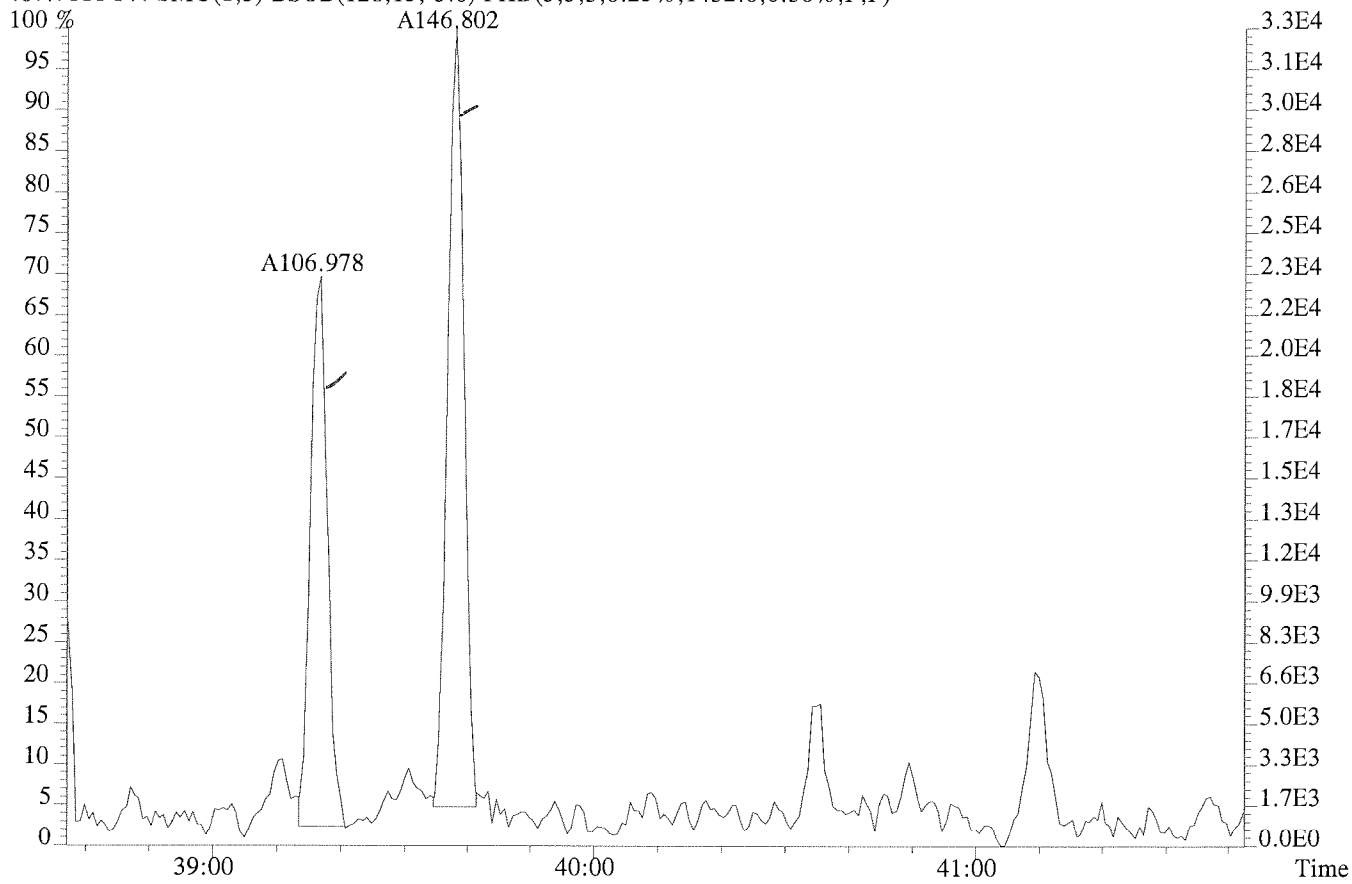
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



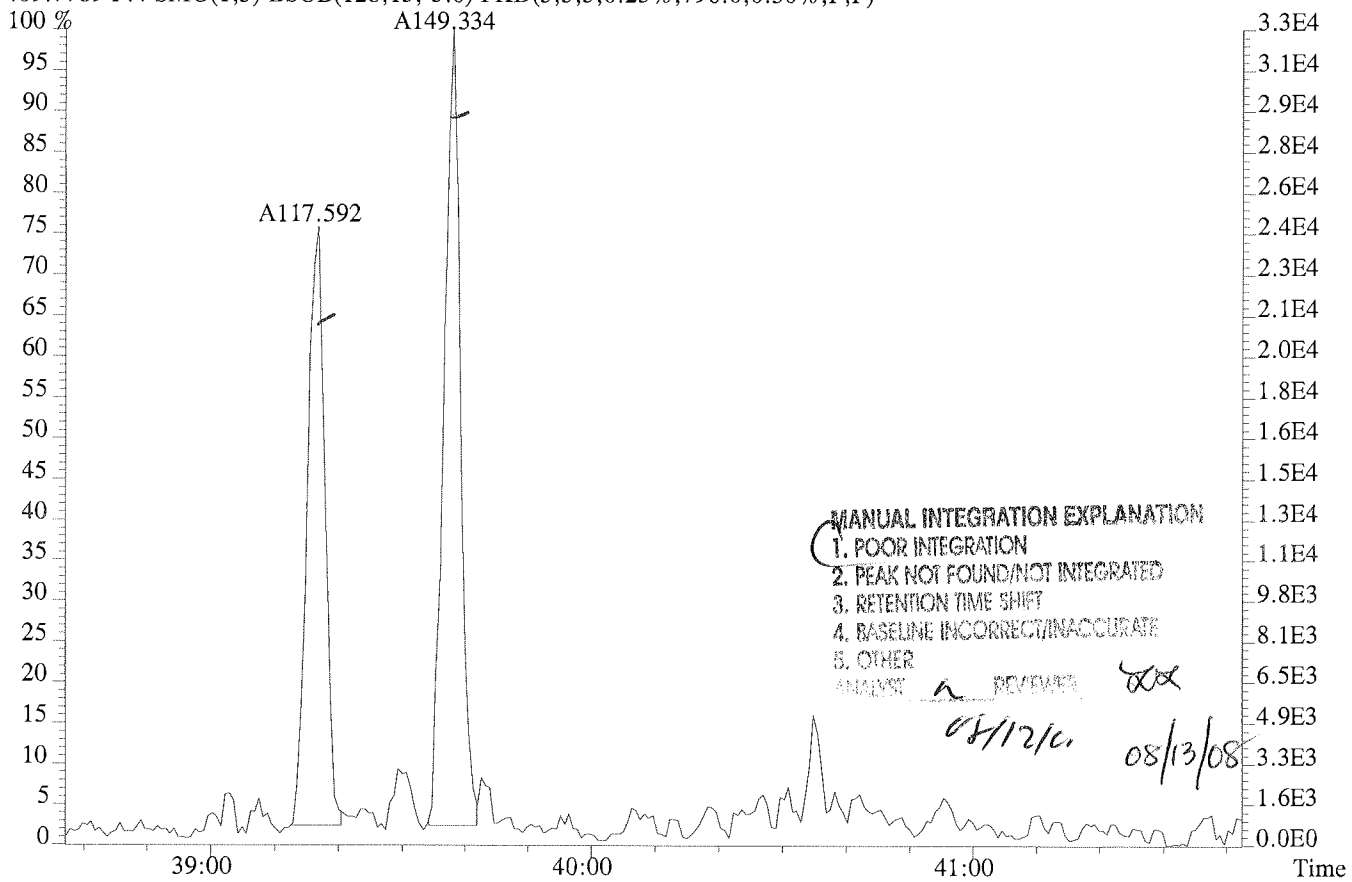
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P200043 #1-281 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1452.0,0.50%,F,F)



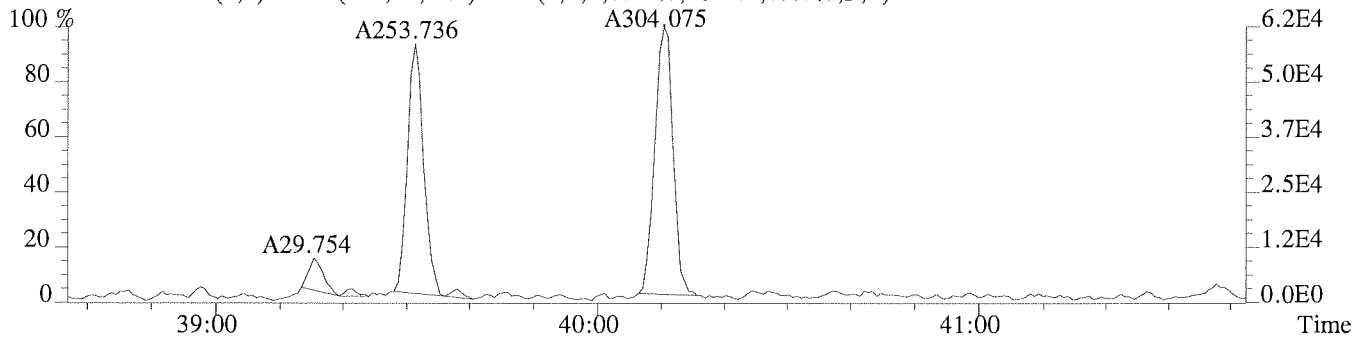
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,796.0,0.50%,F,F)



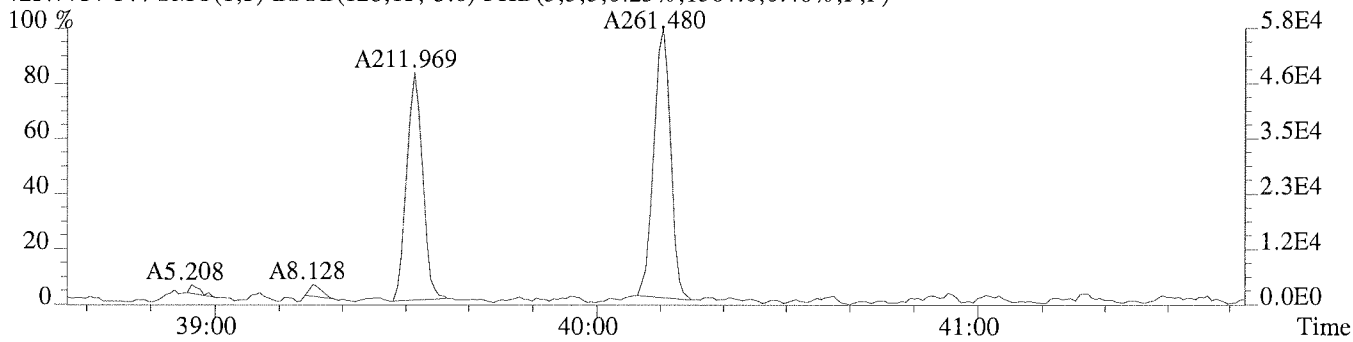
MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST REVIEWER
08/12/08 08/13/08

File:P200043 #1-281 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0

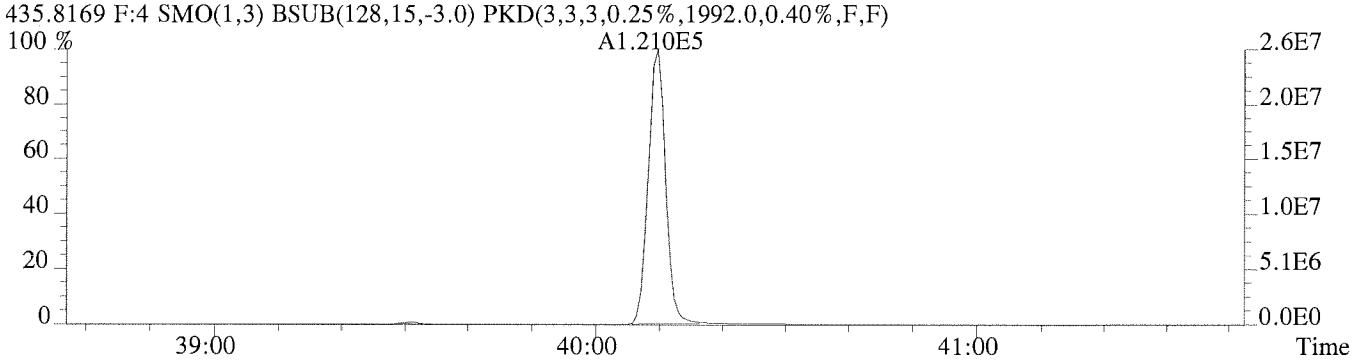
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1872.0,0.40%,F,F)



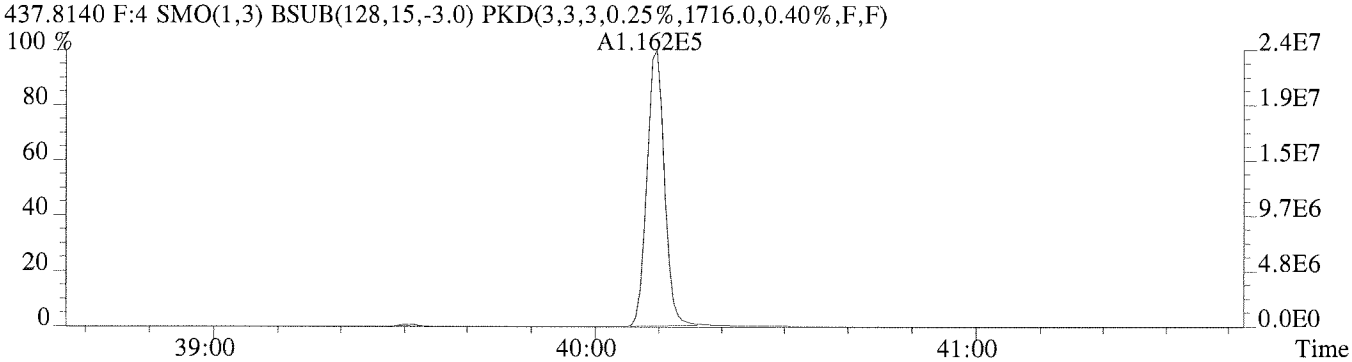
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1364.0,0.40%,F,F)



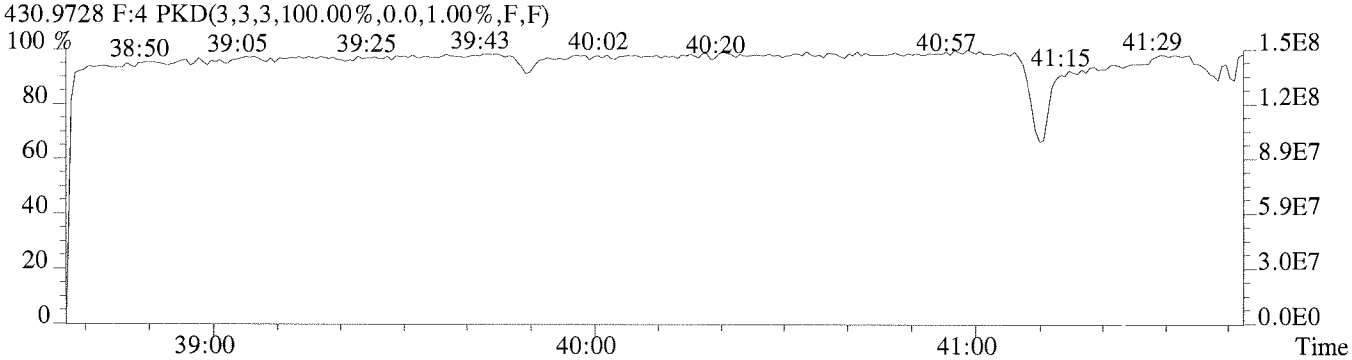
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1992.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1716.0,0.40%,F,F)

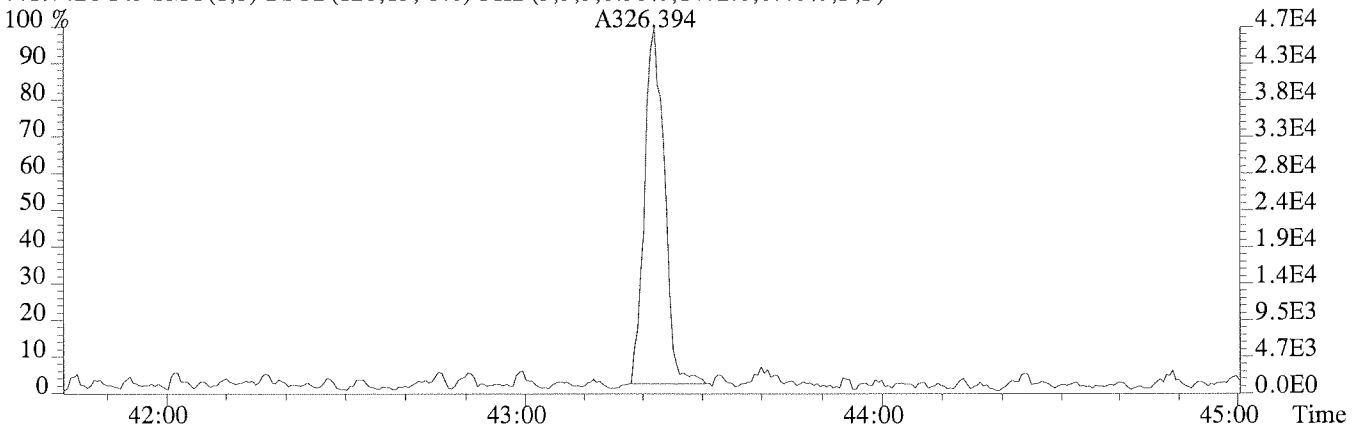


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

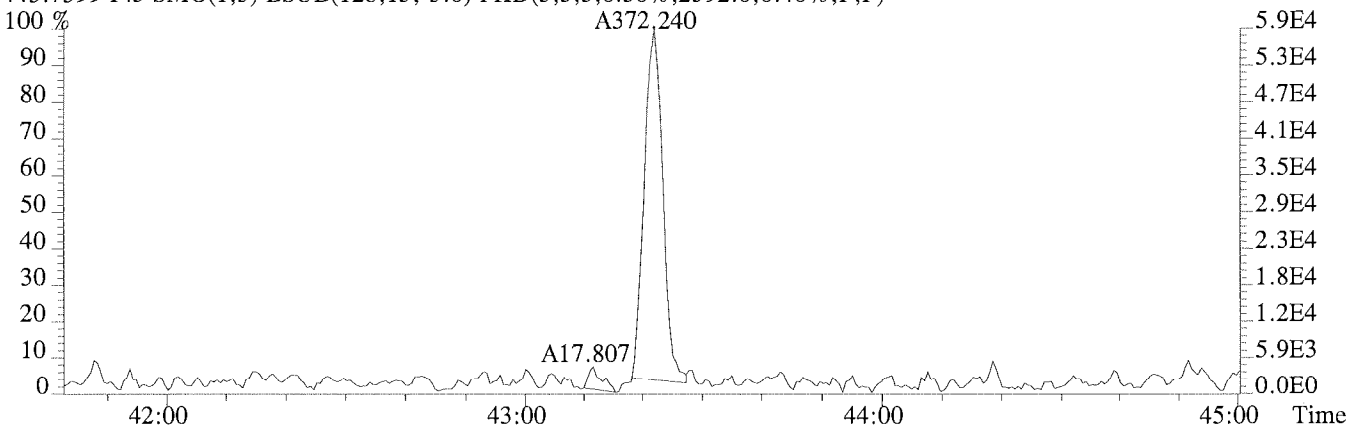


File:P200043 #1-364 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0

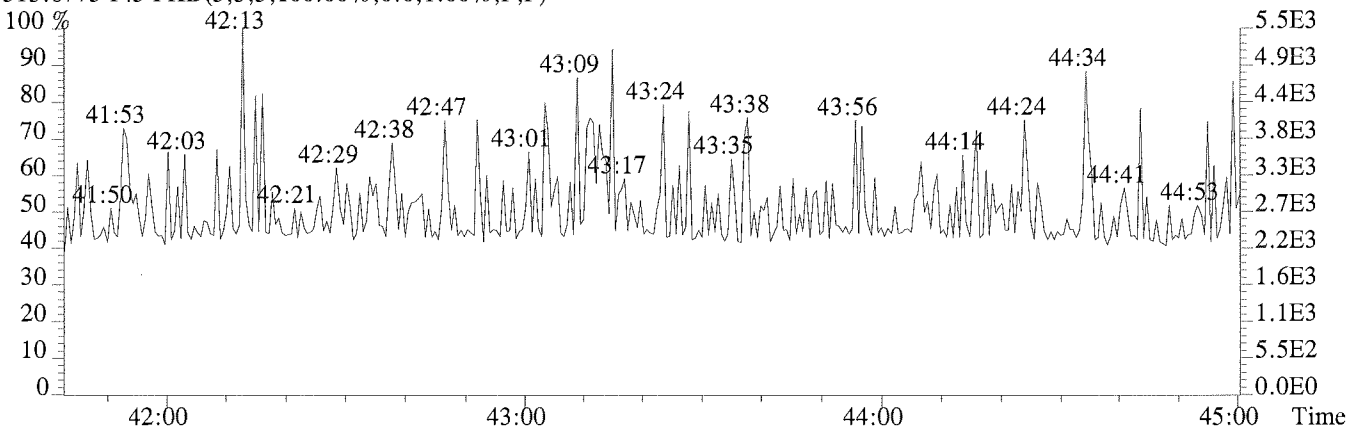
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1472.0,0.40%,F,F)



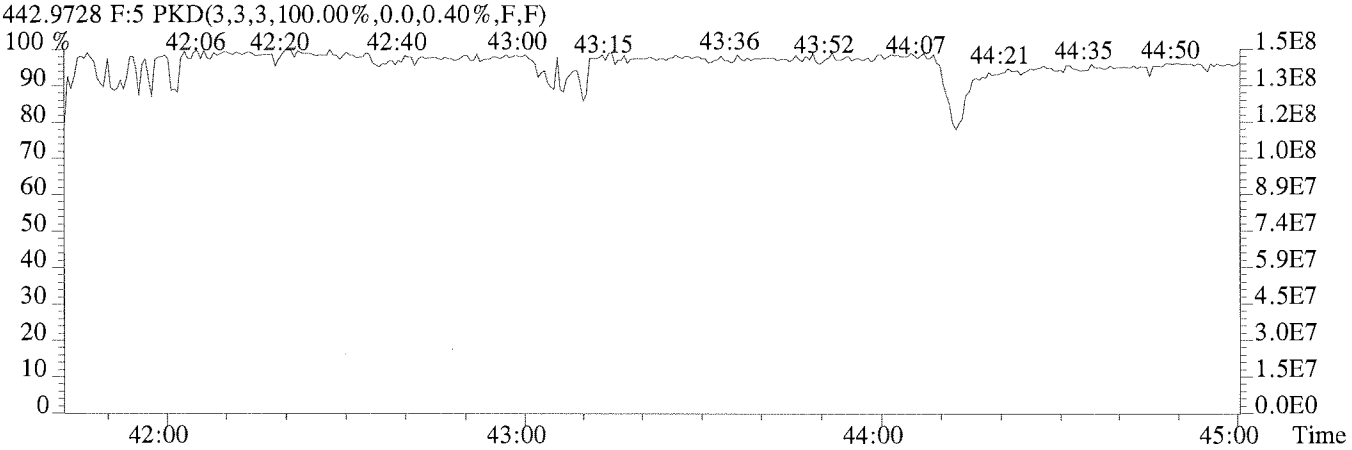
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2392.0,0.40%,F,F)



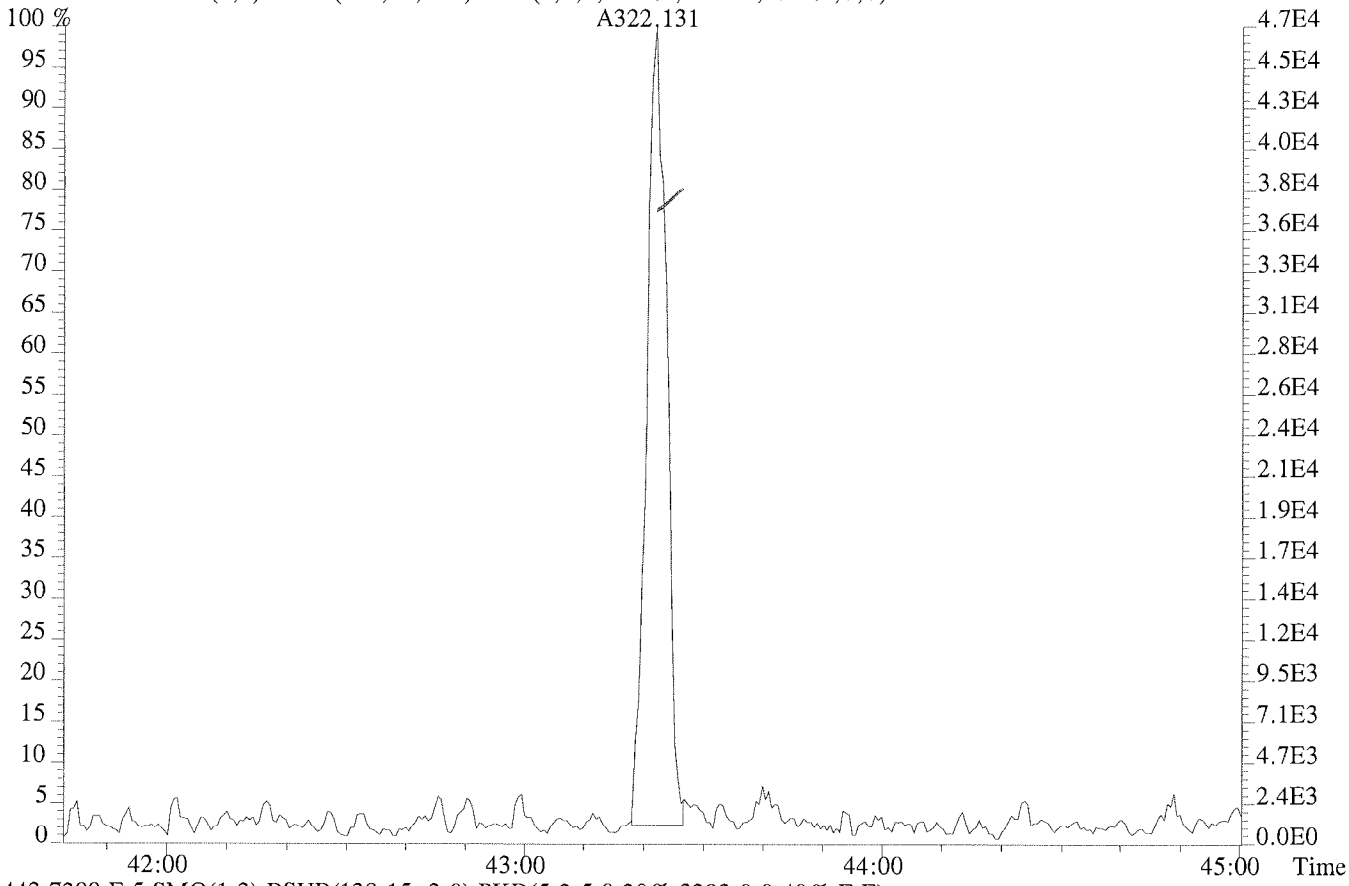
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



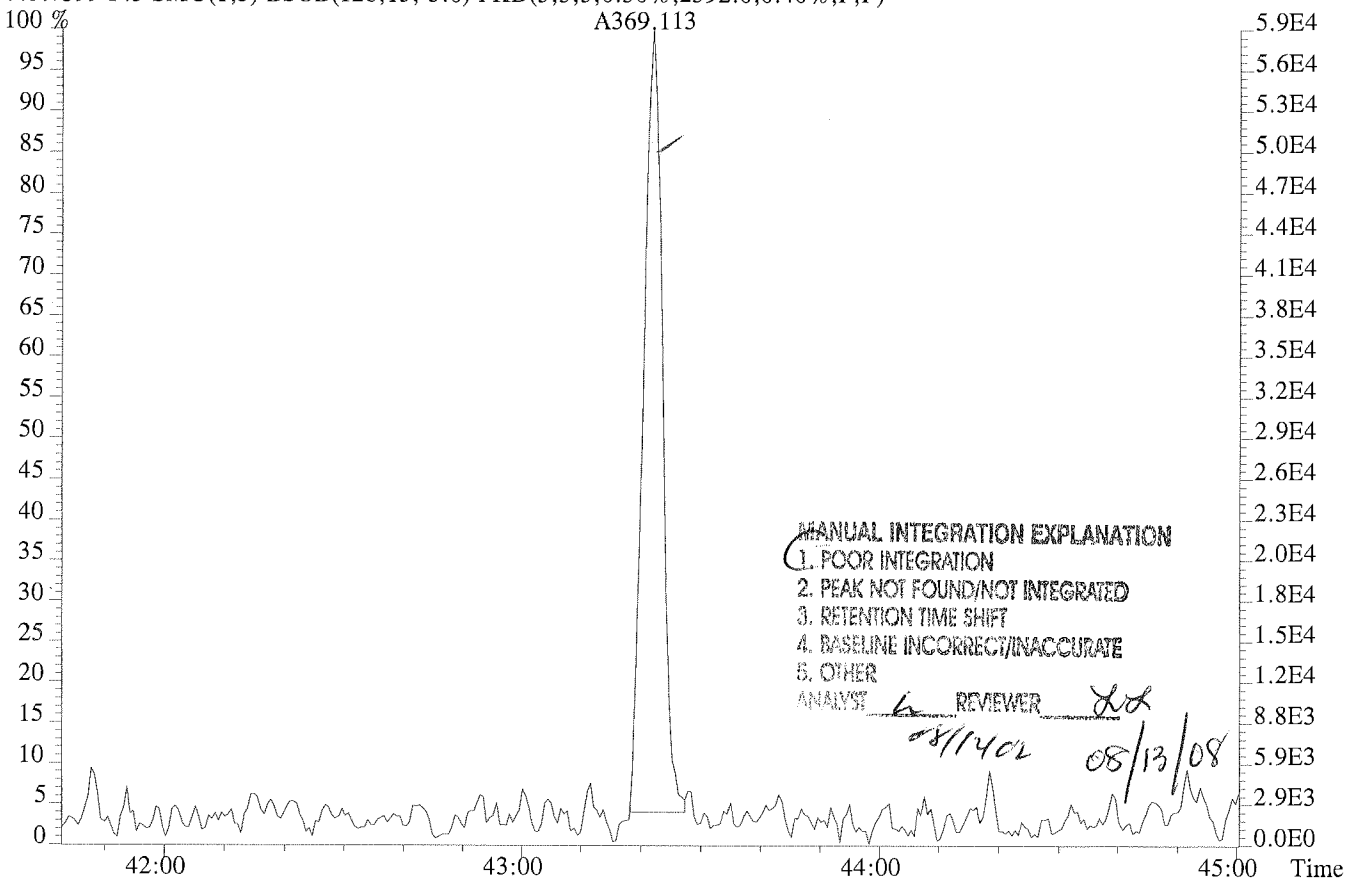
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



File:P200043 #1-364 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1472.0,0.40%,F,F)



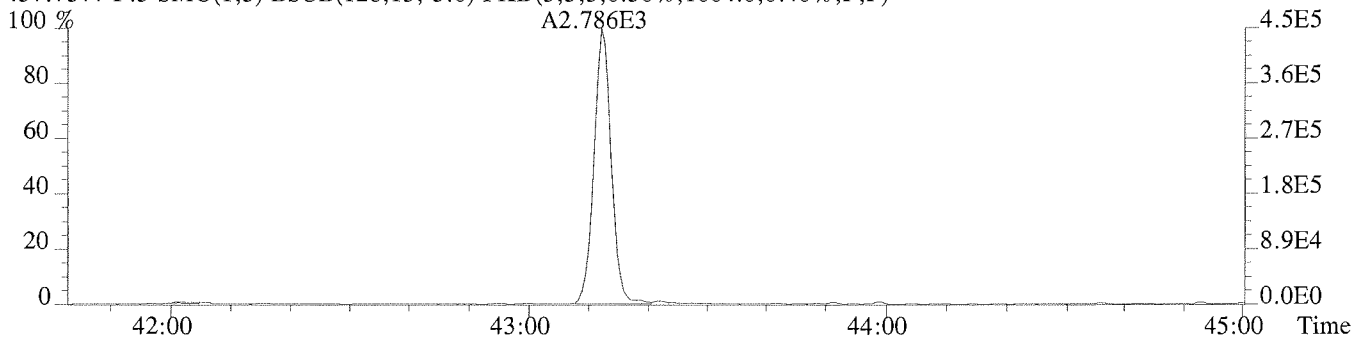
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2392.0,0.40%,F,F)



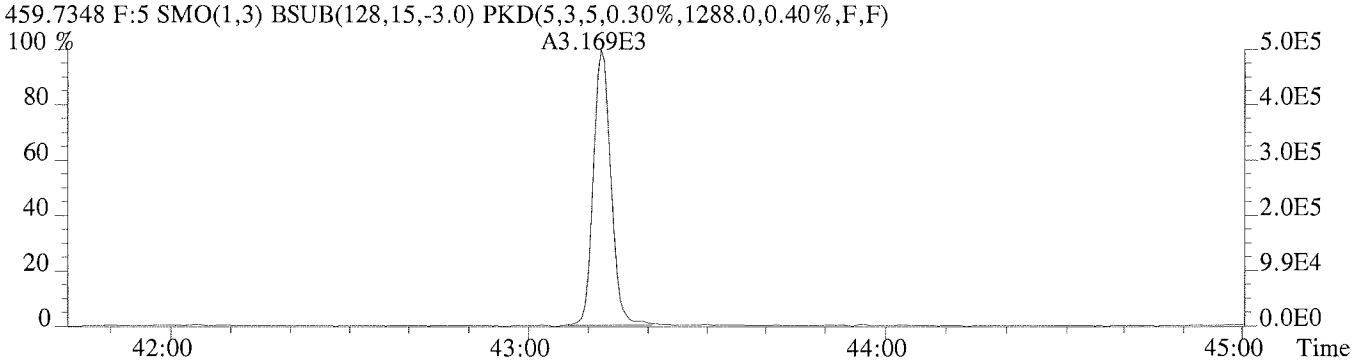
MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST [signature] REVIEWER [signature]
08/14/08 08/13/08

File:P200043 #1-364 Acq: 4-AUG-2008 16:06:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:E0800705-002 H-TI-2.0

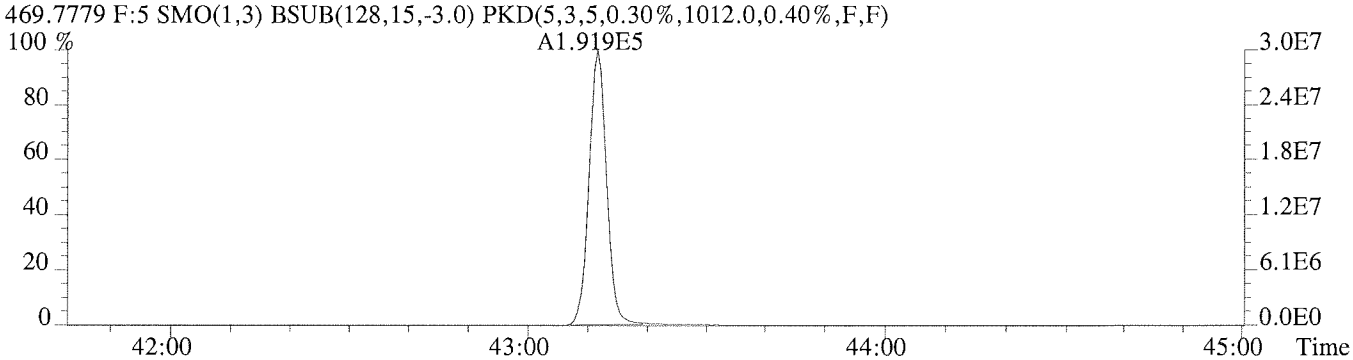
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1004.0,0.40%,F,F)



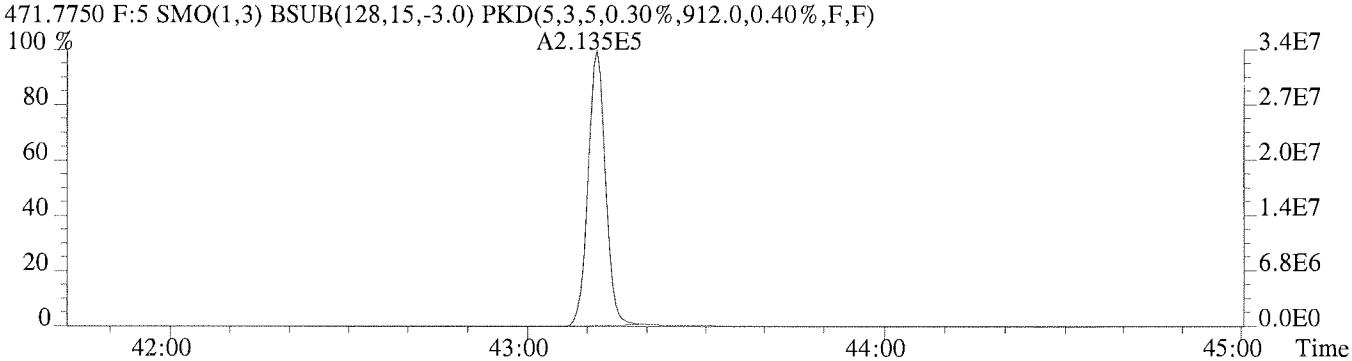
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1288.0,0.40%,F,F)



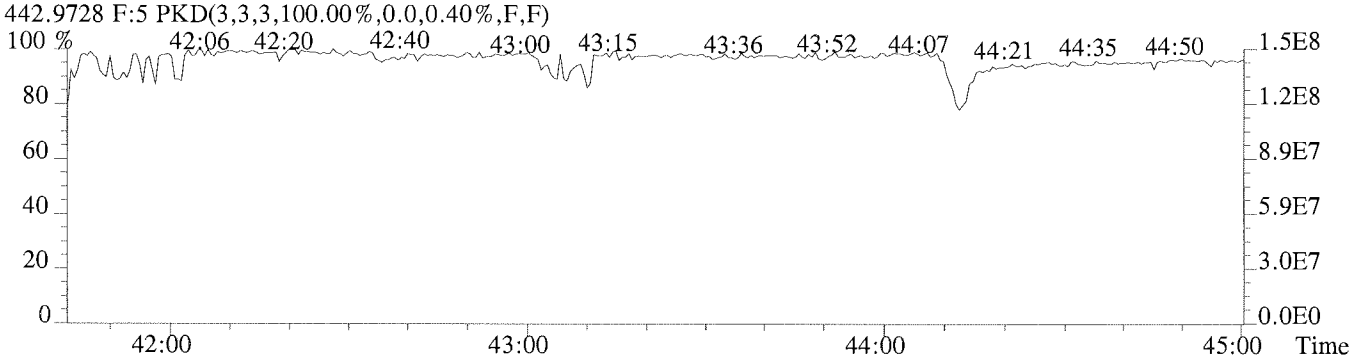
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1012.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,912.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
METHOD BLANK

Run #7 Filename P100163 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 10:05:17
Processed: 7-AUG-08 10:10:51 Sample ID: EQ0800314-01

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	NotFnd	*	*	*	no	no	0.98
2	Unk	1,2,3,7,8-PeCDF	NotFnd	*	*	*	no	no	0.97
3	Unk	2,3,4,7,8-PeCDF	NotFnd	*	*	*	no	no	1.00
4	Unk	1,2,3,4,7,8-HxCDF	NotFnd	*	*	*	no	no	1.22
5	Unk	1,2,3,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.31
6	Unk	2,3,4,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.15
7	Unk	1,2,3,7,8,9-HxCDF	NotFnd	*	*	*	no	no	1.06
8	Unk	1,2,3,4,6,7,8-HpCDF	39:49	2.795e+01	3.162e+01	0.88	no	yes	1.55
9	Unk	1,2,3,4,7,8,9-HpCDF	NotFnd	*	*	*	no	no	1.17
10	Unk	OCDF	44:03	4.356e+01	5.292e+01	0.82	yes	yes	1.36
11	Unk	2,3,7,8-TCDD	NotFnd	*	*	*	no	no	0.92
12	Unk	1,2,3,7,8-PeCDD	NotFnd	*	*	*	no	no	0.88
13	Unk	1,2,3,4,7,8-HxCDD	NotFnd	*	*	*	no	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	NotFnd	*	*	*	no	no	1.13
15	Unk	1,2,3,7,8,9-HxCDD	NotFnd	*	*	*	no	no	1.04
16	Unk	1,2,3,4,6,7,8-HpCDD	40:44	1.452e+02	1.361e+02	1.07	yes	yes	1.02
17	Unk	OCDD	43:53	8.945e+02	9.659e+02	0.93	yes	no	1.02
18	IS	13C-2,3,7,8-TCDF	29:28	2.365e+04	2.972e+04	0.80	yes	no	1.41
19	IS	13C-1,2,3,7,8-PeCDF	33:37	4.177e+04	2.608e+04	1.60	yes	no	1.38
20	IS	13C-1,2,3,4,7,8-HxCDF	37:05	4.625e+04	8.780e+04	0.53	yes	no	1.35
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:48	3.152e+04	7.020e+04	0.45	yes	no	1.03
22	IS	13C-2,3,7,8-TCDD	30:15	1.993e+04	2.541e+04	0.78	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:41	3.005e+04	1.873e+04	1.60	yes	no	0.98
24	IS	13C-1,2,3,6,7,8-HxCDD	37:50	6.514e+04	5.173e+04	1.26	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:43	4.377e+04	4.157e+04	1.05	yes	no	0.85
26	IS	13C-OCDD	43:52	5.969e+04	6.617e+04	0.90	yes	no	0.79
27	RS/RT	13C-1,2,3,4-TCDD	30:04	3.165e+04	3.986e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:07	3.572e+04	2.833e+04	1.26	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:17	4.306e+04					1.01

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary METHOD BLANK

Run #7 Filename P100163 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 10:05:17

Processed: 7-AUG-08 10:10:51 LAB. ID: EQ0800314-01

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	*	4.84e+02	*	*	4.88e+02	*
2	1,2,3,7,8-PeCDF	*	5.72e+02	*	*	6.84e+02	*
3	2,3,4,7,8-PeCDF	*	5.72e+02	*	*	6.84e+02	*
4	1,2,3,4,7,8-HxCDF	*	5.68e+02	*	*	7.12e+02	*
5	1,2,3,6,7,8-HxCDF	*	5.68e+02	*	*	7.12e+02	*
6	2,3,4,6,7,8-HxCDF	*	5.68e+02	*	*	7.12e+02	*
7	1,2,3,7,8,9-HxCDF	*	5.68e+02	*	*	7.12e+02	*
8	1,2,3,4,6,7,8-HpCDF	4.76e+03	9.96e+02	4.8e+00	6.22e+03	5.52e+02	1.1e+01
9	1,2,3,4,7,8,9-HpCDF	*	9.96e+02	*	*	5.52e+02	*
10	OCDF	5.71e+03	4.48e+02	1.3e+01	7.54e+03	6.68e+02	1.1e+01
11	2,3,7,8-TCDD	*	5.84e+02	*	*	3.16e+02	*
12	1,2,3,7,8-PeCDD	*	7.64e+02	*	*	5.32e+02	*
13	1,2,3,4,7,8-HxCDD	*	4.68e+02	*	*	6.20e+02	*
14	1,2,3,6,7,8-HxCDD	*	4.68e+02	*	*	6.20e+02	*
15	1,2,3,7,8,9-HxCDD	*	4.68e+02	*	*	6.20e+02	*
16	1,2,3,4,6,7,8-HpCDD	2.91e+04	6.56e+02	4.4e+01	2.68e+04	7.76e+02	3.5e+01
17	OCDD	1.25e+05	4.80e+02	2.6e+02	1.37e+05	4.76e+02	2.9e+02
18	13C-2,3,7,8-TCDF	4.09e+06	9.88e+02	4.1e+03	5.09e+06	7.28e+02	7.0e+03
19	13C-1,2,3,7,8-PeCDF	8.07e+06	5.20e+02	1.6e+04	5.11e+06	5.72e+02	8.9e+03
20	13C-1,2,3,4,7,8-HxCDF	1.03e+07	4.04e+02	2.5e+04	1.93e+07	5.16e+02	3.7e+04
21	13C-1,2,3,4,6,7,8-HpCDF	6.61e+06	1.19e+03	5.5e+03	1.44e+07	3.24e+03	4.4e+03
22	13C-2,3,7,8-TCDD	3.66e+06	1.47e+03	2.5e+03	4.74e+06	6.04e+02	7.8e+03
23	13C-1,2,3,7,8-PeCDD	5.99e+06	4.64e+02	1.3e+04	3.69e+06	5.00e+02	7.4e+03
24	13C-1,2,3,6,7,8-HxCDD	1.47e+07	4.72e+02	3.1e+04	1.18e+07	5.28e+02	2.2e+04
25	13C-1,2,3,4,6,7,8-HpCDD	8.68e+06	8.16e+02	1.1e+04	8.20e+06	5.72e+02	1.4e+04
26	13C-OCDD	8.43e+06	4.96e+02	1.7e+04	9.33e+06	4.76e+02	2.0e+04
27	13C-1,2,3,4-TCDD	5.81e+06	1.47e+03	4.0e+03	7.27e+06	6.04e+02	1.2e+04
28	13C-1,2,3,7,8,9-HxCDD	7.98e+06	4.72e+02	1.7e+04	6.31e+06	5.28e+02	1.2e+04
29	37Cl-2,3,7,8-TCDD	7.74e+06	4.20e+02	1.8e+04			

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19408 Park Row, Suite 320
Houston, TX 77084
Office:(713)266-1599. Fax:(713)266-0130

Columbia Analytical Services, Inc.
Peak List Summary

CLIENT ID.
METHOD BLANK

Entry: 35 Totals Name: Total Hexa-Dioxins

Run: 7 File: P100163 Sample:1 Injection:1 Function:3

Acquired: 1-AUG-08 10:05:17 Processed: 7-AUG-08 10:10:51

Mass:389.816 391.813 Response:

#	RT	Resp	Resp Ratio	Meet	Tot Resp	Name	Mod?
1	37:16	2.35e+01	1.80e+01 1.30	yes	4.15e+01		n

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Columbia Analytical Services, Inc.
Peak List Summary

CLIENT ID.
METHOD BLANK

Entry: 37 Totals Name: Total Hepta-Dioxins

Run: 7 File: P100163 Sample:1 Injection:1 Function:4

Acquired: 1-AUG-08 10:05:17 Processed: 7-AUG-08 10:10:51

Mass:423.777	425.774			Response:			
#	RT	Resp	Resp	Ratio	Meet	Tot Resp	Name	Mod?
1	40:04	1.30e+02	1.15e+02	1.13	yes	2.45e+02		y
2	40:44	1.45e+02	1.36e+02	1.07	yes	2.81e+02	1,2,3,4,6,7,8-HpCDD	y

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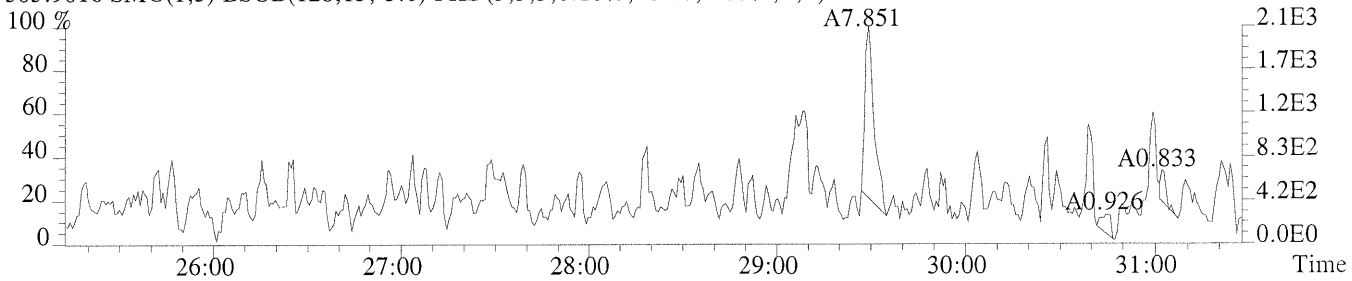
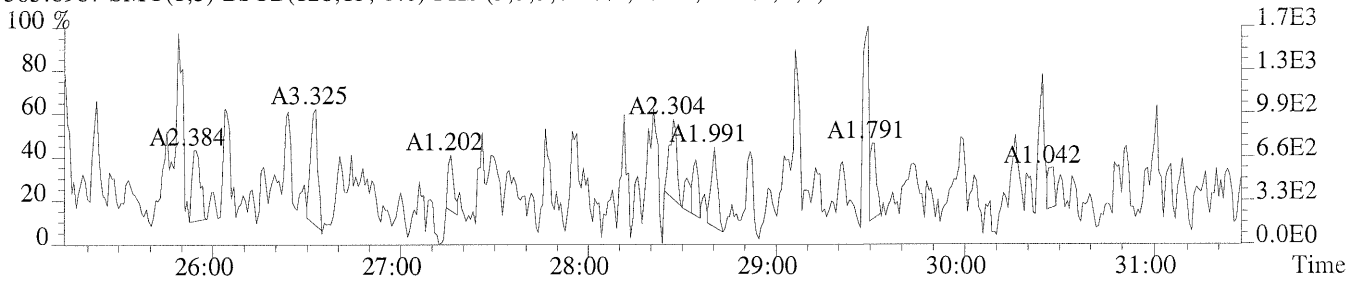
File:P100163 #1-521 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB

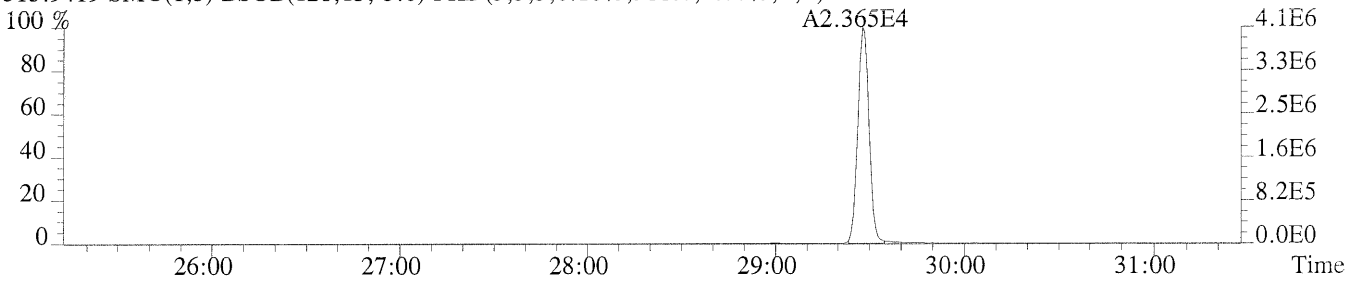
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,484.0,1.00%,F,F)



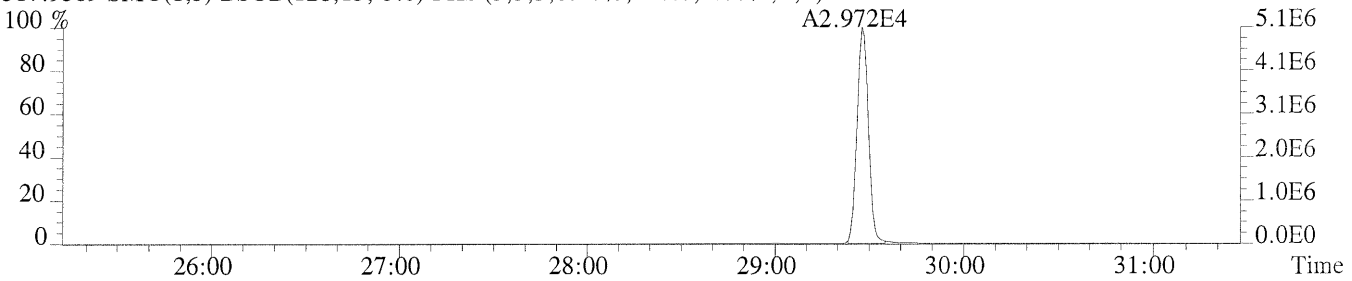
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,488.0,1.00%,F,F)



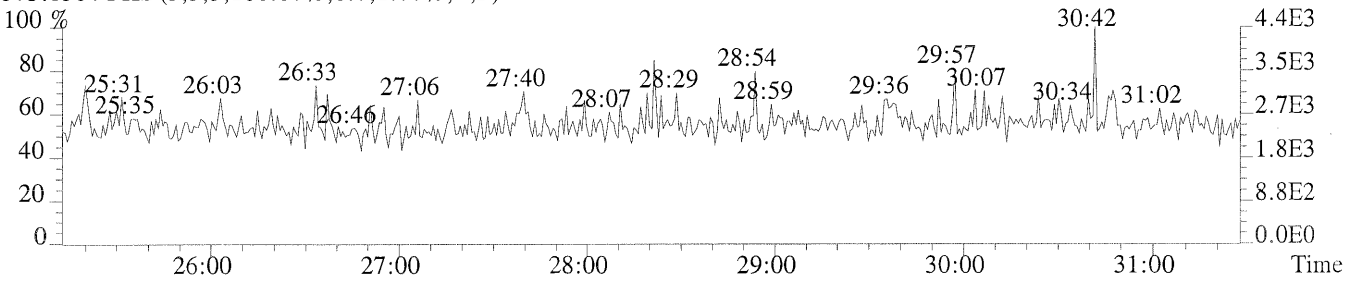
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,988.0,1.00%,F,F)



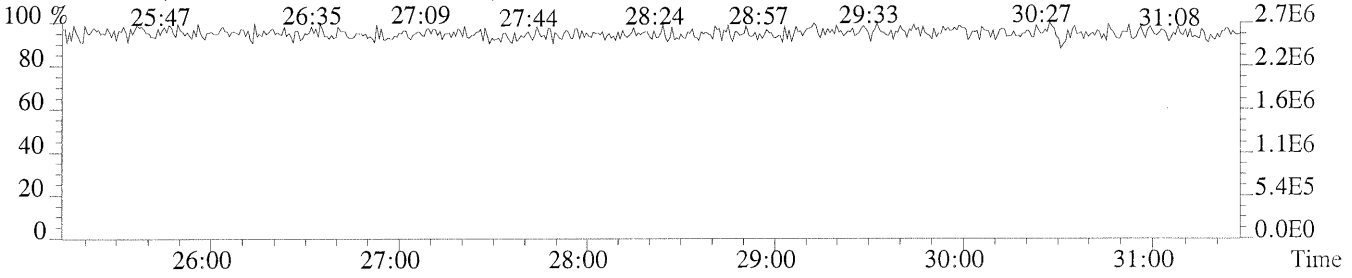
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,728.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

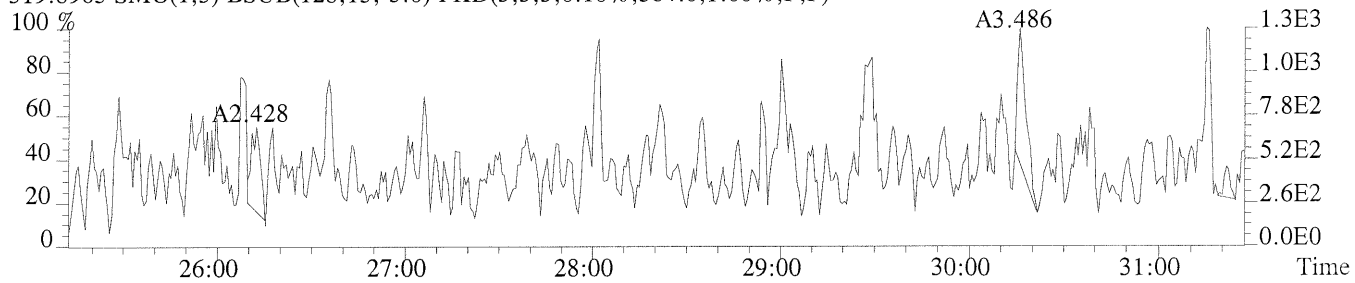


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

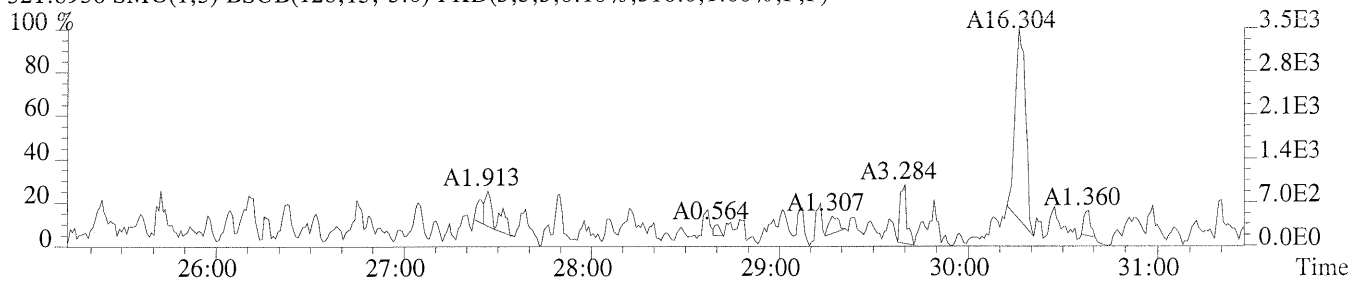


File:P100163 #1-521 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB

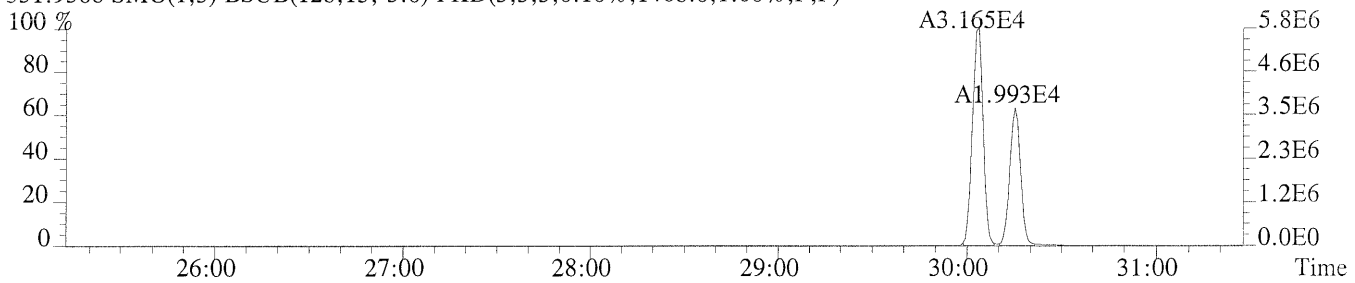
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,584.0,1.00%,F,F)



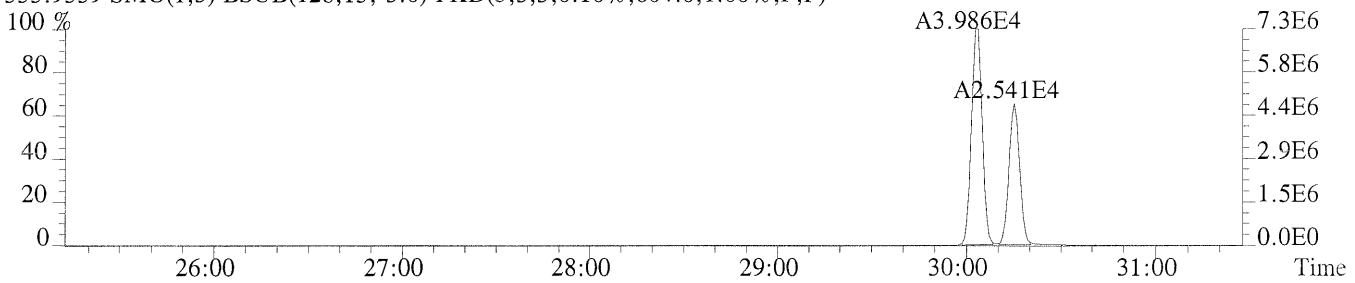
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,316.0,1.00%,F,F)



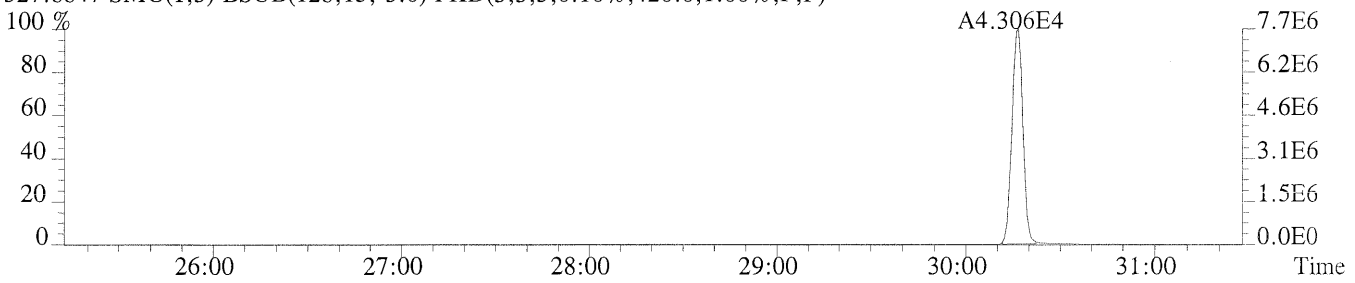
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1468.0,1.00%,F,F)



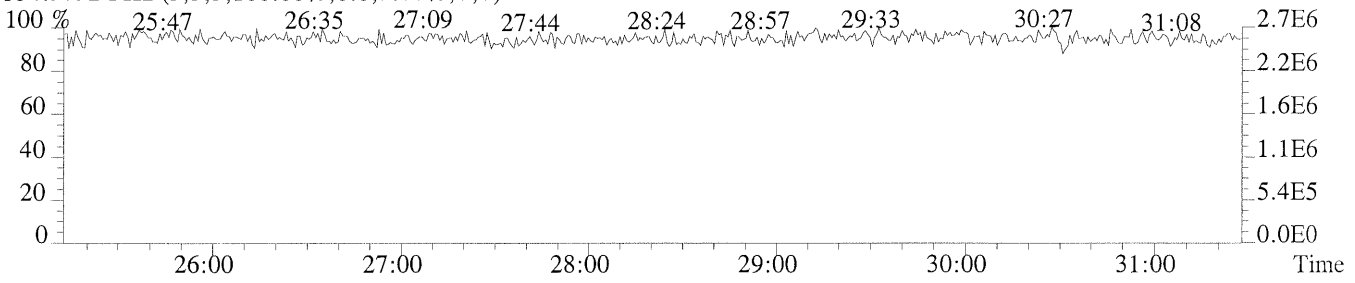
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,604.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,420.0,1.00%,F,F)

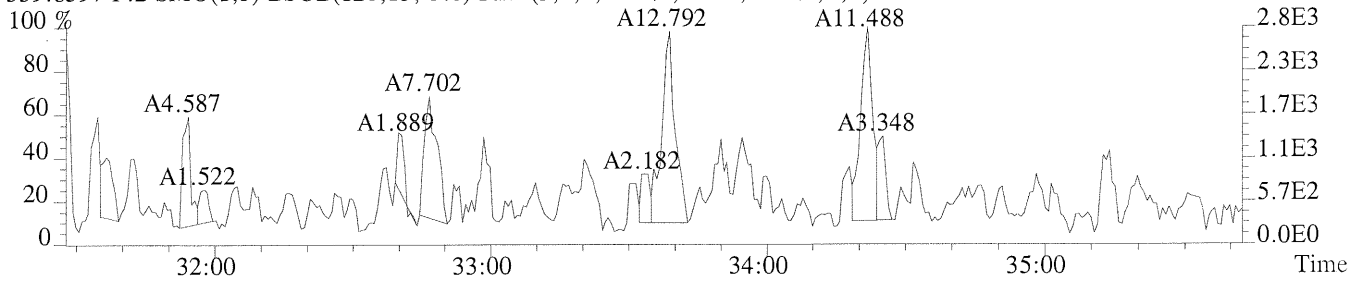


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

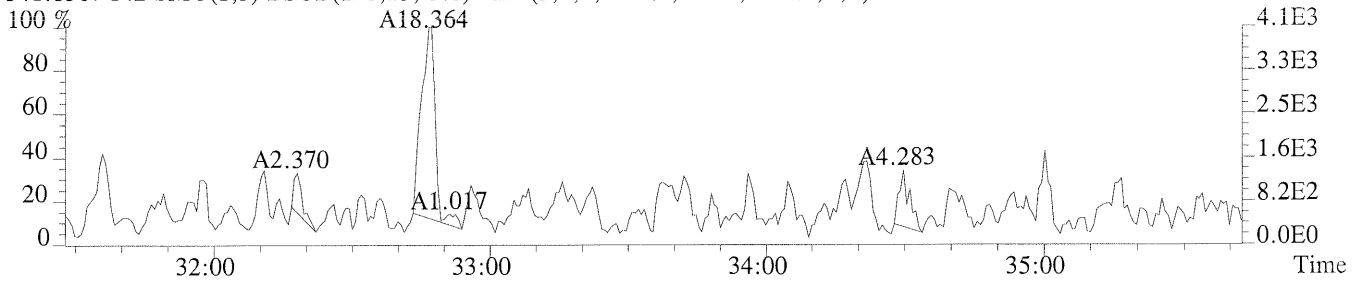


File:P100163 #1-386 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB

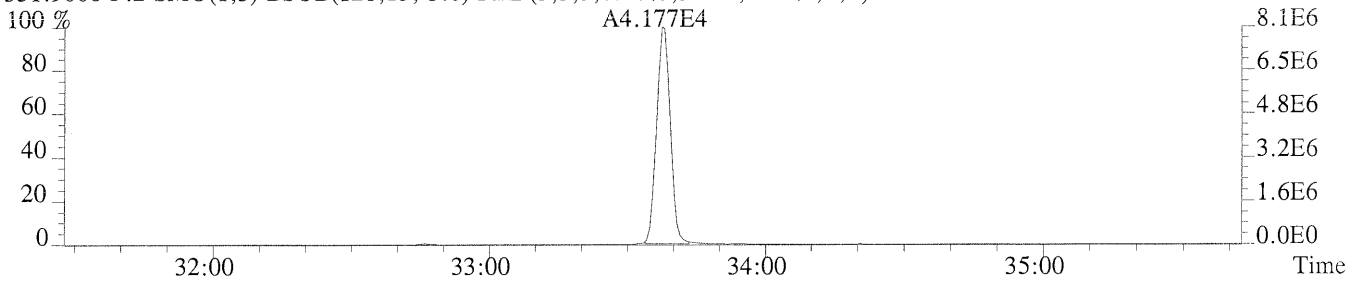
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,572.0,1.00%,F,F)



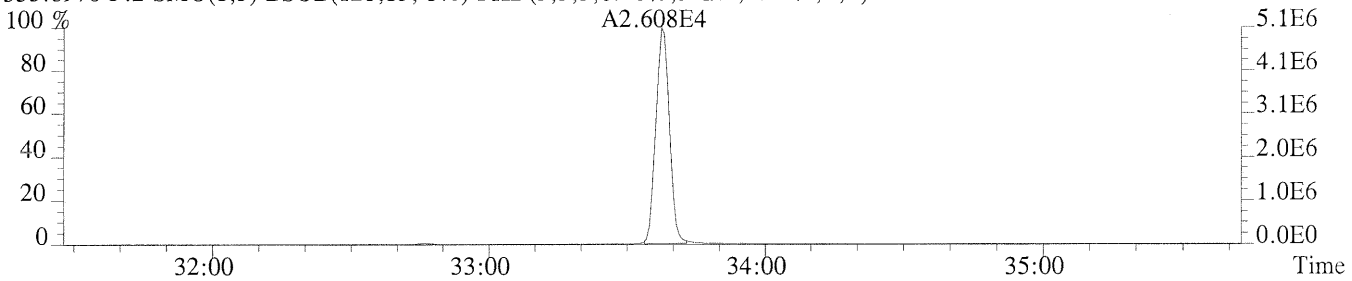
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,684.0,1.00%,F,F)



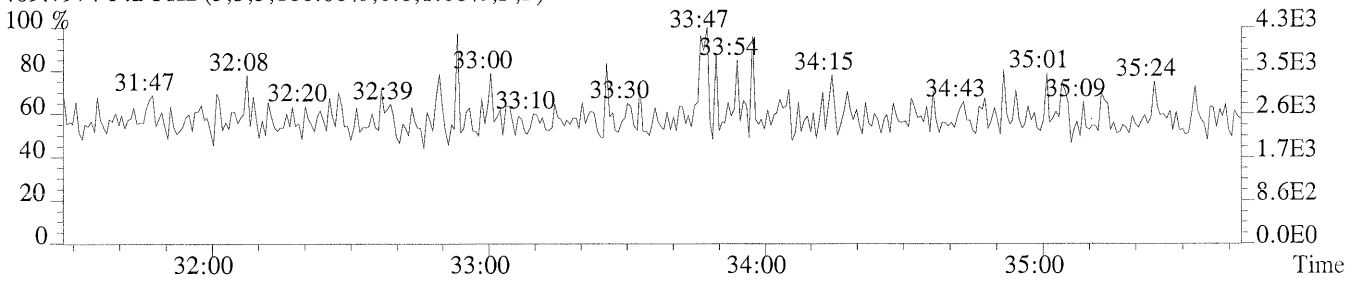
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,520.0,1.00%,F,F)



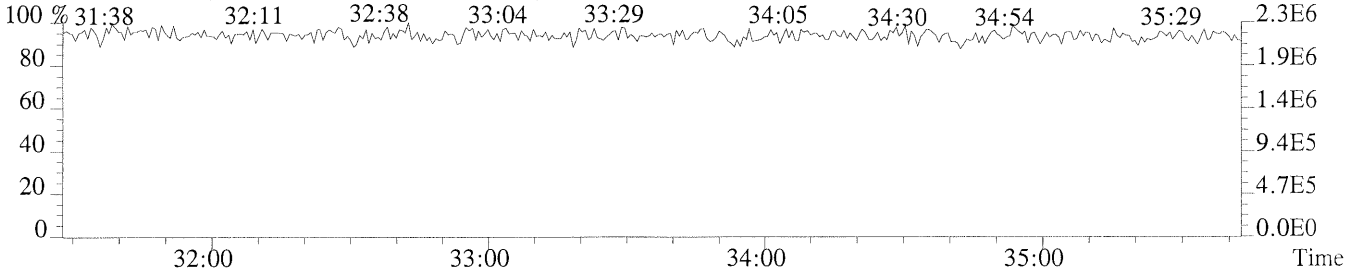
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,572.0,1.00%,F,F)



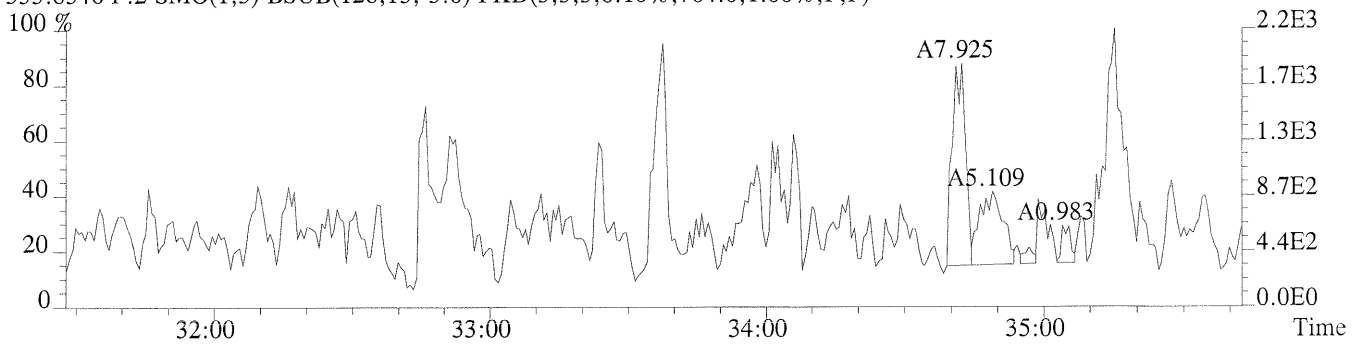
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



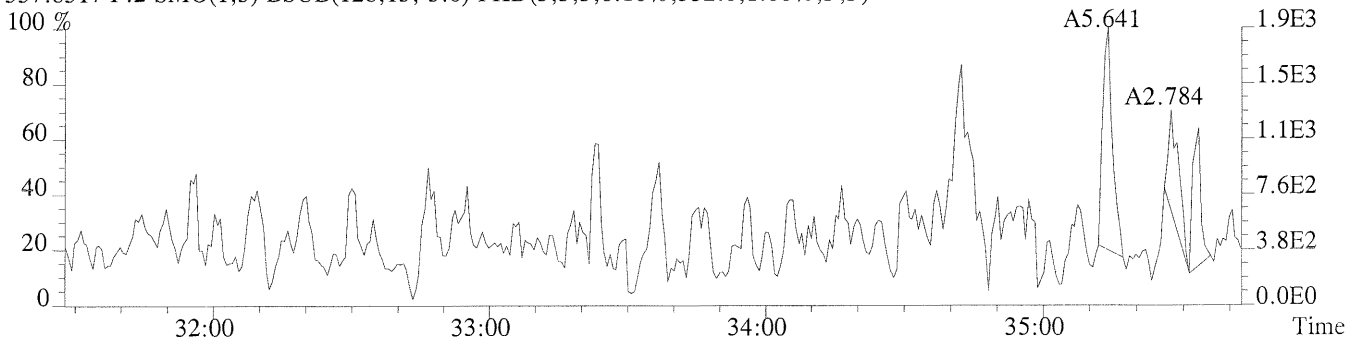
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



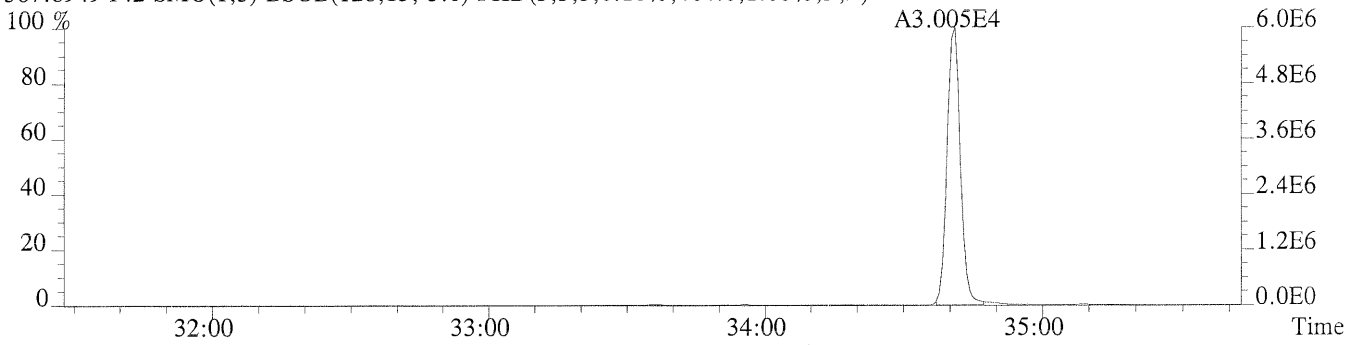
File:P100163 #1-386 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,764.0,1.00%,F,F)



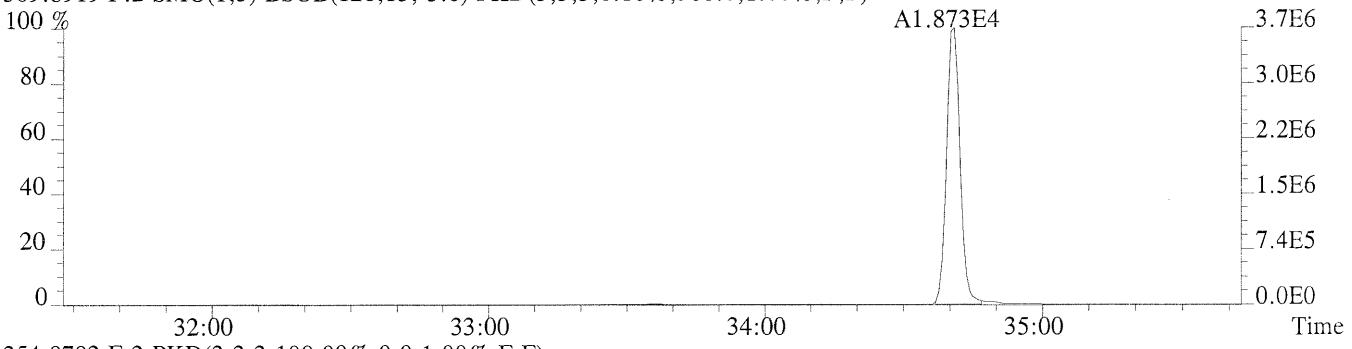
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,532.0,1.00%,F,F)



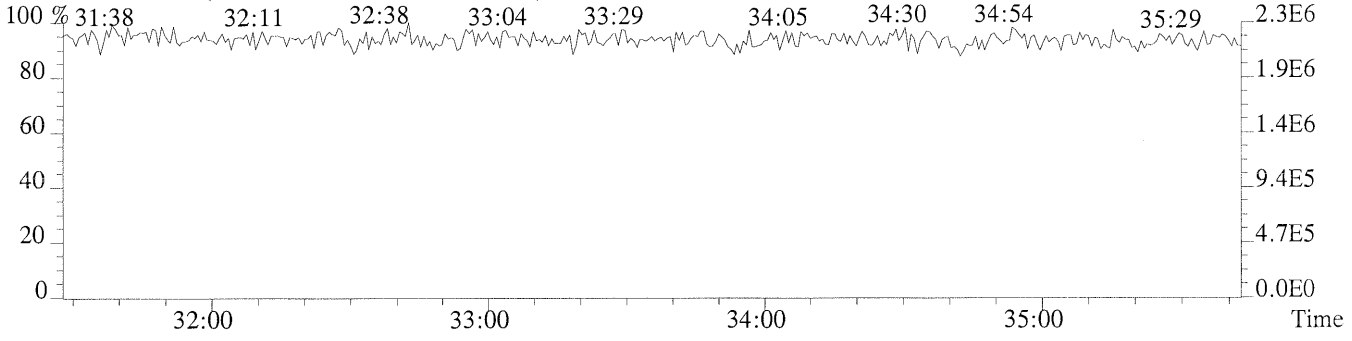
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,464.0,1.00%,F,F)



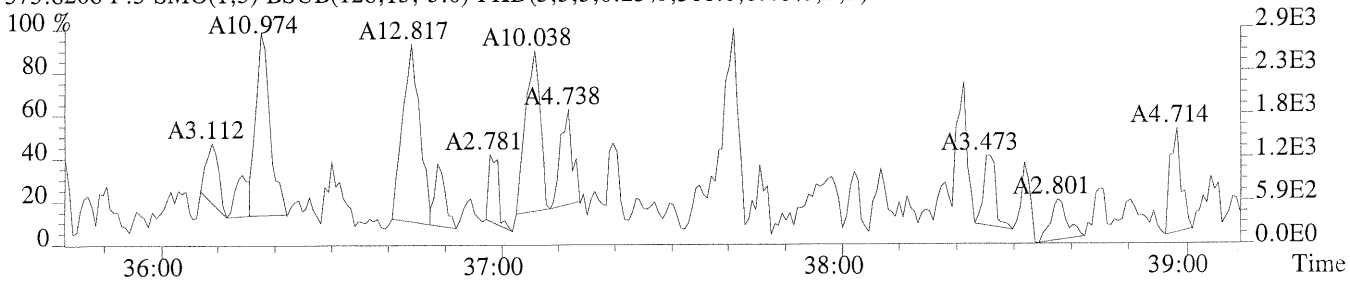
369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,500.0,1.00%,F,F)



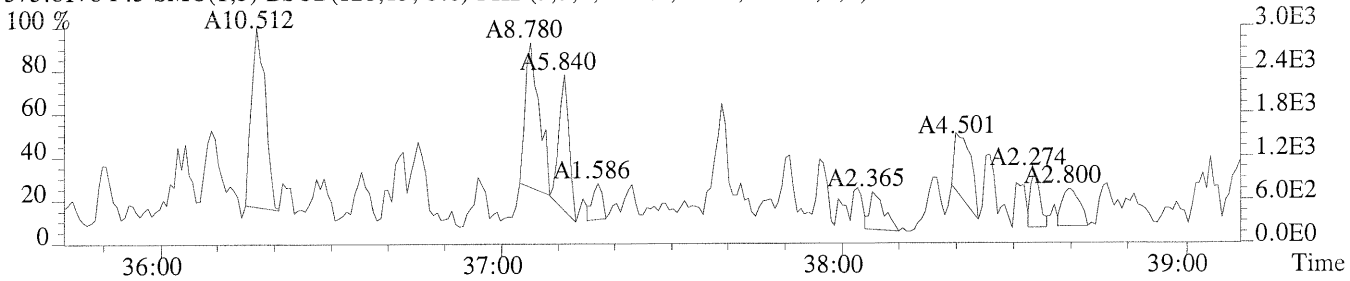
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



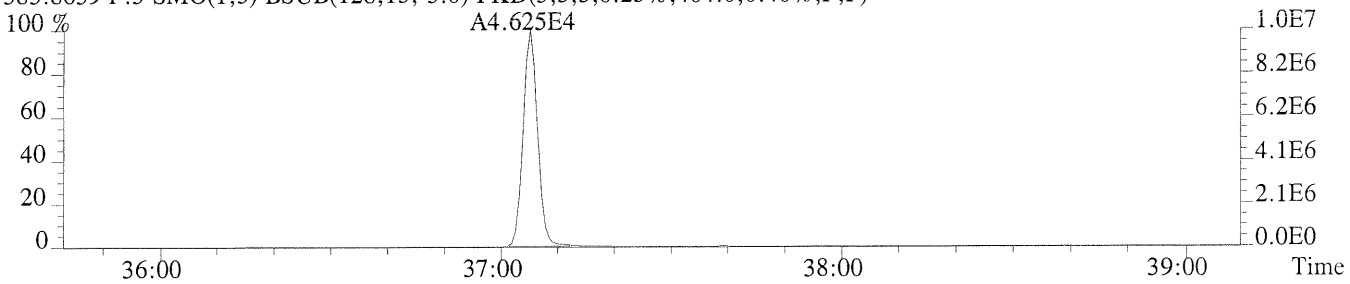
File:P100163 #1-313 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,568.0,0.40%,F,F)



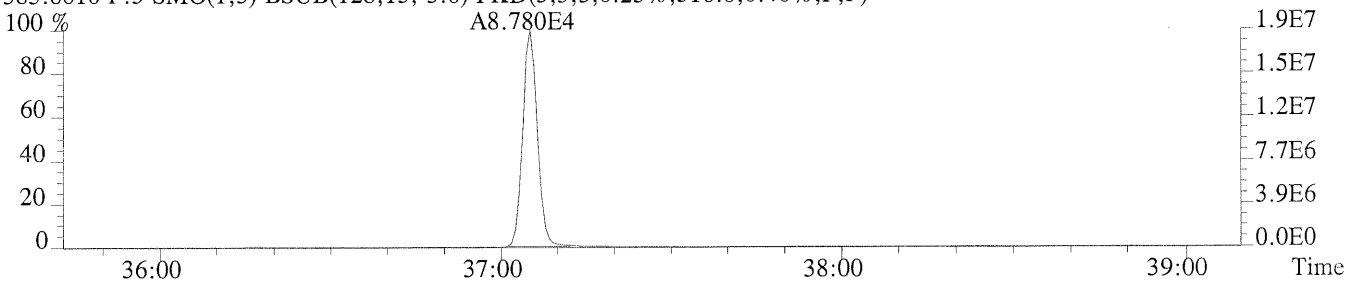
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,712.0,0.40%,F,F)



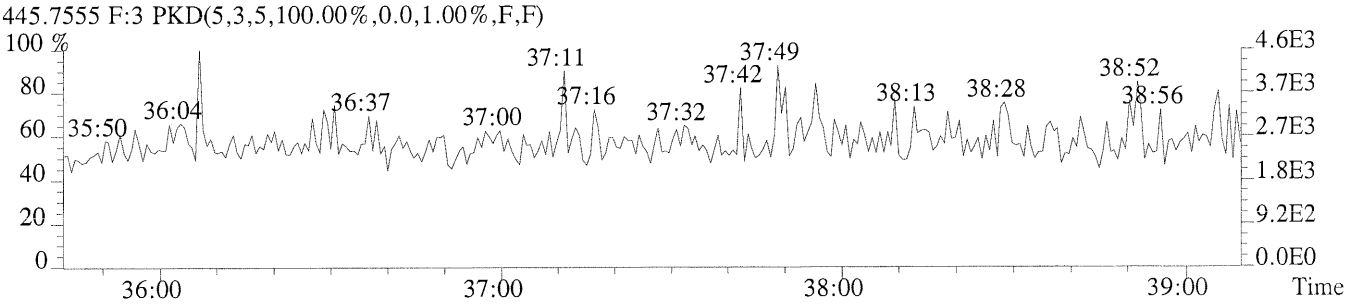
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,404.0,0.40%,F,F)



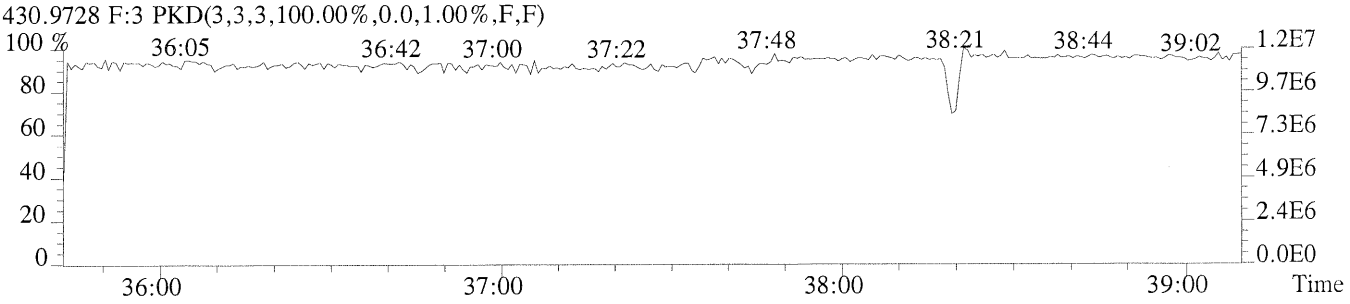
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,516.0,0.40%,F,F)



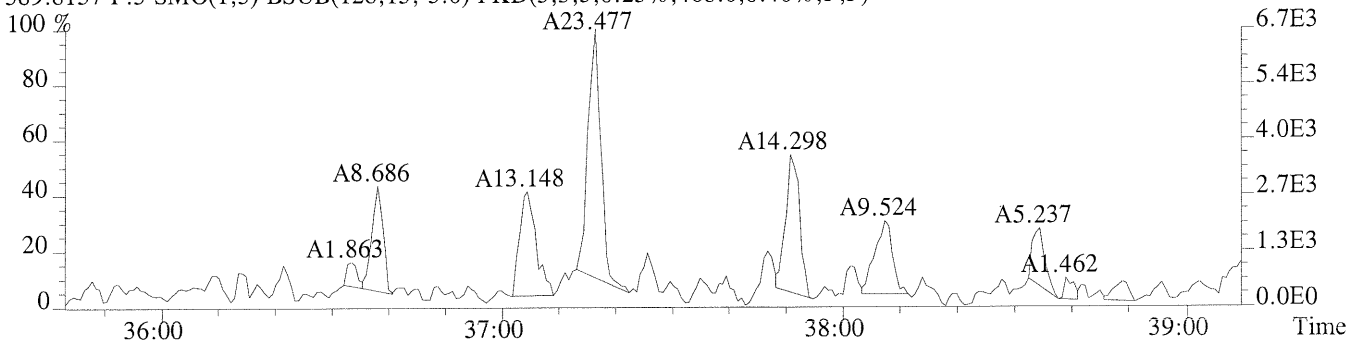
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



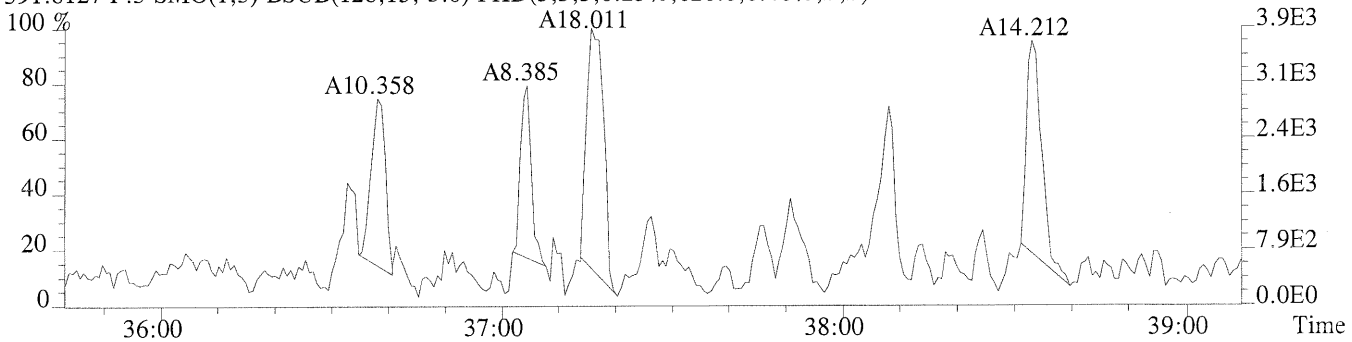
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



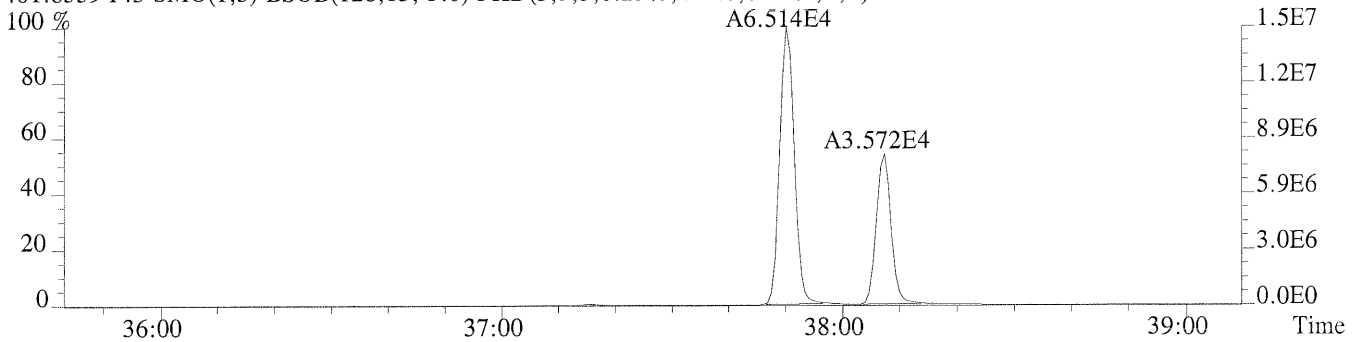
File:P100163 #1-313 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,468.0,0.40%,F,F)



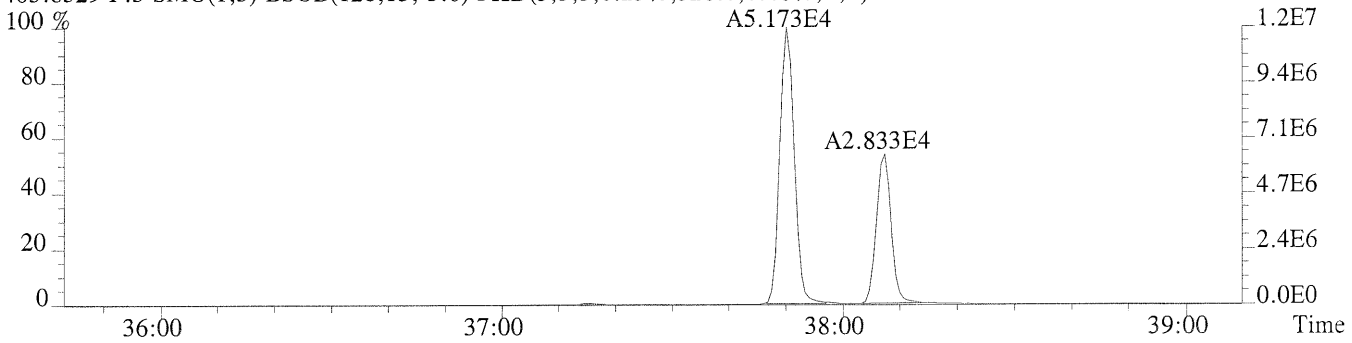
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,620.0,0.40%,F,F)



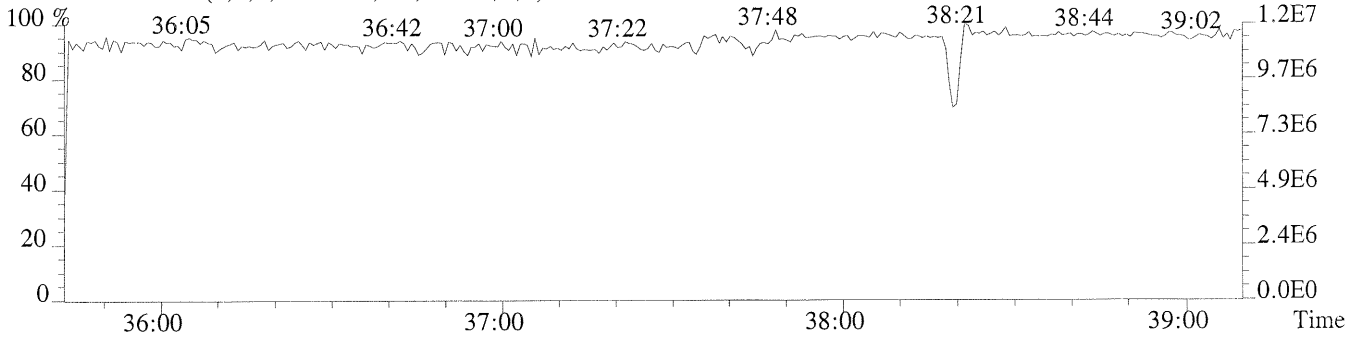
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,472.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,528.0,0.40%,F,F)

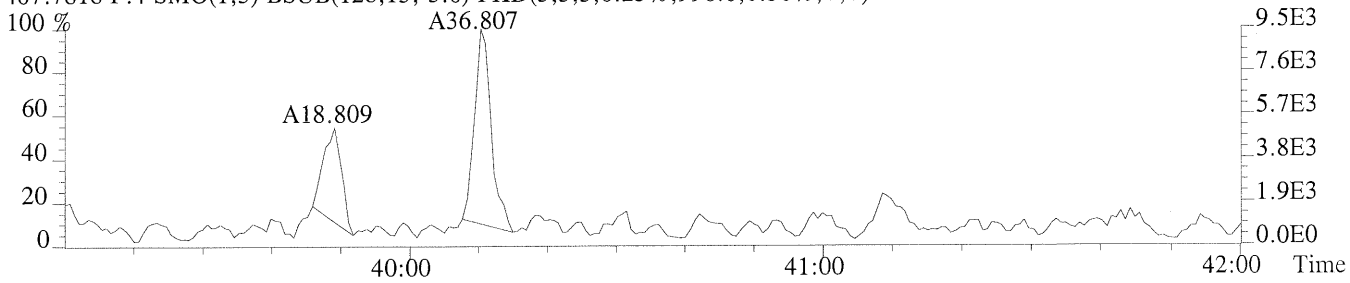


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

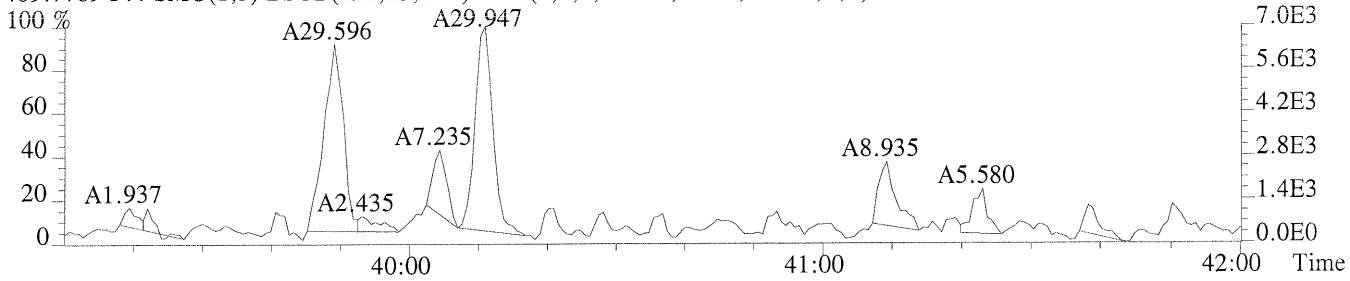


File:P100163 #1-258 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB

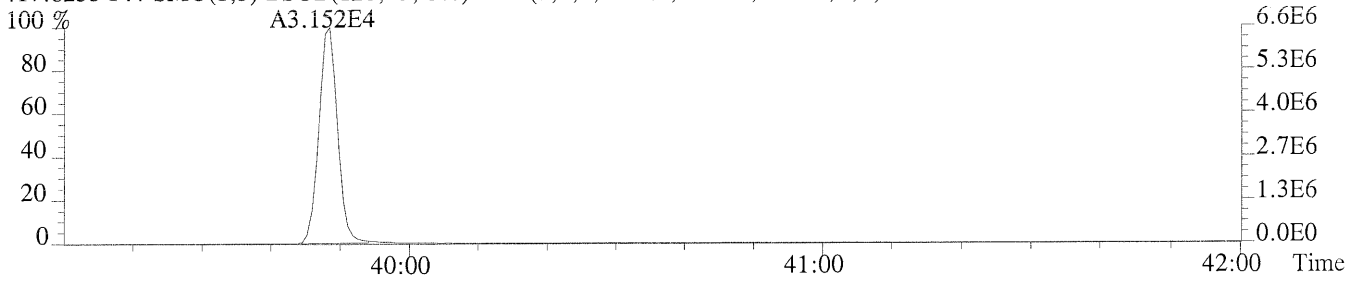
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,996.0,0.50%,F,F)



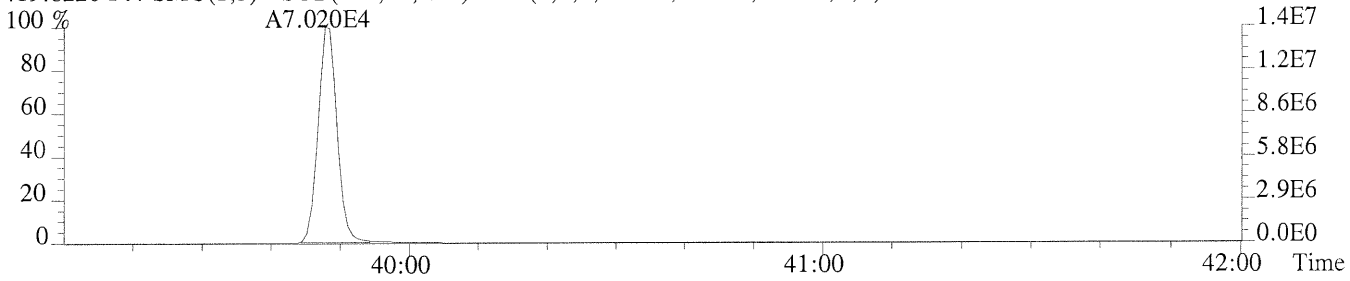
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,552.0,0.50%,F,F)



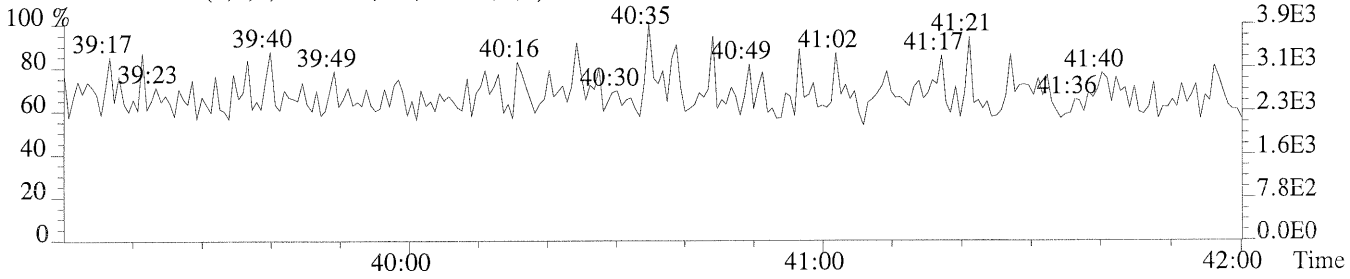
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1192.0,0.50%,F,F)



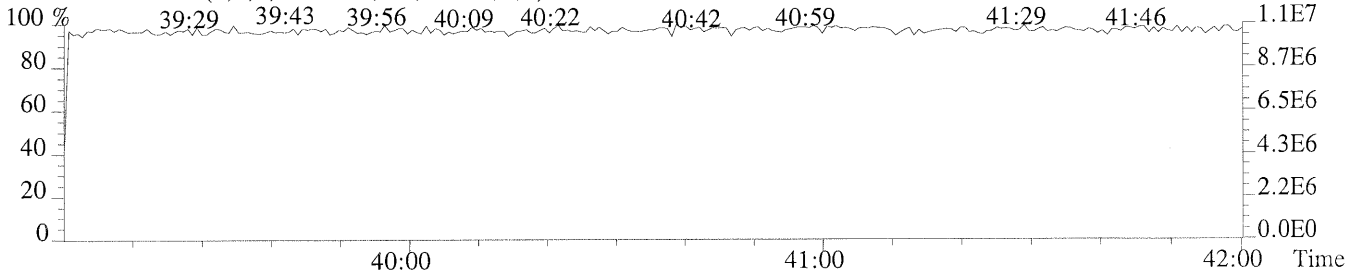
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3236.0,0.50%,F,F)



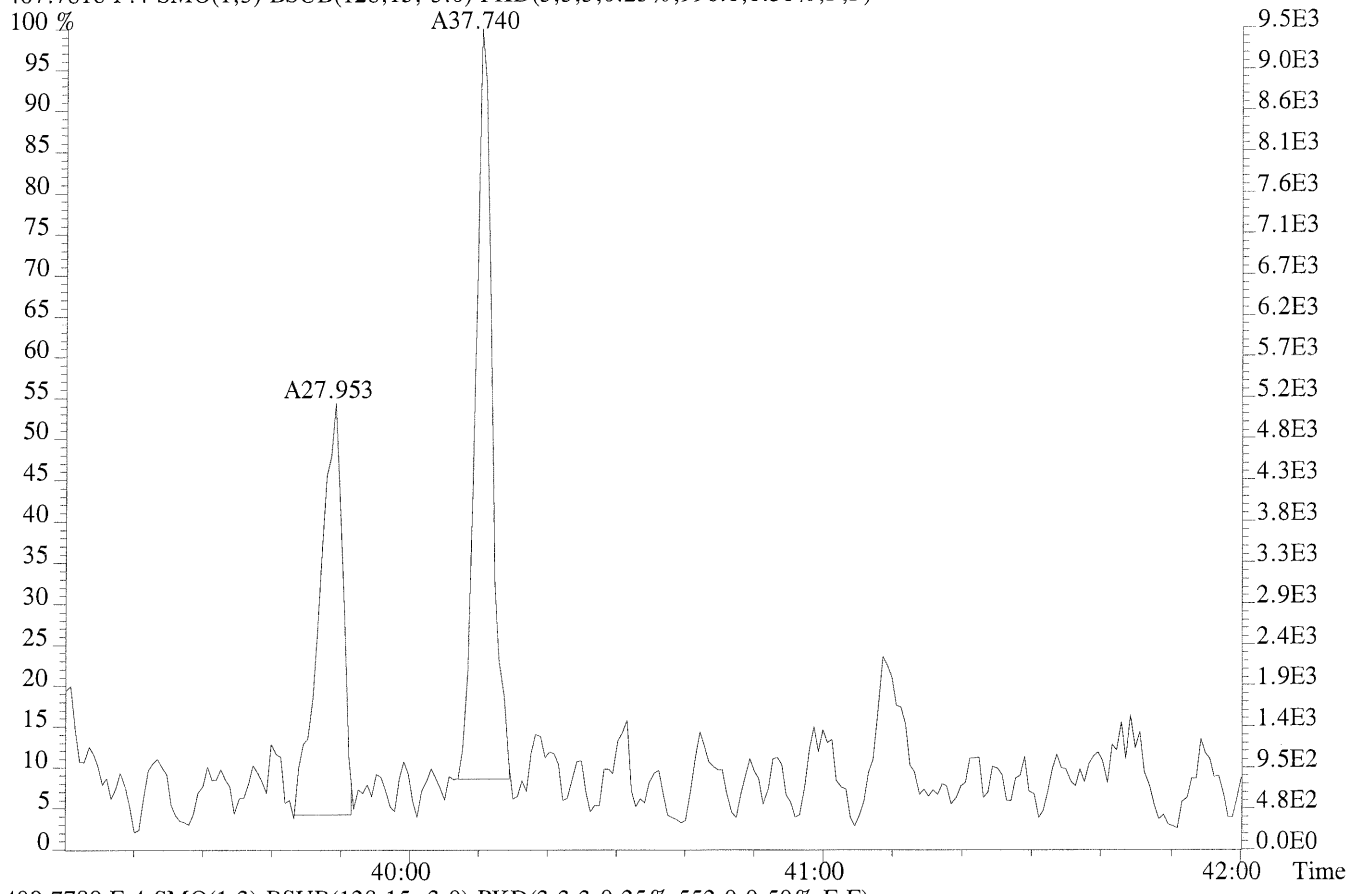
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



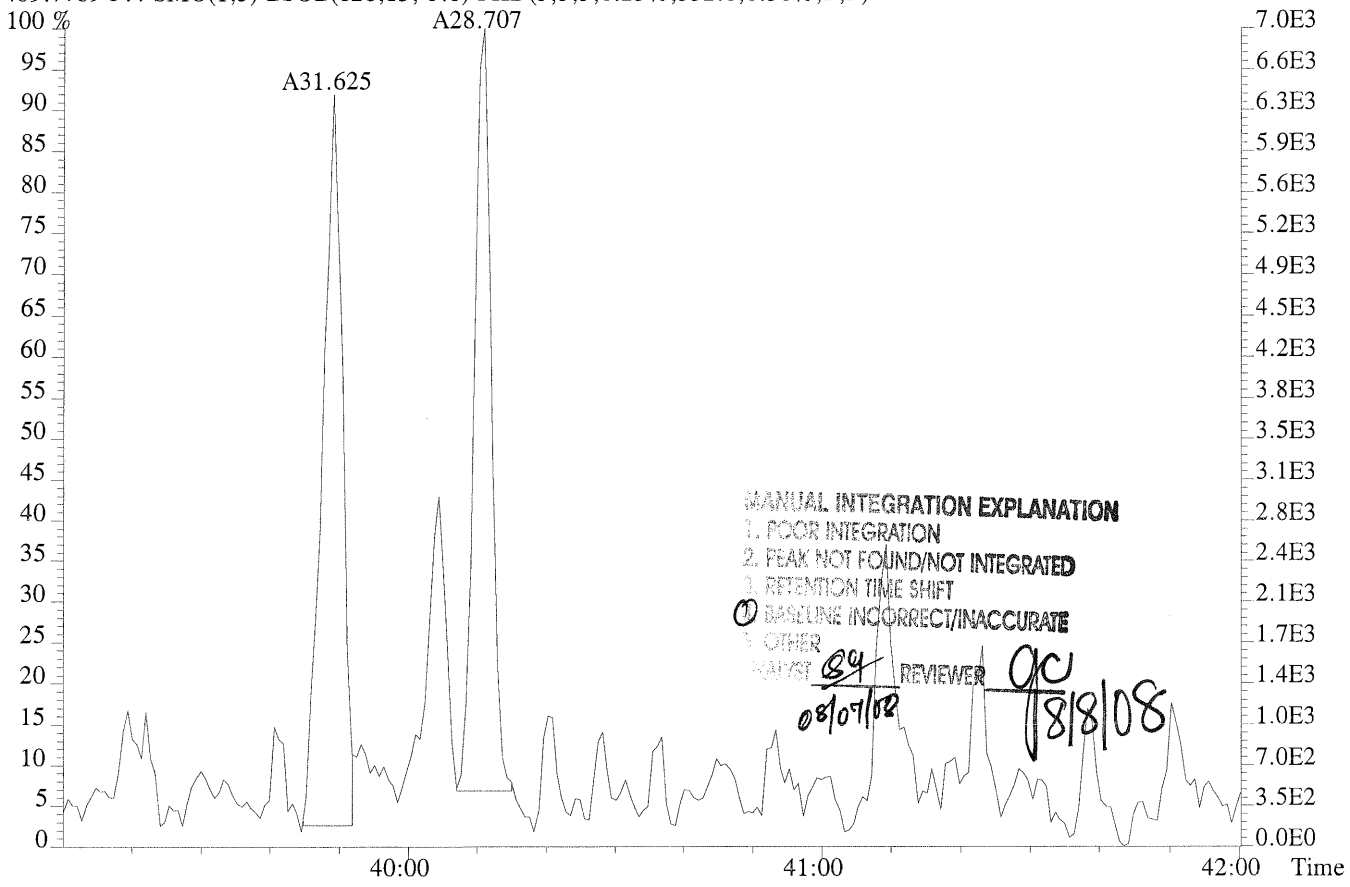
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P100163 #1-258 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,996.0,0.50%,F,F)

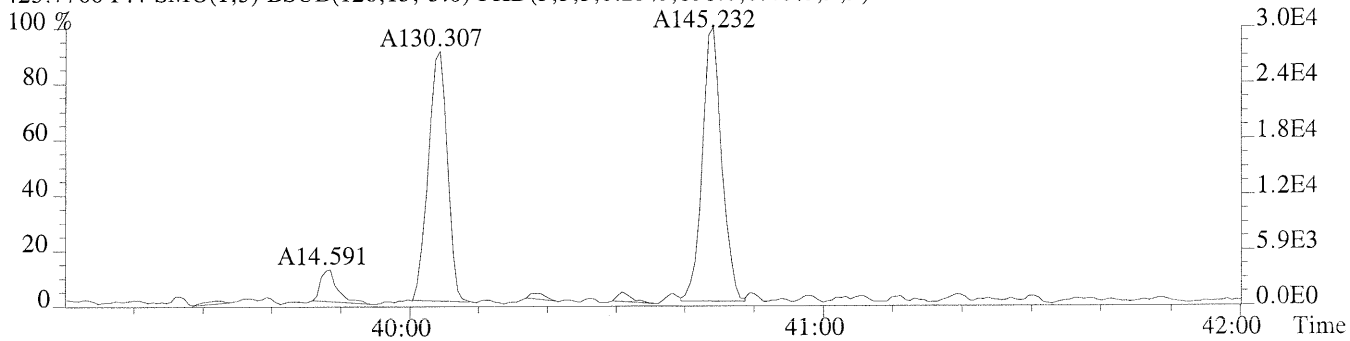


409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,552.0,0.50%,F,F)

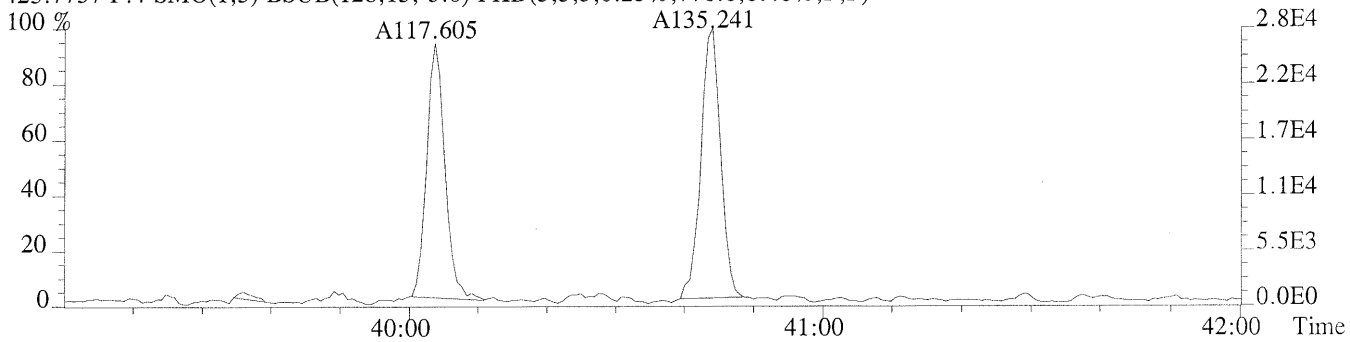


MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST BY REVIEWER QC
08/07/08 8/8/08

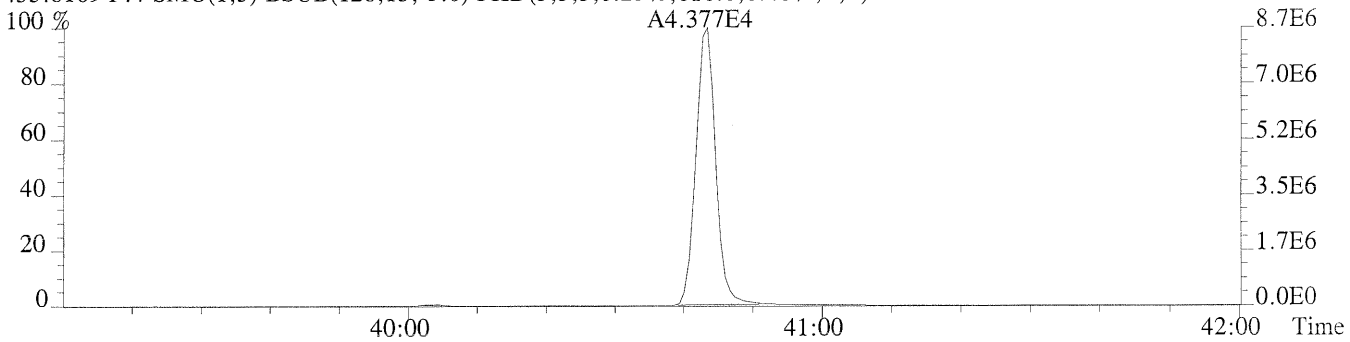
File:P100163 #1-258 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,656.0,0.40%,F,F)



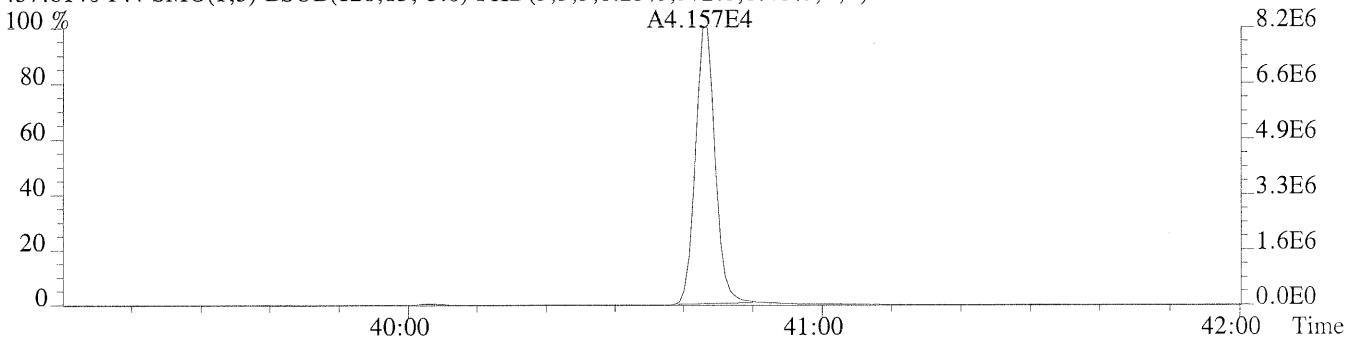
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,776.0,0.40%,F,F)



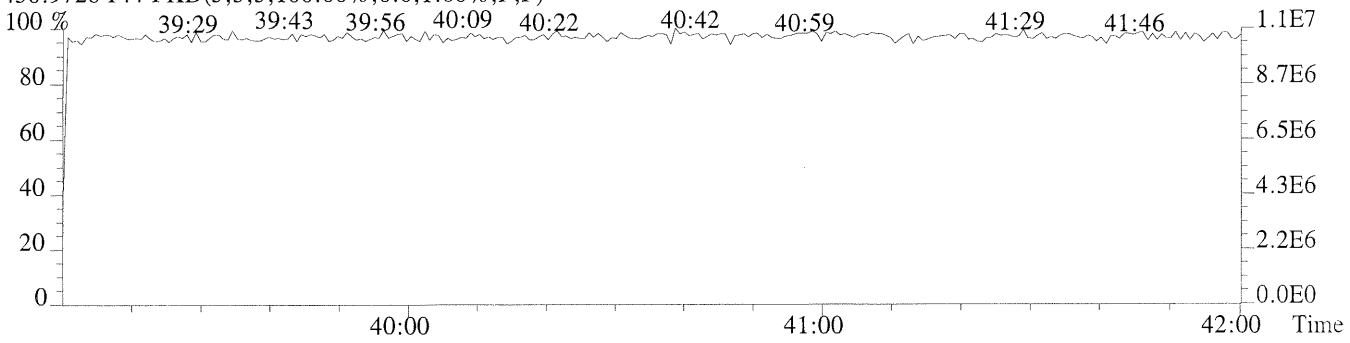
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,816.0,0.40%,F,F)



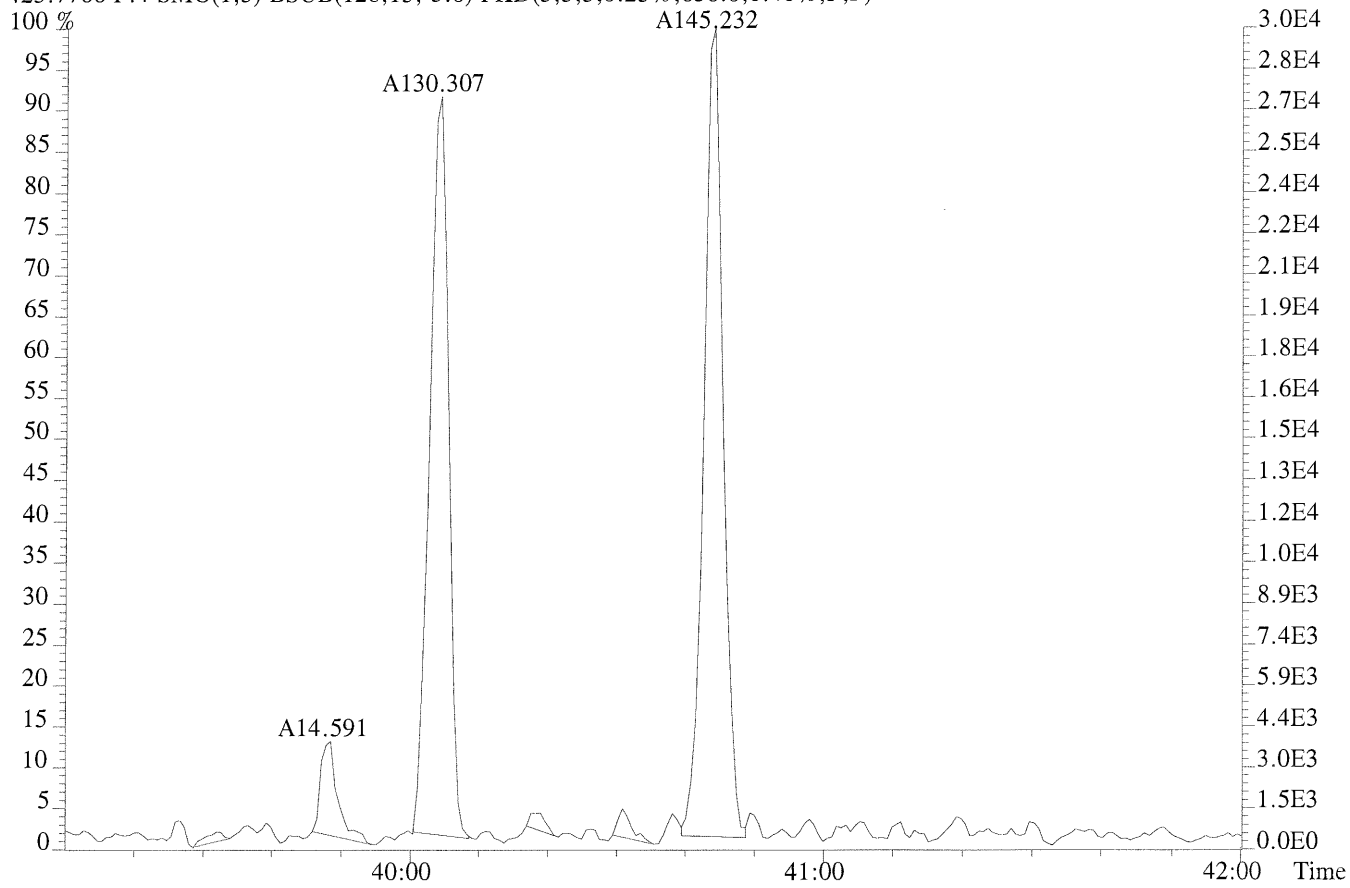
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,572.0,0.40%,F,F)



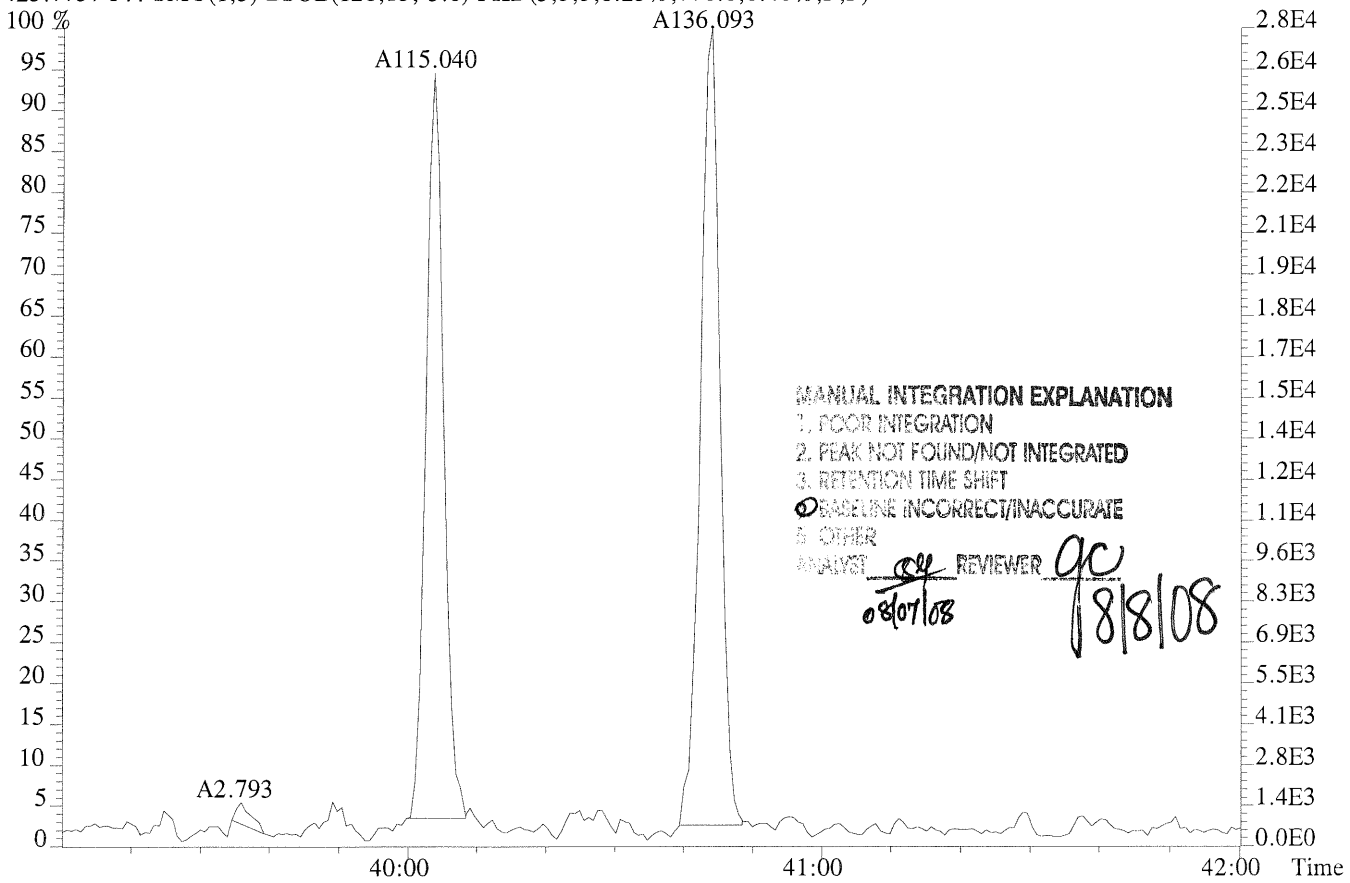
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P100163 #1-258 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,656.0,0.40%,F,F)

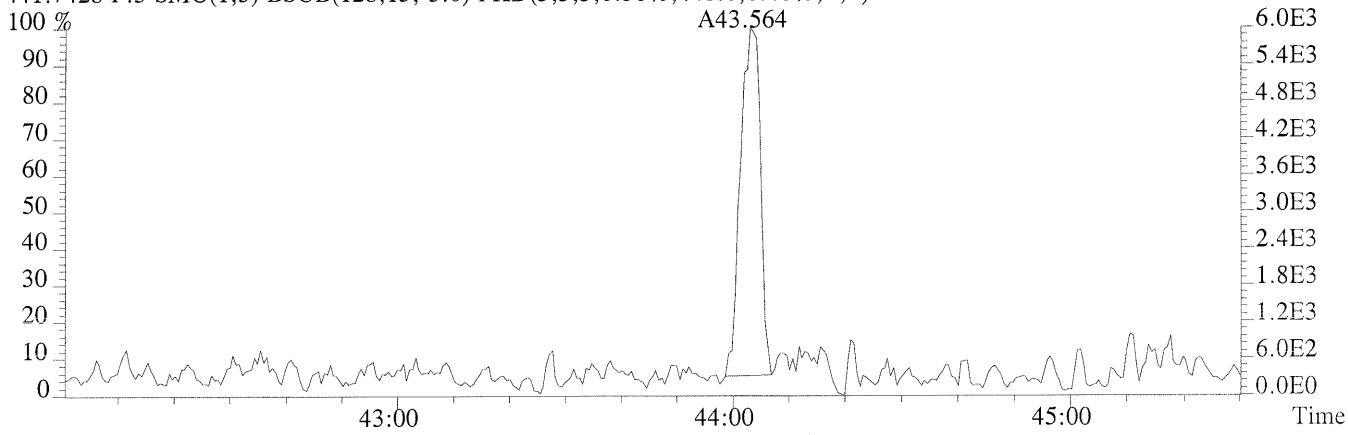


425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,776.0,0.40%,F,F)

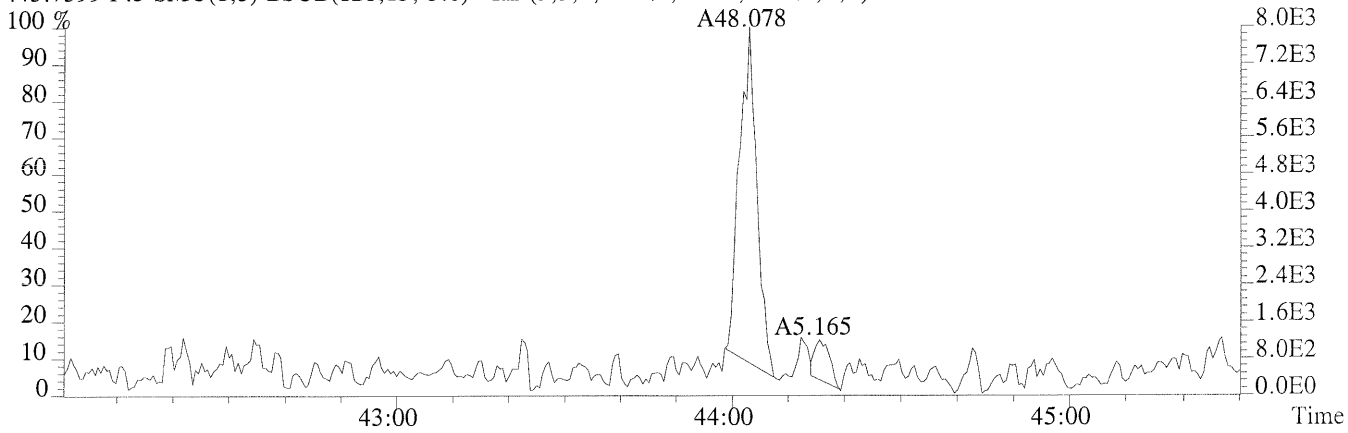


MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST REVIEWER
08/07/08 8/8/08

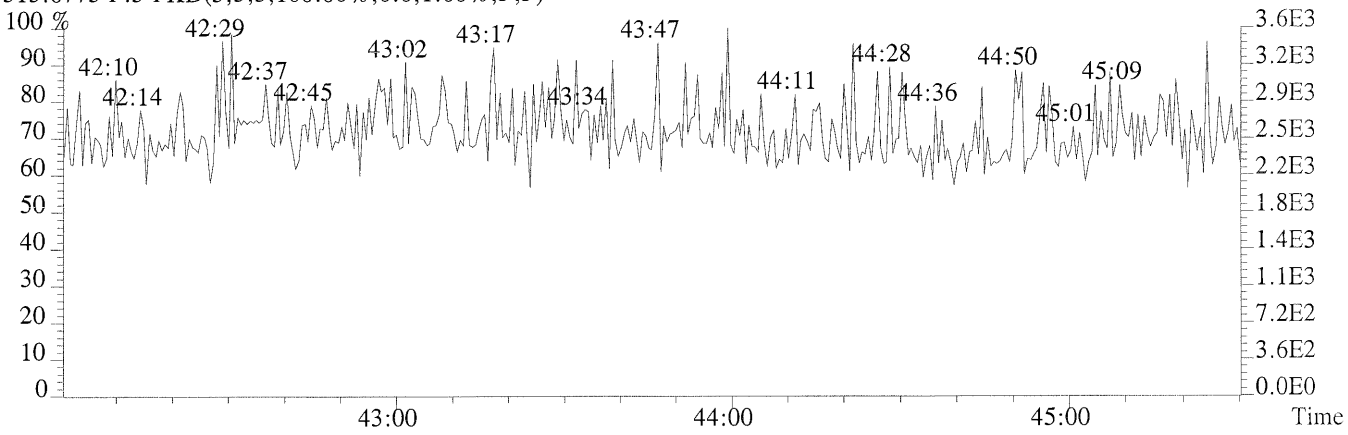
File:P100163 #1-386 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,448.0,0.40%,F,F)



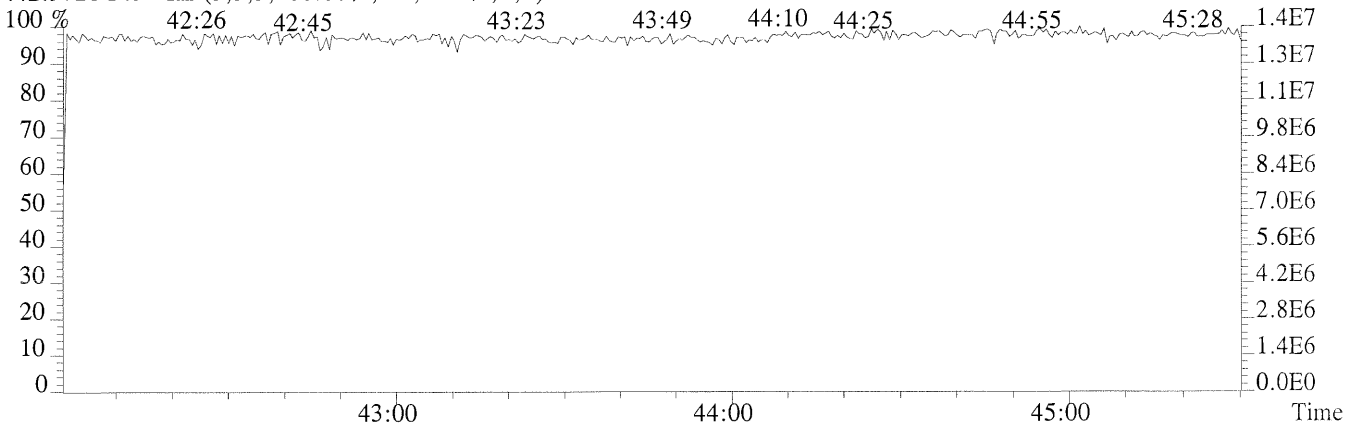
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,668.0,0.40%,F,F)



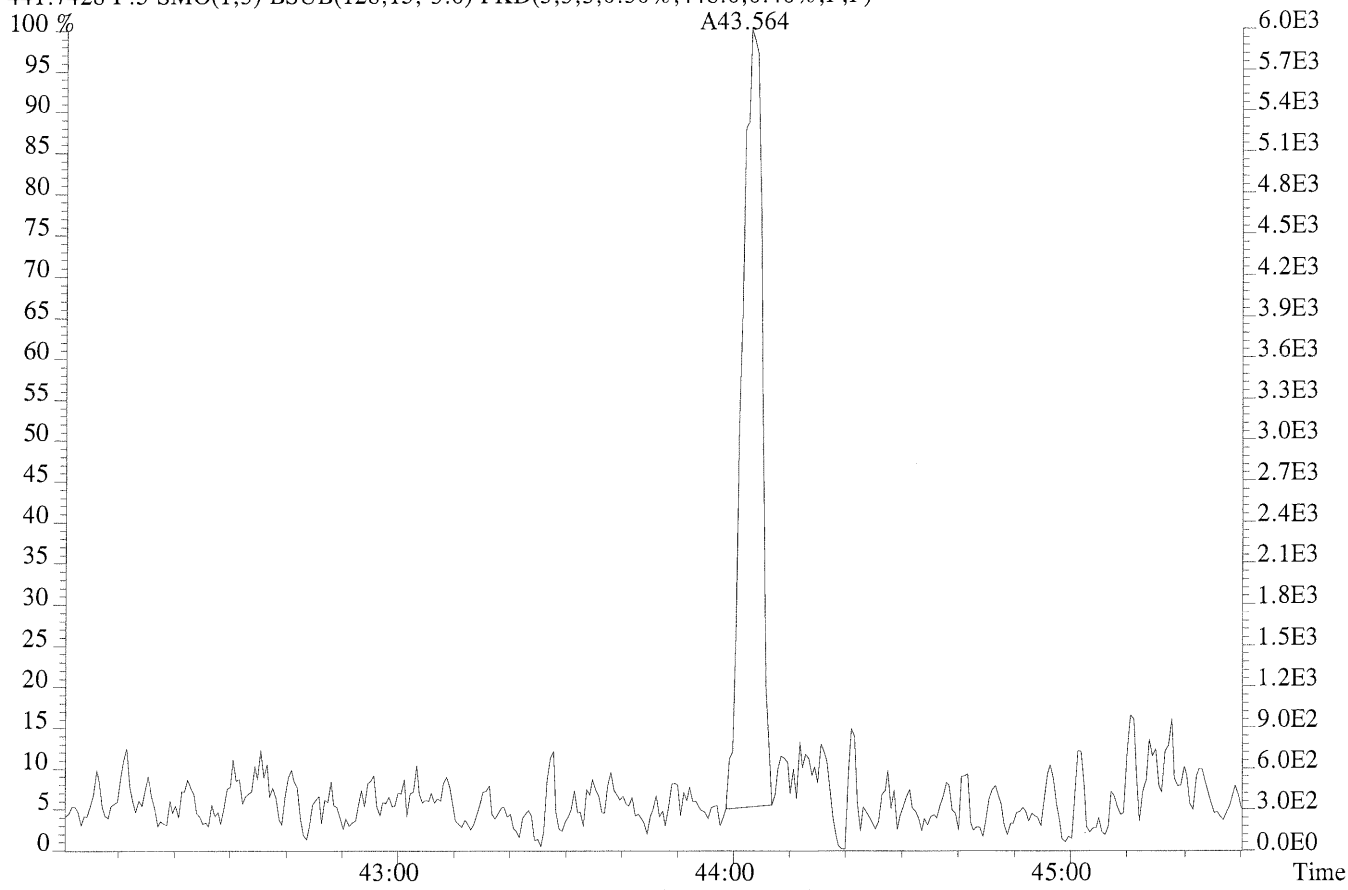
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



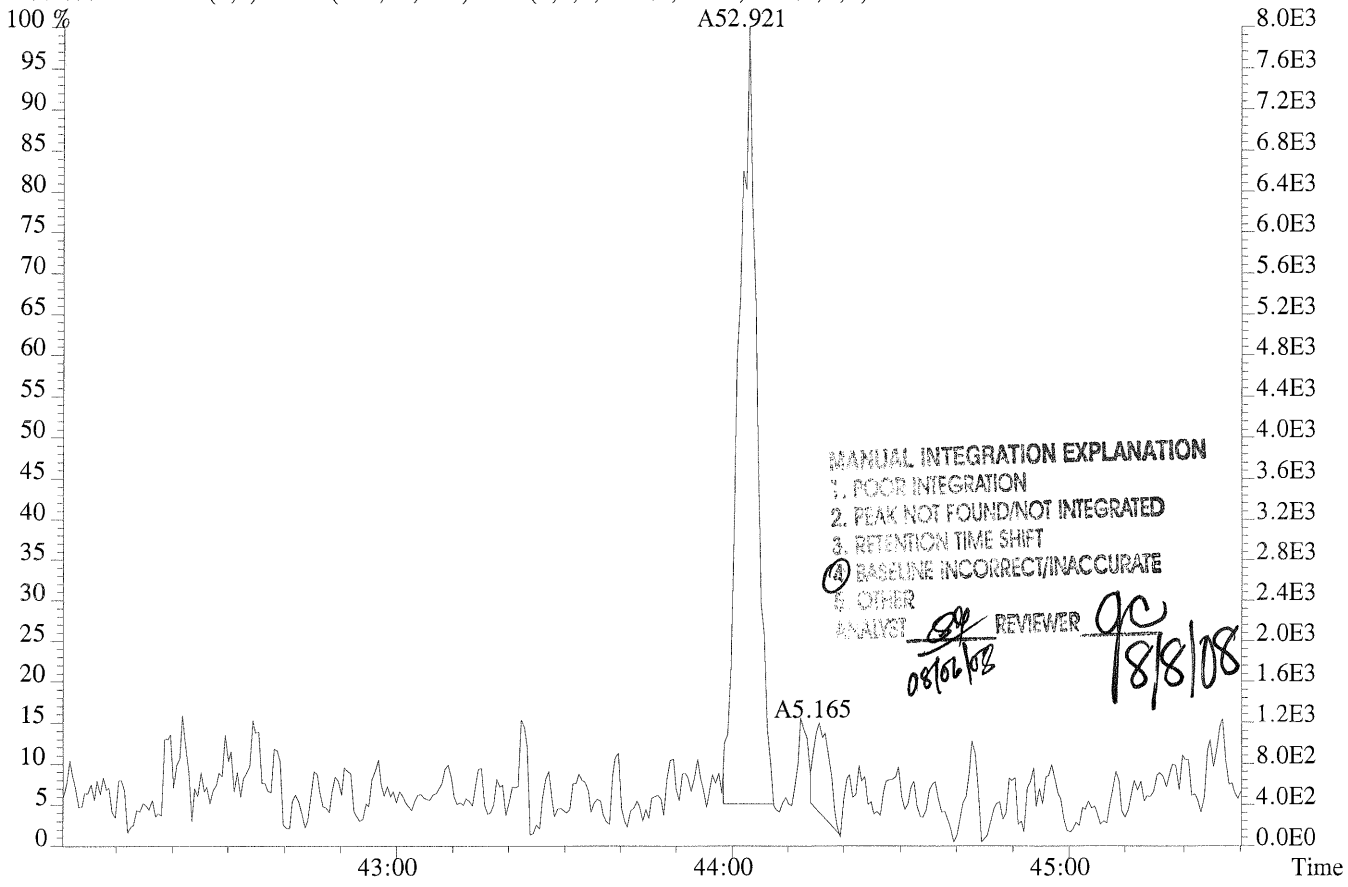
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



File:P100163 #1-386 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,448.0,0.40%,F,F)

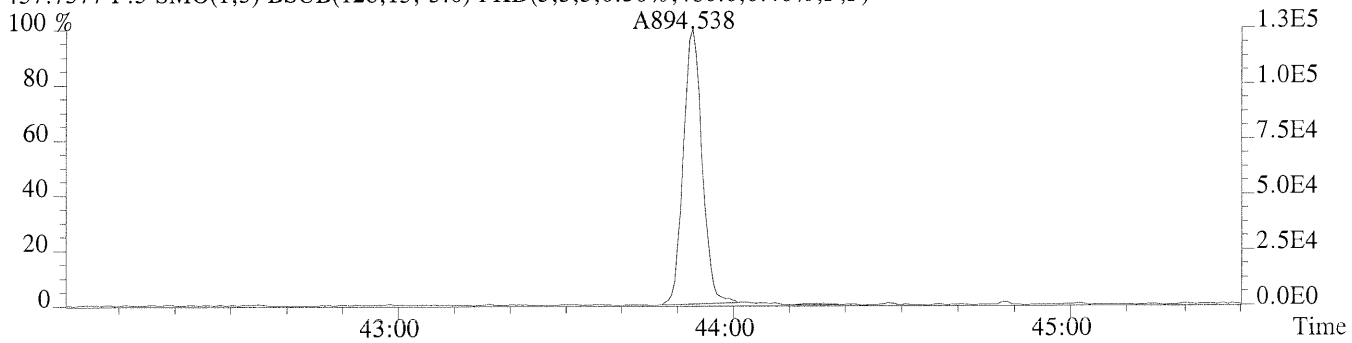


443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,668.0,0.40%,F,F)

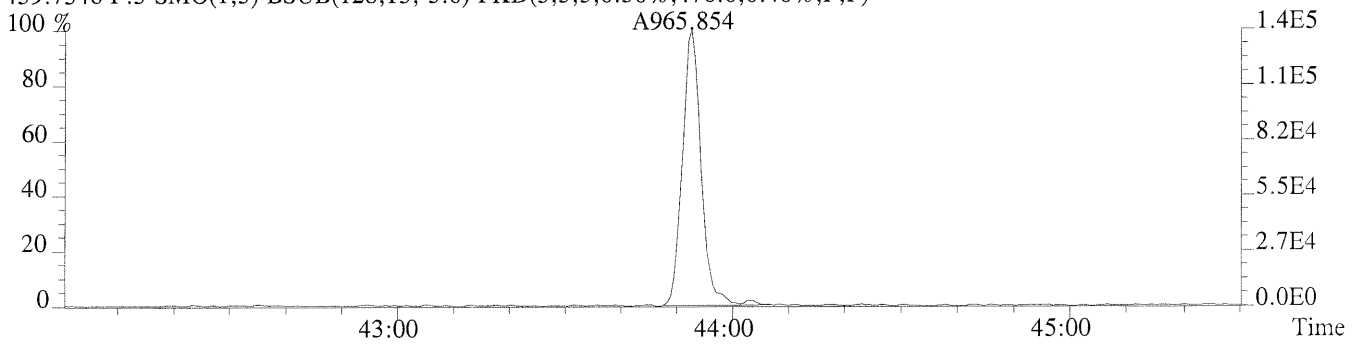


MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST 08/06/08 REVIEWER QC 8/8/08

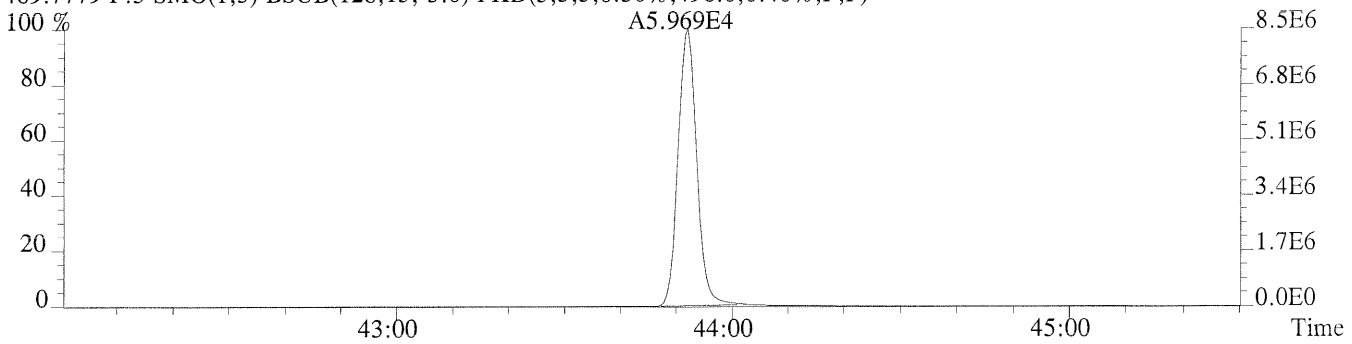
File:P100163 #1-386 Acq: 1-AUG-2008 10:05:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-01 MB
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,480.0,0.40%,F,F)



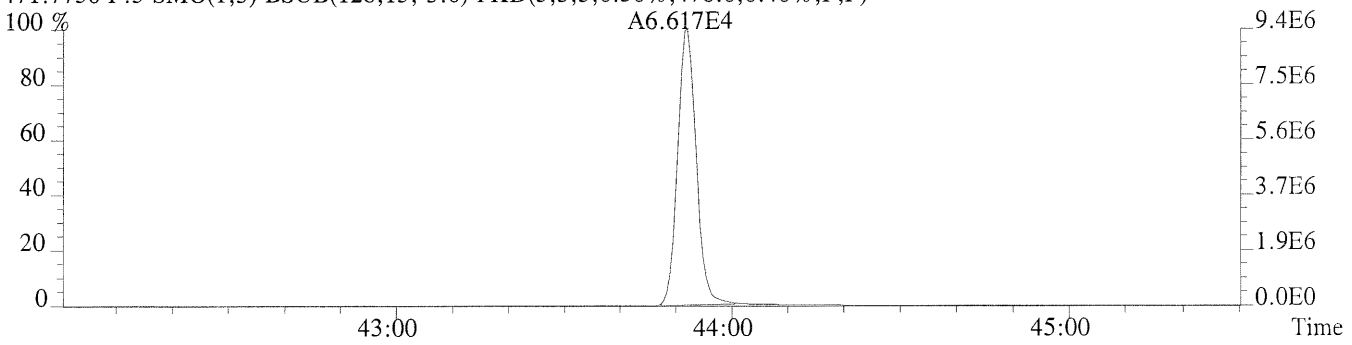
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,476.0,0.40%,F,F)



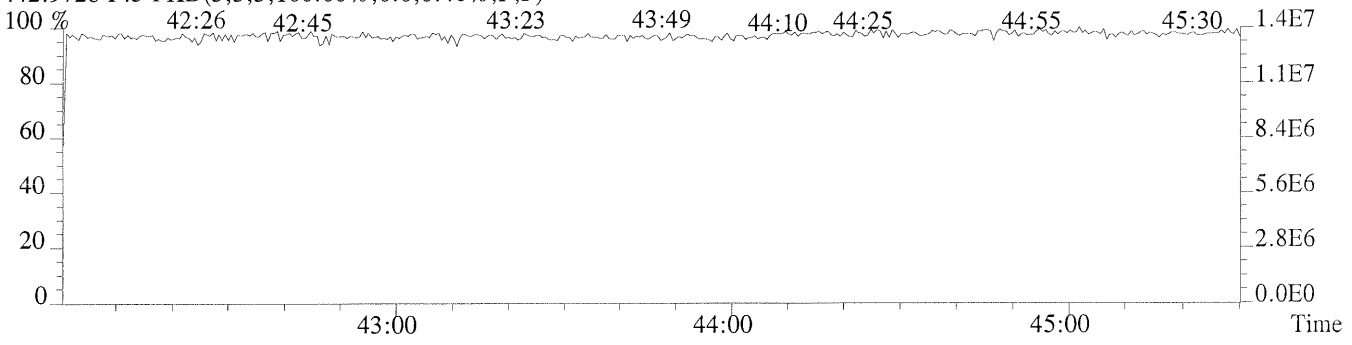
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,496.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,476.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
METHOD BLANK

Run #7 Filename P200040 Samp: 1 Inj: 1 Acquired: 4-AUG-08 12:59:32
Processed: 12-AUG-08 08:24:41 LAB. ID: EQ0800317-01

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	NotFnd	*	*	*	no	no	0.831
2	Unk	1,2,3,7,8-PeCDF	NotFnd	*	*	*	no	no	0.840
3	Unk	2,3,4,7,8-PeCDF	NotFnd	*	*	*	no	no	0.849
4	Unk	1,2,3,4,7,8-HxCDF	NotFnd	*	*	*	no	no	1.085
5	Unk	1,2,3,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.129
6	Unk	2,3,4,6,7,8-HxCDF	NotFnd	*	*	*	no	no	1.011
7	Unk	1,2,3,7,8,9-HxCDF	NotFnd	*	*	*	no	no	0.867
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	6.749e+01	6.611e+01	1.02	yes	yes	1.318
9	Unk	1,2,3,4,7,8,9-HpCDF	NotFnd	*	*	*	no	no	0.966
10	Unk	OCDF	43:21	7.452e+01	1.281e+02	0.58	no	yes	1.109
11	Unk	2,3,7,8-TCDD	NotFnd	*	*	*	no	no	0.921
12	Unk	1,2,3,7,8-PeCDD	NotFnd	*	*	*	no	no	0.872
13	Unk	1,2,3,4,7,8-HxCDD	NotFnd	*	*	*	no	no	0.934
14	Unk	1,2,3,6,7,8-HxCDD	NotFnd	*	*	*	no	no	1.054
15	Unk	1,2,3,7,8,9-HxCDD	NotFnd	*	*	*	no	no	0.969
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	7.340e+01	6.372e+01	1.15	yes	no	0.883
17	Unk	OCDD	43:12	2.286e+02	2.967e+02	0.77	yes	no	0.964
18	IS	13C-2,3,7,8-TCDF	28:35	4.930e+04	6.357e+04	0.78	yes	no	1.421
19	IS	13C-1,2,3,7,8-PeCDF	32:58	8.727e+04	5.534e+04	1.58	yes	no	1.262
20	IS	13C-1,2,3,4,7,8-HxCDF	36:31	9.750e+04	1.872e+05	0.52	yes	no	1.279
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	6.795e+04	1.551e+05	0.44	yes	no	0.901
22	IS	13C-2,3,7,8-TCDD	29:26	4.023e+04	5.153e+04	0.78	yes	no	1.051
23	IS	13C-1,2,3,7,8-PeCDD	34:03	6.738e+04	4.282e+04	1.57	yes	no	0.868
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	1.640e+05	1.314e+05	1.25	yes	no	1.000
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:09	1.196e+05	1.159e+05	1.03	yes	no	0.831
26	IS	13C-OCDD	43:11	1.934e+05	2.114e+05	0.91	yes	no	0.729
27	RS/RT	13C-1,2,3,4-TCDD	29:14	5.200e+04	6.506e+04	0.80	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	6.902e+04	5.536e+04	1.25	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:27	8.570e+04					0.981
				SUM AREA					
30	Tot	Total Tetra-Furans	NotFnd		*	*	no		0.831
31	Tot	Total Tetra-Dioxins	NotFnd		*	*	no		0.921
32	Tot	Total Penta-Furans	NotFnd		*	*	no		0.845
33	Tot	Total Penta-Dioxins	NotFnd		*	*	no		0.872
34	Tot	Total Hexa-Furans	NotFnd		*	*	no		1.023
35	Tot	Total Hexa-Dioxins	NotFnd		*	*	no		0.985
36	Tot	Total Hepta-Furans	39:16		1.336e+02	1.02	yes		1.142
37	Tot	Total Hepta-Dioxins	40:10		1.371e+02	1.15	yes		0.883

Columbia Analytical Services, Inc.
19408 Park Row., Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary METHOD BLANK

Run #7 Filename P200040 #1 Samp: 1 Inj: 1 Acquired: 4-AUG-08 12:59:32

Processed: 12-AUG-08 08:24:41 LAB. ID: EQ0800317-01

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	*	1.06e+03	*	*	2.72e+03	*
2	1,2,3,7,8-PeCDF	*	7.36e+02	*	*	2.46e+03	*
3	2,3,4,7,8-PeCDF	*	7.36e+02	*	*	2.46e+03	*
4	1,2,3,4,7,8-HxCDF	*	1.58e+03	*	*	1.04e+03	*
5	1,2,3,6,7,8-HxCDF	*	1.58e+03	*	*	1.04e+03	*
6	2,3,4,6,7,8-HxCDF	*	1.58e+03	*	*	1.04e+03	*
7	1,2,3,7,8,9-HxCDF	*	1.58e+03	*	*	1.04e+03	*
8	1,2,3,4,6,7,8-HpCDF	1.41e+04	1.56e+03	9.0e+00	2.06e+04	9.88e+02	2.1e+01
9	1,2,3,4,7,8,9-HpCDF	*	1.56e+03	*	*	9.88e+02	*
10	OCDF	1.28e+04	1.28e+03	1.0e+01	2.60e+04	3.33e+03	7.8e+00
11	2,3,7,8-TCDD	*	2.41e+03	*	*	1.16e+03	*
12	1,2,3,7,8-PeCDD	*	2.47e+03	*	*	7.64e+02	*
13	1,2,3,4,7,8-HxCDD	*	7.80e+02	*	*	1.48e+03	*
14	1,2,3,6,7,8-HxCDD	*	7.80e+02	*	*	1.48e+03	*
15	1,2,3,7,8,9-HxCDD	*	7.80e+02	*	*	1.48e+03	*
16	1,2,3,4,6,7,8-HpCDD	1.36e+04	1.16e+03	1.2e+01	1.32e+04	7.76e+02	1.7e+01
17	OCDD	3.64e+04	1.14e+03	3.2e+01	5.15e+04	1.04e+03	4.9e+01
18	13C-2,3,7,8-TCDF	8.17e+06	5.29e+03	1.5e+03	1.05e+07	3.93e+03	2.7e+03
19	13C-1,2,3,7,8-PeCDF	1.69e+07	7.88e+02	2.1e+04	1.08e+07	1.50e+03	7.2e+03
20	13C-1,2,3,4,7,8-HxCDF	2.08e+07	9.44e+02	2.2e+04	4.04e+07	1.77e+03	2.3e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.45e+07	7.03e+03	2.1e+03	3.30e+07	3.17e+03	1.0e+04
22	13C-2,3,7,8-TCDD	7.18e+06	6.21e+03	1.2e+03	9.27e+06	1.35e+03	6.9e+03
23	13C-1,2,3,7,8-PeCDD	1.36e+07	2.36e+03	5.8e+03	8.62e+06	1.00e+03	8.6e+03
24	13C-1,2,3,6,7,8-HxCDD	3.55e+07	7.76e+02	4.6e+04	2.79e+07	1.65e+03	1.7e+04
25	13C-1,2,3,4,6,7,8-HpCDD	2.49e+07	2.94e+03	8.5e+03	2.39e+07	1.29e+03	1.9e+04
26	13C-OCDD	2.88e+07	9.00e+02	3.2e+04	3.20e+07	8.40e+02	3.8e+04
27	13C-1,2,3,4-TCDD	9.40e+06	6.21e+03	1.5e+03	1.17e+07	1.35e+03	8.7e+03
28	13C-1,2,3,7,8,9-HxCDD	1.49e+07	7.76e+02	1.9e+04	1.19e+07	1.65e+03	7.2e+03
29	37Cl-2,3,7,8-TCDD	1.55e+07	7.08e+02	2.2e+04			

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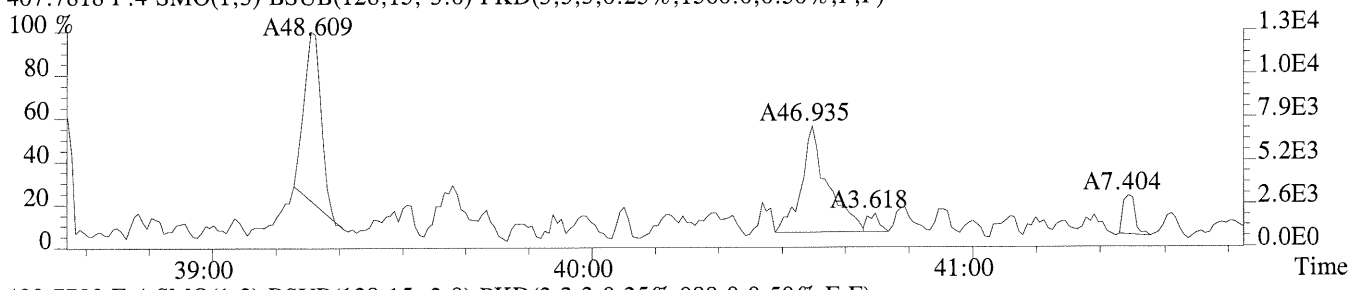
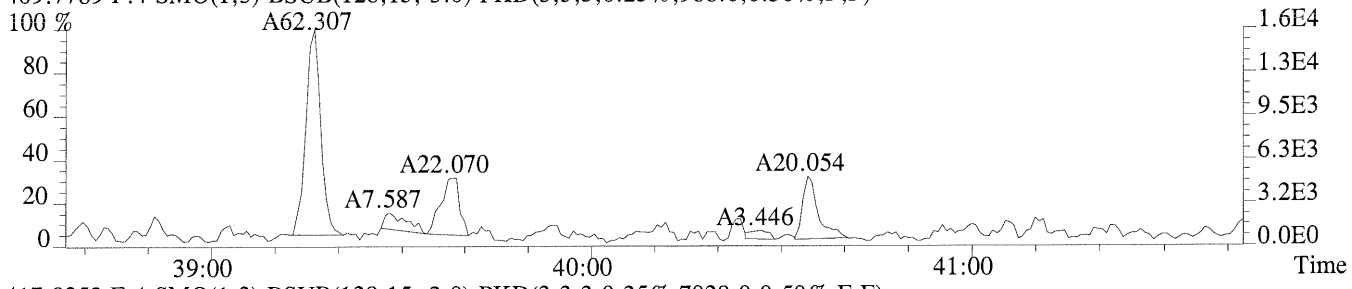
File:P200040 #1-281 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB

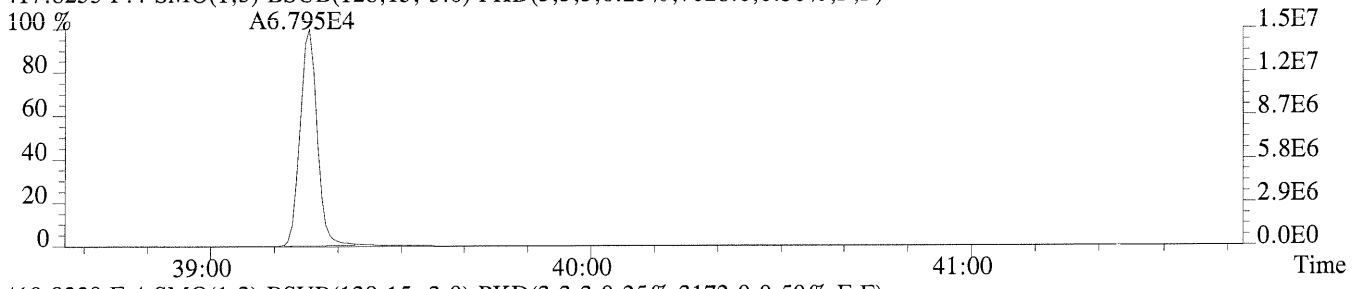
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1560.0,0.50%,F,F)



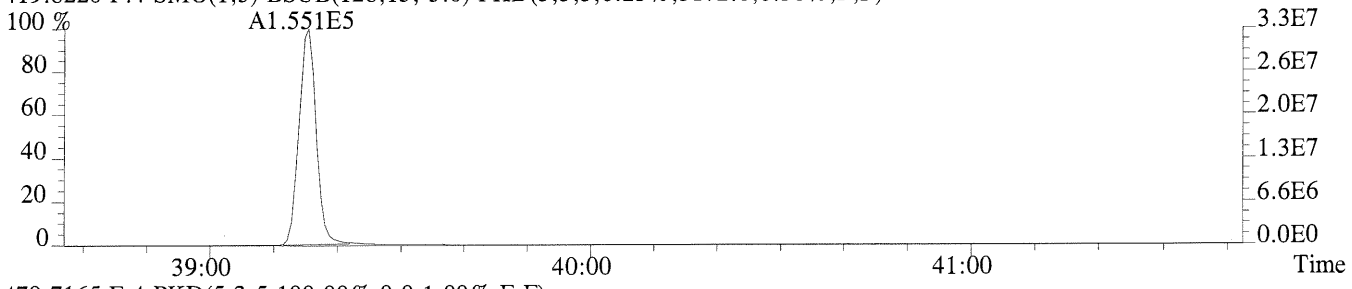
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,988.0,0.50%,F,F)



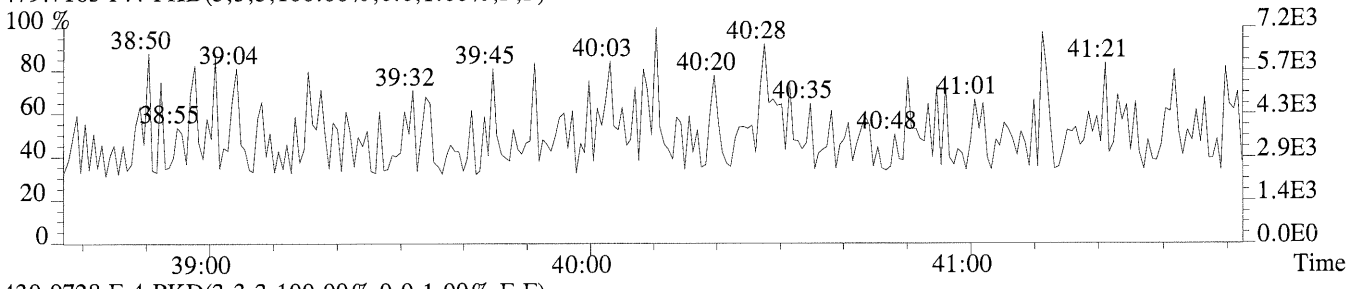
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,7028.0,0.50%,F,F)



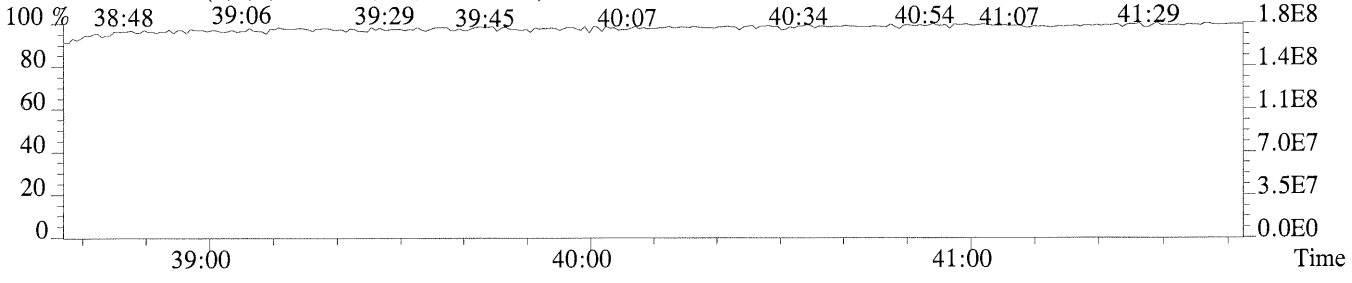
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3172.0,0.50%,F,F)



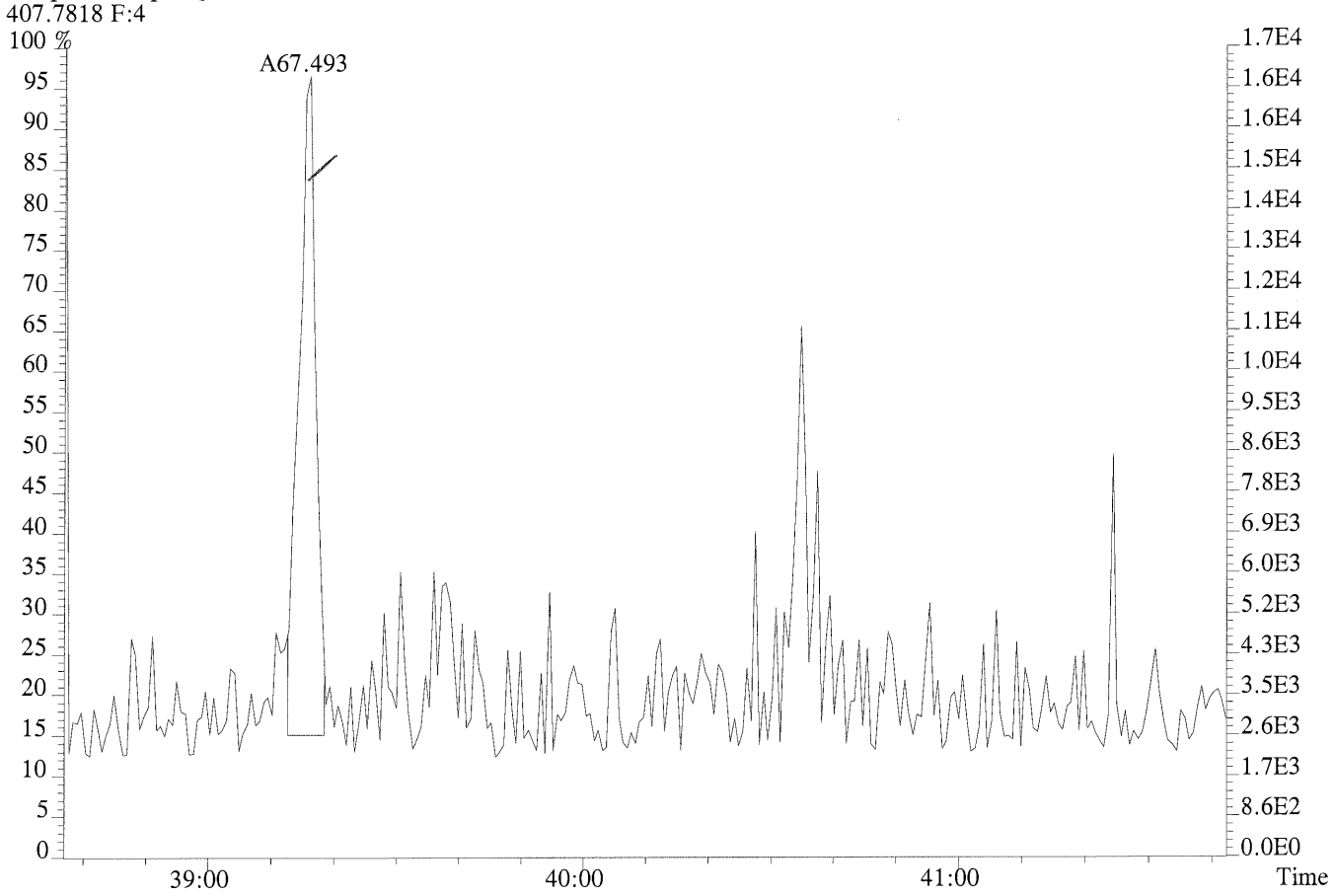
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



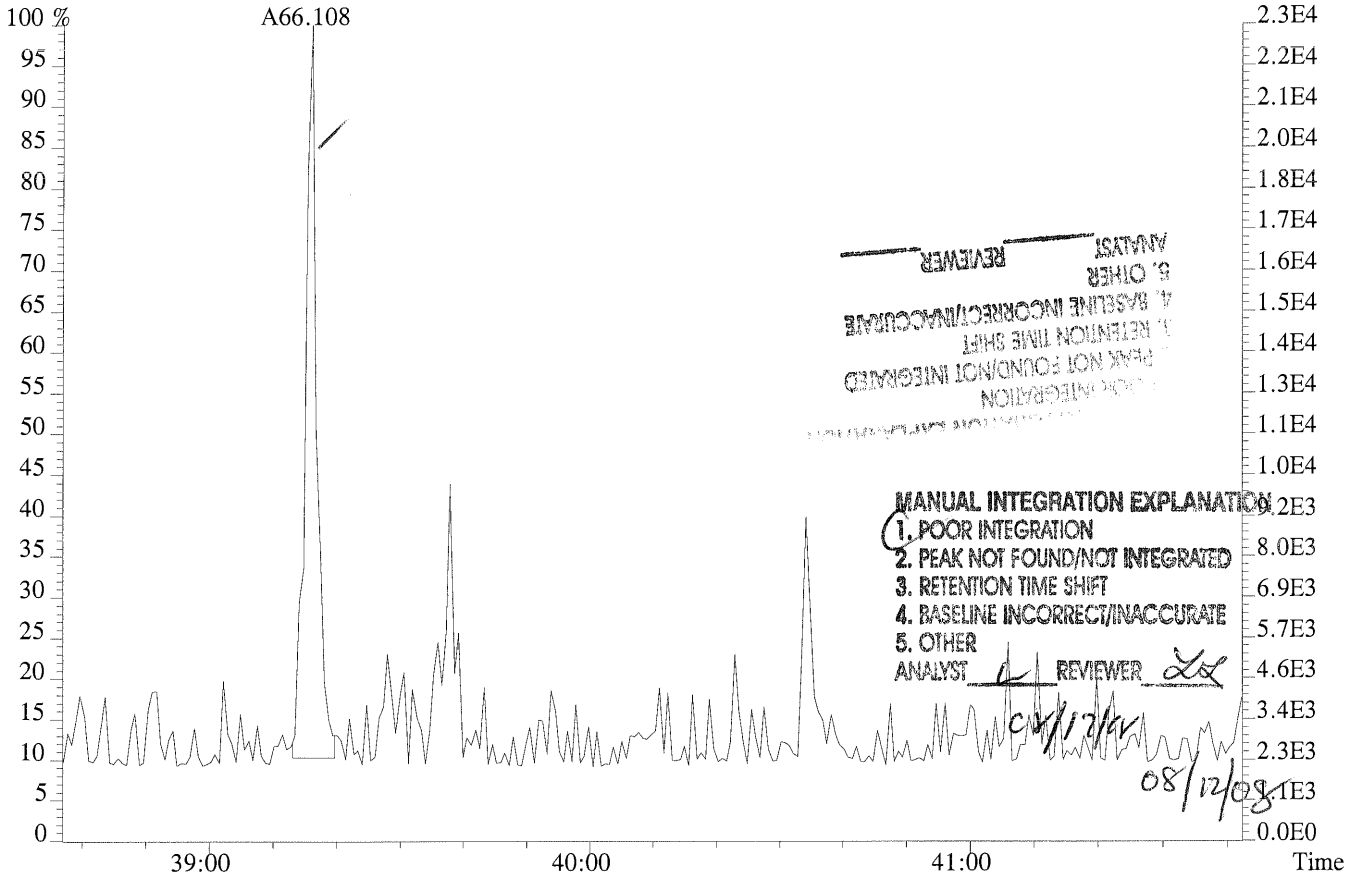
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P200040 #1-281 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
407.7818 F:4



409.7789 F:4



MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST _____ REVIEWER _____
08/12/08

Columbia Analytical Services, Inc.
Peak List Summary

CLIENT ID.
METHOD BLANK

Entry: 36 Totals Name: Total Hepta-Furans

Run: 7 File: P200040 Sample:1 Injection:1 Function:4

Acquired: 4-AUG-08 12:59:32 Processed: 12-AUG-08 08:24:41

Mass:407.782 409.779 Response:

#	RT	Resp	Resp Ratio	Meet	Tot Resp	Name	Mod?
1	39:16	6.75e+01	6.61e+01 1.02	yes	1.34e+02	1,2,3,4,6,7,8-HpCDF	y

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Columbia Analytical Services, Inc.
Peak List Summary

CLIENT ID.
METHOD BLANK

Entry: 37 Totals Name: Total Hepta-Dioxins

Run: 7 File: P200040 Sample:1 Injection:1 Function:4

Acquired: 4-AUG-08 12:59:32 Processed: 12-AUG-08 08:24:41

Mass:423.777 425.774 Response:

#	RT	Resp	Resp Ratio	Meet	Tot Resp	Name	Mod?
1	40:10	7.34e+01	6.37e+01 1.15	yes	1.37e+02	1,2,3,4,6,7,8-HpCDD	n

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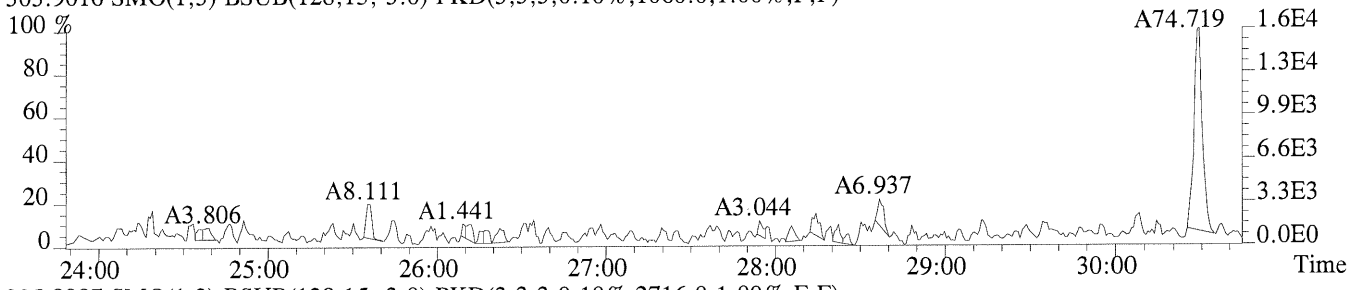
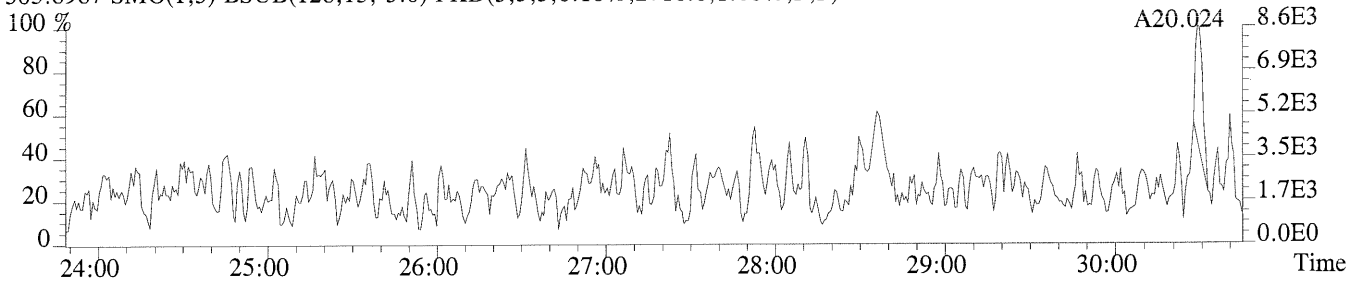
File:P200040 #1-578 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB

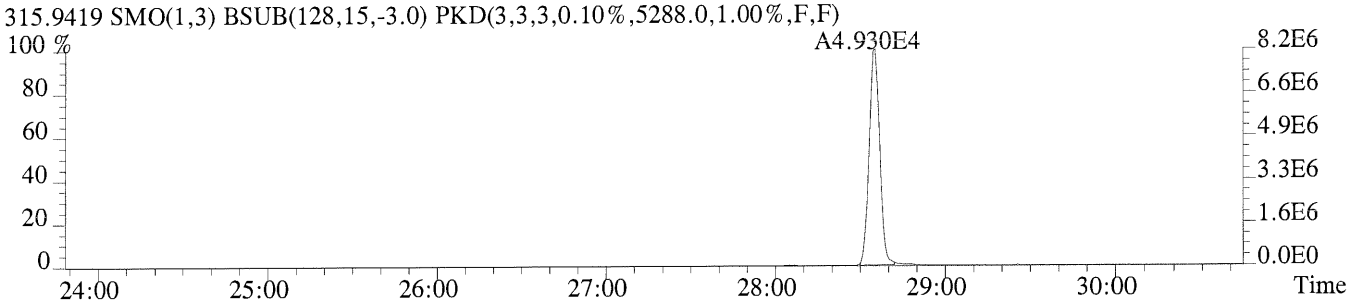
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1060.0,1.00%,F,F)



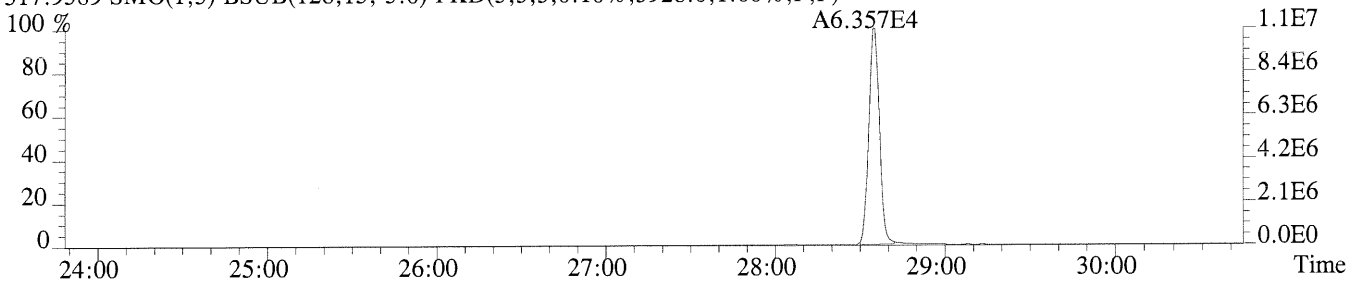
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2716.0,1.00%,F,F)



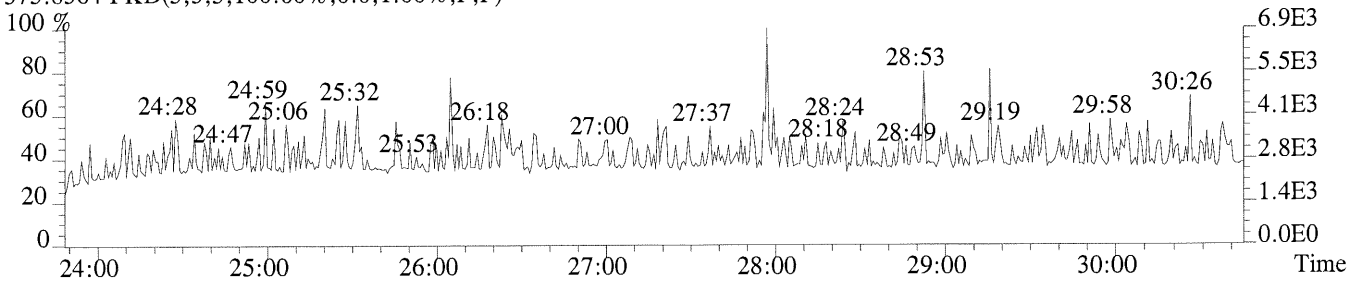
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5288.0,1.00%,F,F)



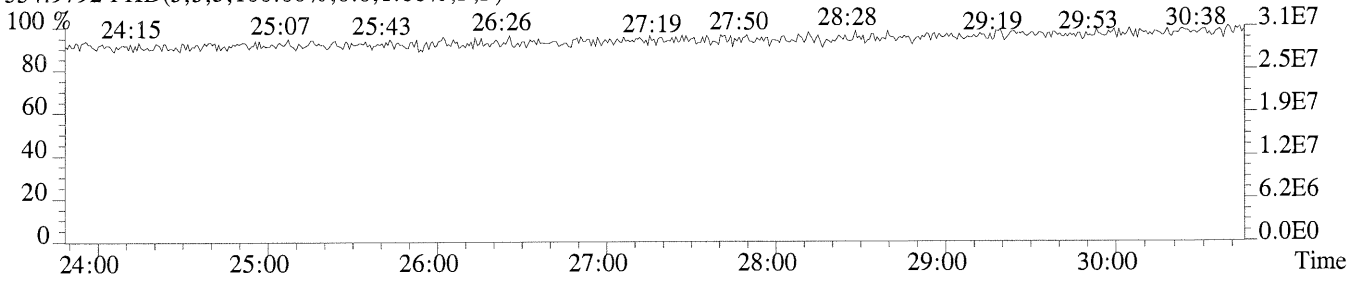
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3928.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

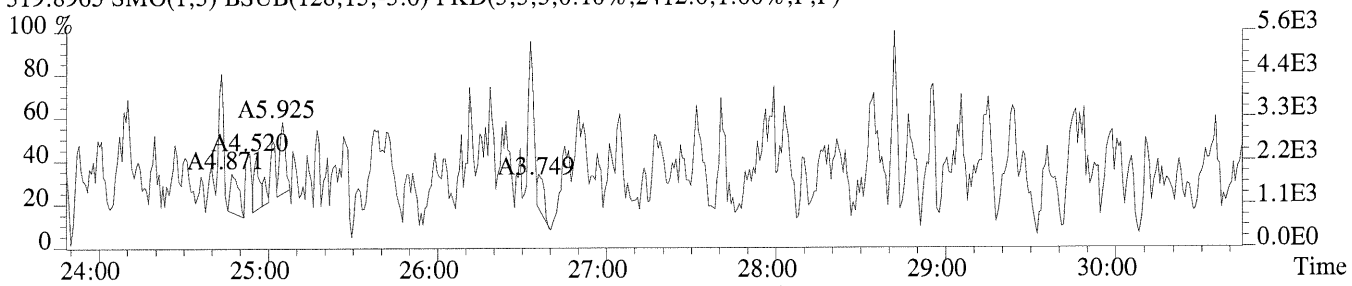


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

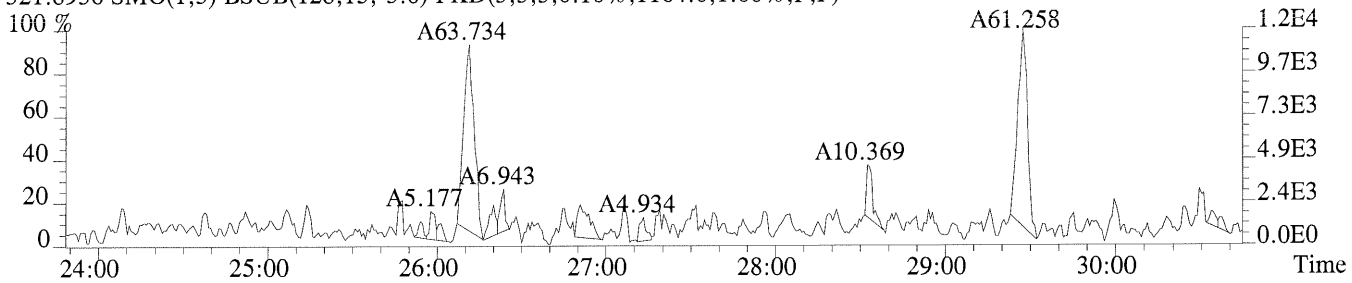


File:P200040 #1-578 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB

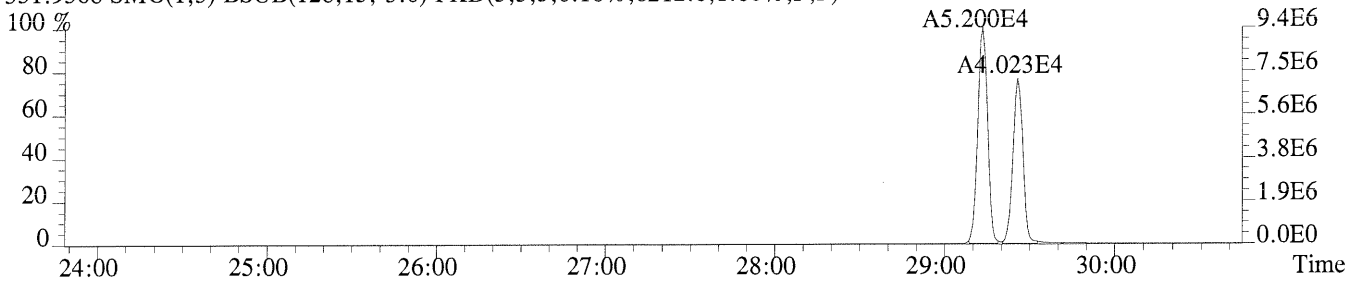
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2412.0,1.00%,F,F)



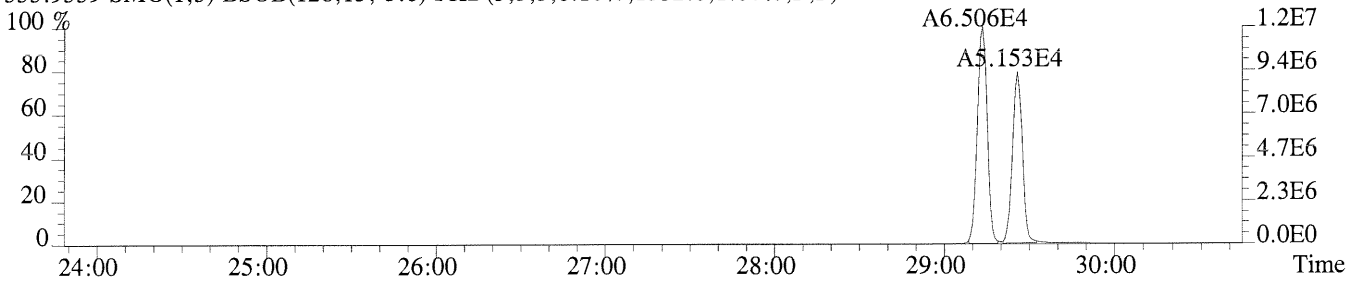
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1164.0,1.00%,F,F)



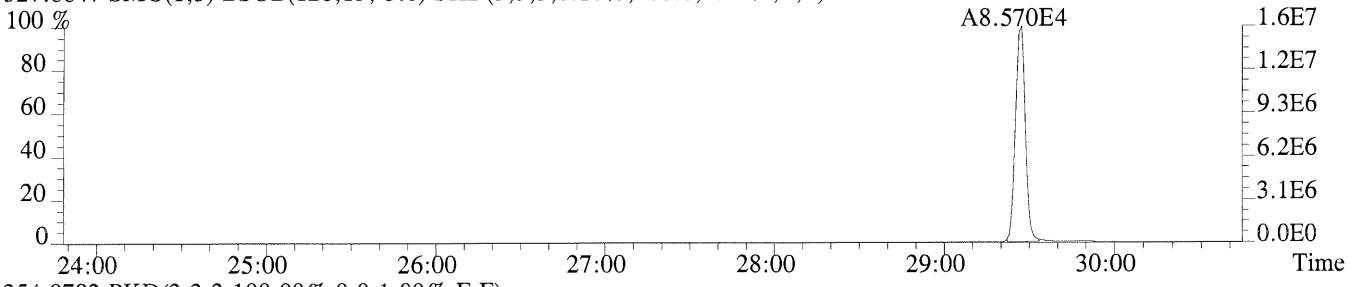
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,6212.0,1.00%,F,F)



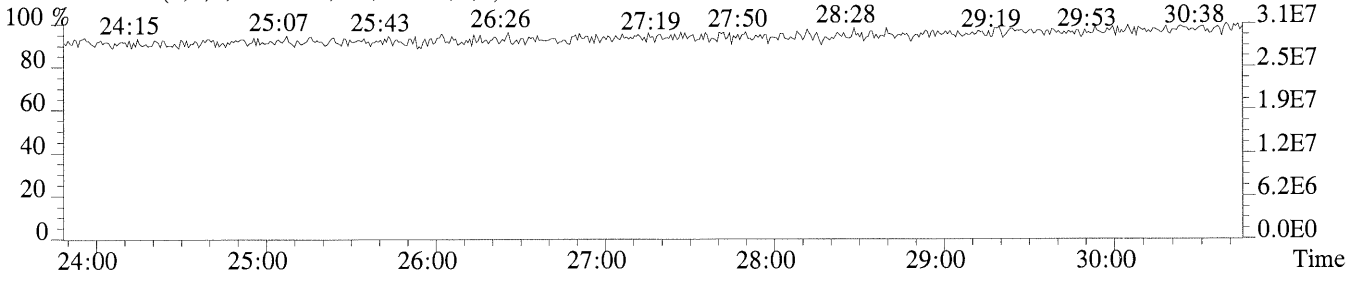
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1352.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,708.0,1.00%,F,F)

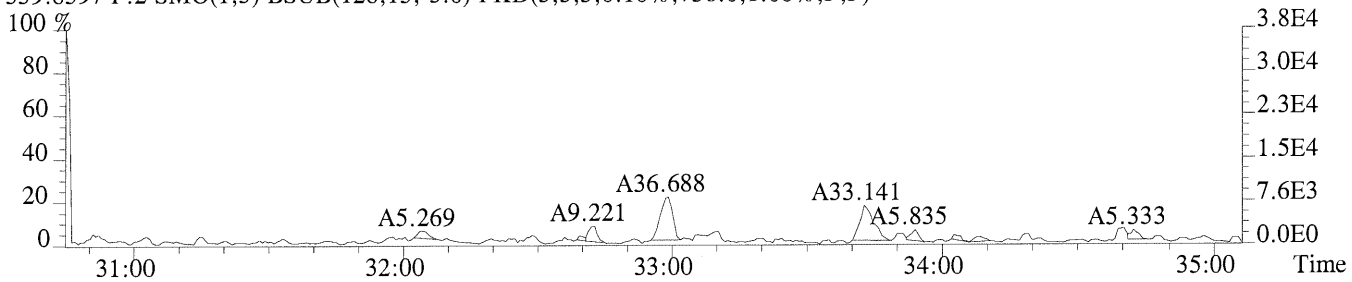


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

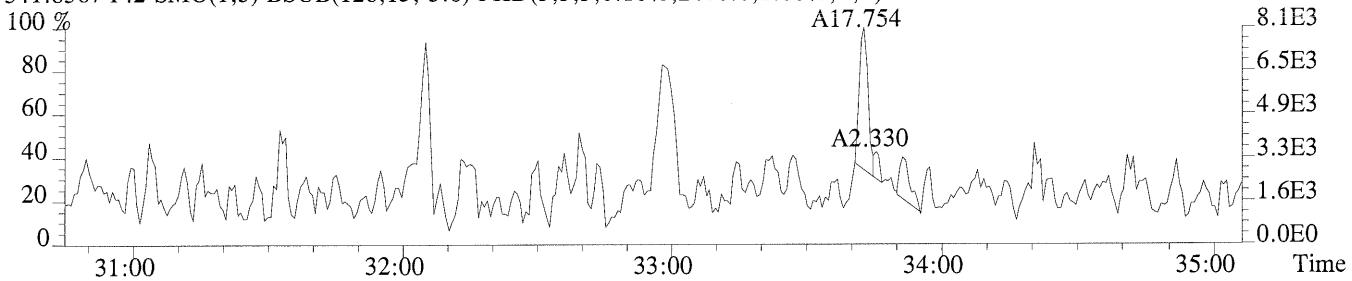


File:P200040 #1-396 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB

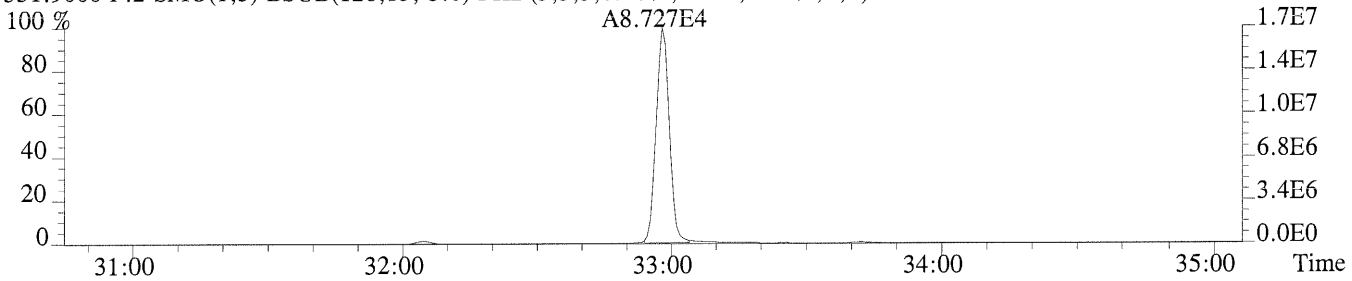
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,736.0,1.00%,F,F)



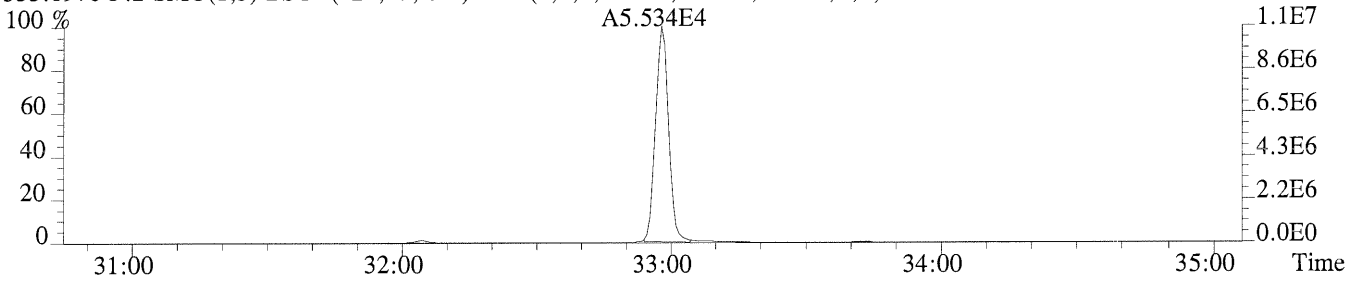
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2460.0,1.00%,F,F)



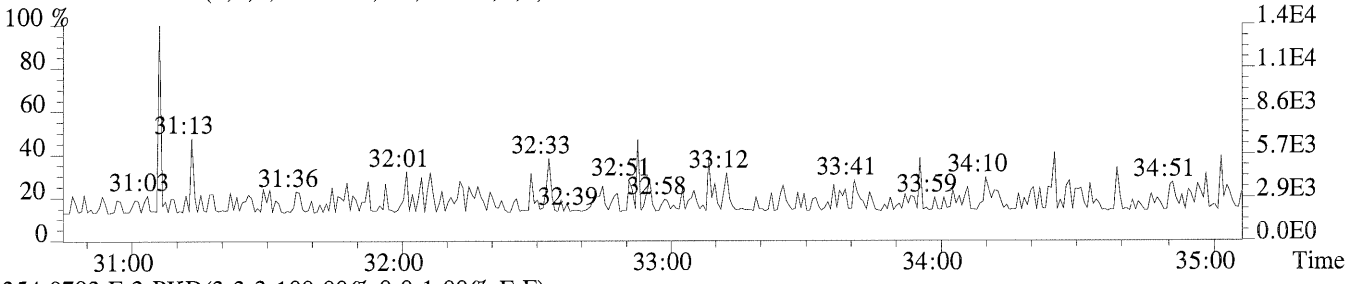
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,788.0,1.00%,F,F)



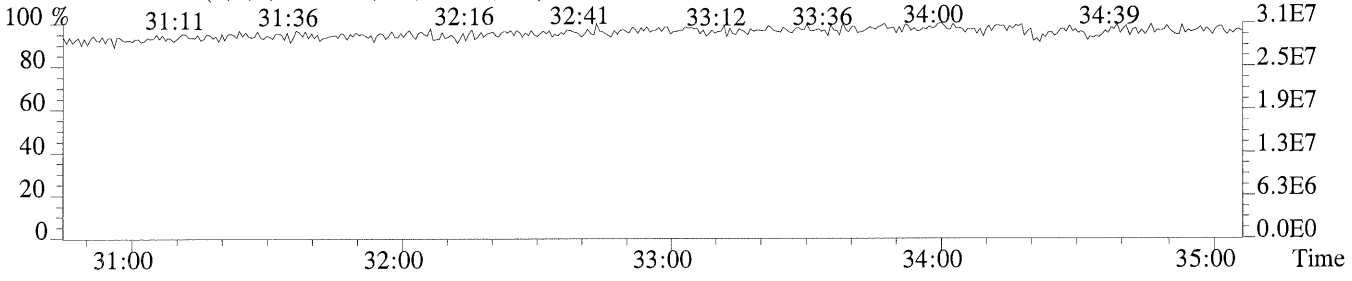
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1504.0,1.00%,F,F)



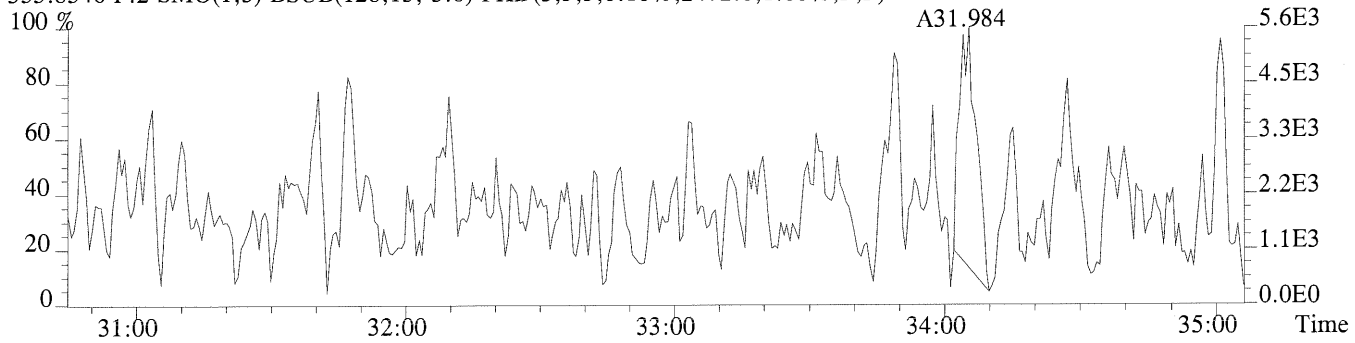
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



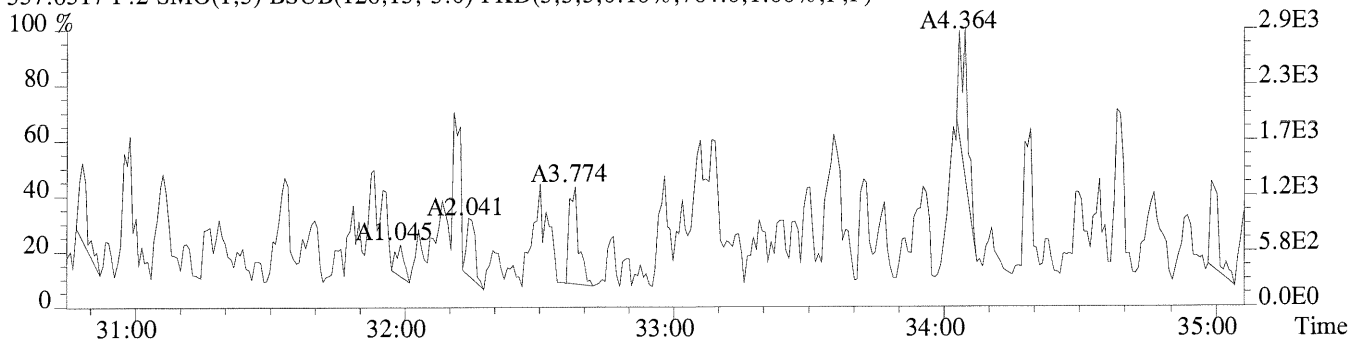
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



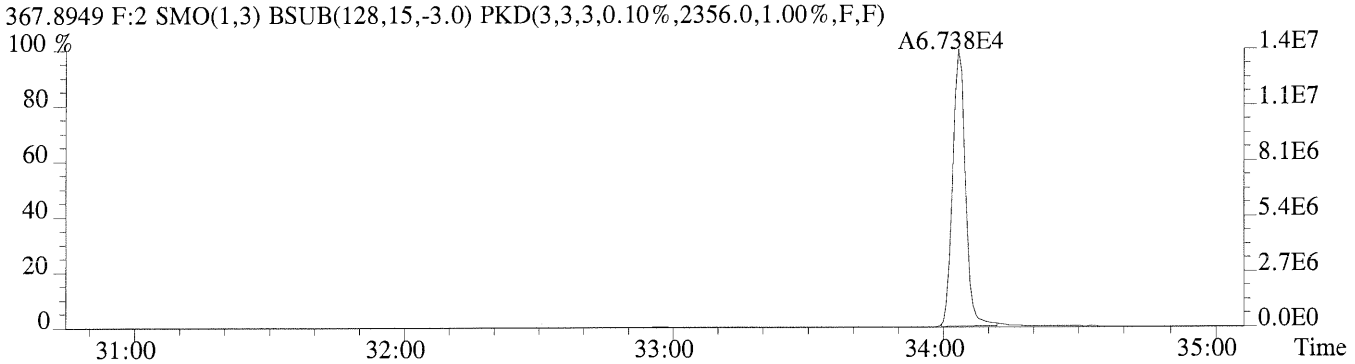
File:P200040 #1-396 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2472.0,1.00%,F,F)



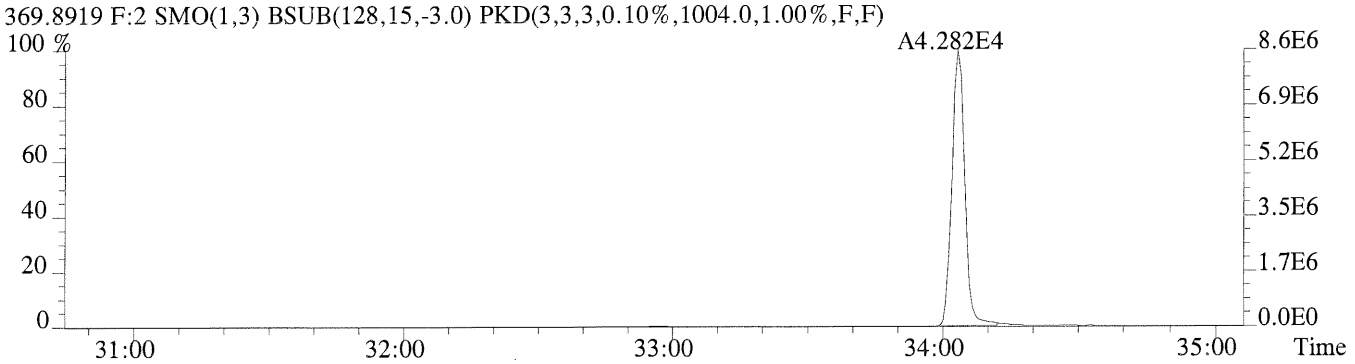
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,764.0,1.00%,F,F)



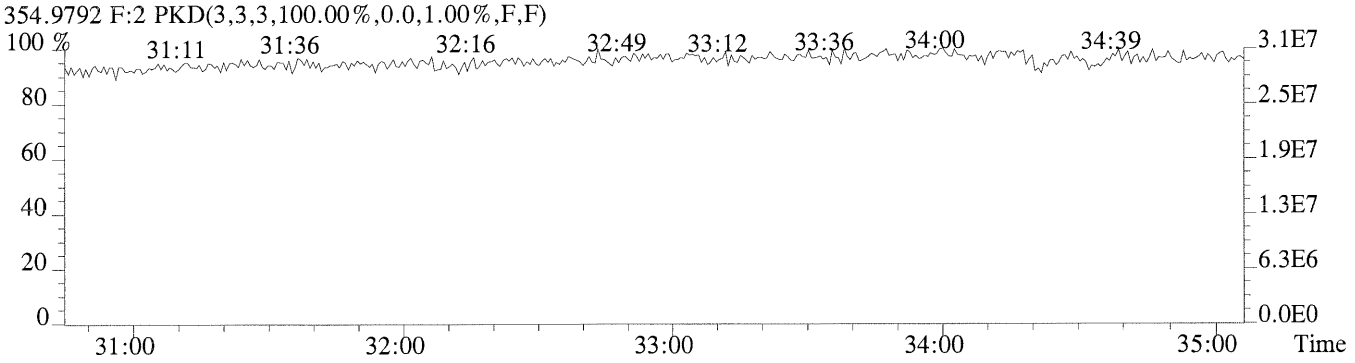
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2356.0,1.00%,F,F)



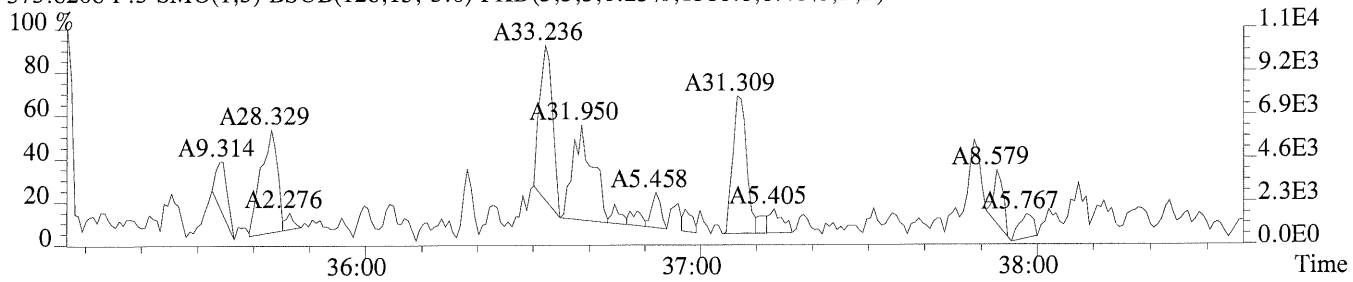
369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1004.0,1.00%,F,F)



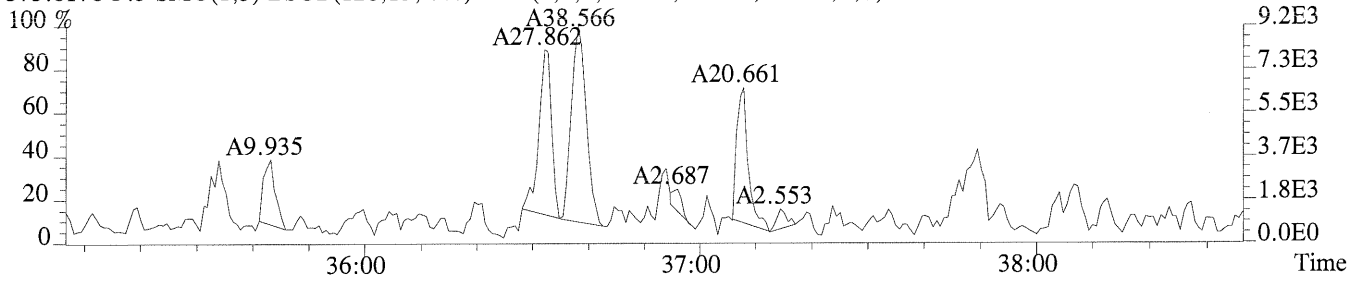
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



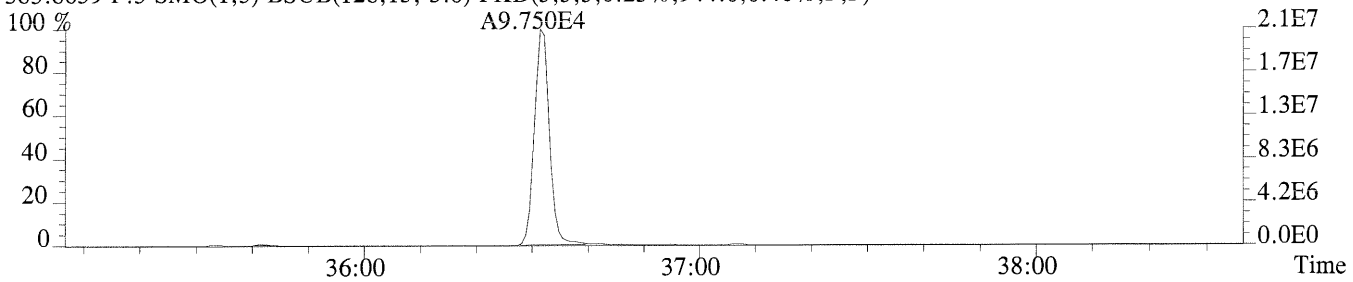
File:P200040 #1-318 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1580.0,0.40%,F,F)



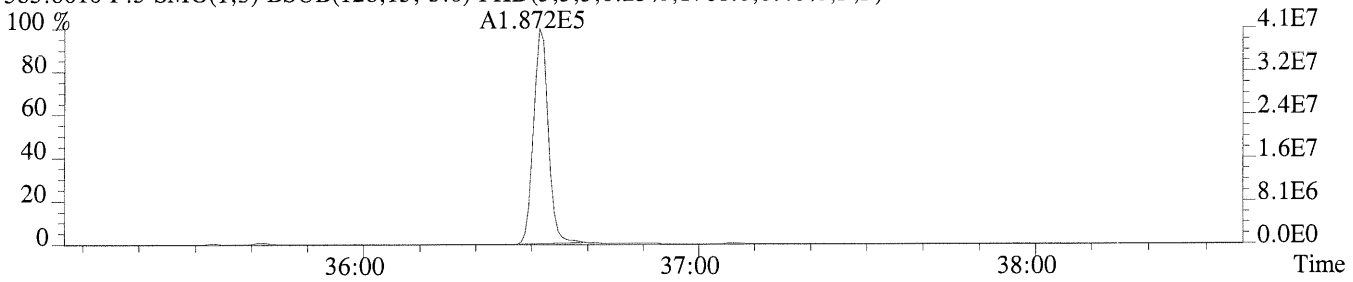
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1044.0,0.40%,F,F)



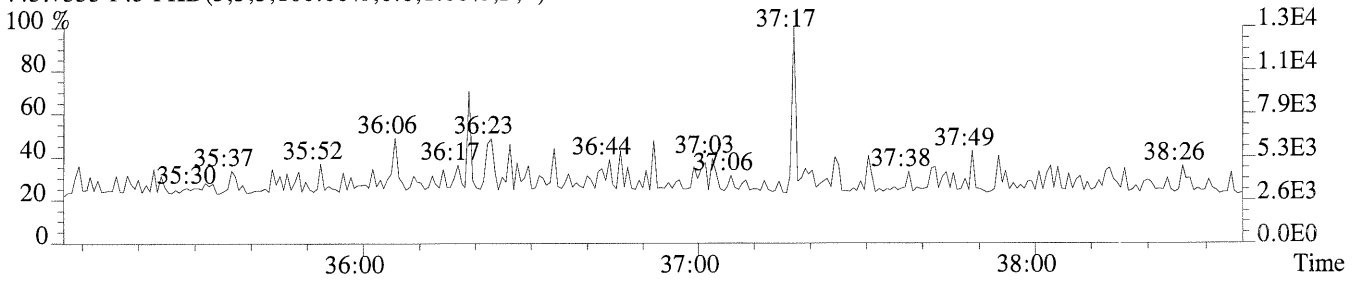
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,944.0,0.40%,F,F)



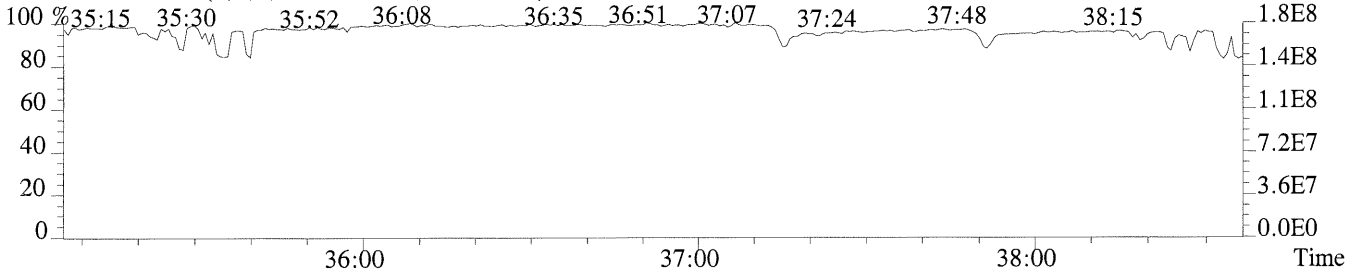
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1768.0,0.40%,F,F)



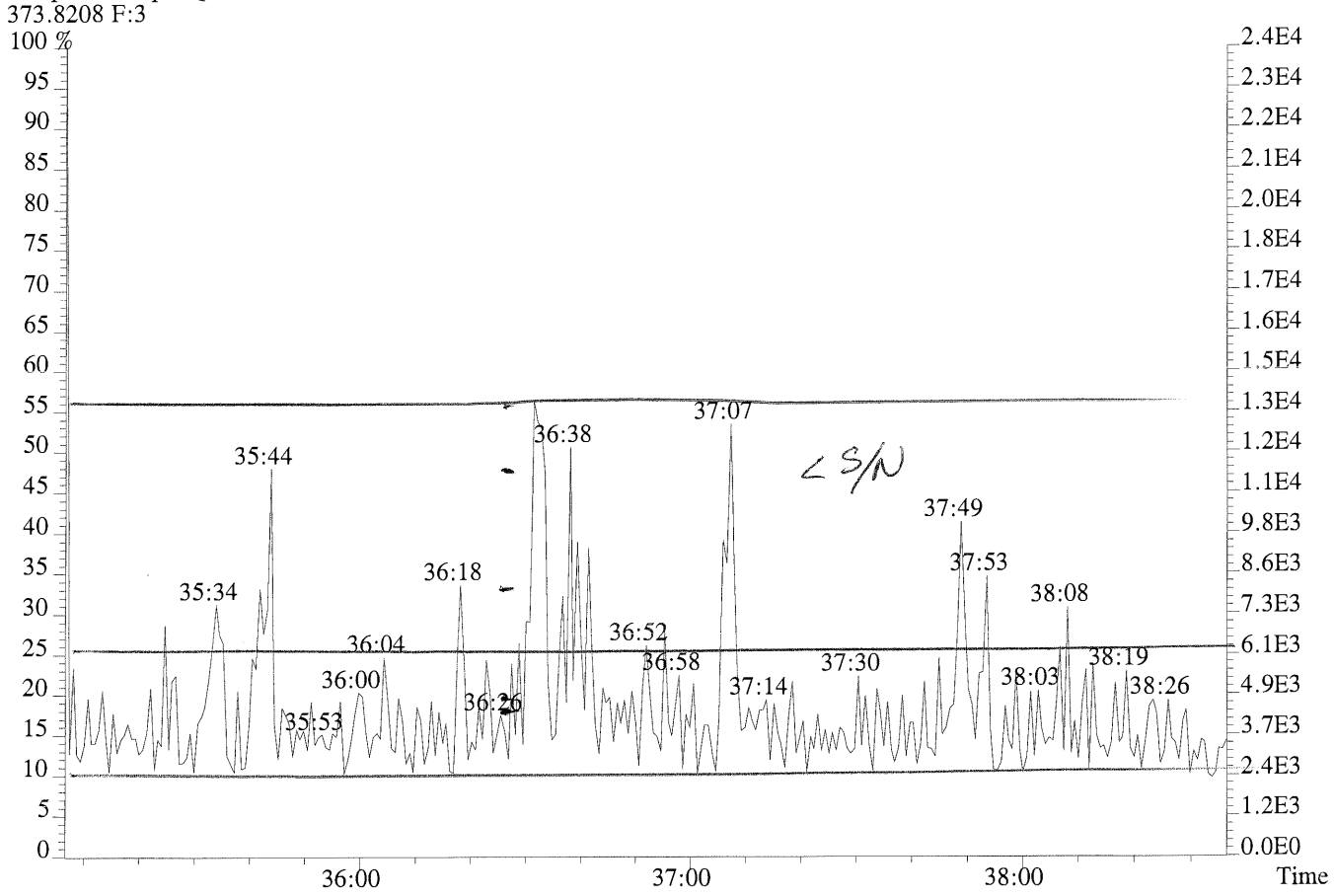
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



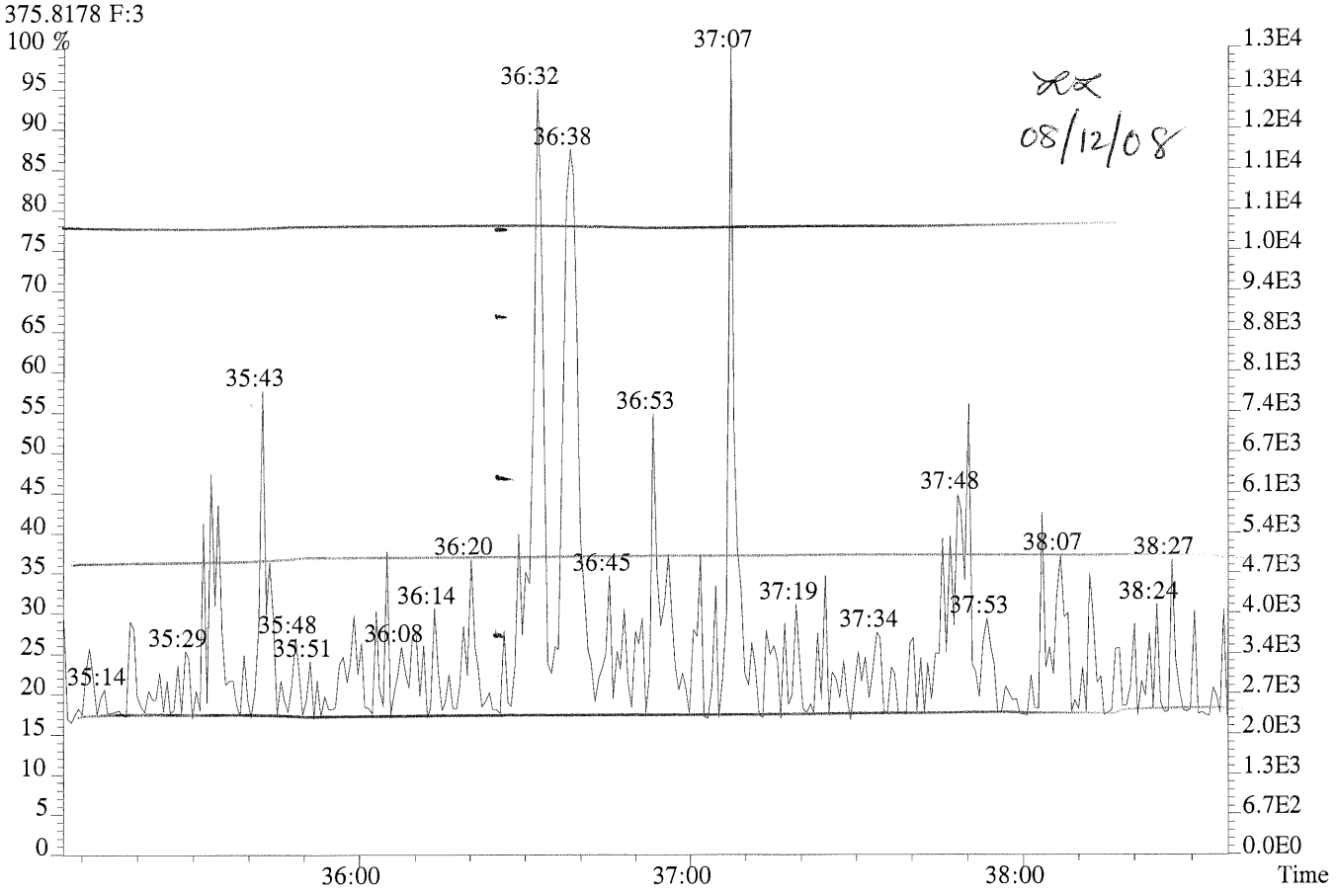
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



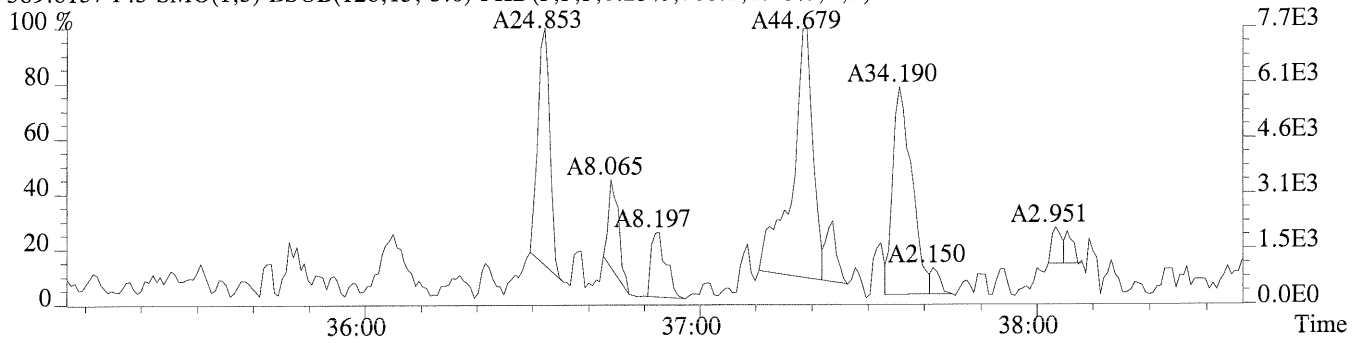
File:P200040 #1-318 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
373.8208 F:3



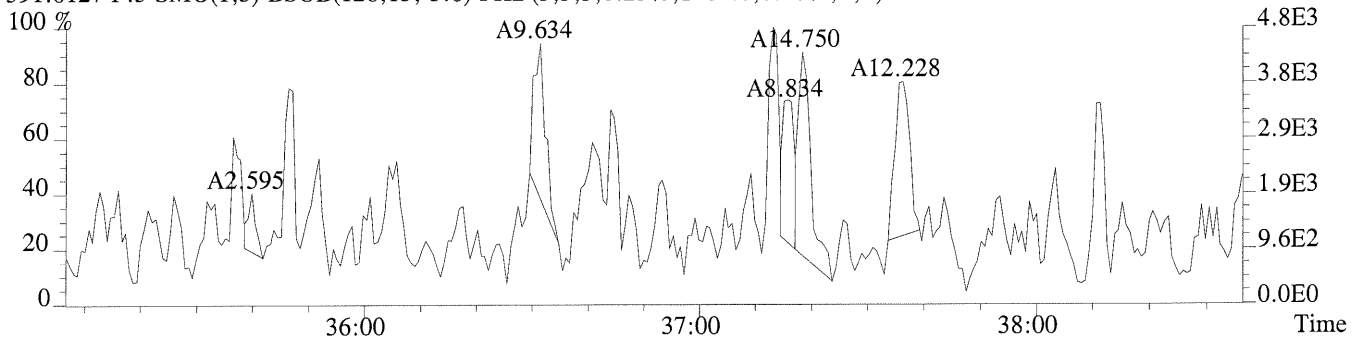
375.8178 F:3



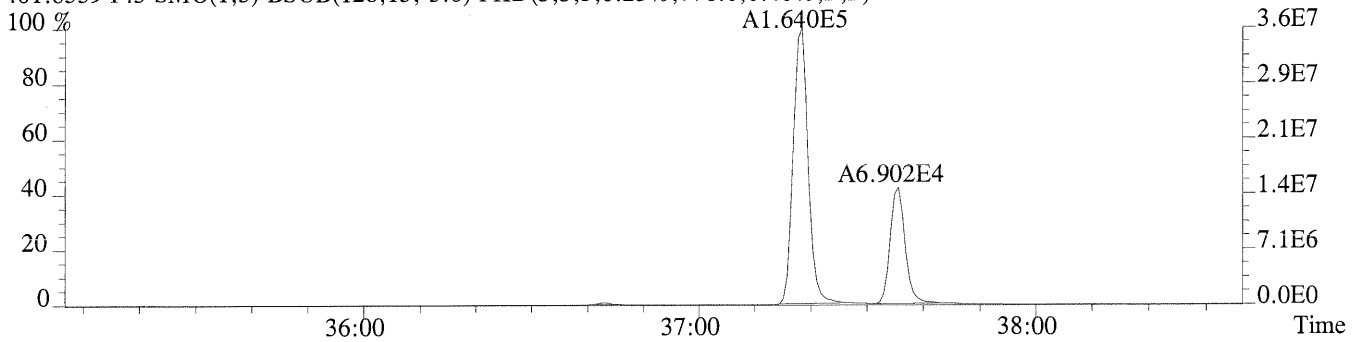
File:P200040 #1-318 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,780.0,0.40%,F,F)



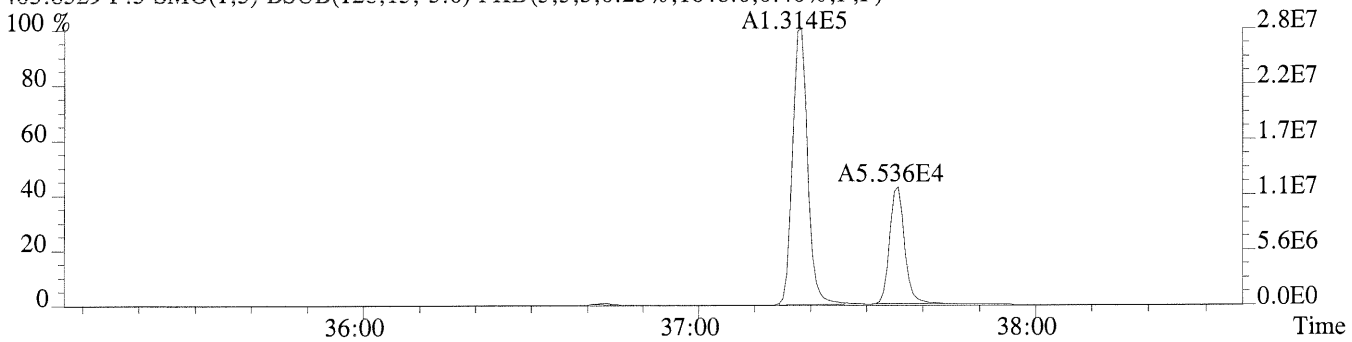
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1484.0,0.40%,F,F)



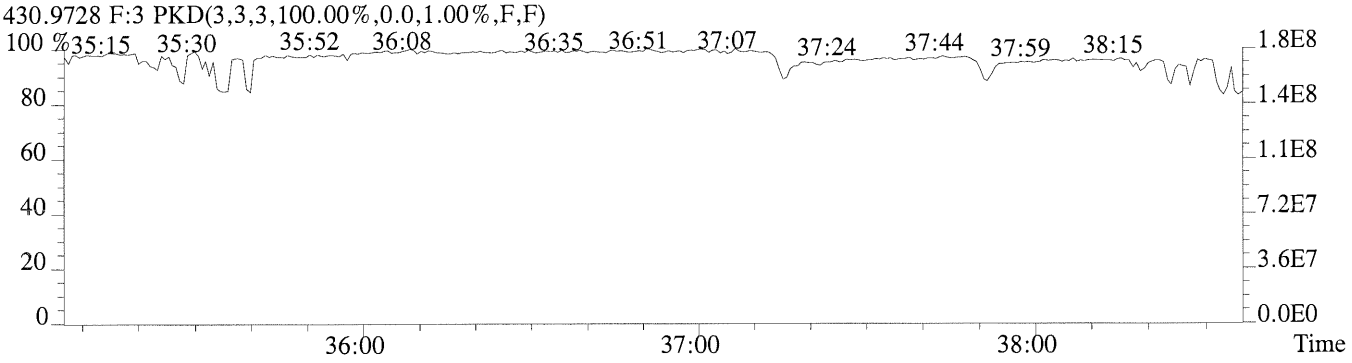
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,776.0,0.40%,F,F)



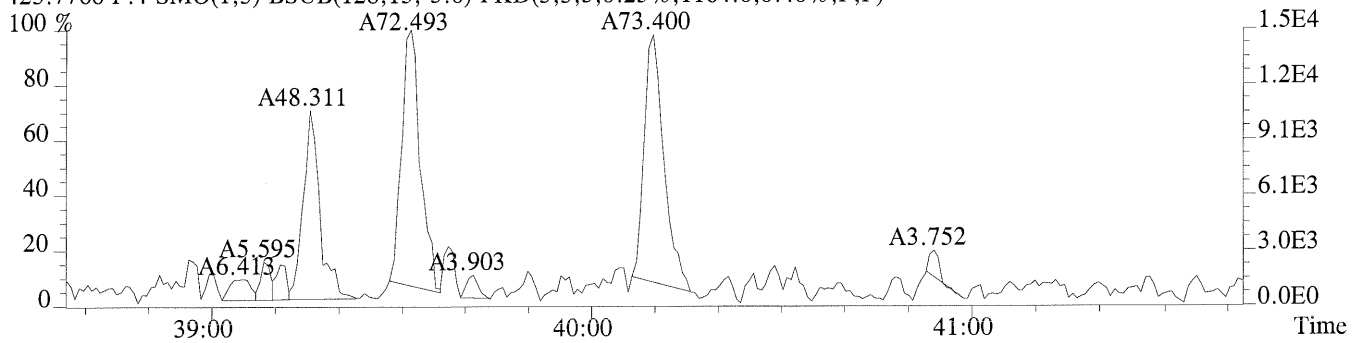
403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1648.0,0.40%,F,F)



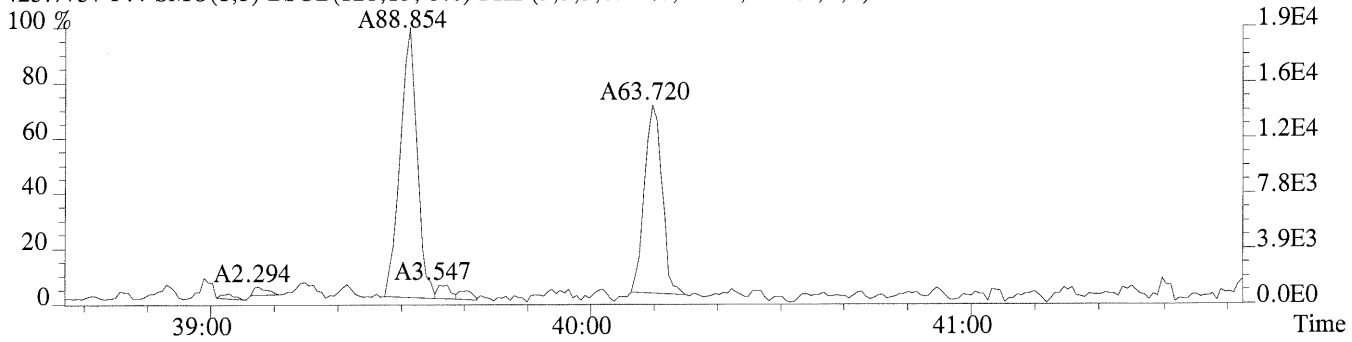
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



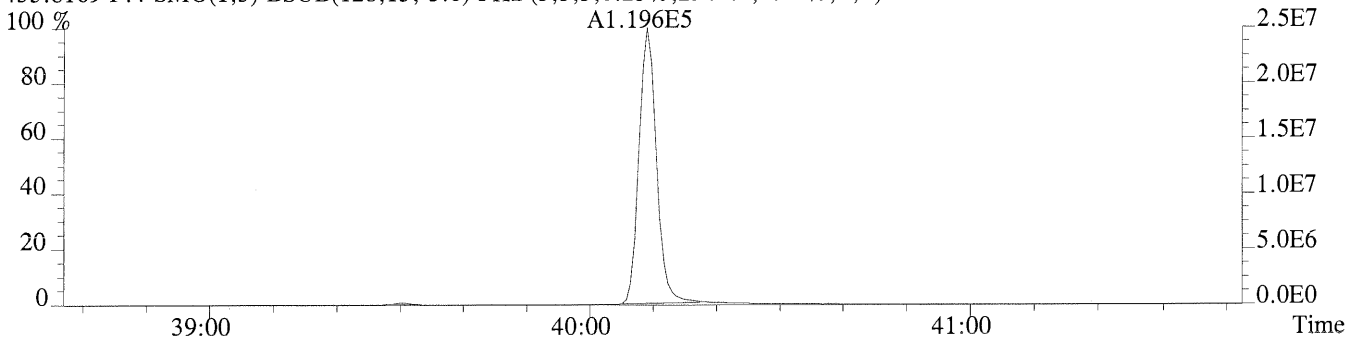
File:P200040 #1-281 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1164.0,0.40%,F,F)



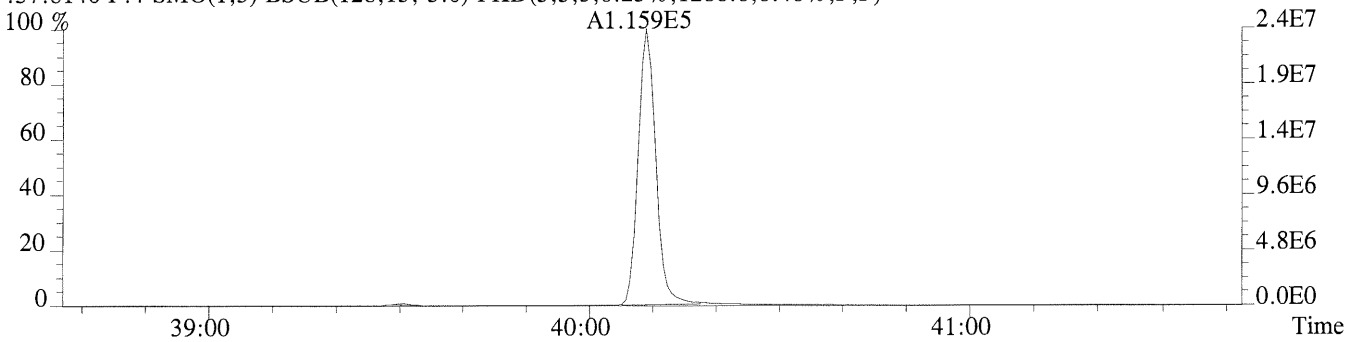
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,776.0,0.40%,F,F)



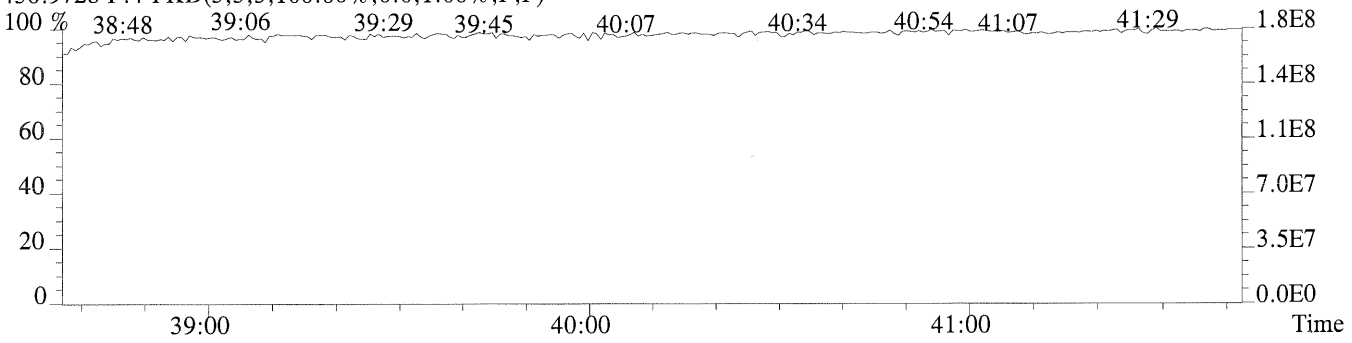
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2944.0,0.40%,F,F)



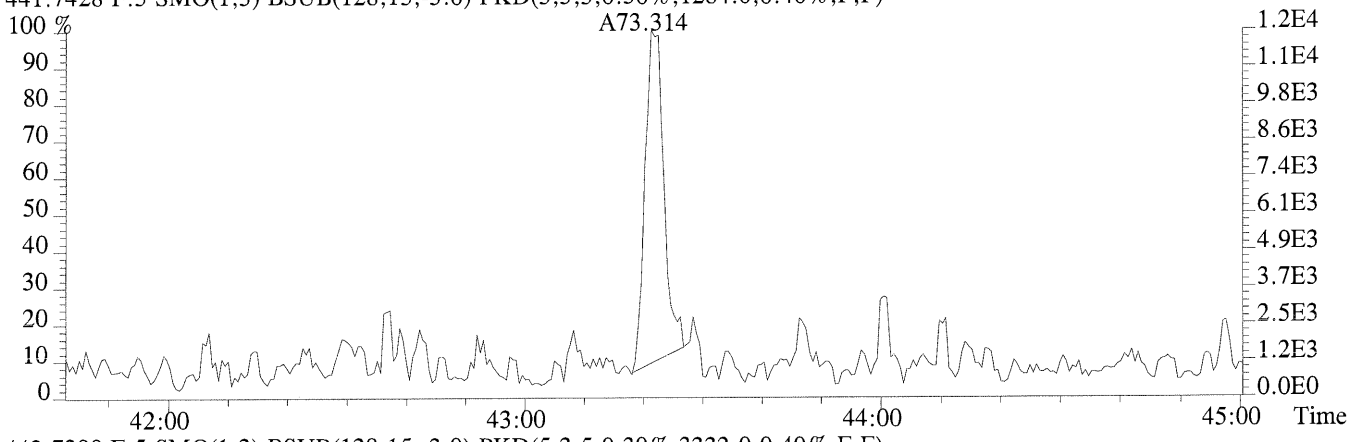
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1288.0,0.40%,F,F)



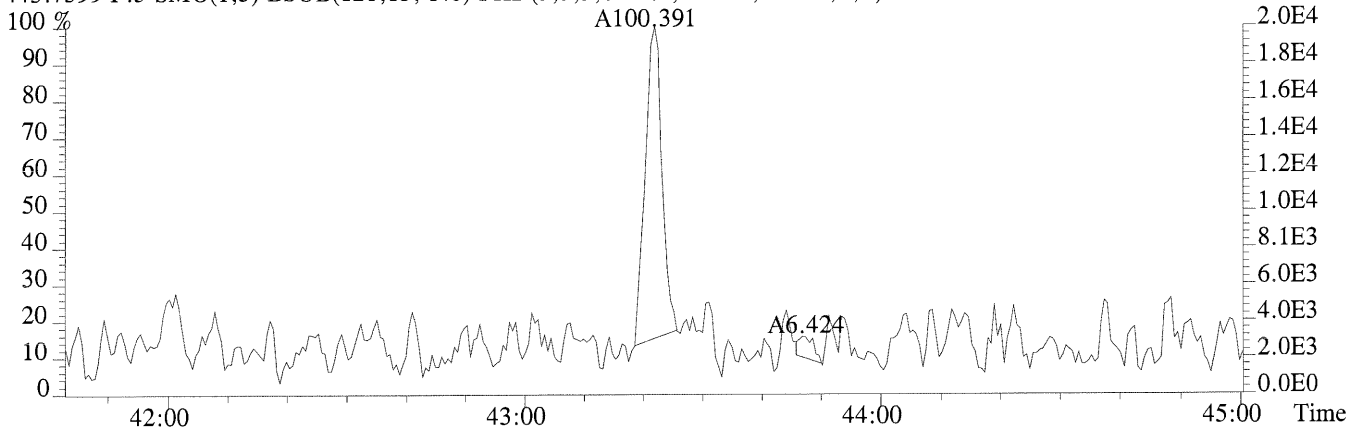
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



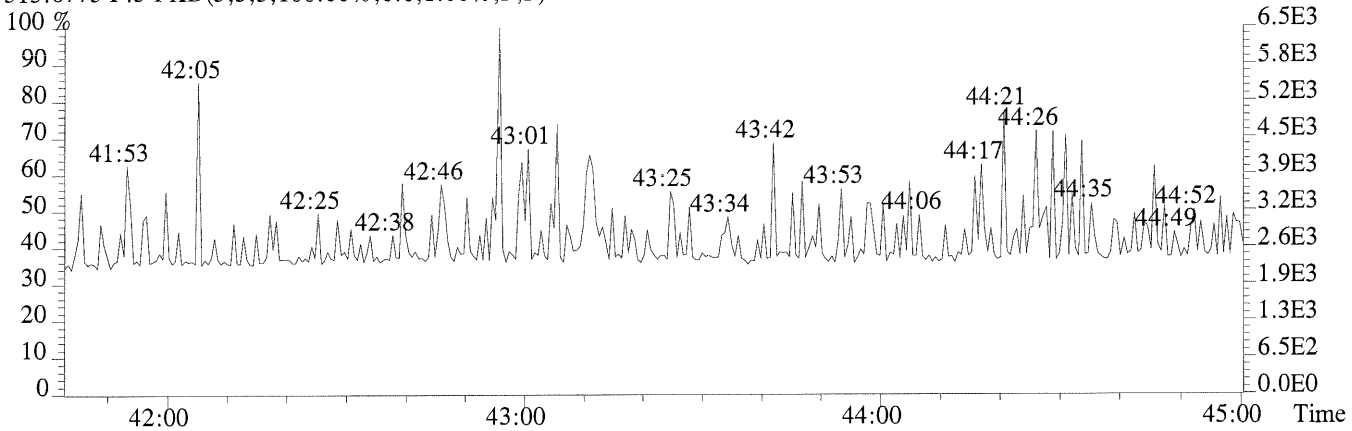
File:P200040 #1-364 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1284.0,0.40%,F,F)



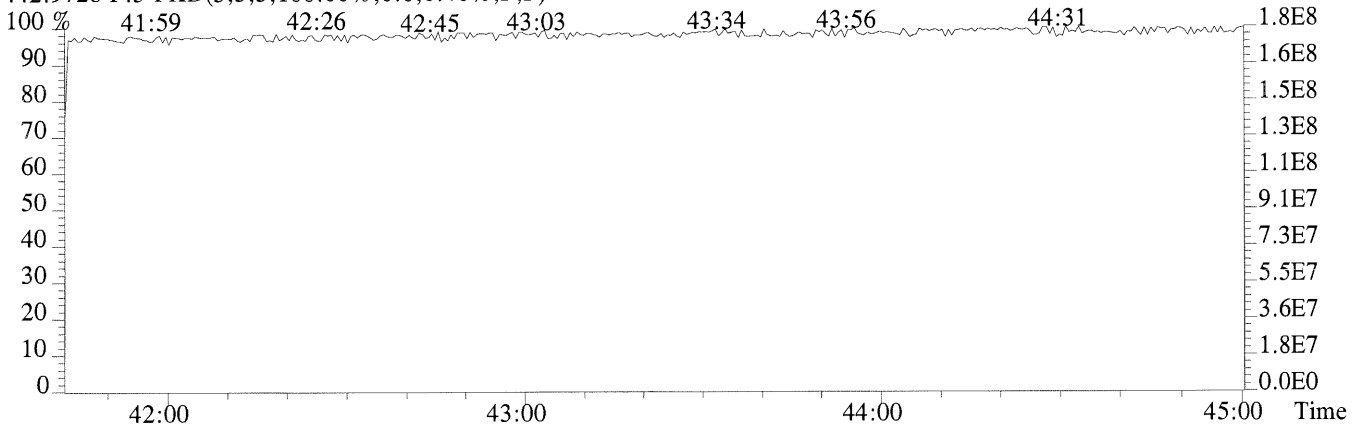
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,3332.0,0.40%,F,F)



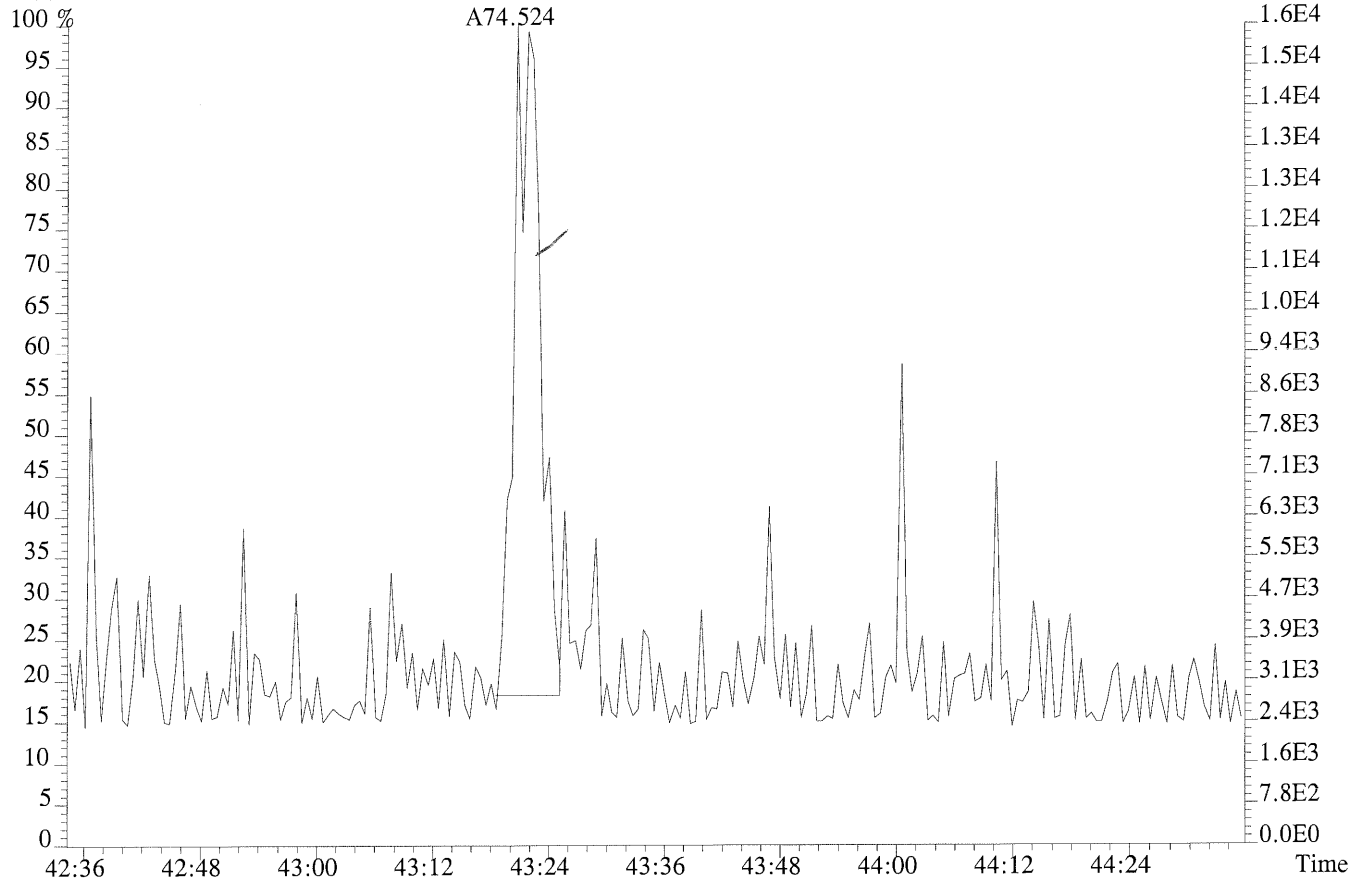
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



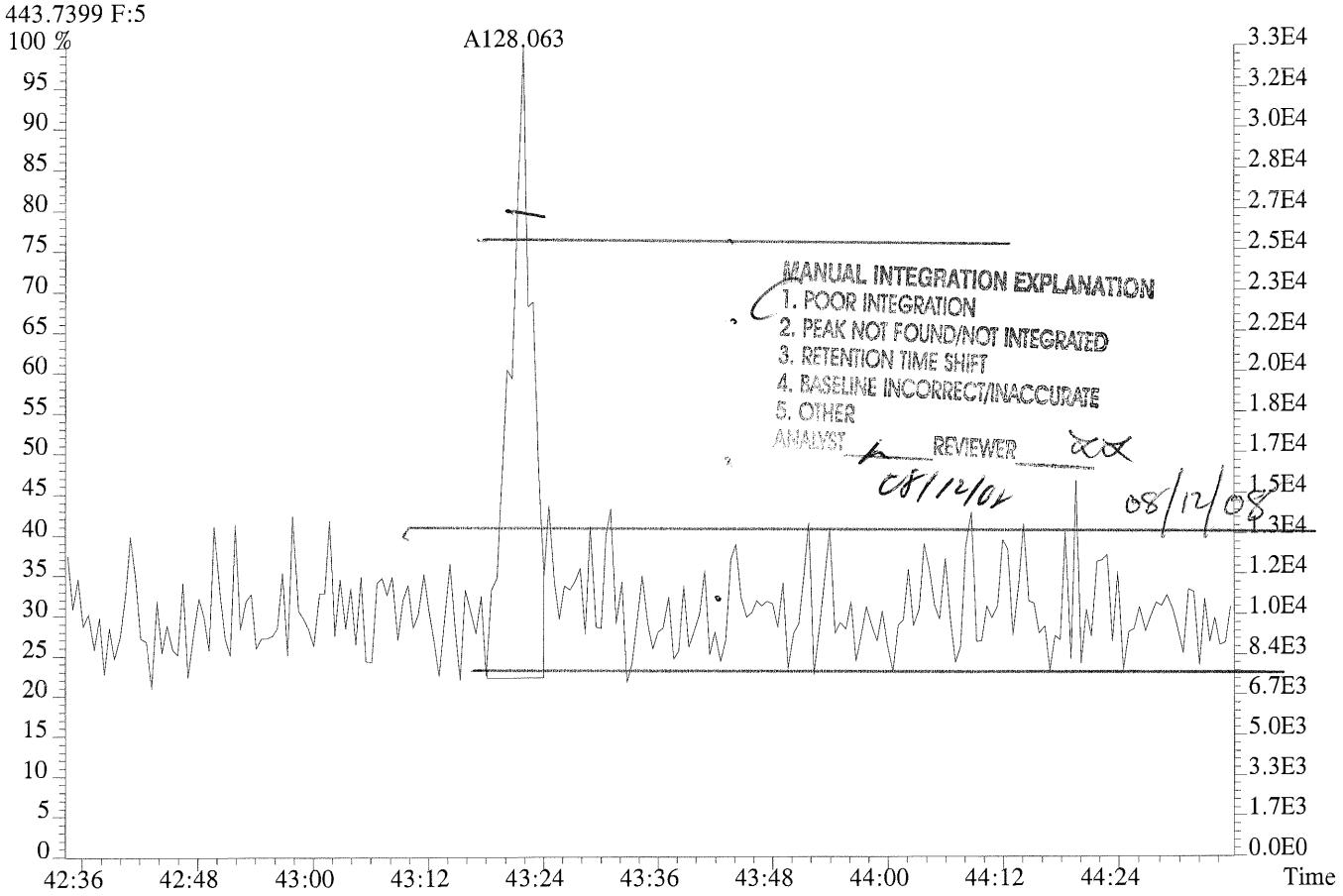
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



File:P200040 #1-364 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
441.7428 F:5

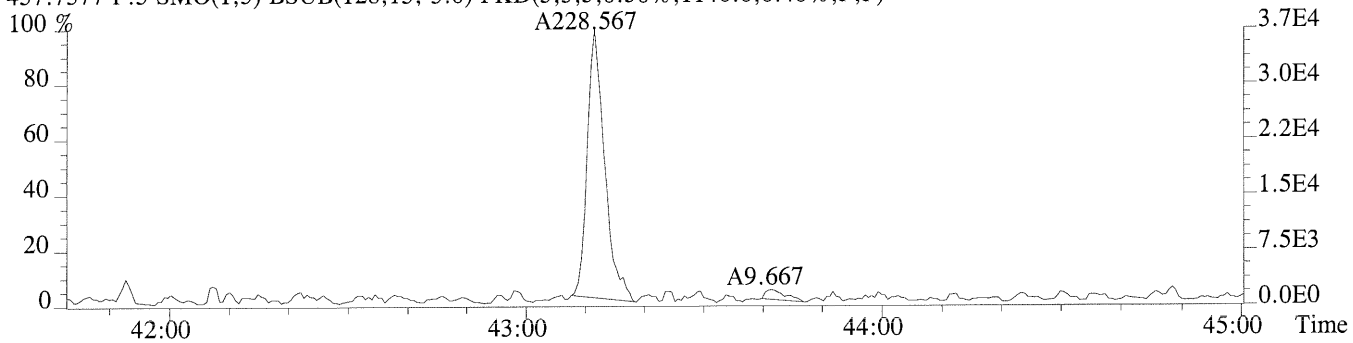


443.7399 F:5

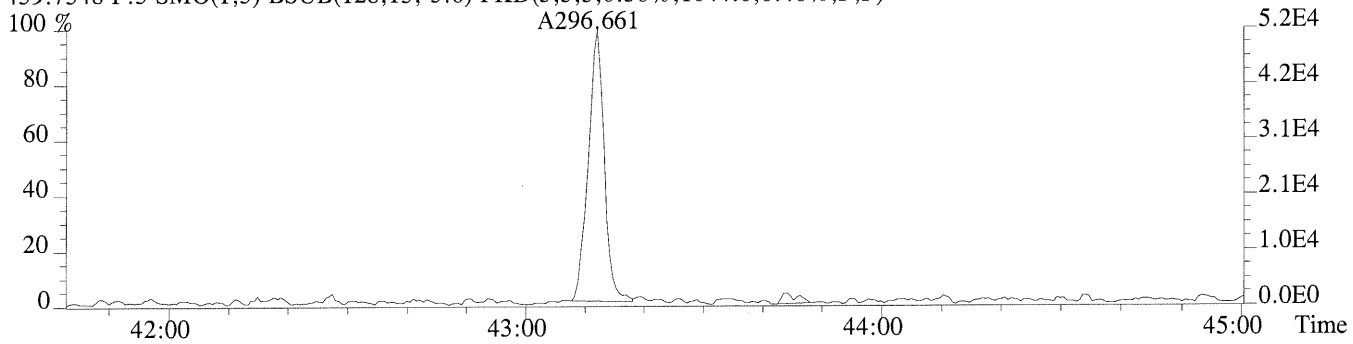


MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST REVIEWER
08/12/08 08/12/08

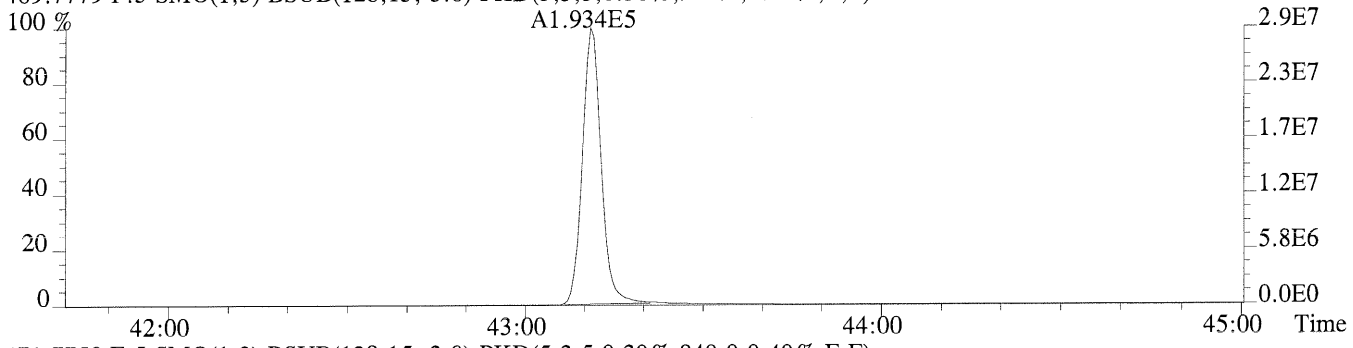
File:P200040 #1-364 Acq: 4-AUG-2008 12:59:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-01 MB
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1140.0,0.40%,F,F)



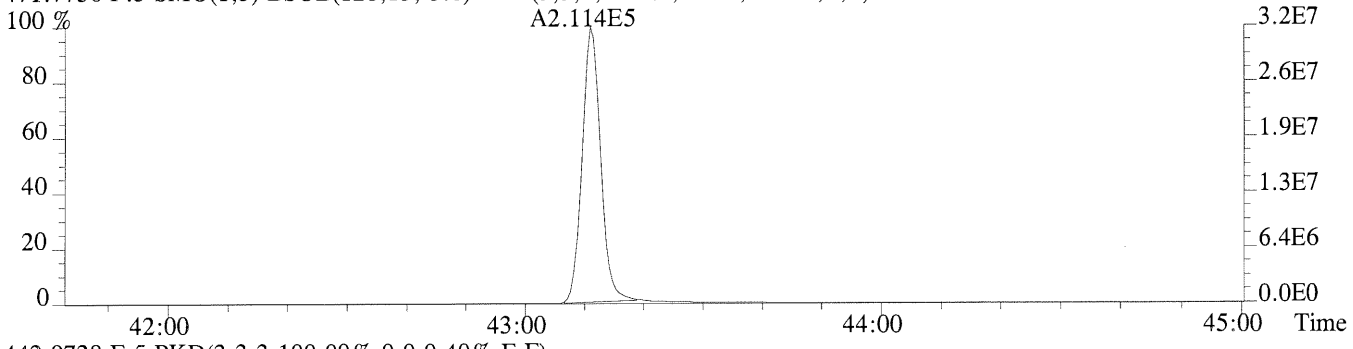
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1044.0,0.40%,F,F)



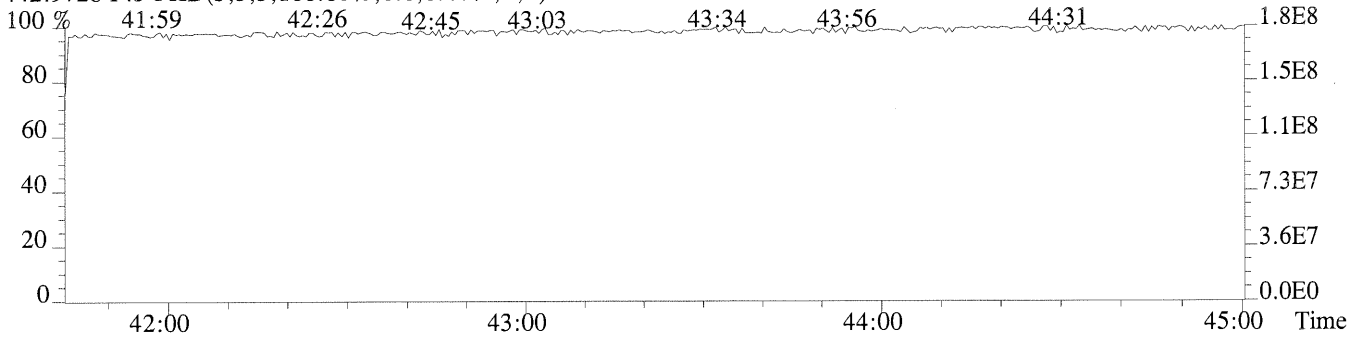
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,900.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,840.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
LCS

Run #15 Filename U217136 #1 Samp: 1 Inj: 1 Acquired: 14-AUG-08 15:49:54
Processed: 15-AUG-08 14:43:44 Sample ID: EQ0800314-02

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:12	3.491e+03	4.599e+03	0.76	yes	no	0.91
2	Unk	1,2,3,7,8-PeCDF	32:31	1.518e+04	9.622e+03	1.58	yes	no	0.90
3	Unk	2,3,4,7,8-PeCDF	33:15	1.633e+04	1.049e+04	1.56	yes	no	0.91
4	Unk	1,2,3,4,7,8-HxCDF	36:03	1.660e+04	1.329e+04	1.25	yes	no	1.15
5	Unk	1,2,3,6,7,8-HxCDF	36:09	1.680e+04	1.359e+04	1.24	yes	no	1.11
6	Unk	2,3,4,6,7,8-HxCDF	36:38	1.549e+04	1.232e+04	1.26	yes	no	1.05
7	Unk	1,2,3,7,8,9-HxCDF	37:20	1.324e+04	1.050e+04	1.26	yes	no	0.89
8	Unk	1,2,3,4,6,7,8-HpCDF	38:47	1.553e+04	1.509e+04	1.03	yes	no	1.40
9	Unk	1,2,3,4,7,8,9-HpCDF	40:06	1.321e+04	1.258e+04	1.05	yes	no	1.07
10	Unk	OCDF	42:55	2.579e+04	2.738e+04	0.94	yes	no	1.16
11	Unk	2,3,7,8-TCDD	29:01	3.063e+03	3.959e+03	0.77	yes	no	0.93
12	Unk	1,2,3,7,8-PeCDD	33:35	1.031e+04	6.409e+03	1.61	yes	no	0.90
13	Unk	1,2,3,4,7,8-HxCDD	36:45	1.181e+04	9.310e+03	1.27	yes	no	1.03
14	Unk	1,2,3,6,7,8-HxCDD	36:49	1.274e+04	9.875e+03	1.29	yes	no	1.04
15	Unk	1,2,3,7,8,9-HxCDD	37:06	1.116e+04	8.576e+03	1.30	yes	no	1.03
16	Unk	1,2,3,4,6,7,8-HpCDD	39:41	9.836e+03	9.606e+03	1.02	yes	no	0.92
17	Unk	OCDD	42:46	1.909e+04	2.157e+04	0.88	yes	no	1.03
18	IS	13C-2,3,7,8-TCDF	28:10	1.930e+04	2.372e+04	0.81	yes	no	1.32
19	IS	13C-1,2,3,7,8-PeCDF	32:30	3.083e+04	1.999e+04	1.54	yes	no	1.37
20	IS	13C-1,2,3,4,7,8-HxCDF	36:02	3.857e+04	7.291e+04	0.53	yes	no	1.27
21	IS	13C-1,2,3,4,6,7,8-HpCDF	38:46	3.018e+04	6.720e+04	0.45	yes	no	0.91
22	IS	13C-2,3,7,8-TCDD	29:00	1.429e+04	1.818e+04	0.79	yes	no	1.02
23	IS	13C-1,2,3,7,8-PeCDD	33:35	2.165e+04	1.398e+04	1.55	yes	no	0.97
24	IS	13C-1,2,3,6,7,8-HxCDD	36:49	5.366e+04	4.330e+04	1.24	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	39:41	4.484e+04	4.304e+04	1.04	yes	no	0.89
26	IS	13C-OCDD	42:45	7.430e+04	8.281e+04	0.90	yes	no	0.96
27	RS/RT	13C-1,2,3,4-TCDD	28:46	2.117e+04	2.667e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:06	2.680e+04	2.214e+04	1.21	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:01	2.416e+04					0.96

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary LCS

Run #15 Filename U217136 #1 Samp: 1 Inj: 1 Acquired: 14-AUG-08 15:49:54

Processed: 15-AUG-08 14:43:44 LAB. ID: EQ0800314-02

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	5.89e+05	8.16e+02	7.2e+02	7.60e+05	1.32e+03	5.8e+02
2	1,2,3,7,8-PeCDF	2.90e+06	1.68e+03	1.7e+03	1.87e+06	1.54e+03	1.2e+03
3	2,3,4,7,8-PeCDF	3.08e+06	1.68e+03	1.8e+03	1.98e+06	1.54e+03	1.3e+03
4	1,2,3,4,7,8-HxCDF	3.65e+06	5.28e+03	6.9e+02	2.93e+06	4.52e+03	6.5e+02
5	1,2,3,6,7,8-HxCDF	3.54e+06	5.28e+03	6.7e+02	2.93e+06	4.52e+03	6.5e+02
6	2,3,4,6,7,8-HxCDF	3.41e+06	5.28e+03	6.5e+02	2.74e+06	4.52e+03	6.1e+02
7	1,2,3,7,8,9-HxCDF	2.63e+06	5.28e+03	5.0e+02	2.10e+06	4.52e+03	4.7e+02
8	1,2,3,4,6,7,8-HpCDF	3.33e+06	4.94e+03	6.7e+02	3.14e+06	2.82e+03	1.1e+03
9	1,2,3,4,7,8,9-HpCDF	2.61e+06	4.94e+03	5.3e+02	2.49e+06	2.82e+03	8.8e+02
10	OCDF	3.49e+06	2.34e+03	1.5e+03	3.86e+06	4.03e+03	9.6e+02
11	2,3,7,8-TCDD	5.25e+05	1.22e+03	4.3e+02	7.07e+05	1.13e+03	6.3e+02
12	1,2,3,7,8-PeCDD	2.05e+06	1.40e+03	1.5e+03	1.30e+06	1.22e+03	1.1e+03
13	1,2,3,4,7,8-HxCDD	2.84e+06	3.43e+03	8.3e+02	2.24e+06	3.76e+03	6.0e+02
14	1,2,3,6,7,8-HxCDD	2.76e+06	3.43e+03	8.0e+02	2.10e+06	3.76e+03	5.6e+02
15	1,2,3,7,8,9-HxCDD	2.48e+06	3.43e+03	7.2e+02	1.94e+06	3.76e+03	5.2e+02
16	1,2,3,4,6,7,8-HpCDD	2.06e+06	3.82e+03	5.4e+02	1.98e+06	3.12e+03	6.3e+02
17	OCDD	2.80e+06	1.48e+03	1.9e+03	3.19e+06	1.75e+03	1.8e+03
18	13C-2,3,7,8-TCDF	3.13e+06	1.87e+03	1.7e+03	3.93e+06	1.17e+03	3.4e+03
19	13C-1,2,3,7,8-PeCDF	5.92e+06	9.32e+02	6.4e+03	3.80e+06	1.17e+03	3.3e+03
20	13C-1,2,3,4,7,8-HxCDF	8.49e+06	8.04e+02	1.1e+04	1.61e+07	1.42e+03	1.1e+04
21	13C-1,2,3,4,6,7,8-HpCDF	6.51e+06	3.58e+03	1.8e+03	1.44e+07	7.41e+03	1.9e+03
22	13C-2,3,7,8-TCDD	2.57e+06	2.86e+03	9.0e+02	3.25e+06	1.22e+03	2.7e+03
23	13C-1,2,3,7,8-PeCDD	4.40e+06	1.02e+03	4.3e+03	2.83e+06	8.68e+02	3.3e+03
24	13C-1,2,3,6,7,8-HxCDD	1.20e+07	4.63e+03	2.6e+03	9.57e+06	1.72e+03	5.6e+03
25	13C-1,2,3,4,6,7,8-HpCDD	9.29e+06	7.94e+03	1.2e+03	8.85e+06	3.30e+03	2.7e+03
26	13C-OCDD	1.12e+07	7.08e+04	1.6e+02	1.23e+07	3.08e+03	4.0e+03
27	13C-1,2,3,4-TCDD	3.75e+06	2.86e+03	1.3e+03	4.79e+06	1.22e+03	3.9e+03
28	13C-1,2,3,7,8,9-HxCDD	6.01e+06	4.63e+03	1.3e+03	4.98e+06	1.72e+03	2.9e+03
29	37Cl-2,3,7,8-TCDD	4.26e+06	6.84e+02	6.2e+03			

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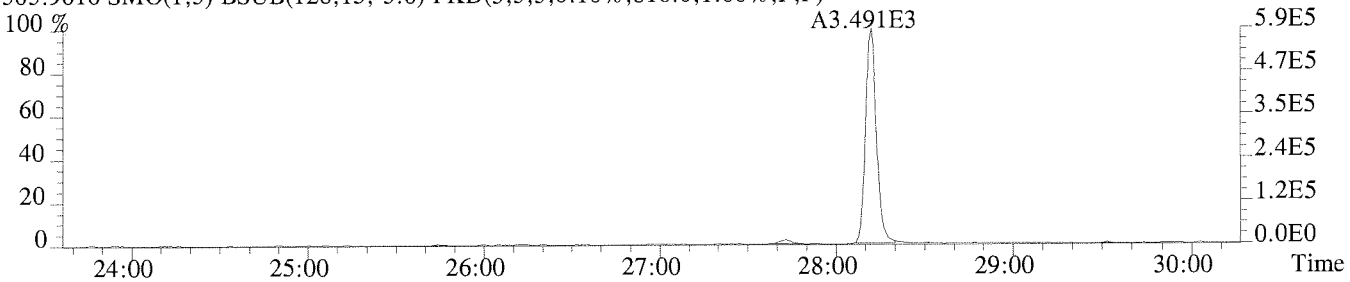
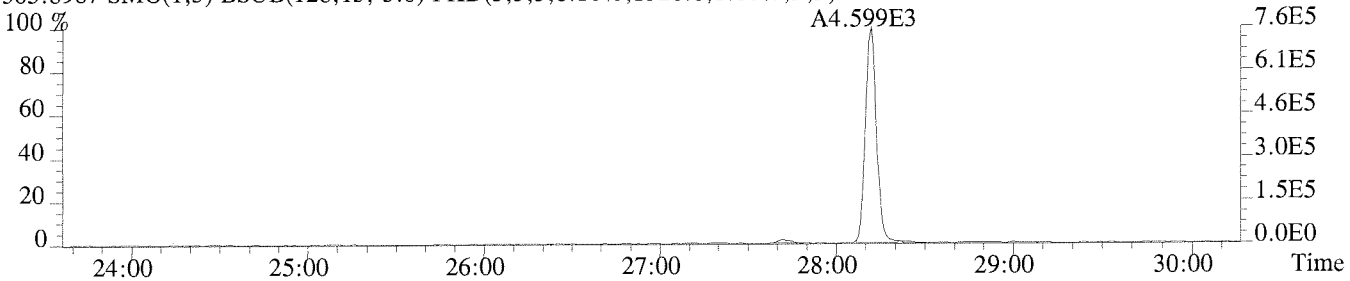
File:U217136 #1-556 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS

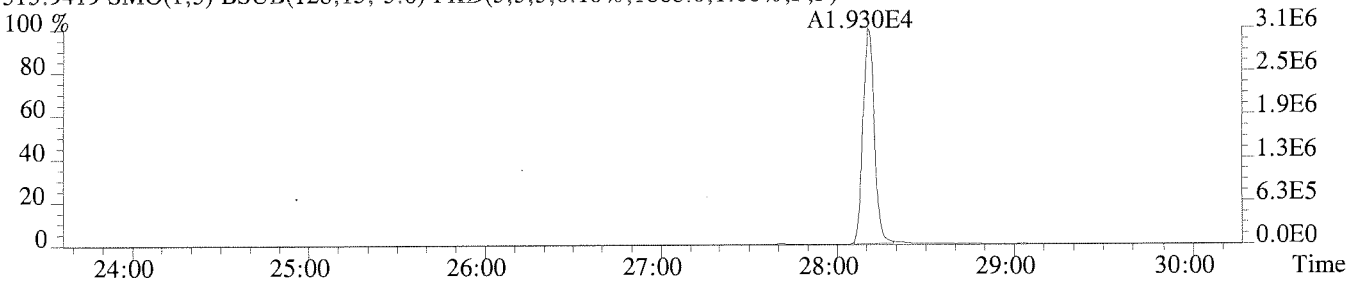
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,816.0,1.00%,F,F)



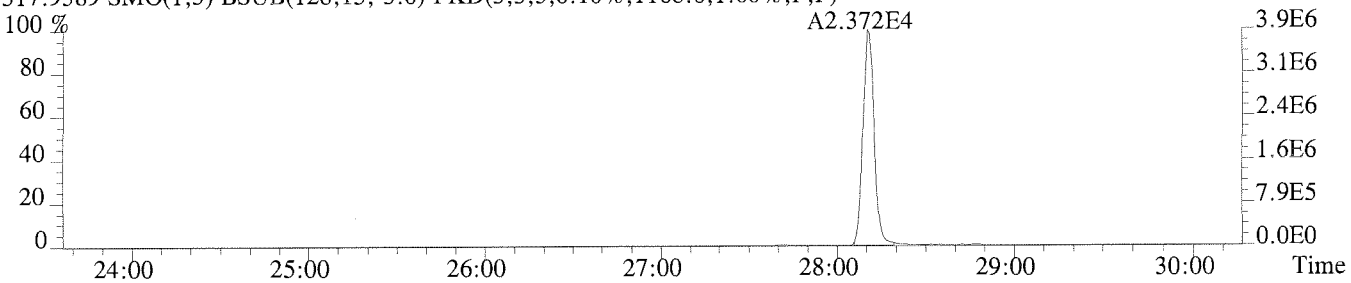
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1320.0,1.00%,F,F)



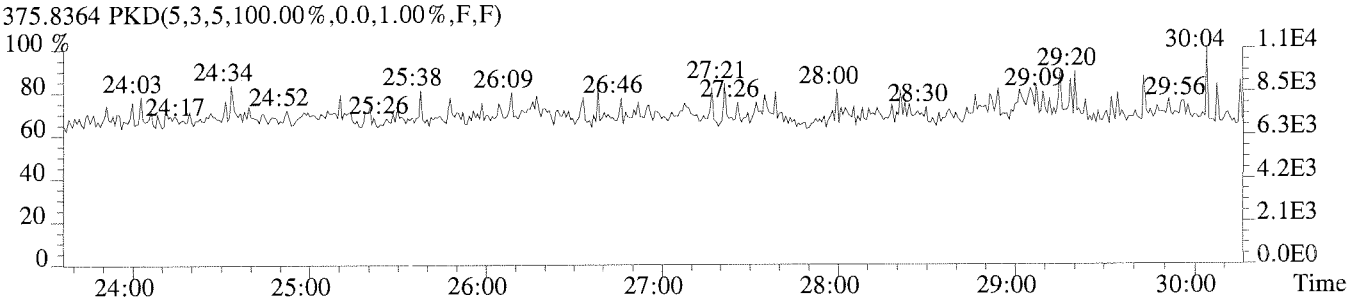
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1868.0,1.00%,F,F)



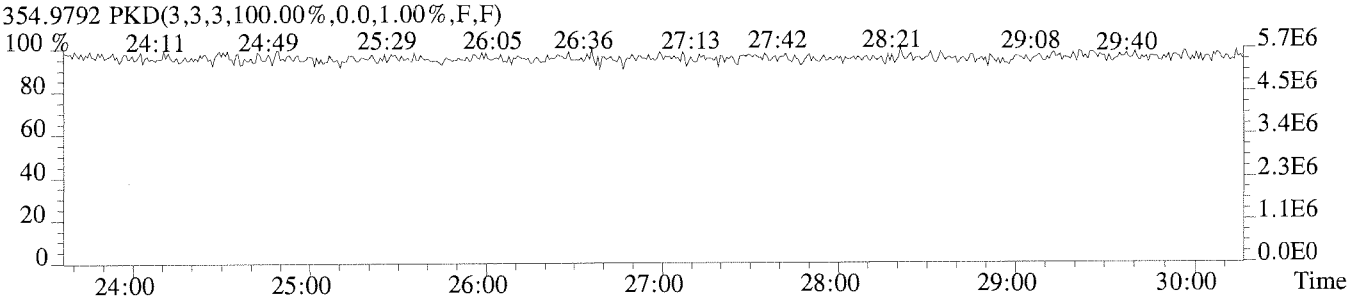
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1168.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

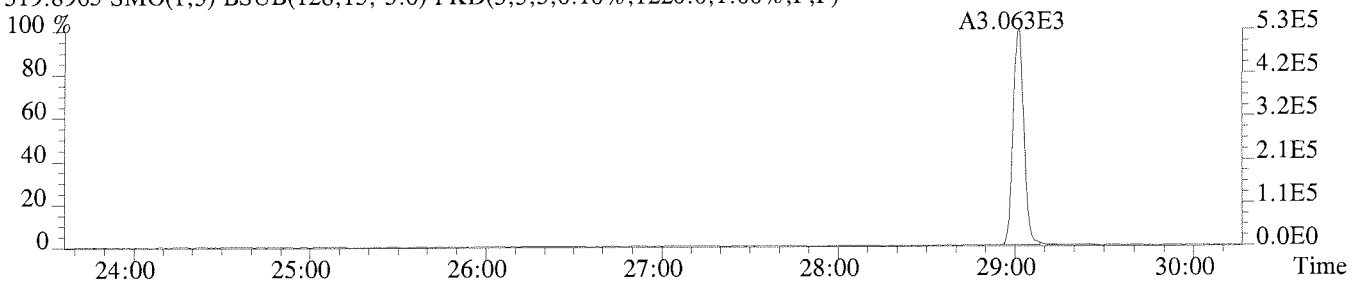


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

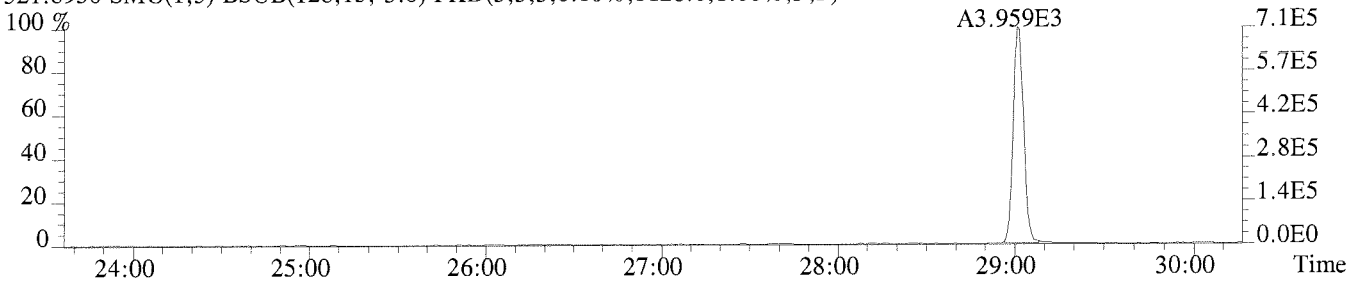


File:U217136 #1-556 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS

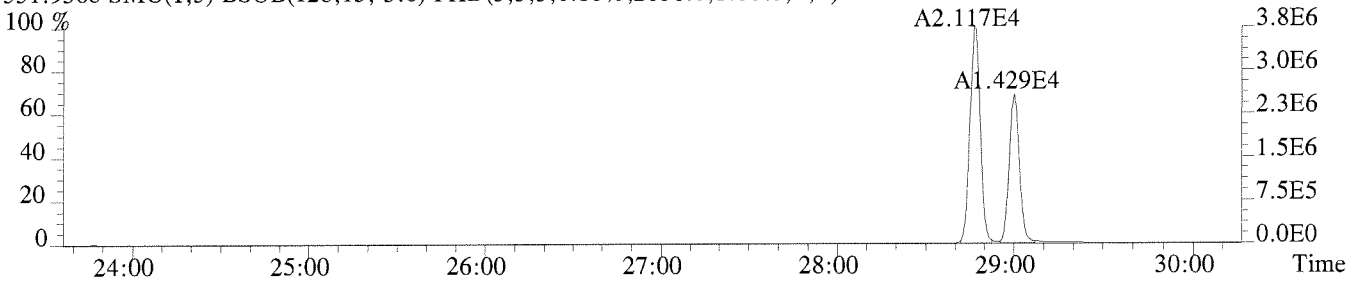
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1220.0,1.00%,F,F)



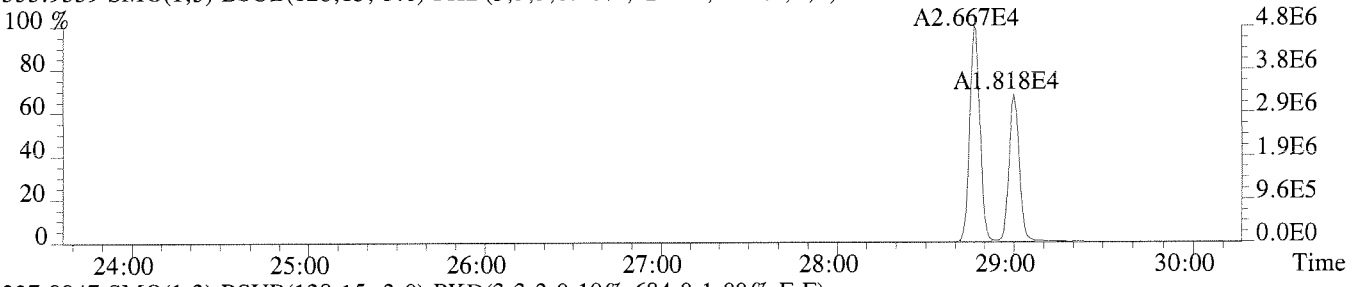
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1128.0,1.00%,F,F)



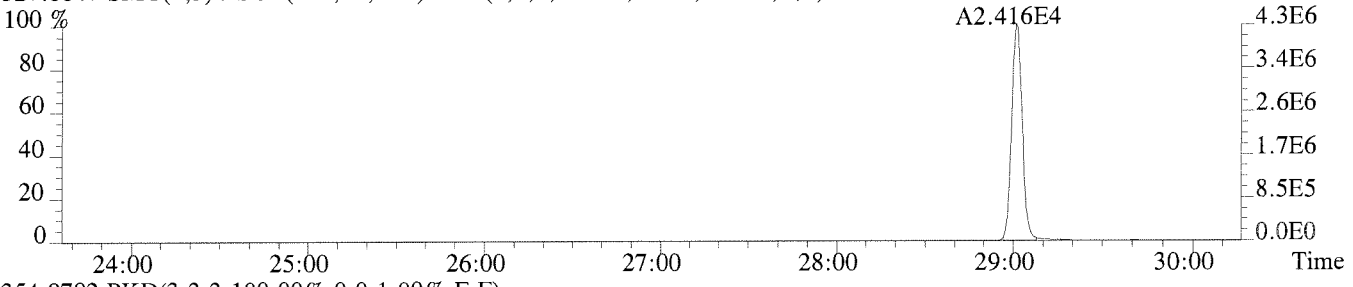
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2856.0,1.00%,F,F)



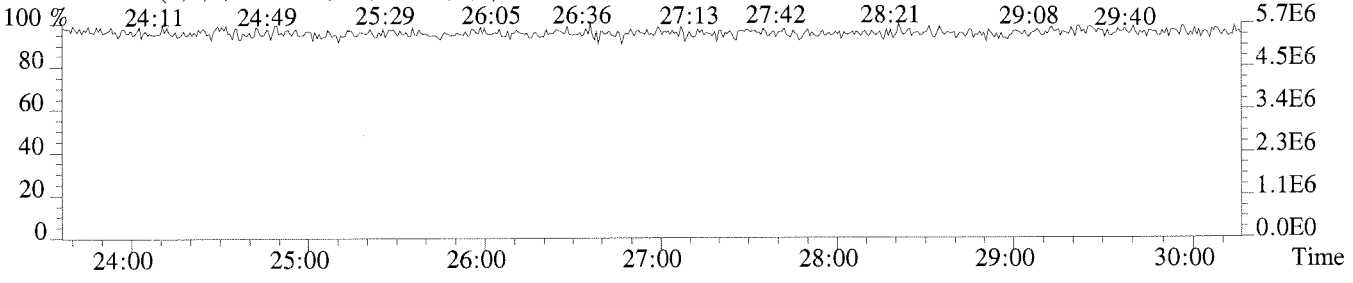
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1224.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,684.0,1.00%,F,F)

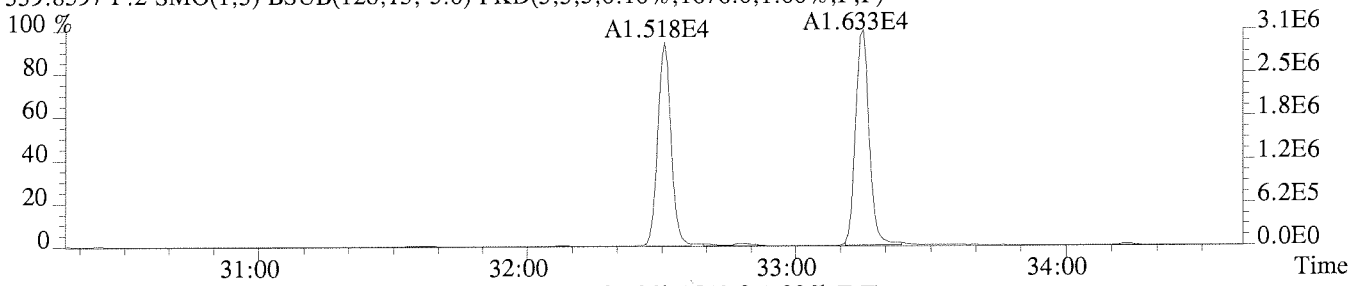


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

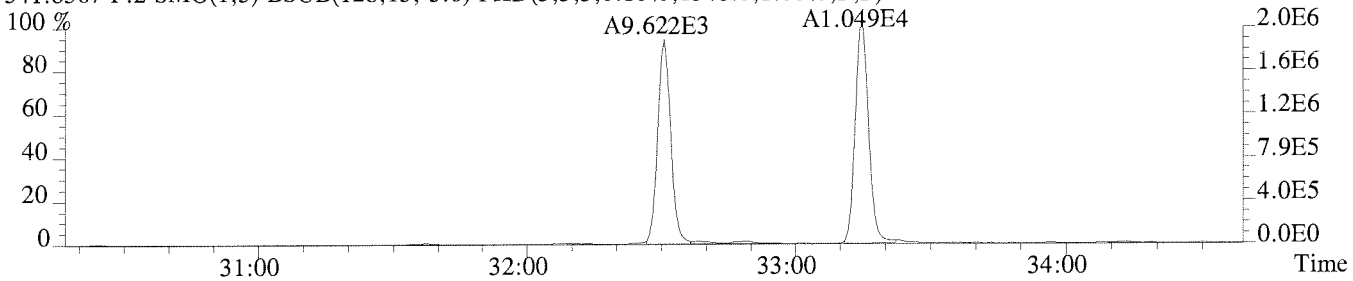


File:U217136 #1-397 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS

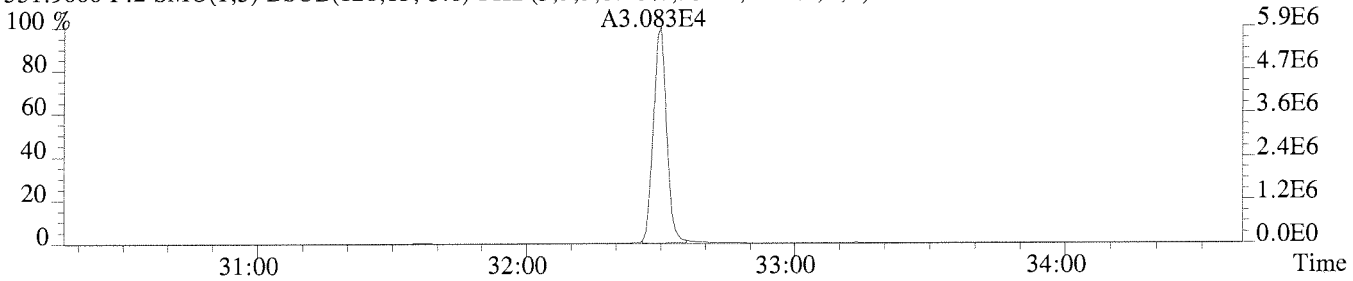
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1676.0,1.00%,F,F)



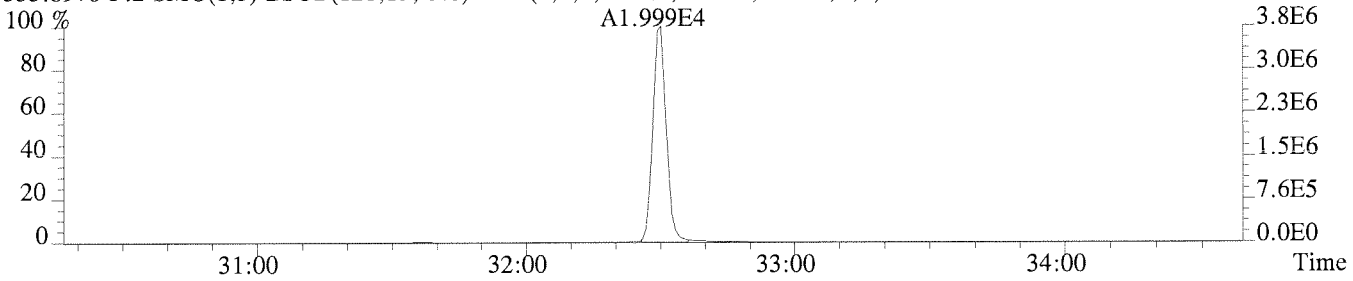
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1540.0,1.00%,F,F)



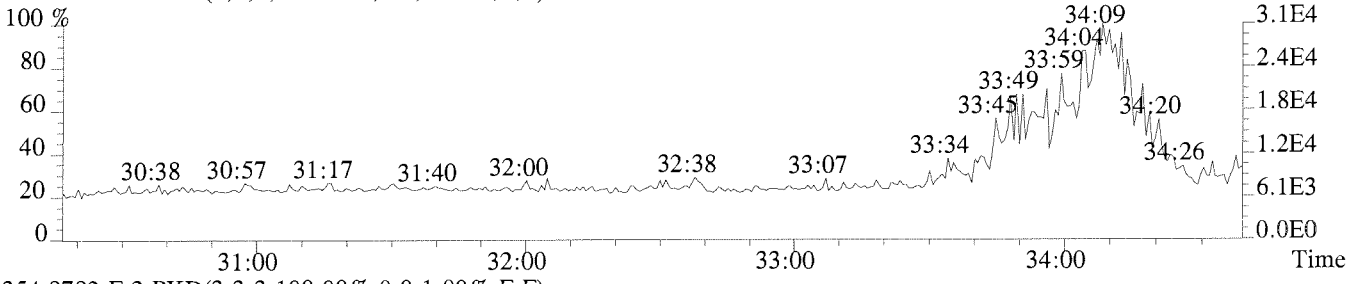
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,932.0,1.00%,F,F)



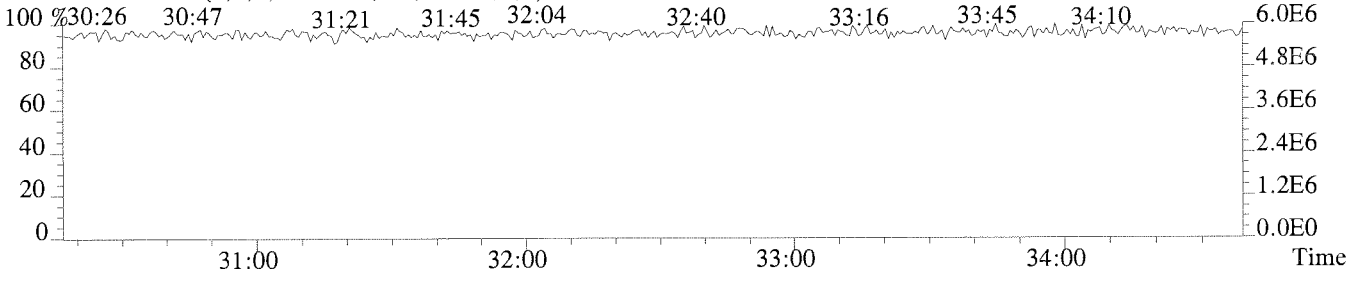
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1168.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

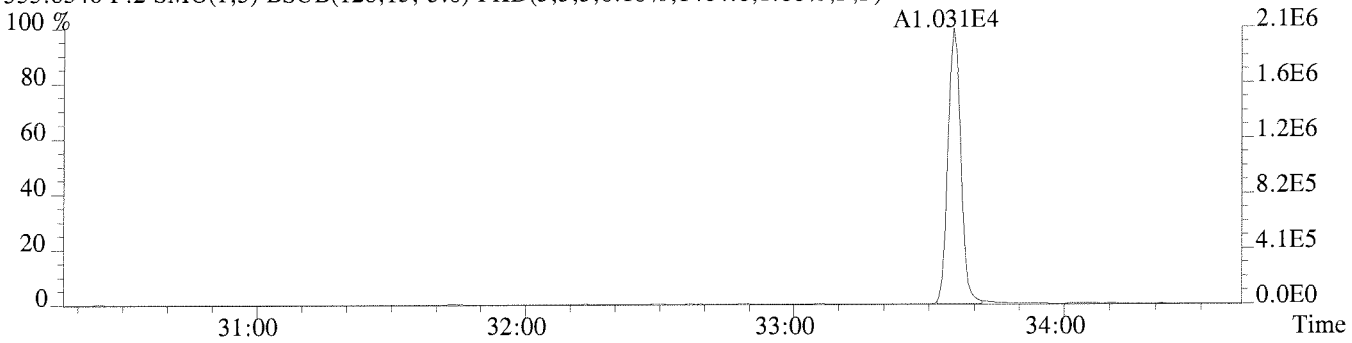


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

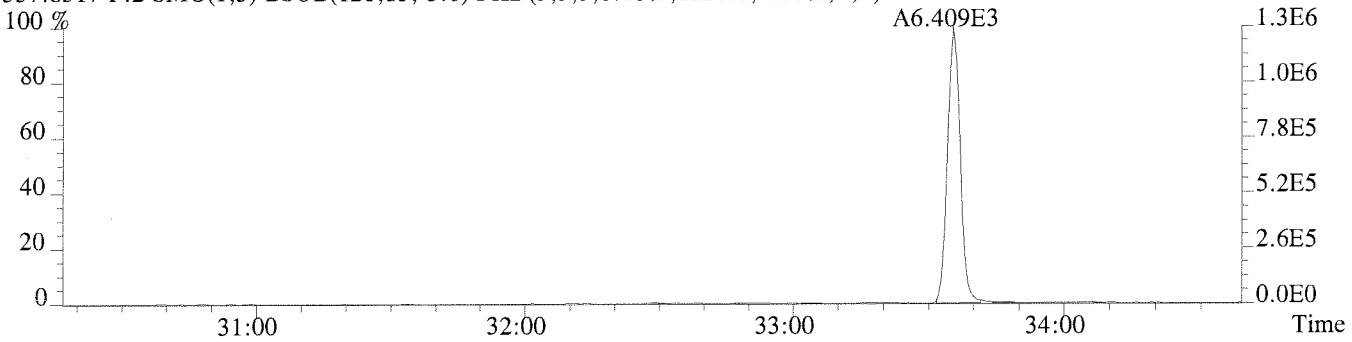


File:U217136 #1-397 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS

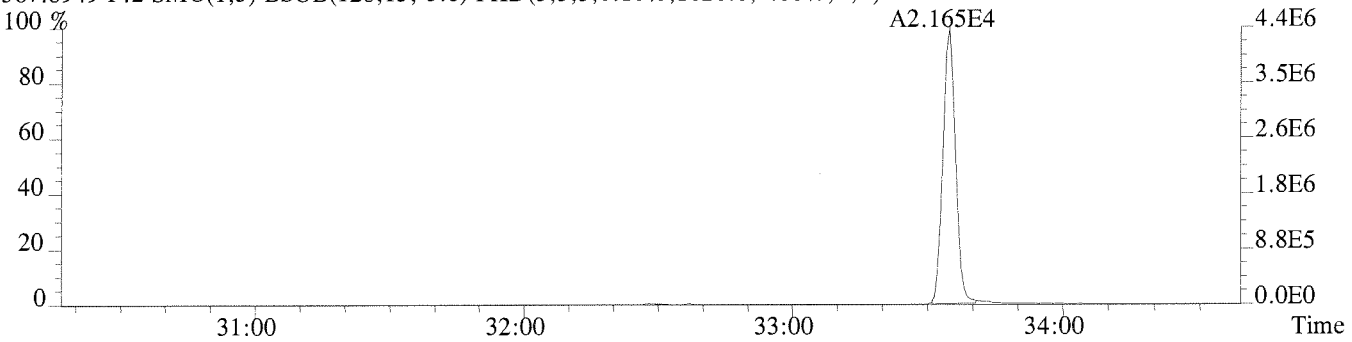
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1404.0,1.00%,F,F)



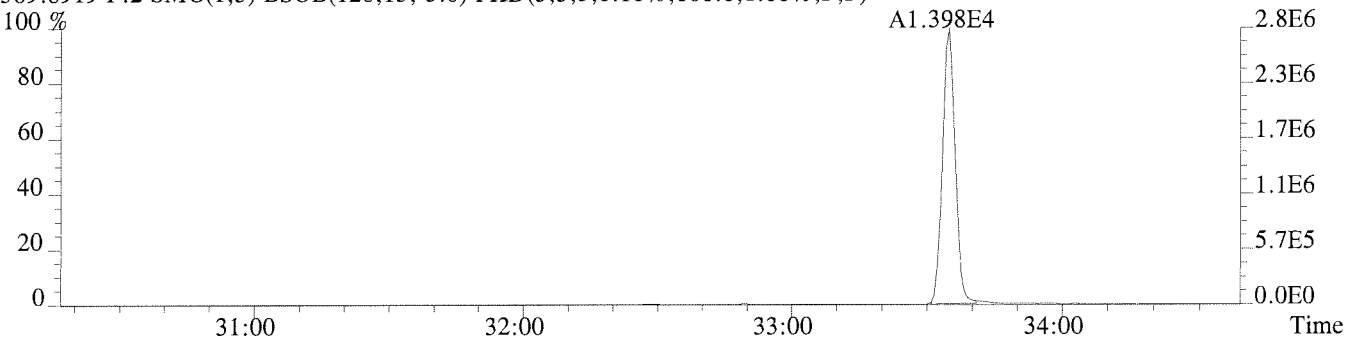
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1220.0,1.00%,F,F)



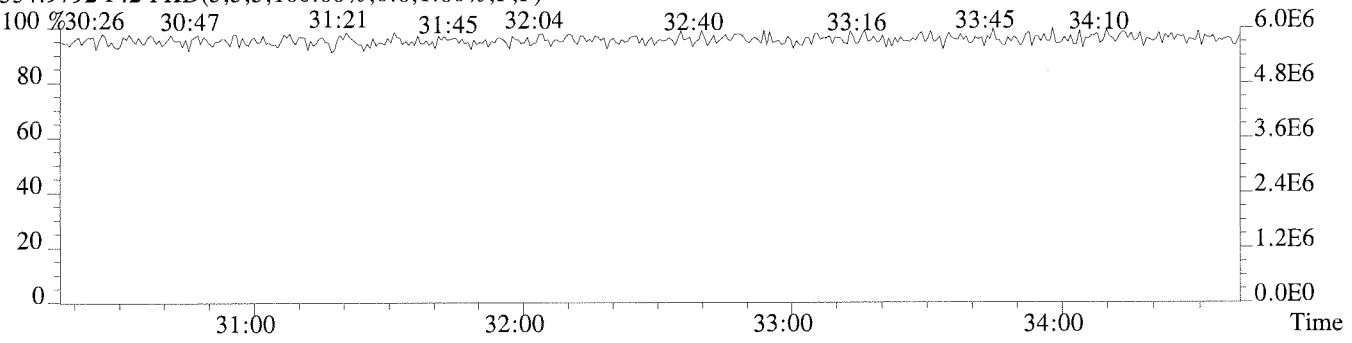
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1020.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,868.0,1.00%,F,F)

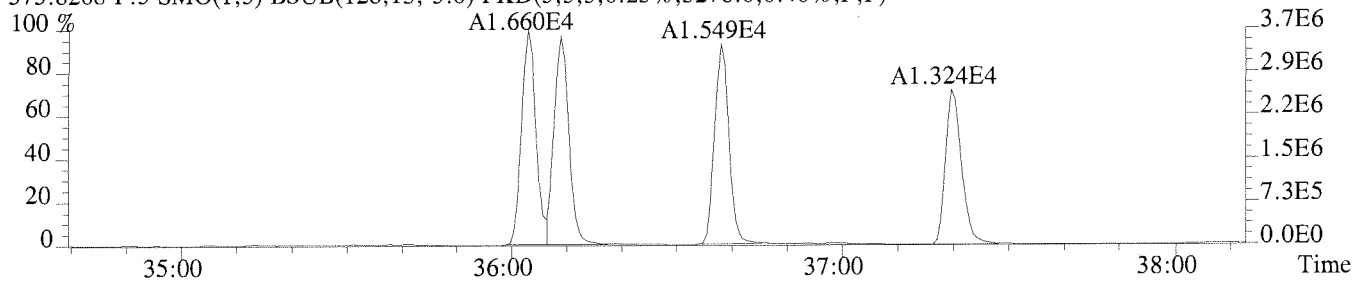


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

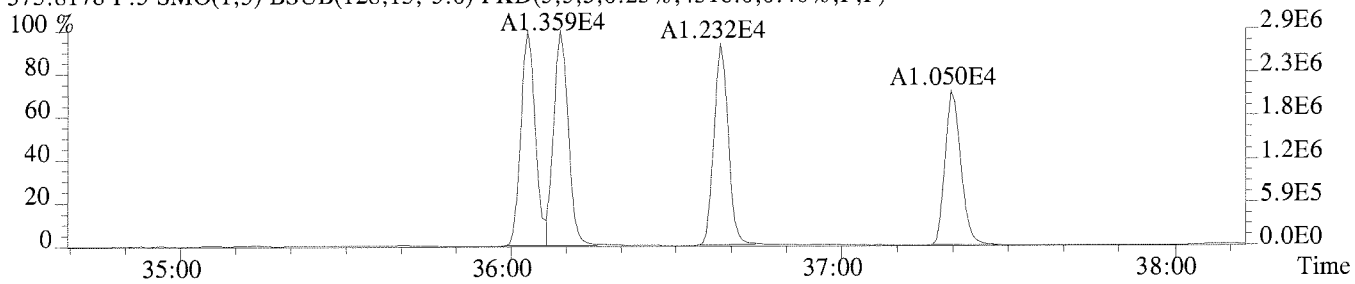


File:U217136 #1-323 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS

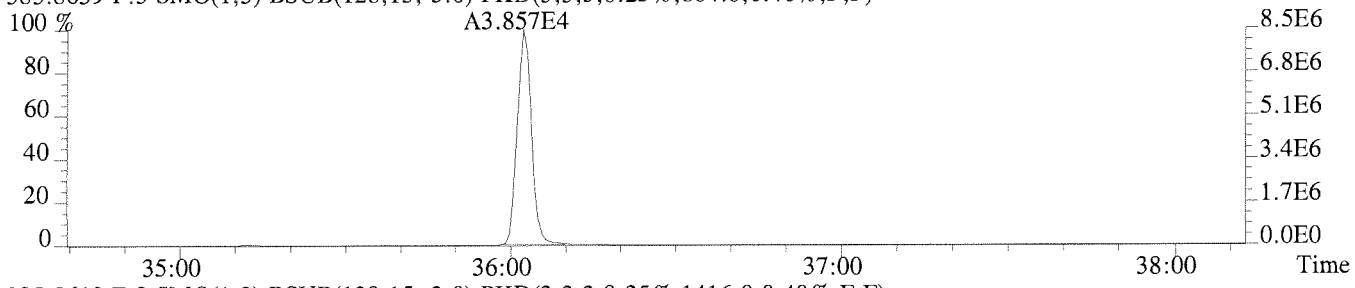
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5276.0,0.40%,F,F)



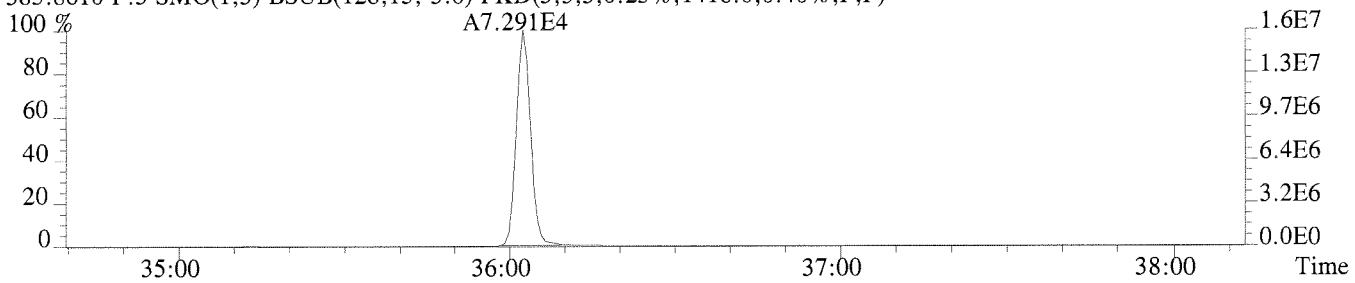
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4516.0,0.40%,F,F)



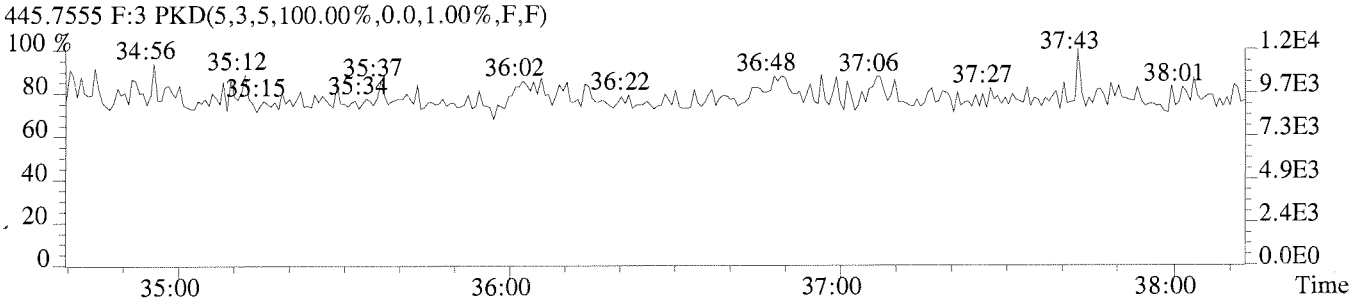
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,804.0,0.40%,F,F)



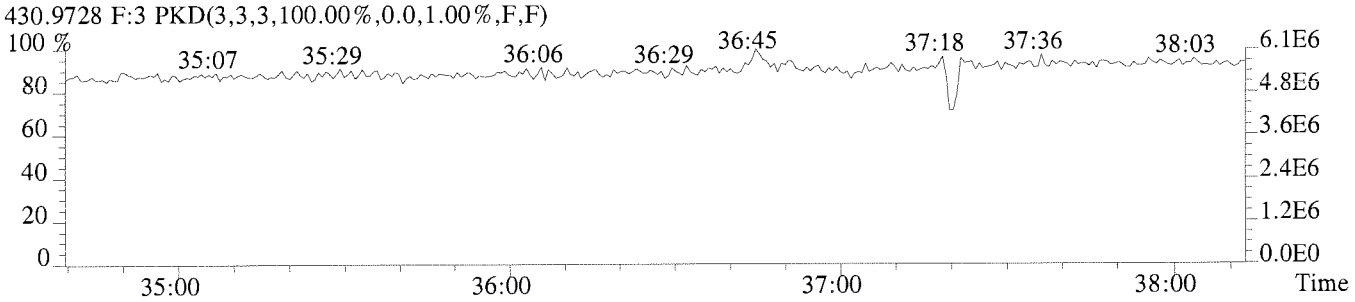
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1416.0,0.40%,F,F)



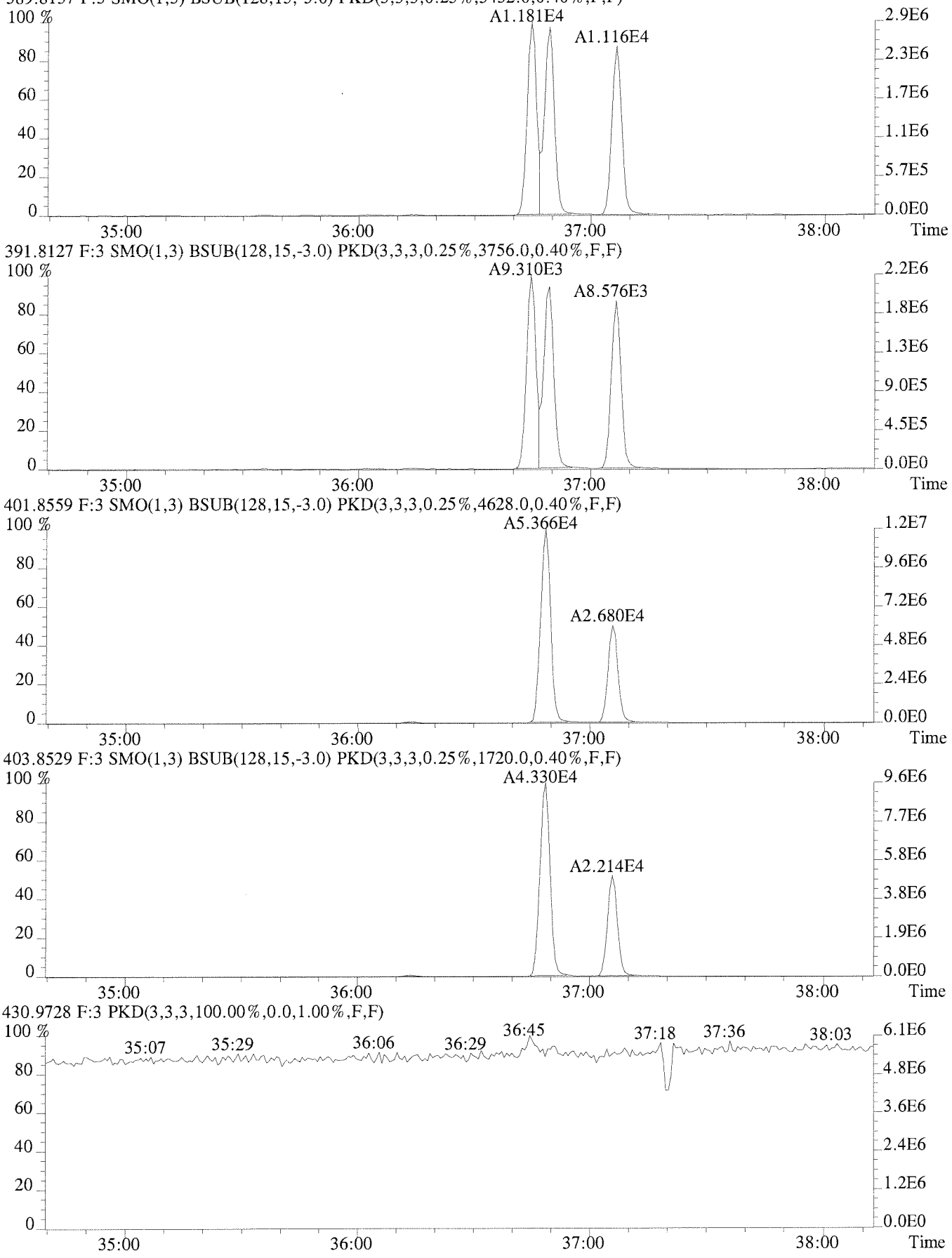
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

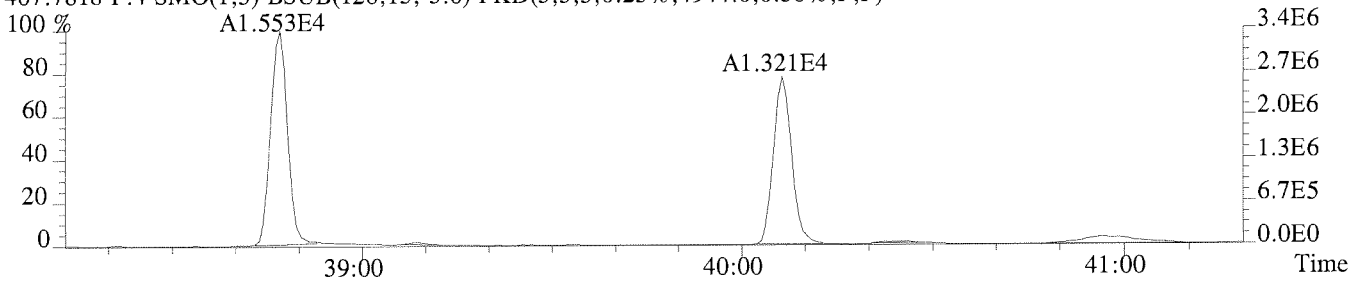


File:U217136 #1-323 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS

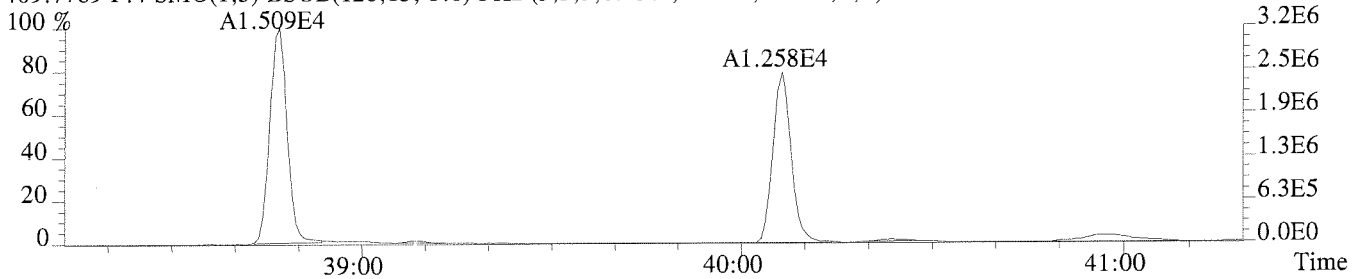


File:U217136 #1-281 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS

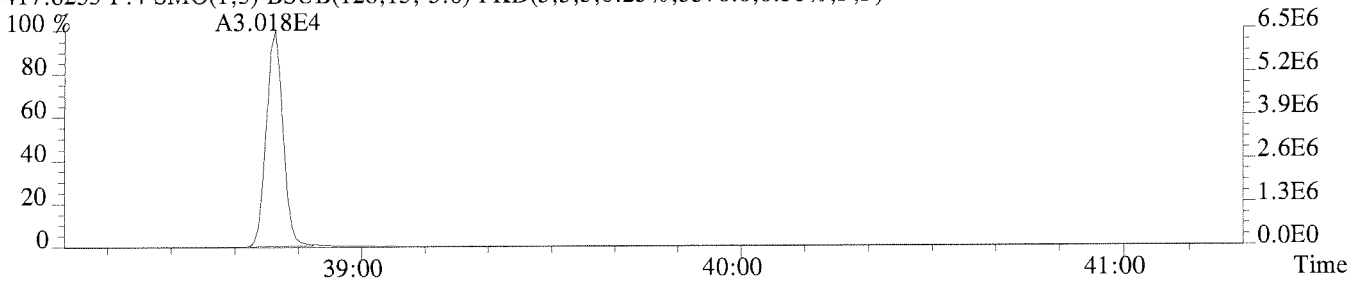
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4944.0,0.50%,F,F)



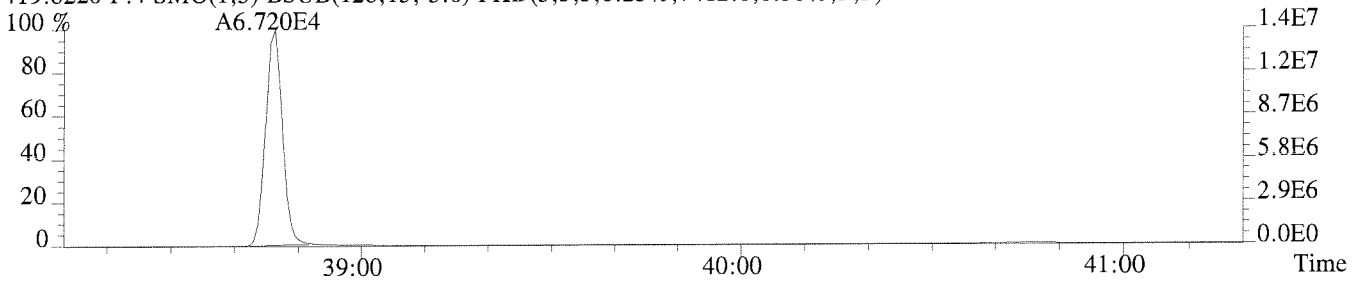
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2816.0,0.50%,F,F)



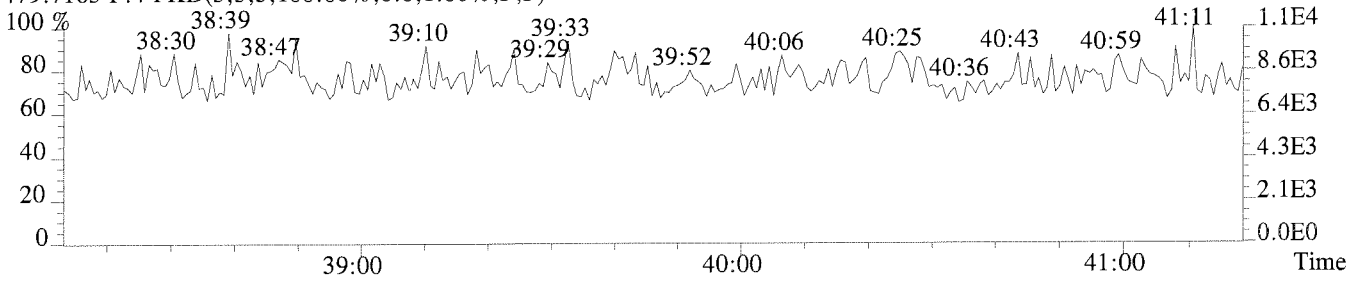
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3576.0,0.50%,F,F)



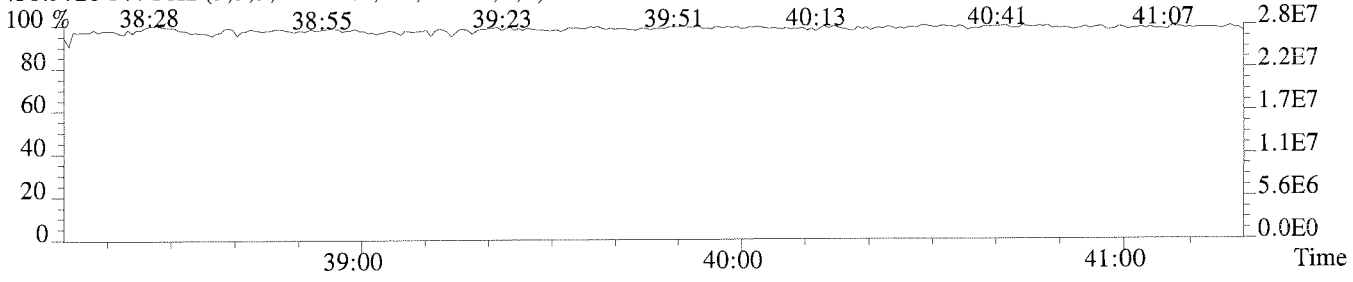
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,7412.0,0.50%,F,F)



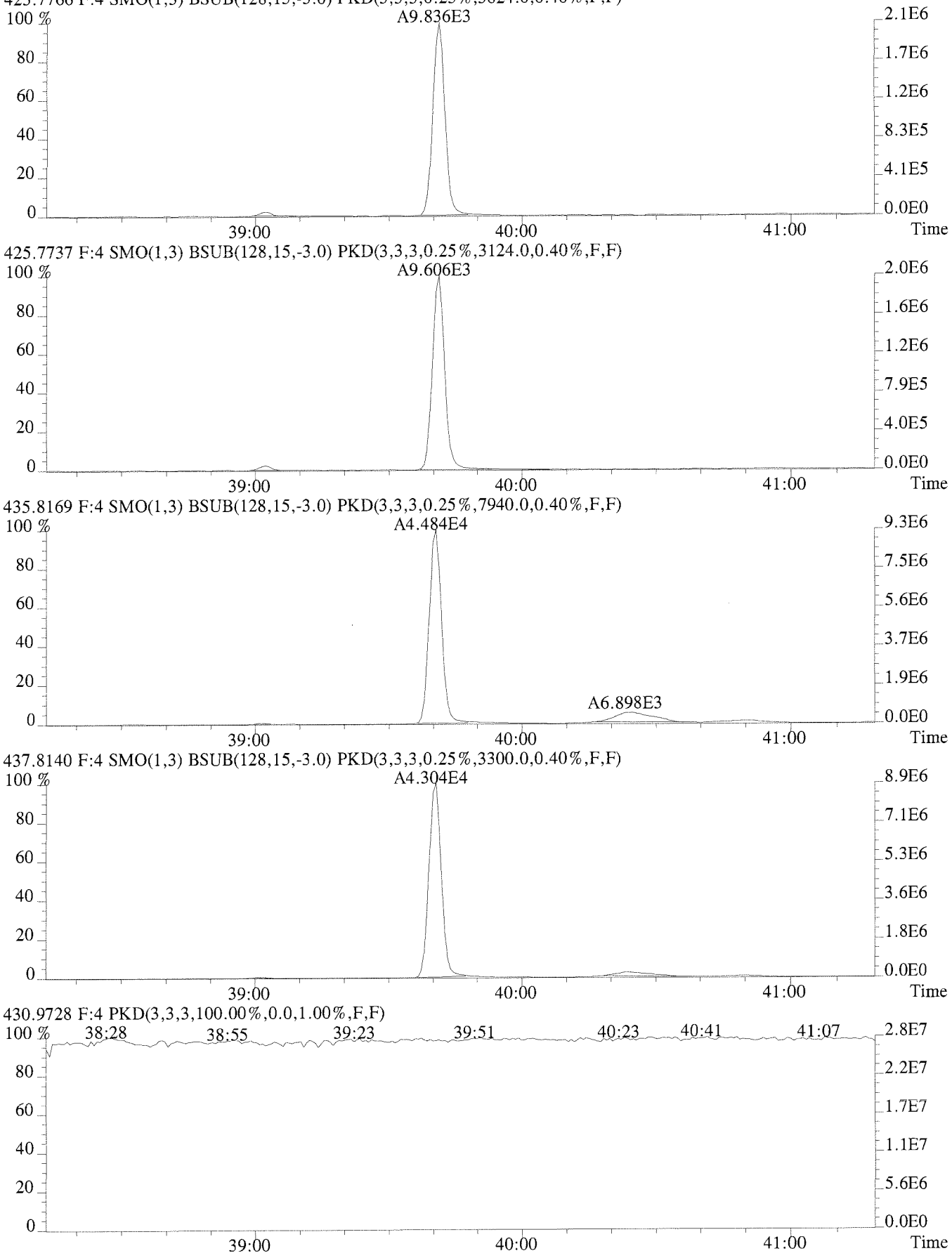
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



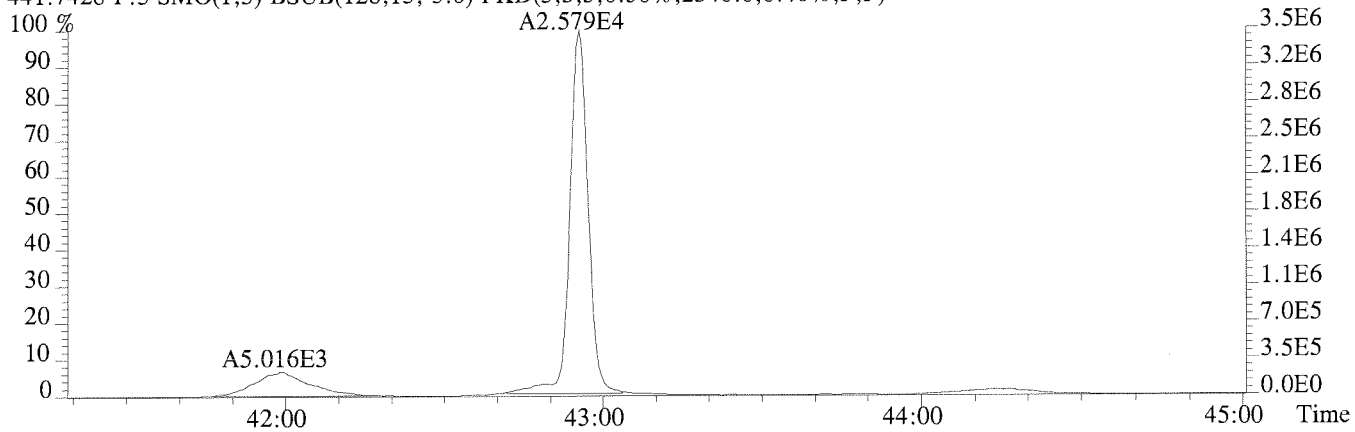
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



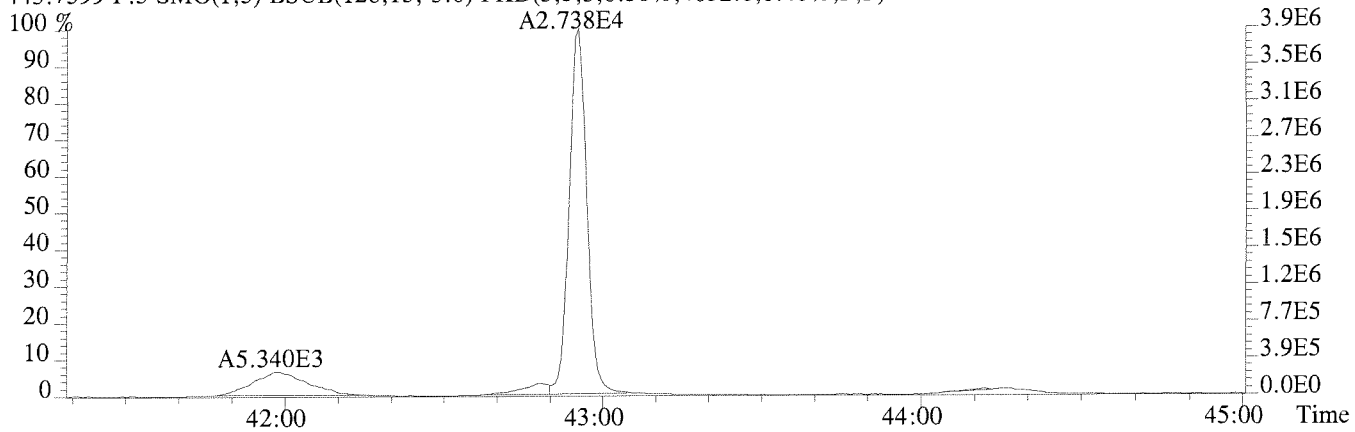
File:U217136 #1-281 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS



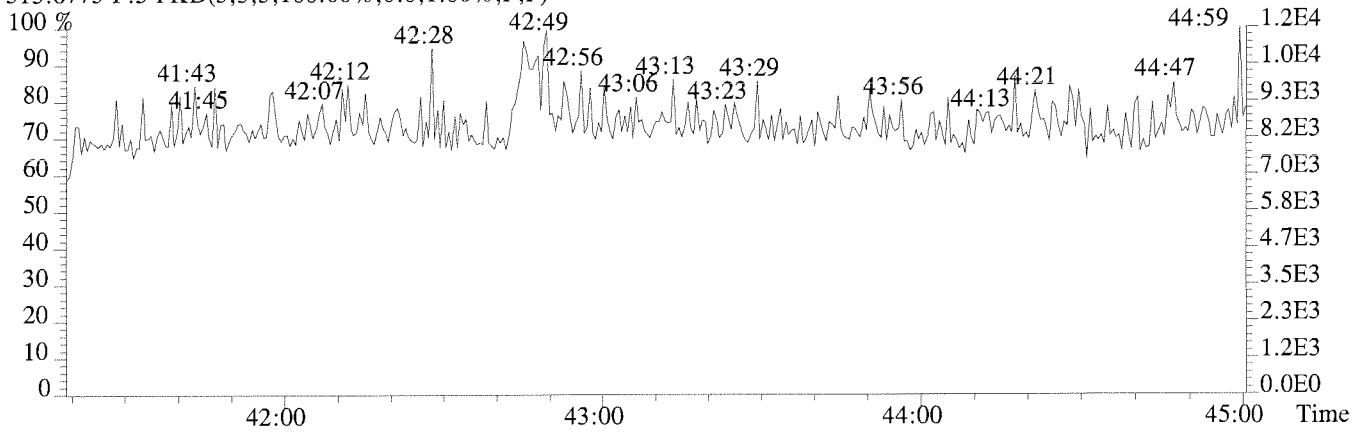
File:U217136 #1-408 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ08003l4-02 LCS
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2340.0,0.40%,F,F)



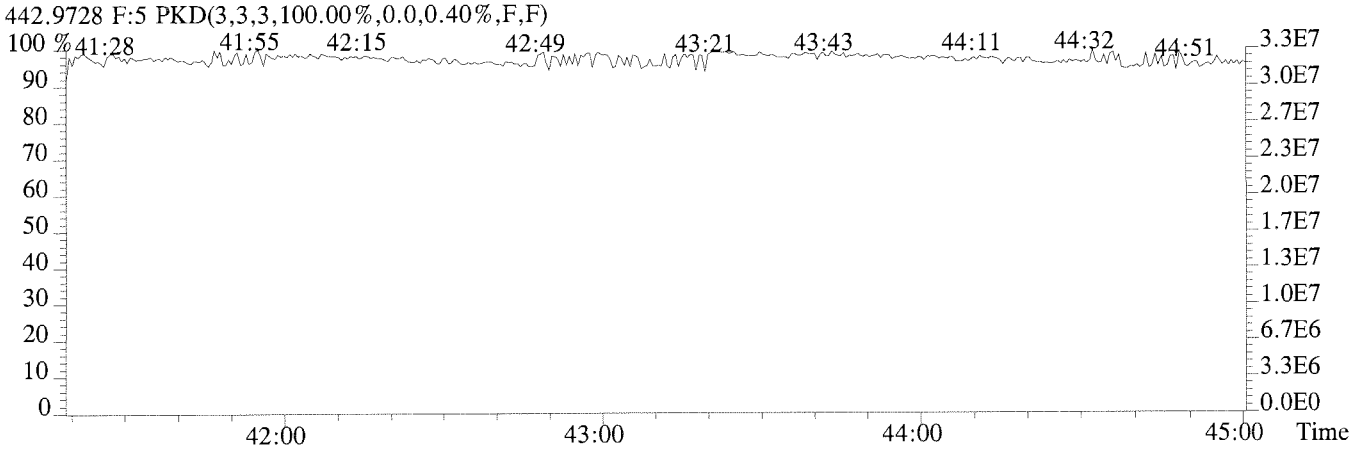
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,4032.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

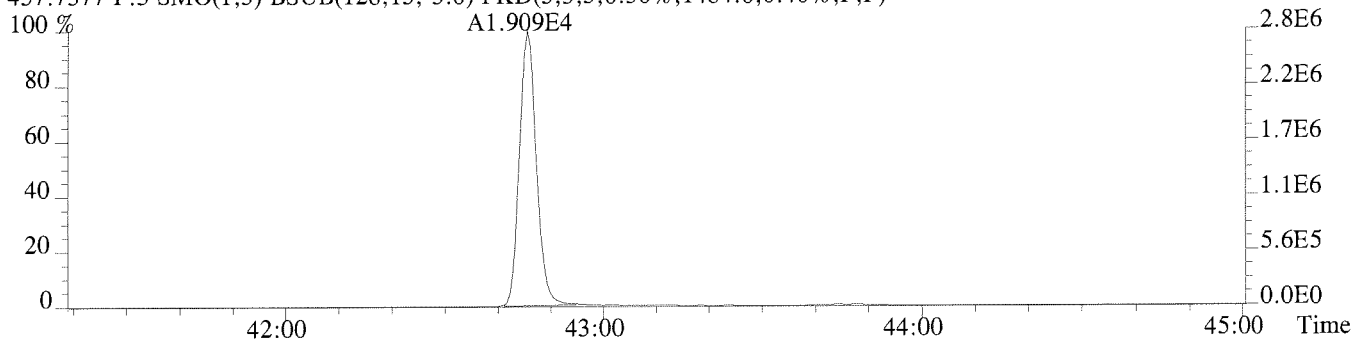


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

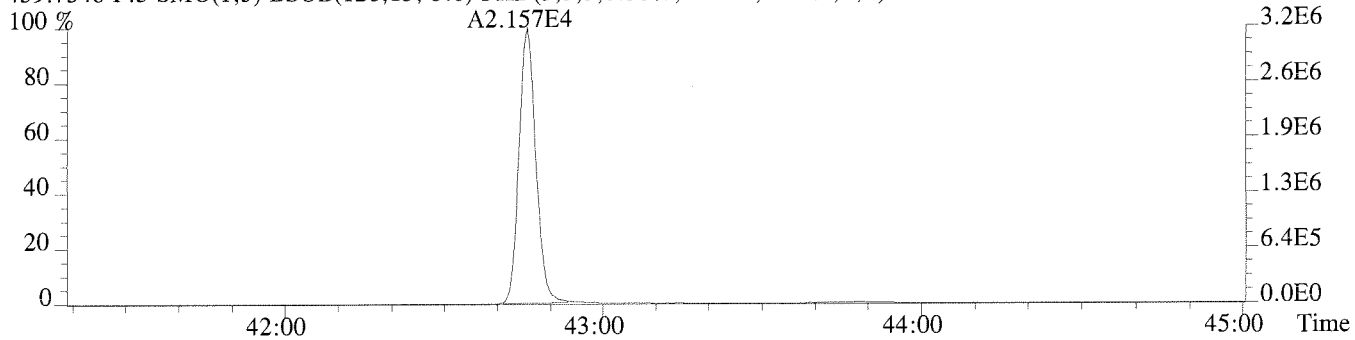


File:U217136 #1-408 Acq:14-AUG-2008 15:49:54 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800314-02 LCS

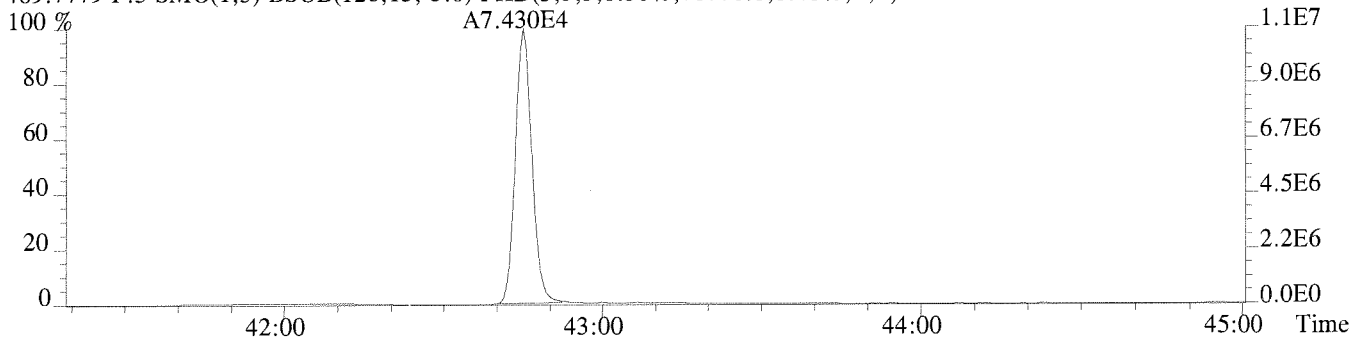
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1484.0,0.40%,F,F)



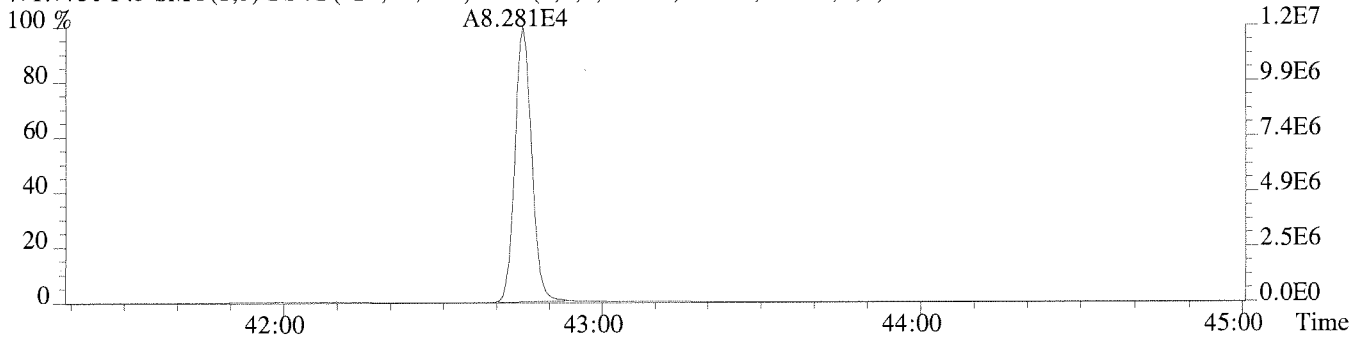
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1748.0,0.40%,F,F)



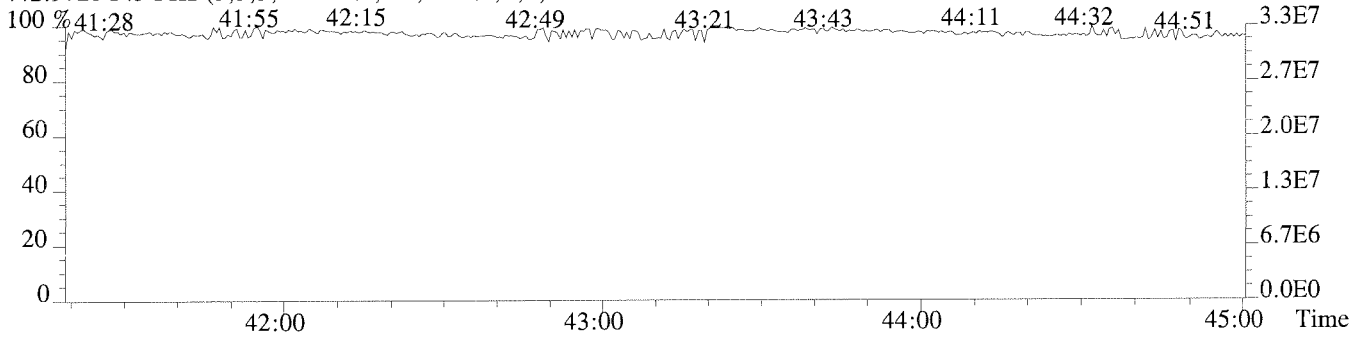
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,70776.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,3084.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
LCS

Run #12 Filename U129320 Samp: 1 Inj: 1 Acquired: 4-AUG-08 16:38:49
Processed: 5-AUG-08 09:26:17 LAB. ID: EQ0800317-02

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:15	4.833e+03	6.059e+03	0.80	yes	no	0.897
2	Unk	1,2,3,7,8-PeCDF	33:39	2.002e+04	1.326e+04	1.51	yes	no	0.906
3	Unk	2,3,4,7,8-PeCDF	34:23	2.194e+04	1.385e+04	1.58	yes	no	0.935
4	Unk	1,2,3,4,7,8-HxCDF	37:14	2.287e+04	1.843e+04	1.24	yes	no	1.168
5	Unk	1,2,3,6,7,8-HxCDF	37:20	2.446e+04	1.941e+04	1.26	yes	no	1.178
6	Unk	2,3,4,6,7,8-HxCDF	37:49	2.252e+04	1.854e+04	1.21	yes	no	1.056
7	Unk	1,2,3,7,8,9-HxCDF	38:31	1.721e+04	1.385e+04	1.24	yes	no	0.830
8	Unk	1,2,3,4,6,7,8-HpCDF	39:57	2.060e+04	2.082e+04	0.99	yes	no	1.437
9	Unk	1,2,3,4,7,8,9-HpCDF	41:16	1.577e+04	1.581e+04	1.00	yes	no	0.963
10	Unk	OCDF	44:02	2.654e+04	2.958e+04	0.90	yes	no	1.033
11	Unk	2,3,7,8-TCDD	30:06	4.343e+03	5.685e+03	0.76	yes	no	0.962
12	Unk	1,2,3,7,8-PeCDD	34:45	1.662e+04	1.077e+04	1.54	yes	no	0.885
13	Unk	1,2,3,4,7,8-HxCDD	37:56	1.945e+04	1.553e+04	1.25	yes	no	0.949
14	Unk	1,2,3,6,7,8-HxCDD	38:00	1.923e+04	1.533e+04	1.25	yes	no	0.991
15	Unk	1,2,3,7,8,9-HxCDD	38:18	1.767e+04	1.423e+04	1.24	yes	no	0.943
16	Unk	1,2,3,4,6,7,8-HpCDD	40:51	1.450e+04	1.410e+04	1.03	yes	no	0.945
17	Unk	OCDD	43:53	2.685e+04	3.091e+04	0.87	yes	no	1.062
18	IS	13C-2,3,7,8-TCDF	29:14	2.038e+04	2.655e+04	0.77	yes	no	1.177
19	IS	13C-1,2,3,7,8-PeCDF	33:38	3.531e+04	2.372e+04	1.49	yes	no	1.211
20	IS	13C-1,2,3,4,7,8-HxCDF	37:13	4.607e+04	9.061e+04	0.51	yes	no	1.178
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:57	3.330e+04	7.712e+04	0.43	yes	no	0.790
22	IS	13C-2,3,7,8-TCDD	30:05	1.644e+04	2.225e+04	0.74	yes	no	0.938
23	IS	13C-1,2,3,7,8-PeCDD	34:44	2.961e+04	1.971e+04	1.50	yes	no	0.926
24	IS	13C-1,2,3,6,7,8-HxCDD	38:00	7.780e+04	6.342e+04	1.23	yes	no	0.989
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:50	5.841e+04	5.622e+04	1.04	yes	no	0.769
26	IS	13C-OCDD	43:52	8.405e+04	9.382e+04	0.90	yes	no	0.711
27	RS/RT	13C-1,2,3,4-TCDD	29:51	2.485e+04	3.296e+04	0.75	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:17	3.564e+04	2.870e+04	1.24	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:06	3.647e+04					0.886
					SUM AREA				
30	Tot	Total Tetra-Furans	28:01		1.103e+04	0.84	yes		0.897
31	Tot	Total Tetra-Dioxins	30:06		1.003e+04	0.76	yes		0.962
32	Tot	Total Penta-Furans	33:39		6.908e+04	1.51	yes		0.920
33	Tot	Total Penta-Dioxins	33:38		2.746e+04	1.37	yes		0.885
34	Tot	Total Hexa-Furans	37:14		1.573e+05	1.24	yes		1.058
35	Tot	Total Hexa-Dioxins	37:56		1.014e+05	1.25	yes		0.961
36	Tot	Total Hepta-Furans	39:57		7.300e+04	0.99	yes		1.200
37	Tot	Total Hepta-Dioxins	40:51		2.860e+04	1.03	yes		0.945

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary LCS

Run #12 Filename U129320 #1 Samp: 1 Inj: 1 Acquired: 4-AUG-08 16:38:49

Processed: 5-AUG-08 09:26:17 LAB. ID: EQ0800317-02

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	7.73e+05	4.32e+02	1.8e+03	9.76e+05	5.56e+02	1.8e+03
2	1,2,3,7,8-PeCDF	3.91e+06	5.16e+02	7.6e+03	2.56e+06	5.08e+02	5.0e+03
3	2,3,4,7,8-PeCDF	4.28e+06	5.16e+02	8.3e+03	2.73e+06	5.08e+02	5.4e+03
4	1,2,3,4,7,8-HxCDF	4.97e+06	9.88e+02	5.0e+03	4.00e+06	1.00e+03	4.0e+03
5	1,2,3,6,7,8-HxCDF	5.04e+06	9.88e+02	5.1e+03	3.98e+06	1.00e+03	4.0e+03
6	2,3,4,6,7,8-HxCDF	4.76e+06	9.88e+02	4.8e+03	3.89e+06	1.00e+03	3.9e+03
7	1,2,3,7,8,9-HxCDF	3.63e+06	9.88e+02	3.7e+03	2.93e+06	1.00e+03	2.9e+03
8	1,2,3,4,6,7,8-HpCDF	4.42e+06	2.41e+03	1.8e+03	4.47e+06	3.04e+03	1.5e+03
9	1,2,3,4,7,8,9-HpCDF	3.05e+06	2.41e+03	1.3e+03	3.11e+06	3.04e+03	1.0e+03
10	OCDF	3.93e+06	9.20e+02	4.3e+03	4.34e+06	1.27e+03	3.4e+03
11	2,3,7,8-TCDD	7.36e+05	4.28e+02	1.7e+03	9.56e+05	2.76e+02	3.5e+03
12	1,2,3,7,8-PeCDD	3.28e+06	9.72e+02	3.4e+03	2.15e+06	6.40e+02	3.4e+03
13	1,2,3,4,7,8-HxCDD	4.12e+06	1.38e+03	3.0e+03	3.27e+06	1.11e+03	2.9e+03
14	1,2,3,6,7,8-HxCDD	4.36e+06	1.38e+03	3.2e+03	3.42e+06	1.11e+03	3.1e+03
15	1,2,3,7,8,9-HxCDD	3.81e+06	1.38e+03	2.8e+03	3.09e+06	1.11e+03	2.8e+03
16	1,2,3,4,6,7,8-HpCDD	2.97e+06	1.89e+03	1.6e+03	2.93e+06	1.91e+03	1.5e+03
17	OCDD	3.97e+06	2.82e+03	1.4e+03	4.59e+06	2.50e+03	1.8e+03
18	13C-2,3,7,8-TCDF	3.22e+06	2.37e+03	1.4e+03	4.25e+06	9.24e+02	4.6e+03
19	13C-1,2,3,7,8-PeCDF	6.73e+06	2.04e+02	3.3e+04	4.55e+06	2.92e+02	1.6e+04
20	13C-1,2,3,4,7,8-HxCDF	9.79e+06	4.56e+02	2.1e+04	1.90e+07	9.32e+02	2.0e+04
21	13C-1,2,3,4,6,7,8-HpCDF	7.16e+06	1.39e+03	5.2e+03	1.64e+07	4.22e+03	3.9e+03
22	13C-2,3,7,8-TCDD	2.92e+06	2.90e+03	1.0e+03	3.89e+06	8.00e+02	4.9e+03
23	13C-1,2,3,7,8-PeCDD	5.96e+06	6.92e+02	8.6e+03	3.99e+06	2.40e+02	1.7e+04
24	13C-1,2,3,6,7,8-HxCDD	1.72e+07	1.54e+03	1.1e+04	1.40e+07	9.04e+02	1.6e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.21e+07	1.05e+03	1.2e+04	1.17e+07	8.00e+02	1.5e+04
26	13C-OCDD	1.23e+07	1.19e+03	1.0e+04	1.40e+07	9.64e+02	1.5e+04
27	13C-1,2,3,4-TCDD	4.42e+06	2.90e+03	1.5e+03	5.80e+06	8.00e+02	7.2e+03
28	13C-1,2,3,7,8,9-HxCDD	7.80e+06	1.54e+03	5.1e+03	6.30e+06	9.04e+02	7.0e+03
29	37Cl-2,3,7,8-TCDD	6.16e+06	3.72e+02	1.7e+04			

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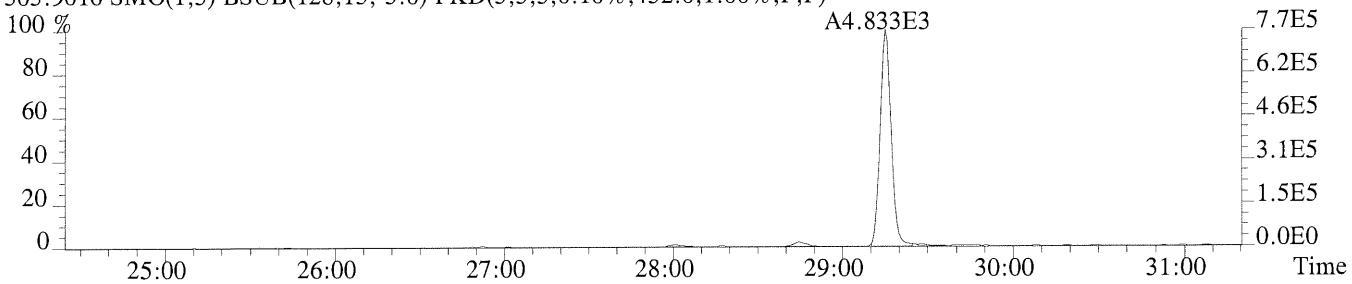
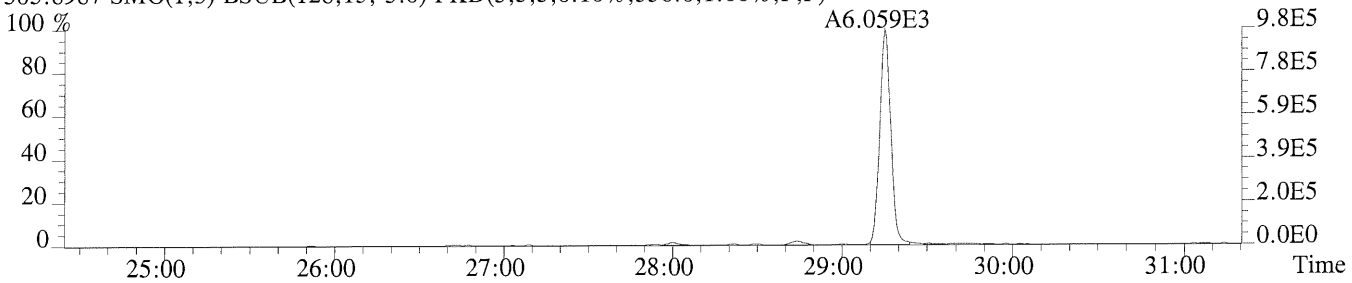
File:U129320 #1-578 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS

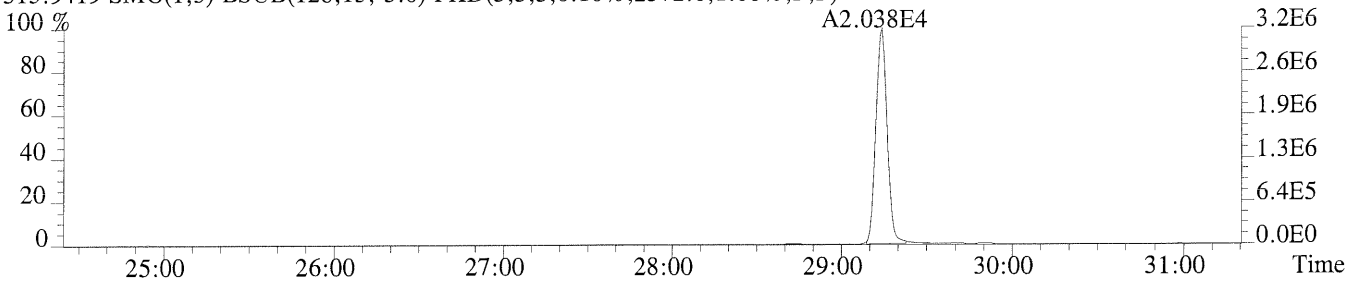
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,432.0,1.00%,F,F)



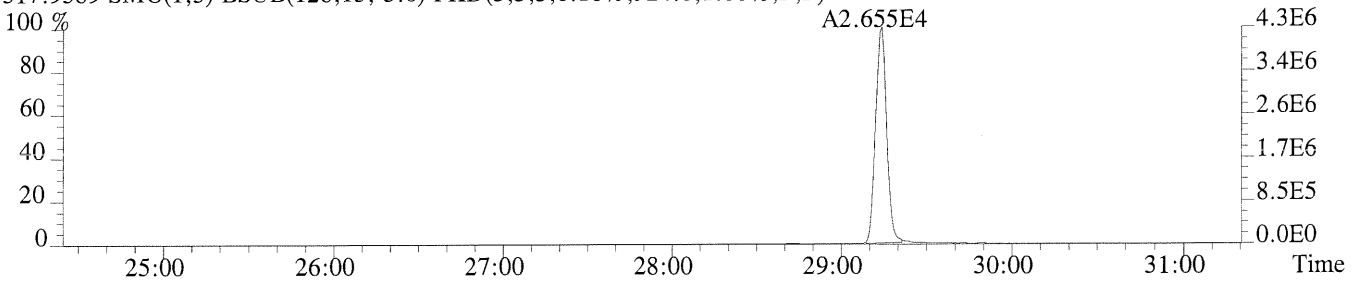
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,556.0,1.00%,F,F)



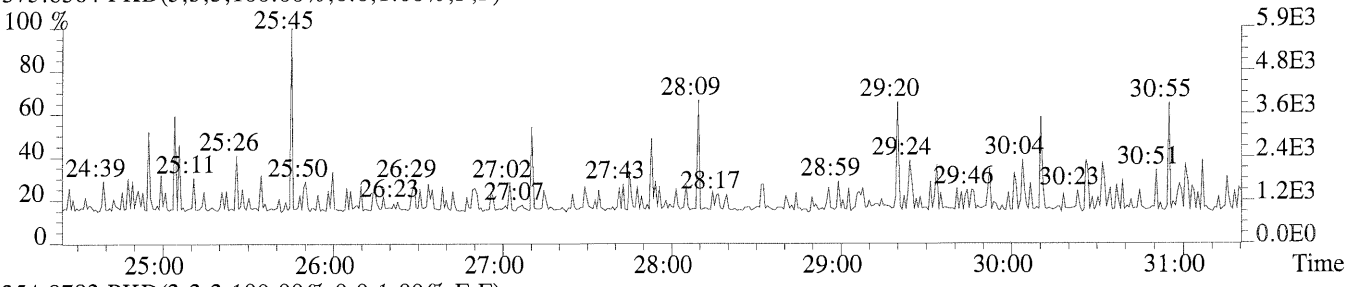
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2372.0,1.00%,F,F)



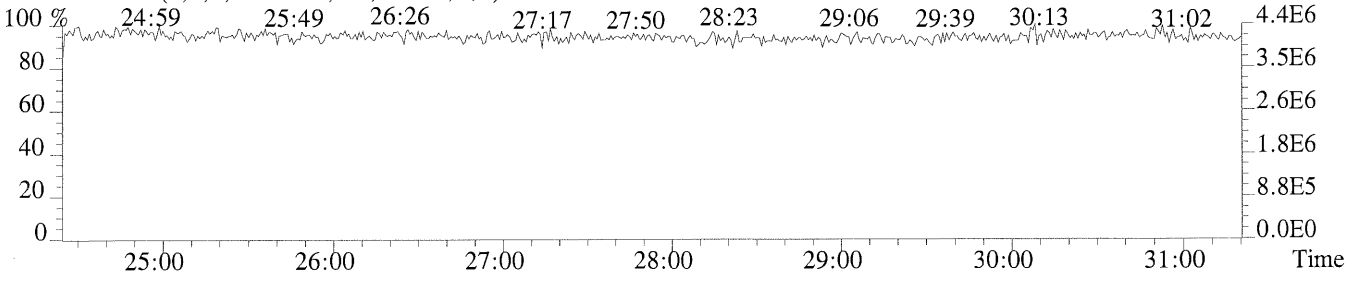
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,924.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

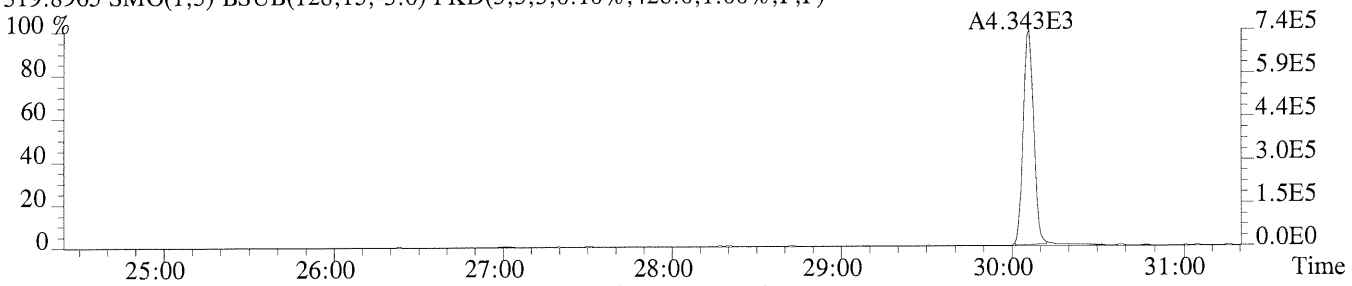


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

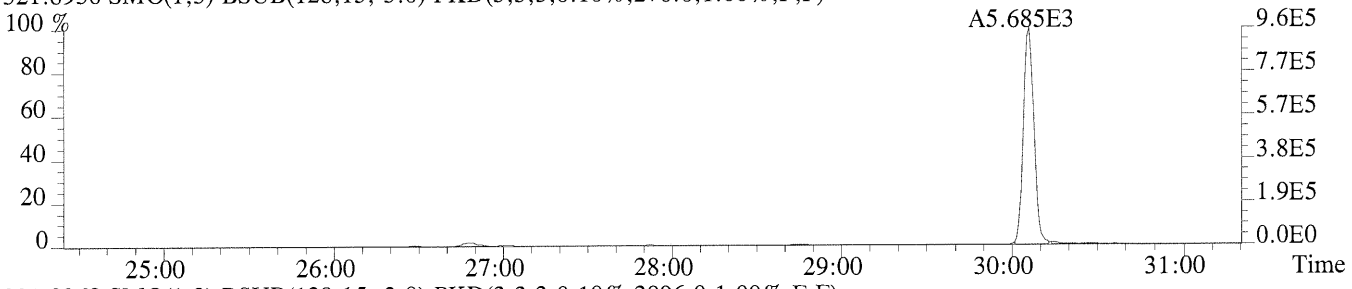


File:U129320 #1-578 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS

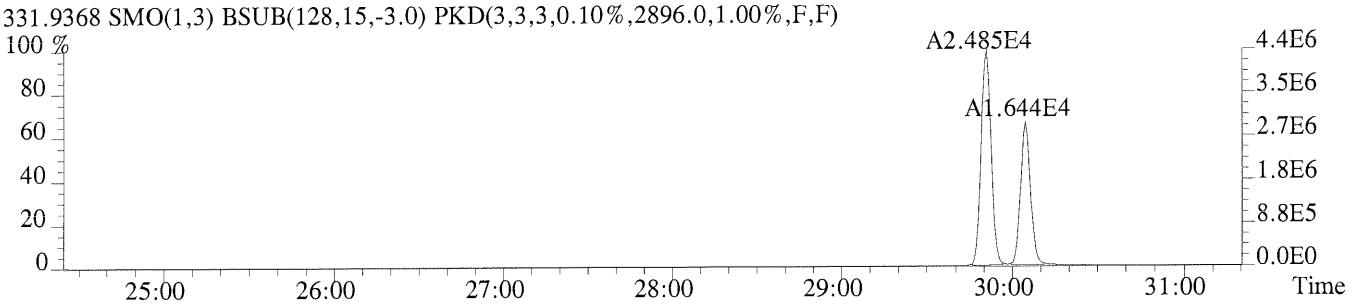
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,428.0,1.00%,F,F)



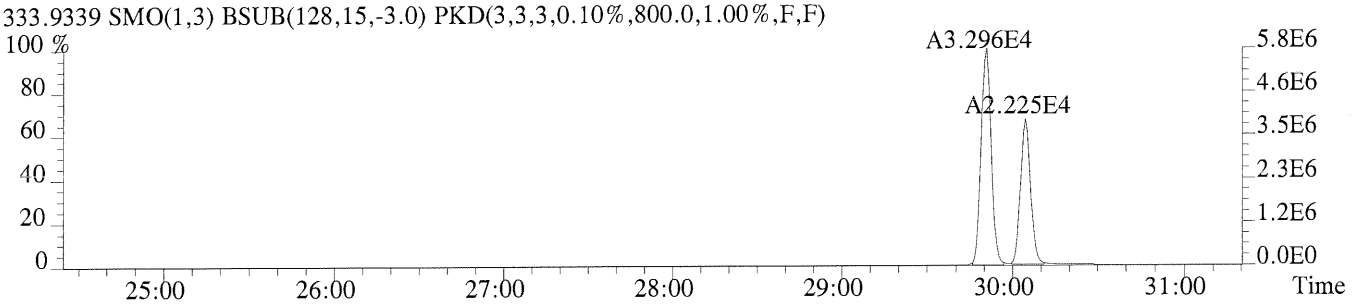
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,276.0,1.00%,F,F)



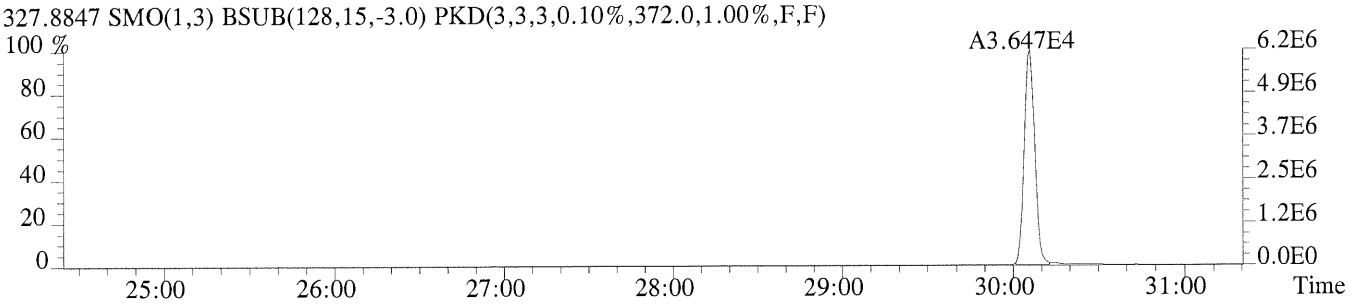
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2896.0,1.00%,F,F)



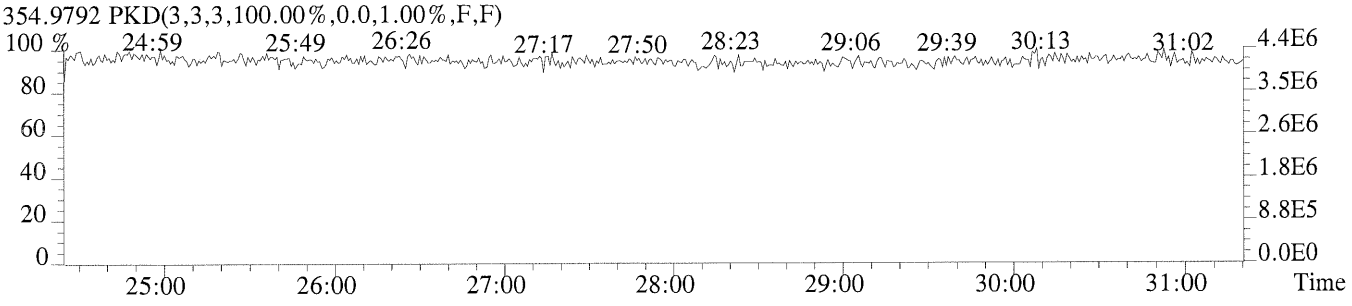
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,800.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,372.0,1.00%,F,F)

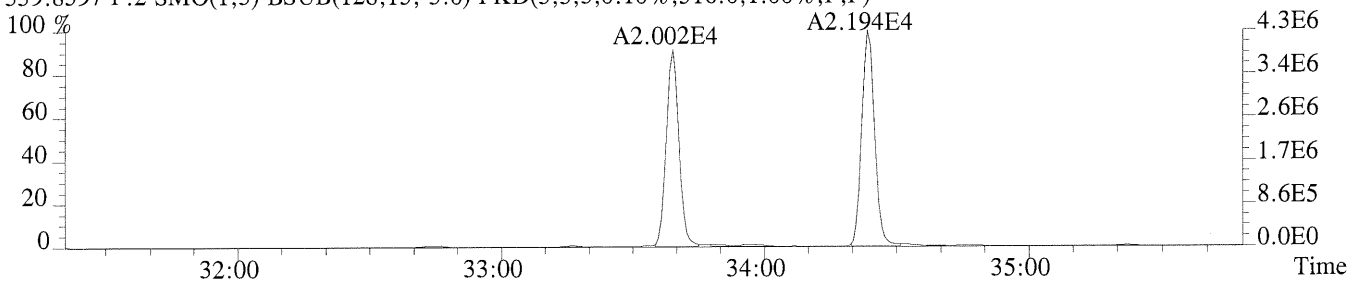


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

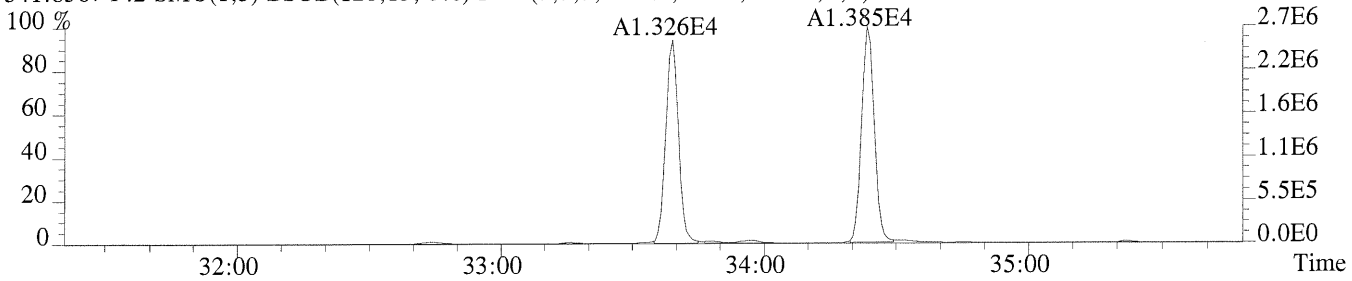


File:U129320 #1-405 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS

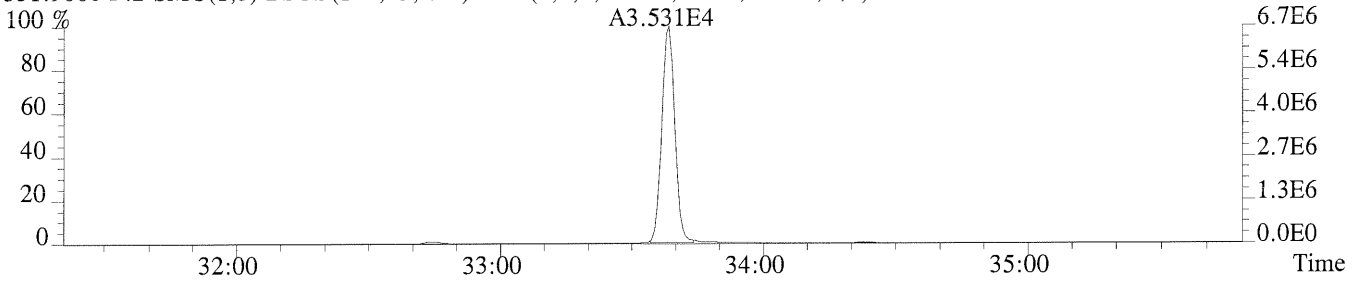
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,516.0,1.00%,F,F)



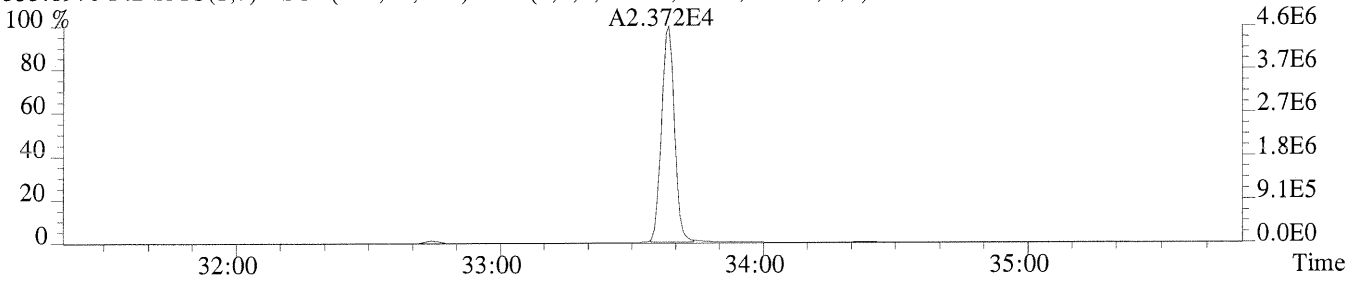
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,508.0,1.00%,F,F)



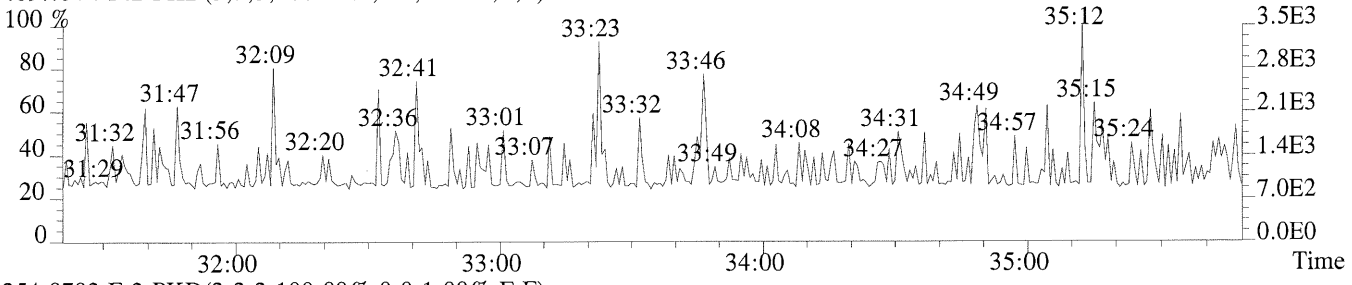
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,204.0,1.00%,F,F)



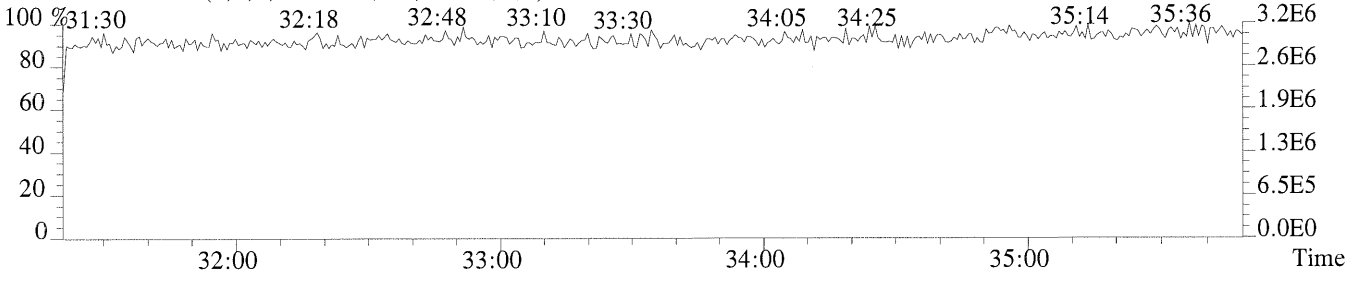
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,292.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

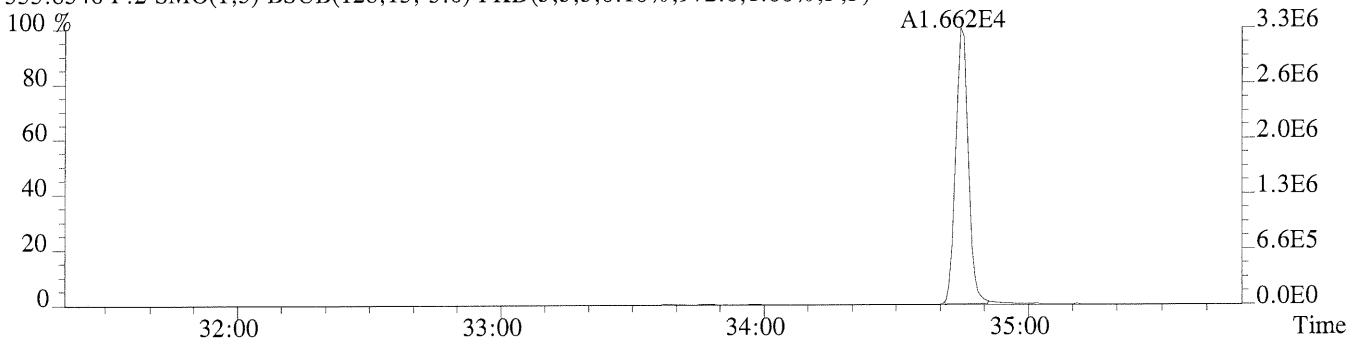


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

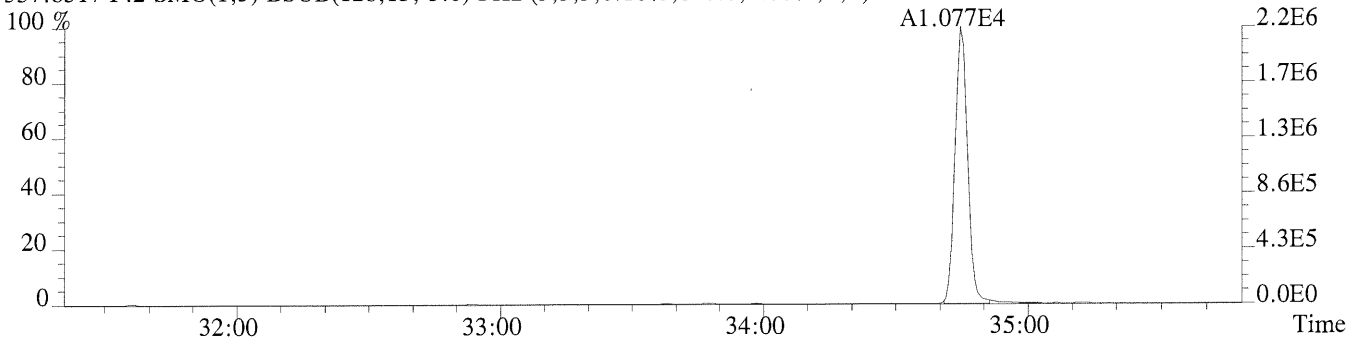


File:U129320 #1-405 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS

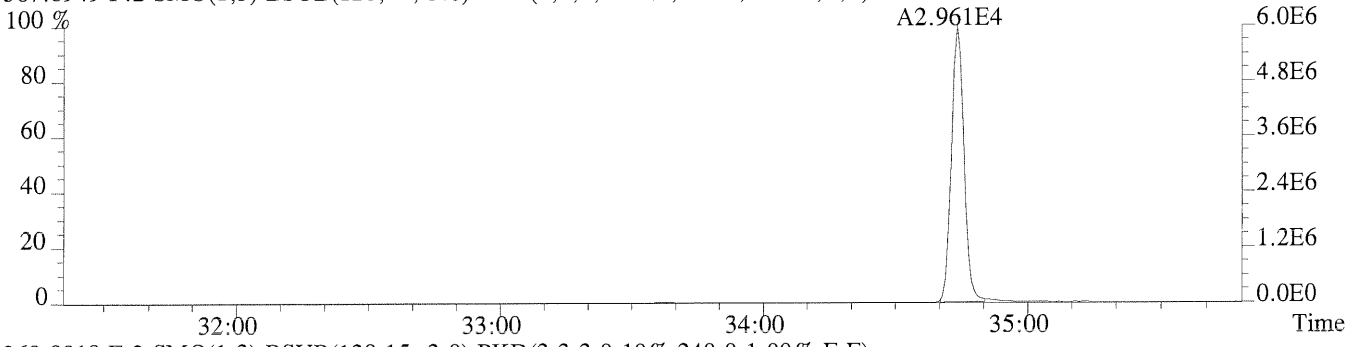
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,972.0,1.00%,F,F)



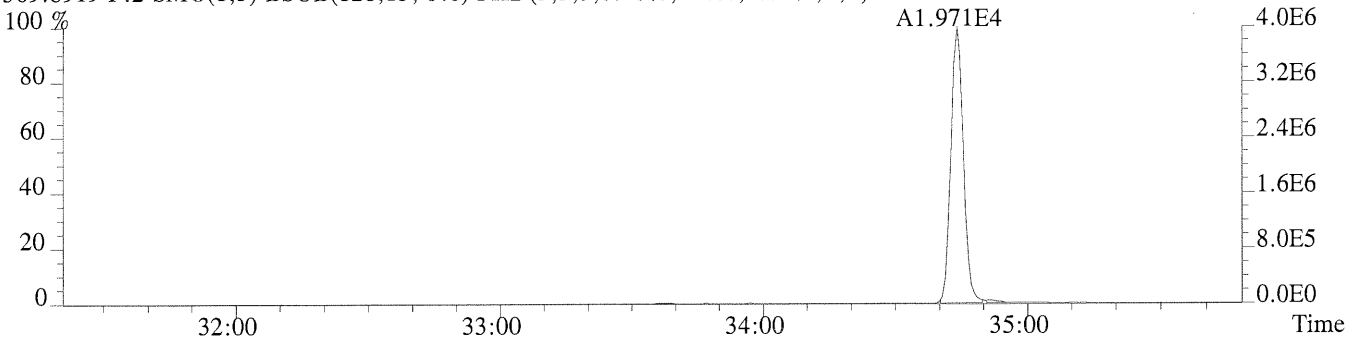
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,640.0,1.00%,F,F)



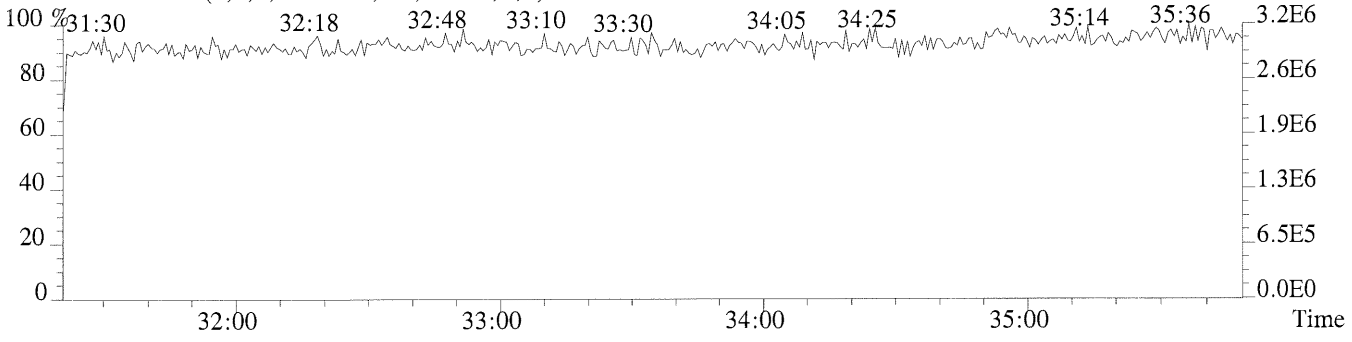
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,692.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,240.0,1.00%,F,F)

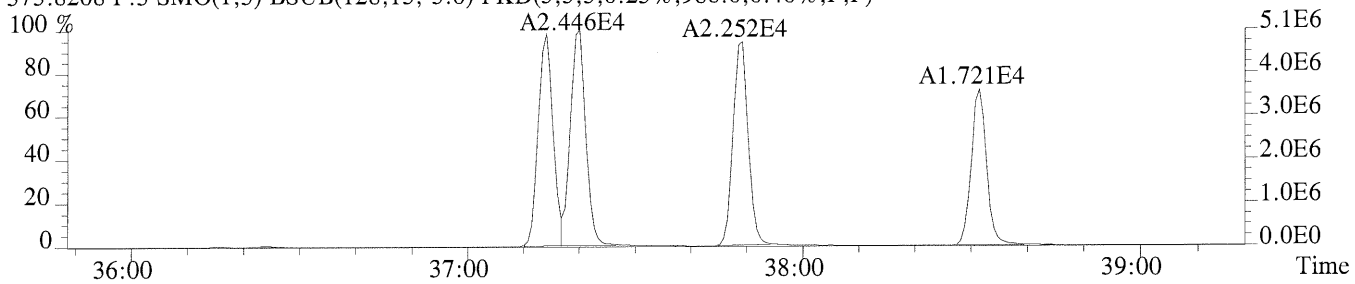


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

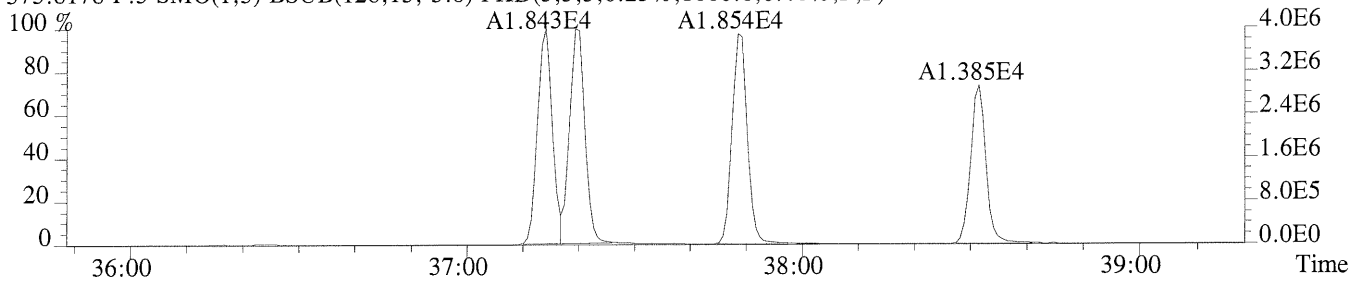


File:U129320 #1-318 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS

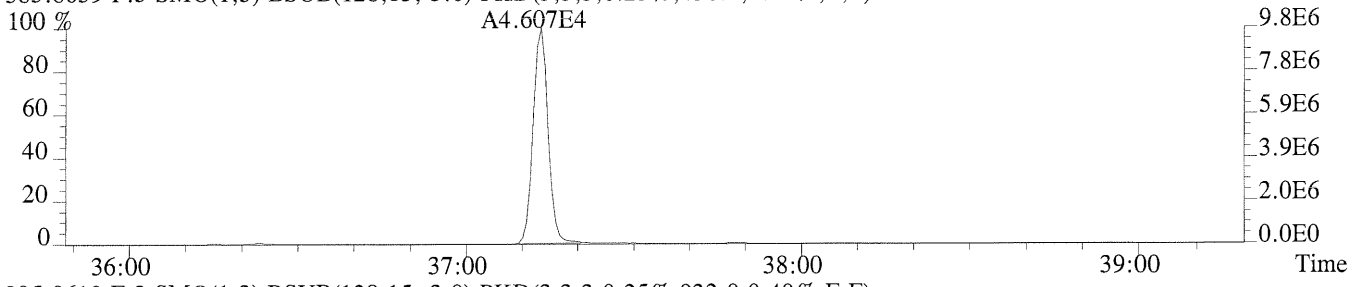
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,988.0,0.40%,F,F)



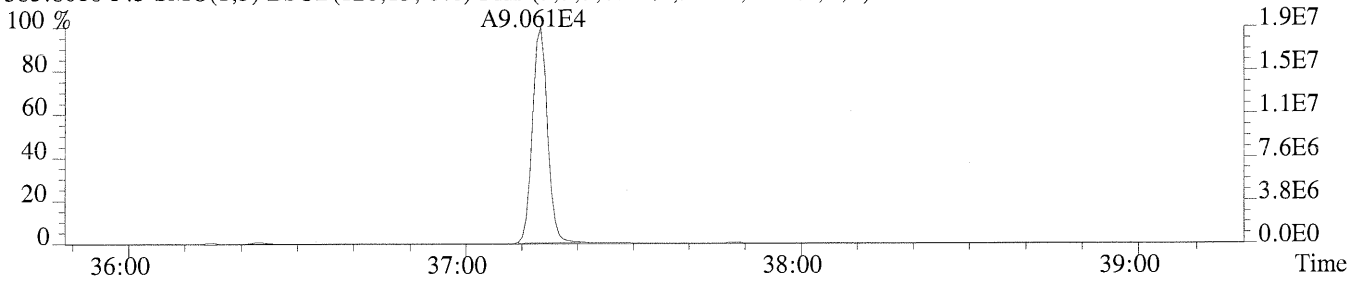
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1000.0,0.40%,F,F)



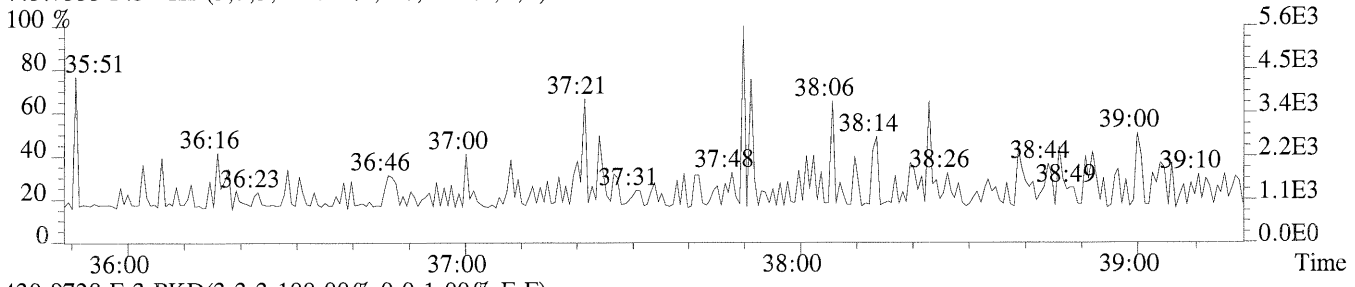
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,456.0,0.40%,F,F)



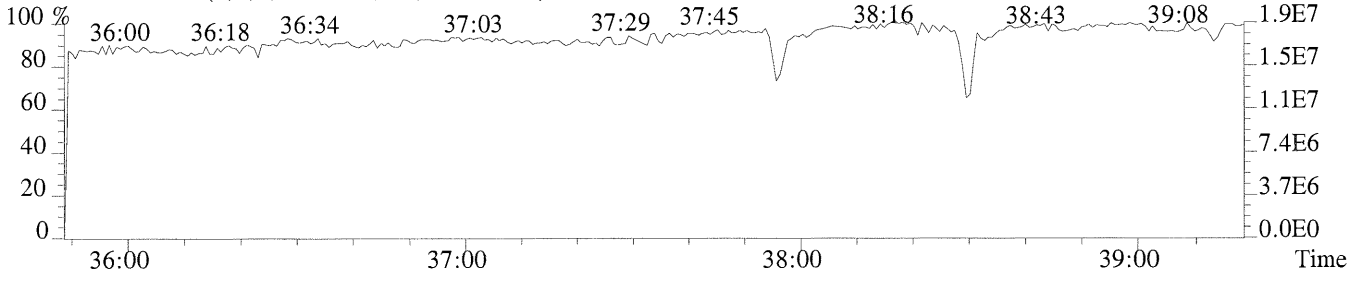
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,932.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

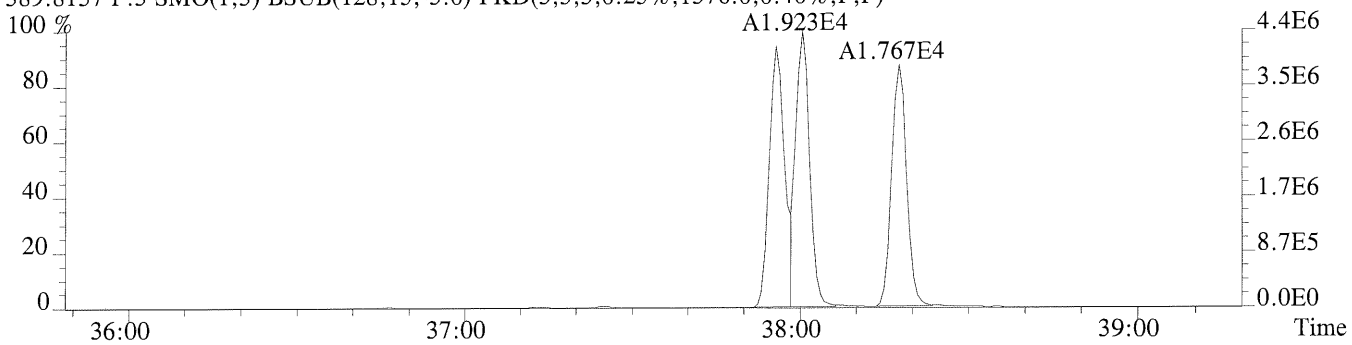


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

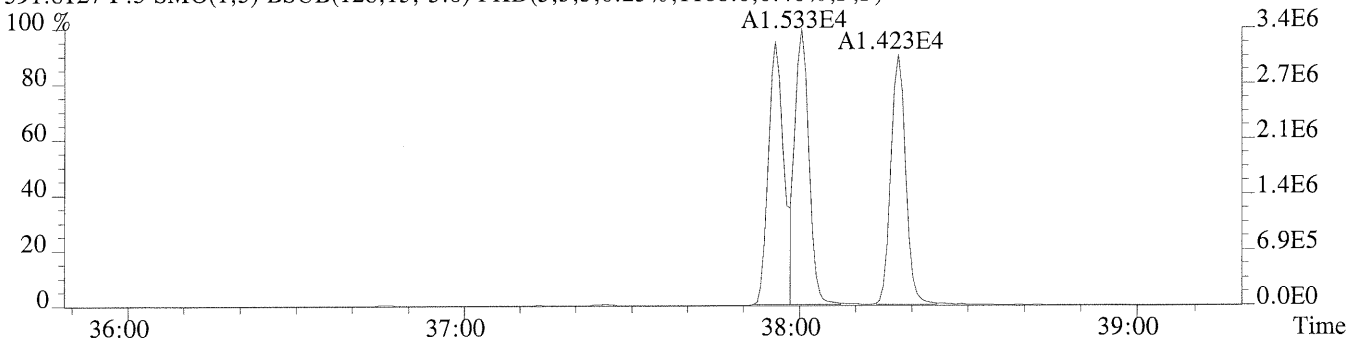


File:U129320 #1-318 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS

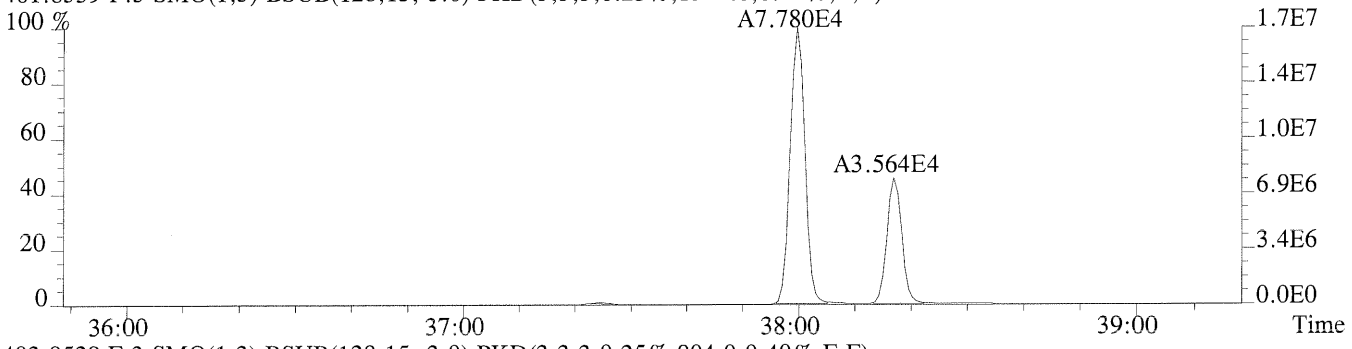
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1376.0,0.40%,F,F)



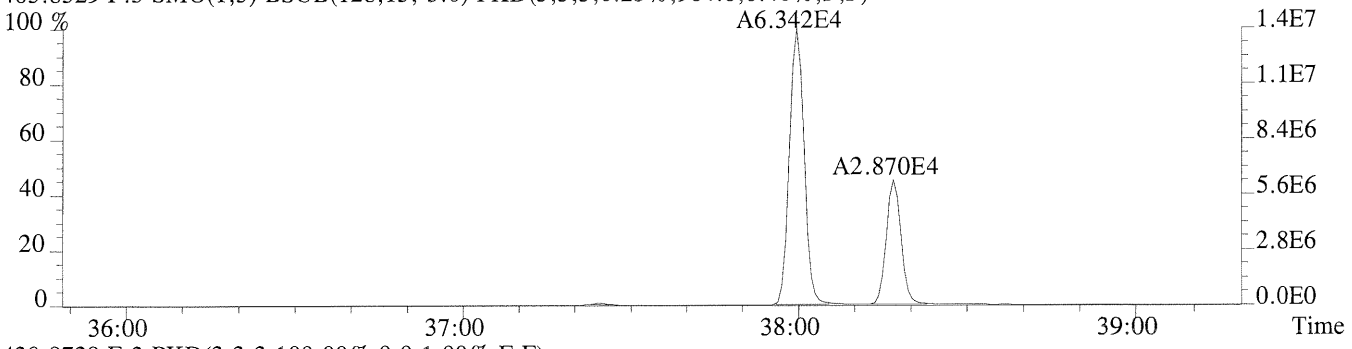
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1108.0,0.40%,F,F)



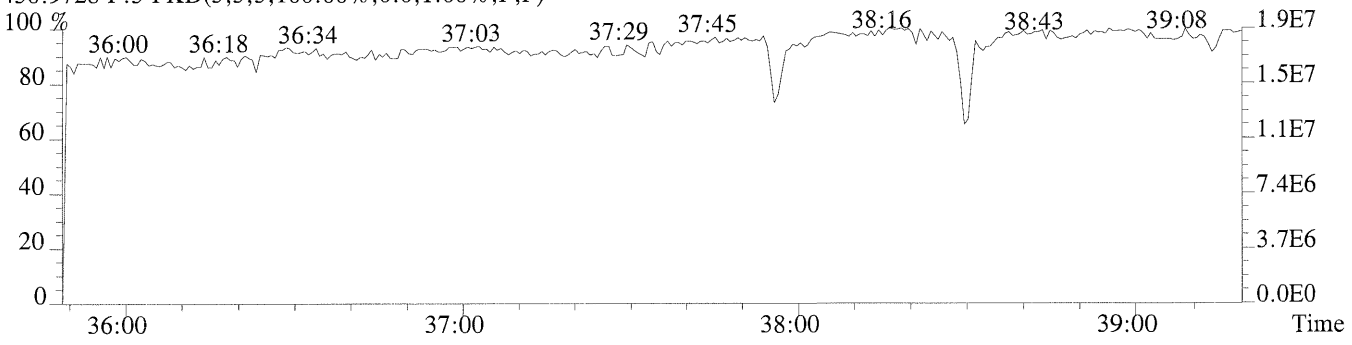
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1544.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,904.0,0.40%,F,F)

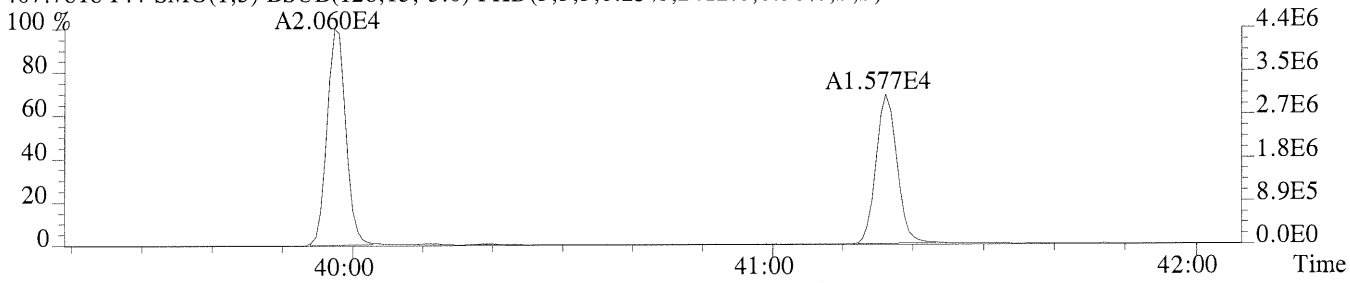


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

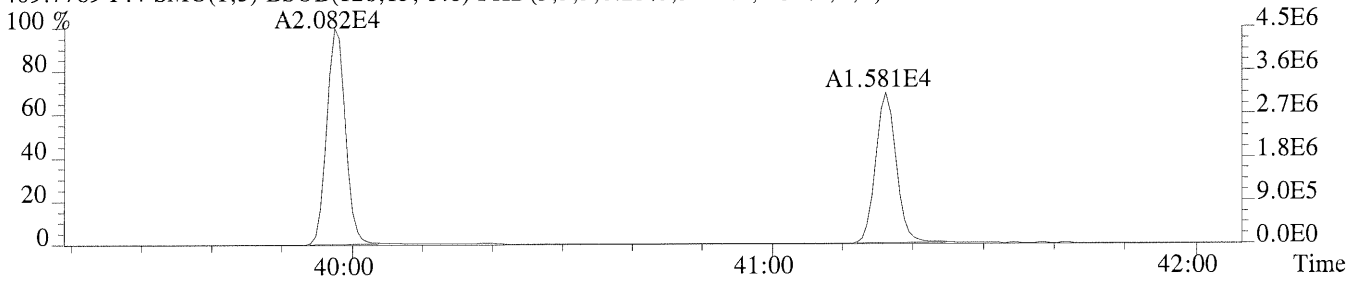


File:U129320 #1-254 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS

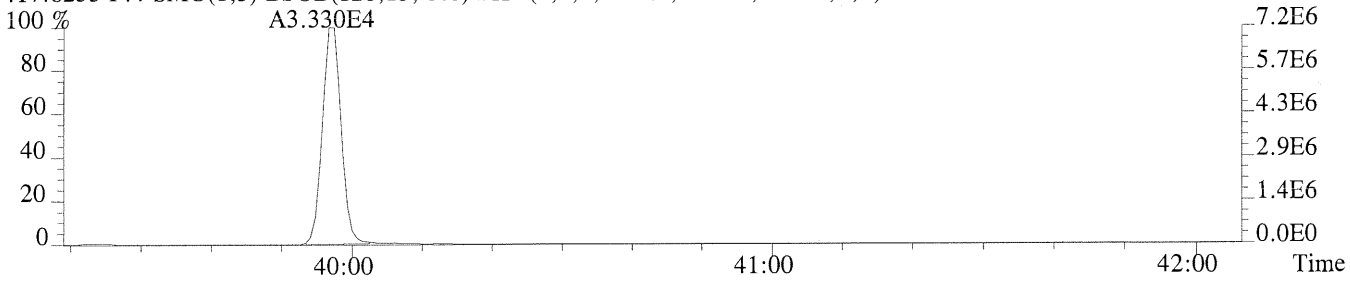
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2412.0,0.50%,F,F)



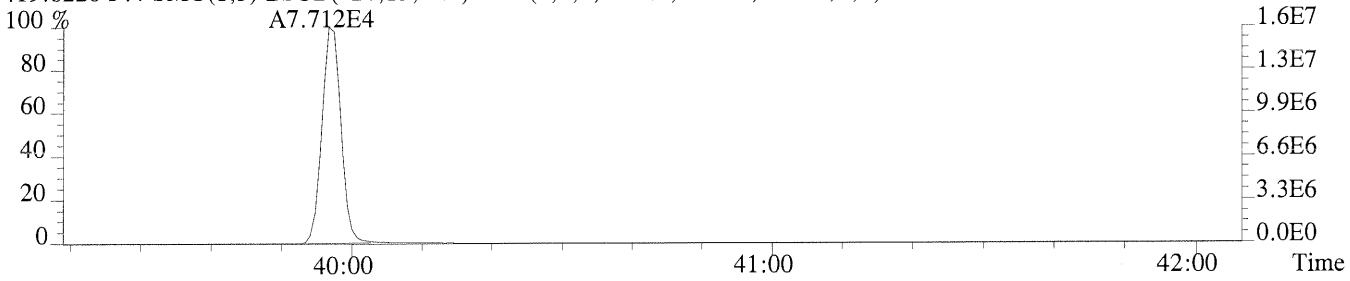
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3040.0,0.50%,F,F)



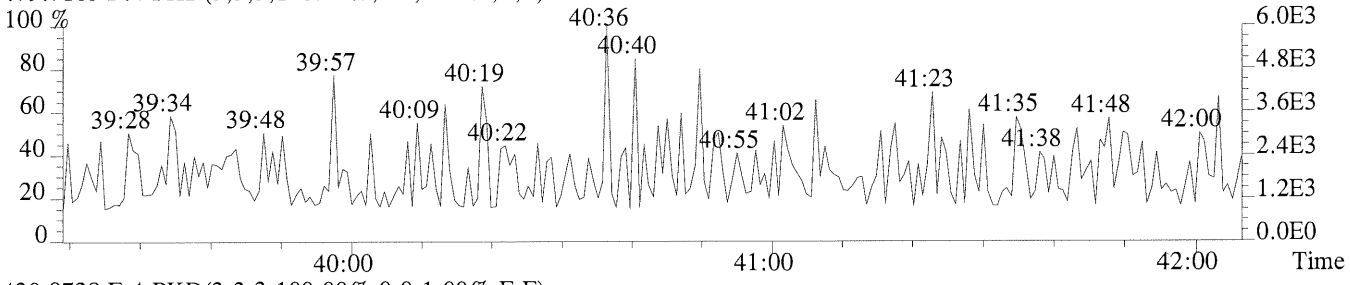
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1388.0,0.50%,F,F)



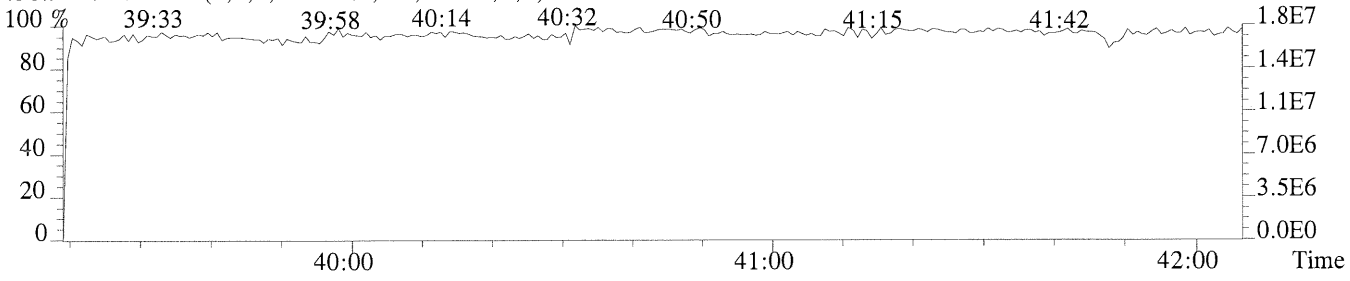
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4220.0,0.50%,F,F)



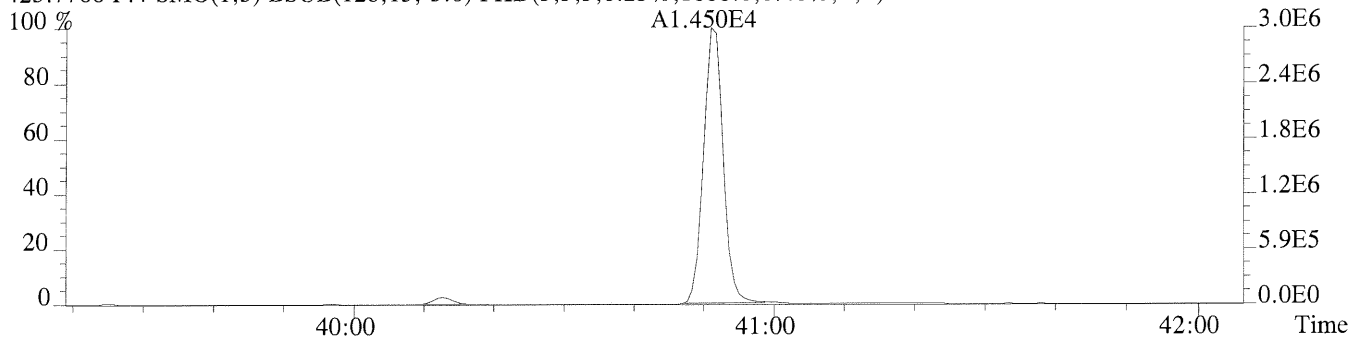
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



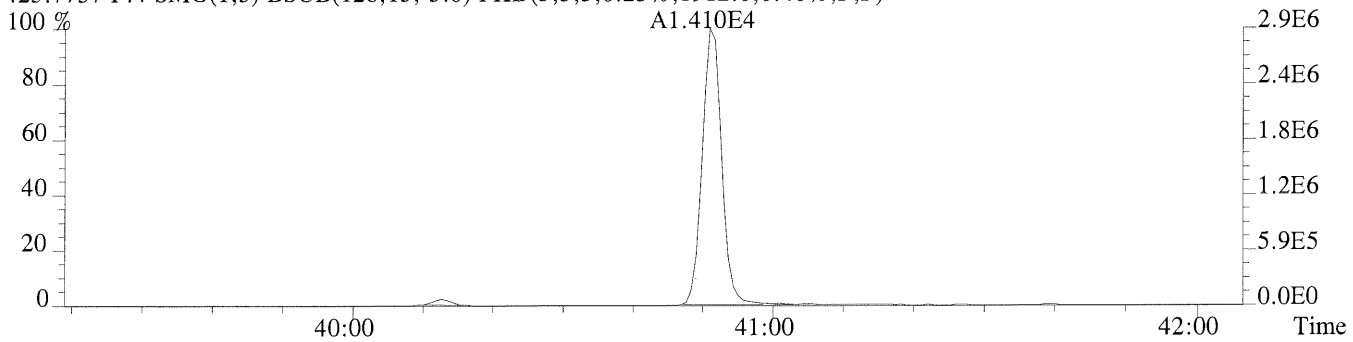
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



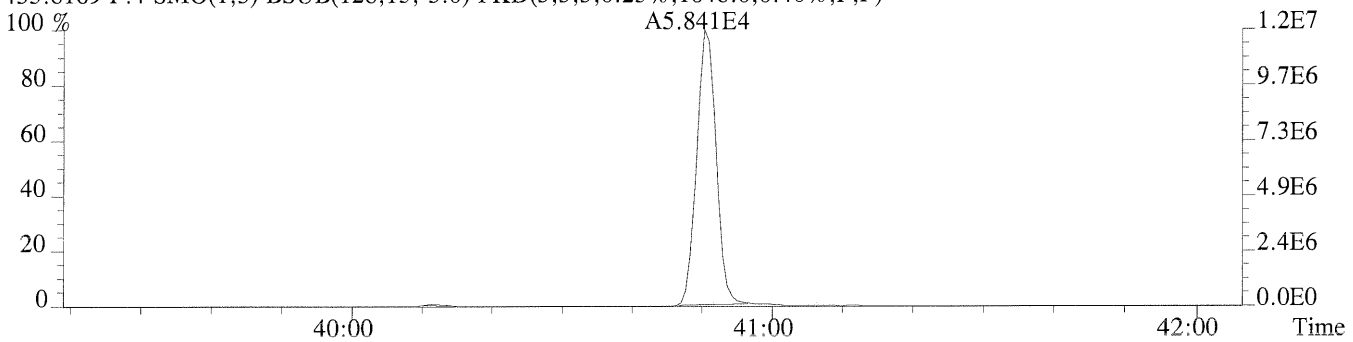
File:U129320 #1-254 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1888.0,0.40%,F,F)



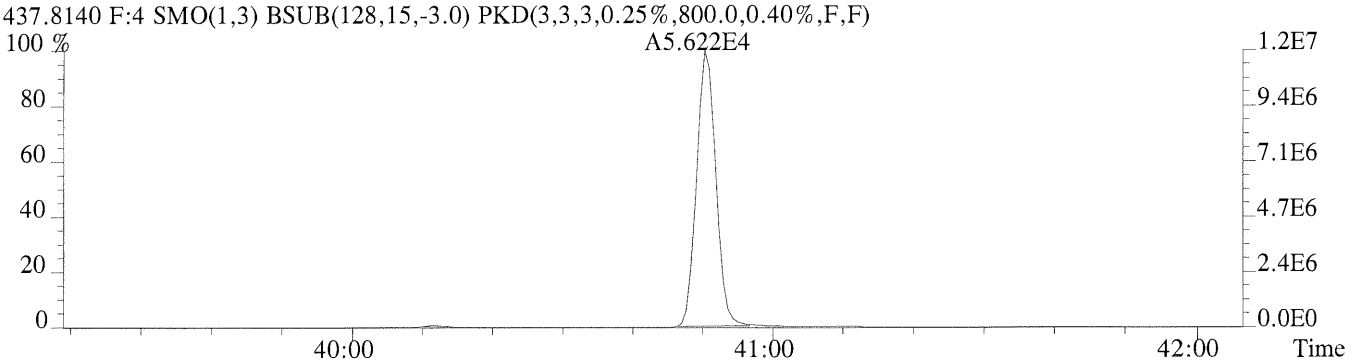
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1912.0,0.40%,F,F)



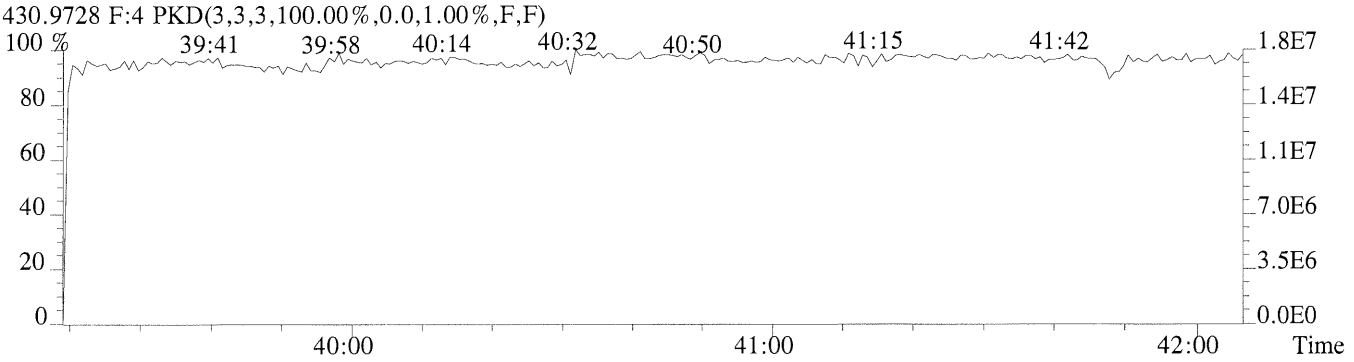
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1048.0,0.40%,F,F)



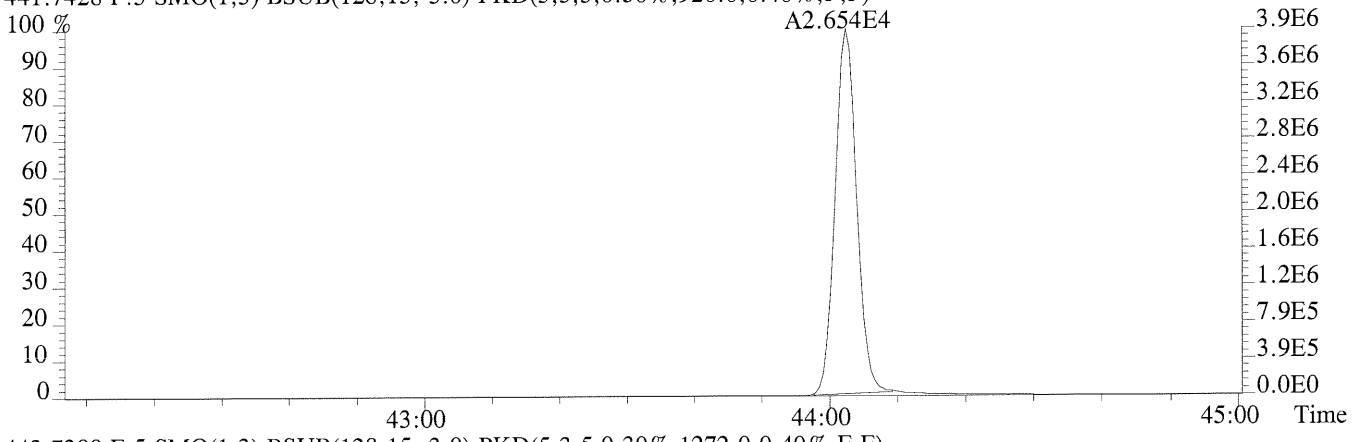
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,800.0,0.40%,F,F)



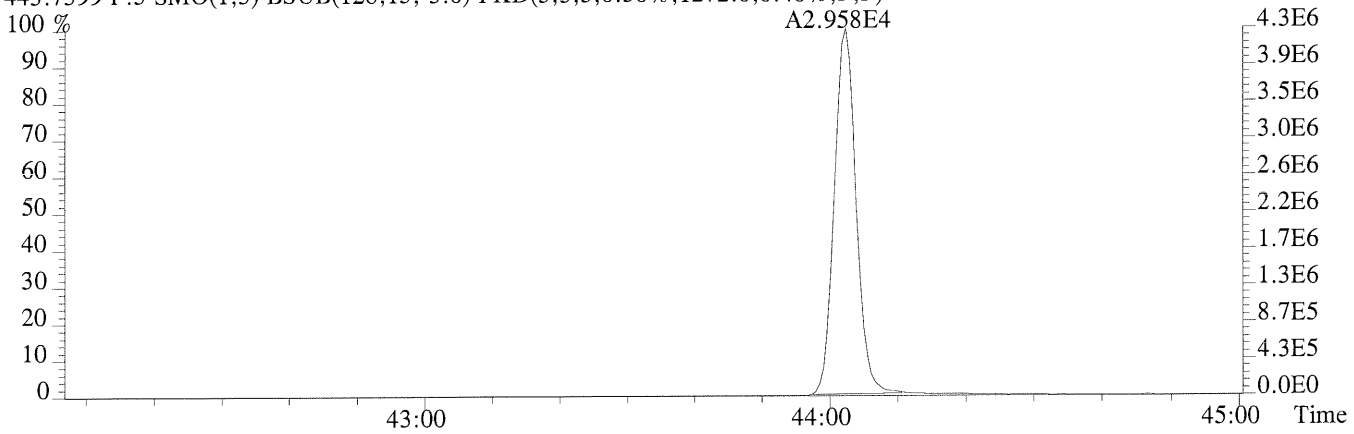
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



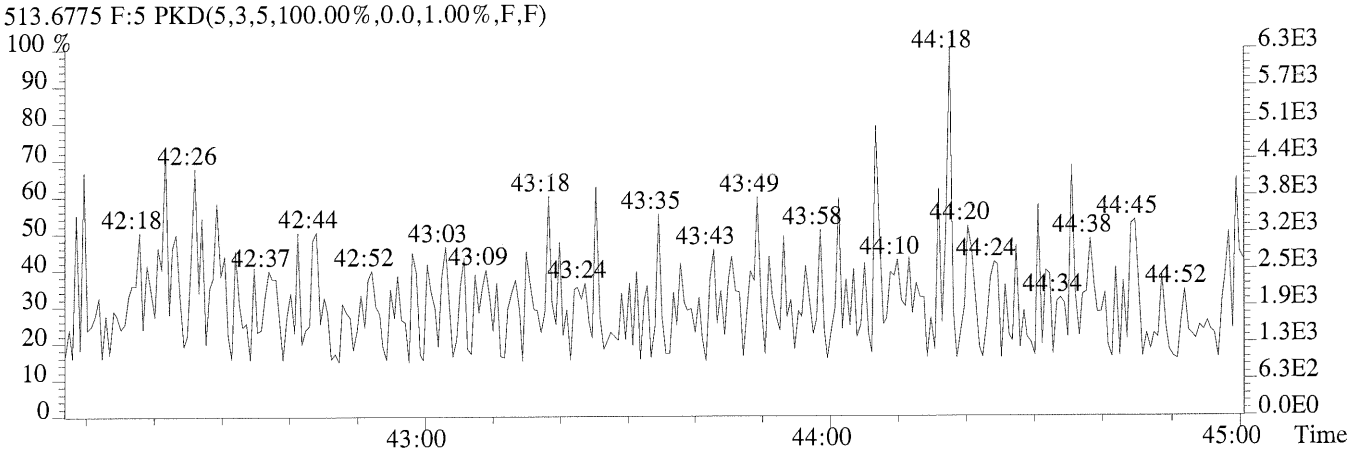
File:U129320 #1-320 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,920.0,0.40%,F,F)



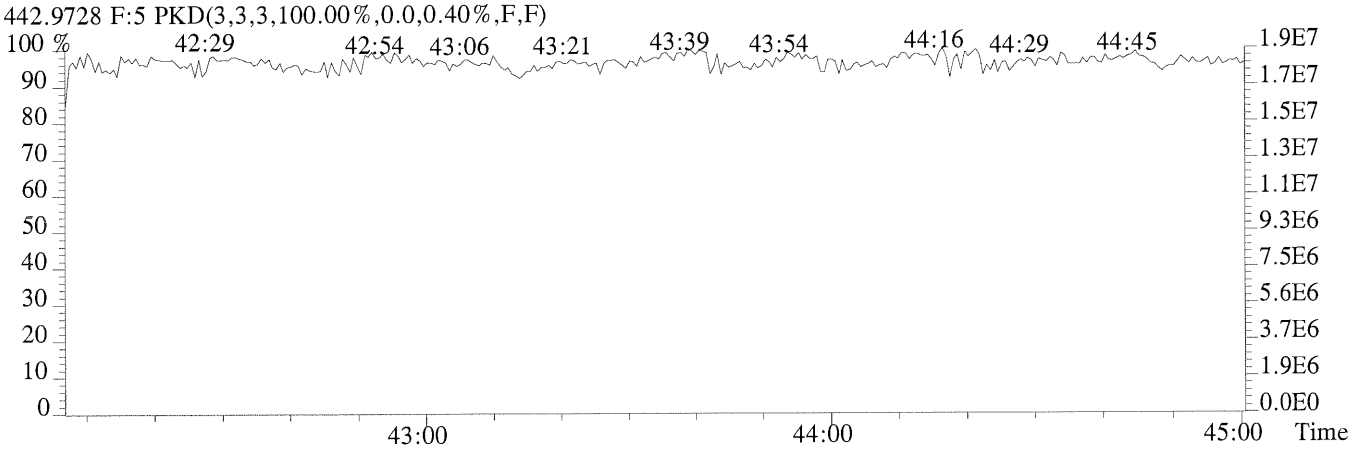
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1272.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

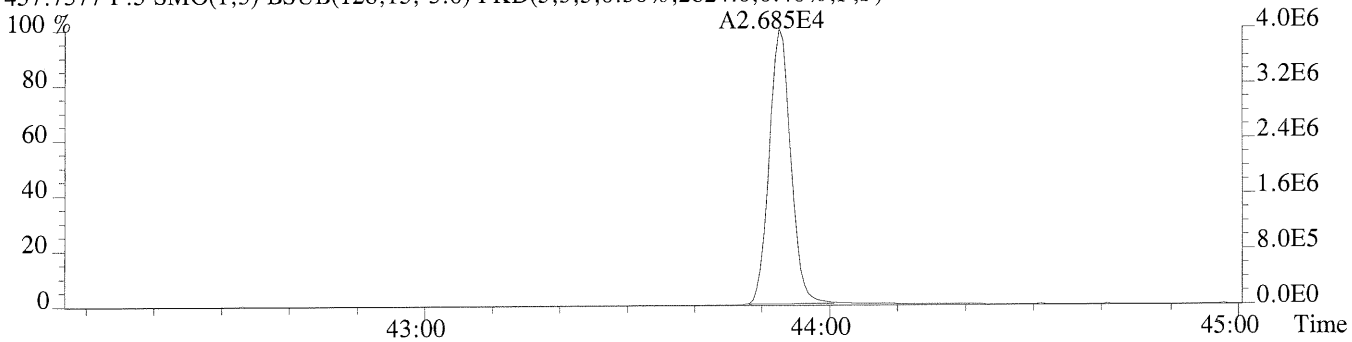


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

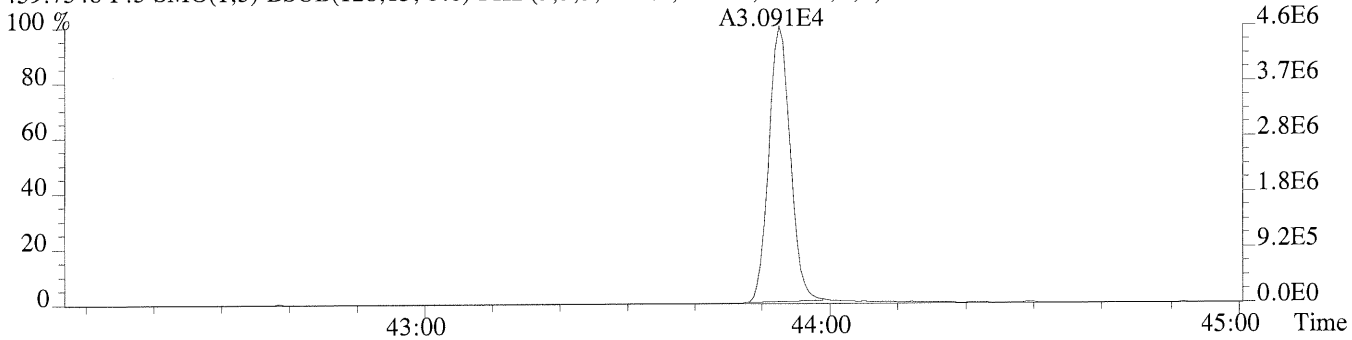


File:U129320 #1-320 Acq: 4-AUG-2008 16:38:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:EQ0800317-02 LCS

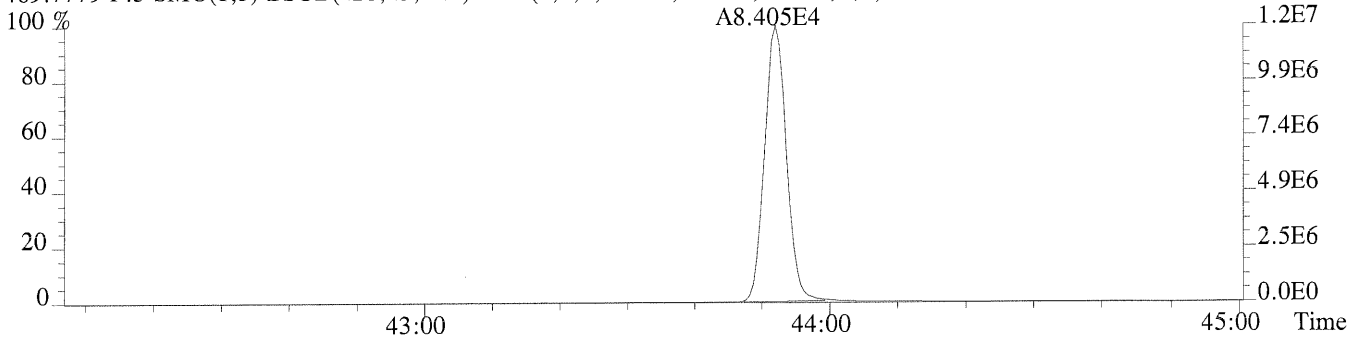
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2824.0,0.40%,F,F)



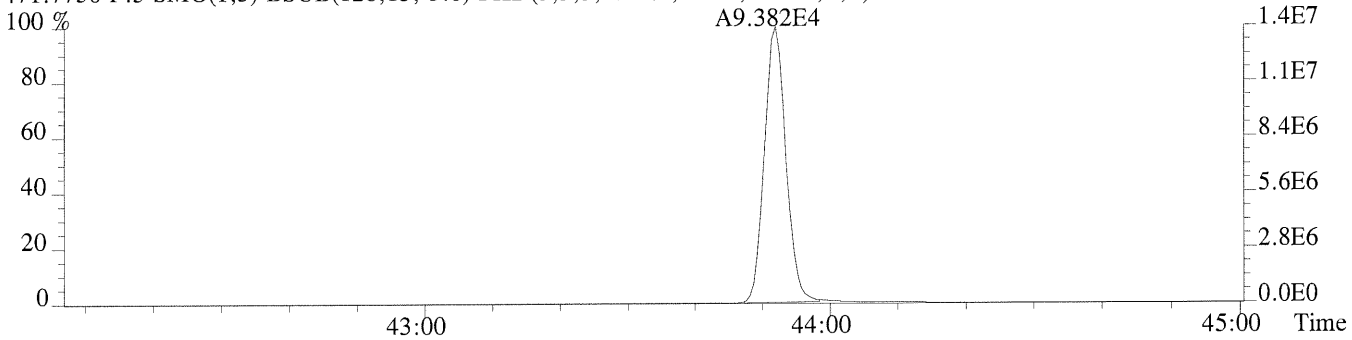
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2496.0,0.40%,F,F)



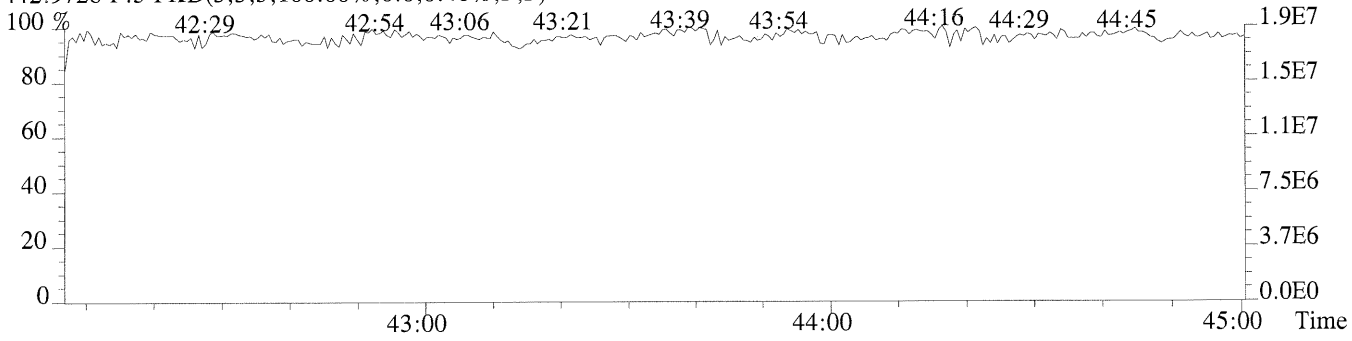
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1188.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,964.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services INC

Continuing Calibration

19408 Park Row, Suite 320, Houston, TX 77084
Phone (713)266-1599 Fax (713)266-0130
www.caslab.com

An Employee Owned Company

RW/ HRCC3 Daily Calibration QC Checklist

Calibration File Name: P100162 – P100172

Circle one: Beginning / Ending

Date: 08/01/08

Method: (8290) / Tetra / TCDD Only / TCDF Conf

Retention Window/Column Performance Check:	**Analyst**	**Second Check**
Windows labeled for first and last eluting compounds	✓	✓
Column performance shows less than or equal to 25% valley between column specific 2378 isomer and the closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or the closest eluters	✓	✓

HRCC3 Continuing Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
Signal-to-noise of all target analytes and associated labeled standards at least 2.5:1	✓	✓
Ending Calibration injected prior to end of 12 hour clock	✓	✓

Analyst: BY

Second QC: JC

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: Columbia Analytical Services Contract:

Lab Code: TX01411 Case No.: Client No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Ultima

Init. Calib. Date: 07/02/08

Init. Calib.Times: 09:52

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSs) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		P100160	1-AUG-08	06:33:24
CCAL HRCC3		P100162	1-AUG-08	08:30:52
METHOD BLANK	EQ0800314-01	P100163	1-AUG-08	10:05:17
PB17-GW-071708	K0806614-032	P100164	1-AUG-08	10:51:49
INCGSB110708	E0800715-003	P100165	1-AUG-08	11:40:13
EST-MW9-030	E0800716-001	P100166	1-AUG-08	12:31:44
EST-MW16-030	E0800716-002	P100167	1-AUG-08	13:23:45
EST-MW4-030	E0800716-003	P100168	1-AUG-08	14:15:57
EST-MW2-030	E0800716-005	P100169	1-AUG-08	15:03:55
EST-MW12-030	E0800716-006	P100170	1-AUG-08	15:55:00
EST-MW3-030	E0800716-007	P100171	1-AUG-08	16:47:41
CCAL HRCC3	CCAL HRCC3	P100172	1-AUG-08	17:47:40

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services, Inc.
An Employee Owned Company

Acq Method: 8290CA 1/613 Result File: E:\P100162RES
GC Method: 8290CA 1/611 EDD File:

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RF
07/31/08	10:47	P100151	EQ8C0697-014	INCSSB1304	EQ312			
	11:35	P100152	-015	INCSSB0504				
	12:27	P100153	-016	INCSSB0601				
	13:18	P100154	-017	INCSSB0613				
	14:08	P100155	EQ8C0640-001	SA67-0.5B				
	14:57	P100156	KQ8C0687-008	Composite				
	15:55	P100157	EQ8C0312-02	LCS				
	16:48	P100158	EQ8C0312-03	DLCS				
	17:39	P100159	CCAL HRMS	D8-2-24				
	18:28		HRMS Check					
08/01/08	06:23							
08/01/08	06:33	P100160	Window Define	D4-5-2				
	~~08:30~~	P100161	CCAL HRMS	D8-2-24				
	08:30	P100162	CCAL HRMS	D8-2-24				
	10:05	P100163	EQ8C0314-01	METHOD BLANK				
	10:57	P100164	KQ8C0614-032	TB17-GW-071708				

Reviewed by: BY

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services, Inc.
An Employee Owned Company

Acq Method: S2ACQ/1613 Result File: H:P100174RES
GC Method: S2GC/1613 EDD File:

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
08/01/08	11:40	P100165	E080715-003	~~INCSG~~ INCGSB	110708			
	12:31	P100166	E080716-001	EST - MW9 - 030				
	13:23	P100167	-002	EST - MW16 - 030				
	14:15	P100168	-003	EST - MW4 - 030				
	15:03	P100169	-005	EST - MW2 - 030				
	15:55	P100170	-006	EST - MW12 - 030				
	16:47	P100171	-007	EST - MW3 - 030				
	17:46	—	HRMS Check					
		P100172	CCAL HRCC3	D8-2-2A				
	18:37	—	HRMS Check					
08/04/08	07:39	P100173	Window Define					
	08:28	P100174	CCAL HRCC3	D8-2-2A				
	09:52	P100175	EQ080034-01	METHOD BLANK	EQ314			
	10:39	P100176	E080715-005	INCGSB	010708			
	11:27	P100177	E080716-008	EST-MW11-030				
	12:15	P100178	E080716-009	EST-MW11-035				

HRMS Check @ 07:36

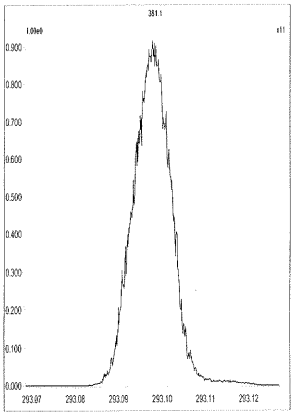
Reviewed by: MC

Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

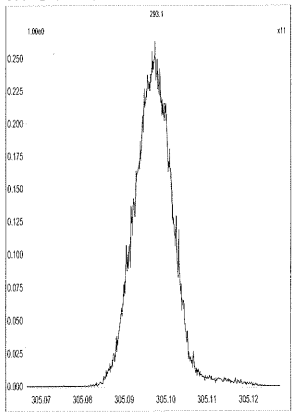
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, August 01, 2008 06:23:31 Central Daylight Time

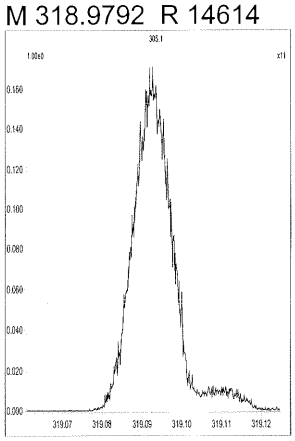
M 292.9824 R 15059



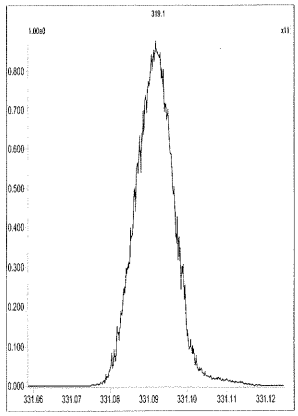
M 304.9824 R 14789



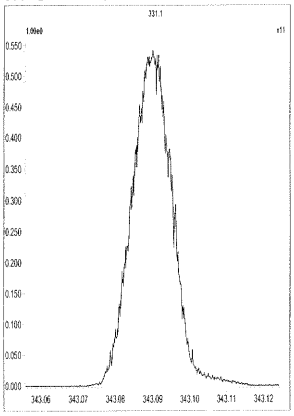
M 318.9792 R 14614



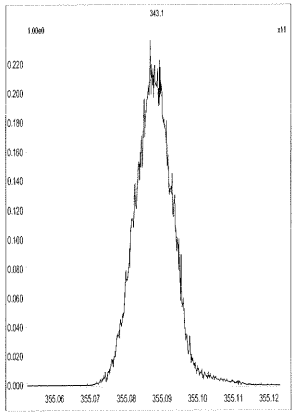
M 330.9792 R 14291



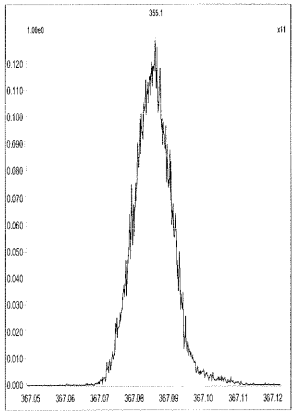
M 342.9792 R 14364



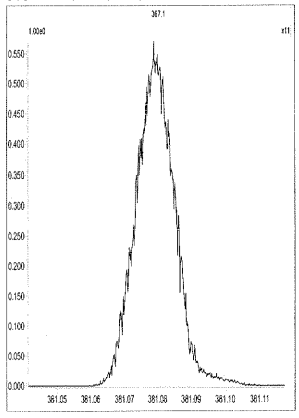
M 354.9792 R 14529



M 366.9792 R 14533



M 380.9760 R 14622

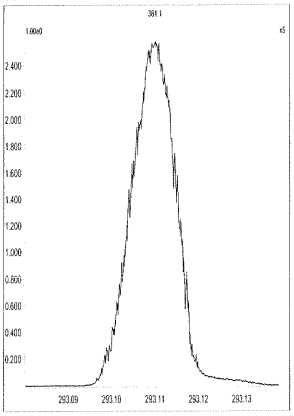


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

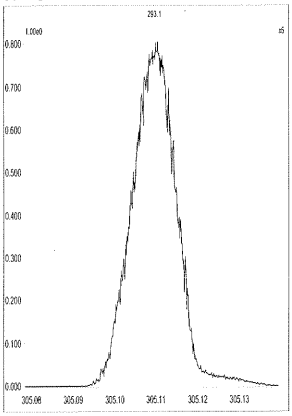
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, August 01, 2008 17:46:06 Central Daylight Time

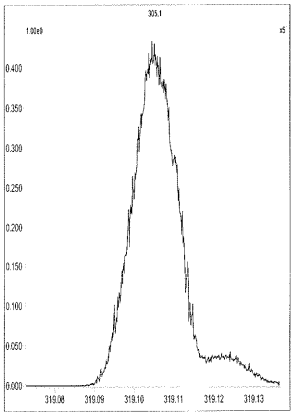
M 292.9824 R 13020



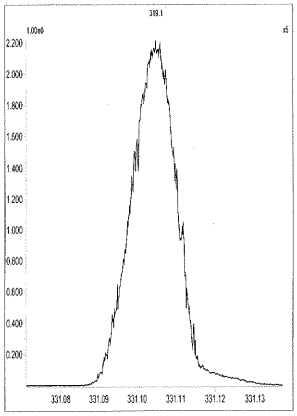
M 304.9824 R 12957



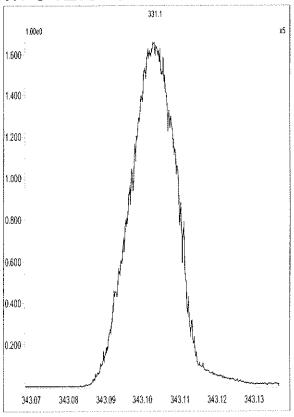
M 318.9792 R 8929



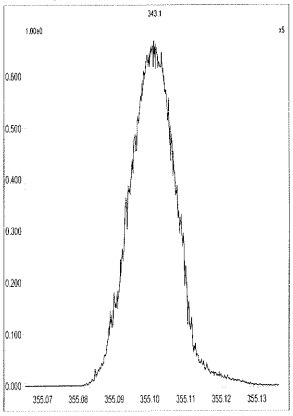
M 330.9792 R 12625



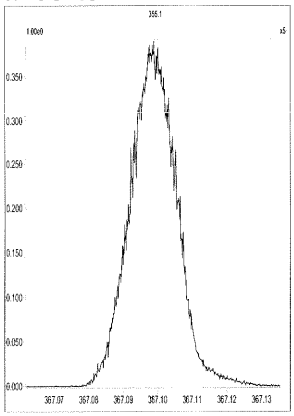
M 342.9792 R 12133



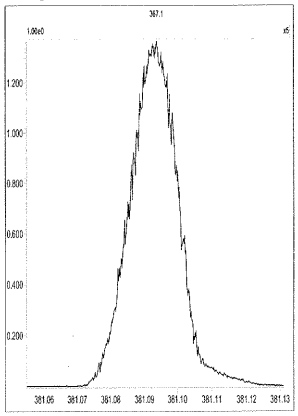
M 354.9792 R 11905



M 366.9792 R 11960

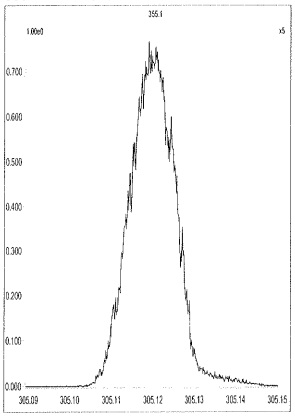


M 380.9760 R 11366

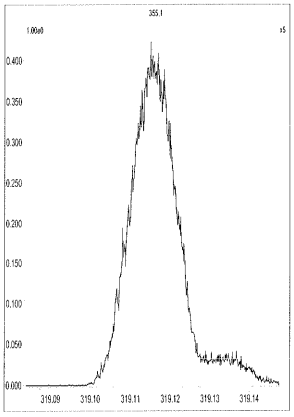


Printed: Friday, August 01, 2008 18:37:01 Central Daylight Time

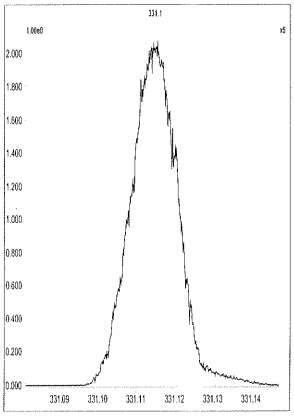
M 304.9824 R 12771



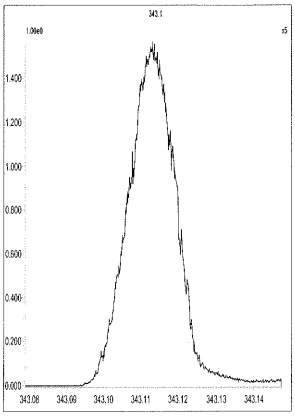
M 318.9792 R 9274



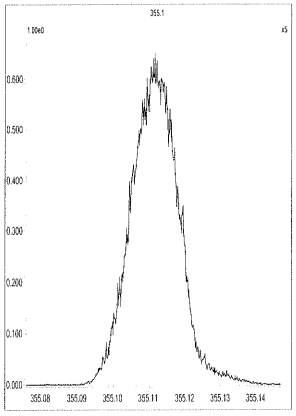
M 330.9792 R 12345



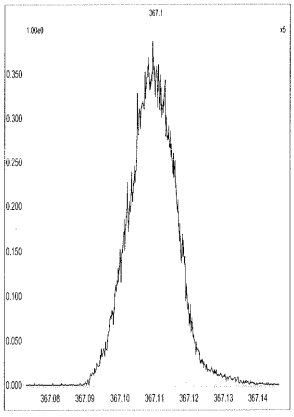
M 342.9792 R 11904



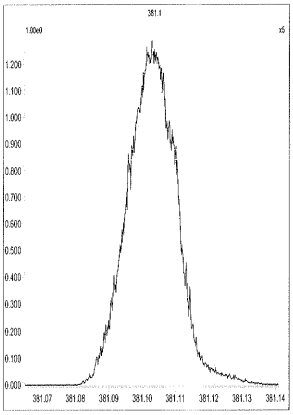
M 354.9792 R 11825



M 366.9792 R 11547



M 380.9760 R 11014



5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID:

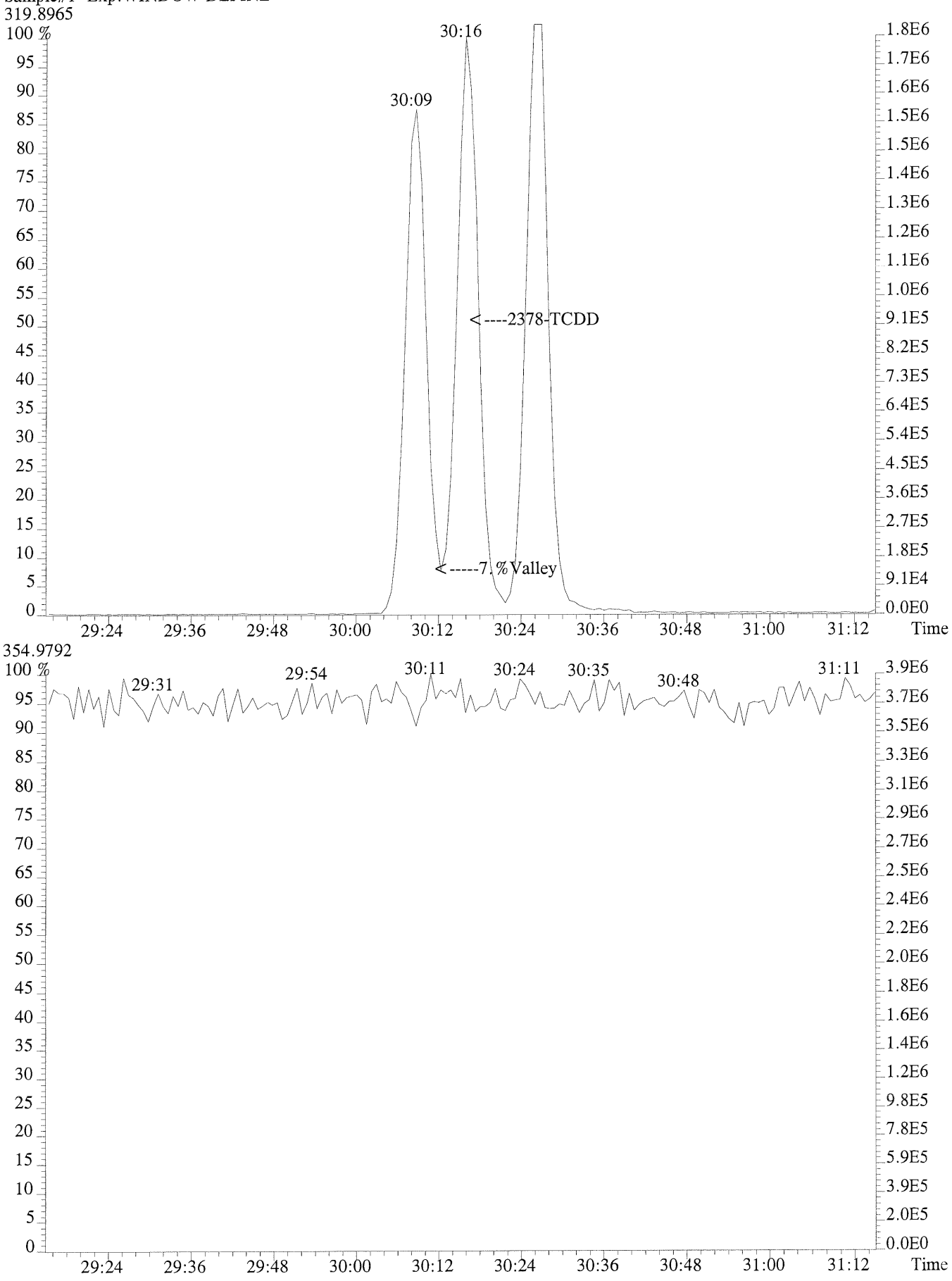
WDM

Lab Name: COLUMBIA ANALYTICAL SERVICES
Lab Code: CAS Case No.: _____ SDG No.:
GC Column: DB-5 ID: 0.25 (mm) Lab File ID: P100160
Date Analyzed: 1-AUG-2008
Time Analyzed: 06:33:24

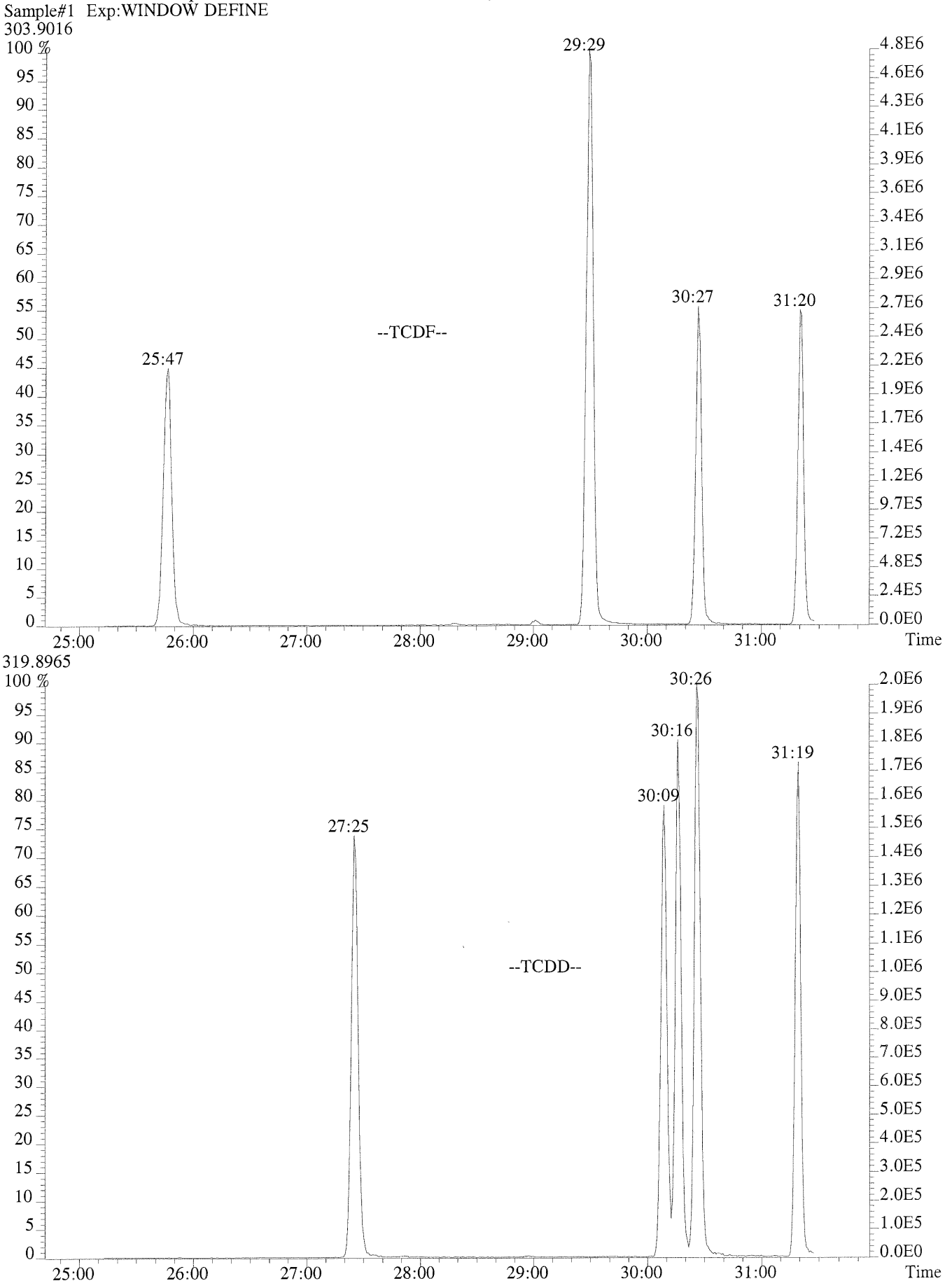
Congener	Retention Time First Eluting	Retention Time Last Eluting
TCDF	25:47	31:20
TCDD	27:25	31:19
PeCDF	31:35	35:18
PeCDD	32:53	35:09
HxCDF	36:09	38:25
HxCDD	36:38	38:05
HpCDF	39:49	41:10
HpCDD	40:04	40:43

% Valley 2378-TCDD: 7. %

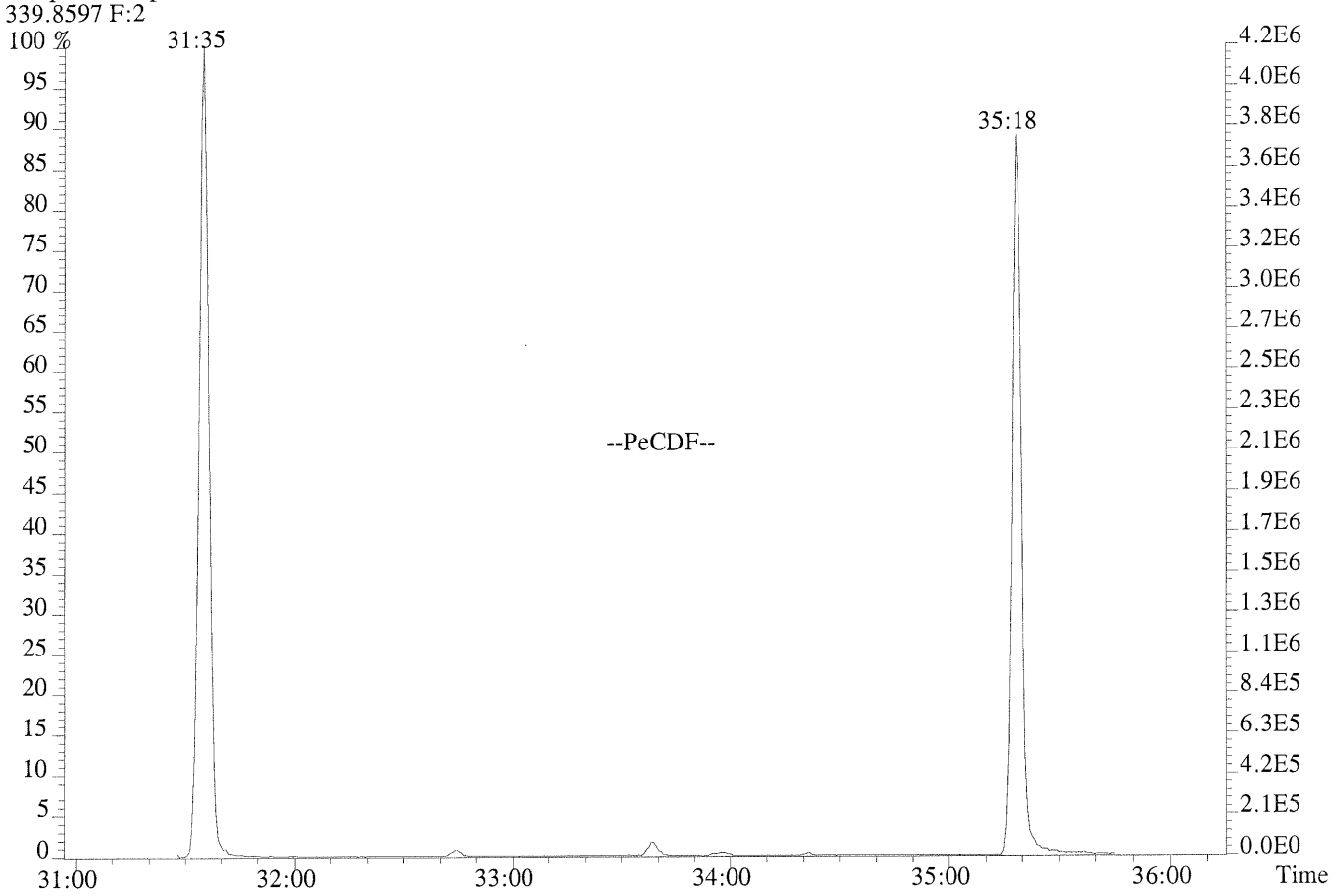
File:P100160 #1-521 Acq: 1-AUG-2008 06:33:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE



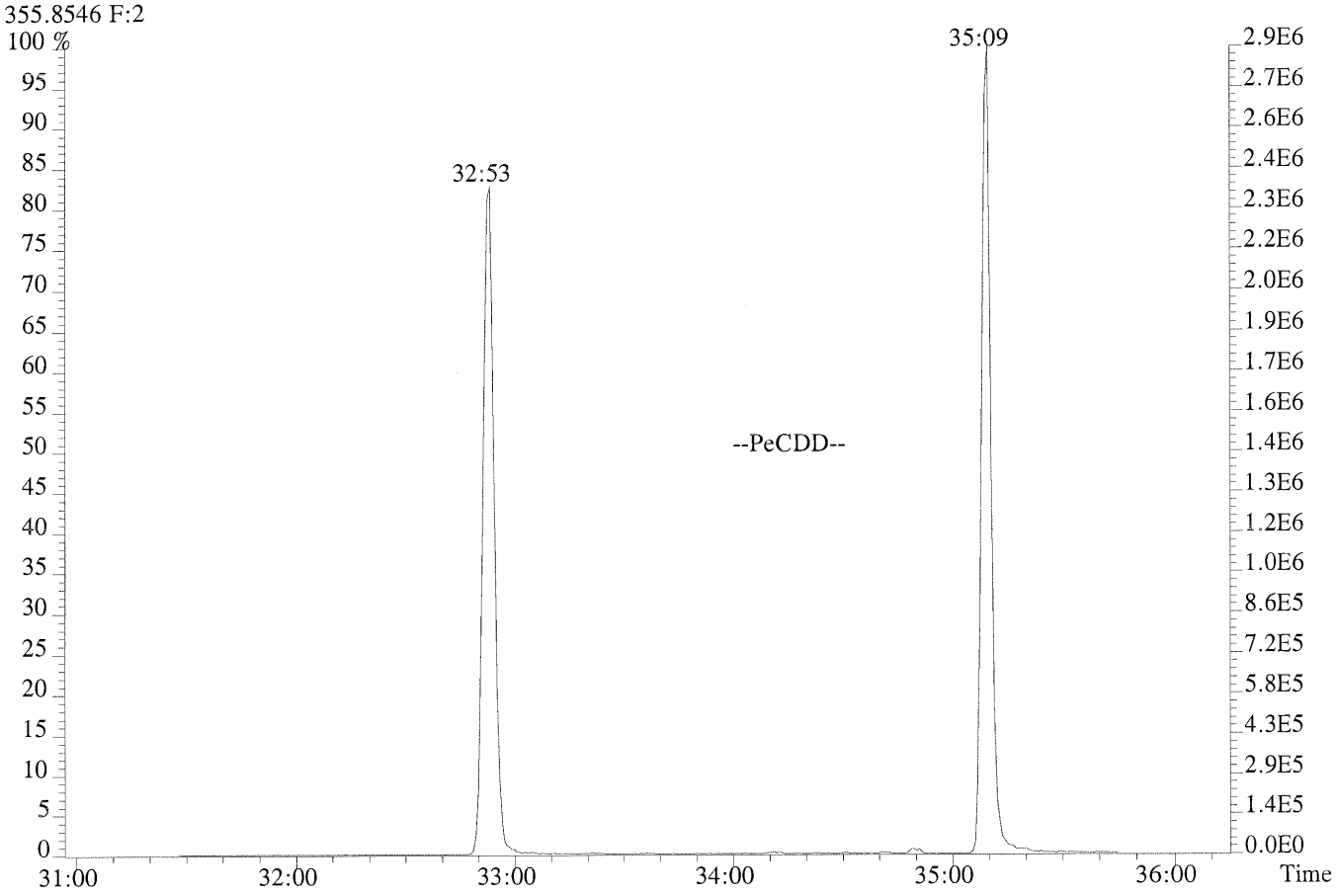
File:P100160 #1-521 Acq: 1-AUG-2008 06:33:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE



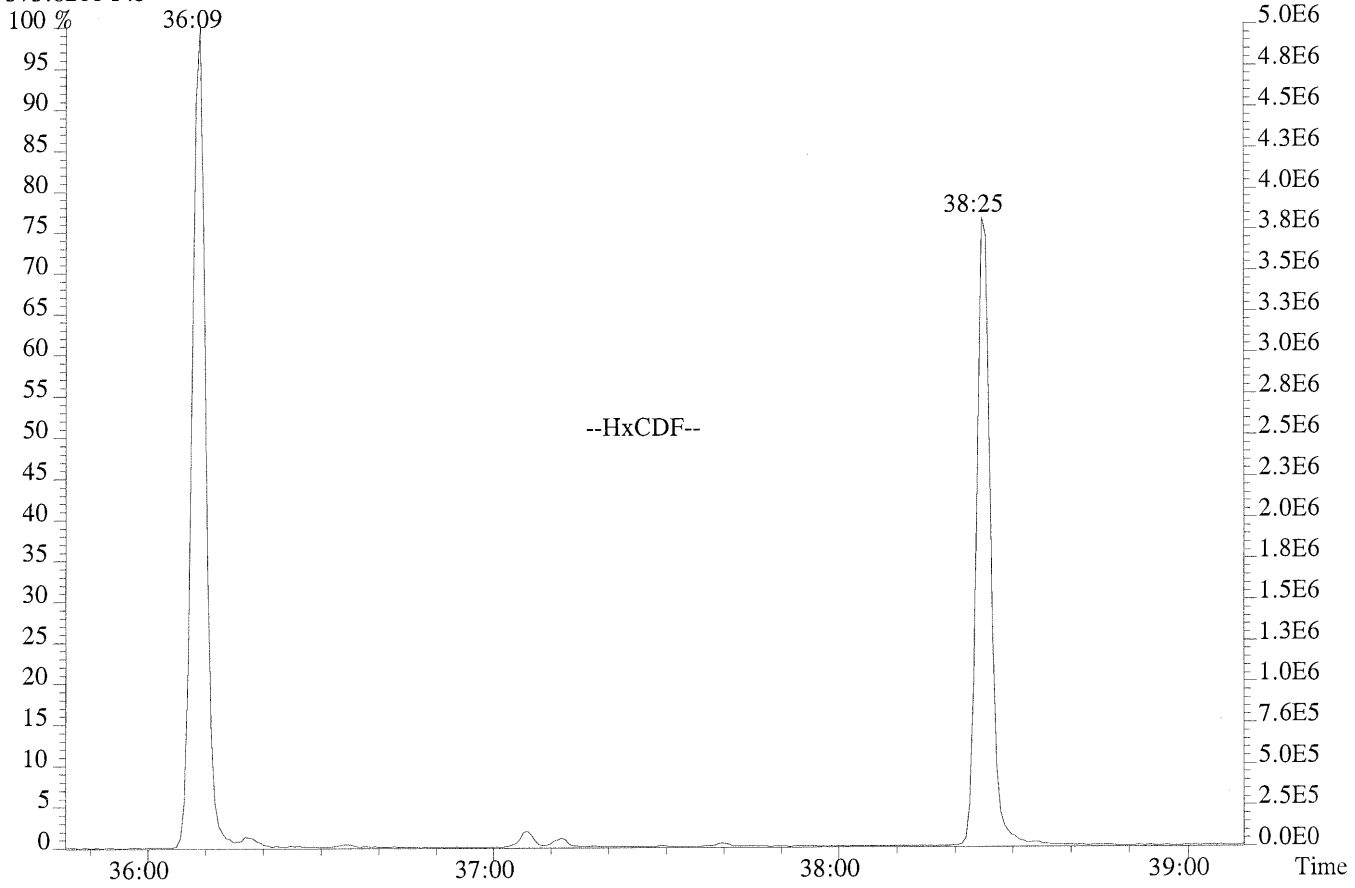
File:P100160 #1-390 Acq: 1-AUG-2008 06:33:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE
339.8597 F:2



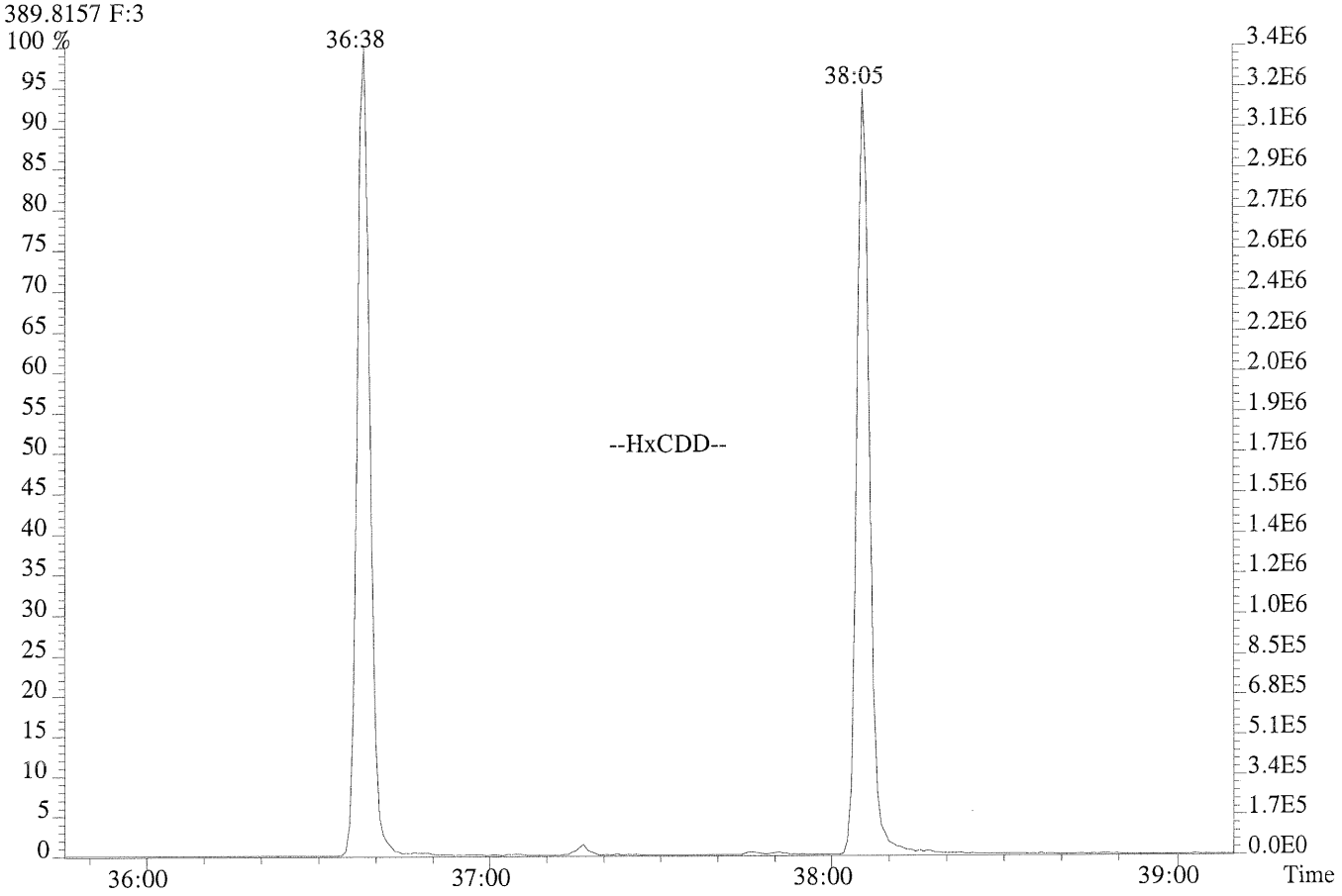
355.8546 F:2



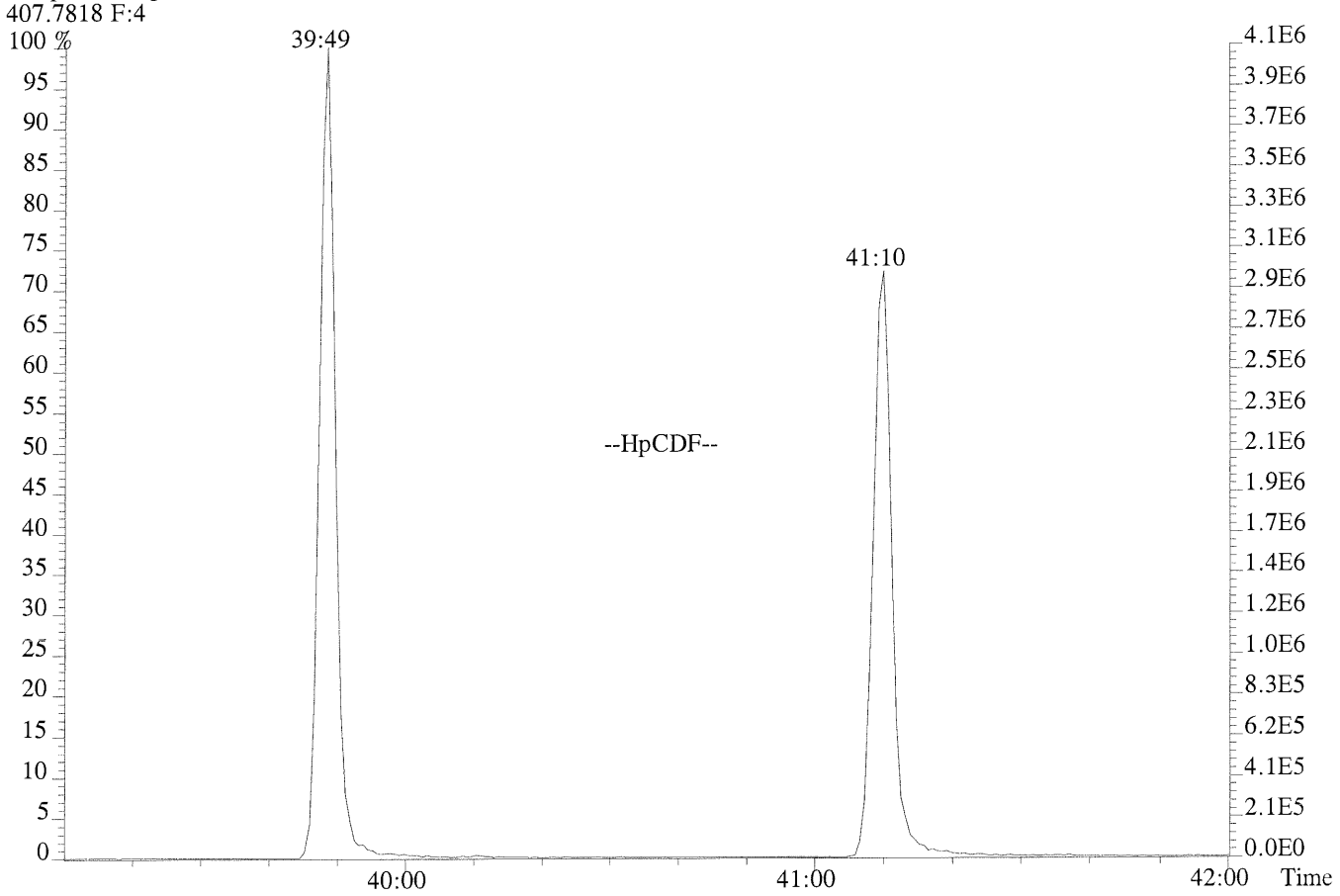
File:P100160 #1-309 Acq: 1-AUG-2008 06:33:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE
373.8208 F:3



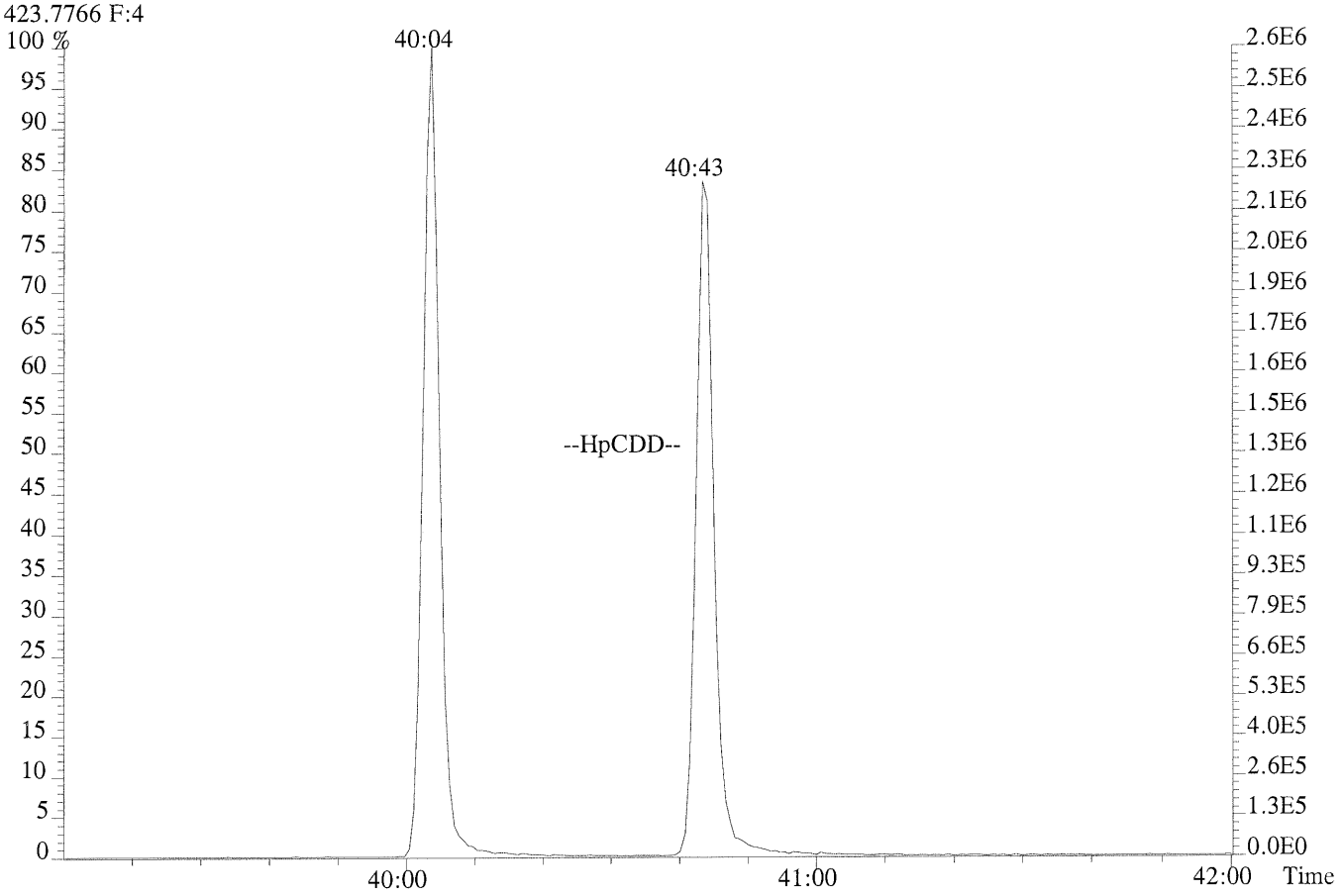
389.8157 F:3



File:P100160 #1-258 Acq: 1-AUG-2008 06:33:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE
407.7818 F:4



423.7766 F:4



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/02/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P100162 Analysis Date: 1-AUG-08 Time: 08:30:52

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	0.95	0.92	2.91
1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32-1.78	0.91	0.88	3.56
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	0.96	0.93	3.98
1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.05-1.43	1.04	1.13	-8.13
1,2,3,7,8,9-HxCDD	M+2/M+4	1.29	1.05-1.43	1.01	1.04	-2.95
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.10	0.88-1.20	0.99	1.02	-3.61
OCDD	M+2/M+4	0.92	0.76-1.02	1.02	1.02	-0.07
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	0.98	0.98	0.10
1,2,3,7,8-PeCDF	M+2/M+4	1.62	1.32-1.78	1.01	0.97	4.29
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	1.07	1.00	7.47
1,2,3,4,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	1.29	1.22	5.95
1,2,3,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	1.28	1.31	-1.76
1,2,3,7,8,9-HxCDF	M+2/M+4	1.29	1.05-1.43	1.03	1.06	-3.31
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	1.21	1.15	4.34
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	1.55	1.55	-0.23
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	1.18	1.17	0.34
OCDF	M+2/M+4	0.91	0.76-1.02	1.36	1.36	-0.34

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/02/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P100162 Analysis Date: 1-AUG-08 Time: 08:30:52

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	1.00	1.10	-9.33
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.61	1.32-1.78	0.83	0.98	-15.40
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	0.96	0.99	-2.66
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	0.88	0.85	3.55
13C-OCDD	M+2/M+4	0.91	0.76-1.02	0.88	0.79	10.31
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	1.37	1.41	-2.38
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.65	1.32-1.78	1.17	1.38	-14.75
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.54	0.43-0.59	1.28	1.35	-5.27
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.37-0.51	1.05	1.03	2.18
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				0.98	1.01	-3.30

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #6 Filename P100162 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 08:30:52
Processed: 7-AUG-08 10:08:49 Sample ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:28	5.274e+03	6.858e+03	0.77	yes	no	0.98
2	Unk	1,2,3,7,8-PeCDF	33:38	1.652e+04	1.017e+04	1.62	yes	no	0.97
3	Unk	2,3,4,7,8-PeCDF	34:21	1.738e+04	1.083e+04	1.60	yes	no	1.00
4	Unk	1,2,3,4,7,8-HxCDF	37:05	1.683e+04	1.331e+04	1.26	yes	no	1.22
5	Unk	1,2,3,6,7,8-HxCDF	37:11	1.671e+04	1.324e+04	1.26	yes	no	1.31
6	Unk	2,3,4,6,7,8-HxCDF	37:40	1.553e+04	1.256e+04	1.24	yes	no	1.15
7	Unk	1,2,3,7,8,9-HxCDF	38:21	1.349e+04	1.045e+04	1.29	yes	no	1.06
8	Unk	1,2,3,4,6,7,8-HpCDF	39:49	1.516e+04	1.462e+04	1.04	yes	no	1.55
9	Unk	1,2,3,4,7,8,9-HpCDF	41:10	1.153e+04	1.115e+04	1.03	yes	no	1.17
10	Unk	OCDF	44:03	2.073e+04	2.267e+04	0.91	yes	no	1.36
11	Unk	2,3,7,8-TCDD	30:16	3.728e+03	4.787e+03	0.78	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:41	1.045e+04	6.485e+03	1.61	yes	no	0.88
13	Unk	1,2,3,4,7,8-HxCDD	37:46	9.591e+03	7.420e+03	1.29	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:51	1.038e+04	8.009e+03	1.30	yes	no	1.13
15	Unk	1,2,3,7,8,9-HxCDD	38:07	1.002e+04	7.750e+03	1.29	yes	no	1.04
16	Unk	1,2,3,4,6,7,8-HpCDD	40:43	8.342e+03	7.566e+03	1.10	yes	no	1.02
17	Unk	OCDD	43:52	1.566e+04	1.702e+04	0.92	yes	no	1.02
18	IS	13C-2,3,7,8-TCDF	29:28	2.747e+04	3.418e+04	0.80	yes	no	1.41
19	IS	13C-1,2,3,7,8-PeCDF	33:37	3.281e+04	1.985e+04	1.65	yes	no	1.38
20	IS	13C-1,2,3,4,7,8-HxCDF	37:05	4.072e+04	7.581e+04	0.54	yes	no	1.35
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:48	3.015e+04	6.615e+04	0.46	yes	no	1.03
22	IS	13C-2,3,7,8-TCDD	30:15	1.971e+04	2.512e+04	0.78	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:40	2.293e+04	1.424e+04	1.61	yes	no	0.98
24	IS	13C-1,2,3,6,7,8-HxCDD	37:50	4.906e+04	3.912e+04	1.25	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:43	4.170e+04	3.881e+04	1.07	yes	no	0.85
26	IS	13C-OCDD	43:52	7.605e+04	8.400e+04	0.91	yes	no	0.79
27	RS/RT	13C-1,2,3,4-TCDD	30:03	1.984e+04	2.508e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:07	5.090e+04	4.048e+04	1.26	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:16	8.778e+03					1.01

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Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #6 Filename P100162 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 08:30:52

Processed: 7-AUG-08 10:08:49 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	9.30e+05	4.08e+02	2.3e+03	1.19e+06	5.12e+02	2.3e+03
2	1,2,3,7,8-PeCDF	3.26e+06	6.12e+02	5.3e+03	2.03e+06	5.92e+02	3.4e+03
3	2,3,4,7,8-PeCDF	3.39e+06	6.12e+02	5.5e+03	2.13e+06	5.92e+02	3.6e+03
4	1,2,3,4,7,8-HxCDF	3.62e+06	5.20e+02	7.0e+03	2.90e+06	5.48e+02	5.3e+03
5	1,2,3,6,7,8-HxCDF	3.60e+06	5.20e+02	6.9e+03	2.85e+06	5.48e+02	5.2e+03
6	2,3,4,6,7,8-HxCDF	3.50e+06	5.20e+02	6.7e+03	2.75e+06	5.48e+02	5.0e+03
7	1,2,3,7,8,9-HxCDF	2.86e+06	5.20e+02	5.5e+03	2.17e+06	5.48e+02	4.0e+03
8	1,2,3,4,6,7,8-HpCDF	3.17e+06	1.44e+03	2.2e+03	3.07e+06	1.32e+03	2.3e+03
9	1,2,3,4,7,8,9-HpCDF	2.16e+06	1.44e+03	1.5e+03	2.10e+06	1.32e+03	1.6e+03
10	OCDF	2.93e+06	4.24e+02	6.9e+03	3.22e+06	7.20e+02	4.5e+03
11	2,3,7,8-TCDD	7.05e+05	5.60e+02	1.3e+03	8.93e+05	4.96e+02	1.8e+03
12	1,2,3,7,8-PeCDD	2.15e+06	7.12e+02	3.0e+03	1.32e+06	4.40e+02	3.0e+03
13	1,2,3,4,7,8-HxCDD	2.18e+06	3.48e+02	6.3e+03	1.68e+06	5.48e+02	3.1e+03
14	1,2,3,6,7,8-HxCDD	2.21e+06	3.48e+02	6.4e+03	1.71e+06	5.48e+02	3.1e+03
15	1,2,3,7,8,9-HxCDD	2.18e+06	3.48e+02	6.3e+03	1.72e+06	5.48e+02	3.1e+03
16	1,2,3,4,6,7,8-HpCDD	1.67e+06	4.56e+02	3.7e+03	1.53e+06	4.52e+02	3.4e+03
17	OCDD	2.26e+06	4.20e+02	5.4e+03	2.46e+06	4.40e+02	5.6e+03
18	13C-2,3,7,8-TCDF	4.82e+06	1.14e+03	4.2e+03	5.94e+06	8.12e+02	7.3e+03
19	13C-1,2,3,7,8-PeCDF	6.41e+06	4.36e+02	1.5e+04	3.86e+06	4.20e+02	9.2e+03
20	13C-1,2,3,4,7,8-HxCDF	8.49e+06	4.32e+02	2.0e+04	1.59e+07	5.76e+02	2.8e+04
21	13C-1,2,3,4,6,7,8-HpCDF	6.38e+06	1.13e+03	5.7e+03	1.38e+07	3.20e+03	4.3e+03
22	13C-2,3,7,8-TCDD	3.49e+06	1.36e+03	2.6e+03	4.52e+06	4.64e+02	9.7e+03
23	13C-1,2,3,7,8-PeCDD	4.69e+06	3.96e+02	1.2e+04	2.92e+06	2.92e+02	1.0e+04
24	13C-1,2,3,6,7,8-HxCDD	1.08e+07	6.24e+02	1.7e+04	8.50e+06	5.88e+02	1.4e+04
25	13C-1,2,3,4,6,7,8-HpCDD	8.34e+06	5.92e+02	1.4e+04	7.83e+06	3.56e+02	2.2e+04
26	13C-OCDD	1.09e+07	4.48e+02	2.4e+04	1.20e+07	4.32e+02	2.8e+04
27	13C-1,2,3,4-TCDD	3.67e+06	1.36e+03	2.7e+03	4.69e+06	4.64e+02	1.0e+04
28	13C-1,2,3,7,8,9-HxCDD	1.11e+07	6.24e+02	1.8e+04	8.91e+06	5.88e+02	1.5e+04
29	37Cl-2,3,7,8-TCDD	1.61e+06	3.68e+02	4.4e+03			

Columbia Analytical Services, Inc.
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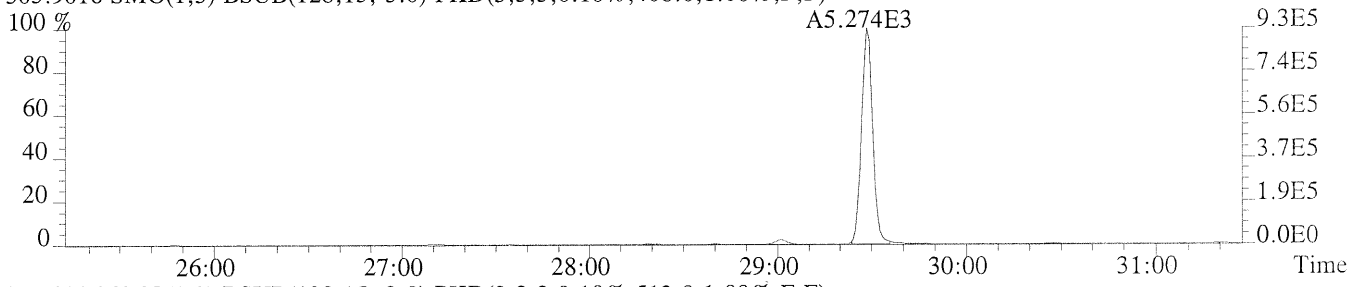
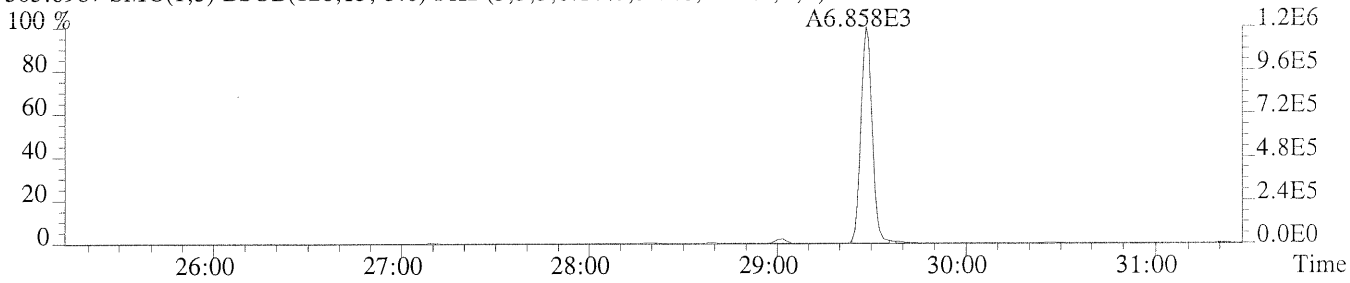
Office:(713)266-1599. Fax:(713)266-0130

File:P100162 #1-521 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

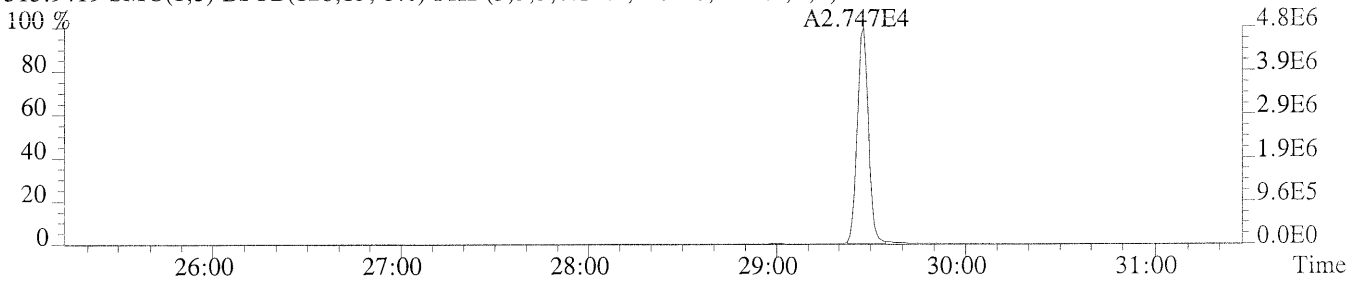
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,408.0,1.00%,F,F)



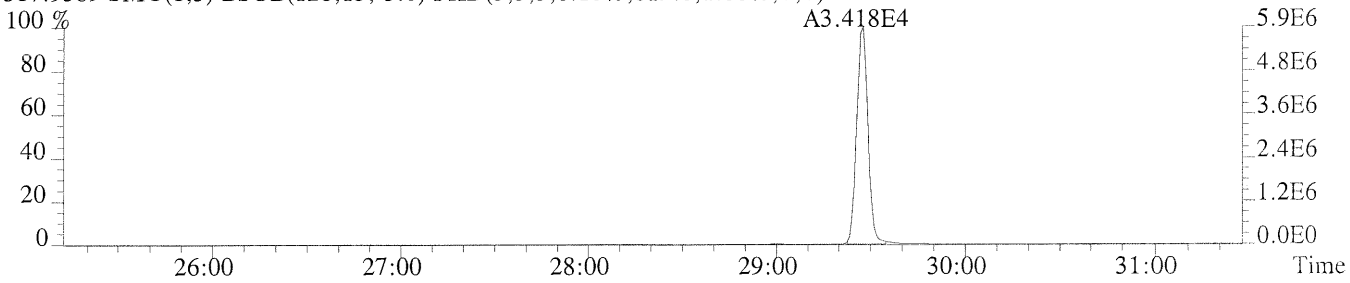
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,512.0,1.00%,F,F)



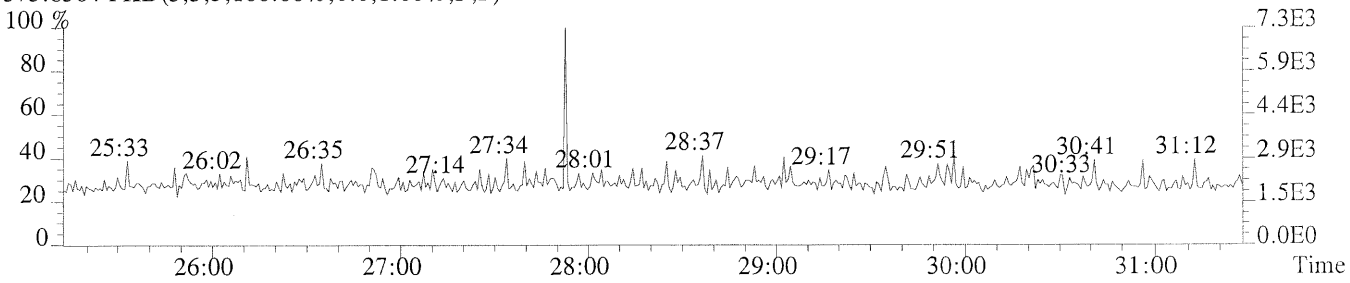
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1136.0,1.00%,F,F)



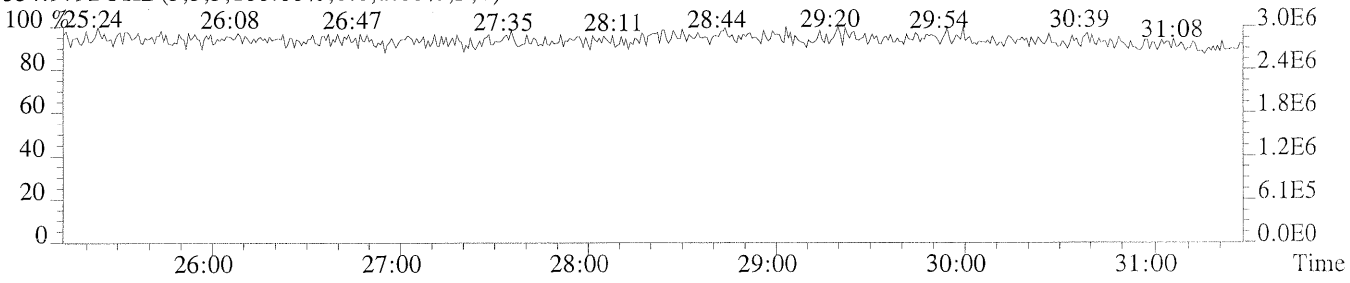
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,812.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

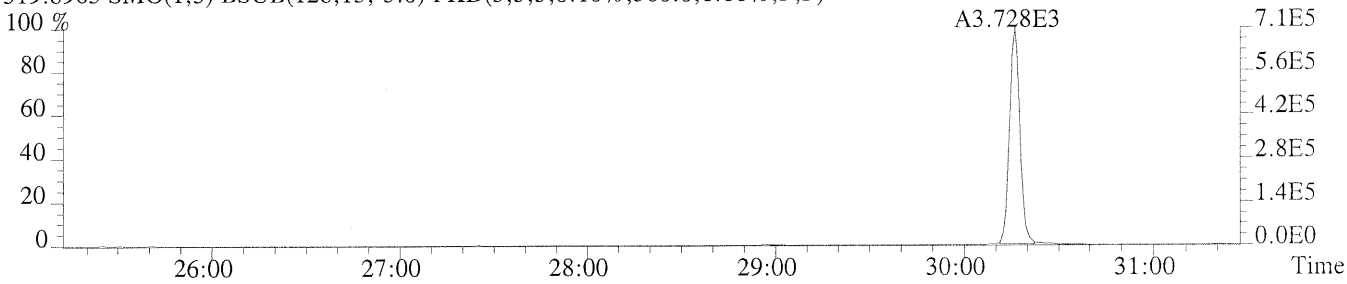


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

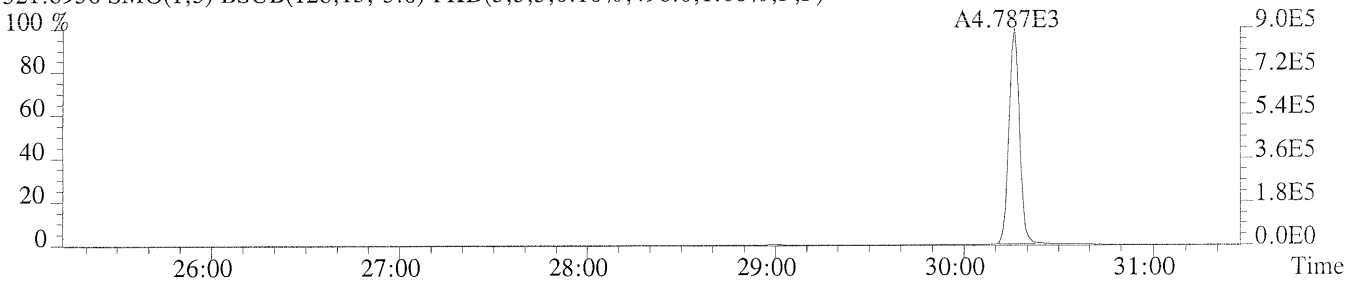


File:P100162 #1-521 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

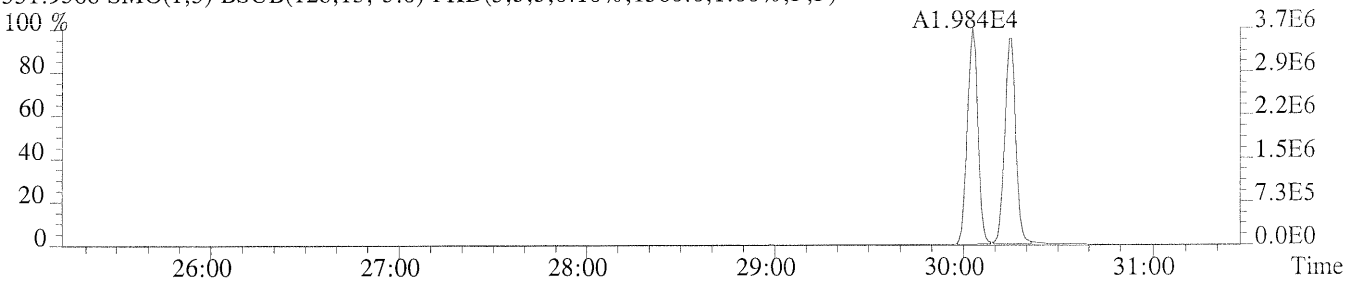
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,560.0,1.00%,F,F)



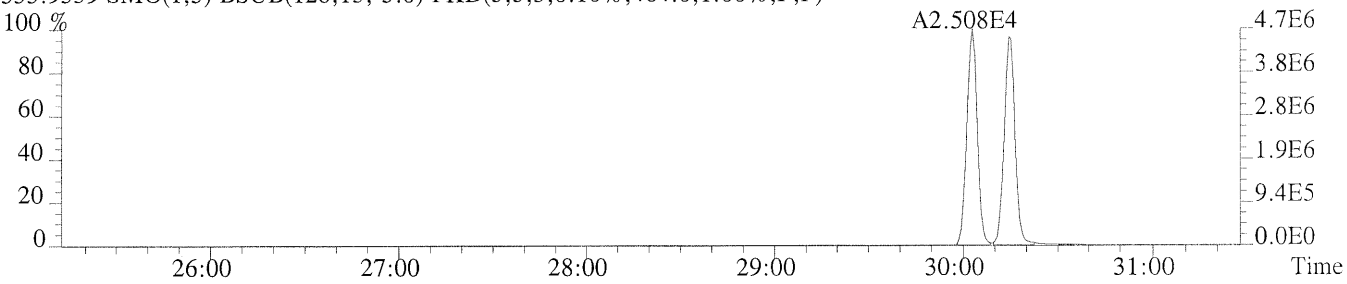
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,496.0,1.00%,F,F)



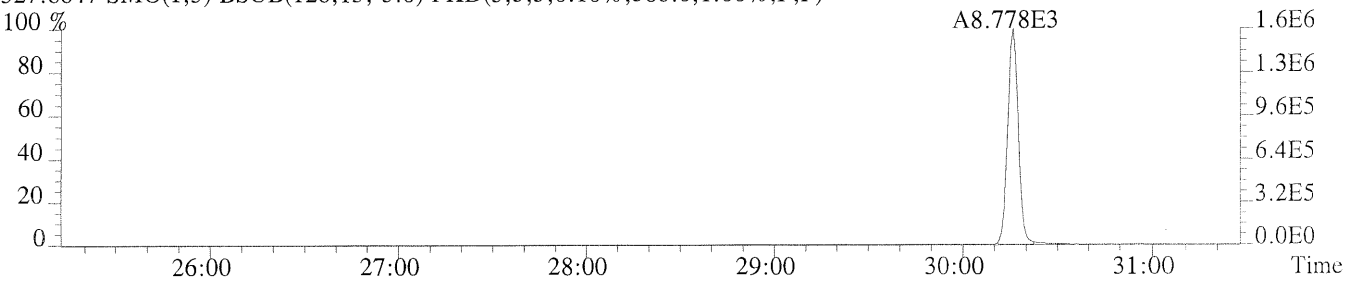
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1360.0,1.00%,F,F)



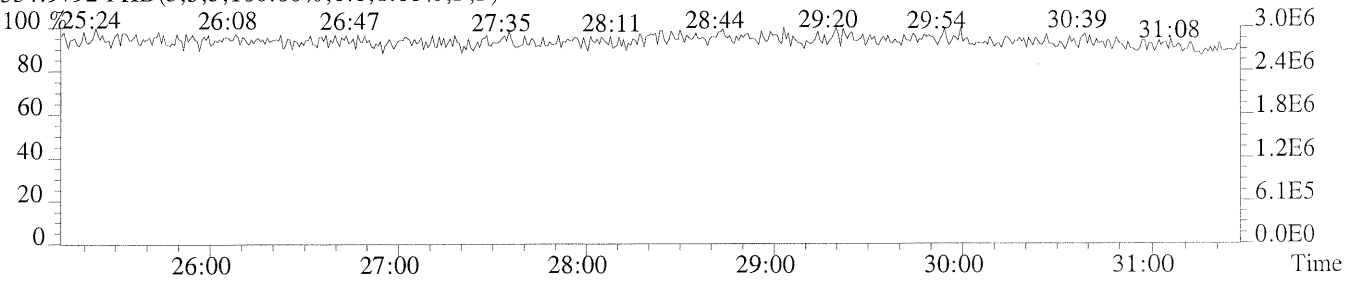
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,464.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,368.0,1.00%,F,F)

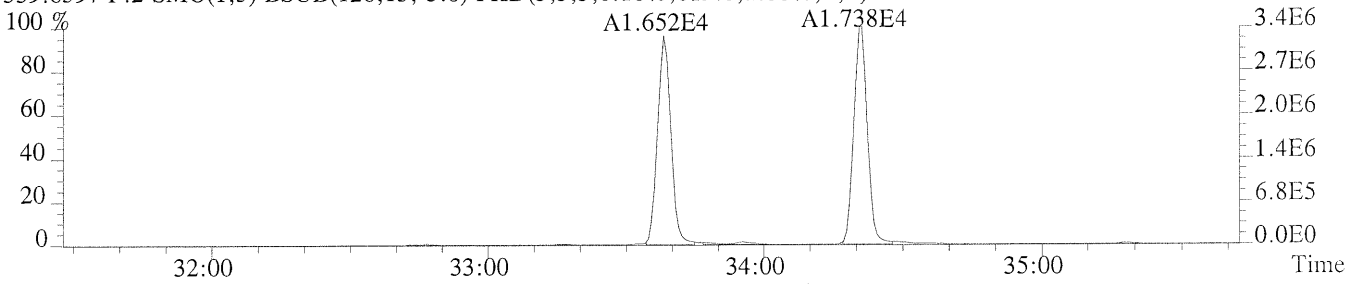


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

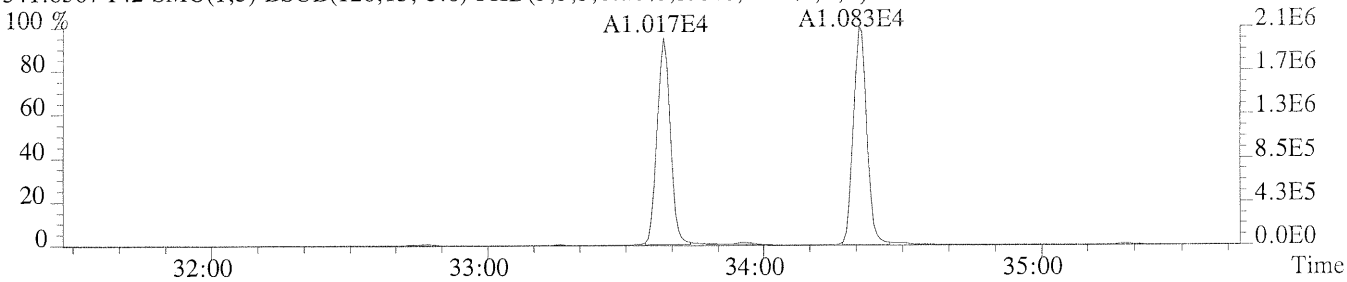


File:P100162 #1-386 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

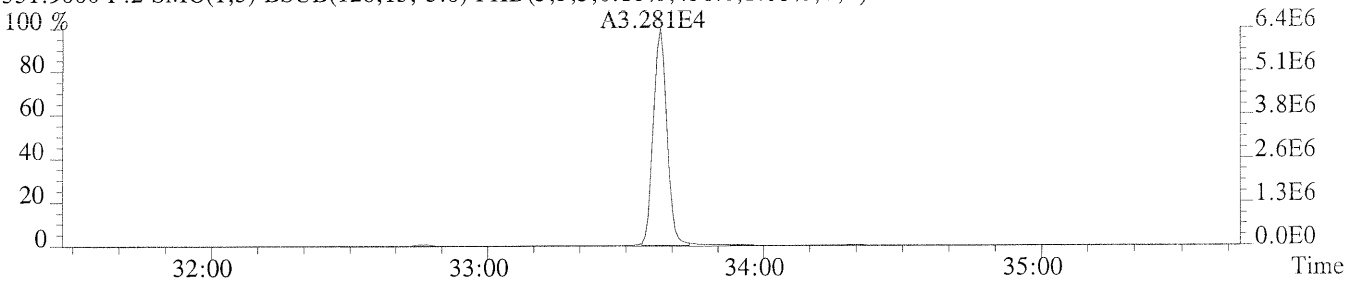
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,612.0,1.00%,F,F)



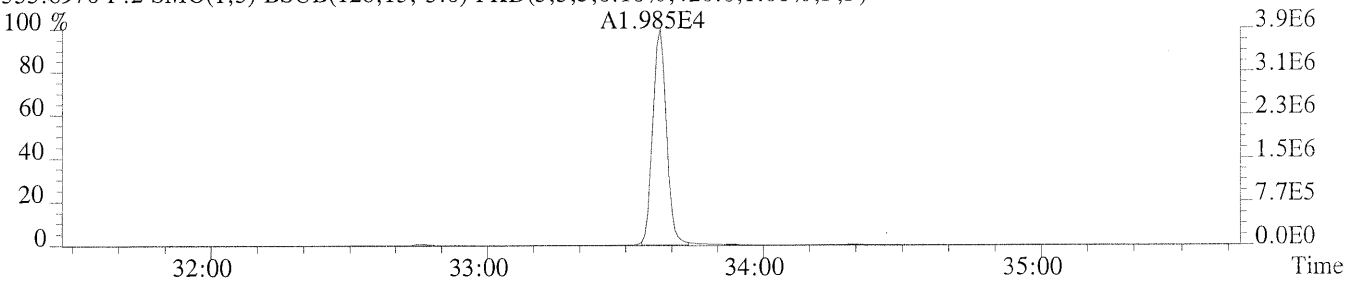
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,592.0,1.00%,F,F)



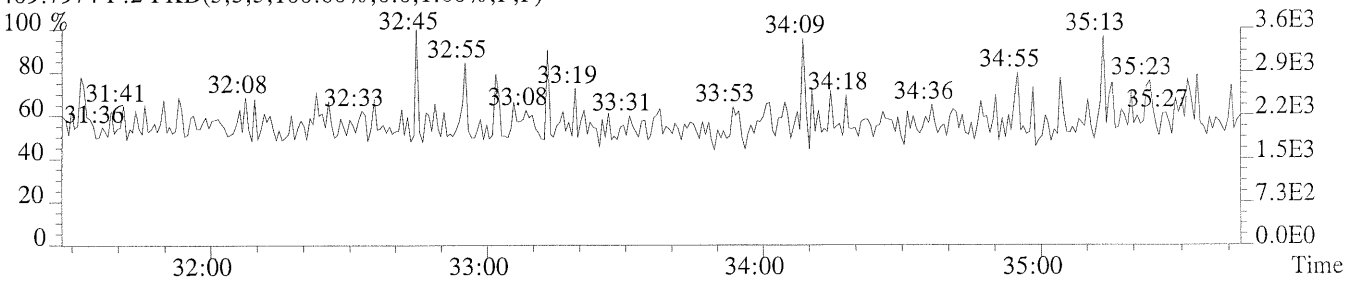
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,436.0,1.00%,F,F)



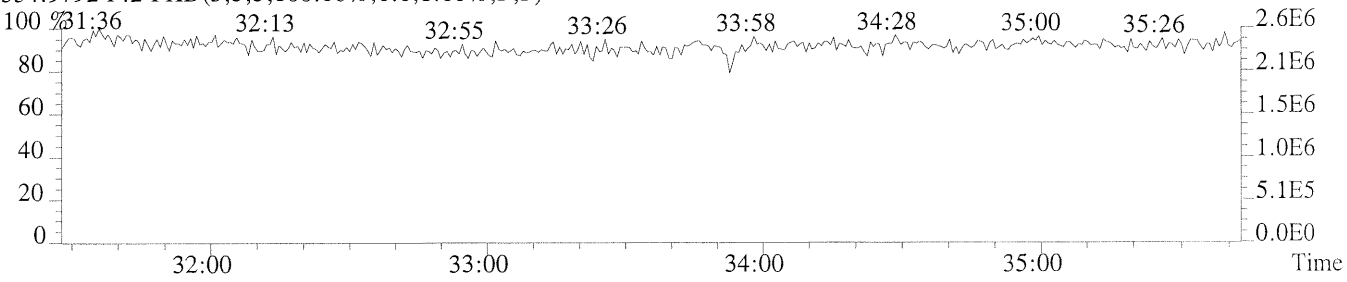
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,420.0,1.00%,F,F)



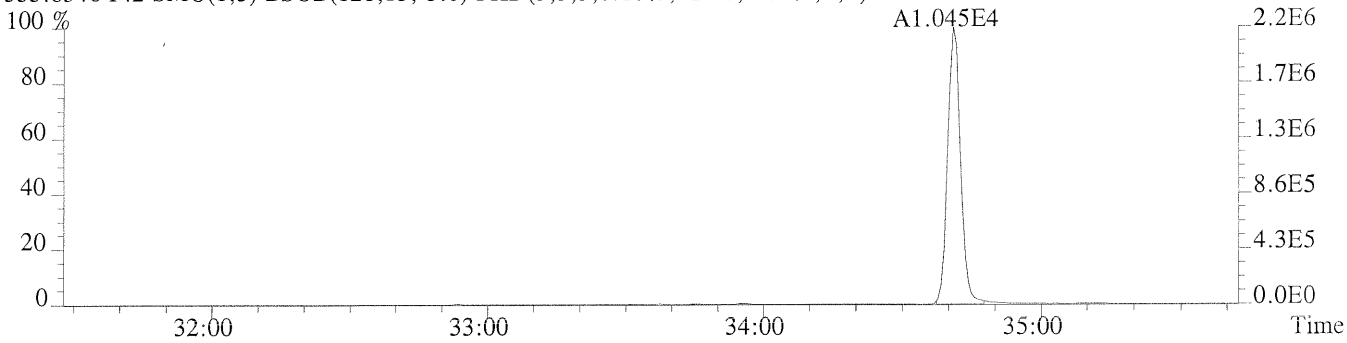
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



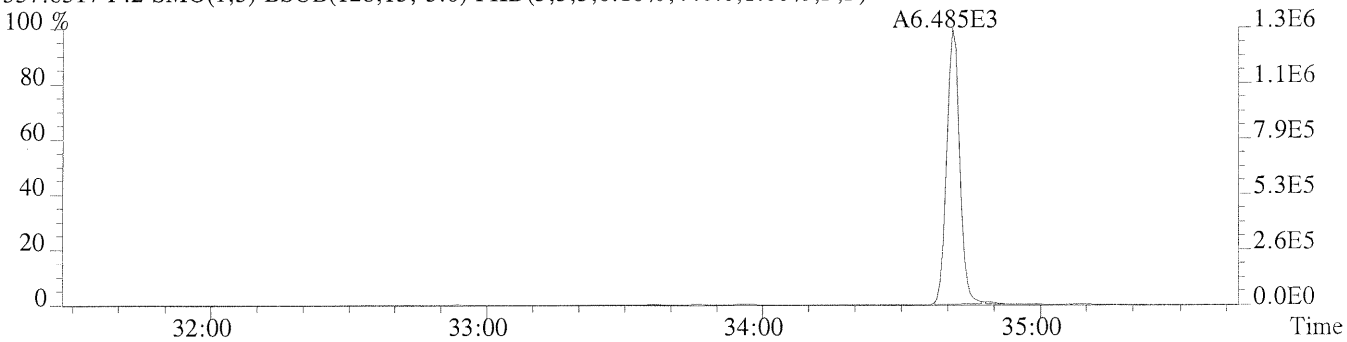
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



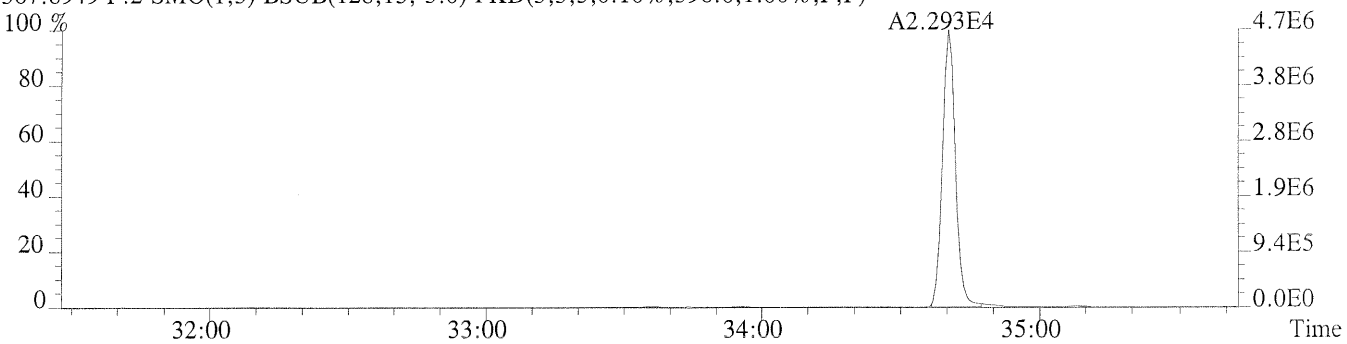
File:P100162 #1-386 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,712.0,1.00%,F,F)



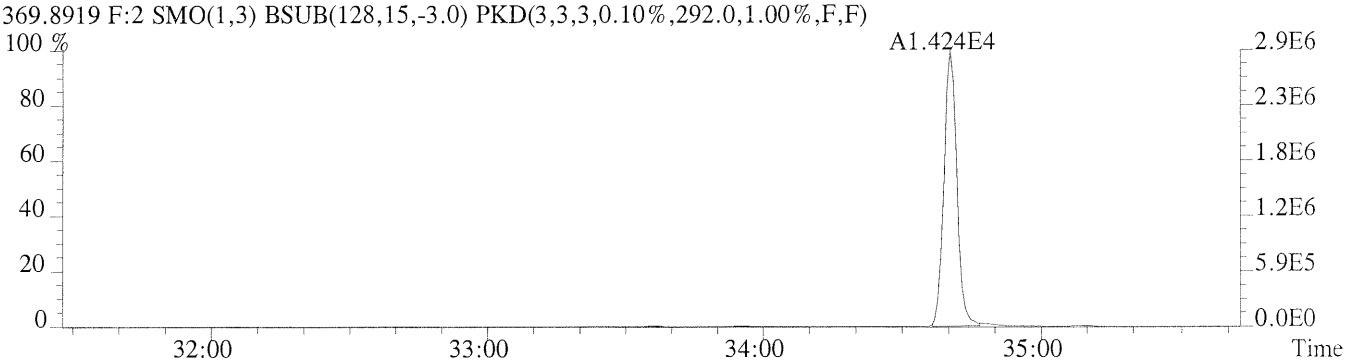
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,440.0,1.00%,F,F)



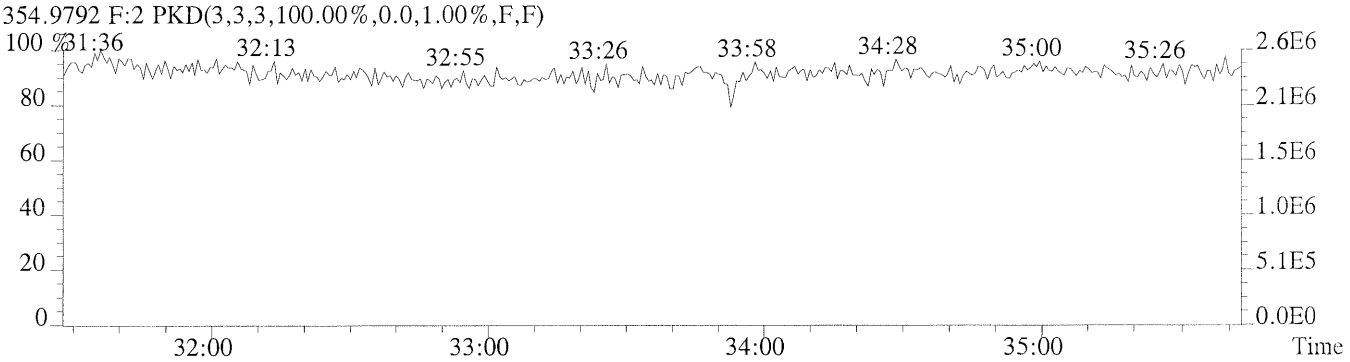
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,396.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,292.0,1.00%,F,F)

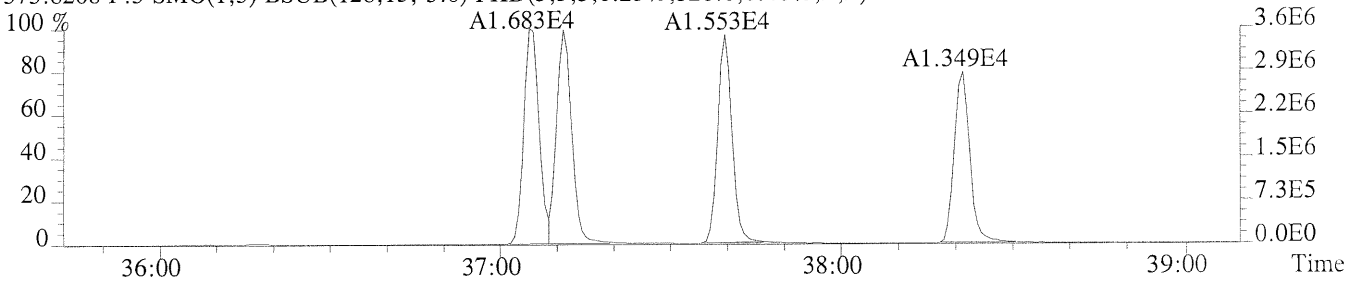


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

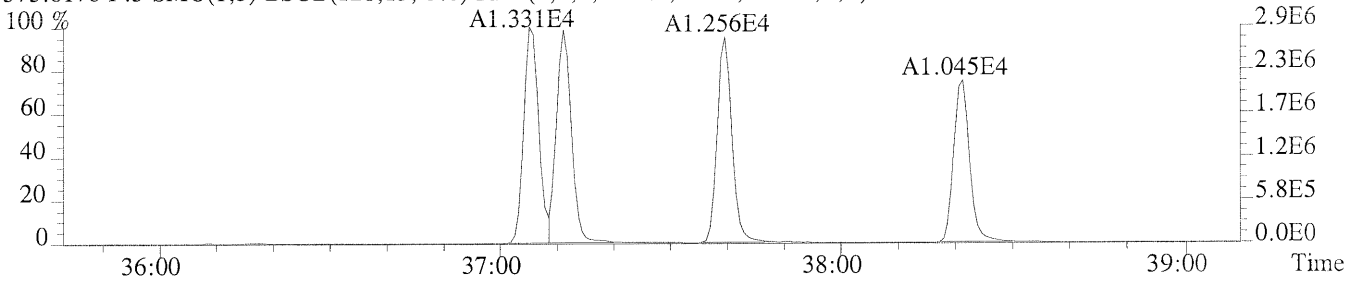


File:P100162 #1-313 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

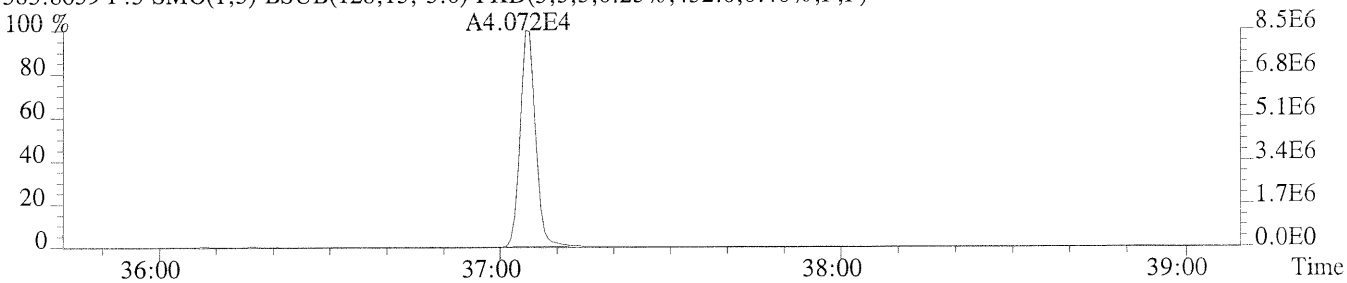
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,520.0,0.40%,F,F)



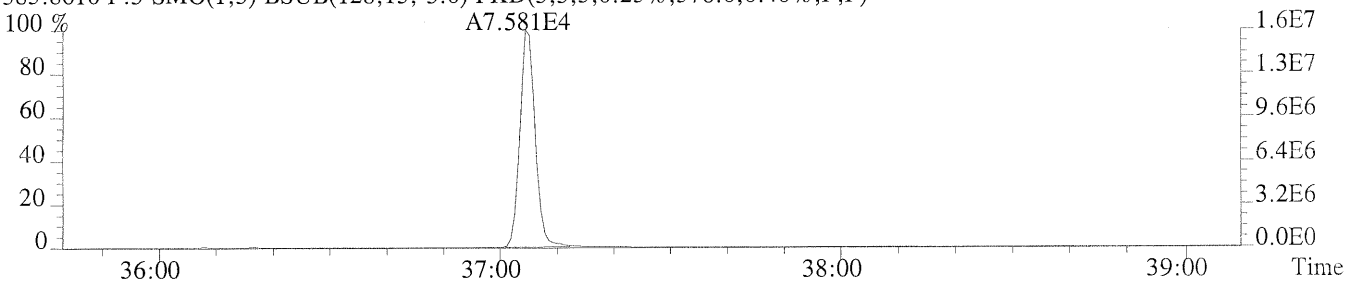
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,548.0,0.40%,F,F)



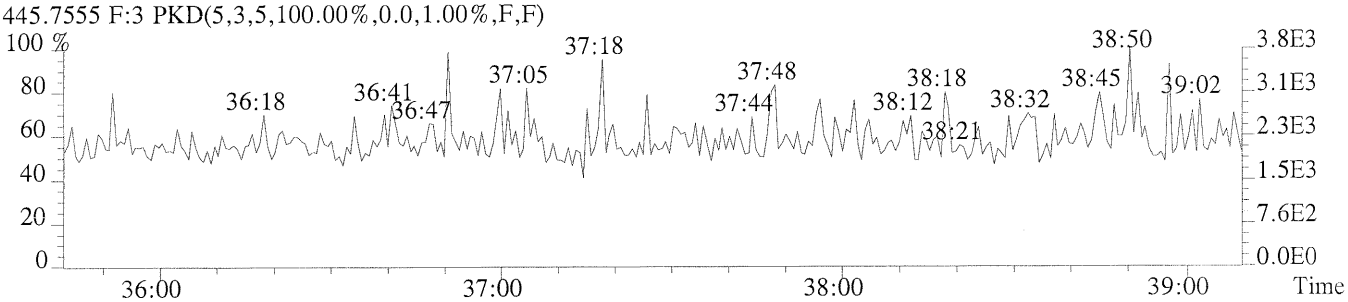
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,432.0,0.40%,F,F)



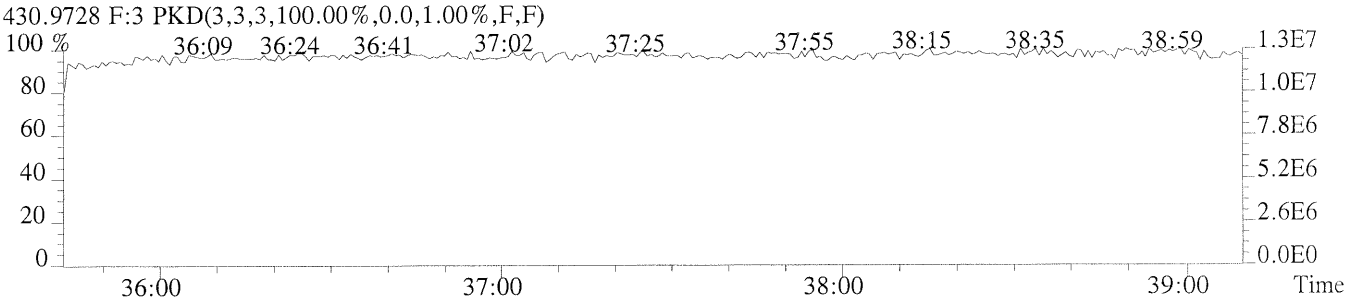
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,576.0,0.40%,F,F)



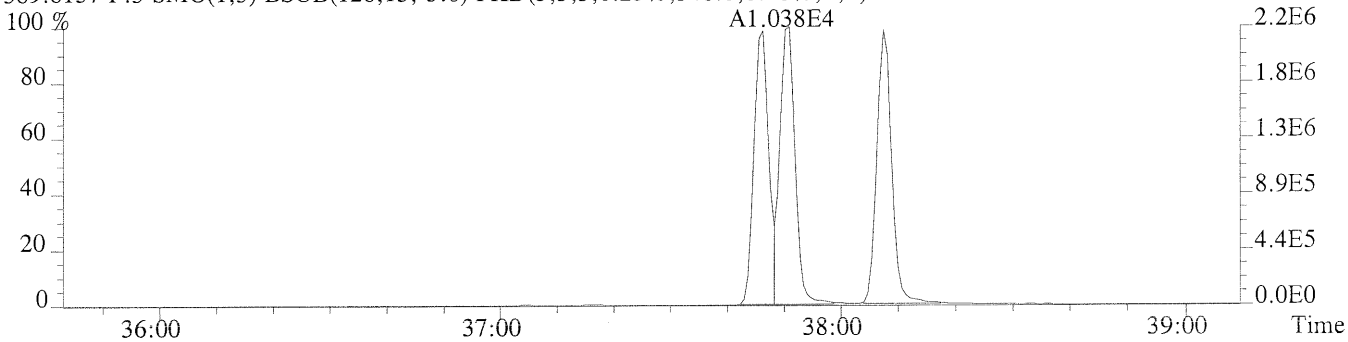
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



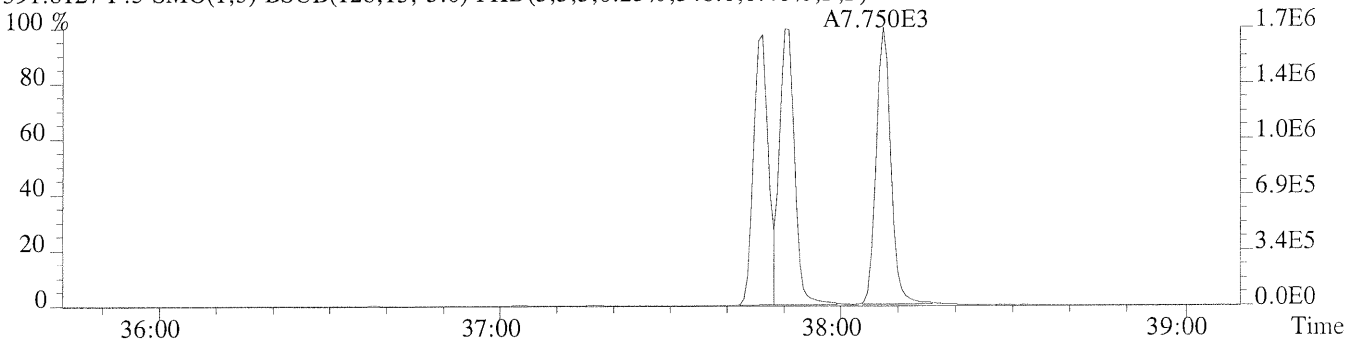
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



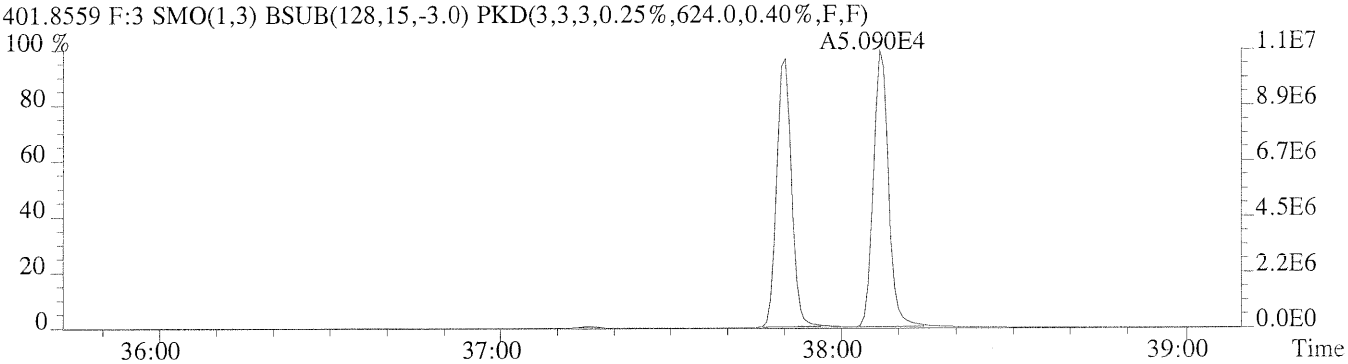
File:P100162 #1-313 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,348.0,0.40%,F,F)



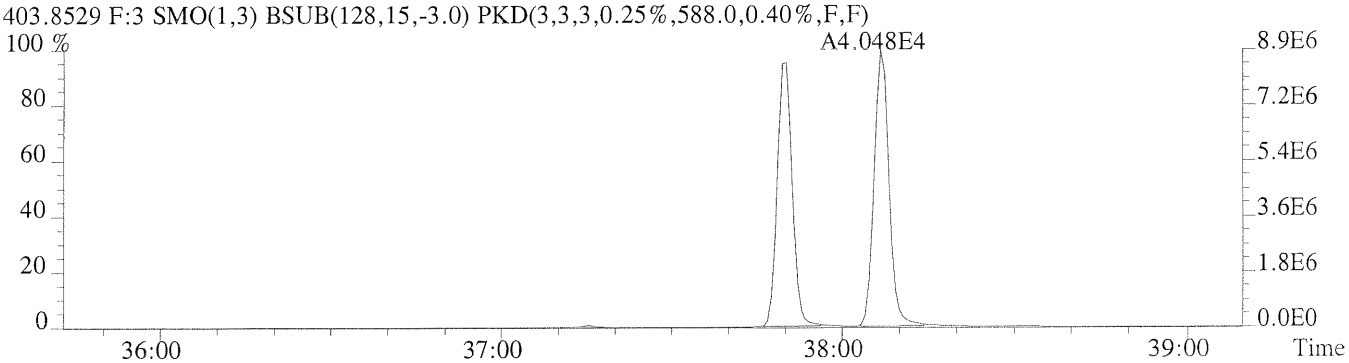
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,548.0,0.40%,F,F)



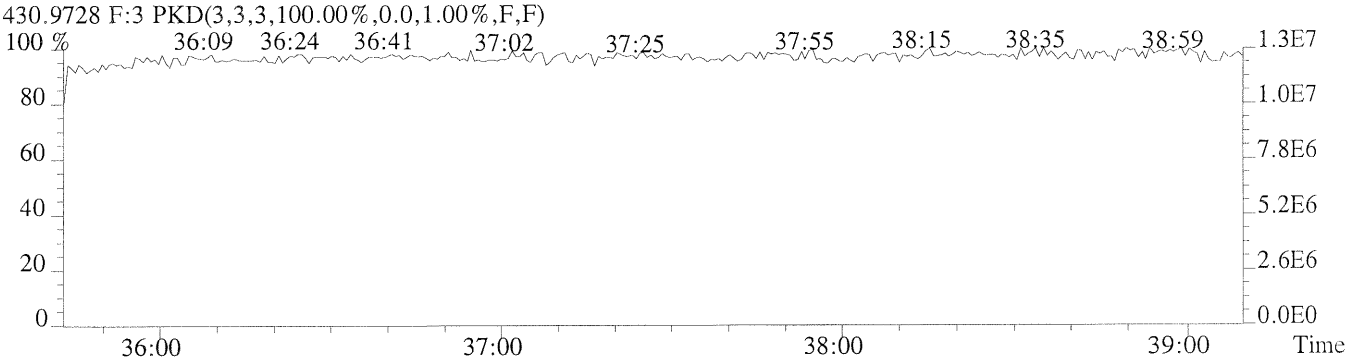
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,624.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,588.0,0.40%,F,F)

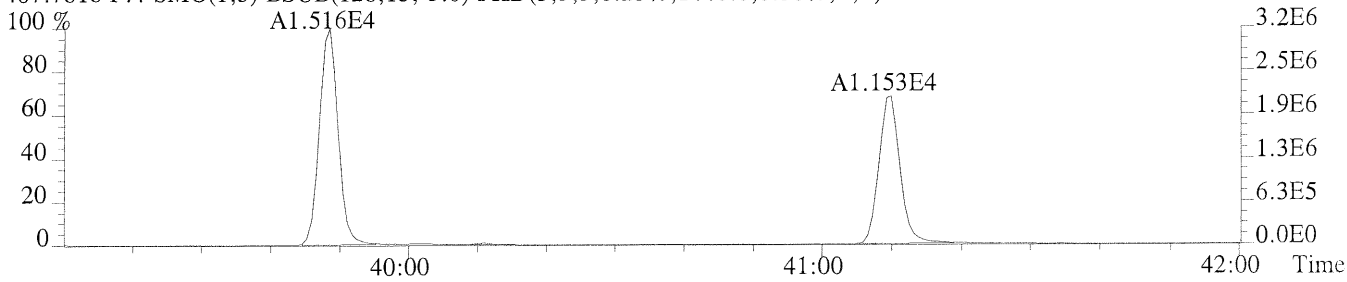


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

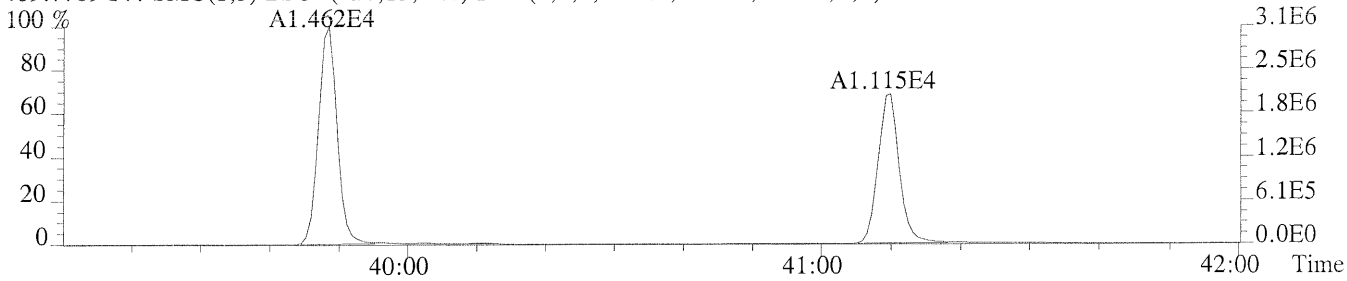


File:P100162 #1-258 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

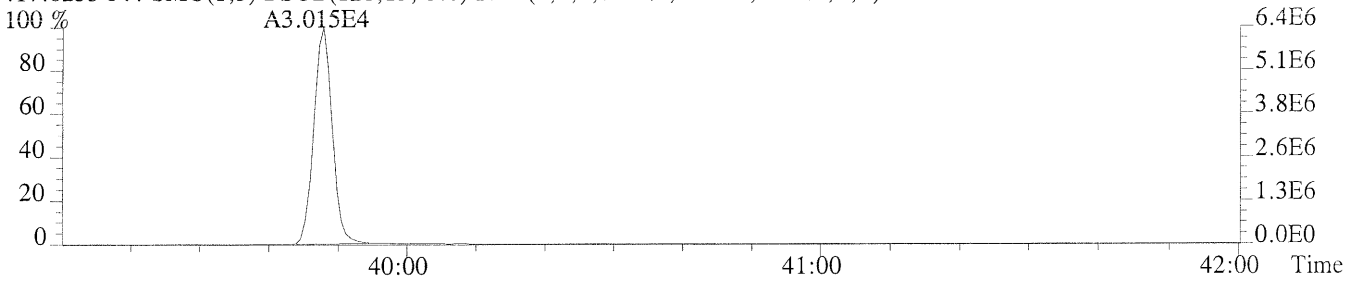
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1440.0,0.50%,F,F)



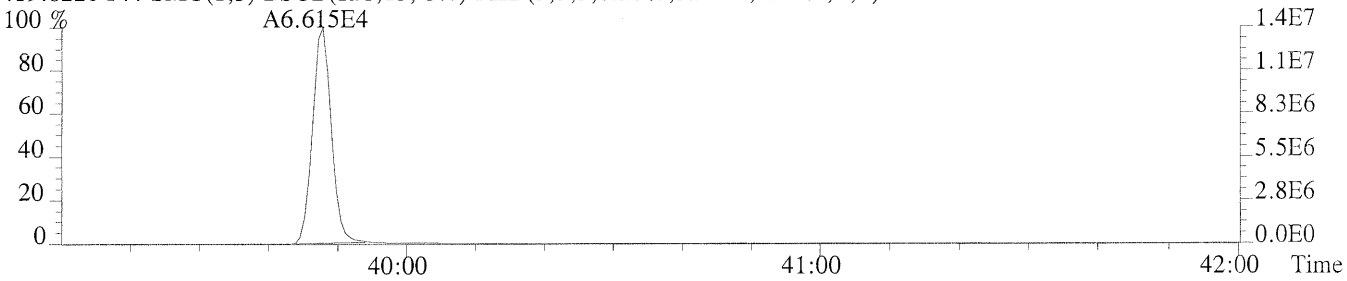
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1324.0,0.50%,F,F)



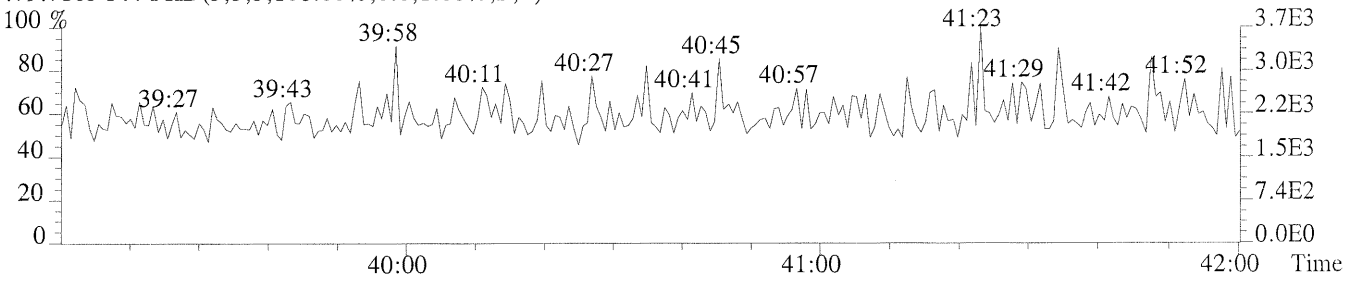
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1128.0,0.50%,F,F)



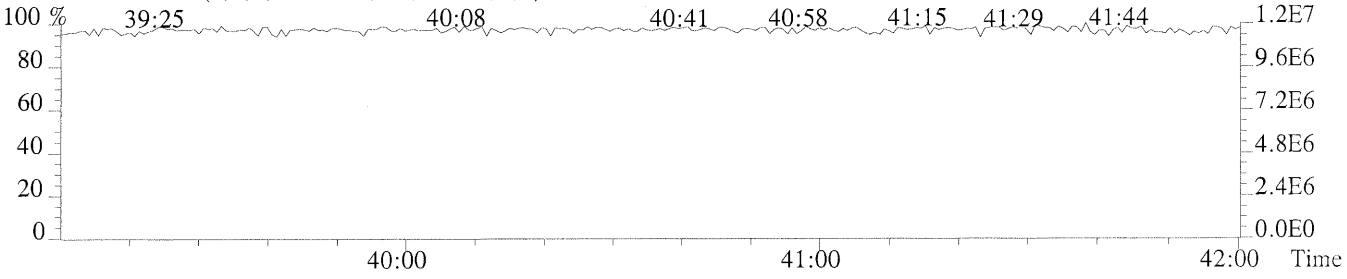
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3200.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

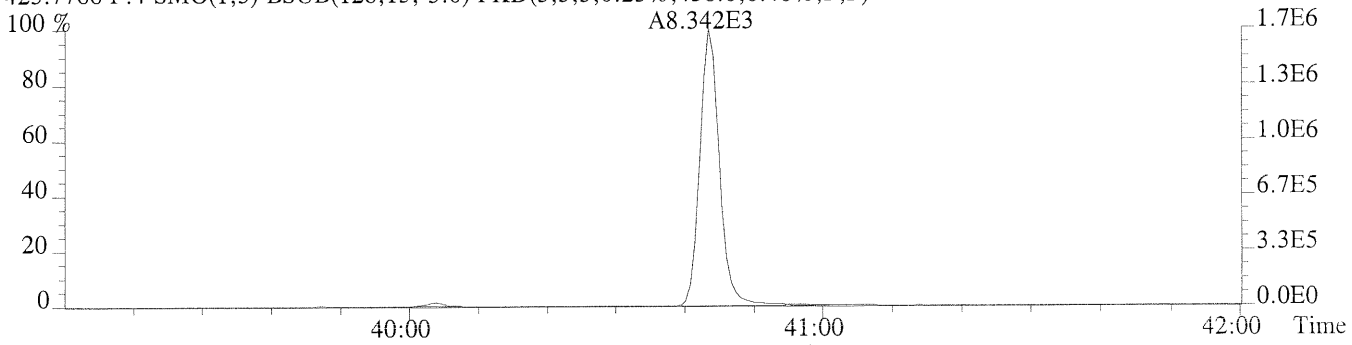


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

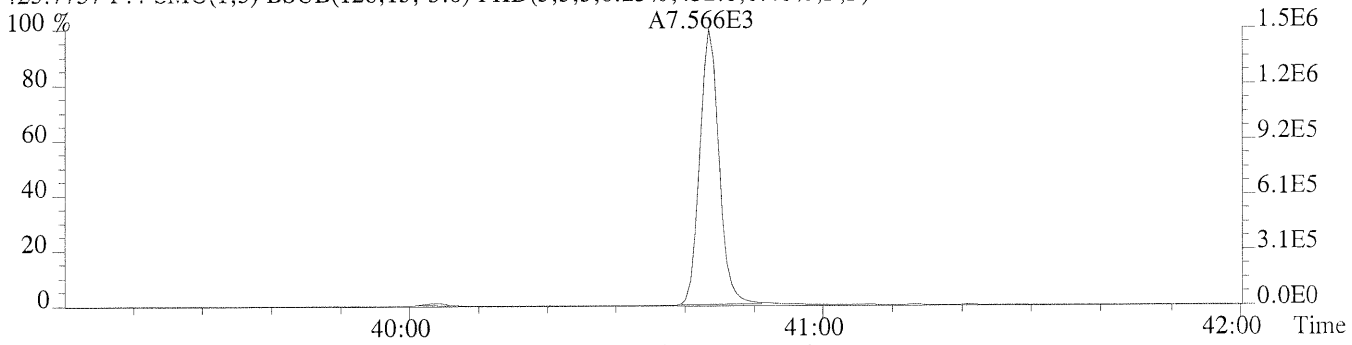


File:P100162 #1-258 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

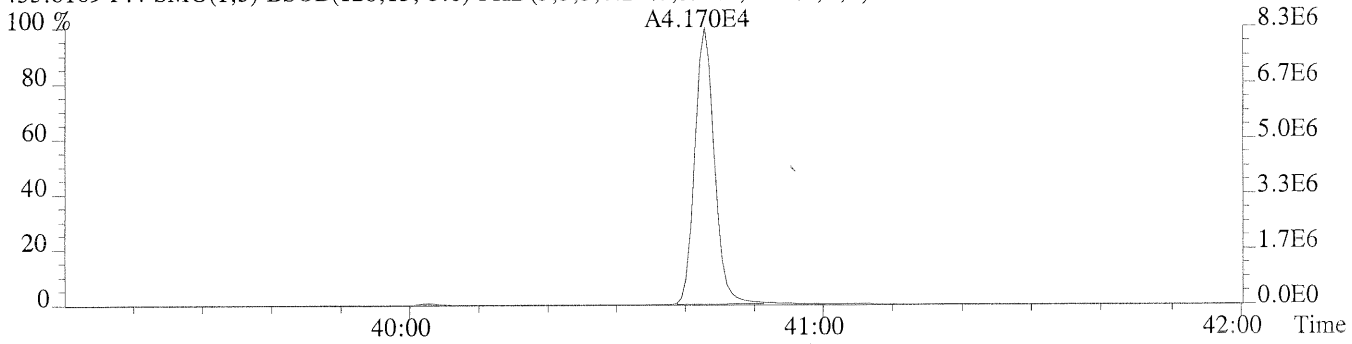
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,456.0,0.40%,F,F)



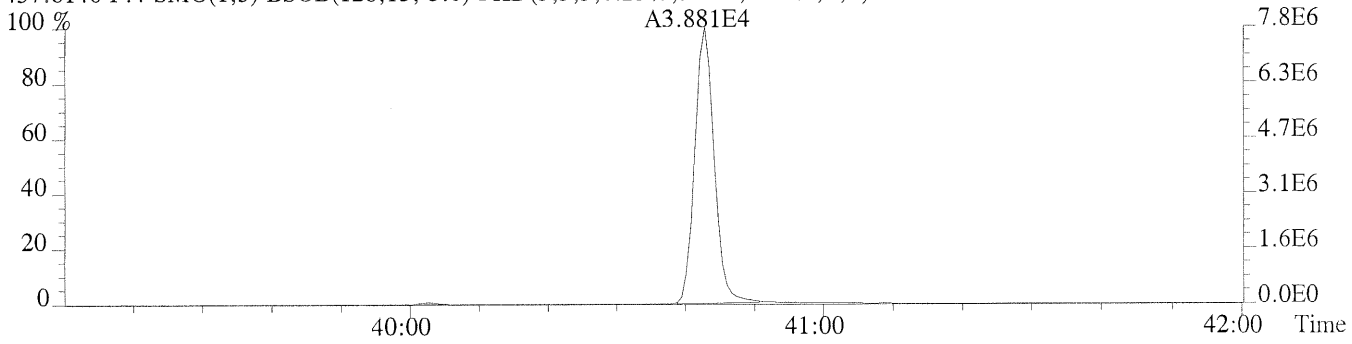
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,452.0,0.40%,F,F)



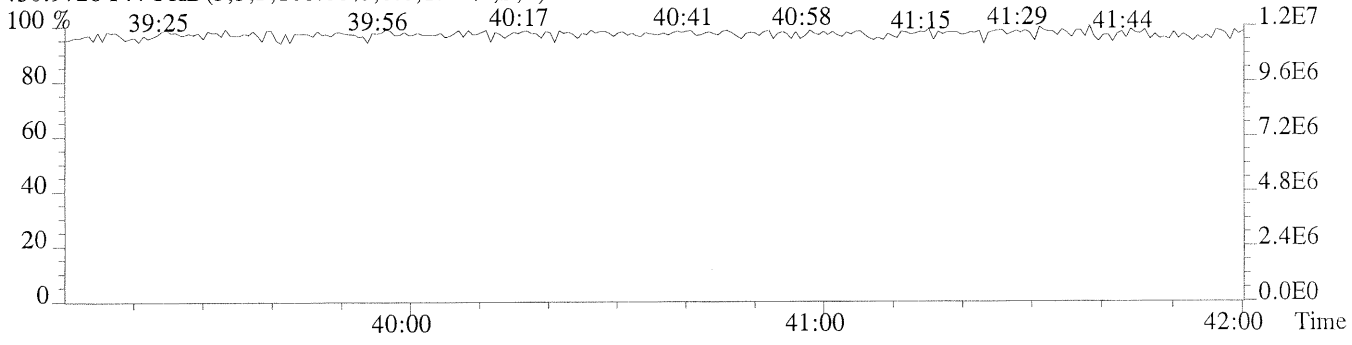
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,592.0,0.40%,F,F)



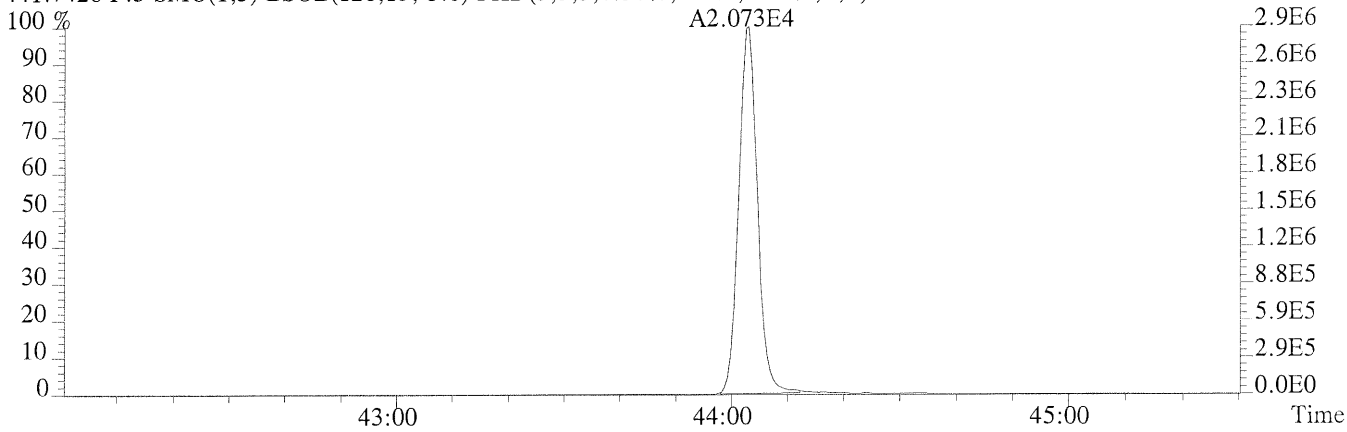
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,356.0,0.40%,F,F)



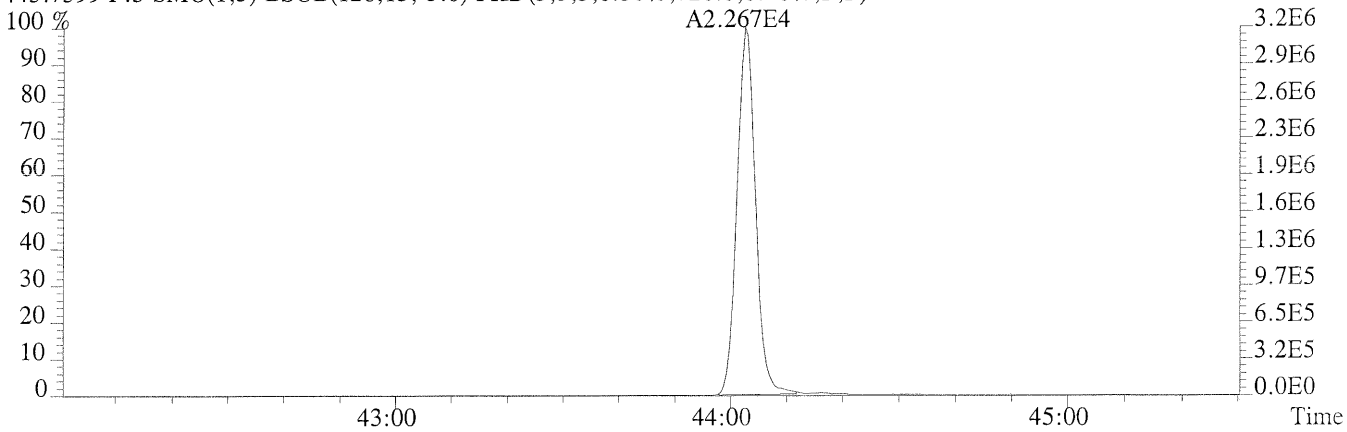
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



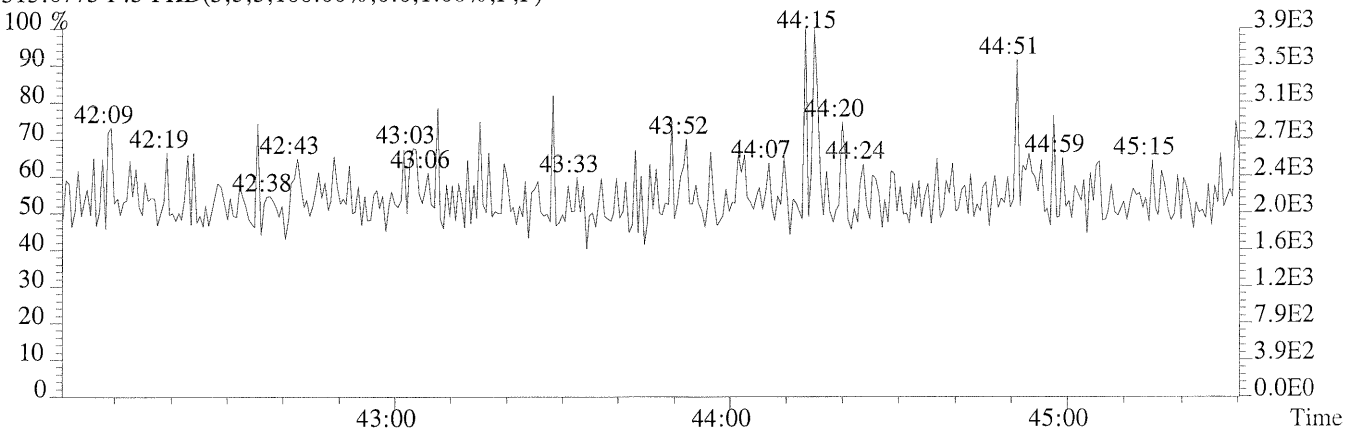
File:P100162 #1-386 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,424.0,0.40%,F,F)



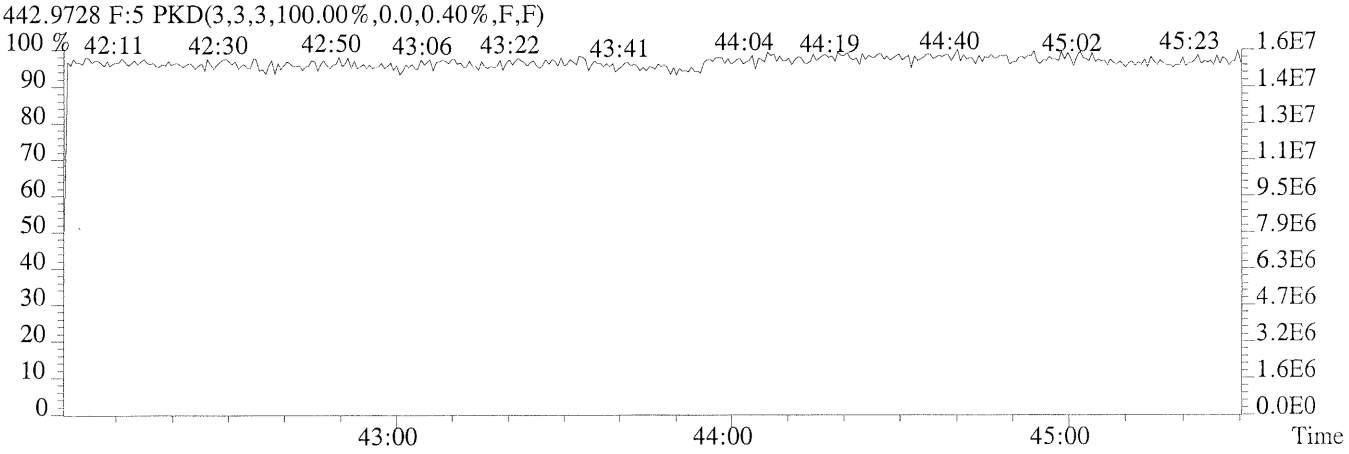
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,720.0,0.40%,F,F)



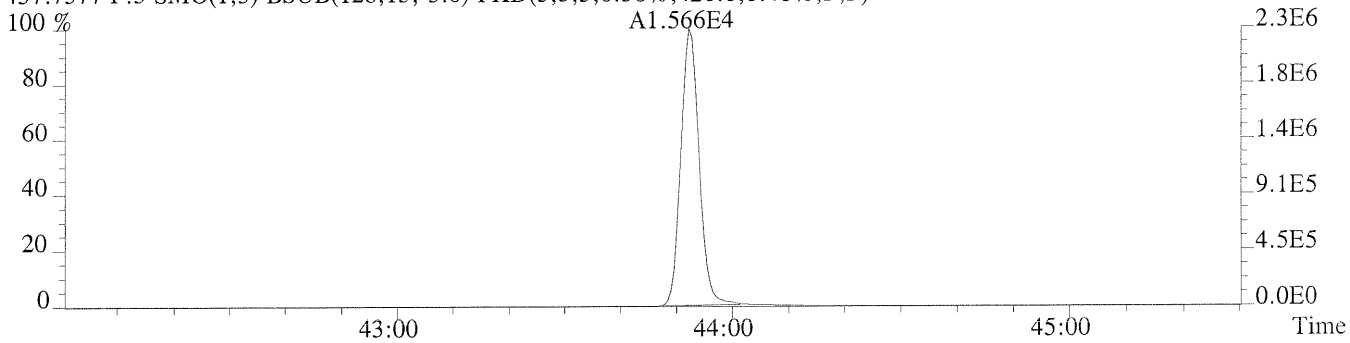
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



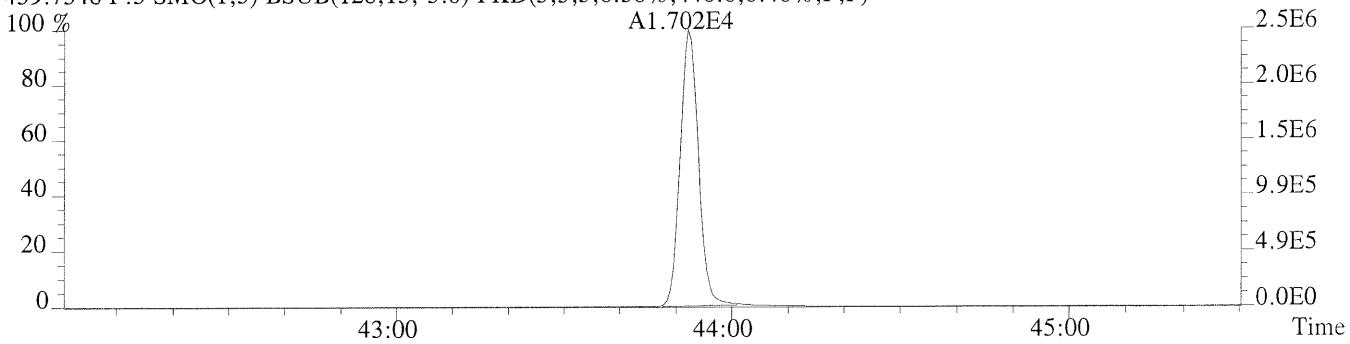
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



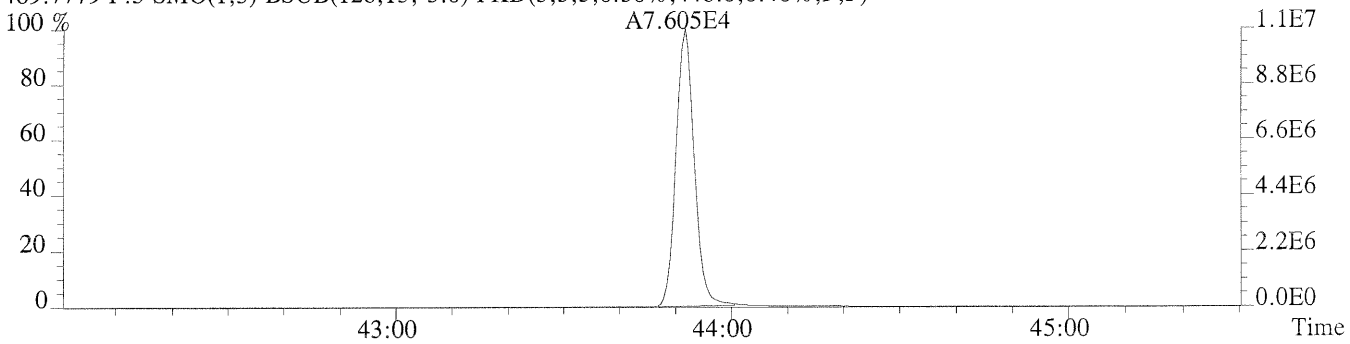
File:P100162 #1-386 Acq: 1-AUG-2008 08:30:52 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,420.0,0.40%,F,F)



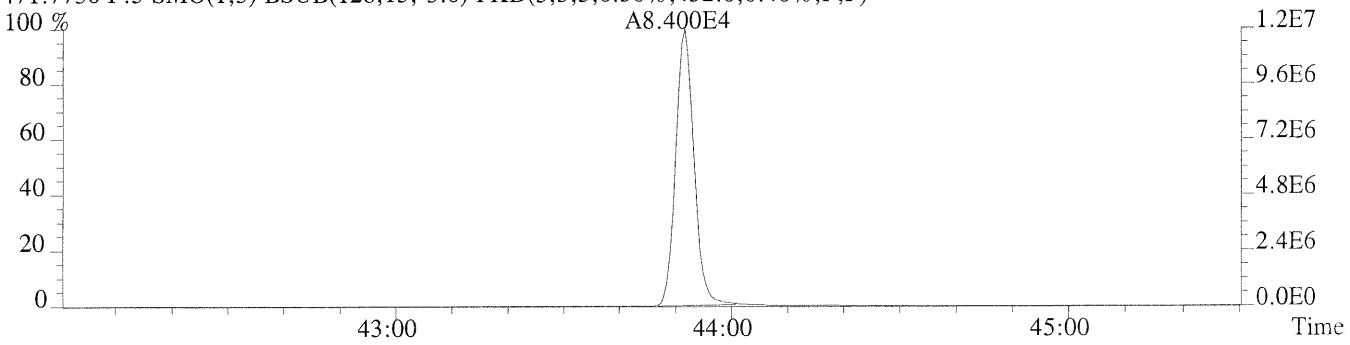
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,440.0,0.40%,F,F)



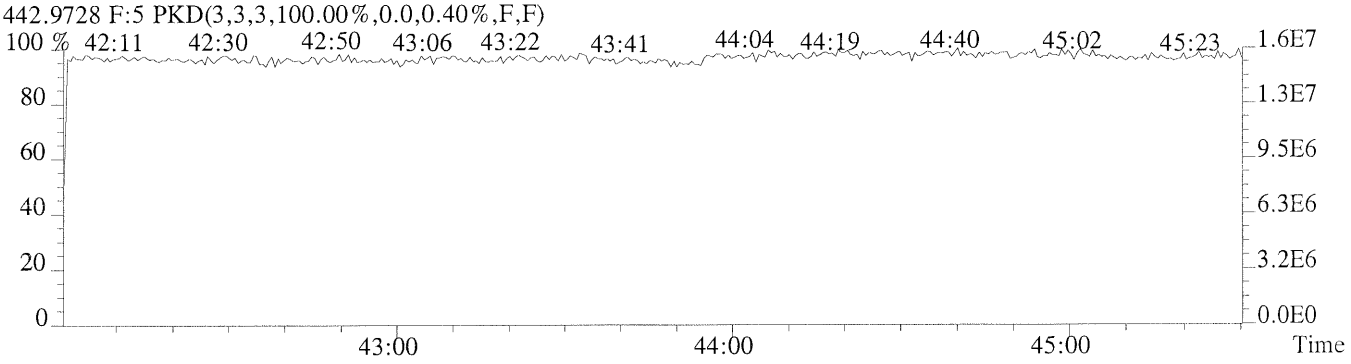
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,448.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,432.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/02/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P100172 Analysis Date: 1-AUG-08 Time: 17:47:40

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.75	0.65-0.89	0.94	0.92	1.80
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	0.91	0.88	2.89
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	0.99	0.93	7.10
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	1.02	1.13	-10.37
1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.05-1.43	1.00	1.04	-3.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	0.88-1.20	0.95	1.02	-7.50
OCDD	M+2/M+4	0.91	0.76-1.02	1.01	1.02	-0.94
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	0.98	0.98	0.02
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	1.01	0.97	3.78
2,3,4,7,8-PeCDF	M+2/M+4	1.60	1.32-1.78	1.02	1.00	1.98
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	1.30	1.22	6.30
1,2,3,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	1.28	1.31	-2.39
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.05-1.43	1.07	1.06	0.83
2,3,4,6,7,8-HxCDF	M+2/M+4	1.27	1.05-1.43	1.25	1.15	8.31
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	1.53	1.55	-1.57
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.06	0.88-1.20	1.15	1.17	-2.42
OCDF	M+2/M+4	0.90	0.76-1.02	1.26	1.36	-7.62

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/02/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P100172 Analysis Date: 1-AUG-08 Time: 17:47:40

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	0.99	1.10	-10.02
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	0.94	0.98	-3.58
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	0.97	0.99	-2.65
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	0.88	0.85	3.12
13C-OCDD	M+2/M+4	0.89	0.76-1.02	0.90	0.79	12.93
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	1.30	1.41	-7.52
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	1.34	1.38	-2.83
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	1.19	1.35	-11.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	0.99	1.03	-3.84
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				0.95	1.01	-5.50

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #16 Filename P100172 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 17:47:40
Processed: 7-AUG-08 10:15:01 Sample ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:29	5.420e+03	6.824e+03	0.79	yes	no	0.98
2	Unk	1,2,3,7,8-PeCDF	33:39	1.979e+04	1.250e+04	1.58	yes	no	0.97
3	Unk	2,3,4,7,8-PeCDF	34:21	2.000e+04	1.252e+04	1.60	yes	no	1.00
4	Unk	1,2,3,4,7,8-HxCDF	37:06	1.860e+04	1.511e+04	1.23	yes	no	1.22
5	Unk	1,2,3,6,7,8-HxCDF	37:12	1.827e+04	1.490e+04	1.23	yes	no	1.31
6	Unk	2,3,4,6,7,8-HxCDF	37:40	1.819e+04	1.431e+04	1.27	yes	no	1.15
7	Unk	1,2,3,7,8,9-HxCDF	38:22	1.562e+04	1.221e+04	1.28	yes	no	1.06
8	Unk	1,2,3,4,6,7,8-HpCDF	39:49	1.686e+04	1.617e+04	1.04	yes	no	1.55
9	Unk	1,2,3,4,7,8,9-HpCDF	41:10	1.274e+04	1.206e+04	1.06	yes	no	1.17
10	Unk	OCDF	44:04	2.334e+04	2.585e+04	0.90	yes	no	1.36
11	Unk	2,3,7,8-TCDD	30:17	3.813e+03	5.099e+03	0.75	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:42	1.256e+04	7.884e+03	1.59	yes	no	0.88
13	Unk	1,2,3,4,7,8-HxCDD	37:46	1.178e+04	9.148e+03	1.29	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:51	1.195e+04	9.479e+03	1.26	yes	no	1.13
15	Unk	1,2,3,7,8,9-HxCDD	38:08	1.192e+04	9.199e+03	1.30	yes	no	1.04
16	Unk	1,2,3,4,6,7,8-HpCDD	40:44	9.184e+03	8.974e+03	1.02	yes	no	1.02
17	Unk	OCDD	43:53	1.892e+04	2.070e+04	0.91	yes	no	1.02
18	IS	13C-2,3,7,8-TCDF	29:28	2.759e+04	3.468e+04	0.80	yes	no	1.41
19	IS	13C-1,2,3,7,8-PeCDF	33:38	3.926e+04	2.473e+04	1.59	yes	no	1.38
20	IS	13C-1,2,3,4,7,8-HxCDF	37:05	4.500e+04	8.491e+04	0.53	yes	no	1.35
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:49	3.310e+04	7.516e+04	0.44	yes	no	1.03
22	IS	13C-2,3,7,8-TCDD	30:15	2.089e+04	2.655e+04	0.79	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:41	2.772e+04	1.745e+04	1.59	yes	no	0.98
24	IS	13C-1,2,3,6,7,8-HxCDD	37:50	5.852e+04	4.683e+04	1.25	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:43	4.883e+04	4.693e+04	1.04	yes	no	0.85
26	IS	13C-OCDD	43:52	9.241e+04	1.033e+05	0.89	yes	no	0.79
27	RS/RT	13C-1,2,3,4-TCDD	30:04	2.122e+04	2.668e+04	0.80	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:07	6.091e+04	4.824e+04	1.26	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:17	9.144e+03					1.01

Columbia Analytical Services, Inc.
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Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #16 Filename P100172 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 17:47:40

Processed: 7-AUG-08 10:15:01 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	9.18e+05	9.60e+02	9.6e+02	1.17e+06	1.38e+03	8.5e+02
2	1,2,3,7,8-PeCDF	3.82e+06	3.19e+03	1.2e+03	2.39e+06	2.25e+03	1.1e+03
3	2,3,4,7,8-PeCDF	3.93e+06	3.19e+03	1.2e+03	2.44e+06	2.25e+03	1.1e+03
4	1,2,3,4,7,8-HxCDF	4.10e+06	2.98e+03	1.4e+03	3.32e+06	2.40e+03	1.4e+03
5	1,2,3,6,7,8-HxCDF	3.95e+06	2.98e+03	1.3e+03	3.22e+06	2.40e+03	1.3e+03
6	2,3,4,6,7,8-HxCDF	3.91e+06	2.98e+03	1.3e+03	3.08e+06	2.40e+03	1.3e+03
7	1,2,3,7,8,9-HxCDF	3.20e+06	2.98e+03	1.1e+03	2.51e+06	2.40e+03	1.0e+03
8	1,2,3,4,6,7,8-HpCDF	3.51e+06	3.28e+04	1.1e+02	3.42e+06	2.92e+04	1.2e+02
9	1,2,3,4,7,8,9-HpCDF	2.38e+06	3.28e+04	7.3e+01	2.28e+06	2.92e+04	7.8e+01
10	OCDF	3.30e+06	4.78e+04	6.9e+01	3.71e+06	9.99e+04	3.7e+01
11	2,3,7,8-TCDD	6.89e+05	1.46e+03	4.7e+02	8.94e+05	1.18e+03	7.5e+02
12	1,2,3,7,8-PeCDD	2.51e+06	2.89e+03	8.7e+02	1.58e+06	1.69e+03	9.3e+02
13	1,2,3,4,7,8-HxCDD	2.63e+06	9.00e+03	2.9e+02	2.05e+06	6.49e+03	3.2e+02
14	1,2,3,6,7,8-HxCDD	2.65e+06	9.00e+03	2.9e+02	2.12e+06	6.49e+03	3.3e+02
15	1,2,3,7,8,9-HxCDD	2.57e+06	9.00e+03	2.9e+02	1.99e+06	6.49e+03	3.1e+02
16	1,2,3,4,6,7,8-HpCDD	1.91e+06	5.77e+04	3.3e+01	1.80e+06	8.59e+03	2.1e+02
17	OCDD	2.70e+06	4.79e+03	5.6e+02	3.03e+06	4.18e+04	7.2e+01
18	13C-2,3,7,8-TCDF	4.63e+06	2.67e+03	1.7e+03	5.85e+06	1.71e+03	3.4e+03
19	13C-1,2,3,7,8-PeCDF	7.53e+06	1.07e+03	7.0e+03	4.73e+06	1.34e+03	3.5e+03
20	13C-1,2,3,4,7,8-HxCDF	9.66e+06	8.92e+02	1.1e+04	1.83e+07	1.82e+03	1.0e+04
21	13C-1,2,3,4,6,7,8-HpCDF	6.92e+06	3.85e+03	1.8e+03	1.54e+07	4.27e+03	3.6e+03
22	13C-2,3,7,8-TCDD	3.73e+06	3.85e+03	9.7e+02	4.73e+06	1.50e+03	3.1e+03
23	13C-1,2,3,7,8-PeCDD	5.51e+06	1.06e+03	5.2e+03	3.46e+06	8.32e+02	4.2e+03
24	13C-1,2,3,6,7,8-HxCDD	1.30e+07	9.68e+02	1.3e+04	1.05e+07	1.23e+03	8.6e+03
25	13C-1,2,3,4,6,7,8-HpCDD	9.57e+06	5.35e+03	1.8e+03	9.18e+06	4.04e+03	2.3e+03
26	13C-OCDD	1.31e+07	9.74e+03	1.3e+03	1.46e+07	3.44e+03	4.3e+03
27	13C-1,2,3,4-TCDD	3.80e+06	3.85e+03	9.9e+02	4.73e+06	1.50e+03	3.1e+03
28	13C-1,2,3,7,8,9-HxCDD	1.32e+07	9.68e+02	1.4e+04	1.05e+07	1.23e+03	8.6e+03
29	37Cl-2,3,7,8-TCDD	1.61e+06	7.68e+02	2.1e+03			

Columbia Analytical Services, Inc.
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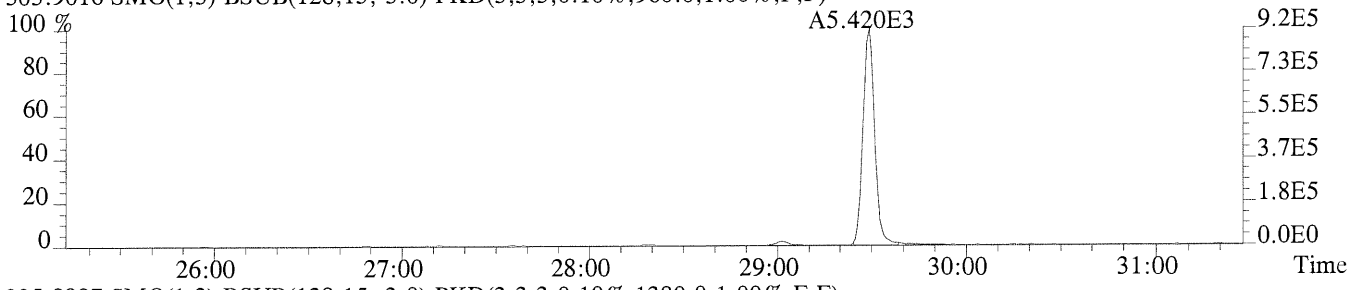
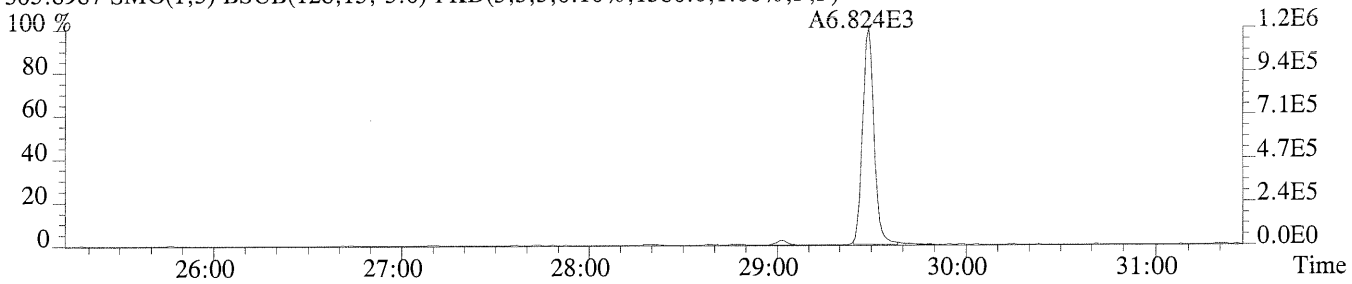
Office:(713)266-1599. Fax:(713)266-0130

File:P100172 #1-521 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

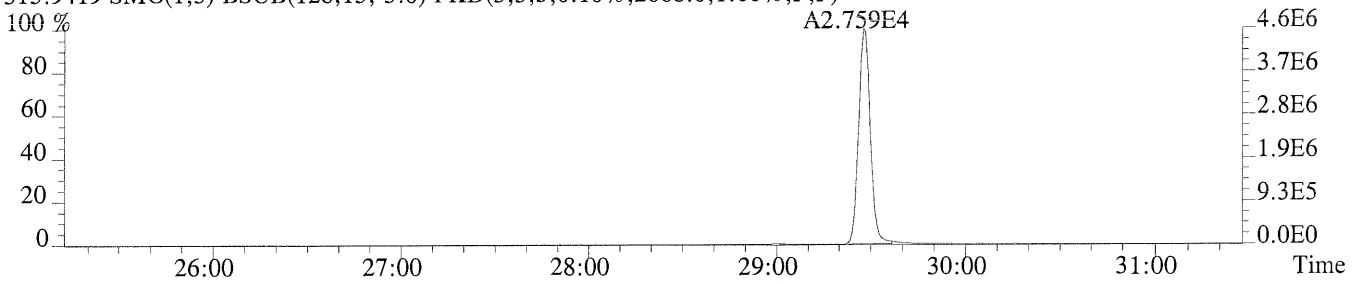
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,960.0,1.00%,F,F)



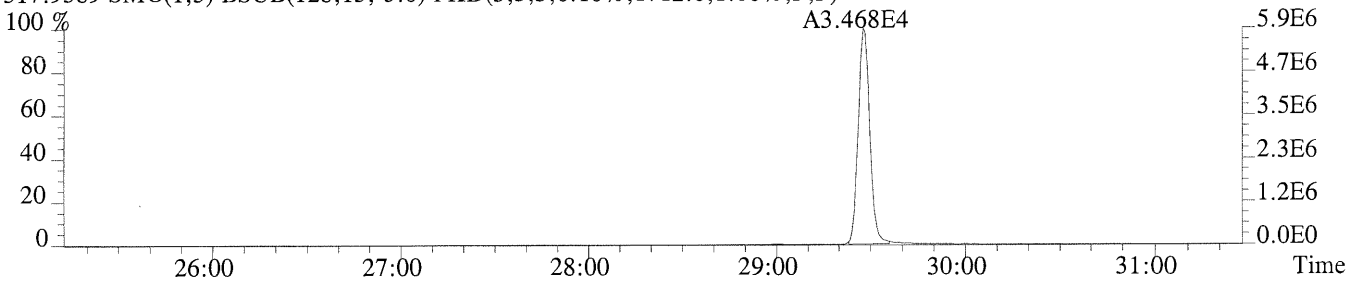
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1380.0,1.00%,F,F)



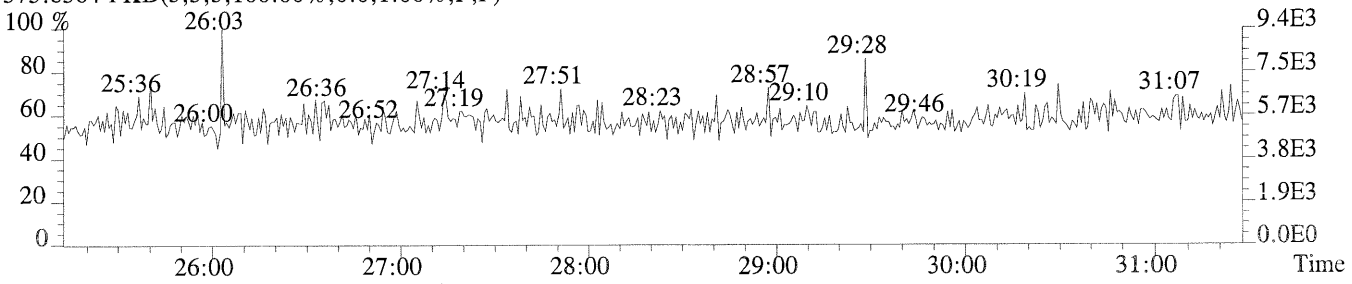
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2668.0,1.00%,F,F)



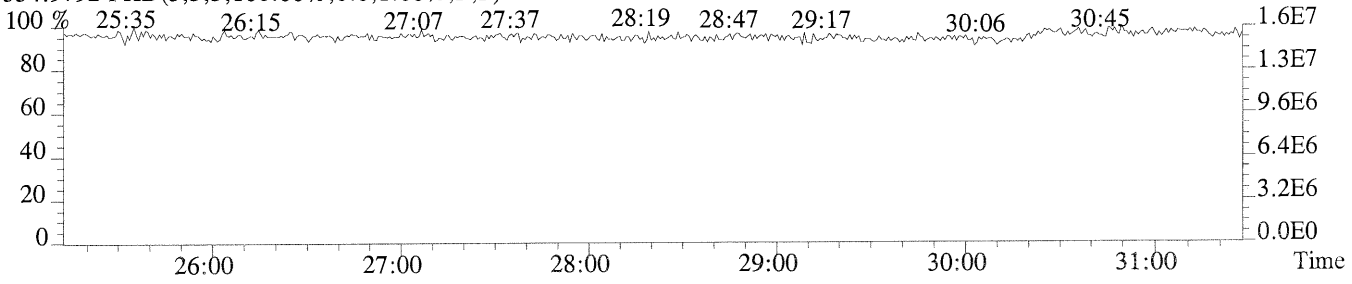
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1712.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

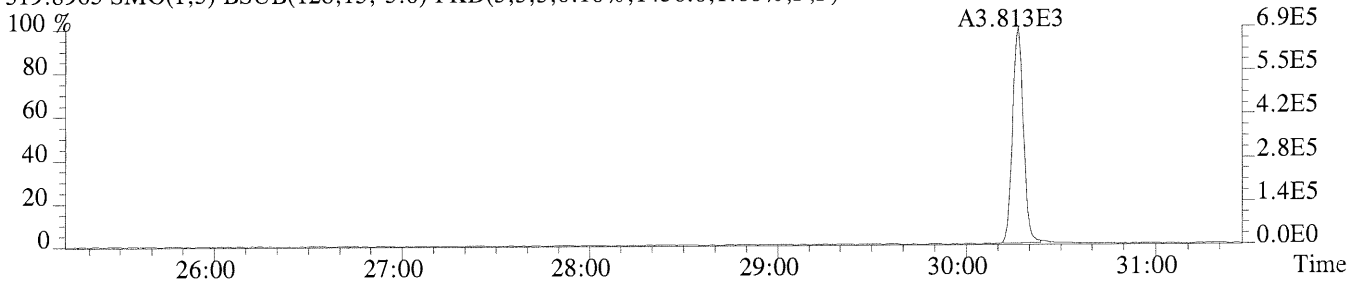


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

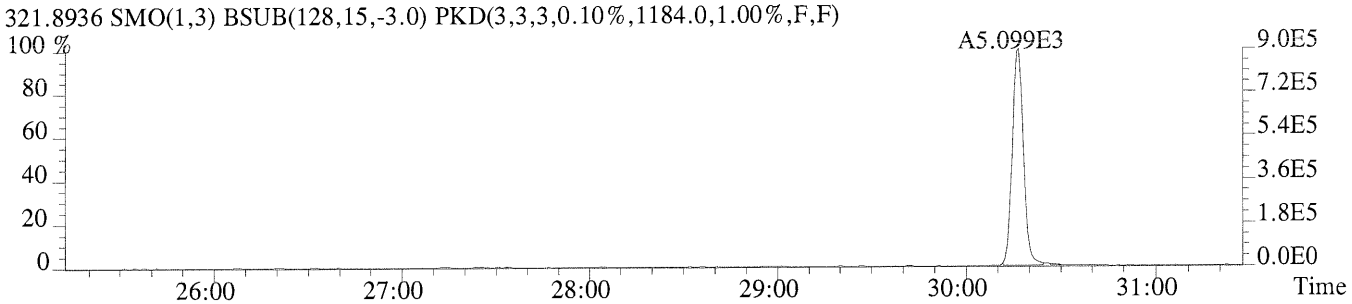


File:P100172 #1-521 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

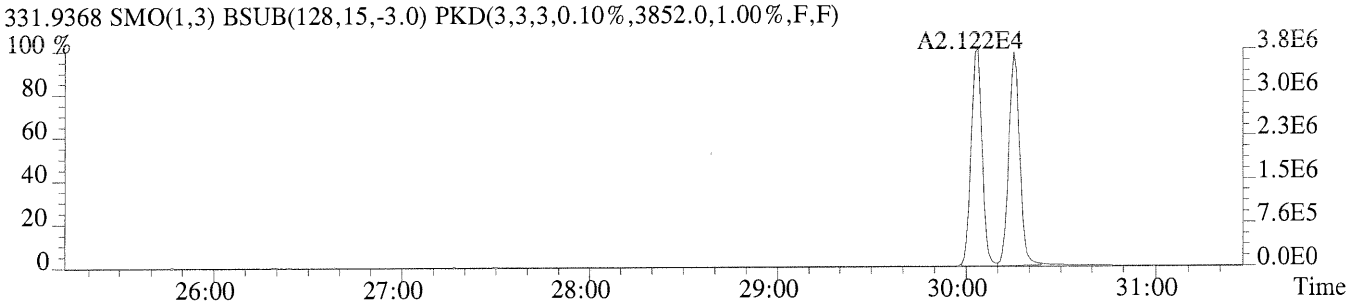
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1456.0,1.00%,F,F)



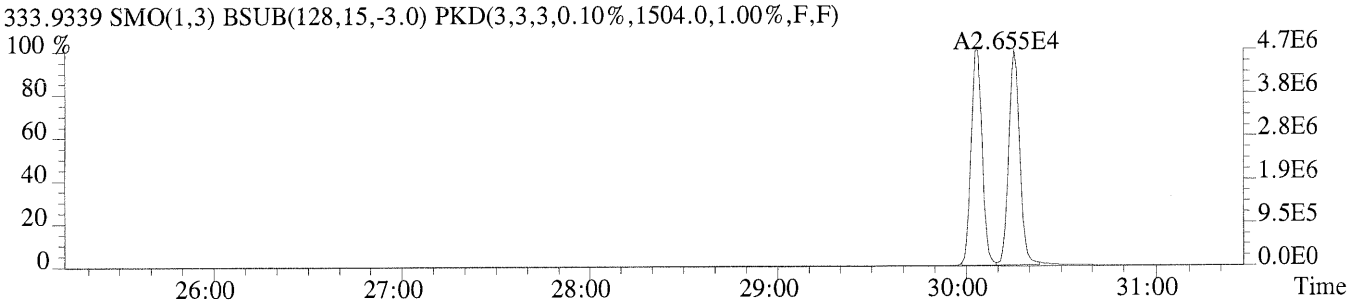
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1184.0,1.00%,F,F)



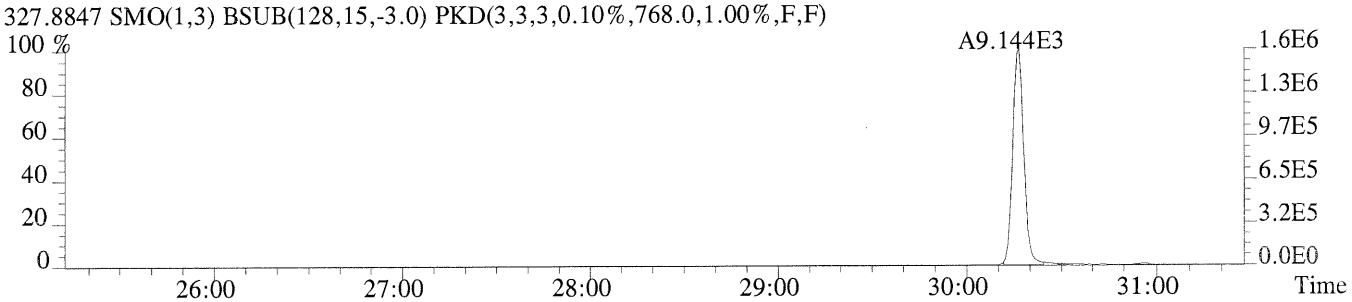
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3852.0,1.00%,F,F)



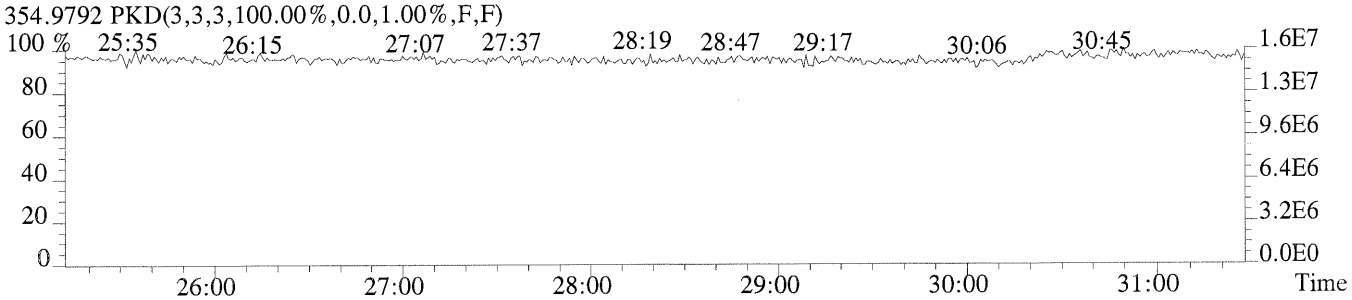
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1504.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,768.0,1.00%,F,F)

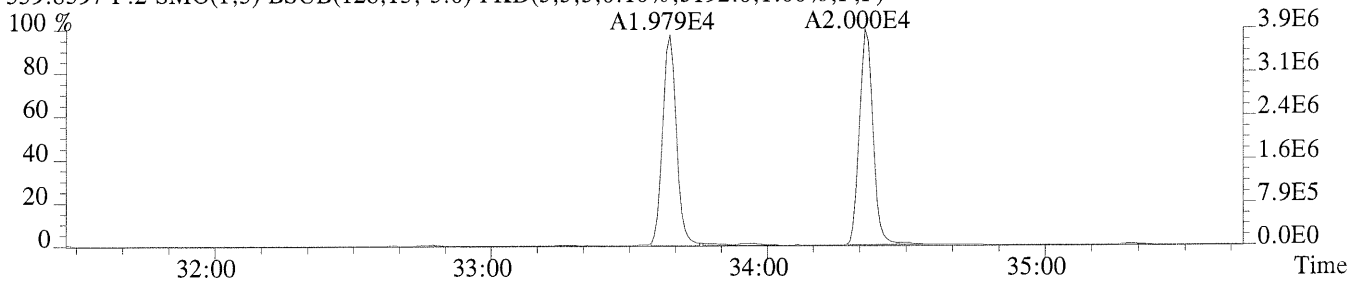


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

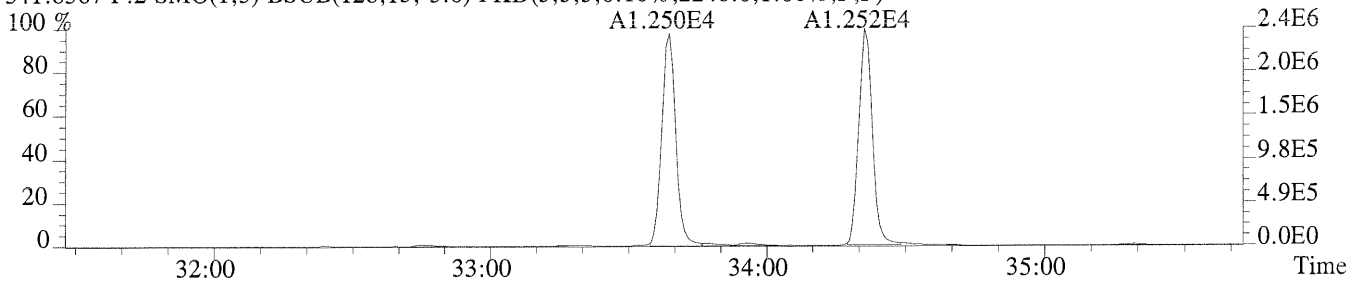


File:P100172 #1-386 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

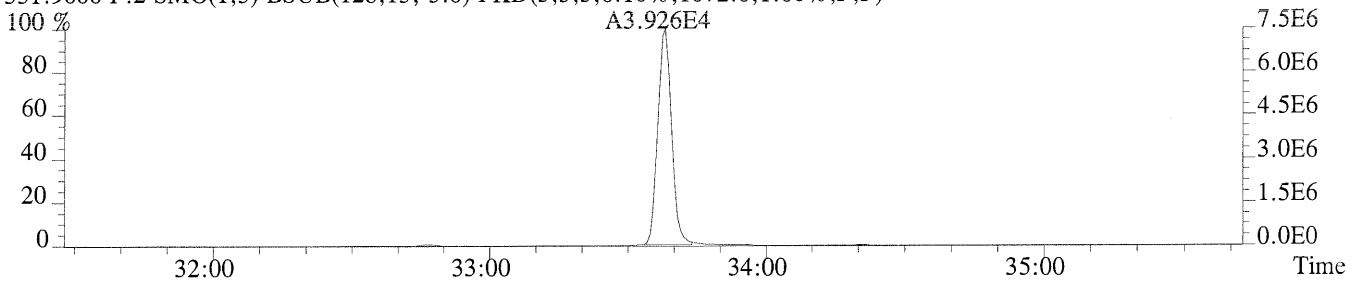
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3192.0,1.00%,F,F)



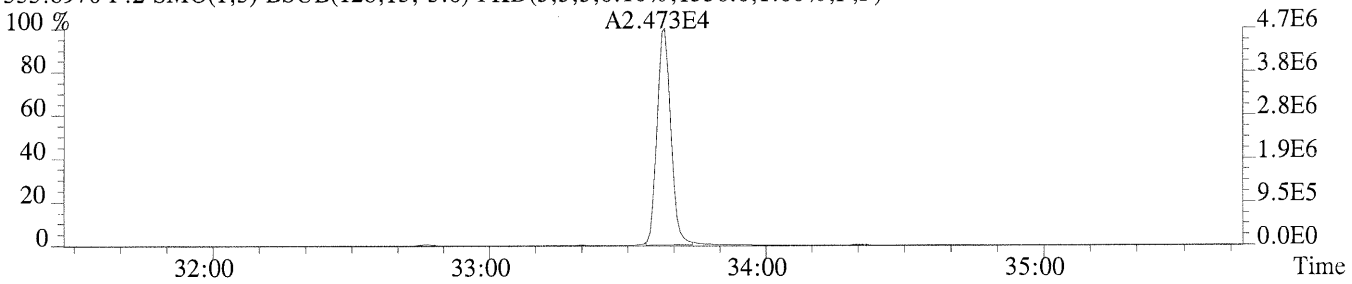
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2248.0,1.00%,F,F)



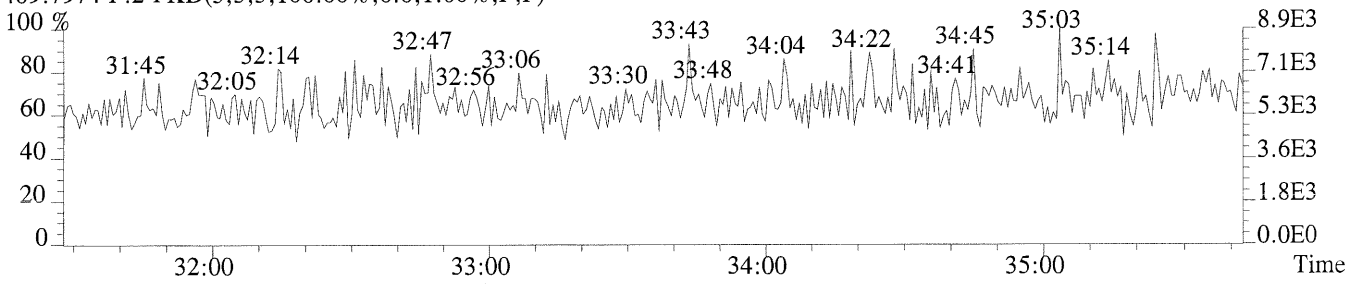
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1072.0,1.00%,F,F)



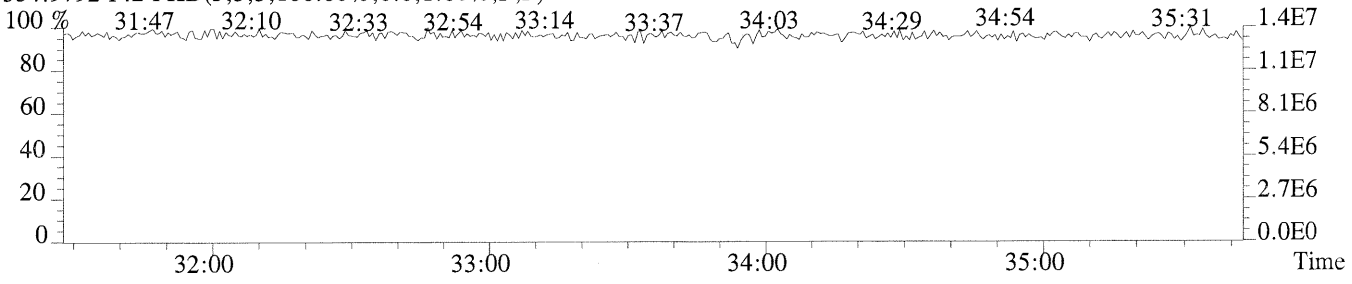
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1336.0,1.00%,F,F)



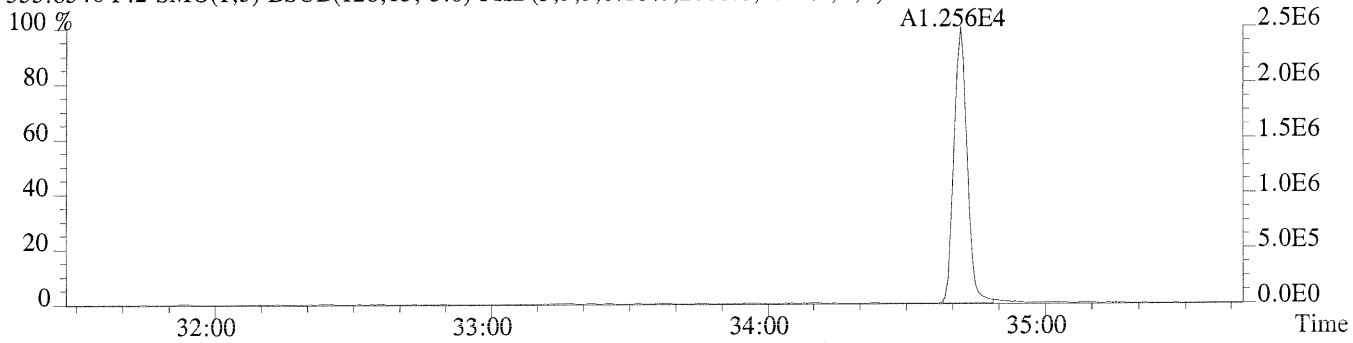
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



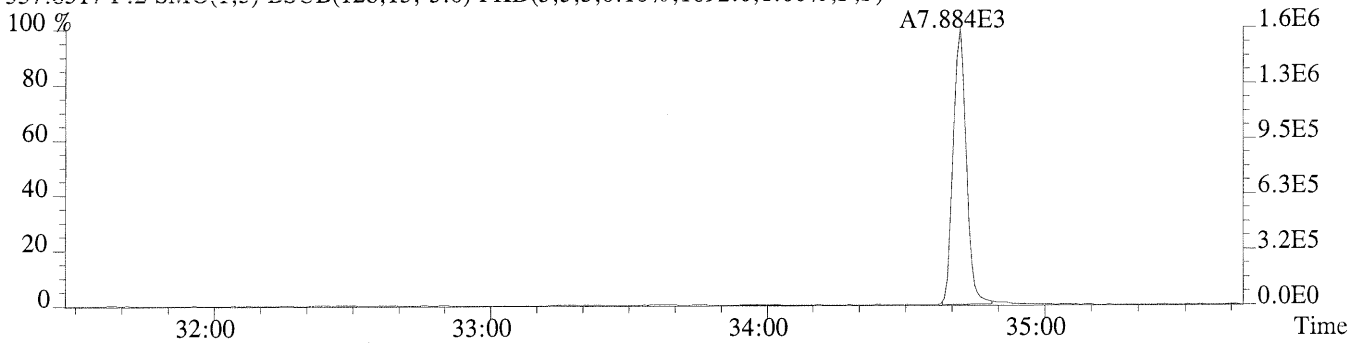
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



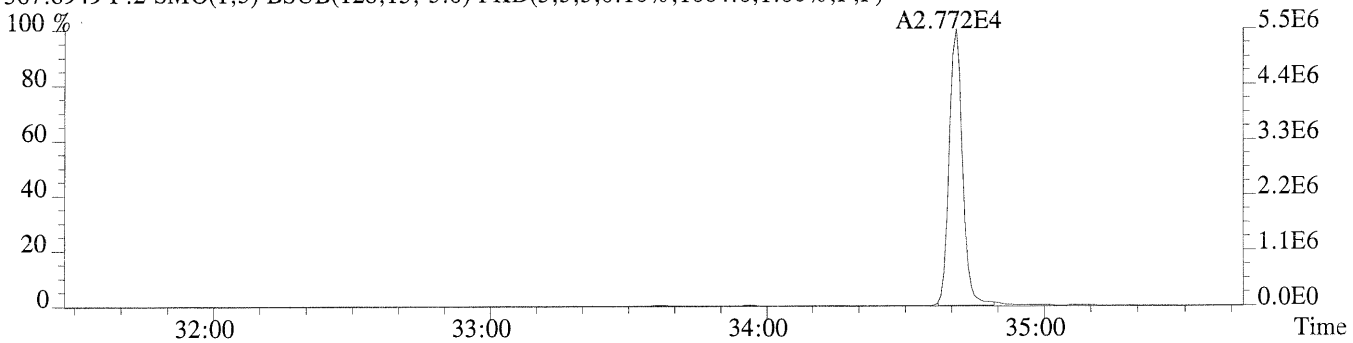
File:P100172 #1-386 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2888.0,1.00%,F,F)



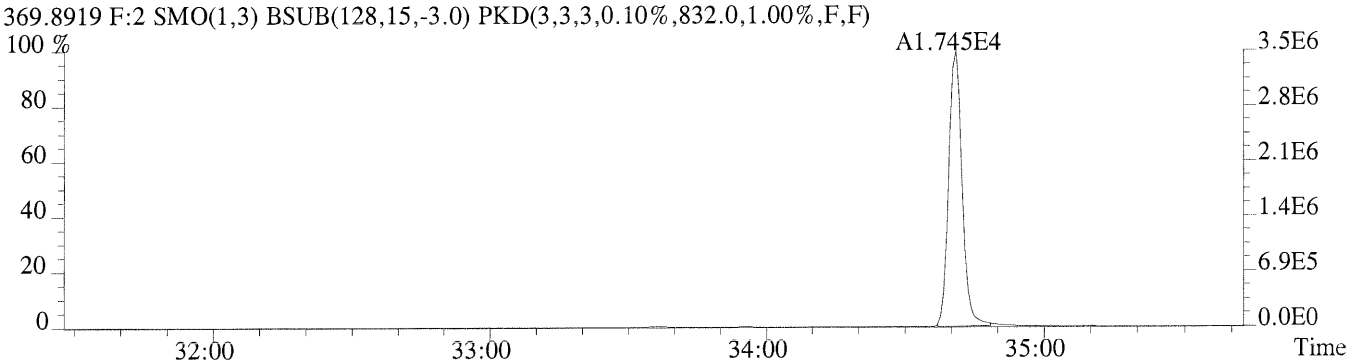
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1692.0,1.00%,F,F)



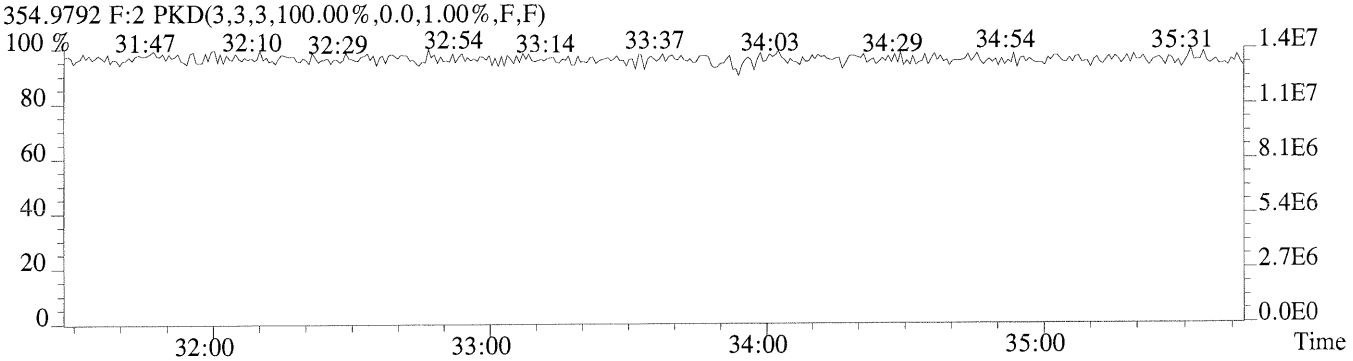
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1064.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,832.0,1.00%,F,F)

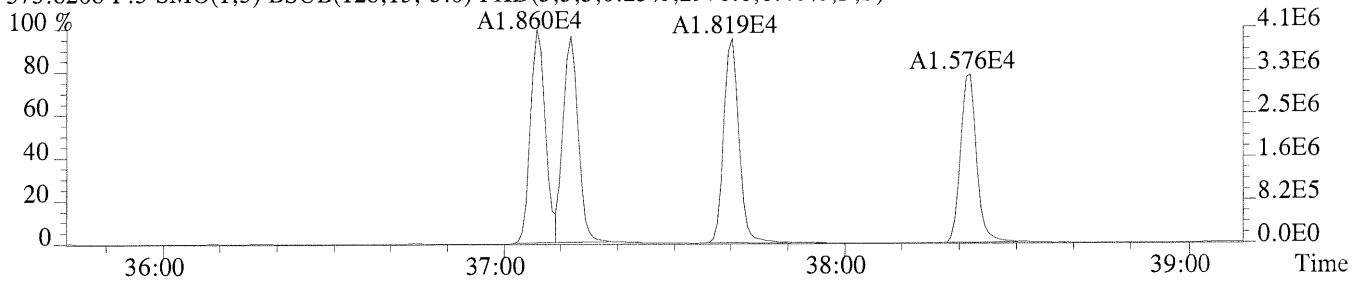


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

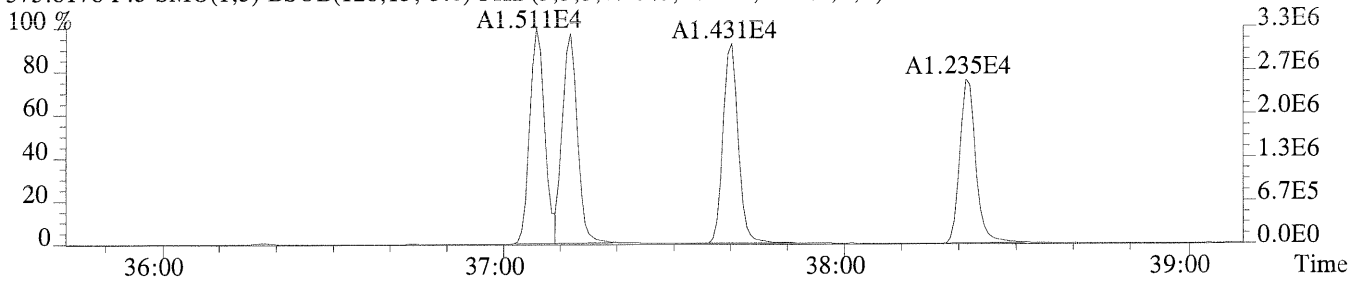


File:P100172 #1-313 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

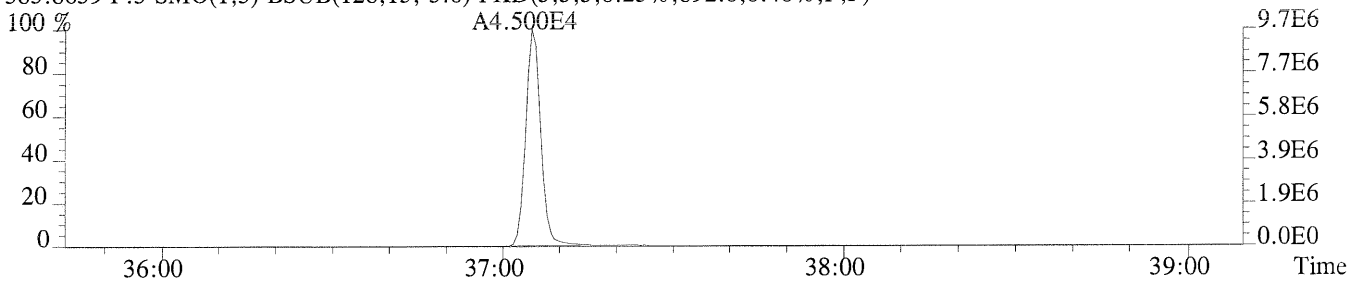
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2976.0,0.40%,F,F)



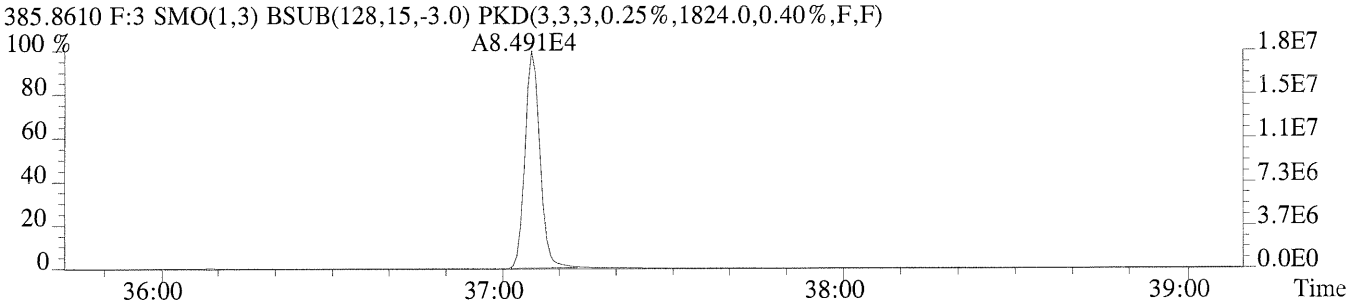
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2404.0,0.40%,F,F)



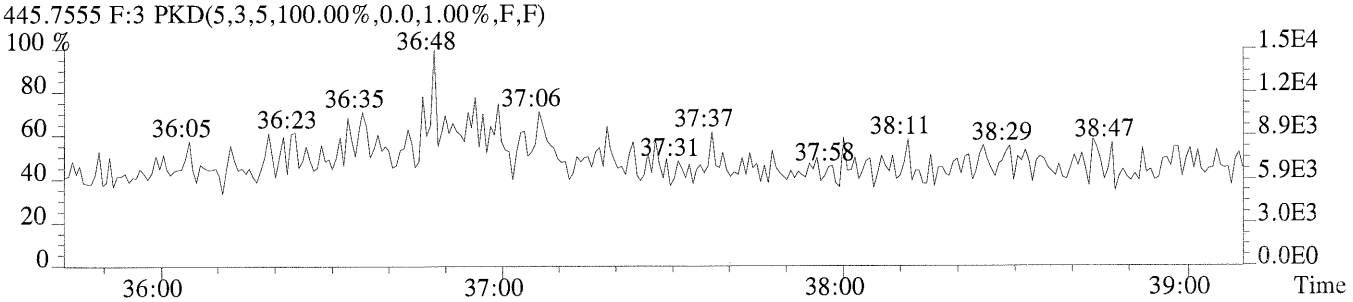
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,892.0,0.40%,F,F)



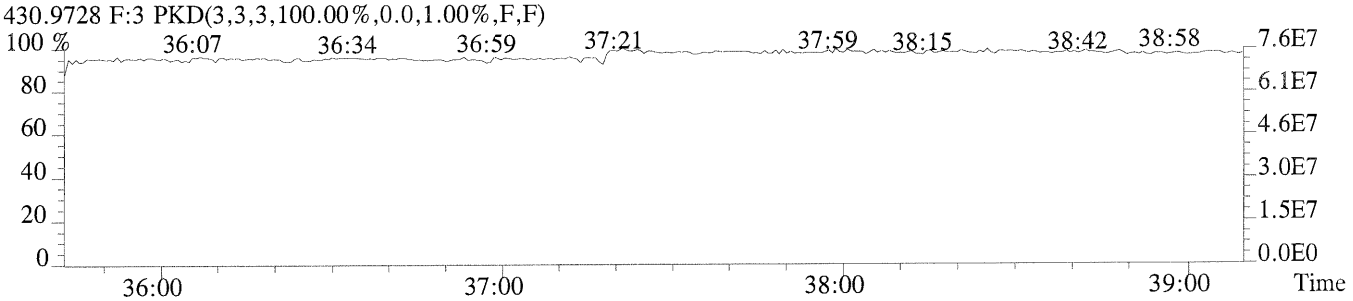
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1824.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

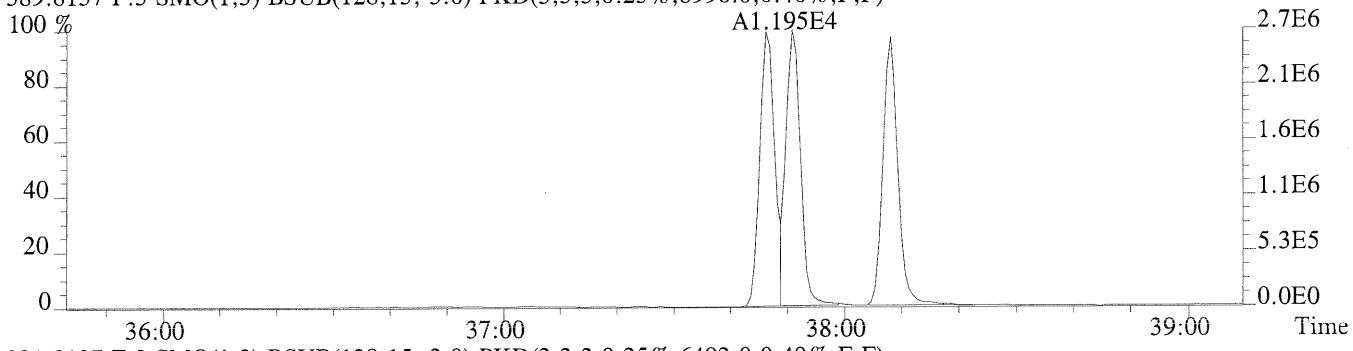


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

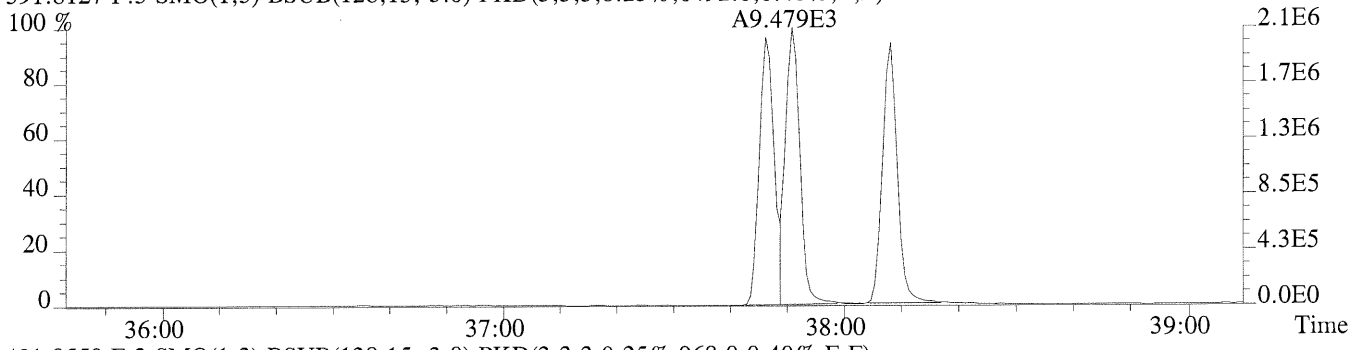


File:P100172 #1-313 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

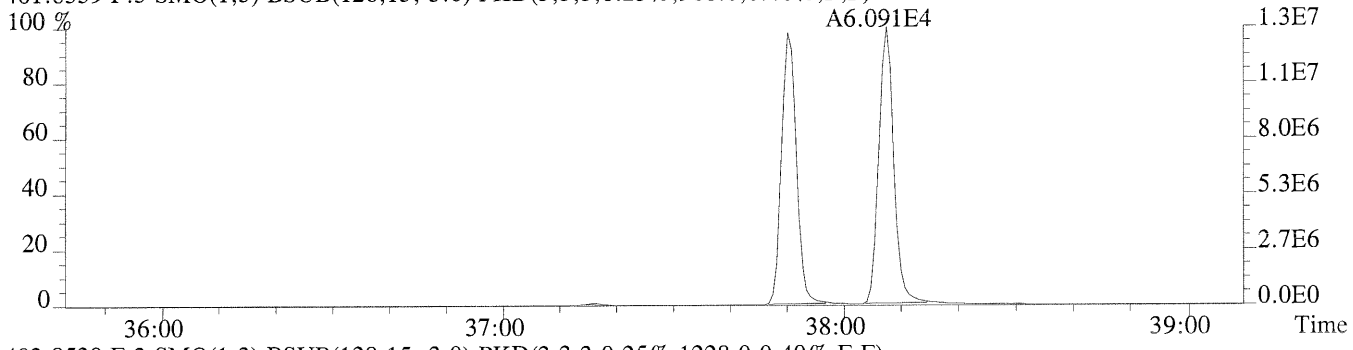
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,8996.0,0.40%,F,F)



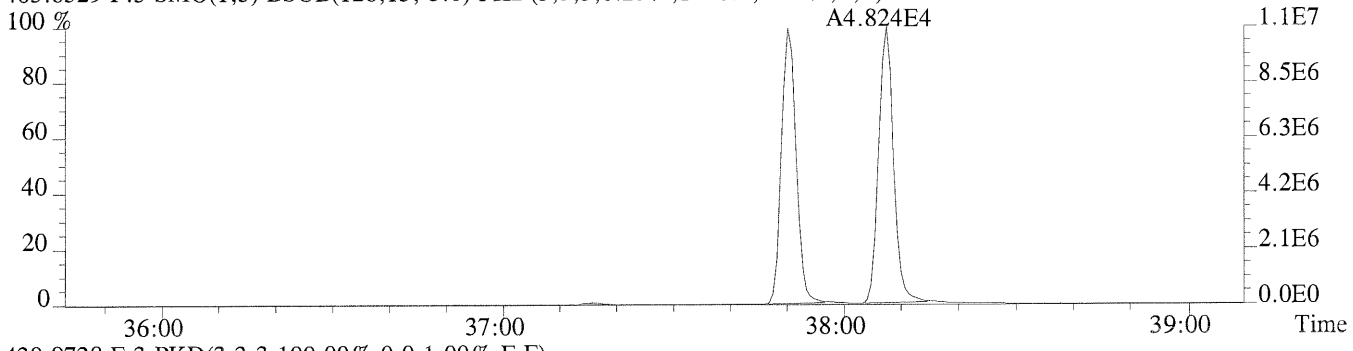
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,6492.0,0.40%,F,F)



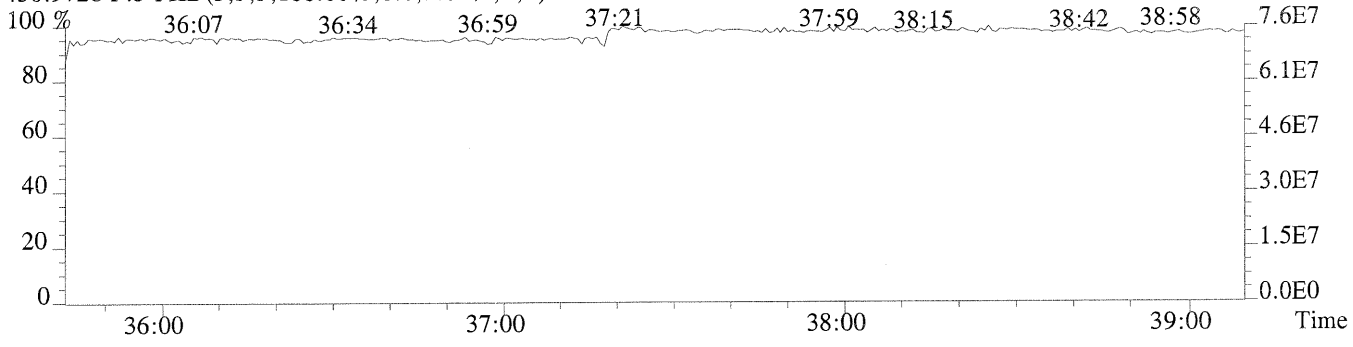
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,968.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1228.0,0.40%,F,F)

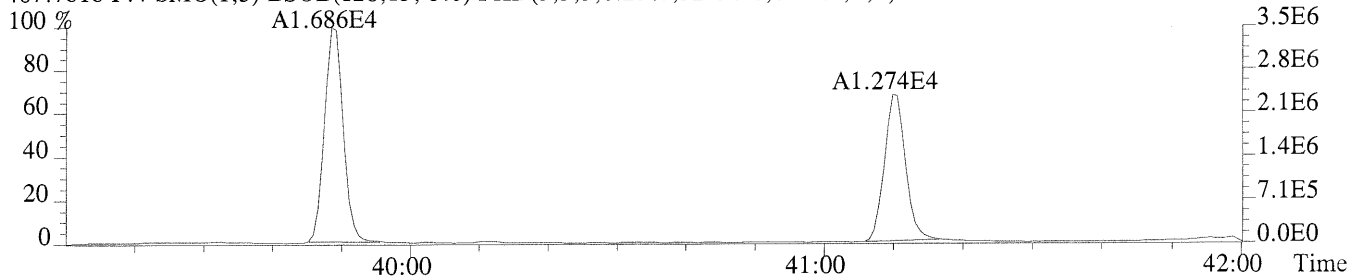


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

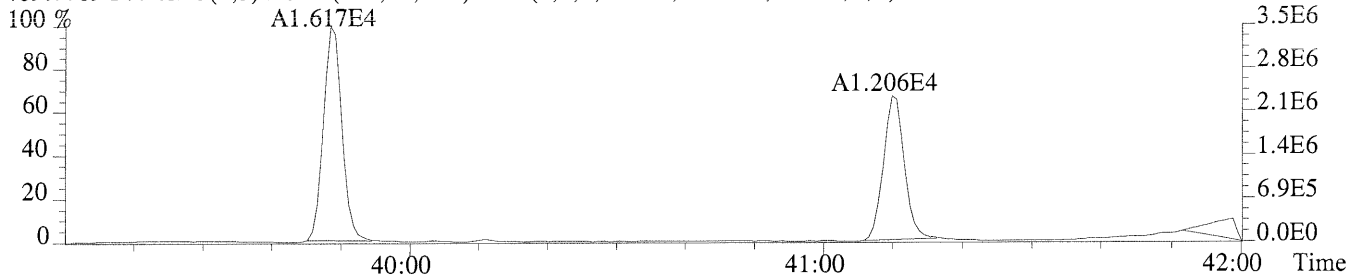


File:P100172 #1-258 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

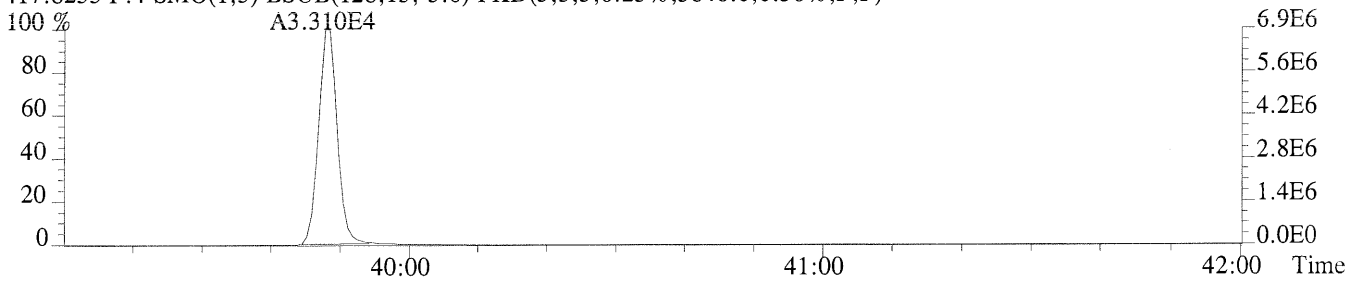
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,32796.0,0.50%,F,F)



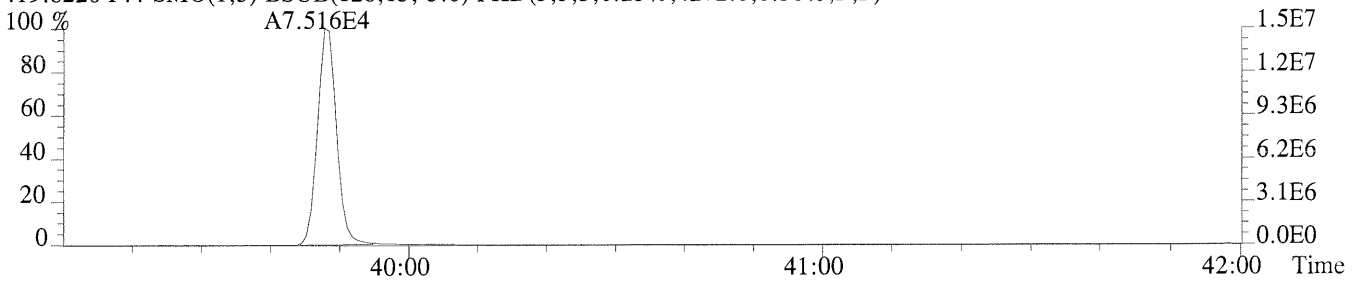
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,29176.0,0.50%,F,F)



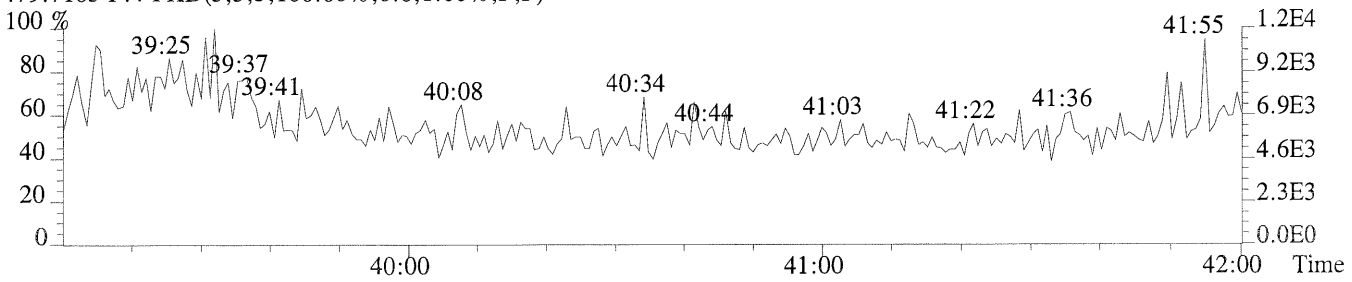
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3848.0,0.50%,F,F)



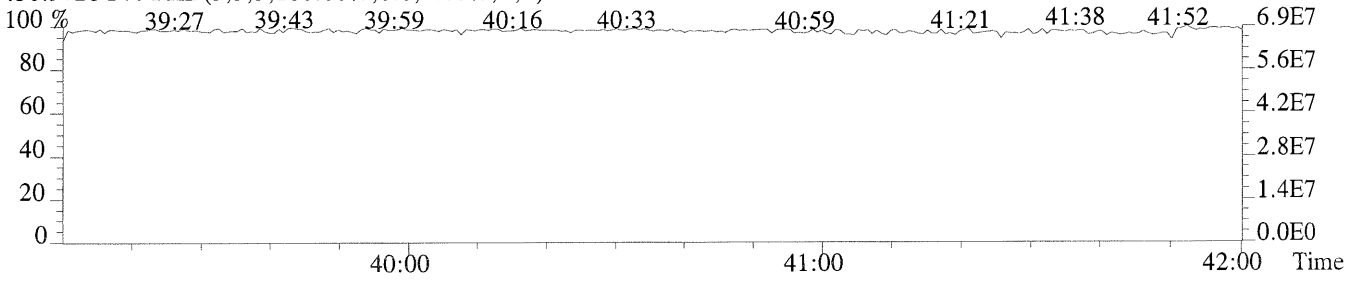
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4272.0,0.50%,F,F)



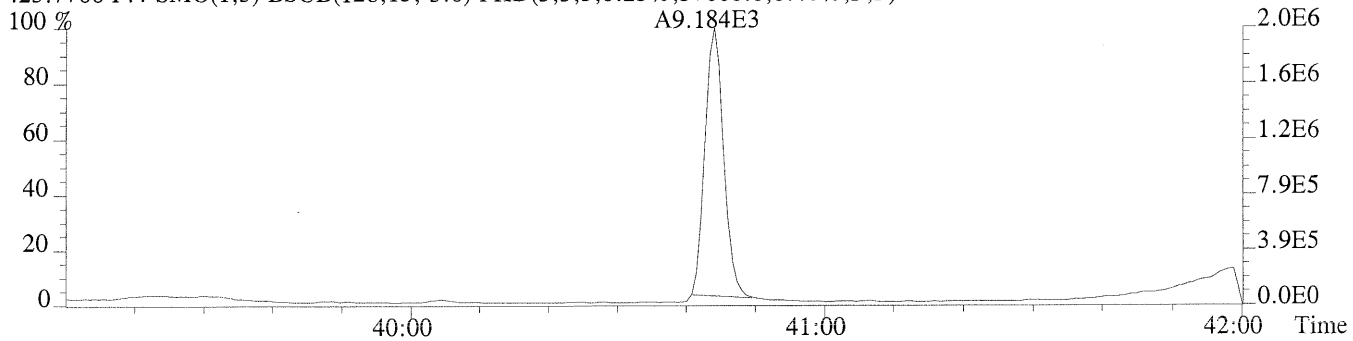
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



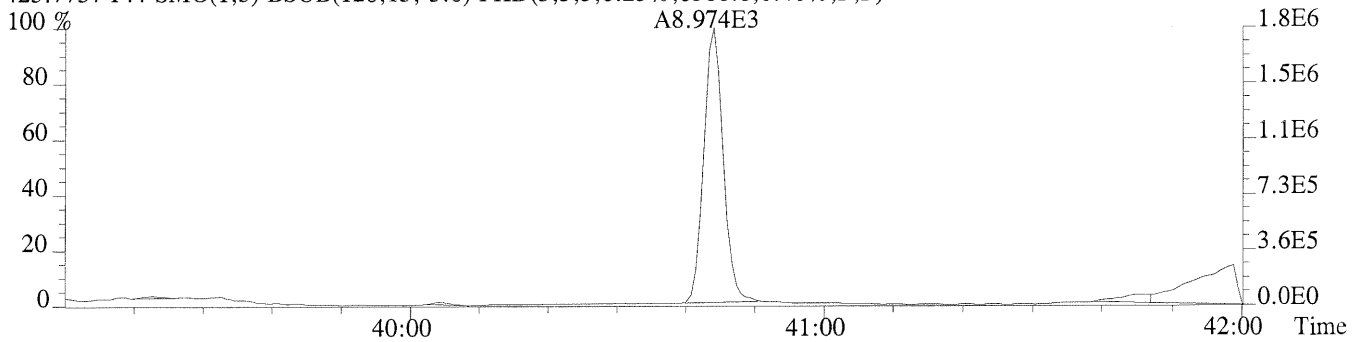
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



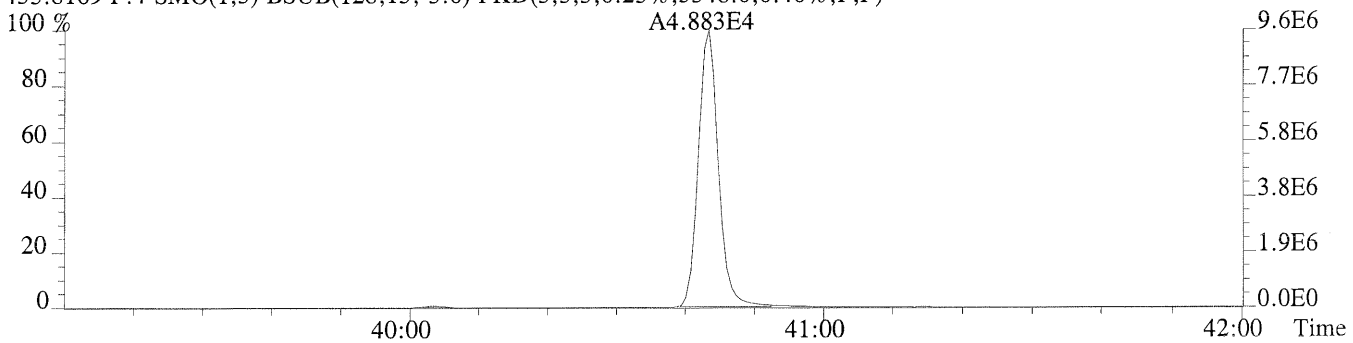
File:P100172 #1-258 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,57660.0,0.40%,F,F)



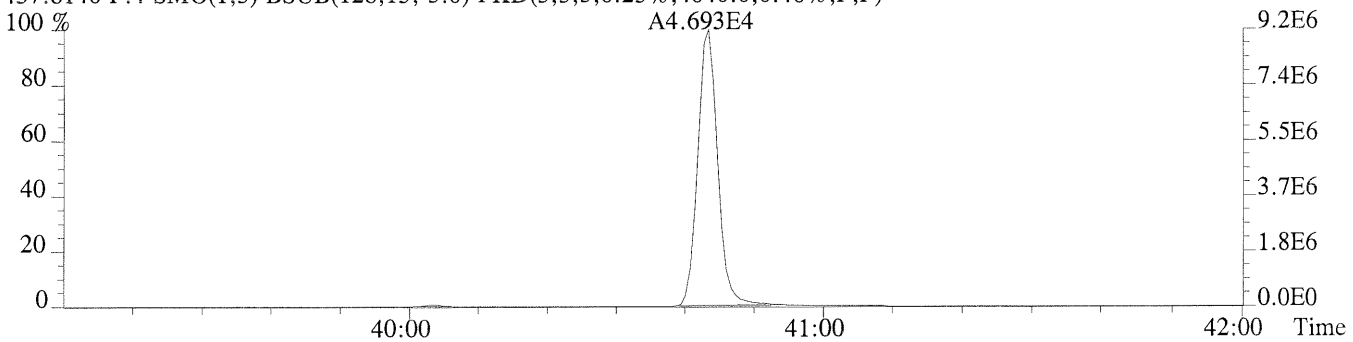
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,8588.0,0.40%,F,F)



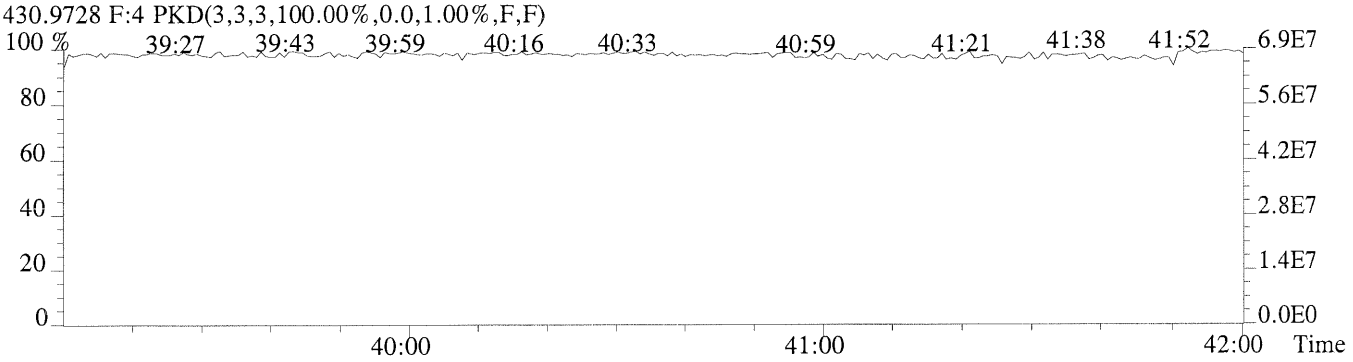
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5348.0,0.40%,F,F)



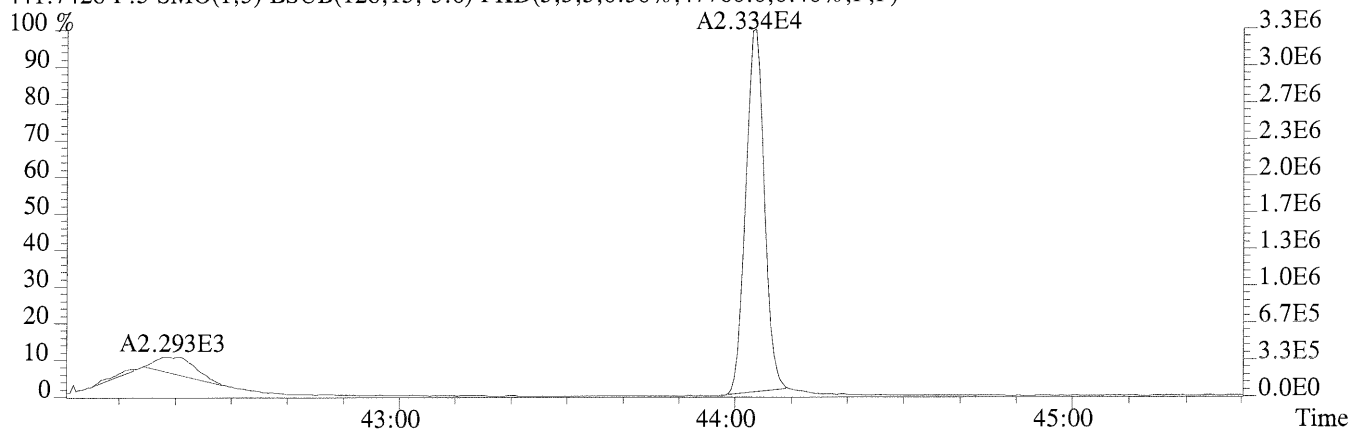
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4040.0,0.40%,F,F)



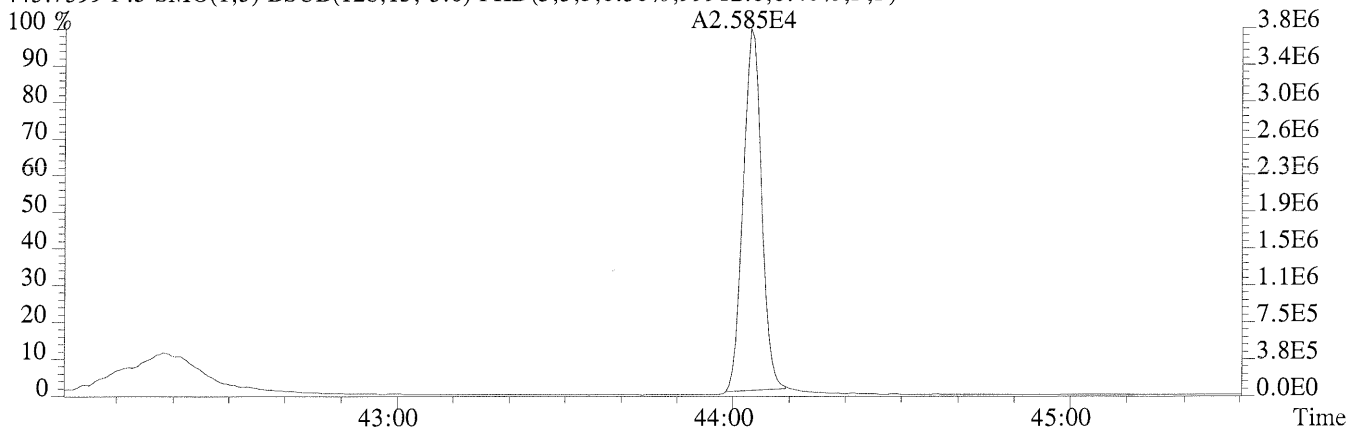
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



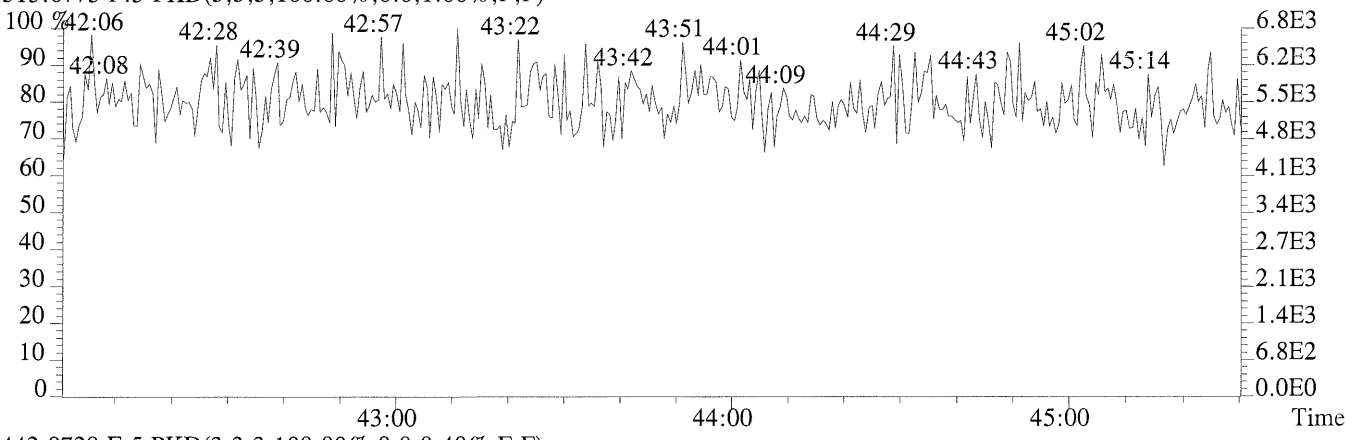
File:P100172 #1-386 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,47760.0,0.40%,F,F)



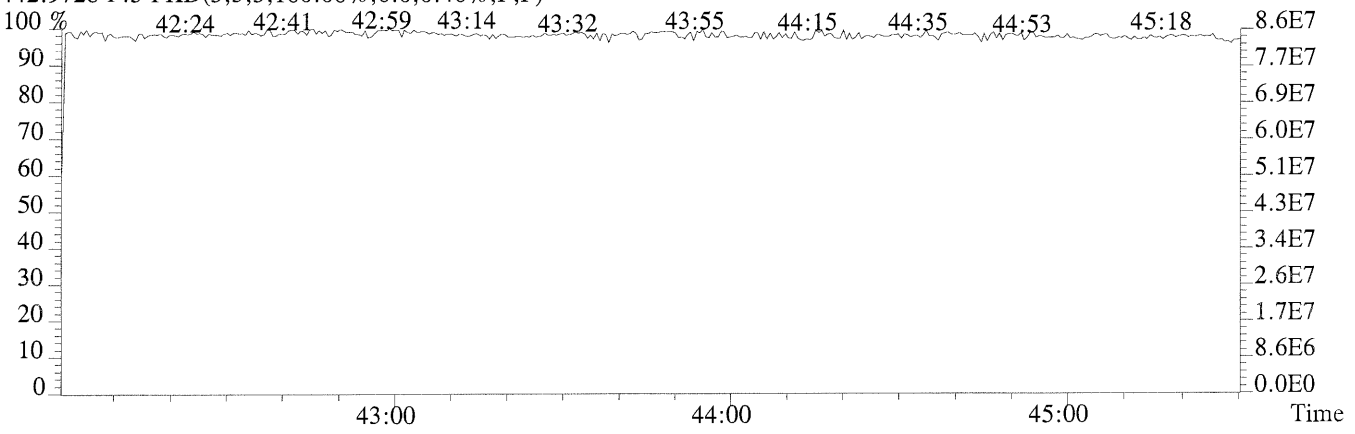
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,99912.0,0.40%,F,F)



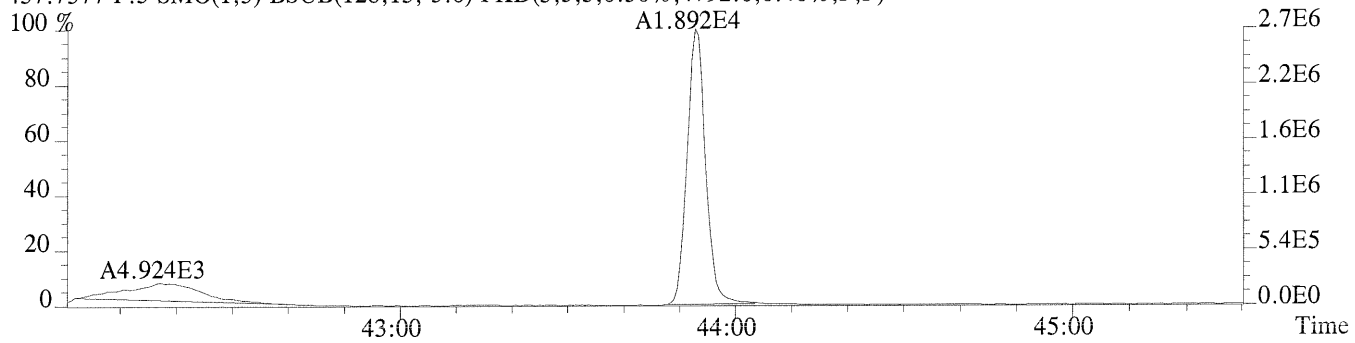
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



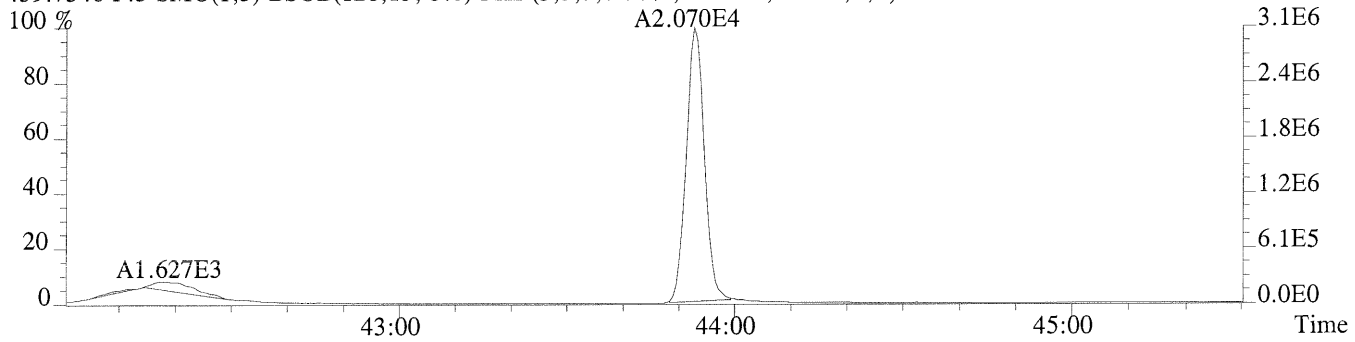
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



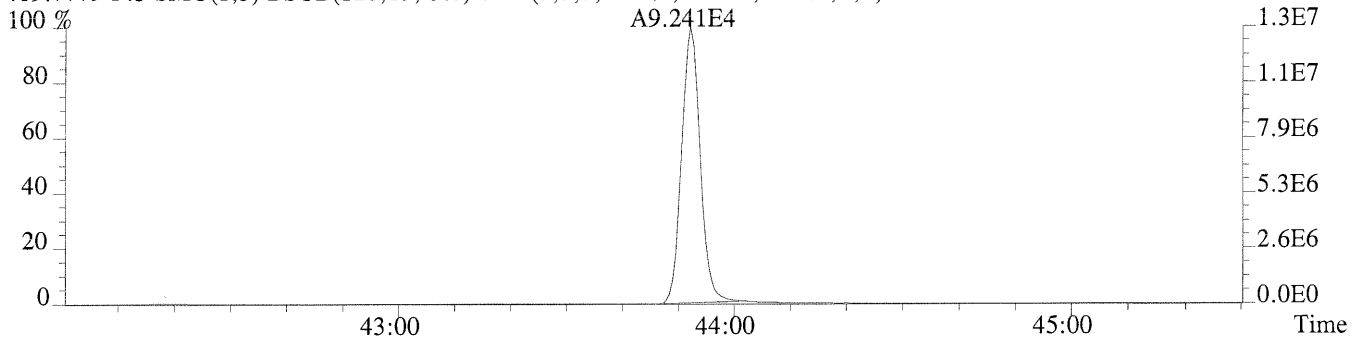
File:P100172 #1-386 Acq: 1-AUG-2008 17:47:40 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,4792.0,0.40%,F,F)



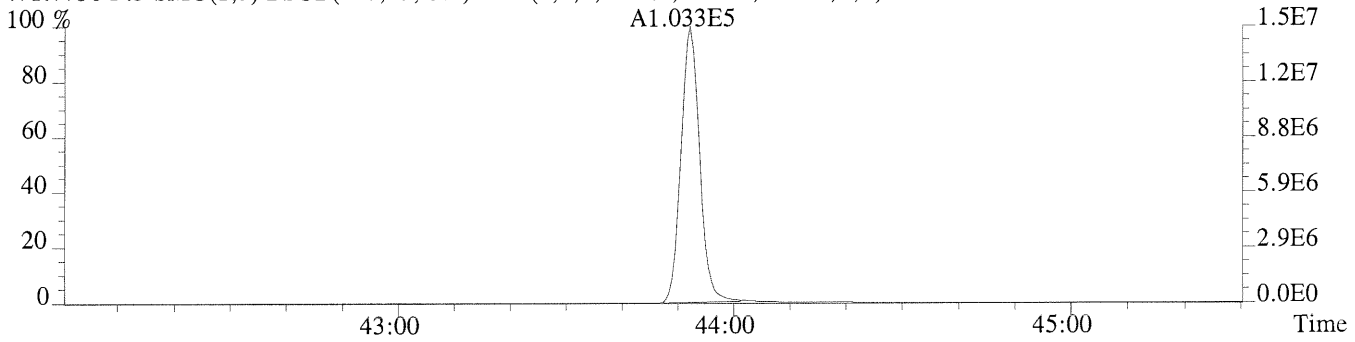
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,41796.0,0.40%,F,F)



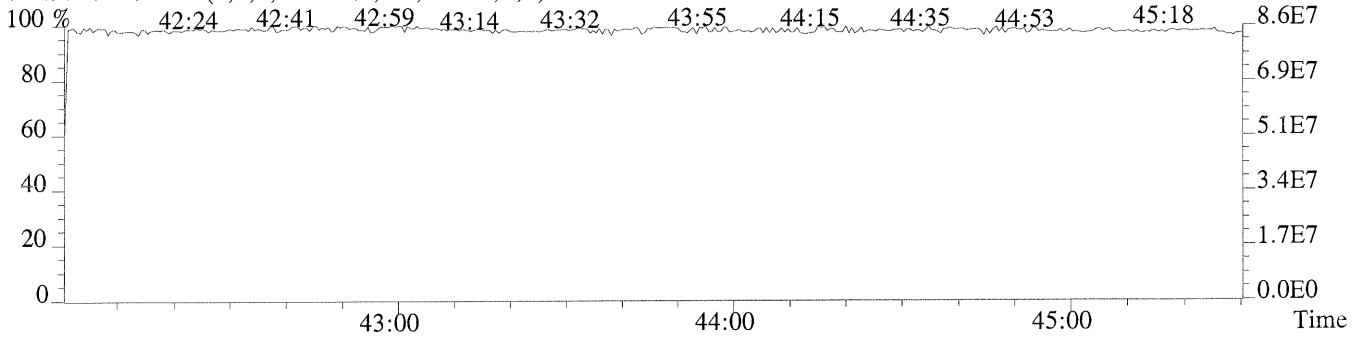
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,9744.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,3436.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



RW/ HRCC3 Daily Calibration QC Checklist

Calibration File Name: P200017/P200022 Circle one: Beginning / Ending

Date: 07/31/02

Method: 8290 / Tetra / TCDD Only / TCDF Conf

Retention Window/Column Performance Check:	**Analyst**	**Second Check**
Windows labeled for first and last eluting compounds	✓	✓
Column performance shows less than or equal to 25% valley between column specific 2378 isomer and the closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or the closest eluters	✓	✓

HRCC3 Continuing Calibration	Analyst	Second Check
Percent RSD within method criteria	use Avg	Avg
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
Signal-to-noise of all target analytes and associated labeled standards at least 2.5:1	✓	✓
Ending Calibration injected prior to end of 12 hour clock	✓	✓

Analyst: _____ Second QC: _____

8290 CCALQC 03/23/04

CAS HOUSTON INC.

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: Columbia Analytical Services, Houston Contract:

Lab Code: CAS Episode No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Premier

Init. Calib. Date: 08/01/08

Init. Calib.Times: 14:25

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, SPIKES AND DUPLICATES IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		P200016	31-JUL-08	07:04:08
CCAL HRCC3		P200017	31-JUL-08	07:59:44
METHOD BLANK	EQ0800314-01	P200018	31-JUL-08	09:13:26
H-EB7162008	E0800703-002	P200019	31-JUL-08	09:59:19
H-EB7182008	E0800704-001	P200020	31-JUL-08	10:49:02
H-EB7172008	E0800705-001	P200021	31-JUL-08	11:37:38
INCGSBO10708	E0800715-001	P200022	31-JUL-08	12:30:30
INCHSBO10708	E0800715-002	P200023	31-JUL-08	13:30:06
INCGSB120708	E0800715-004	P200024	31-JUL-08	15:46:03
INCGSB120708 MS	EQ0800314-03	P200025	31-JUL-08	16:31:59
INCGSB120708 DMS	EQ0800314-04	P200026	31-JUL-08	17:32:21

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services, Inc.
An Employee Owned Company

Acq Method: 8290CB/1613
GC Method: 8290CB/1613

Result File: P200117CAL.RES
EDD File:

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
		P200015						
		P200016	HRMS Check					
07/31/08	06:57		HRMS Check					
	07:04	P200016	Window Defin	DF-80-2				
	07:54	P200017	CCAL HRGC	DB-5 DB-2-22				
	09:13	P200018	EQ080314-01	Method Blank				
		P200017		no 08/04/08				
		P200018						
	09:59	P200019	EQ08 EQ80708-002		HFB 7162008			
	10:49	P200020	EQ80704-001		HFB 7182008			
	11:32	P200021	EQ80705-001		HFB 7192008			
	12:36	P200022	EQ80715-001		INCGSB1207CS			
	13:26	P200023	-002		INCHSB1207CS			
	15:46	P200024	-004		INCGSB1207CS HFB 7162008			
	16:31	P200025	EQ080314-03		INCGSB1207CSMS		INCGSB1207CS	
	17:32	P200026	EQ080714-04		DMS			

Reviewed by:

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services, Inc.
An Employee Owned Company

Acq Method: 8290CS/1613 Result File: PSCP200036.RES
GC Method: 8290CS/1613 EDD File: F_P080018290I

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
07/31/08	18:42	P200027	CCAL HRCC3	DS-2-2A			Use Avg	
07/31/08	18:41		HRMS Check					
08/01/08	~~14:22~~	w05/01/08						
	07:25	P200028	Window Define					
	08:11	P200029	CCAL HRCC3	DS-2-2A			14:22 HRMS Check	
	14:25	P200030	Window Define	DS-49-2				
	15:21	P200031	ICAL HRCC3	DS-2-2A				
	16:23	P200032	ICAL HRCC2	DS-49-4				
	17:11	P200033	ICAL HRCC1	DS-49-5				
	18:16	P200034	ICAL HRCC4	DS-49-2				
	19:02	P200035	ICAL HRCC5	DS-49-1				
		P200036	HRCC3 CSL	w 05/01/08			19:57 HRMS Check	
	19:57		HRMS Check				08:58 ↓	
08/01/08	~~08:58~~						P200036 HRCC3 CSL-DS-6H	
		P200037	Window Define					
		P200038	CCAL HRCC3					

Reviewed by:

Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Thursday, July 31, 2008 06:57:11 Central Daylight Time

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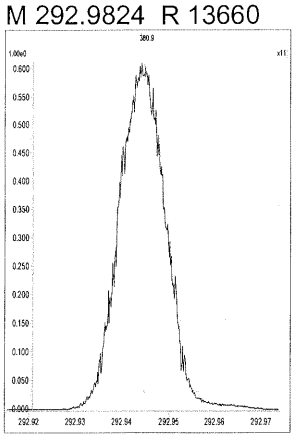
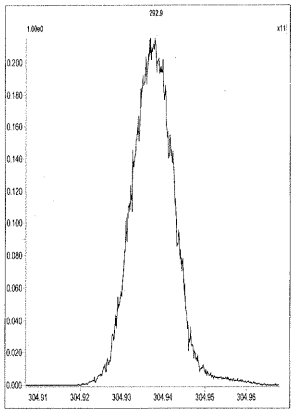
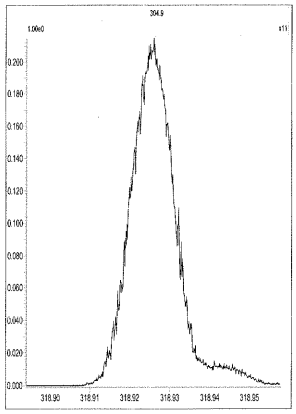


M 304.9824 R 13664



M 318.9792 R 11682



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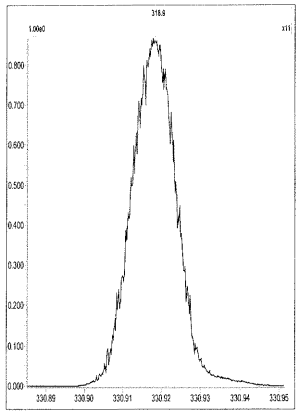

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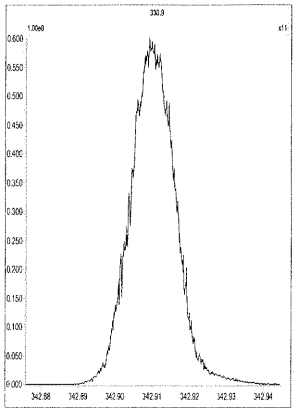
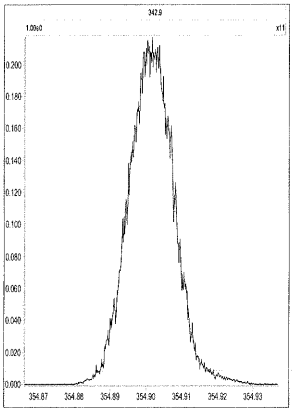


M 354.9792 R 12819



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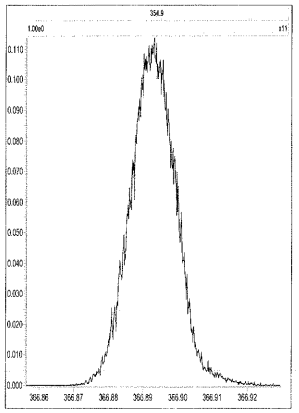
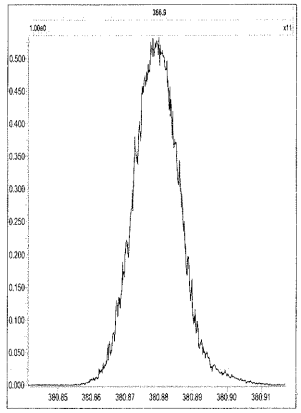


M 380.9760 R 11737



Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

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Printed: Thursday, July 31, 2008 18:41:05 Central Daylight Time

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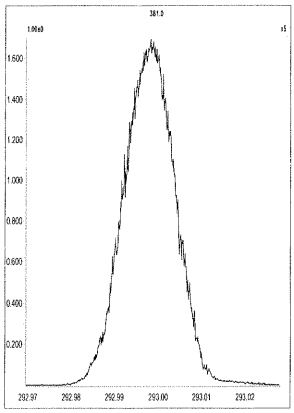
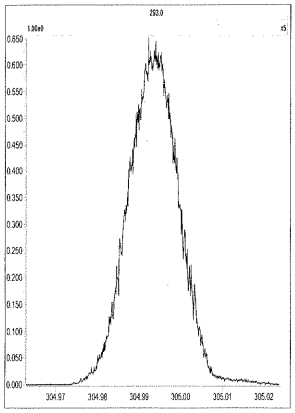
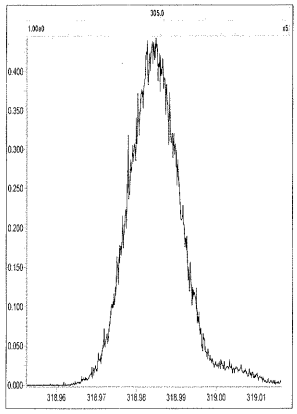


M 304.9824 R 11260



M 318.9792 R 10419



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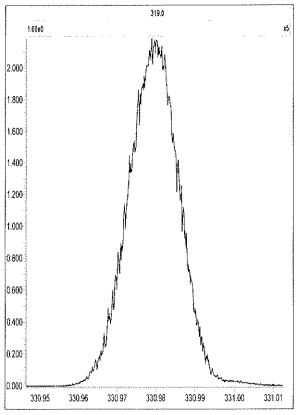
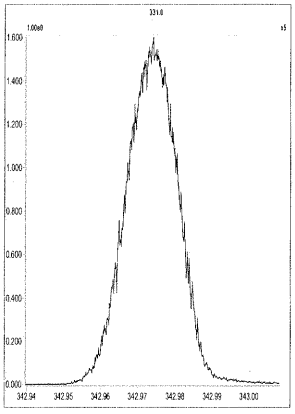


M 342.9792 R 11109



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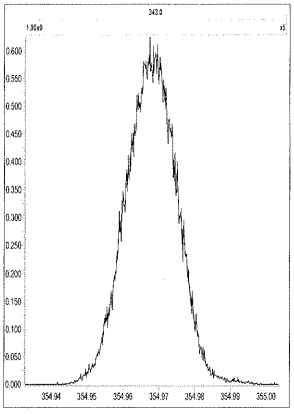
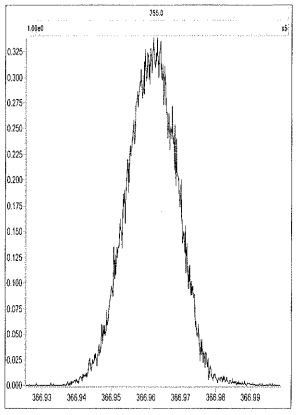
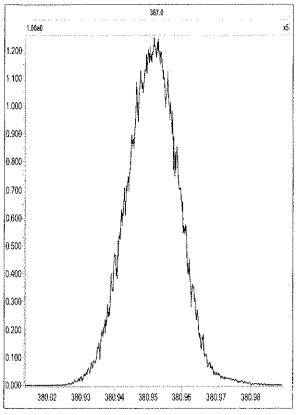


M 366.9792 R 10869



M 380.9760 R 10506



5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID:

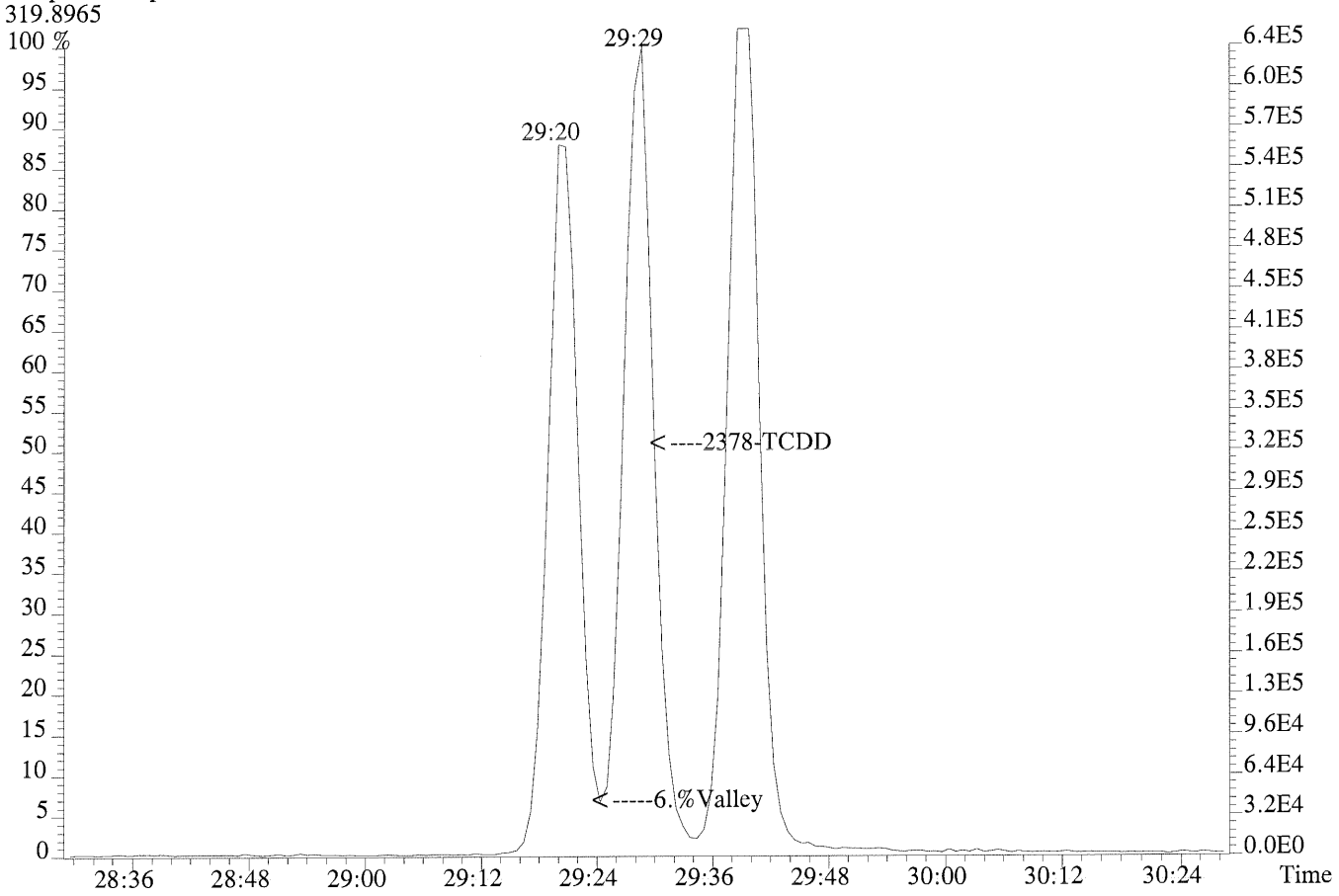
WDM

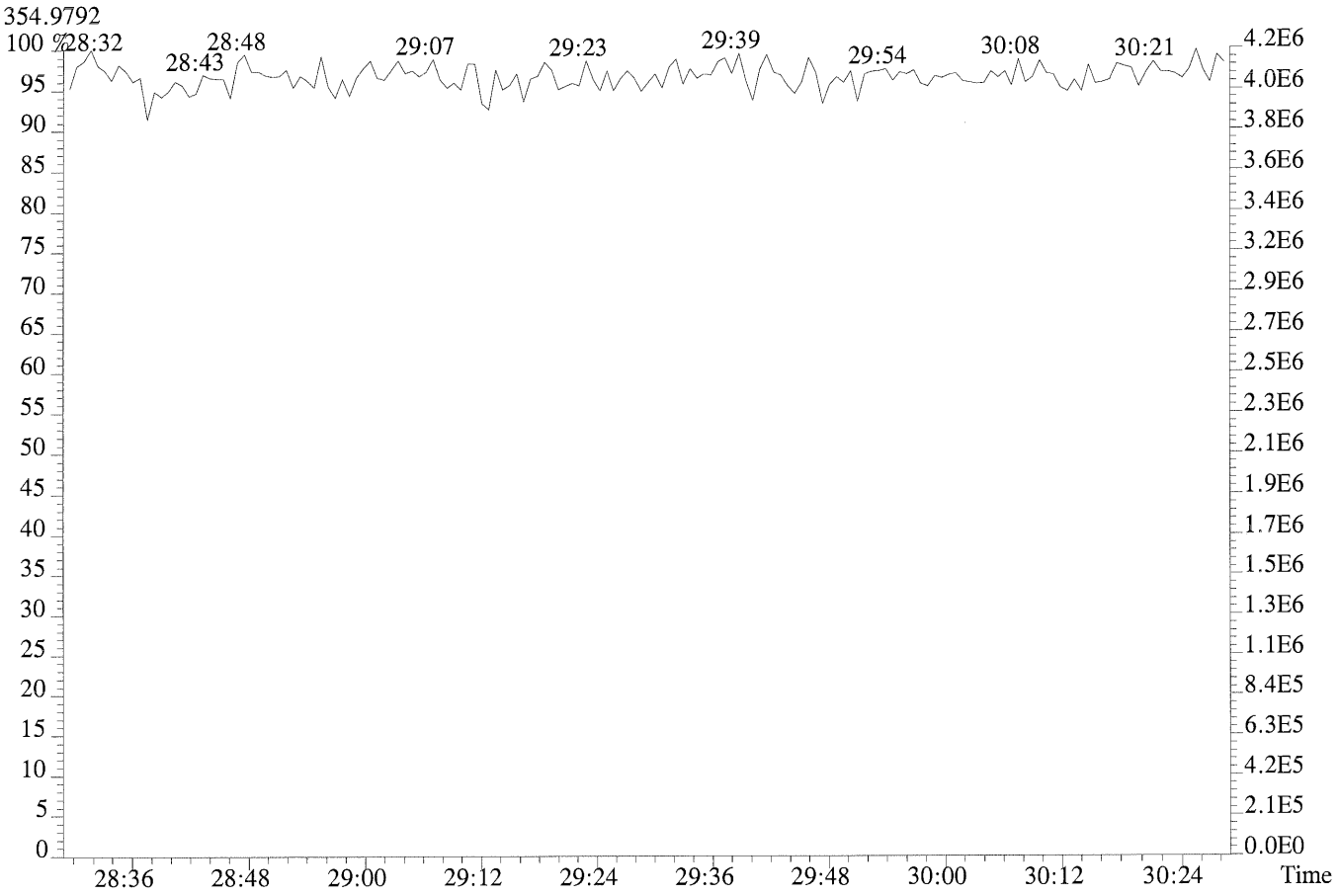
Lab Name: COLUMBIA ANALYTICAL SERVICES
Lab Code: CAS Case No.: _____ SDG No.:
GC Column: DB-5 ID: 0.25 (mm) Lab File ID: P200016
Date Analyzed: 31-JUL-2008
Time Analyzed: 07:04:08

Congener	Retention Time First Eluting	Retention Time Last Eluting
TCDF	24:37	30:36
TCDD	26:25	30:35
PeCDF	30:51	34:43
PeCDD	32:13	34:34
HxCDF	35:35	37:55
HxCDD	36:05	37:35
HpCDF	39:17	40:35
HpCDD	39:32	40:11

% Valley 2378-TCDD: 6. %

File:P200016 #1-575 Acq:31-JUL-2008 07:04:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:Window define





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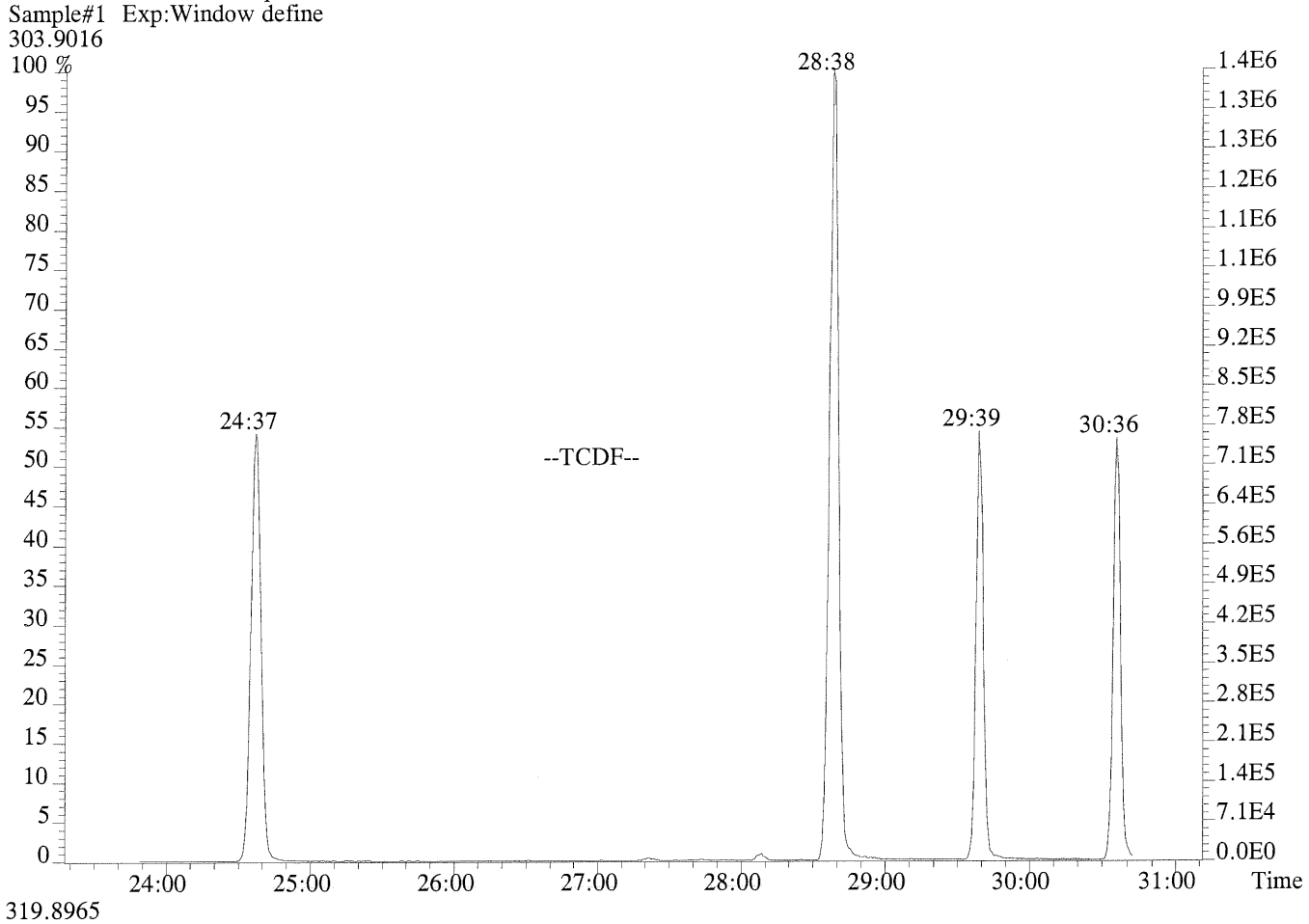

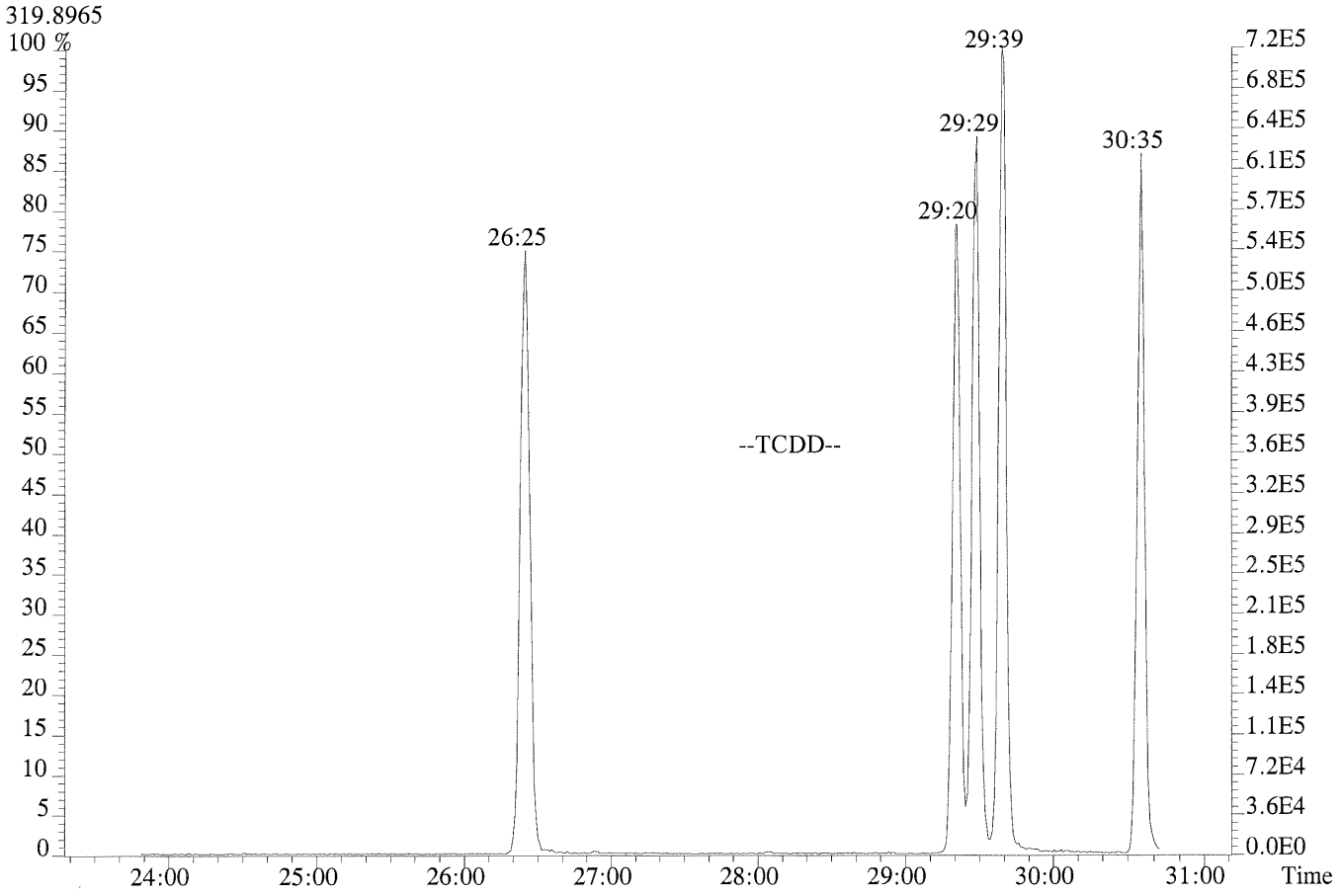

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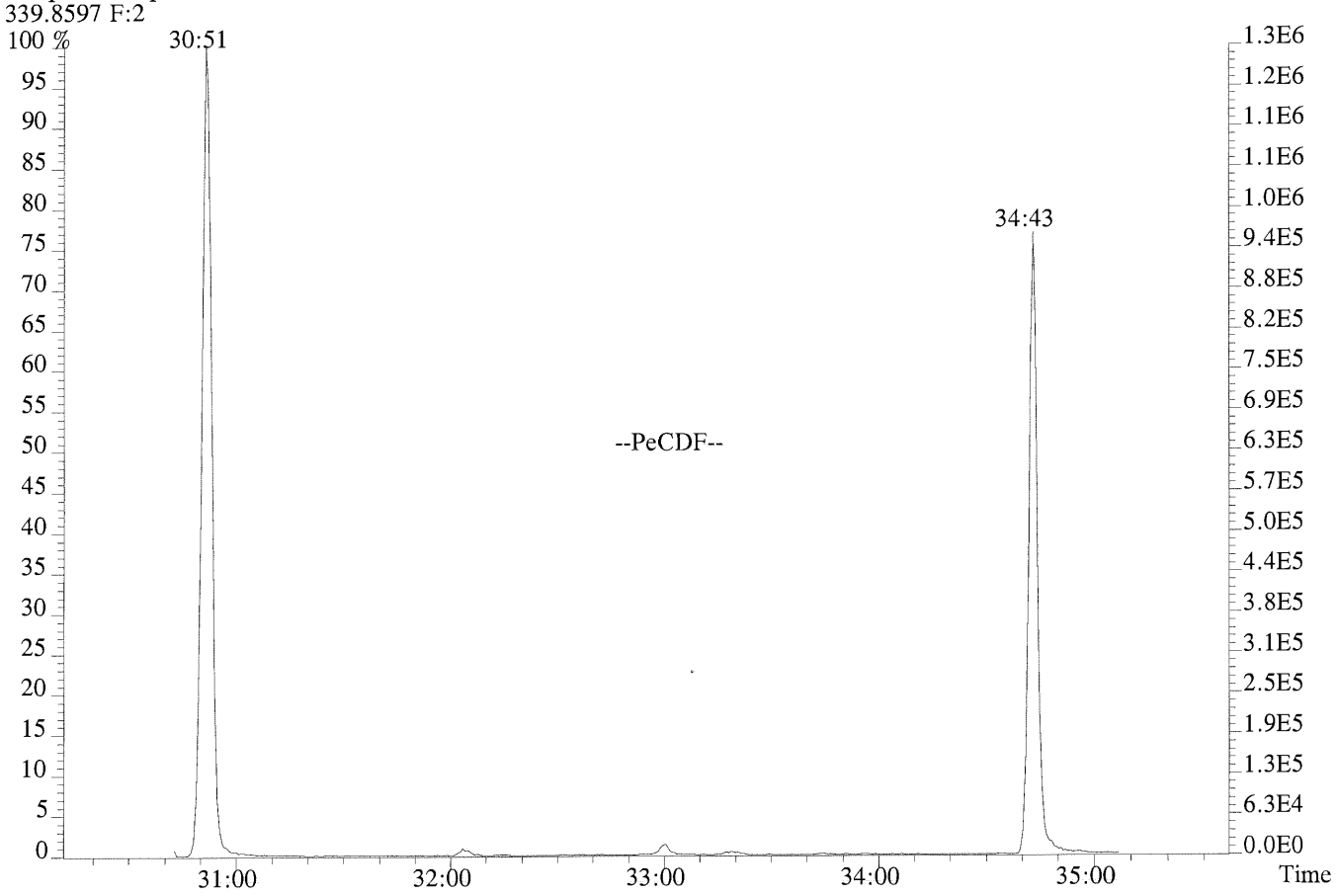
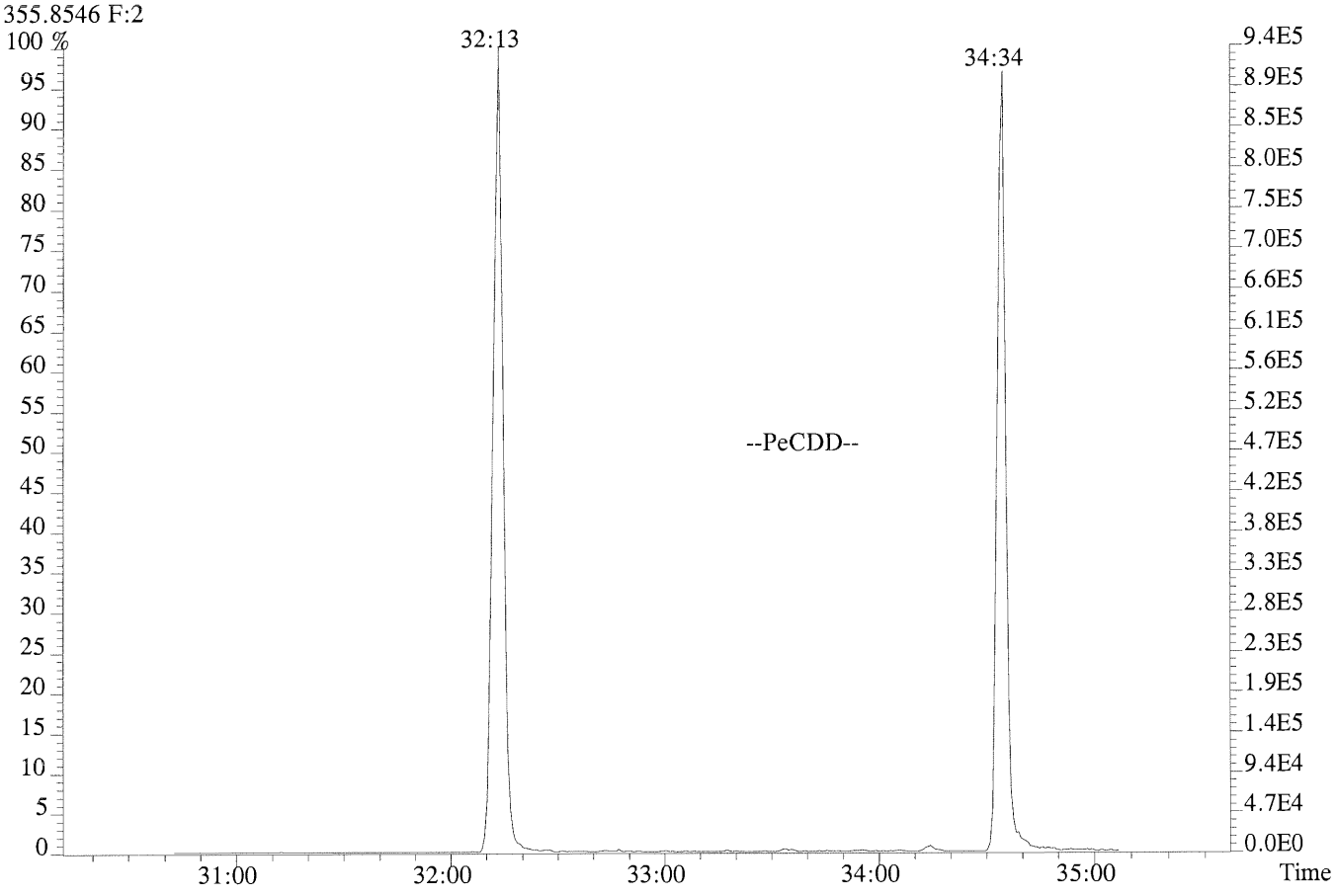


355.8546 F:2



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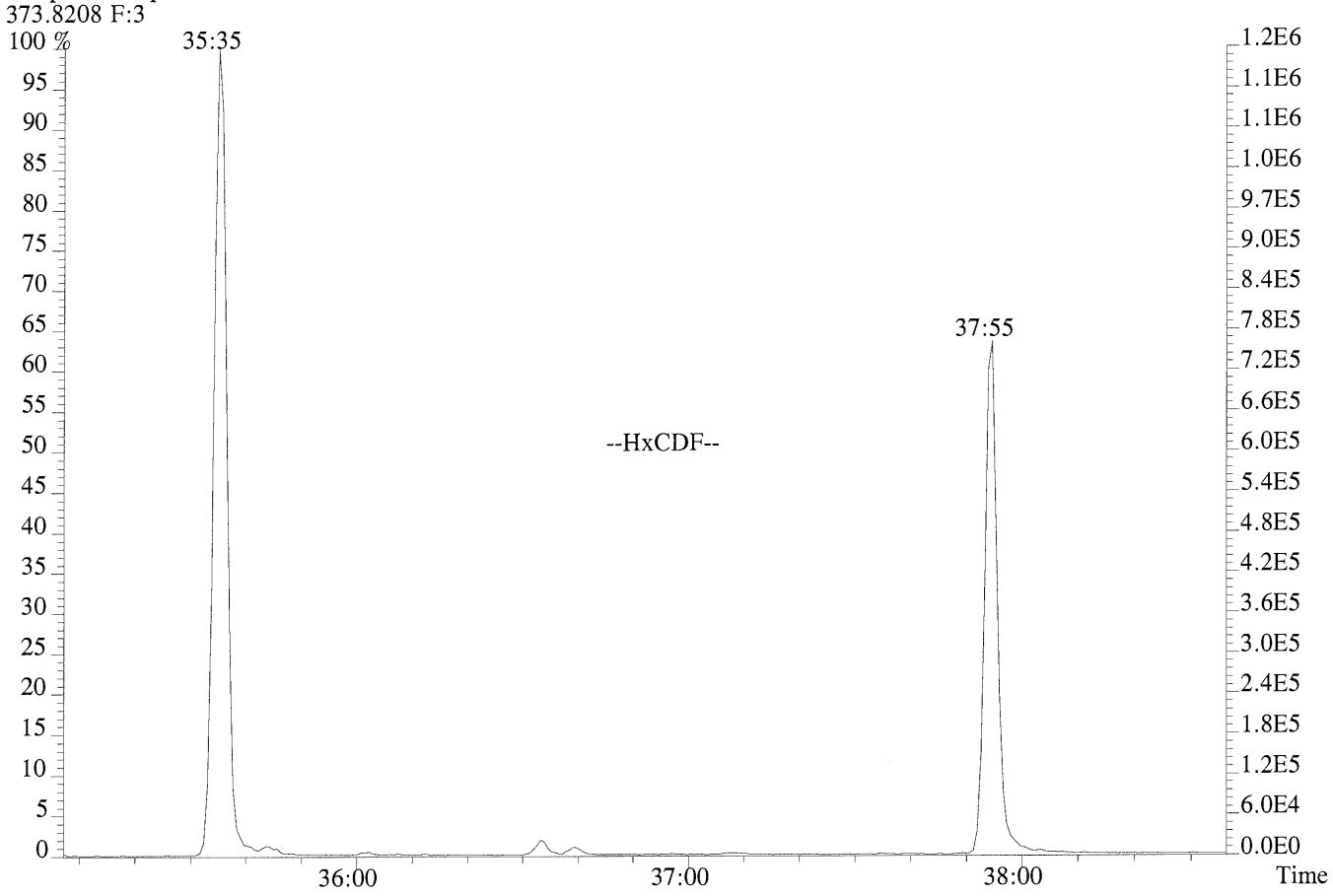
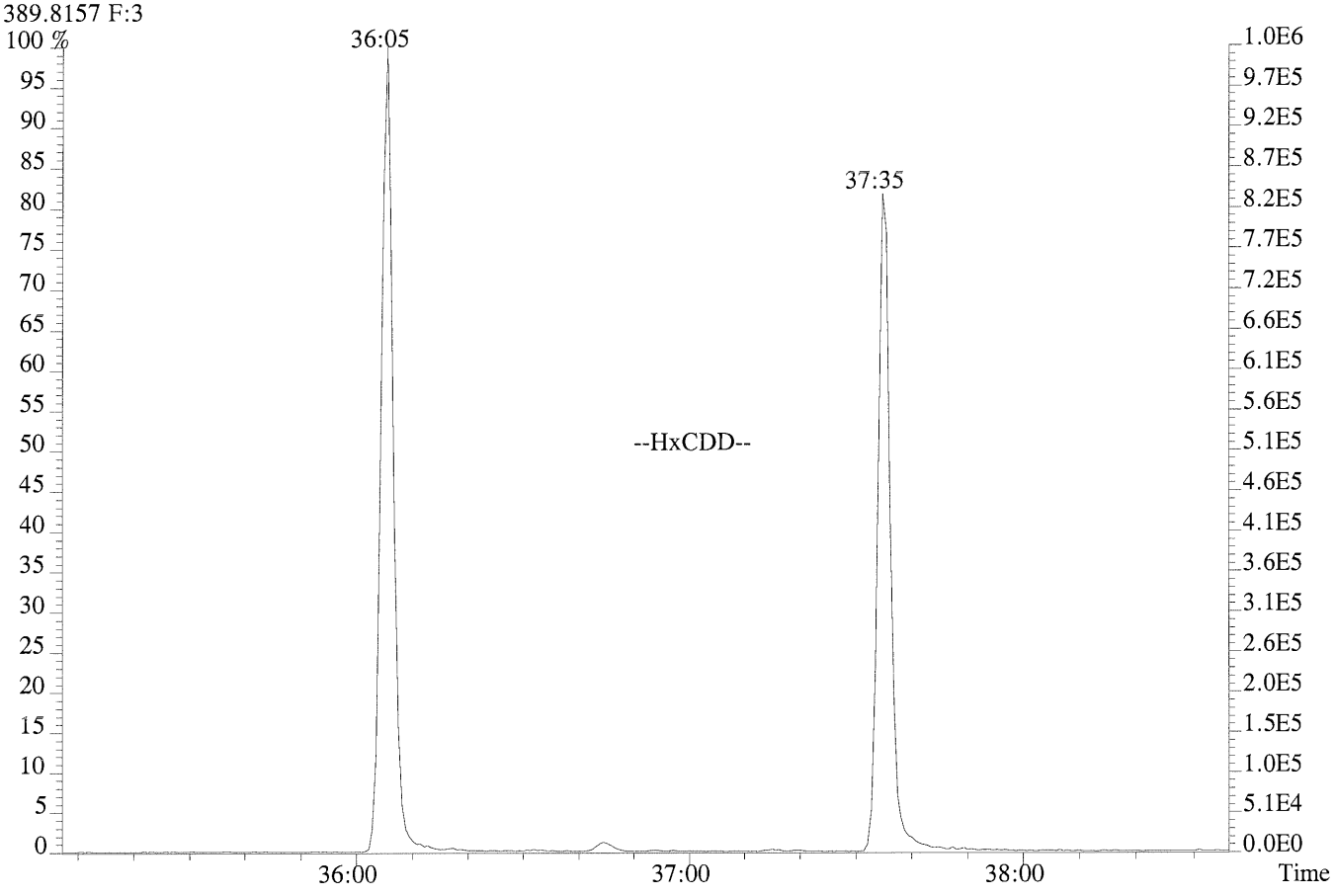


389.8157 F:3



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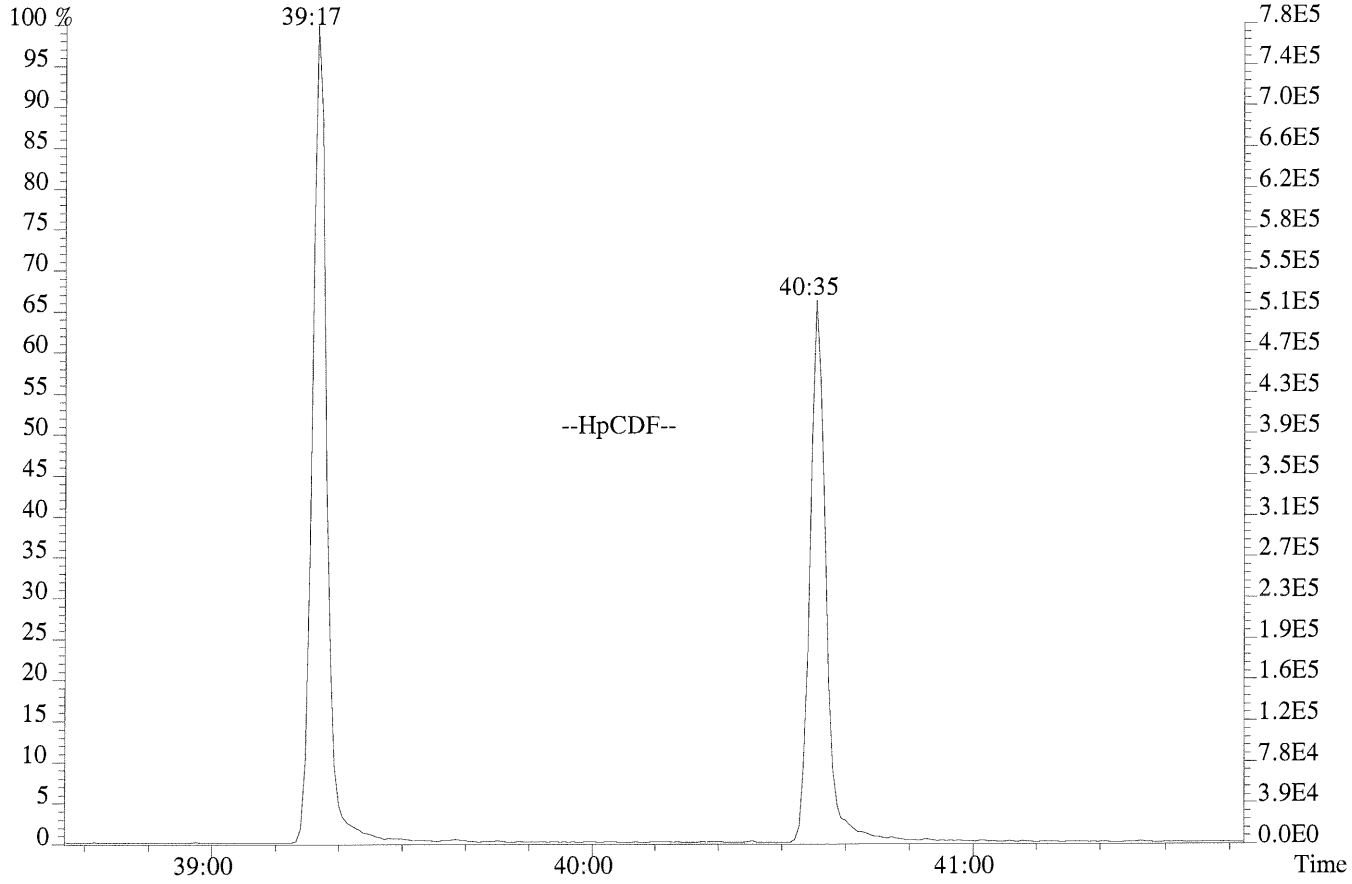
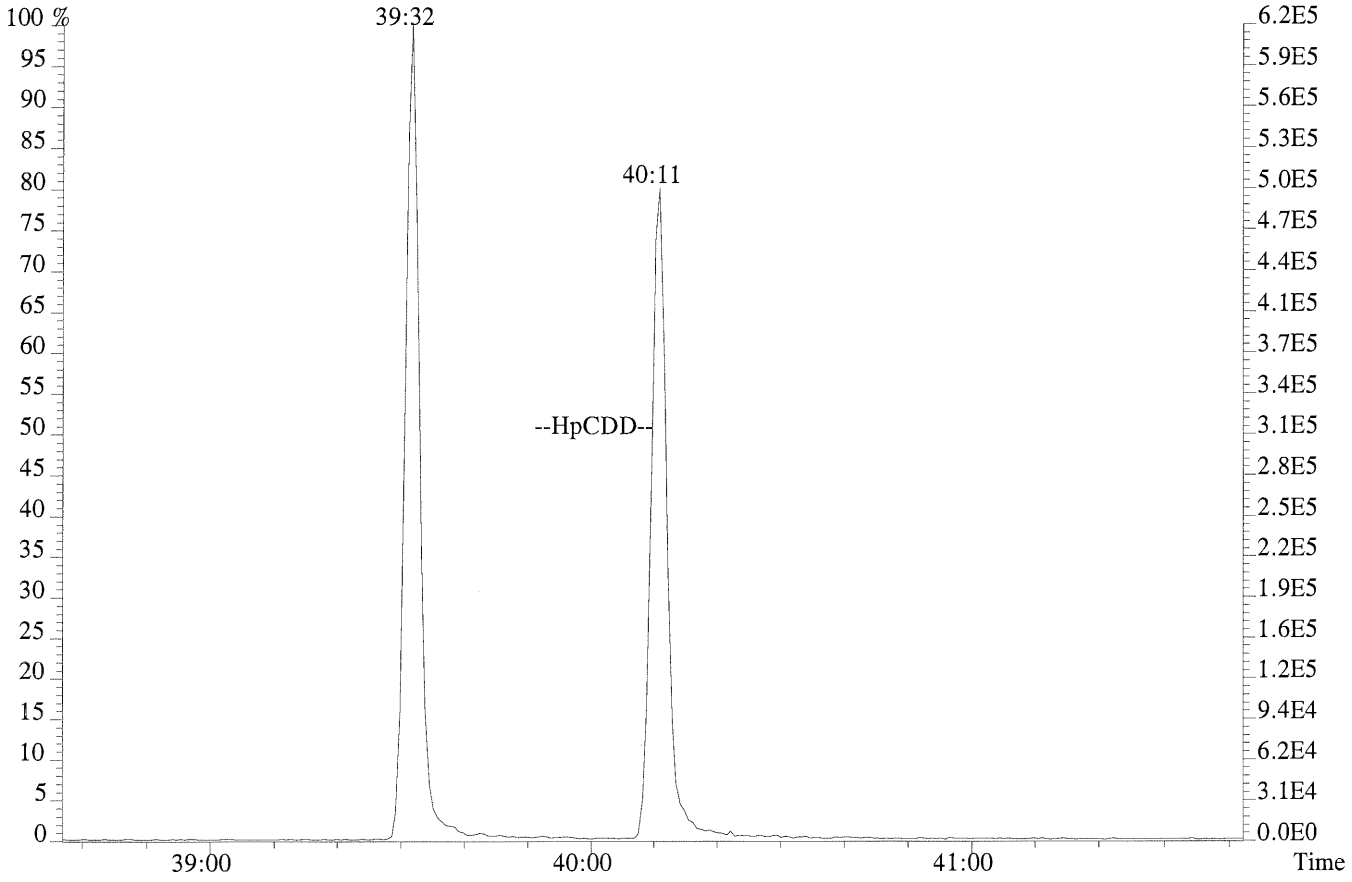
Sample#1 Exp:Window define
407.7818 F:4



423.7766 F:4



FORM 6A
PCDD/PCDF DAILY CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument: AutoSpec-Ultima GC Column ID: DB-5

Begin CCAL Filename: P200017

End CCAL Filename: P200027

	RELATIVE RESPONSE (RR)		MEAN RR(1)	Cv (RSD)
	Begin CCAL	End CCAL		
NATIVE ANALYTES				
2,3,7,8-TCDD	0.91	0.98	0.94	4.89
1,2,3,7,8-PeCDD	0.85	0.87	0.86	1.67
1,2,3,4,7,8-HxCDD	0.87	0.90	0.89	2.27
1,2,3,6,7,8-HxCDD	0.97	1.00	0.98	2.28
1,2,3,7,8,9-HxCDD	0.89	0.91	0.90	1.66
1,2,3,4,6,7,8-HpCDD	0.80	0.87	0.84	6.48
OCDD	0.93	0.96	0.95	2.13
2,3,7,8-TCDF	0.85	0.88	0.86	2.23
1,2,3,7,8-PeCDF	0.84	0.85	0.84	1.08
2,3,4,7,8-PeCDF	0.86	0.87	0.86	0.97
1,2,3,4,7,8-HxCDF	1.08	1.10	1.09	1.01
1,2,3,6,7,8-HxCDF	1.10	1.11	1.11	0.86
1,2,3,7,8,9-HxCDF	0.83	0.86	0.85	2.31
2,3,4,6,7,8-HxCDF	0.98	1.03	1.01	3.13
1,2,3,4,6,7,8-HpCDF	1.33	1.39	1.36	3.47
1,2,3,4,7,8,9-HpCDF	0.93	0.98	0.95	4.04
OCDF	0.97	1.01	0.99	3.28

(1) Two daily mean RF values are used to compute the analyte and and labeled compouds, see Section 8.3.2.4, Method 8290.

8290F6A

FORM 6B
PCDD/PCDF DAILY CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument: AutoSpec-Ultima GC Column ID: DB-5

Begin CCAL Filename: P200017

End CCAL Filename: P200027

	RELATIVE RESPONSE (RR)		MEAN RR(1)	Cv (RSD)
	Begin CCAL	End CCAL		
LABELED COMPOUNDS				
13C-2,3,7,8-TCDD	0.98	0.99	0.99	1.23
13C-1,2,3,7,8-PeCDD	1.04	0.93	0.99	7.82
13C-1,2,3,6,7,8-HxCDD	0.99	0.99	0.99	0.40
13C-1,2,3,4,6,7,8-HpCDD	0.68	0.85	0.77	15.21
13C-OCDD	0.88	0.82	0.85	4.41
13C-2,3,7,8-TCDF	1.28	1.30	1.29	1.28
13C-1,2,3,7,8-PeCDF	1.35	1.22	1.28	7.31
13C-1,2,3,4,7,8-HxCDF	1.09	1.10	1.09	0.61
13C-1,2,3,4,6,7,8-HpCDF	0.81	0.80	0.81	0.42
CLEANUP STANDARD				
37Cl-2,3,7,8-TCDD	0.94	0.97	0.95	2.17

(1) Two daily mean RF values are used to compute the analyte and labeled compounds, see Section 8.3.2.4, Method 8290.

8290F6B

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P200017 Analysis Date: 31-JUL-08 Time: 07:59:44

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	0.91	0.84	8.02
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	0.85	0.79	7.28
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	0.87	0.81	6.96
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	0.97	0.92	4.90
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	0.89	0.89	-0.64
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	0.80	0.79	1.09
OCDD	M+2/M+4	0.88	0.76-1.02	0.93	0.88	6.56
2,3,7,8-TCDF	M/M+2	0.76	0.65-0.89	0.85	0.72	18.72
1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	0.84	0.71	18.17
2,3,4,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	0.86	0.73	17.16
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	1.08	0.93	16.50
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	1.10	0.96	14.57
1,2,3,7,8,9-HxCDF	M+2/M+4	1.22	1.05-1.43	0.83	0.79	4.93
2,3,4,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	0.98	0.86	14.45
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	1.33	1.19	11.68
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88-1.20	0.93	0.94	-1.22
OCDF	M+2/M+4	0.88	0.76-1.02	0.97	0.83	16.23

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P200017 Analysis Date: 31-JUL-08 Time: 07:59:44

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	0.98	1.10	-11.23
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	1.04	1.05	-0.82
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	0.99	0.97	2.03
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	0.68	0.85	-19.38
13C-OCDD	M+2/M+4	0.89	0.76-1.02	0.88	0.87	1.04
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	1.28	1.25	2.55
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	1.35	1.23	9.23
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.43-0.59	1.09	0.98	11.23
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.37-0.51	0.81	0.69	17.55
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				0.94	0.99	-5.35

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #6 Filename P200017 Samp: 1 Inj: 1 Acquired: 31-JUL-08 07:59:44
Processed: 11-AUG-08 12:31:44 LAB. ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	3.140e+03	4.145e+03	0.76	yes	no	0.716
2	Unk	1,2,3,7,8-PeCDF	32:60	1.154e+04	7.400e+03	1.56	yes	no	0.709
3	Unk	2,3,4,7,8-PeCDF	33:44	1.171e+04	7.613e+03	1.54	yes	no	0.730
4	Unk	1,2,3,4,7,8-HxCDF	36:33	1.063e+04	8.674e+03	1.23	yes	no	0.931
5	Unk	1,2,3,6,7,8-HxCDF	36:39	1.083e+04	8.724e+03	1.24	yes	no	0.959
6	Unk	2,3,4,6,7,8-HxCDF	37:08	9.573e+03	7.939e+03	1.21	yes	no	0.860
7	Unk	1,2,3,7,8,9-HxCDF	37:50	8.141e+03	6.660e+03	1.22	yes	no	0.793
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	8.805e+03	8.706e+03	1.01	yes	no	1.188
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	6.130e+03	6.086e+03	1.01	yes	no	0.937
10	Unk	OCDF	43:22	1.295e+04	1.475e+04	0.88	yes	no	0.832
11	Unk	2,3,7,8-TCDD	29:28	2.599e+03	3.371e+03	0.77	yes	no	0.844
12	Unk	1,2,3,7,8-PeCDD	34:05	8.978e+03	5.819e+03	1.54	yes	no	0.790
13	Unk	1,2,3,4,7,8-HxCDD	37:15	7.807e+03	6.219e+03	1.26	yes	no	0.815
14	Unk	1,2,3,6,7,8-HxCDD	37:20	8.665e+03	6.897e+03	1.26	yes	no	0.922
15	Unk	1,2,3,7,8,9-HxCDD	37:37	7.878e+03	6.384e+03	1.23	yes	no	0.892
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	4.563e+03	4.347e+03	1.05	yes	no	0.789
17	Unk	OCDD	43:12	1.255e+04	1.419e+04	0.88	yes	no	0.875
18	IS	13C-2,3,7,8-TCDF	28:36	1.875e+04	2.411e+04	0.78	yes	no	1.247
19	IS	13C-1,2,3,7,8-PeCDF	32:59	2.769e+04	1.749e+04	1.58	yes	no	1.234
20	IS	13C-1,2,3,4,7,8-HxCDF	36:33	3.004e+04	5.893e+04	0.51	yes	no	0.979
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	1.999e+04	4.602e+04	0.43	yes	no	0.687
22	IS	13C-2,3,7,8-TCDD	29:27	1.428e+04	1.846e+04	0.77	yes	no	1.100
23	IS	13C-1,2,3,7,8-PeCDD	34:05	2.137e+04	1.355e+04	1.58	yes	no	1.050
24	IS	13C-1,2,3,6,7,8-HxCDD	37:19	4.468e+04	3.578e+04	1.25	yes	no	0.966
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:09	2.858e+04	2.727e+04	1.05	yes	no	0.848
26	IS	13C-OCDD	43:11	6.754e+04	7.578e+04	0.89	yes	no	0.868
27	RS/RT	13C-1,2,3,4-TCDD	29:15	1.478e+04	1.874e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	4.534e+04	3.634e+04	1.25	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	6.294e+03					0.992
					SUM AREA				
30	Tot	Total Tetra-Furans	28:09		7.399e+03	0.80	yes		0.716
31	Tot	Total Tetra-Dioxins	29:28		5.969e+03	0.77	yes		0.844
32	Tot	Total Penta-Furans	32:07		3.832e+04	1.36	yes		0.720
33	Tot	Total Penta-Dioxins	34:05		1.480e+04	1.54	yes		0.790
34	Tot	Total Hexa-Furans	36:33		7.118e+04	1.23	yes		0.886
35	Tot	Total Hexa-Dioxins	37:15		4.385e+04	1.26	yes		0.876
36	Tot	Total Hepta-Furans	39:16		2.973e+04	1.01	yes		1.062
37	Tot	Total Hepta-Dioxins	39:31		8.980e+03	1.20	yes		0.789

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #6 Filename P200017 #1 Samp: 1 Inj: 1 Acquired: 31-JUL-08 07:59:44

Processed: 11-AUG-08 12:31:44 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	5.50e+05	1.64e+02	3.4e+03	7.15e+05	3.04e+02	2.4e+03
2	1,2,3,7,8-PeCDF	2.27e+06	1.68e+02	1.4e+04	1.45e+06	1.44e+02	1.0e+04
3	2,3,4,7,8-PeCDF	2.37e+06	1.68e+02	1.4e+04	1.54e+06	1.44e+02	1.1e+04
4	1,2,3,4,7,8-HxCDF	2.32e+06	2.96e+02	7.9e+03	1.91e+06	1.00e+02	1.9e+04
5	1,2,3,6,7,8-HxCDF	2.24e+06	2.96e+02	7.6e+03	1.82e+06	1.00e+02	1.8e+04
6	2,3,4,6,7,8-HxCDF	2.06e+06	2.96e+02	7.0e+03	1.73e+06	1.00e+02	1.7e+04
7	1,2,3,7,8,9-HxCDF	1.77e+06	2.96e+02	6.0e+03	1.43e+06	1.00e+02	1.4e+04
8	1,2,3,4,6,7,8-HpCDF	1.94e+06	2.48e+02	7.8e+03	1.94e+06	2.56e+02	7.6e+03
9	1,2,3,4,7,8,9-HpCDF	1.22e+06	2.48e+02	4.9e+03	1.21e+06	2.56e+02	4.7e+03
10	OCDF	1.95e+06	1.84e+02	1.1e+04	2.21e+06	4.16e+02	5.3e+03
11	2,3,7,8-TCDD	4.74e+05	3.88e+02	1.2e+03	6.12e+05	1.72e+02	3.6e+03
12	1,2,3,7,8-PeCDD	1.87e+06	3.32e+02	5.6e+03	1.20e+06	1.36e+02	8.8e+03
13	1,2,3,4,7,8-HxCDD	1.78e+06	1.08e+02	1.6e+04	1.40e+06	1.80e+02	7.8e+03
14	1,2,3,6,7,8-HxCDD	1.86e+06	1.08e+02	1.7e+04	1.47e+06	1.80e+02	8.2e+03
15	1,2,3,7,8,9-HxCDD	1.74e+06	1.08e+02	1.6e+04	1.40e+06	1.80e+02	7.8e+03
16	1,2,3,4,6,7,8-HpCDD	8.56e+05	2.08e+02	4.1e+03	7.98e+05	1.12e+02	7.1e+03
17	OCDD	1.96e+06	1.28e+02	1.5e+04	2.22e+06	8.80e+01	2.5e+04
18	13C-2,3,7,8-TCDF	3.21e+06	6.28e+02	5.1e+03	4.16e+06	4.24e+02	9.8e+03
19	13C-1,2,3,7,8-PeCDF	5.36e+06	6.40e+01	8.4e+04	3.37e+06	2.00e+02	1.7e+04
20	13C-1,2,3,4,7,8-HxCDF	6.41e+06	1.48e+02	4.3e+04	1.25e+07	2.32e+02	5.4e+04
21	13C-1,2,3,4,6,7,8-HpCDF	4.31e+06	3.96e+02	1.1e+04	9.84e+06	1.82e+03	5.4e+03
22	13C-2,3,7,8-TCDD	2.55e+06	8.60e+02	3.0e+03	3.28e+06	1.76e+02	1.9e+04
23	13C-1,2,3,7,8-PeCDD	4.31e+06	2.92e+02	1.5e+04	2.73e+06	1.68e+02	1.6e+04
24	13C-1,2,3,6,7,8-HxCDD	9.95e+06	1.32e+02	7.5e+04	7.91e+06	1.68e+02	4.7e+04
25	13C-1,2,3,4,6,7,8-HpCDD	6.88e+06	3.40e+02	2.0e+04	6.64e+06	1.32e+02	5.0e+04
26	13C-OCDD	1.03e+07	1.40e+02	7.4e+04	1.16e+07	1.08e+02	1.1e+05
27	13C-1,2,3,4-TCDD	2.62e+06	8.60e+02	3.0e+03	3.33e+06	1.76e+02	1.9e+04
28	13C-1,2,3,7,8,9-HxCDD	9.90e+06	1.32e+02	7.5e+04	7.89e+06	1.68e+02	4.7e+04
29	37Cl-2,3,7,8-TCDD	1.14e+06	1.68e+02	6.8e+03			

Columbia Analytical Services, Inc.
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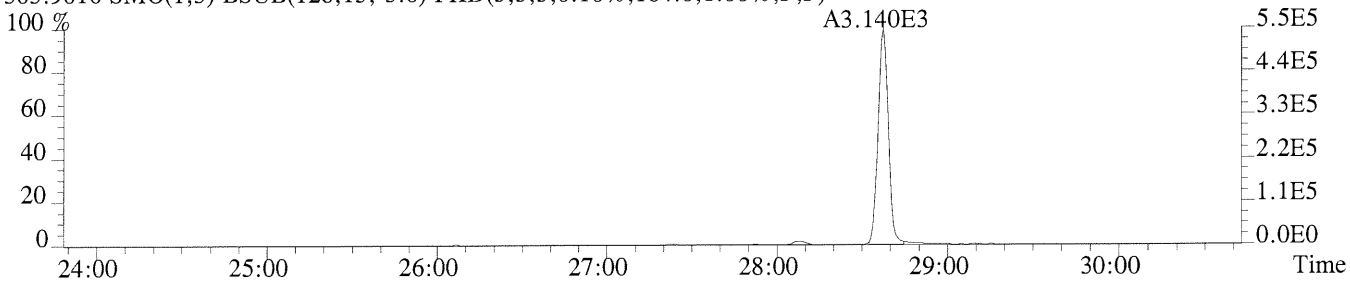
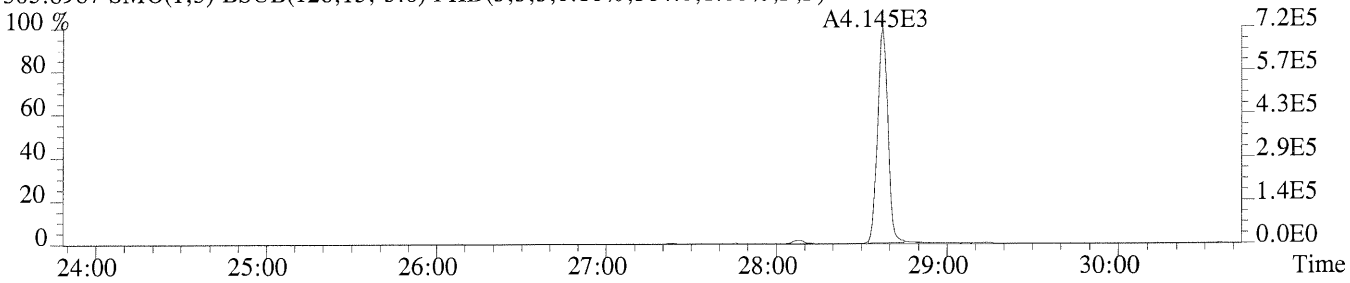
File:P200017 #1-576 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

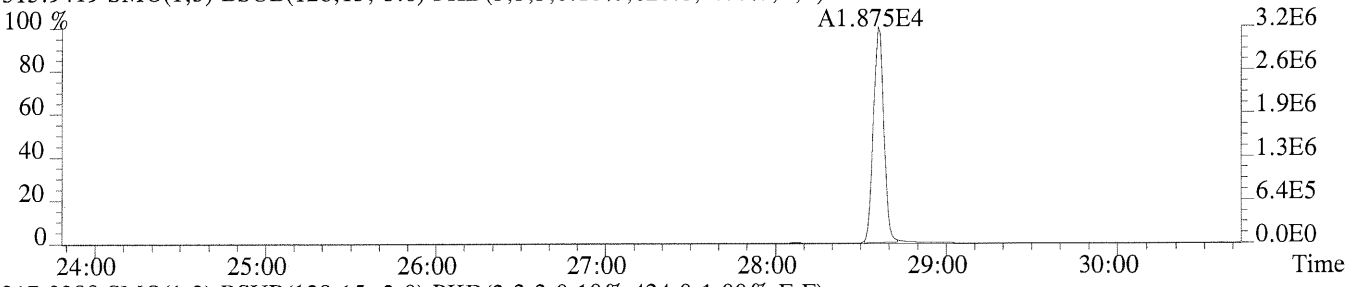
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,164.0,1.00%,F,F)



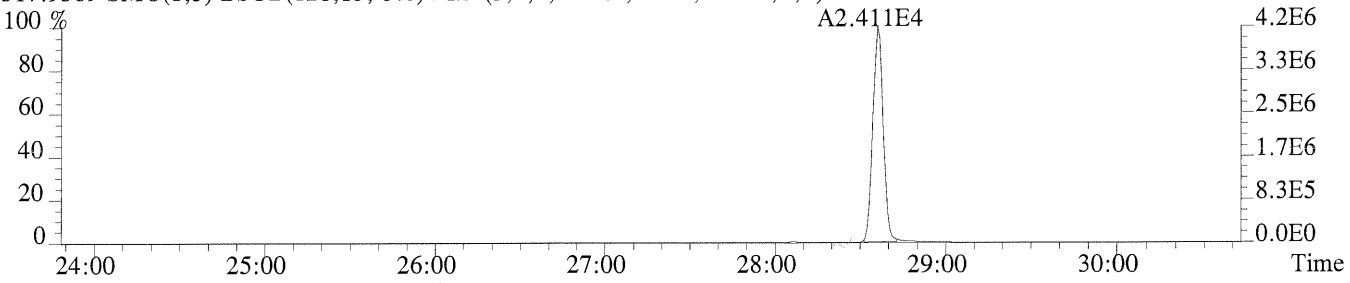
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,304.0,1.00%,F,F)



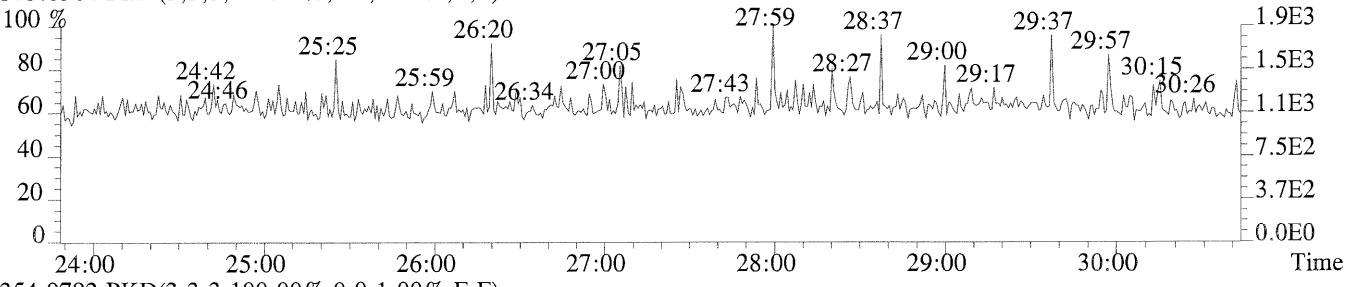
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,628.0,1.00%,F,F)



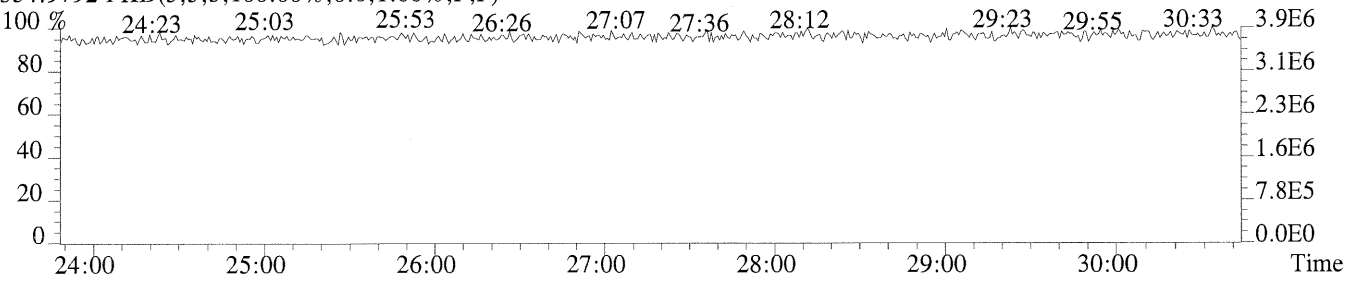
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,424.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

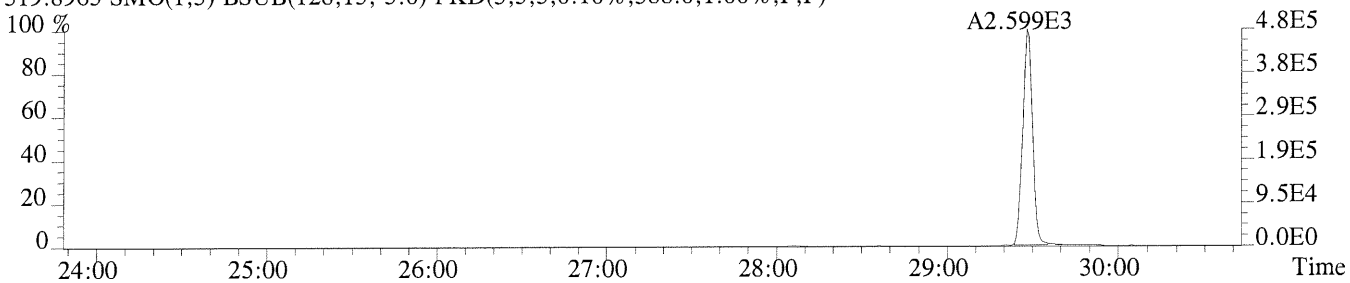


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

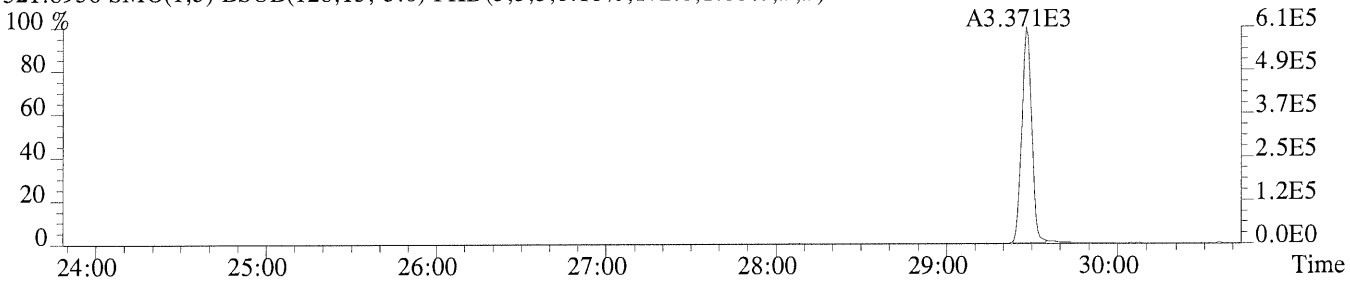


File:P200017 #1-576 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

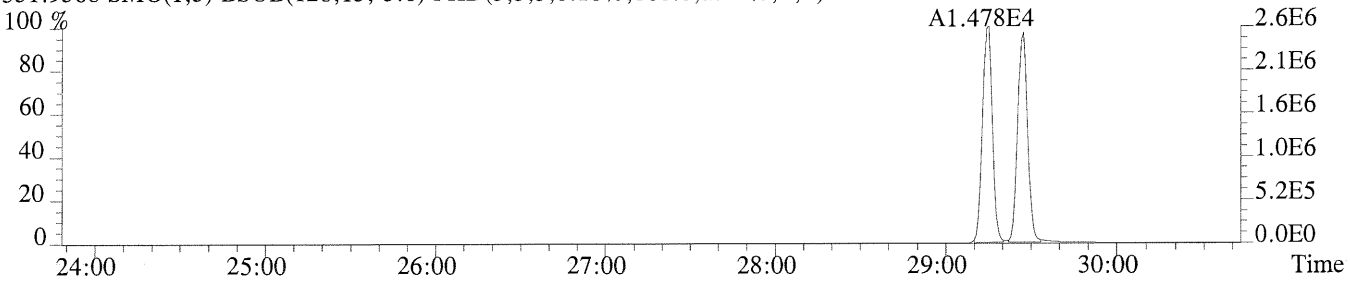
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,388.0,1.00%,F,F)



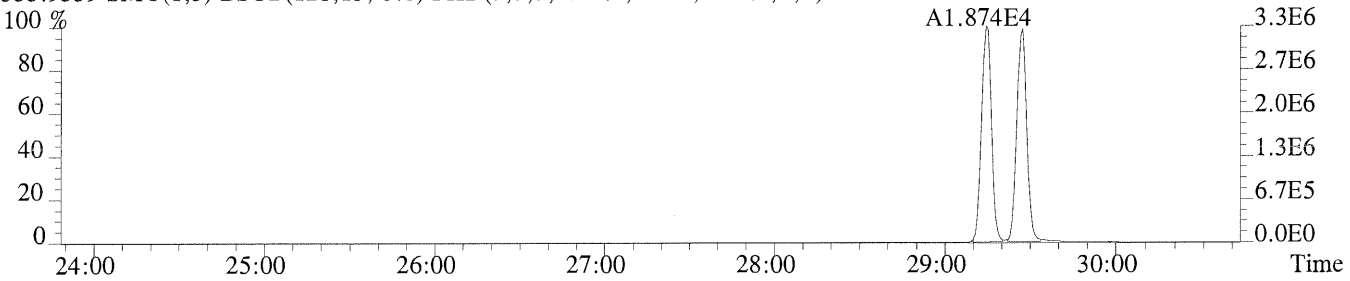
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,172.0,1.00%,F,F)



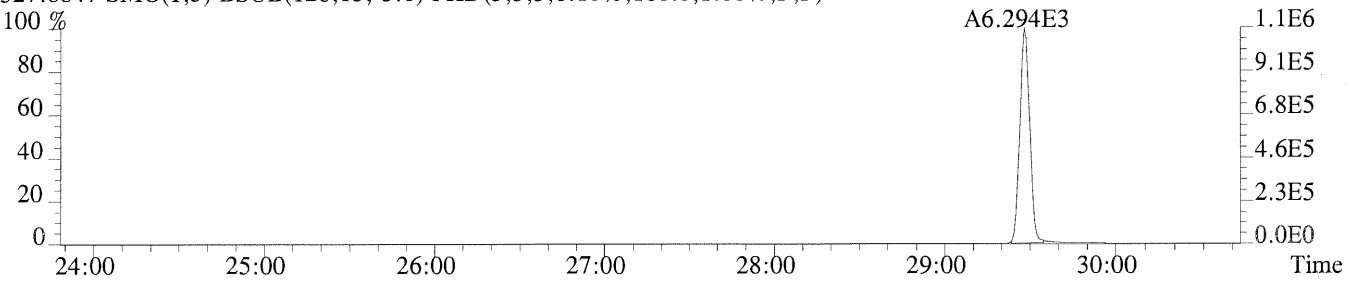
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,860.0,1.00%,F,F)



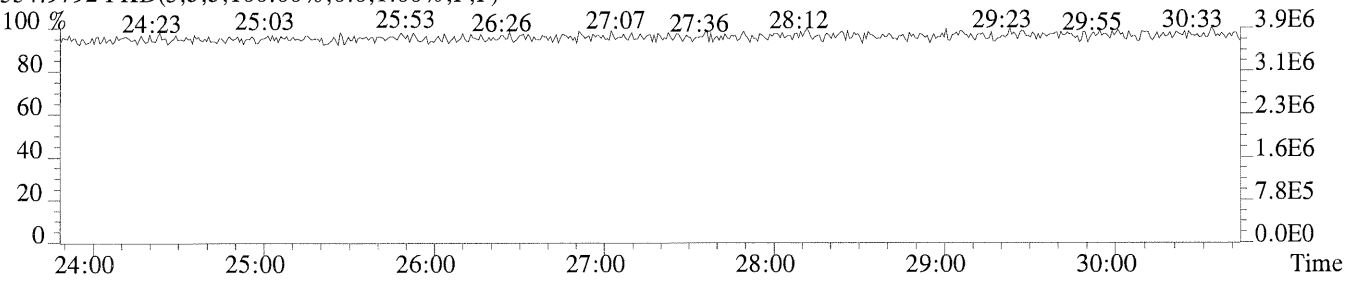
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,176.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,168.0,1.00%,F,F)

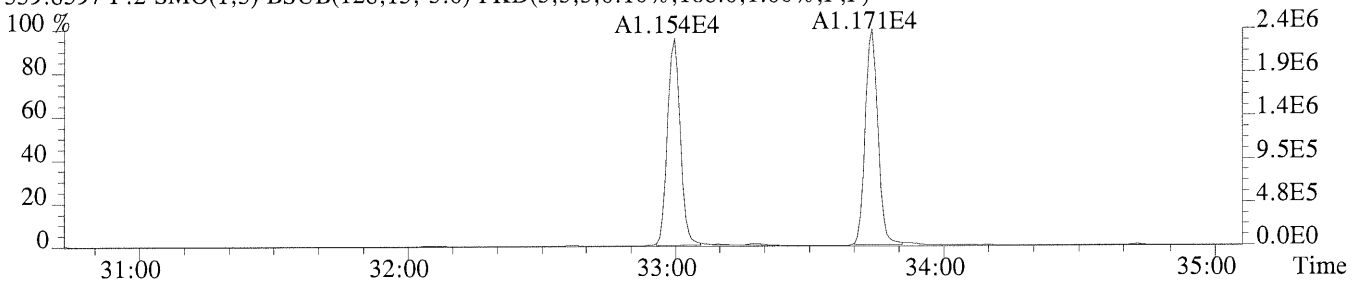


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

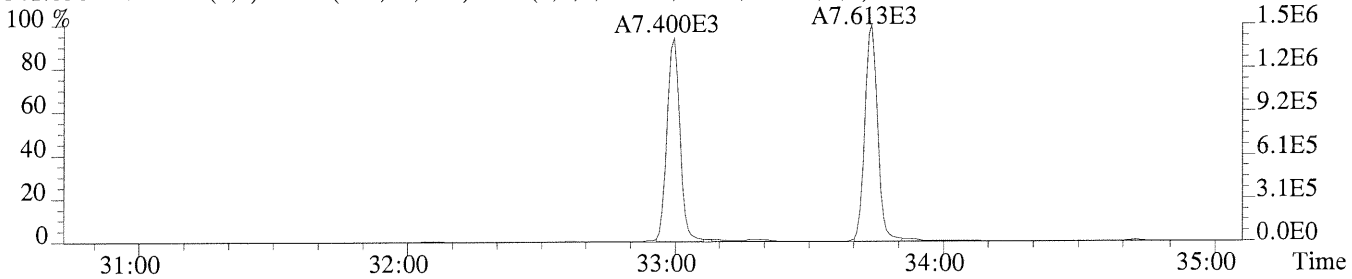


File:P200017 #1-398 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

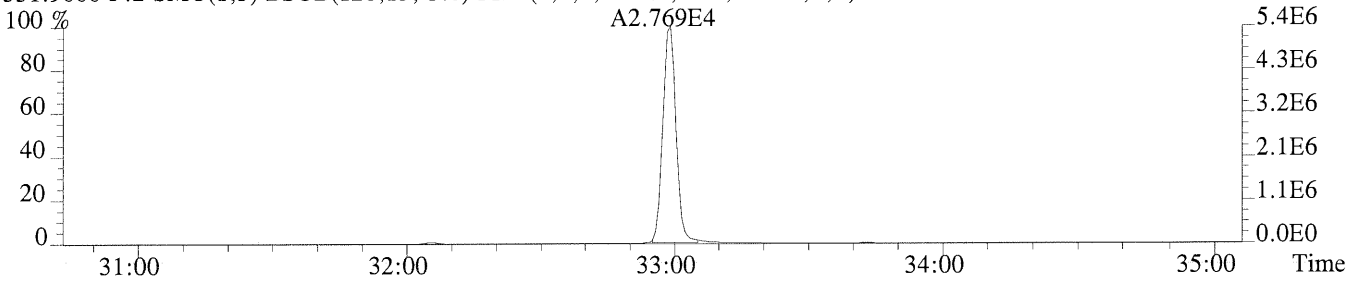
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,168.0,1.00%,F,F)



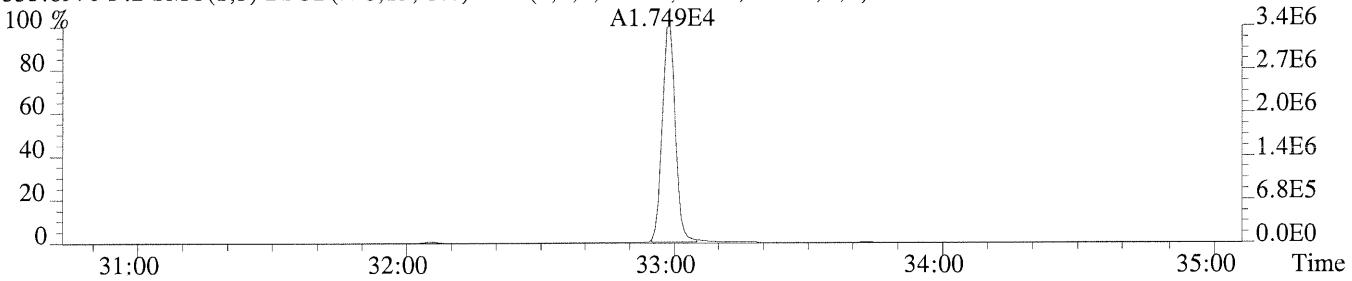
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,144.0,1.00%,F,F)



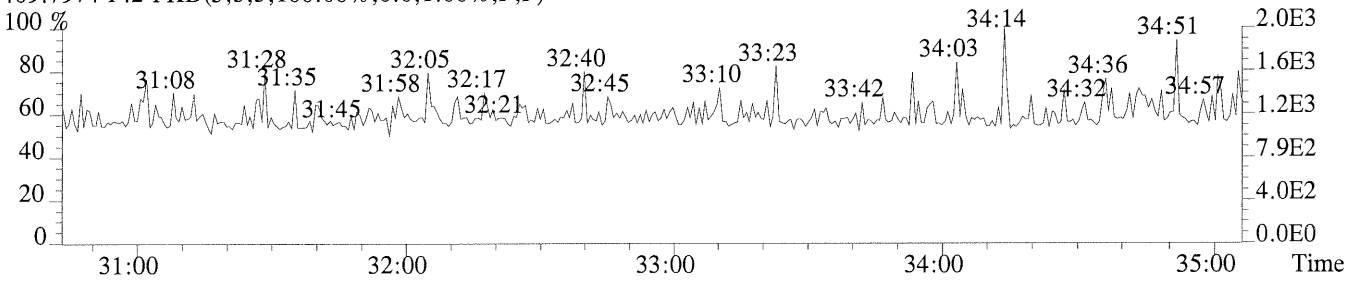
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,64.0,1.00%,F,F)



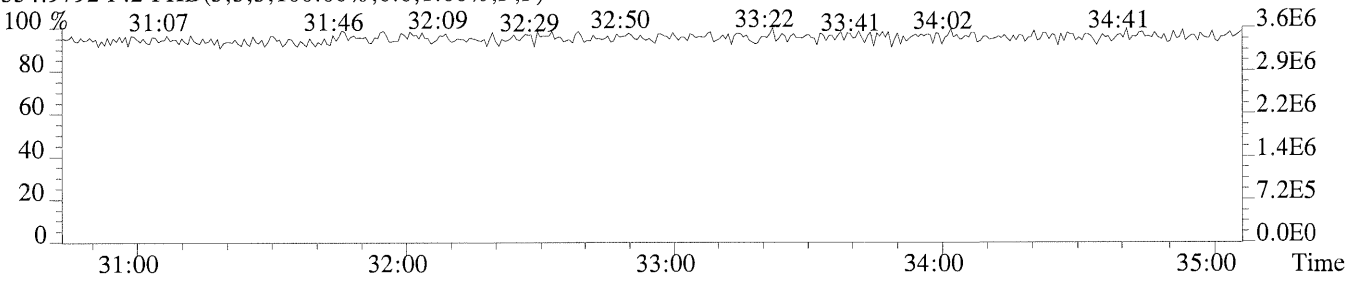
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,200.0,1.00%,F,F)



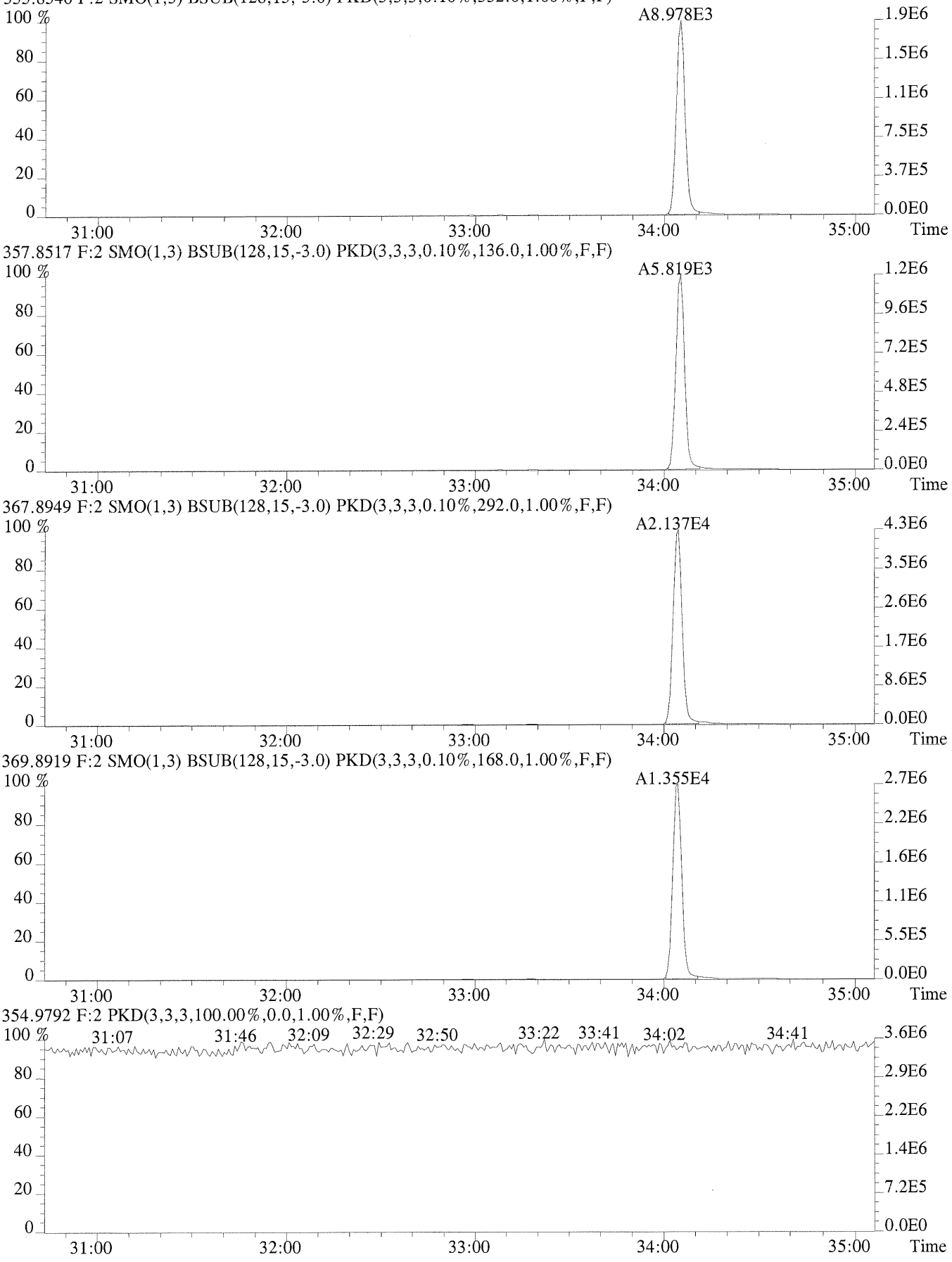
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

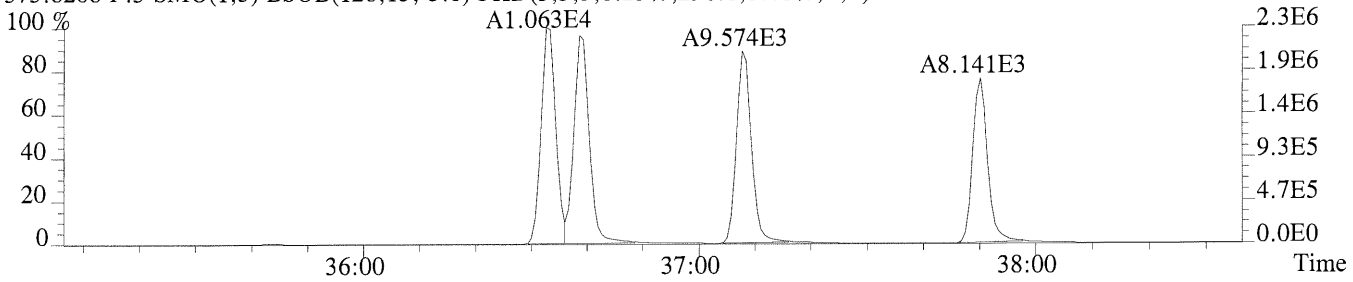


File:P200017 #1-398 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

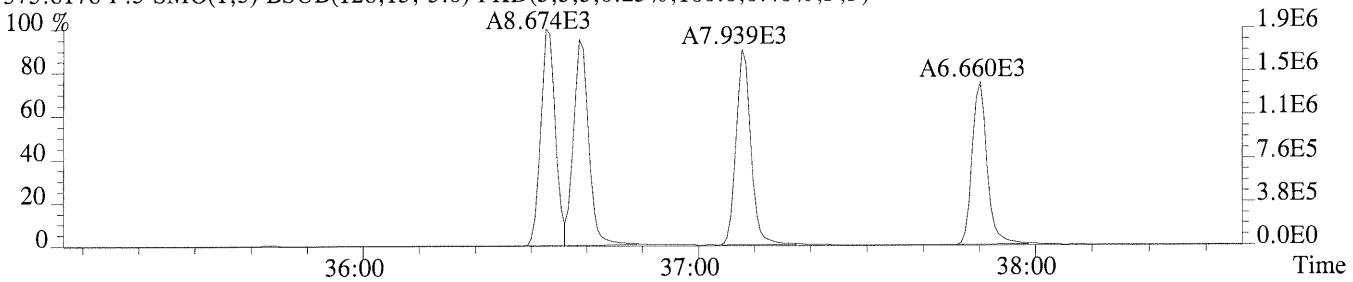


File:P200017 #1-318 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

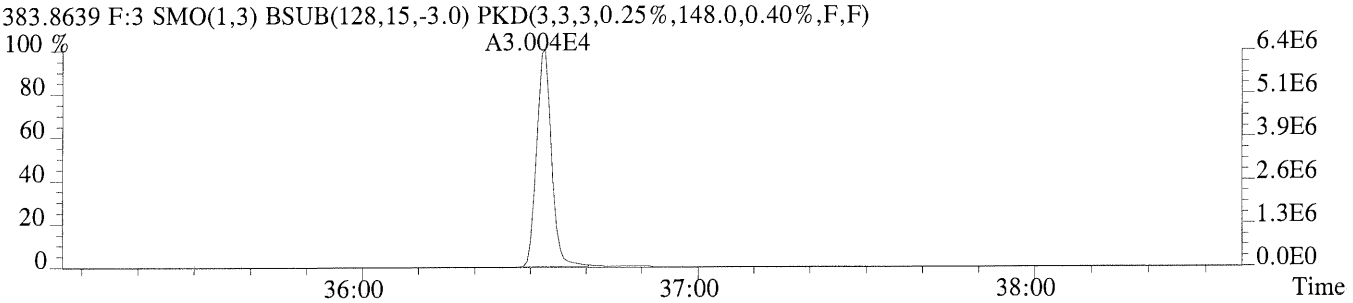
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,296.0,0.40%,F,F)



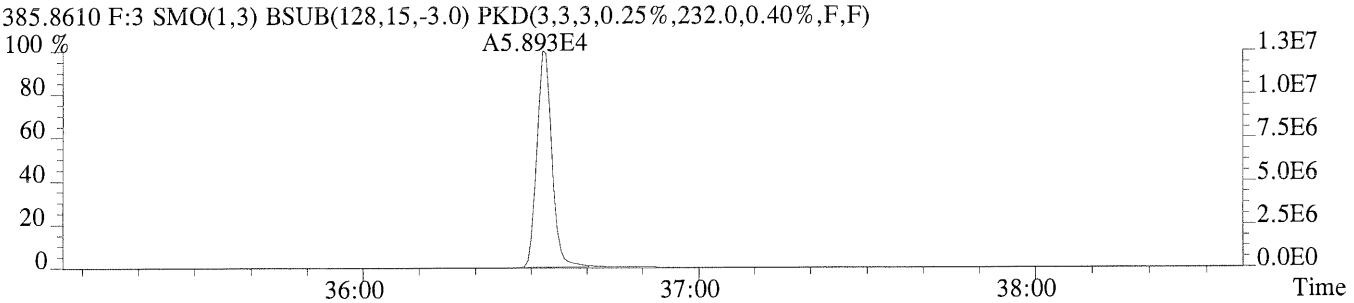
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,100.0,0.40%,F,F)



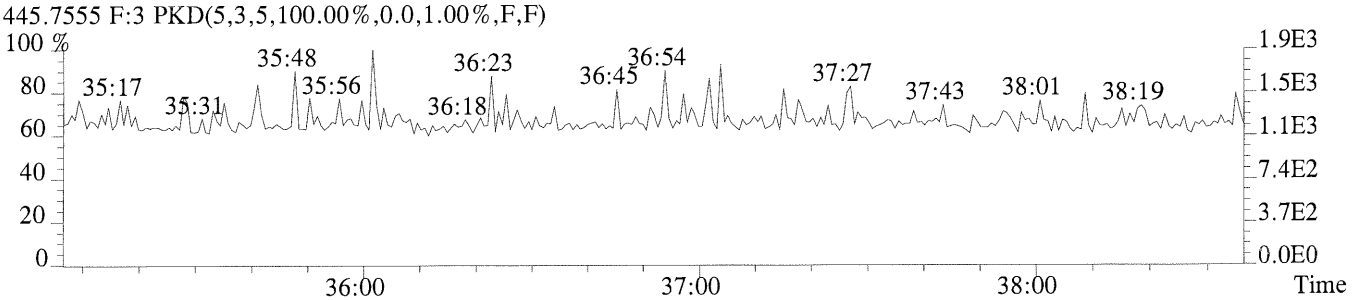
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,148.0,0.40%,F,F)



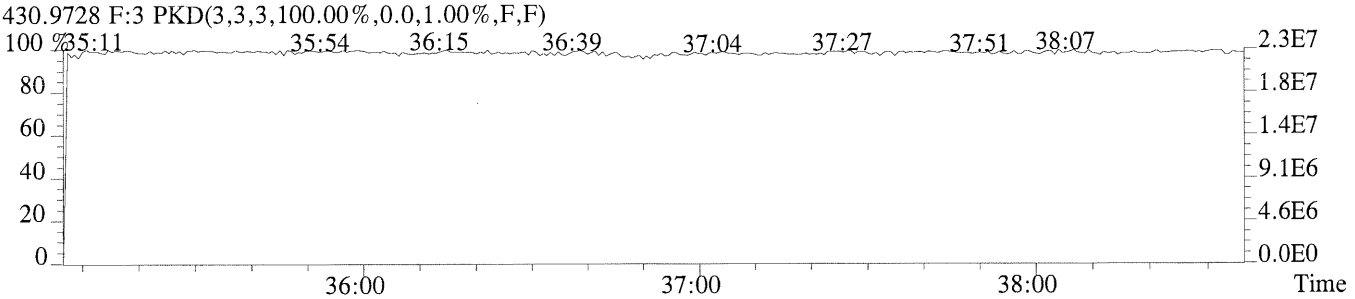
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,232.0,0.40%,F,F)



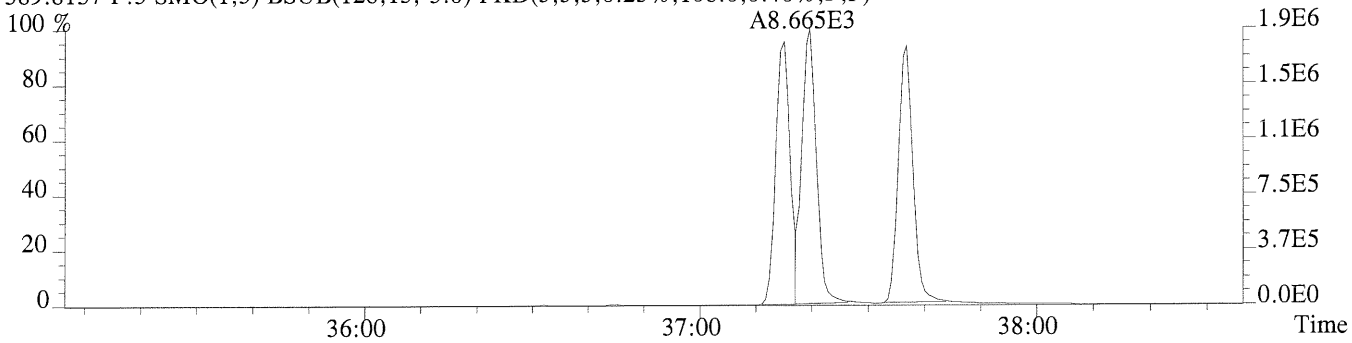
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



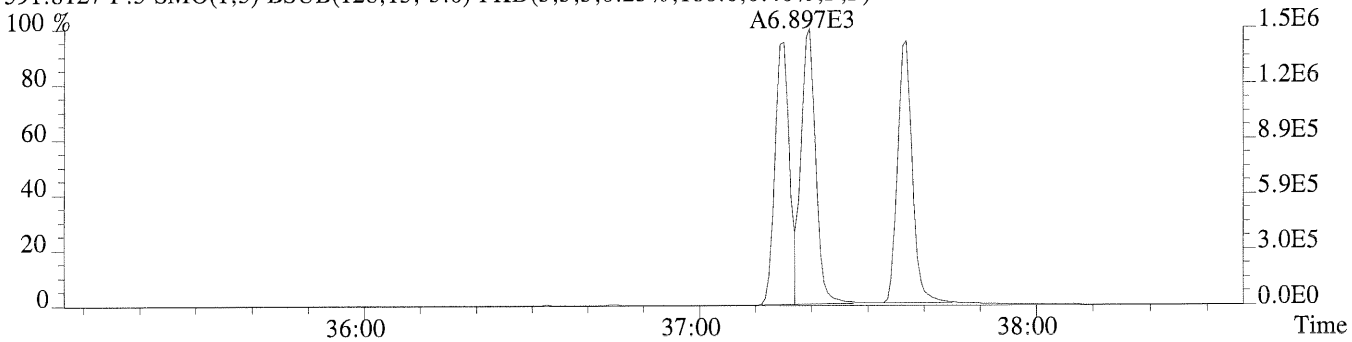
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



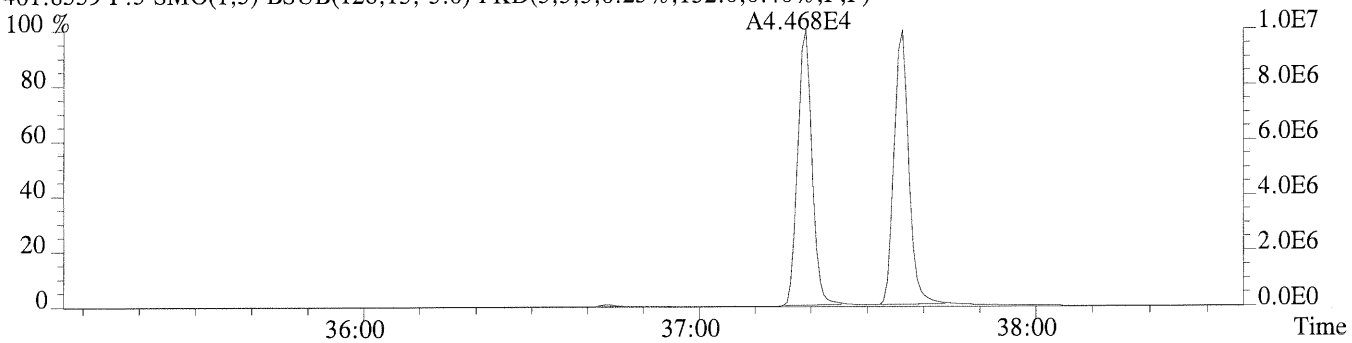
File:P200017 #1-318 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,108.0,0.40%,F,F)



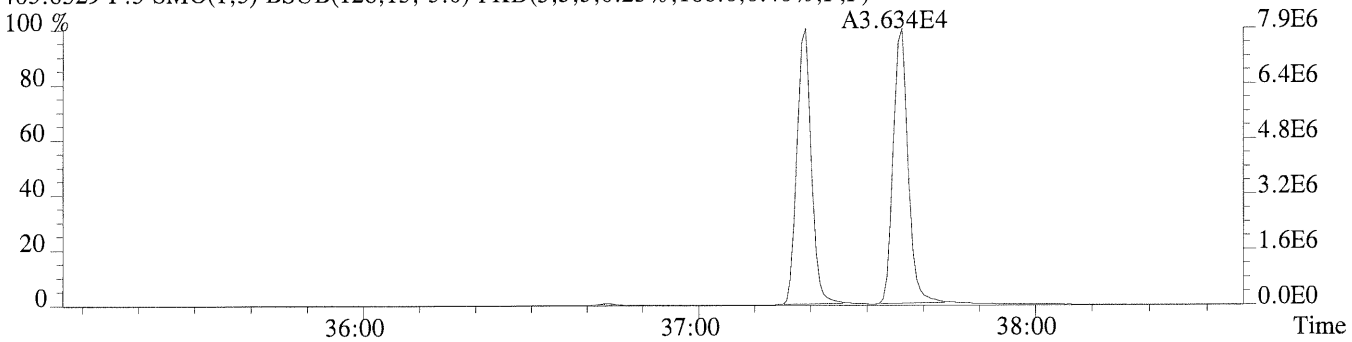
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,180.0,0.40%,F,F)



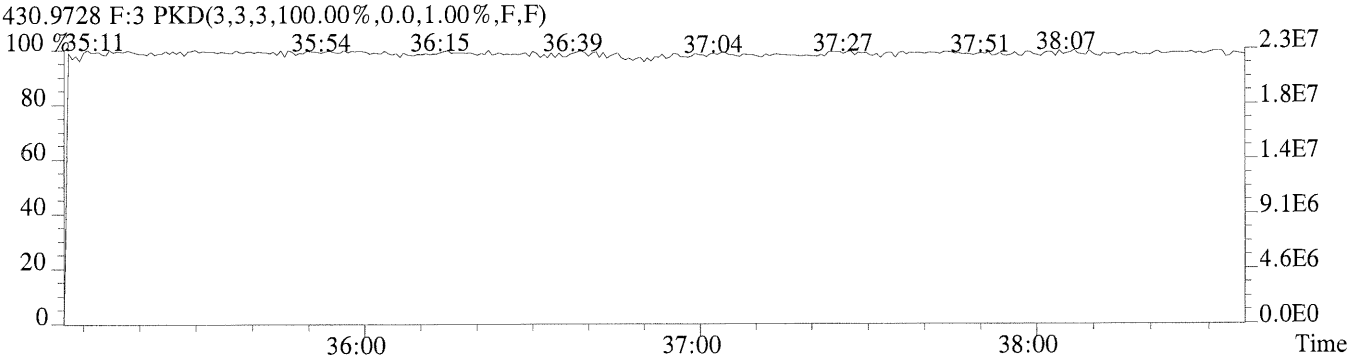
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,132.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,168.0,0.40%,F,F)

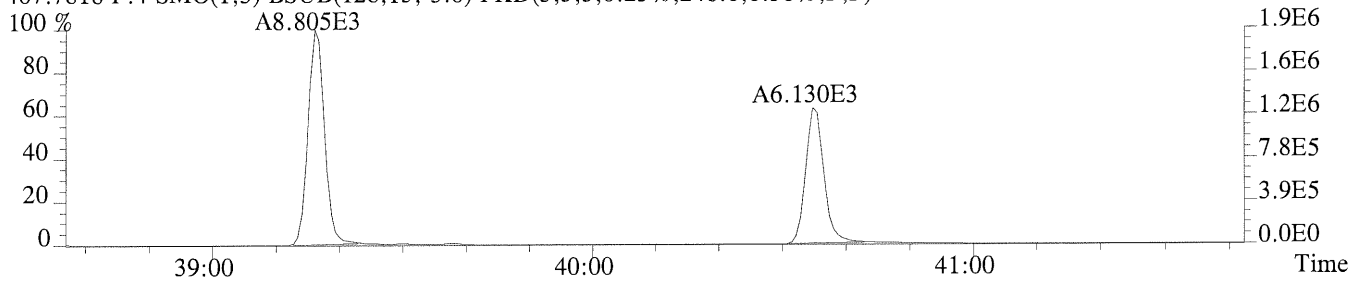


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

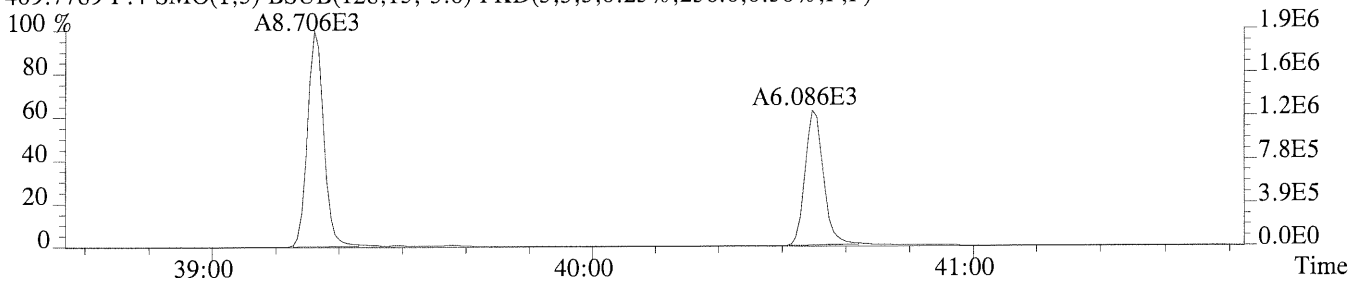


File:P200017 #1-281 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

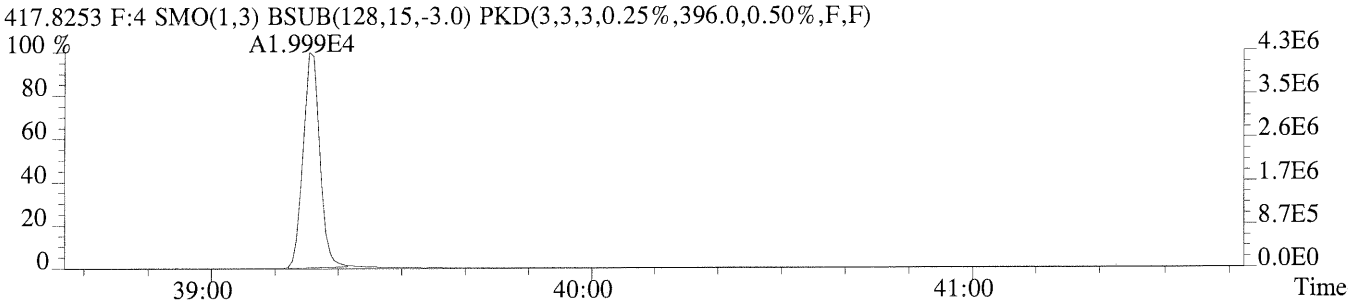
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,248.0,0.50%,F,F)



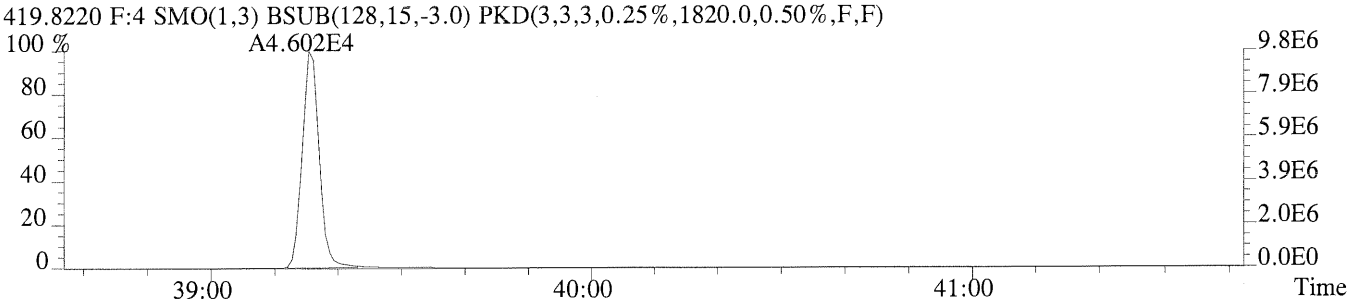
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,256.0,0.50%,F,F)



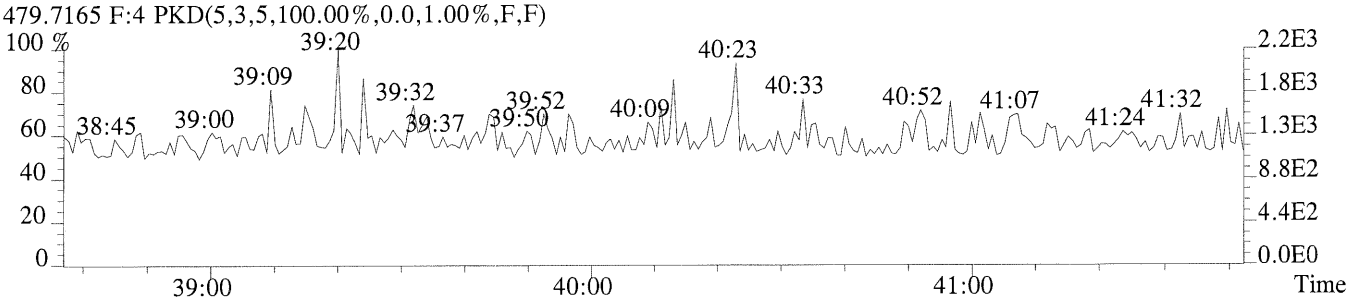
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,396.0,0.50%,F,F)



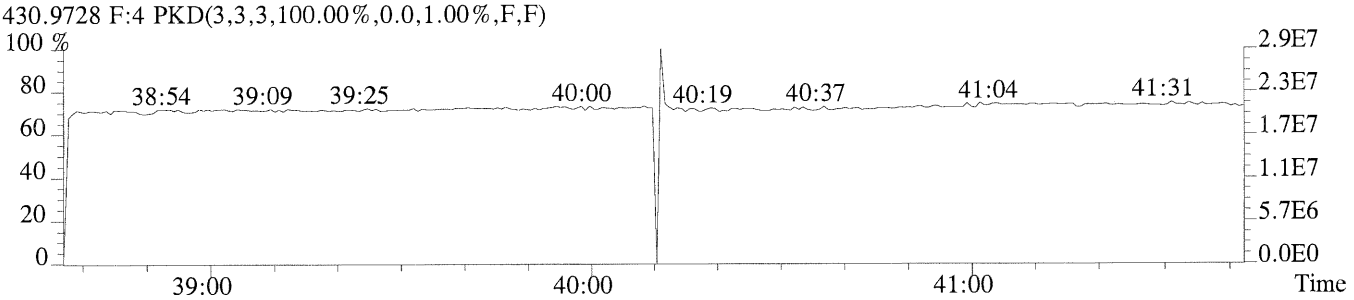
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1820.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

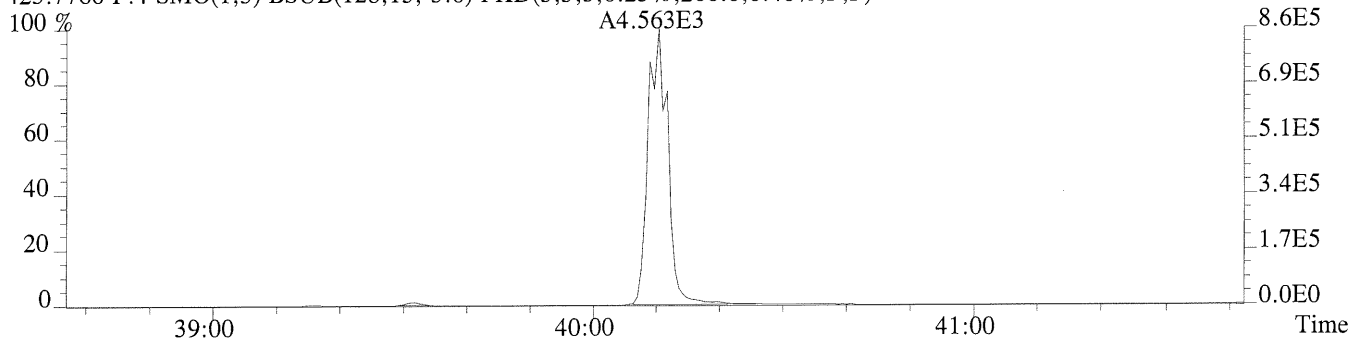


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

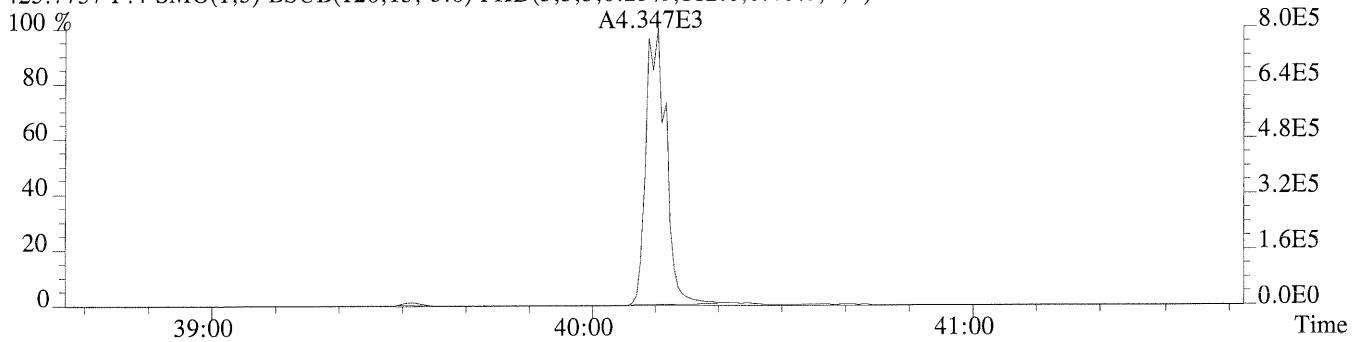


File:P200017 #1-281 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

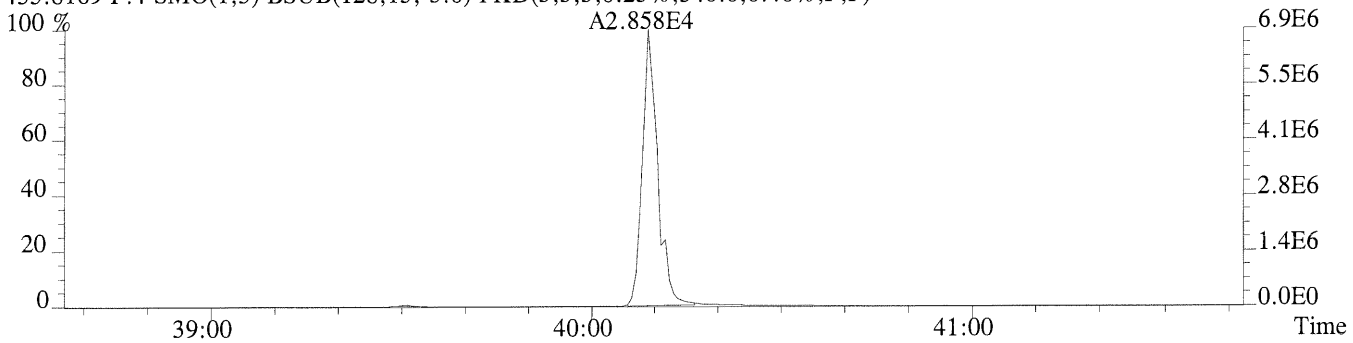
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,208.0,0.40%,F,F)



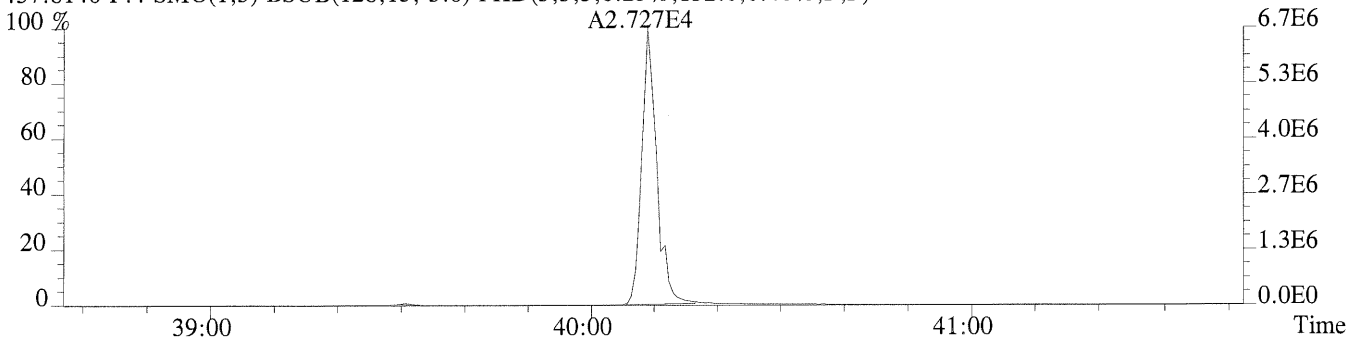
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,112.0,0.40%,F,F)



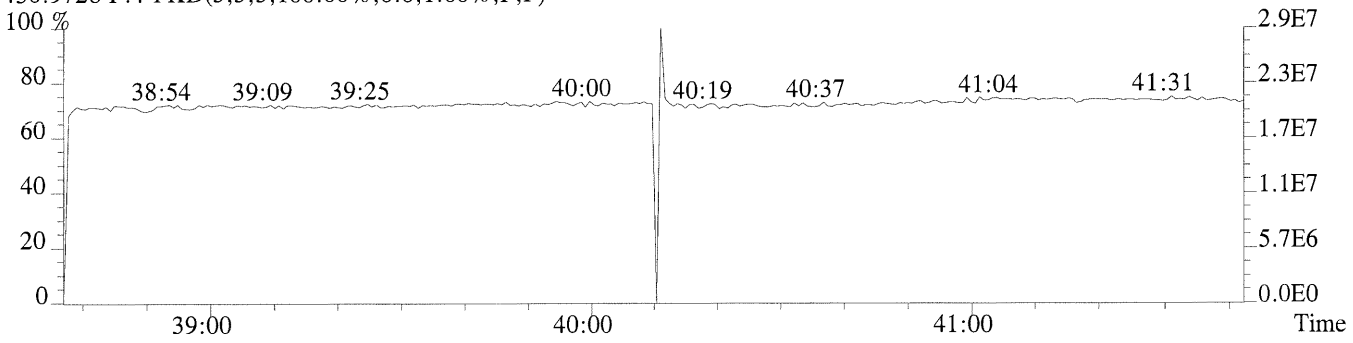
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,340.0,0.40%,F,F)



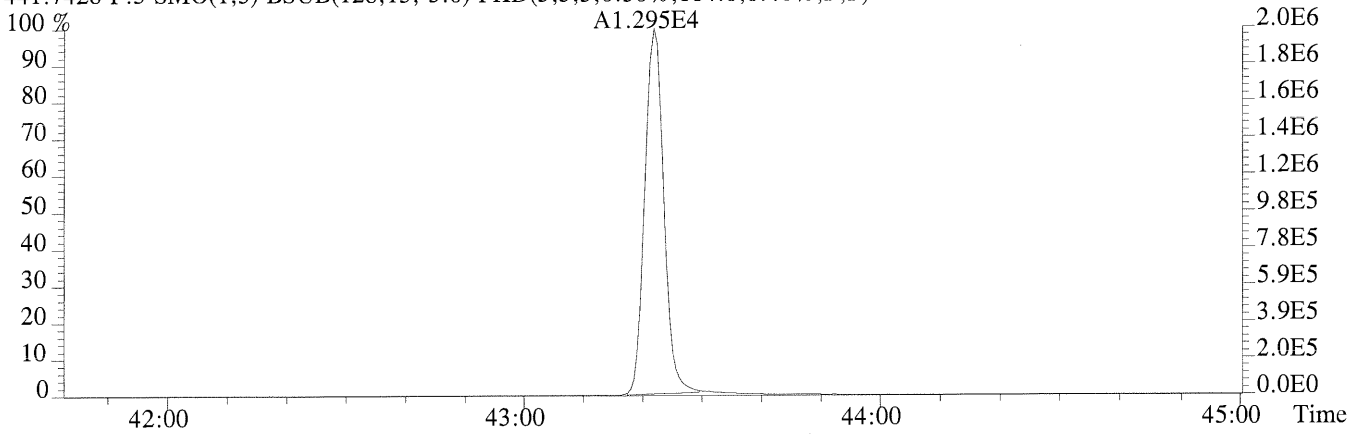
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,132.0,0.40%,F,F)



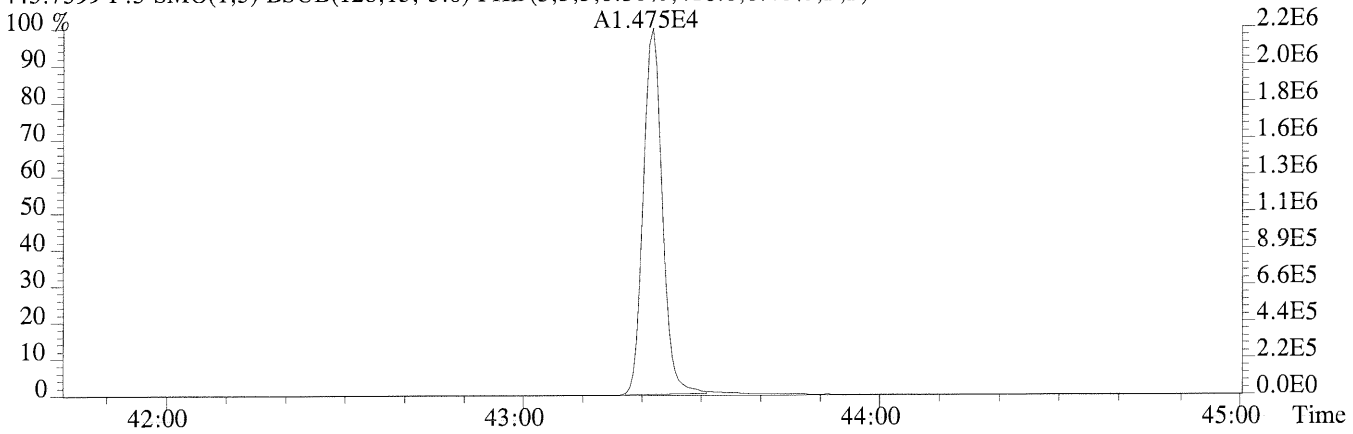
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



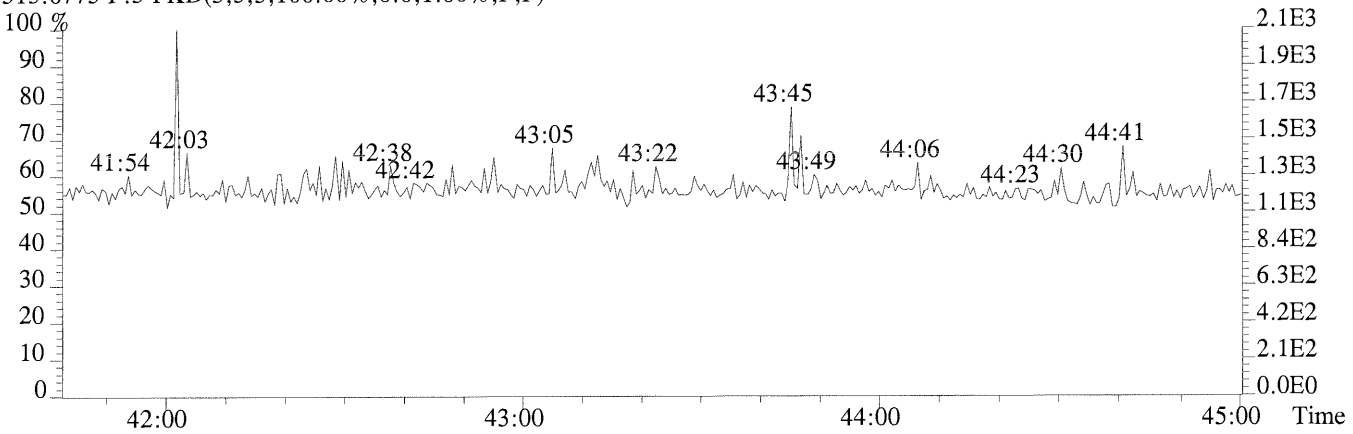
File:P200017 #1-364 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,184.0,0.40%,F,F)



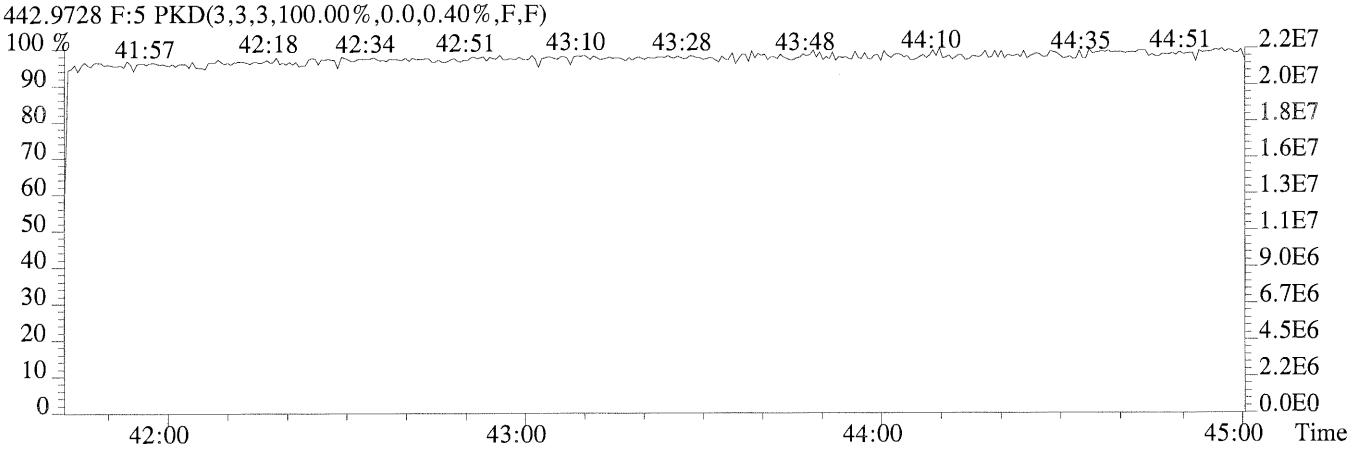
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,416.0,0.40%,F,F)



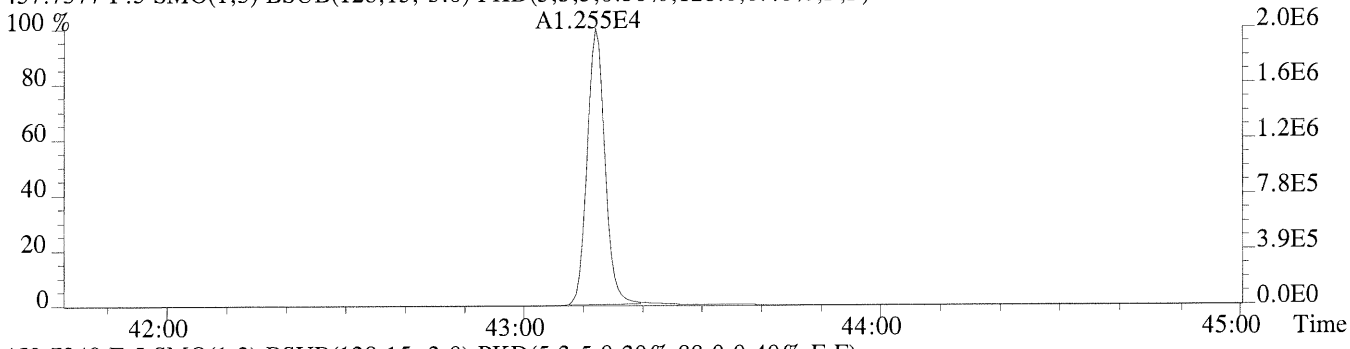
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



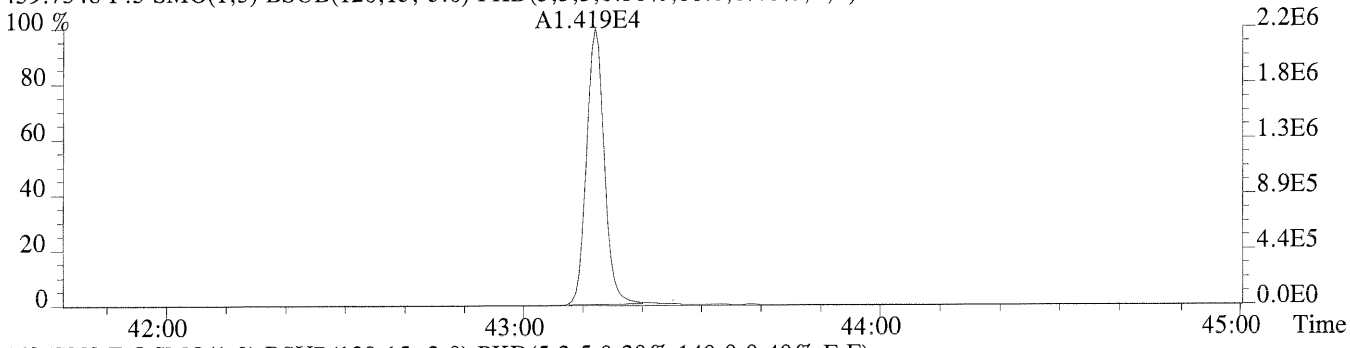
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



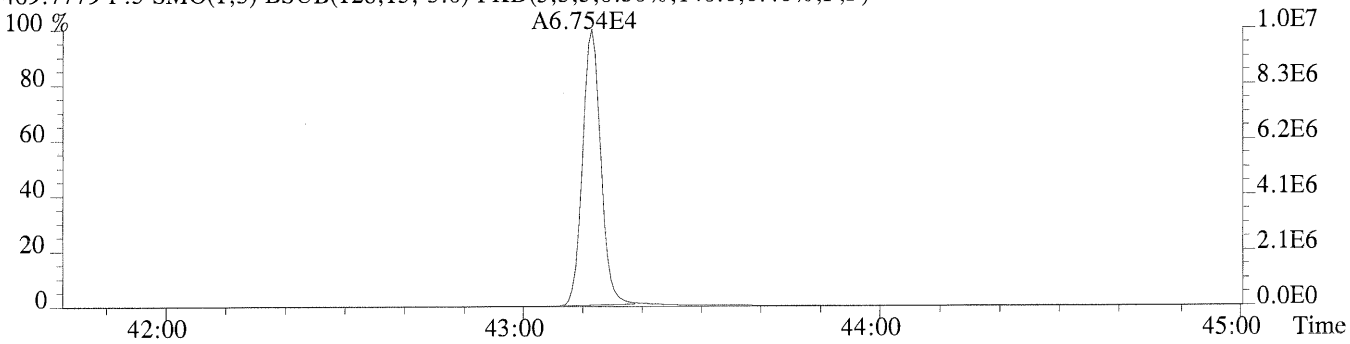
File:P200017 #1-364 Acq:31-JUL-2008 07:59:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,128.0,0.40%,F,F)



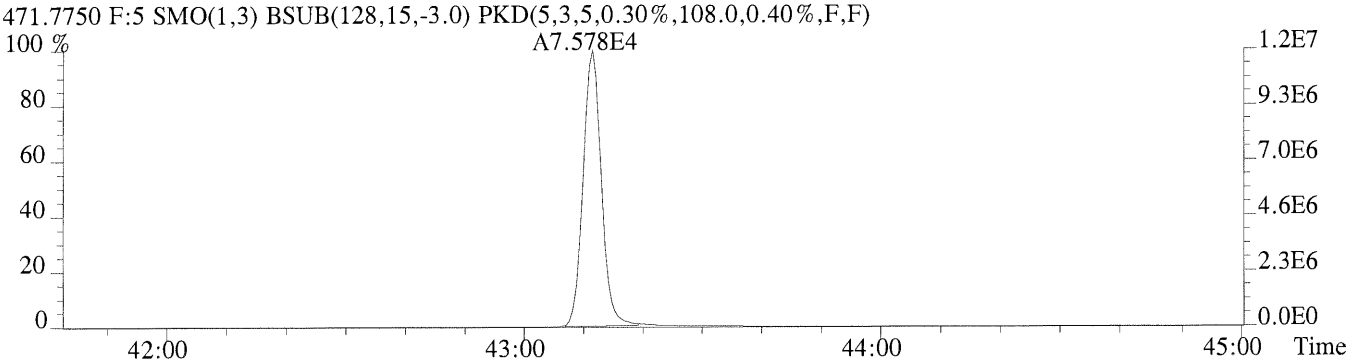
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,88.0,0.40%,F,F)



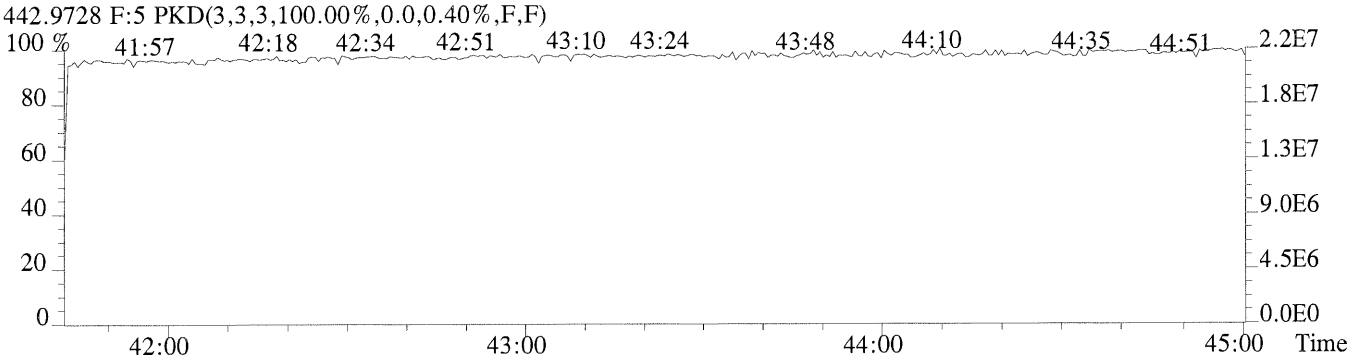
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,140.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,108.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P200027 Analysis Date: 31-JUL-08 Time: 18:42:36

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.76	0.65-0.89	0.98	0.84	15.76
1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	0.87	0.79	9.84
1,2,3,4,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	0.90	0.81	10.45
1,2,3,6,7,8-HxCDD	M+2/M+4	1.27	1.05-1.43	1.00	0.92	8.33
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	0.91	0.89	1.72
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	0.87	0.79	10.80
OCDD	M+2/M+4	0.91	0.76-1.02	0.96	0.88	9.82
2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	0.88	0.72	22.52
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.32-1.78	0.85	0.71	19.99
2,3,4,7,8-PeCDF	M+2/M+4	1.52	1.32-1.78	0.87	0.73	18.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	1.10	0.93	18.18
1,2,3,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	1.11	0.96	15.97
1,2,3,7,8,9-HxCDF	M+2/M+4	1.20	1.05-1.43	0.86	0.79	8.41
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.05-1.43	1.03	0.86	19.63
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	1.39	1.19	17.29
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	0.98	0.94	4.58
OCDF	M+2/M+4	0.89	0.76-1.02	1.01	0.83	21.74

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P200027 Analysis Date: 31-JUL-08 Time: 18:42:36

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	0.99	1.10	-9.68
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	0.93	1.05	-11.21
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	0.99	0.97	2.60
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.03	0.88-1.20	0.85	0.85	0.05
13C-OCDD	M+2/M+4	0.89	0.76-1.02	0.82	0.87	-5.08
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	1.30	1.25	4.44
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	1.22	1.23	-1.51
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	1.10	0.98	12.19
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	0.80	0.69	16.86
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				0.97	0.99	-2.40

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #7 Filename P200027 Samp: 1 Inj: 1 Acquired: 31-JUL-08 18:42:36
Processed: 11-AUG-08 12:39:25 LAB. ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	1.383e+04	1.847e+04	0.75	yes	no	0.716
2	Unk	1,2,3,7,8-PeCDF	32:60	4.418e+04	2.899e+04	1.52	yes	no	0.709
3	Unk	2,3,4,7,8-PeCDF	33:44	4.492e+04	2.962e+04	1.52	yes	no	0.730
4	Unk	1,2,3,4,7,8-HxCDF	36:33	4.006e+04	3.286e+04	1.22	yes	no	0.931
5	Unk	1,2,3,6,7,8-HxCDF	36:39	4.055e+04	3.316e+04	1.22	yes	no	0.959
6	Unk	2,3,4,6,7,8-HxCDF	37:08	3.721e+04	3.095e+04	1.20	yes	no	0.860
7	Unk	1,2,3,7,8,9-HxCDF	37:50	3.102e+04	2.592e+04	1.20	yes	no	0.793
8	Unk	1,2,3,4,6,7,8-HpCDF	39:17	3.395e+04	3.354e+04	1.01	yes	no	1.188
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	2.408e+04	2.338e+04	1.03	yes	no	0.937
10	Unk	OCDF	43:22	4.741e+04	5.323e+04	0.89	yes	no	0.832
11	Unk	2,3,7,8-TCDD	29:28	1.185e+04	1.562e+04	0.76	yes	no	0.844
12	Unk	1,2,3,7,8-PeCDD	34:05	3.466e+04	2.258e+04	1.54	yes	no	0.790
13	Unk	1,2,3,4,7,8-HxCDD	37:15	2.986e+04	2.391e+04	1.25	yes	no	0.815
14	Unk	1,2,3,6,7,8-HxCDD	37:20	3.334e+04	2.632e+04	1.27	yes	no	0.922
15	Unk	1,2,3,7,8,9-HxCDD	37:37	2.994e+04	2.426e+04	1.23	yes	no	0.892
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	2.300e+04	2.173e+04	1.06	yes	no	0.789
17	Unk	OCDD	43:12	4.558e+04	4.998e+04	0.91	yes	no	0.875
18	IS	13C-2,3,7,8-TCDF	28:37	8.123e+04	1.029e+05	0.79	yes	no	1.247
19	IS	13C-1,2,3,7,8-PeCDF	32:59	1.048e+05	6.711e+04	1.56	yes	no	1.234
20	IS	13C-1,2,3,4,7,8-HxCDF	36:33	1.133e+05	2.180e+05	0.52	yes	no	0.979
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:16	7.344e+04	1.688e+05	0.44	yes	no	0.687
22	IS	13C-2,3,7,8-TCDD	29:27	6.172e+04	7.884e+04	0.78	yes	no	1.100
23	IS	13C-1,2,3,7,8-PeCDD	34:05	8.077e+04	5.112e+04	1.58	yes	no	1.050
24	IS	13C-1,2,3,6,7,8-HxCDD	37:19	1.658e+05	1.329e+05	1.25	yes	no	0.966
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	1.297e+05	1.262e+05	1.03	yes	no	0.848
26	IS	13C-OCDD	43:11	2.337e+05	2.633e+05	0.89	yes	no	0.868
27	RS/RT	13C-1,2,3,4-TCDD	29:14	6.211e+04	7.930e+04	0.78	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	1.670e+05	1.346e+05	1.24	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	2.739e+04					0.992
					SUM AREA				
30	Tot	Total Tetra-Furans	28:08		3.291e+04	0.75	yes		0.716
31	Tot	Total Tetra-Dioxins	29:28		2.747e+04	0.76	yes		0.844
32	Tot	Total Penta-Furans	32:06		1.480e+05	1.68	yes		0.720
33	Tot	Total Penta-Dioxins	34:05		5.723e+04	1.54	yes		0.790
34	Tot	Total Hexa-Furans	36:33		2.717e+05	1.22	yes		0.886
35	Tot	Total Hexa-Dioxins	37:15		1.676e+05	1.25	yes		0.876
36	Tot	Total Hepta-Furans	39:17		1.149e+05	1.01	yes		1.062
37	Tot	Total Hepta-Dioxins	40:10		4.474e+04	1.06	yes		0.789

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #7 Filename P200027 #1 Samp: 1 Inj: 1 Acquired: 31-JUL-08 18:42:36

Processed: 11-AUG-08 12:39:25 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	2.31e+06	6.12e+02	3.8e+03	3.15e+06	1.70e+03	1.9e+03
2	1,2,3,7,8-PeCDF	8.70e+06	3.00e+02	2.9e+04	5.62e+06	1.34e+03	4.2e+03
3	2,3,4,7,8-PeCDF	8.97e+06	3.00e+02	3.0e+04	5.86e+06	1.34e+03	4.4e+03
4	1,2,3,4,7,8-HxCDF	8.70e+06	1.25e+03	6.9e+03	7.06e+06	4.48e+02	1.6e+04
5	1,2,3,6,7,8-HxCDF	8.20e+06	1.25e+03	6.6e+03	6.80e+06	4.48e+02	1.5e+04
6	2,3,4,6,7,8-HxCDF	7.93e+06	1.25e+03	6.3e+03	6.61e+06	4.48e+02	1.5e+04
7	1,2,3,7,8,9-HxCDF	6.55e+06	1.25e+03	5.2e+03	5.41e+06	4.48e+02	1.2e+04
8	1,2,3,4,6,7,8-HpCDF	7.19e+06	5.97e+03	1.2e+03	7.13e+06	3.16e+03	2.3e+03
9	1,2,3,4,7,8,9-HpCDF	4.75e+06	5.97e+03	8.0e+02	4.57e+06	3.16e+03	1.4e+03
10	OCDF	7.04e+06	9.00e+02	7.8e+03	7.82e+06	1.96e+03	4.0e+03
11	2,3,7,8-TCDD	2.08e+06	1.36e+03	1.5e+03	2.76e+06	3.60e+02	7.7e+03
12	1,2,3,7,8-PeCDD	7.15e+06	1.60e+03	4.5e+03	4.61e+06	1.32e+02	3.5e+04
13	1,2,3,4,7,8-HxCDD	6.80e+06	9.60e+01	7.1e+04	5.34e+06	7.72e+02	6.9e+03
14	1,2,3,6,7,8-HxCDD	7.01e+06	9.60e+01	7.3e+04	5.56e+06	7.72e+02	7.2e+03
15	1,2,3,7,8,9-HxCDD	6.55e+06	9.60e+01	6.8e+04	5.25e+06	7.72e+02	6.8e+03
16	1,2,3,4,6,7,8-HpCDD	4.74e+06	9.96e+02	4.8e+03	4.49e+06	4.52e+02	9.9e+03
17	OCDD	6.91e+06	2.40e+02	2.9e+04	7.59e+06	4.36e+02	1.7e+04
18	13C-2,3,7,8-TCDF	1.35e+07	3.96e+03	3.4e+03	1.73e+07	2.73e+03	6.3e+03
19	13C-1,2,3,7,8-PeCDF	2.02e+07	5.60e+01	3.6e+05	1.29e+07	6.20e+02	2.1e+04
20	13C-1,2,3,4,7,8-HxCDF	2.39e+07	7.36e+02	3.3e+04	4.54e+07	1.40e+03	3.2e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.58e+07	4.62e+03	3.4e+03	3.53e+07	7.67e+03	4.6e+03
22	13C-2,3,7,8-TCDD	1.09e+07	4.90e+03	2.2e+03	1.38e+07	1.05e+03	1.3e+04
23	13C-1,2,3,7,8-PeCDD	1.60e+07	1.49e+03	1.1e+04	1.02e+07	6.36e+02	1.6e+04
24	13C-1,2,3,6,7,8-HxCDD	3.71e+07	6.04e+02	6.1e+04	2.95e+07	1.14e+03	2.6e+04
25	13C-1,2,3,4,6,7,8-HpCDD	2.68e+07	1.18e+03	2.3e+04	2.58e+07	1.53e+03	1.7e+04
26	13C-OCDD	3.52e+07	5.76e+02	6.1e+04	3.98e+07	7.00e+02	5.7e+04
27	13C-1,2,3,4-TCDD	1.09e+07	4.90e+03	2.2e+03	1.40e+07	1.05e+03	1.3e+04
28	13C-1,2,3,7,8,9-HxCDD	3.68e+07	6.04e+02	6.1e+04	2.91e+07	1.14e+03	2.6e+04
29	37Cl-2,3,7,8-TCDD	4.86e+06	5.56e+02	8.7e+03			

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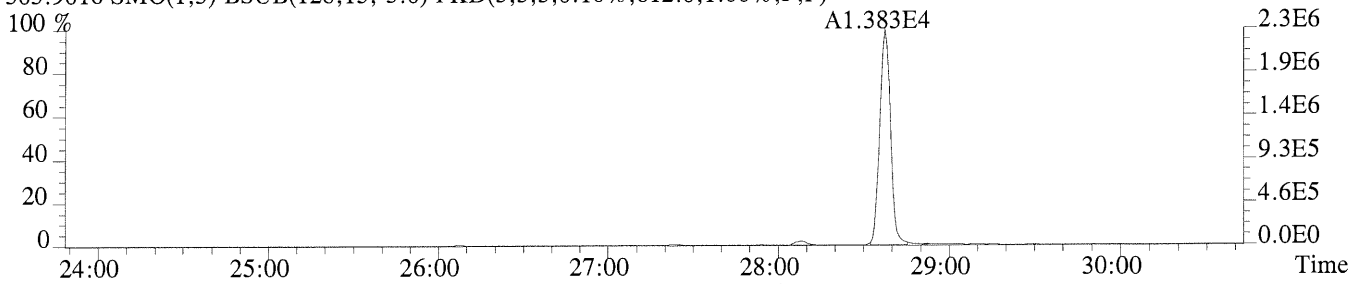
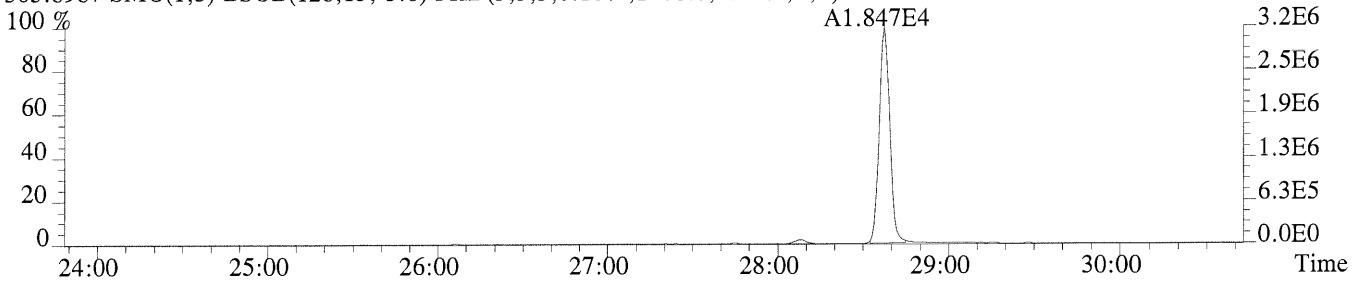
File:P200027 #1-576 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

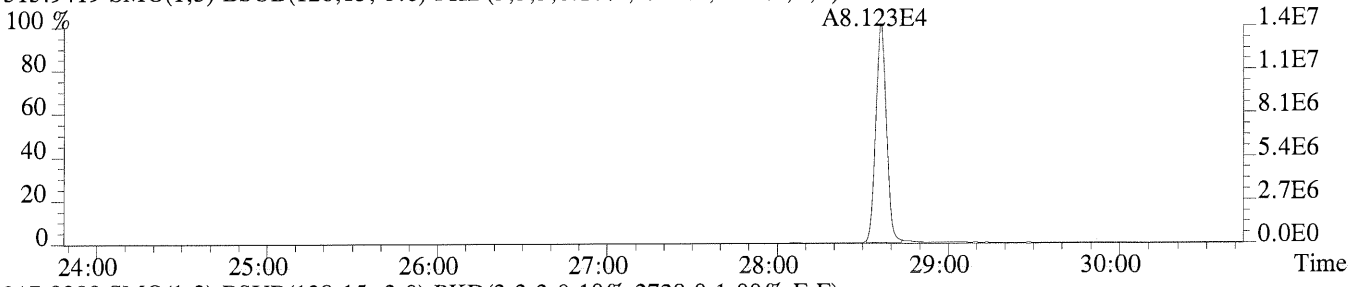
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,612.0,1.00%,F,F)



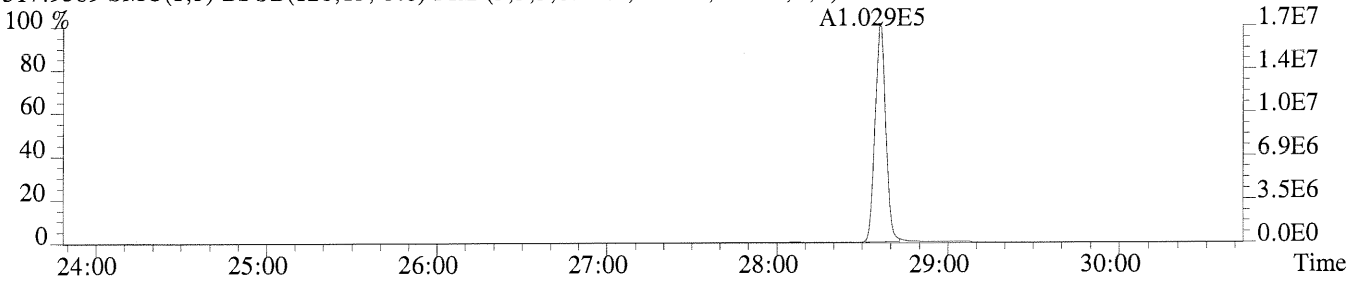
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1700.0,1.00%,F,F)



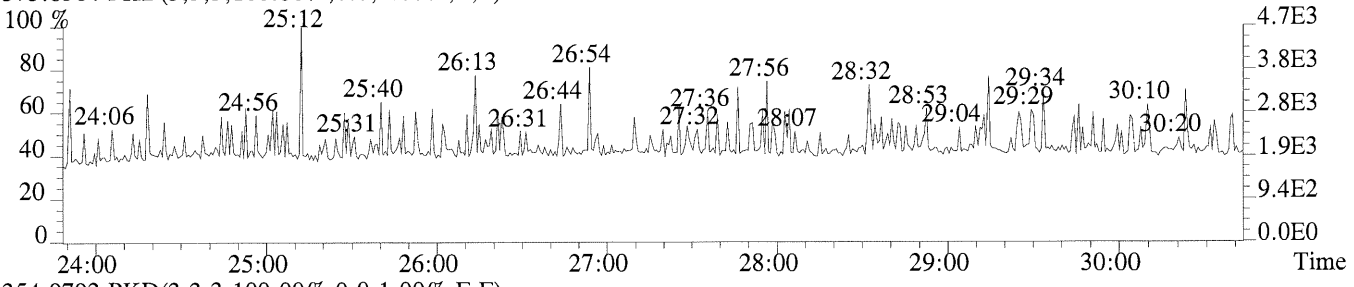
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3960.0,1.00%,F,F)



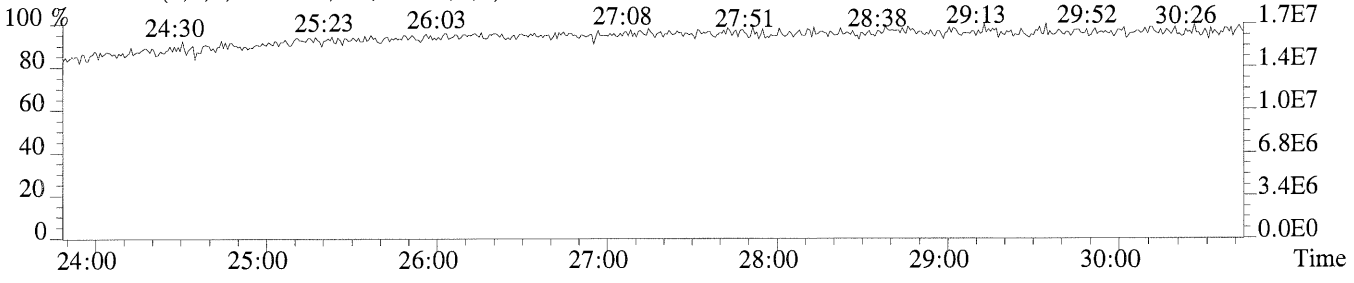
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2728.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

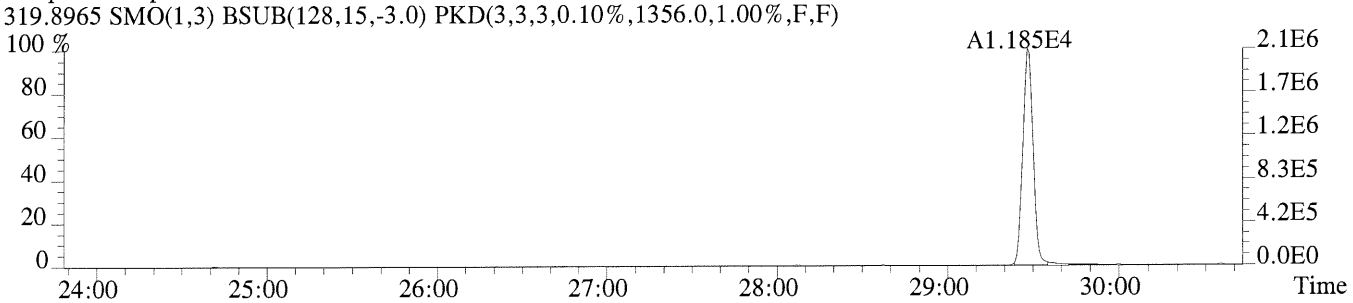


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

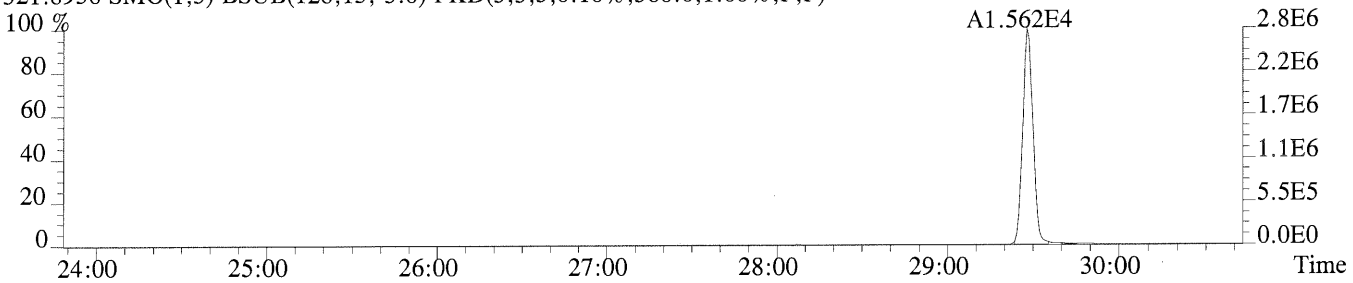


File:P200027 #1-576 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

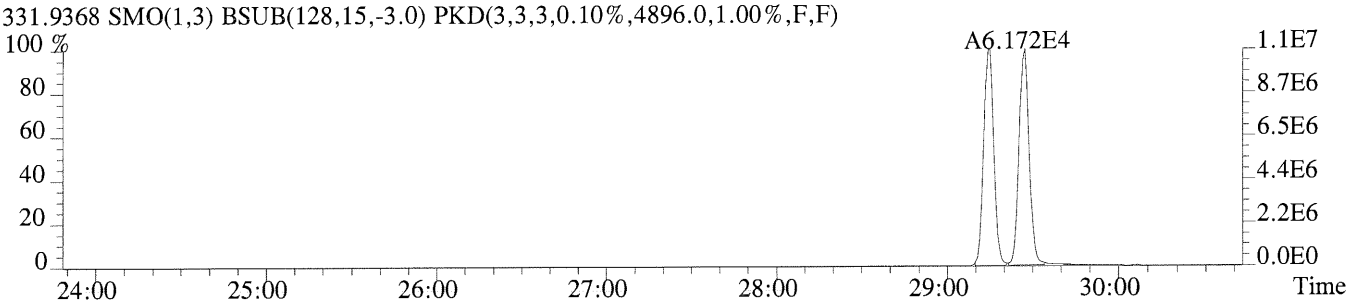
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1356.0,1.00%,F,F)



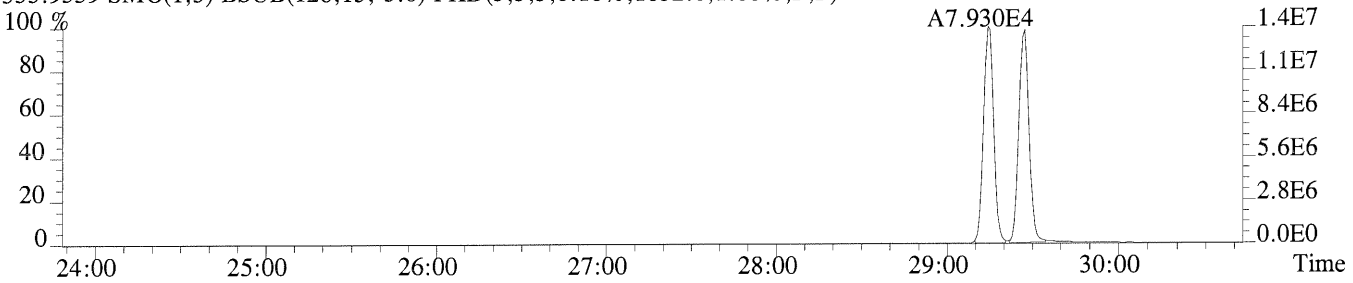
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,360.0,1.00%,F,F)



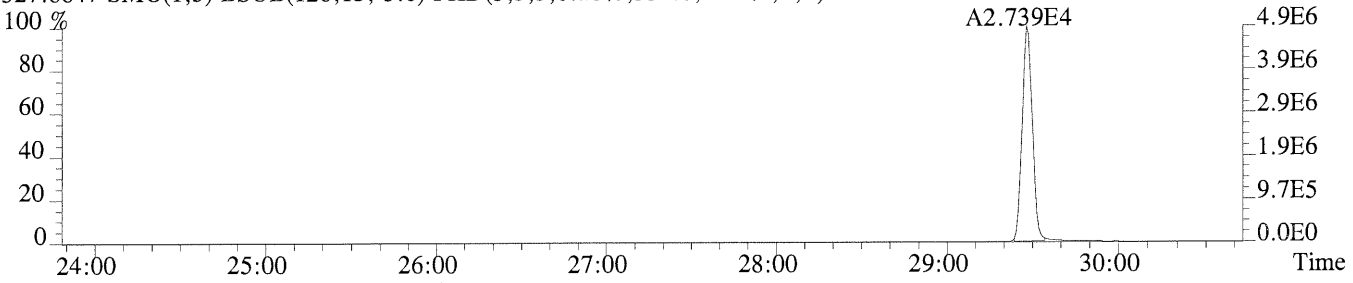
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,4896.0,1.00%,F,F)



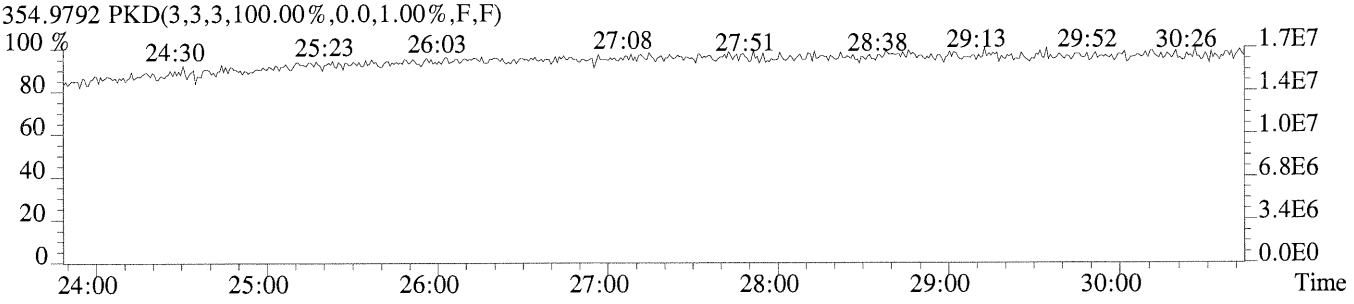
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1052.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,556.0,1.00%,F,F)

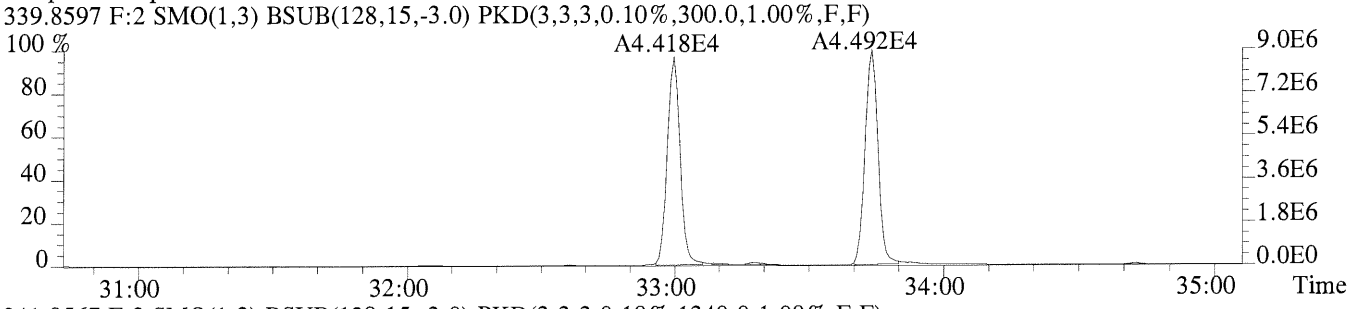


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

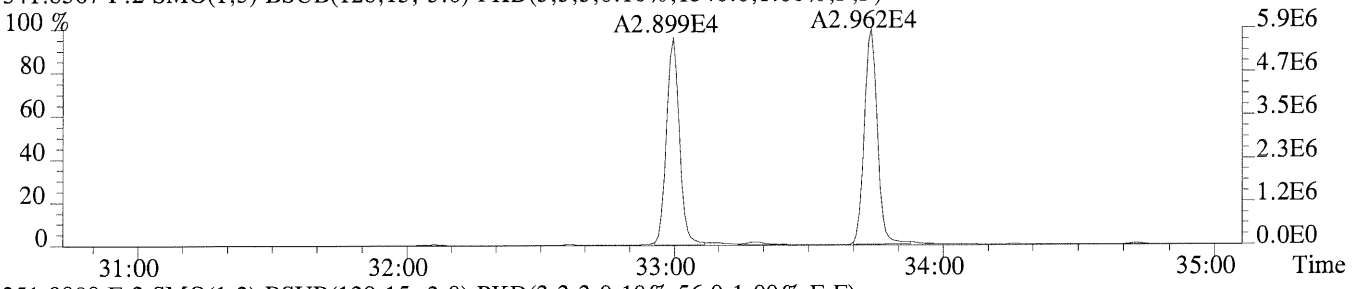


File:P200027 #1-398 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

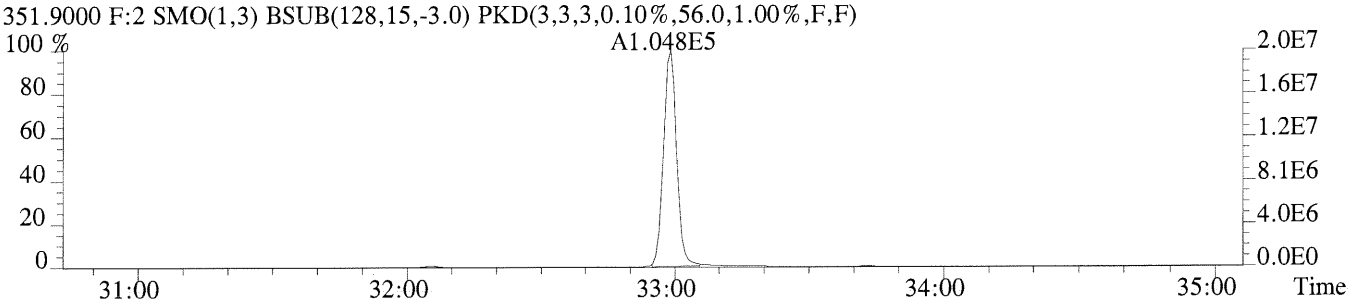
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,300.0,1.00%,F,F)



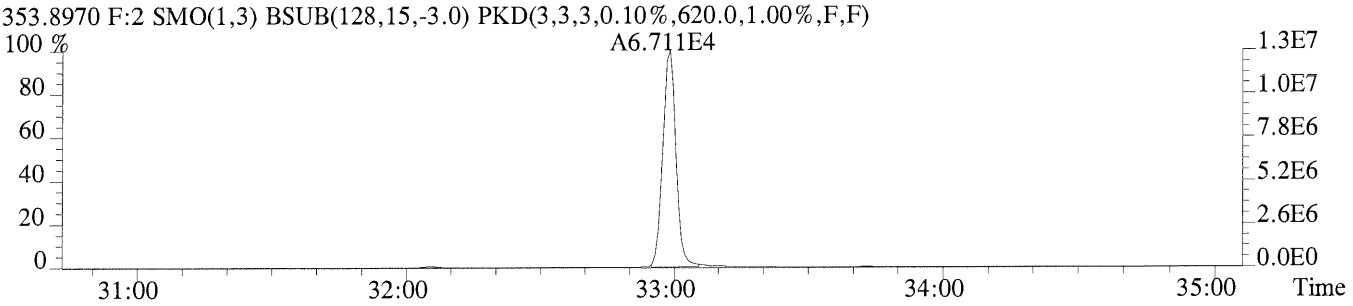
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1340.0,1.00%,F,F)



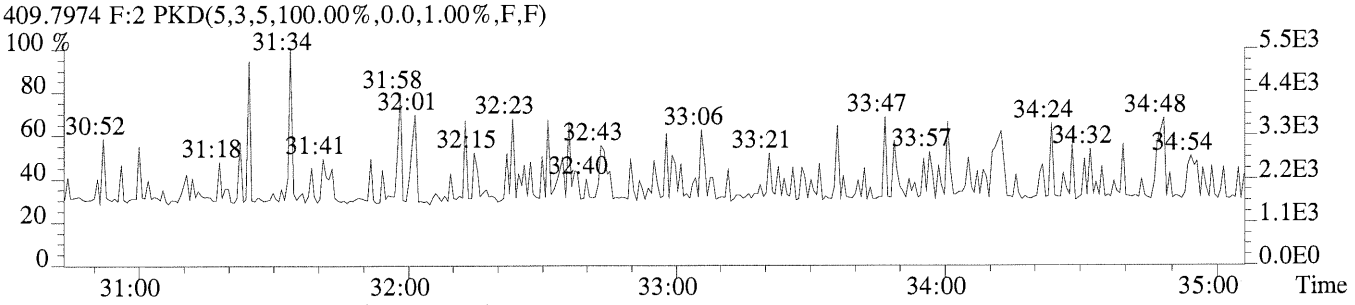
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,56.0,1.00%,F,F)



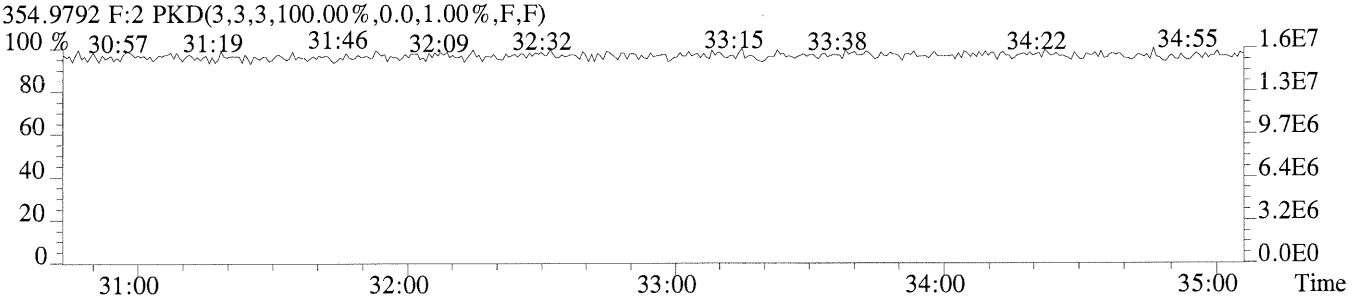
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,620.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

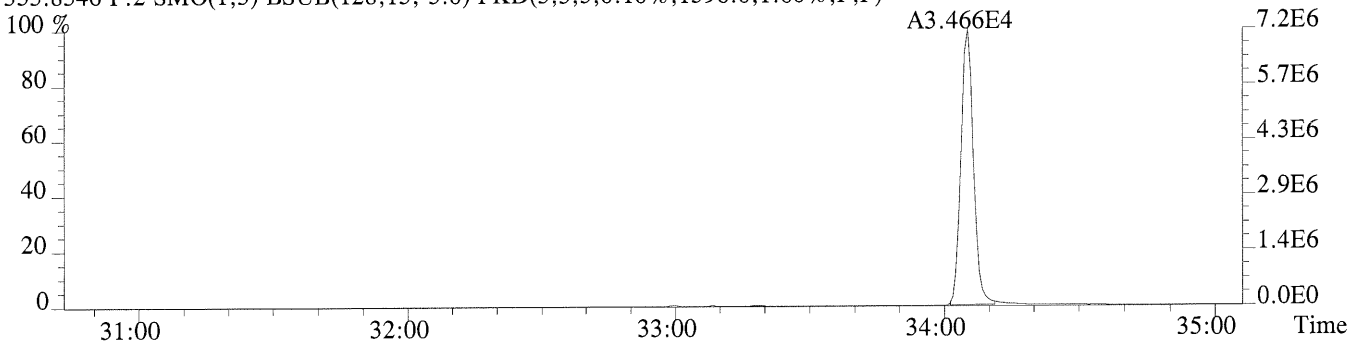


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

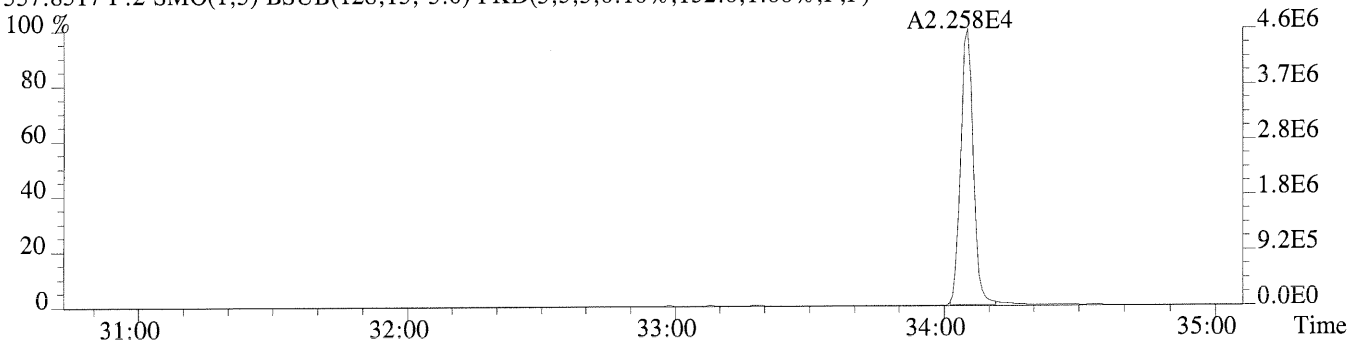


File:P200027 #1-398 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

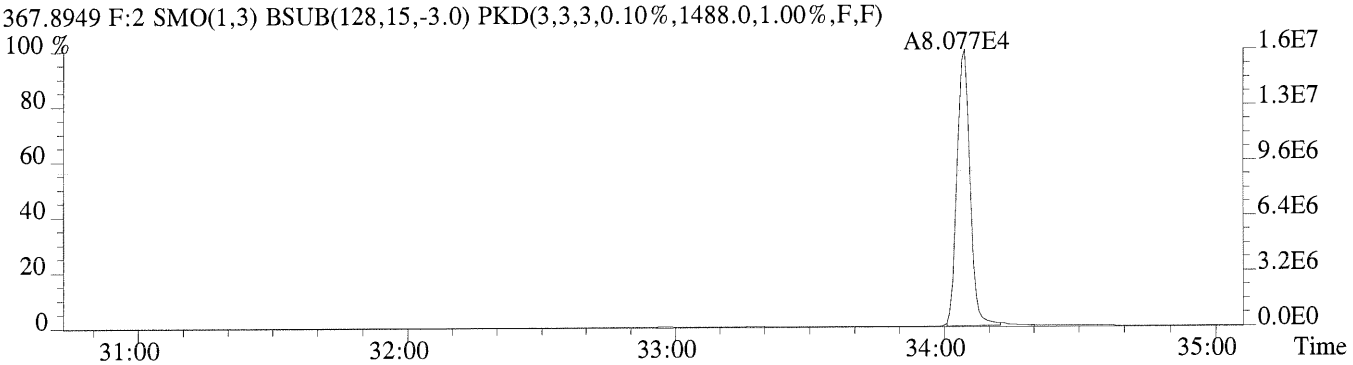
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1596.0,1.00%,F,F)



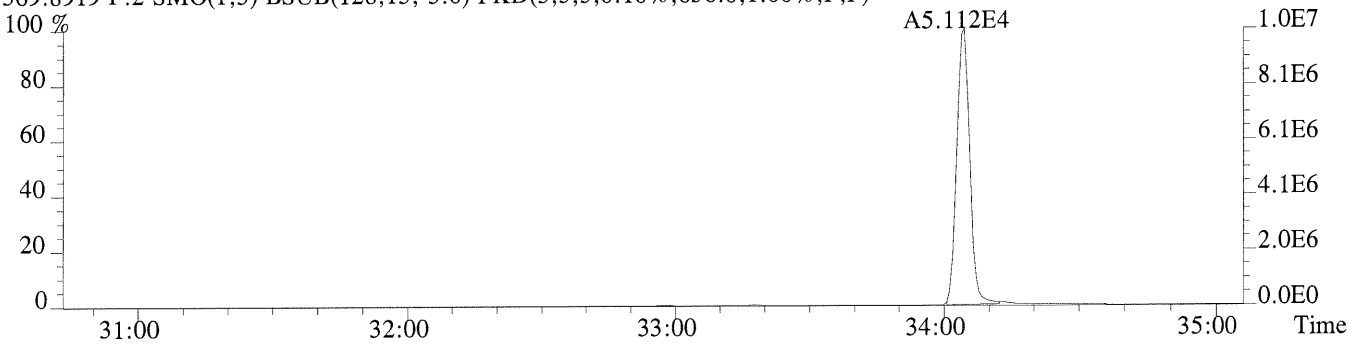
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,132.0,1.00%,F,F)



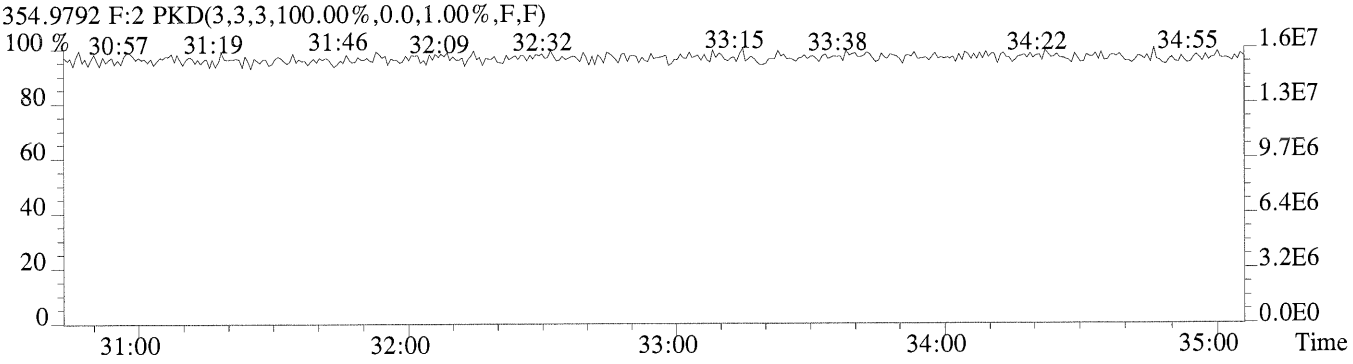
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1488.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,636.0,1.00%,F,F)

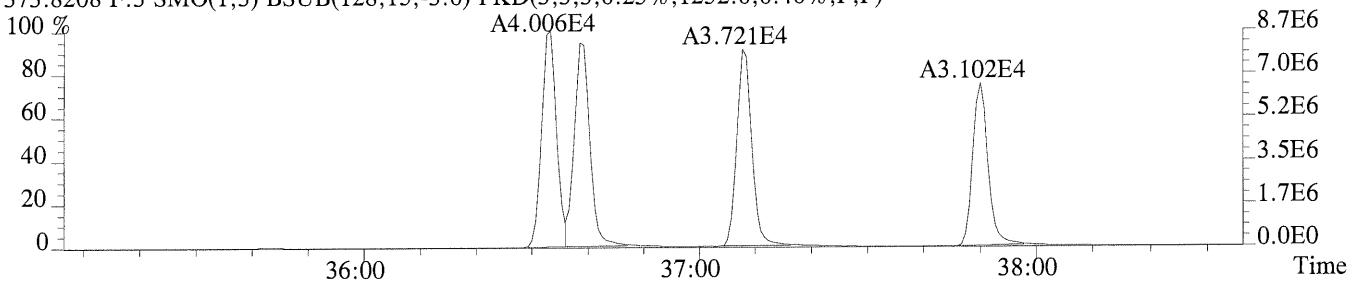


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

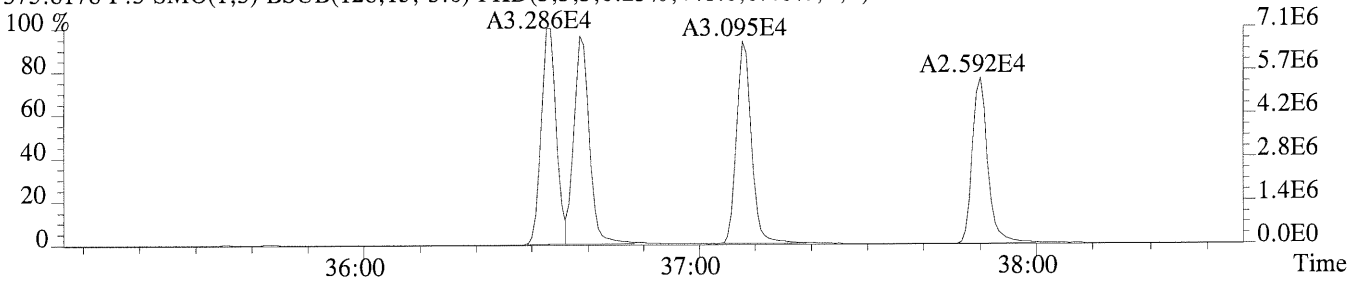


File:P200027 #1-318 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

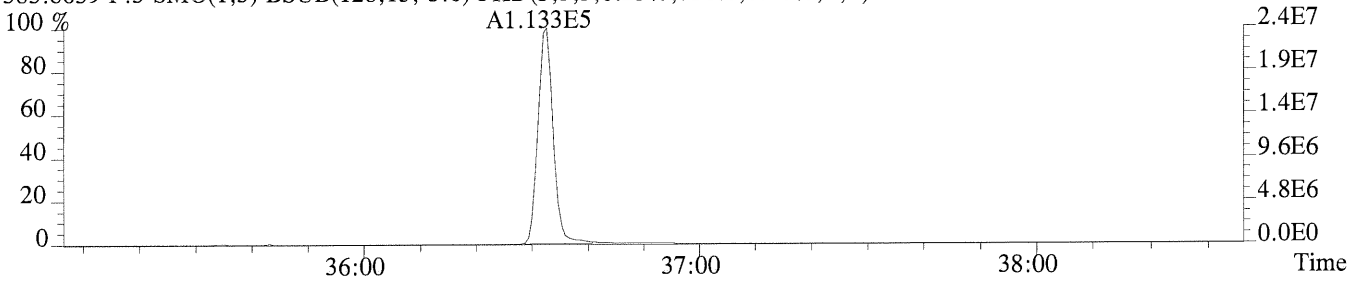
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1252.0,0.40%,F,F)



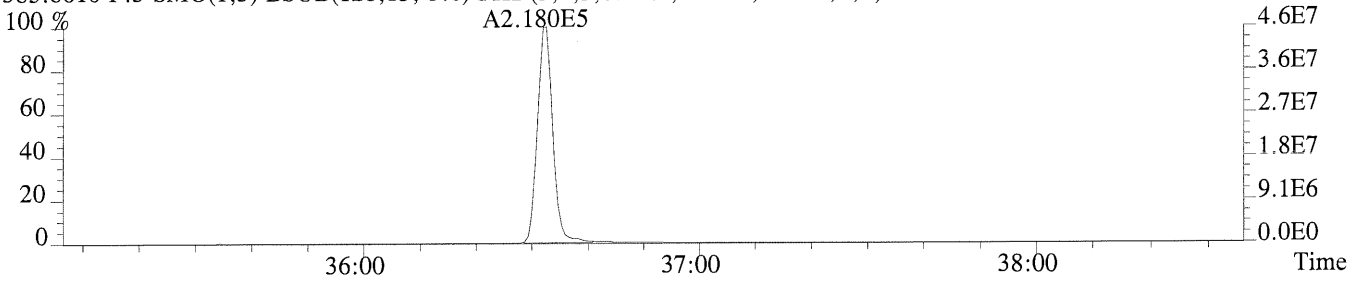
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,448.0,0.40%,F,F)



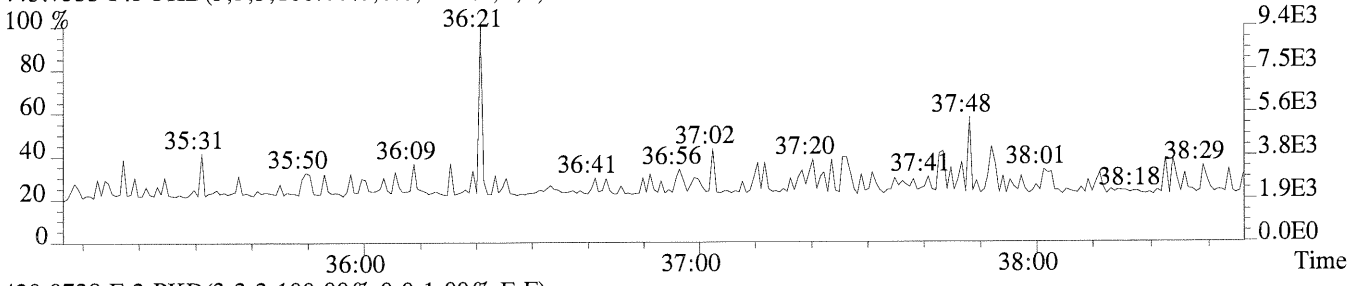
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,736.0,0.40%,F,F)



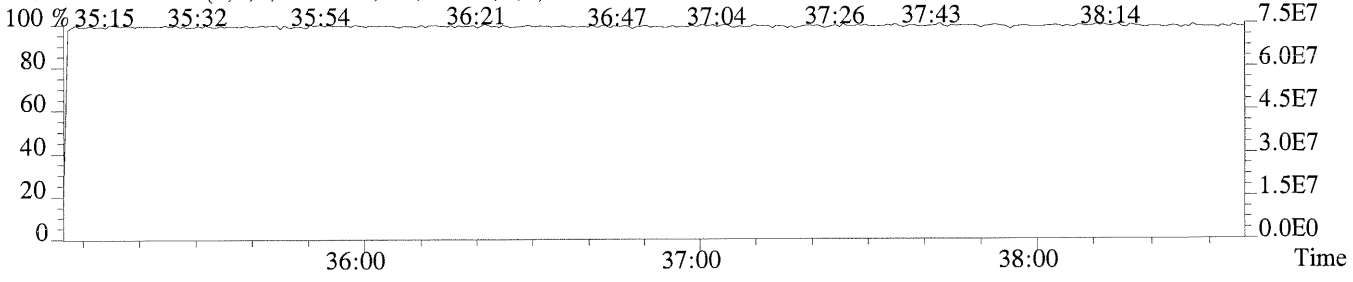
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1400.0,0.40%,F,F)



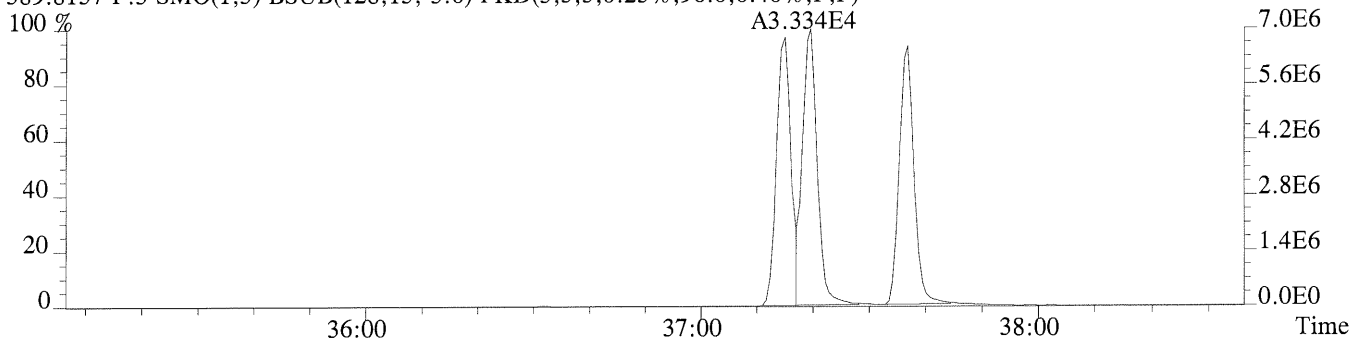
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



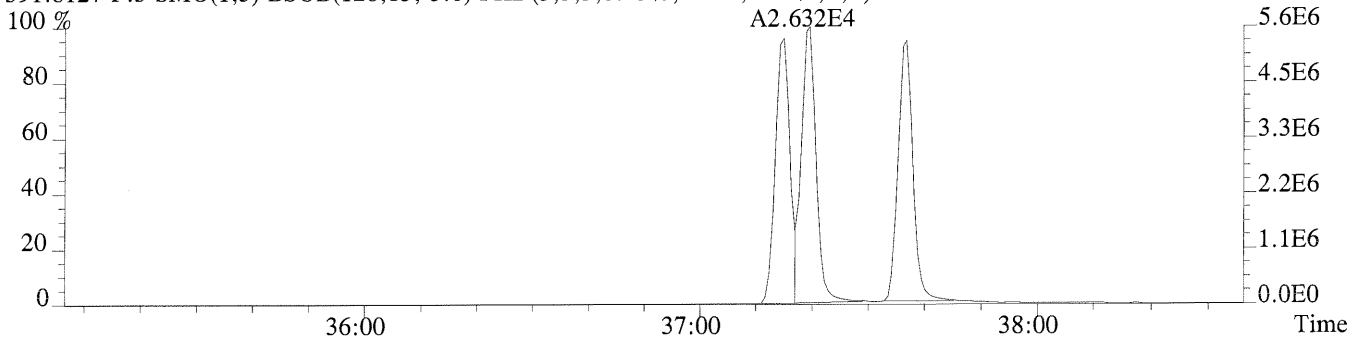
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



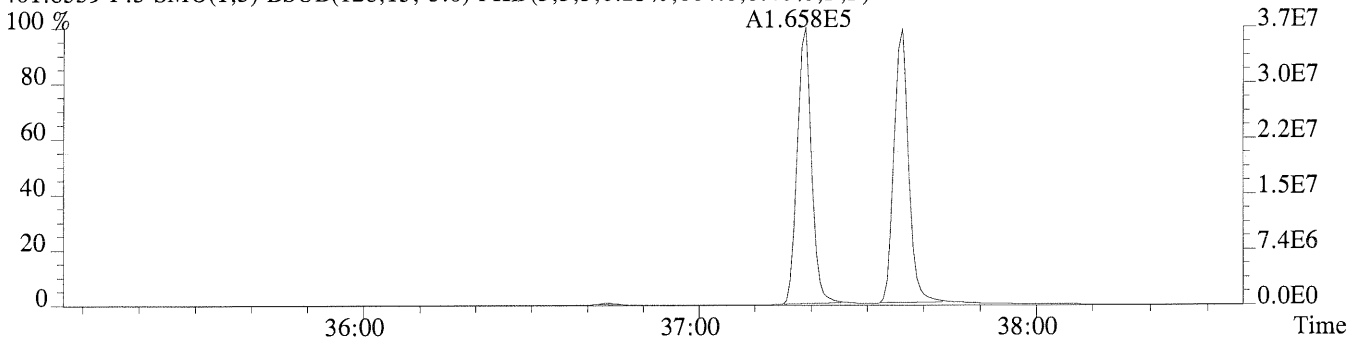
File:P200027 #1-318 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,96.0,0.40%,F,F)



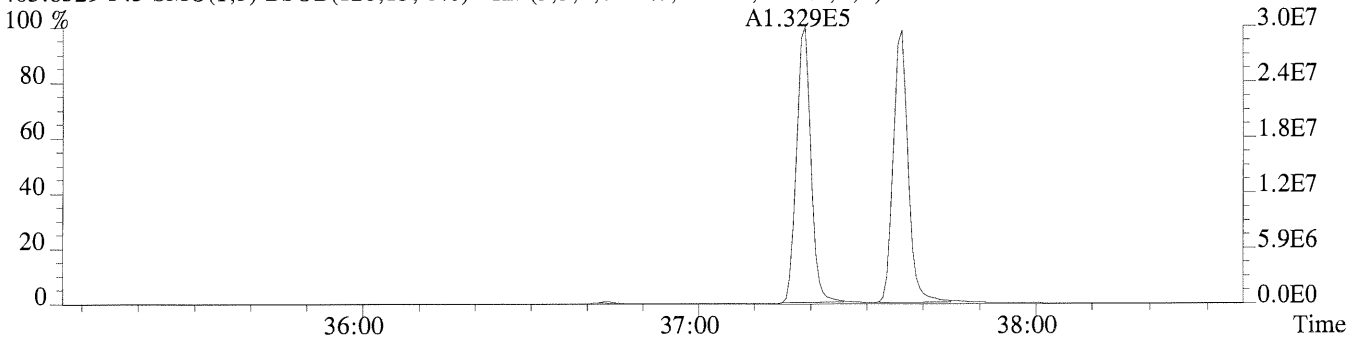
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,772.0,0.40%,F,F)



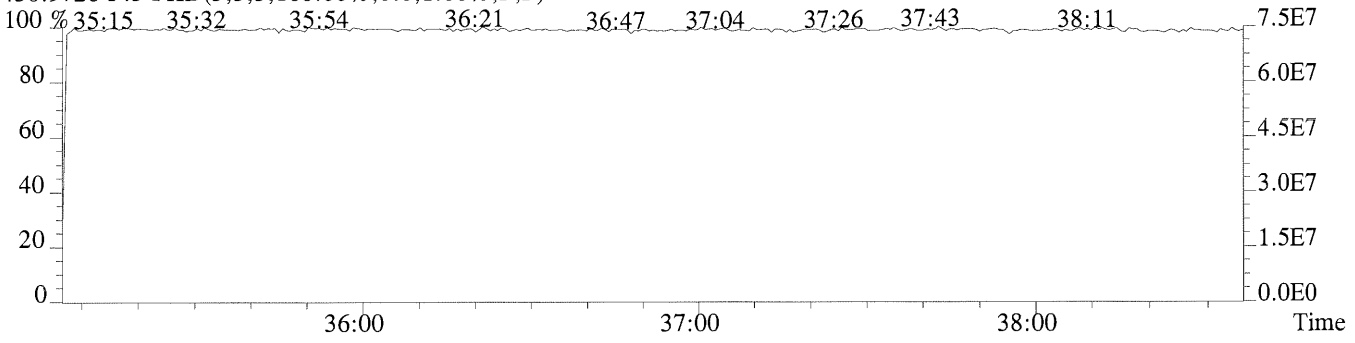
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,604.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1140.0,0.40%,F,F)

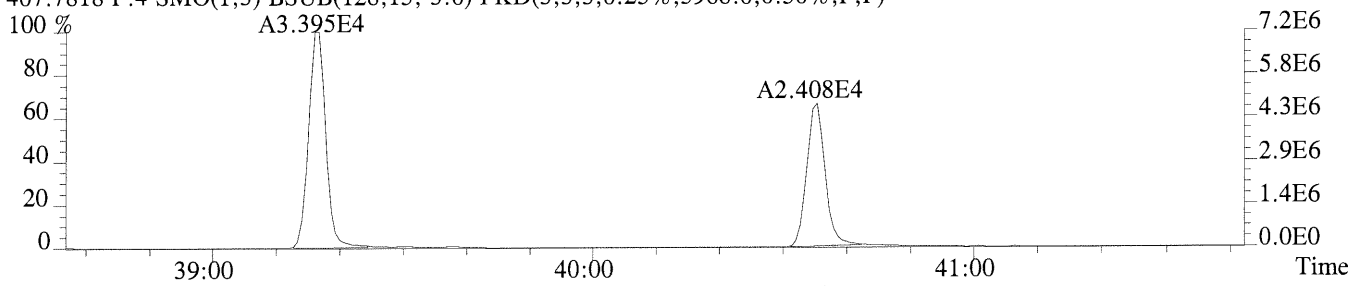


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

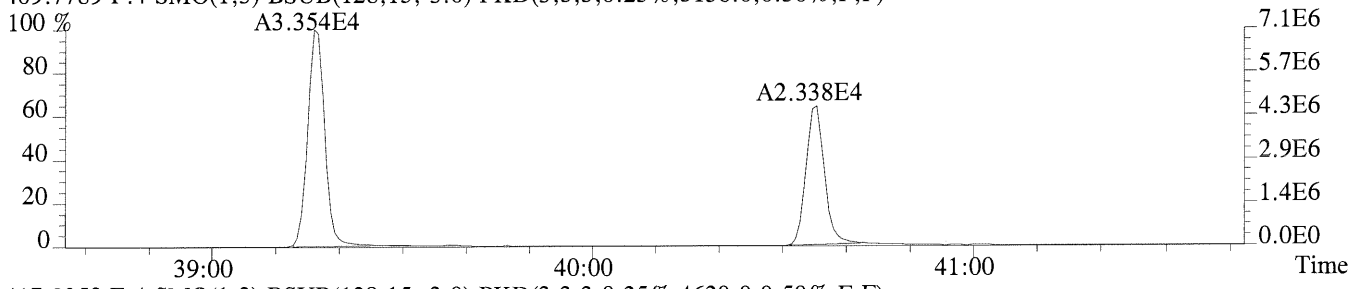


File:P200027 #1-281 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

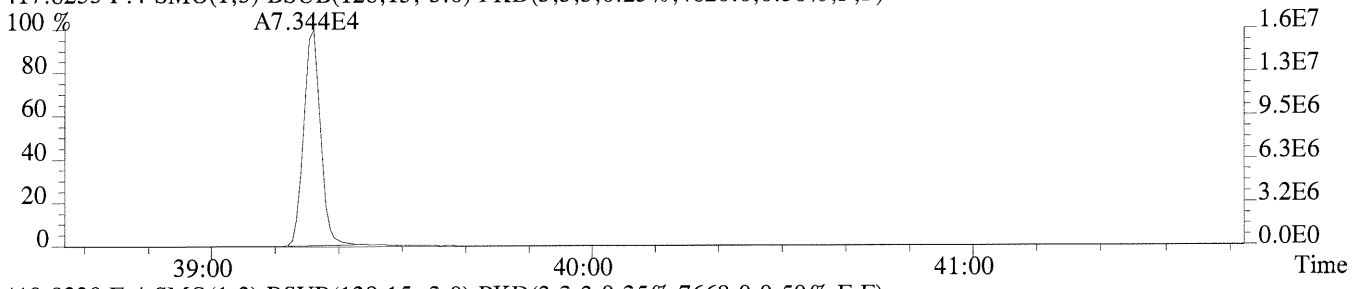
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5968.0,0.50%,F,F)



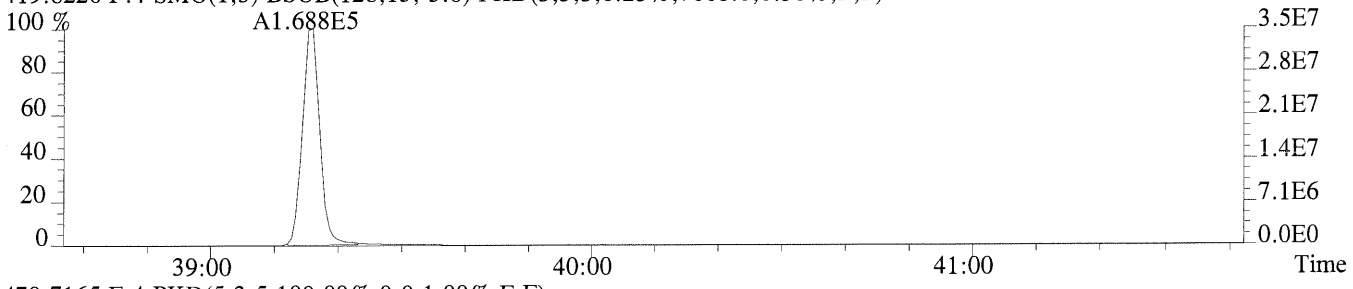
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3156.0,0.50%,F,F)



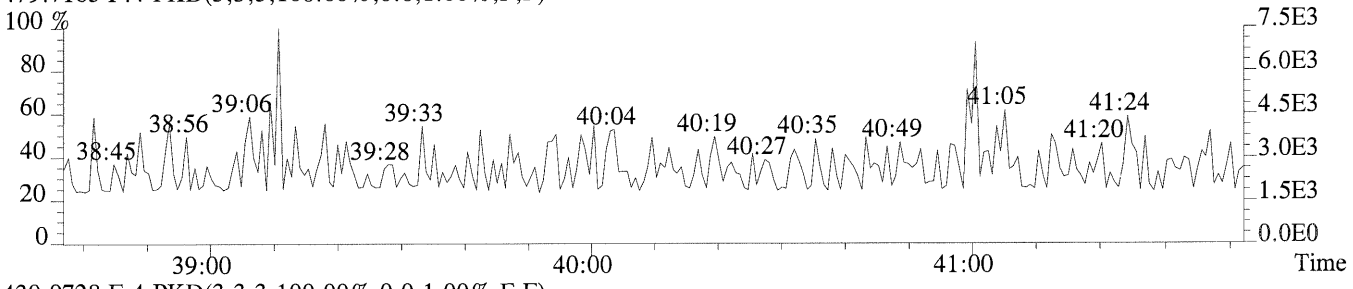
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4620.0,0.50%,F,F)



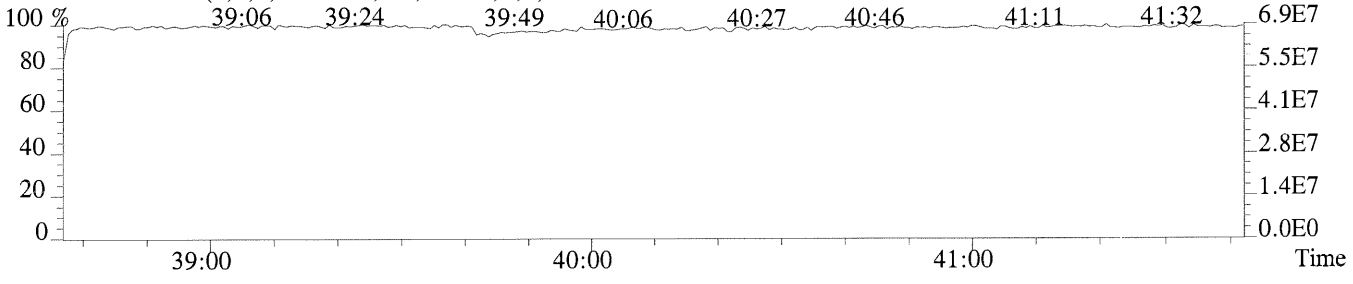
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,7668.0,0.50%,F,F)



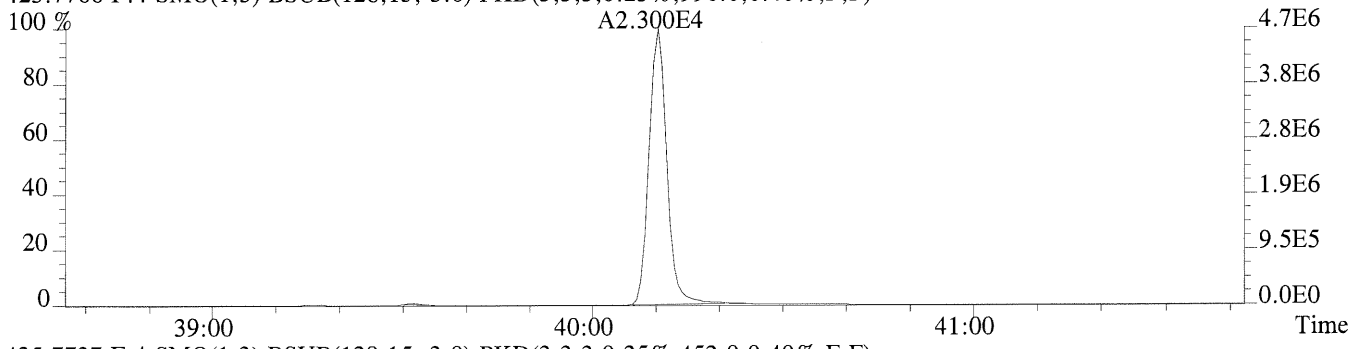
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



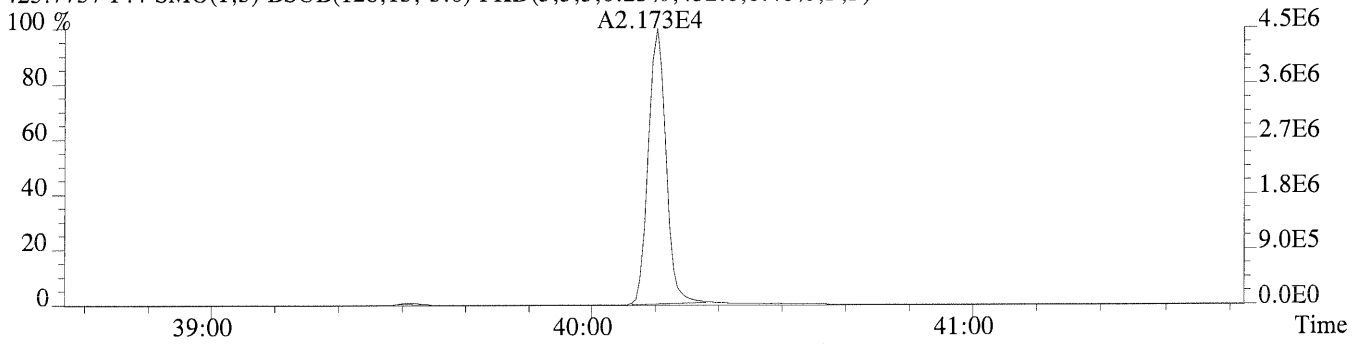
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



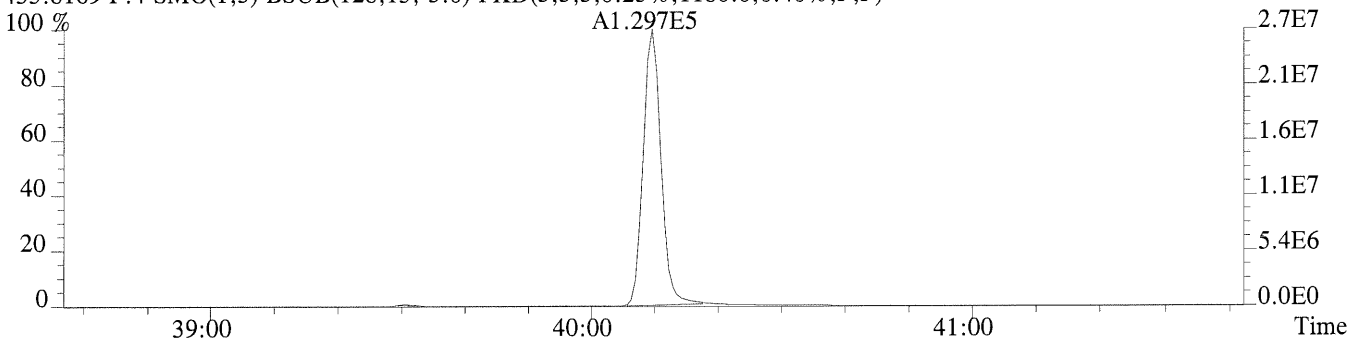
File:P200027 #1-281 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,996.0,0.40%,F,F)



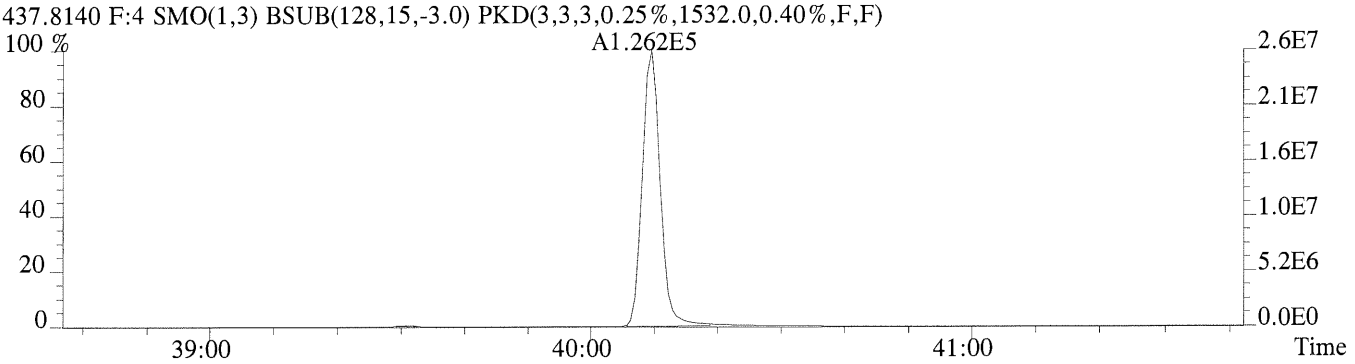
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,452.0,0.40%,F,F)



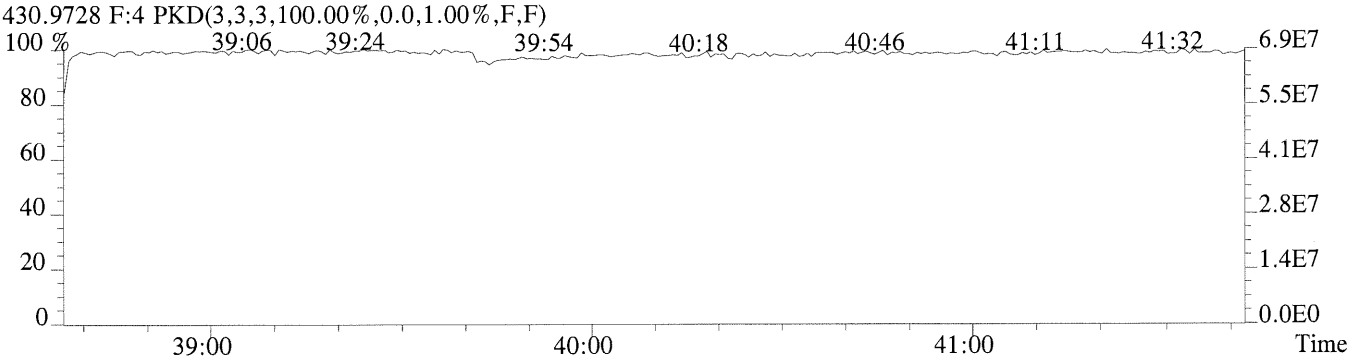
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1180.0,0.40%,F,F)



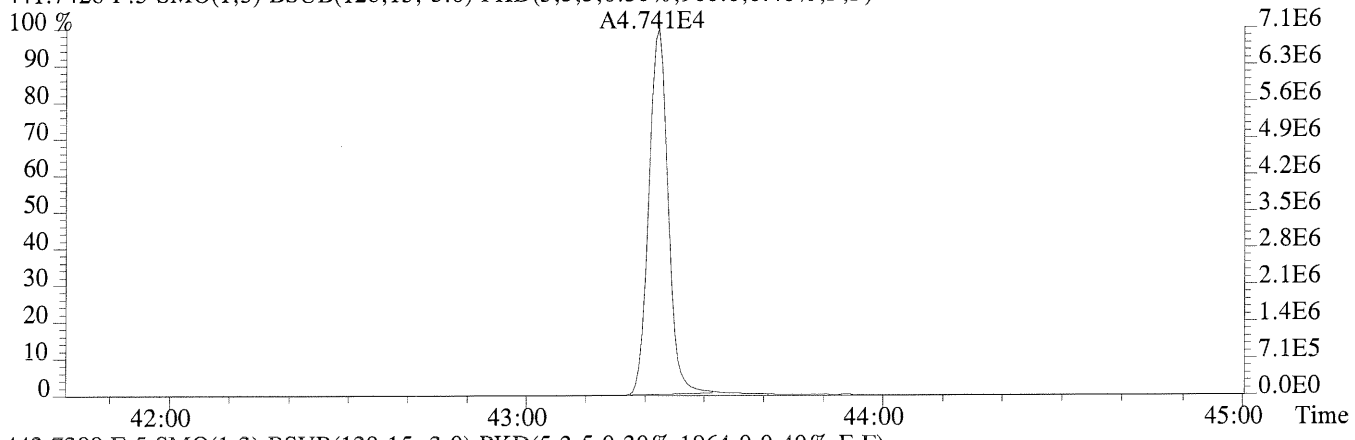
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1532.0,0.40%,F,F)



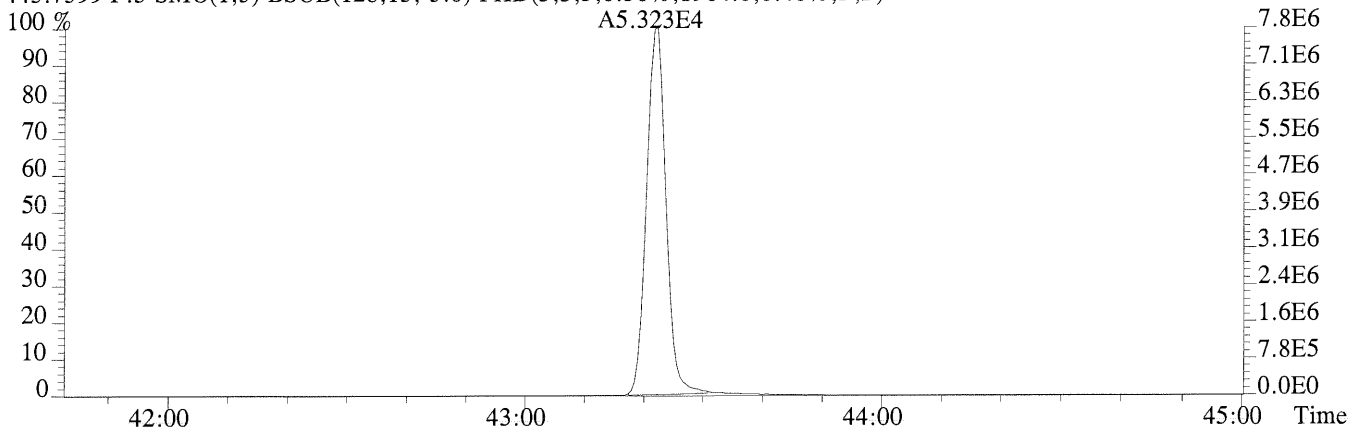
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



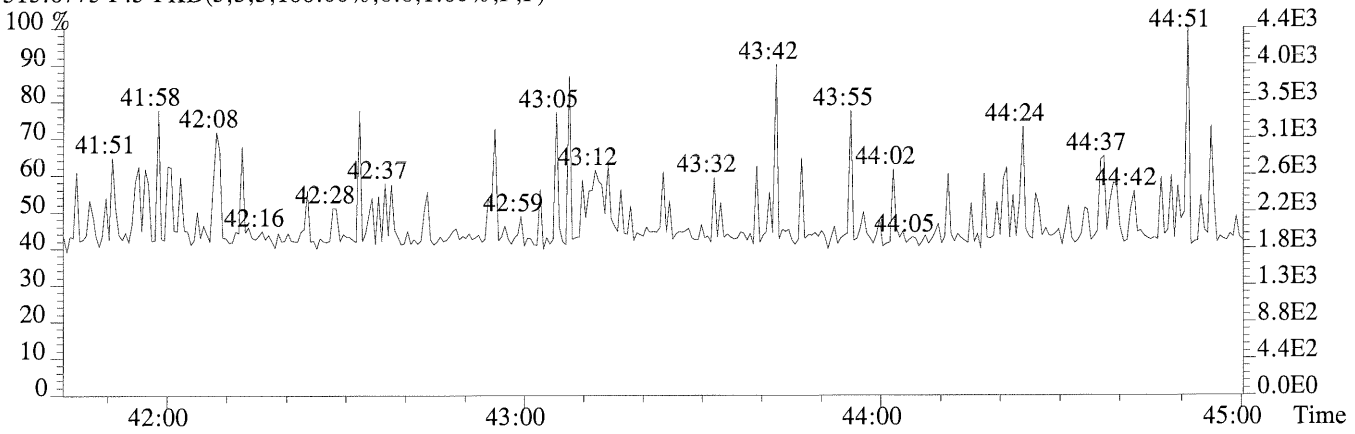
File:P200027 #1-364 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,900.0,0.40%,F,F)



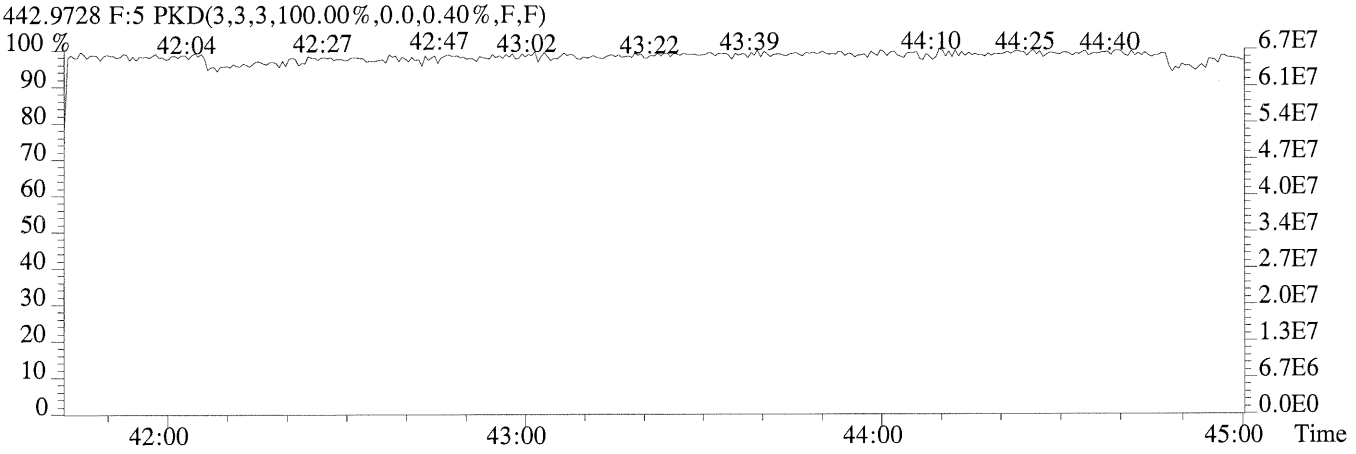
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1964.0,0.40%,F,F)



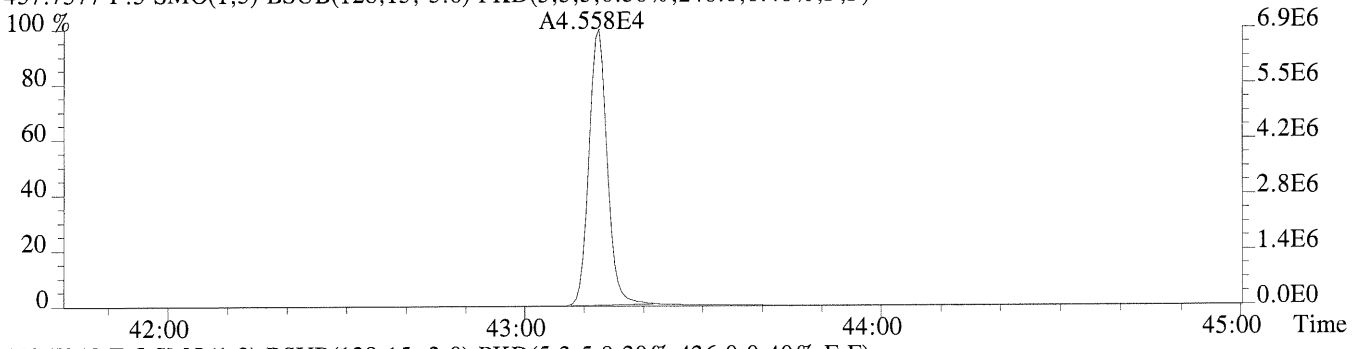
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



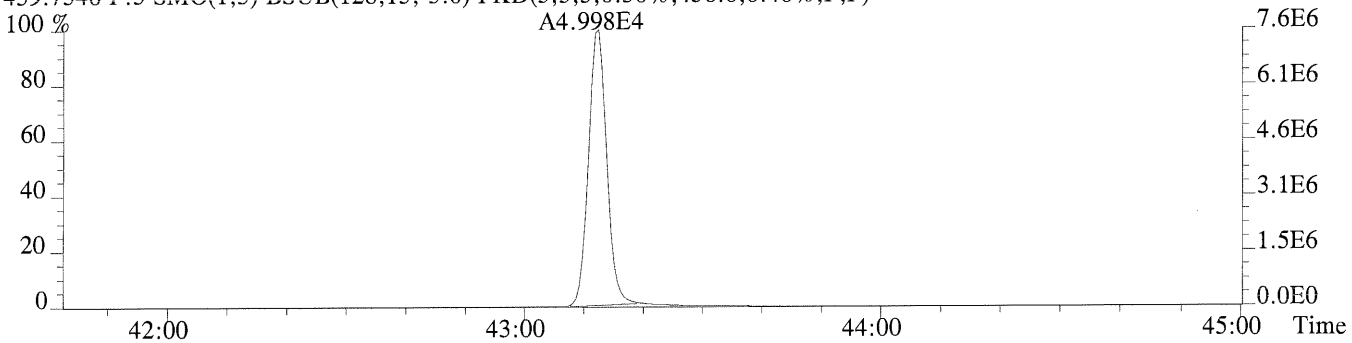
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



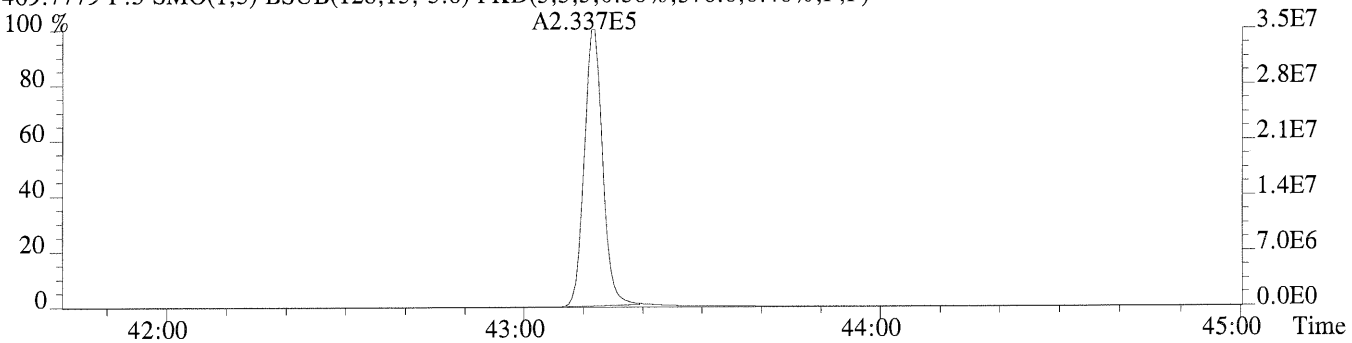
File:P200027 #1-364 Acq:31-JUL-2008 18:42:36 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,240.0,0.40%,F,F)



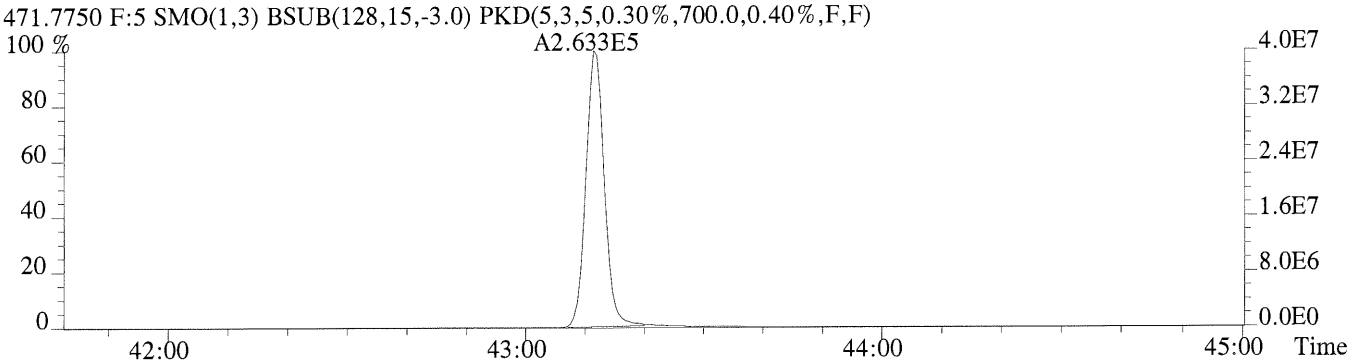
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,436.0,0.40%,F,F)



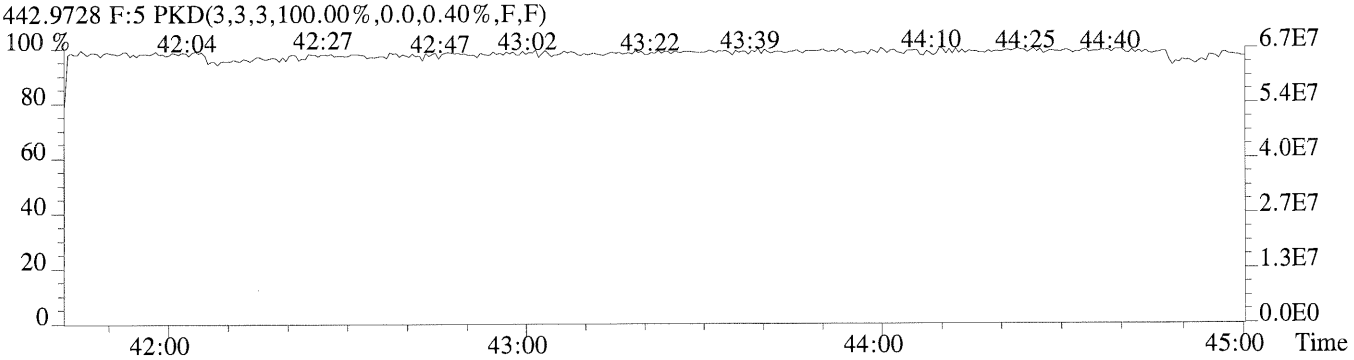
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,576.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,700.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



RW/ HRCC3 Daily Calibration QC Checklist

Calibration File Name: @ 200039/P200045 Circle one: Beginning / Ending

Date: 08/04/08

Method: 8290 / Tetra / TCDD Only / TCDF Conf

Retention Window/Column Performance Check:	**Analyst**	**Second Check**
Windows labeled for first and last eluting compounds	✓	✓
Column performance shows less than or equal to 25% valley between column specific 2378 isomer and the closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or the closest eluters	✓	✓

HRCC3 Continuing Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
Signal-to-noise of all target analytes and associated labeled standards at least 2.5:1	✓	✓
Ending Calibration injected prior to end of 12 hour clock	✓	✓

Analyst: L Second QC: DZ

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: Columbia Analytical Services Contract:

Lab Code: TX01411 Case No.: Client No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Ultima

Init. Calib. Date: 08/01/08

Init. Calib.Times: 14:25

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSs) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		P200037	4-AUG-08	09:05:39
CCAL HRCC3		P200039	4-AUG-08	11:52:05
METHOD BLANK	EQ0800317-01	P200040	4-AUG-08	12:59:32
H-T5A-2.0	E0800703-001	P200041	4-AUG-08	13:49:14
H-T5-3.0DUP	E0800704-003	P200042	4-AUG-08	14:44:44
H-T1-2.0	E0800705-002	P200043	4-AUG-08	16:06:26
cak071808SQC	E0800710-001	P200044	4-AUG-08	16:54:12
CCAL HRCC3	CCAL HRCC3	P200045	4-AUG-08	17:54:20

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services inc.

An Employee Owned Company

Acq Method: 8290CS/1613 Result File: P80P200362ES

GC Method: 8290CS/1613 EDD File: F P808018290I

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
07/31/08	18:42	P200027	CCAL HRCC3	DS-2-2A		~	Use Avg	
07/31/08	18:41		HRMS Check					
08/01/08	~~14:22~~	mo8/07/08						
	07:25	P200028	Window Define				14:22 HRMS Check	
	08:11	P200029	CCAL HRCC3	DS-2-2A				
	14:25	P200030	Window Define	DF-80-2				
	15:21	P200031	ICAL HRCC3	DS-2-2A				
	16:23	P200032	ICAL HRCC2	DS-49-4				
	17:11	P200033	ICAL HRCC1	DS-49-5				
	18:16	P200034	ICAL HRCC4	DS-49-2				
	19:02	P200035	ICAL HRCC5	DS-49-1				
		P200036	HRCC3 CS/	~ 08/07/08			19:57 HRMS Check	
	14:57		HRMS check				08:58 ↓	
08/04/08	08:58		↓				P200036 HRCC3 CS/DF-611	
	09:05	P200037	Window Define					
		P200038	CCAL HRCC3			↓	needs reinjection	

Reviewed by:

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services, Inc.
An Employee Owned Company

Acq Method: 8290CAS/1613
GC Method: 8290CAS/1613
Result File: F-P200039RES
EDD File:

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
08/04/20	11:52	P200039	CCAL HRGC	DB-2-21		KC		
w 08/14/20	12:59	P200040	EQ0800317-01	Method Blank				
14:04	13:49	P200041	EQ0800703-001	H-TSA-2.0		14:44	P200042	
16:04	16:06	P200042	EQ0800704-003	H-TS-3.0DUP			w 08/14/20	
16:54	16:54	P200043	EQ0800705-002	H-T1-2.0				
	17:54	P200044	EQ0800710-001	CAL 071808SQC		17:54	P200045 CCAL HRGC DB-2-21	
	18:43	18:43	HRMS Check					
08/05/20	10:51							
		P200046	Window Defyn	DY-90-2				
		P200047	CCAL HRGC	DB-2-21				
		P200048	EQ0800326-01					
		P200049	EQ0800716-010					
		P200050	1 -011					
		P200051	CCAL HRGC	DB-2-21				
	06:25		HRMS Check				Use Avg	
		P200052	Window Defyn	DY-90-2				

Reviewed by:

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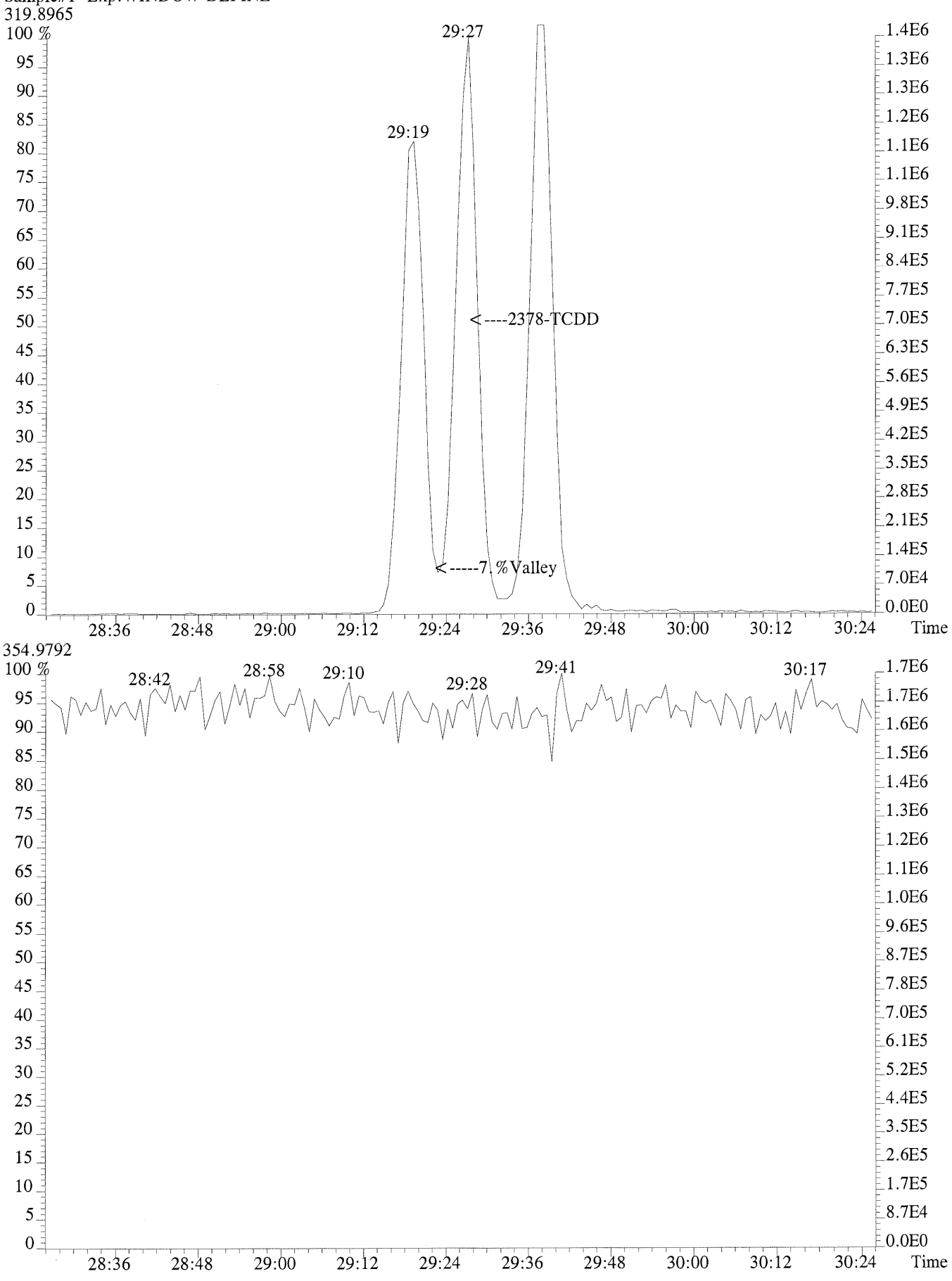
File:P200037 #1-578 Acq: 4-AUG-2008 09:05:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE



5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID

WDM

Lab Name: COLUMBIA ANALYTICAL SERVICES

Lab Code: CAS Case No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Lab File ID: P200037

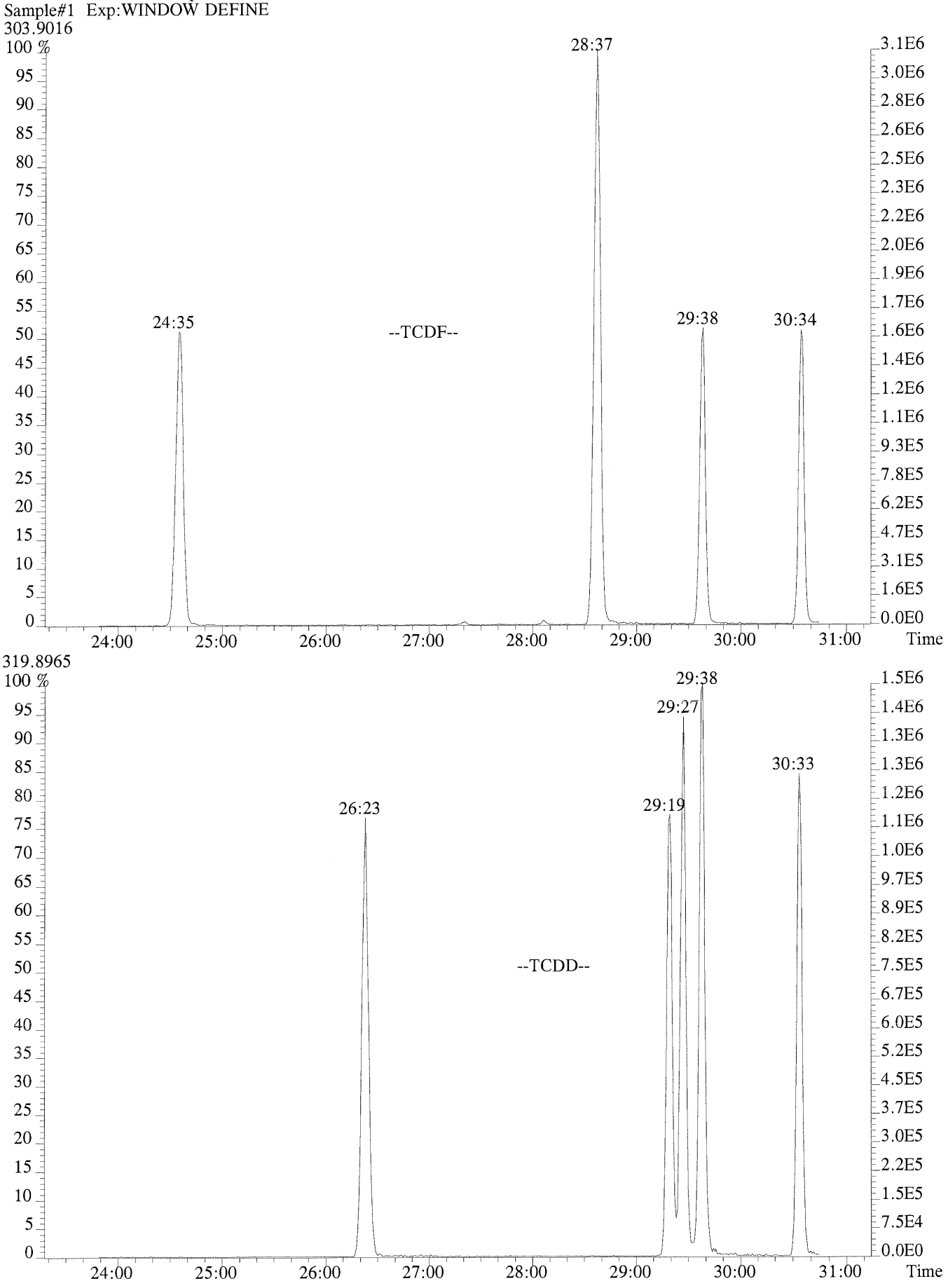
Date Analyzed: 08/04/08

Time Analyzed: 09:05:39

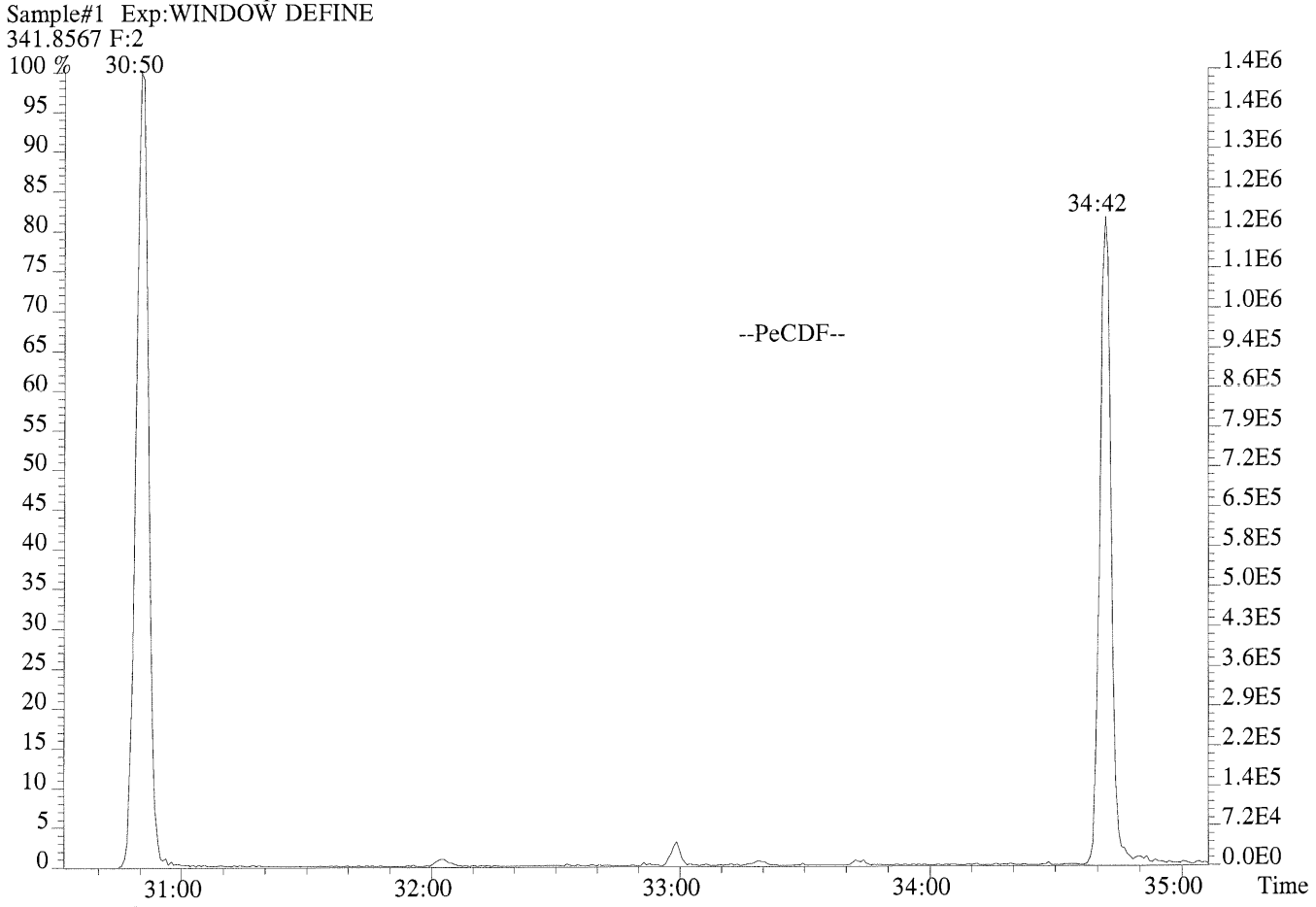
CONGENER	RT FIRST ELUTING	RT LAST ELUTING
TCDF	24:35	30:34
TCDD	26:23	30:33
PeCDF	30:50	34:42
PeCDD	32:12	34:33
HxCDF	35:35	37:53
HxCDD	36:04	37:34
HpCDF	39:16	40:35
HpCDD	39:31	40:10

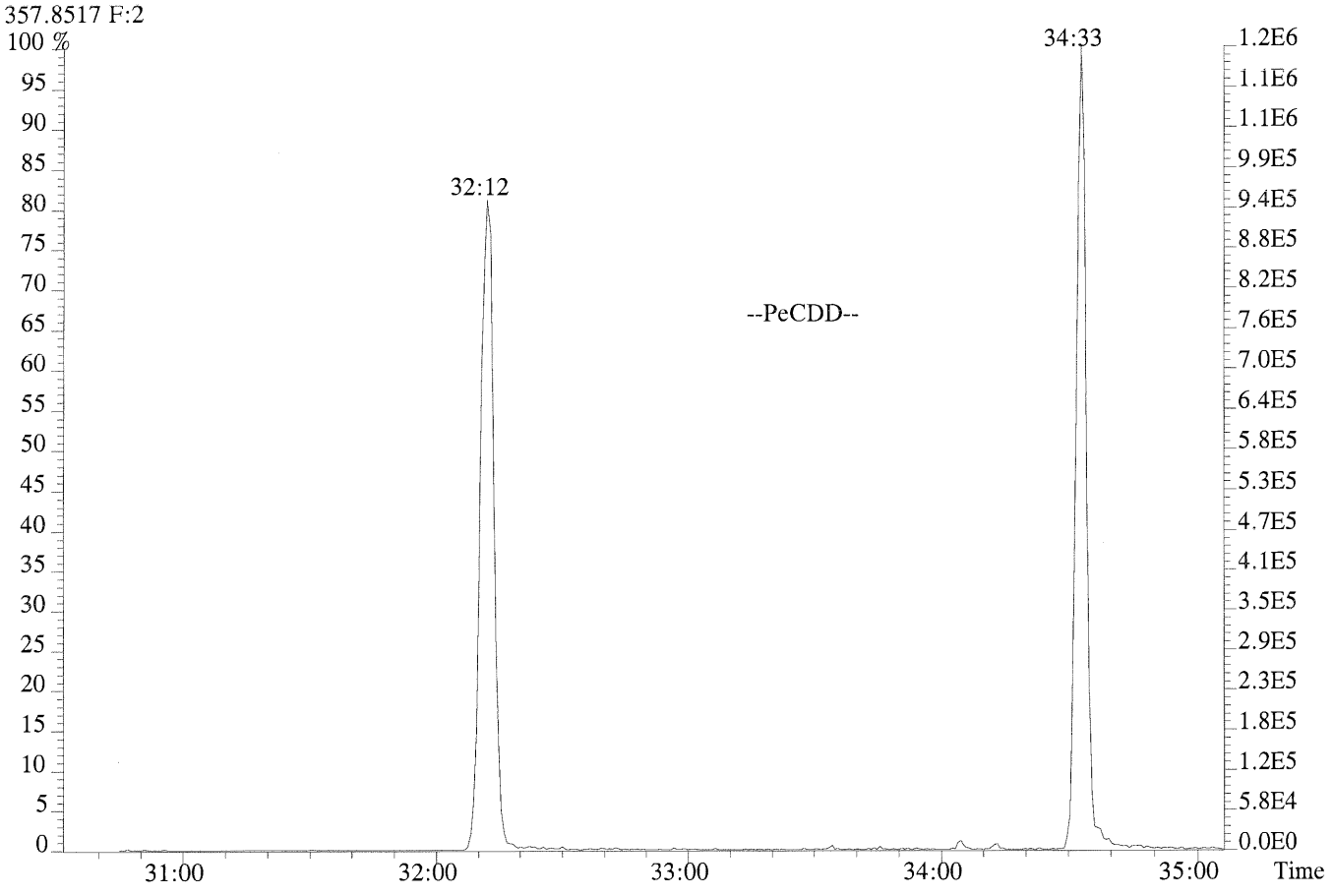
% Valley 2378-TCDD: 7%

File:P200037 #1-578 Acq: 4-AUG-2008 09:05:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE



File:P200037 #1-396 Acq: 4-AUG-2008 09:05:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE





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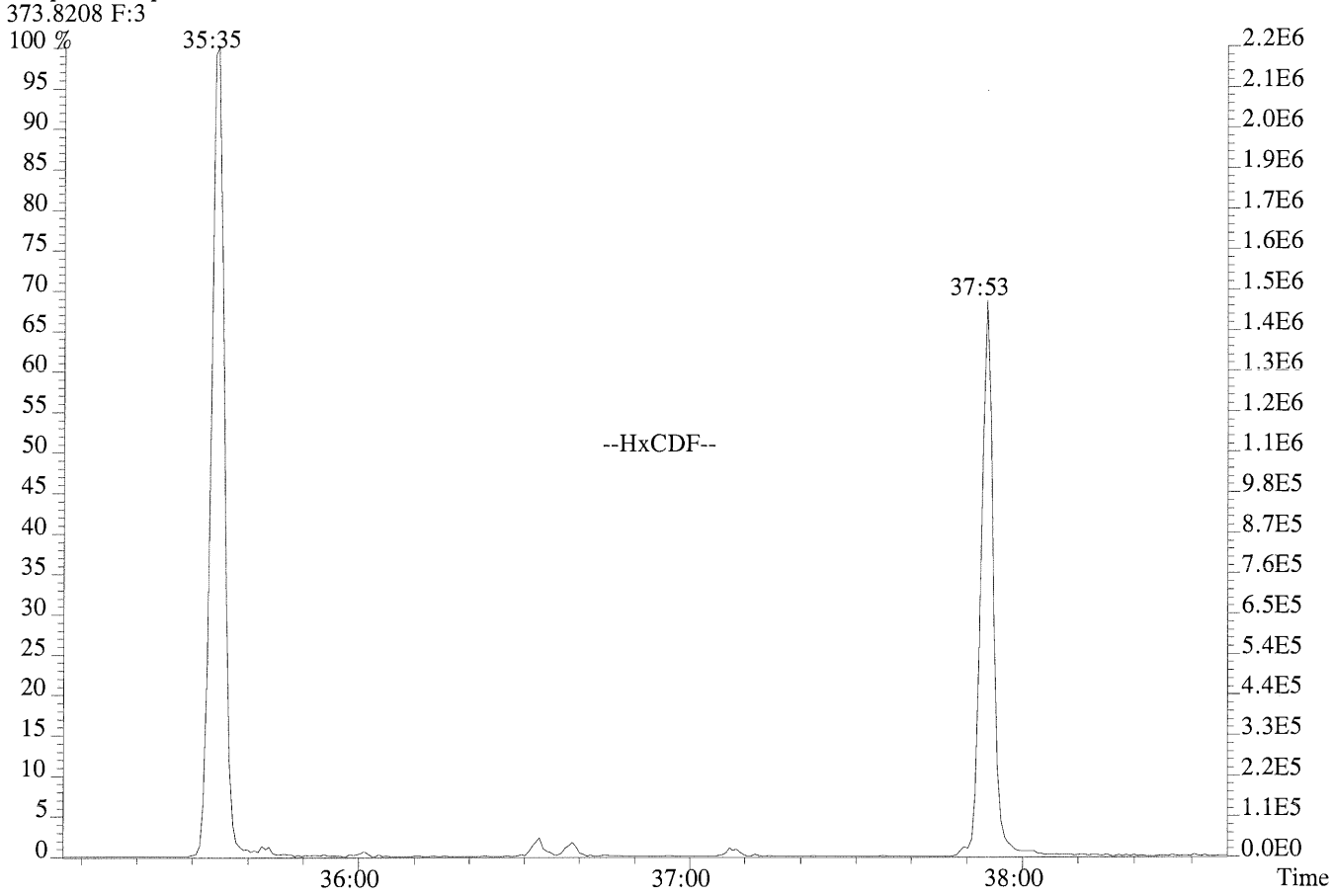
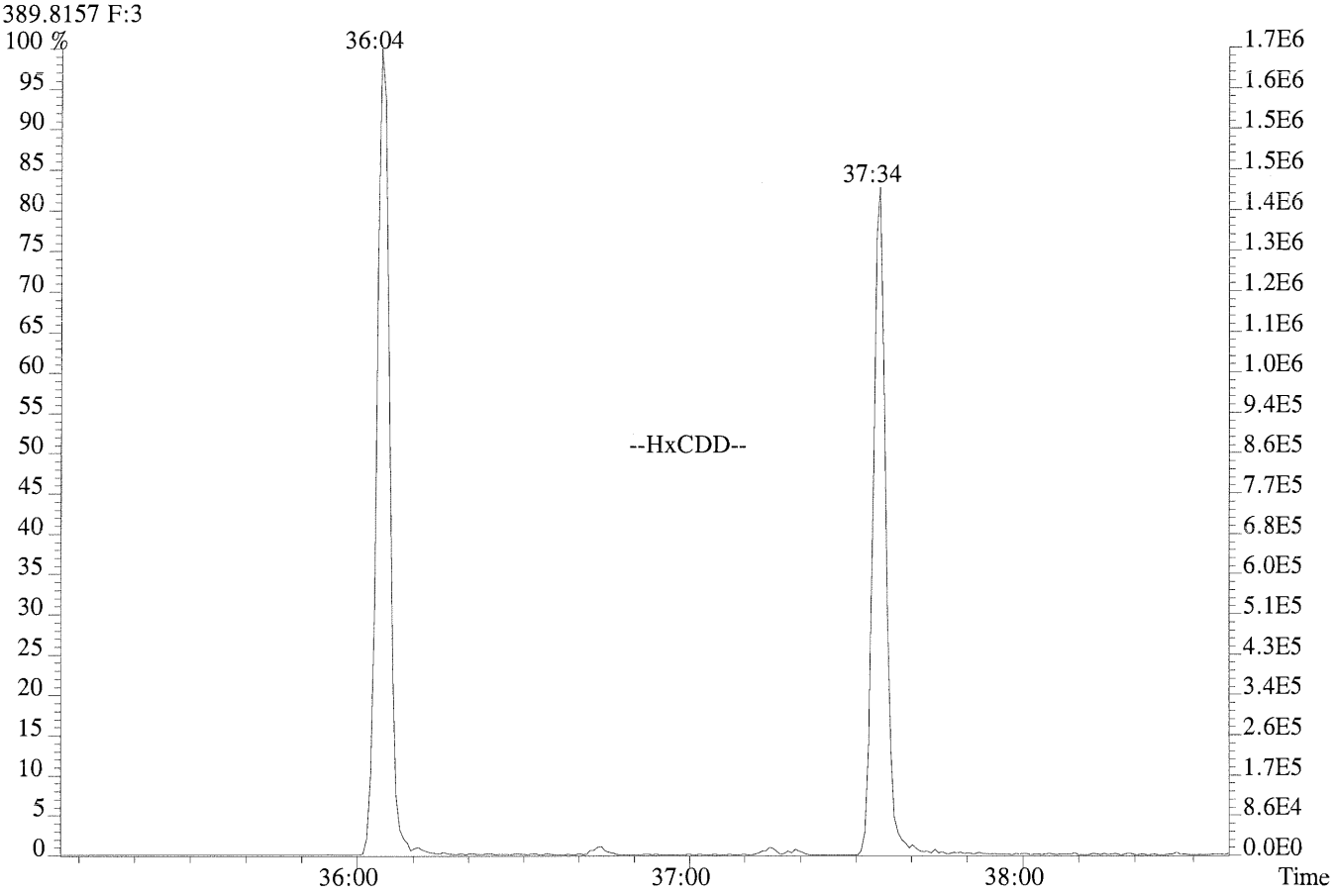
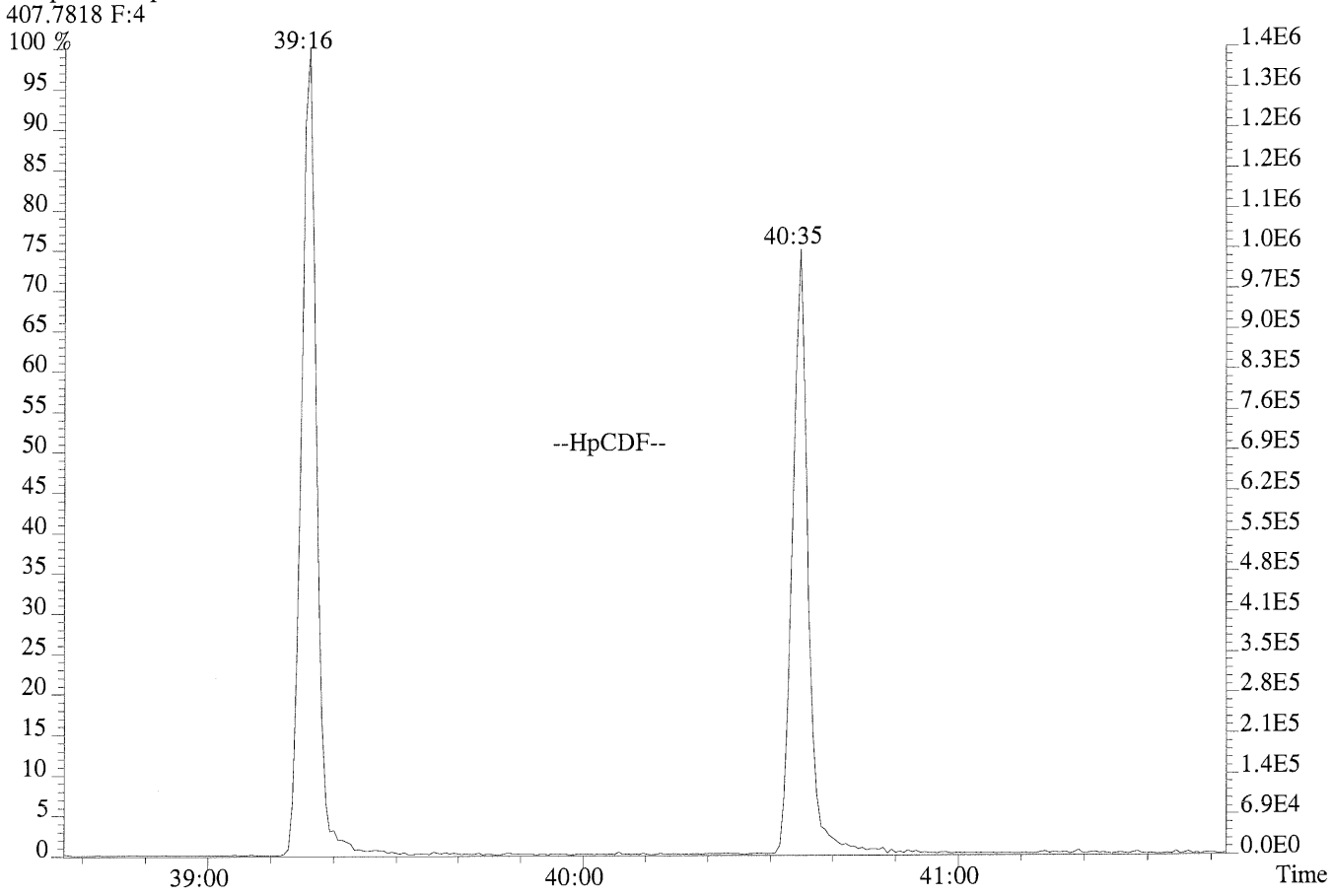
Sample#1 Exp:WINDOW DEFINE

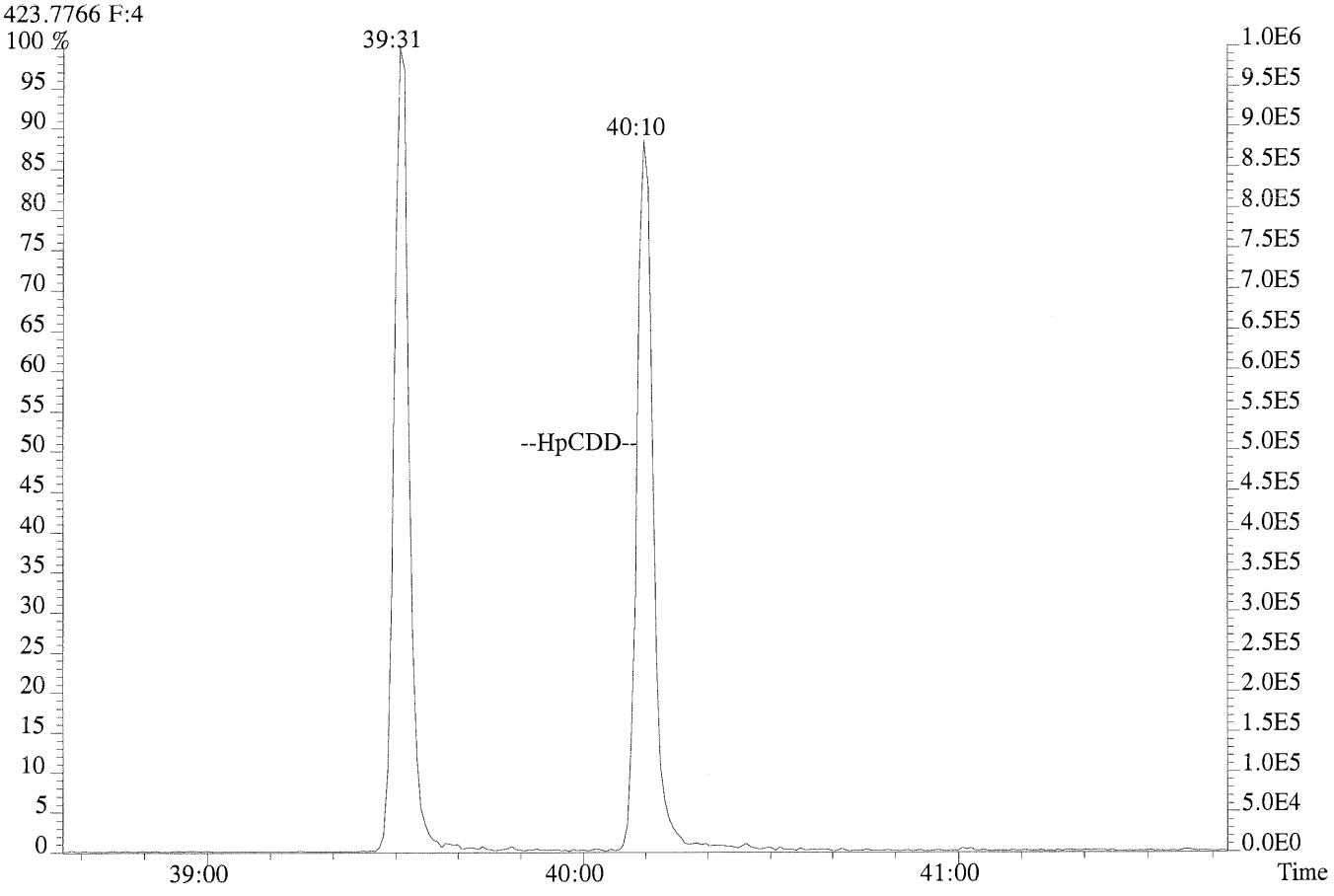




File:P200037 #1-281 Acq: 4-AUG-2008 09:05:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE
407.7818 F:4



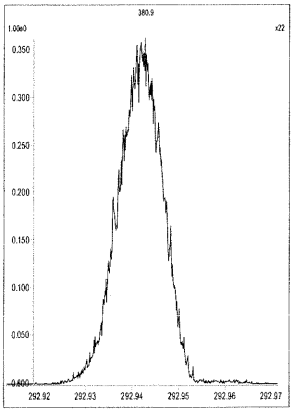
423.7766 F:4



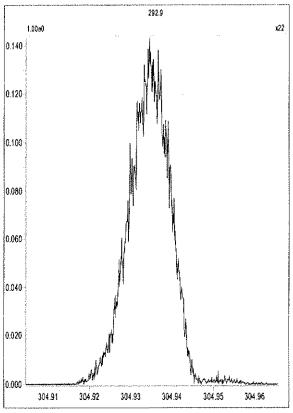
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, August 04, 2008 08:58:47 Central Daylight Time

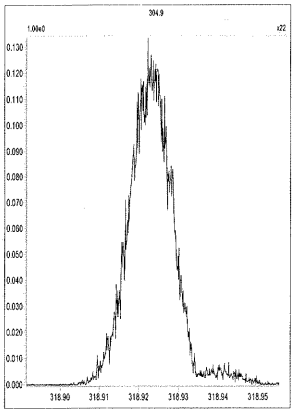
M 292.9824 R 13439



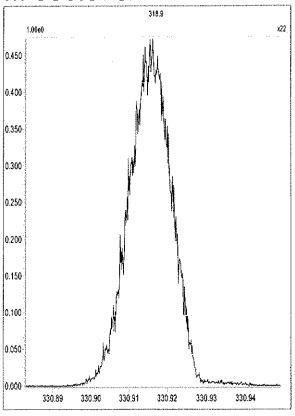
M 304.9824 R 13657



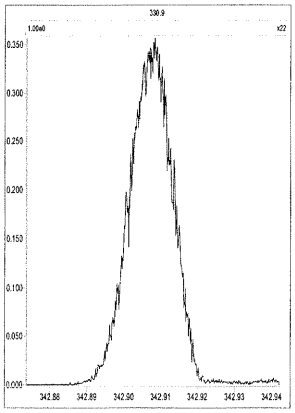
M 318.9792 R 13661



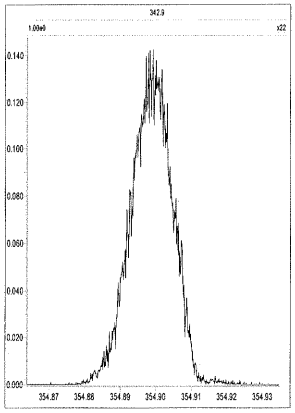
M 330.9792 R 13162



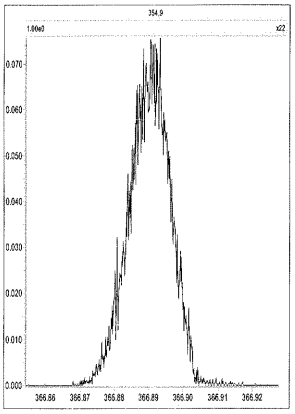
M 342.9792 R 12756



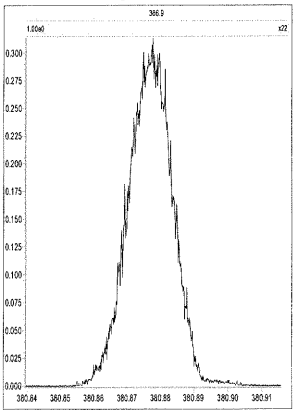
M 354.9792 R 13297



M 366.9792 R 13663



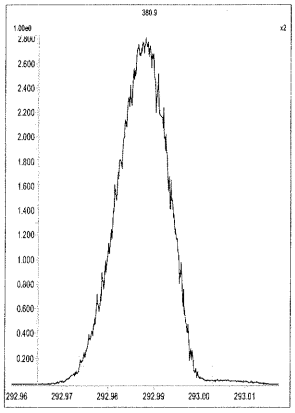
M 380.9760 R 13089



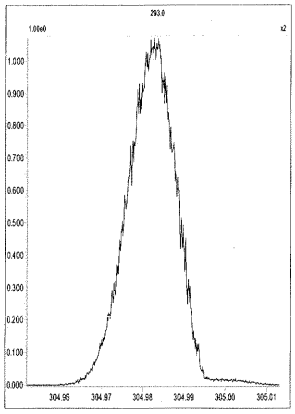
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, August 04, 2008 18:43:59 Central Daylight Time

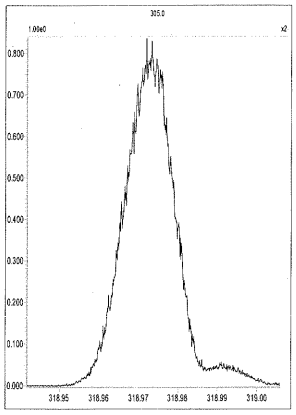
M 292.9824 R 11622



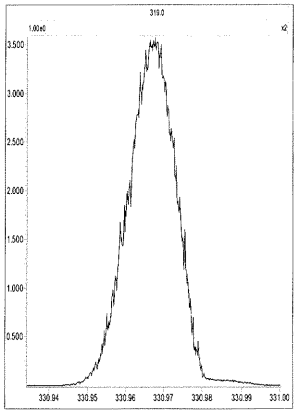
M 304.9824 R 11572



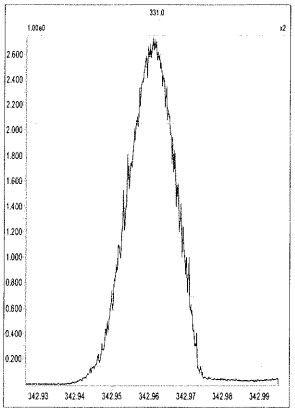
M 318.9792 R 11212



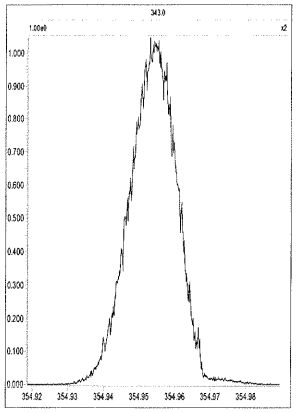
M 330.9792 R 12255



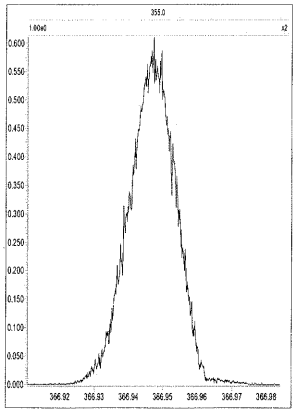
M 342.9792 R 12193



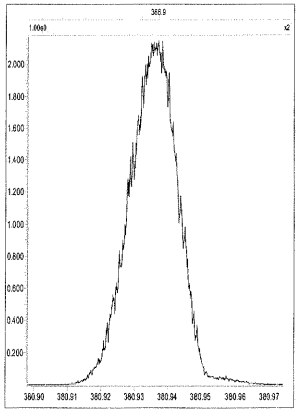
M 354.9792 R 12137



M 366.9792 R 11681



M 380.9760 R 11739



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 08/01/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P200039 Analysis Date: 4-AUG-08 Time: 11:52:05

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	0.97	0.92	5.31
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32-1.78	0.89	0.87	1.65
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	0.90	0.93	-4.09
1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	1.01	1.05	-3.83
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	0.97	0.97	-0.25
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	0.91	0.88	2.61
OCDD	M+2/M+4	0.90	0.76-1.02	0.98	0.96	1.22
2,3,7,8-TCDF	M/M+2	0.74	0.65-0.89	0.88	0.83	5.41
1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	0.87	0.84	3.42
2,3,4,7,8-PeCDF	M+2/M+4	1.54	1.32-1.78	0.88	0.85	3.32
1,2,3,4,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	1.15	1.08	5.76
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	1.16	1.13	2.75
1,2,3,7,8,9-HxCDF	M+2/M+4	1.24	1.05-1.43	0.93	0.87	6.82
2,3,4,6,7,8-HxCDF	M+2/M+4	1.22	1.05-1.43	1.01	1.01	0.12
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.01	0.88-1.20	1.44	1.32	9.51
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.88-1.20	1.04	0.97	7.21
OCDF	M+2/M+4	0.89	0.76-1.02	1.00	1.11	-9.45

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 08/01/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P200039 Analysis Date: 4-AUG-08 Time: 11:52:05

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	1.02	1.05	-2.51
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32-1.78	1.00	0.87	15.21
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	0.97	1.00	-3.27
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	0.85	0.83	1.93
13C-OCDD	M+2/M+4	0.89	0.76-1.02	0.82	0.73	11.87
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	1.34	1.42	-5.77
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.32-1.78	1.34	1.26	5.87
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	1.10	1.28	-14.24
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	0.81	0.90	-9.89
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				1.03	0.98	5.07

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #6 Filename P200039 Samp: 1 Inj: 1 Acquired: 4-AUG-08 11:52:05
Processed: 12-AUG-08 08:21:58 LAB. ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	6.808e+03	9.172e+03	0.74	yes	no	0.831
2	Unk	1,2,3,7,8-PeCDF	32:60	2.397e+04	1.555e+04	1.54	yes	no	0.840
3	Unk	2,3,4,7,8-PeCDF	33:43	2.415e+04	1.572e+04	1.54	yes	no	0.849
4	Unk	1,2,3,4,7,8-HxCDF	36:33	2.208e+04	1.812e+04	1.22	yes	no	1.085
5	Unk	1,2,3,6,7,8-HxCDF	36:39	2.260e+04	1.805e+04	1.25	yes	no	1.129
6	Unk	2,3,4,6,7,8-HxCDF	37:08	1.948e+04	1.600e+04	1.22	yes	no	1.011
7	Unk	1,2,3,7,8,9-HxCDF	37:50	1.796e+04	1.451e+04	1.24	yes	no	0.867
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	1.878e+04	1.866e+04	1.01	yes	no	1.318
9	Unk	1,2,3,4,7,8,9-HpCDF	40:36	1.352e+04	1.336e+04	1.01	yes	no	0.966
10	Unk	OCDF	43:22	2.466e+04	2.763e+04	0.89	yes	no	1.109
11	Unk	2,3,7,8-TCDD	29:28	5.916e+03	7.623e+03	0.78	yes	no	0.921
12	Unk	1,2,3,7,8-PeCDD	34:05	1.837e+04	1.182e+04	1.55	yes	no	0.872
13	Unk	1,2,3,4,7,8-HxCDD	37:15	1.527e+04	1.240e+04	1.23	yes	no	0.934
14	Unk	1,2,3,6,7,8-HxCDD	37:20	1.745e+04	1.386e+04	1.26	yes	no	1.054
15	Unk	1,2,3,7,8,9-HxCDD	37:37	1.661e+04	1.325e+04	1.25	yes	no	0.969
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	1.251e+04	1.200e+04	1.04	yes	no	0.883
17	Unk	OCDD	43:13	2.406e+04	2.674e+04	0.90	yes	no	0.964
18	IS	13C-2,3,7,8-TCDF	28:36	3.989e+04	5.130e+04	0.78	yes	no	1.421
19	IS	13C-1,2,3,7,8-PeCDF	32:59	5.542e+04	3.552e+04	1.56	yes	no	1.262
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	6.004e+04	1.152e+05	0.52	yes	no	1.279
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:16	3.938e+04	9.035e+04	0.44	yes	no	0.901
22	IS	13C-2,3,7,8-TCDD	29:26	3.062e+04	3.917e+04	0.78	yes	no	1.051
23	IS	13C-1,2,3,7,8-PeCDD	34:04	4.164e+04	2.648e+04	1.57	yes	no	0.868
24	IS	13C-1,2,3,6,7,8-HxCDD	37:19	8.626e+04	6.821e+04	1.26	yes	no	1.000
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	6.903e+04	6.631e+04	1.04	yes	no	0.831
26	IS	13C-OCDD	43:12	1.229e+05	1.376e+05	0.89	yes	no	0.729
27	RS/RT	13C-1,2,3,4-TCDD	29:14	3.005e+04	3.804e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	8.893e+04	7.083e+04	1.26	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	1.403e+04					0.981
					SUM AREA				
30	Tot	Total Tetra-Furans	28:08		1.631e+04	0.86	yes		0.831
31	Tot	Total Tetra-Dioxins	29:28		1.354e+04	0.78	yes		0.921
32	Tot	Total Penta-Furans	32:06		7.996e+04	1.57	yes		0.845
33	Tot	Total Penta-Dioxins	34:05		3.019e+04	1.55	yes		0.872
34	Tot	Total Hexa-Furans	35:43		1.491e+05	1.25	yes		1.023
35	Tot	Total Hexa-Dioxins	37:15		8.884e+04	1.23	yes		0.985
36	Tot	Total Hepta-Furans	39:16		6.531e+04	1.01	yes		1.142
37	Tot	Total Hepta-Dioxins	39:32		2.489e+04	1.02	yes		0.883

Columbia Analytical Services, Inc.
19408 Park Row., Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #6 Filename P200039 #1 Samp: 1 Inj: 1 Acquired: 4-AUG-08 11:52:05

Processed: 12-AUG-08 08:21:58 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.12e+06	9.48e+02	1.2e+03	1.54e+06	2.05e+03	7.5e+02
2	1,2,3,7,8-PeCDF	4.64e+06	5.52e+02	8.4e+03	3.02e+06	1.50e+03	2.0e+03
3	2,3,4,7,8-PeCDF	4.81e+06	5.52e+02	8.7e+03	3.17e+06	1.50e+03	2.1e+03
4	1,2,3,4,7,8-HxCDF	4.79e+06	1.84e+03	2.6e+03	3.94e+06	1.06e+03	3.7e+03
5	1,2,3,6,7,8-HxCDF	4.56e+06	1.84e+03	2.5e+03	3.72e+06	1.06e+03	3.5e+03
6	2,3,4,6,7,8-HxCDF	4.22e+06	1.84e+03	2.3e+03	3.49e+06	1.06e+03	3.3e+03
7	1,2,3,7,8,9-HxCDF	3.78e+06	1.84e+03	2.0e+03	3.04e+06	1.06e+03	2.9e+03
8	1,2,3,4,6,7,8-HpCDF	3.95e+06	3.53e+03	1.1e+03	3.90e+06	1.29e+03	3.0e+03
9	1,2,3,4,7,8,9-HpCDF	2.57e+06	3.53e+03	7.3e+02	2.52e+06	1.29e+03	2.0e+03
10	OCDF	3.53e+06	1.39e+03	2.5e+03	3.96e+06	2.74e+03	1.4e+03
11	2,3,7,8-TCDD	1.06e+06	2.34e+03	4.5e+02	1.36e+06	8.80e+02	1.5e+03
12	1,2,3,7,8-PeCDD	3.72e+06	1.85e+03	2.0e+03	2.41e+06	7.16e+02	3.4e+03
13	1,2,3,4,7,8-HxCDD	3.43e+06	8.24e+02	4.2e+03	2.78e+06	1.46e+03	1.9e+03
14	1,2,3,6,7,8-HxCDD	3.64e+06	8.24e+02	4.4e+03	2.86e+06	1.46e+03	2.0e+03
15	1,2,3,7,8,9-HxCDD	3.50e+06	8.24e+02	4.2e+03	2.75e+06	1.46e+03	1.9e+03
16	1,2,3,4,6,7,8-HpCDD	2.56e+06	1.79e+03	1.4e+03	2.41e+06	8.28e+02	2.9e+03
17	OCDD	3.51e+06	7.80e+02	4.5e+03	3.88e+06	1.10e+03	3.5e+03
18	13C-2,3,7,8-TCDF	6.70e+06	5.04e+03	1.3e+03	8.62e+06	3.70e+03	2.3e+03
19	13C-1,2,3,7,8-PeCDF	1.08e+07	1.18e+03	9.1e+03	7.04e+06	1.30e+03	5.4e+03
20	13C-1,2,3,4,7,8-HxCDF	1.26e+07	1.32e+03	9.6e+03	2.42e+07	2.93e+03	8.3e+03
21	13C-1,2,3,4,6,7,8-HpCDF	8.29e+06	3.42e+03	2.4e+03	1.88e+07	2.84e+03	6.6e+03
22	13C-2,3,7,8-TCDD	5.50e+06	6.53e+03	8.4e+02	7.06e+06	1.24e+03	5.7e+03
23	13C-1,2,3,7,8-PeCDD	8.55e+06	2.59e+03	3.3e+03	5.46e+06	1.29e+03	4.2e+03
24	13C-1,2,3,6,7,8-HxCDD	1.88e+07	8.32e+02	2.3e+04	1.48e+07	1.48e+03	1.0e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.41e+07	2.69e+03	5.2e+03	1.34e+07	8.72e+02	1.5e+04
26	13C-OCDD	1.76e+07	8.72e+02	2.0e+04	1.95e+07	7.60e+02	2.6e+04
27	13C-1,2,3,4-TCDD	5.48e+06	6.53e+03	8.4e+02	6.87e+06	1.24e+03	5.5e+03
28	13C-1,2,3,7,8,9-HxCDD	1.91e+07	8.32e+02	2.3e+04	1.52e+07	1.48e+03	1.0e+04
29	37Cl-2,3,7,8-TCDD	2.51e+06	8.60e+02	2.9e+03			

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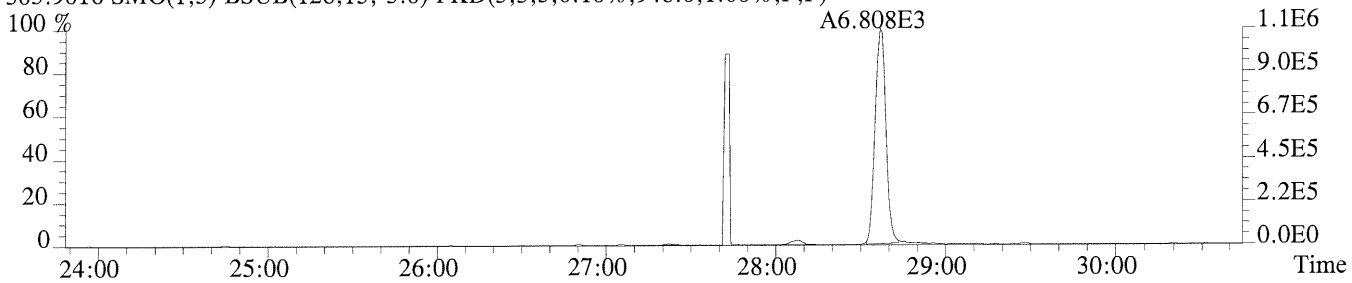
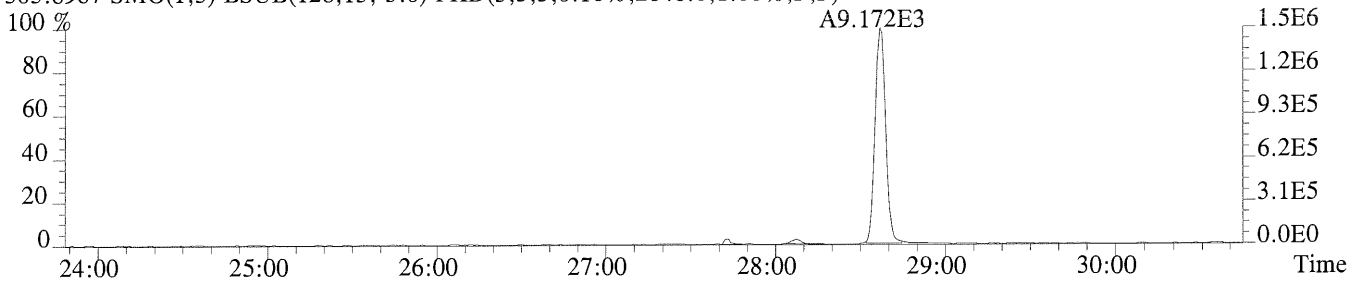
File:P200039 #1-578 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

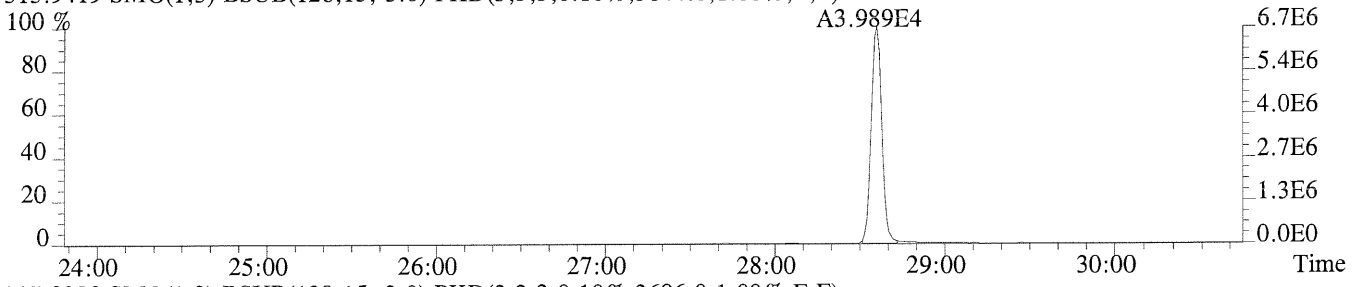
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,948.0,1.00%,F,F)



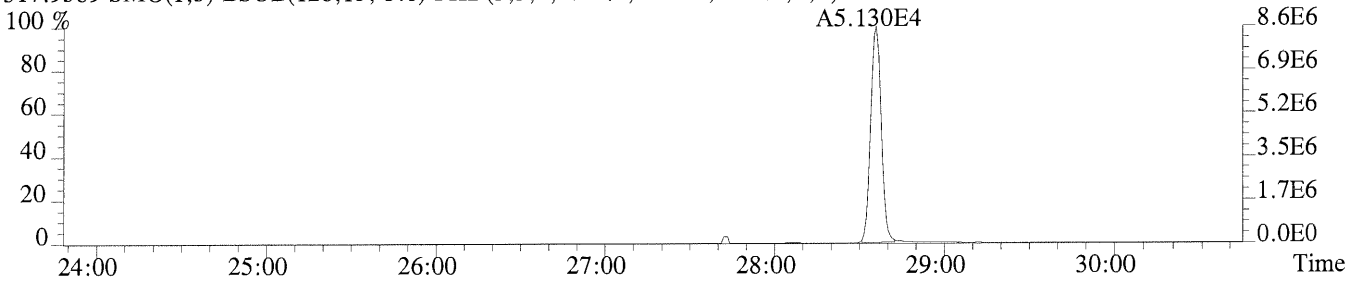
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2048.0,1.00%,F,F)



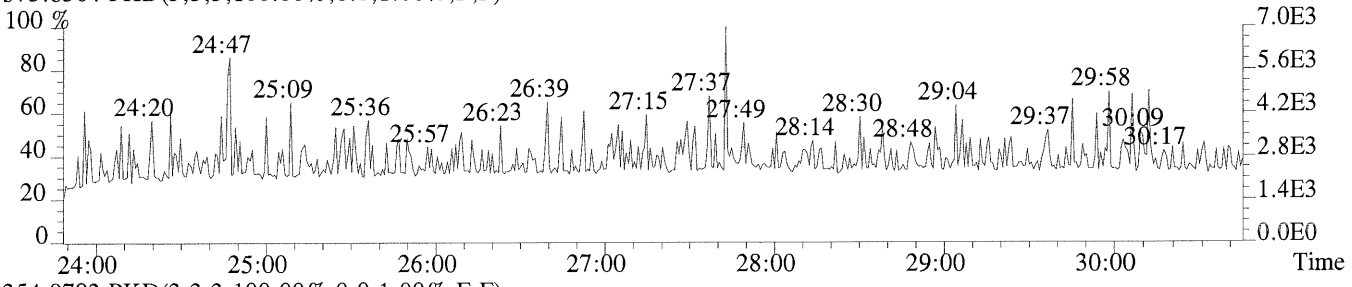
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5044.0,1.00%,F,F)



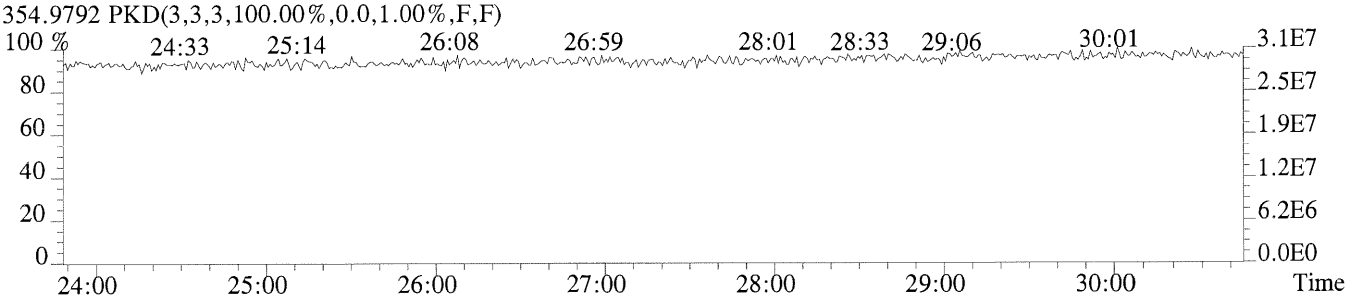
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3696.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

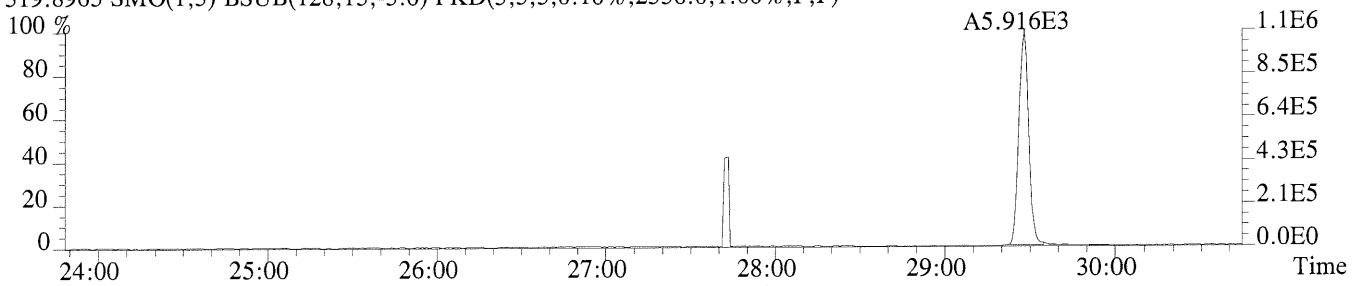


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

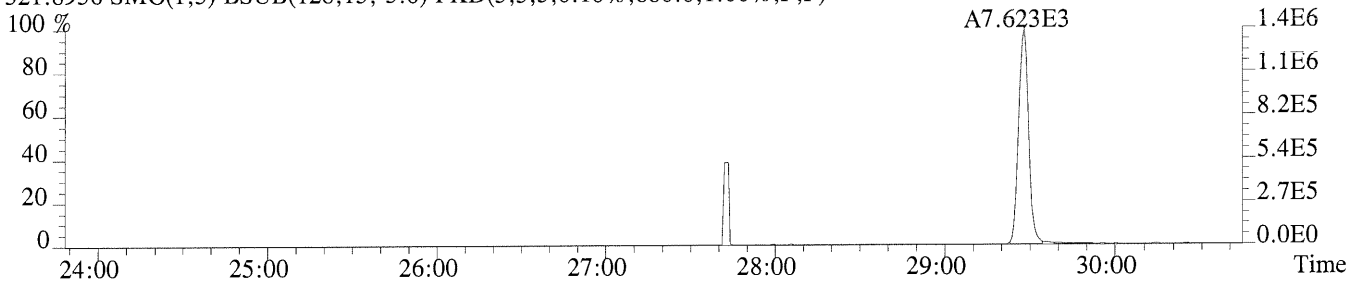


File:P200039 #1-578 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

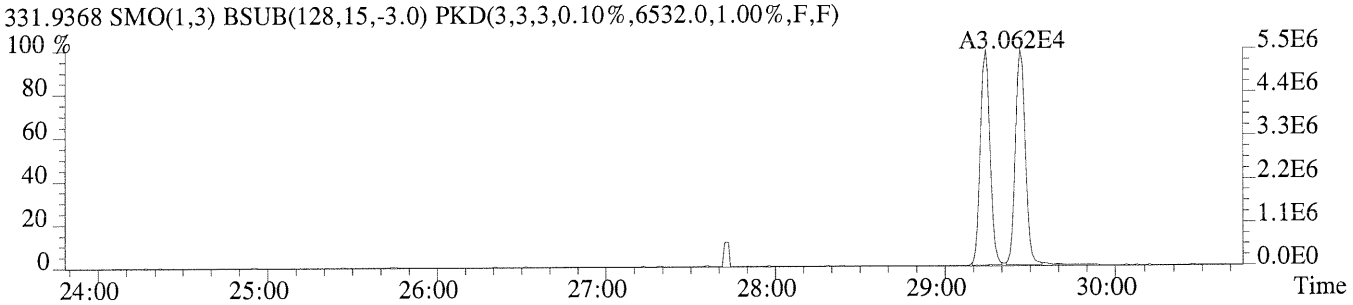
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2336.0,1.00%,F,F)



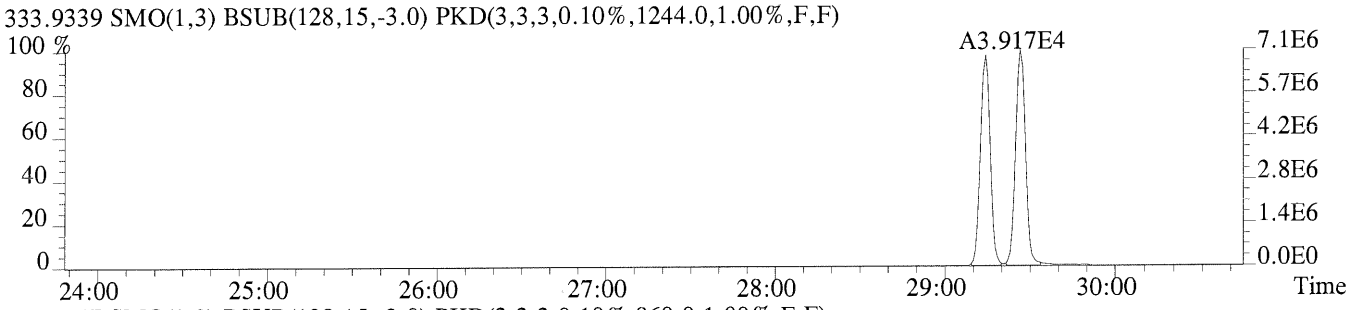
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,880.0,1.00%,F,F)



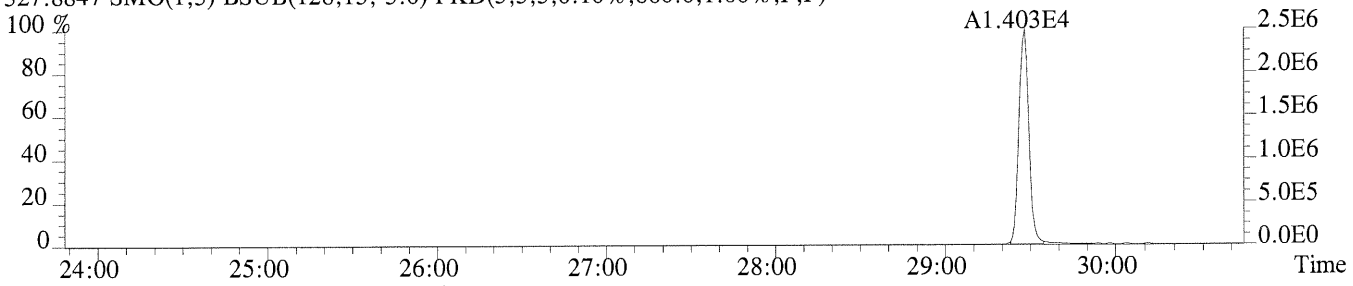
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,6532.0,1.00%,F,F)



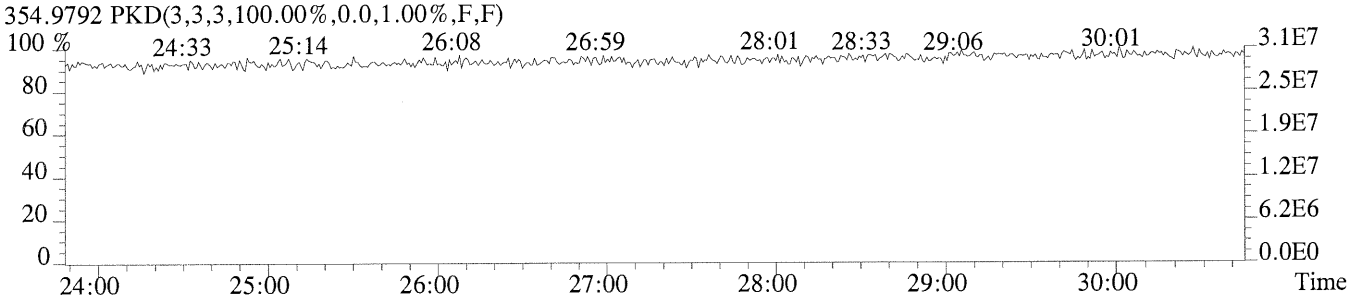
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1244.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,860.0,1.00%,F,F)

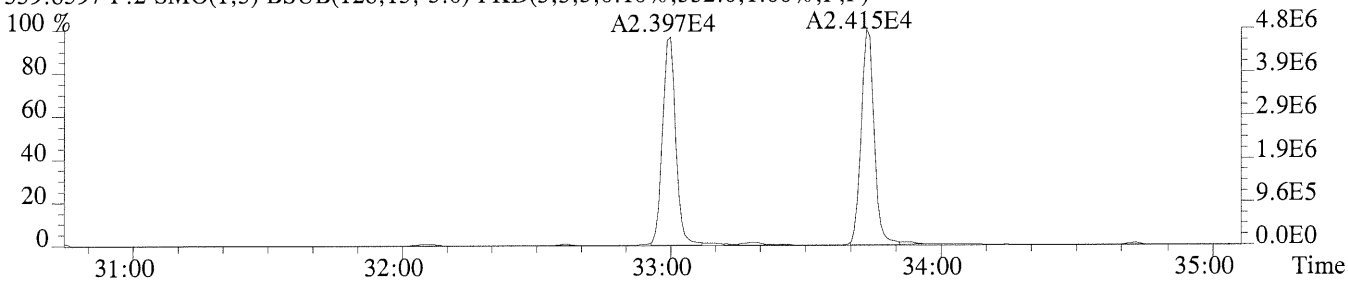


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

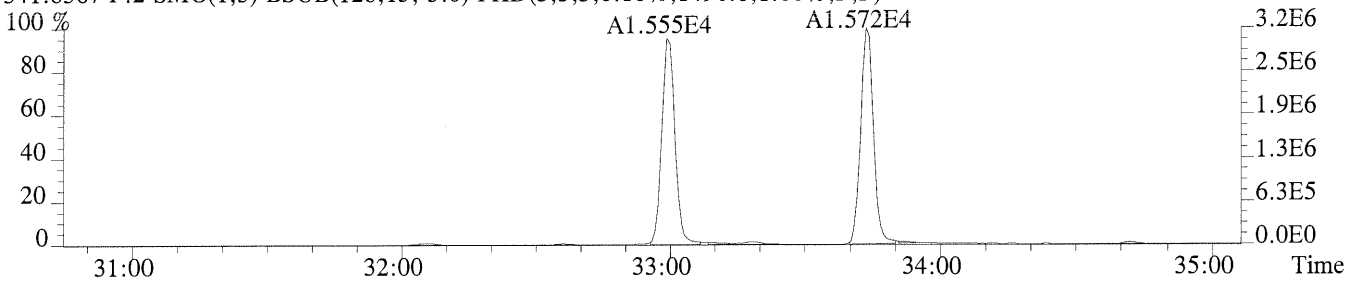


File:P200039 #1-396 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

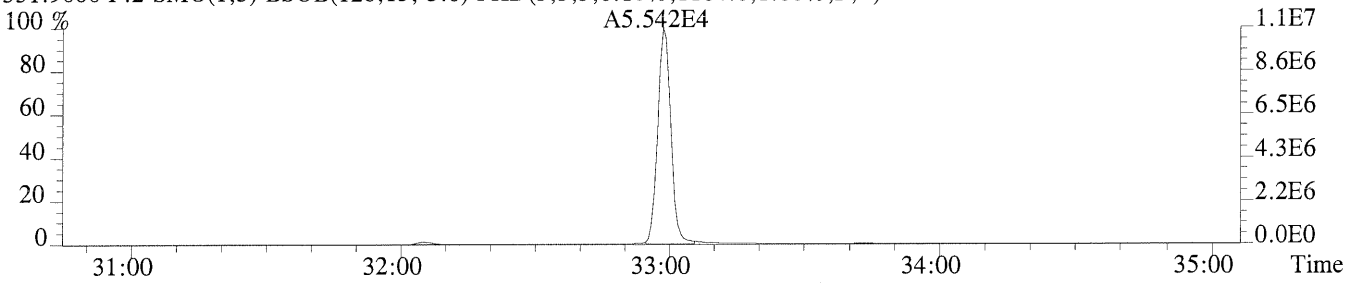
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,552.0,1.00%,F,F)



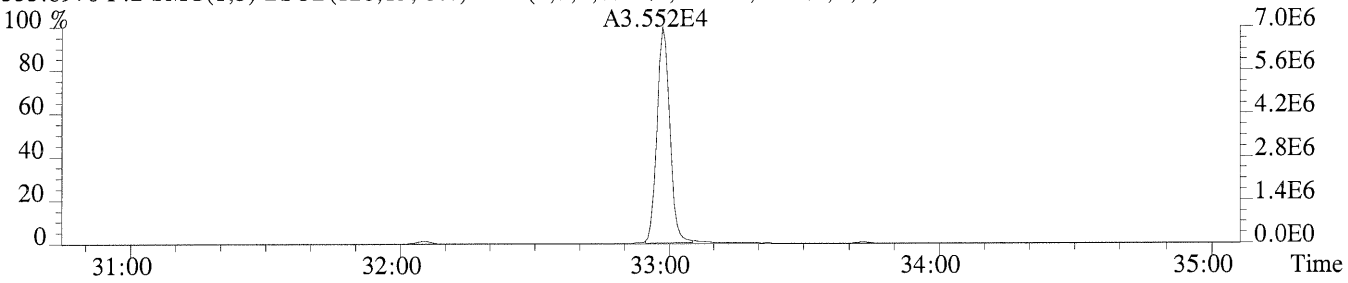
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1496.0,1.00%,F,F)



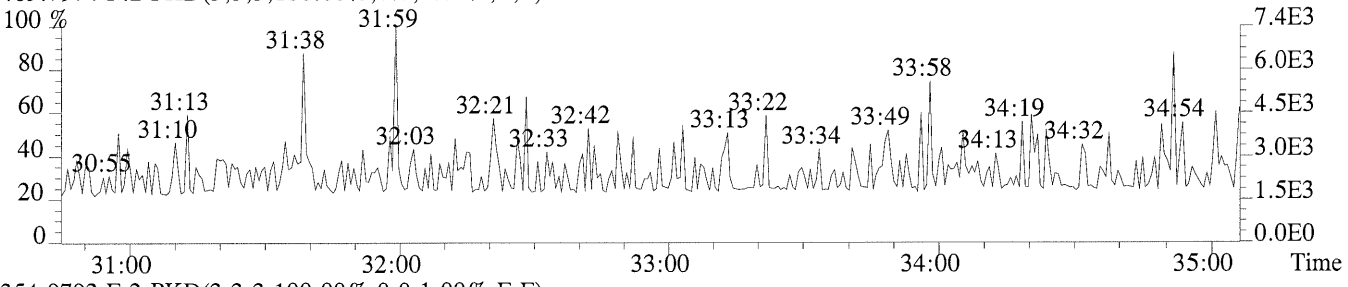
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1184.0,1.00%,F,F)



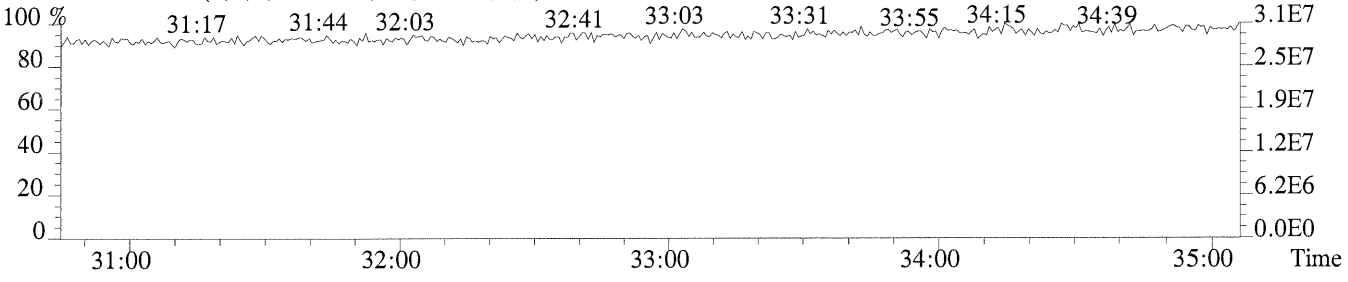
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1296.0,1.00%,F,F)



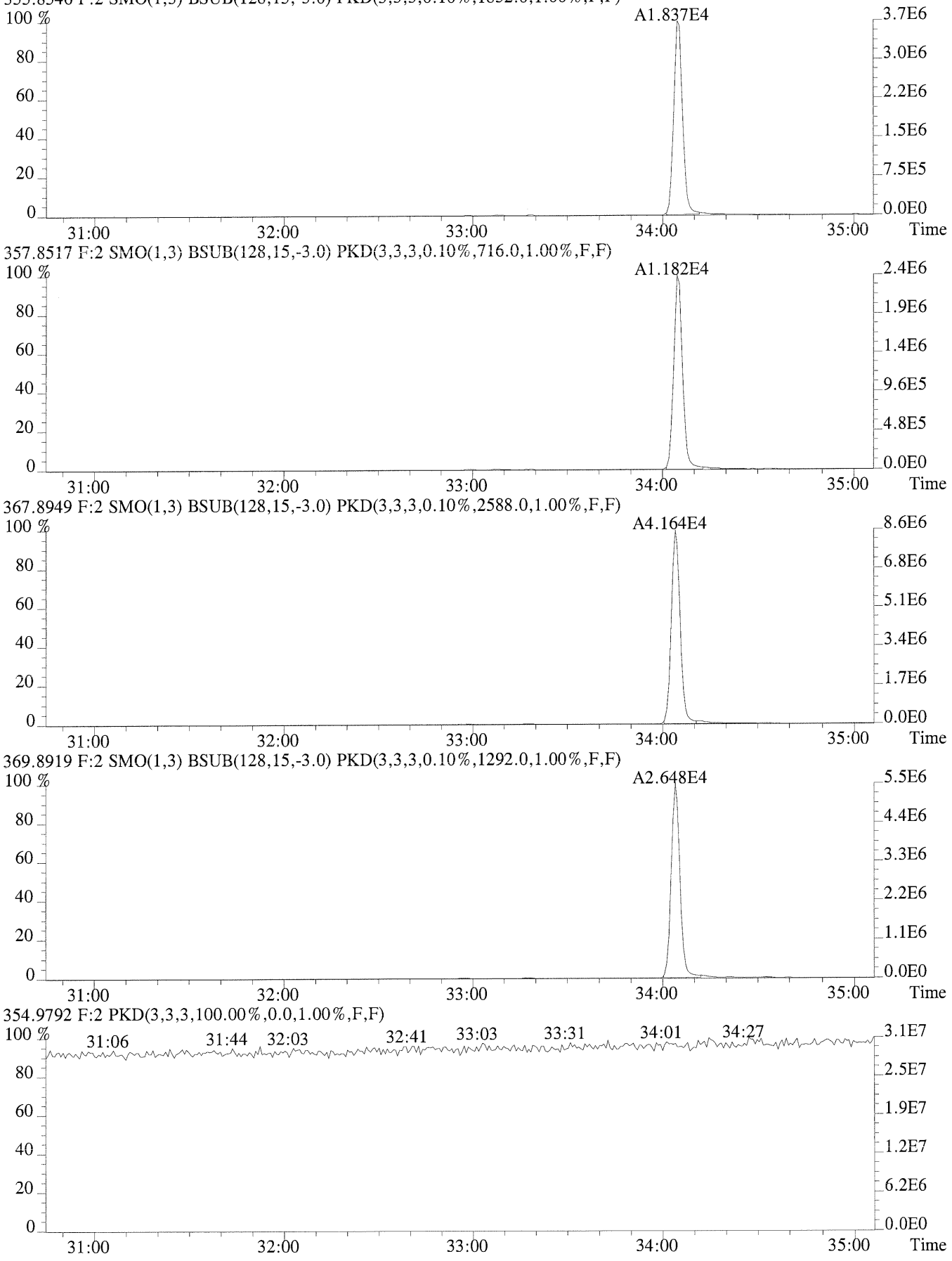
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

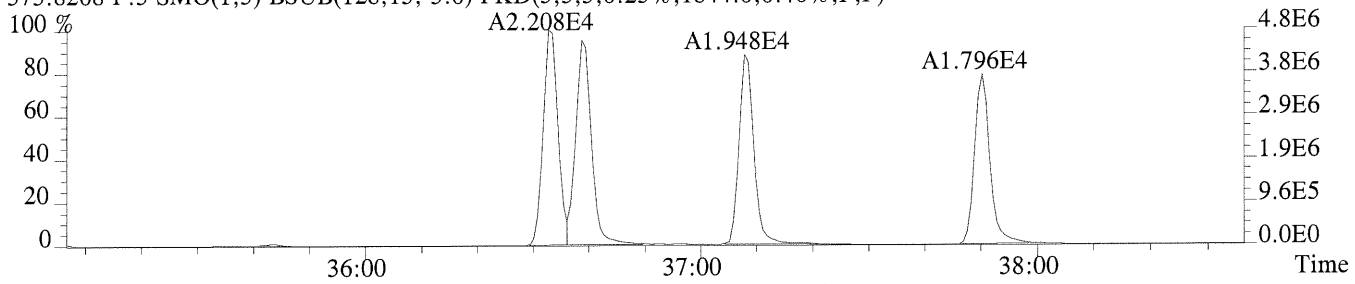


File:P200039 #1-396 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

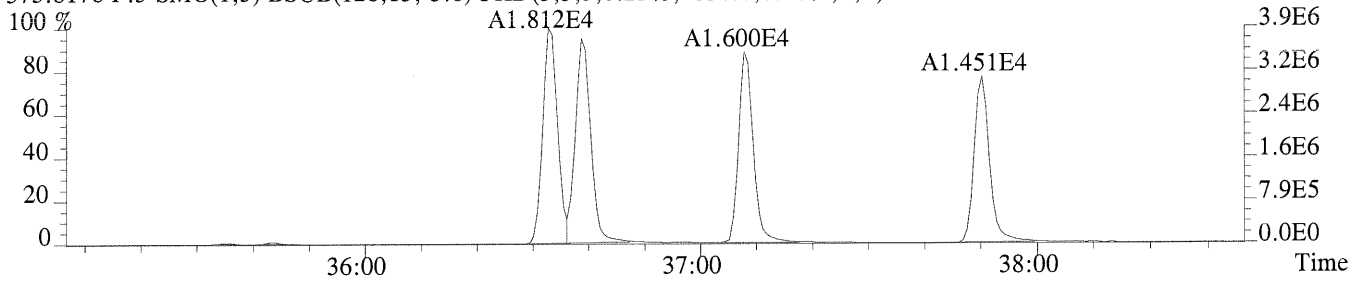


File:P200039 #1-318 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

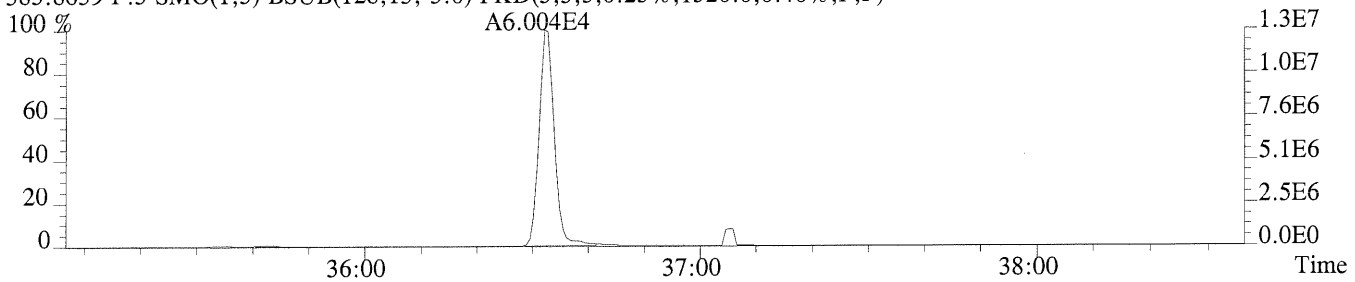
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1844.0,0.40%,F,F)



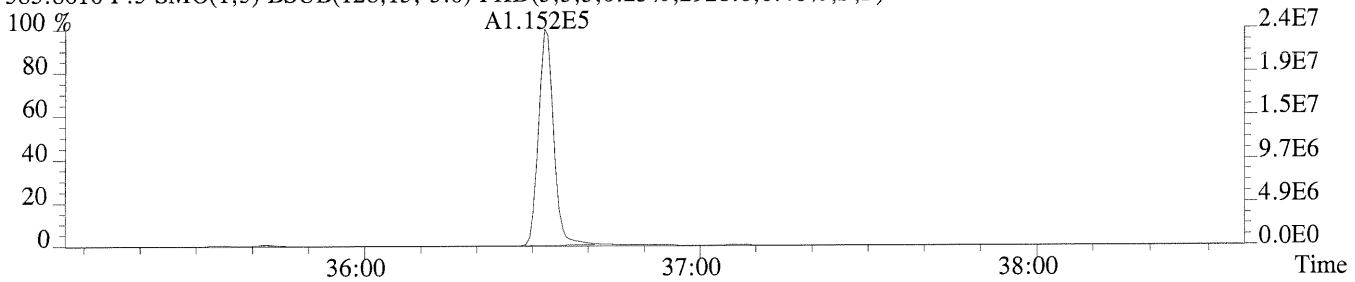
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1056.0,0.40%,F,F)



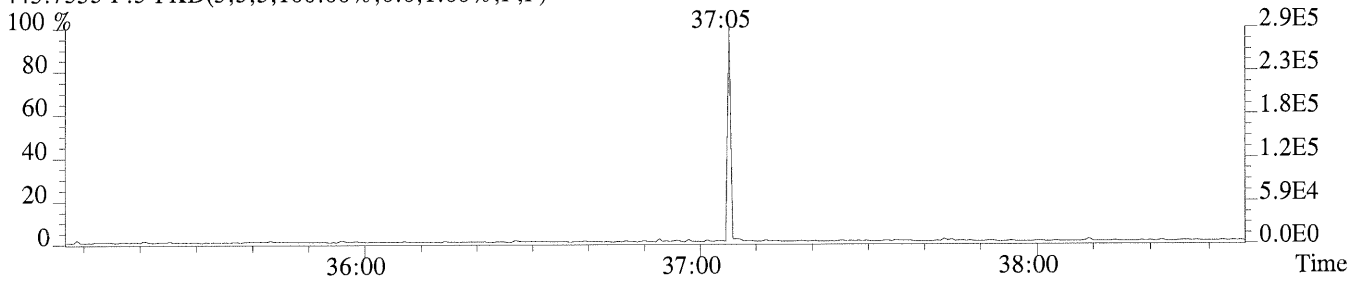
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1320.0,0.40%,F,F)



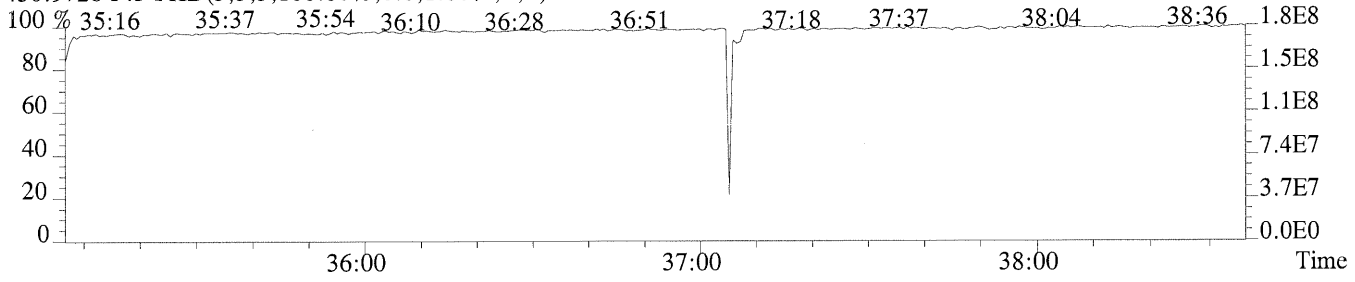
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2928.0,0.40%,F,F)



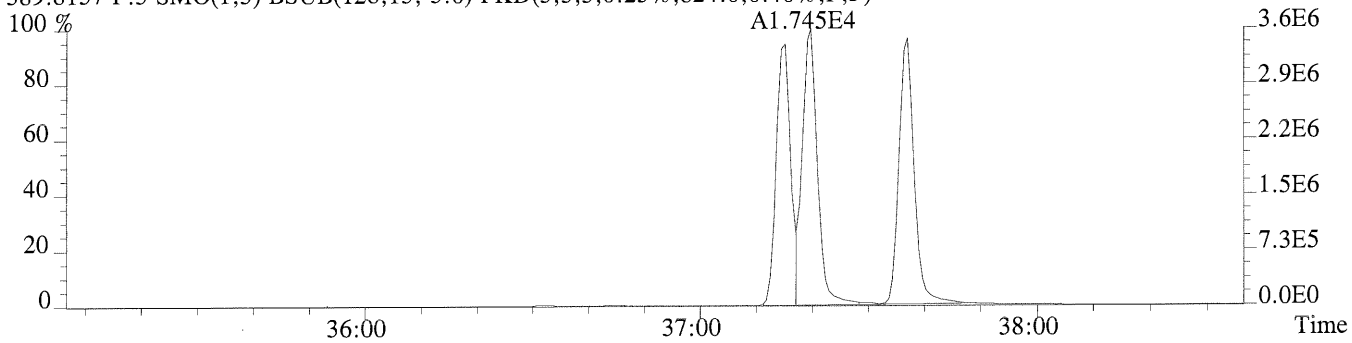
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



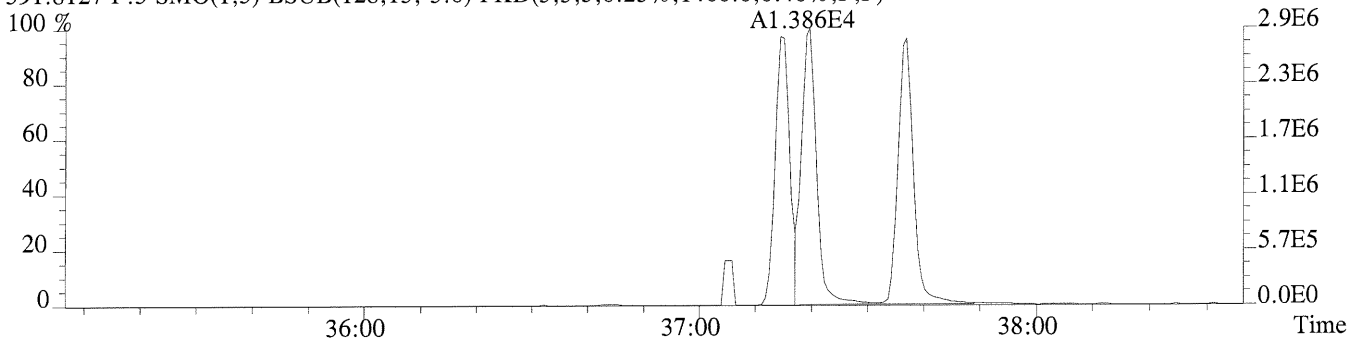
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



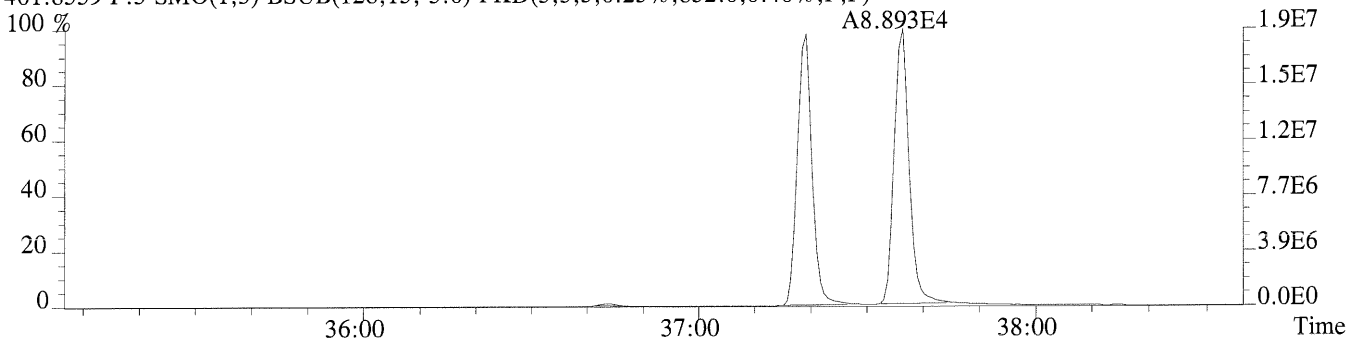
File:P200039 #1-318 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,824.0,0.40%,F,F)



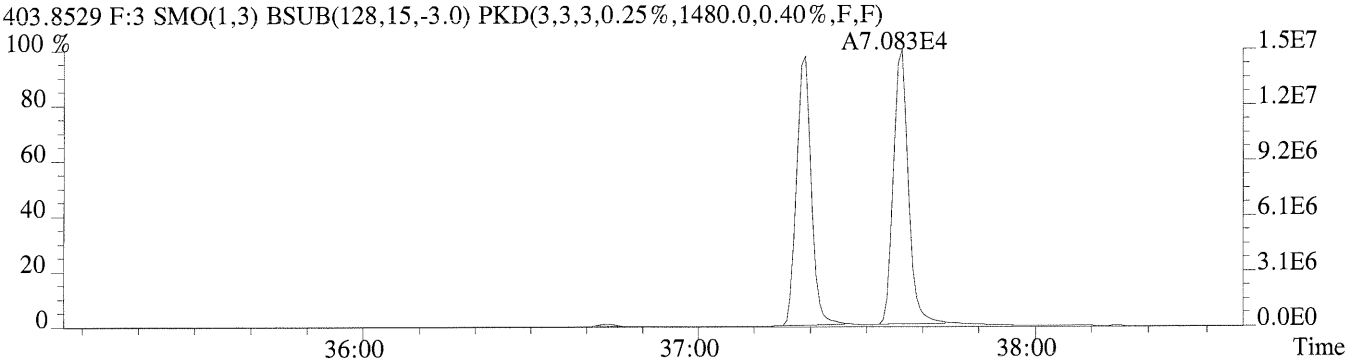
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1460.0,0.40%,F,F)



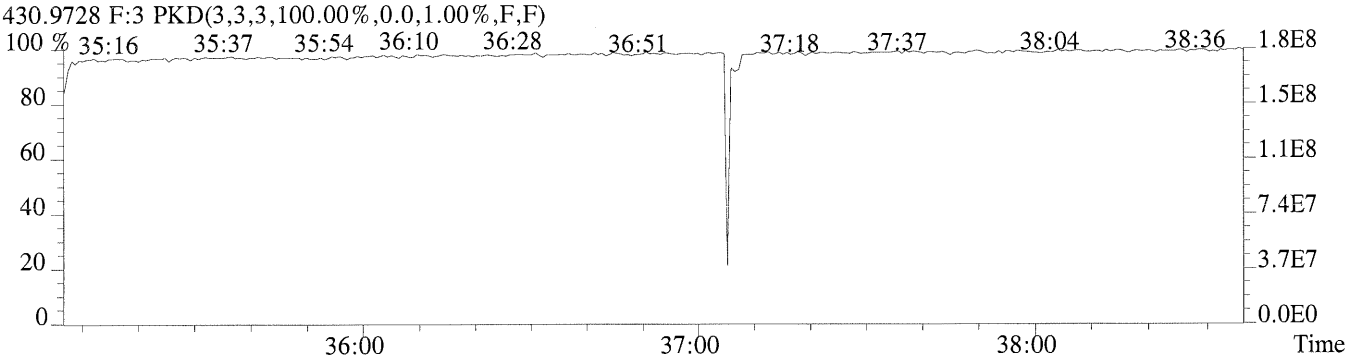
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,832.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1480.0,0.40%,F,F)

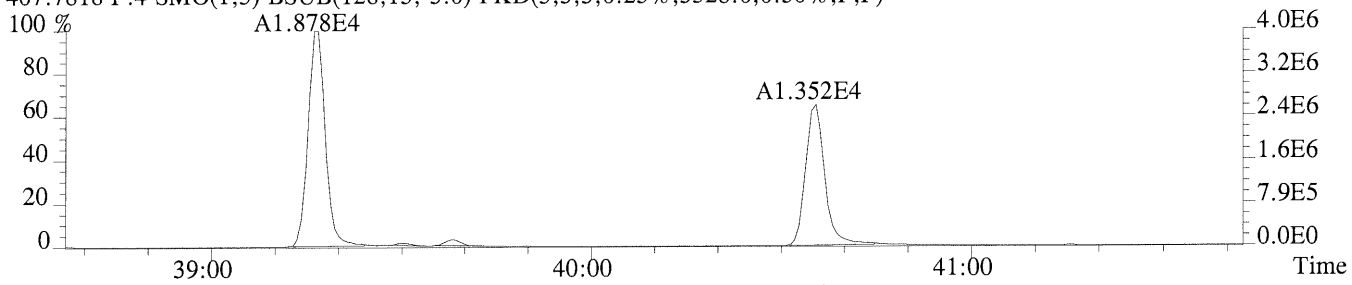


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

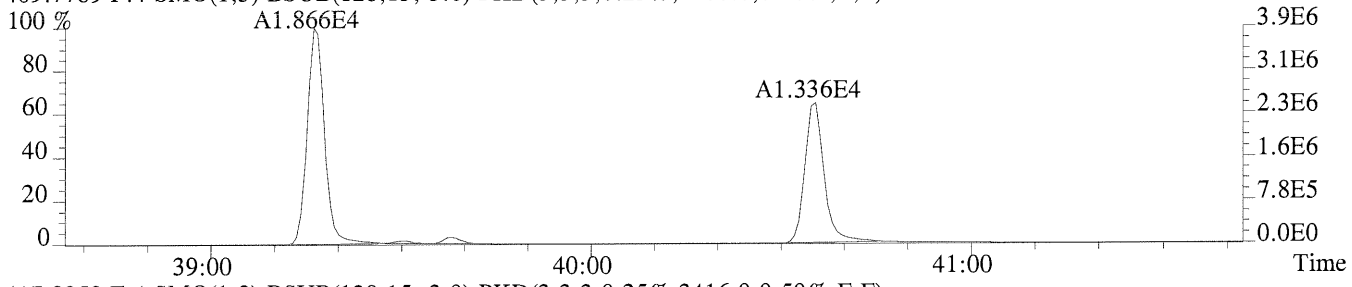


File:P200039 #1-281 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

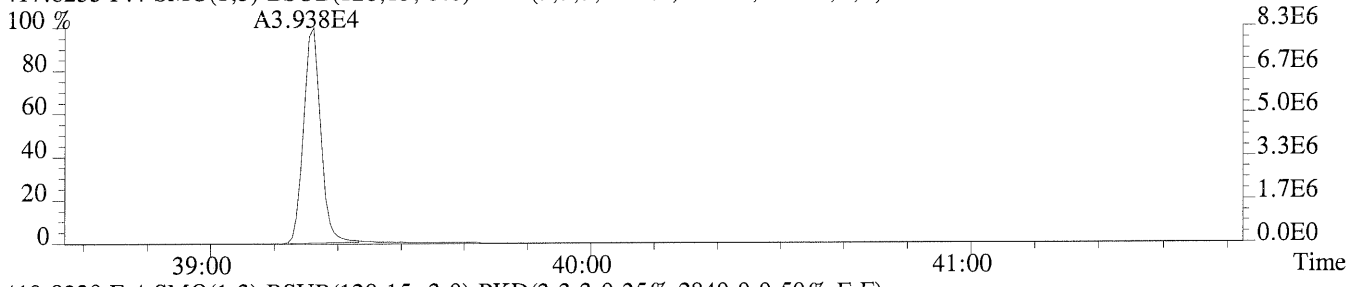
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3528.0,0.50%,F,F)



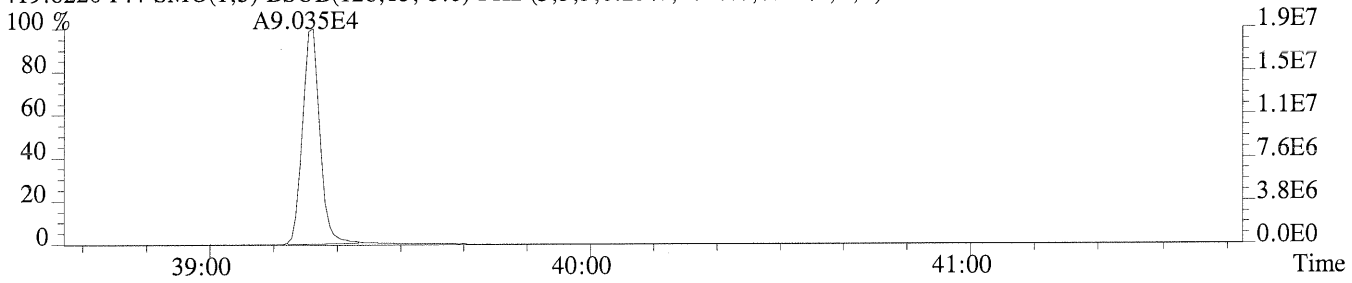
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1288.0,0.50%,F,F)



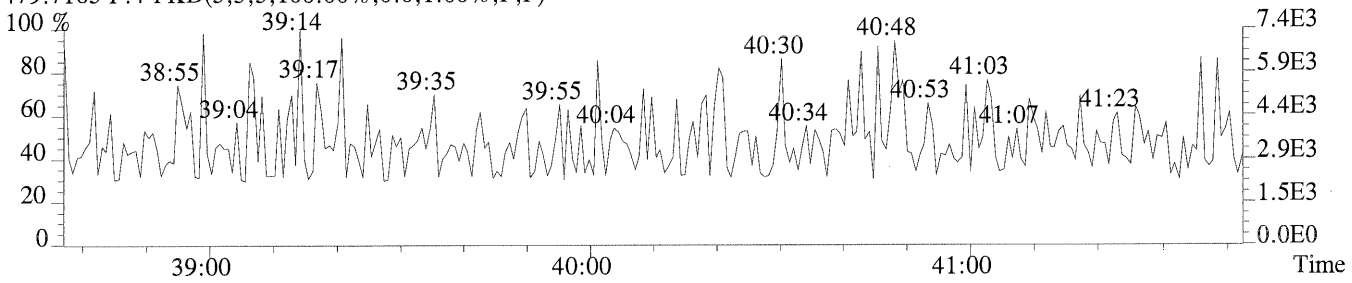
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3416.0,0.50%,F,F)



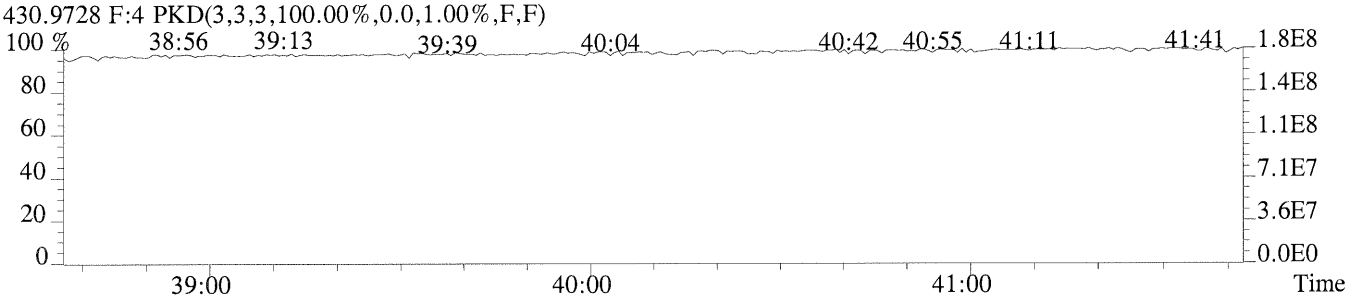
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2840.0,0.50%,F,F)



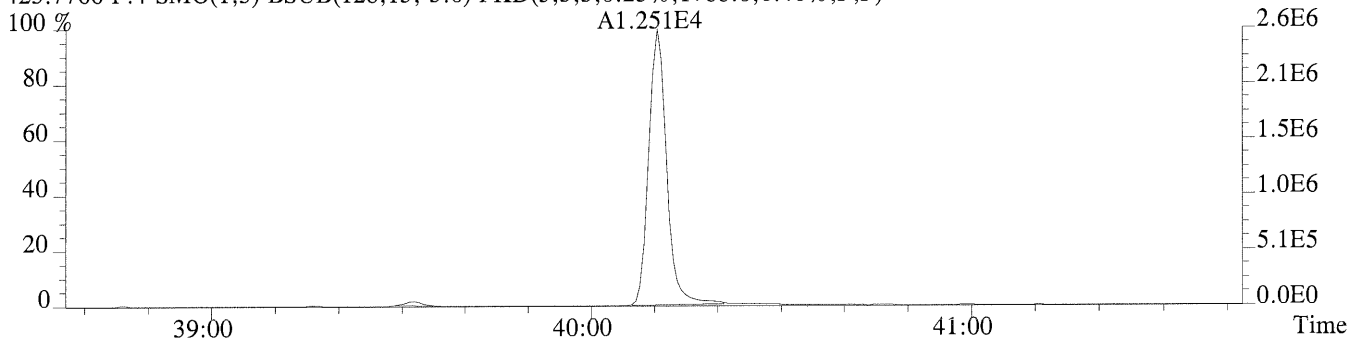
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



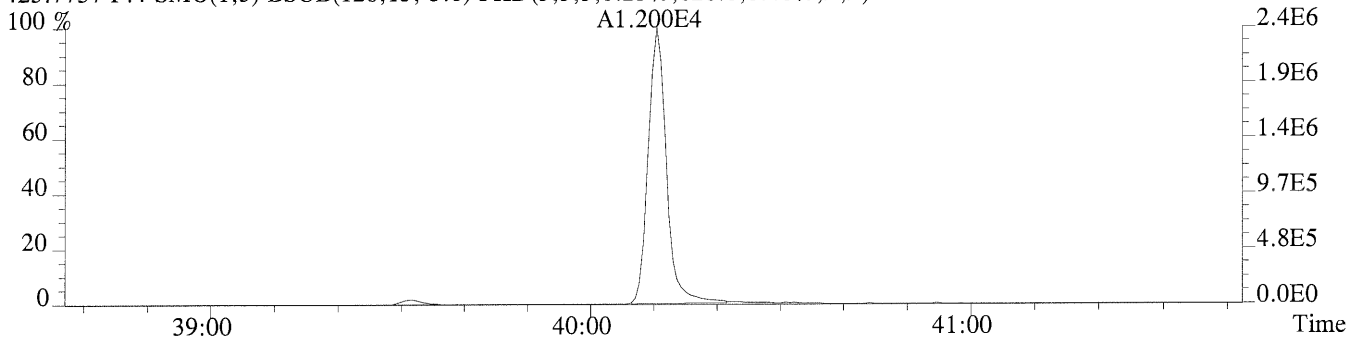
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



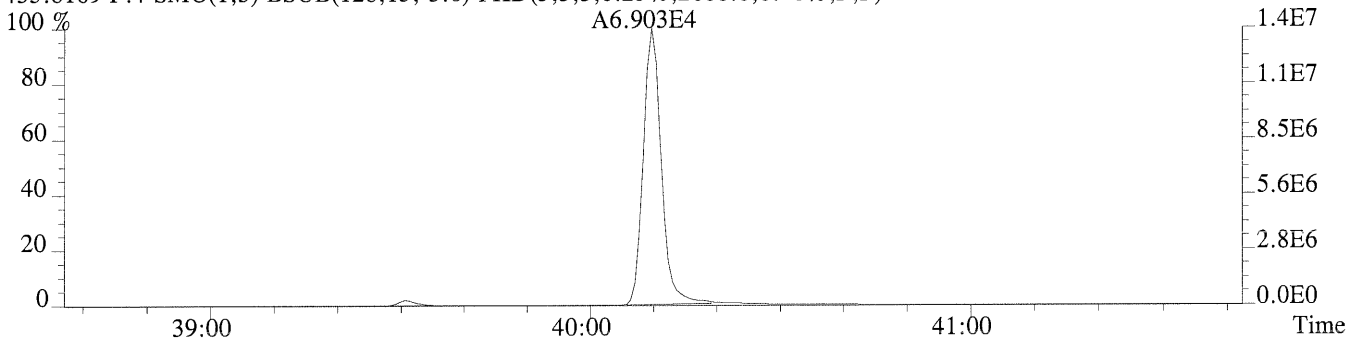
File:P200039 #1-281 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1788.0,0.40%,F,F)



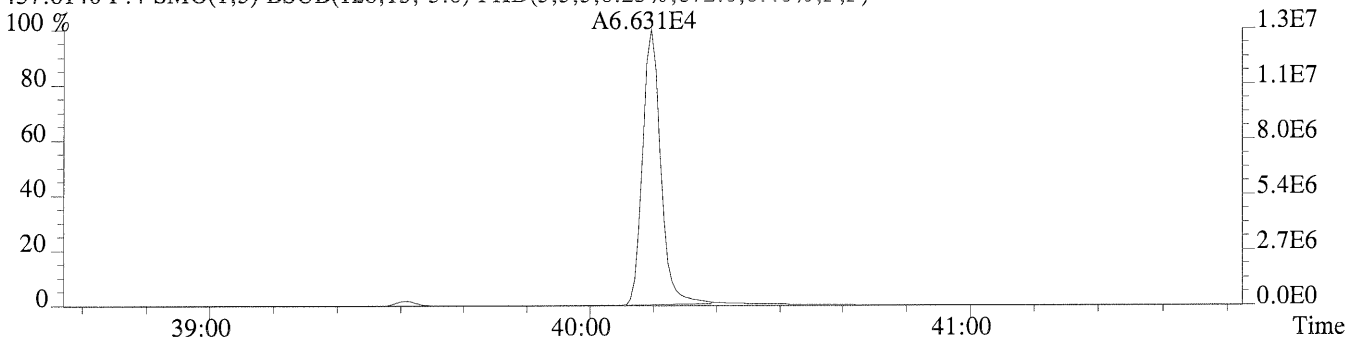
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,828.0,0.40%,F,F)



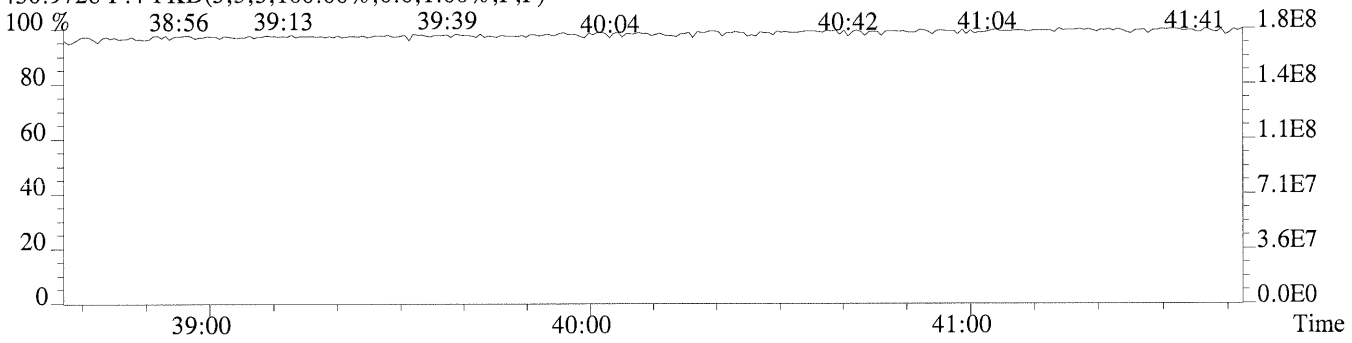
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2688.0,0.40%,F,F)



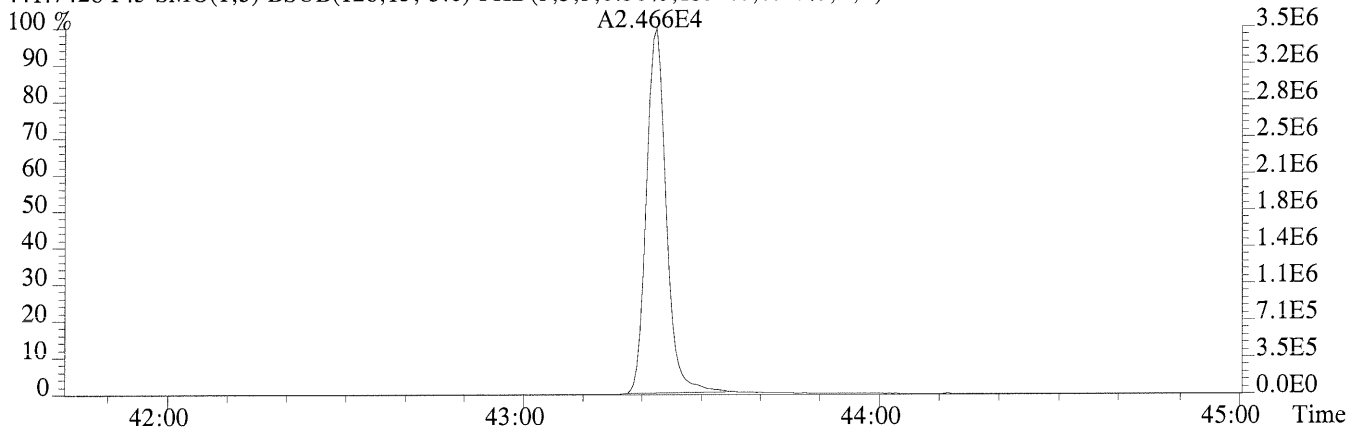
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,872.0,0.40%,F,F)



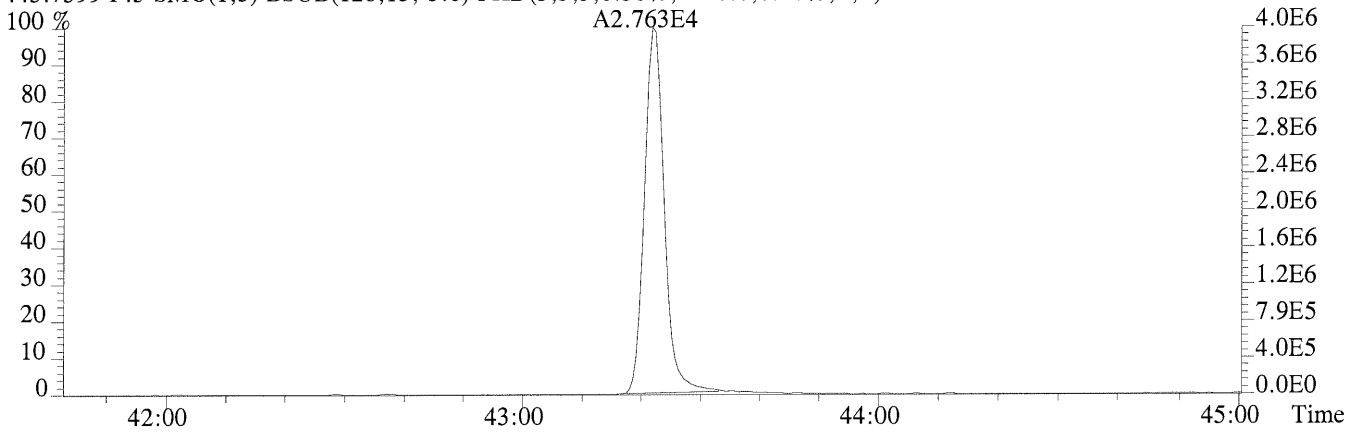
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



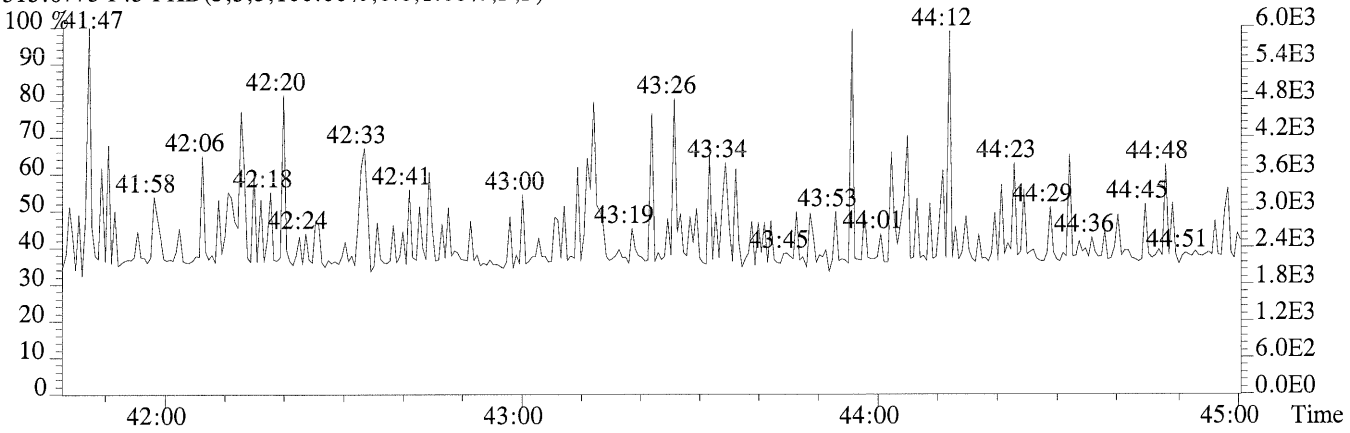
File:P200039 #1-364 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1392.0,0.40%,F,F)



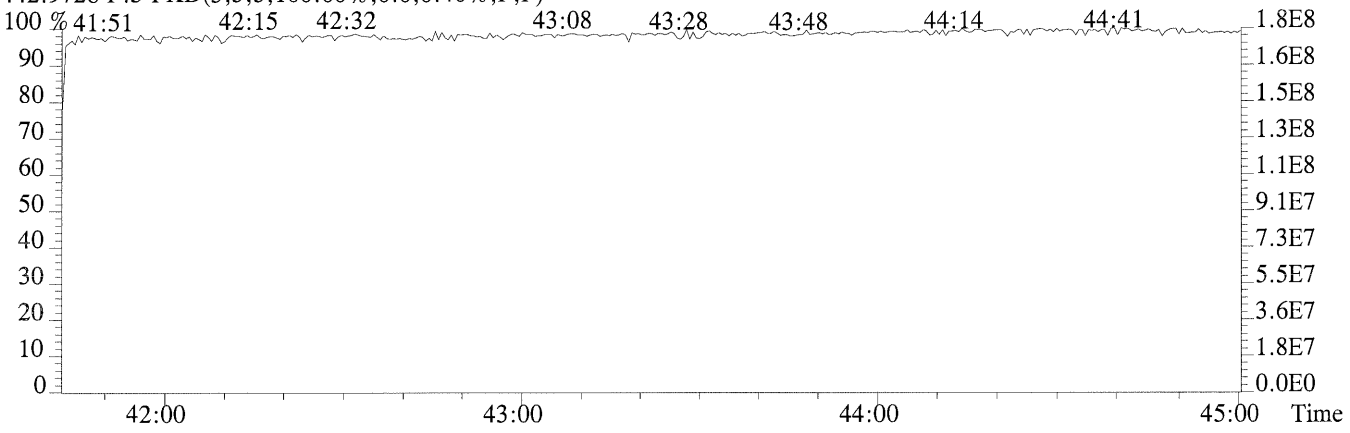
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2740.0,0.40%,F,F)



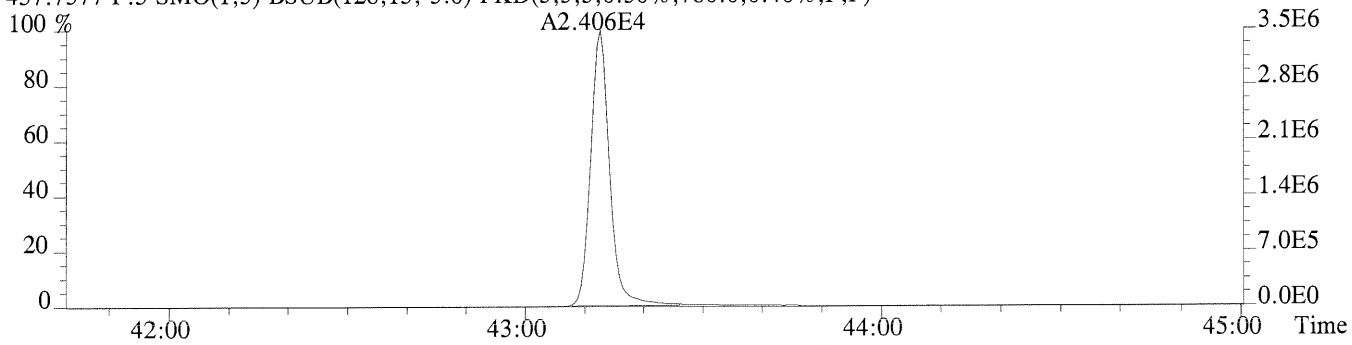
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



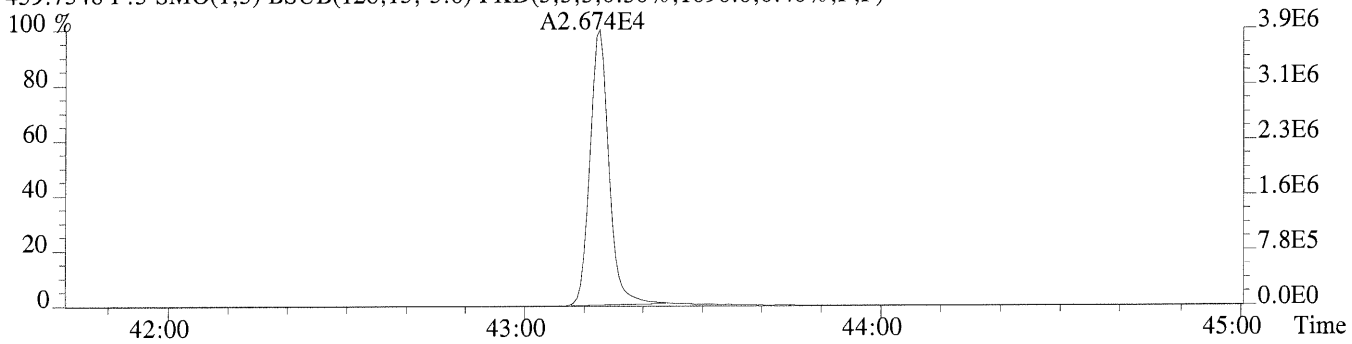
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



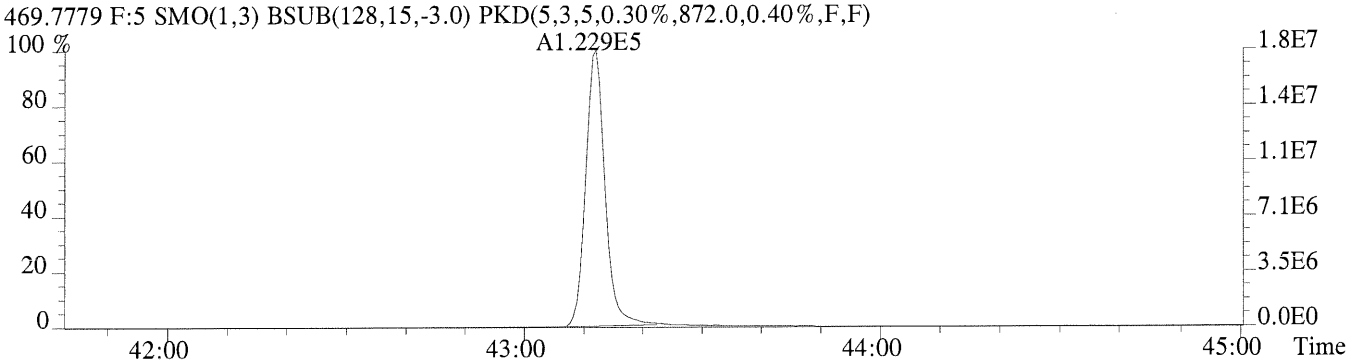
File:P200039 #1-364 Acq: 4-AUG-2008 11:52:05 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,780.0,0.40%,F,F)



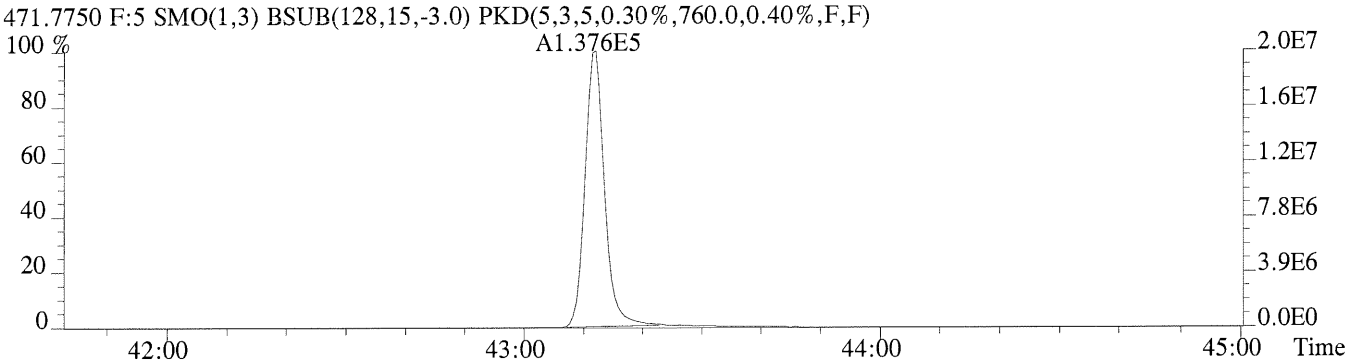
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1096.0,0.40%,F,F)



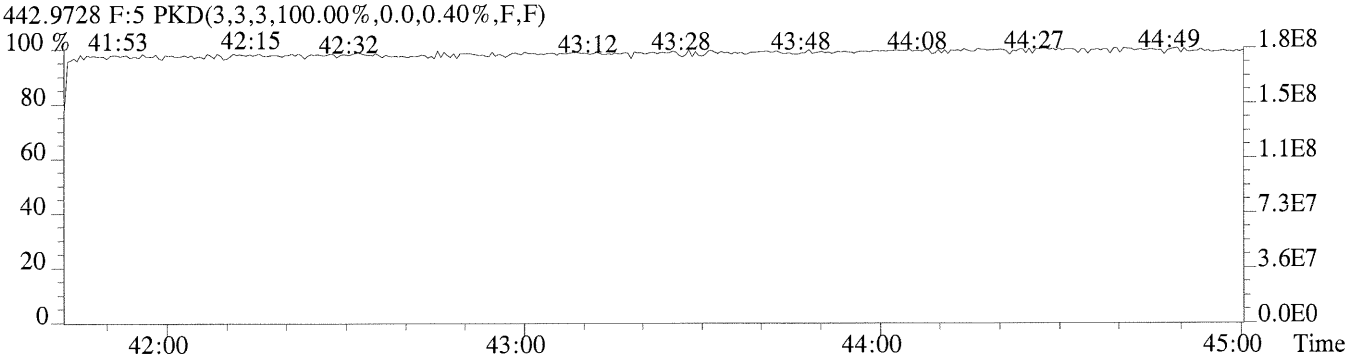
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,872.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,760.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 08/01/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P200045 Analysis Date: 4-AUG-08 Time: 17:54:20

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.80	0.65-0.89	0.99	0.92	7.50
1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.32-1.78	0.90	0.87	3.01
1,2,3,4,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	0.98	0.93	4.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	0.93	1.05	-12.00
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	1.02	0.97	5.20
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	0.90	0.88	1.77
OCDD	M+2/M+4	0.90	0.76-1.02	0.97	0.96	1.05
2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	0.89	0.83	7.01
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	0.87	0.84	3.93
2,3,4,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	0.96	0.85	13.16
1,2,3,4,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	1.16	1.08	7.34
1,2,3,6,7,8-HxCDF	M+2/M+4	1.21	1.05-1.43	1.14	1.13	0.67
1,2,3,7,8,9-HxCDF	M+2/M+4	1.21	1.05-1.43	0.94	0.87	8.69
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.05-1.43	1.11	1.01	9.85
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88-1.20	1.38	1.32	4.51
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.00	0.88-1.20	1.14	0.97	18.45
OCDF	M+2/M+4	0.90	0.76-1.02	1.05	1.11	-5.73

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 08/01/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: P200045 Analysis Date: 4-AUG-08 Time: 17:54:20

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	1.01	1.05	-3.54
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	0.96	0.87	10.91
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.05-1.43	0.91	1.00	-9.13
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	0.88	0.83	6.28
13C-OCDD	M+2/M+4	0.90	0.76-1.02	0.92	0.73	25.80
13C-2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	1.30	1.42	-8.29
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	1.15	1.26	-8.74
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	0.97	1.28	-24.02
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	0.80	0.90	-11.29
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				0.99	0.98	1.30

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #12 Filename P200045 Samp: 1 Inj: 1 Acquired: 4-AUG-08 17:54:20
Processed: 12-AUG-08 08:24:48 LAB. ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:38	9.728e+03	1.292e+04	0.75	yes	no	0.831
2	Unk	1,2,3,7,8-PeCDF	32:60	2.998e+04	1.911e+04	1.57	yes	no	0.840
3	Unk	2,3,4,7,8-PeCDF	33:44	3.300e+04	2.098e+04	1.57	yes	no	0.849
4	Unk	1,2,3,4,7,8-HxCDF	36:33	2.960e+04	2.363e+04	1.25	yes	no	1.085
5	Unk	1,2,3,6,7,8-HxCDF	36:39	2.850e+04	2.346e+04	1.21	yes	no	1.129
6	Unk	2,3,4,6,7,8-HxCDF	37:09	2.828e+04	2.250e+04	1.26	yes	no	1.011
7	Unk	1,2,3,7,8,9-HxCDF	37:50	2.361e+04	1.948e+04	1.21	yes	no	0.867
8	Unk	1,2,3,4,6,7,8-HpCDF	39:17	2.617e+04	2.563e+04	1.02	yes	no	1.318
9	Unk	1,2,3,4,7,8,9-HpCDF	40:36	2.158e+04	2.148e+04	1.00	yes	no	0.966
10	Unk	OCDF	43:23	4.269e+04	4.745e+04	0.90	yes	no	1.109
11	Unk	2,3,7,8-TCDD	29:29	8.713e+03	1.089e+04	0.80	yes	no	0.921
12	Unk	1,2,3,7,8-PeCDD	34:05	2.584e+04	1.639e+04	1.58	yes	no	0.872
13	Unk	1,2,3,4,7,8-HxCDD	37:15	2.321e+04	1.846e+04	1.26	yes	no	0.934
14	Unk	1,2,3,6,7,8-HxCDD	37:20	2.190e+04	1.772e+04	1.24	yes	no	1.054
15	Unk	1,2,3,7,8,9-HxCDD	37:37	2.418e+04	1.938e+04	1.25	yes	no	0.969
16	Unk	1,2,3,4,6,7,8-HpCDD	40:11	1.913e+04	1.820e+04	1.05	yes	no	0.883
17	Unk	OCDD	43:13	3.973e+04	4.424e+04	0.90	yes	no	0.964
18	IS	13C-2,3,7,8-TCDF	28:37	5.543e+04	7.184e+04	0.77	yes	no	1.421
19	IS	13C-1,2,3,7,8-PeCDF	32:59	6.875e+04	4.366e+04	1.57	yes	no	1.262
20	IS	13C-1,2,3,4,7,8-HxCDF	36:33	7.891e+04	1.497e+05	0.53	yes	no	1.279
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:16	5.734e+04	1.307e+05	0.44	yes	no	0.901
22	IS	13C-2,3,7,8-TCDD	29:27	4.355e+04	5.546e+04	0.79	yes	no	1.051
23	IS	13C-1,2,3,7,8-PeCDD	34:05	5.775e+04	3.629e+04	1.59	yes	no	0.868
24	IS	13C-1,2,3,6,7,8-HxCDD	37:19	1.190e+05	9.471e+04	1.26	yes	no	1.000
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	1.062e+05	1.016e+05	1.04	yes	no	0.831
26	IS	13C-OCDD	43:13	2.037e+05	2.275e+05	0.90	yes	no	0.729
27	RS/RT	13C-1,2,3,4-TCDD	29:15	4.302e+04	5.463e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	1.308e+05	1.045e+05	1.25	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:29	1.940e+04					0.981
					SUM AREA				
30	Tot	Total Tetra-Furans	28:09		2.306e+04	0.68	yes		0.831
31	Tot	Total Tetra-Dioxins	29:29		1.961e+04	0.80	yes		0.921
32	Tot	Total Penta-Furans	32:60		1.034e+05	1.57	yes		0.845
33	Tot	Total Penta-Dioxins	34:05		4.222e+04	1.58	yes		0.872
34	Tot	Total Hexa-Furans	36:33		1.991e+05	1.25	yes		1.023
35	Tot	Total Hexa-Dioxins	37:15		1.249e+05	1.26	yes		0.985
36	Tot	Total Hepta-Furans	39:17		9.485e+04	1.02	yes		1.142
37	Tot	Total Hepta-Dioxins	39:32		3.749e+04	1.07	yes		0.883

Columbia Analytical Services, Inc.
19408 Park Row., Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #12 Filename P200045 #1 Samp: 1 Inj: 1 Acquired: 4-AUG-08 17:54:20

Processed: 12-AUG-08 08:24:48 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.70e+06	8.48e+02	2.0e+03	2.21e+06	1.95e+03	1.1e+03
2	1,2,3,7,8-PeCDF	5.91e+06	6.16e+02	9.6e+03	3.80e+06	1.49e+03	2.5e+03
3	2,3,4,7,8-PeCDF	6.96e+06	6.16e+02	1.1e+04	4.37e+06	1.49e+03	2.9e+03
4	1,2,3,4,7,8-HxCDF	6.72e+06	1.60e+03	4.2e+03	5.48e+06	2.04e+03	2.7e+03
5	1,2,3,6,7,8-HxCDF	6.49e+06	1.60e+03	4.1e+03	5.16e+06	2.04e+03	2.5e+03
6	2,3,4,6,7,8-HxCDF	6.40e+06	1.60e+03	4.0e+03	5.03e+06	2.04e+03	2.5e+03
7	1,2,3,7,8,9-HxCDF	5.27e+06	1.60e+03	3.3e+03	4.38e+06	2.04e+03	2.1e+03
8	1,2,3,4,6,7,8-HpCDF	6.03e+06	6.77e+03	8.9e+02	5.97e+06	2.77e+03	2.2e+03
9	1,2,3,4,7,8,9-HpCDF	4.52e+06	6.77e+03	6.7e+02	4.57e+06	2.77e+03	1.7e+03
10	OCDF	6.47e+06	1.72e+03	3.8e+03	7.17e+06	2.98e+03	2.4e+03
11	2,3,7,8-TCDD	1.60e+06	2.54e+03	6.3e+02	1.97e+06	8.40e+02	2.3e+03
12	1,2,3,7,8-PeCDD	5.38e+06	2.67e+03	2.0e+03	3.46e+06	5.96e+02	5.8e+03
13	1,2,3,4,7,8-HxCDD	5.35e+06	1.31e+03	4.1e+03	4.26e+06	2.10e+03	2.0e+03
14	1,2,3,6,7,8-HxCDD	5.17e+06	1.31e+03	3.9e+03	4.20e+06	2.10e+03	2.0e+03
15	1,2,3,7,8,9-HxCDD	5.62e+06	1.31e+03	4.3e+03	4.55e+06	2.10e+03	2.2e+03
16	1,2,3,4,6,7,8-HpCDD	4.07e+06	2.50e+03	1.6e+03	3.87e+06	1.49e+03	2.6e+03
17	OCDD	6.32e+06	1.25e+03	5.0e+03	7.02e+06	2.11e+03	3.3e+03
18	13C-2,3,7,8-TCDF	9.41e+06	4.96e+03	1.9e+03	1.22e+07	3.48e+03	3.5e+03
19	13C-1,2,3,7,8-PeCDF	1.38e+07	5.44e+02	2.5e+04	8.82e+06	9.12e+02	9.7e+03
20	13C-1,2,3,4,7,8-HxCDF	1.80e+07	1.18e+03	1.5e+04	3.41e+07	2.65e+03	1.3e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.32e+07	3.55e+03	3.7e+03	2.99e+07	3.38e+03	8.9e+03
22	13C-2,3,7,8-TCDD	7.80e+06	5.07e+03	1.5e+03	9.92e+06	1.40e+03	7.1e+03
23	13C-1,2,3,7,8-PeCDD	1.23e+07	2.24e+03	5.5e+03	7.76e+06	1.32e+03	5.9e+03
24	13C-1,2,3,6,7,8-HxCDD	2.76e+07	1.16e+03	2.4e+04	2.21e+07	1.62e+03	1.4e+04
25	13C-1,2,3,4,6,7,8-HpCDD	2.28e+07	2.68e+03	8.5e+03	2.19e+07	1.42e+03	1.5e+04
26	13C-OCDD	3.17e+07	1.61e+03	2.0e+04	3.57e+07	1.56e+03	2.3e+04
27	13C-1,2,3,4-TCDD	7.81e+06	5.07e+03	1.5e+03	9.85e+06	1.40e+03	7.0e+03
28	13C-1,2,3,7,8,9-HxCDD	3.04e+07	1.16e+03	2.6e+04	2.44e+07	1.62e+03	1.5e+04
29	37Cl-2,3,7,8-TCDD	3.51e+06	1.17e+03	3.0e+03			

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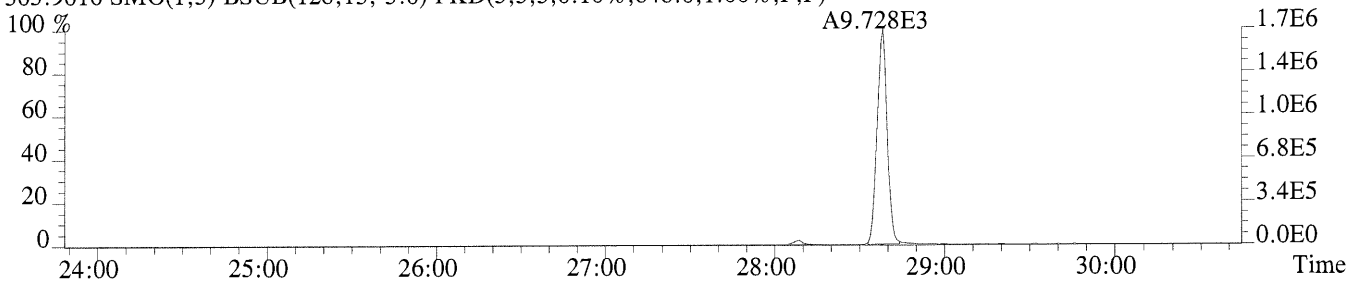
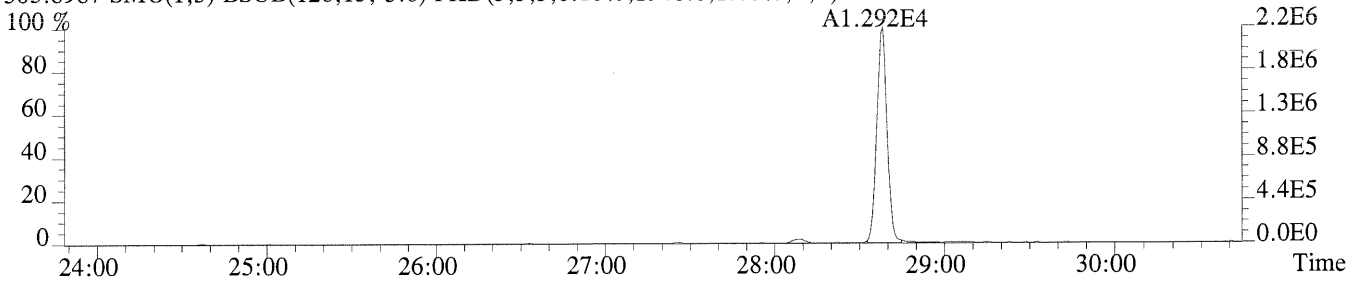
File:P200045 #1-578 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

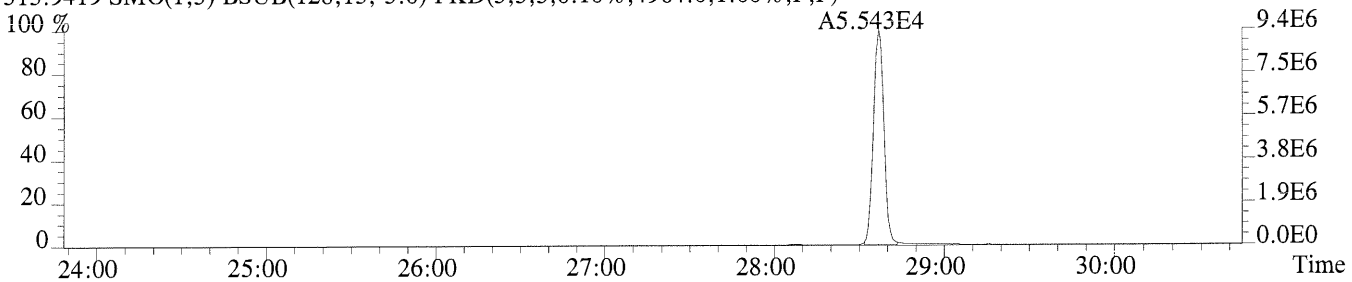
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,848.0,1.00%,F,F)



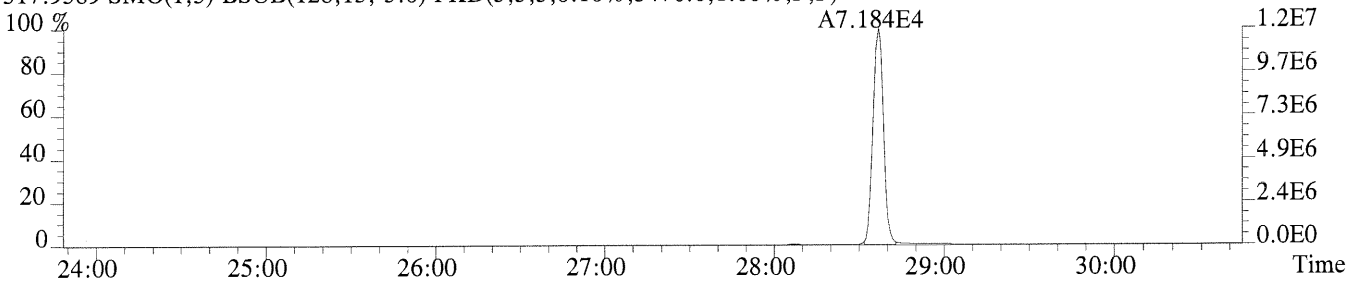
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1948.0,1.00%,F,F)



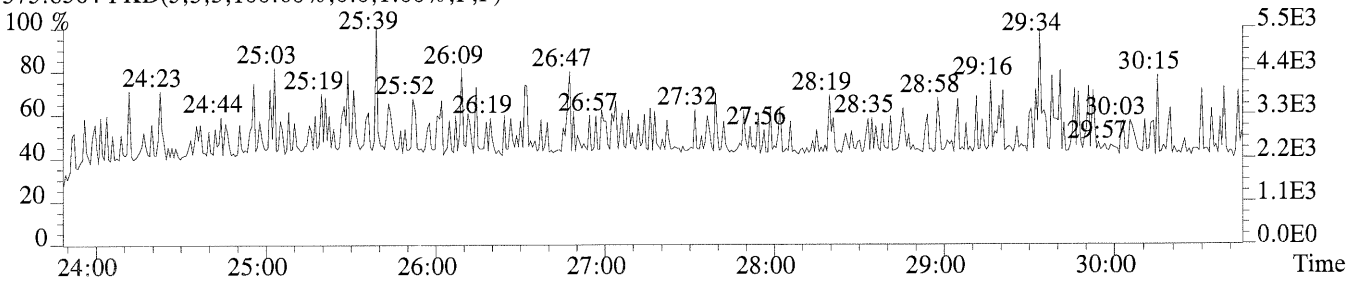
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,4964.0,1.00%,F,F)



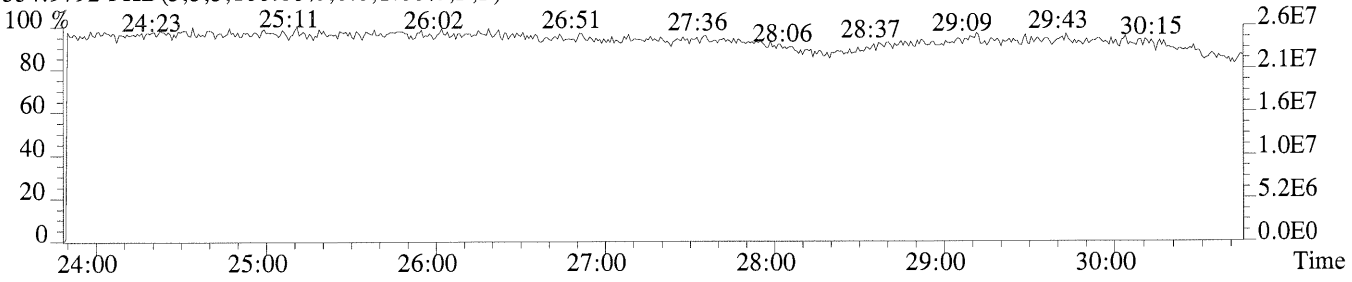
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3476.0,1.00%,F,F)



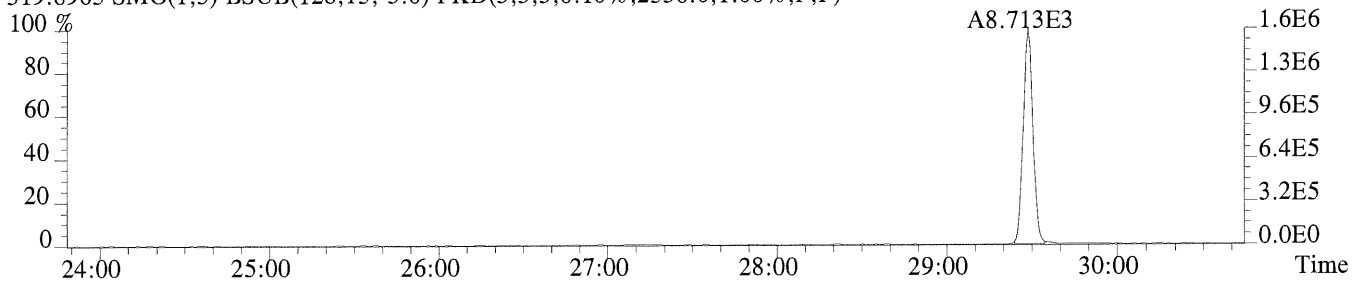
375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



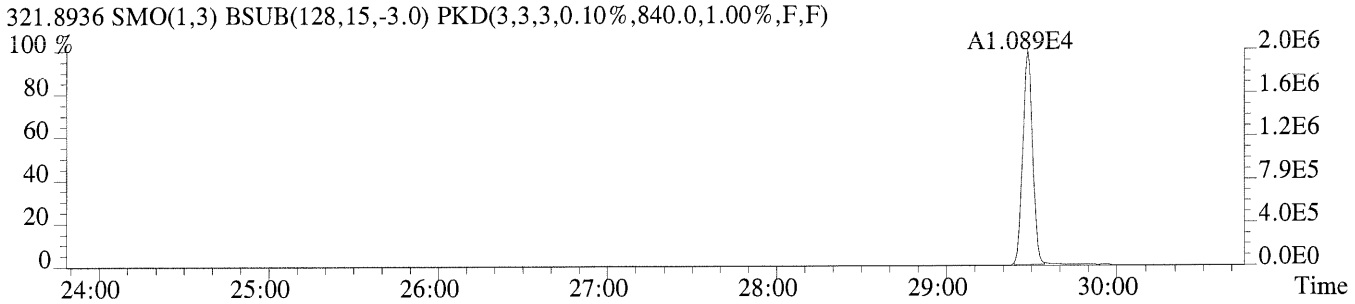
354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



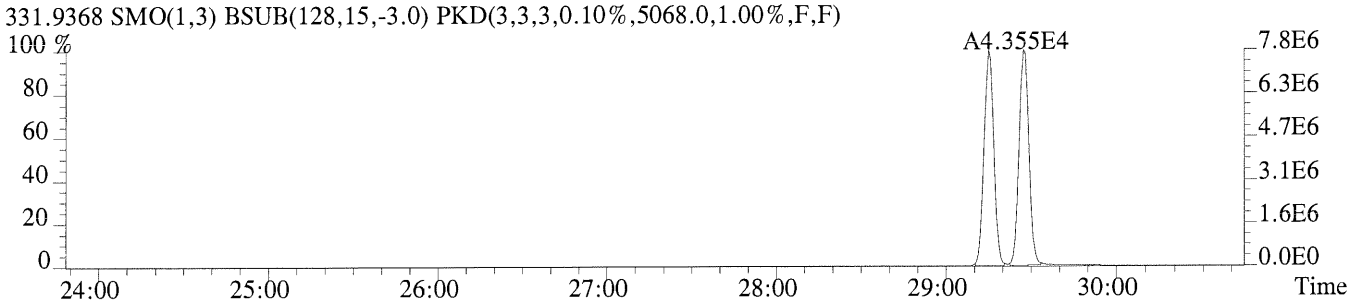
File:P200045 #1-578 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2536.0,1.00%,F,F)



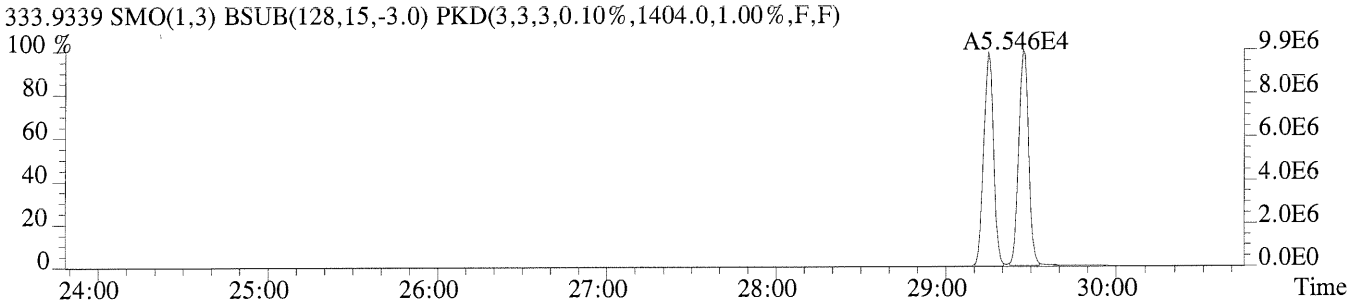
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,840.0,1.00%,F,F)



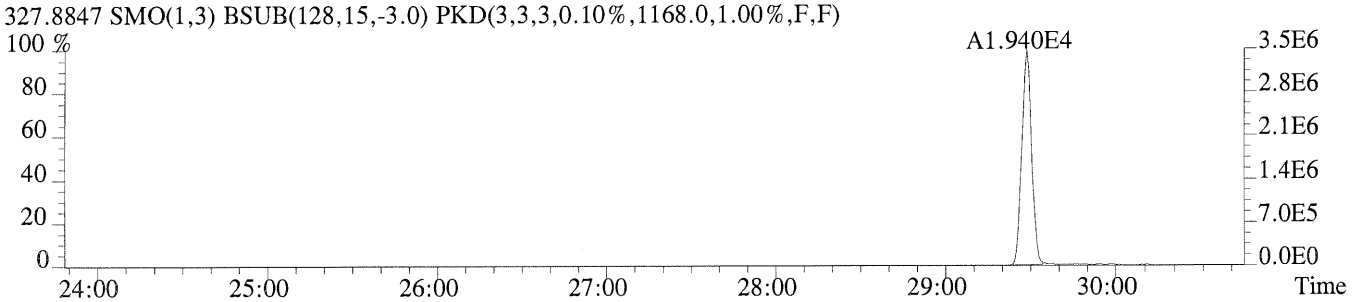
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5068.0,1.00%,F,F)



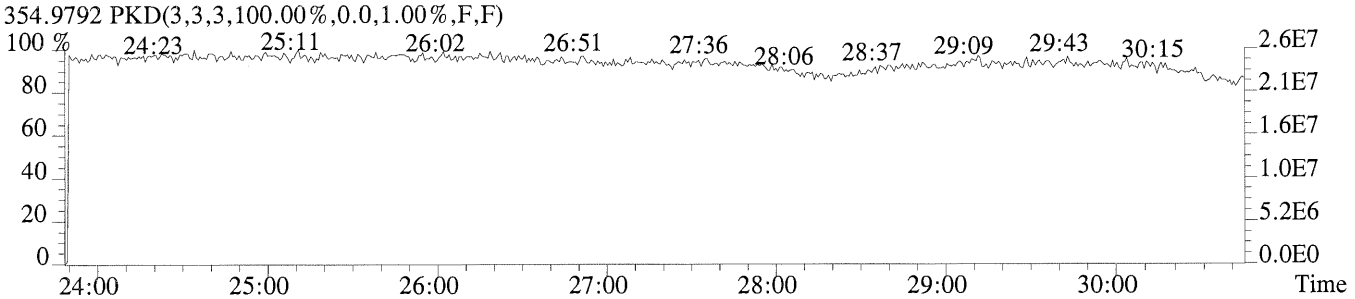
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1404.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1168.0,1.00%,F,F)

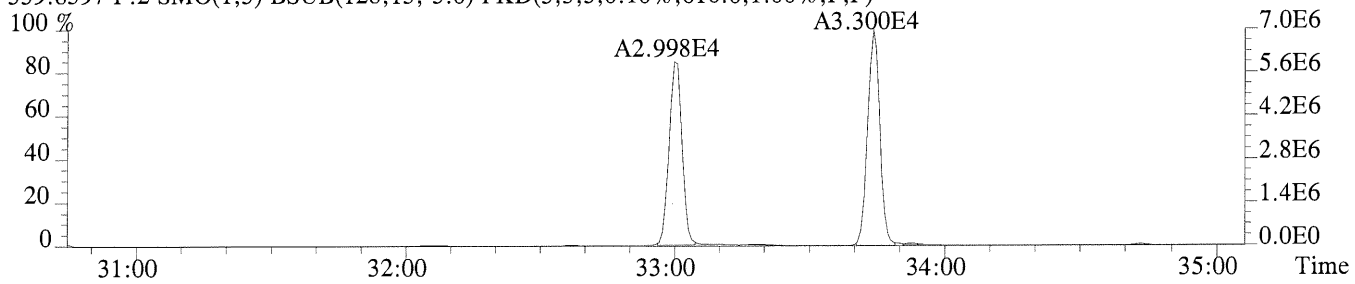


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

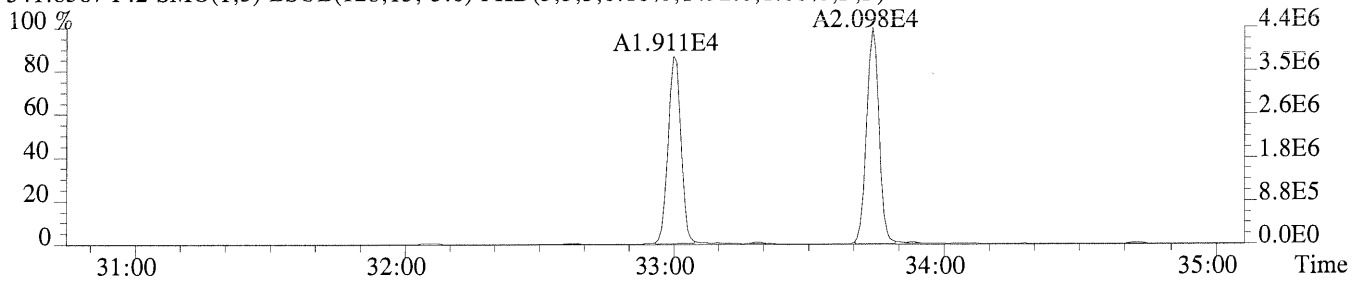


File:P200045 #1-396 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

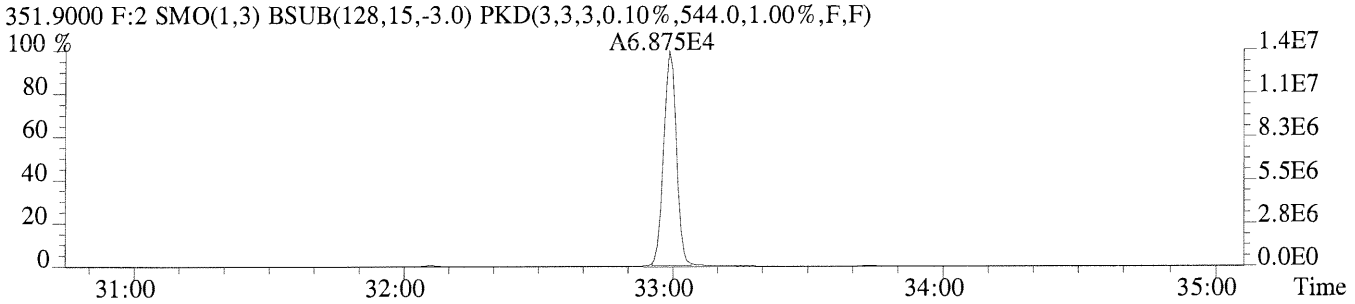
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,616.0,1.00%,F,F)



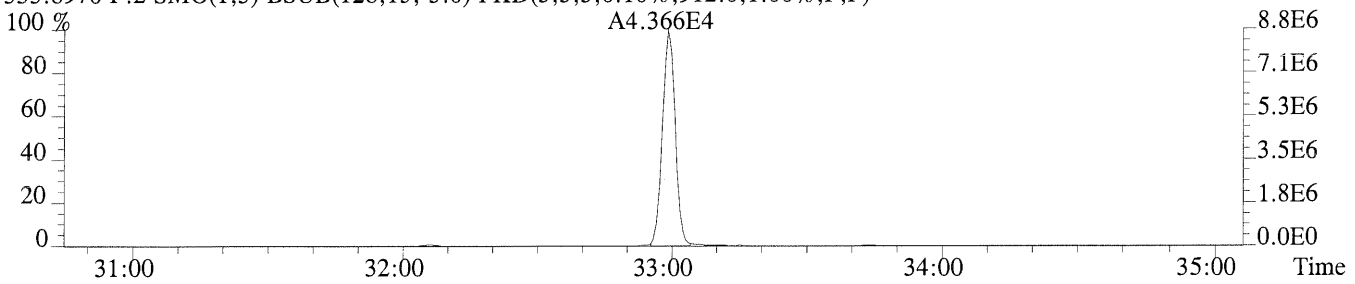
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1492.0,1.00%,F,F)



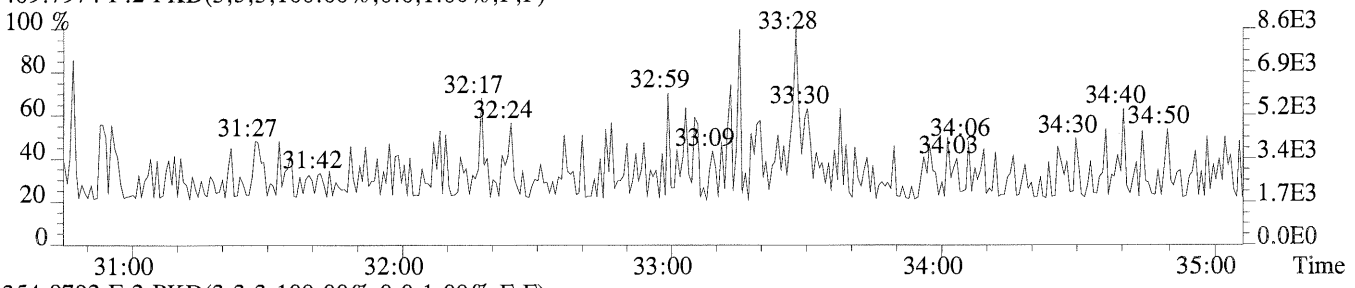
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,544.0,1.00%,F,F)



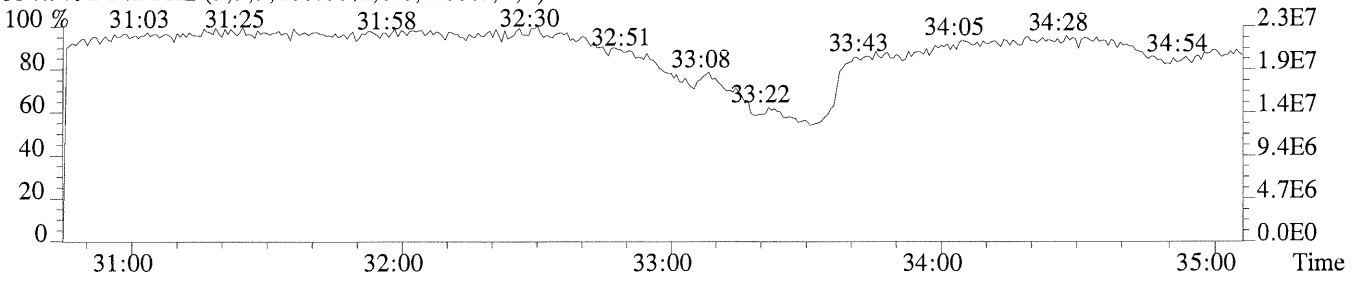
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,912.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

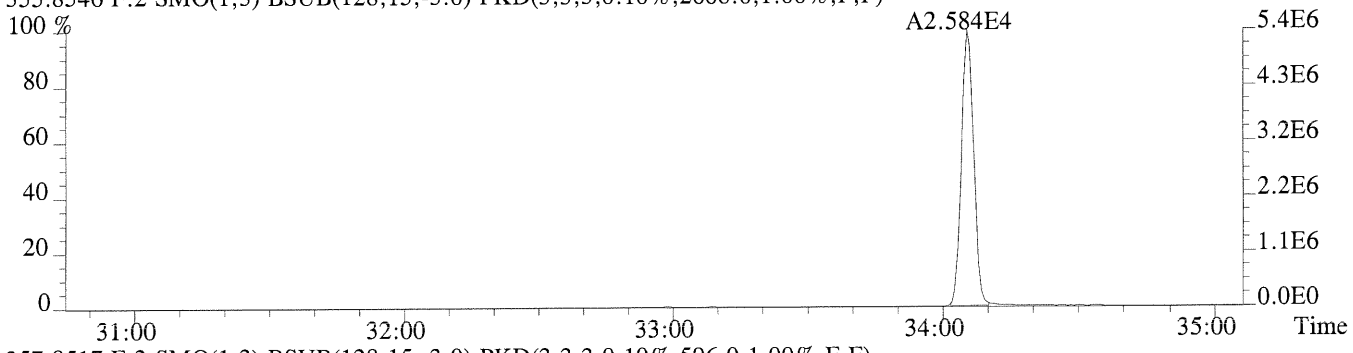


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

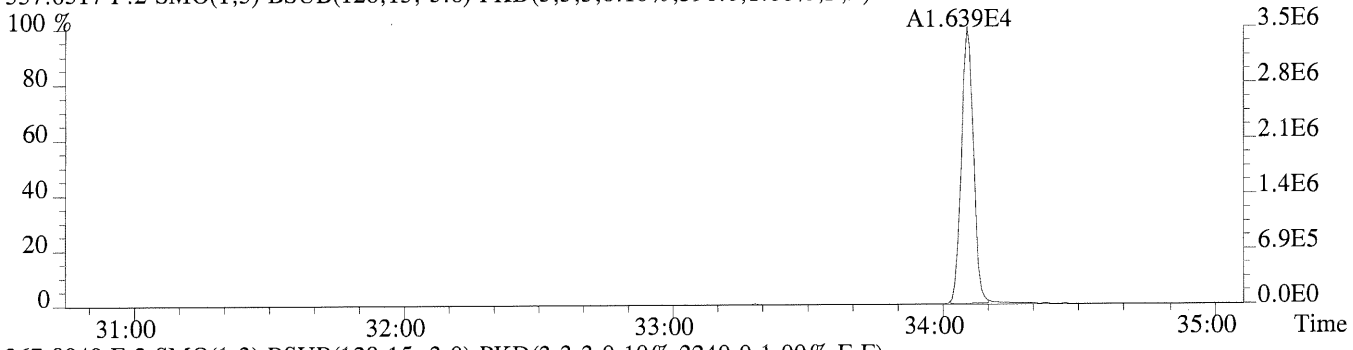


File:P200045 #1-396 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

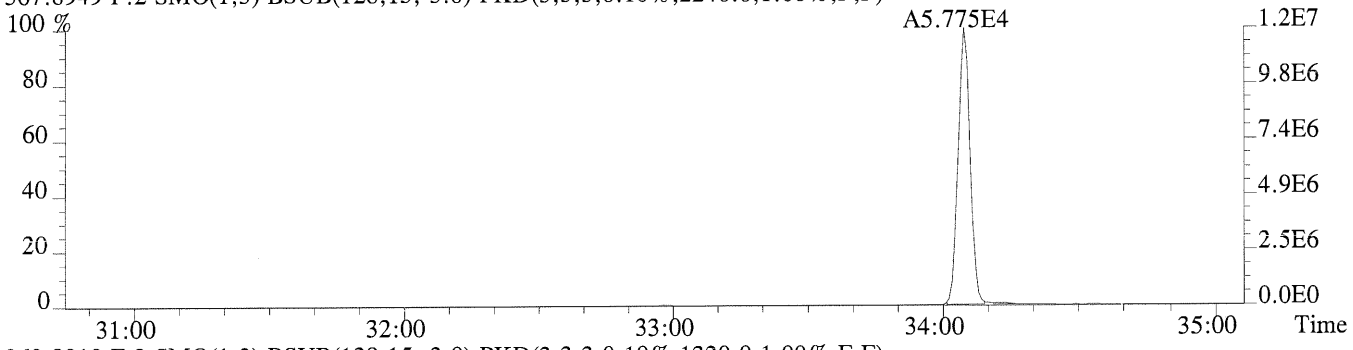
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2668.0,1.00%,F,F)



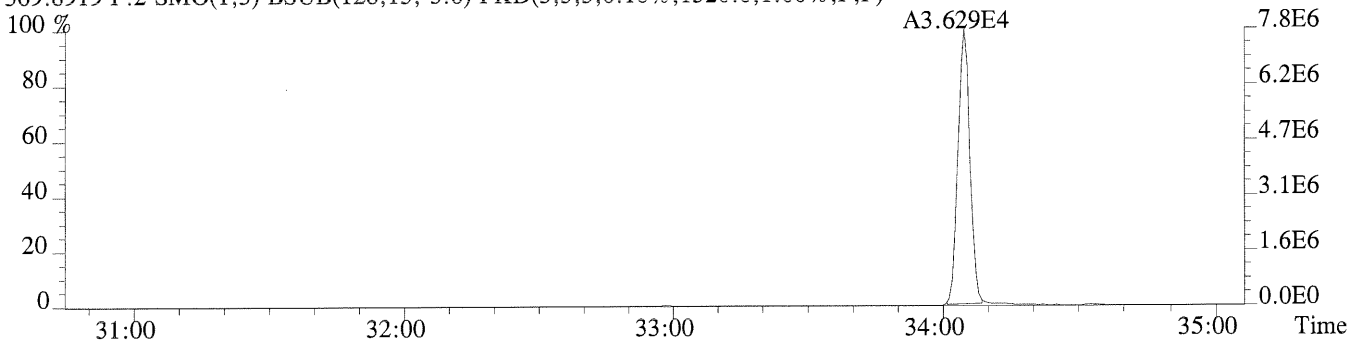
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,596.0,1.00%,F,F)



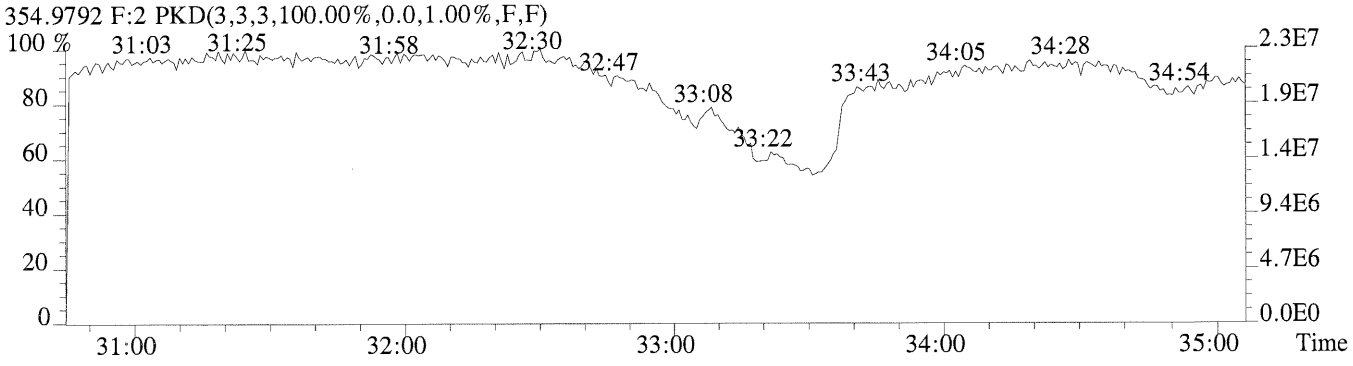
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2240.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1320.0,1.00%,F,F)

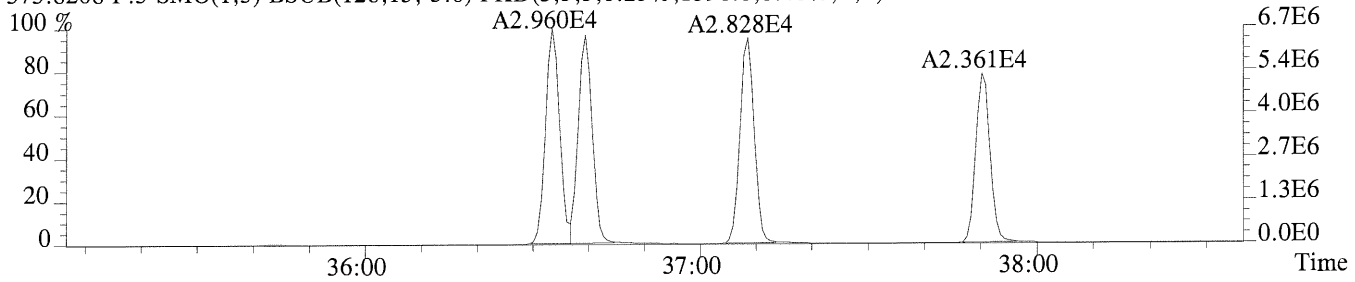


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

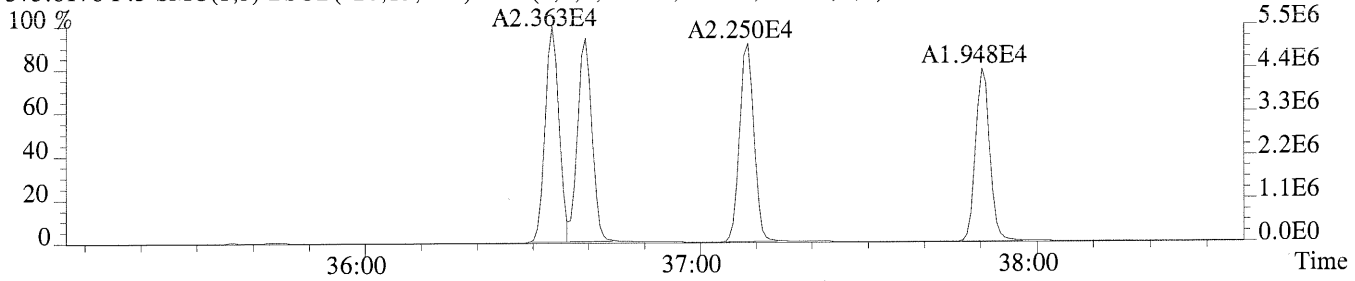


File:P200045 #1-318 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

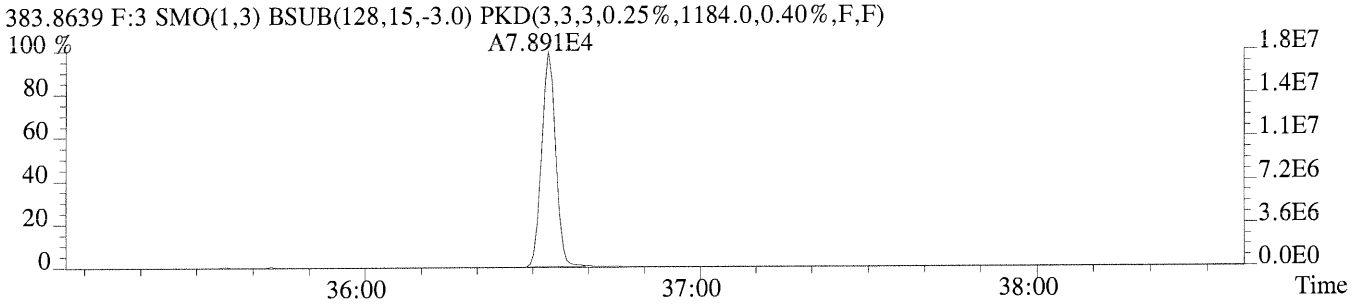
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1596.0,0.40%,F,F)



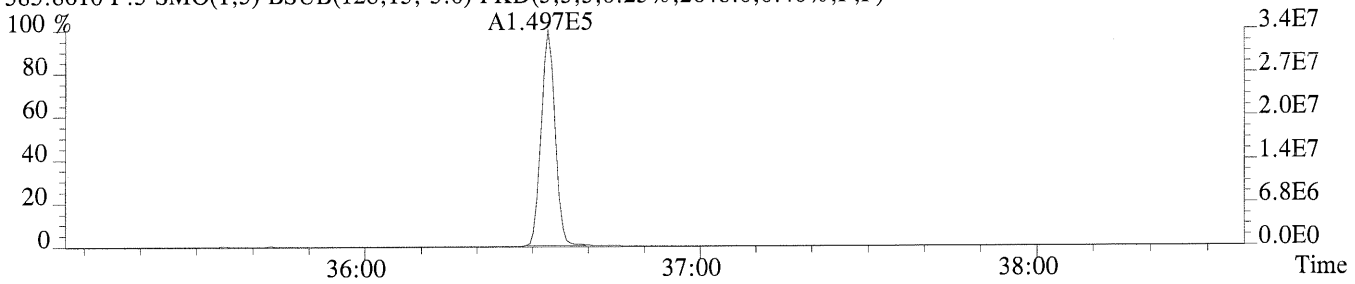
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2036.0,0.40%,F,F)



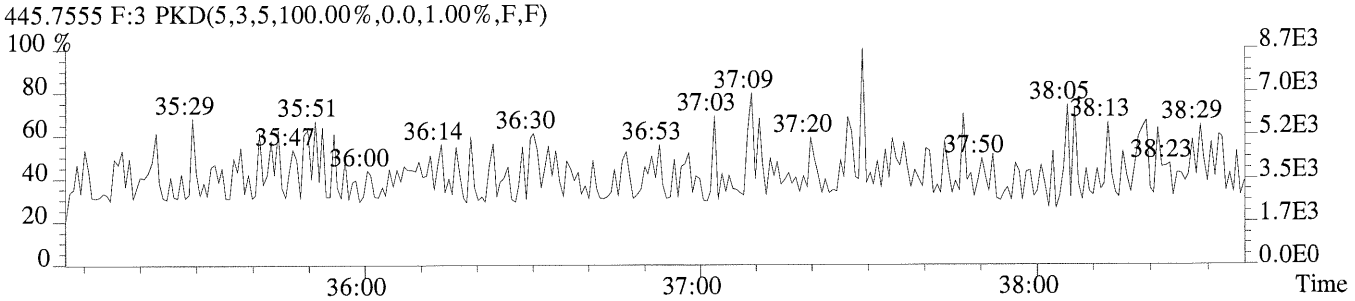
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1184.0,0.40%,F,F)



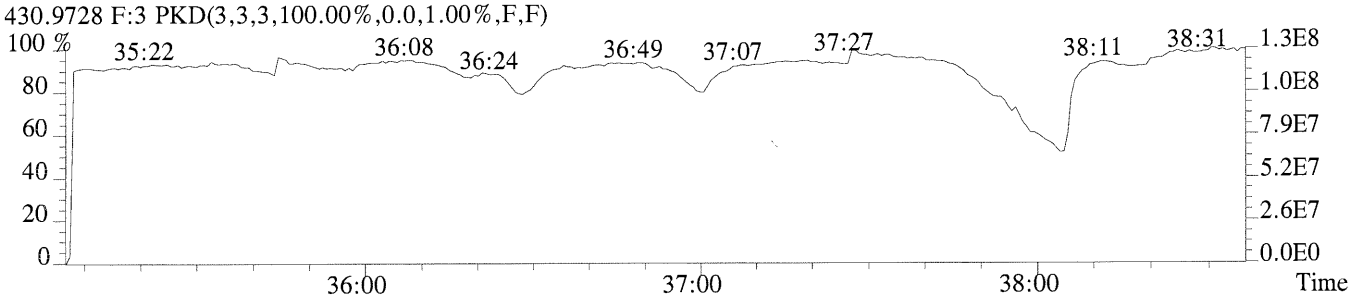
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2648.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

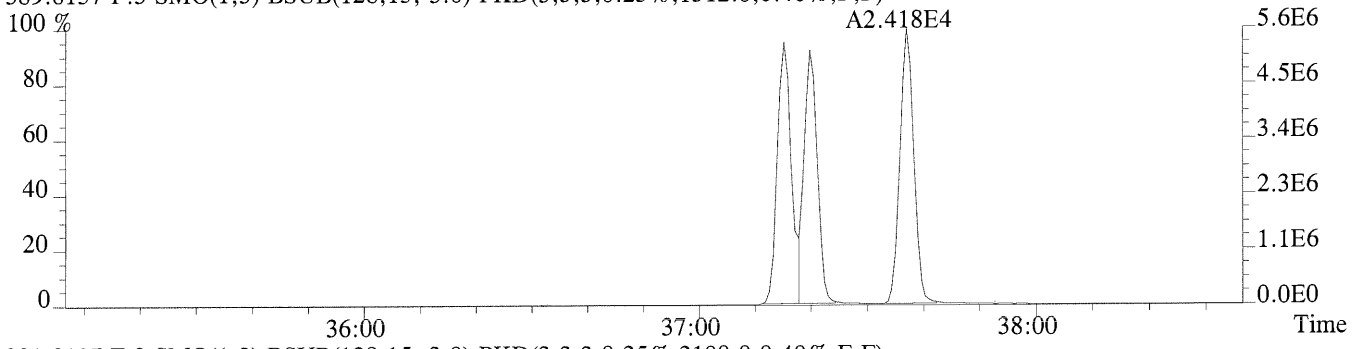


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

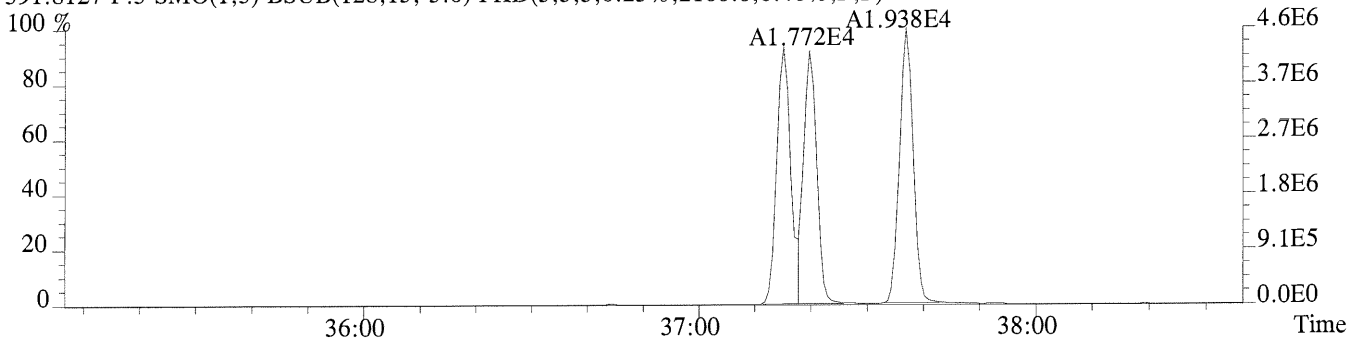


File:P200045 #1-318 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

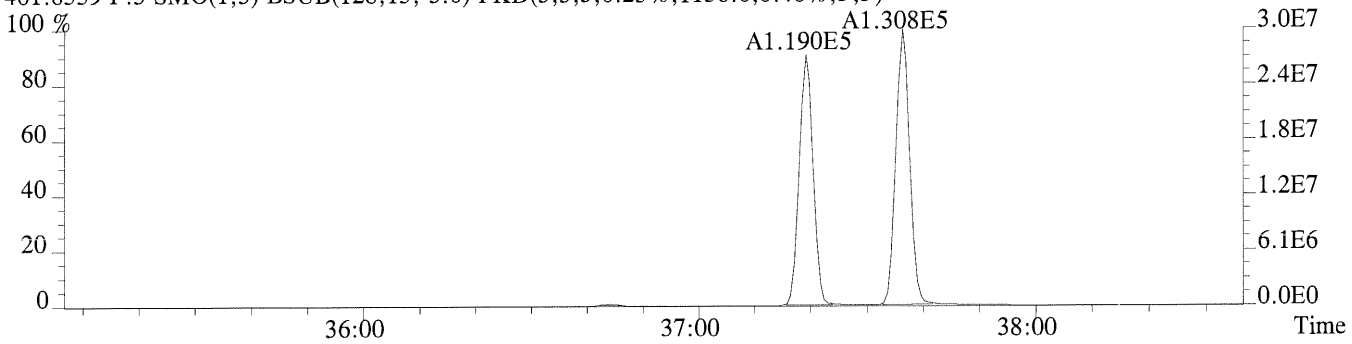
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1312.0,0.40%,F,F)



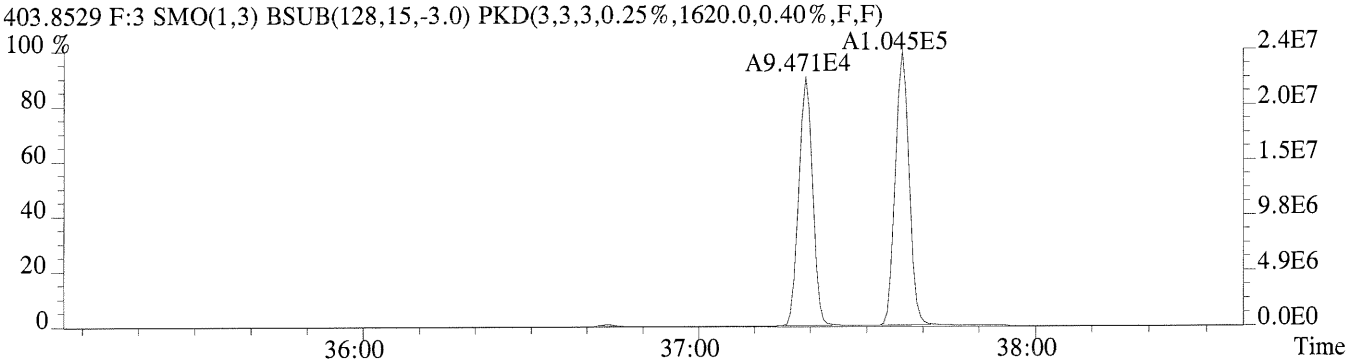
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2100.0,0.40%,F,F)



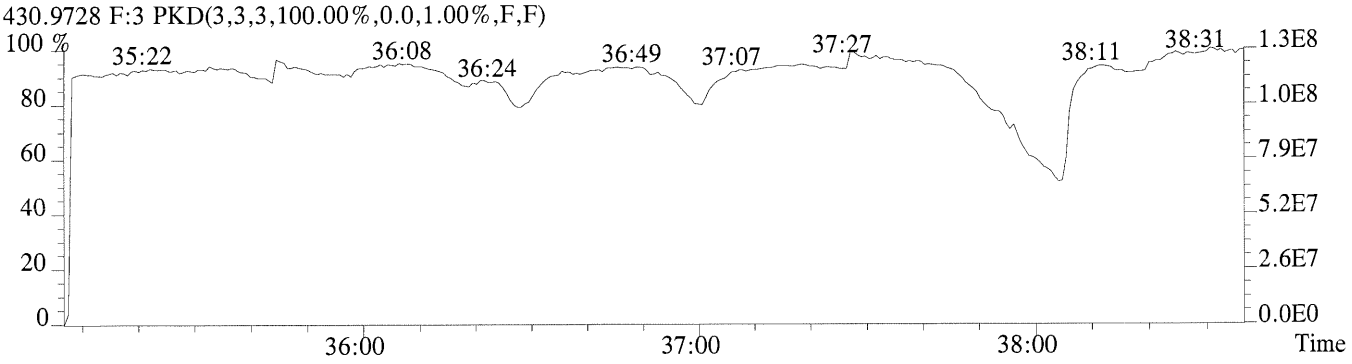
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1156.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1620.0,0.40%,F,F)

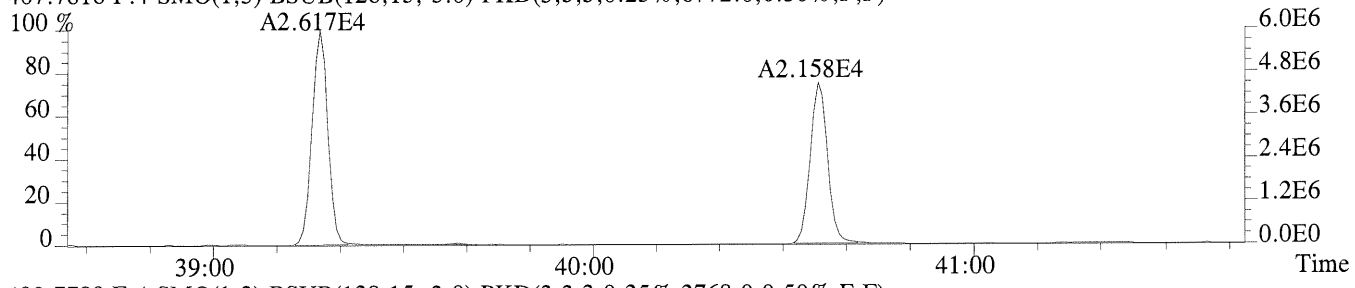


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

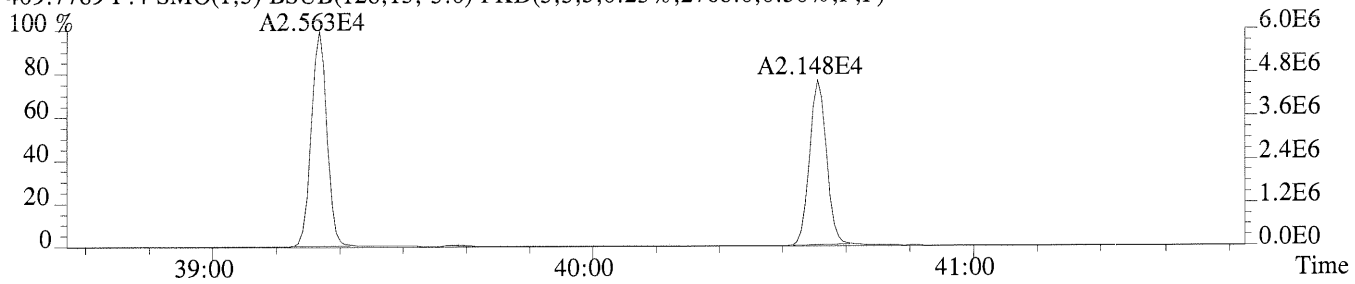


File:P200045 #1-281 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

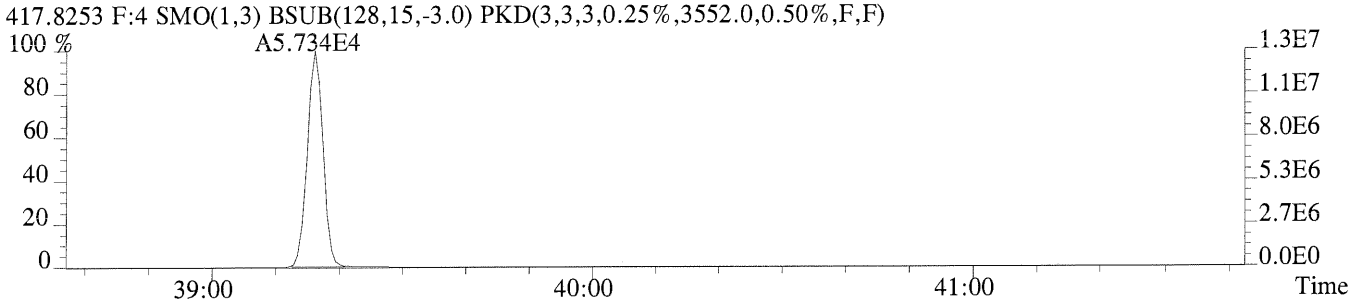
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,6772.0,0.50%,F,F)



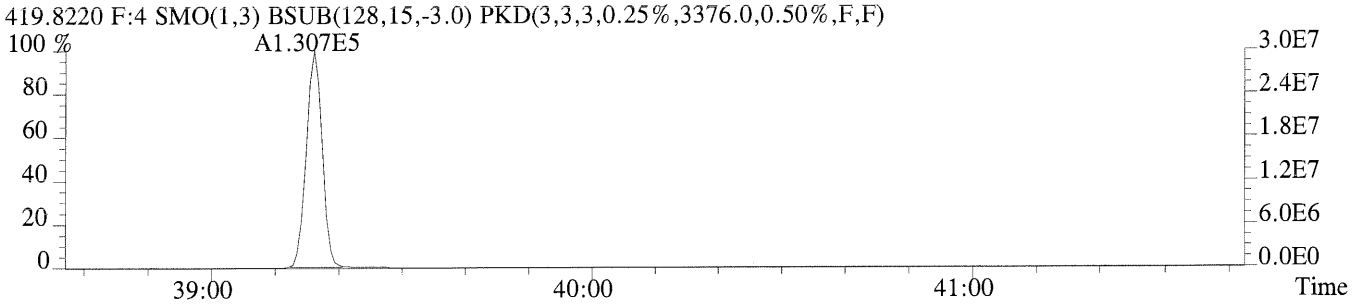
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2768.0,0.50%,F,F)



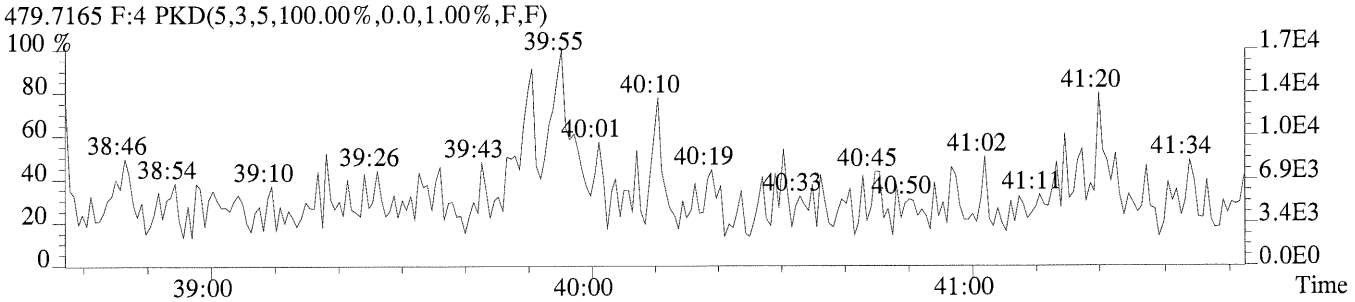
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3552.0,0.50%,F,F)



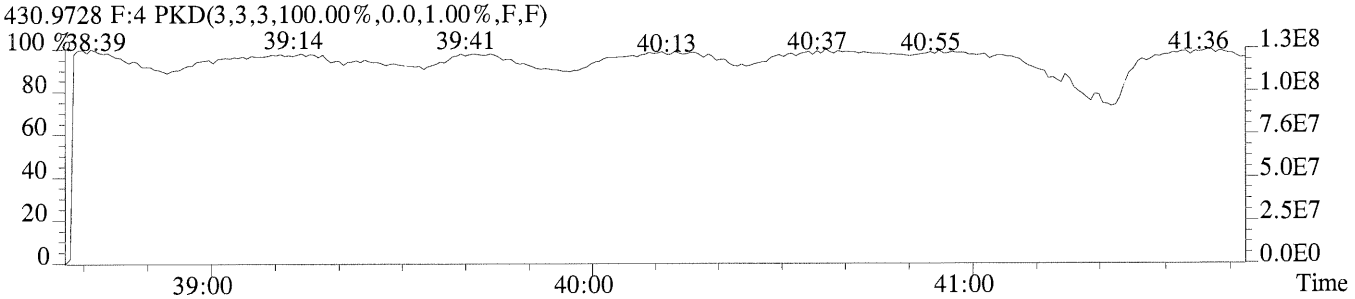
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3376.0,0.50%,F,F)



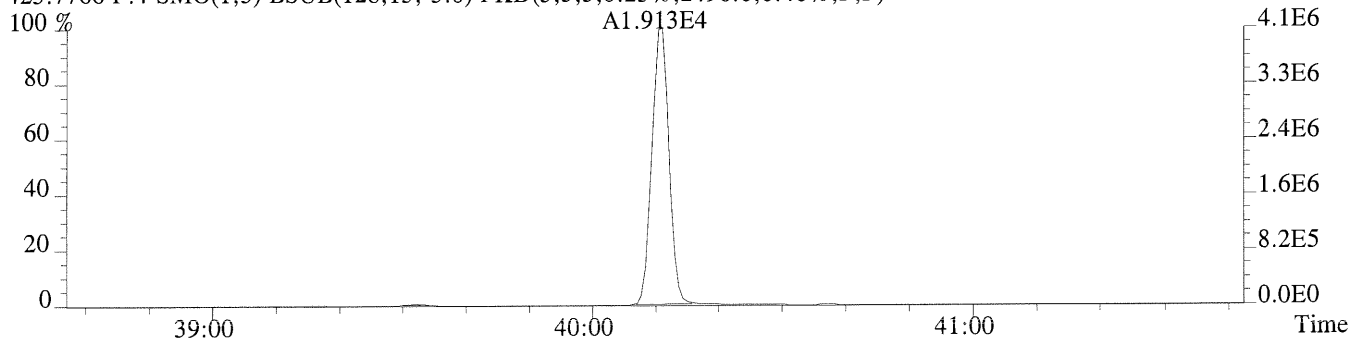
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



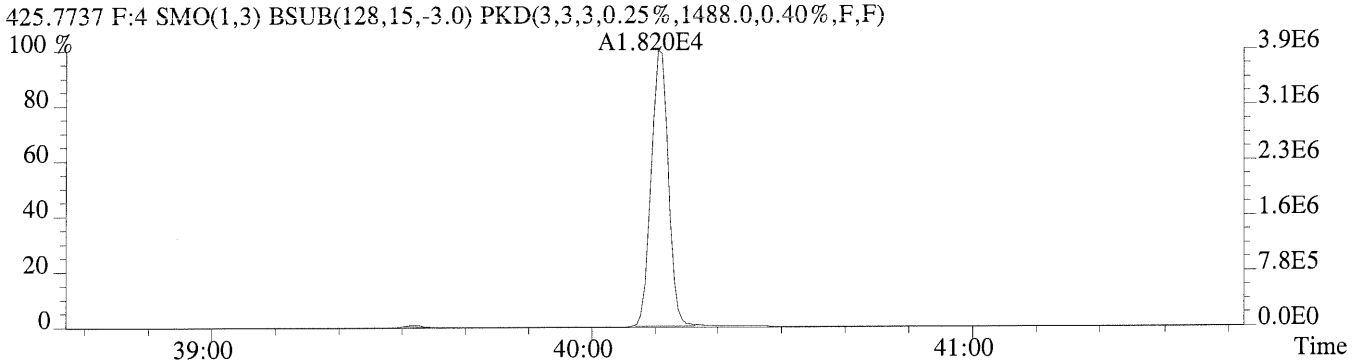
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



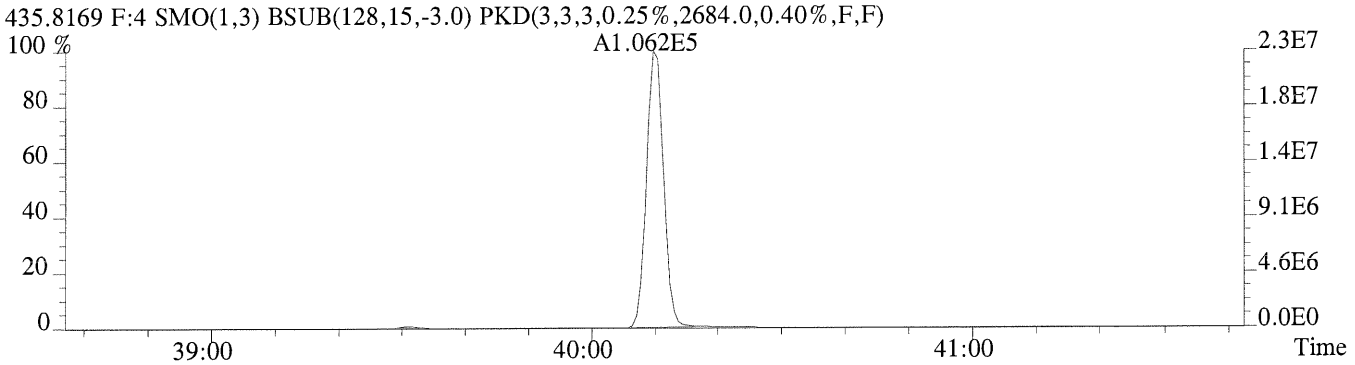
File:P200045 #1-281 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2496.0,0.40%,F,F)



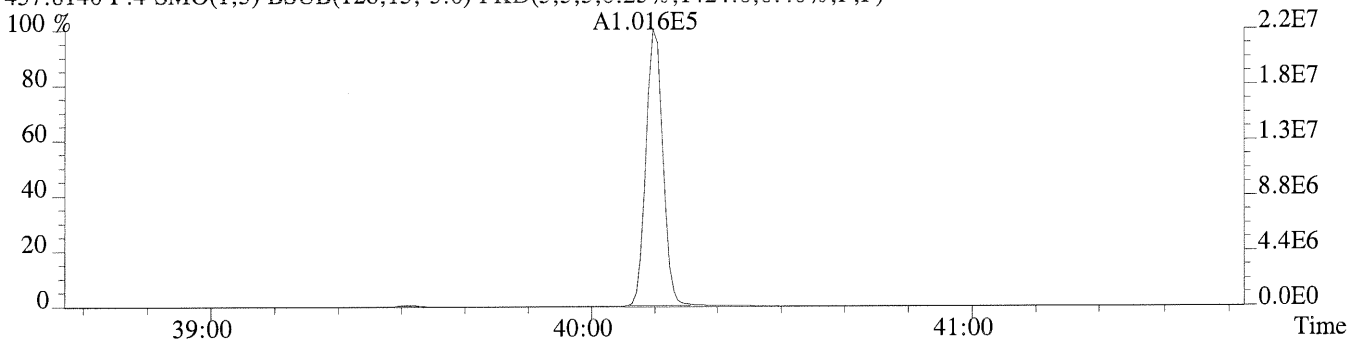
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1488.0,0.40%,F,F)



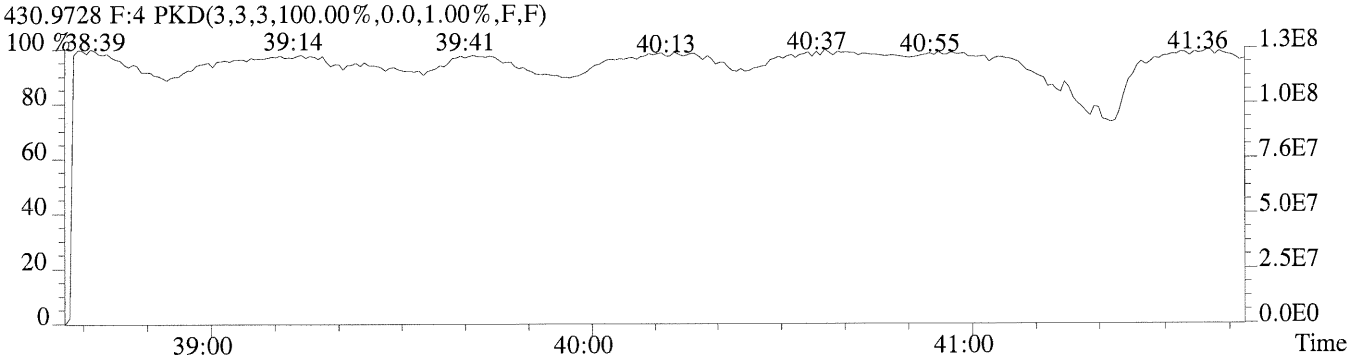
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2684.0,0.40%,F,F)



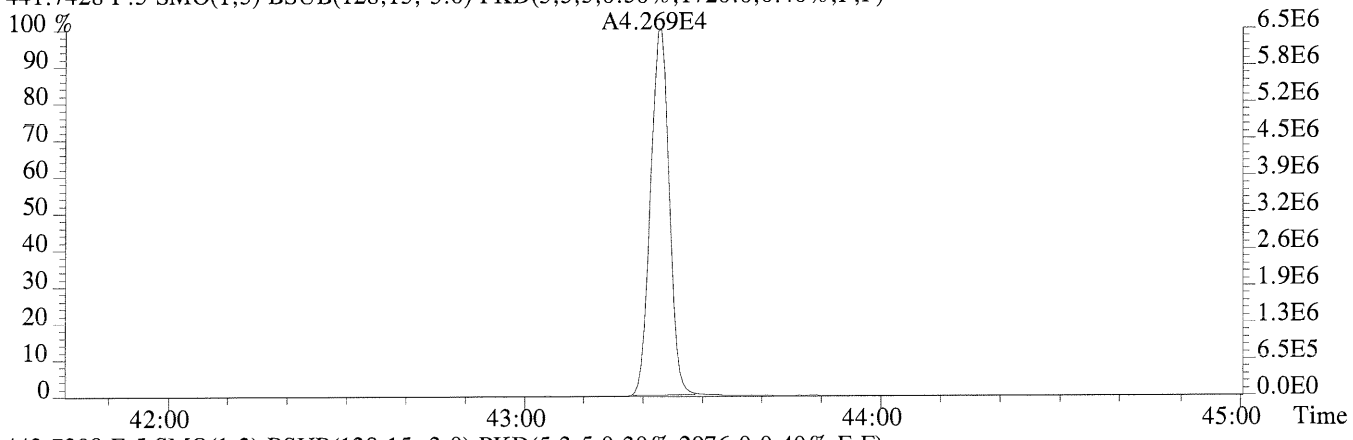
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1424.0,0.40%,F,F)



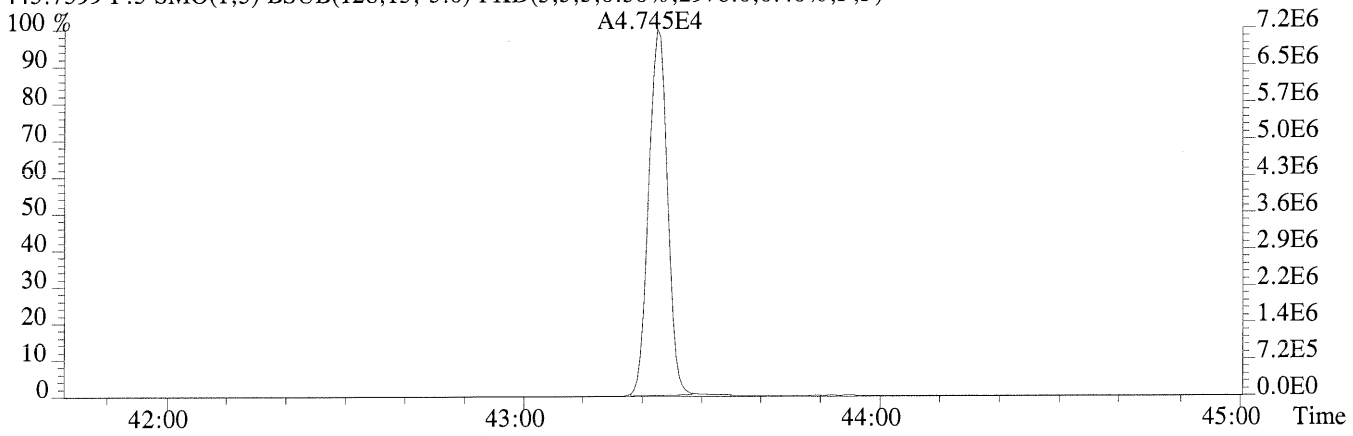
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



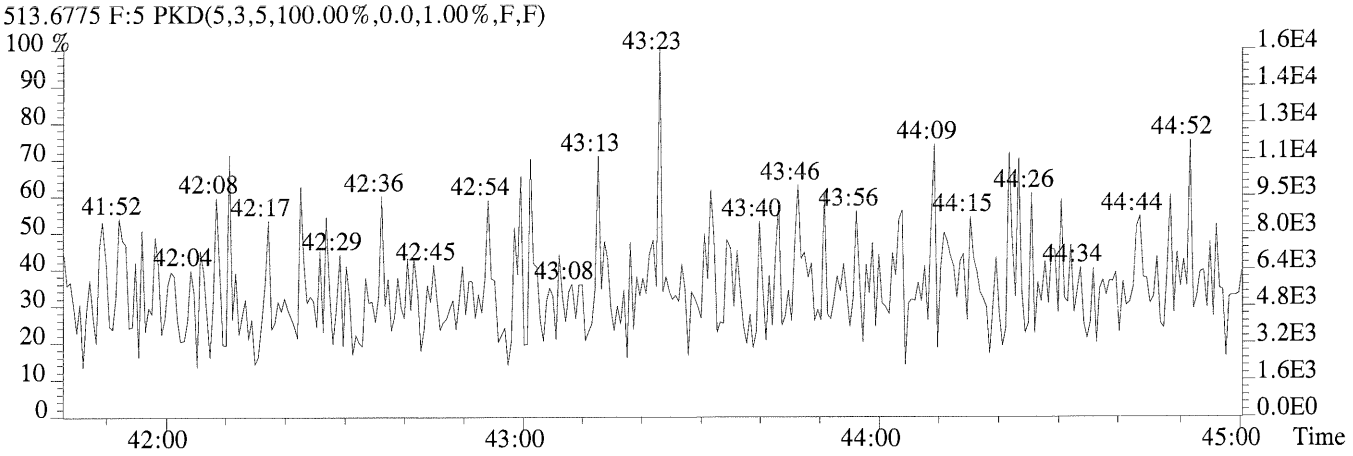
File:P200045 #1-364 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1720.0,0.40%,F,F)



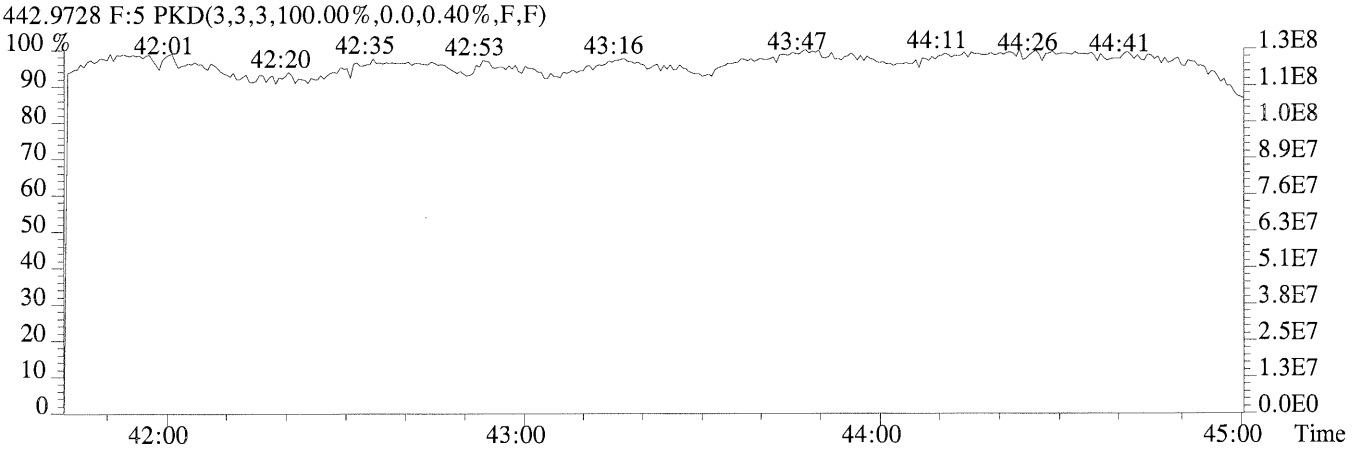
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2976.0,0.40%,F,F)



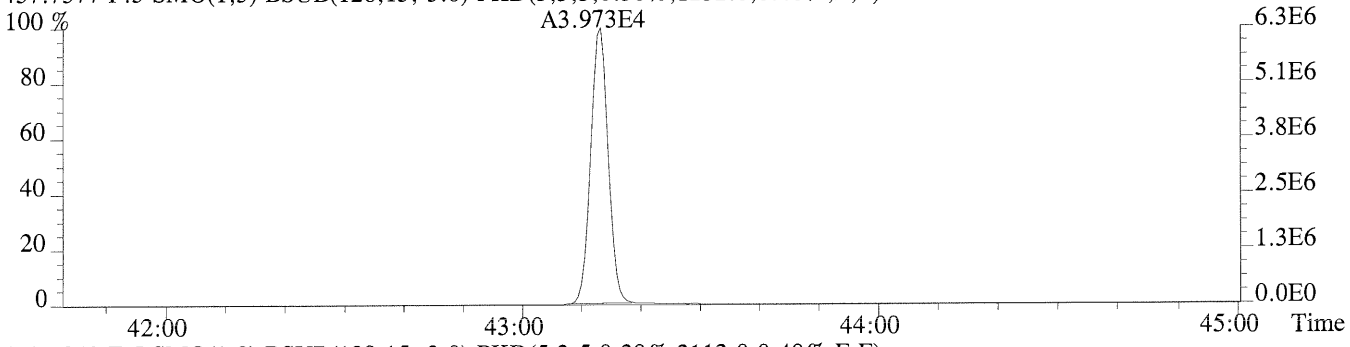
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



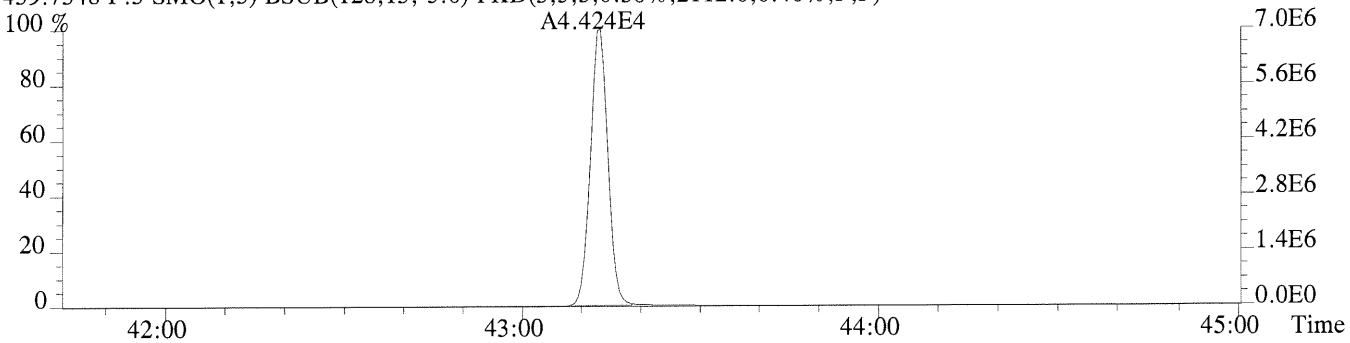
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



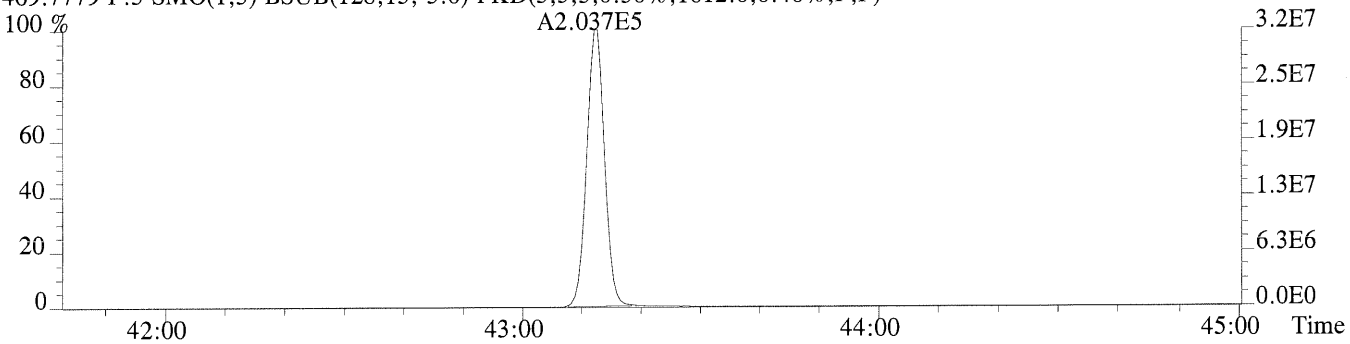
File:P200045 #1-364 Acq: 4-AUG-2008 17:54:20 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1252.0,0.40%,F,F)



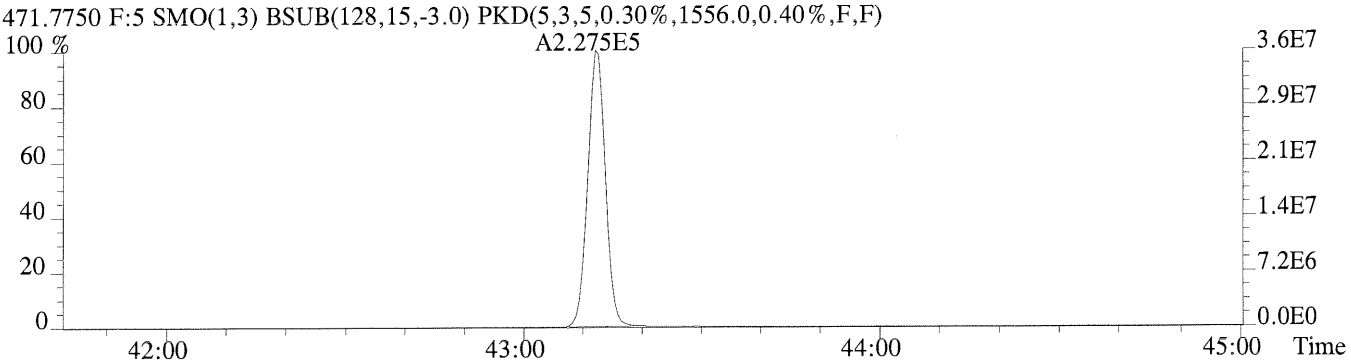
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2112.0,0.40%,F,F)



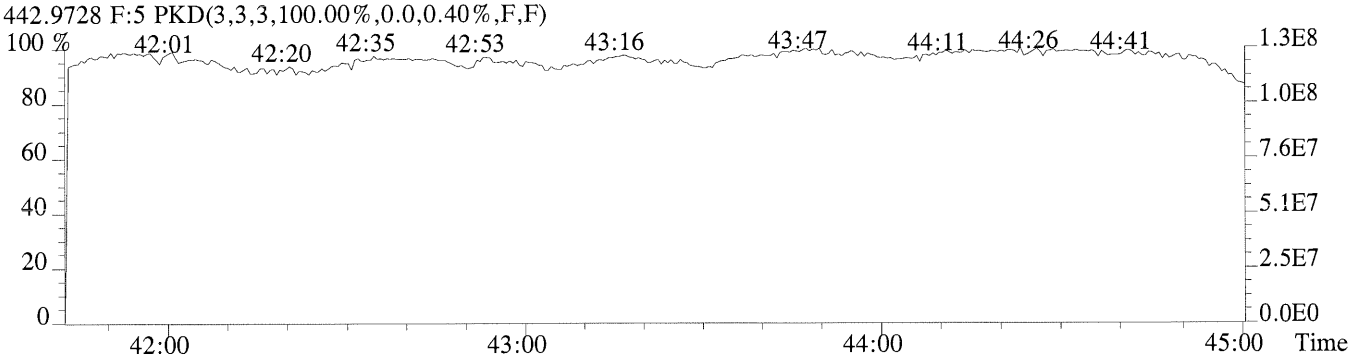
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1612.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1556.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



RW/ HRCC3 Daily Calibration QC Checklist

Calibration File Name: U129310-U129321

Date: 8/4/08

Circle one: Beginning / Ending

Method: (8290) / Tetra / TCDD Only / TCDF Conf

Retention Window/Column Performance Check:	**Analyst**	**Second Check**
Windows labeled for first and last eluting compounds	✓	✓
Column performance shows less than or equal to 25% valley between column specific 2378 isomer and the closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or the closest eluters	✓	✓

HRCC3 Continuing Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
Signal-to-noise of all target analytes and associated labeled standards at least 2.5:1	✓	✓
Ending Calibration injected prior to end of 12 hour clock	✓	✓

Analyst: ~

Second QC: gc

8290 CCALQC 03/23/04

CAS HOUSTON INC.

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: Columbia Analytical Services, Houston Contract:

Lab Code: CAS Episode No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Ultima

Init. Calib. Date: 04/02/07

Init. Calib.Times: 11:25

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, SPIKES AND DUPLICATES IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		U129309	4-AUG-08	10:02:38
CCAL HRCC3		U129310	4-AUG-08	07:57:55
METHOD BLANK	EQ0800325-01	U129311	4-AUG-08	09:03:34
0807404001C	E0800731-001	U129312	4-AUG-08	09:49:20
TP-11	E0800677-006RE	U129313	4-AUG-08	10:37:45
TP-13	E0800677-007RE	U129314	4-AUG-08	11:26:16
TP-14	E0800677-008RE	U129315	4-AUG-08	12:14:51
TP-16	E0800677-009RE	U129316	4-AUG-08	13:03:26
DO NOT USE	DO NOT USE	U129316	4-AUG-08	13:03:26
TP-18	E0800677-010RE	U129317	4-AUG-08	13:51:55
INCSSB0112	E0800697-008	U129319	4-AUG-08	15:52:03
LCS	EQ0800317-02	U129320	4-AUG-08	16:38:49

HRGC/HRMS RUN LOG

CAS HOUSTON 10655 Richmond Avenue, Suite 130-A Houston, TX 77042

Acq Method: 8290 CAS/1613
GC Method: 8290 CAS/1613

Result File: F 0129310 CCAL/RES Archive Tape: _____
EDD File: _____ Instrument ID: VG 70C

Columbia Analytical Services inc.
An Employee Owned Company

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
08/03/01	20:33	0129308	CCAL HRGC	D8-2-20			Use Avg	
↓	21:23		HRMS Check					
08/04/01	07:04		↓					
	07:07	0129309	Window Defn	DY-90-2				
	07:52	0129310	CCAL HRGC	D8-2-2A				
	09:03	0129311	EQ080325-01	Method Blank				
	09:49	0129312	EQ080731-01	CS0704601C				
	10:37	0129313	EQ080627-06NF	TP-11				
	11:26	0129314	-06NF	TP-13				
	12:14	0129315	-06NF	TP-14				
	13:03	0129316	-06NF	TP-16				
	13:51	0129317	-06NF	TP-18				
	14:40	0129318	EQ080729-04	MDL				
	15:52	0129319	EQ080627-05	INCSSB0112				
	16:26	0129320	EQ080317-02	CS				
↓	18:03	0129321	CCAL HRGC	D8-2-2A			Use Avg	

Reviewed by: ee

HRGC/HRMS RUN LOG

CAS HOUSTON 10655 Richmond Avenue, Suite 130-A Houston, TX 77042

Columbia Analytical Services inc.
An Employee Owned Company

Acq Method: 8290CAS/1613 Result File: _____ Archive Tape: _____
GC Method: 8290CAS/1613 EDD File: _____ Instrument ID: VG 70C

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
08/09/18	18:58		HRMS Check			a		

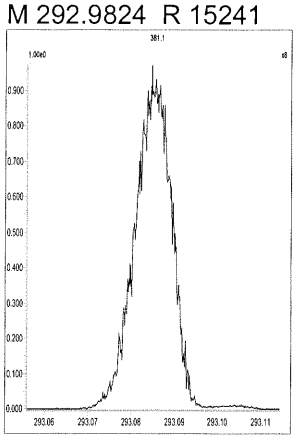
Reviewed by: KJN

Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

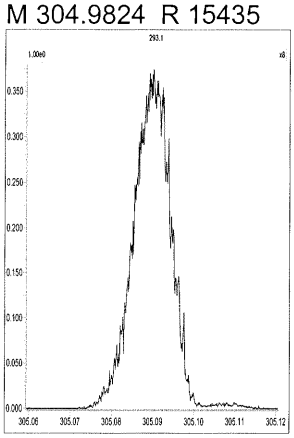
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, August 04, 2008 07:04:13 Central Daylight Time

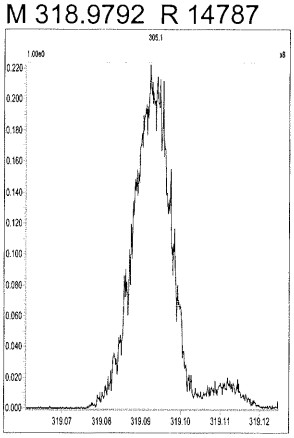
M 292.9824 R 15241



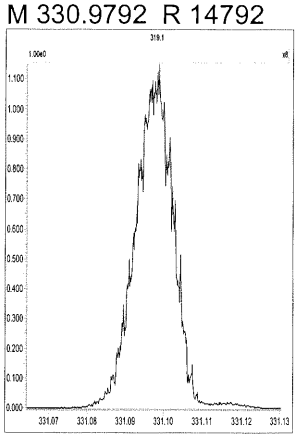
M 304.9824 R 15435



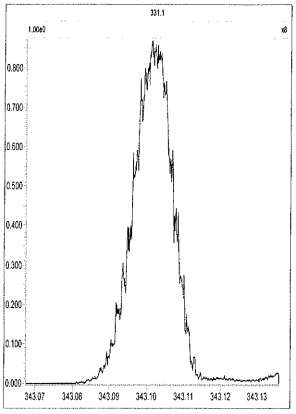
M 318.9792 R 14787



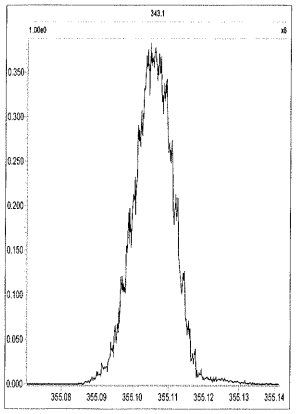
M 330.9792 R 14792



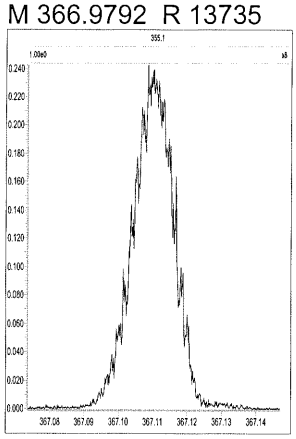
M 342.9792 R 14538



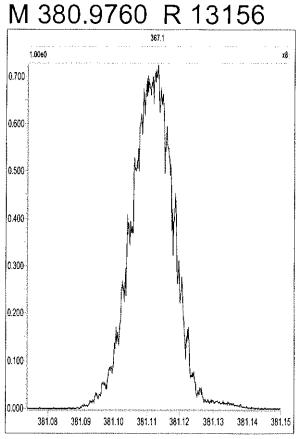
M 354.9792 R 14199



M 366.9792 R 13735



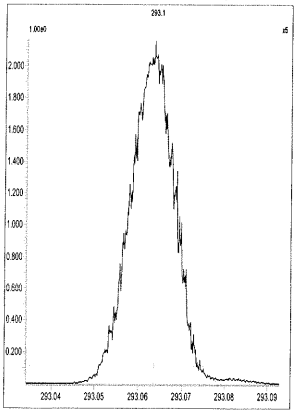
M 380.9760 R 13156



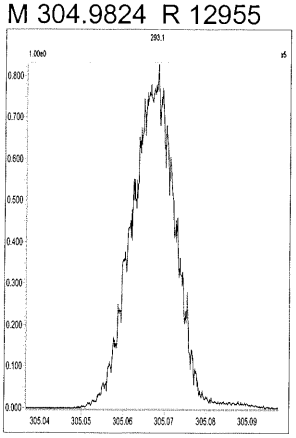
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, August 04, 2008 18:58:52 Central Daylight Time

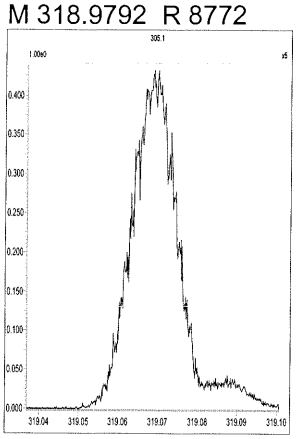
M 292.9824 R 12623



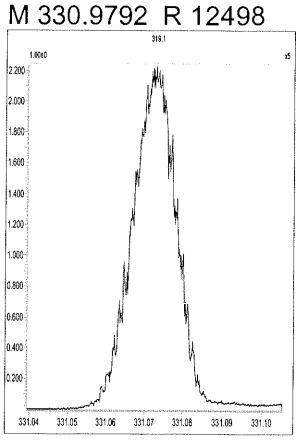
M 304.9824 R 12955



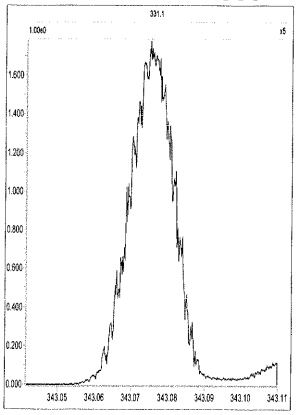
M 318.9792 R 8772



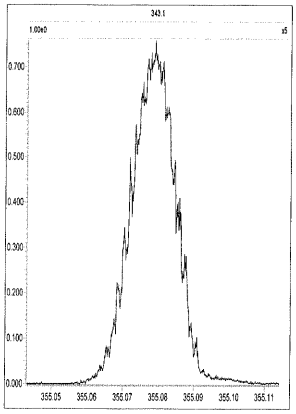
M 330.9792 R 12498



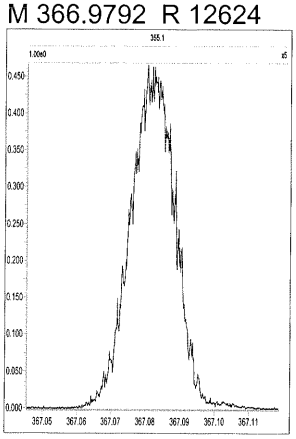
M 342.9792 R 12883



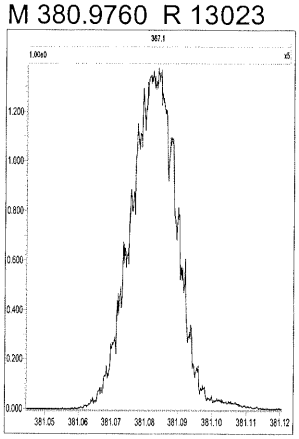
M 354.9792 R 13021



M 366.9792 R 12624



M 380.9760 R 13023



5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID

WDM

Lab Name: COLUMBIA ANALYTICAL SERVICES

Lab Code: CAS Case No.: _____ SDG No.: _____

GC Column: DB-5 ID: 0.25 (mm) Lab File ID: U129309

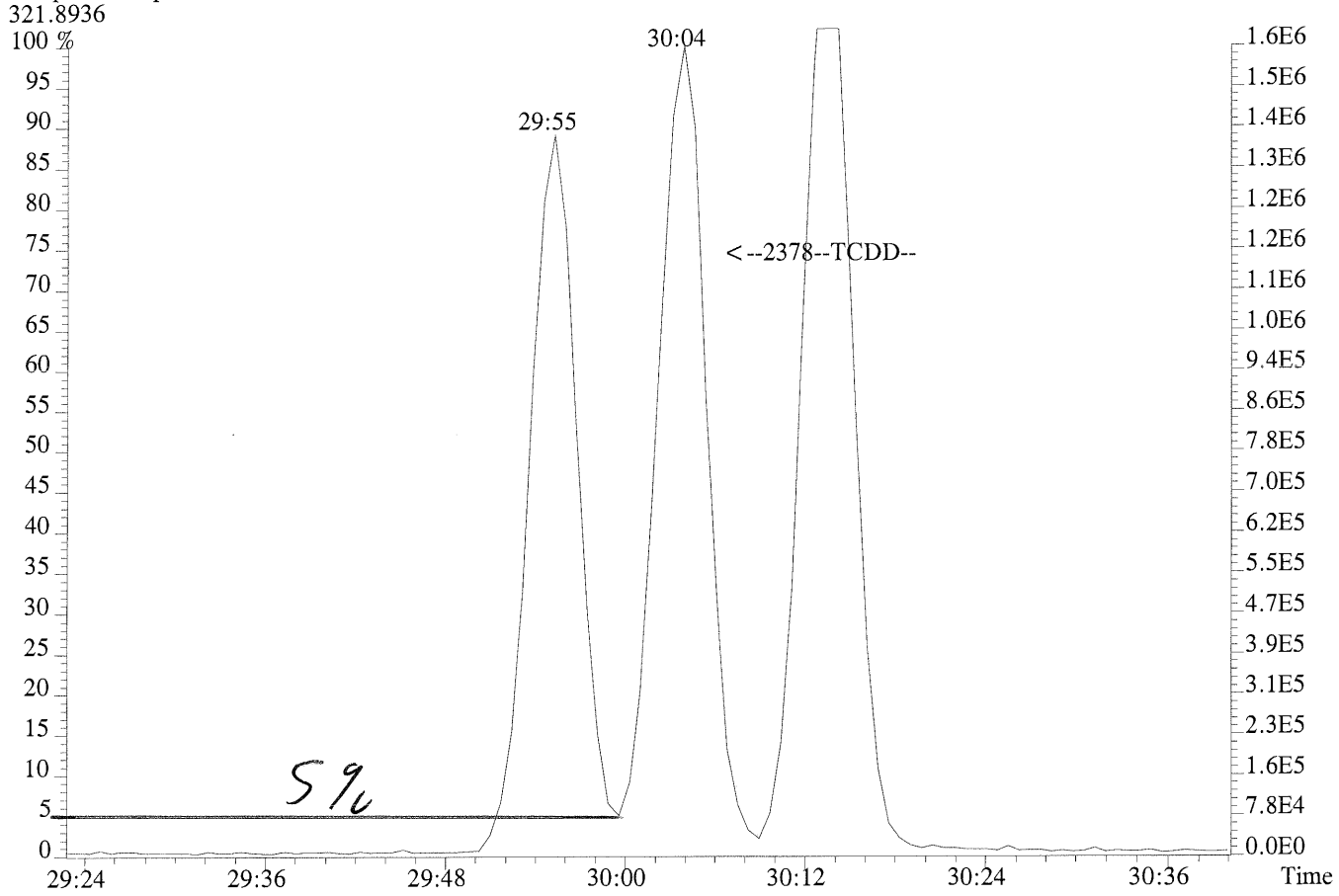
Date Analyzed: 08/04/08

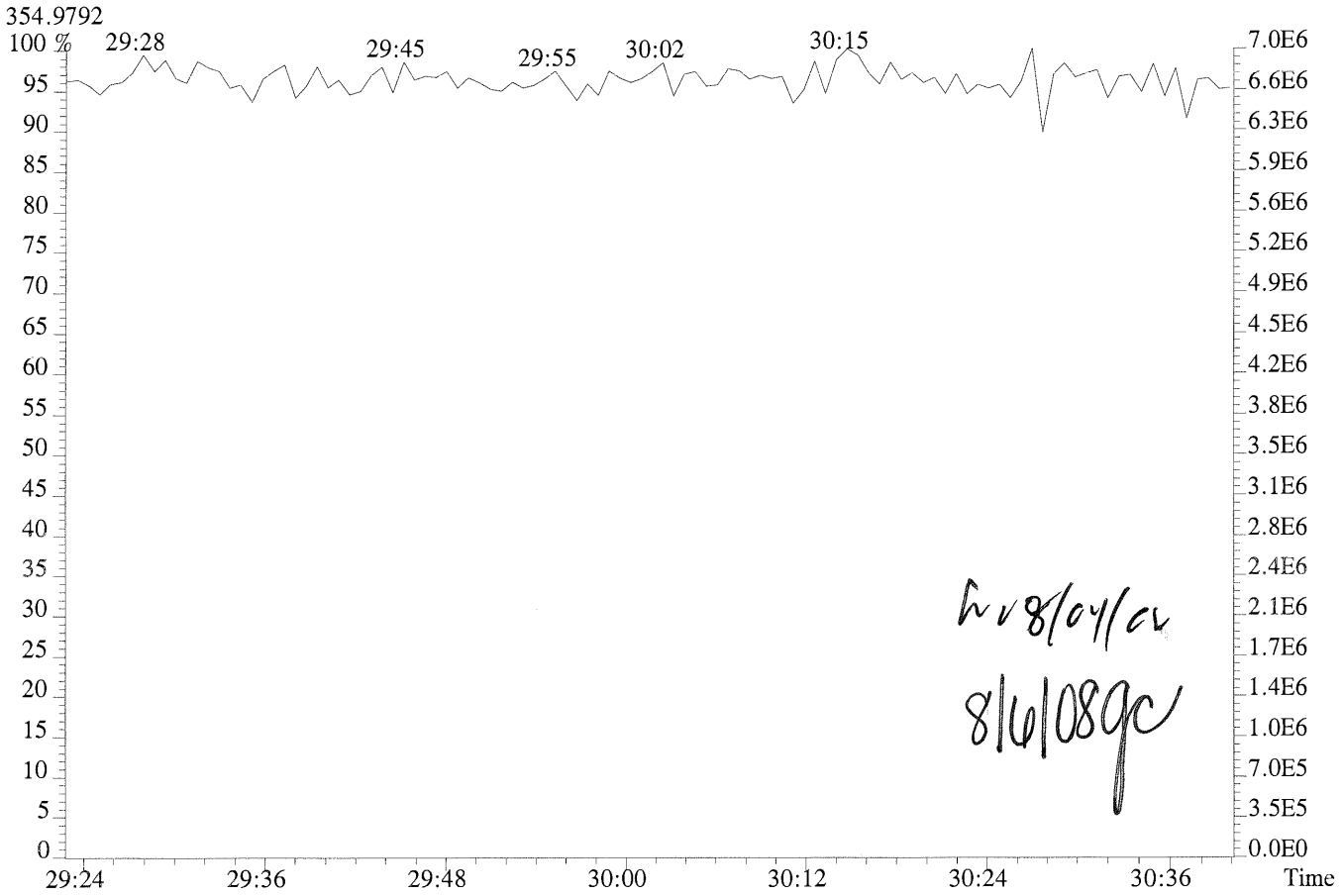
Time Analyzed: 07:07:32

CONGENER	RT FIRST ELUTING	RT LAST ELUTING
TCDF	25:10	31:10
TCDD	26:59	31:09
PeCDF	31:28	35:20
PeCDD	32:50	35:11
HxCDF	36:14	38:33
HxCDD	36:44	38:13
HpCDF	39:56	41:14
HpCDD	40:11	40:49

% Valley 2378-TCDD: 5%

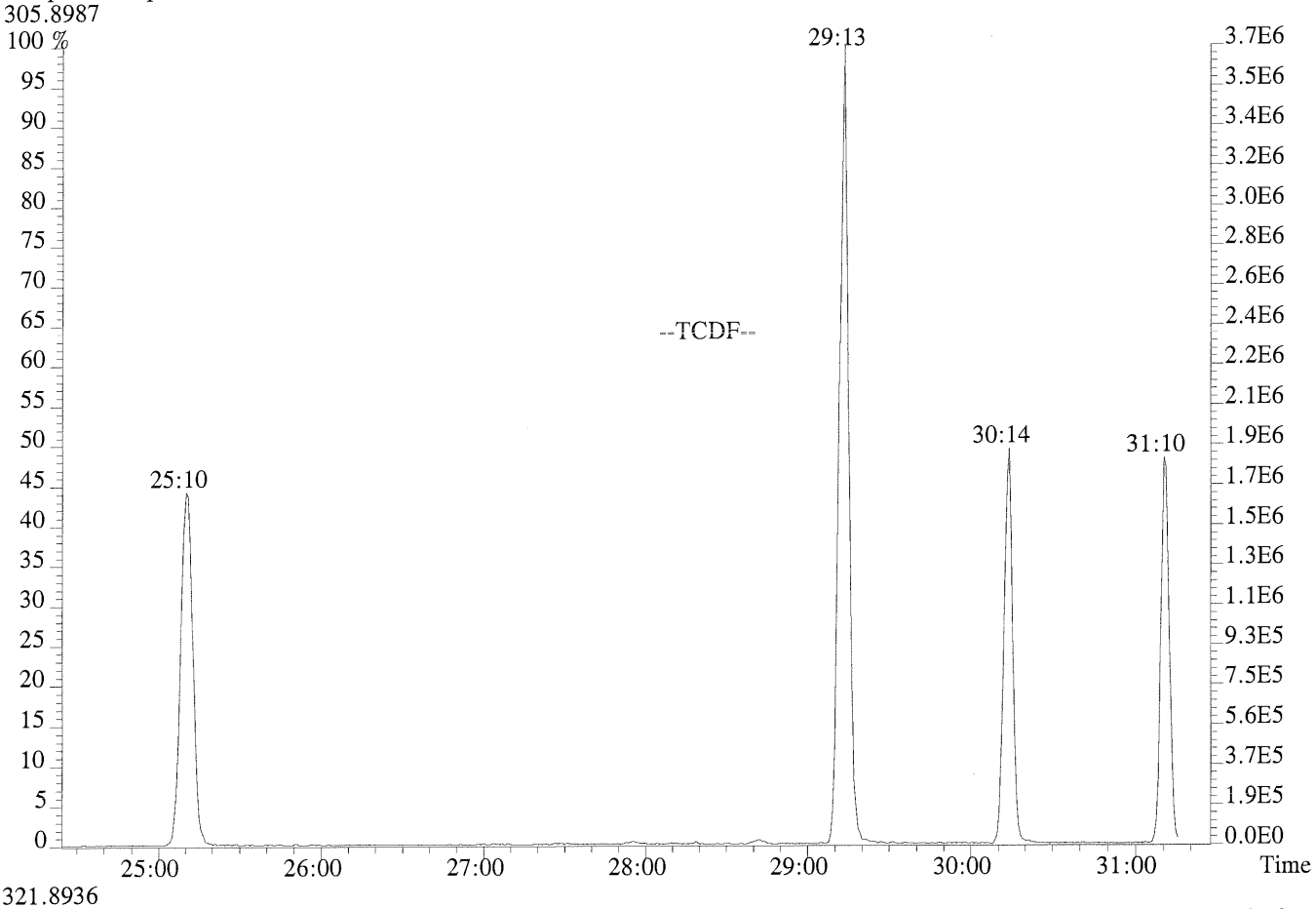
File:U129309 #1-571 Acq: 4-AUG-2008 07:07:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE

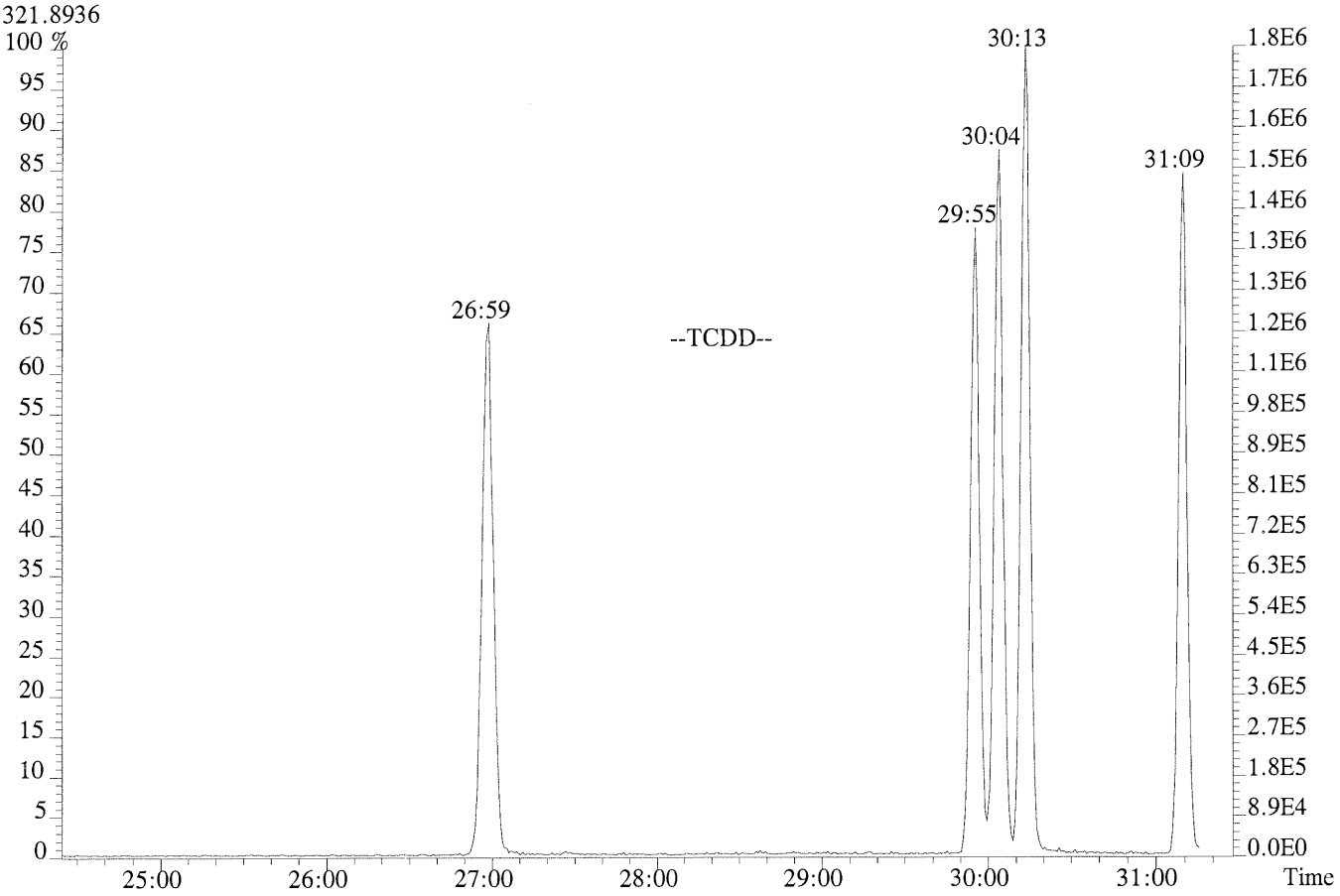




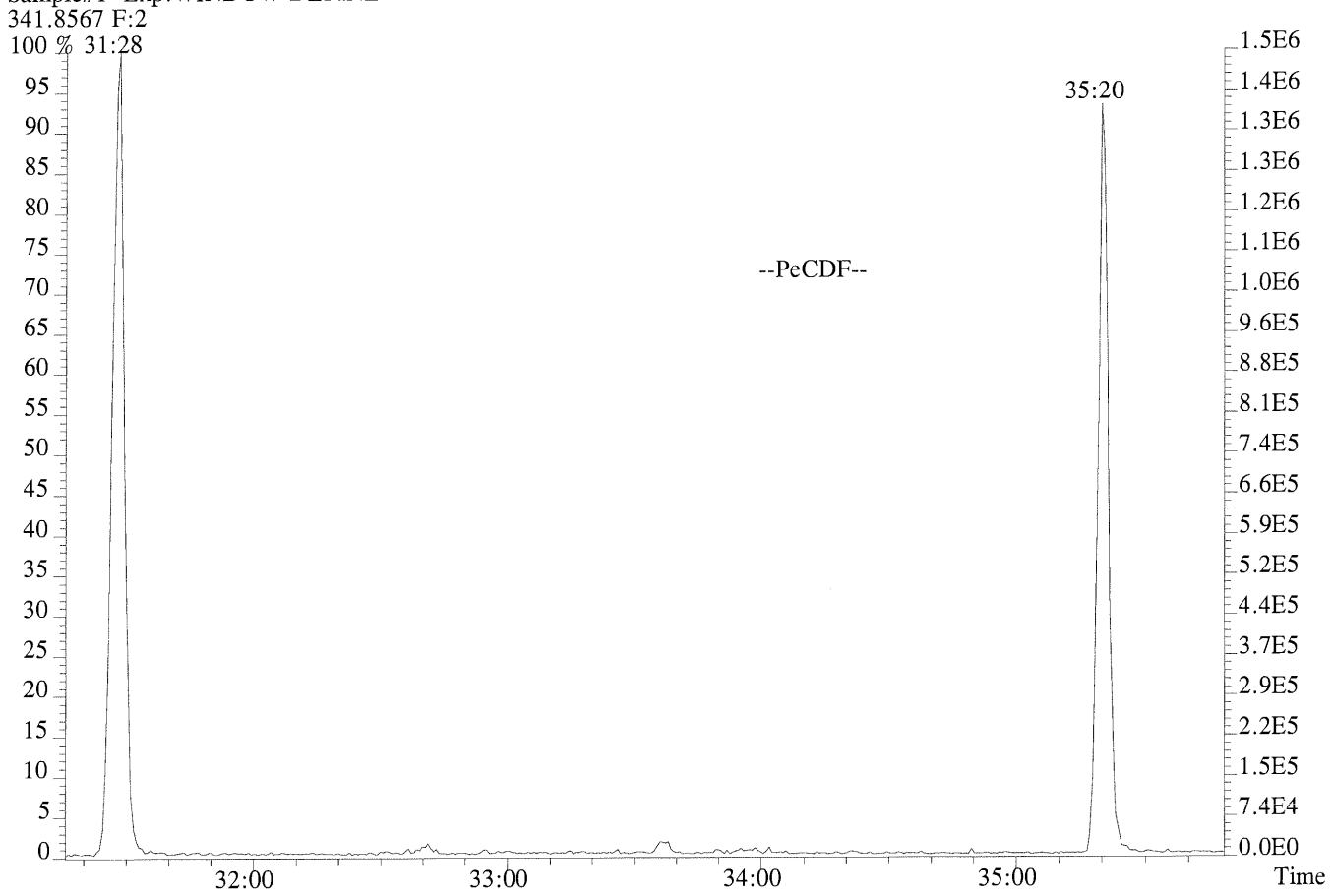
MV 8/04/08
8/6/08 GC

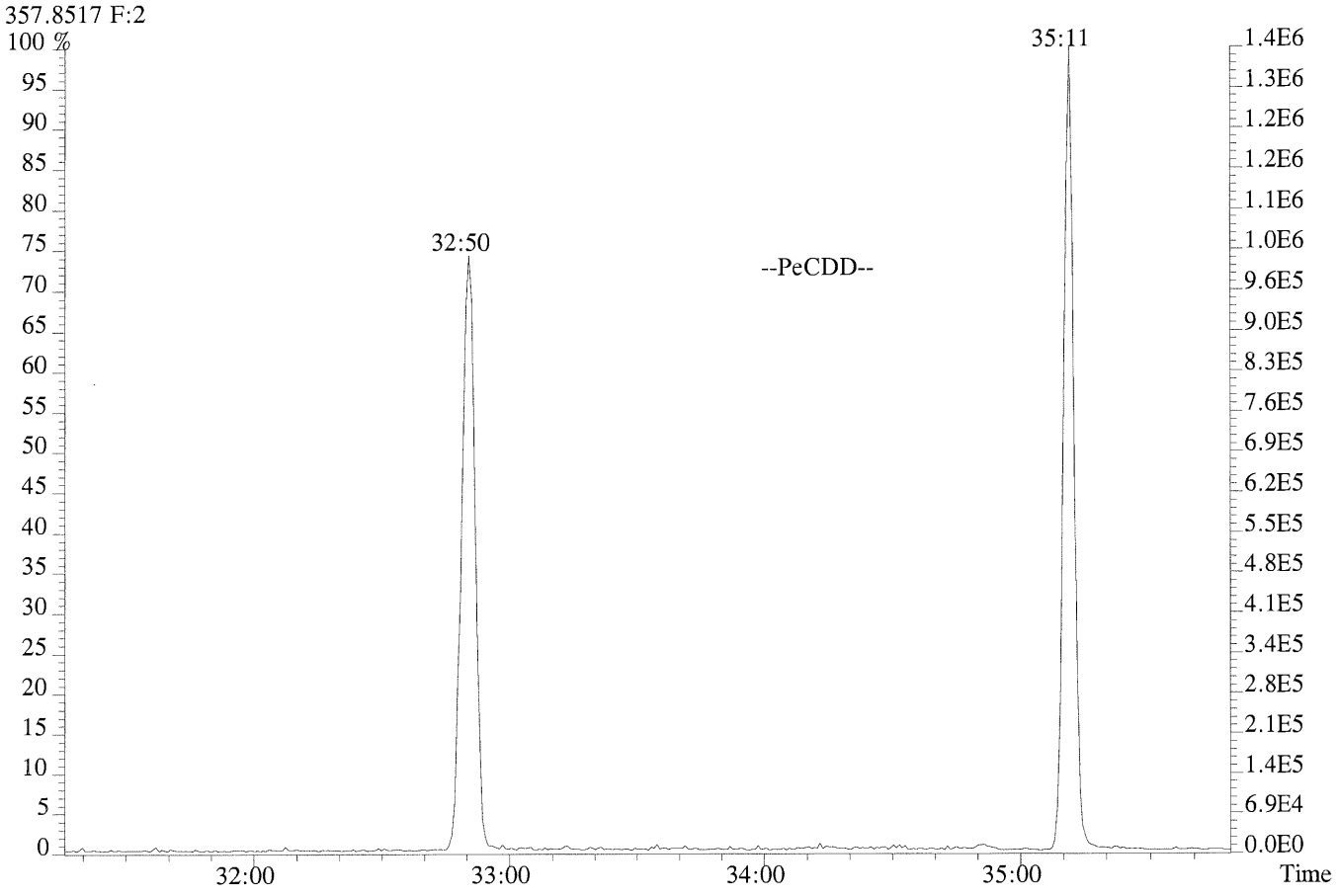
File:U129309 #1-571 Acq: 4-AUG-2008 07:07:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE





File:U129309 #1-413 Acq: 4-AUG-2008 07:07:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE





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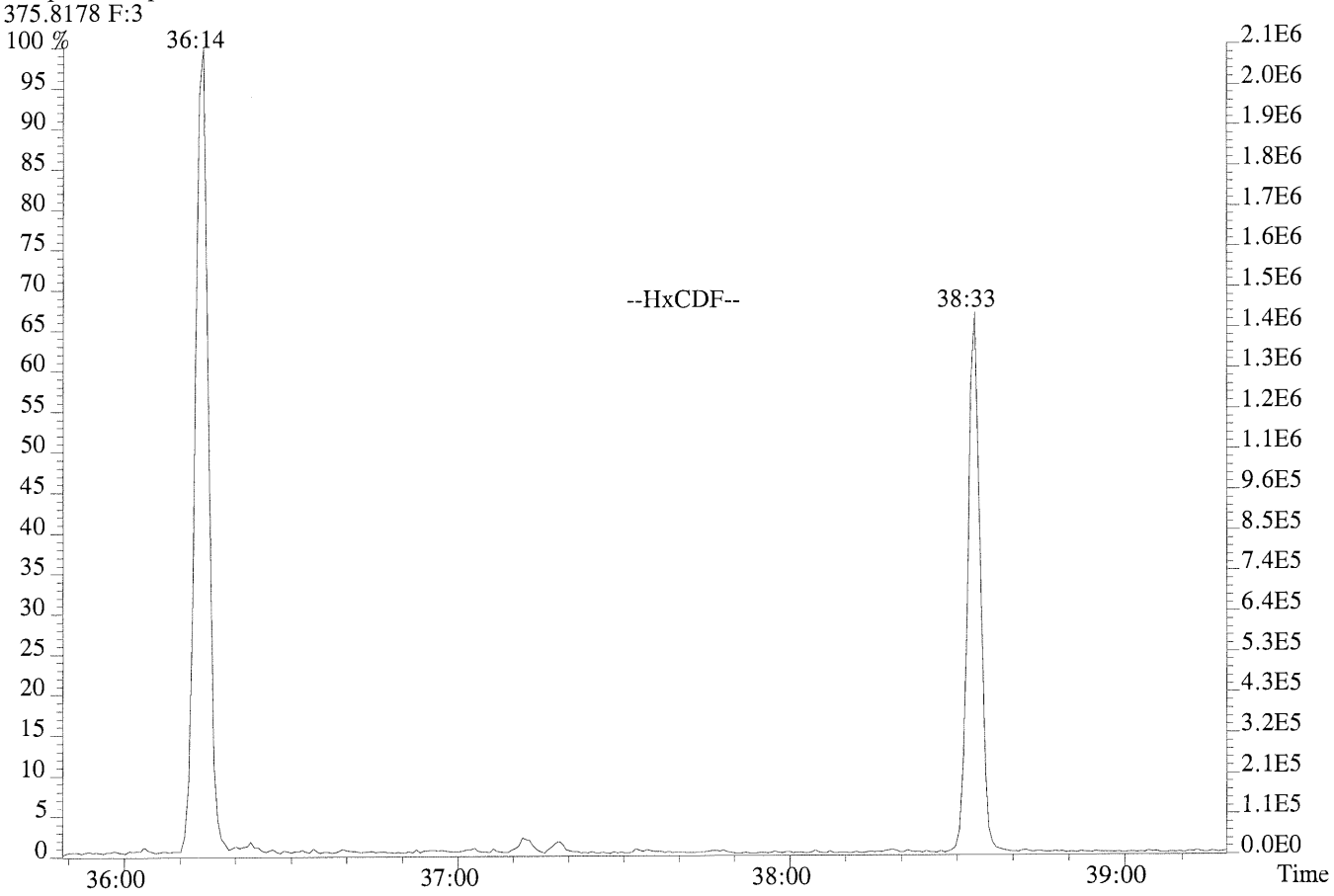
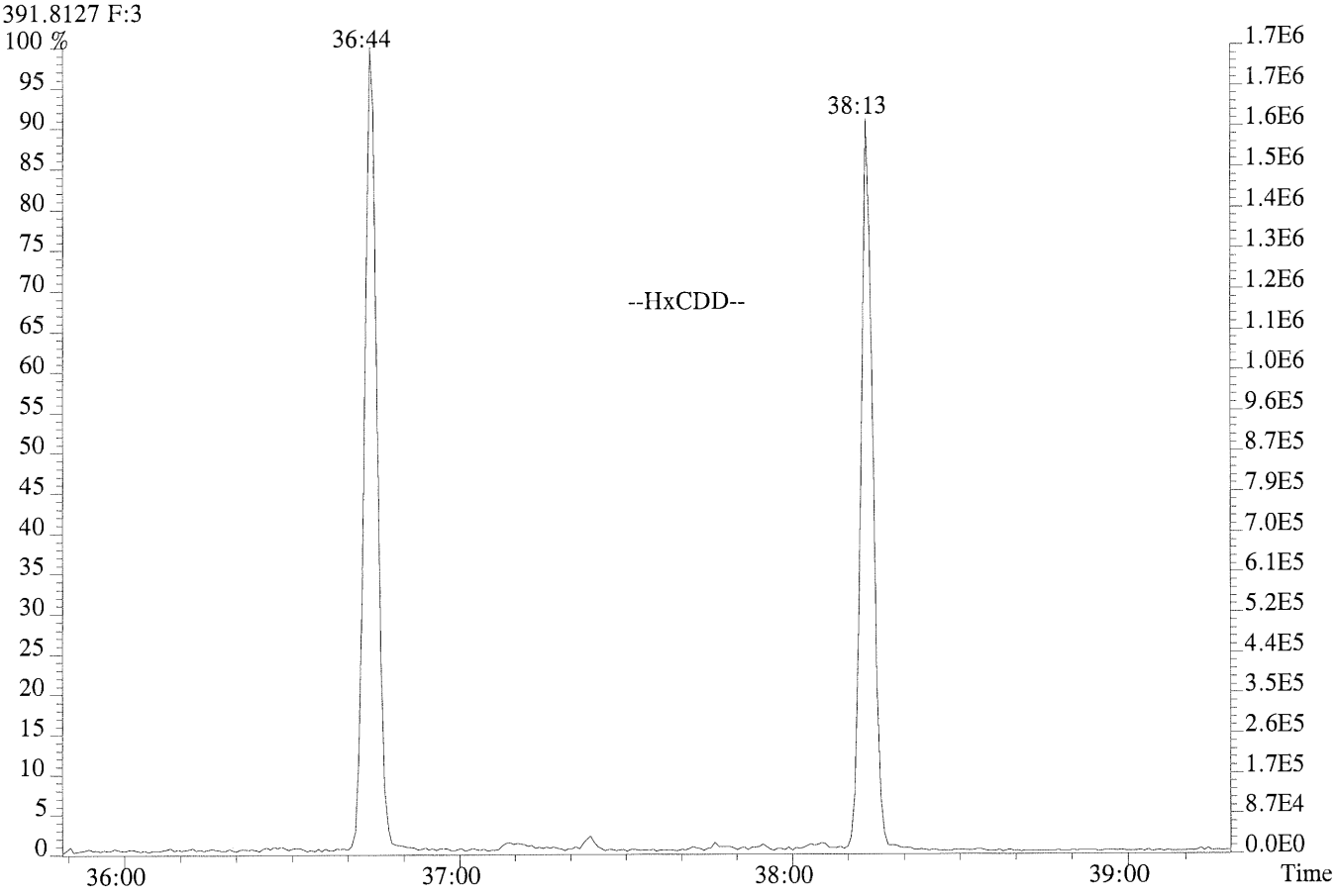
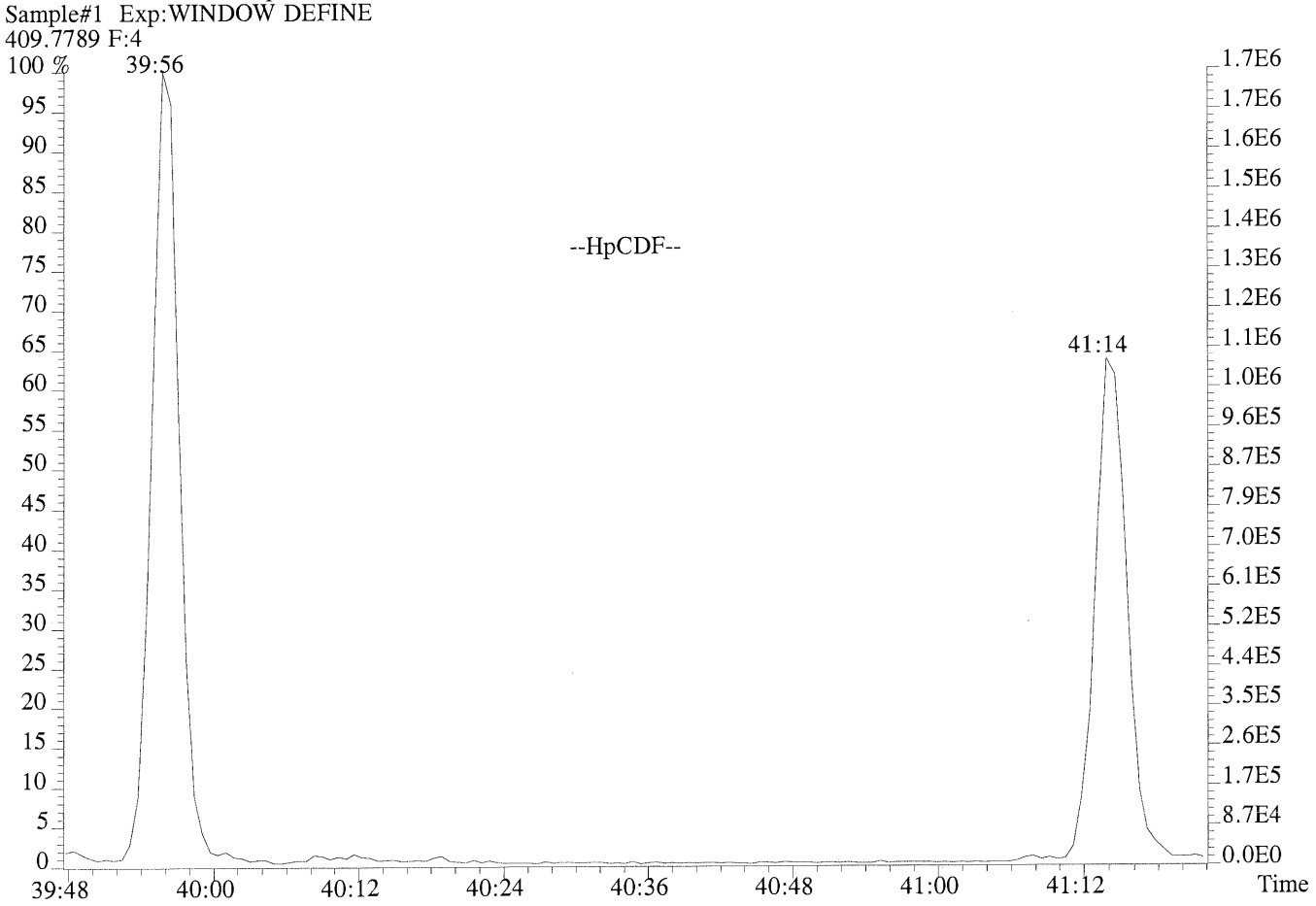
Sample#1 Exp:WINDOW DEFINE
375.8178 F:3

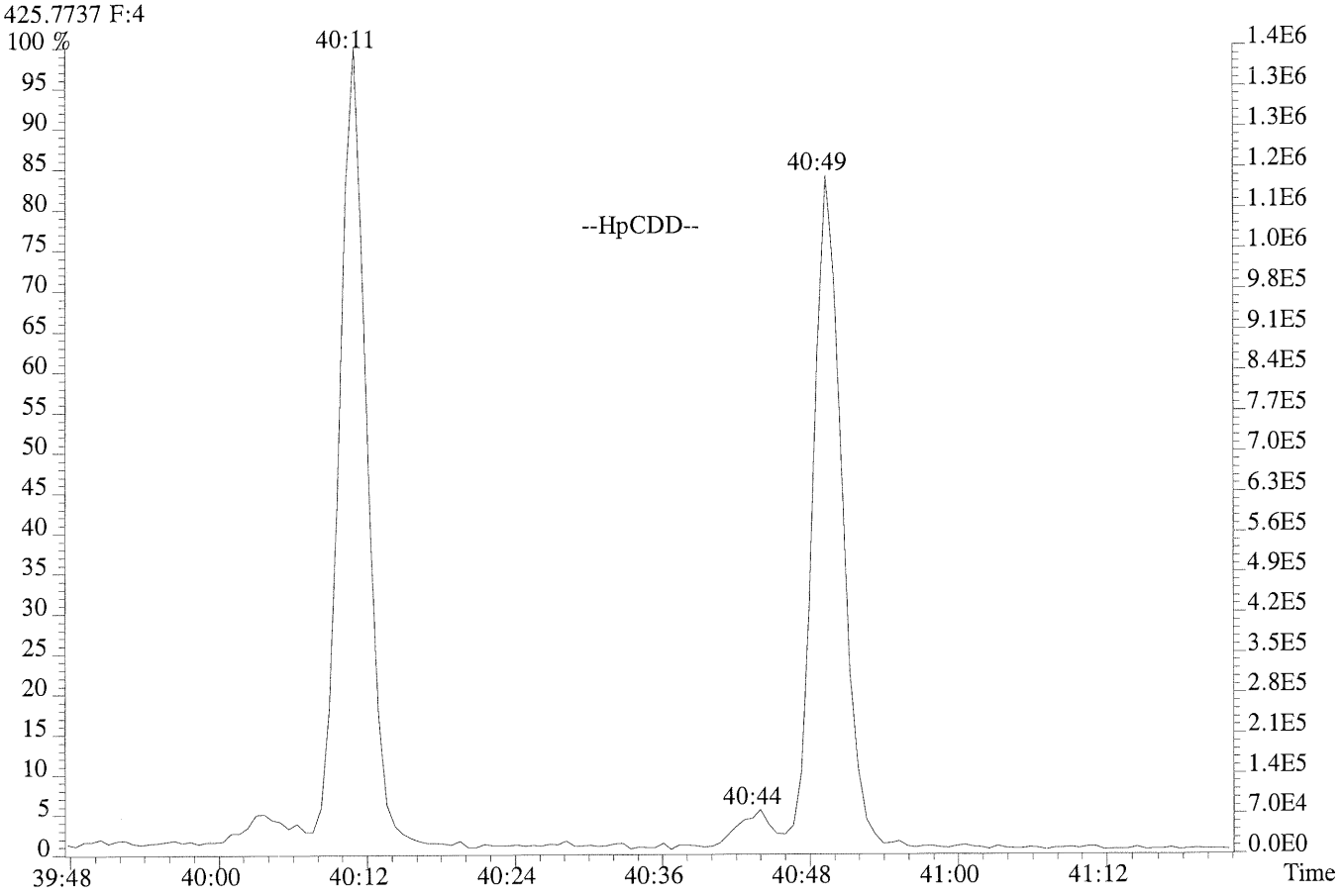


391.8127 F:3



File:U129309 #1-254 Acq: 4-AUG-2008 07:07:32 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE





FORM 6A
PCDD/PCDF DAILY CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/3

Instrument: AutoSpec-Ultima GC Column ID: DB-5

Begin CCAL Filename: U129310

End CCAL Filename: U129321

	RELATIVE RESPONSE (RR)		MEAN RR(1)	Cv (RSD)
	Begin CCAL	End CCAL		
NATIVE ANALYTES				
2,3,7,8-TCDD	0.94	0.98	0.96	3.30
1,2,3,7,8-PeCDD	0.87	0.90	0.88	2.77
1,2,3,4,7,8-HxCDD	0.92	0.98	0.95	4.21
1,2,3,6,7,8-HxCDD	1.03	0.95	0.99	5.92
1,2,3,7,8,9-HxCDD	0.92	0.96	0.94	2.90
1,2,3,4,6,7,8-HpCDD	0.89	1.00	0.94	7.56
OCDD	0.99	1.13	1.06	9.64
2,3,7,8-TCDF	0.88	0.91	0.90	2.00
1,2,3,7,8-PeCDF	0.88	0.94	0.91	4.63
2,3,4,7,8-PeCDF	0.93	0.94	0.94	1.17
1,2,3,4,7,8-HxCDF	1.15	1.19	1.17	2.77
1,2,3,6,7,8-HxCDF	1.16	1.19	1.18	1.75
1,2,3,7,8,9-HxCDF	0.83	0.83	0.83	0.47
2,3,4,6,7,8-HxCDF	1.08	1.04	1.06	2.86
1,2,3,4,6,7,8-HpCDF	1.40	1.48	1.44	3.85
1,2,3,4,7,8,9-HpCDF	0.94	0.99	0.96	3.90
OCDF	1.01	1.06	1.03	3.52

(1) Two daily mean RF values are used to compute the analyte and and labeled compouds, see Section 8.3.2.4, Method 8290.

8290F6A

FORM 6B
PCDD/PCDF DAILY CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/3

Instrument: AutoSpec-Ultima GC Column ID: DB-5

Begin CCAL Filename: U129310

End CCAL Filename: U129321

	RELATIVE RESPONSE (RR)		MEAN RR(1)	Cv (RSD)
	Begin CCAL	End CCAL		
LABELED COMPOUNDS				
13C-2,3,7,8-TCDD	0.89	0.98	0.94	6.93
13C-1,2,3,7,8-PeCDD	0.98	0.87	0.93	8.15
13C-1,2,3,6,7,8-HxCDD	1.00	0.98	0.99	0.90
13C-1,2,3,4,6,7,8-HpCDD	0.86	0.68	0.77	16.90
13C-OCDD	0.86	0.56	0.71	30.52
13C-2,3,7,8-TCDF	1.05	1.30	1.18	15.01
13C-1,2,3,7,8-PeCDF	1.22	1.20	1.21	1.46
13C-1,2,3,4,7,8-HxCDF	1.14	1.21	1.18	4.20
13C-1,2,3,4,6,7,8-HpCDF	0.88	0.70	0.79	15.78
CLEANUP STANDARD				
37Cl-2,3,7,8-TCDD	0.83	0.94	0.89	9.01

(1) Two daily mean RF values are used to compute the analyte and labeled compounds, see Section 8.3.2.4, Method 8290.

8290F6B

FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: U129310 Analysis Date: 4-AUG-08 Time: 07:57:55

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.71	0.65-0.89	0.94	0.96	-2.18
1,2,3,7,8-PeCDD	M+2/M+4	1.51	1.32-1.78	0.87	0.91	-4.87
1,2,3,4,7,8-HxCDD	M+2/M+4	1.22	1.05-1.43	0.92	1.03	-10.99
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	1.03	1.07	-3.29
1,2,3,7,8,9-HxCDD	M+2/M+4	1.25	1.05-1.43	0.92	0.99	-6.53
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.01	0.88-1.20	0.89	0.93	-3.33
OCDD	M+2/M+4	0.87	0.76-1.02	0.99	1.02	-2.77
2,3,7,8-TCDF	M/M+2	0.75	0.65-0.89	0.88	0.96	-7.36
1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.32-1.78	0.88	0.91	-3.88
2,3,4,7,8-PeCDF	M+2/M+4	1.50	1.32-1.78	0.93	0.95	-1.88
1,2,3,4,7,8-HxCDF	M+2/M+4	1.28	1.05-1.43	1.15	1.17	-1.78
1,2,3,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	1.16	1.14	1.90
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	0.83	0.86	-3.33
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	1.08	1.03	4.53
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	1.40	1.36	2.88
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	0.94	1.02	-8.19
OCDF	M+2/M+4	0.89	0.76-1.02	1.01	1.09	-7.51

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: U129310 Analysis Date: 4-AUG-08 Time: 07:57:55

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	0.89	0.90	-0.90
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.51	1.32-1.78	0.98	1.06	-7.37
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.23	1.05-1.43	1.00	1.01	-1.17
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	0.86	1.09	-21.29
13C-OCDD	M+2/M+4	0.89	0.76-1.02	0.86	1.17	-26.40
13C-2,3,7,8-TCDF	M/M+2	0.73	0.65-0.89	1.05	1.20	-12.04
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	1.22	1.52	-19.37
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	1.14	1.28	-11.01
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	0.88	1.11	-20.97
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				0.83	0.86	-3.39

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #6 Filename U129310 Samp: 1 Inj: 1 Acquired: 4-AUG-08 07:57:55
Processed: 5-AUG-08 08:21:22 LAB. ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:14	2.785e+03	3.697e+03	0.75	yes	no	0.955
2	Unk	1,2,3,7,8-PeCDF	33:38	1.152e+04	7.152e+03	1.61	yes	no	0.911
3	Unk	2,3,4,7,8-PeCDF	34:22	1.186e+04	7.904e+03	1.50	yes	no	0.945
4	Unk	1,2,3,4,7,8-HxCDF	37:13	1.183e+04	9.251e+03	1.28	yes	no	1.166
5	Unk	1,2,3,6,7,8-HxCDF	37:18	1.206e+04	9.343e+03	1.29	yes	no	1.142
6	Unk	2,3,4,6,7,8-HxCDF	37:48	1.100e+04	8.836e+03	1.24	yes	no	1.031
7	Unk	1,2,3,7,8,9-HxCDF	38:30	8.464e+03	6.860e+03	1.23	yes	no	0.862
8	Unk	1,2,3,4,6,7,8-HpCDF	39:56	1.005e+04	9.715e+03	1.03	yes	no	1.359
9	Unk	1,2,3,4,7,8,9-HpCDF	41:15	6.705e+03	6.536e+03	1.03	yes	no	1.020
10	Unk	OCDF	44:00	1.321e+04	1.484e+04	0.89	yes	no	1.090
11	Unk	2,3,7,8-TCDD	30:05	2.431e+03	3.403e+03	0.71	yes	no	0.960
12	Unk	1,2,3,7,8-PeCDD	34:43	8.891e+03	5.902e+03	1.51	yes	no	0.912
13	Unk	1,2,3,4,7,8-HxCDD	37:54	8.121e+03	6.640e+03	1.22	yes	no	1.035
14	Unk	1,2,3,6,7,8-HxCDD	37:59	9.204e+03	7.351e+03	1.25	yes	no	1.068
15	Unk	1,2,3,7,8,9-HxCDD	38:16	8.213e+03	6.591e+03	1.25	yes	no	0.988
16	Unk	1,2,3,4,6,7,8-HpCDD	40:50	6.217e+03	6.185e+03	1.01	yes	no	0.925
17	Unk	OCDD	43:51	1.284e+04	1.469e+04	0.87	yes	no	1.017
18	IS	13C-2,3,7,8-TCDF	29:12	1.552e+04	2.111e+04	0.73	yes	no	1.196
19	IS	13C-1,2,3,7,8-PeCDF	33:37	2.591e+04	1.671e+04	1.55	yes	no	1.518
20	IS	13C-1,2,3,4,7,8-HxCDF	37:12	3.137e+04	6.063e+04	0.52	yes	no	1.284
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:55	2.148e+04	4.919e+04	0.44	yes	no	1.111
22	IS	13C-2,3,7,8-TCDD	30:03	1.351e+04	1.754e+04	0.77	yes	no	0.900
23	IS	13C-1,2,3,7,8-PeCDD	34:43	2.050e+04	1.360e+04	1.51	yes	no	1.057
24	IS	13C-1,2,3,6,7,8-HxCDD	37:58	4.414e+04	3.600e+04	1.23	yes	no	1.007
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:49	3.556e+04	3.378e+04	1.05	yes	no	1.094
26	IS	13C-OCDD	43:50	6.573e+04	7.345e+04	0.89	yes	no	1.174
27	RS/RT	13C-1,2,3,4-TCDD	29:50	1.472e+04	2.011e+04	0.73	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:16	4.383e+04	3.669e+04	1.19	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:05	5.781e+03					0.859
					SUM AREA				
30	Tot	Total Tetra-Furans	28:43		6.643e+03	0.66	yes		0.955
31	Tot	Total Tetra-Dioxins	27:31		5.836e+03	0.78	yes		0.960
32	Tot	Total Penta-Furans	33:38		3.855e+04	1.61	yes		0.928
33	Tot	Total Penta-Dioxins	33:56		1.482e+04	1.49	yes		0.912
34	Tot	Total Hexa-Furans	37:13		7.764e+04	1.28	yes		1.050
35	Tot	Total Hexa-Dioxins	37:54		4.612e+04	1.22	yes		1.030
36	Tot	Total Hepta-Furans	39:56		3.300e+04	1.03	yes		1.190
37	Tot	Total Hepta-Dioxins	40:11		1.257e+04	1.01	yes		0.925

Columbia Analytical Services, Inc.
19408 Park Row., Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #6 Filename U129310 #1 Samp: 1 Inj: 1 Acquired: 4-AUG-08 07:57:55

Processed: 5-AUG-08 08:21:22 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	4.36e+05	4.80e+02	9.1e+02	5.76e+05	5.44e+02	1.1e+03
2	1,2,3,7,8-PeCDF	2.17e+06	8.28e+02	2.6e+03	1.35e+06	7.36e+02	1.8e+03
3	2,3,4,7,8-PeCDF	2.31e+06	8.28e+02	2.8e+03	1.55e+06	7.36e+02	2.1e+03
4	1,2,3,4,7,8-HxCDF	2.54e+06	8.84e+02	2.9e+03	1.93e+06	5.52e+02	3.5e+03
5	1,2,3,6,7,8-HxCDF	2.47e+06	8.84e+02	2.8e+03	1.93e+06	5.52e+02	3.5e+03
6	2,3,4,6,7,8-HxCDF	2.33e+06	8.84e+02	2.6e+03	1.87e+06	5.52e+02	3.4e+03
7	1,2,3,7,8,9-HxCDF	1.71e+06	8.84e+02	1.9e+03	1.40e+06	5.52e+02	2.5e+03
8	1,2,3,4,6,7,8-HpCDF	2.15e+06	1.84e+03	1.2e+03	2.05e+06	1.93e+03	1.1e+03
9	1,2,3,4,7,8,9-HpCDF	1.29e+06	1.84e+03	7.0e+02	1.25e+06	1.93e+03	6.5e+02
10	OCDF	1.91e+06	1.26e+03	1.5e+03	2.15e+06	1.28e+03	1.7e+03
11	2,3,7,8-TCDD	4.06e+05	6.68e+02	6.1e+02	5.69e+05	5.80e+02	9.8e+02
12	1,2,3,7,8-PeCDD	1.78e+06	9.48e+02	1.9e+03	1.18e+06	3.76e+02	3.1e+03
13	1,2,3,4,7,8-HxCDD	1.91e+06	1.39e+03	1.4e+03	1.56e+06	8.48e+02	1.8e+03
14	1,2,3,6,7,8-HxCDD	1.94e+06	1.39e+03	1.4e+03	1.52e+06	8.48e+02	1.8e+03
15	1,2,3,7,8,9-HxCDD	1.81e+06	1.39e+03	1.3e+03	1.43e+06	8.48e+02	1.7e+03
16	1,2,3,4,6,7,8-HpCDD	1.27e+06	1.05e+03	1.2e+03	1.27e+06	8.60e+02	1.5e+03
17	OCDD	1.87e+06	1.57e+03	1.2e+03	2.17e+06	1.16e+03	1.9e+03
18	13C-2,3,7,8-TCDF	2.50e+06	2.48e+03	1.0e+03	3.37e+06	8.64e+02	3.9e+03
19	13C-1,2,3,7,8-PeCDF	4.77e+06	5.08e+02	9.4e+03	3.09e+06	4.96e+02	6.2e+03
20	13C-1,2,3,4,7,8-HxCDF	6.54e+06	7.28e+02	9.0e+03	1.25e+07	1.73e+03	7.2e+03
21	13C-1,2,3,4,6,7,8-HpCDF	4.63e+06	2.61e+03	1.8e+03	1.06e+07	3.47e+03	3.1e+03
22	13C-2,3,7,8-TCDD	2.30e+06	3.73e+03	6.2e+02	2.99e+06	1.23e+03	2.4e+03
23	13C-1,2,3,7,8-PeCDD	4.10e+06	5.40e+02	7.6e+03	2.72e+06	5.52e+02	4.9e+03
24	13C-1,2,3,6,7,8-HxCDD	9.71e+06	1.50e+03	6.5e+03	7.90e+06	8.72e+02	9.1e+03
25	13C-1,2,3,4,6,7,8-HpCDD	7.53e+06	1.34e+03	5.6e+03	7.16e+06	9.24e+02	7.7e+03
26	13C-OCDD	9.59e+06	1.59e+03	6.0e+03	1.08e+07	1.28e+03	8.5e+03
27	13C-1,2,3,4-TCDD	2.60e+06	3.73e+03	7.0e+02	3.52e+06	1.23e+03	2.9e+03
28	13C-1,2,3,7,8,9-HxCDD	9.60e+06	1.50e+03	6.4e+03	8.00e+06	8.72e+02	9.2e+03
29	37Cl-2,3,7,8-TCDD	9.62e+05	5.40e+02	1.8e+03			

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
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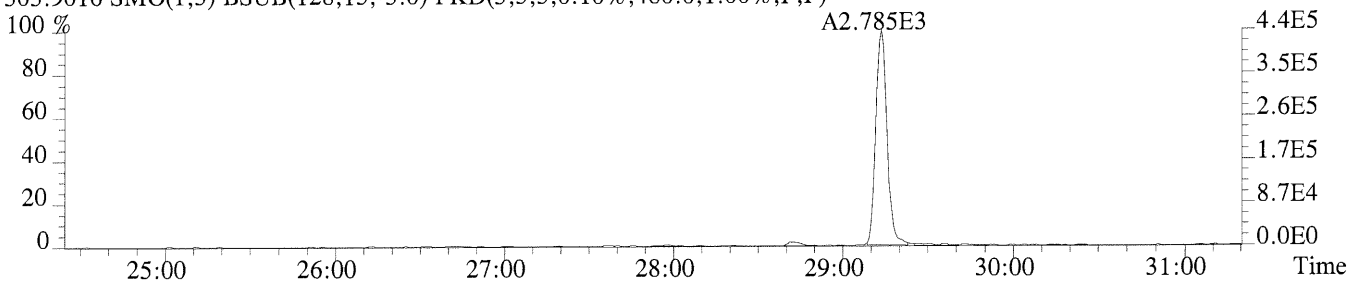
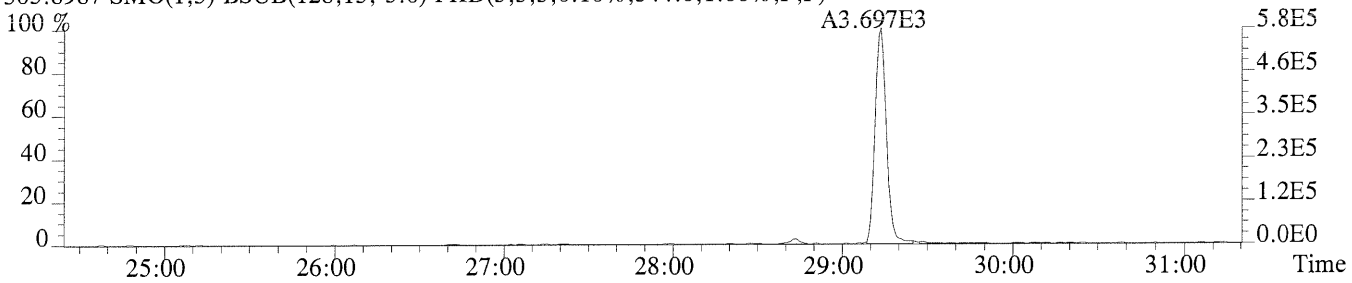
File:U129310 #1-578 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

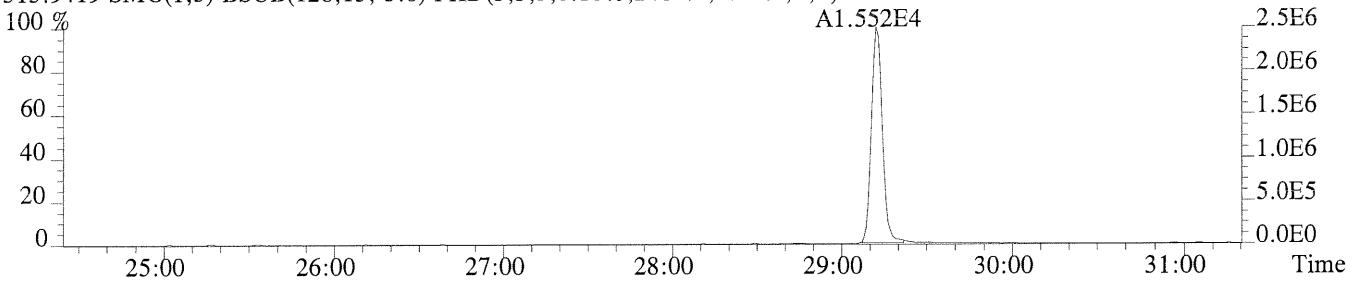
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,480.0,1.00%,F,F)



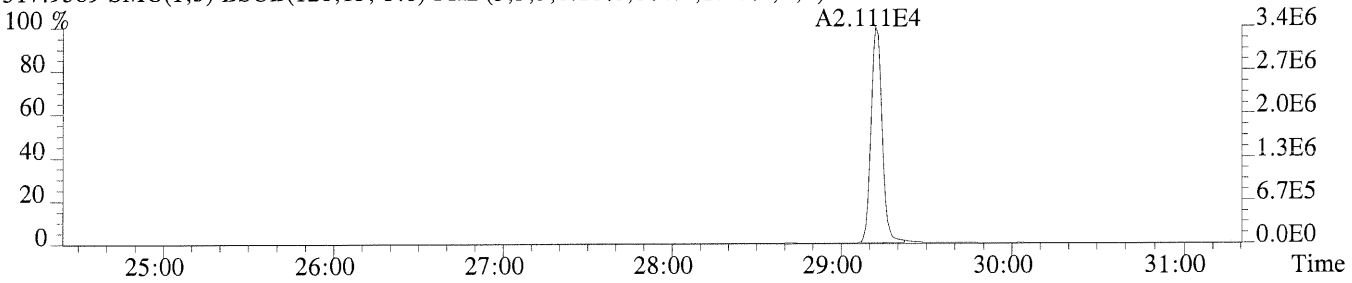
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,544.0,1.00%,F,F)



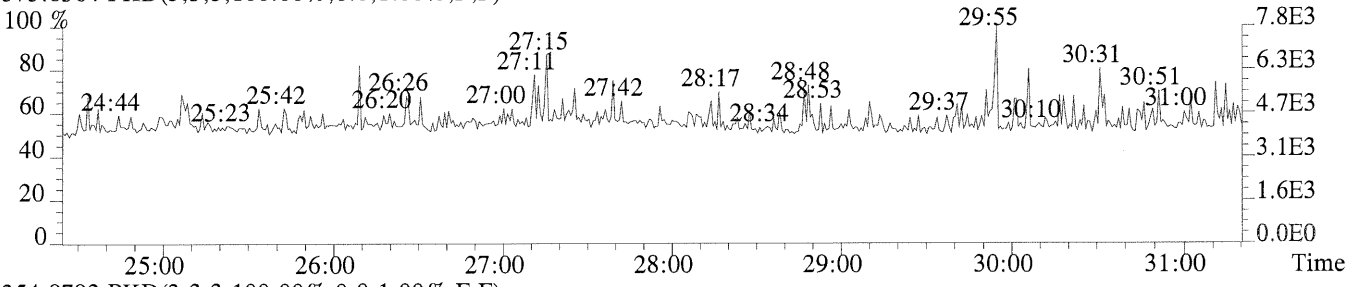
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2480.0,1.00%,F,F)



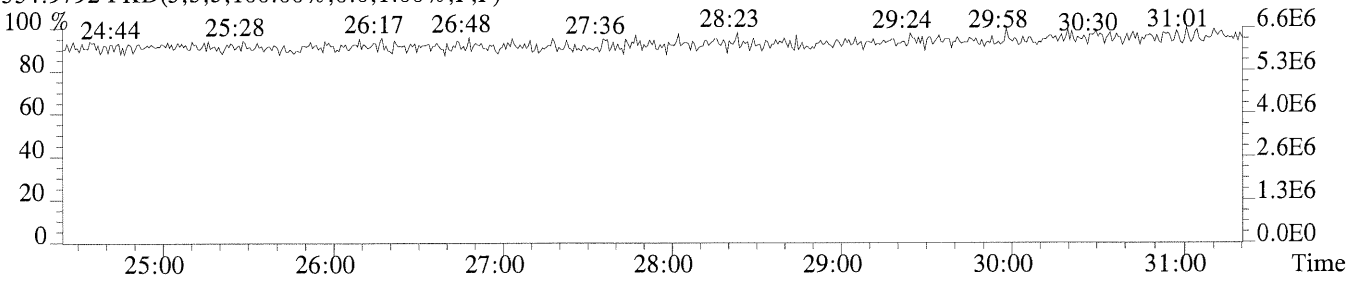
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,864.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

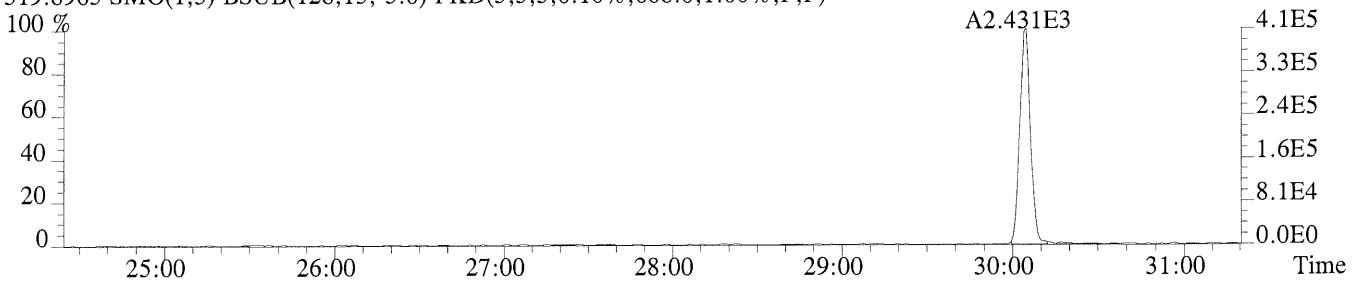


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

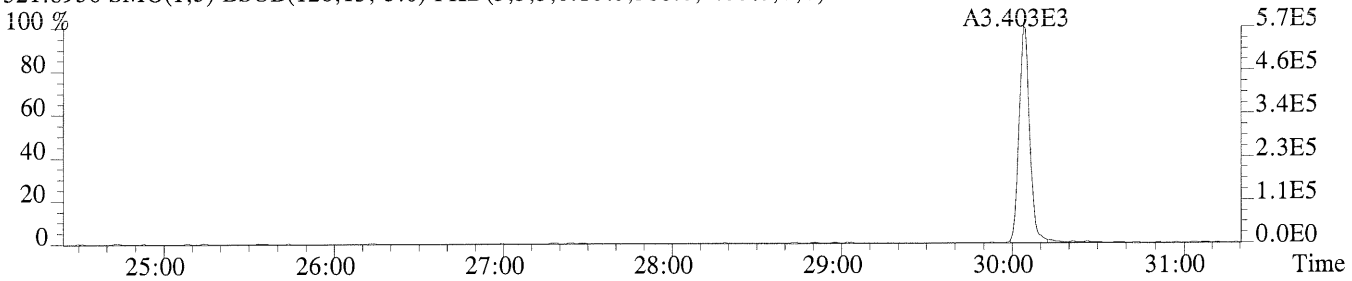


File:U129310 #1-578 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

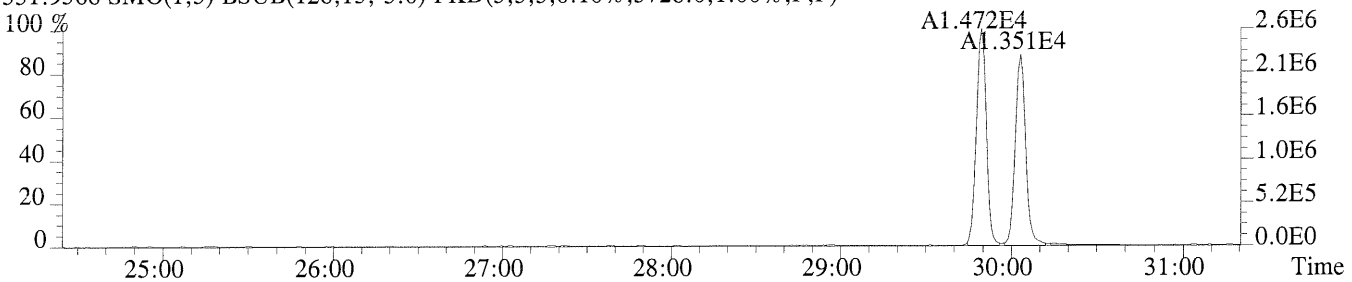
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,668.0,1.00%,F,F)



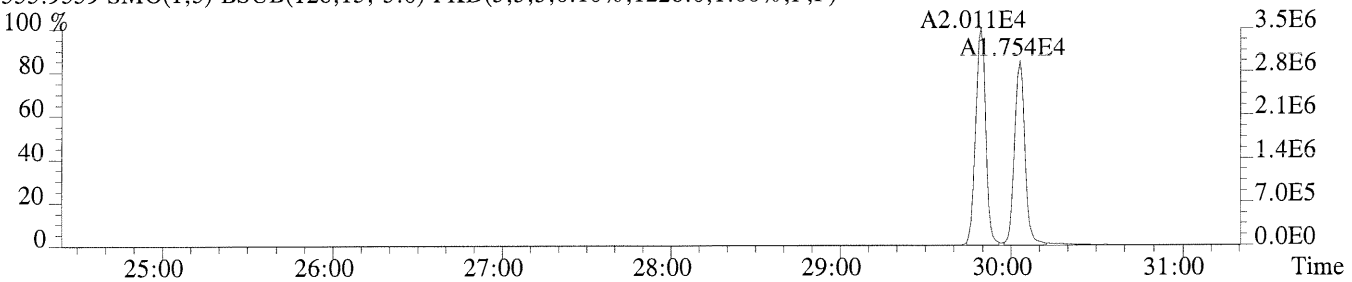
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,580.0,1.00%,F,F)



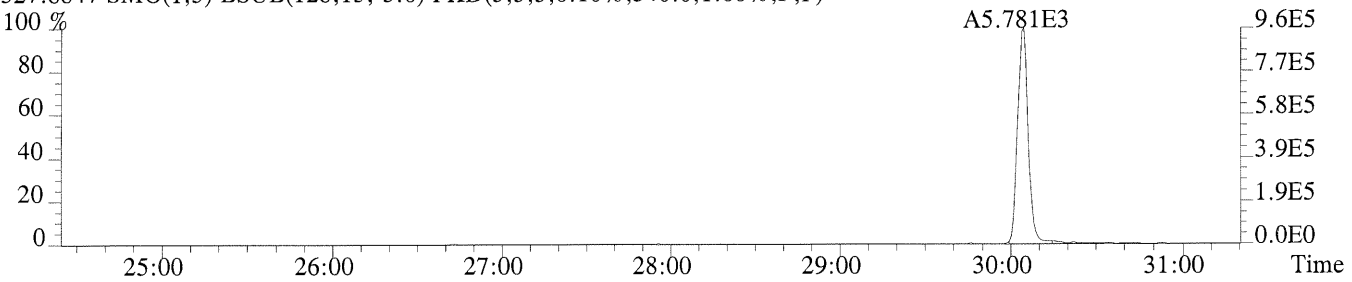
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3728.0,1.00%,F,F)



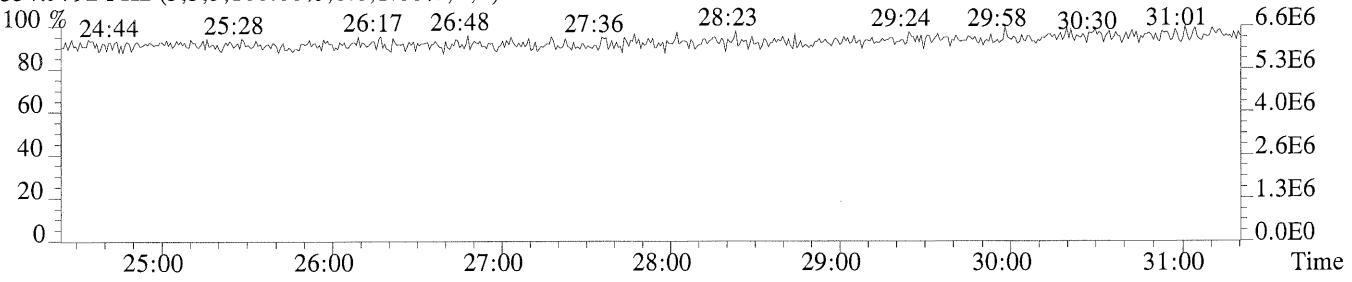
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1228.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,540.0,1.00%,F,F)

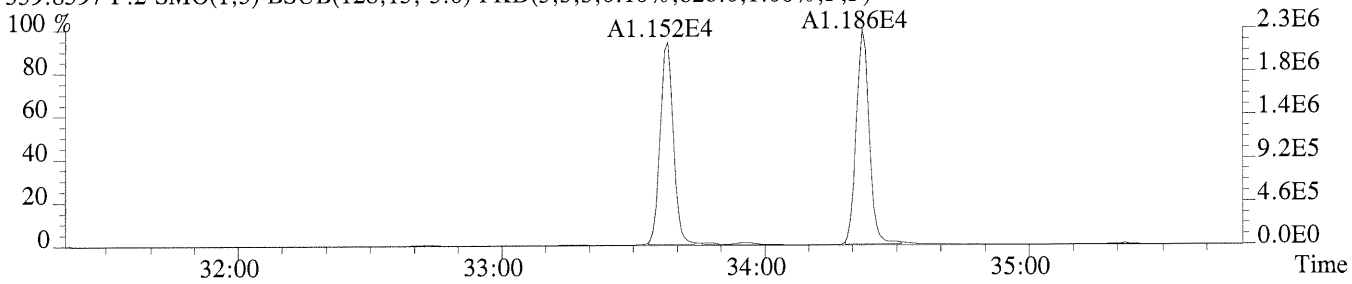


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

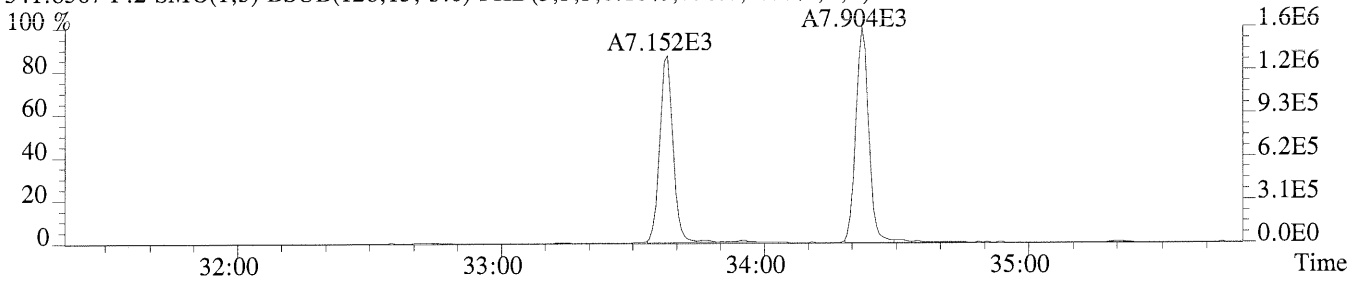


File:U129310 #1-405 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

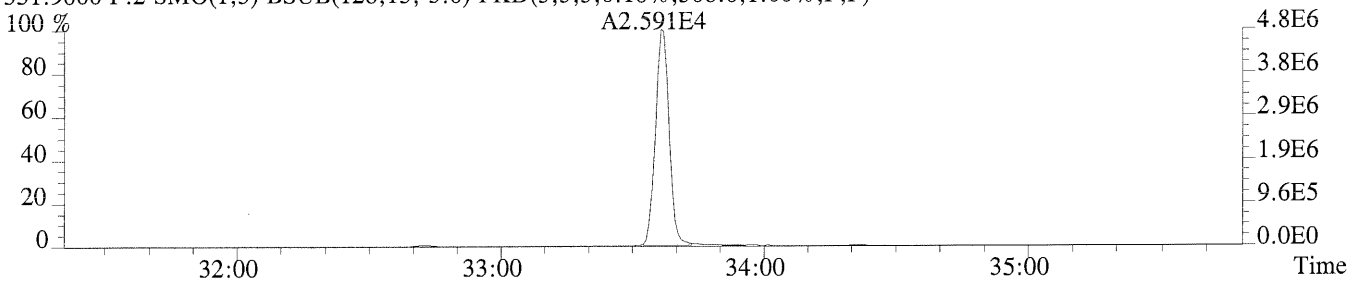
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,828.0,1.00%,F,F)



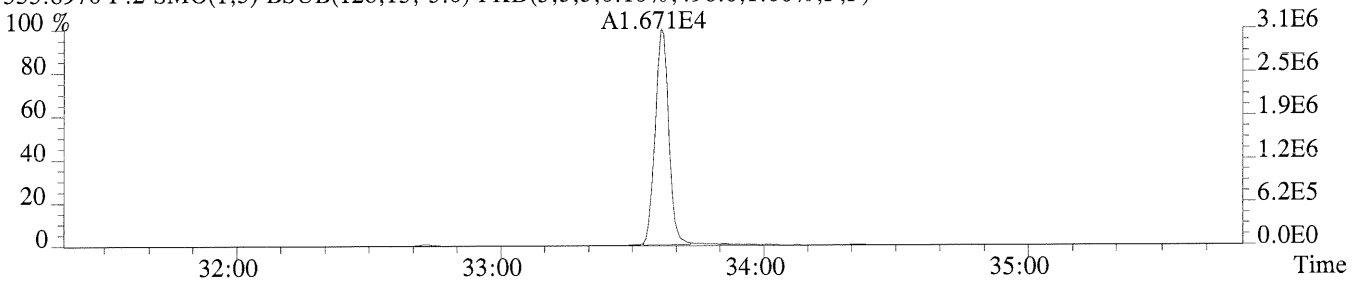
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,736.0,1.00%,F,F)



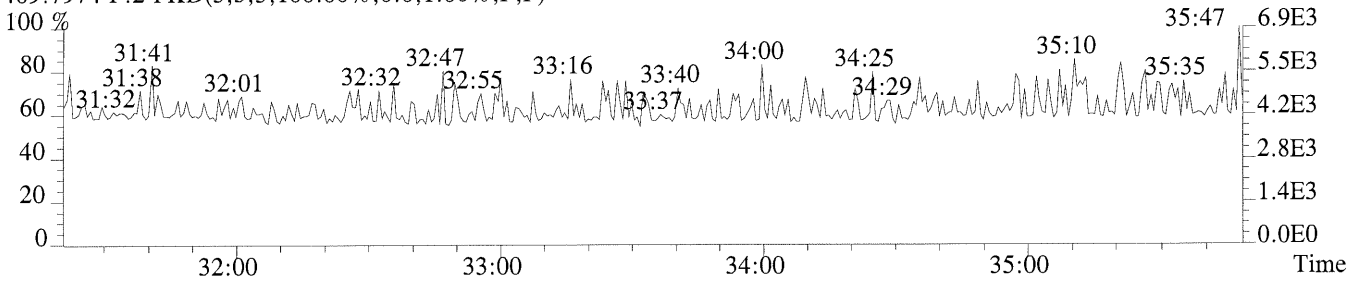
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,508.0,1.00%,F,F)



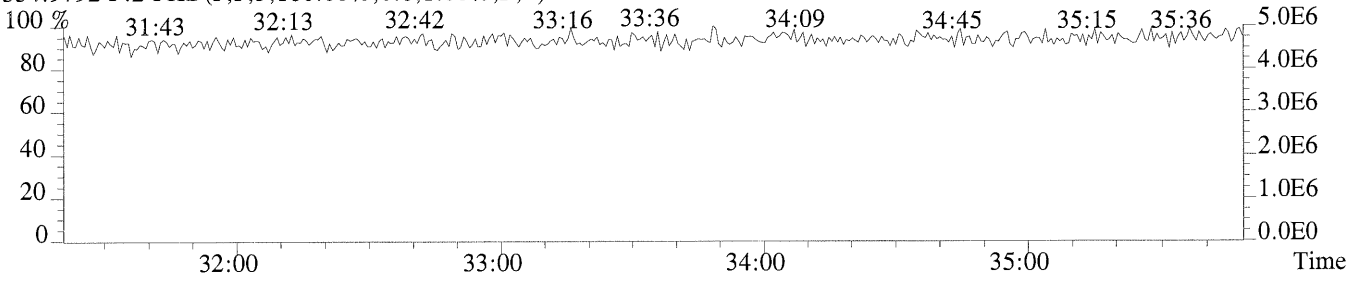
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,496.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

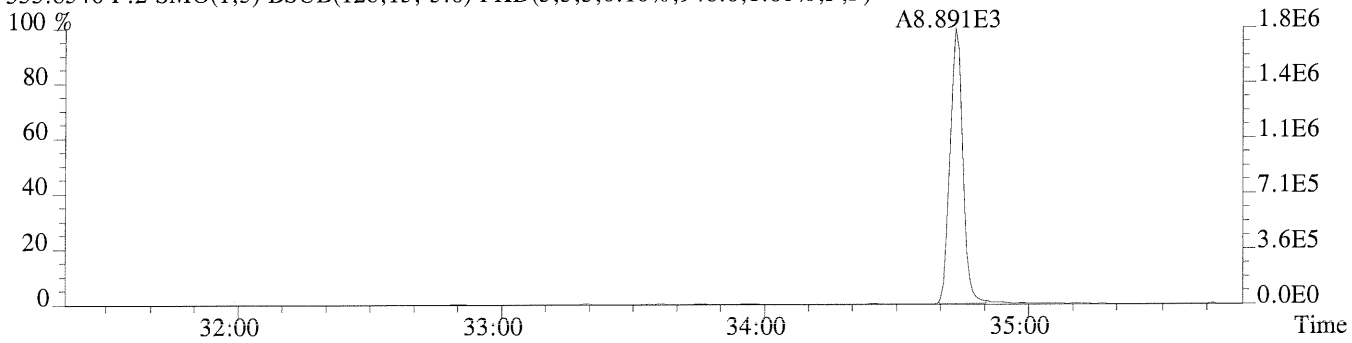


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

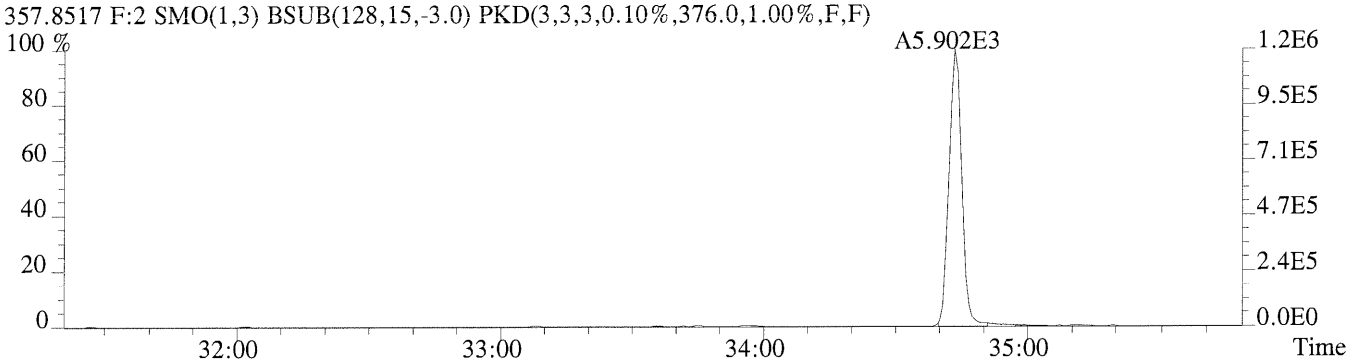


File:U129310 #1-405 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

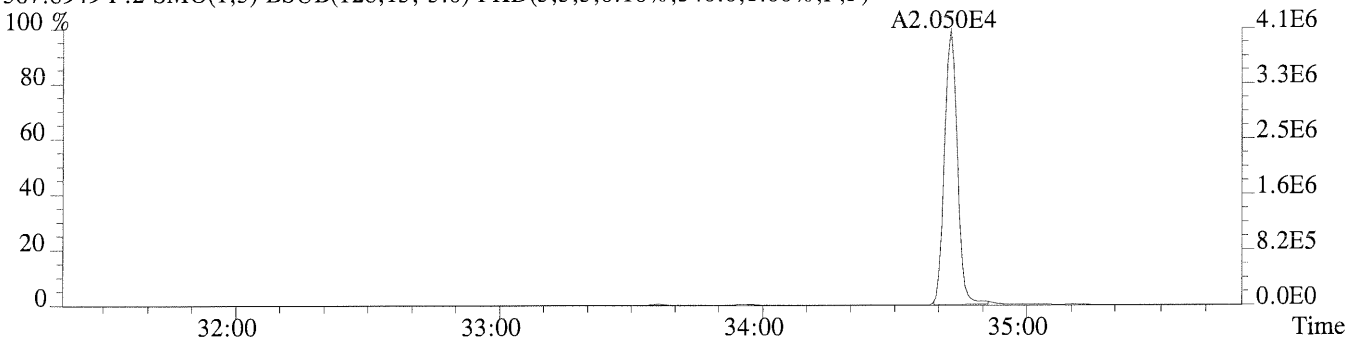
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,948.0,1.00%,F,F)



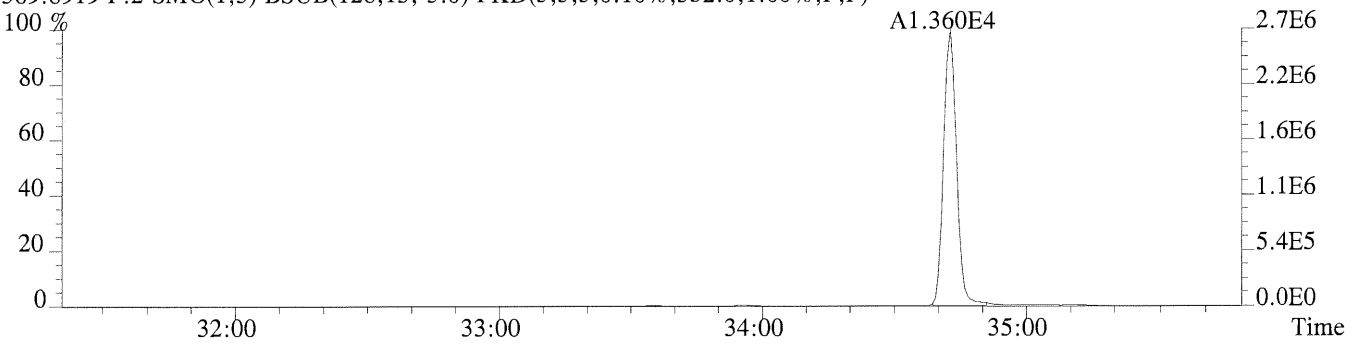
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,376.0,1.00%,F,F)



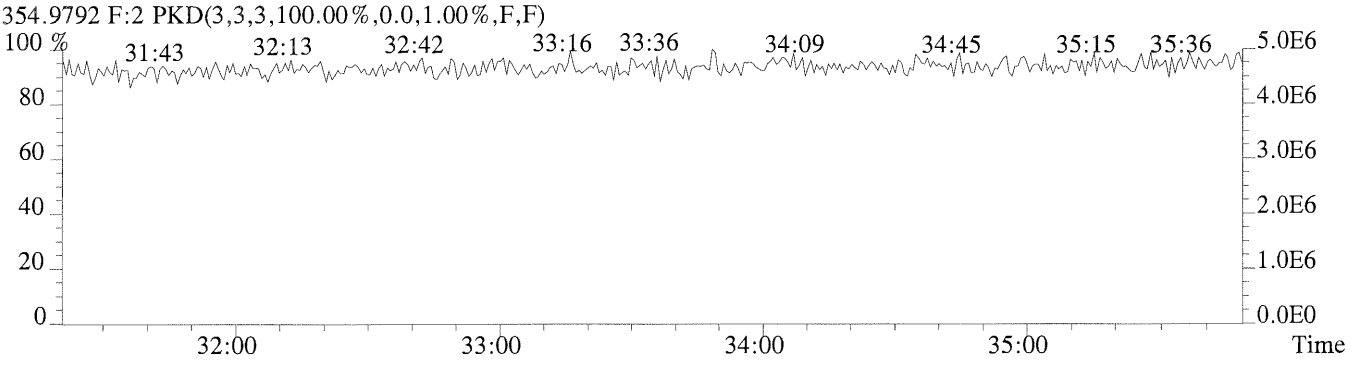
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,540.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,552.0,1.00%,F,F)

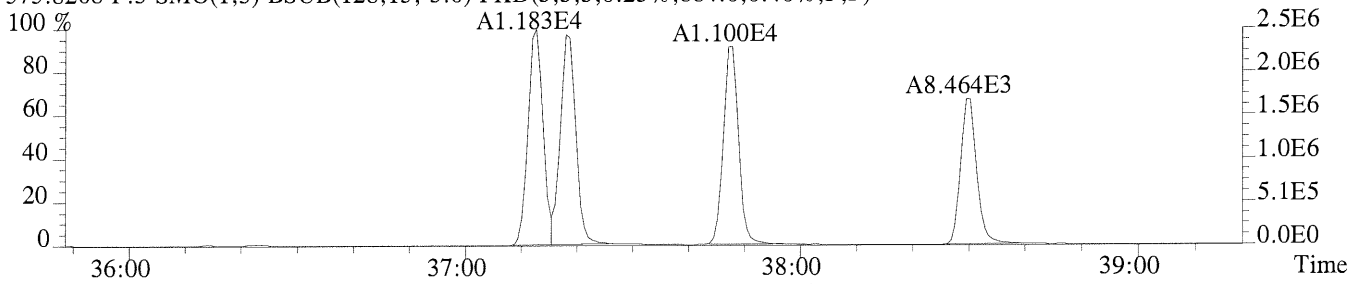


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

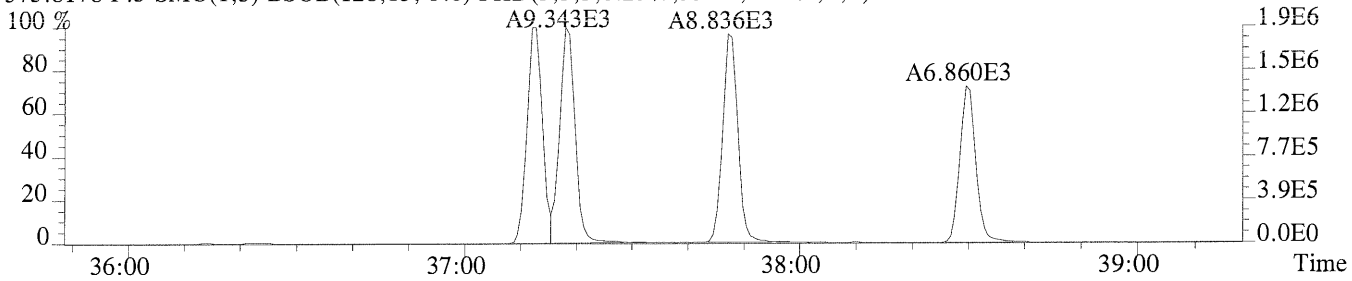


File:U129310 #1-318 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

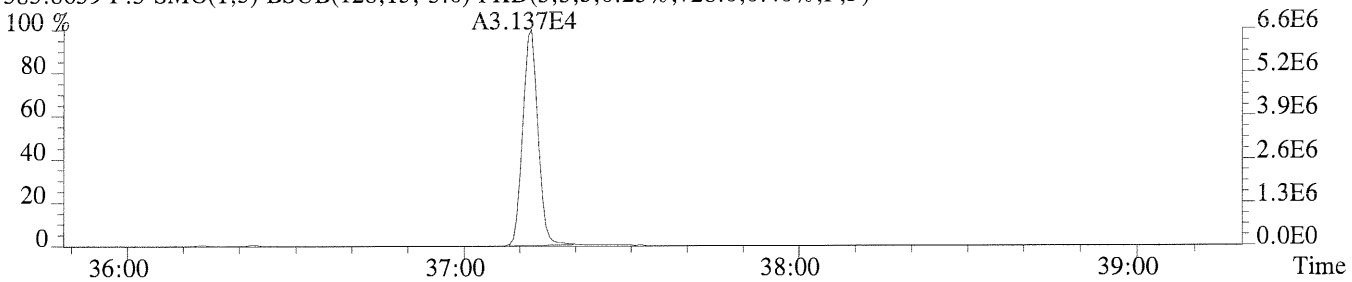
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,884.0,0.40%,F,F)



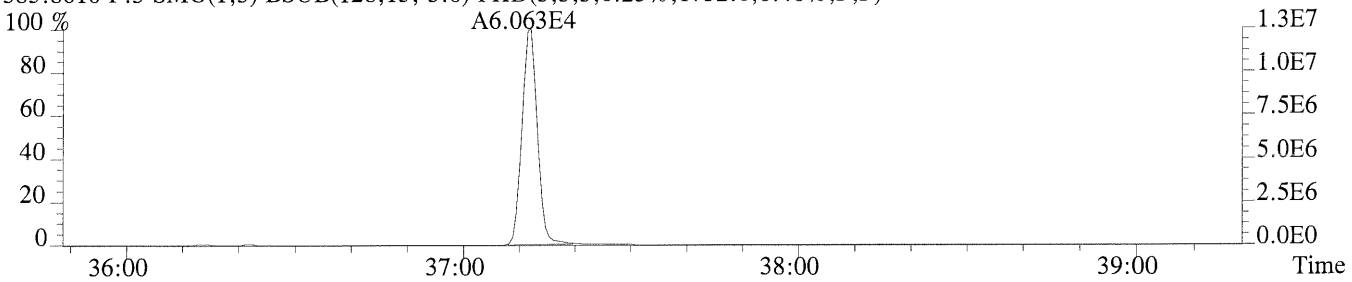
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,552.0,0.40%,F,F)



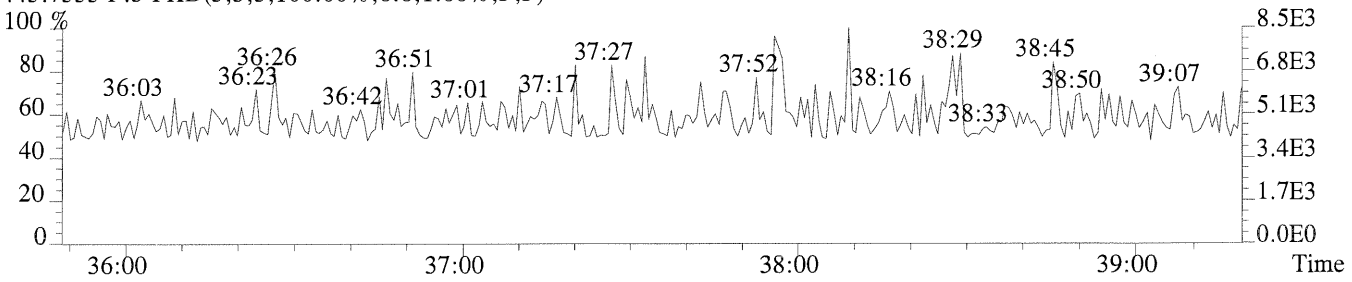
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,728.0,0.40%,F,F)



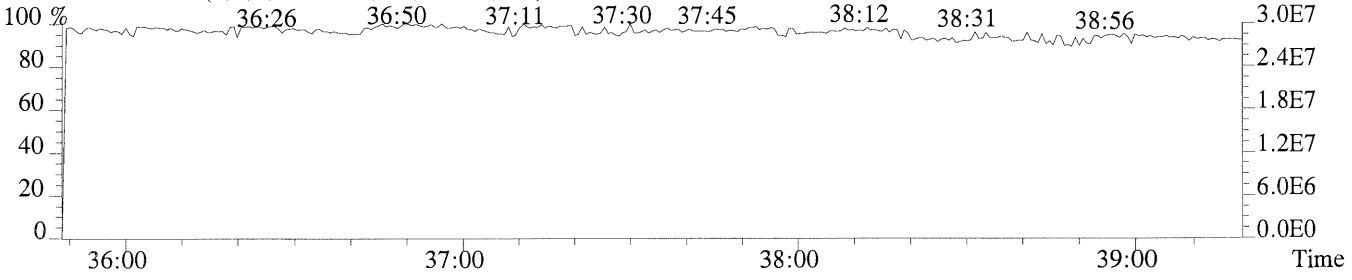
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1732.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

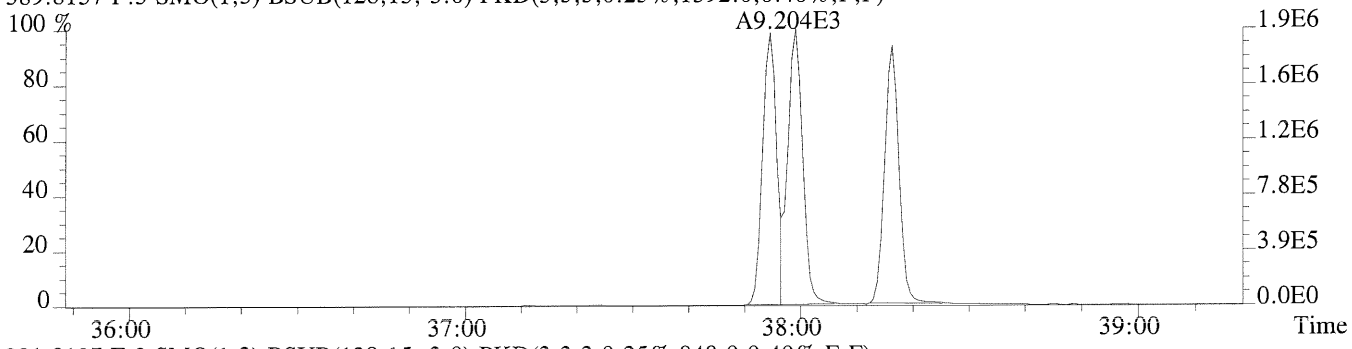


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

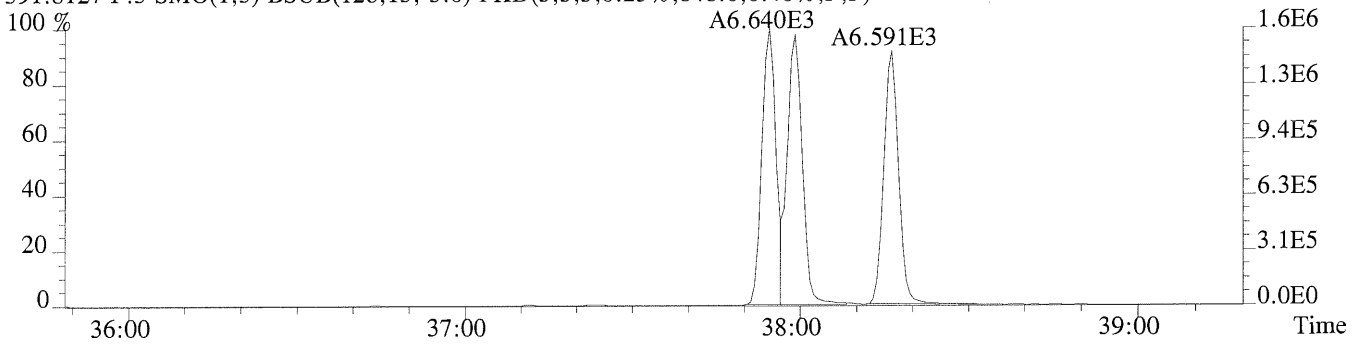


File:U129310 #1-318 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

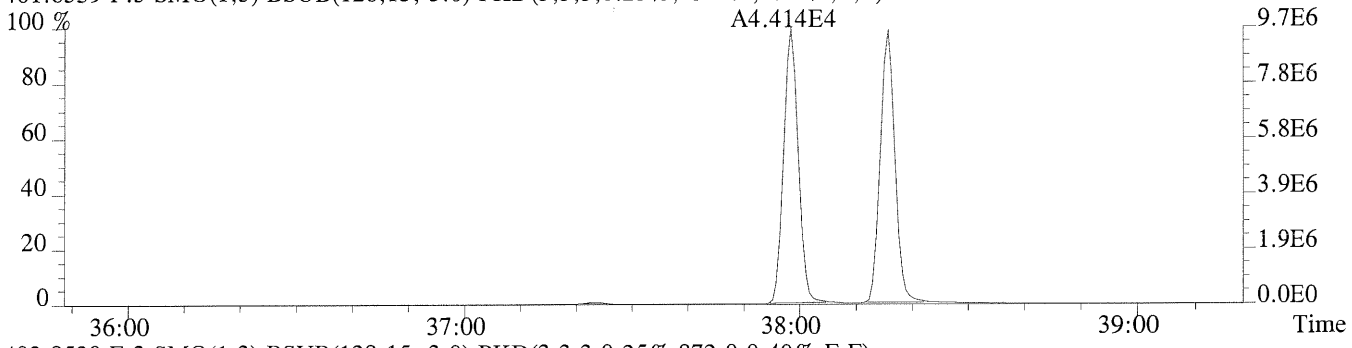
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1392.0,0.40%,F,F)



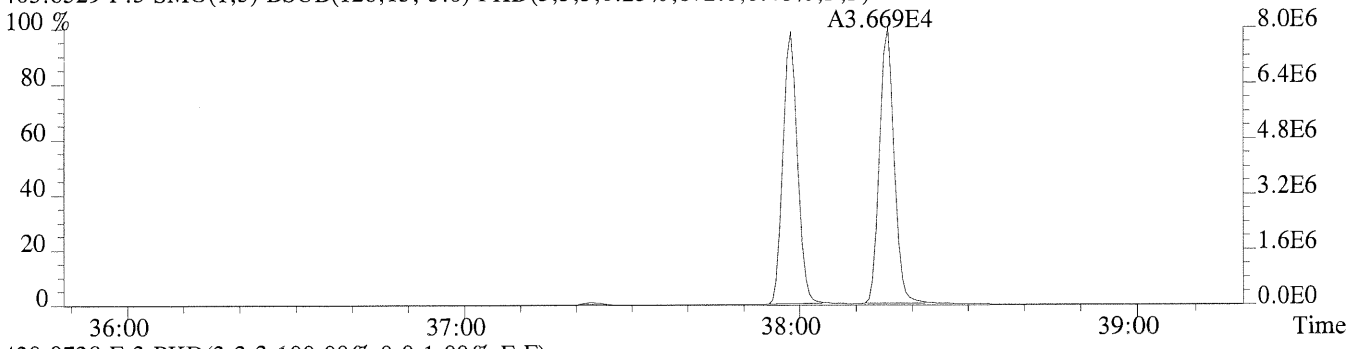
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,848.0,0.40%,F,F)



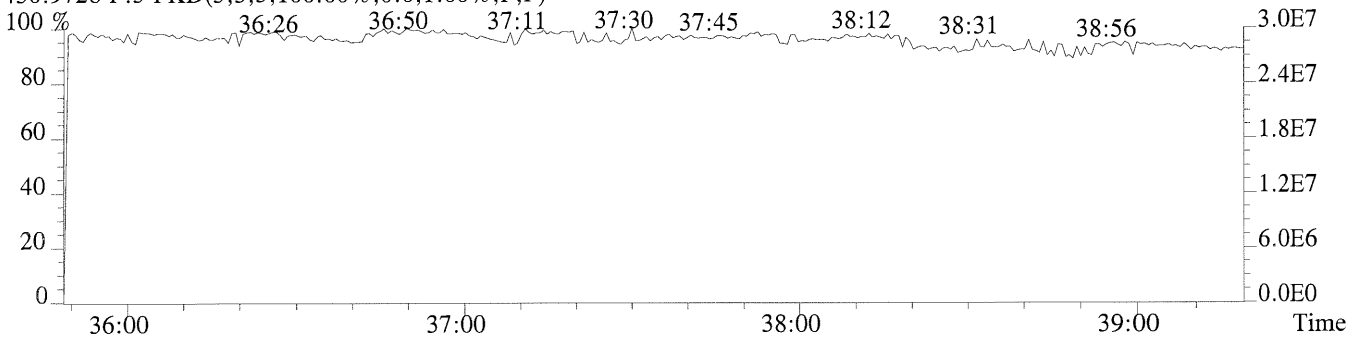
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1500.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,872.0,0.40%,F,F)

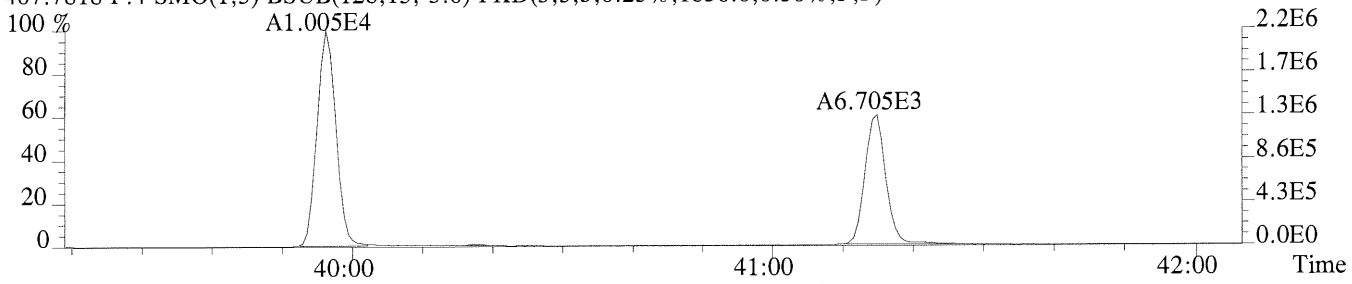


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

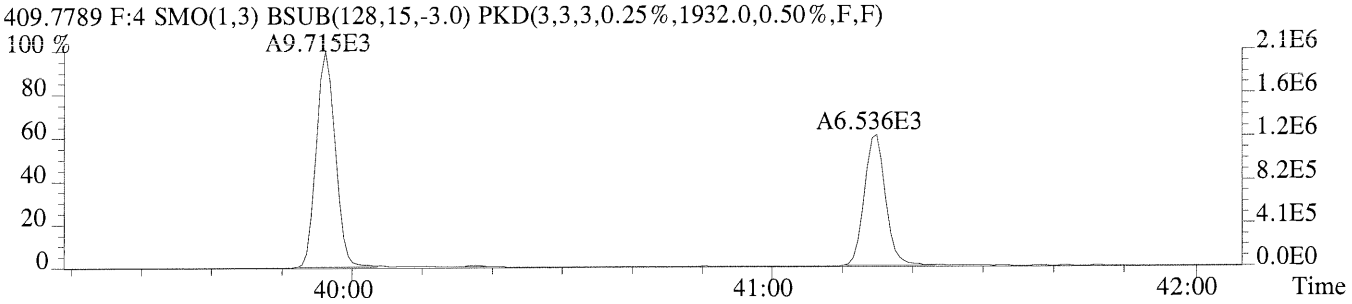


File:U129310 #1-254 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

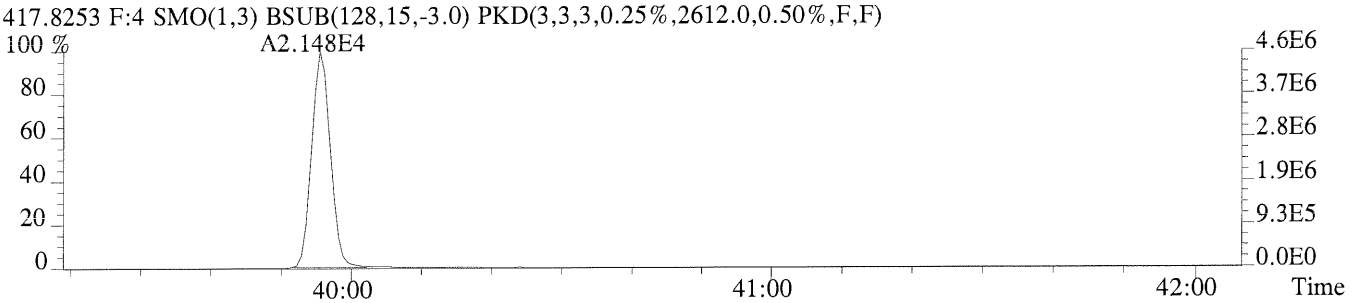
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1836.0,0.50%,F,F)



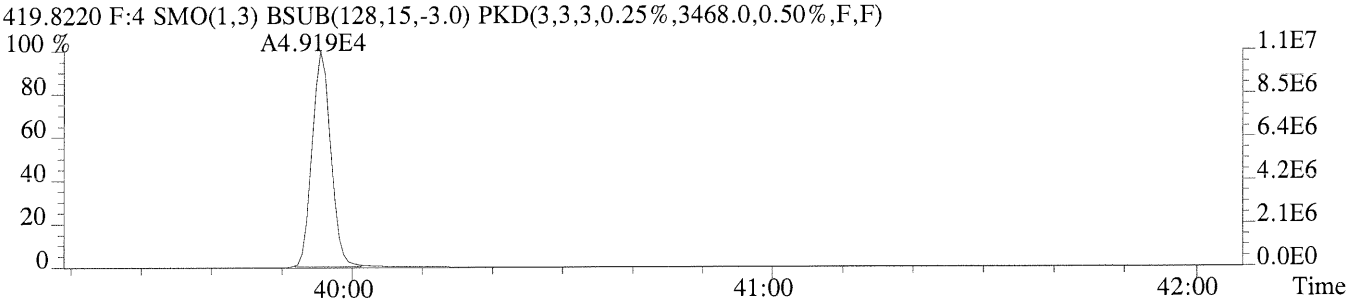
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1932.0,0.50%,F,F)



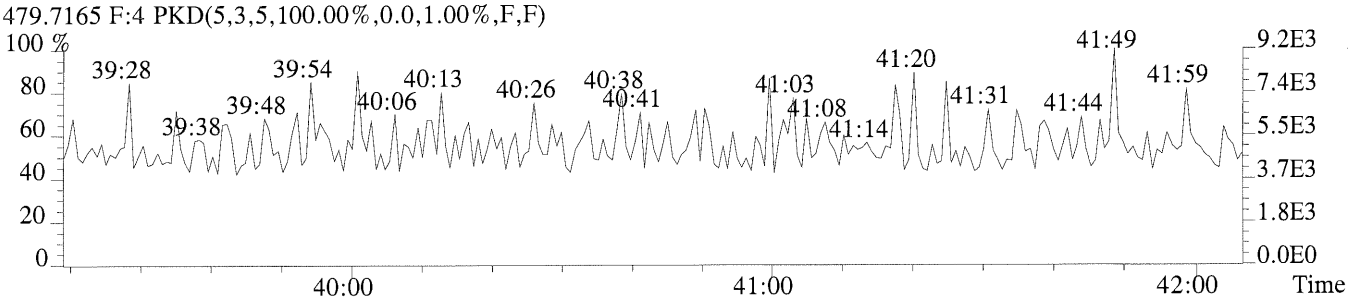
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2612.0,0.50%,F,F)



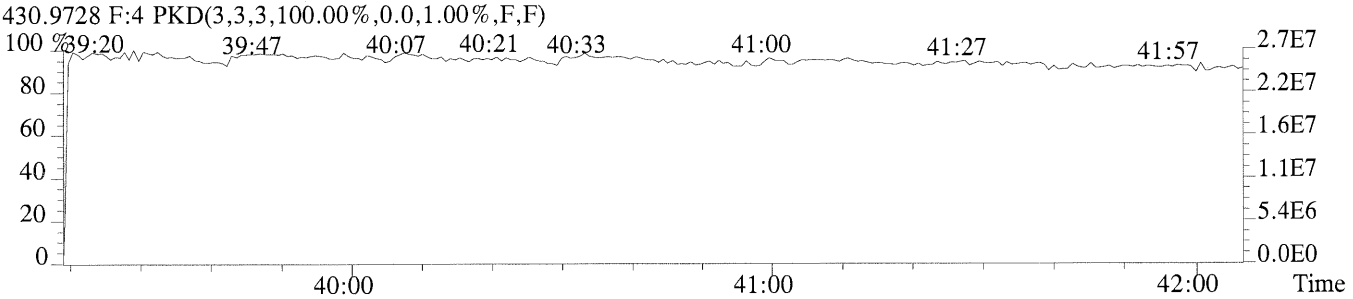
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3468.0,0.50%,F,F)



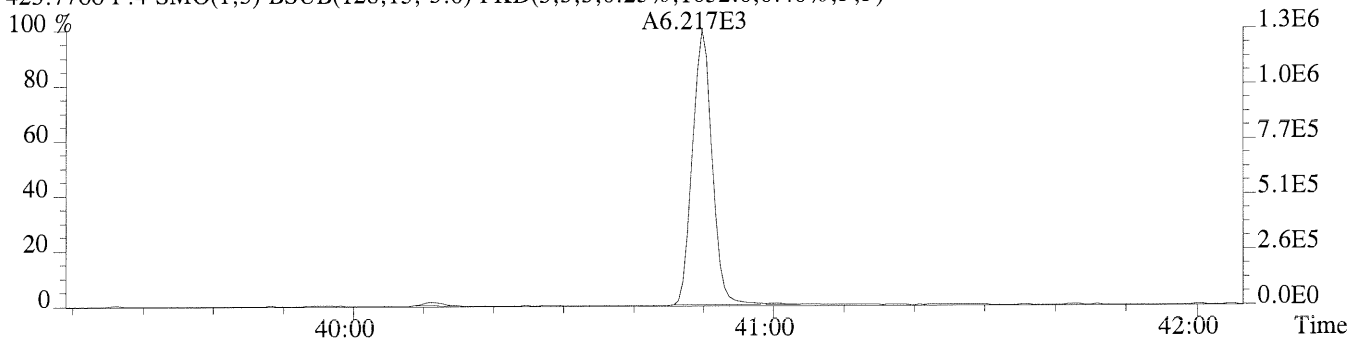
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



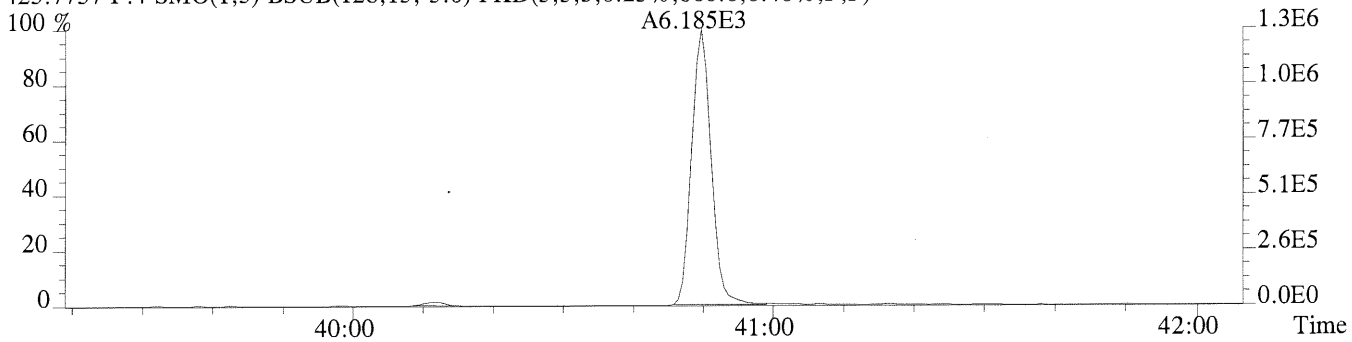
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



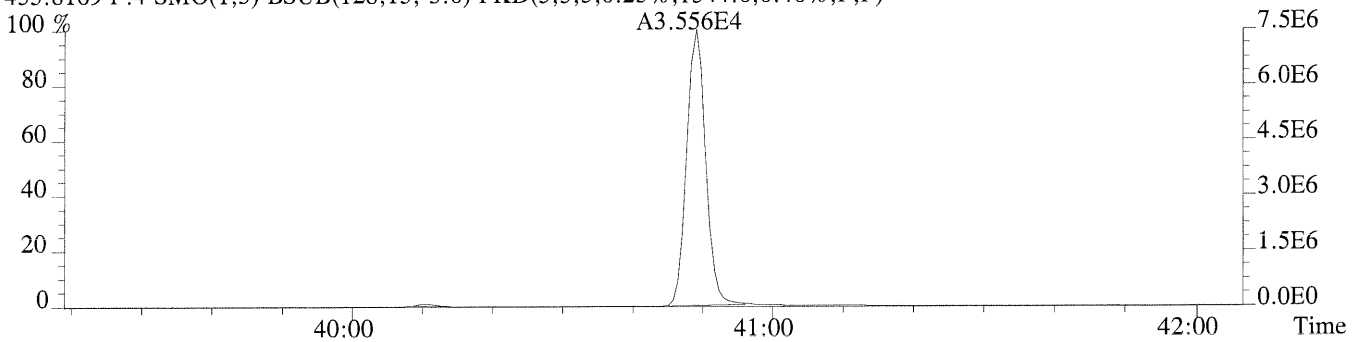
File:U129310 #1-254 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1052.0,0.40%,F,F)



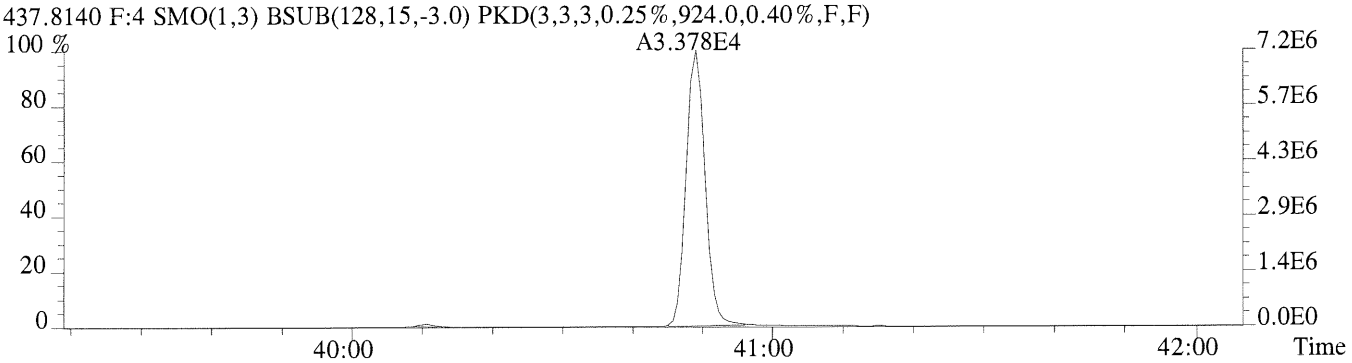
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,860.0,0.40%,F,F)



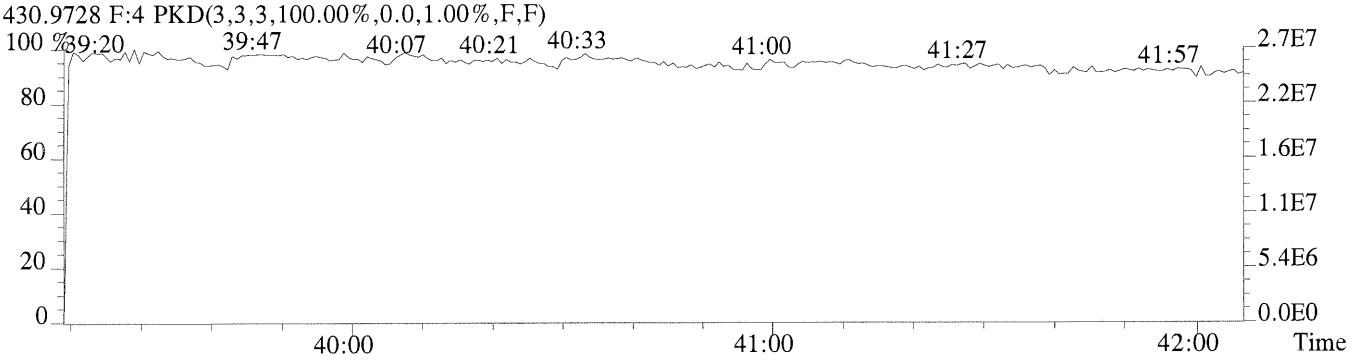
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1344.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,924.0,0.40%,F,F)

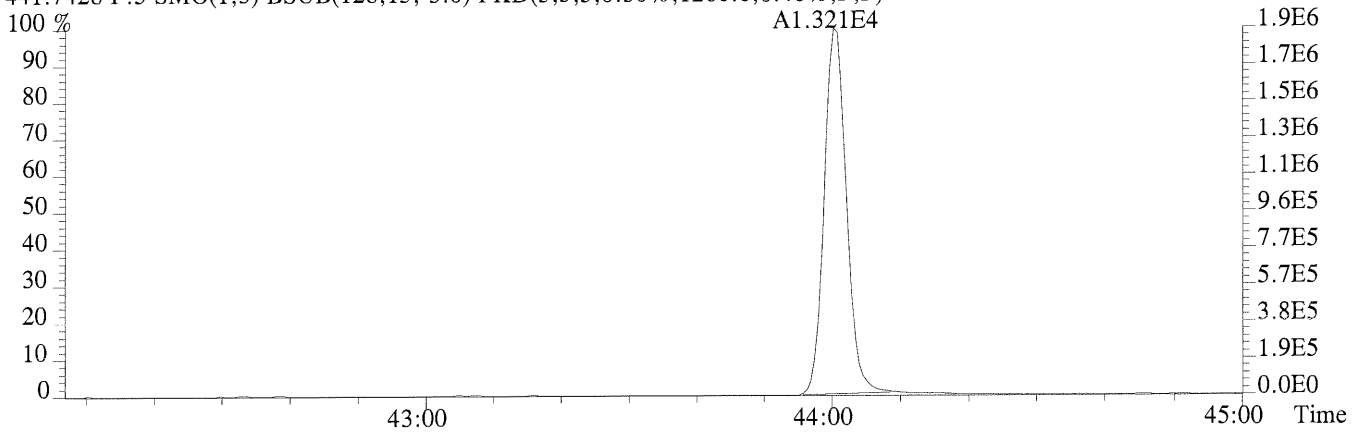


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

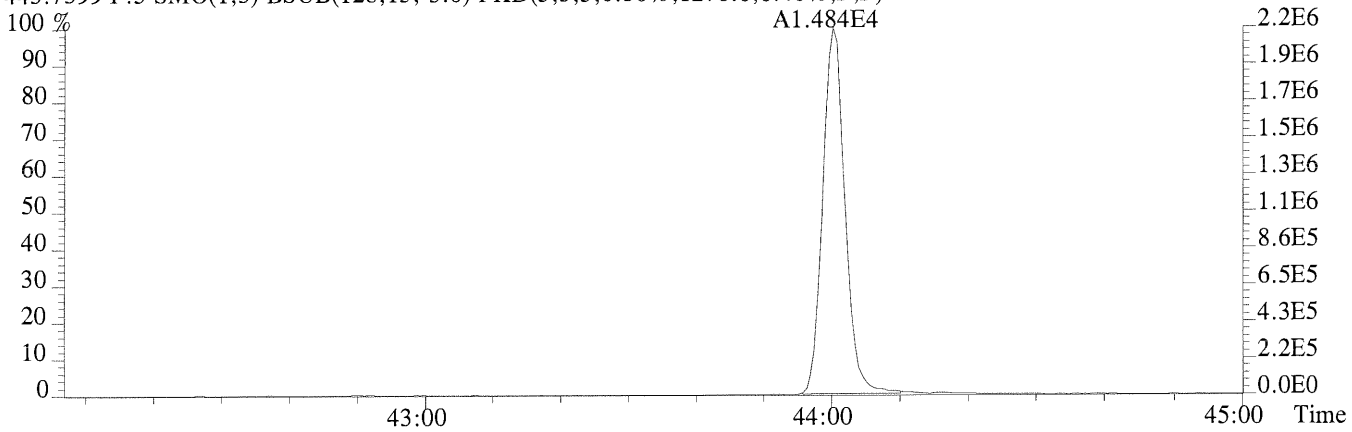


File:U129310 #1-319 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

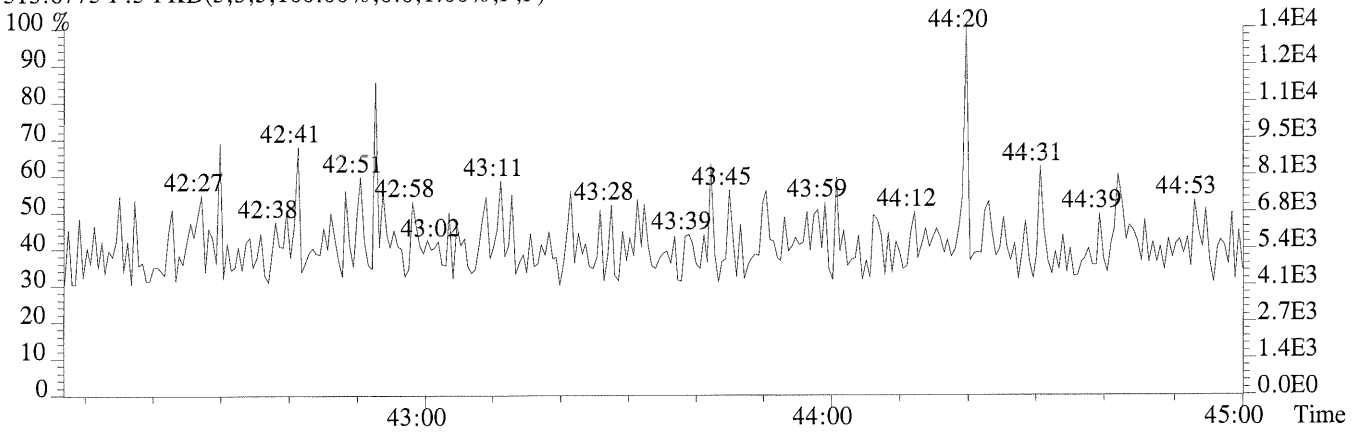
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1260.0,0.40%,F,F)



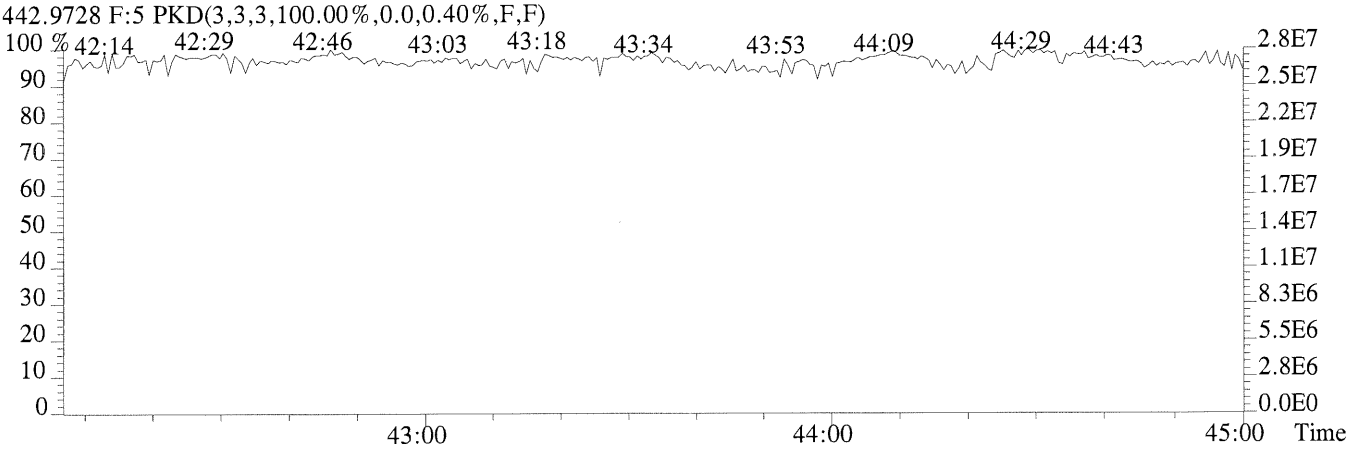
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1276.0,0.40%,F,F)



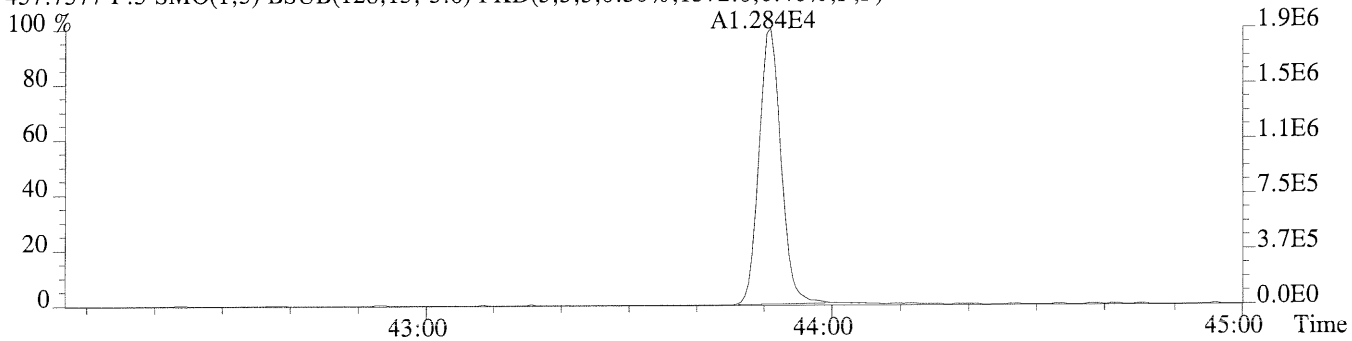
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



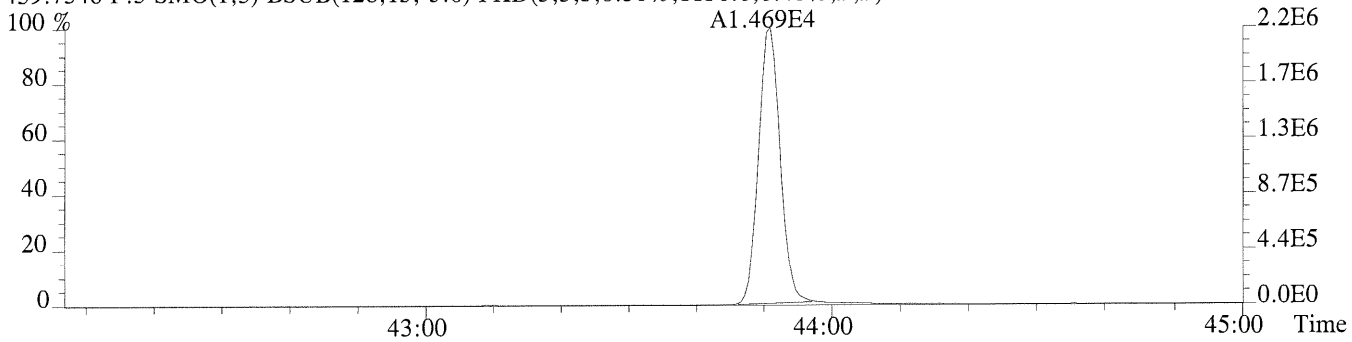
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



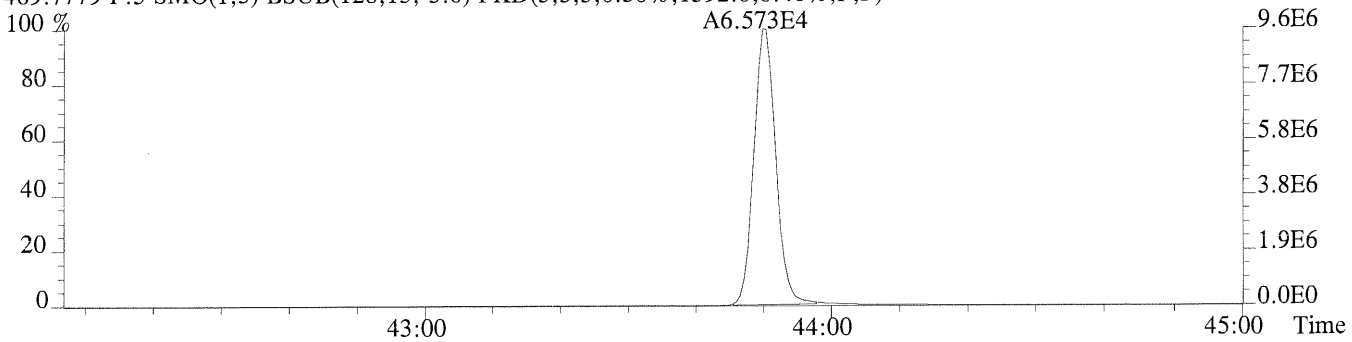
File:U129310 #1-319 Acq: 4-AUG-2008 07:57:55 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1572.0,0.40%,F,F)



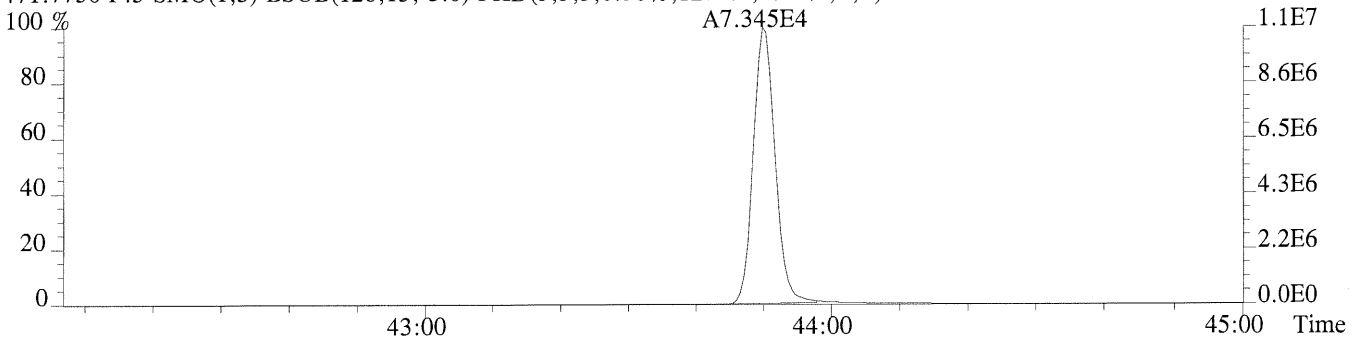
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1156.0,0.40%,F,F)



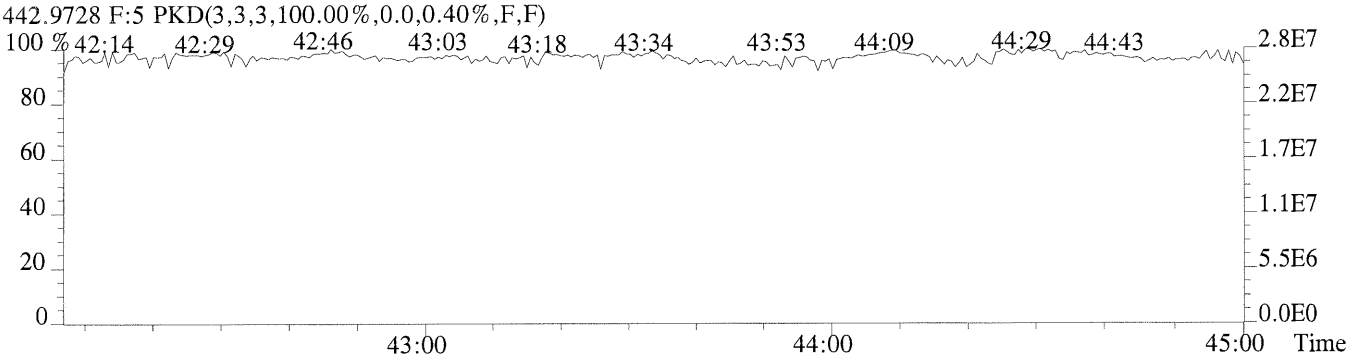
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1592.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1276.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: U129321 Analysis Date: 4-AUG-08 Time: 18:03:07

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	0.98	0.96	2.49
1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.32-1.78	0.90	0.91	-1.06
1,2,3,4,7,8-HxCDD	M+2/M+4	1.33	1.05-1.43	0.98	1.03	-5.53
1,2,3,6,7,8-HxCDD	M+2/M+4	1.11	1.05-1.43	0.95	1.07	-11.06
1,2,3,7,8,9-HxCDD	M+2/M+4	1.24	1.05-1.43	0.96	0.99	-2.62
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.07	0.88-1.20	1.00	0.93	7.58
OCDD	M+2/M+4	0.88	0.76-1.02	1.13	1.02	11.47
2,3,7,8-TCDF	M/M+2	0.83	0.65-0.89	0.91	0.96	-4.71
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	0.94	0.91	2.63
2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	0.94	0.95	-0.25
1,2,3,4,7,8-HxCDF	M+2/M+4	1.30	1.05-1.43	1.19	1.17	2.15
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	1.19	1.14	4.45
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.05-1.43	0.83	0.86	-3.97
2,3,4,6,7,8-HxCDF	M+2/M+4	1.29	1.05-1.43	1.04	1.03	0.40
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	0.88-1.20	1.48	1.36	8.65
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	0.99	1.02	-2.99
OCDF	M+2/M+4	0.88	0.76-1.02	1.06	1.09	-2.79

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: U129321 Analysis Date: 4-AUG-08 Time: 18:03:07

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	0.98	0.90	9.31
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	0.87	1.06	-17.46
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	0.98	1.01	-2.41
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	0.68	1.09	-38.09
13C-OCDD	M+2/M+4	0.89	0.76-1.02	0.56	1.17	-52.53
13C-2,3,7,8-TCDF	M/M+2	0.80	0.65-0.89	1.30	1.20	8.86
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	1.20	1.52	-21.02
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	1.21	1.28	-5.56
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.44	0.37-0.51	0.70	1.11	-36.84
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				0.94	0.86	9.76

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #7 Filename U129321 Samp: 1 Inj: 1 Acquired: 4-AUG-08 18:03:07
Processed: 5-AUG-08 08:21:27 LAB. ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:15	6.816e+03	8.261e+03	0.83	yes	no	0.955
2	Unk	1,2,3,7,8-PeCDF	33:38	2.178e+04	1.390e+04	1.57	yes	no	0.911
3	Unk	2,3,4,7,8-PeCDF	34:23	2.200e+04	1.397e+04	1.58	yes	no	0.945
4	Unk	1,2,3,4,7,8-HxCDF	37:13	1.648e+04	1.268e+04	1.30	yes	no	1.166
5	Unk	1,2,3,6,7,8-HxCDF	37:18	1.621e+04	1.299e+04	1.25	yes	no	1.142
6	Unk	2,3,4,6,7,8-HxCDF	37:48	1.426e+04	1.108e+04	1.29	yes	no	1.031
7	Unk	1,2,3,7,8,9-HxCDF	38:30	1.123e+04	9.018e+03	1.25	yes	no	0.862
8	Unk	1,2,3,4,6,7,8-HpCDF	39:56	1.065e+04	1.026e+04	1.04	yes	no	1.359
9	Unk	1,2,3,4,7,8,9-HpCDF	41:14	7.099e+03	6.917e+03	1.03	yes	no	1.020
10	Unk	OCDF	43:60	1.114e+04	1.270e+04	0.88	yes	no	1.090
11	Unk	2,3,7,8-TCDD	30:05	5.379e+03	6.942e+03	0.77	yes	no	0.960
12	Unk	1,2,3,7,8-PeCDD	34:44	1.524e+04	9.805e+03	1.55	yes	no	0.912
13	Unk	1,2,3,4,7,8-HxCDD	37:54	1.109e+04	8.306e+03	1.33	yes	no	1.035
14	Unk	1,2,3,6,7,8-HxCDD	37:59	9.896e+03	8.948e+03	1.11	yes	no	1.068
15	Unk	1,2,3,7,8,9-HxCDD	38:16	1.057e+04	8.520e+03	1.24	yes	no	0.988
16	Unk	1,2,3,4,6,7,8-HpCDD	40:50	7.042e+03	6.565e+03	1.07	yes	no	0.925
17	Unk	OCDD	43:50	1.197e+04	1.355e+04	0.88	yes	no	1.017
18	IS	13C-2,3,7,8-TCDF	29:13	3.673e+04	4.611e+04	0.80	yes	no	1.196
19	IS	13C-1,2,3,7,8-PeCDF	33:37	4.640e+04	2.989e+04	1.55	yes	no	1.518
20	IS	13C-1,2,3,4,7,8-HxCDF	37:12	4.225e+04	8.014e+04	0.53	yes	no	1.284
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:55	2.168e+04	4.912e+04	0.44	yes	no	1.111
22	IS	13C-2,3,7,8-TCDD	30:04	2.752e+04	3.507e+04	0.78	yes	no	0.900
23	IS	13C-1,2,3,7,8-PeCDD	34:43	3.384e+04	2.168e+04	1.56	yes	no	1.057
24	IS	13C-1,2,3,6,7,8-HxCDD	37:58	5.563e+04	4.355e+04	1.28	yes	no	1.007
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:49	3.495e+04	3.341e+04	1.05	yes	no	1.094
26	IS	13C-OCDD	43:50	5.291e+04	5.961e+04	0.89	yes	no	1.174
27	RS/RT	13C-1,2,3,4-TCDD	29:50	2.822e+04	3.542e+04	0.80	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:16	5.527e+04	4.566e+04	1.21	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:05	1.200e+04					0.859
					SUM AREA				
30	Tot	Total Tetra-Furans	29:15		1.508e+04	0.83	yes		0.955
31	Tot	Total Tetra-Dioxins	30:05		1.232e+04	0.77	yes		0.960
32	Tot	Total Penta-Furans	33:38		7.207e+04	1.57	yes		0.928
33	Tot	Total Penta-Dioxins	34:44		2.504e+04	1.55	yes		0.912
34	Tot	Total Hexa-Furans	36:14		1.041e+05	1.20	yes		1.050
35	Tot	Total Hexa-Dioxins	37:18		5.746e+04	1.32	yes		1.030
36	Tot	Total Hepta-Furans	39:56		3.492e+04	1.04	yes		1.190
37	Tot	Total Hepta-Dioxins	40:08		1.484e+04	1.07	yes		0.925

Columbia Analytical Services, Inc.
19408 Park Row., Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #7 Filename U129321 #1 Samp: 1 Inj: 1 Acquired: 4-AUG-08 18:03:07

Processed: 5-AUG-08 08:21:27 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.16e+06	2.37e+03	4.9e+02	1.36e+06	3.55e+03	3.8e+02
2	1,2,3,7,8-PeCDF	4.36e+06	3.24e+03	1.3e+03	2.75e+06	5.24e+03	5.3e+02
3	2,3,4,7,8-PeCDF	4.47e+06	3.24e+03	1.4e+03	2.88e+06	5.24e+03	5.5e+02
4	1,2,3,4,7,8-HxCDF	3.58e+06	3.36e+03	1.1e+03	2.81e+06	3.06e+03	9.2e+02
5	1,2,3,6,7,8-HxCDF	3.58e+06	3.36e+03	1.1e+03	2.89e+06	3.06e+03	9.5e+02
6	2,3,4,6,7,8-HxCDF	3.11e+06	3.36e+03	9.3e+02	2.47e+06	3.06e+03	8.1e+02
7	1,2,3,7,8,9-HxCDF	2.48e+06	3.36e+03	7.4e+02	1.96e+06	3.06e+03	6.4e+02
8	1,2,3,4,6,7,8-HpCDF	2.30e+06	4.97e+03	4.6e+02	2.21e+06	4.31e+03	5.1e+02
9	1,2,3,4,7,8,9-HpCDF	1.48e+06	4.97e+03	3.0e+02	1.44e+06	4.31e+03	3.3e+02
10	OCDF	1.76e+06	1.66e+03	1.1e+03	2.00e+06	2.76e+03	7.2e+02
11	2,3,7,8-TCDD	9.74e+05	2.31e+03	4.2e+02	1.27e+06	1.55e+03	8.2e+02
12	1,2,3,7,8-PeCDD	3.20e+06	3.95e+03	8.1e+02	2.07e+06	2.09e+03	9.9e+02
13	1,2,3,4,7,8-HxCDD	2.54e+06	5.47e+03	4.6e+02	2.02e+06	2.67e+03	7.6e+02
14	1,2,3,6,7,8-HxCDD	2.37e+06	5.47e+03	4.3e+02	2.03e+06	2.67e+03	7.6e+02
15	1,2,3,7,8,9-HxCDD	2.45e+06	5.47e+03	4.5e+02	1.96e+06	2.67e+03	7.3e+02
16	1,2,3,4,6,7,8-HpCDD	1.43e+06	9.14e+03	1.6e+02	1.36e+06	7.61e+03	1.8e+02
17	OCDD	1.84e+06	3.19e+03	5.8e+02	2.09e+06	4.24e+03	4.9e+02
18	13C-2,3,7,8-TCDF	6.19e+06	7.14e+03	8.7e+02	7.73e+06	3.46e+03	2.2e+03
19	13C-1,2,3,7,8-PeCDF	9.12e+06	2.43e+03	3.8e+03	5.87e+06	3.06e+03	1.9e+03
20	13C-1,2,3,4,7,8-HxCDF	9.13e+06	2.25e+03	4.1e+03	1.76e+07	3.77e+03	4.7e+03
21	13C-1,2,3,4,6,7,8-HpCDF	4.84e+06	5.74e+03	8.4e+02	1.08e+07	4.94e+03	2.2e+03
22	13C-2,3,7,8-TCDD	5.00e+06	1.11e+04	4.5e+02	6.38e+06	3.44e+03	1.9e+03
23	13C-1,2,3,7,8-PeCDD	7.02e+06	2.35e+03	3.0e+03	4.51e+06	2.38e+03	1.9e+03
24	13C-1,2,3,6,7,8-HxCDD	1.31e+07	9.61e+03	1.4e+03	1.03e+07	5.62e+03	1.8e+03
25	13C-1,2,3,4,6,7,8-HpCDD	7.56e+06	2.08e+03	3.6e+03	7.15e+06	1.22e+03	5.8e+03
26	13C-OCDD	8.31e+06	2.06e+03	4.0e+03	9.35e+06	1.86e+03	5.0e+03
27	13C-1,2,3,4-TCDD	5.06e+06	1.11e+04	4.6e+02	6.34e+06	3.44e+03	1.8e+03
28	13C-1,2,3,7,8,9-HxCDD	1.28e+07	9.61e+03	1.3e+03	1.06e+07	5.62e+03	1.9e+03
29	37Cl-2,3,7,8-TCDD	2.21e+06	3.38e+03	6.5e+02			

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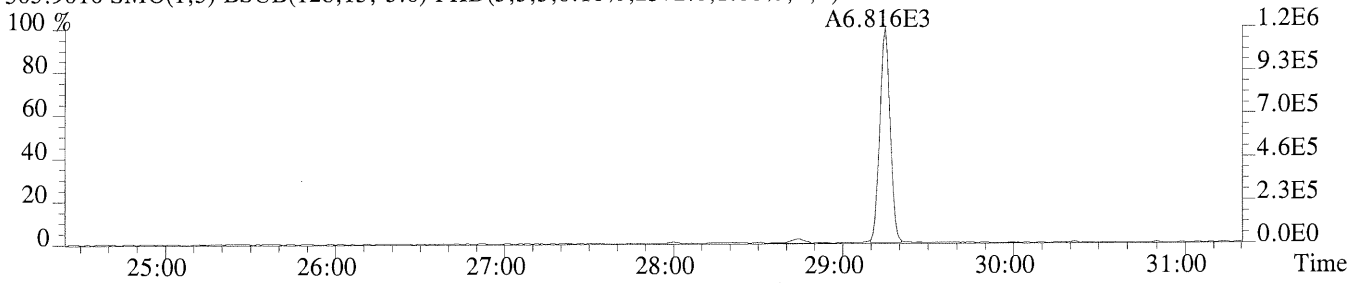
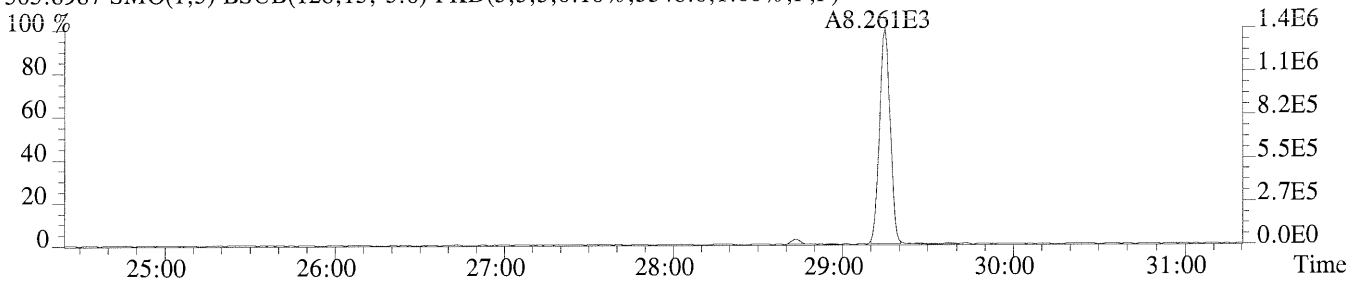
File:U129321 #1-578 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

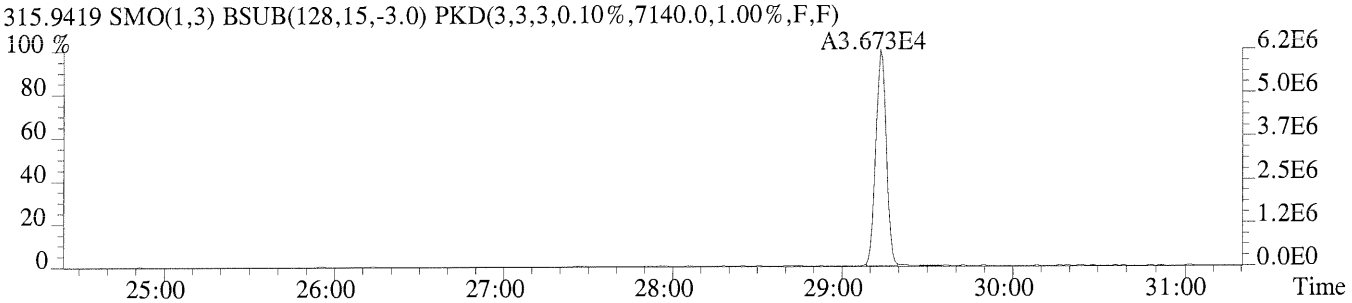
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2372.0,1.00%,F,F)



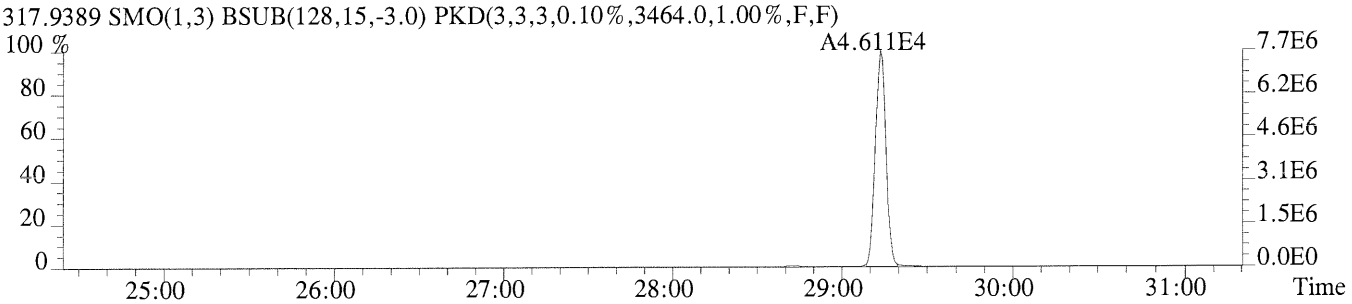
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3548.0,1.00%,F,F)



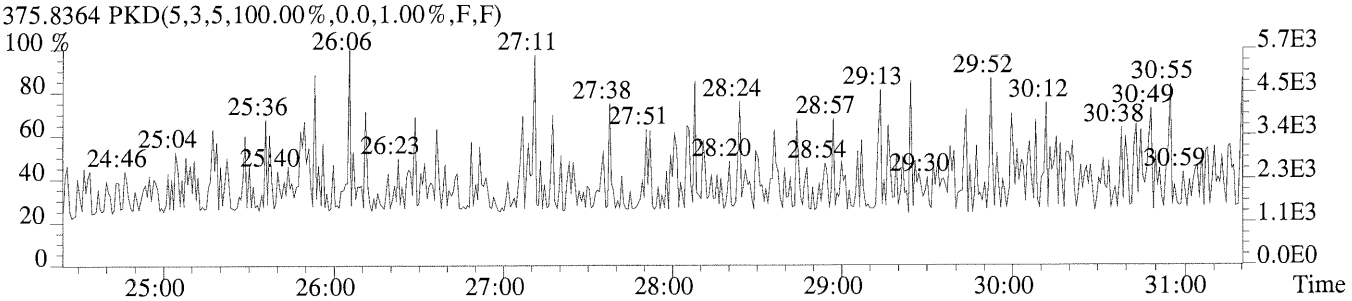
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,7140.0,1.00%,F,F)



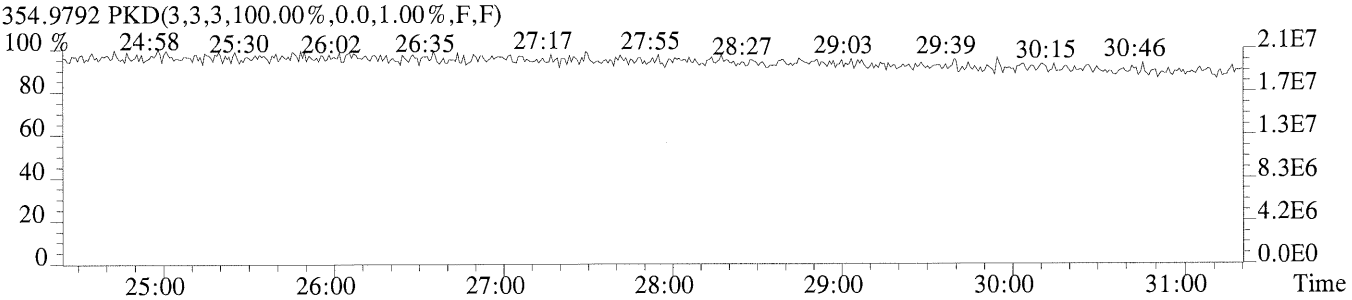
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3464.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

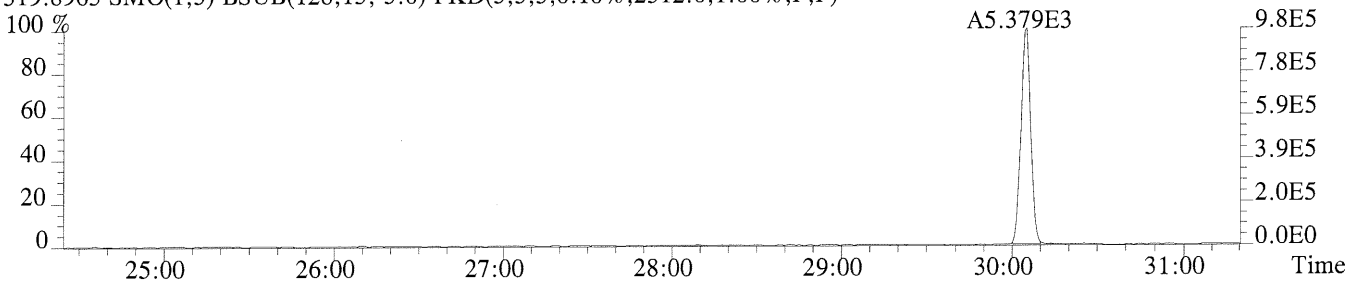


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

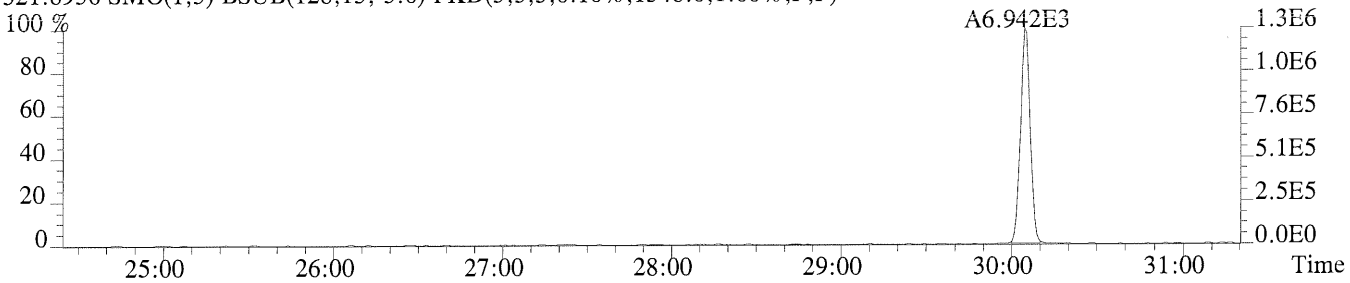


File:U129321 #1-578 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

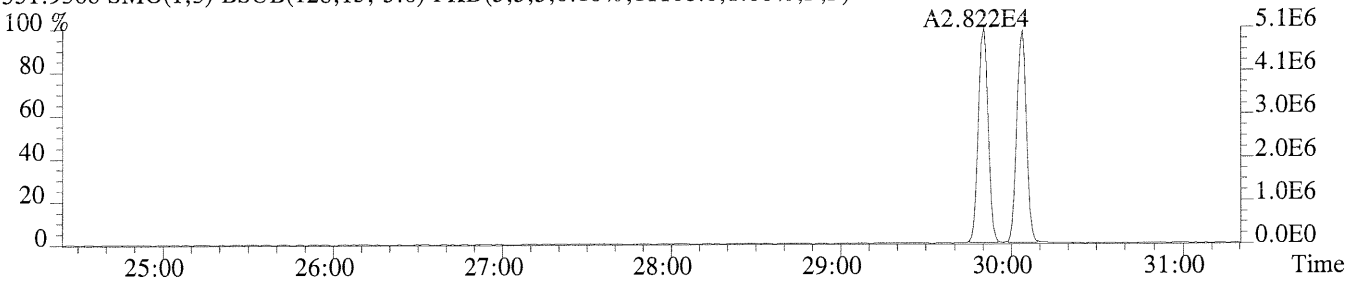
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2312.0,1.00%,F,F)



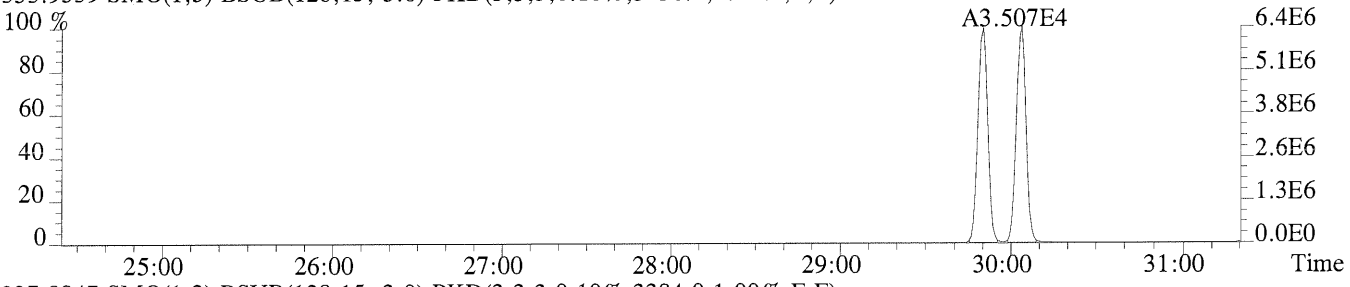
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1548.0,1.00%,F,F)



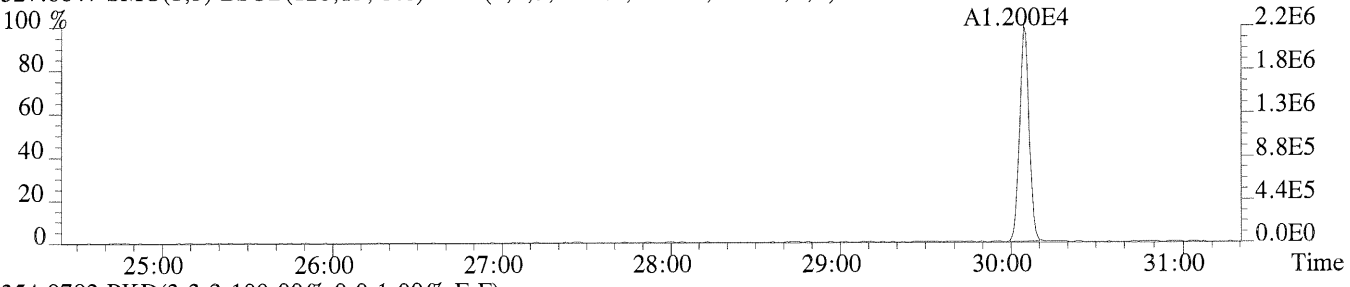
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,11108.0,1.00%,F,F)



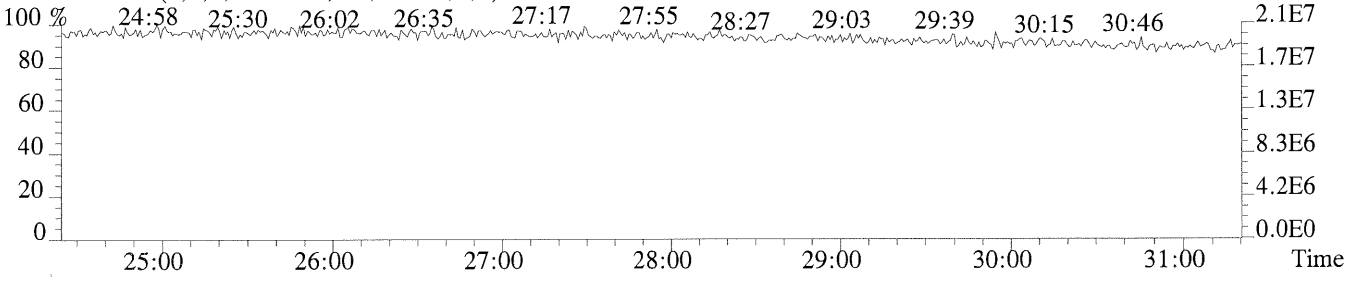
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3436.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3384.0,1.00%,F,F)

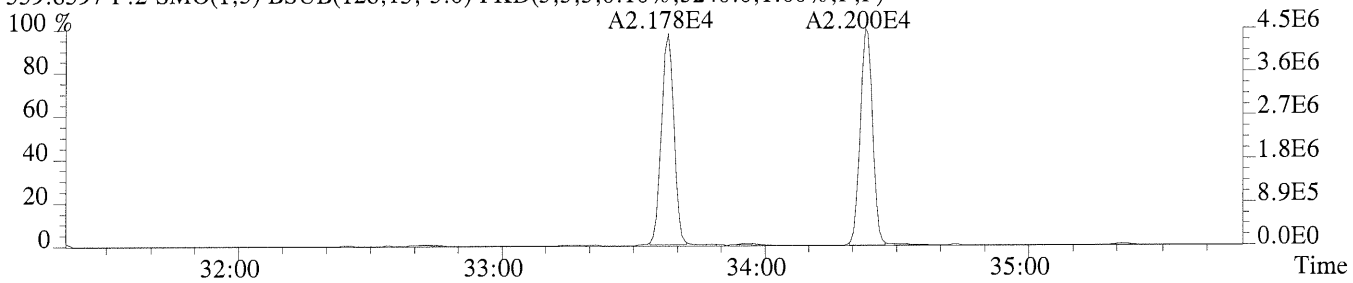


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

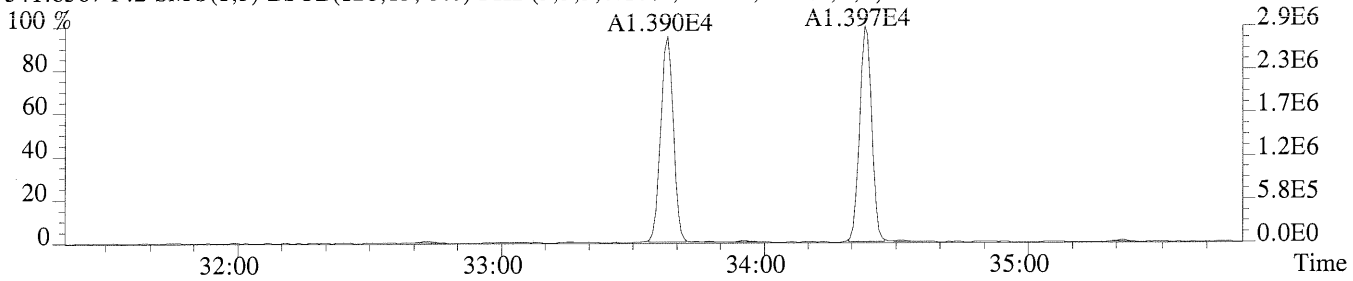


File:U129321 #1-405 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

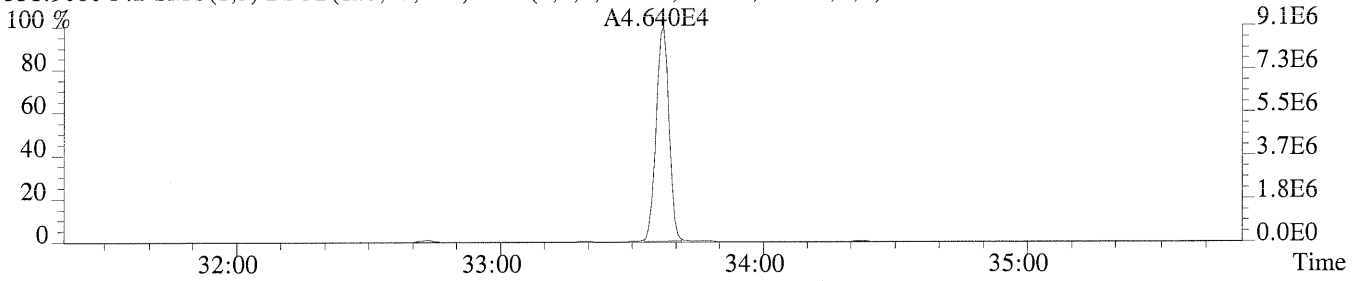
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3240.0,1.00%,F,F)



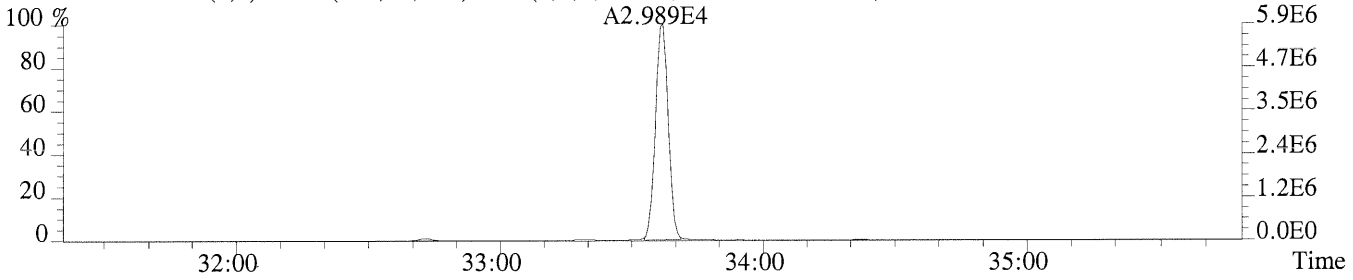
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5236.0,1.00%,F,F)



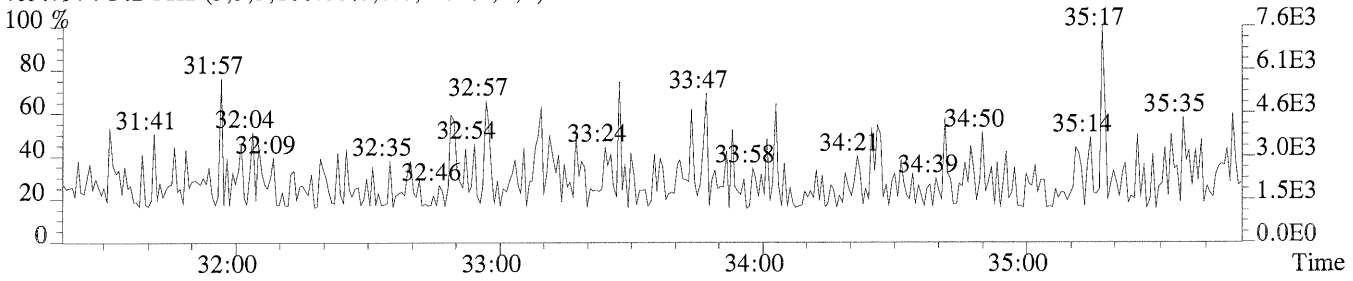
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2432.0,1.00%,F,F)



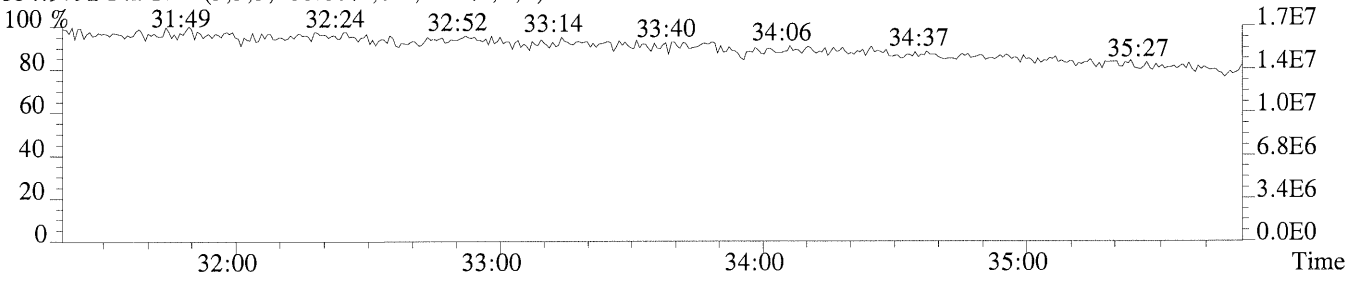
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3056.0,1.00%,F,F)



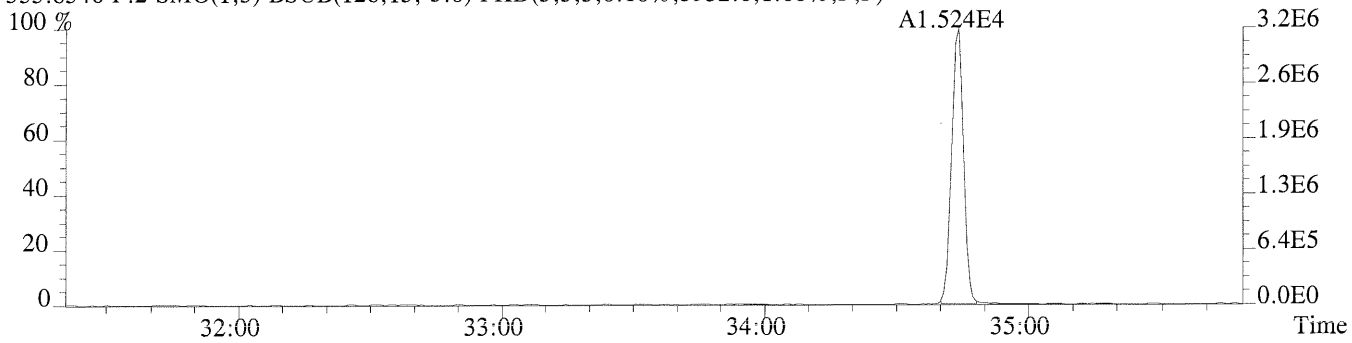
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



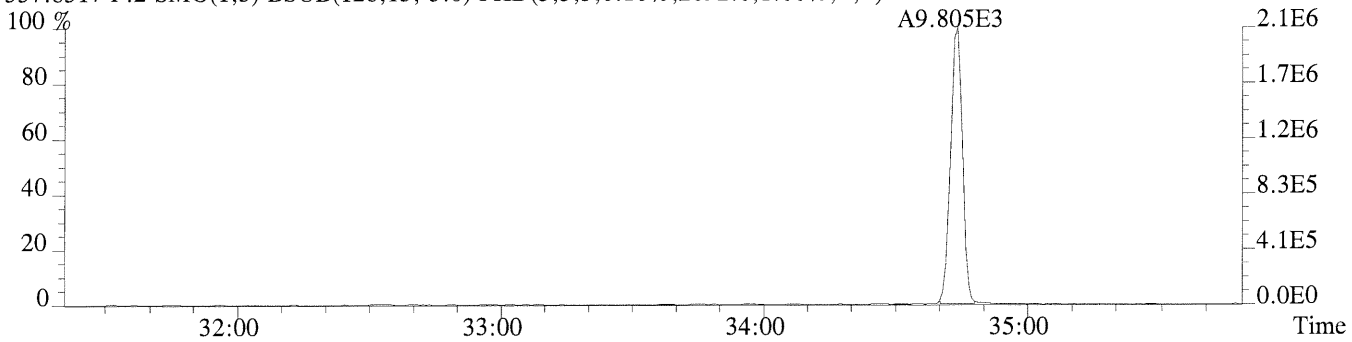
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



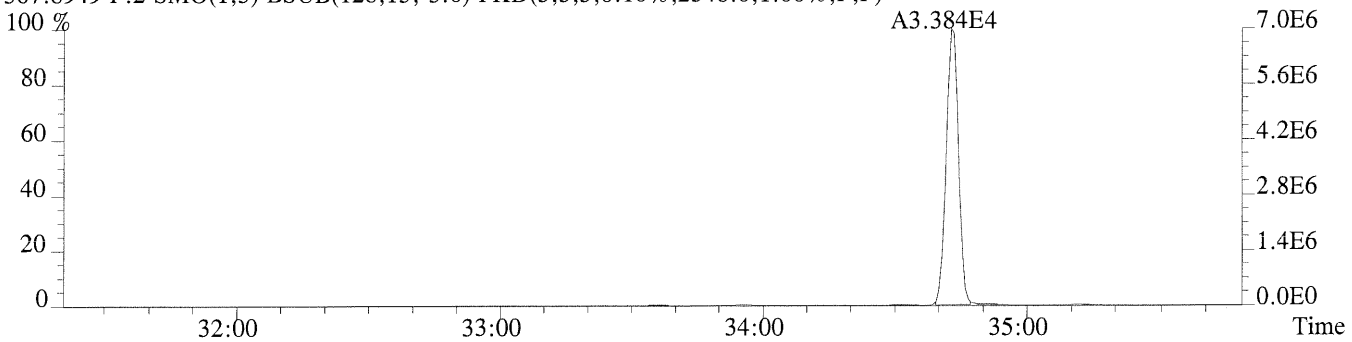
File:U129321 #1-405 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3952.0,1.00%,F,F)



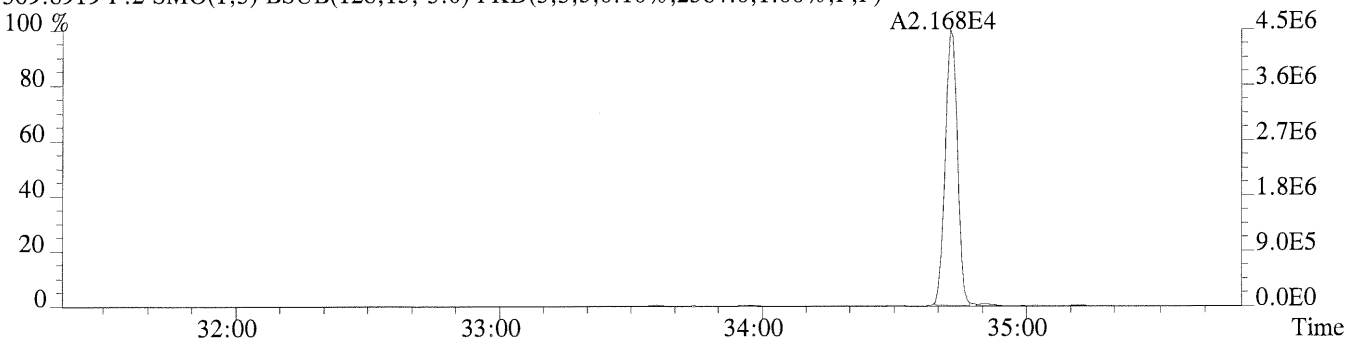
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2092.0,1.00%,F,F)



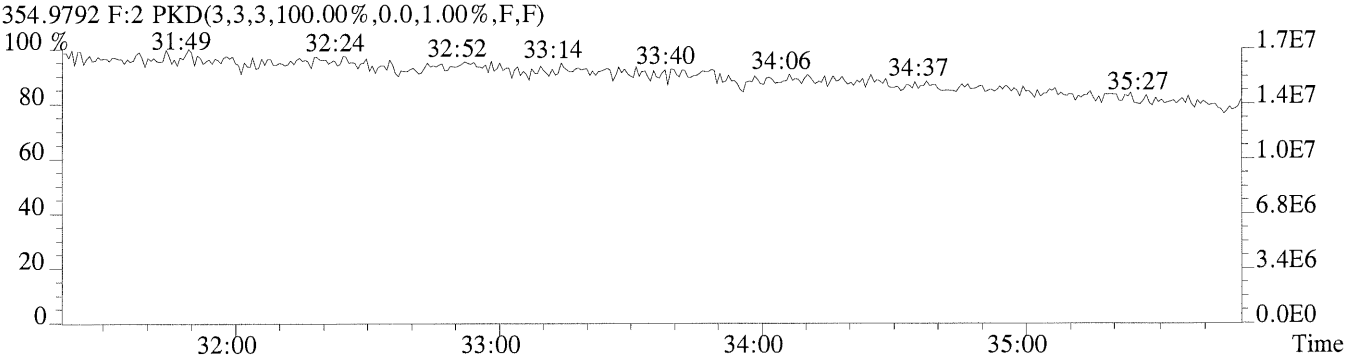
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2348.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2384.0,1.00%,F,F)

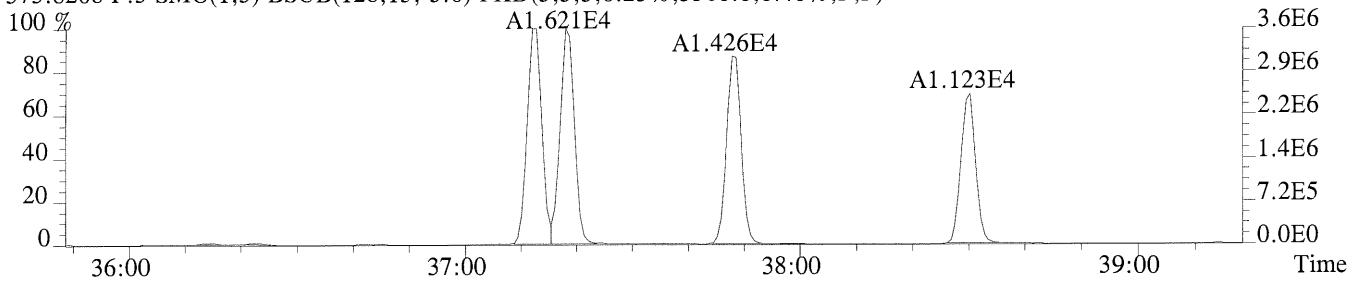


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

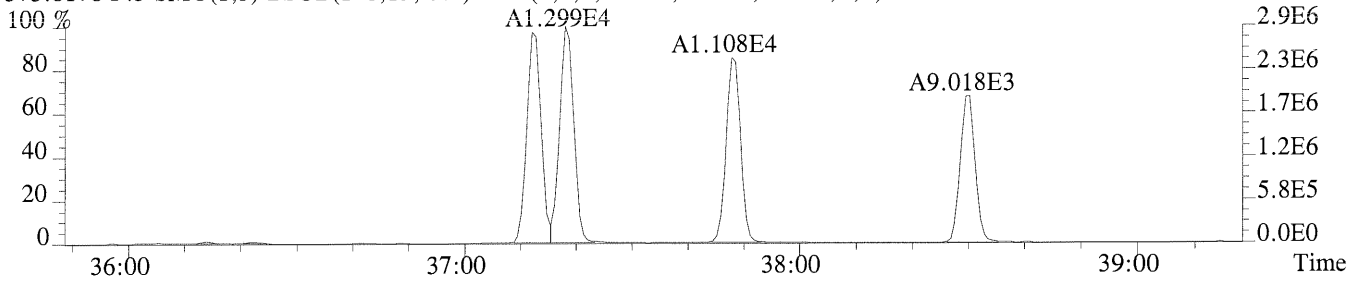


File:U129321 #1-318 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

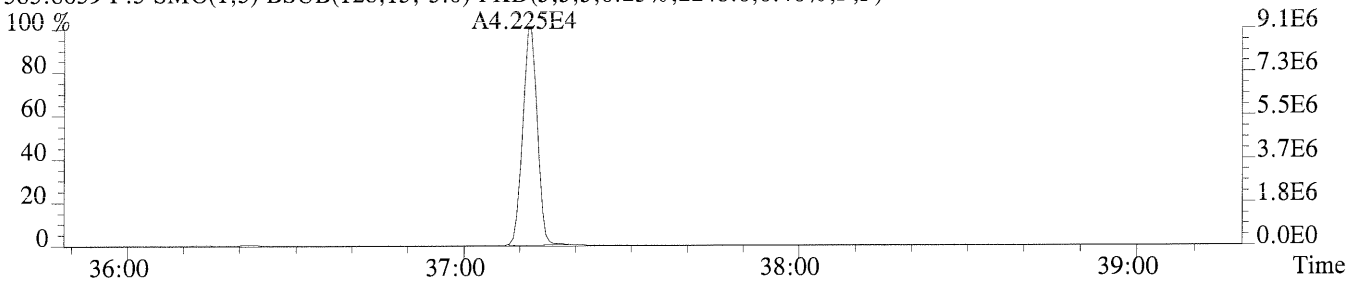
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3360.0,0.40%,F,F)



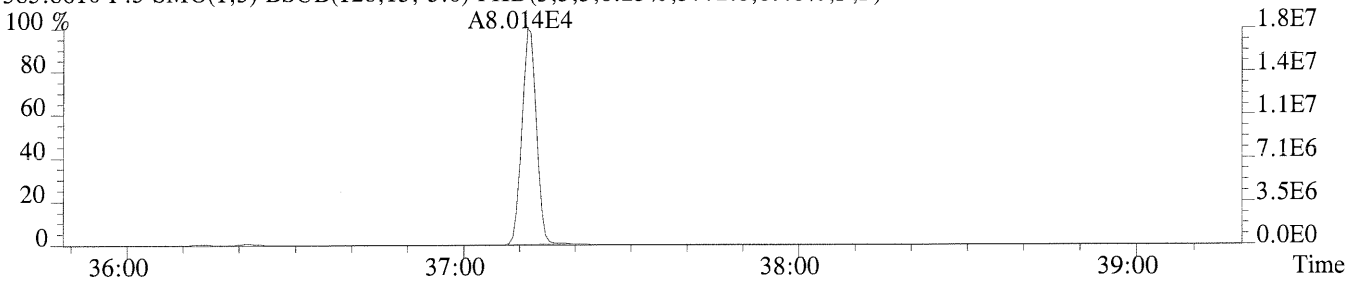
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3056.0,0.40%,F,F)



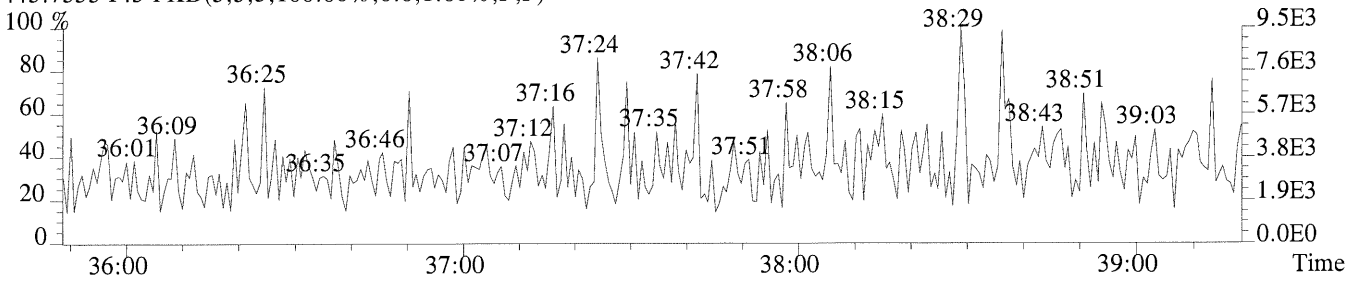
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2248.0,0.40%,F,F)



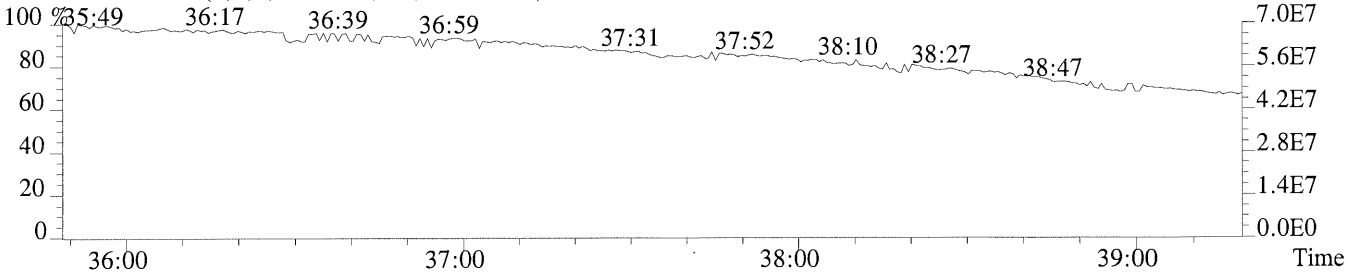
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3772.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

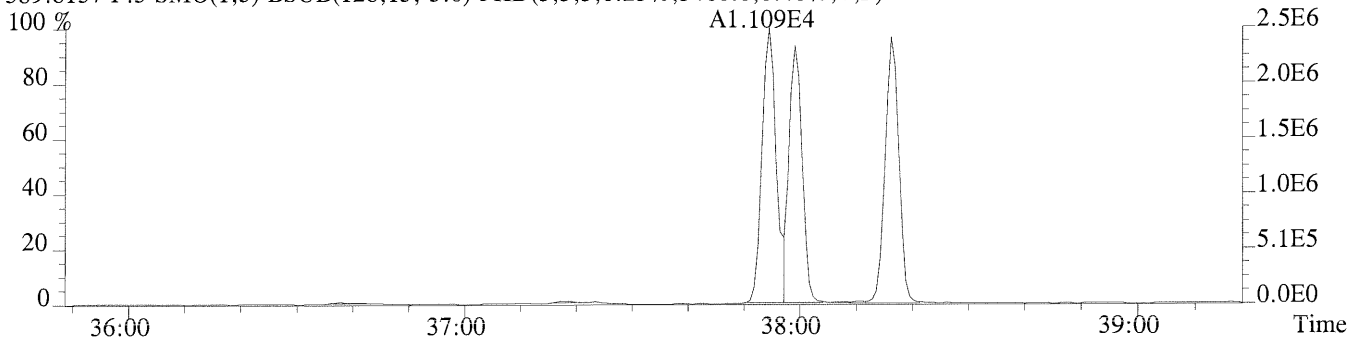


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

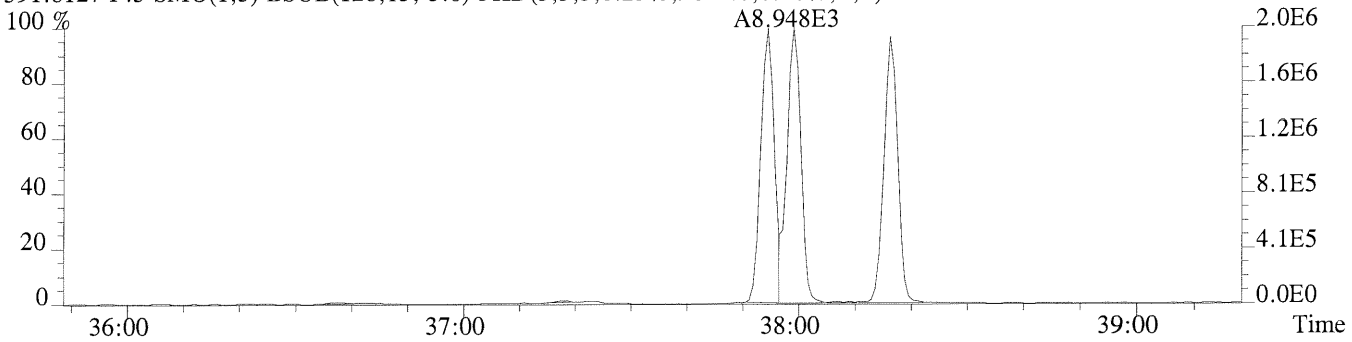


File:U129321 #1-318 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

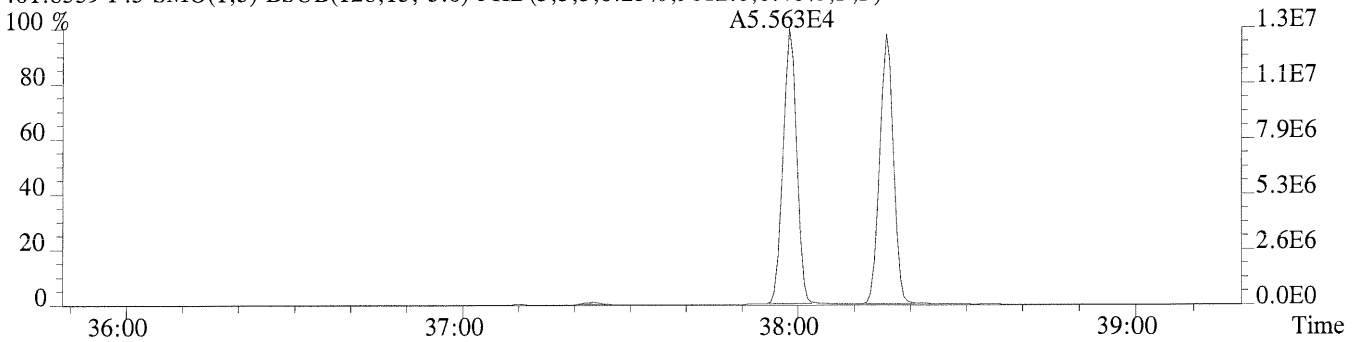
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5468.0,0.40%,F,F)



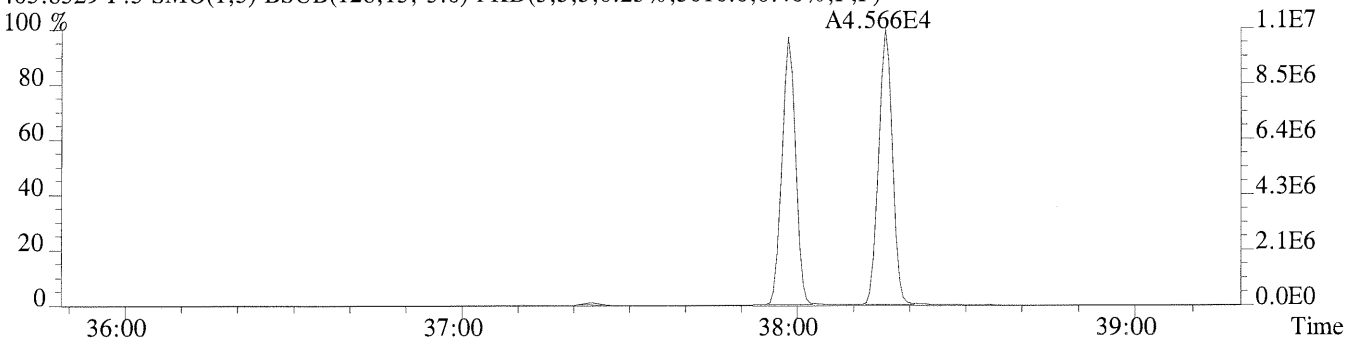
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2672.0,0.40%,F,F)



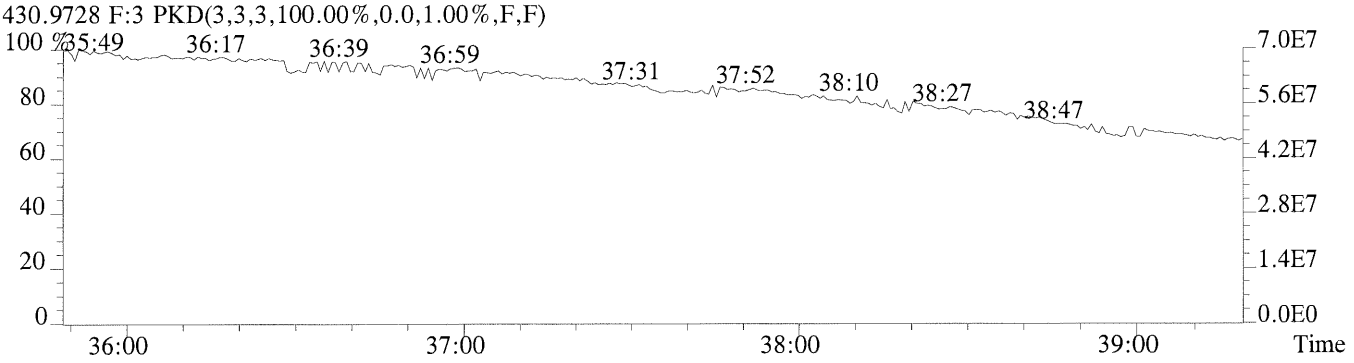
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,9612.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5616.0,0.40%,F,F)

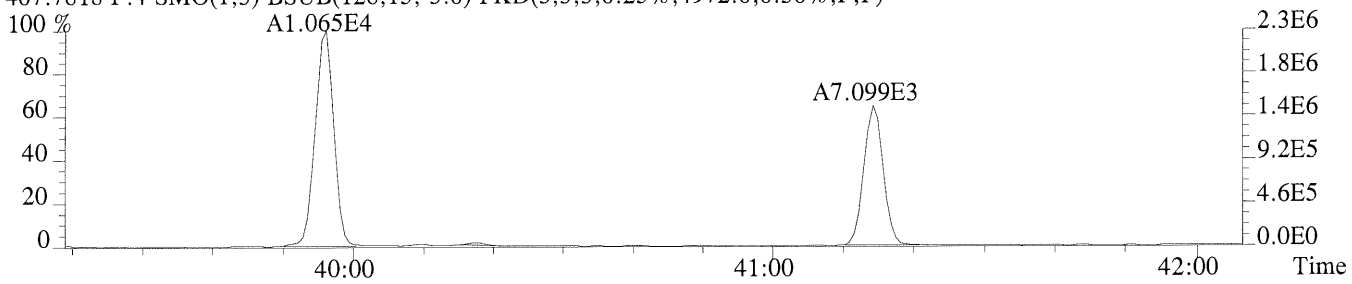


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

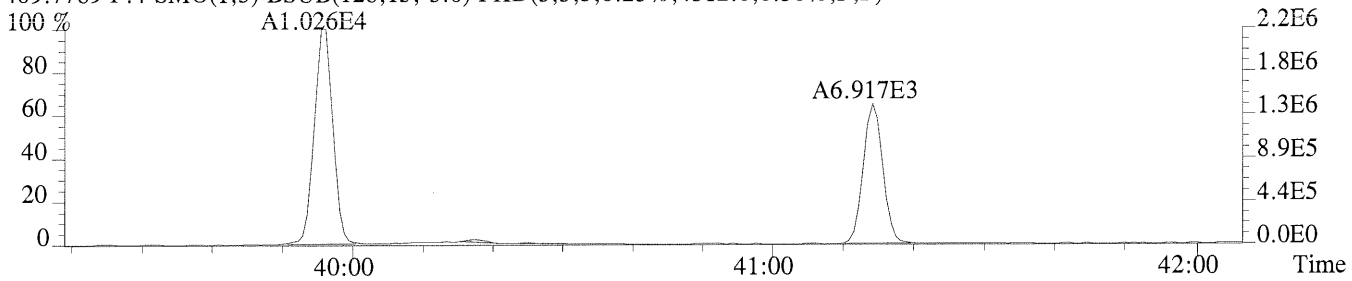


File:U129321 #1-254 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

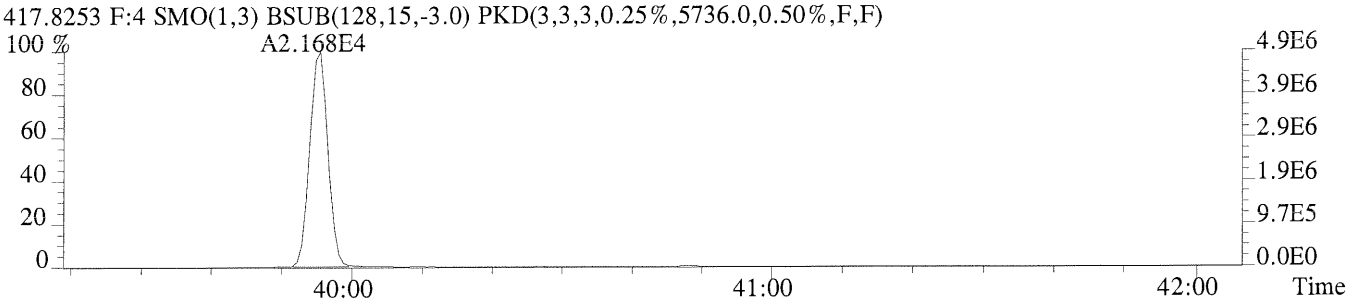
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4972.0,0.50%,F,F)



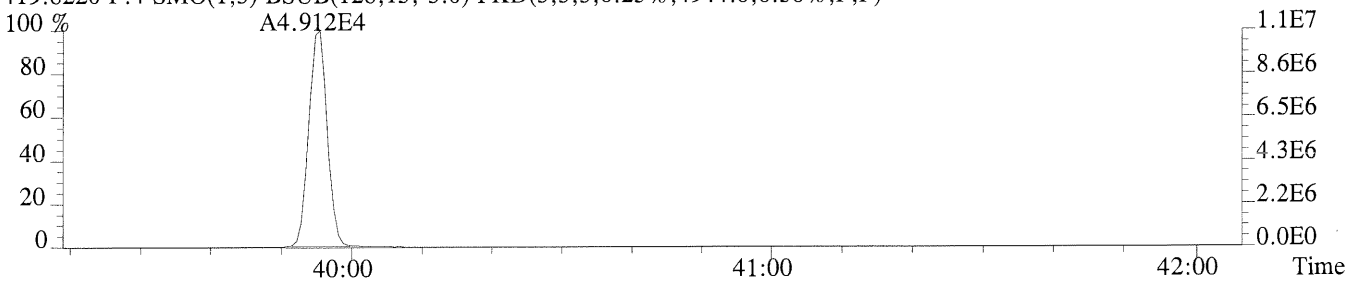
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4312.0,0.50%,F,F)



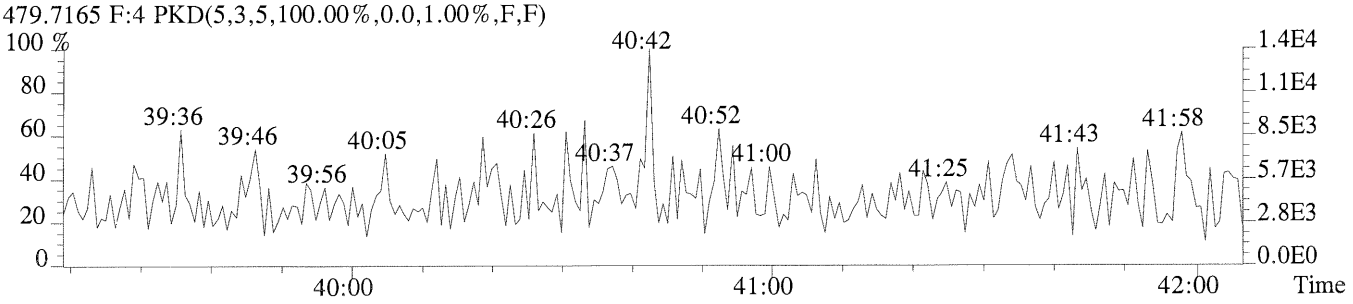
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5736.0,0.50%,F,F)



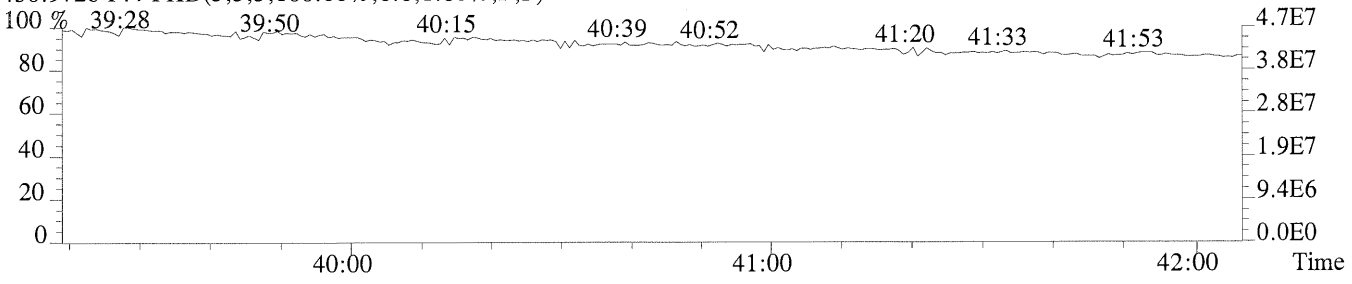
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4944.0,0.50%,F,F)



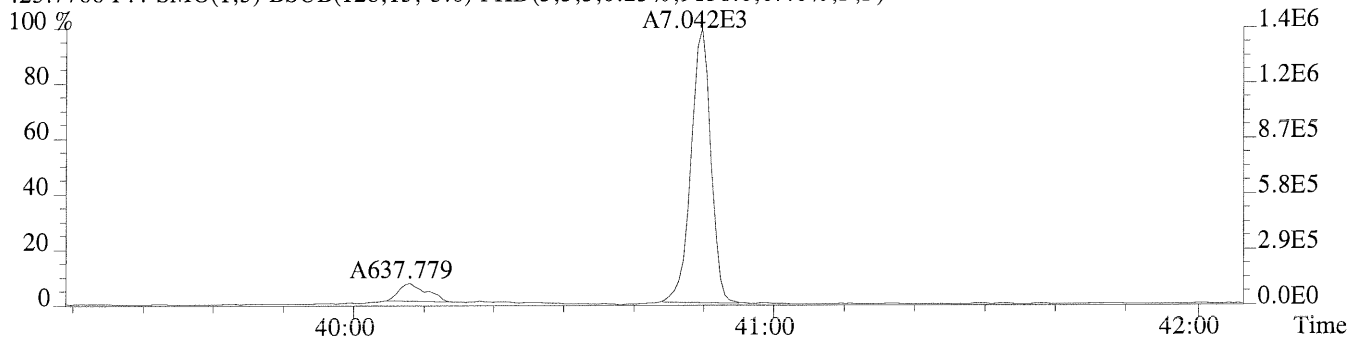
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



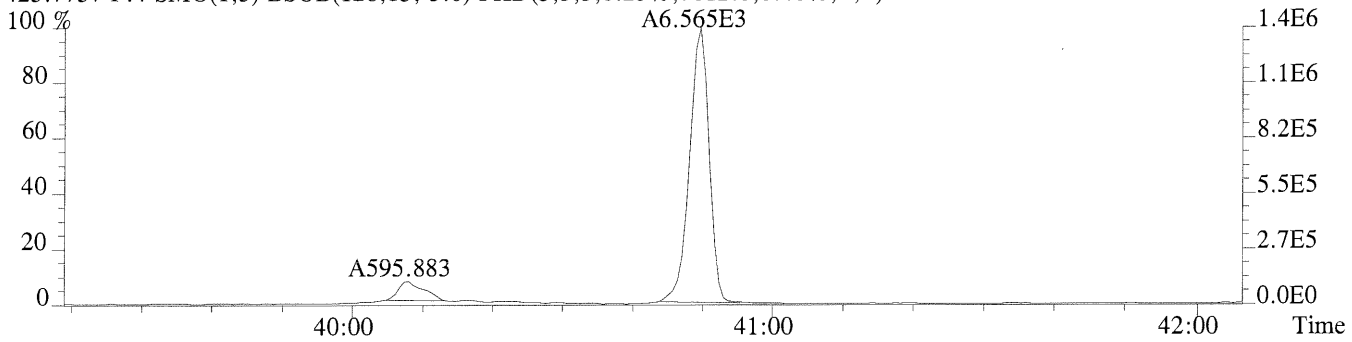
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



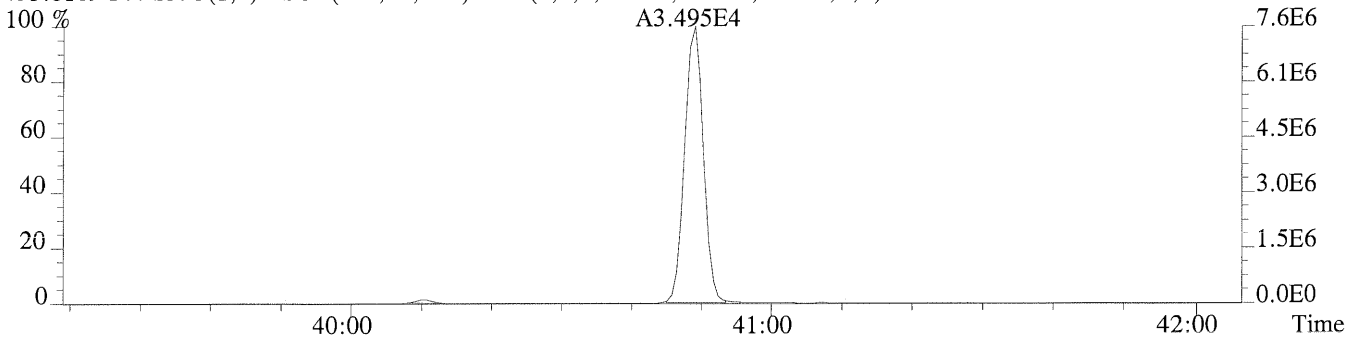
File:U129321 #1-254 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,9136.0,0.40%,F,F)



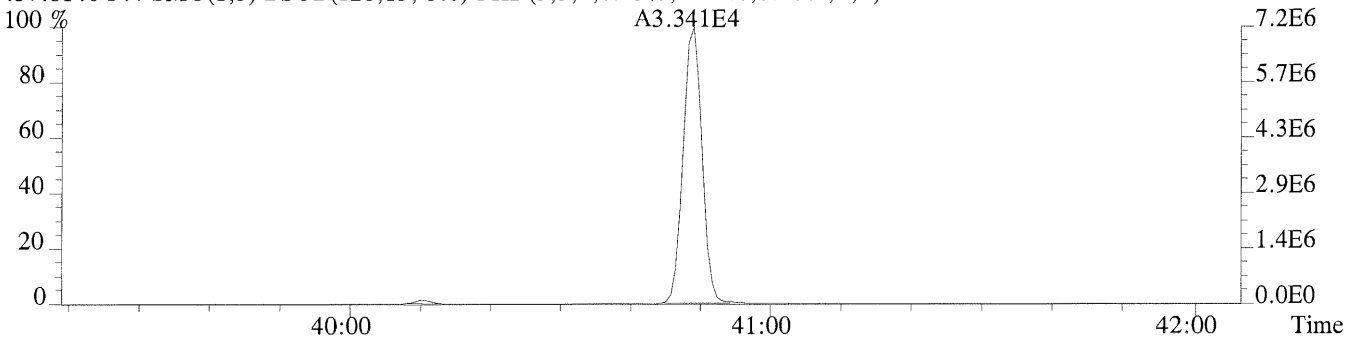
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,7612.0,0.40%,F,F)



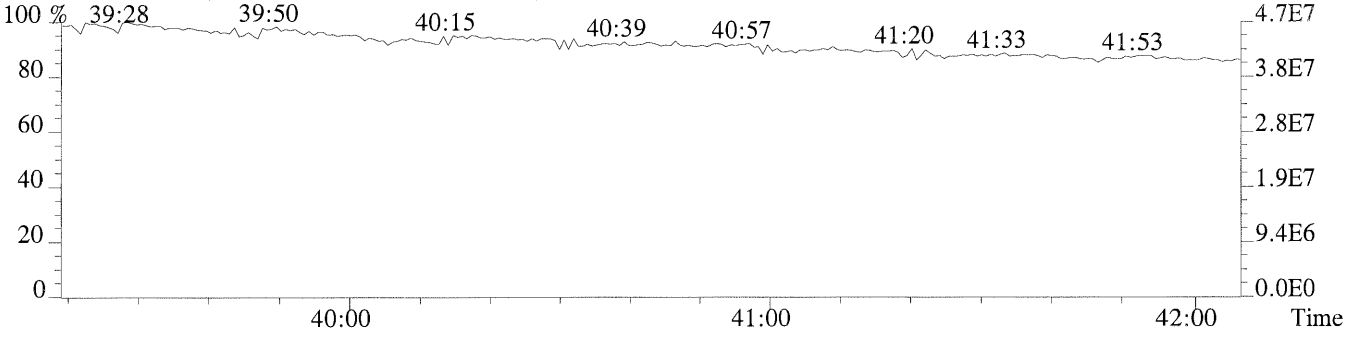
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2080.0,0.40%,F,F)



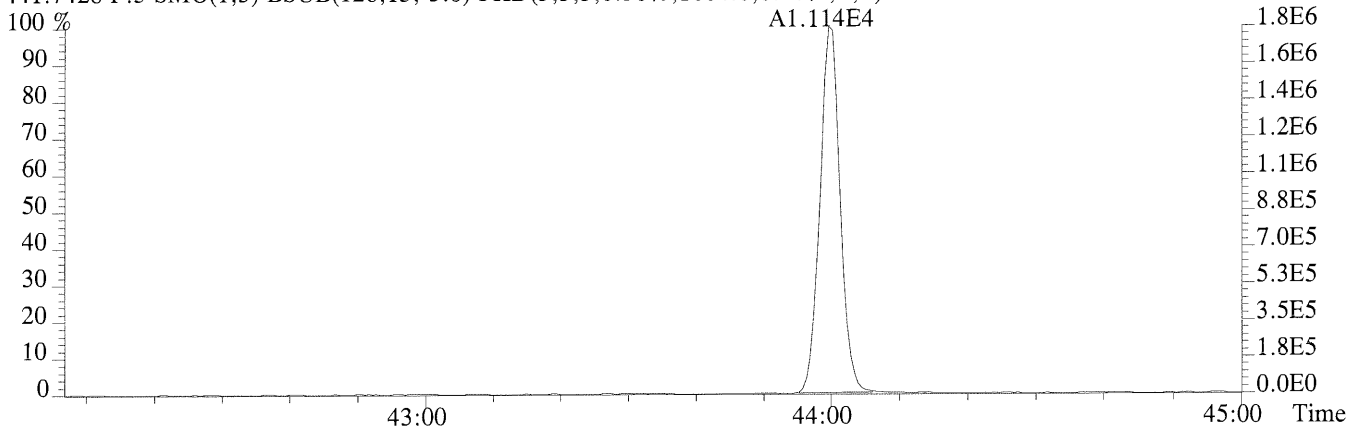
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1224.0,0.40%,F,F)



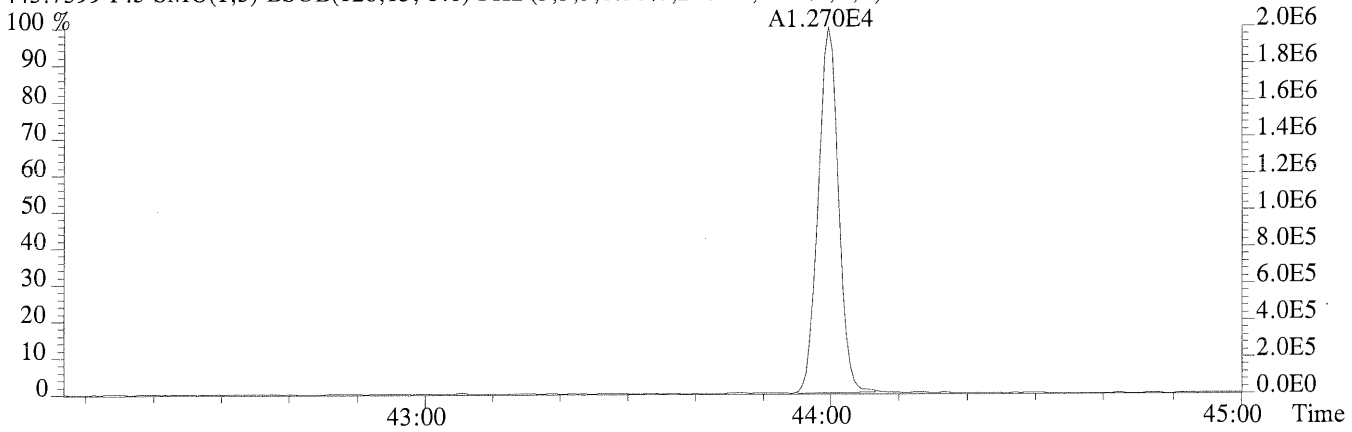
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



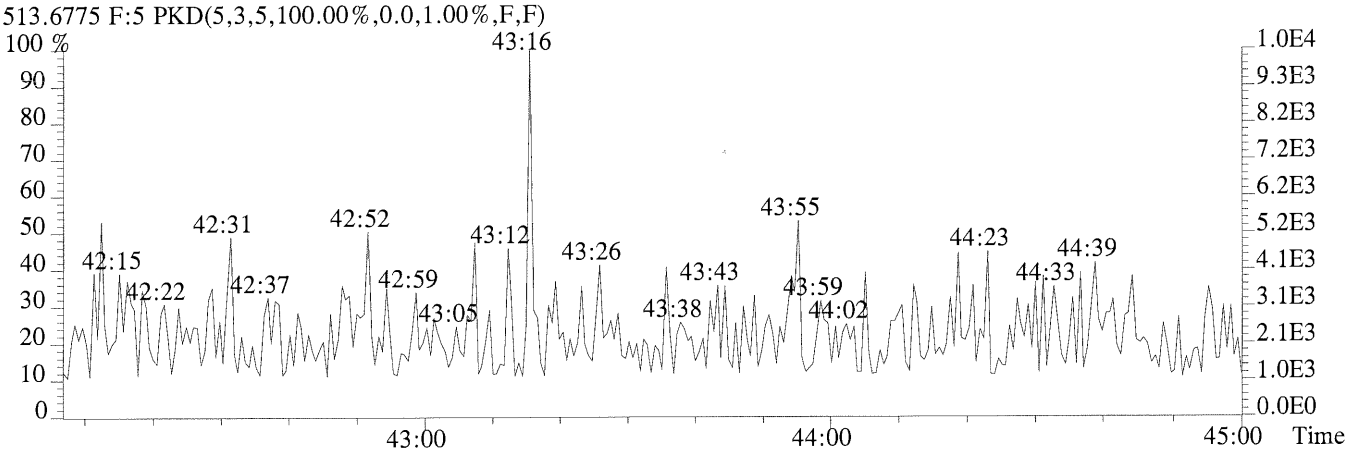
File:U129321 #1-319 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1664.0,0.40%,F,F)



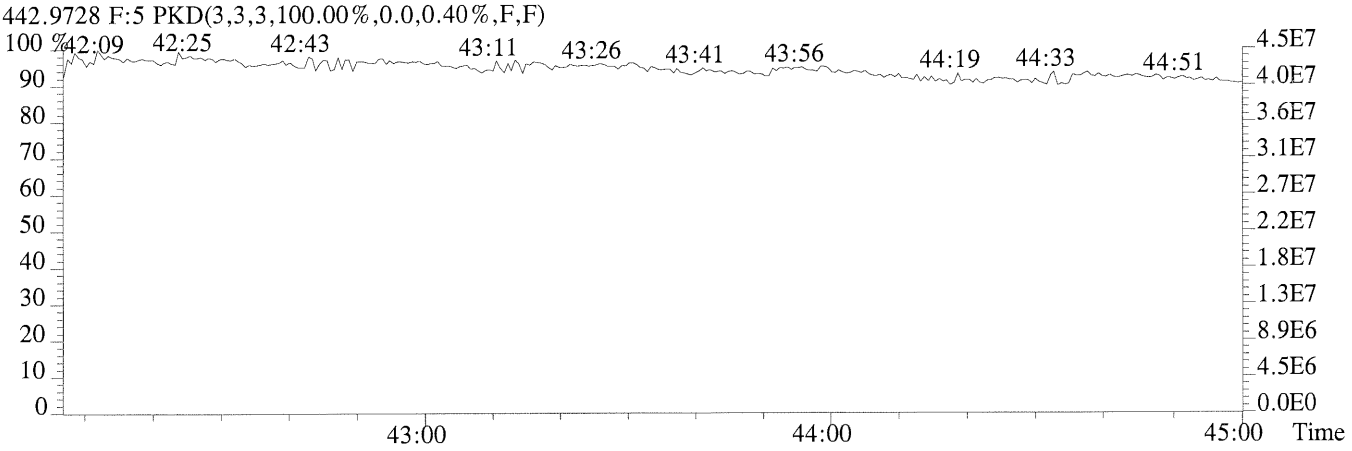
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2764.0,0.40%,F,F)



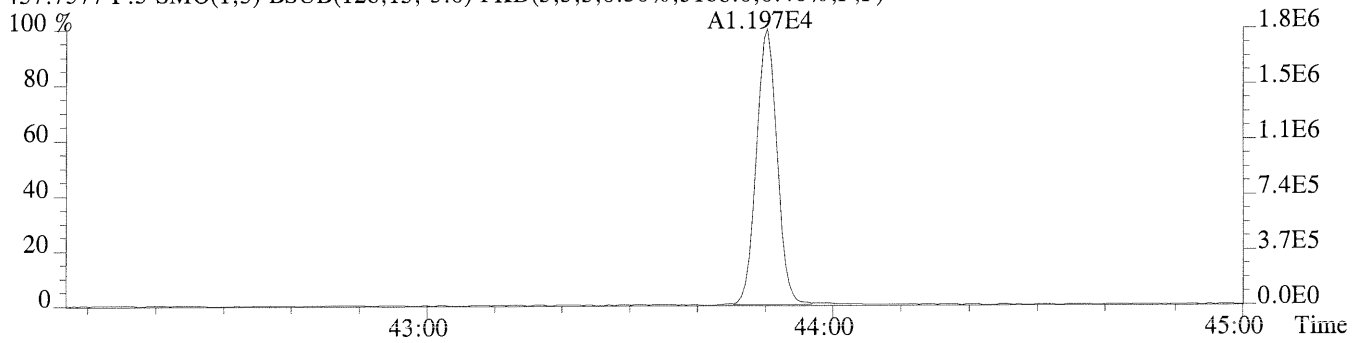
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



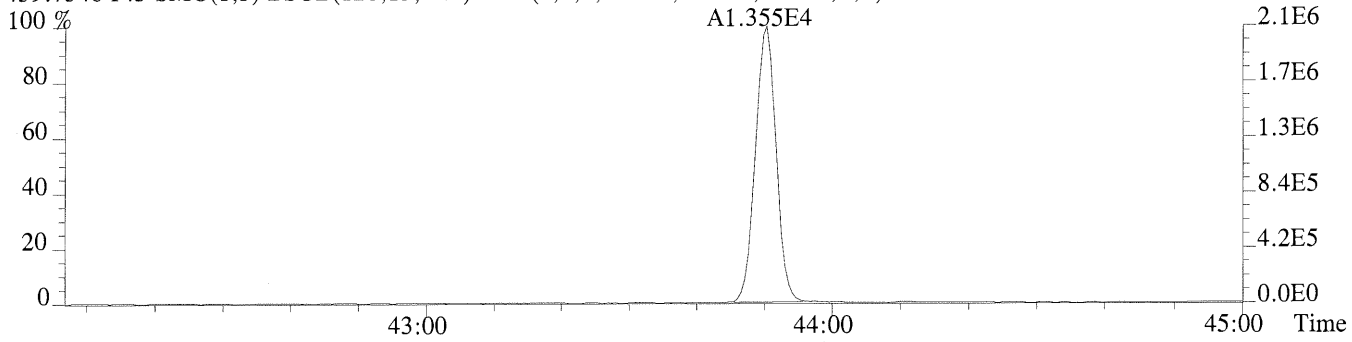
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



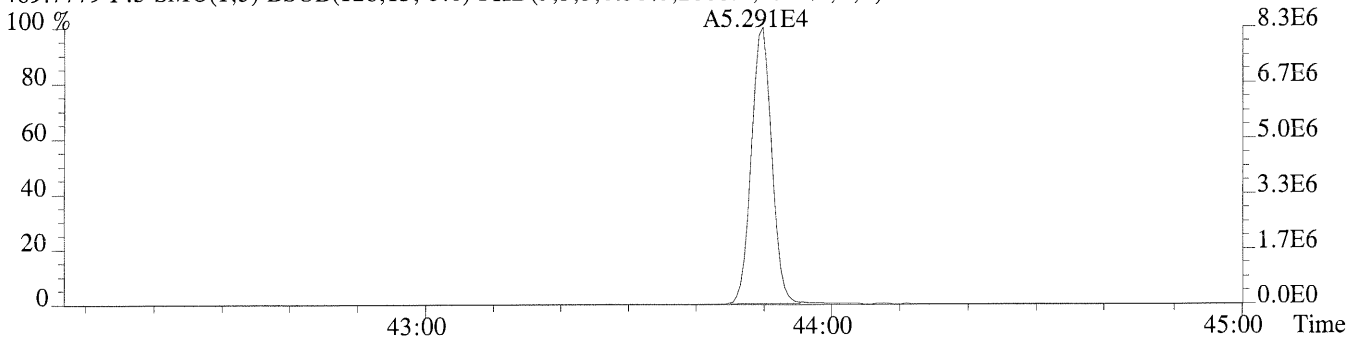
File:U129321 #1-319 Acq: 4-AUG-2008 18:03:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,3188.0,0.40%,F,F)



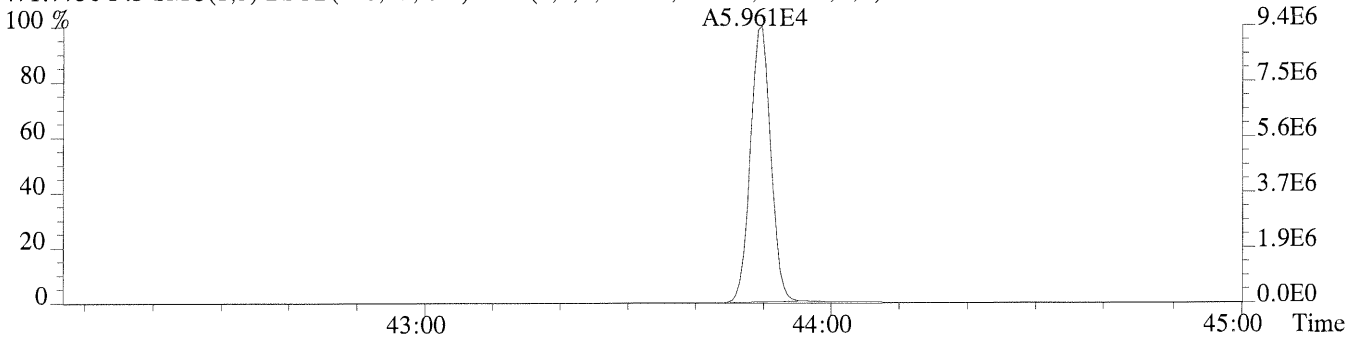
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,4236.0,0.40%,F,F)



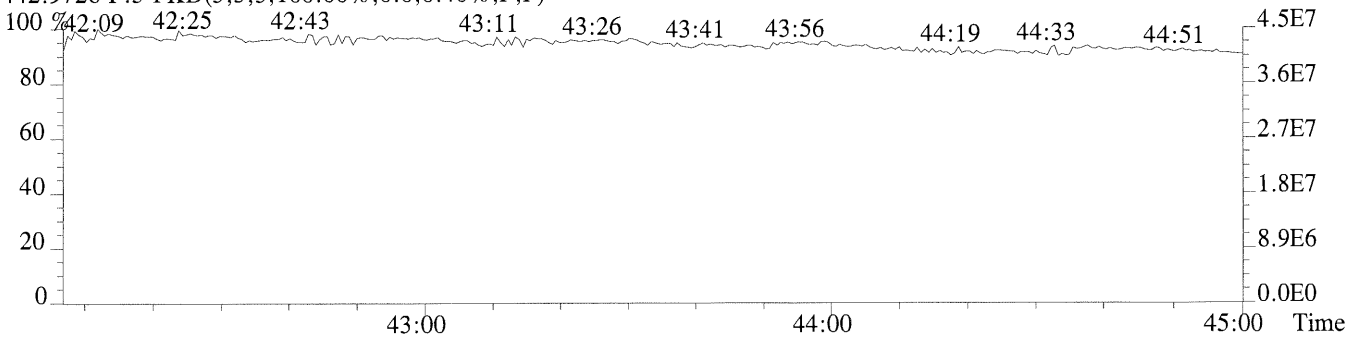
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2060.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1864.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



RW/ HRCC3 Daily Calibration QC Checklist

Calibration File Name: U217127 – U217137

Circle one: (Beginning) / (Ending)

Date: 08/14/08

Method: (8290) / Tetra / TCDD Only / TCDF Conf

Retention Window/Column Performance Check:	**Analyst**	**Second Check**
Windows labeled for first and last eluting compounds	✓	✓
Column performance shows less than or equal to 25% valley between column specific 2378 isomer and the closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or the closest eluters	✓	✓

HRCC3 Continuing Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
Signal-to-noise of all target analytes and associated labeled standards at least 2.5:1	✓	✓
Ending Calibration injected prior to end of 12 hour clock	✓	✓

Analyst: SH

Second QC: QC

8290 CCALQC 03/23/04

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: Columbia Analytical Services Contract:

Lab Code: TX01411 Case No.: Client No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Ultima

Init. Calib. Date: 12/10/07

Init. Calib.Times: 08:50

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSs) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		U217126	14-AUG-08	07:19:52
CCAL HRCC3		U217127	14-AUG-08	08:12:27
METHOD BLANK	EQ0800340-01	U217128	14-AUG-08	09:16:32
PAD 2-3N	E0800745-004RE	U217129	14-AUG-08	10:02:37
2N PAD INTERFACE	E0800745-005RE	U217130	14-AUG-08	10:50:14
07-29-08-MW-5 DMS	EQ0800336-04	U217131	14-AUG-08	11:37:53
DH 1,2,3	E0800746-001RE	U217132	14-AUG-08	12:40:29
310084	E0800764-001	U217133	14-AUG-08	13:26:55
LCS	EQ0800339-02	U217134	14-AUG-08	14:14:35
DLCS	EQ0800339-03	U217135	14-AUG-08	15:02:15
LCS	EQ0800314-02	U217136	14-AUG-08	15:49:54
CCAL HRCC3	CCAL HRCC3	U217137	14-AUG-08	16:58:26

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services inc.

An Employee Owned Company

Acq Method: 8290 CAS/1613 Result File: H:U217127RES

GC Method: 8290 CAS/1613 EDD File: _____

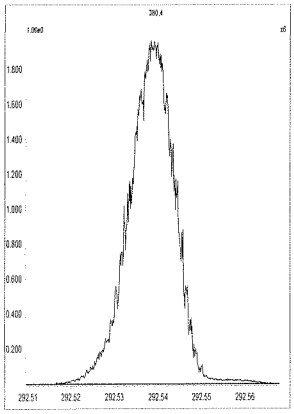
Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
08/14/08	07:00		HRMS Check					
	07:19	U217126	WINDOW DEFINE	D4-90-2				
	08:12	U217127	CCAL HRCC3	D8-2-2A				
	09:16	~~U217128~~ U217128	EQ0800340-01MB	METHOD BLANK				
	10:02	~~U217129~~ U217129	EQ0800745-004RE	PAD 2-3N				
	10:50	U217130	EQ0800745-005RE	2ND PAD INTERFACE				
	11:37	U217131	EQ0800336-04DMS	07-29-08-MW-5 DMS				
	12:40	U217132	EQ0800746-001RE	DH 1, 2, 3				
	13:26	U217133	EQ0800764-001	310084				
	14:14	U217134	EQ0800339-02LCS	LCS				
	15:02	U217135	EQ0800339-03DLCS	DLCS				
	15:49	U217136	EQ0800314-02LCS	LCS				
	16:58	U217137	CCAL HRCC3	D8-2-2A				
	18:08	_____	HRMS CHECK					
		U217138	WINDOW DEFINE	D4-90-2				
		U217139	EQ0800339-01MB					

Reviewed by: _____

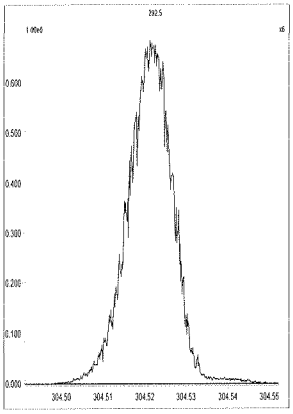
File: Experiment: 8290CAS.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Thursday, August 14, 2008 07:17:56 Central Daylight Time

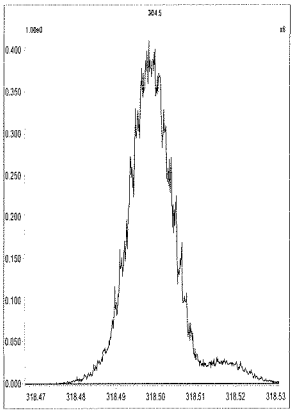
M 292.9824 R 12196



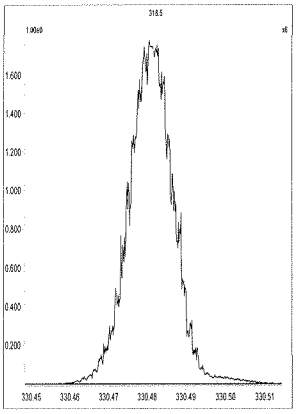
M 304.9824 R 12374



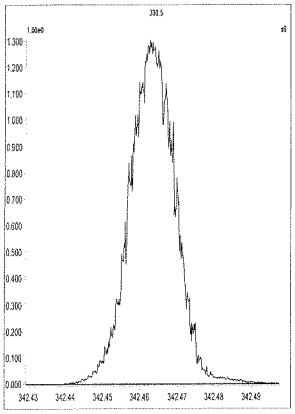
M 318.9792 R 9026



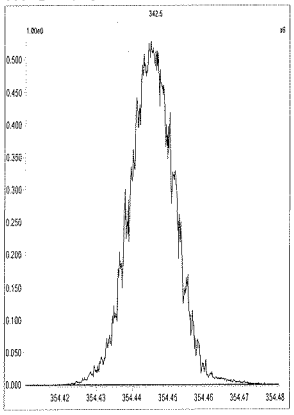
M 330.9792 R 12625



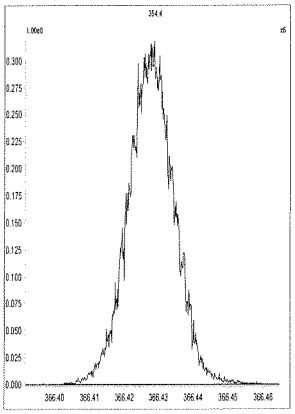
M 342.9792 R 12378



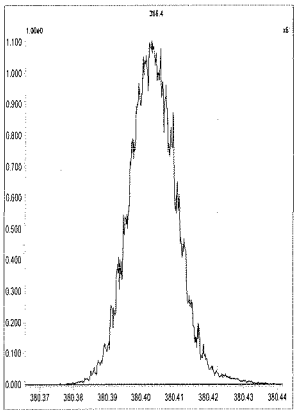
M 354.9792 R 12437



M 366.9792 R 11906



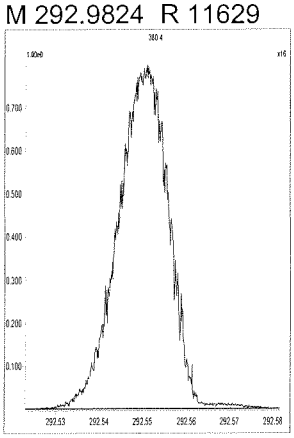
M 380.9760 R 11467



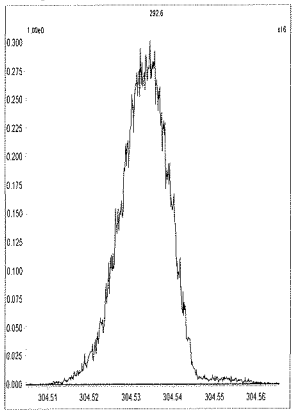
File: Experiment: 8290CAS.exp Reference: Pfk.ref Function: 1 @ 200 (ppm)

Printed: Thursday, August 14, 2008 18:08:35 Central Daylight Time

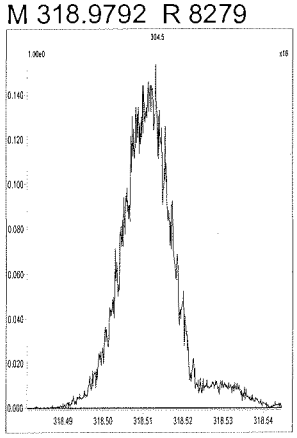
M 292.9824 R 11629



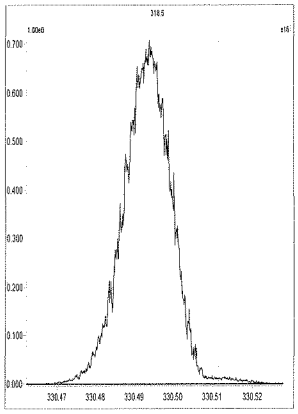
M 304.9824 R 11414



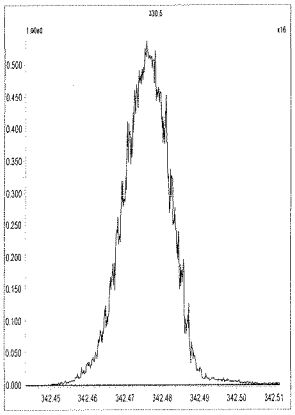
M 318.9792 R 8279



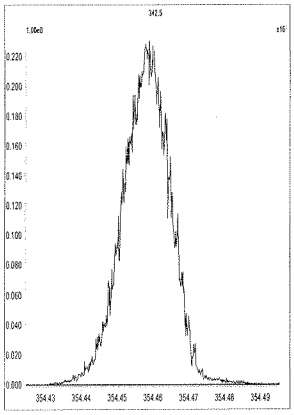
M 330.9792 R 11904



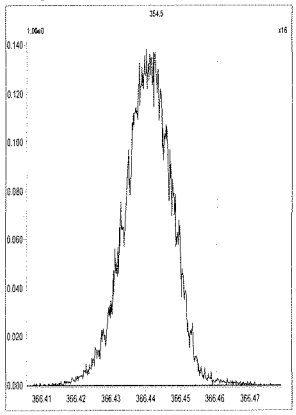
M 342.9792 R 11517



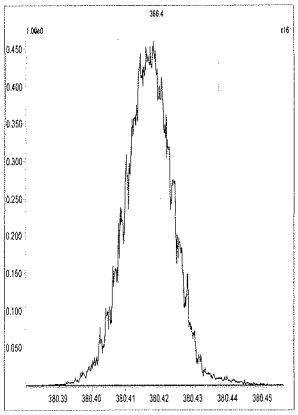
M 354.9792 R 11792



M 366.9792 R 11571



M 380.9760 R 11521



5DFA

WINDOW DEFINING MIX SUMMARY

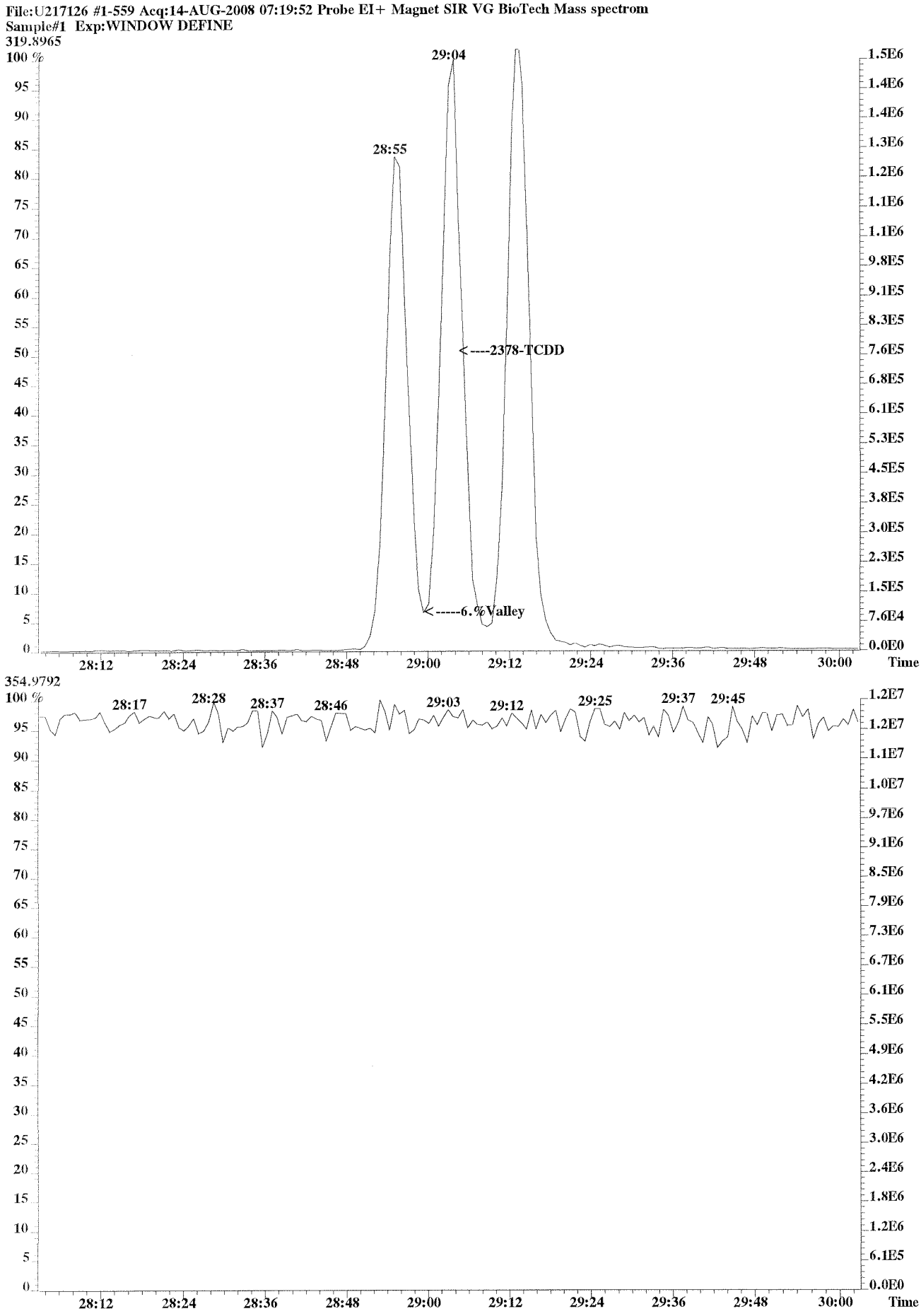
CLIENT ID:

WDM

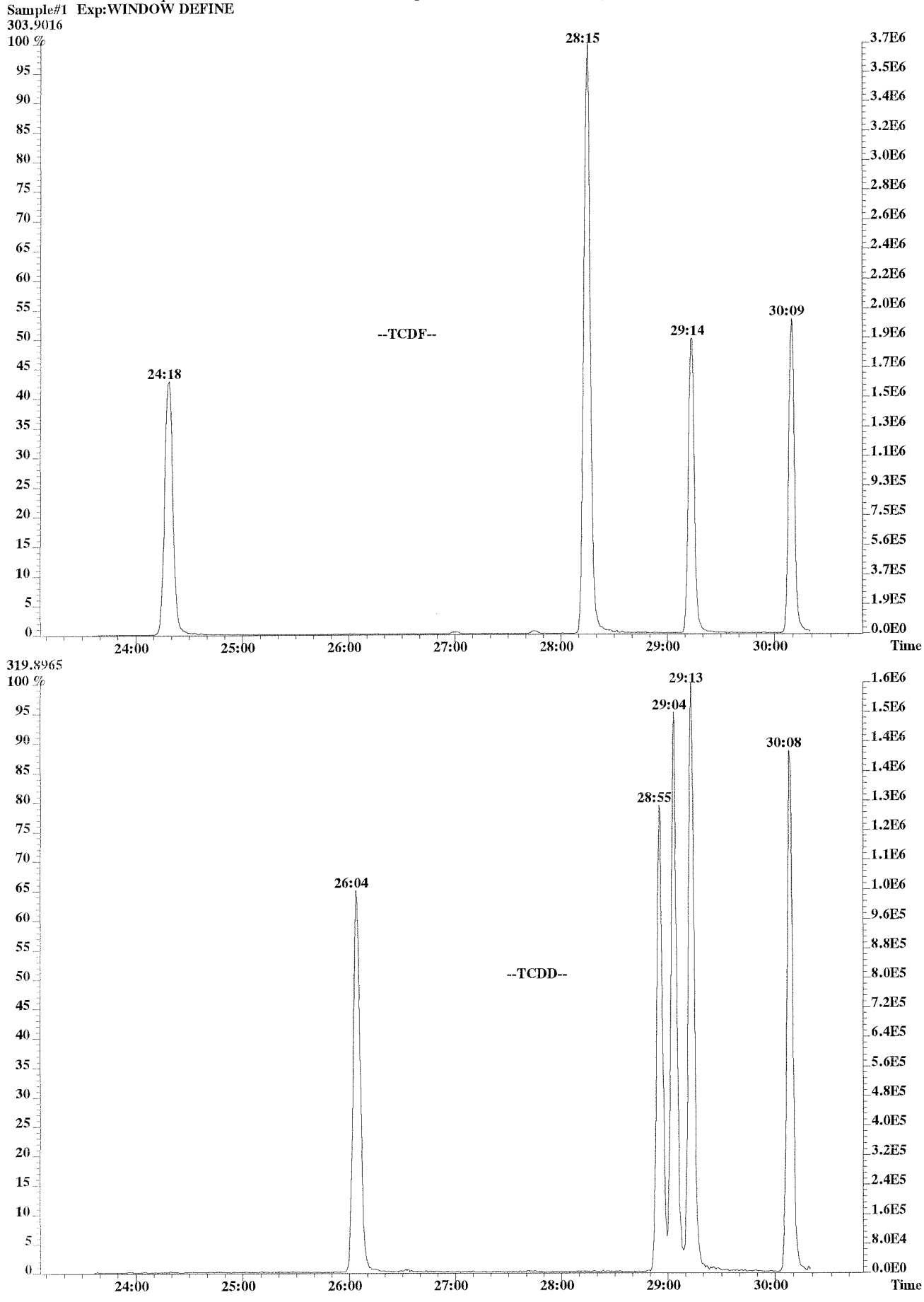
Lab Name: COLUMBIA ANALYTICAL SERVICES
Lab Code: CAS Case No.: _____ SDG No.:
GC Column: DB-5 ID: 0.25 (mm) Lab File ID: U217126
Date Analyzed: 14-AUG-2008
Time Analyzed: 07:19:52

Congener	Retention Time First Eluting	Retention Time Last Eluting
TCDF	24:18	30:09
TCDD	26:04	30:08
PeCDF	30:25	34:15
PeCDD	31:46	34:05
HxCDF	35:07	37:25
HxCDD	35:37	37:06
HpCDF	38:49	40:08
HpCDD	39:04	39:43

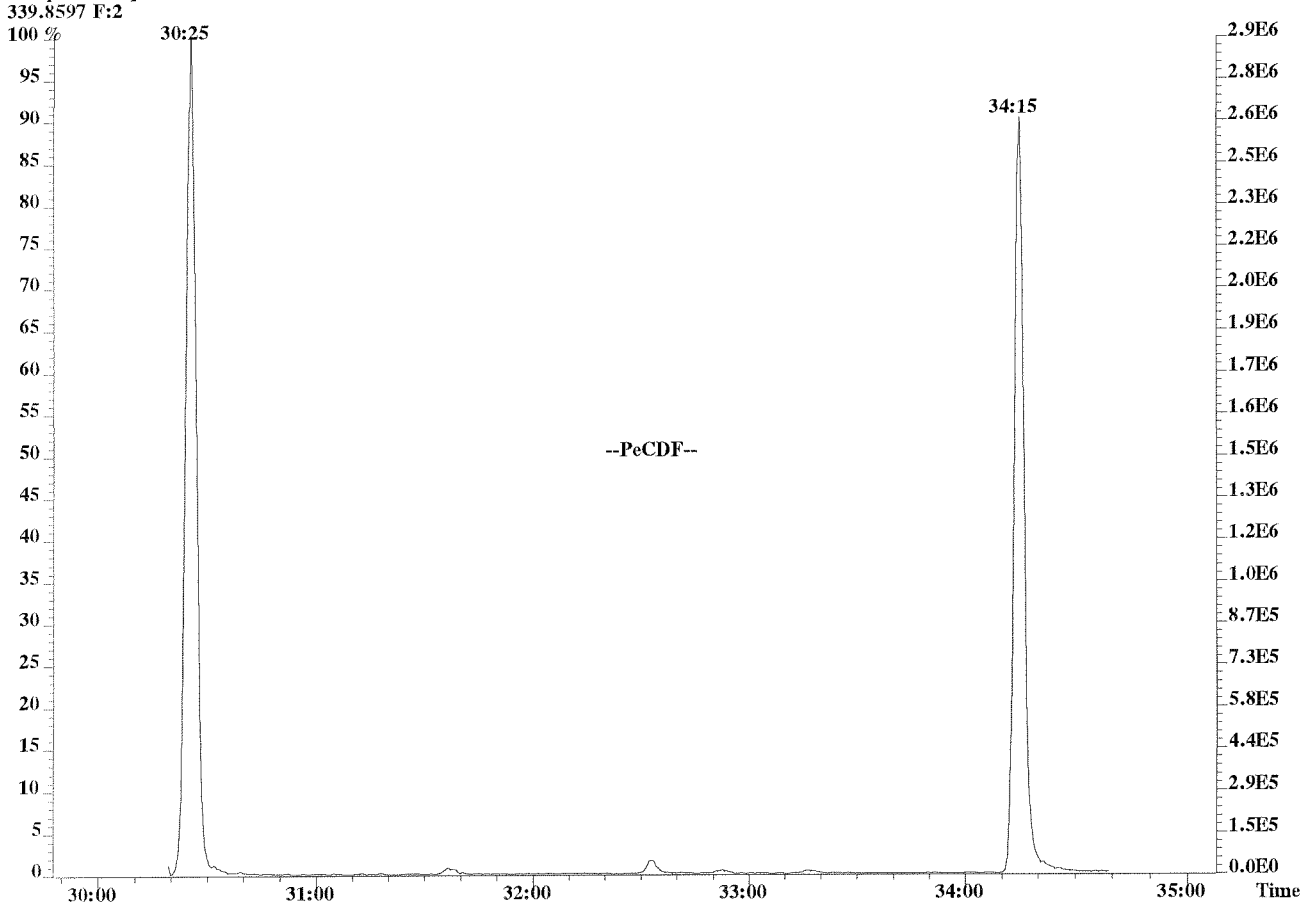
% Valley 2378-TCDD: 6. %


File:U217126 #1-559 Acq:14-AUG-2008 07:19:52 Probe EI+ Magnet SIR VG BioTech Mass spectrom
Sample#1 Exp:WINDOW DEFINE
319.8965
100 %
29:04
28:55
<----2378-TCDD
<-----6.%Valley
28:12
28:24
28:36
28:48
29:00
29:12
29:24
29:36
29:48
30:00
Time
354.9792
100 %
28:17
28:28
28:37
28:46
29:03
29:12
29:25
29:37
29:45
28:12
28:24
28:36
28:48
29:00
29:12
29:24
29:36
29:48
30:00
Time

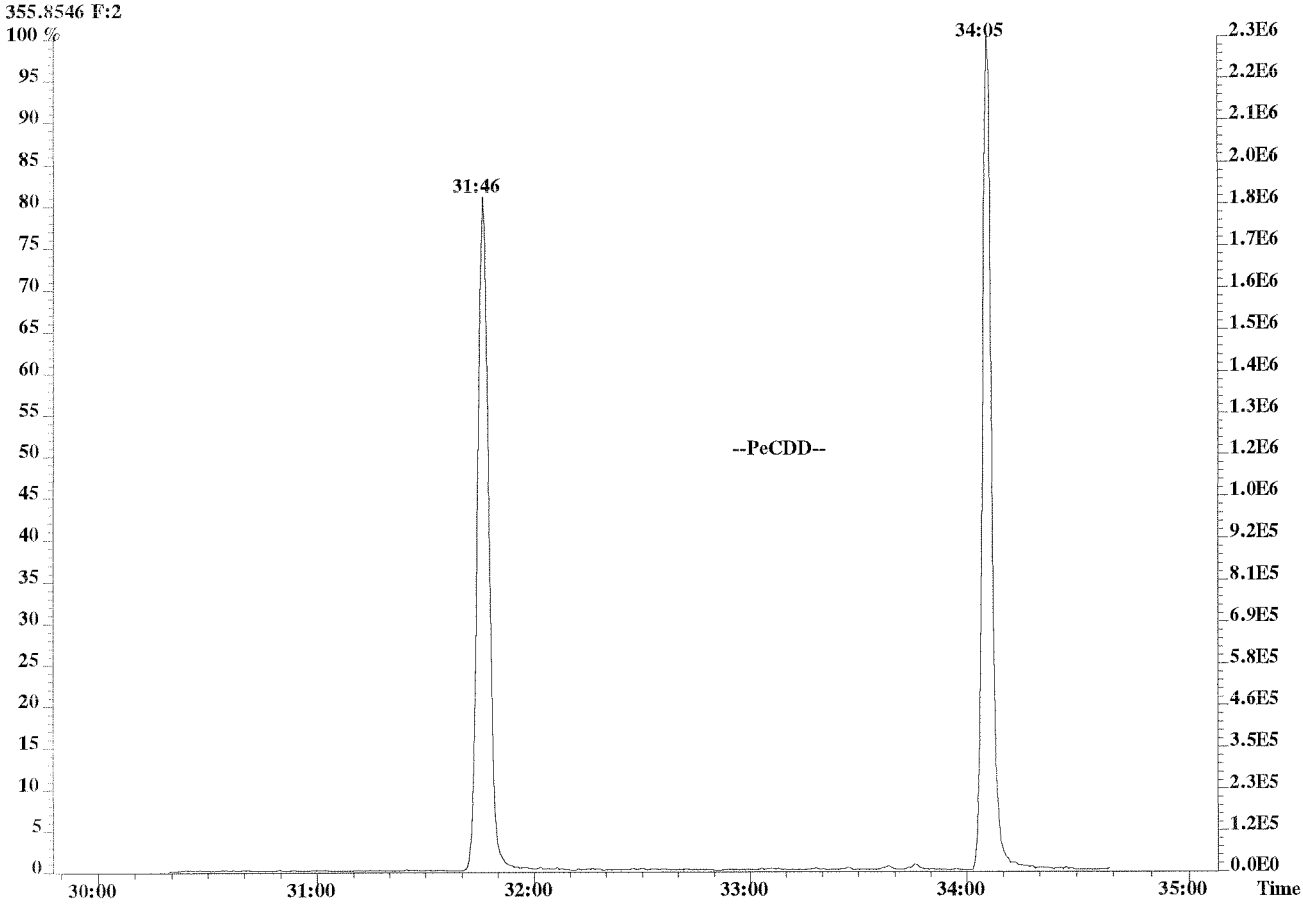
File:U217126 #1-559 Acq:14-AUG-2008 07:19:52 Probe EI+ Magnet SIR VG BioTech Mass spectrom
Sample#1 Exp:WINDOW DEFINE



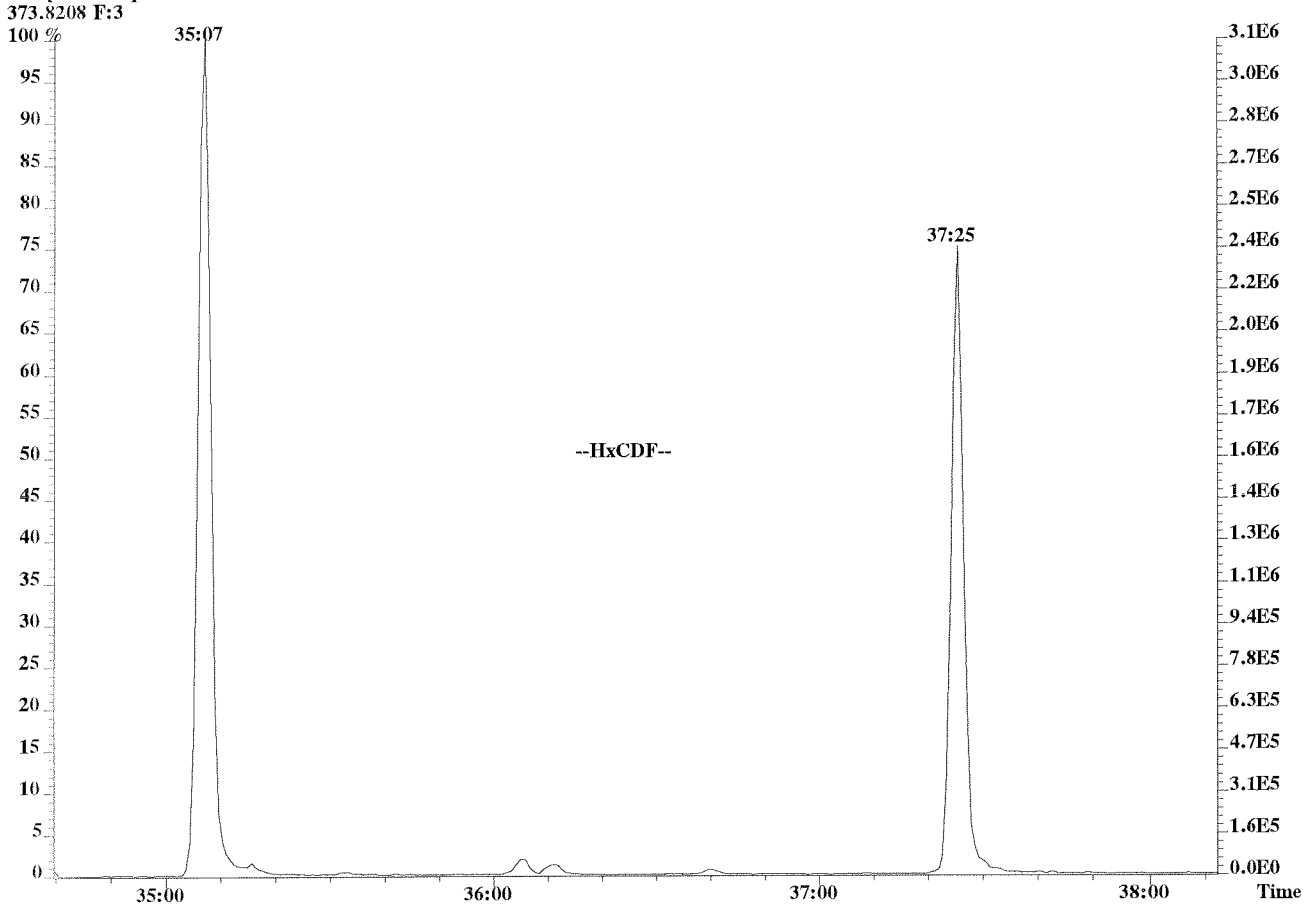
File:U217126 #1-394 Acq:14-AUG-2008 07:19:52 Probe EI+ Magnet SIR VG BioTech Mass spectrom
SampIe#1 Exp:WINDOW DEFINE
339.8597 F:2

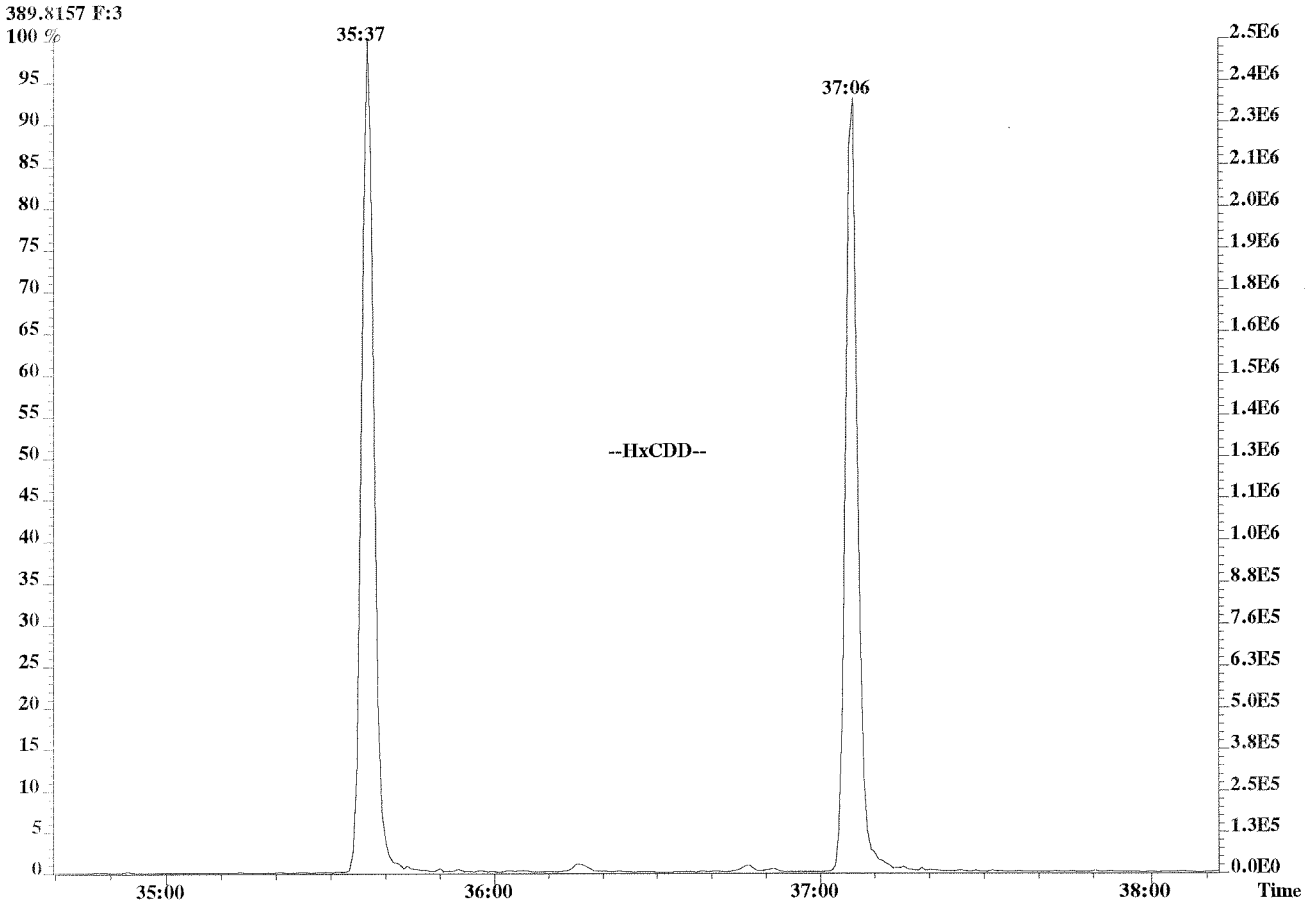


355.8546 F:2

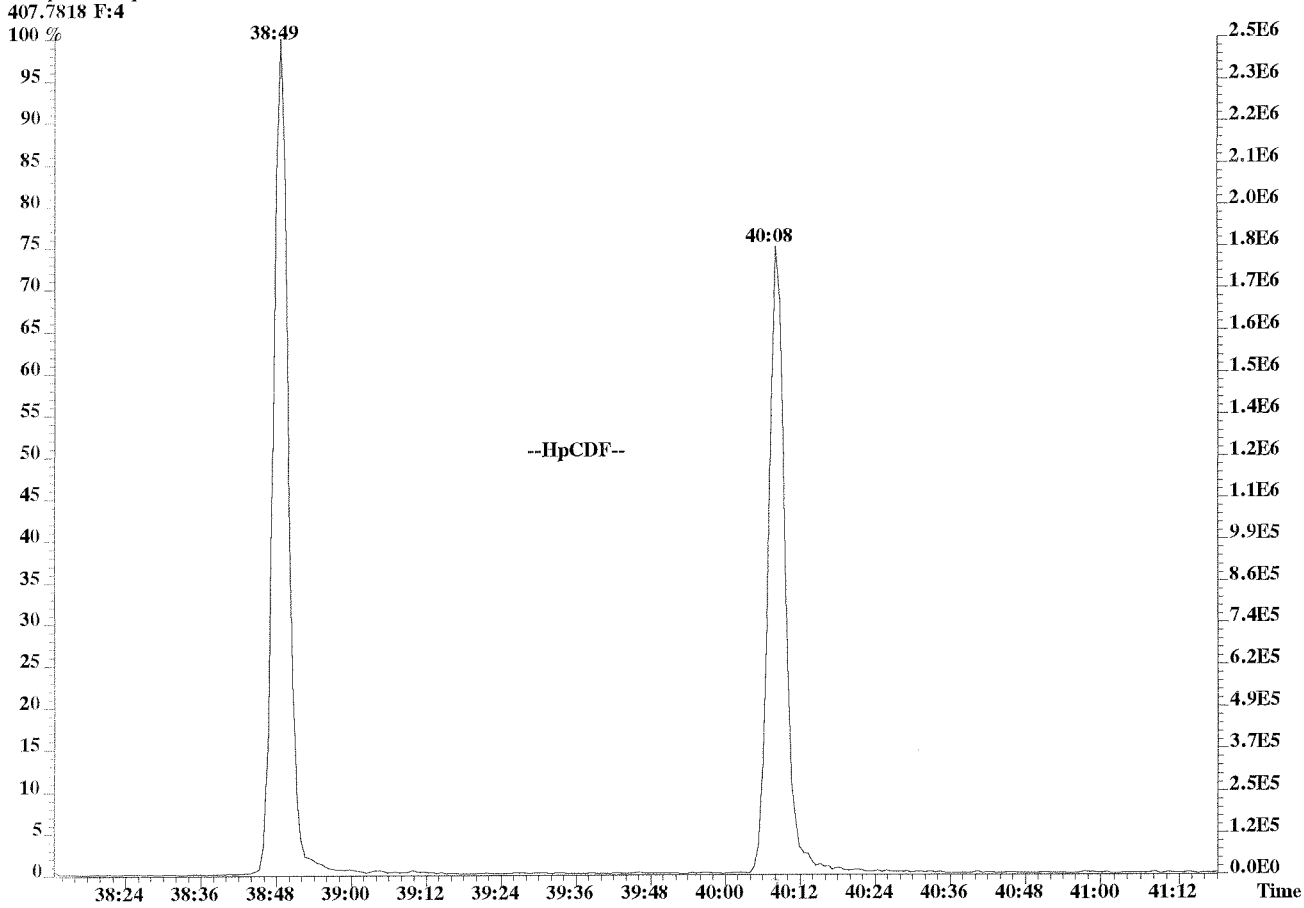


File:U217126 #1-322 Acq:14-AUG-2008 07:19:52 Probe EI+ Magnet SIR VG BioTech Mass spectrom
Sample#1 Exp:WINDOW DEFINE

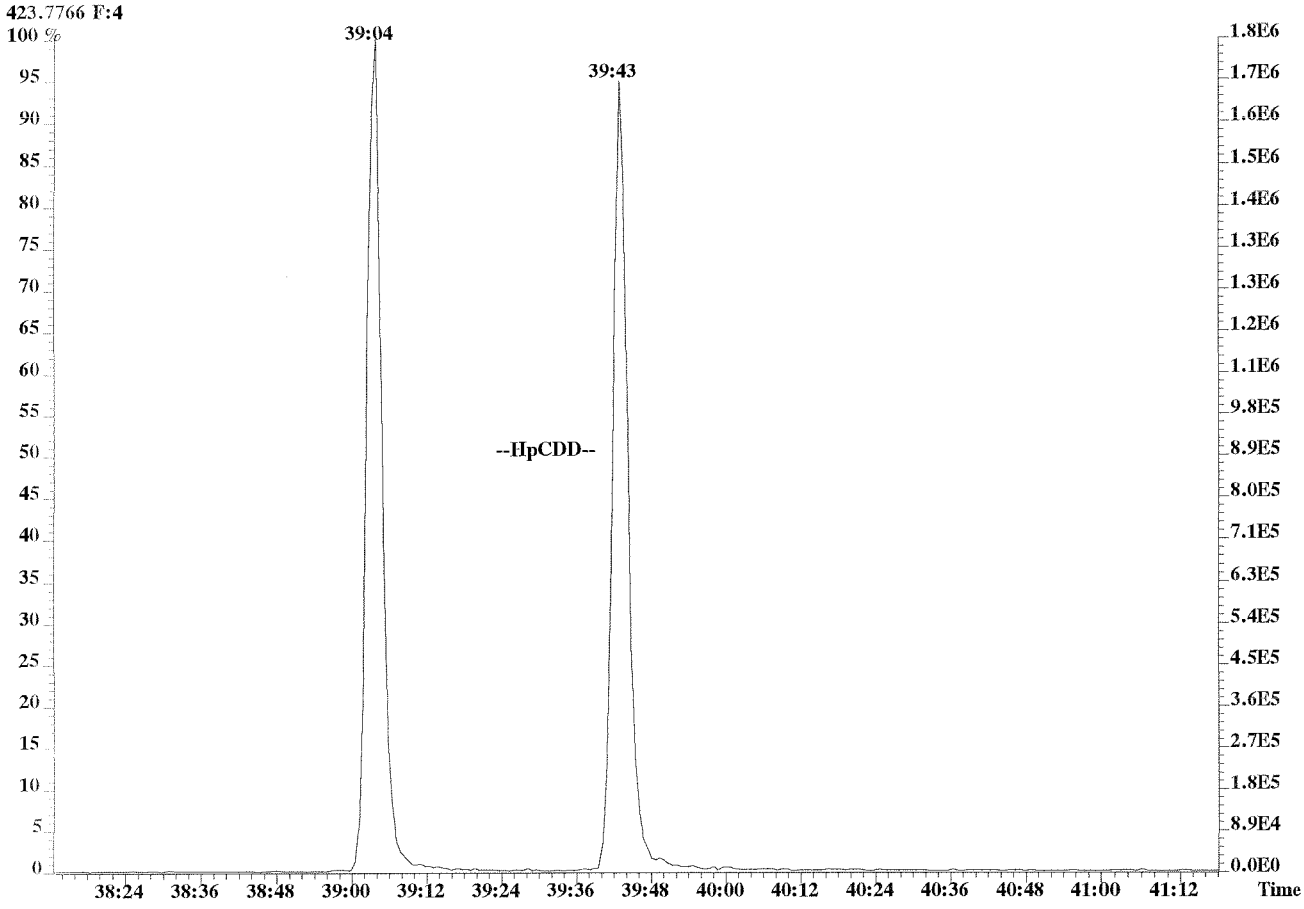




File:U217126 #1-281 Acq:14-AUG-2008 07:19:52 Probe EI+ Magnet SIR VG BioTech Mass spectrom
Sample#1 Exp:WINDOW DEFINE
407.7818 F:4



423.7766 F:4



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 12/10/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: U217127 Analysis Date: 14-AUG-08 Time: 08:12:27

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.77	0.65-0.89	0.99	0.93	7.13
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.32-1.78	0.93	0.90	4.04
1,2,3,4,7,8-HxCDD	M+2/M+4	1.24	1.05-1.43	0.96	1.03	-6.51
1,2,3,6,7,8-HxCDD	M+2/M+4	1.29	1.05-1.43	1.05	1.04	1.37
1,2,3,7,8,9-HxCDD	M+2/M+4	1.27	1.05-1.43	1.03	1.03	0.22
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	0.88-1.20	0.96	0.92	3.56
OCDD	M+2/M+4	0.88	0.76-1.02	1.03	1.03	0.38
2,3,7,8-TCDF	M/M+2	0.77	0.65-0.89	0.97	0.91	6.56
1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	0.95	0.90	6.01
2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	1.00	0.91	9.86
1,2,3,4,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	1.25	1.15	8.72
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	1.22	1.11	10.18
1,2,3,7,8,9-HxCDF	M+2/M+4	1.23	1.05-1.43	1.05	0.89	17.20
2,3,4,6,7,8-HxCDF	M+2/M+4	1.23	1.05-1.43	1.13	1.05	8.19
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.03	0.88-1.20	1.45	1.40	3.80
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.88-1.20	1.19	1.07	11.25
OCDF	M+2/M+4	0.90	0.76-1.02	1.22	1.16	5.62

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/- 20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 12/10/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: U217127 Analysis Date: 14-AUG-08 Time: 08:12:27

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.78	0.65-0.89	1.02	1.02	-0.39
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.54	1.32-1.78	0.97	0.97	0.07
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	0.94	0.99	-5.22
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	0.85	0.89	-4.99
13C-OCDD	M+2/M+4	0.90	0.76-1.02	1.03	0.96	6.62
13C-2,3,7,8-TCDF	M/M+2	0.78	0.65-0.89	1.38	1.32	3.84
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.57	1.32-1.78	1.34	1.37	-2.66
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.43-0.59	1.12	1.27	-12.48
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	0.85	0.91	-6.82
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				1.04	0.96	7.88

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #6 Filename U217127 #1 Samp: 1 Inj: 1 Acquired: 14-AUG-08 08:12:27
Processed: 14-AUG-08 14:56:46 Sample ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:13	7.808e+03	1.014e+04	0.77	yes	no	0.91
2	Unk	1,2,3,7,8-PeCDF	32:32	2.616e+04	1.663e+04	1.57	yes	no	0.90
3	Unk	2,3,4,7,8-PeCDF	33:16	2.767e+04	1.748e+04	1.58	yes	no	0.91
4	Unk	1,2,3,4,7,8-HxCDF	36:04	2.386e+04	1.941e+04	1.23	yes	no	1.15
5	Unk	1,2,3,6,7,8-HxCDF	36:10	2.328e+04	1.876e+04	1.24	yes	no	1.11
6	Unk	2,3,4,6,7,8-HxCDF	36:39	2.155e+04	1.747e+04	1.23	yes	no	1.05
7	Unk	1,2,3,7,8,9-HxCDF	37:21	1.993e+04	1.625e+04	1.23	yes	no	0.89
8	Unk	1,2,3,4,6,7,8-HpCDF	38:48	1.927e+04	1.868e+04	1.03	yes	no	1.40
9	Unk	1,2,3,4,7,8,9-HpCDF	40:08	1.576e+04	1.531e+04	1.03	yes	no	1.07
10	Unk	OCDF	42:57	3.694e+04	4.086e+04	0.90	yes	no	1.16
11	Unk	2,3,7,8-TCDD	29:03	5.921e+03	7.719e+03	0.77	yes	no	0.93
12	Unk	1,2,3,7,8-PeCDD	33:37	1.877e+04	1.181e+04	1.59	yes	no	0.90
13	Unk	1,2,3,4,7,8-HxCDD	36:46	1.539e+04	1.245e+04	1.24	yes	no	1.03
14	Unk	1,2,3,6,7,8-HxCDD	36:51	1.715e+04	1.333e+04	1.29	yes	no	1.04
15	Unk	1,2,3,7,8,9-HxCDD	37:08	1.663e+04	1.312e+04	1.27	yes	no	1.03
16	Unk	1,2,3,4,6,7,8-HpCDD	39:43	1.285e+04	1.219e+04	1.05	yes	no	0.92
17	Unk	OCDD	42:47	3.081e+04	3.484e+04	0.88	yes	no	1.03
18	IS	13C-2,3,7,8-TCDF	28:13	4.071e+04	5.193e+04	0.78	yes	no	1.32
19	IS	13C-1,2,3,7,8-PeCDF	32:31	5.493e+04	3.502e+04	1.57	yes	no	1.37
20	IS	13C-1,2,3,4,7,8-HxCDF	36:04	5.931e+04	1.132e+05	0.52	yes	no	1.27
21	IS	13C-1,2,3,4,6,7,8-HpCDF	38:48	4.064e+04	9.037e+04	0.45	yes	no	0.91
22	IS	13C-2,3,7,8-TCDD	29:01	3.015e+04	3.861e+04	0.78	yes	no	1.02
23	IS	13C-1,2,3,7,8-PeCDD	33:36	3.972e+04	2.573e+04	1.54	yes	no	0.97
24	IS	13C-1,2,3,6,7,8-HxCDD	36:50	8.057e+04	6.421e+04	1.25	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	39:42	6.731e+04	6.373e+04	1.06	yes	no	0.89
26	IS	13C-OCDD	42:47	1.509e+05	1.672e+05	0.90	yes	no	0.96
27	RS/RT	13C-1,2,3,4-TCDD	28:49	2.971e+04	3.765e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:07	8.599e+04	6.870e+04	1.25	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:03	1.395e+04					0.96

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #6 Filename U217127 #1 Samp: 1 Inj: 1 Acquired: 14-AUG-08 08:12:27

Processed: 14-AUG-08 14:56:46 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.29e+06	8.00e+02	1.6e+03	1.70e+06	1.34e+03	1.3e+03
2	1,2,3,7,8-PeCDF	5.04e+06	4.60e+02	1.1e+04	3.24e+06	1.27e+03	2.6e+03
3	2,3,4,7,8-PeCDF	5.41e+06	4.60e+02	1.2e+04	3.36e+06	1.27e+03	2.7e+03
4	1,2,3,4,7,8-HxCDF	5.33e+06	6.68e+02	8.0e+03	4.28e+06	8.76e+02	4.9e+03
5	1,2,3,6,7,8-HxCDF	4.99e+06	6.68e+02	7.5e+03	4.03e+06	8.76e+02	4.6e+03
6	2,3,4,6,7,8-HxCDF	4.79e+06	6.68e+02	7.2e+03	3.85e+06	8.76e+02	4.4e+03
7	1,2,3,7,8,9-HxCDF	4.14e+06	6.68e+02	6.2e+03	3.42e+06	8.76e+02	3.9e+03
8	1,2,3,4,6,7,8-HpCDF	4.00e+06	1.56e+03	2.6e+03	3.95e+06	1.25e+03	3.2e+03
9	1,2,3,4,7,8,9-HpCDF	3.06e+06	1.56e+03	2.0e+03	2.96e+06	1.25e+03	2.4e+03
10	OCDF	5.33e+06	8.68e+02	6.1e+03	5.85e+06	2.13e+03	2.7e+03
11	2,3,7,8-TCDD	1.05e+06	6.84e+02	1.5e+03	1.41e+06	7.00e+02	2.0e+03
12	1,2,3,7,8-PeCDD	3.86e+06	1.16e+03	3.3e+03	2.42e+06	4.80e+02	5.0e+03
13	1,2,3,4,7,8-HxCDD	3.65e+06	7.92e+02	4.6e+03	2.93e+06	8.64e+02	3.4e+03
14	1,2,3,6,7,8-HxCDD	3.72e+06	7.92e+02	4.7e+03	2.86e+06	8.64e+02	3.3e+03
15	1,2,3,7,8,9-HxCDD	3.71e+06	7.92e+02	4.7e+03	2.90e+06	8.64e+02	3.4e+03
16	1,2,3,4,6,7,8-HpCDD	2.63e+06	1.18e+03	2.2e+03	2.51e+06	4.36e+02	5.8e+03
17	OCDD	4.51e+06	7.72e+02	5.8e+03	5.12e+06	8.20e+02	6.2e+03
18	13C-2,3,7,8-TCDF	6.85e+06	2.41e+03	2.8e+03	8.73e+06	1.10e+03	8.0e+03
19	13C-1,2,3,7,8-PeCDF	1.07e+07	4.52e+02	2.4e+04	6.77e+06	5.72e+02	1.2e+04
20	13C-1,2,3,4,7,8-HxCDF	1.29e+07	3.40e+02	3.8e+04	2.48e+07	8.48e+02	2.9e+04
21	13C-1,2,3,4,6,7,8-HpCDF	8.63e+06	1.46e+03	5.9e+03	1.90e+07	5.54e+03	3.4e+03
22	13C-2,3,7,8-TCDD	5.49e+06	3.43e+03	1.6e+03	6.93e+06	1.06e+03	6.5e+03
23	13C-1,2,3,7,8-PeCDD	8.21e+06	7.96e+02	1.0e+04	5.31e+06	6.60e+02	8.0e+03
24	13C-1,2,3,6,7,8-HxCDD	1.82e+07	1.01e+03	1.8e+04	1.45e+07	8.48e+02	1.7e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.38e+07	7.88e+02	1.8e+04	1.30e+07	5.76e+02	2.3e+04
26	13C-OCDD	2.20e+07	1.24e+03	1.8e+04	2.42e+07	8.00e+02	3.0e+04
27	13C-1,2,3,4-TCDD	5.36e+06	3.43e+03	1.6e+03	6.69e+06	1.06e+03	6.3e+03
28	13C-1,2,3,7,8,9-HxCDD	1.92e+07	1.01e+03	1.9e+04	1.52e+07	8.48e+02	1.8e+04
29	37Cl-2,3,7,8-TCDD	2.49e+06	8.52e+02	2.9e+03			

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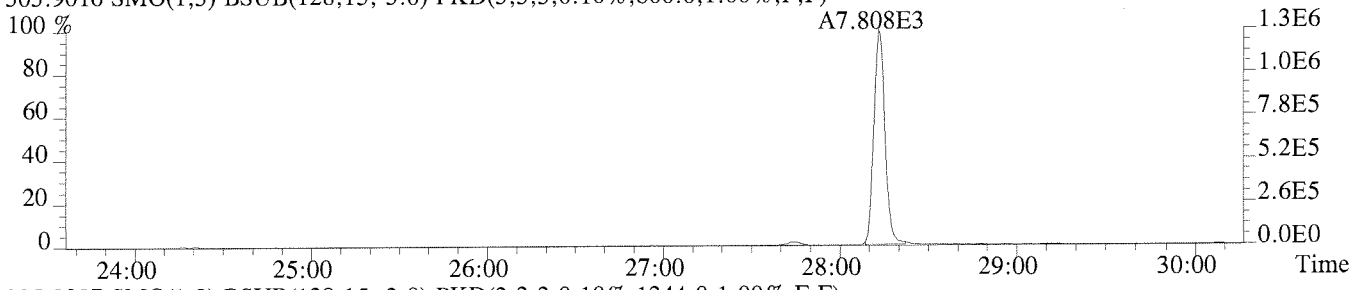
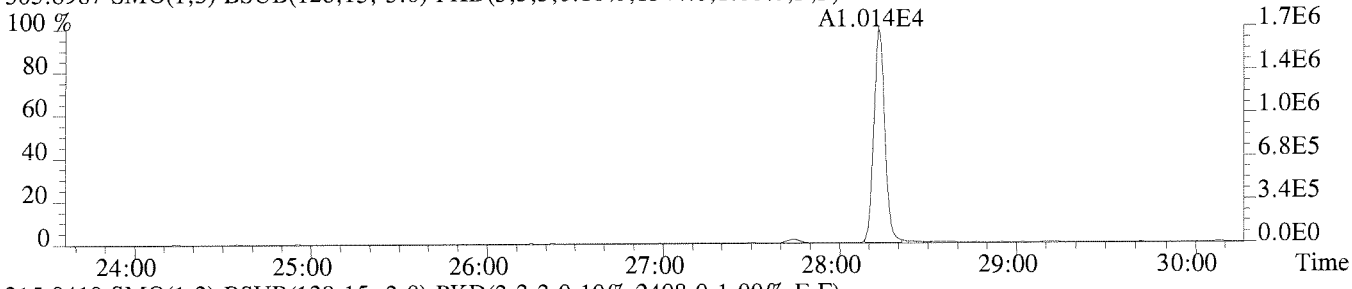
File:U217127 #1-556 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spectf
Sample#1 Exp:CCAL HRCC3

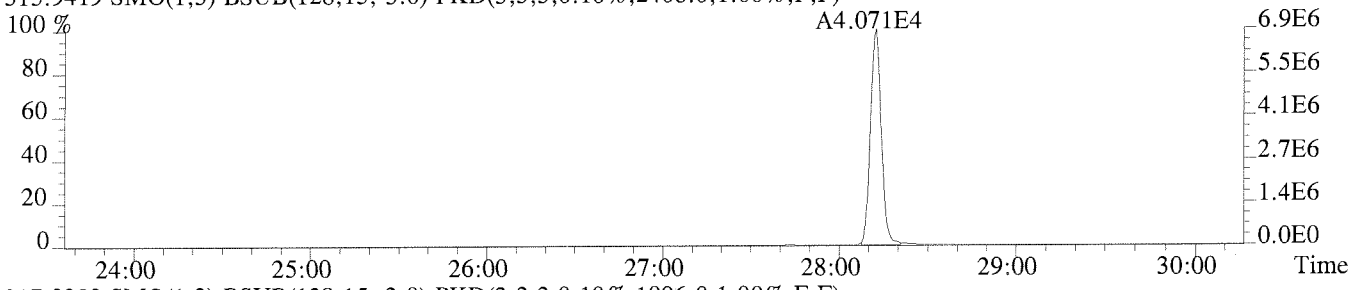
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,800.0,1.00%,F,F)



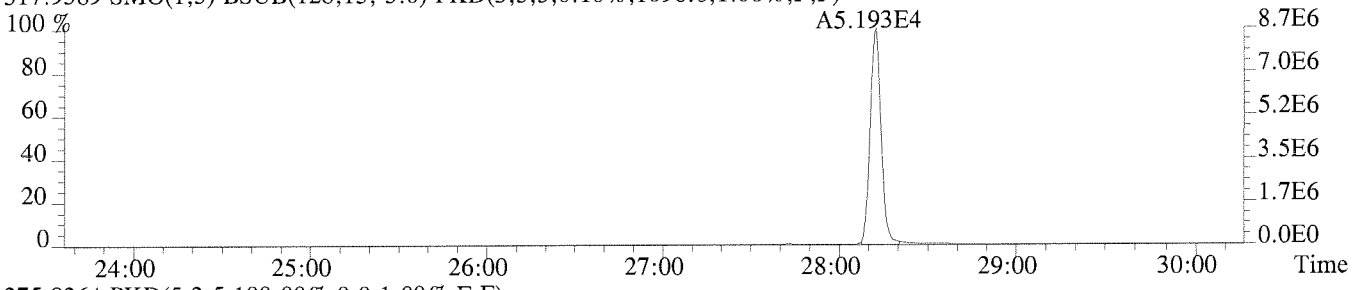
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1344.0,1.00%,F,F)



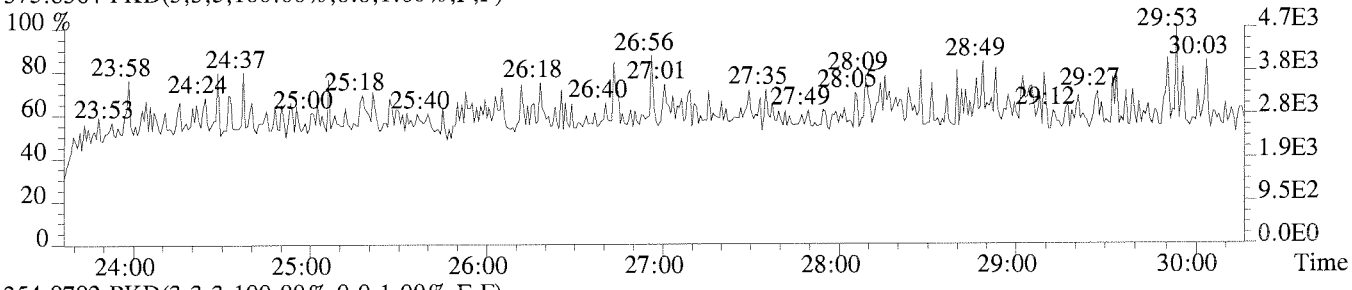
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2408.0,1.00%,F,F)



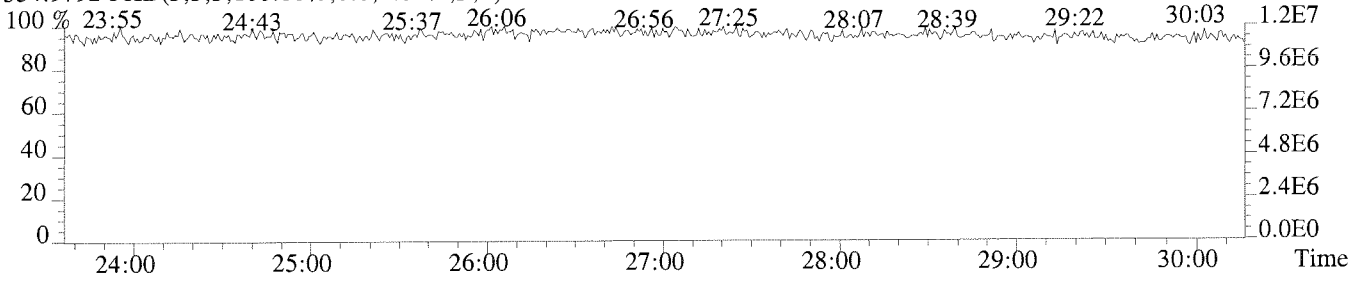
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1096.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

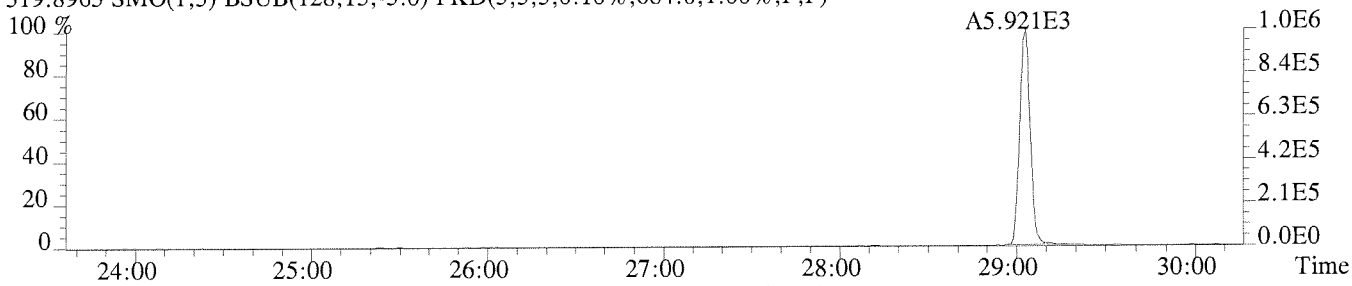


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

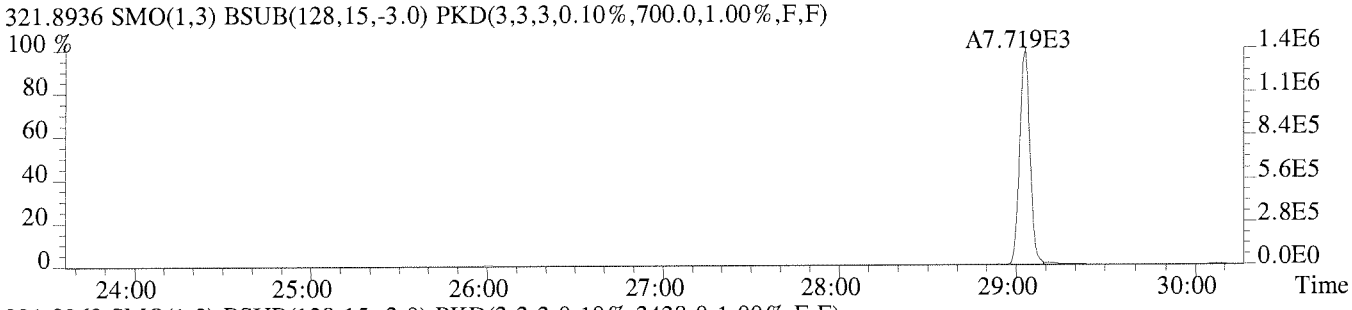


File:U217127 #1-556 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

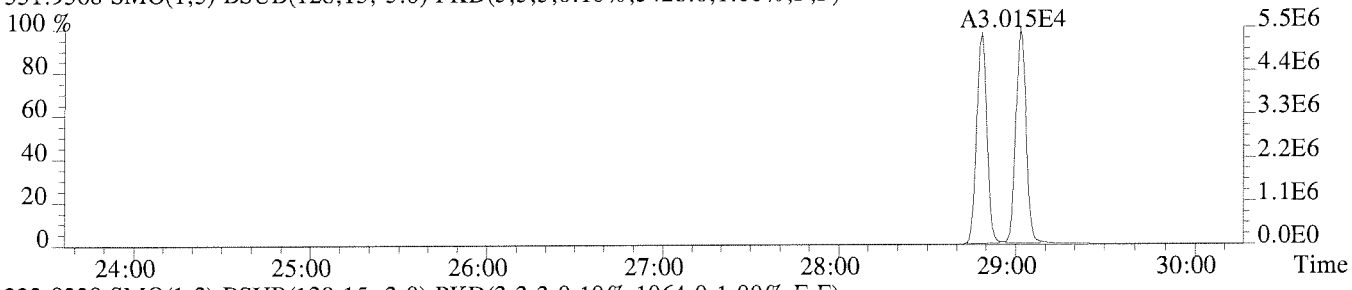
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,684.0,1.00%,F,F)



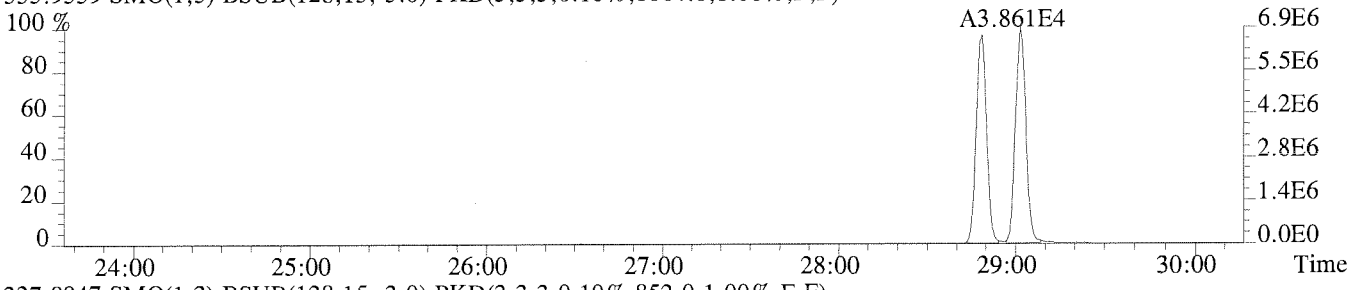
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,700.0,1.00%,F,F)



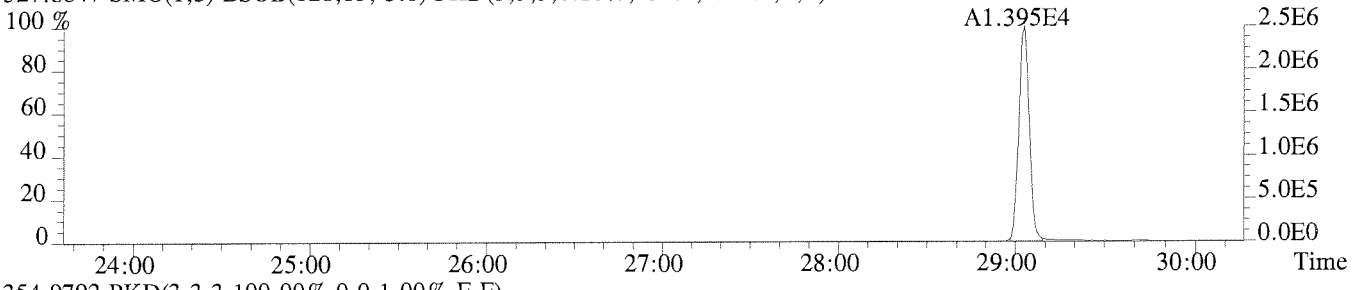
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3428.0,1.00%,F,F)



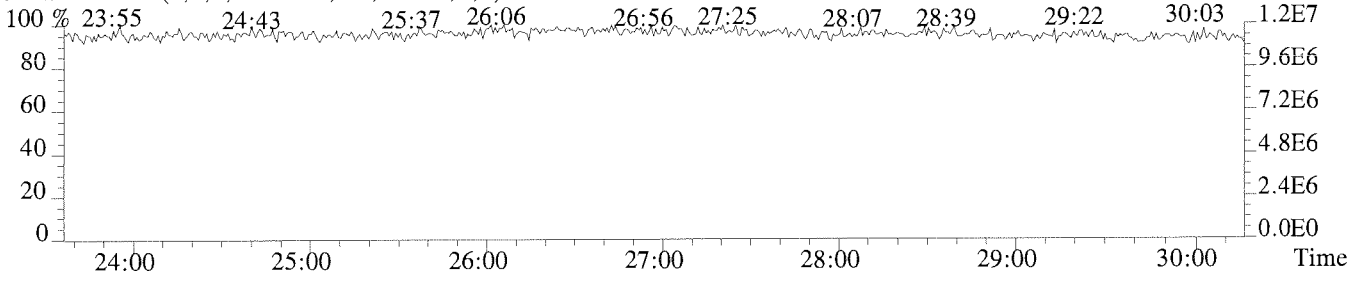
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1064.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,852.0,1.00%,F,F)

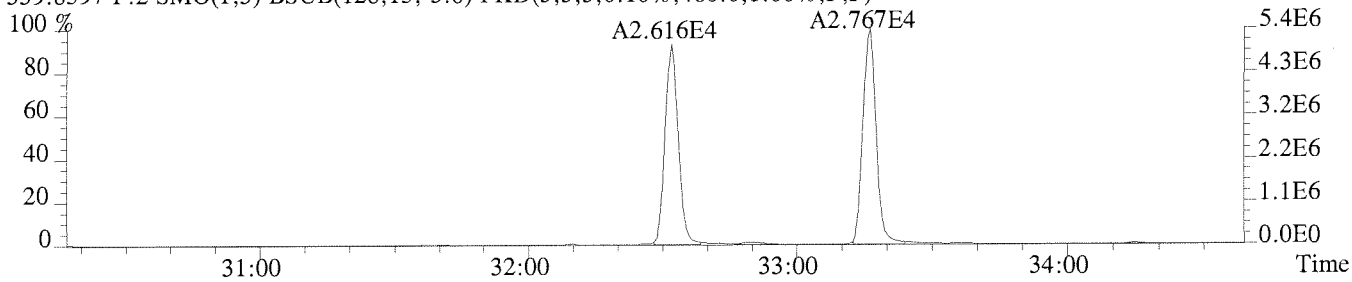


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

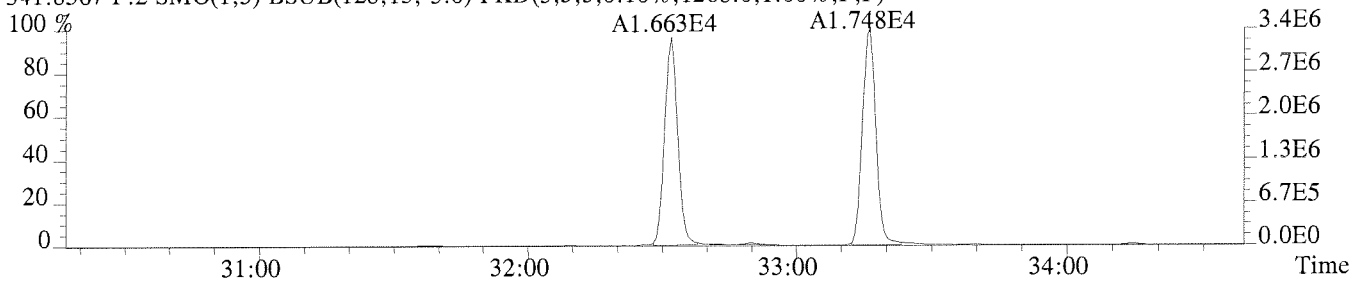


File:U217127 #1-397 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

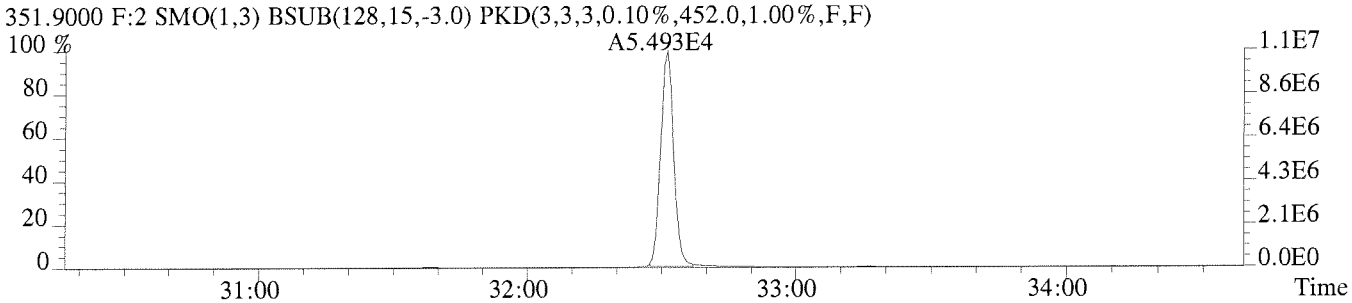
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,460.0,1.00%,F,F)



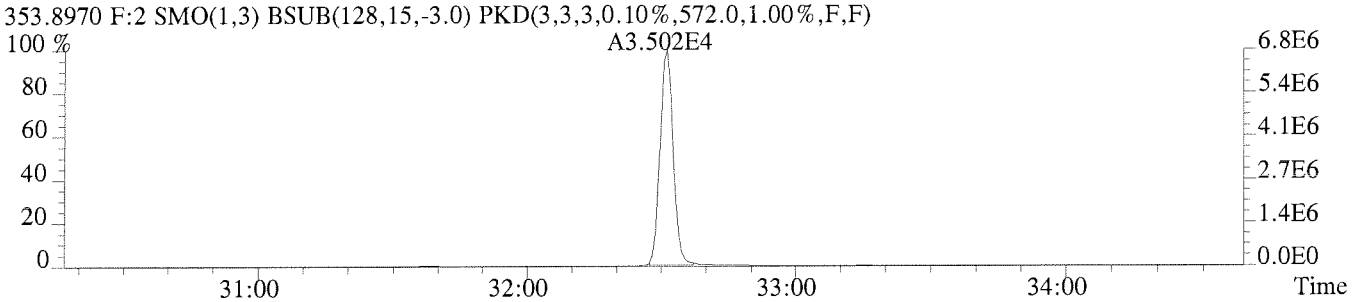
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1268.0,1.00%,F,F)



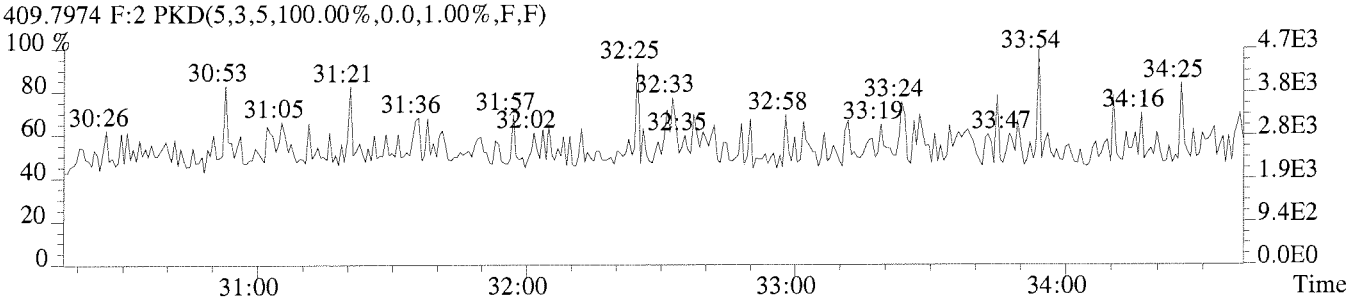
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,452.0,1.00%,F,F)



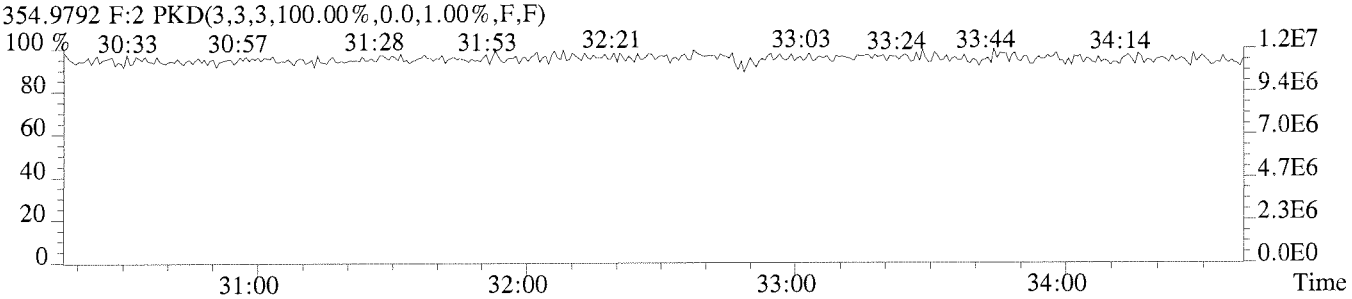
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,572.0,1.00%,F,F)



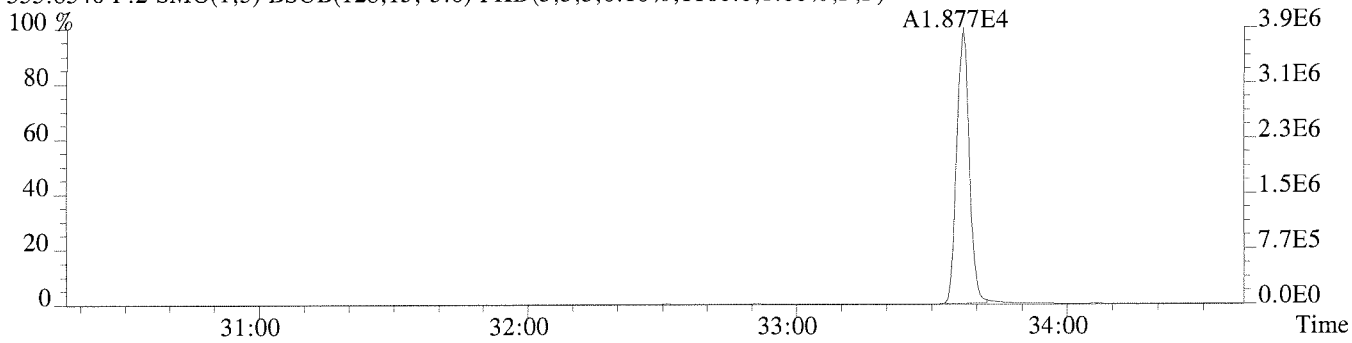
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



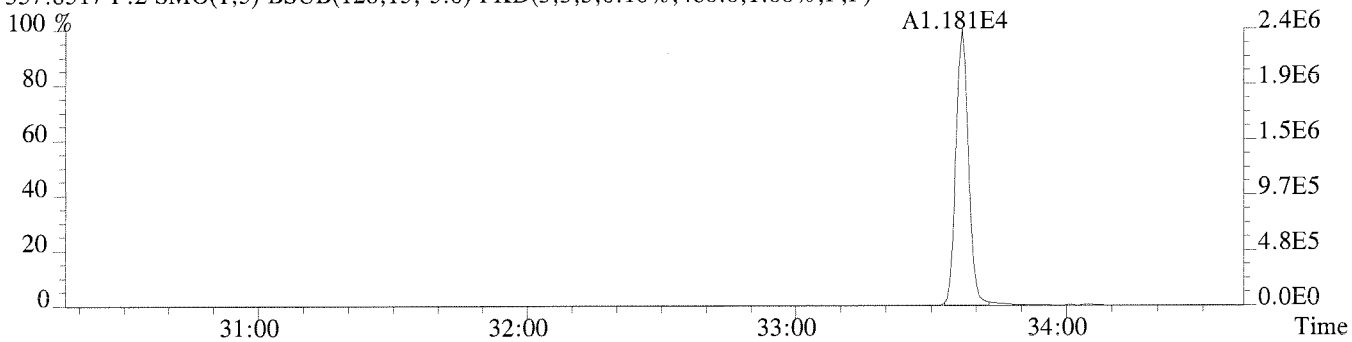
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



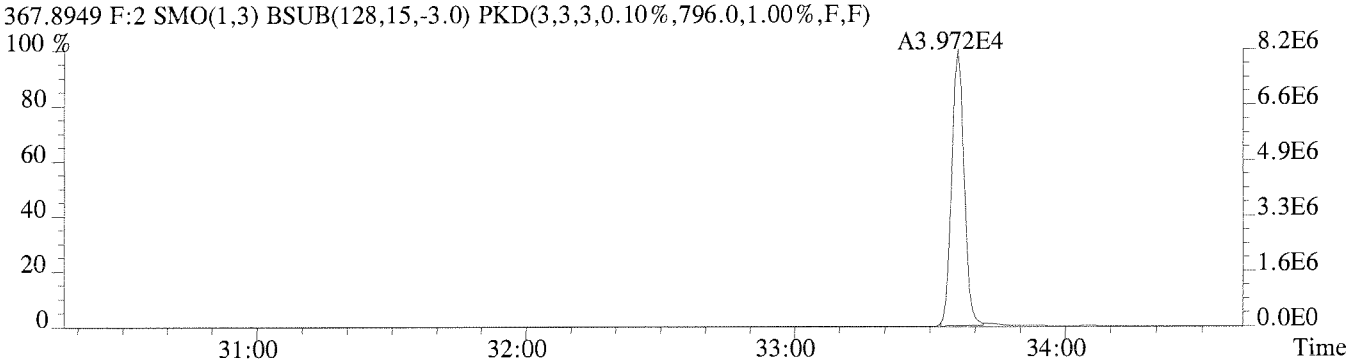
File:U217127 #1-397 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1160.0,1.00%,F,F)



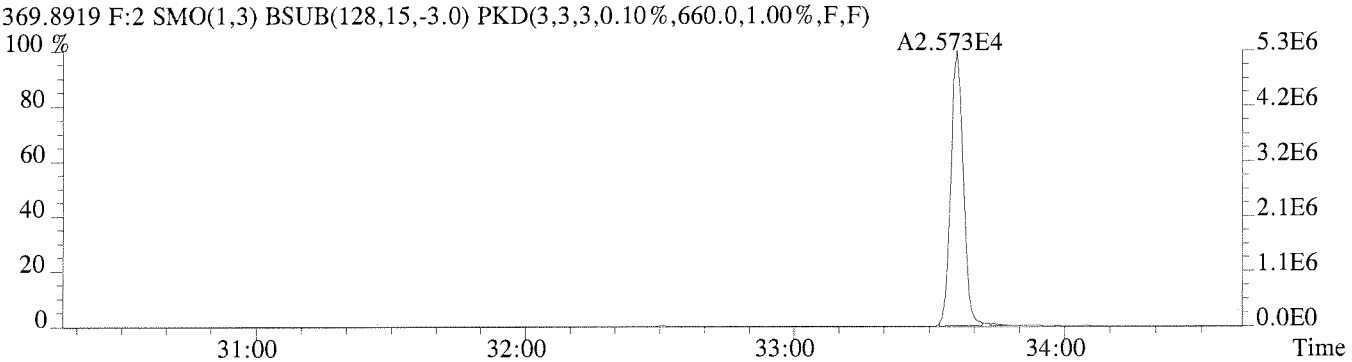
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,480.0,1.00%,F,F)



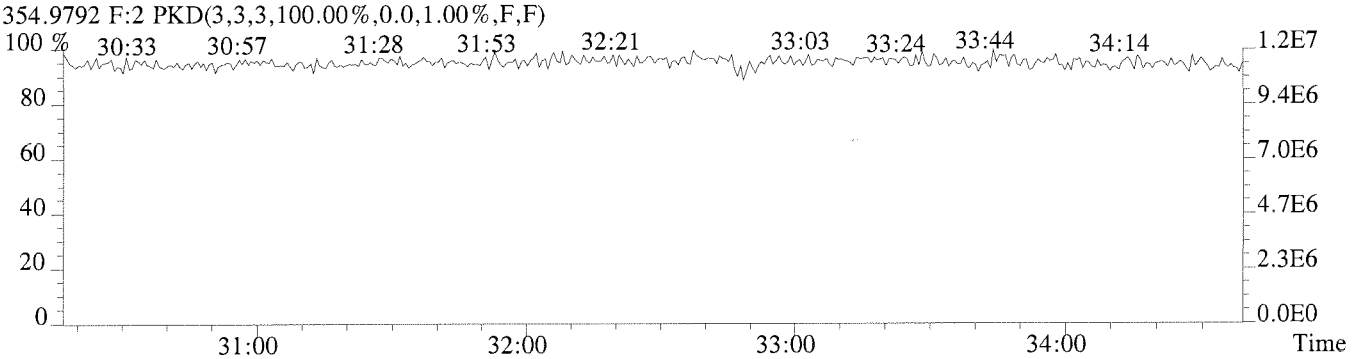
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,796.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,660.0,1.00%,F,F)

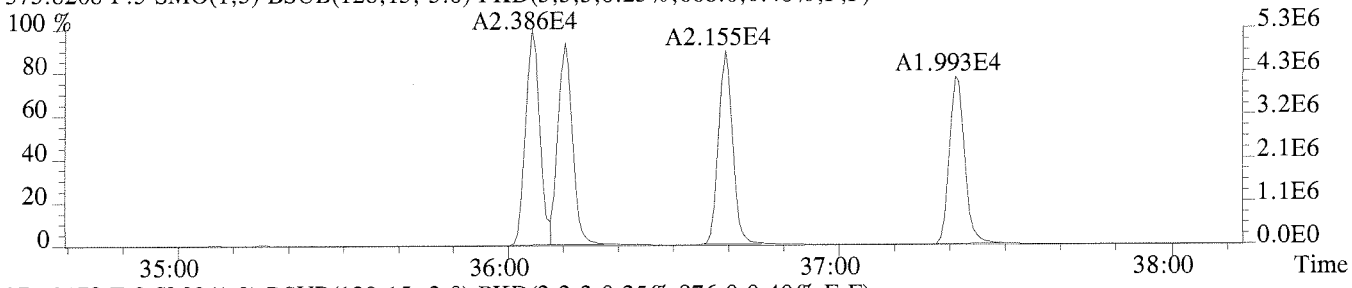


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

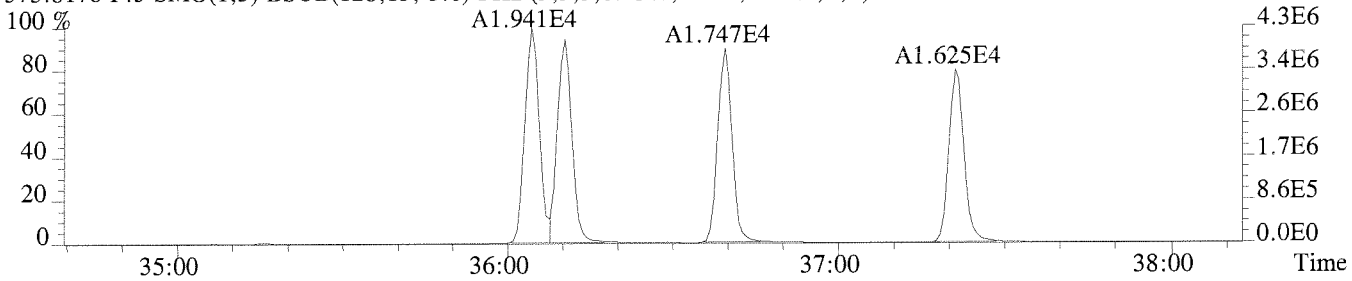


File:U217127 #1-323 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

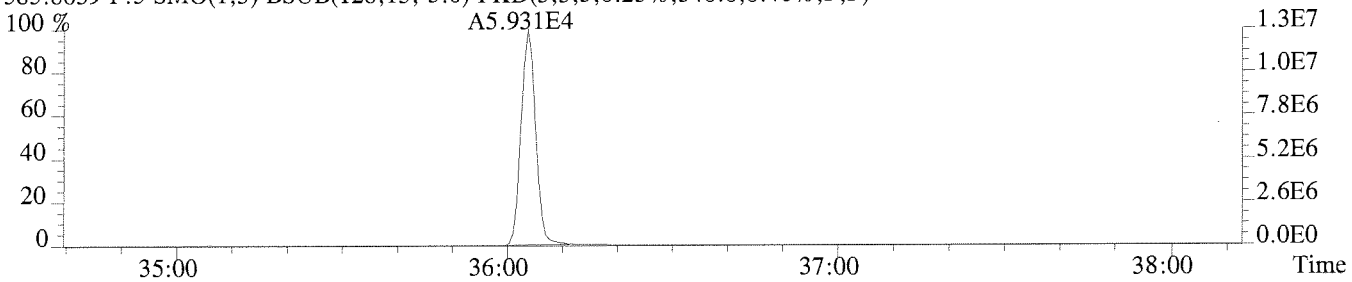
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,668.0,0.40%,F,F)



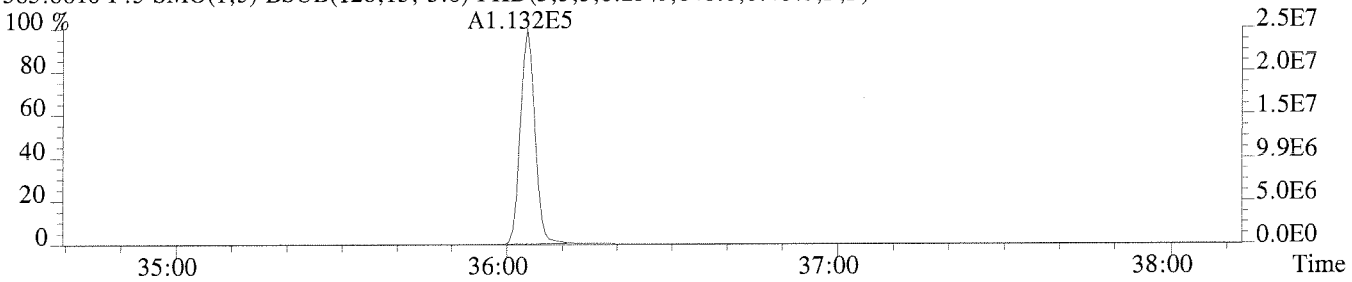
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,876.0,0.40%,F,F)



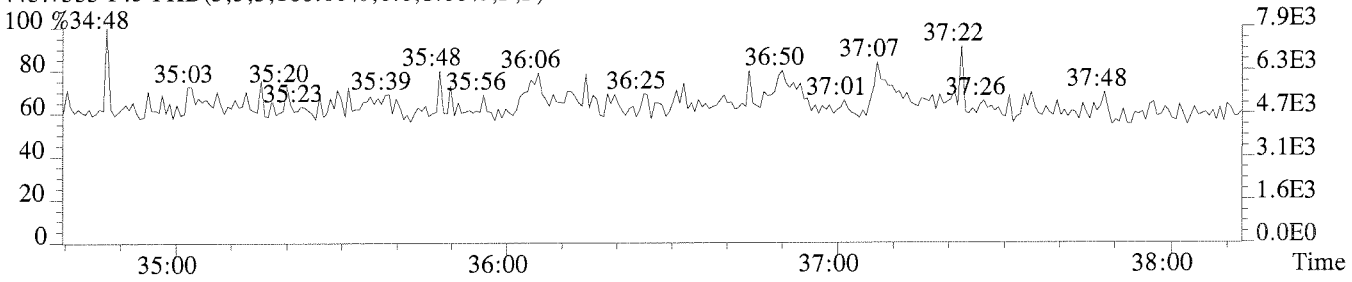
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,340.0,0.40%,F,F)



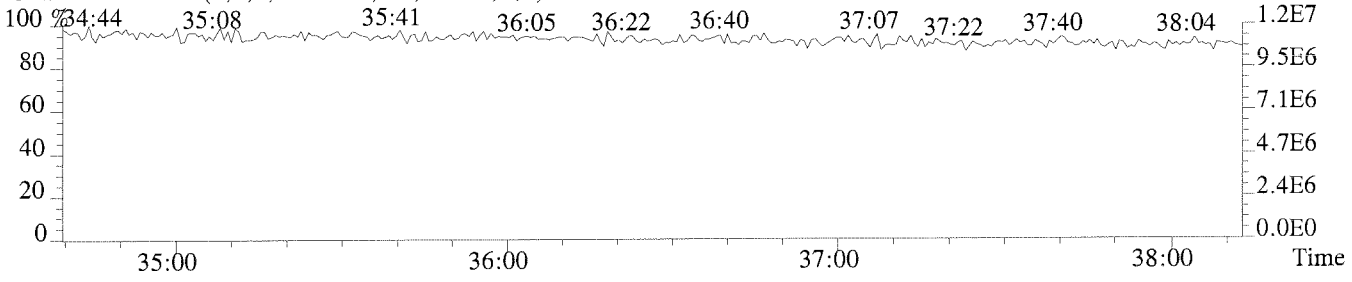
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,848.0,0.40%,F,F)



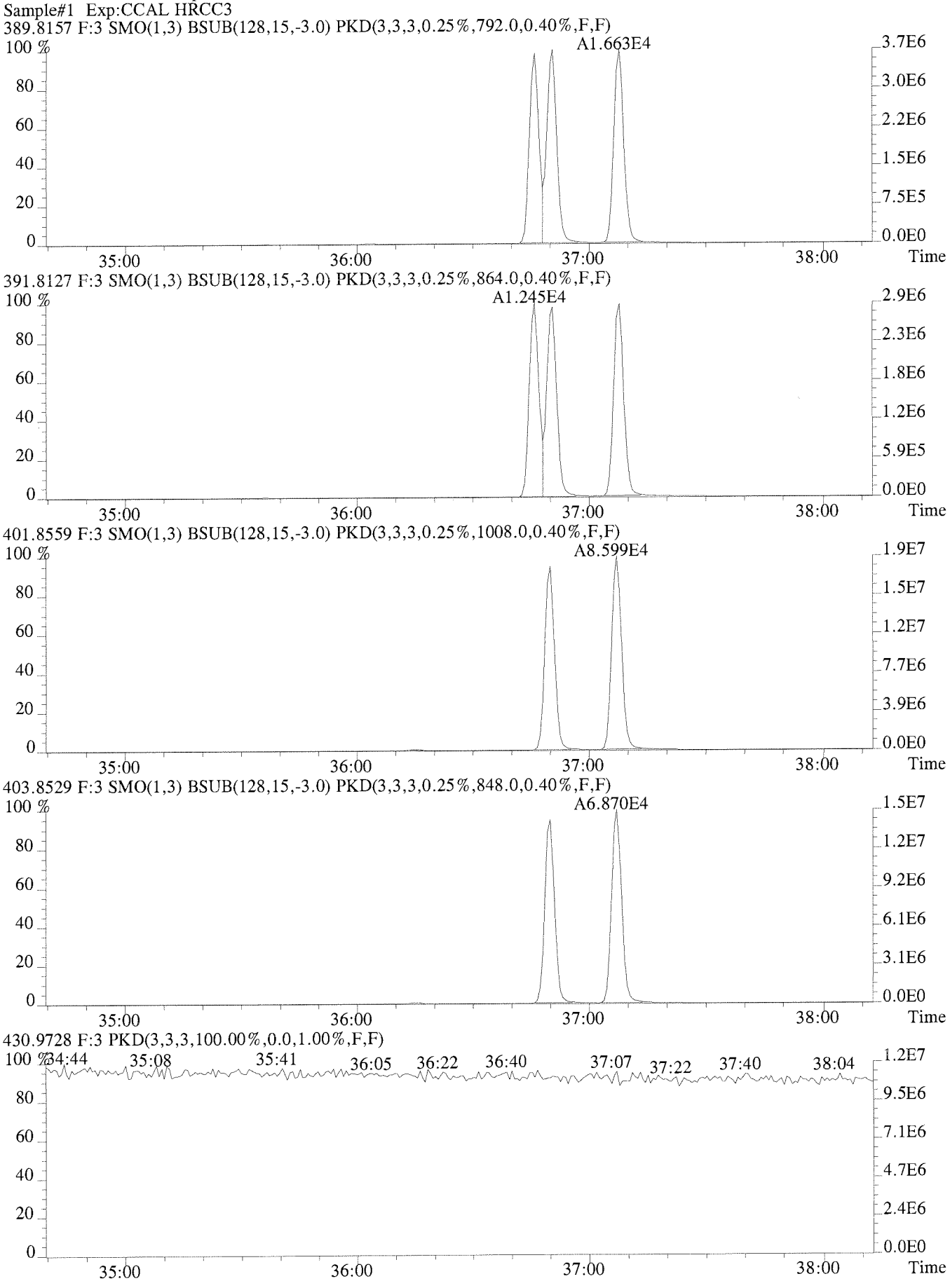
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

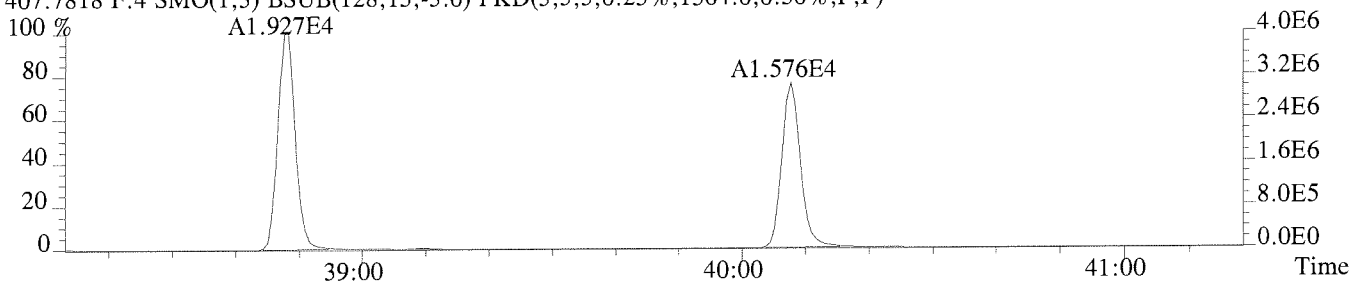


File:U217127 #1-323 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spectf
Sample#1 Exp:CCAL HRCC3

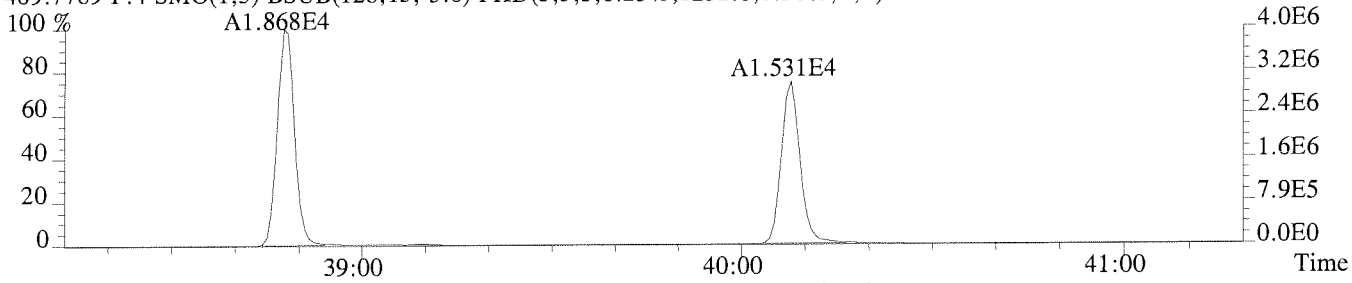


File:U217127 #1-281 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

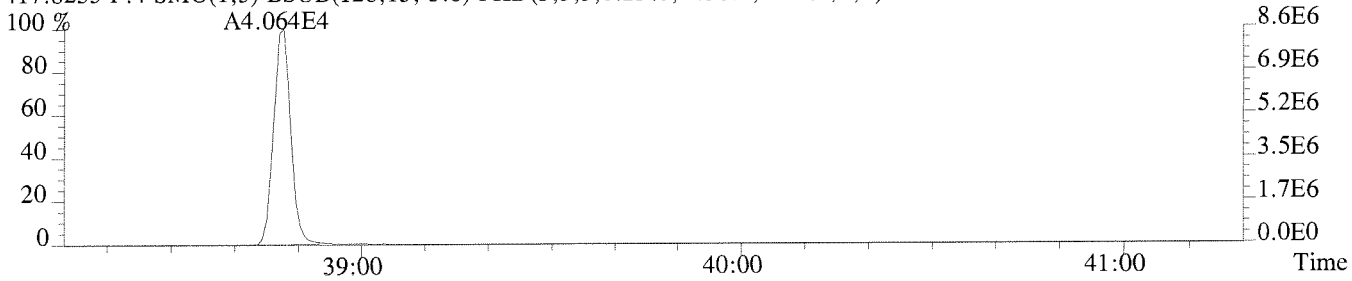
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1564.0,0.50%,F,F)



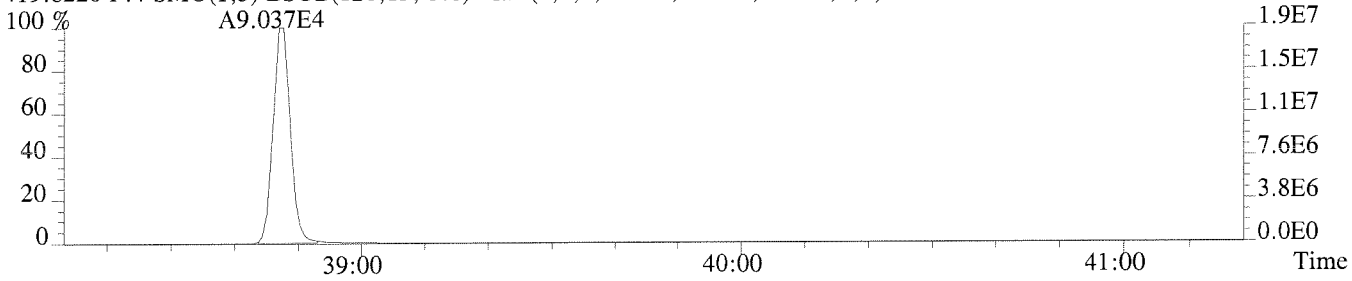
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1252.0,0.50%,F,F)



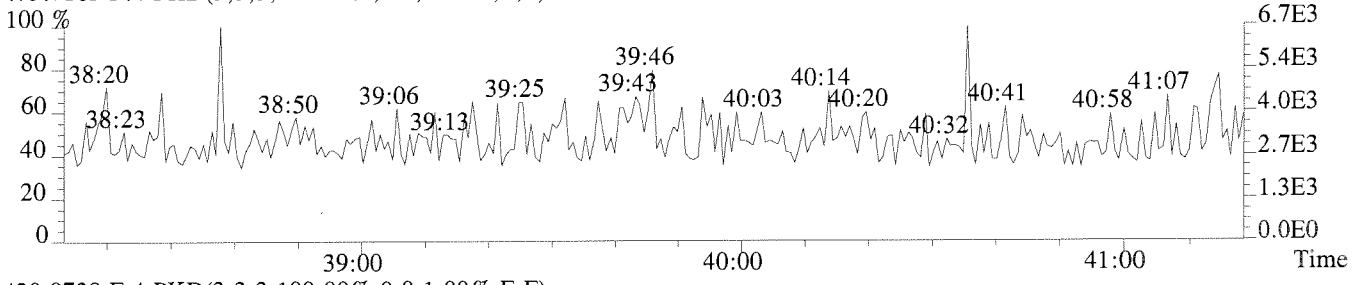
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1456.0,0.50%,F,F)



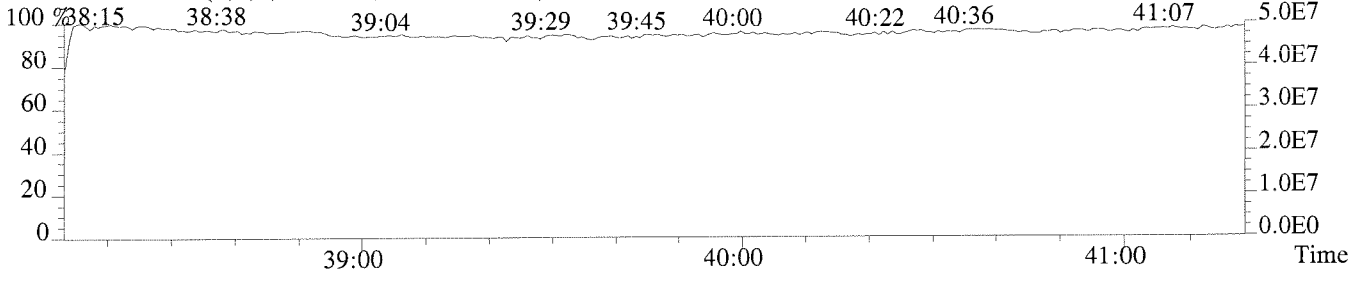
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5544.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

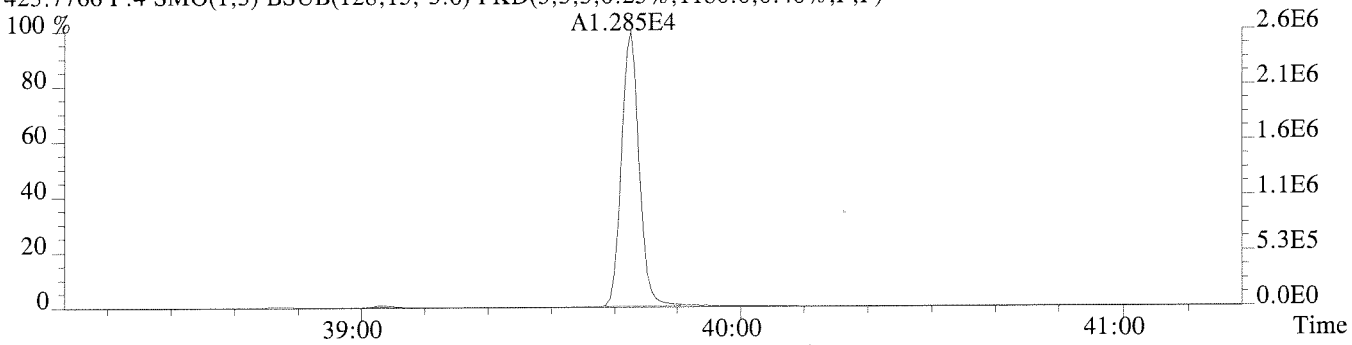


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

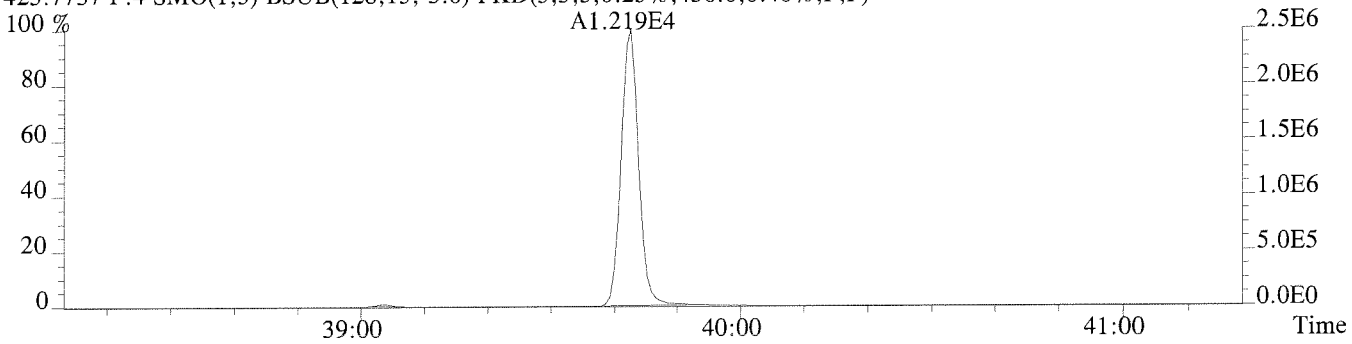


File:U217127 #1-281 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

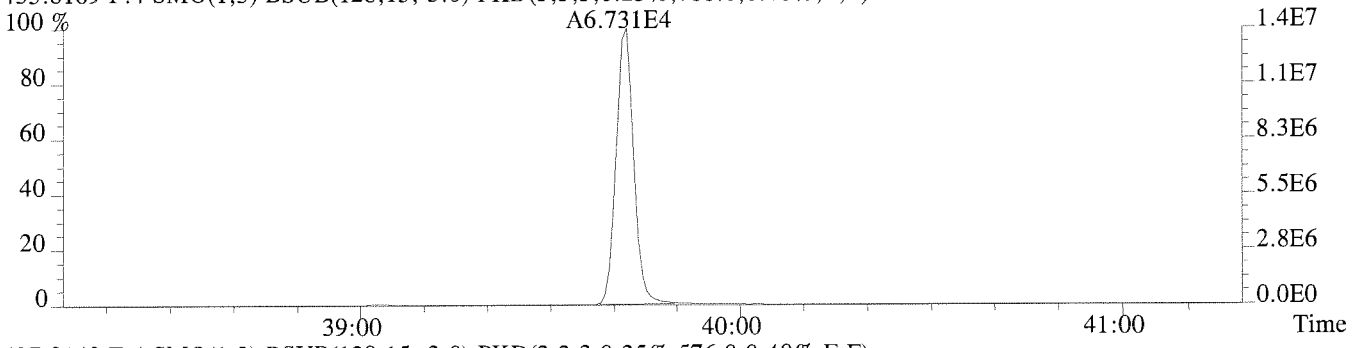
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1180.0,0.40%,F,F)



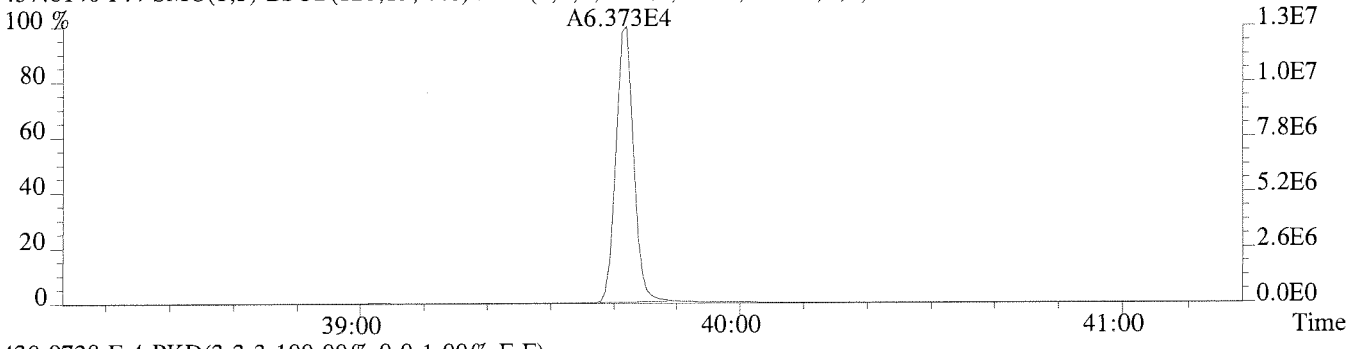
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,436.0,0.40%,F,F)



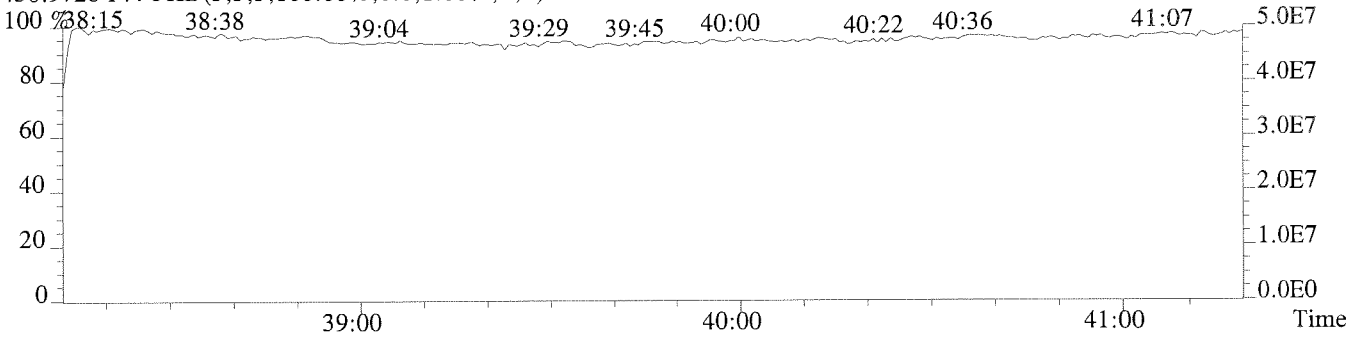
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,788.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,576.0,0.40%,F,F)

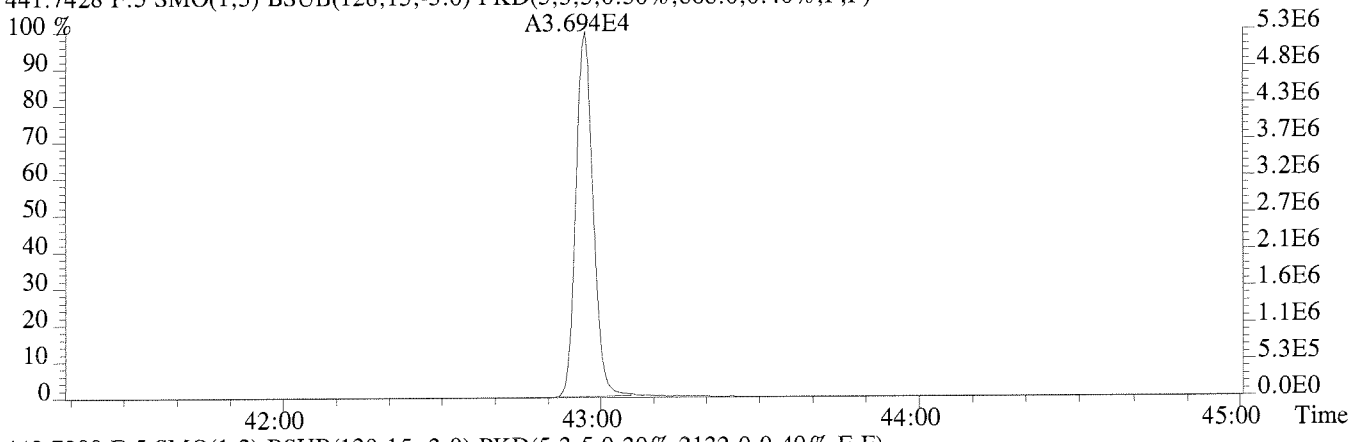


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

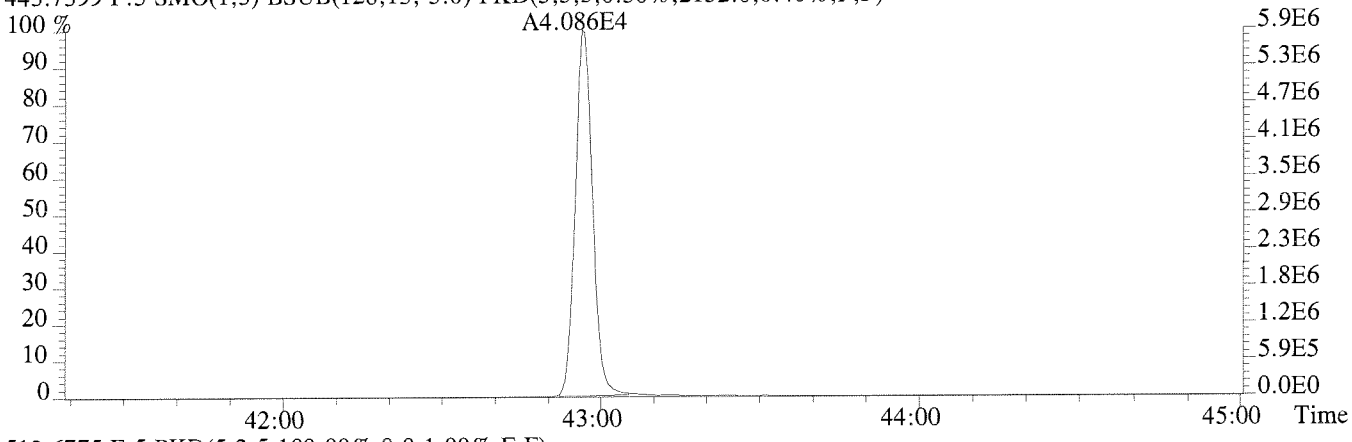


File:U217127 #1-408 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

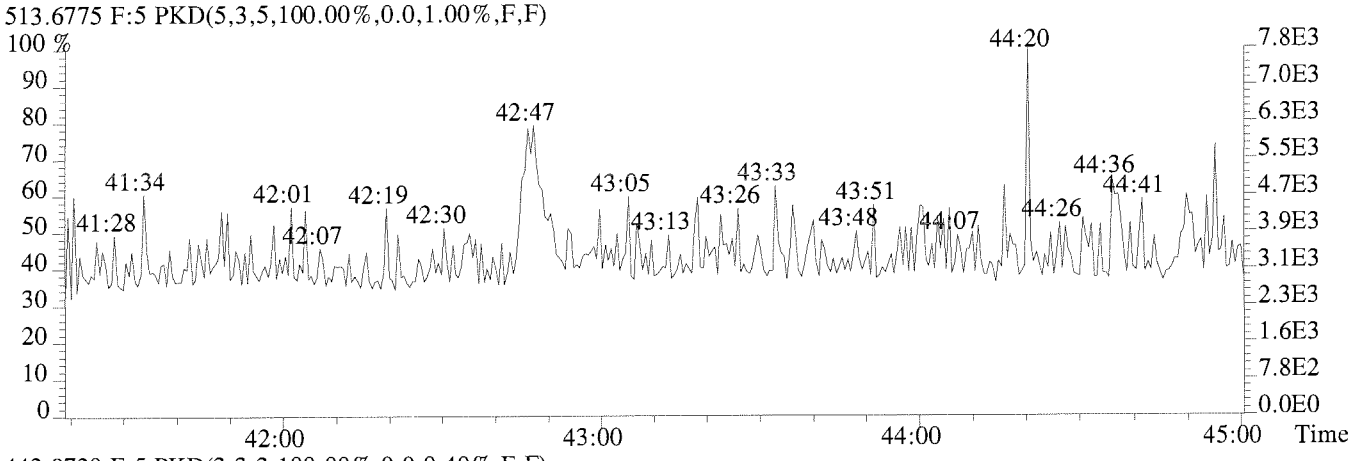
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,868.0,0.40%,F,F)



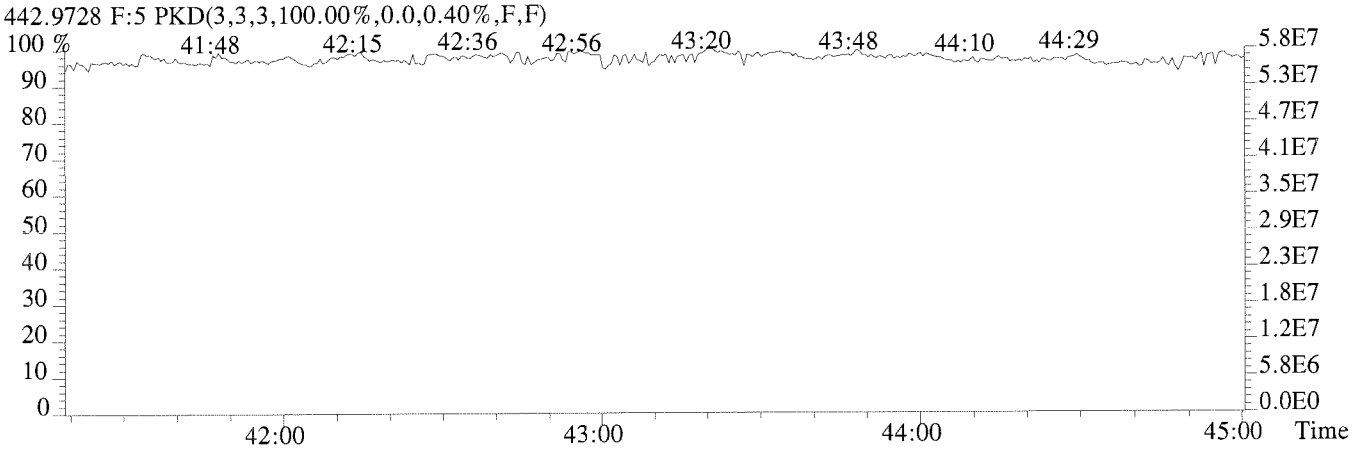
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2132.0,0.40%,F,F)



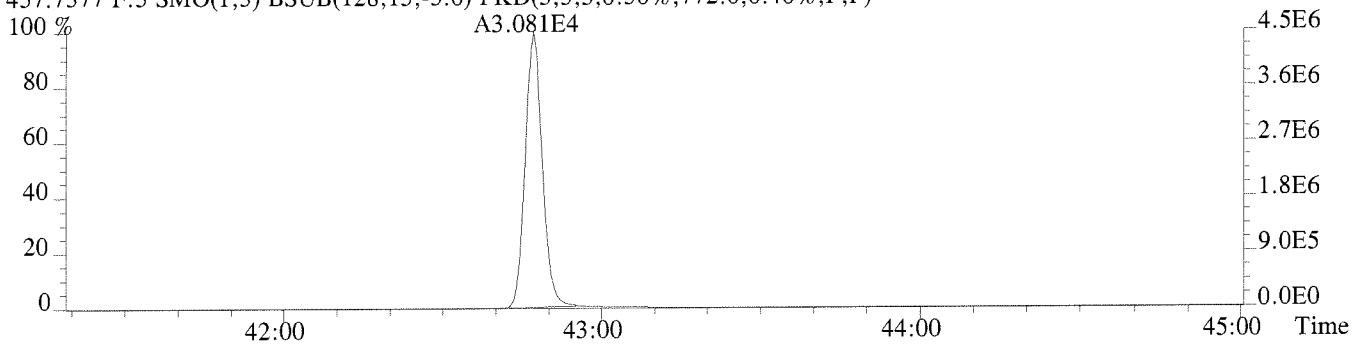
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



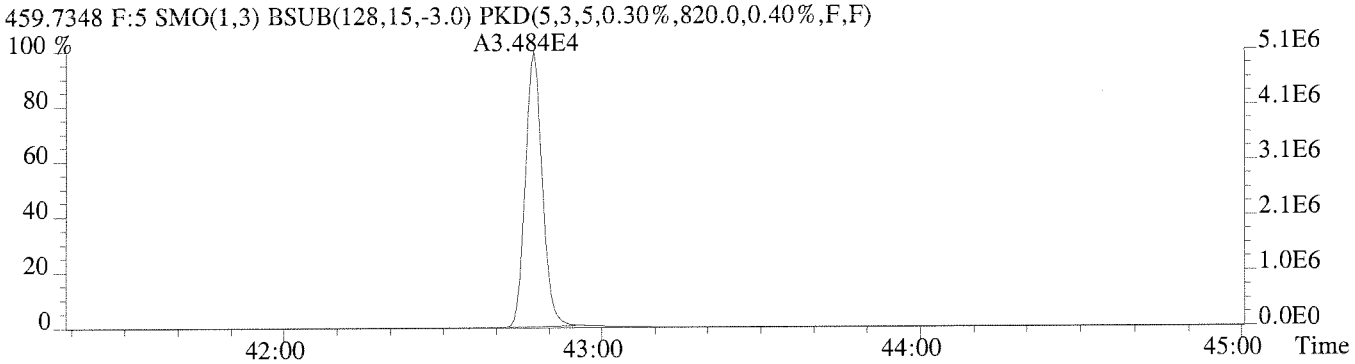
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



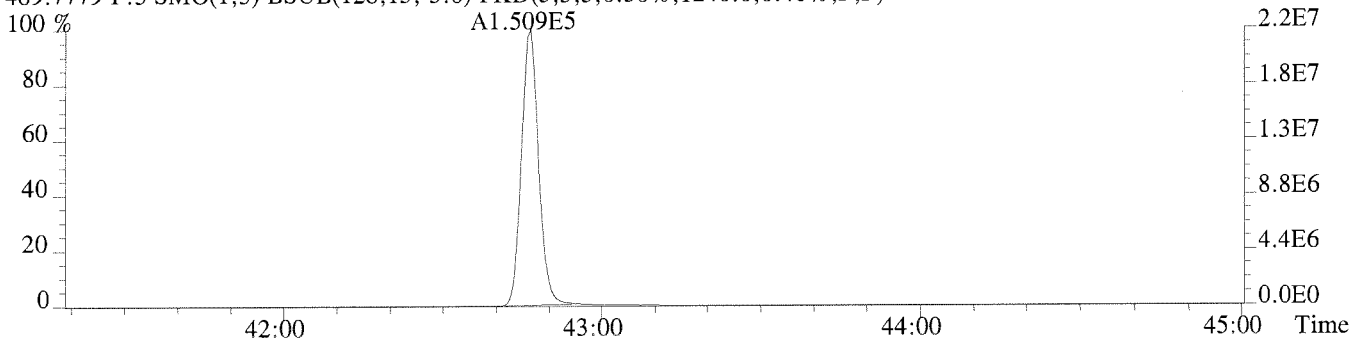
File:U217127 #1-408 Acq:14-AUG-2008 08:12:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,772.0,0.40%,F,F)



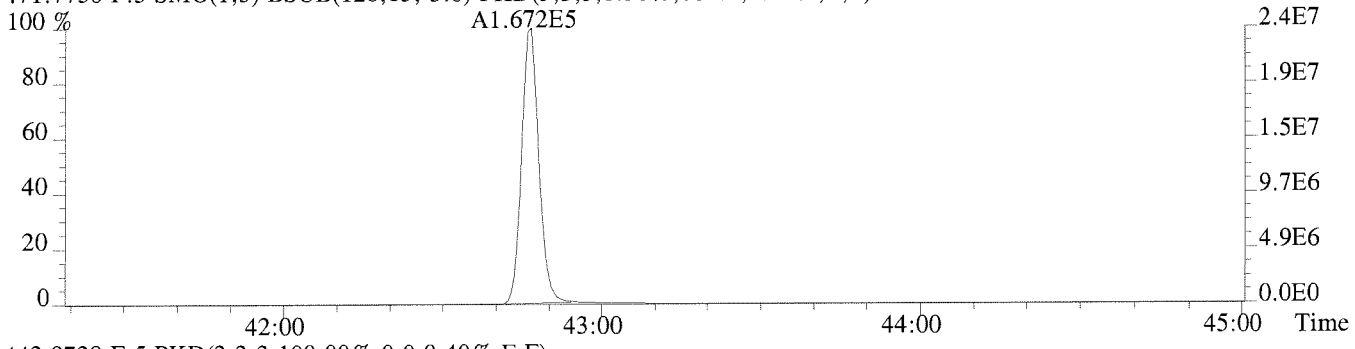
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,820.0,0.40%,F,F)



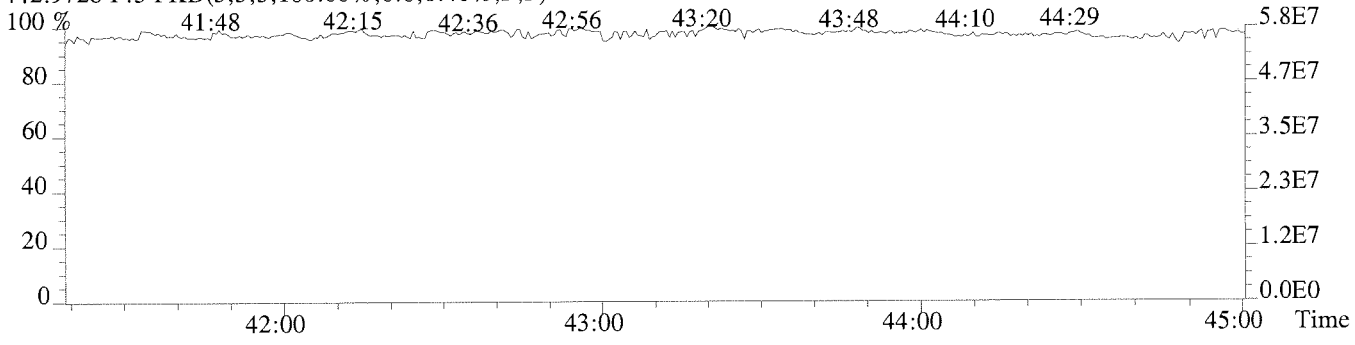
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1240.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,800.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



FORM 4A
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 12/10/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: U217137 Analysis Date: 14-AUG-08 Time: 16:58:26

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
NATIVE ANALYTES						
2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	1.00	0.93	8.43
1,2,3,7,8-PeCDD	M+2/M+4	1.56	1.32-1.78	0.96	0.90	6.76
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.05-1.43	1.01	1.03	-1.60
1,2,3,6,7,8-HxCDD	M+2/M+4	1.31	1.05-1.43	1.09	1.04	4.53
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.05-1.43	1.00	1.03	-2.15
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	0.88-1.20	1.07	0.92	15.76
OCDD	M+2/M+4	0.88	0.76-1.02	1.19	1.03	15.47
2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	0.97	0.91	6.86
1,2,3,7,8-PeCDF	M+2/M+4	1.55	1.32-1.78	0.98	0.90	9.57
2,3,4,7,8-PeCDF	M+2/M+4	1.58	1.32-1.78	1.00	0.91	9.09
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	1.24	1.15	7.64
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.05-1.43	1.23	1.11	11.46
1,2,3,7,8,9-HxCDF	M+2/M+4	1.22	1.05-1.43	0.94	0.89	4.81
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.05-1.43	1.14	1.05	8.67
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.02	0.88-1.20	1.51	1.40	8.51
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.05	0.88-1.20	1.00	1.07	-6.38
OCDF	M+2/M+4	0.91	0.76-1.02	1.24	1.16	6.76

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the 17 unlabeled standard must not exceed +/-20%, Section 7.7.4.1. The ending CCAL must not exceed +/-25%. Section 8.3.2.4.

8290F4A

FORM 4B
PCDD/PCDF CALIBRATION VERIFICATION

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 12/10/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

VER Data Filename: U217137 Analysis Date: 14-AUG-08 Time: 16:58:26

	M/Z'S FORMING RATIO (1)	ION ABUND. RATIO	QC LIMITS (2)	CCAL. RRF	MEAN RRF	%D (3)
LABELED COMPOUNDS						
13C-2,3,7,8-TCDD	M/M+2	0.79	0.65-0.89	0.94	1.02	-8.06
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.32-1.78	0.77	0.97	-21.12
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.05-1.43	0.99	0.99	-0.22
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	0.88-1.20	0.88	0.89	-1.12
13C-OCDD	M+2/M+4	0.90	0.76-1.02	0.91	0.96	-5.48
13C-2,3,7,8-TCDF	M/M+2	0.79	0.65-0.89	1.26	1.32	-4.70
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.32-1.78	1.12	1.37	-18.25
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.43-0.59	1.25	1.27	-2.29
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.37-0.51	1.02	0.91	12.46
CLEANUP STANDARD						
37Cl-2,3,7,8-TCDD				0.93	0.96	-3.28

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits as specified in Table 8, Method 8290.

(3) The beginning CCAL %RSD for the labeled standard must not exceed +/- 30%, Section 7.7.4.2. The ending CCAL must not exceed +/- 35%, Section 8.3.2.4.

8290F4B

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
CCAL HRCC3

Run #16 Filename U217137 #1 Samp: 1 Inj: 1 Acquired: 14-AUG-08 16:58:26
Processed: 15-AUG-08 14:44:01 Sample ID: CCAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:12	6.398e+03	8.117e+03	0.79	yes	no	0.91
2	Unk	1,2,3,7,8-PeCDF	32:31	1.982e+04	1.281e+04	1.55	yes	no	0.90
3	Unk	2,3,4,7,8-PeCDF	33:15	2.027e+04	1.281e+04	1.58	yes	no	0.91
4	Unk	1,2,3,4,7,8-HxCDF	36:03	1.711e+04	1.382e+04	1.24	yes	no	1.15
5	Unk	1,2,3,6,7,8-HxCDF	36:09	1.702e+04	1.367e+04	1.25	yes	no	1.11
6	Unk	2,3,4,6,7,8-HxCDF	36:38	1.564e+04	1.265e+04	1.24	yes	no	1.05
7	Unk	1,2,3,7,8,9-HxCDF	37:20	1.282e+04	1.053e+04	1.22	yes	no	0.89
8	Unk	1,2,3,4,6,7,8-HpCDF	38:47	1.565e+04	1.530e+04	1.02	yes	no	1.40
9	Unk	1,2,3,4,7,8,9-HpCDF	40:06	1.045e+04	9.950e+03	1.05	yes	no	1.07
10	Unk	OCDF	42:55	2.141e+04	2.366e+04	0.91	yes	no	1.16
11	Unk	2,3,7,8-TCDD	29:01	4.941e+03	6.252e+03	0.79	yes	no	0.93
12	Unk	1,2,3,7,8-PeCDD	33:35	1.325e+04	8.469e+03	1.56	yes	no	0.90
13	Unk	1,2,3,4,7,8-HxCDD	36:45	1.118e+04	8.766e+03	1.28	yes	no	1.03
14	Unk	1,2,3,6,7,8-HxCDD	36:49	1.211e+04	9.270e+03	1.31	yes	no	1.04
15	Unk	1,2,3,7,8,9-HxCDD	37:06	1.092e+04	8.850e+03	1.23	yes	no	1.03
16	Unk	1,2,3,4,6,7,8-HpCDD	39:41	9.584e+03	9.249e+03	1.04	yes	no	0.92
17	Unk	OCDD	42:46	2.023e+04	2.305e+04	0.88	yes	no	1.03
18	IS	13C-2,3,7,8-TCDF	28:10	3.300e+04	4.169e+04	0.79	yes	no	1.32
19	IS	13C-1,2,3,7,8-PeCDF	32:30	4.074e+04	2.563e+04	1.59	yes	no	1.37
20	IS	13C-1,2,3,4,7,8-HxCDF	36:02	4.317e+04	8.136e+04	0.53	yes	no	1.27
21	IS	13C-1,2,3,4,6,7,8-HpCDF	38:46	3.185e+04	7.036e+04	0.45	yes	no	0.91
22	IS	13C-2,3,7,8-TCDD	29:00	2.461e+04	3.114e+04	0.79	yes	no	1.02
23	IS	13C-1,2,3,7,8-PeCDD	33:35	2.769e+04	1.762e+04	1.57	yes	no	0.97
24	IS	13C-1,2,3,6,7,8-HxCDD	36:49	5.471e+04	4.382e+04	1.25	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	39:41	4.538e+04	4.278e+04	1.06	yes	no	0.89
26	IS	13C-OCDD	42:45	8.652e+04	9.581e+04	0.90	yes	no	0.96
27	RS/RT	13C-1,2,3,4-TCDD	28:46	2.633e+04	3.284e+04	0.80	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:06	5.601e+04	4.400e+04	1.27	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:01	1.099e+04					0.96

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary CCAL HRCC3

Run #16 Filename U217137 #1 Samp: 1 Inj: 1 Acquired: 14-AUG-08 16:58:26

Processed: 15-AUG-08 14:44:01 LAB. ID: CCAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.05e+06	1.44e+03	7.3e+02	1.35e+06	1.63e+03	8.2e+02
2	1,2,3,7,8-PeCDF	3.77e+06	1.25e+03	3.0e+03	2.45e+06	1.62e+03	1.5e+03
3	2,3,4,7,8-PeCDF	3.93e+06	1.25e+03	3.1e+03	2.53e+06	1.62e+03	1.6e+03
4	1,2,3,4,7,8-HxCDF	3.72e+06	1.83e+03	2.0e+03	3.00e+06	3.60e+03	8.3e+02
5	1,2,3,6,7,8-HxCDF	3.64e+06	1.83e+03	2.0e+03	2.92e+06	3.60e+03	8.1e+02
6	2,3,4,6,7,8-HxCDF	3.48e+06	1.83e+03	1.9e+03	2.81e+06	3.60e+03	7.8e+02
7	1,2,3,7,8,9-HxCDF	2.65e+06	1.83e+03	1.5e+03	2.19e+06	3.60e+03	6.1e+02
8	1,2,3,4,6,7,8-HpCDF	3.32e+06	5.76e+03	5.8e+02	3.23e+06	3.45e+03	9.4e+02
9	1,2,3,4,7,8,9-HpCDF	2.06e+06	5.76e+03	3.6e+02	1.93e+06	3.45e+03	5.6e+02
10	OCDF	3.10e+06	2.02e+03	1.5e+03	3.43e+06	2.48e+03	1.4e+03
11	2,3,7,8-TCDD	8.84e+05	1.26e+03	7.0e+02	1.11e+06	1.06e+03	1.1e+03
12	1,2,3,7,8-PeCDD	2.71e+06	2.20e+03	1.2e+03	1.71e+06	1.41e+03	1.2e+03
13	1,2,3,4,7,8-HxCDD	2.69e+06	2.60e+03	1.0e+03	2.08e+06	2.87e+03	7.2e+02
14	1,2,3,6,7,8-HxCDD	2.60e+06	2.60e+03	1.0e+03	1.99e+06	2.87e+03	6.9e+02
15	1,2,3,7,8,9-HxCDD	2.42e+06	2.60e+03	9.3e+02	1.98e+06	2.87e+03	6.9e+02
16	1,2,3,4,6,7,8-HpCDD	1.98e+06	2.37e+03	8.4e+02	1.88e+06	3.40e+03	5.5e+02
17	OCDD	2.94e+06	4.22e+03	7.0e+02	3.33e+06	3.52e+03	9.5e+02
18	13C-2,3,7,8-TCDF	5.48e+06	2.22e+03	2.5e+03	6.89e+06	1.34e+03	5.1e+03
19	13C-1,2,3,7,8-PeCDF	7.75e+06	6.76e+02	1.1e+04	4.89e+06	9.60e+02	5.1e+03
20	13C-1,2,3,4,7,8-HxCDF	9.28e+06	1.04e+03	8.9e+03	1.76e+07	1.42e+03	1.2e+04
21	13C-1,2,3,4,6,7,8-HpCDF	6.86e+06	1.78e+03	3.9e+03	1.50e+07	4.50e+03	3.3e+03
22	13C-2,3,7,8-TCDD	4.46e+06	2.57e+03	1.7e+03	5.65e+06	1.20e+03	4.7e+03
23	13C-1,2,3,7,8-PeCDD	5.67e+06	1.04e+03	5.4e+03	3.58e+06	8.16e+02	4.4e+03
24	13C-1,2,3,6,7,8-HxCDD	1.24e+07	1.53e+03	8.1e+03	9.95e+06	1.48e+03	6.7e+03
25	13C-1,2,3,4,6,7,8-HpCDD	9.36e+06	2.22e+03	4.2e+03	8.81e+06	1.32e+03	6.7e+03
26	13C-OCDD	1.27e+07	1.88e+03	6.7e+03	1.41e+07	1.33e+03	1.1e+04
27	13C-1,2,3,4-TCDD	4.59e+06	2.57e+03	1.8e+03	5.79e+06	1.20e+03	4.8e+03
28	13C-1,2,3,7,8,9-HxCDD	1.23e+07	1.53e+03	8.1e+03	9.77e+06	1.48e+03	6.6e+03
29	37Cl-2,3,7,8-TCDD	1.93e+06	1.16e+03	1.7e+03			

Columbia Analytical Services, Inc.
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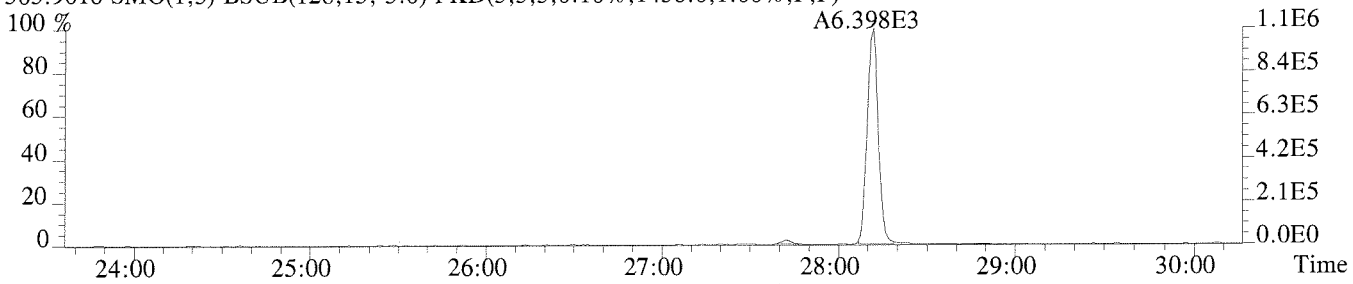
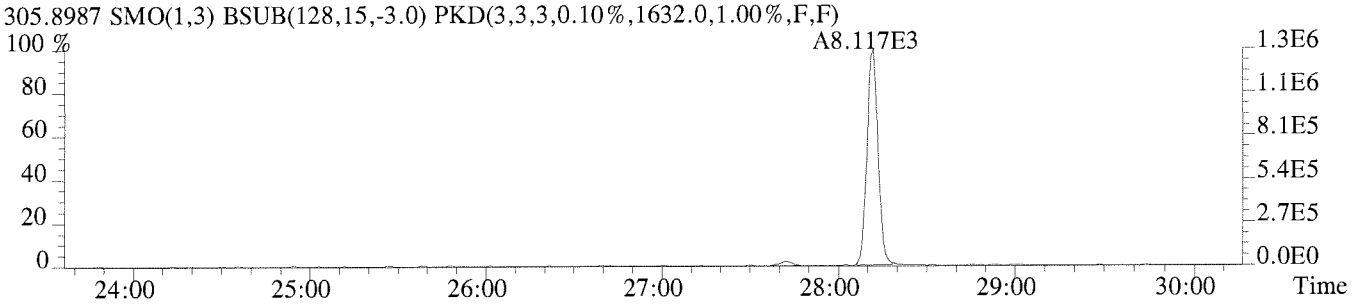
Office:(713)266-1599. Fax:(713)266-0130

File:U217137 #1-556 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

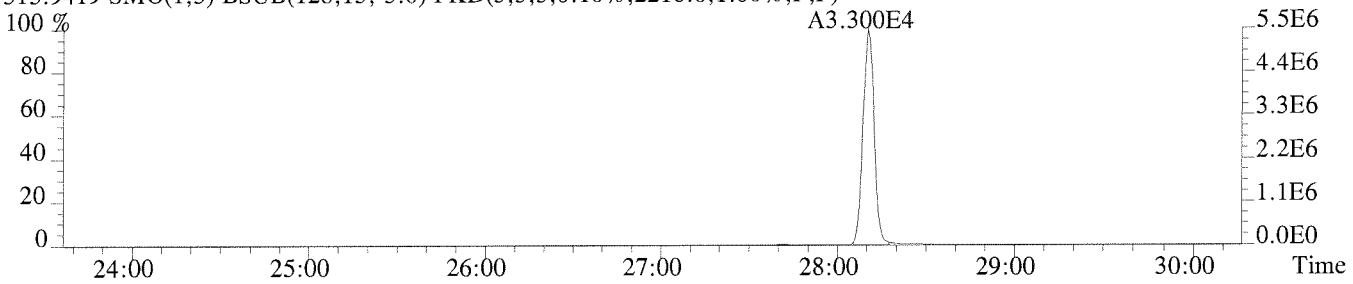
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1436.0,1.00%,F,F)



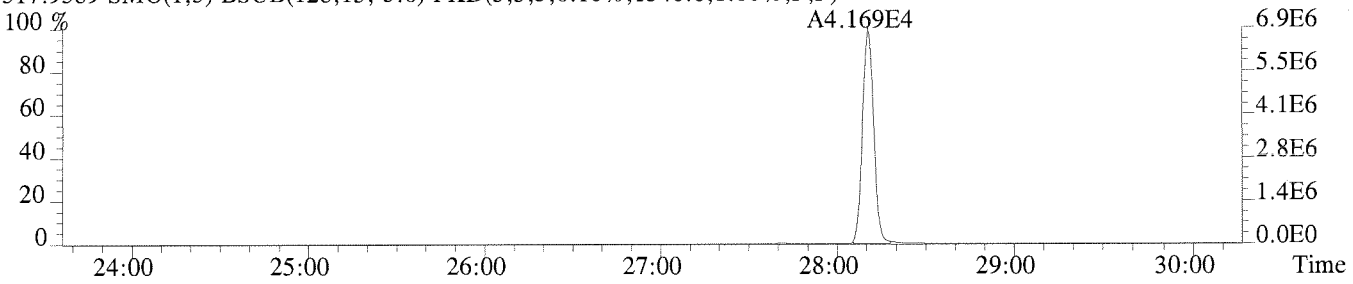
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1632.0,1.00%,F,F)



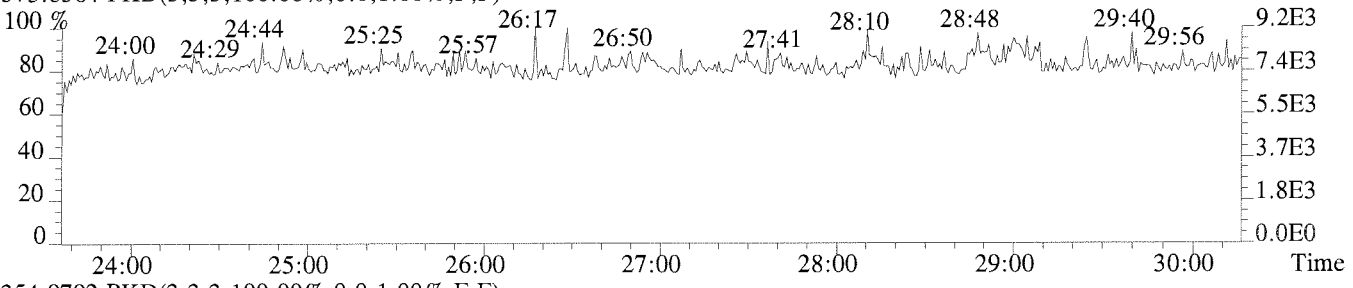
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2216.0,1.00%,F,F)



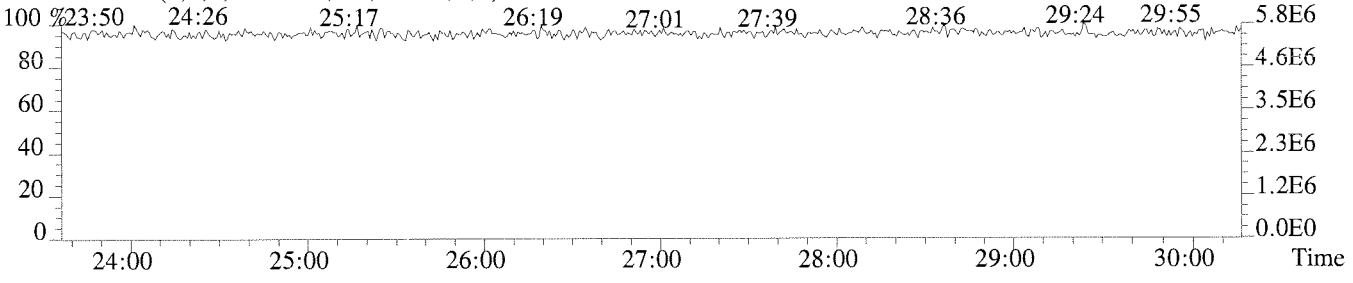
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1340.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

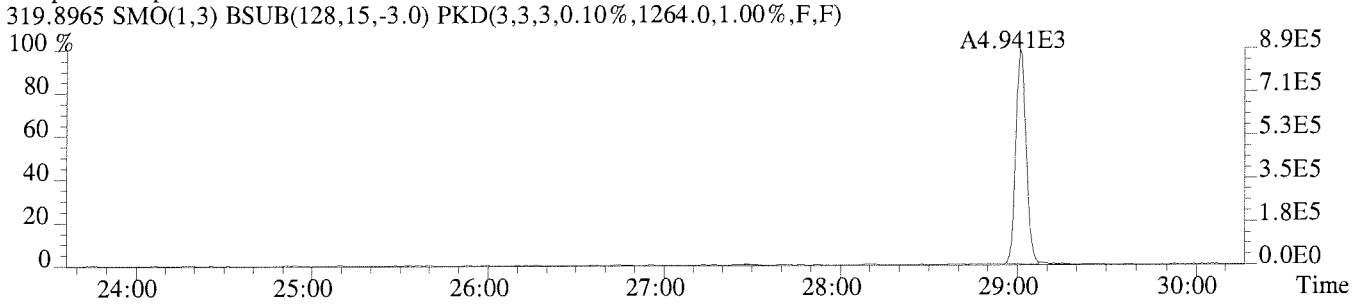


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

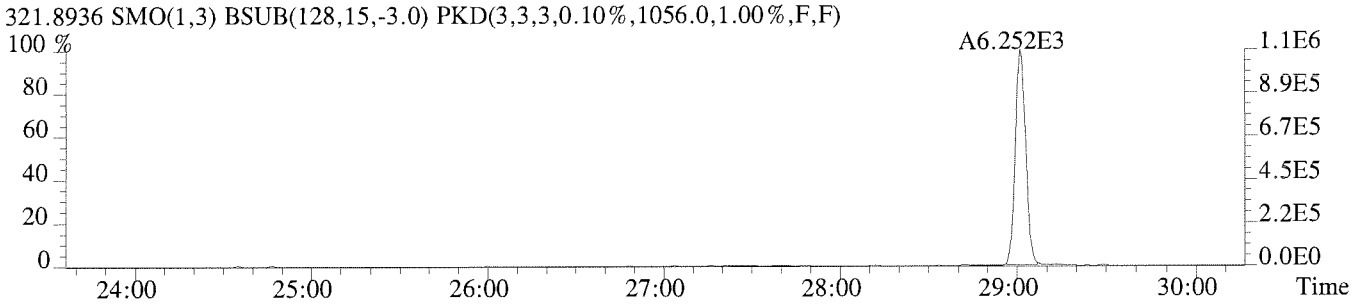


File:U217137 #1-556 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

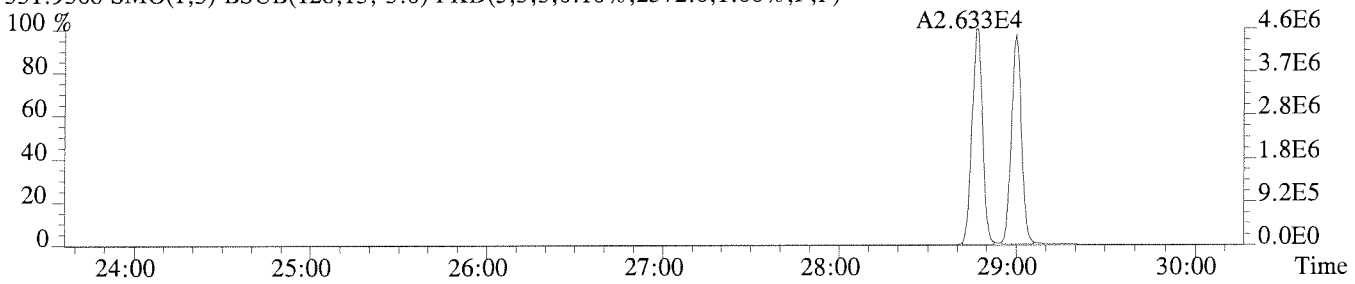
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1264.0,1.00%,F,F)



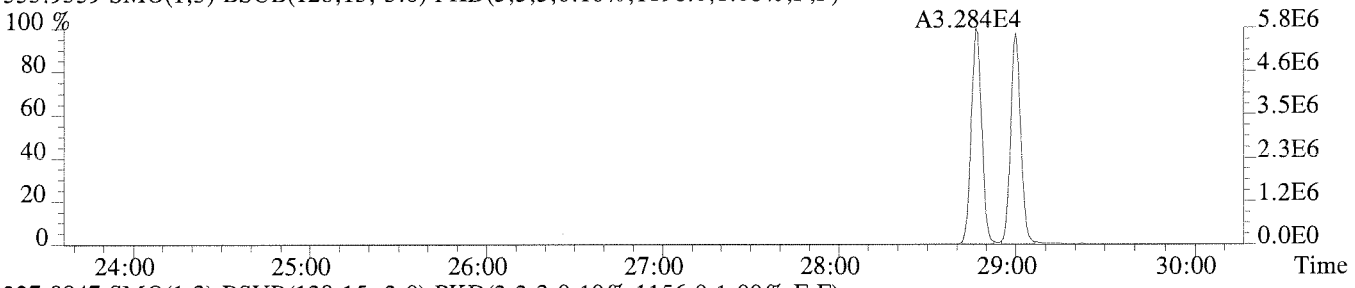
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1056.0,1.00%,F,F)



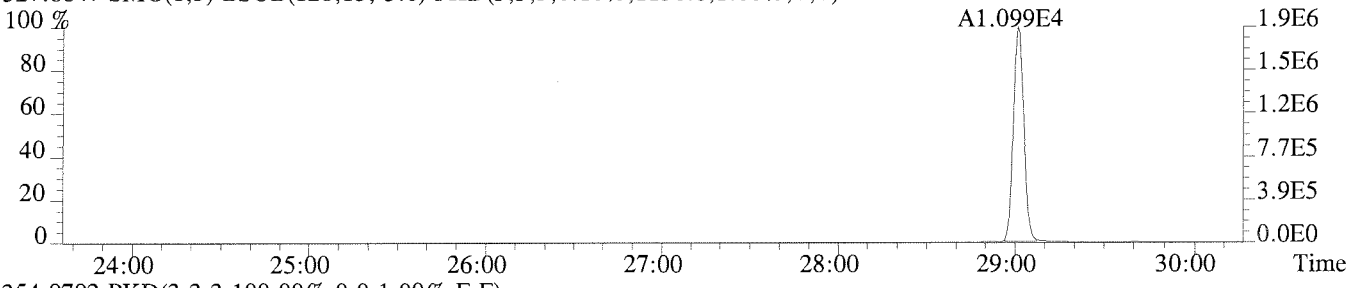
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2572.0,1.00%,F,F)



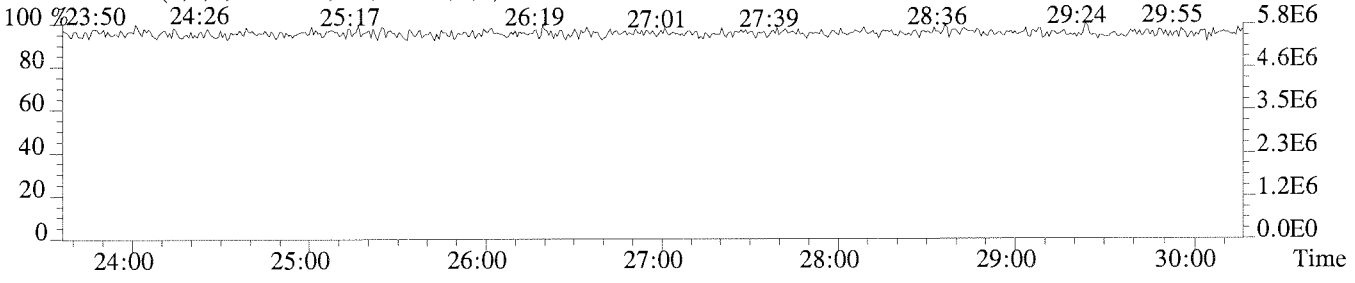
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1196.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1156.0,1.00%,F,F)

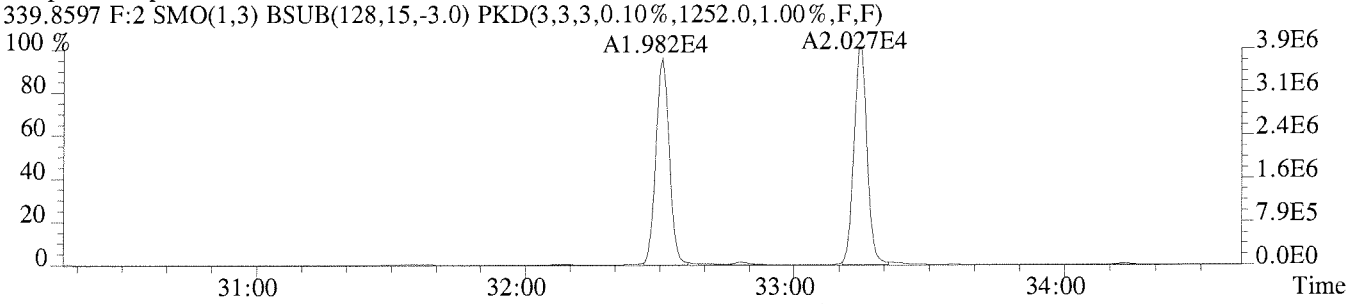


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

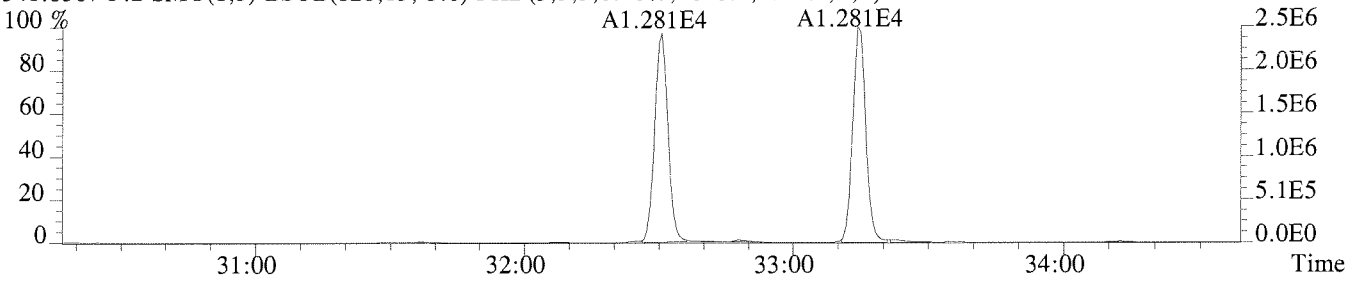


File:U217137 #1-397 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

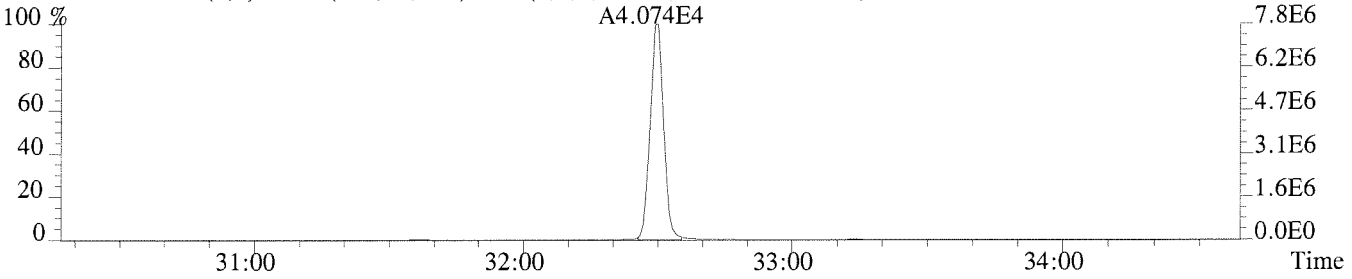
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1252.0,1.00%,F,F)



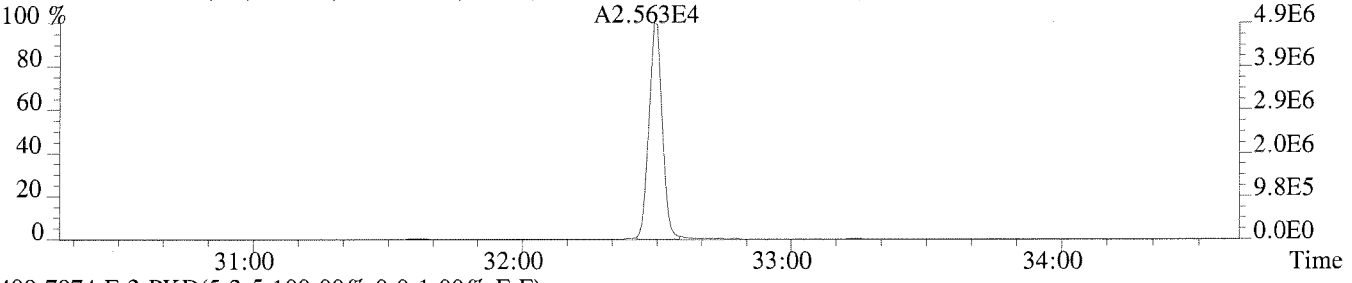
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1620.0,1.00%,F,F)



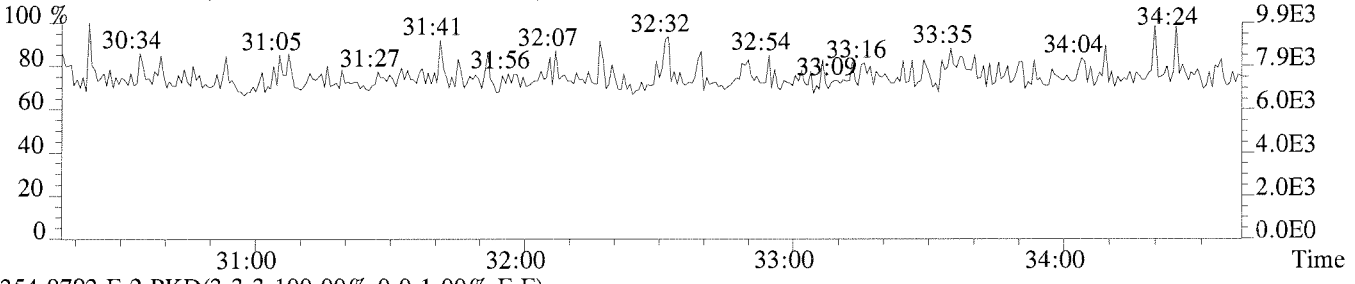
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,676.0,1.00%,F,F)



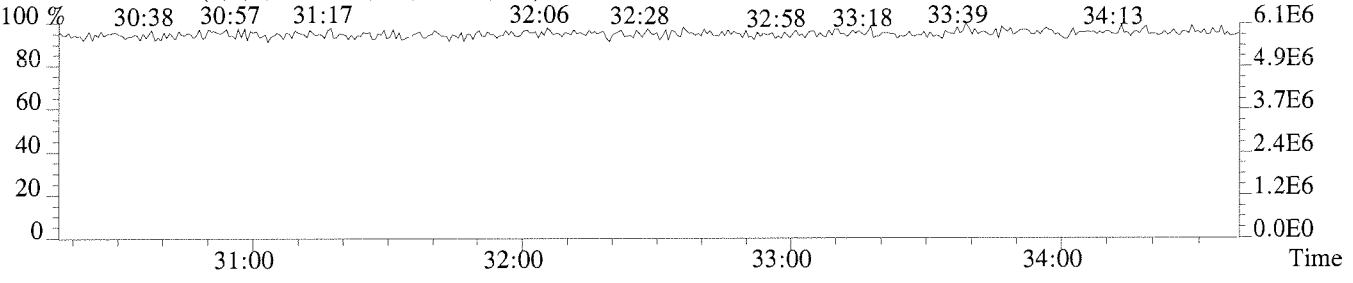
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,960.0,1.00%,F,F)



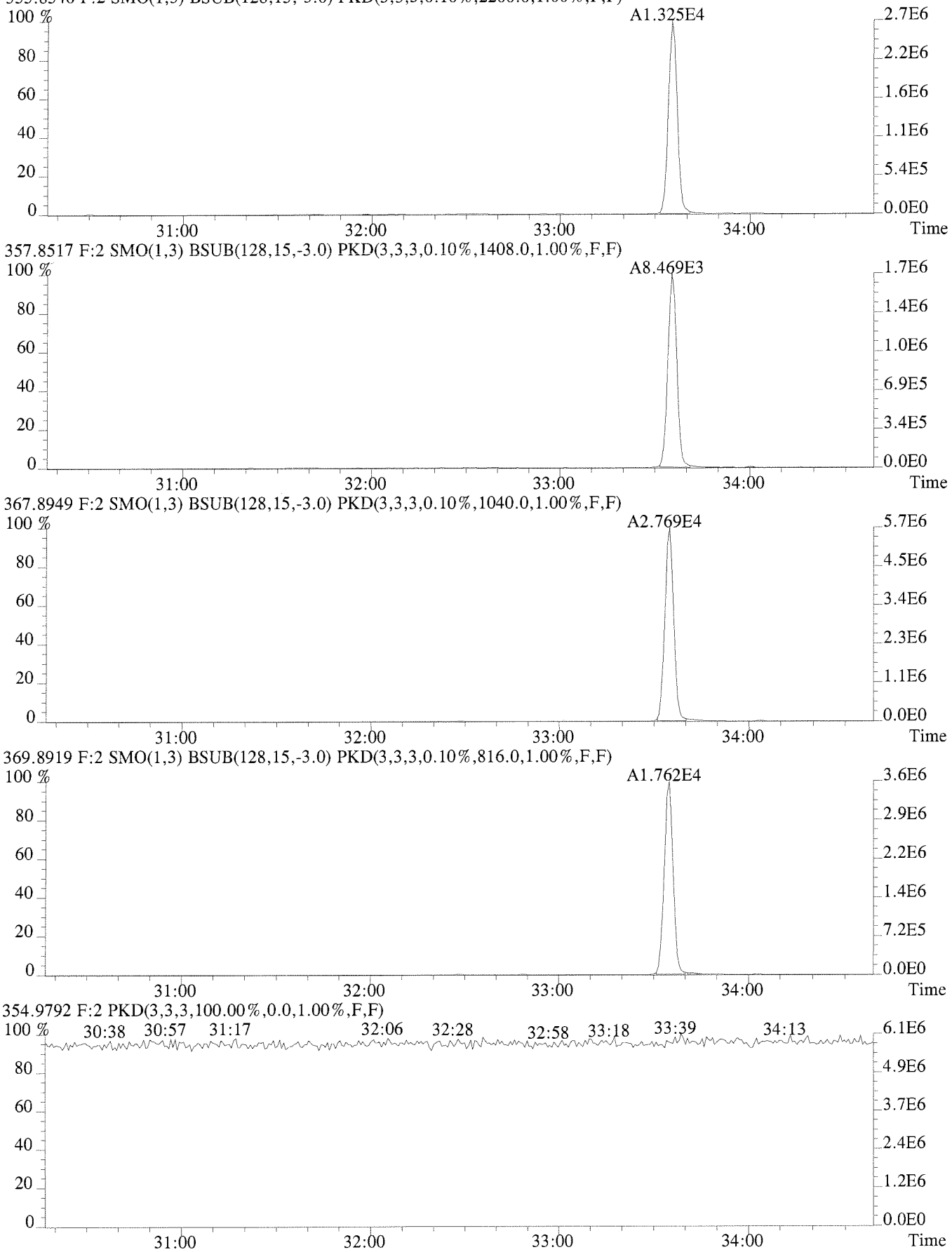
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

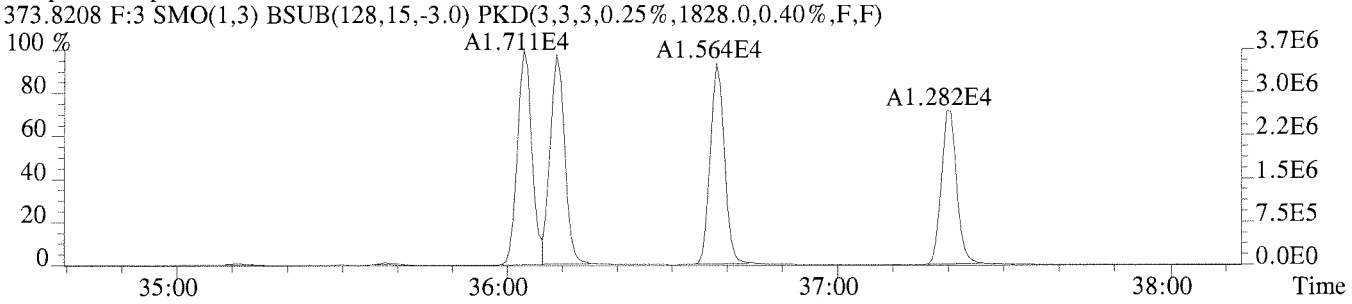


File:U217137 #1-397 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

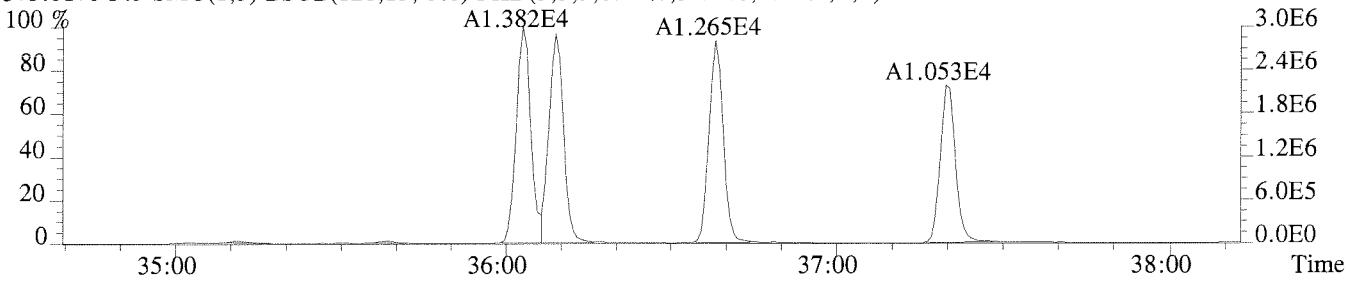


File:U217137 #1-323 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

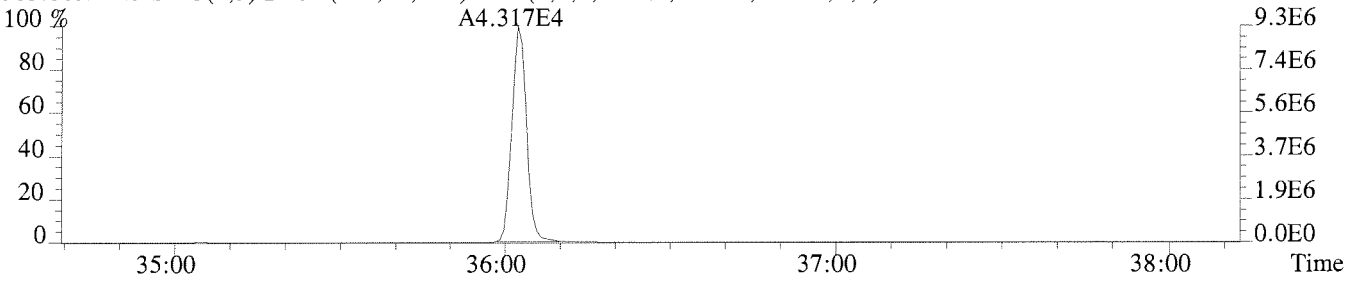
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1828.0,0.40%,F,F)



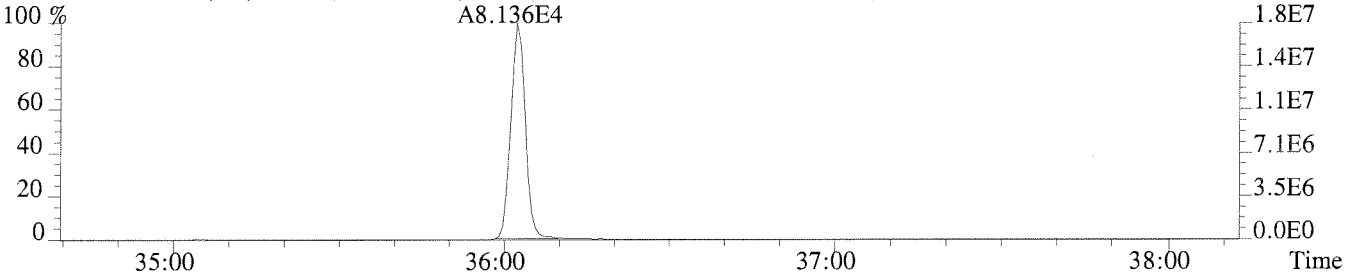
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3596.0,0.40%,F,F)



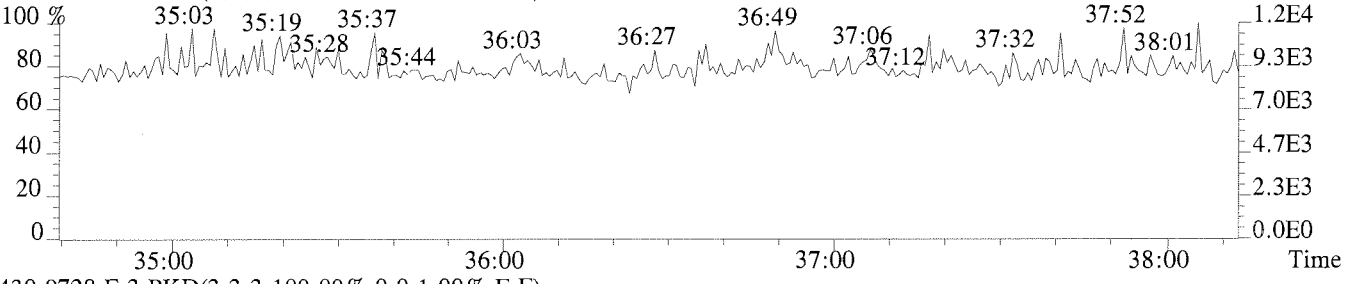
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1040.0,0.40%,F,F)



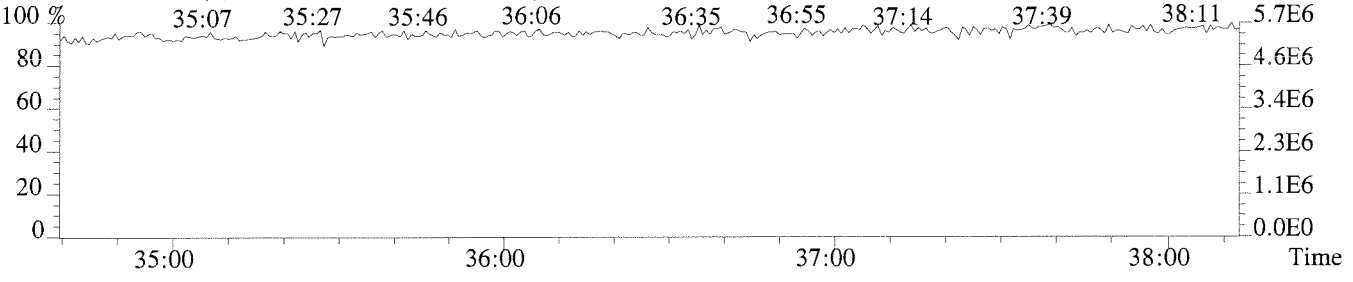
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1420.0,0.40%,F,F)



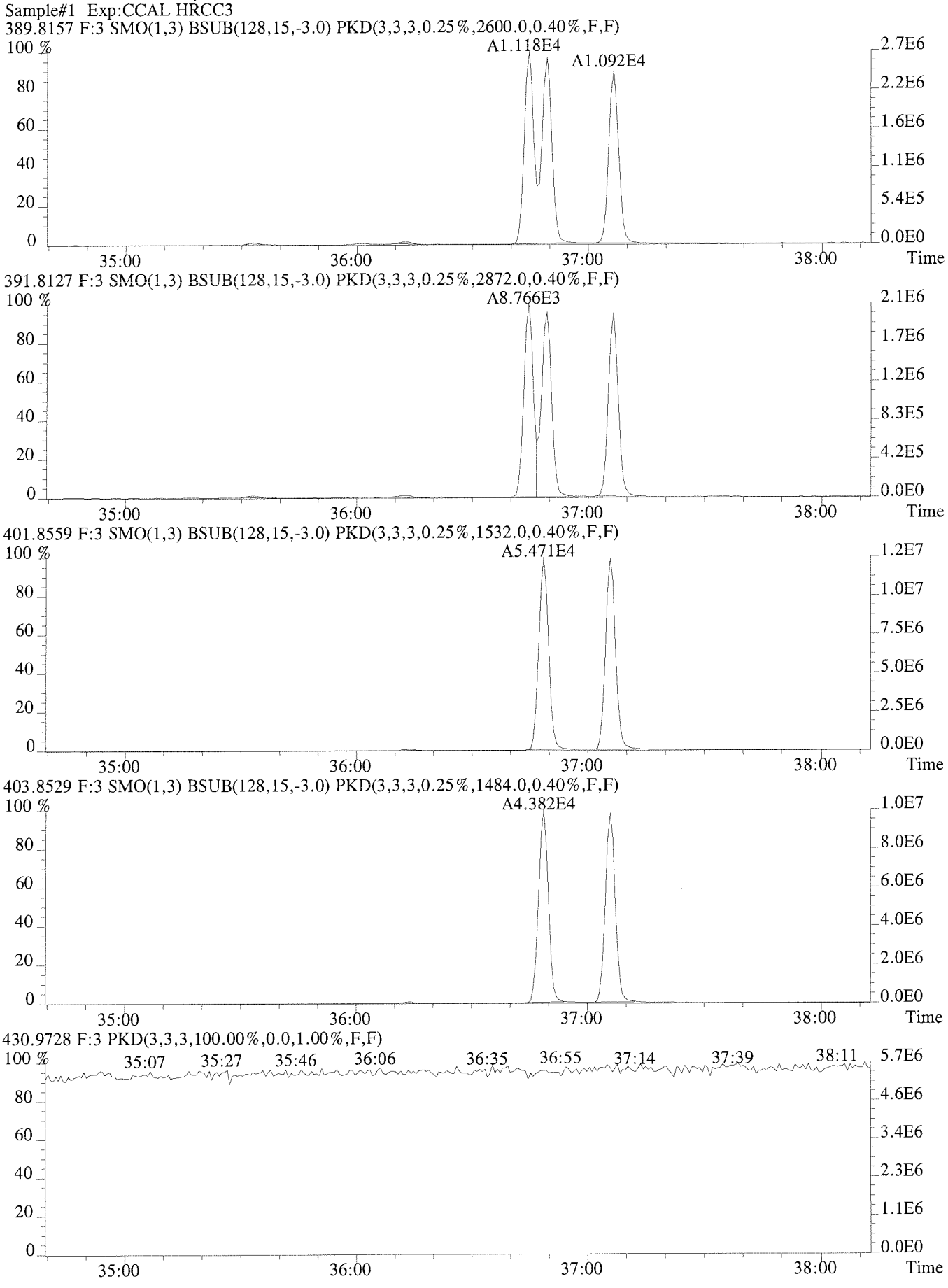
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

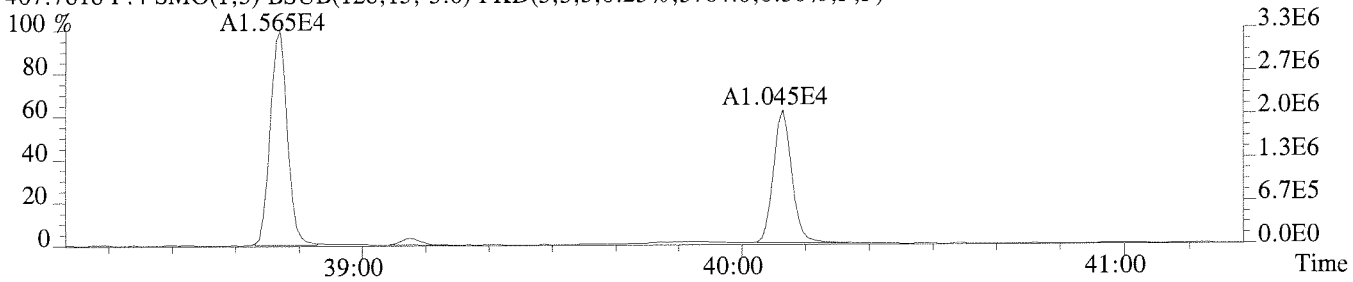


File:U217137 #1-323 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

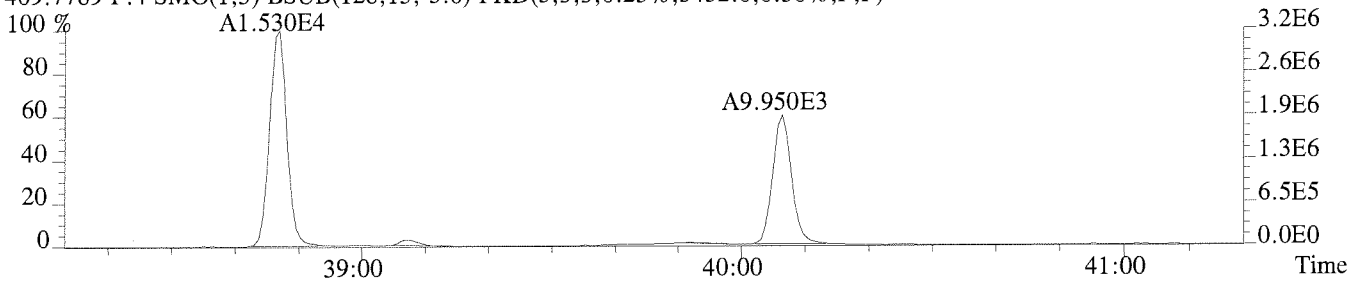


File:U217137 #1-281 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

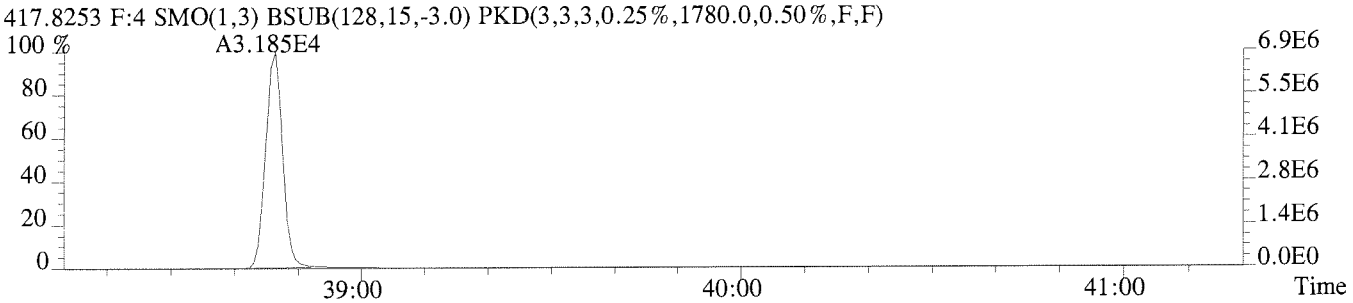
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5764.0,0.50%,F,F)



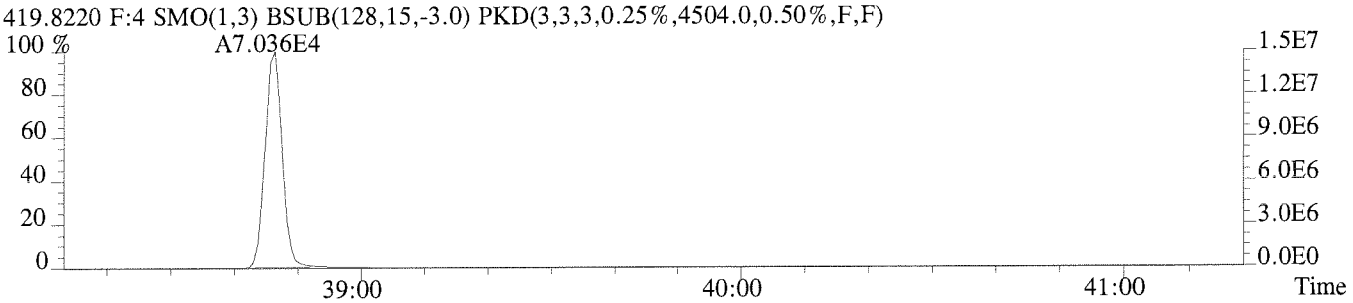
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3452.0,0.50%,F,F)



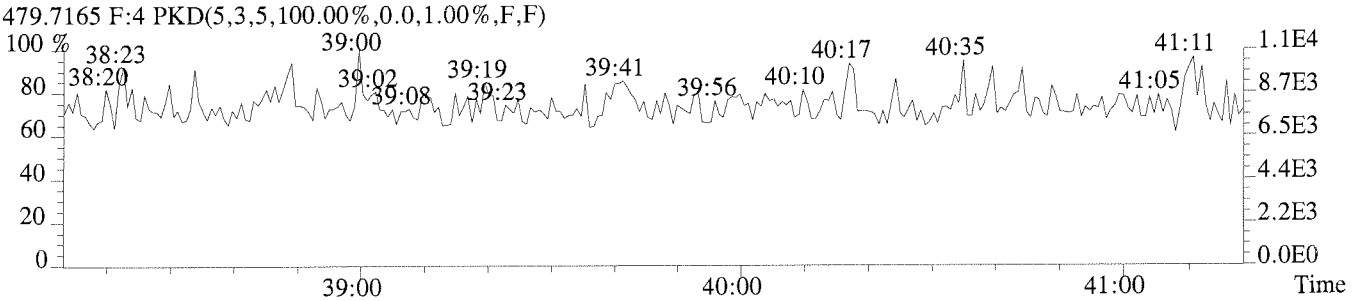
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1780.0,0.50%,F,F)



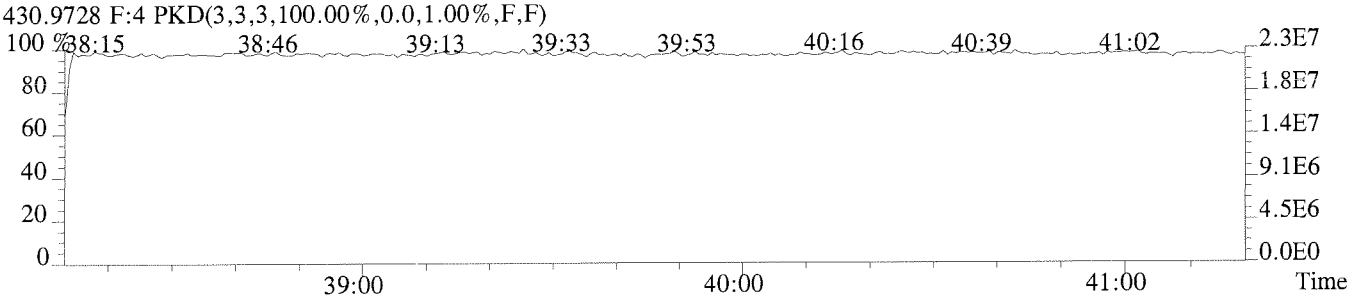
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4504.0,0.50%,F,F)



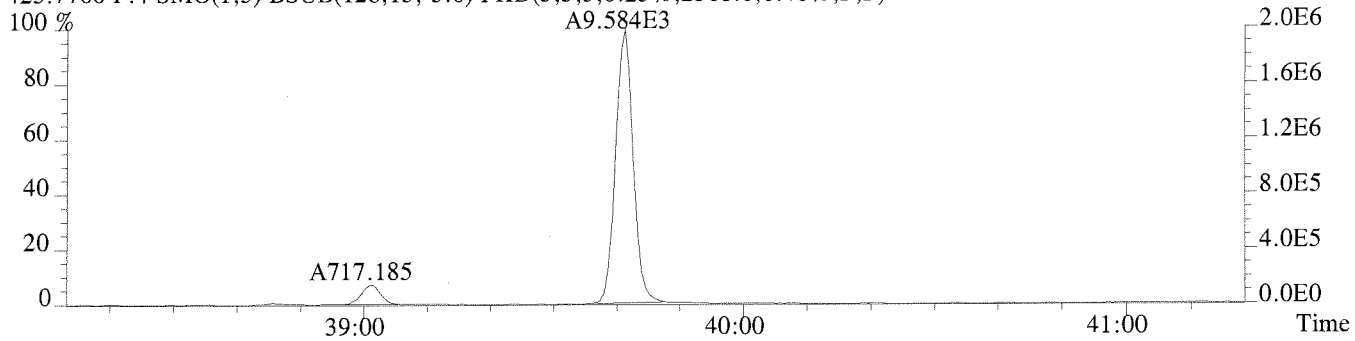
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



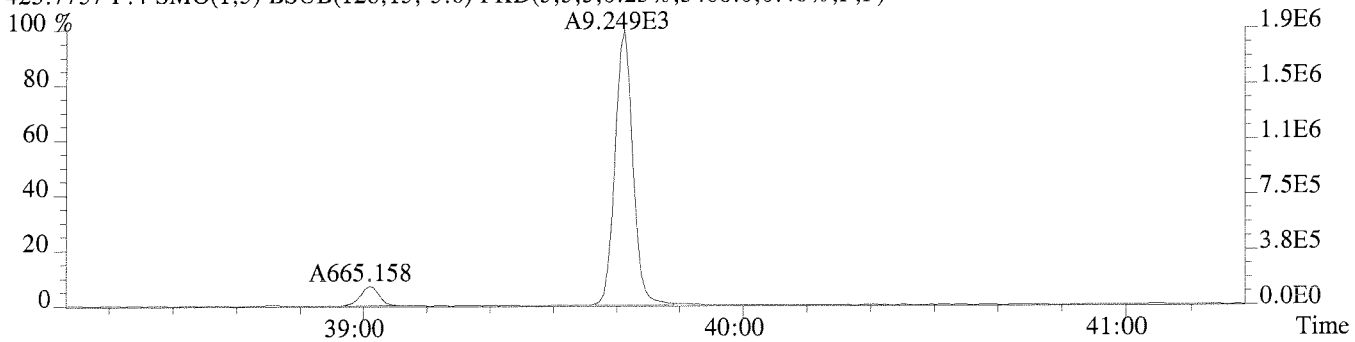
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



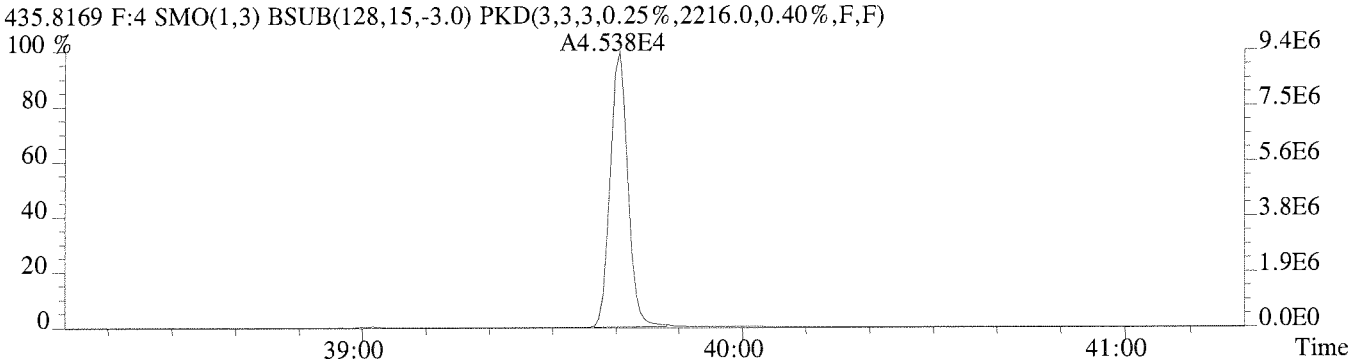
File:U217137 #1-281 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2368.0,0.40%,F,F)



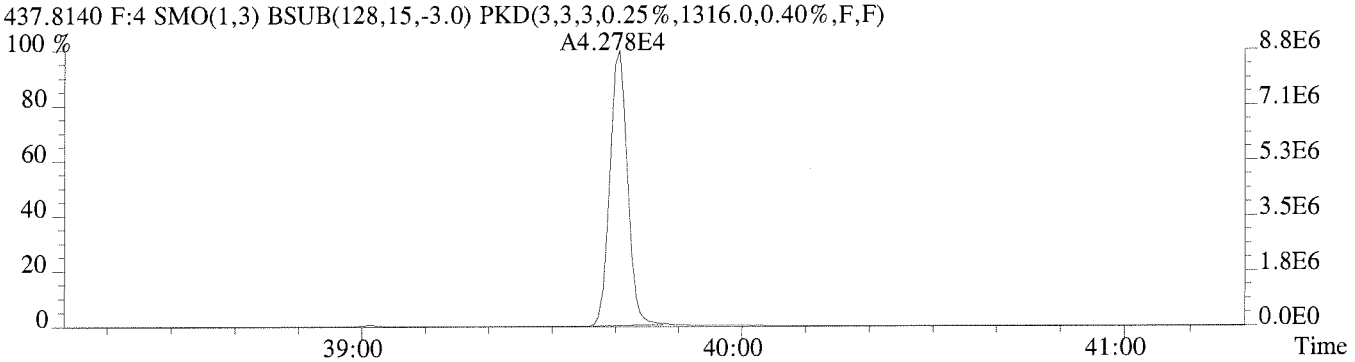
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3400.0,0.40%,F,F)



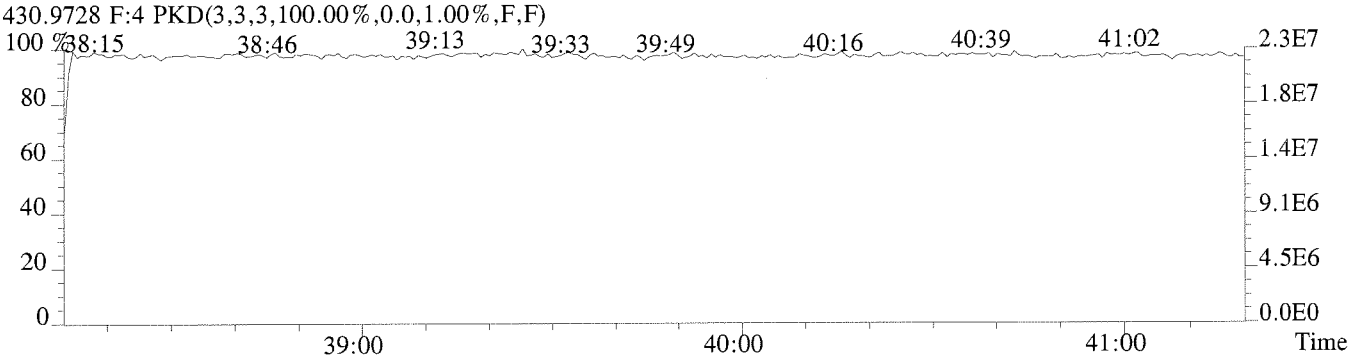
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2216.0,0.40%,F,F)



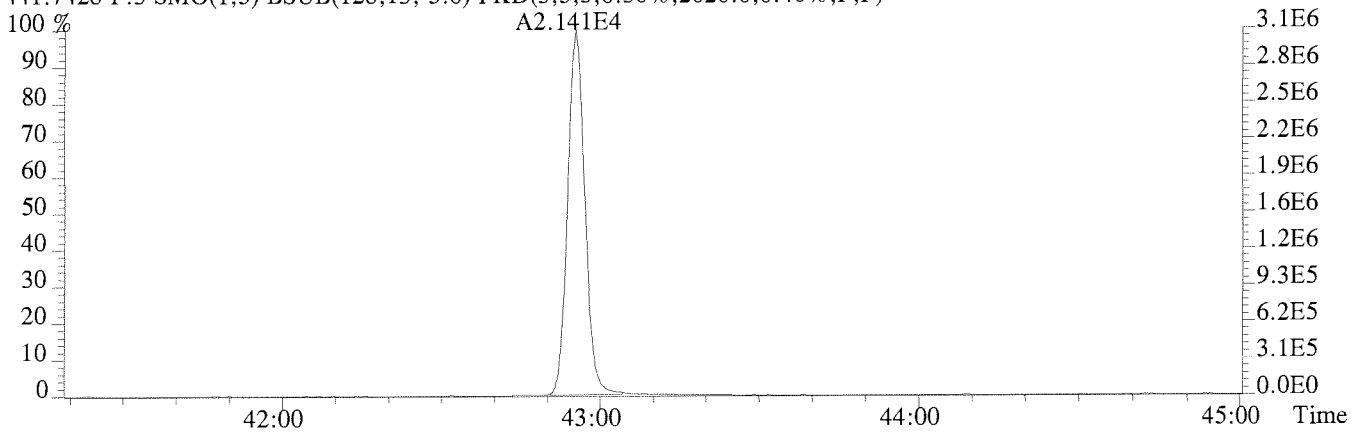
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1316.0,0.40%,F,F)



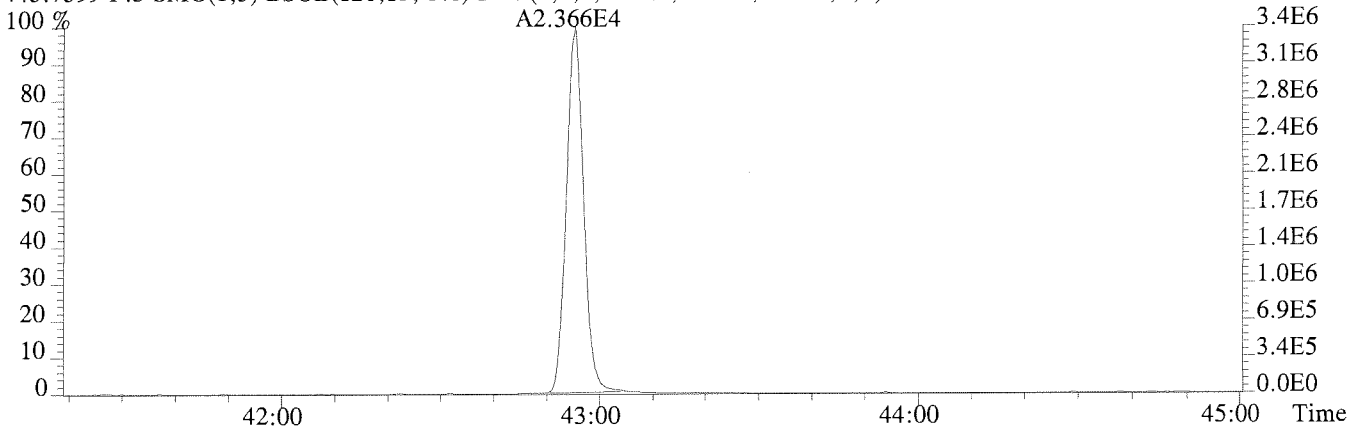
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



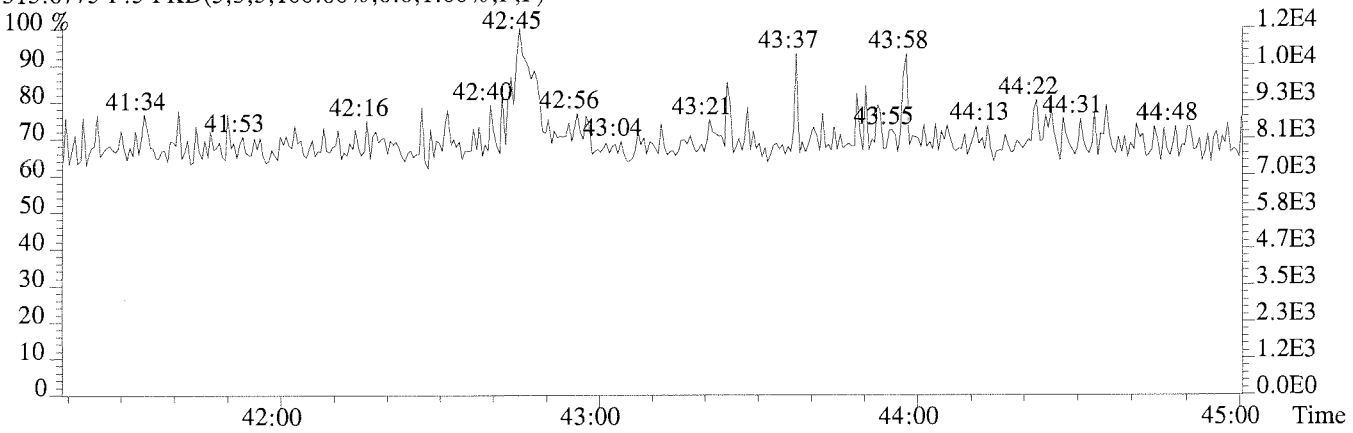
File:U217137 #1-408 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2020.0,0.40%,F,F)



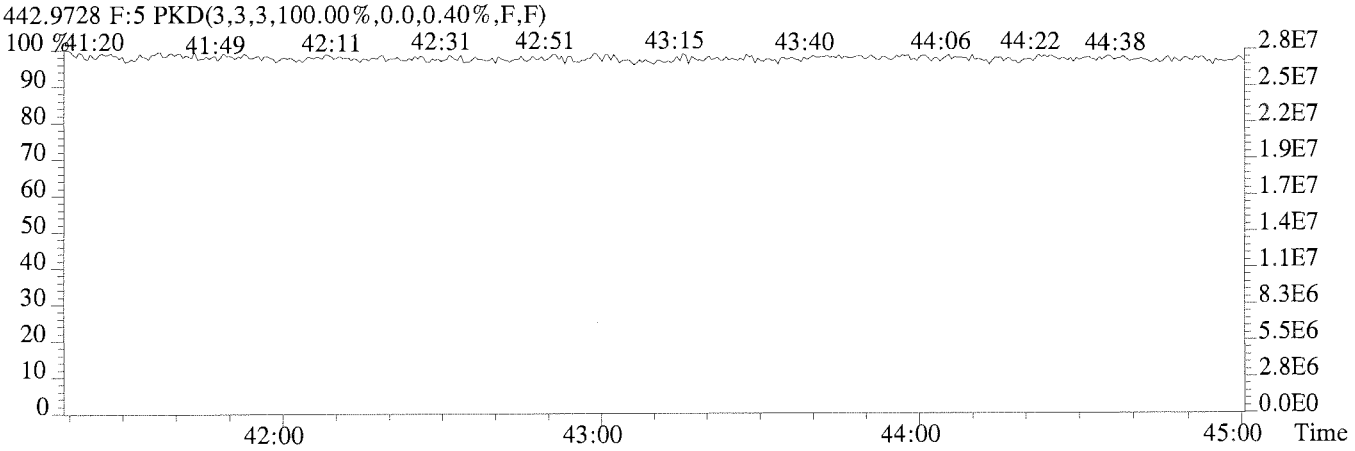
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2476.0,0.40%,F,F)



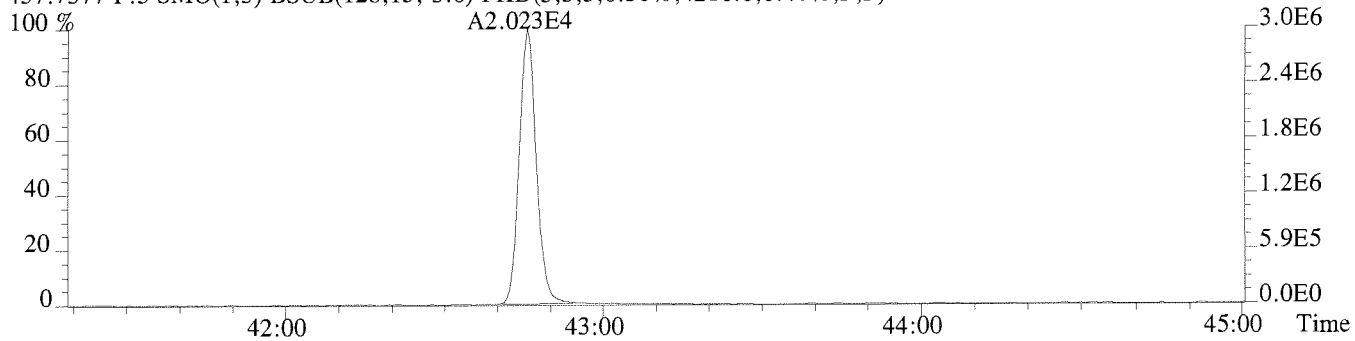
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



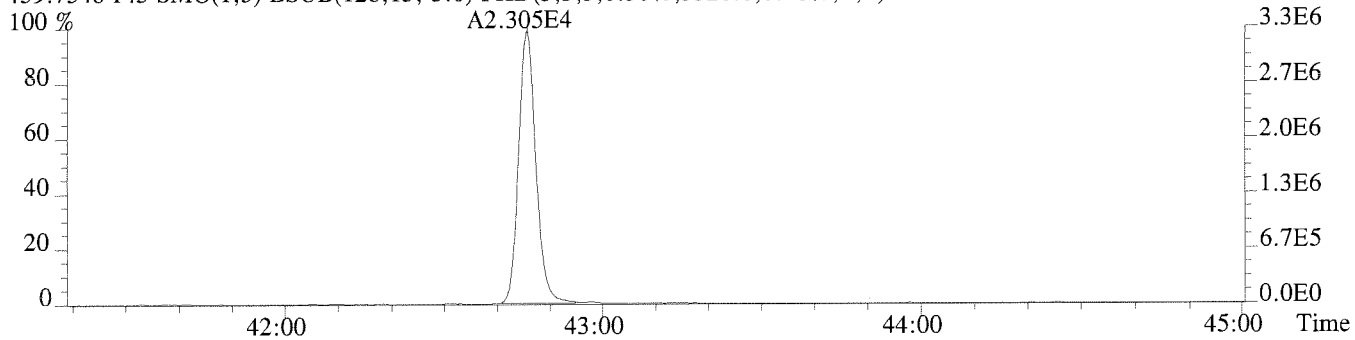
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



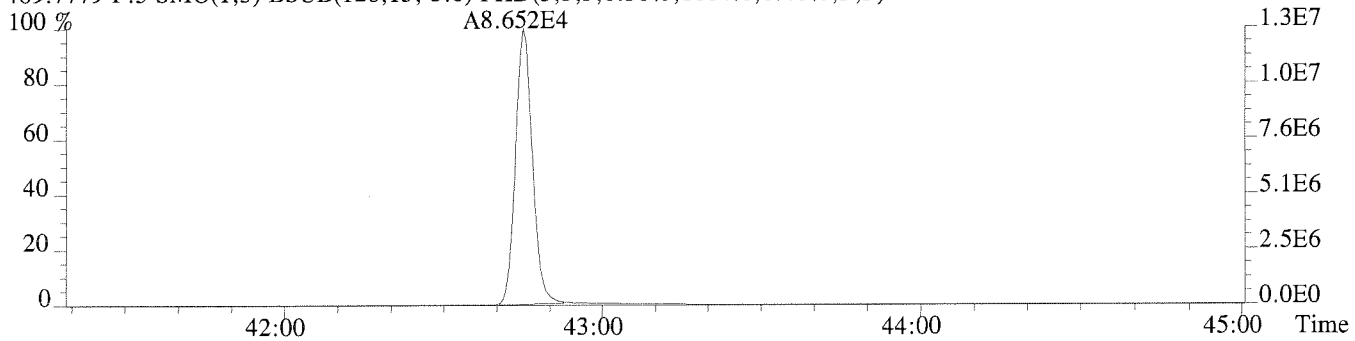
File:U217137 #1-408 Acq:14-AUG-2008 16:58:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,4216.0,0.40%,F,F)



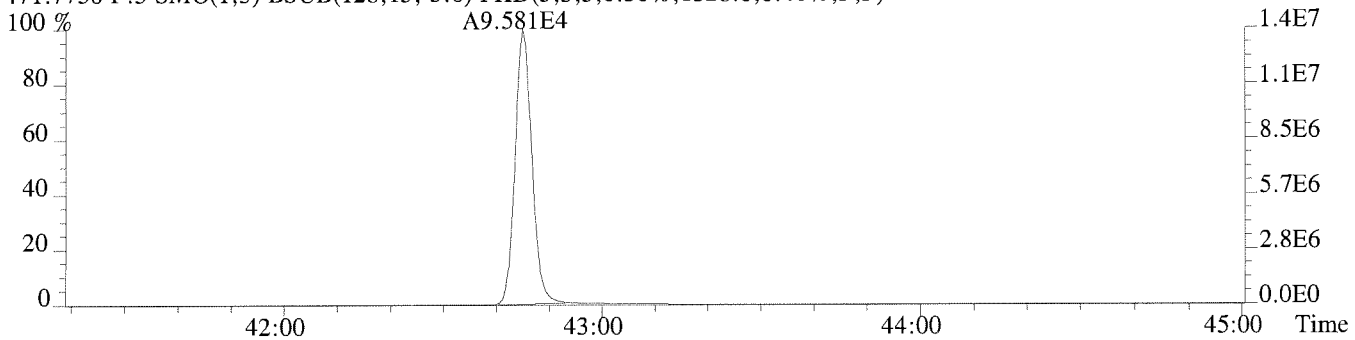
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,3520.0,0.40%,F,F)



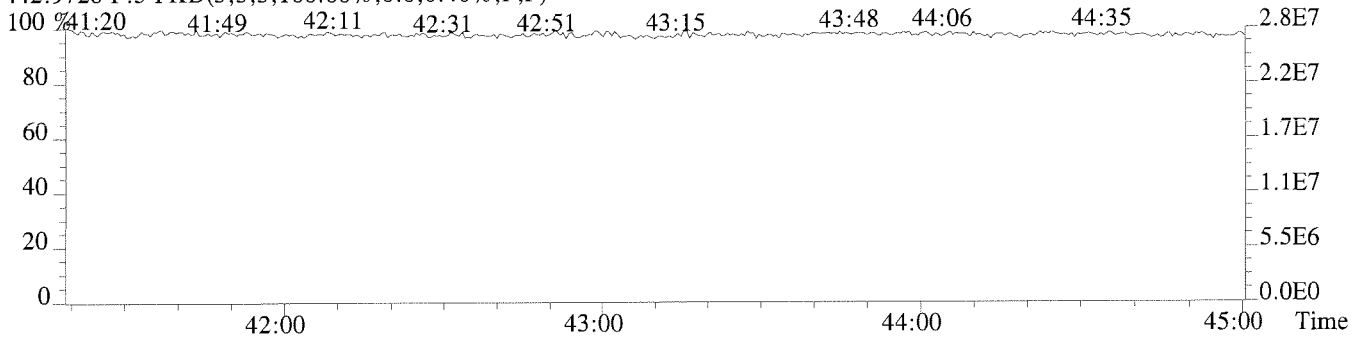
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1884.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1328.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services INC

Initial Calibration

19408 Park Row, Suite 320, Houston, TX 77084
Phone (713)266-1599 Fax (713)266-0130
www.caslab.com

An Employee Owned Company

Initial Calibration QC Checklist

ICAL Name: 1613-28290-1

Date: 4/2/07

Method: 1613 / 8290 / Tetra / TCDD Only / TCDF Conf / 8280 / 613 / M23

Retention Window/Column Performance Check	Analyst	Second Check
Windows in and first and last eluters labeled	✓	✓
Column Performance shows less than or equal to 25% valley between column specific 2378 isomer and it's closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or it's closest eluters	✓	✓

Initial Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections of greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
2378-TCDD elutes at 25 minutes or later on the DB-5 column	✓	✓
Signal-to-noise of all target analytes and their labeled standards at least 10:1	✓	✓
Valley between labeled 123478 and 123678 HxCDD peaks less than or equal to 50%	N/A	N/A
All Manual Intergrations signed and dated and first and final copies of Ical summary included	✓	✓

Analyst: _____ Second QC: _____

icalqc.xls 02-23-00

CAS HOUSTON INC.

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Name: Columbia Analytical Services, Houston Contract

Lab Code: TX01411 CASE No.: Client No: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Ultima

Init. Calib. Date: 04/02/07

Init. Calib.Times: 11:25

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, SPIKES AND DUPLICATES IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		U120205	2-APR-07	11:25:17
ICAL HRCC1		U120206	2-APR-07	13:56:35
ICAL HRCC2		U120207	2-APR-07	14:42:23
ICAL HRCC3		U120208	2-APR-07	15:34:13
ICAL HRCC4		U120209	2-APR-07	16:23:37
ICAL HRCC5		U120210	2-APR-07	17:13:27

HRGC/HRMS RUN LOG

CAS HOUSTON 10655 Richmond Avenue, Suite 130-A Houston, TX 77042

Columbia Analytical Services inc. An Employee Owned Company

Acq Method: 8290 CAS/1613 Result File: U120402B290I Archive Tape: _____

GC Method: 8290 CAS/1613 EDD File: _____ Instrument ID: AutoSpec 1

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
03/31/07	00:03	U120200	K0702185-001DL	XA-5-1 DL	EB29049	YC	1:100	
	00:57	U120201	EB29052-LCS	LAB SPIKE	EB29052			
	1:39	U120202	EB29052-DLCS	DUP LAB SPIKE	I			
	2:27	U120203	Test					
	3:15	U120204	CCAL HRCC3	D8-2-2A			use average RF	
4/2/07	11:25	U120205	Window Def. Mix	D4-90-2				
	13:56	U120206	Ical HRCC1	D5-49-5				
	14:42	U120207	Ical HRCC2	D5-49-4				
	15:34	U120208	Ical HRCC3	D8-2-2A				
	16:23	U120209	Ical HRCC4	D5-49-2				
	17:13	U120210	Ical HRCC5	D5-49-1				
↓	18:02	U120211	Test			↓		

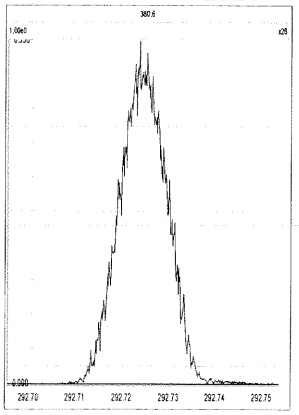
Reviewed by: JB

Experiment Calibration Report **MassLynx 4.0 SCN503** Page 1 of 1

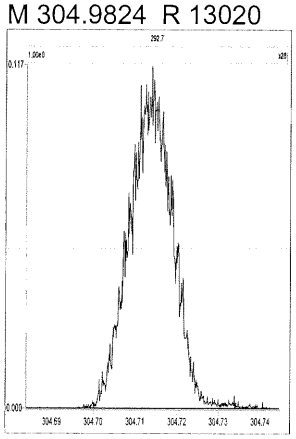
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Monday, April 02, 2007 11:23:56 Central Standard Time

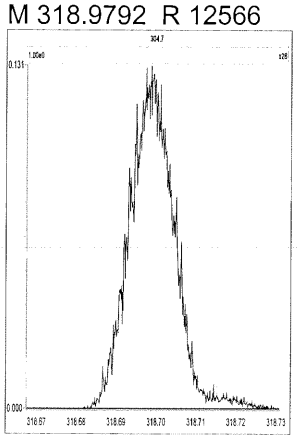
M 292.9824 R 12823



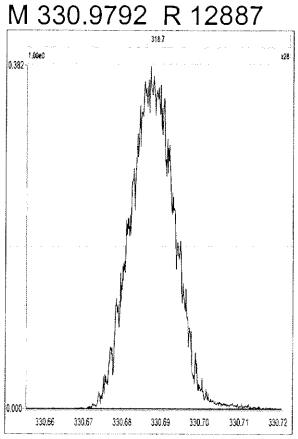
M 304.9824 R 13020



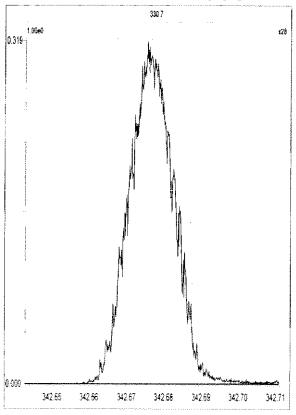
M 318.9792 R 12566



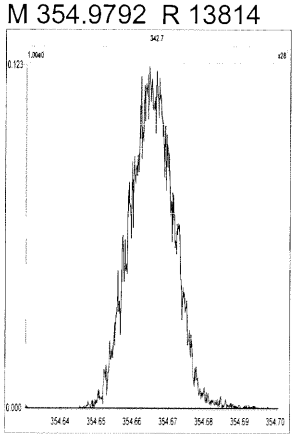
M 330.9792 R 12887



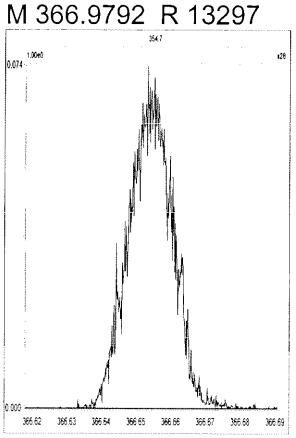
M 342.9792 R 13367



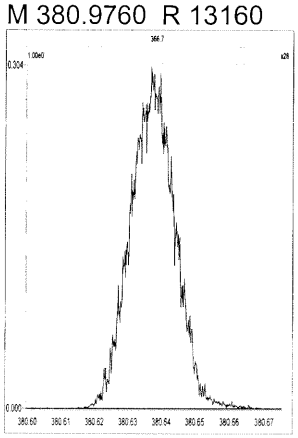
M 354.9792 R 13814



M 366.9792 R 13297



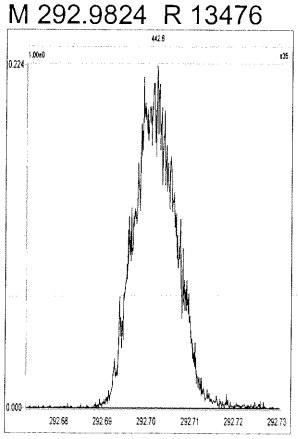
M 380.9760 R 13160



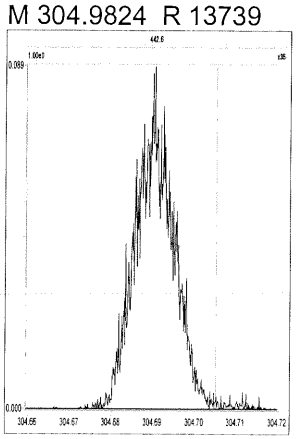
Resolution Check Report **MassLynx 4.0 SCN503** Page 1 of 1

Printed: Monday, April 02, 2007 18:52:37 Central Standard Time

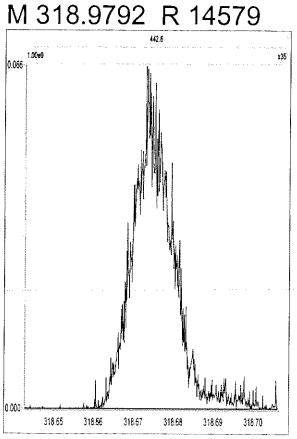
M 292.9824 R 13476



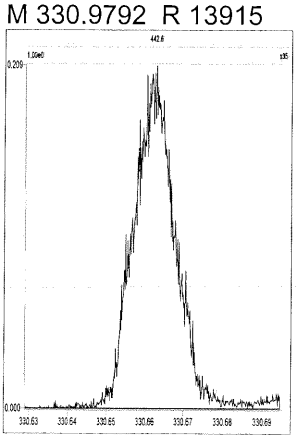
M 304.9824 R 13739



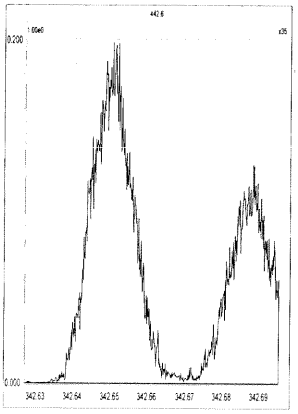
M 318.9792 R 14579



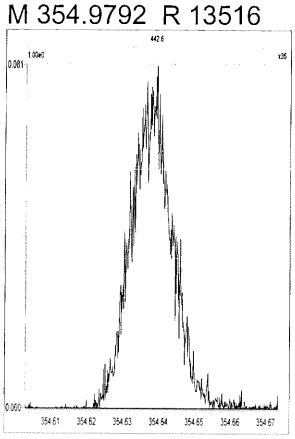
M 330.9792 R 13915



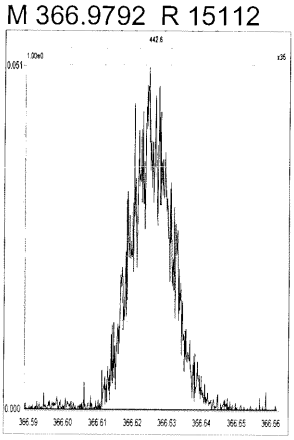
M 342.9792 R 4612



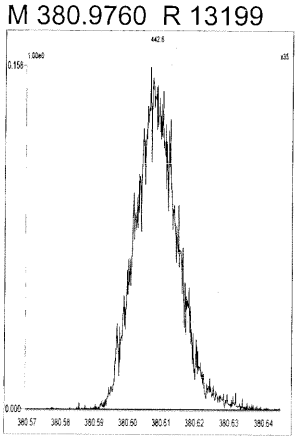
M 354.9792 R 13516



M 366.9792 R 15112



M 380.9760 R 13199



5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID

WDM

Lab Name: COLUMBIA ANALYTICAL SERVICES

Lab Code: CAS Case No.: _____ SDG No.: _____

GC Column: DB-5 ID: 0.25 (mm) Lab File ID: U120205

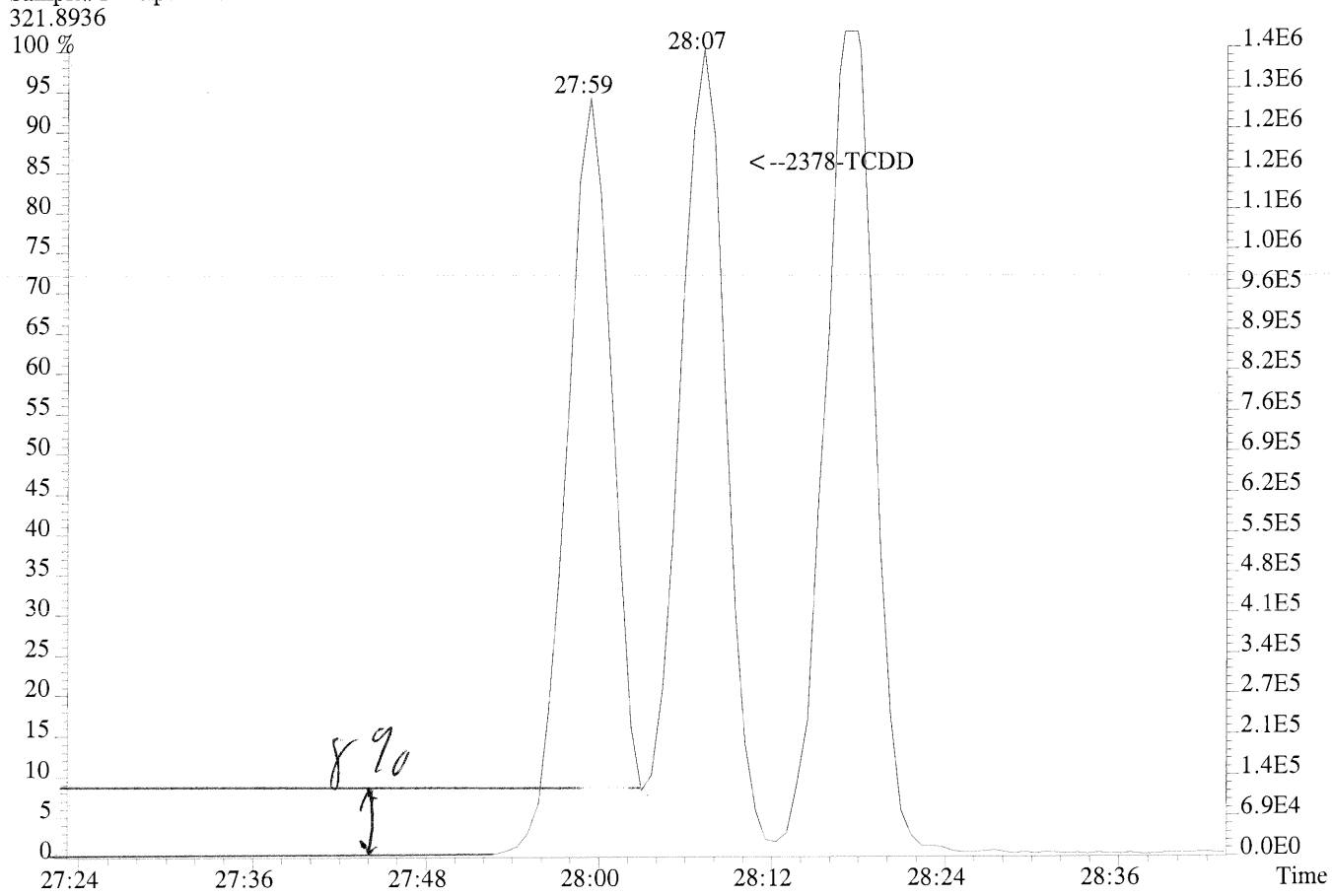
Date Analyzed: 04/02/07

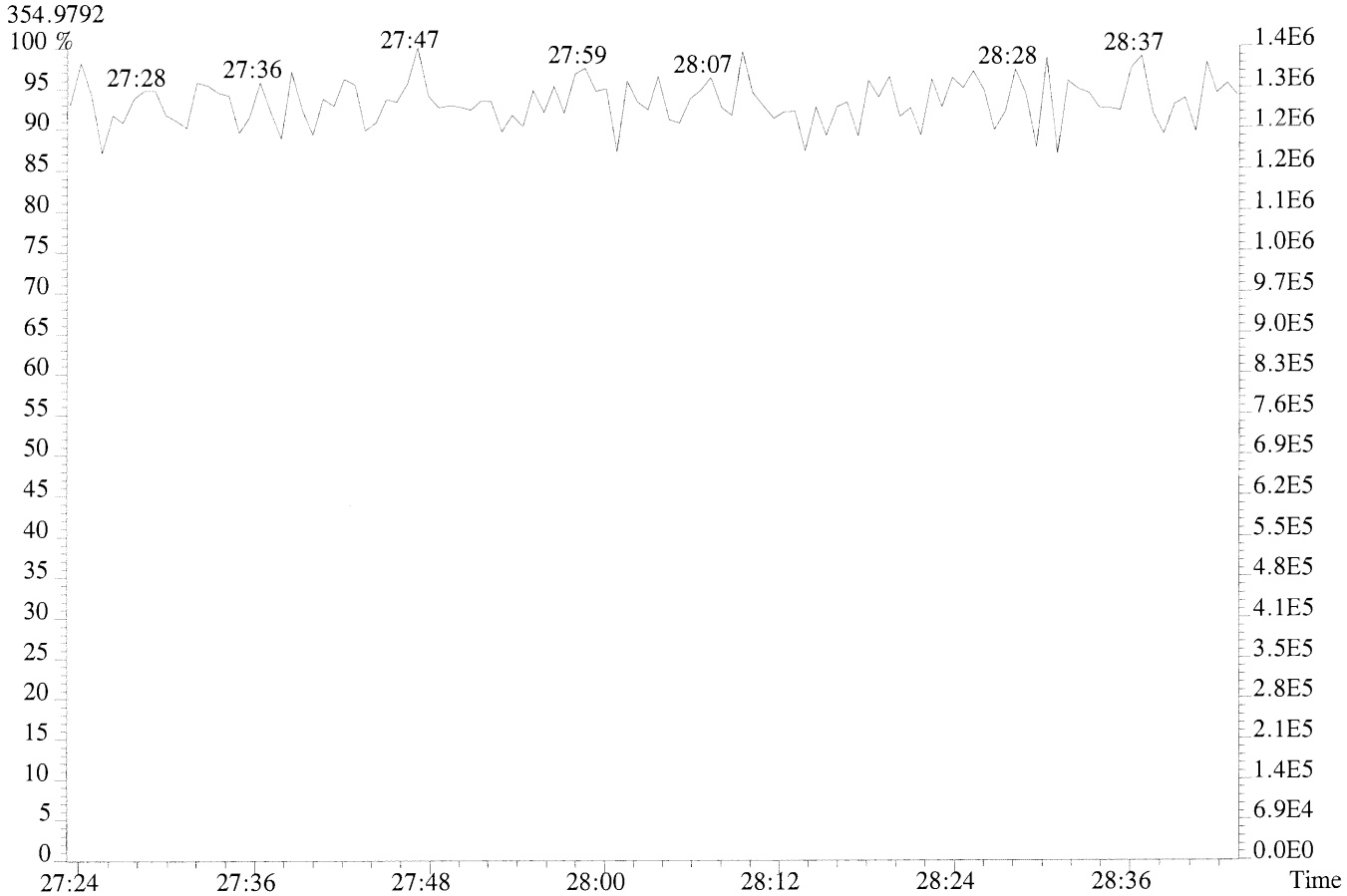
Time Analyzed: 11:25:17

CONGENER	RT FIRST ELUTING	RT LAST ELUTING
TCDF	23:27	29:13
TCDD	25:10	29:11
PeCDF	29:28	33:15
PeCDD	30:47	33:06
HxCDF	34:06	36:24
HxCDD	34:36	36:04
HpCDF	37:46	39:05
HpCDD	38:01	38:40

% Valley 2378-TCDD: 8%

File:U120205 #1-552 Acq: 2-APR-2007 11:25:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE





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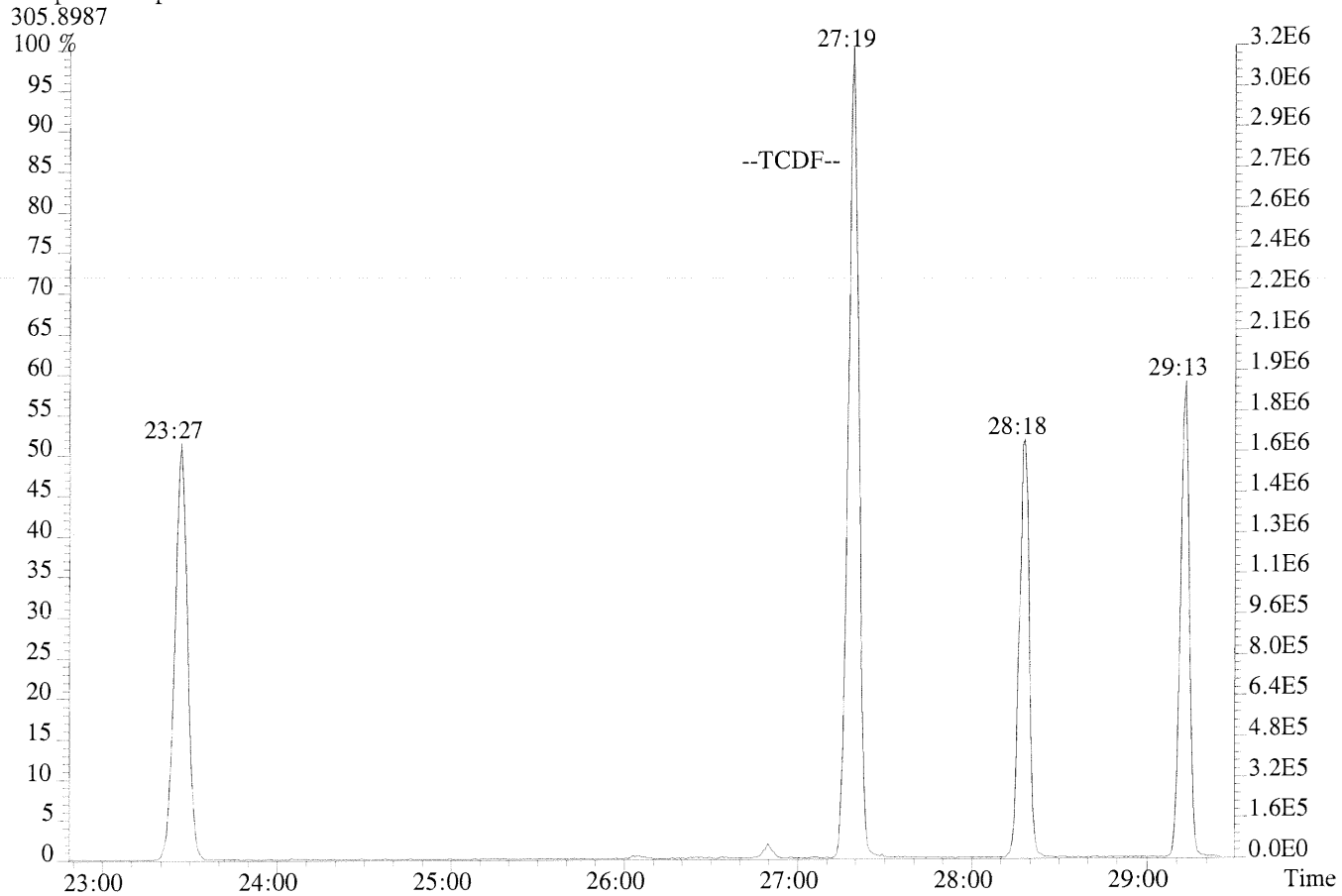

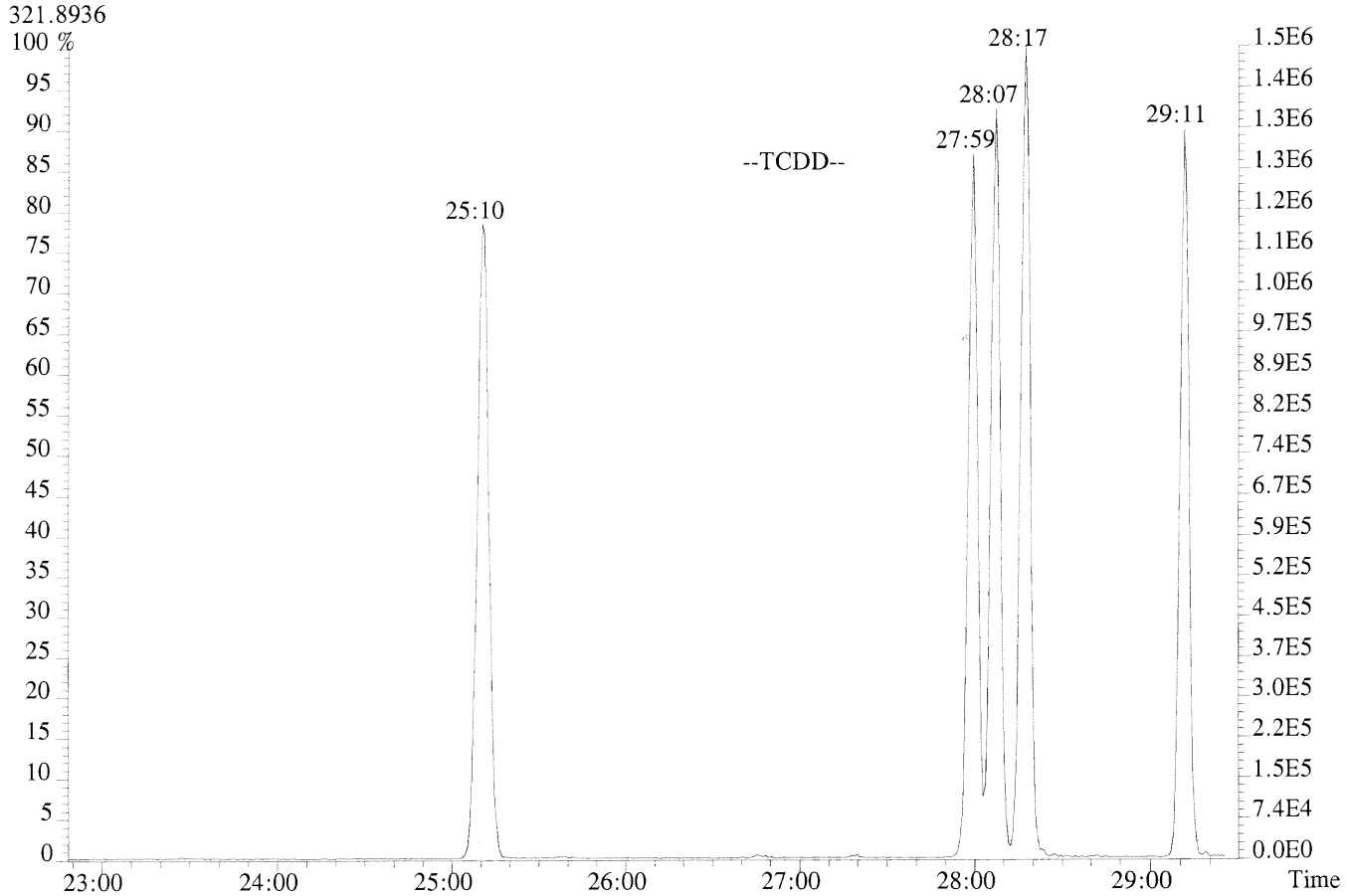

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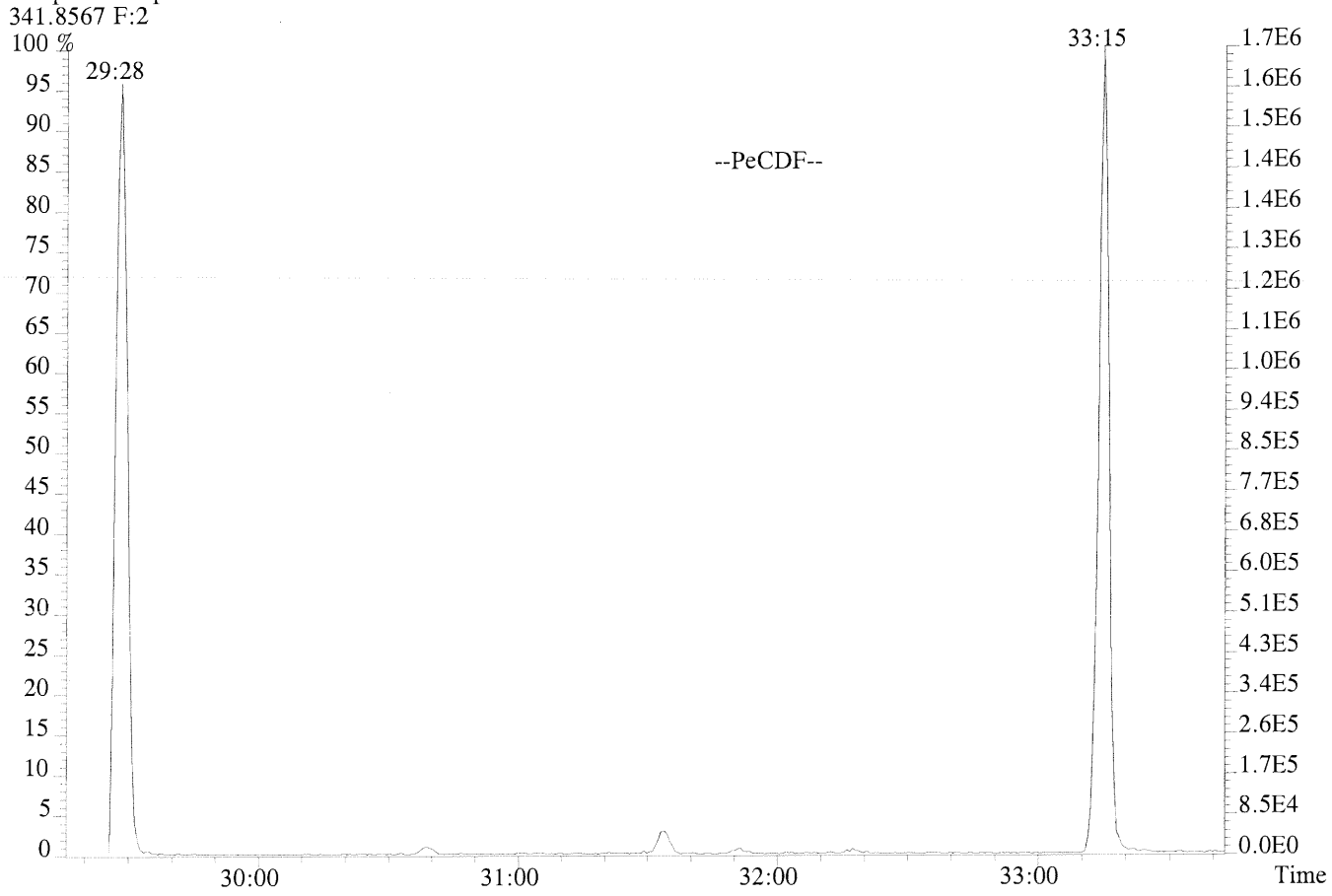
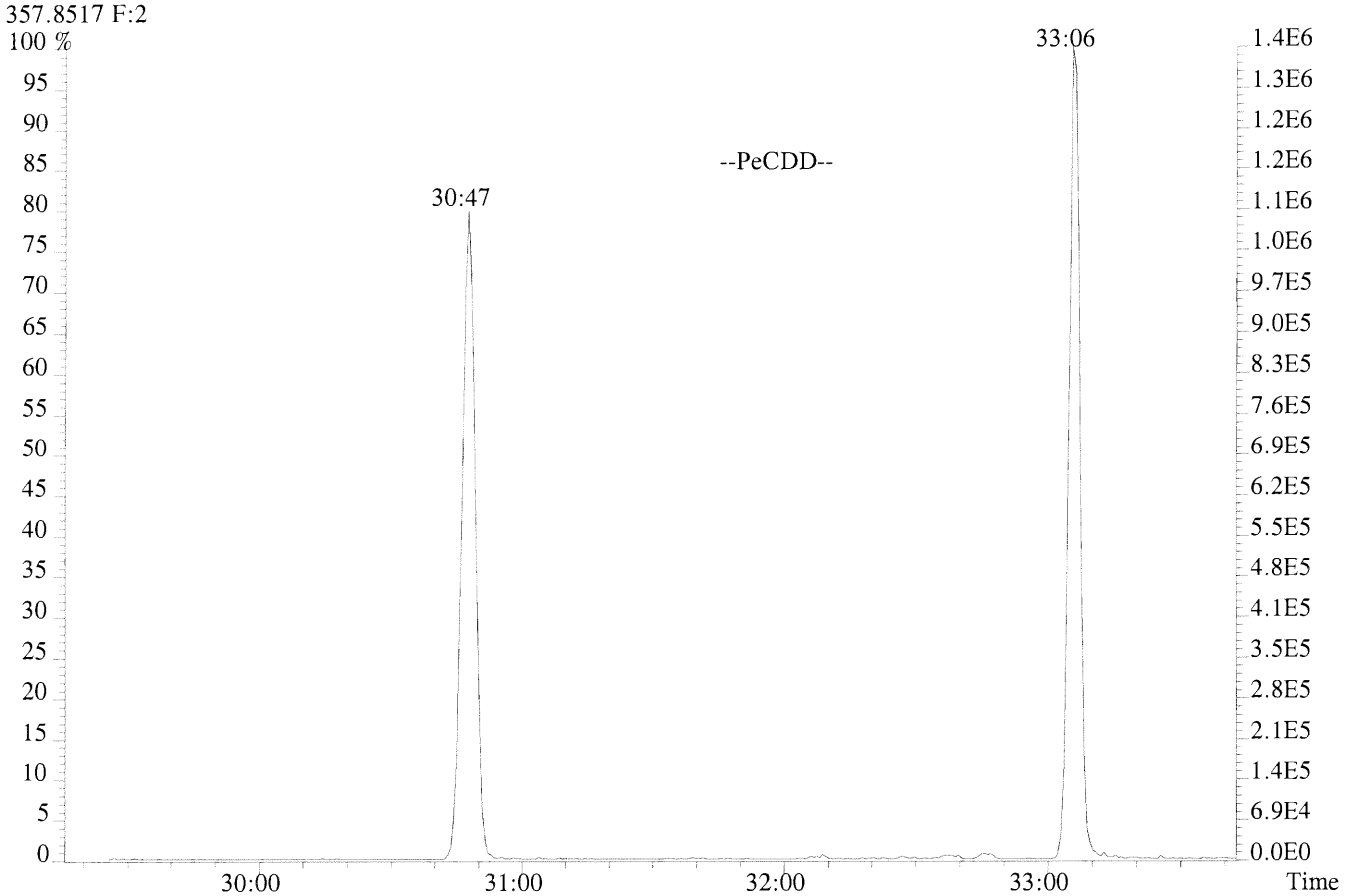
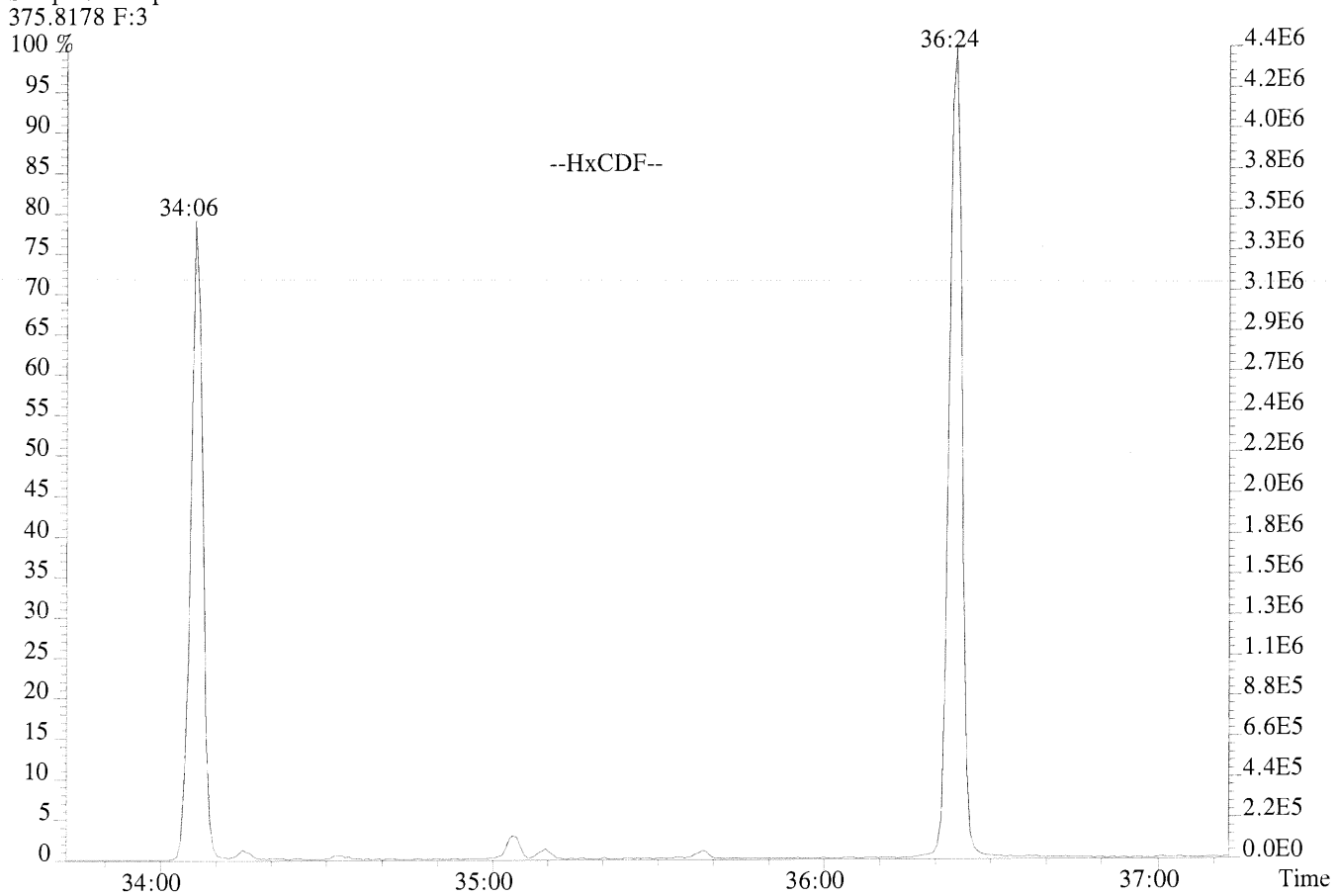
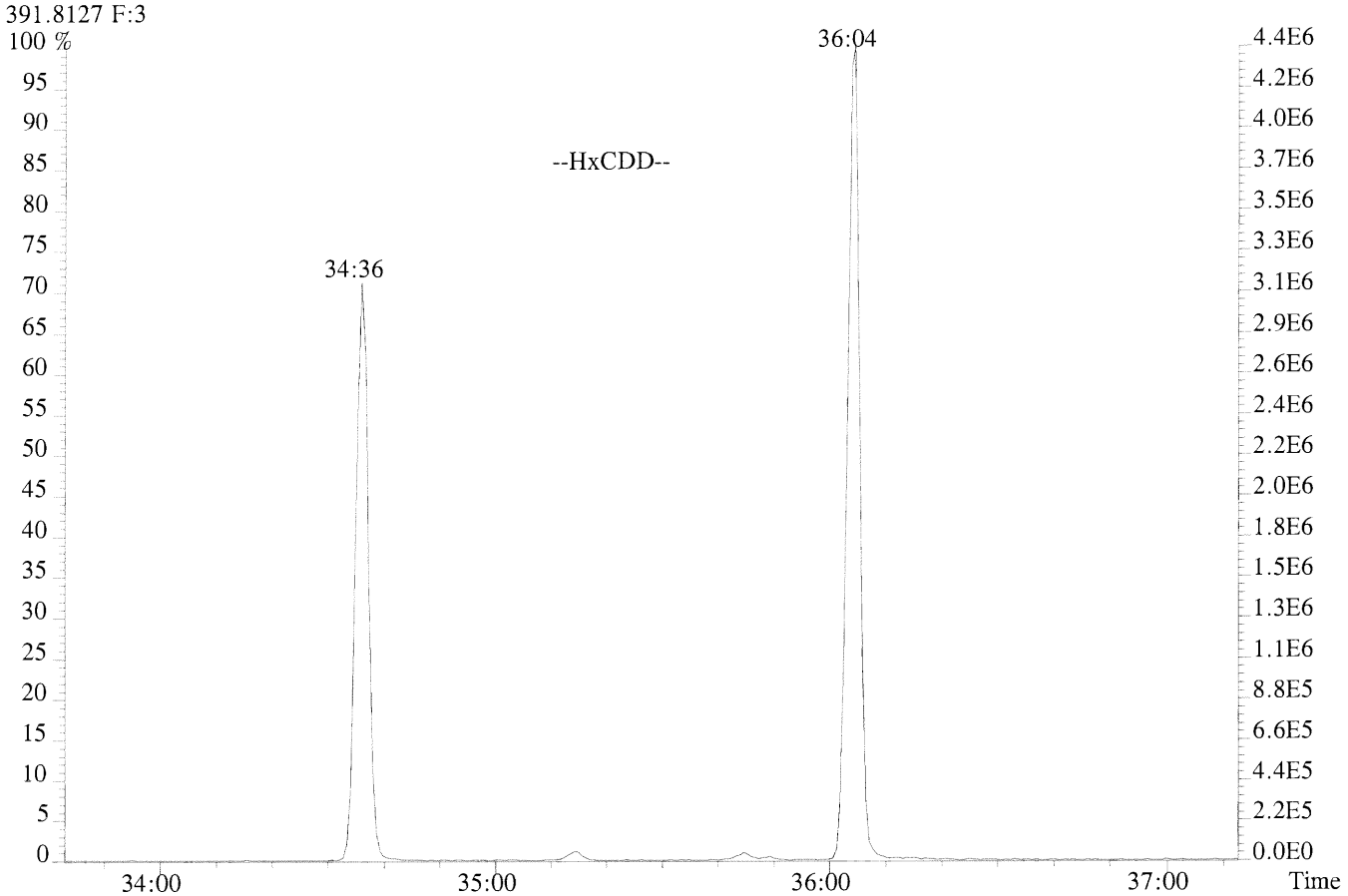




File:U120205 #1-318 Acq: 2-APR-2007 11:25:17 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE





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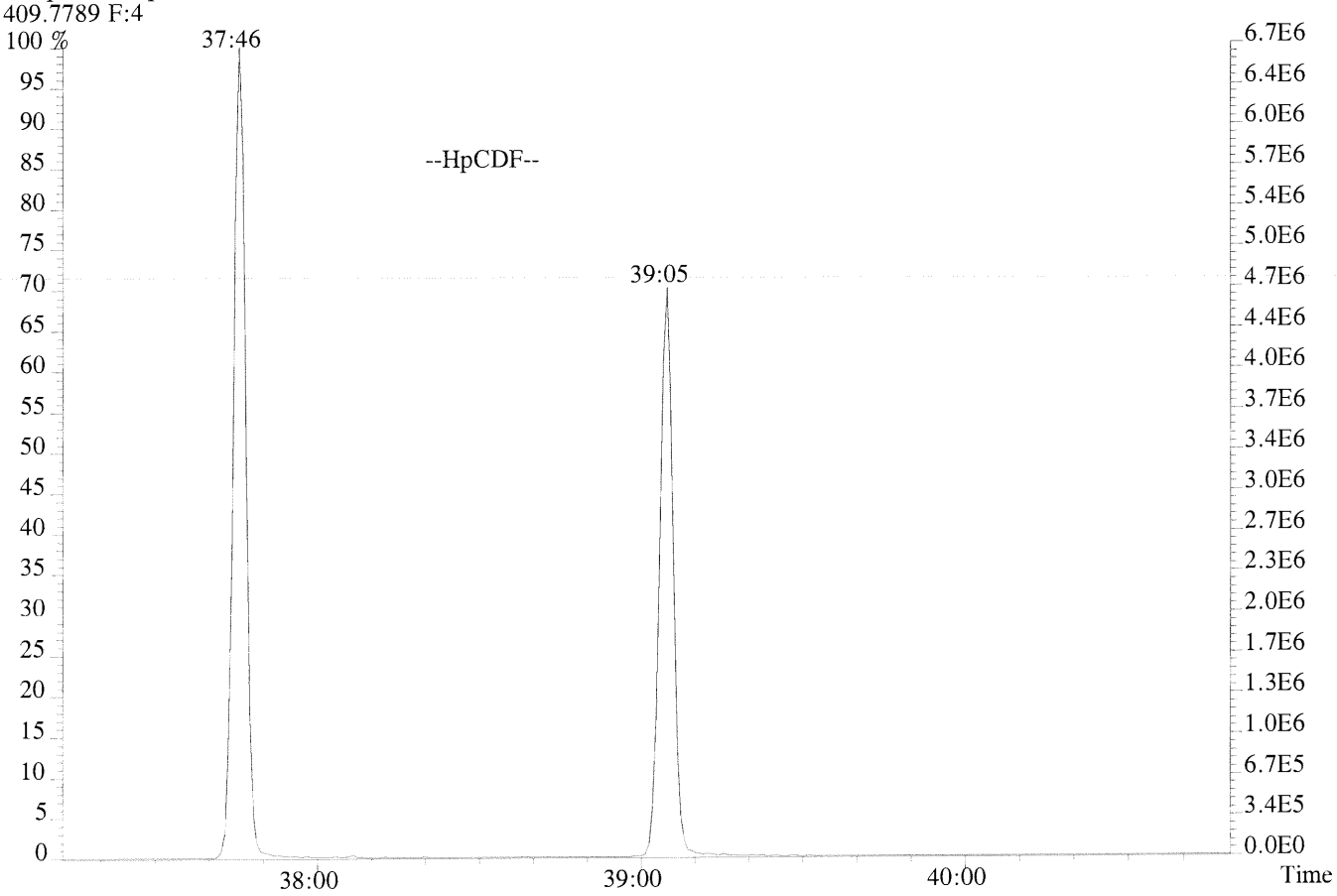
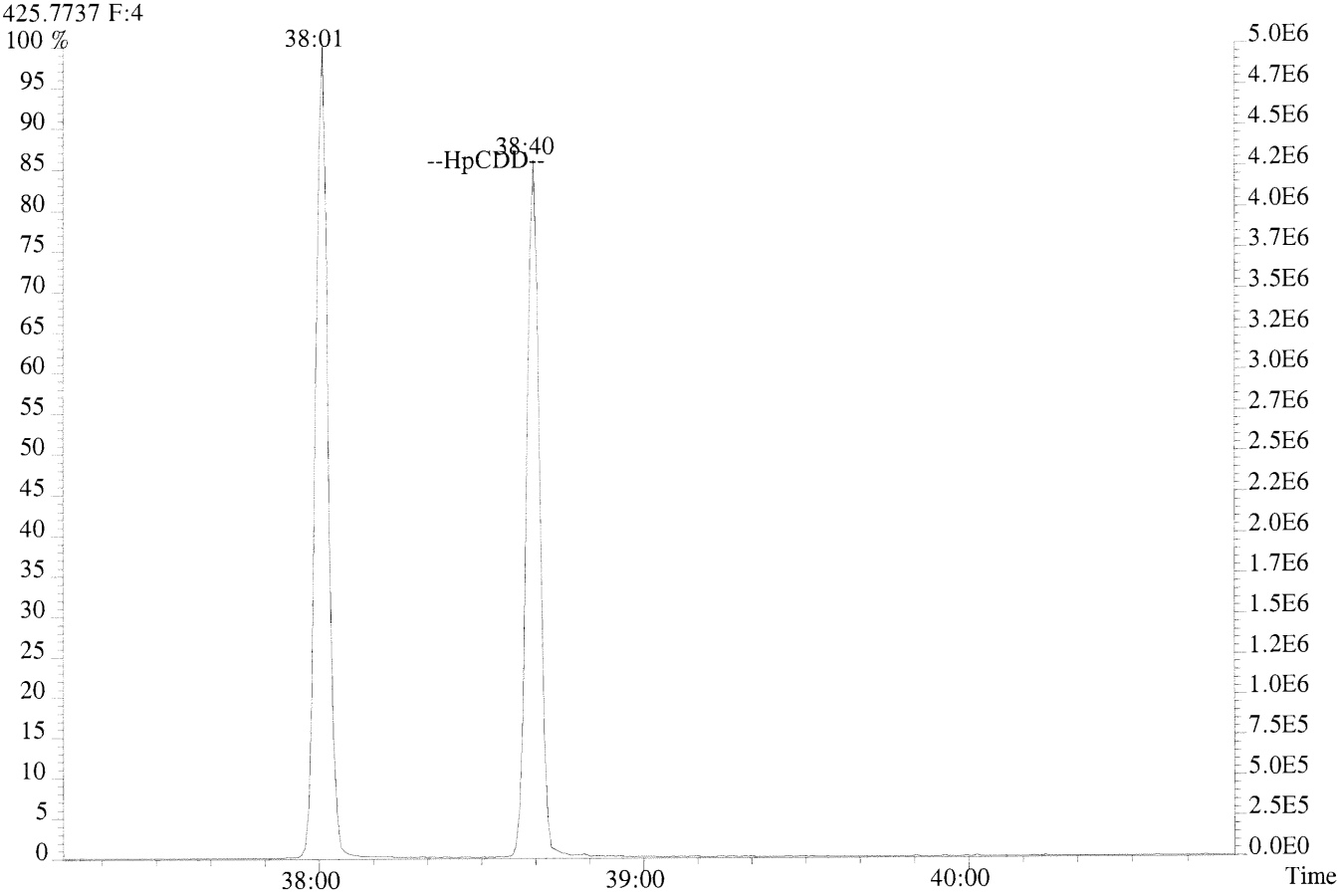
Sample#1 Exp:WINDOW DEFINE





FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: U120206 HRCC4 Data Filename: U120209

HRCC2 Data Filename: U120207 HRCC5 Data Filename: U120210

HRCC3 Data Filename: U120208

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
NATIVE ANALYTES							
2,3,7,8-TCDD	0.97	0.93	0.98	0.96	0.97	0.96	2.08
1,2,3,7,8-PeCDD	0.86	0.89	0.92	0.93	0.95	0.91	3.92
1,2,3,4,7,8-HxCDD	1.02	1.03	0.97	1.05	1.10	1.03	4.60
1,2,3,6,7,8-HxCDD	1.02	1.07	0.99	1.15	1.10	1.07	6.03
1,2,3,7,8,9-HxCDD	0.95	0.98	0.94	1.03	1.04	0.99	4.60
1,2,3,4,6,7,8-HpCDD	0.91	0.91	0.93	0.93	0.96	0.93	2.31
OCDD	1.04	1.04	0.99	1.01	1.01	1.02	2.11
2,3,7,8-TCDF	0.84	0.85	0.99	1.17	0.93	0.96	13.87
1,2,3,7,8-PeCDF	0.87	0.88	0.93	0.92	0.95	0.91	3.88
2,3,4,7,8-PeCDF	0.89	0.89	0.98	0.94	1.02	0.95	6.13
1,2,3,4,7,8-HxCDF	1.12	1.11	1.22	1.17	1.21	1.17	4.41
1,2,3,6,7,8-HxCDF	1.07	1.13	1.19	1.19	1.13	1.14	4.33
1,2,3,7,8,9-HxCDF	0.81	0.82	0.86	0.88	0.93	0.86	5.64
2,3,4,6,7,8-HxCDF	0.98	1.01	1.07	1.08	1.03	1.03	4.01
1,2,3,4,6,7,8-HpCDF	1.30	1.37	1.37	1.37	1.38	1.36	2.32
1,2,3,4,7,8,9-HpCDF	0.96	0.99	1.02	1.03	1.11	1.02	5.51
OCDF	1.05	1.07	1.08	1.11	1.12	1.09	2.77

(1) The %RSD for the 17 unlabeled standard must not exceed +/- 20%, see Section 7.7.2.1, Method 8290.

8290F3A

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: U120206 HCC4 Data Filename: U120209

HCC2 Data Filename: U120207 HCC5 Data Filename: U120210

HCC3 Data Filename: U120208

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	0.89	0.89	0.85	0.96	0.91	0.90	4.36
13C-1,2,3,7,8-PeCDD	1.03	1.00	1.03	1.13	1.09	1.06	4.97
13C-1,2,3,6,7,8-HxCDD	1.01	1.02	0.98	1.01	1.02	1.01	1.37
13C-1,2,3,4,6,7,8-HpCDD	1.10	1.09	0.99	1.15	1.15	1.09	6.01
13C-OCDD	1.15	1.13	1.03	1.24	1.31	1.17	9.04
13C-2,3,7,8-TCDF	1.23	1.23	1.14	1.08	1.30	1.20	7.34
13C-1,2,3,7,8-PeCDF	1.46	1.47	1.42	1.66	1.57	1.52	6.43
13C-1,2,3,4,7,8-HxCDF	1.30	1.31	1.15	1.32	1.33	1.28	5.73
13C-1,2,3,4,6,7,8-HpCDF	1.11	1.10	0.99	1.19	1.17	1.11	7.05
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	0.84	0.82	0.83	0.91	0.90	0.86	5.13

(1) The %RSD for the nine labeled reference compounds must not exceed +/- 30%, see Section 7.7.2.1, Method 8290.

8290F3B

FORM 3C
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: U120206 HCC4 Data Filename: U120209

HCC2 Data Filename: U120207 HCC5 Data Filename: U120210

HCC3 Data Filename: U120208

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO					QC LIMITS (2)
		HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	
NATIVE ANALYTES							
2,3,7,8-TCDD	M/M+2	0.85	0.80	0.77	0.79	0.79	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.68	1.49	1.62	1.61	1.57	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.35	1.42	1.30	1.30	1.30	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.37	1.21	1.14	1.26	1.30	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.19	1.26	1.19	1.30	1.31	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.14	1.06	1.05	1.05	1.03	0.88-1.20
OCDD	M+2/M+4	0.91	0.89	0.89	0.89	0.91	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.71	0.87	0.75	0.79	0.79	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.52	1.62	1.60	1.58	1.56	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.59	1.46	1.57	1.58	1.57	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.25	1.30	1.27	1.21	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.18	1.29	1.24	1.24	1.21	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.25	1.28	1.24	1.27	1.23	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.11	1.22	1.22	1.27	1.22	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.92	0.94	1.02	0.99	0.99	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	0.93	1.08	0.98	1.01	1.01	0.88-1.20
OCDF	M+2/M+4	0.88	0.97	0.92	0.90	0.93	0.76-1.02

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits from Table 8, Method 8290.

8290F3C

FORM 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 04/02/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: U120206 HRCC4 Data Filename: U120209

HRCC2 Data Filename: U120207 HRCC5 Data Filename: U120210

HRCC3 Data Filename: U120208

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	QC LIMITS (2)
13C-2,3,7,8-TCDD	M/M+2	0.74	0.80	0.81	0.79	0.77	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.53	1.57	1.60	1.55	1.32-1.78
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.24	1.25	1.23	1.24	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	1.05	1.04	1.05	1.04	0.88-1.20
13C-OCDD	M+2/M+4	0.91	0.89	0.89	0.89	0.90	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.83	0.83	0.84	0.85	0.80	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.61	1.60	1.61	1.57	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.54	0.51	0.54	0.52	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.43	0.44	0.43	0.42	0.42	0.37-0.51

(1) See Table 6, Method 8290, for m/z specifications.Method 8290.

(2) Ion Abundance Ratio Control Limits from Table 8,

8290F3D

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC1

Run #1 Filename U120206 Samp: 1 Inj: 1 Acquired: 2-APR-07 13:56:35
Processed: 3-APR-07 08:05:38 Sample ID: ICAL HRCC1

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	27:17	1.472e+02	2.085e+02	0.71	yes	no
2	Unk	1,2,3,7,8-PeCDF	31:33	6.662e+02	4.371e+02	1.52	yes	no
3	Unk	2,3,4,7,8-PeCDF	32:16	6.883e+02	4.342e+02	1.59	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:03	6.333e+02	5.087e+02	1.24	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:09	5.925e+02	5.036e+02	1.18	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	35:37	5.273e+02	4.734e+02	1.11	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:19	4.625e+02	3.693e+02	1.25	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	37:45	5.479e+02	5.962e+02	0.92	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:04	4.038e+02	4.361e+02	0.93	yes	no
10	Unk	OCDF	41:51	8.946e+02	1.017e+03	0.88	yes	no
11	Unk	2,3,7,8-TCDD	28:06	1.361e+02	1.610e+02	0.85	yes	no
12	Unk	1,2,3,7,8-PeCDD	32:37	4.789e+02	2.852e+02	1.68	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	35:44	4.629e+02	3.438e+02	1.35	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	35:48	4.700e+02	3.437e+02	1.37	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:06	4.124e+02	3.452e+02	1.19	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	38:39	4.174e+02	3.659e+02	1.14	yes	no
17	Unk	OCDD	41:41	9.068e+02	9.912e+02	0.91	yes	no
18	IS	13C-2,3,7,8-TCDF	27:16	9.664e+03	1.163e+04	0.83	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	31:32	1.559e+04	9.670e+03	1.61	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:02	1.754e+04	3.367e+04	0.52	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	37:44	1.328e+04	3.059e+04	0.43	yes	no
22	IS	13C-2,3,7,8-TCDD	28:04	6.525e+03	8.807e+03	0.74	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	32:36	1.082e+04	6.910e+03	1.57	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	35:48	2.195e+04	1.777e+04	1.24	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	38:38	2.214e+04	2.100e+04	1.05	yes	no
26	IS	13C-OCDD	41:41	4.327e+04	4.770e+04	0.91	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	27:52	7.424e+03	9.849e+03	0.75	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:05	2.180e+04	1.758e+04	1.24	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	28:06	2.889e+02				

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC1

Run #1 Filename U120206 Samp: 1 Inj: 1 Acquired: 2-APR-07 13:56:35

Processed: 3-APR-07 08:05:38 LAB. ID: ICAL HRCC1

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	2.59e+04	2.04e+02	1.3e+02	3.13e+04	2.28e+02	1.4e+02
2	1,2,3,7,8-PeCDF	1.33e+05	3.44e+02	3.9e+02	8.48e+04	2.84e+02	3.0e+02
3	2,3,4,7,8-PeCDF	1.36e+05	3.44e+02	4.0e+02	8.66e+04	2.84e+02	3.1e+02
4	1,2,3,4,7,8-HxCDF	1.46e+05	3.20e+02	4.6e+02	1.15e+05	2.60e+02	4.4e+02
5	1,2,3,6,7,8-HxCDF	1.34e+05	3.20e+02	4.2e+02	1.04e+05	2.60e+02	4.0e+02
6	2,3,4,6,7,8-HxCDF	1.13e+05	3.20e+02	3.5e+02	1.01e+05	2.60e+02	3.9e+02
7	1,2,3,7,8,9-HxCDF	9.79e+04	3.20e+02	3.1e+02	7.92e+04	2.60e+02	3.0e+02
8	1,2,3,4,6,7,8-HpCDF	1.15e+05	5.76e+02	2.0e+02	1.35e+05	2.36e+02	5.7e+02
9	1,2,3,4,7,8,9-HpCDF	8.01e+04	5.76e+02	1.4e+02	8.63e+04	2.36e+02	3.7e+02
10	OCDF	1.33e+05	3.12e+02	4.2e+02	1.42e+05	3.88e+02	3.7e+02
11	2,3,7,8-TCDD	2.43e+04	2.24e+02	1.1e+02	2.73e+04	2.08e+02	1.3e+02
12	1,2,3,7,8-PeCDD	9.82e+04	3.80e+02	2.6e+02	5.65e+04	2.64e+02	2.1e+02
13	1,2,3,4,7,8-HxCDD	9.94e+04	4.92e+02	2.0e+02	7.50e+04	3.48e+02	2.2e+02
14	1,2,3,6,7,8-HxCDD	1.04e+05	4.92e+02	2.1e+02	8.00e+04	3.48e+02	2.3e+02
15	1,2,3,7,8,9-HxCDD	8.38e+04	4.92e+02	1.7e+02	7.62e+04	3.48e+02	2.2e+02
16	1,2,3,4,6,7,8-HpCDD	8.83e+04	3.64e+02	2.4e+02	7.82e+04	1.96e+02	4.0e+02
17	OCDD	1.30e+05	6.32e+02	2.1e+02	1.56e+05	5.40e+02	2.9e+02
18	13C-2,3,7,8-TCDF	1.59e+06	4.24e+02	3.7e+03	1.95e+06	4.28e+02	4.6e+03
19	13C-1,2,3,7,8-PeCDF	2.99e+06	3.24e+02	9.2e+03	1.88e+06	2.88e+02	6.5e+03
20	13C-1,2,3,4,7,8-HxCDF	3.93e+06	3.04e+02	1.3e+04	7.41e+06	3.28e+02	2.3e+04
21	13C-1,2,3,4,6,7,8-HpCDF	2.89e+06	1.08e+03	2.7e+03	6.74e+06	2.02e+03	3.3e+03
22	13C-2,3,7,8-TCDD	1.16e+06	8.04e+02	1.4e+03	1.54e+06	2.32e+02	6.6e+03
23	13C-1,2,3,7,8-PeCDD	2.21e+06	2.24e+02	9.9e+03	1.39e+06	3.60e+02	3.9e+03
24	13C-1,2,3,6,7,8-HxCDD	4.98e+06	3.64e+02	1.4e+04	4.06e+06	5.04e+02	8.1e+03
25	13C-1,2,3,4,6,7,8-HpCDD	4.62e+06	5.68e+02	8.1e+03	4.41e+06	4.72e+02	9.3e+03
26	13C-OCDD	6.64e+06	3.92e+02	1.7e+04	7.34e+06	2.40e+02	3.1e+04
27	13C-1,2,3,4-TCDD	1.30e+06	8.04e+02	1.6e+03	1.73e+06	2.32e+02	7.5e+03
28	13C-1,2,3,7,8,9-HxCDD	4.85e+06	3.64e+02	1.3e+04	3.88e+06	5.04e+02	7.7e+03
29	37Cl-2,3,7,8-TCDD	5.36e+04	2.12e+02	2.5e+02			

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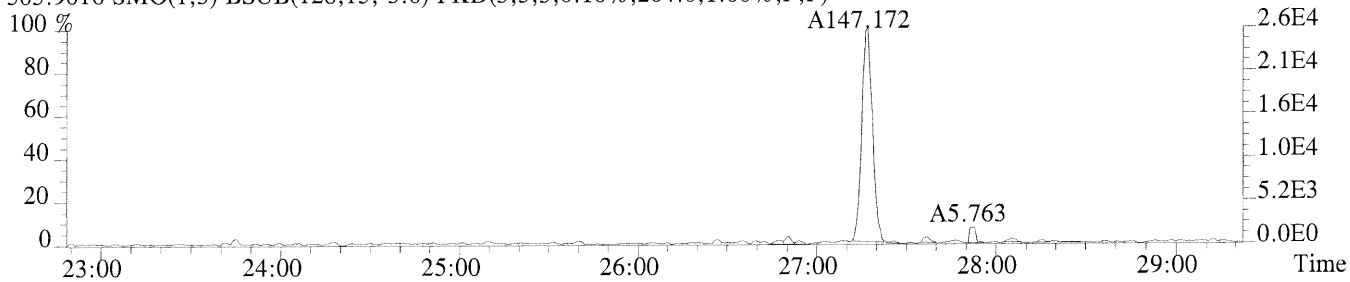
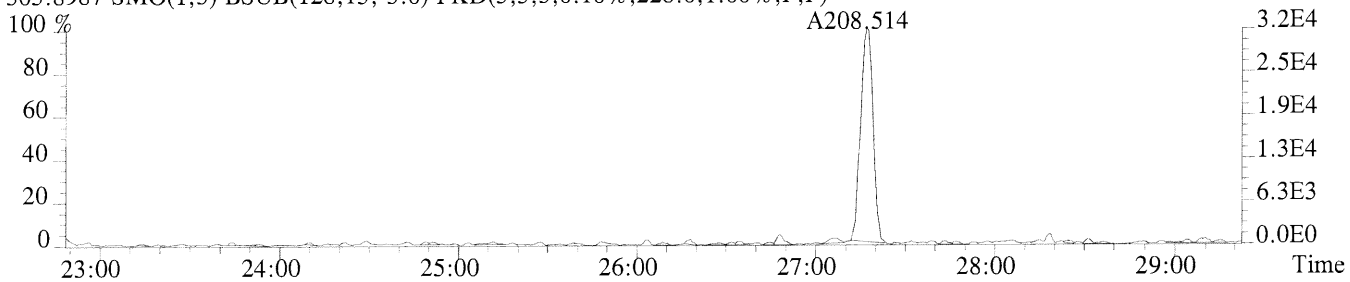
File:U120206 #1-548 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

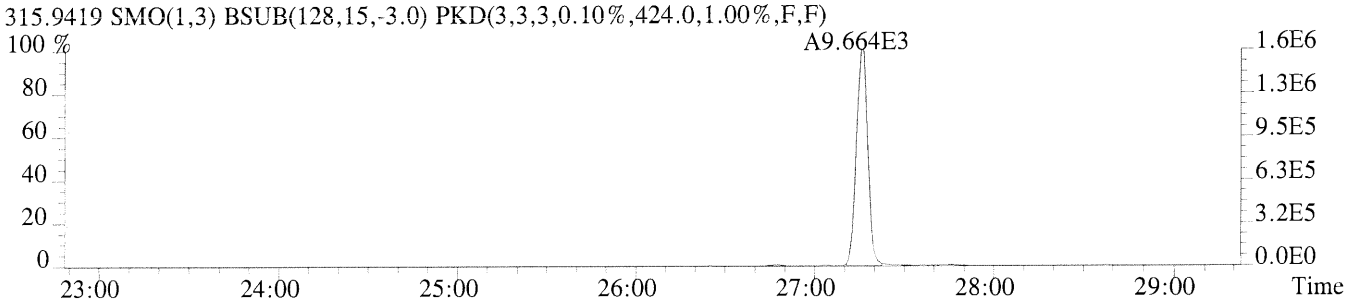
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,204.0,1.00%,F,F)



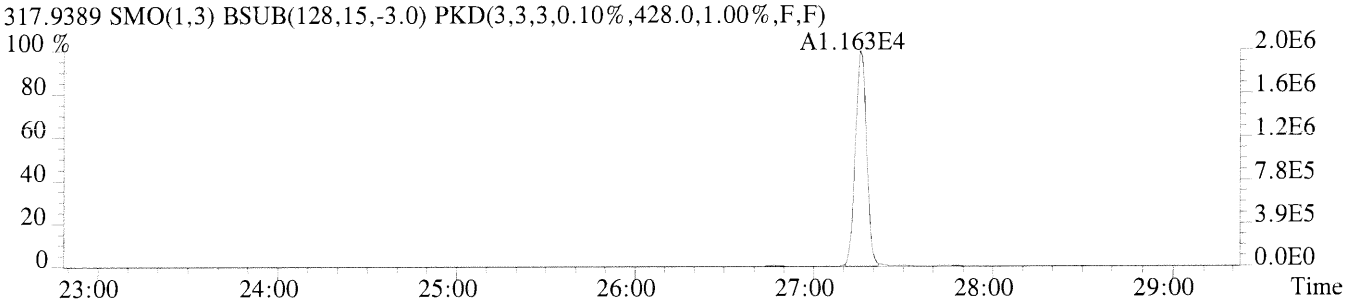
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,228.0,1.00%,F,F)



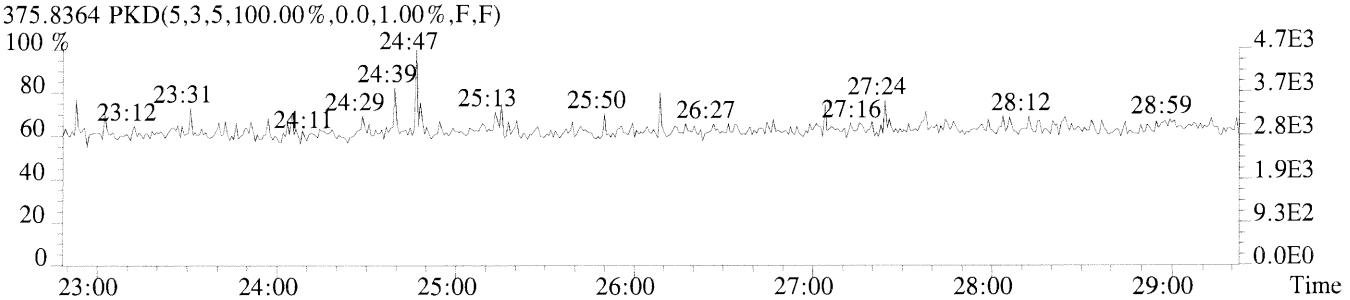
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,424.0,1.00%,F,F)



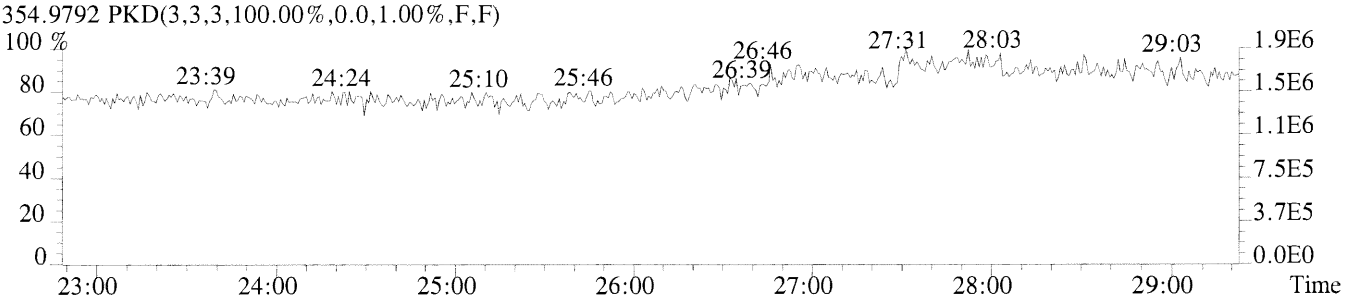
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,428.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

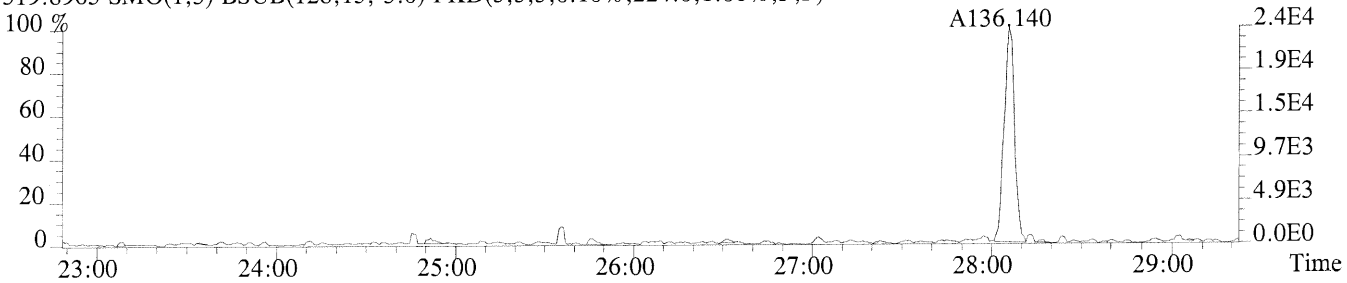


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

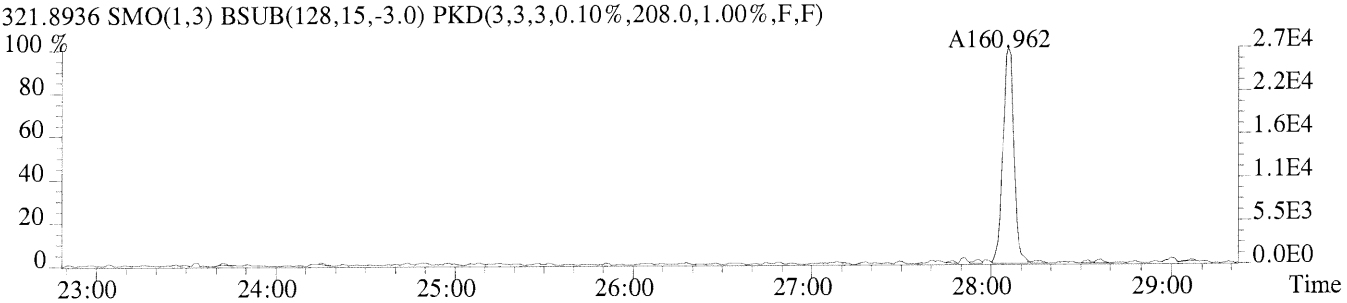


File:U120206 #1-548 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

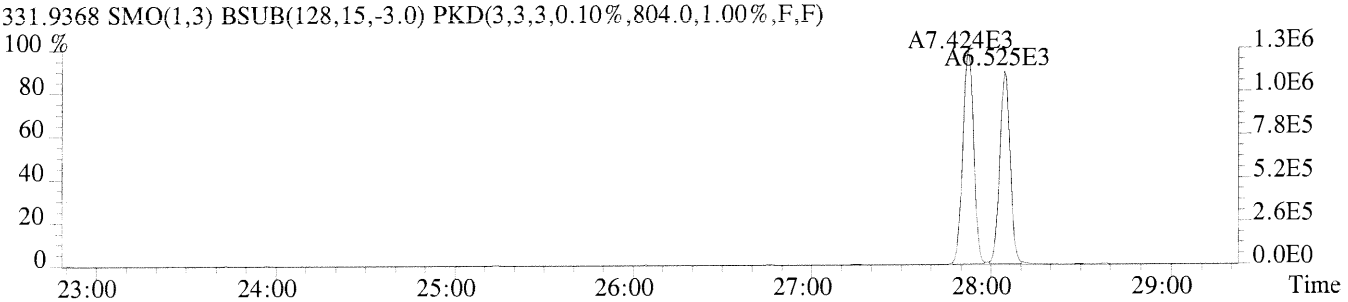
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,224.0,1.00%,F,F)



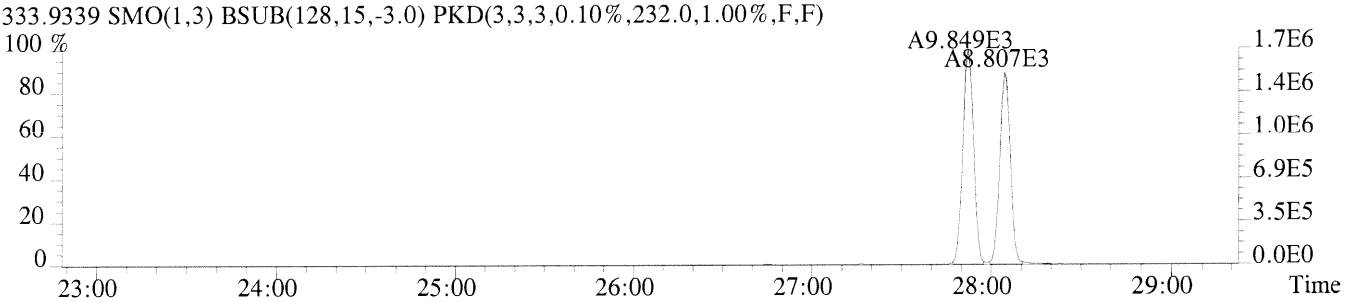
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,208.0,1.00%,F,F)



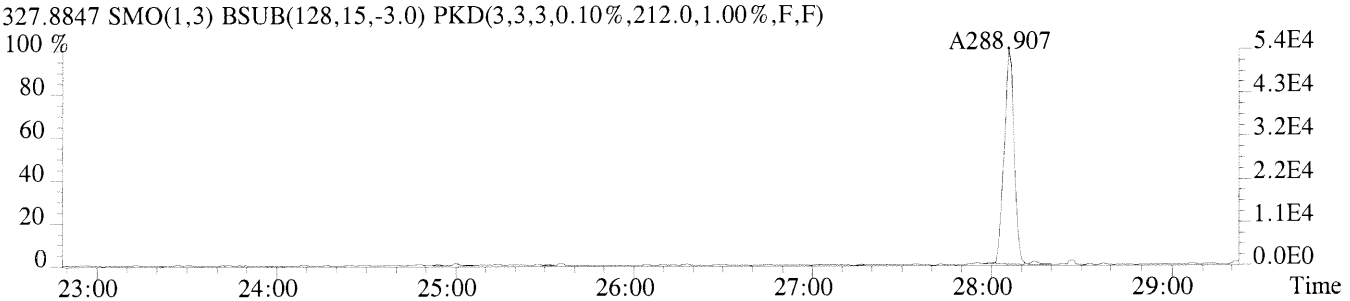
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,804.0,1.00%,F,F)



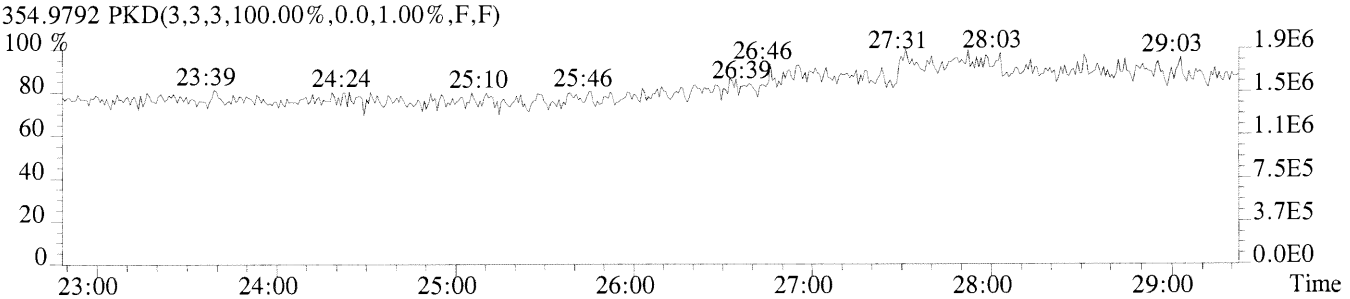
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,232.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,212.0,1.00%,F,F)

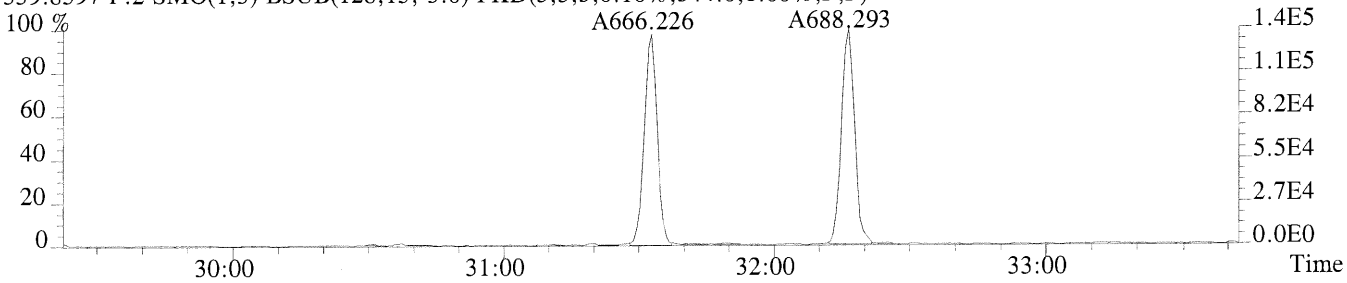


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

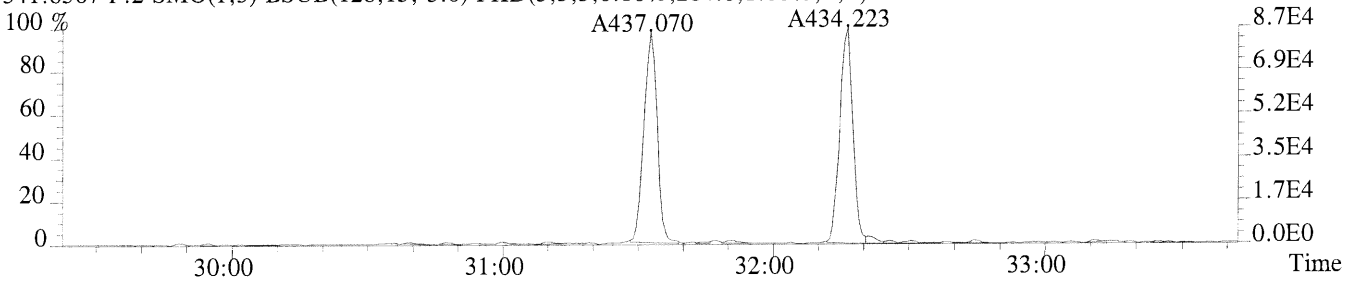


File:U120206 #1-394 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

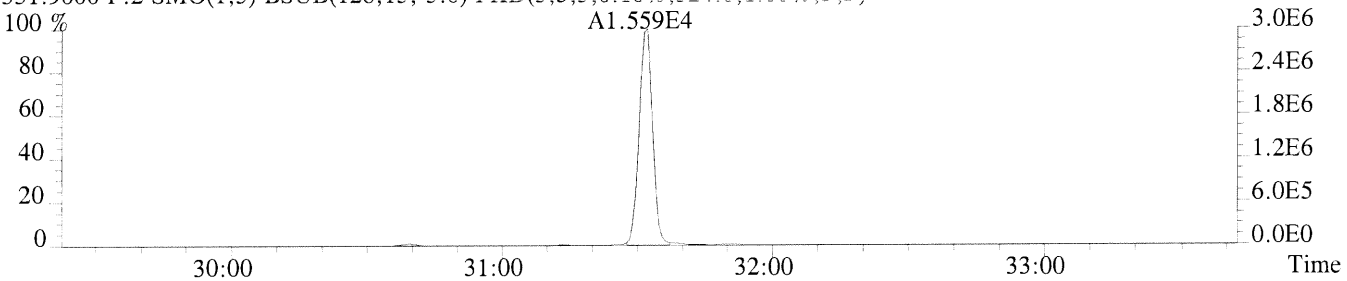
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,344.0,1.00%,F,F)



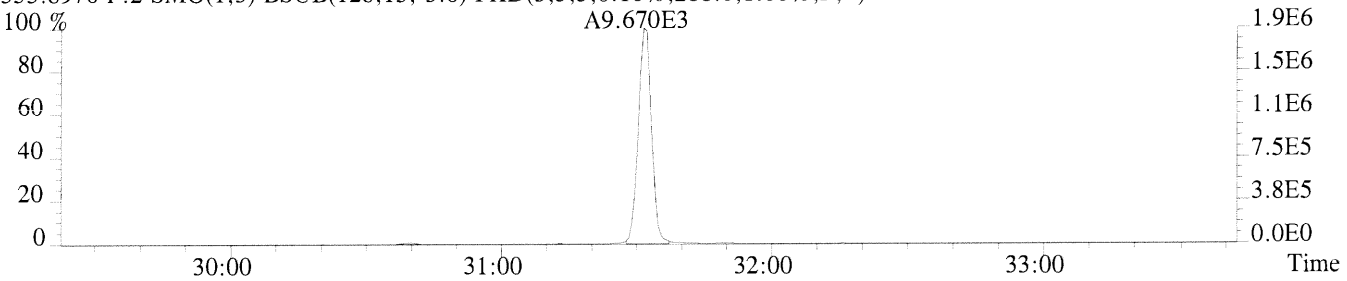
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,284.0,1.00%,F,F)



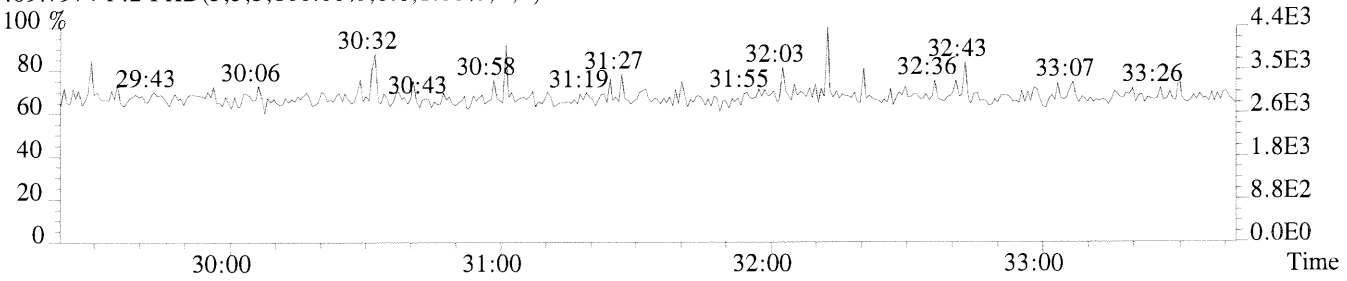
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,324.0,1.00%,F,F)



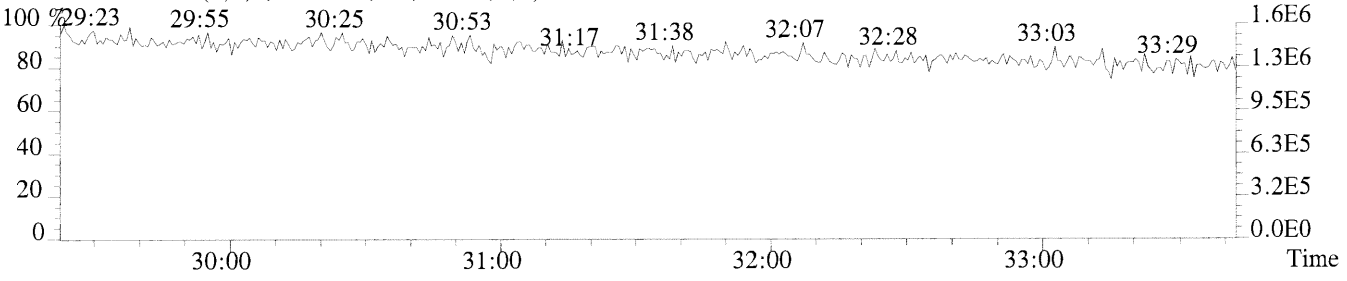
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,288.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

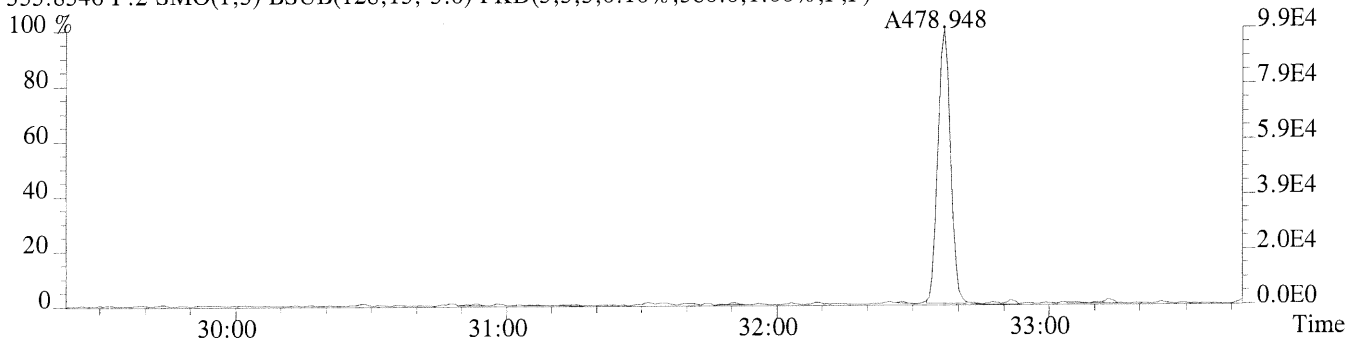


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

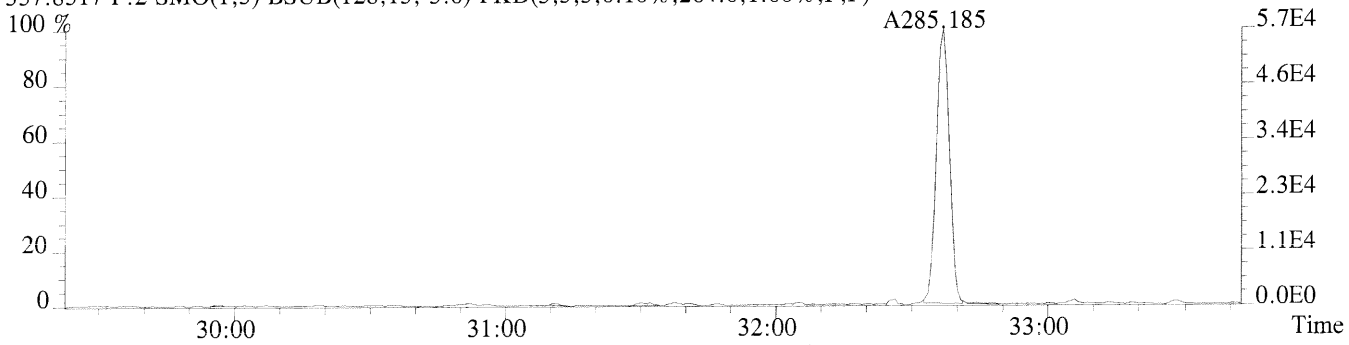


File:U120206 #1-394 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

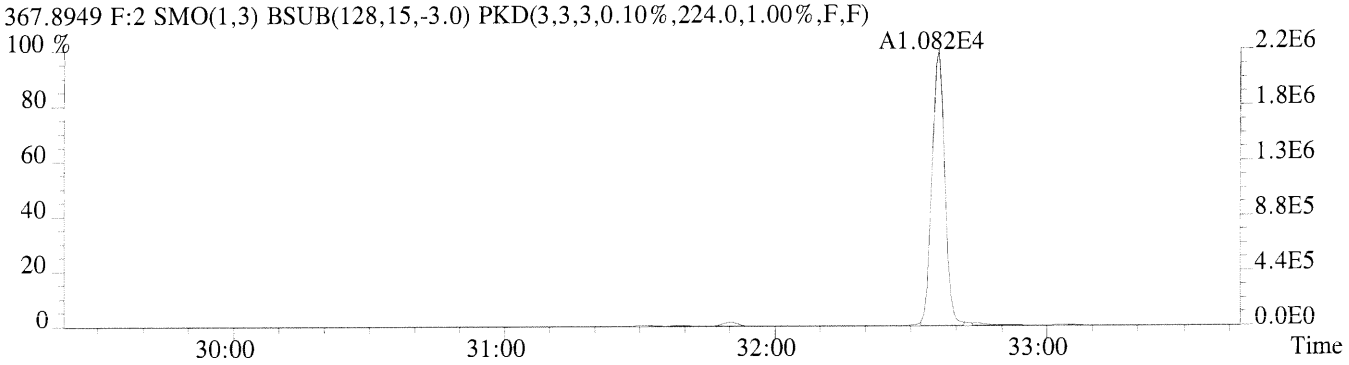
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,380.0,1.00%,F,F)



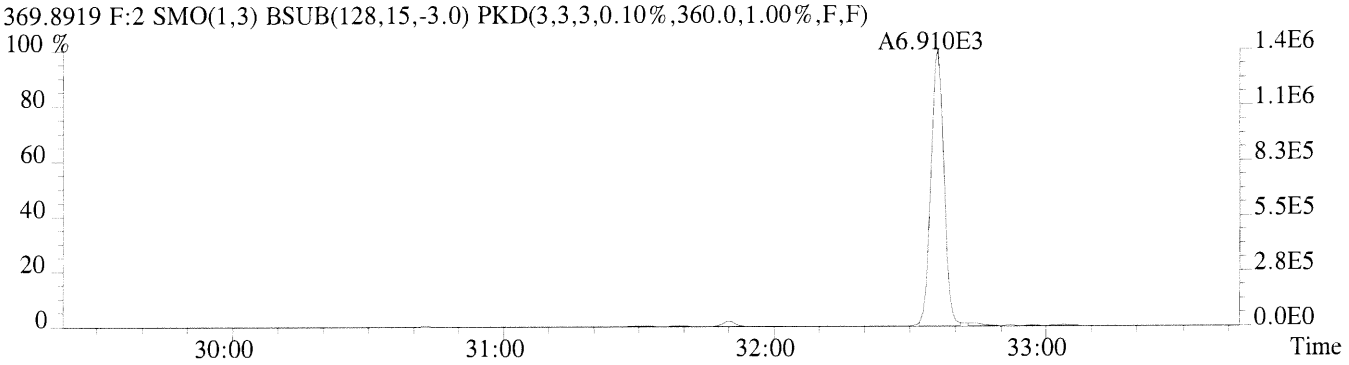
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,264.0,1.00%,F,F)



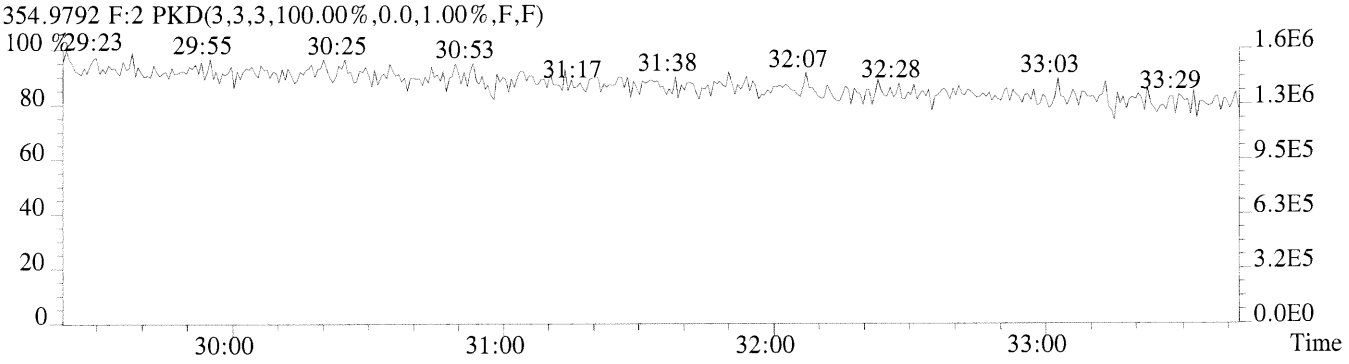
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,224.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,360.0,1.00%,F,F)

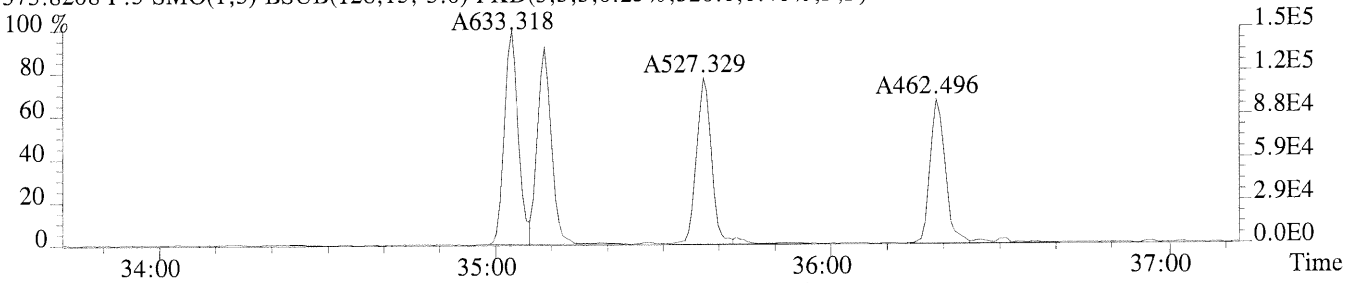


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

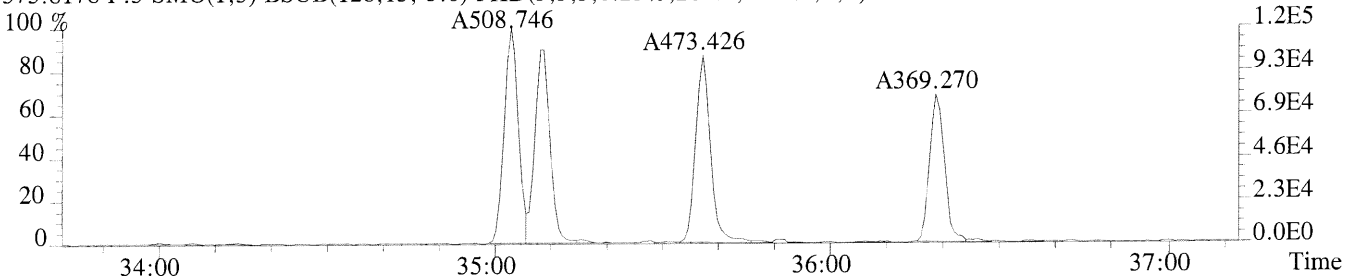


File:U120206 #1-318 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

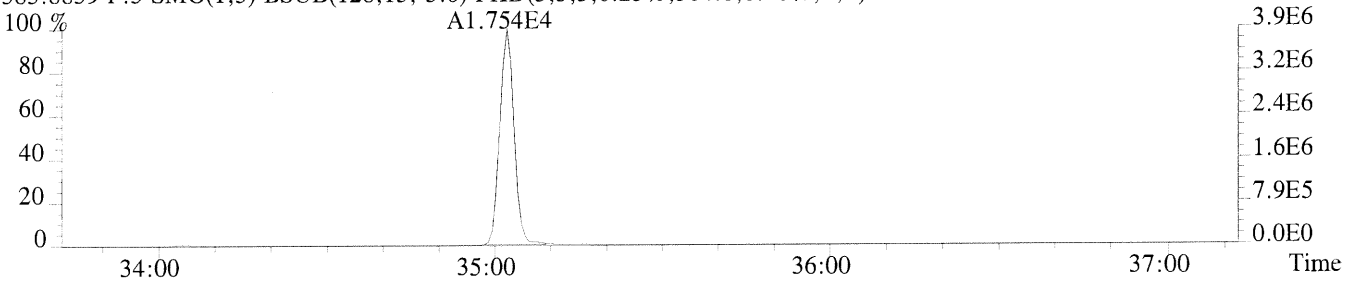
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,320.0,0.40%,F,F)



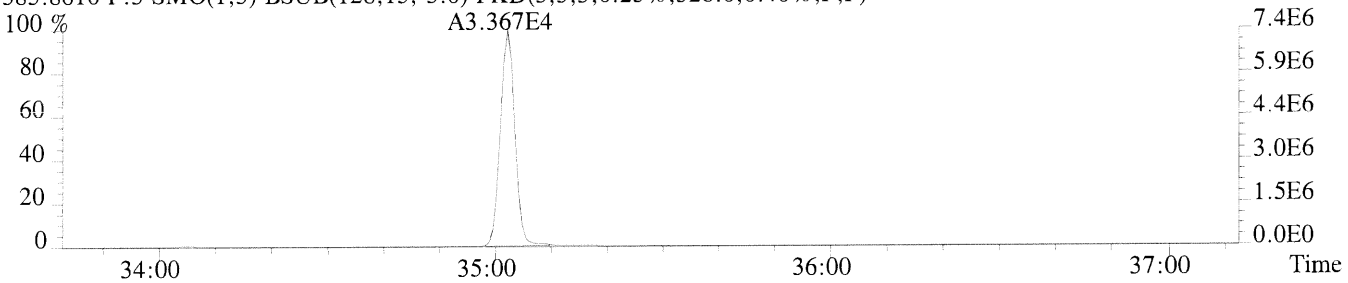
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,260.0,0.40%,F,F)



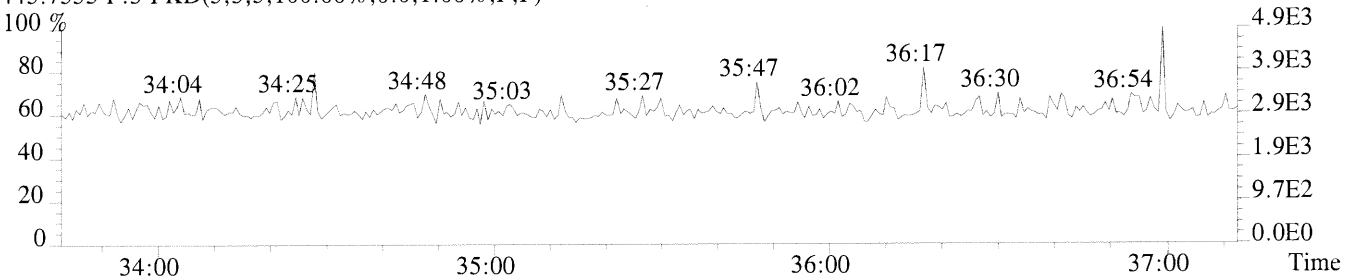
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,304.0,0.40%,F,F)



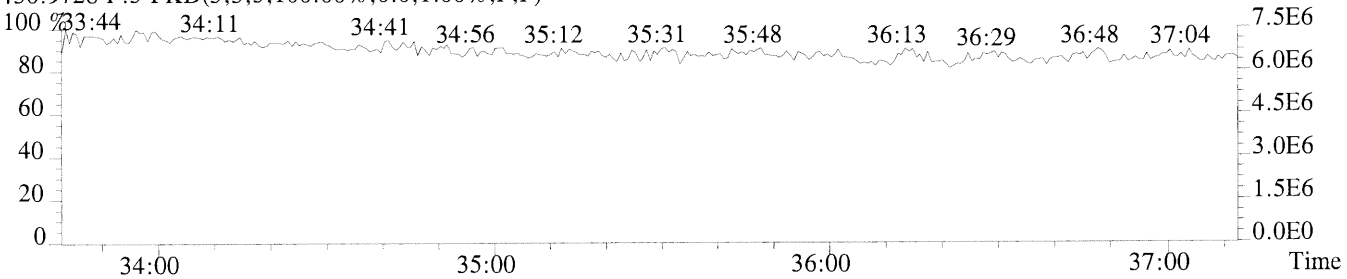
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,328.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

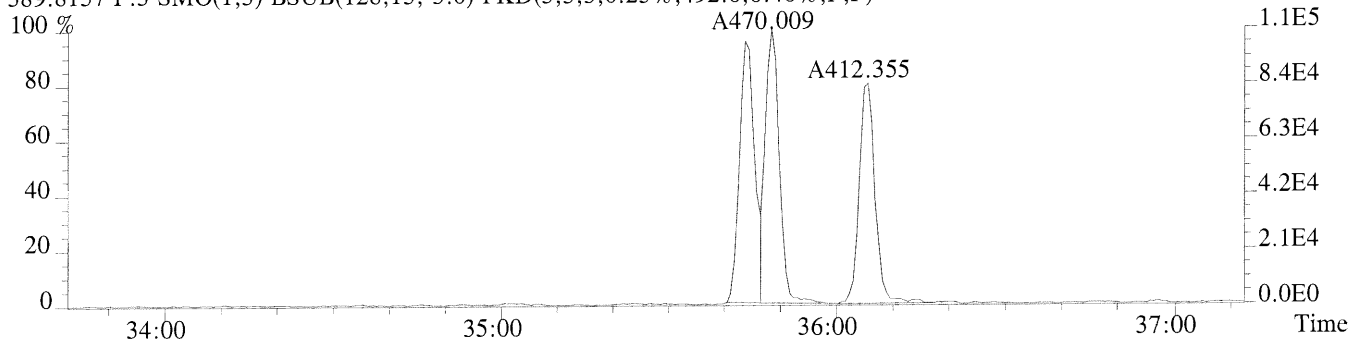


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

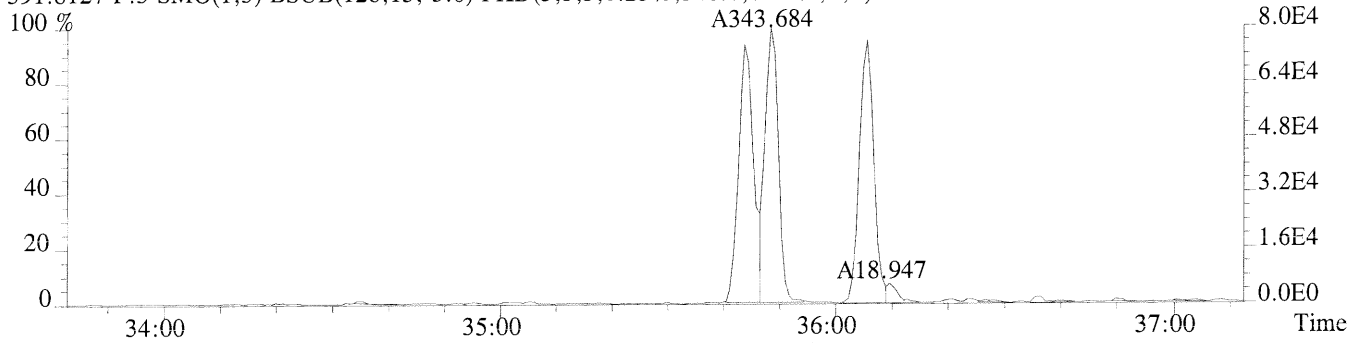


File:U120206 #1-318 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

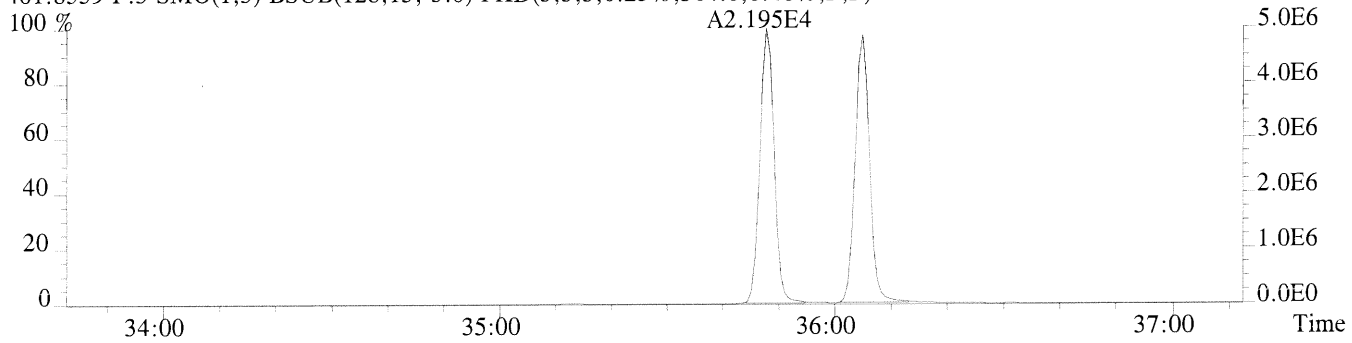
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,492.0,0.40%,F,F)



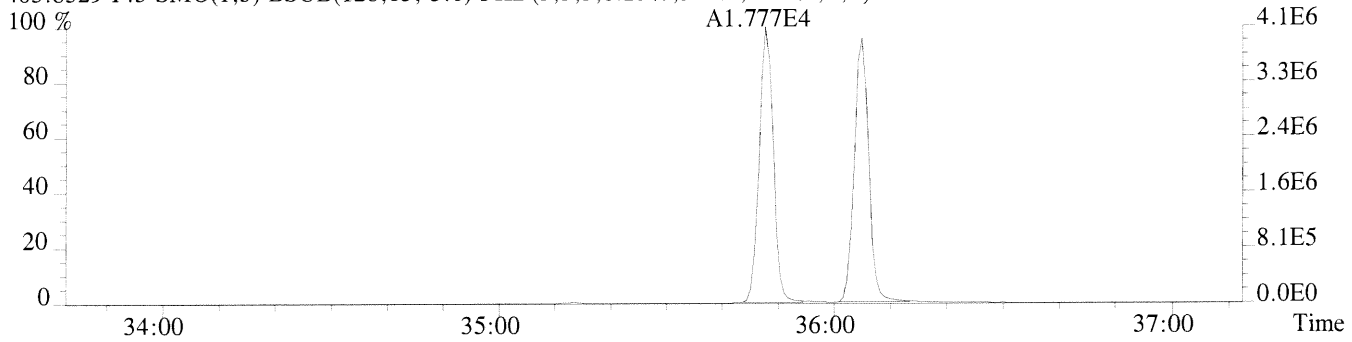
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,348.0,0.40%,F,F)



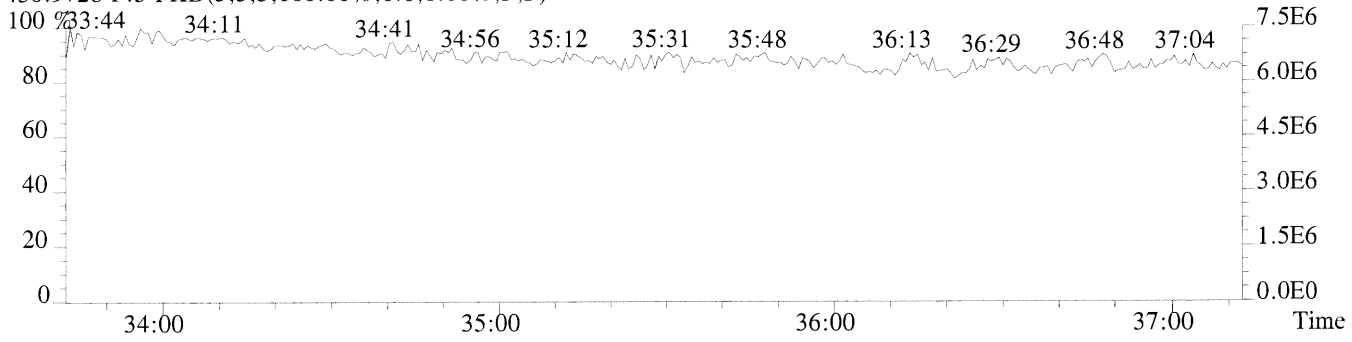
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,364.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,504.0,0.40%,F,F)

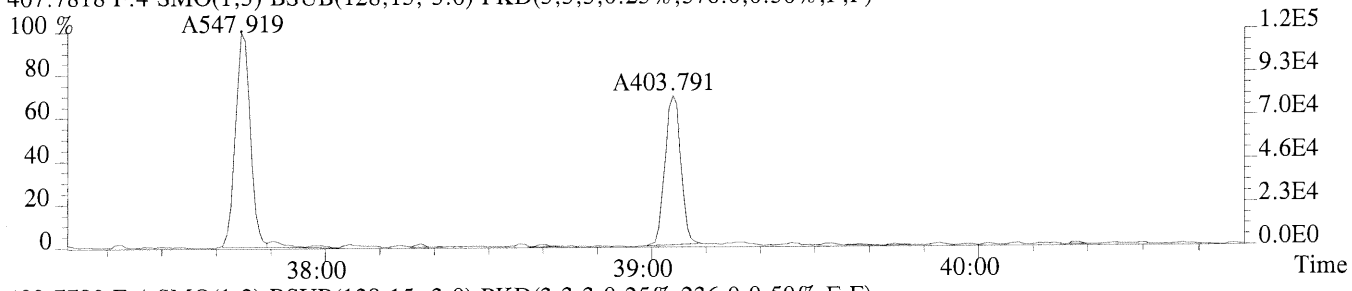


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

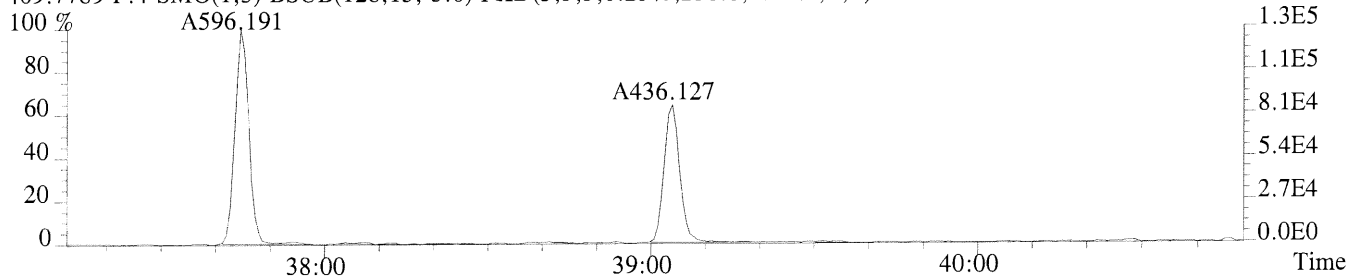


File:U120206 #1-327 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

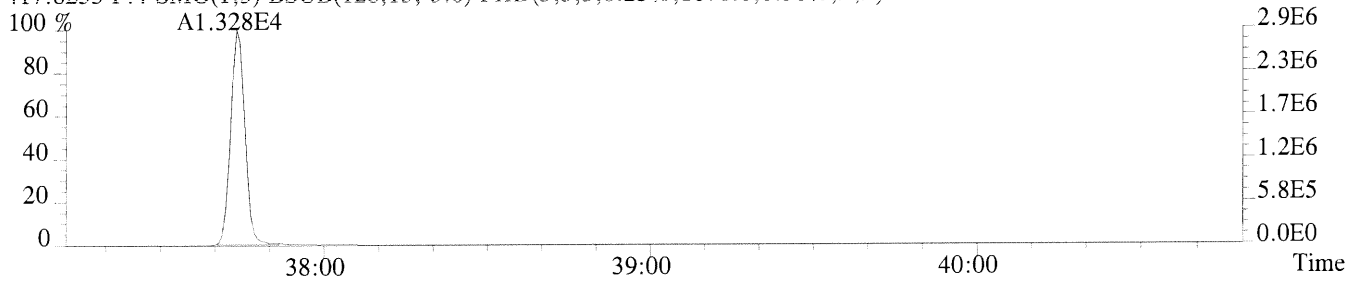
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,576.0,0.50%,F,F)



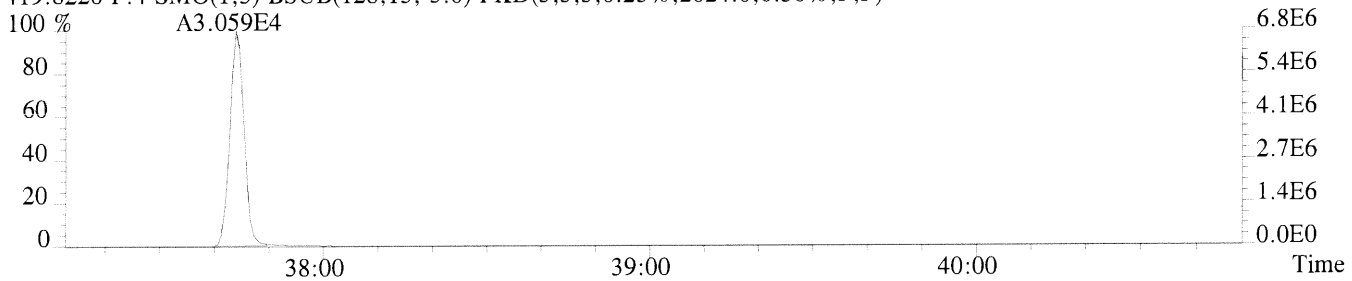
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,236.0,0.50%,F,F)



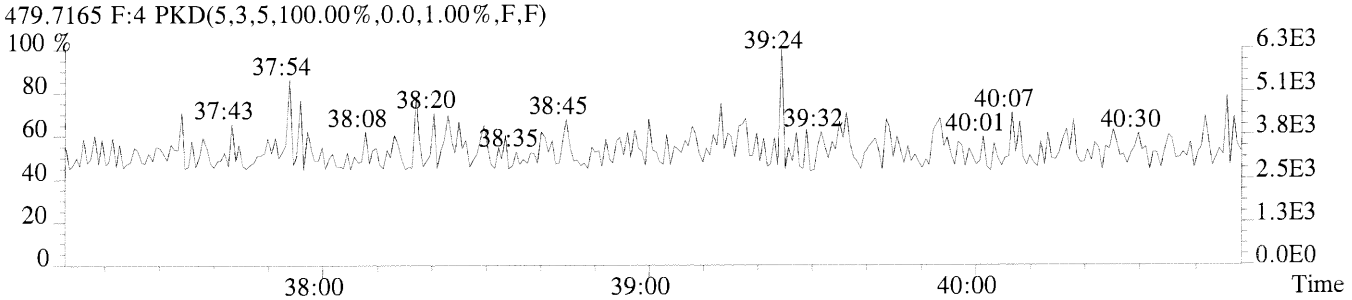
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1076.0,0.50%,F,F)



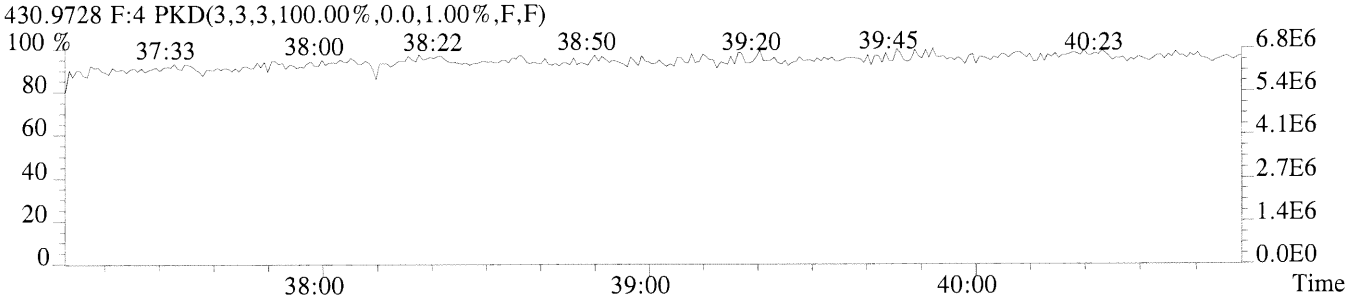
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2024.0,0.50%,F,F)



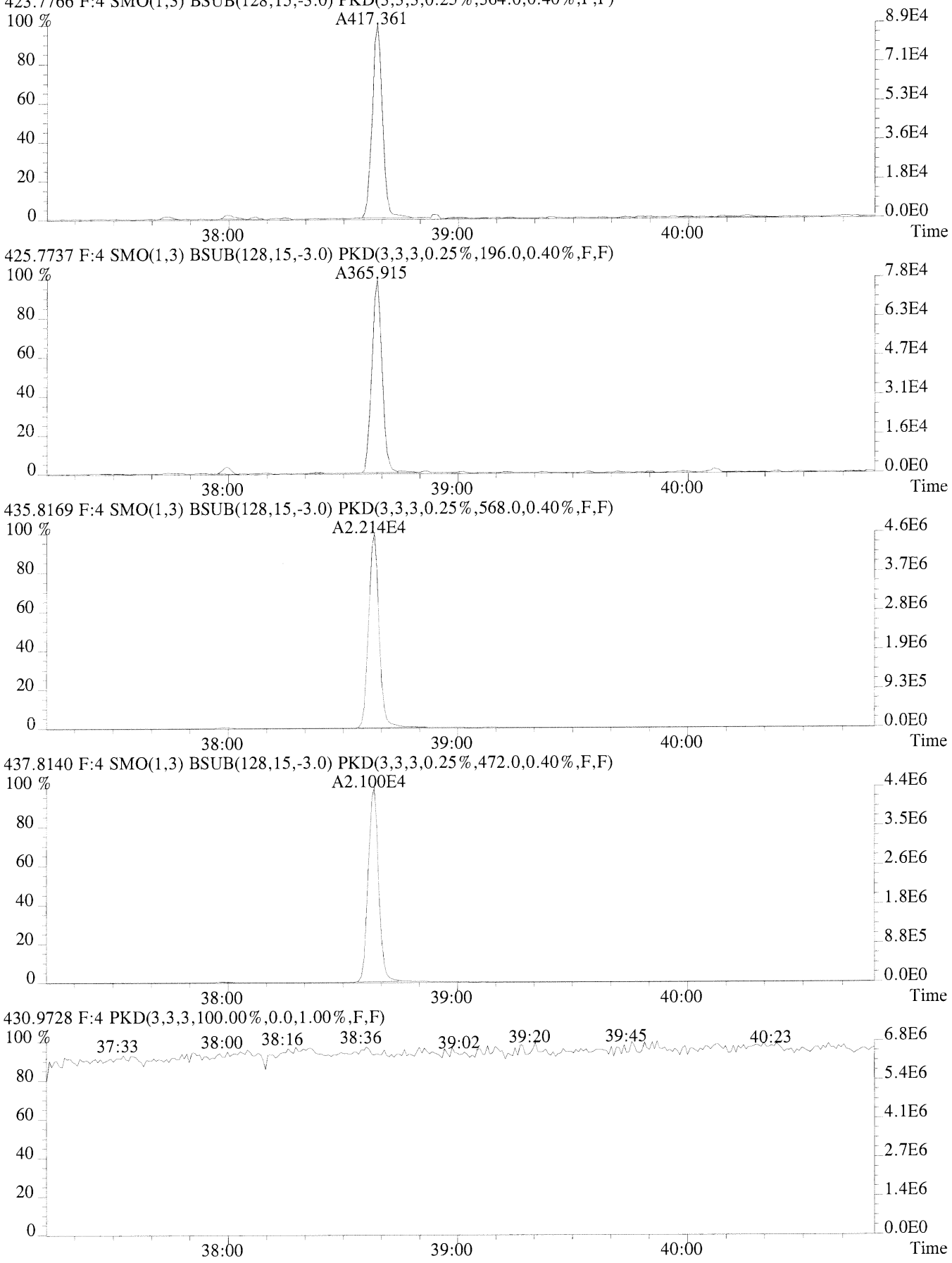
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



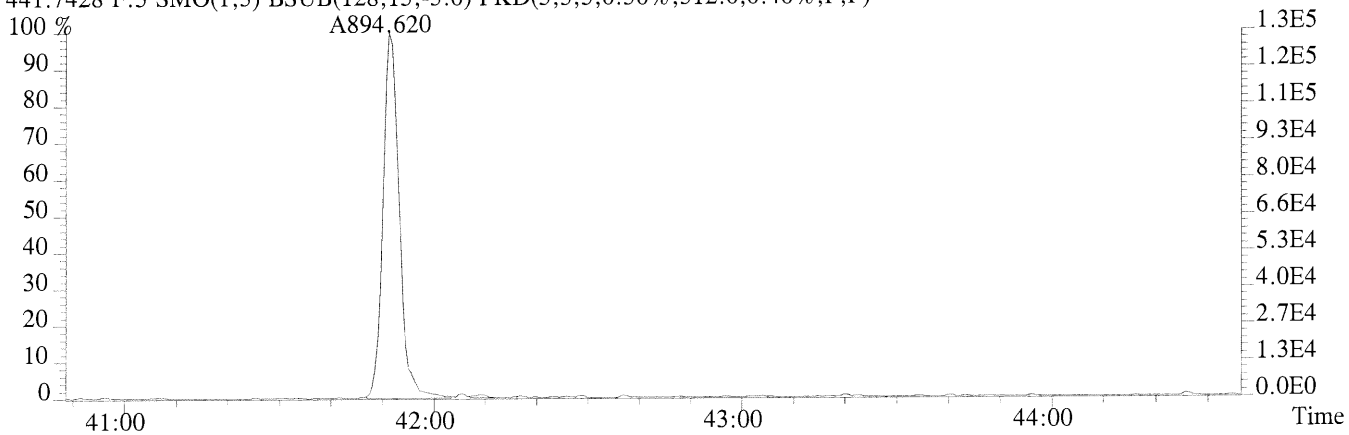
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



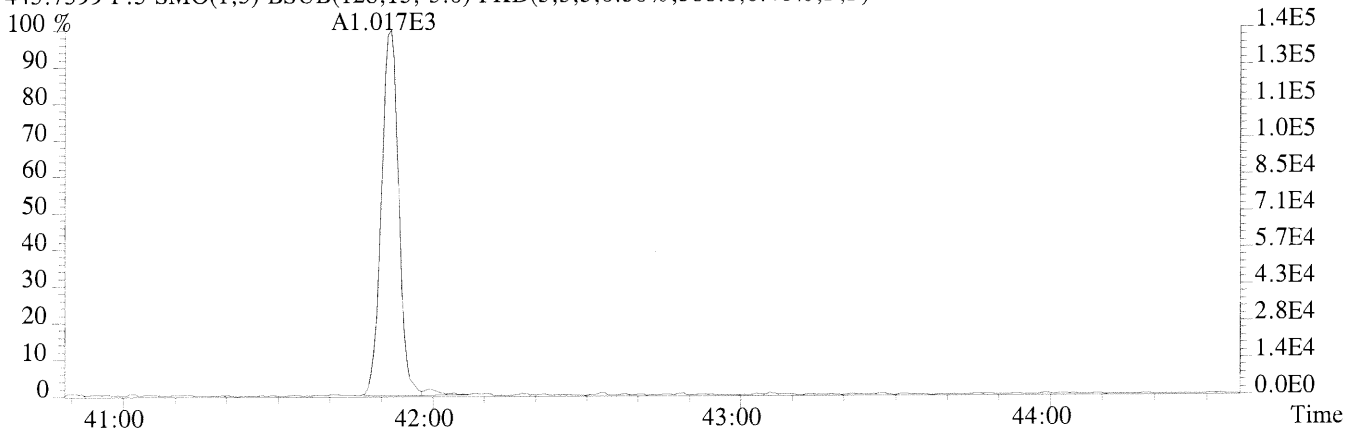
File:U120206 #1-327 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1



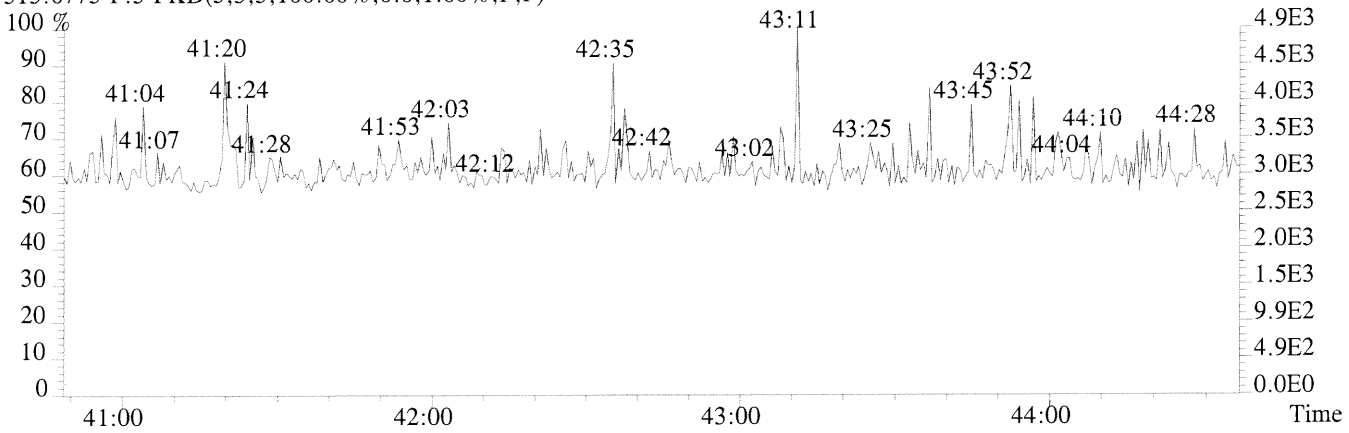
File:U120206 #1-420 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,312.0,0.40%,F,F)



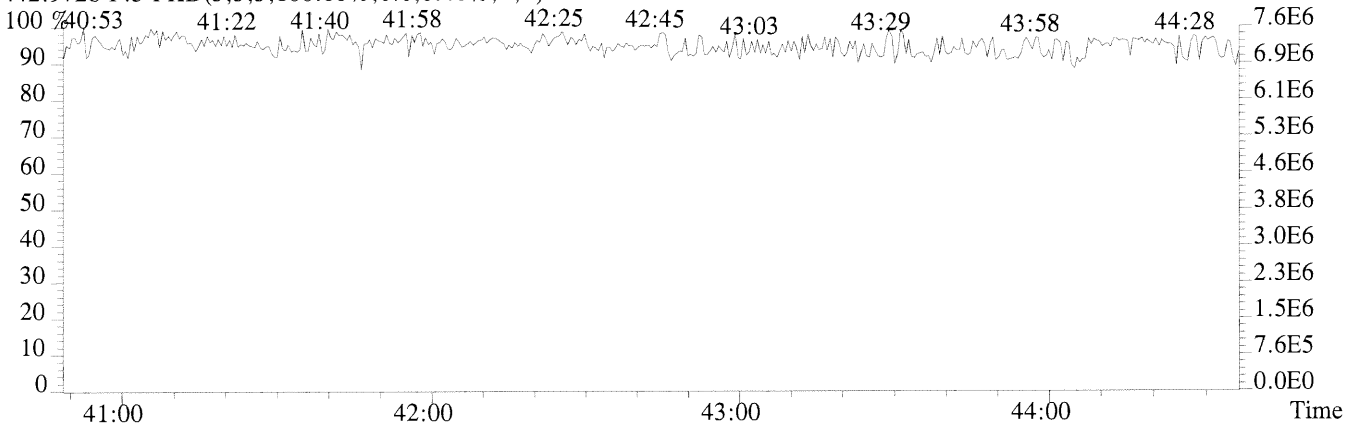
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,388.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

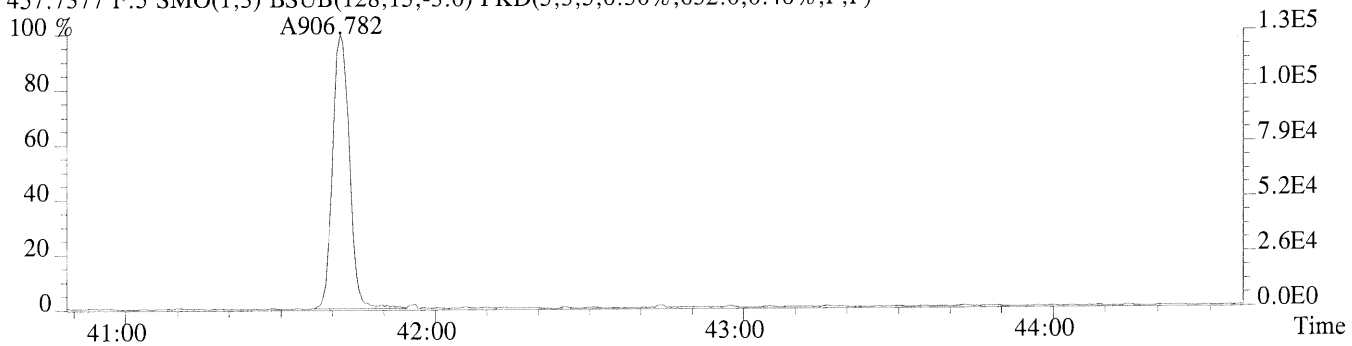


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

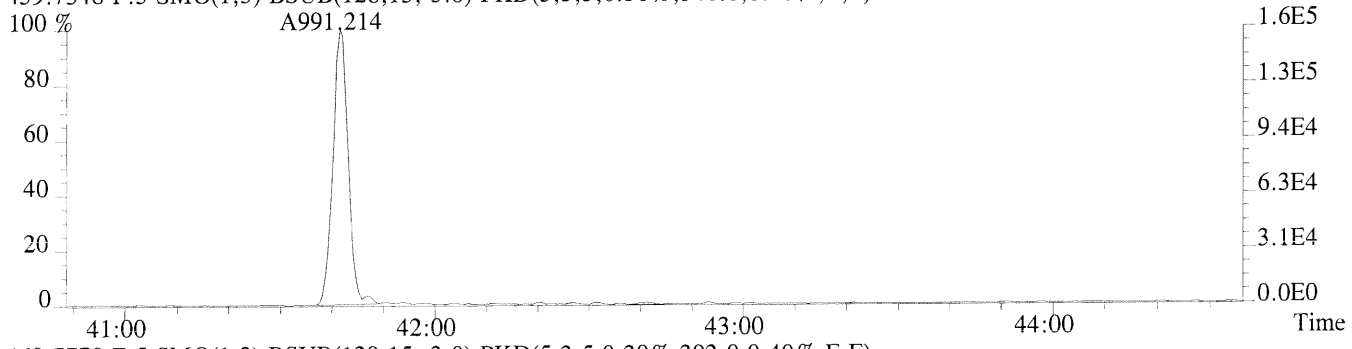


File:U120206 #1-420 Acq: 2-APR-2007 13:56:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

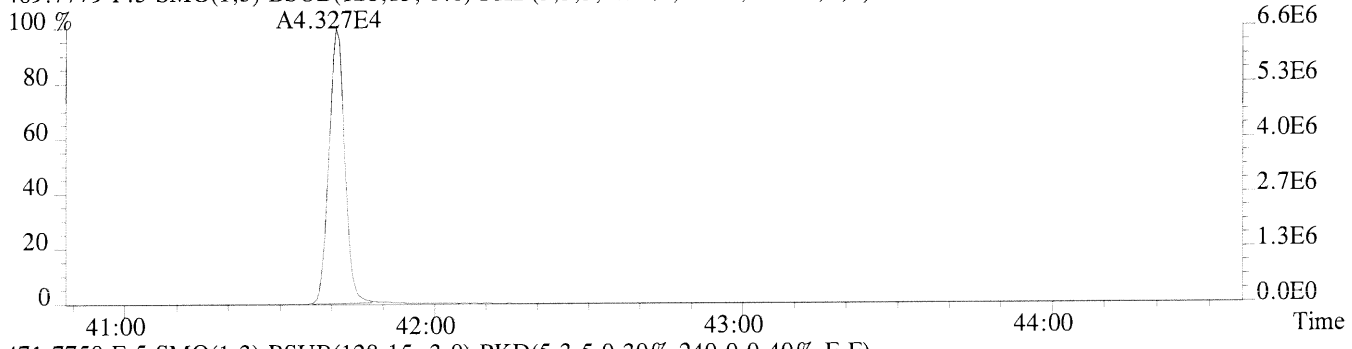
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,632.0,0.40%,F,F)



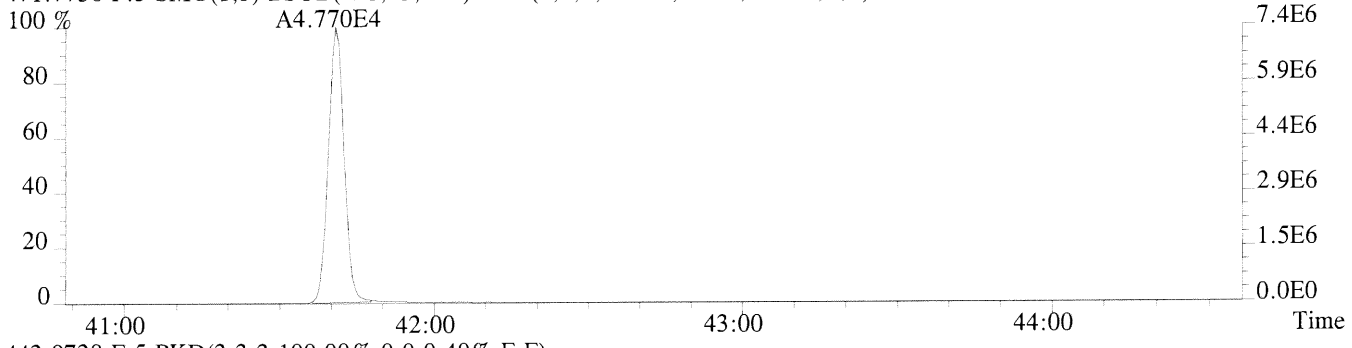
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,540.0,0.40%,F,F)



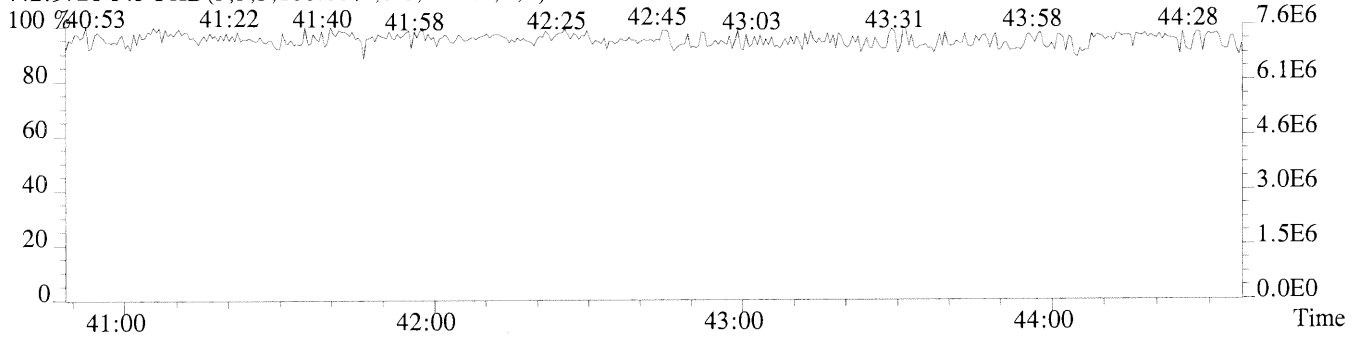
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,392.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,240.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC2

Run #2 Filename U120207 Samp: 1 Inj: 1 Acquired: 2-APR-07 14:42:23
Processed: 3-APR-07 08:06:17 Sample ID: ICAL HRCC2

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	27:16	4.266e+02	4.917e+02	0.87	yes	no
2	Unk	1,2,3,7,8-PeCDF	31:32	1.737e+03	1.070e+03	1.62	yes	no
3	Unk	2,3,4,7,8-PeCDF	32:16	1.700e+03	1.161e+03	1.46	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:03	1.618e+03	1.291e+03	1.25	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:09	1.665e+03	1.286e+03	1.29	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	35:37	1.445e+03	1.183e+03	1.22	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:19	1.199e+03	9.397e+02	1.28	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	37:45	1.445e+03	1.543e+03	0.94	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:04	1.126e+03	1.043e+03	1.08	yes	no
10	Unk	OCDF	41:52	2.382e+03	2.462e+03	0.97	yes	no
11	Unk	2,3,7,8-TCDD	28:06	3.189e+02	3.997e+02	0.80	yes	no
12	Unk	1,2,3,7,8-PeCDD	32:37	1.166e+03	7.814e+02	1.49	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	35:44	1.226e+03	8.626e+02	1.42	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	35:48	1.185e+03	9.812e+02	1.21	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:06	1.107e+03	8.815e+02	1.26	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	38:39	1.008e+03	9.515e+02	1.06	yes	no
17	Unk	OCDD	41:41	2.203e+03	2.476e+03	0.89	yes	no
18	IS	13C-2,3,7,8-TCDF	27:15	9.762e+03	1.174e+04	0.83	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	31:31	1.582e+04	9.843e+03	1.61	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:02	1.826e+04	3.396e+04	0.54	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	37:44	1.327e+04	3.045e+04	0.44	yes	no
22	IS	13C-2,3,7,8-TCDD	28:04	6.892e+03	8.608e+03	0.80	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	32:36	1.057e+04	6.930e+03	1.53	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	35:48	2.238e+04	1.803e+04	1.24	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	38:38	2.220e+04	2.109e+04	1.05	yes	no
26	IS	13C-OCDD	41:41	4.240e+04	4.786e+04	0.89	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	27:52	7.805e+03	9.651e+03	0.81	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:05	2.193e+04	1.785e+04	1.23	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	28:06	7.146e+02				

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Houston, TX 77042
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC2

Run #2 Filename U120207 Samp: 1 Inj: 1 Acquired: 2-APR-07 14:42:23

Processed: 3-APR-07 08:06:17 LAB. ID: ICAL HRCC2

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	6.54e+04	2.56e+02	2.6e+02	7.68e+04	4.36e+02	1.8e+02
2	1,2,3,7,8-PeCDF	3.25e+05	2.52e+02	1.3e+03	2.10e+05	2.00e+02	1.0e+03
3	2,3,4,7,8-PeCDF	3.23e+05	2.52e+02	1.3e+03	2.23e+05	2.00e+02	1.1e+03
4	1,2,3,4,7,8-HxCDF	3.52e+05	2.80e+02	1.3e+03	2.90e+05	2.04e+02	1.4e+03
5	1,2,3,6,7,8-HxCDF	3.53e+05	2.80e+02	1.3e+03	2.70e+05	2.04e+02	1.3e+03
6	2,3,4,6,7,8-HxCDF	3.13e+05	2.80e+02	1.1e+03	2.50e+05	2.04e+02	1.2e+03
7	1,2,3,7,8,9-HxCDF	2.51e+05	2.80e+02	9.0e+02	2.01e+05	2.04e+02	9.8e+02
8	1,2,3,4,6,7,8-HpCDF	3.16e+05	8.44e+02	3.7e+02	3.29e+05	5.56e+02	5.9e+02
9	1,2,3,4,7,8,9-HpCDF	2.22e+05	8.44e+02	2.6e+02	1.98e+05	5.56e+02	3.6e+02
10	OCDF	3.49e+05	3.20e+02	1.1e+03	3.54e+05	5.72e+02	6.2e+02
11	2,3,7,8-TCDD	5.65e+04	2.88e+02	2.0e+02	6.82e+04	2.72e+02	2.5e+02
12	1,2,3,7,8-PeCDD	2.42e+05	2.88e+02	8.4e+02	1.57e+05	2.60e+02	6.0e+02
13	1,2,3,4,7,8-HxCDD	2.72e+05	4.08e+02	6.7e+02	2.07e+05	2.76e+02	7.5e+02
14	1,2,3,6,7,8-HxCDD	2.60e+05	4.08e+02	6.4e+02	2.02e+05	2.76e+02	7.3e+02
15	1,2,3,7,8,9-HxCDD	2.36e+05	4.08e+02	5.8e+02	1.96e+05	2.76e+02	7.1e+02
16	1,2,3,4,6,7,8-HpCDD	2.13e+05	2.48e+02	8.6e+02	2.02e+05	2.80e+02	7.2e+02
17	OCDD	3.29e+05	3.44e+02	9.6e+02	3.91e+05	3.56e+02	1.1e+03
18	13C-2,3,7,8-TCDF	1.65e+06	5.12e+02	3.2e+03	2.00e+06	4.92e+02	4.1e+03
19	13C-1,2,3,7,8-PeCDF	3.12e+06	3.00e+02	1.0e+04	1.95e+06	3.56e+02	5.5e+03
20	13C-1,2,3,4,7,8-HxCDF	4.02e+06	2.84e+02	1.4e+04	7.49e+06	2.96e+02	2.5e+04
21	13C-1,2,3,4,6,7,8-HpCDF	2.87e+06	1.87e+03	1.5e+03	6.59e+06	2.31e+03	2.9e+03
22	13C-2,3,7,8-TCDD	1.23e+06	7.00e+02	1.8e+03	1.54e+06	1.60e+02	9.6e+03
23	13C-1,2,3,7,8-PeCDD	2.12e+06	2.72e+02	7.8e+03	1.38e+06	2.96e+02	4.7e+03
24	13C-1,2,3,6,7,8-HxCDD	5.07e+06	4.60e+02	1.1e+04	4.10e+06	2.56e+02	1.6e+04
25	13C-1,2,3,4,6,7,8-HpCDD	4.57e+06	2.56e+02	1.8e+04	4.38e+06	3.00e+02	1.5e+04
26	13C-OCDD	6.41e+06	2.20e+02	2.9e+04	7.32e+06	3.56e+02	2.1e+04
27	13C-1,2,3,4-TCDD	1.43e+06	7.00e+02	2.0e+03	1.72e+06	1.60e+02	1.1e+04
28	13C-1,2,3,7,8,9-HxCDD	4.83e+06	4.60e+02	1.0e+04	3.92e+06	2.56e+02	1.5e+04
29	37Cl-2,3,7,8-TCDD	1.24e+05	2.48e+02	5.0e+02			

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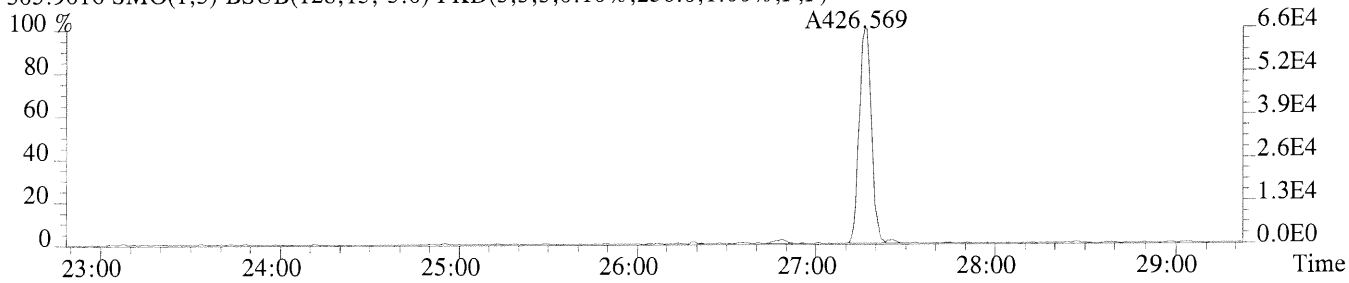
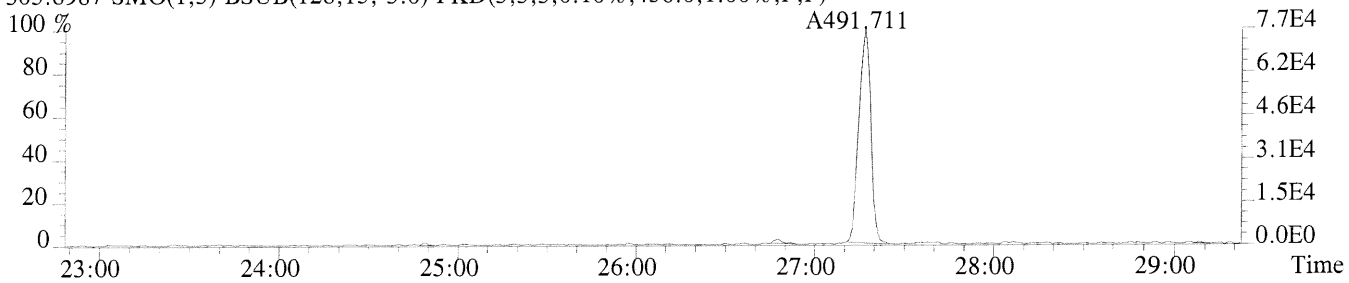
File:U120207 #1-548 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

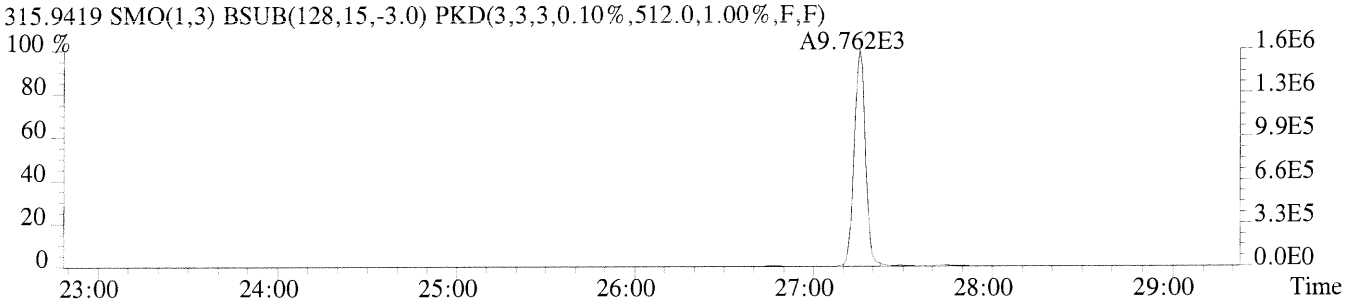
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,256.0,1.00%,F,F)



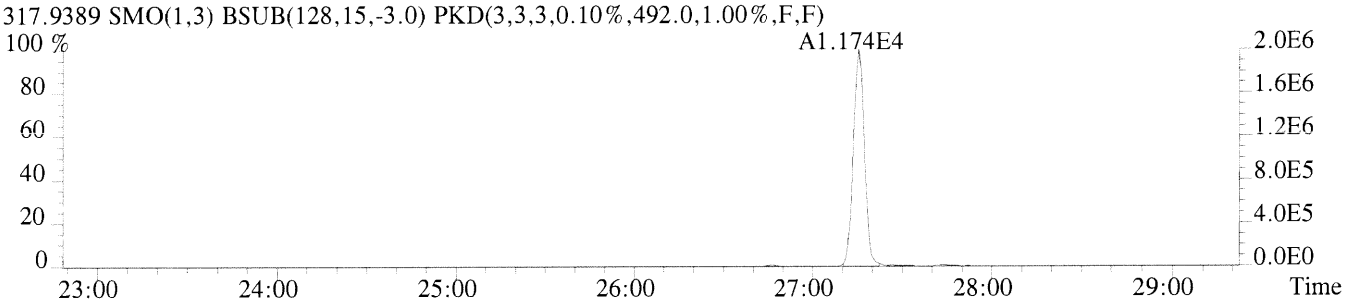
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,436.0,1.00%,F,F)



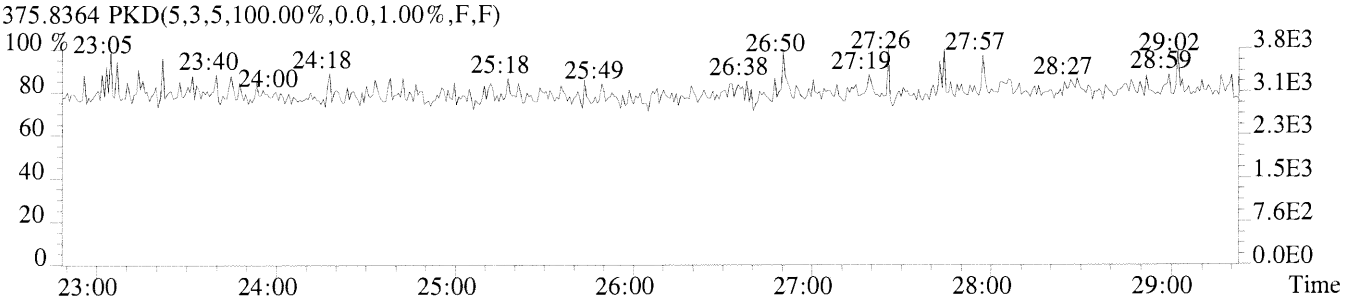
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,512.0,1.00%,F,F)



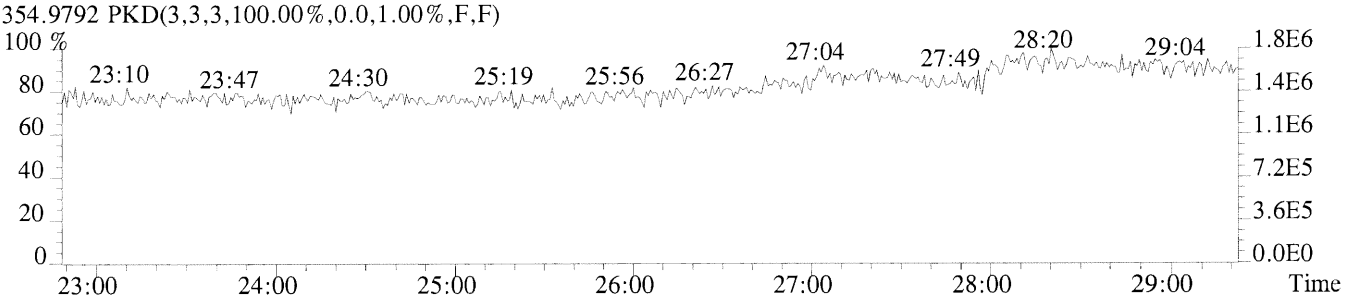
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,492.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

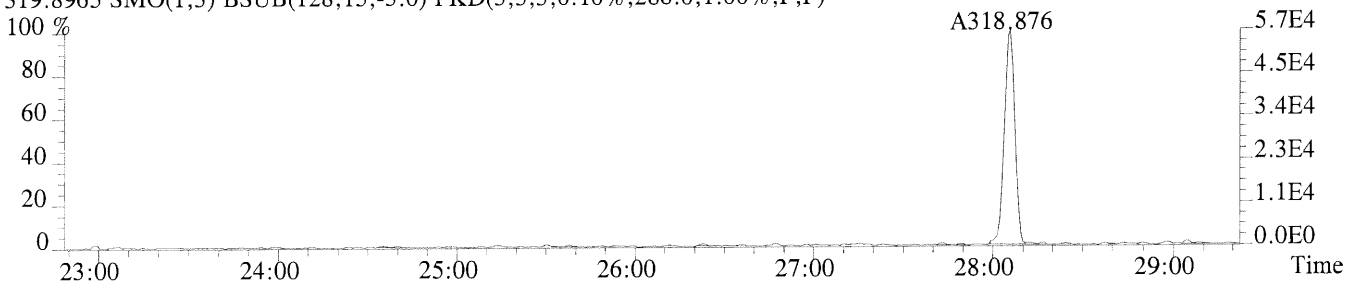


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

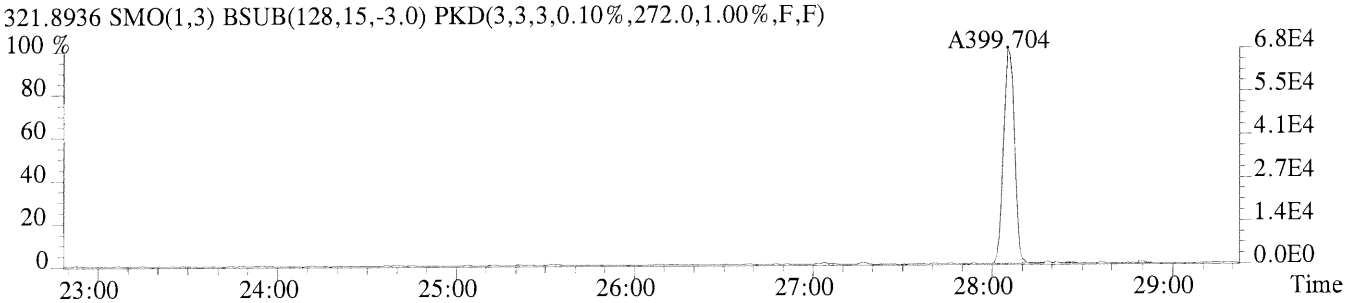


File:U120207 #1-548 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

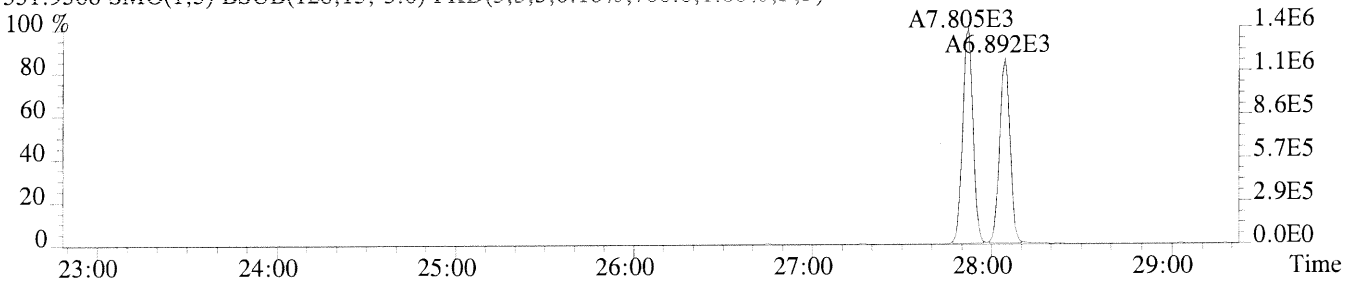
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,288.0,1.00%,F,F)



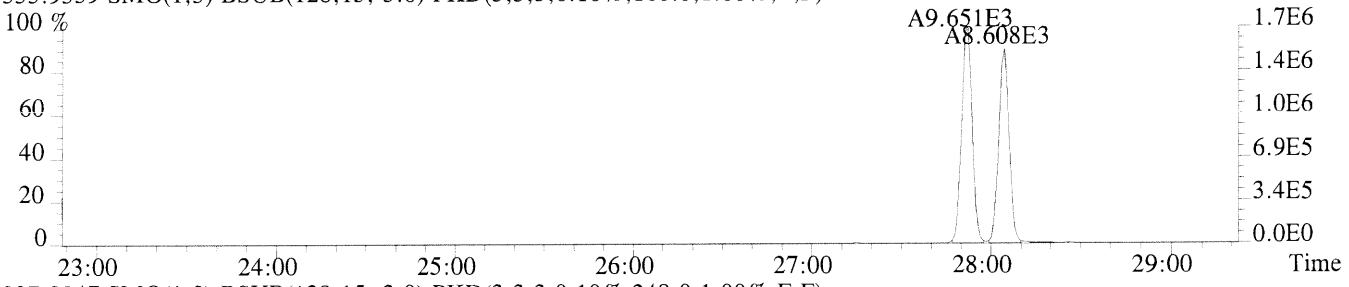
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,272.0,1.00%,F,F)



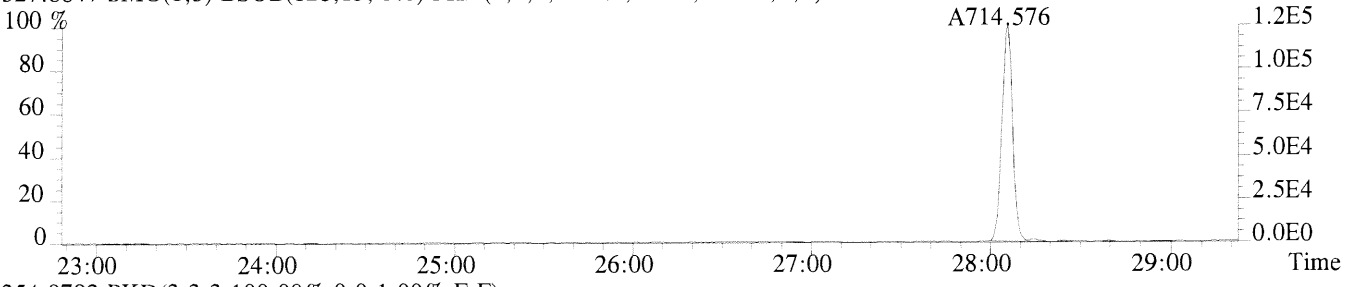
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,700.0,1.00%,F,F)



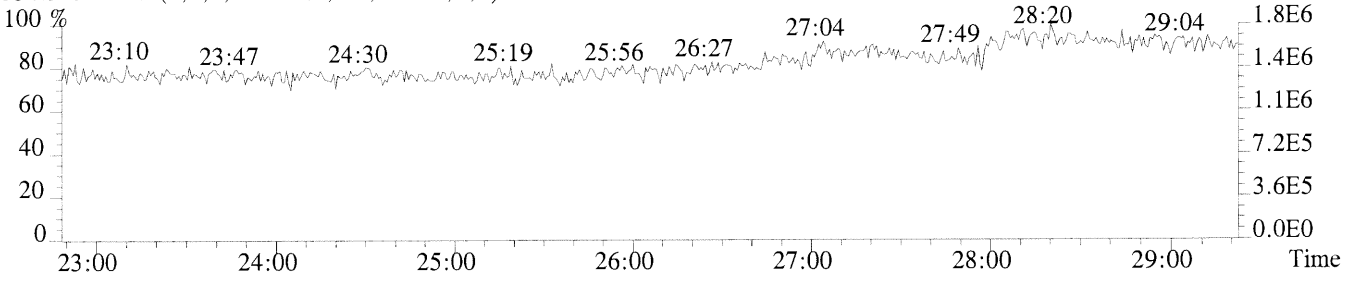
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,160.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,248.0,1.00%,F,F)

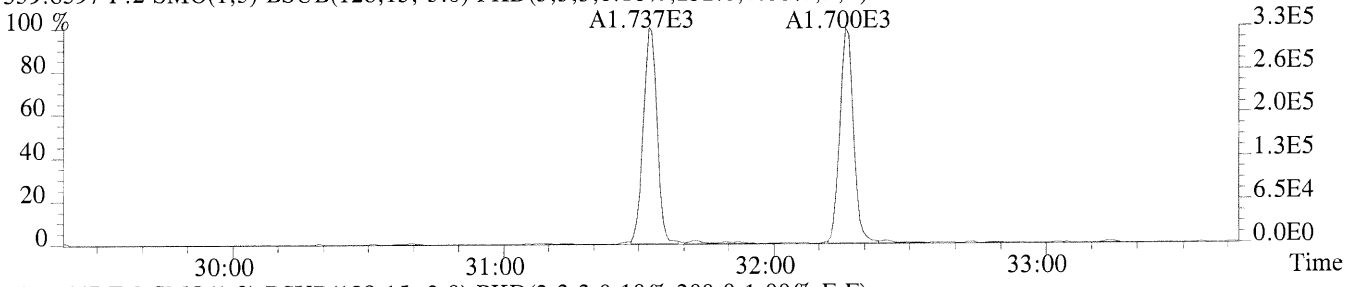


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

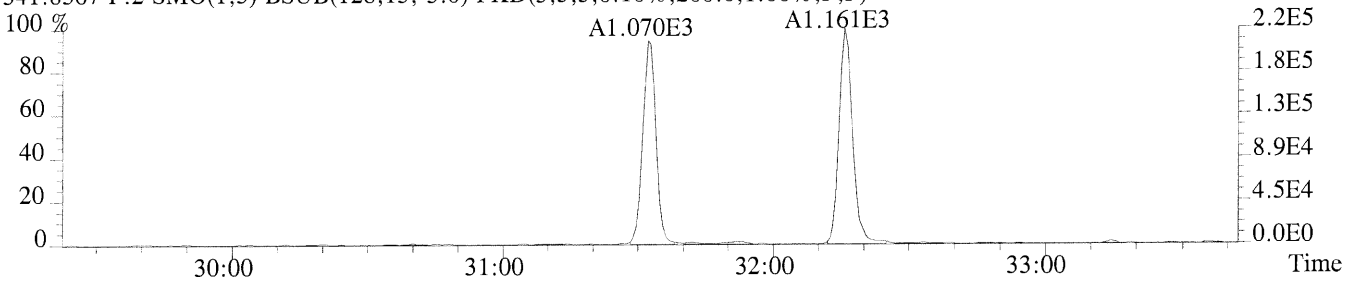


File:U120207 #1-394 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

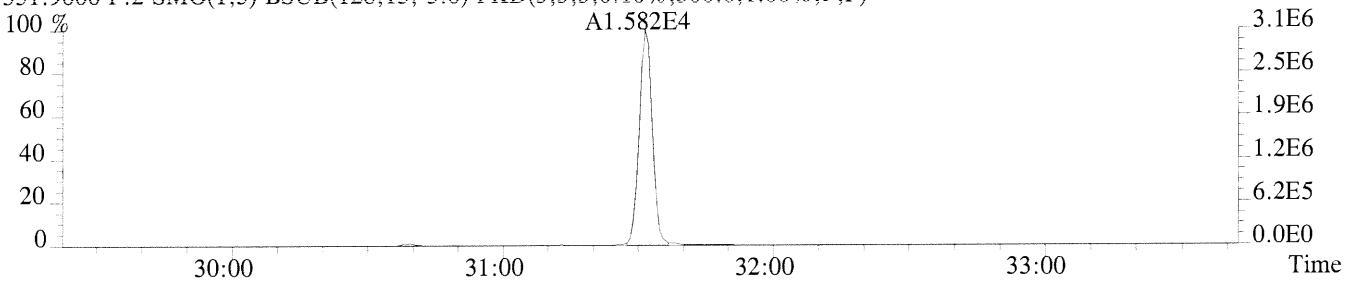
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,252.0,1.00%,F,F)



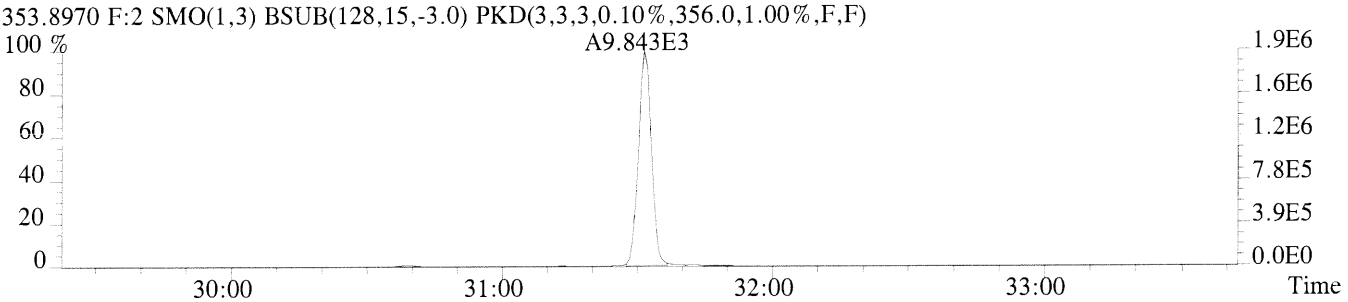
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,200.0,1.00%,F,F)



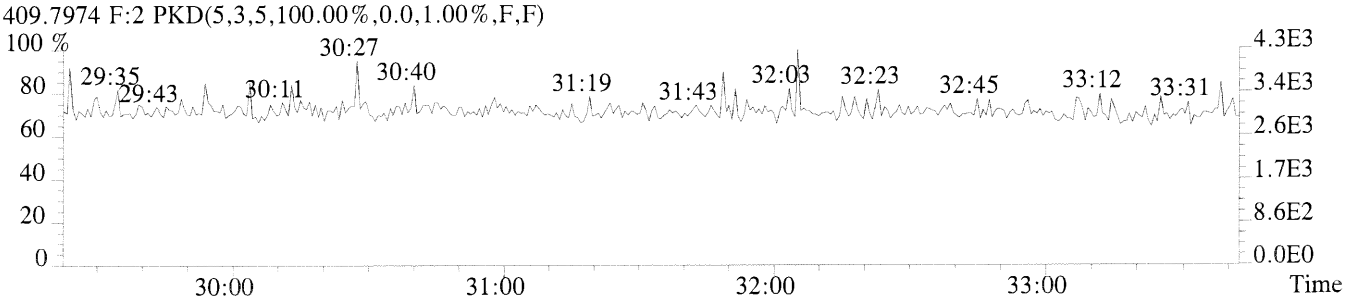
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,300.0,1.00%,F,F)



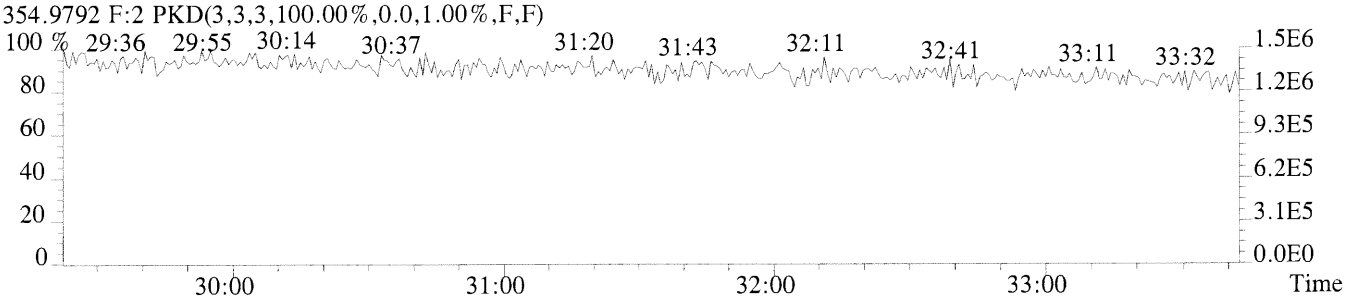
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,356.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

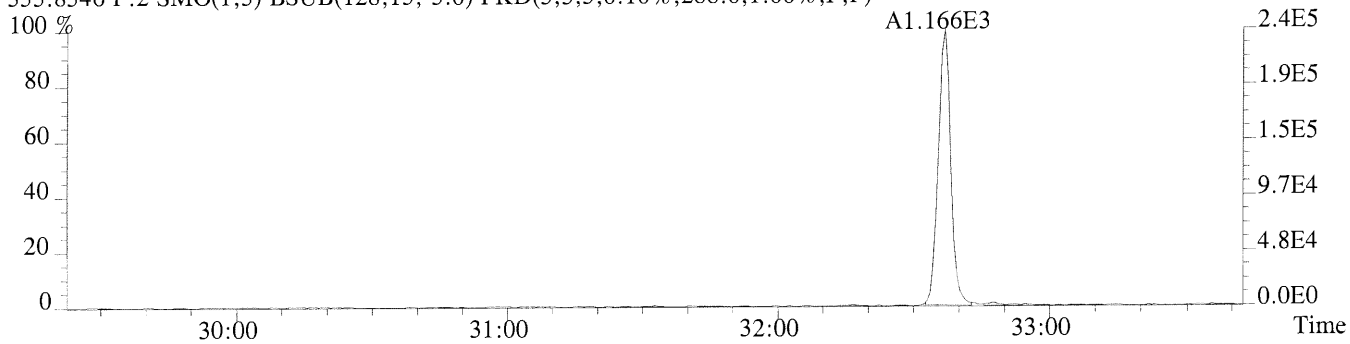


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

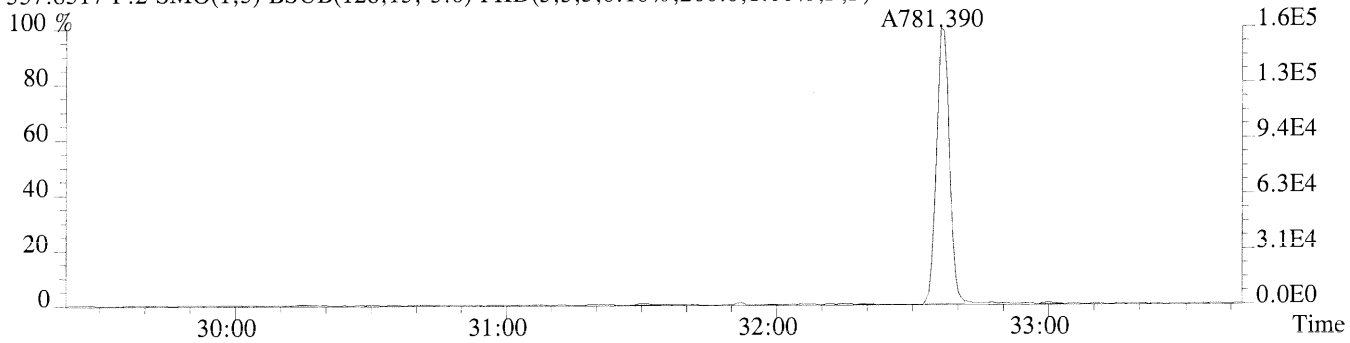


File:U120207 #1-394 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

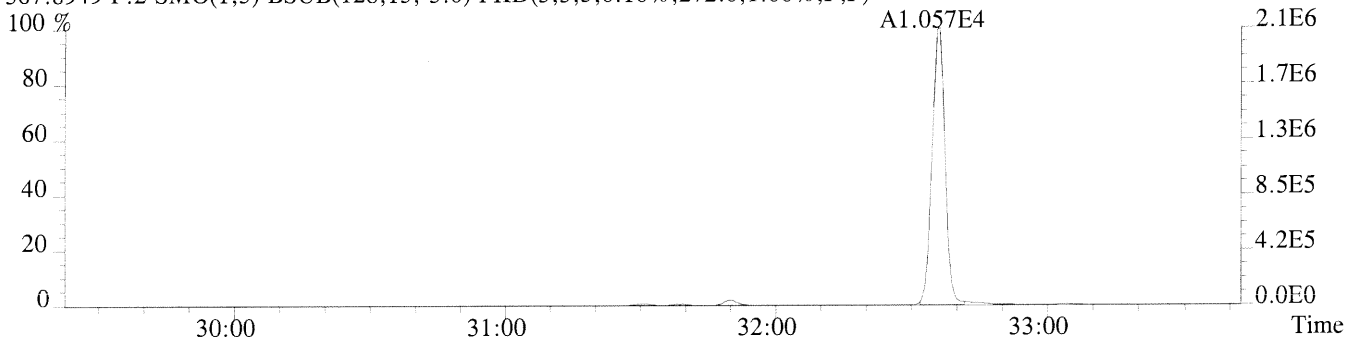
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,288.0,1.00%,F,F)



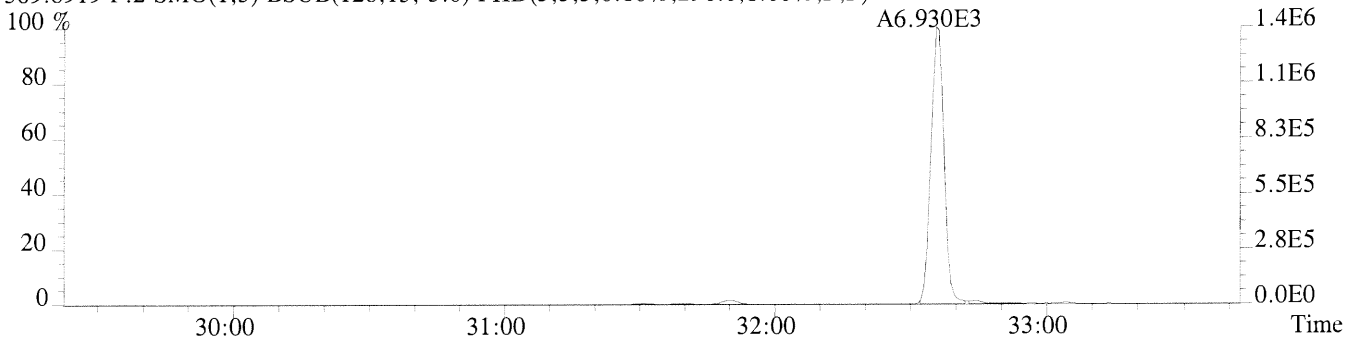
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,260.0,1.00%,F,F)



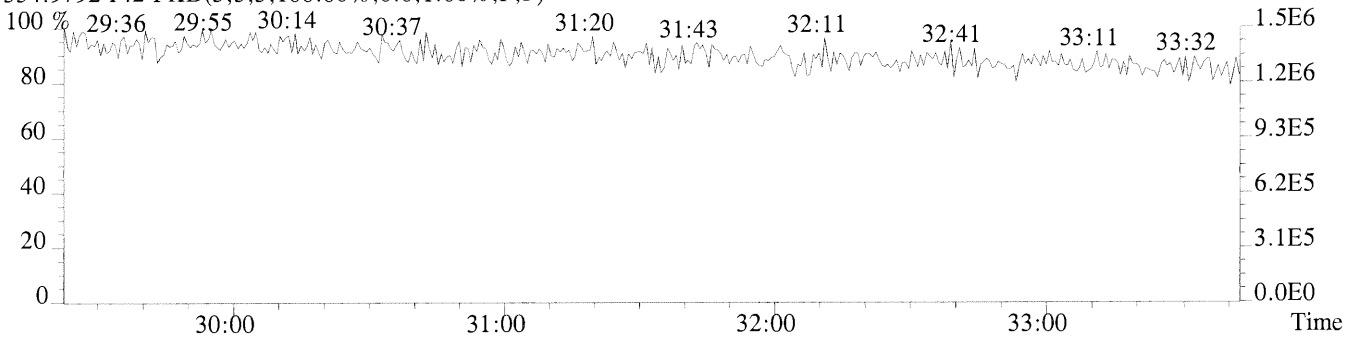
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,272.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,296.0,1.00%,F,F)

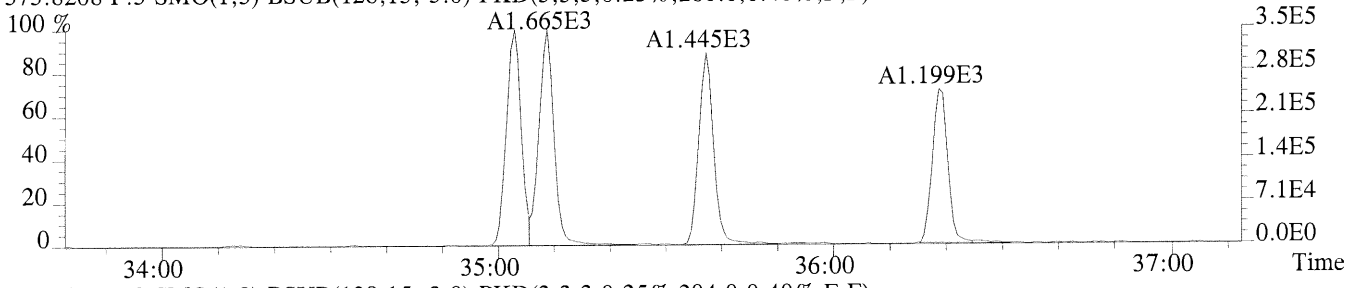


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

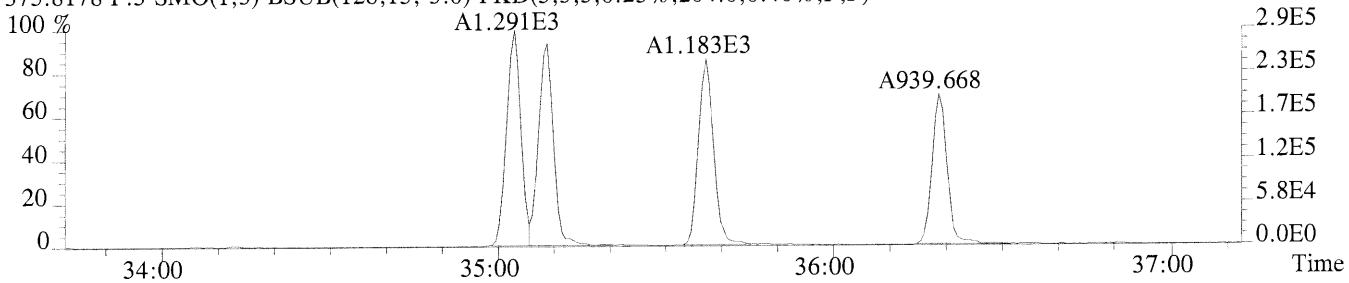


File:U120207 #1-318 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

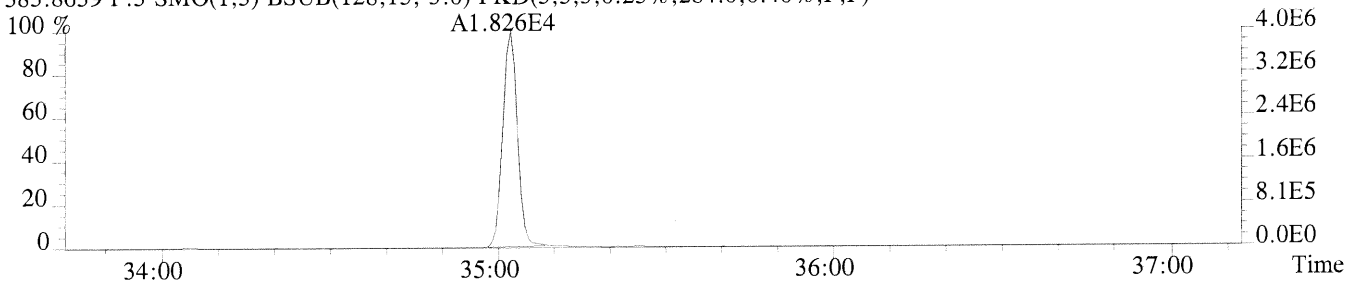
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,280.0,0.40%,F,F)



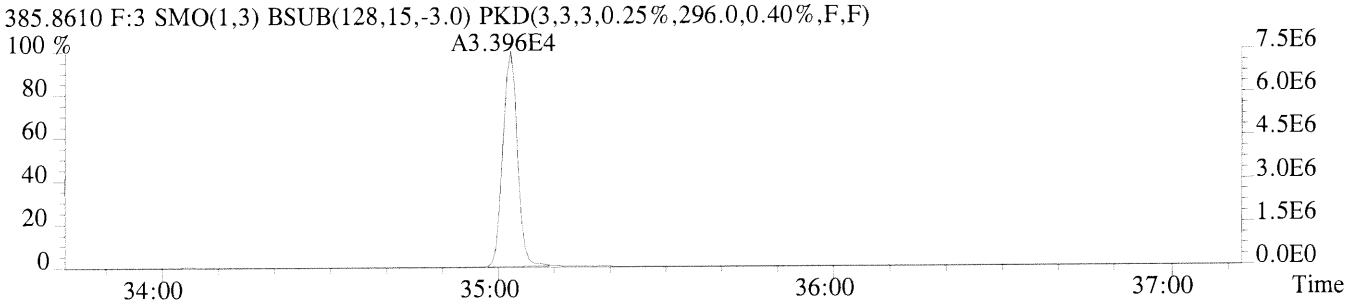
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,204.0,0.40%,F,F)



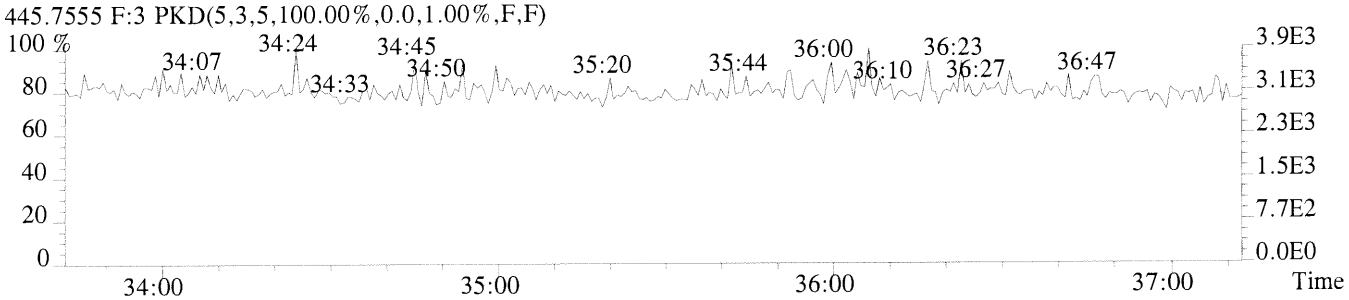
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,284.0,0.40%,F,F)



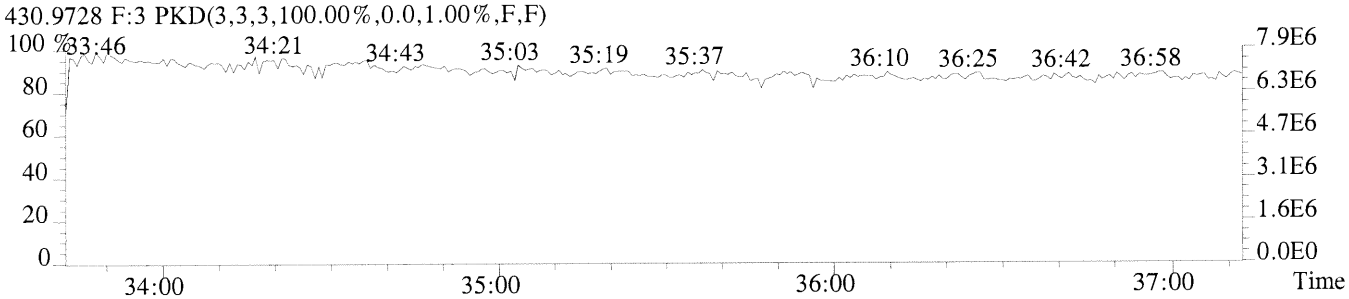
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,296.0,0.40%,F,F)



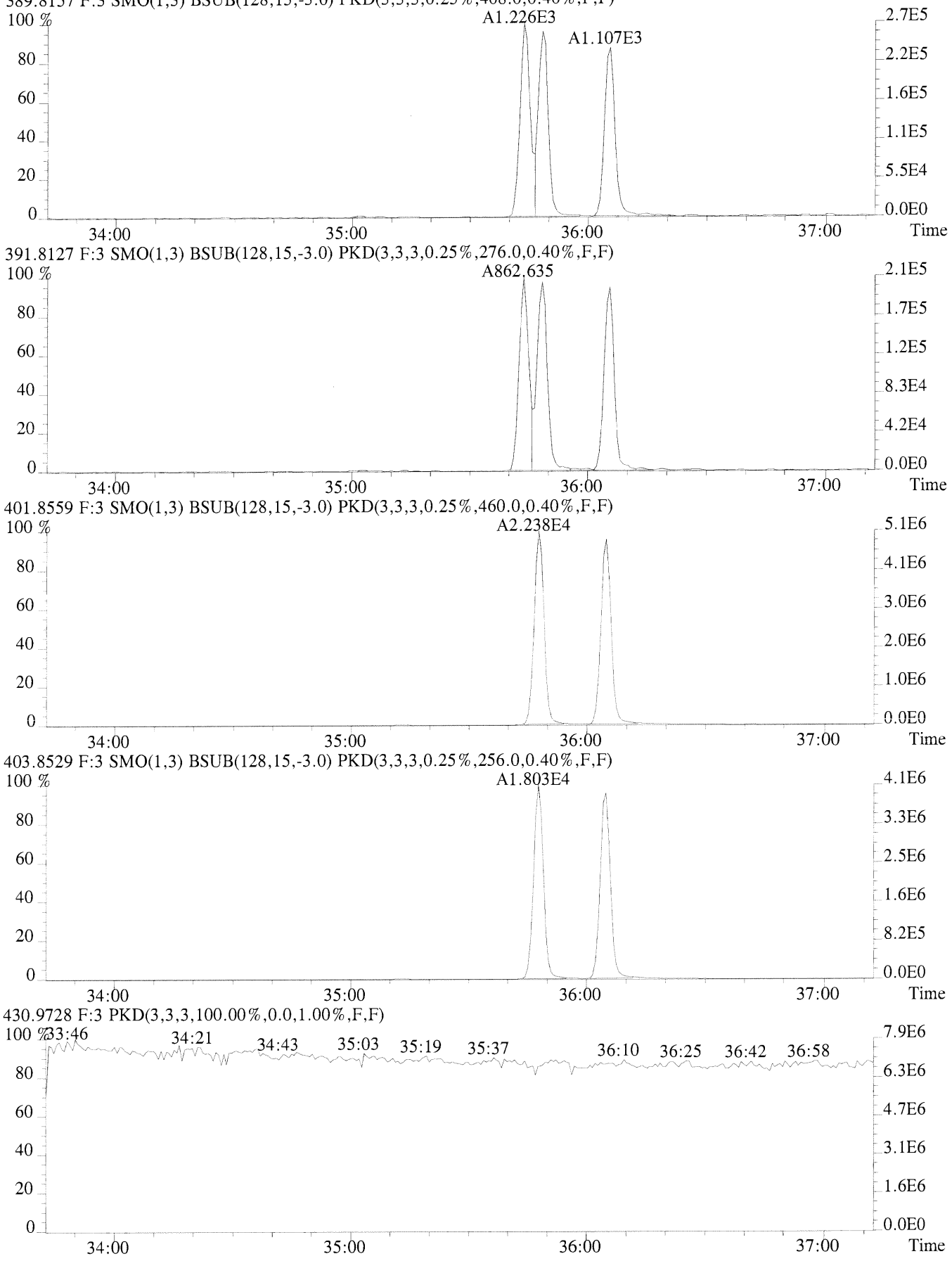
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

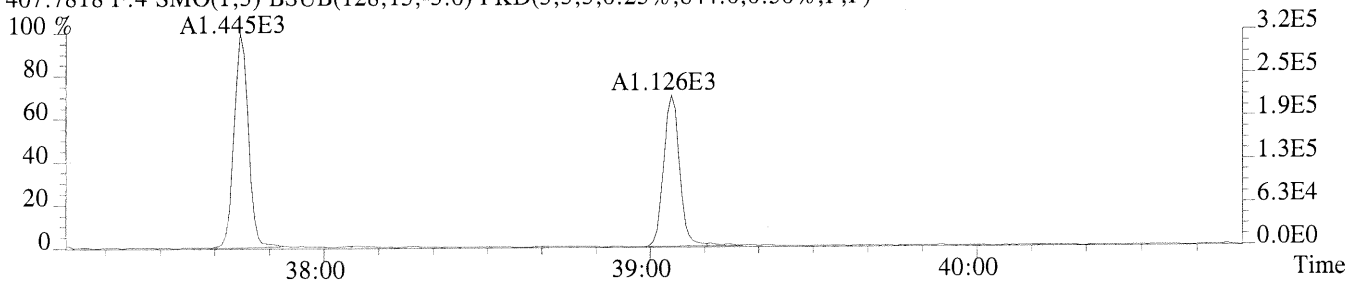


File:U120207 #1-318 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

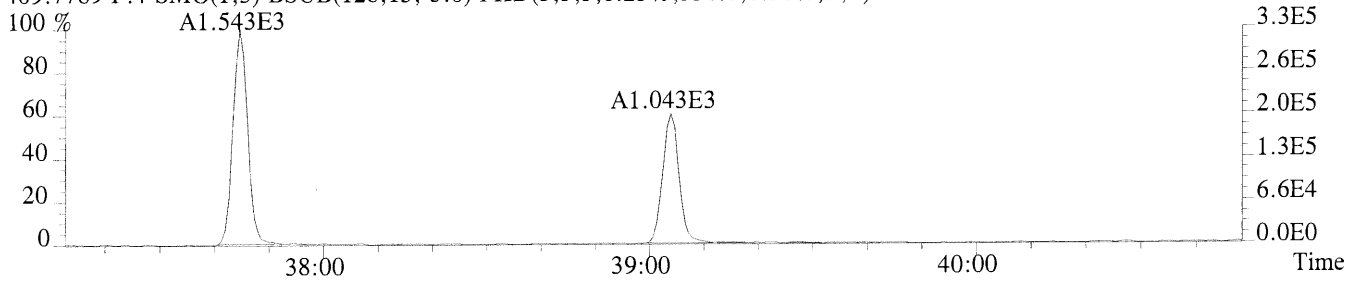


File:U120207 #1-327 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

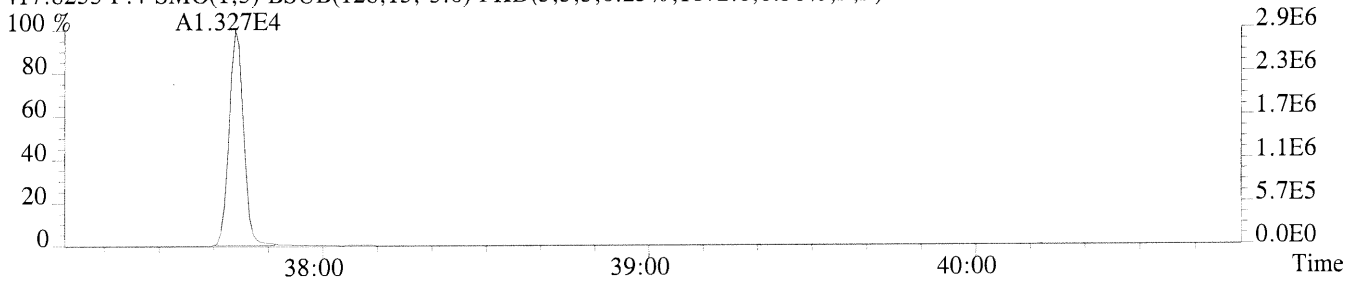
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,844.0,0.50%,F,F)



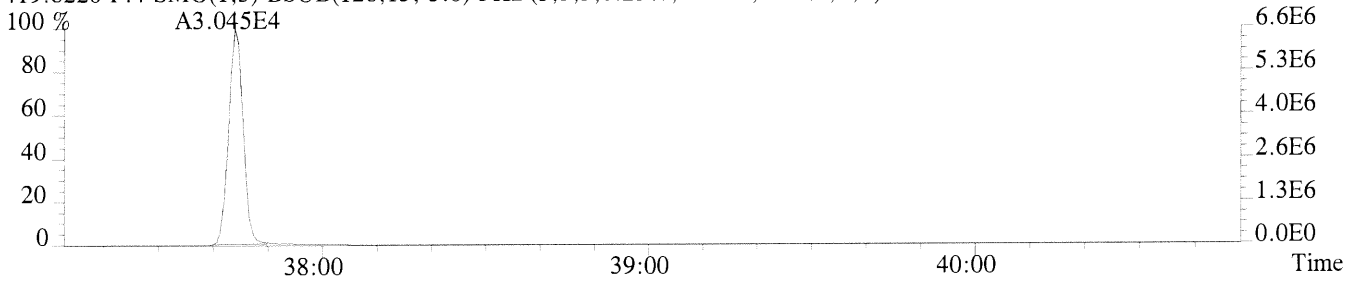
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,556.0,0.50%,F,F)



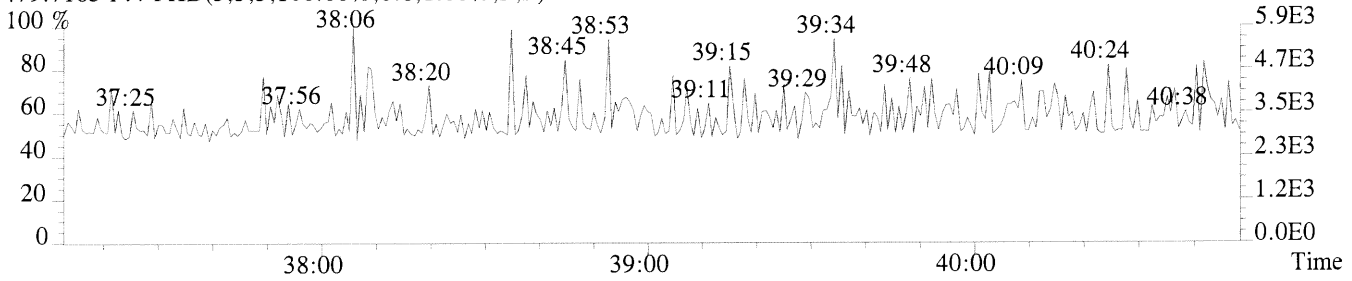
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1872.0,0.50%,F,F)



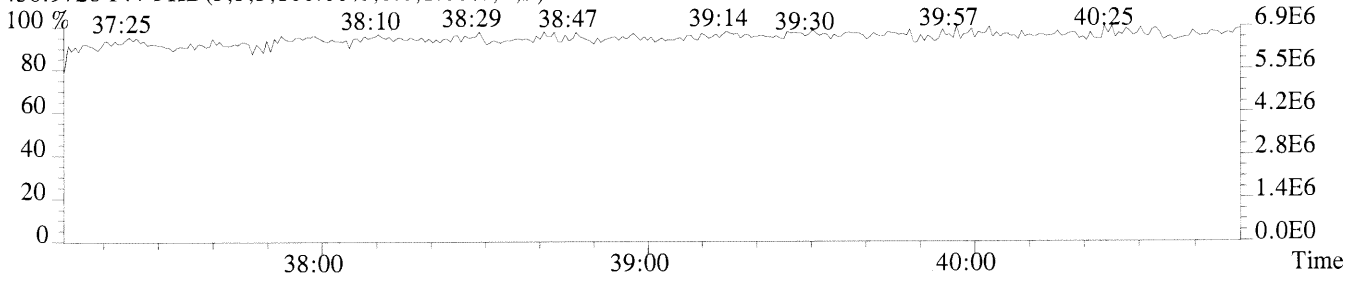
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2312.0,0.50%,F,F)



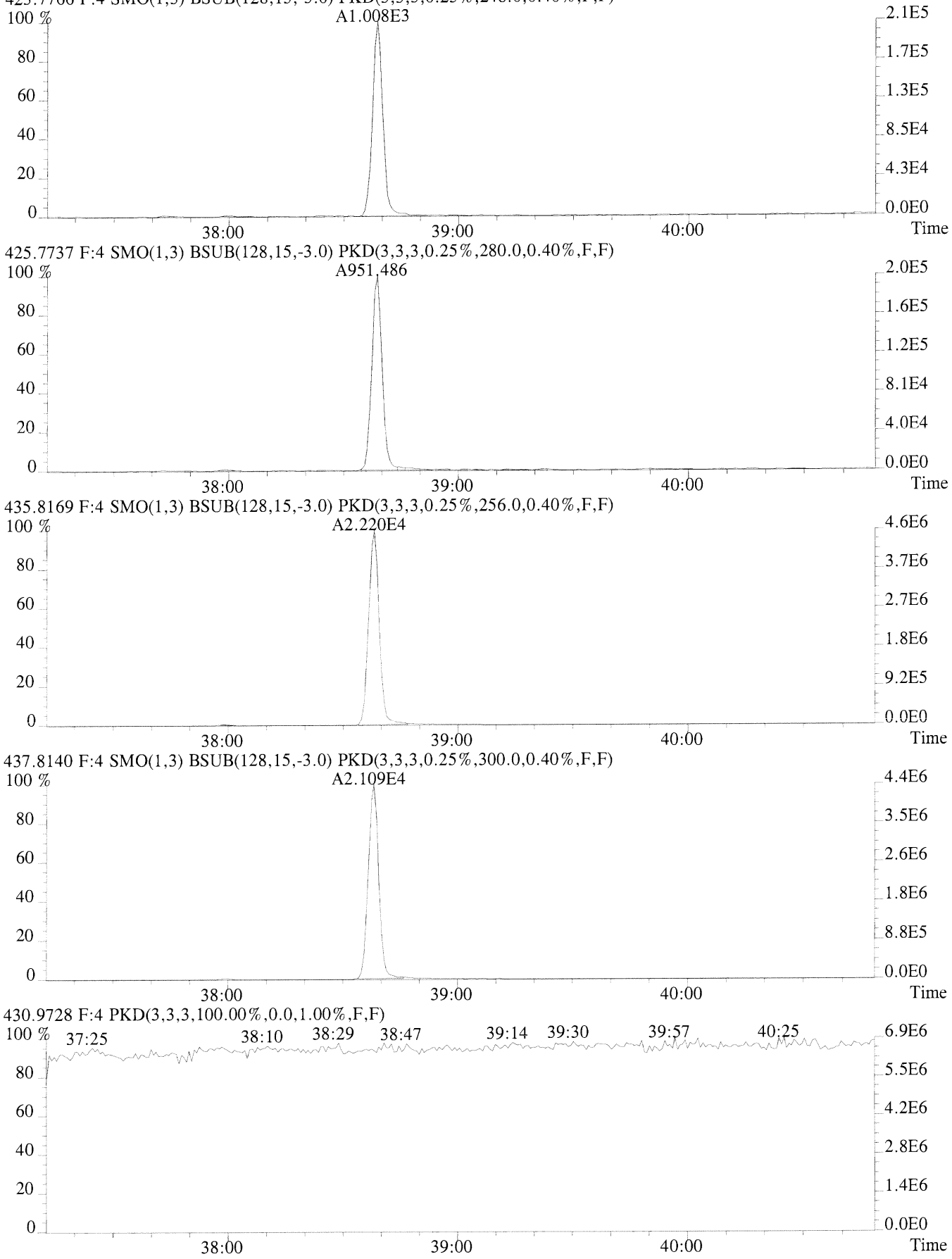
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

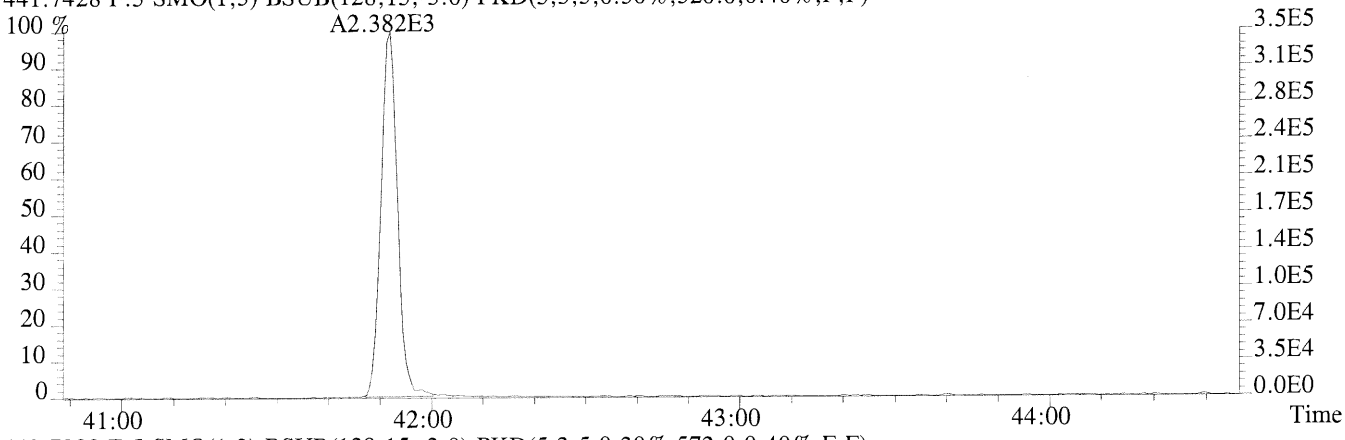


File:U120207 #1-327 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

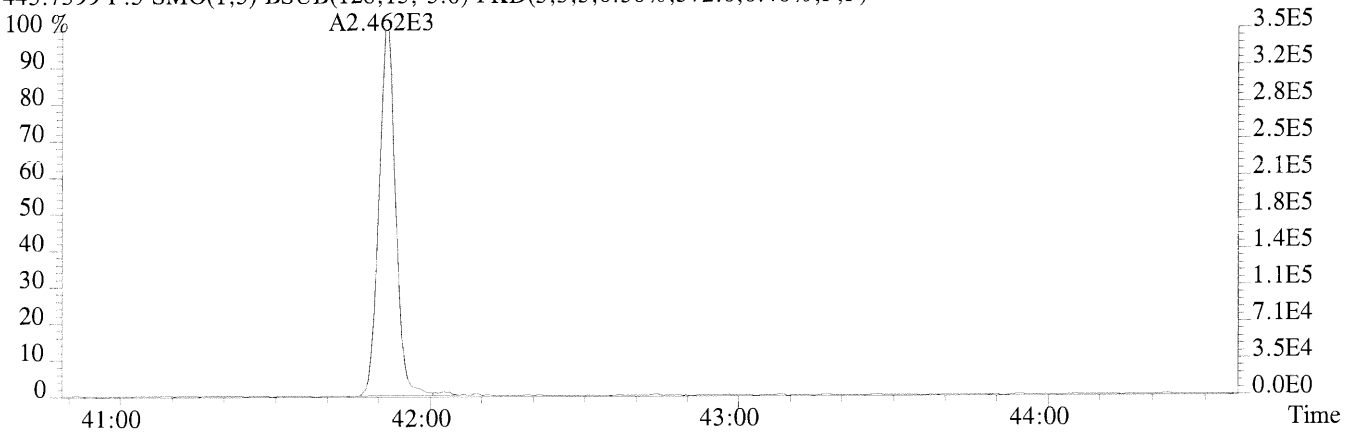


File:U120207 #1-420 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

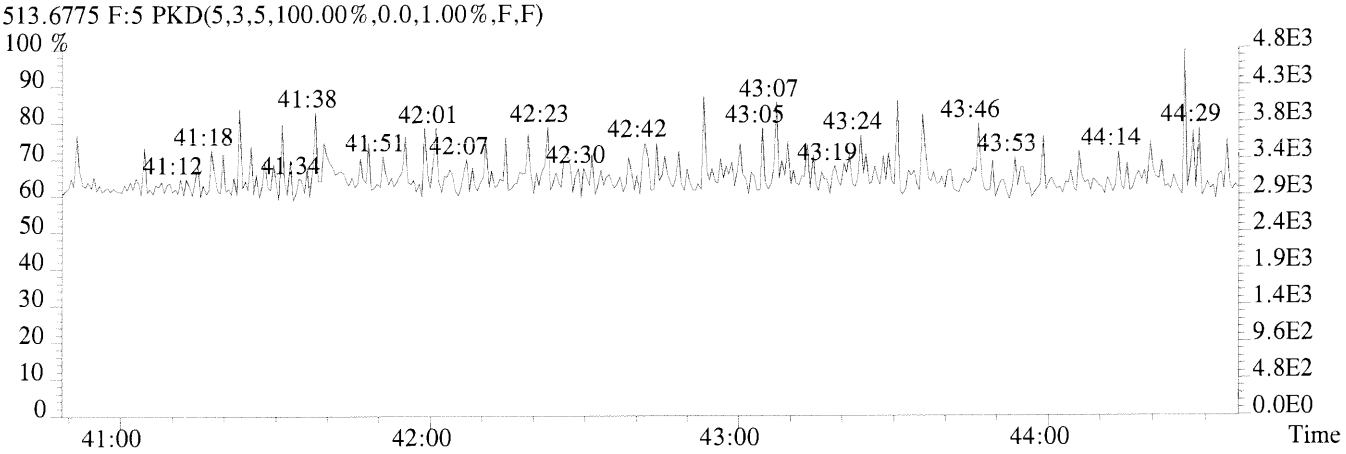
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,320.0,0.40%,F,F)



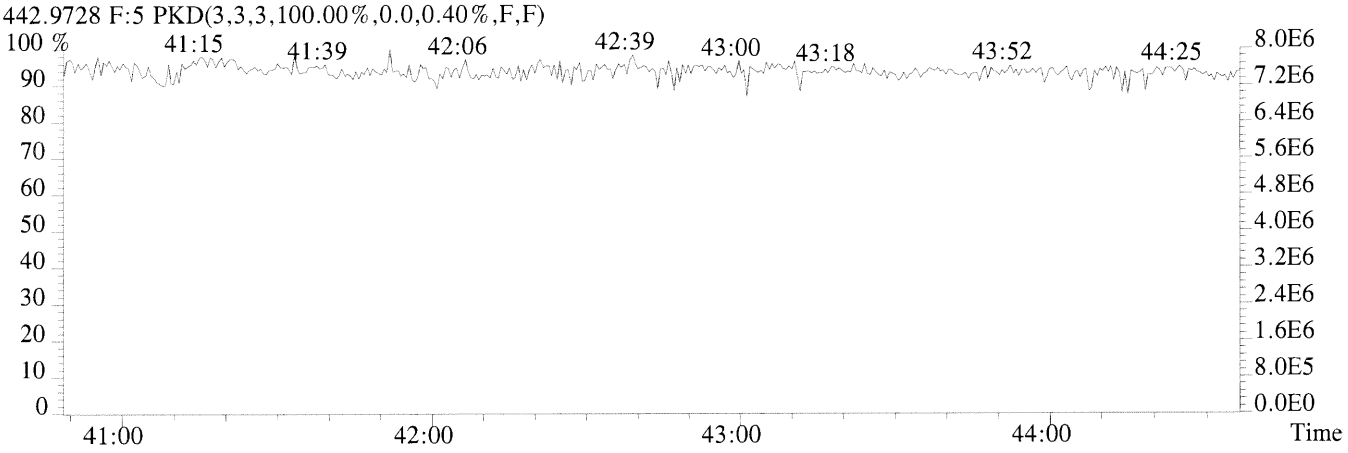
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,572.0,0.40%,F,F)



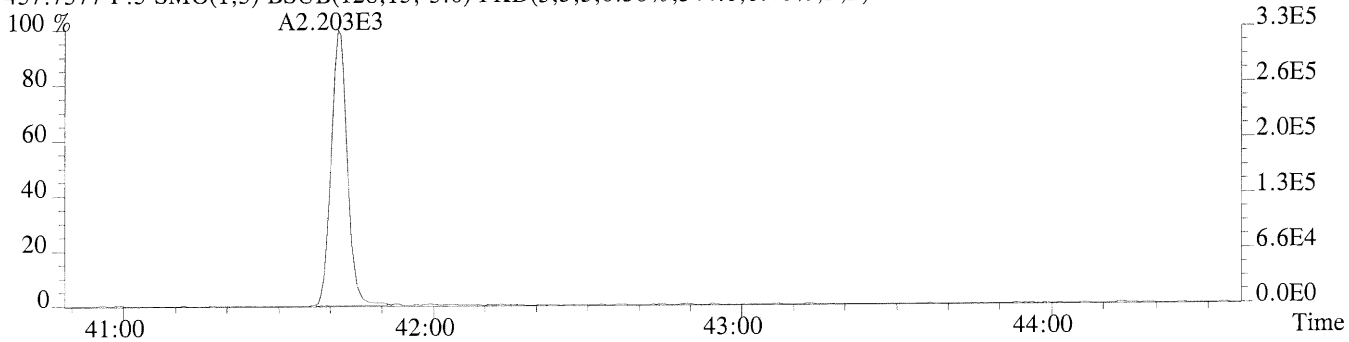
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



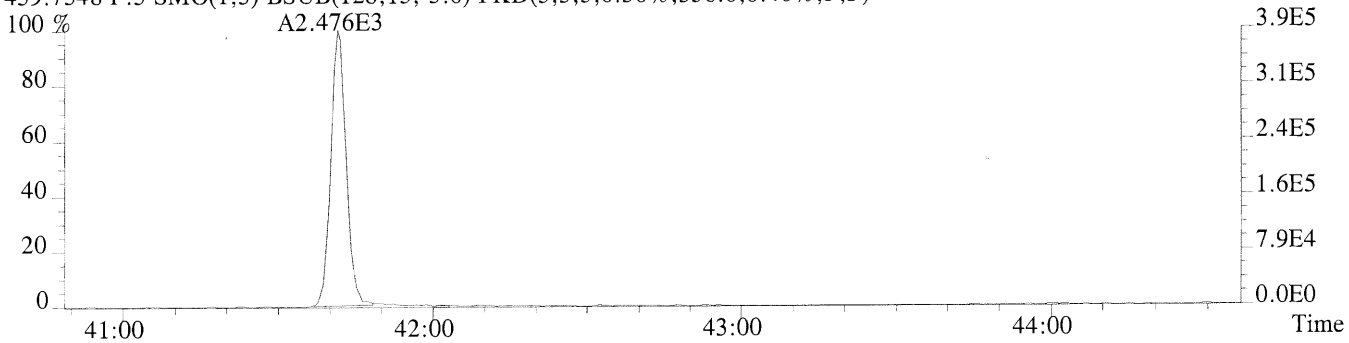
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



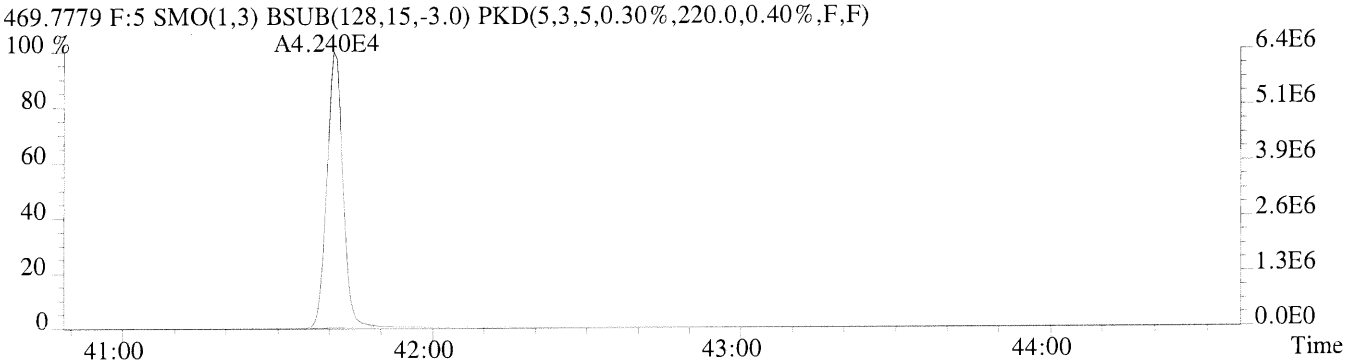
File:U120207 #1-420 Acq: 2-APR-2007 14:42:23 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,344.0,0.40%,F,F)



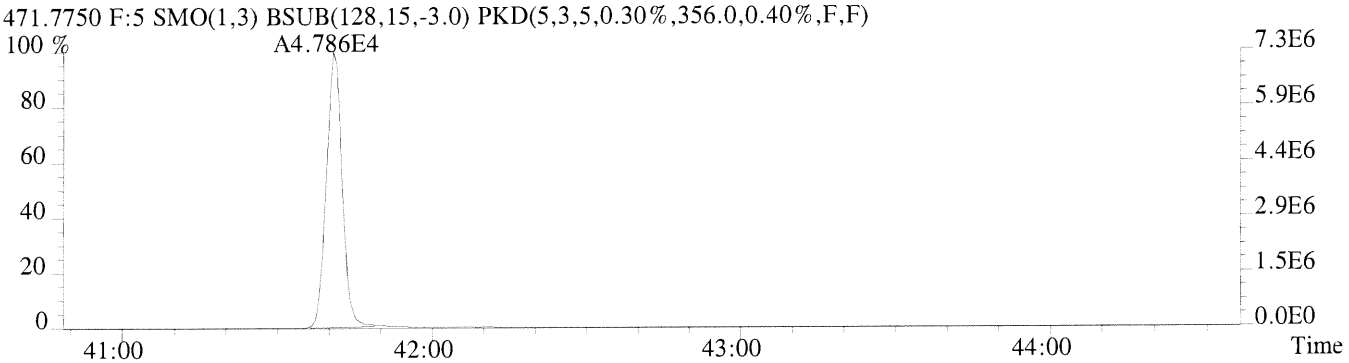
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,356.0,0.40%,F,F)



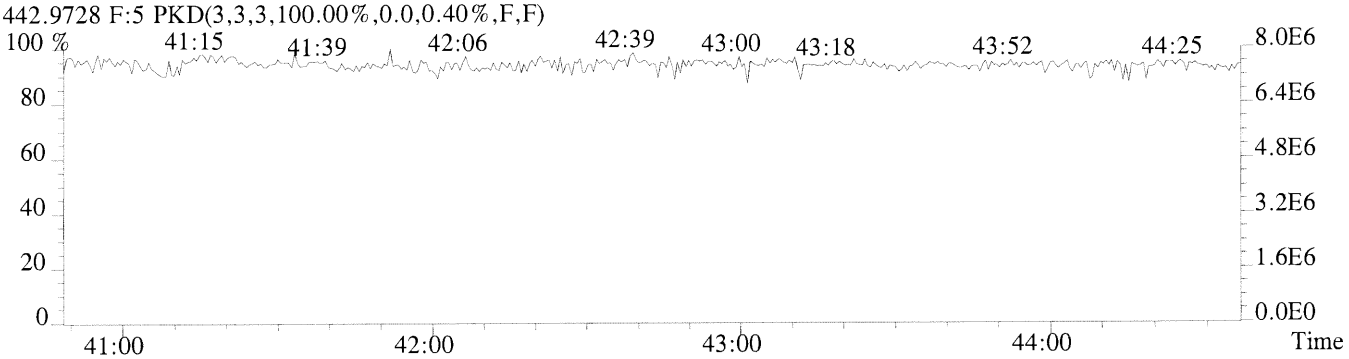
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,220.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,356.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC3

Run #3 Filename U120208 Samp: 1 Inj: 1 Acquired: 2-APR-07 15:34:13
Processed: 3-APR-07 08:06:18 Sample ID: ICAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	27:16	1.257e+03	1.682e+03	0.75	yes	no
2	Unk	1,2,3,7,8-PeCDF	31:32	5.345e+03	3.351e+03	1.60	yes	no
3	Unk	2,3,4,7,8-PeCDF	32:16	5.574e+03	3.542e+03	1.57	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:03	5.889e+03	4.514e+03	1.30	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:09	5.594e+03	4.513e+03	1.24	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	35:37	5.001e+03	4.084e+03	1.22	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:19	4.059e+03	3.286e+03	1.24	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	37:45	5.042e+03	4.920e+03	1.02	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:04	3.653e+03	3.742e+03	0.98	yes	no
10	Unk	OCDF	41:51	7.930e+03	8.579e+03	0.92	yes	no
11	Unk	2,3,7,8-TCDD	28:05	9.567e+02	1.238e+03	0.77	yes	no
12	Unk	1,2,3,7,8-PeCDD	32:37	3.874e+03	2.391e+03	1.62	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	35:44	3.993e+03	3.083e+03	1.30	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	35:48	3.822e+03	3.364e+03	1.14	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:06	3.694e+03	3.098e+03	1.19	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	38:39	3.463e+03	3.302e+03	1.05	yes	no
17	Unk	OCDD	41:41	7.135e+03	7.995e+03	0.89	yes	no
18	IS	13C-2,3,7,8-TCDF	27:16	6.817e+03	8.074e+03	0.84	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	31:31	1.147e+04	7.170e+03	1.60	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:02	1.429e+04	2.829e+04	0.51	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	37:44	1.087e+04	2.552e+04	0.43	yes	no
22	IS	13C-2,3,7,8-TCDD	28:04	5.027e+03	6.178e+03	0.81	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	32:36	8.273e+03	5.275e+03	1.57	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	35:48	2.017e+04	1.614e+04	1.25	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	38:38	1.859e+04	1.789e+04	1.04	yes	no
26	IS	13C-OCDD	41:41	3.588e+04	4.023e+04	0.89	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	27:52	5.824e+03	7.289e+03	0.80	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:05	2.058e+04	1.633e+04	1.26	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	28:05	2.167e+03				

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC3

Run #3 Filename U120208 Samp: 1 Inj: 1 Acquired: 2-APR-07 15:34:13

Processed: 3-APR-07 08:06:18 LAB. ID: ICAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	2.02e+05	2.60e+02	7.8e+02	2.68e+05	3.08e+02	8.7e+02
2	1,2,3,7,8-PeCDF	1.02e+06	2.84e+02	3.6e+03	6.46e+05	2.60e+02	2.5e+03
3	2,3,4,7,8-PeCDF	1.10e+06	2.84e+02	3.9e+03	7.06e+05	2.60e+02	2.7e+03
4	1,2,3,4,7,8-HxCDF	1.31e+06	3.00e+02	4.4e+03	1.03e+06	1.84e+02	5.6e+03
5	1,2,3,6,7,8-HxCDF	1.16e+06	3.00e+02	3.9e+03	9.40e+05	1.84e+02	5.1e+03
6	2,3,4,6,7,8-HxCDF	1.09e+06	3.00e+02	3.6e+03	8.63e+05	1.84e+02	4.7e+03
7	1,2,3,7,8,9-HxCDF	8.53e+05	3.00e+02	2.8e+03	6.82e+05	1.84e+02	3.7e+03
8	1,2,3,4,6,7,8-HpCDF	1.10e+06	1.62e+03	6.8e+02	1.07e+06	7.16e+02	1.5e+03
9	1,2,3,4,7,8,9-HpCDF	7.26e+05	1.62e+03	4.5e+02	7.22e+05	7.16e+02	1.0e+03
10	OCDF	1.18e+06	2.88e+02	4.1e+03	1.31e+06	7.16e+02	1.8e+03
11	2,3,7,8-TCDD	1.69e+05	3.08e+02	5.5e+02	2.11e+05	2.68e+02	7.9e+02
12	1,2,3,7,8-PeCDD	7.78e+05	3.56e+02	2.2e+03	4.76e+05	2.68e+02	1.8e+03
13	1,2,3,4,7,8-HxCDD	8.83e+05	3.56e+02	2.5e+03	7.24e+05	2.16e+02	3.4e+03
14	1,2,3,6,7,8-HxCDD	8.85e+05	3.56e+02	2.5e+03	7.16e+05	2.16e+02	3.3e+03
15	1,2,3,7,8,9-HxCDD	8.15e+05	3.56e+02	2.3e+03	6.75e+05	2.16e+02	3.1e+03
16	1,2,3,4,6,7,8-HpCDD	7.26e+05	2.80e+02	2.6e+03	7.05e+05	3.56e+02	2.0e+03
17	OCDD	1.09e+06	2.28e+02	4.8e+03	1.23e+06	2.16e+02	5.7e+03
18	13C-2,3,7,8-TCDF	1.14e+06	4.96e+02	2.3e+03	1.35e+06	3.52e+02	3.8e+03
19	13C-1,2,3,7,8-PeCDF	2.24e+06	2.28e+02	9.8e+03	1.44e+06	1.40e+02	1.0e+04
20	13C-1,2,3,4,7,8-HxCDF	3.12e+06	1.92e+02	1.6e+04	6.07e+06	4.04e+02	1.5e+04
21	13C-1,2,3,4,6,7,8-HpCDF	2.39e+06	1.98e+03	1.2e+03	5.55e+06	5.60e+02	9.9e+03
22	13C-2,3,7,8-TCDD	8.92e+05	8.04e+02	1.1e+03	1.09e+06	3.04e+02	3.6e+03
23	13C-1,2,3,7,8-PeCDD	1.67e+06	2.52e+02	6.6e+03	1.05e+06	2.52e+02	4.2e+03
24	13C-1,2,3,6,7,8-HxCDD	4.51e+06	3.48e+02	1.3e+04	3.62e+06	3.76e+02	9.6e+03
25	13C-1,2,3,4,6,7,8-HpCDD	3.93e+06	4.04e+02	9.7e+03	3.76e+06	2.40e+02	1.6e+04
26	13C-OCDD	5.43e+06	4.08e+02	1.3e+04	6.01e+06	3.16e+02	1.9e+04
27	13C-1,2,3,4-TCDD	1.01e+06	8.04e+02	1.3e+03	1.25e+06	3.04e+02	4.1e+03
28	13C-1,2,3,7,8,9-HxCDD	4.59e+06	3.48e+02	1.3e+04	3.57e+06	3.76e+02	9.5e+03
29	37Cl-2,3,7,8-TCDD	3.83e+05	2.44e+02	1.6e+03			

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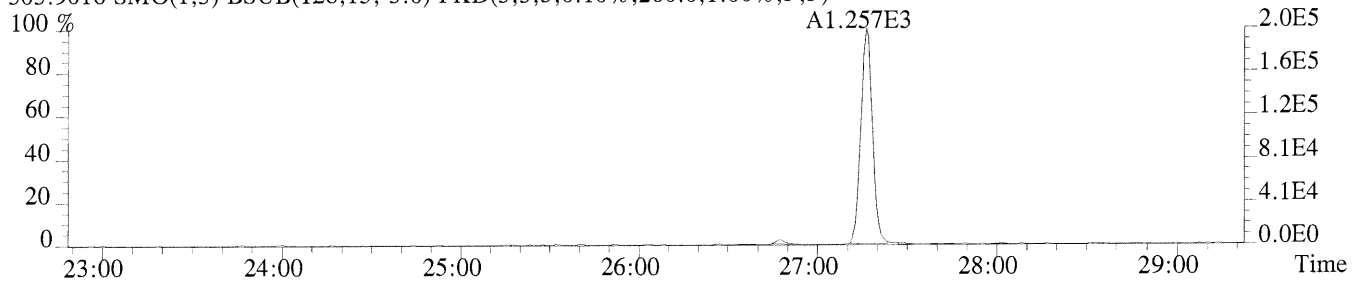
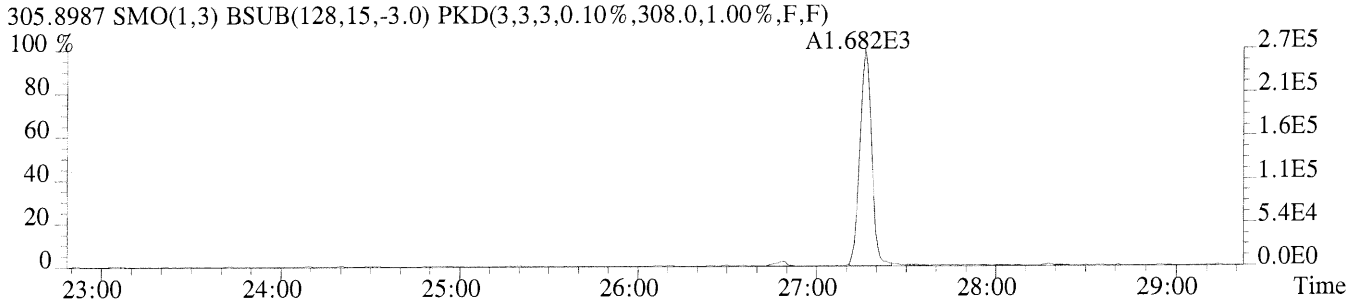
File:U120208 #1-548 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

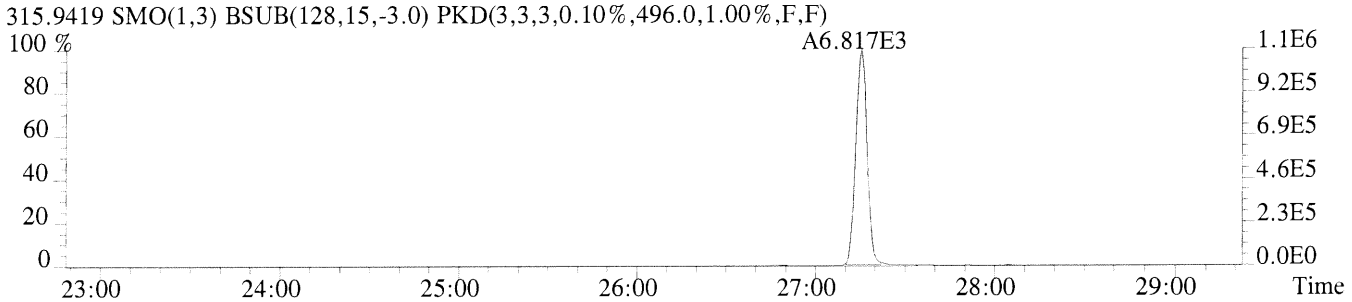
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,260.0,1.00%,F,F)



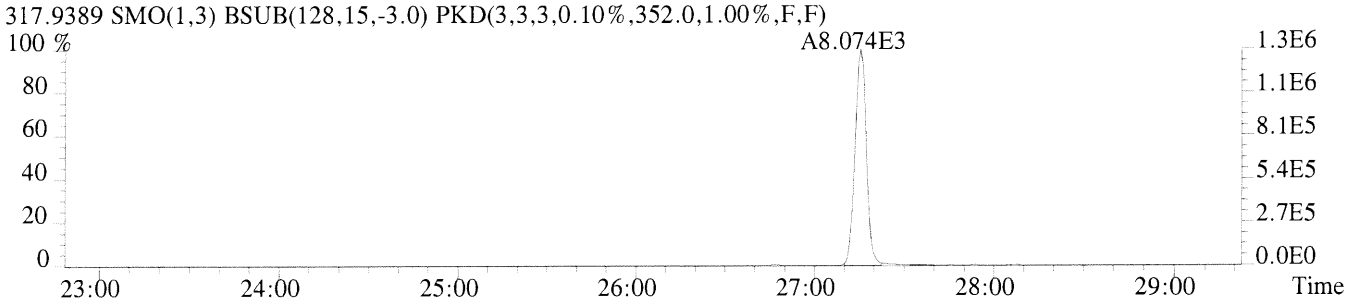
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,308.0,1.00%,F,F)



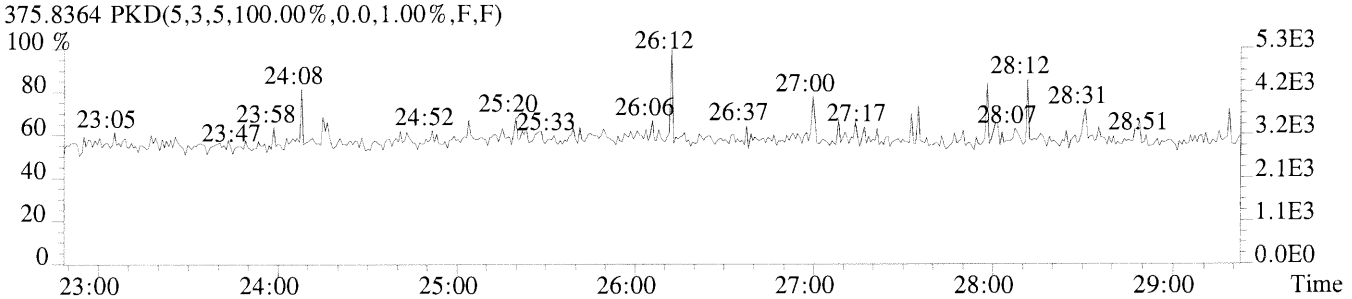
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,496.0,1.00%,F,F)



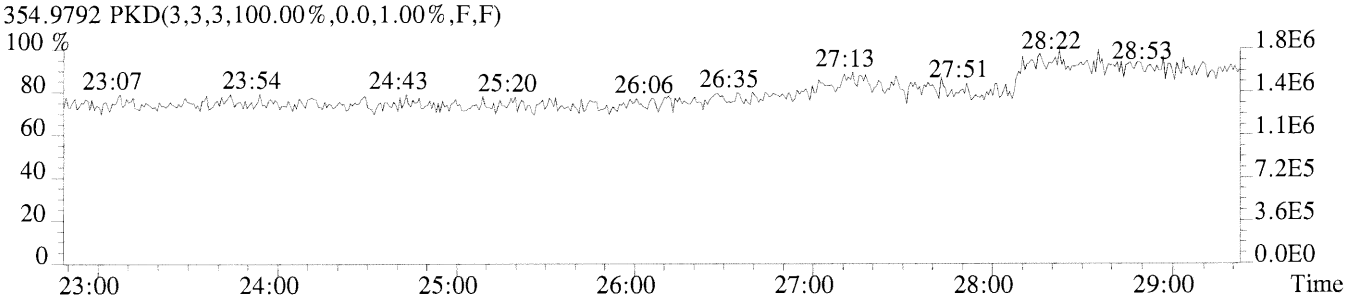
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,352.0,1.00%,F,F)



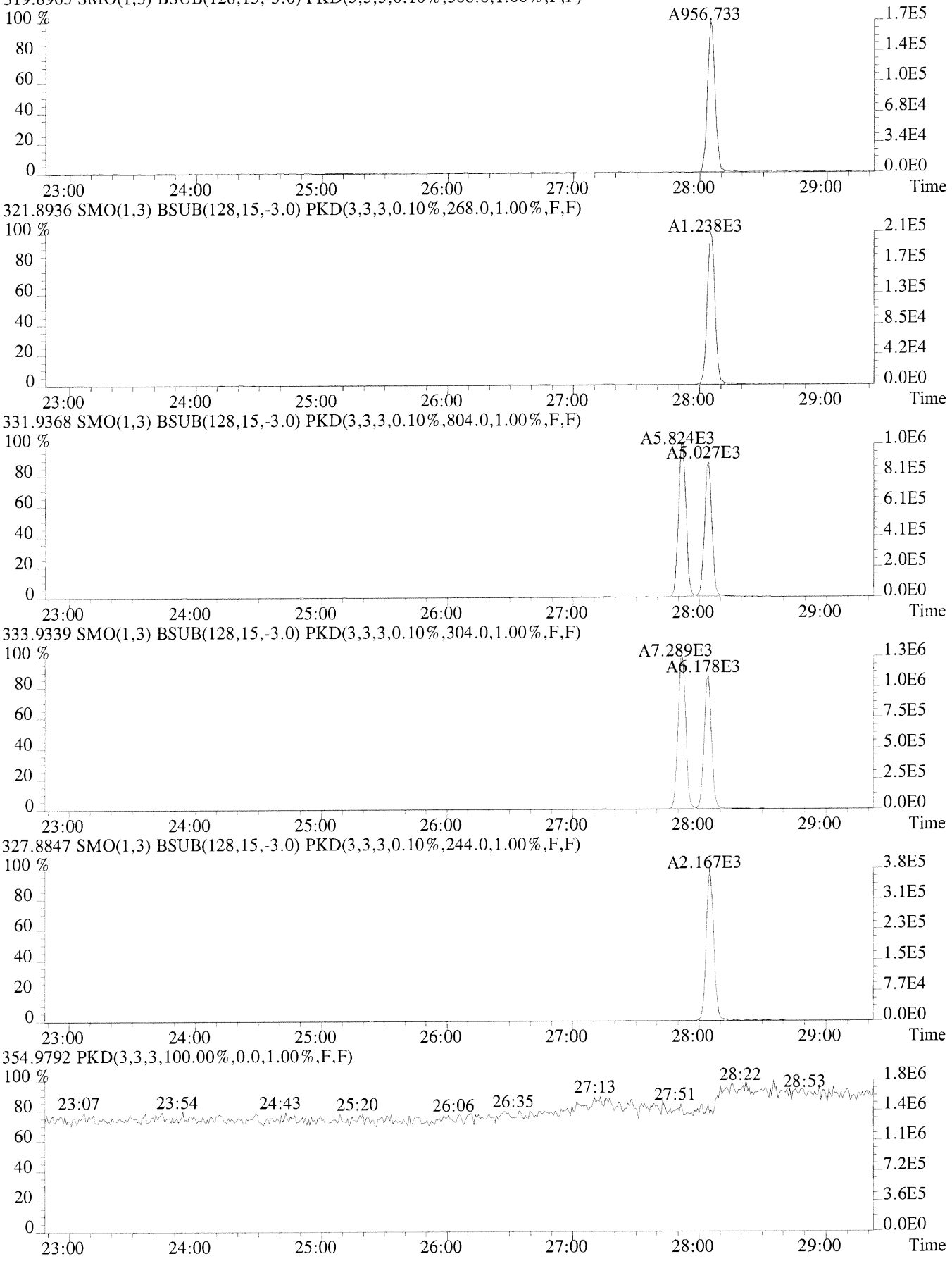
375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

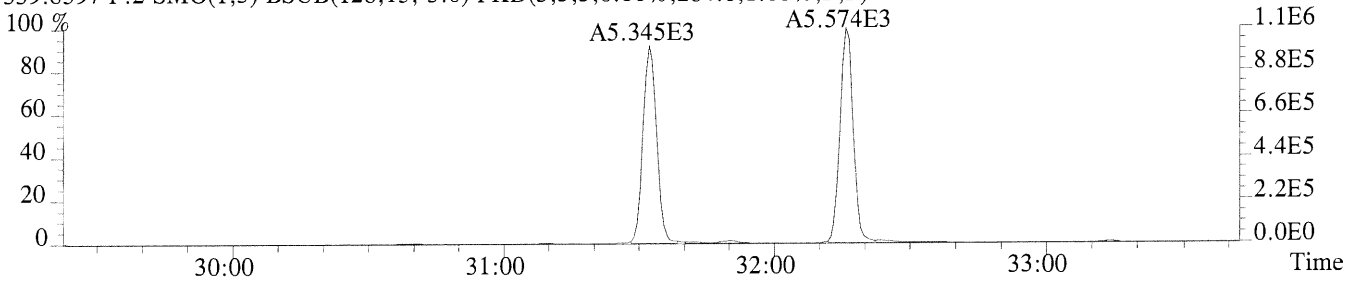


File:U120208 #1-548 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

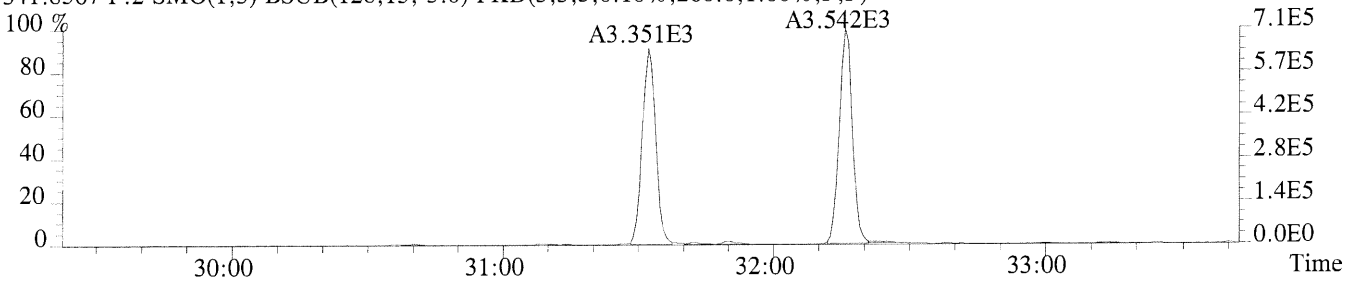


File:U120208 #1-394 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

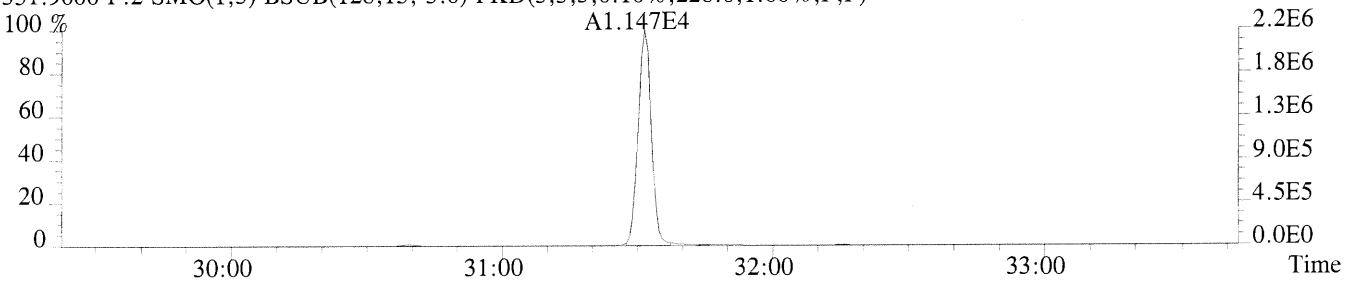
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,284.0,1.00%,F,F)



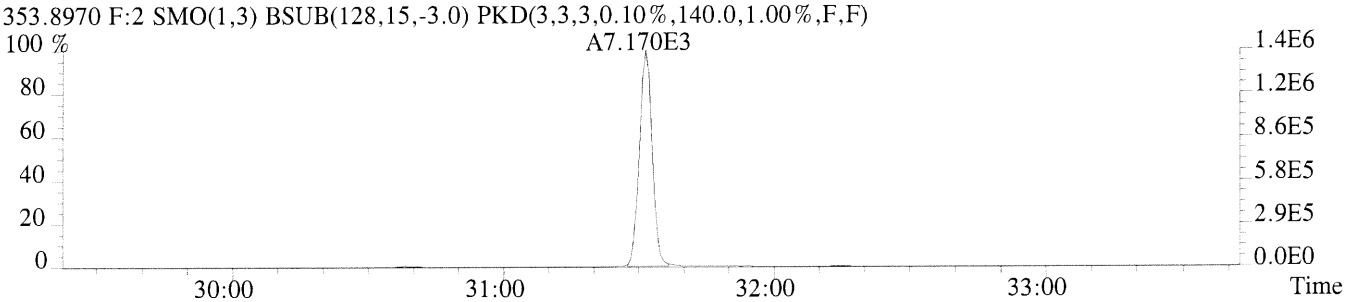
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,260.0,1.00%,F,F)



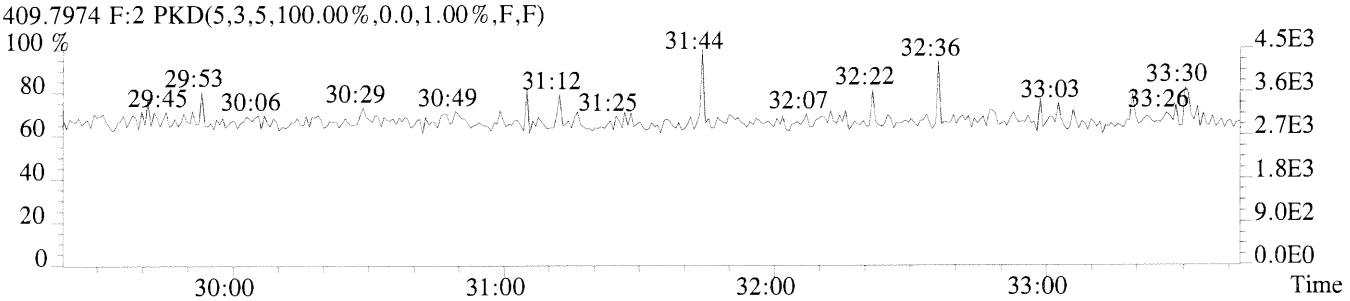
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,228.0,1.00%,F,F)



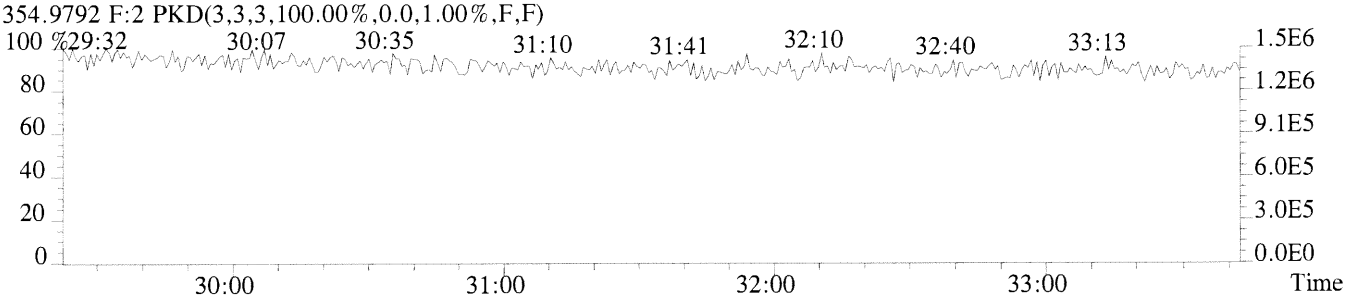
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,140.0,1.00%,F,F)



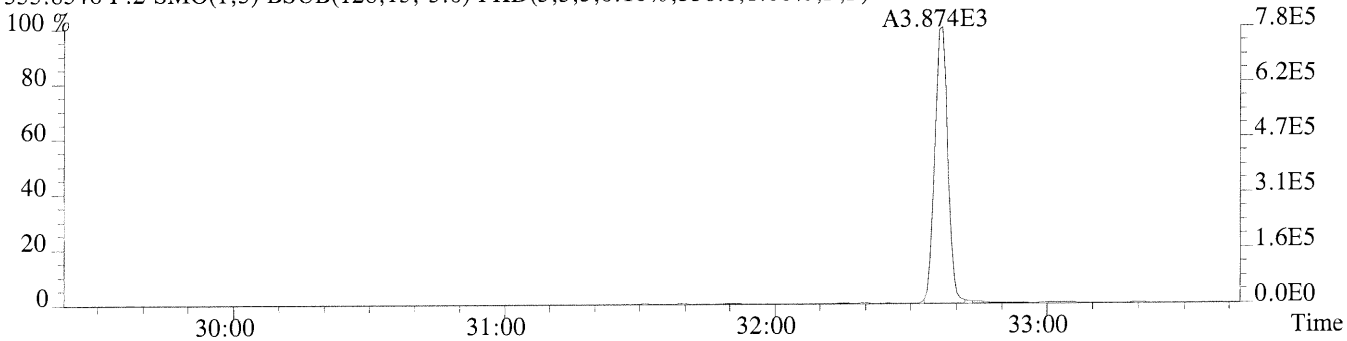
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



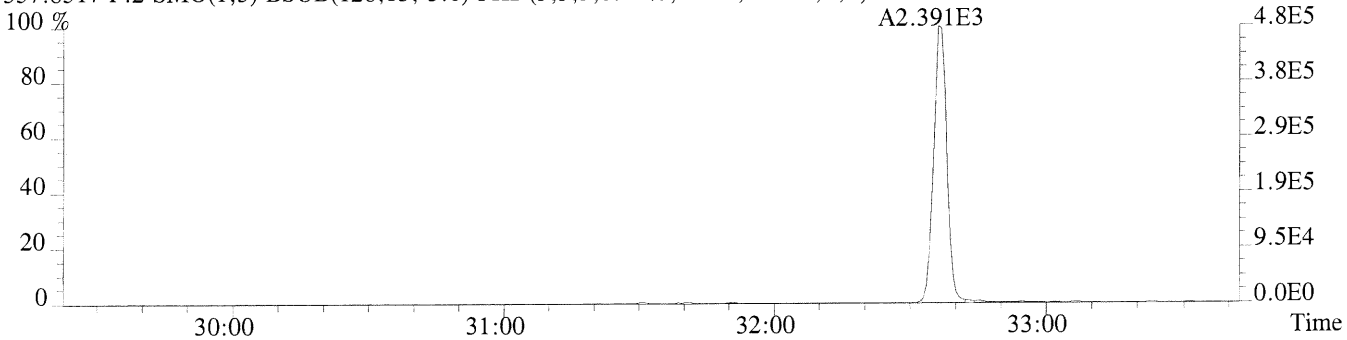
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



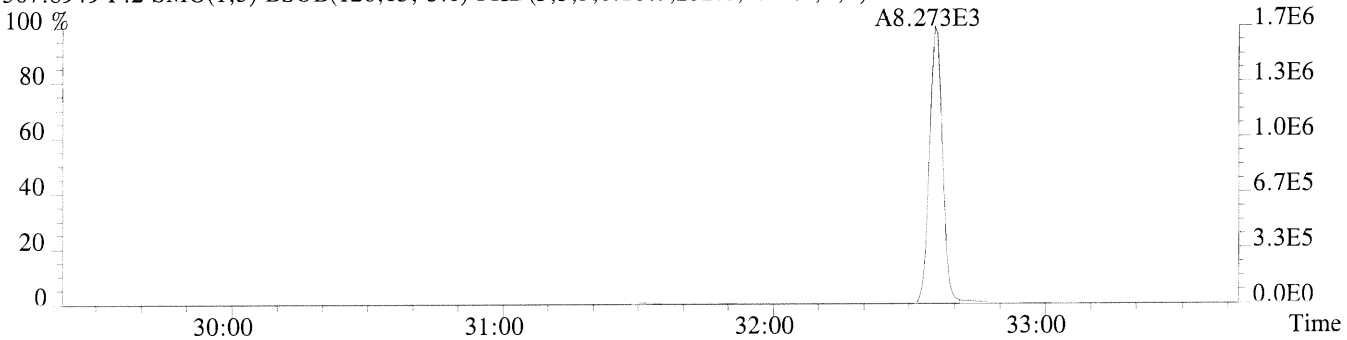
File:U120208 #1-394 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,356.0,1.00%,F,F)



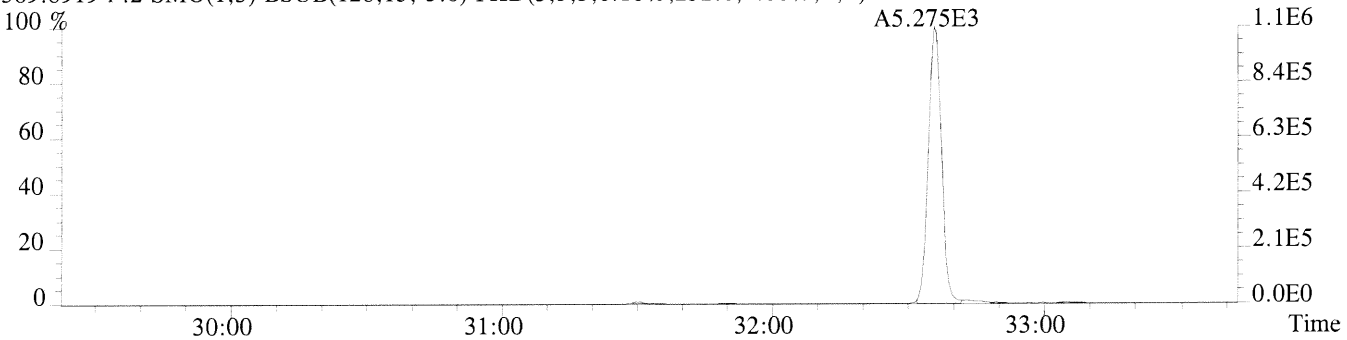
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,268.0,1.00%,F,F)



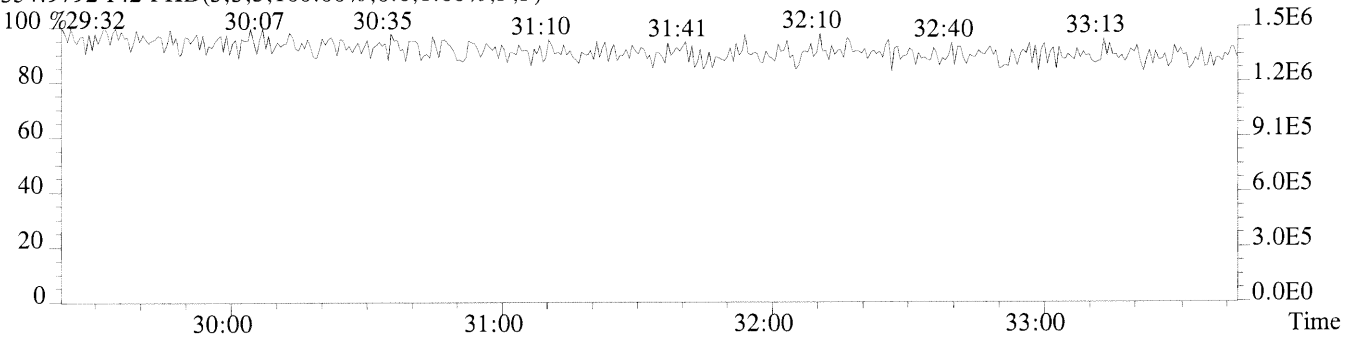
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,252.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,252.0,1.00%,F,F)

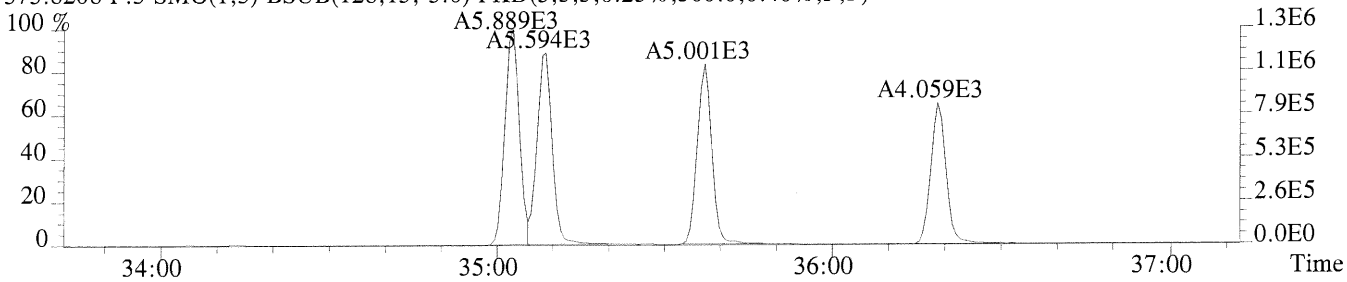


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

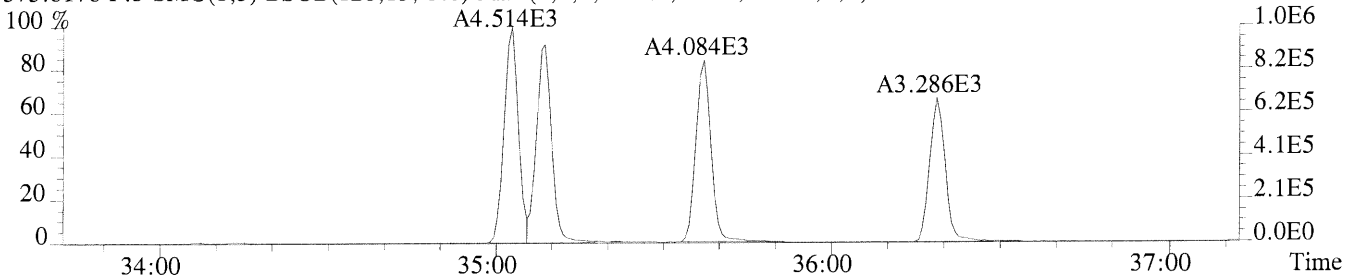


File:U120208 #1-318 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

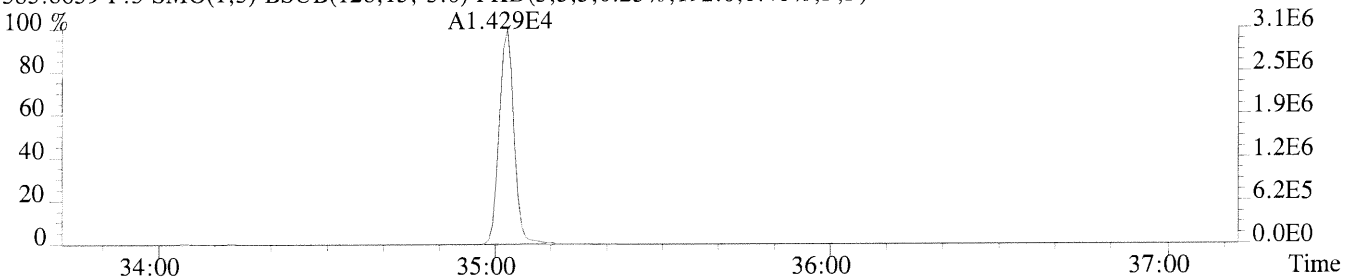
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,300.0,0.40%,F,F)



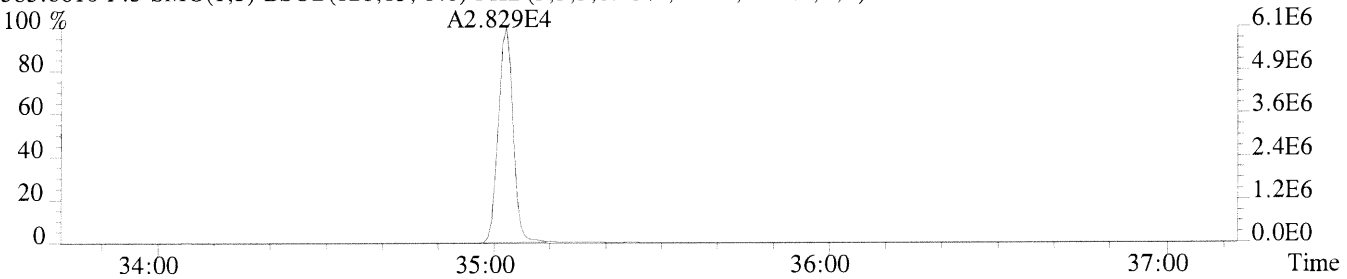
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,184.0,0.40%,F,F)



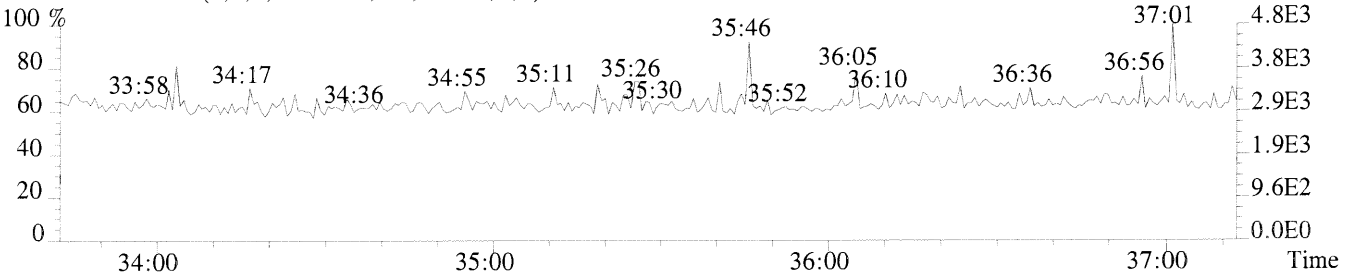
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,192.0,0.40%,F,F)



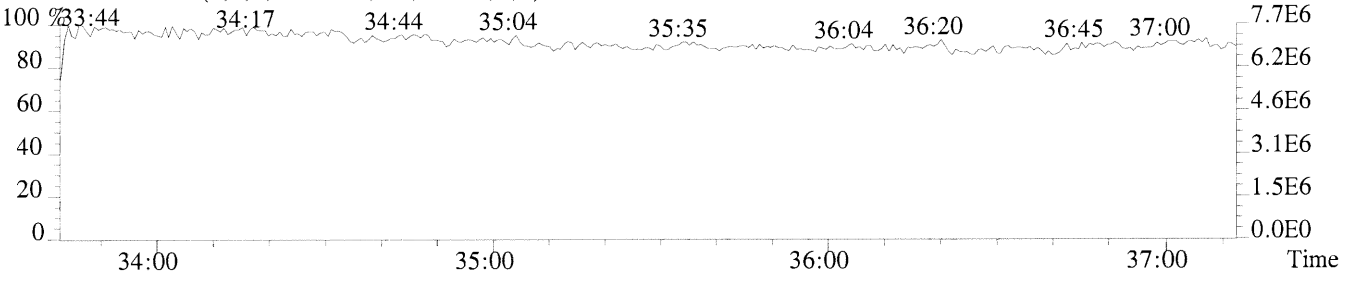
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,404.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

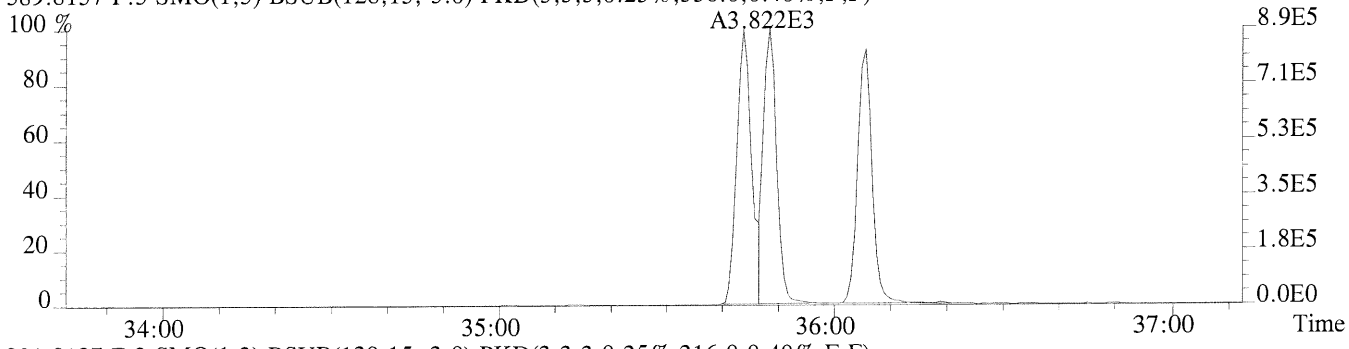


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

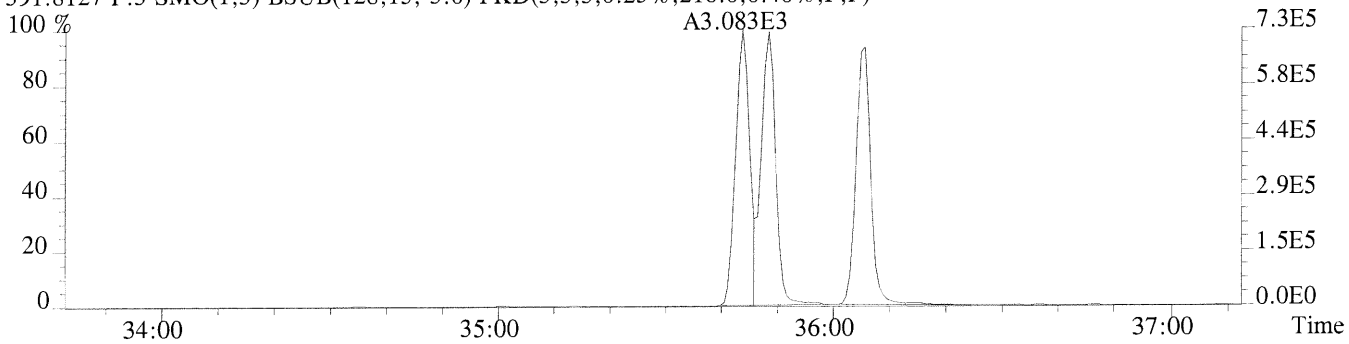


File:U120208 #1-318 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

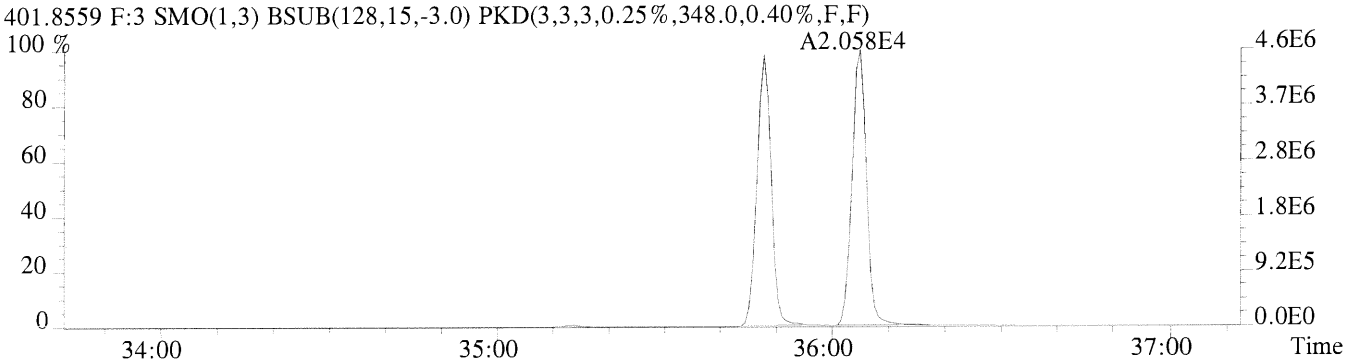
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,356.0,0.40%,F,F)



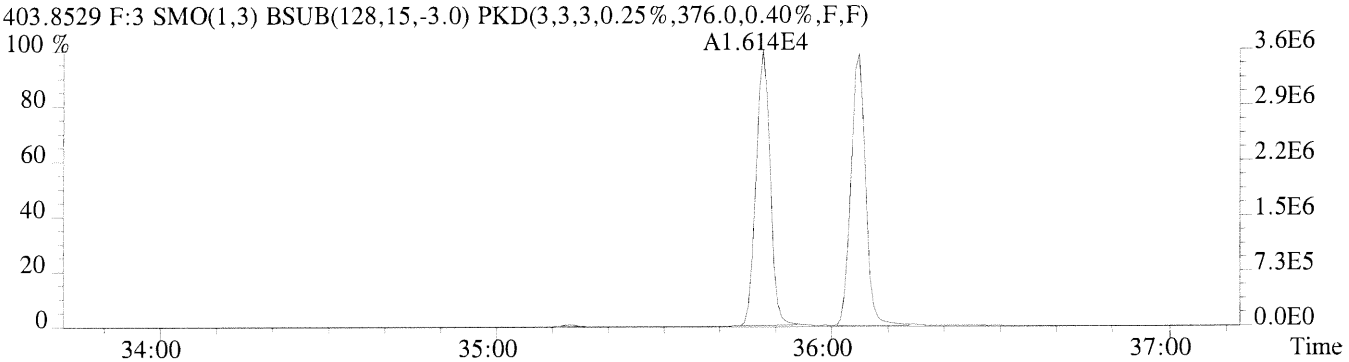
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,216.0,0.40%,F,F)



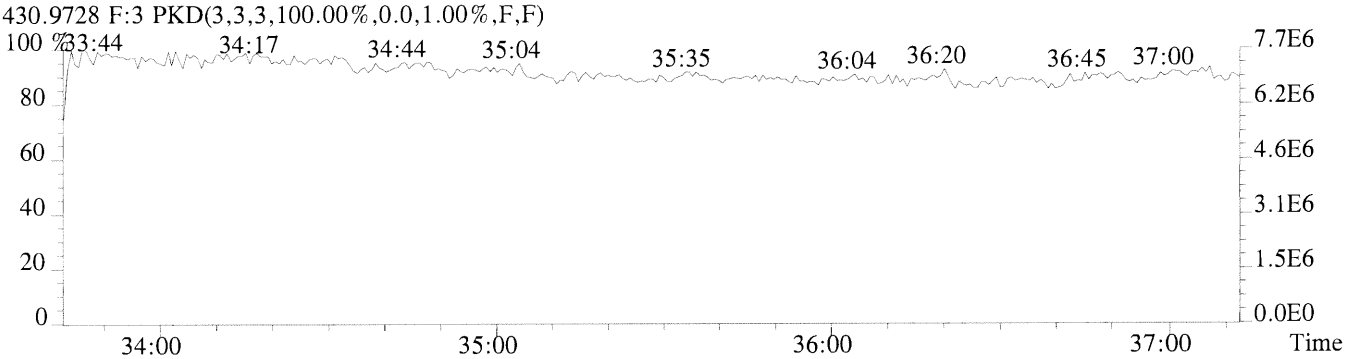
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,348.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,376.0,0.40%,F,F)

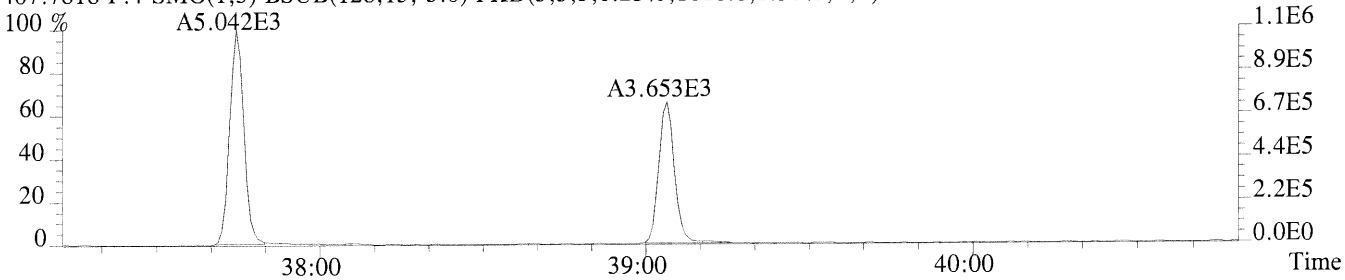


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

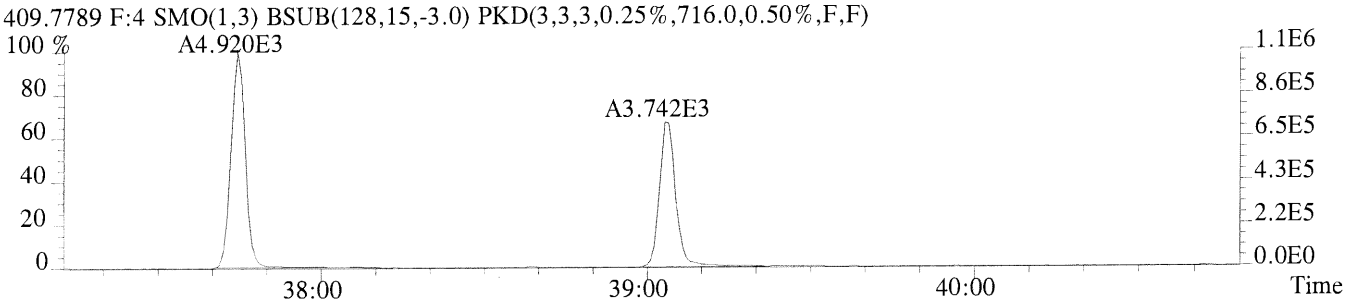


File:U120208 #1-327 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

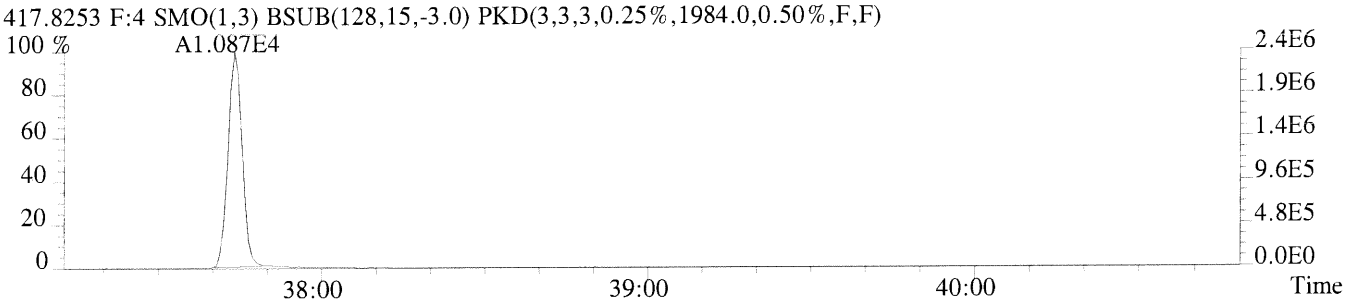
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1616.0,0.50%,F,F)



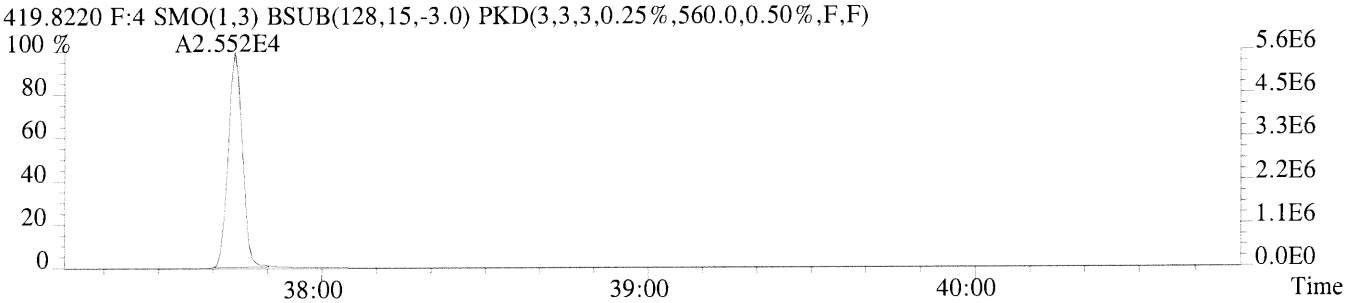
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,716.0,0.50%,F,F)



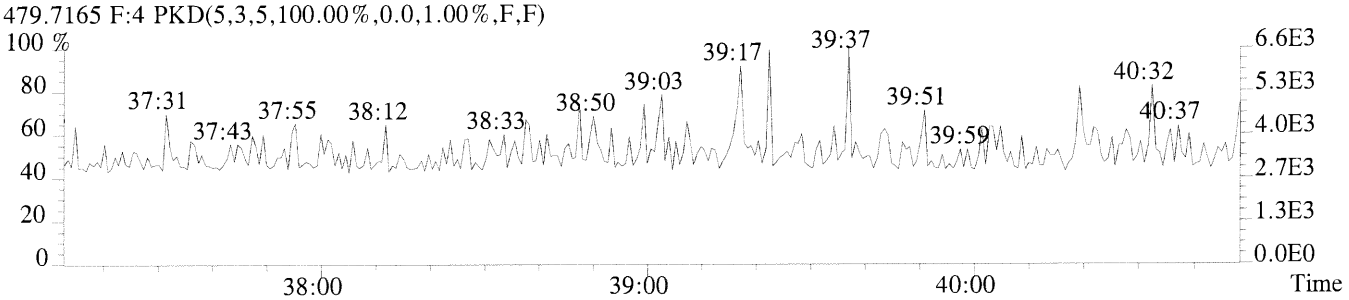
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1984.0,0.50%,F,F)



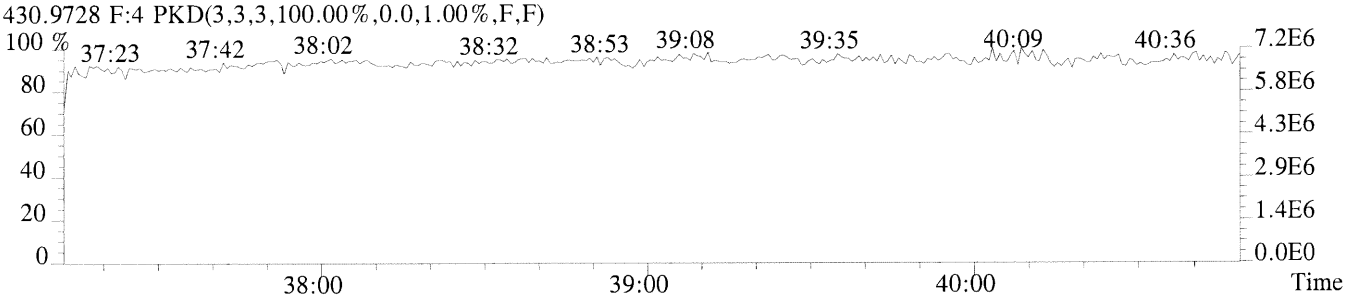
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,560.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

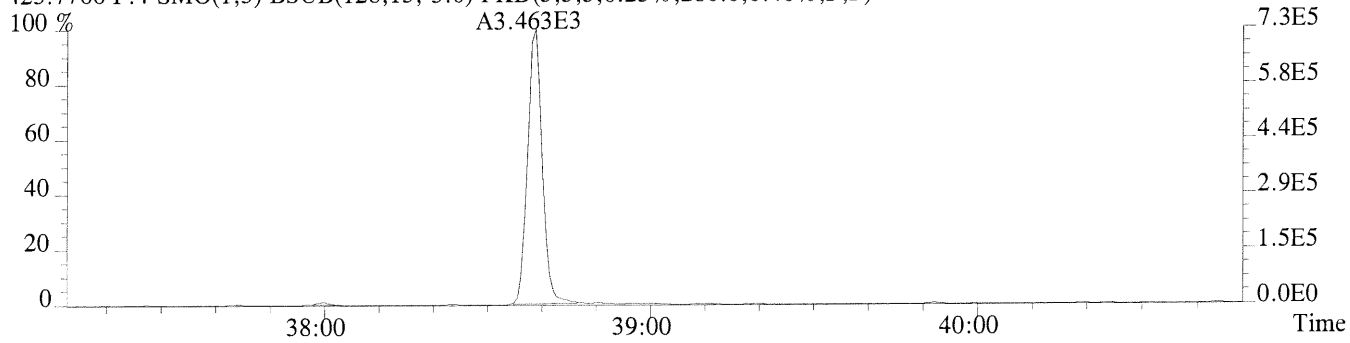


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

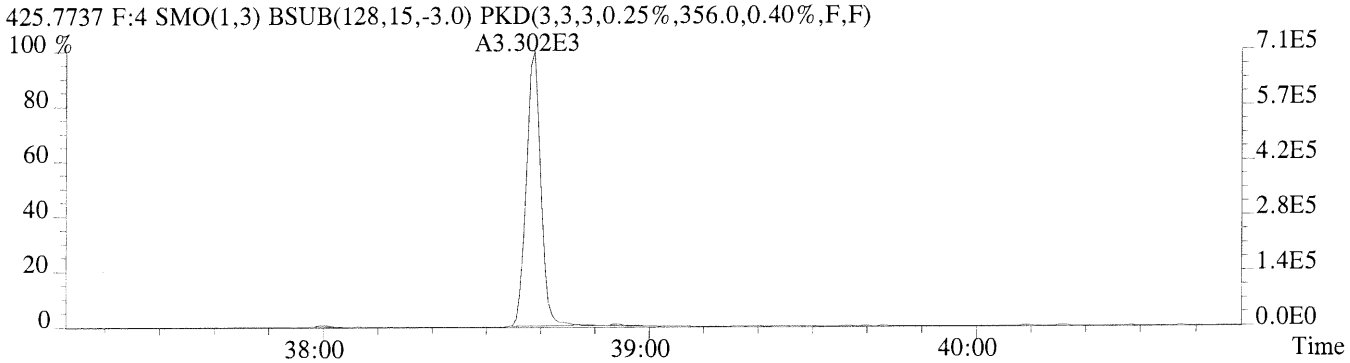


File:U120208 #1-327 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

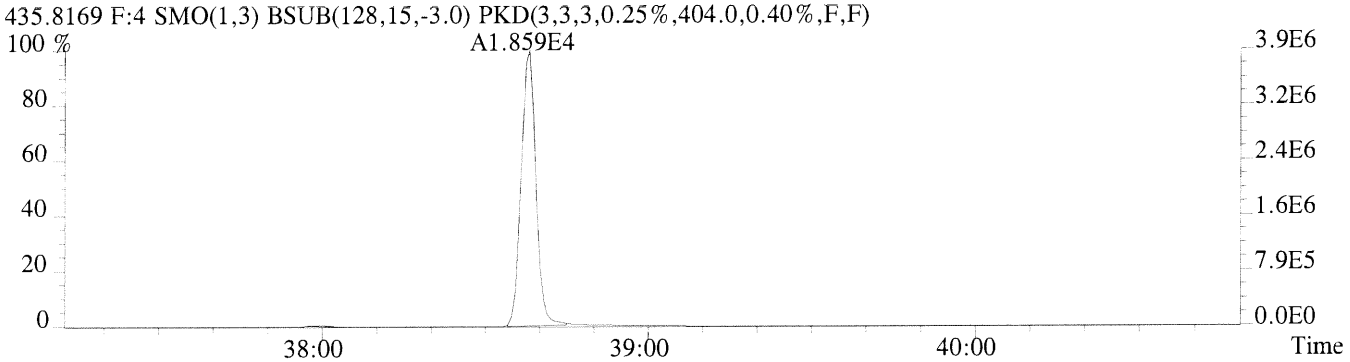
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,280.0,0.40%,F,F)



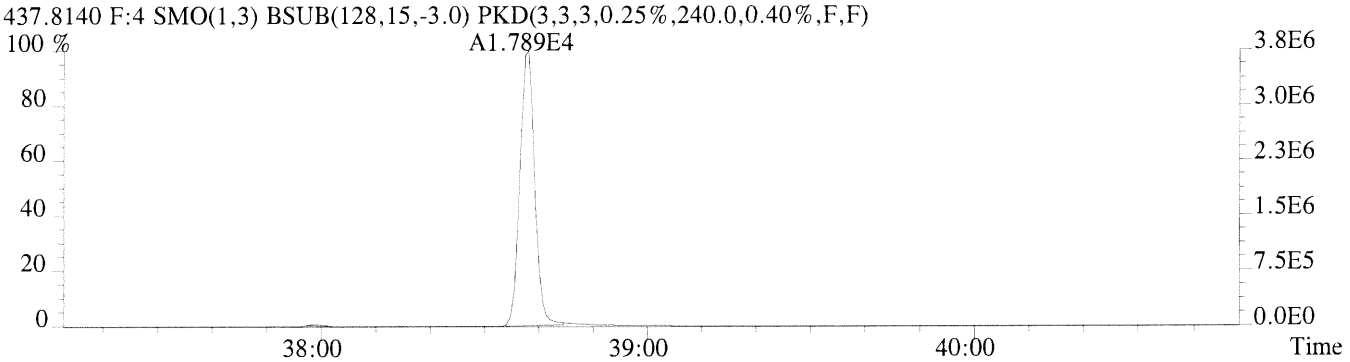
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,356.0,0.40%,F,F)



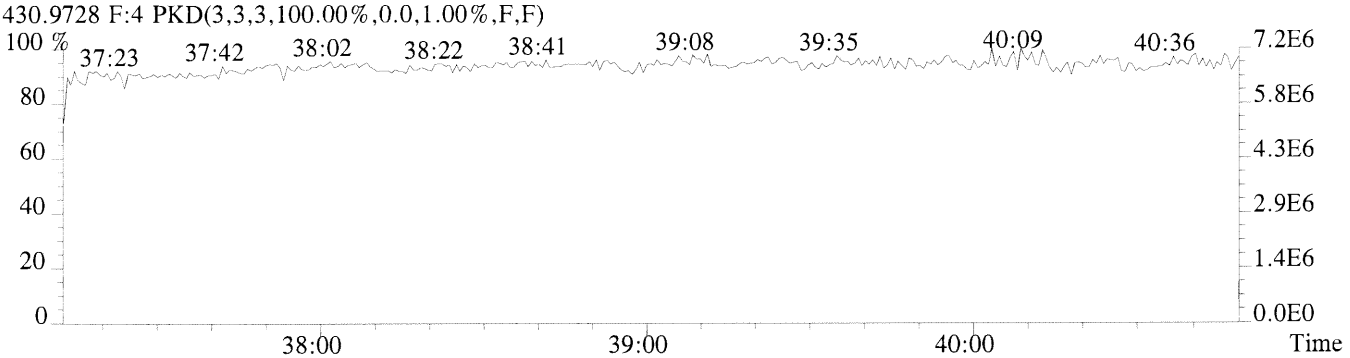
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,404.0,0.40%,F,F)



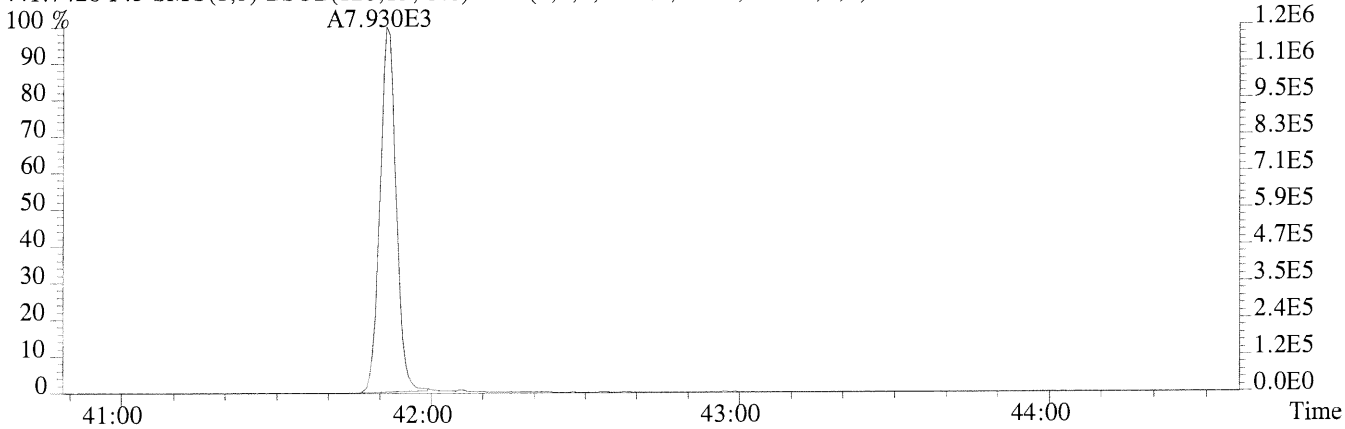
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,240.0,0.40%,F,F)



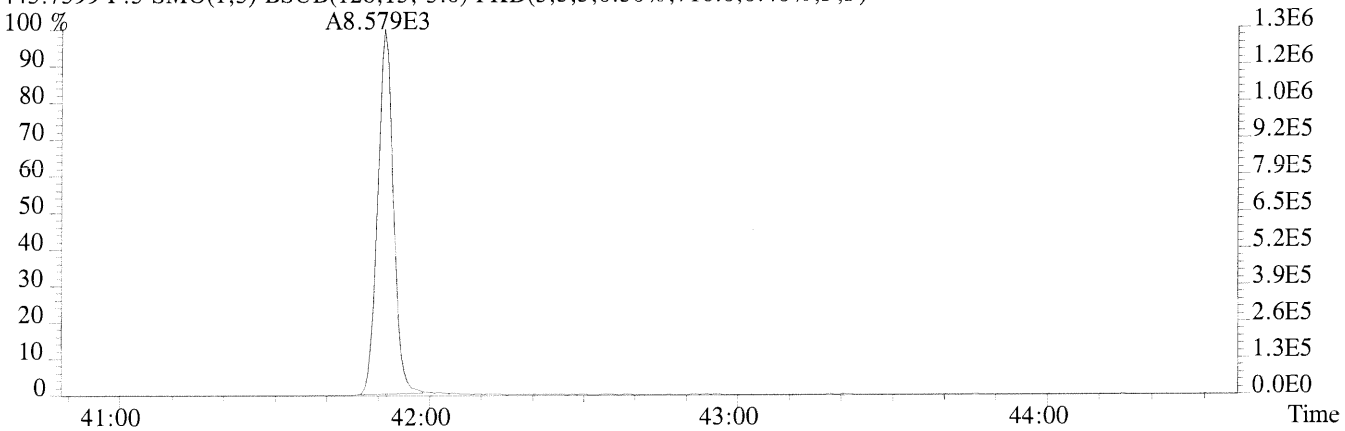
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



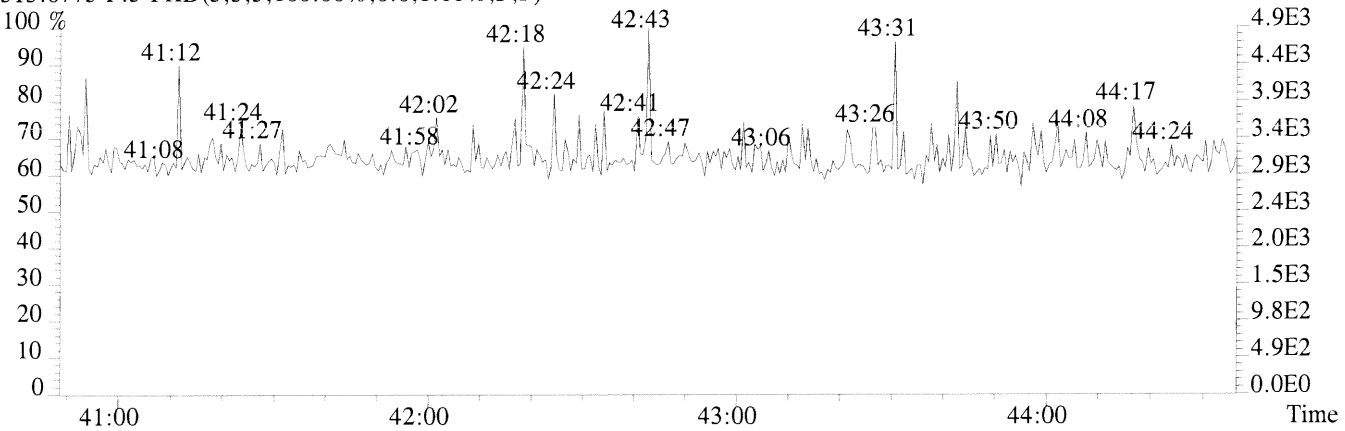
File:U120208 #1-420 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,288.0,0.40%,F,F)



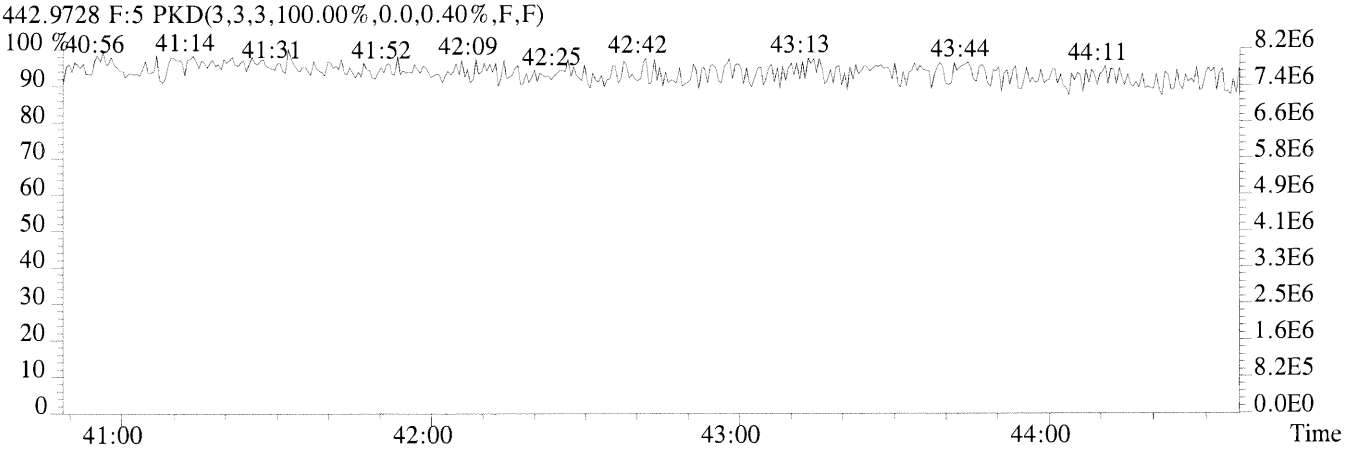
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,716.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

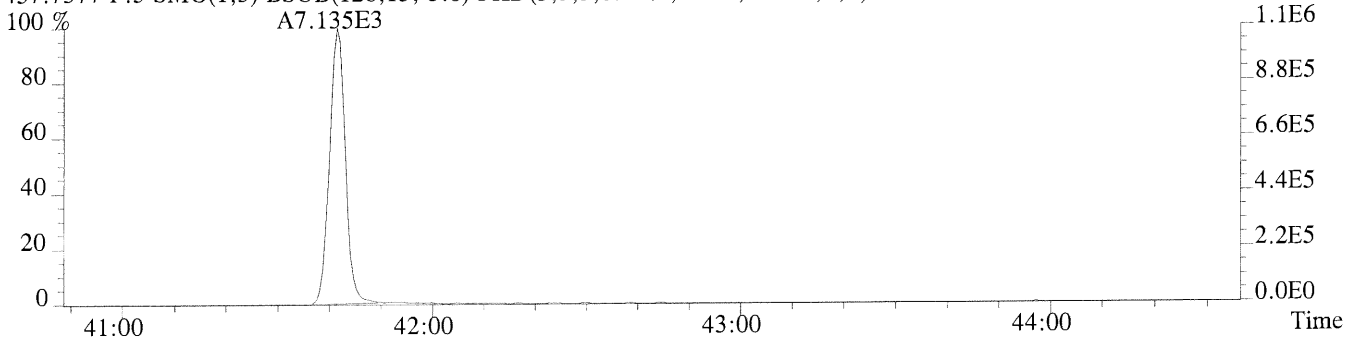


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

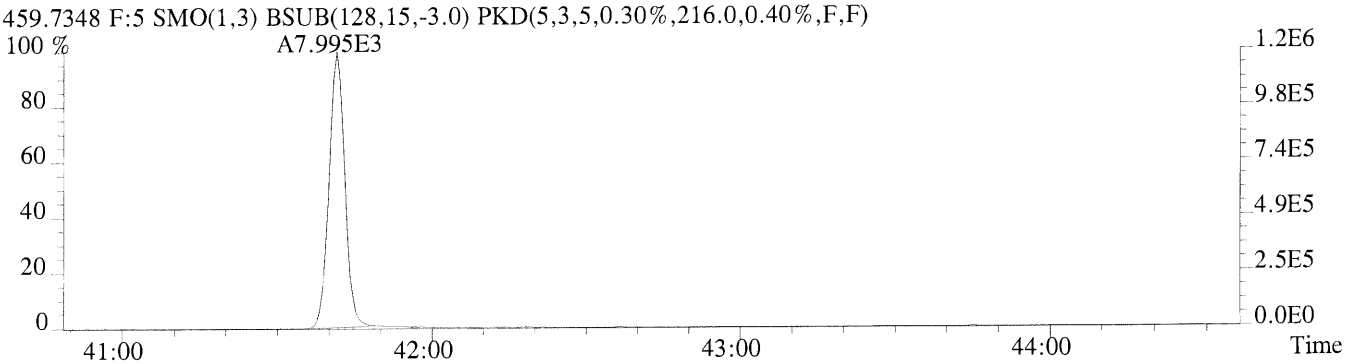


File:U120208 #1-420 Acq: 2-APR-2007 15:34:13 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

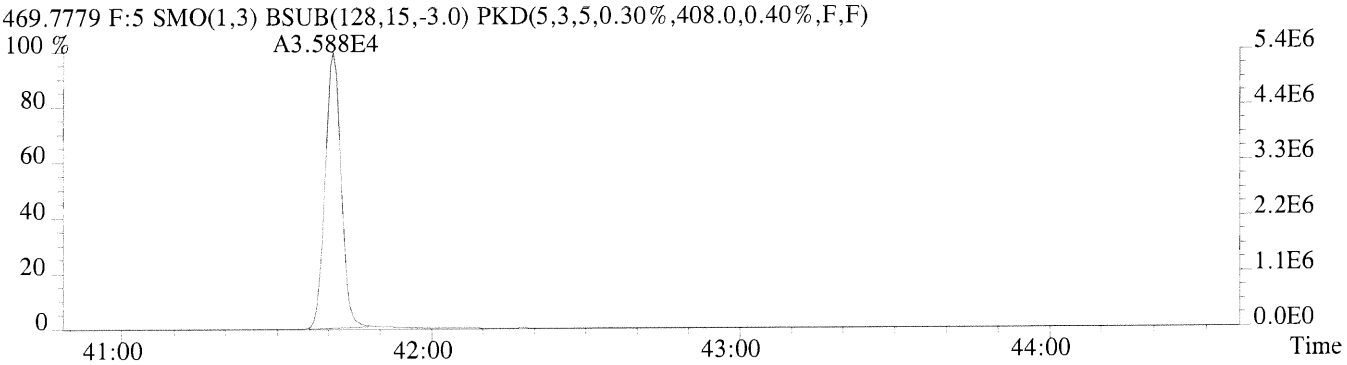
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,228.0,0.40%,F,F)



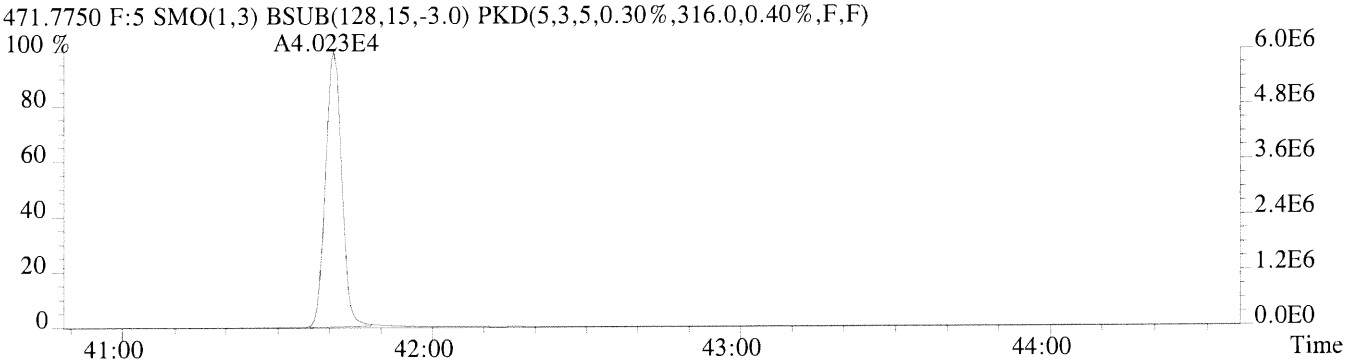
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,216.0,0.40%,F,F)



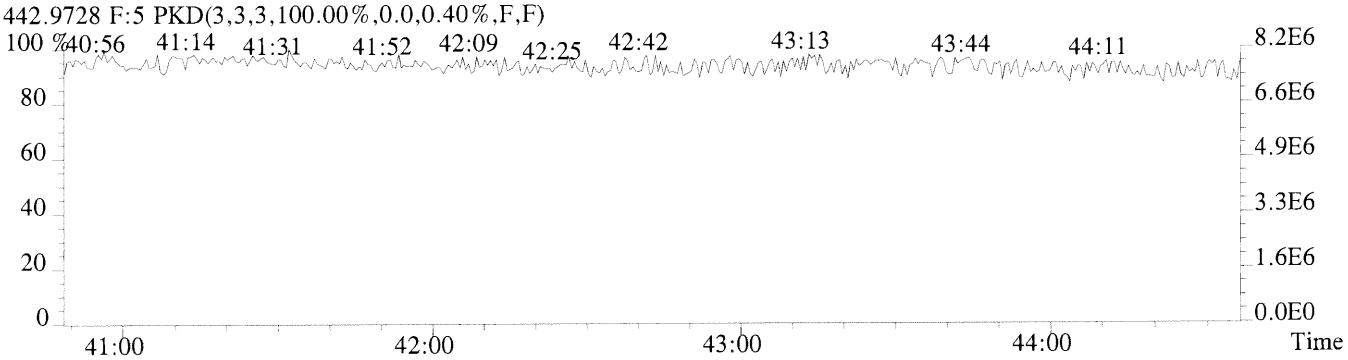
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,408.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,316.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC4

Run #4 Filename U120209 Samp: 1 Inj: 1 Acquired: 2-APR-07 16:23:37
Processed: 3-APR-07 08:06:20 Sample ID: ICAL HRCC4

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	27:16	6.792e+03	8.584e+03	0.79	yes	no
2	Unk	1,2,3,7,8-PeCDF	31:32	2.874e+04	1.819e+04	1.58	yes	no
3	Unk	2,3,4,7,8-PeCDF	32:16	2.932e+04	1.856e+04	1.58	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:03	2.896e+04	2.282e+04	1.27	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:09	2.927e+04	2.358e+04	1.24	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	35:37	2.674e+04	2.102e+04	1.27	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:19	2.197e+04	1.726e+04	1.27	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	37:45	2.710e+04	2.742e+04	0.99	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:04	2.051e+04	2.033e+04	1.01	yes	no
10	Unk	OCDF	41:51	4.386e+04	4.892e+04	0.90	yes	no
11	Unk	2,3,7,8-TCDD	28:06	4.960e+03	6.310e+03	0.79	yes	no
12	Unk	1,2,3,7,8-PeCDD	32:37	1.981e+04	1.233e+04	1.61	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	35:44	1.996e+04	1.538e+04	1.30	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	35:48	2.179e+04	1.725e+04	1.26	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:06	1.965e+04	1.513e+04	1.30	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	38:39	1.832e+04	1.747e+04	1.05	yes	no
17	Unk	OCDD	41:41	3.931e+04	4.436e+04	0.89	yes	no
18	IS	13C-2,3,7,8-TCDF	27:15	6.069e+03	7.126e+03	0.85	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	31:31	1.253e+04	7.782e+03	1.61	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:02	1.553e+04	2.884e+04	0.54	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	37:44	1.182e+04	2.792e+04	0.42	yes	no
22	IS	13C-2,3,7,8-TCDD	28:04	5.184e+03	6.574e+03	0.79	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	32:36	8.514e+03	5.309e+03	1.60	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	35:48	1.862e+04	1.518e+04	1.23	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	38:38	1.981e+04	1.881e+04	1.05	yes	no
26	IS	13C-OCDD	41:41	3.927e+04	4.395e+04	0.89	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	27:52	5.745e+03	6.490e+03	0.89	yes	yes
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:05	1.851e+04	1.501e+04	1.23	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	28:05	1.113e+04				

Columbia Analytical Services, Inc.
10655 Richmond Ave., Suite 130A
Houston, TX 77042
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC4

Run #4 Filename U120209 Samp: 1 Inj: 1 Acquired: 2-APR-07 16:23:37

Processed: 3-APR-07 08:06:20 LAB. ID: ICAL HRCC4

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.13e+06	2.28e+02	4.9e+03	1.45e+06	3.16e+02	4.6e+03
2	1,2,3,7,8-PeCDF	5.92e+06	3.12e+02	1.9e+04	3.76e+06	3.20e+02	1.2e+04
3	2,3,4,7,8-PeCDF	6.05e+06	3.12e+02	1.9e+04	3.82e+06	3.20e+02	1.2e+04
4	1,2,3,4,7,8-HxCDF	6.39e+06	2.88e+02	2.2e+04	5.10e+06	2.32e+02	2.2e+04
5	1,2,3,6,7,8-HxCDF	6.31e+06	2.88e+02	2.2e+04	4.97e+06	2.32e+02	2.1e+04
6	2,3,4,6,7,8-HxCDF	6.08e+06	2.88e+02	2.1e+04	4.73e+06	2.32e+02	2.0e+04
7	1,2,3,7,8,9-HxCDF	4.88e+06	2.88e+02	1.7e+04	3.87e+06	2.32e+02	1.7e+04
8	1,2,3,4,6,7,8-HpCDF	5.93e+06	2.50e+03	2.4e+03	6.05e+06	9.08e+02	6.7e+03
9	1,2,3,4,7,8,9-HpCDF	4.03e+06	2.50e+03	1.6e+03	4.03e+06	9.08e+02	4.4e+03
10	OCDF	6.59e+06	2.04e+02	3.2e+04	7.36e+06	4.80e+02	1.5e+04
11	2,3,7,8-TCDD	9.12e+05	2.96e+02	3.1e+03	1.16e+06	1.80e+02	6.4e+03
12	1,2,3,7,8-PeCDD	4.09e+06	3.96e+02	1.0e+04	2.58e+06	2.44e+02	1.1e+04
13	1,2,3,4,7,8-HxCDD	4.81e+06	2.84e+02	1.7e+04	3.67e+06	2.96e+02	1.2e+04
14	1,2,3,6,7,8-HxCDD	4.72e+06	2.84e+02	1.7e+04	3.74e+06	2.96e+02	1.3e+04
15	1,2,3,7,8,9-HxCDD	4.39e+06	2.84e+02	1.5e+04	3.42e+06	2.96e+02	1.2e+04
16	1,2,3,4,6,7,8-HpCDD	3.89e+06	3.96e+02	9.8e+03	3.62e+06	3.72e+02	9.7e+03
17	OCDD	5.99e+06	2.48e+02	2.4e+04	6.72e+06	2.68e+02	2.5e+04
18	13C-2,3,7,8-TCDF	1.02e+06	3.56e+02	2.9e+03	1.22e+06	3.84e+02	3.2e+03
19	13C-1,2,3,7,8-PeCDF	2.56e+06	2.76e+02	9.3e+03	1.58e+06	2.04e+02	7.7e+03
20	13C-1,2,3,4,7,8-HxCDF	3.44e+06	2.24e+02	1.5e+04	6.27e+06	3.56e+02	1.8e+04
21	13C-1,2,3,4,6,7,8-HpCDF	2.56e+06	1.80e+03	1.4e+03	6.15e+06	3.20e+03	1.9e+03
22	13C-2,3,7,8-TCDD	9.86e+05	6.68e+02	1.5e+03	1.21e+06	2.96e+02	4.1e+03
23	13C-1,2,3,7,8-PeCDD	1.77e+06	2.68e+02	6.6e+03	1.12e+06	3.28e+02	3.4e+03
24	13C-1,2,3,6,7,8-HxCDD	4.29e+06	3.24e+02	1.3e+04	3.50e+06	3.24e+02	1.1e+04
25	13C-1,2,3,4,6,7,8-HpCDD	4.11e+06	4.80e+02	8.6e+03	3.84e+06	4.72e+02	8.1e+03
26	13C-OCDD	5.91e+06	4.88e+02	1.2e+04	6.65e+06	2.20e+02	3.0e+04
27	13C-1,2,3,4-TCDD	1.07e+06	6.68e+02	1.6e+03	1.17e+06	2.96e+02	4.0e+03
28	13C-1,2,3,7,8,9-HxCDD	4.12e+06	3.24e+02	1.3e+04	3.34e+06	3.24e+02	1.0e+04
29	37Cl-2,3,7,8-TCDD	2.03e+06	2.28e+02	8.9e+03			

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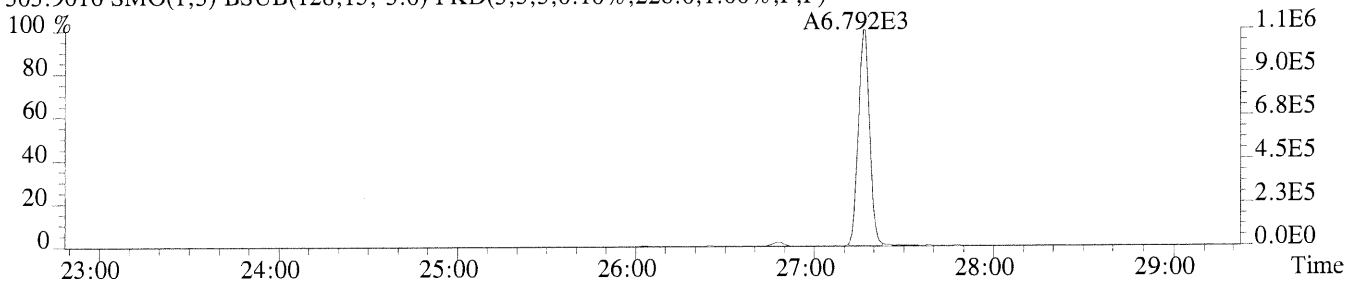
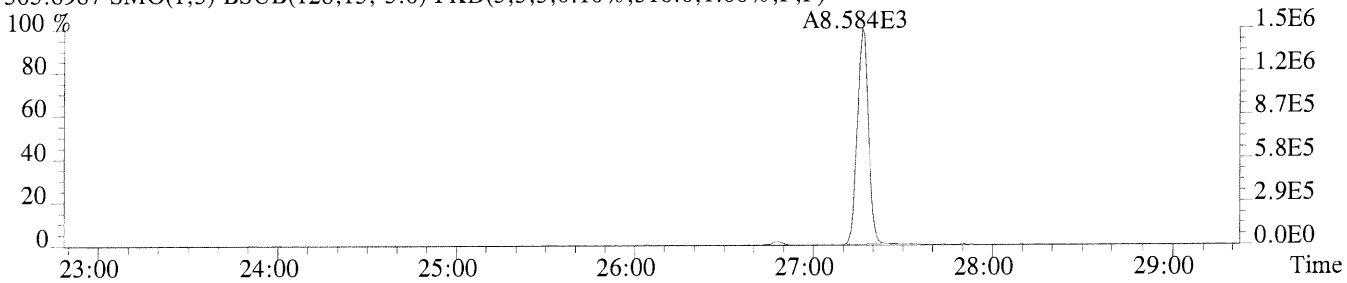
File:U120209 #1-548 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

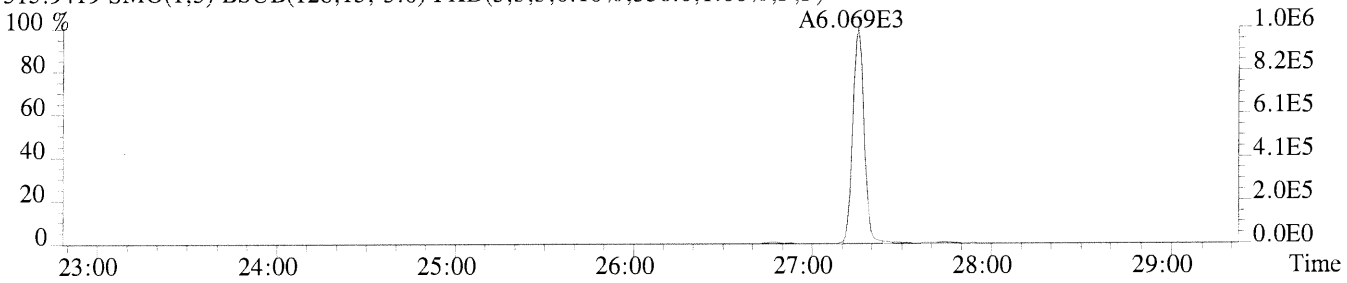
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,228.0,1.00%,F,F)



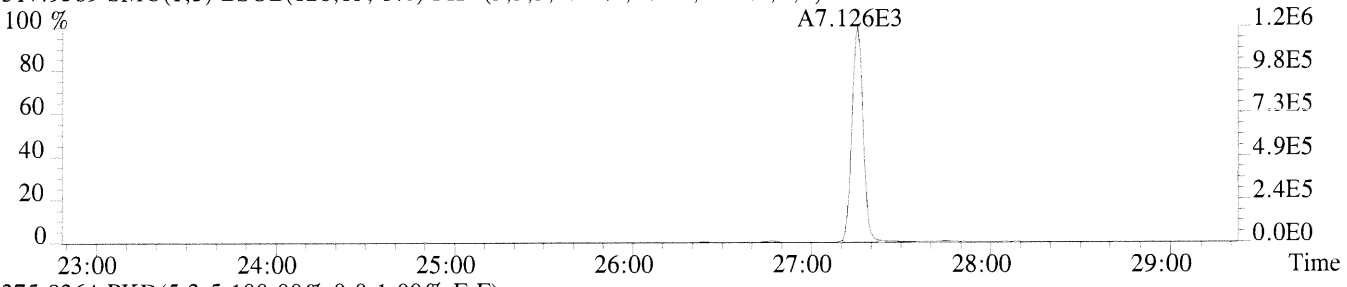
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,316.0,1.00%,F,F)



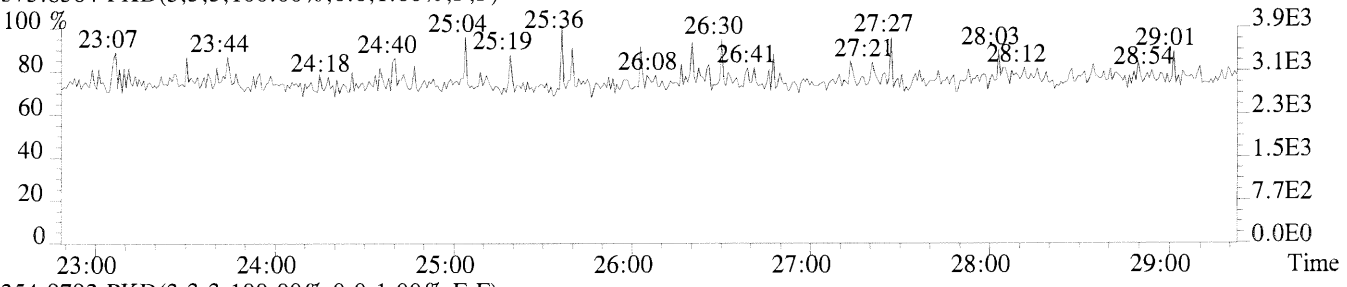
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,356.0,1.00%,F,F)



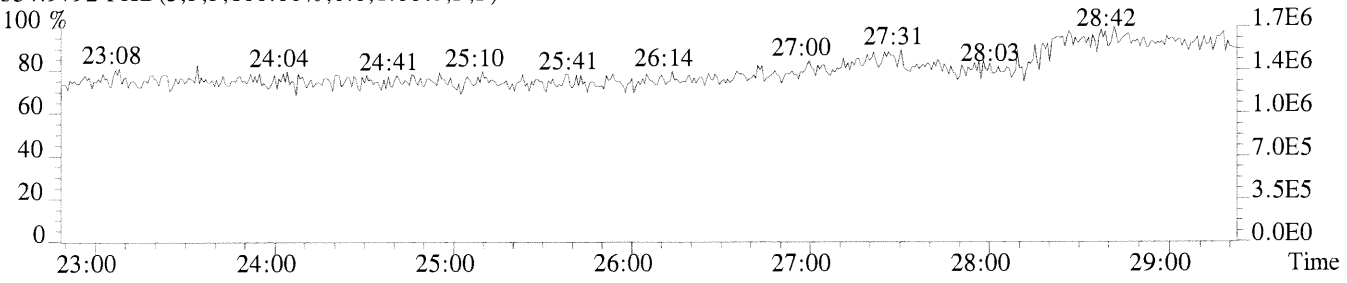
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,384.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

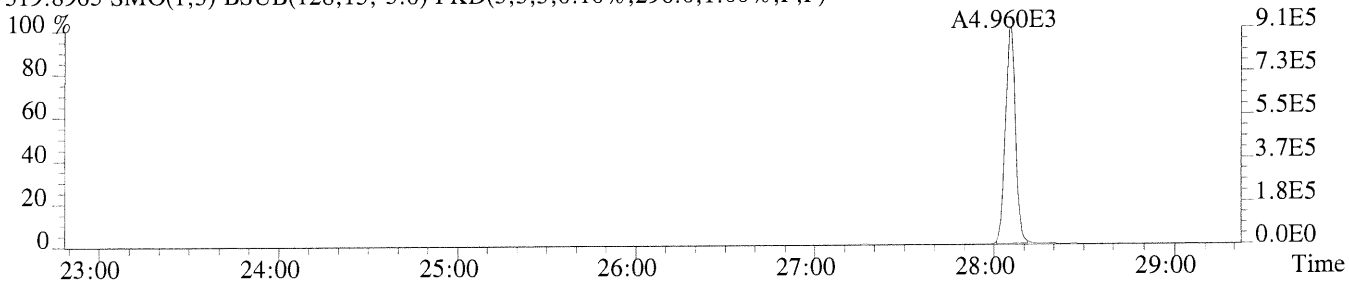


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

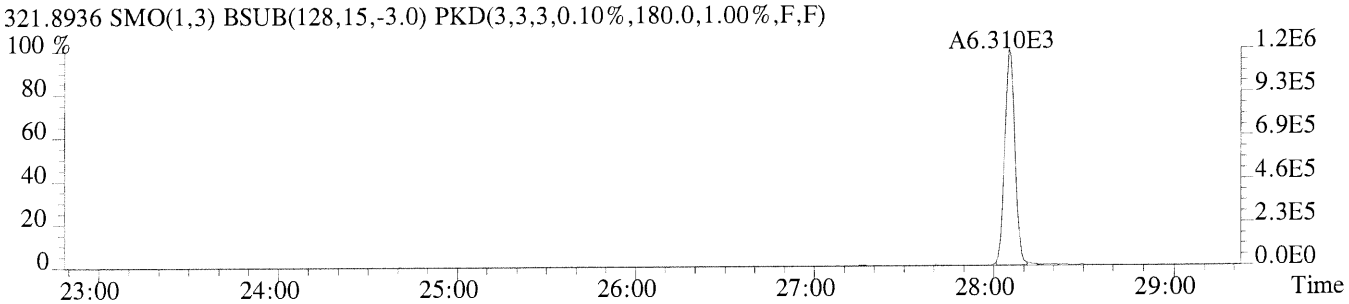


File:U120209 #1-548 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spectf
Sample#1 Exp:ICAL HRCC4

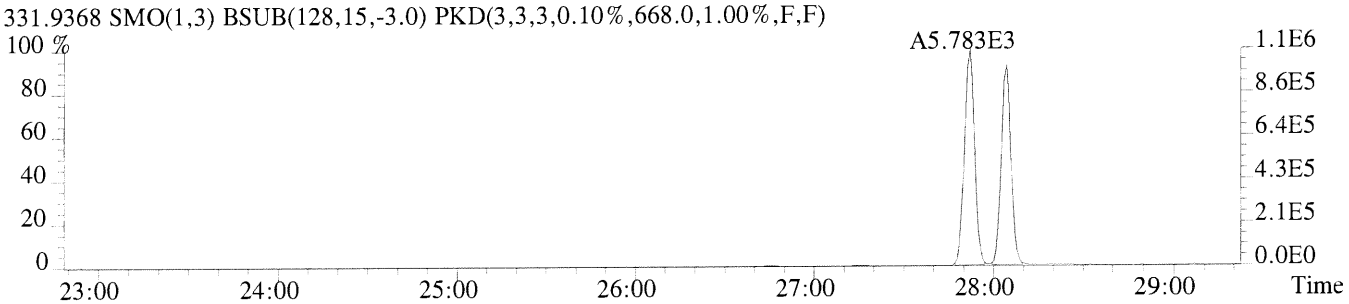
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,296.0,1.00%,F,F)



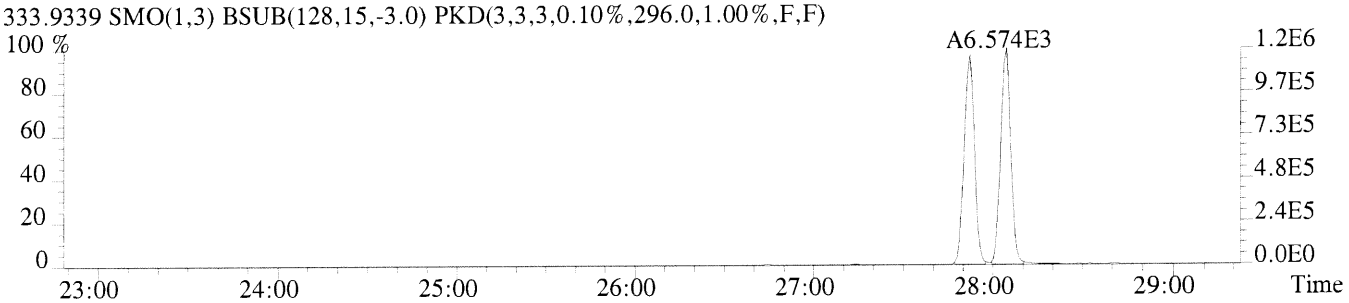
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,180.0,1.00%,F,F)



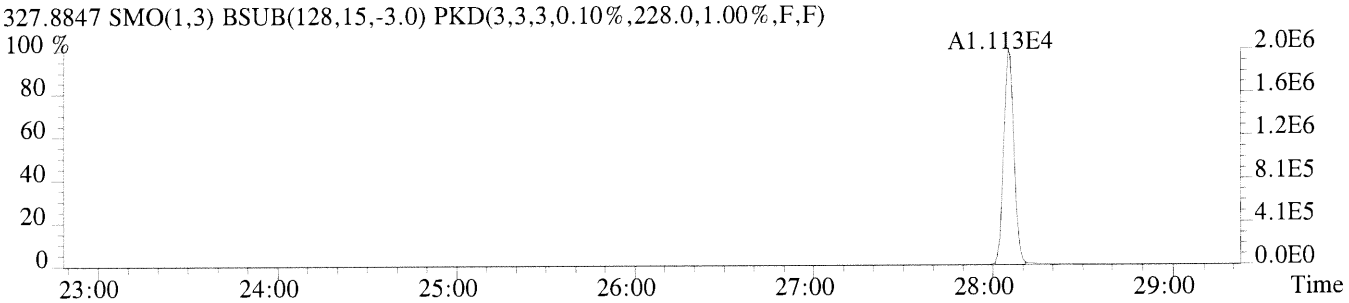
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,668.0,1.00%,F,F)



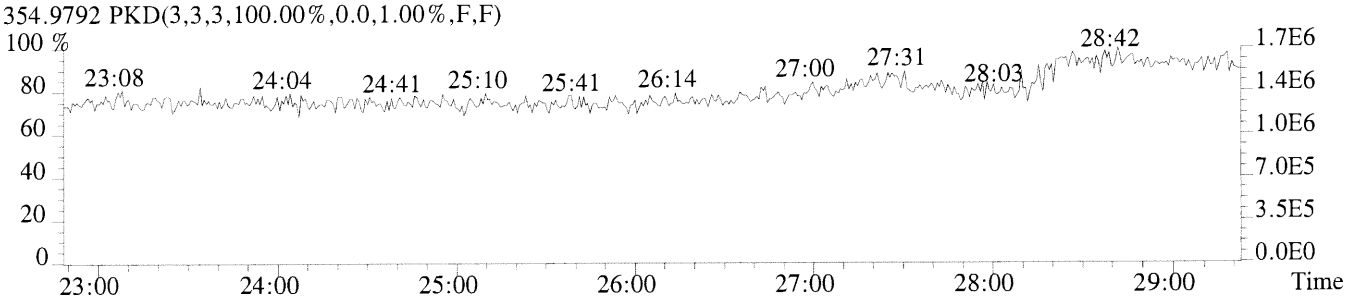
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,296.0,1.00%,F,F)



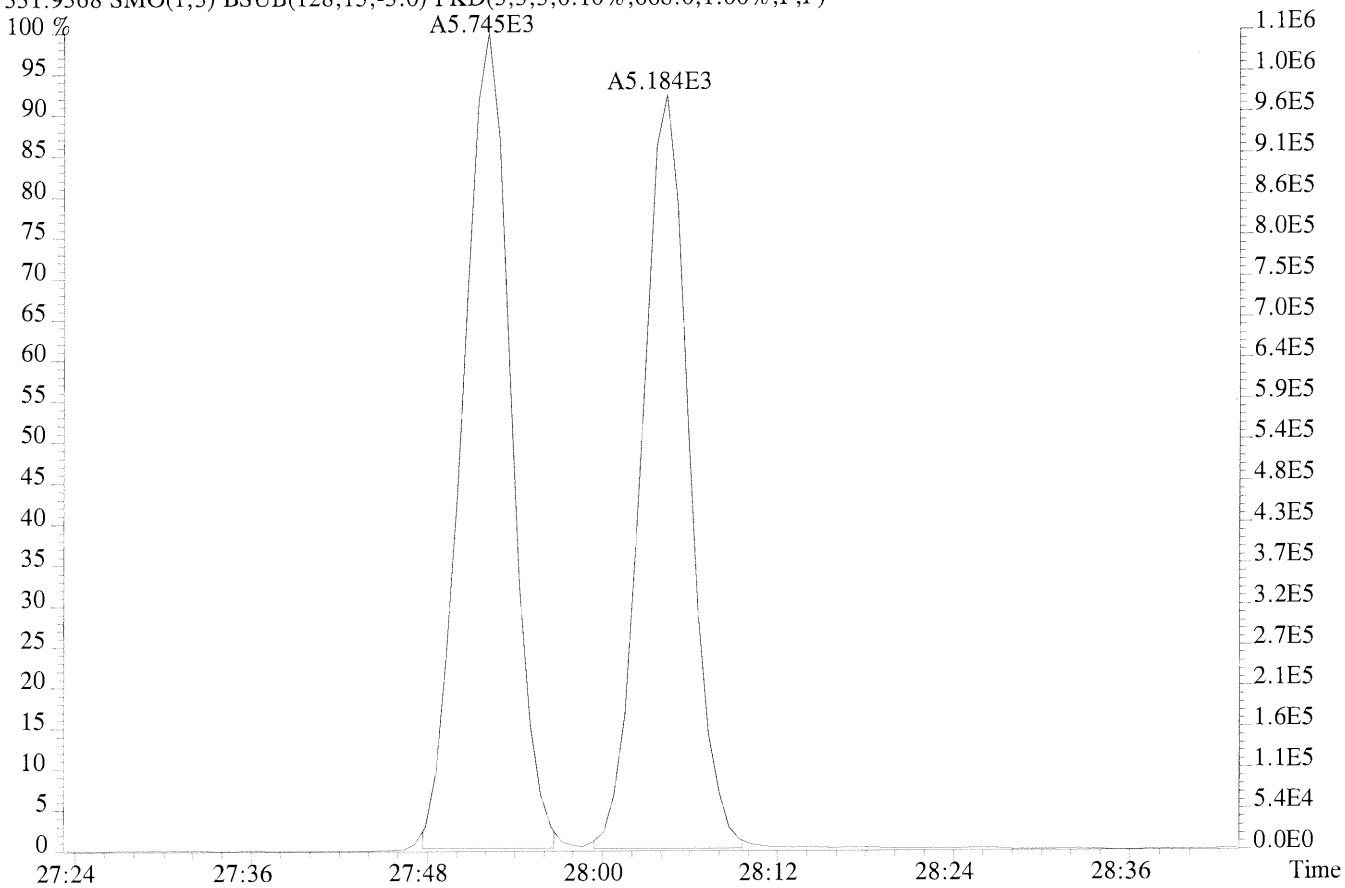
327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,228.0,1.00%,F,F)



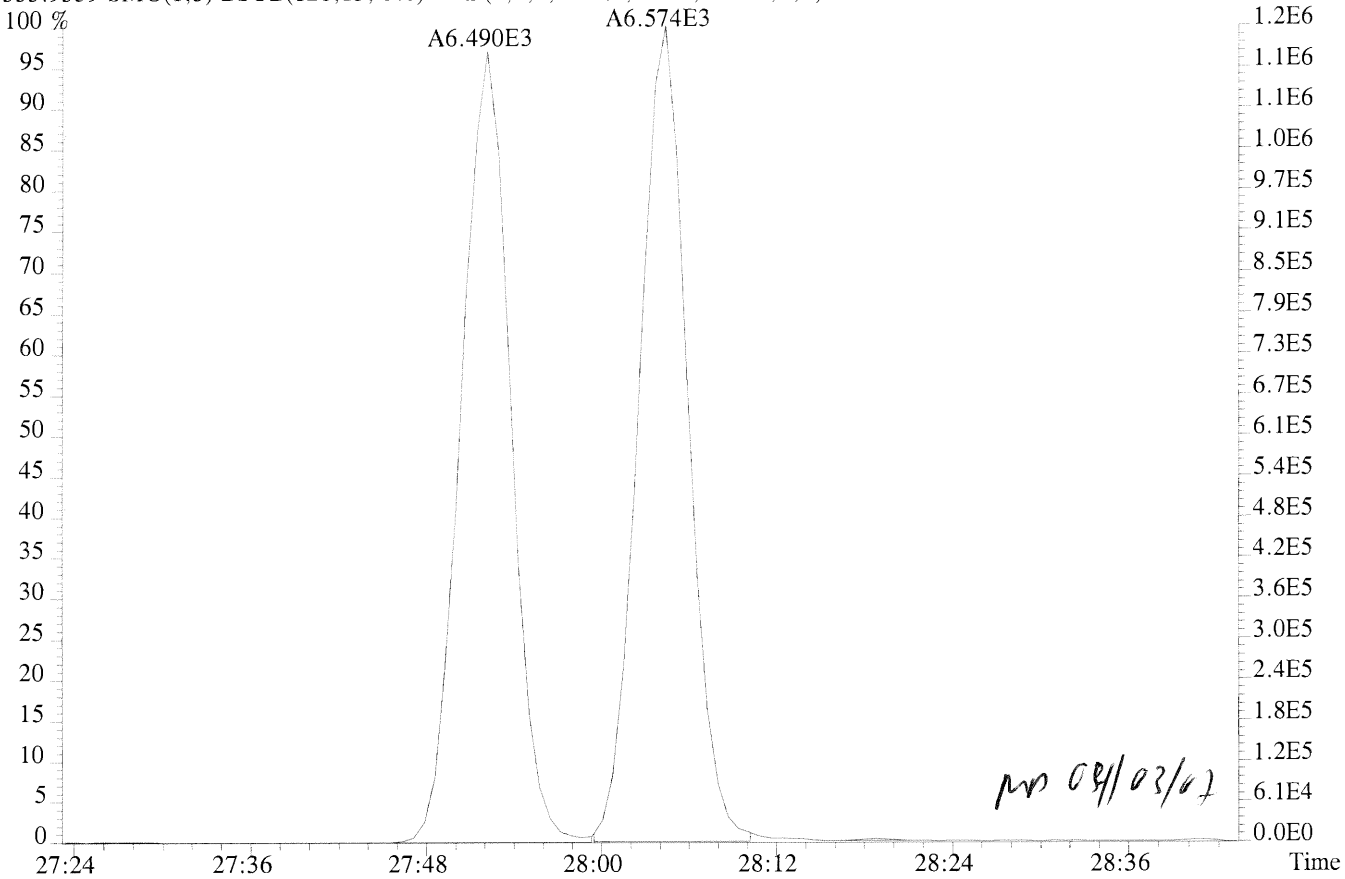
354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:U120209 #1-548 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,668.0,1.00%,F,F)



333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,296.0,1.00%,F,F)

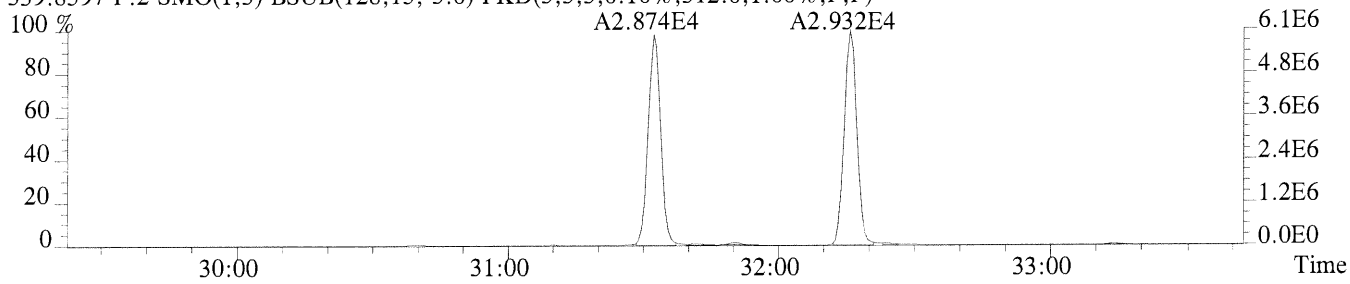


MD 04/03/07

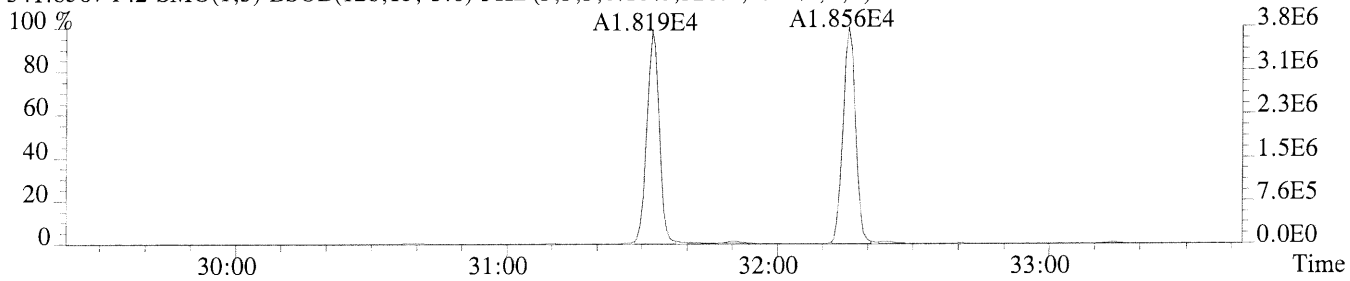
 MC 4/3/07

File:U120209 #1-394 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

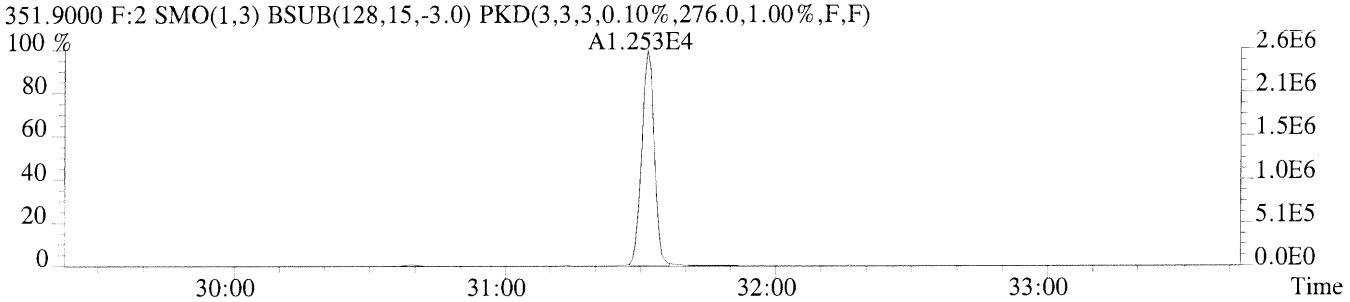
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,312.0,1.00%,F,F)



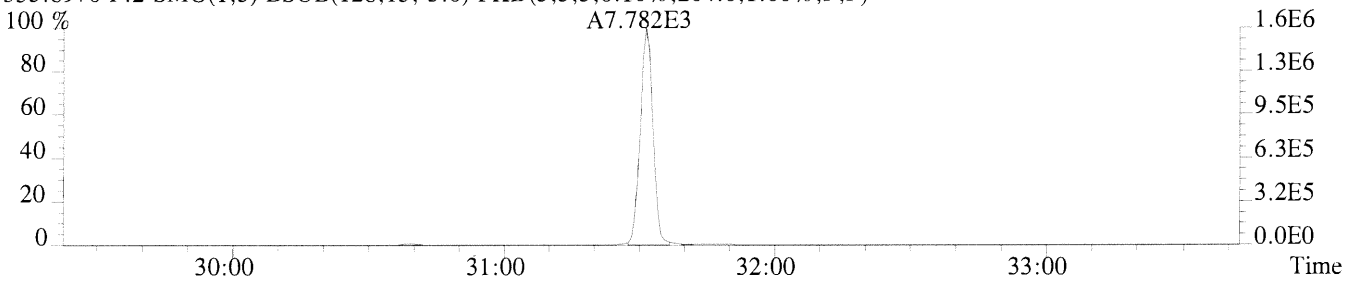
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,320.0,1.00%,F,F)



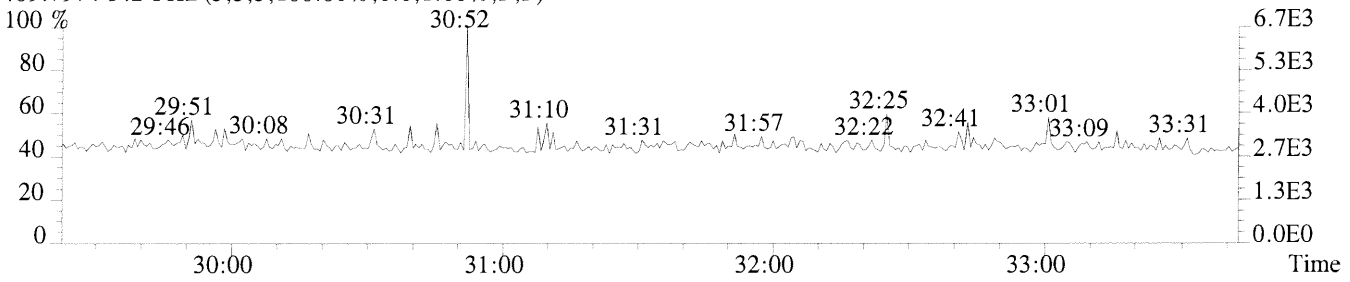
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,276.0,1.00%,F,F)



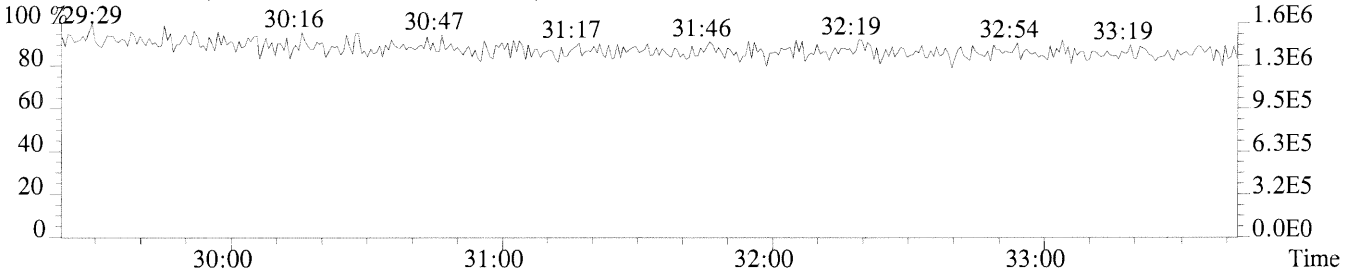
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,204.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

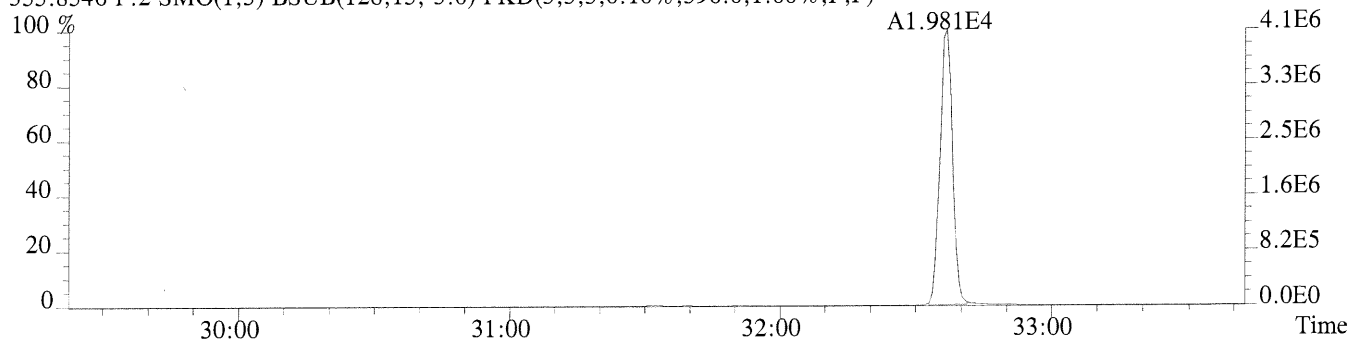


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

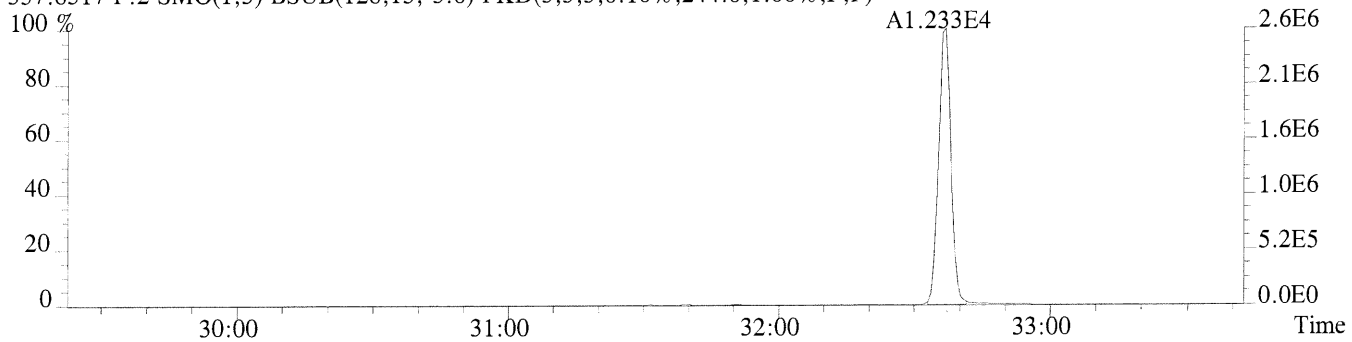


File:U120209 #1-394 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

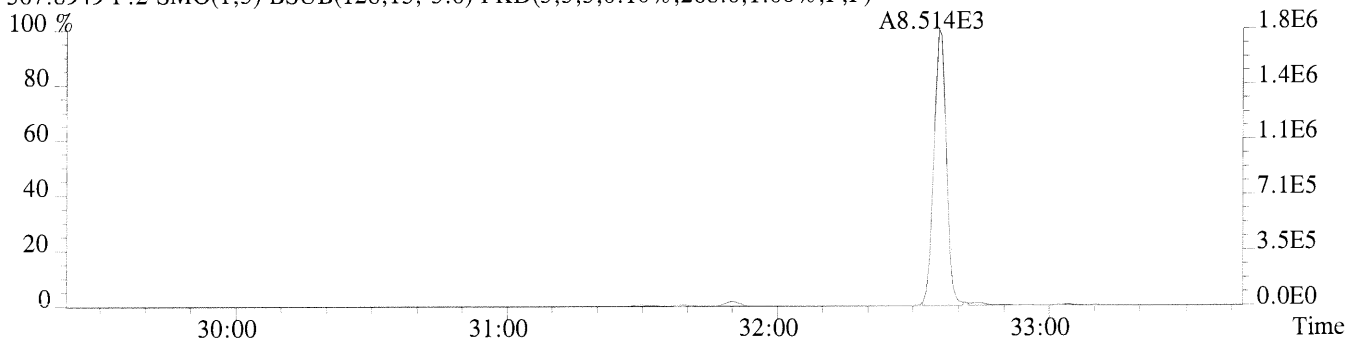
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,396.0,1.00%,F,F)



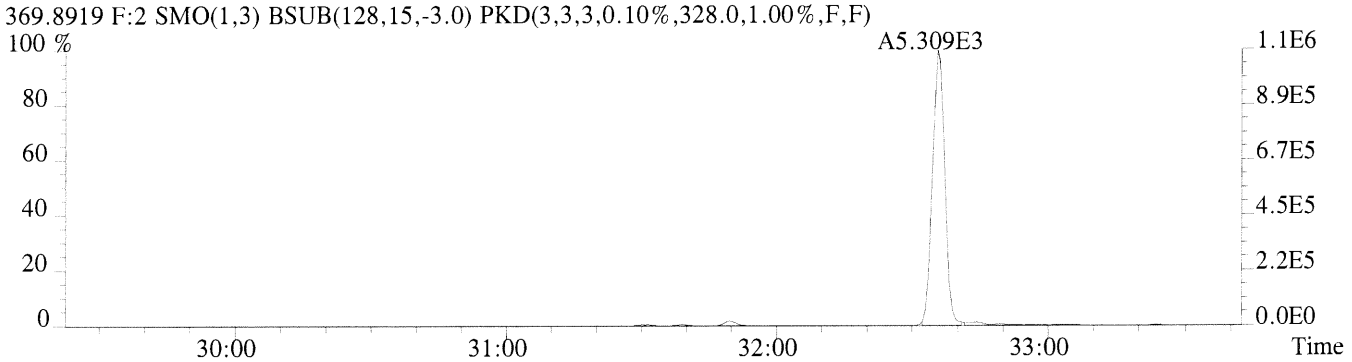
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,244.0,1.00%,F,F)



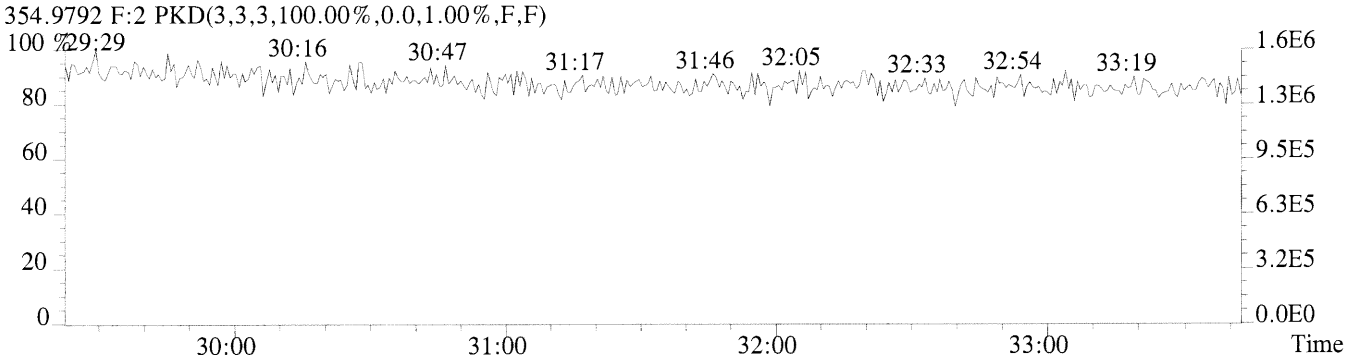
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,268.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,328.0,1.00%,F,F)

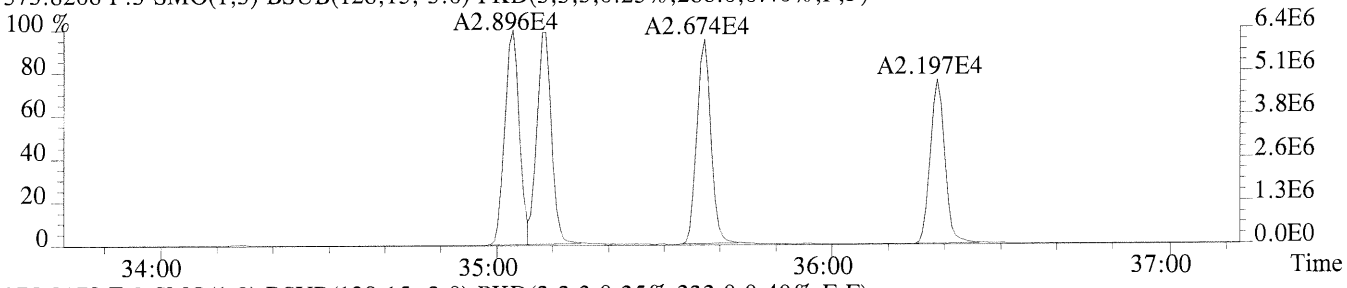


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

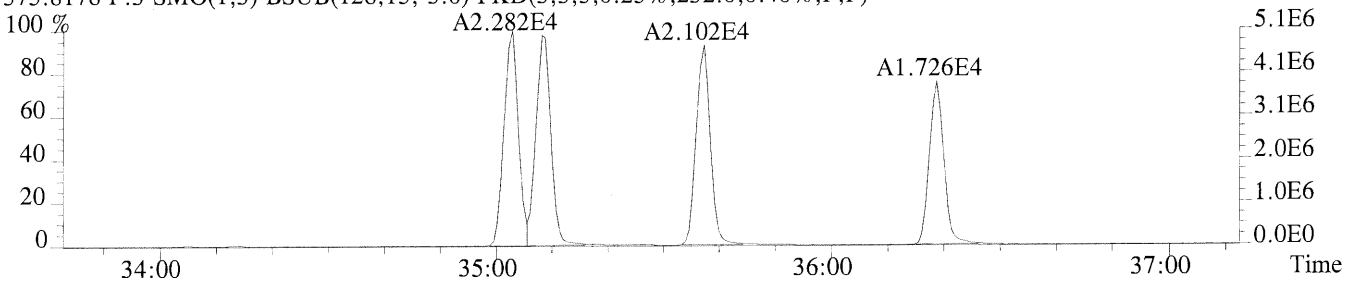


File:U120209 #1-318 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

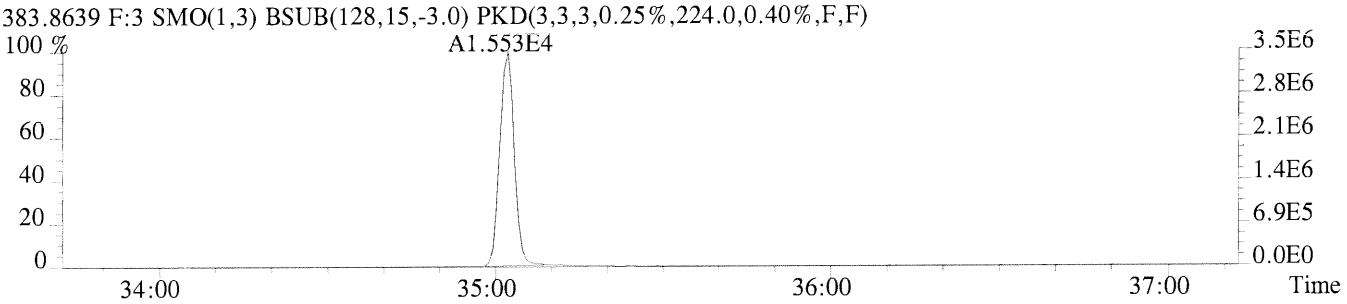
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,288.0,0.40%,F,F)



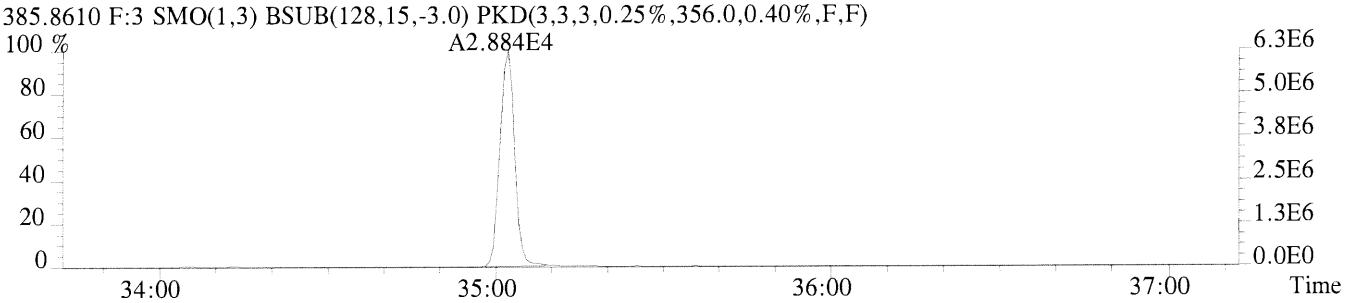
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,232.0,0.40%,F,F)



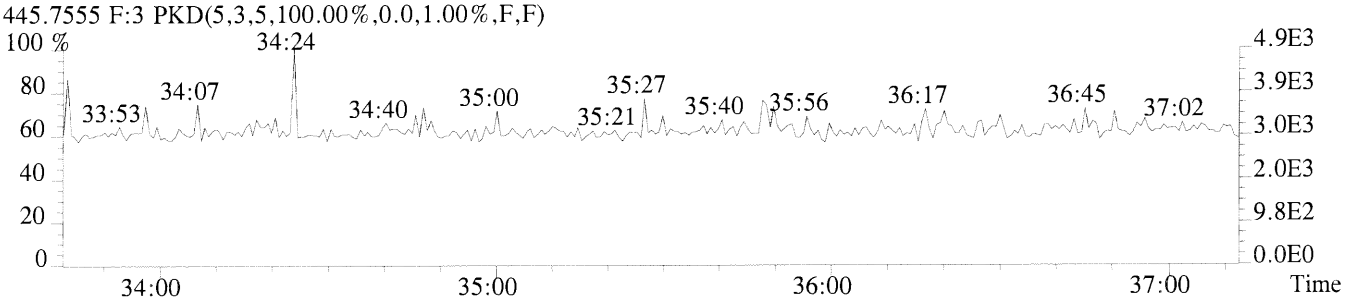
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,224.0,0.40%,F,F)



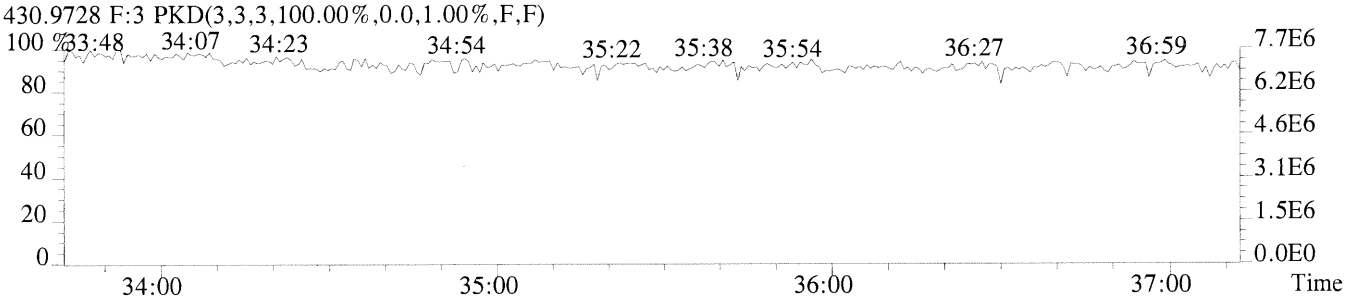
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,356.0,0.40%,F,F)



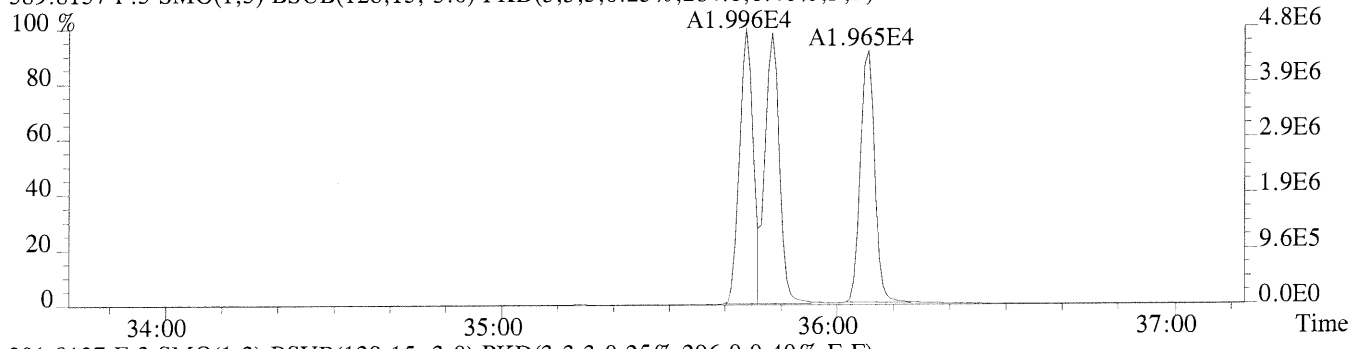
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



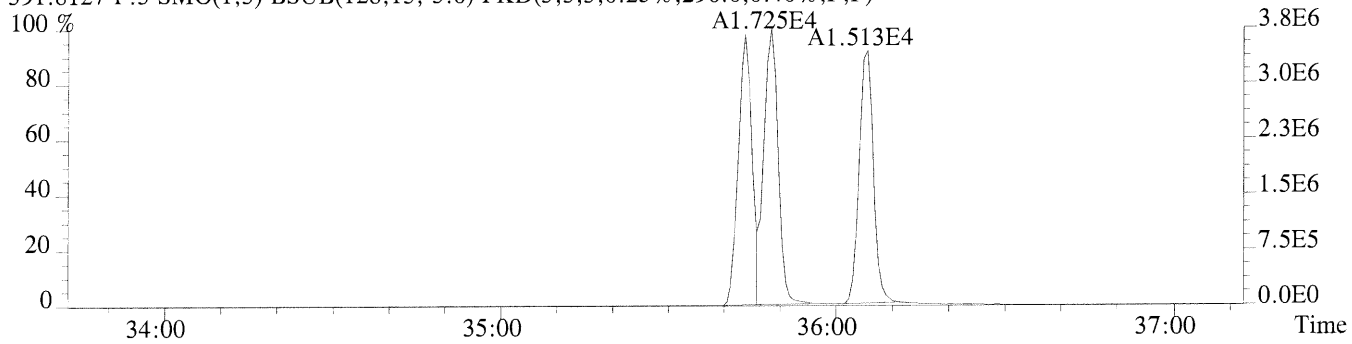
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



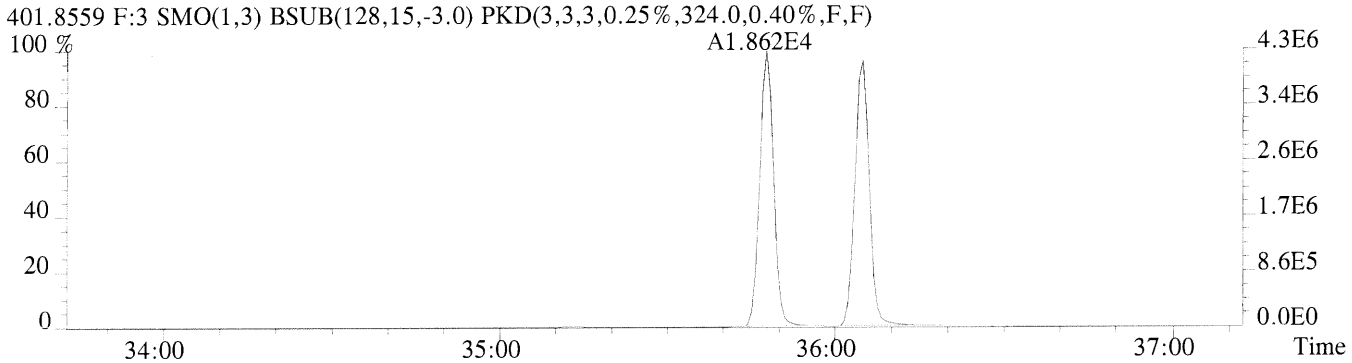
File:U120209 #1-318 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,284.0,0.40%,F,F)



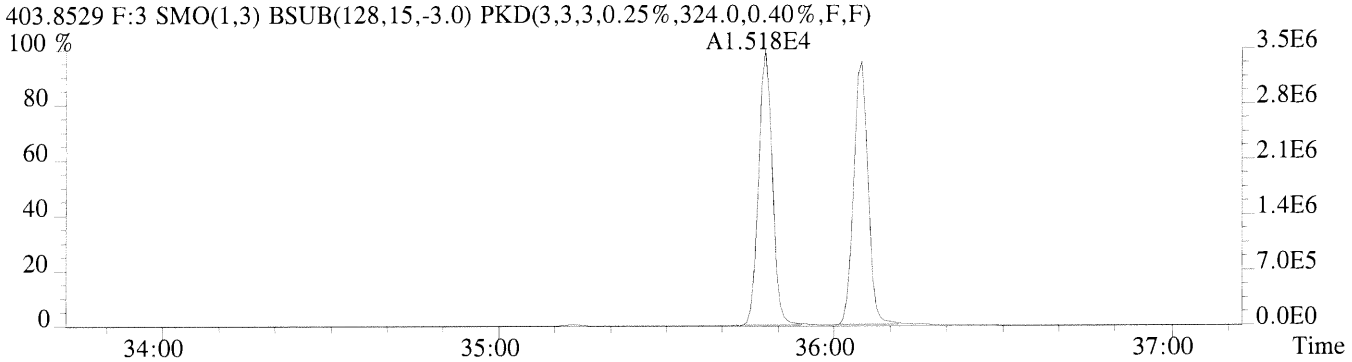
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,296.0,0.40%,F,F)



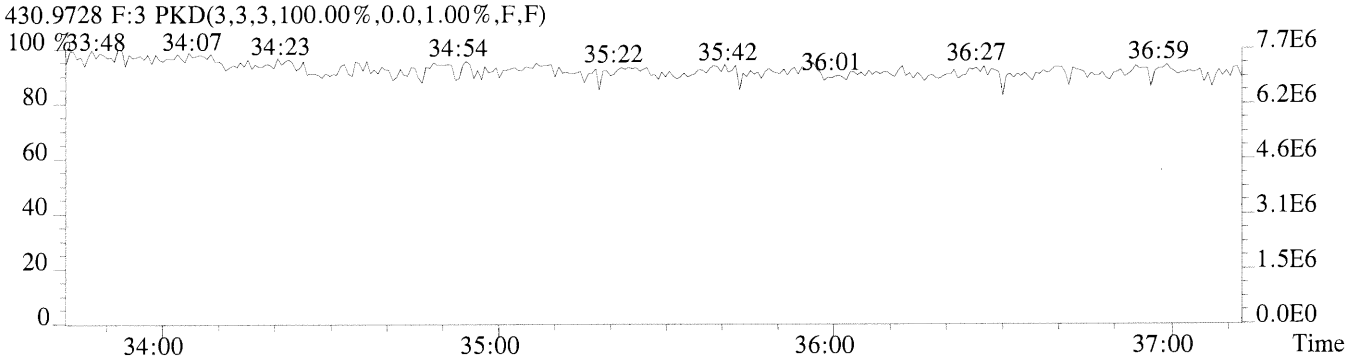
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,324.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,324.0,0.40%,F,F)

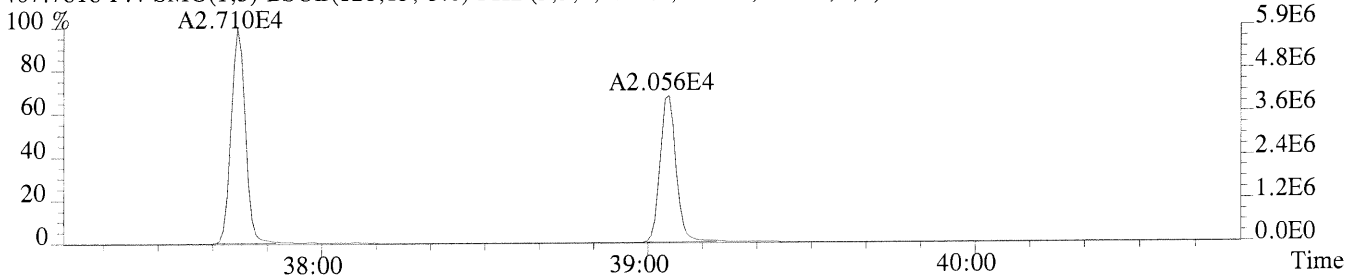


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

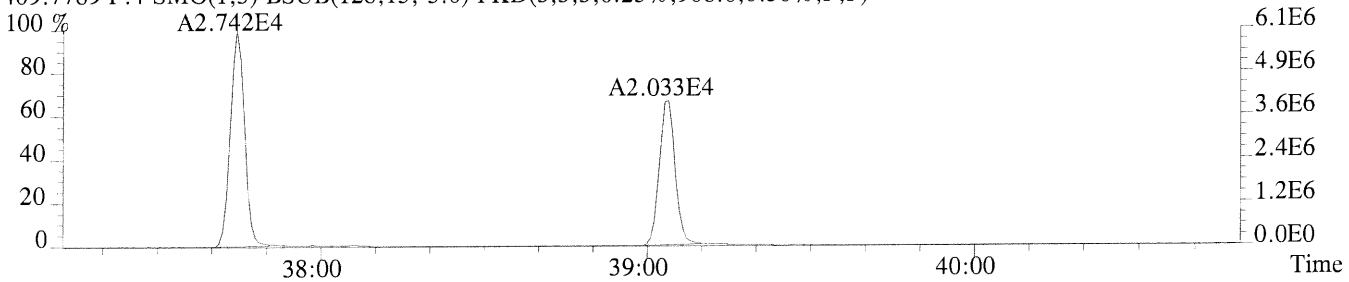


File:U120209 #1-327 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

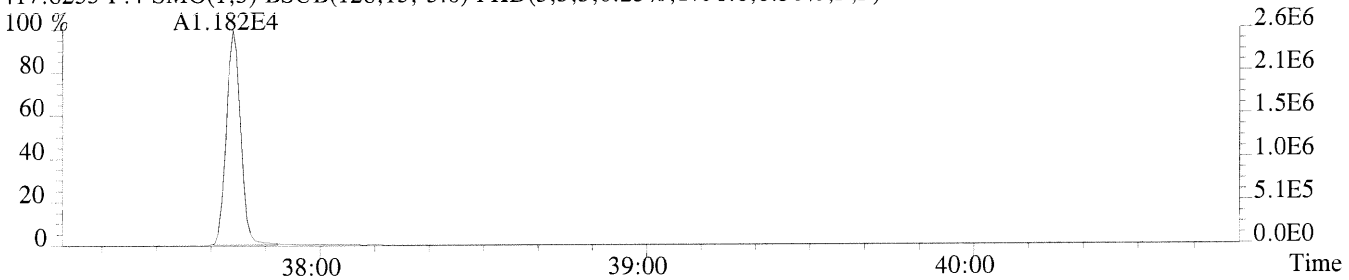
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2504.0,0.50%,F,F)



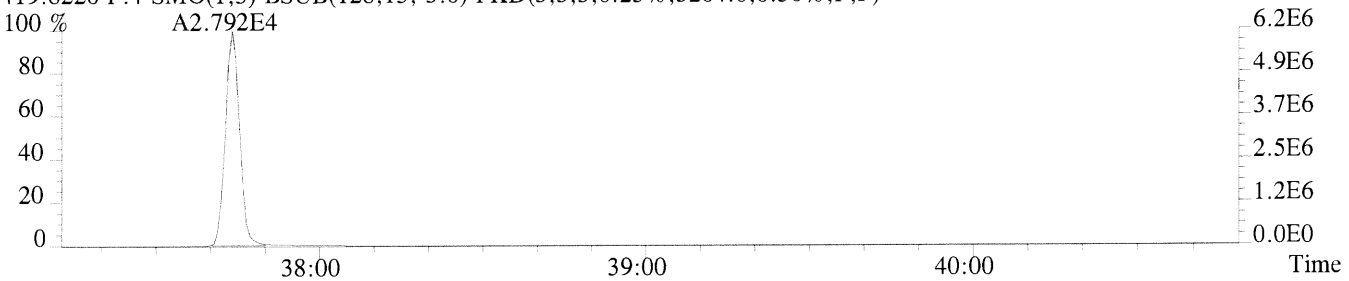
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,908.0,0.50%,F,F)



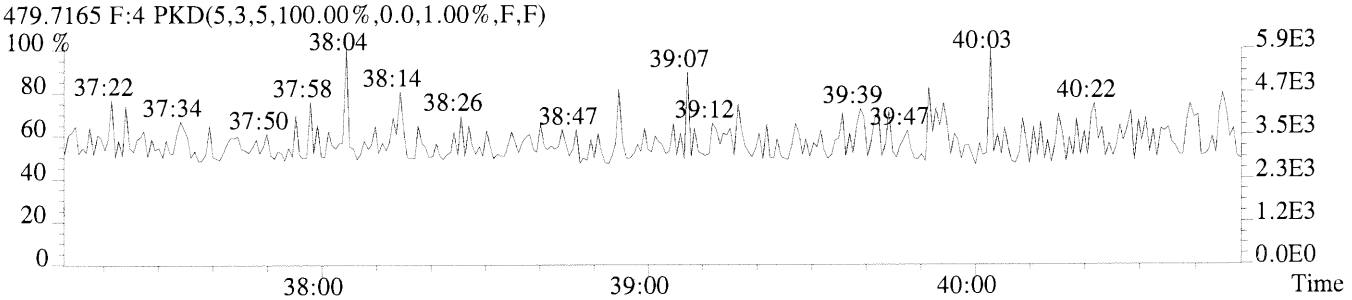
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1796.0,0.50%,F,F)



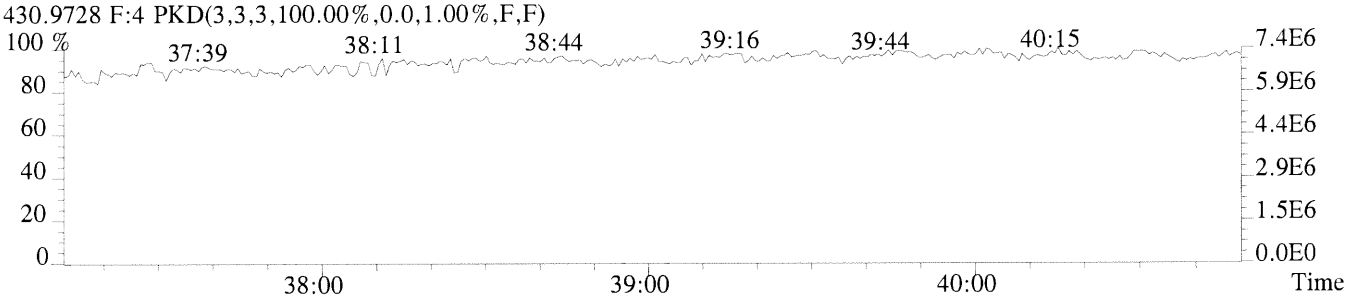
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3204.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

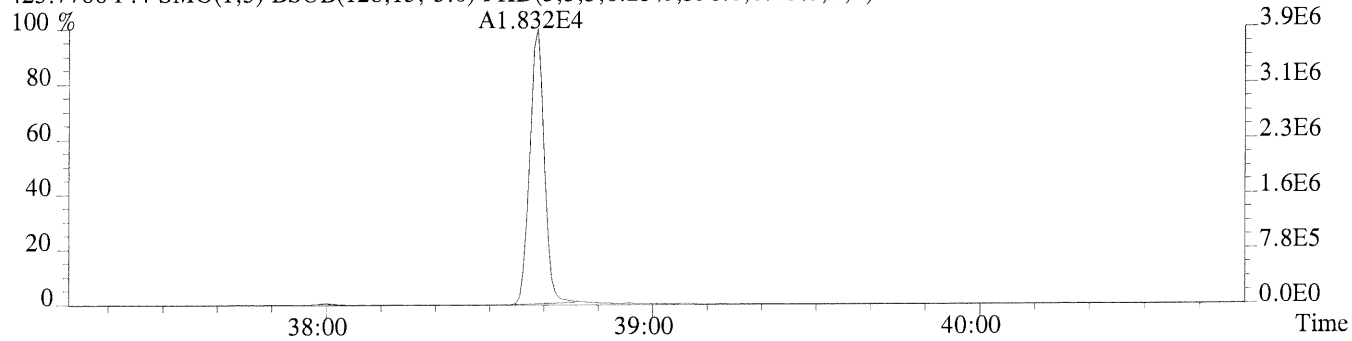


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

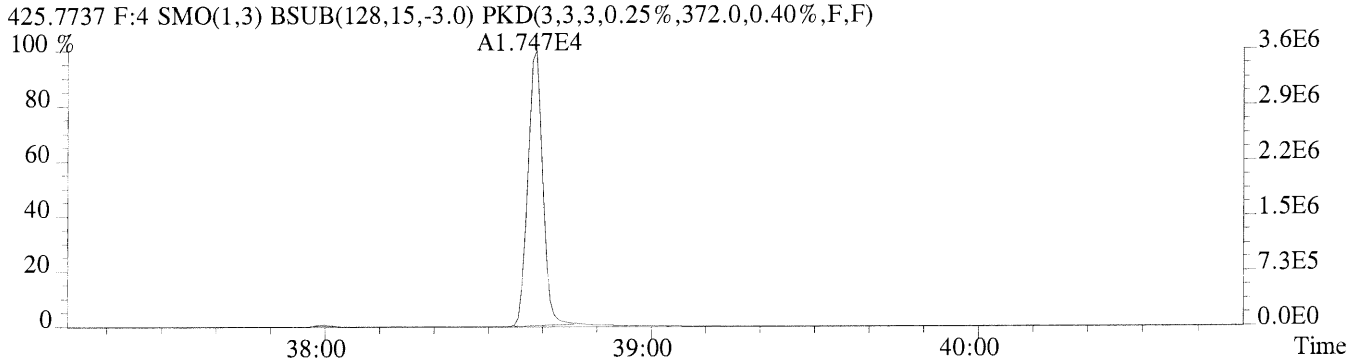


File:U120209 #1-327 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

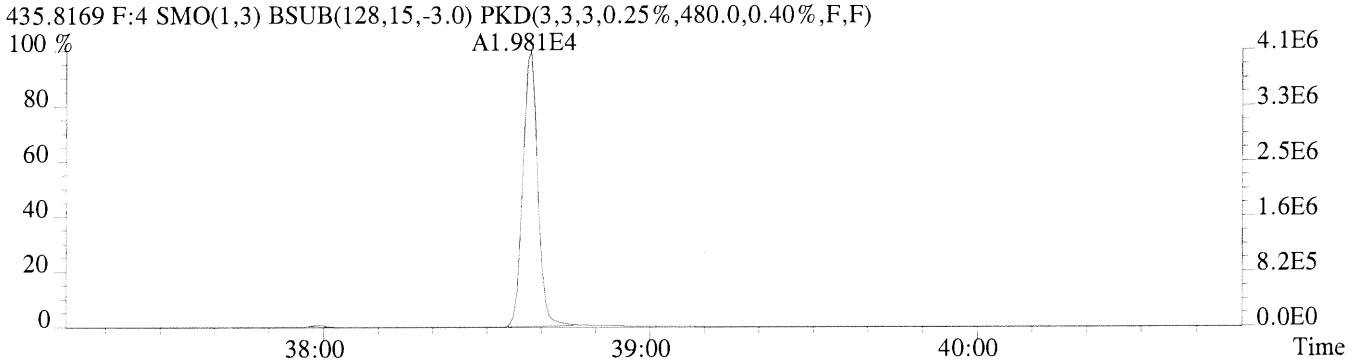
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,396.0,0.40%,F,F)



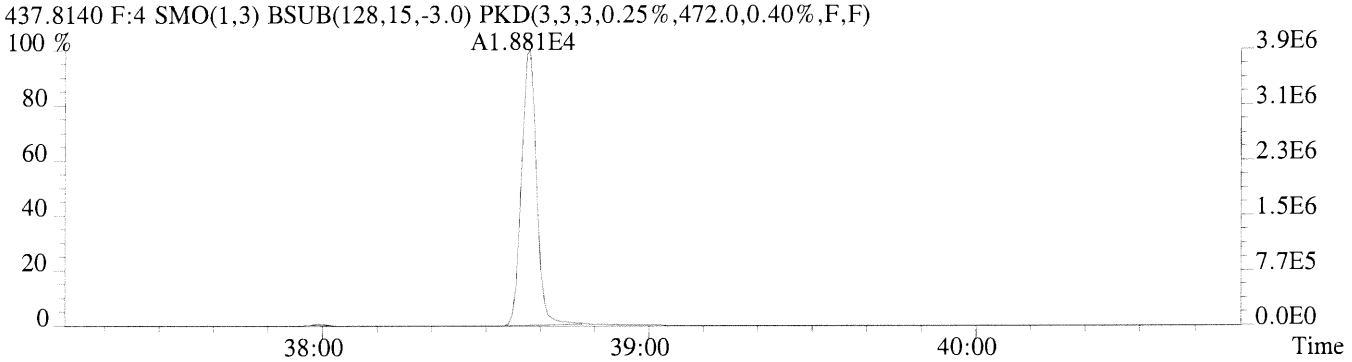
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,372.0,0.40%,F,F)



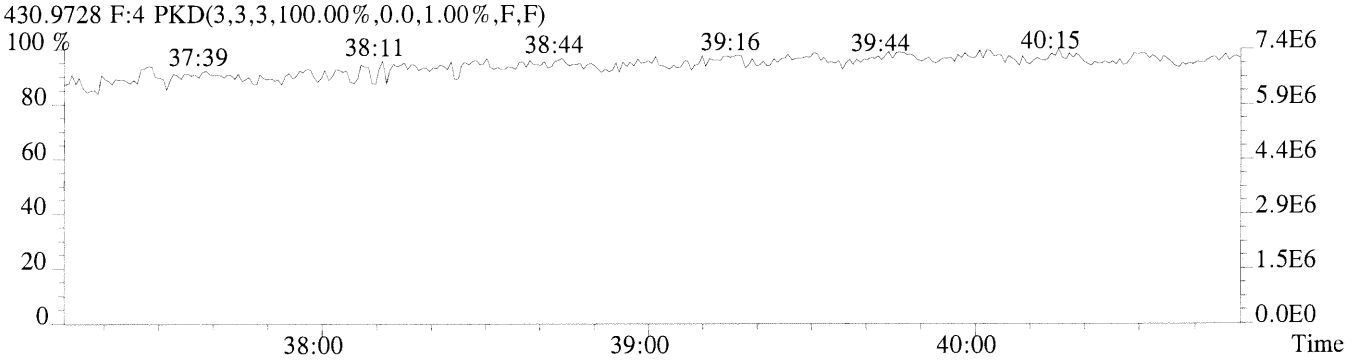
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,480.0,0.40%,F,F)



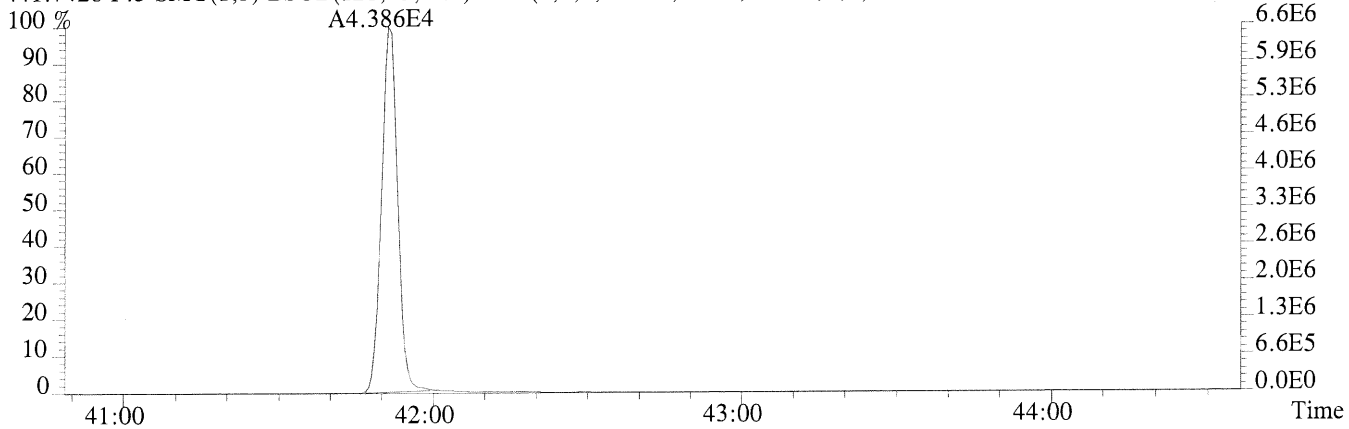
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,472.0,0.40%,F,F)



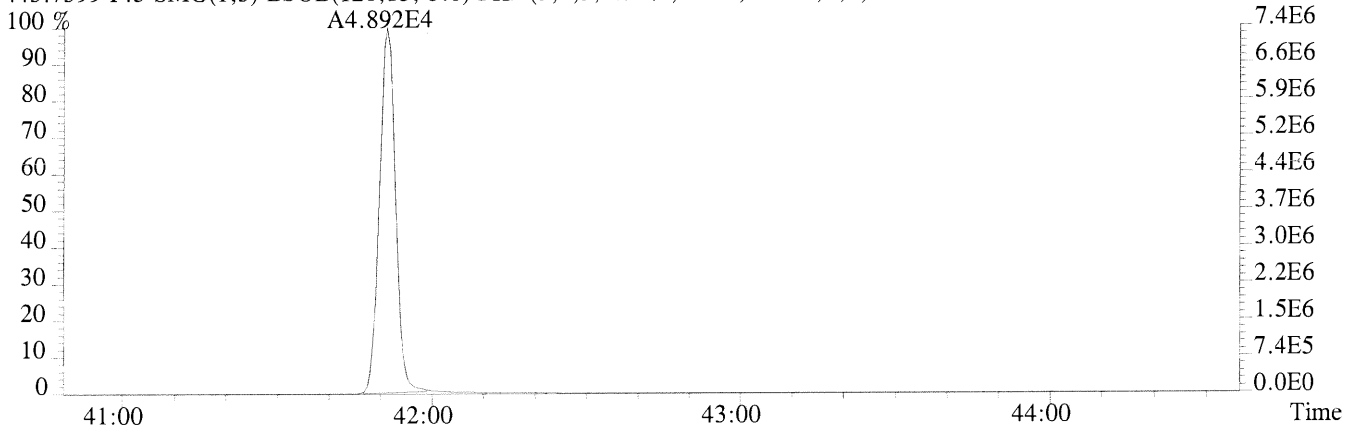
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



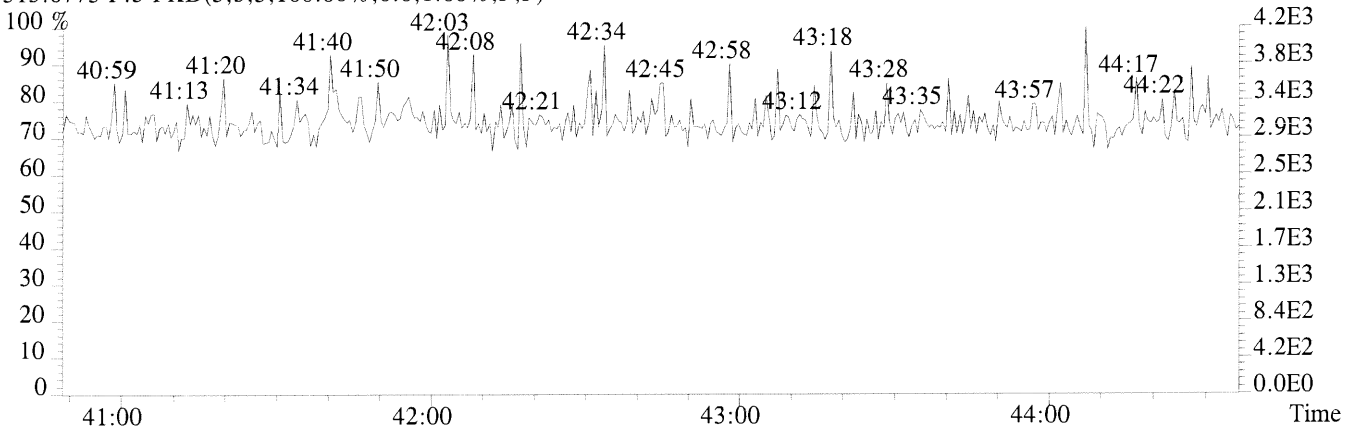
File:U120209 #1-420 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,204.0,0.40%,F,F)



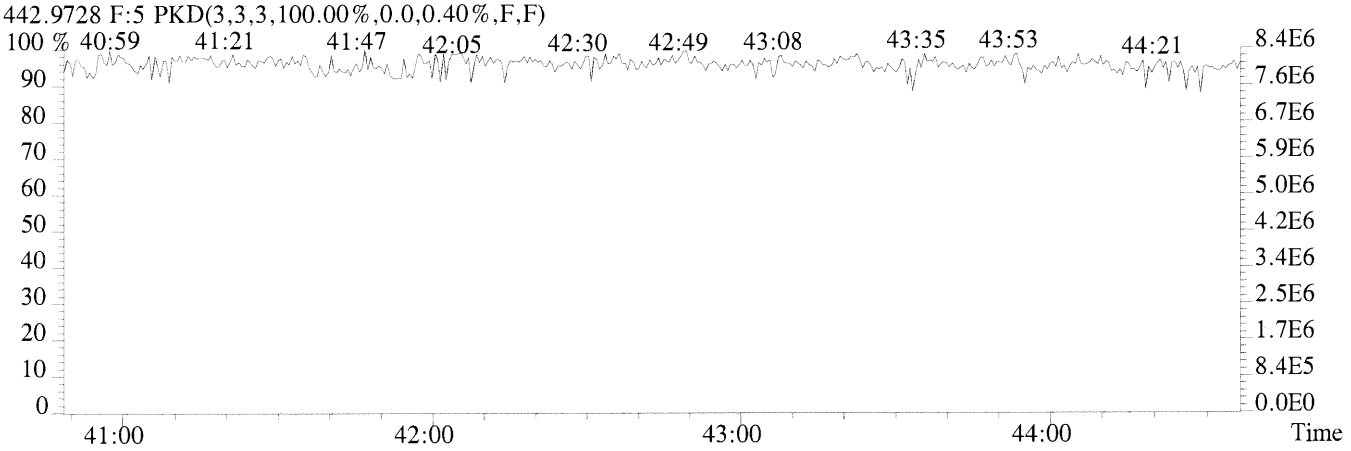
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,480.0,0.40%,F,F)



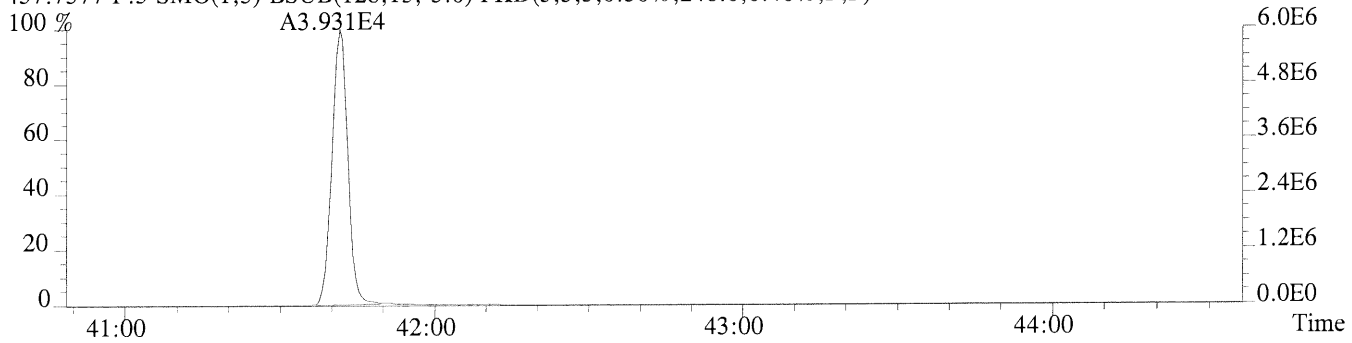
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



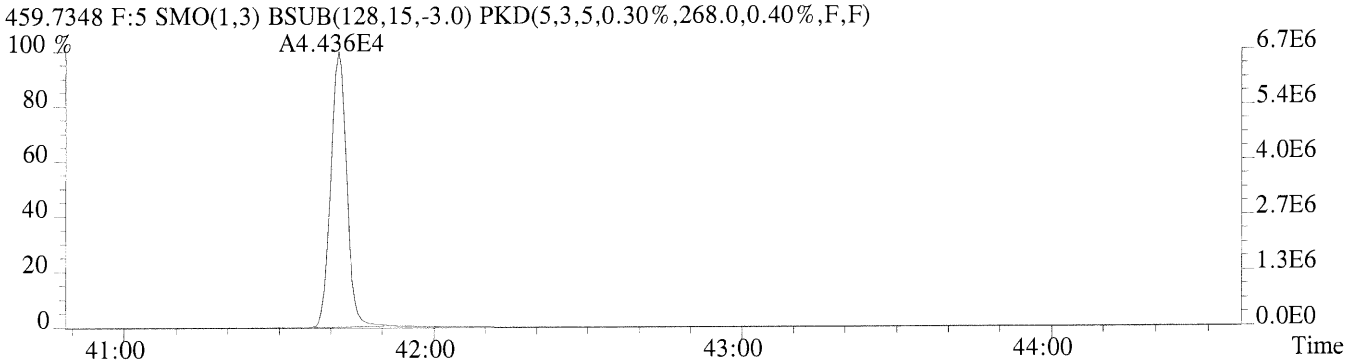
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



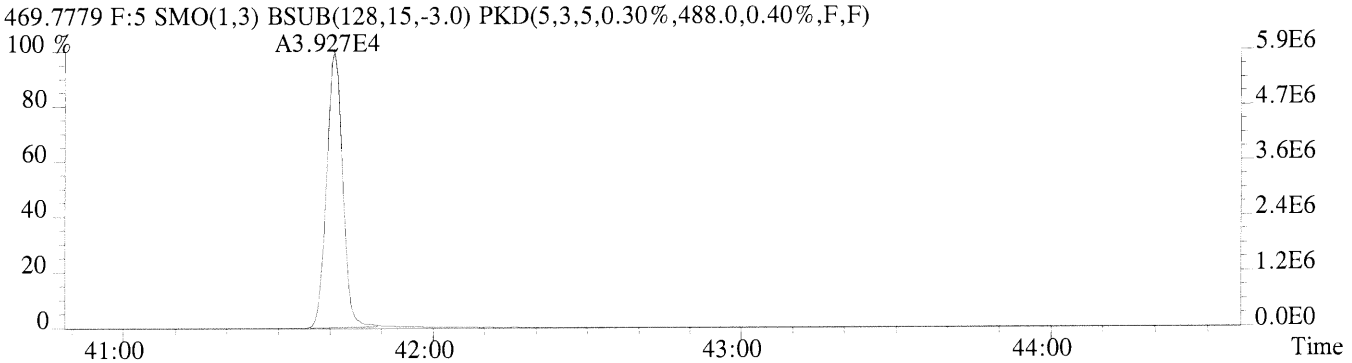
File:U120209 #1-420 Acq: 2-APR-2007 16:23:37 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,248.0,0.40%,F,F)



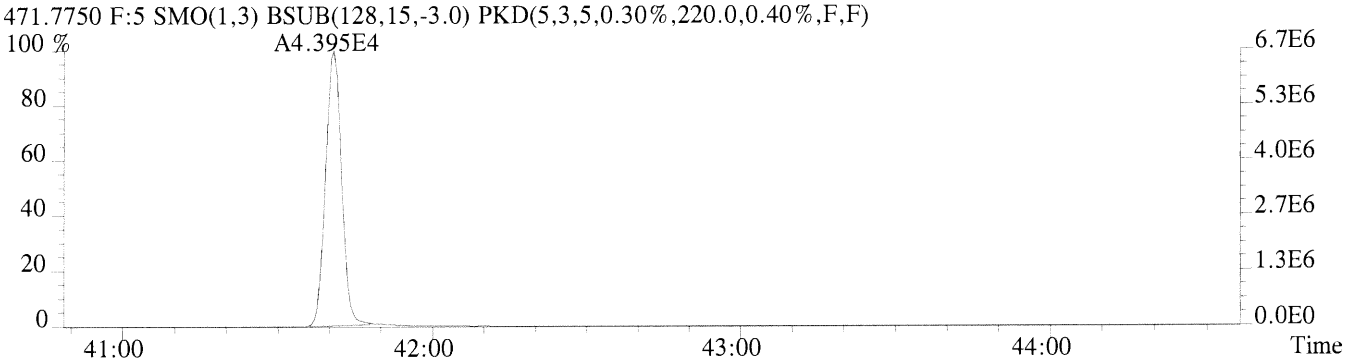
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,268.0,0.40%,F,F)



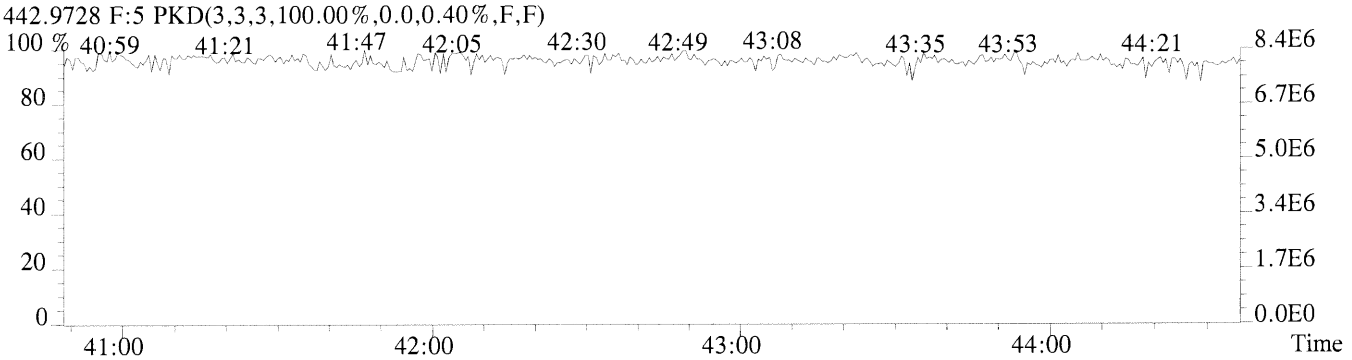
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,488.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,220.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC5

Run #5 Filename U120210 Samp: 1 Inj: 1 Acquired: 2-APR-07 17:13:27
Processed: 3-APR-07 08:06:21 Sample ID: ICAL HRCC5

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	27:16	3.073e+04	3.868e+04	0.79	yes	no
2	Unk	1,2,3,7,8-PeCDF	31:32	1.305e+05	8.373e+04	1.56	yes	no
3	Unk	2,3,4,7,8-PeCDF	32:15	1.410e+05	8.973e+04	1.57	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:02	1.432e+05	1.188e+05	1.21	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:08	1.340e+05	1.103e+05	1.21	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	35:37	1.219e+05	1.002e+05	1.22	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:18	1.109e+05	8.991e+04	1.23	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	37:45	1.305e+05	1.322e+05	0.99	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:03	1.055e+05	1.048e+05	1.01	yes	no
10	Unk	OCDF	41:51	2.306e+05	2.476e+05	0.93	yes	no
11	Unk	2,3,7,8-TCDD	28:04	2.217e+04	2.804e+04	0.79	yes	no
12	Unk	1,2,3,7,8-PeCDD	32:36	9.088e+04	5.795e+04	1.57	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	35:43	1.032e+05	7.963e+04	1.30	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	35:48	1.028e+05	7.916e+04	1.30	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:05	9.762e+04	7.432e+04	1.31	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	38:38	9.041e+04	8.809e+04	1.03	yes	no
17	Unk	OCDD	41:41	2.038e+05	2.246e+05	0.91	yes	no
18	IS	13C-2,3,7,8-TCDF	27:15	8.247e+03	1.033e+04	0.80	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	31:31	1.377e+04	8.745e+03	1.57	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:02	1.836e+04	3.563e+04	0.52	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	37:44	1.415e+04	3.329e+04	0.42	yes	no
22	IS	13C-2,3,7,8-TCDD	28:04	5.637e+03	7.338e+03	0.77	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	32:36	9.489e+03	6.140e+03	1.55	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	35:47	2.287e+04	1.850e+04	1.24	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	38:37	2.374e+04	2.282e+04	1.04	yes	no
26	IS	13C-OCDD	41:40	5.044e+04	5.591e+04	0.90	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	27:51	6.234e+03	8.066e+03	0.77	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:04	2.258e+04	1.804e+04	1.25	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	28:05	5.168e+04				

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Houston, TX 77042
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC5

Run #5 Filename U120210 Samp: 1 Inj: 1 Acquired: 2-APR-07 17:13:27

Processed: 3-APR-07 08:06:21 LAB. ID: ICAL HRCC5

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	5.01e+06	2.44e+02	2.1e+04	6.46e+06	2.84e+02	2.3e+04
2	1,2,3,7,8-PeCDF	2.56e+07	2.76e+02	9.3e+04	1.61e+07	3.44e+02	4.7e+04
3	2,3,4,7,8-PeCDF	2.84e+07	2.76e+02	1.0e+05	1.82e+07	3.44e+02	5.3e+04
4	1,2,3,4,7,8-HxCDF	3.21e+07	3.76e+02	8.5e+04	2.67e+07	3.84e+02	6.9e+04
5	1,2,3,6,7,8-HxCDF	2.93e+07	3.76e+02	7.8e+04	2.45e+07	3.84e+02	6.4e+04
6	2,3,4,6,7,8-HxCDF	2.70e+07	3.76e+02	7.2e+04	2.26e+07	3.84e+02	5.9e+04
7	1,2,3,7,8,9-HxCDF	2.42e+07	3.76e+02	6.4e+04	1.99e+07	3.84e+02	5.2e+04
8	1,2,3,4,6,7,8-HpCDF	2.77e+07	6.20e+03	4.5e+03	2.83e+07	5.89e+03	4.8e+03
9	1,2,3,4,7,8,9-HpCDF	2.17e+07	6.20e+03	3.5e+03	2.17e+07	5.89e+03	3.7e+03
10	OCDF	3.44e+07	2.96e+02	1.2e+05	3.73e+07	4.68e+02	8.0e+04
11	2,3,7,8-TCDD	4.01e+06	2.76e+02	1.5e+04	5.03e+06	2.44e+02	2.1e+04
12	1,2,3,7,8-PeCDD	1.92e+07	4.72e+02	4.1e+04	1.23e+07	3.08e+02	4.0e+04
13	1,2,3,4,7,8-HxCDD	2.28e+07	2.72e+02	8.4e+04	1.78e+07	2.68e+02	6.6e+04
14	1,2,3,6,7,8-HxCDD	2.30e+07	2.72e+02	8.5e+04	1.79e+07	2.68e+02	6.7e+04
15	1,2,3,7,8,9-HxCDD	2.22e+07	2.72e+02	8.2e+04	1.70e+07	2.68e+02	6.3e+04
16	1,2,3,4,6,7,8-HpCDD	1.89e+07	4.36e+02	4.3e+04	1.87e+07	8.52e+02	2.2e+04
17	OCDD	3.10e+07	1.28e+02	2.4e+05	3.43e+07	3.68e+02	9.3e+04
18	13C-2,3,7,8-TCDF	1.35e+06	4.52e+02	3.0e+03	1.77e+06	4.08e+02	4.3e+03
19	13C-1,2,3,7,8-PeCDF	2.68e+06	3.08e+02	8.7e+03	1.69e+06	3.20e+02	5.3e+03
20	13C-1,2,3,4,7,8-HxCDF	4.09e+06	2.88e+02	1.4e+04	7.87e+06	4.68e+02	1.7e+04
21	13C-1,2,3,4,6,7,8-HpCDF	3.05e+06	1.43e+03	2.1e+03	7.10e+06	8.80e+02	8.1e+03
22	13C-2,3,7,8-TCDD	1.02e+06	6.36e+02	1.6e+03	1.33e+06	2.64e+02	5.0e+03
23	13C-1,2,3,7,8-PeCDD	2.01e+06	2.88e+02	7.0e+03	1.28e+06	3.36e+02	3.8e+03
24	13C-1,2,3,6,7,8-HxCDD	5.11e+06	2.00e+02	2.6e+04	4.20e+06	4.72e+02	8.9e+03
25	13C-1,2,3,4,6,7,8-HpCDD	5.11e+06	5.88e+02	8.7e+03	4.85e+06	4.12e+02	1.2e+04
26	13C-OCDD	7.73e+06	2.76e+02	2.8e+04	8.47e+06	2.92e+02	2.9e+04
27	13C-1,2,3,4-TCDD	1.10e+06	6.36e+02	1.7e+03	1.40e+06	2.64e+02	5.3e+03
28	13C-1,2,3,7,8,9-HxCDD	5.02e+06	2.00e+02	2.5e+04	4.10e+06	4.72e+02	8.7e+03
29	37Cl-2,3,7,8-TCDD	9.27e+06	2.24e+02	4.1e+04			

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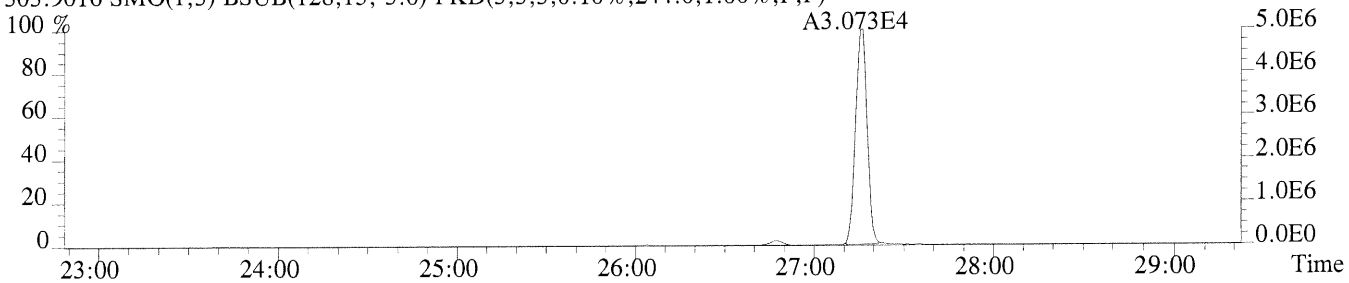
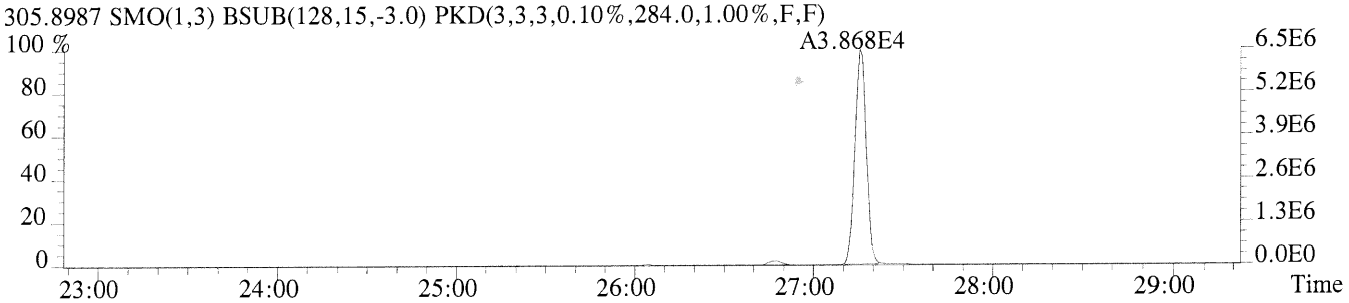
File:U120210 #1-548 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

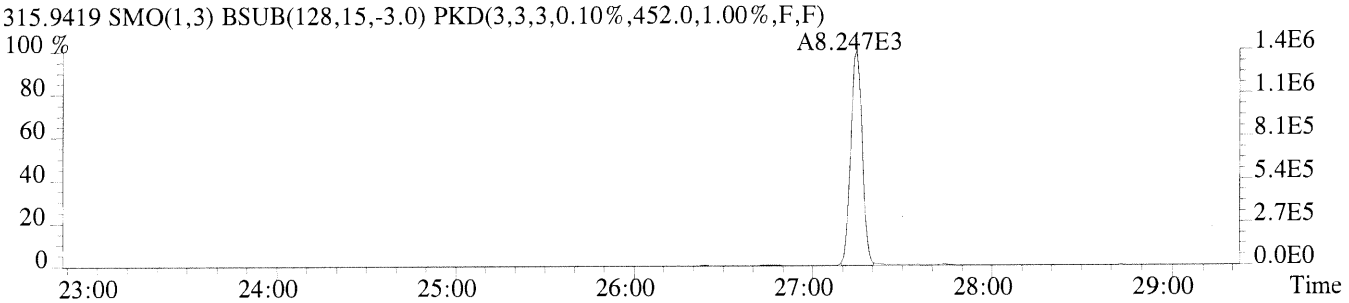
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,244.0,1.00%,F,F)



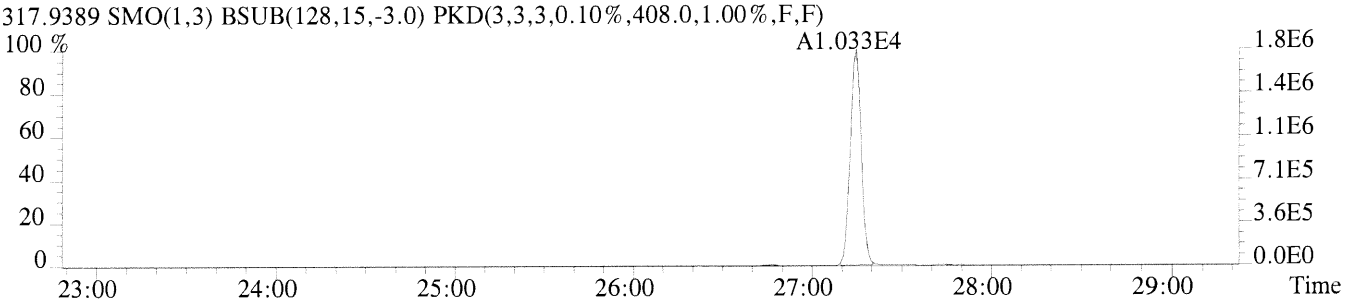
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,284.0,1.00%,F,F)



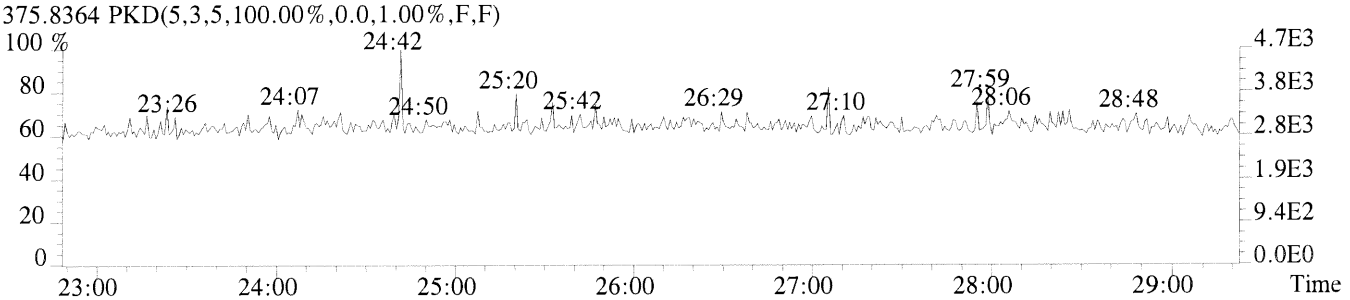
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,452.0,1.00%,F,F)



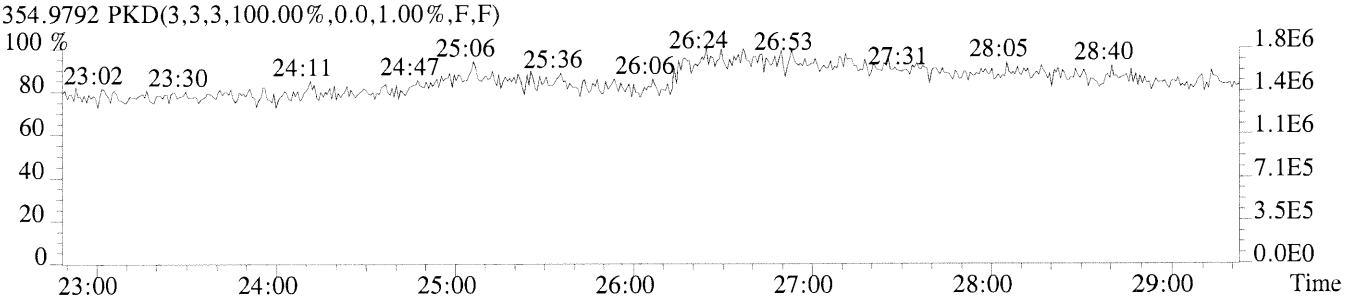
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,408.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

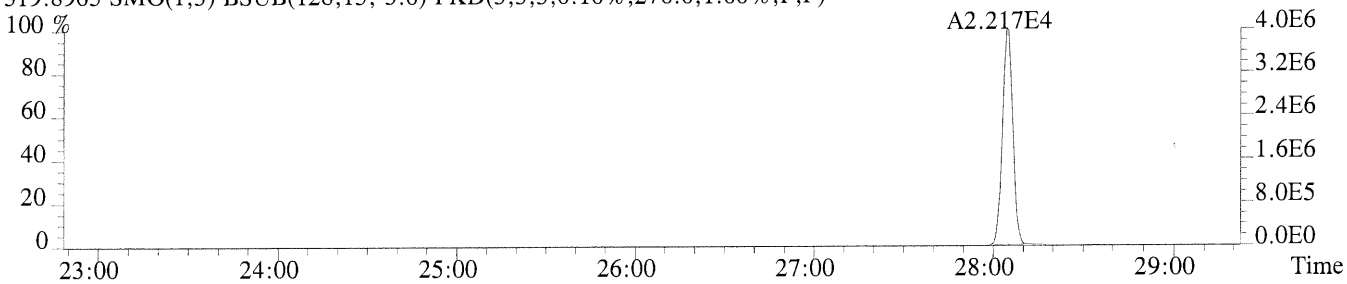


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

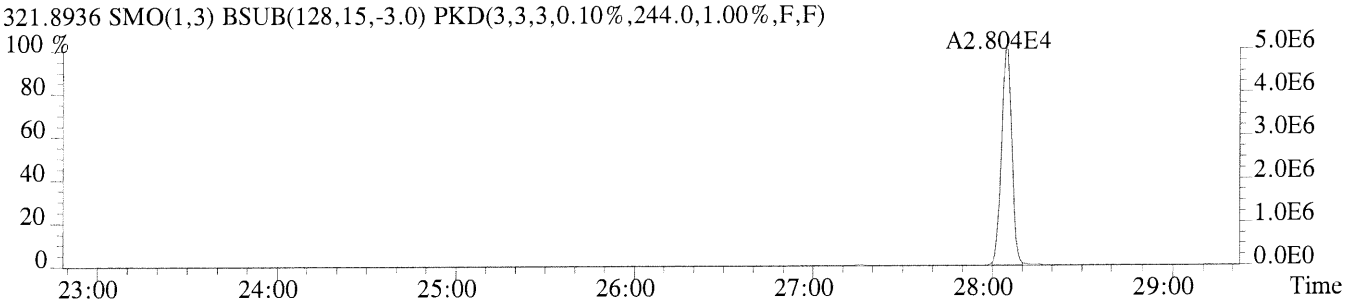


File:U120210 #1-548 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

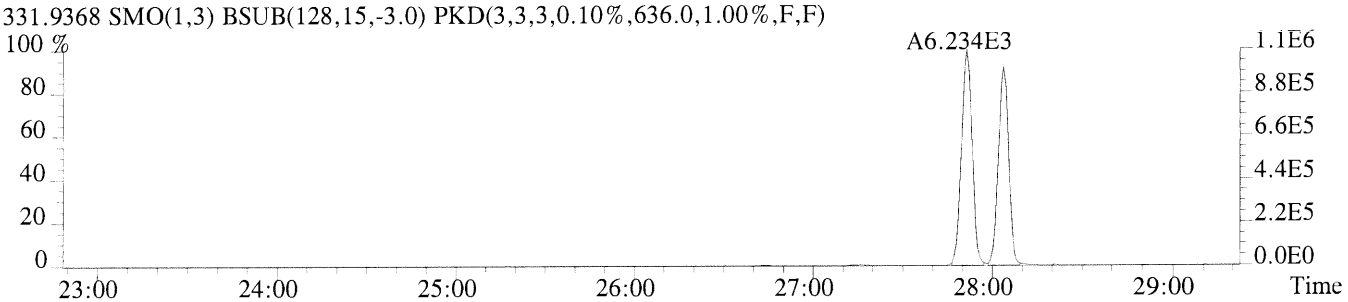
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,276.0,1.00%,F,F)



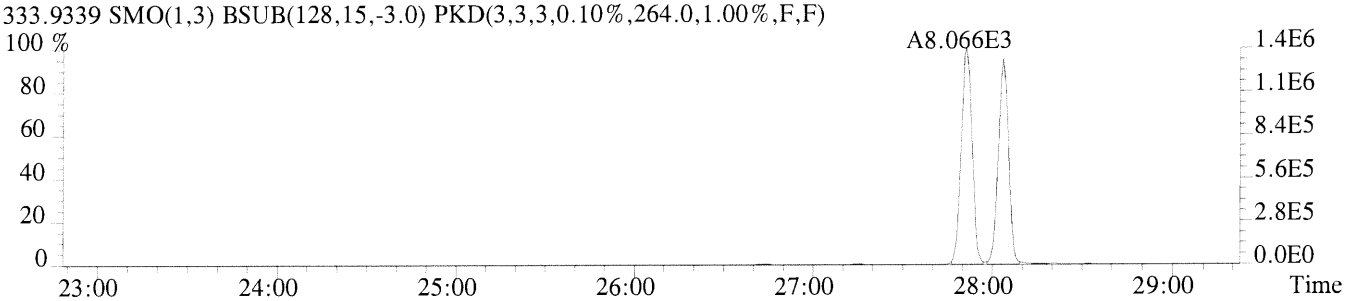
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,244.0,1.00%,F,F)



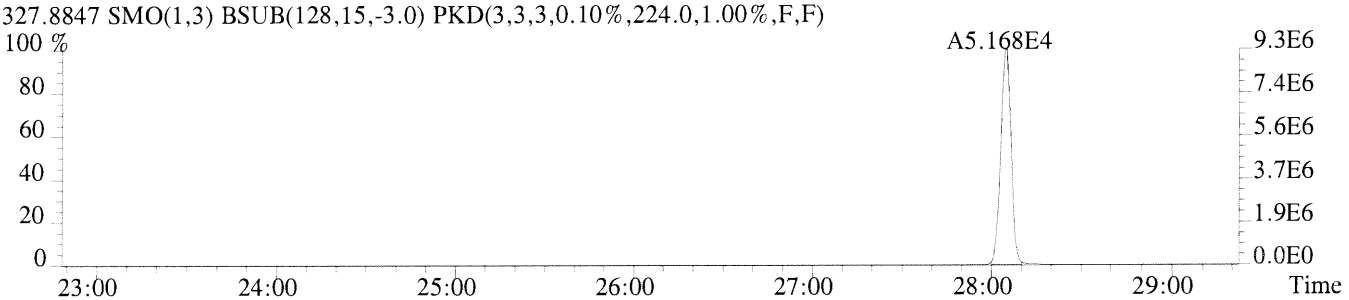
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,636.0,1.00%,F,F)



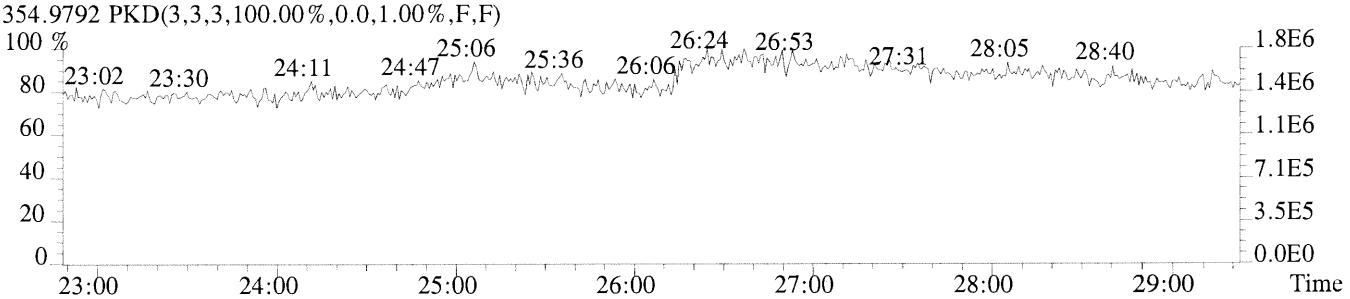
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,264.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,224.0,1.00%,F,F)

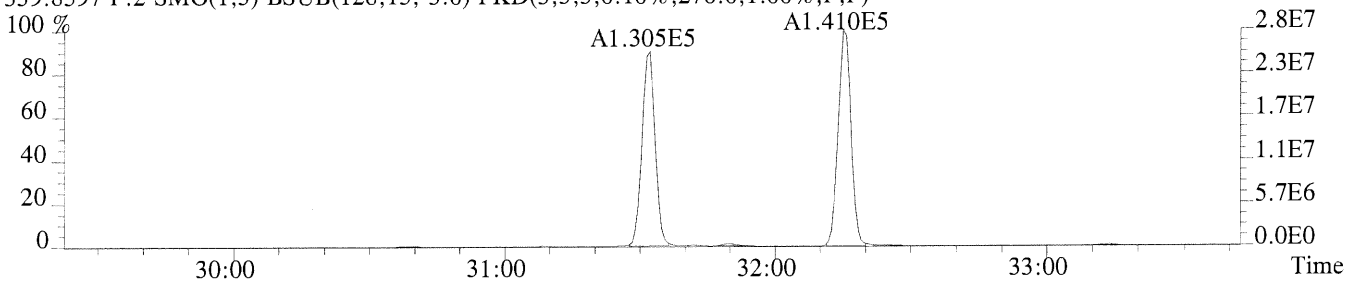


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

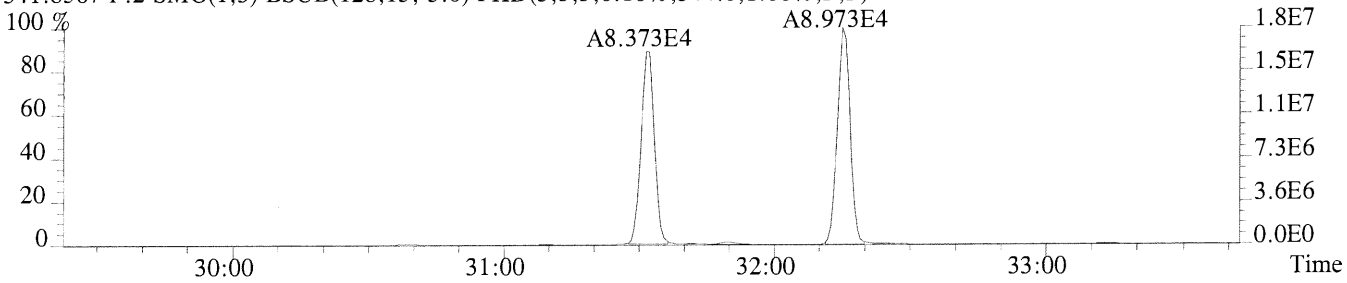


File:U120210 #1-394 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

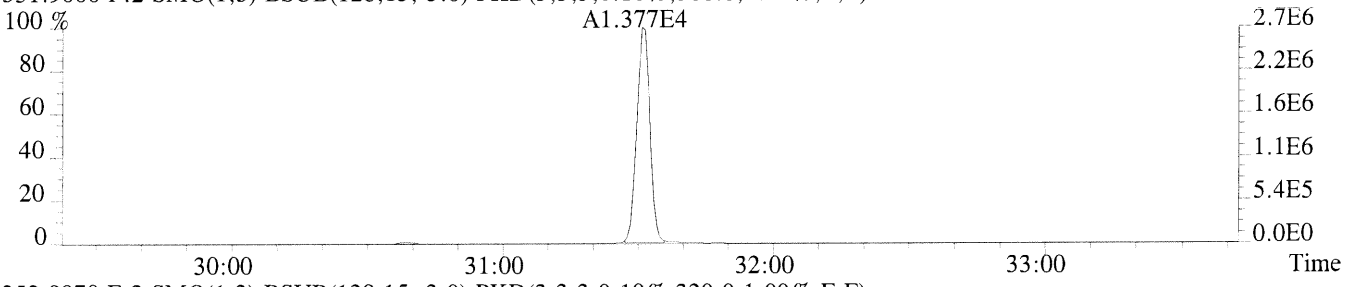
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,276.0,1.00%,F,F)



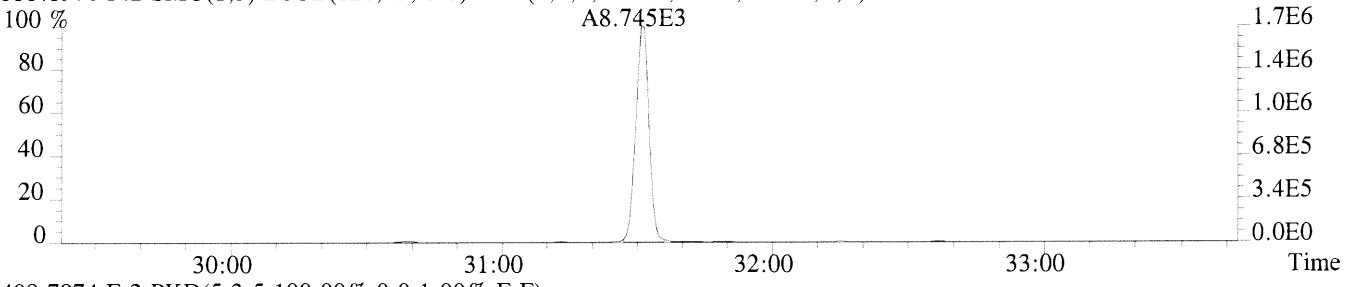
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,344.0,1.00%,F,F)



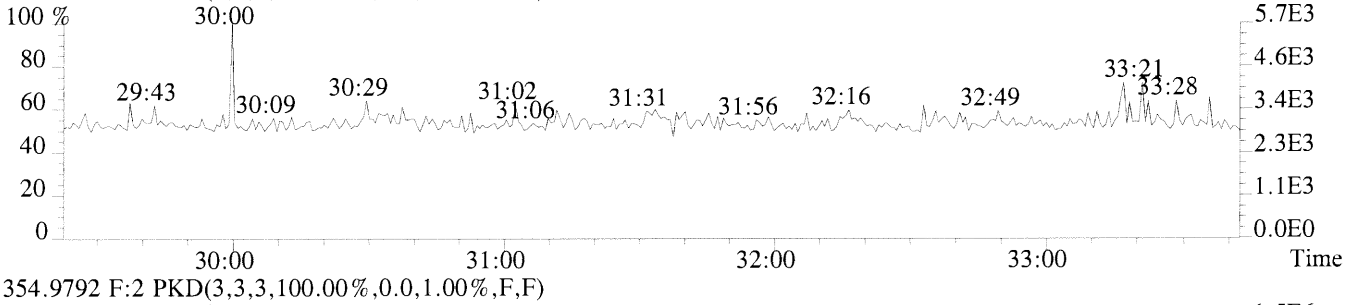
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,308.0,1.00%,F,F)



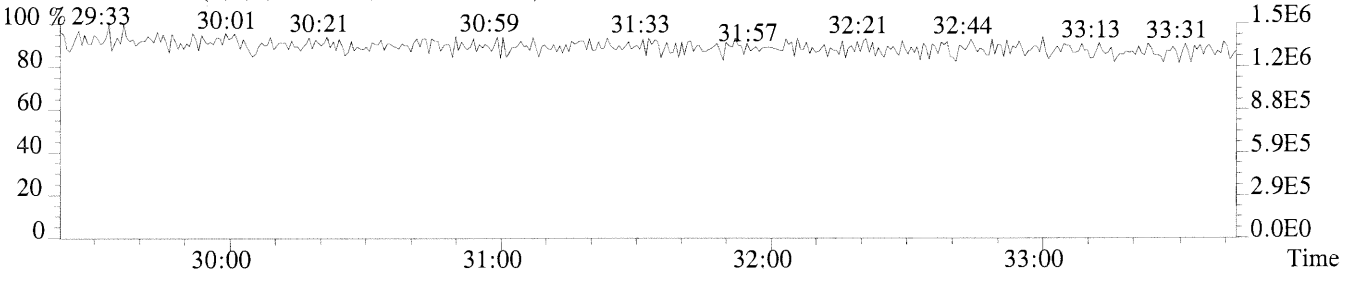
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,320.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

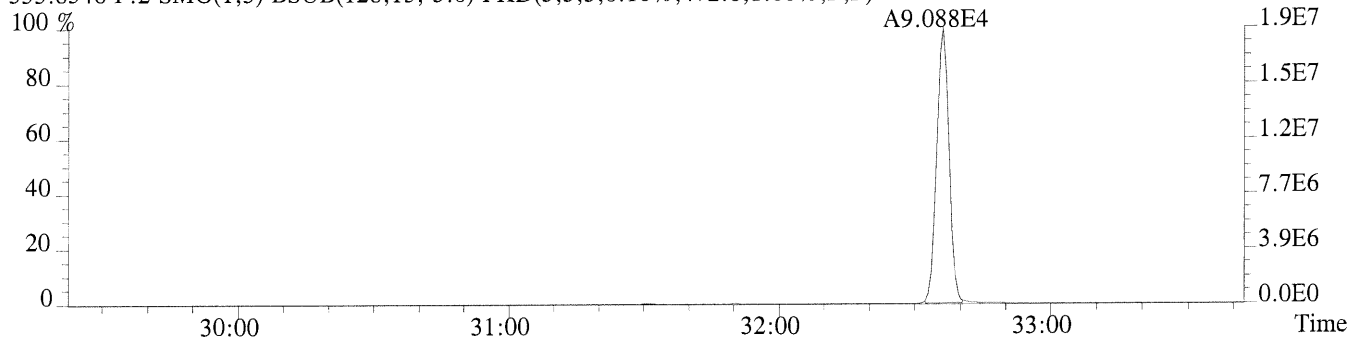


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

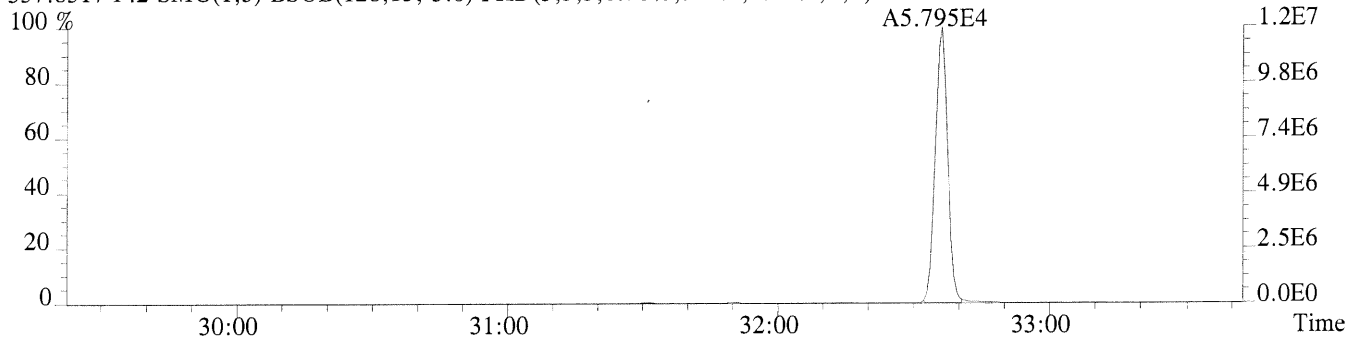


File:U120210 #1-394 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

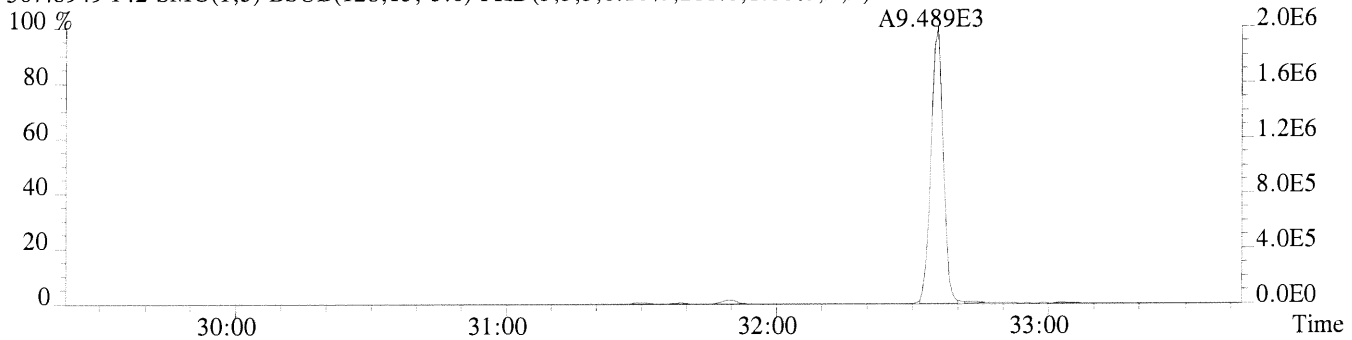
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,472.0,1.00%,F,F)



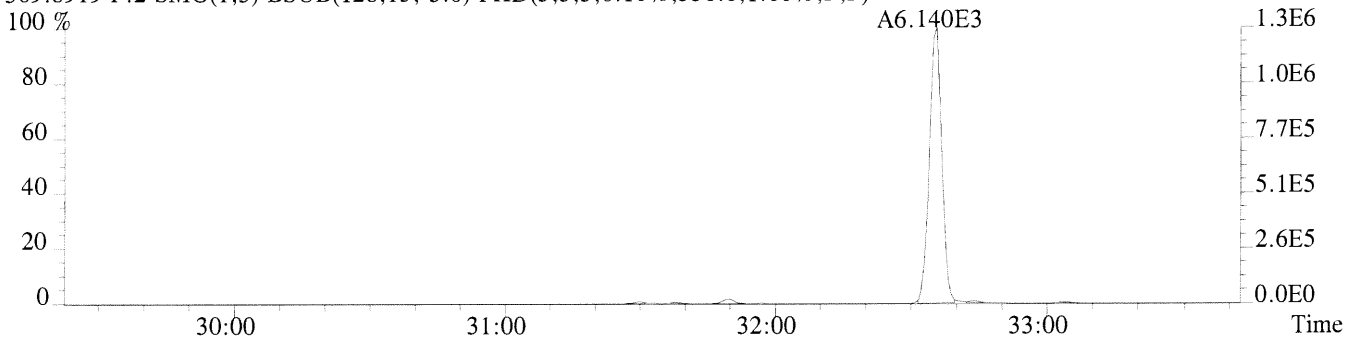
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,308.0,1.00%,F,F)



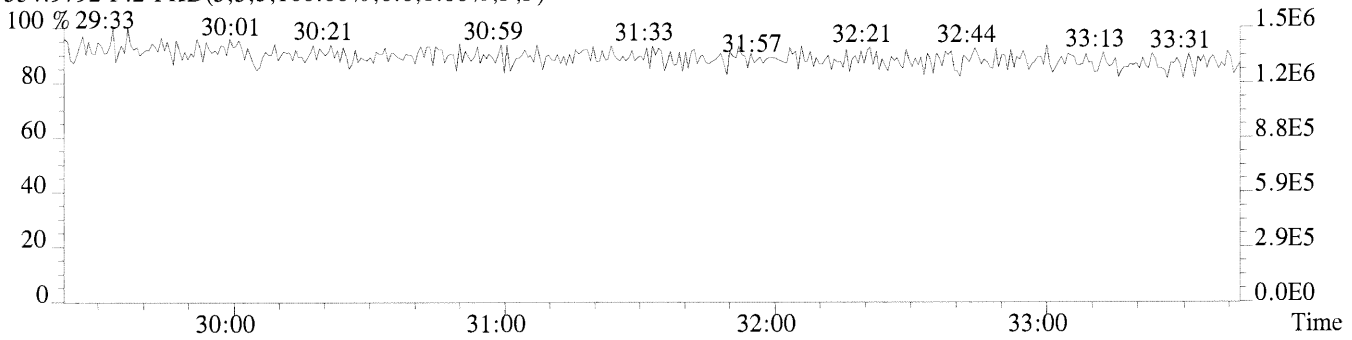
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,288.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,336.0,1.00%,F,F)

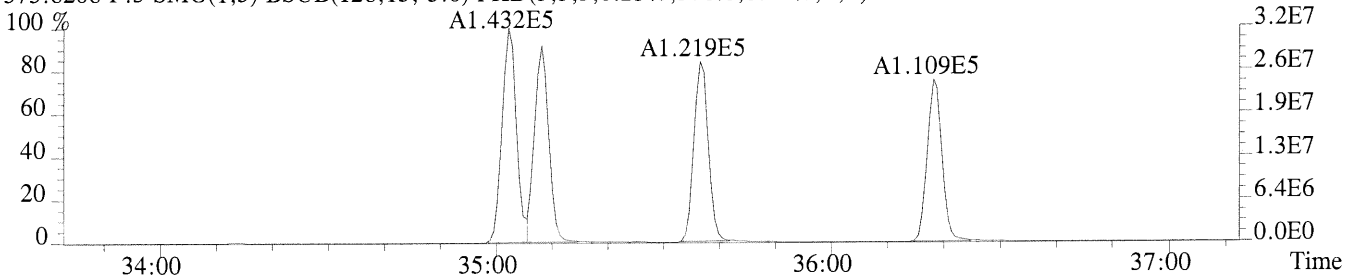


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

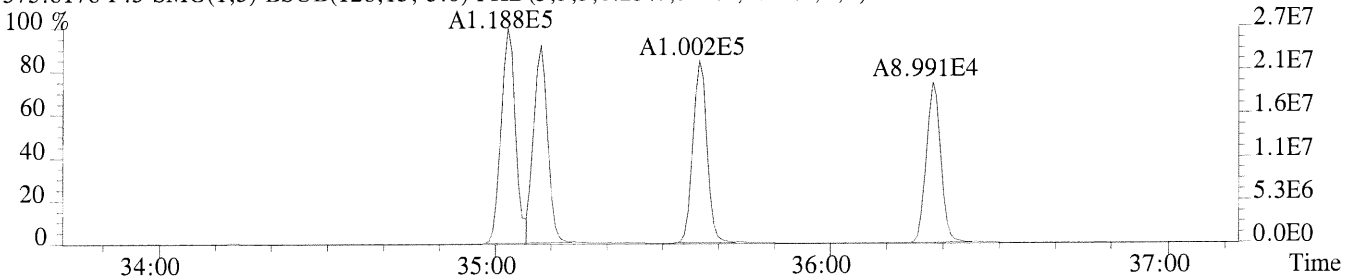


File:U120210 #1-318 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

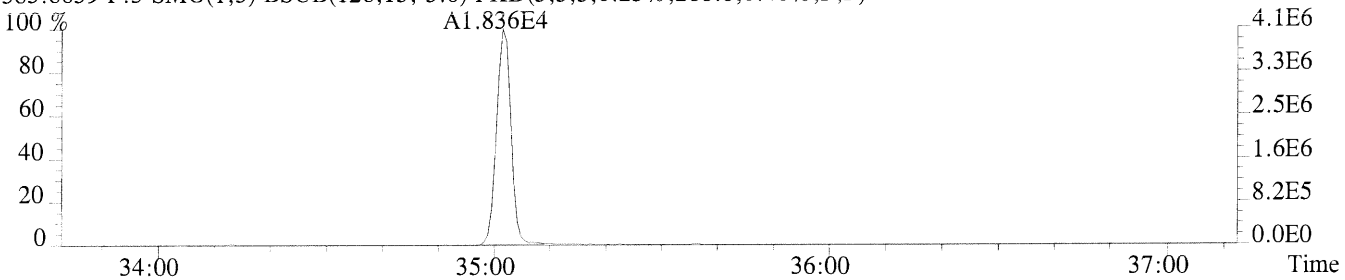
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,376.0,0.40%,F,F)



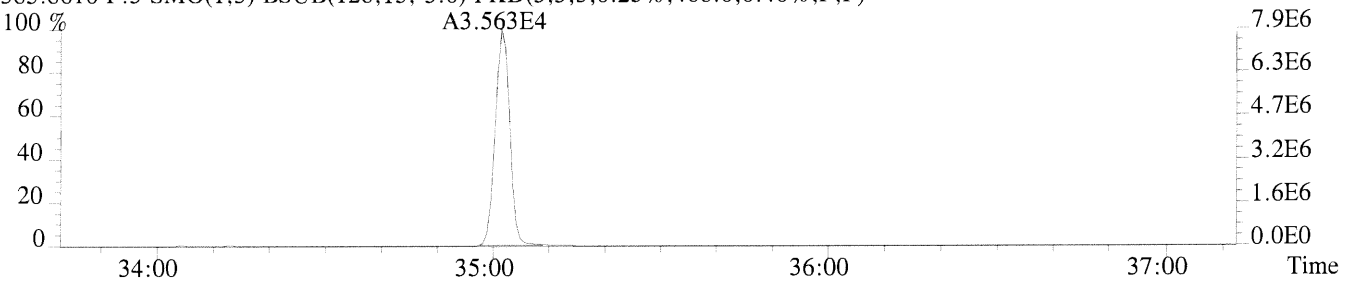
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,384.0,0.40%,F,F)



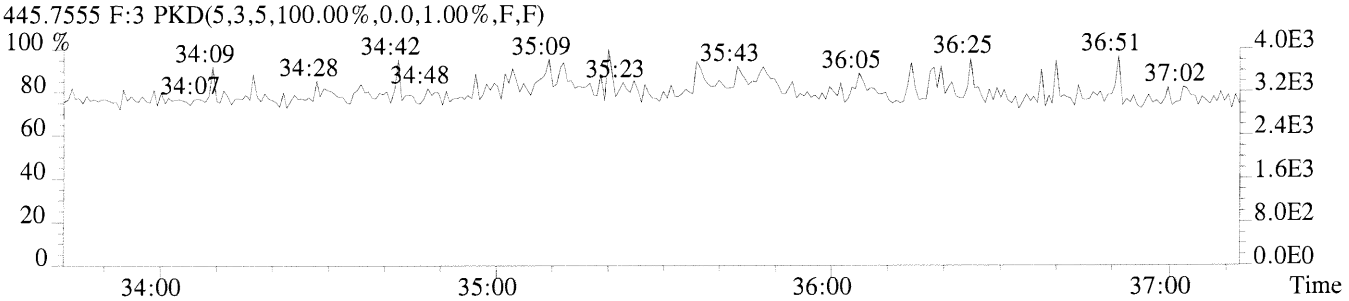
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,288.0,0.40%,F,F)



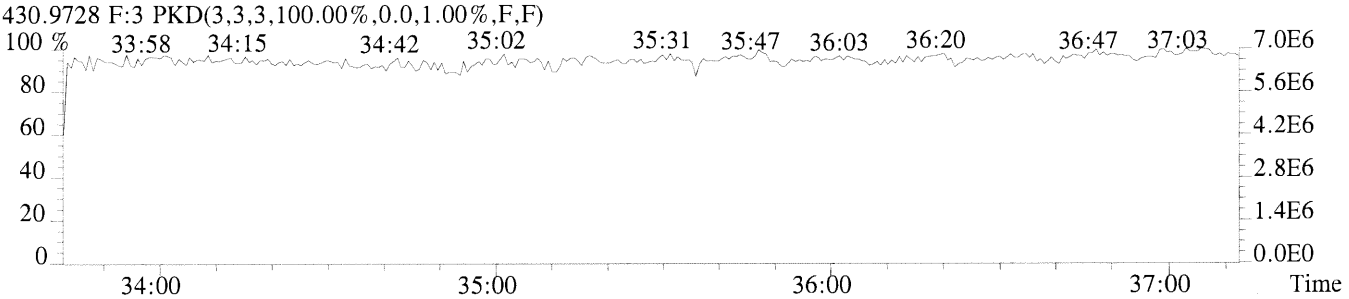
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,468.0,0.40%,F,F)



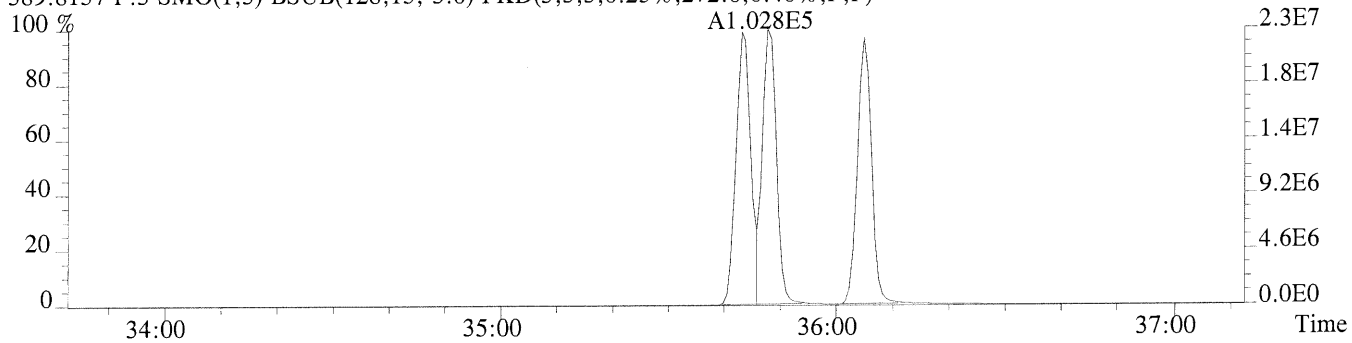
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



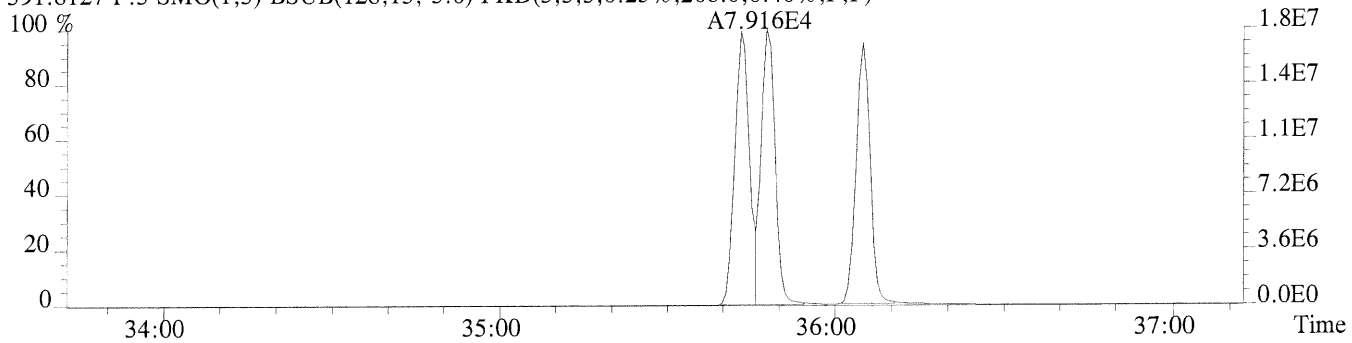
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



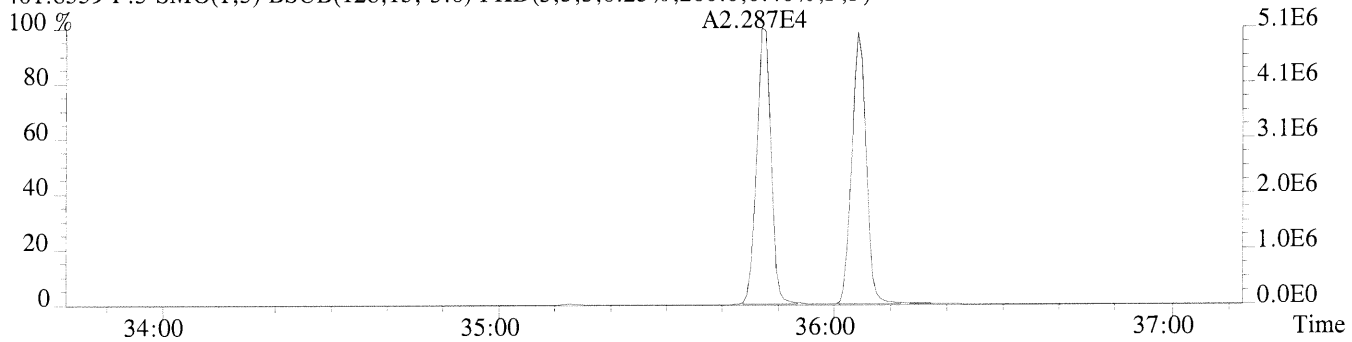
File:U120210 #1-318 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,272.0,0.40%,F,F)



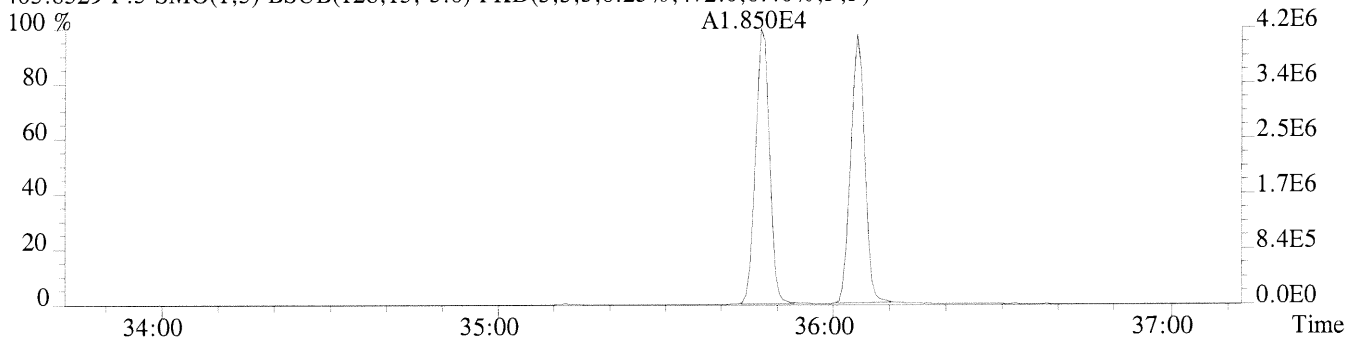
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,268.0,0.40%,F,F)



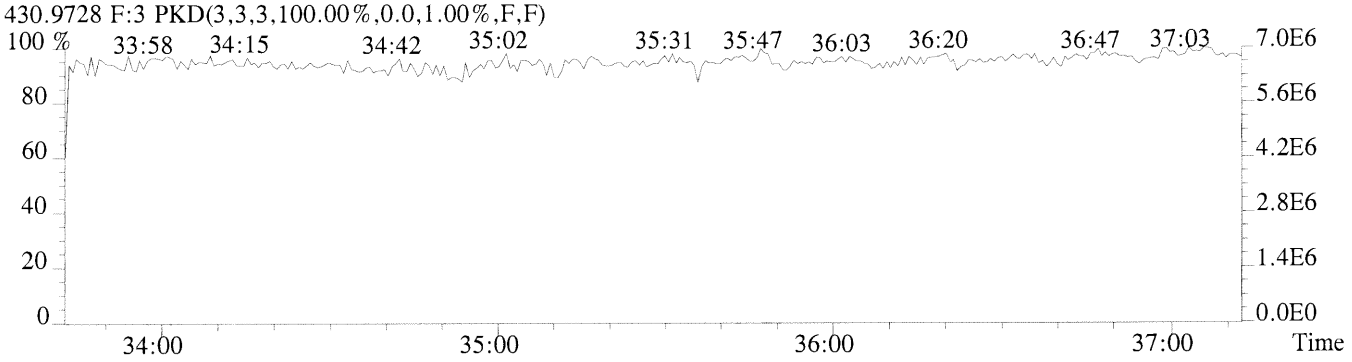
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,200.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,472.0,0.40%,F,F)

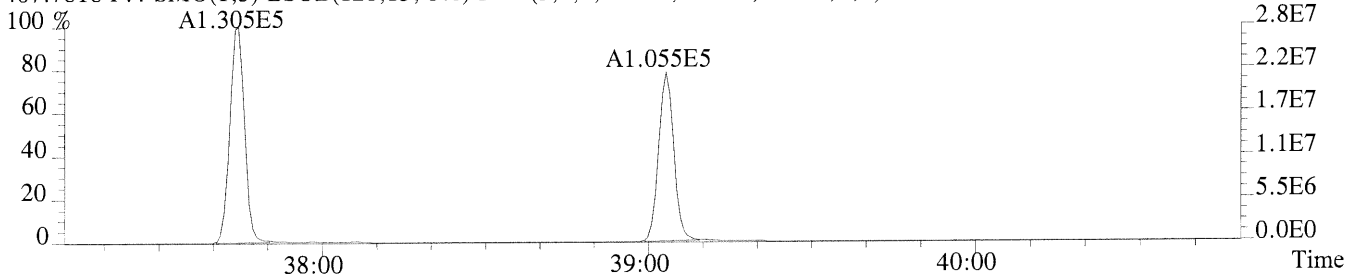


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

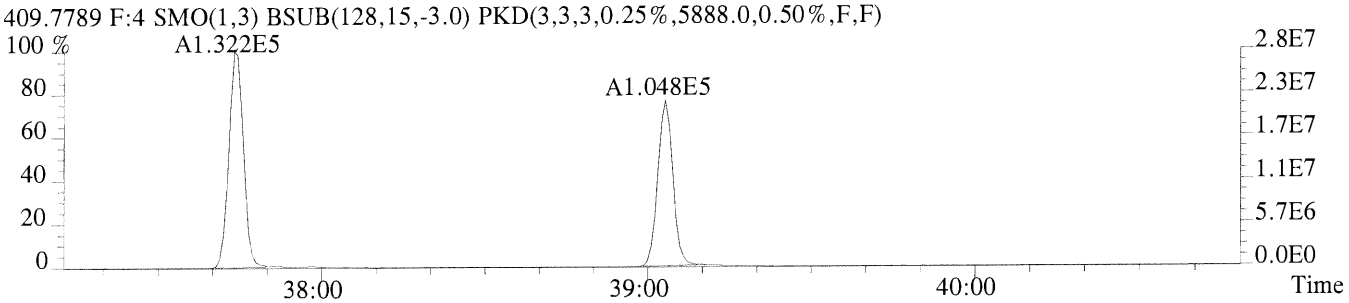


File:U120210 #1-327 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

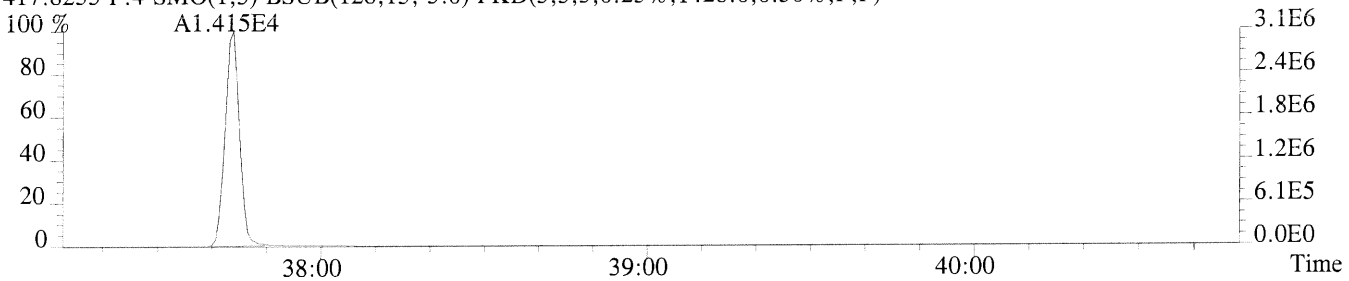
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,6196.0,0.50%,F,F)



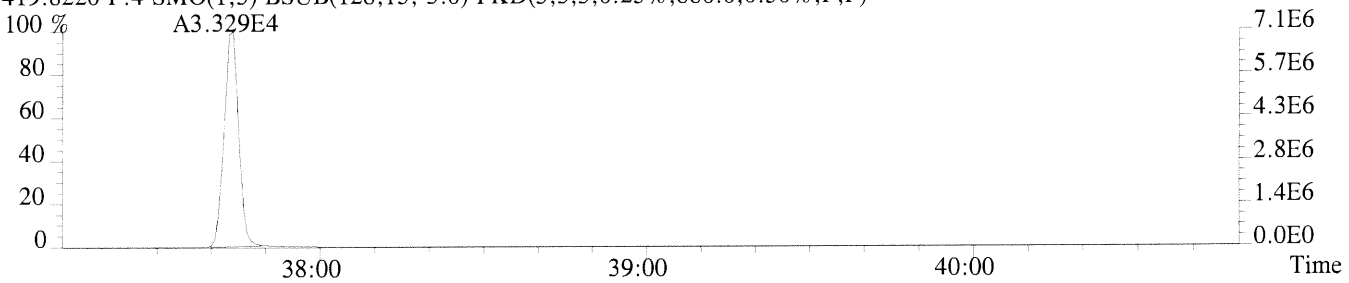
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5888.0,0.50%,F,F)



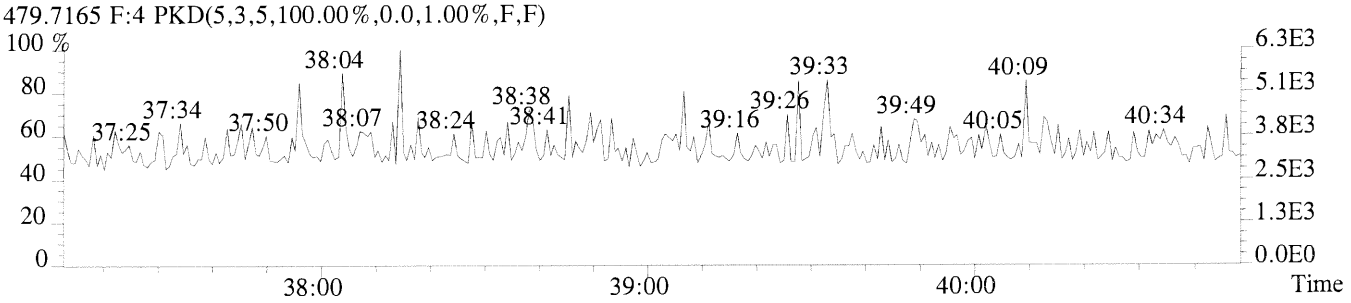
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1428.0,0.50%,F,F)



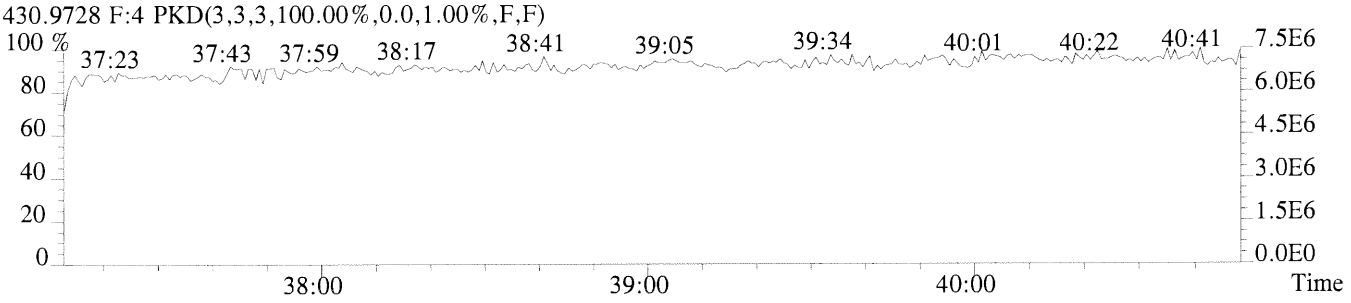
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,880.0,0.50%,F,F)



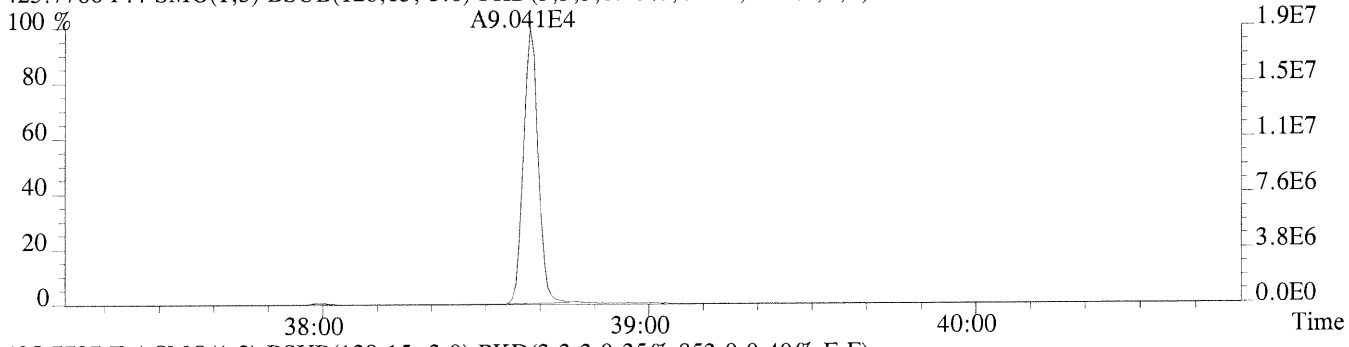
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



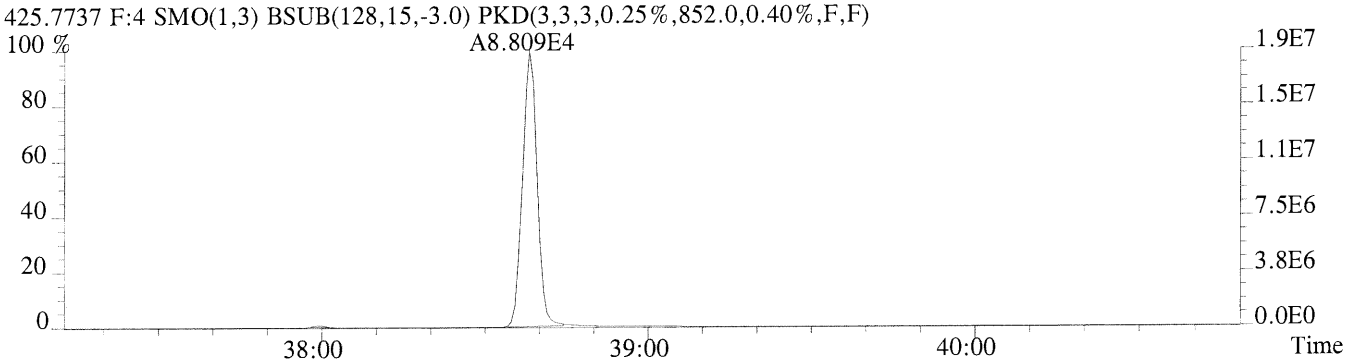
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



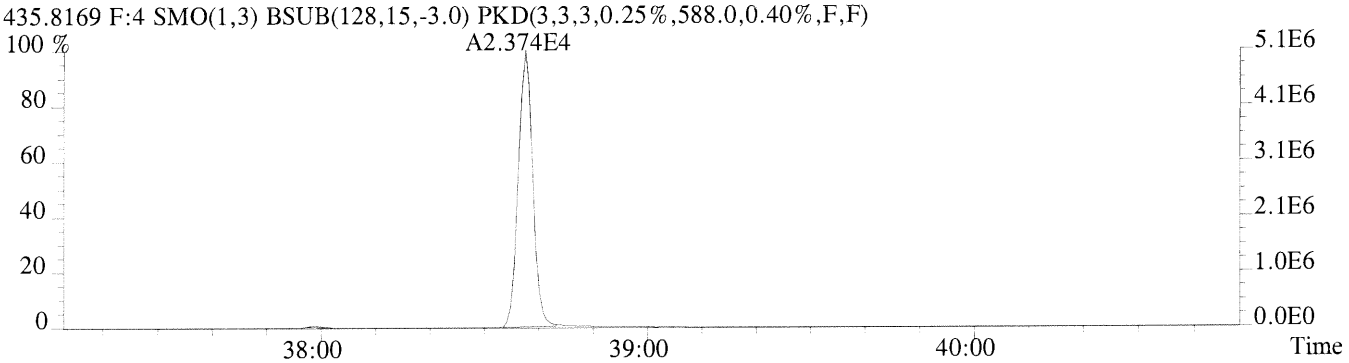
File:U120210 #1-327 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,436.0,0.40%,F,F)



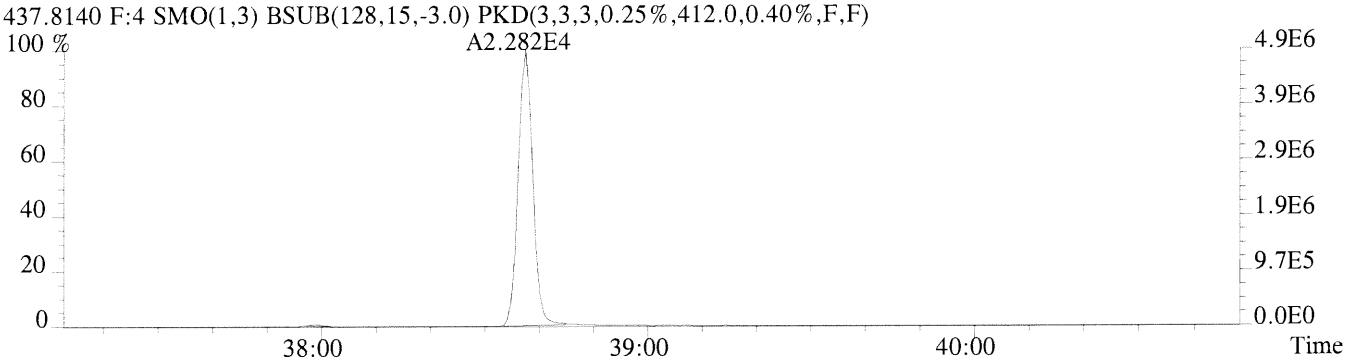
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,852.0,0.40%,F,F)



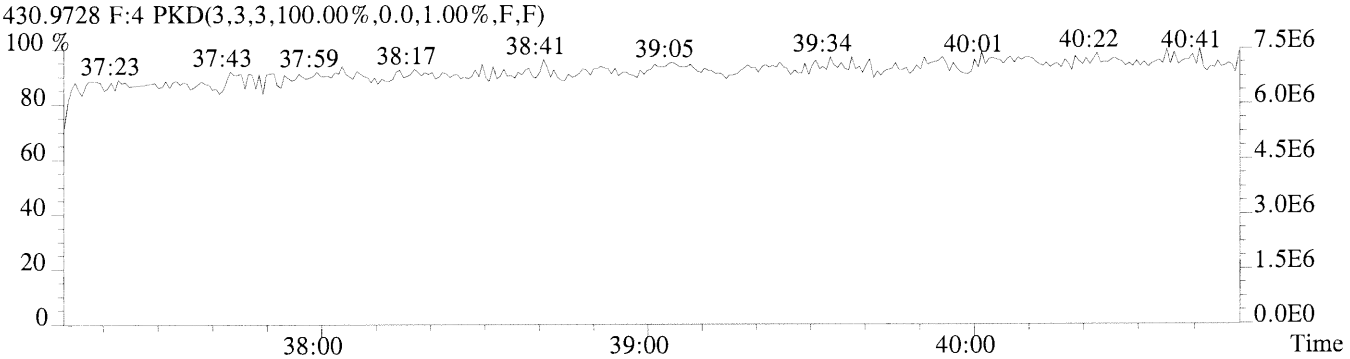
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,588.0,0.40%,F,F)



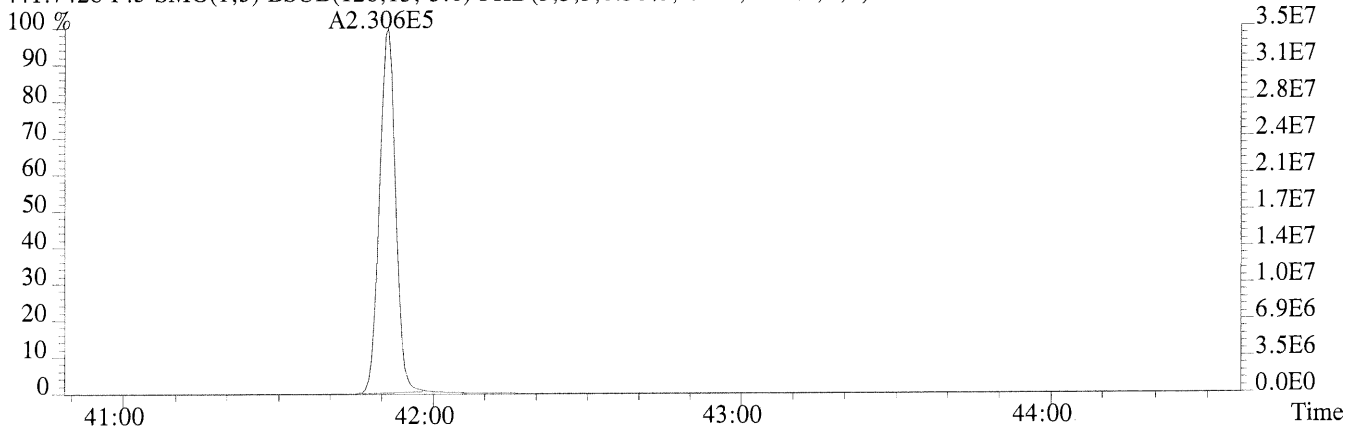
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,412.0,0.40%,F,F)



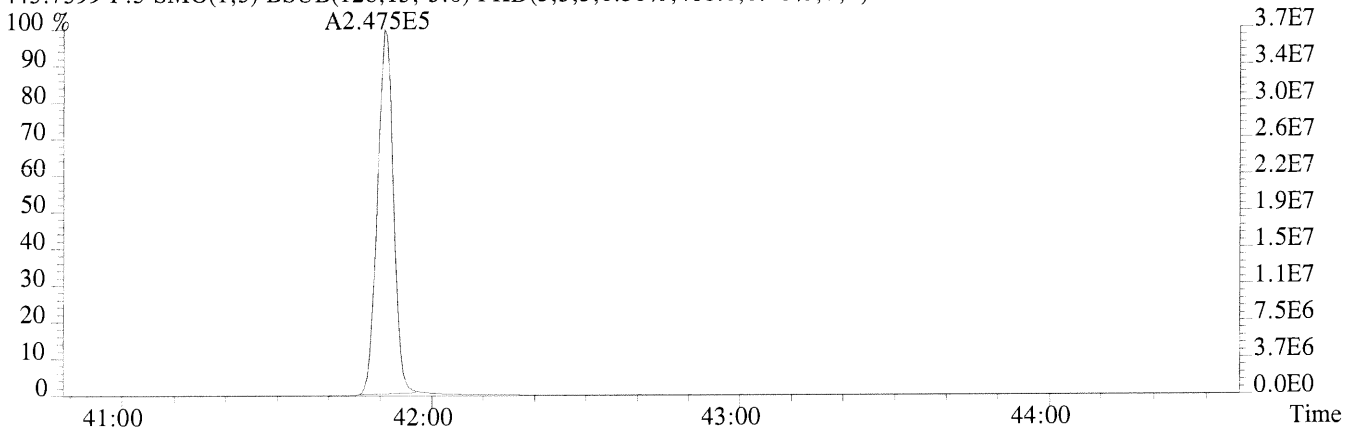
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



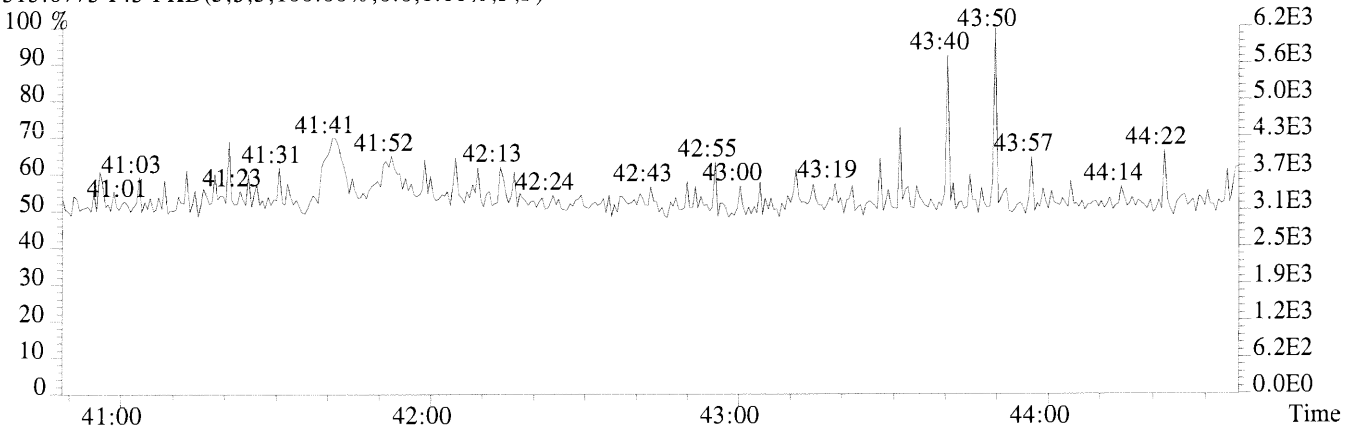
File:U120210 #1-420 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,296.0,0.40%,F,F)



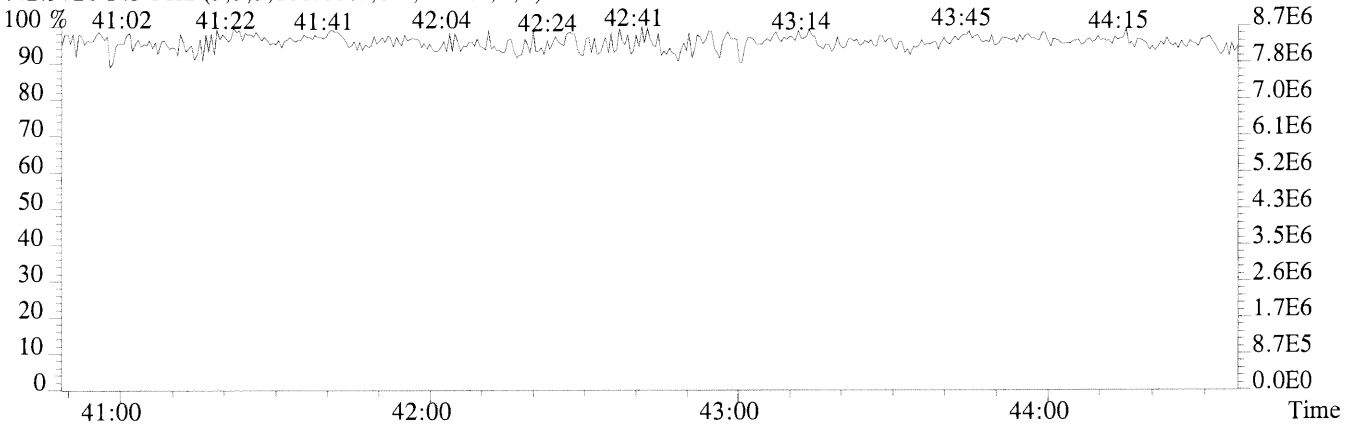
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,468.0,0.40%,F,F)



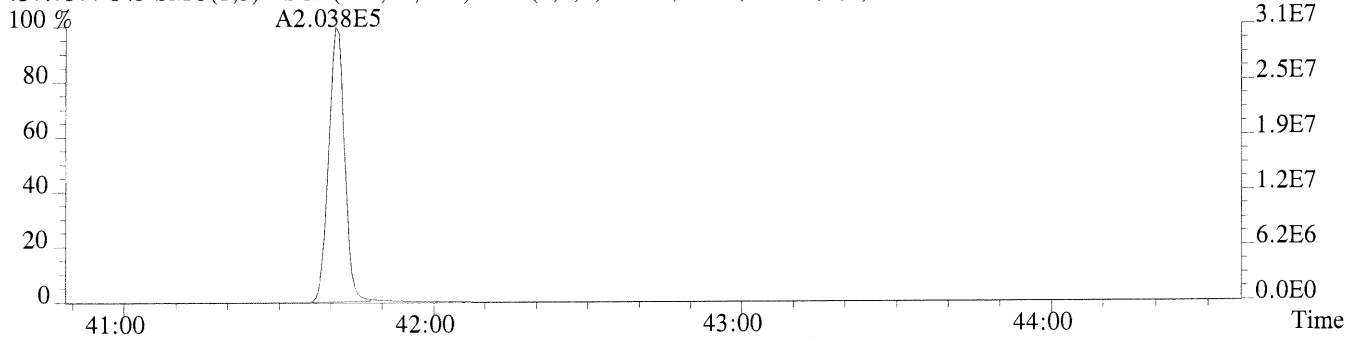
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



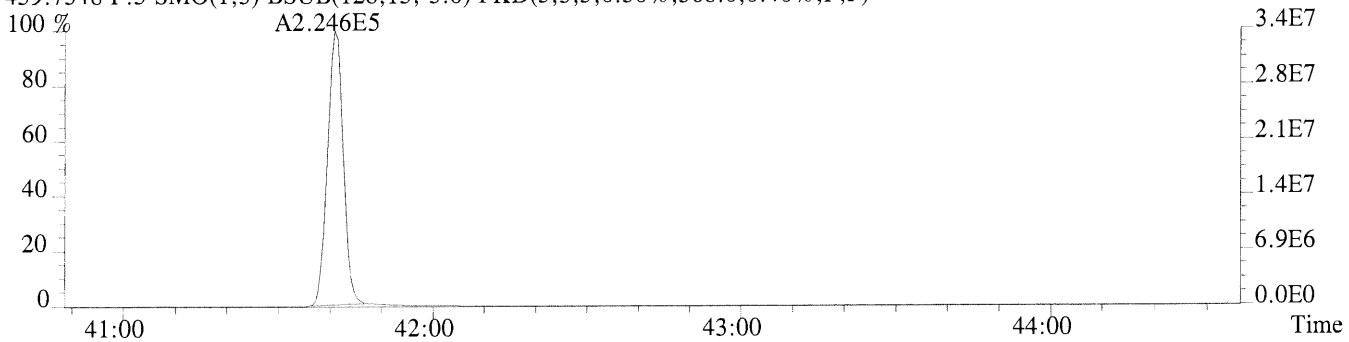
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



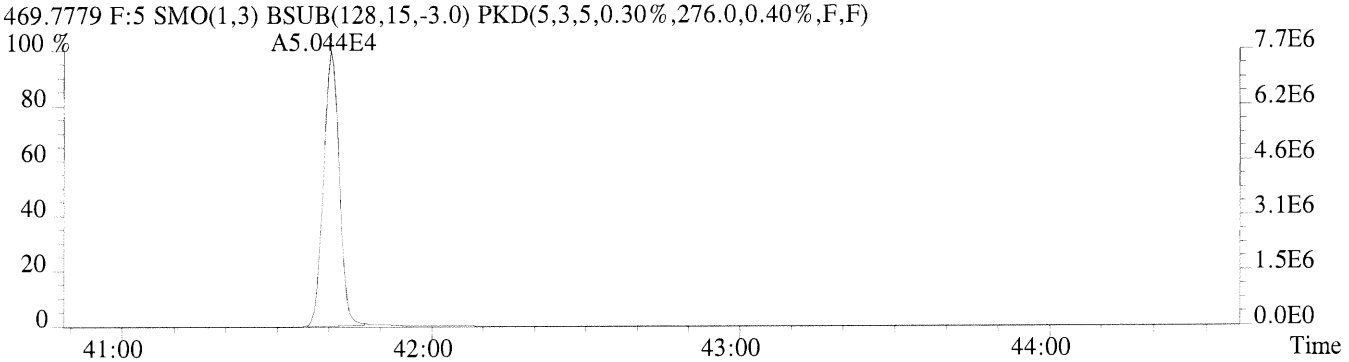
File:U120210 #1-420 Acq: 2-APR-2007 17:13:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,128.0,0.40%,F,F)



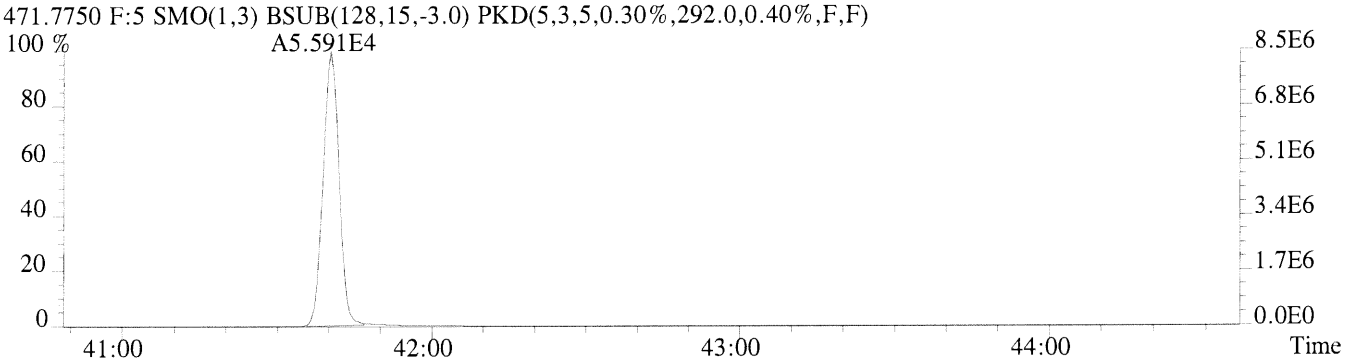
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,368.0,0.40%,F,F)



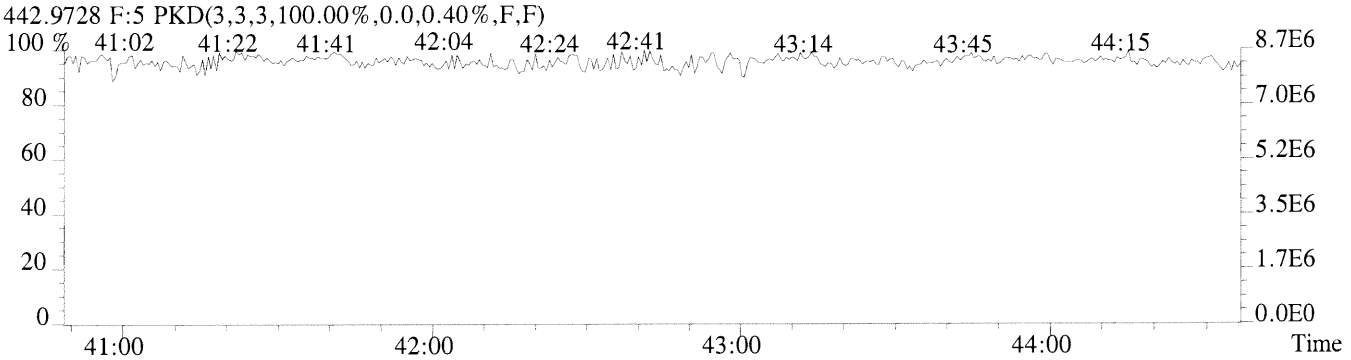
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,276.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,292.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Initial Calibration QC Checklist

ICAL Name: __P807028290I_____

Date: __2 Jul 2008_____

Method: 1613 / 8290 / Tetra / TCDD Only / TCDF Conf / 8280 / 613 / M23

Retention Window/Column Performance Check	Analyst	Second Check
Windows in and first and last eluters labeled	✓	✓
Column Performance shows less than or equal to 25% valley between column specific 2378 isomer and it's closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or it's closest eluters	✓	✓

Initial Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections of greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
2378-TCDD elutes at 25 minutes or later on the DB-5 column	✓	✓
Signal-to-noise of all target analytes and their labeled standards at least 10:1	✓	✓
Valley between labeled 123478 and 123678 HxCDD peaks less than or equal to 50%	NA	N/A
All Manual Intergrations signed and dated and first and final copies of Ical summary included	✓	✓

Analyst: cee Second QC: MC

icalqc.xls 02-23-00

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: Columbia Analytical Services Contract:

Lab Code: TX01411 Case No.: Client No.: SDG No.:

GC Column: db5 ID: 0.25 (mm) Instrument ID: AutoSpec-Ultima

Init. Calib. Date: 07/02/08

Init. Calib.Times: 09:52

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSs) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		P100005	2-JUL-08	09:52:48
ICAL HRCC1		P100006	2-JUL-08	11:02:24
ICAL HRCC2	ICAL HRCC2	P100007	2-JUL-08	11:56:08
ICAL HRCC3	ICAL HRCC3	P100008	2-JUL-08	12:44:22
ICAL HRCC4	ICAL HRCC4	P100009	2-JUL-08	13:43:26
ICAL HRCC5	ICAL HRCC5	P100010	2-JUL-08	14:37:42

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services inc.

An Employee Owned Company

Acq Method: ~~8290CAS~~/1613 Result File: P8702829021

GC Method: ~~8290CAS~~/1613 EDD File: P100013RES

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
6/26/08		P100001	WINDOW DEFINE	D4-90-2		JS	Run Aborted Ground column Broke	
		P100002	ICAL HRCC3	D8-2-2A				
		P100003	Window Define	D4-90-2				
		P100004	CCAL CS3	D8-2-2A				
7/2/08	9:52	P100005	Window Define	D4-90-2		AC		
	11:02	P100006	ICAL HRCC1	~~D449-5~~ AC	7/2/08		D5-49-5	
	11:56	P100007	ICAL HRCC2	D5-49-4				
	12:44	P100008	ICAL HRCC3	D8-2-2A				
	13:43	P100009	ICAL HRCC4	D5-49-2				
	14:37	P100010	ICAL HRCC5	D5-49-1				
	15:44	P100011	HRCC3 CSV	D4-61-1				
	08:27	P100012	Window Define	D4-90-2		JC		
	09:27	P100013	CCAL HRCC3	D8-2-2A				
	10:45	P100014	EQ0800275-01	METHOD BLANK				
	11:33	P100015	LCS800603-006	AAFBMBTCRAS022				
	~~14:50~~ 12:20	P100016	E0800603-007	1	023			

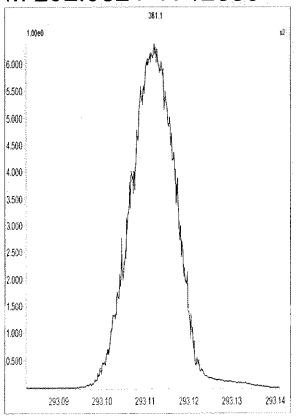
Reviewed by: CC

Experiment Calibration Report **MassLynx 4.1**

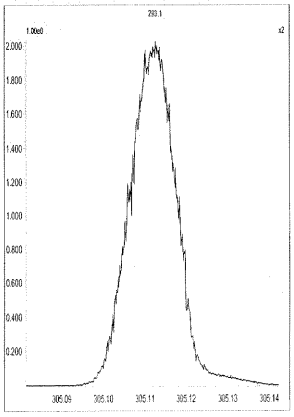
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, July 02, 2008 09:43:17 Central Daylight Time

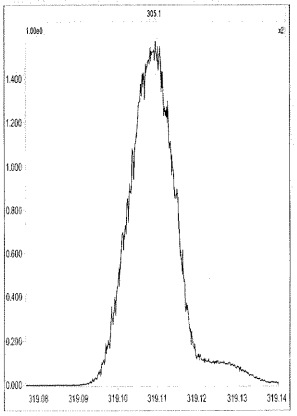
M 292.9824 R 12886



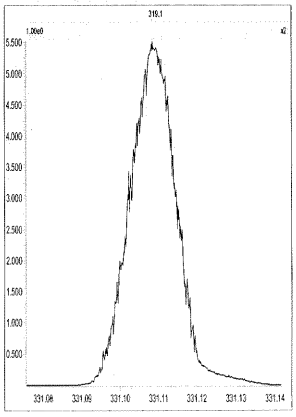
M 304.9824 R 12373



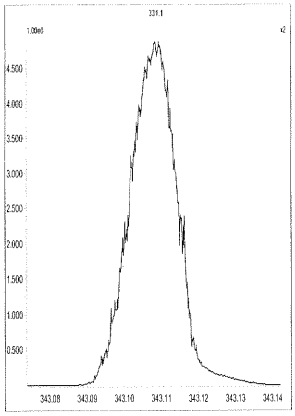
M 318.9792 R 9364



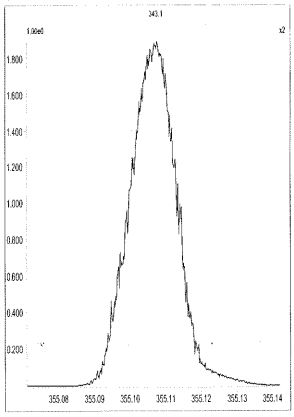
M 330.9792 R 12135



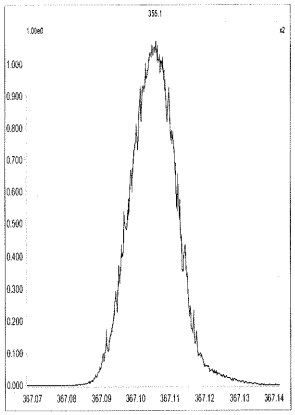
M 342.9792 R 11685



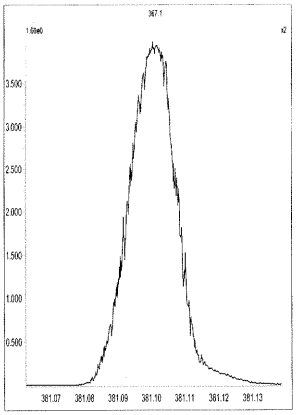
M 354.9792 R 12137



M 366.9792 R 11627



M 380.9760 R 11630

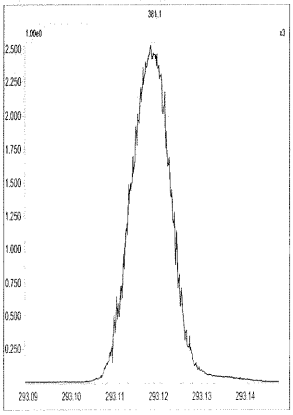


Experiment Calibration Report **MassLynx 4.1**

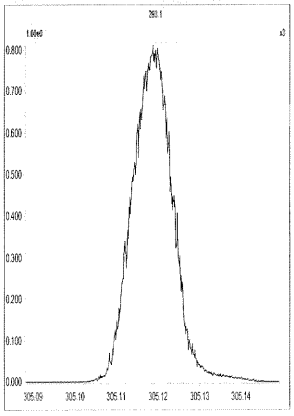
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Wednesday, July 02, 2008 16:52:31 Central Daylight Time

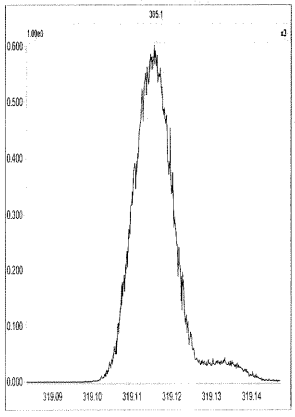
M 292.9824 R 14367



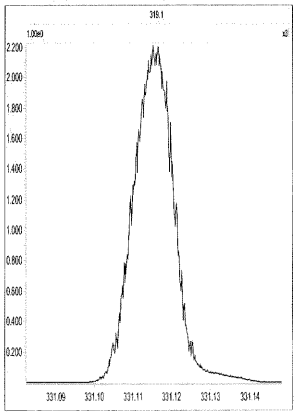
M 304.9824 R 14283



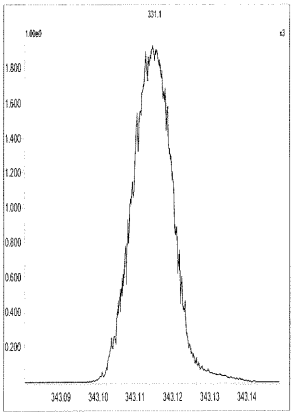
M 318.9792 R 10201



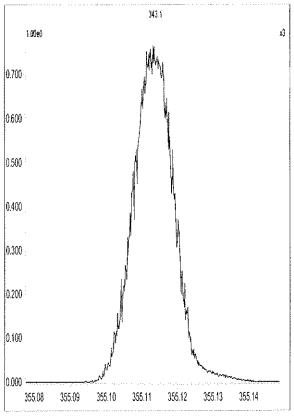
M 330.9792 R 14285



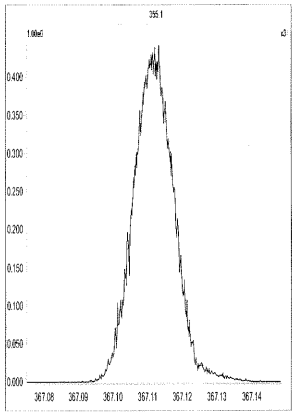
M 342.9792 R 14042



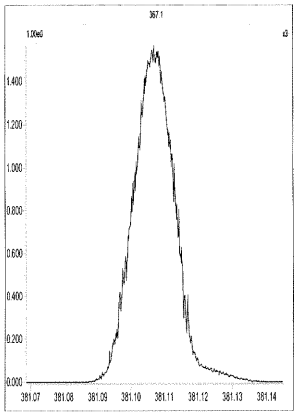
M 354.9792 R 14369



M 366.9792 R 14123



M 380.9760 R 14048



5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID:

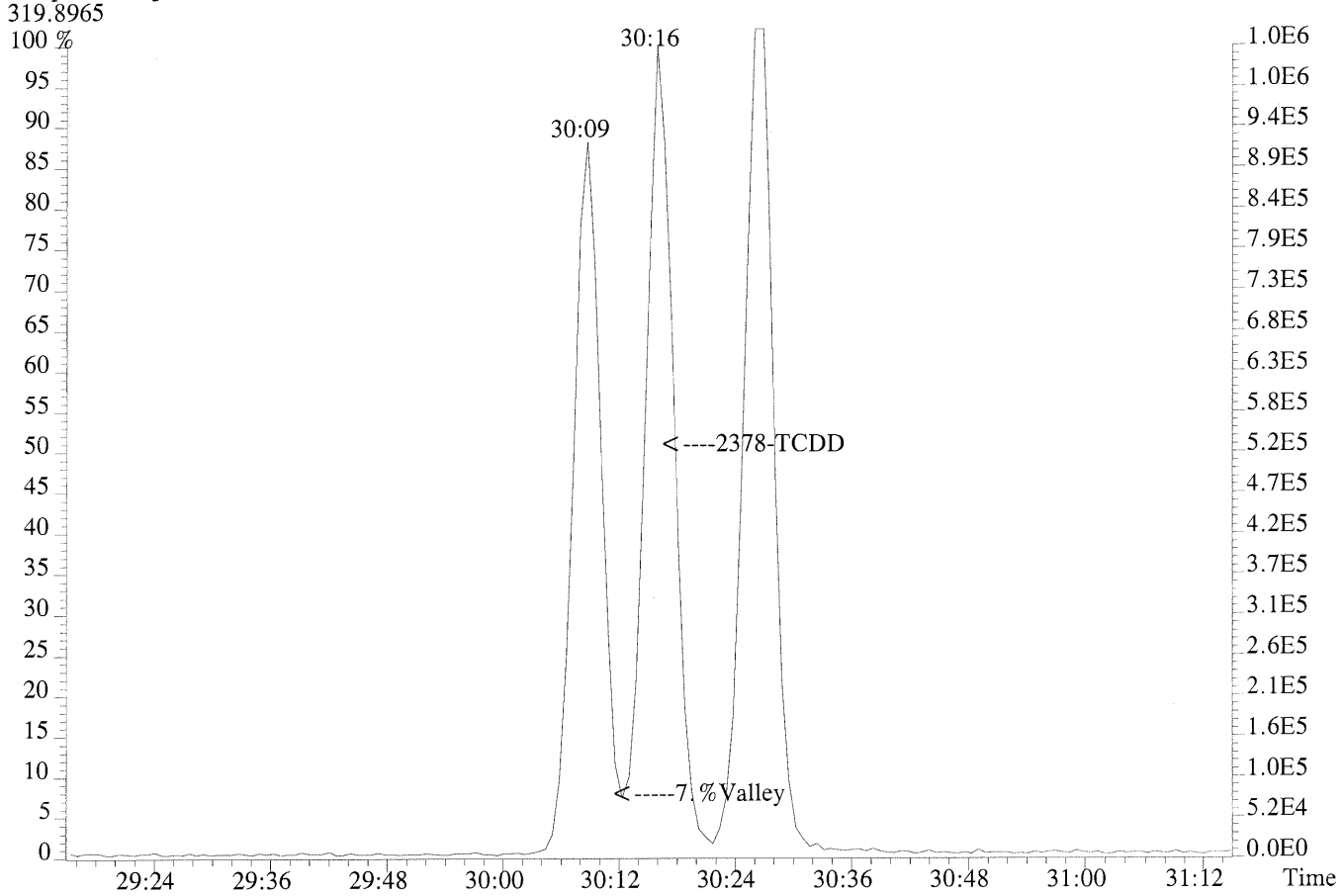
WDM

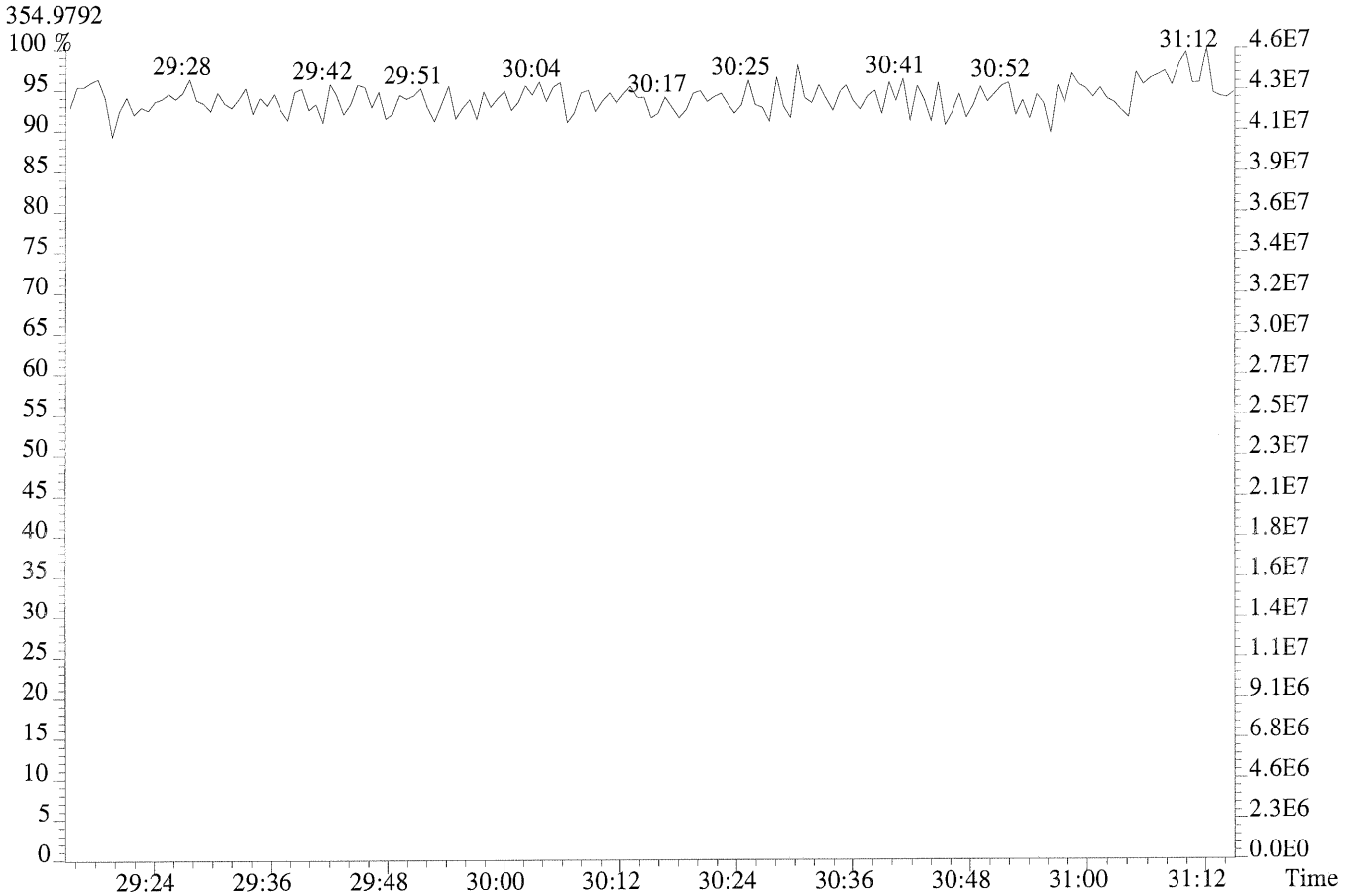
Lab Name: COLUMBIA ANALYTICAL SERVICES
Lab Code: CAS Case No.: _____ SDG No.:
GC Column: DB-5 ID: 0.25 (mm) Lab File ID: P100005
Date Analyzed: 2-JUL-2008
Time Analyzed: 09:52:48

Congener	Retention Time First Eluting	Retention Time Last Eluting
TCDF	25:46	31:21
TCDD	27:25	31:19
PeCDF	31:35	35:18
PeCDD	32:53	35:10
HxCDF	36:08	38:25
HxCDD	36:38	38:05
HpCDF	39:48	41:09
HpCDD	40:03	40:44

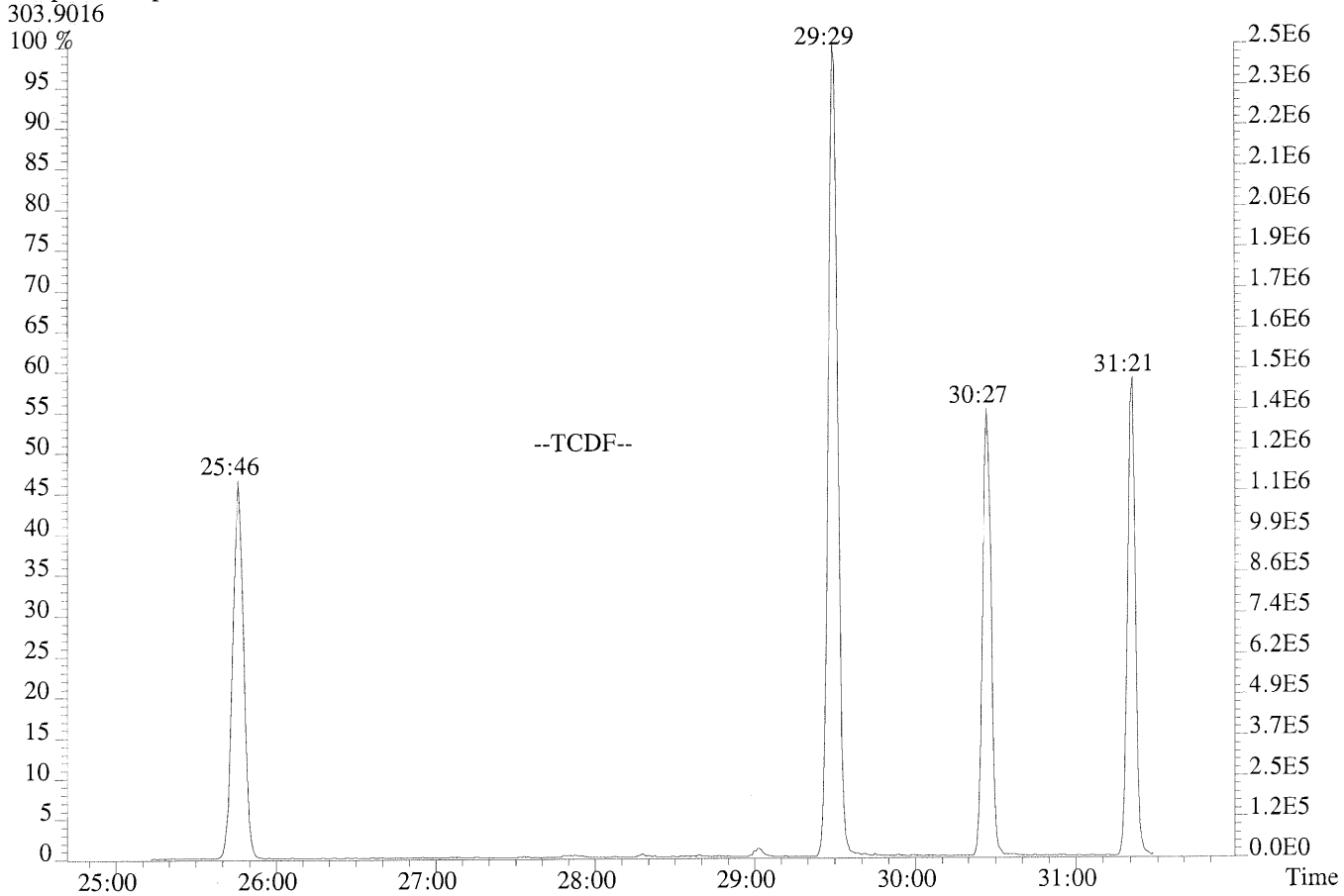
% Valley 2378-TCDD: 7. %

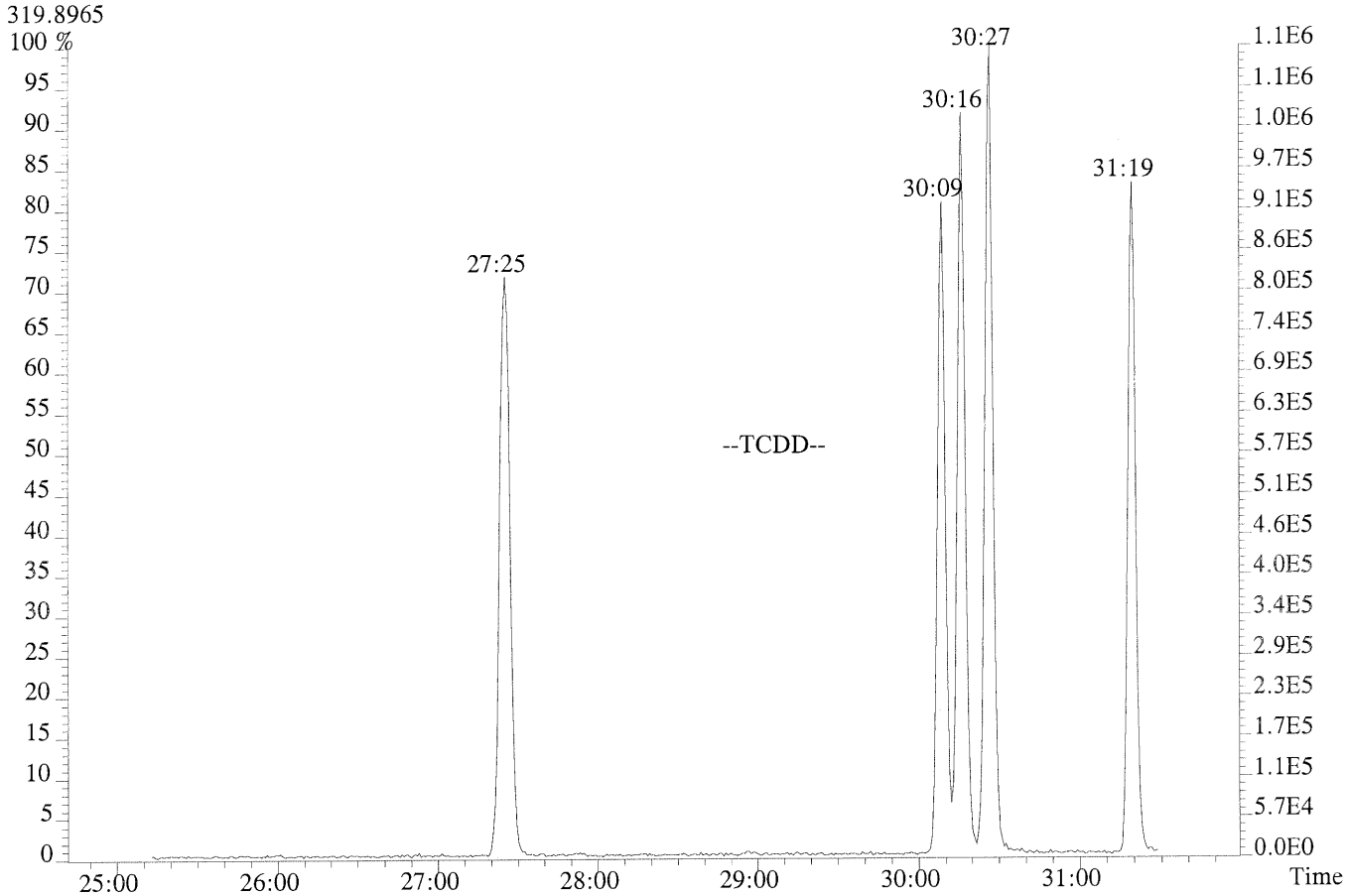
File:P100005 #1-523 Acq: 2-JUL-2008 09:52:48 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:Window define D4-90-2



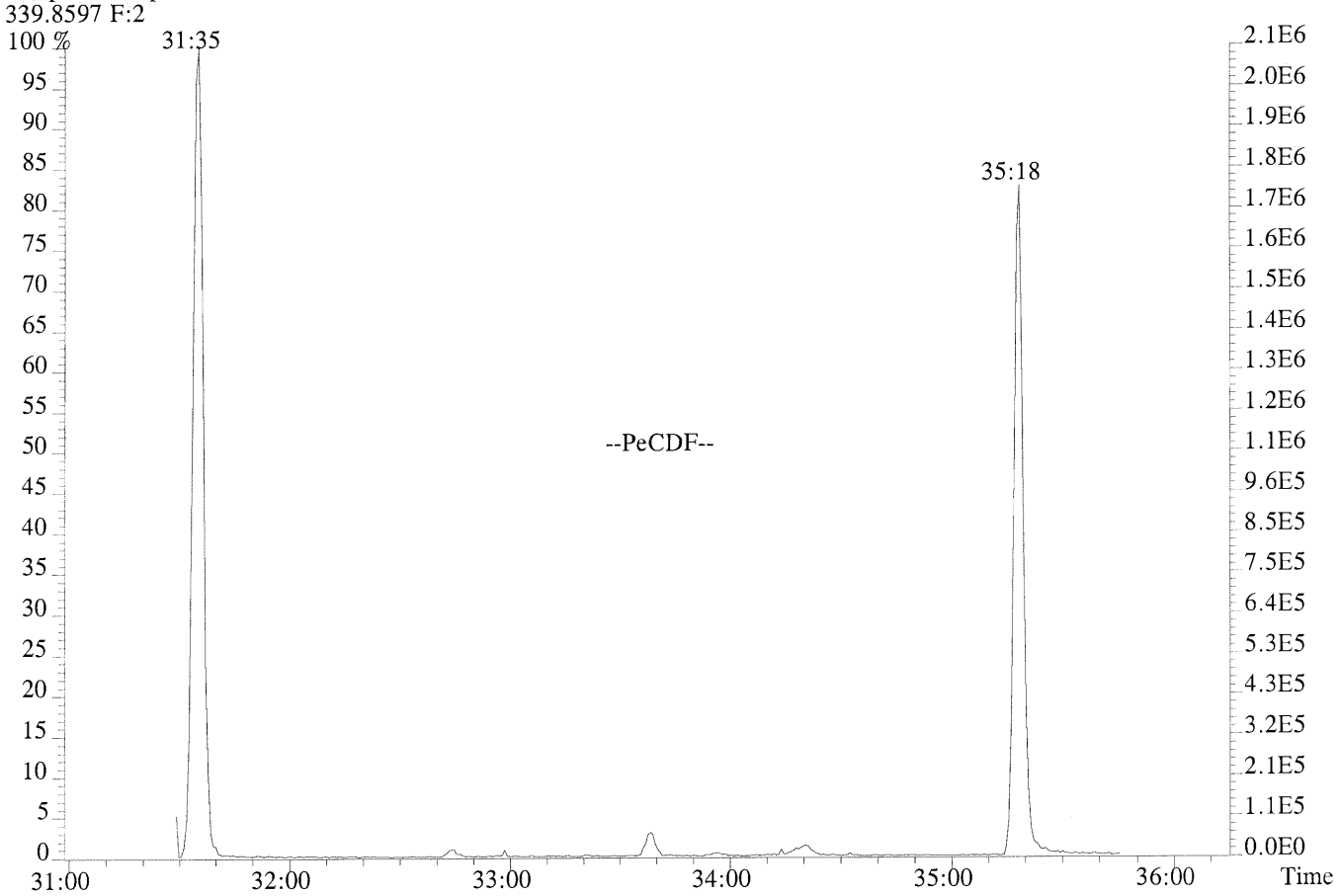


File:P100005 #1-523 Acq: 2-JUL-2008 09:52:48 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:Window define D4-90-2

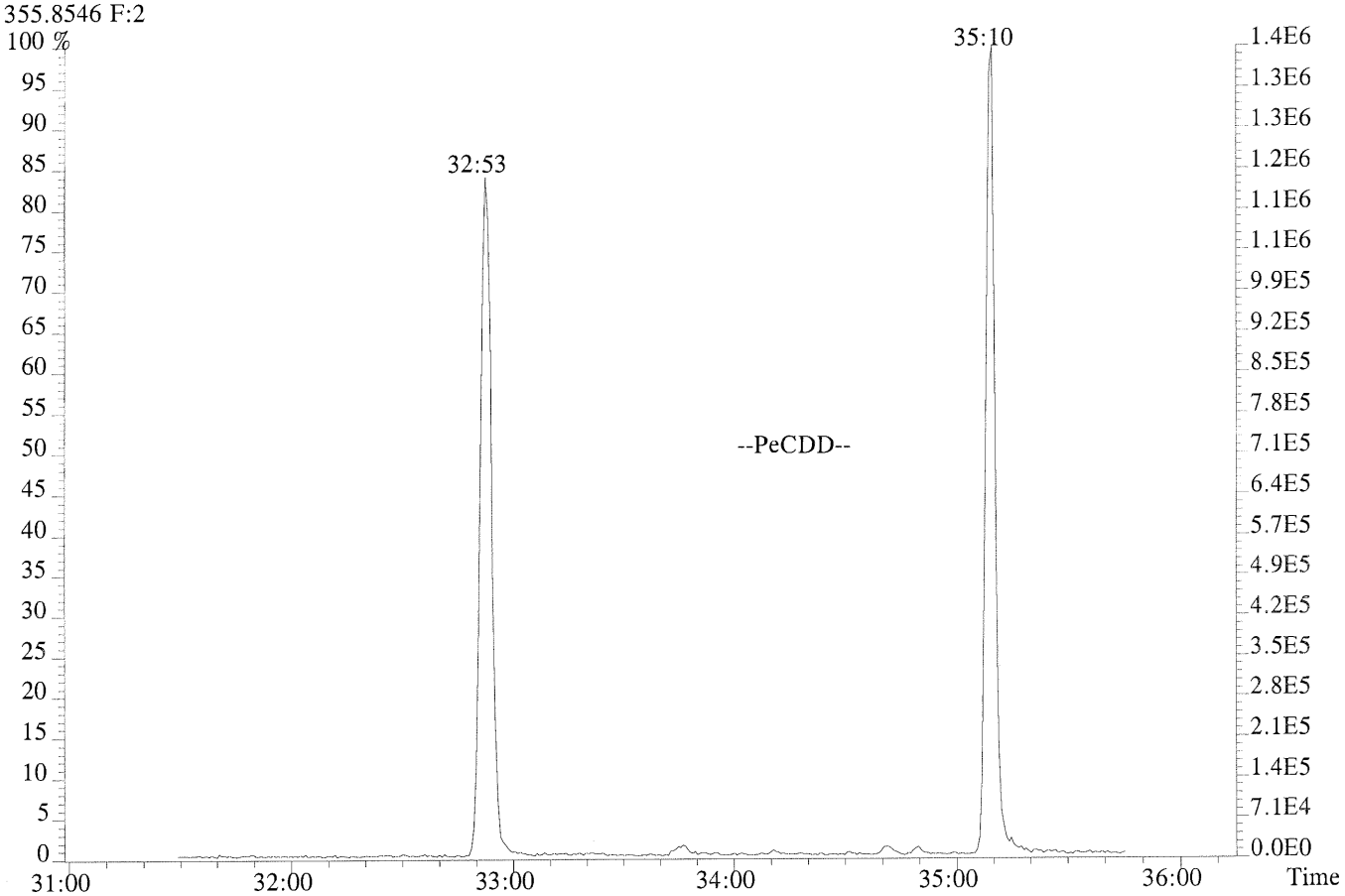




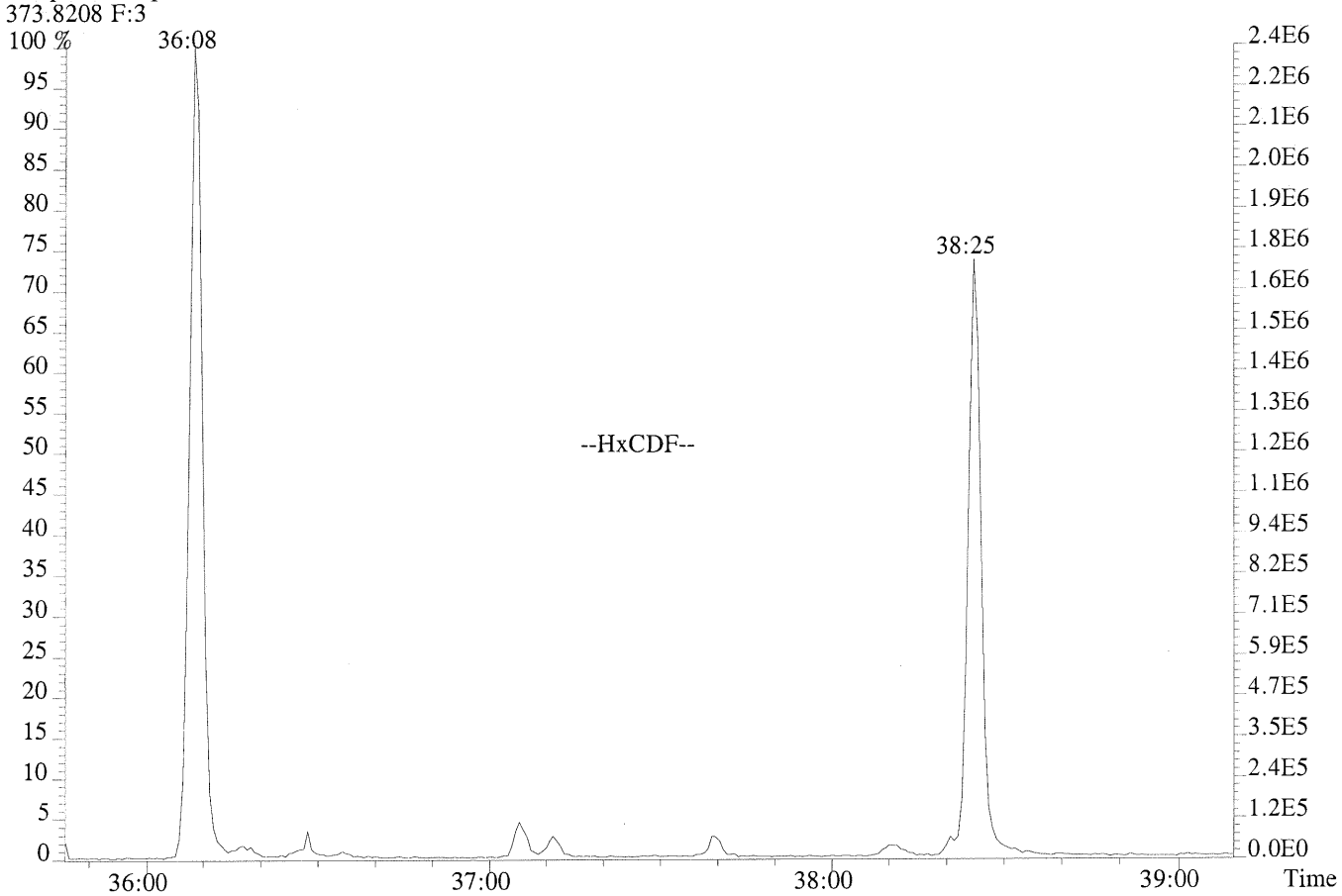
File:P100005 #1-388 Acq: 2-JUL-2008 09:52:48 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:Window define D4-90-2
339.8597 F:2



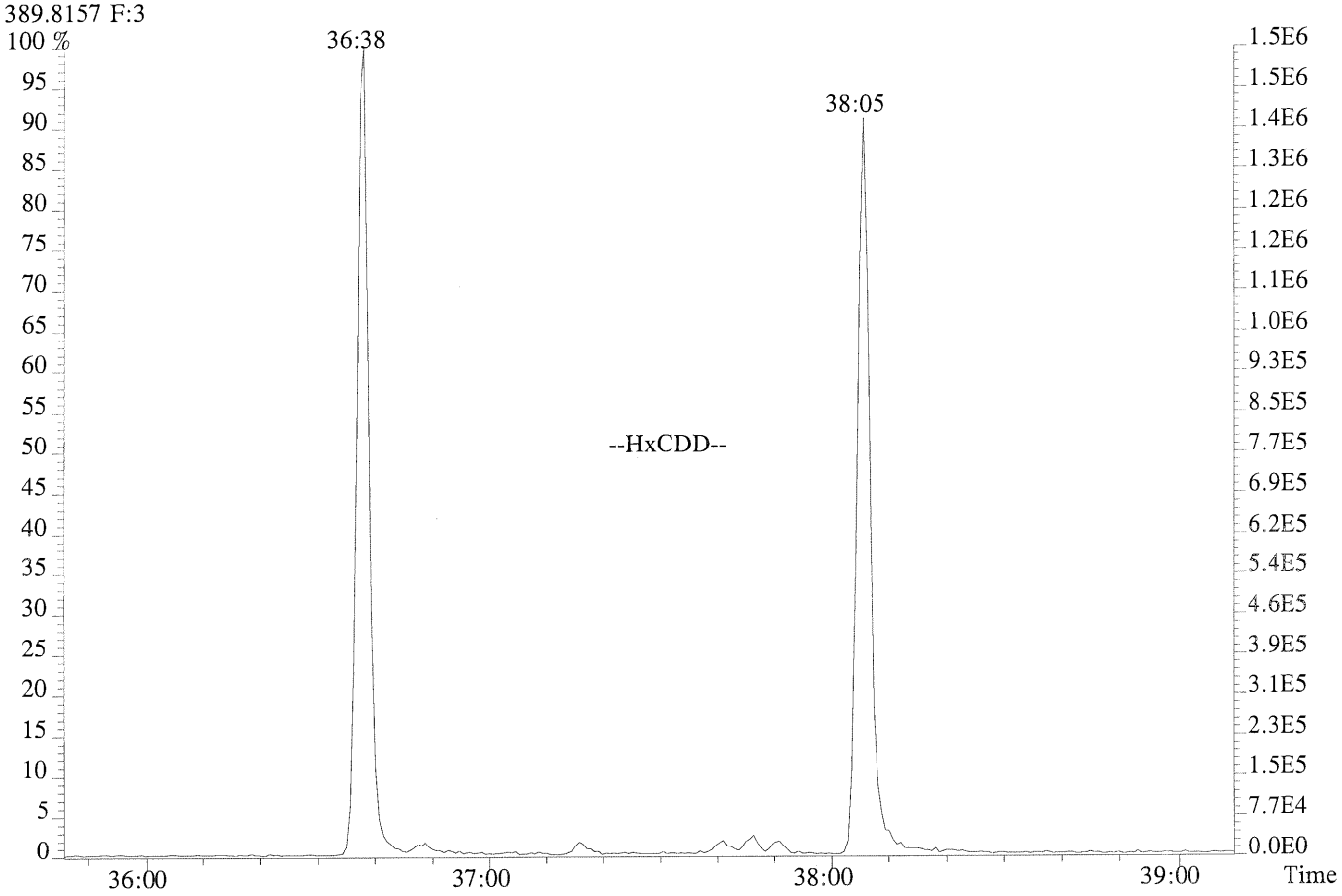
355.8546 F:2



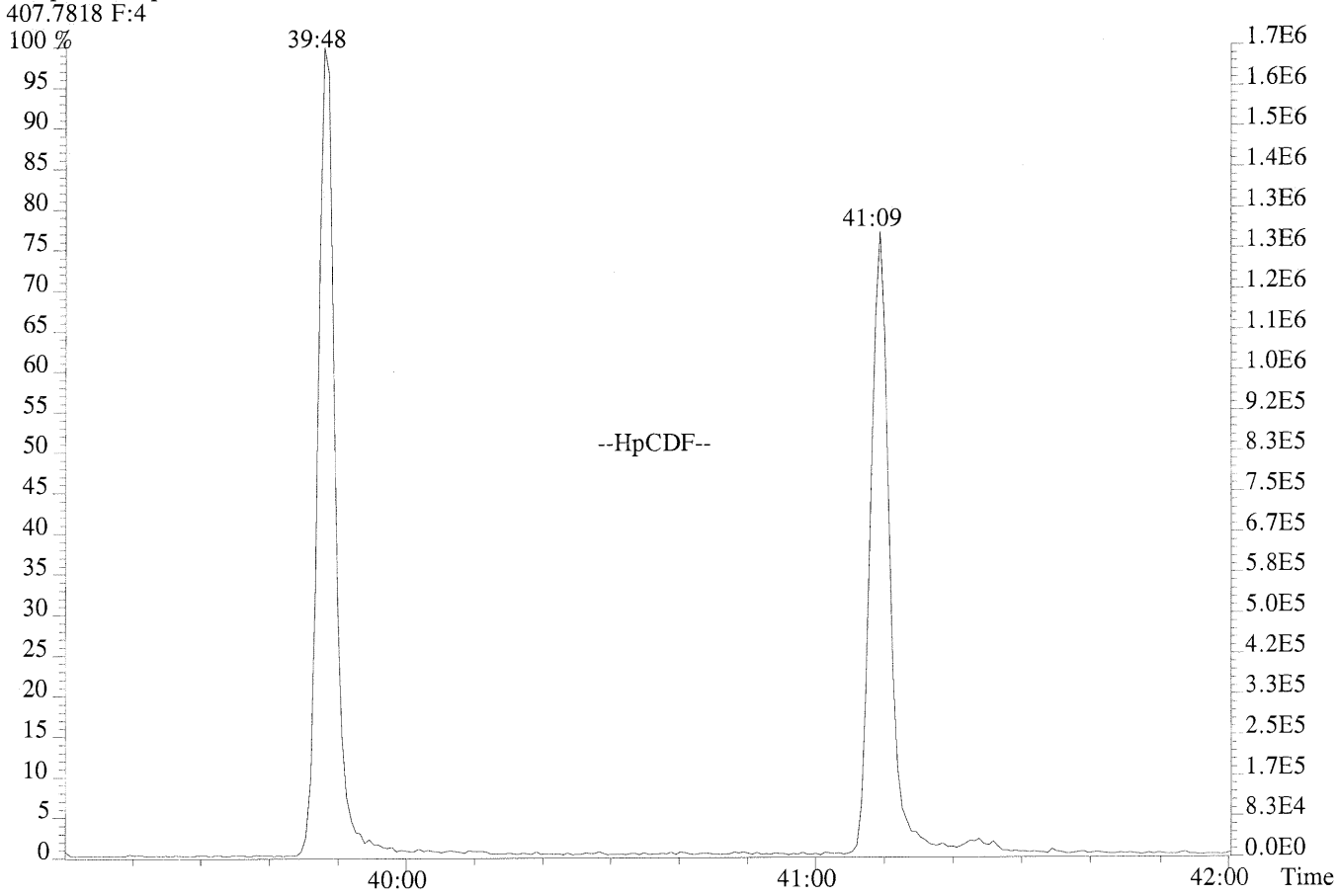
File:P100005 #1-309 Acq: 2-JUL-2008 09:52:48 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:Window define D4-90-2
373.8208 F:3



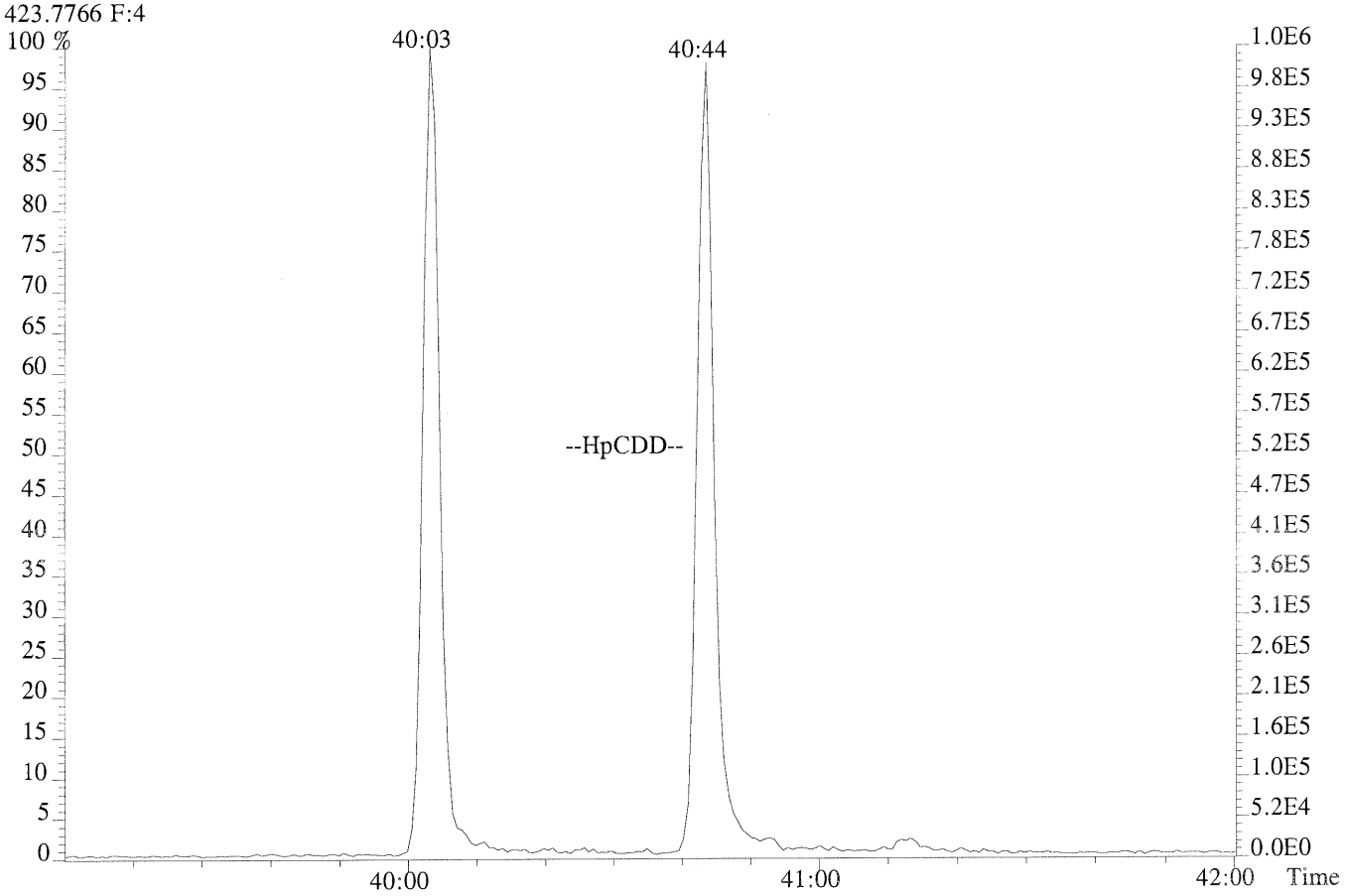
389.8157 F:3



File:P100005 #1-258 Acq: 2-JUL-2008 09:52:48 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:Window define D4-90-2
407.7818 F:4



423.7766 F:4



FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/02/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: P100006 HRCC4 Data Filename: P100009

HRCC2 Data Filename: P100007 HRCC5 Data Filename: P100010

HRCC3 Data Filename: P100008

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
NATIVE ANALYTES							
2,3,7,8-TCDD	0.93	0.87	0.96	0.92	0.94	0.92	3.47
1,2,3,7,8-PeCDD	0.80	0.86	0.90	0.91	0.93	0.88	5.79
1,2,3,4,7,8-HxCDD	0.89	0.92	0.85	0.94	1.03	0.93	7.13
1,2,3,6,7,8-HxCDD	1.02	1.17	1.16	1.21	1.12	1.13	6.27
1,2,3,7,8,9-HxCDD	1.09	1.04	1.00	1.02	1.04	1.04	3.41
1,2,3,4,6,7,8-HpCDD	1.16	0.99	0.98	0.98	1.01	1.02	7.35
OCDD	1.10	1.00	1.00	1.00	1.02	1.02	4.36
2,3,7,8-TCDF	0.99	0.93	1.02	0.98	1.00	0.98	3.05
1,2,3,7,8-PeCDF	0.87	0.95	1.02	1.00	1.03	0.97	6.73
2,3,4,7,8-PeCDF	0.90	0.98	1.04	1.01	1.05	1.00	5.98
1,2,3,4,7,8-HxCDF	1.19	1.21	1.26	1.22	1.23	1.22	2.17
1,2,3,6,7,8-HxCDF	1.16	1.27	1.39	1.34	1.38	1.31	7.40
1,2,3,7,8,9-HxCDF	1.09	1.04	1.06	1.04	1.08	1.06	2.34
2,3,4,6,7,8-HxCDF	1.08	1.12	1.20	1.16	1.21	1.15	4.82
1,2,3,4,6,7,8-HpCDF	1.66	1.48	1.57	1.49	1.54	1.55	4.49
1,2,3,4,7,8,9-HpCDF	1.29	1.13	1.13	1.15	1.17	1.17	5.87
OCDF	1.40	1.31	1.34	1.36	1.39	1.36	2.62

(1) The %RSD for the 17 unlabeled standard must not exceed +/- 20%, see Section 7.7.2.1, Method 8290.

8290F3A

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/02/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: P100006 HCC4 Data Filename: P100009

HCC2 Data Filename: P100007 HCC5 Data Filename: P100010

HCC3 Data Filename: P100008

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	1.09	1.09	1.05	1.12	1.15	1.10	3.58
13C-1,2,3,7,8-PeCDD	0.99	0.96	0.97	0.96	1.01	0.98	2.33
13C-1,2,3,6,7,8-HxCDD	0.99	0.98	0.98	1.00	1.01	0.99	1.31
13C-1,2,3,4,6,7,8-HpCDD	0.88	0.87	0.79	0.87	0.84	0.85	4.62
13C-OCDD	0.80	0.84	0.71	0.83	0.79	0.79	6.26
13C-2,3,7,8-TCDF	1.39	1.41	1.36	1.41	1.46	1.41	2.65
13C-1,2,3,7,8-PeCDF	1.37	1.35	1.34	1.38	1.44	1.38	2.73
13C-1,2,3,4,7,8-HxCDF	1.36	1.38	1.24	1.40	1.36	1.35	4.64
13C-1,2,3,4,6,7,8-HpCDF	1.06	1.05	0.95	1.06	1.03	1.03	4.43
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	0.93	0.98	1.02	1.03	1.09	1.01	6.14

(1) The %RSD for the nine labeled reference compounds must not exceed +/- 30%, see Section 7.7.2.1, Method 8290.

8290F3B

FORM 3C
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/02/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: P100006 HCC4 Data Filename: P100009

HCC2 Data Filename: P100007 HCC5 Data Filename: P100010

HCC3 Data Filename: P100008

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO					QC LIMITS (2)
		HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	
NATIVE ANALYTES							
2,3,7,8-TCDD	M/M+2	0.80	0.81	0.77	0.78	0.78	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.65	1.60	1.59	1.58	1.57	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.28	1.29	1.27	1.27	1.27	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.25	1.28	1.30	1.27	1.28	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.30	1.29	1.25	1.28	1.26	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	1.07	1.06	1.07	1.07	0.88-1.20
OCDD	M+2/M+4	0.89	0.92	0.88	0.91	0.90	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.80	0.80	0.81	0.78	0.79	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.63	1.58	1.57	1.59	1.61	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.58	1.57	1.60	1.61	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.25	1.28	1.26	1.26	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.39	1.27	1.28	1.25	1.27	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.28	1.30	1.29	1.27	1.28	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.24	1.29	1.30	1.26	1.26	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.10	1.02	1.08	1.04	1.05	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.04	1.02	1.05	1.06	1.05	0.88-1.20
OCDF	M+2/M+4	0.89	0.89	0.91	0.93	0.91	0.76-1.02

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits from Table 8, Method 8290.

8290F3C

FORM 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/02/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: P100006 HRCC4 Data Filename: P100009

HRCC2 Data Filename: P100007 HRCC5 Data Filename: P100010

HRCC3 Data Filename: P100008

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO					QC LIMITS (2)
		HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	M/M+2	0.78	0.78	0.78	0.78	0.78	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.55	1.55	1.59	1.57	1.57	1.32-1.78
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.26	1.27	1.25	1.25	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	1.07	1.05	1.02	1.03	0.88-1.20
13C-OCDD	M+2/M+4	0.91	0.91	0.90	0.90	0.90	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.80	0.80	0.80	0.80	0.80	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.61	1.57	1.58	1.61	1.59	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.53	0.54	0.53	0.54	0.54	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.46	0.45	0.44	0.45	0.37-0.51

(1) See Table 6, Method 8290, for m/z specifications.Method 8290.

(2) Ion Abundance Ratio Control Limits from Table 8,

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC1

Run #1 Filename P100006 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 11:02:24
Processed: 3-JUL-08 14:49:02 Sample ID: ICAL HRCC1

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:28	6.269e+02	7.844e+02	0.80	yes	no	0.98
2	Unk	1,2,3,7,8-PeCDF	33:38	1.896e+03	1.165e+03	1.63	yes	no	0.97
3	Unk	2,3,4,7,8-PeCDF	34:20	1.938e+03	1.247e+03	1.55	yes	no	1.00
4	Unk	1,2,3,4,7,8-HxCDF	37:05	1.873e+03	1.505e+03	1.24	yes	no	1.22
5	Unk	1,2,3,6,7,8-HxCDF	37:10	1.919e+03	1.382e+03	1.39	yes	no	1.31
6	Unk	2,3,4,6,7,8-HxCDF	37:39	1.706e+03	1.371e+03	1.24	yes	no	1.15
7	Unk	1,2,3,7,8,9-HxCDF	38:21	1.754e+03	1.365e+03	1.28	yes	no	1.06
8	Unk	1,2,3,4,6,7,8-HpCDF	39:48	1.930e+03	1.762e+03	1.10	yes	no	1.55
9	Unk	1,2,3,4,7,8,9-HpCDF	41:09	1.465e+03	1.414e+03	1.04	yes	no	1.17
10	Unk	OCDF	44:02	2.206e+03	2.465e+03	0.89	yes	yes	1.36
11	Unk	2,3,7,8-TCDD	30:16	4.666e+02	5.827e+02	0.80	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:41	1.272e+03	7.693e+02	1.65	yes	no	0.88
13	Unk	1,2,3,4,7,8-HxCDD	37:45	1.044e+03	8.148e+02	1.28	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:50	1.180e+03	9.400e+02	1.25	yes	no	1.13
15	Unk	1,2,3,7,8,9-HxCDD	38:07	1.285e+03	9.855e+02	1.30	yes	no	1.04
16	Unk	1,2,3,4,6,7,8-HpCDD	40:43	1.104e+03	1.048e+03	1.05	yes	yes	1.02
17	Unk	OCDD	43:52	1.736e+03	1.940e+03	0.89	yes	no	1.02
18	IS	13C-2,3,7,8-TCDF	29:27	3.172e+04	3.982e+04	0.80	yes	no	1.41
19	IS	13C-1,2,3,7,8-PeCDF	33:37	4.356e+04	2.702e+04	1.61	yes	no	1.38
20	IS	13C-1,2,3,4,7,8-HxCDF	37:04	4.957e+04	9.290e+04	0.53	yes	no	1.35
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:47	3.457e+04	7.685e+04	0.45	yes	no	1.03
22	IS	13C-2,3,7,8-TCDD	30:14	2.457e+04	3.167e+04	0.78	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:40	3.094e+04	1.994e+04	1.55	yes	no	0.98
24	IS	13C-1,2,3,6,7,8-HxCDD	37:49	5.754e+04	4.634e+04	1.24	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:42	4.732e+04	4.567e+04	1.04	yes	no	0.85
26	IS	13C-OCDD	43:51	7.984e+04	8.726e+04	0.91	yes	no	0.79
27	RS/RT	13C-1,2,3,4-TCDD	30:03	2.278e+04	2.882e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:07	5.795e+04	4.712e+04	1.23	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:16	9.576e+02					1.01

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC1

Run #1 Filename P100006 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 11:02:24

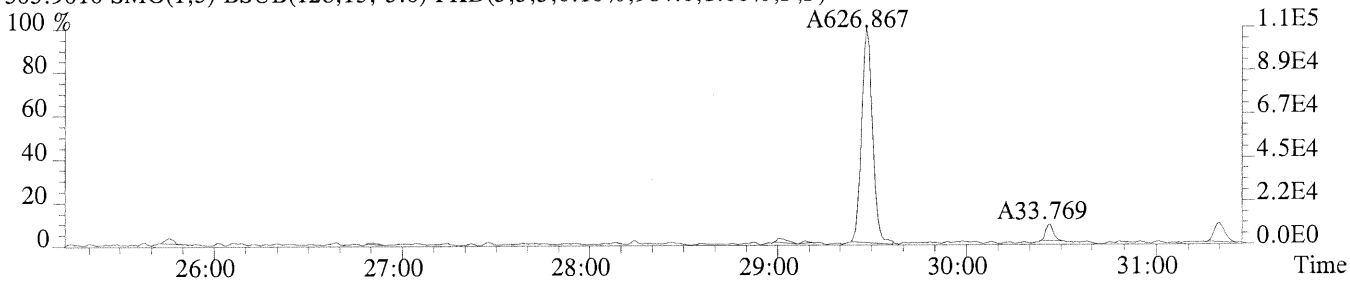
Processed: 3-JUL-08 14:49:02 LAB. ID:

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.10e+05	9.84e+02	1.1e+02	1.41e+05	2.11e+03	6.7e+01
2	1,2,3,7,8-PeCDF	3.63e+05	1.08e+03	3.3e+02	2.22e+05	1.92e+03	1.2e+02
3	2,3,4,7,8-PeCDF	3.75e+05	1.08e+03	3.5e+02	2.57e+05	1.92e+03	1.3e+02
4	1,2,3,4,7,8-HxCDF	4.11e+05	1.60e+03	2.6e+02	3.22e+05	1.15e+03	2.8e+02
5	1,2,3,6,7,8-HxCDF	3.83e+05	1.60e+03	2.4e+02	2.84e+05	1.15e+03	2.5e+02
6	2,3,4,6,7,8-HxCDF	3.80e+05	1.60e+03	2.4e+02	2.99e+05	1.15e+03	2.6e+02
7	1,2,3,7,8,9-HxCDF	3.30e+05	1.60e+03	2.1e+02	2.43e+05	1.15e+03	2.1e+02
8	1,2,3,4,6,7,8-HpCDF	3.92e+05	1.01e+03	3.9e+02	3.52e+05	1.22e+03	2.9e+02
9	1,2,3,4,7,8,9-HpCDF	2.45e+05	1.01e+03	2.4e+02	2.47e+05	1.22e+03	2.0e+02
10	OCDF	2.81e+05	1.41e+03	2.0e+02	3.19e+05	2.77e+03	1.2e+02
11	2,3,7,8-TCDD	8.42e+04	2.18e+03	3.9e+01	1.03e+05	8.60e+02	1.2e+02
12	1,2,3,7,8-PeCDD	2.55e+05	2.16e+03	1.2e+02	1.50e+05	7.24e+02	2.1e+02
13	1,2,3,4,7,8-HxCDD	2.40e+05	1.33e+03	1.8e+02	1.94e+05	1.57e+03	1.2e+02
14	1,2,3,6,7,8-HxCDD	2.50e+05	1.33e+03	1.9e+02	1.90e+05	1.57e+03	1.2e+02
15	1,2,3,7,8,9-HxCDD	2.50e+05	1.33e+03	1.9e+02	1.92e+05	1.57e+03	1.2e+02
16	1,2,3,4,6,7,8-HpCDD	2.08e+05	1.27e+03	1.6e+02	2.05e+05	9.44e+02	2.2e+02
17	OCDD	2.35e+05	1.05e+03	2.2e+02	2.66e+05	1.24e+03	2.1e+02
18	13C-2,3,7,8-TCDF	5.63e+06	3.46e+03	1.6e+03	7.06e+06	2.48e+03	2.8e+03
19	13C-1,2,3,7,8-PeCDF	8.40e+06	7.44e+02	1.1e+04	5.23e+06	9.76e+02	5.4e+03
20	13C-1,2,3,4,7,8-HxCDF	1.04e+07	1.26e+03	8.3e+03	1.92e+07	2.34e+03	8.2e+03
21	13C-1,2,3,4,6,7,8-HpCDF	7.12e+06	3.18e+03	2.2e+03	1.57e+07	4.32e+03	3.6e+03
22	13C-2,3,7,8-TCDD	4.53e+06	5.16e+03	8.8e+02	5.86e+06	1.94e+03	3.0e+03
23	13C-1,2,3,7,8-PeCDD	5.98e+06	1.09e+03	5.5e+03	3.92e+06	1.53e+03	2.6e+03
24	13C-1,2,3,6,7,8-HxCDD	1.27e+07	1.12e+03	1.1e+04	1.01e+07	1.38e+03	7.3e+03
25	13C-1,2,3,4,6,7,8-HpCDD	9.11e+06	1.74e+03	5.2e+03	8.77e+06	1.21e+03	7.3e+03
26	13C-OCDD	1.07e+07	8.36e+02	1.3e+04	1.17e+07	1.08e+03	1.1e+04
27	13C-1,2,3,4-TCDD	4.30e+06	5.16e+03	8.3e+02	5.42e+06	1.94e+03	2.8e+03
28	13C-1,2,3,7,8,9-HxCDD	1.20e+07	1.12e+03	1.1e+04	9.63e+06	1.38e+03	7.0e+03
29	37Cl-2,3,7,8-TCDD	1.76e+05	1.19e+03	1.5e+02			

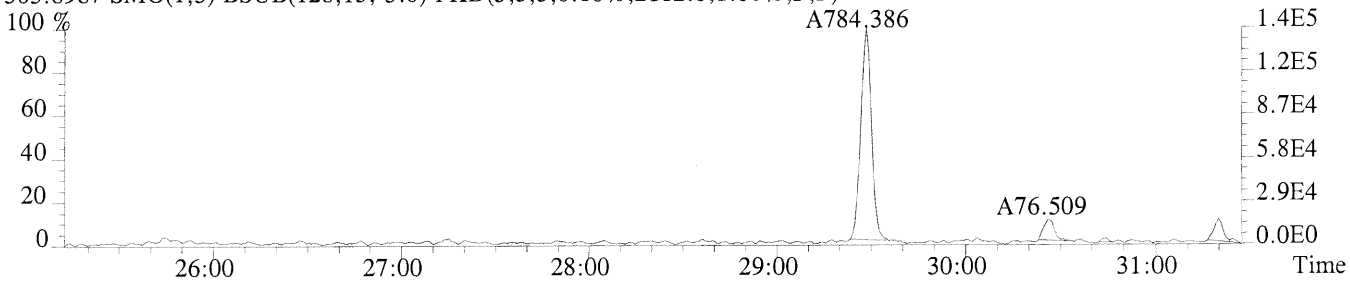
Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office:(713)266-1599. Fax:(713)266-0130

File:P100006 #1-521 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

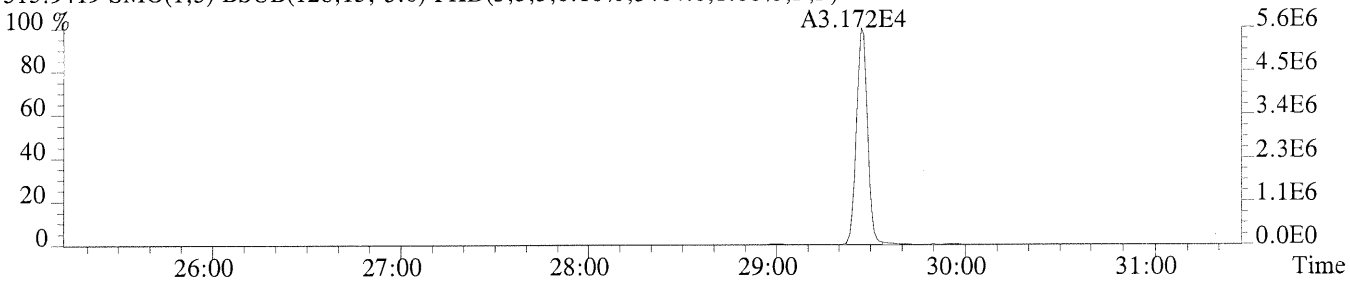
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,984.0,1.00%,F,F)



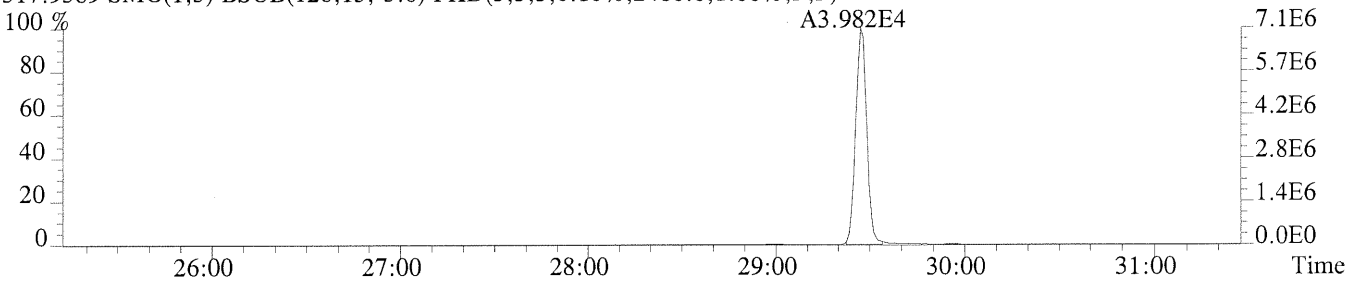
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2112.0,1.00%,F,F)



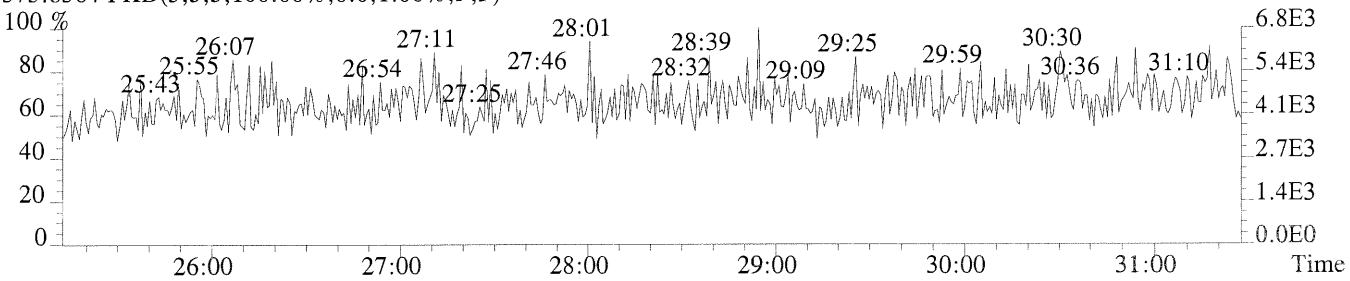
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3464.0,1.00%,F,F)



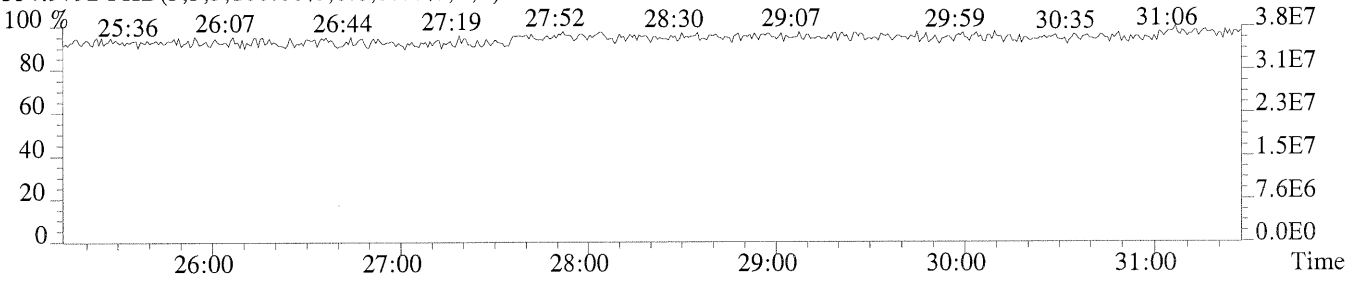
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2480.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

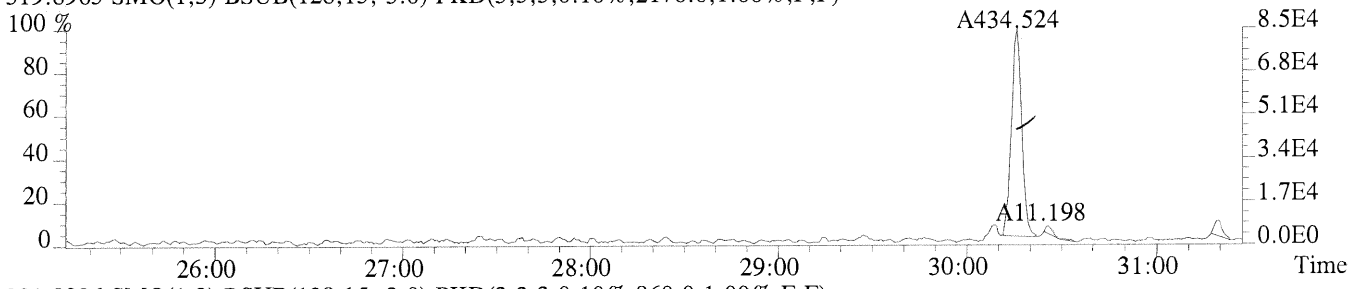


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

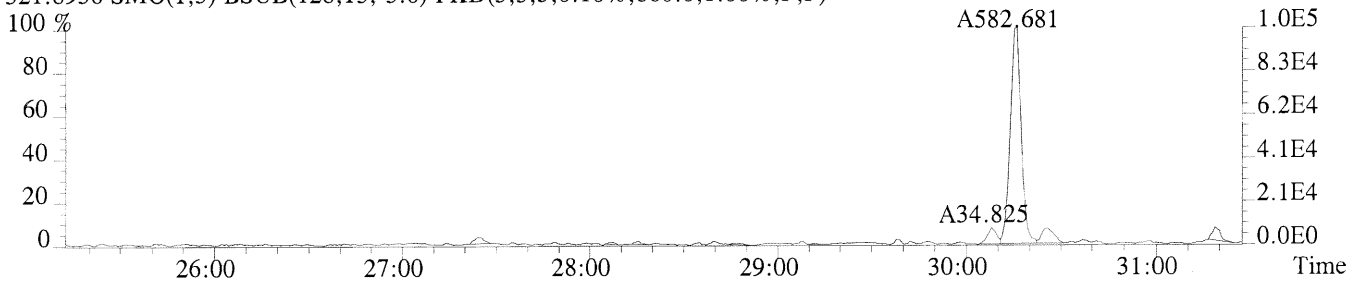


File:P100006 #1-521 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

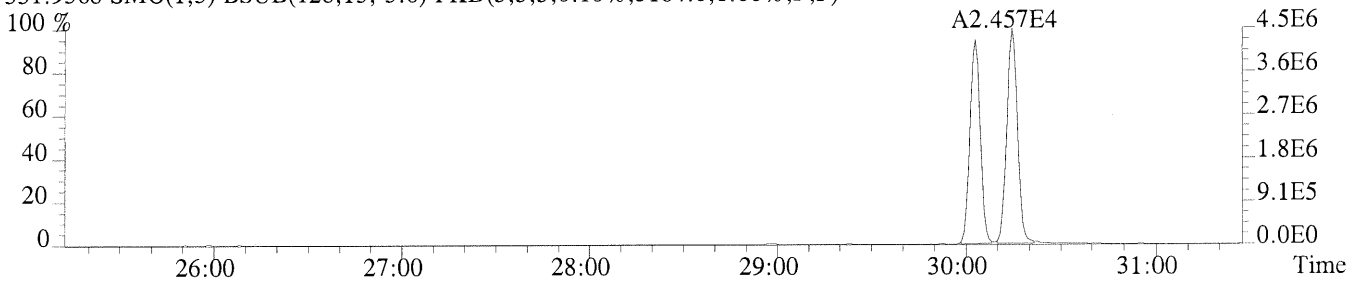
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2176.0,1.00%,F,F)



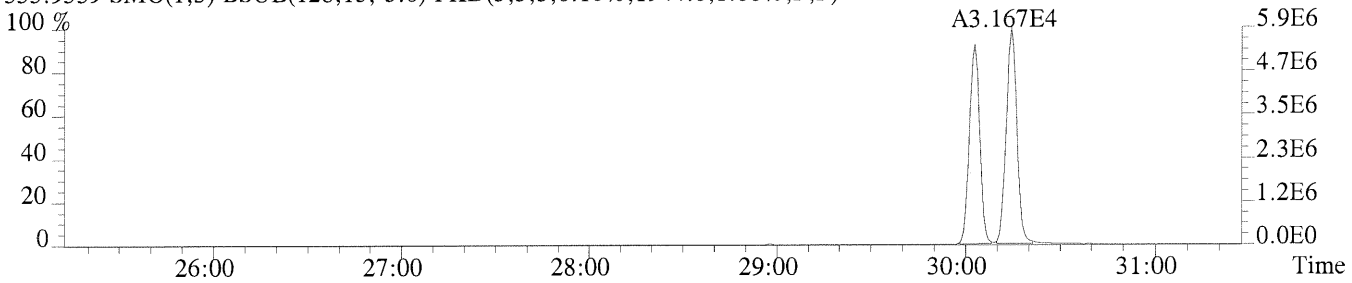
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,860.0,1.00%,F,F)



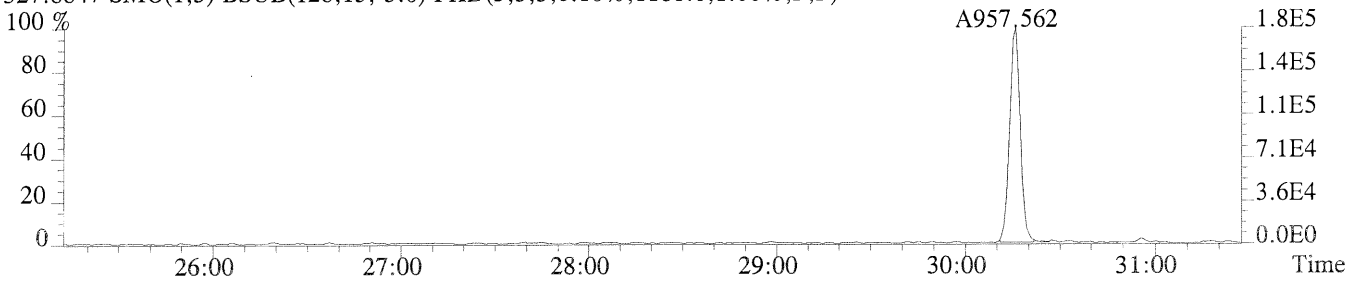
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5164.0,1.00%,F,F)



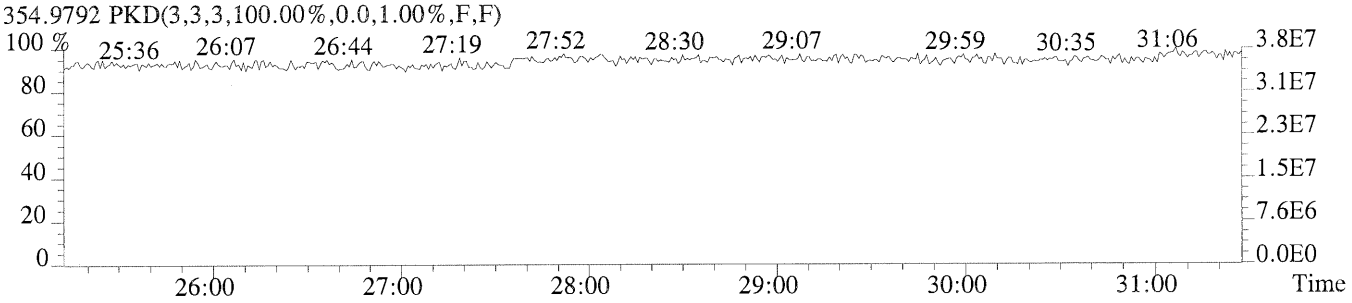
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1944.0,1.00%,F,F)



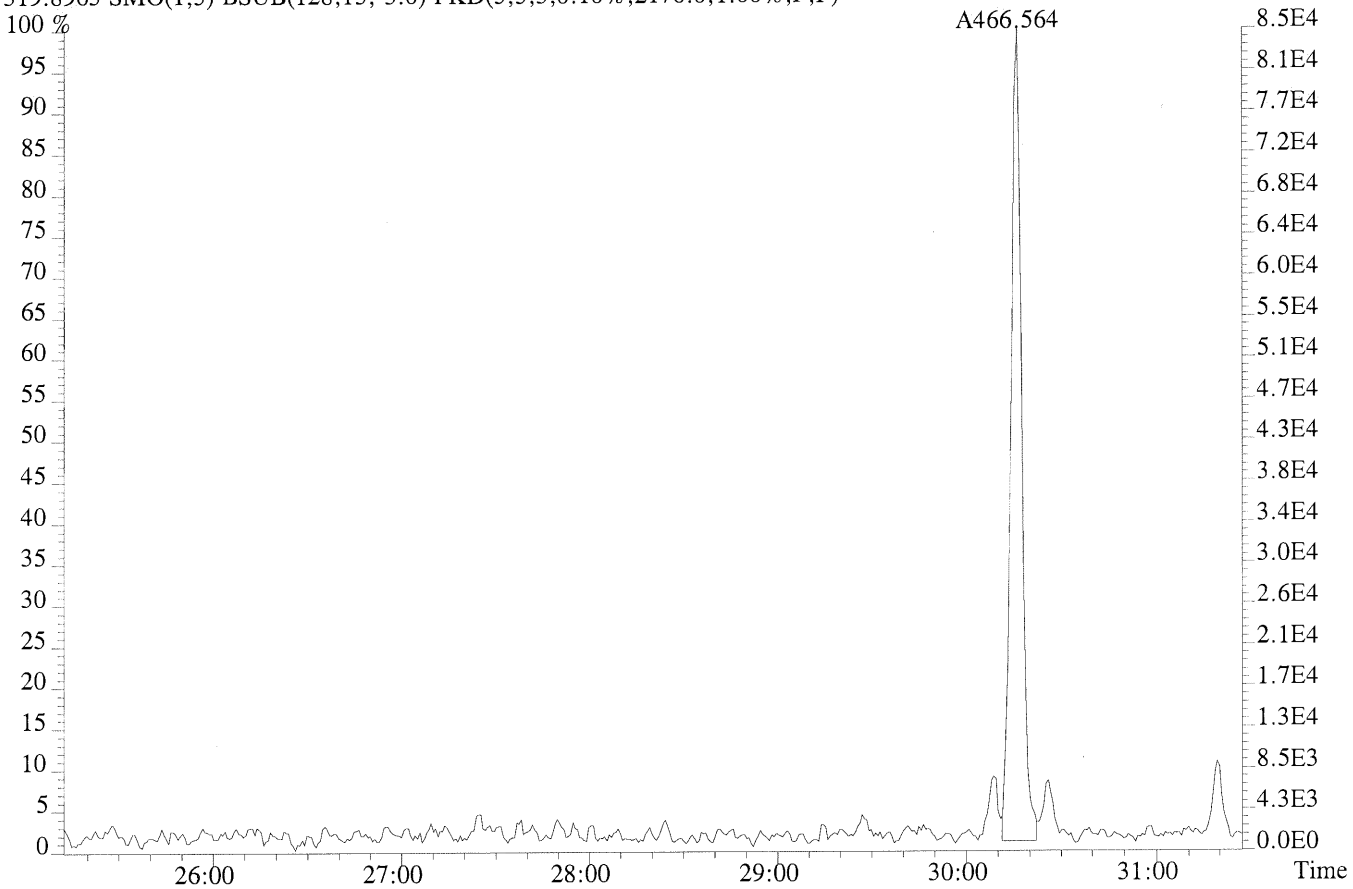
327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1188.0,1.00%,F,F)



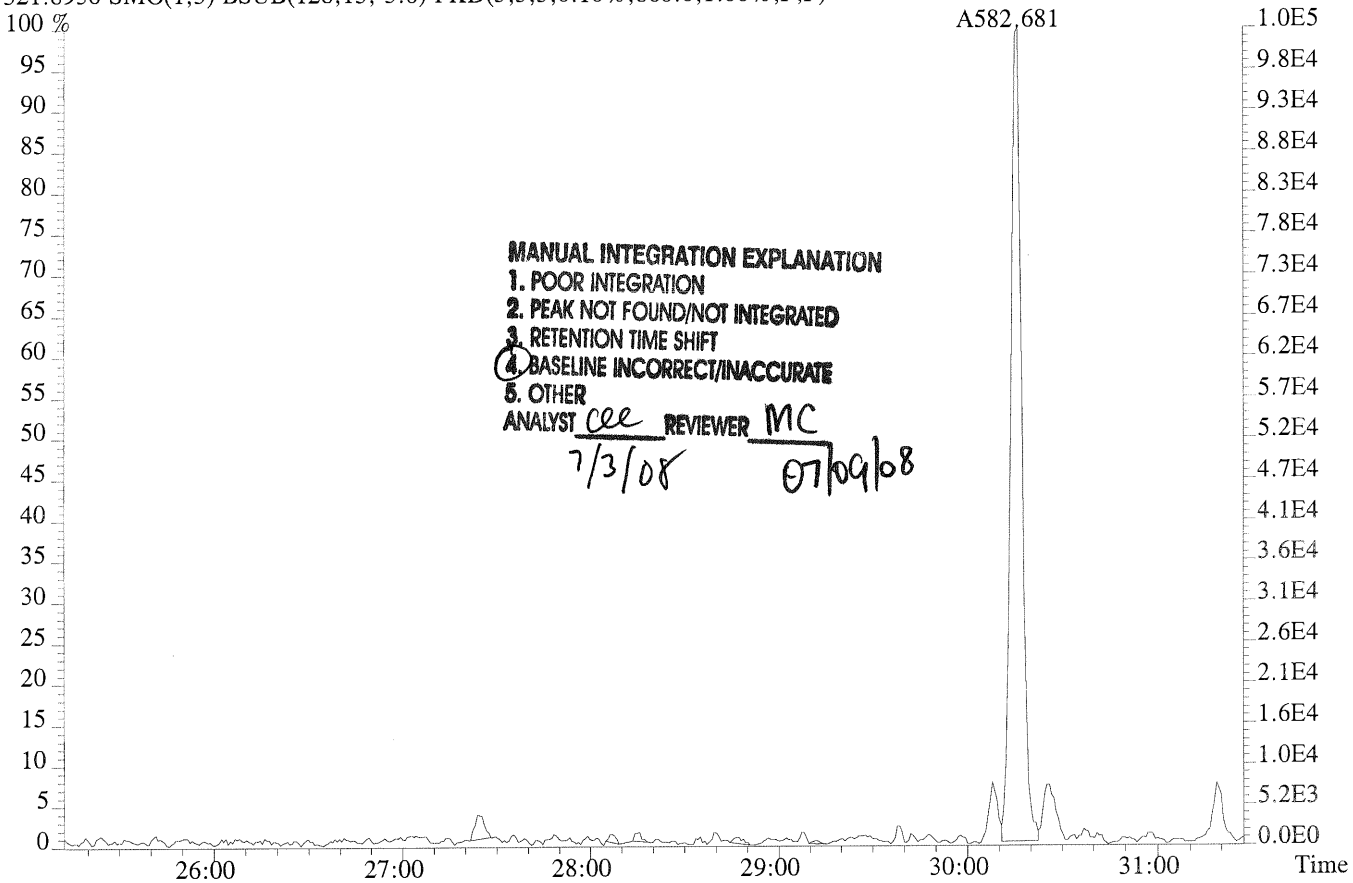
354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P100006 #1-521 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2176.0,1.00%,F,F)



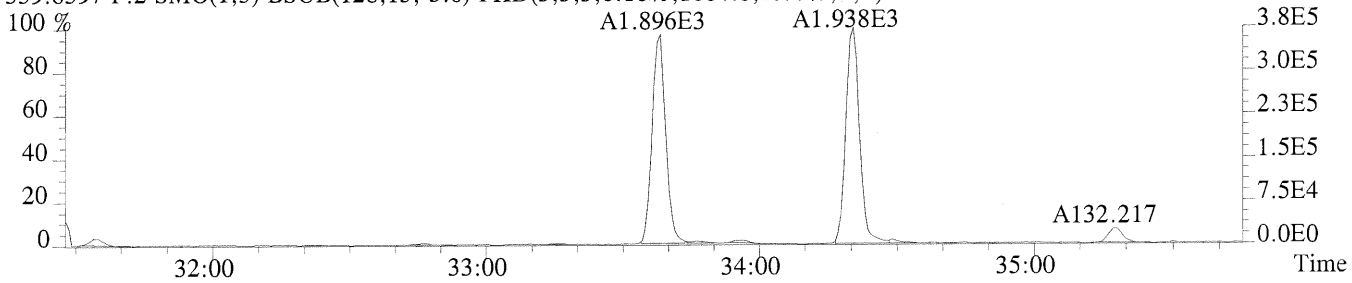
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,860.0,1.00%,F,F)



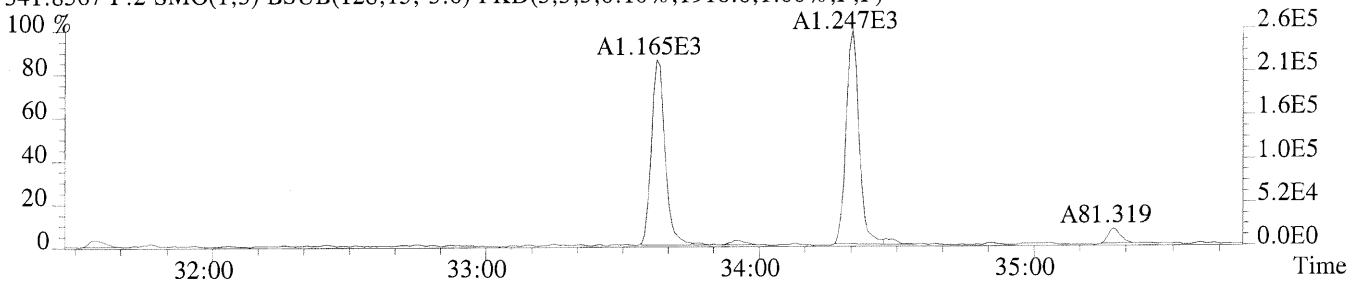
MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
(4.) BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST cee REVIEWER MC
7/3/08 07/09/08

File:P100006 #1-390 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

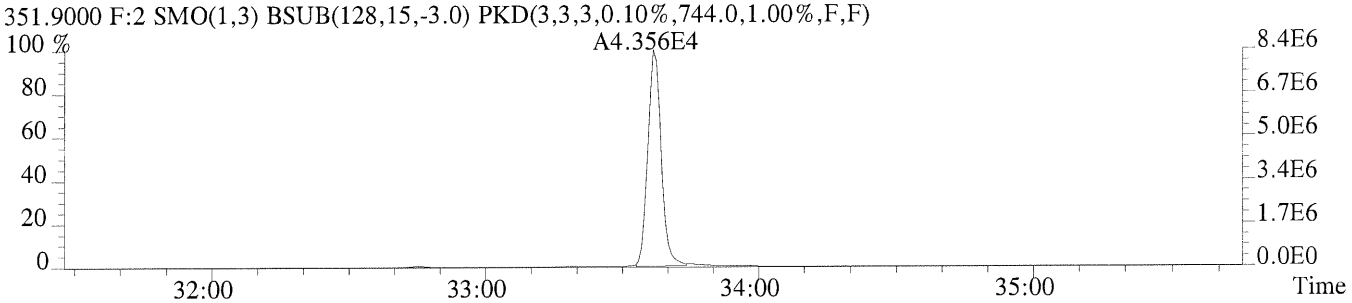
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1084.0,1.00%,F,F)



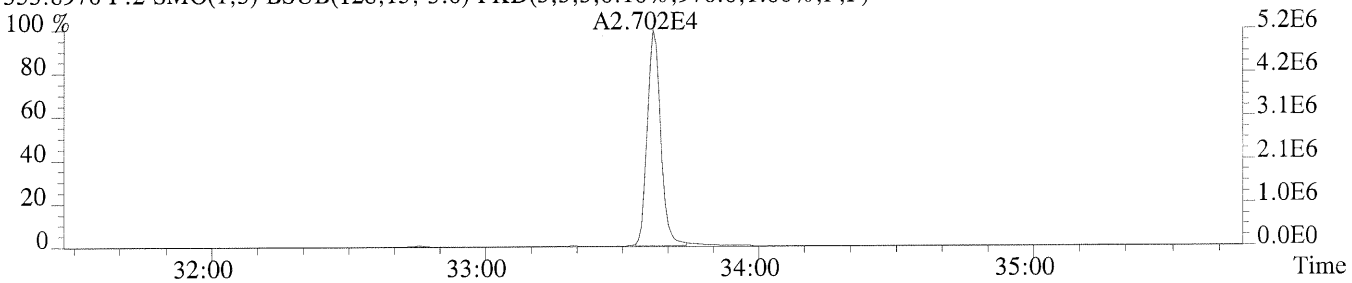
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1916.0,1.00%,F,F)



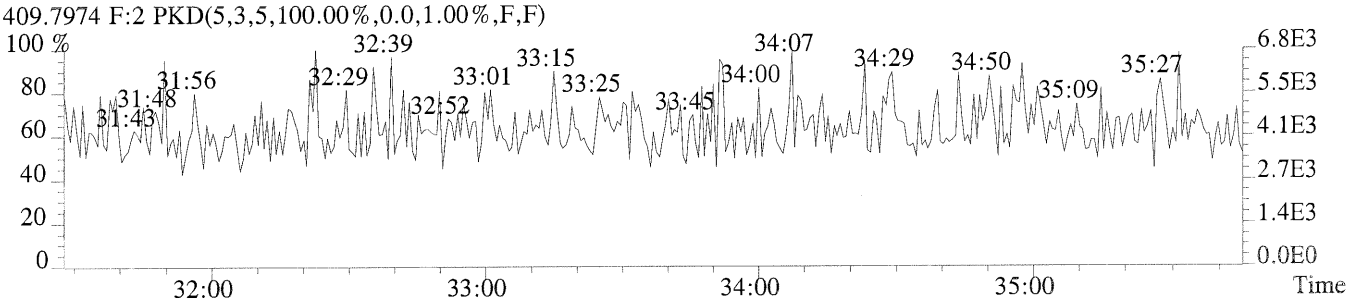
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,744.0,1.00%,F,F)



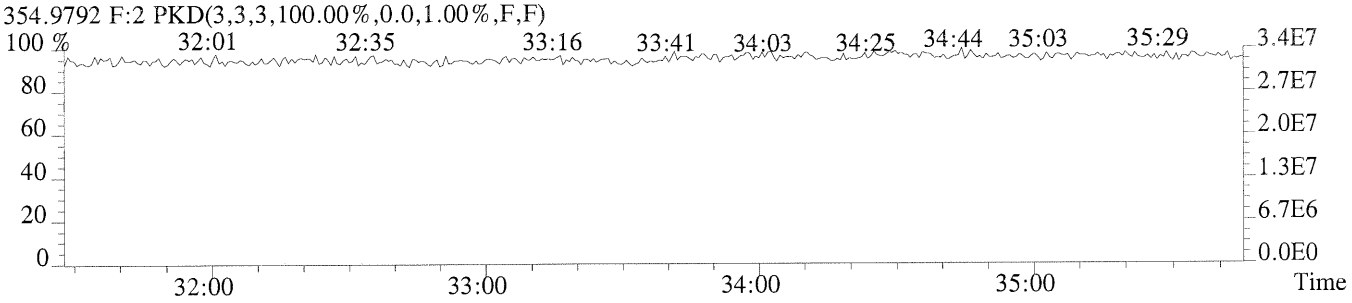
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,976.0,1.00%,F,F)



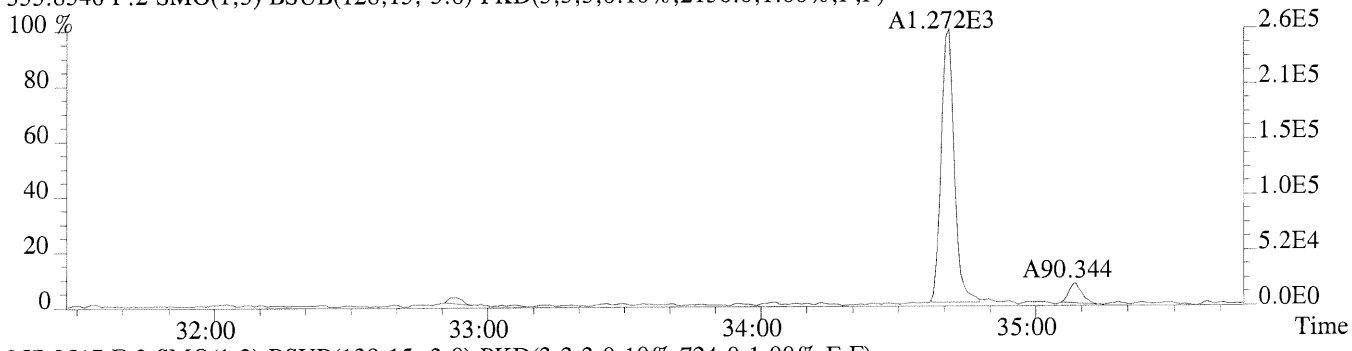
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



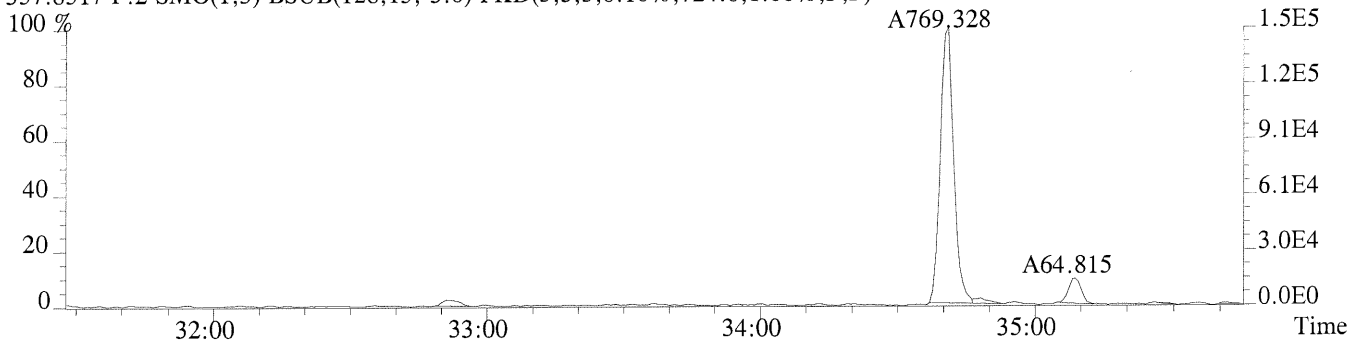
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



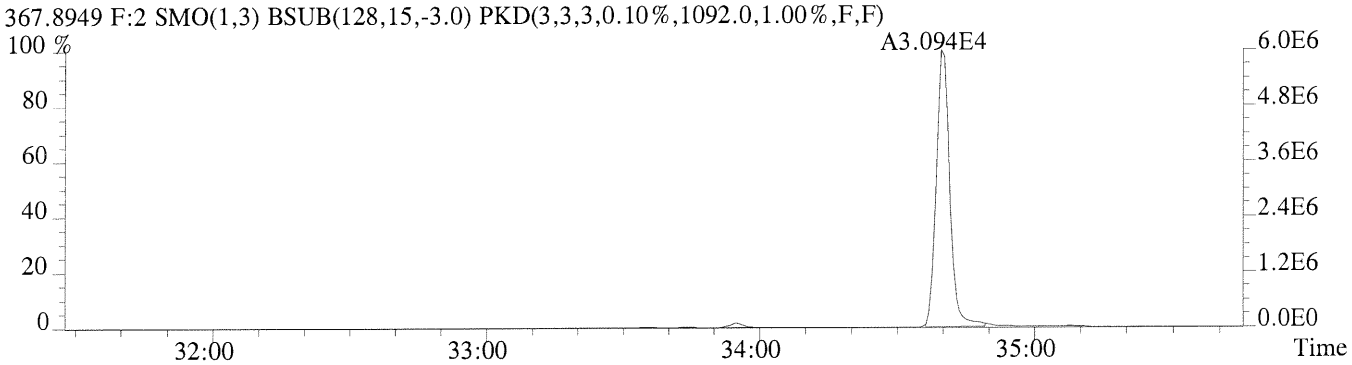
File:P100006 #1-390 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2156.0,1.00%,F,F)



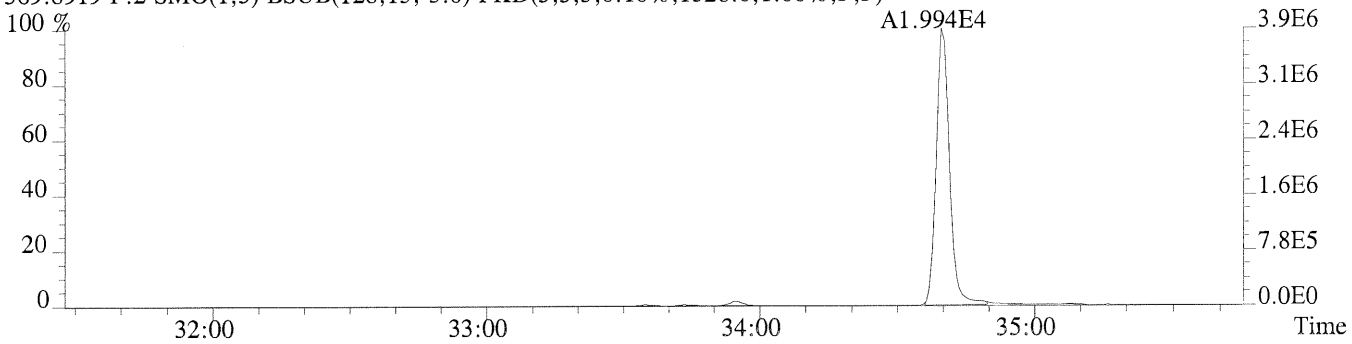
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,724.0,1.00%,F,F)



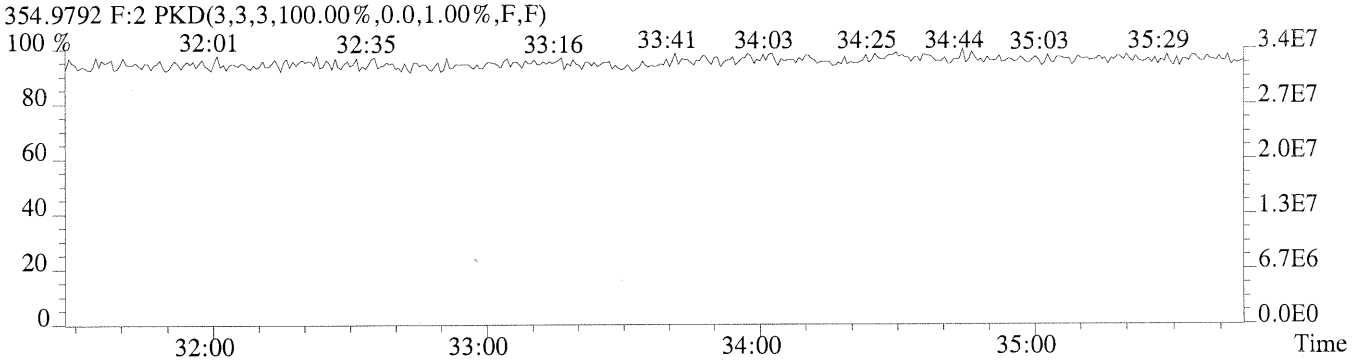
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1092.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1528.0,1.00%,F,F)

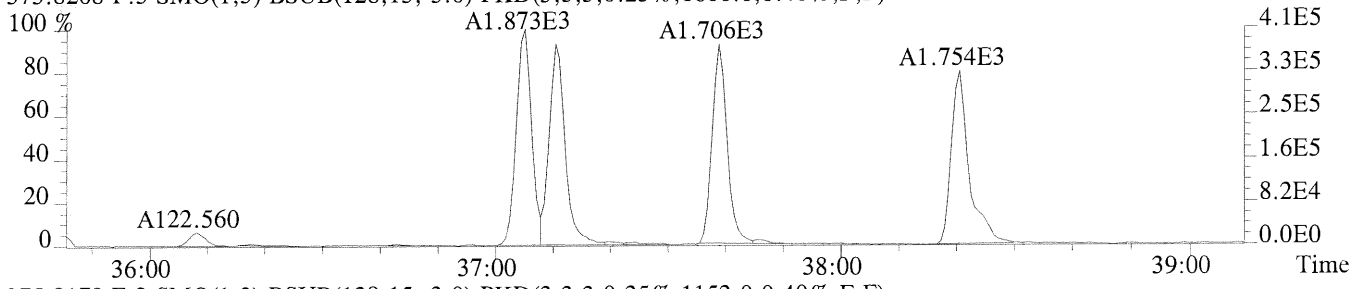


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

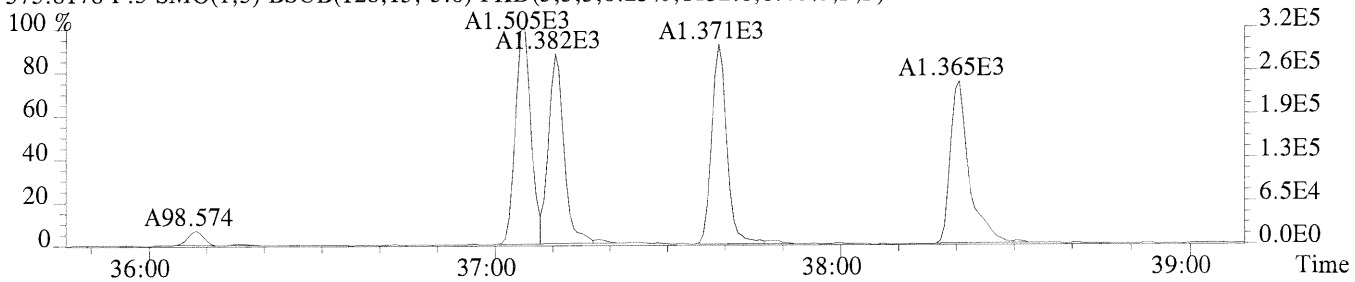


File:P100006 #1-309 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

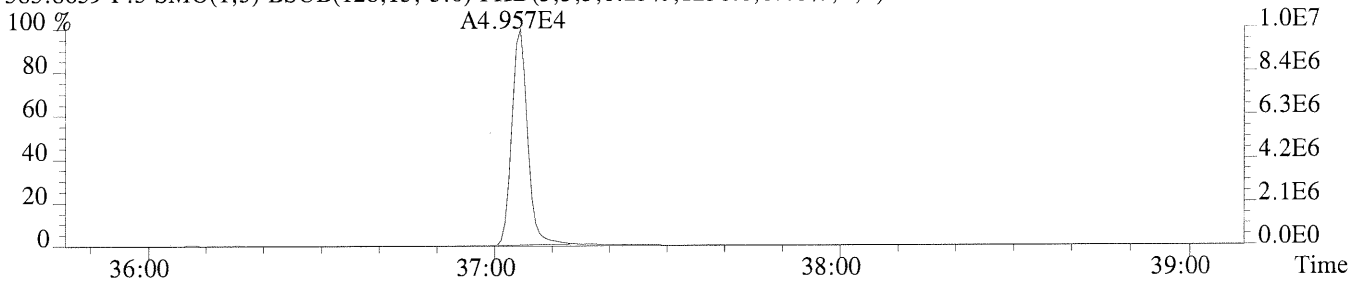
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1600.0,0.40%,F,F)



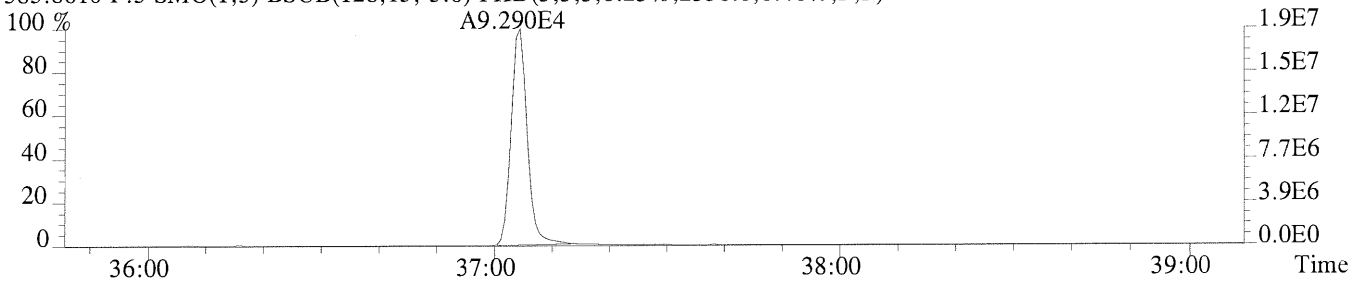
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1152.0,0.40%,F,F)



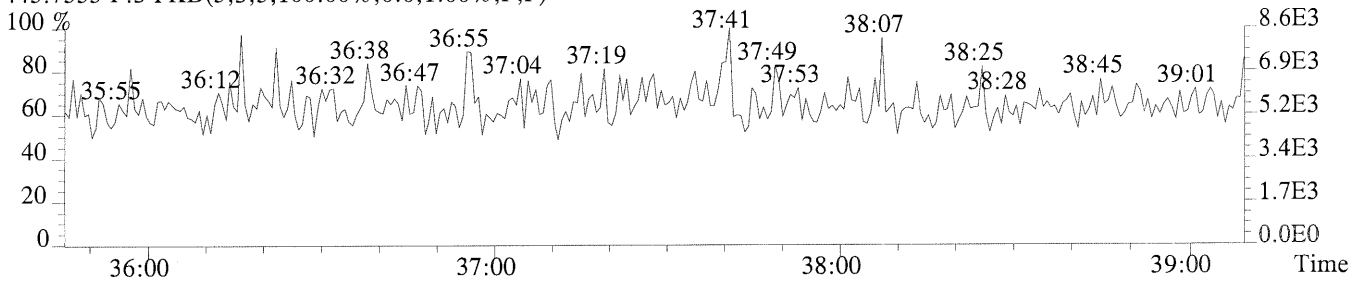
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1256.0,0.40%,F,F)



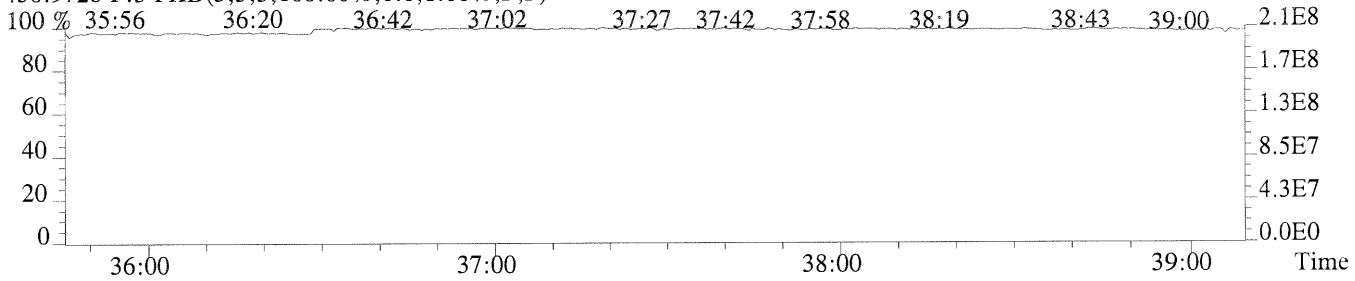
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2336.0,0.40%,F,F)



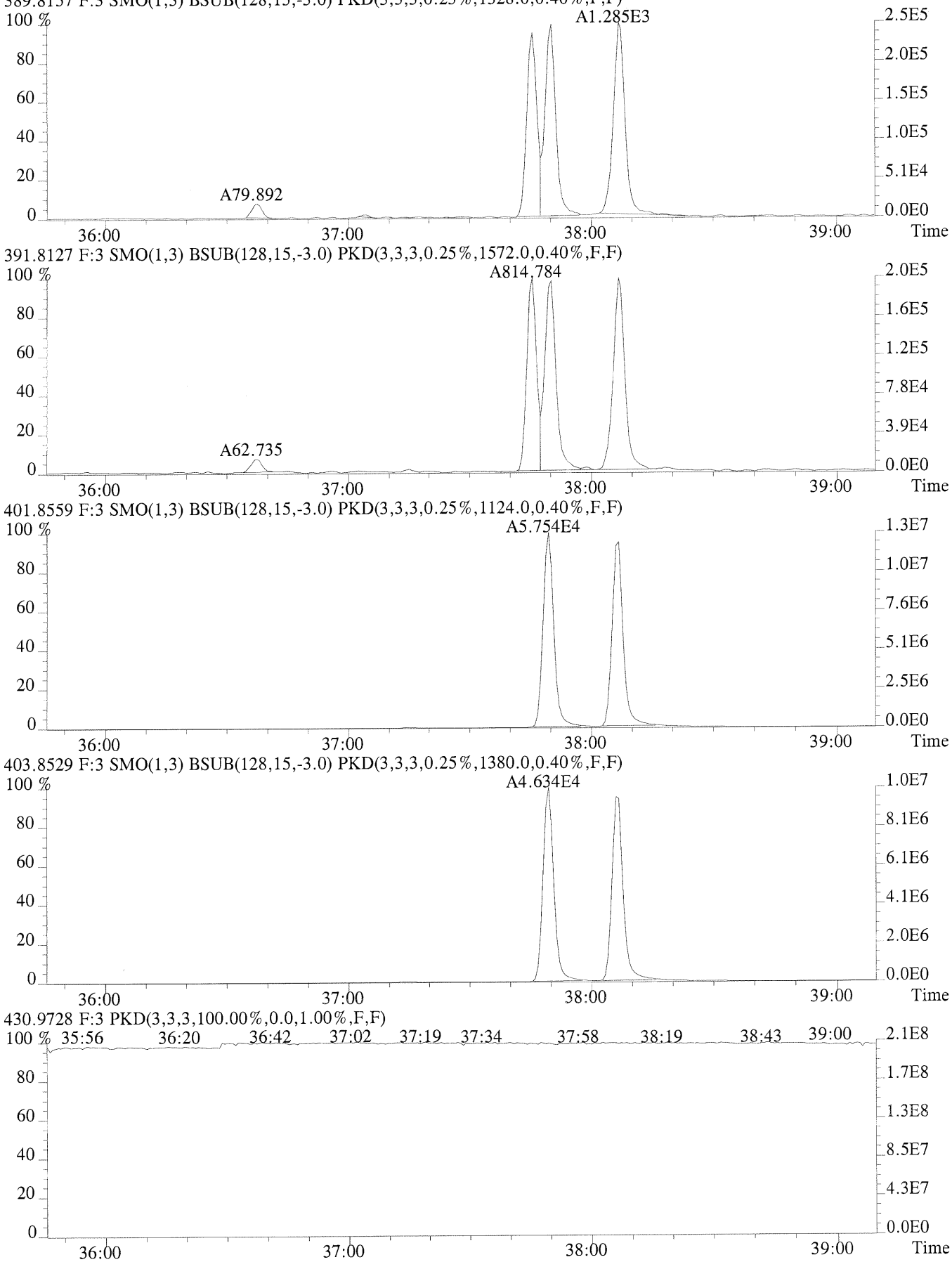
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

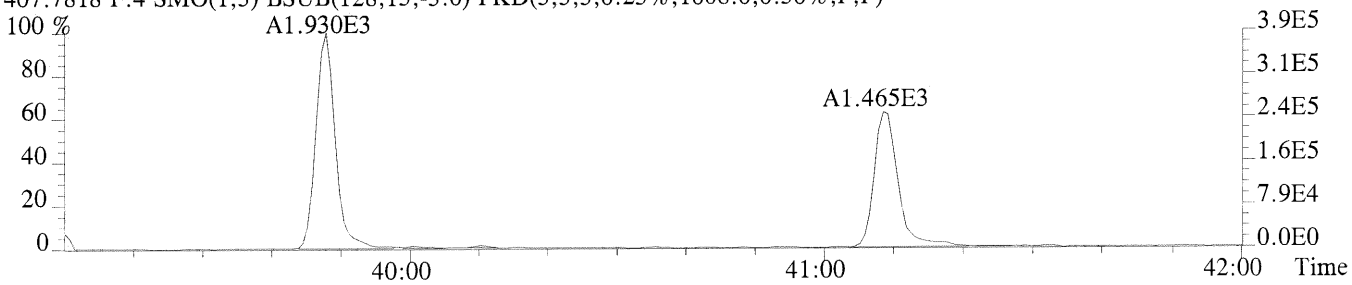


File:P100006 #1-309 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

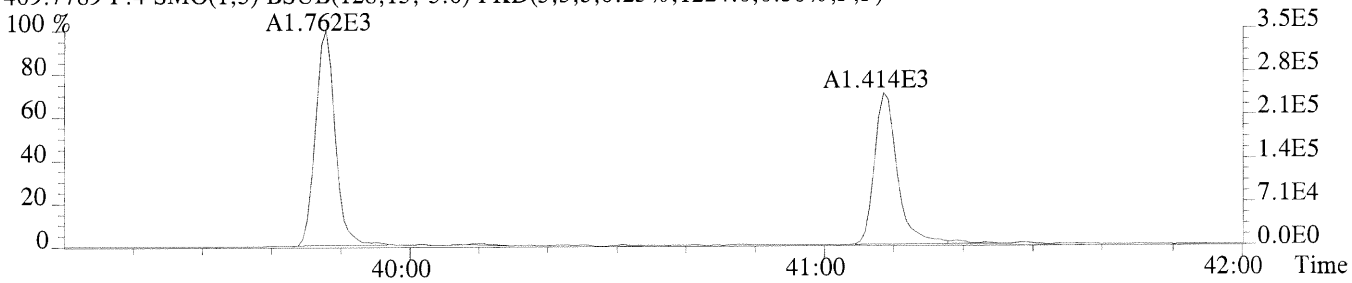


File:P100006 #1-258 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

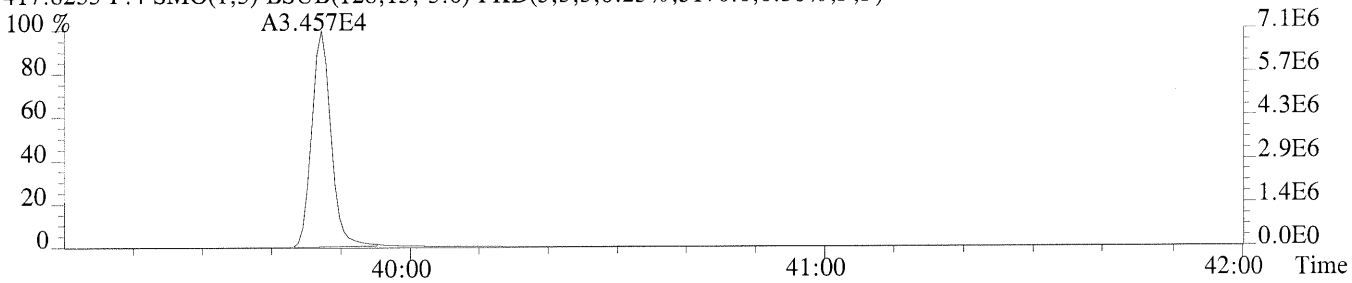
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1008.0,0.50%,F,F)



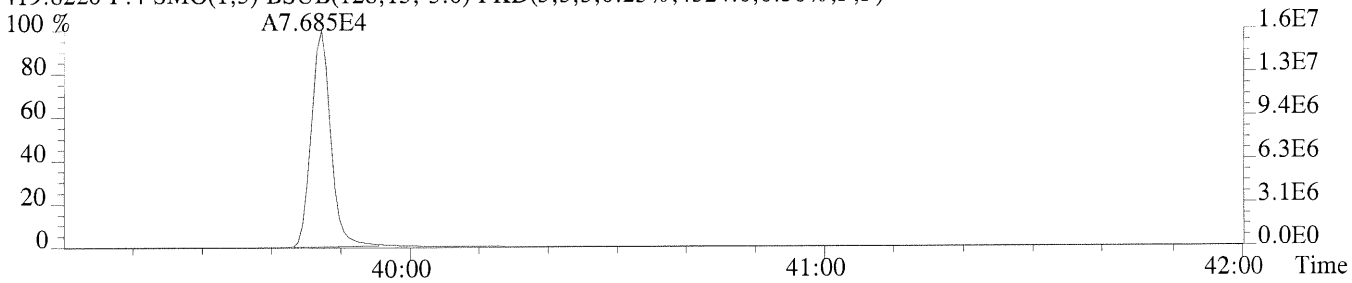
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1224.0,0.50%,F,F)



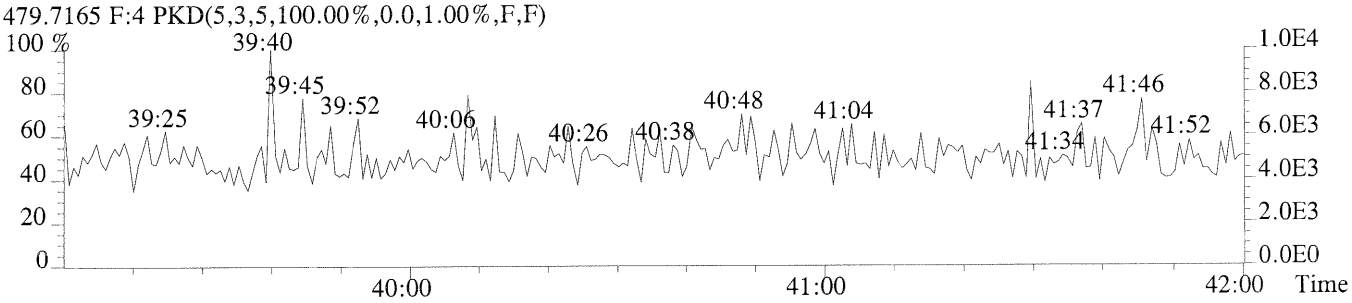
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3176.0,0.50%,F,F)



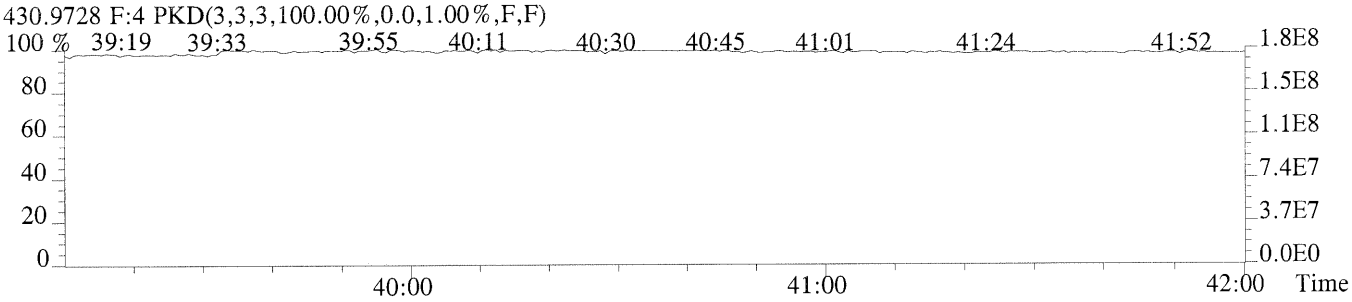
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4324.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

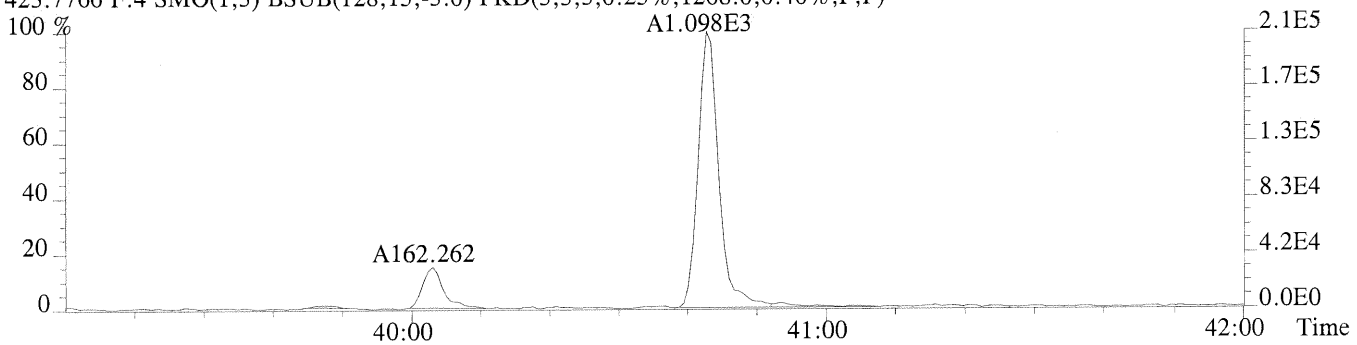


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

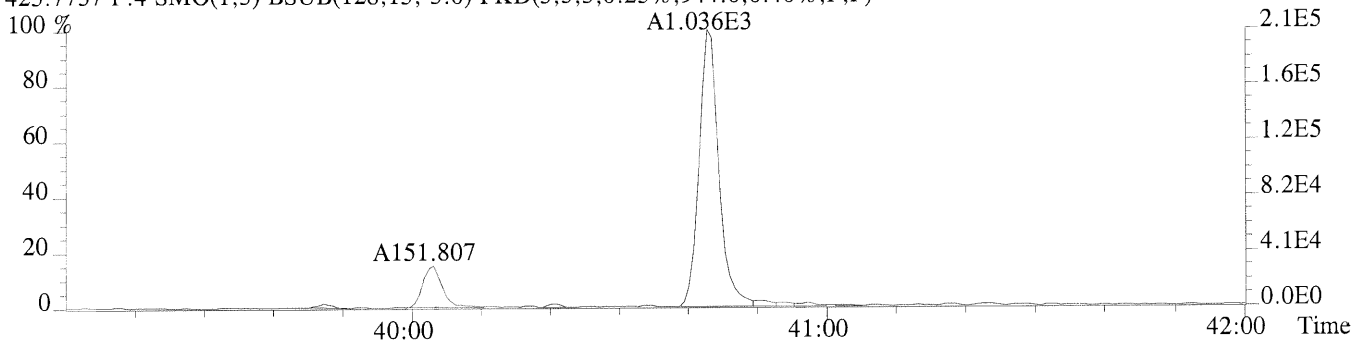


File:P100006 #1-258 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

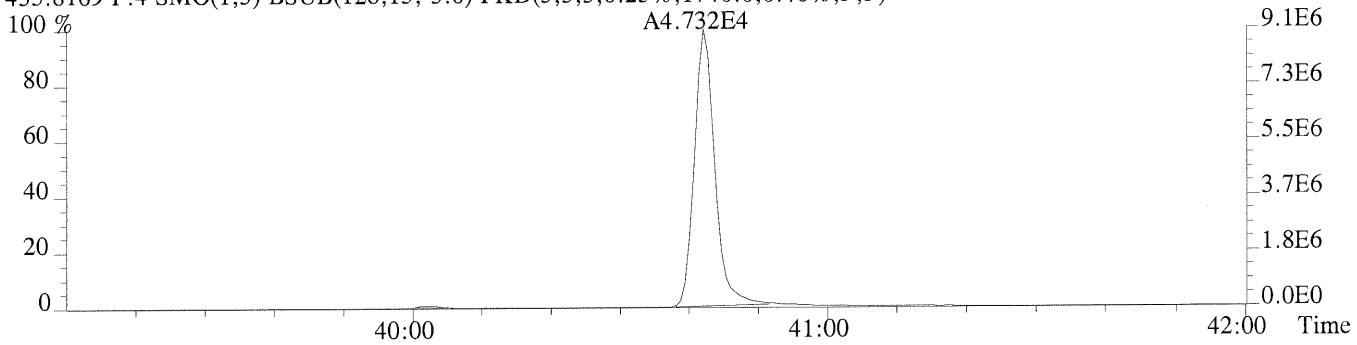
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1268.0,0.40%,F,F)



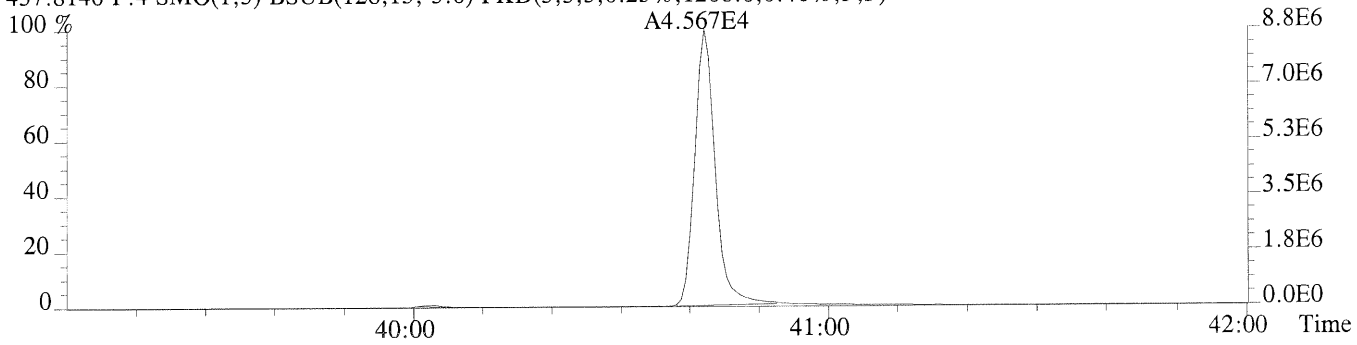
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,944.0,0.40%,F,F)



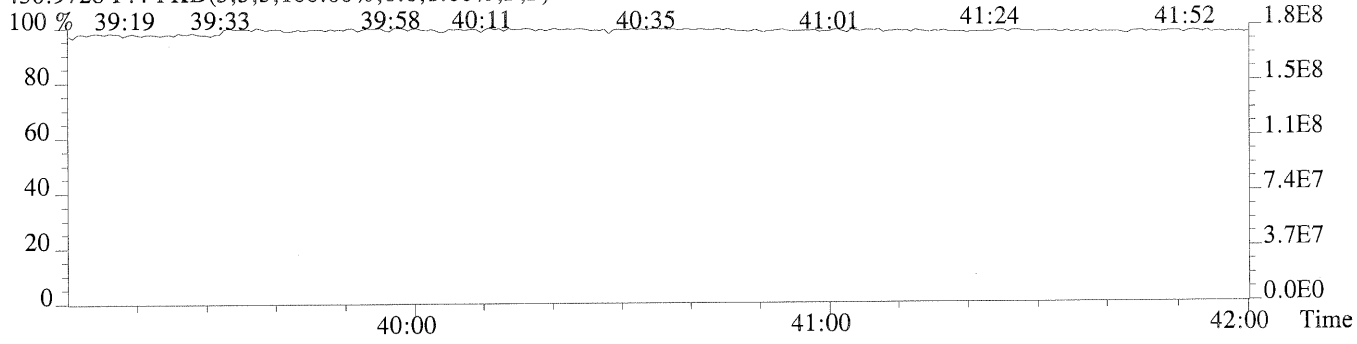
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1740.0,0.40%,F,F)



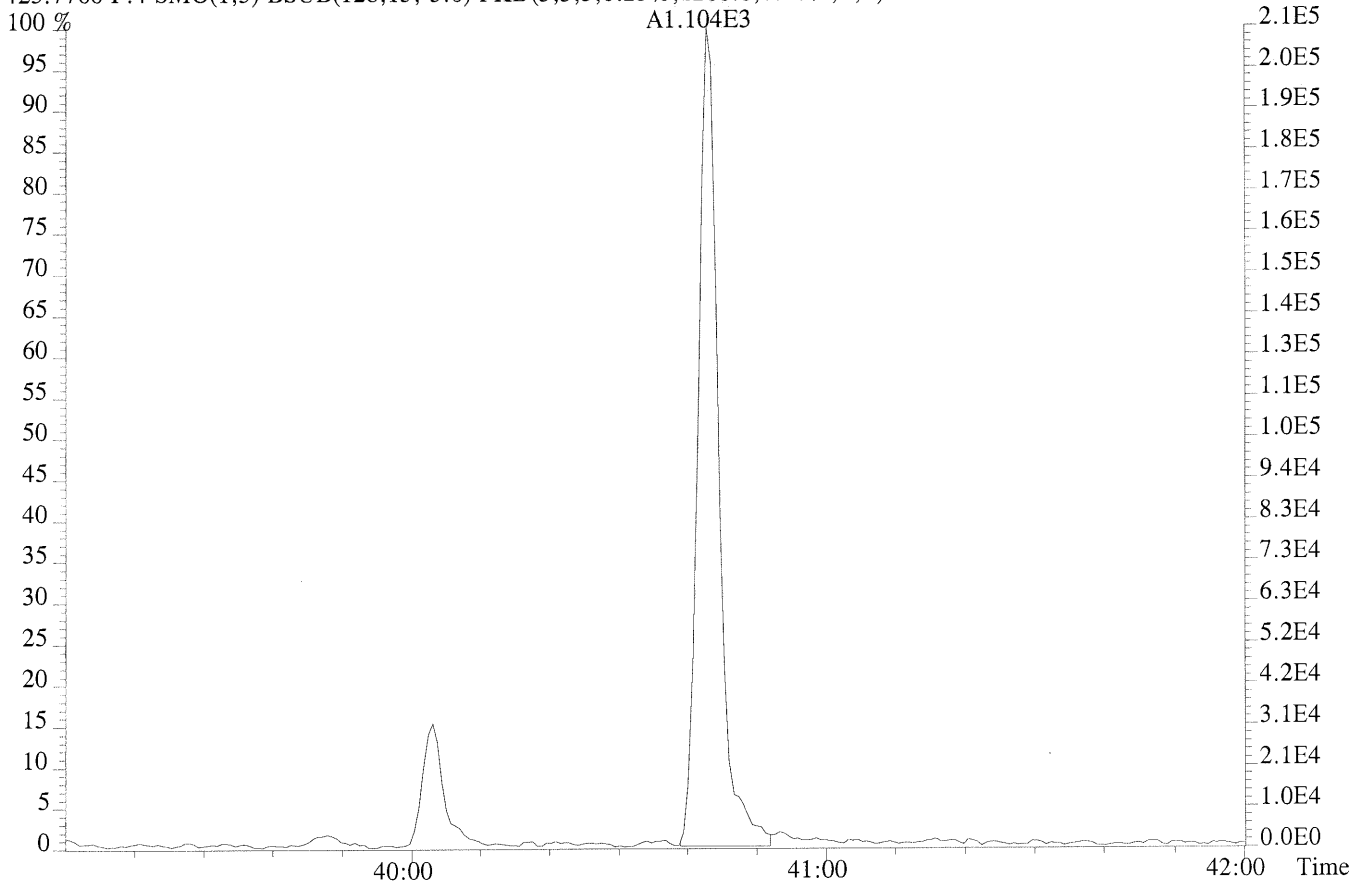
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1208.0,0.40%,F,F)



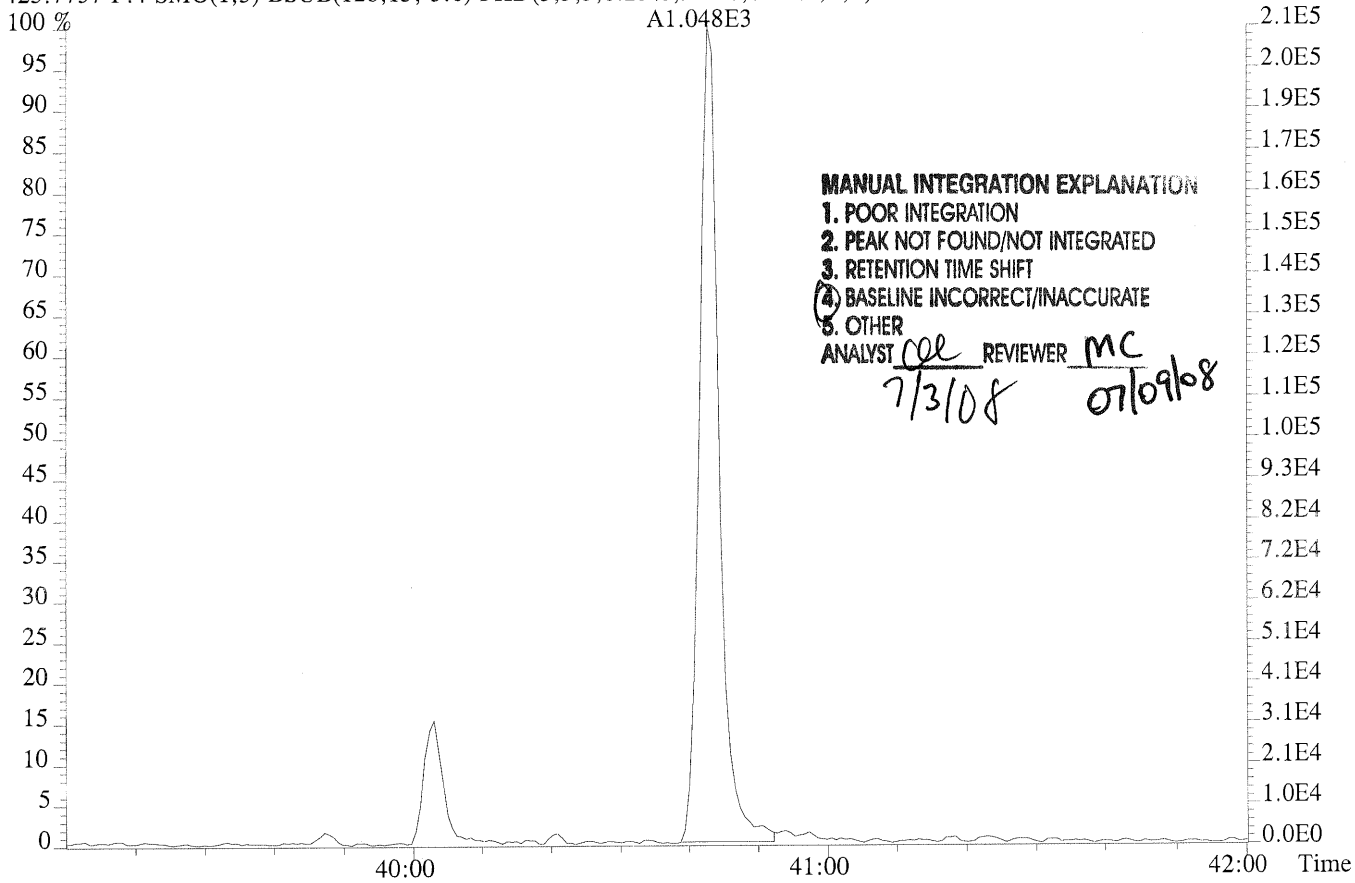
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P100006 #1-258 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1268.0,0.40%,F,F)



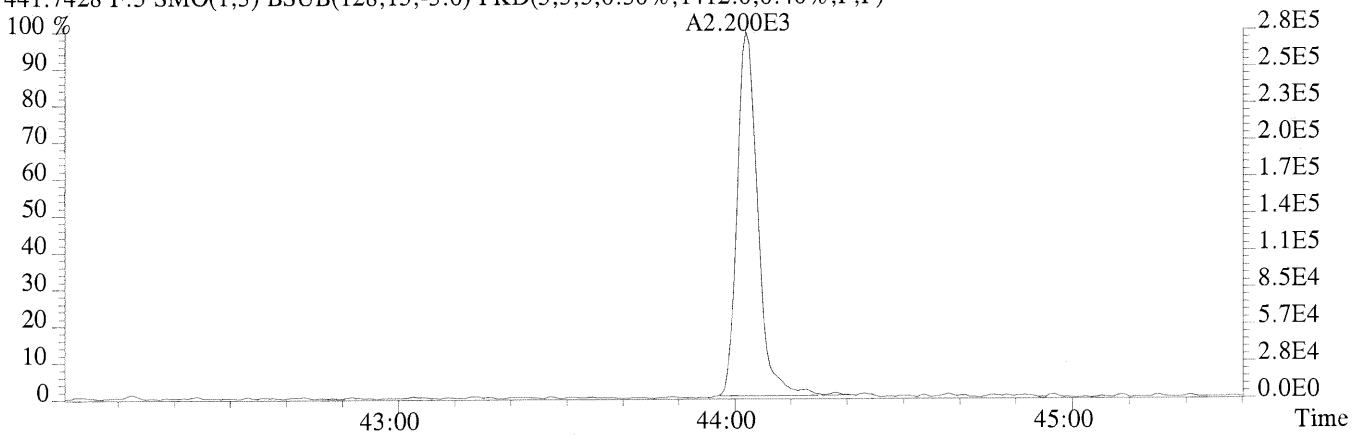
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,944.0,0.40%,F,F)



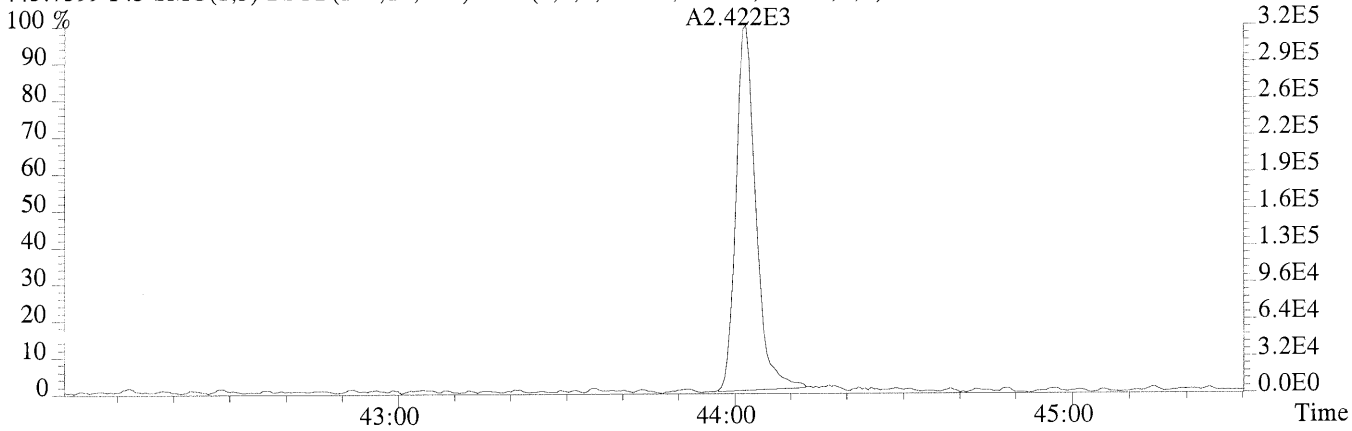
MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST cee REVIEWER MC
7/3/08 07/09/08

File:P100006 #1-386 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

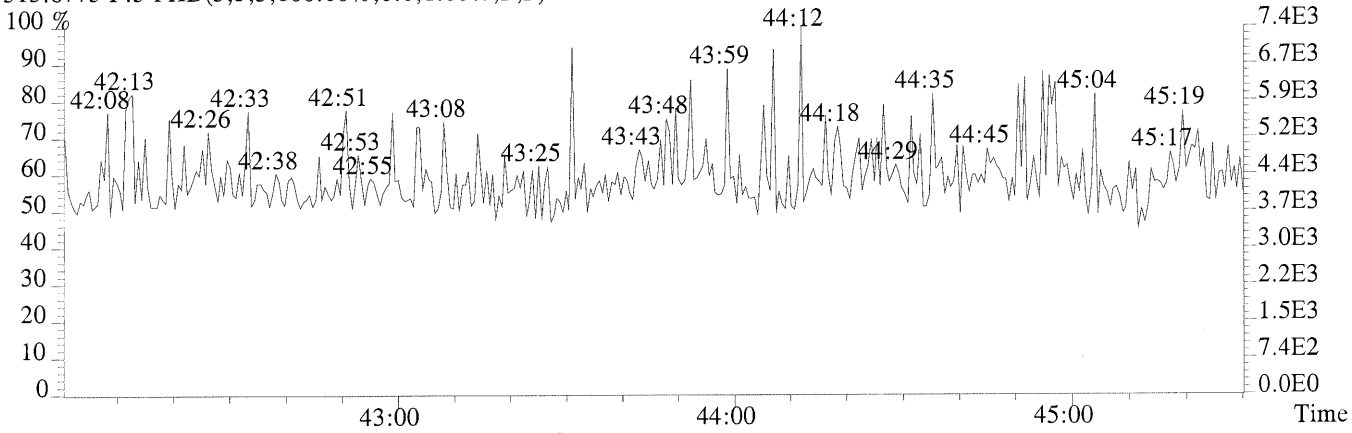
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1412.0,0.40%,F,F)



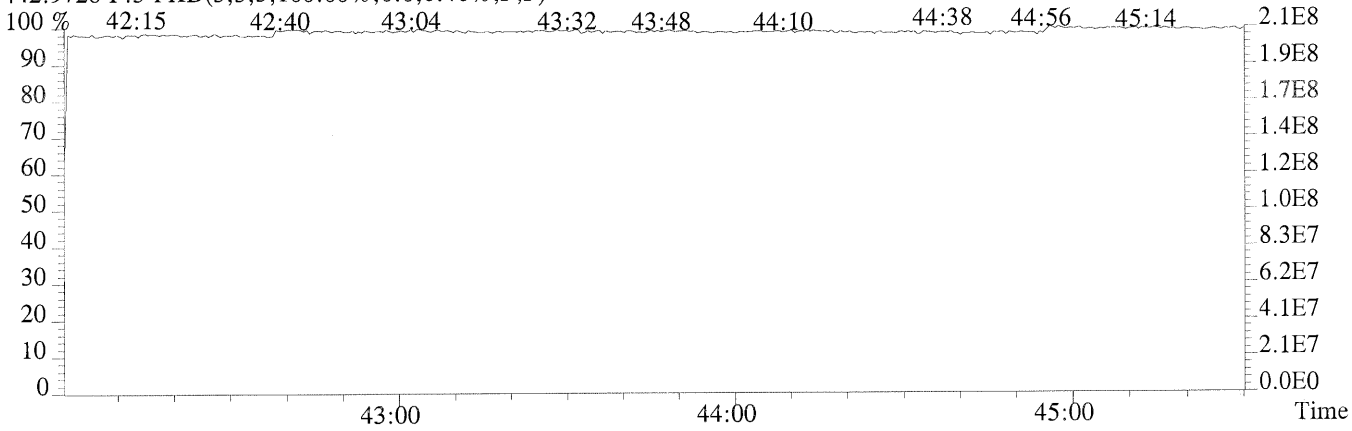
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2772.0,0.40%,F,F)



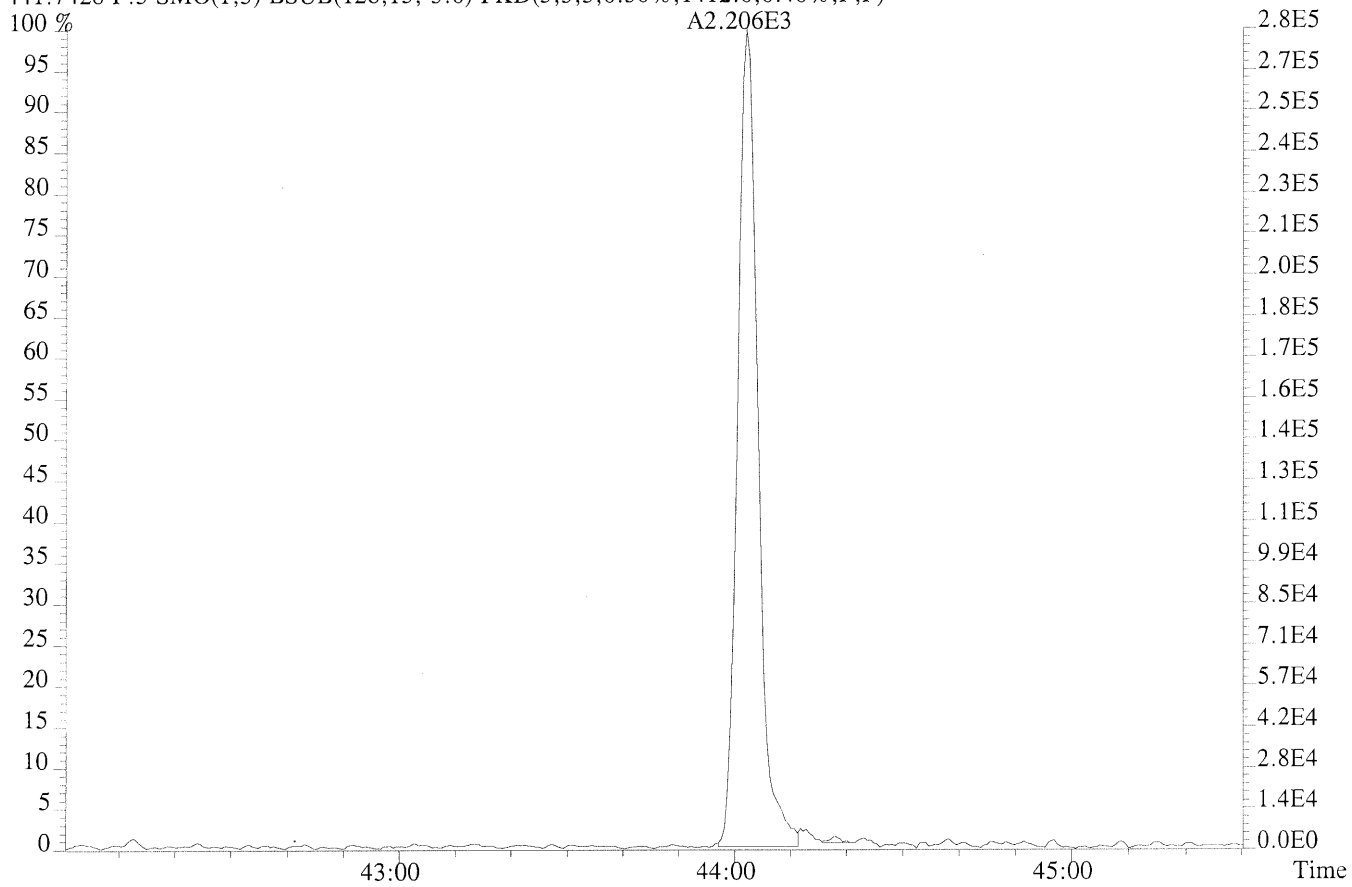
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



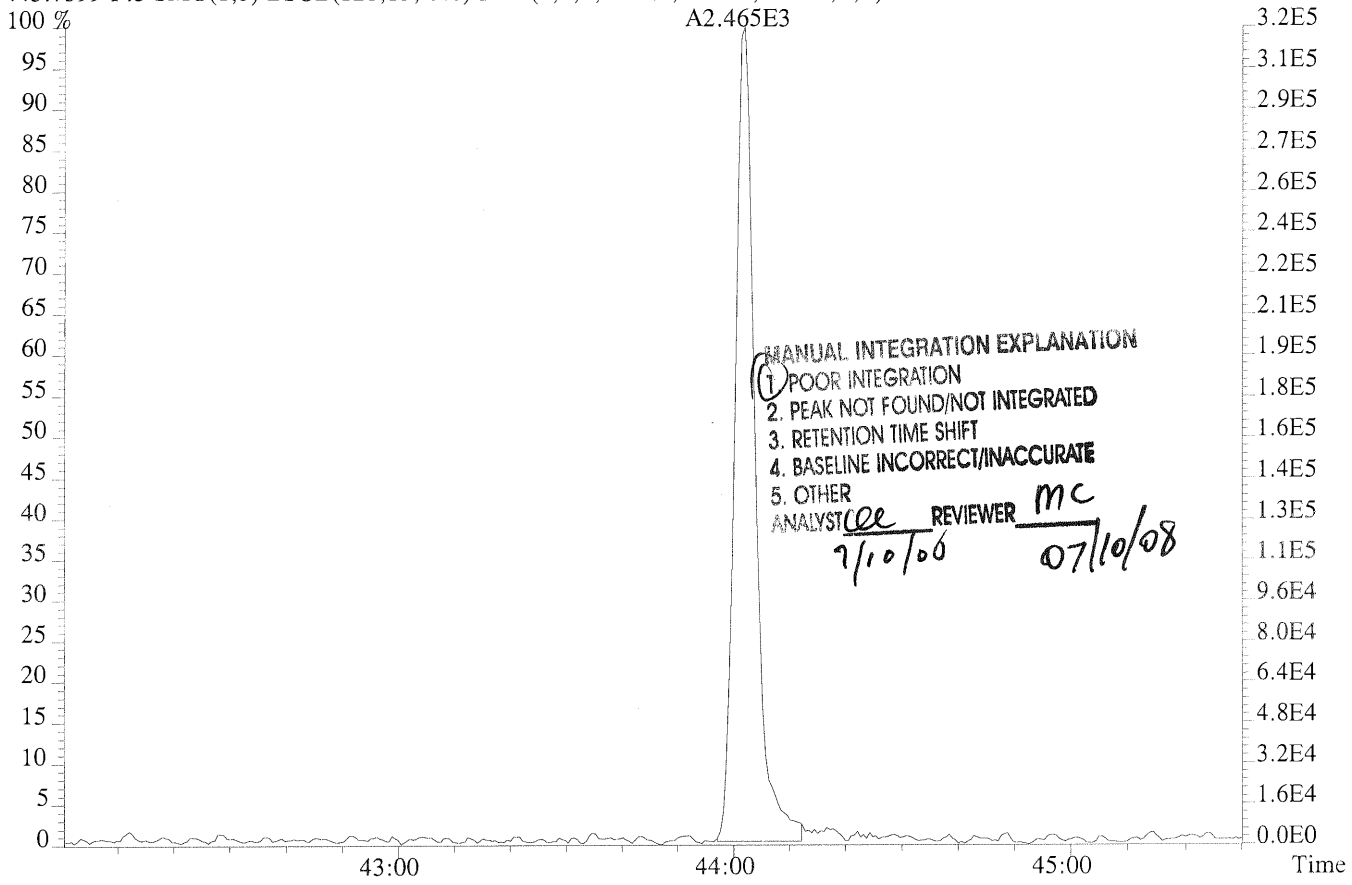
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



File:P100006 #1-386 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1412.0,0.40%,F,F)



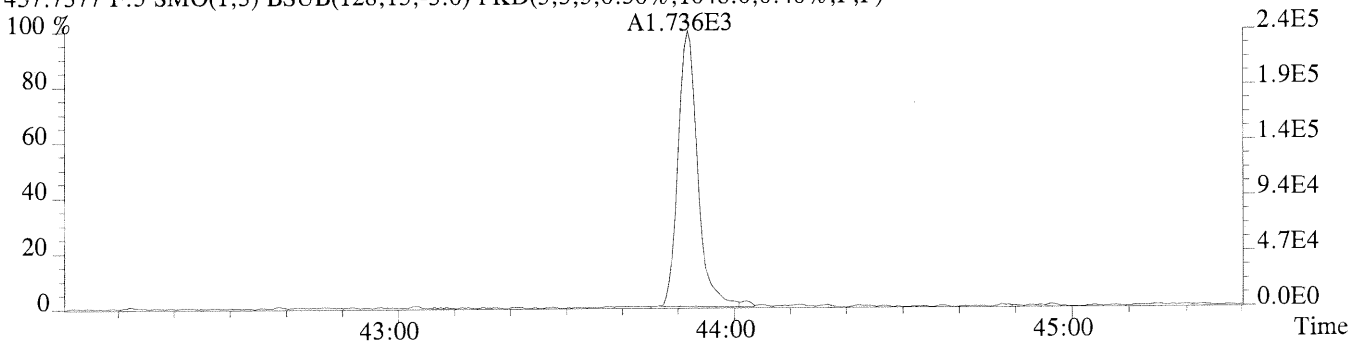
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2772.0,0.40%,F,F)



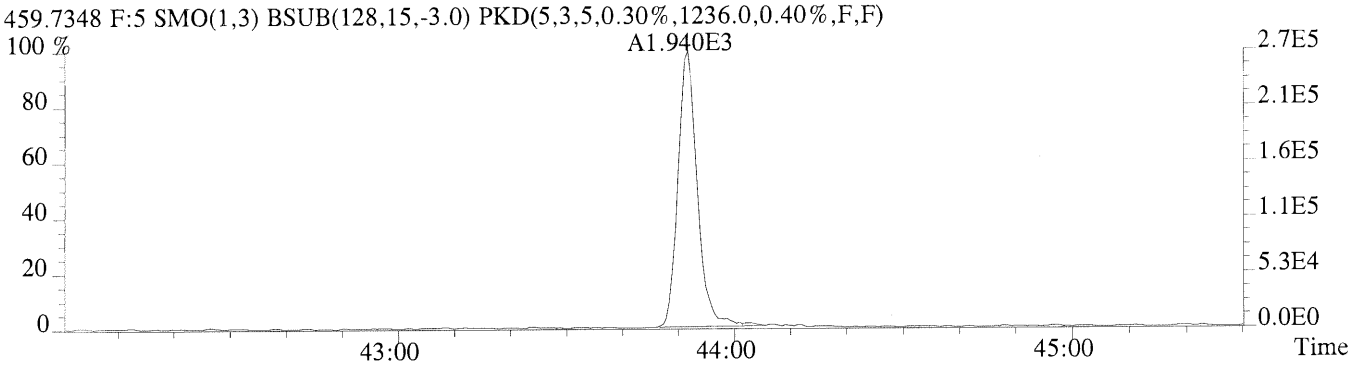
MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST cee 7/10/08 REVIEWER mc 07/10/08

File:P100006 #1-386 Acq: 2-JUL-2008 11:02:24 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

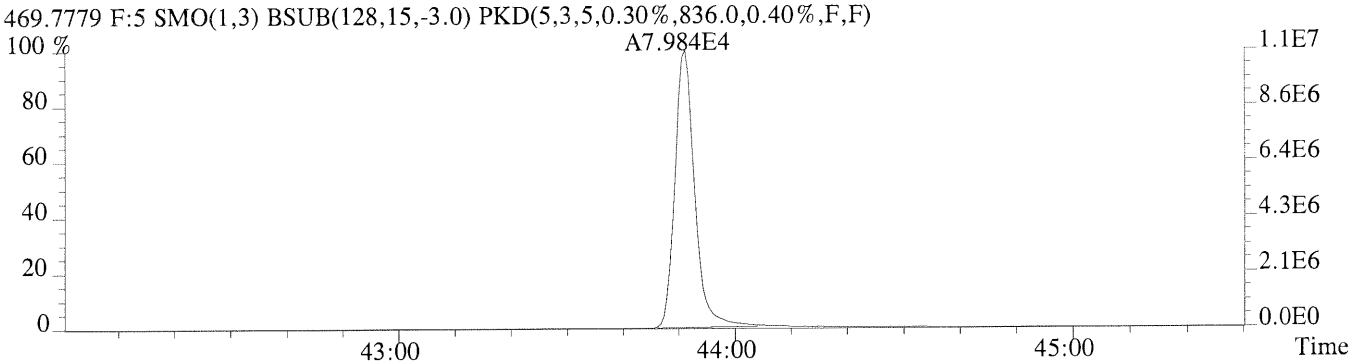
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1048.0,0.40%,F,F)



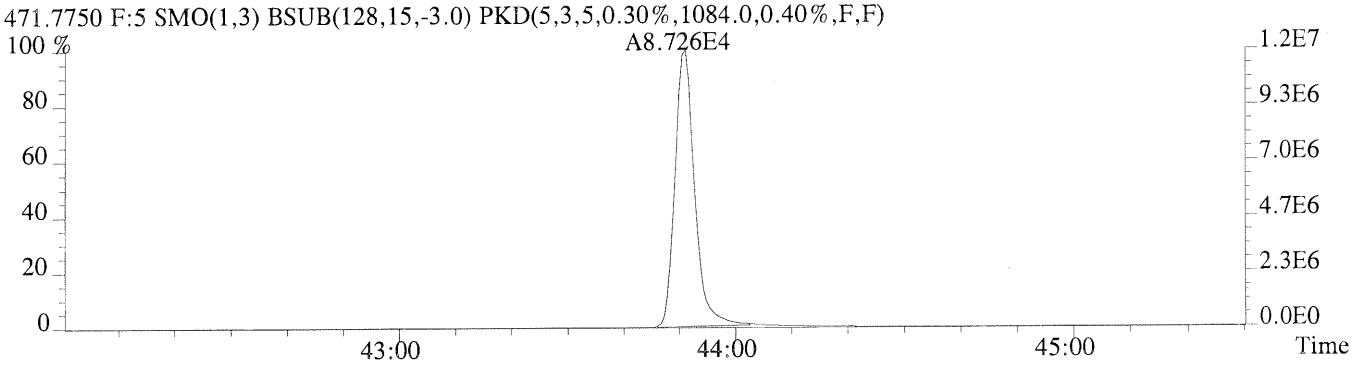
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1236.0,0.40%,F,F)



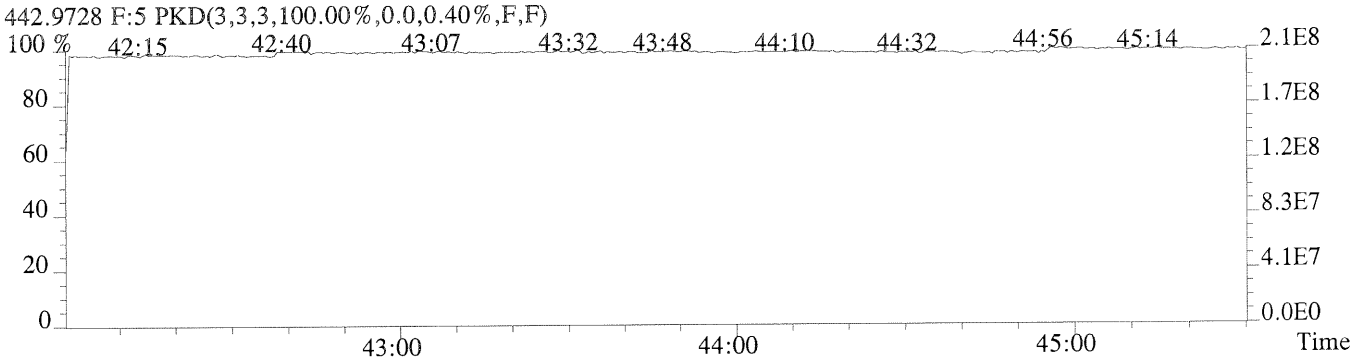
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,836.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1084.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC2

Run #2 Filename P100007 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 11:56:08
Processed: 3-JUL-08 14:49:03 Sample ID:

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:28	2.137e+03	2.682e+03	0.80	yes	no	0.98
2	Unk	1,2,3,7,8-PeCDF	33:37	7.147e+03	4.526e+03	1.58	yes	no	0.97
3	Unk	2,3,4,7,8-PeCDF	34:20	7.373e+03	4.658e+03	1.58	yes	no	1.00
4	Unk	1,2,3,4,7,8-HxCDF	37:05	6.721e+03	5.356e+03	1.25	yes	no	1.22
5	Unk	1,2,3,6,7,8-HxCDF	37:10	7.073e+03	5.578e+03	1.27	yes	no	1.31
6	Unk	2,3,4,6,7,8-HxCDF	37:39	6.294e+03	4.877e+03	1.29	yes	no	1.15
7	Unk	1,2,3,7,8,9-HxCDF	38:21	5.851e+03	4.508e+03	1.30	yes	no	1.06
8	Unk	1,2,3,4,6,7,8-HpCDF	39:48	5.675e+03	5.581e+03	1.02	yes	no	1.55
9	Unk	1,2,3,4,7,8,9-HpCDF	41:09	4.312e+03	4.229e+03	1.02	yes	no	1.17
10	Unk	OCDF	44:02	7.532e+03	8.417e+03	0.89	yes	no	1.36
11	Unk	2,3,7,8-TCDD	30:15	1.557e+03	1.910e+03	0.81	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:40	4.625e+03	2.899e+03	1.60	yes	no	0.88
13	Unk	1,2,3,4,7,8-HxCDD	37:45	3.676e+03	2.849e+03	1.29	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:50	4.644e+03	3.617e+03	1.28	yes	no	1.13
15	Unk	1,2,3,7,8,9-HxCDD	38:07	4.145e+03	3.225e+03	1.29	yes	no	1.04
16	Unk	1,2,3,4,6,7,8-HpCDD	40:43	3.216e+03	3.015e+03	1.07	yes	no	1.02
17	Unk	OCDD	43:52	5.790e+03	6.319e+03	0.92	yes	no	1.02
18	IS	13C-2,3,7,8-TCDF	29:27	4.571e+04	5.744e+04	0.80	yes	no	1.41
19	IS	13C-1,2,3,7,8-PeCDF	33:37	6.006e+04	3.820e+04	1.57	yes	no	1.38
20	IS	13C-1,2,3,4,7,8-HxCDF	37:04	6.965e+04	1.302e+05	0.54	yes	no	1.35
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:47	4.776e+04	1.041e+05	0.46	yes	no	1.03
22	IS	13C-2,3,7,8-TCDD	30:14	3.477e+04	4.474e+04	0.78	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:40	4.271e+04	2.762e+04	1.55	yes	no	0.98
24	IS	13C-1,2,3,6,7,8-HxCDD	37:49	7.889e+04	6.261e+04	1.26	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:42	6.483e+04	6.087e+04	1.07	yes	no	0.85
26	IS	13C-OCDD	43:51	1.154e+05	1.273e+05	0.91	yes	no	0.79
27	RS/RT	13C-1,2,3,4-TCDD	30:02	3.222e+04	4.070e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:07	8.056e+04	6.398e+04	1.26	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:15	3.558e+03					1.01

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC2

Run #2 Filename P100007 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 11:56:08

Processed: 3-JUL-08 14:49:03 LAB. ID:

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	3.79e+05	1.24e+03	3.1e+02	4.88e+05	2.75e+03	1.8e+02
2	1,2,3,7,8-PeCDF	1.38e+06	1.00e+03	1.4e+03	8.77e+05	2.16e+03	4.1e+02
3	2,3,4,7,8-PeCDF	1.42e+06	1.00e+03	1.4e+03	9.11e+05	2.16e+03	4.2e+02
4	1,2,3,4,7,8-HxCDF	1.49e+06	1.44e+03	1.0e+03	1.17e+06	7.20e+02	1.6e+03
5	1,2,3,6,7,8-HxCDF	1.37e+06	1.44e+03	9.5e+02	1.12e+06	7.20e+02	1.6e+03
6	2,3,4,6,7,8-HxCDF	1.32e+06	1.44e+03	9.2e+02	1.03e+06	7.20e+02	1.4e+03
7	1,2,3,7,8,9-HxCDF	1.15e+06	1.44e+03	8.0e+02	8.87e+05	7.20e+02	1.2e+03
8	1,2,3,4,6,7,8-HpCDF	1.17e+06	1.82e+03	6.5e+02	1.15e+06	1.56e+03	7.3e+02
9	1,2,3,4,7,8,9-HpCDF	7.62e+05	1.82e+03	4.2e+02	7.23e+05	1.56e+03	4.6e+02
10	OCDF	9.96e+05	1.35e+03	7.4e+02	1.08e+06	3.48e+03	3.1e+02
11	2,3,7,8-TCDD	2.89e+05	1.35e+03	2.1e+02	3.48e+05	1.02e+03	3.4e+02
12	1,2,3,7,8-PeCDD	9.22e+05	2.40e+03	3.8e+02	5.72e+05	7.76e+02	7.4e+02
13	1,2,3,4,7,8-HxCDD	8.66e+05	9.52e+02	9.1e+02	6.61e+05	1.65e+03	4.0e+02
14	1,2,3,6,7,8-HxCDD	9.29e+05	9.52e+02	9.8e+02	7.12e+05	1.65e+03	4.3e+02
15	1,2,3,7,8,9-HxCDD	8.10e+05	9.52e+02	8.5e+02	6.32e+05	1.65e+03	3.8e+02
16	1,2,3,4,6,7,8-HpCDD	6.11e+05	1.26e+03	4.9e+02	5.61e+05	7.84e+02	7.2e+02
17	OCDD	7.79e+05	8.88e+02	8.8e+02	8.64e+05	1.51e+03	5.7e+02
18	13C-2,3,7,8-TCDF	8.02e+06	4.52e+03	1.8e+03	1.01e+07	3.78e+03	2.7e+03
19	13C-1,2,3,7,8-PeCDF	1.15e+07	9.84e+02	1.2e+04	7.41e+06	1.12e+03	6.6e+03
20	13C-1,2,3,4,7,8-HxCDF	1.46e+07	1.55e+03	9.4e+03	2.68e+07	1.70e+03	1.6e+04
21	13C-1,2,3,4,6,7,8-HpCDF	9.72e+06	6.67e+03	1.5e+03	2.12e+07	6.86e+03	3.1e+03
22	13C-2,3,7,8-TCDD	6.19e+06	6.55e+03	9.5e+02	7.89e+06	1.86e+03	4.2e+03
23	13C-1,2,3,7,8-PeCDD	8.33e+06	2.16e+03	3.9e+03	5.44e+06	1.46e+03	3.7e+03
24	13C-1,2,3,6,7,8-HxCDD	1.69e+07	1.29e+03	1.3e+04	1.35e+07	1.04e+03	1.3e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.22e+07	2.24e+03	5.4e+03	1.15e+07	1.16e+03	1.0e+04
26	13C-OCDD	1.55e+07	1.38e+03	1.1e+04	1.71e+07	1.08e+03	1.6e+04
27	13C-1,2,3,4-TCDD	6.04e+06	6.55e+03	9.2e+02	7.65e+06	1.86e+03	4.1e+03
28	13C-1,2,3,7,8,9-HxCDD	1.64e+07	1.29e+03	1.3e+04	1.29e+07	1.04e+03	1.2e+04
29	37Cl-2,3,7,8-TCDD	6.52e+05	1.33e+03	4.9e+02			

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
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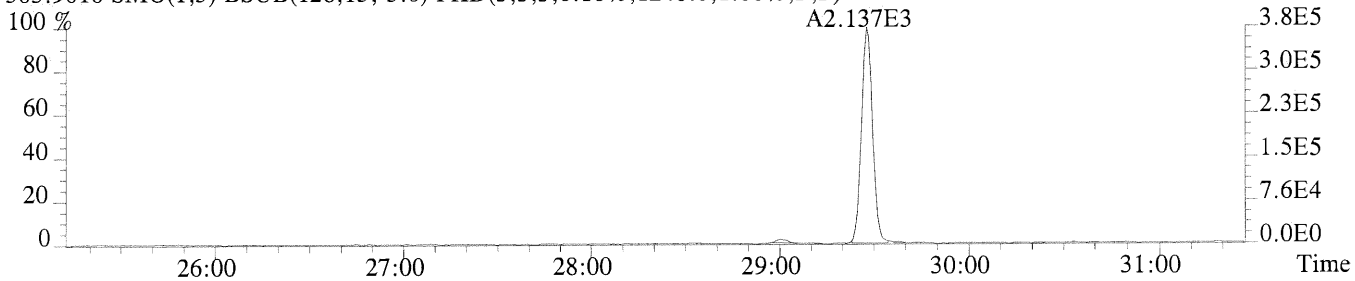
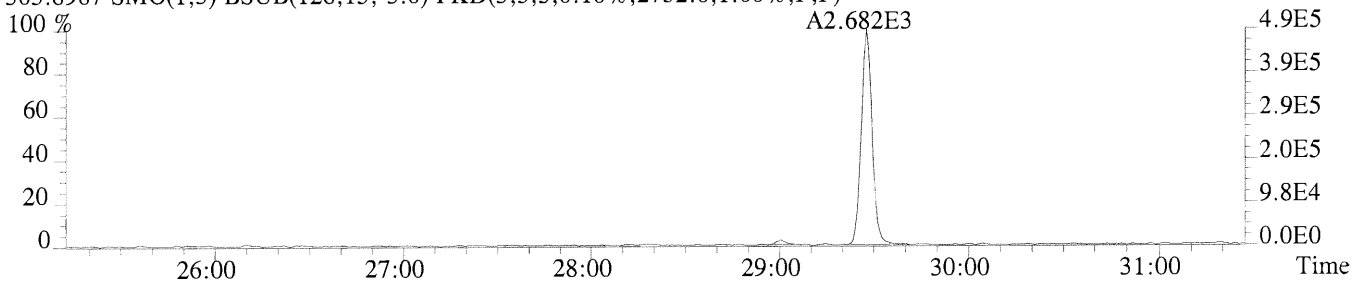
File:P100007 #1-521 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

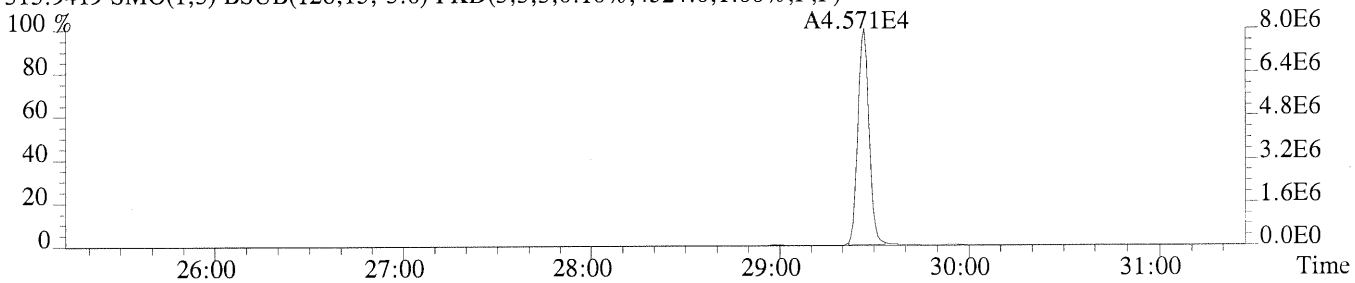
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1240.0,1.00%,F,F)



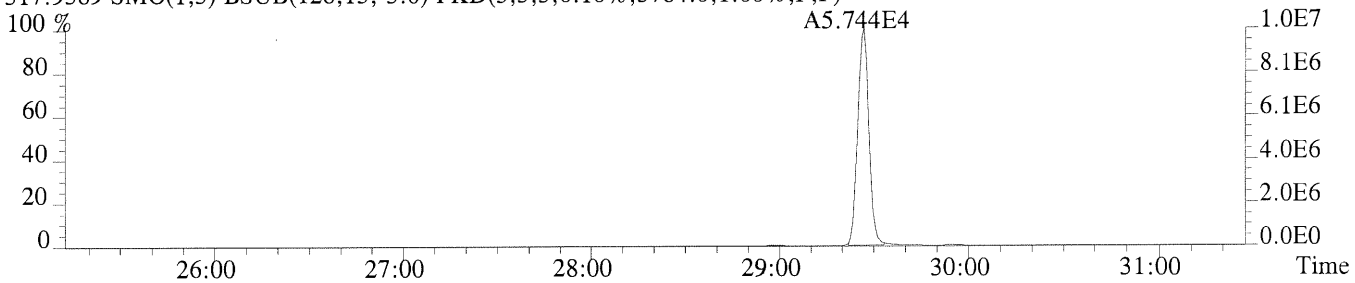
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2752.0,1.00%,F,F)



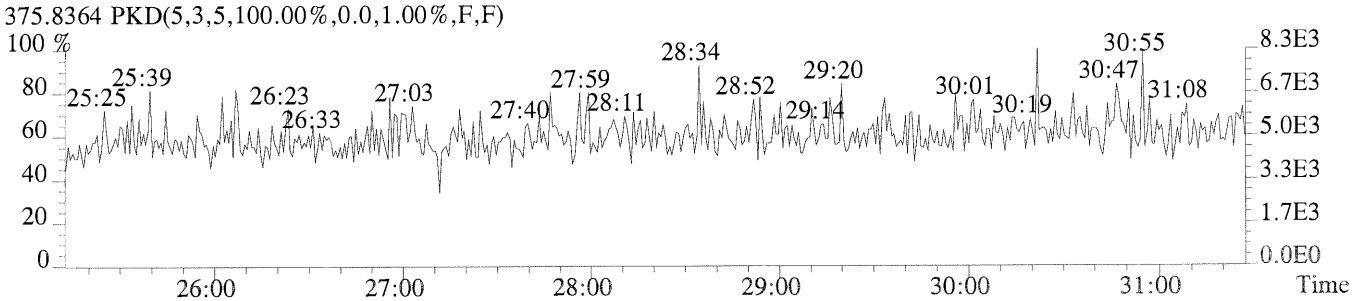
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,4524.0,1.00%,F,F)



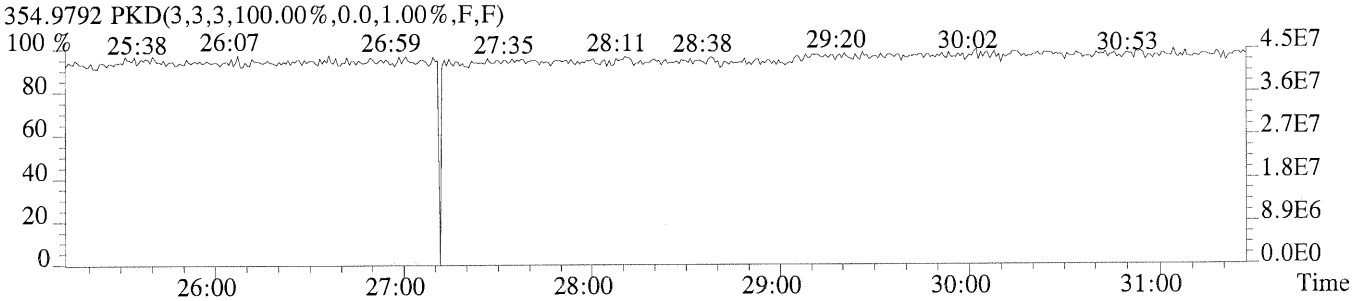
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3784.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

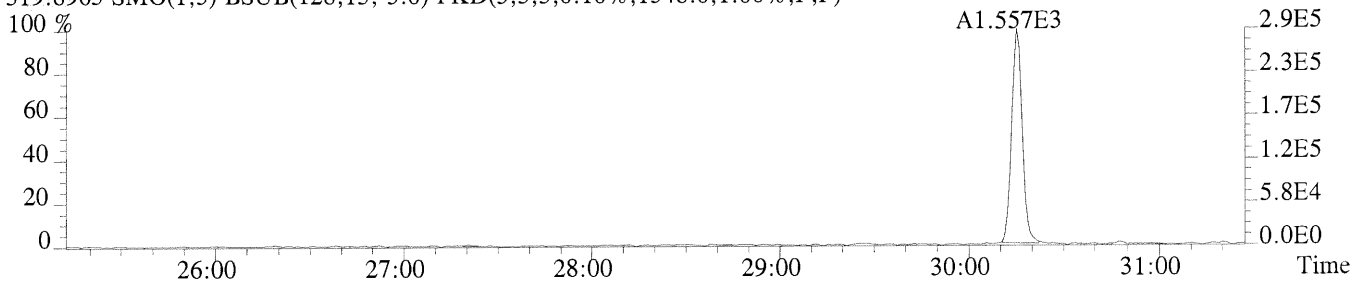


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

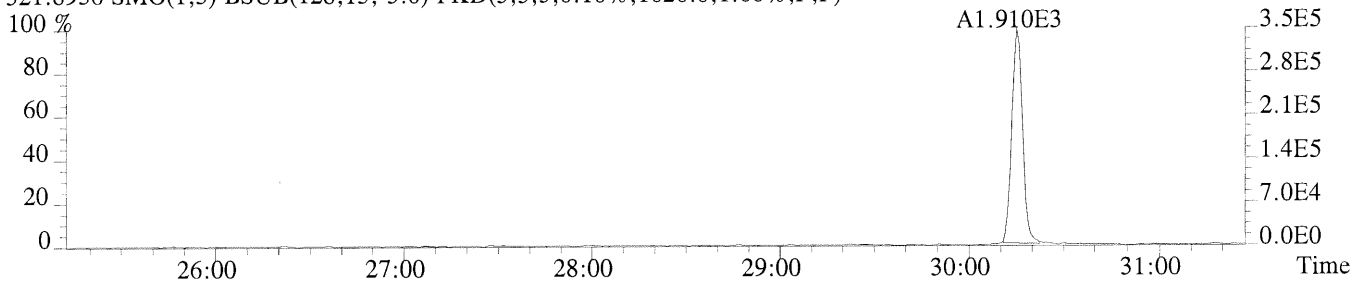


File:P100007 #1-521 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

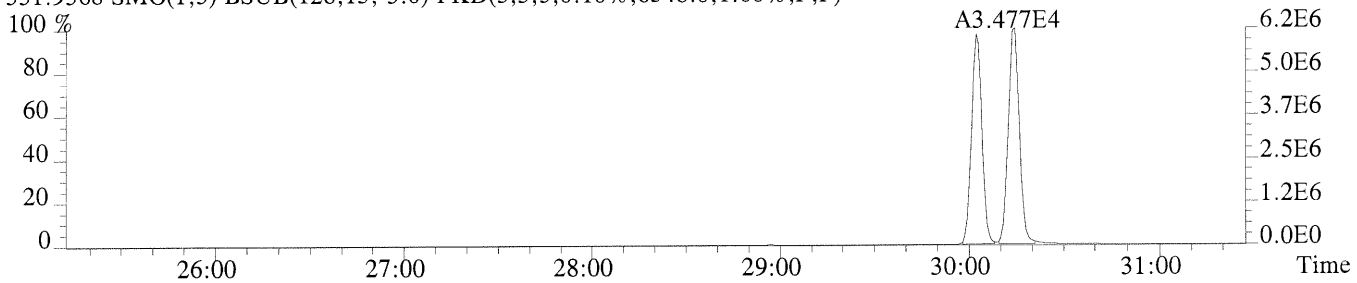
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1348.0,1.00%,F,F)



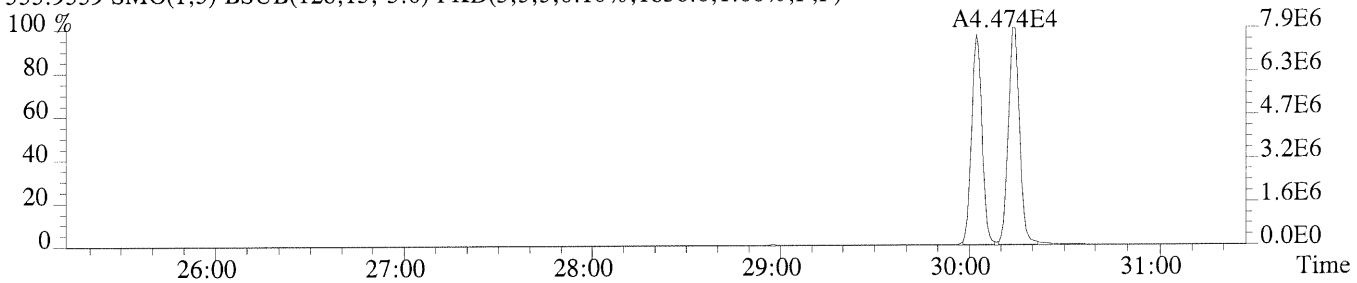
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1020.0,1.00%,F,F)



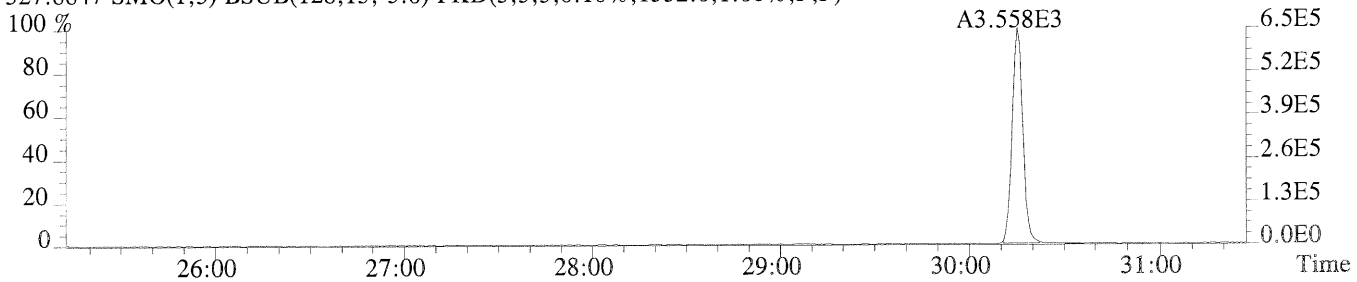
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,6548.0,1.00%,F,F)



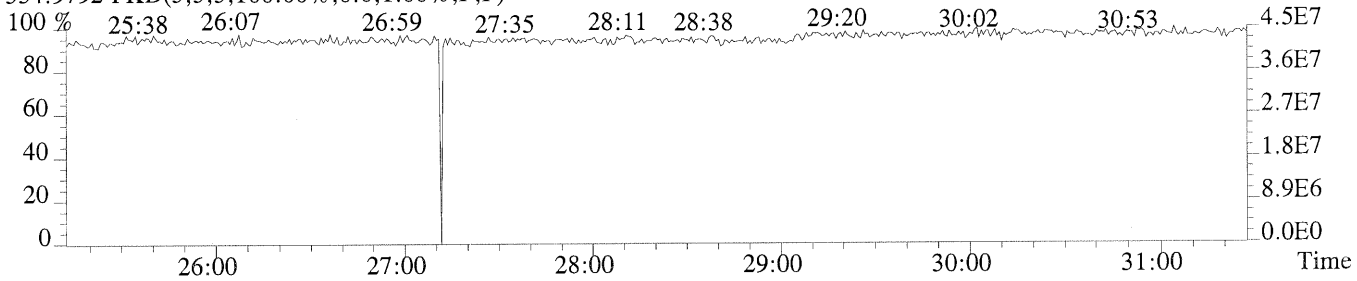
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1856.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1332.0,1.00%,F,F)

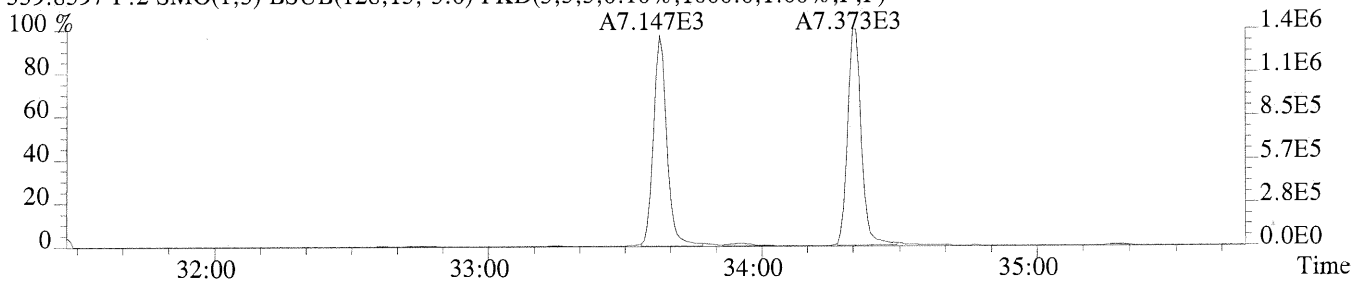


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

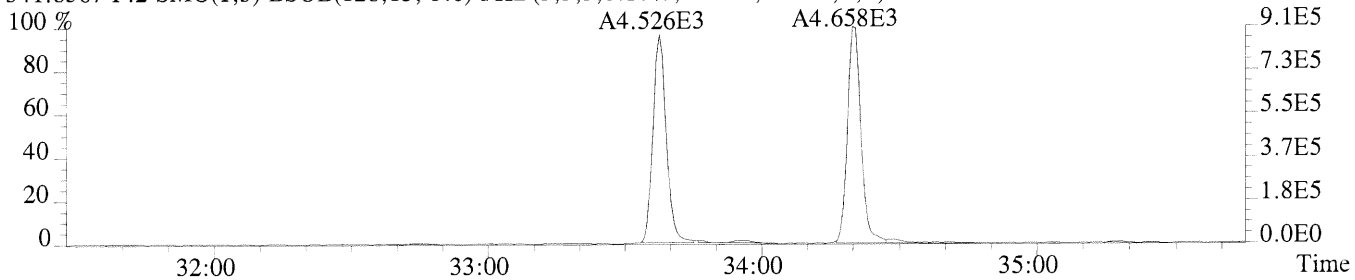


File:P100007 #1-390 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

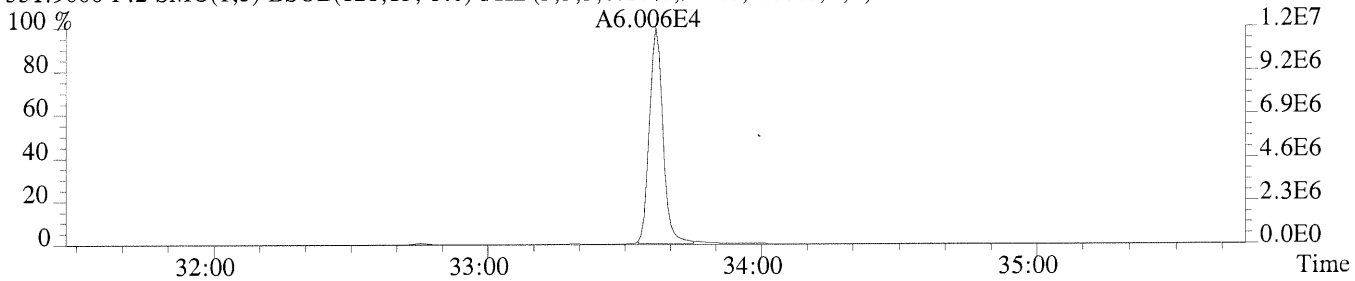
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1000.0,1.00%,F,F)



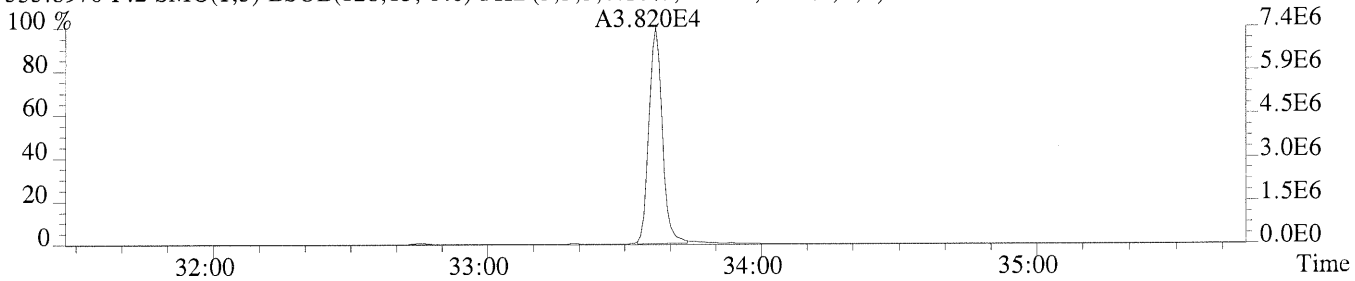
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2156.0,1.00%,F,F)



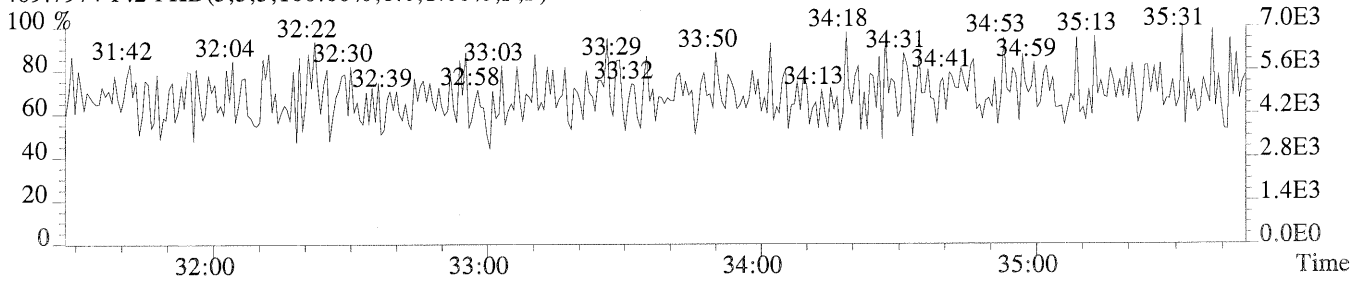
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,984.0,1.00%,F,F)



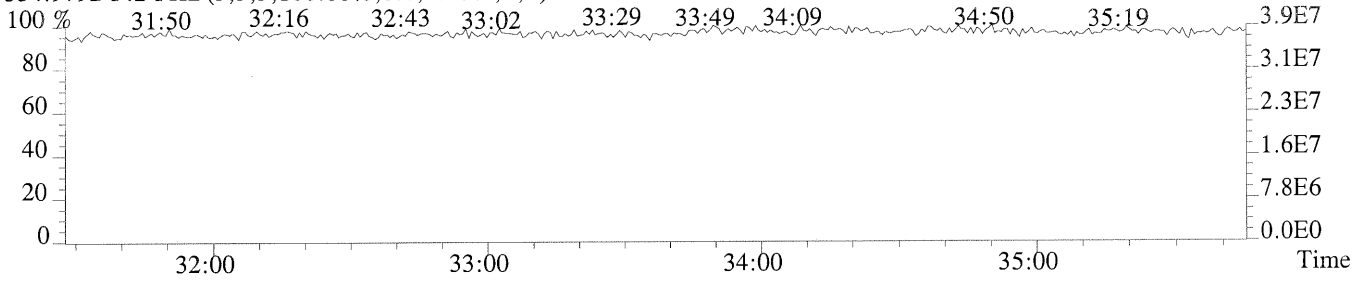
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1124.0,1.00%,F,F)



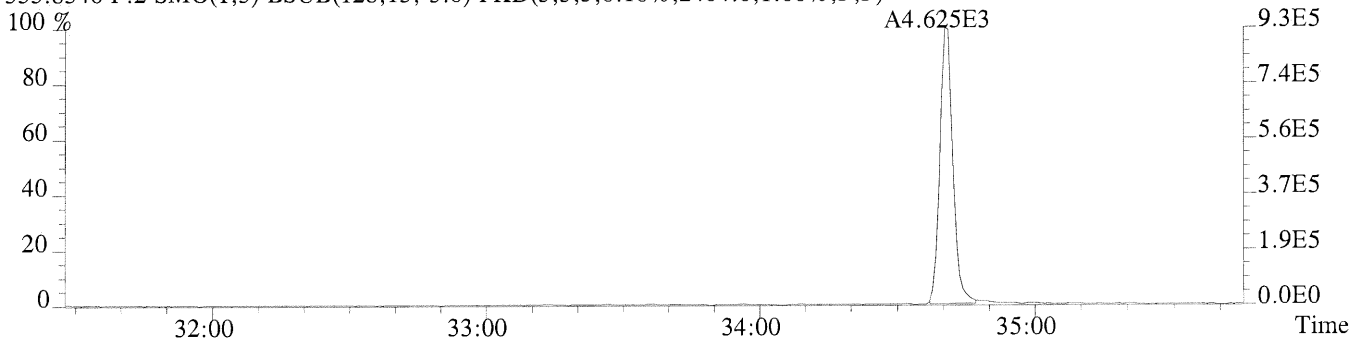
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



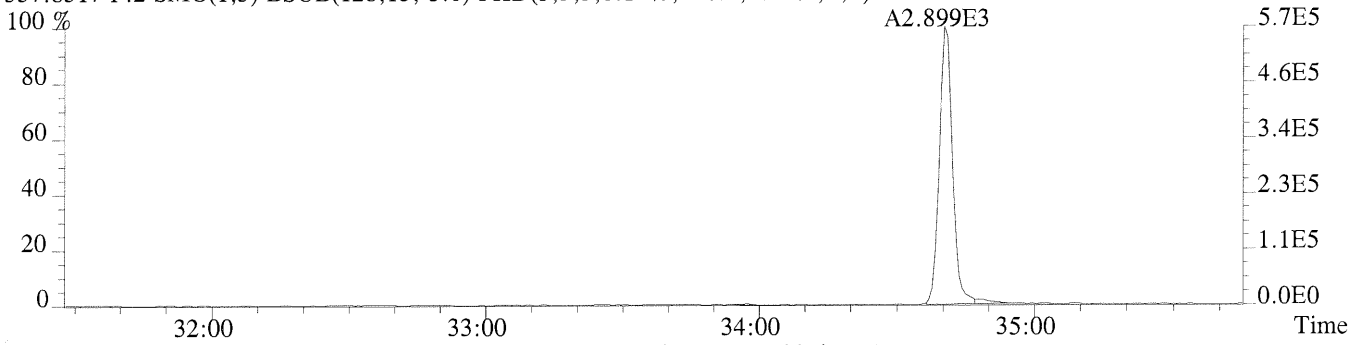
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



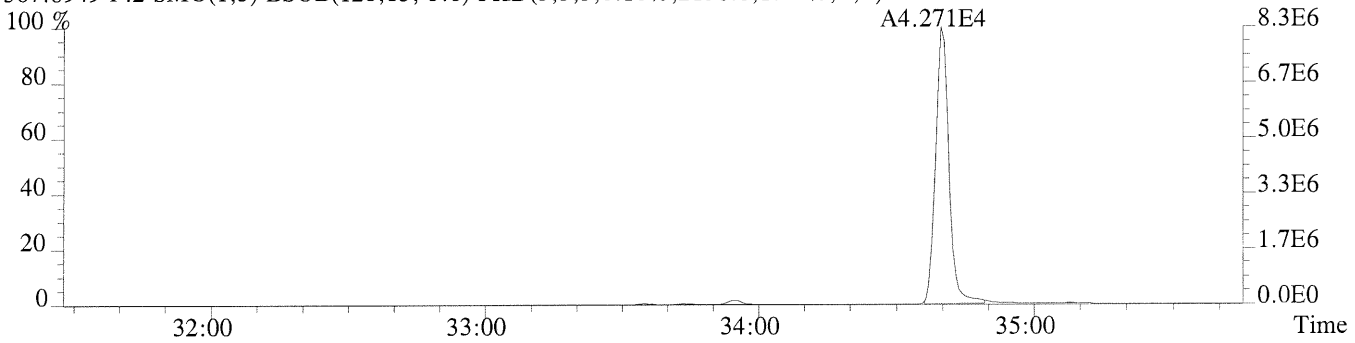
File:P100007 #1-390 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2404.0,1.00%,F,F)



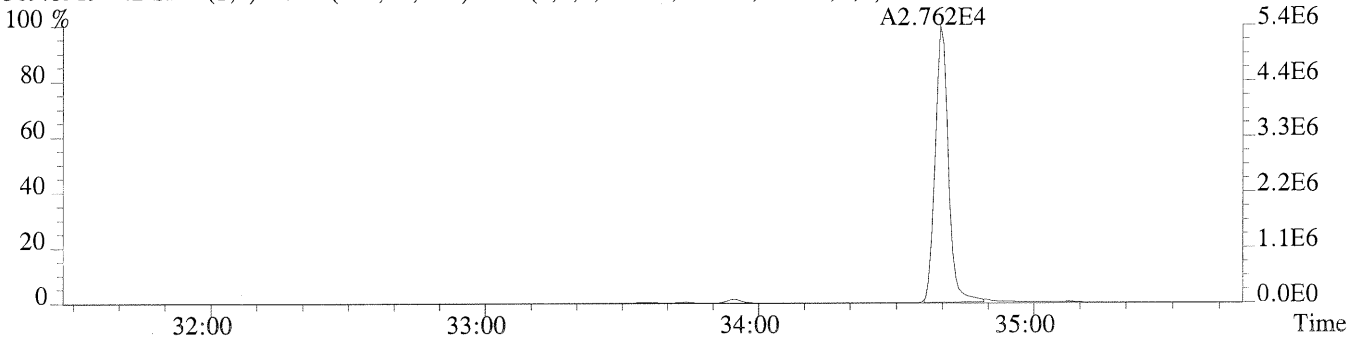
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,776.0,1.00%,F,F)



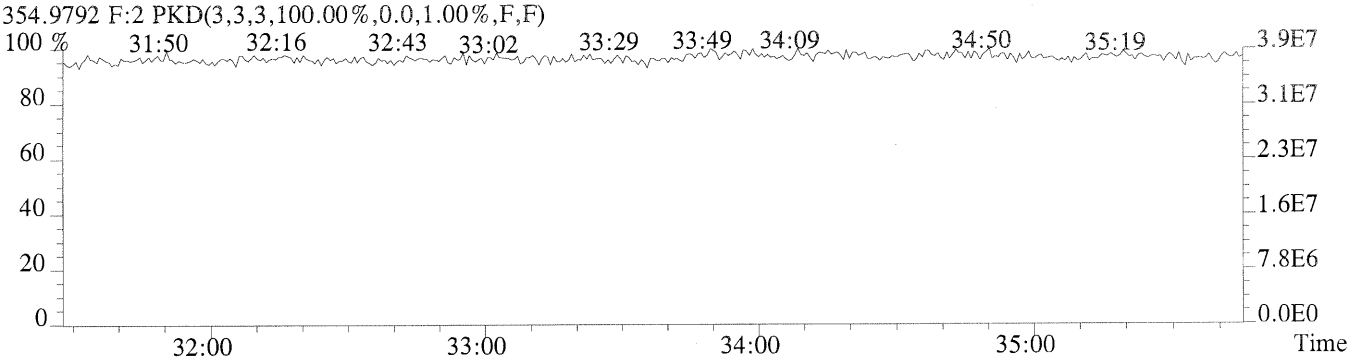
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2156.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1460.0,1.00%,F,F)

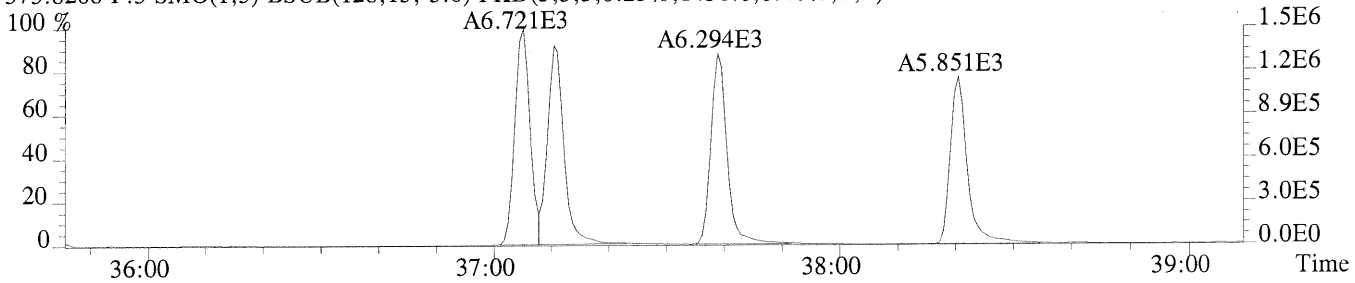


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

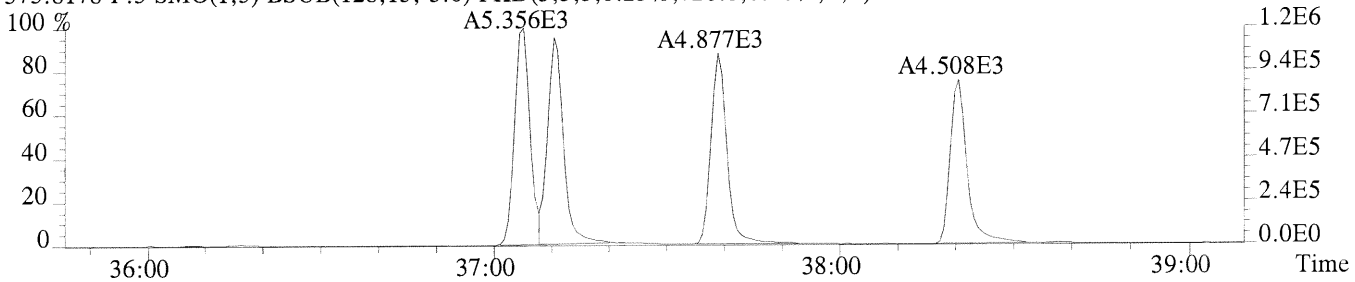


File:P100007 #1-309 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

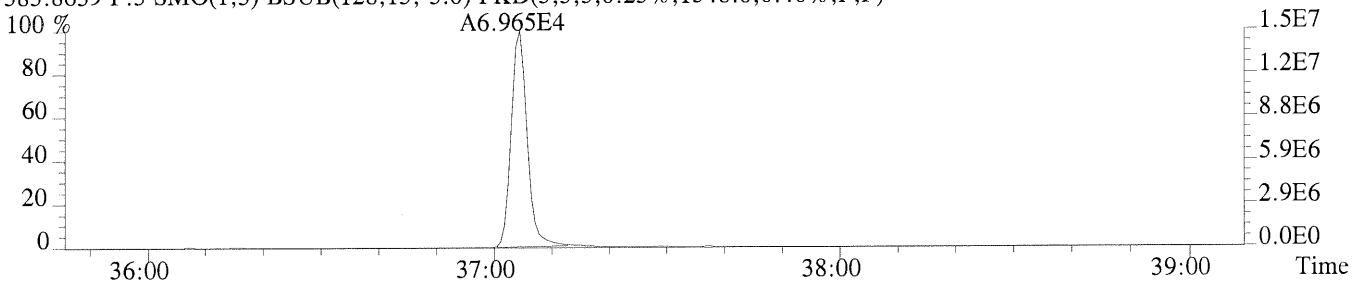
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1436.0,0.40%,F,F)



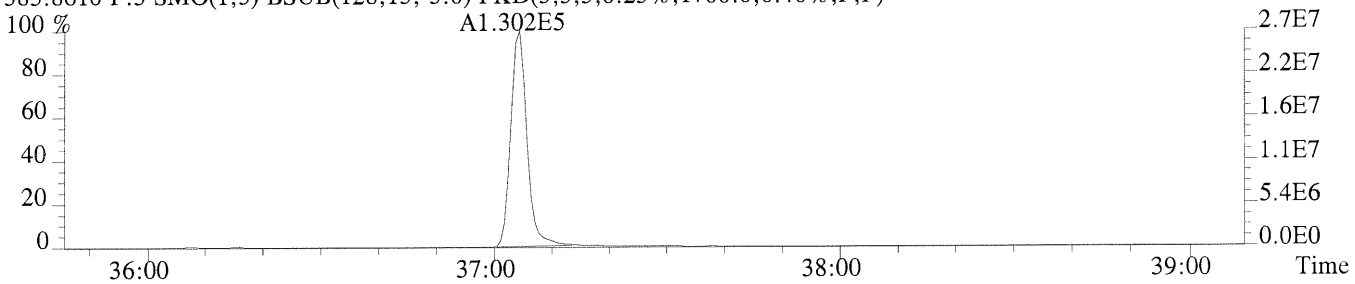
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,720.0,0.40%,F,F)



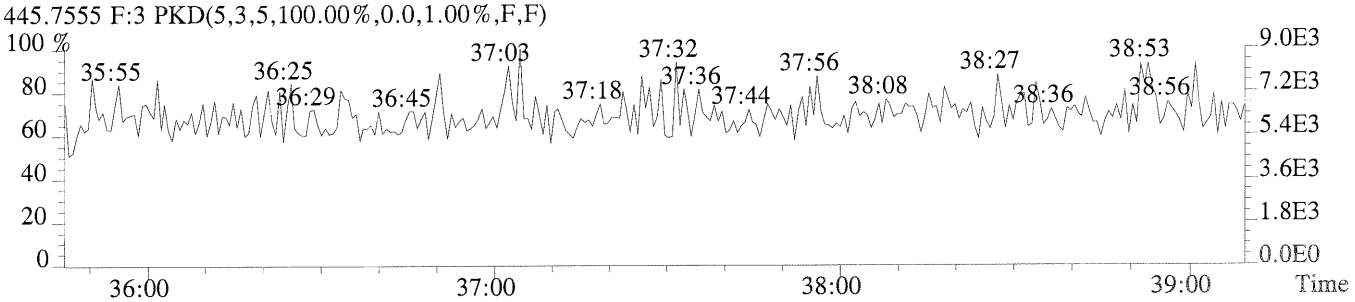
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1548.0,0.40%,F,F)



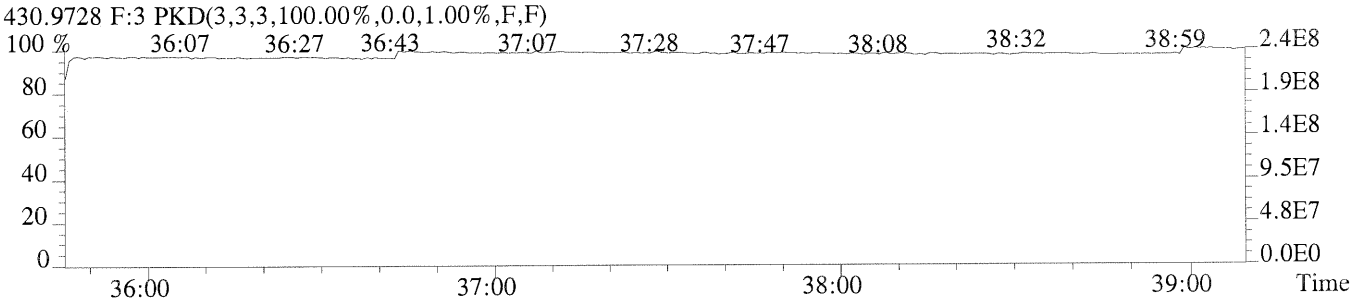
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1700.0,0.40%,F,F)



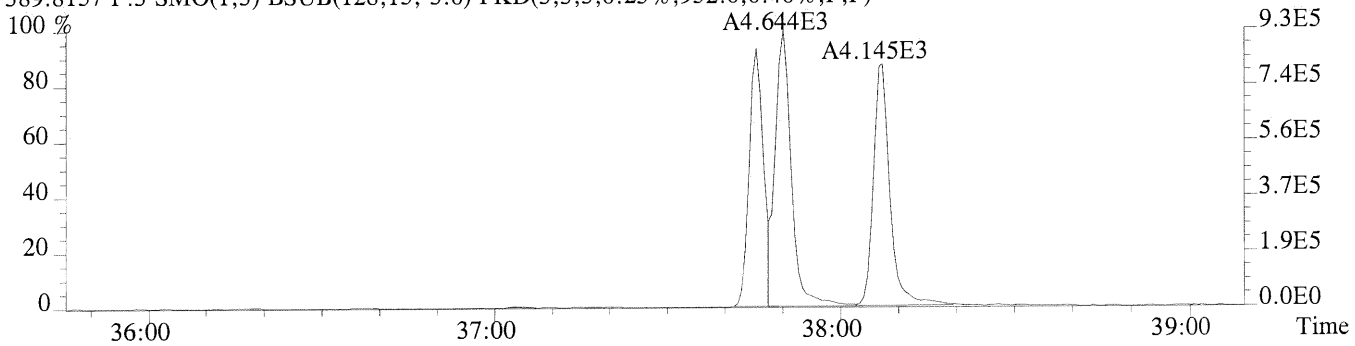
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



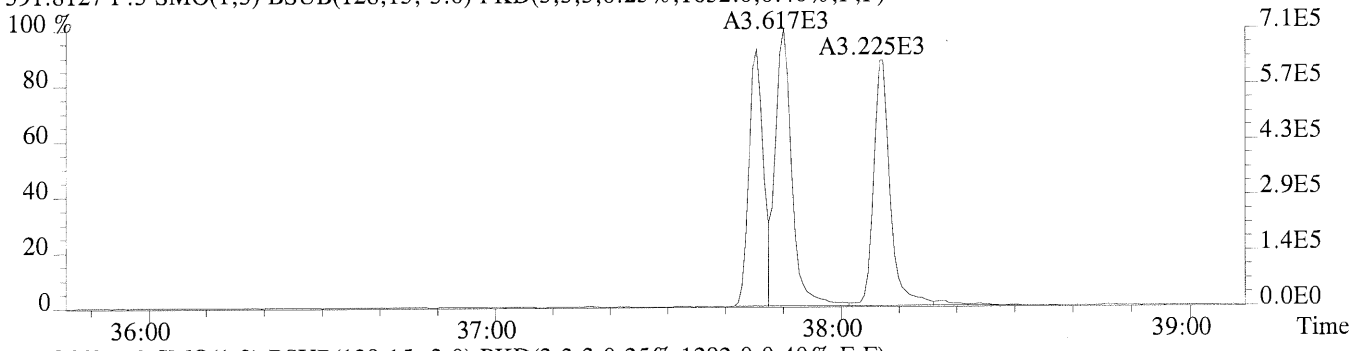
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



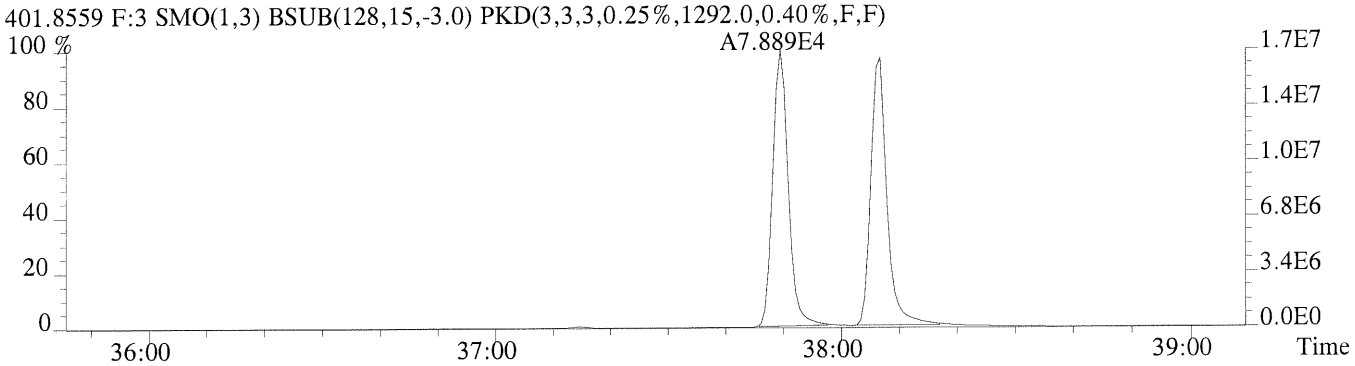
File:P100007 #1-309 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,952.0,0.40%,F,F)



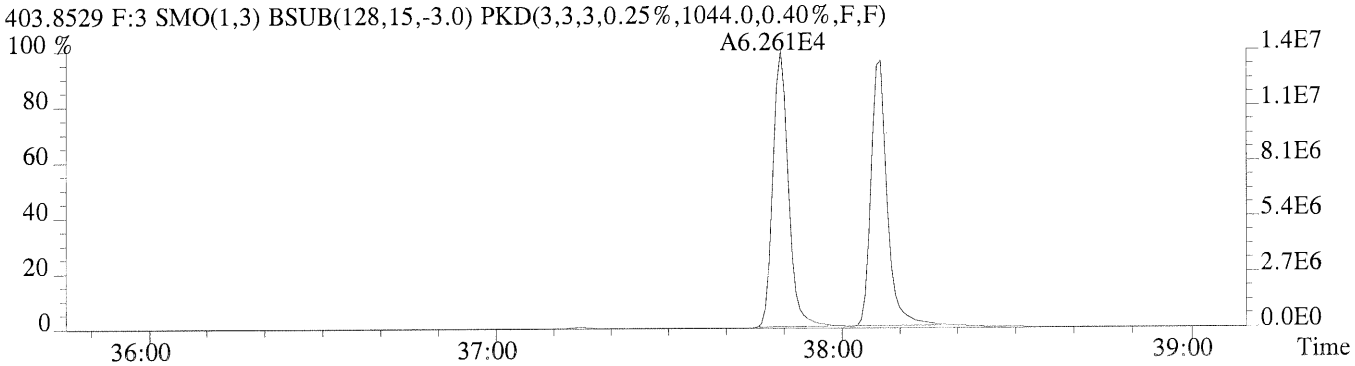
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1652.0,0.40%,F,F)



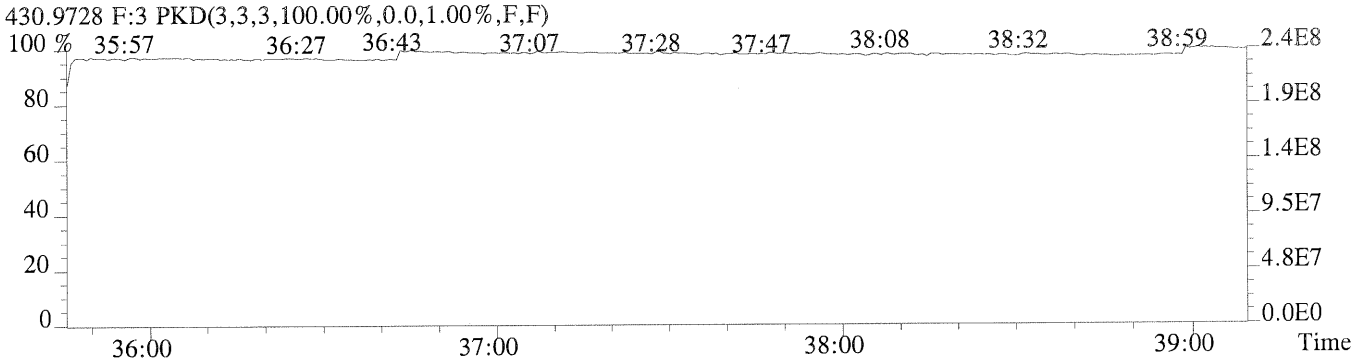
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1292.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1044.0,0.40%,F,F)

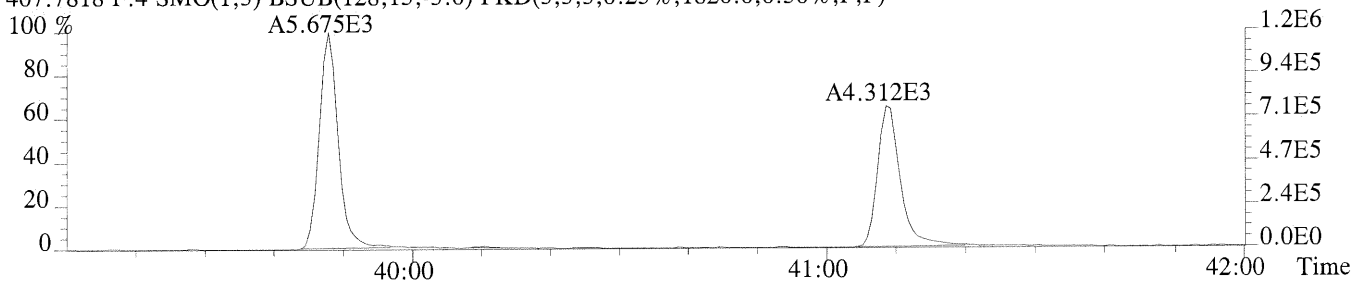


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

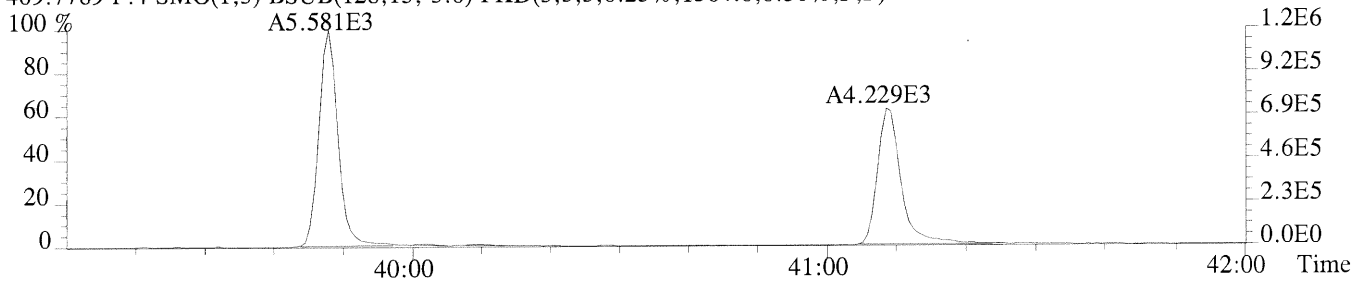


File:P100007 #1-258 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

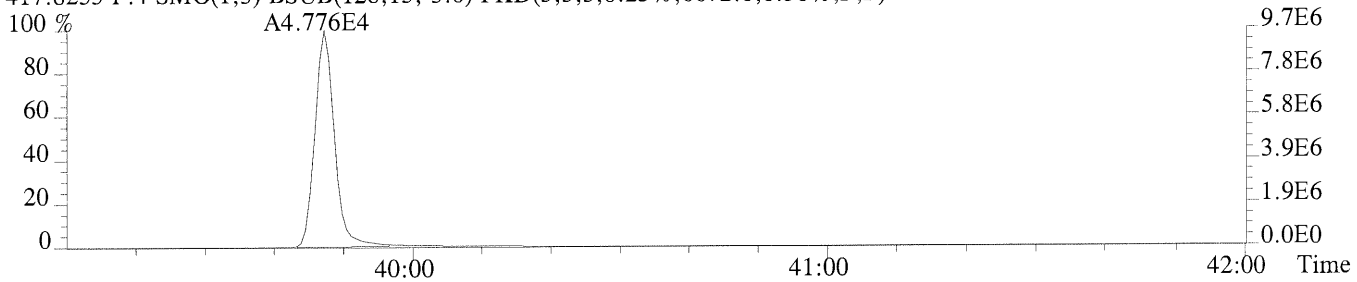
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1820.0,0.50%,F,F)



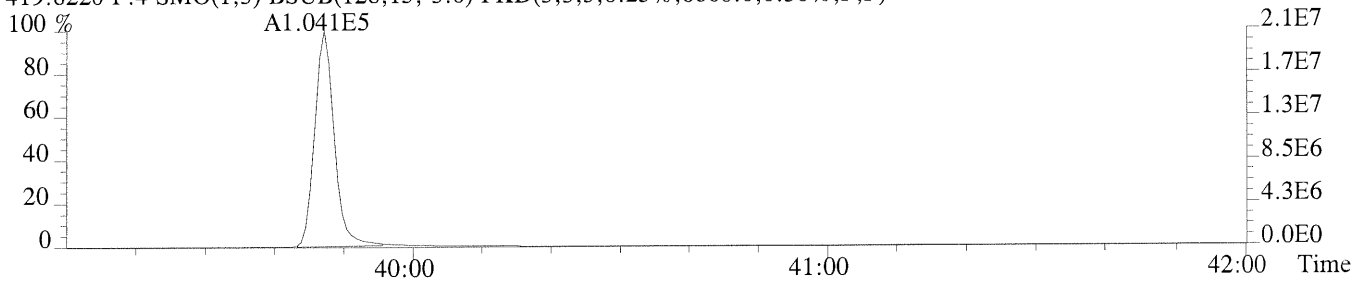
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1564.0,0.50%,F,F)



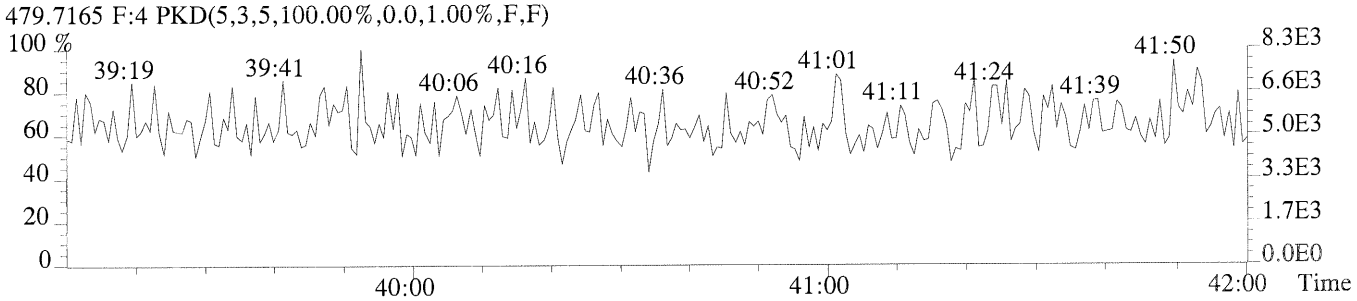
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,6672.0,0.50%,F,F)



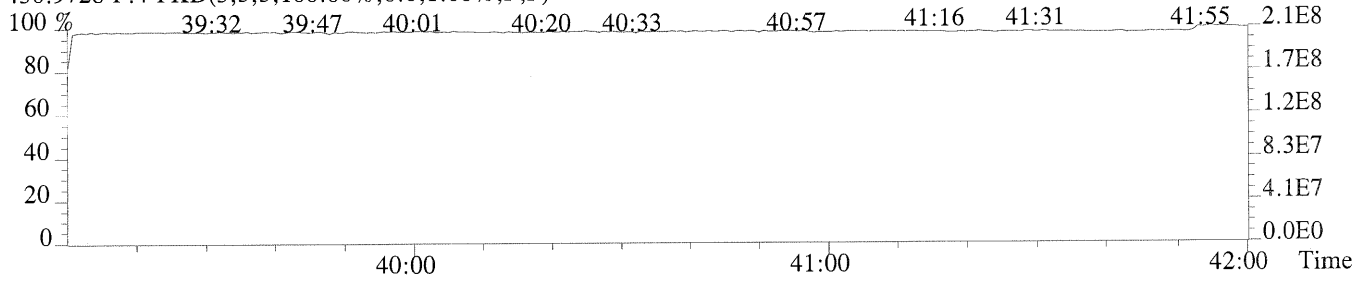
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,6860.0,0.50%,F,F)



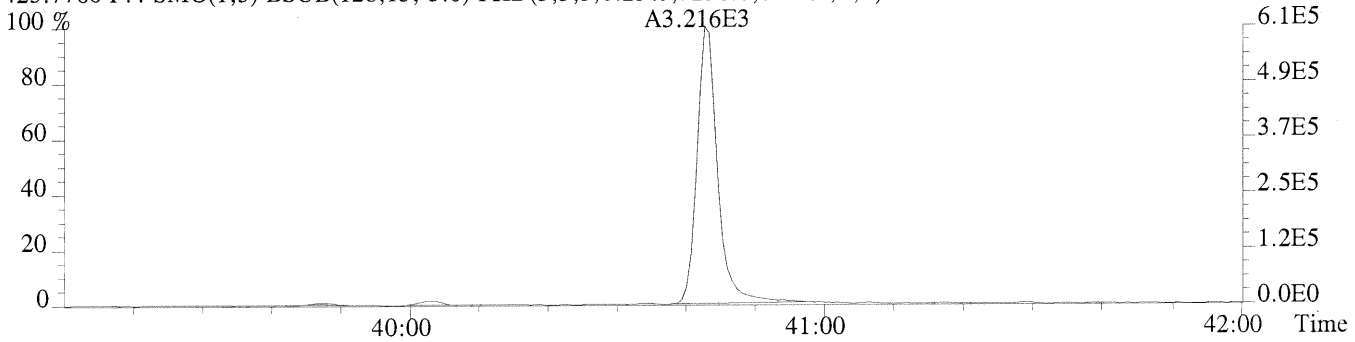
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



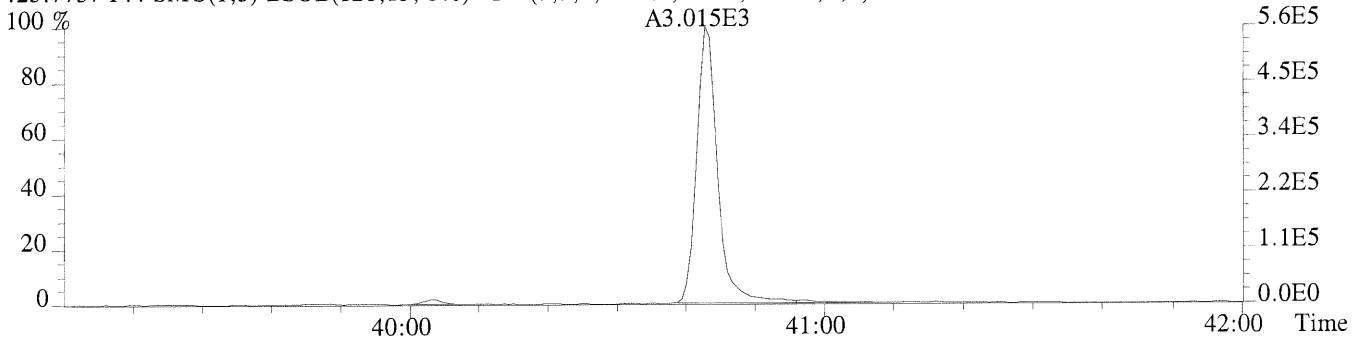
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



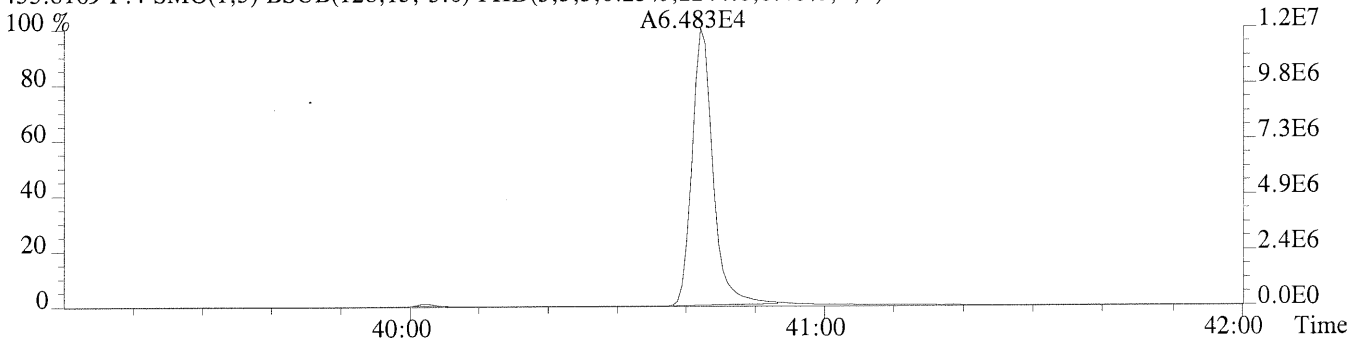
File:P100007 #1-258 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1256.0,0.40%,F,F)



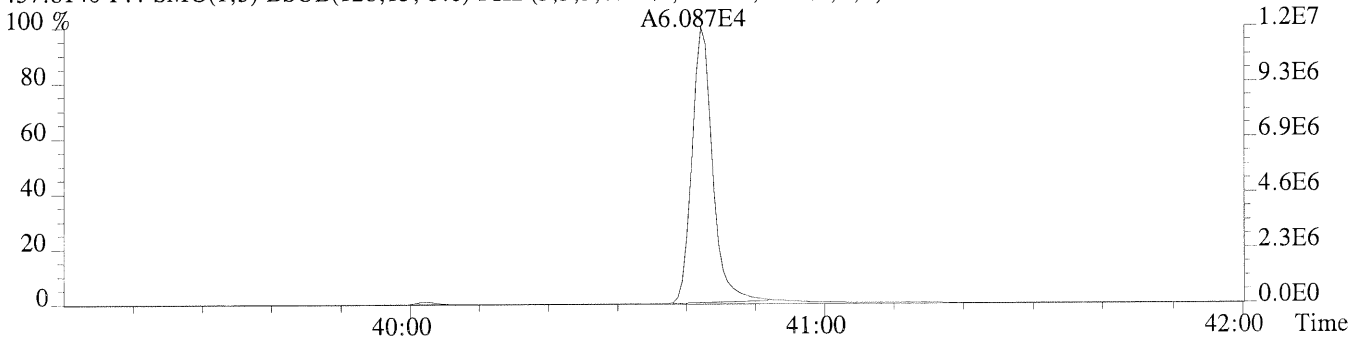
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,784.0,0.40%,F,F)



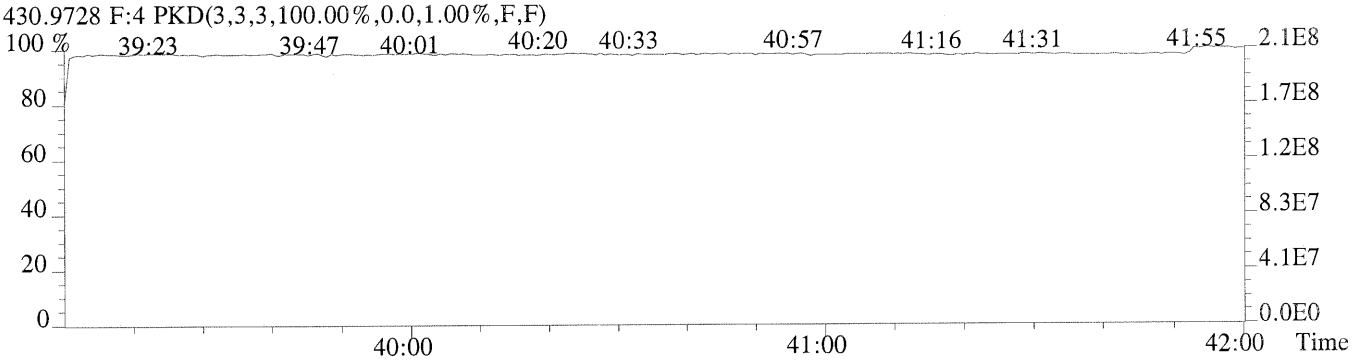
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2244.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1156.0,0.40%,F,F)

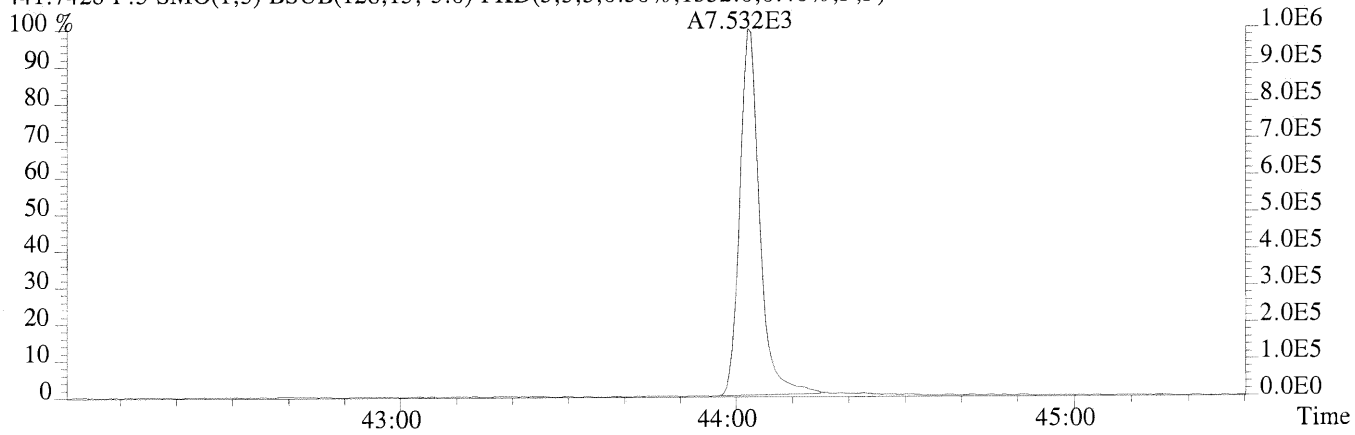


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

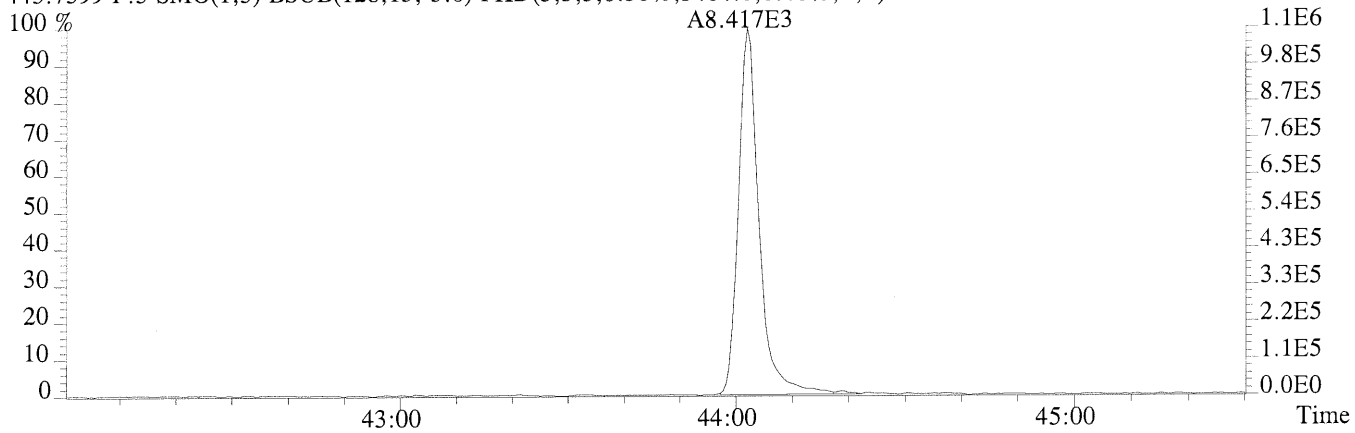


File:P100007 #1-386 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

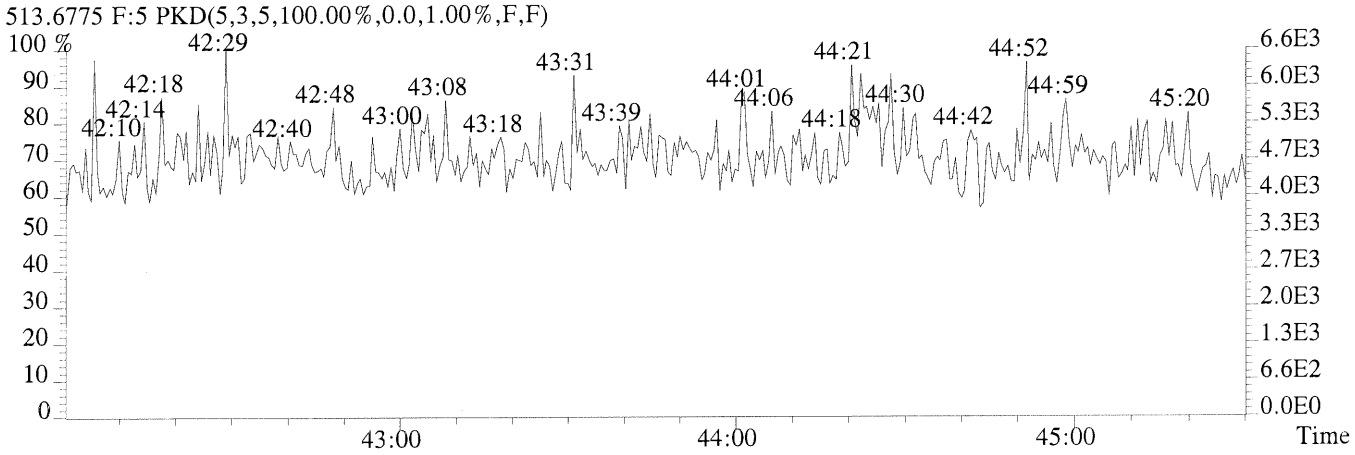
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1352.0,0.40%,F,F)



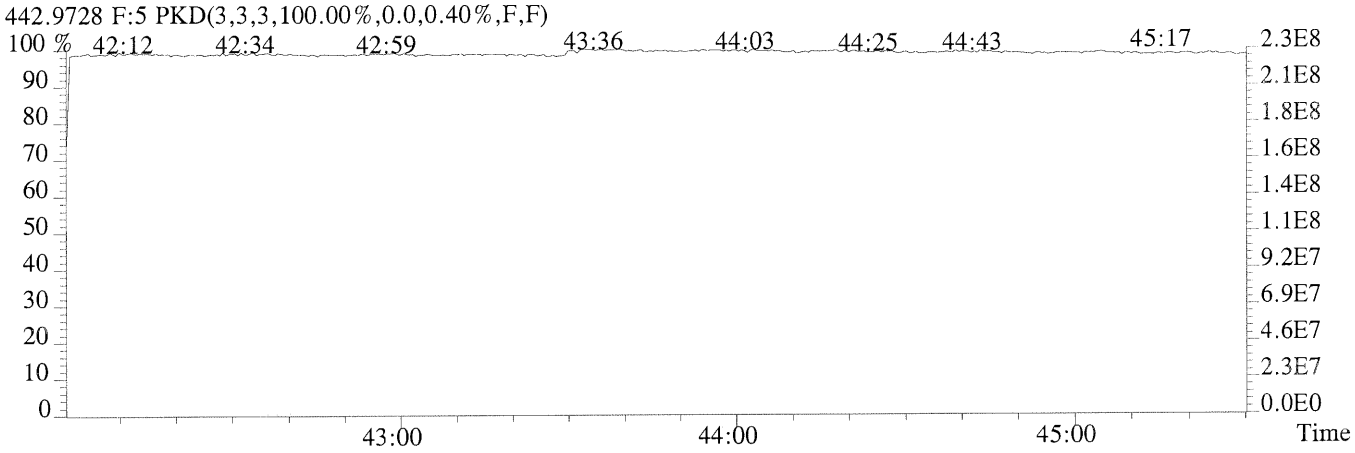
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,3484.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

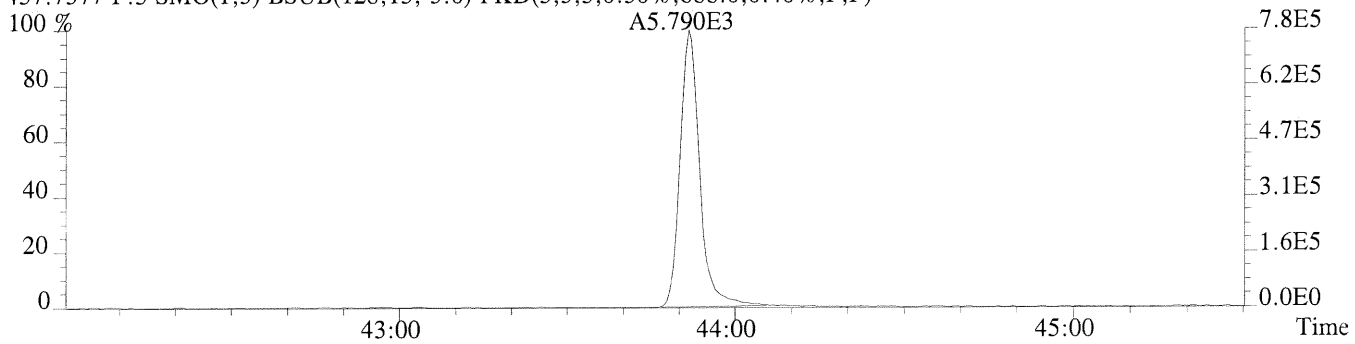


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

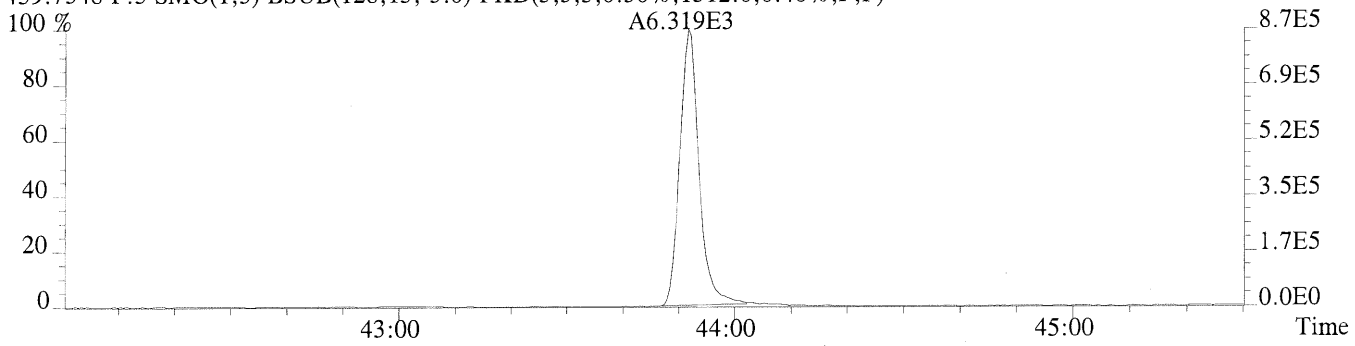


File:P100007 #1-386 Acq: 2-JUL-2008 11:56:08 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

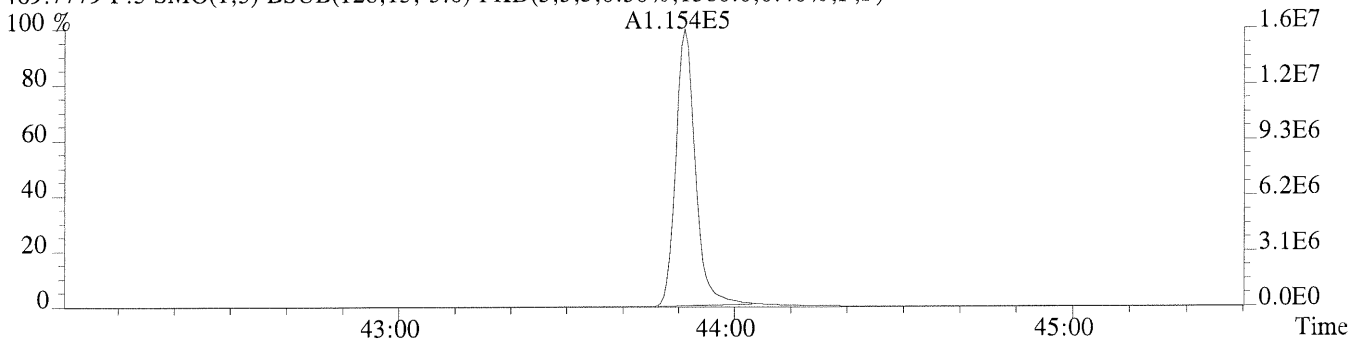
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,888.0,0.40%,F,F)



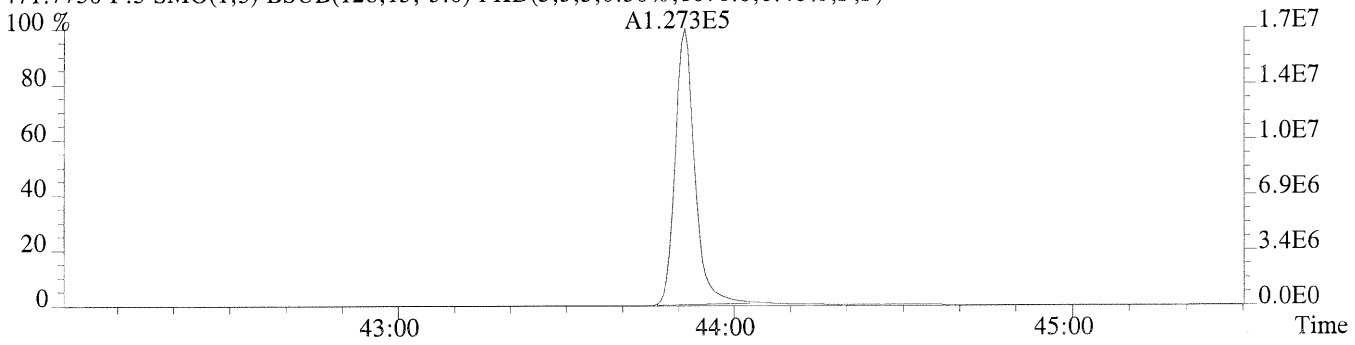
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1512.0,0.40%,F,F)



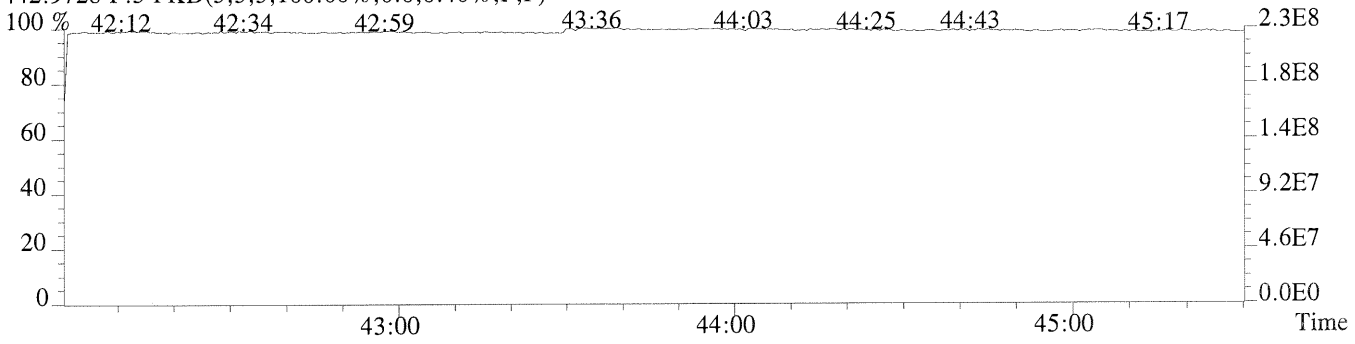
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1380.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1076.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC3

Run #3 Filename P100008 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 12:44:22
Processed: 3-JUL-08 14:49:03 Sample ID:

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:28	6.852e+03	8.463e+03	0.81	yes	no	0.98
2	Unk	1,2,3,7,8-PeCDF	33:37	2.307e+04	1.474e+04	1.57	yes	no	0.97
3	Unk	2,3,4,7,8-PeCDF	34:20	2.374e+04	1.510e+04	1.57	yes	no	1.00
4	Unk	1,2,3,4,7,8-HxCDF	37:05	2.210e+04	1.721e+04	1.28	yes	no	1.22
5	Unk	1,2,3,6,7,8-HxCDF	37:11	2.444e+04	1.902e+04	1.28	yes	no	1.31
6	Unk	2,3,4,6,7,8-HxCDF	37:39	2.122e+04	1.638e+04	1.30	yes	no	1.15
7	Unk	1,2,3,7,8,9-HxCDF	38:21	1.871e+04	1.454e+04	1.29	yes	no	1.06
8	Unk	1,2,3,4,6,7,8-HpCDF	39:48	1.957e+04	1.820e+04	1.08	yes	no	1.55
9	Unk	1,2,3,4,7,8,9-HpCDF	41:09	1.391e+04	1.328e+04	1.05	yes	no	1.17
10	Unk	OCDF	44:02	2.296e+04	2.522e+04	0.91	yes	no	1.36
11	Unk	2,3,7,8-TCDD	30:16	4.845e+03	6.290e+03	0.77	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:41	1.492e+04	9.367e+03	1.59	yes	no	0.88
13	Unk	1,2,3,4,7,8-HxCDD	37:45	1.179e+04	9.287e+03	1.27	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:50	1.620e+04	1.247e+04	1.30	yes	no	1.13
15	Unk	1,2,3,7,8,9-HxCDD	38:07	1.371e+04	1.096e+04	1.25	yes	no	1.04
16	Unk	1,2,3,4,6,7,8-HpCDD	40:43	9.987e+03	9.465e+03	1.06	yes	no	1.02
17	Unk	OCDD	43:52	1.687e+04	1.909e+04	0.88	yes	no	1.02
18	IS	13C-2,3,7,8-TCDF	29:27	3.348e+04	4.193e+04	0.80	yes	no	1.41
19	IS	13C-1,2,3,7,8-PeCDF	33:37	4.559e+04	2.879e+04	1.58	yes	no	1.38
20	IS	13C-1,2,3,4,7,8-HxCDF	37:04	5.390e+04	1.025e+05	0.53	yes	no	1.35
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:47	3.762e+04	8.269e+04	0.45	yes	no	1.03
22	IS	13C-2,3,7,8-TCDD	30:14	2.545e+04	3.268e+04	0.78	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:40	3.300e+04	2.069e+04	1.59	yes	no	0.98
24	IS	13C-1,2,3,6,7,8-HxCDD	37:49	6.928e+04	5.449e+04	1.27	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:42	5.096e+04	4.853e+04	1.05	yes	no	0.85
26	IS	13C-OCDD	43:51	8.536e+04	9.468e+04	0.90	yes	no	0.79
27	RS/RT	13C-1,2,3,4-TCDD	30:03	2.440e+04	3.107e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:07	7.019e+04	5.608e+04	1.25	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:16	1.135e+04					1.01

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC3

Run #3 Filename P100008 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 12:44:22

Processed: 3-JUL-08 14:49:03 LAB. ID:

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.18e+06	1.01e+03	1.2e+03	1.48e+06	2.27e+03	6.5e+02
2	1,2,3,7,8-PeCDF	4.24e+06	7.40e+02	5.7e+03	2.70e+06	2.04e+03	1.3e+03
3	2,3,4,7,8-PeCDF	4.62e+06	7.40e+02	6.2e+03	2.94e+06	2.04e+03	1.4e+03
4	1,2,3,4,7,8-HxCDF	4.88e+06	2.02e+03	2.4e+03	3.74e+06	1.12e+03	3.4e+03
5	1,2,3,6,7,8-HxCDF	4.47e+06	2.02e+03	2.2e+03	3.50e+06	1.12e+03	3.1e+03
6	2,3,4,6,7,8-HxCDF	4.12e+06	2.02e+03	2.0e+03	3.28e+06	1.12e+03	2.9e+03
7	1,2,3,7,8,9-HxCDF	3.56e+06	2.02e+03	1.8e+03	2.77e+06	1.12e+03	2.5e+03
8	1,2,3,4,6,7,8-HpCDF	3.85e+06	5.33e+03	7.2e+02	3.64e+06	2.06e+03	1.8e+03
9	1,2,3,4,7,8,9-HpCDF	2.43e+06	5.33e+03	4.5e+02	2.27e+06	2.06e+03	1.1e+03
10	OCDF	2.90e+06	1.58e+03	1.8e+03	3.20e+06	2.83e+03	1.1e+03
11	2,3,7,8-TCDD	8.82e+05	1.72e+03	5.1e+02	1.13e+06	1.13e+03	1.0e+03
12	1,2,3,7,8-PeCDD	2.84e+06	2.58e+03	1.1e+03	1.78e+06	9.60e+02	1.9e+03
13	1,2,3,4,7,8-HxCDD	2.75e+06	1.17e+03	2.4e+03	2.16e+06	1.54e+03	1.4e+03
14	1,2,3,6,7,8-HxCDD	3.07e+06	1.17e+03	2.6e+03	2.38e+06	1.54e+03	1.5e+03
15	1,2,3,7,8,9-HxCDD	2.63e+06	1.17e+03	2.2e+03	2.12e+06	1.54e+03	1.4e+03
16	1,2,3,4,6,7,8-HpCDD	1.81e+06	1.13e+03	1.6e+03	1.73e+06	9.96e+02	1.7e+03
17	OCDD	2.25e+06	1.16e+03	1.9e+03	2.54e+06	1.34e+03	1.9e+03
18	13C-2,3,7,8-TCDF	5.81e+06	3.40e+03	1.7e+03	7.33e+06	3.70e+03	2.0e+03
19	13C-1,2,3,7,8-PeCDF	8.39e+06	9.36e+02	9.0e+03	5.38e+06	1.37e+03	3.9e+03
20	13C-1,2,3,4,7,8-HxCDF	1.10e+07	9.52e+02	1.2e+04	2.07e+07	1.90e+03	1.1e+04
21	13C-1,2,3,4,6,7,8-HpCDF	7.40e+06	3.35e+03	2.2e+03	1.62e+07	5.82e+03	2.8e+03
22	13C-2,3,7,8-TCDD	4.61e+06	5.57e+03	8.3e+02	5.94e+06	1.91e+03	3.1e+03
23	13C-1,2,3,7,8-PeCDD	6.19e+06	2.28e+03	2.7e+03	3.88e+06	1.95e+03	2.0e+03
24	13C-1,2,3,6,7,8-HxCDD	1.45e+07	1.69e+03	8.6e+03	1.13e+07	1.32e+03	8.6e+03
25	13C-1,2,3,4,6,7,8-HpCDD	9.38e+06	1.48e+03	6.3e+03	8.82e+06	8.48e+02	1.0e+04
26	13C-OCDD	1.13e+07	1.00e+03	1.1e+04	1.26e+07	1.14e+03	1.1e+04
27	13C-1,2,3,4-TCDD	4.60e+06	5.57e+03	8.3e+02	5.85e+06	1.91e+03	3.1e+03
28	13C-1,2,3,7,8,9-HxCDD	1.39e+07	1.69e+03	8.2e+03	1.10e+07	1.32e+03	8.3e+03
29	37Cl-2,3,7,8-TCDD	2.04e+06	9.96e+02	2.0e+03			

Columbia Analytical Services, Inc.
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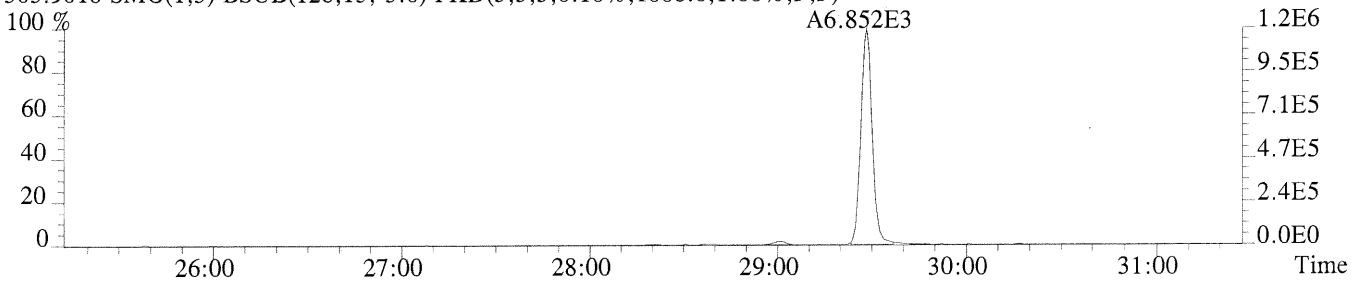
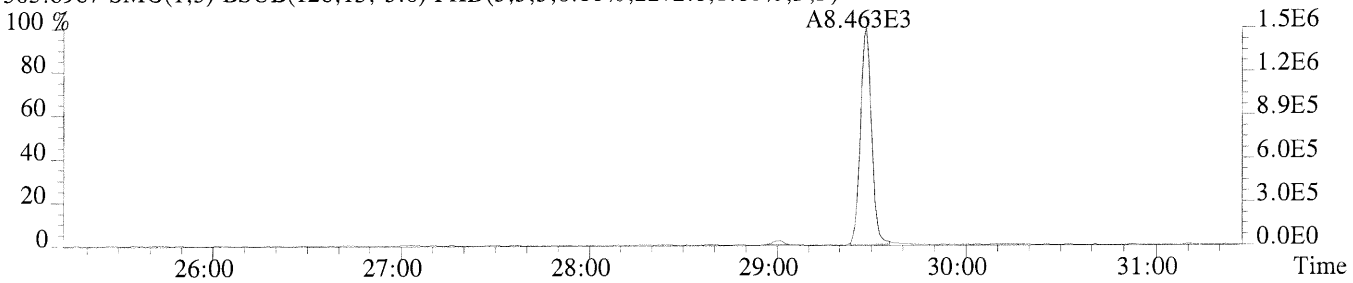
File:P100008 #1-521 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

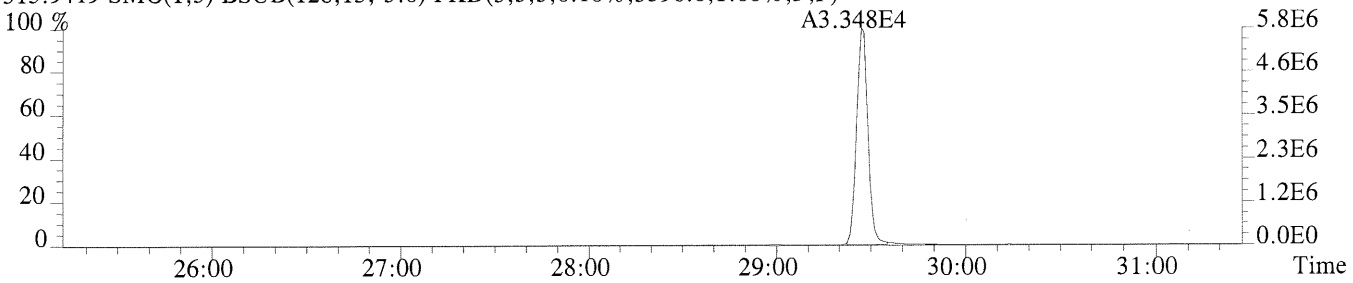
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1008.0,1.00%,F,F)



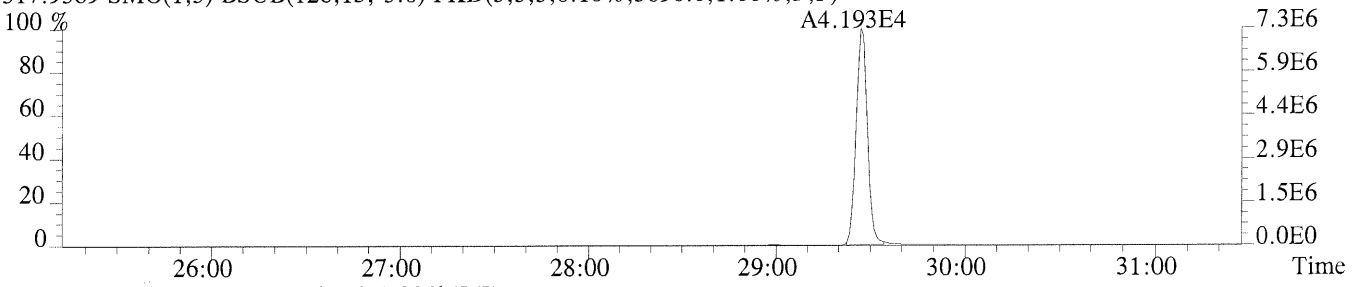
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2272.0,1.00%,F,F)



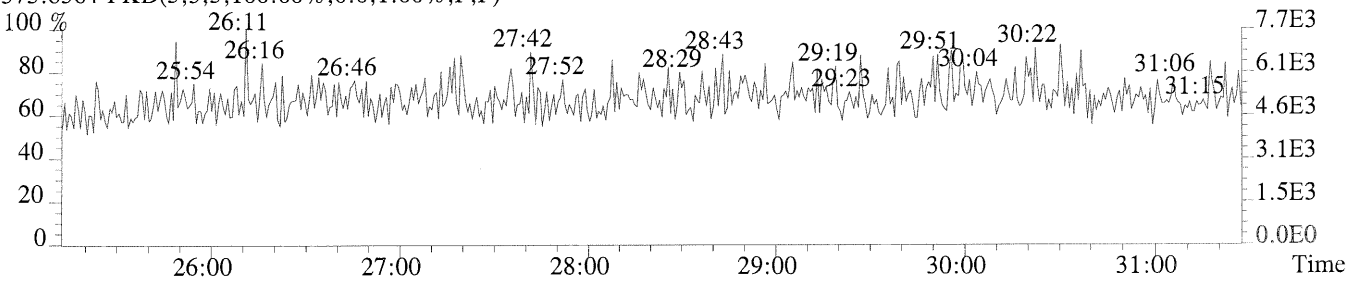
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3396.0,1.00%,F,F)



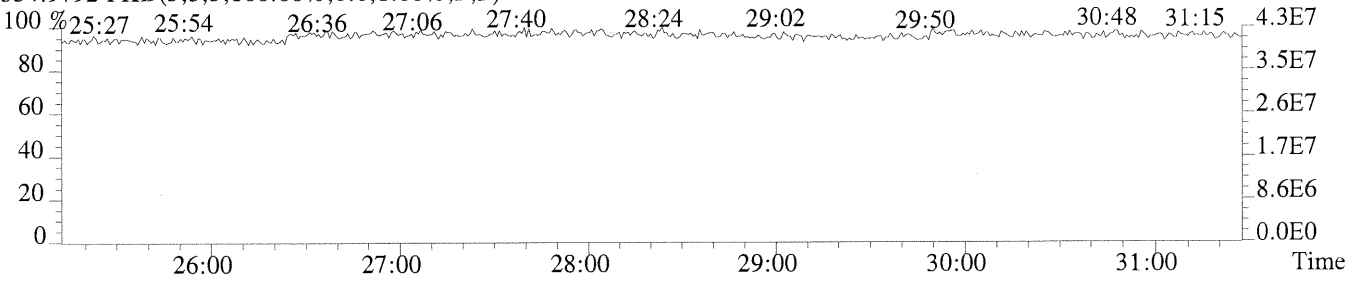
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3696.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

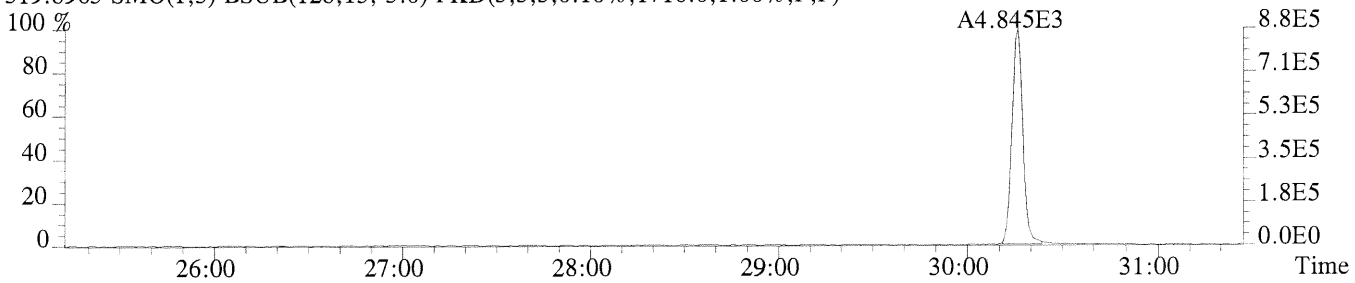


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

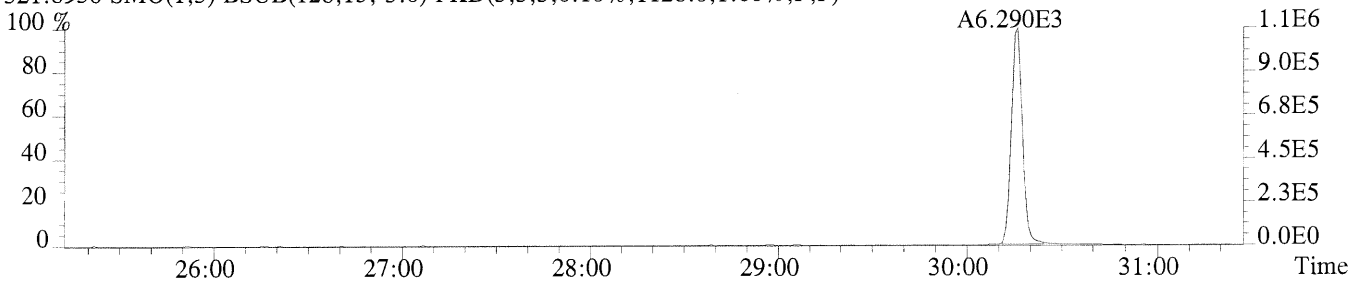


File:P100008 #1-521 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

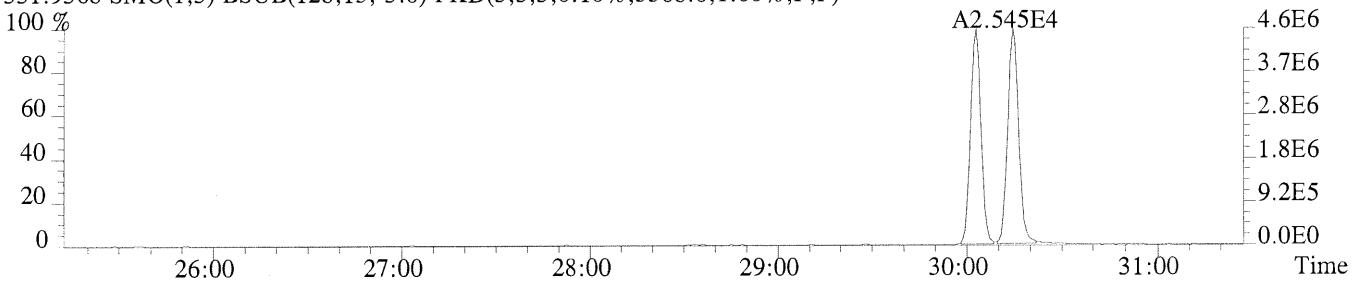
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1716.0,1.00%,F,F)



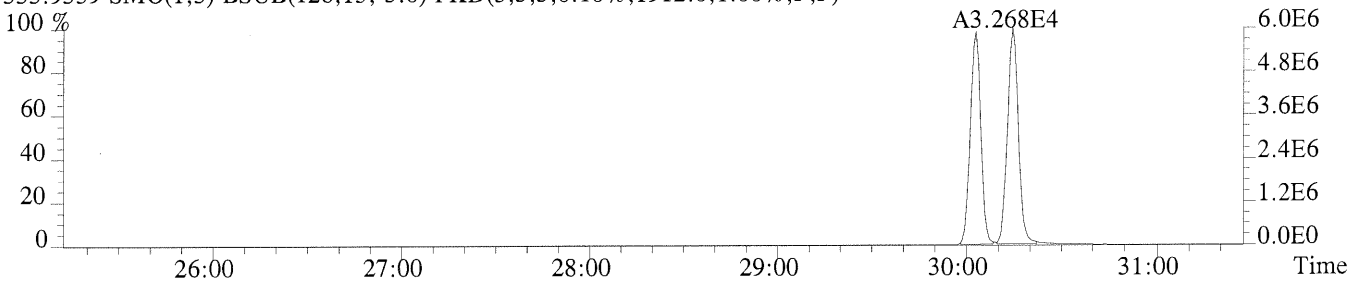
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1128.0,1.00%,F,F)



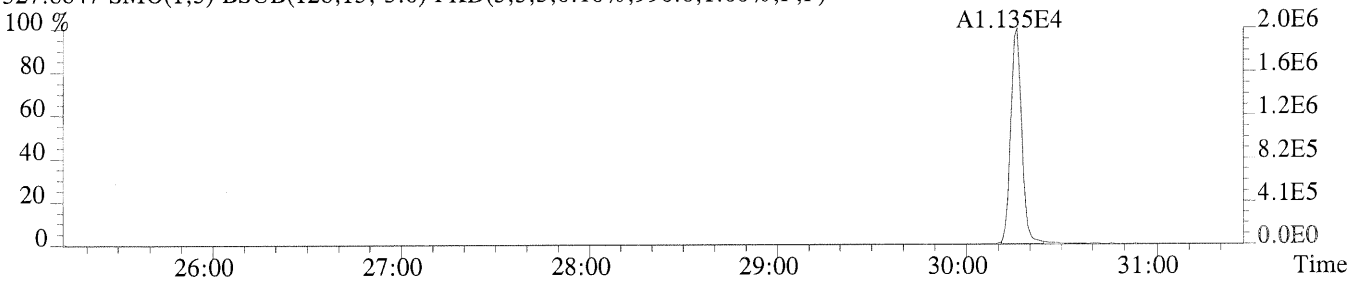
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5568.0,1.00%,F,F)



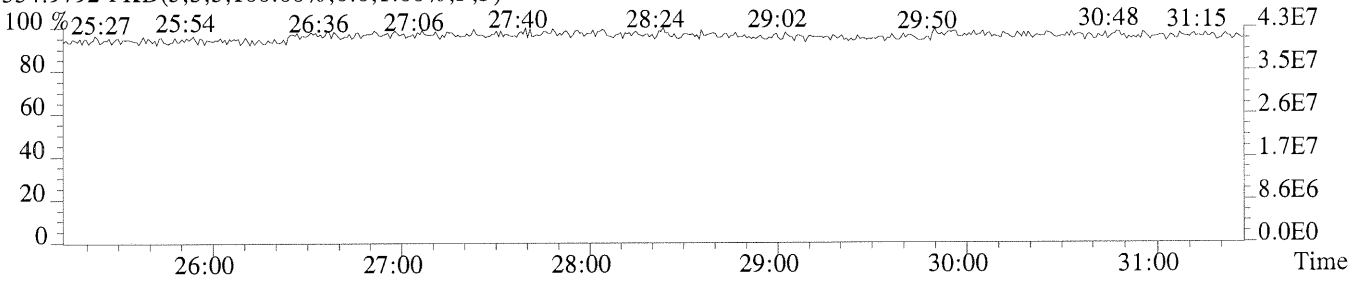
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1912.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,996.0,1.00%,F,F)

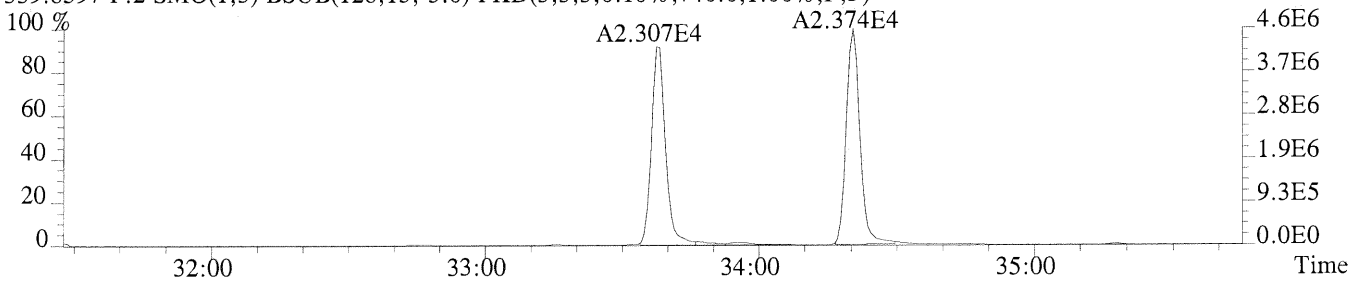


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

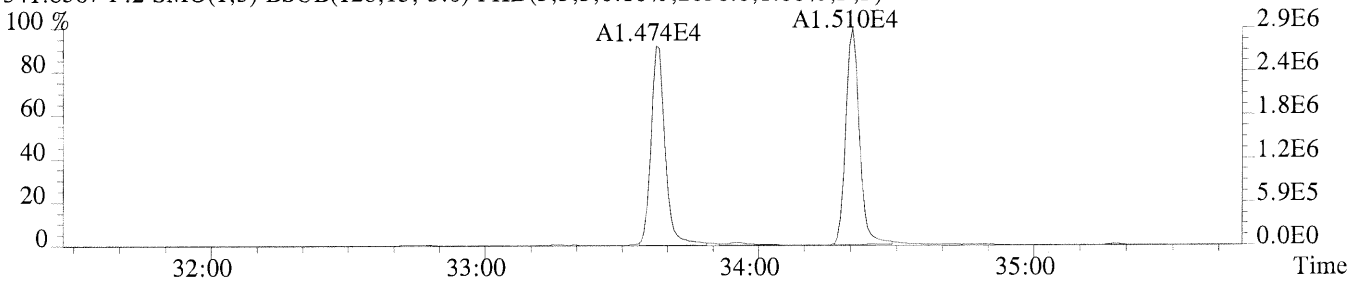


File:P100008 #1-390 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

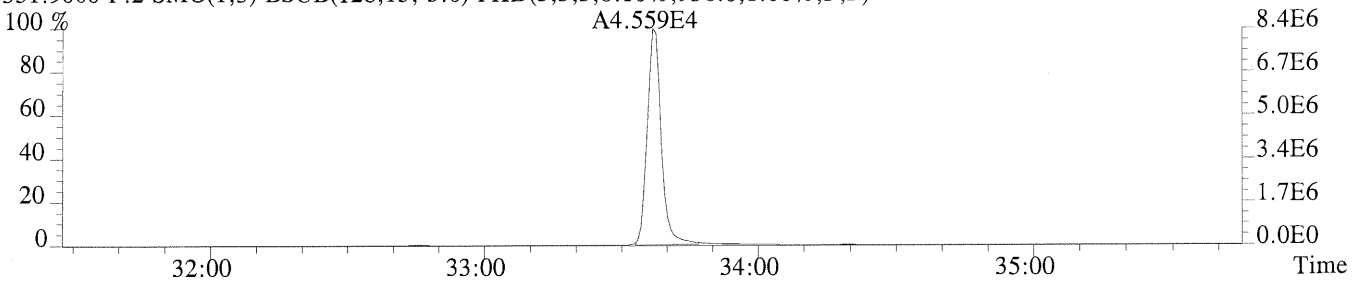
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,740.0,1.00%,F,F)



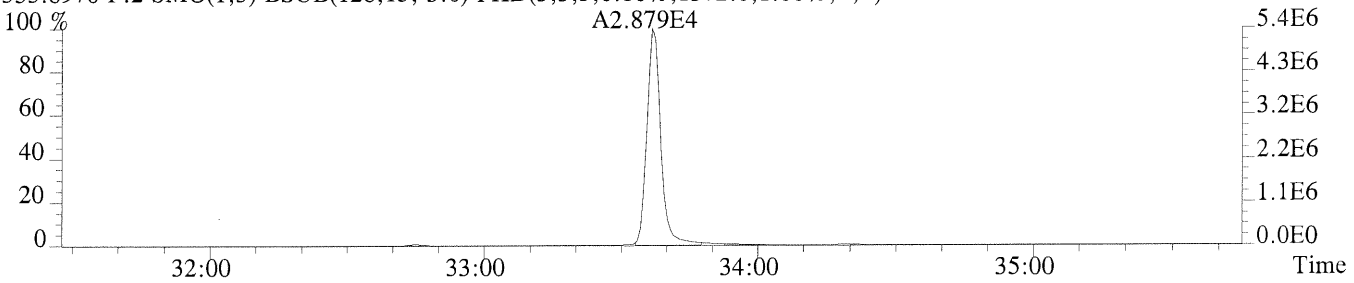
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2036.0,1.00%,F,F)



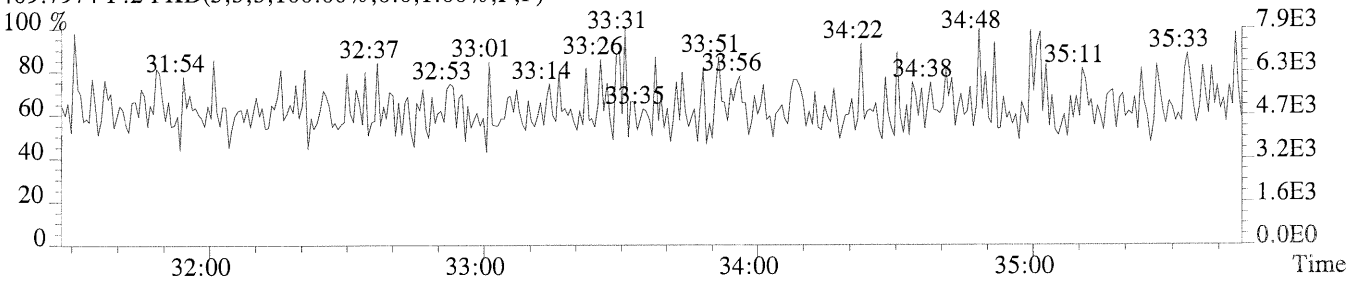
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,936.0,1.00%,F,F)



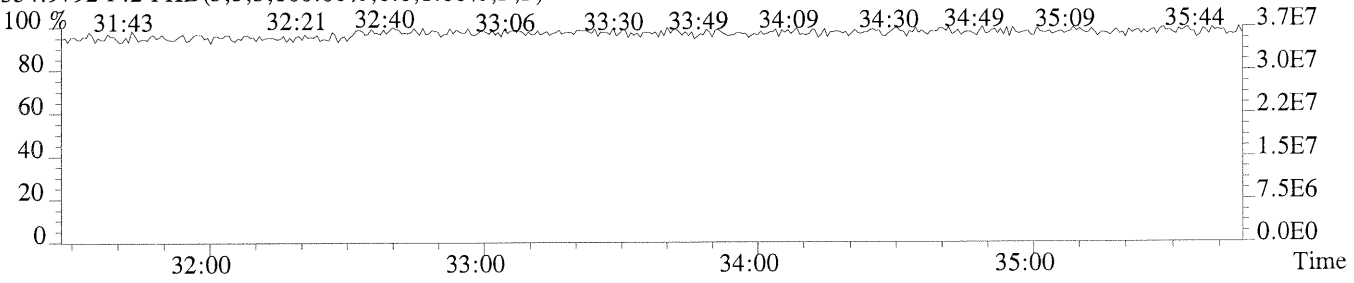
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1372.0,1.00%,F,F)



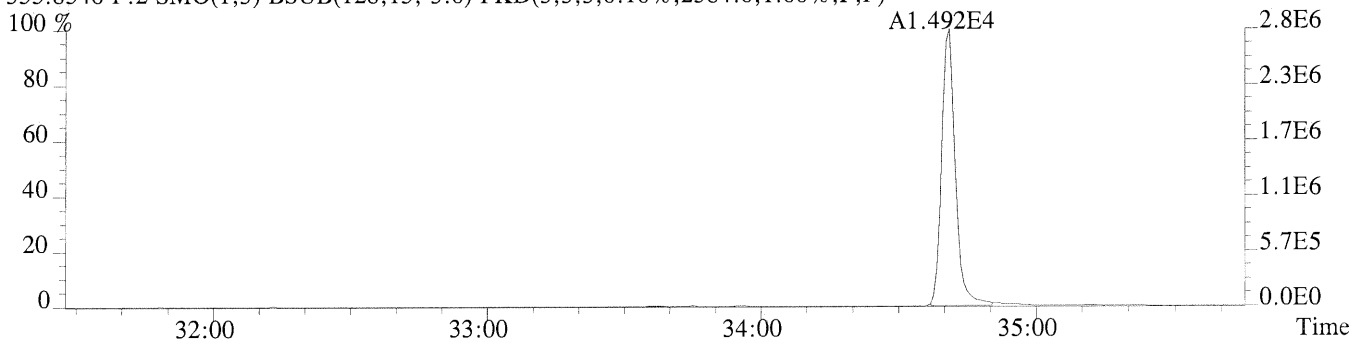
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



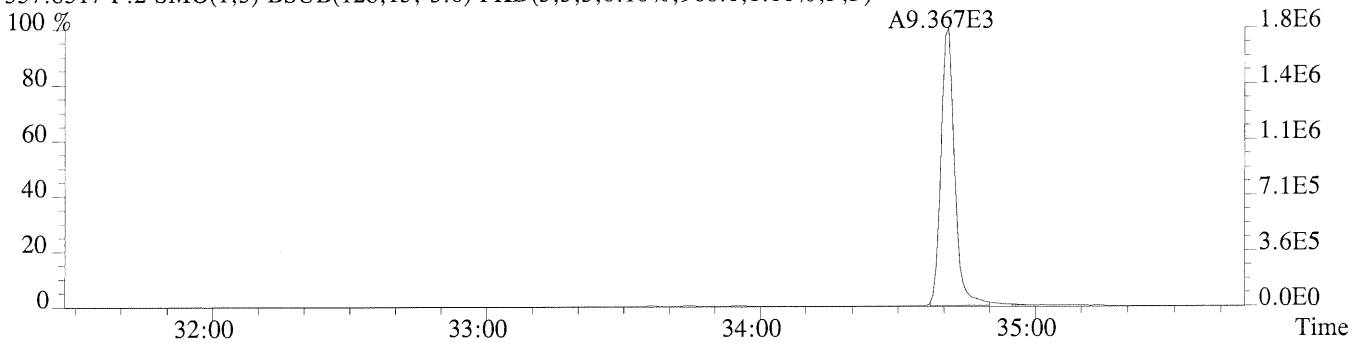
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



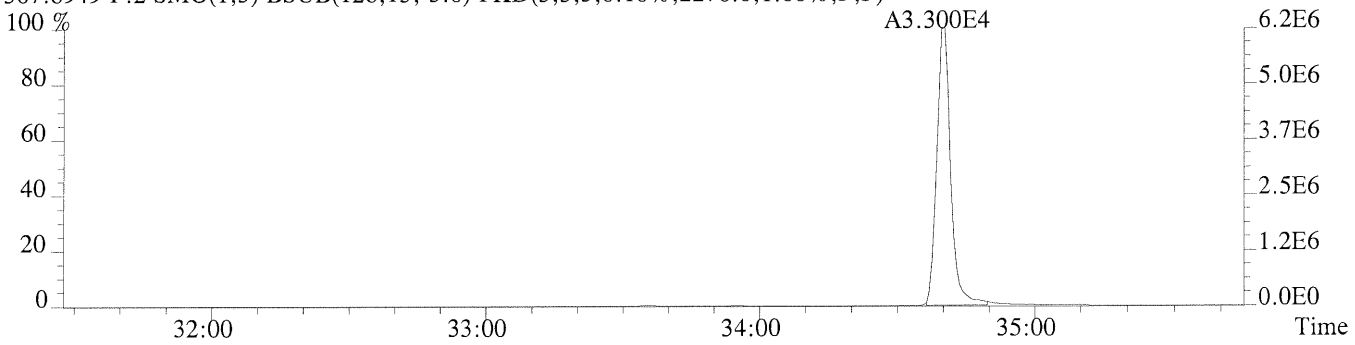
File:P100008 #1-390 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2584.0,1.00%,F,F)



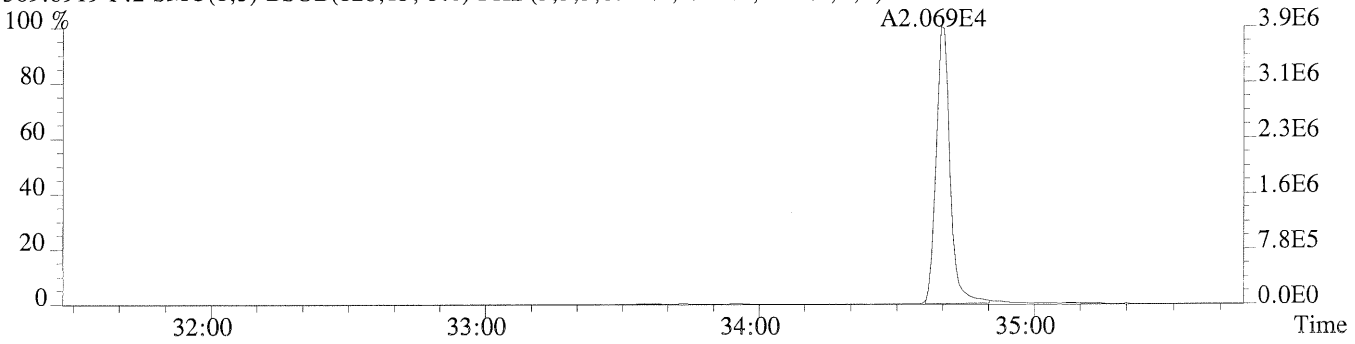
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,960.0,1.00%,F,F)



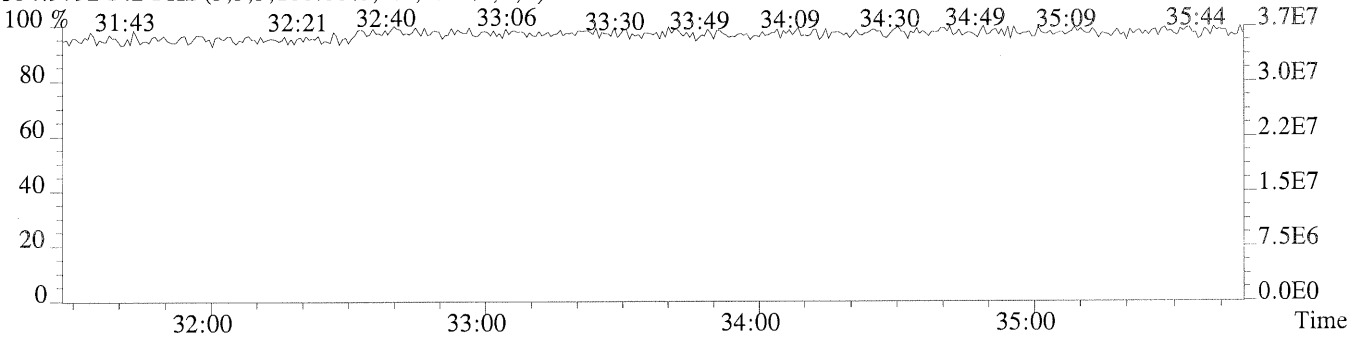
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2276.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1952.0,1.00%,F,F)

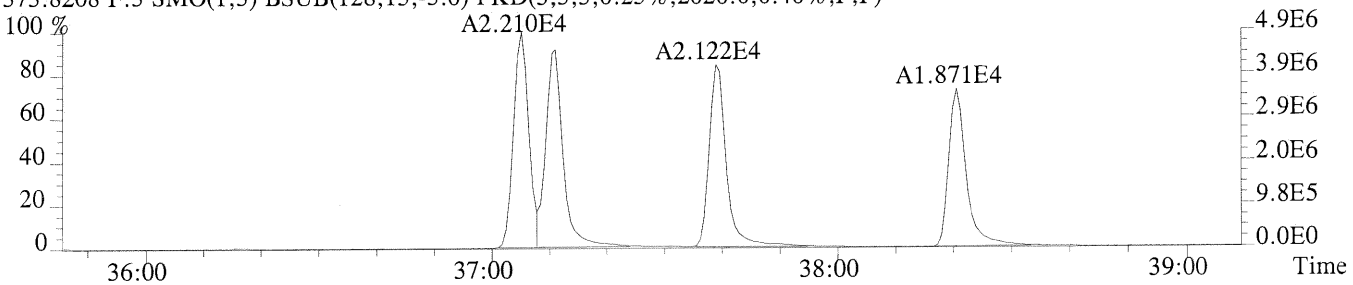


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

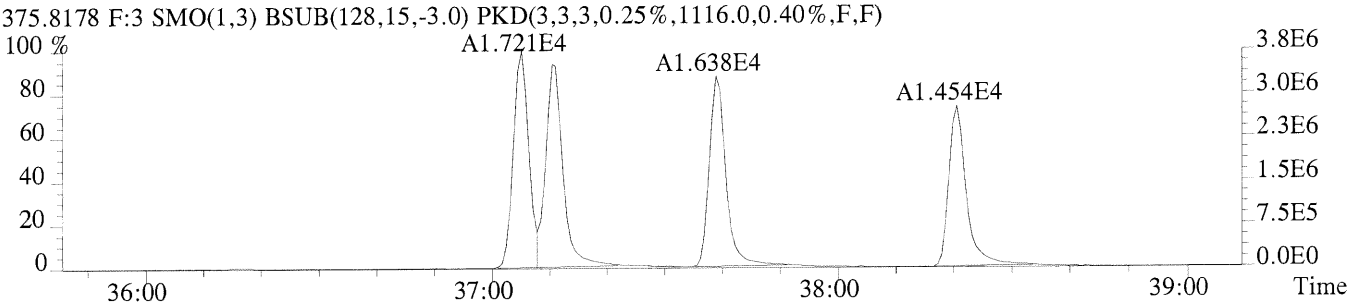


File:P100008 #1-309 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

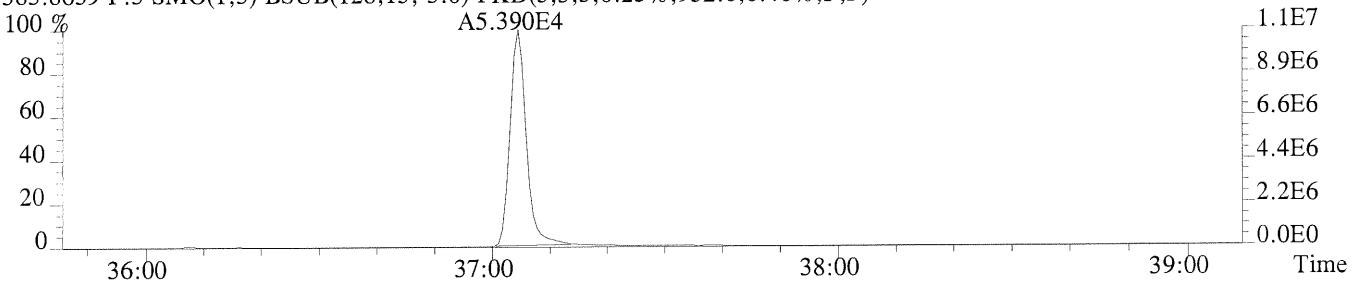
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2020.0,0.40%,F,F)



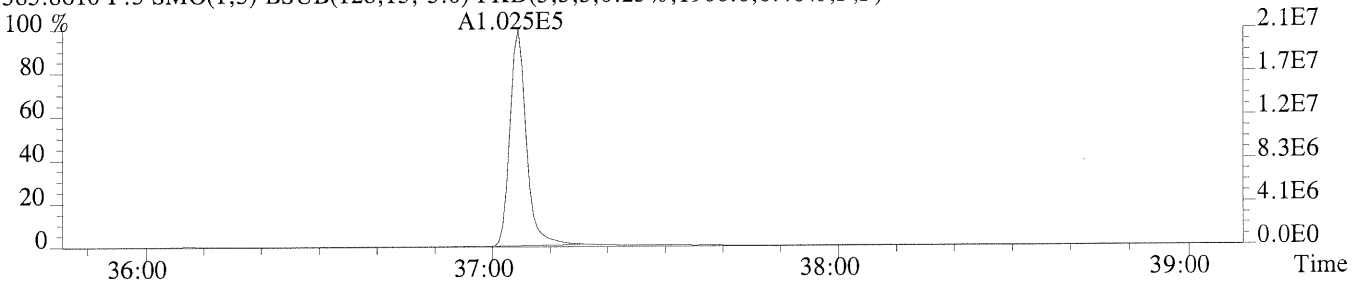
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1116.0,0.40%,F,F)



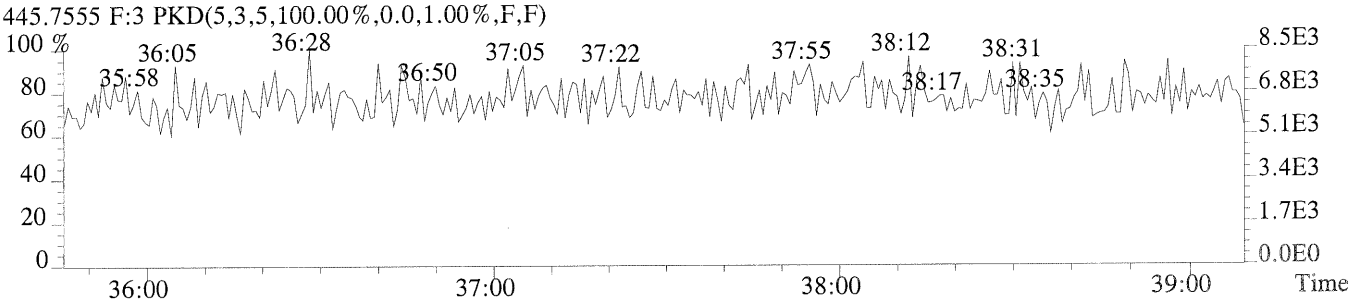
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,952.0,0.40%,F,F)



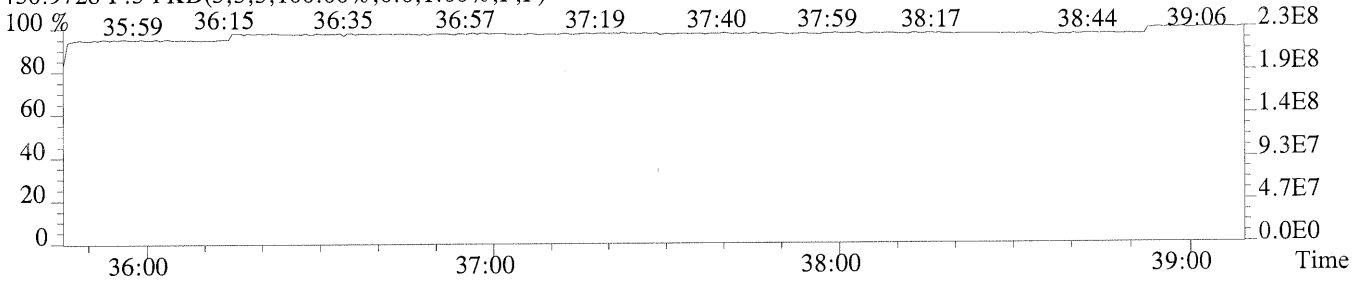
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1900.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

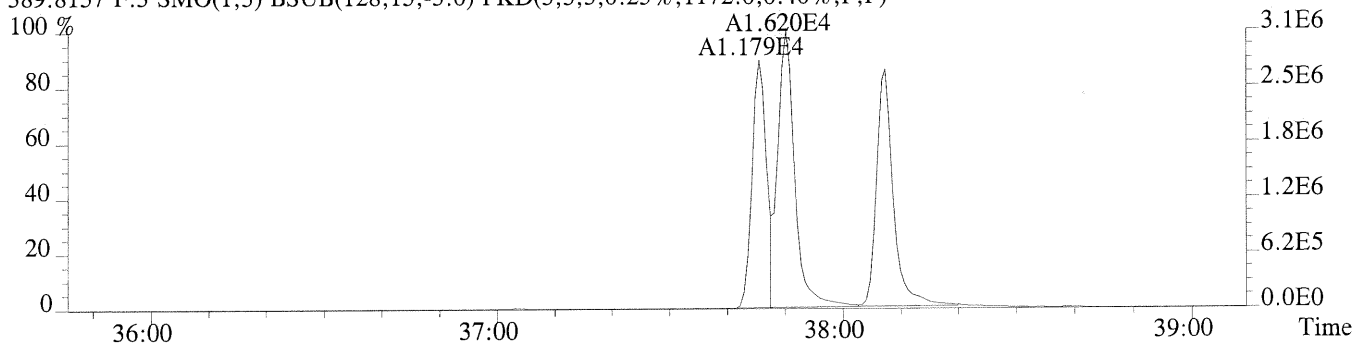


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

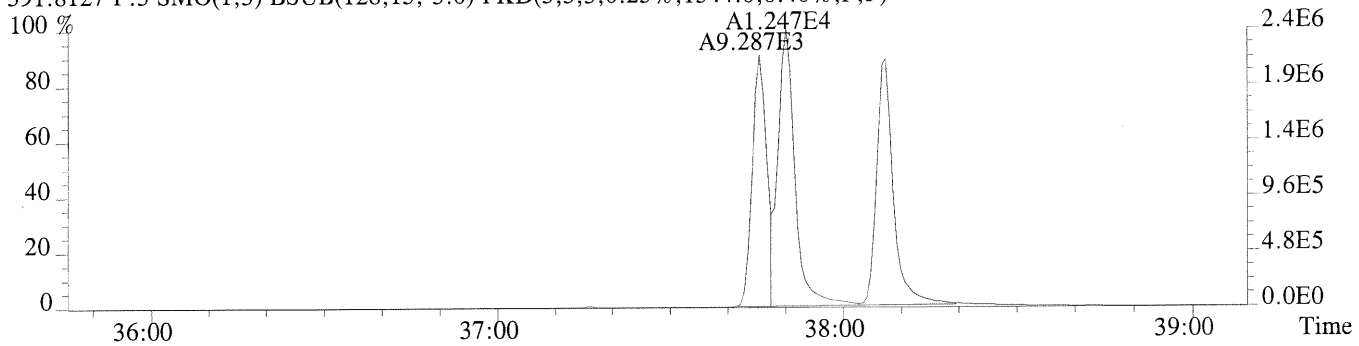


File:P100008 #1-309 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

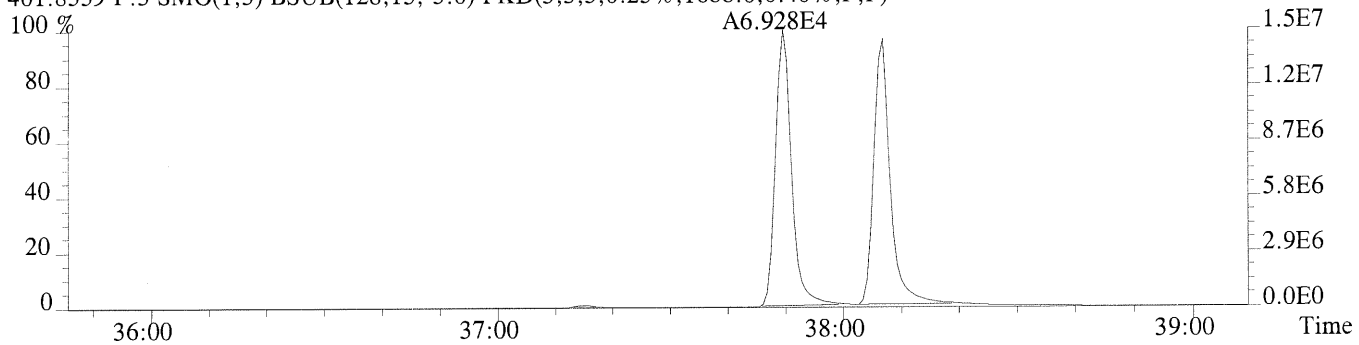
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1172.0,0.40%,F,F)



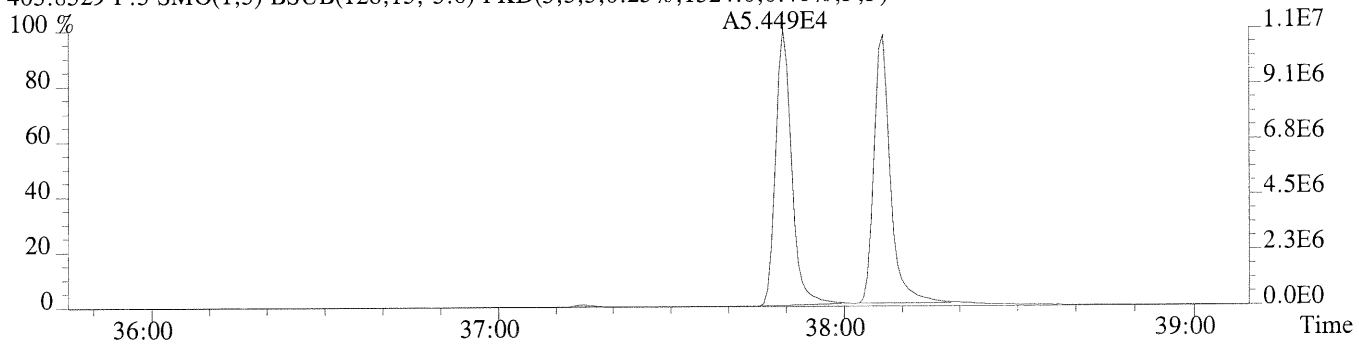
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1544.0,0.40%,F,F)



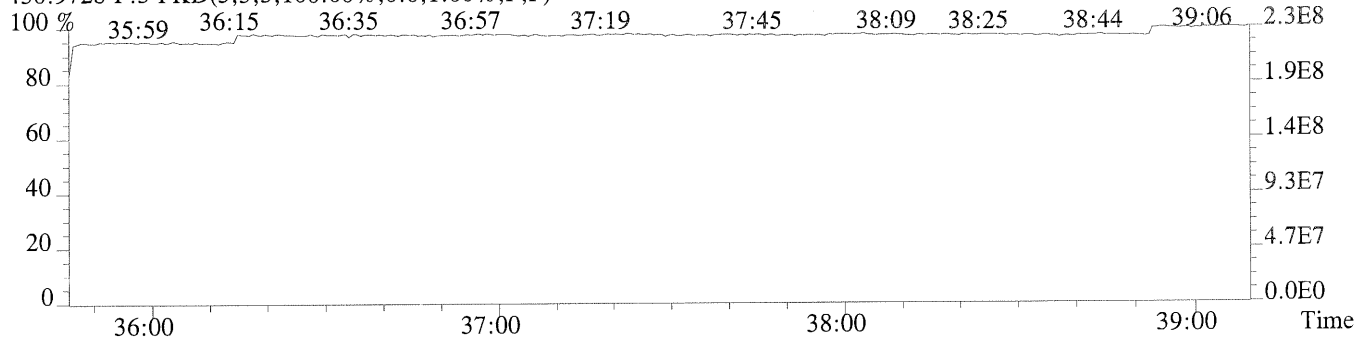
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1688.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1324.0,0.40%,F,F)

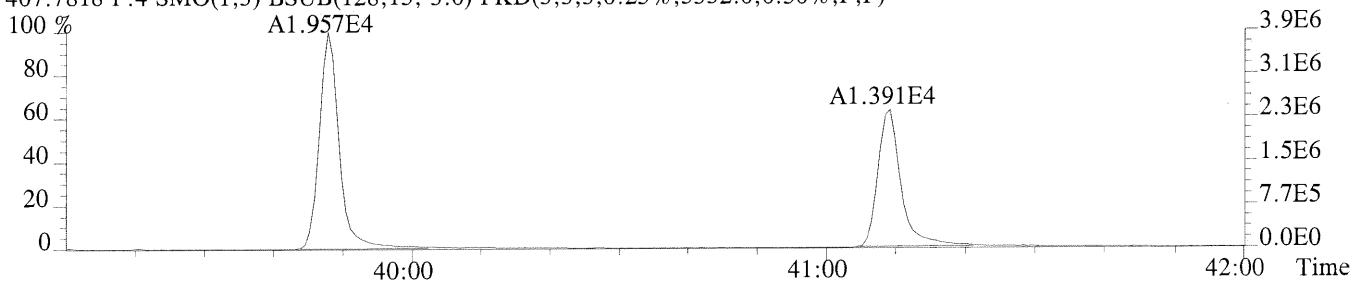


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

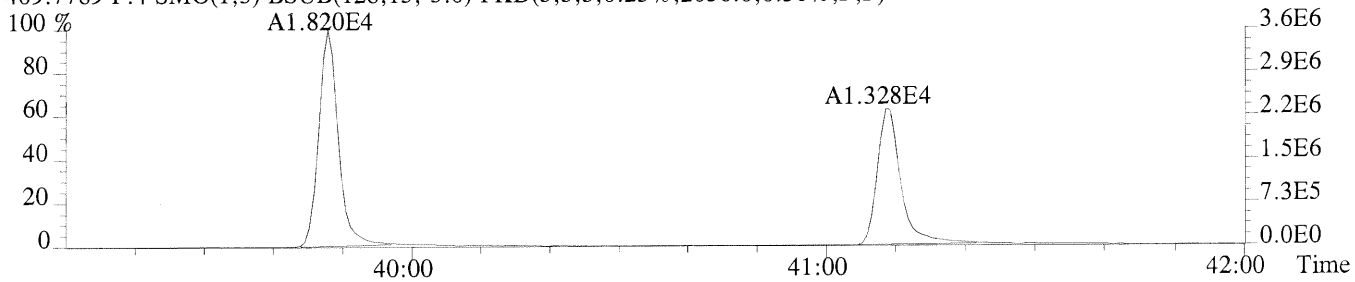


File:P100008 #1-258 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

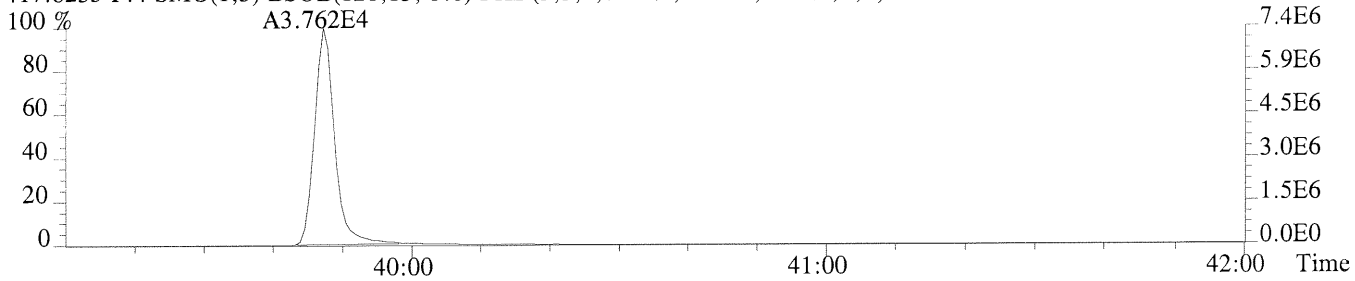
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5332.0,0.50%,F,F)



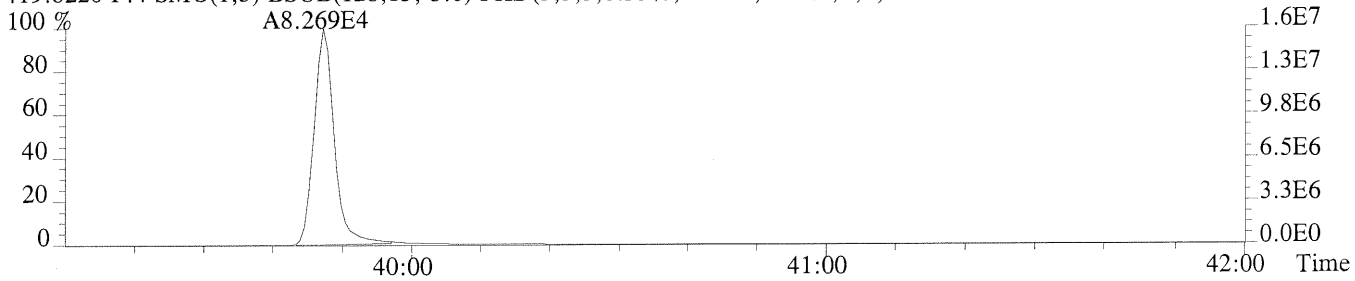
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2056.0,0.50%,F,F)



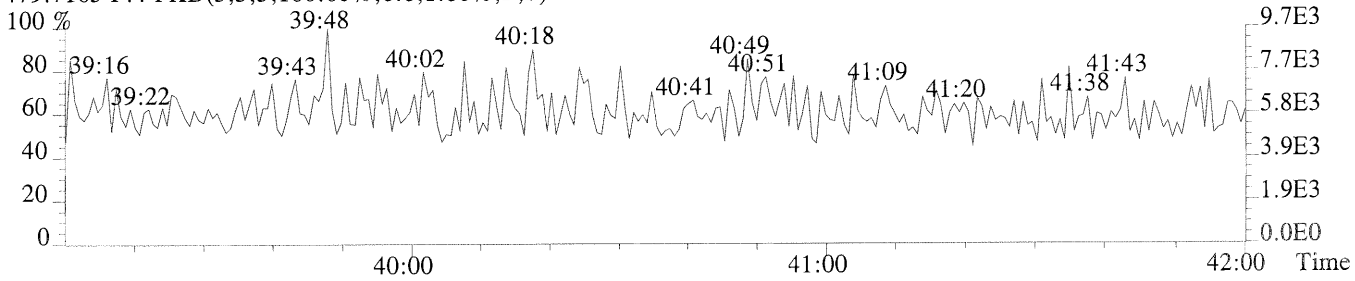
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3352.0,0.50%,F,F)



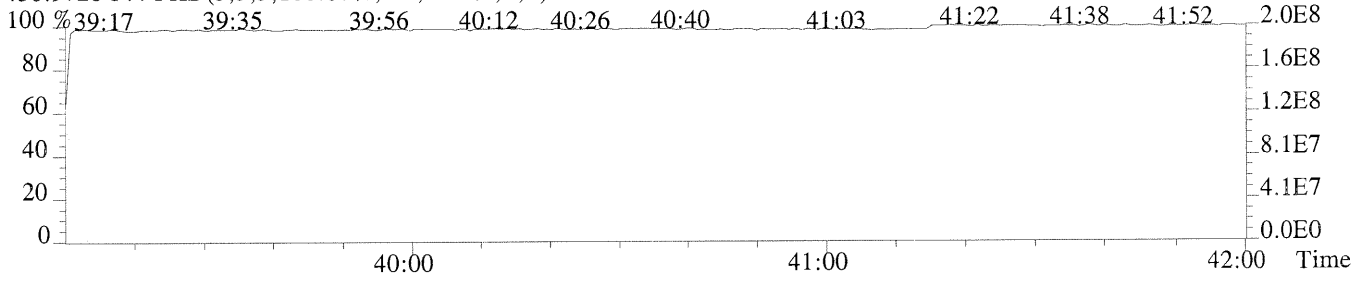
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5816.0,0.50%,F,F)



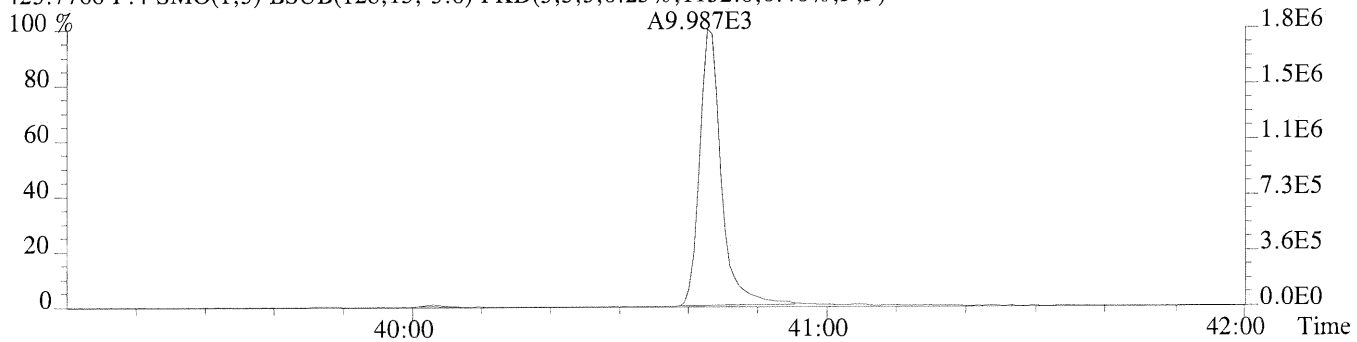
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



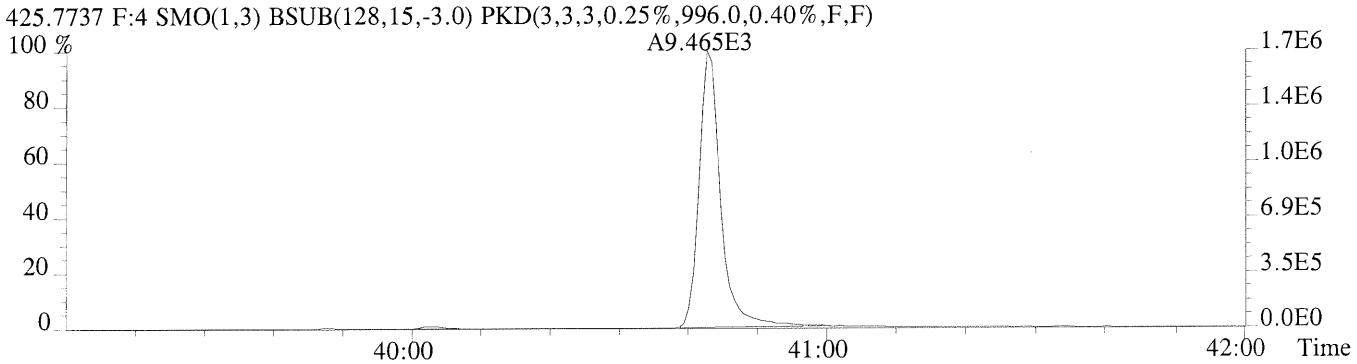
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



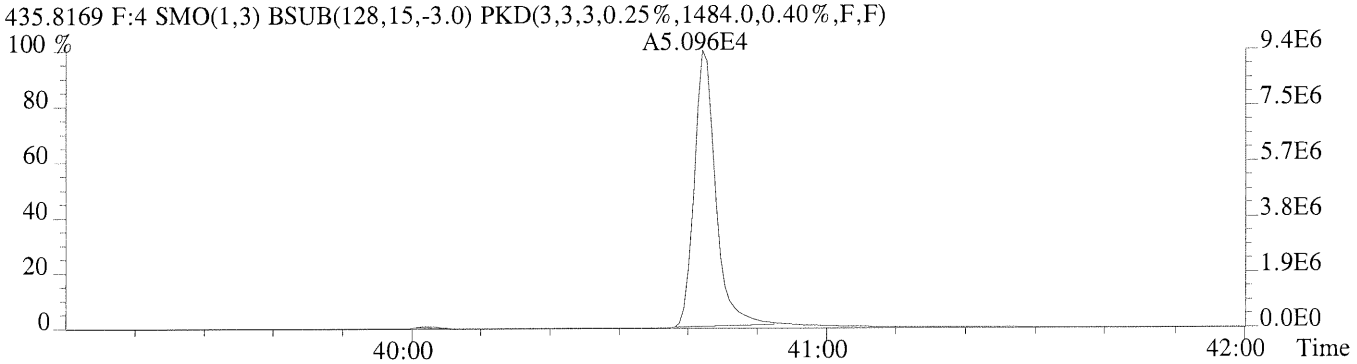
File:P100008 #1-258 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1132.0,0.40%,F,F)



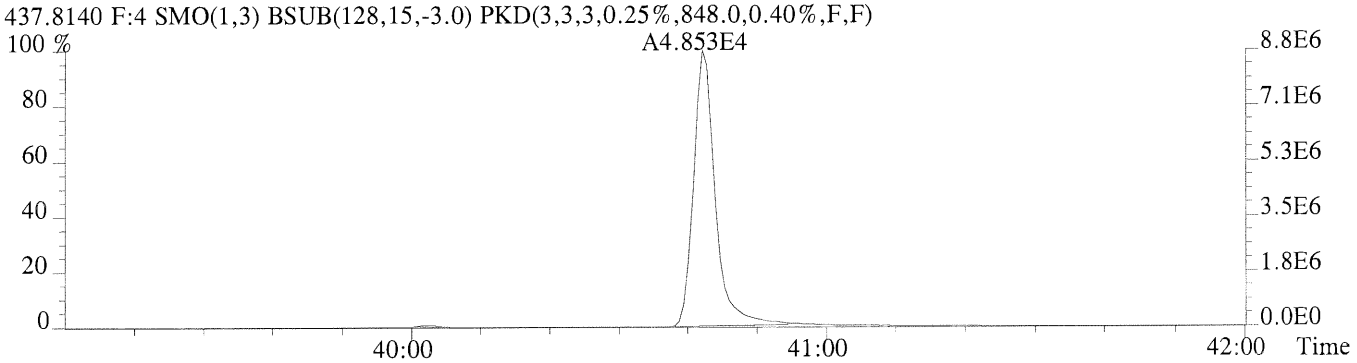
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,996.0,0.40%,F,F)



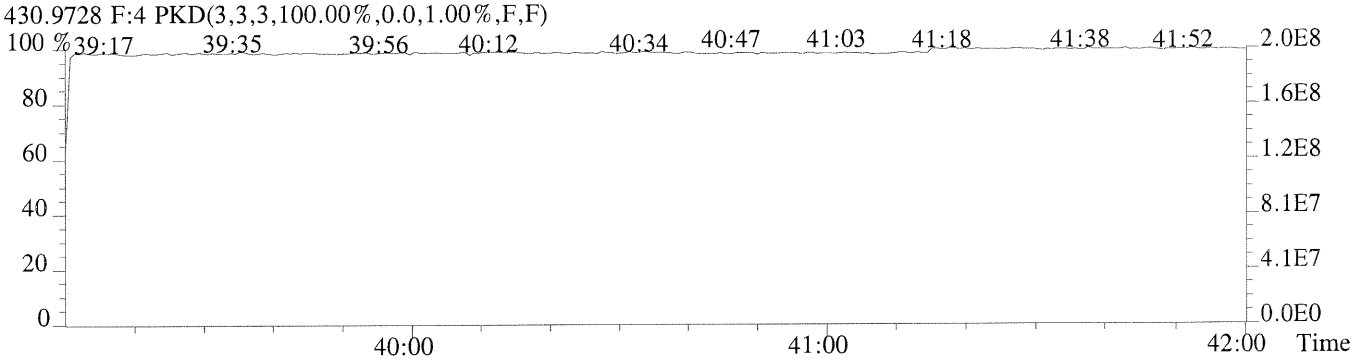
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1484.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,848.0,0.40%,F,F)

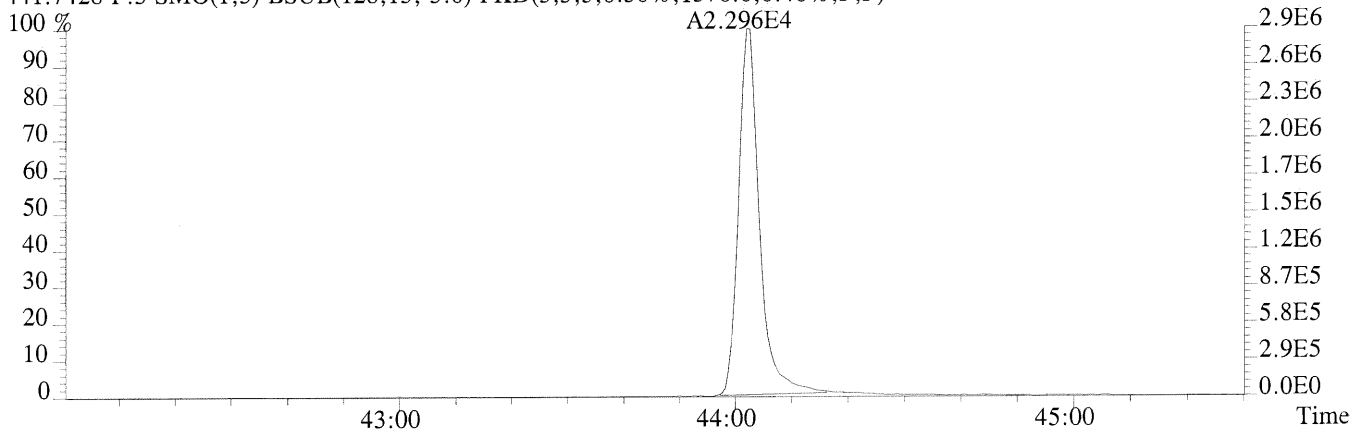


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

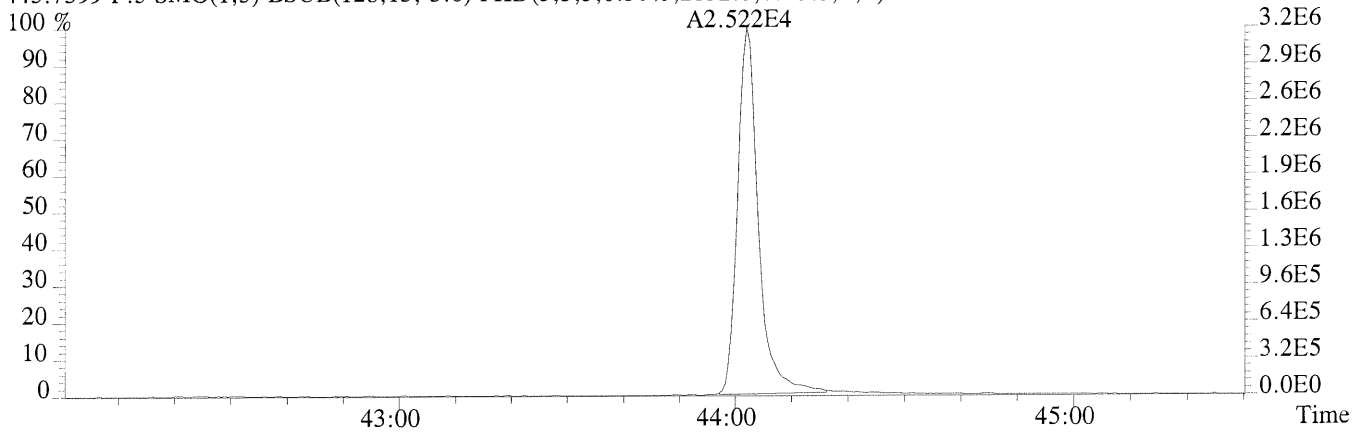


File:P100008 #1-386 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

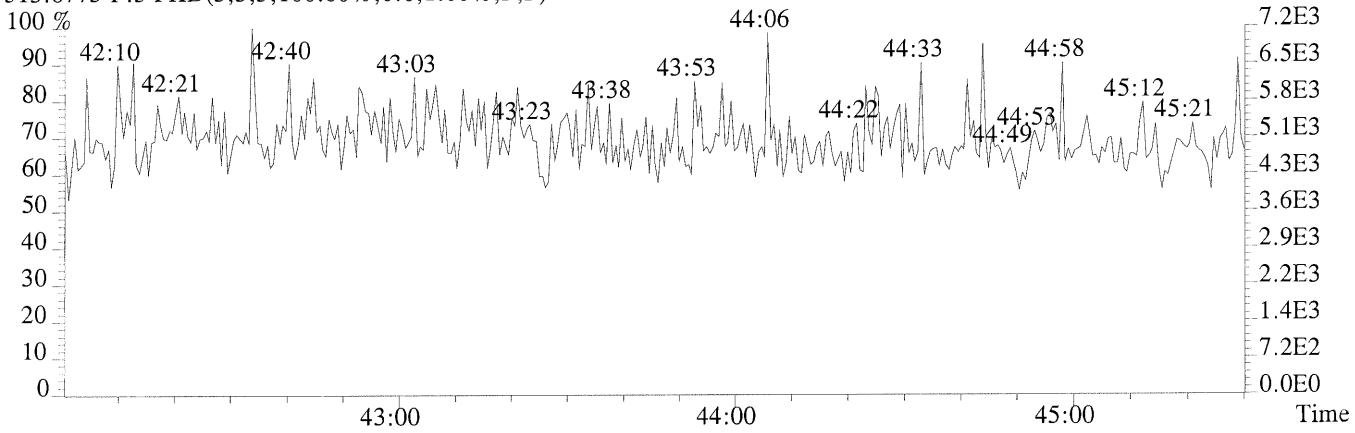
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1576.0,0.40%,F,F)



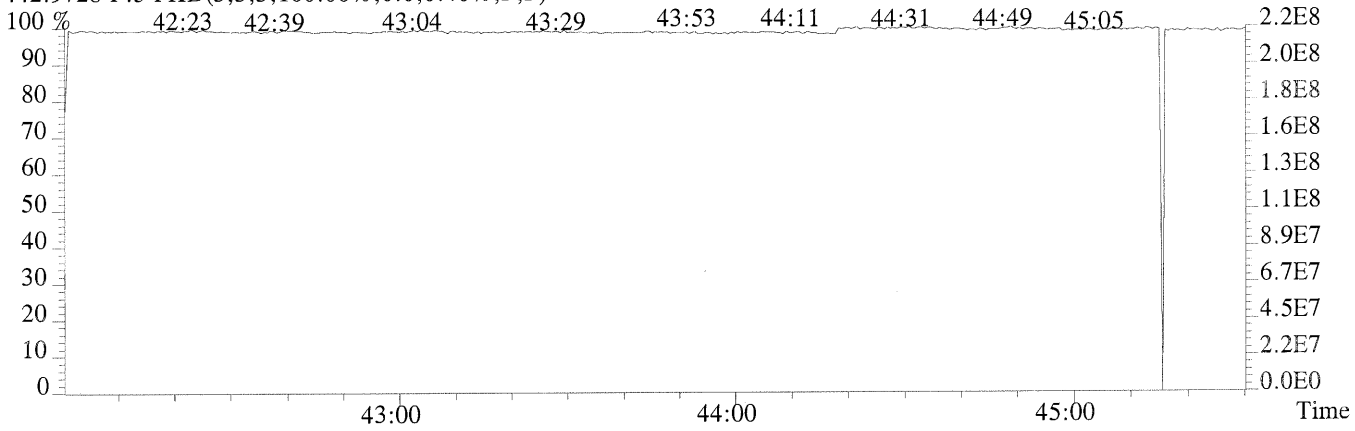
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2832.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

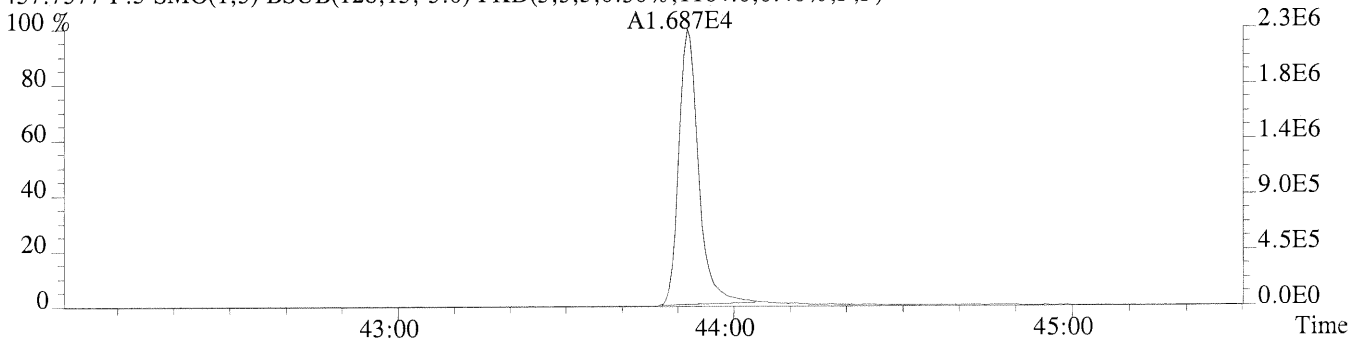


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

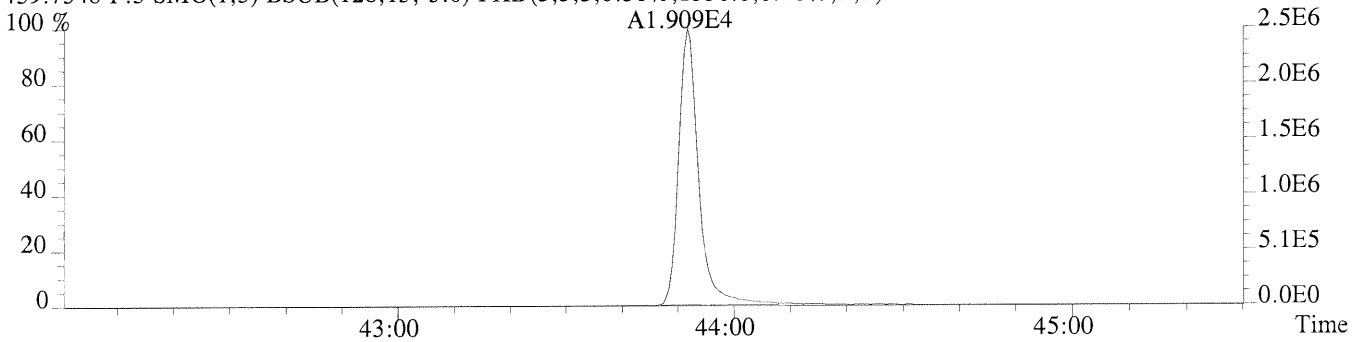


File:P100008 #1-386 Acq: 2-JUL-2008 12:44:22 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

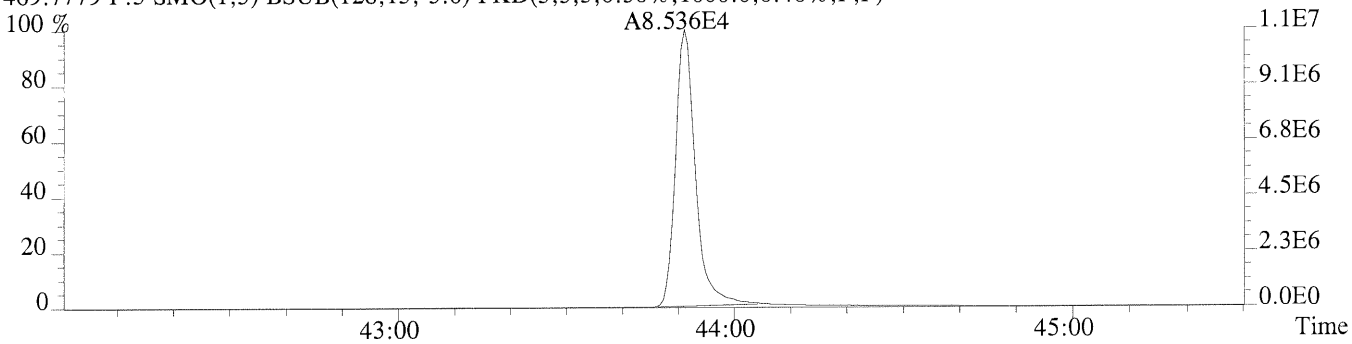
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1164.0,0.40%,F,F)



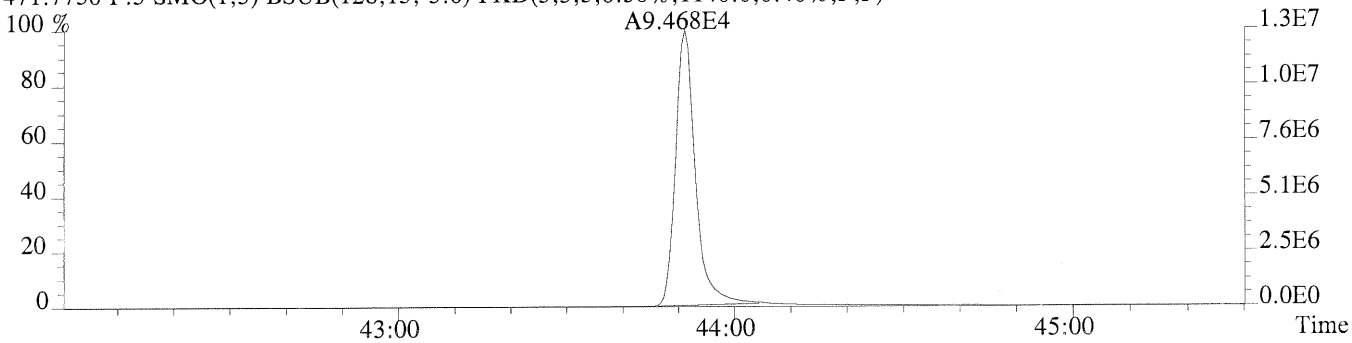
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1336.0,0.40%,F,F)



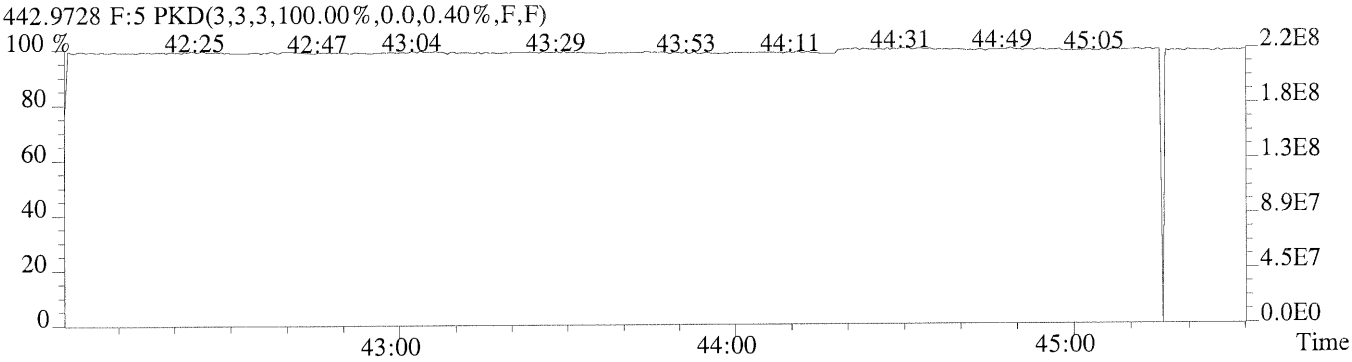
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1000.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1140.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC4

Run #4 Filename P100009 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 13:43:26
Processed: 3-JUL-08 14:49:03 Sample ID:

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:28	3.130e+04	4.004e+04	0.78	yes	no	0.98
2	Unk	1,2,3,7,8-PeCDF	33:38	1.097e+05	6.878e+04	1.59	yes	no	0.97
3	Unk	2,3,4,7,8-PeCDF	34:21	1.109e+05	6.919e+04	1.60	yes	no	1.00
4	Unk	1,2,3,4,7,8-HxCDF	37:05	9.673e+04	7.701e+04	1.26	yes	no	1.22
5	Unk	1,2,3,6,7,8-HxCDF	37:11	1.064e+05	8.500e+04	1.25	yes	no	1.31
6	Unk	2,3,4,6,7,8-HxCDF	37:39	9.249e+04	7.335e+04	1.26	yes	no	1.15
7	Unk	1,2,3,7,8,9-HxCDF	38:21	8.271e+04	6.531e+04	1.27	yes	no	1.06
8	Unk	1,2,3,4,6,7,8-HpCDF	39:48	8.267e+04	7.924e+04	1.04	yes	no	1.55
9	Unk	1,2,3,4,7,8,9-HpCDF	41:09	6.411e+04	6.029e+04	1.06	yes	no	1.17
10	Unk	OCDF	44:03	1.104e+05	1.192e+05	0.93	yes	no	1.36
11	Unk	2,3,7,8-TCDD	30:16	2.326e+04	2.968e+04	0.78	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:41	6.870e+04	4.356e+04	1.58	yes	no	0.88
13	Unk	1,2,3,4,7,8-HxCDD	37:46	5.359e+04	4.221e+04	1.27	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:50	6.895e+04	5.417e+04	1.27	yes	no	1.13
15	Unk	1,2,3,7,8,9-HxCDD	38:07	5.843e+04	4.571e+04	1.28	yes	no	1.04
16	Unk	1,2,3,4,6,7,8-HpCDD	40:43	4.527e+04	4.239e+04	1.07	yes	no	1.02
17	Unk	OCDD	43:52	8.044e+04	8.793e+04	0.91	yes	no	1.02
18	IS	13C-2,3,7,8-TCDF	29:27	3.219e+04	4.039e+04	0.80	yes	no	1.41
19	IS	13C-1,2,3,7,8-PeCDF	33:37	4.405e+04	2.728e+04	1.61	yes	no	1.38
20	IS	13C-1,2,3,4,7,8-HxCDF	37:05	4.971e+04	9.272e+04	0.54	yes	no	1.35
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:47	3.335e+04	7.496e+04	0.44	yes	no	1.03
22	IS	13C-2,3,7,8-TCDD	30:14	2.533e+04	3.245e+04	0.78	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:40	3.016e+04	1.921e+04	1.57	yes	no	0.98
24	IS	13C-1,2,3,6,7,8-HxCDD	37:50	5.665e+04	4.531e+04	1.25	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:42	4.500e+04	4.407e+04	1.02	yes	no	0.85
26	IS	13C-OCDD	43:51	8.013e+04	8.893e+04	0.90	yes	no	0.79
27	RS/RT	13C-1,2,3,4-TCDD	30:03	2.267e+04	2.890e+04	0.78	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:07	5.604e+04	4.590e+04	1.22	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:16	5.317e+04					1.01

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC4

Run #4 Filename P100009 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 13:43:26

Processed: 3-JUL-08 14:49:03 LAB. ID:

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	5.48e+06	1.38e+03	4.0e+03	6.93e+06	2.87e+03	2.4e+03
2	1,2,3,7,8-PeCDF	2.02e+07	9.80e+02	2.1e+04	1.26e+07	1.66e+03	7.6e+03
3	2,3,4,7,8-PeCDF	2.17e+07	9.80e+02	2.2e+04	1.35e+07	1.66e+03	8.1e+03
4	1,2,3,4,7,8-HxCDF	2.13e+07	1.43e+03	1.5e+04	1.70e+07	1.31e+03	1.3e+04
5	1,2,3,6,7,8-HxCDF	2.01e+07	1.43e+03	1.4e+04	1.59e+07	1.31e+03	1.2e+04
6	2,3,4,6,7,8-HxCDF	1.87e+07	1.43e+03	1.3e+04	1.49e+07	1.31e+03	1.1e+04
7	1,2,3,7,8,9-HxCDF	1.63e+07	1.43e+03	1.1e+04	1.28e+07	1.31e+03	9.8e+03
8	1,2,3,4,6,7,8-HpCDF	1.65e+07	4.64e+03	3.6e+03	1.58e+07	4.52e+03	3.5e+03
9	1,2,3,4,7,8,9-HpCDF	1.09e+07	4.64e+03	2.3e+03	1.03e+07	4.52e+03	2.3e+03
10	OCDF	1.40e+07	1.20e+03	1.2e+04	1.54e+07	2.50e+03	6.2e+03
11	2,3,7,8-TCDD	4.29e+06	1.95e+03	2.2e+03	5.42e+06	1.11e+03	4.9e+03
12	1,2,3,7,8-PeCDD	1.34e+07	2.06e+03	6.5e+03	8.38e+06	1.16e+03	7.2e+03
13	1,2,3,4,7,8-HxCDD	1.25e+07	9.40e+02	1.3e+04	9.83e+06	1.90e+03	5.2e+03
14	1,2,3,6,7,8-HxCDD	1.37e+07	9.40e+02	1.5e+04	1.09e+07	1.90e+03	5.7e+03
15	1,2,3,7,8,9-HxCDD	1.19e+07	9.40e+02	1.3e+04	9.27e+06	1.90e+03	4.9e+03
16	1,2,3,4,6,7,8-HpCDD	8.17e+06	1.69e+03	4.8e+03	7.78e+06	6.88e+02	1.1e+04
17	OCDD	1.08e+07	1.12e+03	9.6e+03	1.19e+07	6.32e+02	1.9e+04
18	13C-2,3,7,8-TCDF	5.59e+06	3.66e+03	1.5e+03	7.01e+06	3.38e+03	2.1e+03
19	13C-1,2,3,7,8-PeCDF	8.05e+06	9.76e+02	8.2e+03	5.05e+06	1.24e+03	4.1e+03
20	13C-1,2,3,4,7,8-HxCDF	1.02e+07	1.00e+03	1.0e+04	1.90e+07	2.06e+03	9.2e+03
21	13C-1,2,3,4,6,7,8-HpCDF	6.60e+06	4.34e+03	1.5e+03	1.45e+07	8.31e+03	1.7e+03
22	13C-2,3,7,8-TCDD	4.56e+06	6.06e+03	7.5e+02	5.85e+06	2.16e+03	2.7e+03
23	13C-1,2,3,7,8-PeCDD	5.74e+06	1.77e+03	3.2e+03	3.62e+06	1.30e+03	2.8e+03
24	13C-1,2,3,6,7,8-HxCDD	1.21e+07	1.54e+03	7.9e+03	9.72e+06	9.52e+02	1.0e+04
25	13C-1,2,3,4,6,7,8-HpCDD	8.08e+06	1.70e+03	4.8e+03	7.81e+06	7.44e+02	1.0e+04
26	13C-OCDD	1.07e+07	1.08e+03	9.9e+03	1.18e+07	7.32e+02	1.6e+04
27	13C-1,2,3,4-TCDD	4.16e+06	6.06e+03	6.9e+02	5.32e+06	2.16e+03	2.5e+03
28	13C-1,2,3,7,8,9-HxCDD	1.13e+07	1.54e+03	7.4e+03	9.04e+06	9.52e+02	9.5e+03
29	37Cl-2,3,7,8-TCDD	9.62e+06	1.31e+03	7.4e+03			

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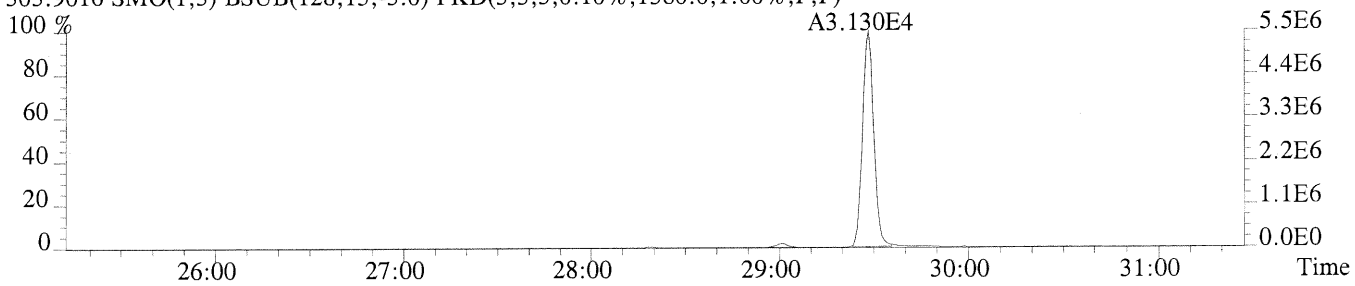
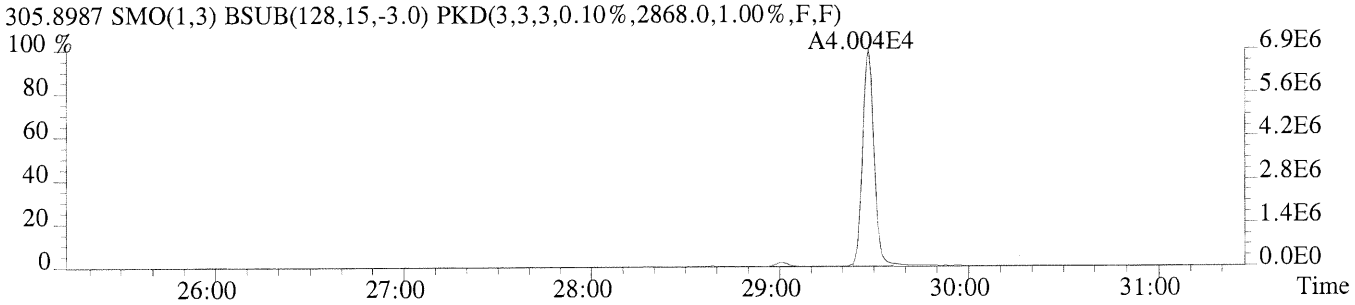
File:P100009 #1-521 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

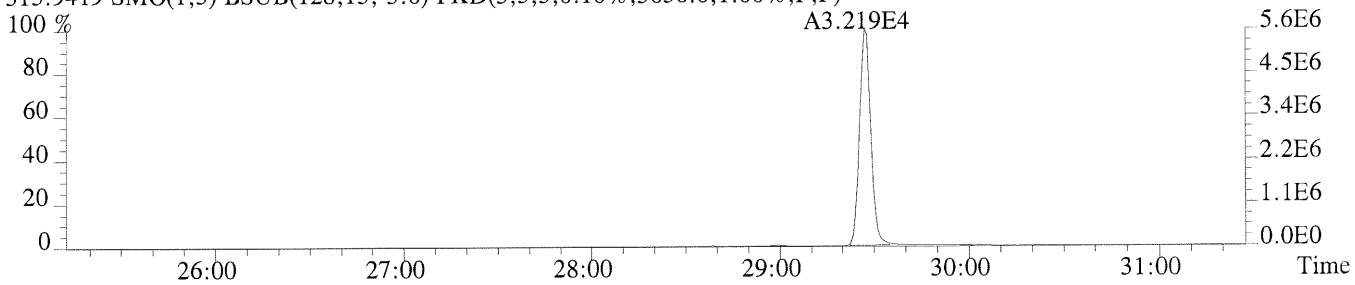
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1380.0,1.00%,F,F)



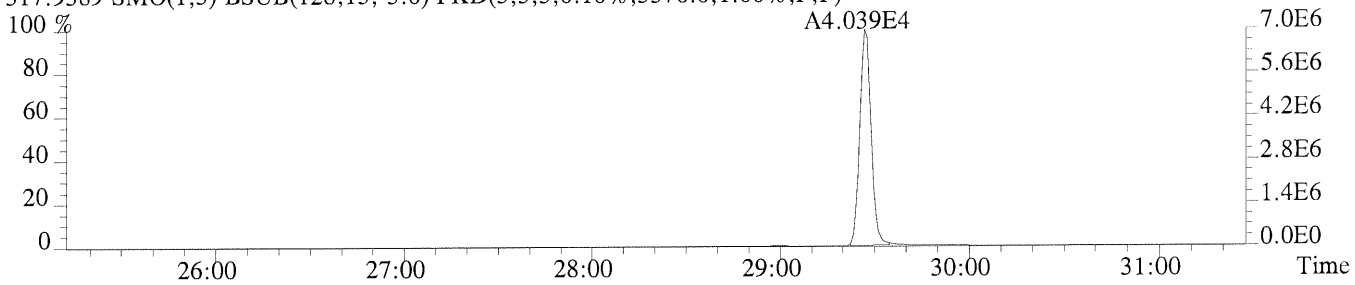
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2868.0,1.00%,F,F)



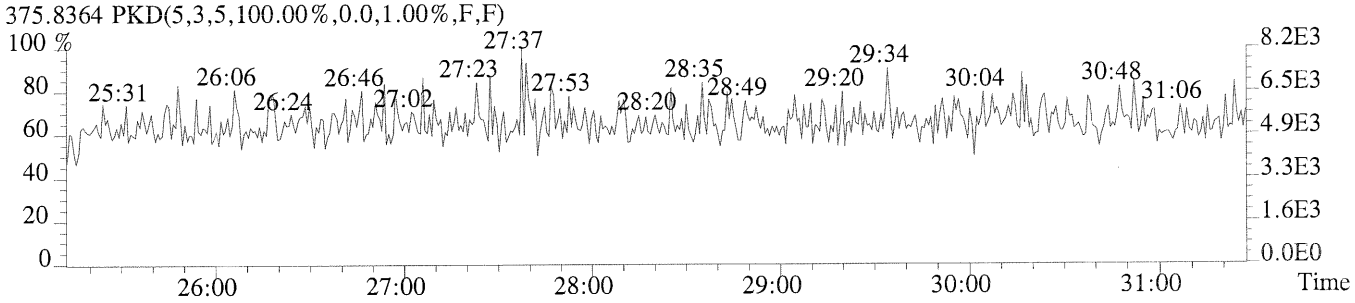
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3656.0,1.00%,F,F)



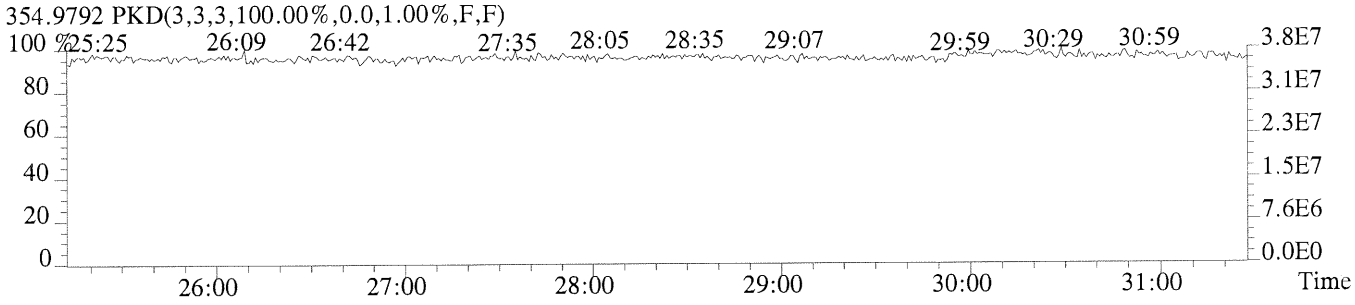
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3376.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

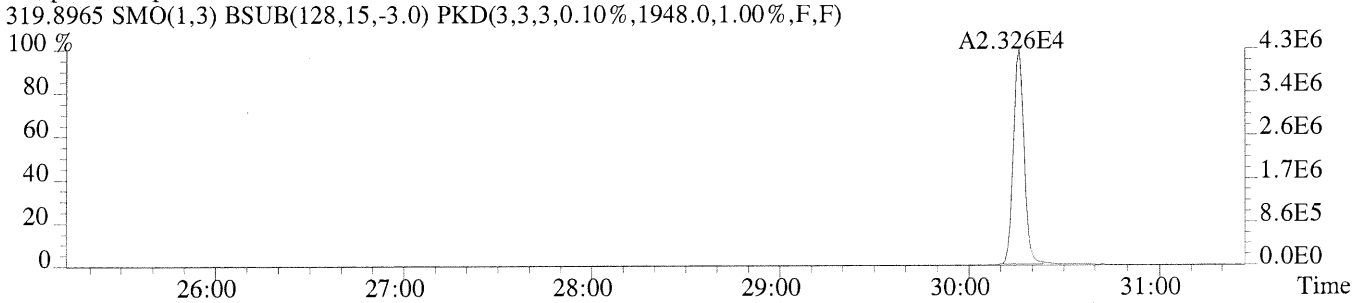


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

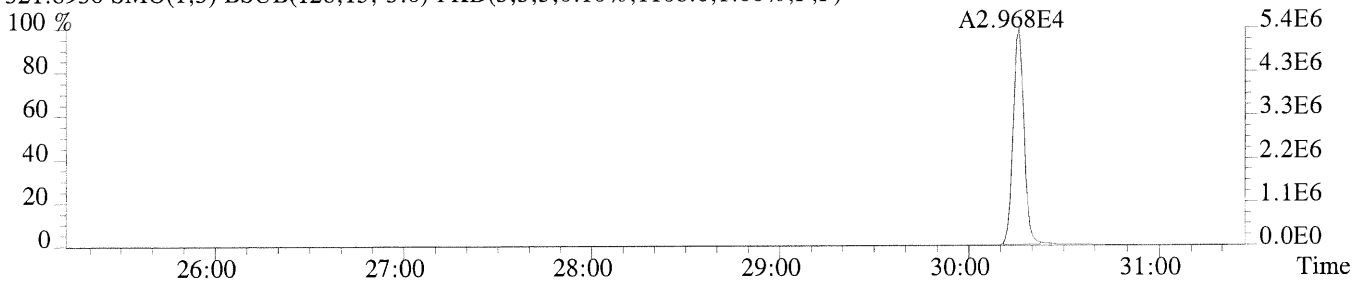


File:P100009 #1-521 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

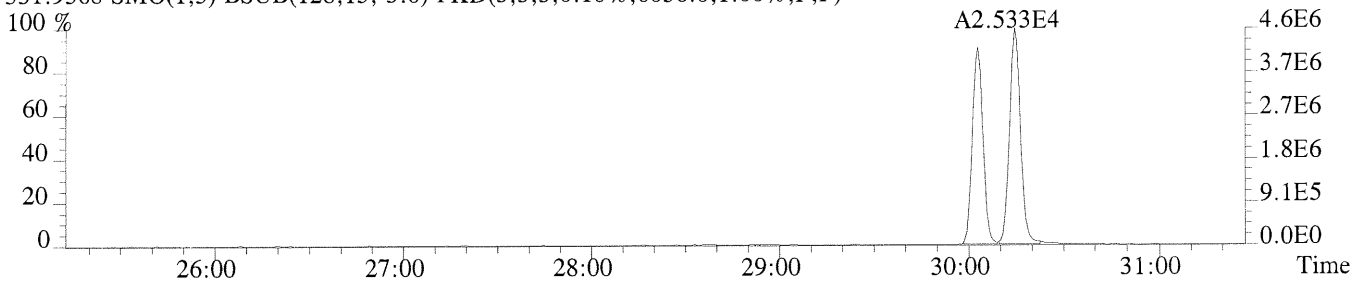
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1948.0,1.00%,F,F)



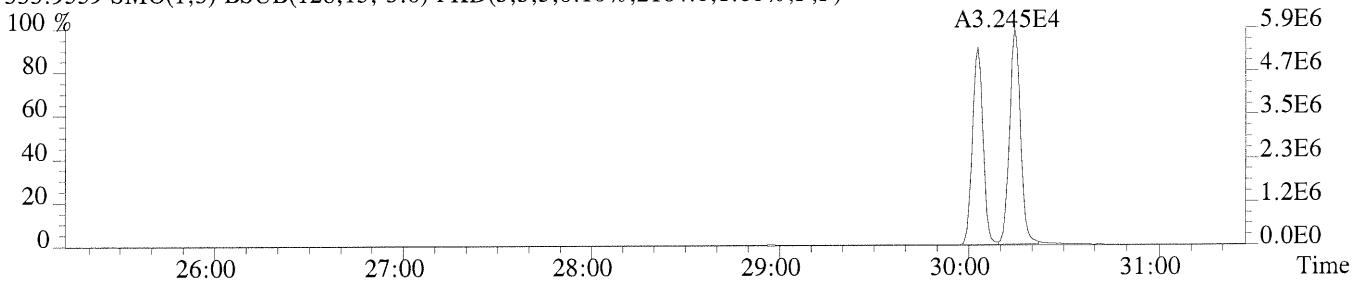
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1108.0,1.00%,F,F)



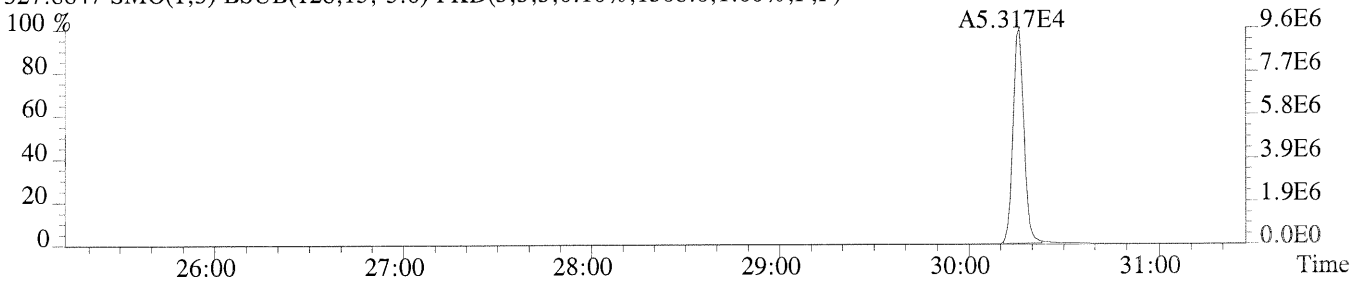
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,6056.0,1.00%,F,F)



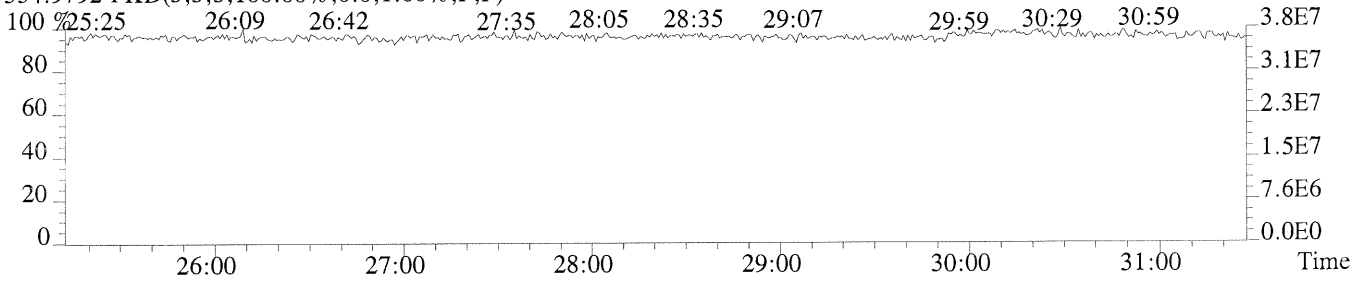
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2164.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1308.0,1.00%,F,F)

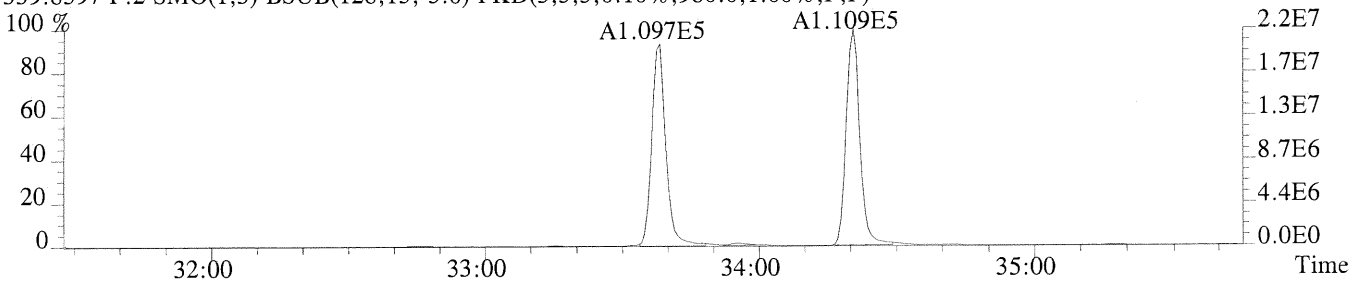


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

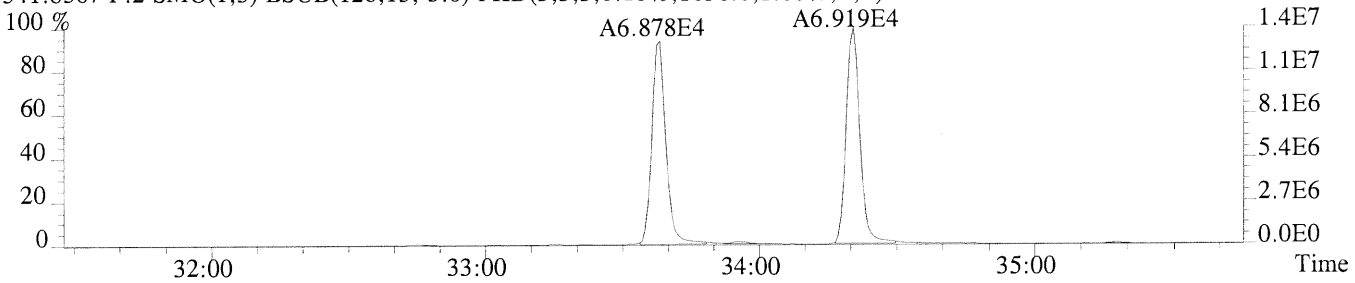


File:P100009 #1-390 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

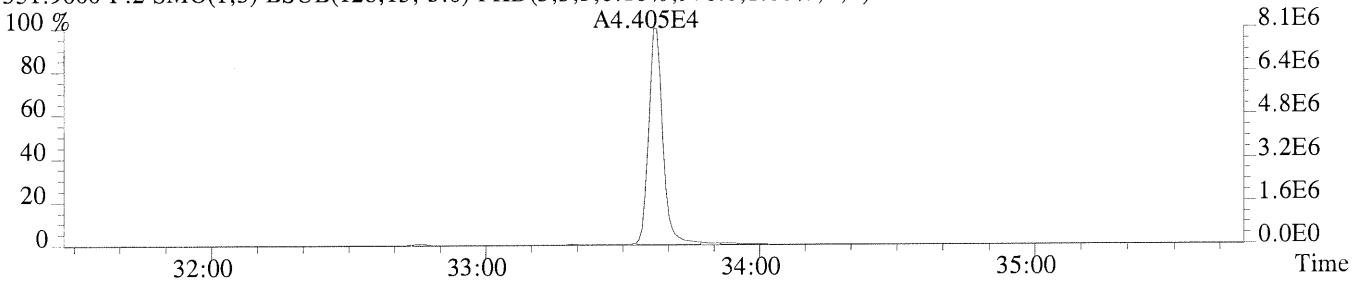
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,980.0,1.00%,F,F)



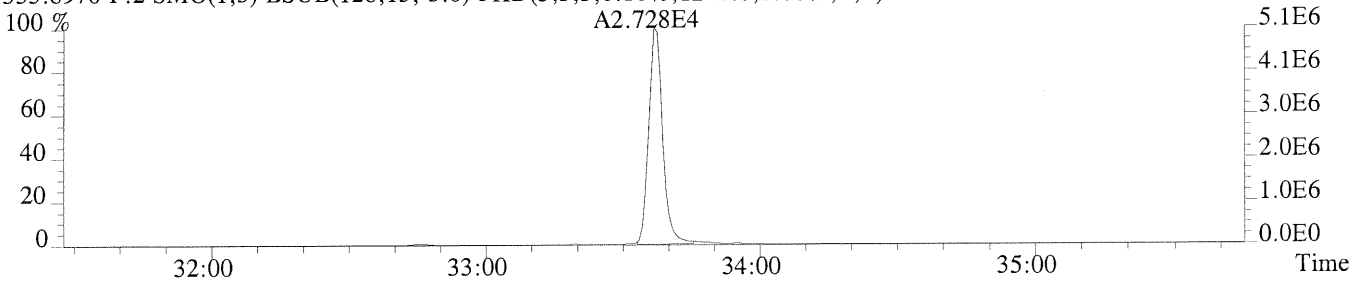
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1656.0,1.00%,F,F)



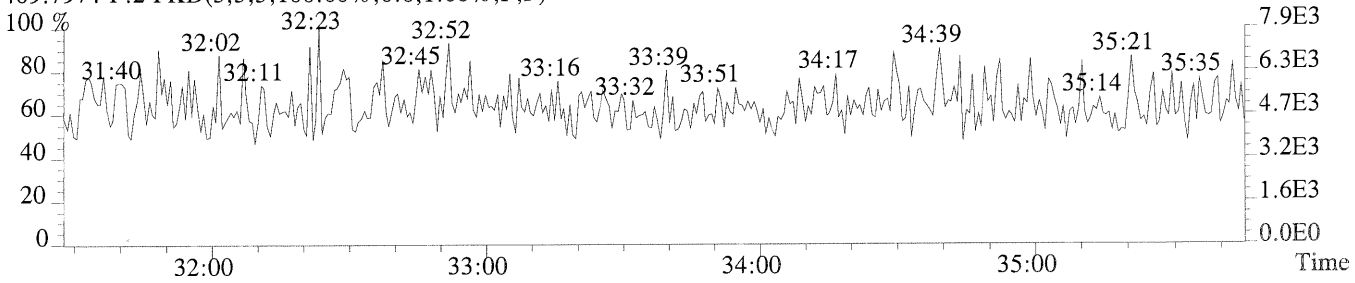
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,976.0,1.00%,F,F)



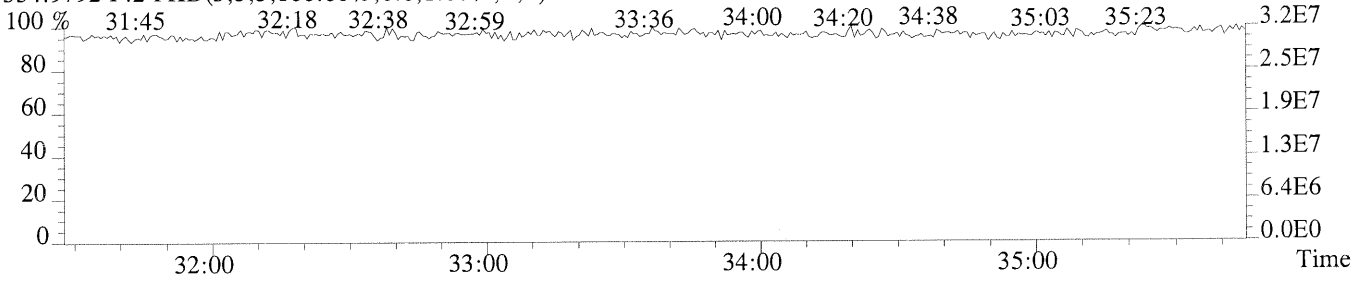
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1240.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

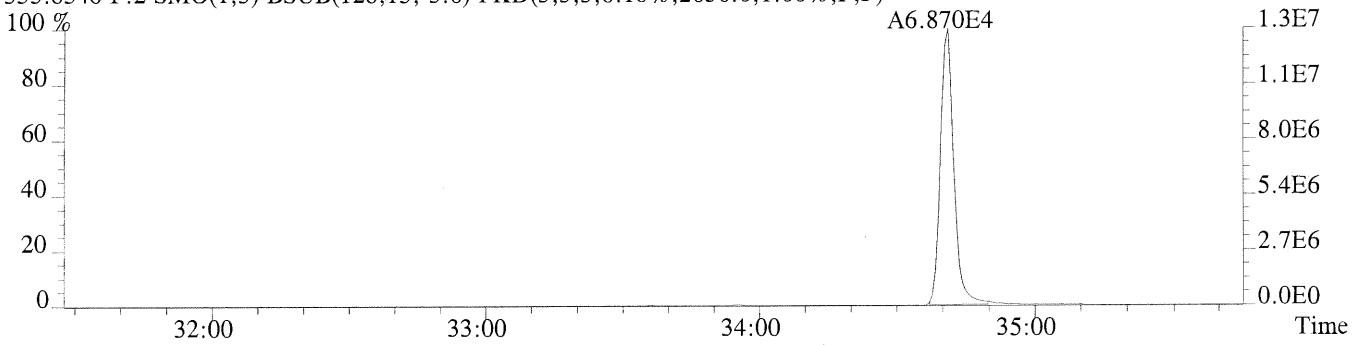


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

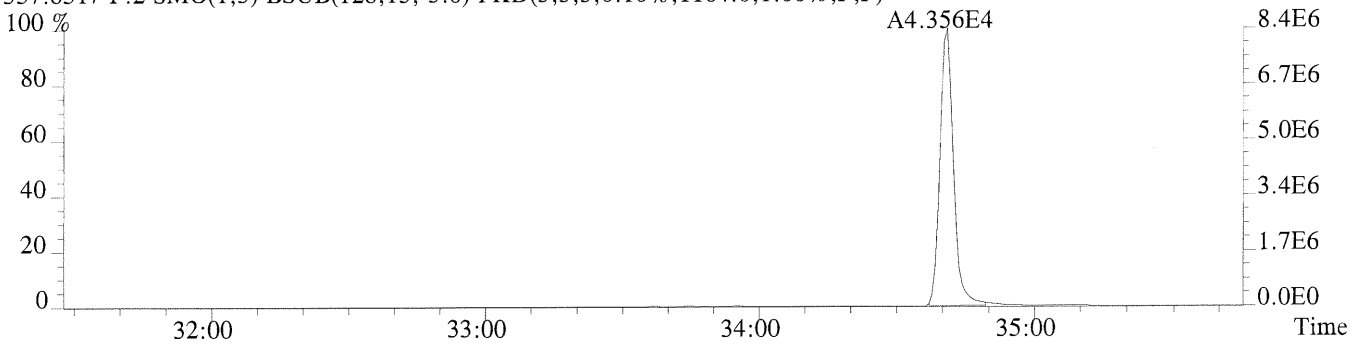


File:P100009 #1-390 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

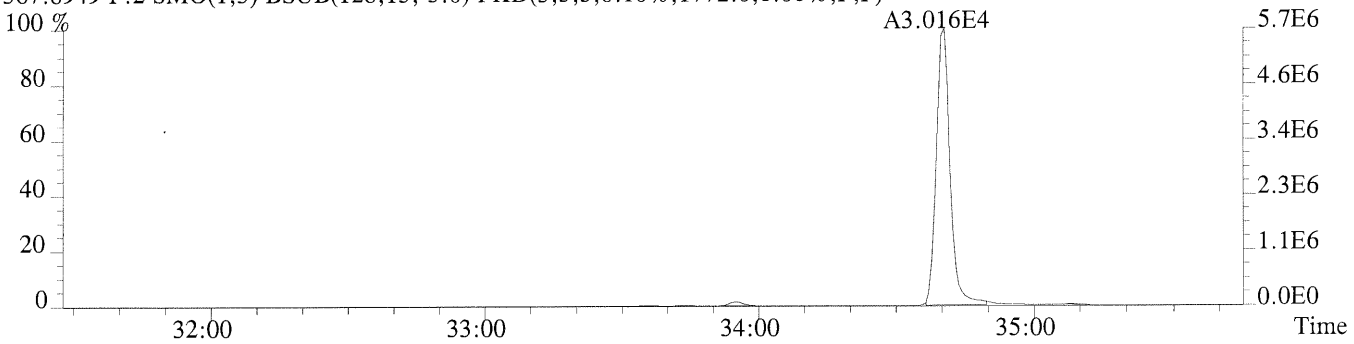
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2056.0,1.00%,F,F)



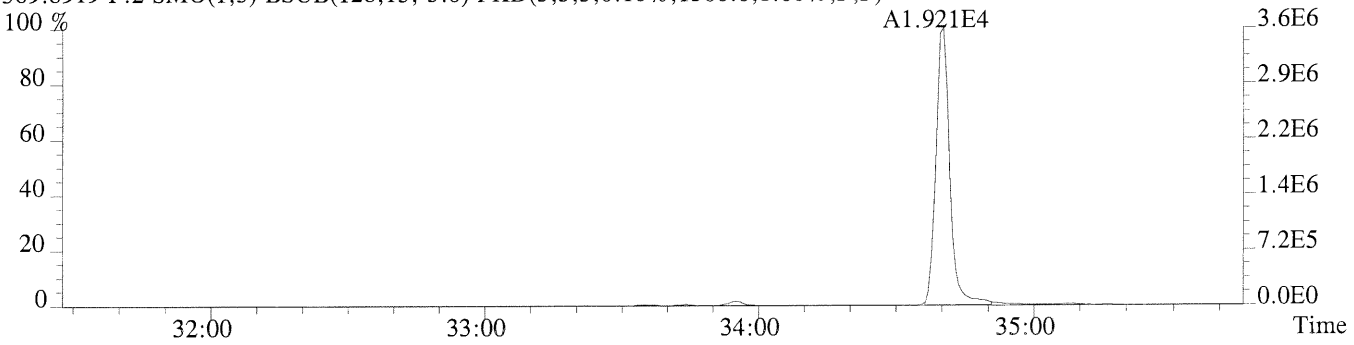
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1164.0,1.00%,F,F)



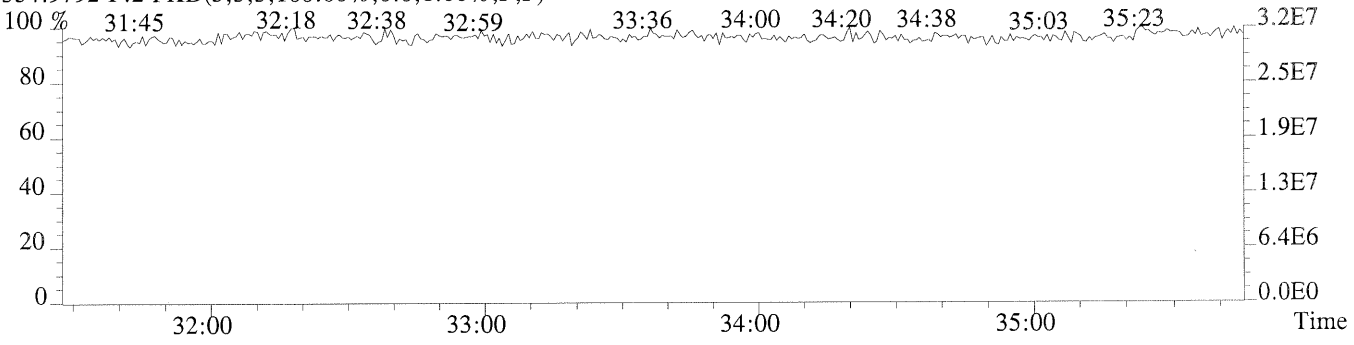
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1772.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1300.0,1.00%,F,F)

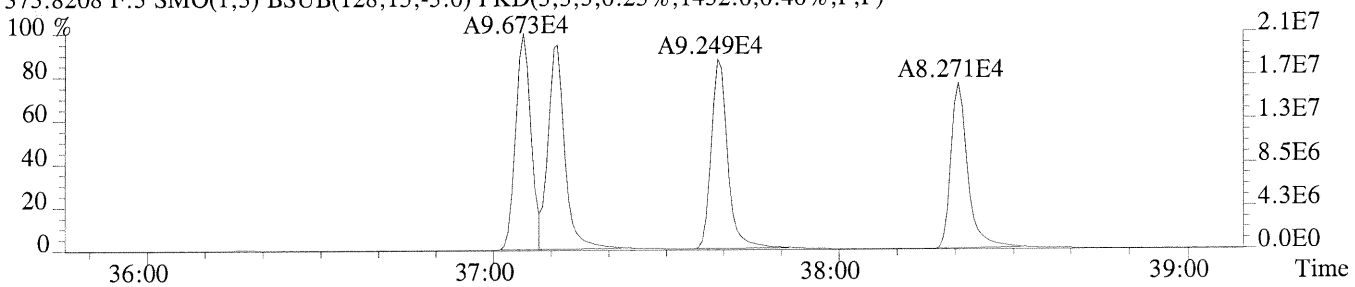


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

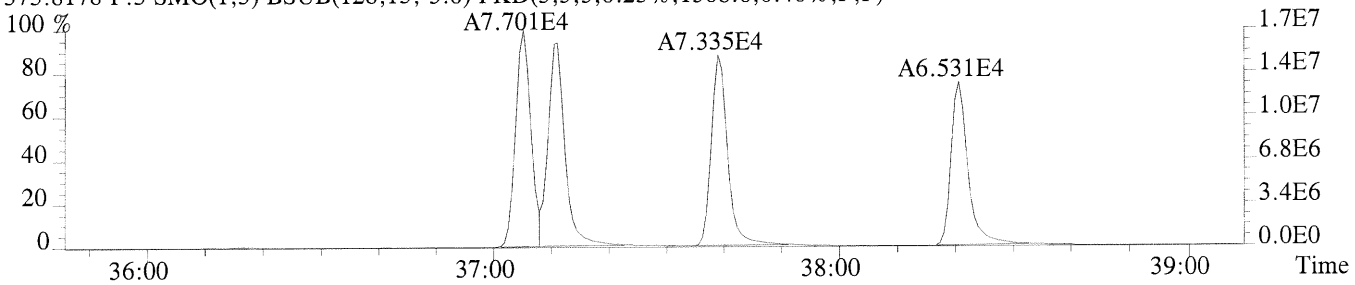


File:P100009 #1-309 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

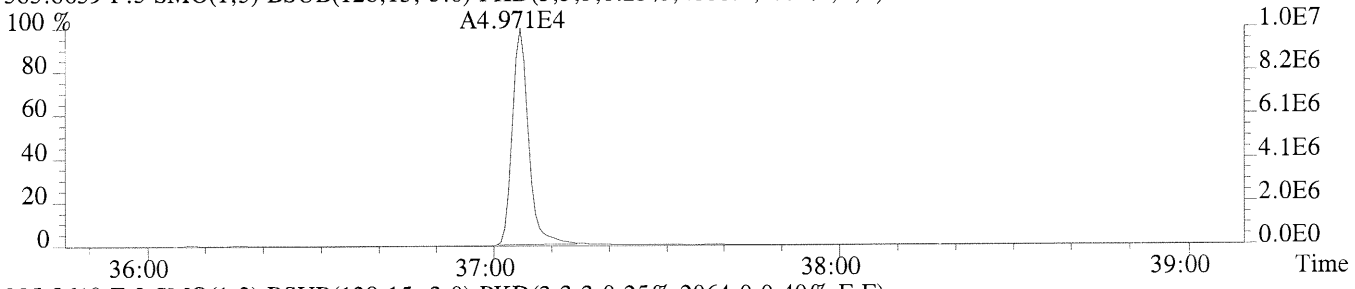
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1432.0,0.40%,F,F)



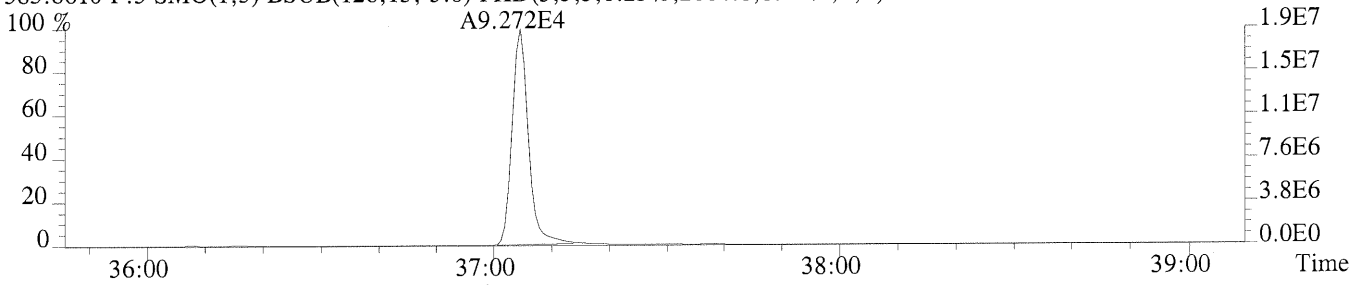
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1308.0,0.40%,F,F)



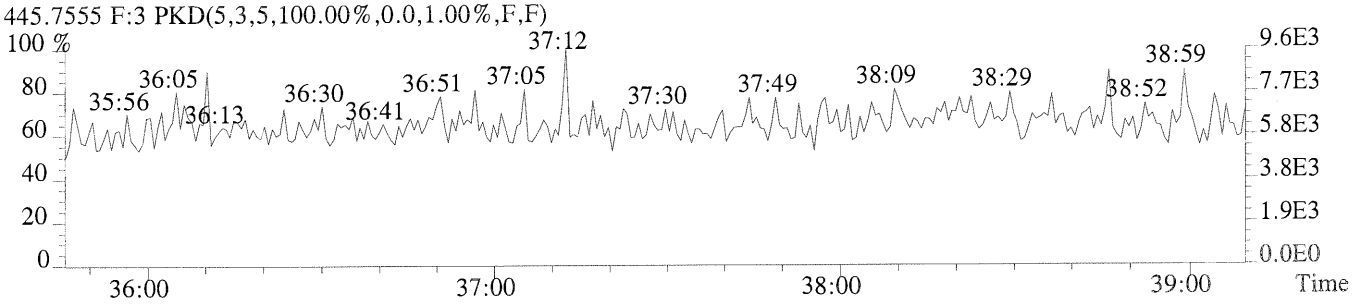
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1000.0,0.40%,F,F)



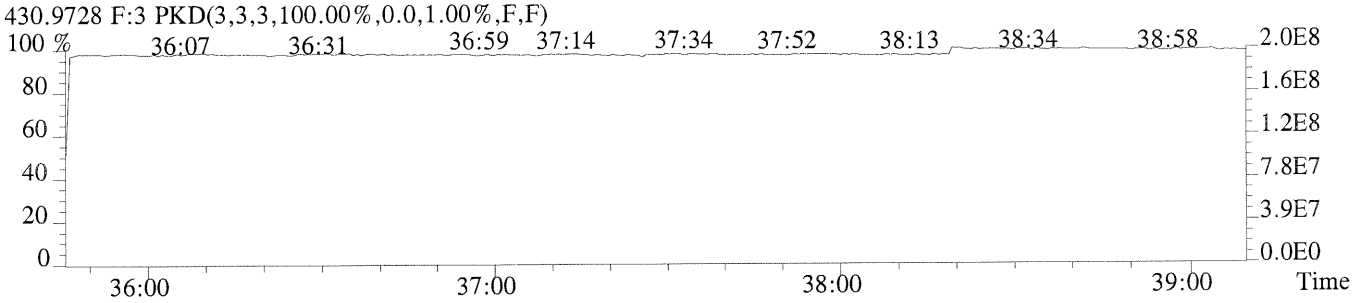
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2064.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

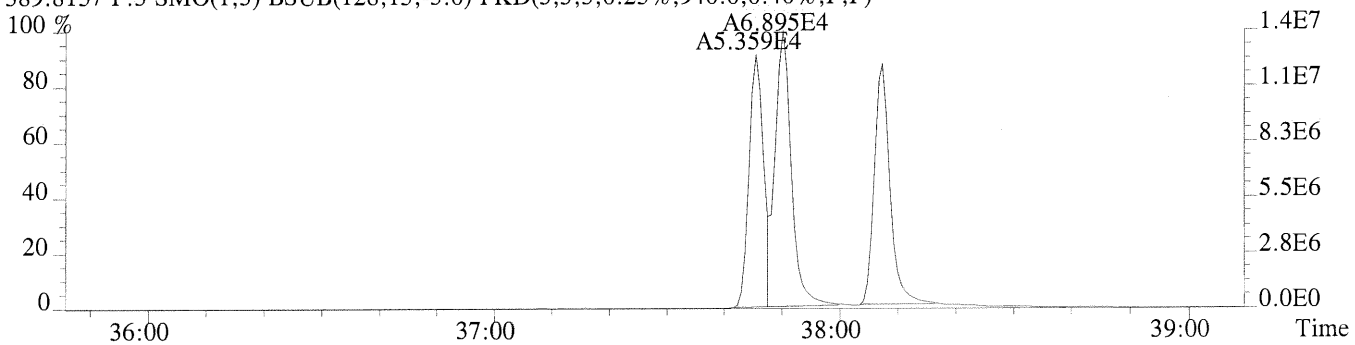


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

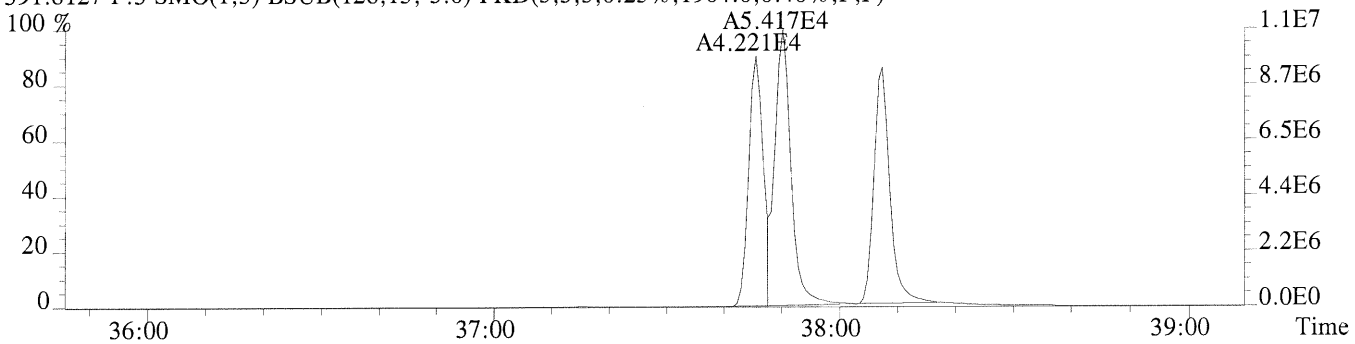


File:P100009 #1-309 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

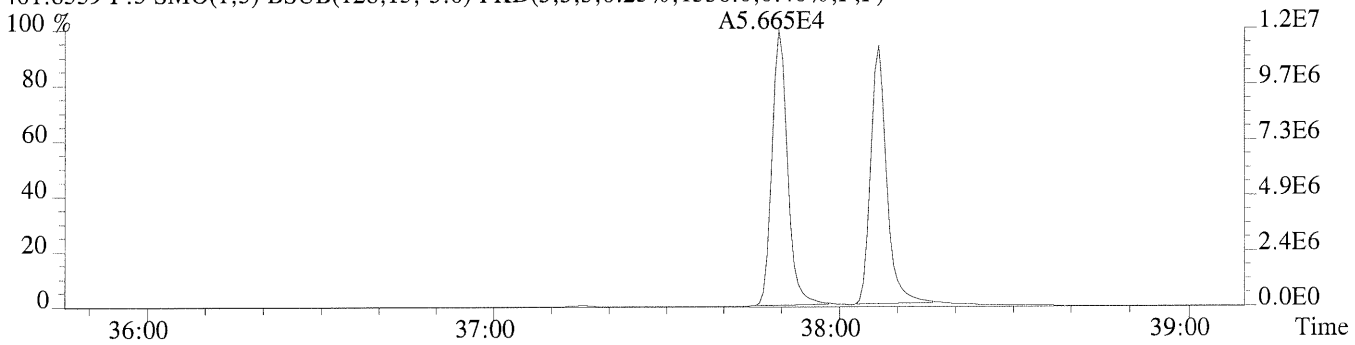
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,940.0,0.40%,F,F)



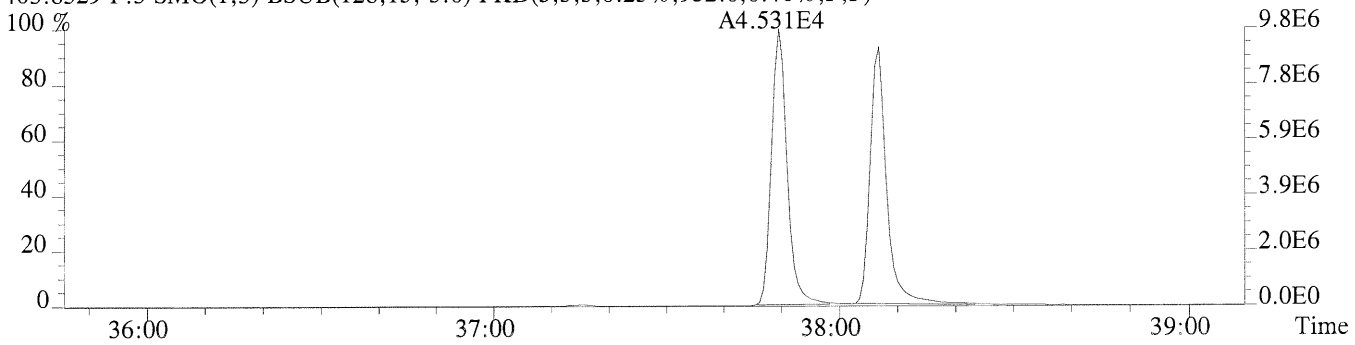
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1904.0,0.40%,F,F)



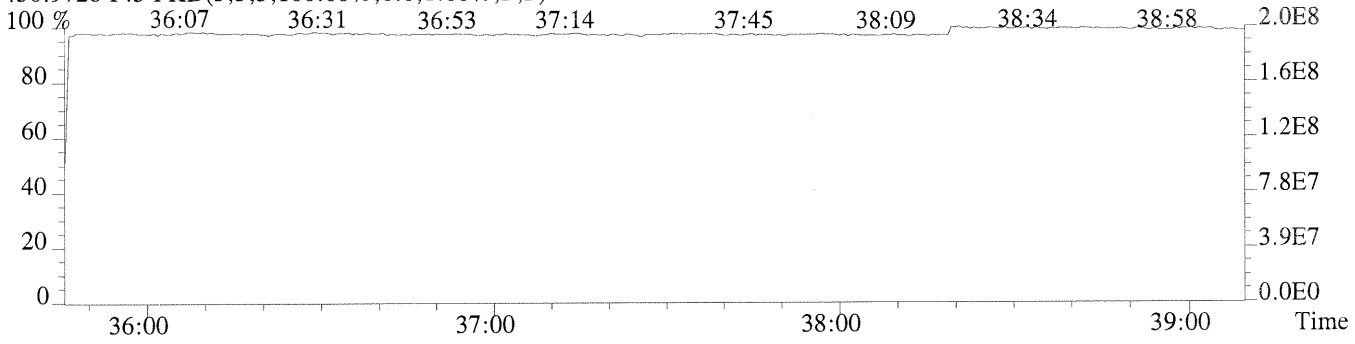
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1536.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,952.0,0.40%,F,F)

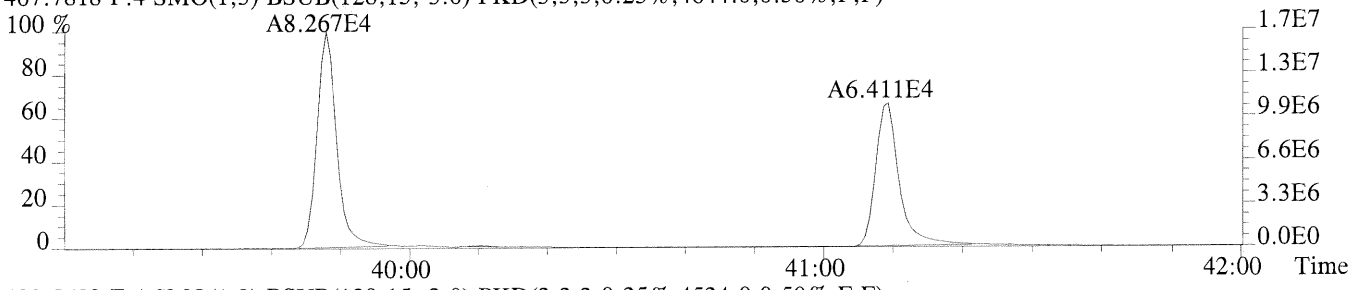


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

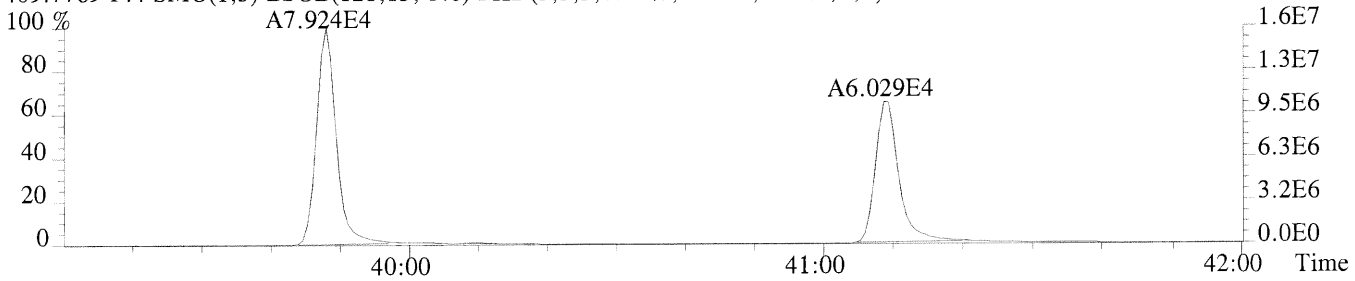


File:P100009 #1-258 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

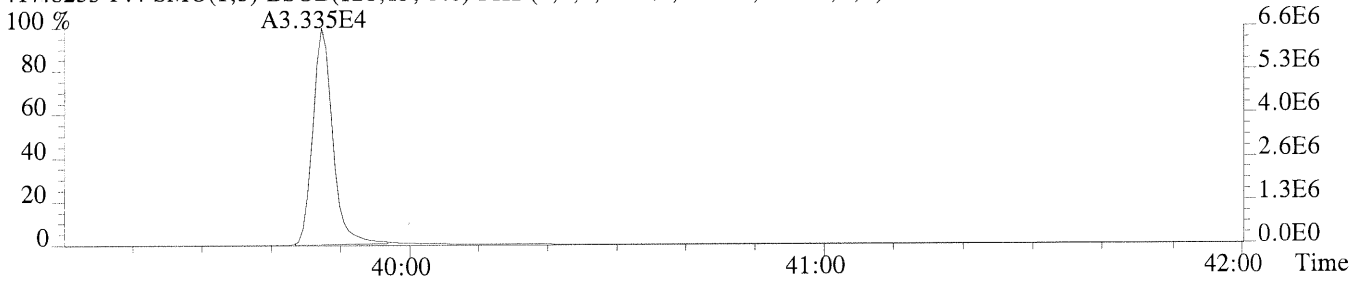
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4644.0,0.50%,F,F)



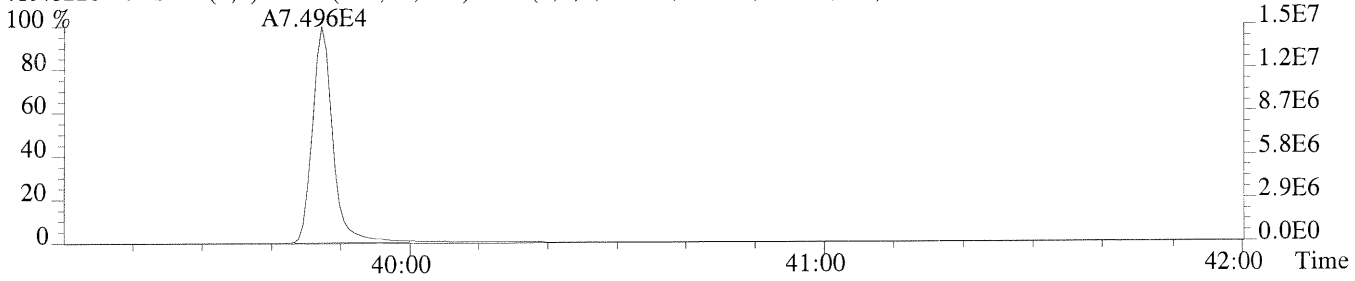
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4524.0,0.50%,F,F)



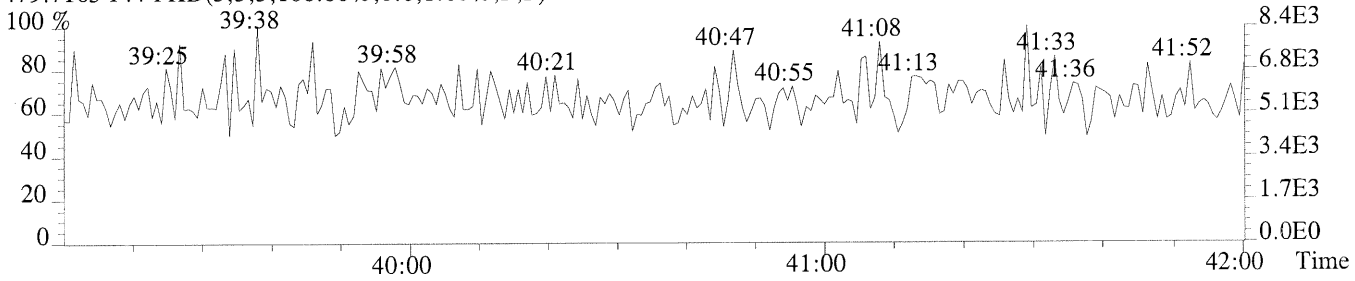
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4336.0,0.50%,F,F)



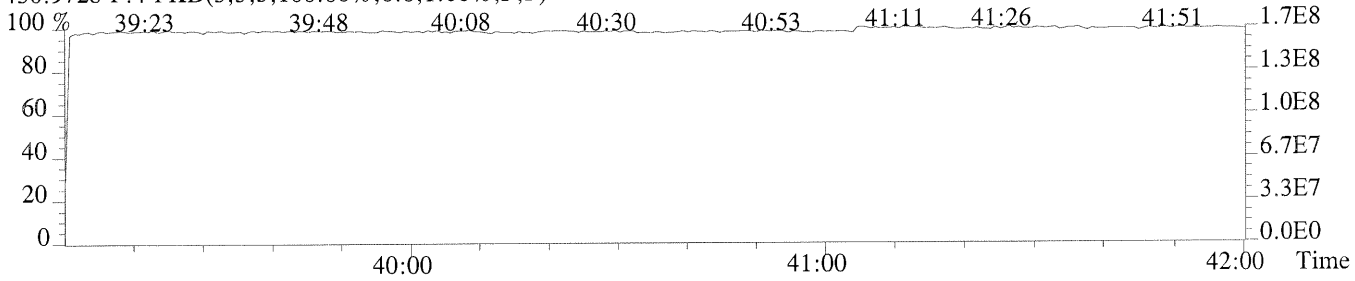
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,8312.0,0.50%,F,F)



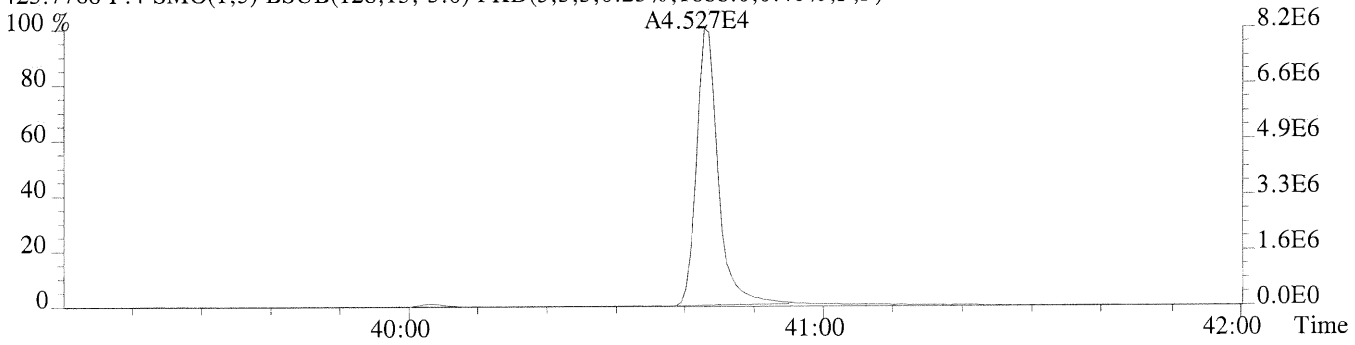
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



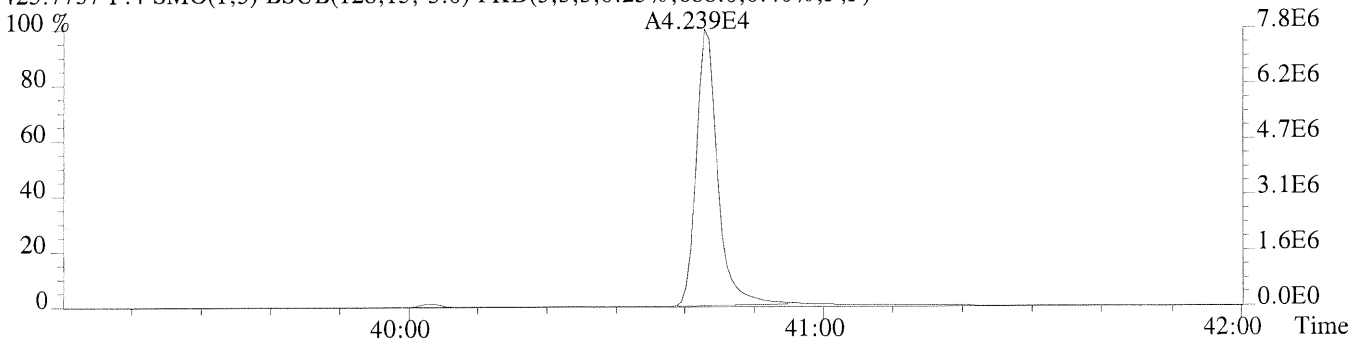
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



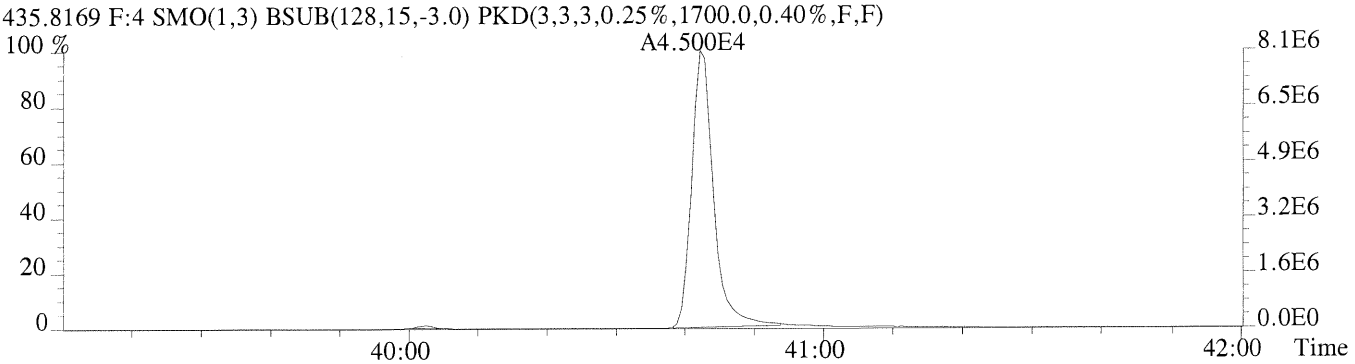
File:P100009 #1-258 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1688.0,0.40%,F,F)



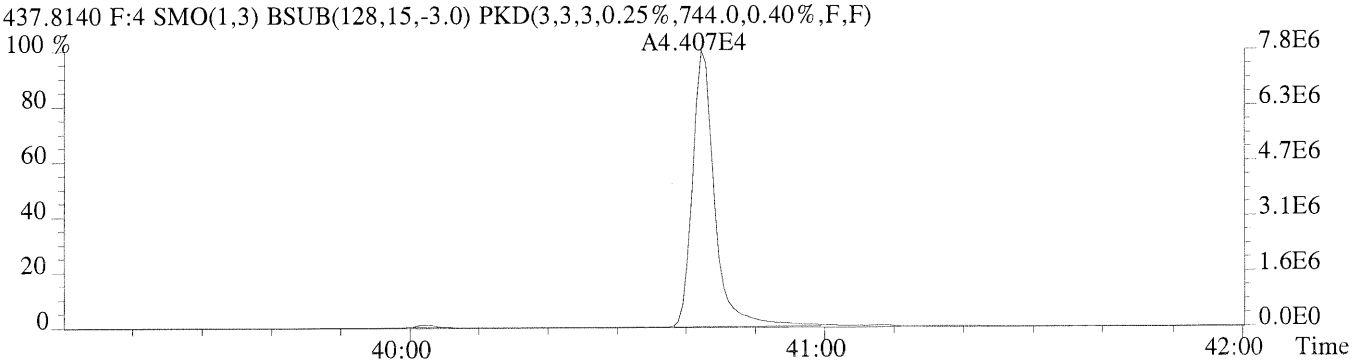
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,688.0,0.40%,F,F)



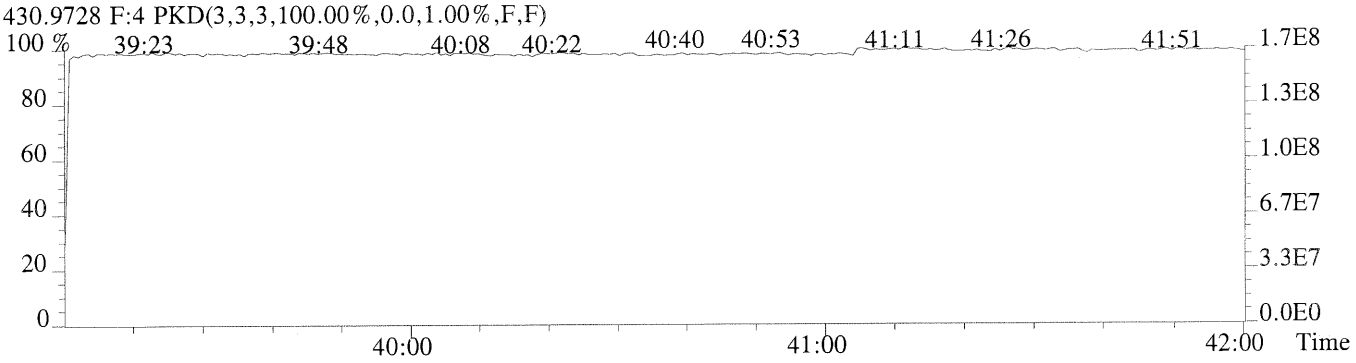
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1700.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,744.0,0.40%,F,F)

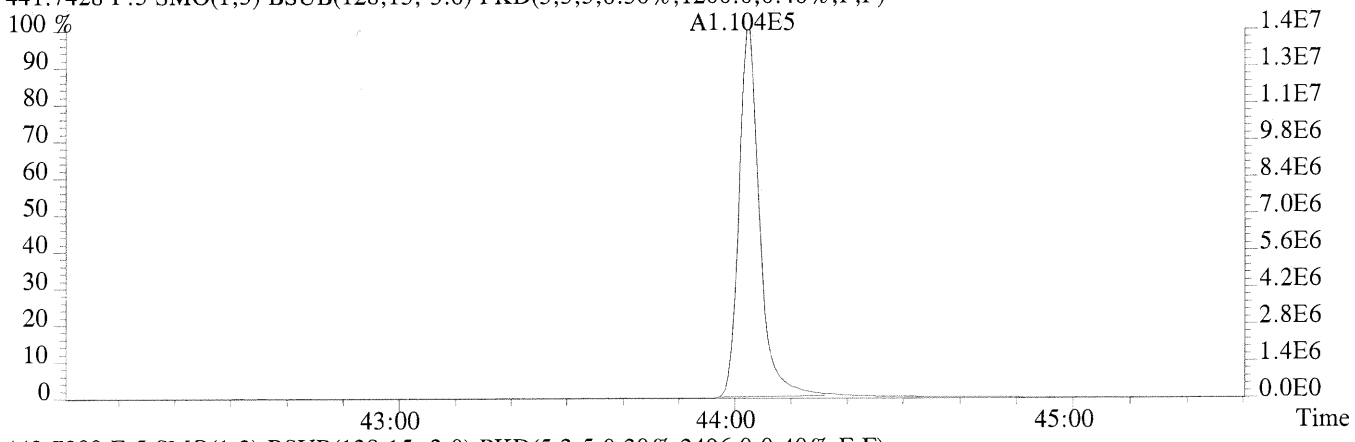


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

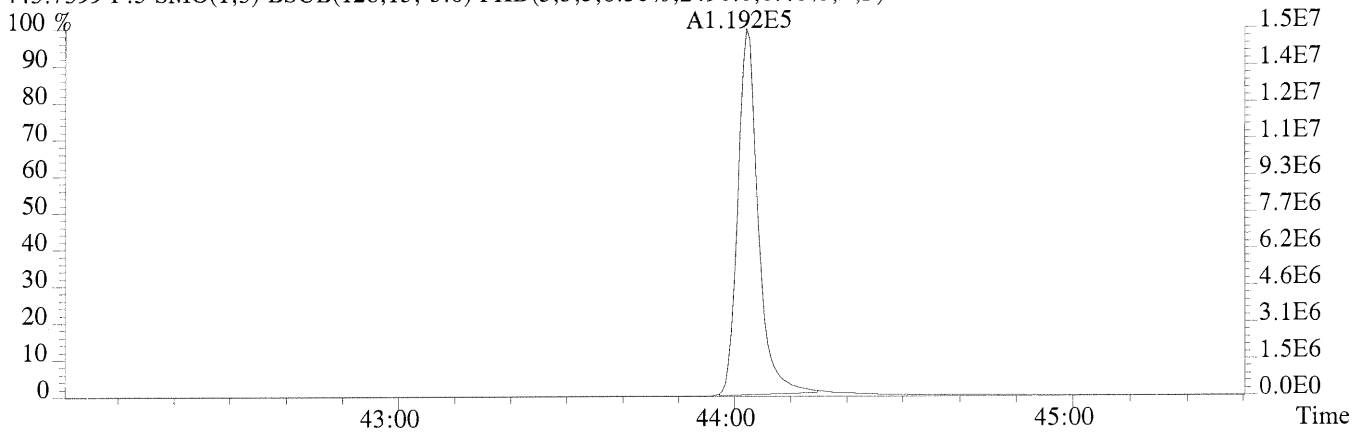


File:P100009 #1-386 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

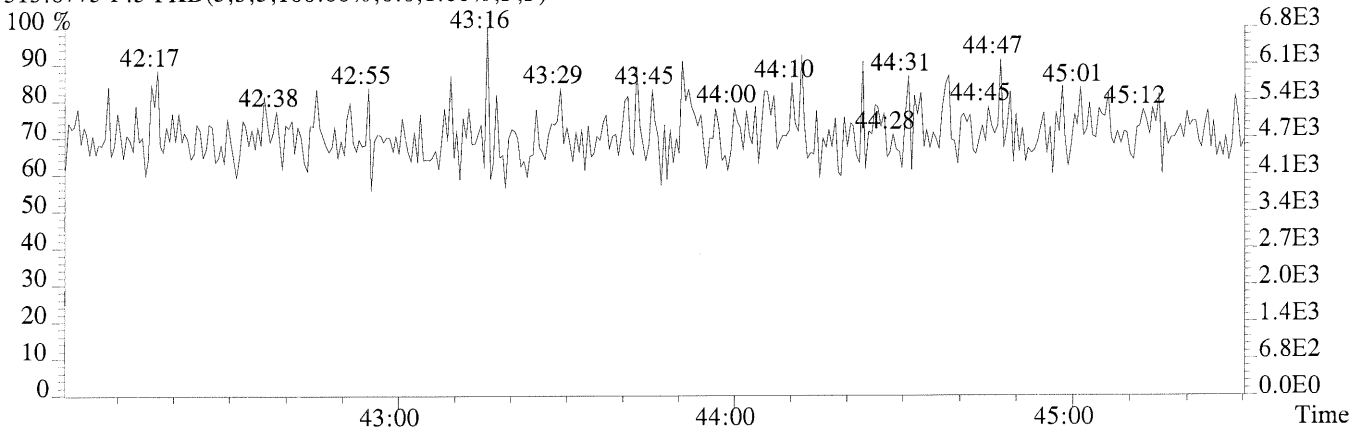
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1200.0,0.40%,F,F)



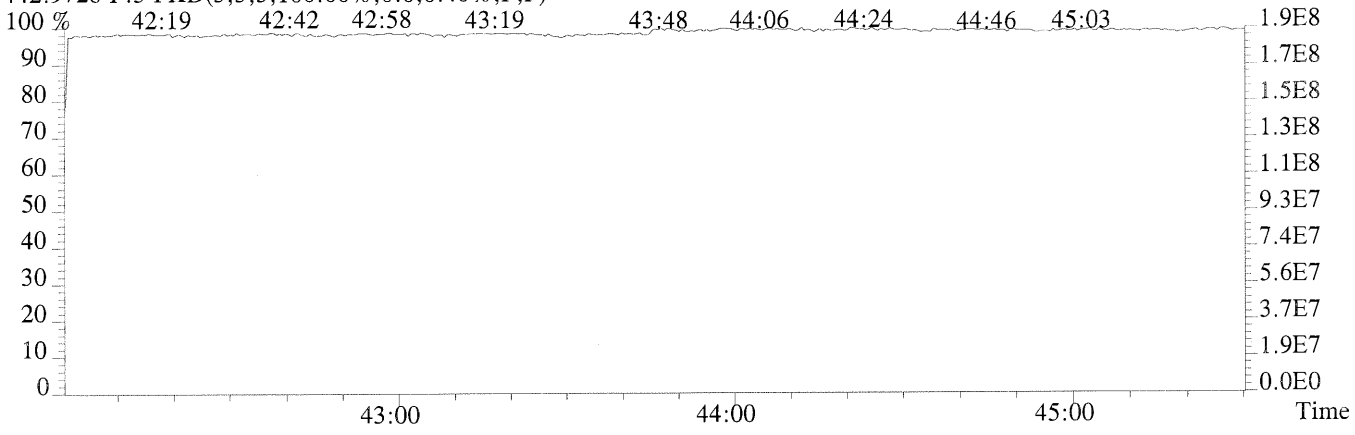
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2496.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

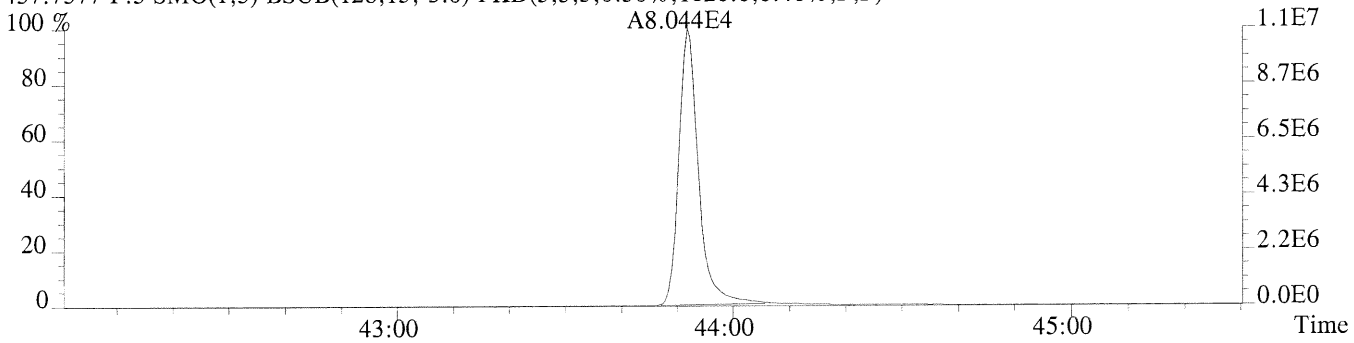


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

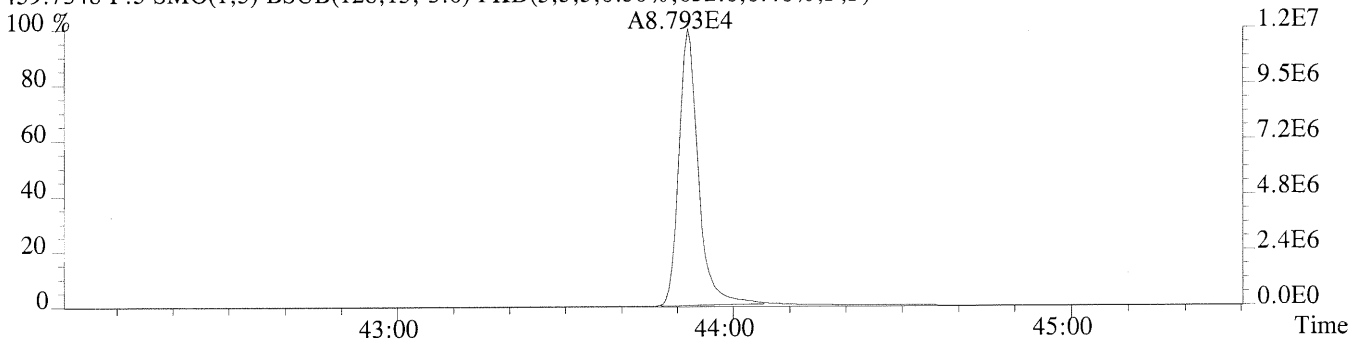


File:P100009 #1-386 Acq: 2-JUL-2008 13:43:26 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

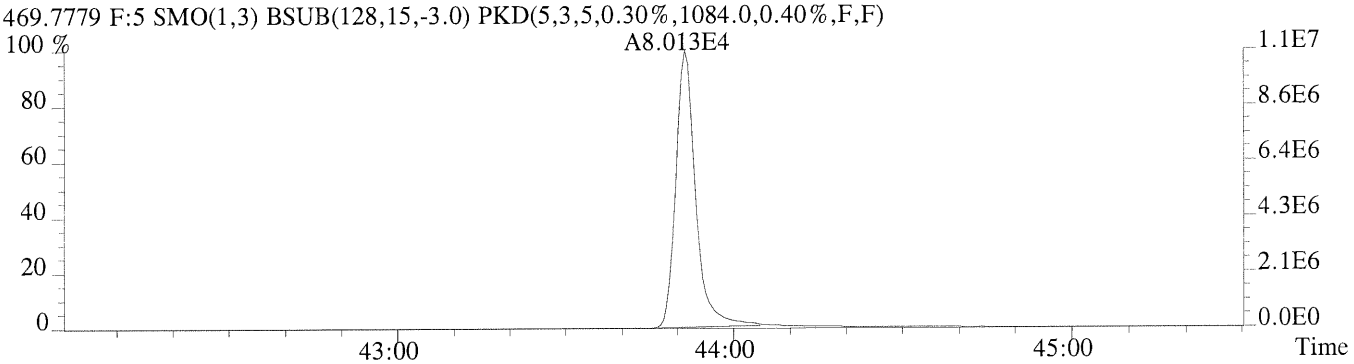
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1120.0,0.40%,F,F)



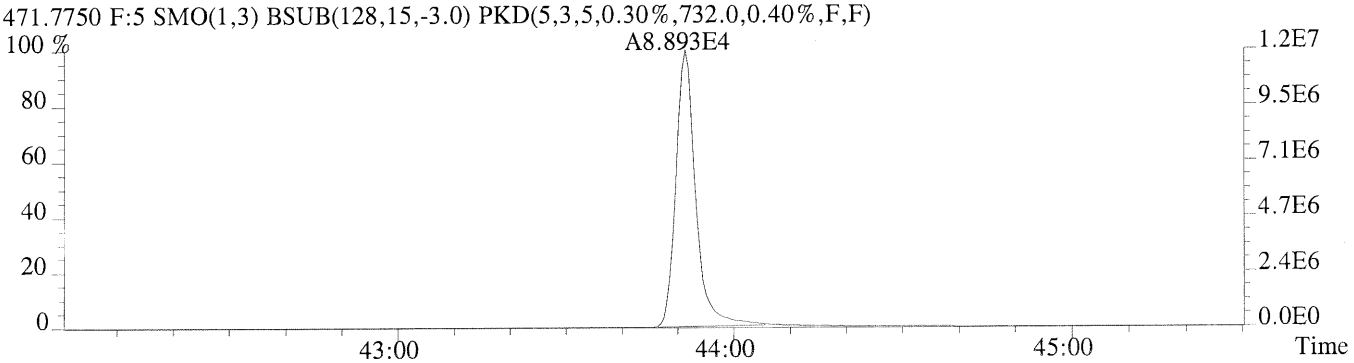
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,632.0,0.40%,F,F)



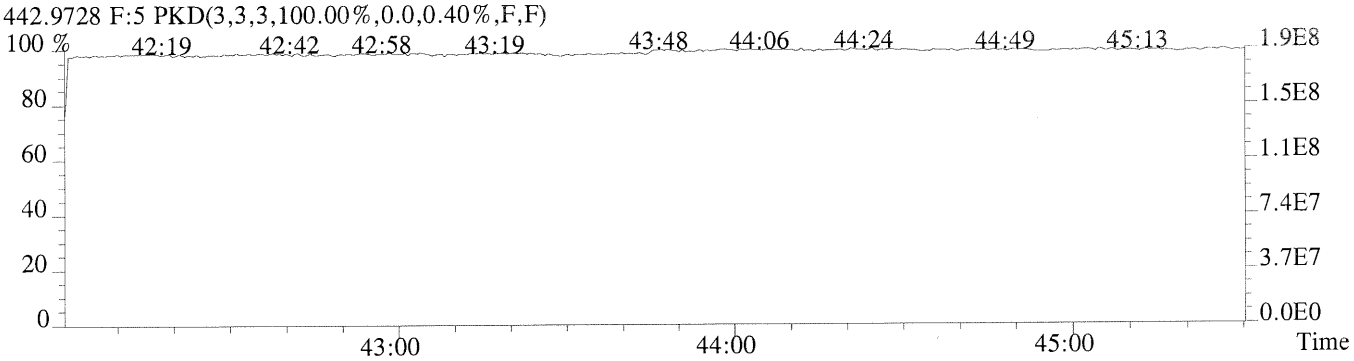
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1084.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,732.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC5

Run #5 Filename P100010 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 14:37:42
Processed: 3-JUL-08 14:49:03 Sample ID:

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	29:28	1.232e+05	1.551e+05	0.79	yes	no	0.98
2	Unk	1,2,3,7,8-PeCDF	33:38	4.342e+05	2.702e+05	1.61	yes	no	0.97
3	Unk	2,3,4,7,8-PeCDF	34:20	4.435e+05	2.758e+05	1.61	yes	no	1.00
4	Unk	1,2,3,4,7,8-HxCDF	37:05	3.776e+05	2.987e+05	1.26	yes	no	1.22
5	Unk	1,2,3,6,7,8-HxCDF	37:11	4.242e+05	3.344e+05	1.27	yes	no	1.31
6	Unk	2,3,4,6,7,8-HxCDF	37:40	3.706e+05	2.939e+05	1.26	yes	no	1.15
7	Unk	1,2,3,7,8,9-HxCDF	38:21	3.319e+05	2.601e+05	1.28	yes	no	1.06
8	Unk	1,2,3,4,6,7,8-HpCDF	39:48	3.304e+05	3.138e+05	1.05	yes	no	1.55
9	Unk	1,2,3,4,7,8,9-HpCDF	41:09	2.505e+05	2.381e+05	1.05	yes	no	1.17
10	Unk	OCDF	44:03	4.267e+05	4.667e+05	0.91	yes	no	1.36
11	Unk	2,3,7,8-TCDD	30:16	9.037e+04	1.162e+05	0.78	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:41	2.750e+05	1.751e+05	1.57	yes	no	0.88
13	Unk	1,2,3,4,7,8-HxCDD	37:45	2.354e+05	1.852e+05	1.27	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:50	2.566e+05	2.008e+05	1.28	yes	no	1.13
15	Unk	1,2,3,7,8,9-HxCDD	38:07	2.364e+05	1.871e+05	1.26	yes	no	1.04
16	Unk	1,2,3,4,6,7,8-HpCDD	40:43	1.775e+05	1.662e+05	1.07	yes	no	1.02
17	Unk	OCDD	43:52	3.091e+05	3.433e+05	0.90	yes	no	1.02
18	IS	13C-2,3,7,8-TCDF	29:27	3.101e+04	3.885e+04	0.80	yes	no	1.41
19	IS	13C-1,2,3,7,8-PeCDF	33:37	4.216e+04	2.650e+04	1.59	yes	no	1.38
20	IS	13C-1,2,3,4,7,8-HxCDF	37:04	4.820e+04	8.904e+04	0.54	yes	no	1.35
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:47	3.243e+04	7.187e+04	0.45	yes	no	1.03
22	IS	13C-2,3,7,8-TCDD	30:14	2.413e+04	3.108e+04	0.78	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:40	2.961e+04	1.890e+04	1.57	yes	no	0.98
24	IS	13C-1,2,3,6,7,8-HxCDD	37:49	5.673e+04	4.535e+04	1.25	yes	no	0.99
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:43	4.304e+04	4.172e+04	1.03	yes	no	0.85
26	IS	13C-OCDD	43:52	7.619e+04	8.423e+04	0.90	yes	no	0.79
27	RS/RT	13C-1,2,3,4-TCDD	30:03	2.109e+04	2.675e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	38:07	5.652e+04	4.467e+04	1.27	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	30:16	2.092e+05					1.01

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC5

Run #5 Filename P100010 #1 Samp: 1 Inj: 1 Acquired: 2-JUL-08 14:37:42

Processed: 3-JUL-08 14:49:03 LAB. ID:

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	2.15e+07	9.40e+02	2.3e+04	2.71e+07	2.02e+03	1.3e+04
2	1,2,3,7,8-PeCDF	8.29e+07	1.18e+03	7.0e+04	5.11e+07	2.26e+03	2.3e+04
3	2,3,4,7,8-PeCDF	8.97e+07	1.18e+03	7.6e+04	5.58e+07	2.26e+03	2.5e+04
4	1,2,3,4,7,8-HxCDF	8.52e+07	2.29e+03	3.7e+04	6.71e+07	1.83e+03	3.7e+04
5	1,2,3,6,7,8-HxCDF	8.44e+07	2.29e+03	3.7e+04	6.64e+07	1.83e+03	3.6e+04
6	2,3,4,6,7,8-HxCDF	7.51e+07	2.29e+03	3.3e+04	6.01e+07	1.83e+03	3.3e+04
7	1,2,3,7,8,9-HxCDF	6.67e+07	2.29e+03	2.9e+04	5.25e+07	1.83e+03	2.9e+04
8	1,2,3,4,6,7,8-HpCDF	6.71e+07	1.47e+04	4.6e+03	6.39e+07	1.52e+04	4.2e+03
9	1,2,3,4,7,8,9-HpCDF	4.59e+07	1.47e+04	3.1e+03	4.32e+07	1.52e+04	2.8e+03
10	OCDF	5.86e+07	1.74e+03	3.4e+04	6.32e+07	2.69e+03	2.3e+04
11	2,3,7,8-TCDD	1.66e+07	1.64e+03	1.0e+04	2.14e+07	1.10e+03	1.9e+04
12	1,2,3,7,8-PeCDD	5.55e+07	2.56e+03	2.2e+04	3.52e+07	1.22e+03	2.9e+04
13	1,2,3,4,7,8-HxCDD	5.19e+07	6.76e+02	7.7e+04	4.07e+07	1.21e+03	3.4e+04
14	1,2,3,6,7,8-HxCDD	5.46e+07	6.76e+02	8.1e+04	4.30e+07	1.21e+03	3.6e+04
15	1,2,3,7,8,9-HxCDD	4.94e+07	6.76e+02	7.3e+04	3.87e+07	1.21e+03	3.2e+04
16	1,2,3,4,6,7,8-HpCDD	3.34e+07	2.52e+03	1.3e+04	3.09e+07	1.22e+03	2.5e+04
17	OCDD	4.28e+07	1.30e+03	3.3e+04	4.73e+07	9.12e+02	5.2e+04
18	13C-2,3,7,8-TCDF	5.29e+06	4.12e+03	1.3e+03	6.69e+06	2.89e+03	2.3e+03
19	13C-1,2,3,7,8-PeCDF	7.93e+06	1.16e+03	6.8e+03	4.96e+06	1.24e+03	4.0e+03
20	13C-1,2,3,4,7,8-HxCDF	9.99e+06	1.36e+03	7.4e+03	1.85e+07	1.97e+03	9.4e+03
21	13C-1,2,3,4,6,7,8-HpCDF	6.42e+06	5.18e+03	1.2e+03	1.43e+07	3.60e+03	4.0e+03
22	13C-2,3,7,8-TCDD	4.35e+06	5.48e+03	7.9e+02	5.66e+06	1.72e+03	3.3e+03
23	13C-1,2,3,7,8-PeCDD	5.82e+06	2.12e+03	2.8e+03	3.69e+06	1.49e+03	2.5e+03
24	13C-1,2,3,6,7,8-HxCDD	1.20e+07	1.29e+03	9.3e+03	9.73e+06	1.59e+03	6.1e+03
25	13C-1,2,3,4,6,7,8-HpCDD	8.05e+06	1.98e+03	4.1e+03	7.64e+06	1.49e+03	5.1e+03
26	13C-OCDD	1.04e+07	1.18e+03	8.8e+03	1.14e+07	9.92e+02	1.1e+04
27	13C-1,2,3,4-TCDD	3.94e+06	5.48e+03	7.2e+02	4.95e+06	1.72e+03	2.9e+03
28	13C-1,2,3,7,8,9-HxCDD	1.15e+07	1.29e+03	8.9e+03	9.28e+06	1.59e+03	5.8e+03
29	37Cl-2,3,7,8-TCDD	3.82e+07	1.41e+03	2.7e+04			

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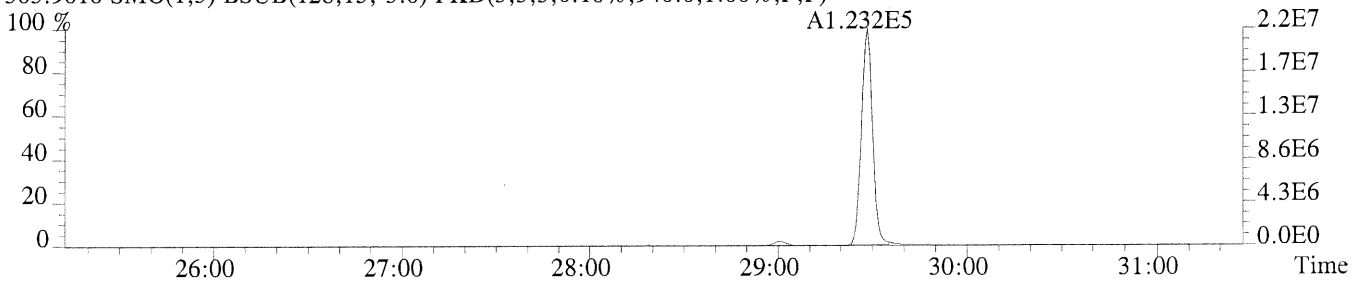
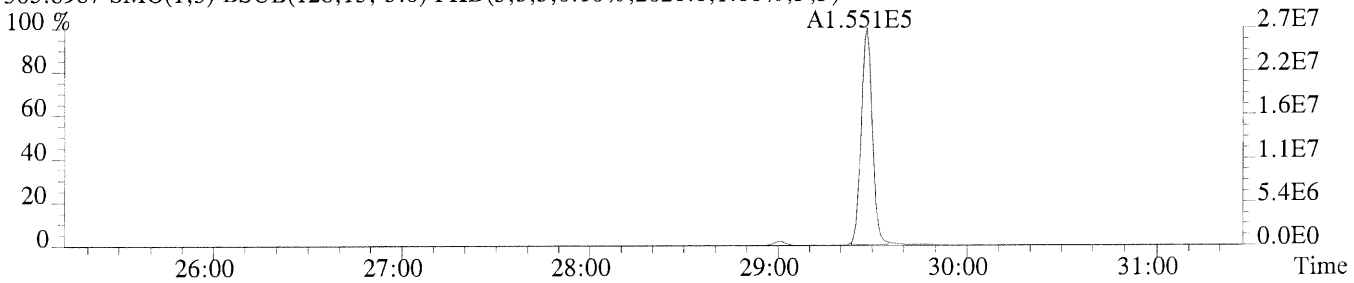
File:P100010 #1-521 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

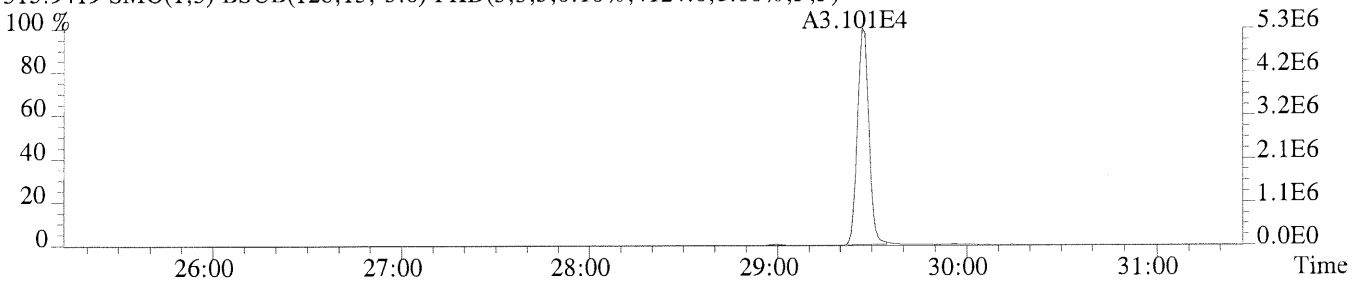
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,940.0,1.00%,F,F)



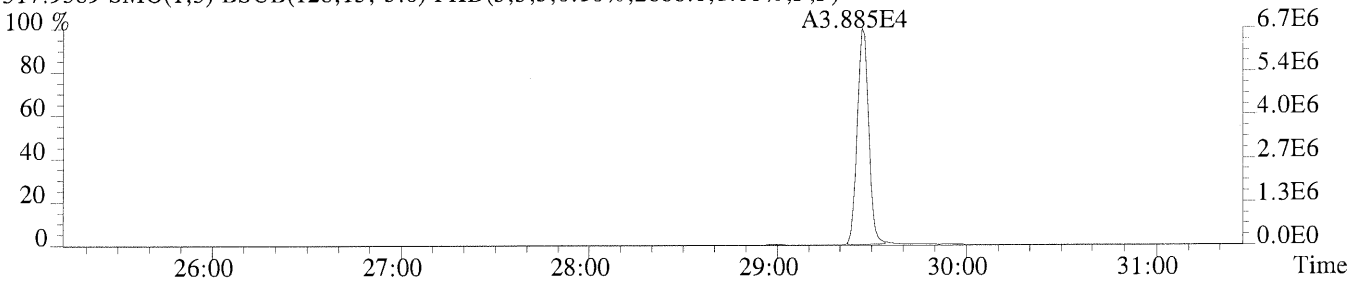
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2020.0,1.00%,F,F)



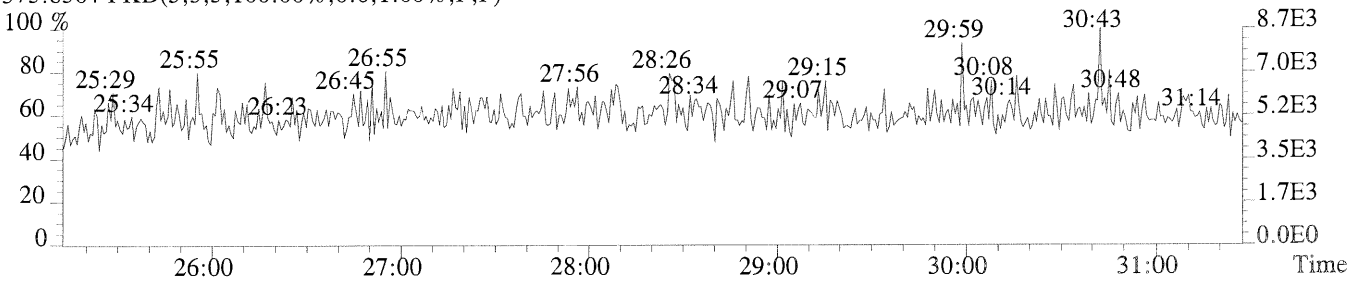
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,4124.0,1.00%,F,F)



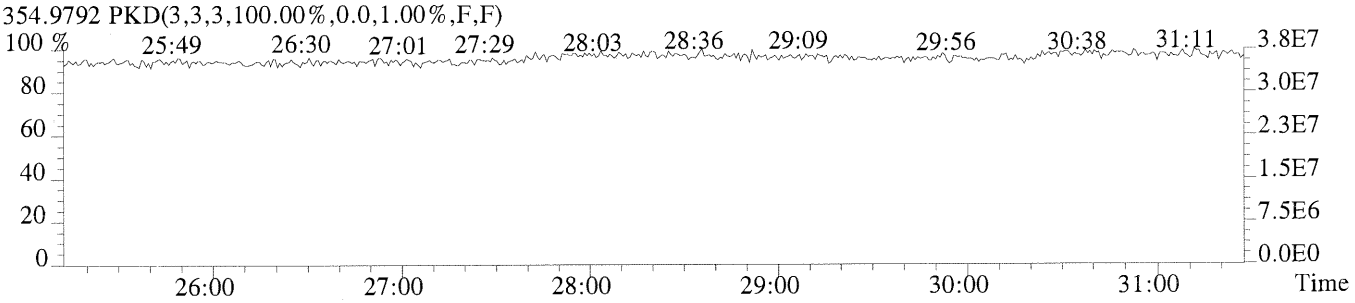
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2888.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

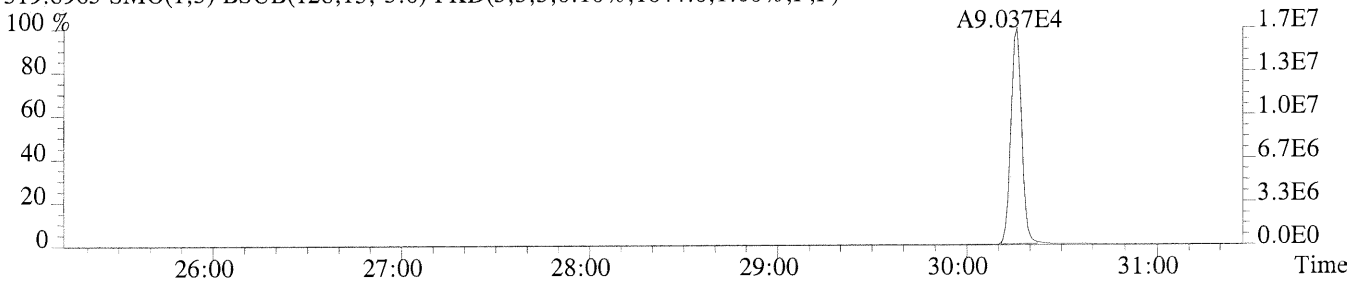


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

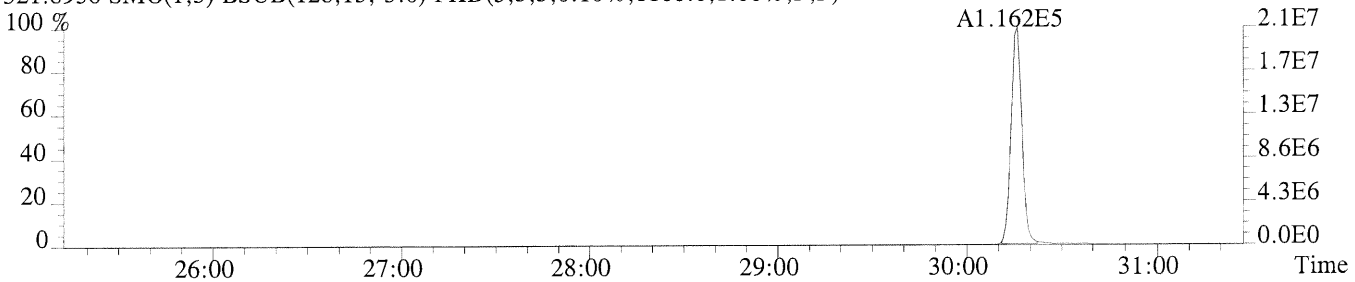


File:P100010 #1-521 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

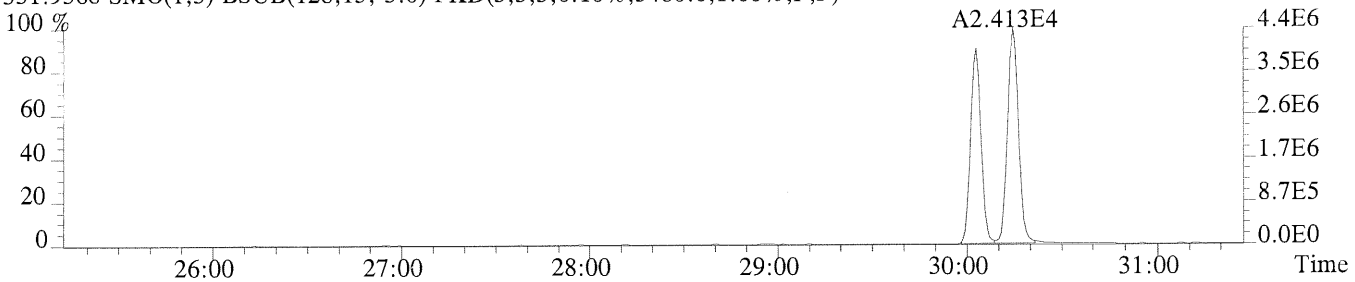
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1644.0,1.00%,F,F)



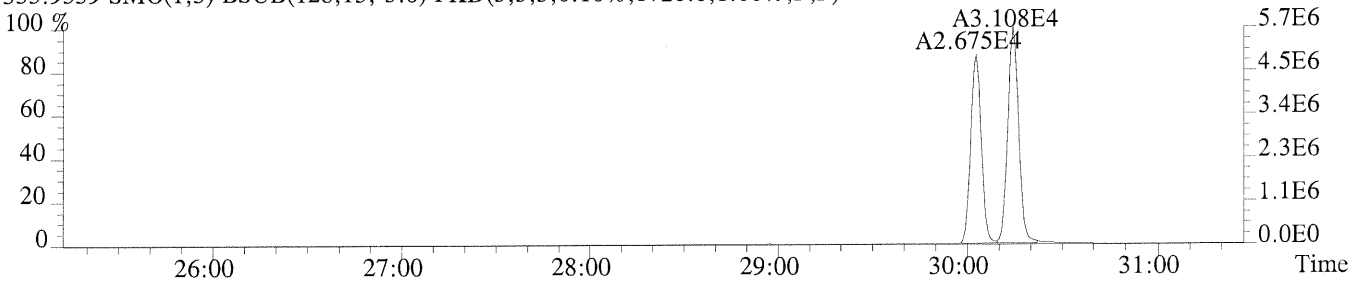
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1100.0,1.00%,F,F)



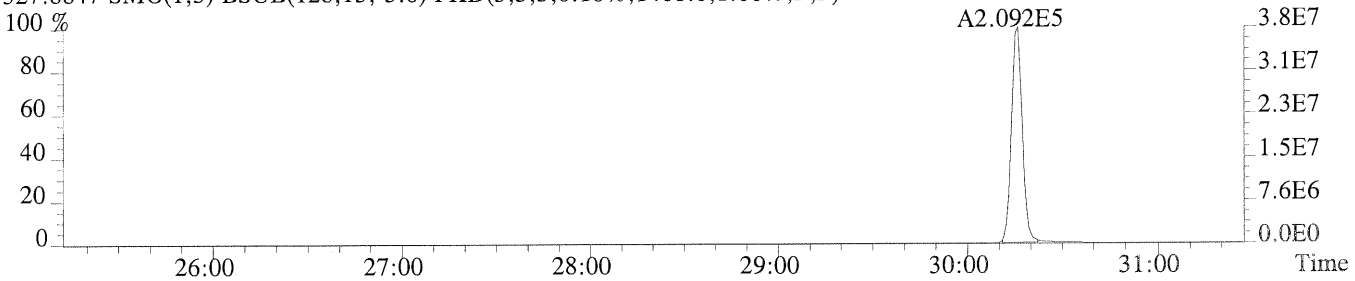
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5480.0,1.00%,F,F)



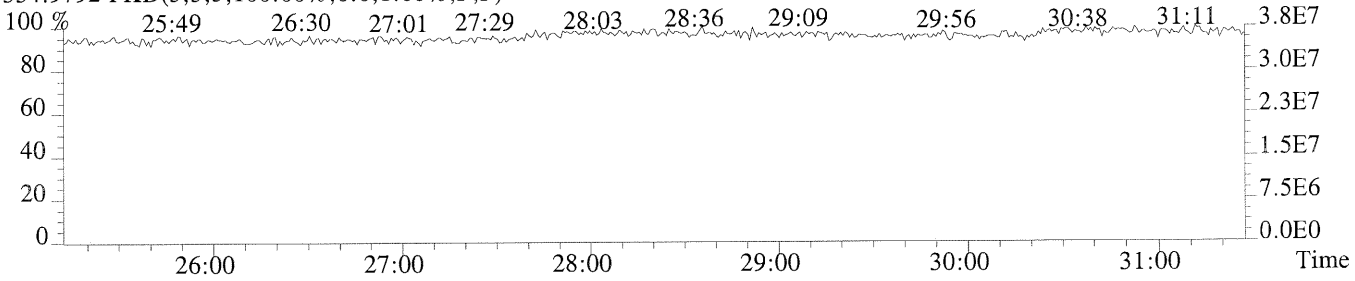
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1720.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1408.0,1.00%,F,F)

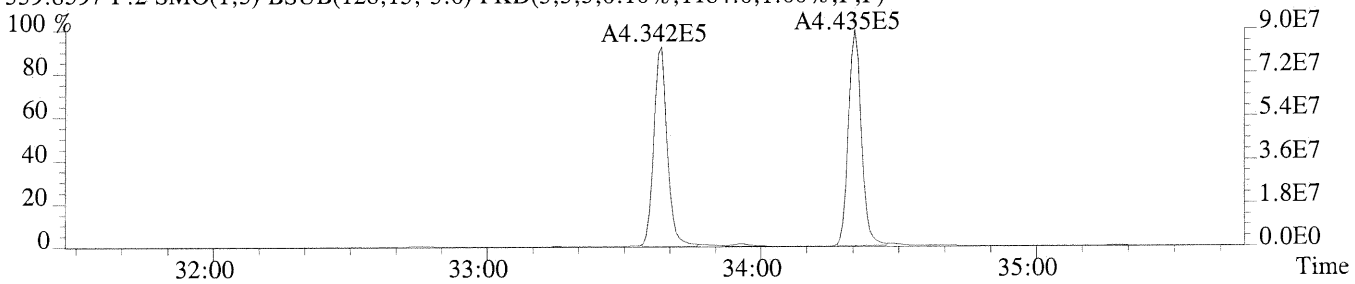


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

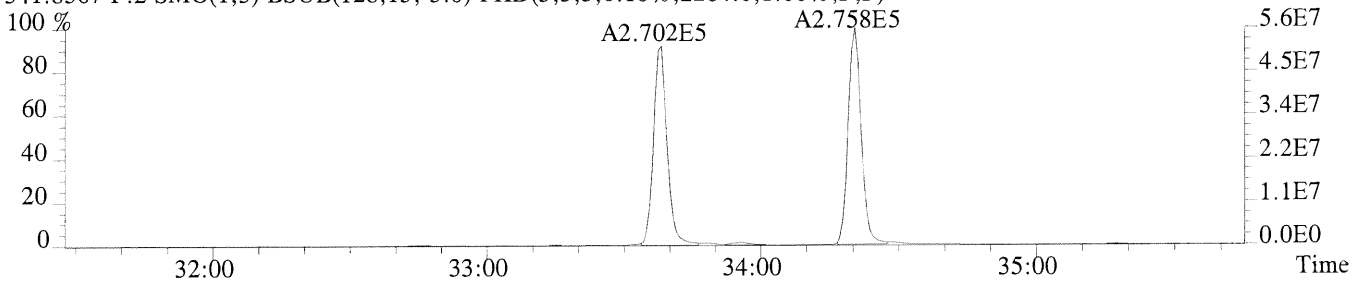


File:P100010 #1-390 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

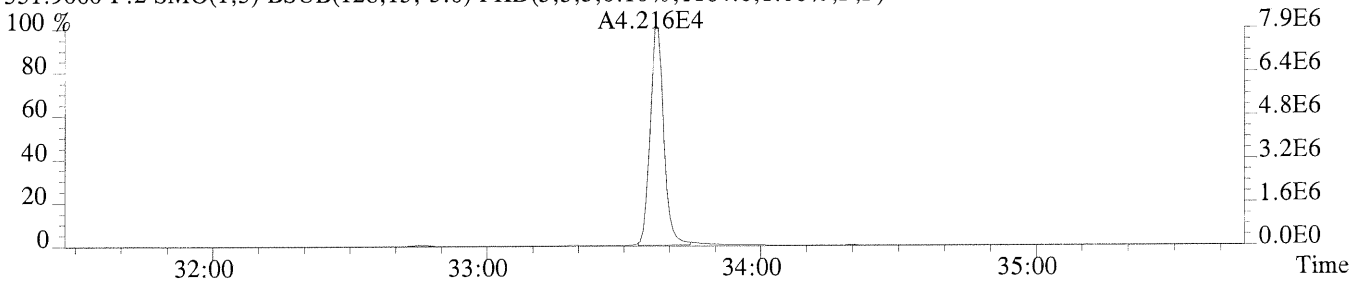
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1184.0,1.00%,F,F)



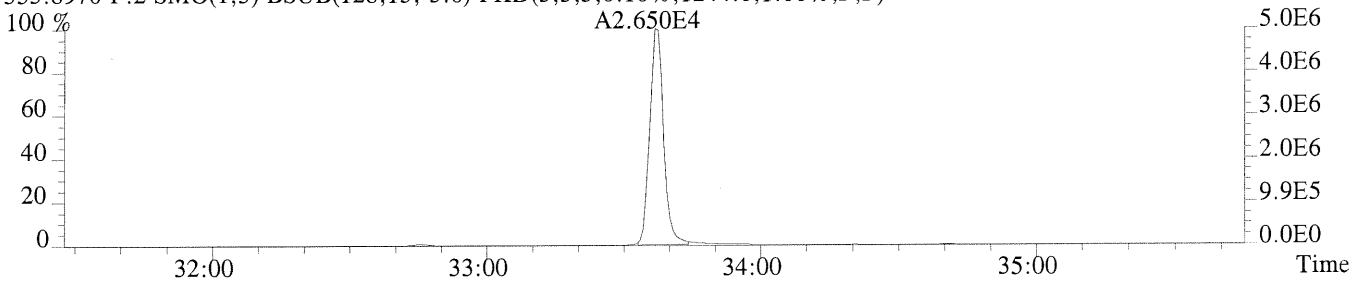
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2264.0,1.00%,F,F)



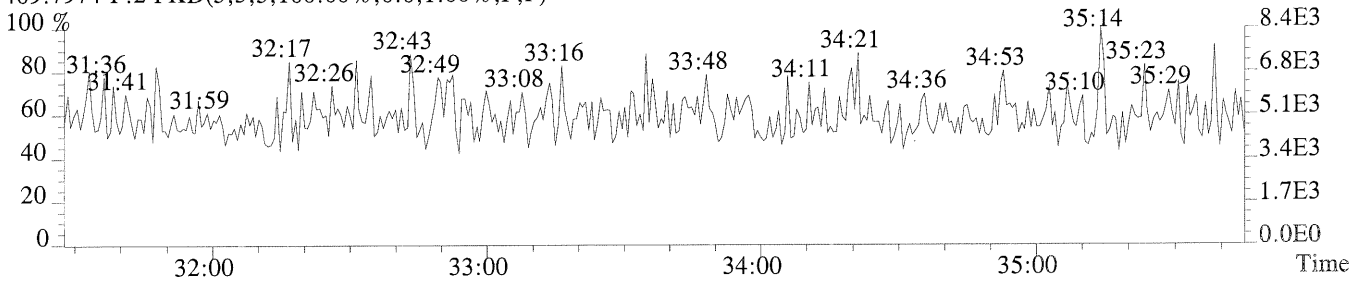
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1164.0,1.00%,F,F)



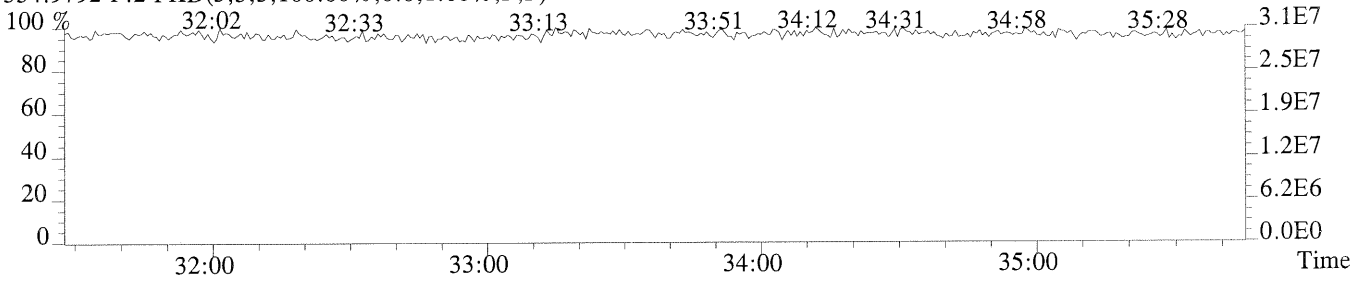
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1244.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

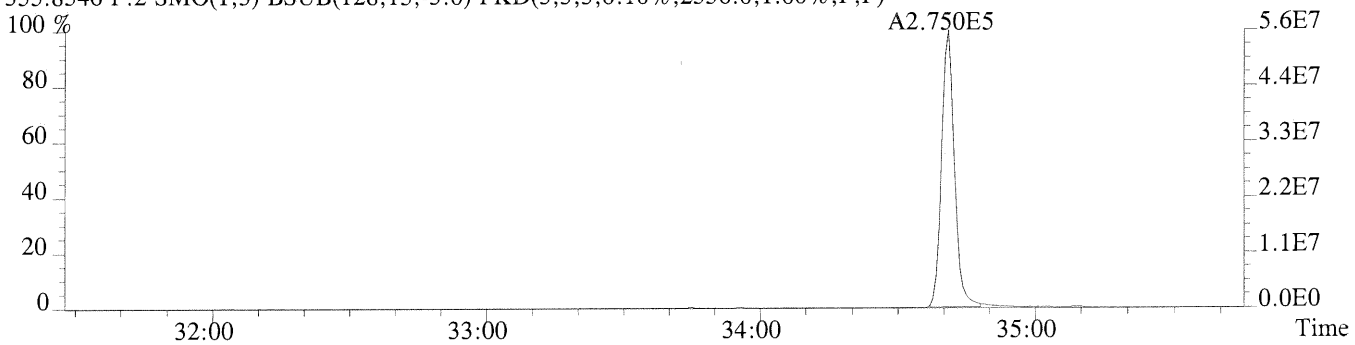


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

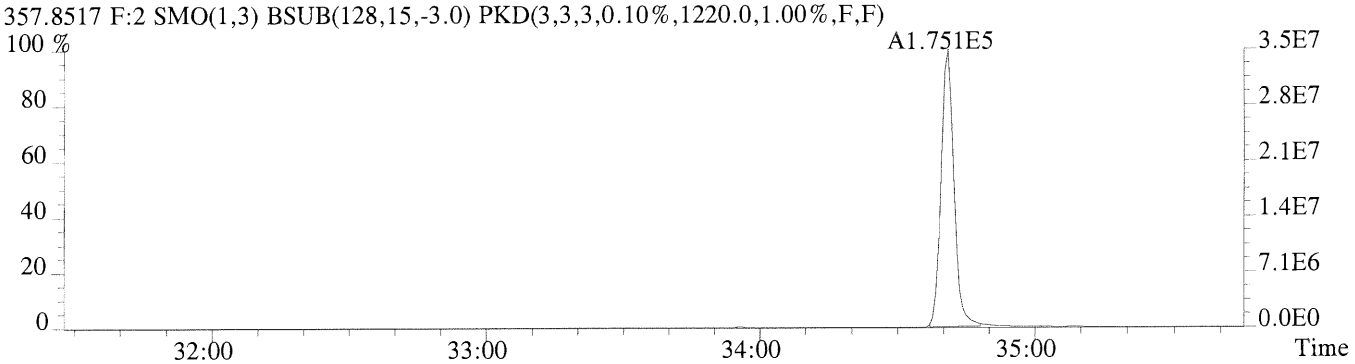


File:P100010 #1-390 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

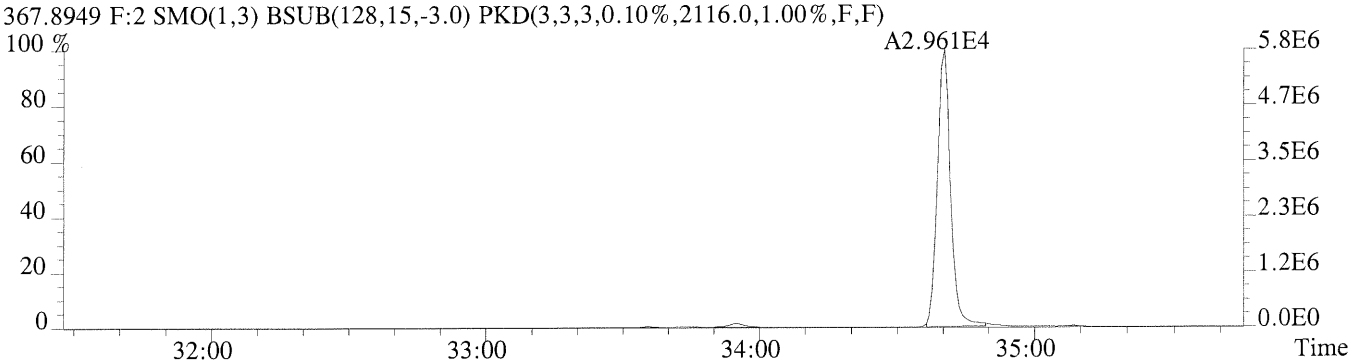
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2556.0,1.00%,F,F)



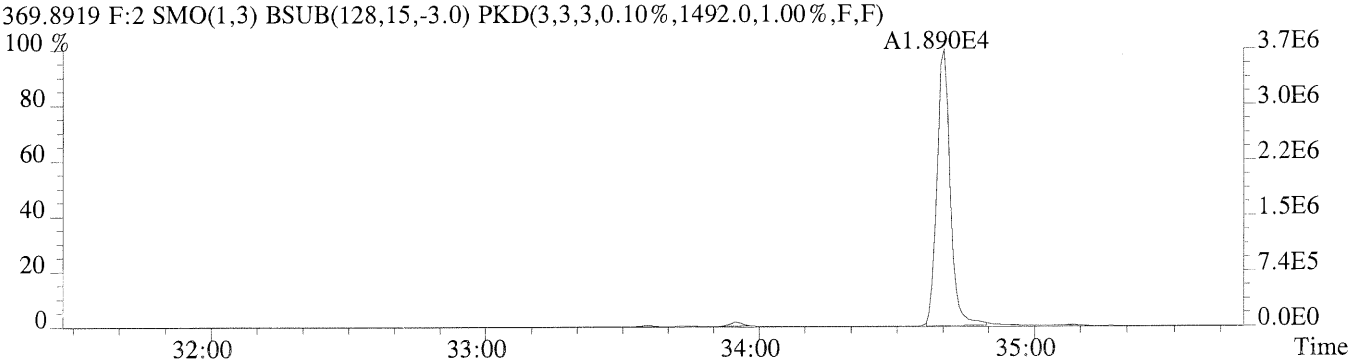
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1220.0,1.00%,F,F)



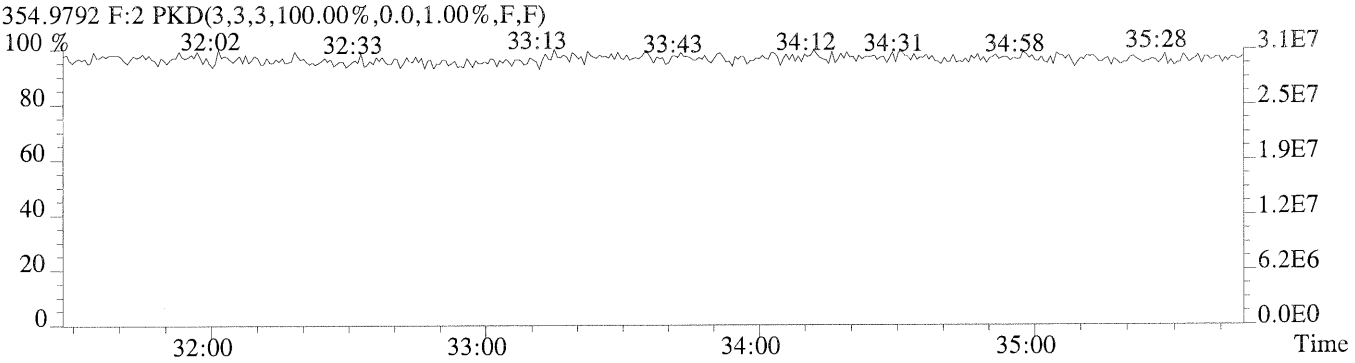
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2116.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1492.0,1.00%,F,F)

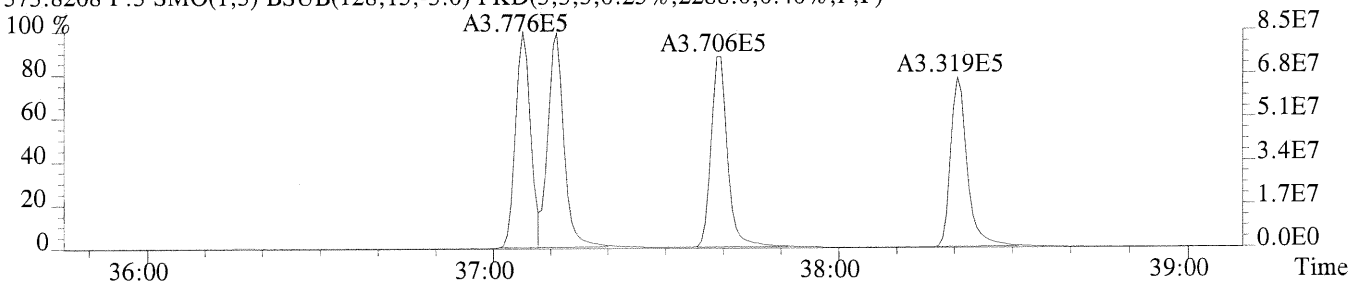


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

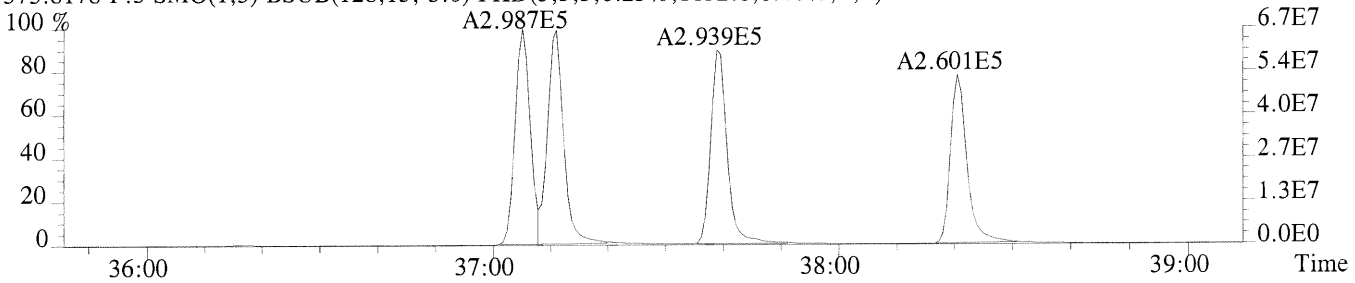


File:P100010 #1-309 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

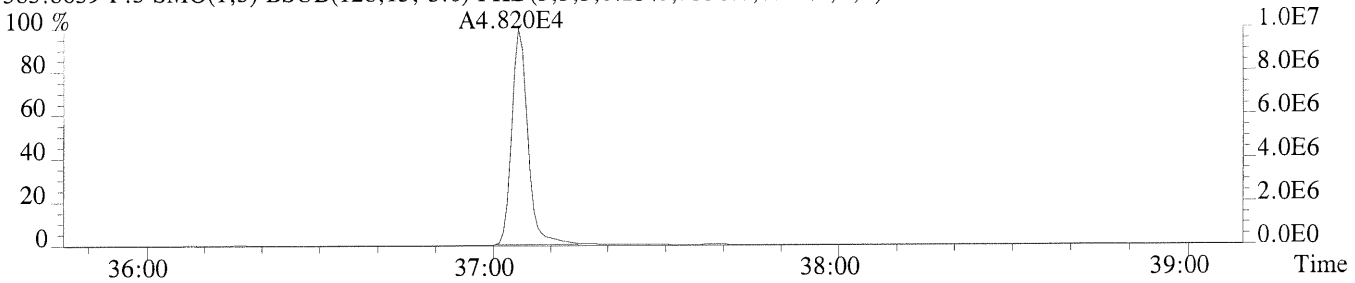
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2288.0,0.40%,F,F)



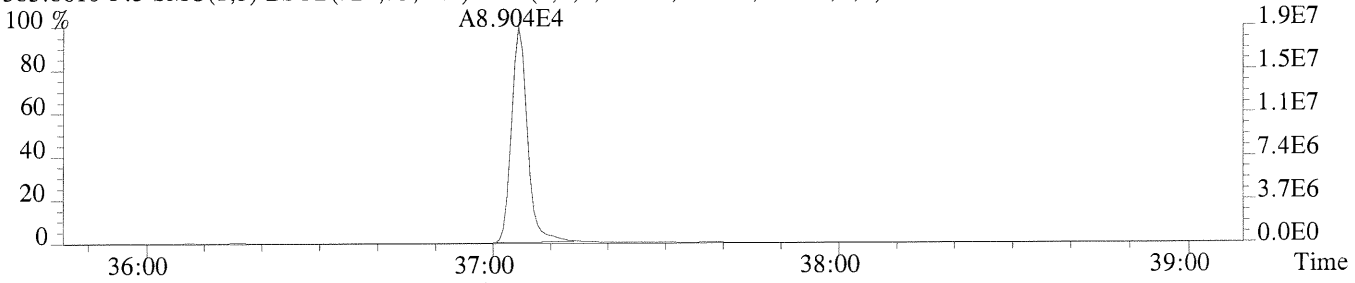
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1832.0,0.40%,F,F)



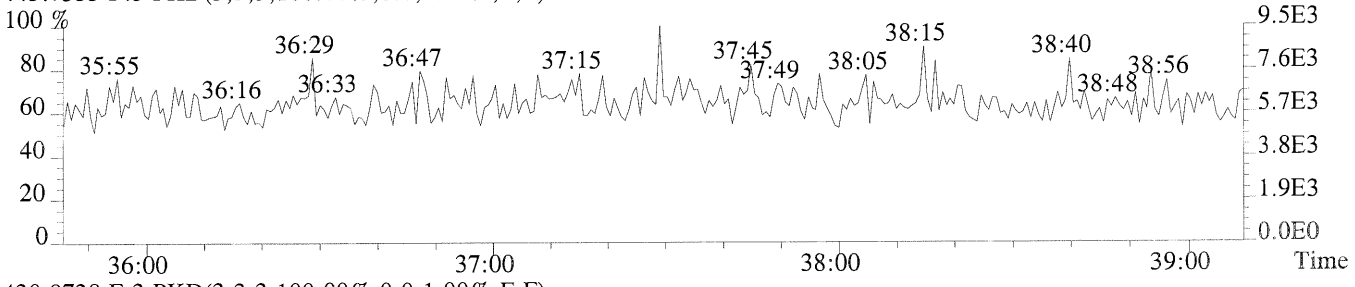
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1356.0,0.40%,F,F)



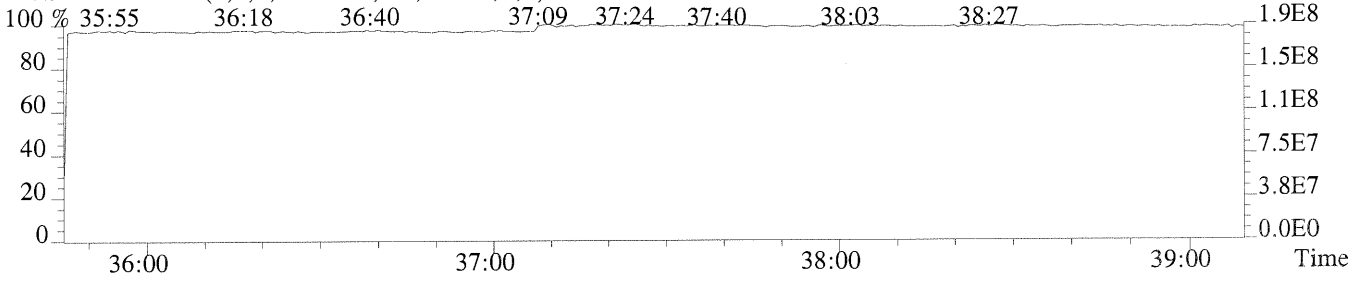
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1968.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

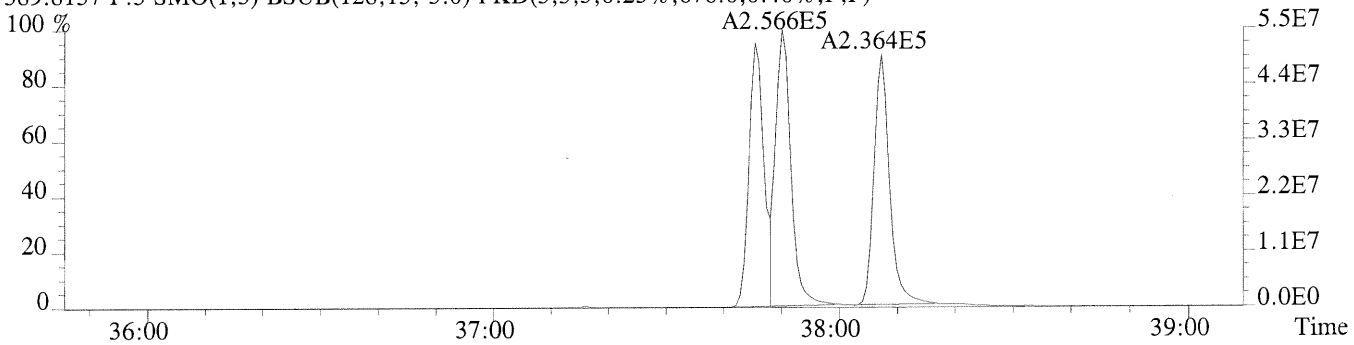


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

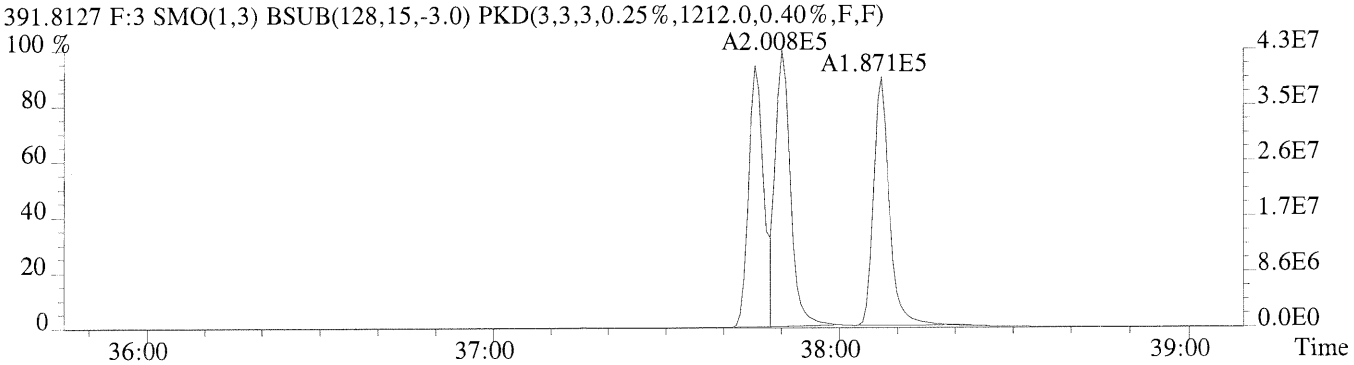


File:P100010 #1-309 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

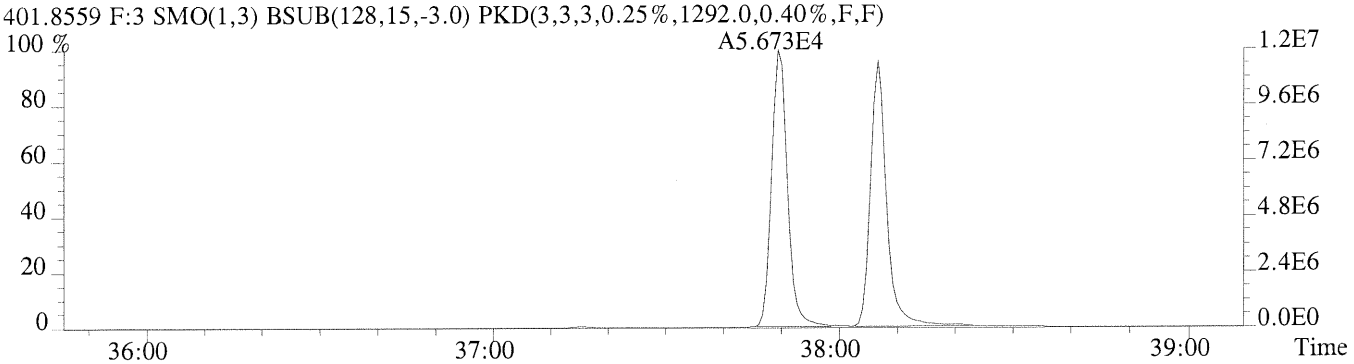
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,676.0,0.40%,F,F)



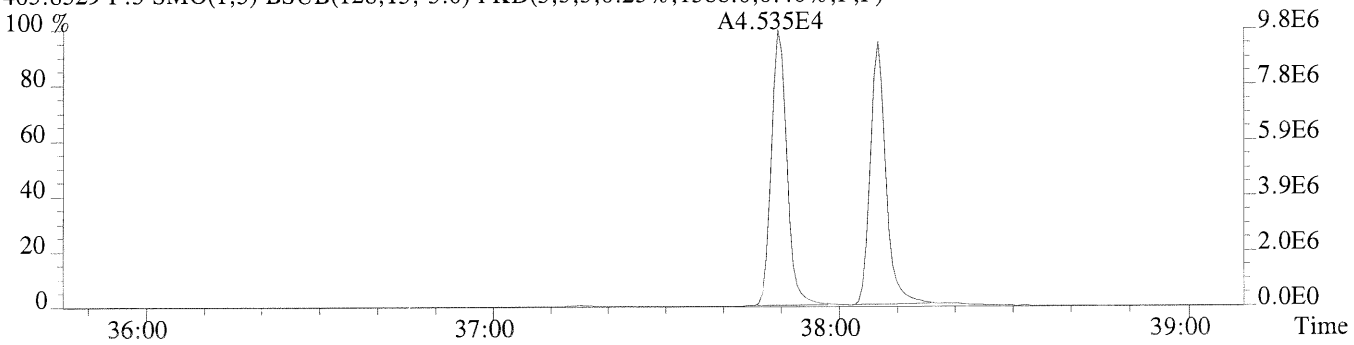
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1212.0,0.40%,F,F)



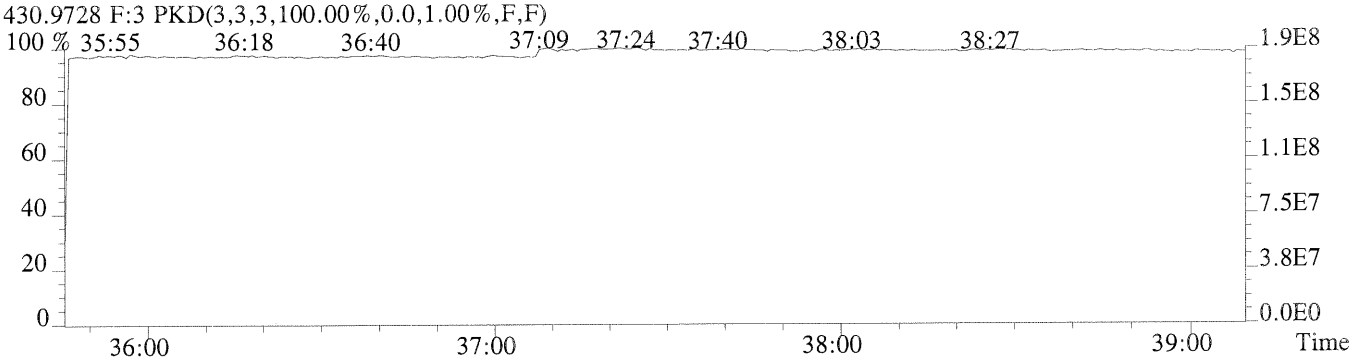
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1292.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1588.0,0.40%,F,F)

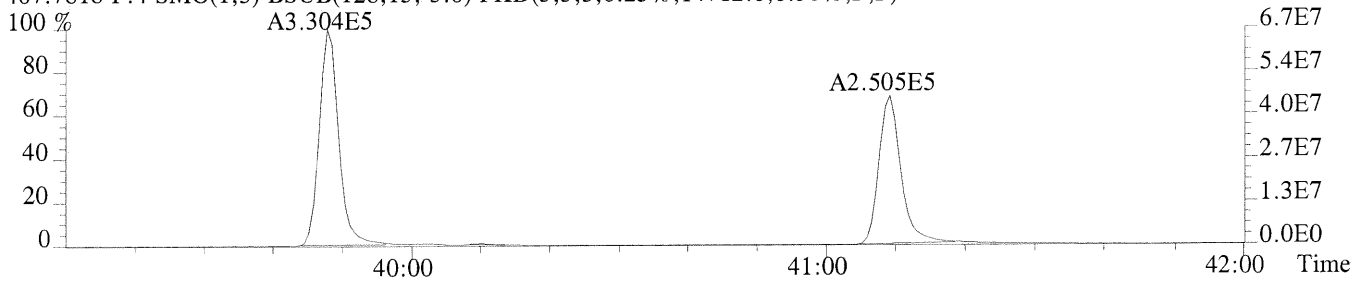


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

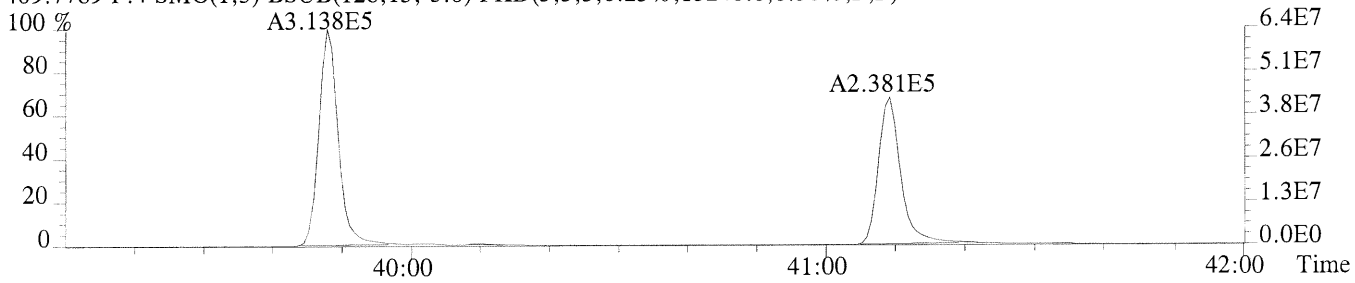


File:P100010 #1-258 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

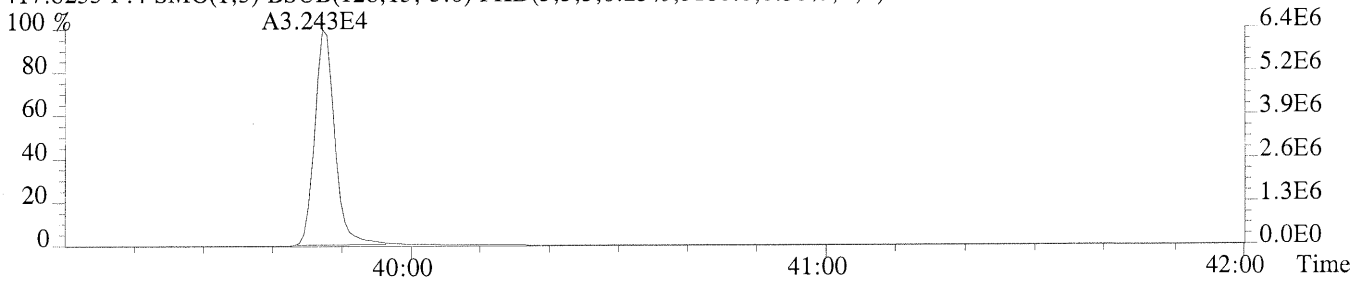
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,14712.0,0.50%,F,F)



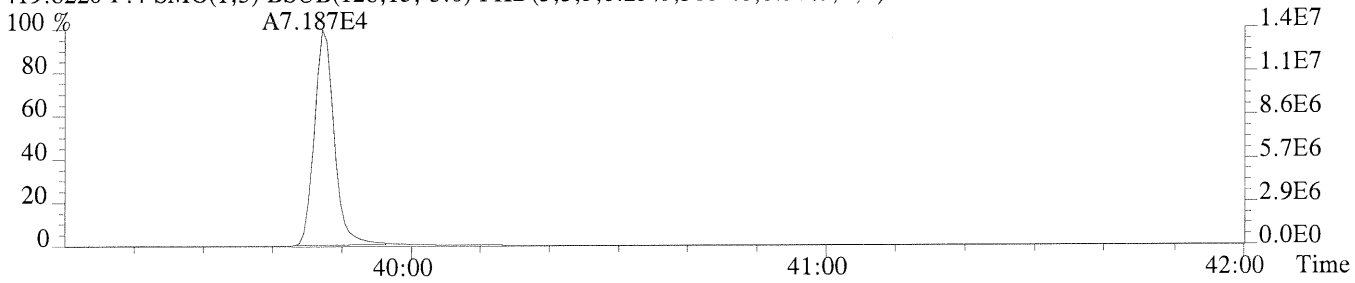
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,15248.0,0.50%,F,F)



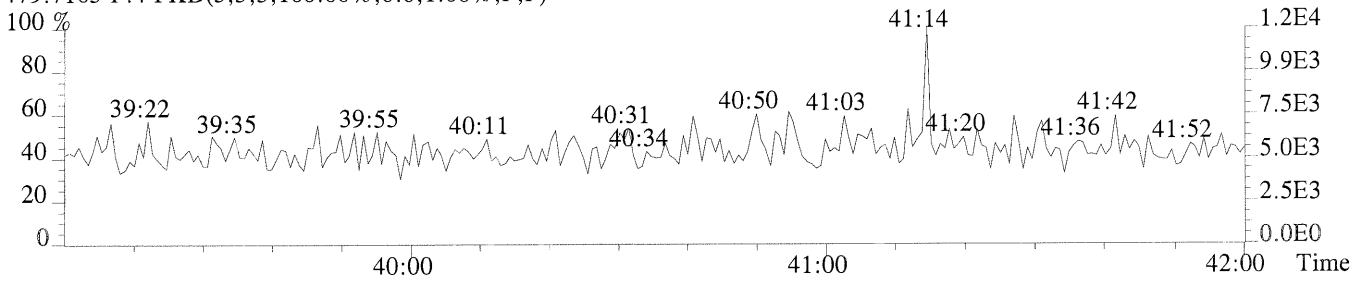
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5180.0,0.50%,F,F)



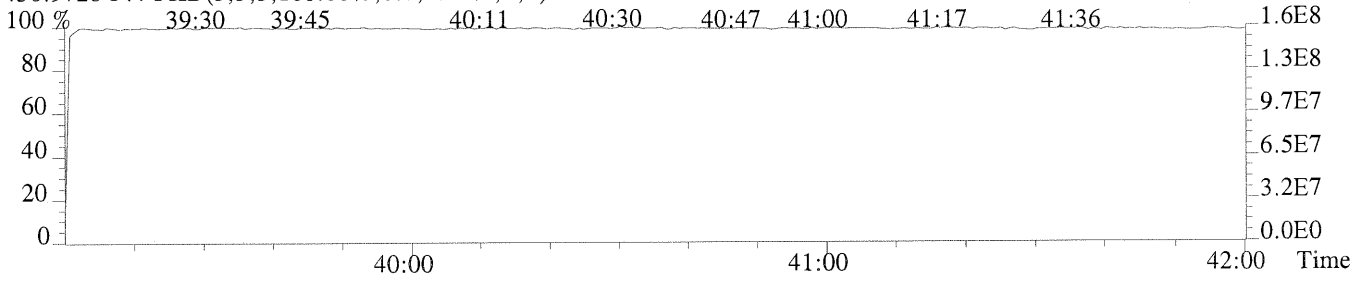
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3604.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

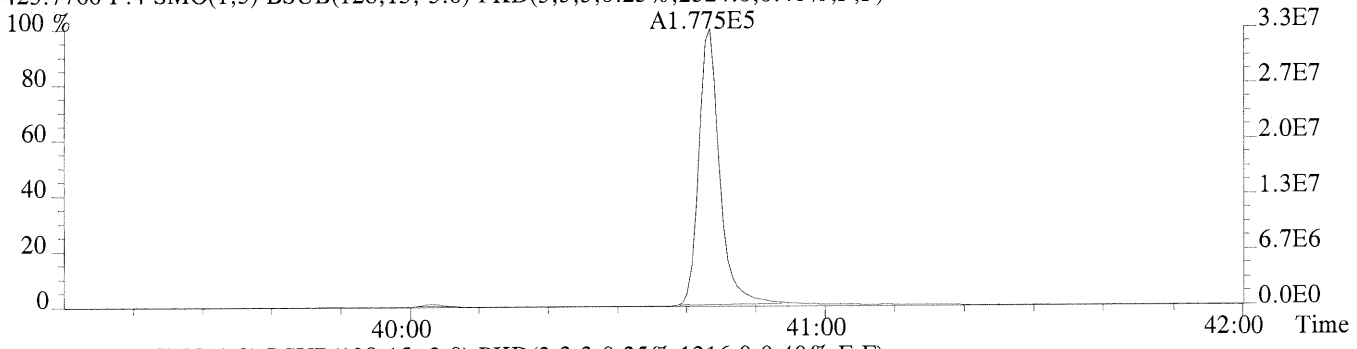


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

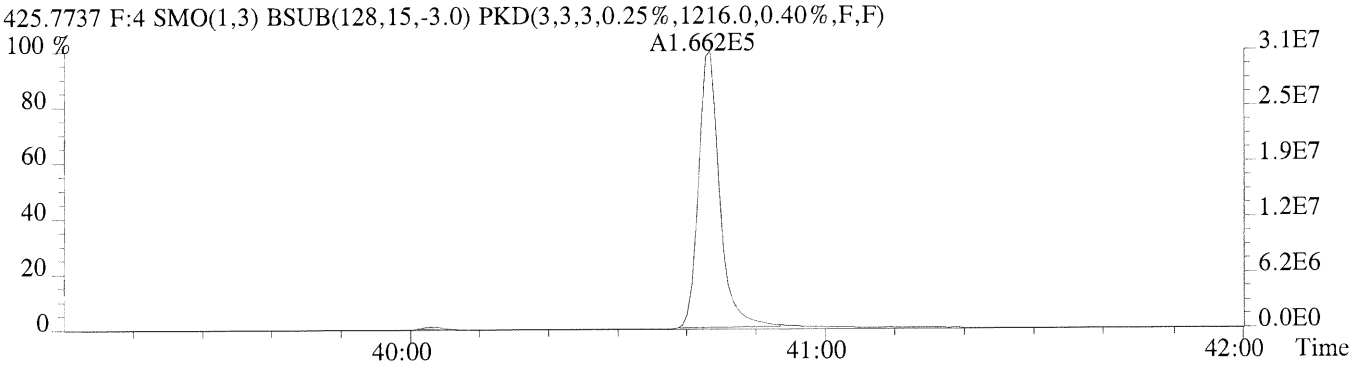


File:P100010 #1-258 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

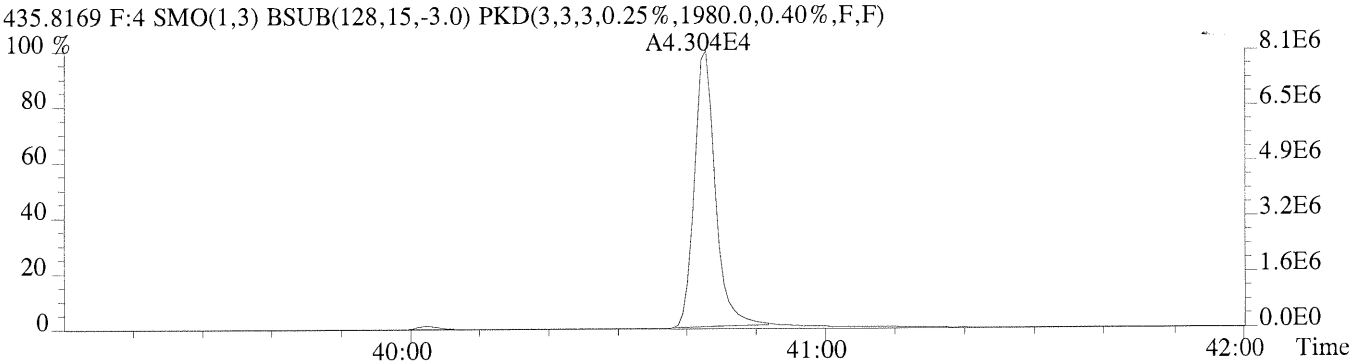
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2524.0,0.40%,F,F)



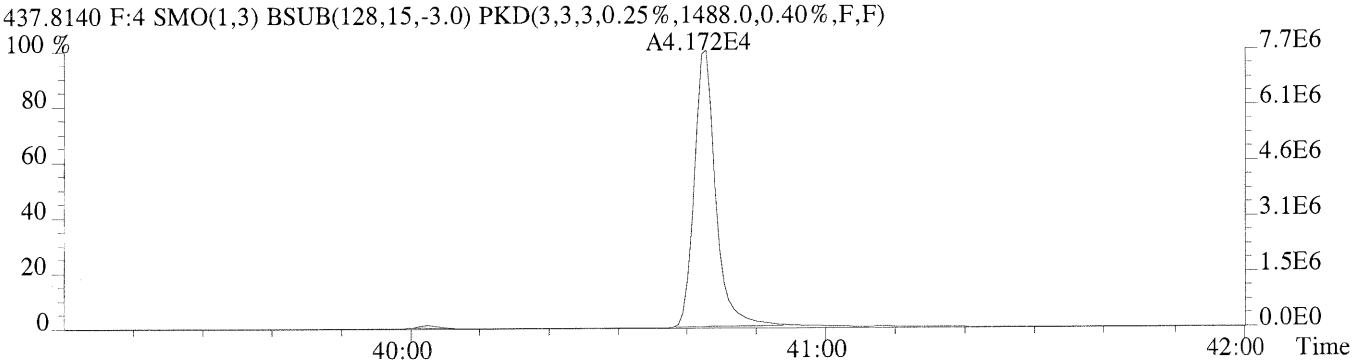
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1216.0,0.40%,F,F)



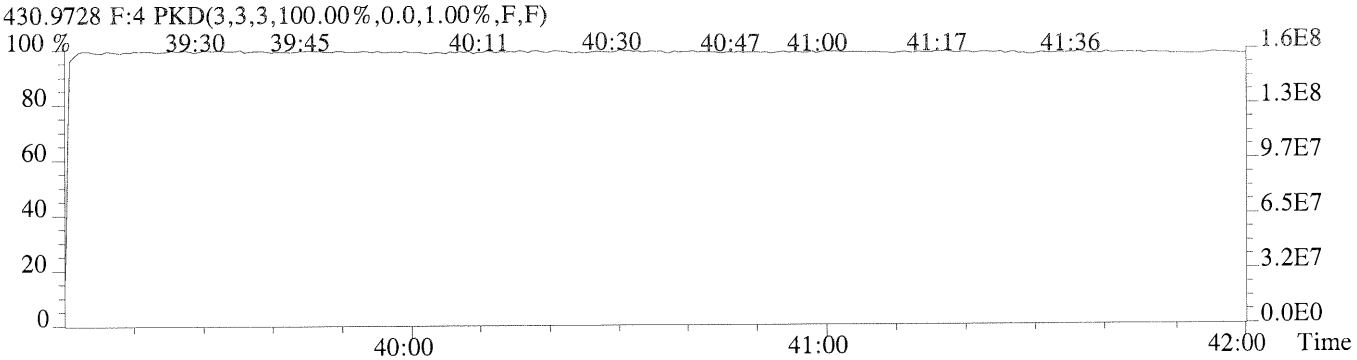
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1980.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1488.0,0.40%,F,F)

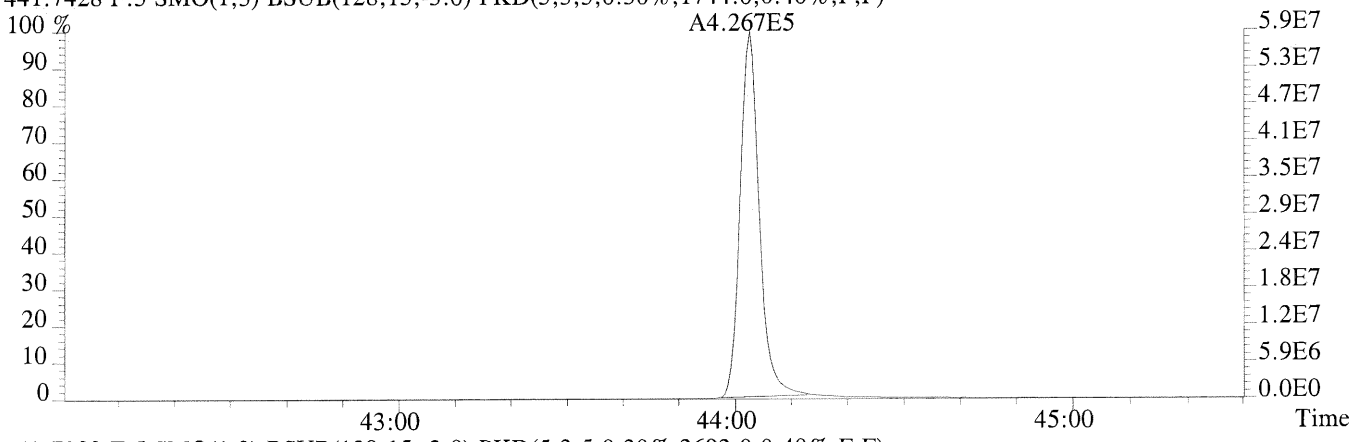


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

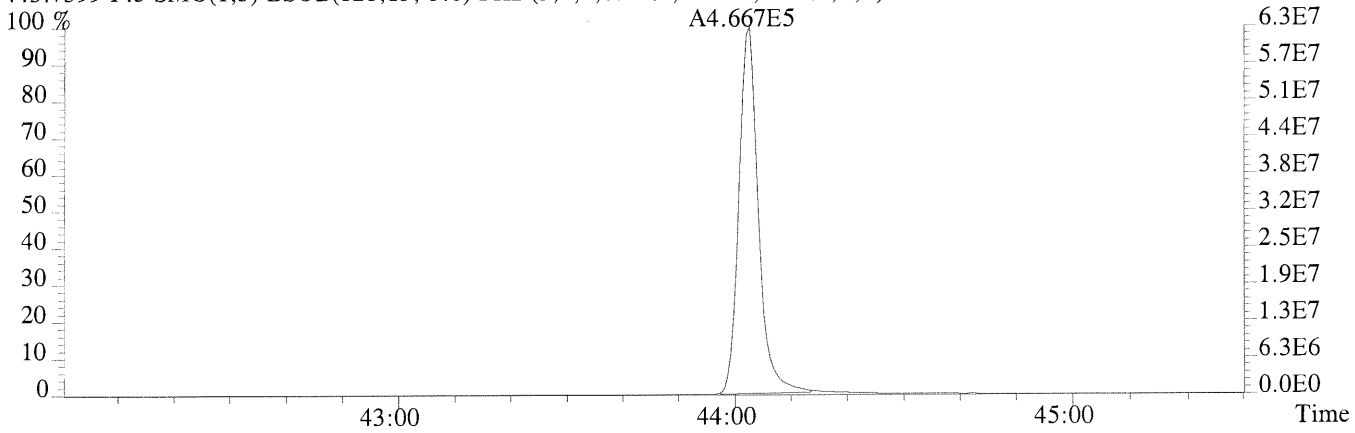


File:P100010 #1-386 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

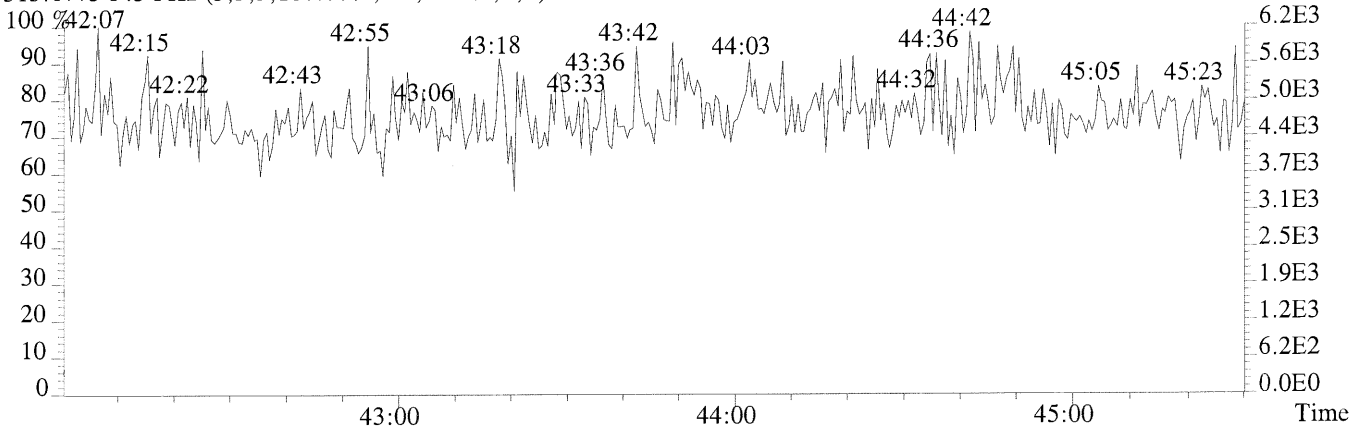
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1744.0,0.40%,F,F)



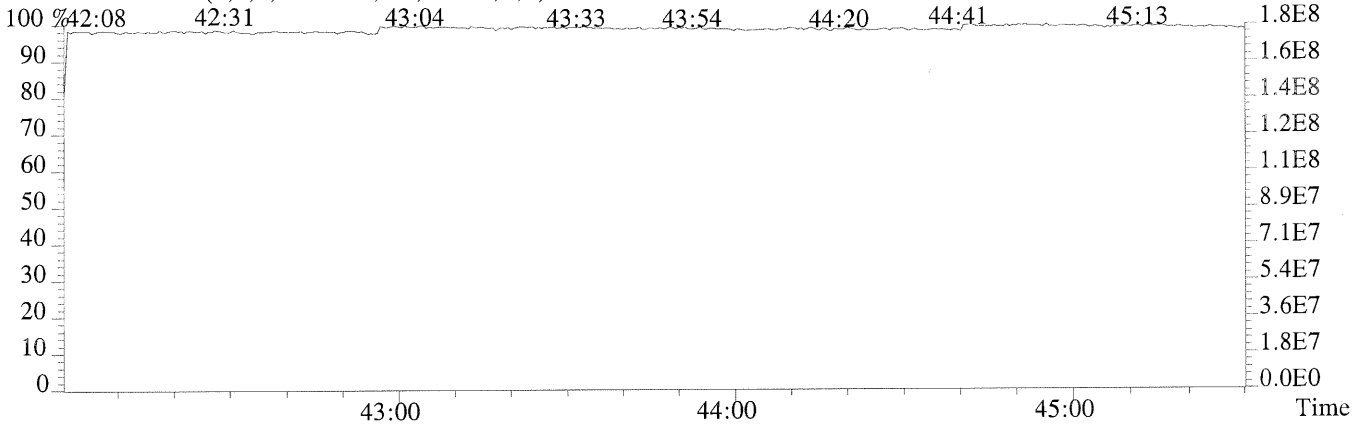
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2692.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

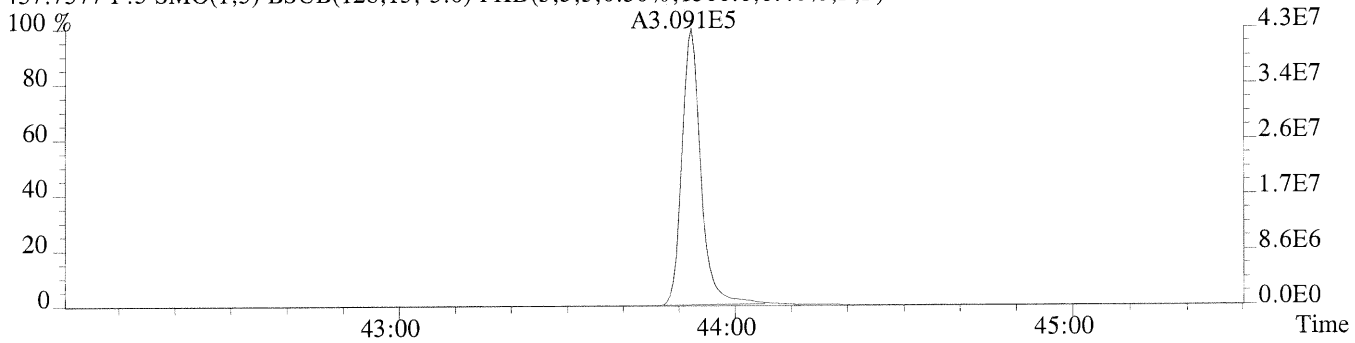


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

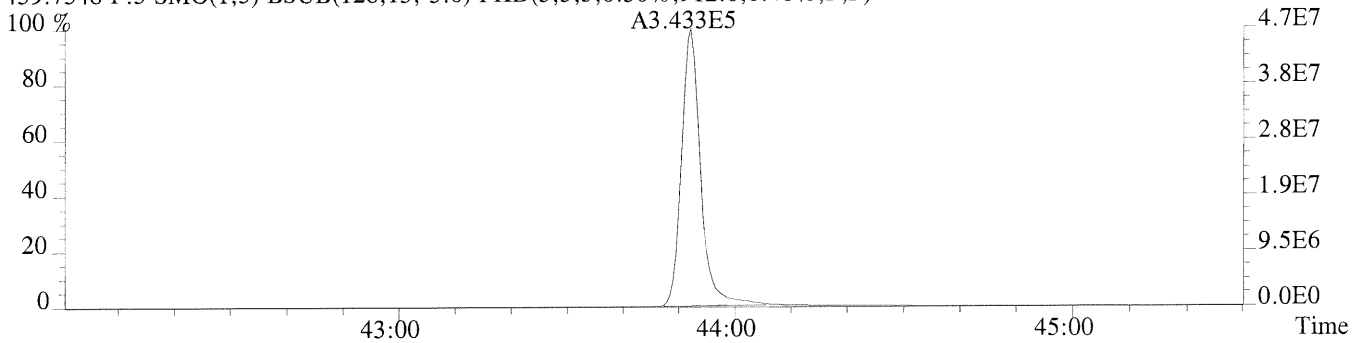


File:P100010 #1-386 Acq: 2-JUL-2008 14:37:42 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

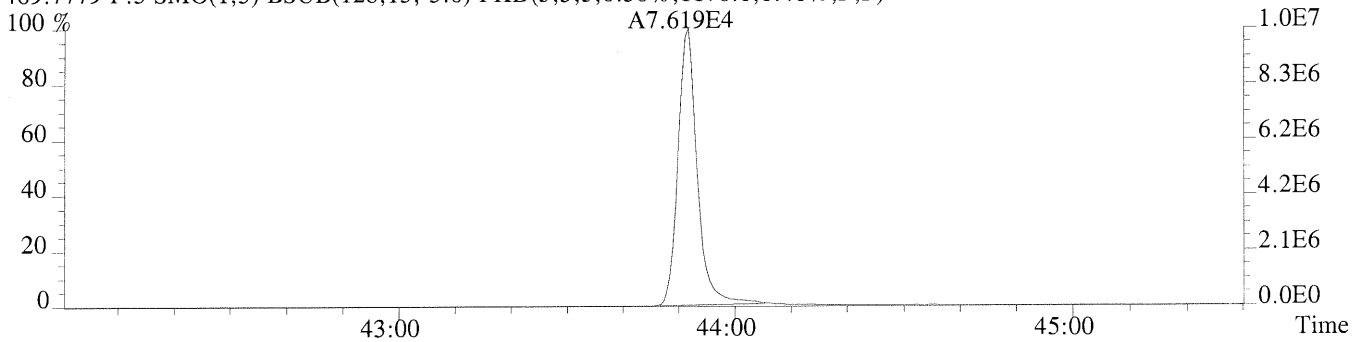
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1300.0,0.40%,F,F)



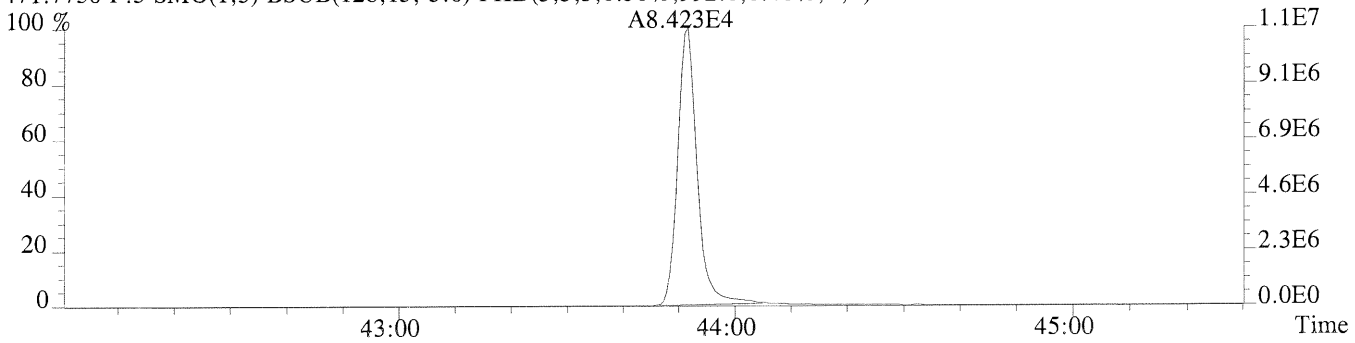
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,912.0,0.40%,F,F)



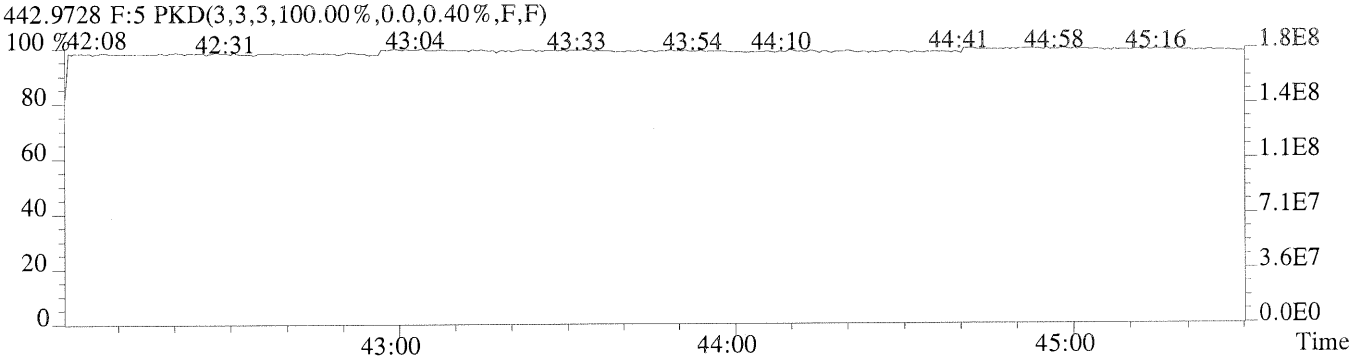
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1176.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,992.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Initial Calibration QC Checklist

492

ICAL Name: P807182901

Date: 07/18/01

Method: 1613 / 8290 / Tetra / TCDD Only / TCDF Conf / 8280 / 613 / M23

Retention Window/Column Performance Check	Analyst	Second Check
Windows in and first and last eluters labeled	✓	✓
Column Performance shows less than or equal to 25% valley between column specific 2378 isomer and it's closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or it's closest eluters	✓	✓

Initial Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections of greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
2378-TCDD elutes at 25 minutes or later on the DB-5 column	✓	✓
Signal-to-noise of all target analytes and their labeled standards at least 10:1	✓	✓
Valley between labeled 123478 and 123678 HxCDD peaks less than or equal to 50%	N/A	N4
All Manual Intergrations signed and dated and first and final copies of Ical summary included	✓	✓

Analyst: _____ Second QC: _____

icalqc.xls 02-23-00

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: Columbia Analytical Services Contract:

Lab Code: TX01411 Case No.: Client No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Ultima

Init. Calib. Date: 07/18/08

Init. Calib.Times: 12:27:56

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSs) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		P200003	18-JUL-08	12:27:56
ICAL HRCC1	ICAL HRCC1	P200006	18-JUL-08	16:12:01
ICAL HRCC2	ICAL HRCC2	P200005	18-JUL-08	15:25:44
ICAL HRCC3	ICAL HRCC3	P200004	18-JUL-08	14:23:04
ICAL HRCC4	ICAL HRCC4	P200007	18-JUL-08	17:03:35
ICAL HRCC5	ICAL HRCC5	P200008	18-JUL-08	17:50:46

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services inc.
An Employee Owned Company

Acq Method: 8290CAS
GC Method: 8290CAS

Result File: F P807188290I
EDD File: F P200004AES

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
		P200001	Windows defined	D4-90-2		KL		
		P200002	CS3					
07/18/07	12:27	P200003	Windows Defined	D4-90-2				
	14:23	P200004	IcalHRGC3	D8-2-2A				
	15:25	P200005	IcalHRGC2	D5-49-4				
	16:12	P200006	IcalHRGC1	D5-49-5				
	17:03	P200007	IcalHRGC4	D5-49-2				
	17:50	P200008	IcalHRGC5	D5-49-1				
	18:51	P200009	HRGC3 CSV	P4-61-1				

Reviewed by: QC

5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID

WDM

Lab Name: COLUMBIA ANALYTICAL SERVICES

Lab Code: CAS Case No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Lab File ID: P200003

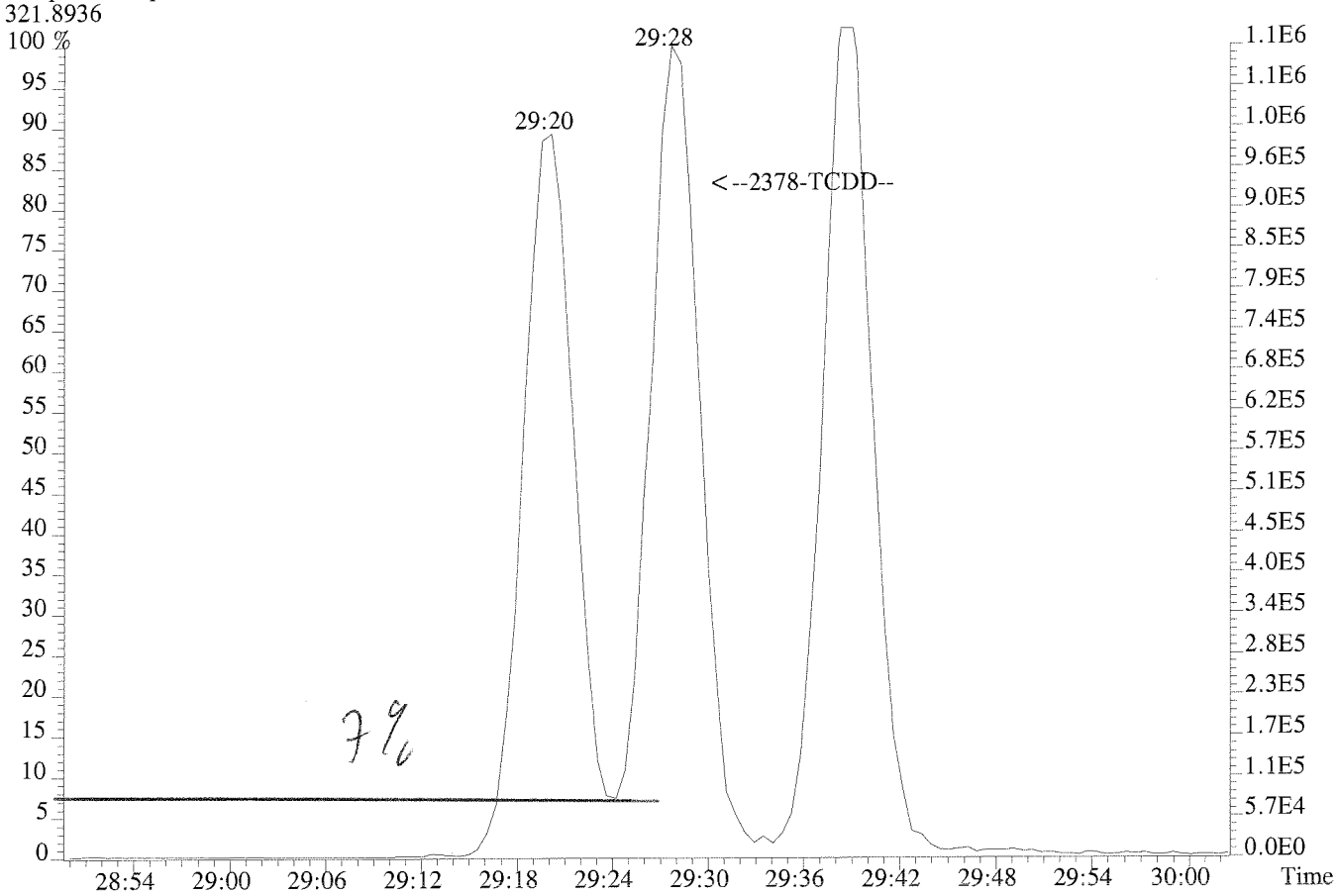
Date Analyzed: 07/18/08

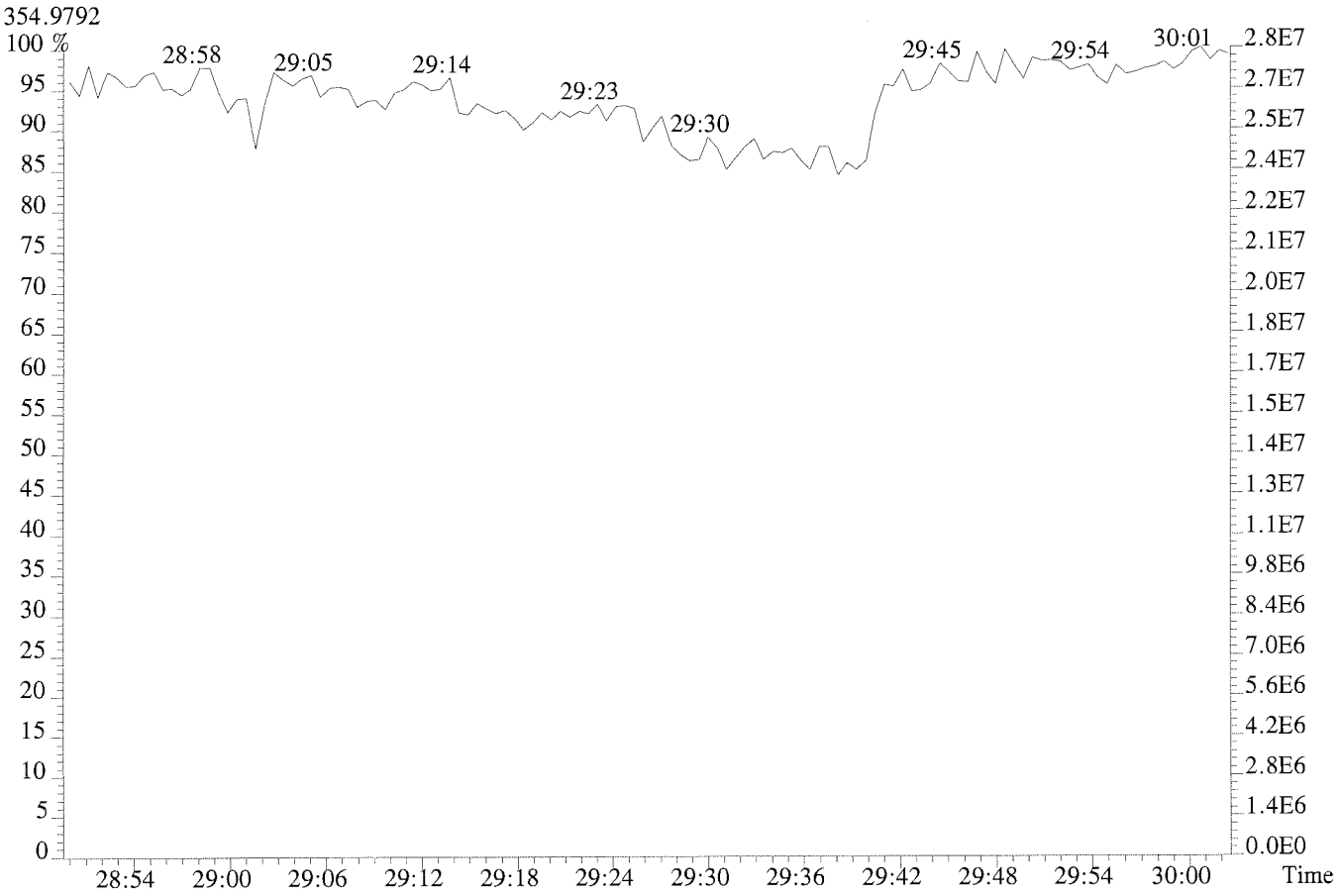
Time Analyzed: 12:27:56

CONGENER	RT FIRST ELUTING	RT LAST ELUTING
TCDF	24:36	30:35
TCDD	26:24	30:34
PeCDF	30:51	34:42
PeCDD	32:12	34:34
HxCDF	35:35	37:54
HxCDD	36:05	37:34
HpCDF	39:16	40:35
HpCDD	39:31	40:10

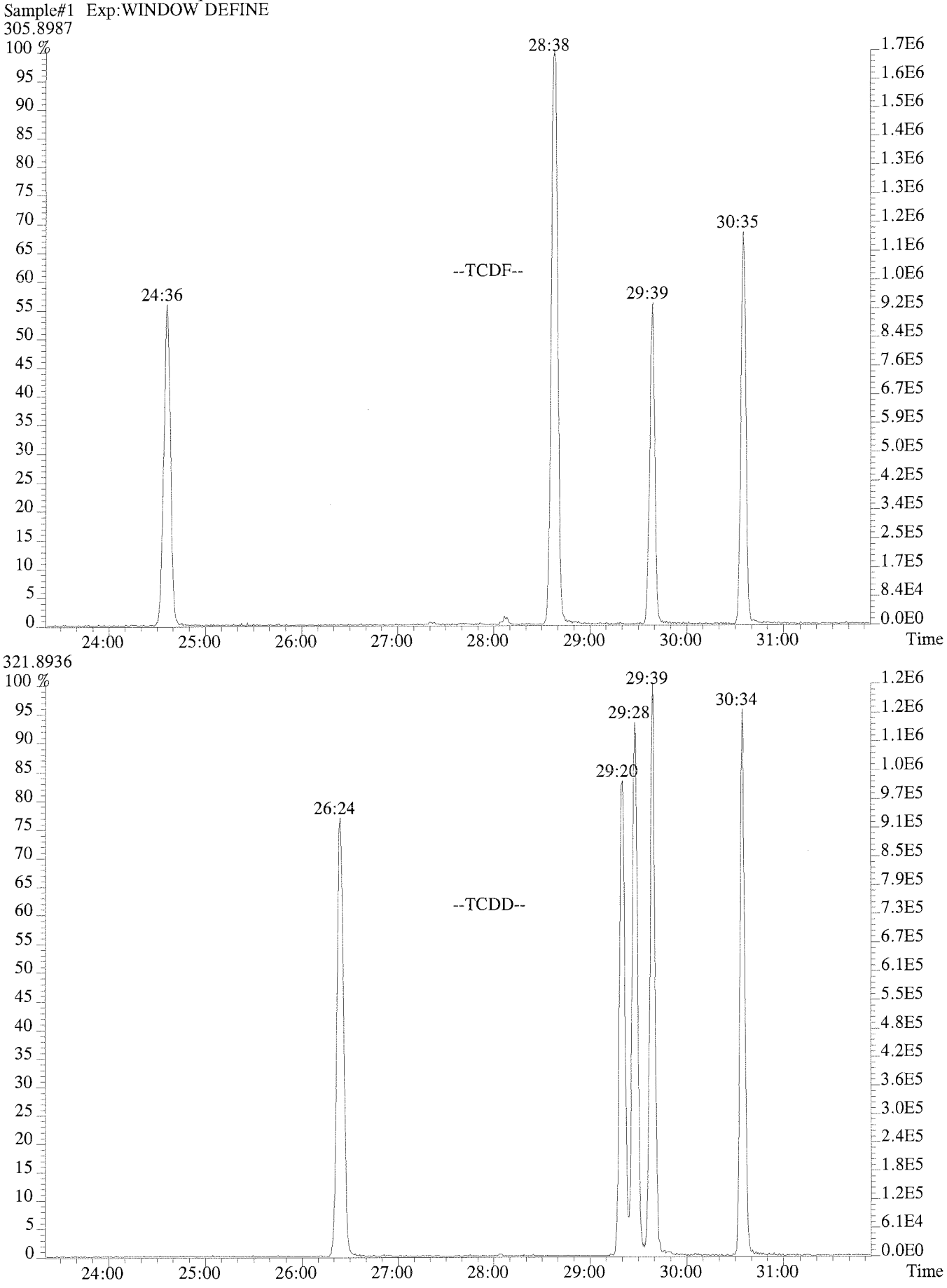
% Valley 2378-TCDD: 7%

File:P200003 #1-2744 Acq:18-JUL-2008 12:27:56 Probe EI+ Magnet SIR VG BioTech Mass spec£
Sample#1 Exp:WINDOW DEFINE

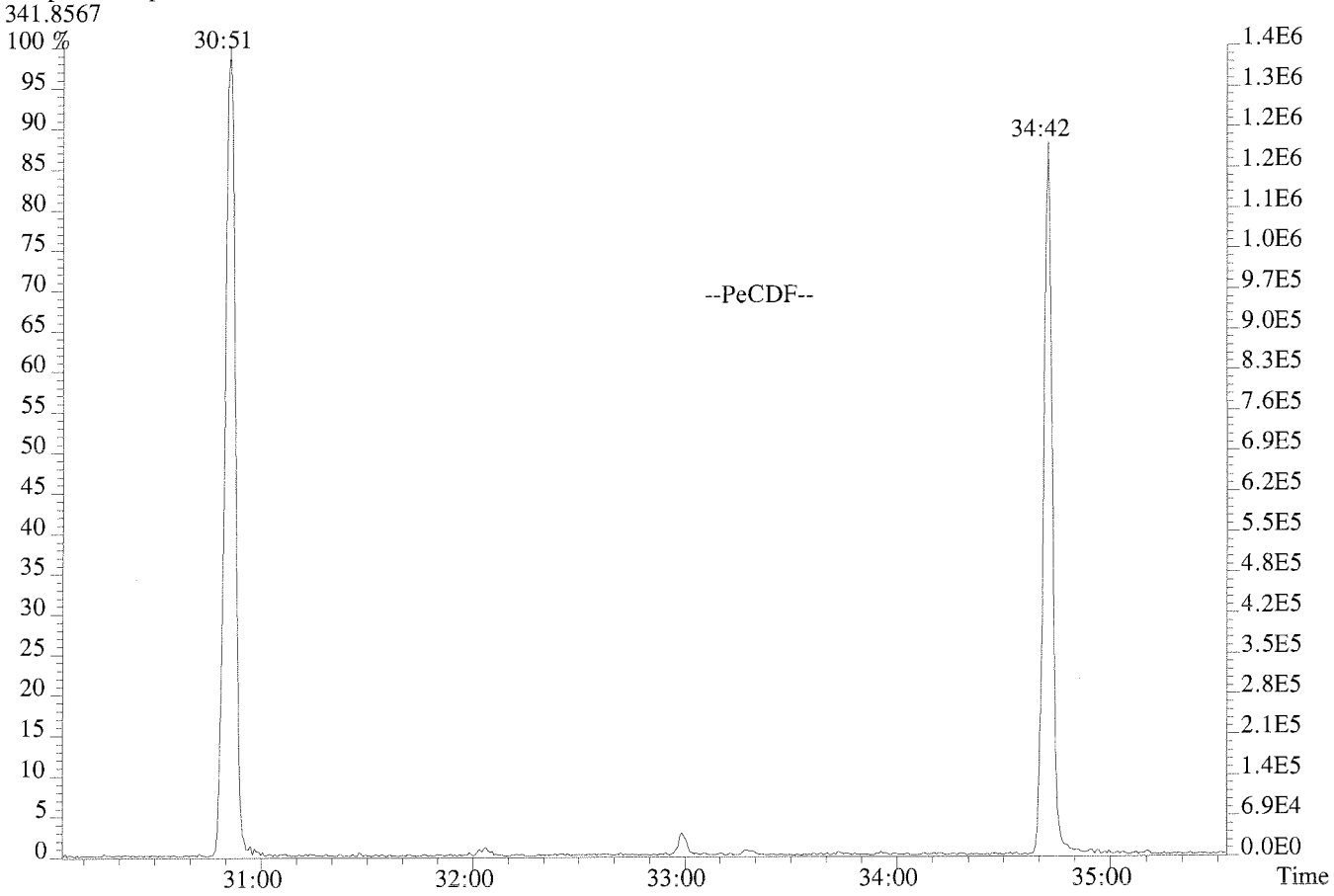


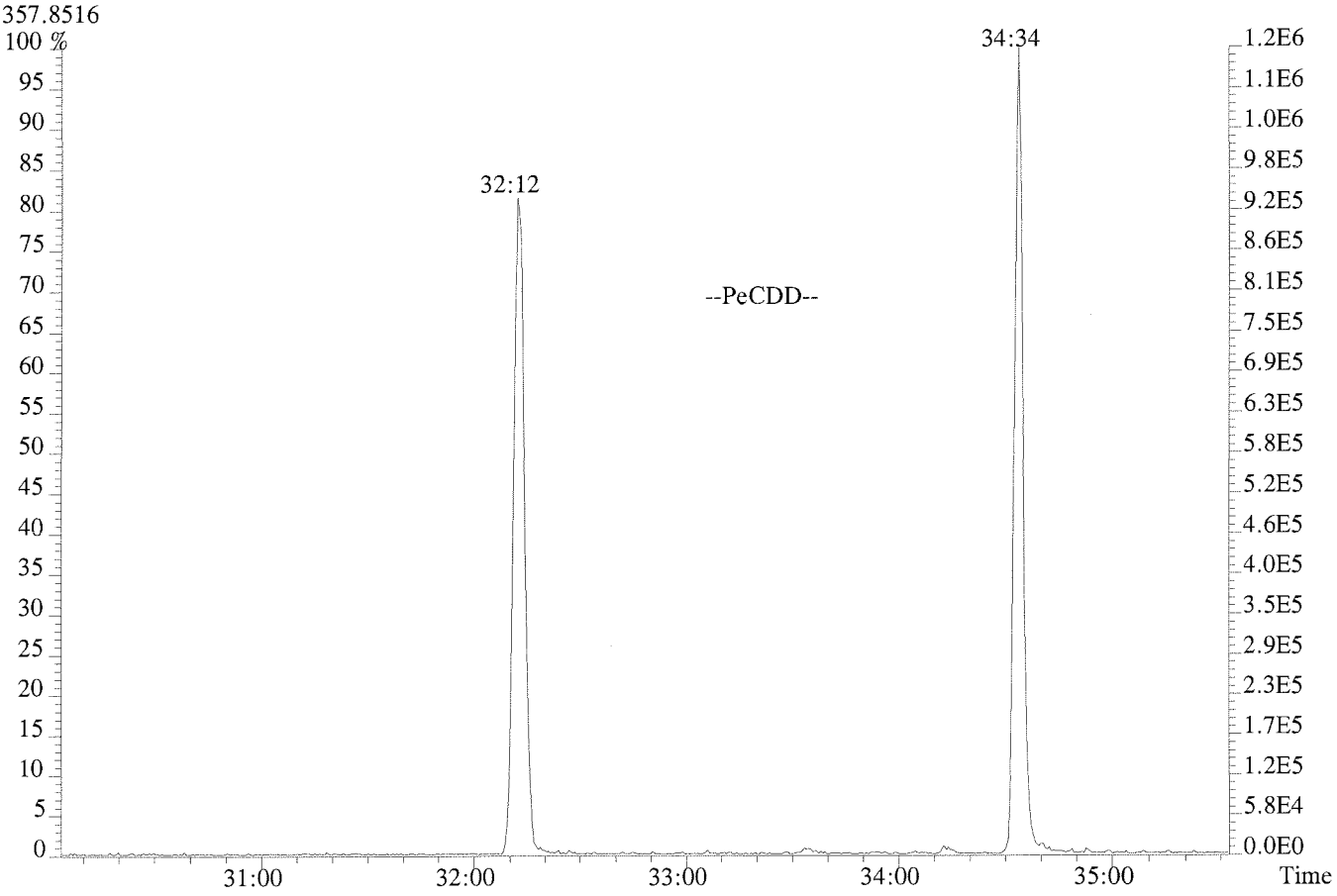


File:P200003 #1-2744 Acq:18-JUL-2008 12:27:56 Probe EI+ Magnet SIR VG BioTech Mass spec£
Sample#1 Exp:WINDOW DEFINE

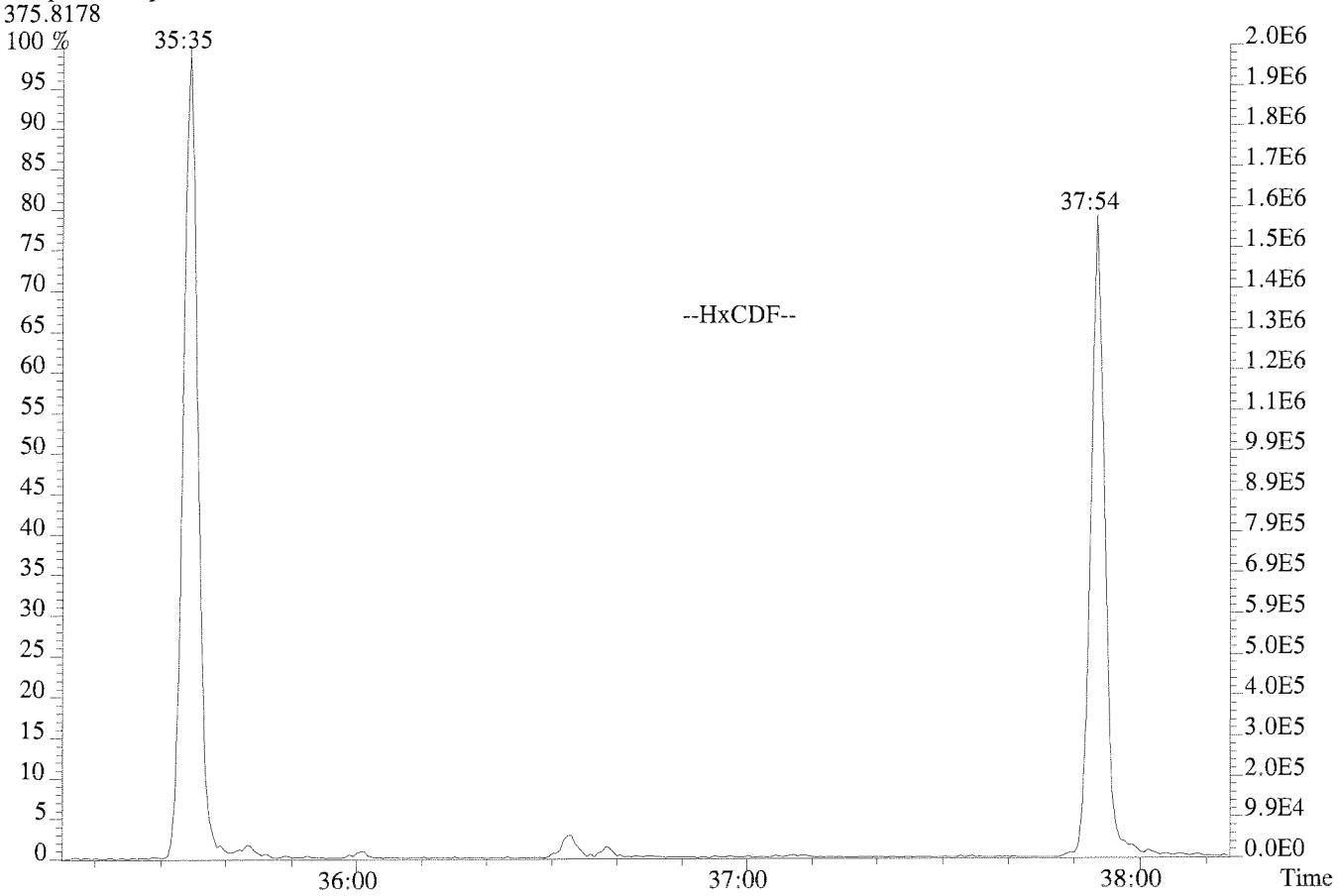


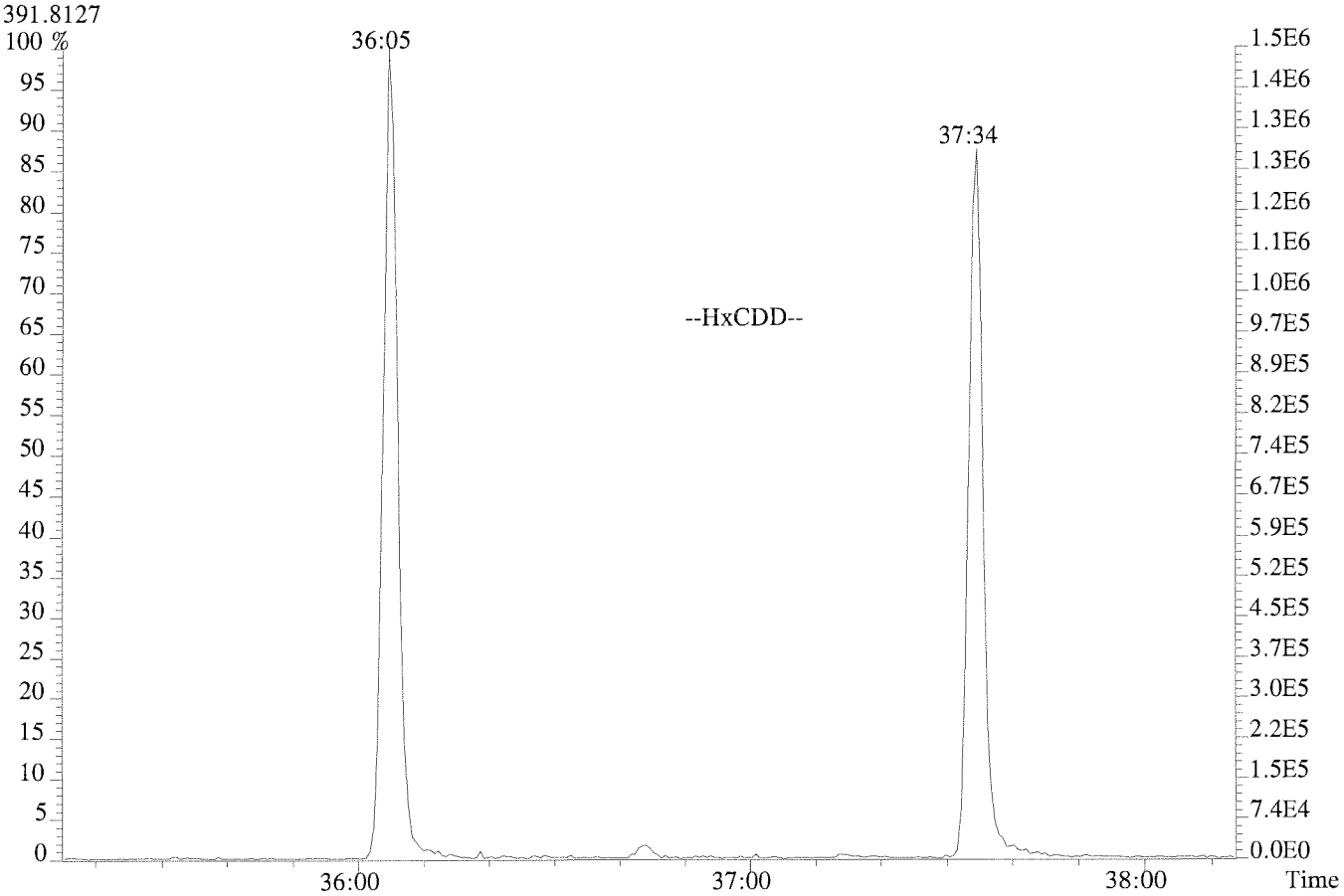
File:P200003 #1-2744 Acq:18-JUL-2008 12:27:56 Probe EI+ Magnet SIR VG BioTech Mass spec£
Sample#1 Exp:WINDOW DEFINE



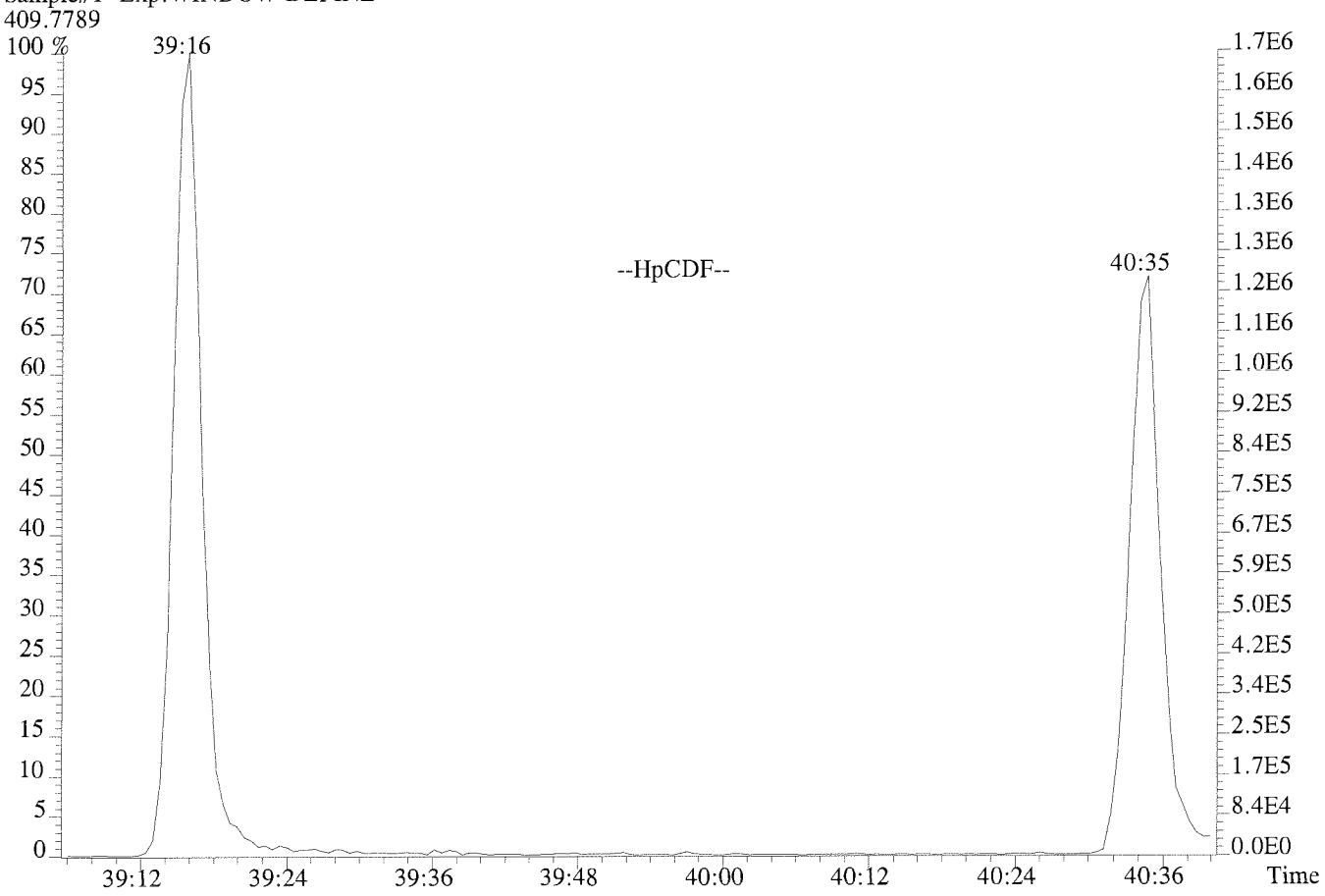


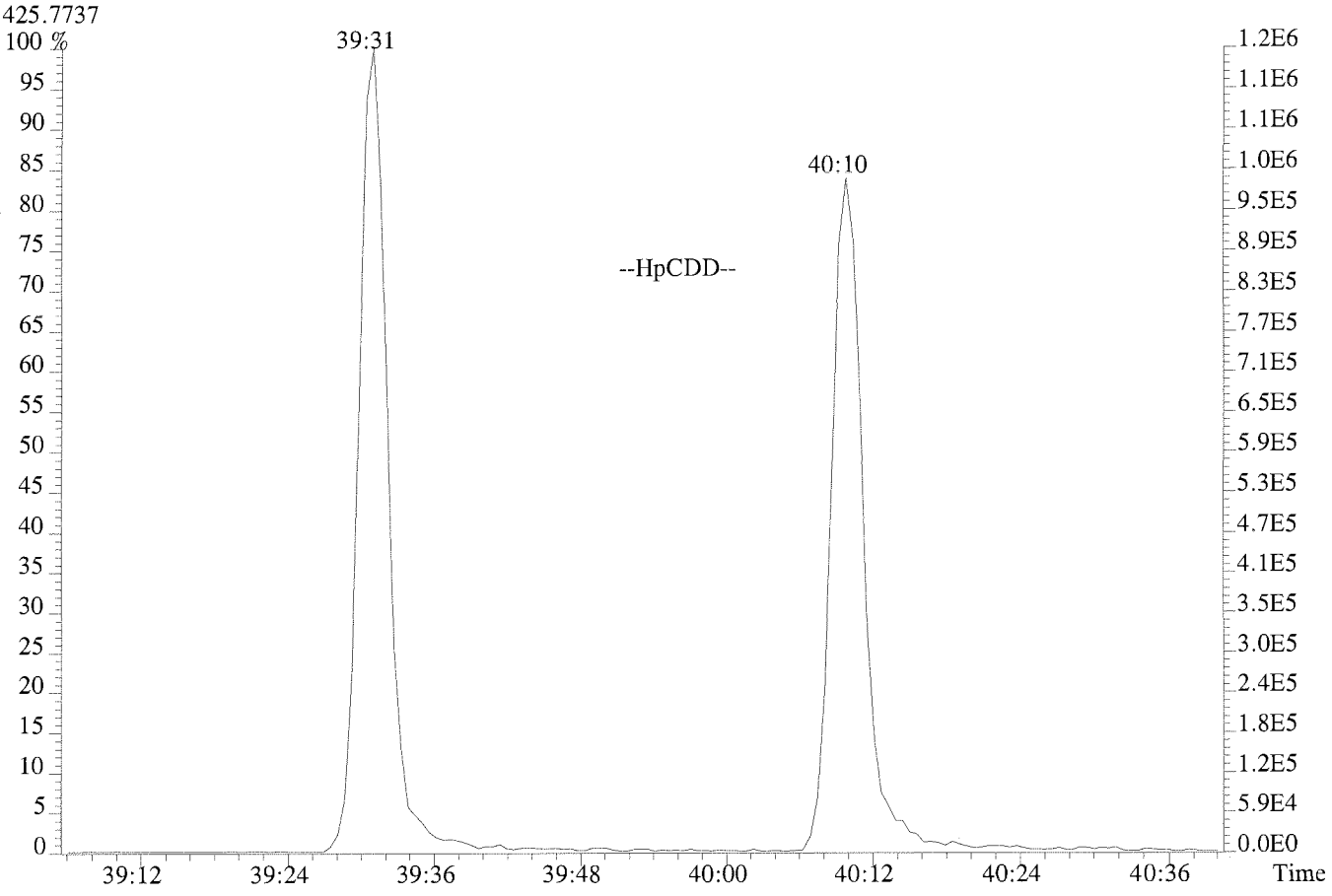
File:P200003 #1-2744 Acq:18-JUL-2008 12:27:56 Probe EI+ Magnet SIR VG BioTech Mass spec£
Sample#1 Exp:WINDOW DEFINE





File:P200003 #1-2744 Acq:18-JUL-2008 12:27:56 Probe EI+ Magnet SIR VG BioTech Mass spec£
Sample#1 Exp:WINDOW DEFINE



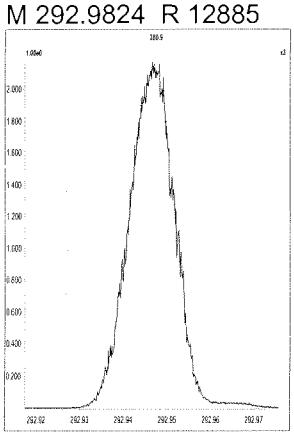


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

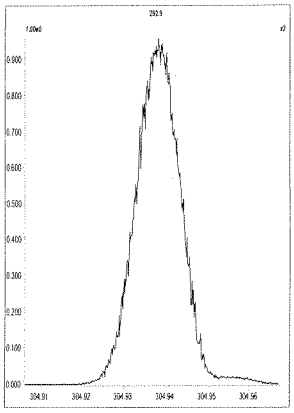
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, July 18, 2008 12:24:41 Central Daylight Time

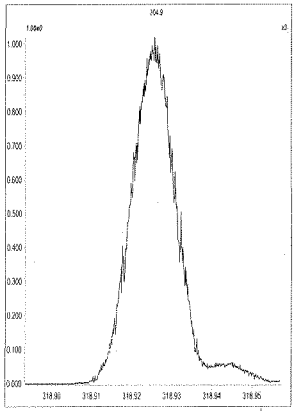
M 292.9824 R 12885



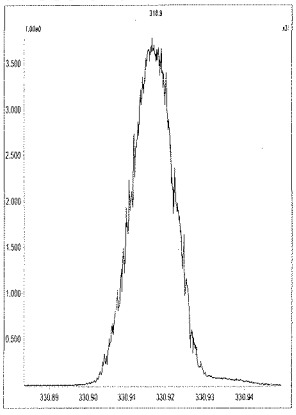
M 304.9824 R 13023



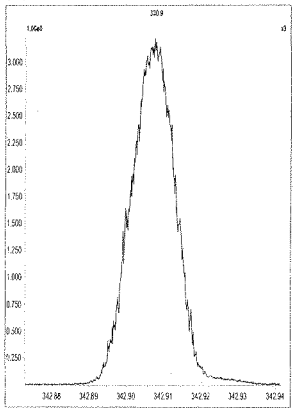
M 318.9792 R 12195



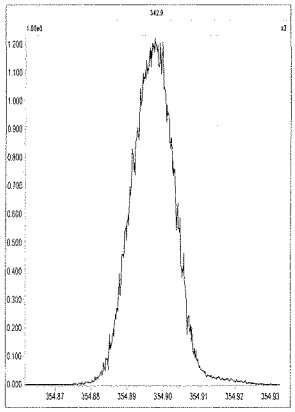
M 330.9792 R 12818



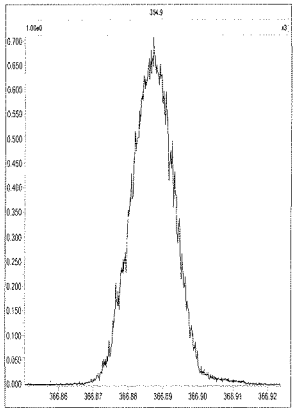
M 342.9792 R 13159



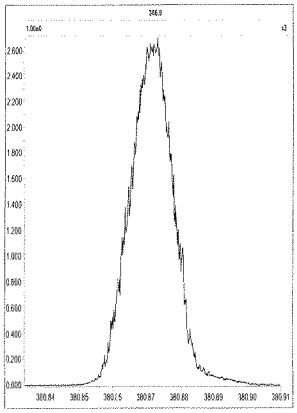
M 354.9792 R 14044



M 366.9792 R 13300



M 380.9760 R 13513

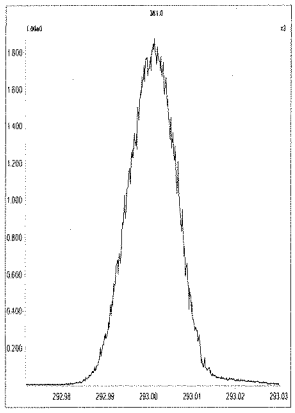


Experiment Calibration Report **MassLynx 4.1**

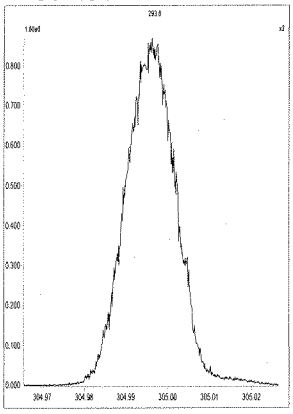
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, July 18, 2008 18:49:03 Central Daylight Time

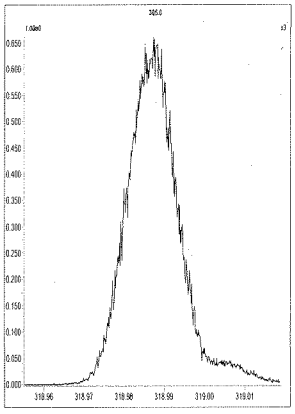
M 292.9824 R 11569



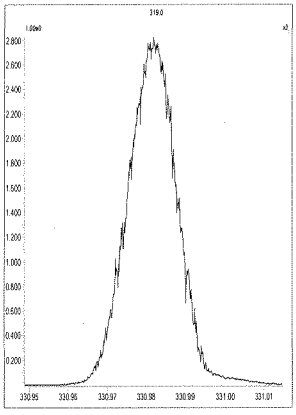
M 304.9824 R 11736



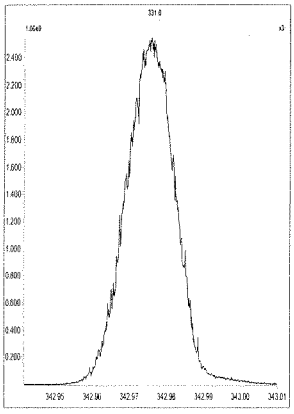
M 318.9792 R 8867



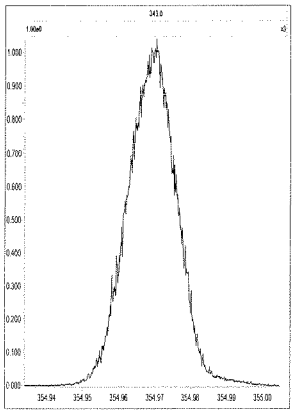
M 330.9792 R 11962



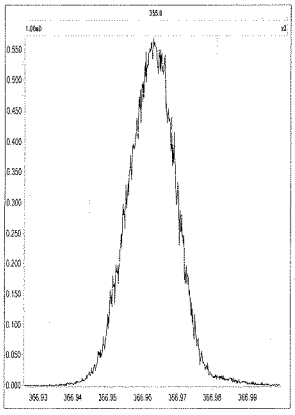
M 342.9792 R 11903



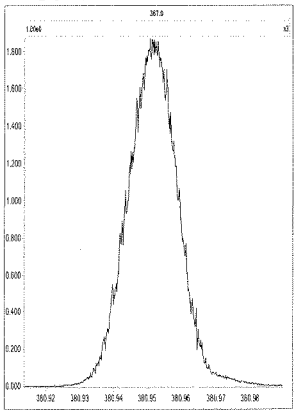
M 354.9792 R 11469



M 366.9792 R 11686



M 380.9760 R 11310



FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: P200006 HRCC4 Data Filename: P200007

HRCC2 Data Filename: P200005 HRCC5 Data Filename: P200008

HRCC3 Data Filename: P200004

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
NATIVE ANALYTES							
2,3,7,8-TCDD	0.81	0.79	0.89	0.85	0.87	0.84	4.69
1,2,3,7,8-PeCDD	0.76	0.78	0.80	0.81	0.81	0.79	2.54
1,2,3,4,7,8-HxCDD	0.74	0.80	0.80	0.85	0.88	0.81	6.84
1,2,3,6,7,8-HxCDD	0.92	0.94	0.88	0.93	0.95	0.92	2.68
1,2,3,7,8,9-HxCDD	0.88	0.85	0.87	0.92	0.93	0.89	3.77
1,2,3,4,6,7,8-HpCDD	0.77	0.77	0.79	0.81	0.81	0.79	2.46
OCDD	0.87	0.84	0.89	0.88	0.90	0.88	2.44
2,3,7,8-TCDF	0.65	0.70	0.75	0.74	0.75	0.72	6.22
1,2,3,7,8-PeCDF	0.66	0.69	0.74	0.73	0.74	0.71	4.91
2,3,4,7,8-PeCDF	0.69	0.69	0.76	0.75	0.77	0.73	5.55
1,2,3,4,7,8-HxCDF	0.88	0.90	0.95	0.96	0.97	0.93	4.22
1,2,3,6,7,8-HxCDF	0.87	0.95	1.03	0.97	0.97	0.96	5.99
1,2,3,7,8,9-HxCDF	0.70	0.74	0.85	0.83	0.85	0.79	8.85
2,3,4,6,7,8-HxCDF	0.78	0.82	0.89	0.91	0.90	0.86	6.61
1,2,3,4,6,7,8-HpCDF	1.12	1.16	1.22	1.21	1.23	1.19	3.89
1,2,3,4,7,8,9-HpCDF	0.86	0.90	0.96	0.97	1.00	0.94	6.12
OCDF	0.78	0.80	0.84	0.86	0.88	0.83	4.88

(1) The %RSD for the 17 unlabeled standard must not exceed +/- 20%, see Section 7.7.2.1, Method 8290.

8290F3A

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: P200006 HCC4 Data Filename: P200007

HCC2 Data Filename: P200005 HCC5 Data Filename: P200008

HCC3 Data Filename: P200004

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	1.11	1.10	1.06	1.11	1.12	1.10	2.15
13C-1,2,3,7,8-PeCDD	1.05	0.95	0.96	1.11	1.18	1.05	9.18
13C-1,2,3,6,7,8-HxCDD	0.98	0.97	0.95	0.98	0.95	0.97	1.47
13C-1,2,3,4,6,7,8-HpCDD	0.87	0.84	0.80	0.87	0.85	0.85	3.28
13C-OCDD	0.88	0.84	0.81	0.89	0.92	0.87	4.56
13C-2,3,7,8-TCDF	1.26	1.24	1.22	1.25	1.27	1.25	1.56
13C-1,2,3,7,8-PeCDF	1.24	1.13	1.11	1.31	1.38	1.23	9.33
13C-1,2,3,4,7,8-HxCDF	1.02	1.01	0.90	0.98	0.98	0.98	4.67
13C-1,2,3,4,6,7,8-HpCDF	0.72	0.69	0.64	0.71	0.69	0.69	4.61
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	0.94	0.98	1.02	1.00	1.02	0.99	3.41

(1) The %RSD for the nine labeled reference compounds must not exceed +/- 30%, see Section 7.7.2.1, Method 8290.

8290F3B

FORM 3C
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: P200006 HCC4 Data Filename: P200007

HCC2 Data Filename: P200005 HCC5 Data Filename: P200008

HCC3 Data Filename: P200004

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO					QC LIMITS (2)
		HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	
NATIVE ANALYTES							
2,3,7,8-TCDD	M/M+2	0.78	0.70	0.78	0.77	0.76	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.52	1.52	1.53	1.51	1.52	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.23	1.35	1.21	1.24	1.21	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.17	1.17	1.30	1.24	1.23	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.20	1.16	1.23	1.24	1.22	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	1.04	0.99	1.03	1.01	0.88-1.20
OCDD	M+2/M+4	0.91	0.86	0.90	0.88	0.88	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.80	0.73	0.74	0.75	0.74	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.58	1.53	1.52	1.49	1.50	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.42	1.63	1.55	1.52	1.50	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.19	1.18	1.19	1.18	1.20	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.24	1.17	1.21	1.18	1.16	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.16	1.20	1.20	1.17	1.17	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.26	1.17	1.21	1.15	1.14	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	0.95	0.95	1.02	1.00	0.98	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	1.04	0.97	1.01	0.99	0.88-1.20
OCDF	M+2/M+4	0.86	0.87	0.89	0.88	0.87	0.76-1.02

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits from Table 8, Method 8290.

8290F3C

FORM 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 07/18/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: P200006 HRCC4 Data Filename: P200007

HRCC2 Data Filename: P200005 HRCC5 Data Filename: P200008

HRCC3 Data Filename: P200004

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO					QC LIMITS (2)
		HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	M/M+2	0.76	0.76	0.77	0.76	0.77	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.55	1.56	1.56	1.56	1.32-1.78
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.24	1.24	1.24	1.23	1.23	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	1.02	1.02	1.03	1.02	0.88-1.20
13C-OCDD	M+2/M+4	0.89	0.88	0.89	0.89	0.89	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.76	0.76	0.76	0.76	0.76	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.54	1.58	1.56	1.55	1.56	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.51	0.52	0.51	0.52	0.51	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.42	0.44	0.42	0.44	0.43	0.37-0.51

(1) See Table 6, Method 8290, for m/z specifications.Method 8290.

(2) Ion Abundance Ratio Control Limits from Table 8,

8290F3D

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC1

Run #1 Filename P200006 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 16:12:01
Processed: 30-JUL-08 09:37:37 Sample ID: ICAL HRCC1

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	6.456e+02	8.103e+02	0.80	yes	no	0.72
2	Unk	1,2,3,7,8-PeCDF	32:60	2.258e+03	1.427e+03	1.58	yes	no	0.71
3	Unk	2,3,4,7,8-PeCDF	33:44	2.241e+03	1.583e+03	1.42	yes	no	0.73
4	Unk	1,2,3,4,7,8-HxCDF	36:33	1.829e+03	1.542e+03	1.19	yes	no	0.93
5	Unk	1,2,3,6,7,8-HxCDF	36:39	1.838e+03	1.484e+03	1.24	yes	no	0.96
6	Unk	2,3,4,6,7,8-HxCDF	37:08	1.663e+03	1.318e+03	1.26	yes	no	0.86
7	Unk	1,2,3,7,8,9-HxCDF	37:50	1.436e+03	1.240e+03	1.16	yes	no	0.79
8	Unk	1,2,3,4,6,7,8-HpCDF	39:17	1.470e+03	1.544e+03	0.95	yes	no	1.19
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	1.170e+03	1.135e+03	1.03	yes	no	0.94
10	Unk	OCDF	43:22	2.392e+03	2.767e+03	0.86	yes	no	0.83
11	Unk	2,3,7,8-TCDD	29:28	7.105e+02	9.165e+02	0.78	yes	no	0.84
12	Unk	1,2,3,7,8-PeCDD	34:05	2.160e+03	1.425e+03	1.52	yes	no	0.79
13	Unk	1,2,3,4,7,8-HxCDD	37:15	1.500e+03	1.218e+03	1.23	yes	no	0.81
14	Unk	1,2,3,6,7,8-HxCDD	37:20	1.809e+03	1.551e+03	1.17	yes	no	0.92
15	Unk	1,2,3,7,8,9-HxCDD	37:37	1.764e+03	1.465e+03	1.20	yes	no	0.89
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	1.281e+03	1.235e+03	1.04	yes	no	0.79
17	Unk	OCDD	43:12	2.724e+03	2.994e+03	0.91	yes	no	0.88
18	IS	13C-2,3,7,8-TCDF	28:36	4.890e+04	6.392e+04	0.76	yes	no	1.25
19	IS	13C-1,2,3,7,8-PeCDF	32:59	6.760e+04	4.399e+04	1.54	yes	no	1.23
20	IS	13C-1,2,3,4,7,8-HxCDF	36:33	6.462e+04	1.266e+05	0.51	yes	no	0.98
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:16	4.004e+04	9.441e+04	0.42	yes	no	0.69
22	IS	13C-2,3,7,8-TCDD	29:26	4.318e+04	5.685e+04	0.76	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:04	5.765e+04	3.678e+04	1.57	yes	no	1.05
24	IS	13C-1,2,3,6,7,8-HxCDD	37:19	1.016e+05	8.191e+04	1.24	yes	no	0.97
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	8.250e+04	8.062e+04	1.02	yes	no	0.85
26	IS	13C-OCDD	43:11	1.552e+05	1.745e+05	0.89	yes	no	0.87
27	RS/RT	13C-1,2,3,4-TCDD	29:14	3.947e+04	5.035e+04	0.78	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	1.047e+05	8.277e+04	1.26	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	1.690e+03					0.99

Columbia Analytical Services, Inc.
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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC1

Run #1 Filename P200006 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 16:12:01

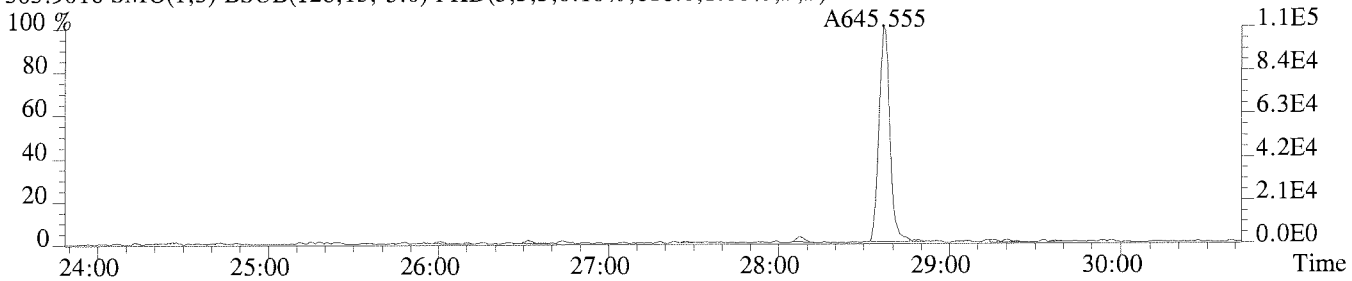
Processed: 30-JUL-08 09:37:37 LAB. ID: ICAL HRCC1

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.05e+05	6.16e+02	1.7e+02	1.36e+05	2.13e+03	6.4e+01
2	1,2,3,7,8-PeCDF	4.41e+05	4.20e+02	1.0e+03	2.62e+05	1.31e+03	2.0e+02
3	2,3,4,7,8-PeCDF	4.29e+05	4.20e+02	1.0e+03	2.89e+05	1.31e+03	2.2e+02
4	1,2,3,4,7,8-HxCDF	3.96e+05	1.60e+03	2.5e+02	3.36e+05	3.64e+02	9.2e+02
5	1,2,3,6,7,8-HxCDF	3.44e+05	1.60e+03	2.1e+02	2.91e+05	3.64e+02	8.0e+02
6	2,3,4,6,7,8-HxCDF	3.29e+05	1.60e+03	2.1e+02	2.53e+05	3.64e+02	6.9e+02
7	1,2,3,7,8,9-HxCDF	2.86e+05	1.60e+03	1.8e+02	2.50e+05	3.64e+02	6.9e+02
8	1,2,3,4,6,7,8-HpCDF	3.01e+05	1.08e+03	2.8e+02	3.15e+05	1.03e+03	3.1e+02
9	1,2,3,4,7,8,9-HpCDF	2.11e+05	1.08e+03	2.0e+02	2.01e+05	1.03e+03	2.0e+02
10	OCDF	3.26e+05	8.00e+02	4.1e+02	3.81e+05	2.70e+03	1.4e+02
11	2,3,7,8-TCDD	1.26e+05	1.68e+03	7.5e+01	1.49e+05	6.00e+02	2.5e+02
12	1,2,3,7,8-PeCDD	4.29e+05	2.11e+03	2.0e+02	2.69e+05	5.12e+02	5.3e+02
13	1,2,3,4,7,8-HxCDD	3.53e+05	2.76e+02	1.3e+03	2.79e+05	9.88e+02	2.8e+02
14	1,2,3,6,7,8-HxCDD	3.69e+05	2.76e+02	1.3e+03	3.07e+05	9.88e+02	3.1e+02
15	1,2,3,7,8,9-HxCDD	3.56e+05	2.76e+02	1.3e+03	2.87e+05	9.88e+02	2.9e+02
16	1,2,3,4,6,7,8-HpCDD	2.43e+05	1.38e+03	1.8e+02	2.38e+05	3.44e+02	6.9e+02
17	OCDD	3.76e+05	6.00e+02	6.3e+02	4.12e+05	7.04e+02	5.9e+02
18	13C-2,3,7,8-TCDF	8.12e+06	3.34e+03	2.4e+03	1.07e+07	2.56e+03	4.2e+03
19	13C-1,2,3,7,8-PeCDF	1.25e+07	2.16e+02	5.8e+04	8.18e+06	1.37e+03	6.0e+03
20	13C-1,2,3,4,7,8-HxCDF	1.34e+07	8.48e+02	1.6e+04	2.58e+07	1.62e+03	1.6e+04
21	13C-1,2,3,4,6,7,8-HpCDF	8.27e+06	3.50e+03	2.4e+03	1.92e+07	8.78e+03	2.2e+03
22	13C-2,3,7,8-TCDD	7.58e+06	6.82e+03	1.1e+03	9.88e+06	9.76e+02	1.0e+04
23	13C-1,2,3,7,8-PeCDD	1.10e+07	2.08e+03	5.3e+03	7.06e+06	1.22e+03	5.8e+03
24	13C-1,2,3,6,7,8-HxCDD	2.16e+07	4.80e+02	4.5e+04	1.74e+07	1.26e+03	1.4e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.61e+07	2.07e+03	7.8e+03	1.57e+07	1.60e+03	9.8e+03
26	13C-OCDD	2.19e+07	4.96e+02	4.4e+04	2.49e+07	5.28e+02	4.7e+04
27	13C-1,2,3,4-TCDD	7.10e+06	6.82e+03	1.0e+03	9.02e+06	9.76e+02	9.2e+03
28	13C-1,2,3,7,8,9-HxCDD	2.17e+07	4.80e+02	4.5e+04	1.75e+07	1.26e+03	1.4e+04
29	37Cl-2,3,7,8-TCDD	3.02e+05	5.28e+02	5.7e+02			

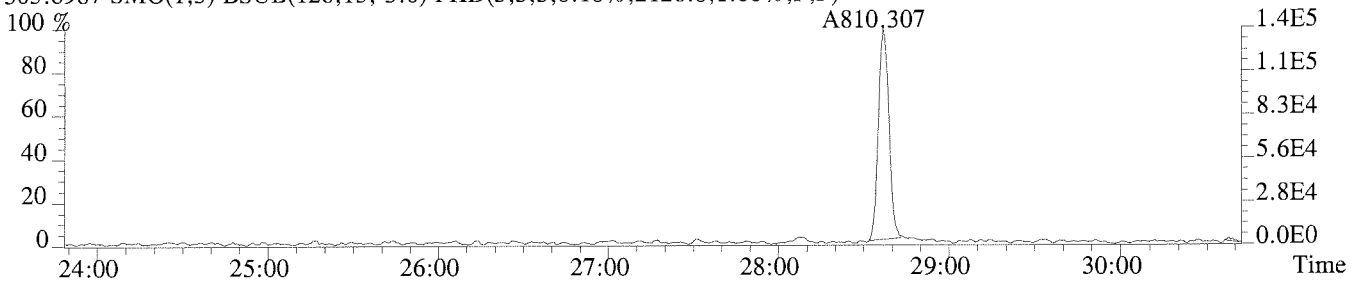
Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office:(713)266-1599. Fax:(713)266-0130

File:P200006 #1-575 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

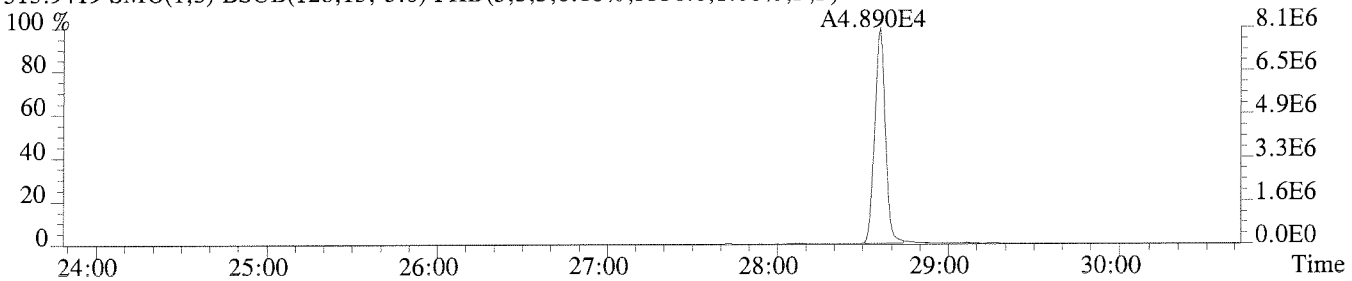
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,616.0,1.00%,F,F)



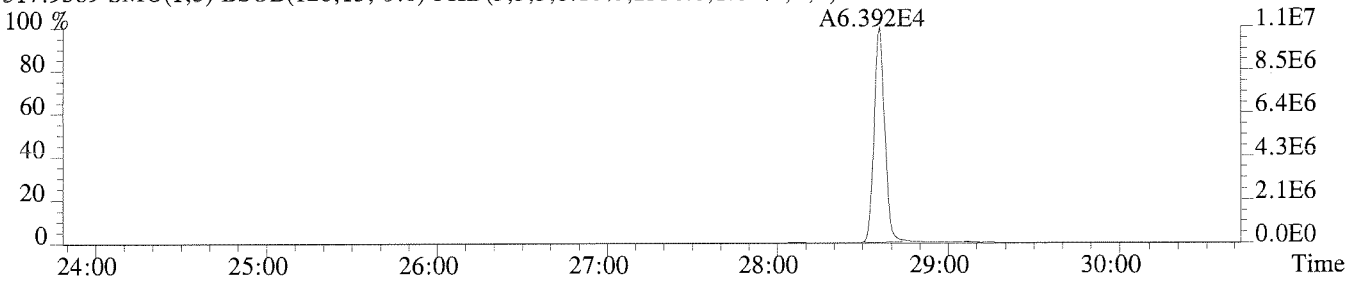
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2128.0,1.00%,F,F)



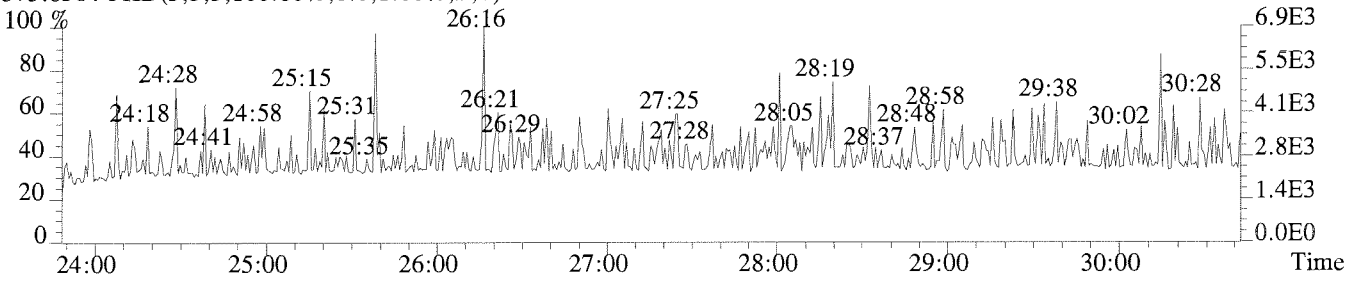
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3336.0,1.00%,F,F)



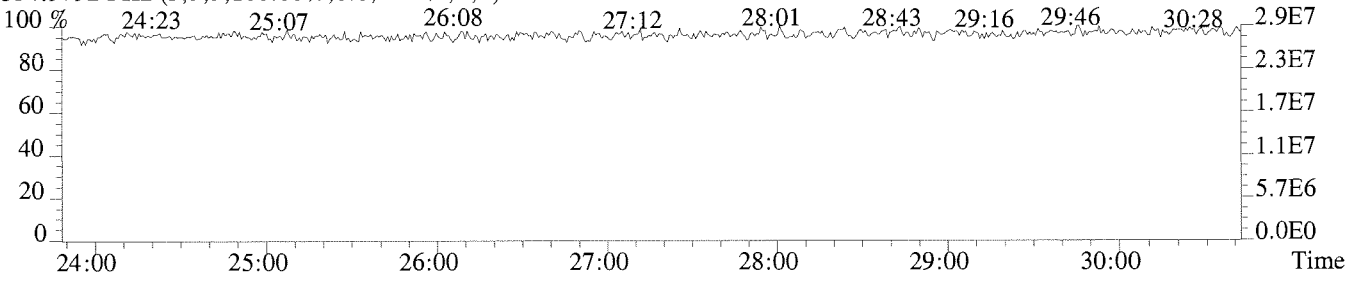
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2556.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

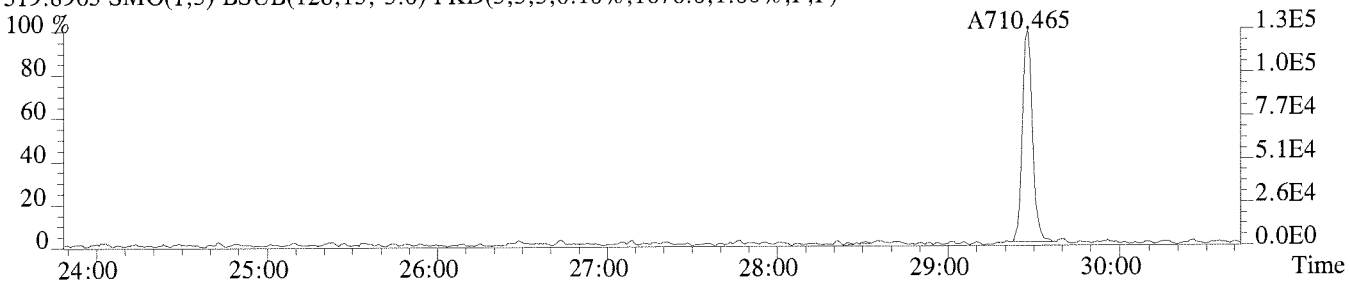


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

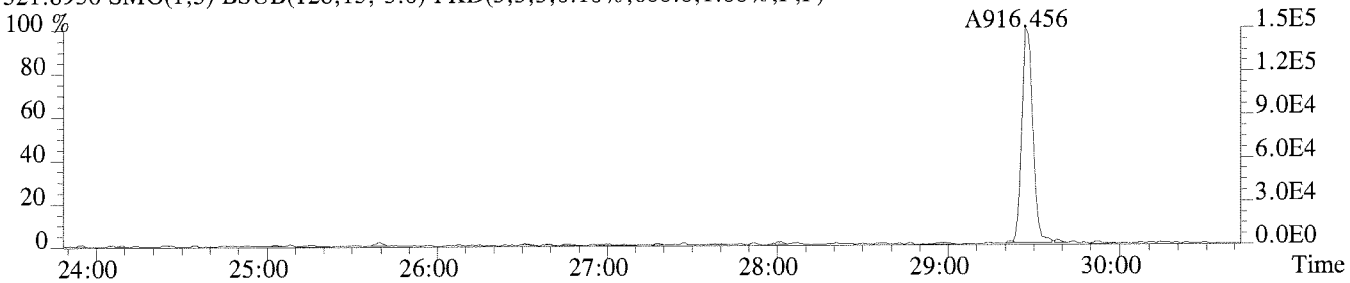


File:P200006 #1-575 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

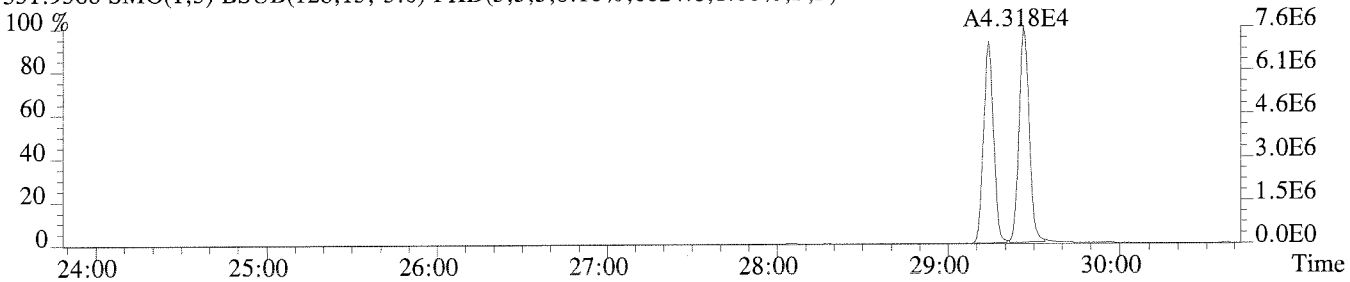
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1676.0,1.00%,F,F)



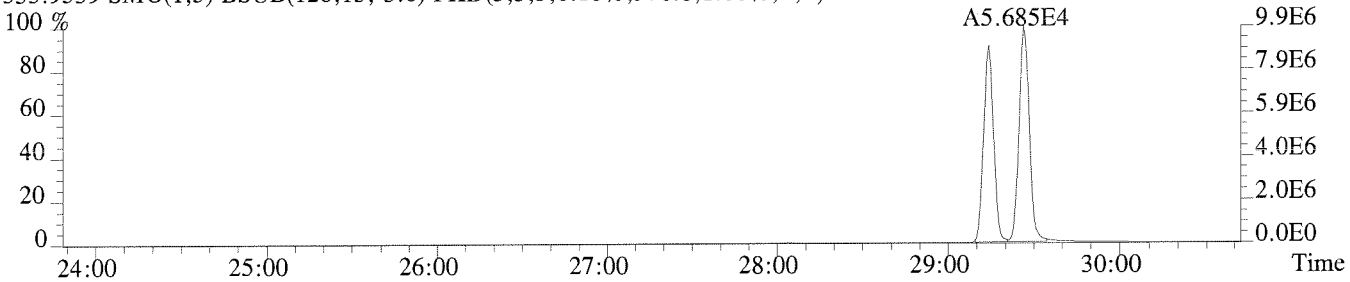
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,600.0,1.00%,F,F)



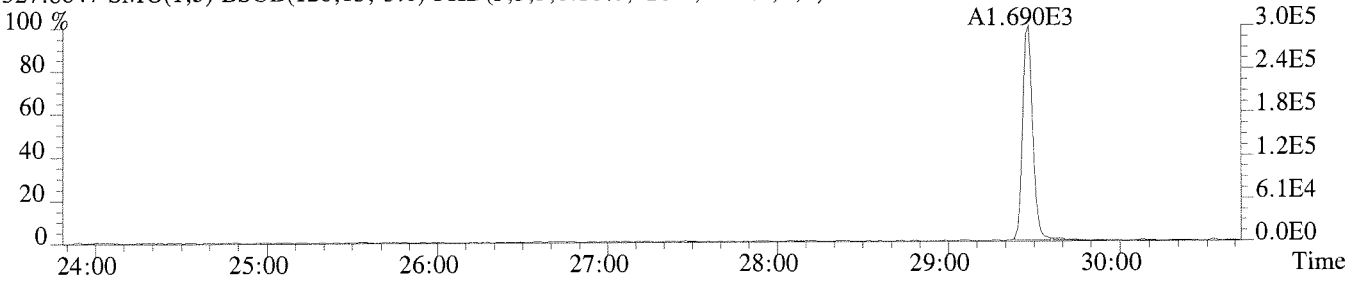
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,6824.0,1.00%,F,F)



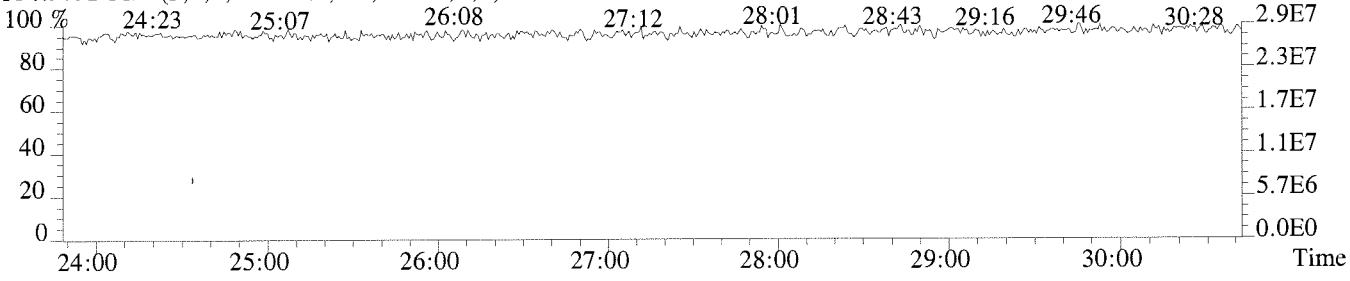
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,976.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,528.0,1.00%,F,F)

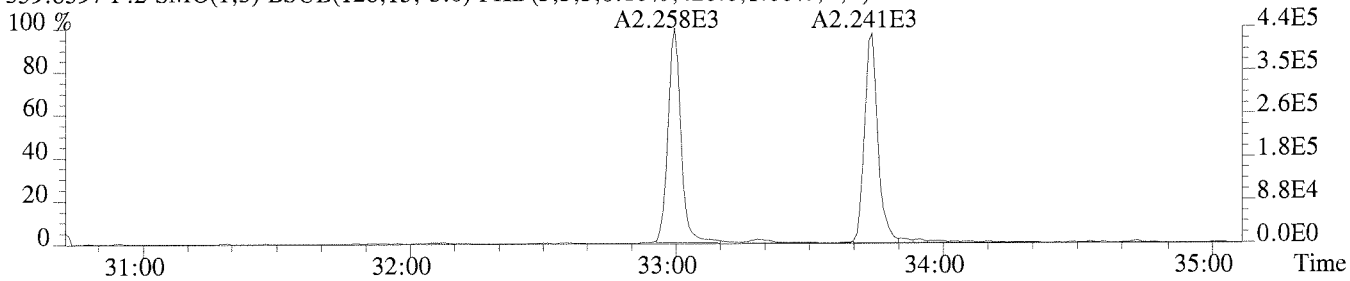


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

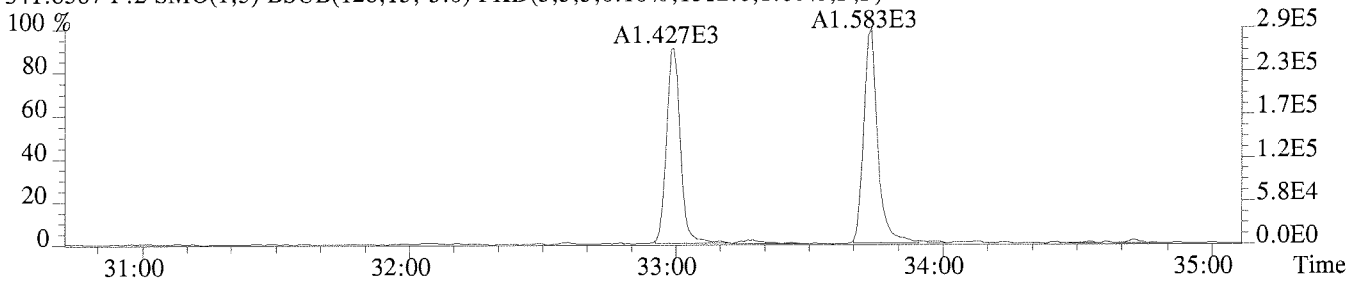


File:P200006 #1-400 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

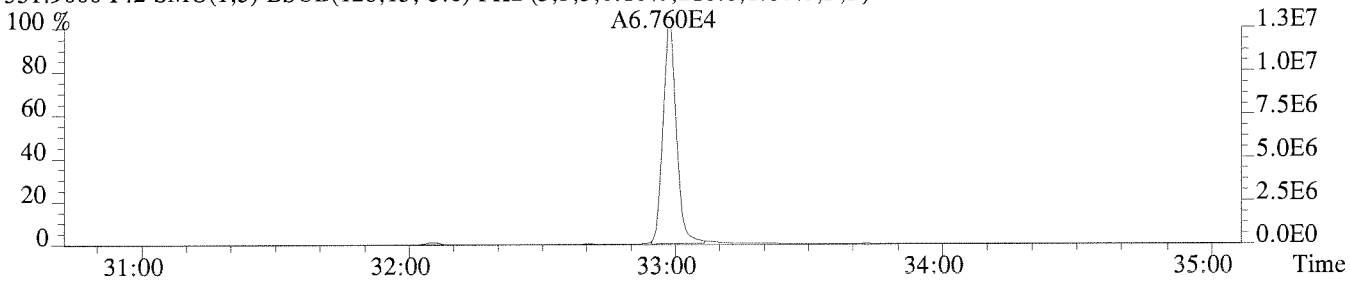
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,420.0,1.00%,F,F)



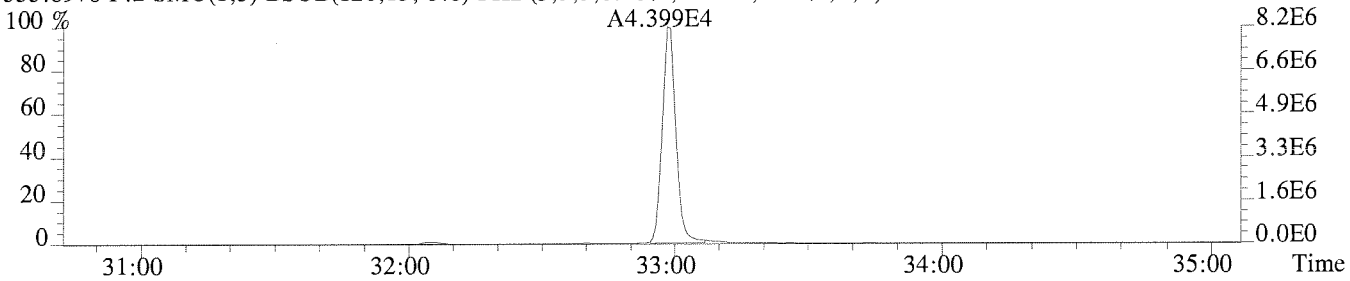
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1312.0,1.00%,F,F)



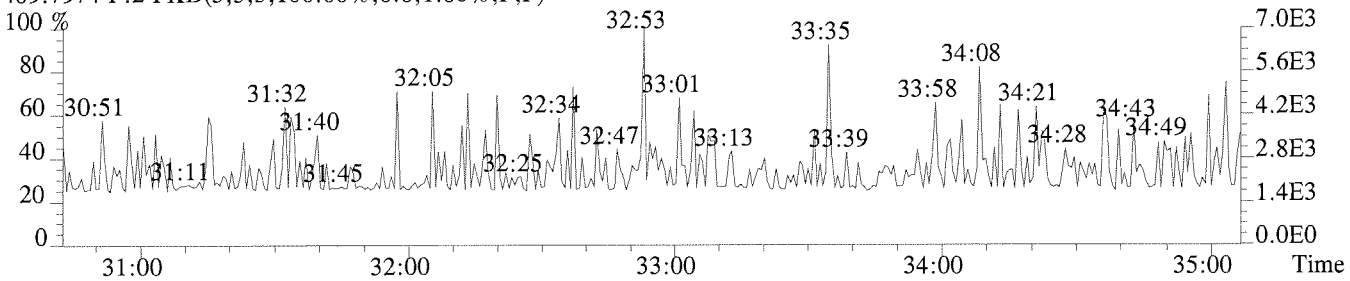
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,216.0,1.00%,F,F)



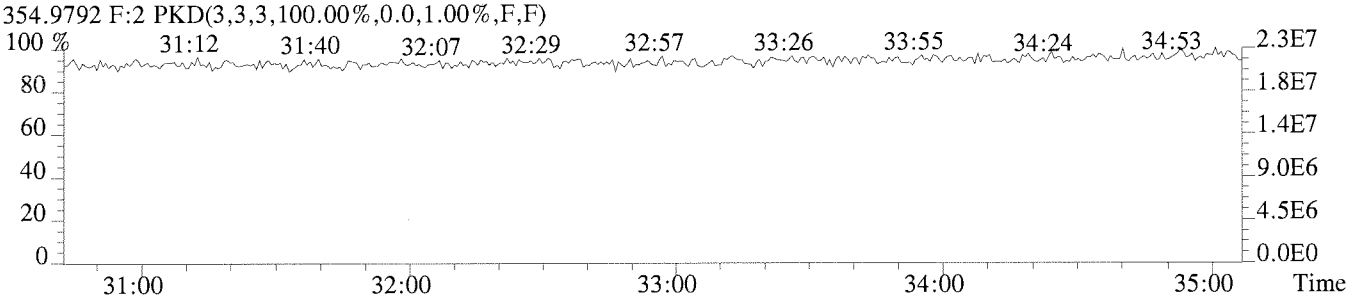
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1368.0,1.00%,F,F)



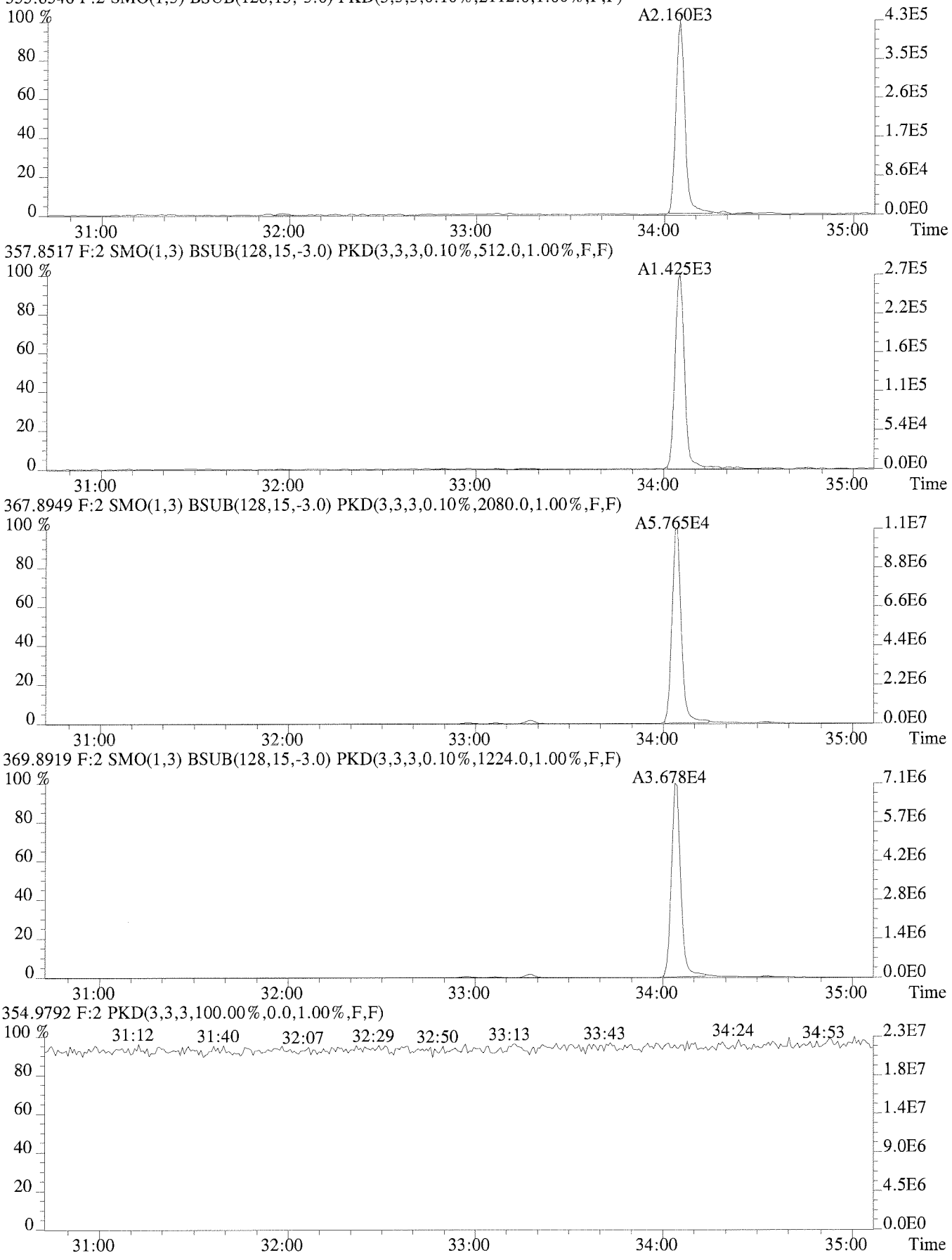
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

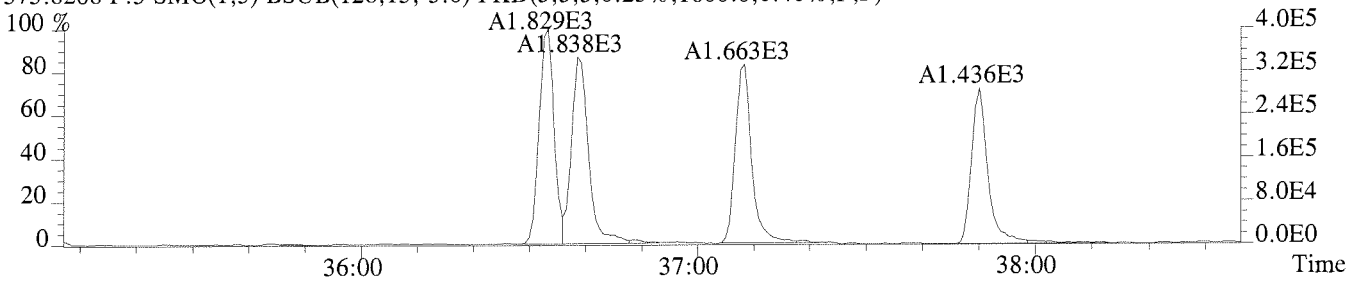


File:P200006 #1-400 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

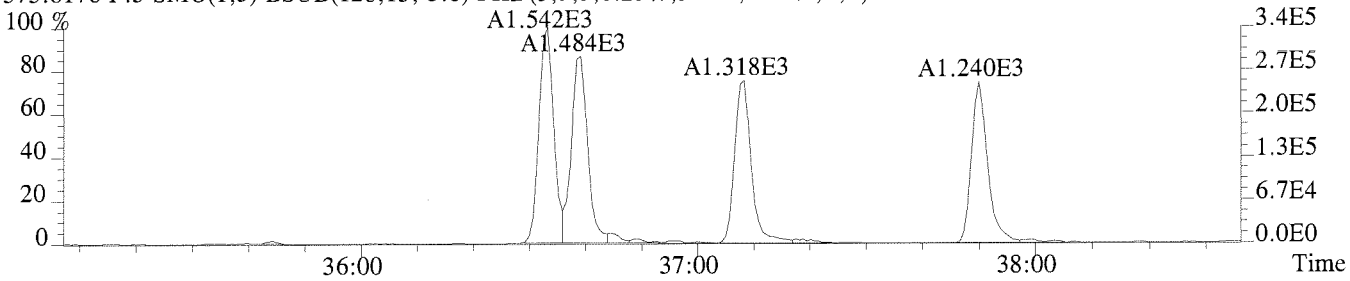


File:P200006 #1-317 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

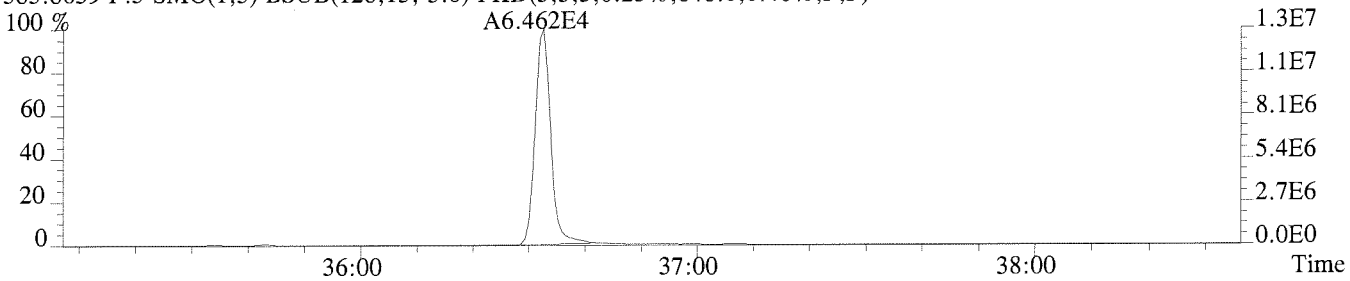
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1600.0,0.40%,F,F)



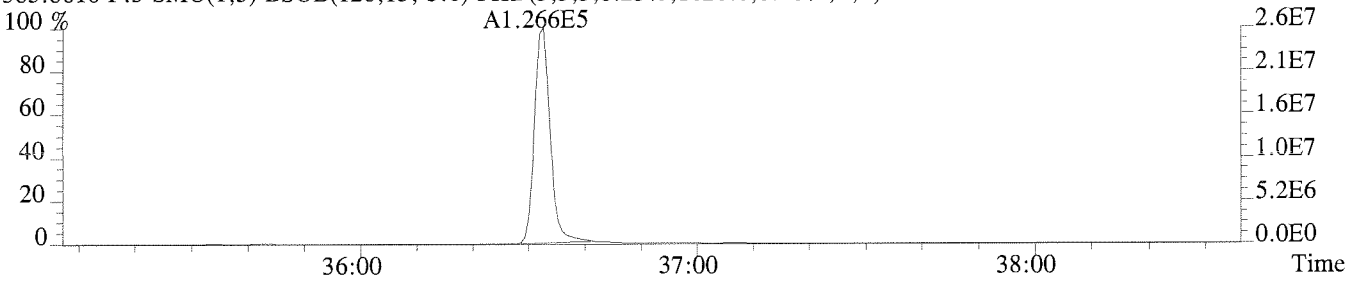
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,364.0,0.40%,F,F)



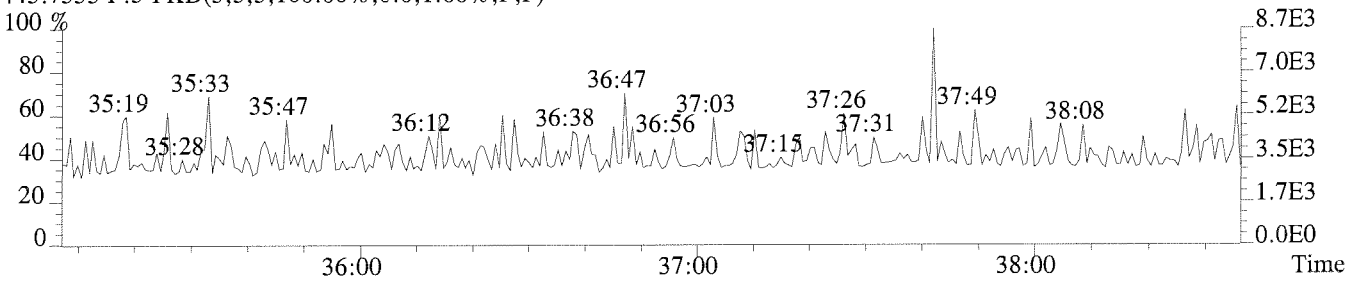
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,848.0,0.40%,F,F)



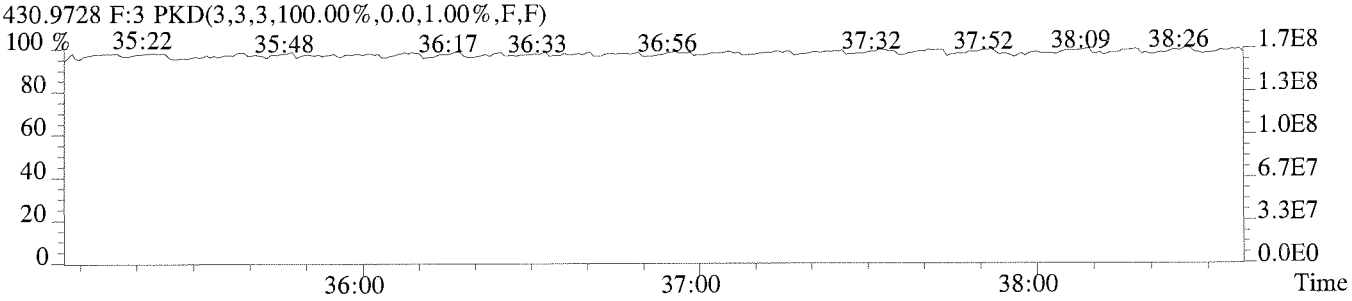
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1620.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

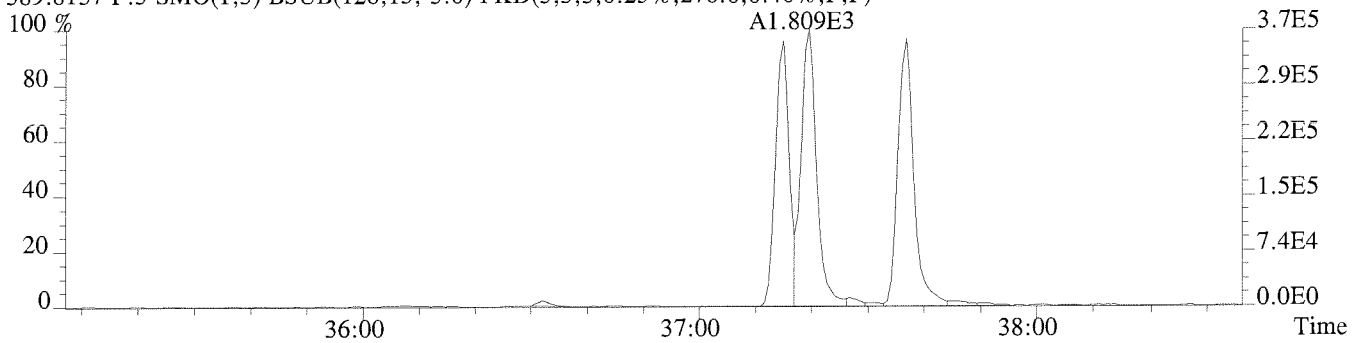


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

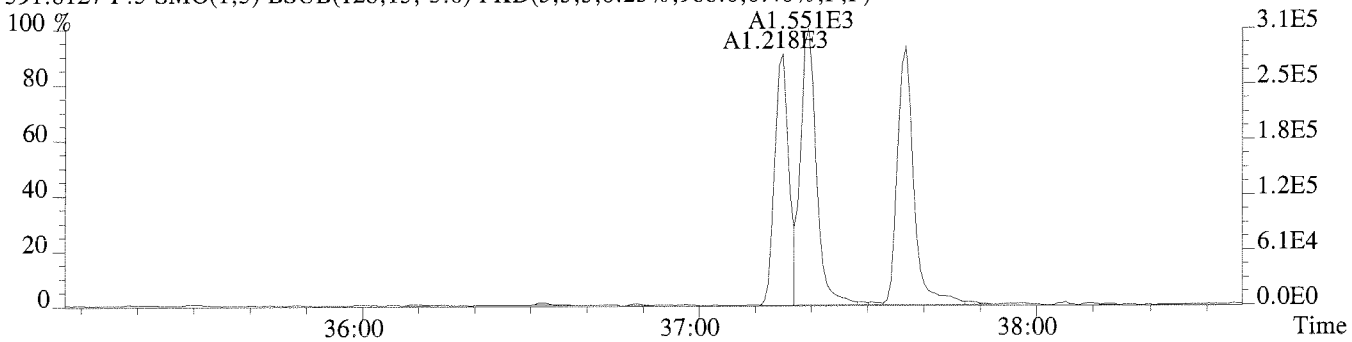


File:P200006 #1-317 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

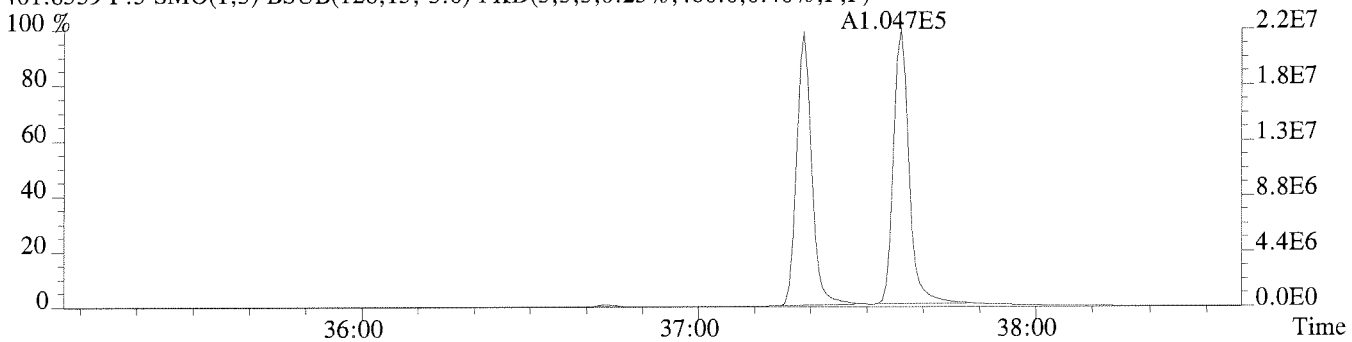
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,276.0,0.40%,F,F)



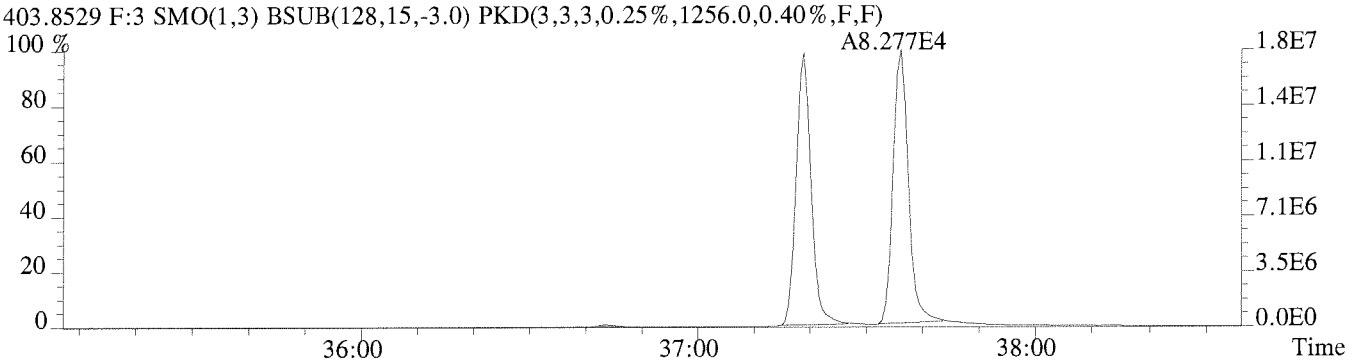
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,988.0,0.40%,F,F)



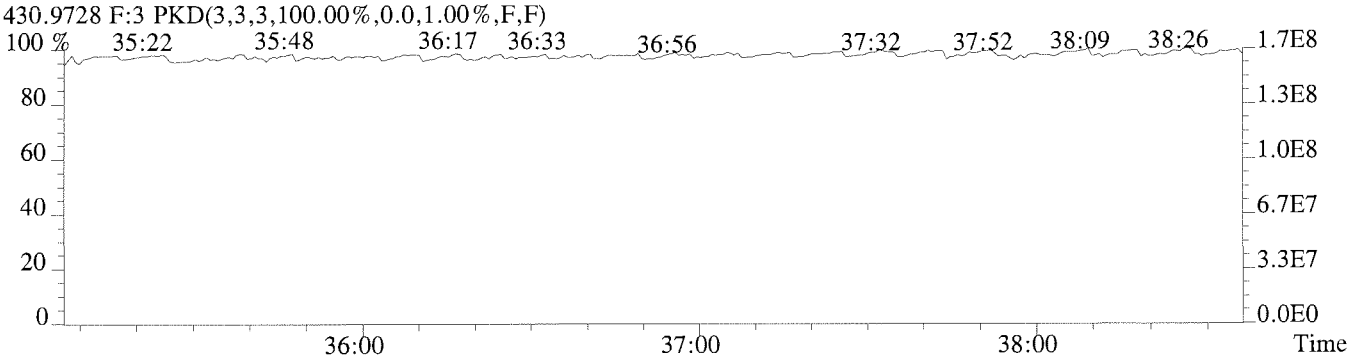
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,480.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1256.0,0.40%,F,F)

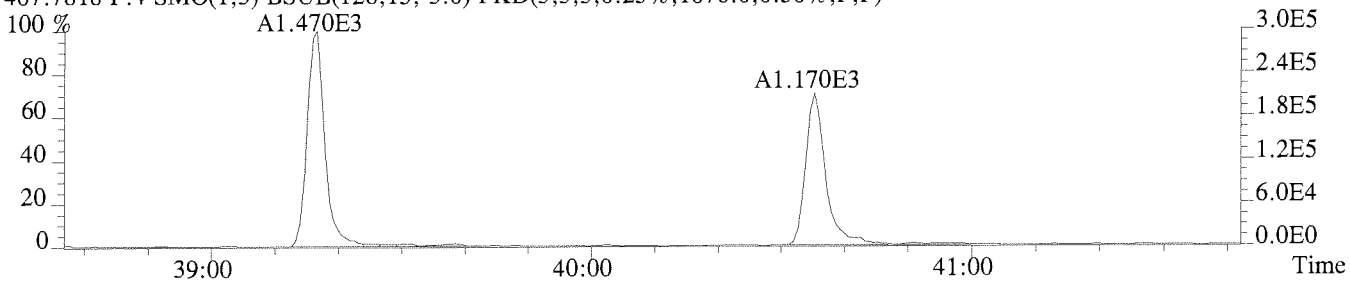


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

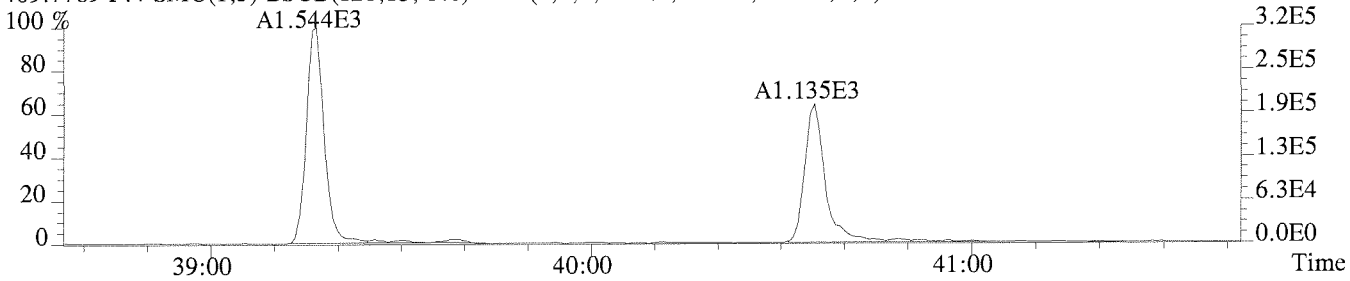


File:P200006 #1-281 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

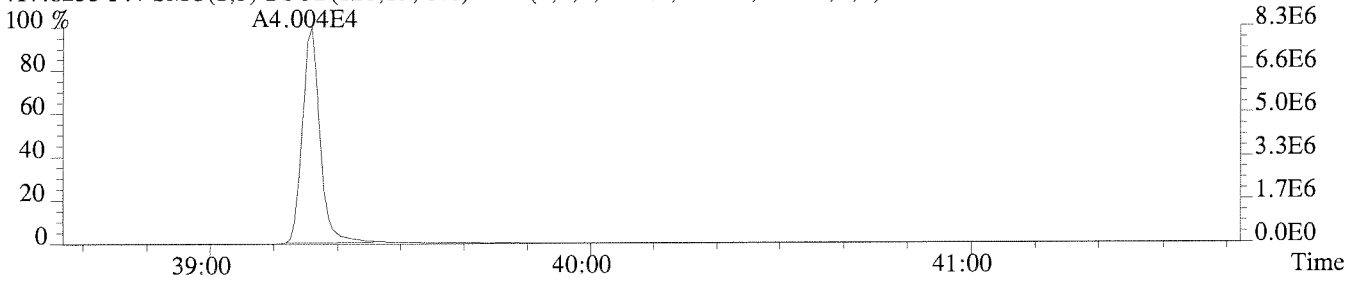
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1076.0,0.50%,F,F)



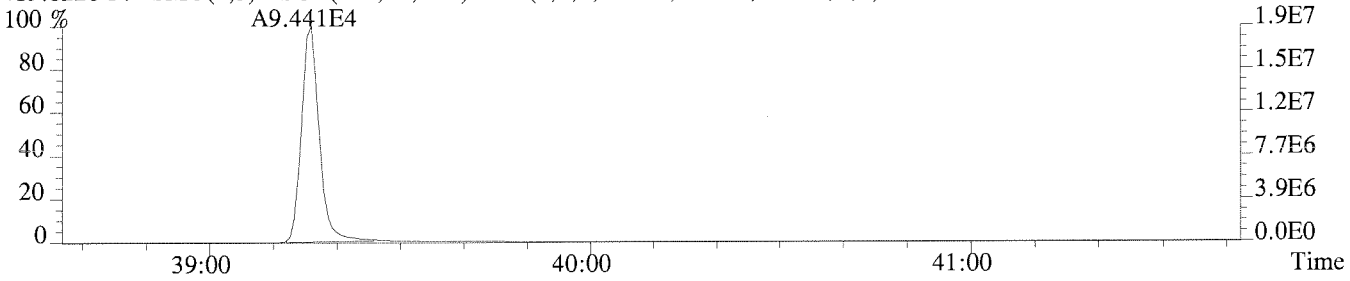
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1028.0,0.50%,F,F)



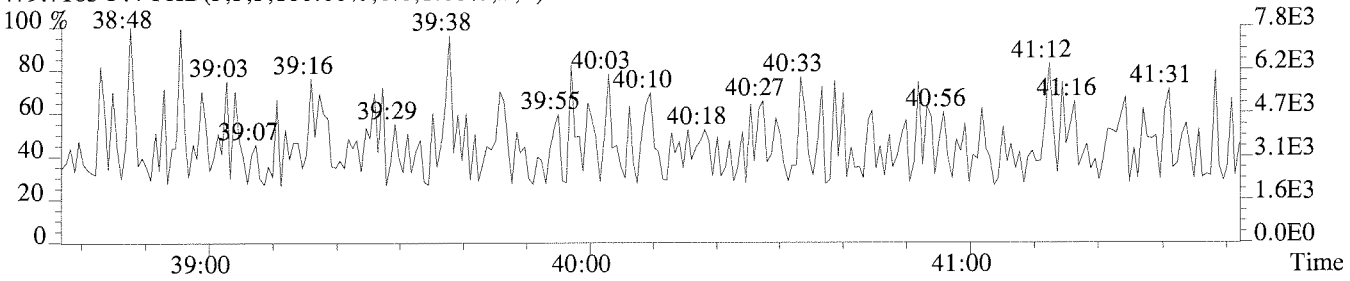
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3492.0,0.50%,F,F)



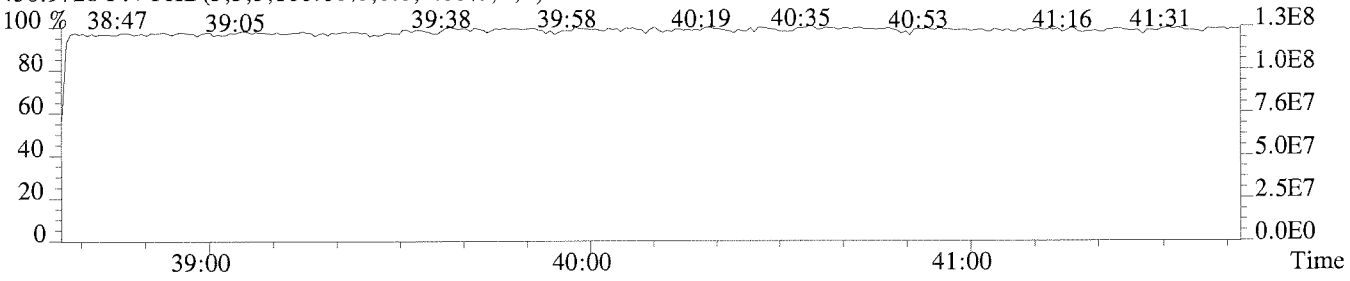
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,8776.0,0.50%,F,F)



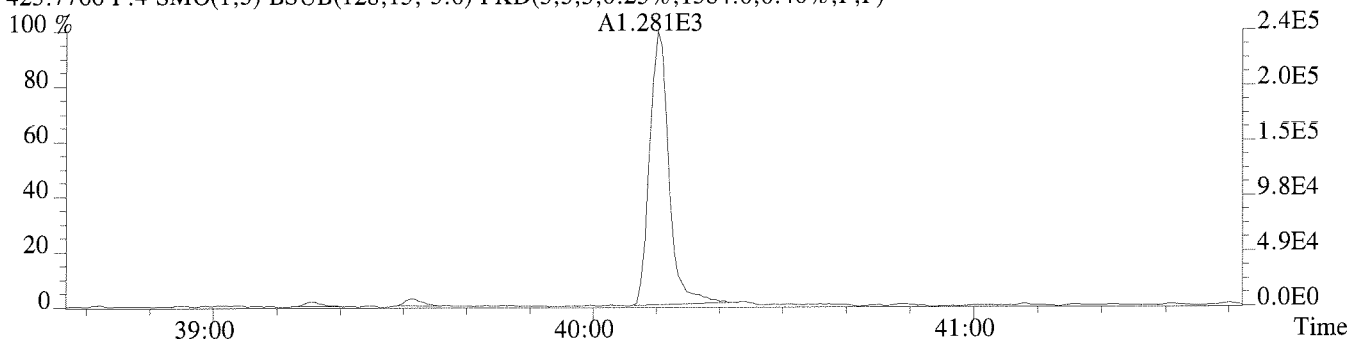
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



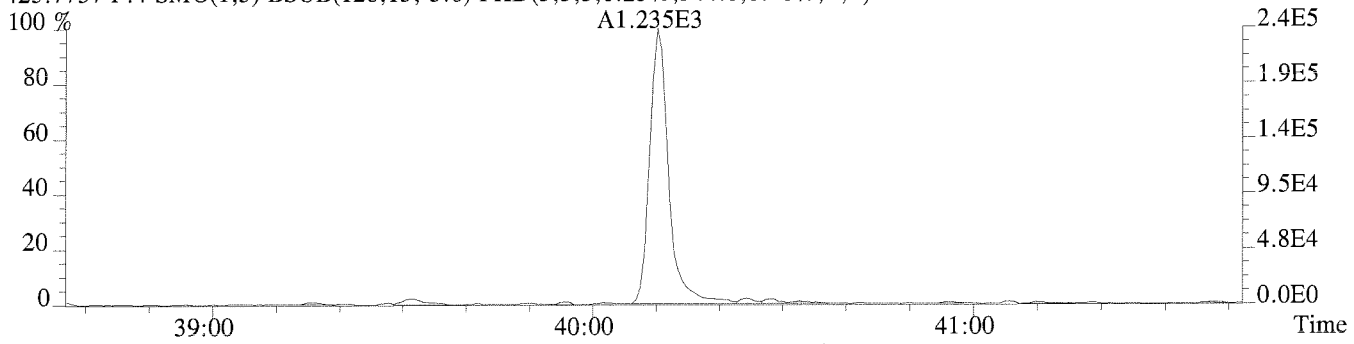
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



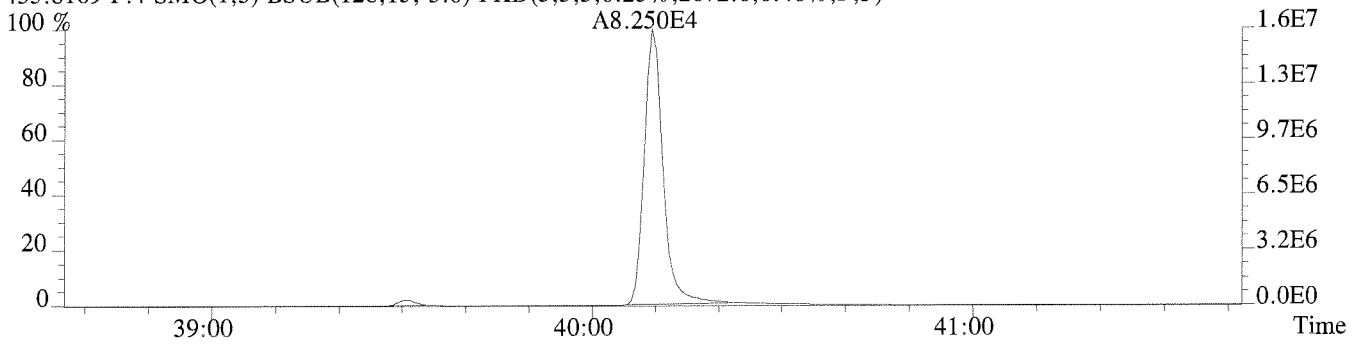
File:P200006 #1-281 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1384.0,0.40%,F,F)



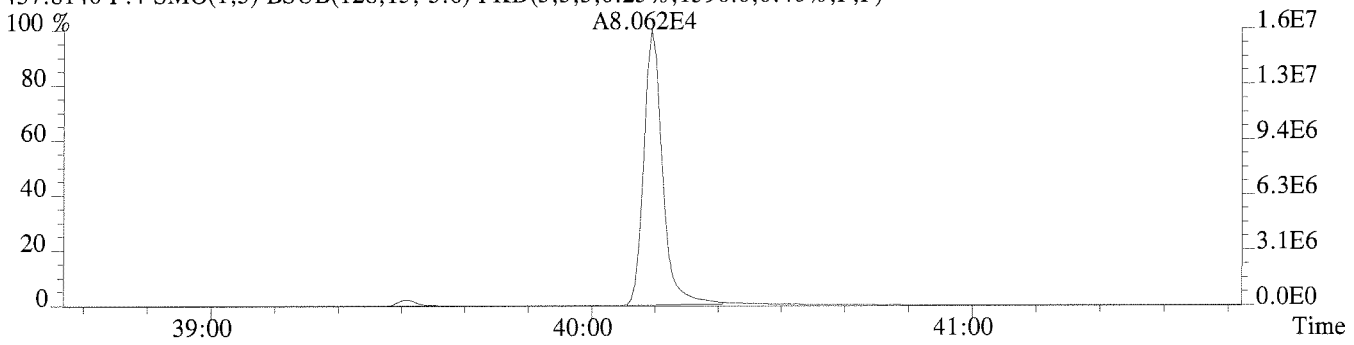
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,344.0,0.40%,F,F)



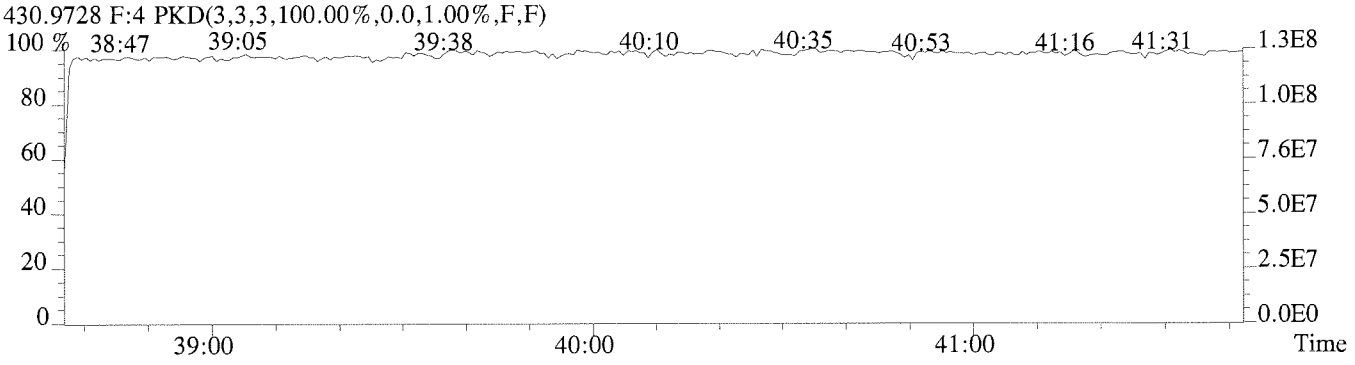
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2072.0,0.40%,F,F)



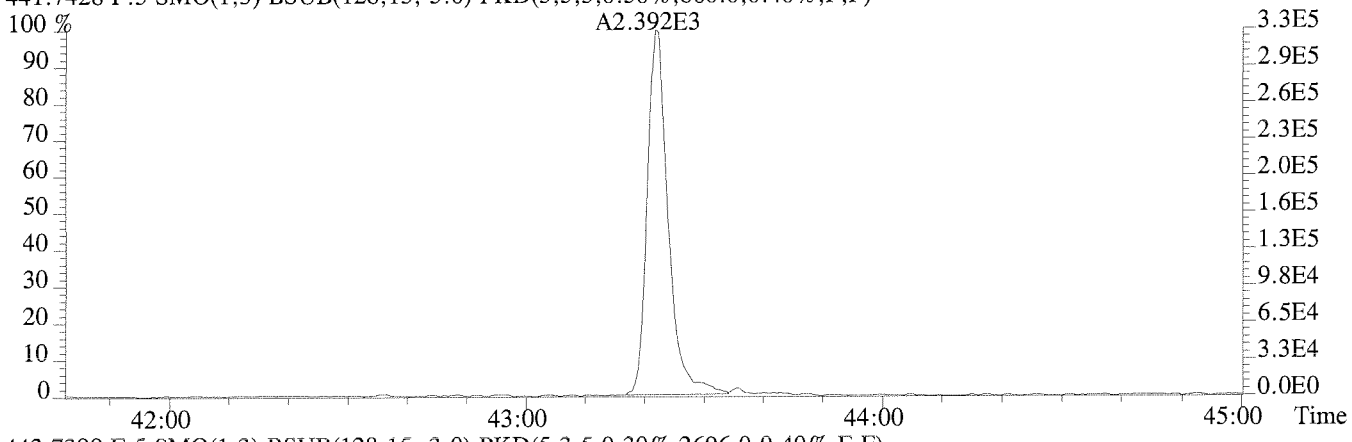
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1596.0,0.40%,F,F)



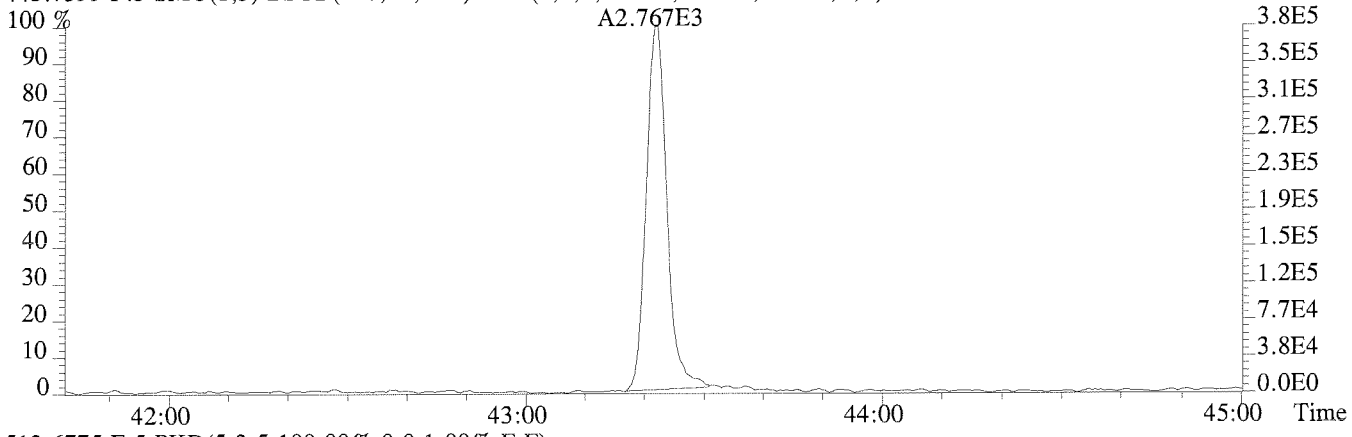
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



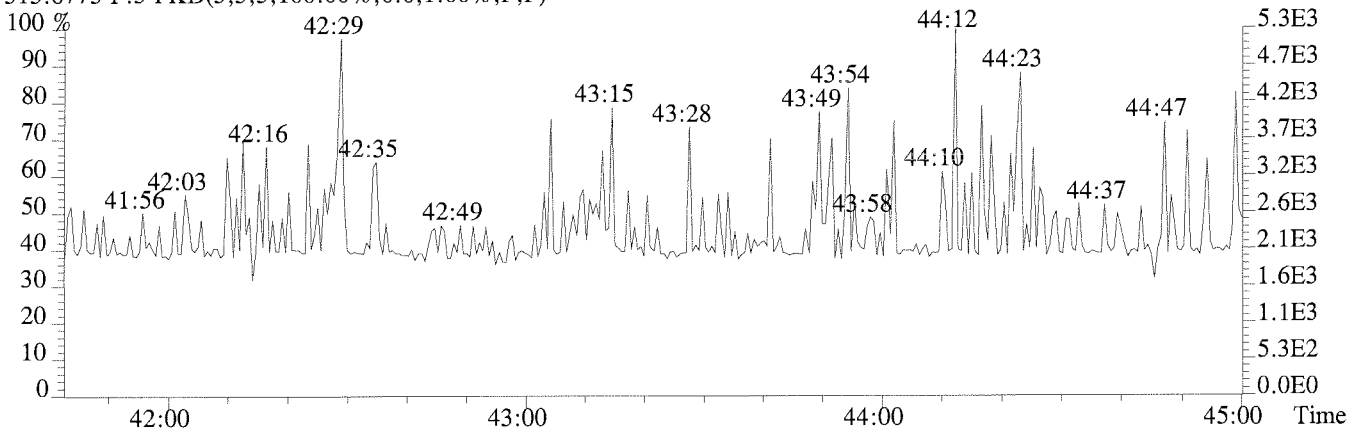
File:P200006 #1-364 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,800.0,0.40%,F,F)



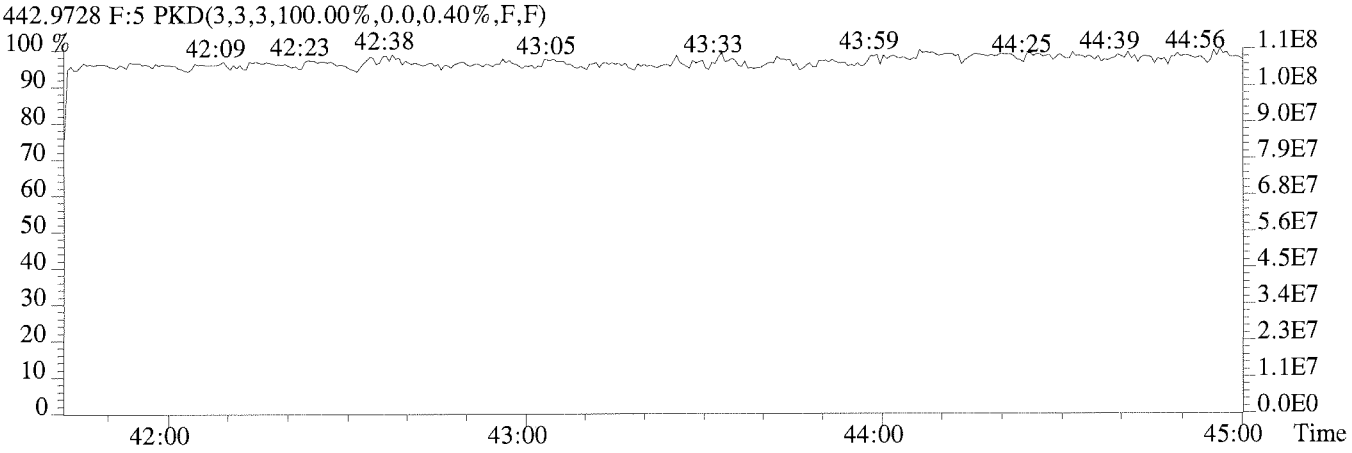
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2696.0,0.40%,F,F)



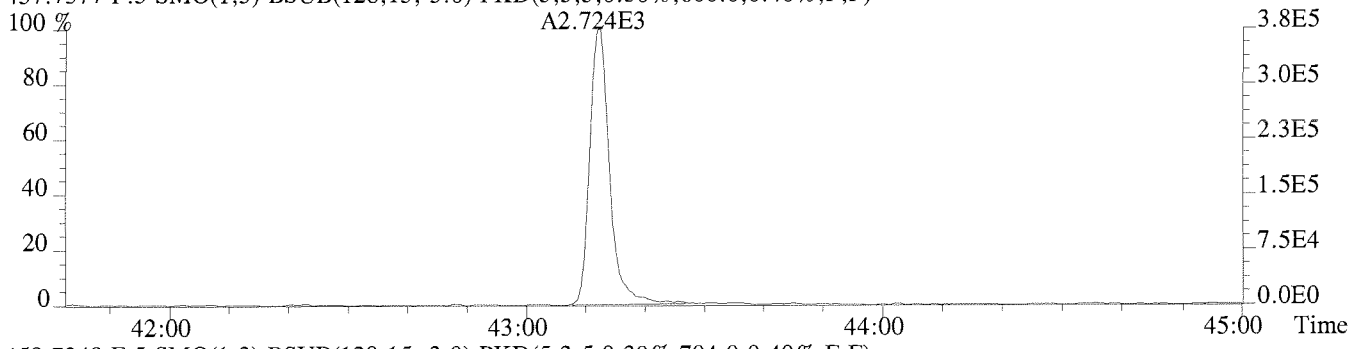
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



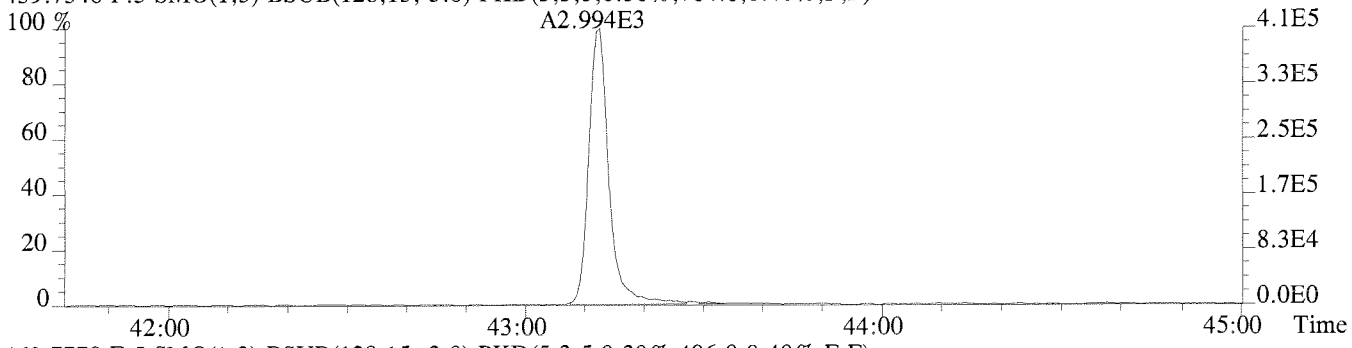
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



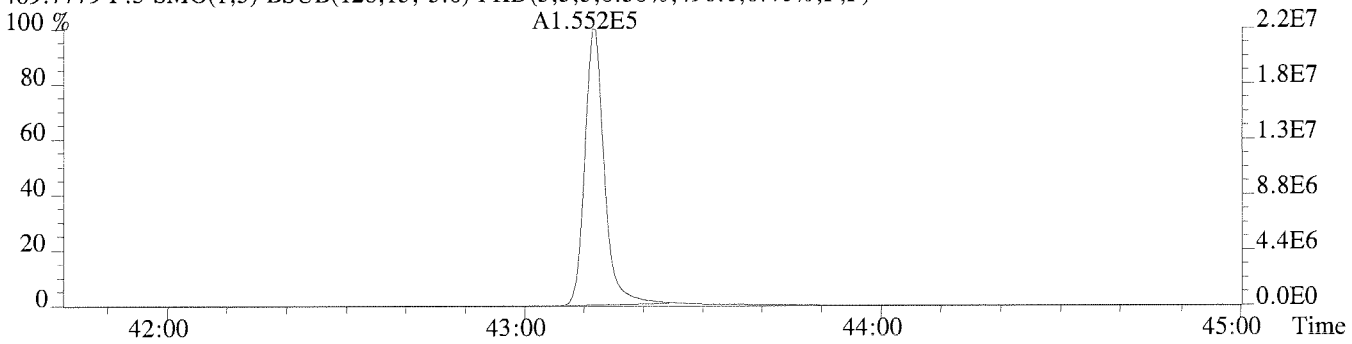
File:P200006 #1-364 Acq:18-JUL-2008 16:12:01 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,600.0,0.40%,F,F)



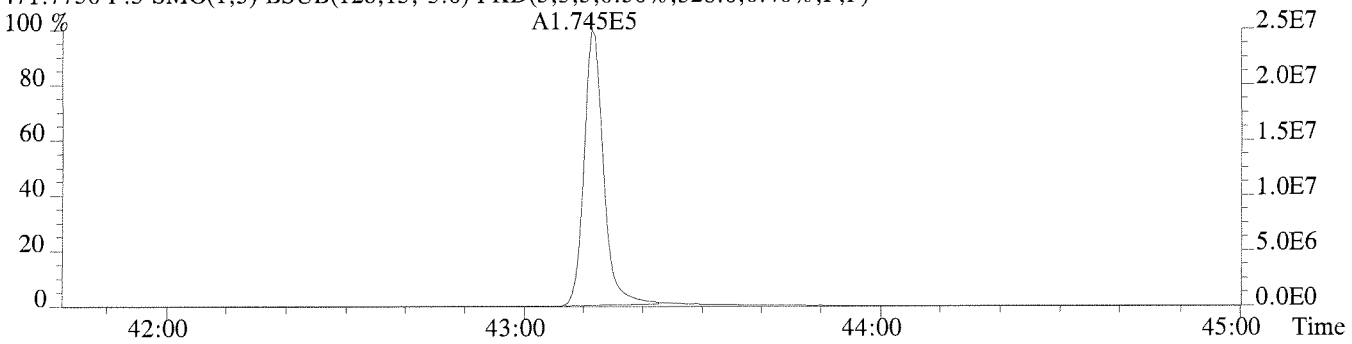
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,704.0,0.40%,F,F)



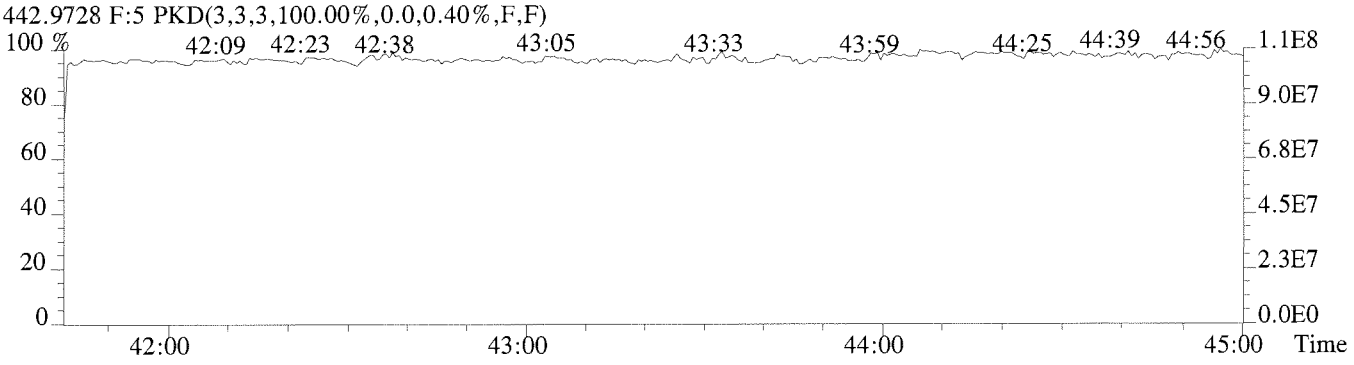
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,496.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,528.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC2

Run #2 Filename P200005 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 15:25:44
Processed: 30-JUL-08 09:37:37 Sample ID: ICAL HRCC2

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:38	1.838e+03	2.513e+03	0.73	yes	no	0.72
2	Unk	1,2,3,7,8-PeCDF	32:60	5.862e+03	3.824e+03	1.53	yes	no	0.71
3	Unk	2,3,4,7,8-PeCDF	33:44	6.017e+03	3.698e+03	1.63	yes	no	0.73
4	Unk	1,2,3,4,7,8-HxCDF	36:33	4.703e+03	4.002e+03	1.18	yes	no	0.93
5	Unk	1,2,3,6,7,8-HxCDF	36:39	4.994e+03	4.264e+03	1.17	yes	no	0.96
6	Unk	2,3,4,6,7,8-HxCDF	37:08	4.288e+03	3.672e+03	1.17	yes	no	0.86
7	Unk	1,2,3,7,8,9-HxCDF	37:50	3.883e+03	3.247e+03	1.20	yes	no	0.79
8	Unk	1,2,3,4,6,7,8-HpCDF	39:17	3.724e+03	3.912e+03	0.95	yes	no	1.19
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	3.024e+03	2.908e+03	1.04	yes	no	0.94
10	Unk	OCDF	43:22	6.044e+03	6.913e+03	0.87	yes	no	0.83
11	Unk	2,3,7,8-TCDD	29:28	1.819e+03	2.583e+03	0.70	yes	no	0.84
12	Unk	1,2,3,7,8-PeCDD	34:05	5.643e+03	3.707e+03	1.52	yes	no	0.79
13	Unk	1,2,3,4,7,8-HxCDD	37:15	4.256e+03	3.144e+03	1.35	yes	no	0.81
14	Unk	1,2,3,6,7,8-HxCDD	37:20	4.673e+03	4.002e+03	1.17	yes	no	0.92
15	Unk	1,2,3,7,8,9-HxCDD	37:37	4.257e+03	3.665e+03	1.16	yes	no	0.89
16	Unk	1,2,3,4,6,7,8-HpCDD	40:11	3.162e+03	3.048e+03	1.04	yes	no	0.79
17	Unk	OCDD	43:12	6.308e+03	7.317e+03	0.86	yes	no	0.88
18	IS	13C-2,3,7,8-TCDF	28:36	5.390e+04	7.057e+04	0.76	yes	no	1.25
19	IS	13C-1,2,3,7,8-PeCDF	32:59	6.923e+04	4.388e+04	1.58	yes	no	1.23
20	IS	13C-1,2,3,4,7,8-HxCDF	36:33	6.610e+04	1.279e+05	0.52	yes	no	0.98
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:16	4.010e+04	9.181e+04	0.44	yes	no	0.69
22	IS	13C-2,3,7,8-TCDD	29:27	4.801e+04	6.276e+04	0.76	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:05	5.823e+04	3.752e+04	1.55	yes	no	1.05
24	IS	13C-1,2,3,6,7,8-HxCDD	37:19	1.025e+05	8.281e+04	1.24	yes	no	0.97
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	8.157e+04	8.023e+04	1.02	yes	no	0.85
26	IS	13C-OCDD	43:12	1.519e+05	1.717e+05	0.88	yes	no	0.87
27	RS/RT	13C-1,2,3,4-TCDD	29:14	4.443e+04	5.598e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	1.057e+05	8.575e+04	1.23	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	4.910e+03					0.99

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC2

Run #2 Filename P200005 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 15:25:44

Processed: 30-JUL-08 09:37:37 LAB. ID: ICAL HRCC2

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	3.02e+05	8.52e+02	3.5e+02	4.03e+05	1.68e+03	2.4e+02
2	1,2,3,7,8-PeCDF	1.14e+06	1.68e+02	6.8e+03	7.49e+05	1.38e+03	5.4e+02
3	2,3,4,7,8-PeCDF	1.16e+06	1.68e+02	6.9e+03	7.39e+05	1.38e+03	5.4e+02
4	1,2,3,4,7,8-HxCDF	1.06e+06	1.54e+03	6.9e+02	9.02e+05	7.08e+02	1.3e+03
5	1,2,3,6,7,8-HxCDF	9.84e+05	1.54e+03	6.4e+02	8.11e+05	7.08e+02	1.1e+03
6	2,3,4,6,7,8-HxCDF	8.83e+05	1.54e+03	5.7e+02	7.48e+05	7.08e+02	1.1e+03
7	1,2,3,7,8,9-HxCDF	7.76e+05	1.54e+03	5.0e+02	6.39e+05	7.08e+02	9.0e+02
8	1,2,3,4,6,7,8-HpCDF	7.77e+05	8.76e+02	8.9e+02	8.08e+05	1.91e+03	4.2e+02
9	1,2,3,4,7,8,9-HpCDF	5.44e+05	8.76e+02	6.2e+02	5.23e+05	1.91e+03	2.7e+02
10	OCDF	8.50e+05	9.40e+02	9.0e+02	9.53e+05	3.31e+03	2.9e+02
11	2,3,7,8-TCDD	3.34e+05	2.20e+03	1.5e+02	4.53e+05	8.56e+02	5.3e+02
12	1,2,3,7,8-PeCDD	1.12e+06	2.39e+03	4.7e+02	7.29e+05	5.60e+02	1.3e+03
13	1,2,3,4,7,8-HxCDD	9.37e+05	6.72e+02	1.4e+03	7.33e+05	1.01e+03	7.2e+02
14	1,2,3,6,7,8-HxCDD	9.99e+05	6.72e+02	1.5e+03	8.03e+05	1.01e+03	7.9e+02
15	1,2,3,7,8,9-HxCDD	9.17e+05	6.72e+02	1.4e+03	8.00e+05	1.01e+03	7.9e+02
16	1,2,3,4,6,7,8-HpCDD	6.10e+05	1.26e+03	4.8e+02	6.03e+05	4.20e+02	1.4e+03
17	OCDD	9.23e+05	5.52e+02	1.7e+03	1.07e+06	8.56e+02	1.3e+03
18	13C-2,3,7,8-TCDF	8.82e+06	4.03e+03	2.2e+03	1.16e+07	3.61e+03	3.2e+03
19	13C-1,2,3,7,8-PeCDF	1.31e+07	4.48e+02	2.9e+04	8.42e+06	1.12e+03	7.5e+03
20	13C-1,2,3,4,7,8-HxCDF	1.40e+07	9.44e+02	1.5e+04	2.73e+07	2.87e+03	9.5e+03
21	13C-1,2,3,4,6,7,8-HpCDF	8.44e+06	9.04e+03	9.3e+02	1.91e+07	4.75e+03	4.0e+03
22	13C-2,3,7,8-TCDD	8.31e+06	5.35e+03	1.6e+03	1.09e+07	1.16e+03	9.3e+03
23	13C-1,2,3,7,8-PeCDD	1.14e+07	2.12e+03	5.4e+03	7.36e+06	1.53e+03	4.8e+03
24	13C-1,2,3,6,7,8-HxCDD	2.23e+07	8.76e+02	2.5e+04	1.81e+07	1.71e+03	1.1e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.57e+07	2.68e+03	5.9e+03	1.57e+07	1.00e+03	1.6e+04
26	13C-OCDD	2.19e+07	4.64e+02	4.7e+04	2.45e+07	6.24e+02	3.9e+04
27	13C-1,2,3,4-TCDD	7.80e+06	5.35e+03	1.5e+03	9.87e+06	1.16e+03	8.5e+03
28	13C-1,2,3,7,8,9-HxCDD	2.24e+07	8.76e+02	2.6e+04	1.81e+07	1.71e+03	1.1e+04
29	37Cl-2,3,7,8-TCDD	8.71e+05	9.04e+02	9.6e+02			

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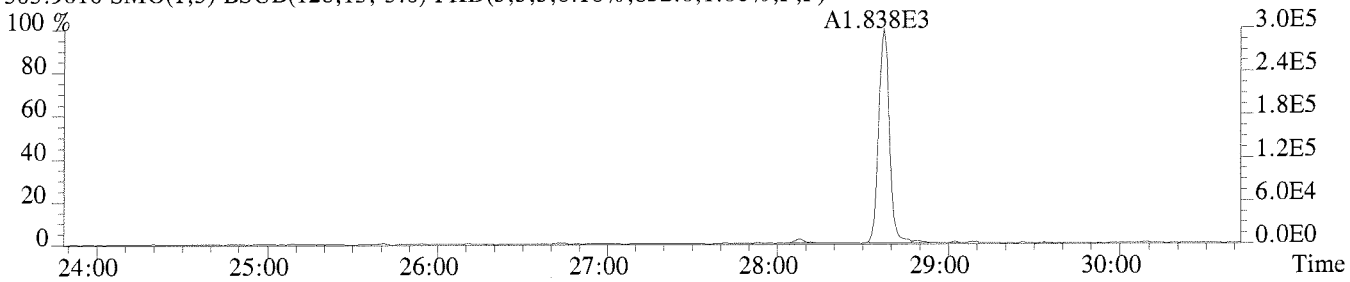
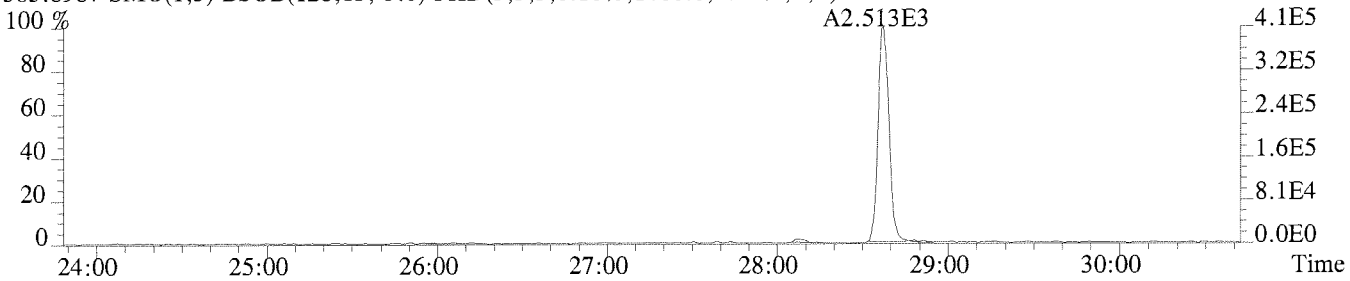
File:P200005 #1-575 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

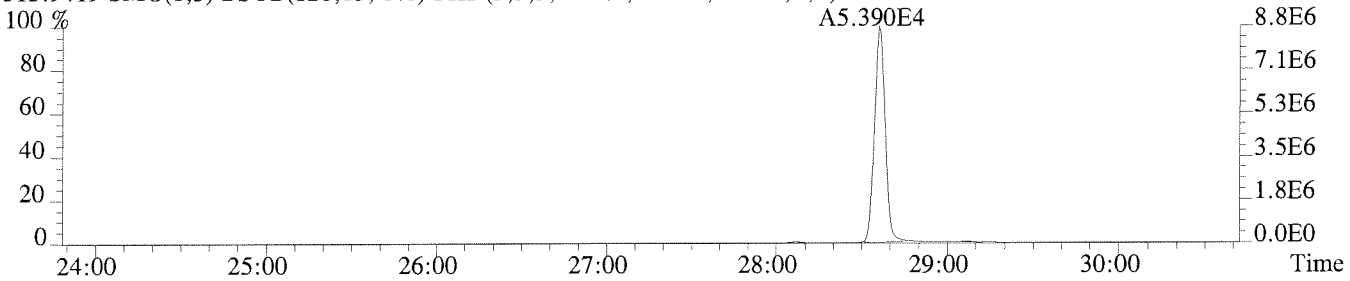
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,852.0,1.00%,F,F)



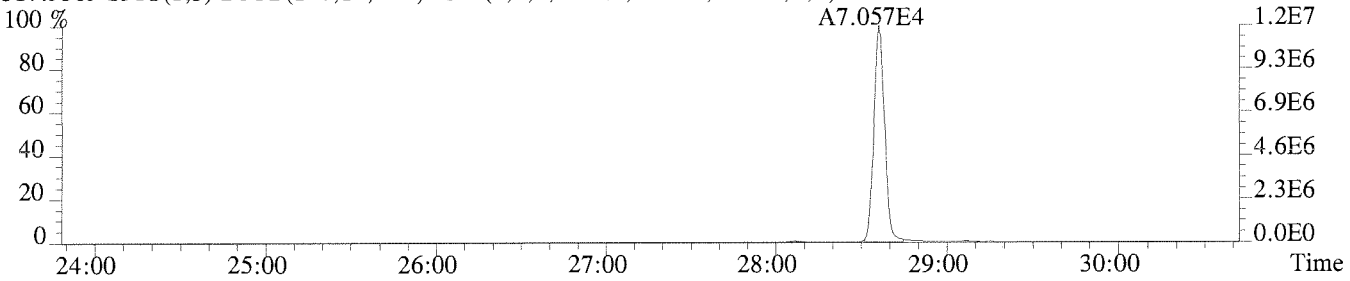
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1680.0,1.00%,F,F)



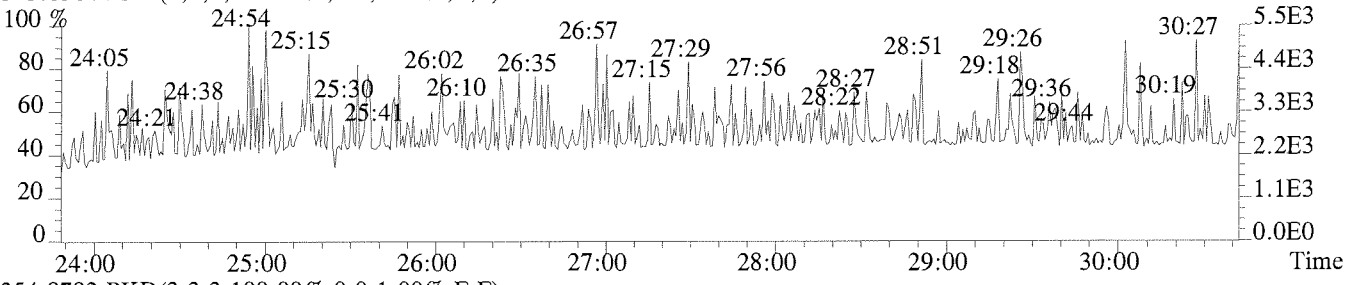
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,4032.0,1.00%,F,F)



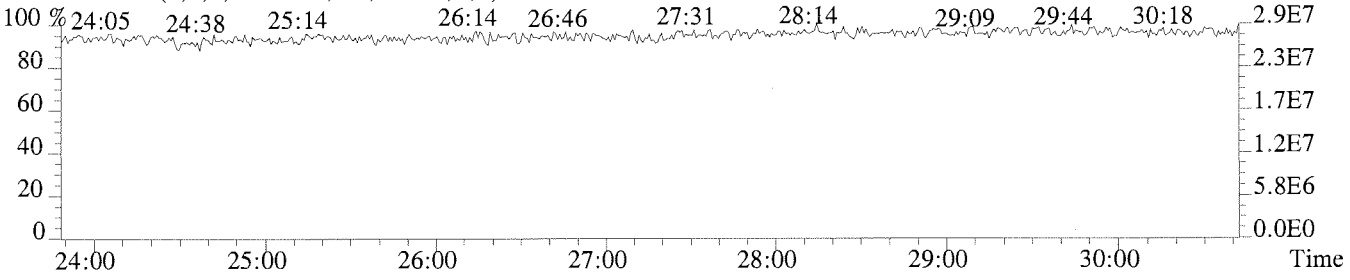
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3612.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

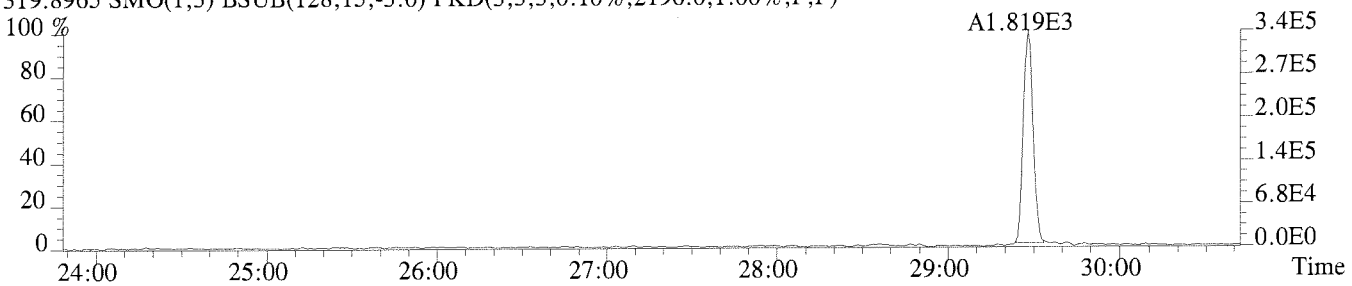


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

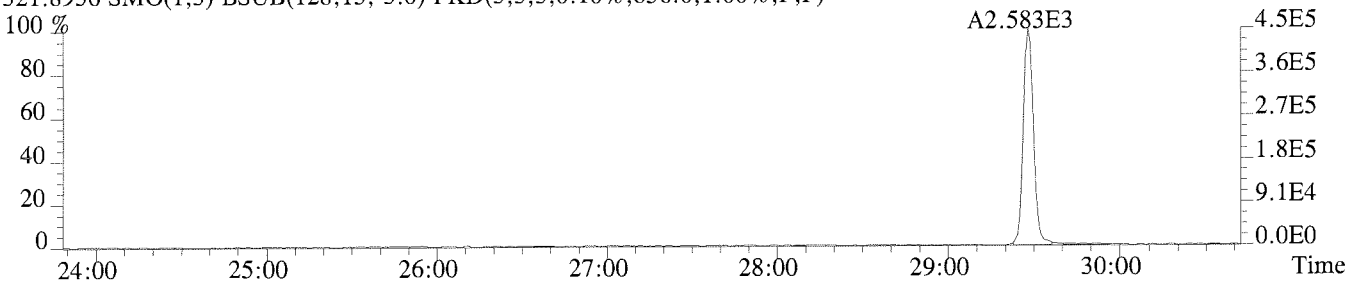


File:P200005 #1-575 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

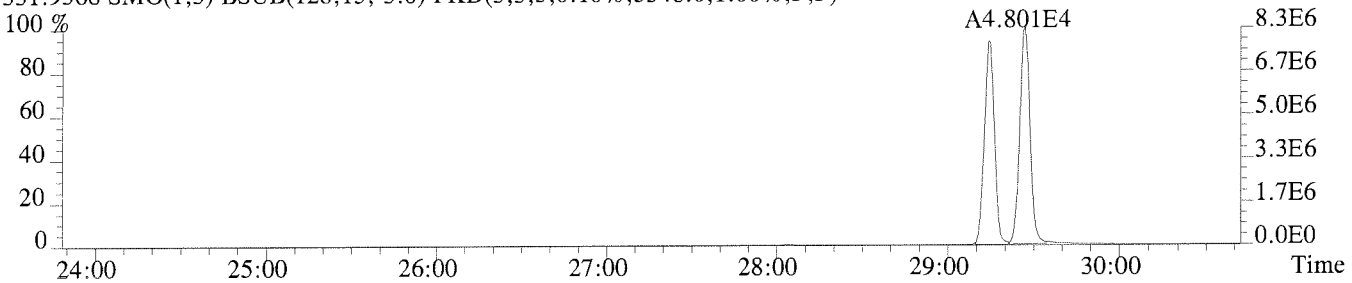
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2196.0,1.00%,F,F)



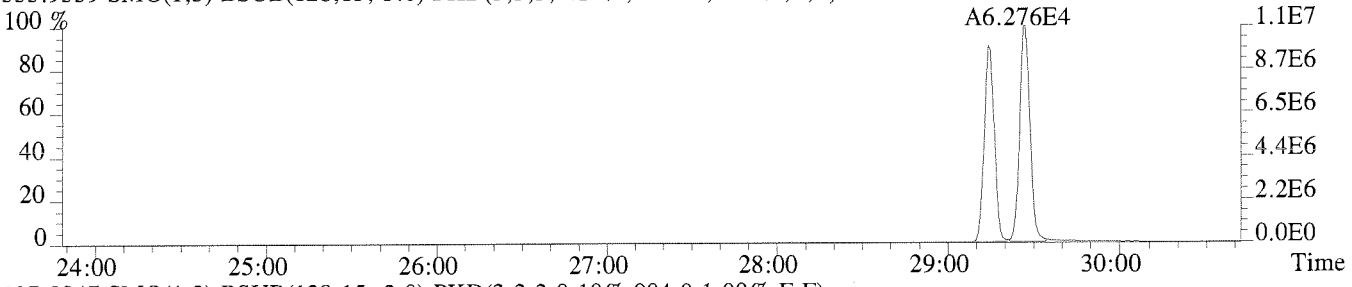
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,856.0,1.00%,F,F)



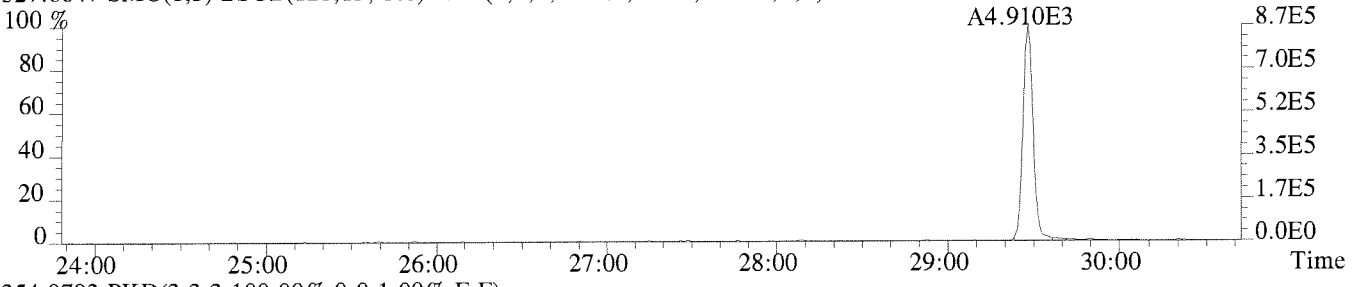
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5348.0,1.00%,F,F)



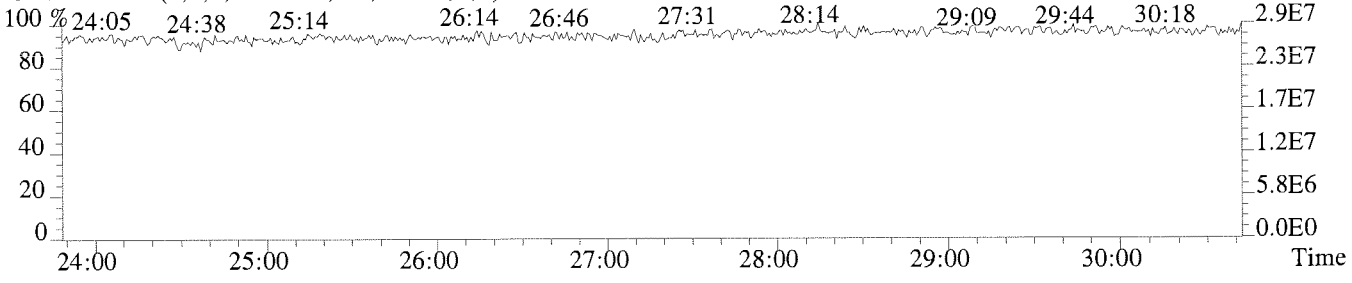
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1164.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,904.0,1.00%,F,F)

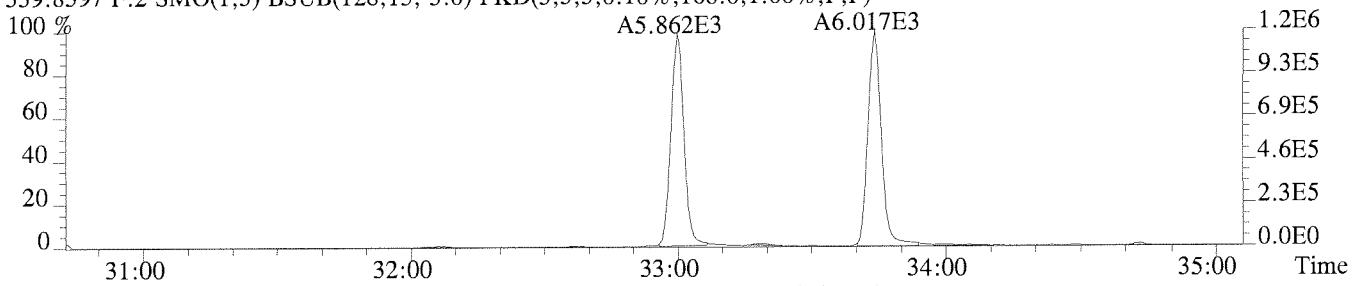


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

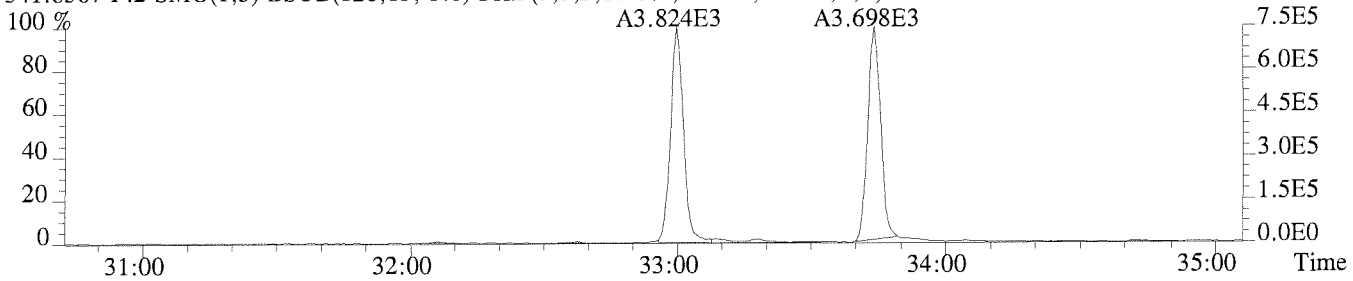


File:P200005 #1-399 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

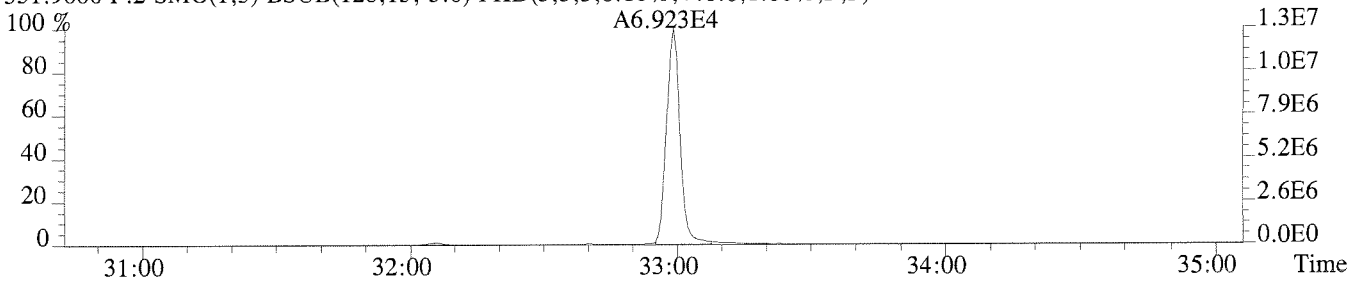
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,168.0,1.00%,F,F)



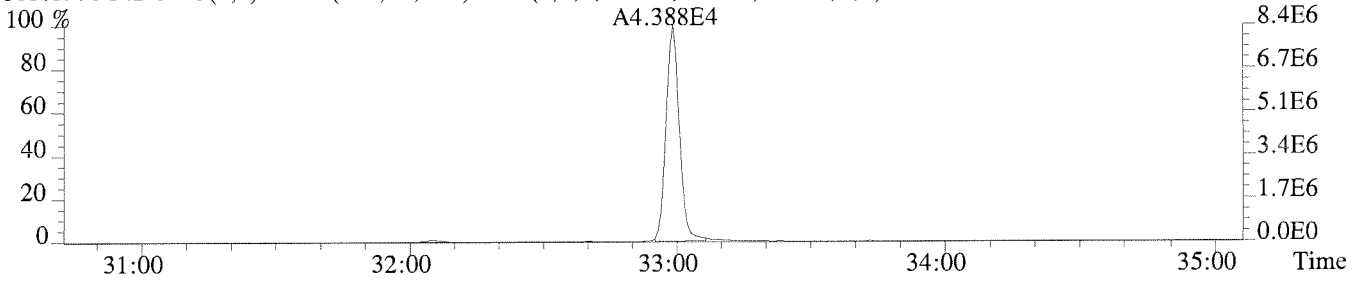
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1380.0,1.00%,F,F)



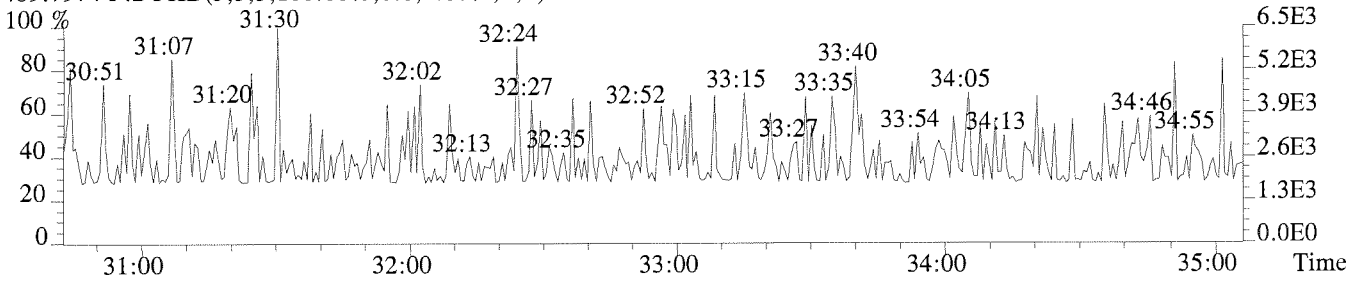
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,448.0,1.00%,F,F)



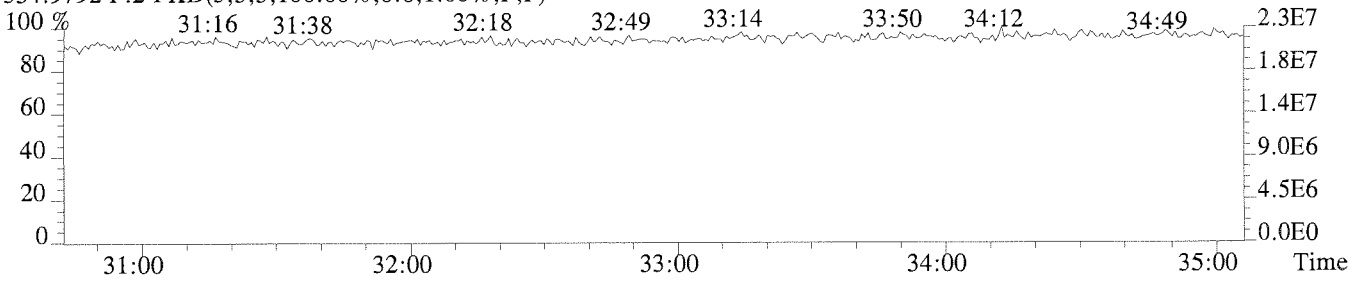
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1124.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

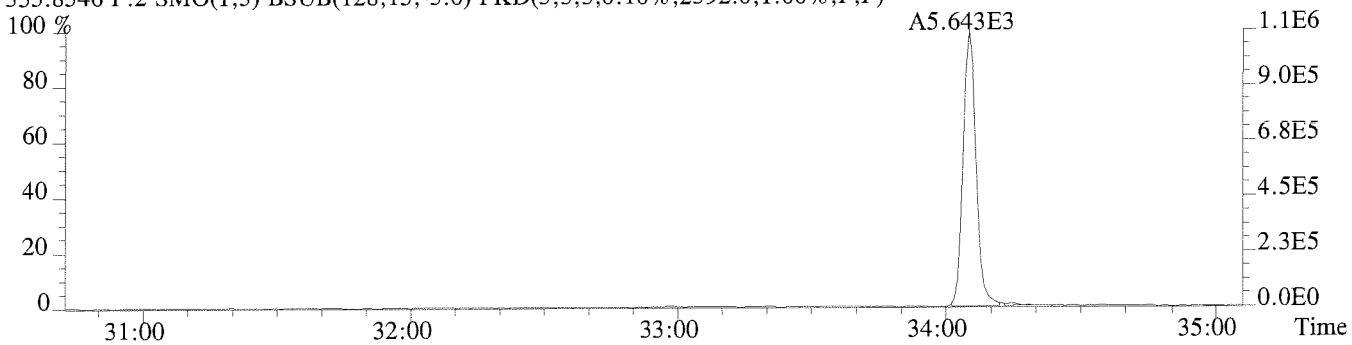


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

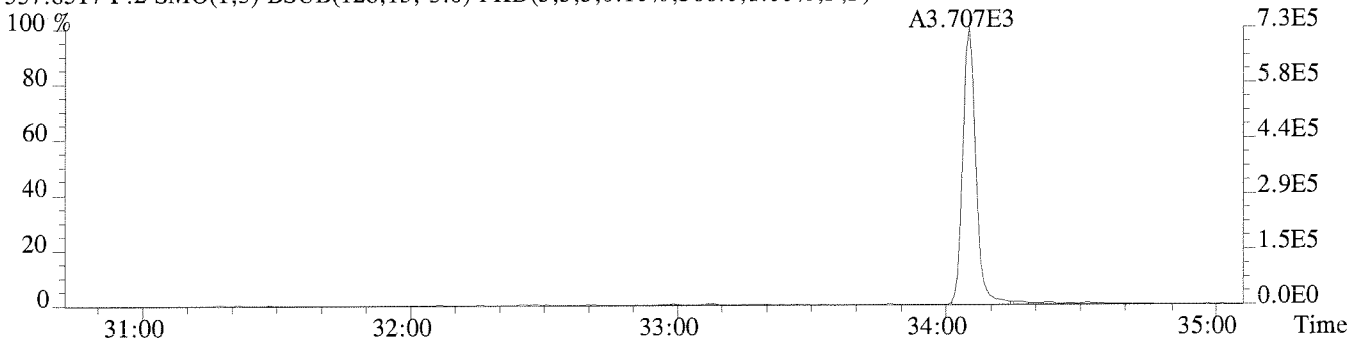


File:P200005 #1-399 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

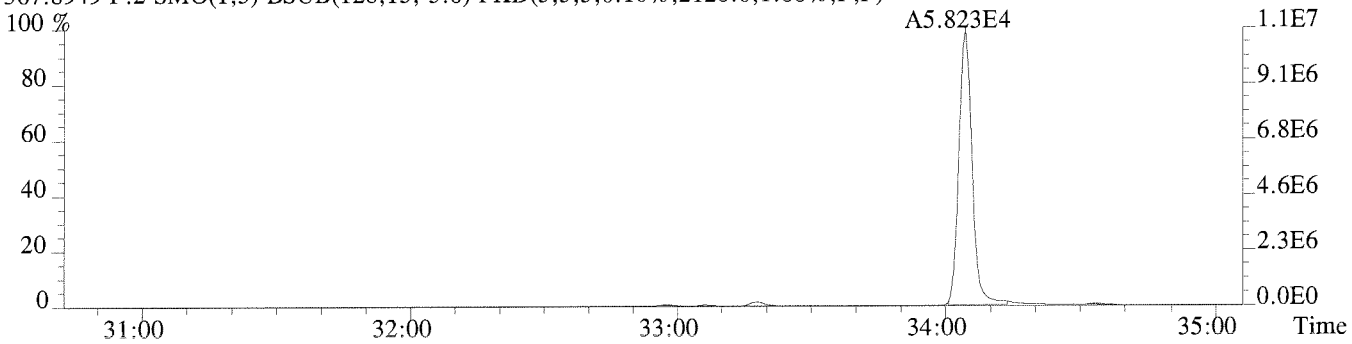
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2392.0,1.00%,F,F)



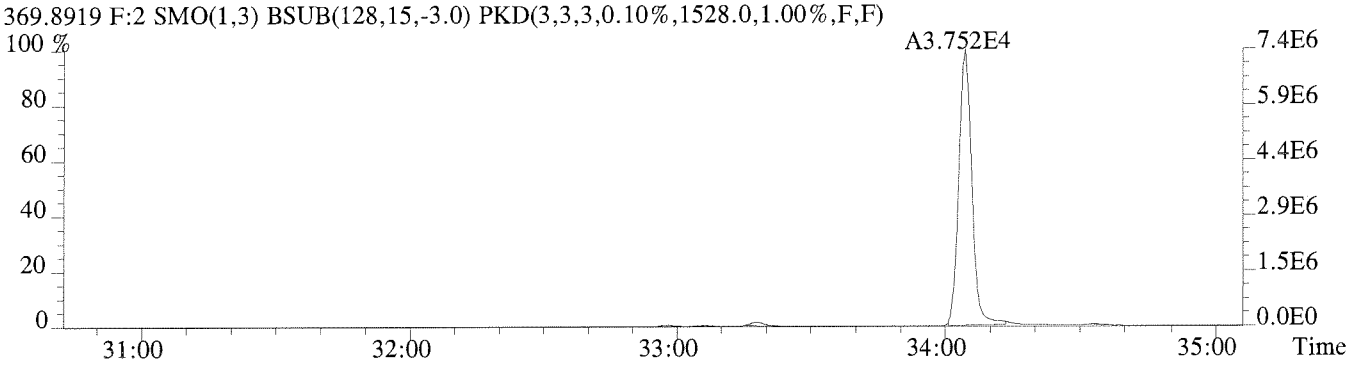
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,560.0,1.00%,F,F)



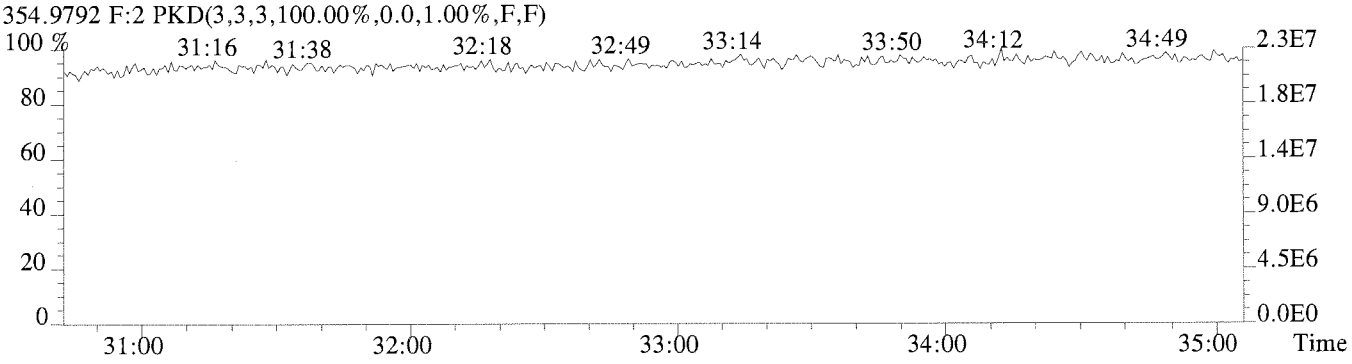
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2120.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1528.0,1.00%,F,F)

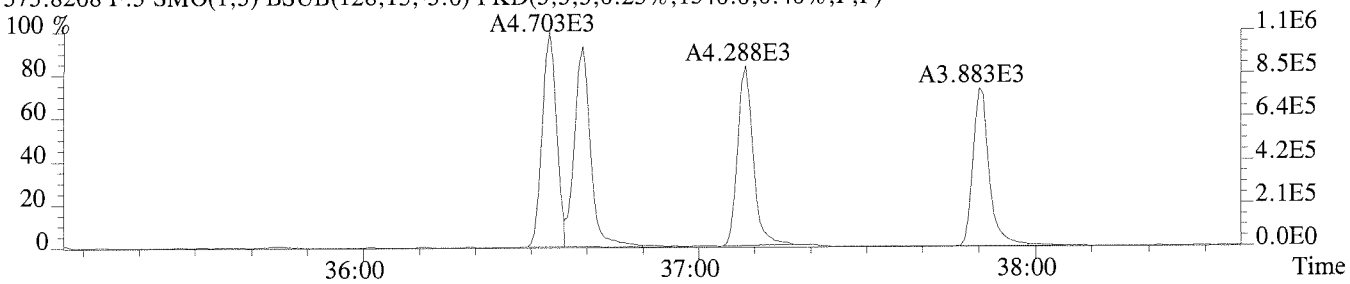


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

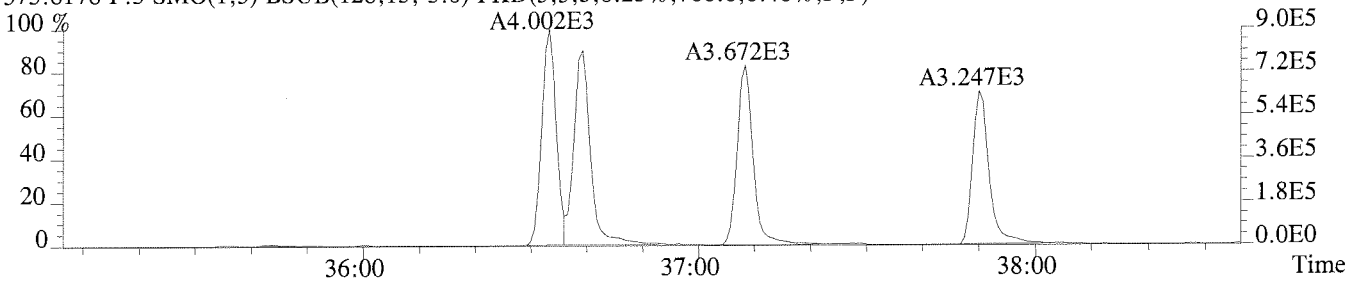


File:P200005 #1-318 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

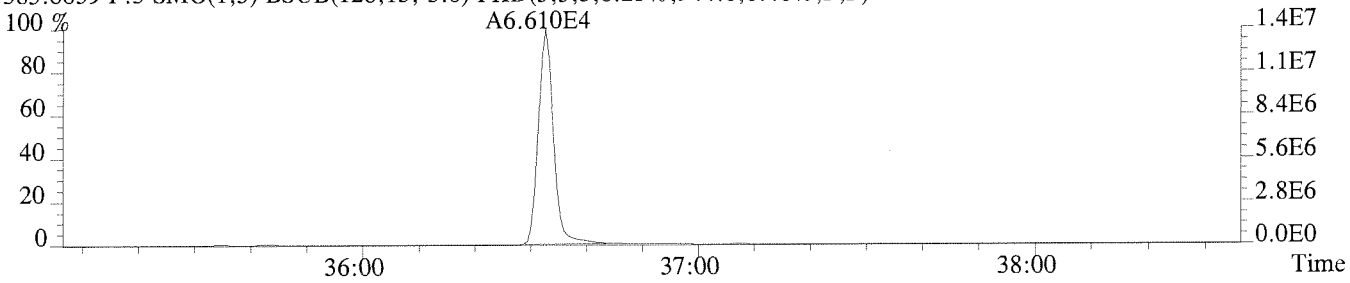
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1540.0,0.40%,F,F)



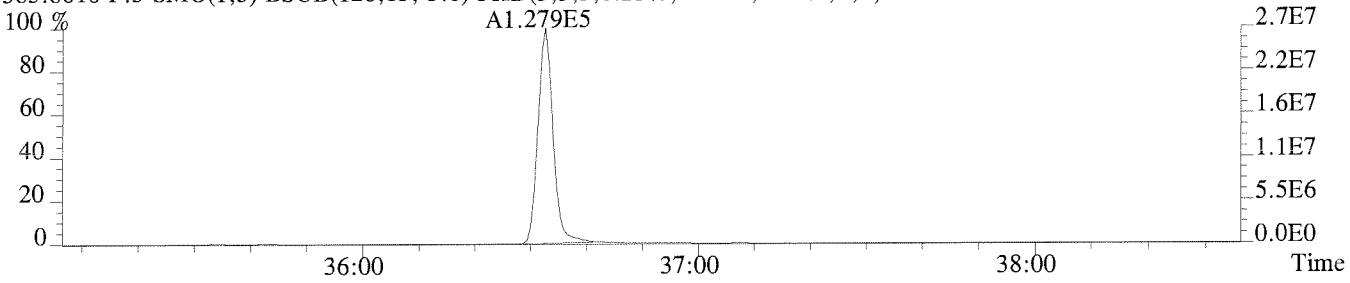
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,708.0,0.40%,F,F)



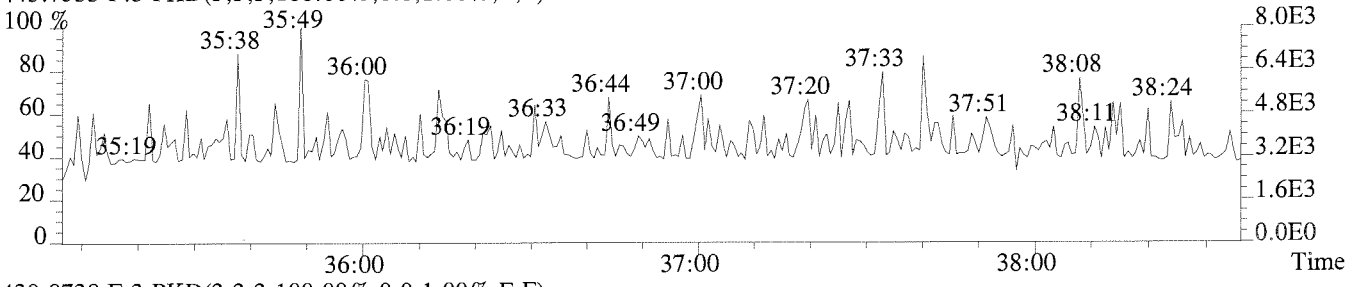
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,944.0,0.40%,F,F)



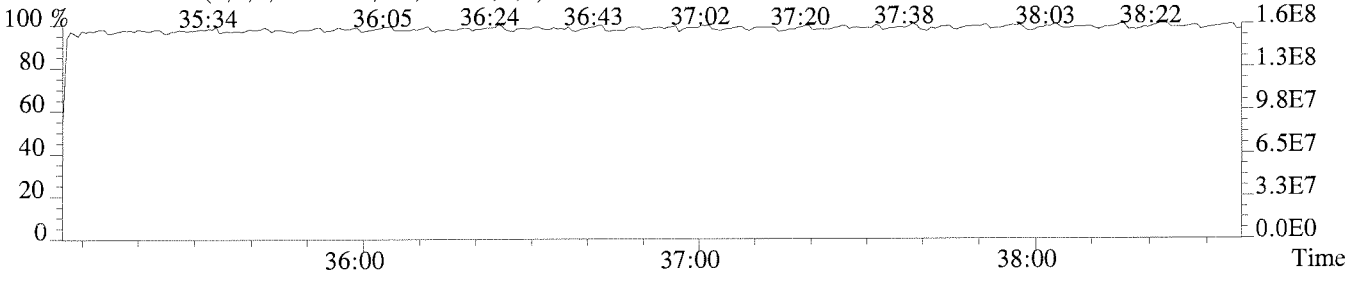
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2872.0,0.40%,F,F)



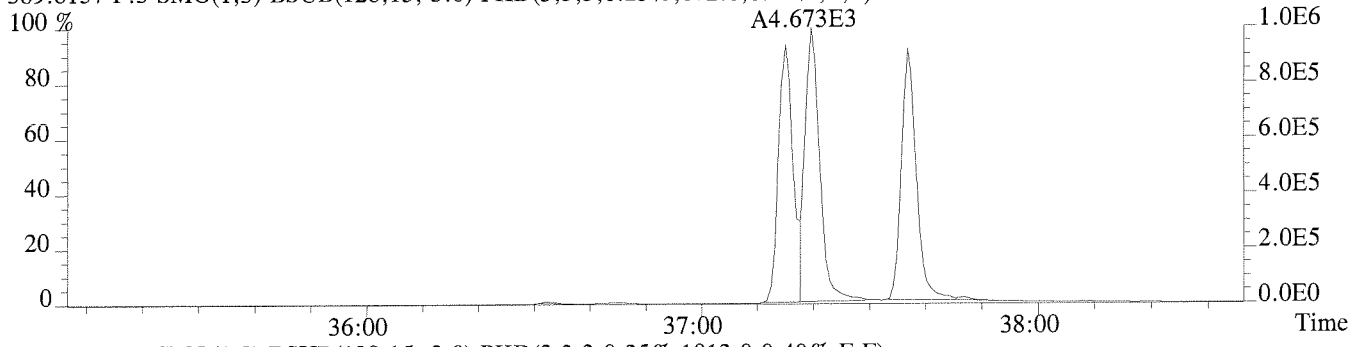
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



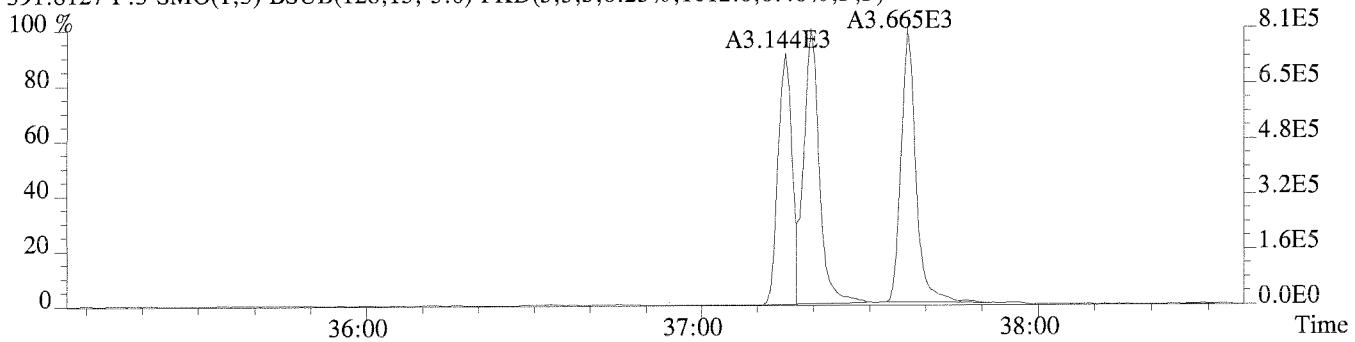
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



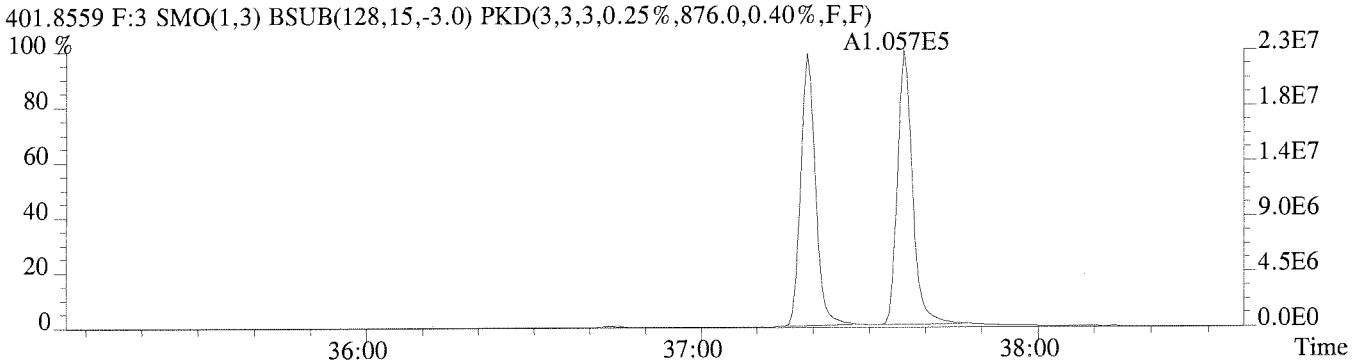
File:P200005 #1-318 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,672.0,0.40%,F,F)



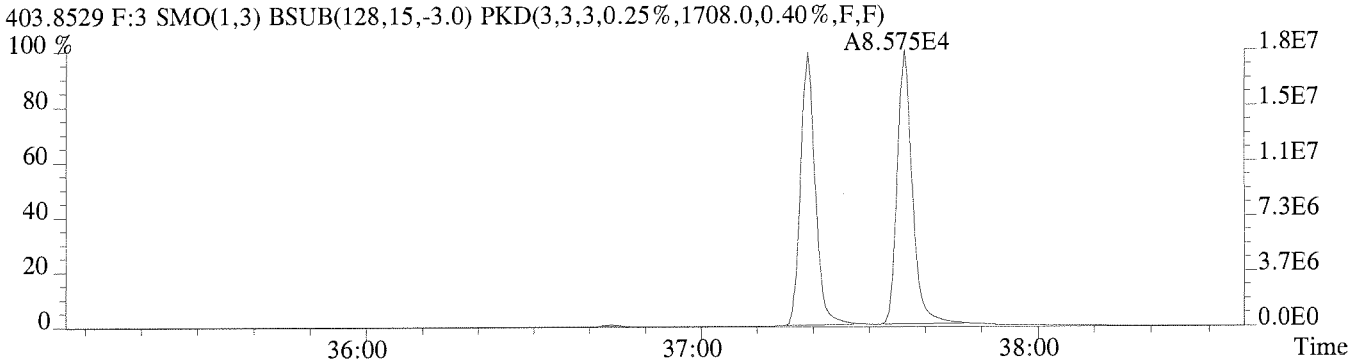
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1012.0,0.40%,F,F)



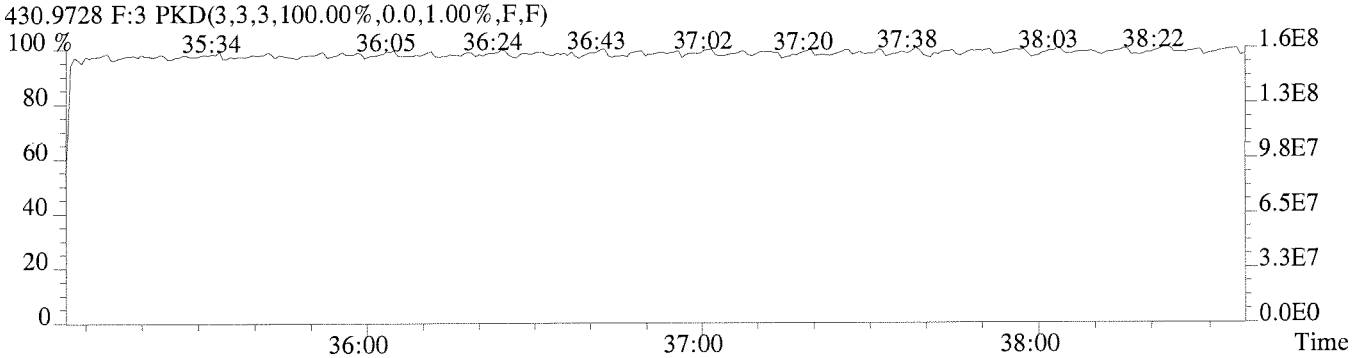
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,876.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1708.0,0.40%,F,F)

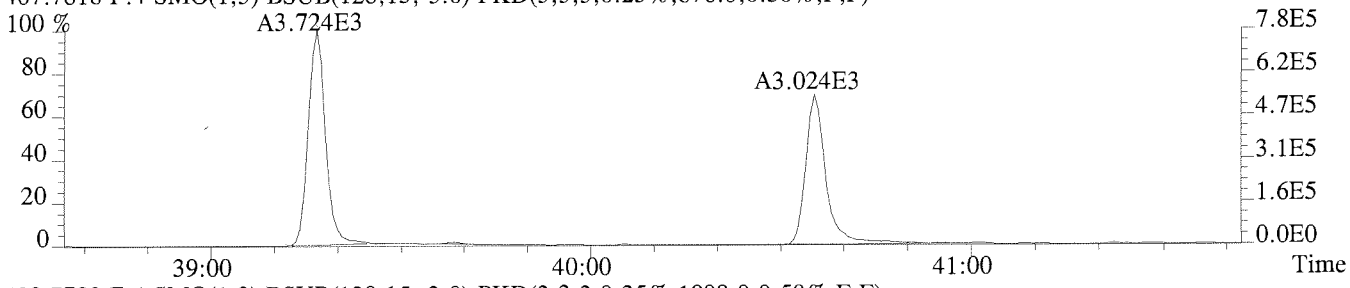


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

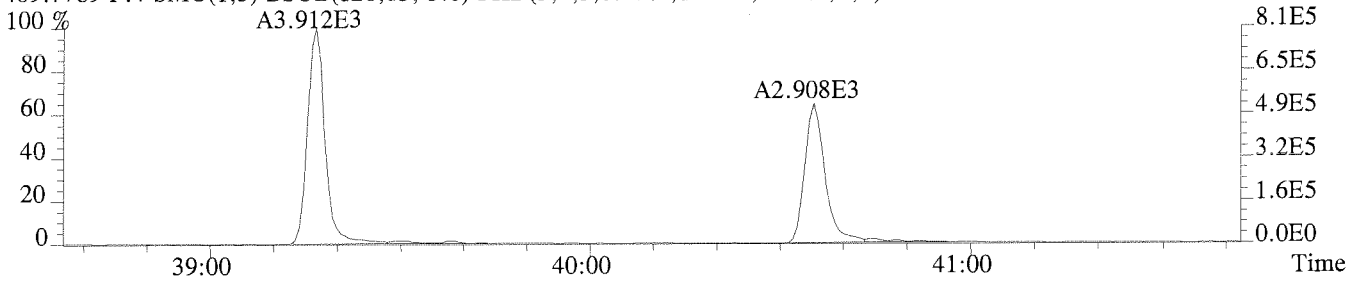


File:P200005 #1-281 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

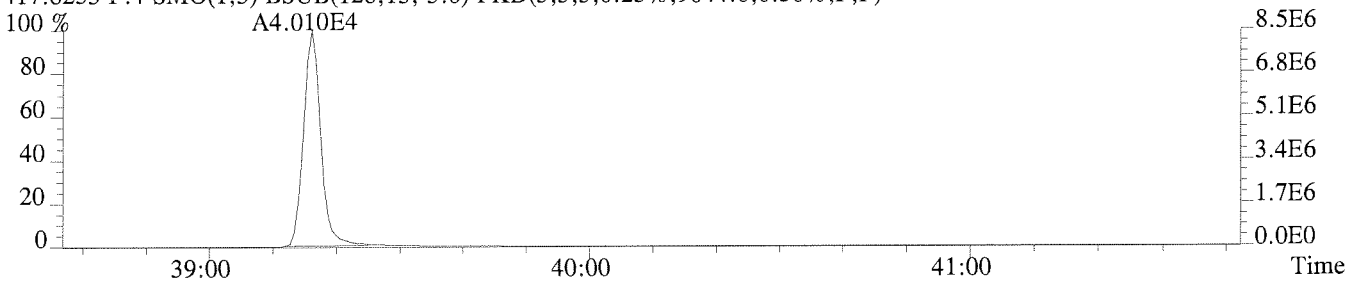
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,876.0,0.50%,F,F)



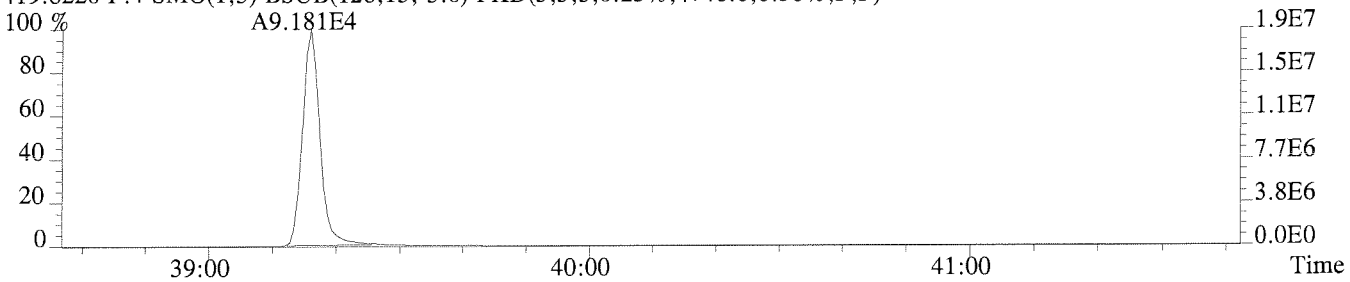
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1908.0,0.50%,F,F)



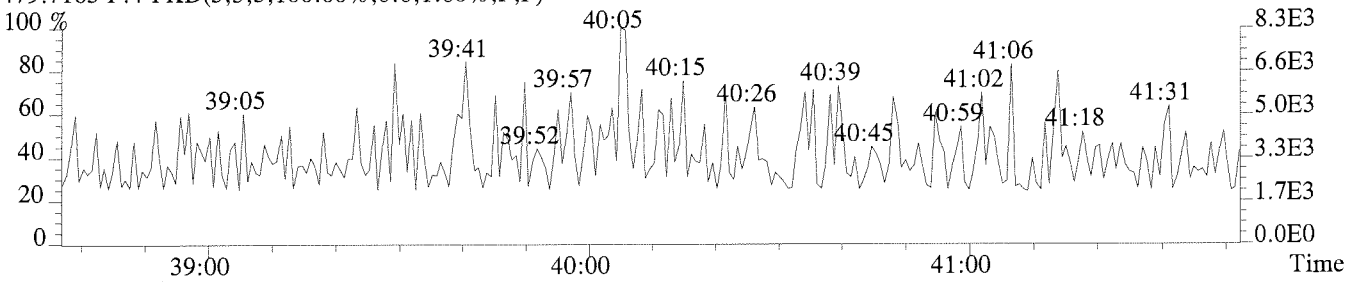
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,9044.0,0.50%,F,F)



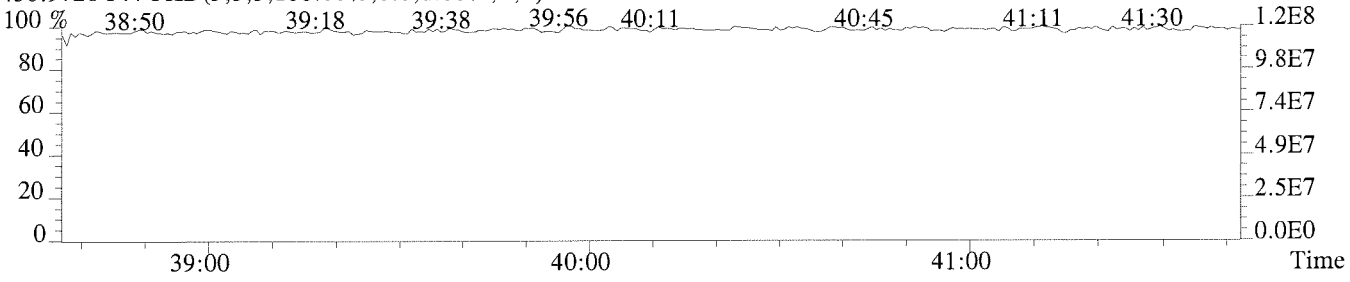
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4748.0,0.50%,F,F)



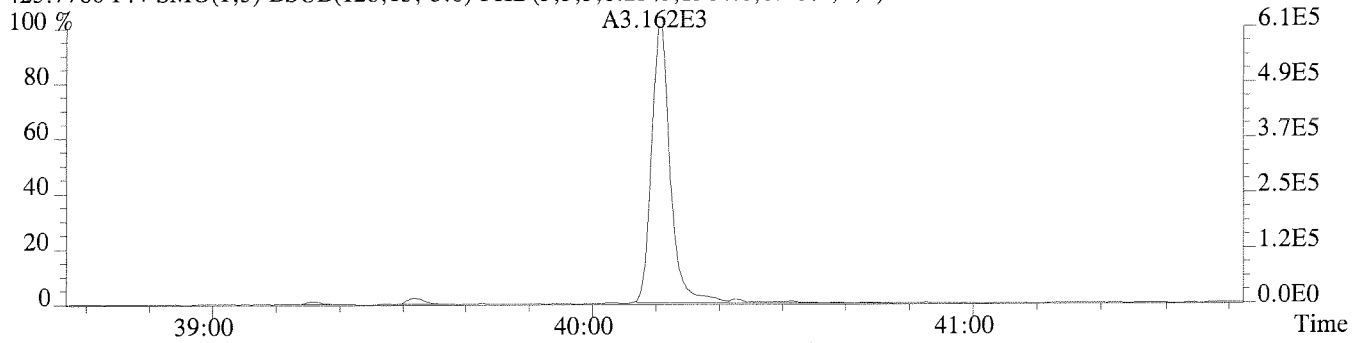
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



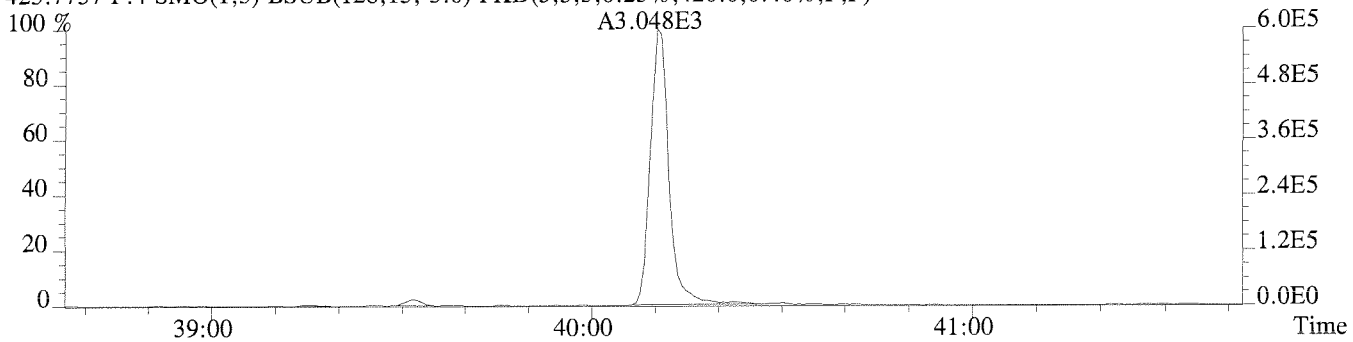
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



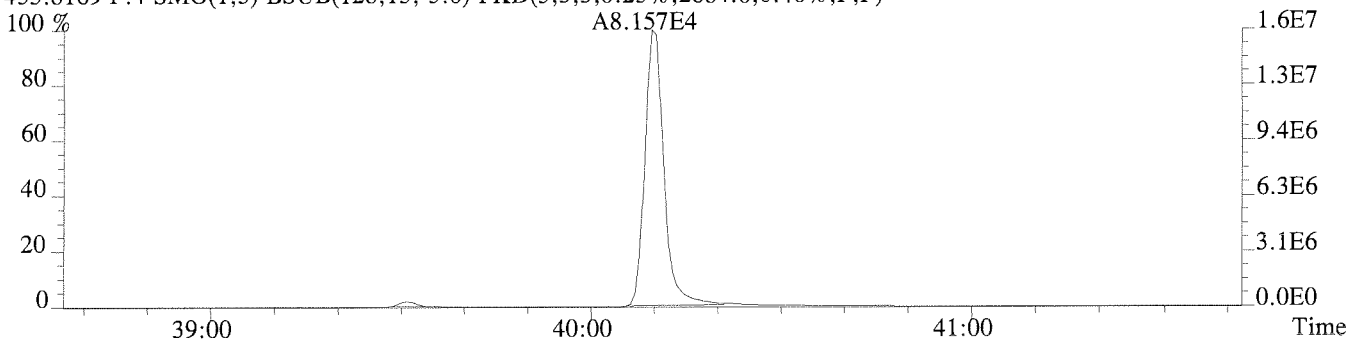
File:P200005 #1-281 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1264.0,0.40%,F,F)



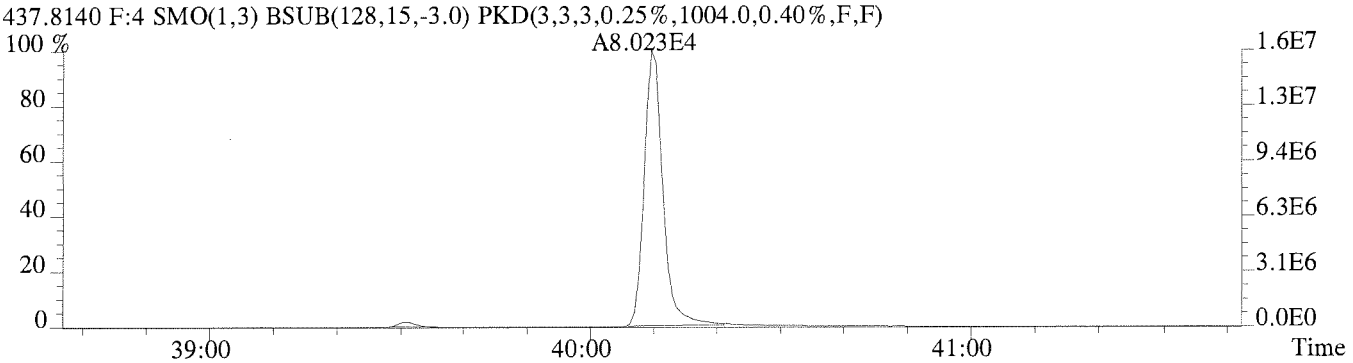
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,420.0,0.40%,F,F)



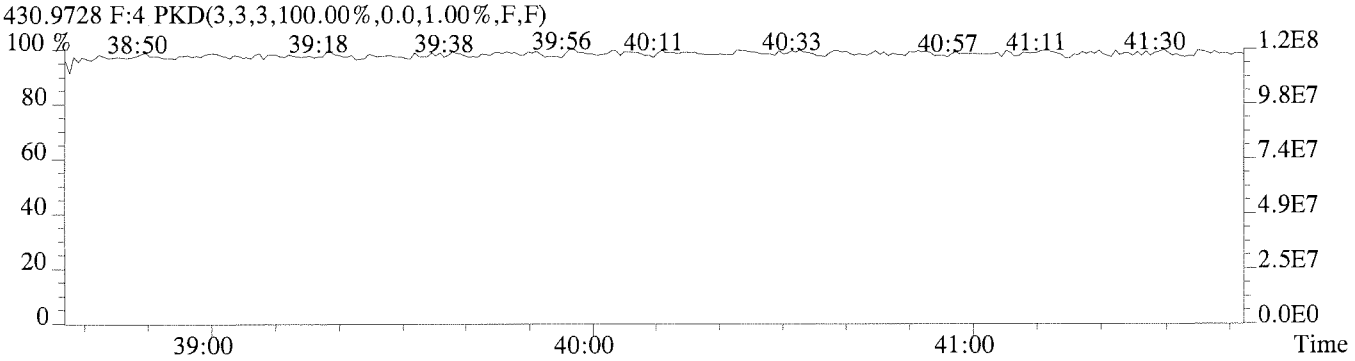
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2684.0,0.40%,F,F)



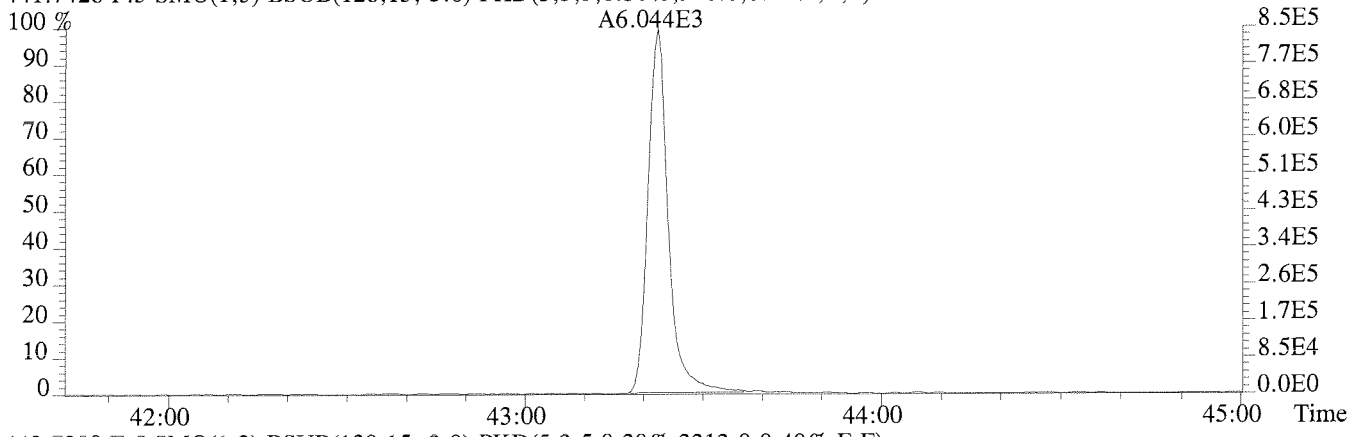
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1004.0,0.40%,F,F)



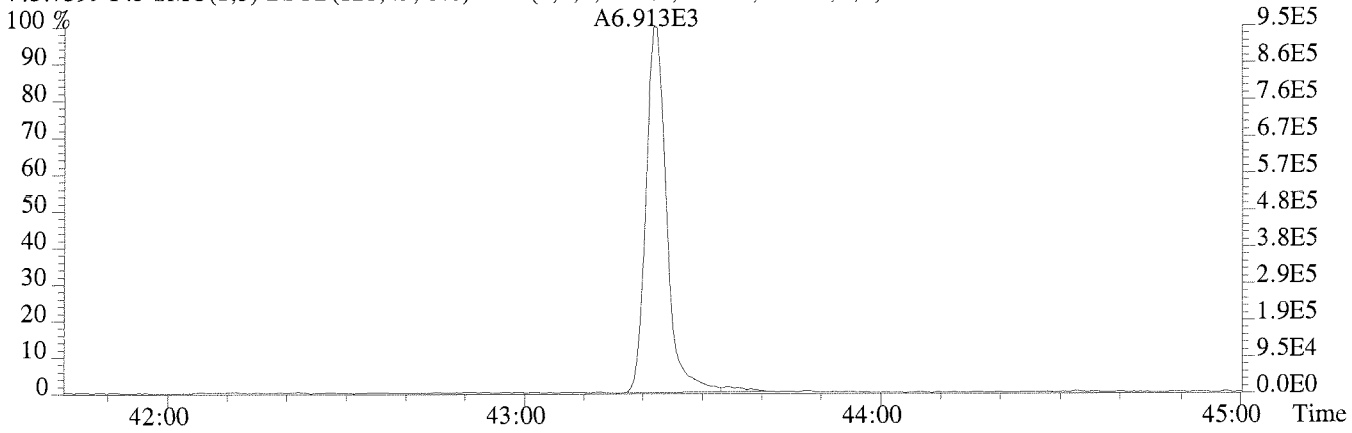
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



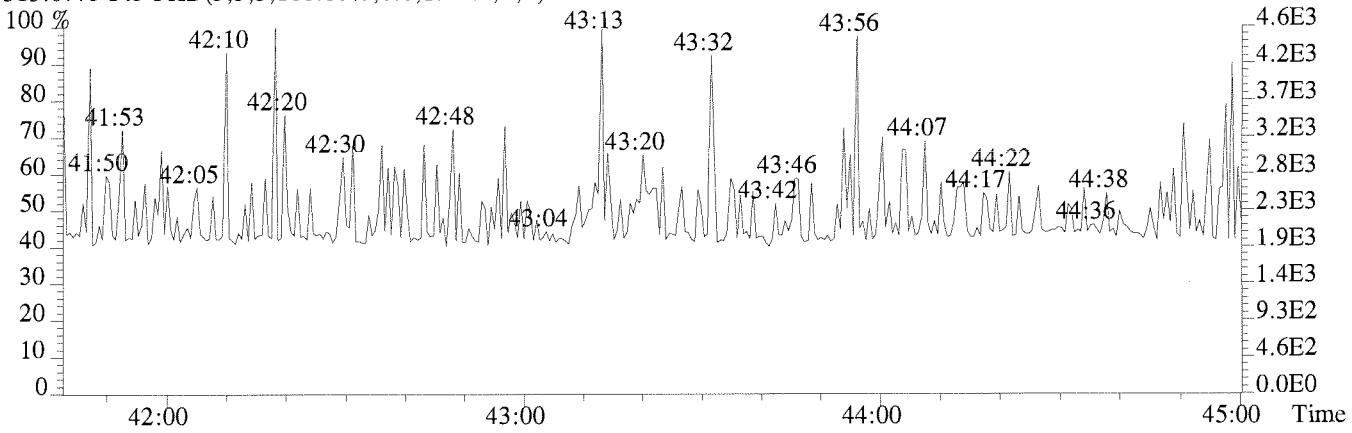
File:P200005 #1-364 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,940.0,0.40%,F,F)



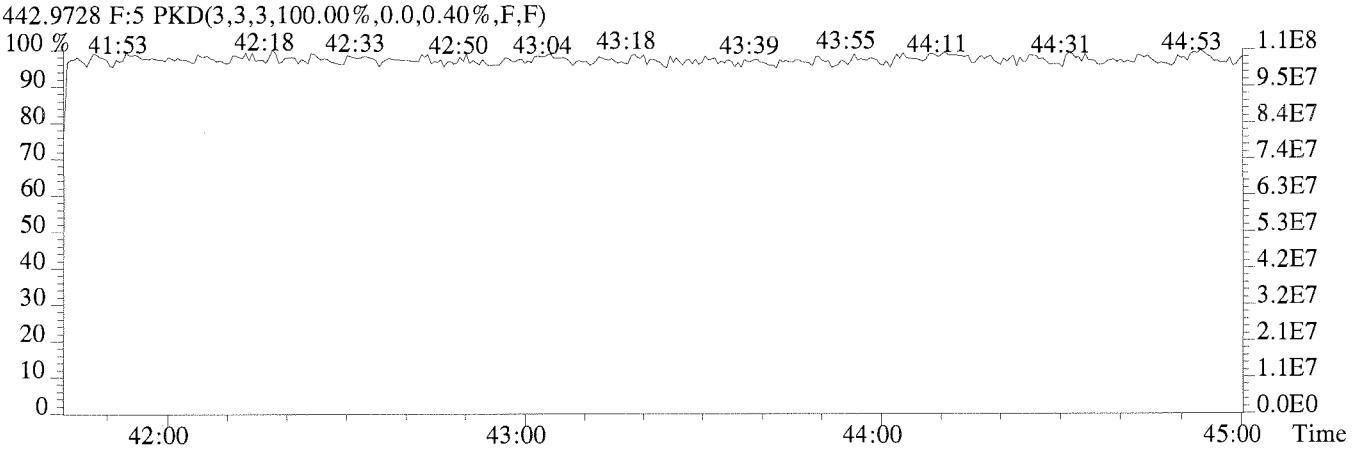
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,3312.0,0.40%,F,F)



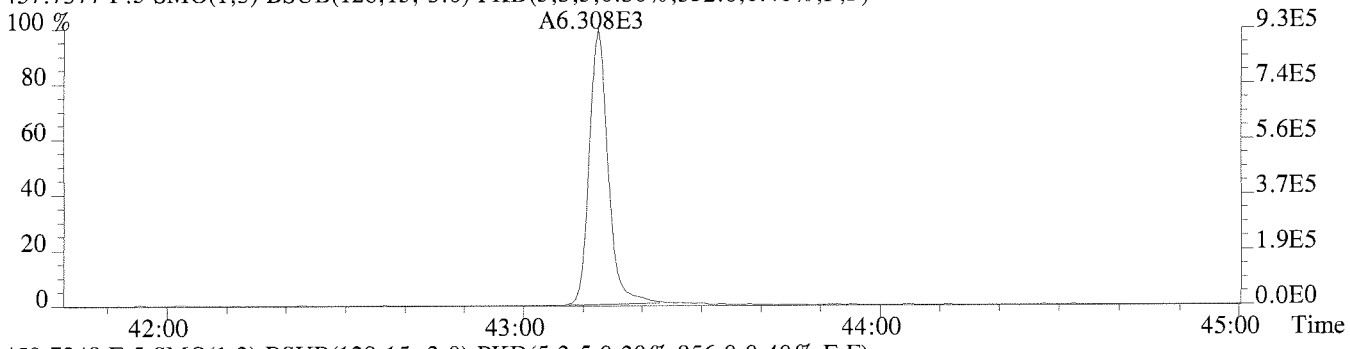
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



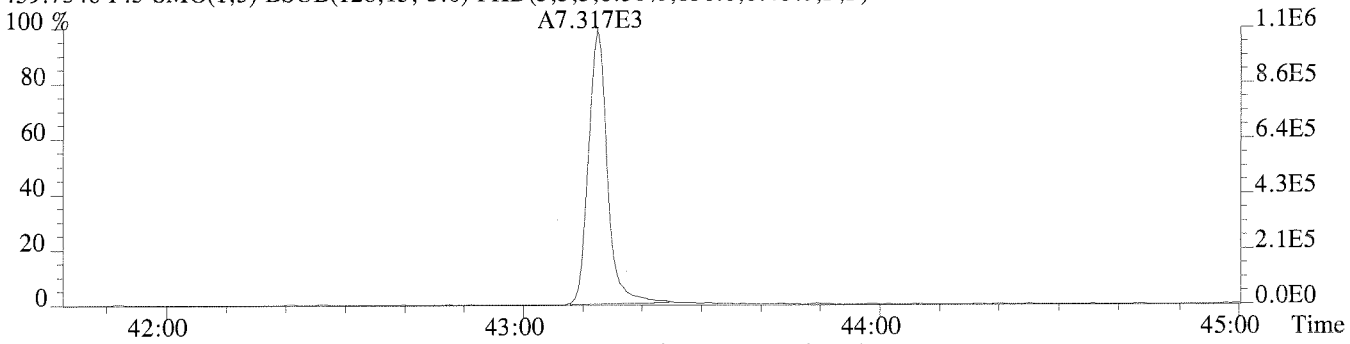
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



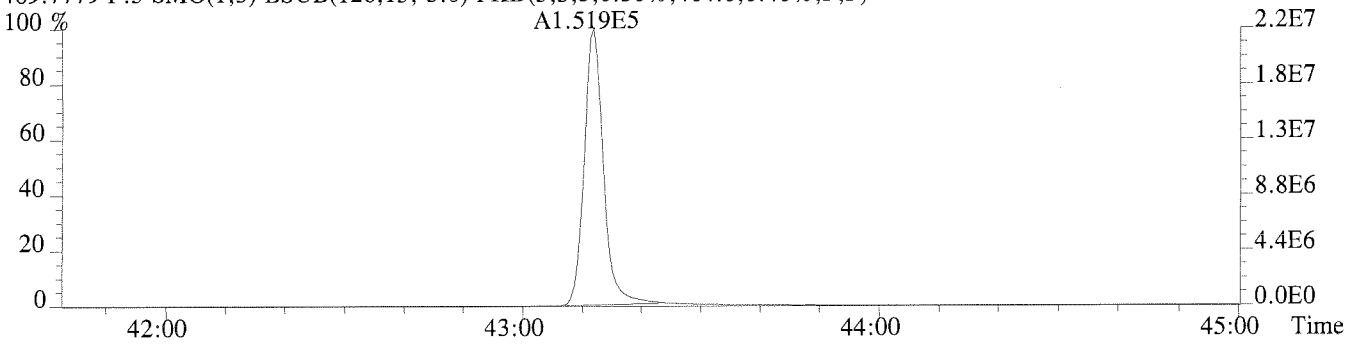
File:P200005 #1-364 Acq:18-JUL-2008 15:25:44 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,552.0,0.40%,F,F)



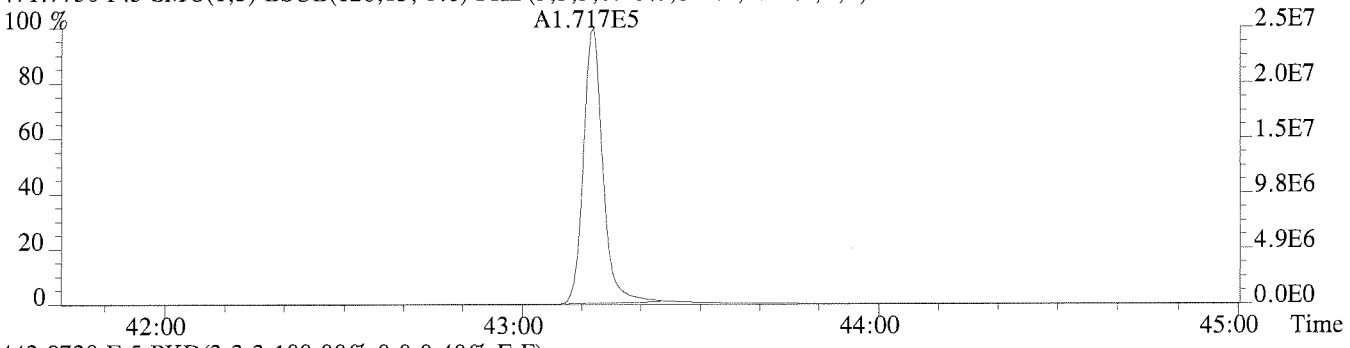
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,856.0,0.40%,F,F)



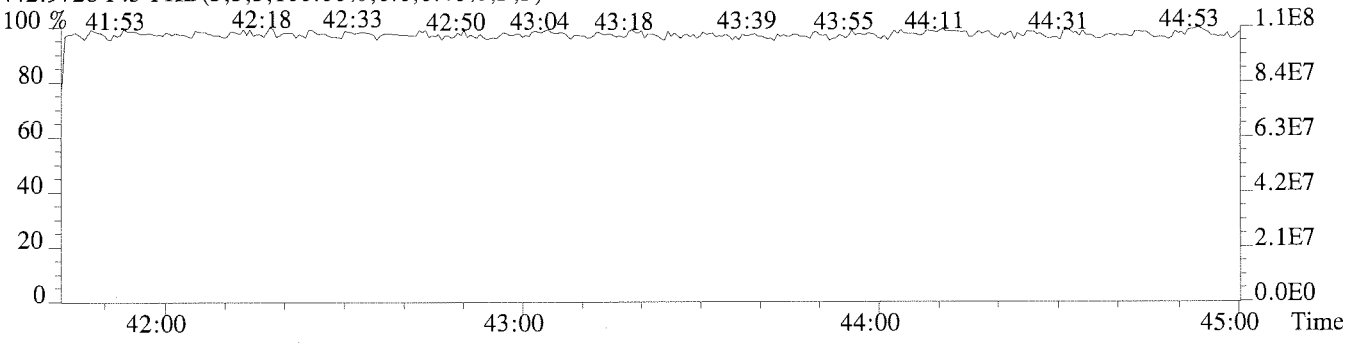
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,464.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,624.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC3

Run #3 Filename P200004 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 14:23:04
Processed: 30-JUL-08 09:37:37 Sample ID: ICAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	7.585e+03	1.030e+04	0.74	yes	no	0.72
2	Unk	1,2,3,7,8-PeCDF	32:59	2.415e+04	1.592e+04	1.52	yes	no	0.71
3	Unk	2,3,4,7,8-PeCDF	33:43	2.499e+04	1.617e+04	1.55	yes	no	0.73
4	Unk	1,2,3,4,7,8-HxCDF	36:33	1.894e+04	1.587e+04	1.19	yes	no	0.93
5	Unk	1,2,3,6,7,8-HxCDF	36:39	2.065e+04	1.704e+04	1.21	yes	no	0.96
6	Unk	2,3,4,6,7,8-HxCDF	37:08	1.790e+04	1.474e+04	1.21	yes	no	0.86
7	Unk	1,2,3,7,8,9-HxCDF	37:49	1.697e+04	1.414e+04	1.20	yes	no	0.79
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	1.591e+04	1.554e+04	1.02	yes	no	1.19
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	1.215e+04	1.254e+04	0.97	yes	no	0.94
10	Unk	OCDF	43:22	2.593e+04	2.925e+04	0.89	yes	no	0.83
11	Unk	2,3,7,8-TCDD	29:27	8.122e+03	1.036e+04	0.78	yes	no	0.84
12	Unk	1,2,3,7,8-PeCDD	34:04	2.267e+04	1.481e+04	1.53	yes	no	0.79
13	Unk	1,2,3,4,7,8-HxCDD	37:14	1.685e+04	1.390e+04	1.21	yes	no	0.81
14	Unk	1,2,3,6,7,8-HxCDD	37:19	1.921e+04	1.482e+04	1.30	yes	no	0.92
15	Unk	1,2,3,7,8,9-HxCDD	37:36	1.849e+04	1.506e+04	1.23	yes	no	0.89
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	1.284e+04	1.292e+04	0.99	yes	no	0.79
17	Unk	OCDD	43:12	2.776e+04	3.093e+04	0.90	yes	no	0.88
18	IS	13C-2,3,7,8-TCDF	28:35	5.160e+04	6.776e+04	0.76	yes	no	1.25
19	IS	13C-1,2,3,7,8-PeCDF	32:58	6.631e+04	4.255e+04	1.56	yes	no	1.23
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	6.167e+04	1.218e+05	0.51	yes	no	0.98
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	3.810e+04	9.078e+04	0.42	yes	no	0.69
22	IS	13C-2,3,7,8-TCDD	29:26	4.507e+04	5.861e+04	0.77	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:04	5.726e+04	3.661e+04	1.56	yes	no	1.05
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	1.067e+05	8.601e+04	1.24	yes	no	0.97
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:09	8.229e+04	8.060e+04	1.02	yes	no	0.85
26	IS	13C-OCDD	43:11	1.552e+05	1.749e+05	0.89	yes	no	0.87
27	RS/RT	13C-1,2,3,4-TCDD	29:14	4.284e+04	5.499e+04	0.78	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:35	1.122e+05	9.066e+04	1.24	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:27	1.997e+04					0.99

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC3

Run #3 Filename P200004 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 14:23:04

Processed: 30-JUL-08 09:37:37 LAB. ID: ICAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.22e+06	3.56e+02	3.4e+03	1.67e+06	2.10e+03	8.0e+02
2	1,2,3,7,8-PeCDF	4.61e+06	4.00e+02	1.2e+04	3.04e+06	1.19e+03	2.5e+03
3	2,3,4,7,8-PeCDF	4.80e+06	4.00e+02	1.2e+04	3.08e+06	1.19e+03	2.6e+03
4	1,2,3,4,7,8-HxCDF	4.24e+06	1.27e+03	3.3e+03	3.49e+06	6.48e+02	5.4e+03
5	1,2,3,6,7,8-HxCDF	4.15e+06	1.27e+03	3.3e+03	3.39e+06	6.48e+02	5.2e+03
6	2,3,4,6,7,8-HxCDF	3.72e+06	1.27e+03	2.9e+03	3.10e+06	6.48e+02	4.8e+03
7	1,2,3,7,8,9-HxCDF	3.42e+06	1.27e+03	2.7e+03	2.83e+06	6.48e+02	4.4e+03
8	1,2,3,4,6,7,8-HpCDF	3.29e+06	2.98e+03	1.1e+03	3.31e+06	1.34e+03	2.5e+03
9	1,2,3,4,7,8,9-HpCDF	2.36e+06	2.98e+03	7.9e+02	2.32e+06	1.34e+03	1.7e+03
10	OCDF	3.65e+06	1.00e+03	3.6e+03	4.09e+06	2.45e+03	1.7e+03
11	2,3,7,8-TCDD	1.40e+06	1.94e+03	7.2e+02	1.78e+06	7.60e+02	2.3e+03
12	1,2,3,7,8-PeCDD	4.53e+06	1.93e+03	2.3e+03	3.00e+06	4.16e+02	7.2e+03
13	1,2,3,4,7,8-HxCDD	3.65e+06	5.16e+02	7.1e+03	3.01e+06	1.80e+03	1.7e+03
14	1,2,3,6,7,8-HxCDD	4.10e+06	5.16e+02	8.0e+03	3.18e+06	1.80e+03	1.8e+03
15	1,2,3,7,8,9-HxCDD	3.94e+06	5.16e+02	7.6e+03	3.22e+06	1.80e+03	1.8e+03
16	1,2,3,4,6,7,8-HpCDD	2.49e+06	1.44e+03	1.7e+03	2.51e+06	6.92e+02	3.6e+03
17	OCDD	3.99e+06	5.52e+02	7.2e+03	4.47e+06	4.72e+02	9.5e+03
18	13C-2,3,7,8-TCDF	8.56e+06	3.42e+03	2.5e+03	1.13e+07	3.39e+03	3.3e+03
19	13C-1,2,3,7,8-PeCDF	1.26e+07	4.44e+02	2.8e+04	8.09e+06	1.10e+03	7.4e+03
20	13C-1,2,3,4,7,8-HxCDF	1.28e+07	6.12e+02	2.1e+04	2.56e+07	1.47e+03	1.7e+04
21	13C-1,2,3,4,6,7,8-HpCDF	7.90e+06	3.44e+03	2.3e+03	1.88e+07	8.06e+03	2.3e+03
22	13C-2,3,7,8-TCDD	7.74e+06	5.99e+03	1.3e+03	1.00e+07	1.13e+03	8.9e+03
23	13C-1,2,3,7,8-PeCDD	1.12e+07	1.92e+03	5.8e+03	7.11e+06	1.31e+03	5.4e+03
24	13C-1,2,3,6,7,8-HxCDD	2.28e+07	5.88e+02	3.9e+04	1.87e+07	1.20e+03	1.6e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.57e+07	1.94e+03	8.1e+03	1.57e+07	2.30e+03	6.8e+03
26	13C-OCDD	2.23e+07	4.08e+02	5.5e+04	2.53e+07	4.96e+02	5.1e+04
27	13C-1,2,3,4-TCDD	7.45e+06	5.99e+03	1.2e+03	9.58e+06	1.13e+03	8.5e+03
28	13C-1,2,3,7,8,9-HxCDD	2.37e+07	5.88e+02	4.0e+04	1.90e+07	1.20e+03	1.6e+04
29	37Cl-2,3,7,8-TCDD	3.45e+06	8.68e+02	4.0e+03			

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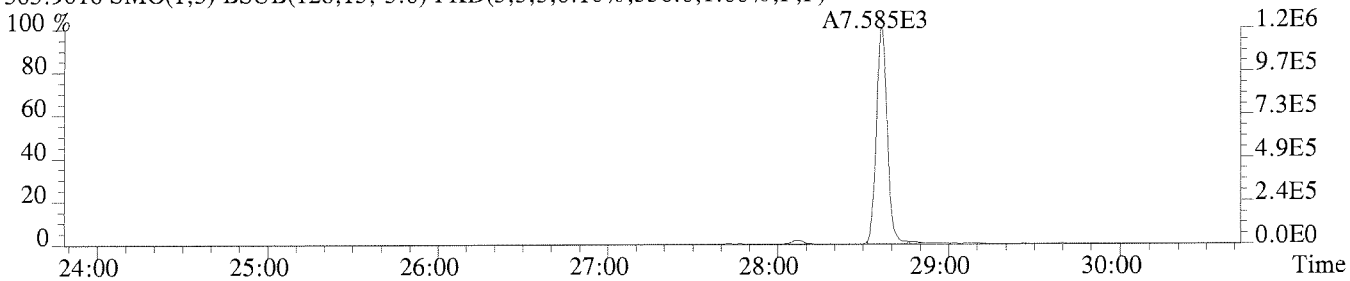
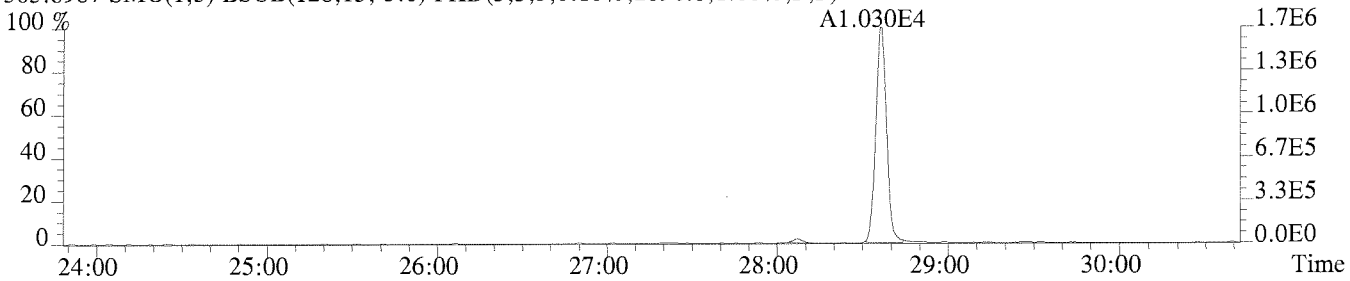
File:P200004 #1-575 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

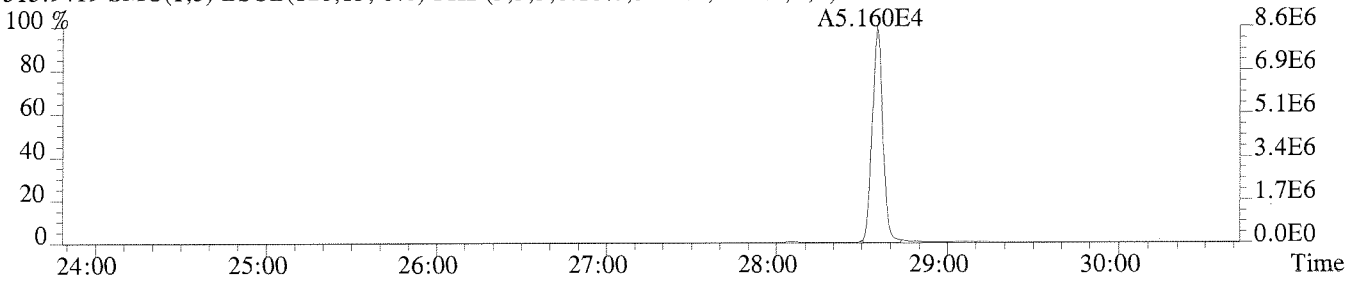
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,356.0,1.00%,F,F)



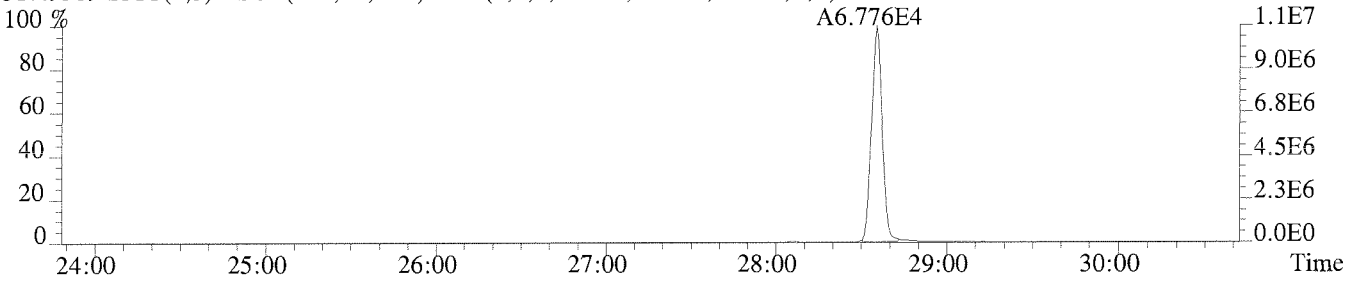
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2096.0,1.00%,F,F)



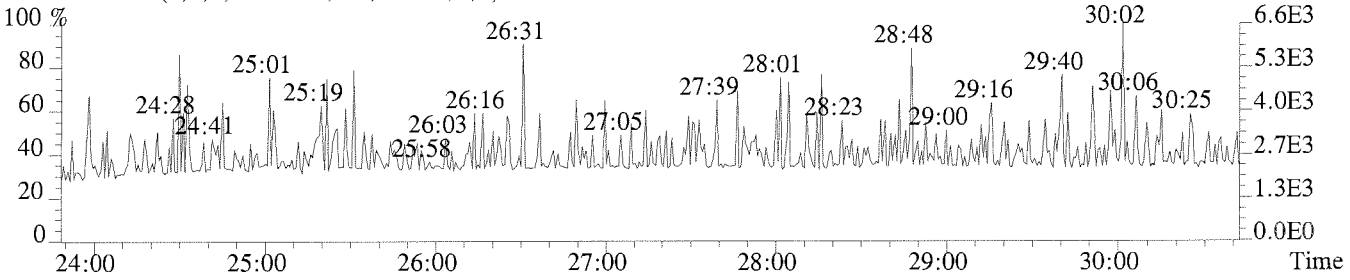
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3420.0,1.00%,F,F)



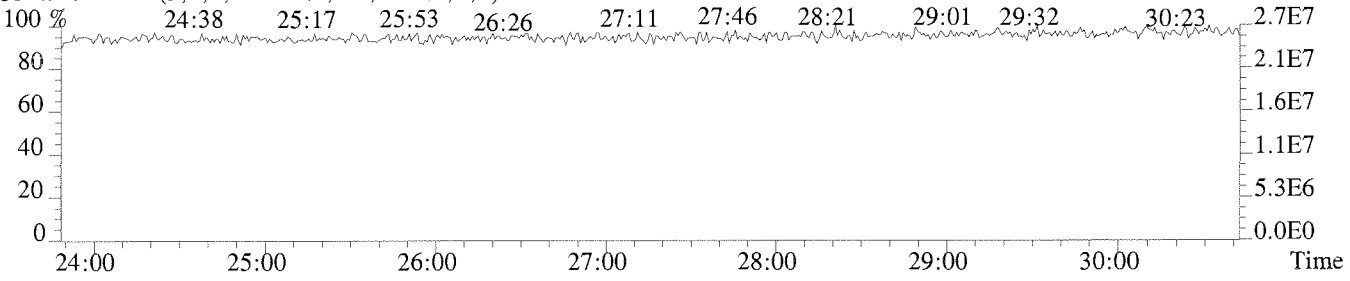
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3392.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

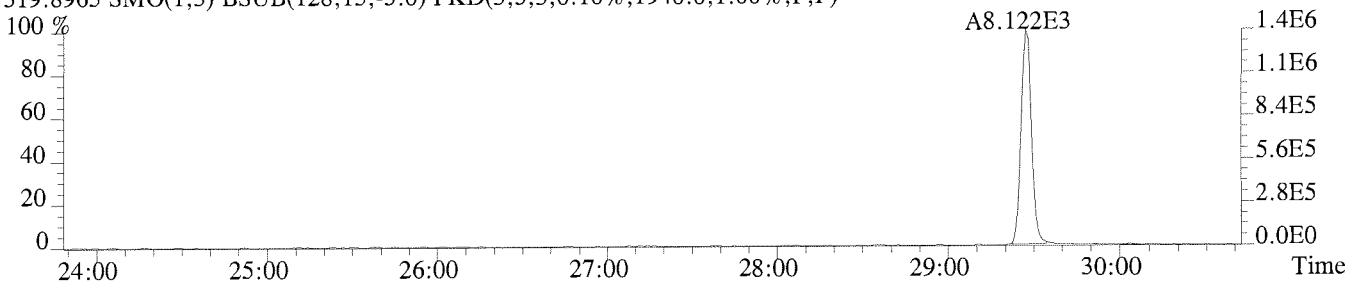


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

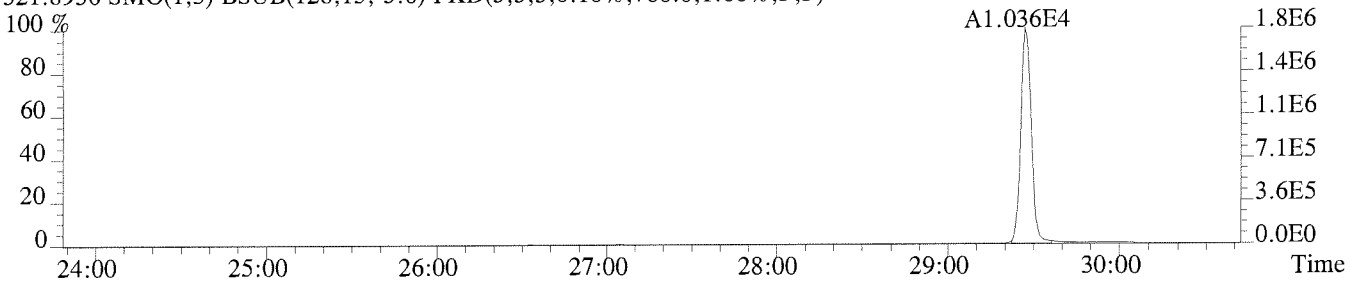


File:P200004 #1-575 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

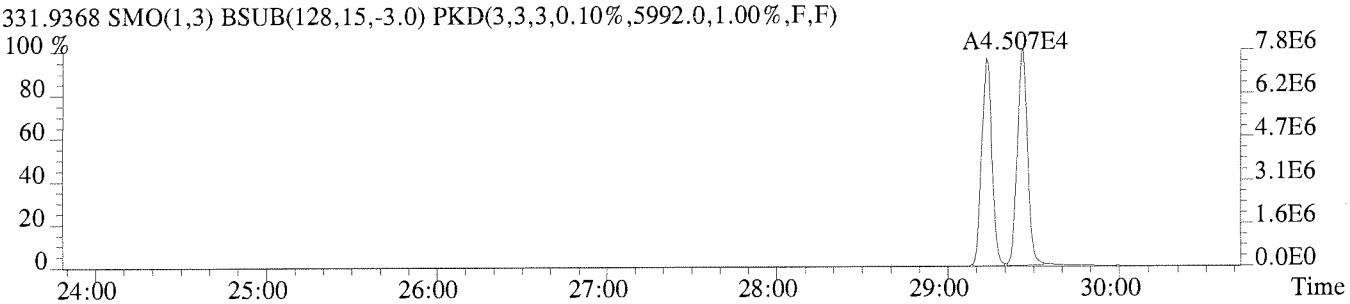
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1940.0,1.00%,F,F)



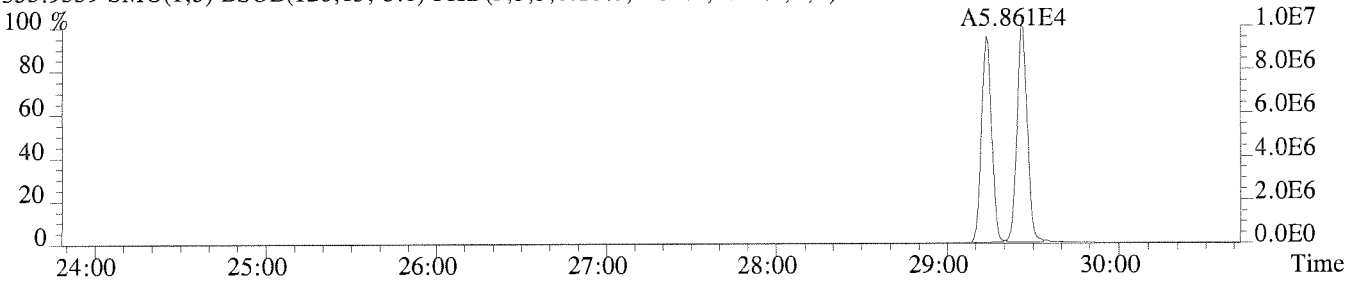
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,760.0,1.00%,F,F)



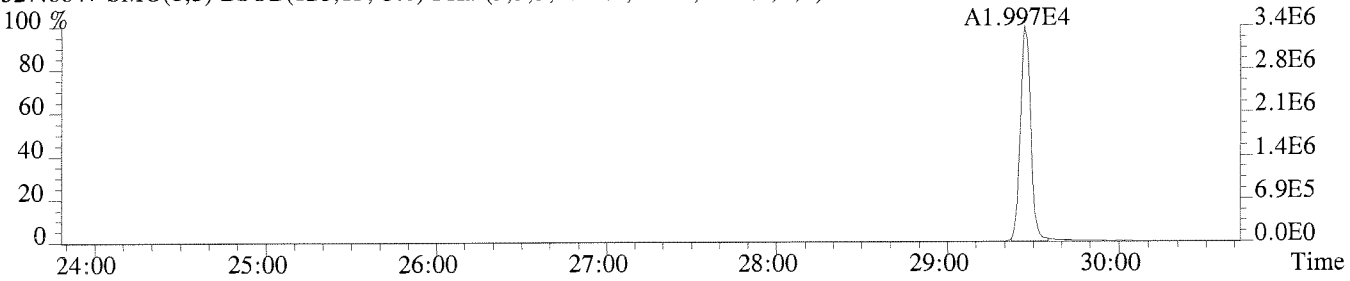
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5992.0,1.00%,F,F)



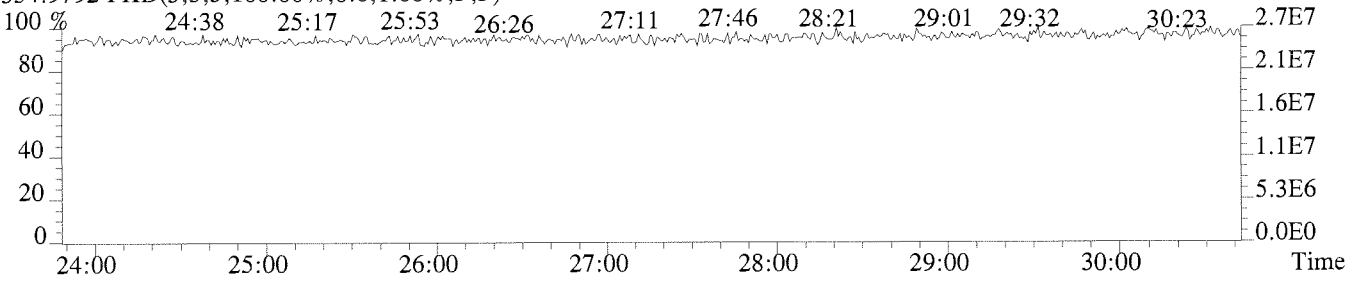
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1132.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,868.0,1.00%,F,F)

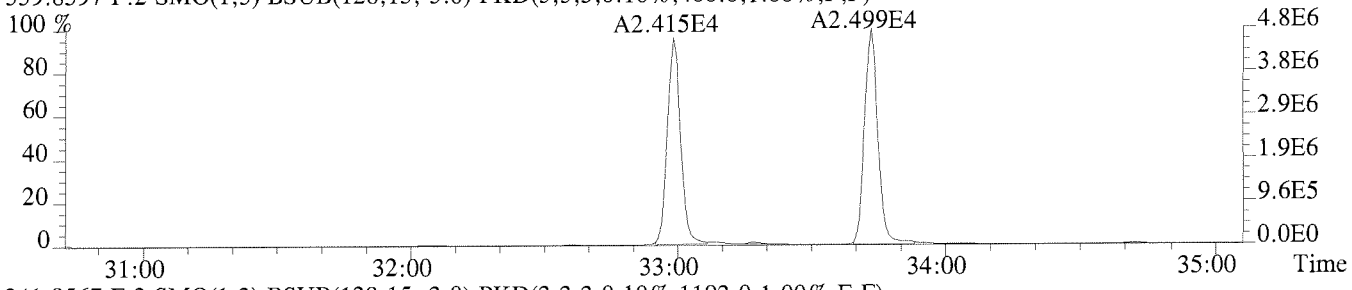


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

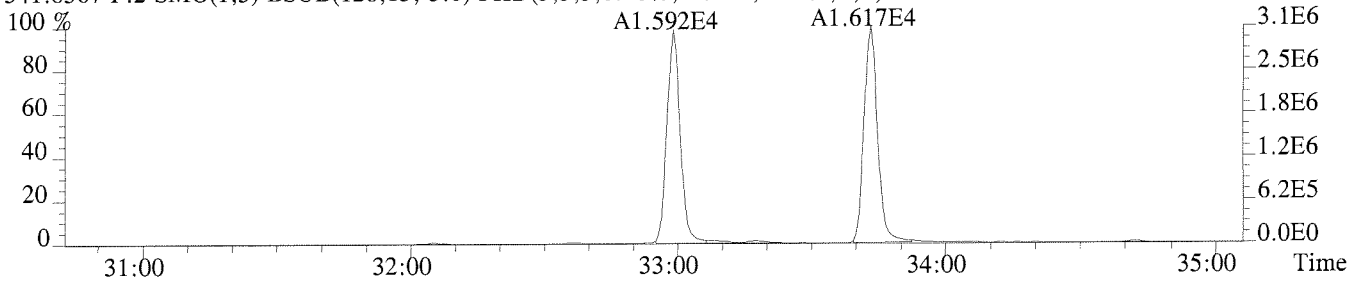


File:P200004 #1-399 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

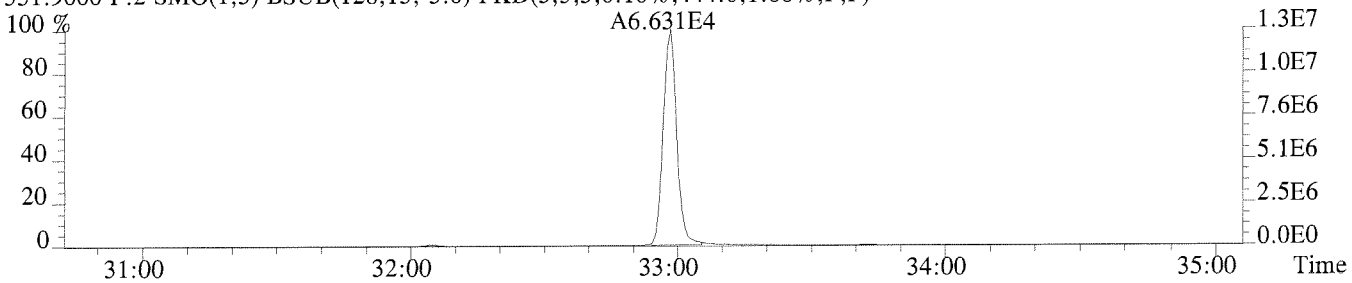
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,400.0,1.00%,F,F)



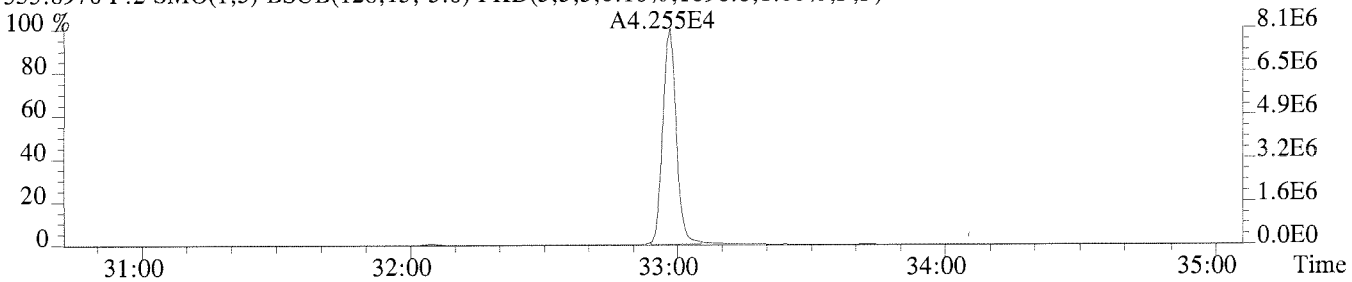
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1192.0,1.00%,F,F)



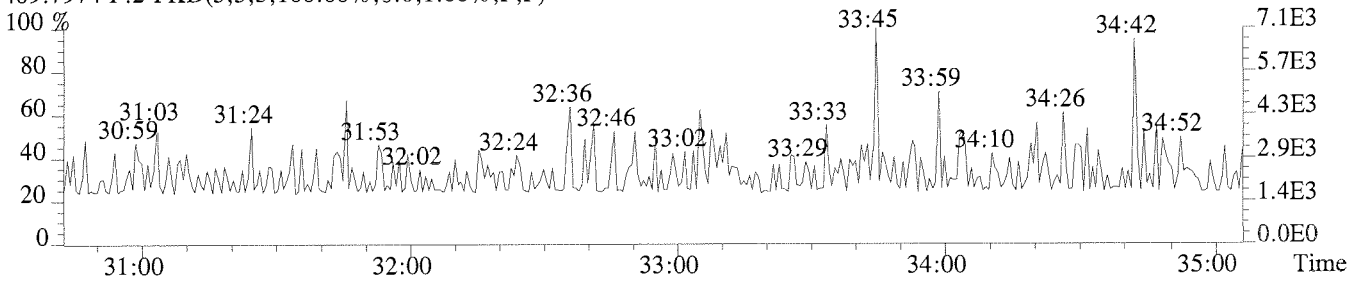
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,444.0,1.00%,F,F)



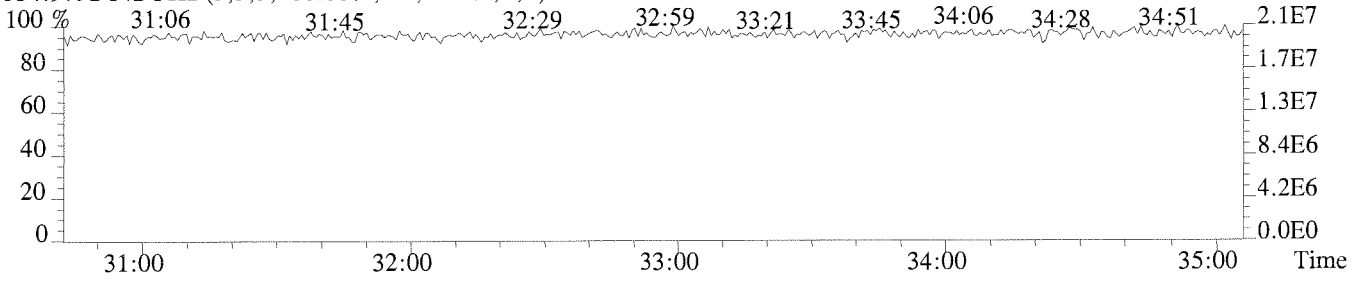
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1096.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

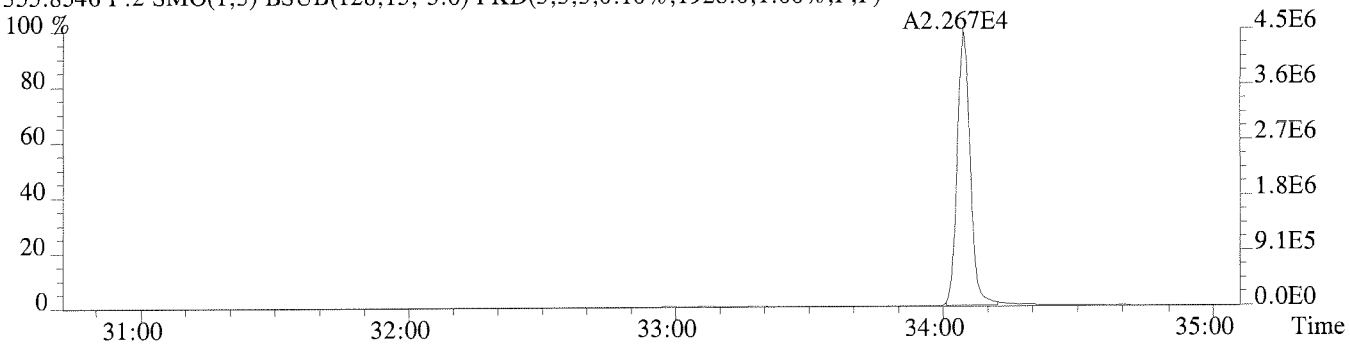


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

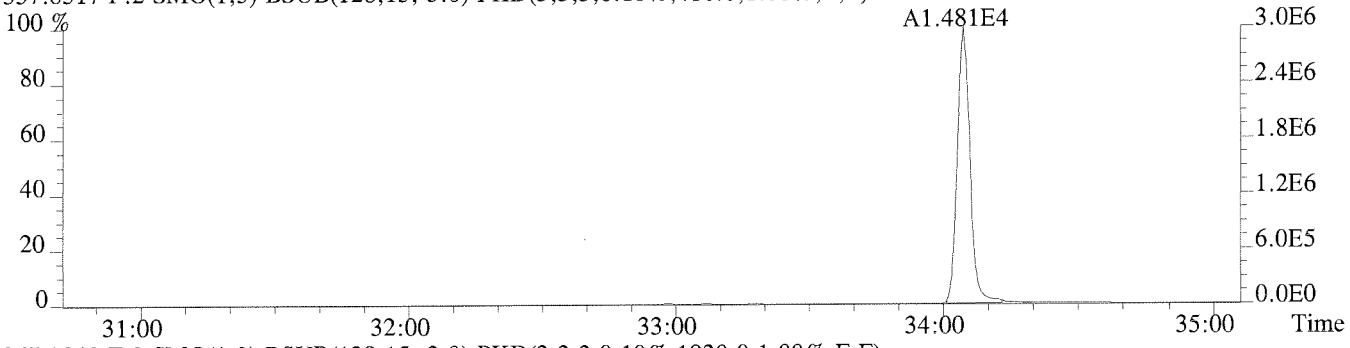


File:P200004 #1-399 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

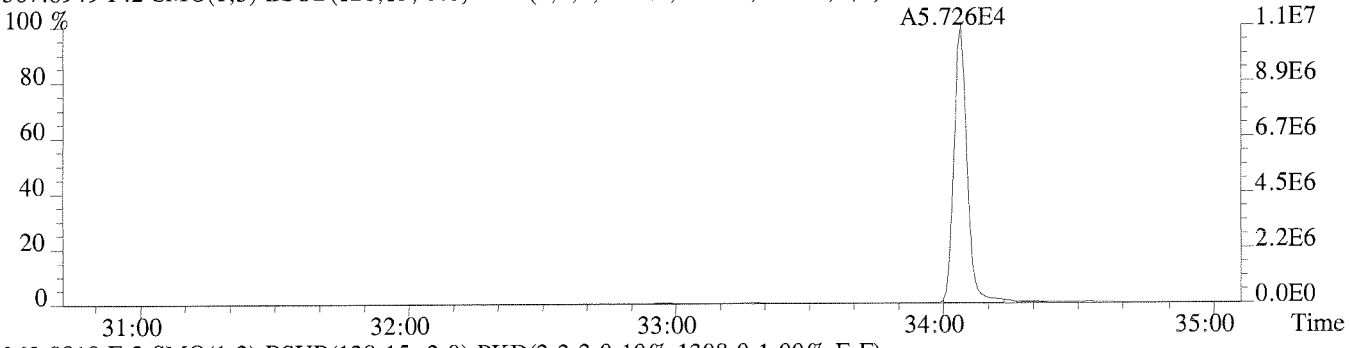
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1928.0,1.00%,F,F)



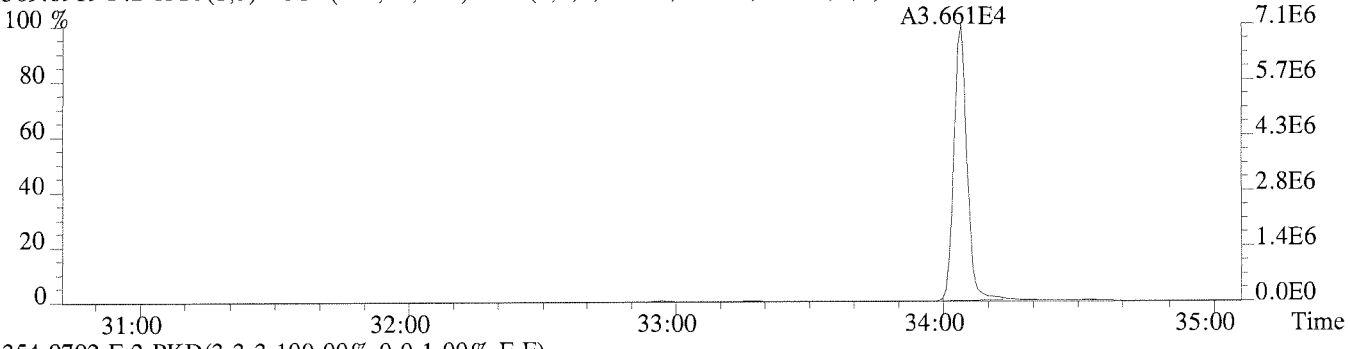
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,416.0,1.00%,F,F)



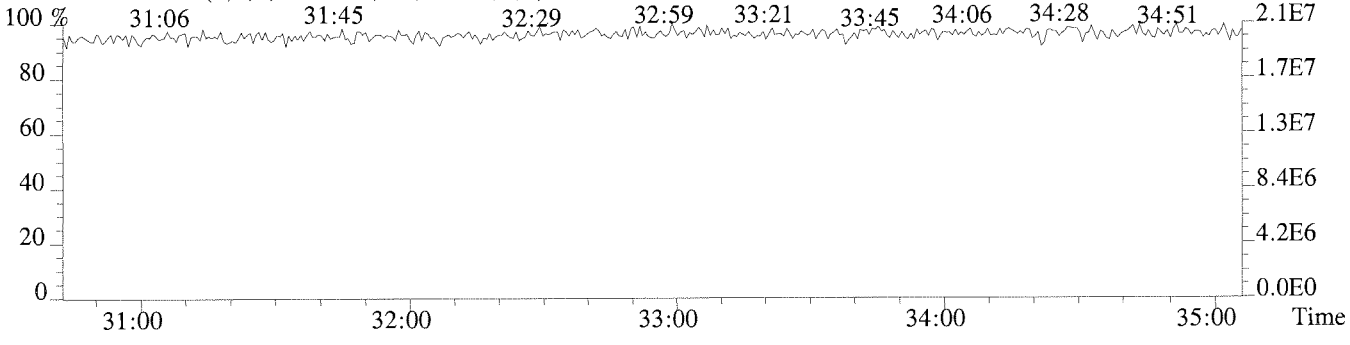
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1920.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1308.0,1.00%,F,F)

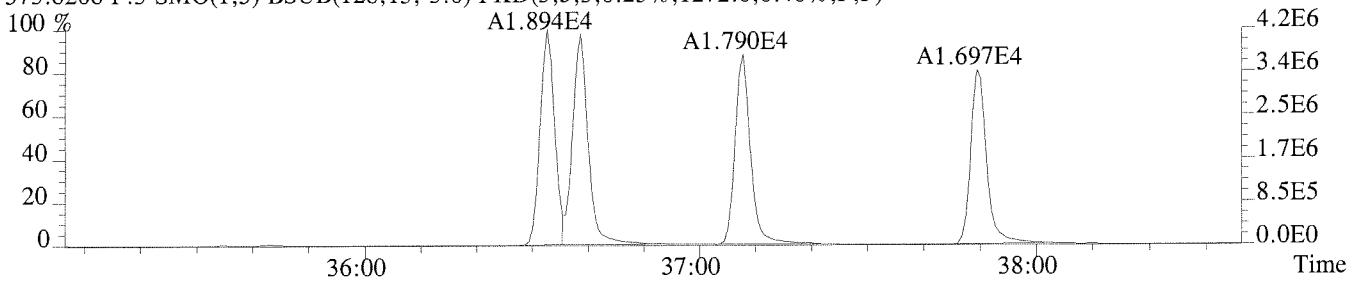


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

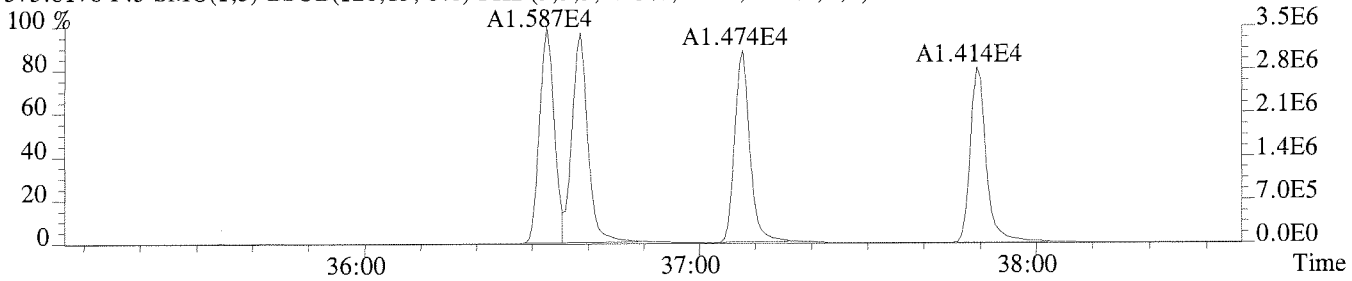


File:P200004 #1-318 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spectf
Sample#1 Exp:ICAL HRCC3

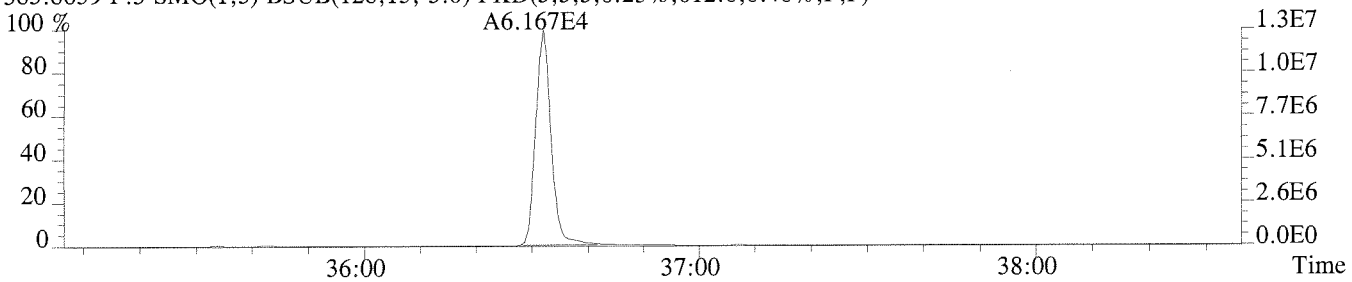
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1272.0,0.40%,F,F)



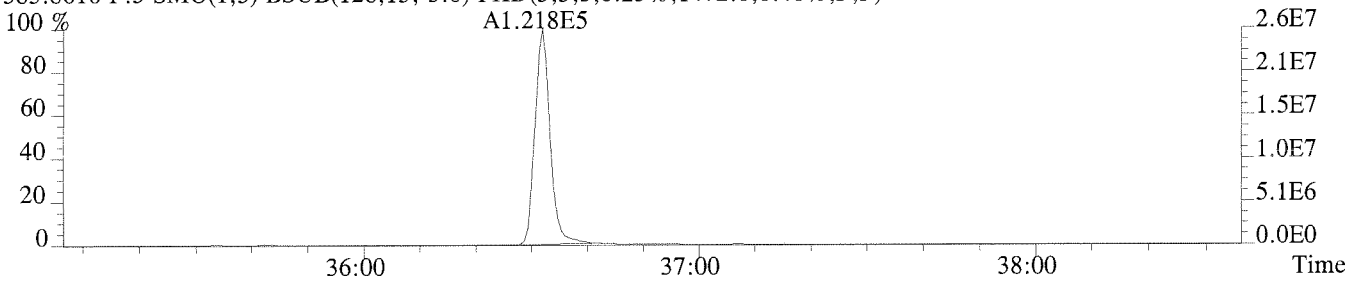
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,648.0,0.40%,F,F)



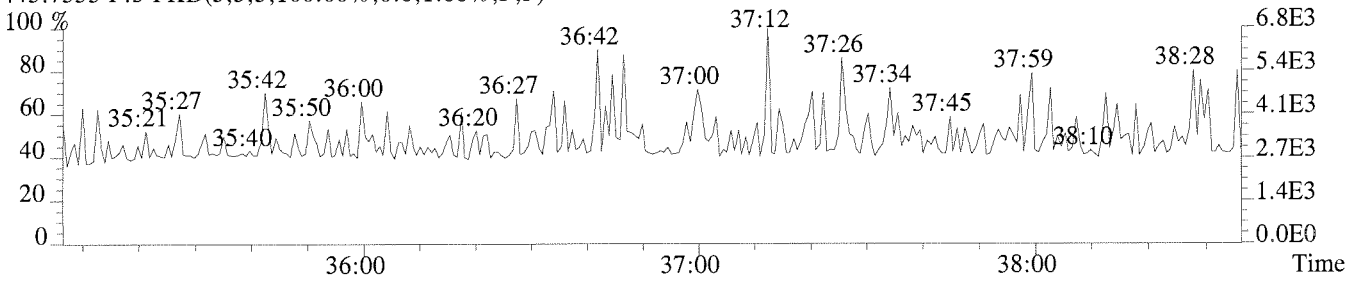
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,612.0,0.40%,F,F)



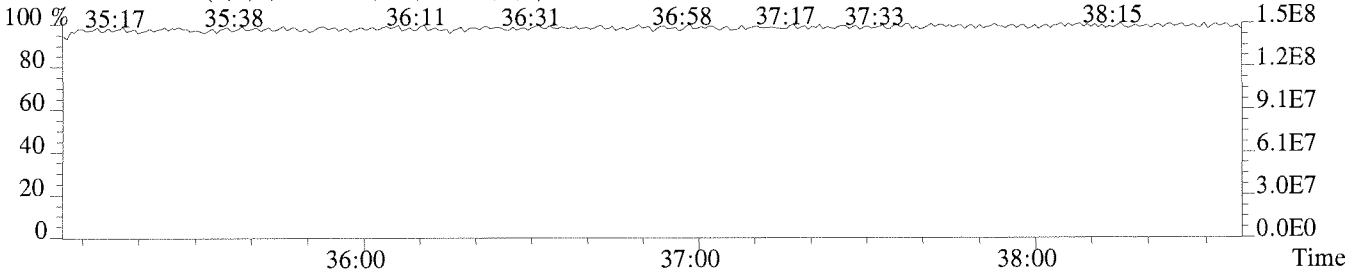
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1472.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

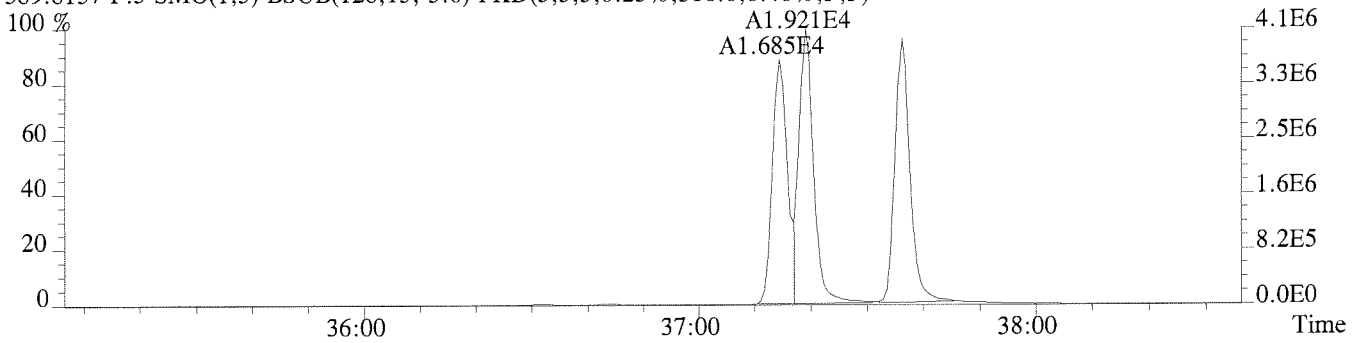


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

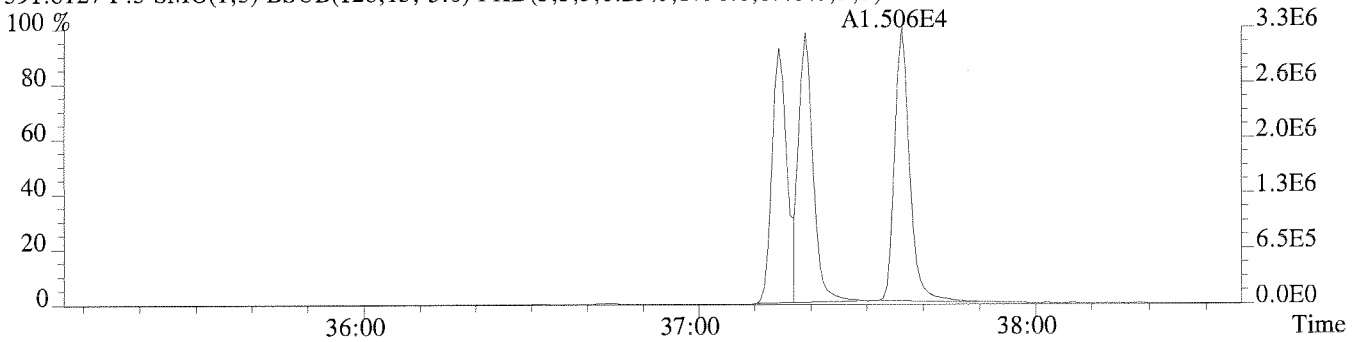


File:P200004 #1-318 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

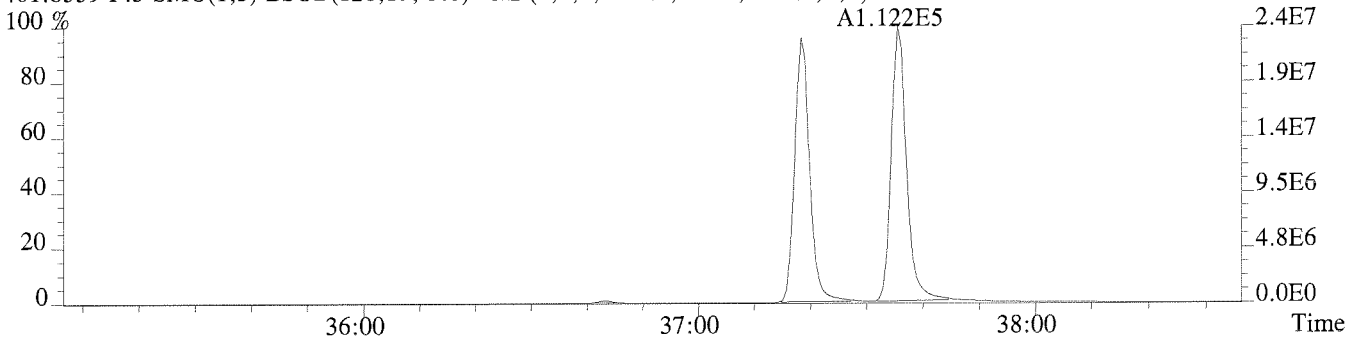
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,516.0,0.40%,F,F)



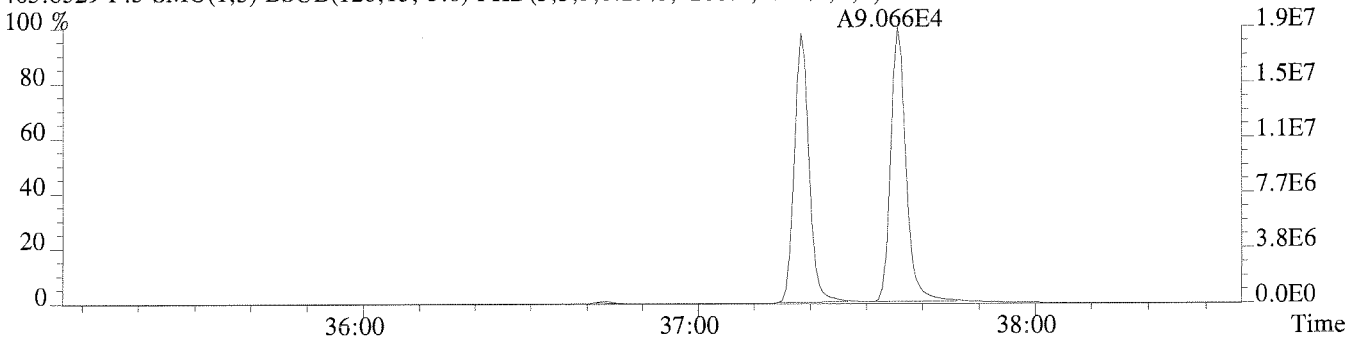
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1796.0,0.40%,F,F)



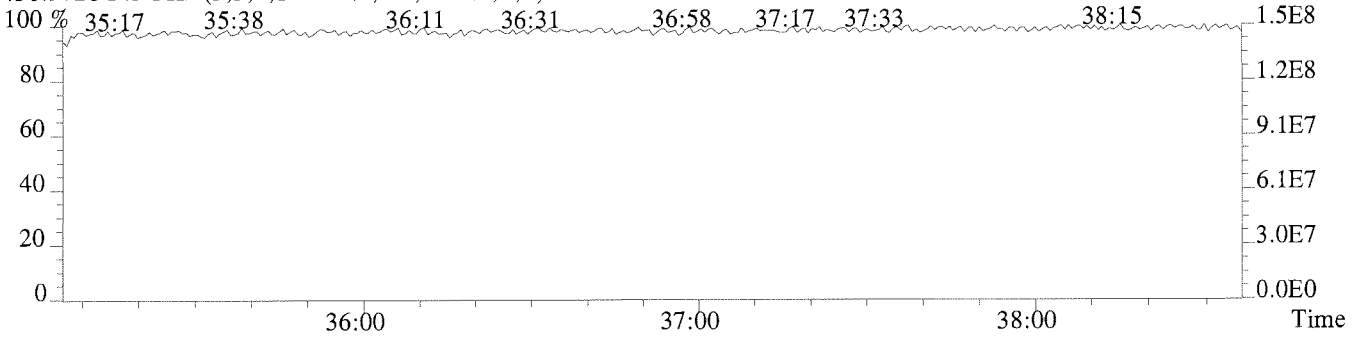
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,588.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1200.0,0.40%,F,F)

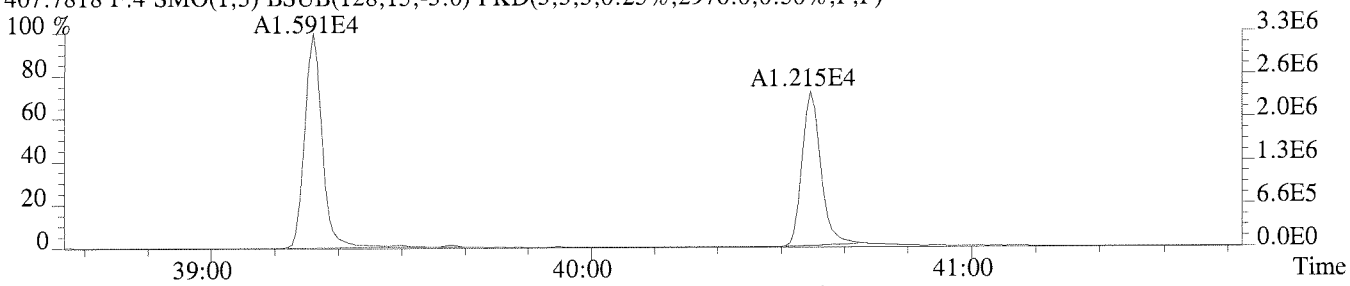


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

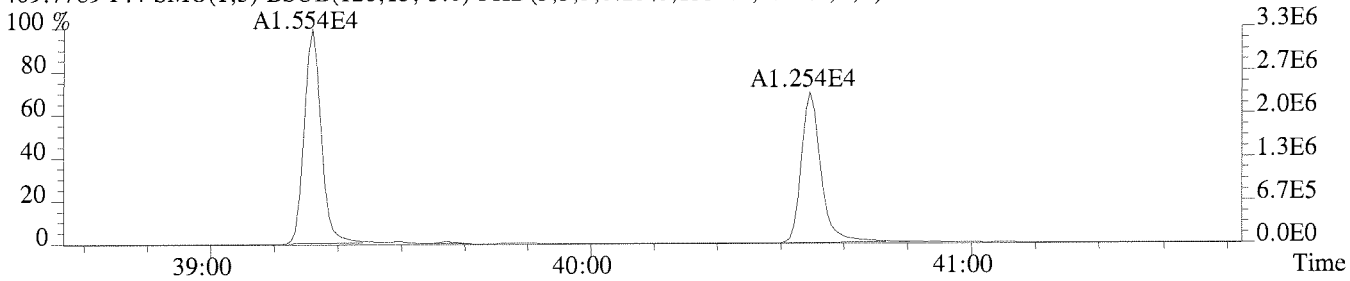


File:P200004 #1-281 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

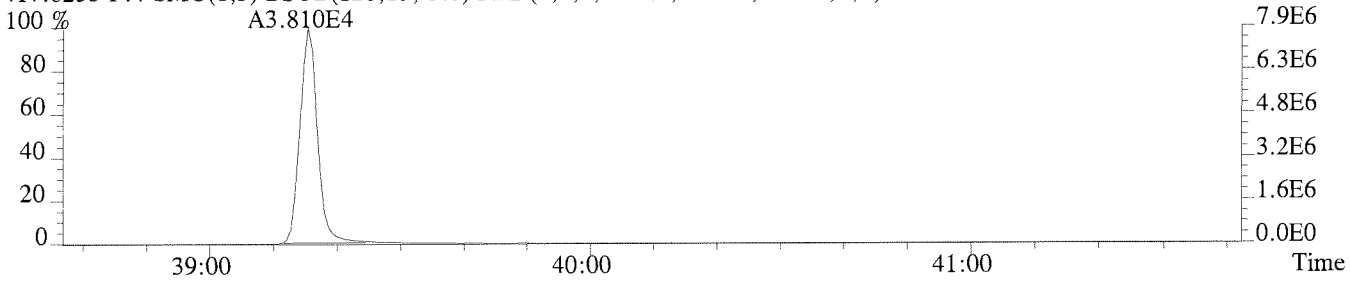
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2976.0,0.50%,F,F)



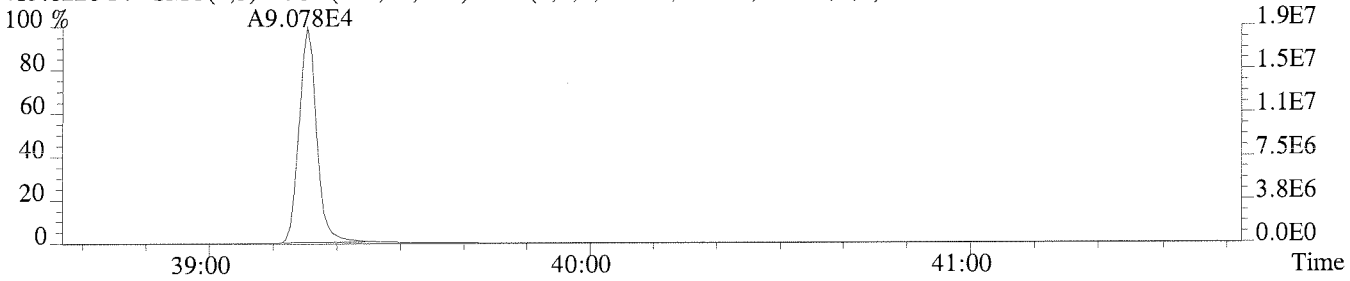
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1336.0,0.50%,F,F)



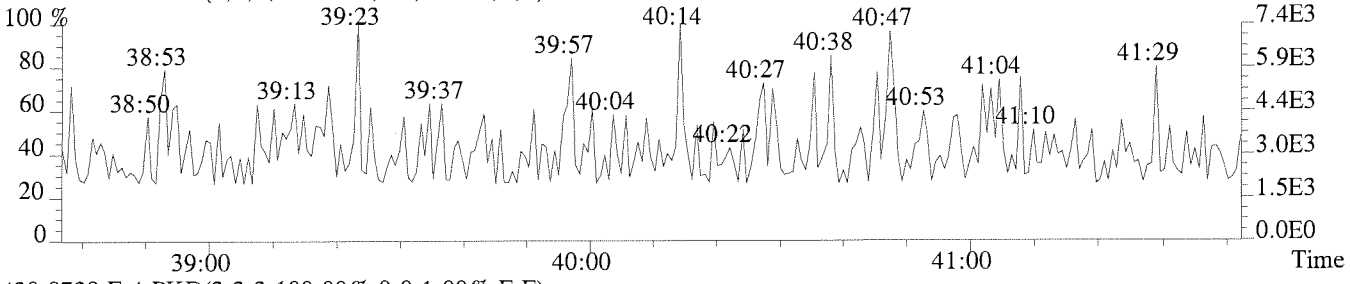
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3440.0,0.50%,F,F)



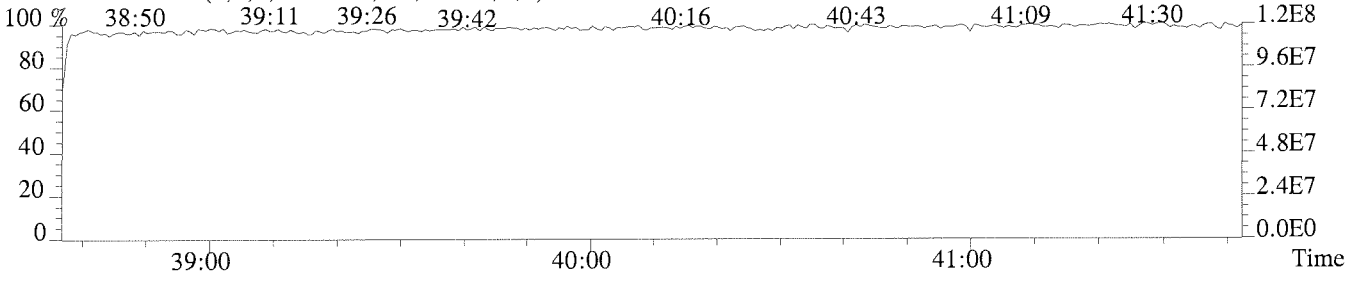
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,8060.0,0.50%,F,F)



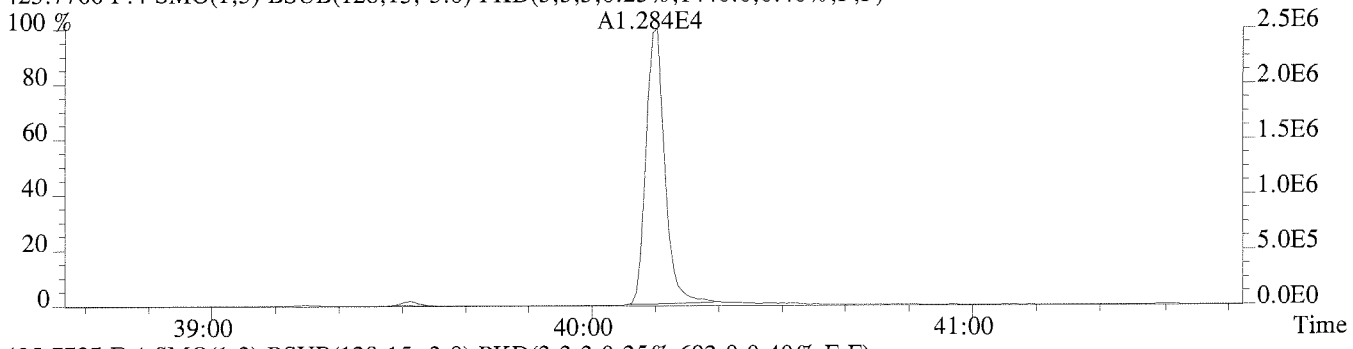
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



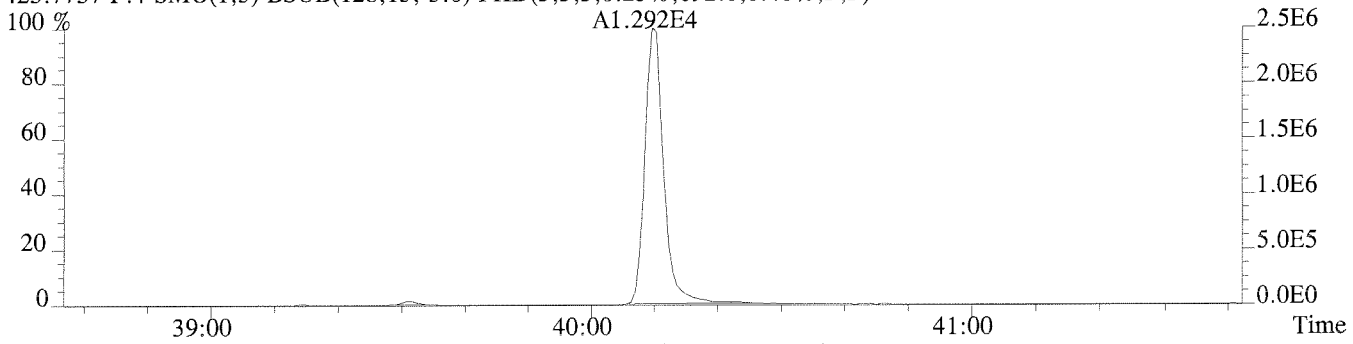
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



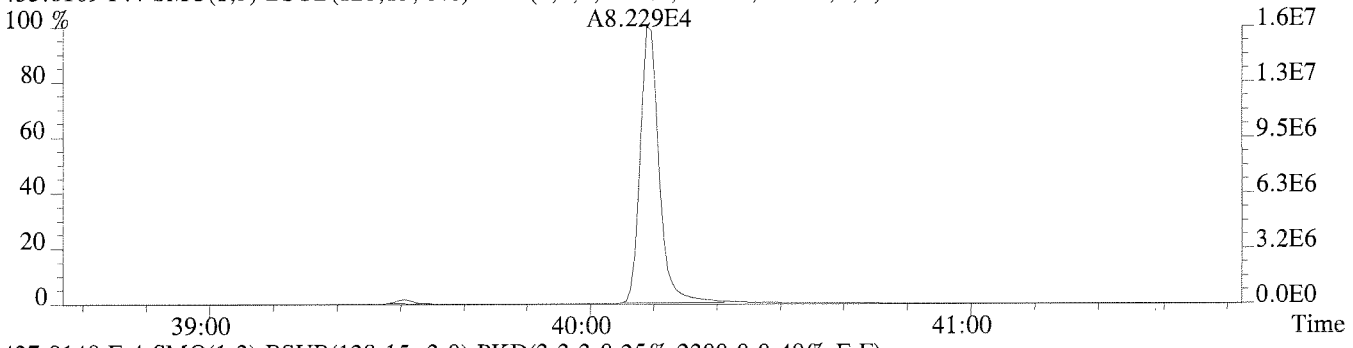
File:P200004 #1-281 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1440.0,0.40%,F,F)



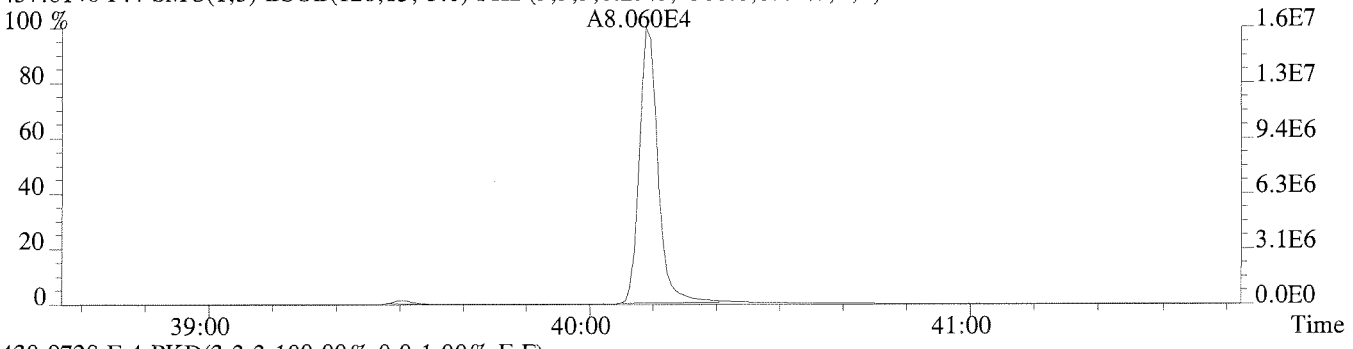
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,692.0,0.40%,F,F)



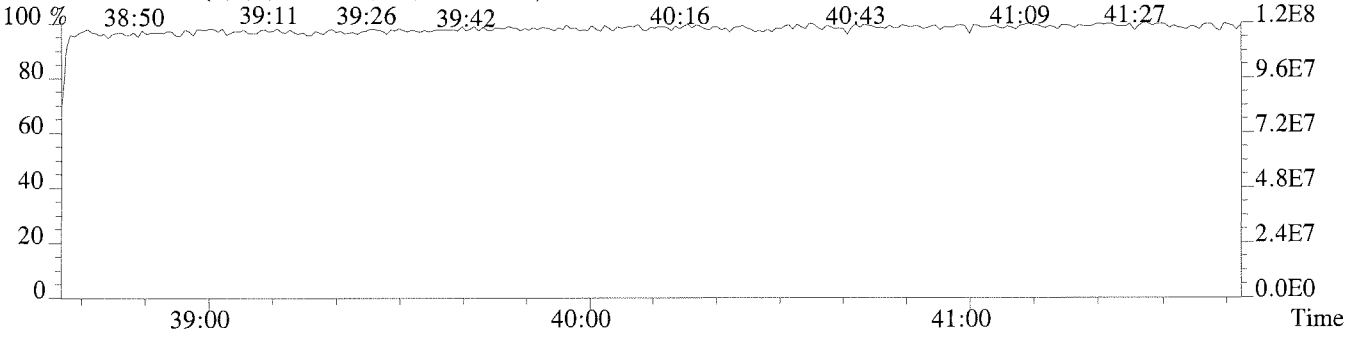
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1936.0,0.40%,F,F)



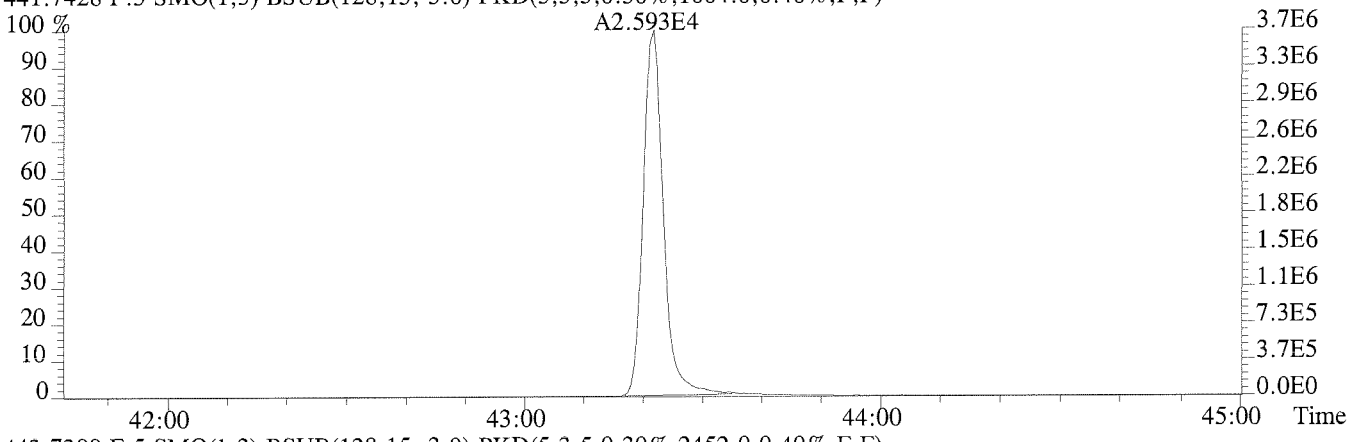
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2300.0,0.40%,F,F)



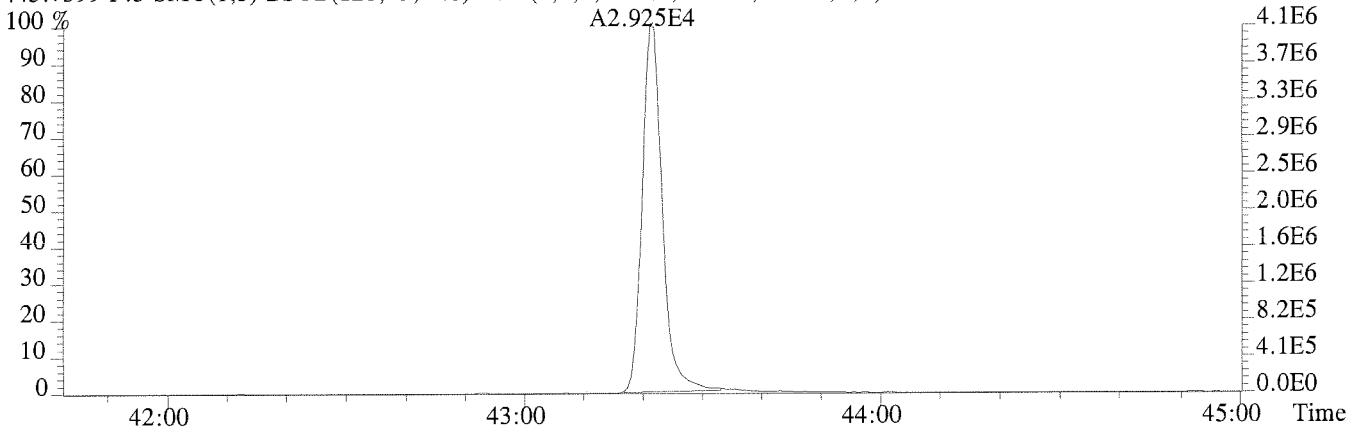
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



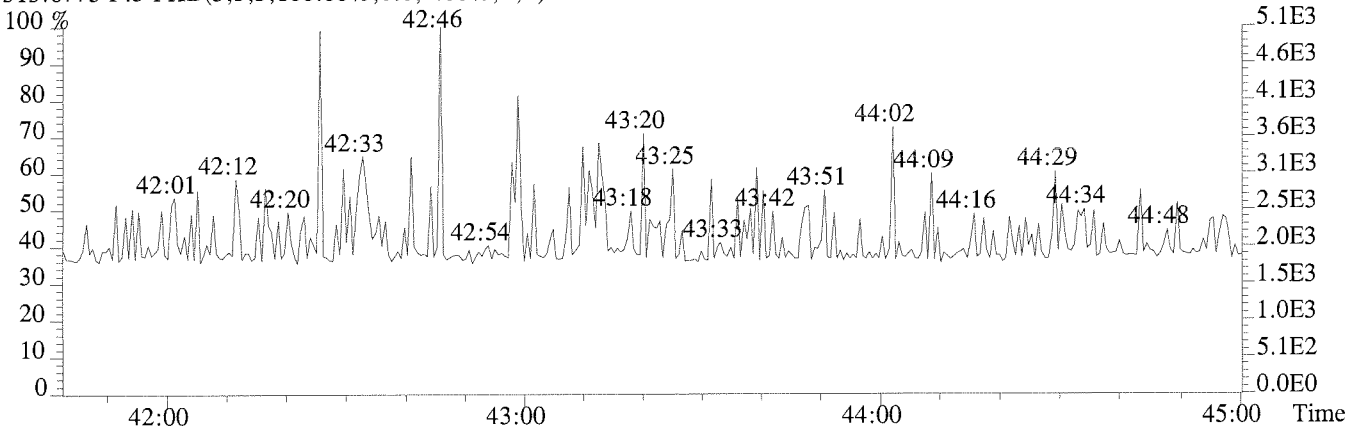
File:P200004 #1-364 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1004.0,0.40%,F,F)



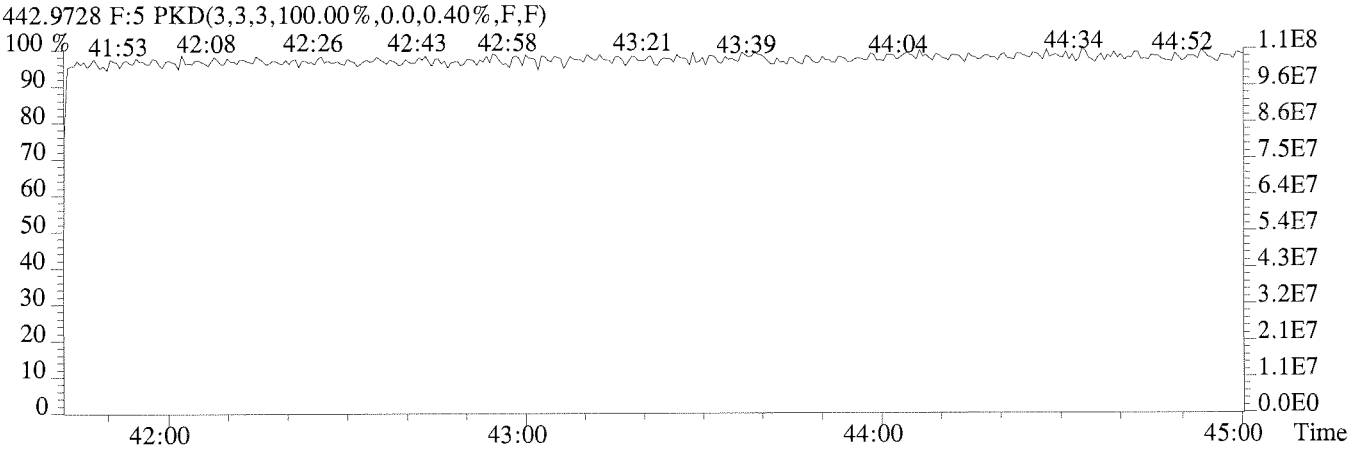
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2452.0,0.40%,F,F)



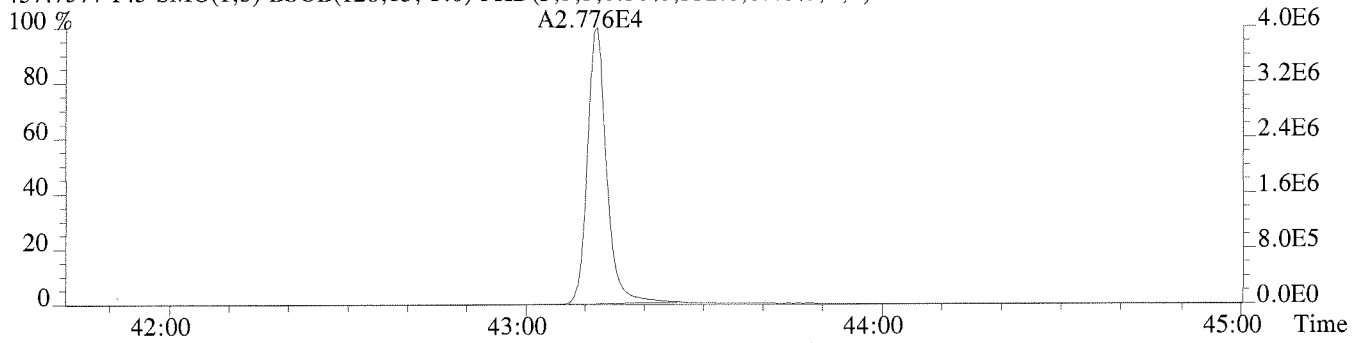
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



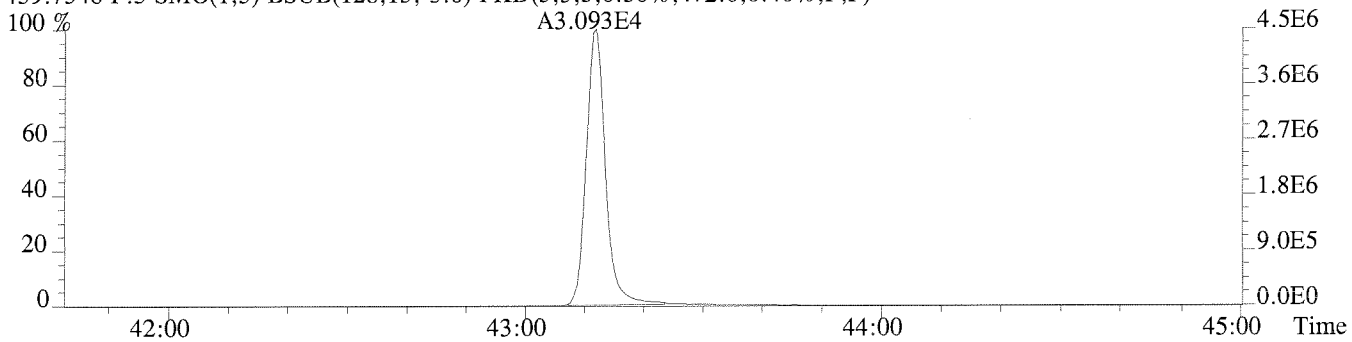
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



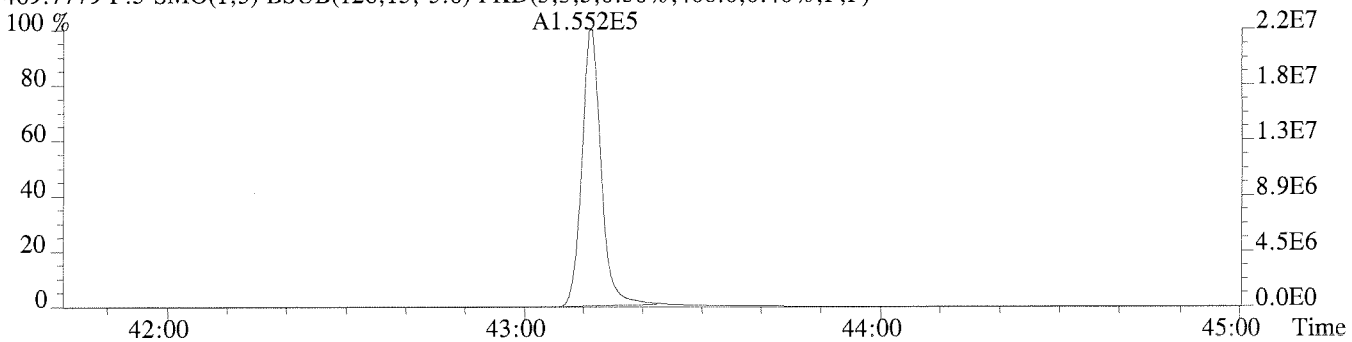
File:P200004 #1-364 Acq:18-JUL-2008 14:23:04 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,552.0,0.40%,F,F)



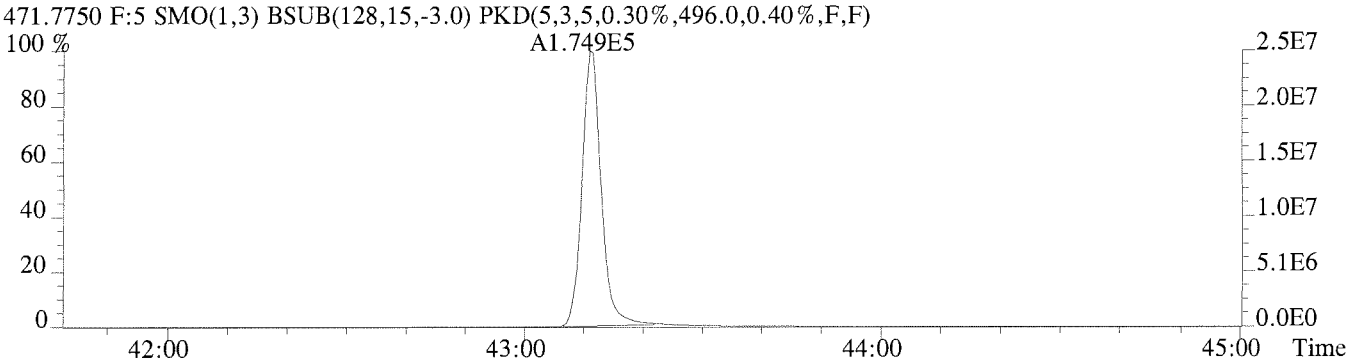
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,472.0,0.40%,F,F)



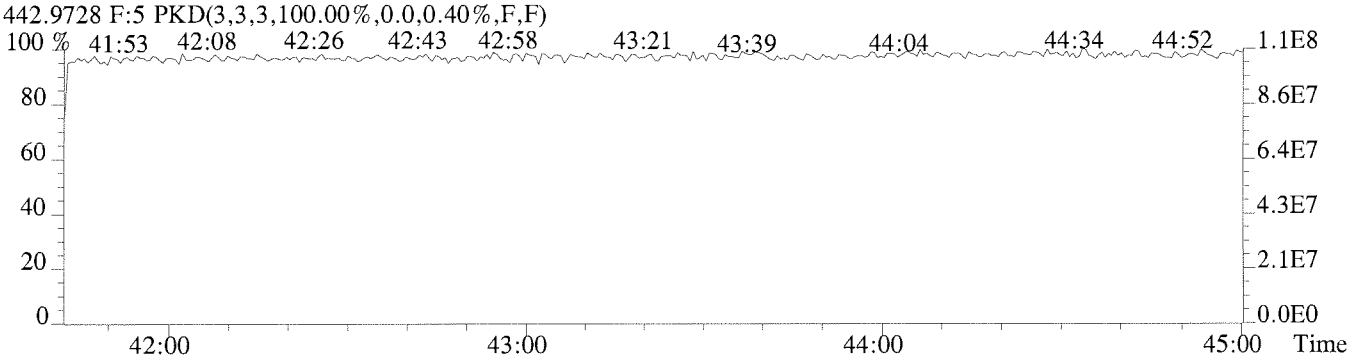
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,408.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,496.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC4

Run #4 Filename P200007 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 17:03:35
Processed: 30-JUL-08 09:37:38 Sample ID: ICAL HRCC4

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	3.263e+04	4.375e+04	0.75	yes	no	0.72
2	Unk	1,2,3,7,8-PeCDF	32:59	1.189e+05	7.963e+04	1.49	yes	no	0.71
3	Unk	2,3,4,7,8-PeCDF	33:43	1.238e+05	8.147e+04	1.52	yes	no	0.73
4	Unk	1,2,3,4,7,8-HxCDF	36:33	9.648e+04	8.207e+04	1.18	yes	no	0.93
5	Unk	1,2,3,6,7,8-HxCDF	36:39	9.767e+04	8.297e+04	1.18	yes	no	0.96
6	Unk	2,3,4,6,7,8-HxCDF	37:08	8.991e+04	7.851e+04	1.15	yes	no	0.86
7	Unk	1,2,3,7,8,9-HxCDF	37:49	8.371e+04	7.147e+04	1.17	yes	no	0.79
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	8.117e+04	8.148e+04	1.00	yes	no	1.19
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	6.546e+04	6.475e+04	1.01	yes	no	0.94
10	Unk	OCDF	43:22	1.349e+05	1.535e+05	0.88	yes	no	0.83
11	Unk	2,3,7,8-TCDD	29:27	3.406e+04	4.452e+04	0.77	yes	no	0.84
12	Unk	1,2,3,7,8-PeCDD	34:04	1.120e+05	7.410e+04	1.51	yes	no	0.79
13	Unk	1,2,3,4,7,8-HxCDD	37:14	8.770e+04	7.054e+04	1.24	yes	no	0.81
14	Unk	1,2,3,6,7,8-HxCDD	37:19	9.526e+04	7.674e+04	1.24	yes	no	0.92
15	Unk	1,2,3,7,8,9-HxCDD	37:36	9.481e+04	7.619e+04	1.24	yes	no	0.89
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	6.746e+04	6.563e+04	1.03	yes	no	0.79
17	Unk	OCDD	43:12	1.388e+05	1.583e+05	0.88	yes	no	0.88
18	IS	13C-2,3,7,8-TCDF	28:35	4.465e+04	5.907e+04	0.76	yes	no	1.25
19	IS	13C-1,2,3,7,8-PeCDF	32:58	6.638e+04	4.273e+04	1.55	yes	no	1.23
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	6.357e+04	1.224e+05	0.52	yes	no	0.98
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	4.079e+04	9.333e+04	0.44	yes	no	0.69
22	IS	13C-2,3,7,8-TCDD	29:26	3.985e+04	5.221e+04	0.76	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:04	5.638e+04	3.608e+04	1.56	yes	no	1.05
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	1.023e+05	8.327e+04	1.23	yes	no	0.97
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	8.390e+04	8.129e+04	1.03	yes	no	0.85
26	IS	13C-OCDD	43:11	1.581e+05	1.782e+05	0.89	yes	no	0.87
27	RS/RT	13C-1,2,3,4-TCDD	29:13	3.648e+04	4.674e+04	0.78	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:35	1.047e+05	8.474e+04	1.24	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:27	8.325e+04					0.99

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC4

Run #4 Filename P200007 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 17:03:35

Processed: 30-JUL-08 09:37:38 LAB. ID: ICAL HRCC4

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	5.38e+06	5.76e+02	9.3e+03	7.16e+06	1.82e+03	3.9e+03
2	1,2,3,7,8-PeCDF	2.26e+07	2.16e+02	1.0e+05	1.52e+07	1.04e+03	1.5e+04
3	2,3,4,7,8-PeCDF	2.41e+07	2.16e+02	1.1e+05	1.59e+07	1.04e+03	1.5e+04
4	1,2,3,4,7,8-HxCDF	2.10e+07	1.06e+03	2.0e+04	1.77e+07	1.36e+03	1.3e+04
5	1,2,3,6,7,8-HxCDF	2.02e+07	1.06e+03	1.9e+04	1.70e+07	1.36e+03	1.3e+04
6	2,3,4,6,7,8-HxCDF	1.86e+07	1.06e+03	1.8e+04	1.62e+07	1.36e+03	1.2e+04
7	1,2,3,7,8,9-HxCDF	1.69e+07	1.06e+03	1.6e+04	1.45e+07	1.36e+03	1.1e+04
8	1,2,3,4,6,7,8-HpCDF	1.68e+07	4.12e+03	4.1e+03	1.70e+07	5.07e+03	3.4e+03
9	1,2,3,4,7,8,9-HpCDF	1.22e+07	4.12e+03	3.0e+03	1.21e+07	5.07e+03	2.4e+03
10	OCDF	1.90e+07	7.60e+02	2.5e+04	2.15e+07	1.99e+03	1.1e+04
11	2,3,7,8-TCDD	5.93e+06	2.14e+03	2.8e+03	7.85e+06	9.76e+02	8.0e+03
12	1,2,3,7,8-PeCDD	2.26e+07	2.96e+03	7.6e+03	1.49e+07	4.60e+02	3.2e+04
13	1,2,3,4,7,8-HxCDD	1.94e+07	6.36e+02	3.0e+04	1.54e+07	1.24e+03	1.2e+04
14	1,2,3,6,7,8-HxCDD	2.01e+07	6.36e+02	3.2e+04	1.62e+07	1.24e+03	1.3e+04
15	1,2,3,7,8,9-HxCDD	1.97e+07	6.36e+02	3.1e+04	1.59e+07	1.24e+03	1.3e+04
16	1,2,3,4,6,7,8-HpCDD	1.32e+07	1.38e+03	9.6e+03	1.27e+07	7.60e+02	1.7e+04
17	OCDD	2.04e+07	6.48e+02	3.1e+04	2.30e+07	4.16e+02	5.5e+04
18	13C-2,3,7,8-TCDF	7.32e+06	3.72e+03	2.0e+03	9.77e+06	2.44e+03	4.0e+03
19	13C-1,2,3,7,8-PeCDF	1.27e+07	6.60e+02	1.9e+04	8.12e+06	9.24e+02	8.8e+03
20	13C-1,2,3,4,7,8-HxCDF	1.31e+07	6.16e+02	2.1e+04	2.56e+07	2.44e+03	1.0e+04
21	13C-1,2,3,4,6,7,8-HpCDF	8.45e+06	3.38e+03	2.5e+03	1.95e+07	5.54e+03	3.5e+03
22	13C-2,3,7,8-TCDD	6.96e+06	9.53e+03	7.3e+02	9.08e+06	1.30e+03	7.0e+03
23	13C-1,2,3,7,8-PeCDD	1.11e+07	2.20e+03	5.0e+03	7.23e+06	1.25e+03	5.8e+03
24	13C-1,2,3,6,7,8-HxCDD	2.19e+07	7.52e+02	2.9e+04	1.80e+07	1.37e+03	1.3e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.61e+07	2.46e+03	6.6e+03	1.57e+07	1.67e+03	9.4e+03
26	13C-OCDD	2.28e+07	6.96e+02	3.3e+04	2.54e+07	7.00e+02	3.6e+04
27	13C-1,2,3,4-TCDD	6.36e+06	9.53e+03	6.7e+02	8.11e+06	1.30e+03	6.3e+03
28	13C-1,2,3,7,8,9-HxCDD	2.17e+07	7.52e+02	2.9e+04	1.78e+07	1.37e+03	1.3e+04
29	37Cl-2,3,7,8-TCDD	1.47e+07	9.08e+02	1.6e+04			

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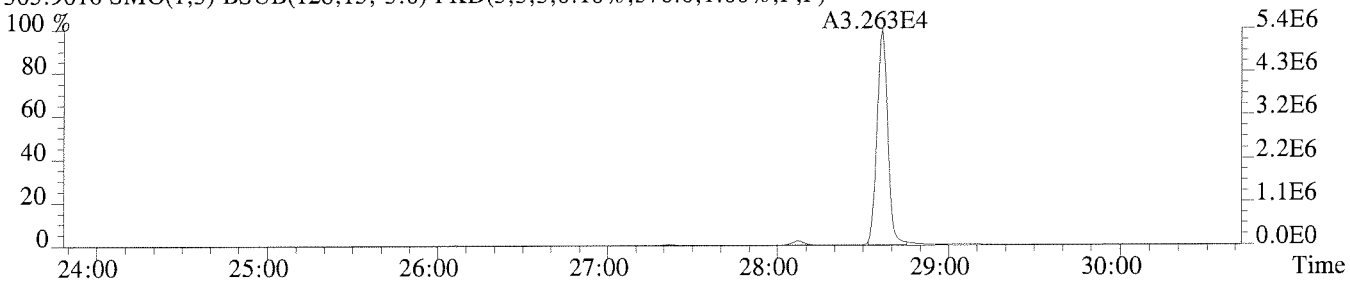
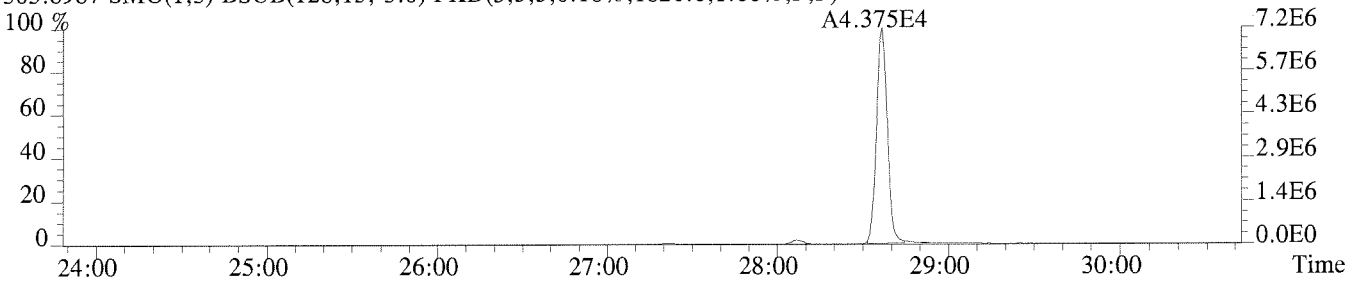
File:P200007 #1-575 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

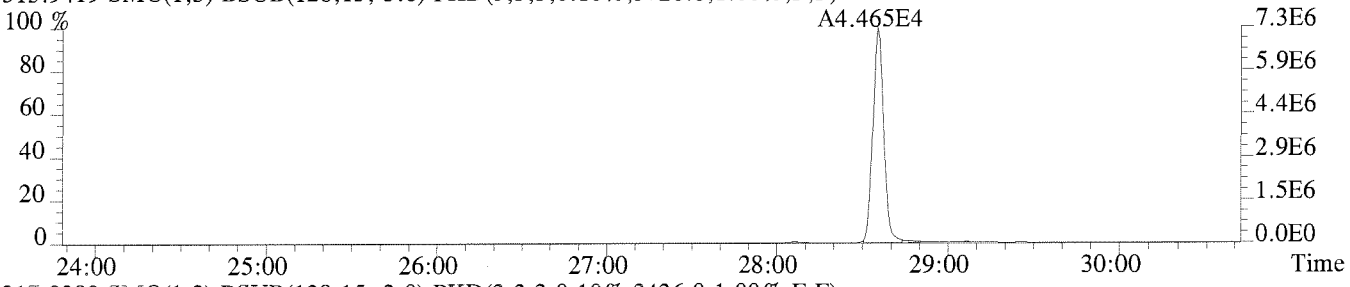
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,576.0,1.00%,F,F)



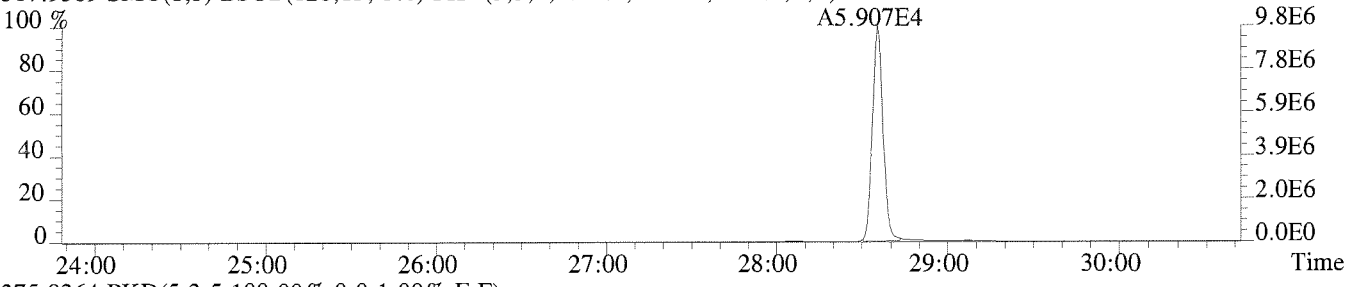
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1820.0,1.00%,F,F)



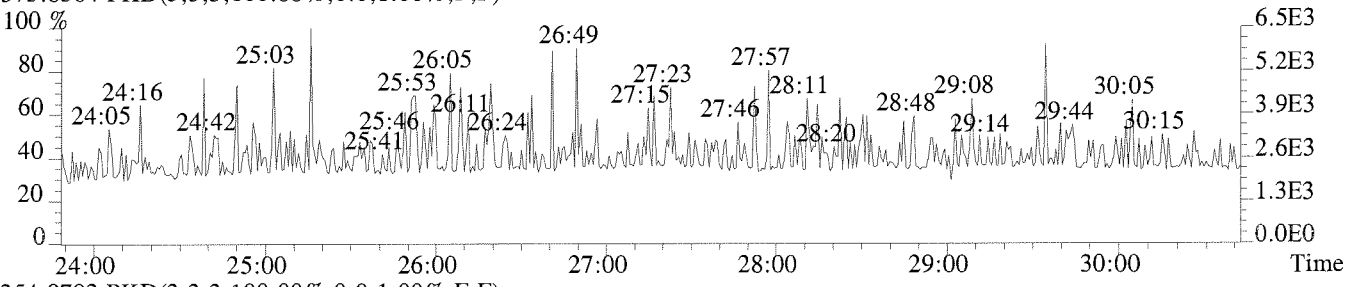
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3720.0,1.00%,F,F)



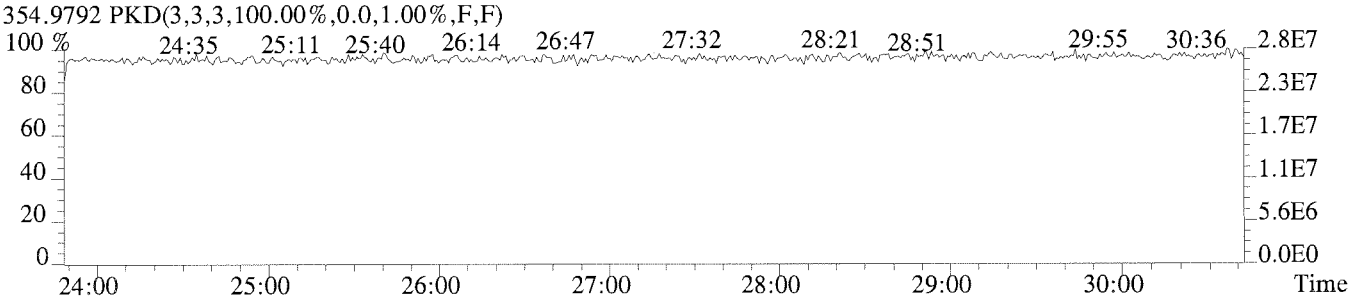
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2436.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

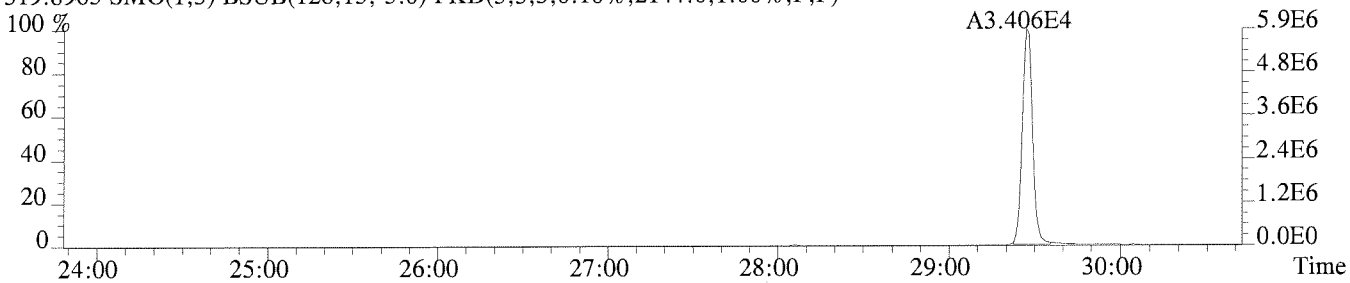


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

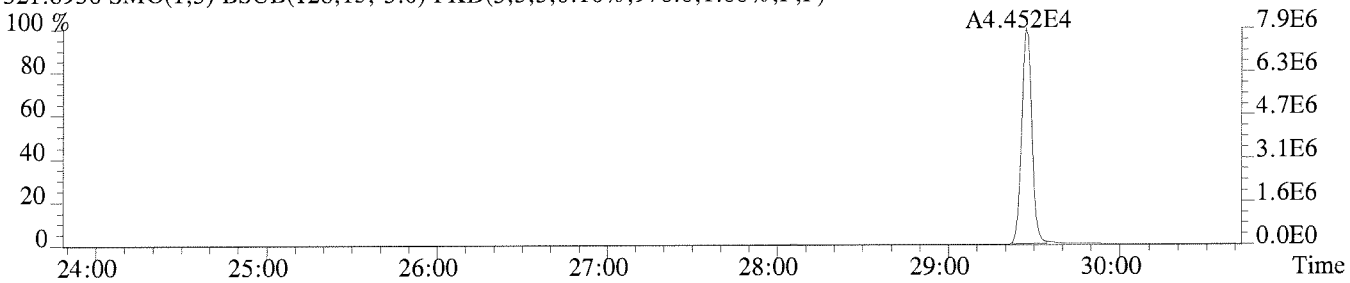


File:P200007 #1-575 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

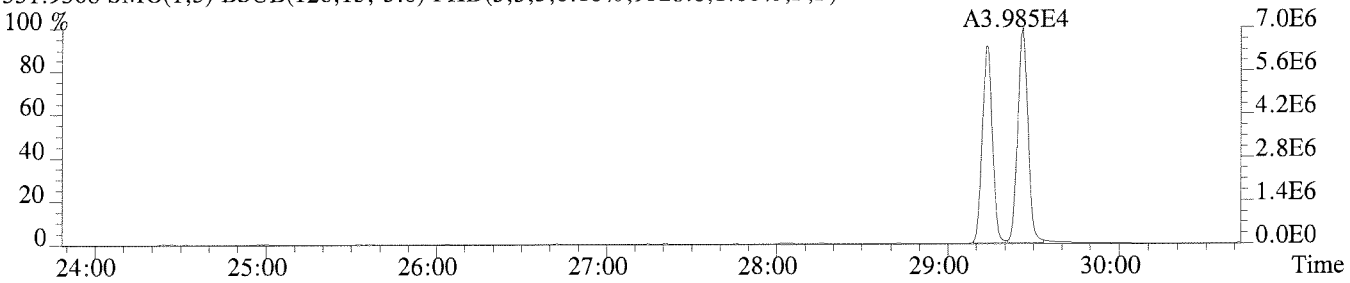
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2144.0,1.00%,F,F)



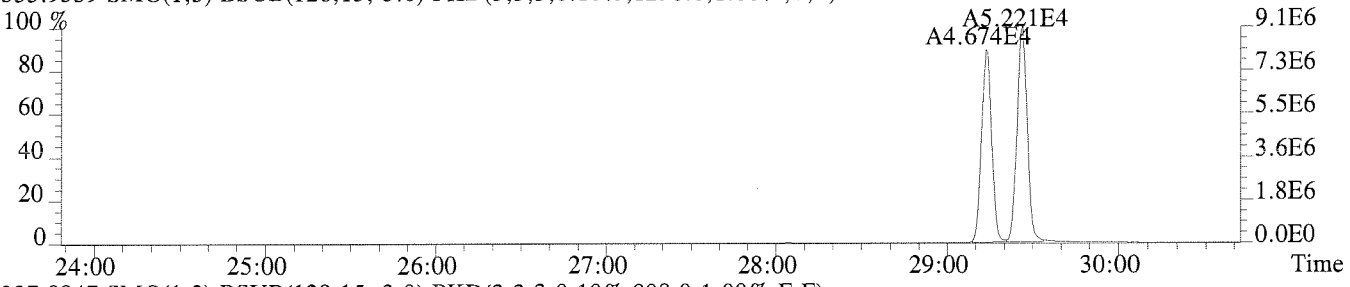
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,976.0,1.00%,F,F)



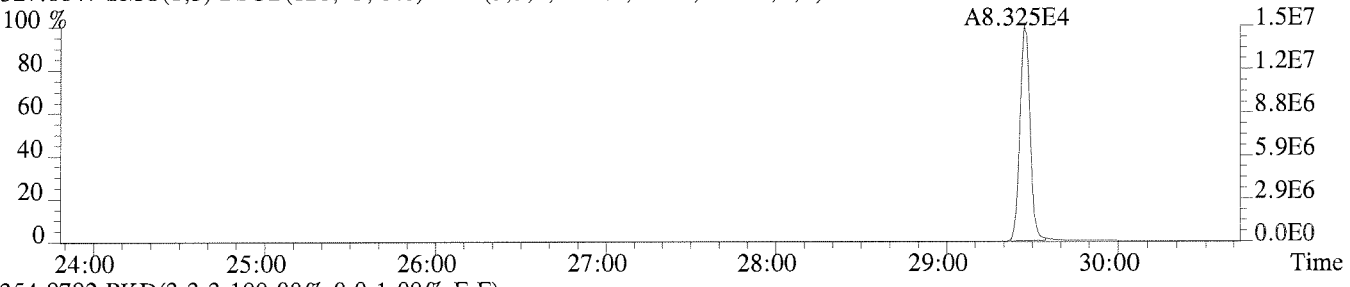
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,9528.0,1.00%,F,F)



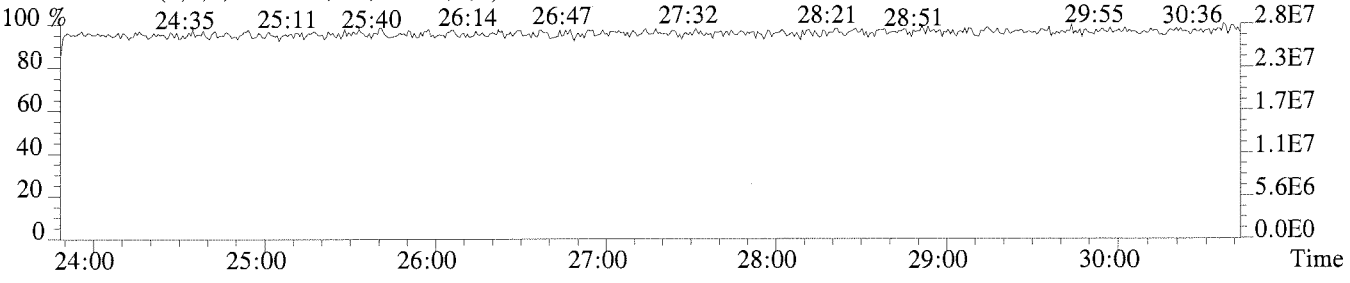
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1296.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,908.0,1.00%,F,F)

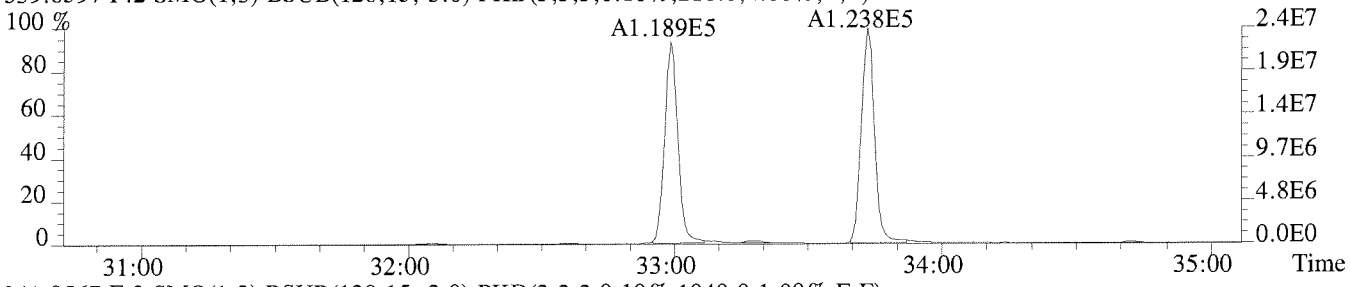


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

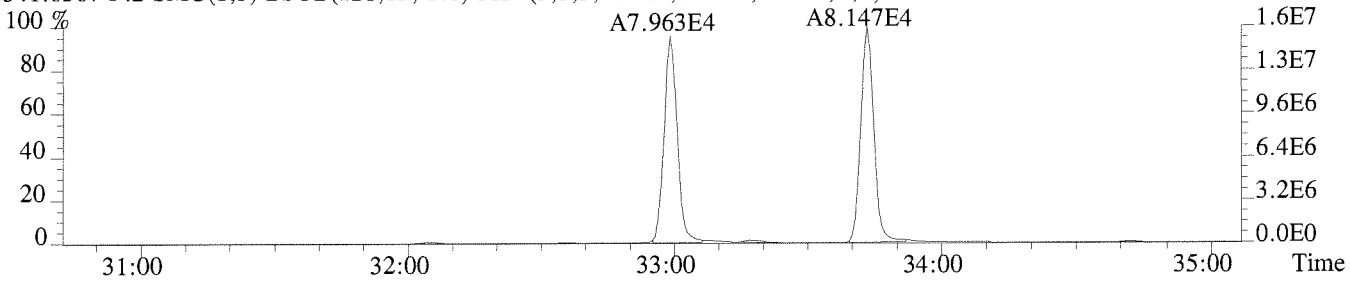


File:P200007 #1-400 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

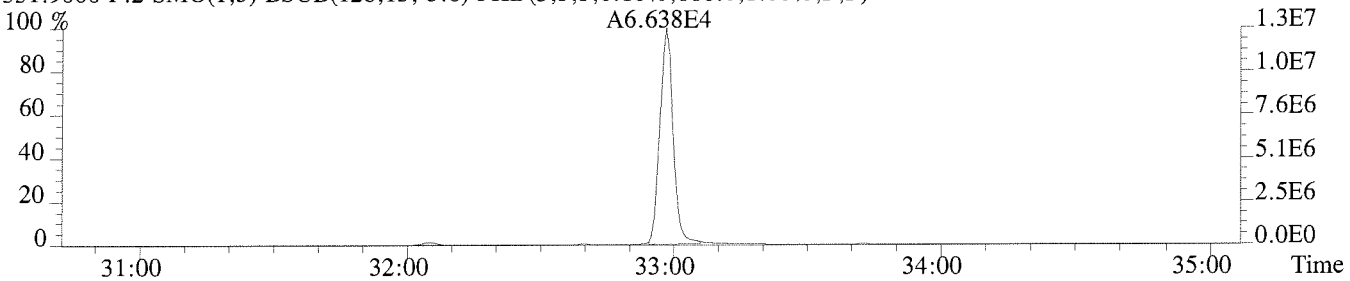
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,216.0,1.00%,F,F)



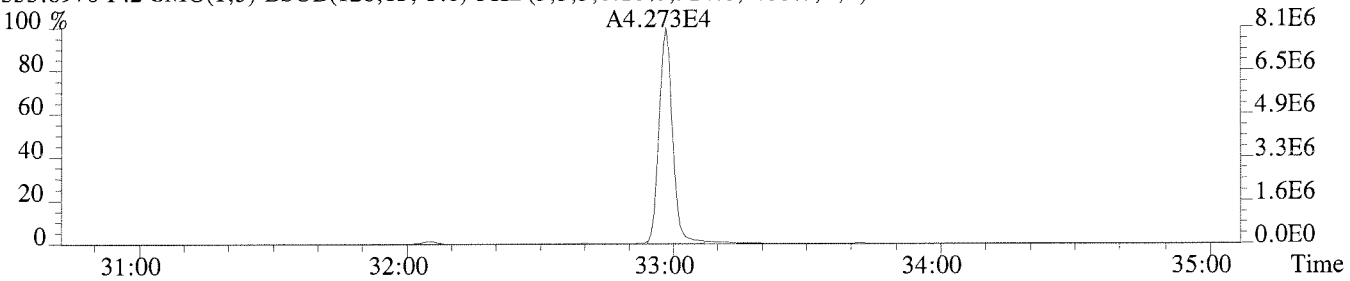
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1040.0,1.00%,F,F)



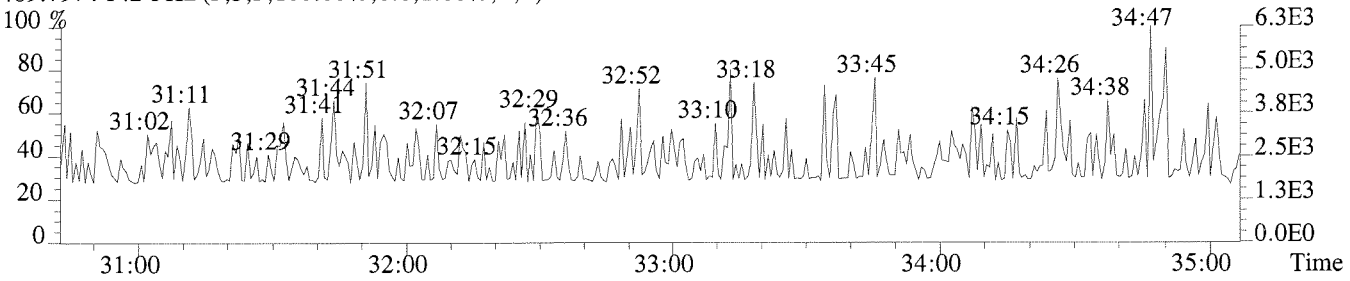
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,660.0,1.00%,F,F)



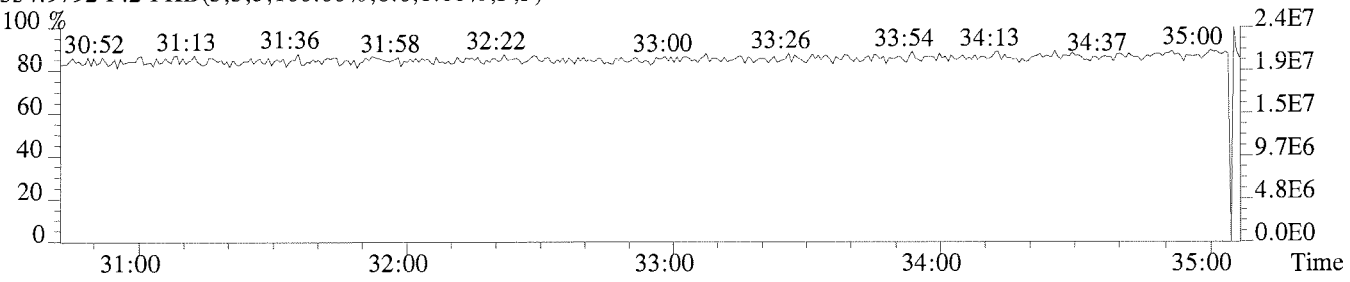
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,924.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

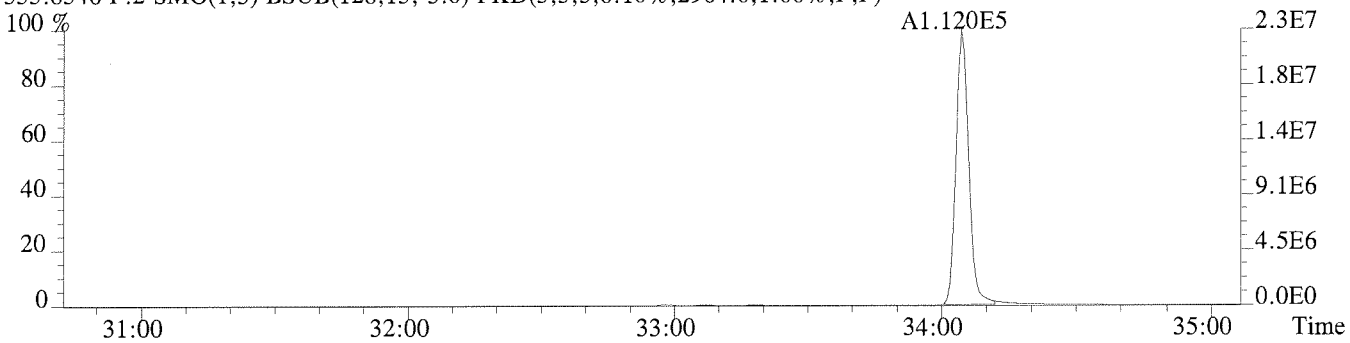


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

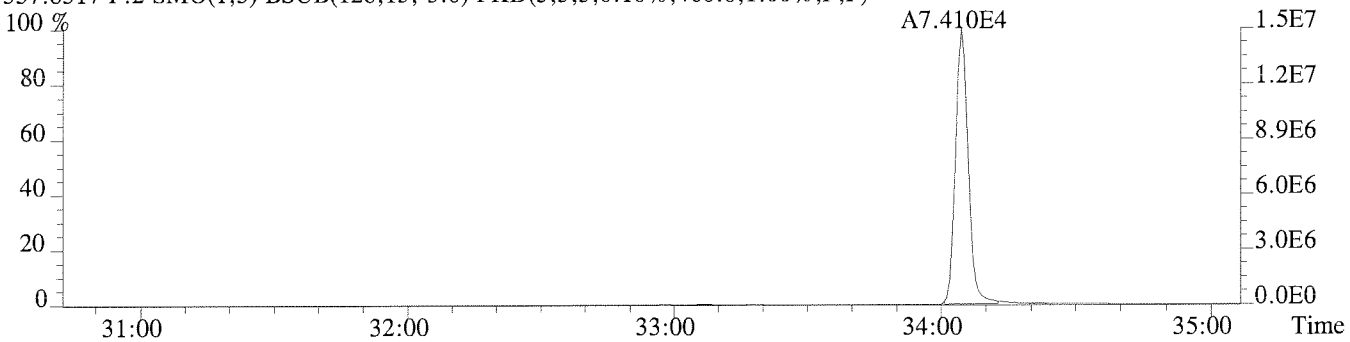


File:P200007 #1-400 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

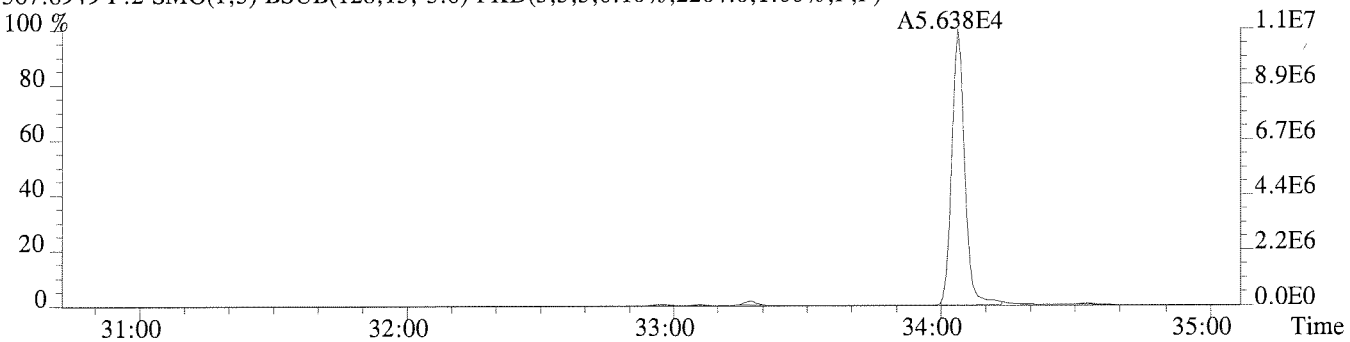
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2964.0,1.00%,F,F)



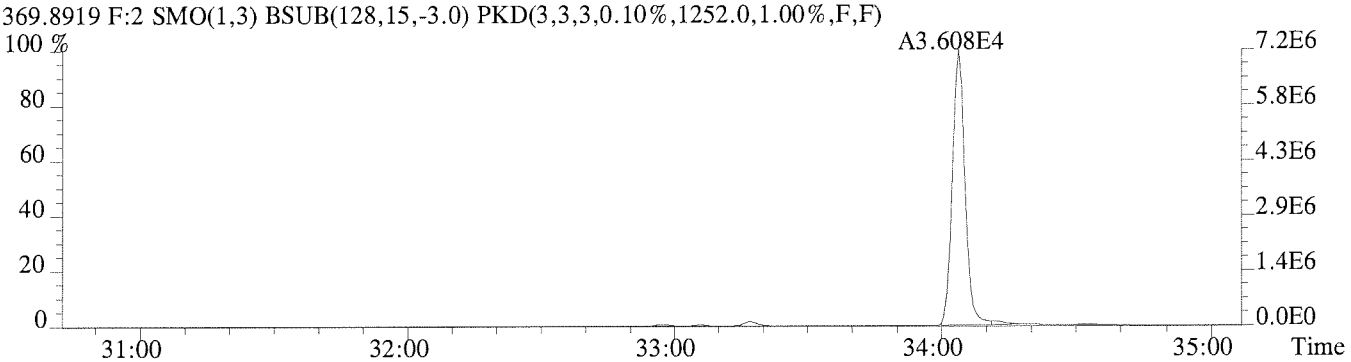
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,460.0,1.00%,F,F)



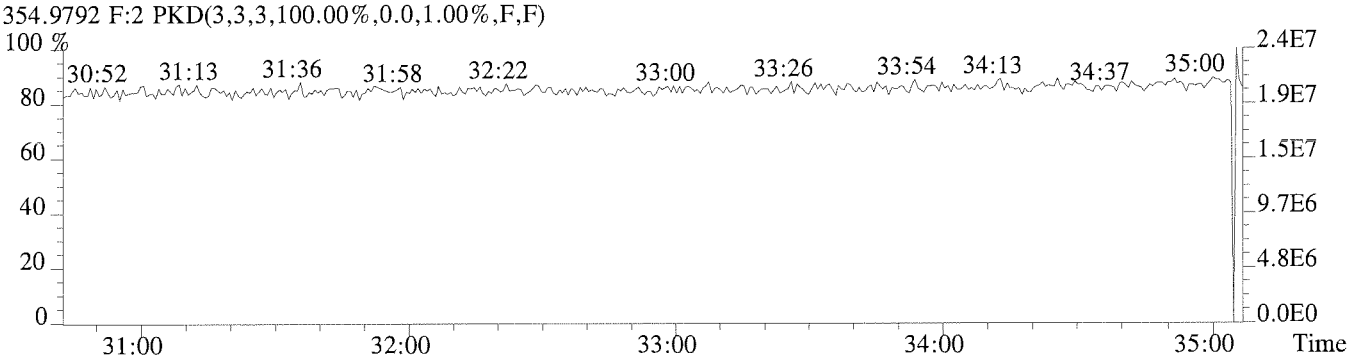
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2204.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1252.0,1.00%,F,F)

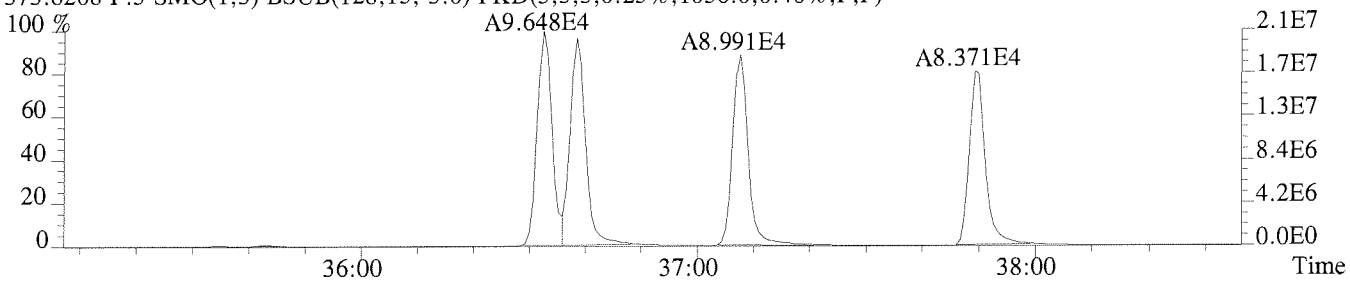


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

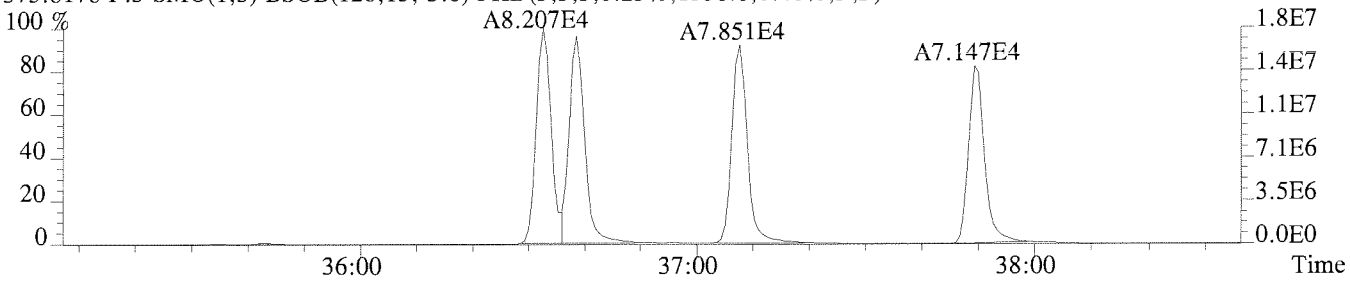


File:P200007 #1-317 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

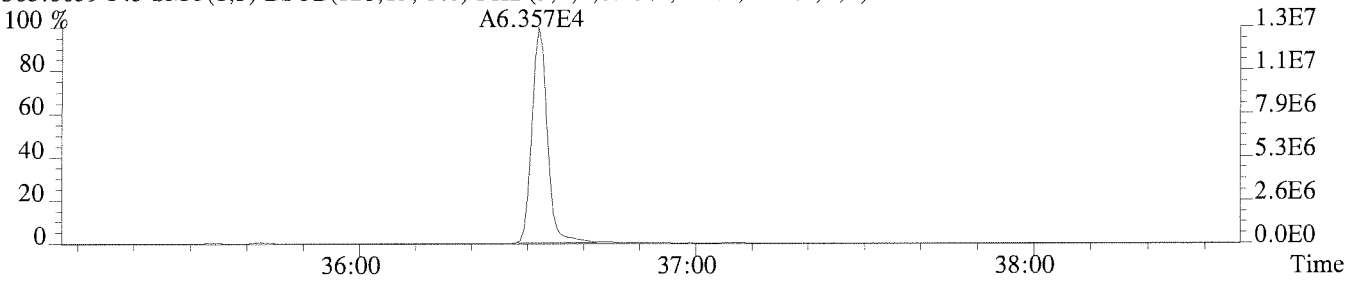
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1056.0,0.40%,F,F)



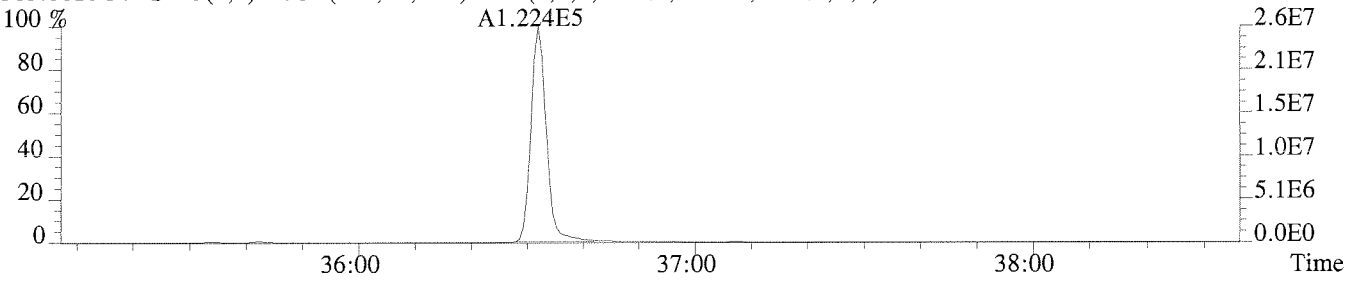
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1356.0,0.40%,F,F)



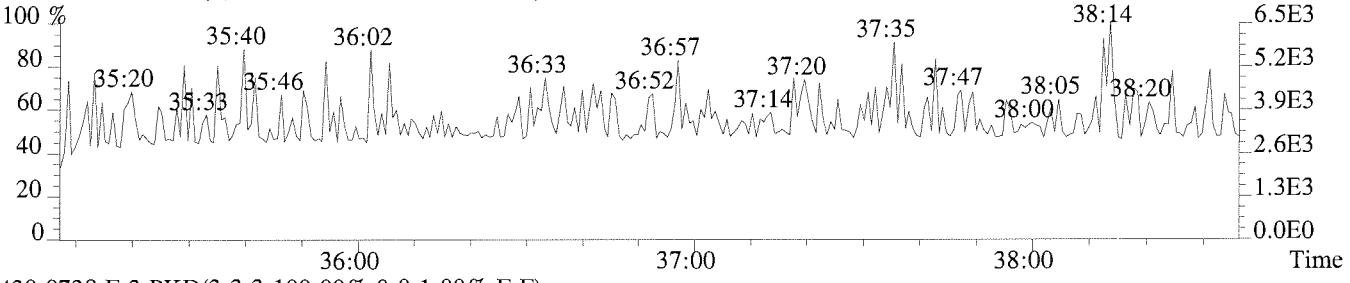
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,616.0,0.40%,F,F)



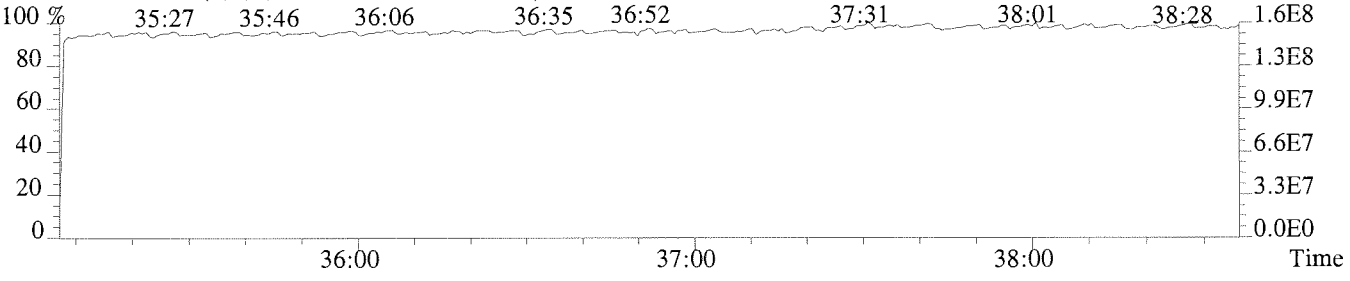
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2444.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

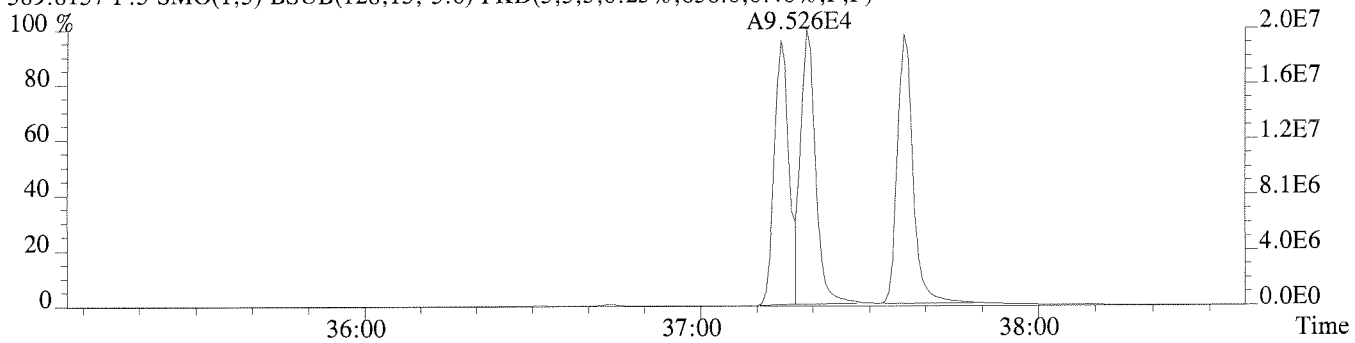


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

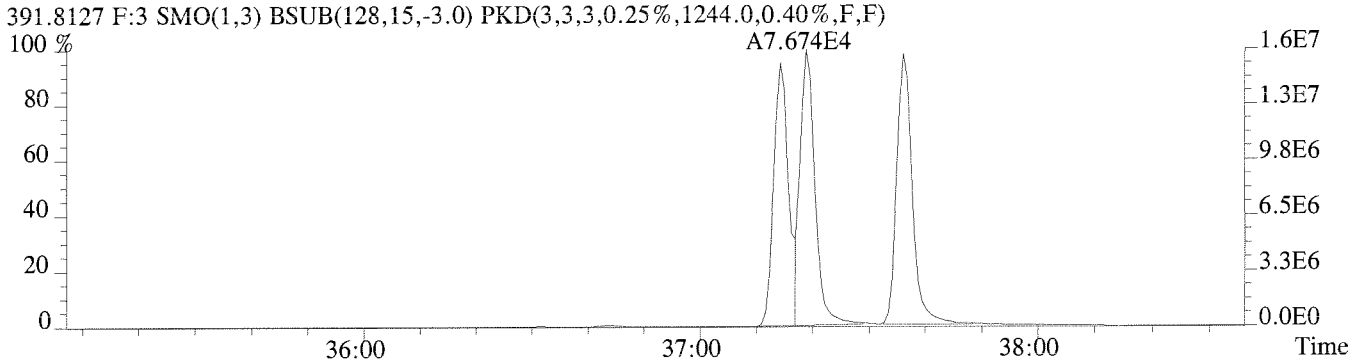


File:P200007 #1-317 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

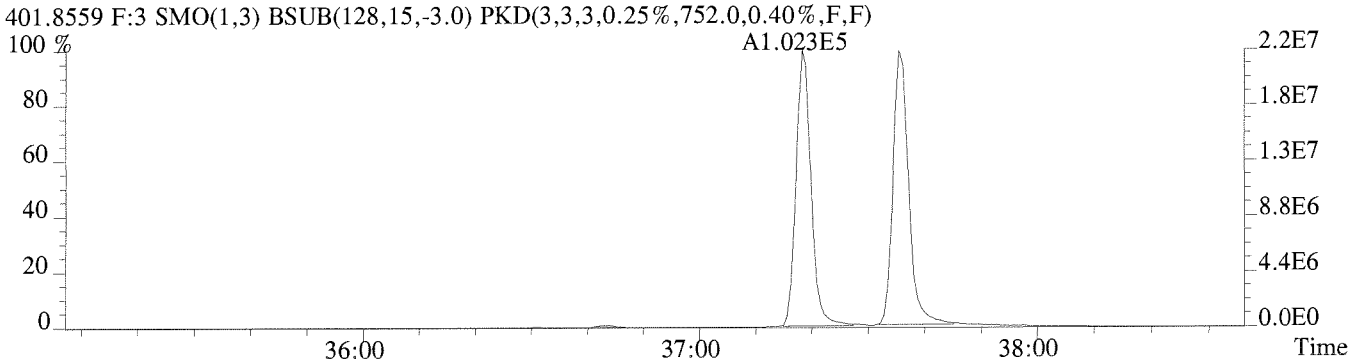
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,636.0,0.40%,F,F)



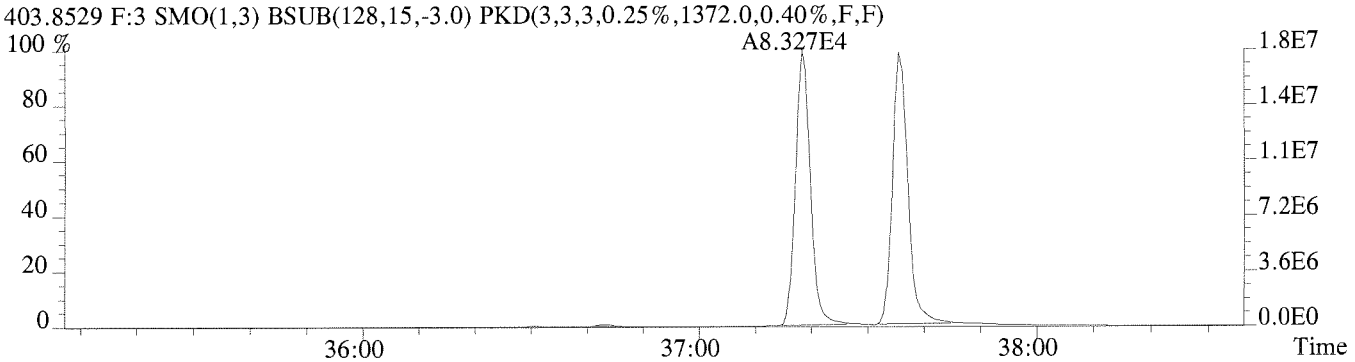
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1244.0,0.40%,F,F)



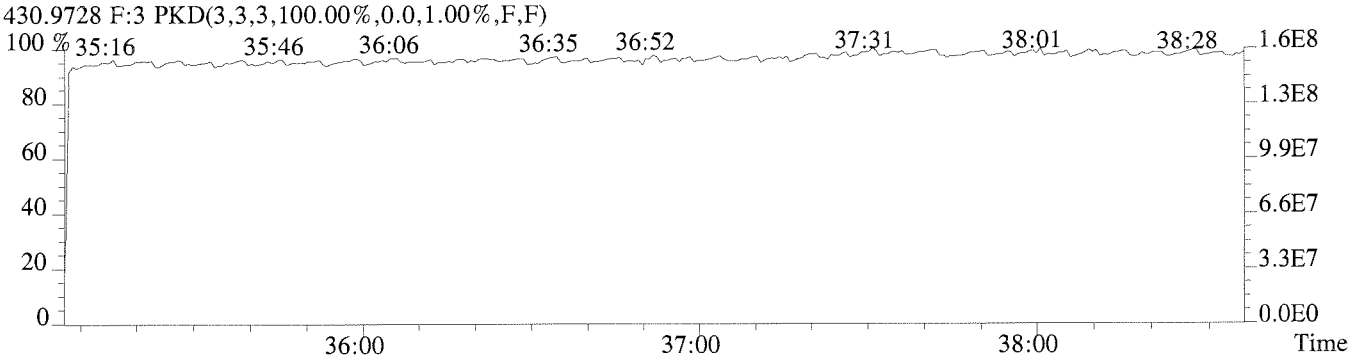
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,752.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1372.0,0.40%,F,F)

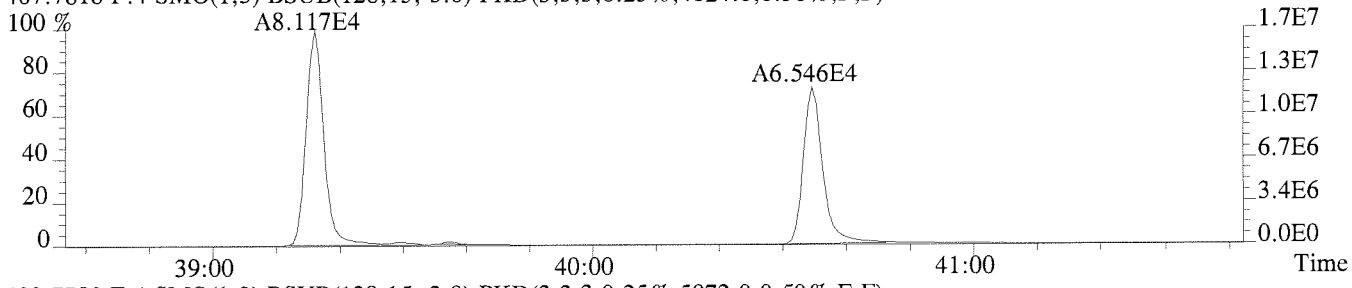


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

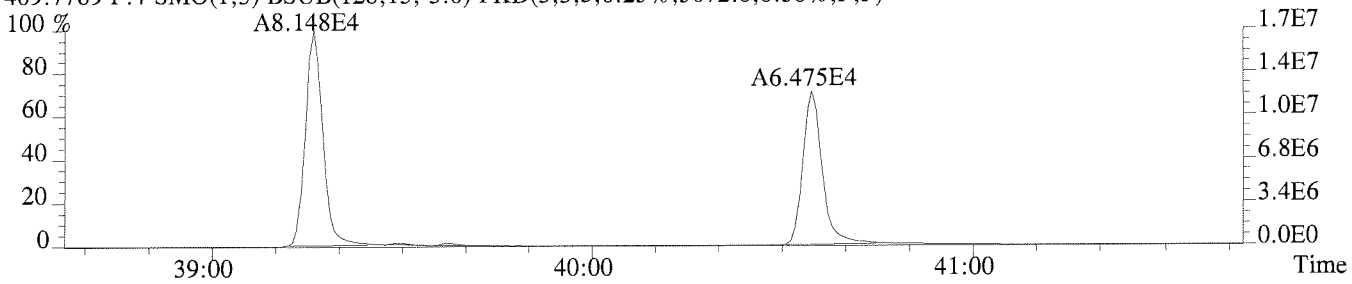


File:P200007 #1-281 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

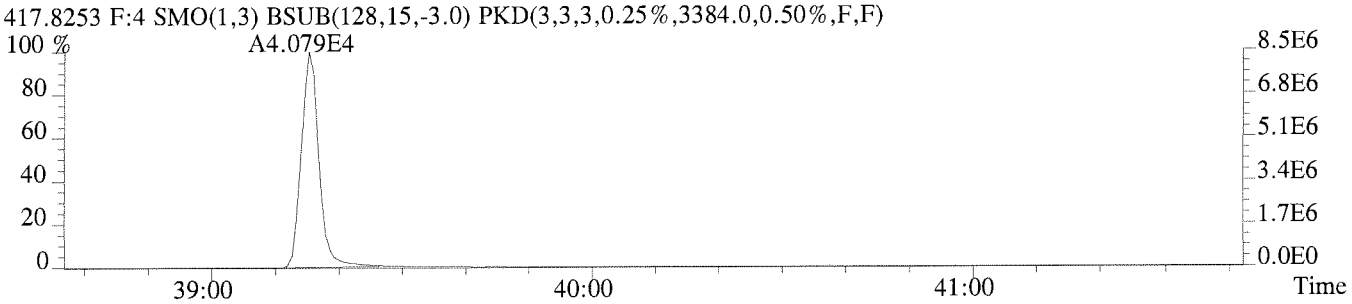
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4124.0,0.50%,F,F)



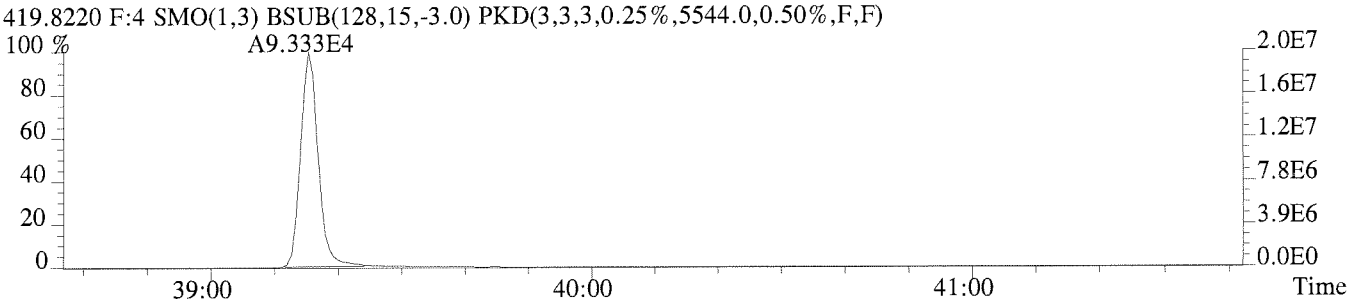
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5072.0,0.50%,F,F)



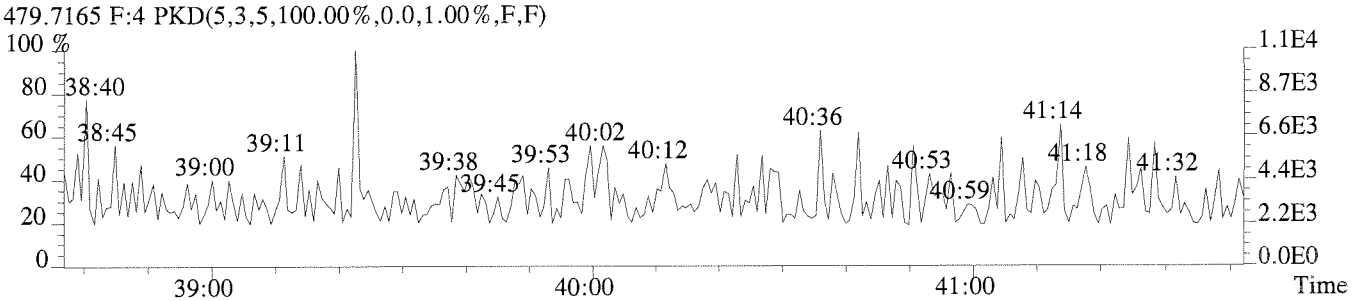
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3384.0,0.50%,F,F)



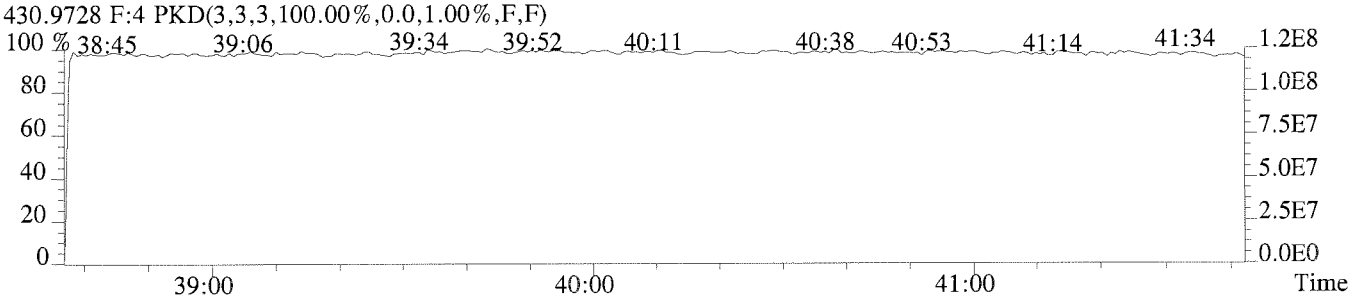
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5544.0,0.50%,F,F)



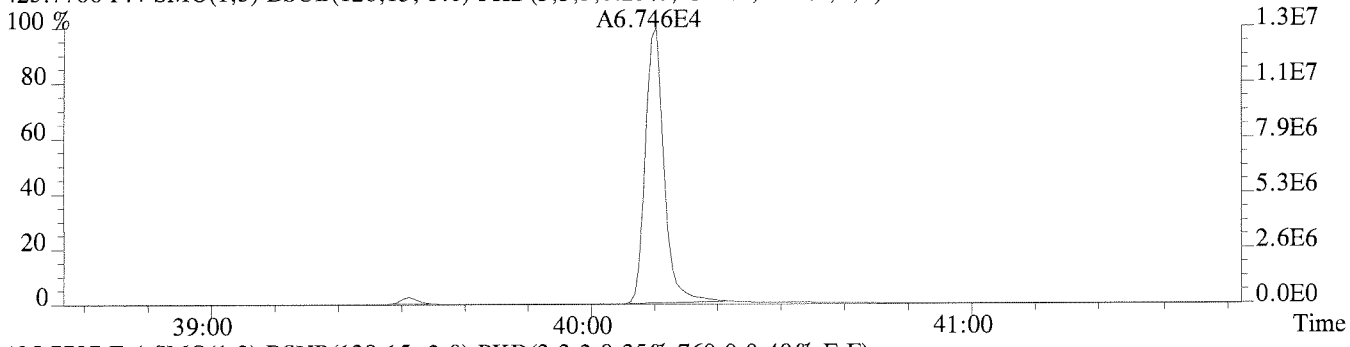
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



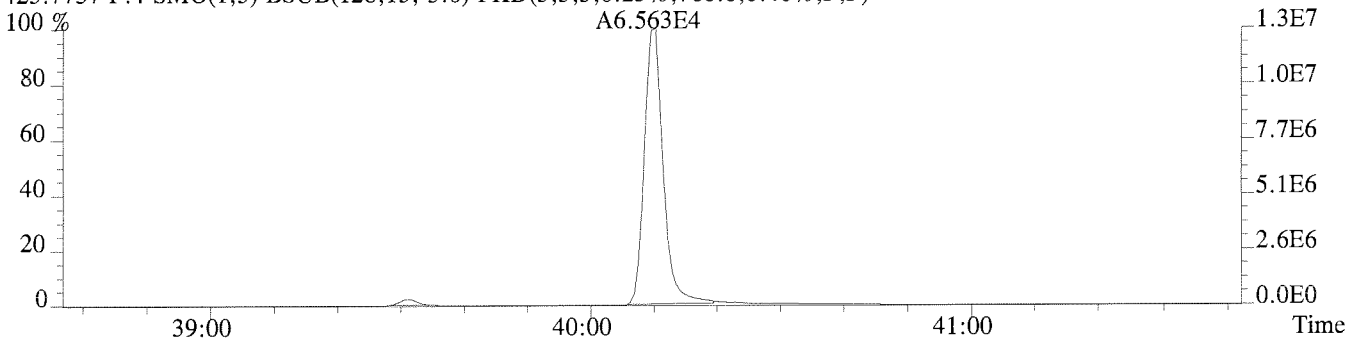
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



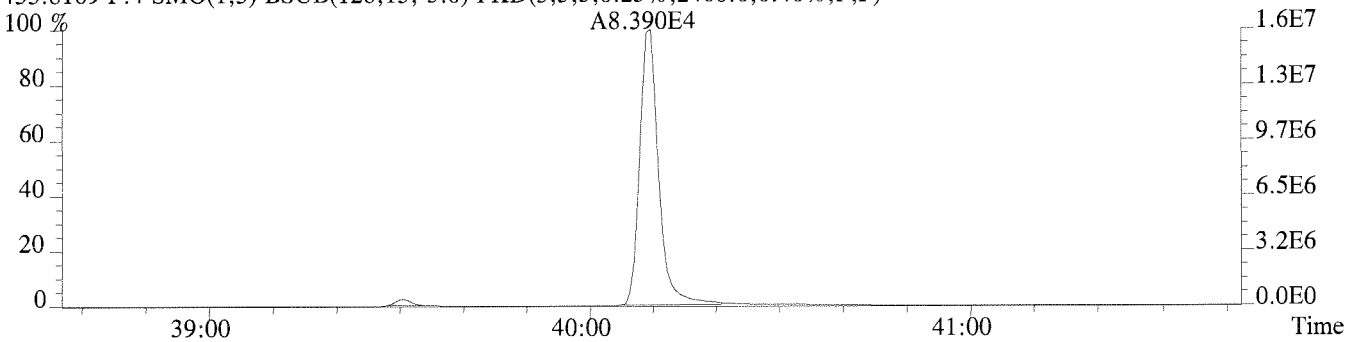
File:P200007 #1-281 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1376.0,0.40%,F,F)



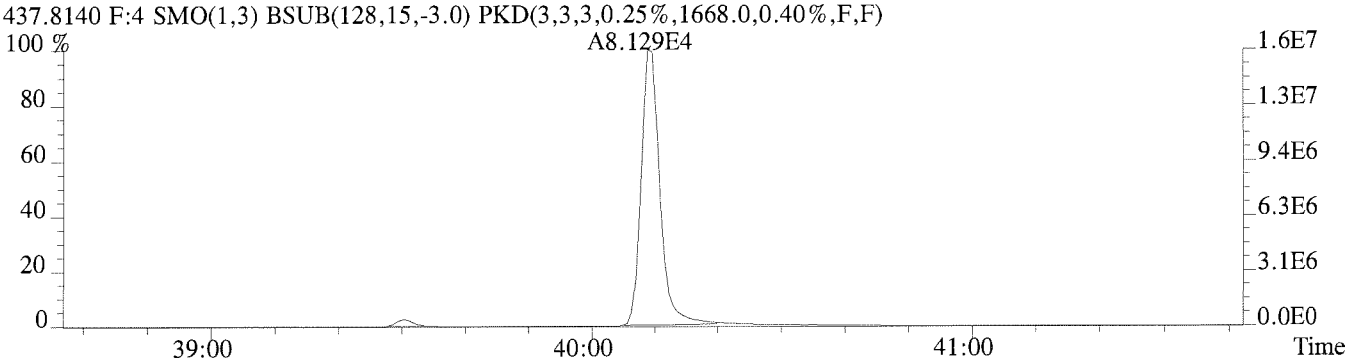
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,760.0,0.40%,F,F)



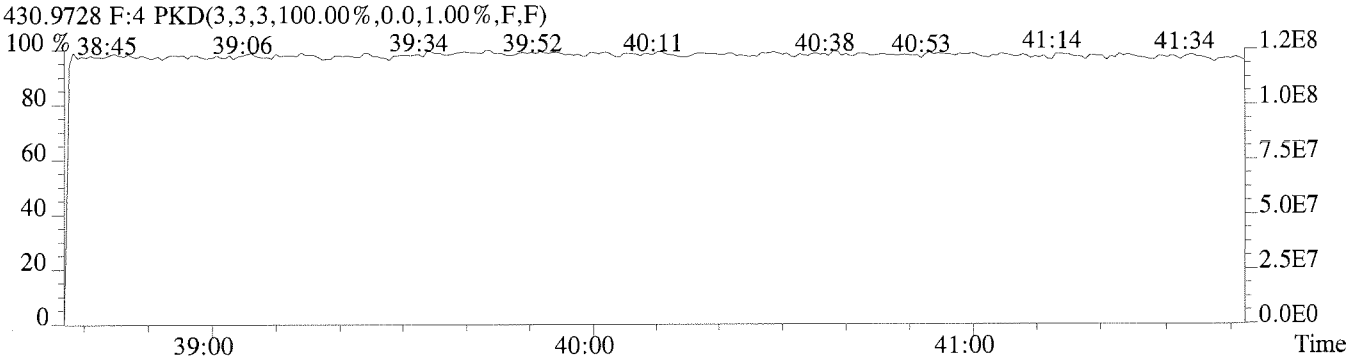
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2460.0,0.40%,F,F)



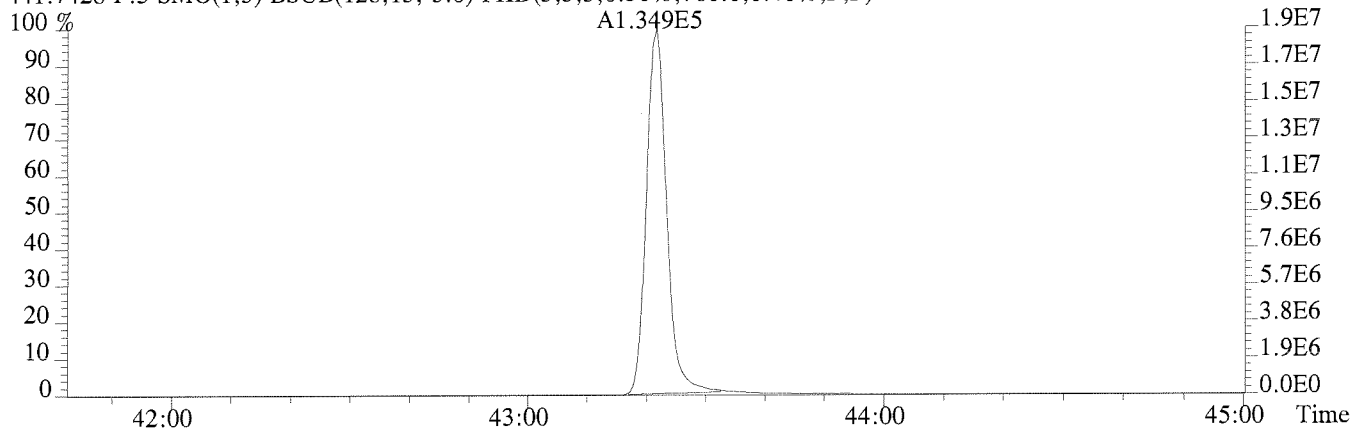
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1668.0,0.40%,F,F)



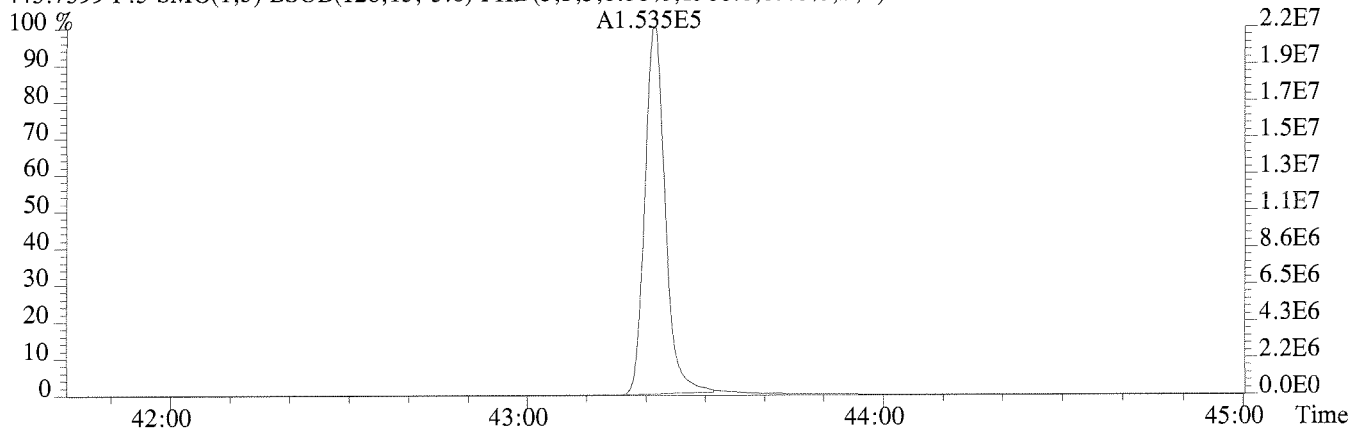
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



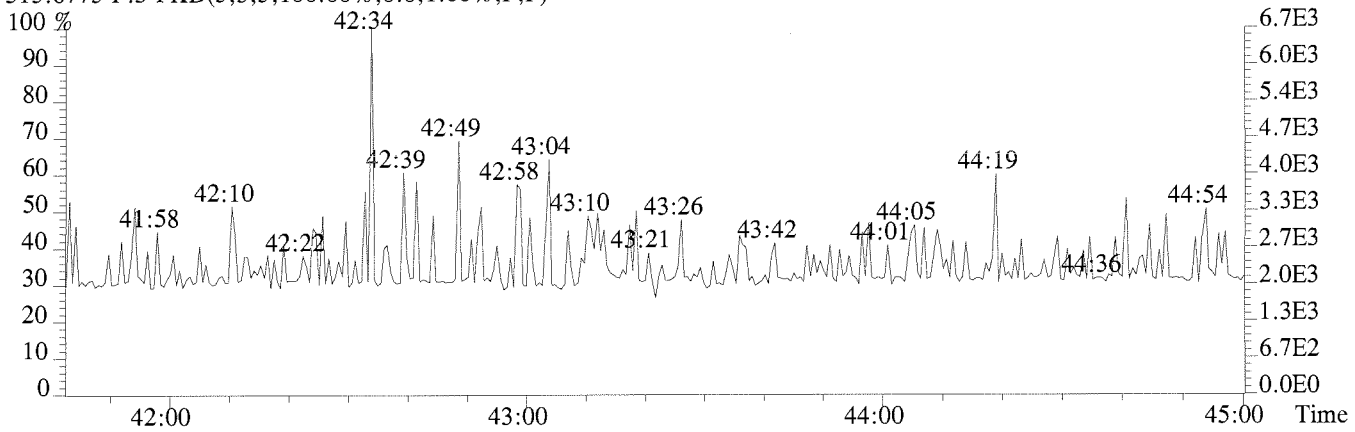
File:P200007 #1-364 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,760.0,0.40%,F,F)



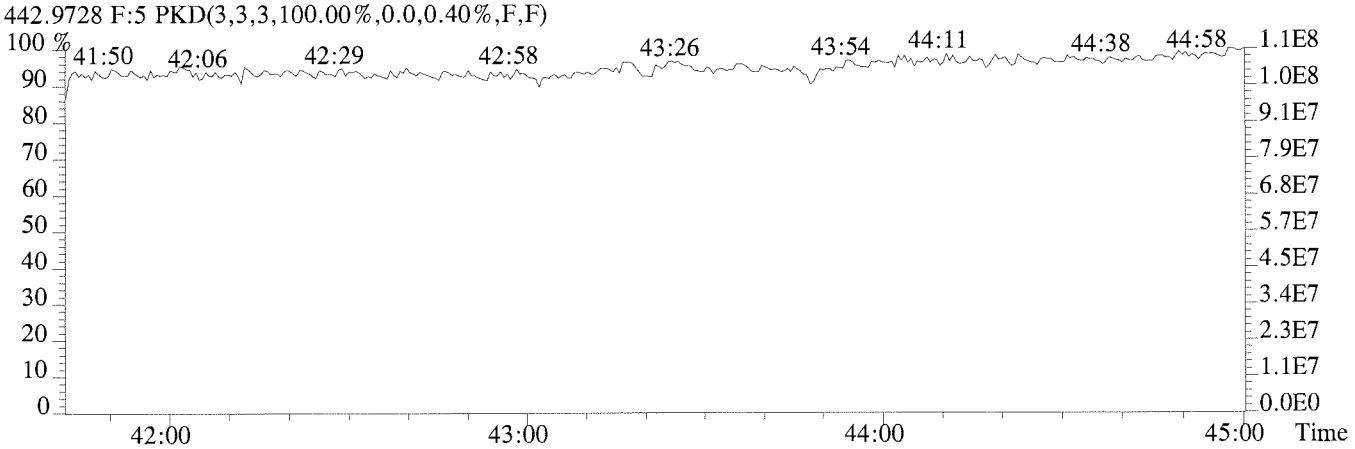
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1988.0,0.40%,F,F)



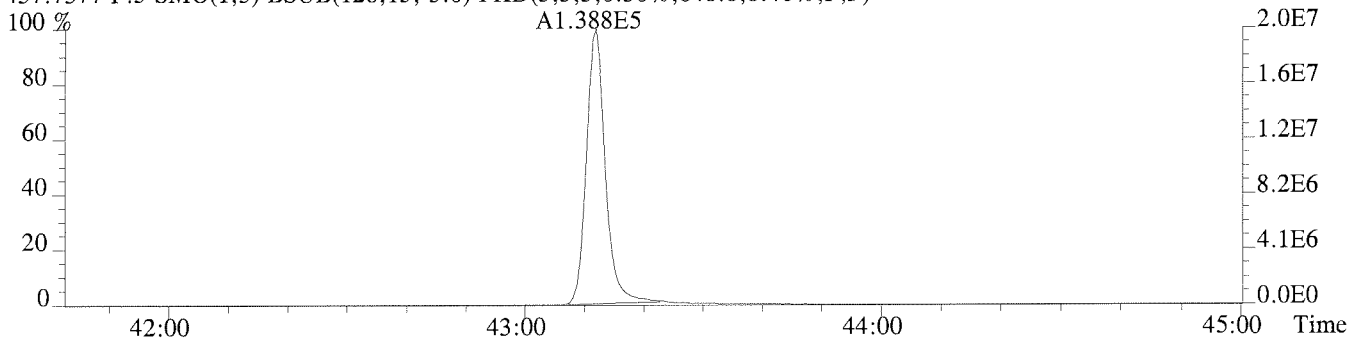
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



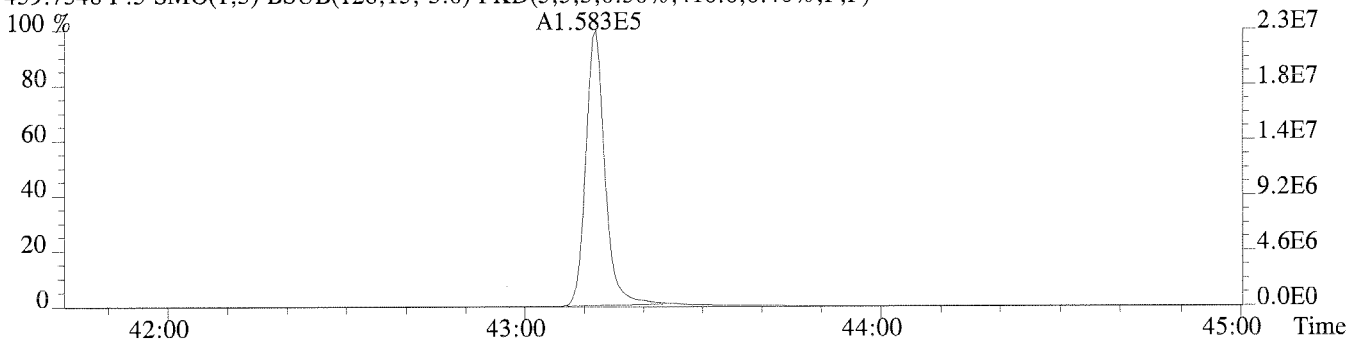
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



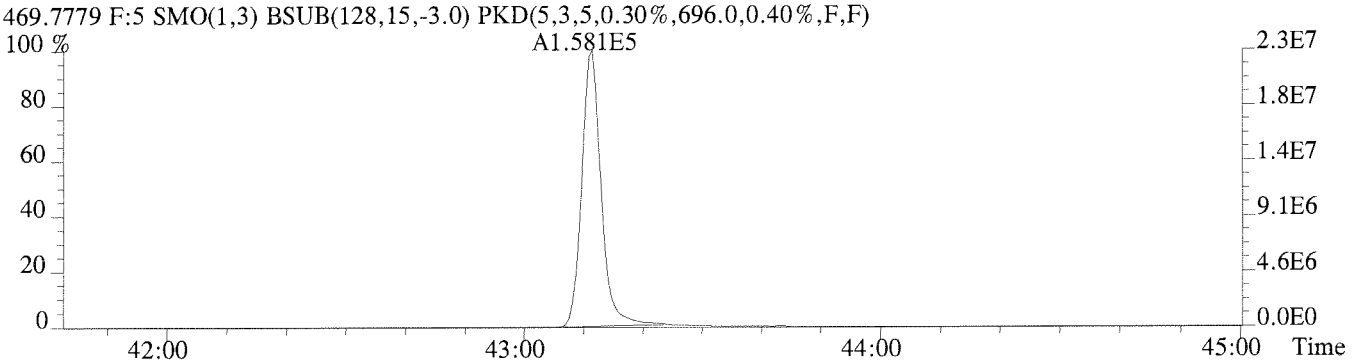
File:P200007 #1-364 Acq:18-JUL-2008 17:03:35 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,648.0,0.40%,F,F)



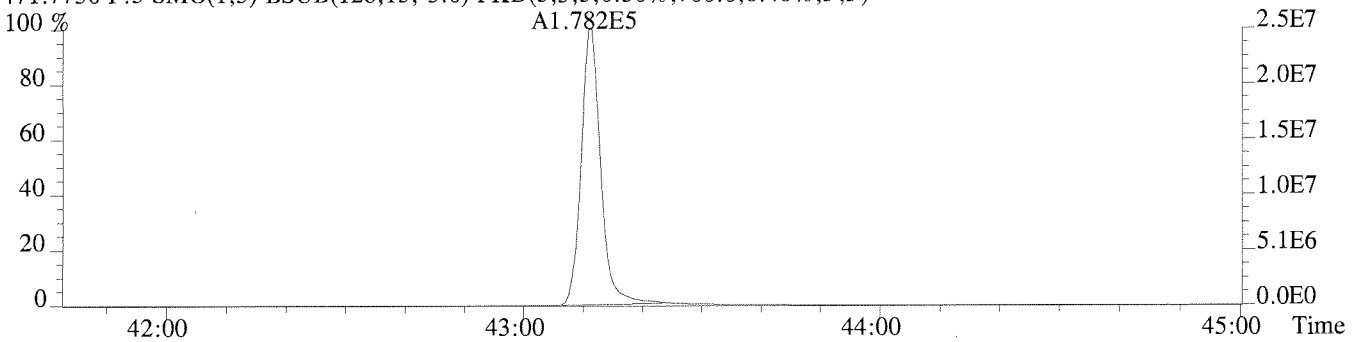
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,416.0,0.40%,F,F)



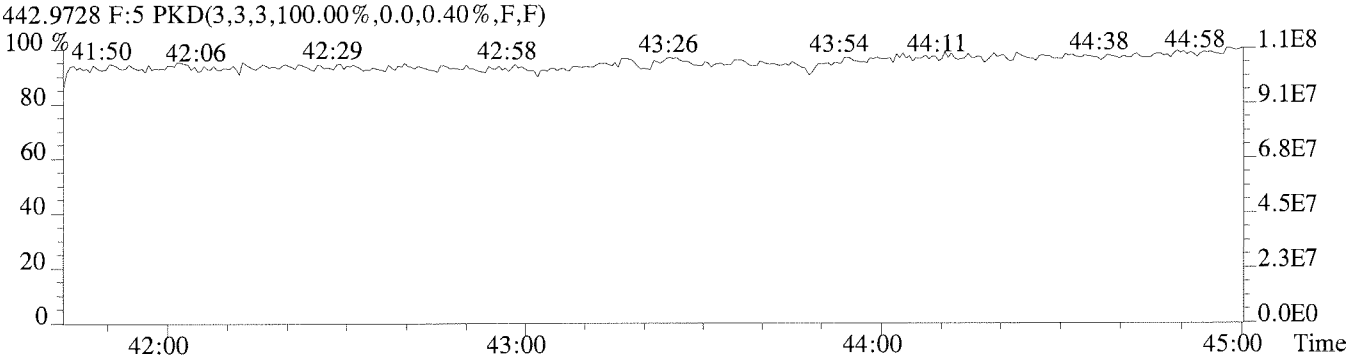
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,696.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,700.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC5

Run #5 Filename P200008 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 17:50:46
Processed: 30-JUL-08 09:37:38 Sample ID: ICAL HRCC5

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	9.378e+04	1.259e+05	0.74	yes	no	0.72
2	Unk	1,2,3,7,8-PeCDF	32:59	3.512e+05	2.345e+05	1.50	yes	no	0.71
3	Unk	2,3,4,7,8-PeCDF	33:43	3.665e+05	2.445e+05	1.50	yes	no	0.73
4	Unk	1,2,3,4,7,8-HxCDF	36:33	2.902e+05	2.423e+05	1.20	yes	no	0.93
5	Unk	1,2,3,6,7,8-HxCDF	36:39	2.875e+05	2.482e+05	1.16	yes	no	0.96
6	Unk	2,3,4,6,7,8-HxCDF	37:08	2.647e+05	2.323e+05	1.14	yes	no	0.86
7	Unk	1,2,3,7,8,9-HxCDF	37:50	2.512e+05	2.142e+05	1.17	yes	no	0.79
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	2.347e+05	2.399e+05	0.98	yes	no	1.19
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	1.921e+05	1.942e+05	0.99	yes	no	0.94
10	Unk	OCDF	43:22	4.236e+05	4.846e+05	0.87	yes	no	0.83
11	Unk	2,3,7,8-TCDD	29:28	9.626e+04	1.274e+05	0.76	yes	no	0.84
12	Unk	1,2,3,7,8-PeCDD	34:04	3.295e+05	2.171e+05	1.52	yes	no	0.79
13	Unk	1,2,3,4,7,8-HxCDD	37:14	2.596e+05	2.139e+05	1.21	yes	no	0.81
14	Unk	1,2,3,6,7,8-HxCDD	37:19	2.798e+05	2.272e+05	1.23	yes	no	0.92
15	Unk	1,2,3,7,8,9-HxCDD	37:36	2.740e+05	2.251e+05	1.22	yes	no	0.89
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	1.951e+05	1.926e+05	1.01	yes	no	0.79
17	Unk	OCDD	43:12	4.313e+05	4.907e+05	0.88	yes	no	0.88
18	IS	13C-2,3,7,8-TCDF	28:35	3.163e+04	4.164e+04	0.76	yes	no	1.25
19	IS	13C-1,2,3,7,8-PeCDF	32:58	4.840e+04	3.098e+04	1.56	yes	no	1.23
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	4.617e+04	9.123e+04	0.51	yes	no	0.98
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	2.909e+04	6.761e+04	0.43	yes	no	0.69
22	IS	13C-2,3,7,8-TCDD	29:26	2.800e+04	3.646e+04	0.77	yes	no	1.10
23	IS	13C-1,2,3,7,8-PeCDD	34:04	4.128e+04	2.649e+04	1.56	yes	no	1.05
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	7.371e+04	6.005e+04	1.23	yes	no	0.97
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	6.030e+04	5.932e+04	1.02	yes	no	0.85
26	IS	13C-OCDD	43:11	1.212e+05	1.363e+05	0.89	yes	no	0.87
27	RS/RT	13C-1,2,3,4-TCDD	29:14	2.500e+04	3.259e+04	0.77	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:35	7.702e+04	6.357e+04	1.21	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	2.353e+05					0.99

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Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC5

Run #5 Filename P200008 #1 Samp: 1 Inj: 1 Acquired: 18-JUL-08 17:50:46

Processed: 30-JUL-08 09:37:38 LAB. ID: ICAL HRCC5

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.59e+07	5.92e+02	2.7e+04	2.14e+07	1.92e+03	1.1e+04
2	1,2,3,7,8-PeCDF	6.70e+07	3.68e+02	1.8e+05	4.50e+07	1.04e+03	4.3e+04
3	2,3,4,7,8-PeCDF	7.42e+07	3.68e+02	2.0e+05	4.92e+07	1.04e+03	4.7e+04
4	1,2,3,4,7,8-HxCDF	6.50e+07	2.09e+03	3.1e+04	5.39e+07	1.16e+03	4.7e+04
5	1,2,3,6,7,8-HxCDF	6.02e+07	2.09e+03	2.9e+04	5.25e+07	1.16e+03	4.5e+04
6	2,3,4,6,7,8-HxCDF	5.74e+07	2.09e+03	2.7e+04	5.03e+07	1.16e+03	4.3e+04
7	1,2,3,7,8,9-HxCDF	5.16e+07	2.09e+03	2.5e+04	4.44e+07	1.16e+03	3.8e+04
8	1,2,3,4,6,7,8-HpCDF	4.99e+07	1.05e+04	4.8e+03	5.17e+07	9.82e+03	5.3e+03
9	1,2,3,4,7,8,9-HpCDF	3.80e+07	1.05e+04	3.6e+03	3.84e+07	9.82e+03	3.9e+03
10	OCDF	6.25e+07	1.01e+03	6.2e+04	7.06e+07	3.08e+03	2.3e+04
11	2,3,7,8-TCDD	1.70e+07	1.83e+03	9.3e+03	2.25e+07	6.68e+02	3.4e+04
12	1,2,3,7,8-PeCDD	6.70e+07	2.24e+03	3.0e+04	4.43e+07	3.72e+02	1.2e+05
13	1,2,3,4,7,8-HxCDD	5.80e+07	9.44e+02	6.1e+04	4.77e+07	1.42e+03	3.4e+04
14	1,2,3,6,7,8-HxCDD	6.00e+07	9.44e+02	6.4e+04	4.93e+07	1.42e+03	3.5e+04
15	1,2,3,7,8,9-HxCDD	5.86e+07	9.44e+02	6.2e+04	4.82e+07	1.42e+03	3.4e+04
16	1,2,3,4,6,7,8-HpCDD	3.86e+07	1.98e+03	2.0e+04	3.78e+07	2.45e+03	1.5e+04
17	OCDD	6.44e+07	4.92e+02	1.3e+05	7.31e+07	3.72e+02	2.0e+05
18	13C-2,3,7,8-TCDF	5.20e+06	3.66e+03	1.4e+03	6.90e+06	3.16e+03	2.2e+03
19	13C-1,2,3,7,8-PeCDF	9.18e+06	3.00e+02	3.1e+04	5.93e+06	1.13e+03	5.3e+03
20	13C-1,2,3,4,7,8-HxCDF	9.96e+06	8.36e+02	1.2e+04	1.95e+07	3.08e+03	6.3e+03
21	13C-1,2,3,4,6,7,8-HpCDF	6.14e+06	4.09e+03	1.5e+03	1.41e+07	3.69e+03	3.8e+03
22	13C-2,3,7,8-TCDD	4.97e+06	5.87e+03	8.5e+02	6.53e+06	1.29e+03	5.1e+03
23	13C-1,2,3,7,8-PeCDD	8.48e+06	2.24e+03	3.8e+03	5.48e+06	1.35e+03	4.1e+03
24	13C-1,2,3,6,7,8-HxCDD	1.59e+07	6.96e+02	2.3e+04	1.31e+07	2.01e+03	6.5e+03
25	13C-1,2,3,4,6,7,8-HpCDD	1.17e+07	1.83e+03	6.4e+03	1.14e+07	7.92e+02	1.4e+04
26	13C-OCDD	1.79e+07	7.88e+02	2.3e+04	2.01e+07	8.84e+02	2.3e+04
27	13C-1,2,3,4-TCDD	4.44e+06	5.87e+03	7.6e+02	5.81e+06	1.29e+03	4.5e+03
28	13C-1,2,3,7,8,9-HxCDD	1.61e+07	6.96e+02	2.3e+04	1.33e+07	2.01e+03	6.6e+03
29	37Cl-2,3,7,8-TCDD	4.13e+07	6.88e+02	6.0e+04			

Columbia Analytical Services, Inc.
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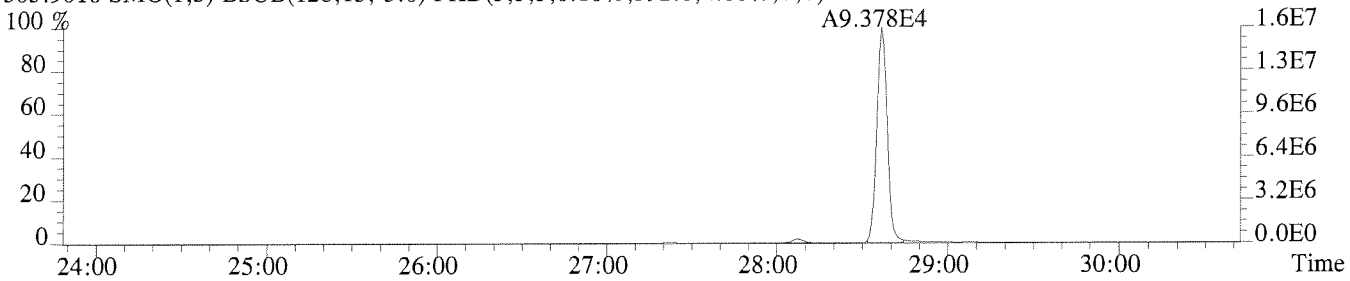
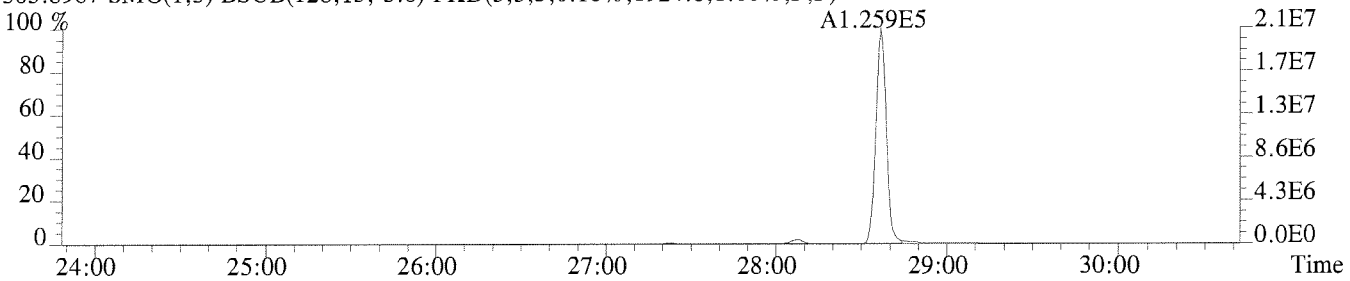
File:P200008 #1-575 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

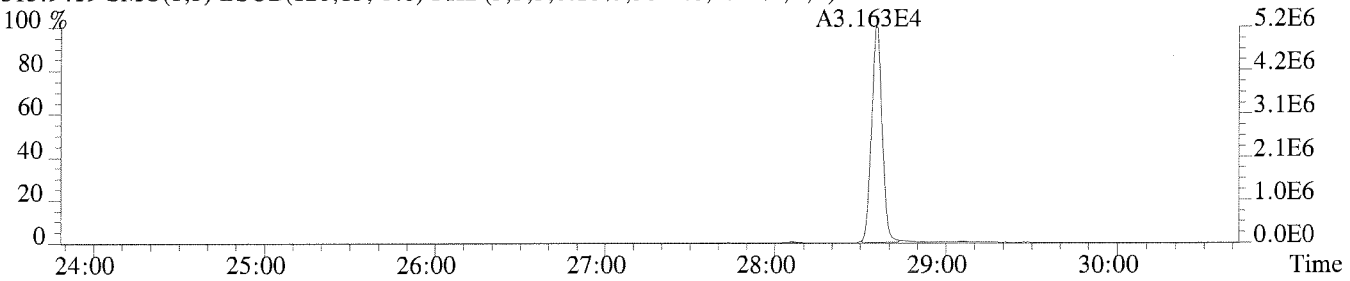
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,592.0,1.00%,F,F)



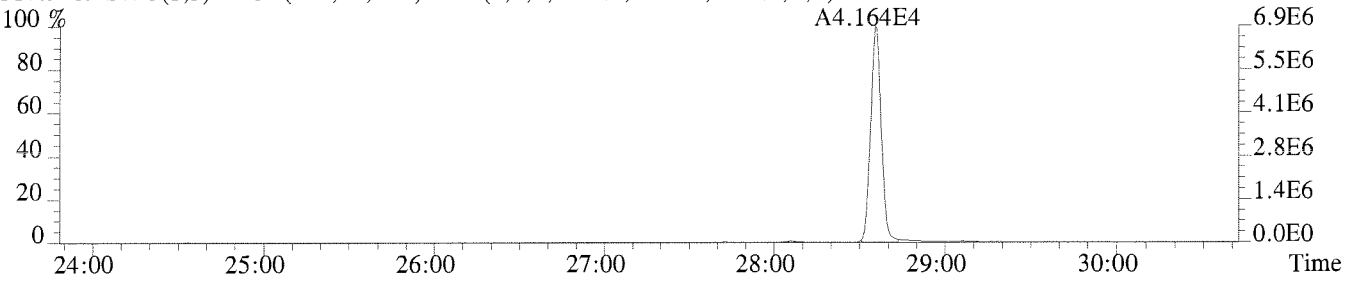
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1924.0,1.00%,F,F)



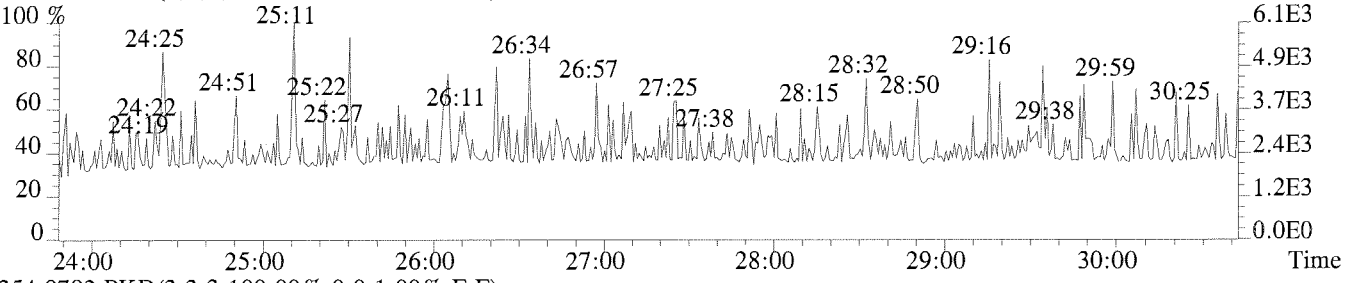
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3664.0,1.00%,F,F)



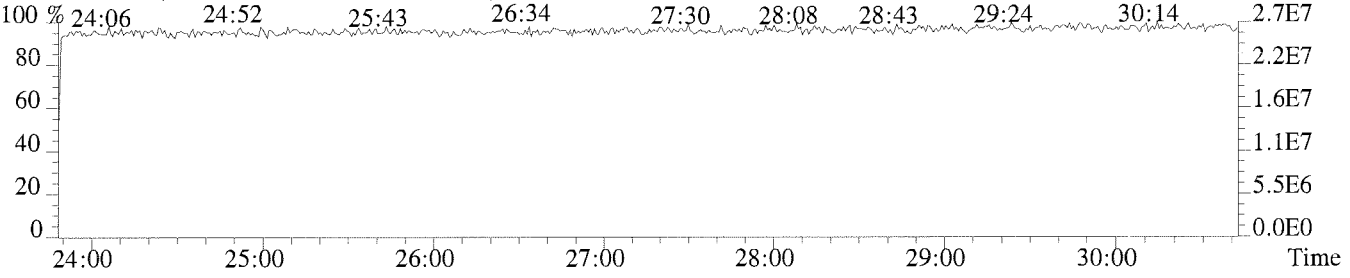
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3164.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

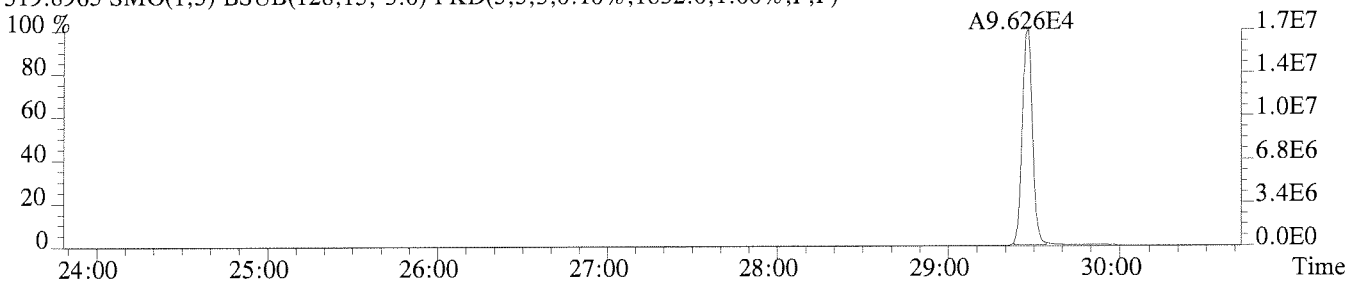


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

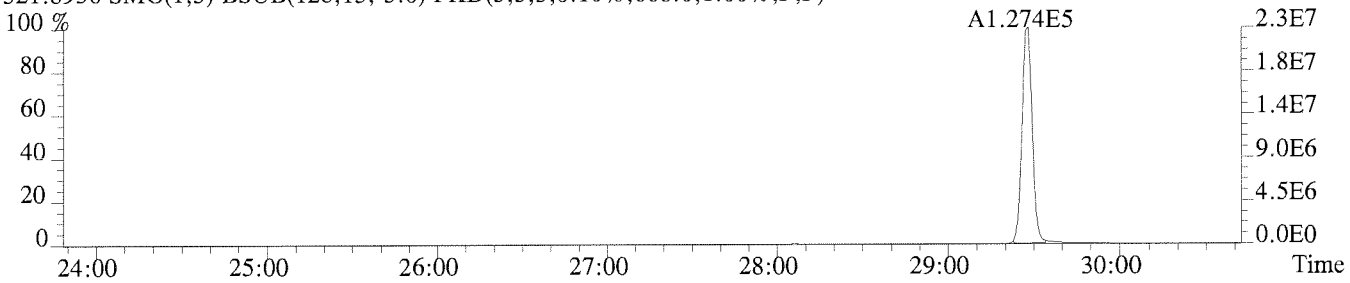


File:P200008 #1-575 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

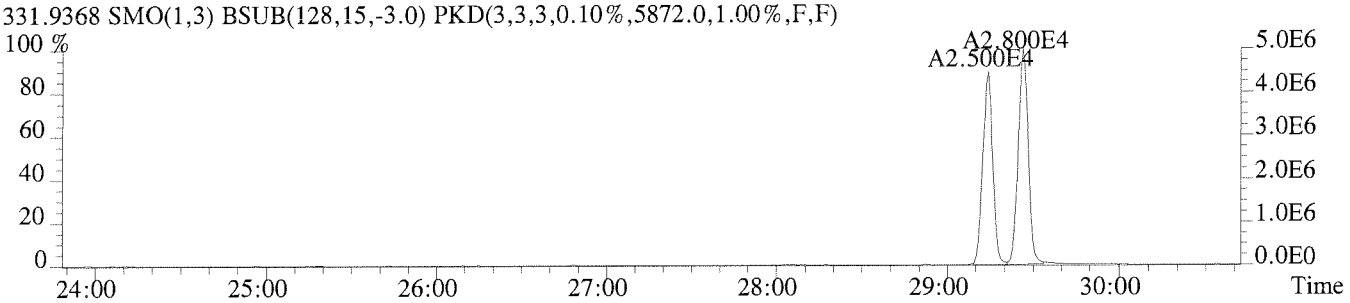
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1832.0,1.00%,F,F)



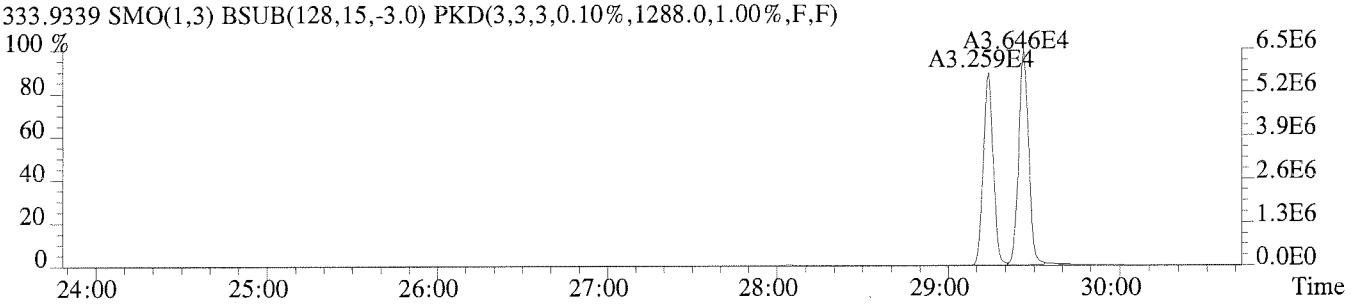
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,668.0,1.00%,F,F)



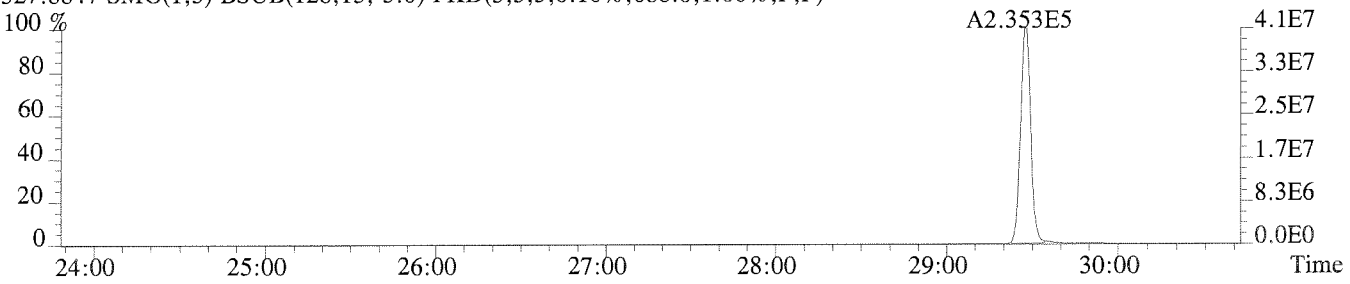
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,5872.0,1.00%,F,F)



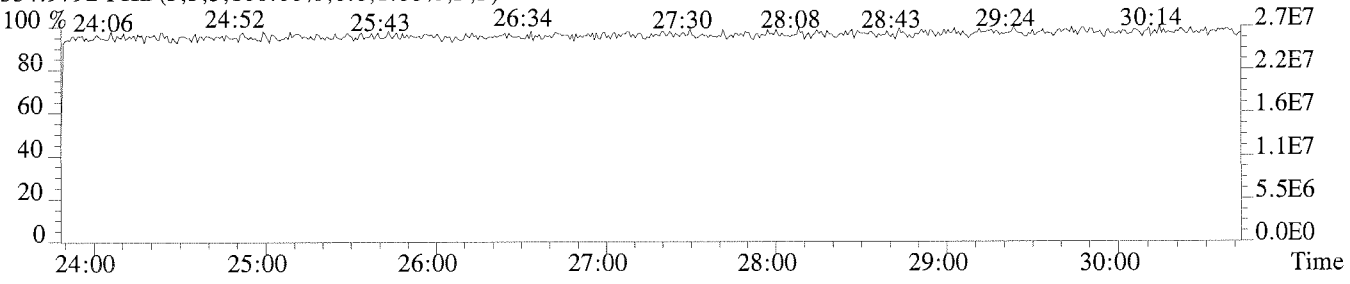
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1288.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,688.0,1.00%,F,F)

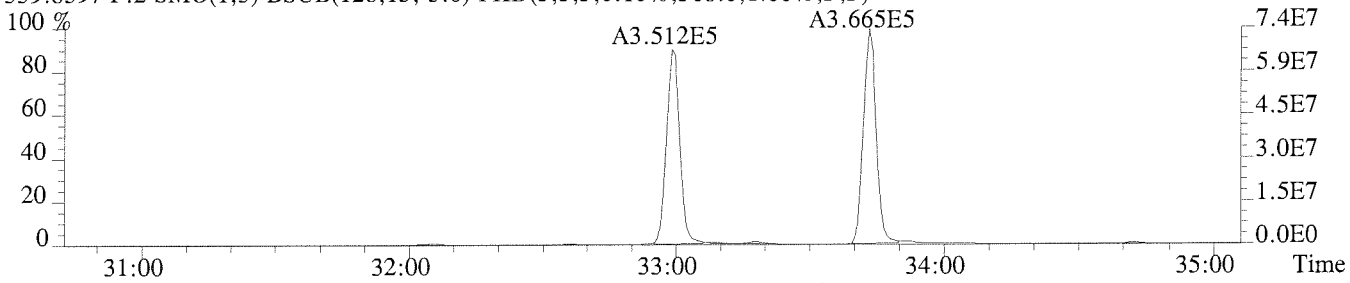


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

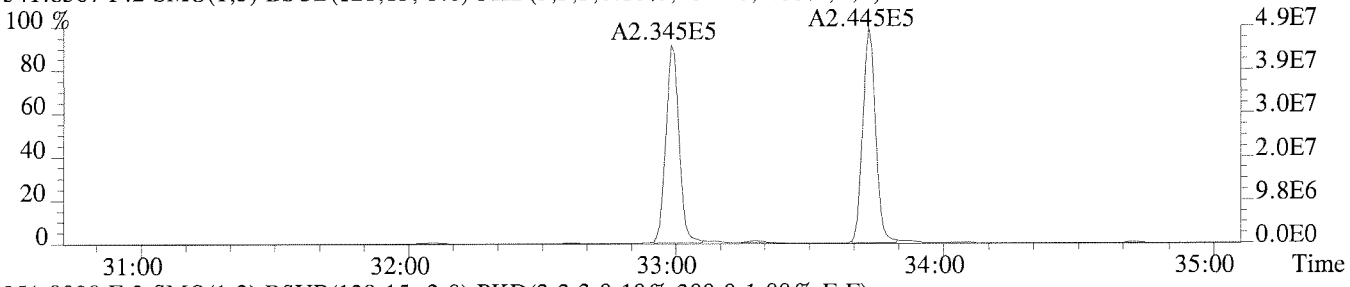


File:P200008 #1-399 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

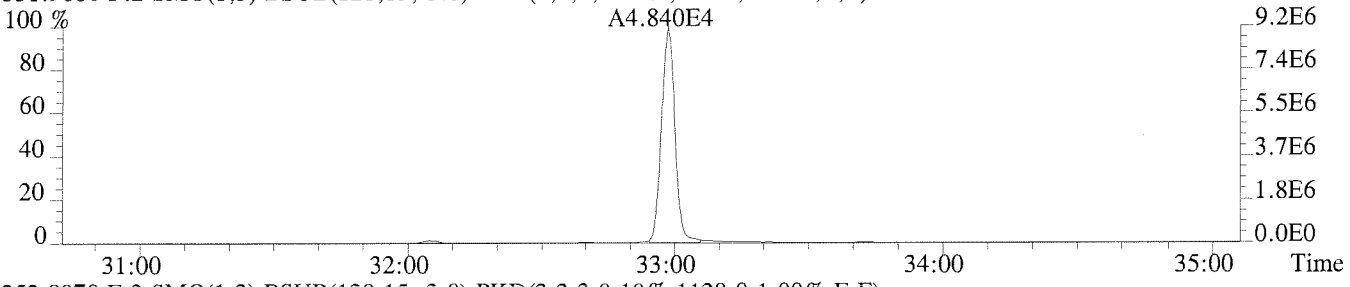
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,368.0,1.00%,F,F)



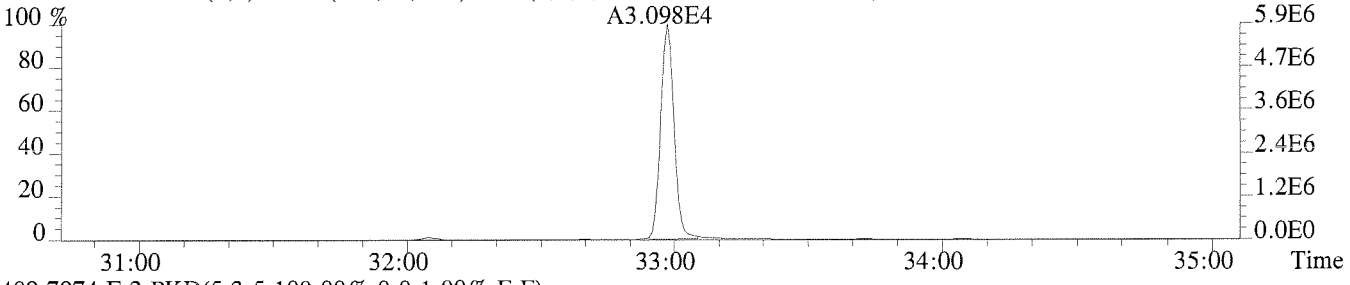
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1044.0,1.00%,F,F)



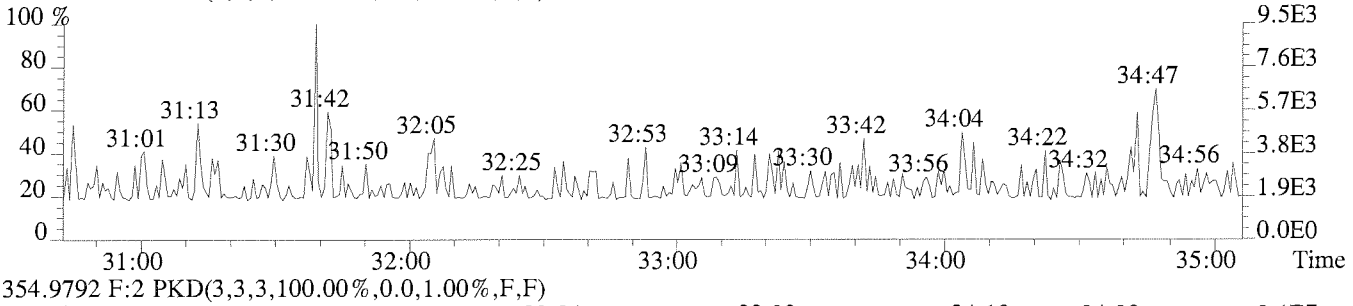
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,300.0,1.00%,F,F)



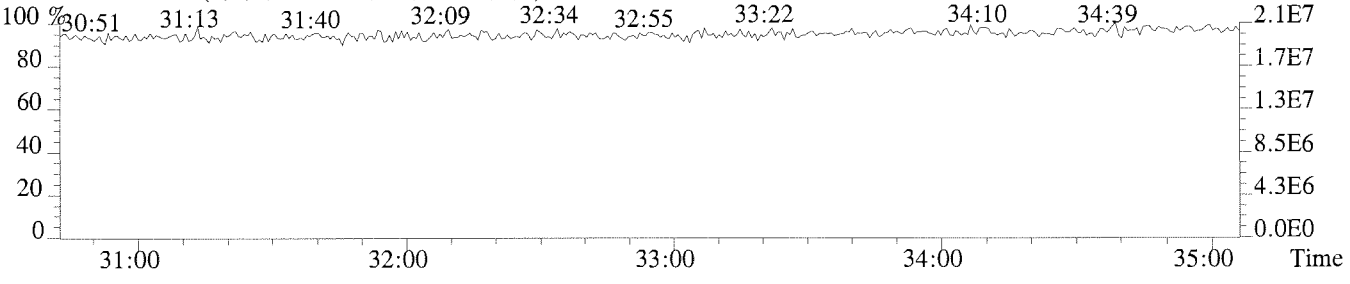
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1128.0,1.00%,F,F)



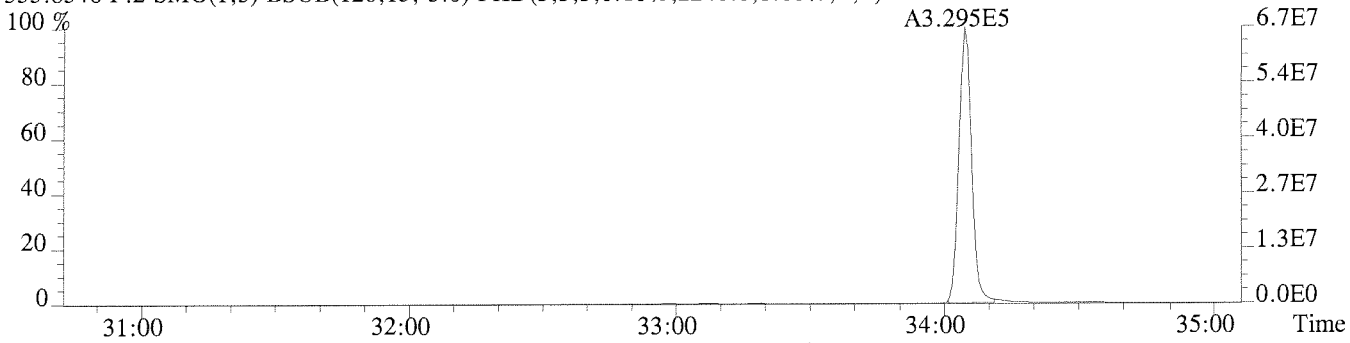
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



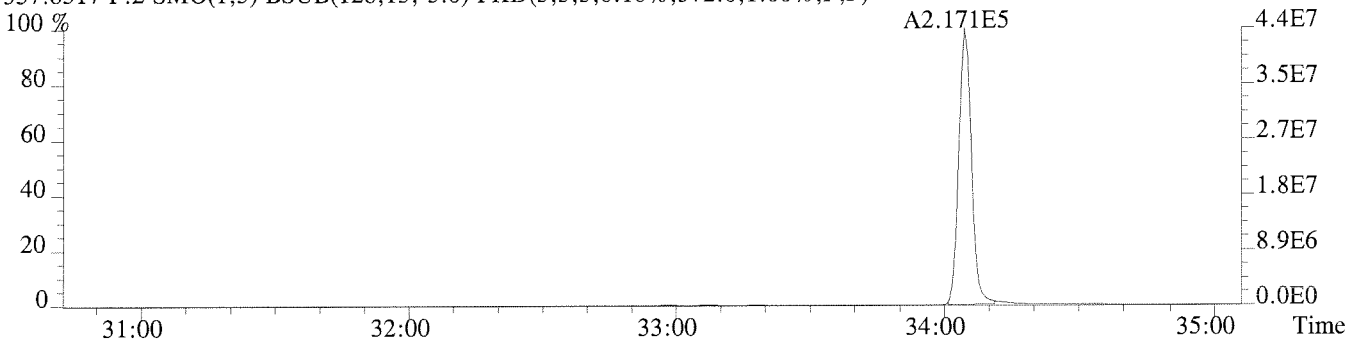
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



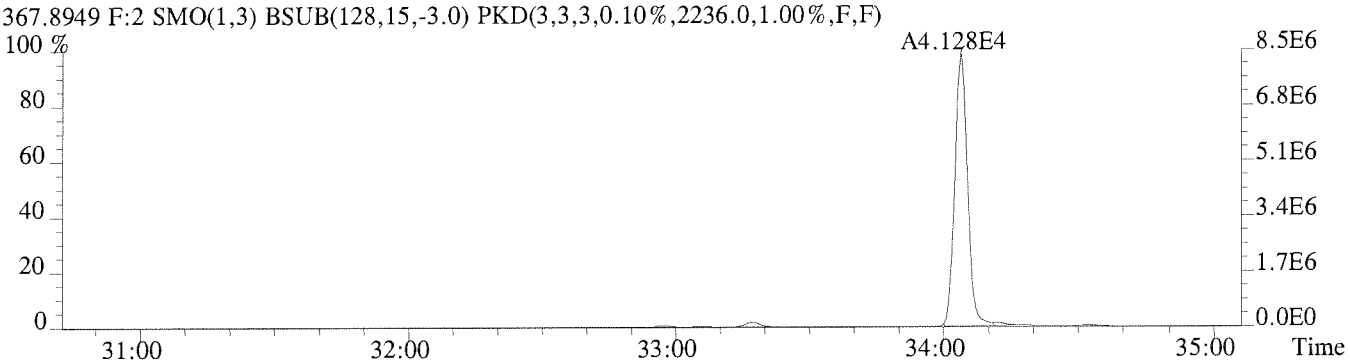
File:P200008 #1-399 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2240.0,1.00%,F,F)



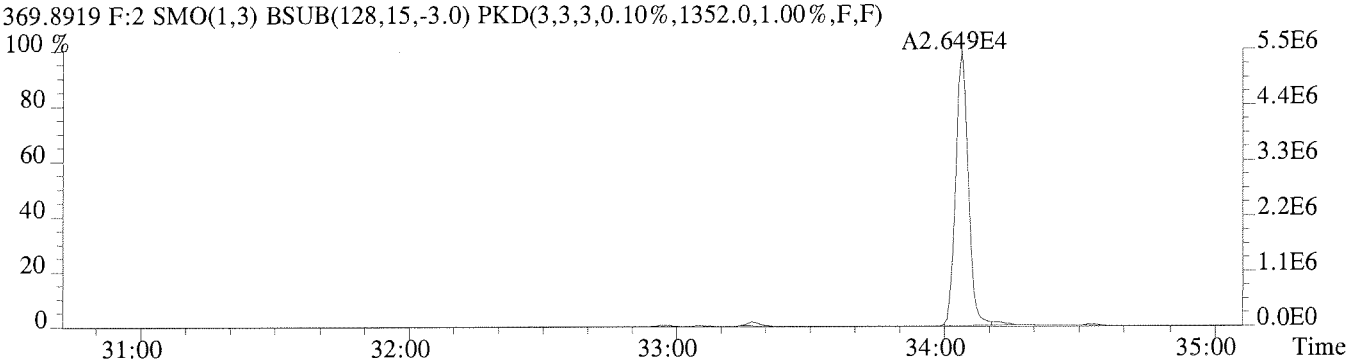
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,372.0,1.00%,F,F)



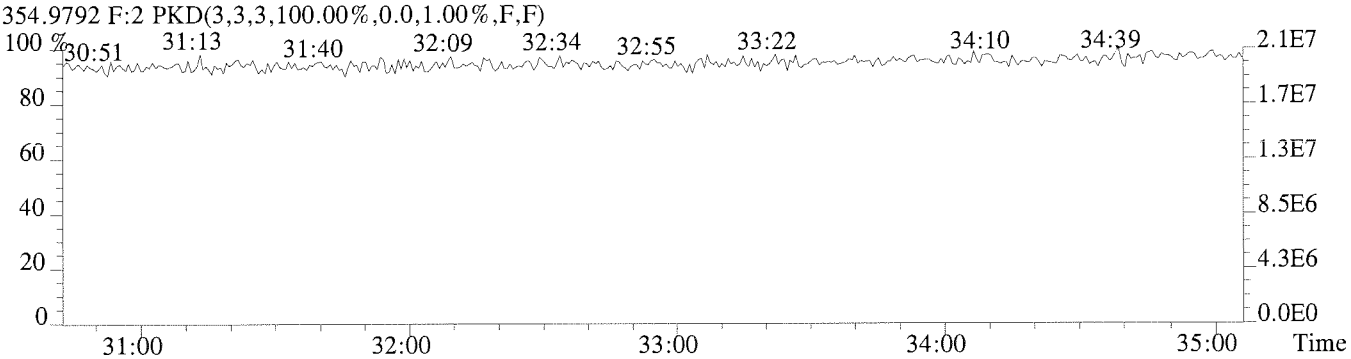
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2236.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1352.0,1.00%,F,F)

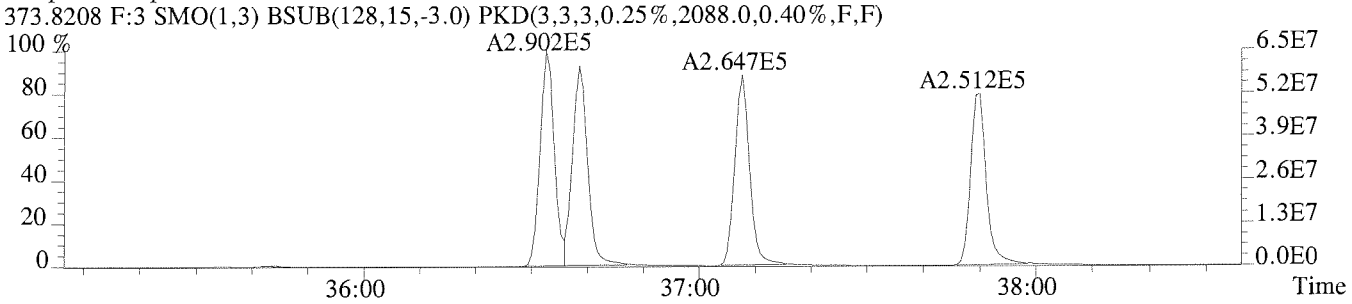


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

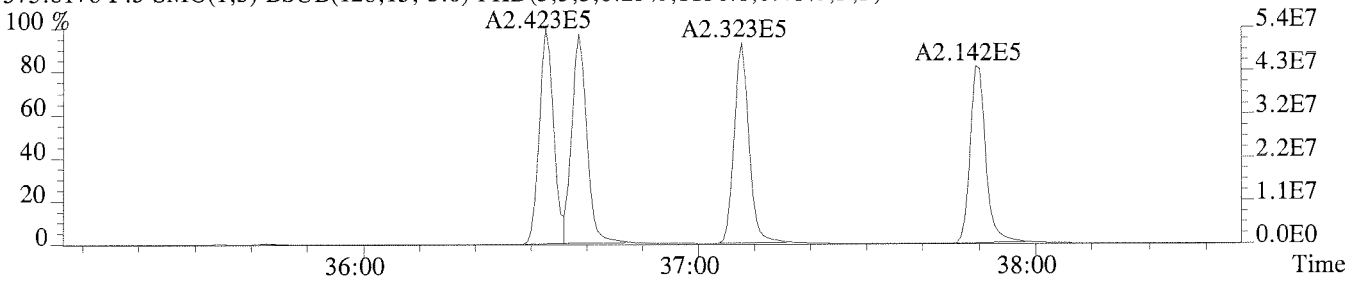


File:P200008 #1-318 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

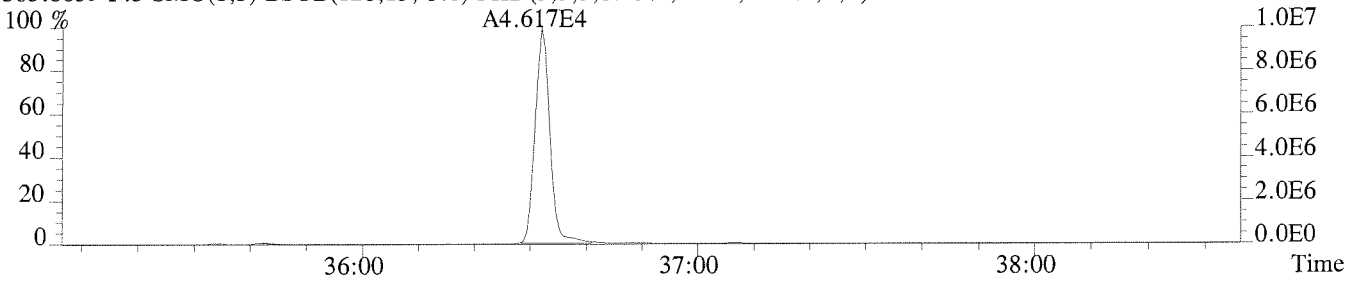
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2088.0,0.40%,F,F)



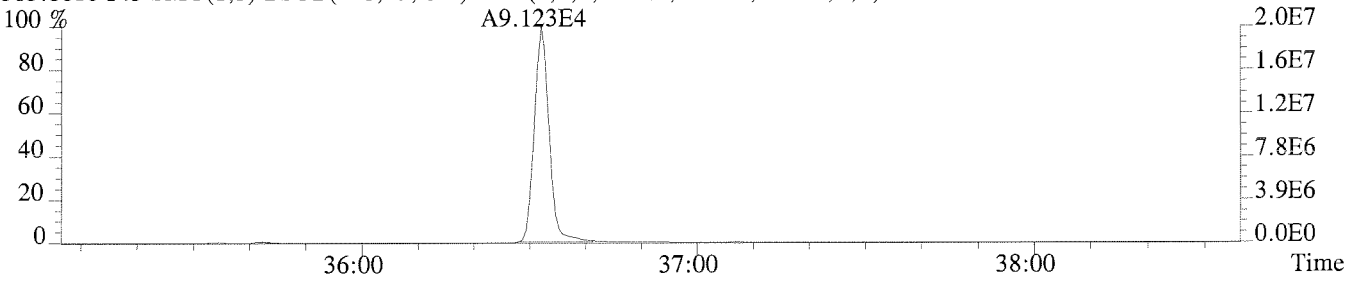
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1156.0,0.40%,F,F)



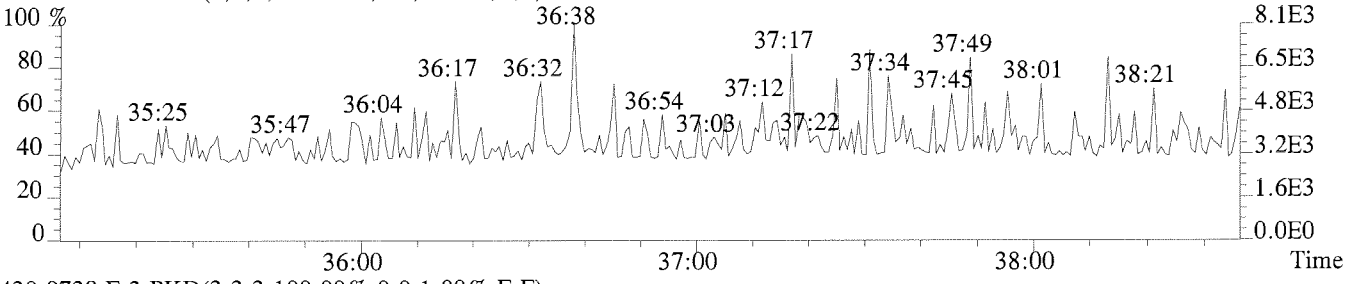
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,836.0,0.40%,F,F)



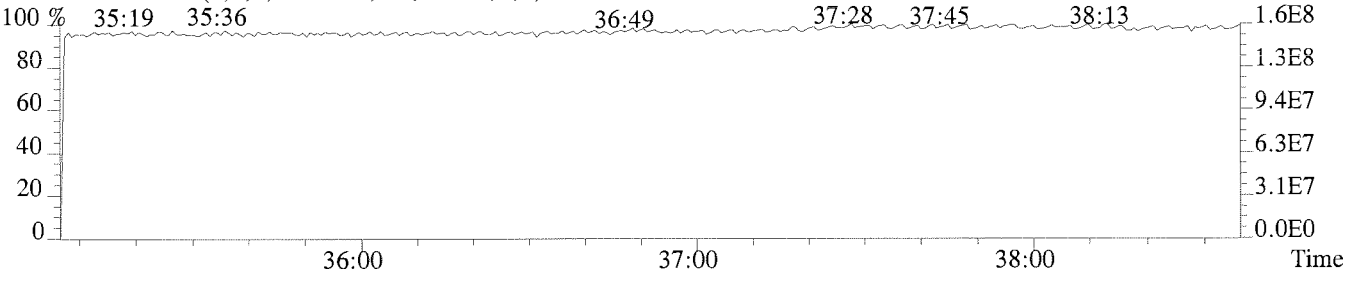
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3084.0,0.40%,F,F)



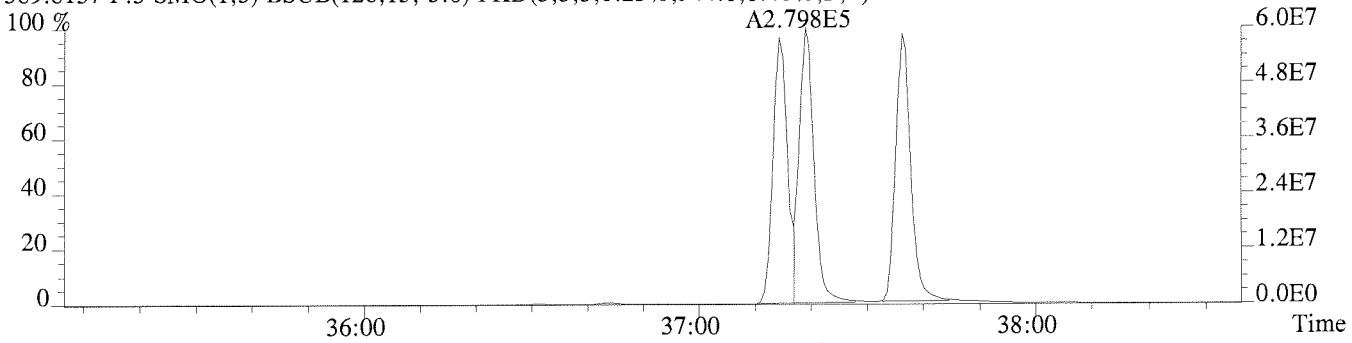
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



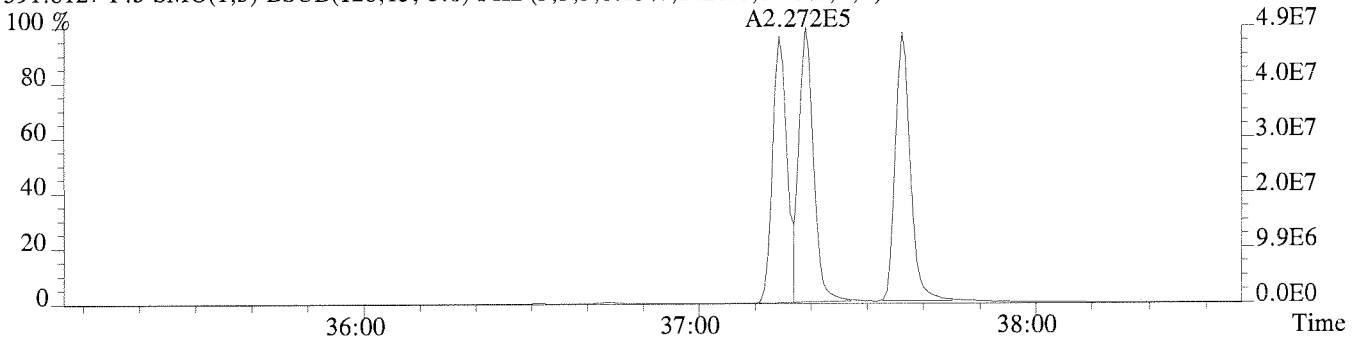
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



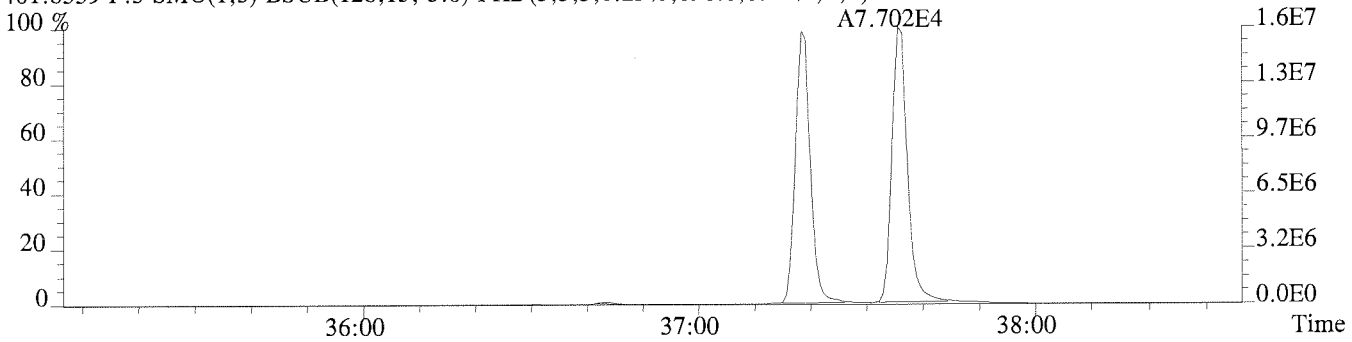
File:P200008 #1-318 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,944.0,0.40%,F,F)



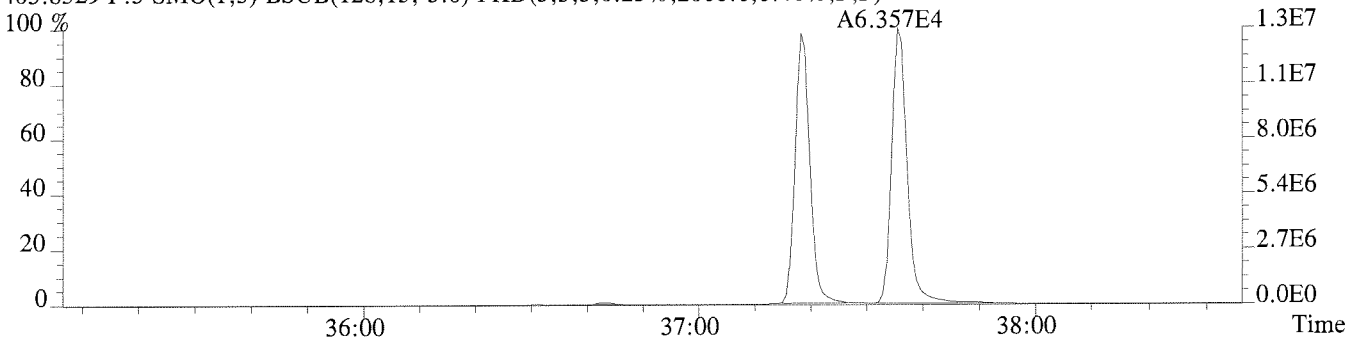
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1420.0,0.40%,F,F)



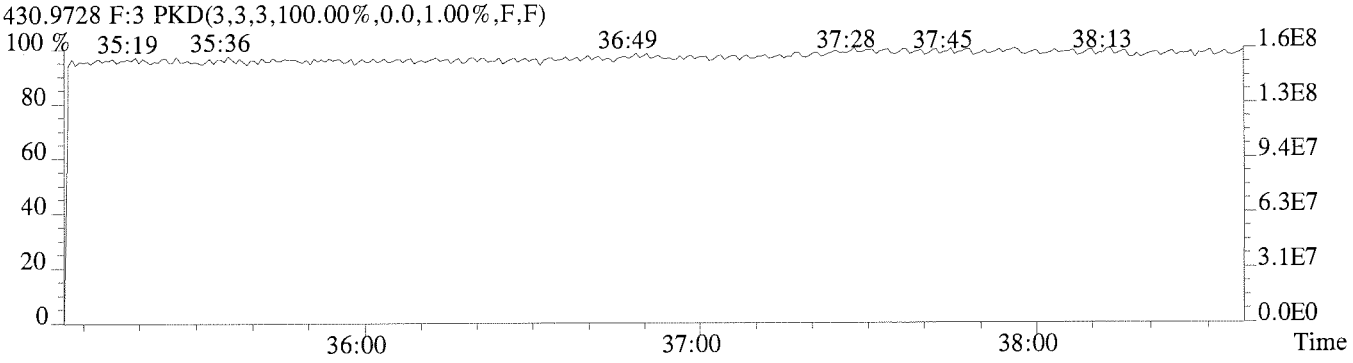
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,696.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2008.0,0.40%,F,F)

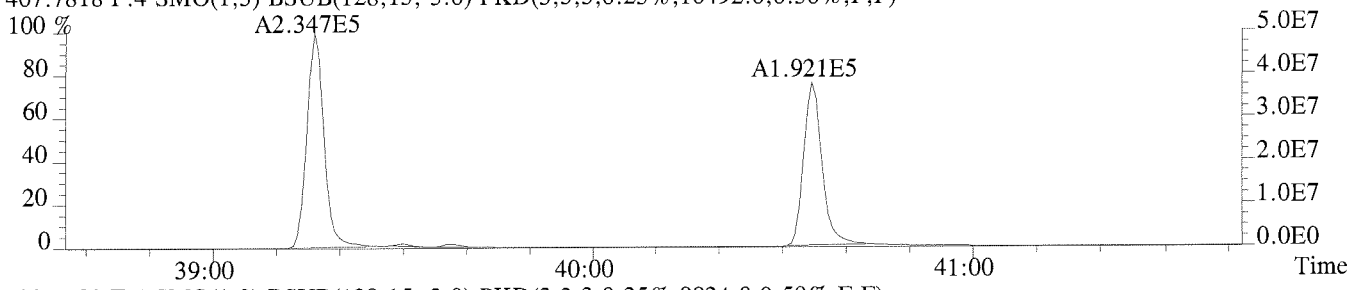


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

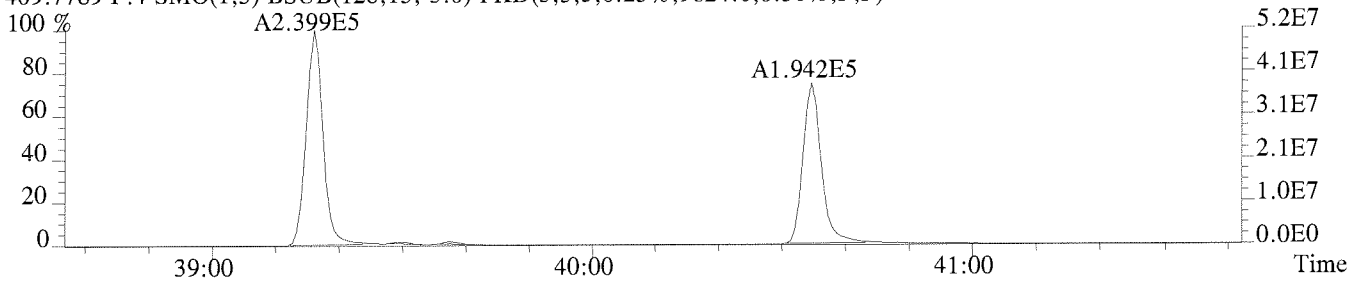


File:P200008 #1-281 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

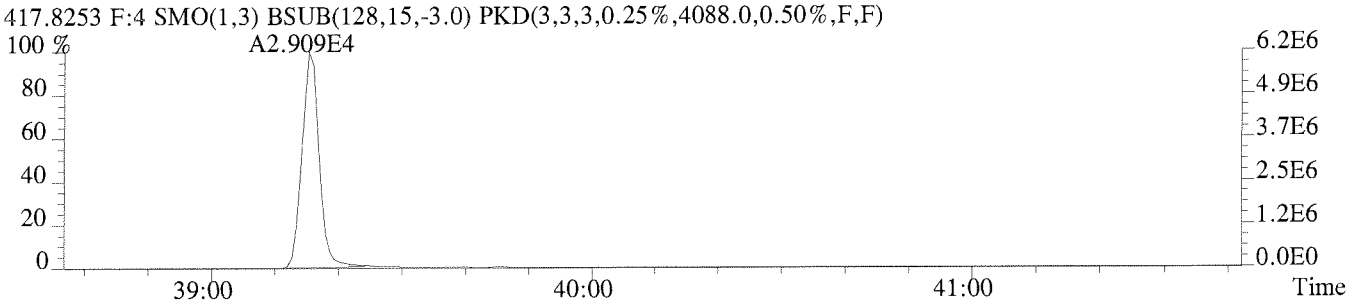
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,10492.0,0.50%,F,F)



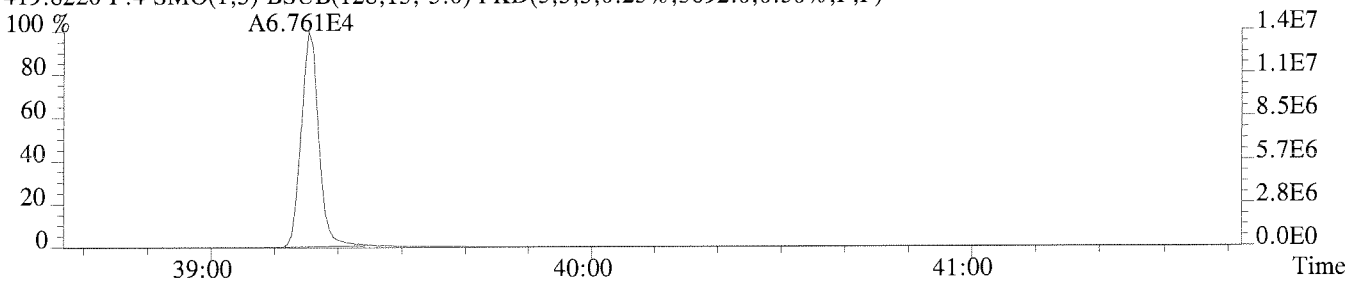
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,9824.0,0.50%,F,F)



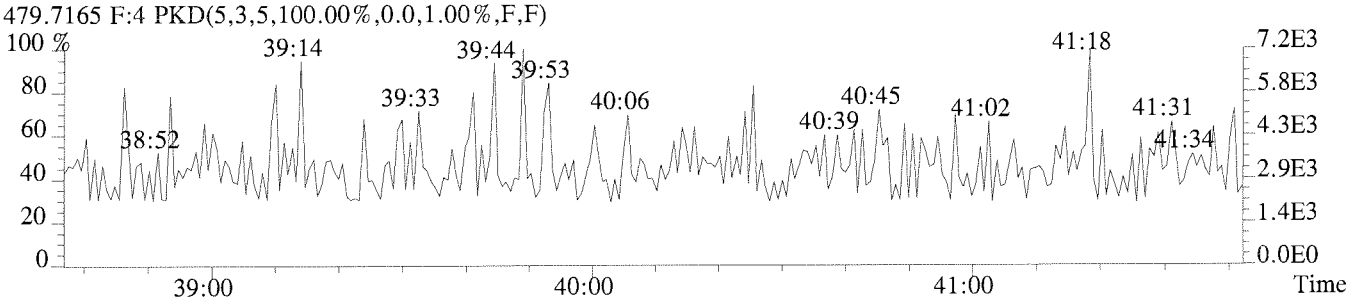
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4088.0,0.50%,F,F)



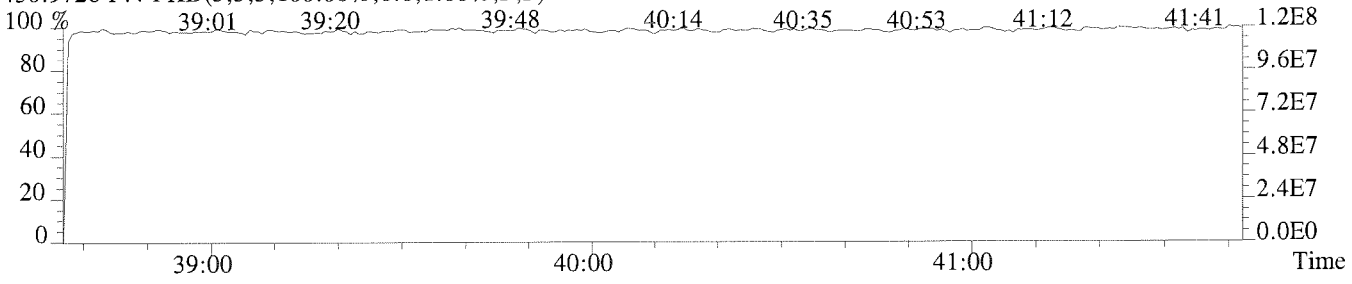
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3692.0,0.50%,F,F)



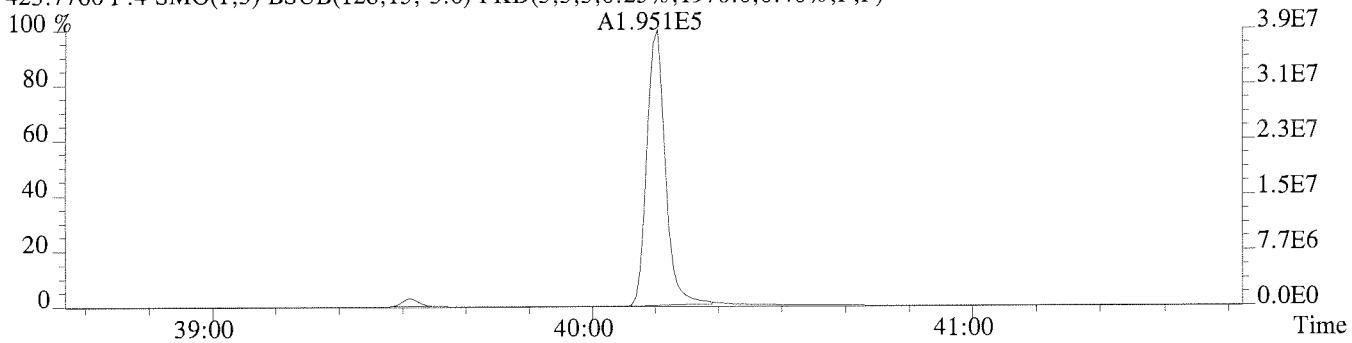
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



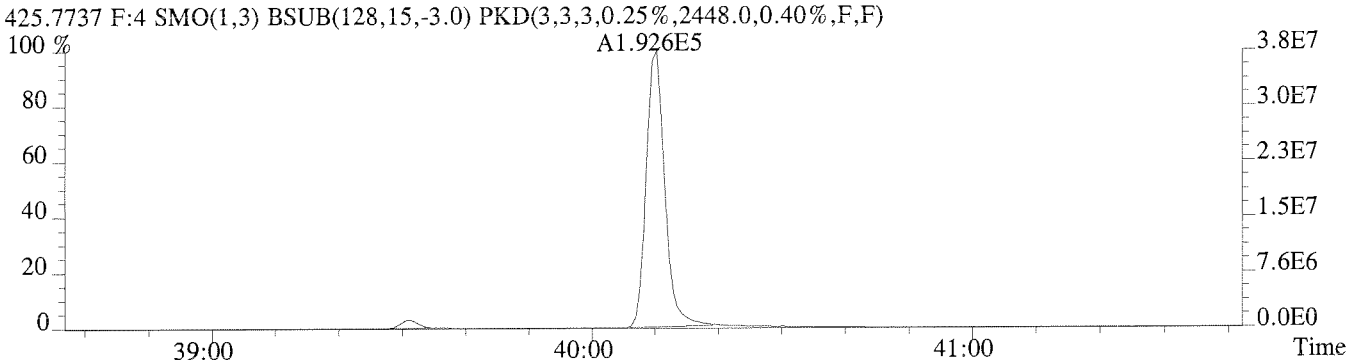
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



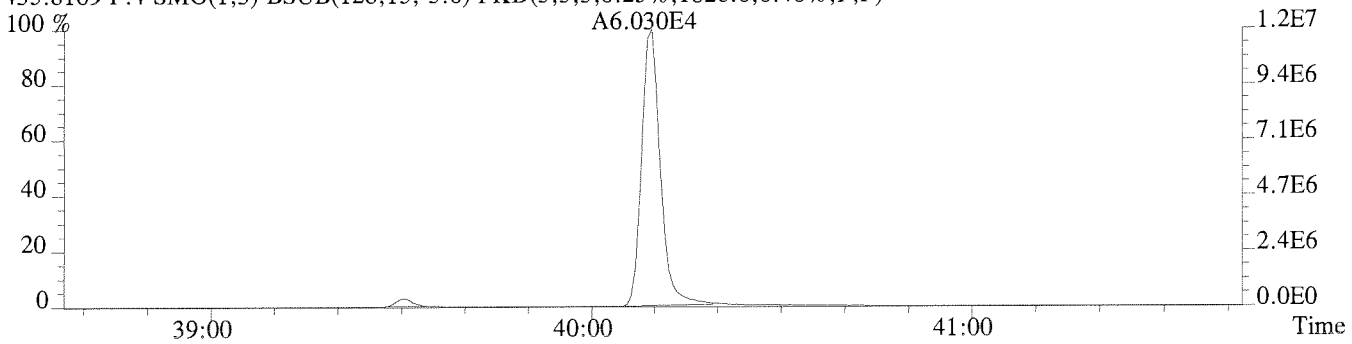
File:P200008 #1-281 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1976.0,0.40%,F,F)



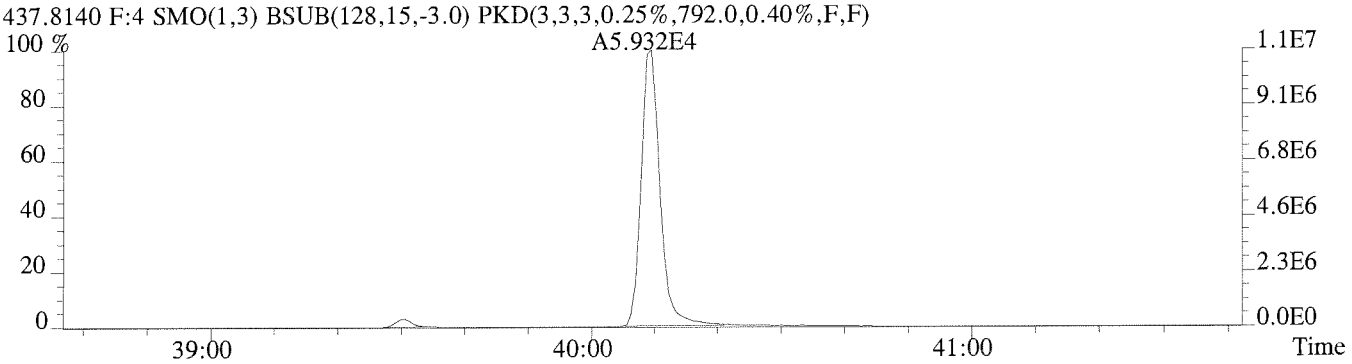
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2448.0,0.40%,F,F)



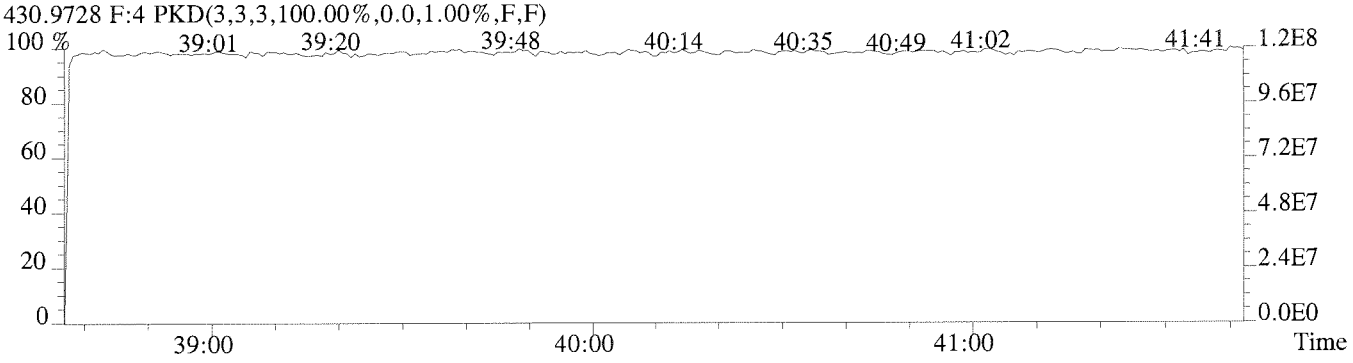
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1828.0,0.40%,F,F)



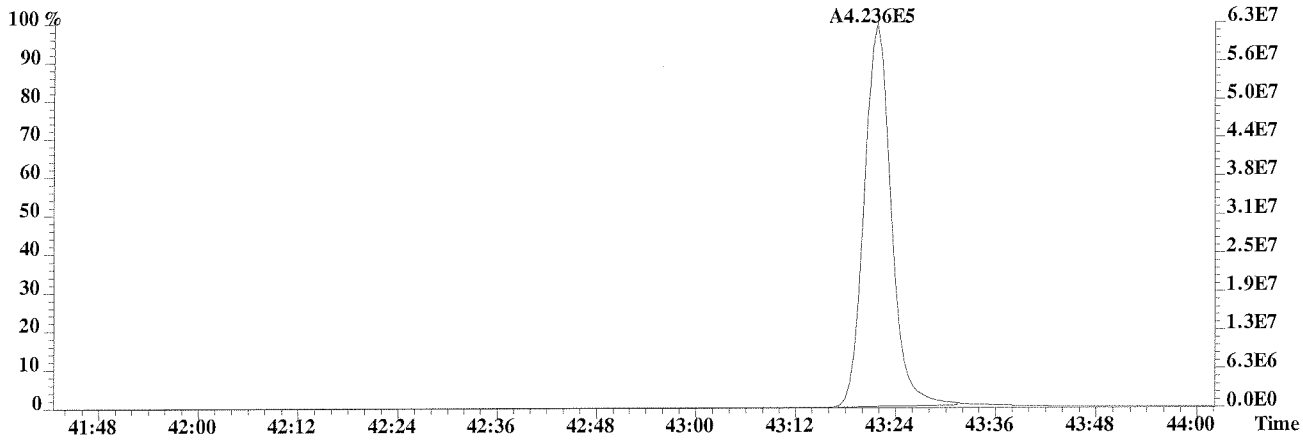
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,792.0,0.40%,F,F)

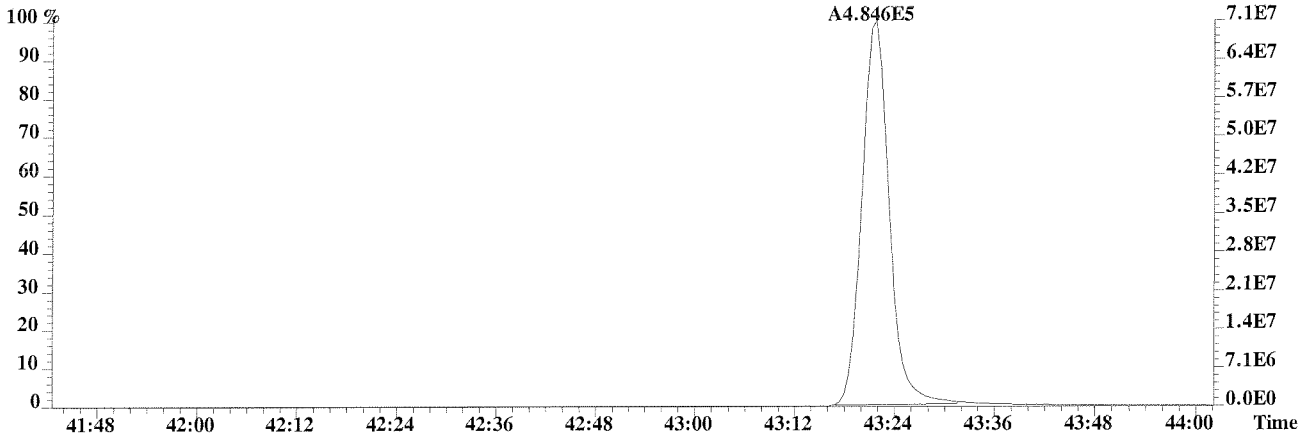


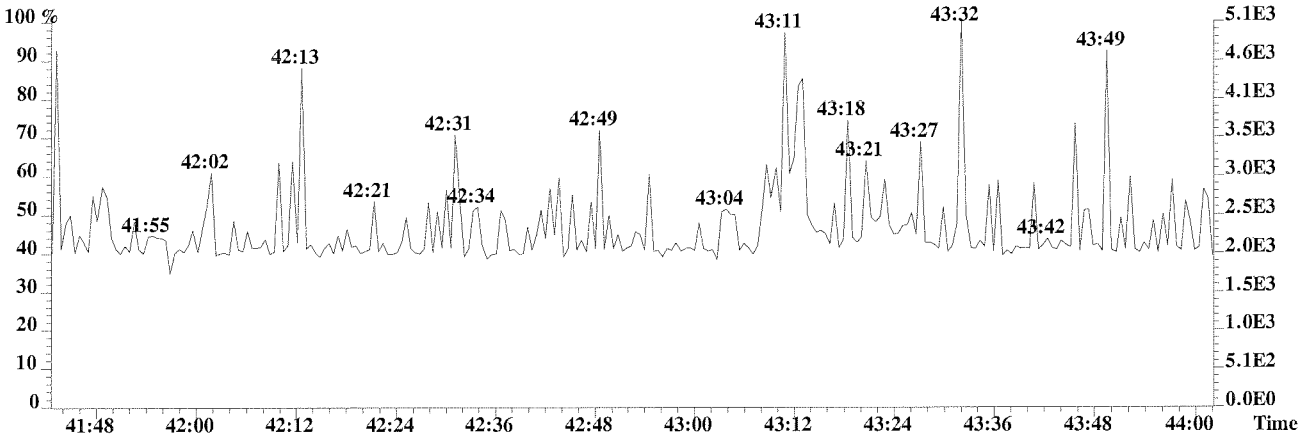
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

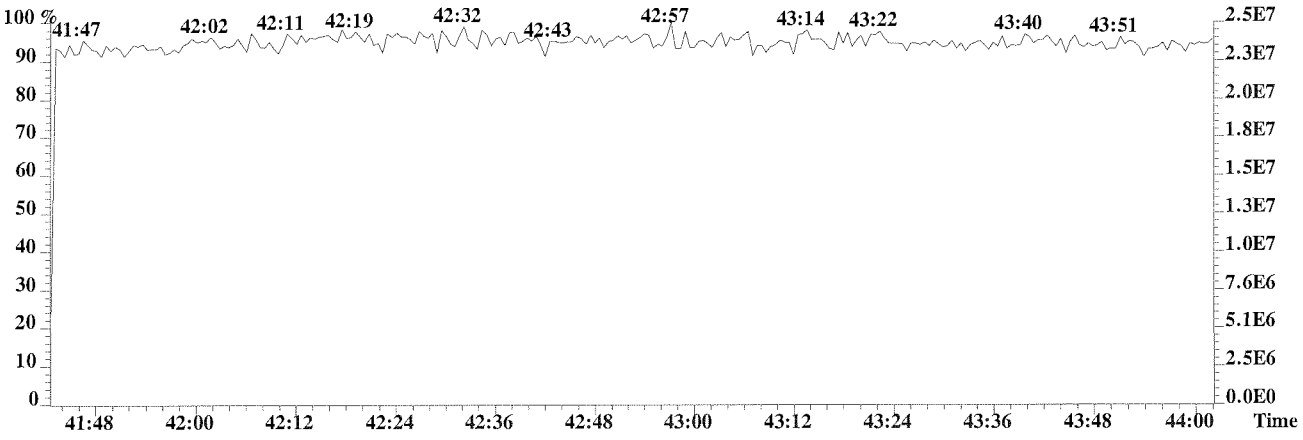


File:P200008 #1-364 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spectrom
441.7428 F:5 Exp:ICAL HRCC5

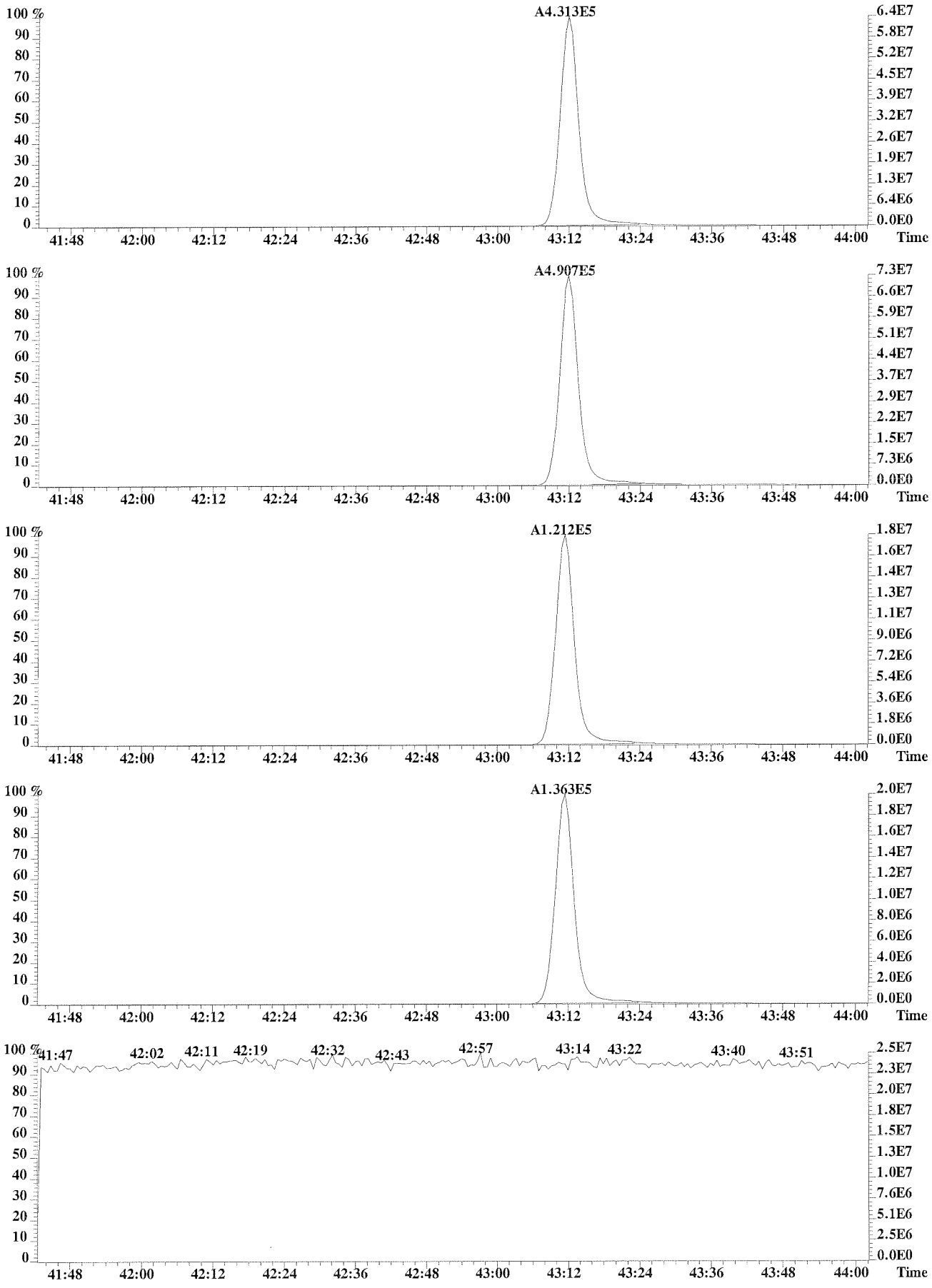








File:P200008 #1-364 Acq:18-JUL-2008 17:50:46 Probe EI+ Magnet SIR VG BioTech Mass spectrom
457.7377 F:5 Exp:ICAL HRCC5



Initial Calibration QC Checklist

ICAL Name: P8280182ICAL

Date: 08/01/08

Method: 1613 / 8290 / Tetra / TCDD Only / TCDF Conf / 8280 / 613 / M23

Retention Window/Column Performance Check	Analyst	Second Check
Windows in and first and last eluters labeled	✓	✓
Column Performance shows less than or equal to 25% valley between column specific 2378 isomer and it's closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or it's closest eluters	✓	✓

Initial Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections of greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
2378-TCDD elutes at 25 minutes or later on the DB-5 column	✓	✓
Signal-to-noise of all target analytes and their labeled standards at least 10:1	✓	✓
Valley between labeled 123478 and 123678 HxCDD peaks less than or equal to 50%	N/A	N/A
All Manual Intergrations signed and dated and first and final copies of Ical summary included	✓	✓

Analyst: KLM Second QC: MC

icalqc.xls 02-23-00

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Lab Name: Columbia Analytical Services Contract:

Lab Code: TX01411 Case No.: Client No.: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Premier

Init. Calib. Date: 08/01/08

Init. Calib.Times: 14:25

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, AND LABORATORY CONTROL SAMPLES (LCSs) IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		P200031	1-AUG-08	14:25:15
ICAL HRCC1		P200033	1-AUG-08	17:11:30
ICAL HRCC2		P200032	1-AUG-08	16:23:43
ICAL HRCC3		P200031	1-AUG-08	15:21:27
ICAL HRCC4		P200034	1-AUG-08	18:16:07
ICAL HRCC5		P200035	1-AUG-08	19:02:53

HRGC/HRMS RUN LOG

CAS HOUSTON 19408 Park Row, Suite 320 Houston, TX 77084

Columbia Analytical Services inc.
An Employee Owned Company

Acq Method: 8290CAS/1613 Result File: P80P200326RES
GC Method: 8290CAS/1613 EDD File: FP8080182901

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
		P200027	CCAL HRCC3	D8-2-2A		↓	Use Any	
07/31/08	18:41		HRMS Check					
08/01/08	~~14:22~~	m080107a0r	↓					
	07:25	P200028	Window Define					
	08:11	P200029	CCAL HRCC3	D8-2-2A			14:22 HRMS Check	
	14:25	P200030	Window Define	D4-90-2				
	15:21	P200031	ICAL HRCC3	D8-2-2A				
	16:23	P200032	ICAL HRCC2	D5-49-4				
	17:11	P200033	ICAL HRCC1	D5-49-5				
	18:16	P200034	ICAL HRCC4	D5-49-2				
	19:02	P200035	ICAL HRCC5	D5-49-1				
		~~P200036~~	~~HRCC3 CS/~~	in 080719			19:57 HRMS Check	
	~~14:57~~		~~HRMS check~~				08:58 ↓	
08/04/08	08:58		↓				P200036 HRCC3 CS/ D4-6H	
		P200037	Window Define					
↓		P200038	CCAL HRCC3			↓		

Reviewed by: [signature]

5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID:

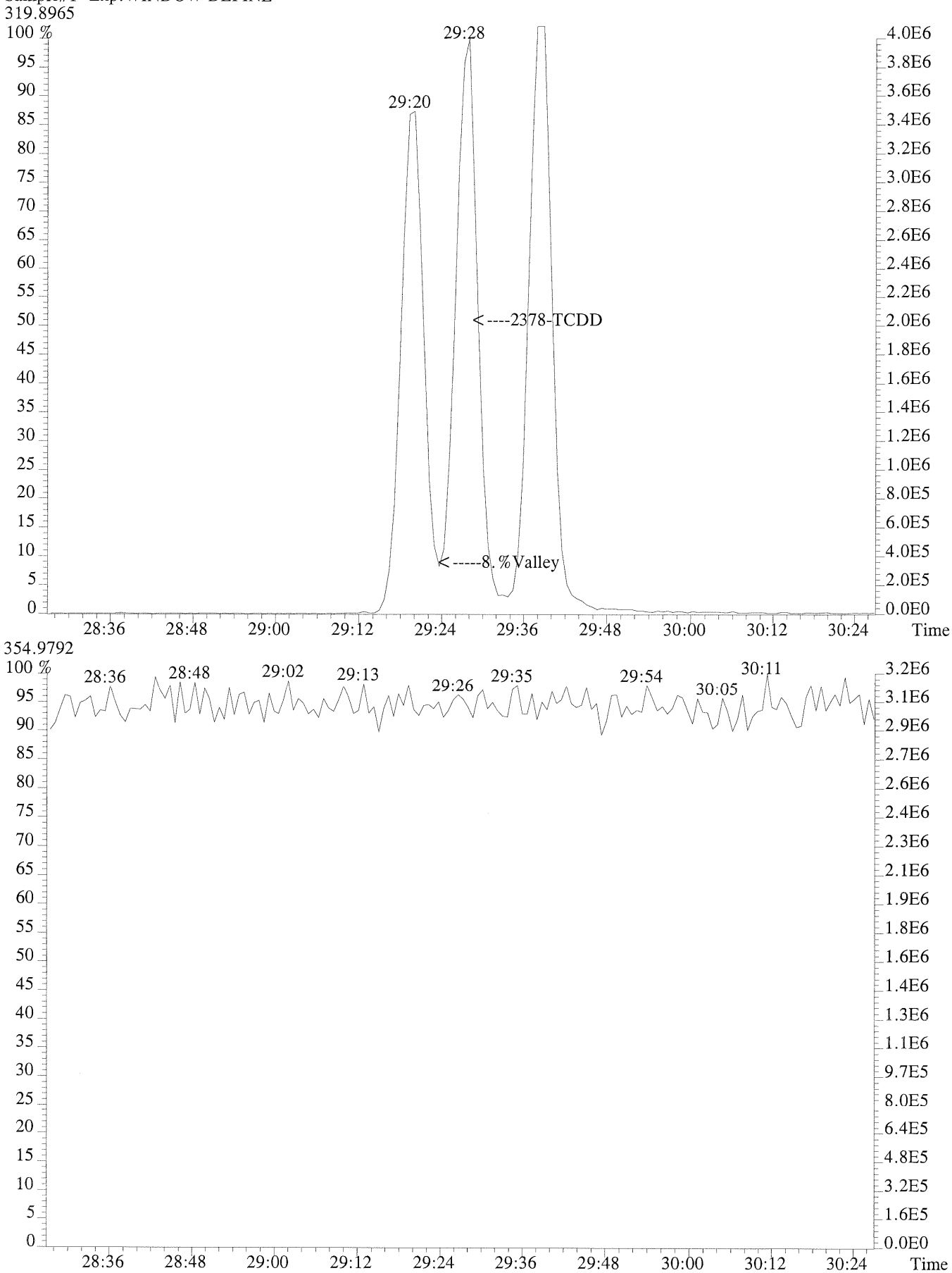
WDM

Lab Name: COLUMBIA ANALYTICAL SERVICES
Lab Code: CAS Case No.: _____ SDG No.:
GC Column: DB-5 ID: 0.25 (mm) Lab File ID: P200030
Date Analyzed: 1-AUG-2008
Time Analyzed: 14:25:15

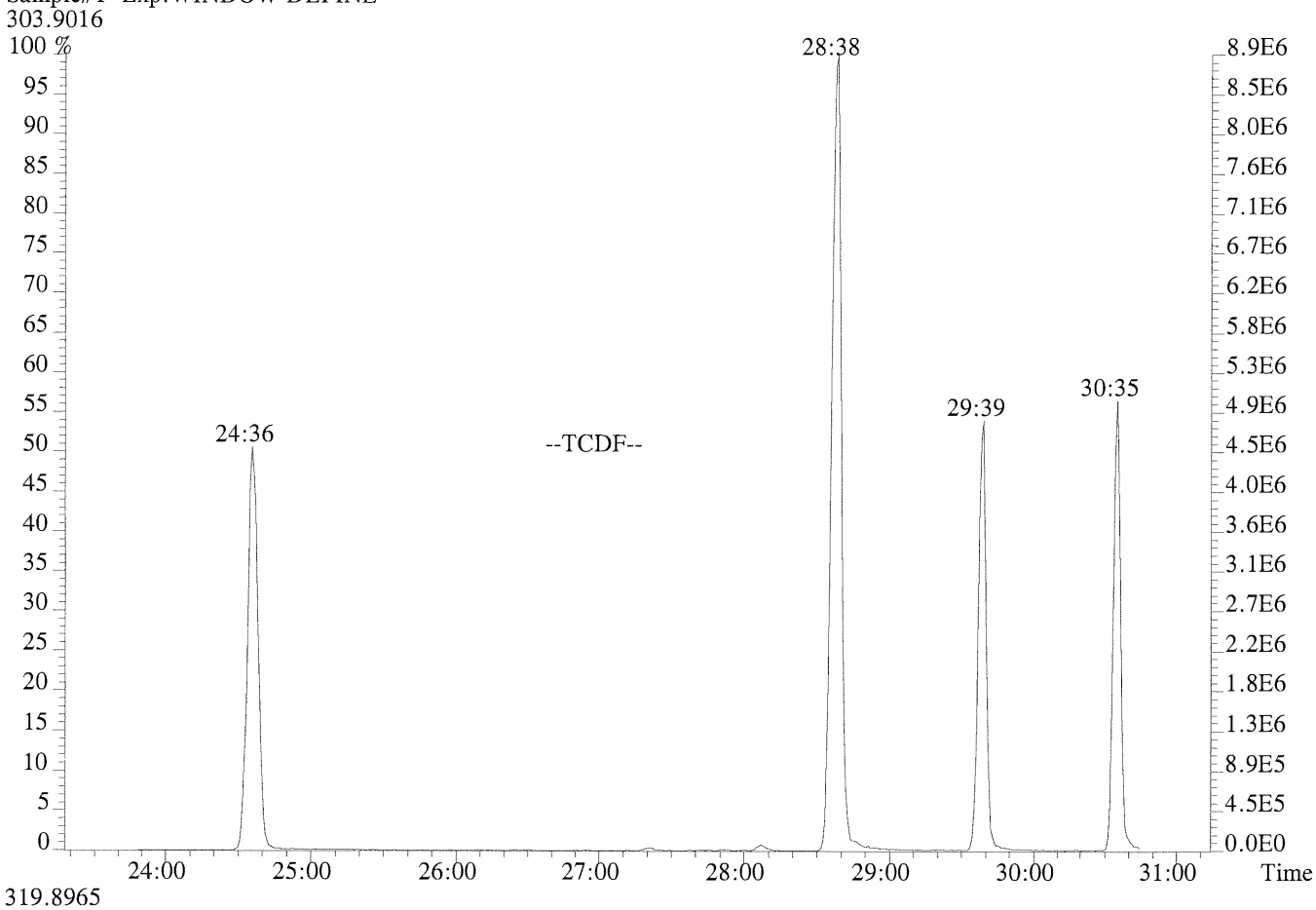
Congener	Retention Time First Eluting	Retention Time Last Eluting
TCDF	24:36	30:35
TCDD	26:24	30:34
PeCDF	30:51	34:42
PeCDD	32:13	34:34
HxCDF	35:35	37:53
HxCDD	36:05	37:34
HpCDF	39:16	40:35
HpCDD	39:31	40:10

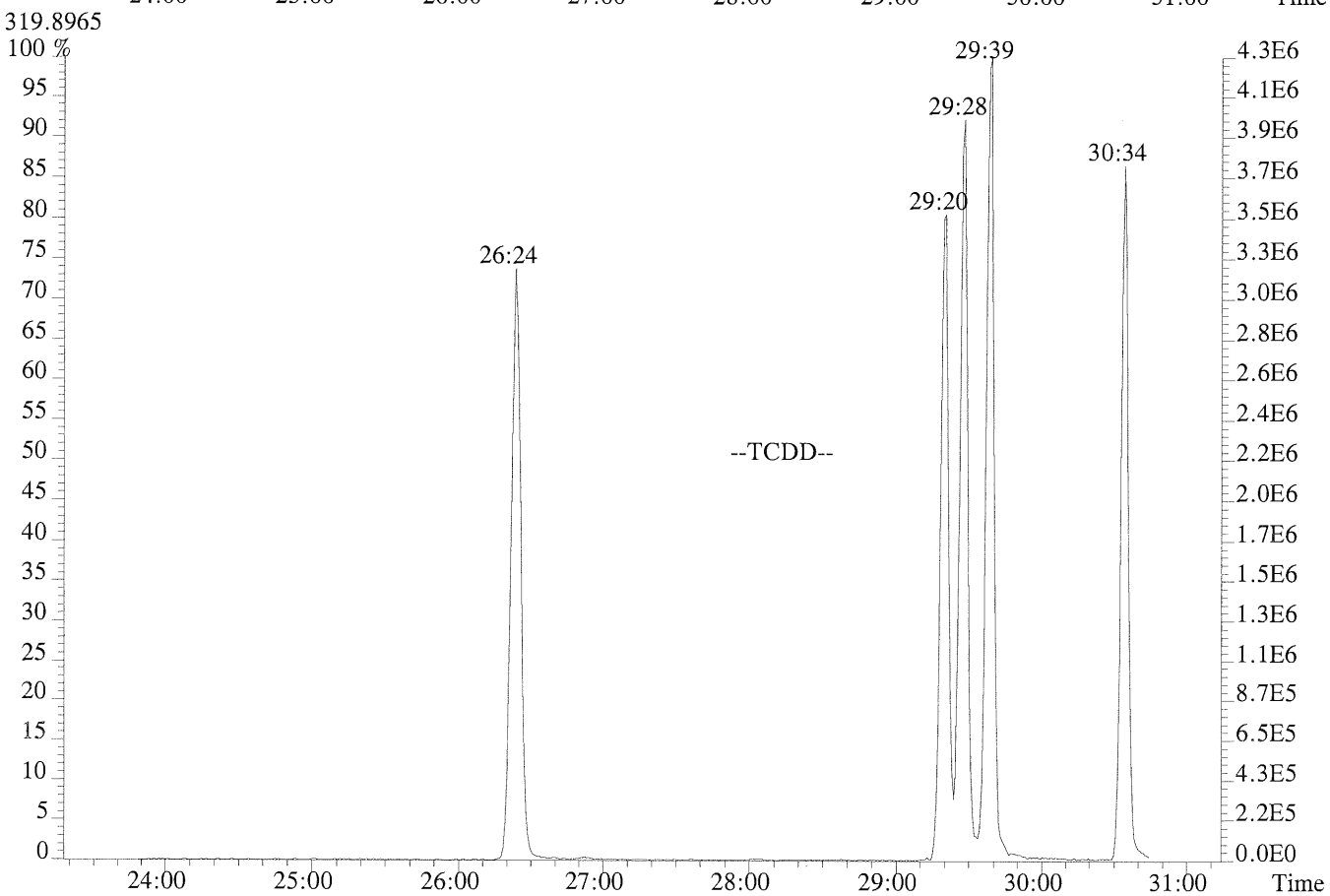
% Valley 2378-TCDD: 8. %

File:P200030 #1-578 Acq: 1-AUG-2008 14:25:15 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE

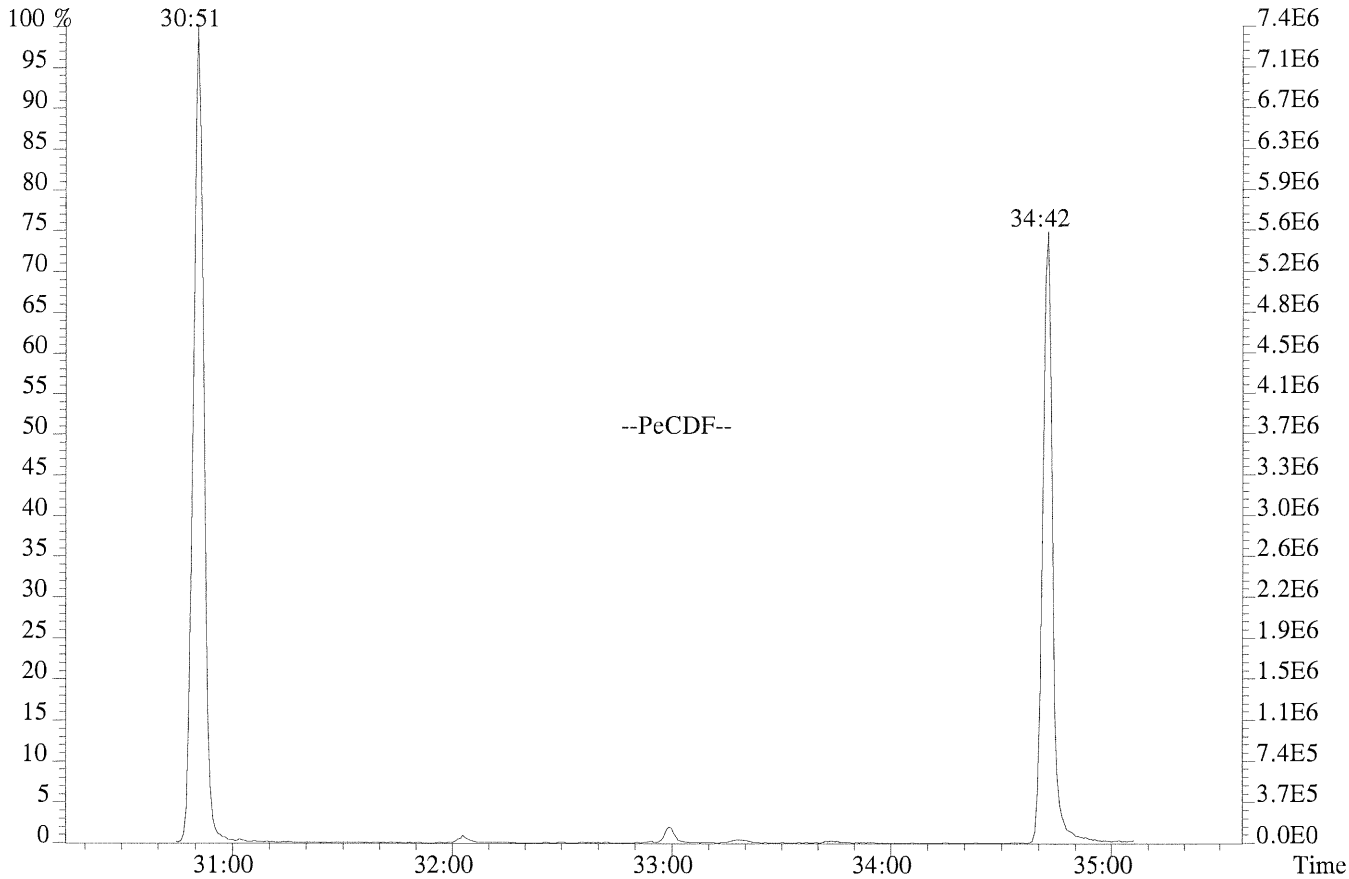


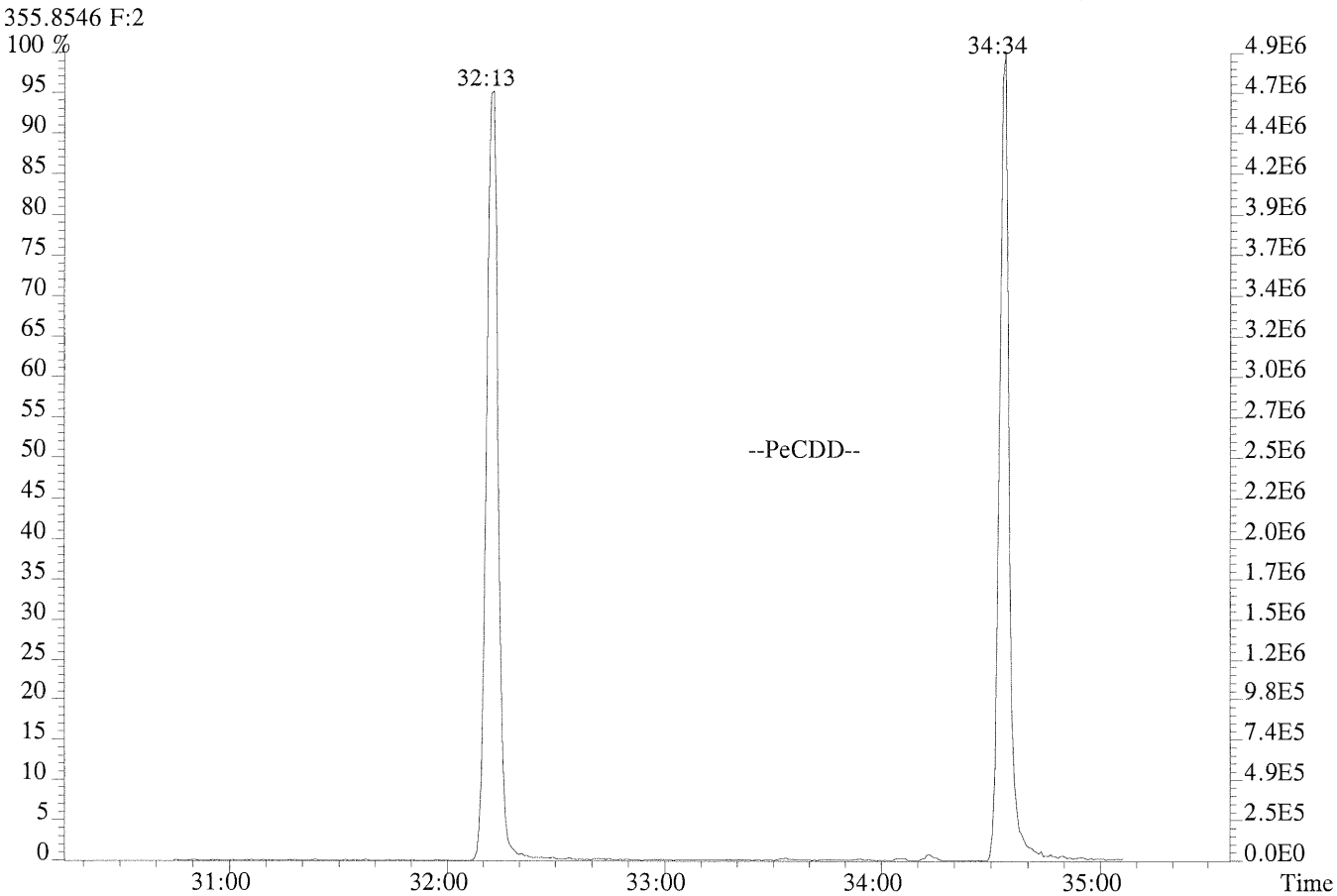
File:P200030 #1-578 Acq: 1-AUG-2008 14:25:15 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE



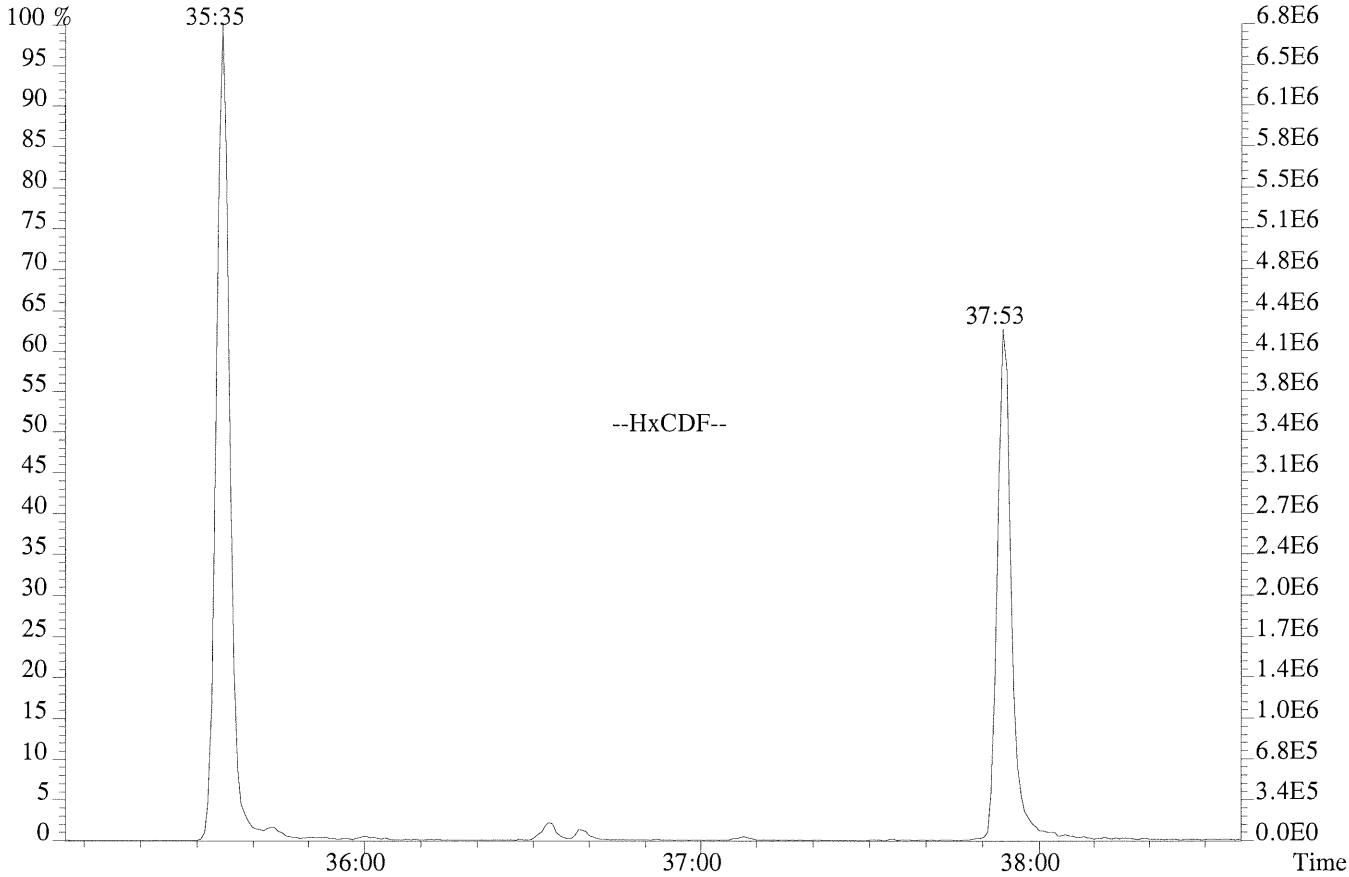


File:P200030 #1-396 Acq: 1-AUG-2008 14:25:15 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE

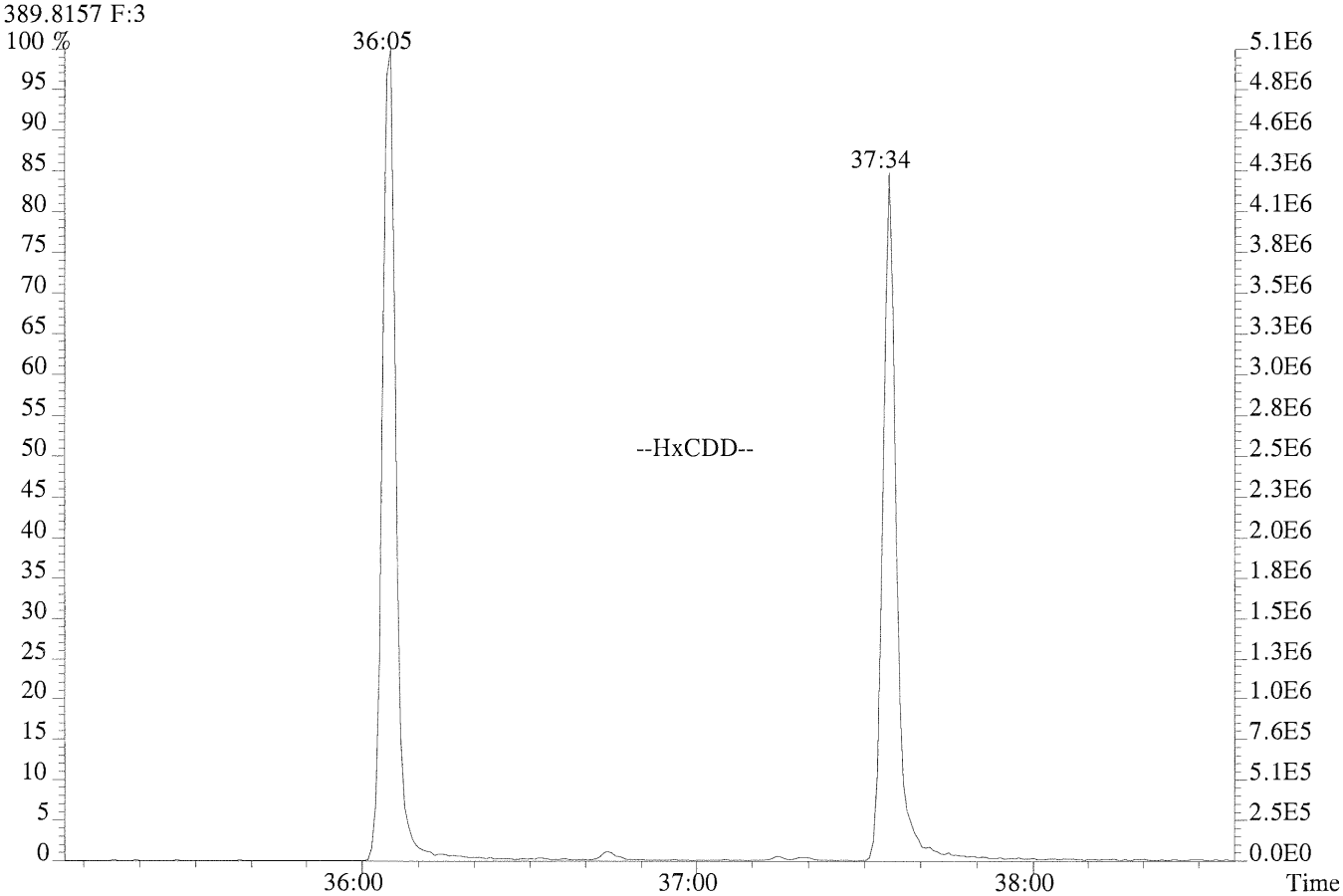




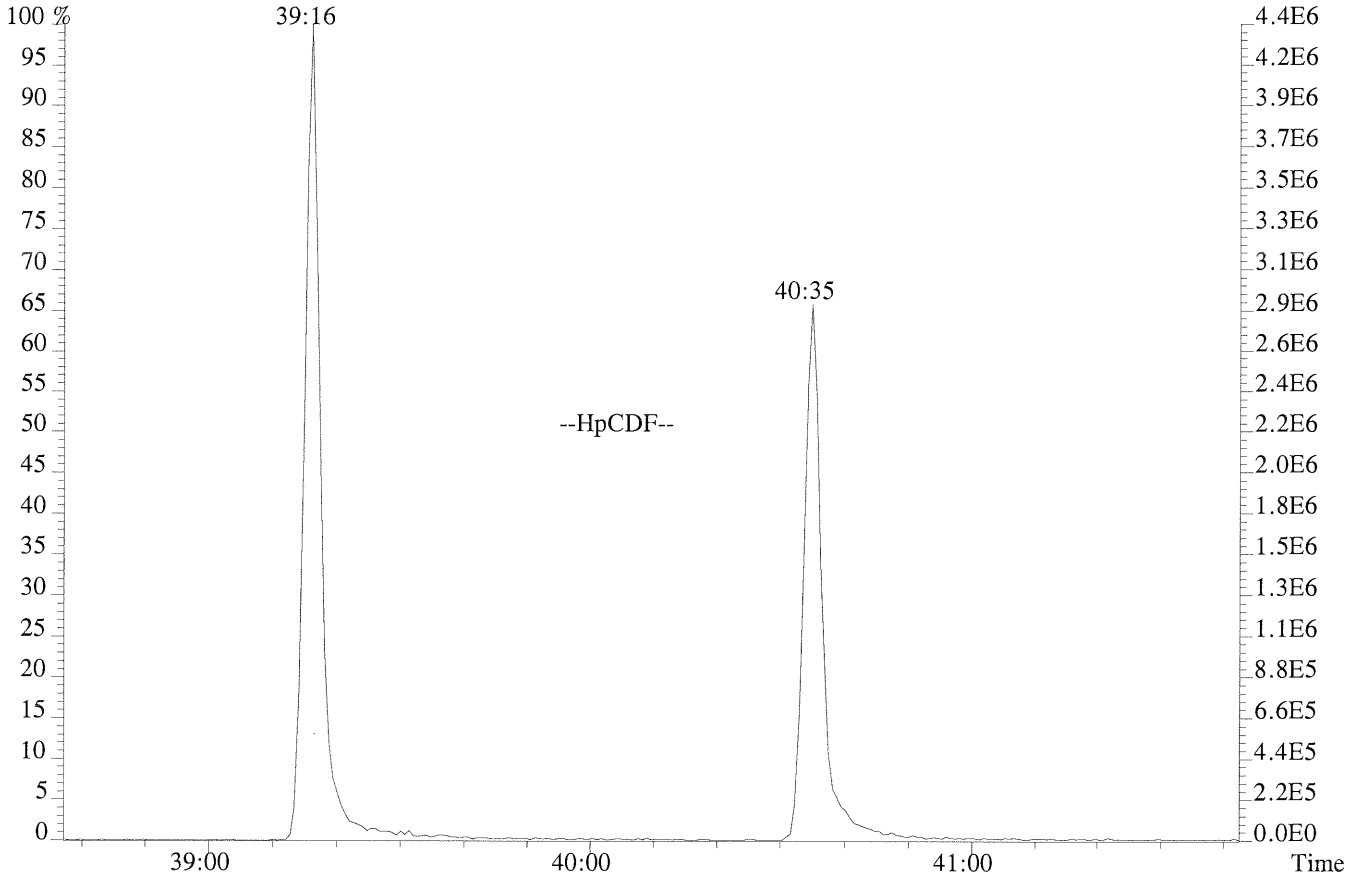
File:P200030 #1-318 Acq: 1-AUG-2008 14:25:15 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE
373.8208 F:3



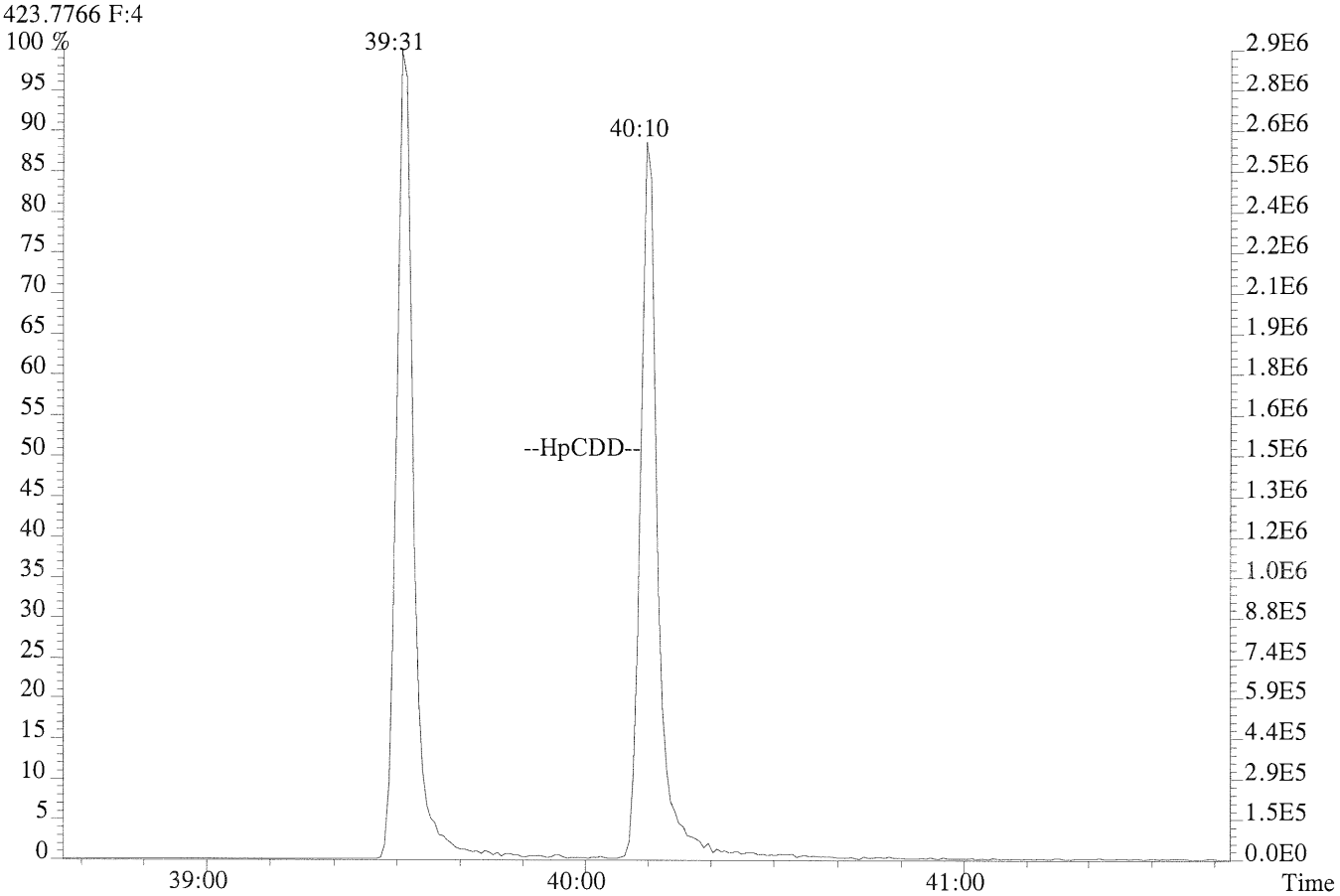
389.8157 F:3



File:P200030 #1-281 Acq: 1-AUG-2008 14:25:15 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE
407.7818 F:4



423.7766 F:4

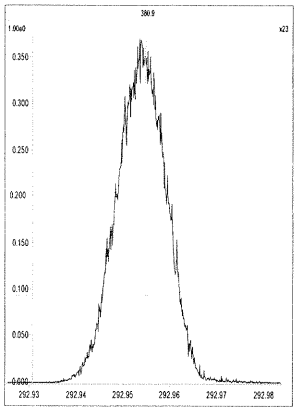


Experiment Calibration Report **MassLynx 4.1**

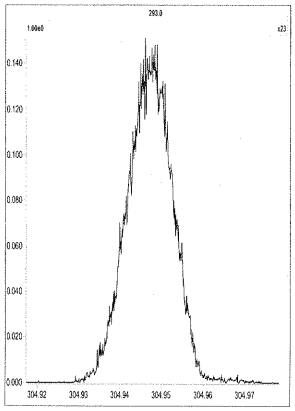
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, August 01, 2008 14:22:07 Central Daylight Time

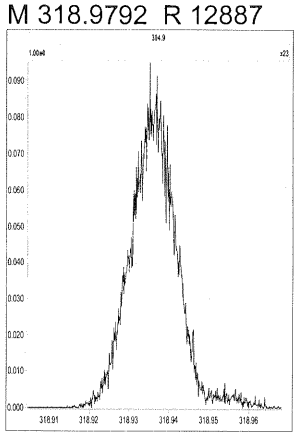
M 292.9824 R 12254



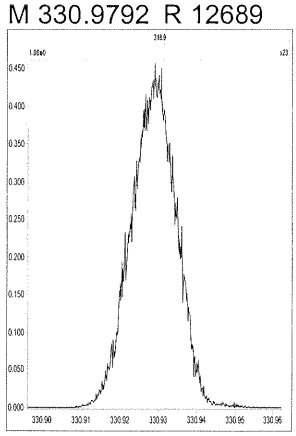
M 304.9824 R 12434



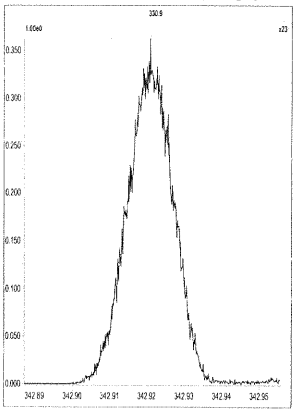
M 318.9792 R 12887



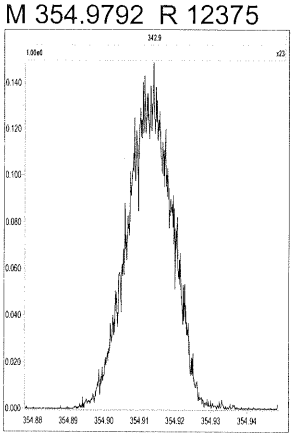
M 330.9792 R 12689



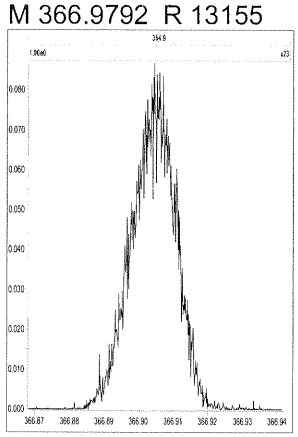
M 342.9792 R 12191



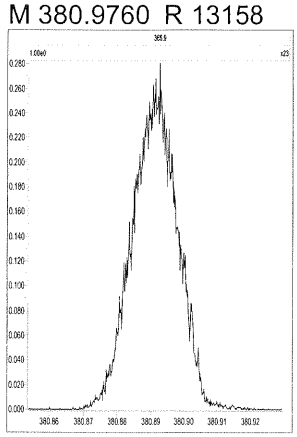
M 354.9792 R 12375



M 366.9792 R 13155



M 380.9760 R 13158

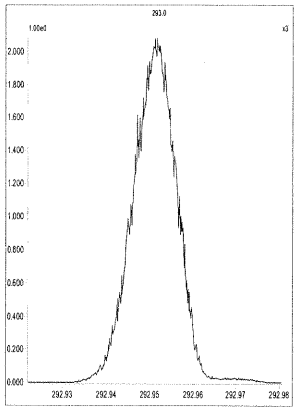


Experiment Calibration Report **MassLynx 4.1** Page 1 of 1

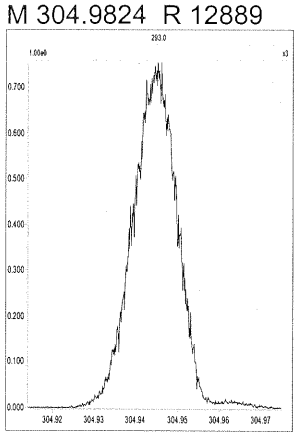
File: Experiment: 8290CAS.exp Reference: pfk.ref Function: 1 @ 200 (ppm)

Printed: Friday, August 01, 2008 19:57:10 Central Daylight Time

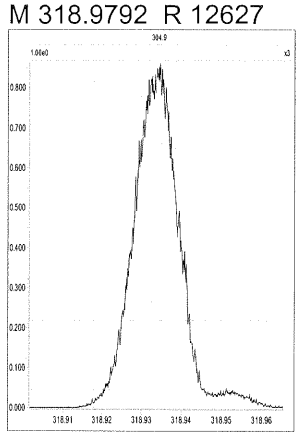
M 292.9824 R 12952



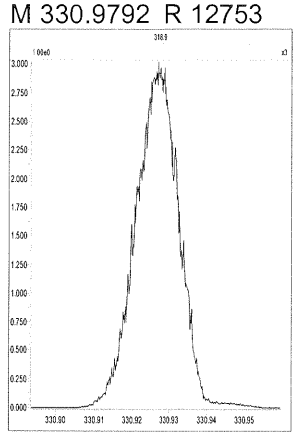
M 304.9824 R 12889



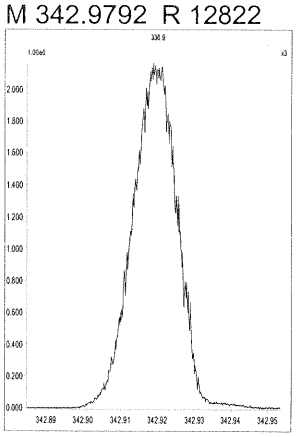
M 318.9792 R 12627



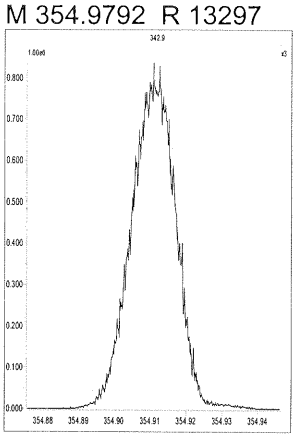
M 330.9792 R 12753



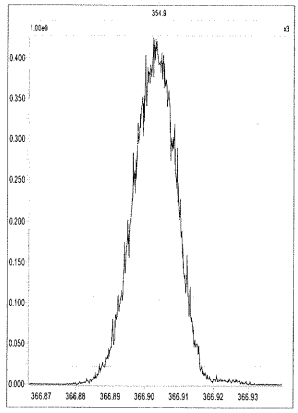
M 342.9792 R 12822



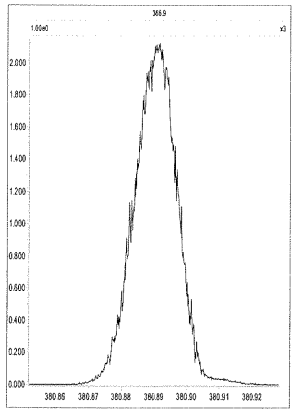
M 354.9792 R 13297



M 366.9792 R 12752



M 380.9760 R 12887



FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 08/01/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: P200033 HRCC4 Data Filename: P200034

HRCC2 Data Filename: P200032 HRCC5 Data Filename: P200035

HRCC3 Data Filename: P200031

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
NATIVE ANALYTES	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
2,3,7,8-TCDD	0.91	0.89	0.96	0.92	0.92	0.92	2.74
1,2,3,7,8-PeCDD	0.86	0.86	0.87	0.87	0.90	0.87	1.69
1,2,3,4,7,8-HxCDD	0.95	0.91	0.91	0.94	0.96	0.93	2.56
1,2,3,6,7,8-HxCDD	1.07	1.07	0.99	1.07	1.07	1.05	3.57
1,2,3,7,8,9-HxCDD	0.98	0.97	0.92	0.97	1.00	0.97	3.00
1,2,3,4,6,7,8-HpCDD	0.88	0.86	0.89	0.89	0.90	0.88	1.61
OCDD	0.96	0.95	0.97	0.95	0.98	0.96	1.13
2,3,7,8-TCDF	0.79	0.81	0.87	0.84	0.85	0.83	3.60
1,2,3,7,8-PeCDF	0.81	0.82	0.87	0.84	0.85	0.84	2.80
2,3,4,7,8-PeCDF	0.81	0.83	0.88	0.86	0.87	0.85	3.59
1,2,3,4,7,8-HxCDF	1.08	1.08	1.10	1.07	1.09	1.08	0.86
1,2,3,6,7,8-HxCDF	1.09	1.12	1.18	1.13	1.12	1.13	2.83
1,2,3,7,8,9-HxCDF	0.85	0.84	0.89	0.86	0.89	0.87	2.62
2,3,4,6,7,8-HxCDF	0.97	0.99	1.06	1.01	1.03	1.01	3.31
1,2,3,4,6,7,8-HpCDF	1.28	1.31	1.36	1.32	1.33	1.32	2.15
1,2,3,4,7,8,9-HpCDF	0.94	0.94	0.97	0.99	1.00	0.97	2.76
OCDF	1.12	1.10	1.13	1.14	1.05	1.11	3.04

(1) The %RSD for the 17 unlabeled standard must not exceed +/- 20%, see Section 7.7.2.1, Method 8290.

8290F3A

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 08/01/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: P200033 HCC4 Data Filename: P200034

HCC2 Data Filename: P200032 HCC5 Data Filename: P200035

HCC3 Data Filename: P200031

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	1.06	1.06	0.98	1.07	1.09	1.05	3.76
13C-1,2,3,7,8-PeCDD	0.81	0.79	0.98	0.81	0.95	0.87	10.16
13C-1,2,3,6,7,8-HxCDD	1.01	1.01	0.99	1.01	0.98	1.00	1.23
13C-1,2,3,4,6,7,8-HpCDD	0.86	0.84	0.78	0.87	0.81	0.83	4.45
13C-OCDD	0.77	0.74	0.67	0.63	0.83	0.73	10.62
13C-2,3,7,8-TCDF	1.42	1.42	1.46	1.43	1.38	1.42	2.14
13C-1,2,3,7,8-PeCDF	1.22	1.19	1.37	1.19	1.33	1.26	6.65
13C-1,2,3,4,7,8-HxCDF	1.39	1.34	1.12	1.33	1.23	1.28	8.38
13C-1,2,3,4,6,7,8-HpCDF	0.96	0.93	0.84	0.95	0.83	0.90	6.89
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	0.95	0.97	0.97	0.99	1.02	0.98	2.75

(1) The %RSD for the nine labeled reference compounds must not exceed +/- 30%, see Section 7.7.2.1, Method 8290.

8290F3B

FORM 3C
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 08/01/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: P200033 HCC4 Data Filename: P200034

HCC2 Data Filename: P200032 HCC5 Data Filename: P200035

HCC3 Data Filename: P200031

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO					QC LIMITS (2)
		HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	
NATIVE ANALYTES							
2,3,7,8-TCDD	M/M+2	0.80	0.79	0.77	0.77	0.78	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.42	1.53	1.56	1.54	1.55	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.35	1.24	1.24	1.24	1.26	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.09	1.25	1.28	1.26	1.26	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.28	1.22	1.29	1.26	1.24	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.06	1.02	1.02	1.05	1.04	0.88-1.20
OCDD	M+2/M+4	0.93	0.88	0.90	0.89	0.89	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.73	0.72	0.76	0.77	0.77	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.59	1.54	1.56	1.53	1.54	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.47	1.57	1.51	1.53	1.53	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.27	1.23	1.23	1.22	1.22	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.25	1.28	1.20	1.22	1.23	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.32	1.23	1.21	1.22	1.23	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.27	1.22	1.23	1.23	1.23	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.06	1.00	1.03	1.01	1.02	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.03	0.96	1.04	1.02	1.02	0.88-1.20
OCDF	M+2/M+4	0.88	0.89	0.90	0.89	0.89	0.76-1.02

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits from Table 8, Method 8290.

8290F3C

FORM 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 08/01/08

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: P200033 HRCC4 Data Filename: P200034

HRCC2 Data Filename: P200032 HRCC5 Data Filename: P200035

HRCC3 Data Filename: P200031

LABELED COMPOUNDS	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	QC LIMITS (2)
13C-2,3,7,8-TCDD	M/M+2	0.78	0.78	0.79	0.77	0.78	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.58	1.58	1.58	1.54	1.57	1.32-1.78
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.27	1.26	1.25	1.26	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.05	1.04	1.05	1.04	1.04	0.88-1.20
13C-OCDD	M+2/M+4	0.90	0.89	0.91	0.90	0.89	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.79	0.77	0.78	0.78	0.78	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.57	1.58	1.57	1.55	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.52	0.52	0.52	0.52	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.45	0.44	0.44	0.44	0.45	0.37-0.51

(1) See Table 6, Method 8290, for m/z specifications.Method 8290.

(2) Ion Abundance Ratio Control Limits from Table 8,

8290F3D

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC1

Run #1 Filename P200033 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 17:11:30
Processed: 7-AUG-08 06:33:19 Sample ID: ICAL HRCC1

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	1.109e+03	1.513e+03	0.73	yes	no	0.83
2	Unk	1,2,3,7,8-PeCDF	32:59	3.548e+03	2.237e+03	1.59	yes	no	0.84
3	Unk	2,3,4,7,8-PeCDF	33:43	3.424e+03	2.326e+03	1.47	yes	no	0.85
4	Unk	1,2,3,4,7,8-HxCDF	36:33	3.006e+03	2.359e+03	1.27	yes	no	1.01
5	Unk	1,2,3,6,7,8-HxCDF	36:39	3.025e+03	2.416e+03	1.25	yes	no	1.05
6	Unk	2,3,4,6,7,8-HxCDF	37:08	2.702e+03	2.133e+03	1.27	yes	no	0.94
7	Unk	1,2,3,7,8,9-HxCDF	37:50	2.408e+03	1.828e+03	1.32	yes	yes	0.81
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	2.265e+03	2.138e+03	1.06	yes	no	1.32
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	1.648e+03	1.600e+03	1.03	yes	no	0.97
10	Unk	OCDF	43:22	2.914e+03	3.296e+03	0.88	yes	no	1.11
11	Unk	2,3,7,8-TCDD	29:27	9.983e+02	1.242e+03	0.80	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:05	2.387e+03	1.686e+03	1.42	yes	no	0.87
13	Unk	1,2,3,4,7,8-HxCDD	37:14	1.994e+03	1.473e+03	1.35	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:19	2.044e+03	1.870e+03	1.09	yes	no	1.05
15	Unk	1,2,3,7,8,9-HxCDD	37:36	2.007e+03	1.573e+03	1.28	yes	no	0.97
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	1.393e+03	1.316e+03	1.06	yes	no	0.88
17	Unk	OCDD	43:12	2.572e+03	2.755e+03	0.93	yes	no	0.96
18	IS	13C-2,3,7,8-TCDF	28:35	7.275e+04	9.239e+04	0.79	yes	no	1.42
19	IS	13C-1,2,3,7,8-PeCDF	32:59	8.691e+04	5.560e+04	1.56	yes	no	1.26
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	8.565e+04	1.636e+05	0.52	yes	no	1.28
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	5.319e+04	1.193e+05	0.45	yes	no	0.90
22	IS	13C-2,3,7,8-TCDD	29:26	5.391e+04	6.949e+04	0.78	yes	no	1.05
23	IS	13C-1,2,3,7,8-PeCDD	34:04	5.817e+04	3.673e+04	1.58	yes	no	0.87
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	1.017e+05	8.057e+04	1.26	yes	no	1.00
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:09	7.906e+04	7.538e+04	1.05	yes	no	0.83
26	IS	13C-OCDD	43:12	1.309e+05	1.459e+05	0.90	yes	no	0.73
27	RS/RT	13C-1,2,3,4-TCDD	29:14	5.140e+04	6.515e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	9.892e+04	8.099e+04	1.22	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:27	2.216e+03					0.98

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC1

Run #1 Filename P200033 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 17:11:30

Processed: 7-AUG-08 06:33:19 LAB. ID: ICAL HRCC1

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.78e+05	1.00e+02	1.8e+03	2.26e+05	4.76e+02	4.8e+02
2	1,2,3,7,8-PeCDF	6.75e+05	1.20e+02	5.6e+03	4.41e+05	8.12e+02	5.4e+02
3	2,3,4,7,8-PeCDF	6.51e+05	1.20e+02	5.4e+03	4.41e+05	8.12e+02	5.4e+02
4	1,2,3,4,7,8-HxCDF	6.36e+05	1.80e+02	3.5e+03	5.17e+05	1.28e+02	4.0e+03
5	1,2,3,6,7,8-HxCDF	6.02e+05	1.80e+02	3.3e+03	4.64e+05	1.28e+02	3.6e+03
6	2,3,4,6,7,8-HxCDF	5.45e+05	1.80e+02	3.0e+03	4.33e+05	1.28e+02	3.4e+03
7	1,2,3,7,8,9-HxCDF	4.51e+05	1.80e+02	2.5e+03	3.45e+05	1.28e+02	2.7e+03
8	1,2,3,4,6,7,8-HpCDF	4.70e+05	1.16e+03	4.1e+02	4.39e+05	4.76e+02	9.2e+02
9	1,2,3,4,7,8,9-HpCDF	2.92e+05	1.16e+03	2.5e+02	3.01e+05	4.76e+02	6.3e+02
10	OCDF	3.85e+05	1.60e+02	2.4e+03	4.50e+05	3.92e+02	1.1e+03
11	2,3,7,8-TCDD	1.74e+05	1.52e+02	1.1e+03	2.17e+05	1.32e+02	1.6e+03
12	1,2,3,7,8-PeCDD	4.78e+05	6.44e+02	7.4e+02	3.39e+05	1.48e+02	2.3e+03
13	1,2,3,4,7,8-HxCDD	4.39e+05	1.28e+02	3.4e+03	3.48e+05	6.80e+01	5.1e+03
14	1,2,3,6,7,8-HxCDD	4.34e+05	1.28e+02	3.4e+03	3.62e+05	6.80e+01	5.3e+03
15	1,2,3,7,8,9-HxCDD	4.06e+05	1.28e+02	3.2e+03	3.23e+05	6.80e+01	4.8e+03
16	1,2,3,4,6,7,8-HpCDD	2.59e+05	1.24e+02	2.1e+03	2.49e+05	1.16e+02	2.1e+03
17	OCDD	3.54e+05	1.16e+02	3.1e+03	3.93e+05	9.60e+01	4.1e+03
18	13C-2,3,7,8-TCDF	1.19e+07	9.16e+02	1.3e+04	1.52e+07	8.68e+02	1.8e+04
19	13C-1,2,3,7,8-PeCDF	1.68e+07	1.12e+02	1.5e+05	1.07e+07	1.96e+02	5.5e+04
20	13C-1,2,3,4,7,8-HxCDF	1.80e+07	2.84e+02	6.3e+04	3.45e+07	4.24e+02	8.1e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.10e+07	5.33e+03	2.1e+03	2.45e+07	7.77e+03	3.2e+03
22	13C-2,3,7,8-TCDD	9.41e+06	1.58e+03	6.0e+03	1.22e+07	5.60e+02	2.2e+04
23	13C-1,2,3,7,8-PeCDD	1.15e+07	4.68e+02	2.4e+04	7.23e+06	1.52e+02	4.8e+04
24	13C-1,2,3,6,7,8-HxCDD	2.20e+07	4.52e+02	4.9e+04	1.74e+07	3.00e+02	5.8e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.49e+07	4.20e+02	3.6e+04	1.44e+07	1.60e+02	9.0e+04
26	13C-OCDD	1.83e+07	1.12e+02	1.6e+05	2.02e+07	1.08e+02	1.9e+05
27	13C-1,2,3,4-TCDD	8.91e+06	1.58e+03	5.7e+03	1.13e+07	5.60e+02	2.0e+04
28	13C-1,2,3,7,8,9-HxCDD	2.08e+07	4.52e+02	4.6e+04	1.67e+07	3.00e+02	5.6e+04
29	37Cl-2,3,7,8-TCDD	3.87e+05	1.44e+02	2.7e+03			

Columbia Analytical Services, Inc.
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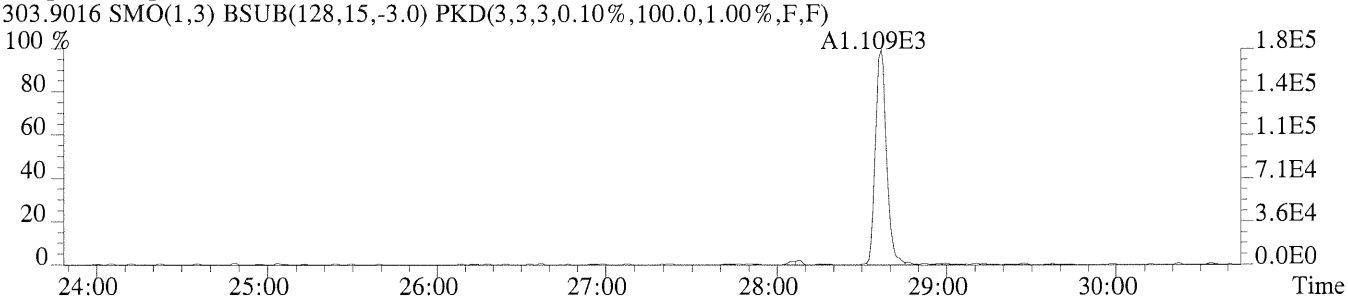
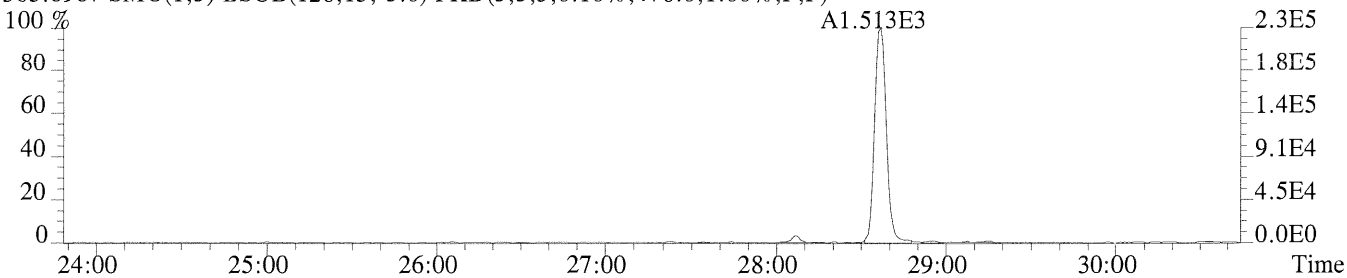
File:P200033 #1-578 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

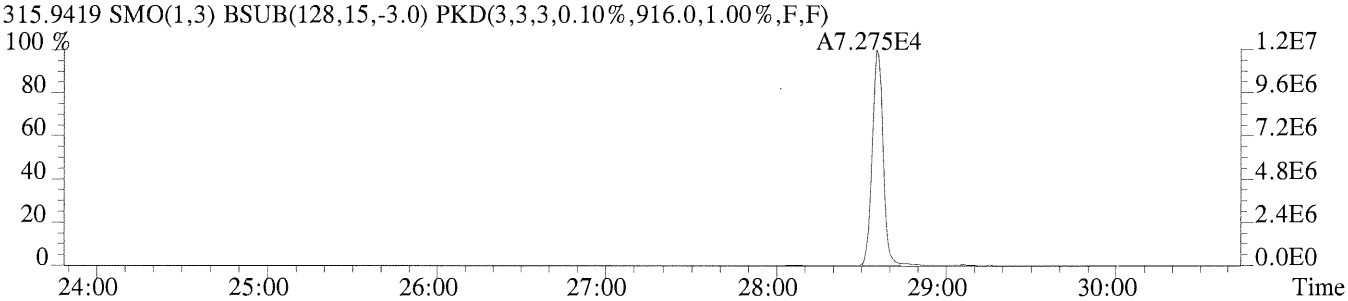
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,100.0,1.00%,F,F)



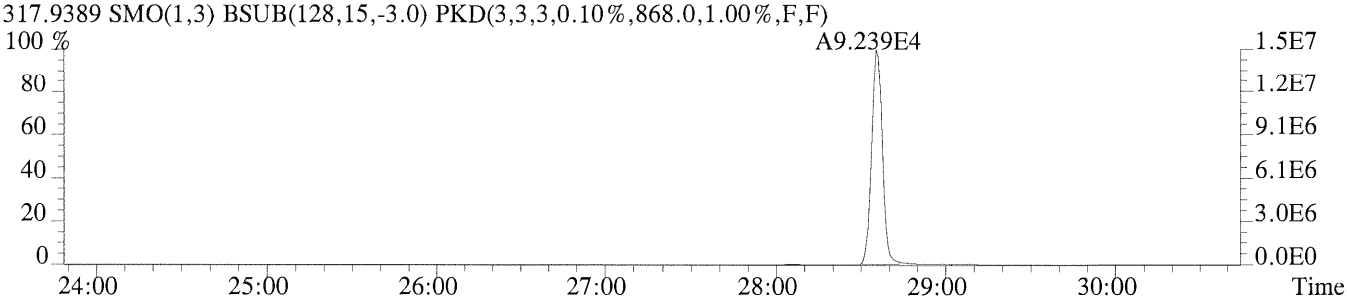
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,476.0,1.00%,F,F)



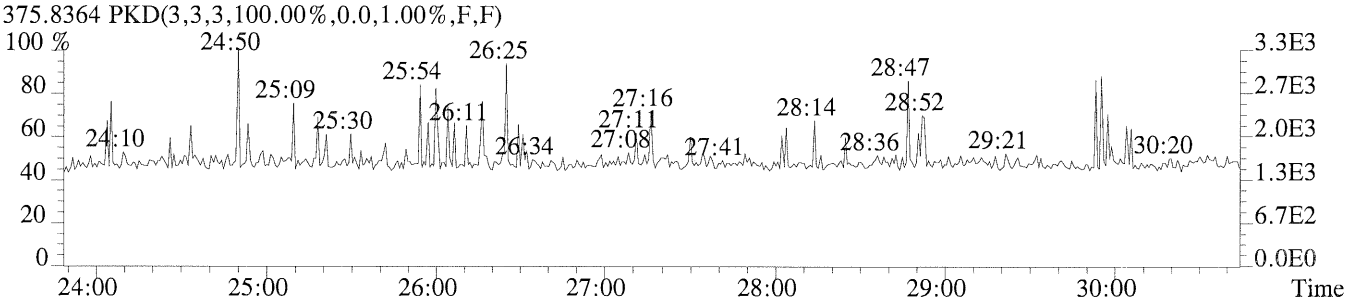
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,916.0,1.00%,F,F)



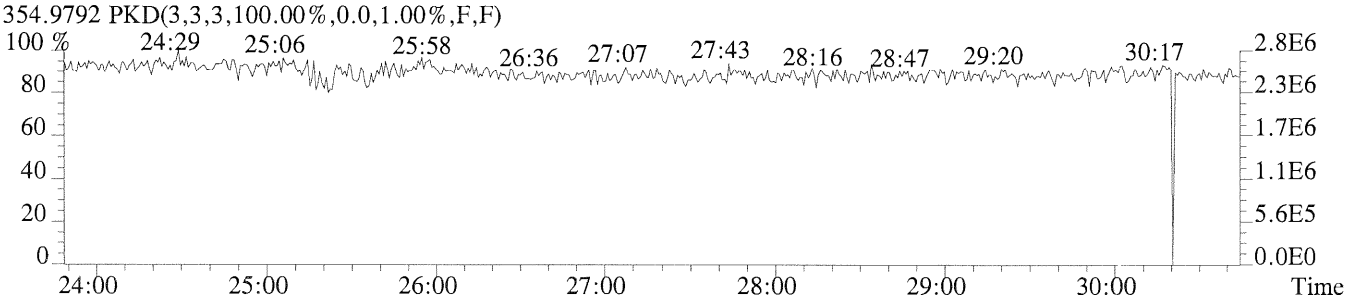
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,868.0,1.00%,F,F)



375.8364 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

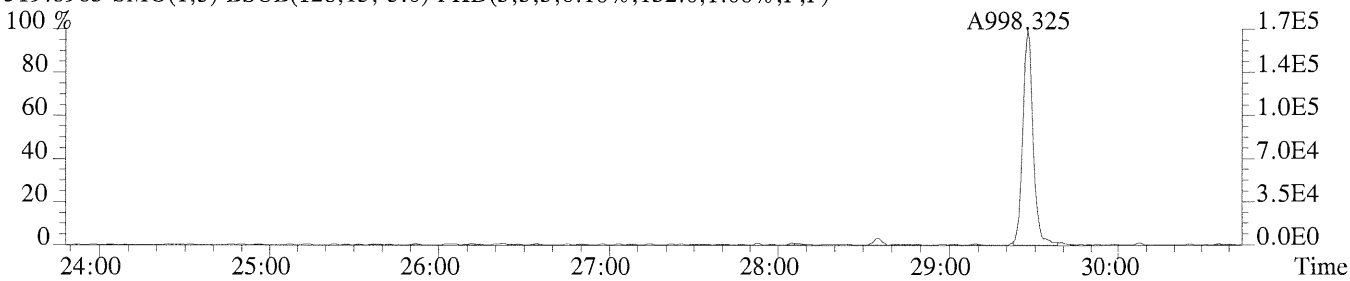


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

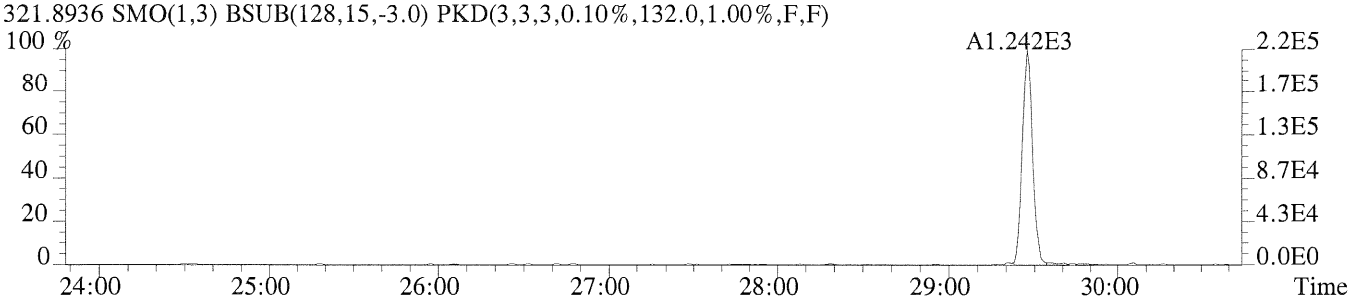


File:P200033 #1-578 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

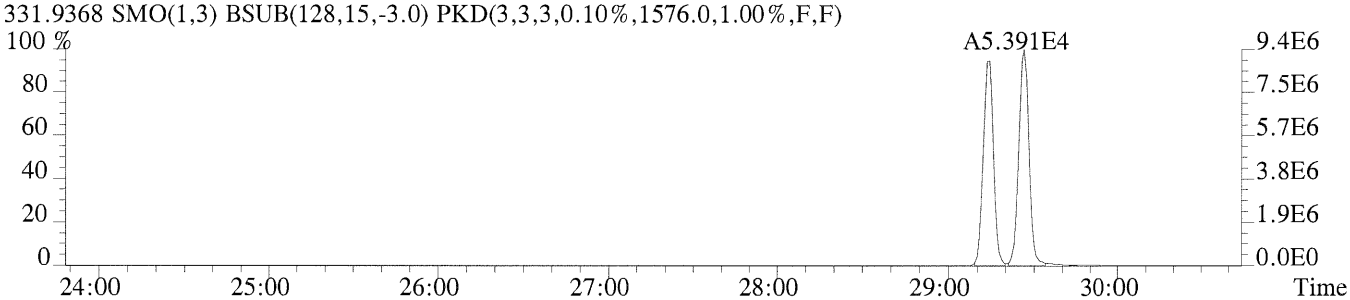
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,152.0,1.00%,F,F)



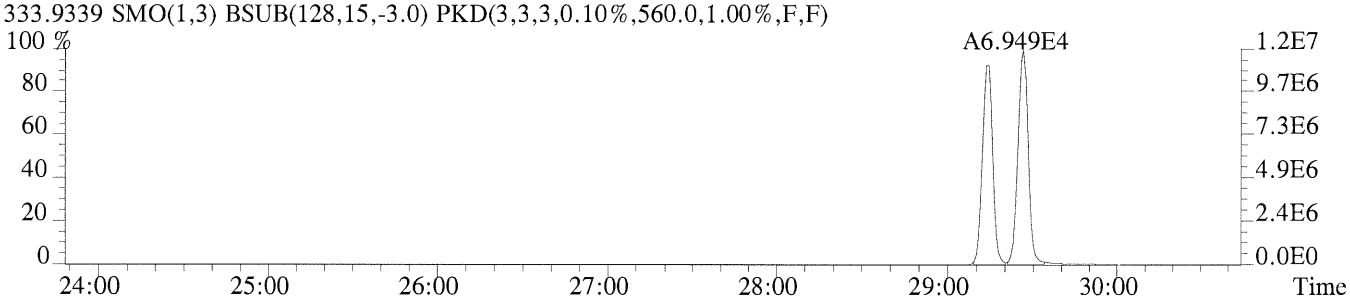
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,132.0,1.00%,F,F)



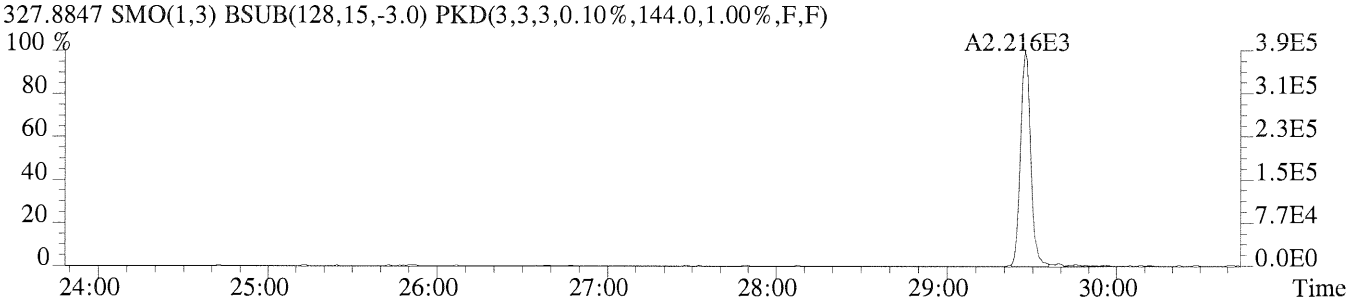
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1576.0,1.00%,F,F)



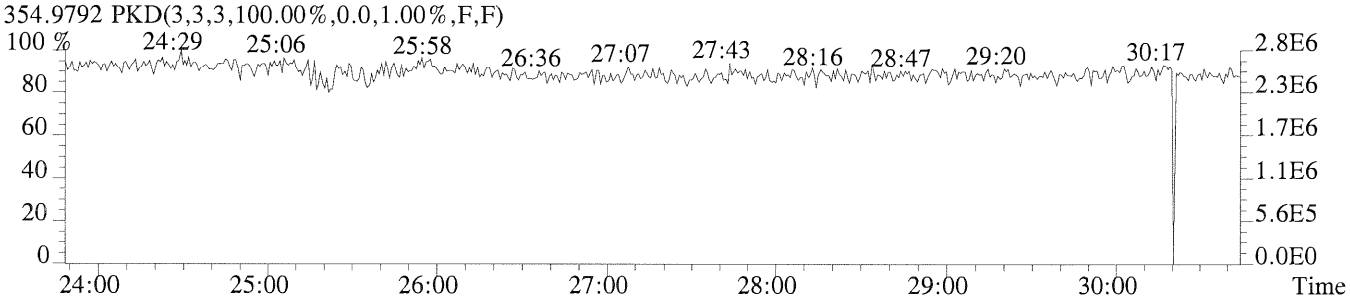
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,560.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,144.0,1.00%,F,F)

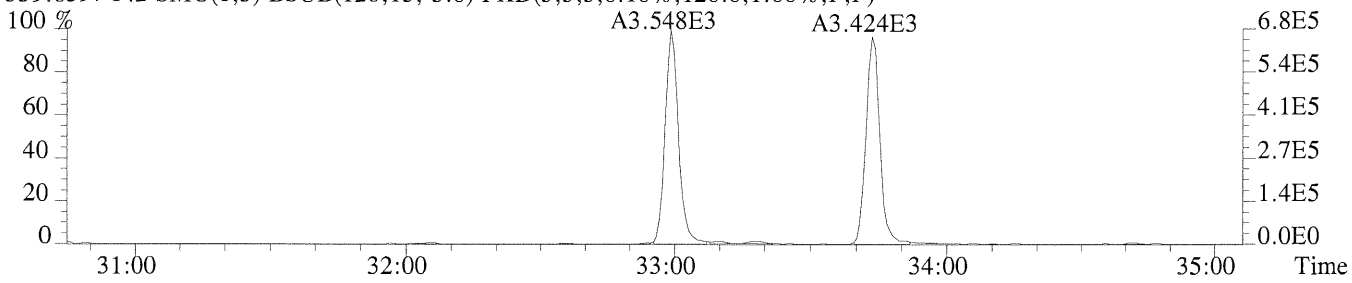


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

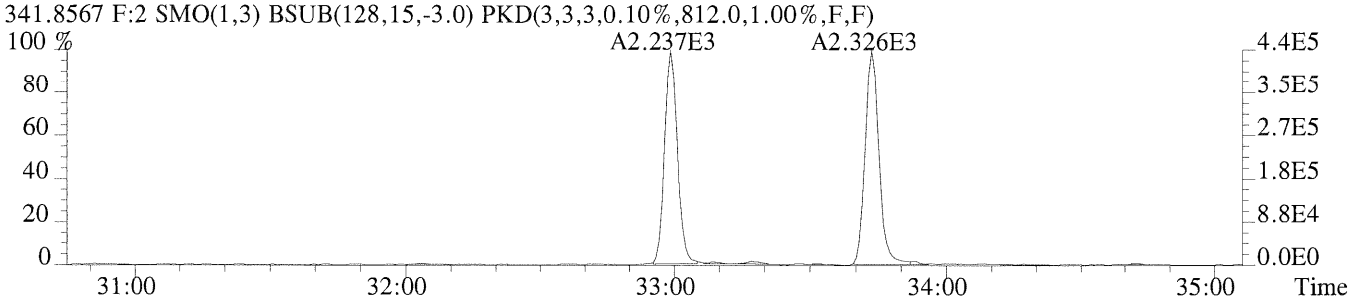


File:P200033 #1-396 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

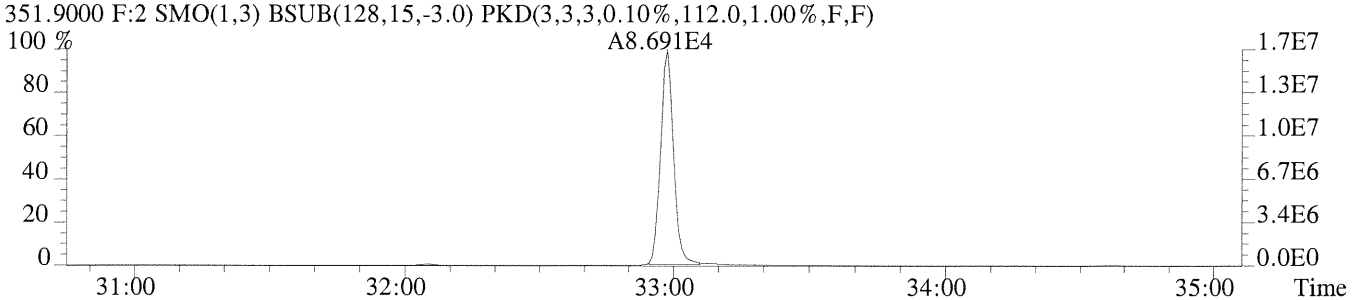
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,120.0,1.00%,F,F)



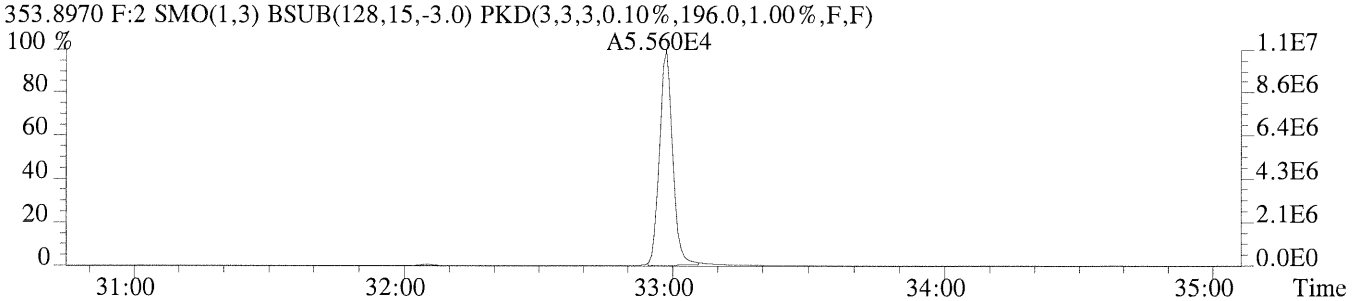
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,812.0,1.00%,F,F)



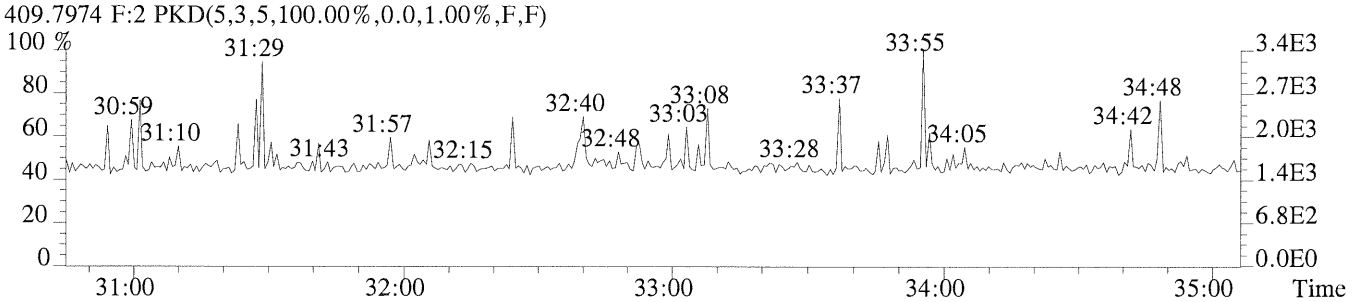
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,112.0,1.00%,F,F)



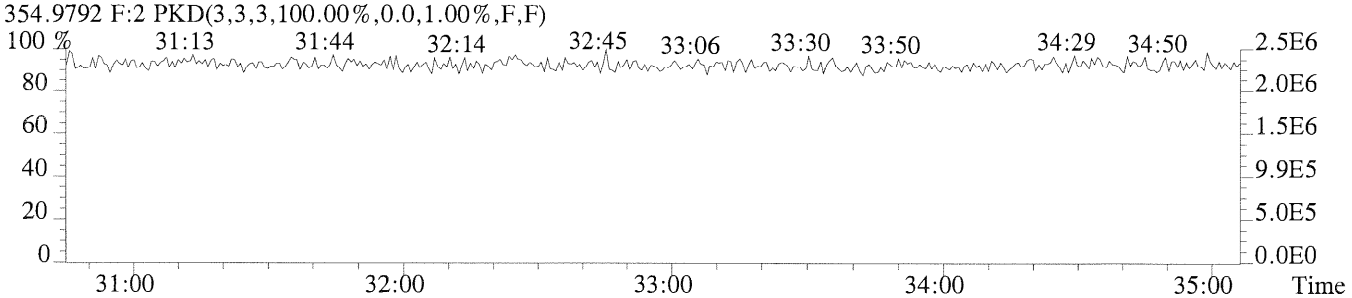
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,196.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

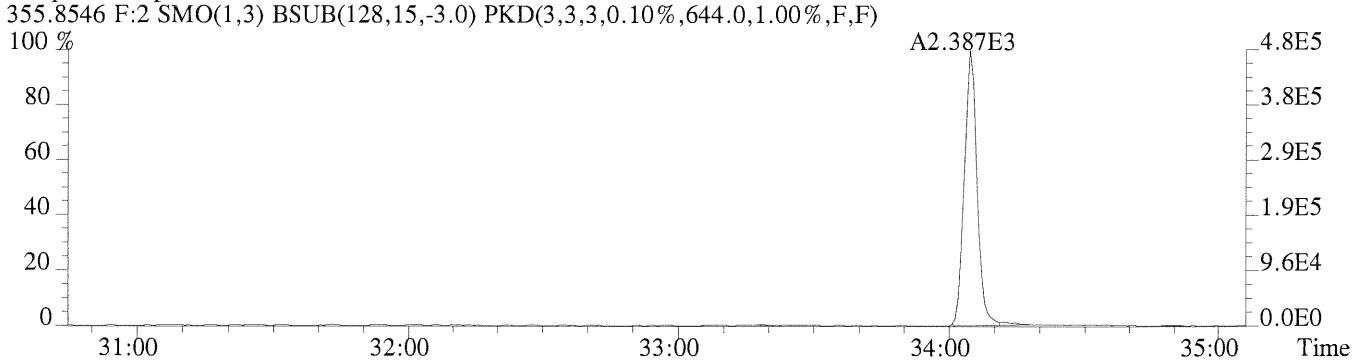


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

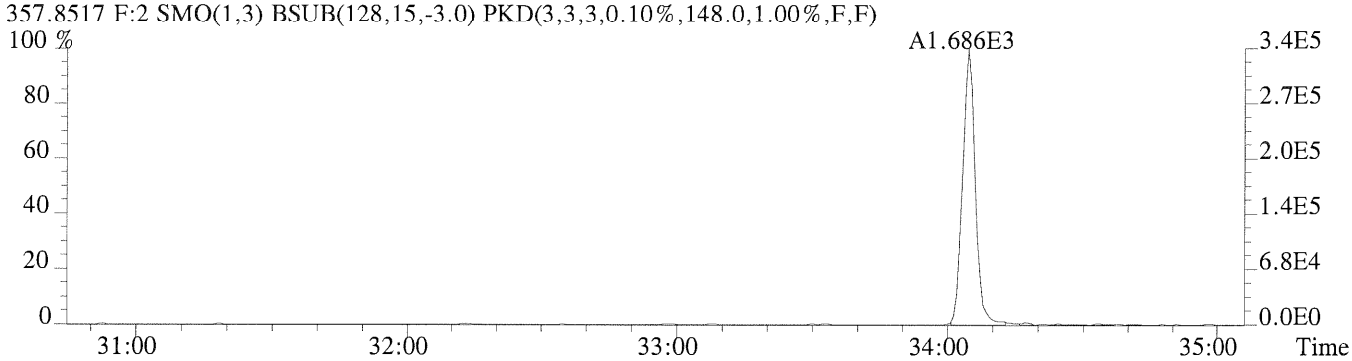


File:P200033 #1-396 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

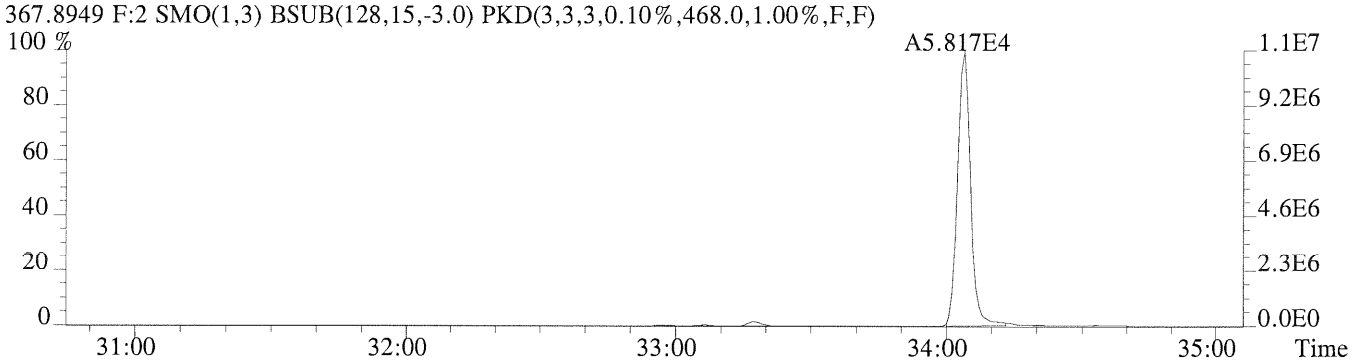
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,644.0,1.00%,F,F)



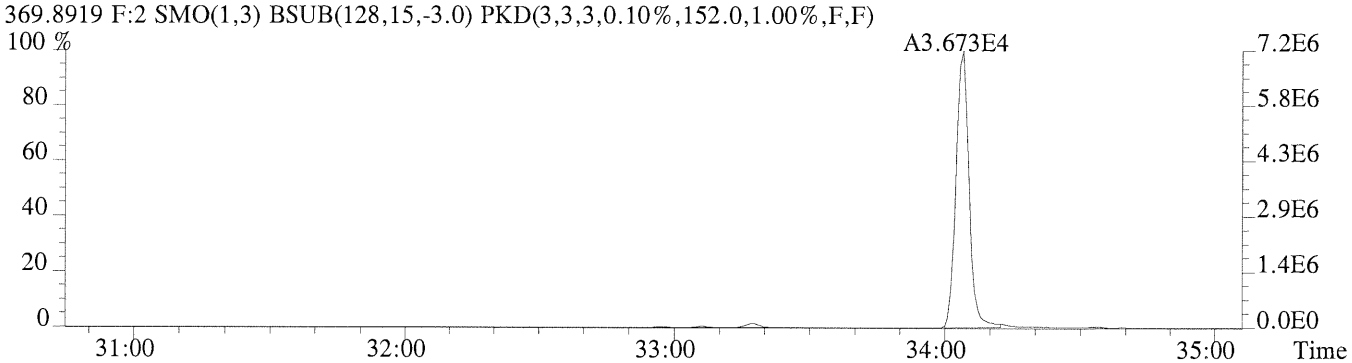
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,148.0,1.00%,F,F)



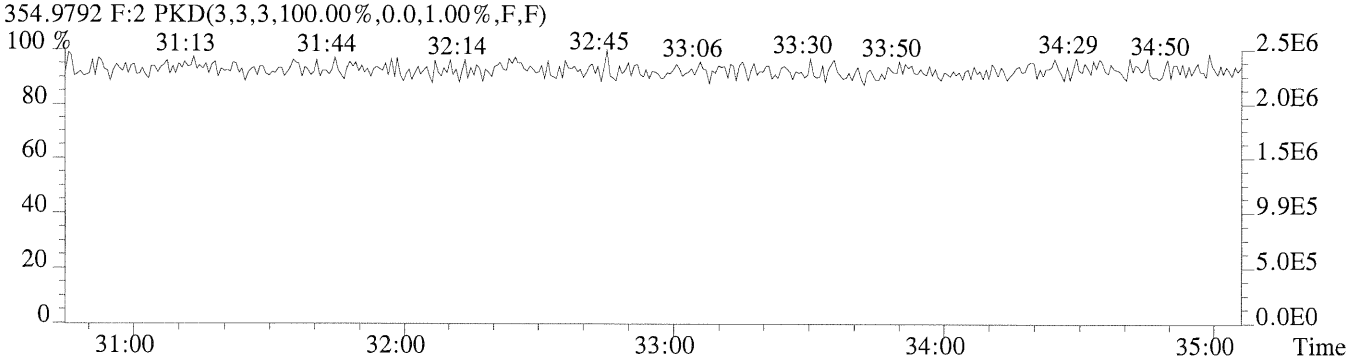
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,468.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,152.0,1.00%,F,F)

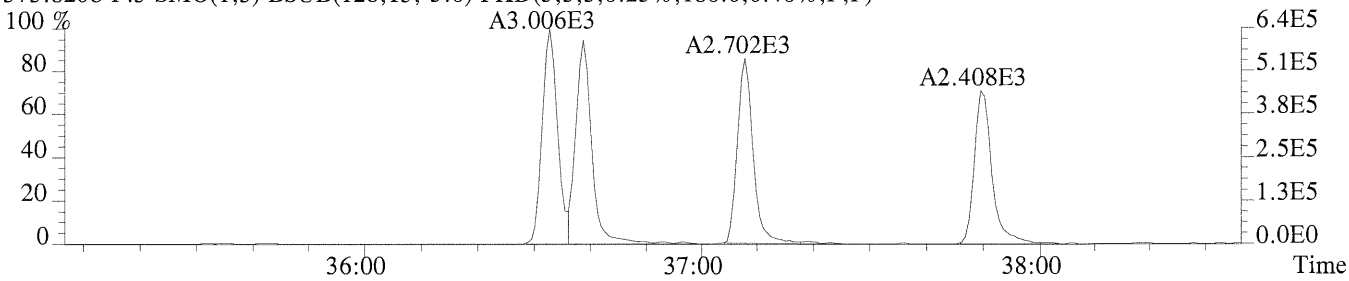


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

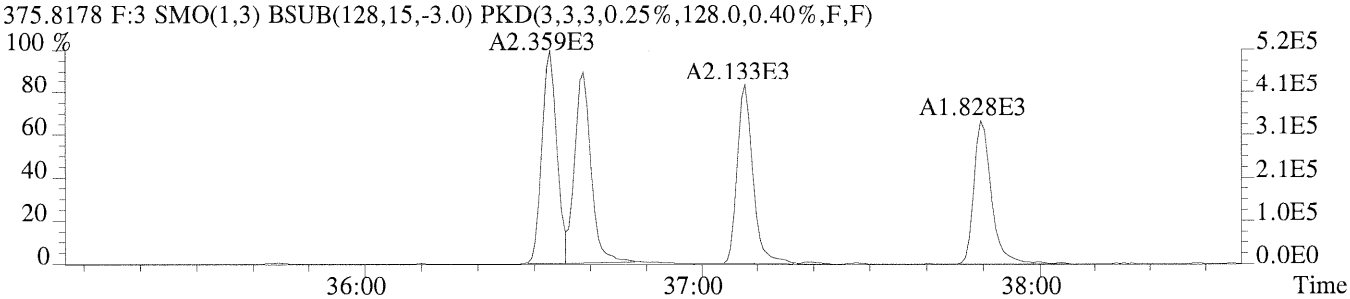


File:P200033 #1-318 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

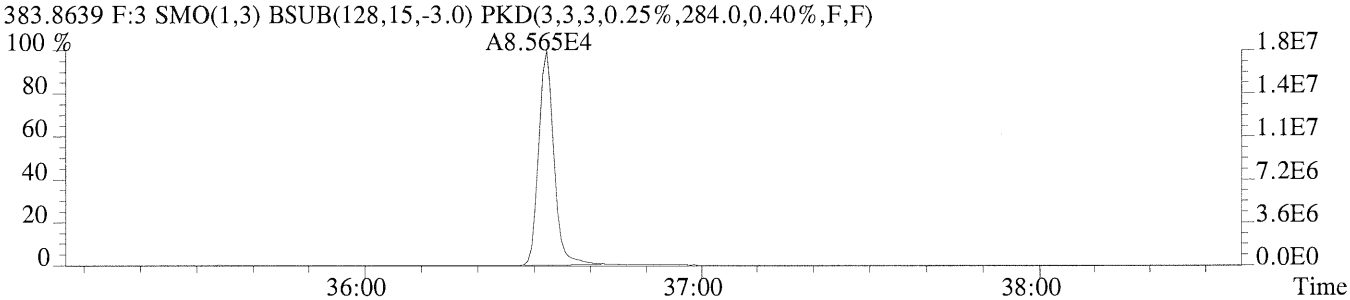
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,180.0,0.40%,F,F)



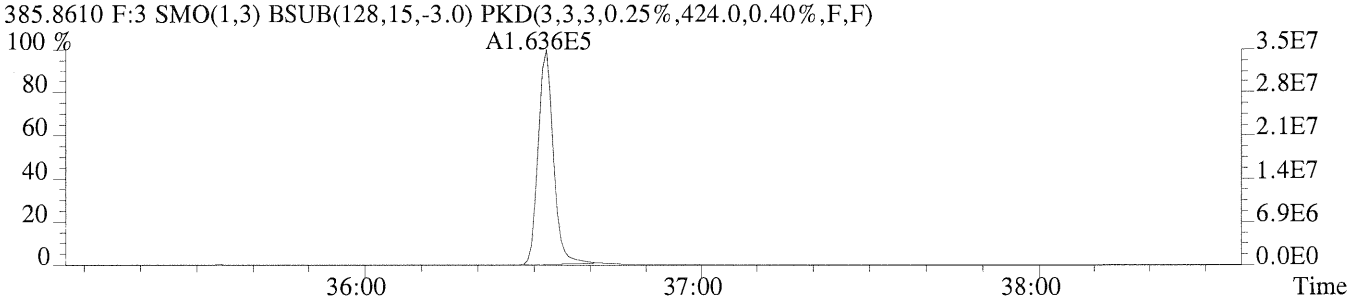
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,128.0,0.40%,F,F)



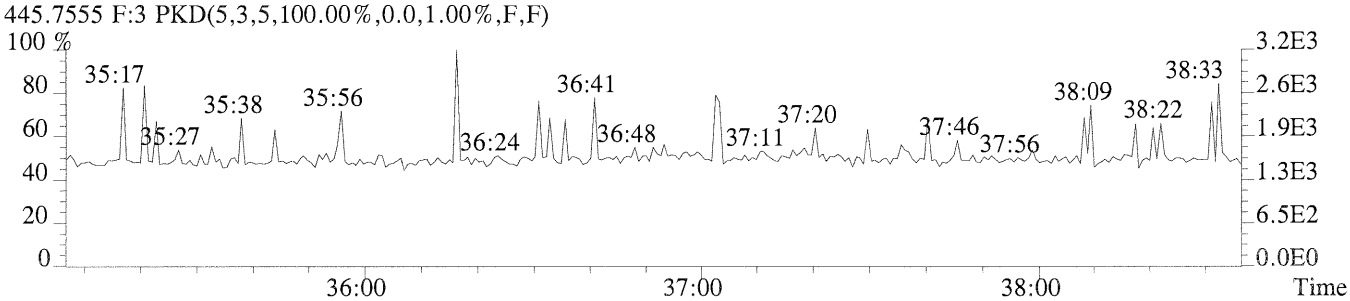
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,284.0,0.40%,F,F)



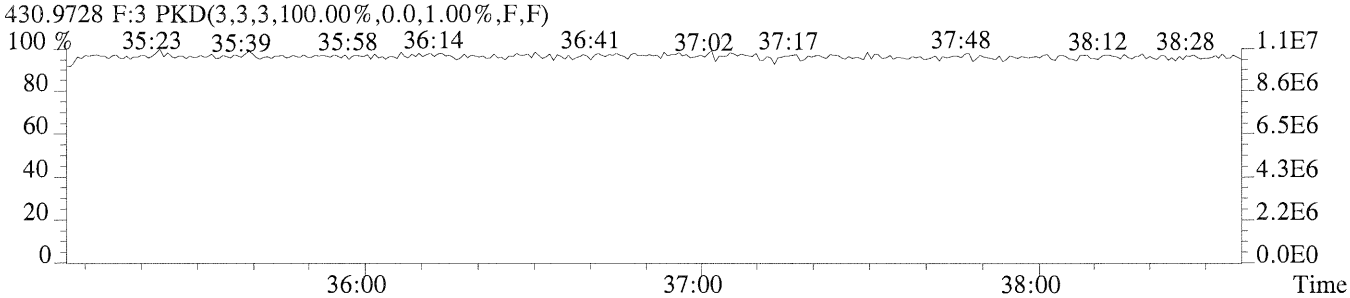
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,424.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

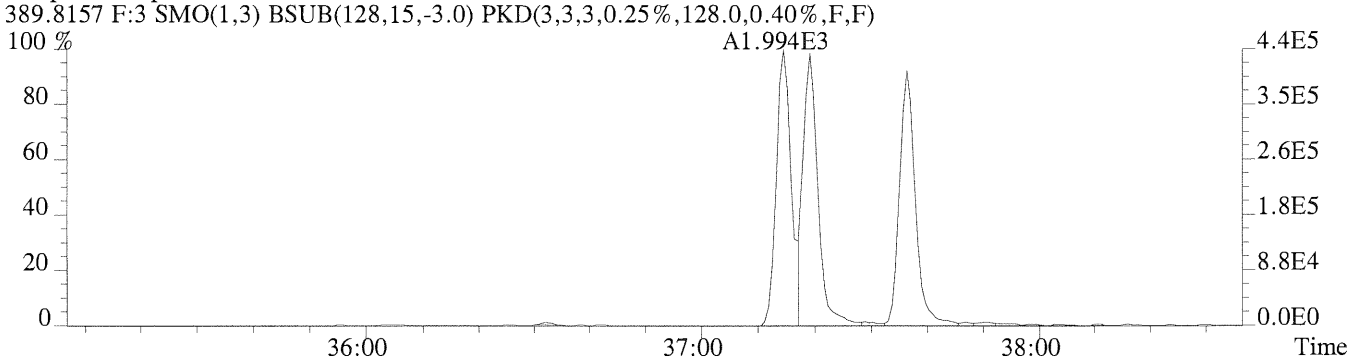


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

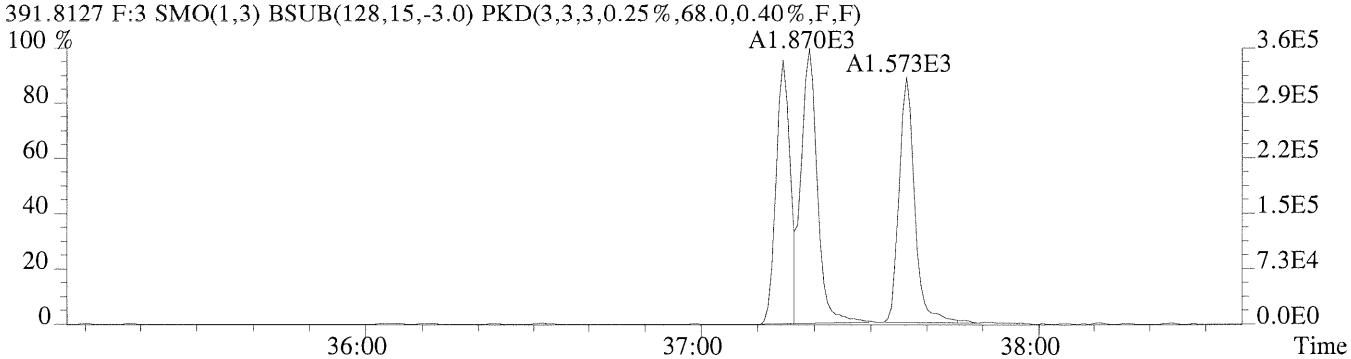


File:P200033 #1-318 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

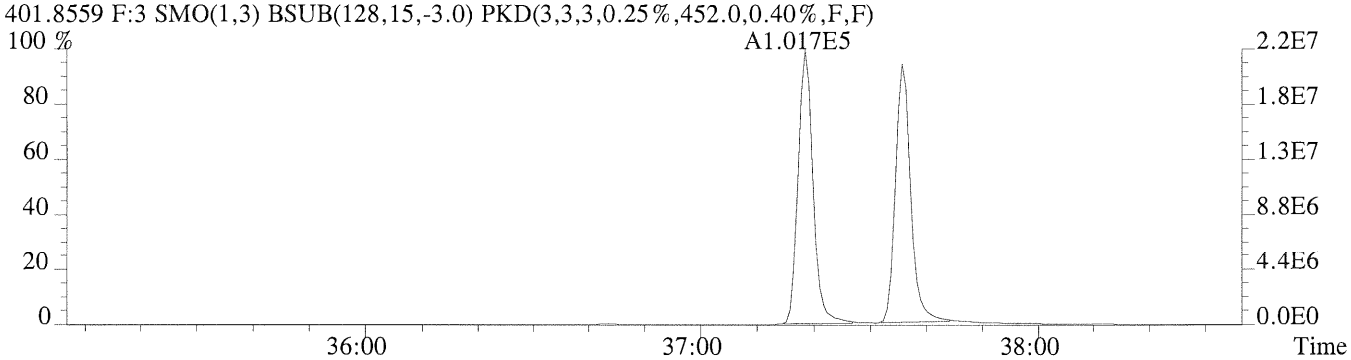
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,128.0,0.40%,F,F)



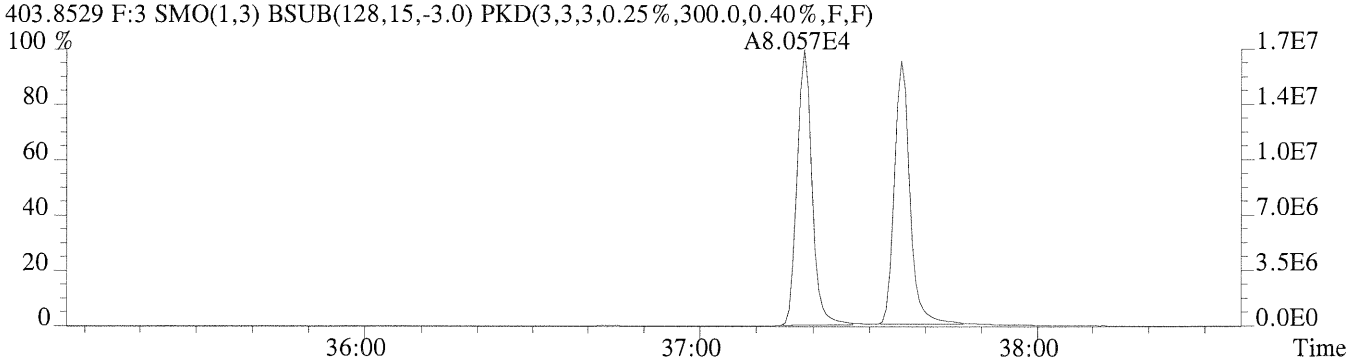
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,68.0,0.40%,F,F)



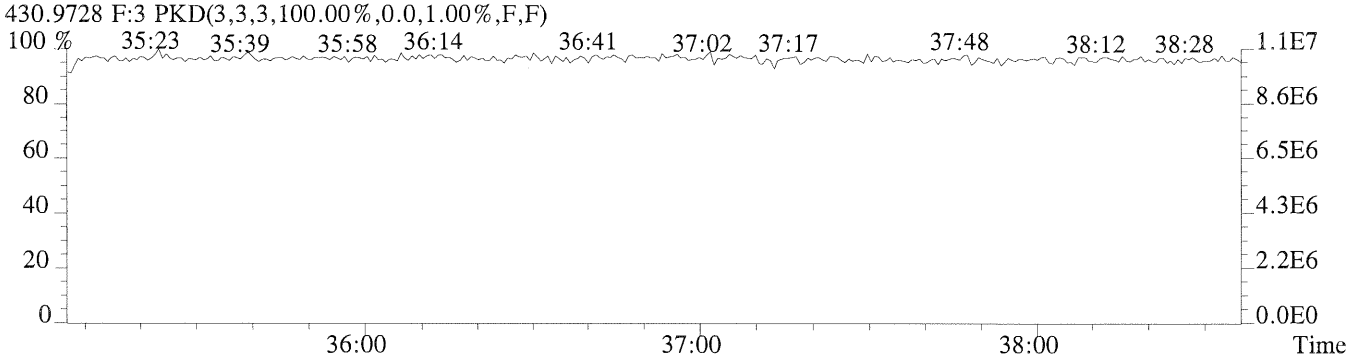
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,452.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,300.0,0.40%,F,F)

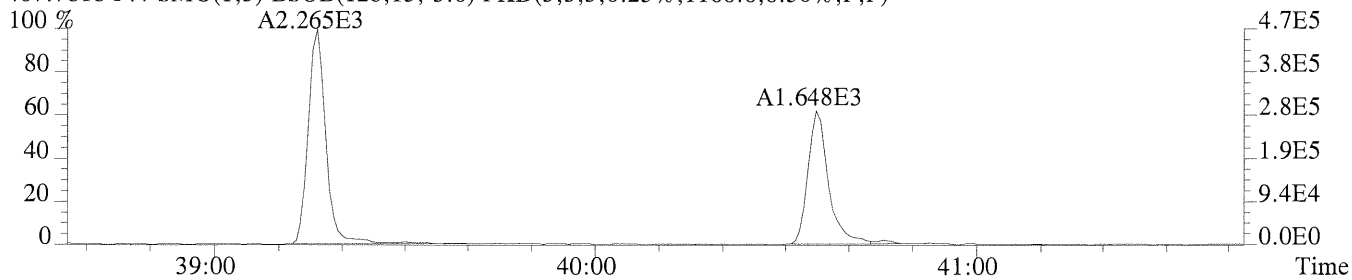


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

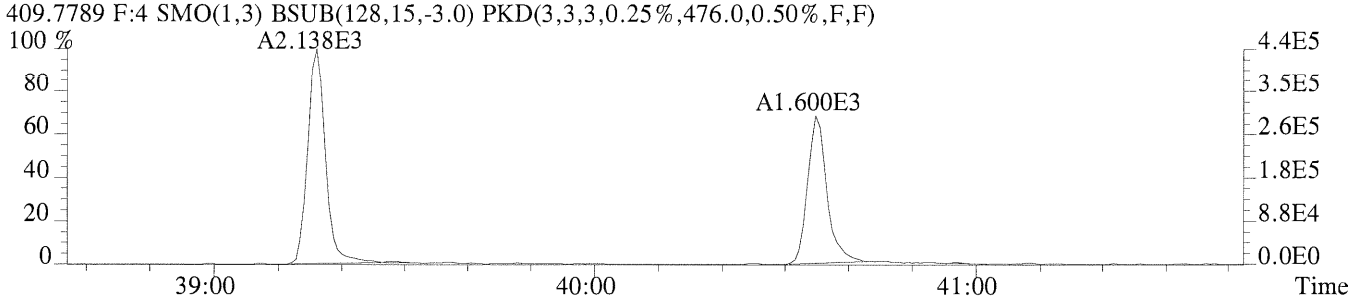


File:P200033 #1-281 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

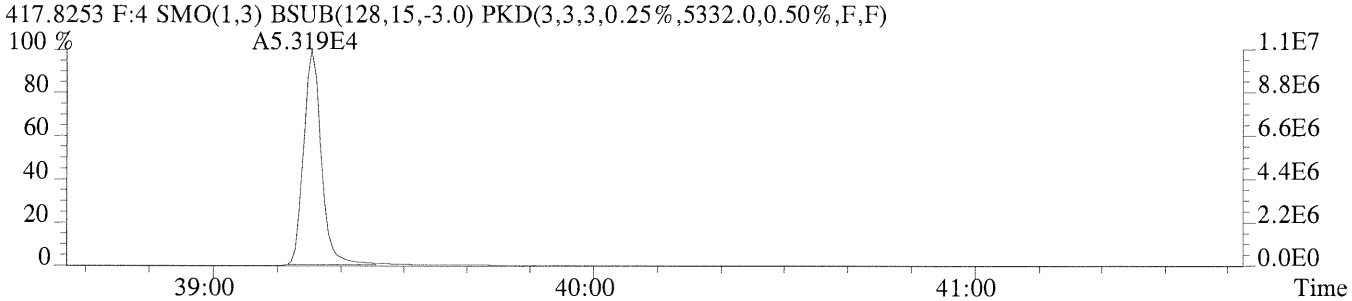
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1160.0,0.50%,F,F)



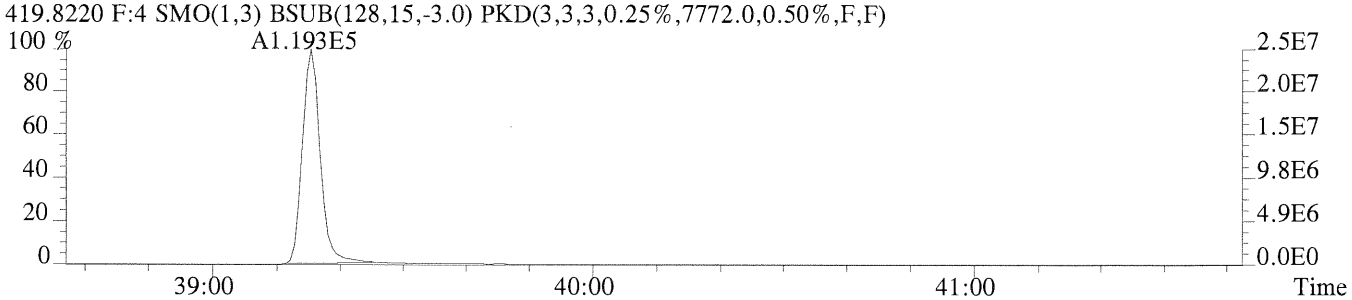
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,476.0,0.50%,F,F)



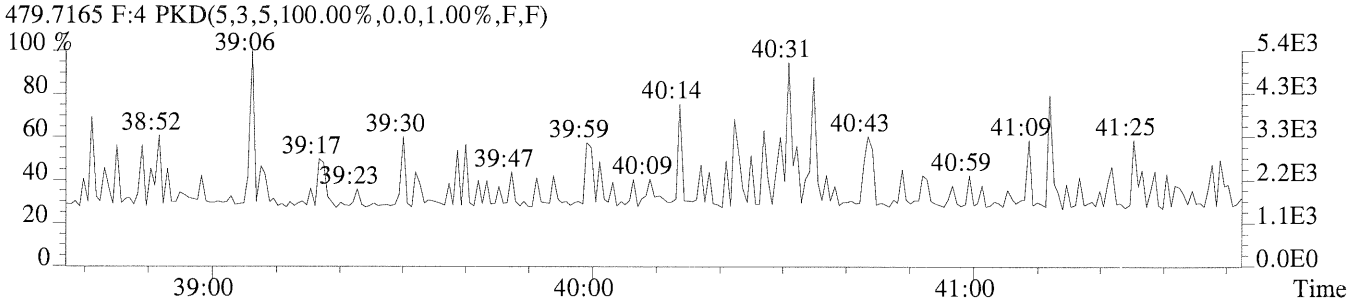
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5332.0,0.50%,F,F)



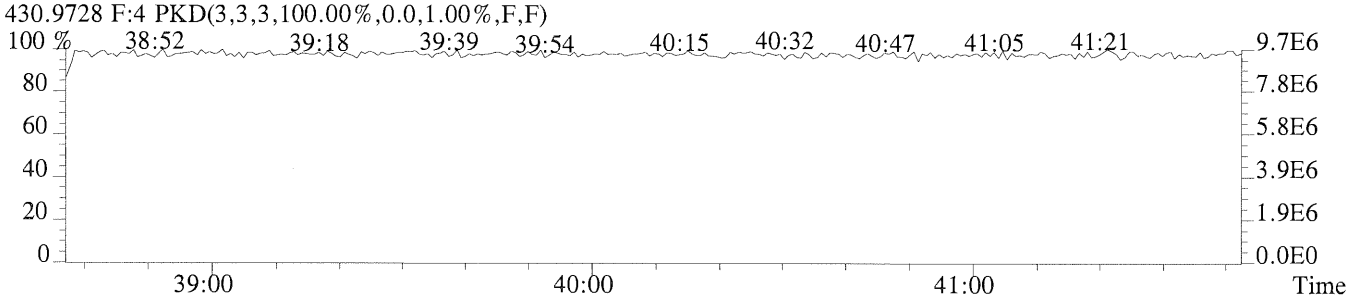
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,7772.0,0.50%,F,F)



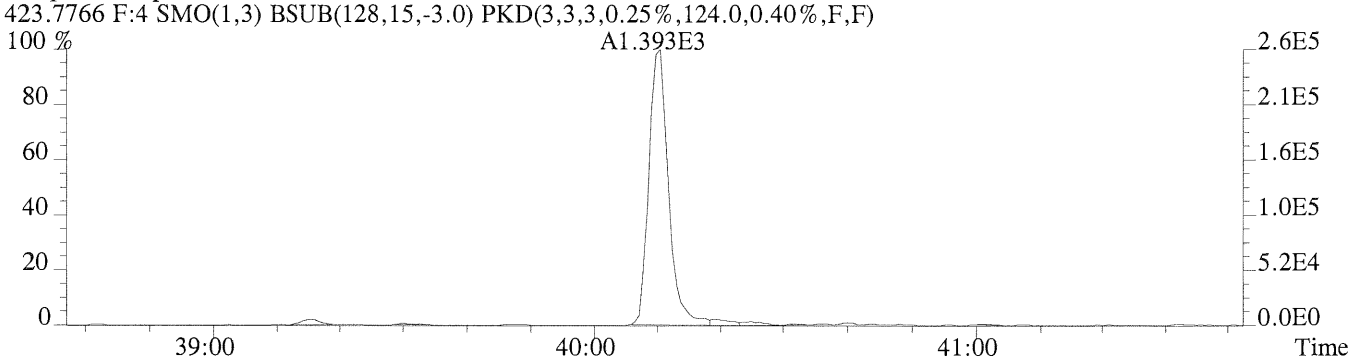
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



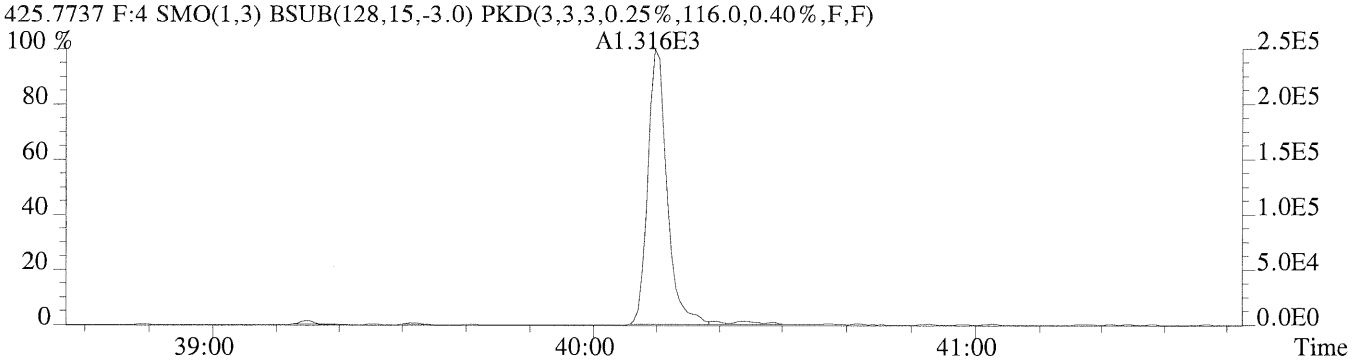
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



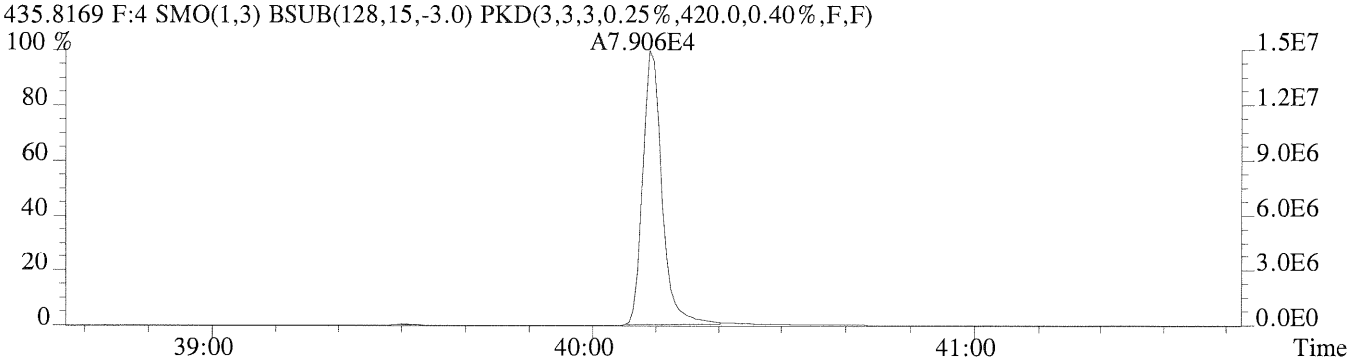
File:P200033 #1-281 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,124.0,0.40%,F,F)



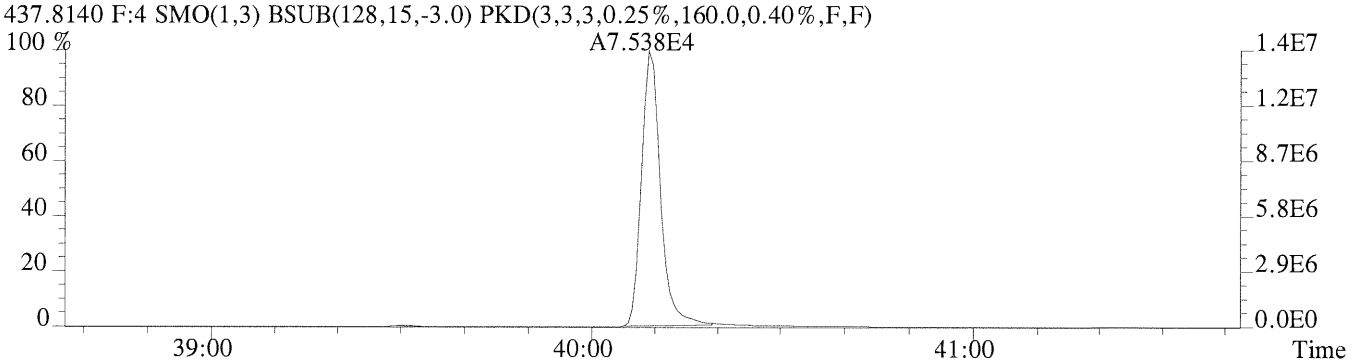
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,116.0,0.40%,F,F)



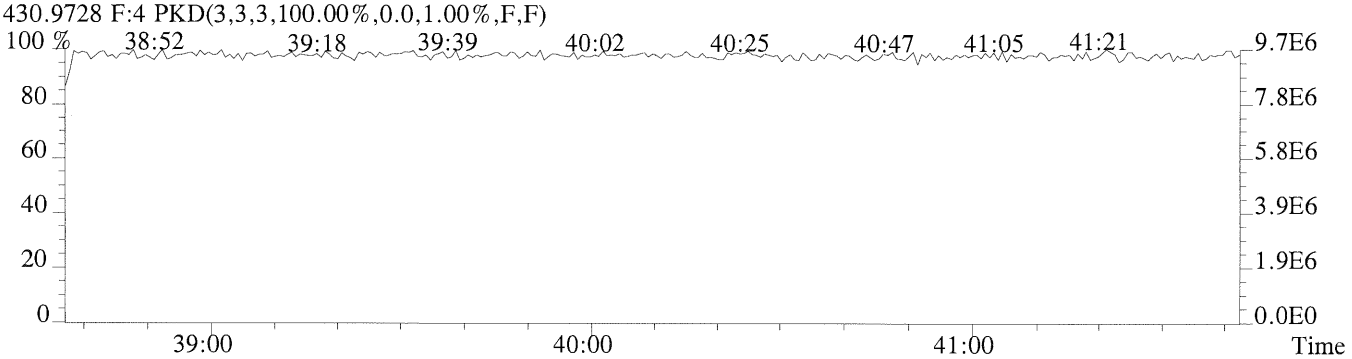
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,420.0,0.40%,F,F)



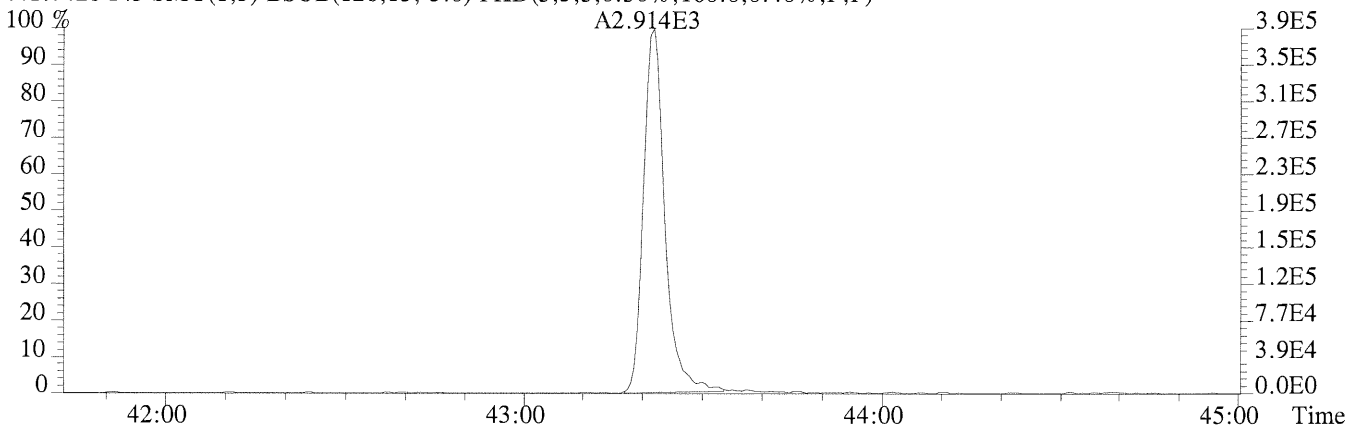
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,160.0,0.40%,F,F)



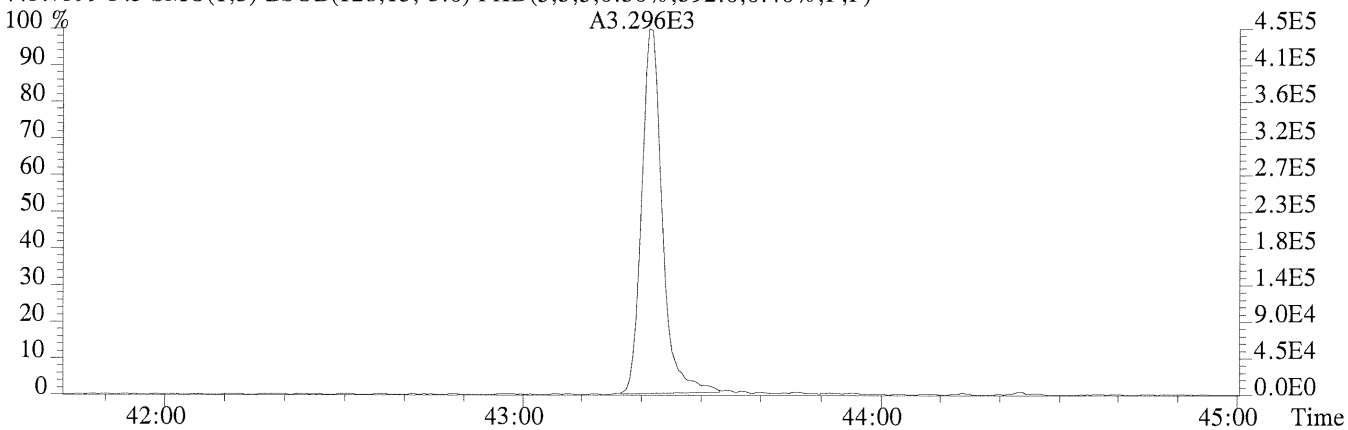
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



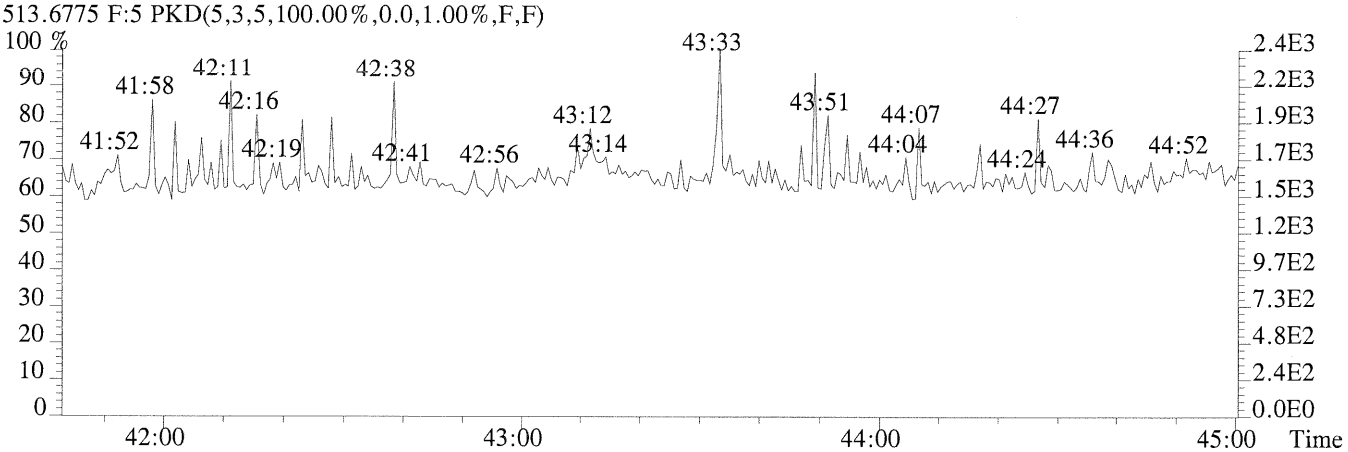
File:P200033 #1-364 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,160.0,0.40%,F,F)



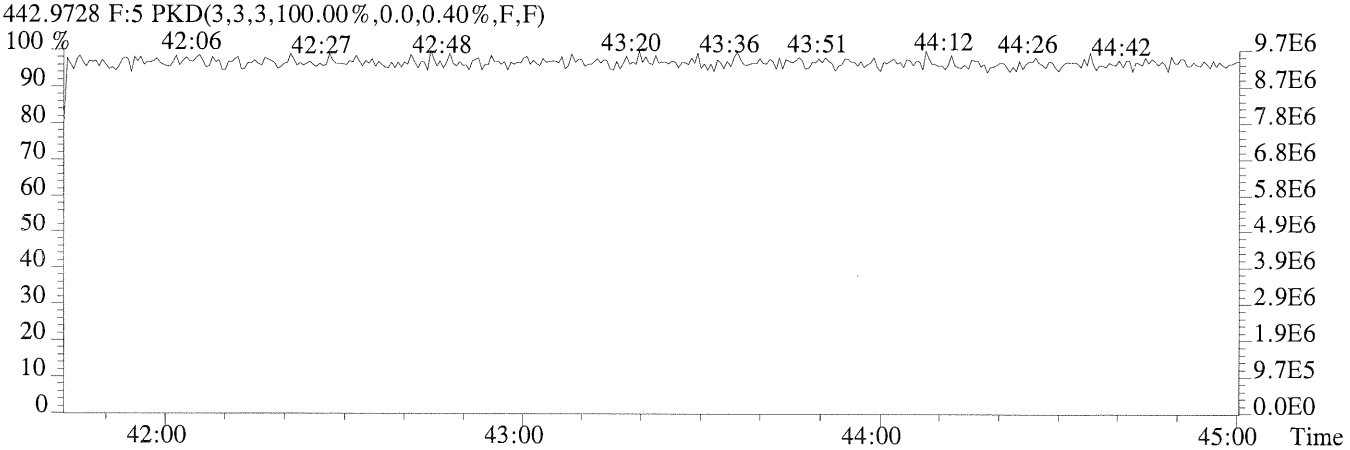
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,392.0,0.40%,F,F)



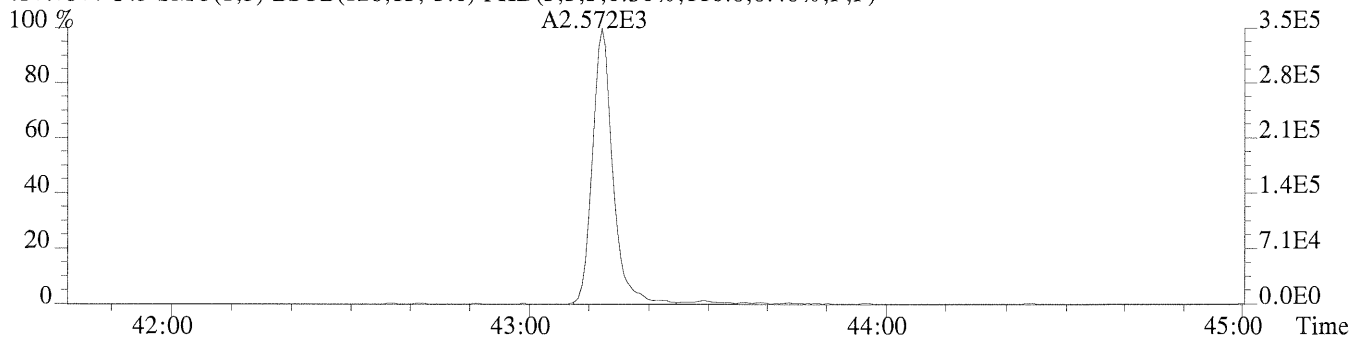
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



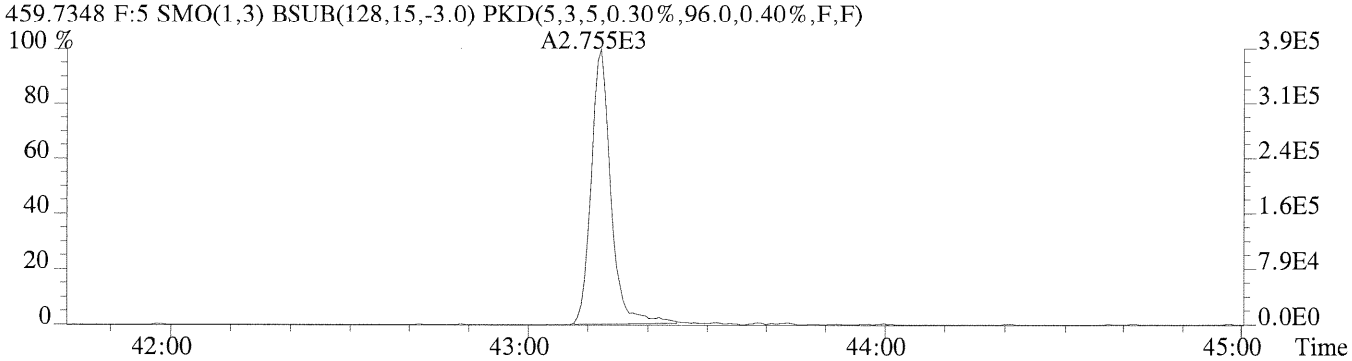
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



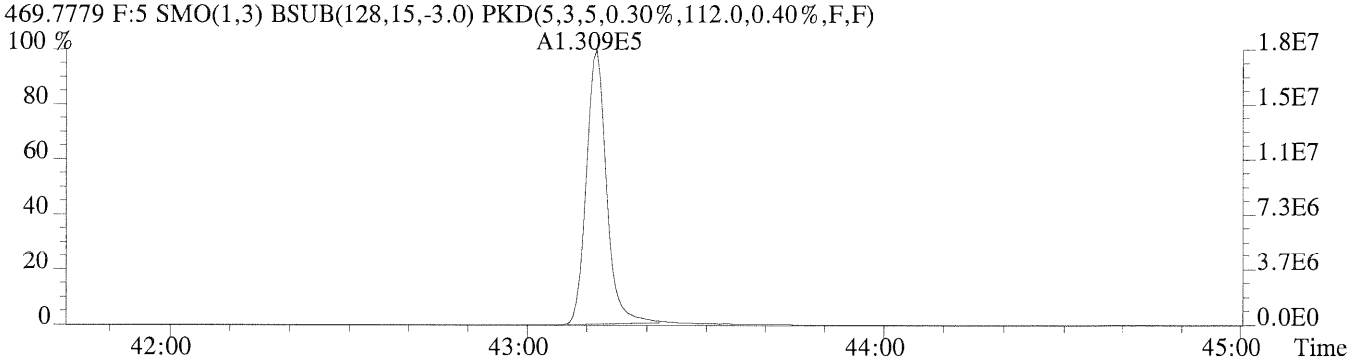
File:P200033 #1-364 Acq: 1-AUG-2008 17:11:30 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,116.0,0.40%,F,F)



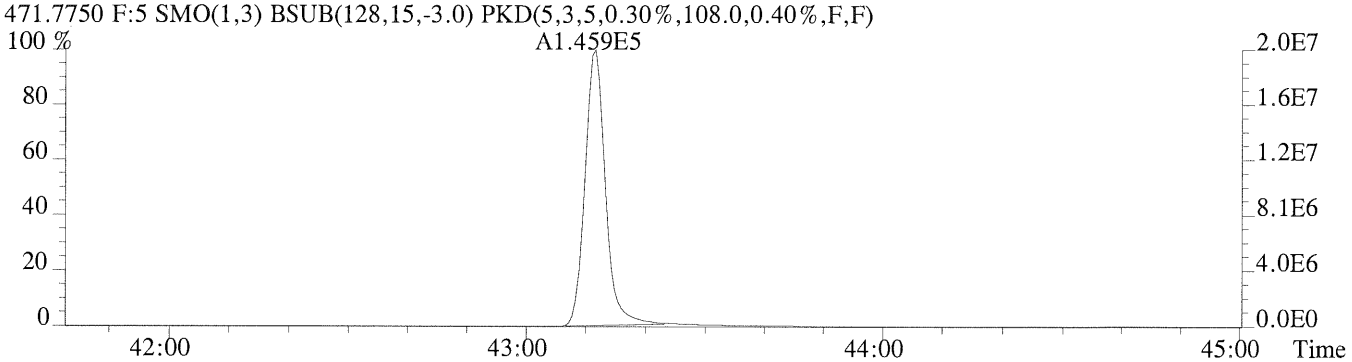
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,96.0,0.40%,F,F)



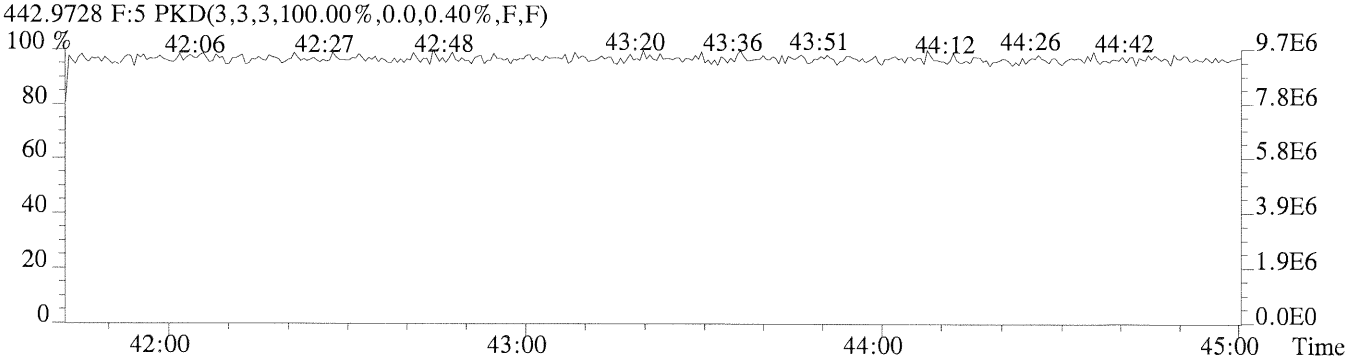
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,112.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,108.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC2

Run #2 Filename P200032 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 16:23:43
Processed: 7-AUG-08 06:33:19 Sample ID: ICAL HRCC2

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	3.143e+03	4.336e+03	0.72	yes	no	0.83
2	Unk	1,2,3,7,8-PeCDF	33:00	9.728e+03	6.301e+03	1.54	yes	no	0.84
3	Unk	2,3,4,7,8-PeCDF	33:44	9.827e+03	6.270e+03	1.57	yes	no	0.85
4	Unk	1,2,3,4,7,8-HxCDF	36:33	8.090e+03	6.556e+03	1.23	yes	no	1.08
5	Unk	1,2,3,6,7,8-HxCDF	36:39	8.521e+03	6.649e+03	1.28	yes	no	1.13
6	Unk	2,3,4,6,7,8-HxCDF	37:08	7.370e+03	6.050e+03	1.22	yes	no	1.01
7	Unk	1,2,3,7,8,9-HxCDF	37:50	6.262e+03	5.105e+03	1.23	yes	yes	0.87
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	6.165e+03	6.169e+03	1.00	yes	no	1.32
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	4.313e+03	4.477e+03	0.96	yes	no	0.97
10	Unk	OCDF	43:22	7.780e+03	8.777e+03	0.89	yes	no	1.11
11	Unk	2,3,7,8-TCDD	29:28	2.719e+03	3.453e+03	0.79	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:05	6.737e+03	4.404e+03	1.53	yes	no	0.87
13	Unk	1,2,3,4,7,8-HxCDD	37:15	5.124e+03	4.117e+03	1.24	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:20	6.035e+03	4.813e+03	1.25	yes	no	1.05
15	Unk	1,2,3,7,8,9-HxCDD	37:37	5.437e+03	4.452e+03	1.22	yes	no	0.97
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	3.665e+03	3.607e+03	1.02	yes	no	0.88
17	Unk	OCDD	43:13	6.705e+03	7.626e+03	0.88	yes	no	0.96
18	IS	13C-2,3,7,8-TCDF	28:36	8.078e+04	1.045e+05	0.77	yes	no	1.42
19	IS	13C-1,2,3,7,8-PeCDF	32:58	9.491e+04	6.061e+04	1.57	yes	no	1.26
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	9.271e+04	1.774e+05	0.52	yes	no	1.28
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:16	5.769e+04	1.303e+05	0.44	yes	no	0.90
22	IS	13C-2,3,7,8-TCDD	29:26	6.086e+04	7.753e+04	0.78	yes	no	1.05
23	IS	13C-1,2,3,7,8-PeCDD	34:04	6.336e+04	4.021e+04	1.58	yes	no	0.87
24	IS	13C-1,2,3,6,7,8-HxCDD	37:19	1.136e+05	8.980e+04	1.27	yes	no	1.00
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	8.632e+04	8.262e+04	1.04	yes	no	0.83
26	IS	13C-OCDD	43:12	1.421e+05	1.589e+05	0.89	yes	no	0.73
27	RS/RT	13C-1,2,3,4-TCDD	29:14	5.797e+04	7.242e+04	0.80	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	1.126e+05	8.966e+04	1.26	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	6.321e+03					0.98

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC2

Run #2 Filename P200032 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 16:23:43

Processed: 7-AUG-08 06:33:19 LAB. ID: ICAL HRCC2

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	5.00e+05	9.60e+01	5.2e+03	7.03e+05	2.84e+02	2.5e+03
2	1,2,3,7,8-PeCDF	1.79e+06	1.24e+02	1.4e+04	1.18e+06	4.88e+02	2.4e+03
3	2,3,4,7,8-PeCDF	1.84e+06	1.24e+02	1.5e+04	1.17e+06	4.88e+02	2.4e+03
4	1,2,3,4,7,8-HxCDF	1.70e+06	2.36e+02	7.2e+03	1.37e+06	1.16e+02	1.2e+04
5	1,2,3,6,7,8-HxCDF	1.59e+06	2.36e+02	6.7e+03	1.30e+06	1.16e+02	1.1e+04
6	2,3,4,6,7,8-HxCDF	1.43e+06	2.36e+02	6.0e+03	1.19e+06	1.16e+02	1.0e+04
7	1,2,3,7,8,9-HxCDF	1.23e+06	2.36e+02	5.2e+03	9.87e+05	1.16e+02	8.5e+03
8	1,2,3,4,6,7,8-HpCDF	1.19e+06	2.39e+03	5.0e+02	1.24e+06	5.00e+02	2.5e+03
9	1,2,3,4,7,8,9-HpCDF	7.68e+05	2.39e+03	3.2e+02	7.71e+05	5.00e+02	1.5e+03
10	OCDF	1.05e+06	1.80e+02	5.8e+03	1.18e+06	3.76e+02	3.1e+03
11	2,3,7,8-TCDD	4.64e+05	5.12e+02	9.1e+02	5.91e+05	1.08e+02	5.5e+03
12	1,2,3,7,8-PeCDD	1.33e+06	4.00e+02	3.3e+03	8.48e+05	8.40e+01	1.0e+04
13	1,2,3,4,7,8-HxCDD	1.13e+06	9.60e+01	1.2e+04	9.02e+05	1.04e+02	8.7e+03
14	1,2,3,6,7,8-HxCDD	1.21e+06	9.60e+01	1.3e+04	9.45e+05	1.04e+02	9.1e+03
15	1,2,3,7,8,9-HxCDD	1.09e+06	9.60e+01	1.1e+04	8.65e+05	1.04e+02	8.3e+03
16	1,2,3,4,6,7,8-HpCDD	7.28e+05	1.20e+02	6.1e+03	6.91e+05	8.80e+01	7.9e+03
17	OCDD	9.33e+05	1.08e+02	8.6e+03	1.05e+06	1.28e+02	8.2e+03
18	13C-2,3,7,8-TCDF	1.32e+07	1.02e+03	1.3e+04	1.71e+07	9.28e+02	1.8e+04
19	13C-1,2,3,7,8-PeCDF	1.70e+07	1.60e+02	1.1e+05	1.10e+07	1.32e+02	8.3e+04
20	13C-1,2,3,4,7,8-HxCDF	1.83e+07	2.00e+02	9.2e+04	3.58e+07	4.60e+02	7.8e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.15e+07	5.46e+03	2.1e+03	2.60e+07	1.32e+04	2.0e+03
22	13C-2,3,7,8-TCDD	1.02e+07	1.72e+03	5.9e+03	1.32e+07	5.08e+02	2.6e+04
23	13C-1,2,3,7,8-PeCDD	1.21e+07	8.80e+01	1.4e+05	7.81e+06	1.32e+02	5.9e+04
24	13C-1,2,3,6,7,8-HxCDD	2.38e+07	1.16e+02	2.1e+05	1.87e+07	5.80e+02	3.2e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.64e+07	1.48e+02	1.1e+05	1.57e+07	6.96e+02	2.3e+04
26	13C-OCDD	1.98e+07	1.24e+02	1.6e+05	2.22e+07	1.44e+02	1.5e+05
27	13C-1,2,3,4-TCDD	9.88e+06	1.72e+03	5.7e+03	1.24e+07	5.08e+02	2.4e+04
28	13C-1,2,3,7,8,9-HxCDD	2.31e+07	1.16e+02	2.0e+05	1.84e+07	5.80e+02	3.2e+04
29	37Cl-2,3,7,8-TCDD	1.13e+06	1.16e+02	9.7e+03			

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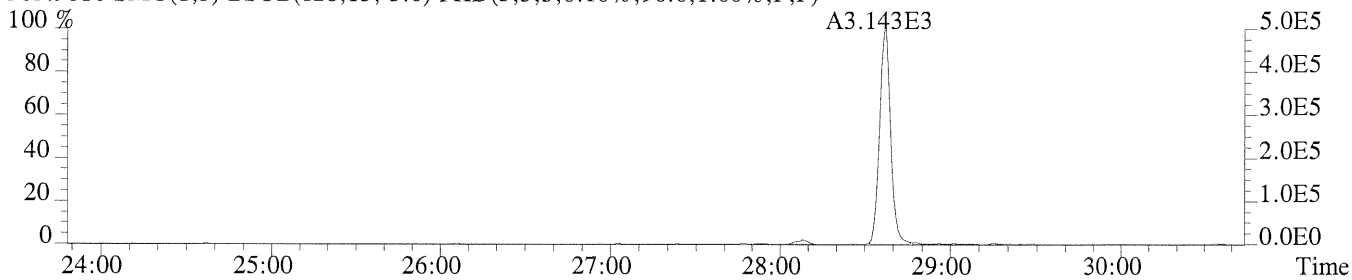
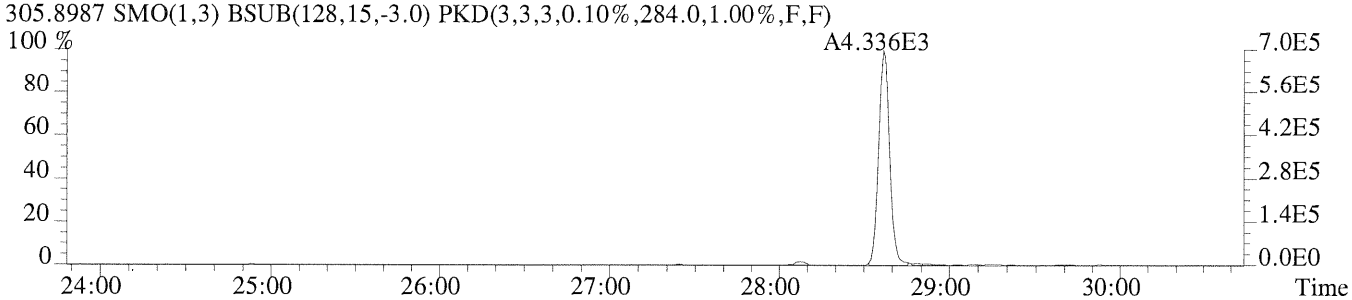
File:P200032 #1-578 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

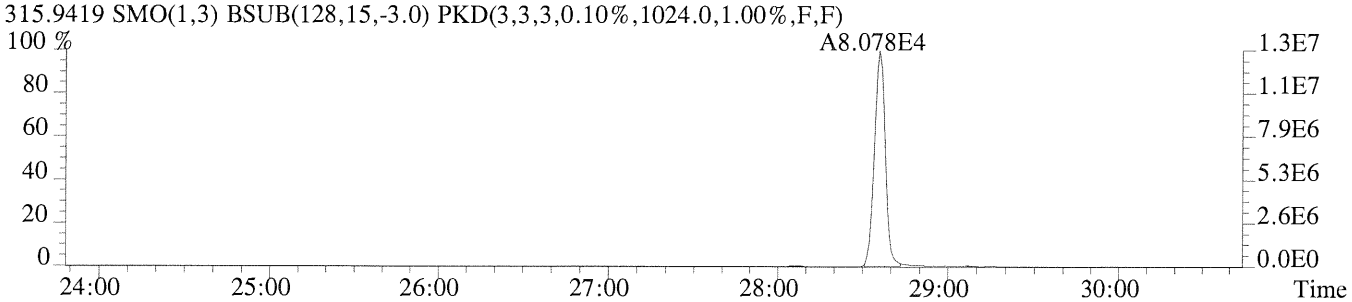
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,96.0,1.00%,F,F)



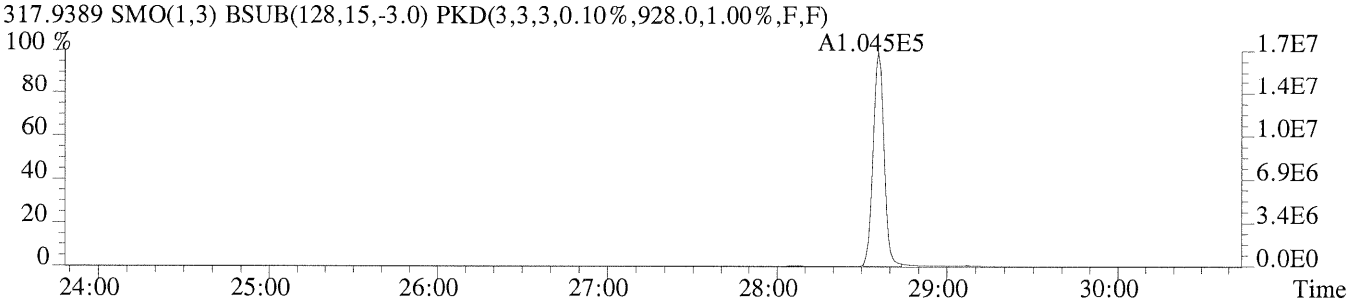
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,284.0,1.00%,F,F)



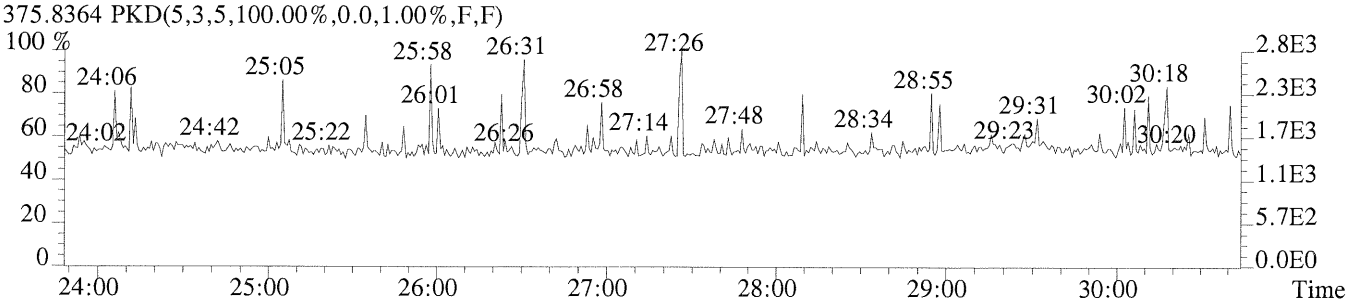
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1024.0,1.00%,F,F)



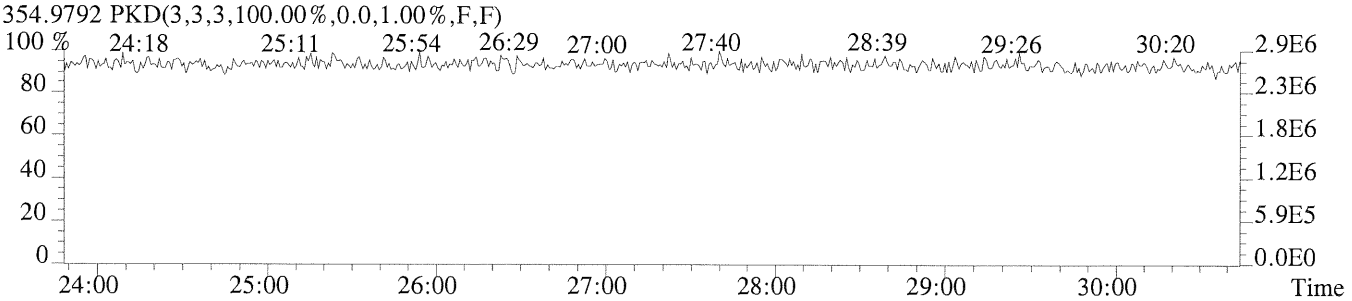
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,928.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

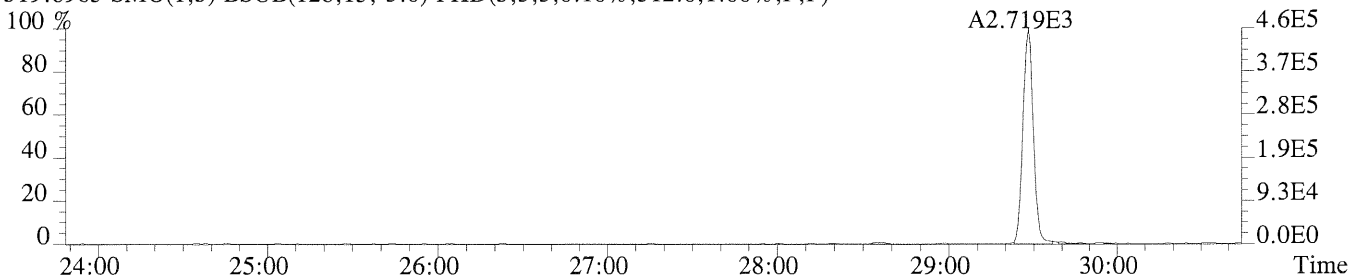


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

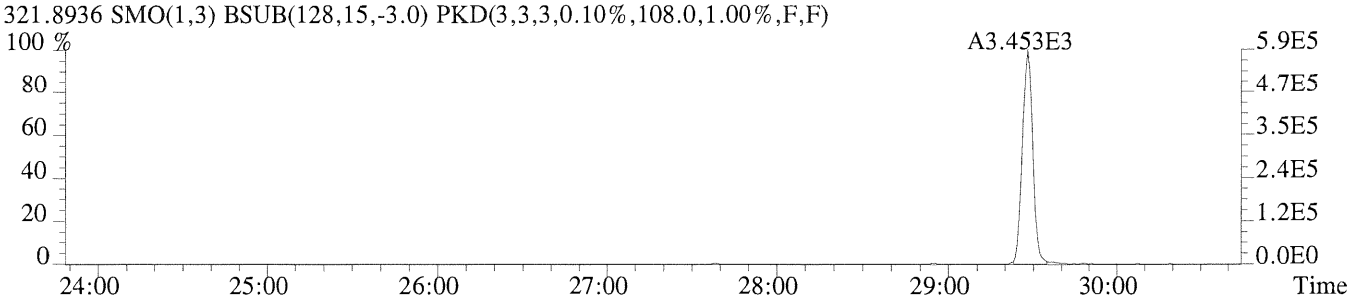


File:P200032 #1-578 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

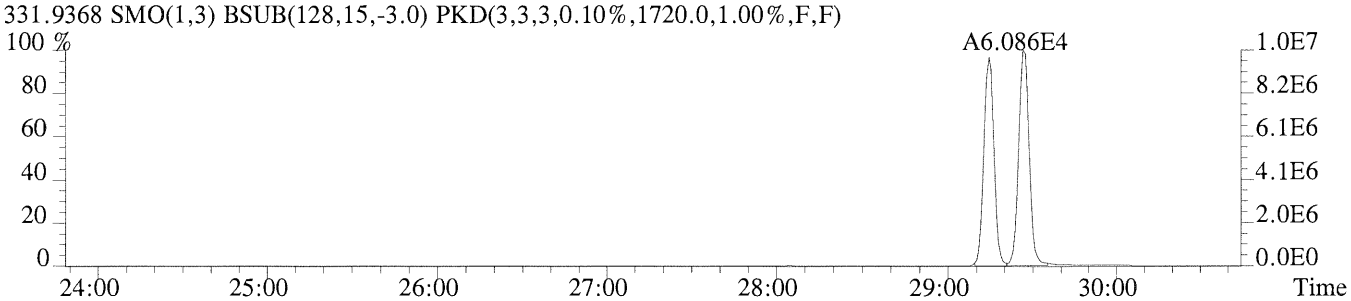
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,512.0,1.00%,F,F)



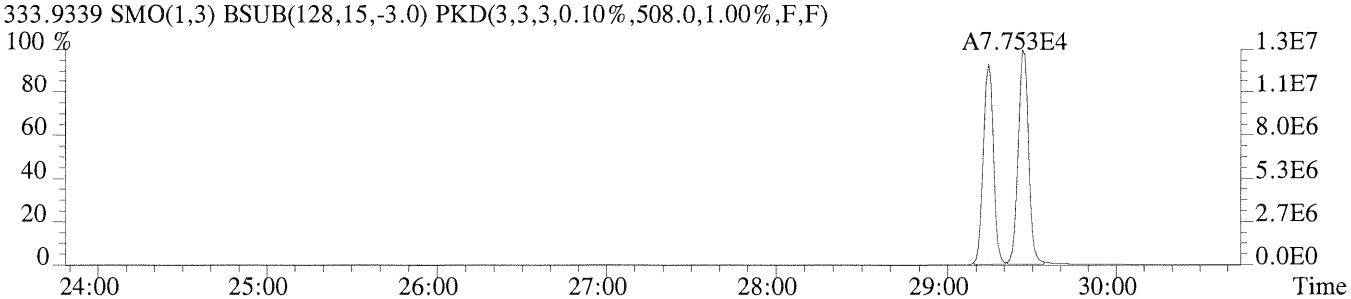
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,108.0,1.00%,F,F)



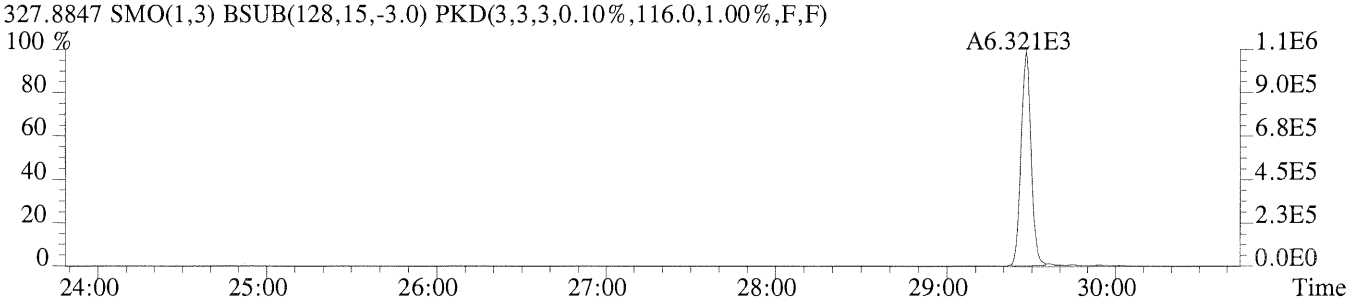
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1720.0,1.00%,F,F)



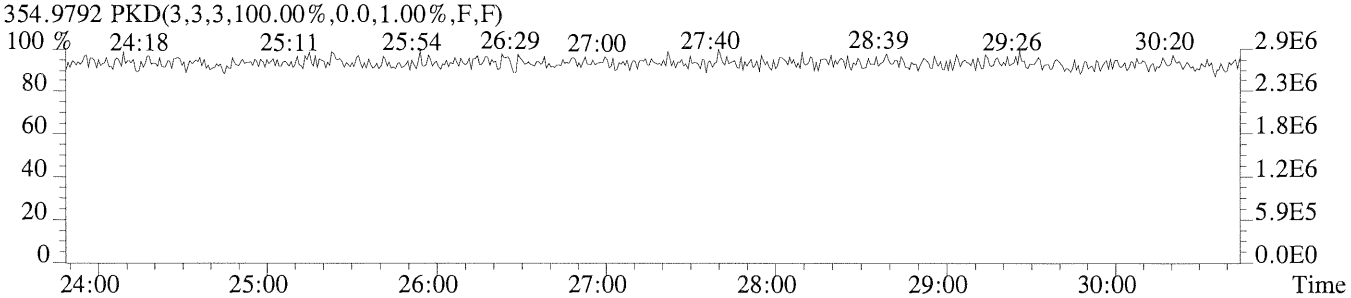
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,508.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,116.0,1.00%,F,F)

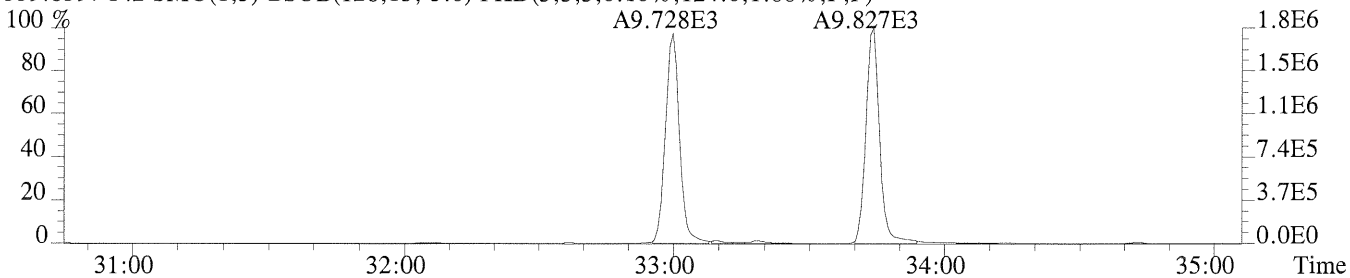


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

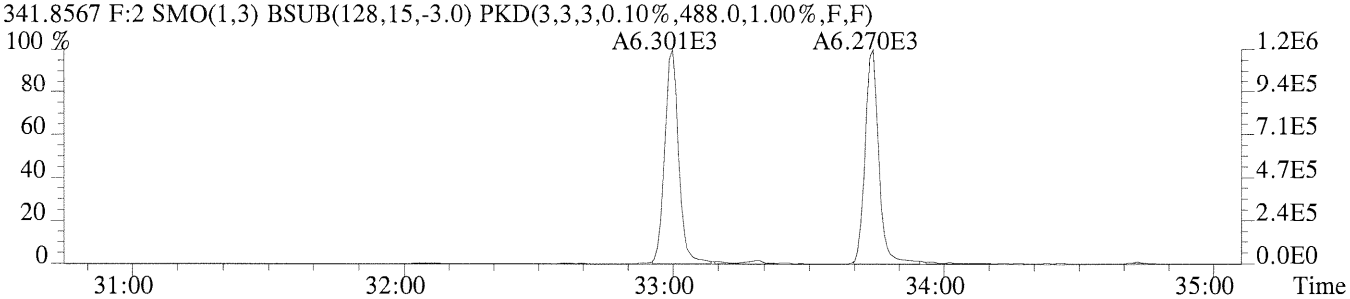


File:P200032 #1-396 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

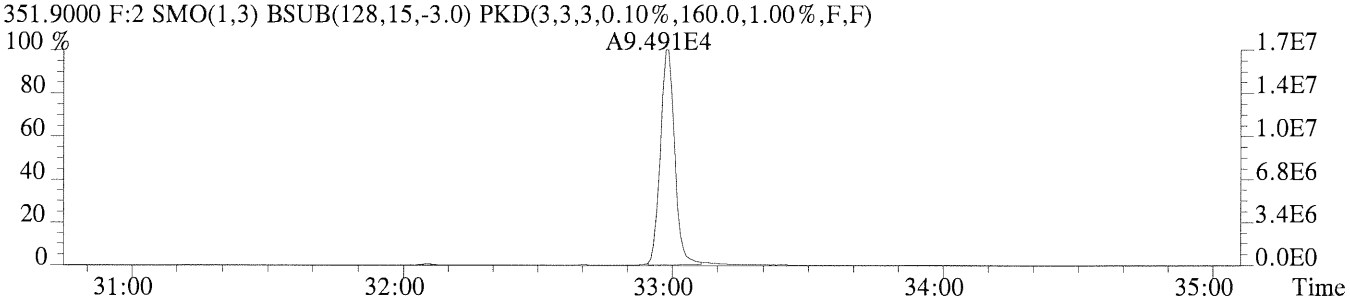
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,124.0,1.00%,F,F)



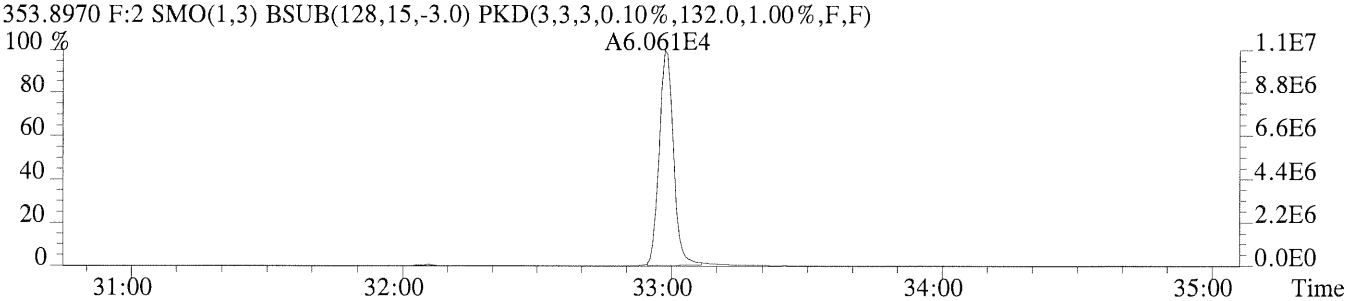
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,488.0,1.00%,F,F)



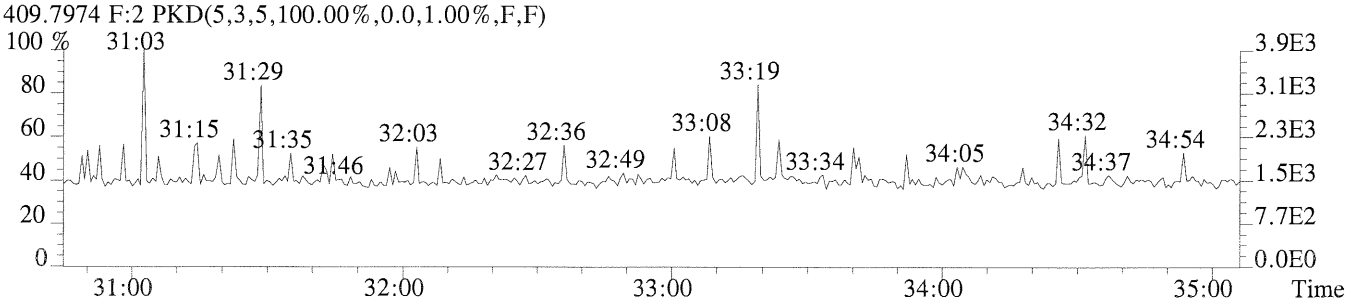
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,160.0,1.00%,F,F)



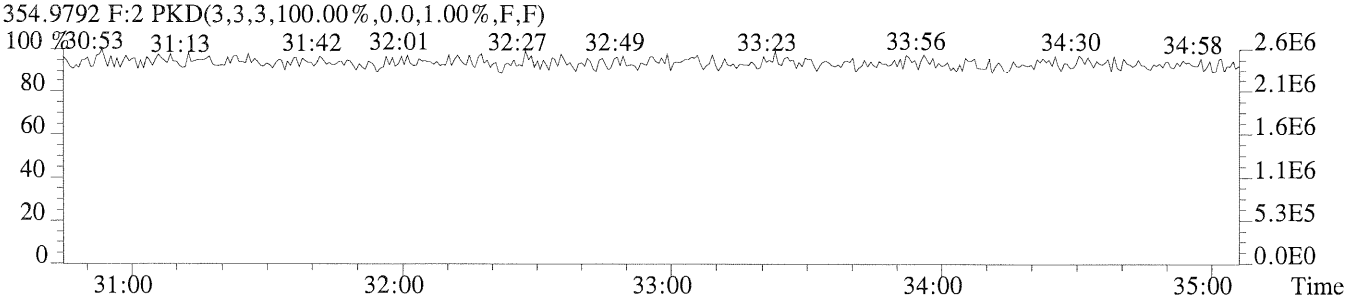
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,132.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

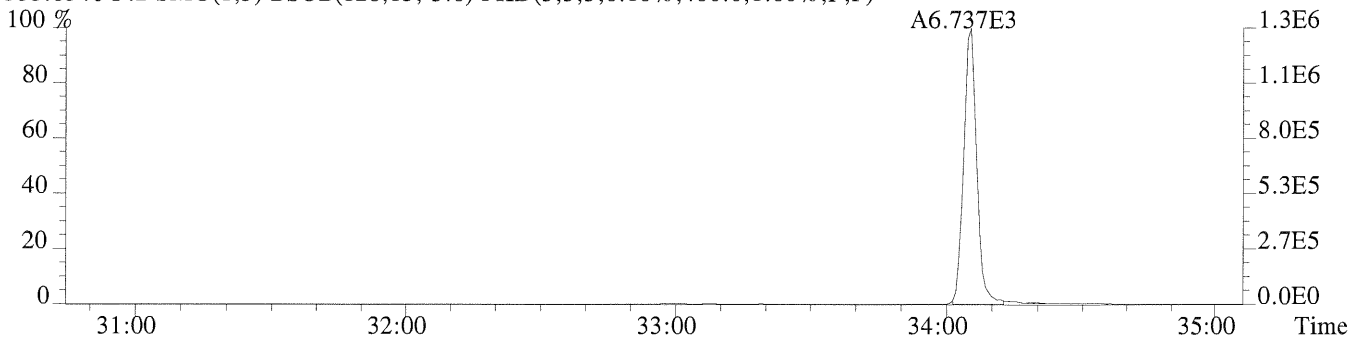


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

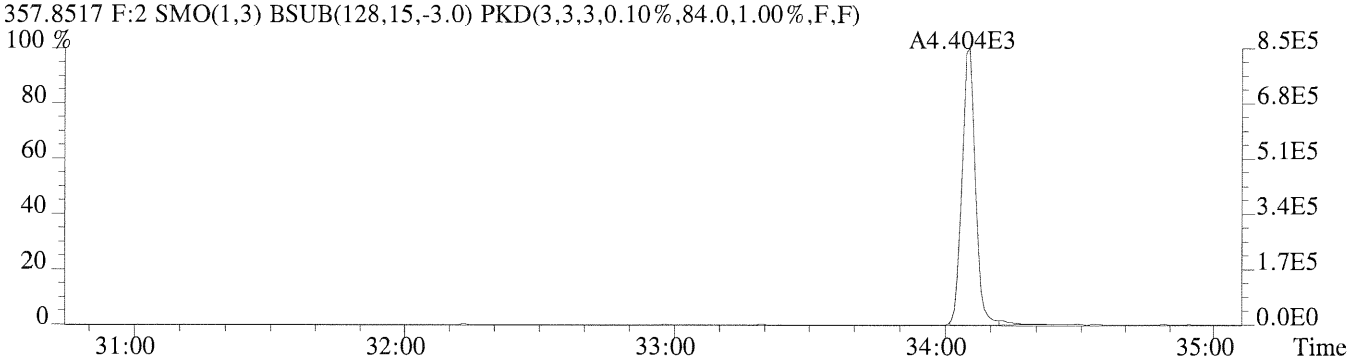


File:P200032 #1-396 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

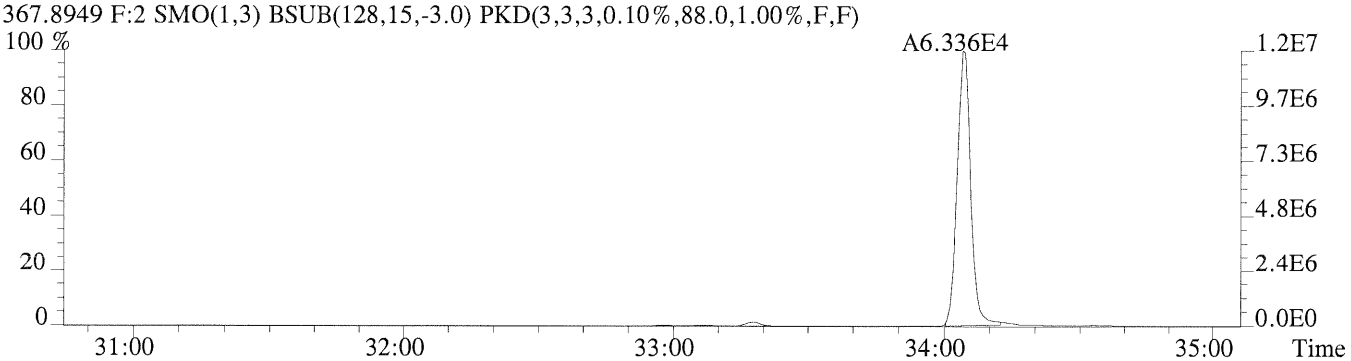
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,400.0,1.00%,F,F)



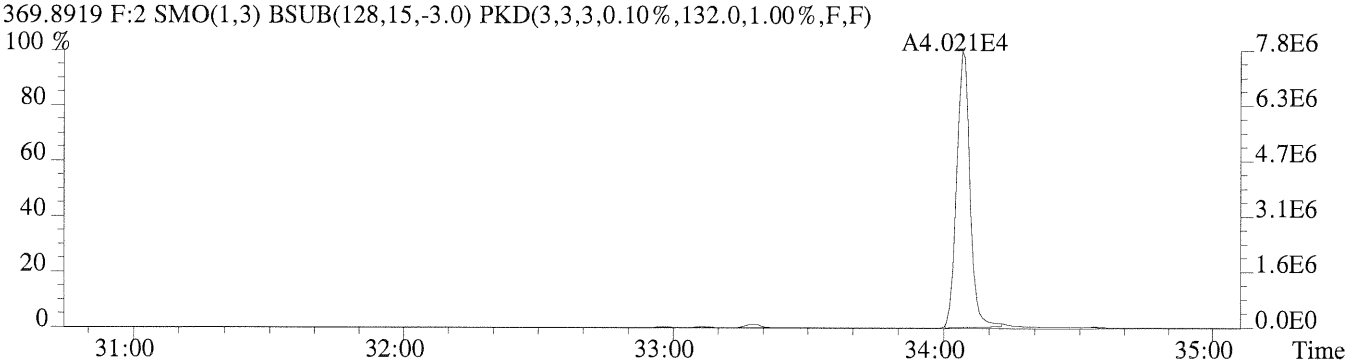
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,84.0,1.00%,F,F)



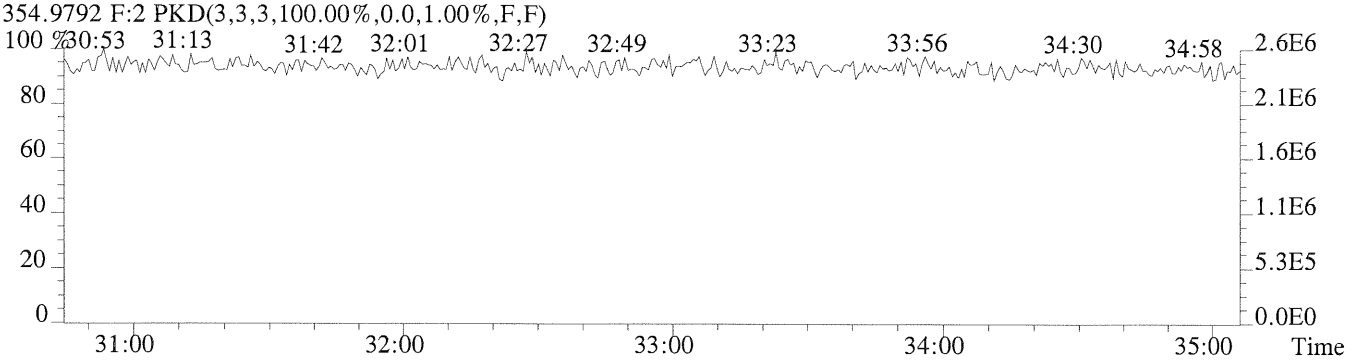
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,88.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,132.0,1.00%,F,F)

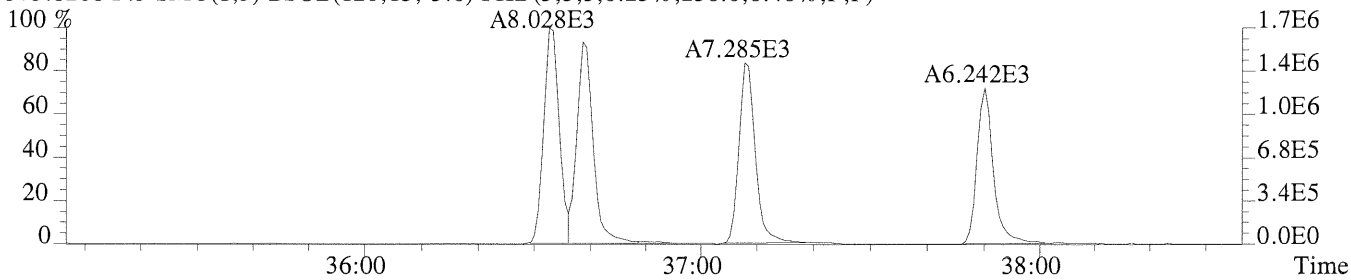


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

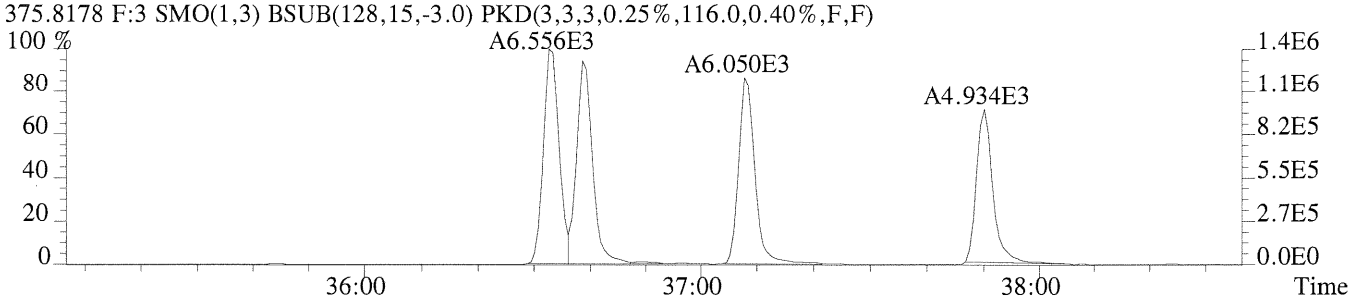


File:P200032 #1-318 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

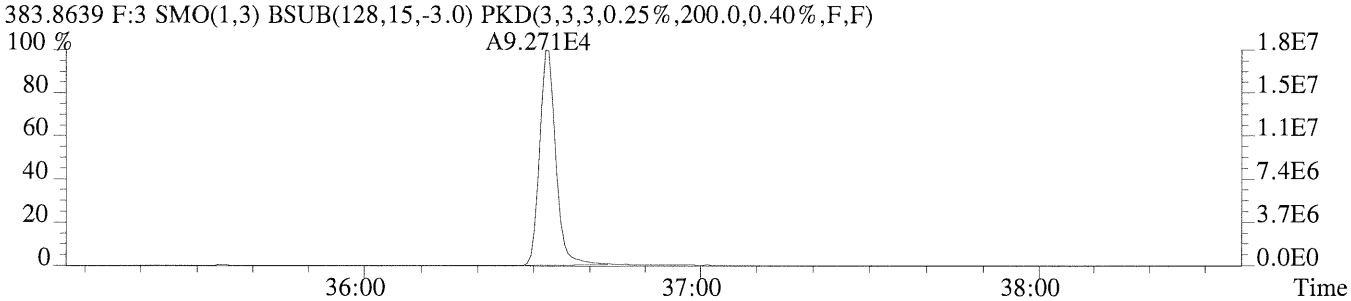
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,236.0,0.40%,F,F)



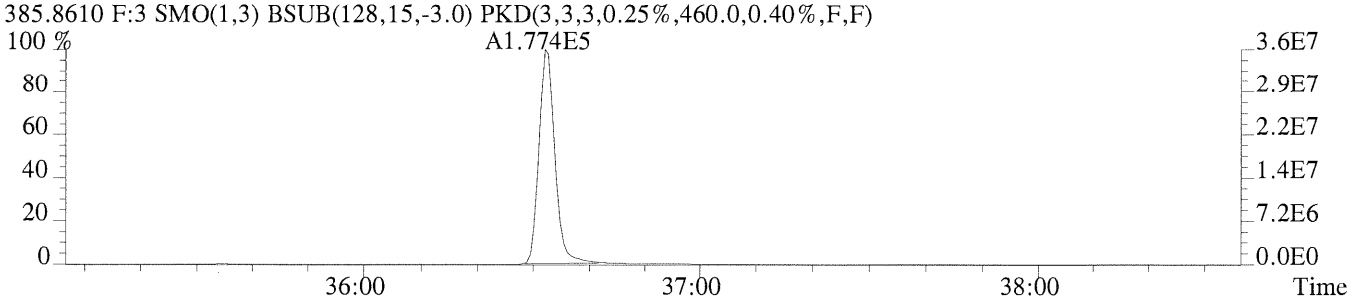
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,116.0,0.40%,F,F)



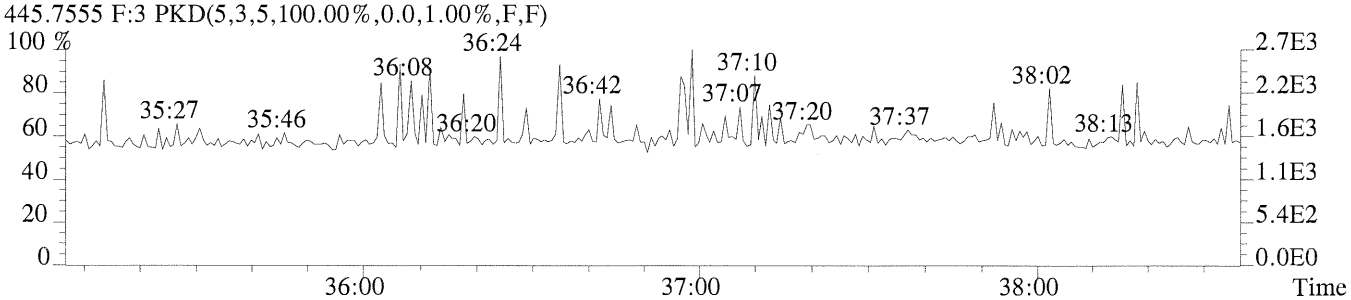
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,200.0,0.40%,F,F)



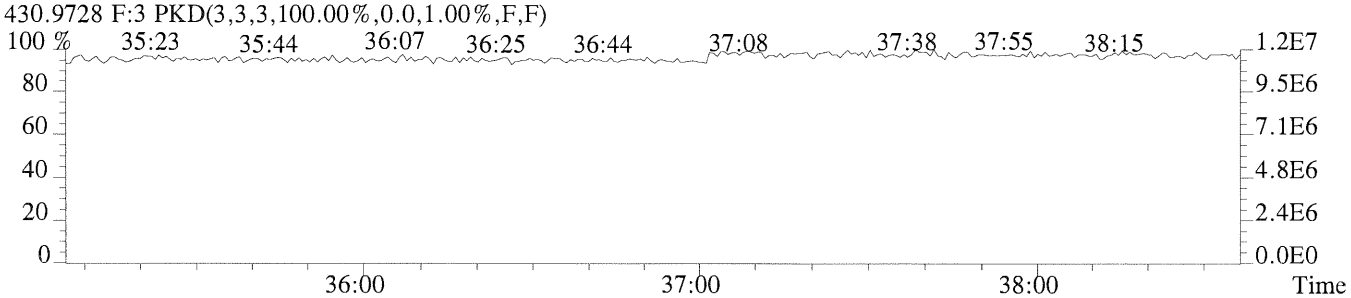
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,460.0,0.40%,F,F)



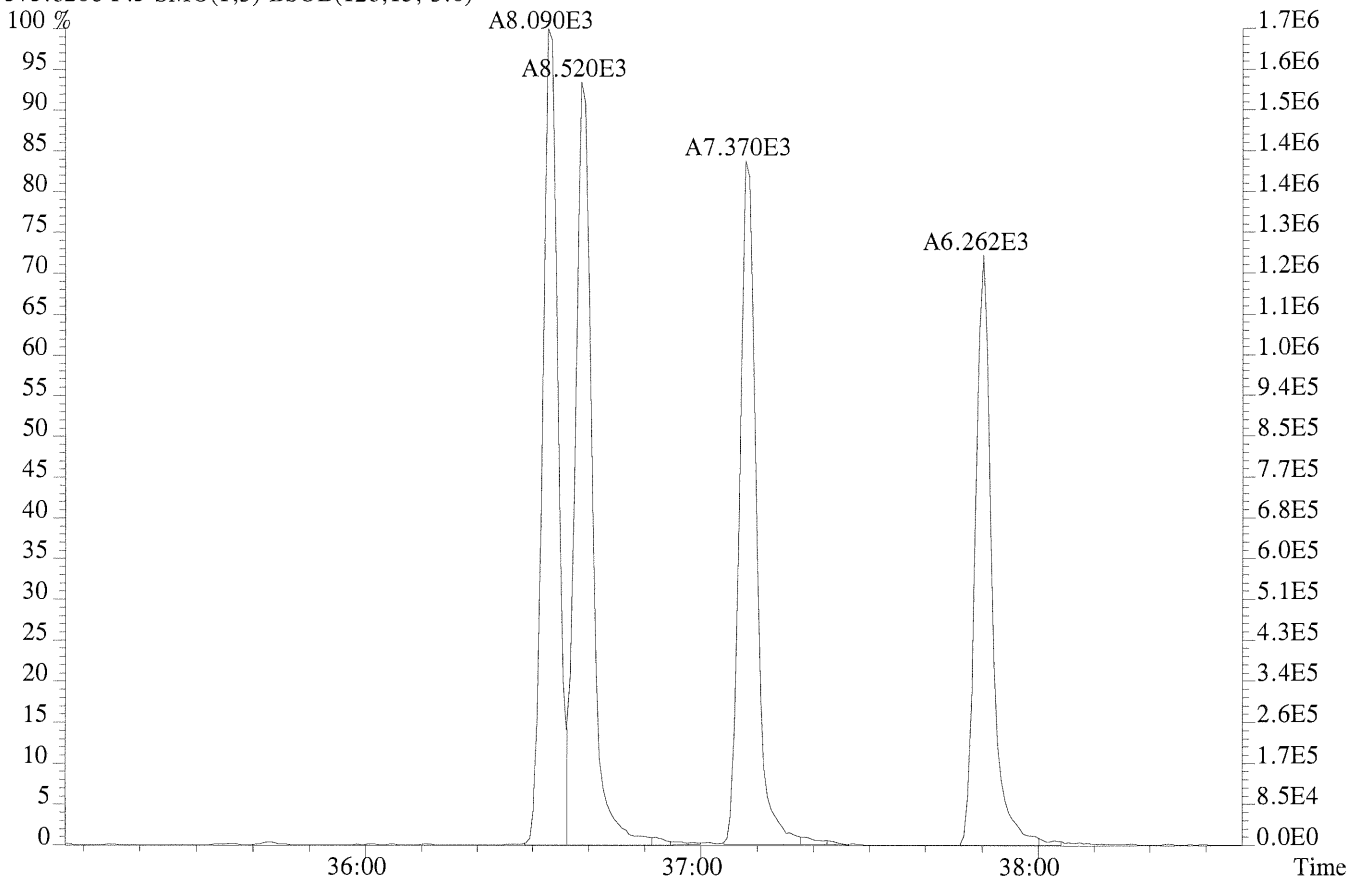
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



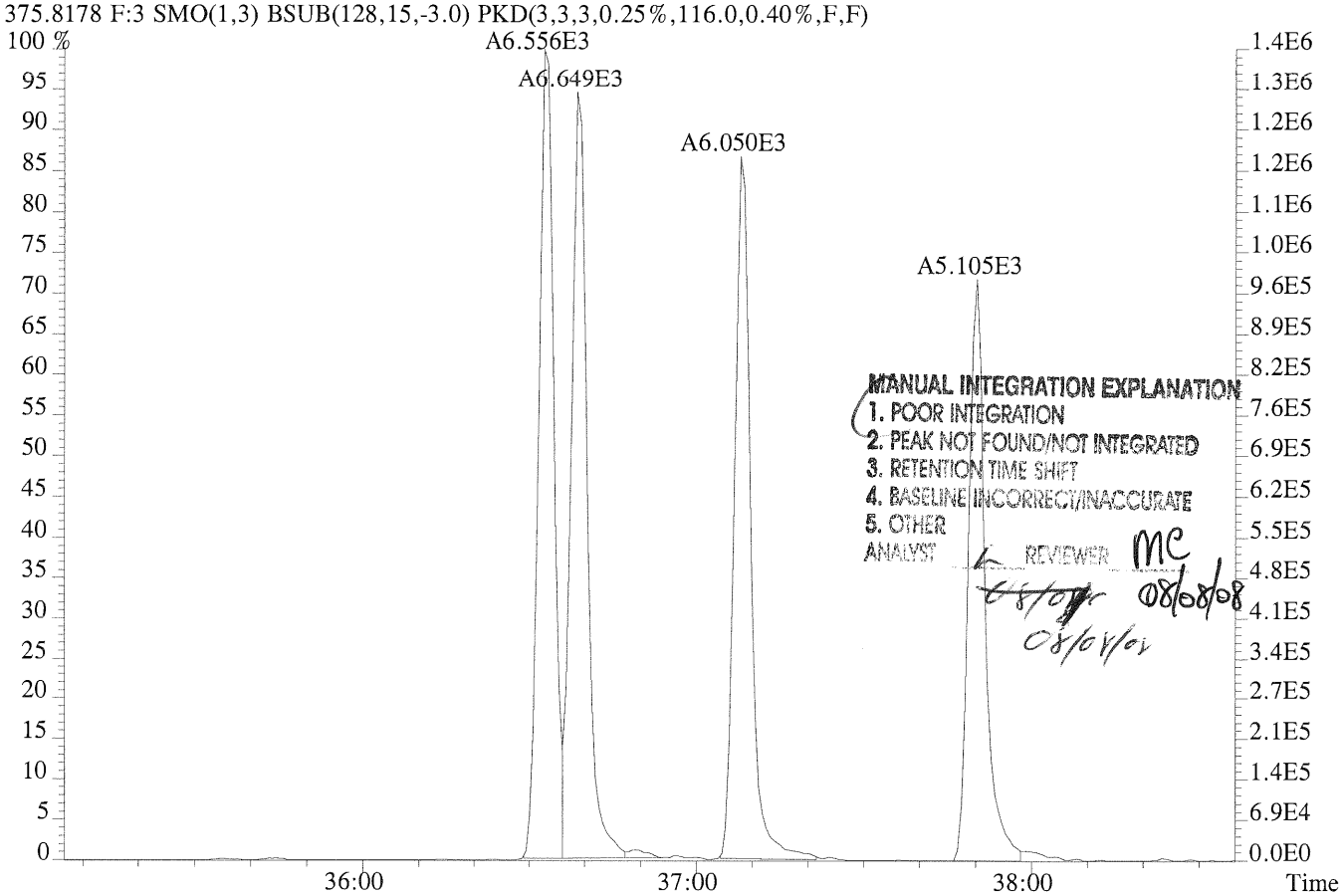
430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



File:P200032 #1-318 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0)

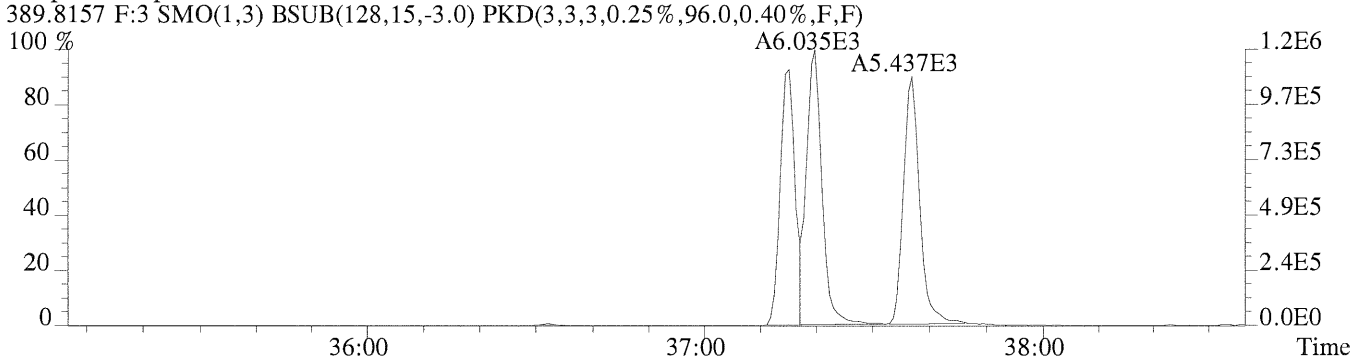


375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,116.0,0.40%,F,F)

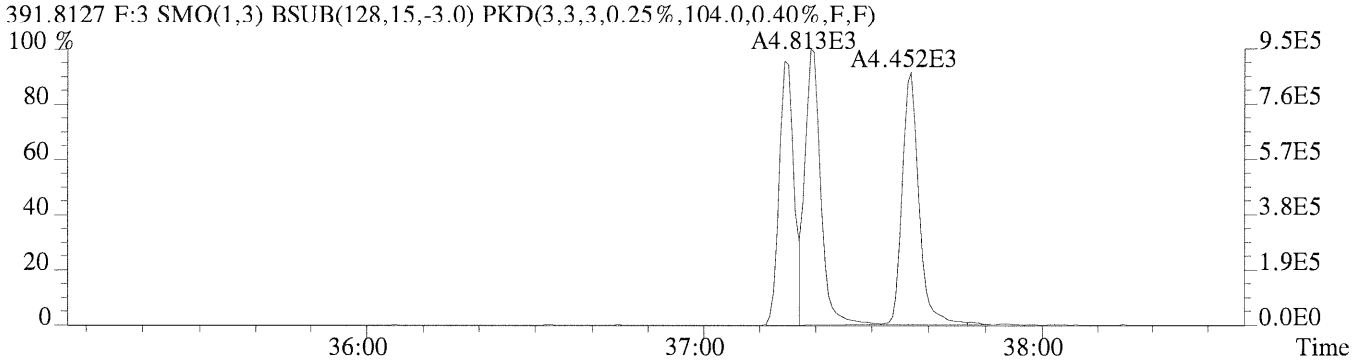


MANUAL INTEGRATION EXPLANATION
1. POOR INTEGRATION
2. PEAK NOT FOUND/NOT INTEGRATED
3. RETENTION TIME SHIFT
4. BASELINE INCORRECT/INACCURATE
5. OTHER
ANALYST REVIEWER MC
08/08/08
08/08/08

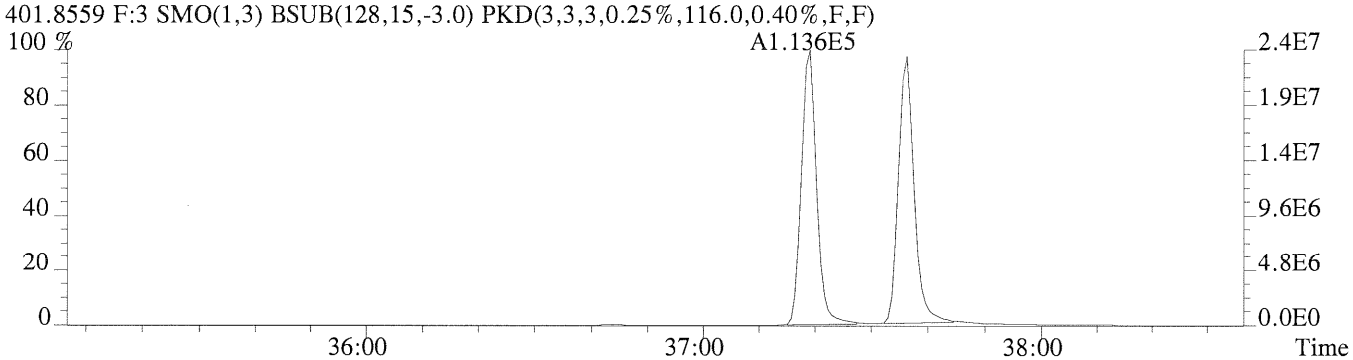
File:P200032 #1-318 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,96.0,0.40%,F,F)



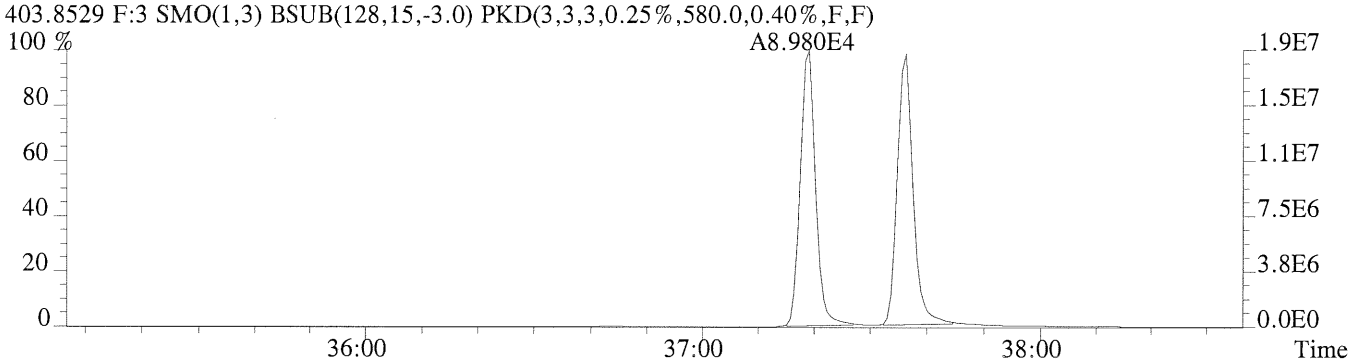
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,104.0,0.40%,F,F)



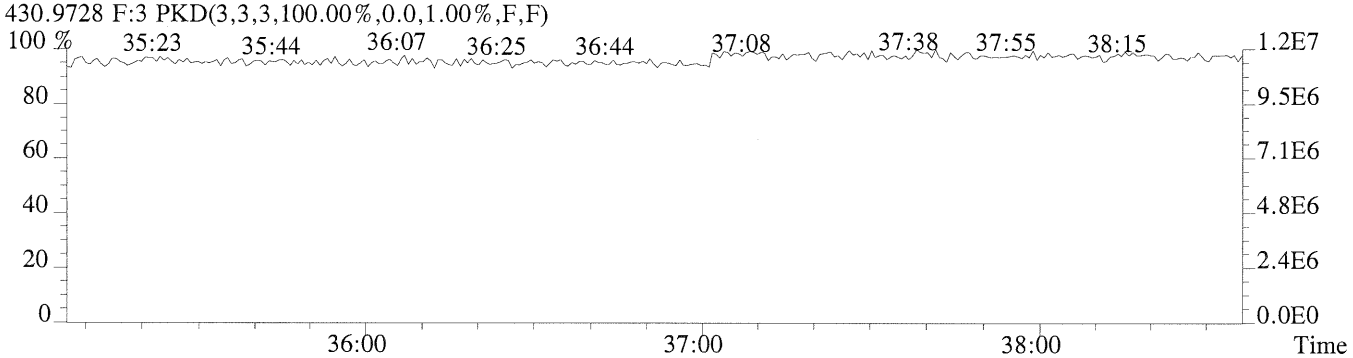
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,116.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,580.0,0.40%,F,F)

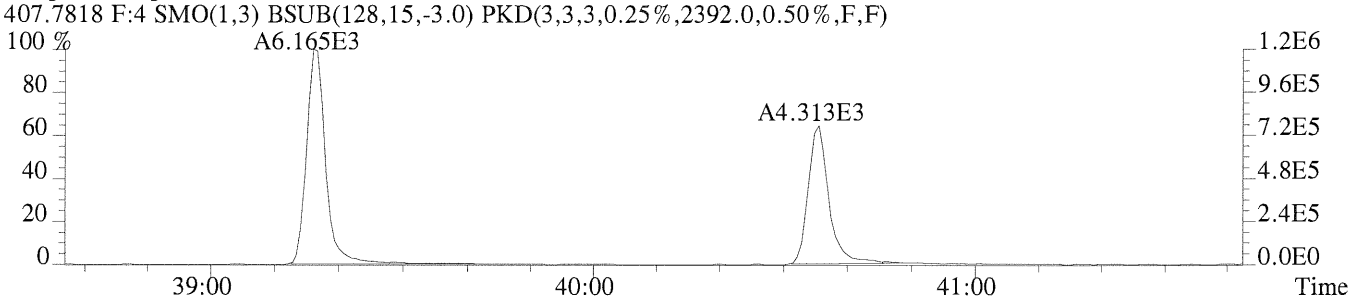


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

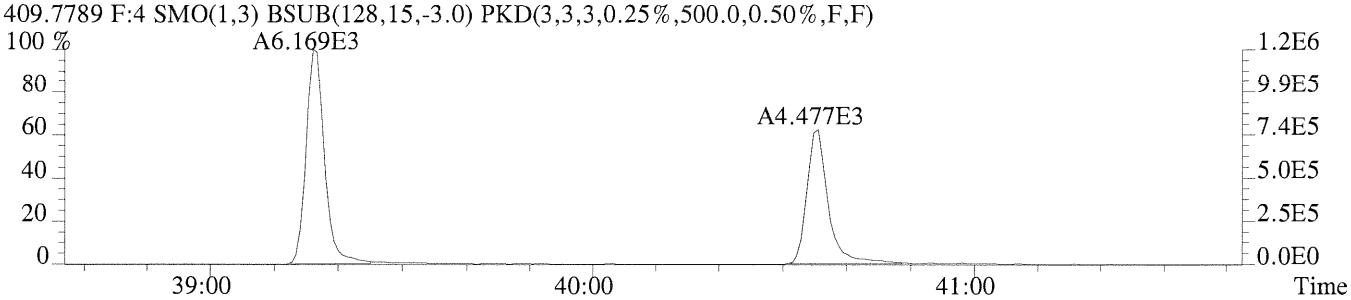


File:P200032 #1-281 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

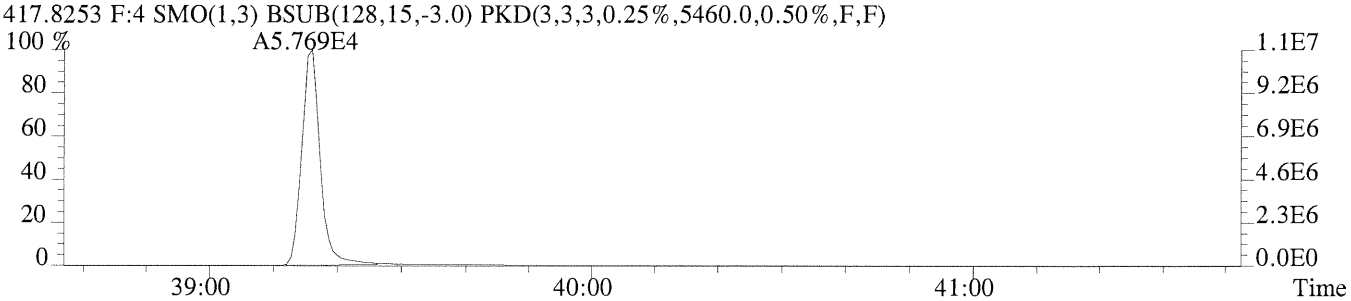
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2392.0,0.50%,F,F)



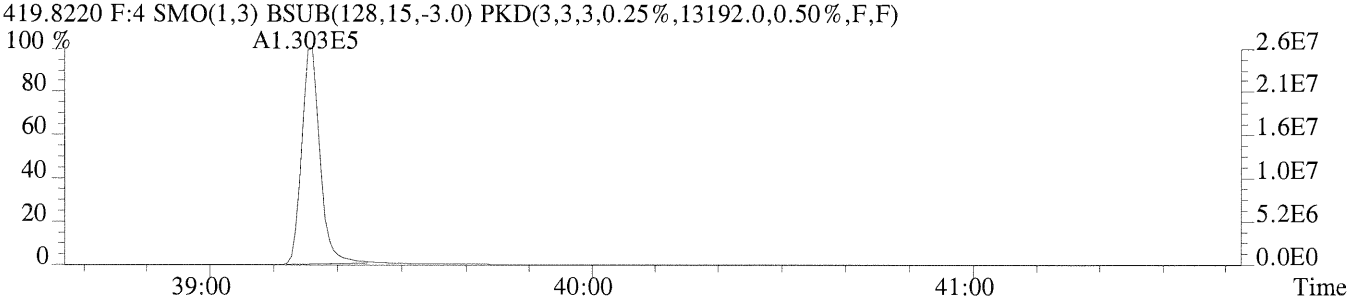
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,500.0,0.50%,F,F)



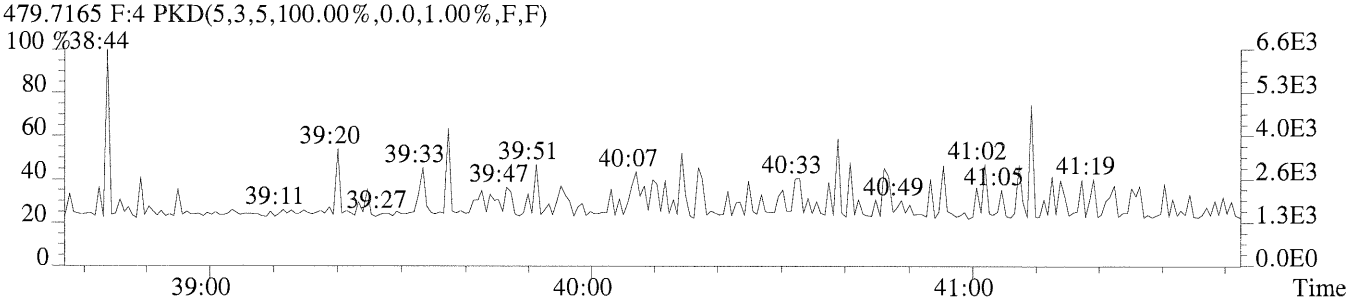
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5460.0,0.50%,F,F)



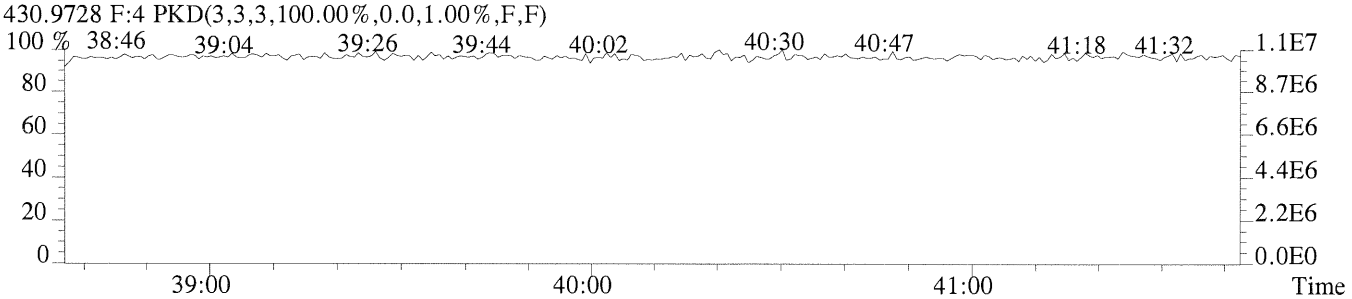
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,13192.0,0.50%,F,F)



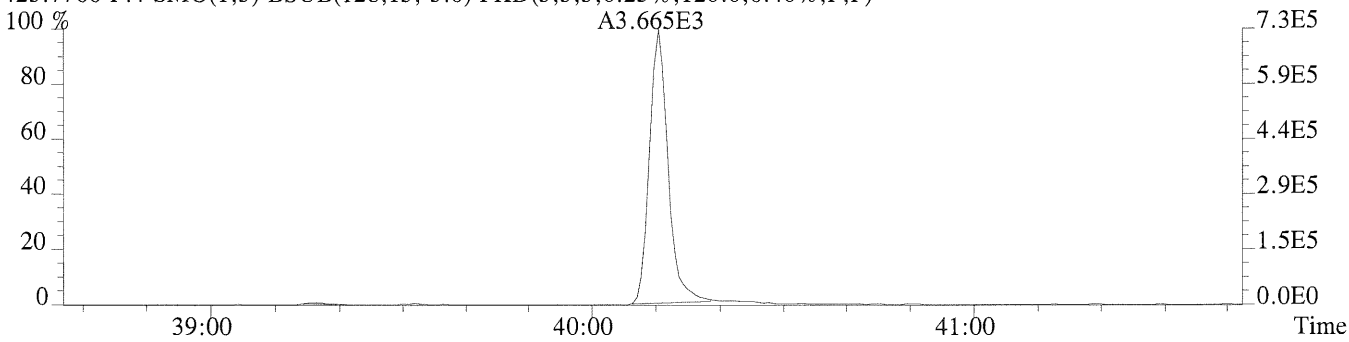
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



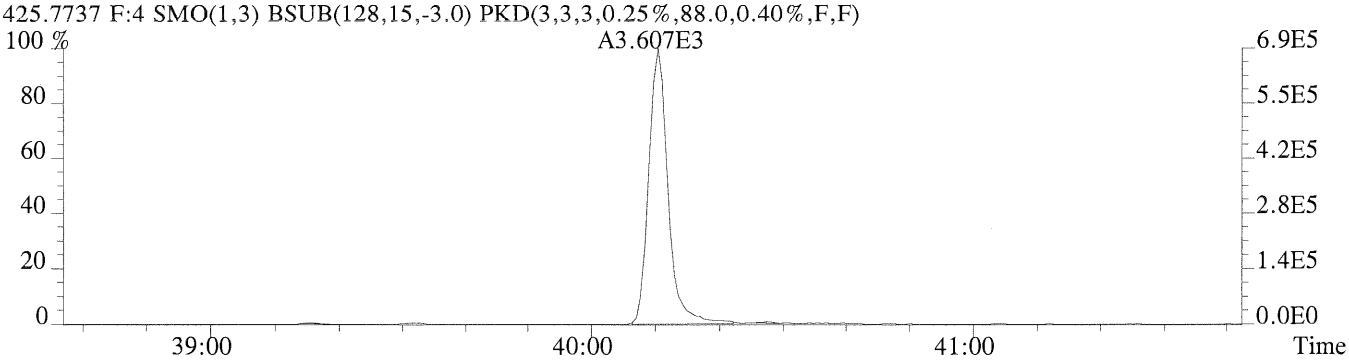
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



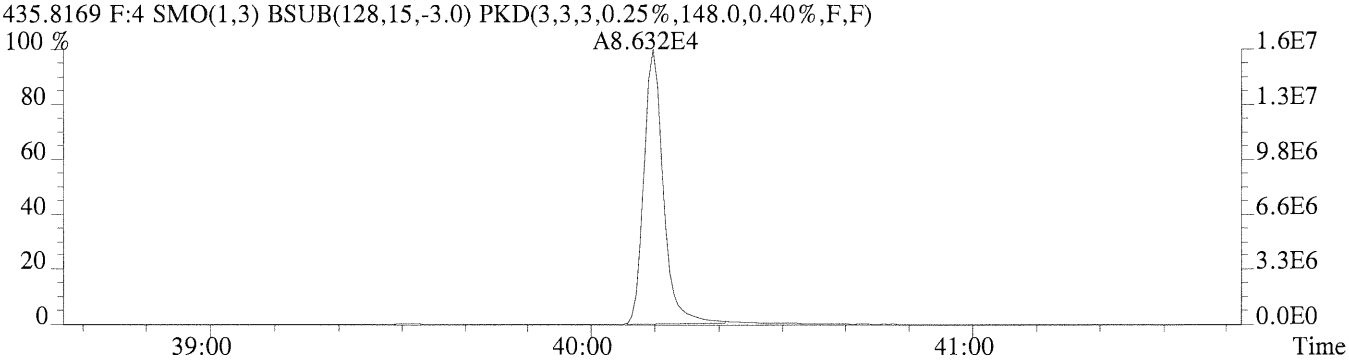
File:P200032 #1-281 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,120.0,0.40%,F,F)



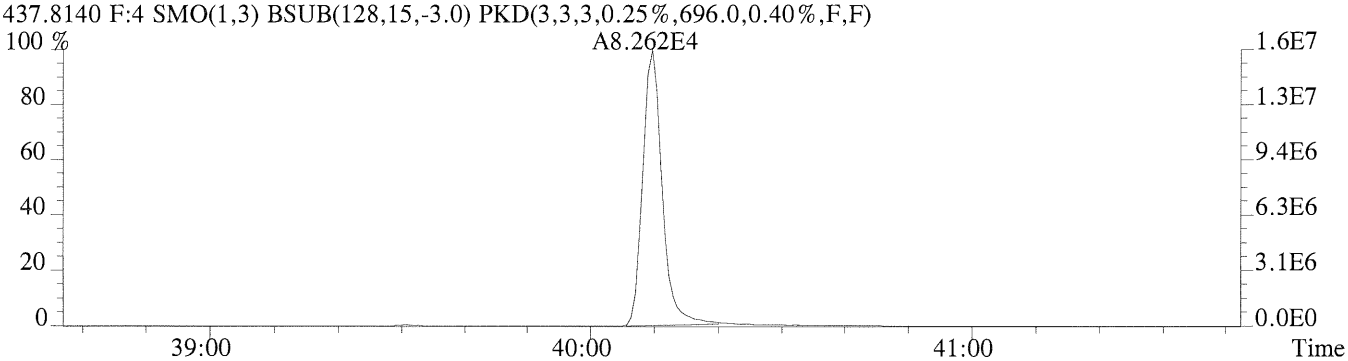
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,88.0,0.40%,F,F)



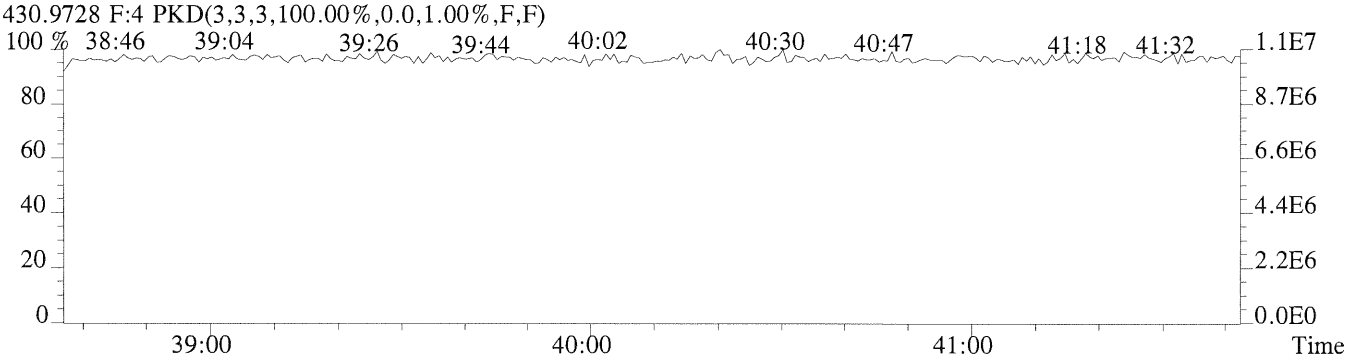
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,148.0,0.40%,F,F)



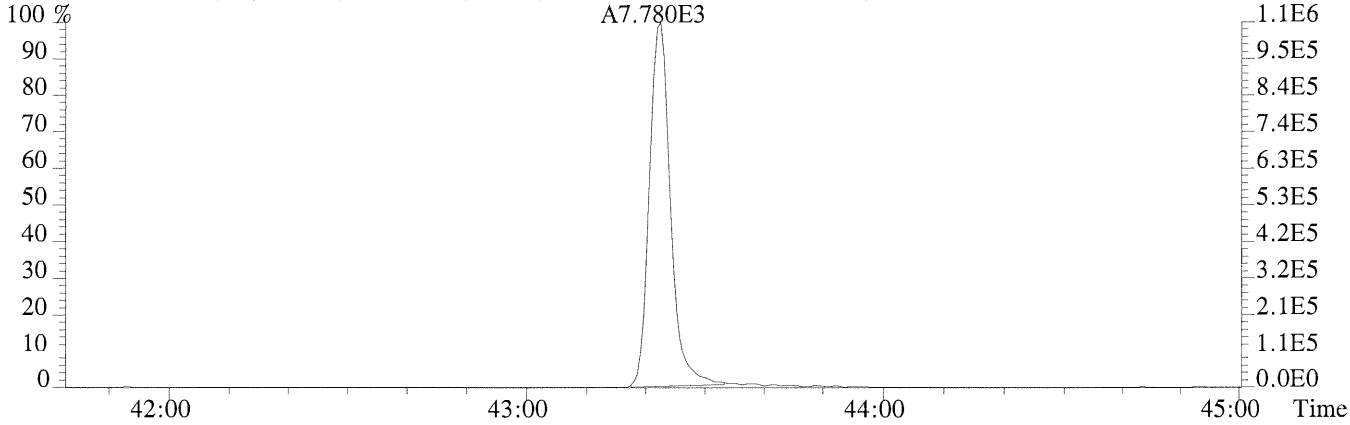
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,696.0,0.40%,F,F)



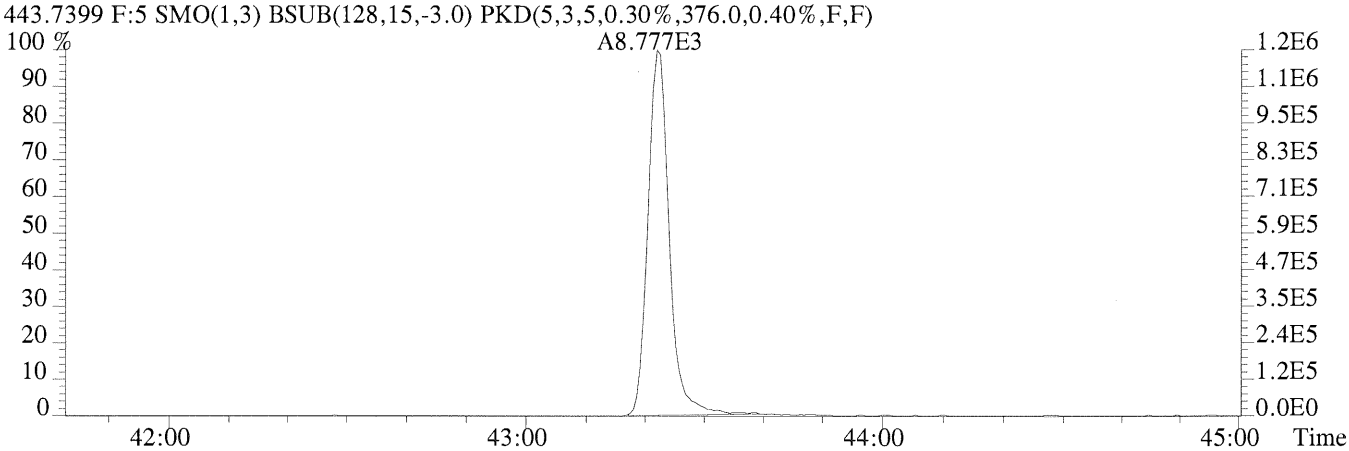
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



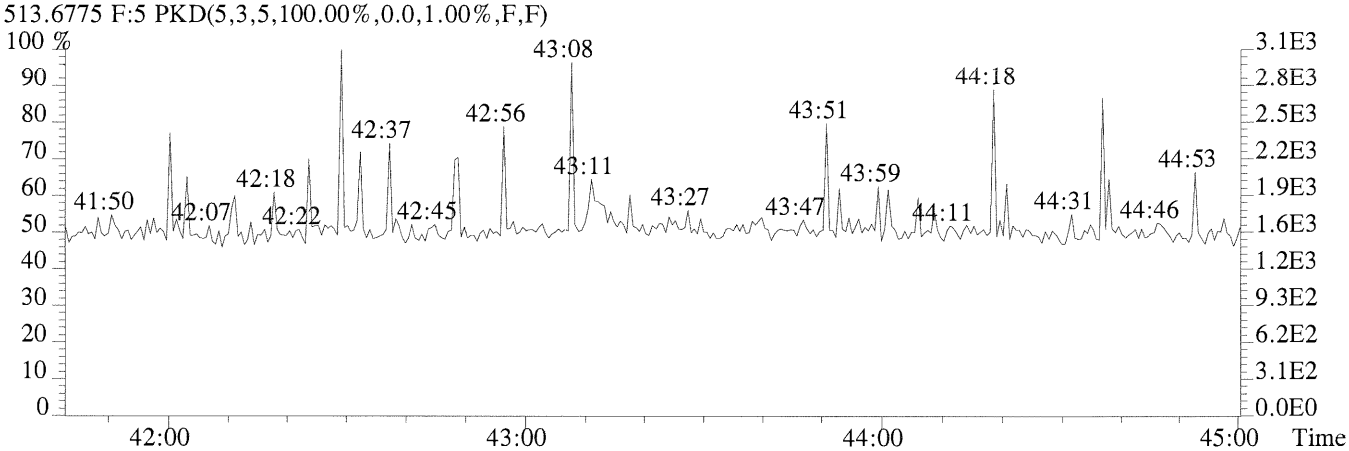
File:P200032 #1-364 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,180.0,0.40%,F,F)



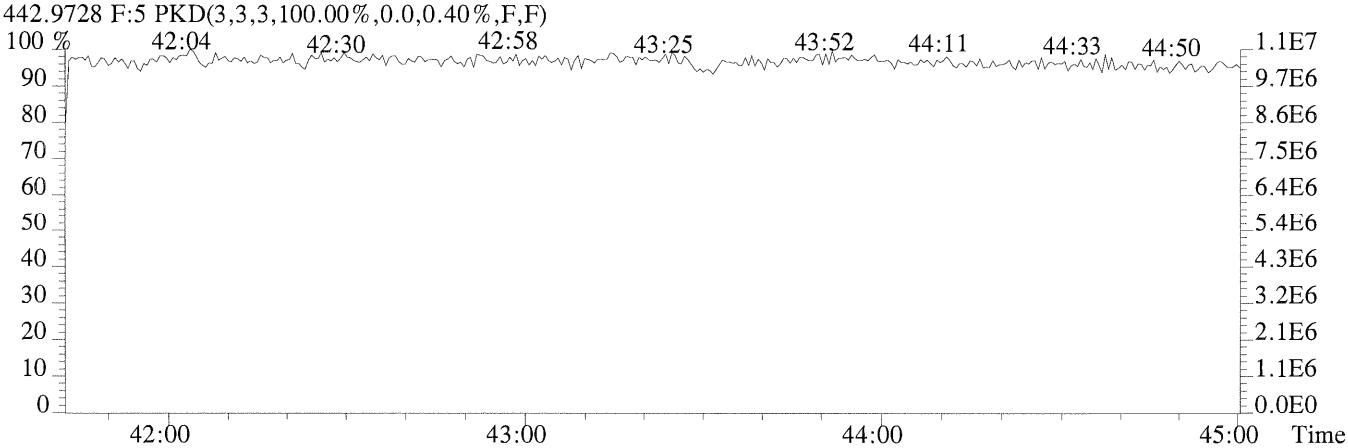
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,376.0,0.40%,F,F)



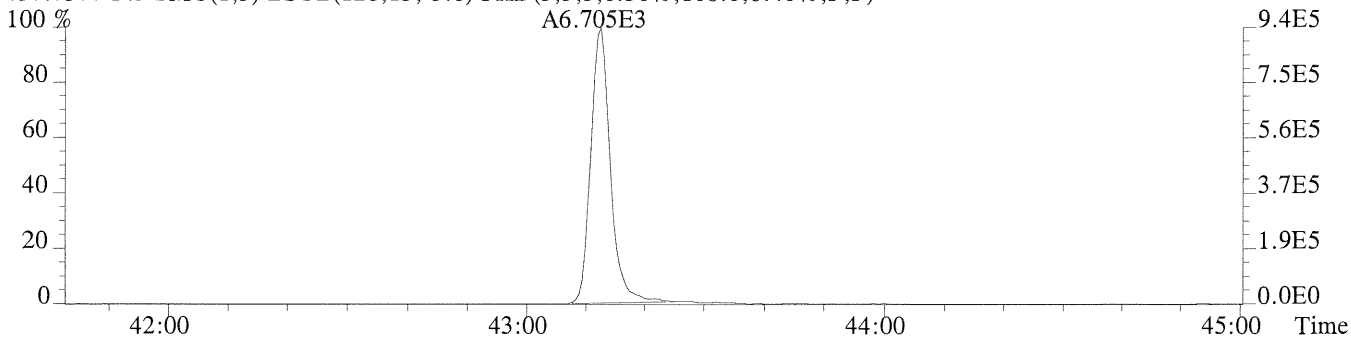
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



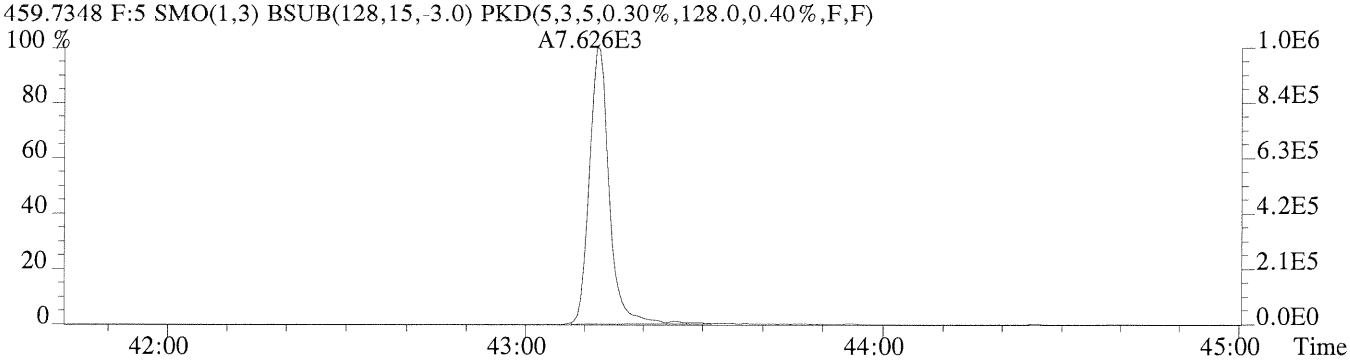
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



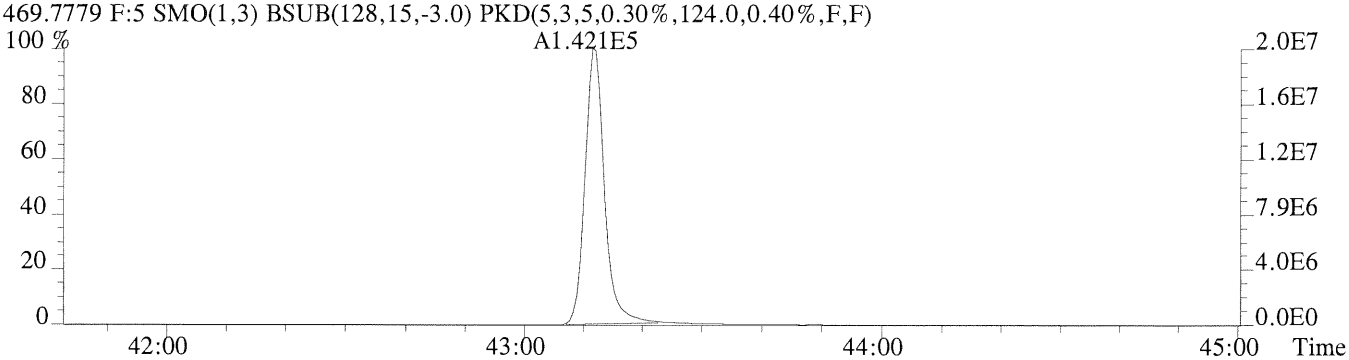
File:P200032 #1-364 Acq: 1-AUG-2008 16:23:43 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,108.0,0.40%,F,F)



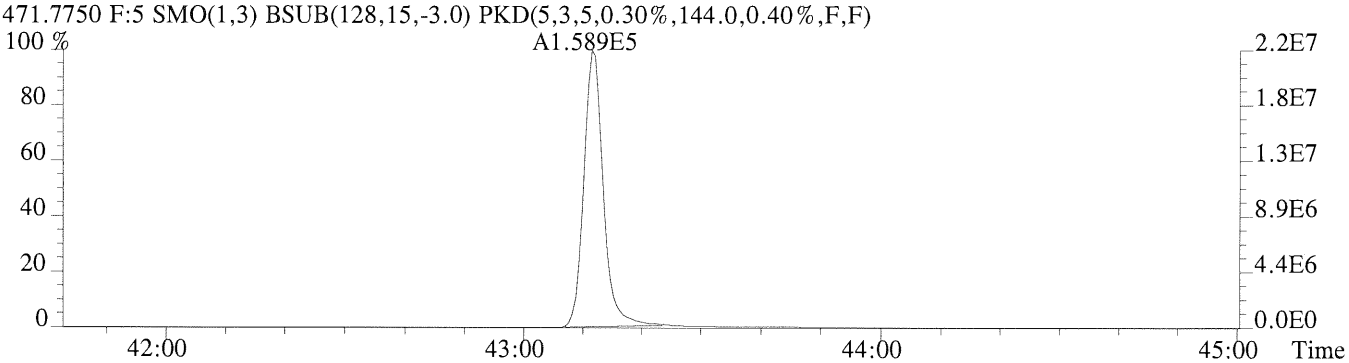
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,128.0,0.40%,F,F)



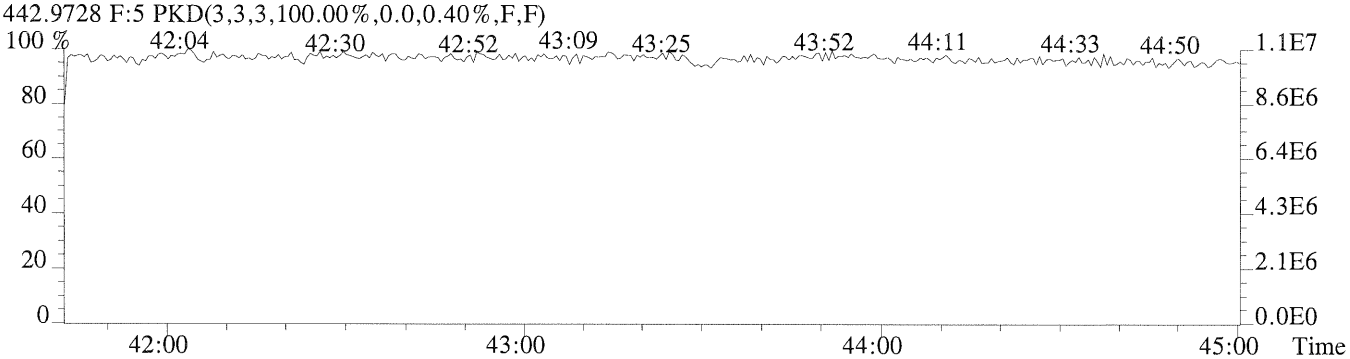
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,124.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,144.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC3

Run #3 Filename P200031 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 15:21:27
Processed: 7-AUG-08 06:33:20 Sample ID: ICAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	9.711e+03	1.284e+04	0.76	yes	no	0.83
2	Unk	1,2,3,7,8-PeCDF	32:59	3.257e+04	2.085e+04	1.56	yes	no	0.84
3	Unk	2,3,4,7,8-PeCDF	33:43	3.247e+04	2.147e+04	1.51	yes	no	0.85
4	Unk	1,2,3,4,7,8-HxCDF	36:33	2.528e+04	2.048e+04	1.23	yes	no	1.01
5	Unk	1,2,3,6,7,8-HxCDF	36:39	2.688e+04	2.243e+04	1.20	yes	no	1.05
6	Unk	2,3,4,6,7,8-HxCDF	37:08	2.434e+04	1.982e+04	1.23	yes	no	0.94
7	Unk	1,2,3,7,8,9-HxCDF	37:50	2.048e+04	1.688e+04	1.21	yes	no	0.81
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	2.148e+04	2.087e+04	1.03	yes	no	1.32
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	1.551e+04	1.488e+04	1.04	yes	no	0.97
10	Unk	OCDF	43:22	2.681e+04	2.984e+04	0.90	yes	no	1.11
11	Unk	2,3,7,8-TCDD	29:28	7.325e+03	9.496e+03	0.77	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:05	2.318e+04	1.489e+04	1.56	yes	no	0.87
13	Unk	1,2,3,4,7,8-HxCDD	37:14	1.866e+04	1.508e+04	1.24	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:19	2.053e+04	1.601e+04	1.28	yes	no	1.05
15	Unk	1,2,3,7,8,9-HxCDD	37:36	1.923e+04	1.491e+04	1.29	yes	no	0.97
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	1.314e+04	1.283e+04	1.02	yes	no	0.88
17	Unk	OCDD	43:12	2.318e+04	2.566e+04	0.90	yes	no	0.96
18	IS	13C-2,3,7,8-TCDF	28:36	5.699e+04	7.314e+04	0.78	yes	no	1.42
19	IS	13C-1,2,3,7,8-PeCDF	32:59	7.487e+04	4.749e+04	1.58	yes	no	1.26
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	7.178e+04	1.372e+05	0.52	yes	no	1.28
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:16	4.778e+04	1.084e+05	0.44	yes	no	0.90
22	IS	13C-2,3,7,8-TCDD	29:26	3.865e+04	4.896e+04	0.79	yes	no	1.05
23	IS	13C-1,2,3,7,8-PeCDD	34:04	5.357e+04	3.386e+04	1.58	yes	no	0.87
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	1.032e+05	8.197e+04	1.26	yes	no	1.00
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:10	7.484e+04	7.109e+04	1.05	yes	no	0.83
26	IS	13C-OCDD	43:12	1.198e+05	1.317e+05	0.91	yes	no	0.73
27	RS/RT	13C-1,2,3,4-TCDD	29:14	3.880e+04	5.026e+04	0.77	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	1.046e+05	8.232e+04	1.27	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:28	1.729e+04					0.98

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC3

Run #3 Filename P200031 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 15:21:27

Processed: 7-AUG-08 06:33:20 LAB. ID: ICAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.60e+06	1.36e+02	1.2e+04	2.17e+06	8.00e+01	2.7e+04
2	1,2,3,7,8-PeCDF	6.18e+06	1.00e+02	6.2e+04	4.03e+06	4.76e+02	8.5e+03
3	2,3,4,7,8-PeCDF	6.42e+06	1.00e+02	6.4e+04	4.17e+06	4.76e+02	8.8e+03
4	1,2,3,4,7,8-HxCDF	5.52e+06	3.44e+02	1.6e+04	4.46e+06	1.72e+02	2.6e+04
5	1,2,3,6,7,8-HxCDF	5.55e+06	3.44e+02	1.6e+04	4.58e+06	1.72e+02	2.7e+04
6	2,3,4,6,7,8-HxCDF	5.01e+06	3.44e+02	1.5e+04	4.07e+06	1.72e+02	2.4e+04
7	1,2,3,7,8,9-HxCDF	4.08e+06	3.44e+02	1.2e+04	3.27e+06	1.72e+02	1.9e+04
8	1,2,3,4,6,7,8-HpCDF	4.48e+06	1.30e+03	3.5e+03	4.44e+06	1.18e+03	3.8e+03
9	1,2,3,4,7,8,9-HpCDF	2.86e+06	1.30e+03	2.2e+03	2.80e+06	1.18e+03	2.4e+03
10	OCDF	3.74e+06	7.60e+01	4.9e+04	4.12e+06	4.84e+02	8.5e+03
11	2,3,7,8-TCDD	1.33e+06	2.00e+02	6.6e+03	1.70e+06	1.12e+02	1.5e+04
12	1,2,3,7,8-PeCDD	4.51e+06	4.60e+02	9.8e+03	2.97e+06	1.08e+02	2.7e+04
13	1,2,3,4,7,8-HxCDD	4.13e+06	1.36e+02	3.0e+04	3.34e+06	1.28e+02	2.6e+04
14	1,2,3,6,7,8-HxCDD	4.20e+06	1.36e+02	3.1e+04	3.34e+06	1.28e+02	2.6e+04
15	1,2,3,7,8,9-HxCDD	3.80e+06	1.36e+02	2.8e+04	3.06e+06	1.28e+02	2.4e+04
16	1,2,3,4,6,7,8-HpCDD	2.53e+06	3.20e+02	7.9e+03	2.42e+06	5.60e+01	4.3e+04
17	OCDD	3.26e+06	1.16e+02	2.8e+04	3.67e+06	1.08e+02	3.4e+04
18	13C-2,3,7,8-TCDF	9.37e+06	6.96e+02	1.3e+04	1.21e+07	7.20e+02	1.7e+04
19	13C-1,2,3,7,8-PeCDF	1.44e+07	1.60e+02	9.0e+04	9.08e+06	1.20e+02	7.6e+04
20	13C-1,2,3,4,7,8-HxCDF	1.49e+07	1.32e+02	1.1e+05	2.89e+07	5.60e+02	5.2e+04
21	13C-1,2,3,4,6,7,8-HpCDF	9.95e+06	5.04e+03	2.0e+03	2.26e+07	5.44e+03	4.1e+03
22	13C-2,3,7,8-TCDD	6.77e+06	1.14e+03	5.9e+03	8.52e+06	6.40e+02	1.3e+04
23	13C-1,2,3,7,8-PeCDD	1.05e+07	1.12e+02	9.4e+04	6.65e+06	1.08e+02	6.2e+04
24	13C-1,2,3,6,7,8-HxCDD	2.19e+07	2.20e+02	9.9e+04	1.75e+07	2.88e+02	6.1e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.41e+07	7.52e+02	1.9e+04	1.35e+07	3.72e+02	3.6e+04
26	13C-OCDD	1.70e+07	1.16e+02	1.5e+05	1.89e+07	9.60e+01	2.0e+05
27	13C-1,2,3,4-TCDD	6.97e+06	1.14e+03	6.1e+03	8.89e+06	6.40e+02	1.4e+04
28	13C-1,2,3,7,8,9-HxCDD	2.11e+07	2.20e+02	9.6e+04	1.68e+07	2.88e+02	5.8e+04
29	37Cl-2,3,7,8-TCDD	3.07e+06	9.60e+01	3.2e+04			

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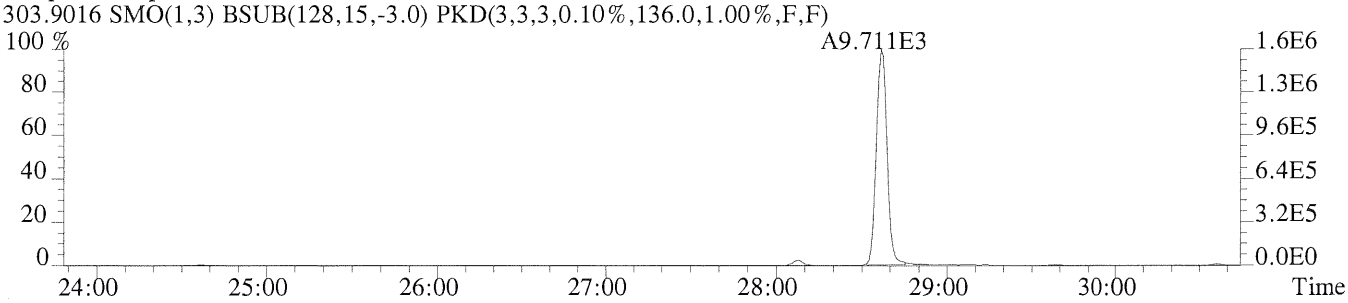
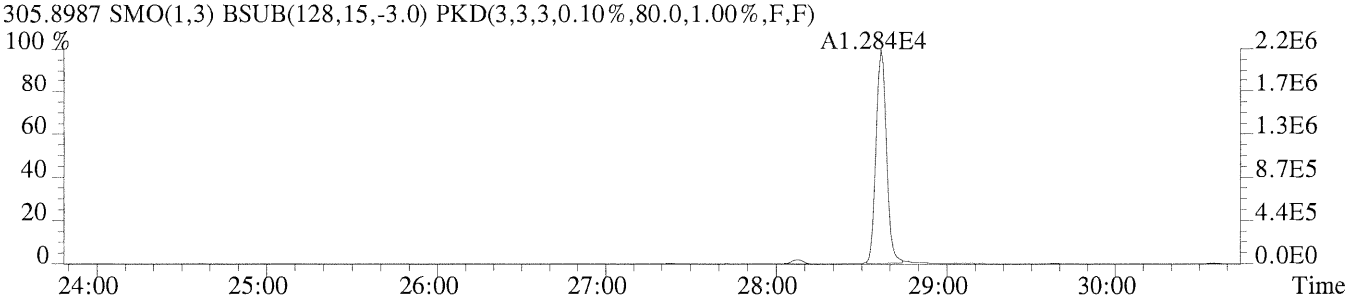
File:P200031 #1-578 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

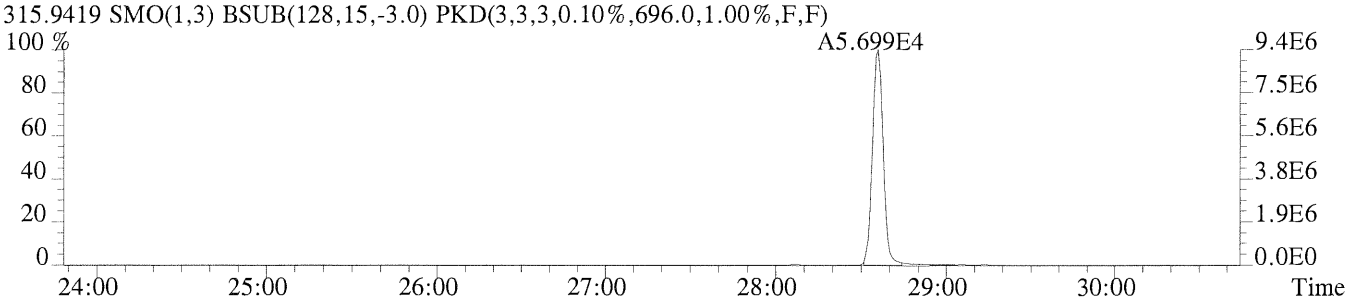
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,136.0,1.00%,F,F)



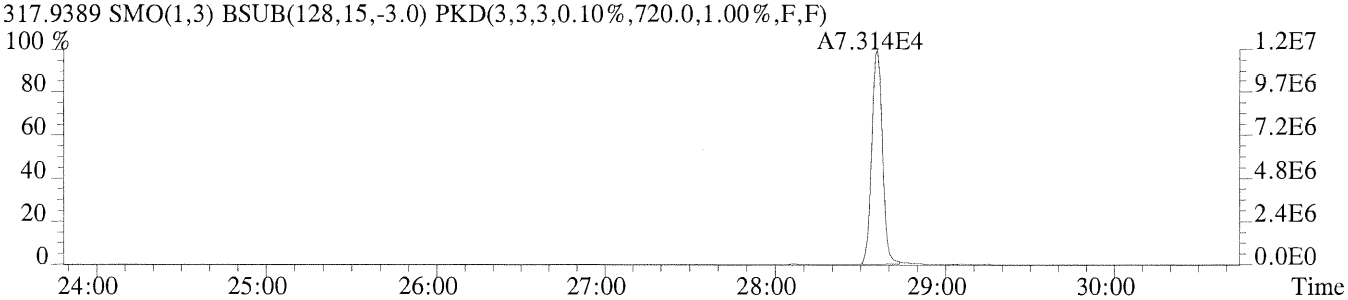
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,80.0,1.00%,F,F)



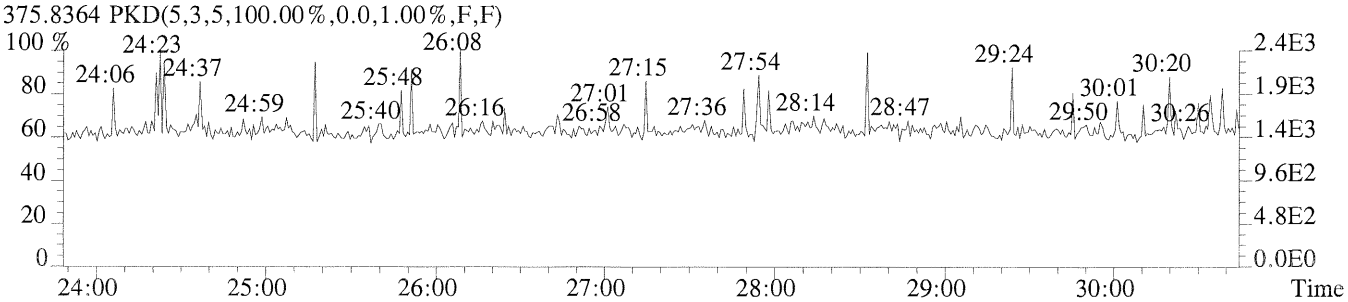
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,696.0,1.00%,F,F)



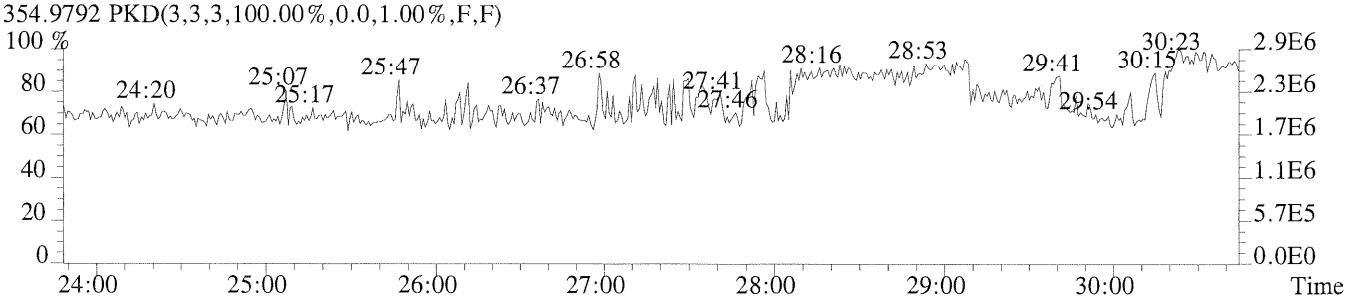
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,720.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

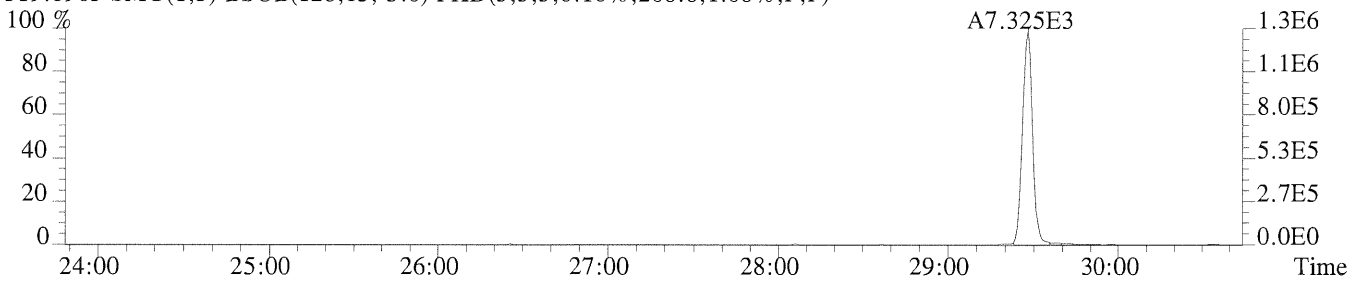


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

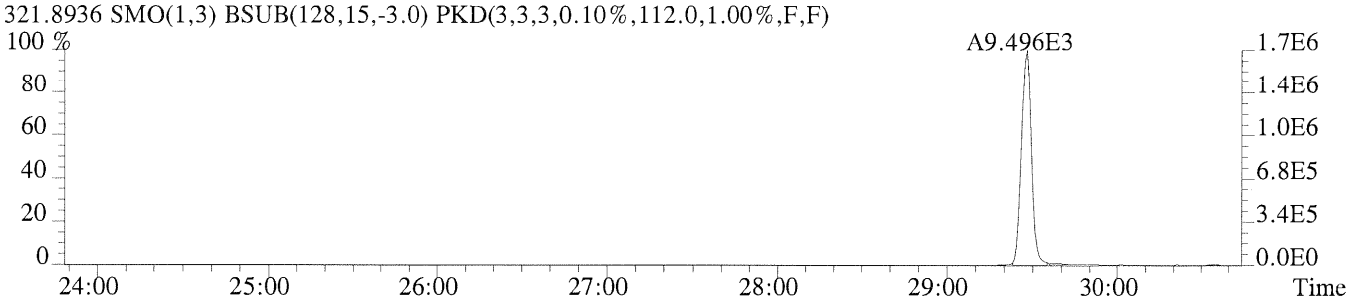


File:P200031 #1-578 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

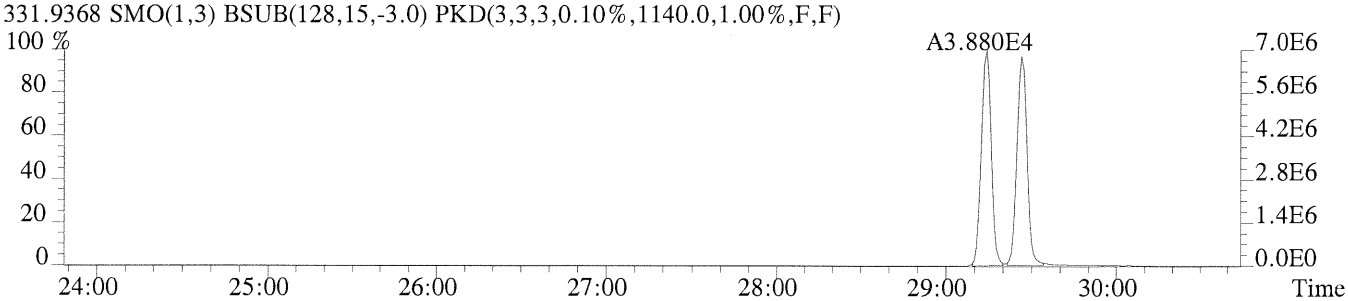
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,200.0,1.00%,F,F)



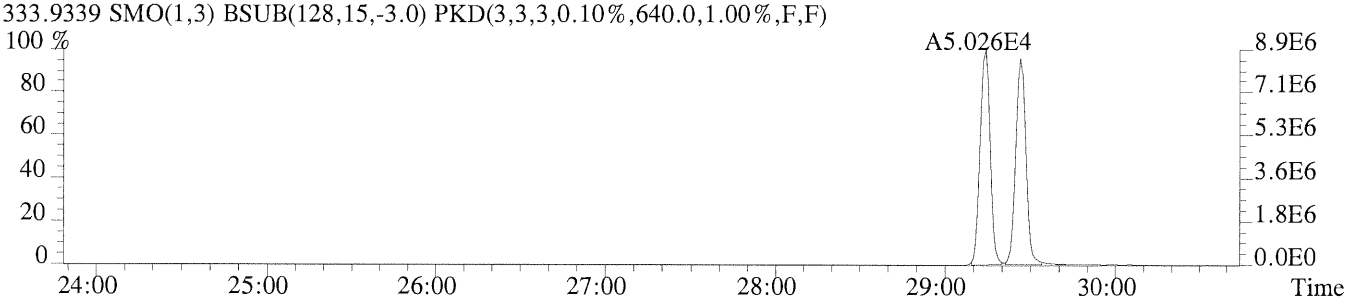
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,112.0,1.00%,F,F)



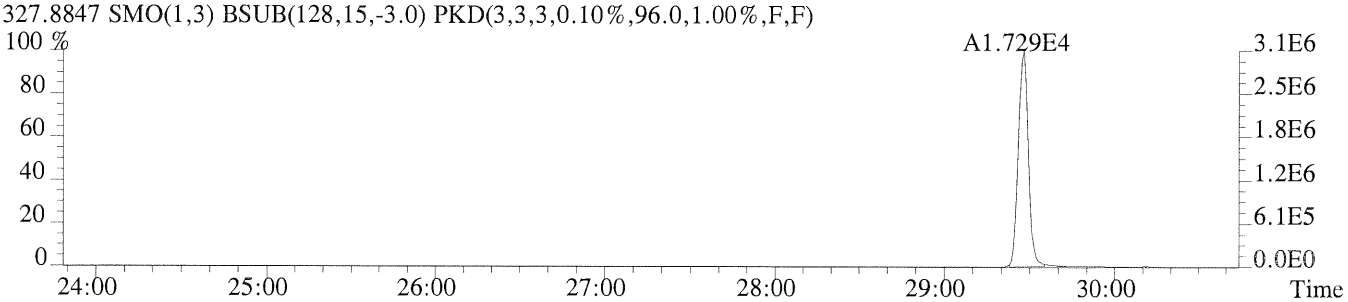
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1140.0,1.00%,F,F)



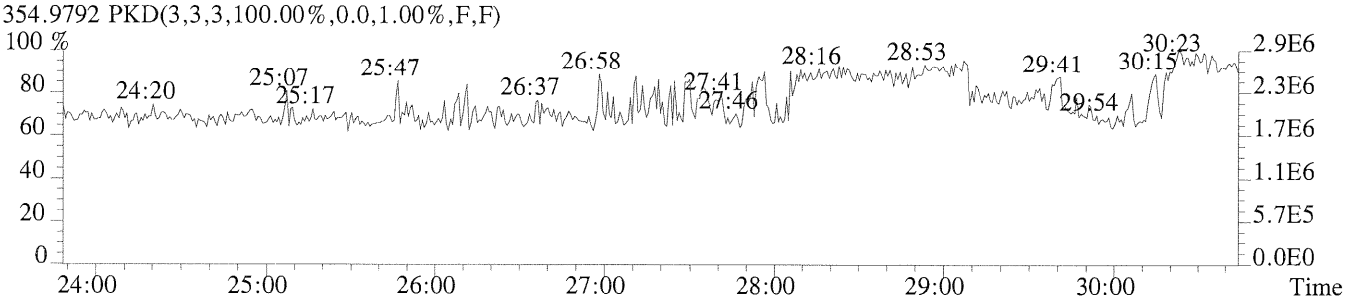
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,640.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,96.0,1.00%,F,F)

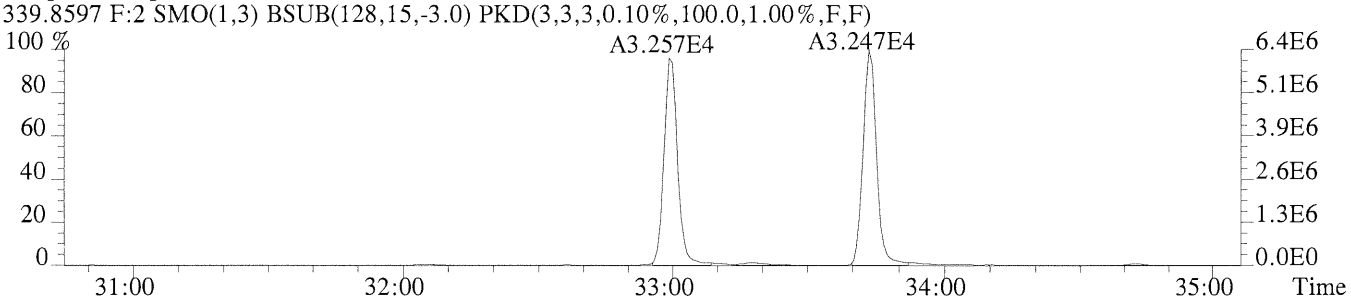


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

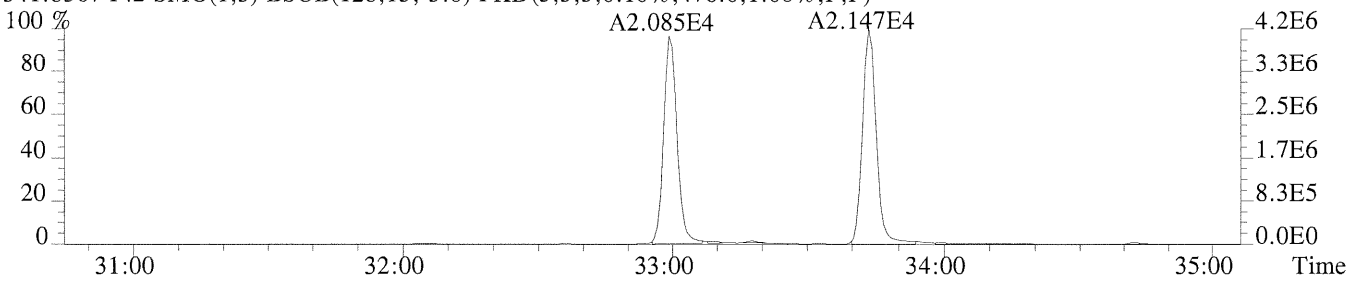


File:P200031 #1-396 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

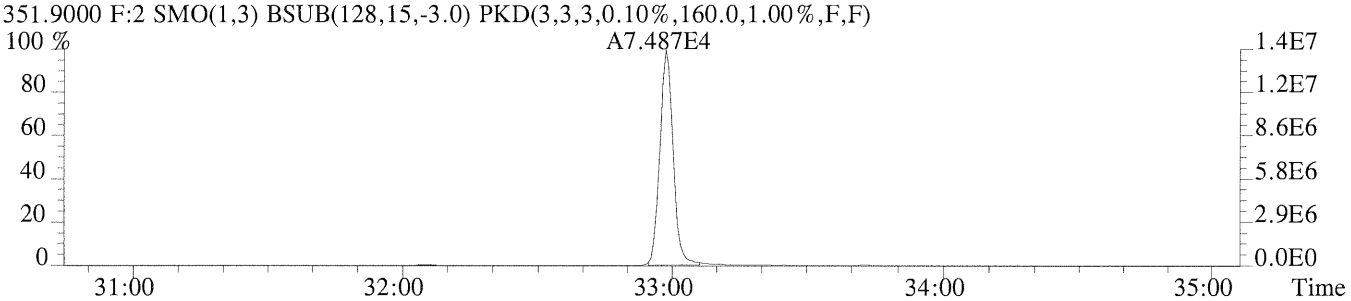
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,100.0,1.00%,F,F)



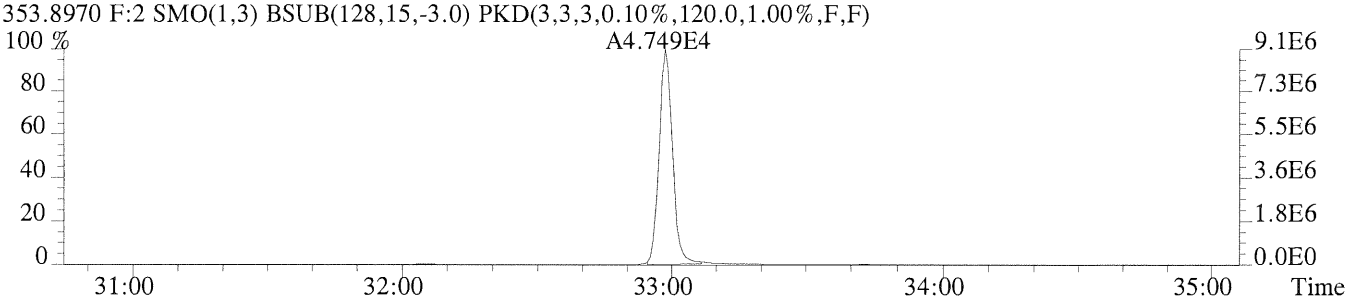
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,476.0,1.00%,F,F)



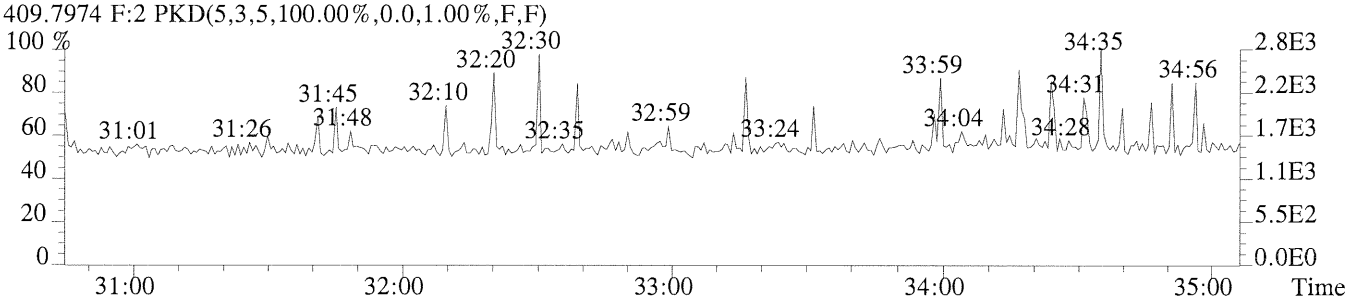
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,160.0,1.00%,F,F)



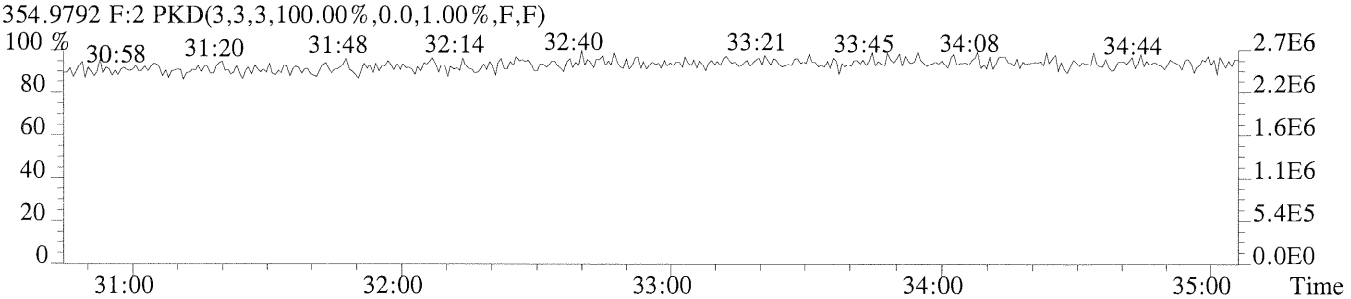
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,120.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

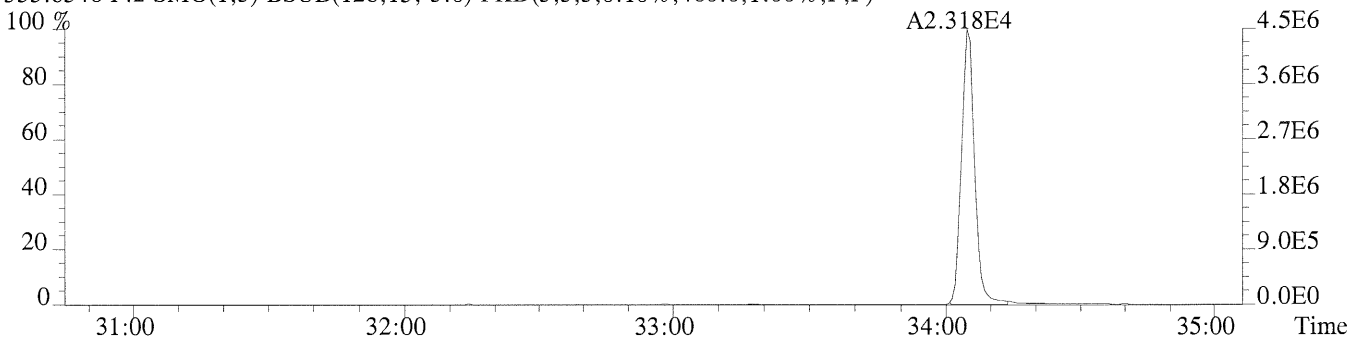


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

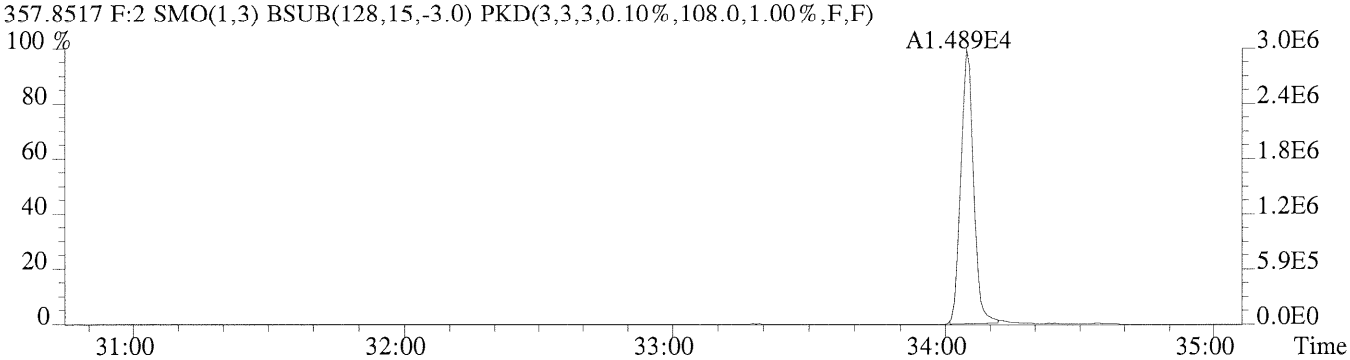


File:P200031 #1-396 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

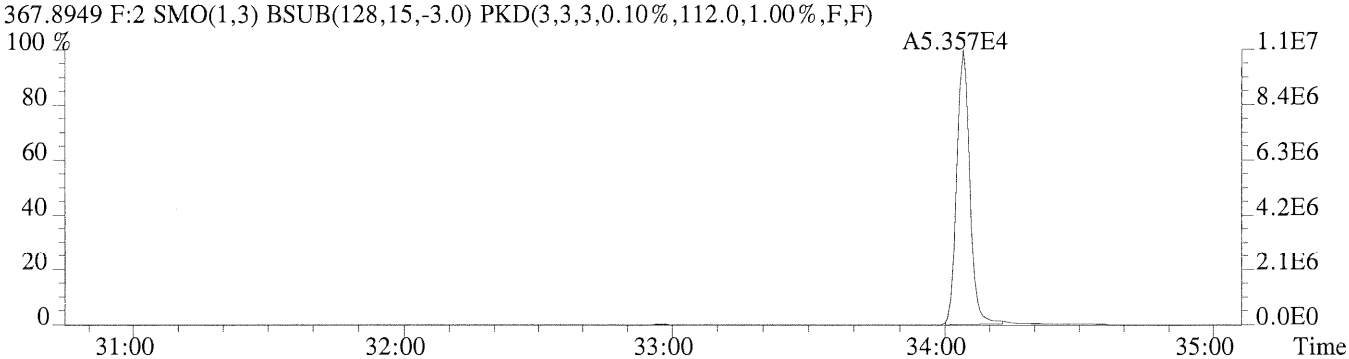
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,460.0,1.00%,F,F)



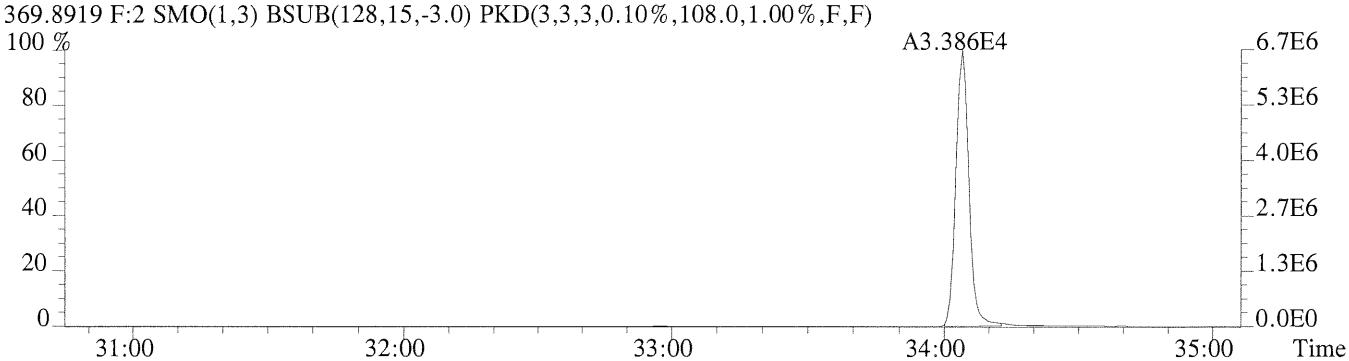
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,108.0,1.00%,F,F)



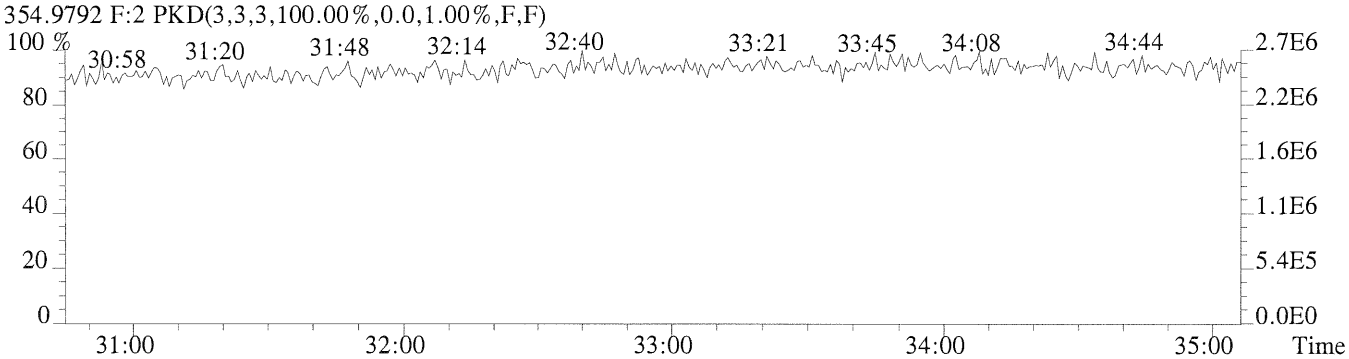
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,112.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,108.0,1.00%,F,F)

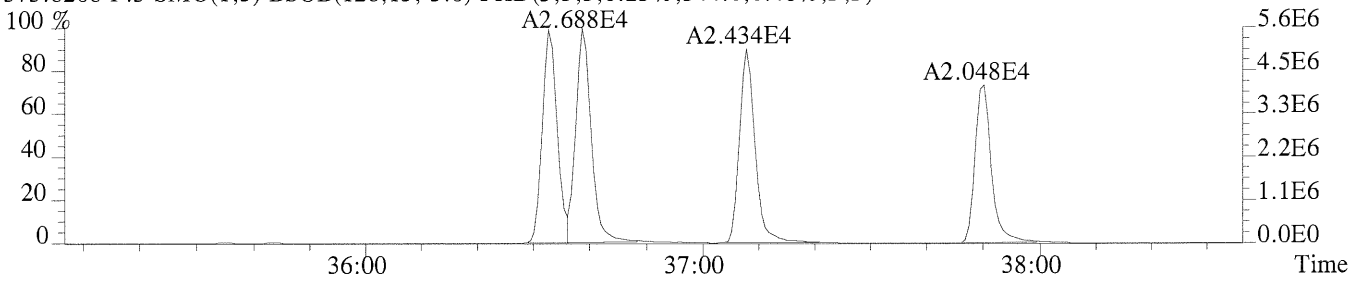


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

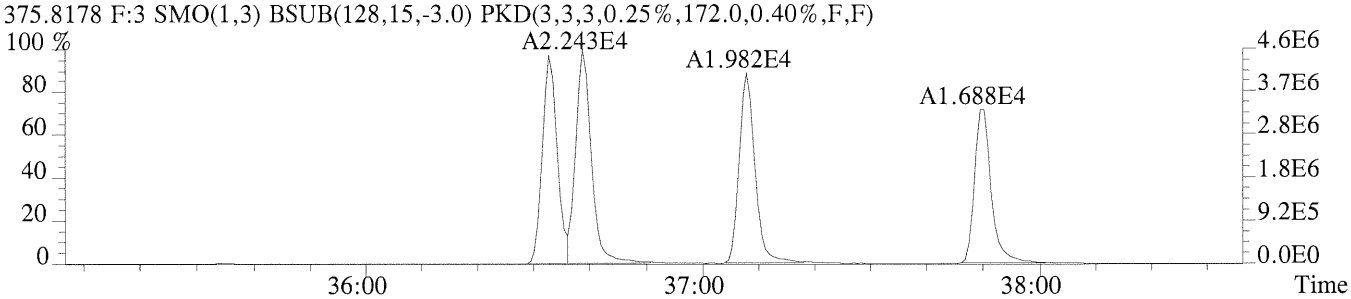


File:P200031 #1-318 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

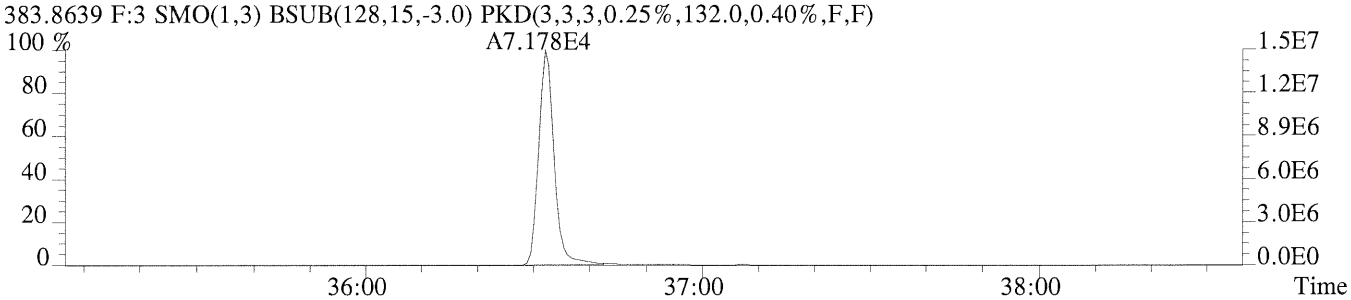
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,344.0,0.40%,F,F)



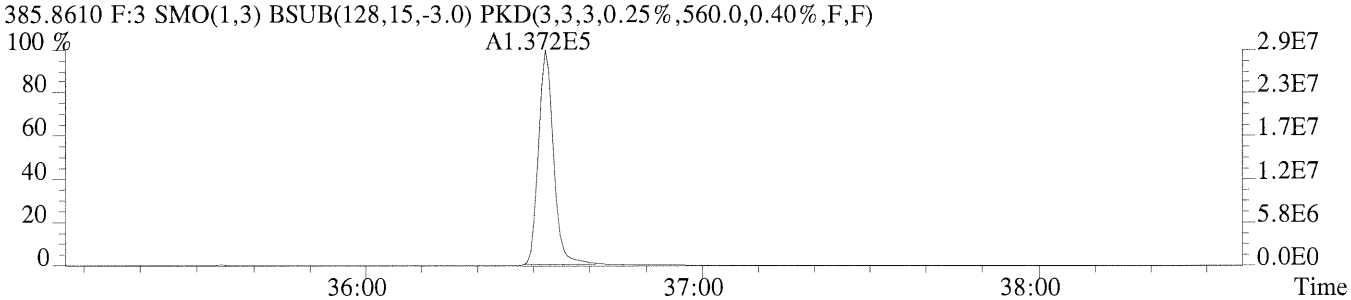
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,172.0,0.40%,F,F)



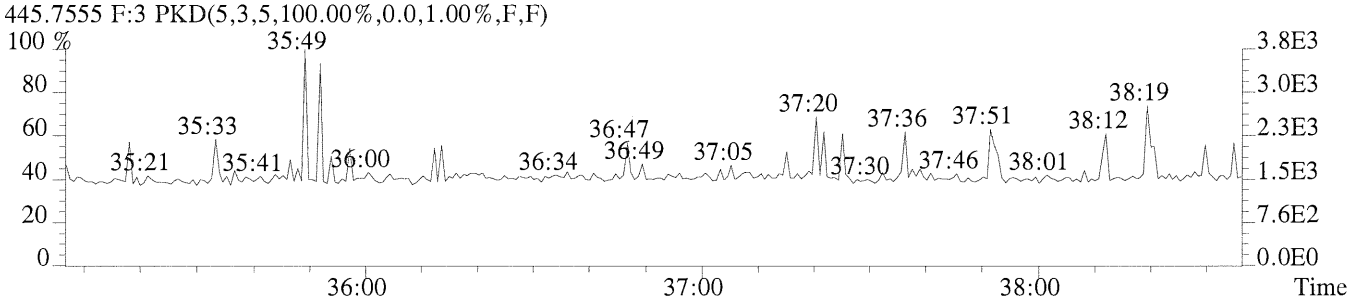
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,132.0,0.40%,F,F)



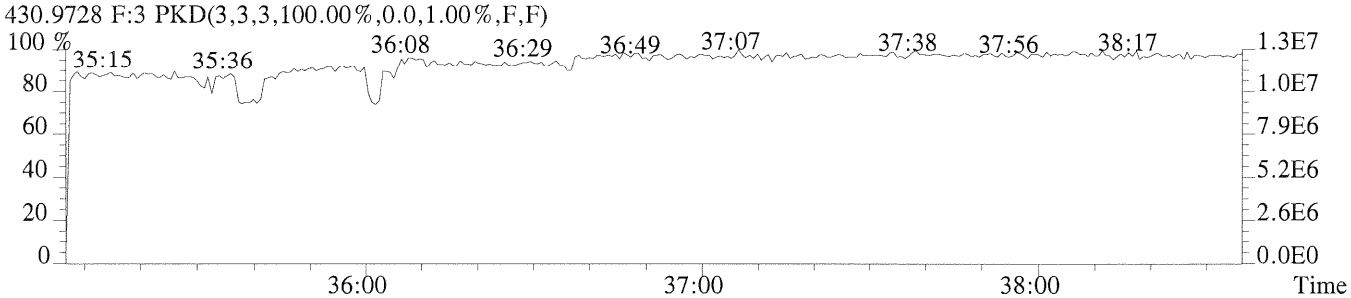
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,560.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

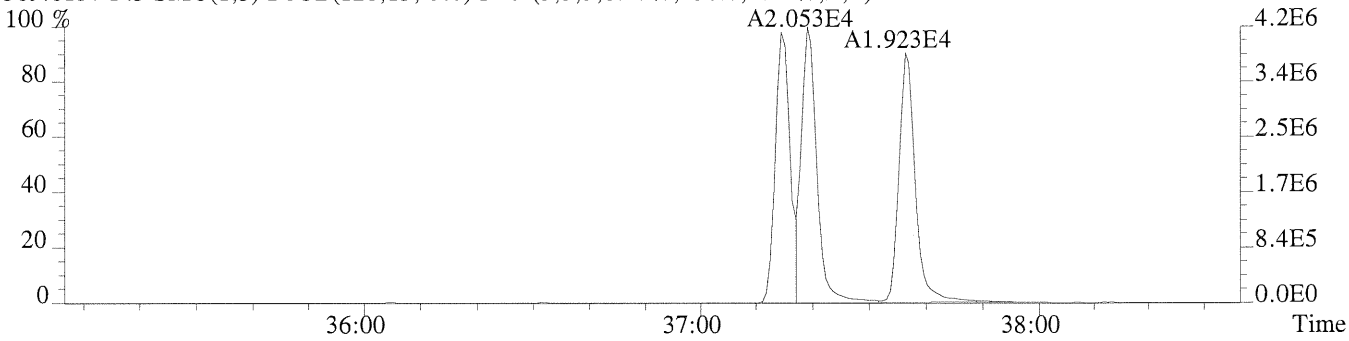


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

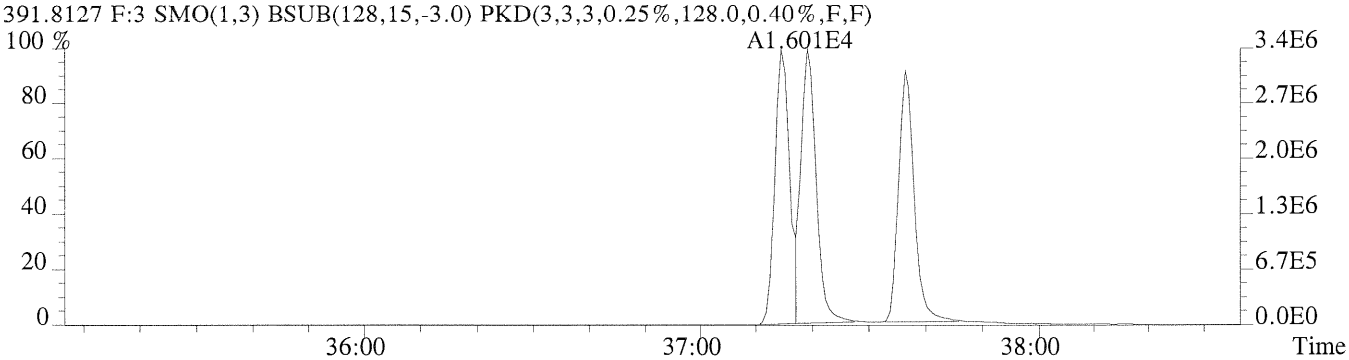


File:P200031 #1-318 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

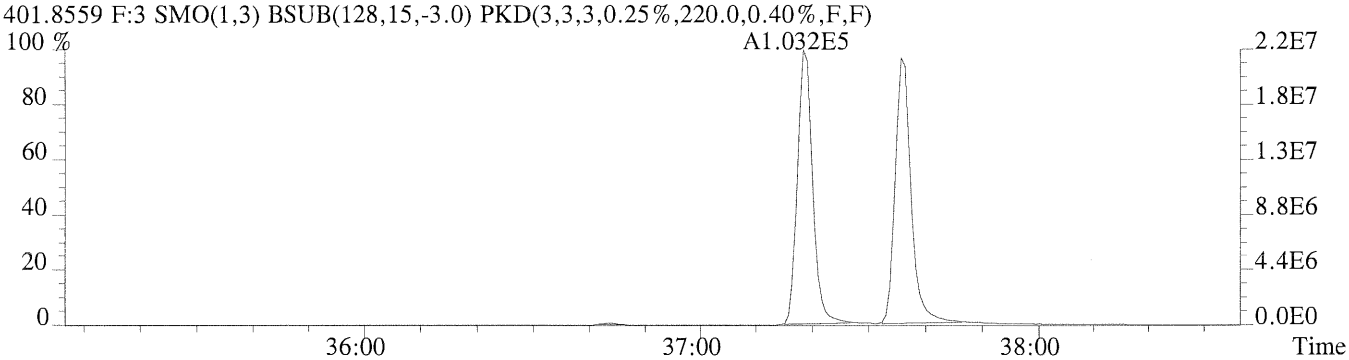
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,136.0,0.40%,F,F)



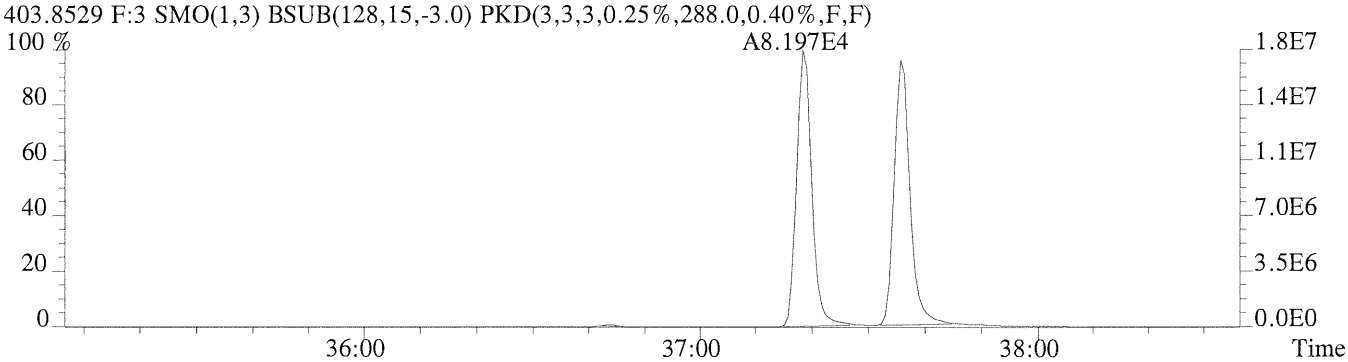
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,128.0,0.40%,F,F)



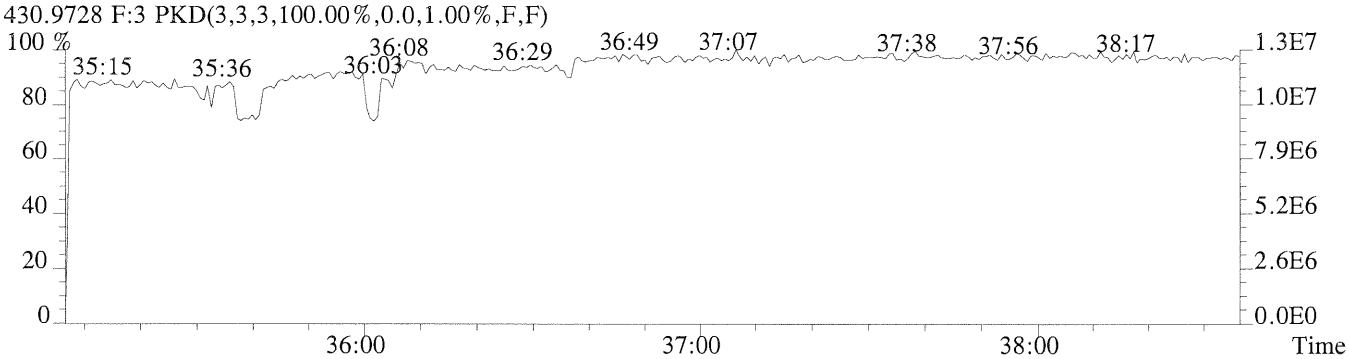
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,220.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,288.0,0.40%,F,F)

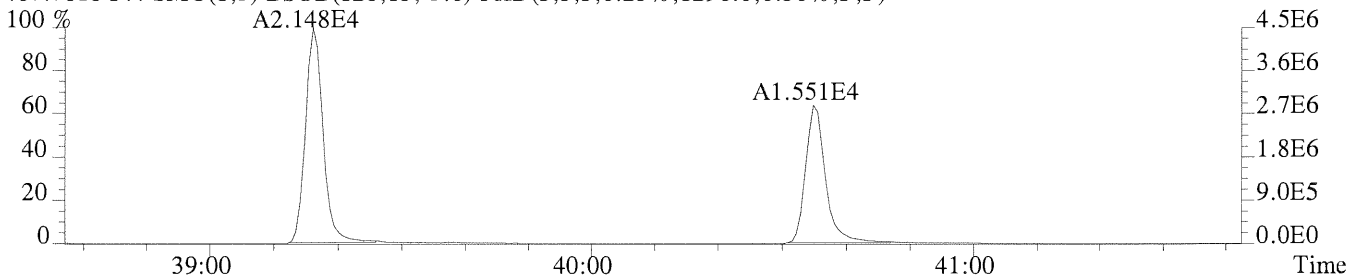


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

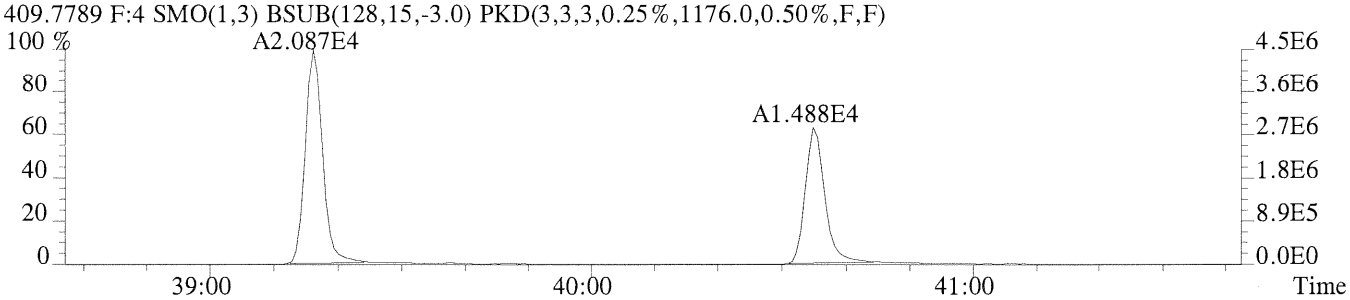


File:P200031 #1-281 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

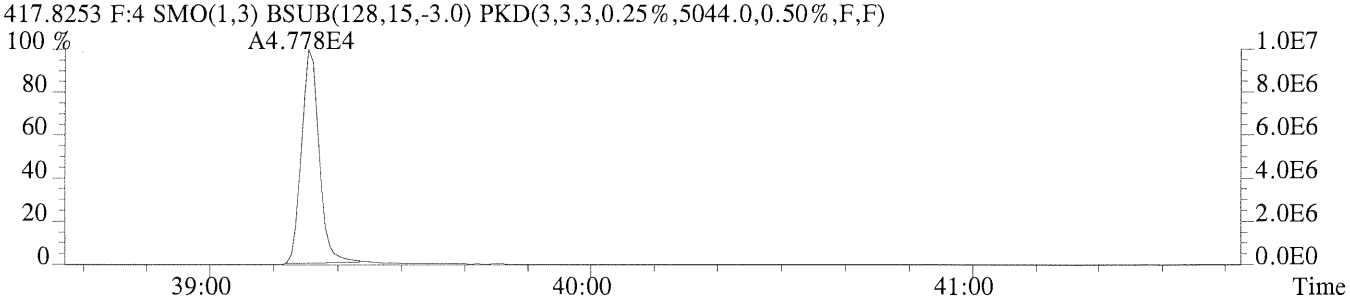
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1296.0,0.50%,F,F)



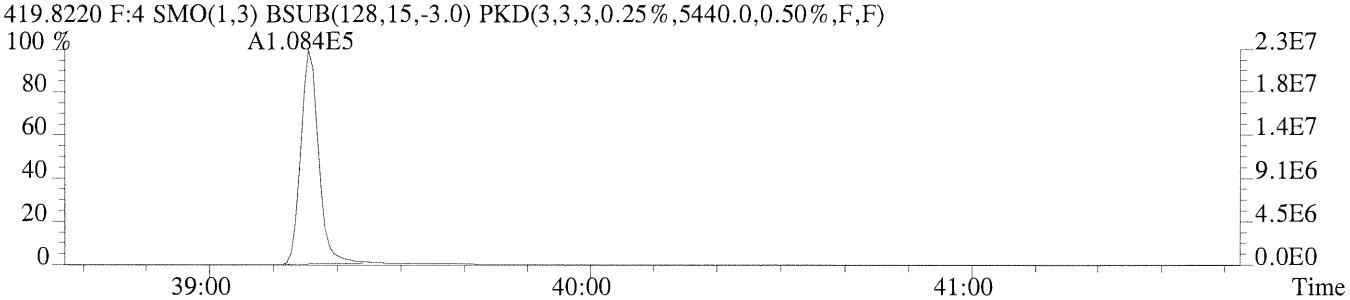
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1176.0,0.50%,F,F)



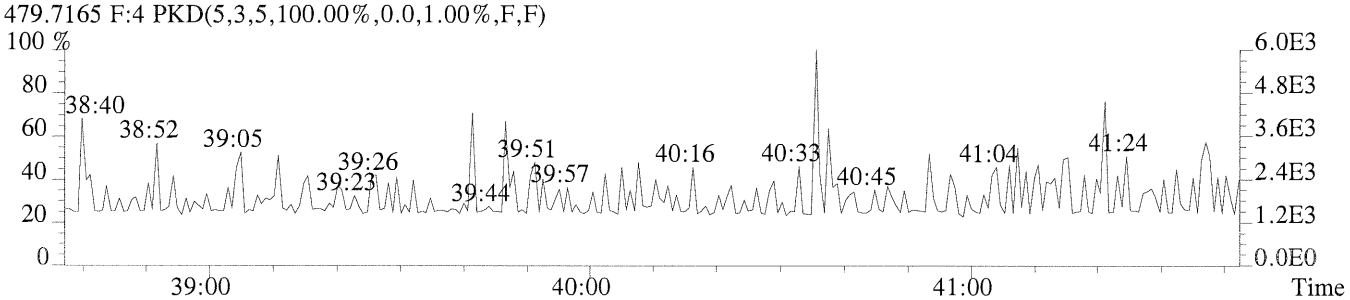
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5044.0,0.50%,F,F)



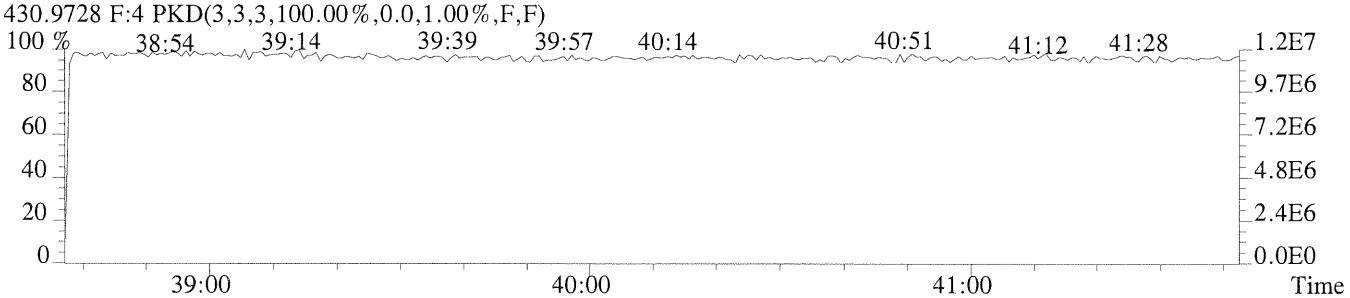
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5440.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

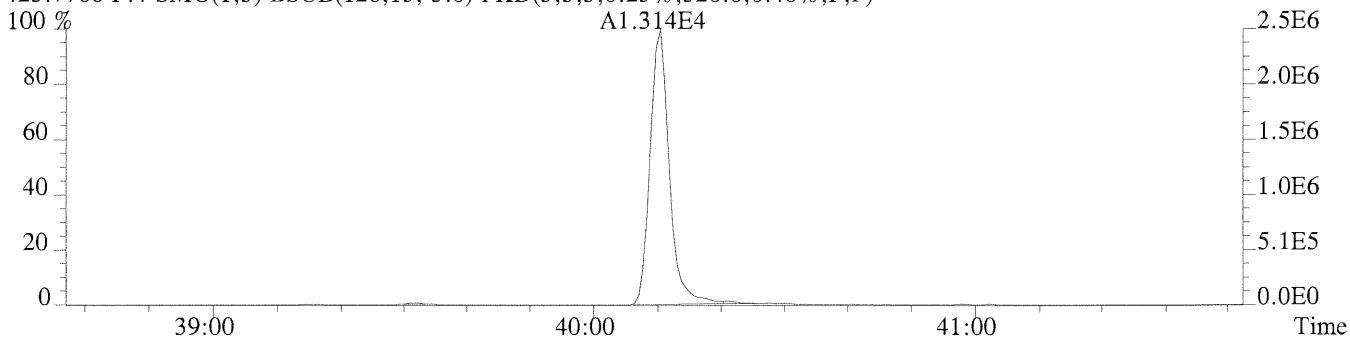


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

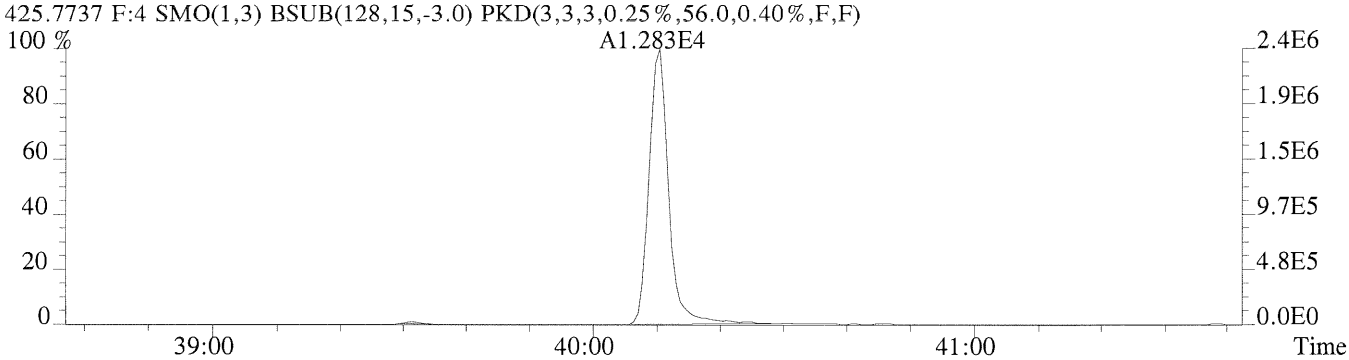


File:P200031 #1-281 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

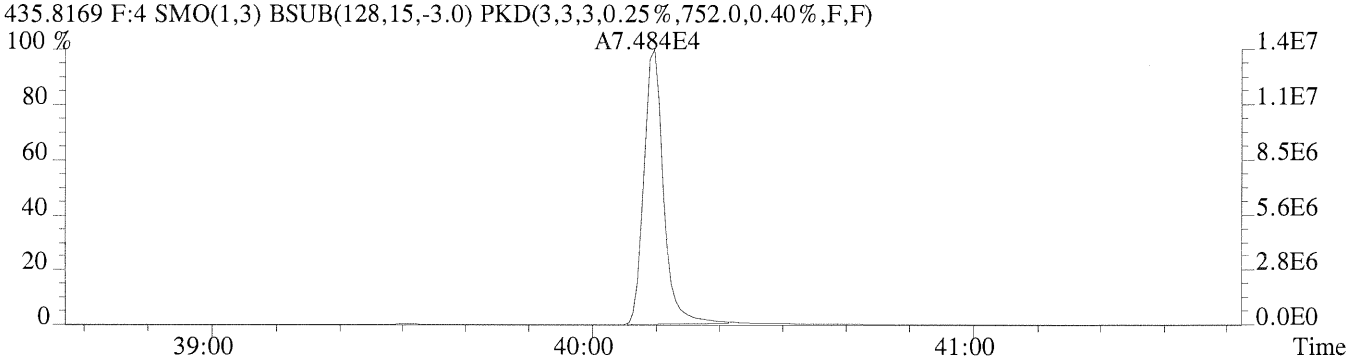
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,320.0,0.40%,F,F)



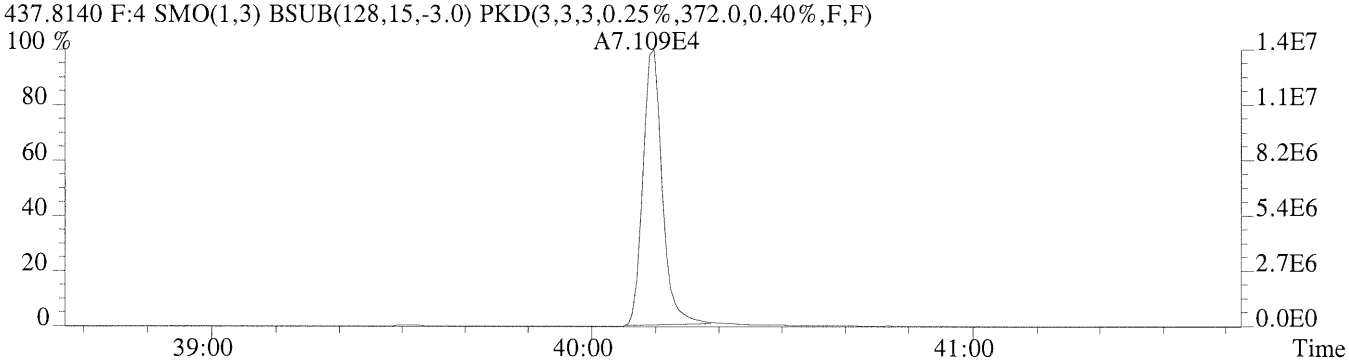
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,56.0,0.40%,F,F)



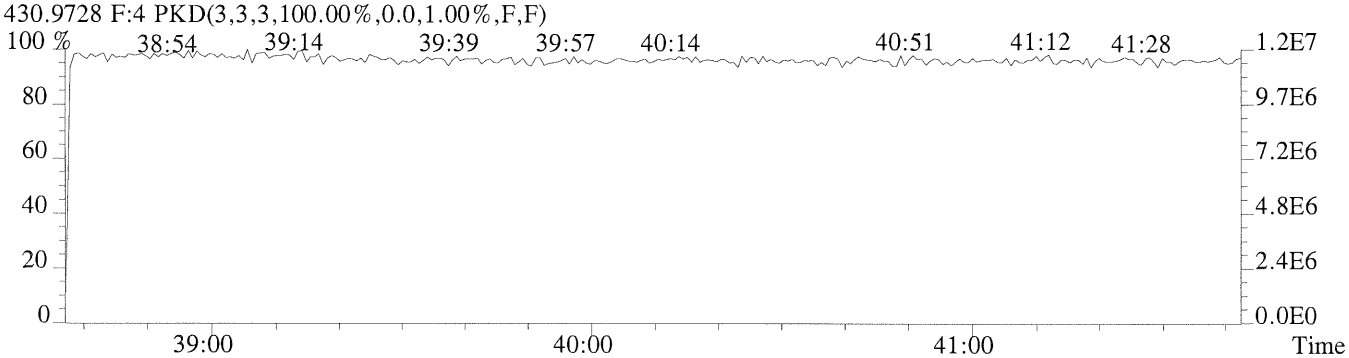
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,752.0,0.40%,F,F)



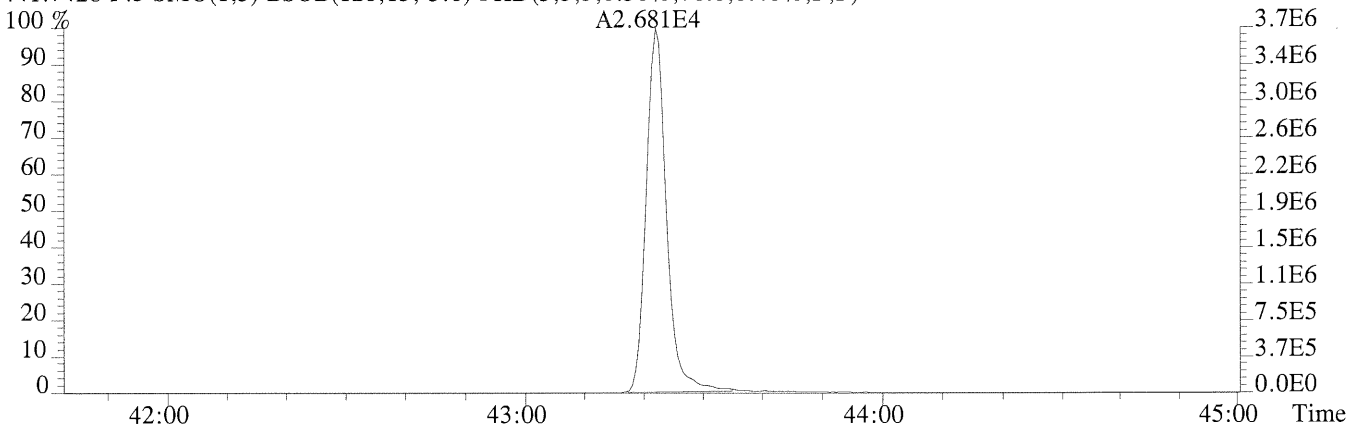
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,372.0,0.40%,F,F)



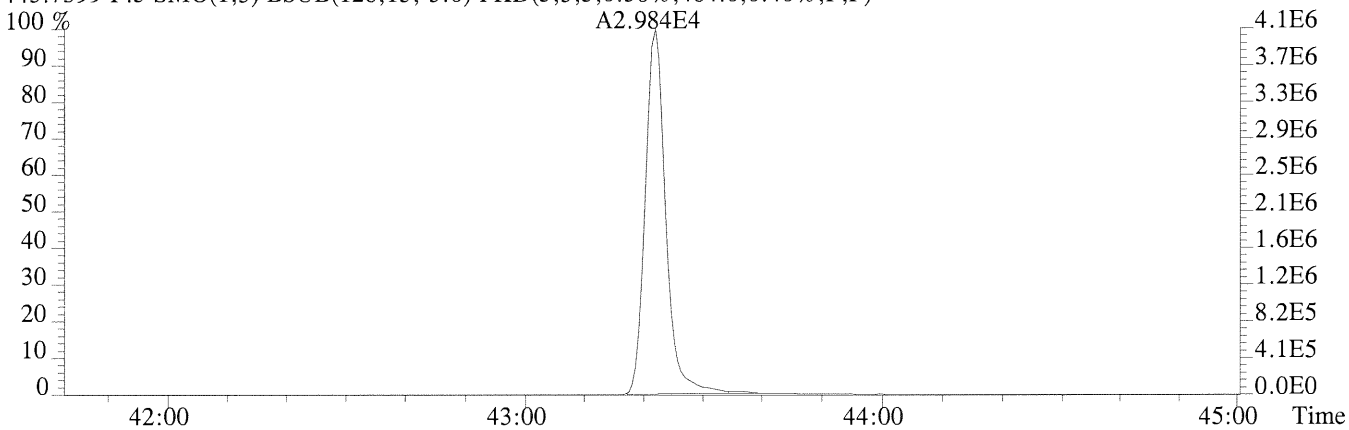
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



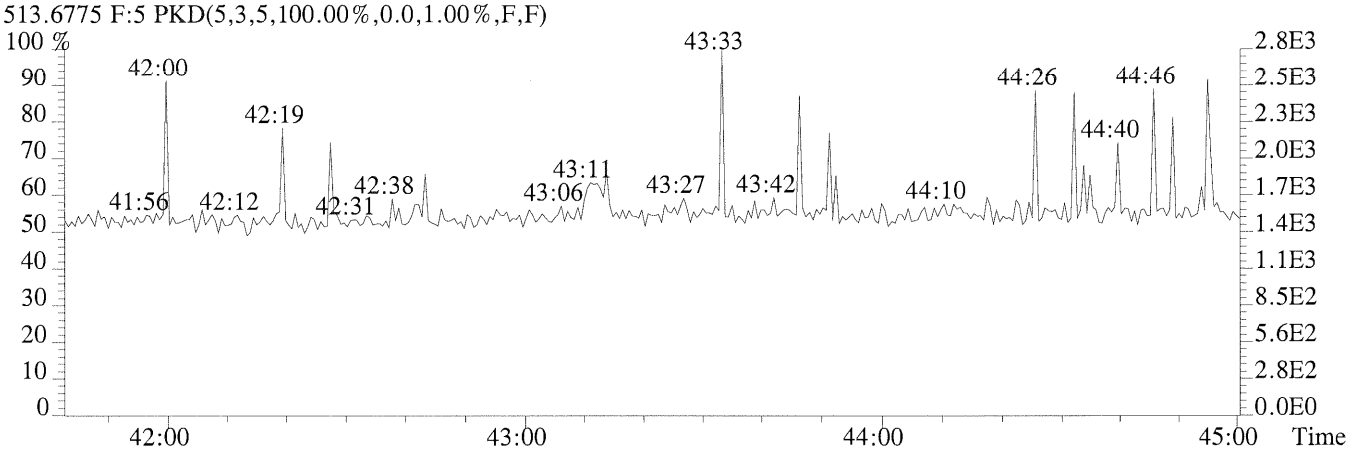
File:P200031 #1-364 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,76.0,0.40%,F,F)



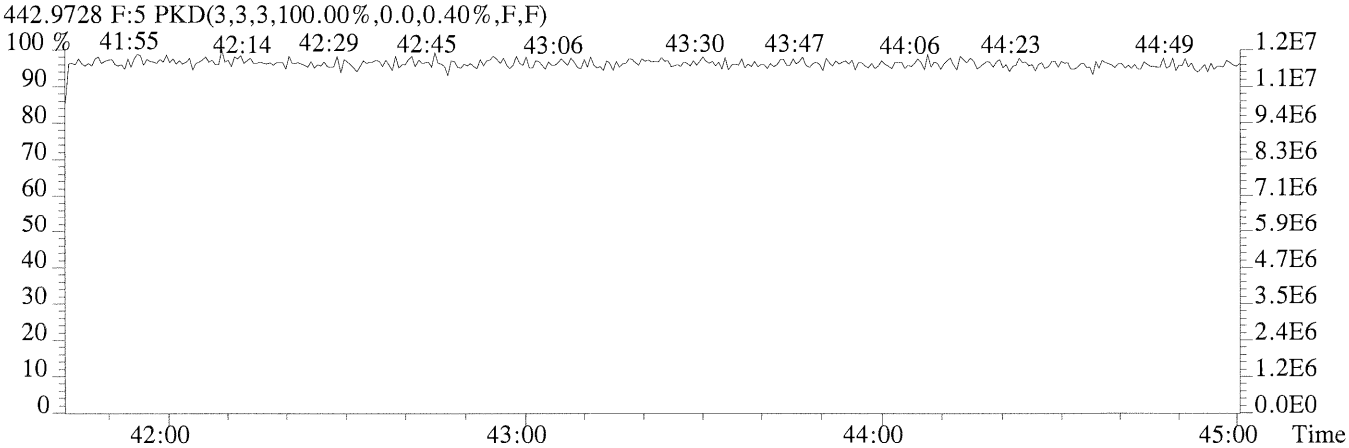
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,484.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

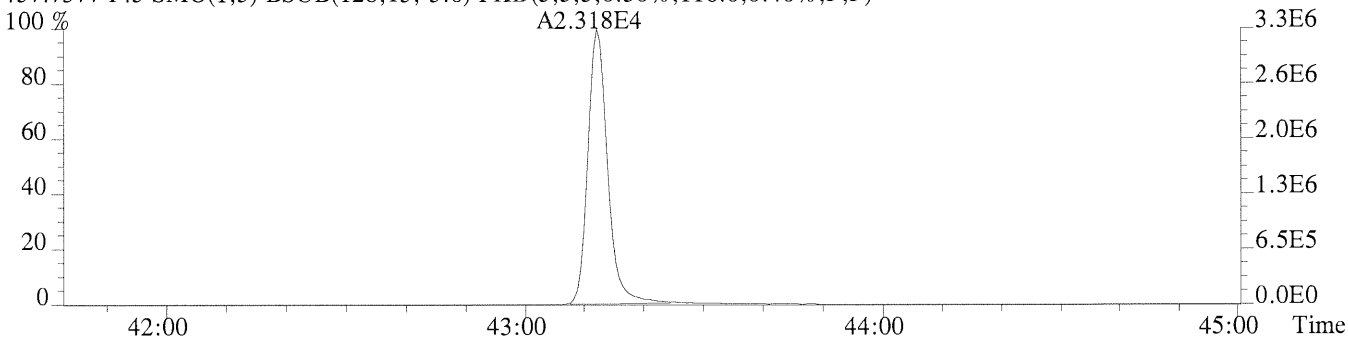


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

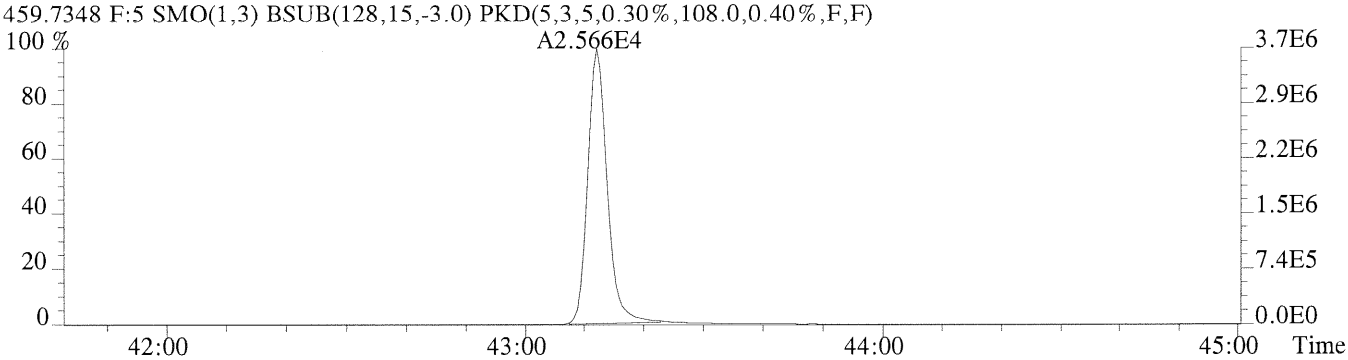


File:P200031 #1-364 Acq: 1-AUG-2008 15:21:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:CCAL HRCC3

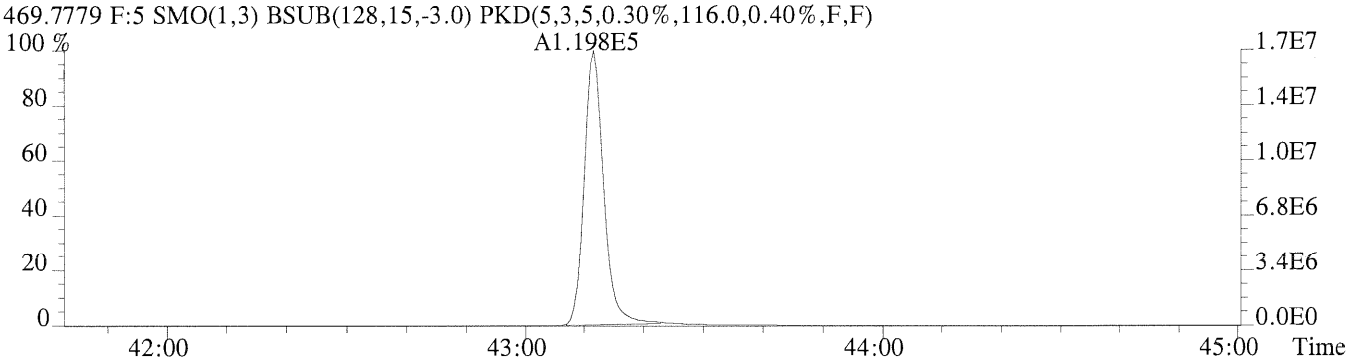
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,116.0,0.40%,F,F)



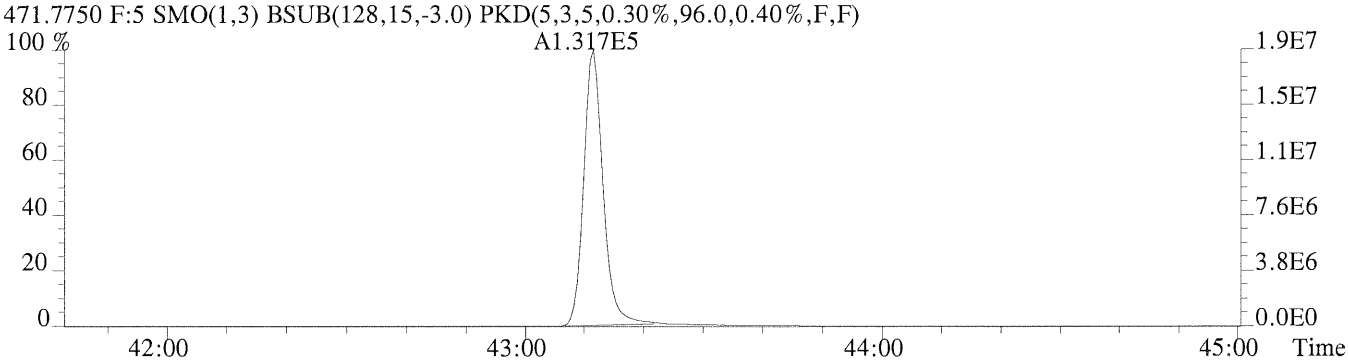
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,108.0,0.40%,F,F)



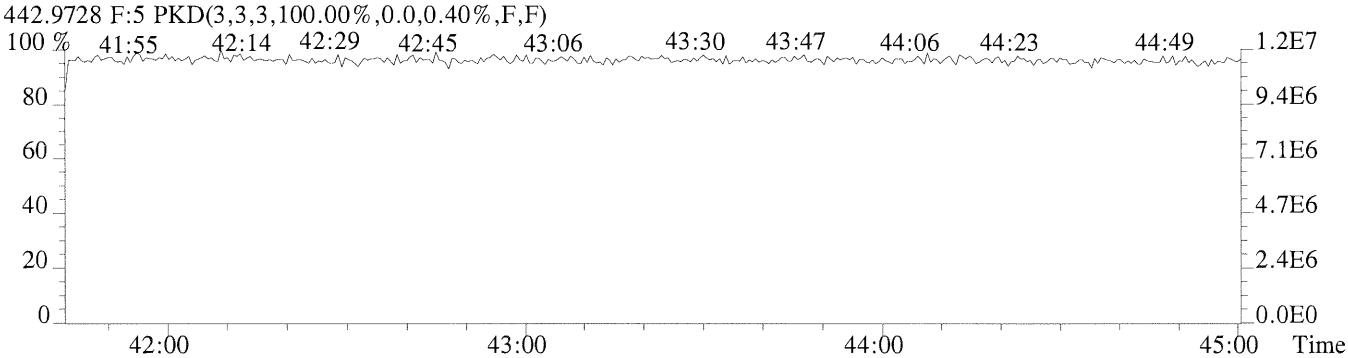
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,116.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,96.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC4

Run #4 Filename P200034 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 18:16:07
Processed: 7-AUG-08 06:33:20 Sample ID: ICAL HRCC4

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	5.932e+04	7.728e+04	0.77	yes	no	0.83
2	Unk	1,2,3,7,8-PeCDF	32:59	1.729e+05	1.128e+05	1.53	yes	no	0.84
3	Unk	2,3,4,7,8-PeCDF	33:43	1.757e+05	1.151e+05	1.53	yes	no	0.85
4	Unk	1,2,3,4,7,8-HxCDF	36:33	1.390e+05	1.142e+05	1.22	yes	no	1.08
5	Unk	1,2,3,6,7,8-HxCDF	36:39	1.462e+05	1.195e+05	1.22	yes	no	1.13
6	Unk	2,3,4,6,7,8-HxCDF	37:07	1.307e+05	1.061e+05	1.23	yes	no	1.01
7	Unk	1,2,3,7,8,9-HxCDF	37:50	1.120e+05	9.166e+04	1.22	yes	no	0.86
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	1.116e+05	1.100e+05	1.01	yes	no	1.32
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	8.384e+04	8.213e+04	1.02	yes	no	0.97
10	Unk	OCDF	43:22	1.203e+05	1.349e+05	0.89	yes	no	1.11
11	Unk	2,3,7,8-TCDD	29:27	4.848e+04	6.286e+04	0.77	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:05	1.213e+05	7.866e+04	1.54	yes	no	0.87
13	Unk	1,2,3,4,7,8-HxCDD	37:14	9.237e+04	7.426e+04	1.24	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:19	1.060e+05	8.394e+04	1.26	yes	no	1.05
15	Unk	1,2,3,7,8,9-HxCDD	37:36	9.598e+04	7.644e+04	1.26	yes	no	0.97
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	7.010e+04	6.690e+04	1.05	yes	no	0.88
17	Unk	OCDD	43:12	1.008e+05	1.127e+05	0.89	yes	no	0.96
18	IS	13C-2,3,7,8-TCDF	28:35	7.137e+04	9.111e+04	0.78	yes	no	1.42
19	IS	13C-1,2,3,7,8-PeCDF	32:59	8.260e+04	5.267e+04	1.57	yes	no	1.26
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	8.010e+04	1.555e+05	0.52	yes	no	1.28
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:15	5.146e+04	1.168e+05	0.44	yes	no	0.90
22	IS	13C-2,3,7,8-TCDD	29:26	5.255e+04	6.845e+04	0.77	yes	no	1.05
23	IS	13C-1,2,3,7,8-PeCDD	34:04	5.545e+04	3.609e+04	1.54	yes	no	0.87
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	9.892e+04	7.918e+04	1.25	yes	no	1.00
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:09	7.892e+04	7.556e+04	1.04	yes	no	0.83
26	IS	13C-OCDD	43:11	1.058e+05	1.179e+05	0.90	yes	no	0.73
27	RS/RT	13C-1,2,3,4-TCDD	29:14	4.992e+04	6.366e+04	0.78	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	9.873e+04	7.842e+04	1.26	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:27	1.126e+05					0.98

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC4

Run #4 Filename P200034 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 18:16:07

Processed: 7-AUG-08 06:33:20 LAB. ID: ICAL HRCC4

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	9.93e+06	1.08e+02	9.2e+04	1.29e+07	1.44e+02	8.9e+04
2	1,2,3,7,8-PeCDF	3.32e+07	6.80e+01	4.9e+05	2.17e+07	7.12e+02	3.0e+04
3	2,3,4,7,8-PeCDF	3.51e+07	6.80e+01	5.2e+05	2.27e+07	7.12e+02	3.2e+04
4	1,2,3,4,7,8-HxCDF	3.04e+07	8.36e+02	3.6e+04	2.48e+07	7.36e+02	3.4e+04
5	1,2,3,6,7,8-HxCDF	2.90e+07	8.36e+02	3.5e+04	2.37e+07	7.36e+02	3.2e+04
6	2,3,4,6,7,8-HxCDF	2.68e+07	8.36e+02	3.2e+04	2.20e+07	7.36e+02	3.0e+04
7	1,2,3,7,8,9-HxCDF	2.28e+07	8.36e+02	2.7e+04	1.87e+07	7.36e+02	2.5e+04
8	1,2,3,4,6,7,8-HpCDF	2.34e+07	7.66e+03	3.1e+03	2.29e+07	6.00e+03	3.8e+03
9	1,2,3,4,7,8,9-HpCDF	1.56e+07	7.66e+03	2.0e+03	1.51e+07	6.00e+03	2.5e+03
10	OCDF	1.70e+07	4.72e+02	3.6e+04	1.93e+07	3.00e+02	6.4e+04
11	2,3,7,8-TCDD	8.43e+06	9.60e+01	8.8e+04	1.10e+07	1.48e+02	7.5e+04
12	1,2,3,7,8-PeCDD	2.44e+07	4.68e+02	5.2e+04	1.58e+07	1.56e+02	1.0e+05
13	1,2,3,4,7,8-HxCDD	2.13e+07	5.20e+02	4.1e+04	1.69e+07	1.60e+02	1.1e+05
14	1,2,3,6,7,8-HxCDD	2.19e+07	5.20e+02	4.2e+04	1.74e+07	1.60e+02	1.1e+05
15	1,2,3,7,8,9-HxCDD	2.07e+07	5.20e+02	4.0e+04	1.64e+07	1.60e+02	1.0e+05
16	1,2,3,4,6,7,8-HpCDD	1.37e+07	1.00e+03	1.4e+04	1.32e+07	8.56e+02	1.5e+04
17	OCDD	1.43e+07	1.24e+02	1.2e+05	1.62e+07	1.24e+02	1.3e+05
18	13C-2,3,7,8-TCDF	1.18e+07	1.01e+03	1.2e+04	1.51e+07	5.28e+02	2.9e+04
19	13C-1,2,3,7,8-PeCDF	1.58e+07	1.20e+02	1.3e+05	1.00e+07	1.32e+02	7.6e+04
20	13C-1,2,3,4,7,8-HxCDF	1.70e+07	1.44e+02	1.2e+05	3.28e+07	8.80e+02	3.7e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.08e+07	2.71e+03	4.0e+03	2.43e+07	8.02e+03	3.0e+03
22	13C-2,3,7,8-TCDD	9.29e+06	1.42e+03	6.5e+03	1.20e+07	5.92e+02	2.0e+04
23	13C-1,2,3,7,8-PeCDD	1.10e+07	1.60e+02	6.9e+04	7.00e+06	1.28e+02	5.5e+04
24	13C-1,2,3,6,7,8-HxCDD	2.15e+07	3.24e+02	6.6e+04	1.71e+07	5.48e+02	3.1e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.54e+07	1.51e+03	1.0e+04	1.47e+07	7.16e+02	2.1e+04
26	13C-OCDD	1.47e+07	1.96e+02	7.5e+04	1.68e+07	2.56e+02	6.6e+04
27	13C-1,2,3,4-TCDD	8.80e+06	1.42e+03	6.2e+03	1.11e+07	5.92e+02	1.9e+04
28	13C-1,2,3,7,8,9-HxCDD	2.11e+07	3.24e+02	6.5e+04	1.68e+07	5.48e+02	3.1e+04
29	37Cl-2,3,7,8-TCDD	1.97e+07	1.12e+02	1.8e+05			

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
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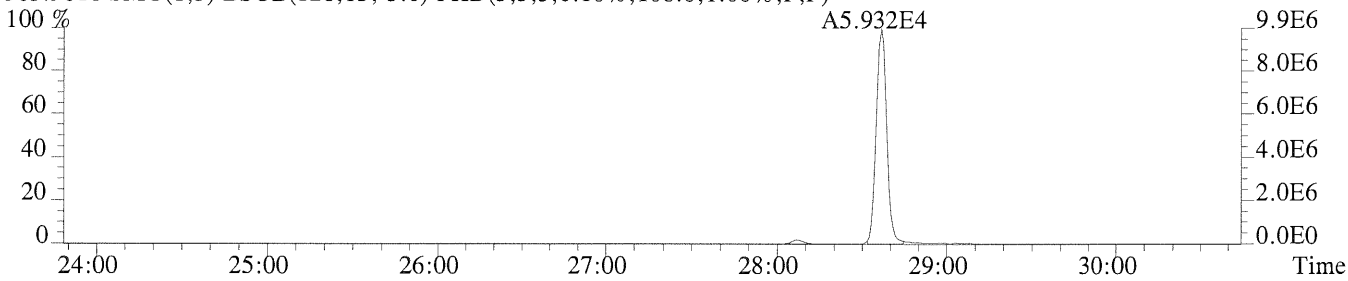
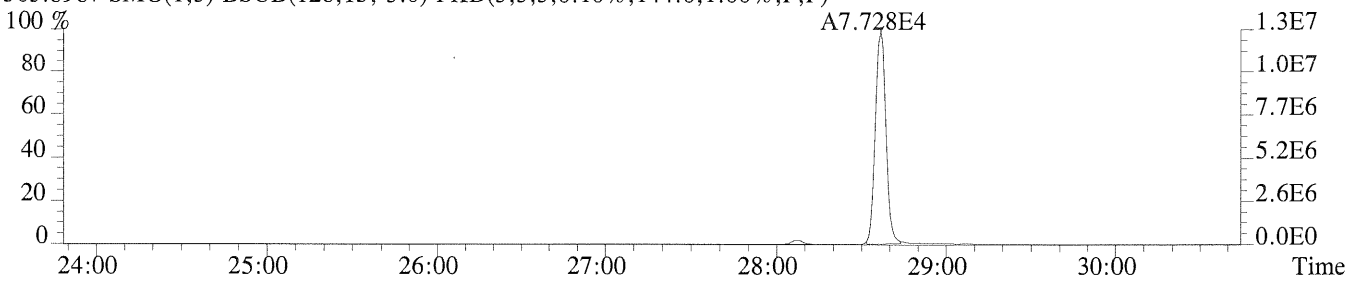
File:P200034 #1-578 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

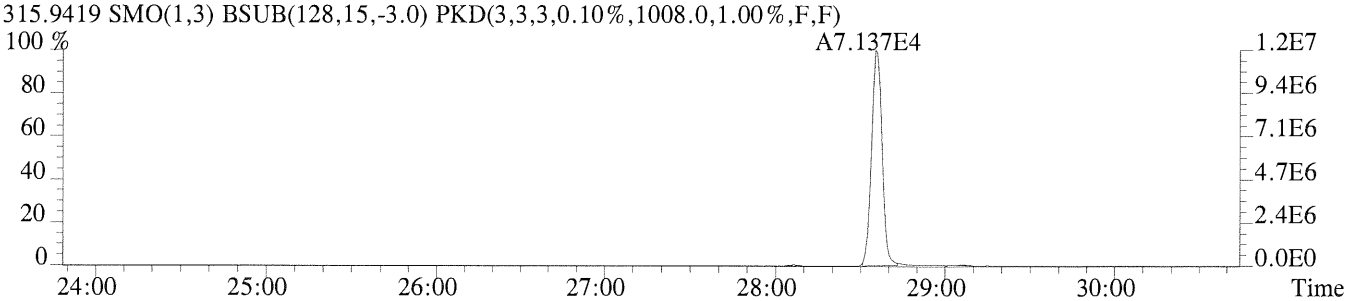
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,108.0,1.00%,F,F)



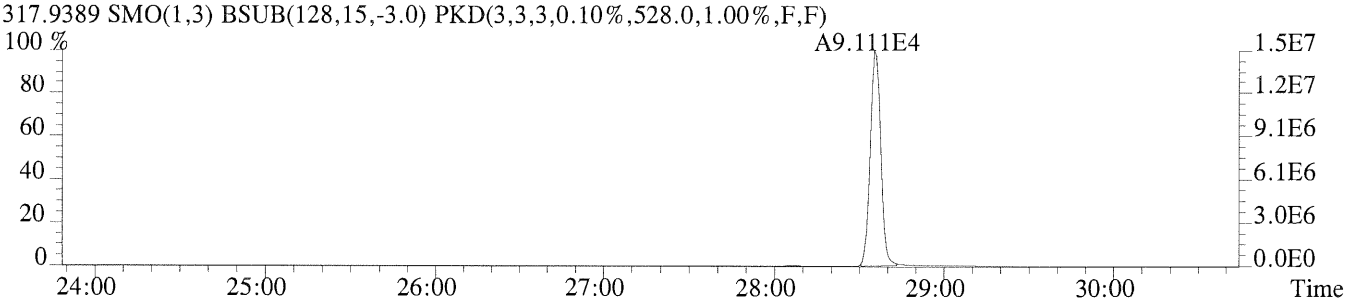
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,144.0,1.00%,F,F)



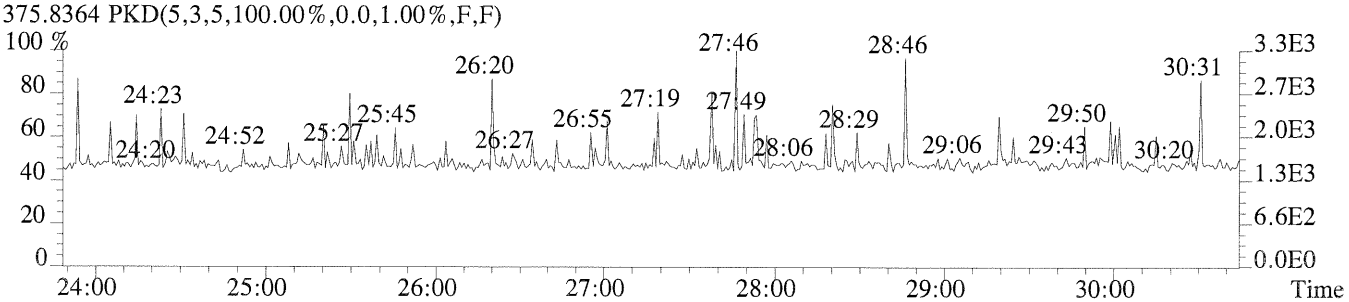
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1008.0,1.00%,F,F)



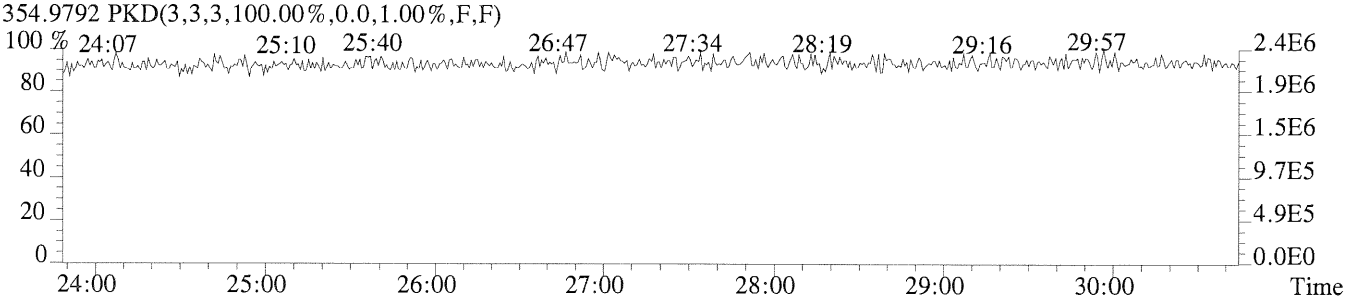
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,528.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

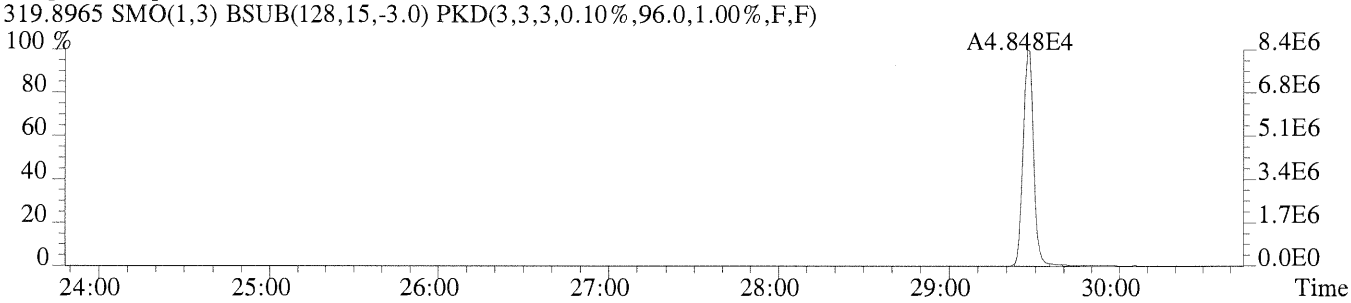


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

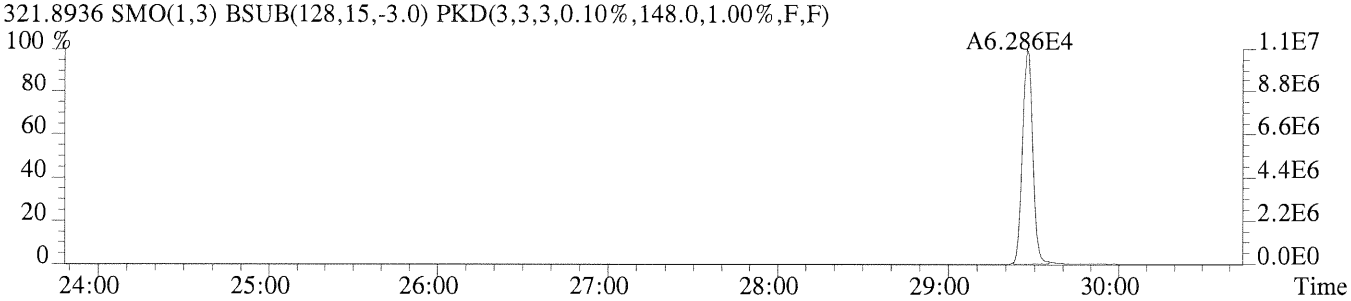


File:P200034 #1-578 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

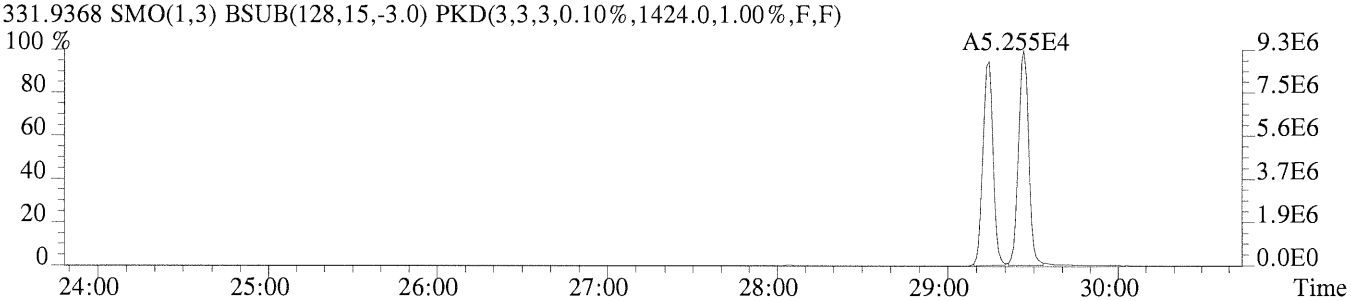
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,96.0,1.00%,F,F)



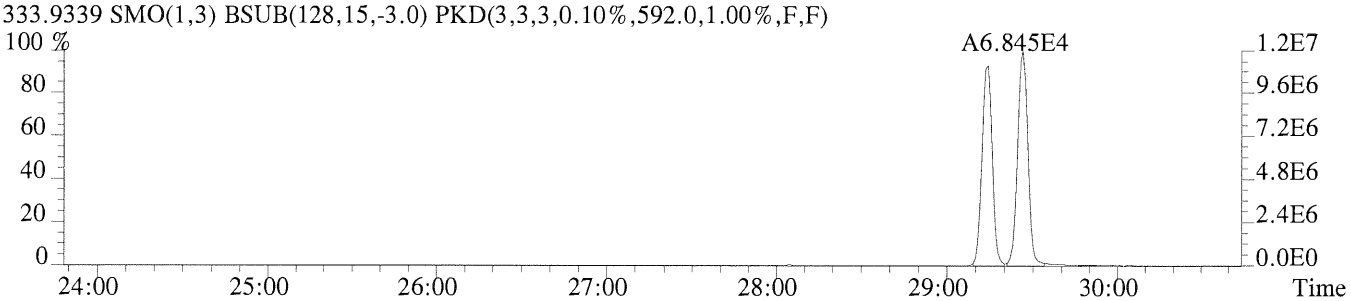
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,148.0,1.00%,F,F)



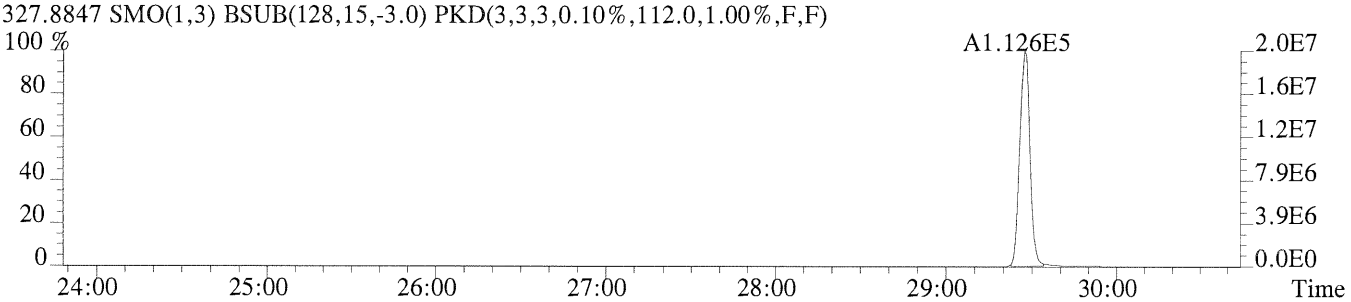
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1424.0,1.00%,F,F)



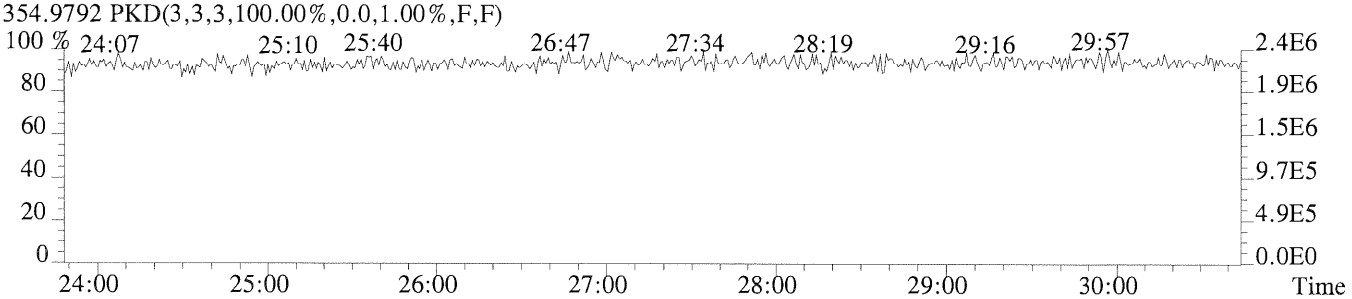
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,592.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,112.0,1.00%,F,F)

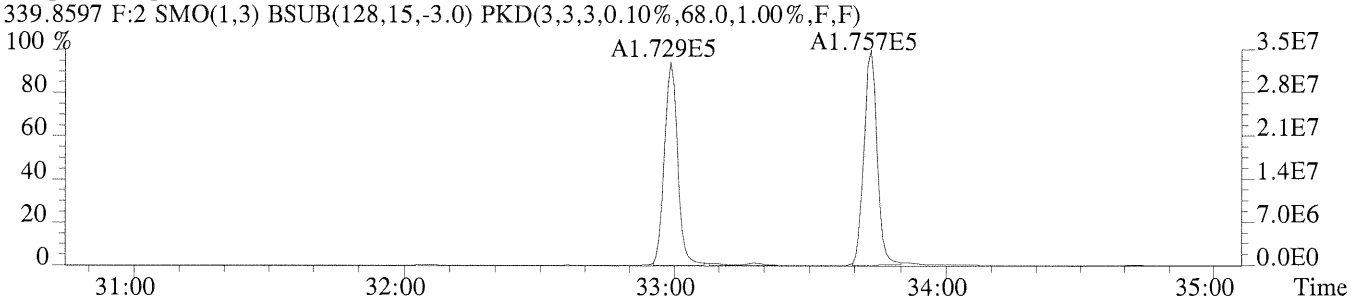


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

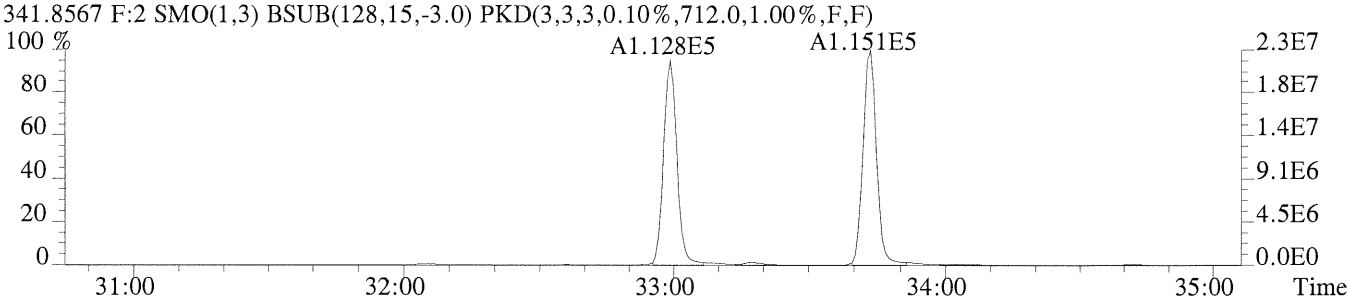


File:P200034 #1-396 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

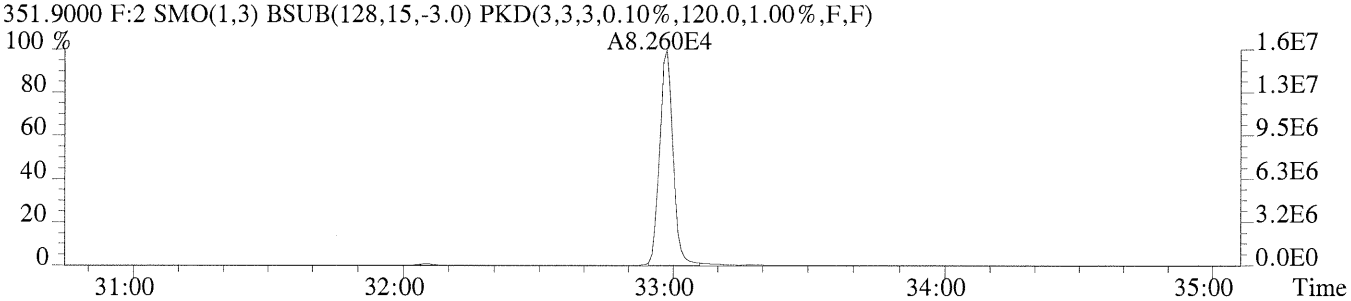
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,68.0,1.00%,F,F)



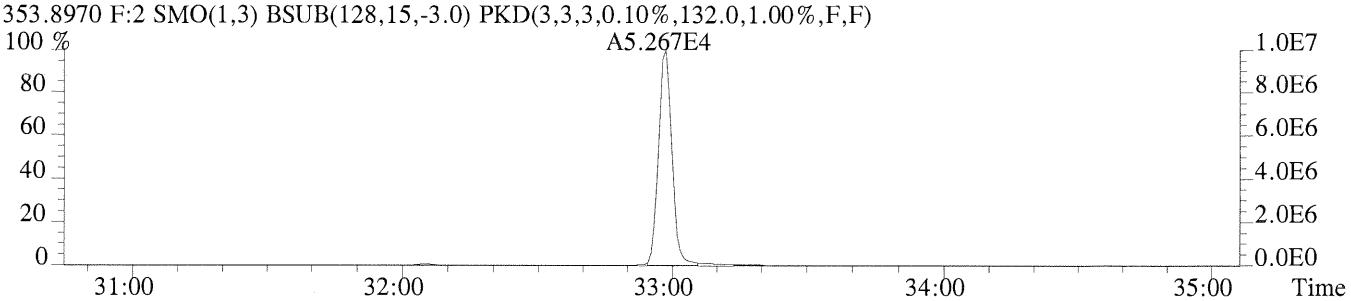
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,712.0,1.00%,F,F)



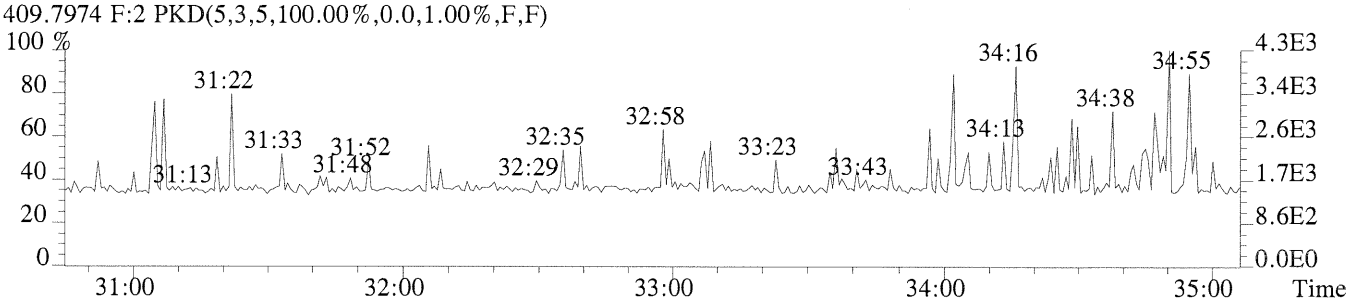
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,120.0,1.00%,F,F)



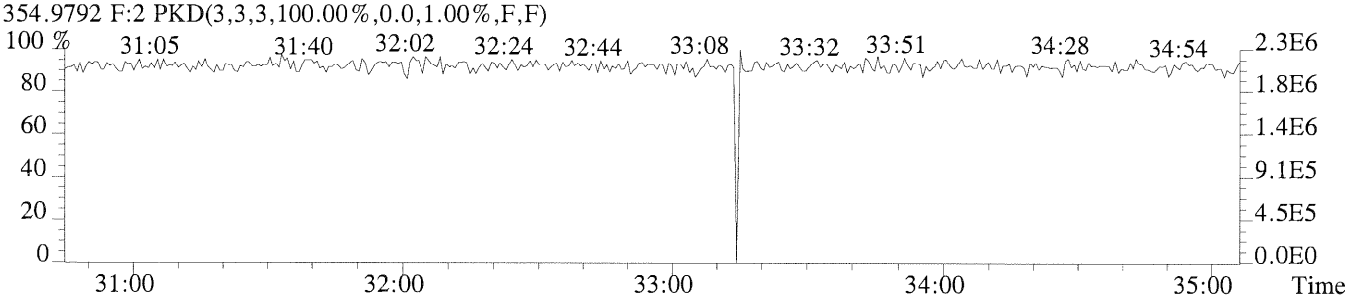
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,132.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

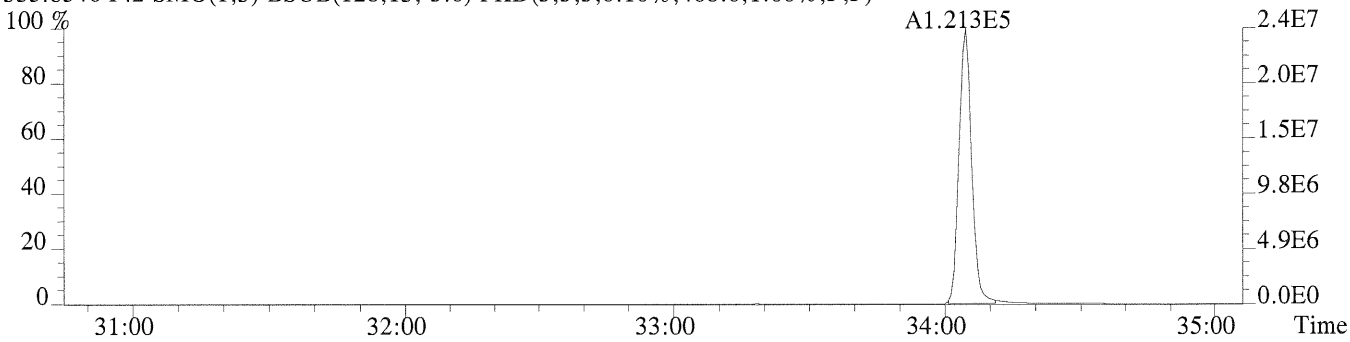


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

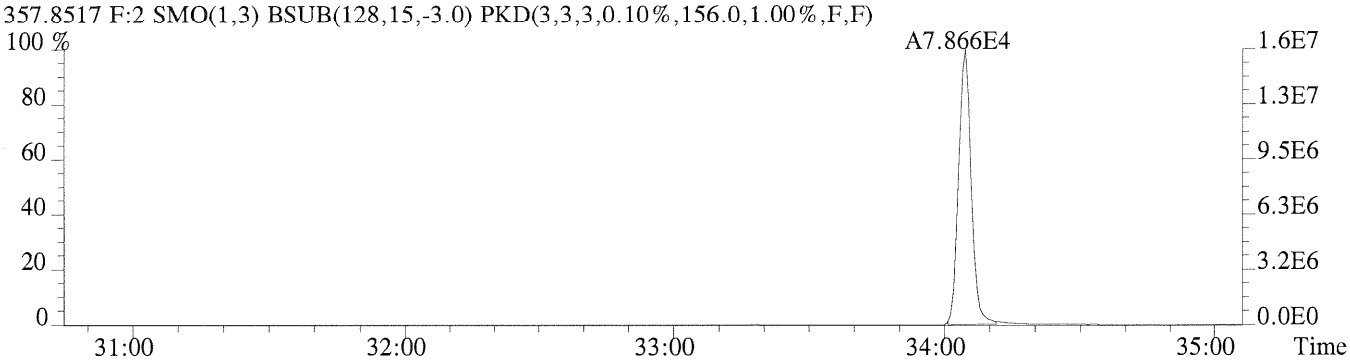


File:P200034 #1-396 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

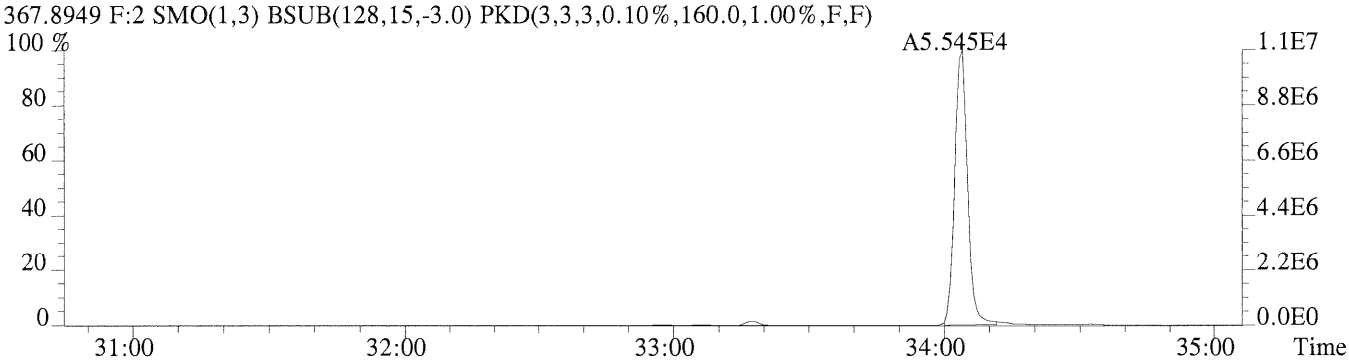
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,468.0,1.00%,F,F)



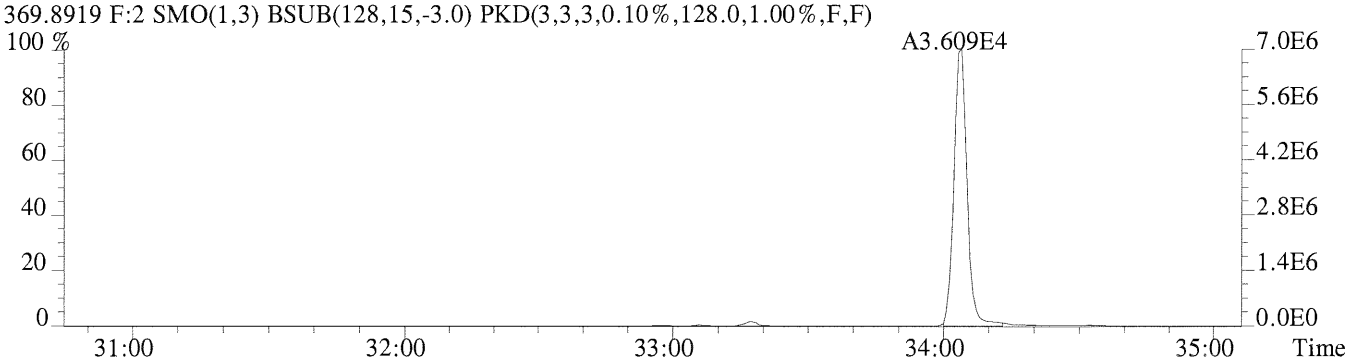
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,156.0,1.00%,F,F)



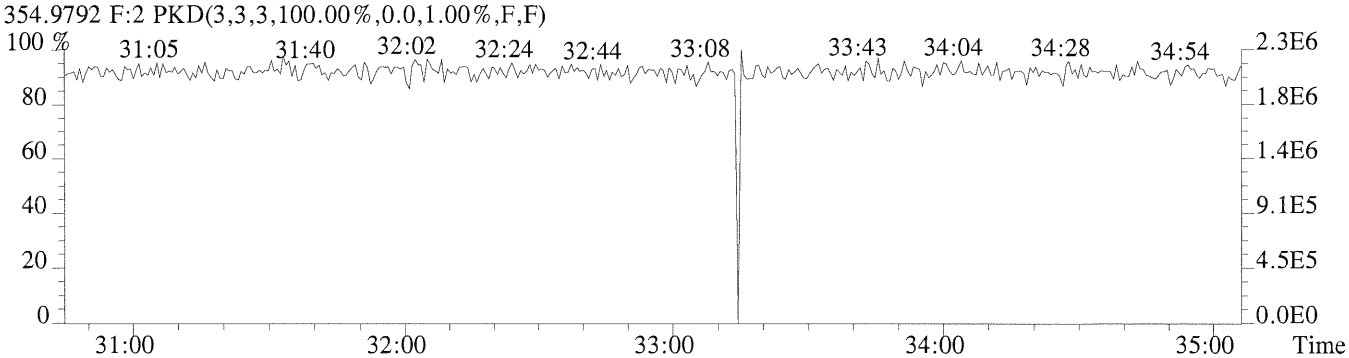
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,160.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,128.0,1.00%,F,F)

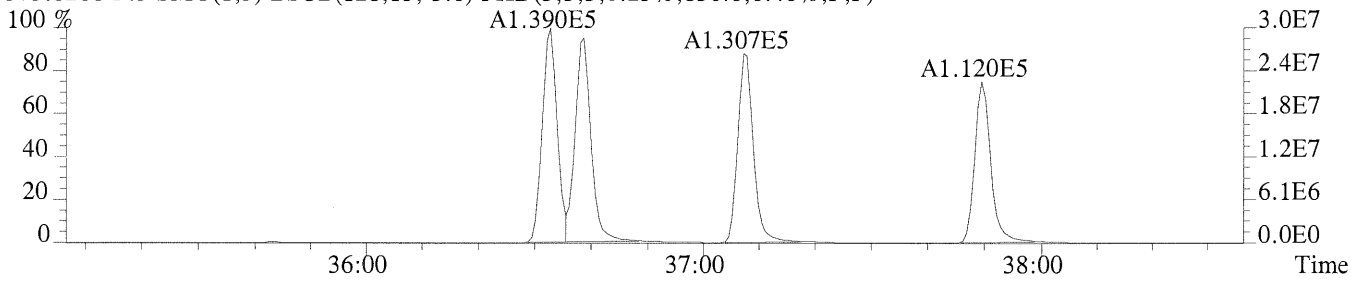


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

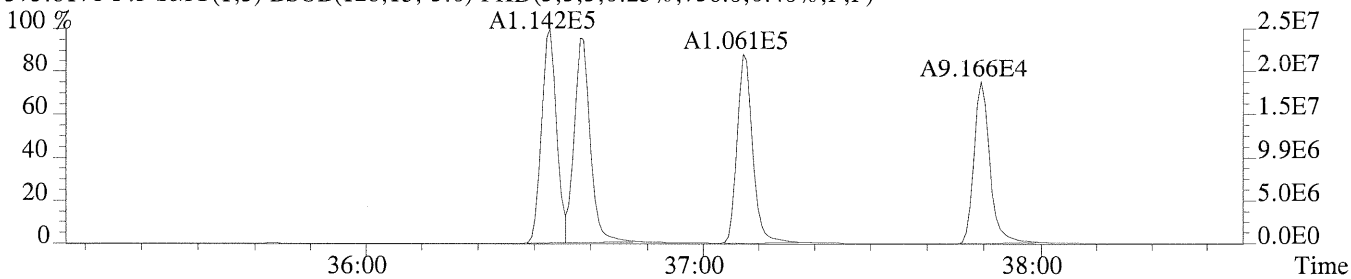


File:P200034 #1-318 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

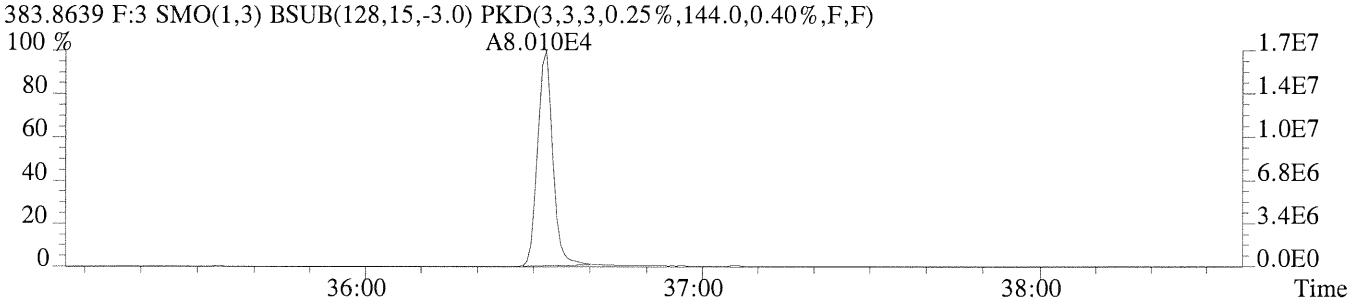
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,836.0,0.40%,F,F)



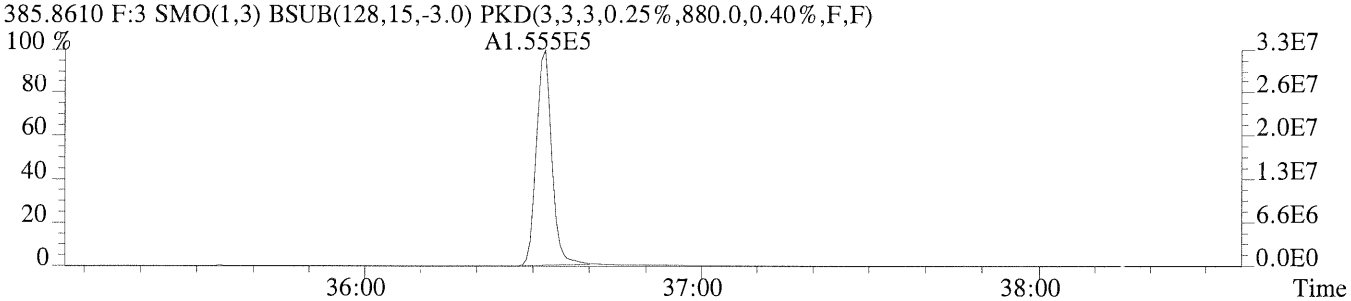
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,736.0,0.40%,F,F)



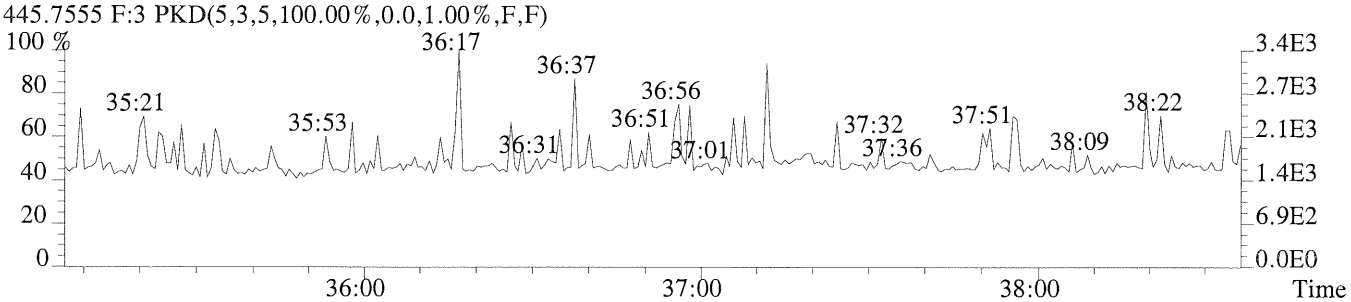
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,144.0,0.40%,F,F)



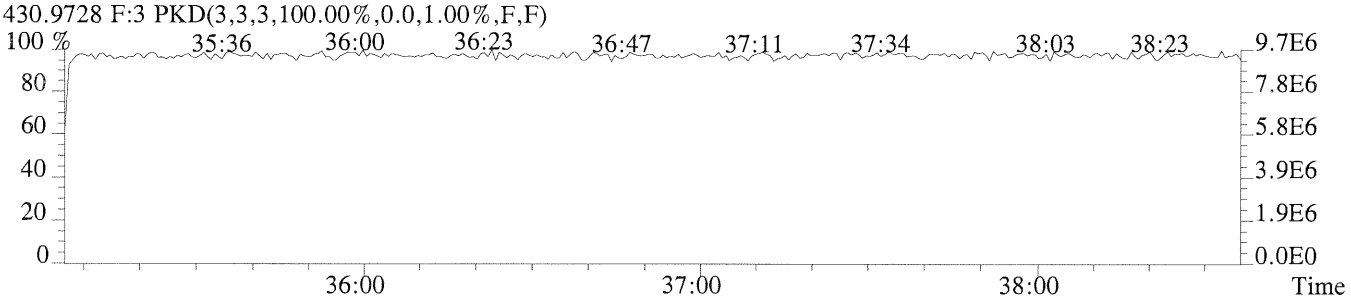
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,880.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

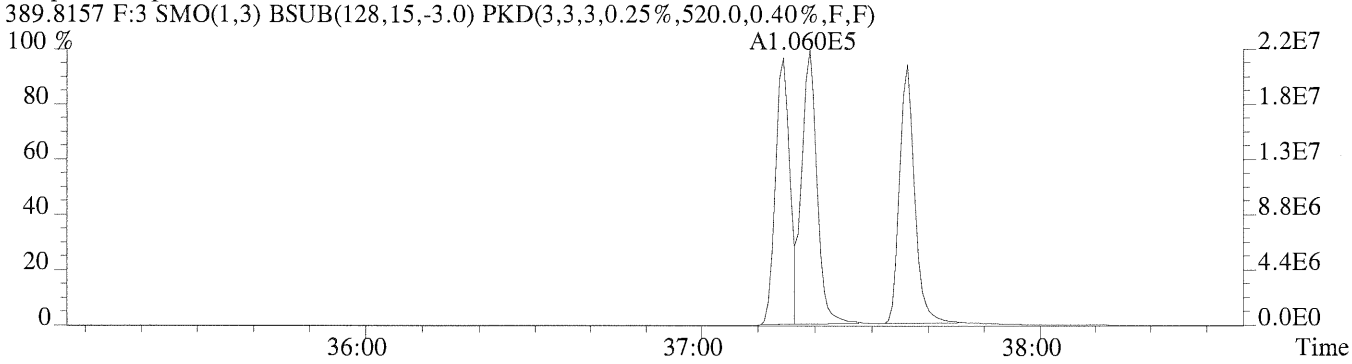


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

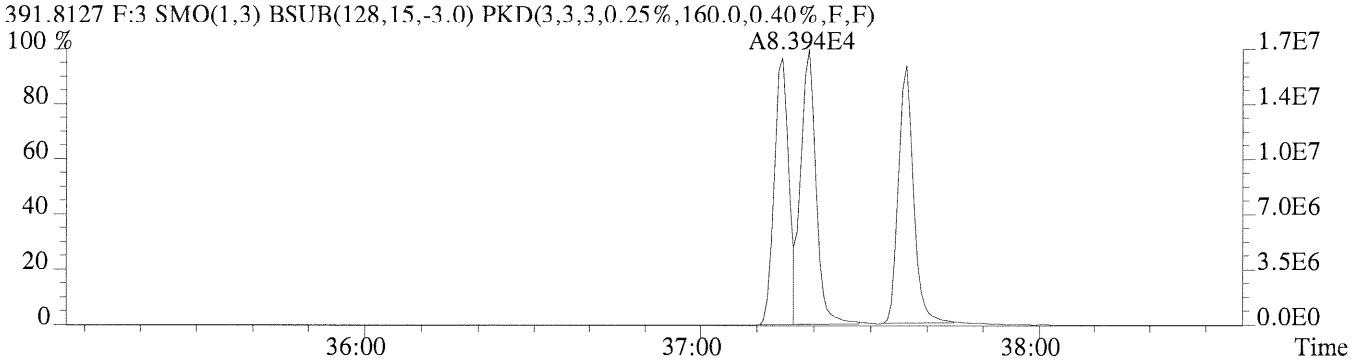


File:P200034 #1-318 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

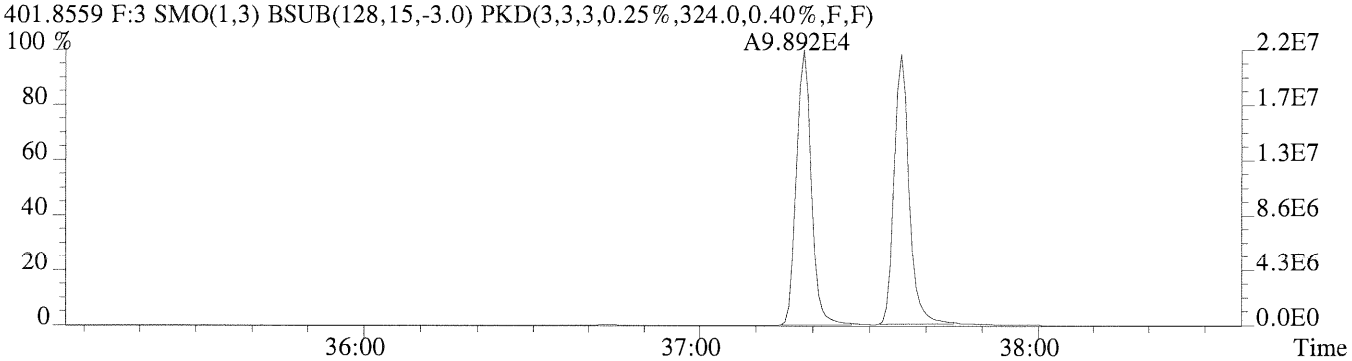
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,520.0,0.40%,F,F)



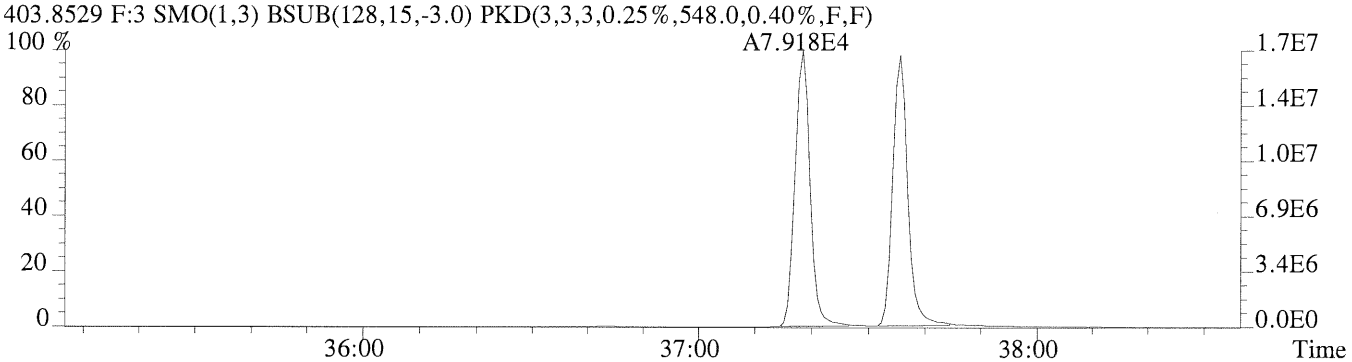
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,160.0,0.40%,F,F)



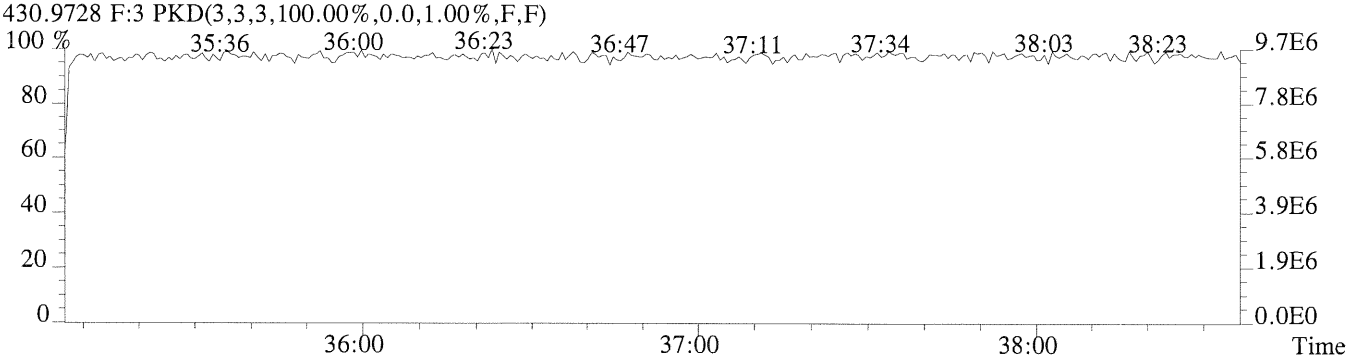
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,324.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,548.0,0.40%,F,F)

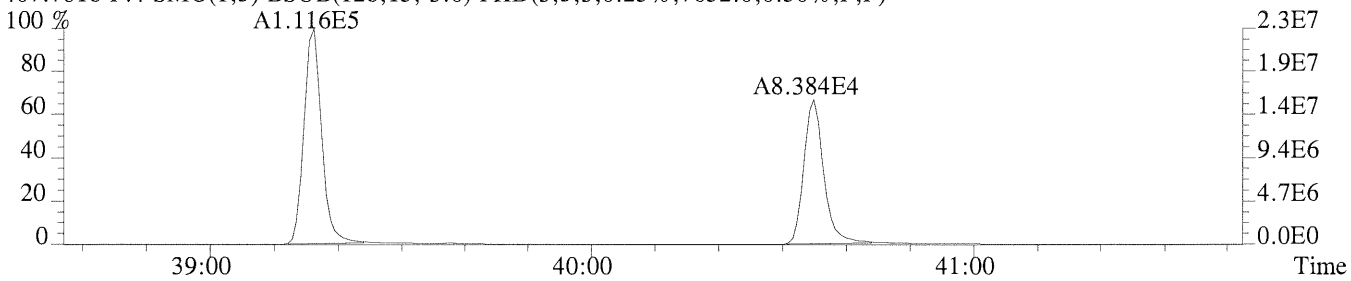


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

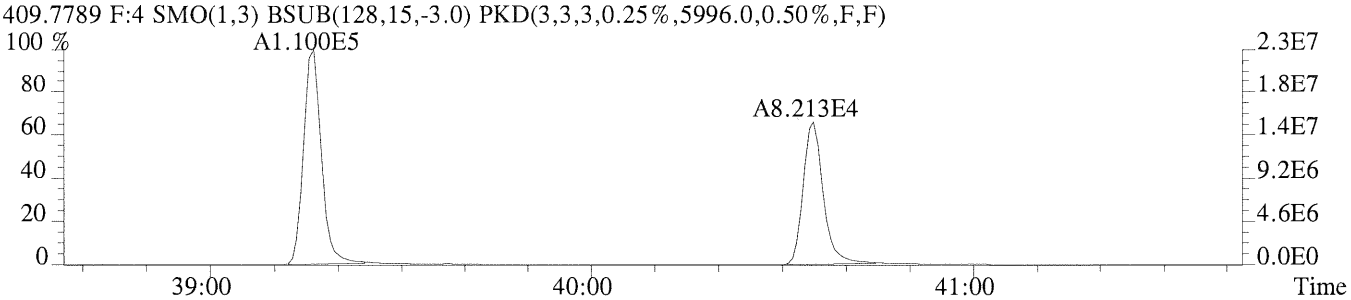


File:P200034 #1-281 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

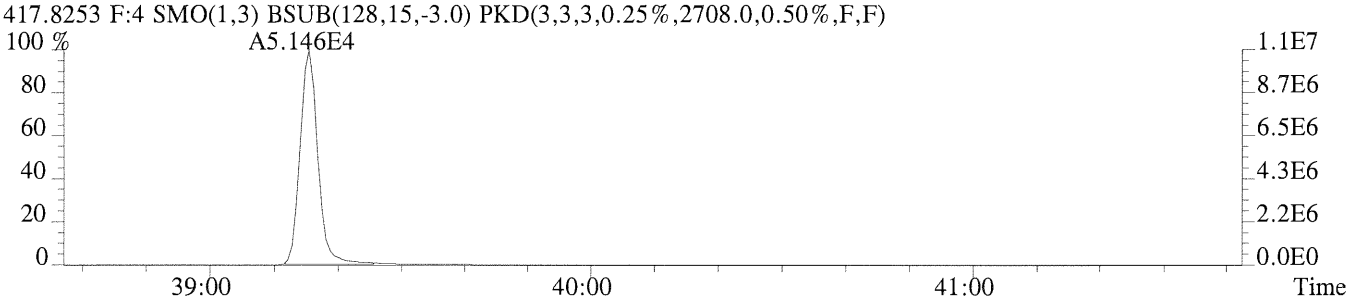
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,7652.0,0.50%,F,F)



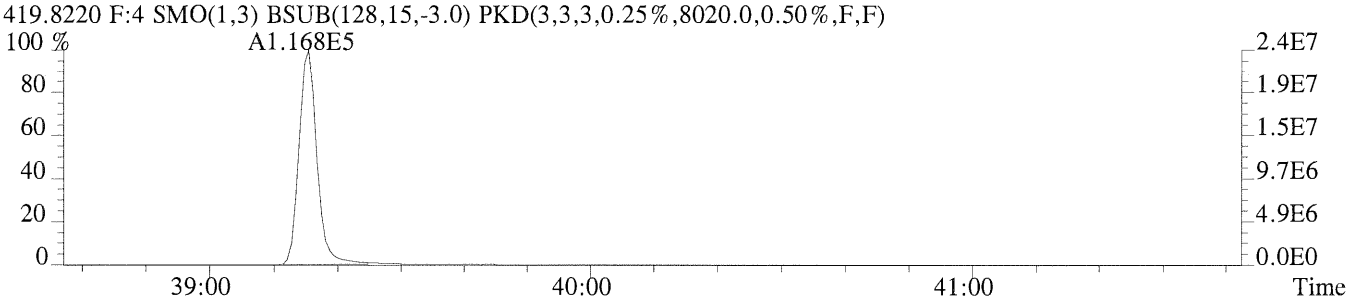
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5996.0,0.50%,F,F)



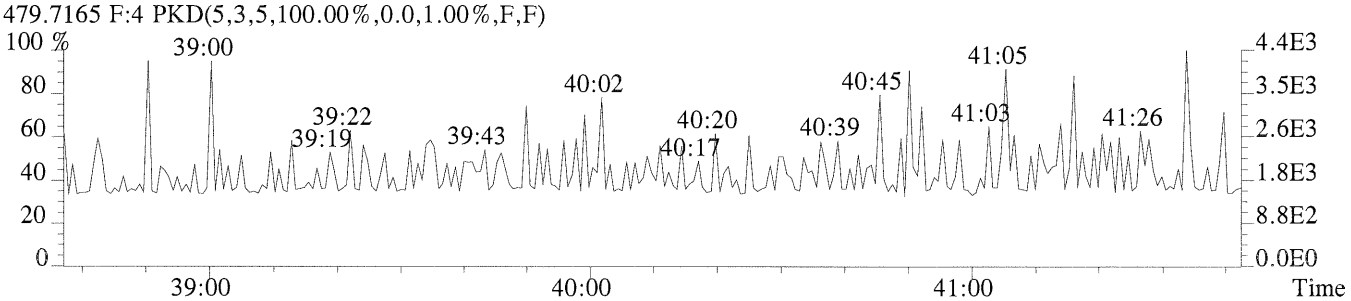
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2708.0,0.50%,F,F)



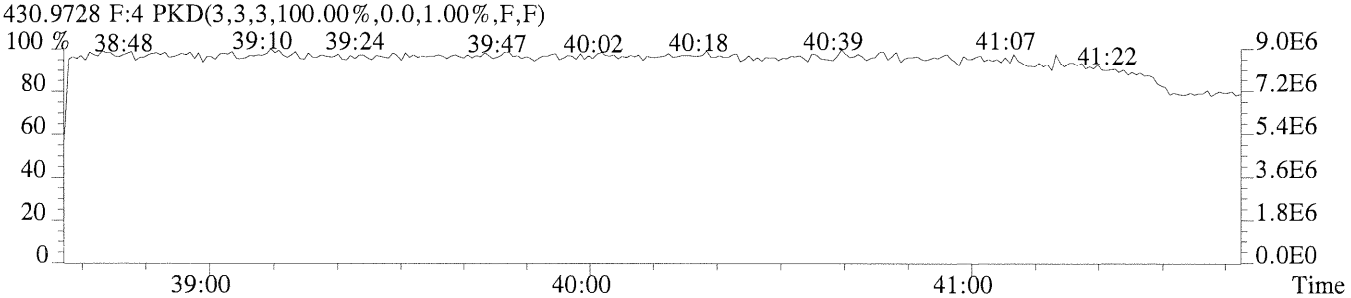
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,8020.0,0.50%,F,F)



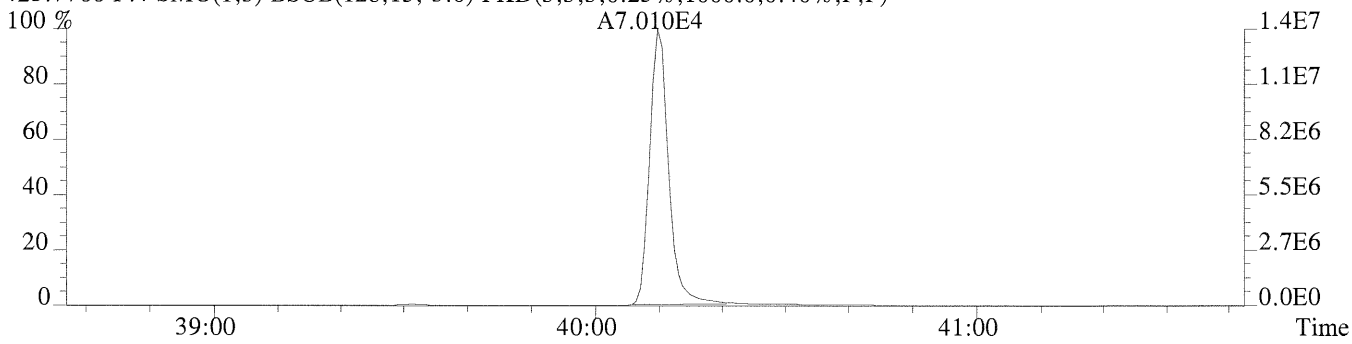
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



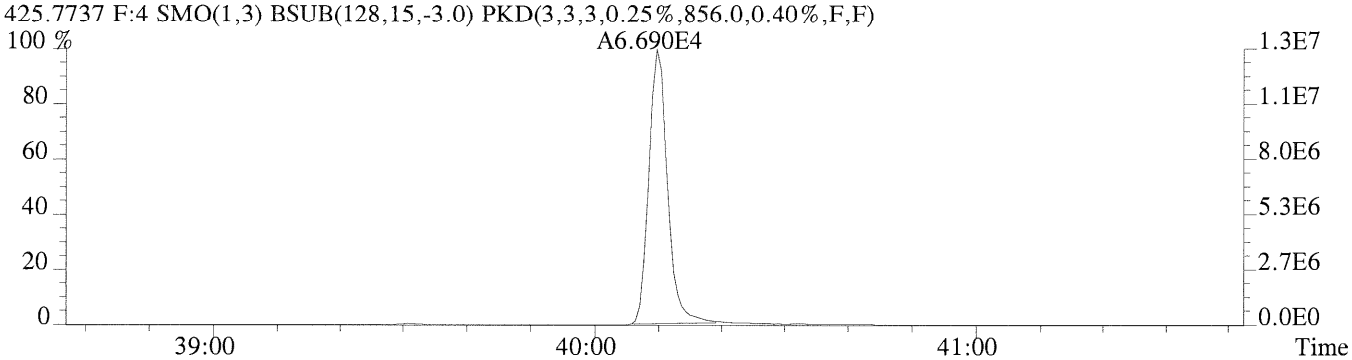
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



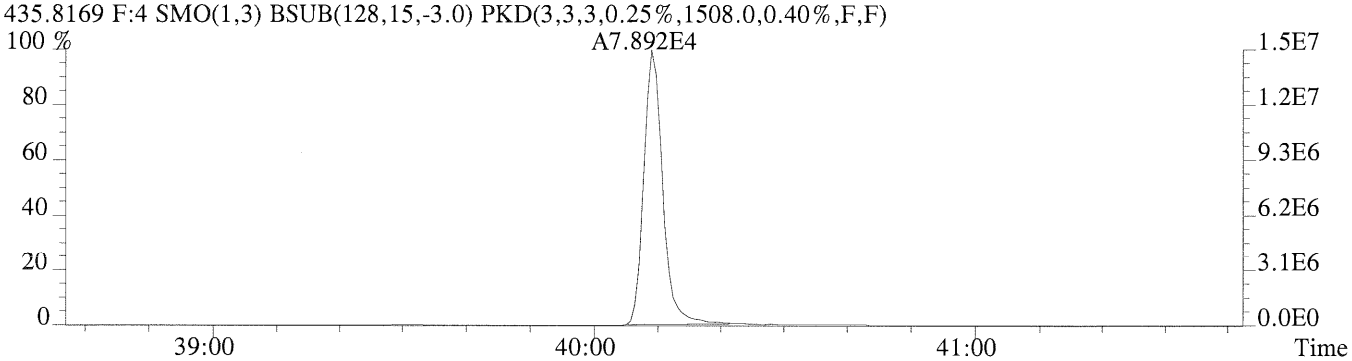
File:P200034 #1-281 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1000.0,0.40%,F,F)



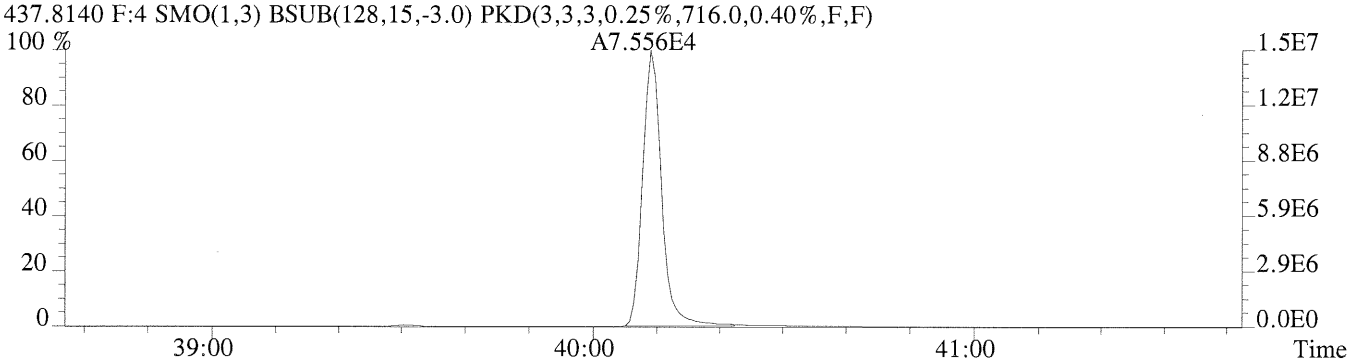
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,856.0,0.40%,F,F)



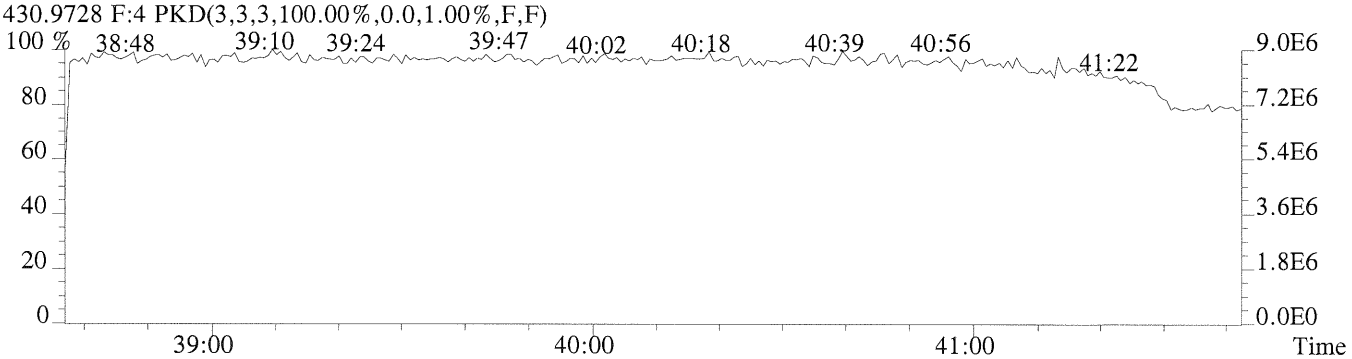
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1508.0,0.40%,F,F)



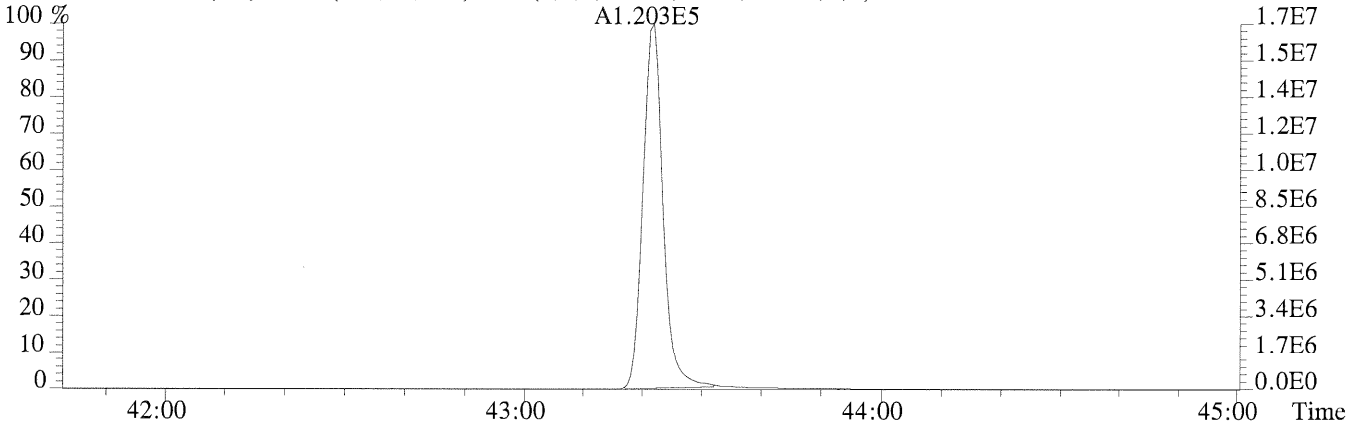
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,716.0,0.40%,F,F)



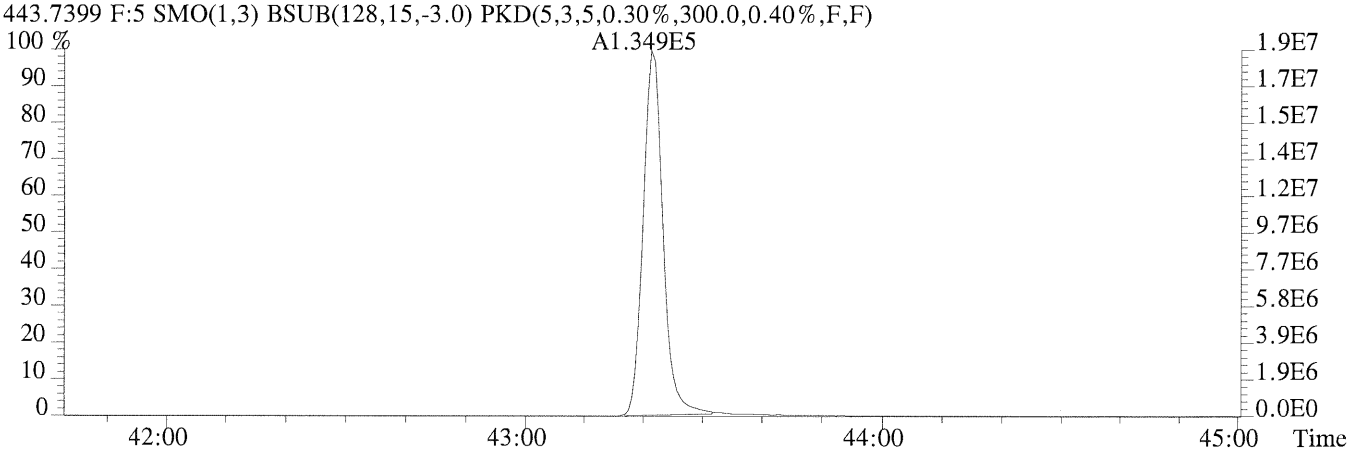
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



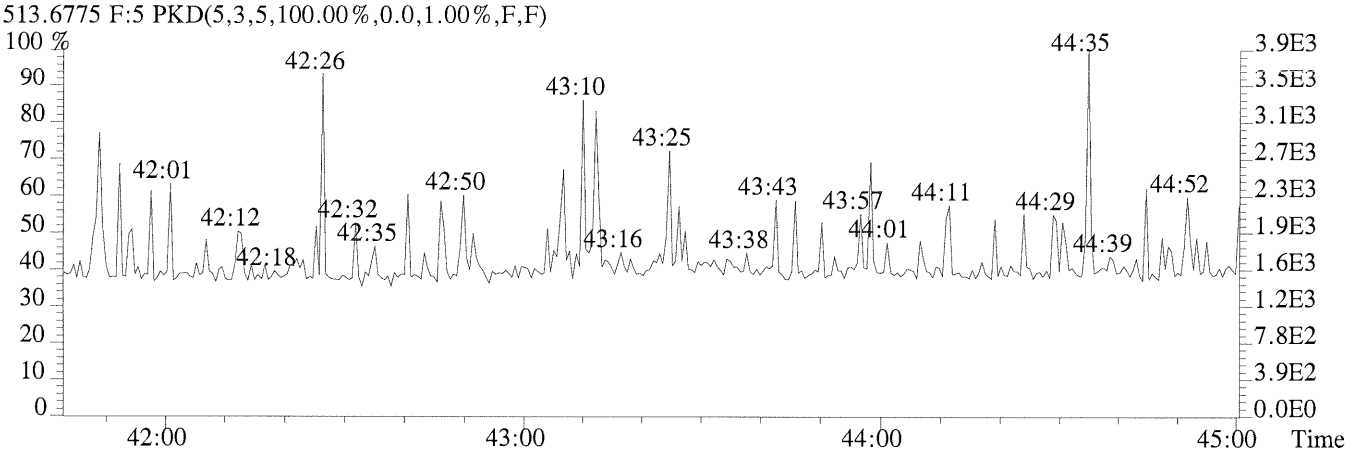
File:P200034 #1-364 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,472.0,0.40%,F,F)



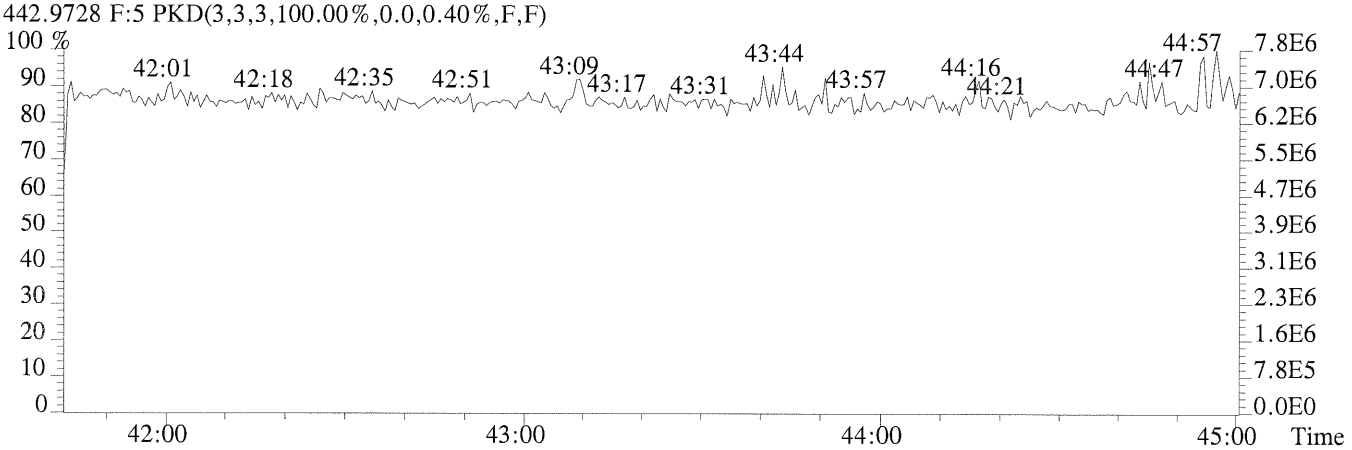
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,300.0,0.40%,F,F)



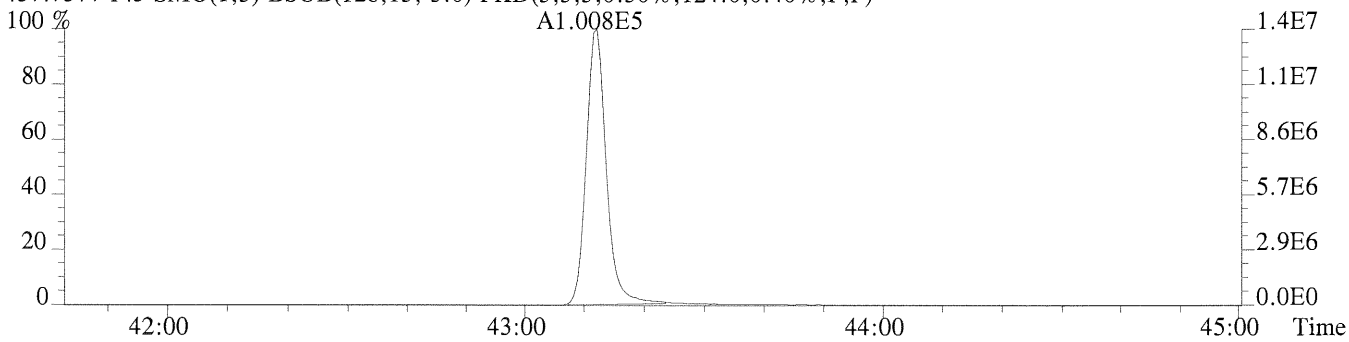
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



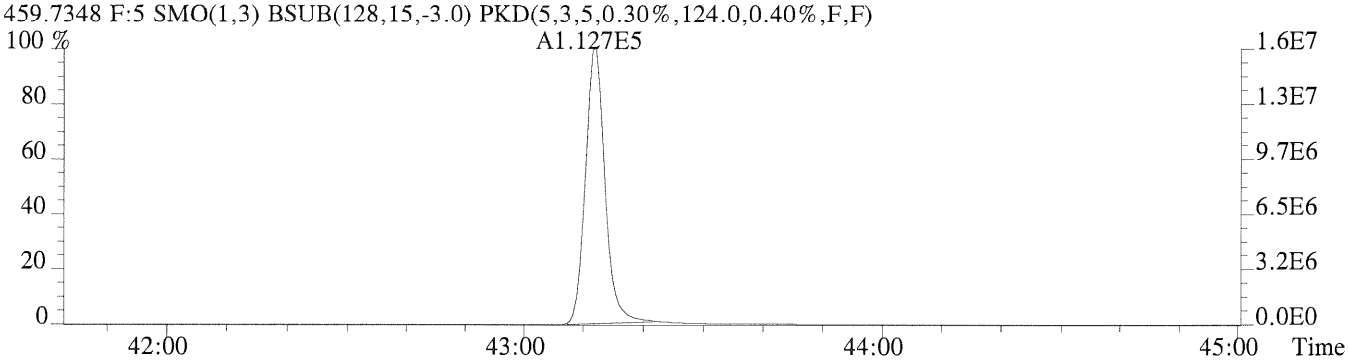
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



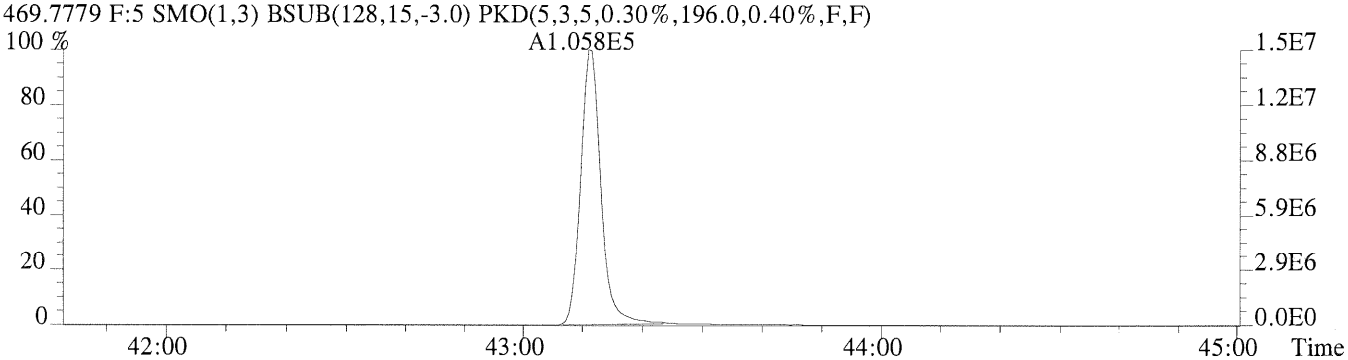
File:P200034 #1-364 Acq: 1-AUG-2008 18:16:07 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,124.0,0.40%,F,F)



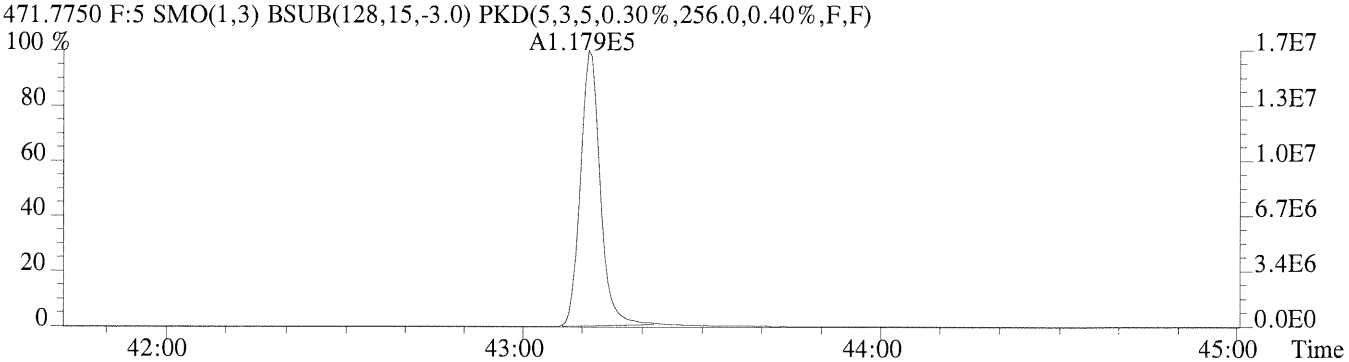
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,124.0,0.40%,F,F)



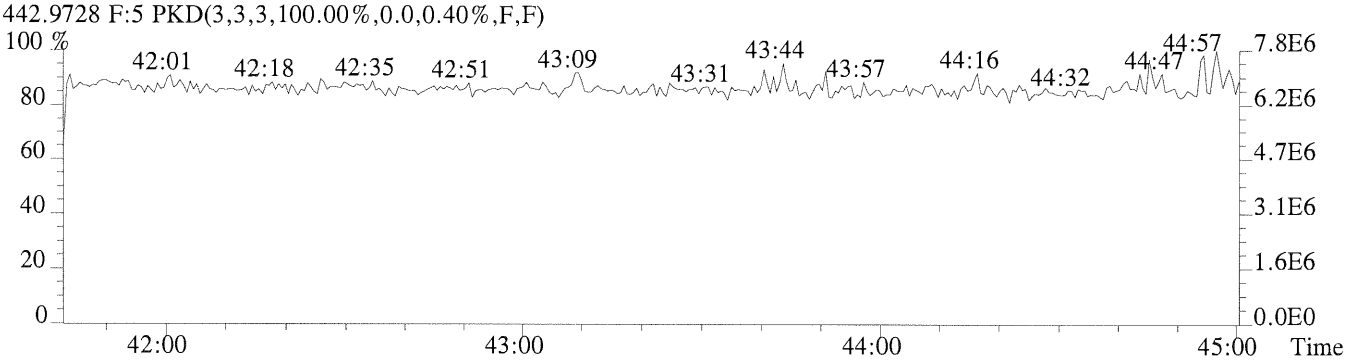
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,196.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,256.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC5

Run #5 Filename P200035 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 19:02:53
Processed: 7-AUG-08 06:33:20 Sample ID: ICAL HRCC5

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?	RRF
1	Unk	2,3,7,8-TCDF	28:37	2.767e+05	3.596e+05	0.77	yes	no	0.83
2	Unk	1,2,3,7,8-PeCDF	32:59	9.303e+05	6.026e+05	1.54	yes	no	0.84
3	Unk	2,3,4,7,8-PeCDF	33:43	9.497e+05	6.187e+05	1.53	yes	no	0.85
4	Unk	1,2,3,4,7,8-HxCDF	36:33	8.287e+05	6.786e+05	1.22	yes	no	1.01
5	Unk	1,2,3,6,7,8-HxCDF	36:39	8.534e+05	6.947e+05	1.23	yes	no	1.05
6	Unk	2,3,4,6,7,8-HxCDF	37:07	7.826e+05	6.386e+05	1.23	yes	no	0.94
7	Unk	1,2,3,7,8,9-HxCDF	37:50	6.739e+05	5.489e+05	1.23	yes	no	0.81
8	Unk	1,2,3,4,6,7,8-HpCDF	39:16	6.275e+05	6.156e+05	1.02	yes	no	1.32
9	Unk	1,2,3,4,7,8,9-HpCDF	40:35	4.716e+05	4.611e+05	1.02	yes	no	0.97
10	Unk	OCDF	43:22	9.250e+05	1.035e+06	0.89	yes	no	1.11
11	Unk	2,3,7,8-TCDD	29:27	2.395e+05	3.086e+05	0.78	yes	no	0.92
12	Unk	1,2,3,7,8-PeCDD	34:05	7.021e+05	4.516e+05	1.55	yes	no	0.87
13	Unk	1,2,3,4,7,8-HxCDD	37:14	5.938e+05	4.712e+05	1.26	yes	no	0.93
14	Unk	1,2,3,6,7,8-HxCDD	37:19	6.625e+05	5.266e+05	1.26	yes	no	1.05
15	Unk	1,2,3,7,8,9-HxCDD	37:36	6.124e+05	4.942e+05	1.24	yes	no	0.97
16	Unk	1,2,3,4,6,7,8-HpCDD	40:10	4.163e+05	4.015e+05	1.04	yes	no	0.88
17	Unk	OCDD	43:12	8.537e+05	9.637e+05	0.89	yes	no	0.96
18	IS	13C-2,3,7,8-TCDF	28:35	8.240e+04	1.051e+05	0.78	yes	no	1.42
19	IS	13C-1,2,3,7,8-PeCDF	32:58	1.099e+05	7.098e+04	1.55	yes	no	1.26
20	IS	13C-1,2,3,4,7,8-HxCDF	36:32	1.185e+05	2.264e+05	0.52	yes	no	1.28
21	IS	13C-1,2,3,4,6,7,8-HpCDF	39:16	7.242e+04	1.619e+05	0.45	yes	no	0.90
22	IS	13C-2,3,7,8-TCDD	29:26	6.476e+04	8.341e+04	0.78	yes	no	1.05
23	IS	13C-1,2,3,7,8-PeCDD	34:03	7.868e+04	5.017e+04	1.57	yes	no	0.87
24	IS	13C-1,2,3,6,7,8-HxCDD	37:18	1.542e+05	1.224e+05	1.26	yes	no	1.00
25	IS	13C-1,2,3,4,6,7,8-HpCDD	40:09	1.161e+05	1.115e+05	1.04	yes	no	0.83
26	IS	13C-OCDD	43:12	2.191e+05	2.456e+05	0.89	yes	no	0.73
27	RS/RT	13C-1,2,3,4-TCDD	29:14	5.999e+04	7.627e+04	0.79	yes	no	-
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	37:36	1.560e+05	1.253e+05	1.25	yes	no	-
29	C/Up	37Cl-2,3,7,8-TCDD	29:27	5.569e+05					0.98

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC5

Run #5 Filename P200035 #1 Samp: 1 Inj: 1 Acquired: 1-AUG-08 19:02:53

Processed: 7-AUG-08 06:33:20 LAB. ID: ICAL HRCC5

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	4.60e+07	3.00e+02	1.5e+05	5.94e+07	4.96e+02	1.2e+05
2	1,2,3,7,8-PeCDF	1.81e+08	2.52e+02	7.2e+05	1.16e+08	7.64e+02	1.5e+05
3	2,3,4,7,8-PeCDF	1.88e+08	2.52e+02	7.5e+05	1.23e+08	7.64e+02	1.6e+05
4	1,2,3,4,7,8-HxCDF	1.85e+08	2.30e+03	8.0e+04	1.50e+08	1.08e+03	1.4e+05
5	1,2,3,6,7,8-HxCDF	1.78e+08	2.30e+03	7.7e+04	1.43e+08	1.08e+03	1.3e+05
6	2,3,4,6,7,8-HxCDF	1.65e+08	2.30e+03	7.2e+04	1.36e+08	1.08e+03	1.3e+05
7	1,2,3,7,8,9-HxCDF	1.44e+08	2.30e+03	6.2e+04	1.17e+08	1.08e+03	1.1e+05
8	1,2,3,4,6,7,8-HpCDF	1.37e+08	3.50e+04	3.9e+03	1.34e+08	1.74e+04	7.7e+03
9	1,2,3,4,7,8,9-HpCDF	9.43e+07	3.50e+04	2.7e+03	9.15e+07	1.74e+04	5.3e+03
10	OCDF	1.39e+08	1.36e+02	1.0e+06	1.54e+08	5.12e+02	3.0e+05
11	2,3,7,8-TCDD	4.32e+07	3.08e+02	1.4e+05	5.58e+07	2.36e+02	2.4e+05
12	1,2,3,7,8-PeCDD	1.40e+08	5.52e+02	2.5e+05	8.93e+07	1.88e+02	4.8e+05
13	1,2,3,4,7,8-HxCDD	1.39e+08	8.12e+02	1.7e+05	1.10e+08	5.16e+02	2.1e+05
14	1,2,3,6,7,8-HxCDD	1.41e+08	8.12e+02	1.7e+05	1.13e+08	5.16e+02	2.2e+05
15	1,2,3,7,8,9-HxCDD	1.33e+08	8.12e+02	1.6e+05	1.08e+08	5.16e+02	2.1e+05
16	1,2,3,4,6,7,8-HpCDD	8.73e+07	1.59e+03	5.5e+04	8.46e+07	1.03e+03	8.2e+04
17	OCDD	1.33e+08	1.36e+02	9.8e+05	1.49e+08	1.04e+02	1.4e+06
18	13C-2,3,7,8-TCDF	1.37e+07	9.56e+02	1.4e+04	1.76e+07	5.84e+02	3.0e+04
19	13C-1,2,3,7,8-PeCDF	2.12e+07	3.52e+02	6.0e+04	1.38e+07	4.60e+02	3.0e+04
20	13C-1,2,3,4,7,8-HxCDF	2.55e+07	4.96e+02	5.1e+04	4.84e+07	9.28e+02	5.2e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.57e+07	3.83e+03	4.1e+03	3.54e+07	5.94e+03	6.0e+03
22	13C-2,3,7,8-TCDD	1.13e+07	1.57e+03	7.2e+03	1.47e+07	7.80e+02	1.9e+04
23	13C-1,2,3,7,8-PeCDD	1.58e+07	3.56e+02	4.4e+04	1.02e+07	1.28e+02	7.9e+04
24	13C-1,2,3,6,7,8-HxCDD	3.45e+07	2.84e+02	1.2e+05	2.75e+07	8.88e+02	3.1e+04
25	13C-1,2,3,4,6,7,8-HpCDD	2.44e+07	1.56e+03	1.6e+04	2.34e+07	2.64e+02	8.9e+04
26	13C-OCDD	3.41e+07	1.16e+02	2.9e+05	3.78e+07	1.08e+02	3.5e+05
27	13C-1,2,3,4-TCDD	1.07e+07	1.57e+03	6.8e+03	1.36e+07	7.80e+02	1.7e+04
28	13C-1,2,3,7,8,9-HxCDD	3.39e+07	2.84e+02	1.2e+05	2.72e+07	8.88e+02	3.1e+04
29	37Cl-2,3,7,8-TCDD	1.01e+08	2.60e+02	3.9e+05			

Columbia Analytical Services, Inc.
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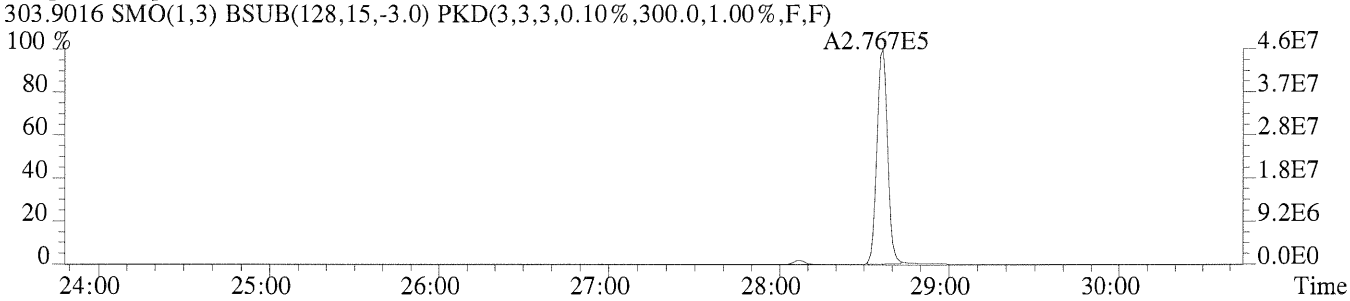
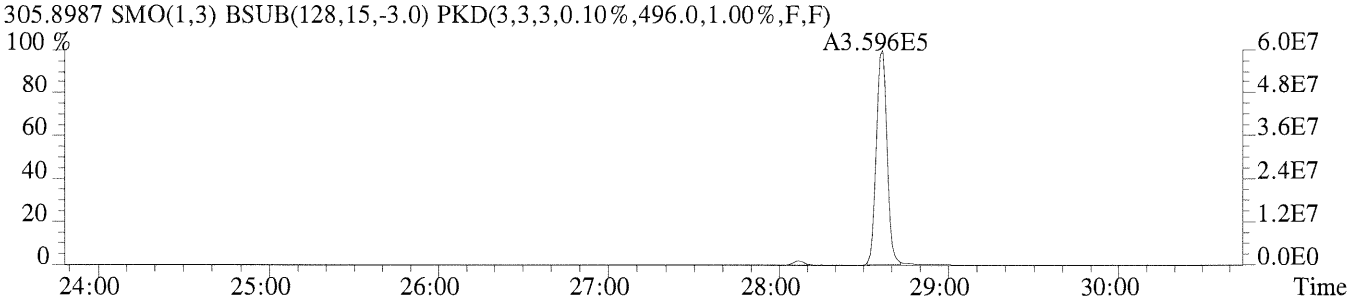
File:P200035 #1-578 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

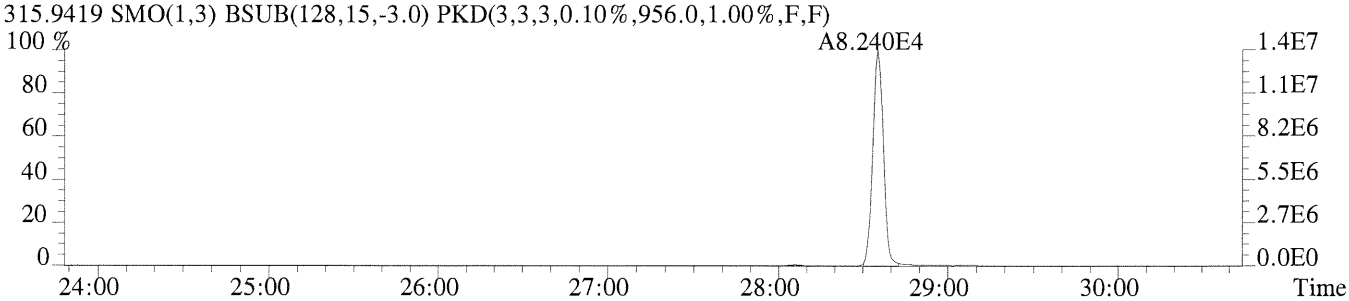
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,300.0,1.00%,F,F)



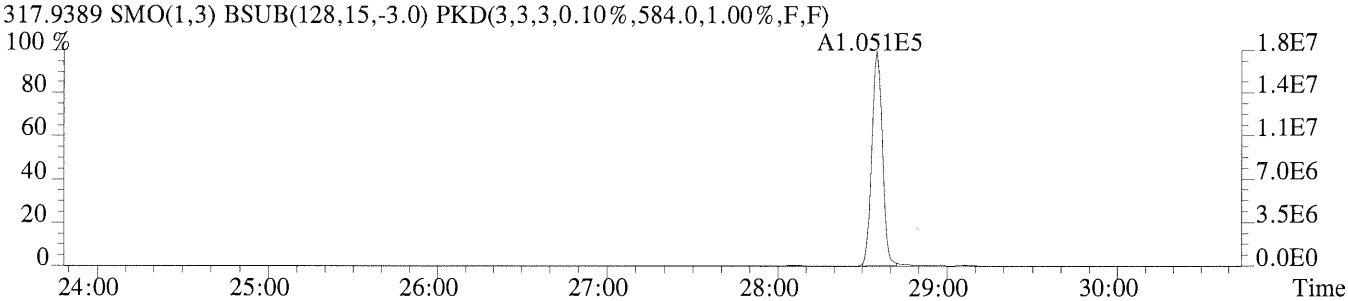
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,496.0,1.00%,F,F)



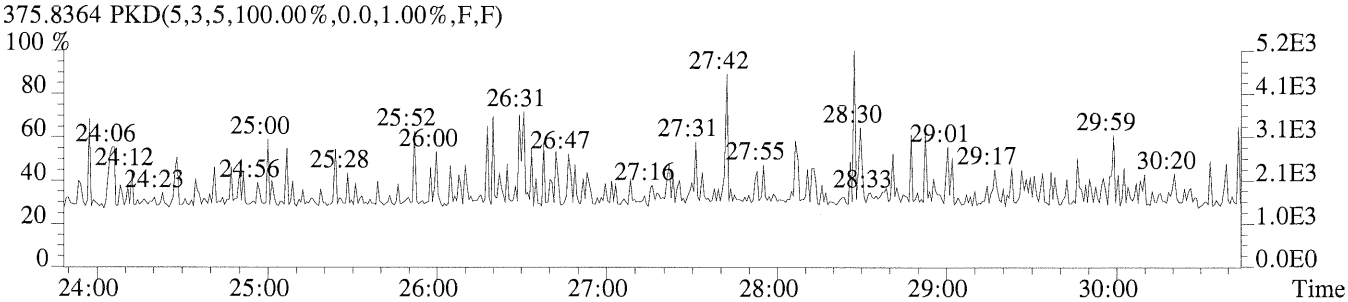
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,956.0,1.00%,F,F)



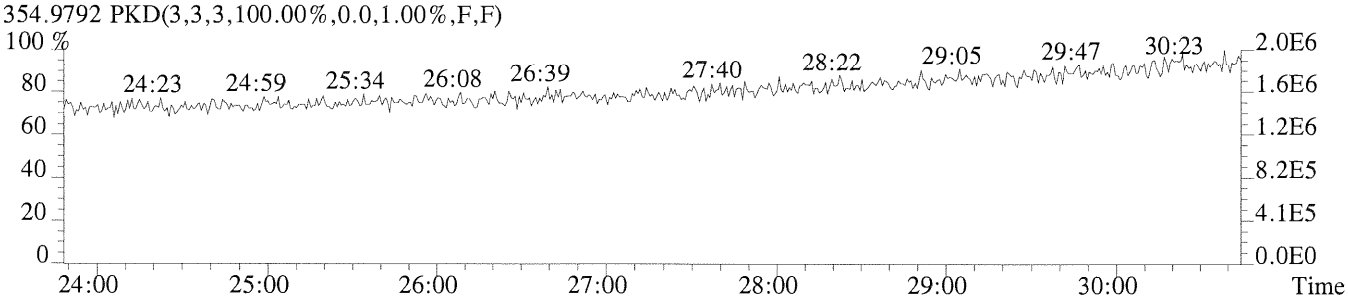
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,584.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

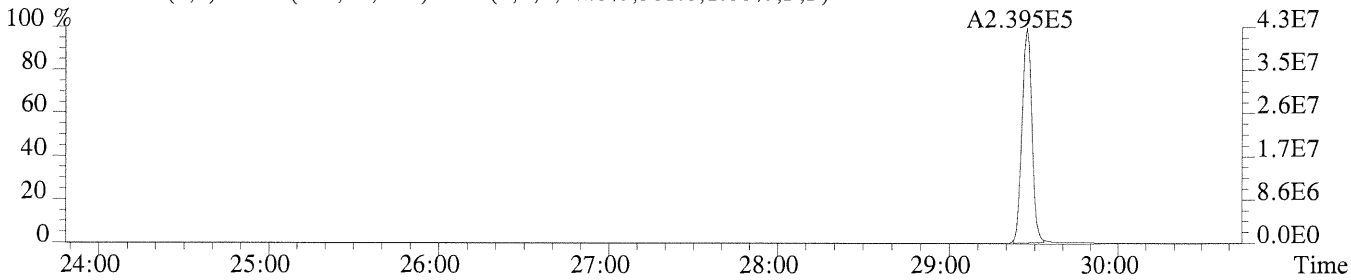


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

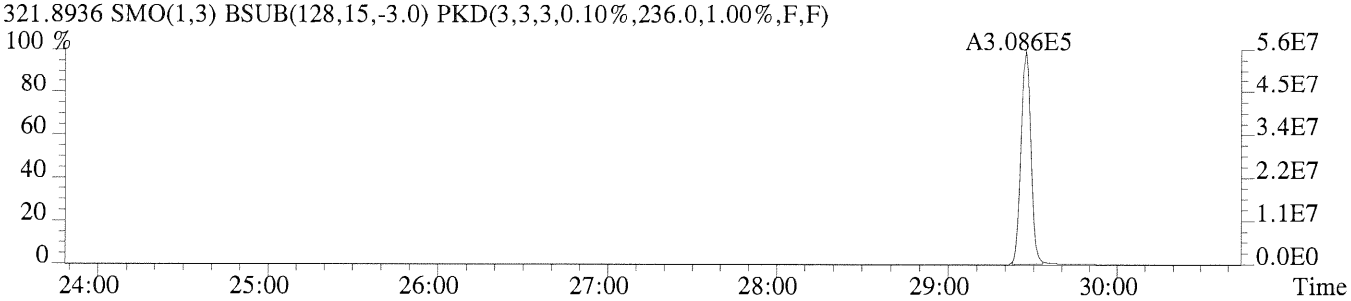


File:P200035 #1-578 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

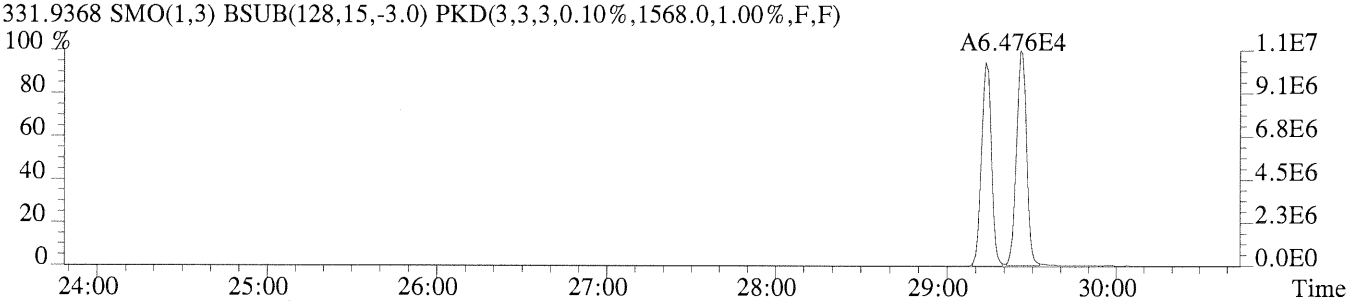
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,308.0,1.00%,F,F)



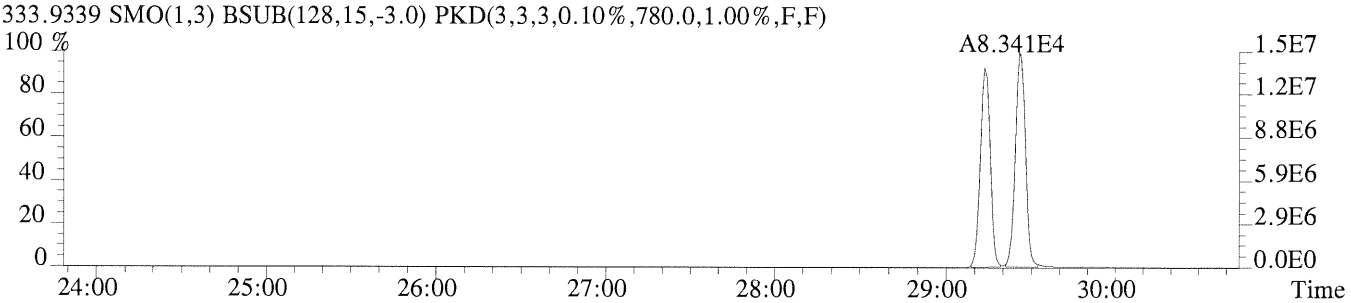
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,236.0,1.00%,F,F)



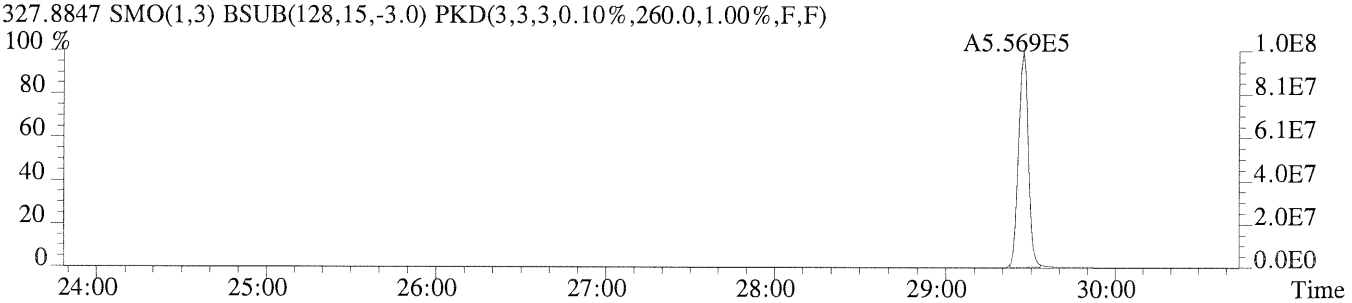
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1568.0,1.00%,F,F)



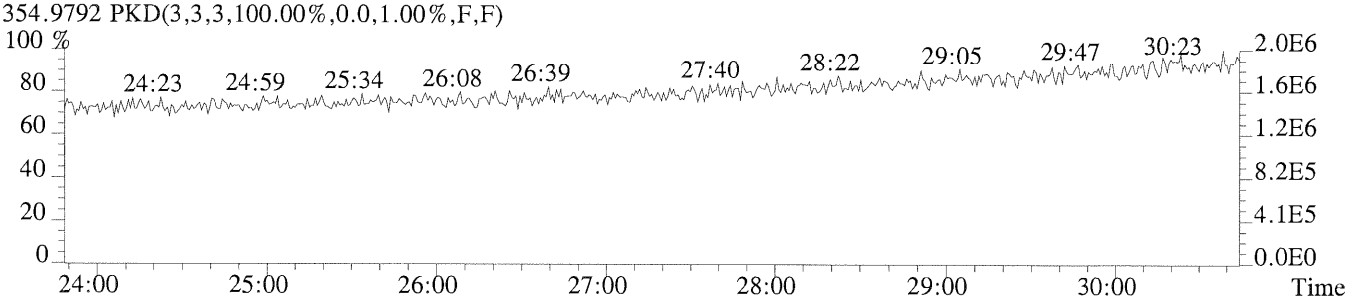
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,780.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,260.0,1.00%,F,F)

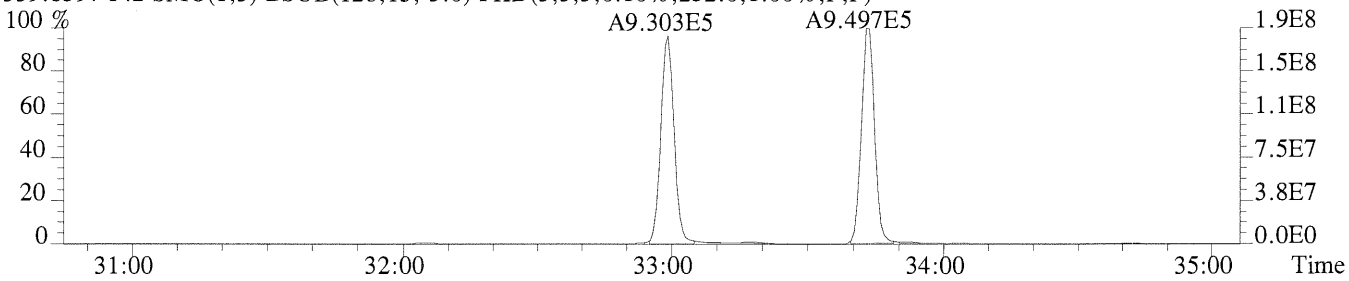


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

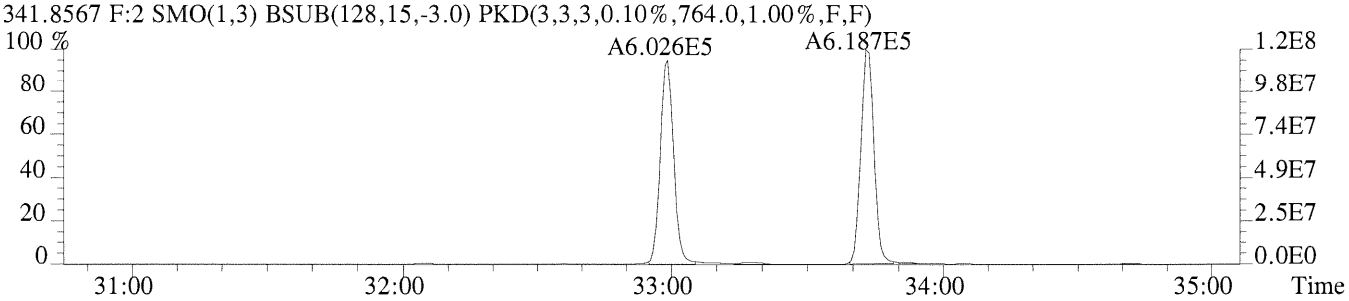


File:P200035 #1-396 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

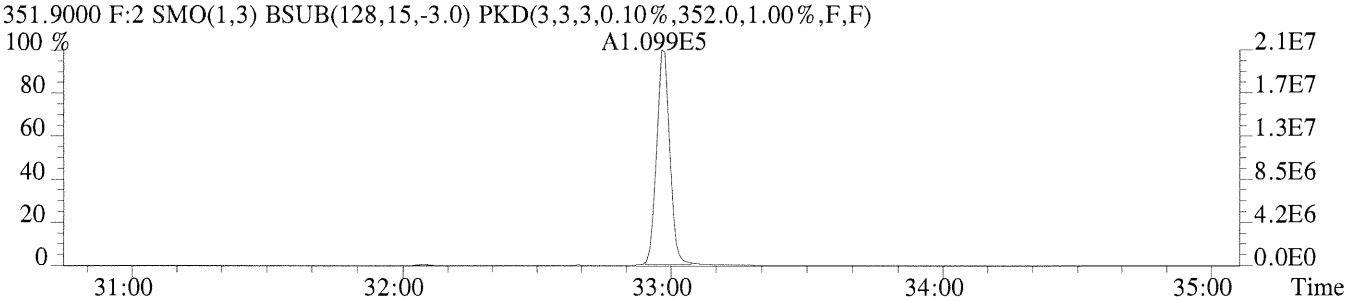
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,252.0,1.00%,F,F)



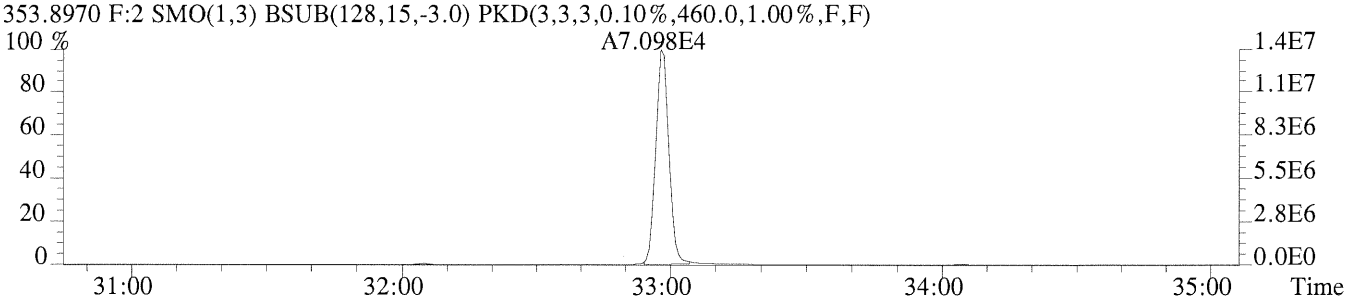
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,764.0,1.00%,F,F)



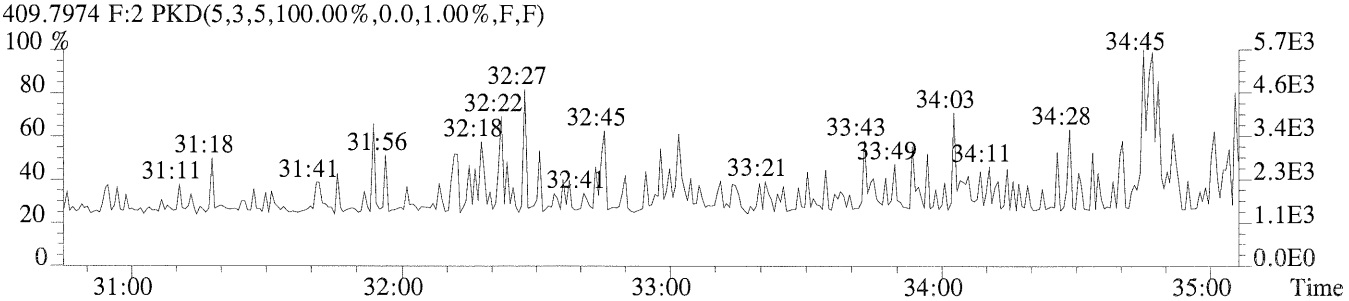
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,352.0,1.00%,F,F)



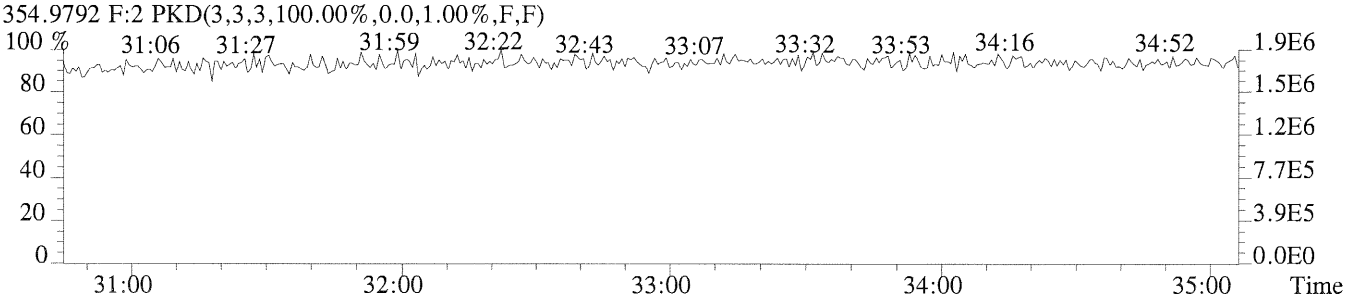
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,460.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

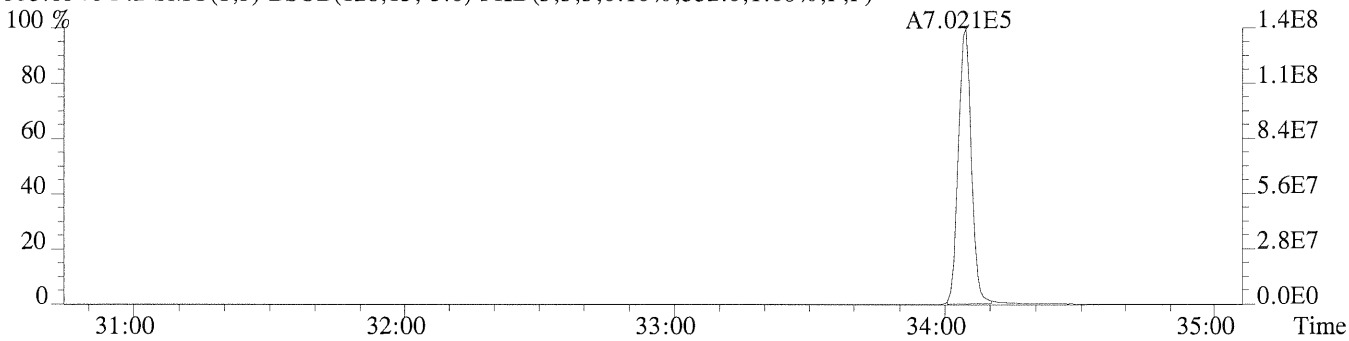


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

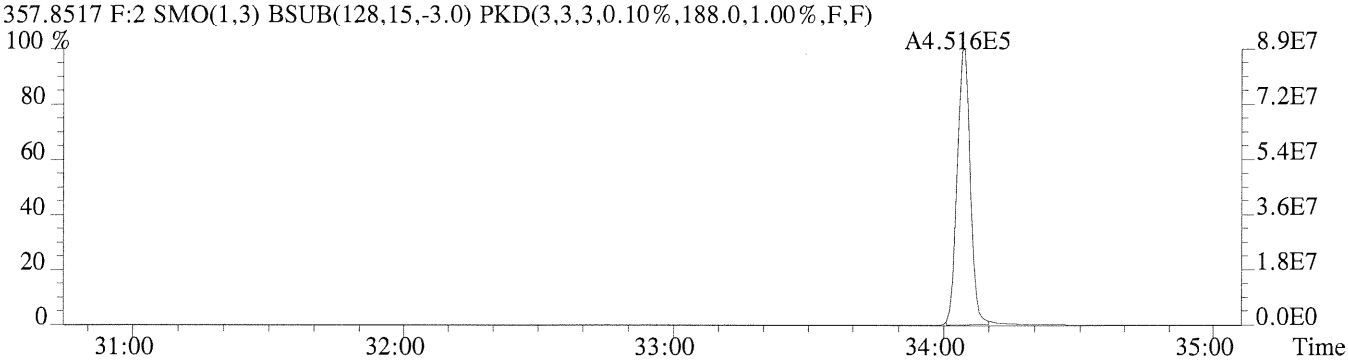


File:P200035 #1-396 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

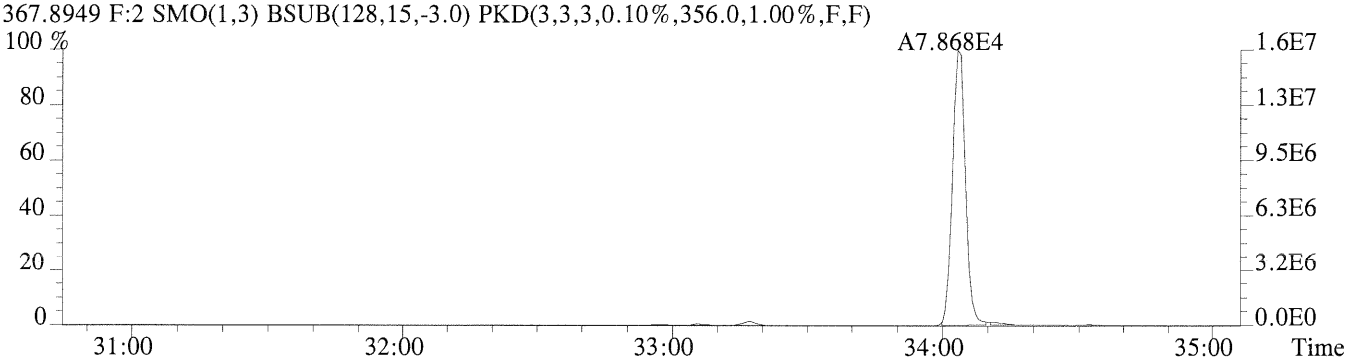
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,552.0,1.00%,F,F)



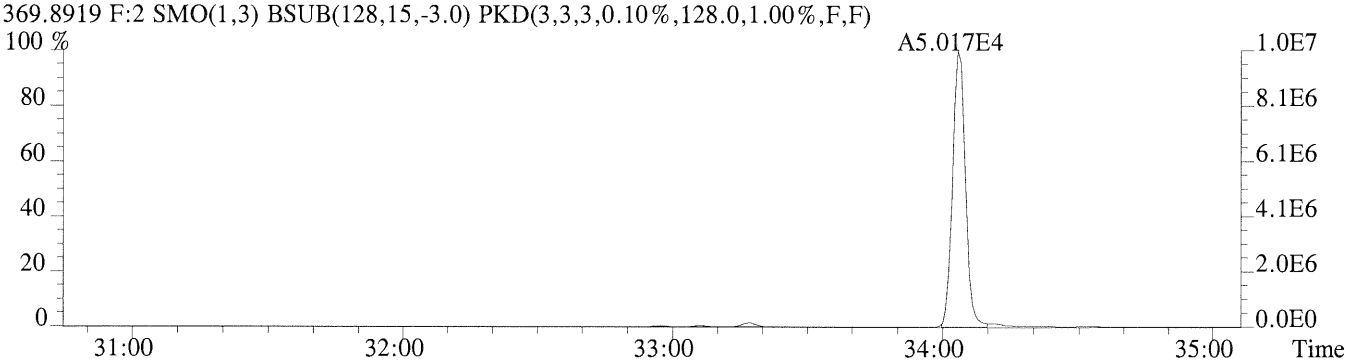
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,188.0,1.00%,F,F)



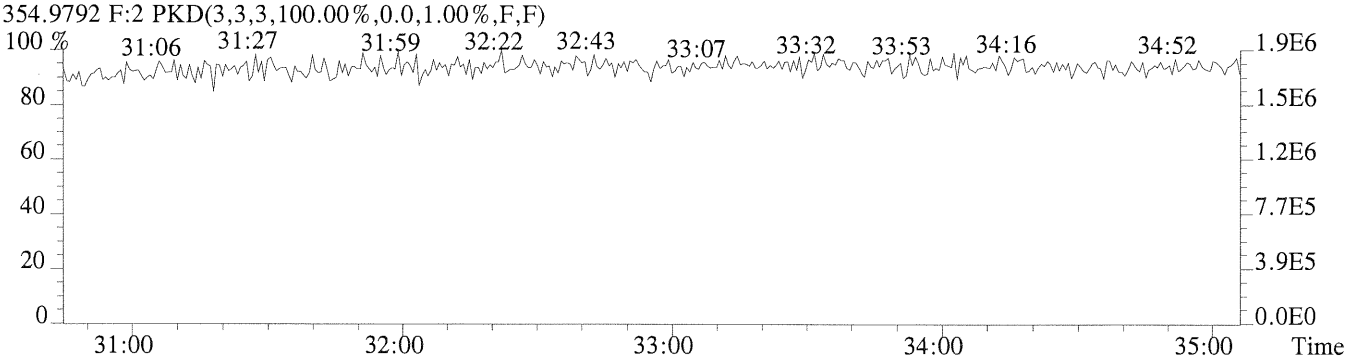
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,356.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,128.0,1.00%,F,F)

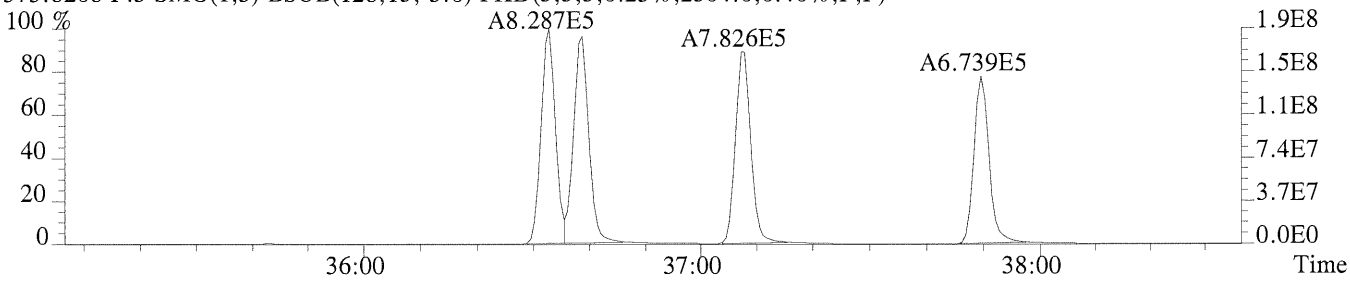


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

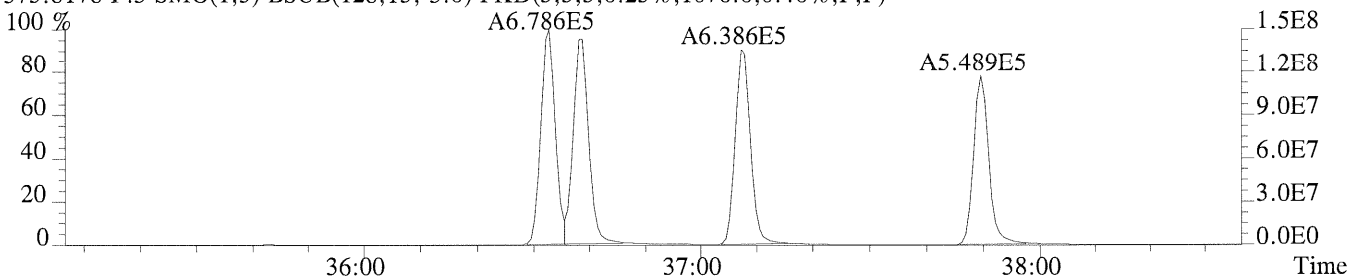


File:P200035 #1-318 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

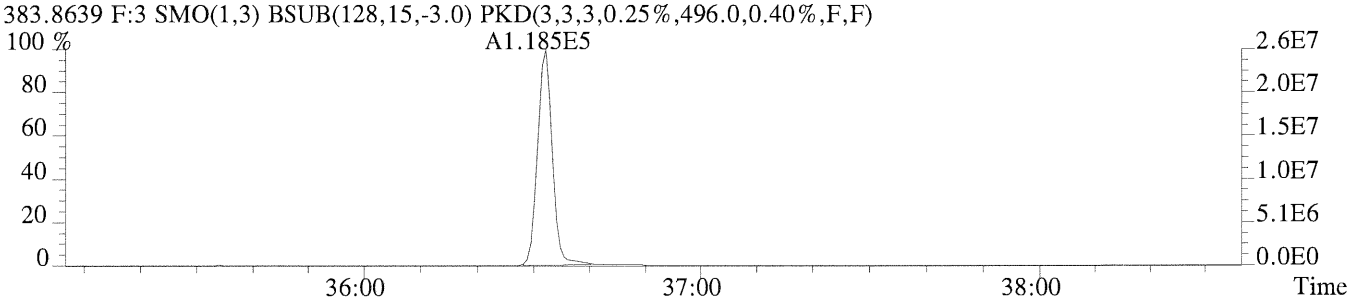
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2304.0,0.40%,F,F)



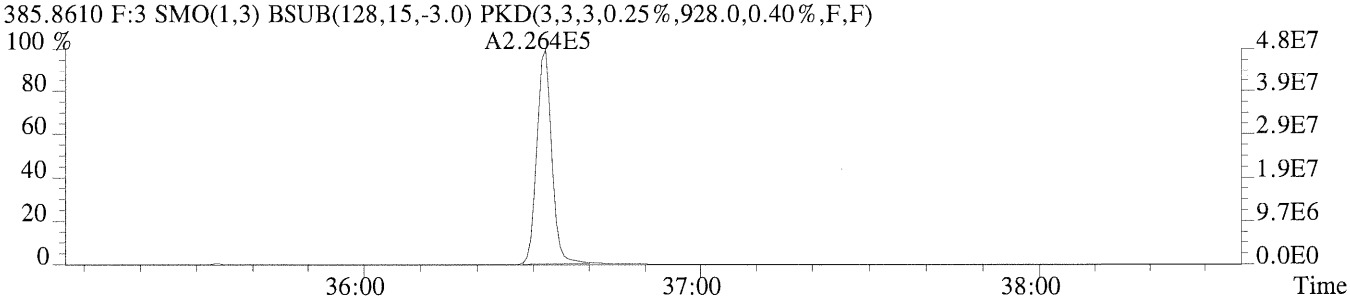
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1076.0,0.40%,F,F)



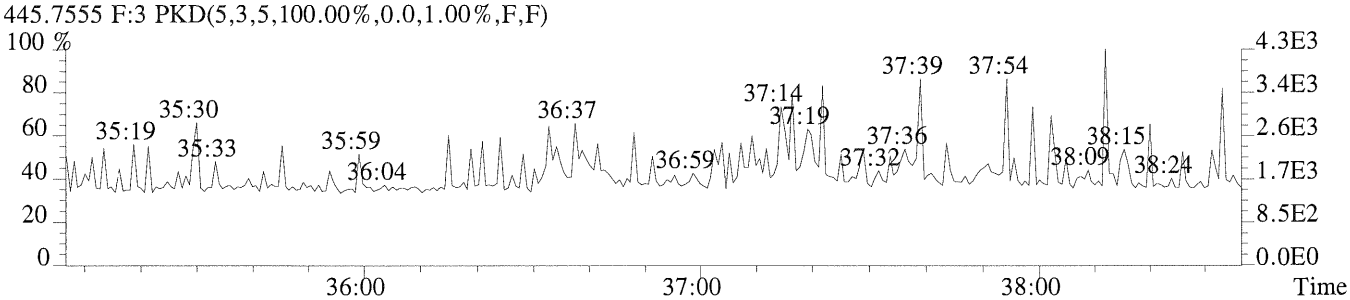
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,496.0,0.40%,F,F)



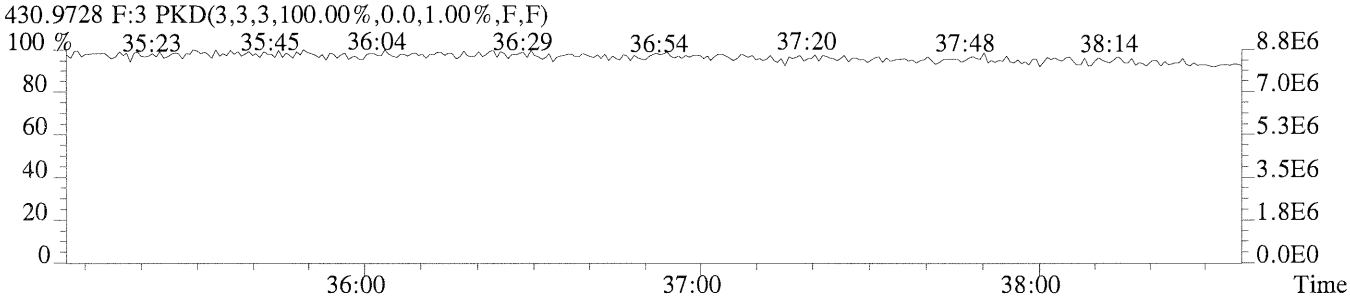
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,928.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

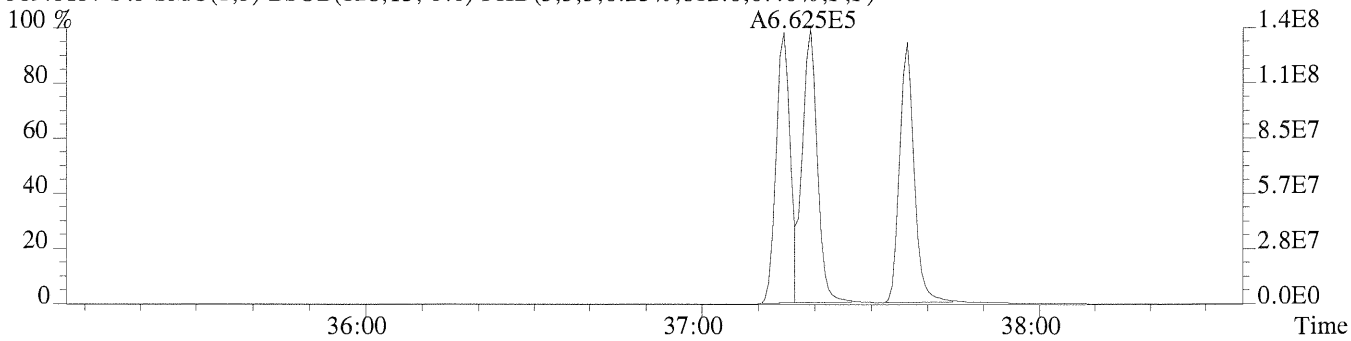


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

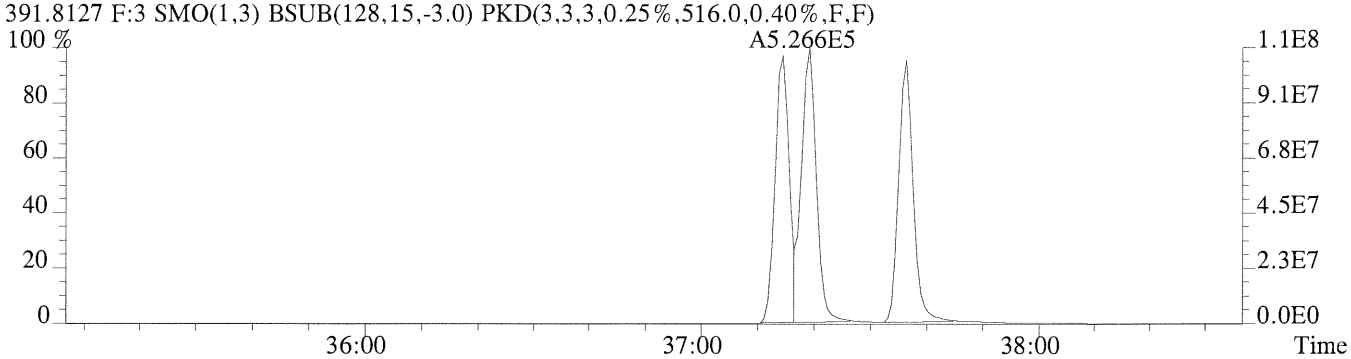


File:P200035 #1-318 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

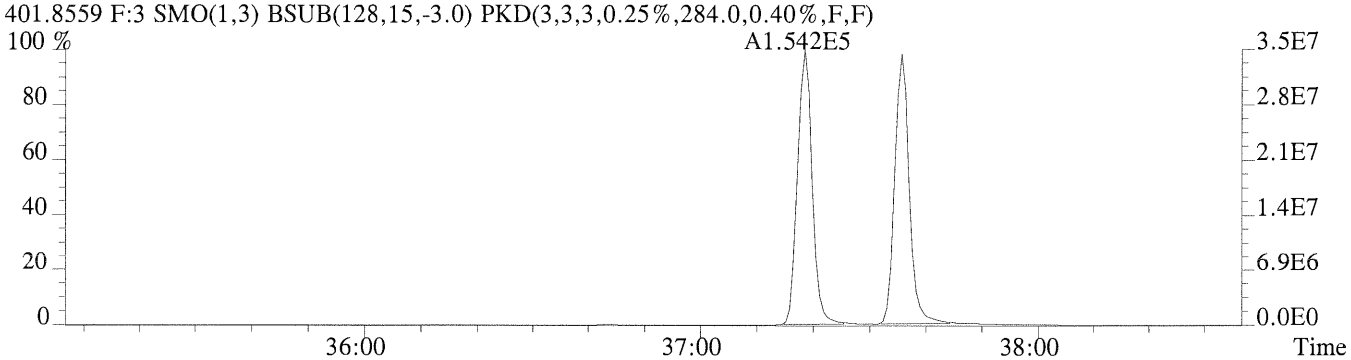
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,812.0,0.40%,F,F)



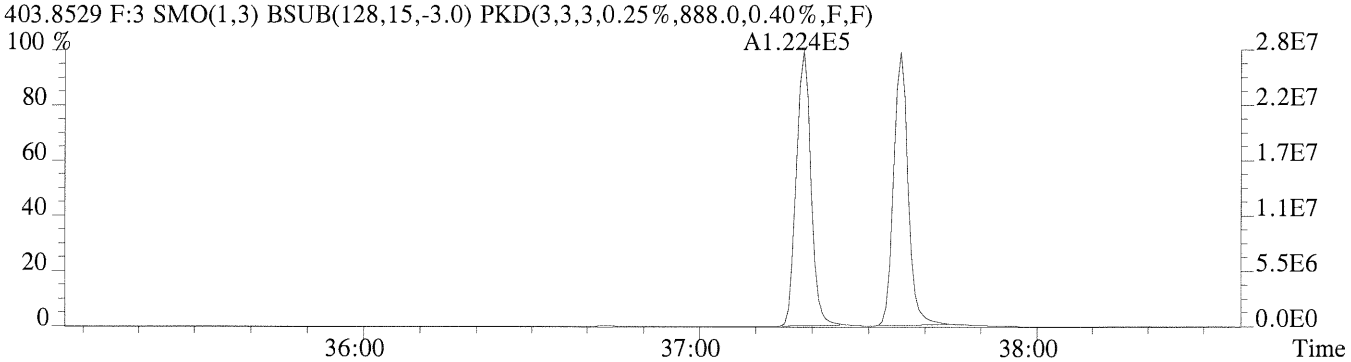
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,516.0,0.40%,F,F)



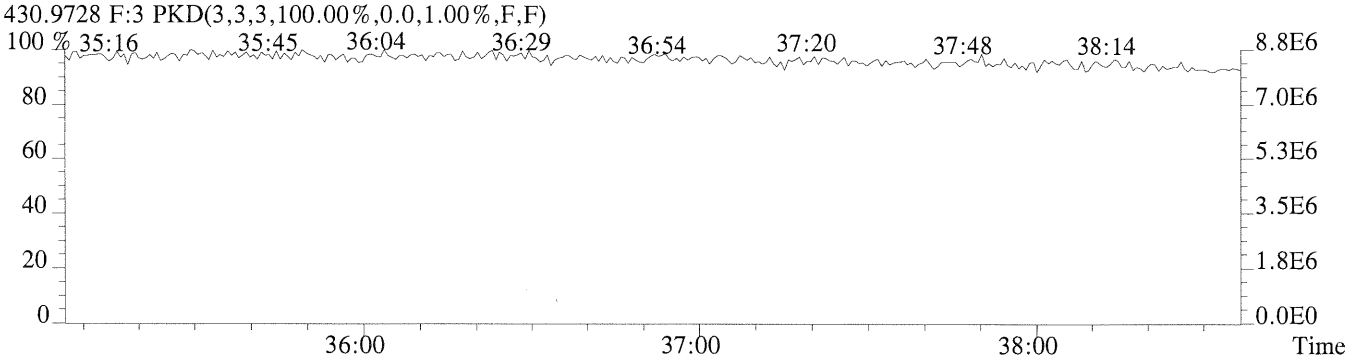
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,284.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,888.0,0.40%,F,F)

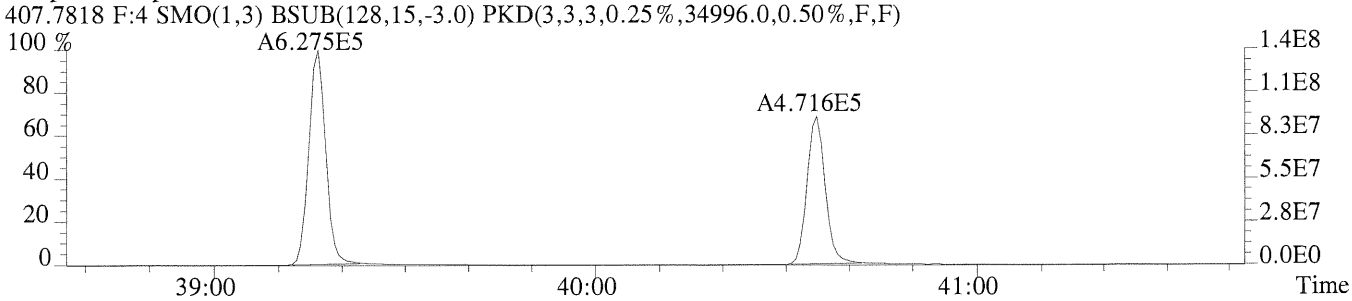


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

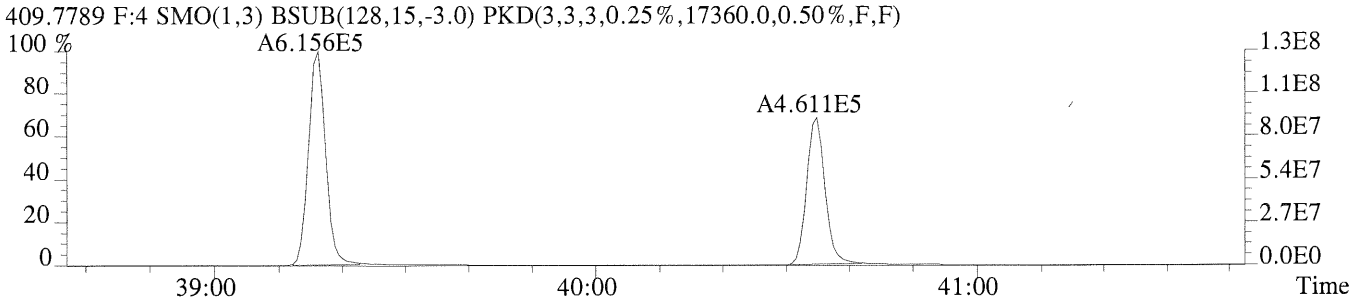


File:P200035 #1-281 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

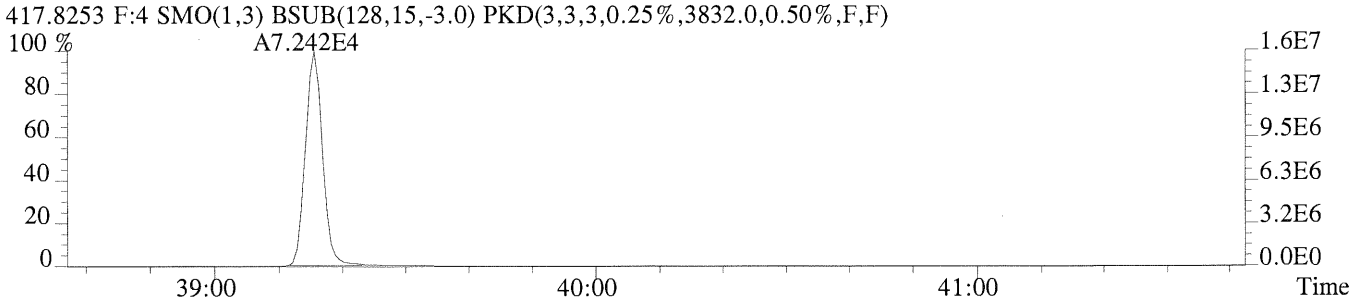
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,34996.0,0.50%,F,F)



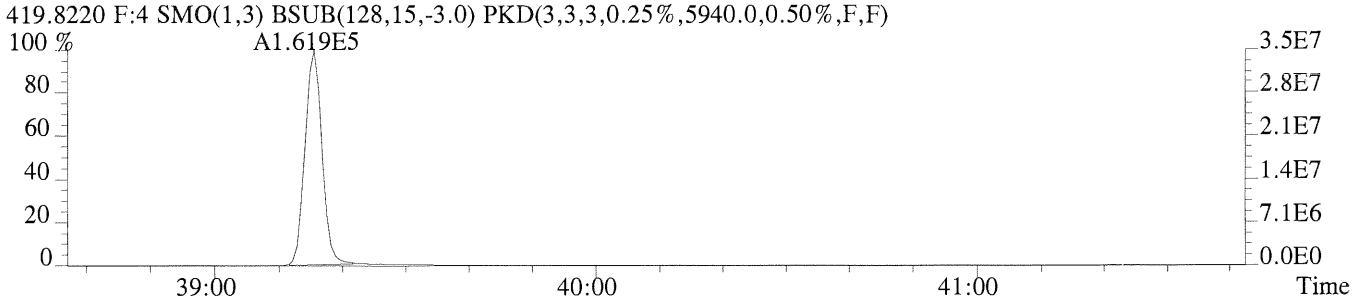
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,17360.0,0.50%,F,F)



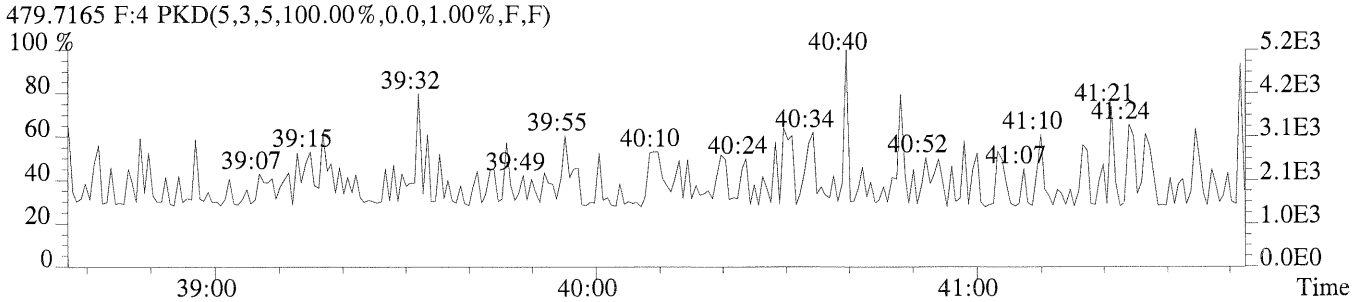
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3832.0,0.50%,F,F)



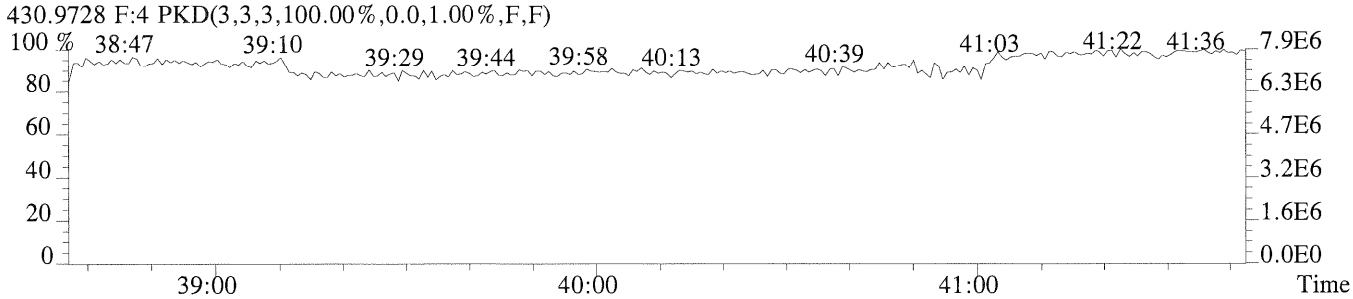
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5940.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

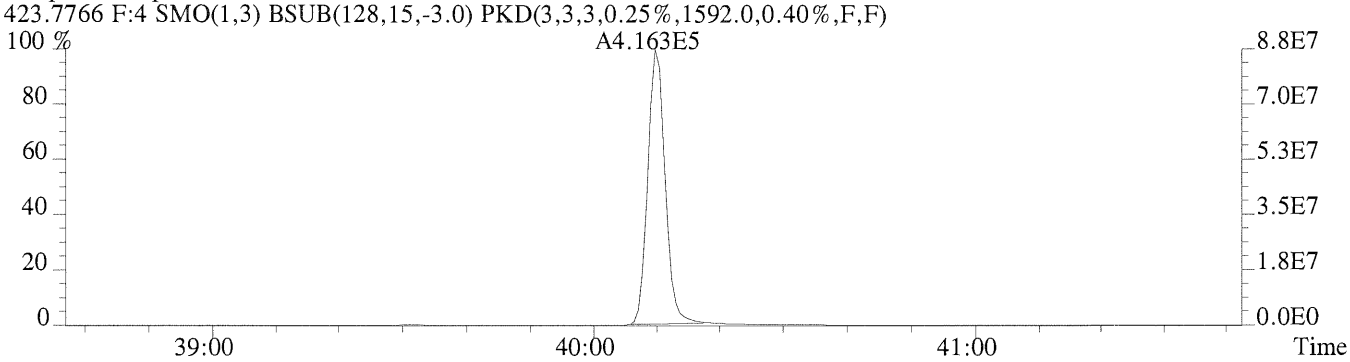


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

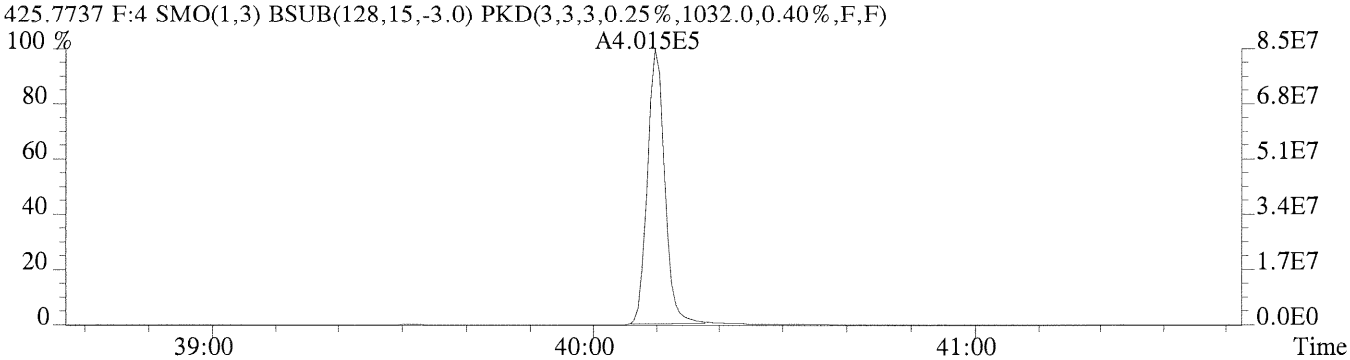


File:P200035 #1-281 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

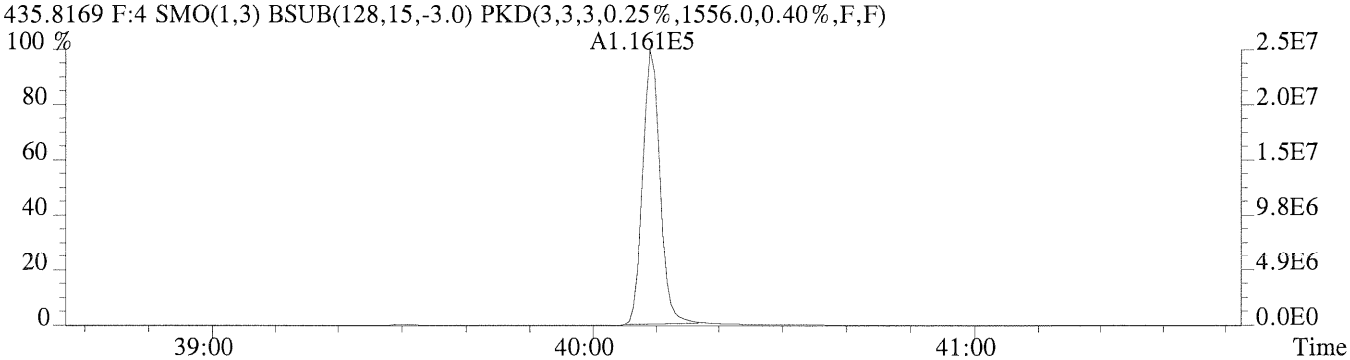
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1592.0,0.40%,F,F)



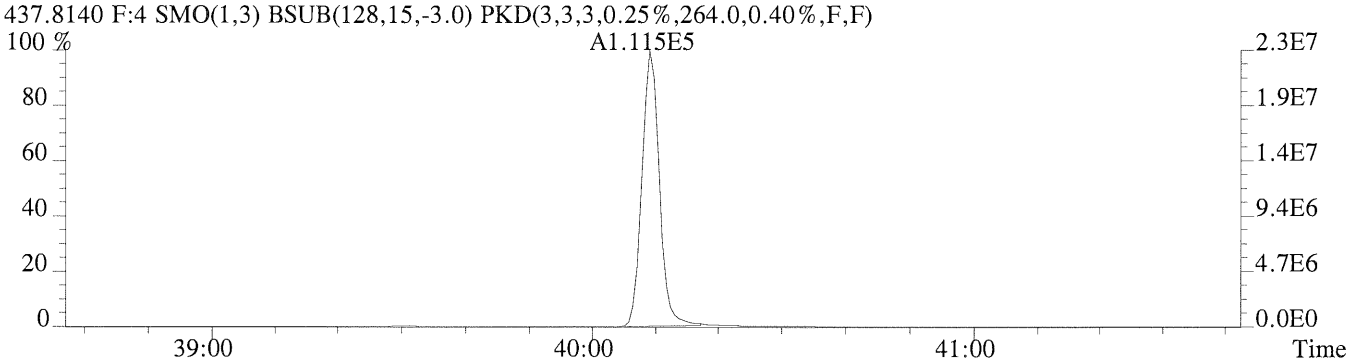
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1032.0,0.40%,F,F)



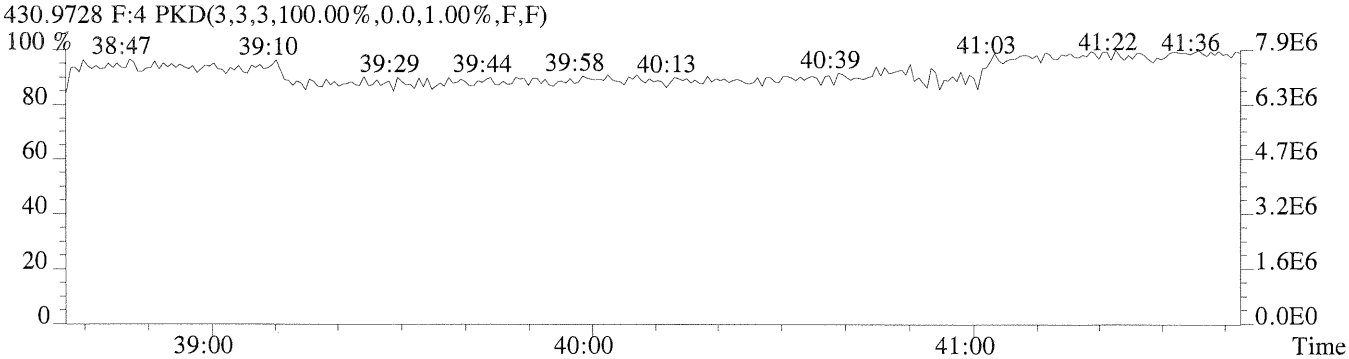
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1556.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,264.0,0.40%,F,F)

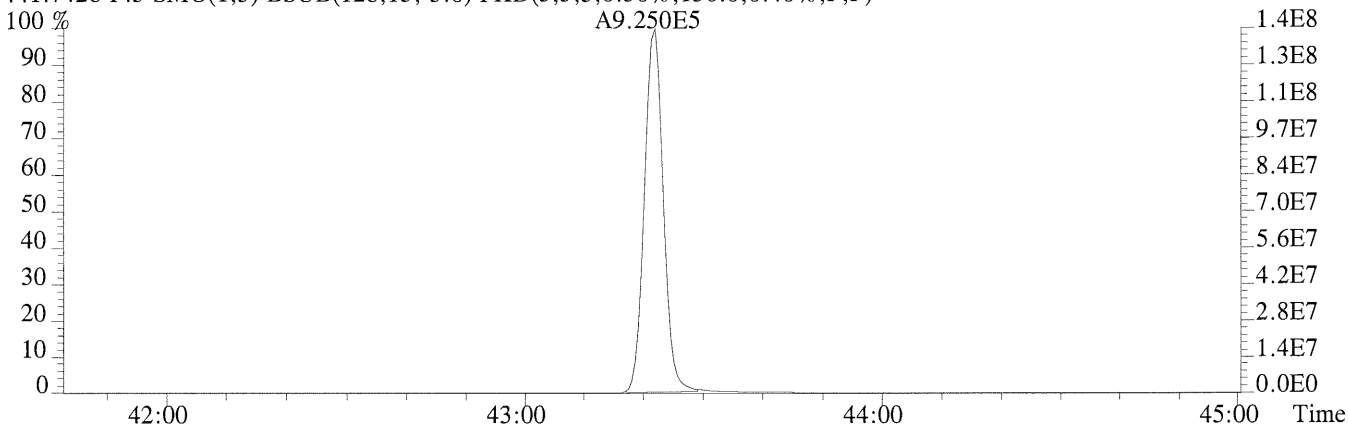


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

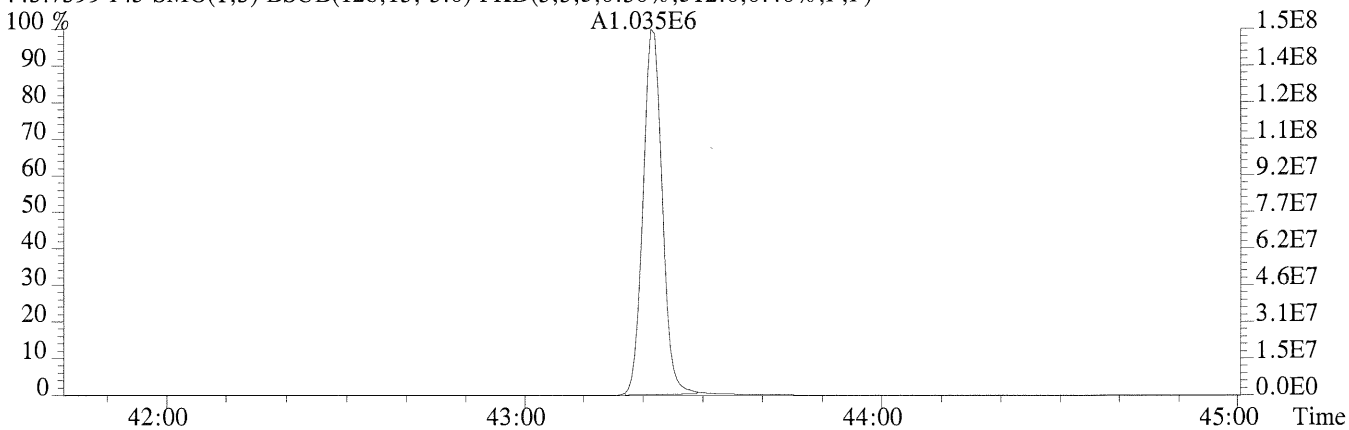


File:P200035 #1-364 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

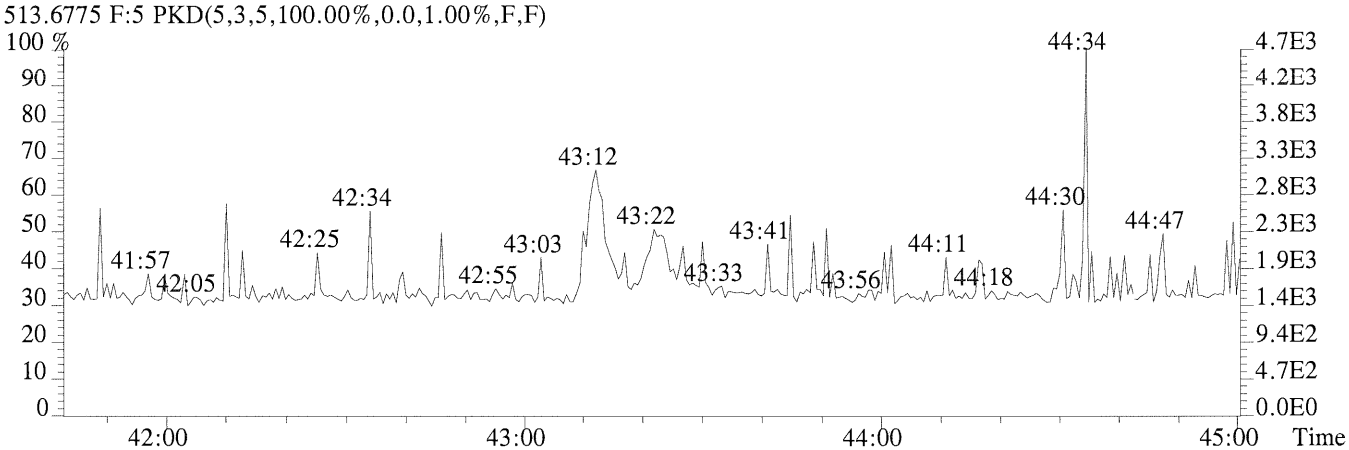
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,136.0,0.40%,F,F)



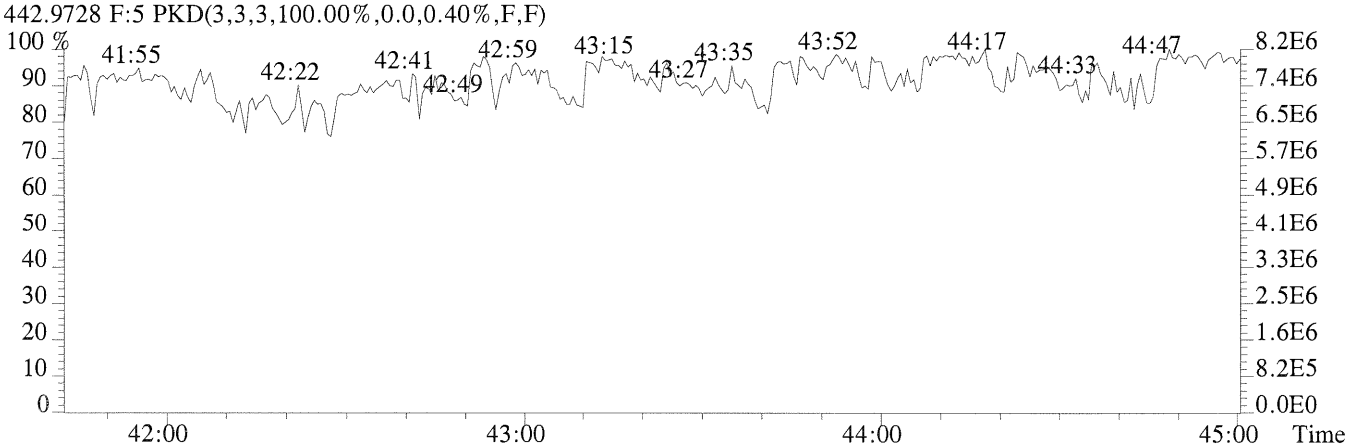
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,512.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

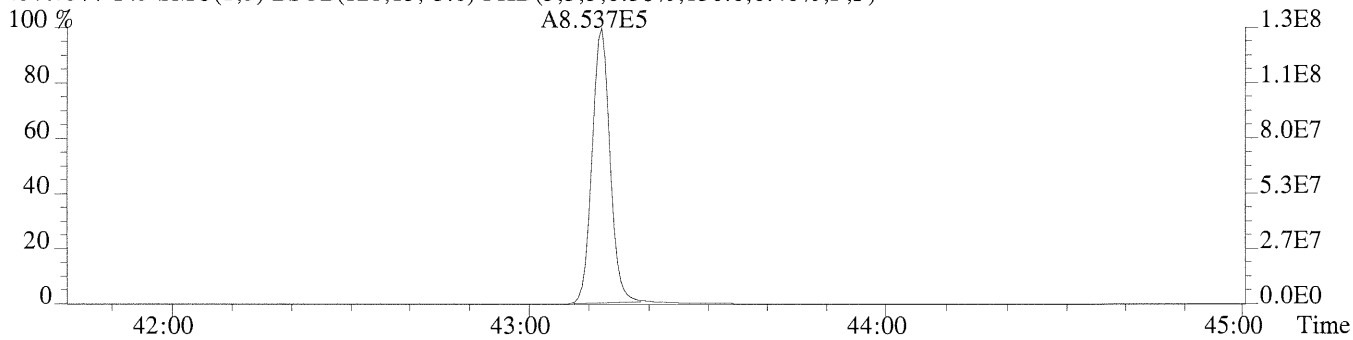


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

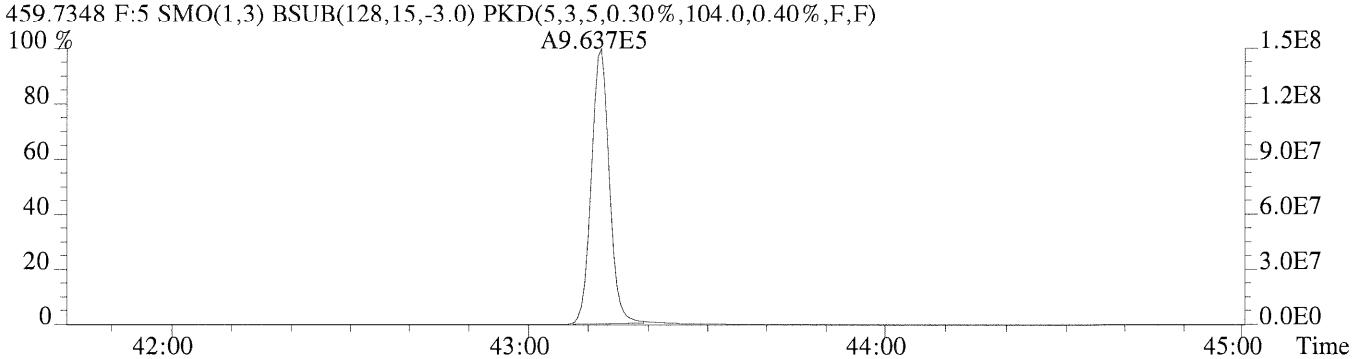


File:P200035 #1-364 Acq: 1-AUG-2008 19:02:53 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

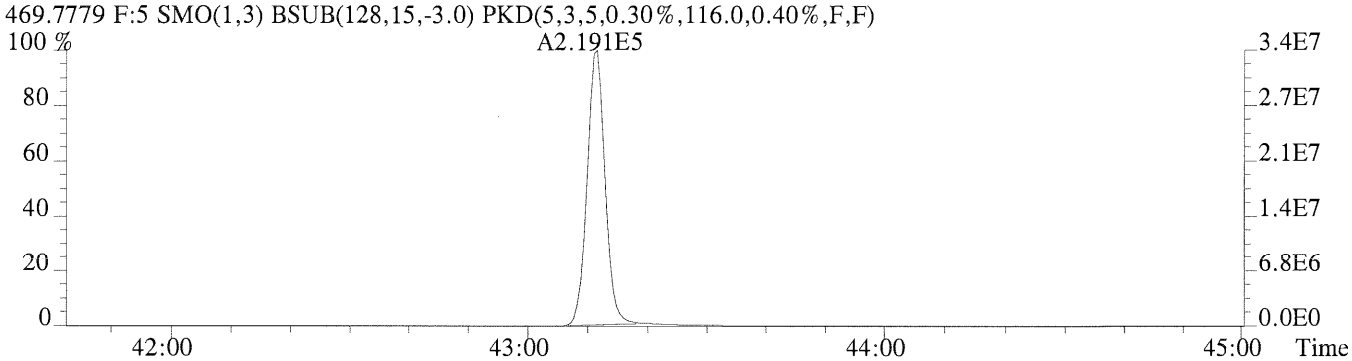
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,136.0,0.40%,F,F)



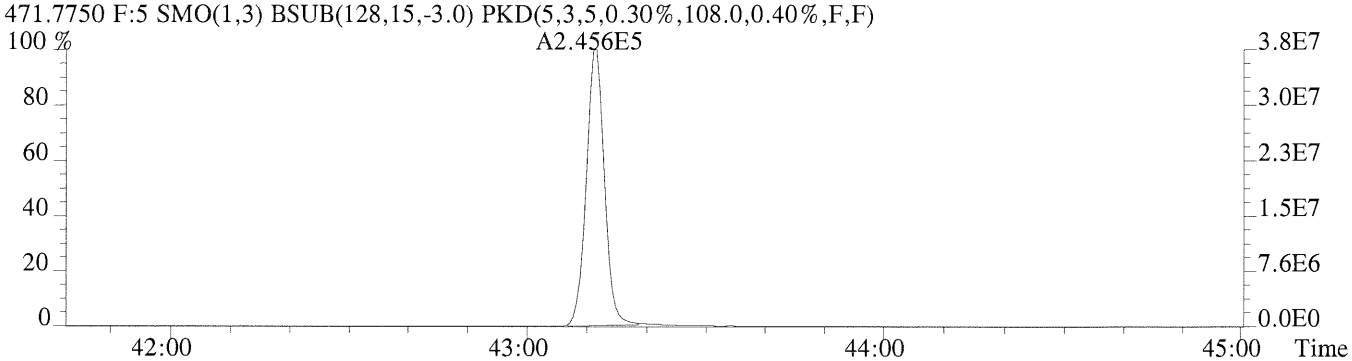
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,104.0,0.40%,F,F)



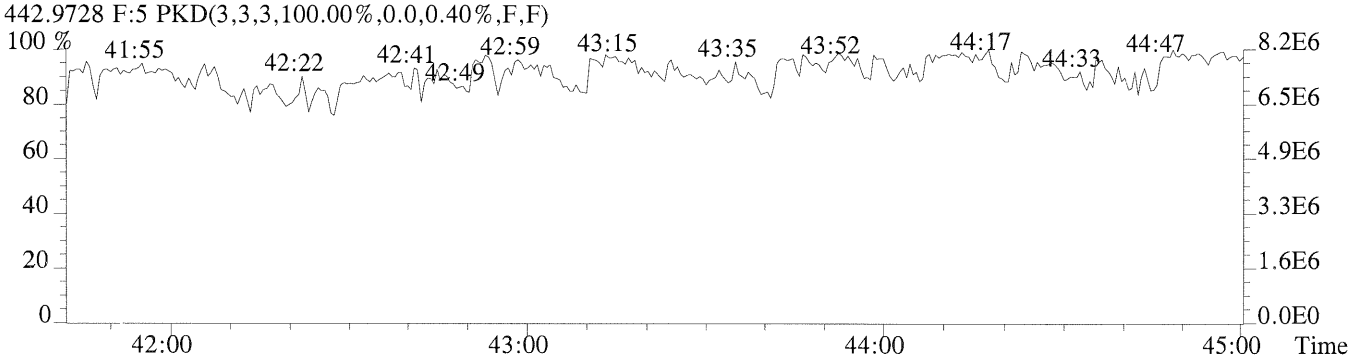
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,116.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,108.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Initial Calibration QC Checklist

ICAL Name: C7012108290F

Date: 12/10/07

Method: 1613 / 8290 / Tetra / TCDD Only / TCDF Conf / 8280 / 613 / M23

Retention Window/Column Performance Check	Analyst	Second Check
Windows in and first and last eluters labeled	✓	✓
Column Performance shows less than or equal to 25% valley between column specific 2378 isomer and it's closest eluters	✓	✓
No QC ion deflections affect column specific 2378 isomer or it's closest eluters	✓	✓

Initial Calibration	Analyst	Second Check
Percent RSD within method criteria	✓	✓
All relative abundance ratios meet method criteria	✓	✓
No QC ion deflections of greater than 20%	✓	✓
Mass spectrometer resolution greater than or equal to 10,000 and documented	✓	✓
2378-TCDD elutes at 25 minutes or later on the DB-5 column	✓	✓
Signal-to-noise of all target analytes and their labeled standards at least 10:1	✓	✓
Valley between labeled 123478 and 123678 HxCDD peaks less than or equal to 50%	N/A	N/A.
All Manual Intergrations signed and dated and first and final copies of Ical summary included	✓	✓

Analyst: LD Second QC: [illegible]

icalqc.xls 02-23-00

CAS HOUSTON INC. Page 1 of 1

5DFC
PCDD/PCDF ANALYTICAL SEQUENCE SUMMARY

Name: Columbia Analytical Services, Houston Contract

Lab Code: TX01411 CASE No.: Client No: SDG No.:

GC Column: DB-5 ID: 0.25 (mm) Instrument ID: AutoSpec-Ultima

Init. Calib. Date: 12/10/07

Init. Calib.Times: 08:50

THE ANALYTICAL SEQUENCE OF STANDARDS, SAMPLES, BLANKS, SPIKES AND DUPLICATES IS AS FOLLOWS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
WINDOW DEFINE		U212886	10-DEC-07	08:50:39
ICAL HRCC1		U212889	10-DEC-07	12:19:27
ICAL HRCC2		U212888	10-DEC-07	11:32:50
ICAL HRCC3		U212887	10-DEC-07	09:58:49
ICAL HRCC4		U212890	10-DEC-07	13:15:19
ICAL HRCC5		U212891	10-DEC-07	14:02:46

HRGC/HRMS RUN LOG

CAS HOUSTON 10655 Richmond Avenue, Suite 130-A Houston, TX 77042

Columbia Analytical Services inc.
An Employee Owned Company

Acq Method: 8290CAS/1613 Result File: _____ Archive Tape: _____

GC Method: 8290CAS/1613 EDD File: _____ Instrument ID: AutoSpec 2

Date	Time	File	CAS ID	Client ID	Batch #	Analyst	Comments	RE
		U212876	K0701014-003			KC		
		U212877	" -004					
		U212878	" -005					
		U212879	~~" -006~~				K0711014-007	
		U212880	JB 12/11/07 ~~-007~~				" -008	
		U212881	~~-008~~				" -010	
		U212882	K0711014 -011					
		U212883	P0701107-006					
		U212884	" -012					
		U212885	CCAL 053	~~D4-90-2 JB 12/11/07~~			D8-92-4B	
12/10/07	08:50	U212886	WINDOW DEFINE	D4-90-2				
	09:58	U212887	ICAL HRCC3	D8-2-2A				
	11:32	U212888	" HRCC2	D5-49-4				
	12:19	U212889	" HRCC1	D5-49-5				
	13:15	U212890	" HRCC4	D5-49-2				
	14:02	U212891	" HRCC5	D5-49-1				

Reviewed by: _____

5DFA

WINDOW DEFINING MIX SUMMARY

CLIENT ID

WDM

Lab Name: COLUMBIA ANALYTICAL SERVICES

Lab Code: CAS Case No.: _____ SDG No.: _____

GC Column: DB-5 ID: 0.25 (mm) Lab File ID: U2127886

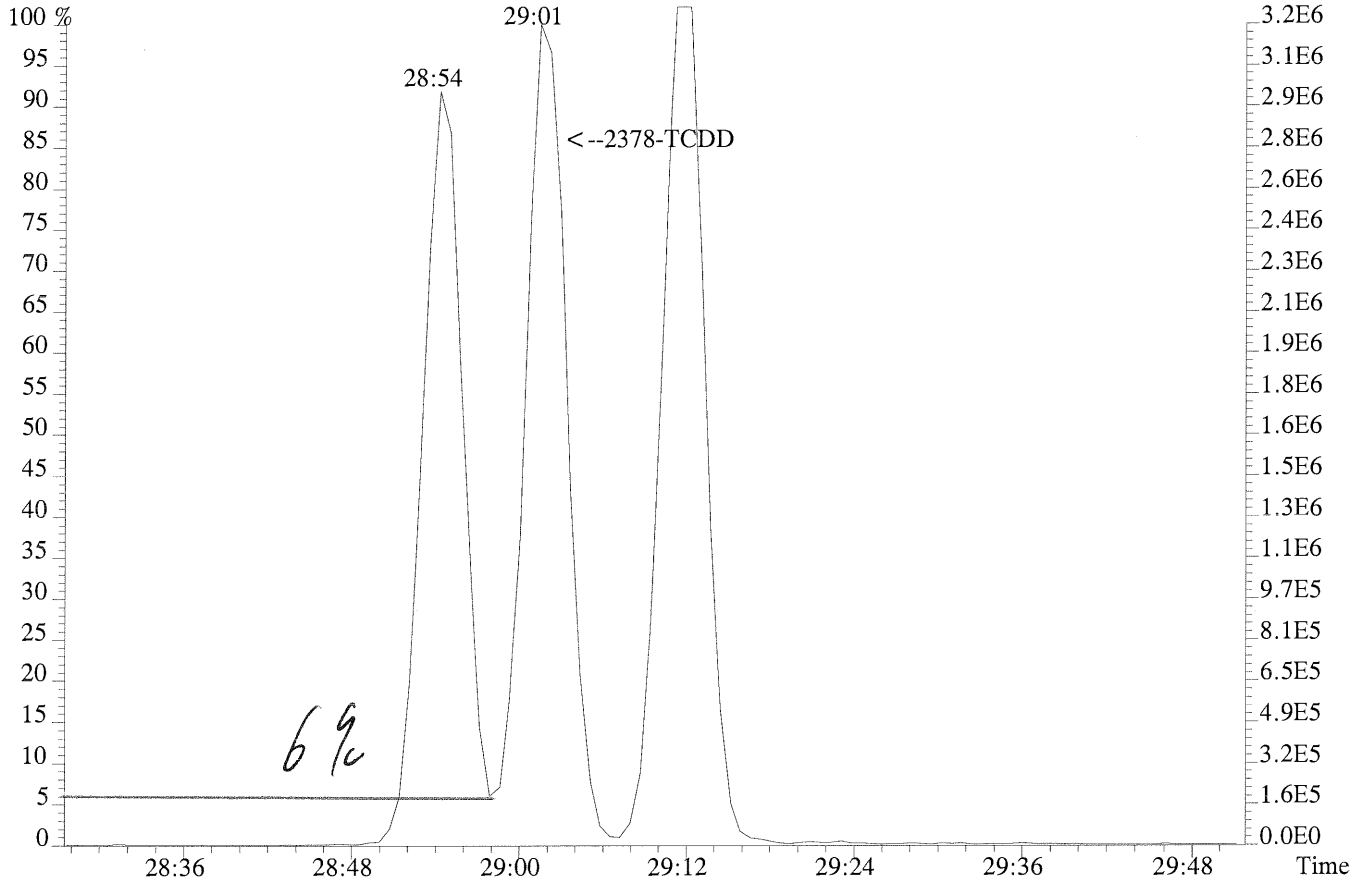
Date Analyzed: 12/10/07

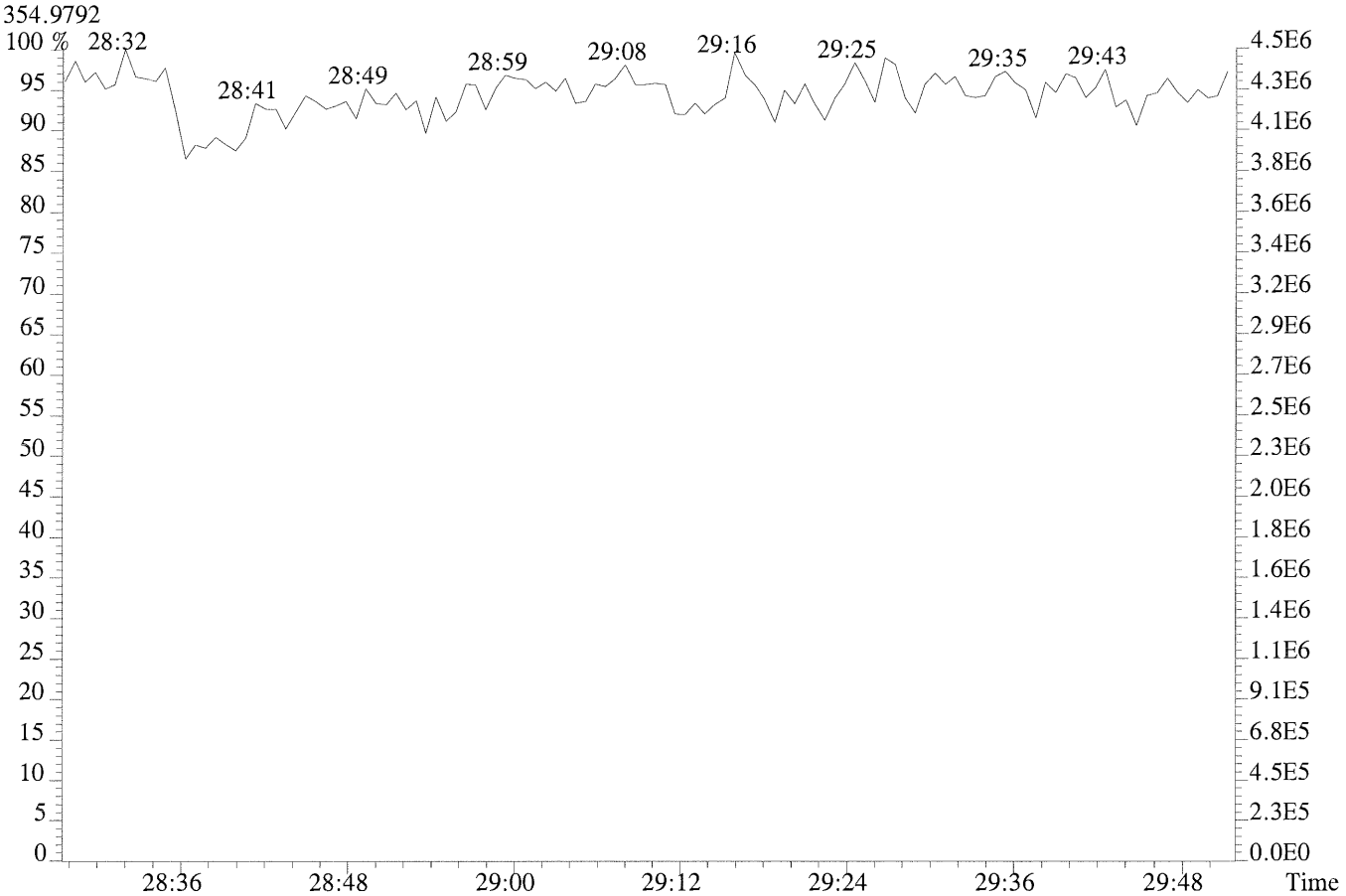
Time Analyzed: 08:50:39

CONGENER	RT FIRST ELUTING	RT LAST ELUTING
TCDF	24:44	30:05
TCDD	26:17	30:03
PeCDF	30:19	33:59
PeCDD	31:35	33:50
HxCDF	34:49	37:05
HxCDD	35:18	36:45
HpCDF	38:29	39:52
HpCDD	38:45	39:26

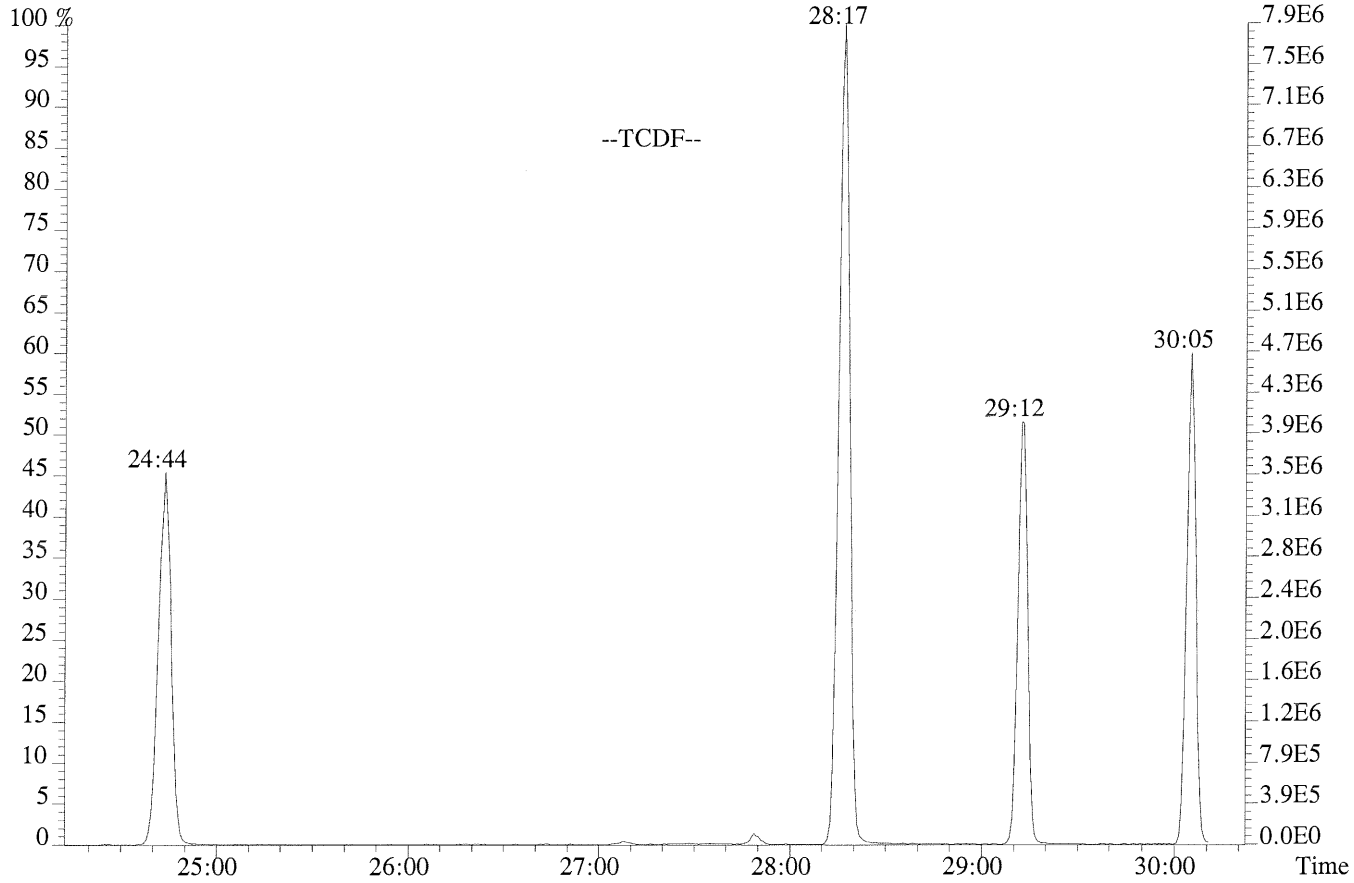
% Valley 2378-TCDD: 6%

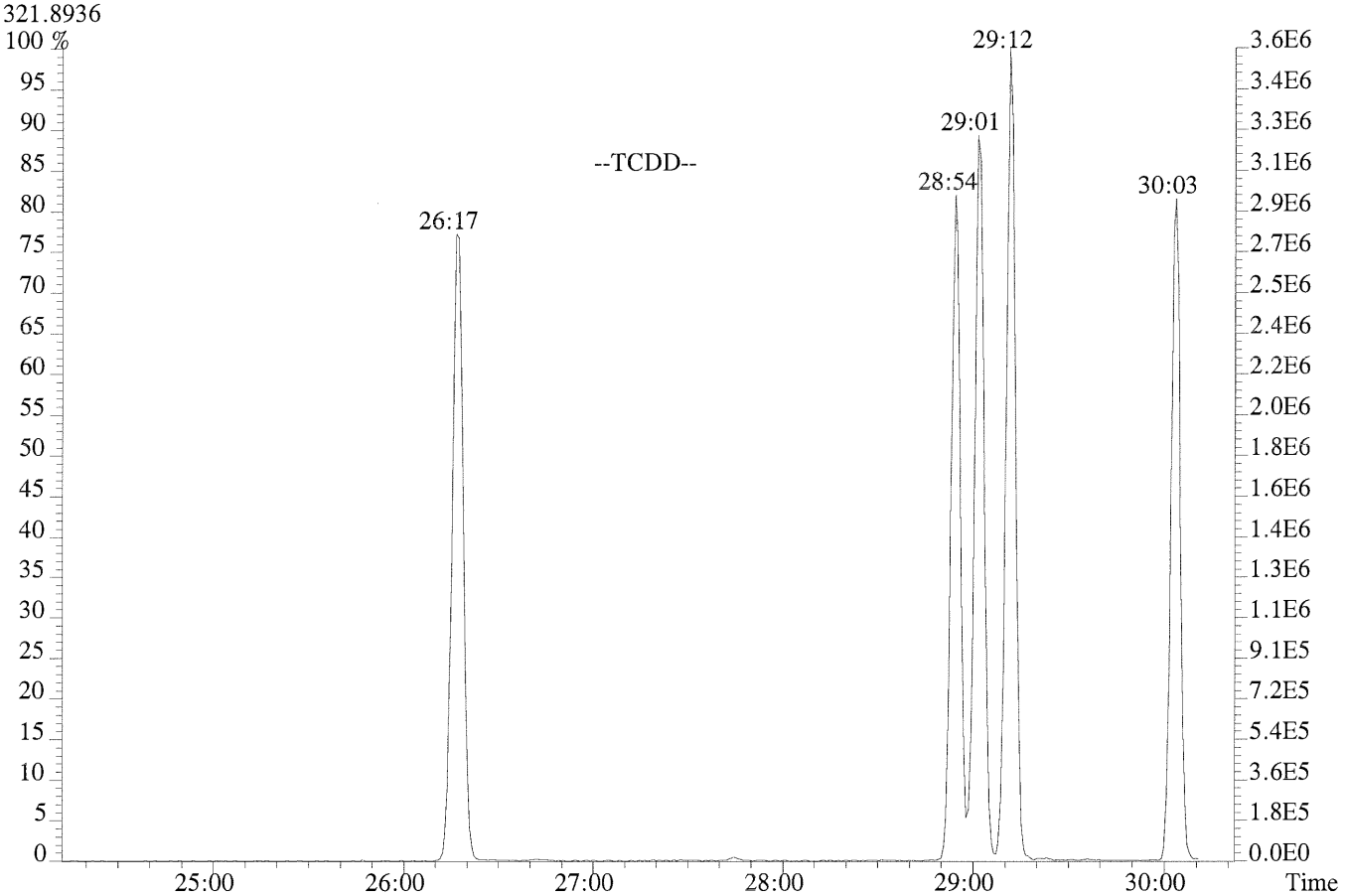
File:U212886 #1-498 Acq:10-DEC-2007 08:50:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE



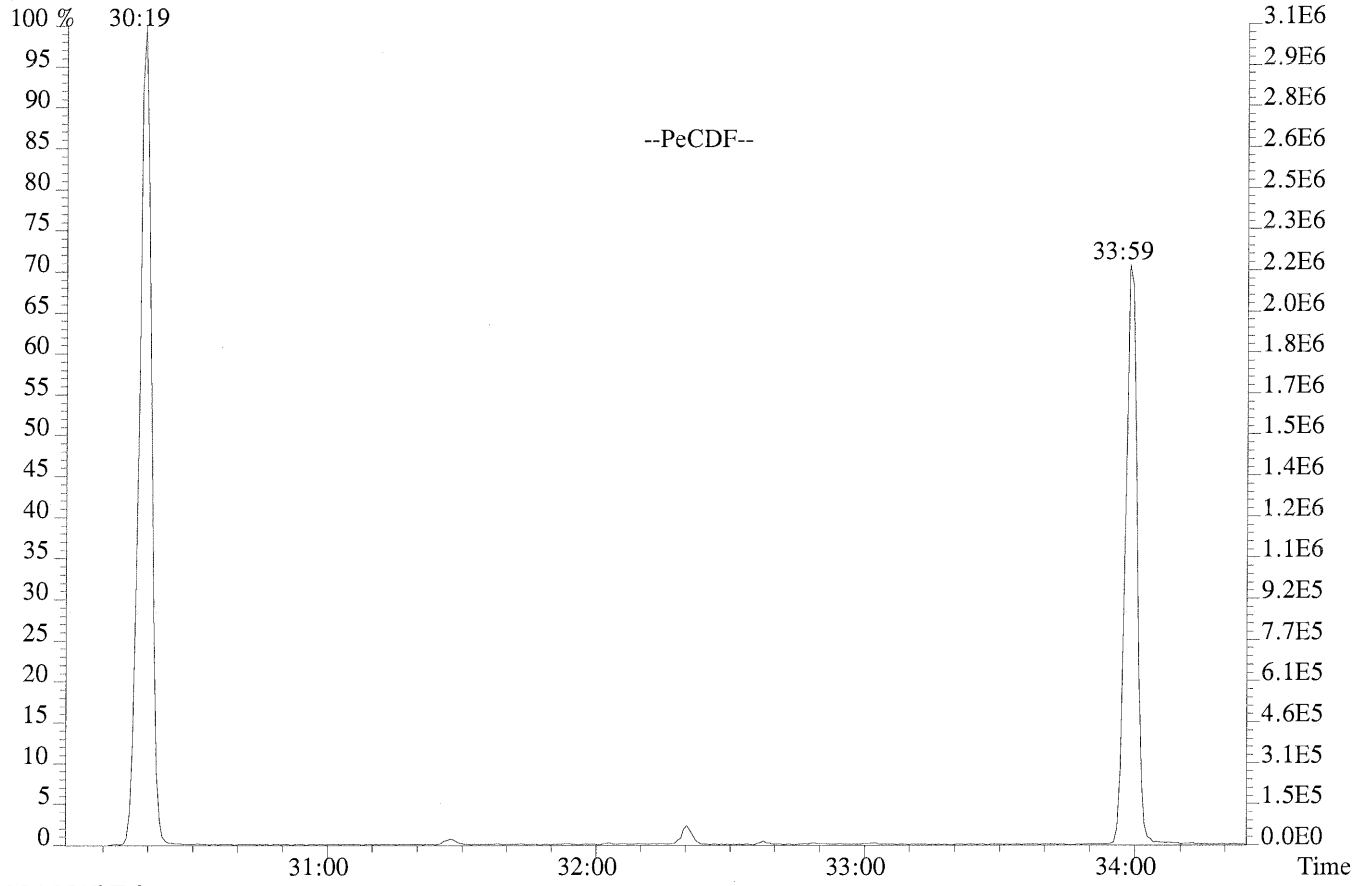


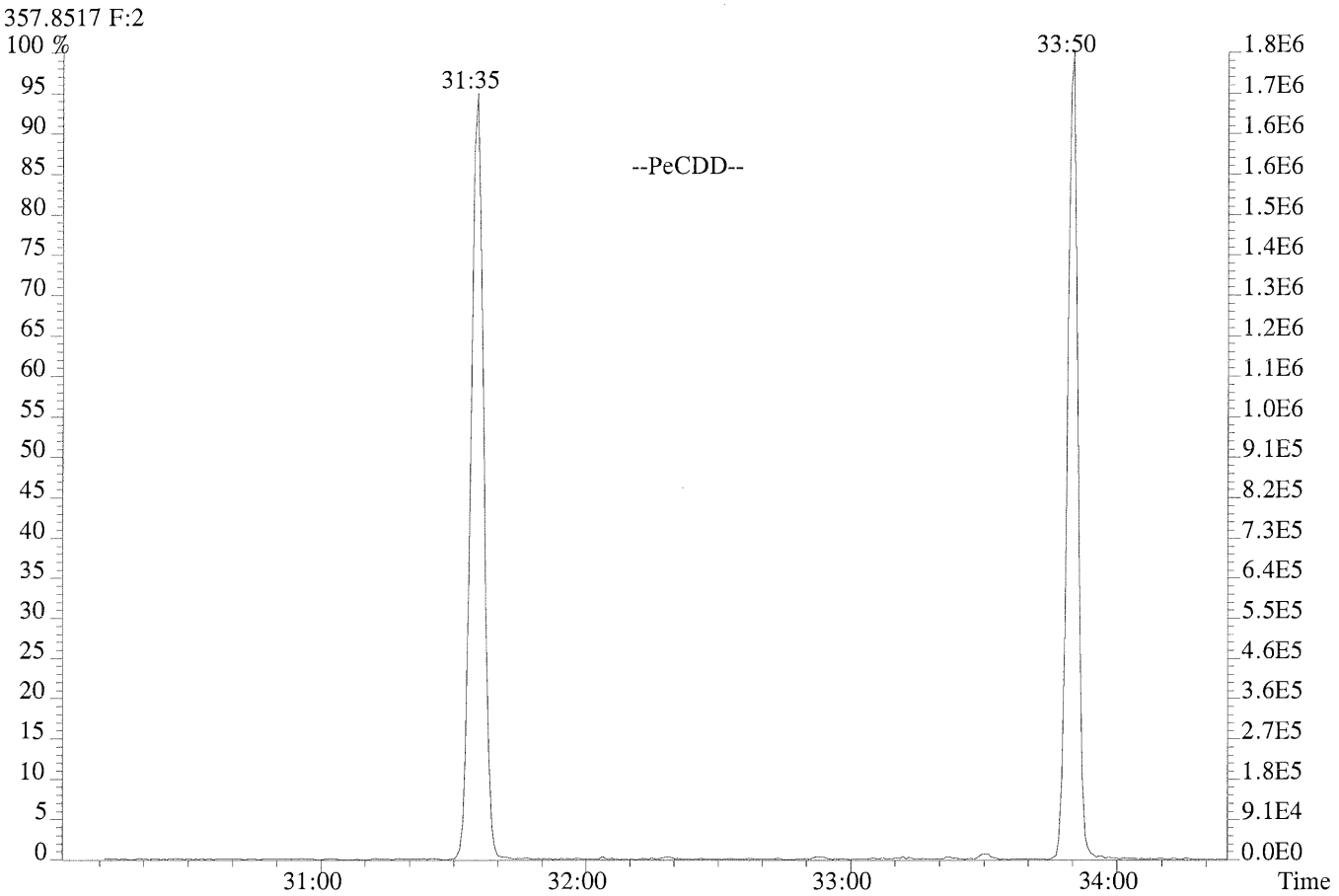
File:U212886 #1-498 Acq:10-DEC-2007 08:50:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE



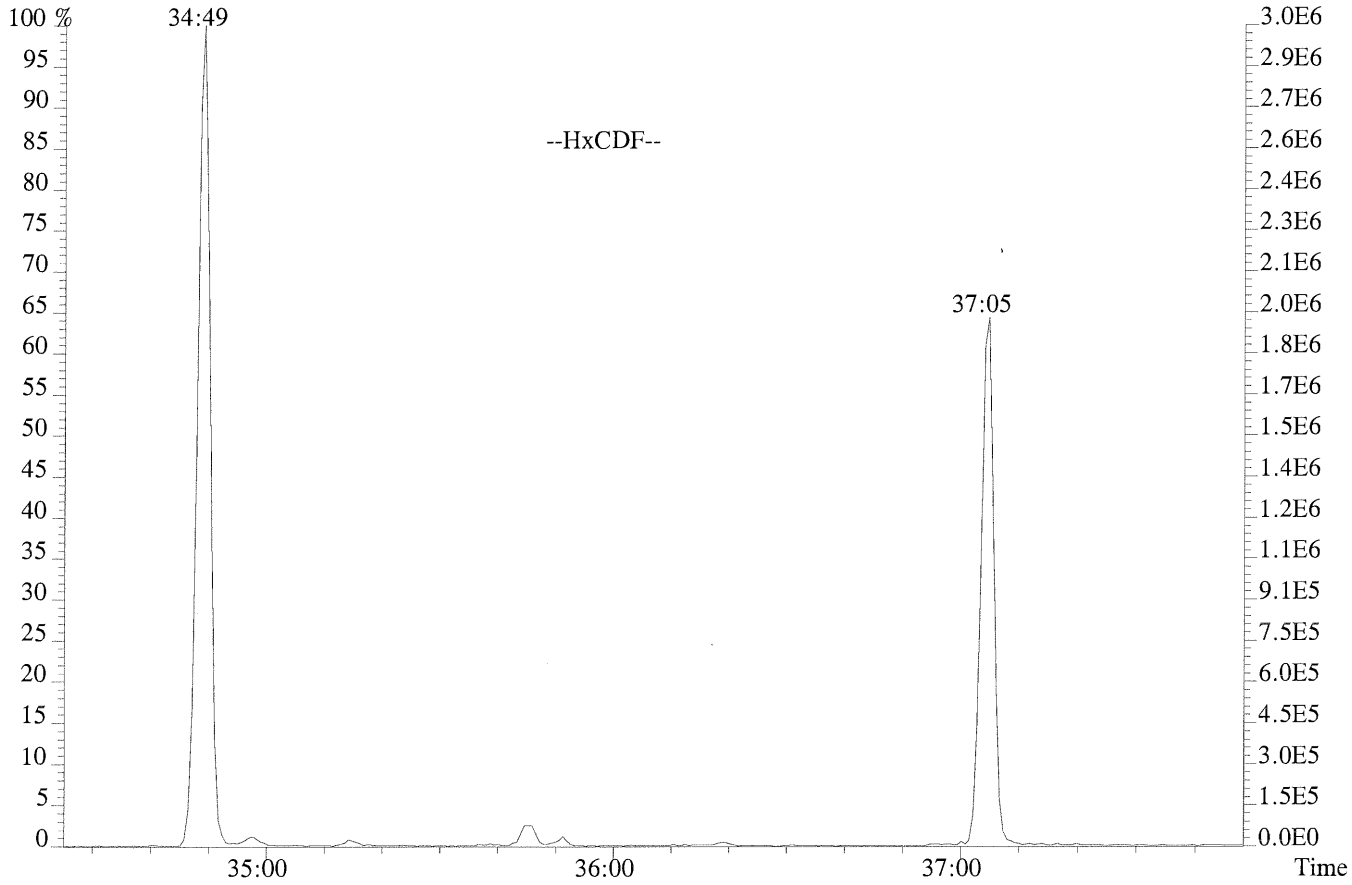


File:U212886 #1-384 Acq:10-DEC-2007 08:50:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE

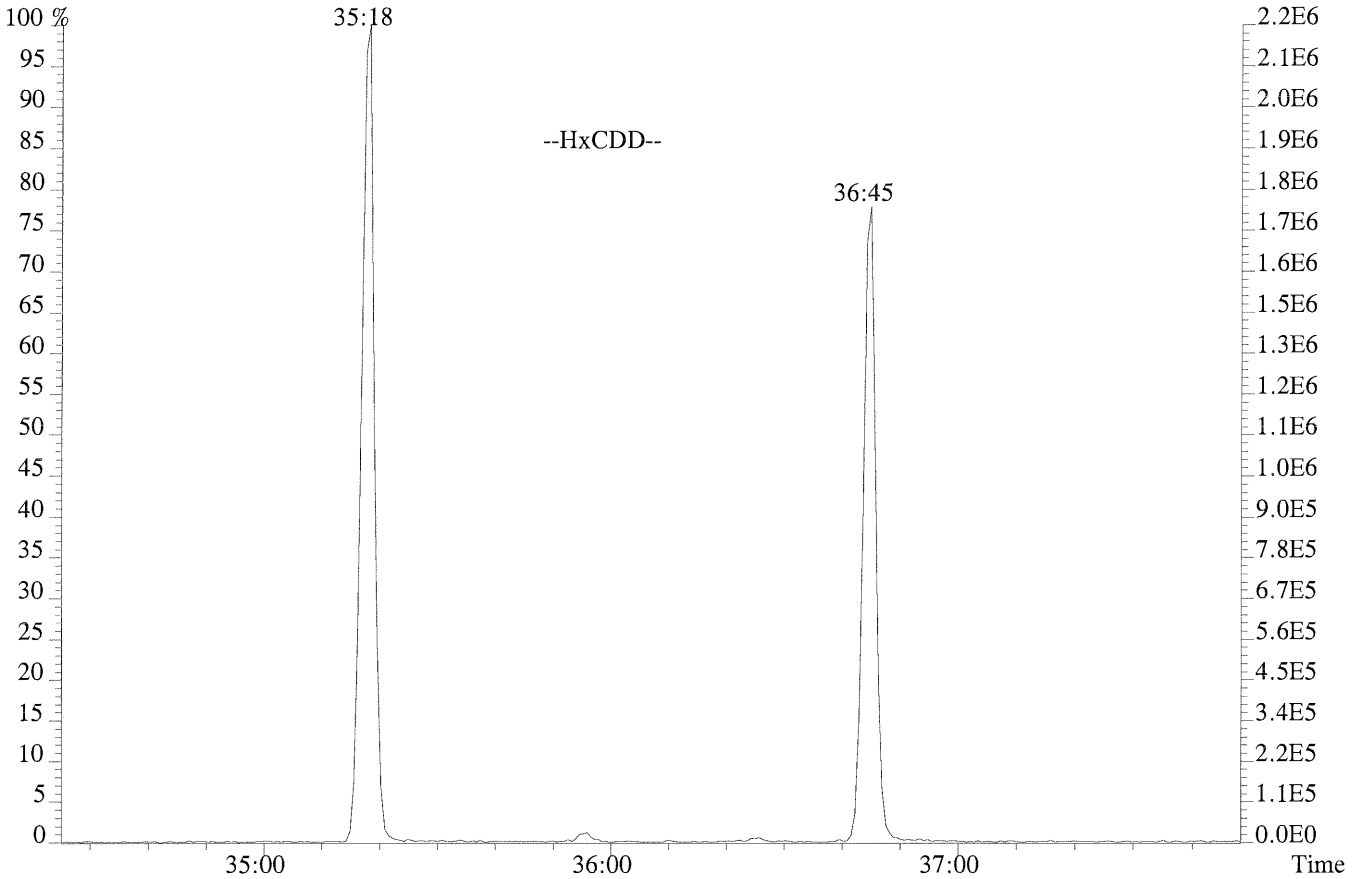




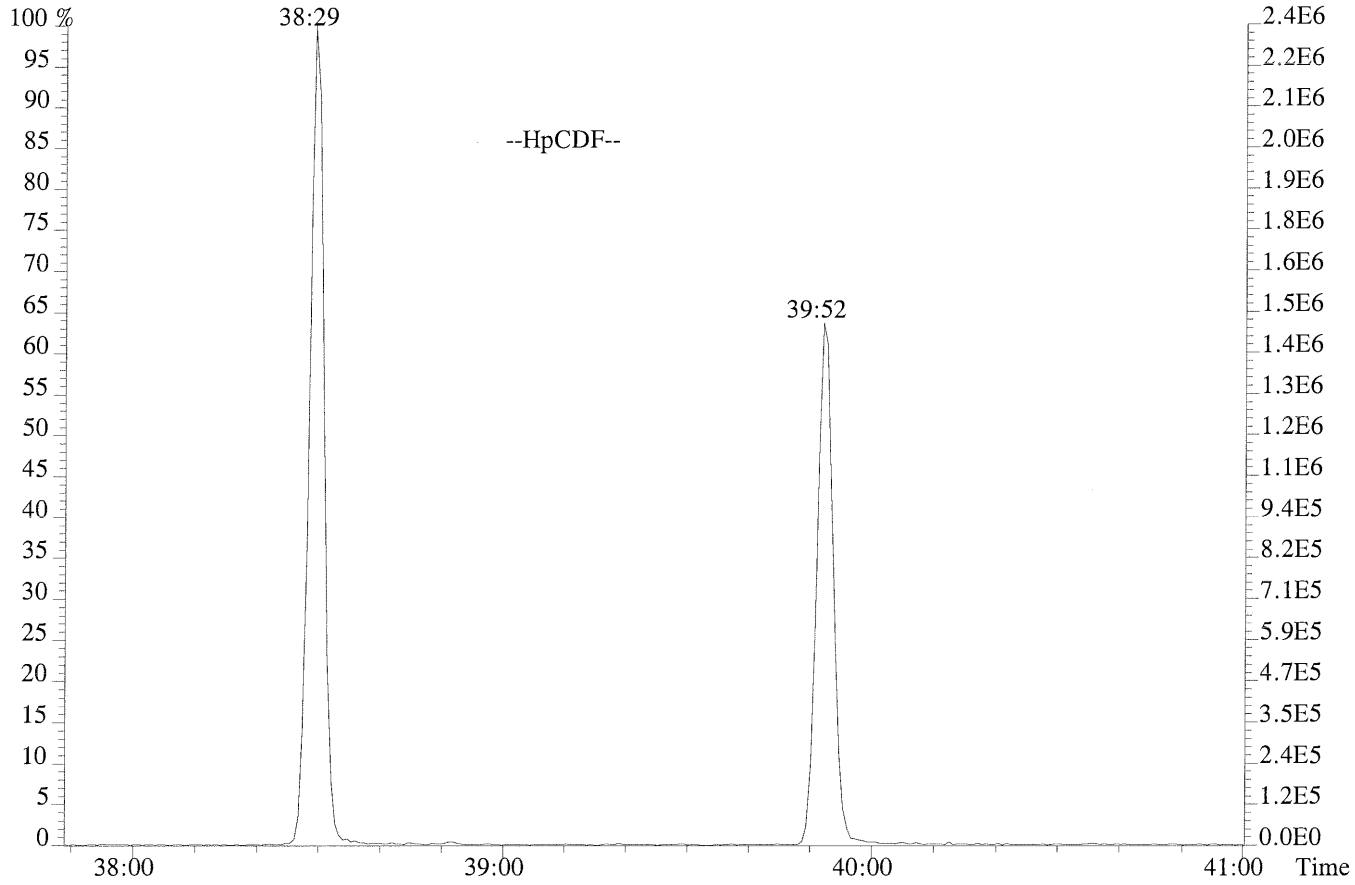
File:U212886 #1-308 Acq:10-DEC-2007 08:50:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE
375.8178 F:3



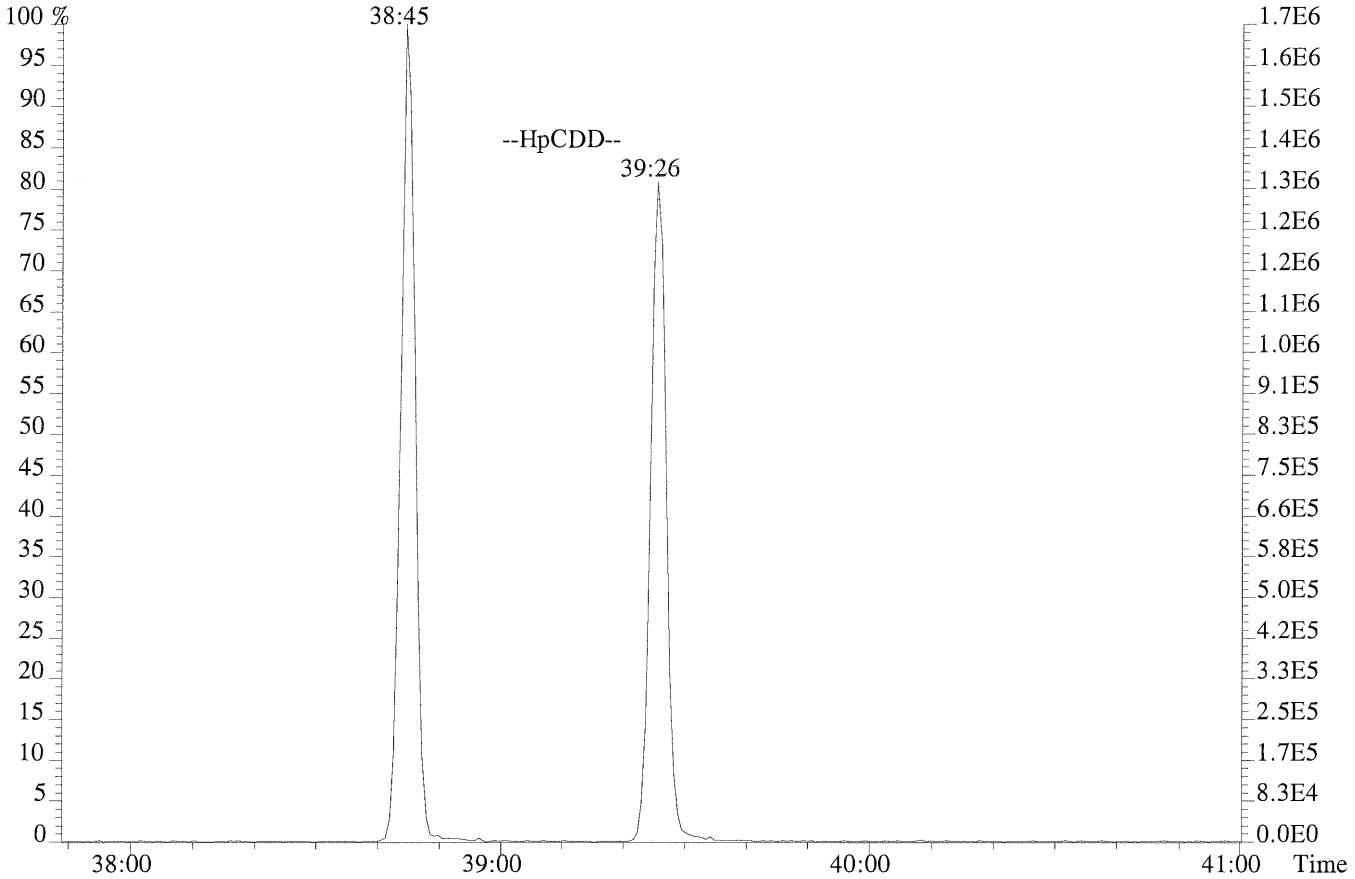
391.8127 F:3



File:U212886 #1-290 Acq:10-DEC-2007 08:50:39 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:WINDOW DEFINE
409.7789 F:4



425.7737 F:4



FORM 3A
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 12/10/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: U212889 HRCC4 Data Filename: U212890

HRCC2 Data Filename: U212888 HRCC5 Data Filename: U212891

HRCC3 Data Filename: U212887

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
NATIVE ANALYTES							
2,3,7,8-TCDD	0.88	0.88	0.96	0.95	0.95	0.93	4.20
1,2,3,7,8-PeCDD	0.89	0.90	0.88	0.91	0.91	0.90	1.60
1,2,3,4,7,8-HxCDD	0.99	1.02	0.97	1.07	1.08	1.03	4.72
1,2,3,6,7,8-HxCDD	1.05	1.02	1.00	1.09	1.04	1.04	3.23
1,2,3,7,8,9-HxCDD	1.01	1.03	0.96	1.08	1.05	1.03	4.73
1,2,3,4,6,7,8-HpCDD	0.90	0.93	0.92	0.93	0.94	0.92	1.62
OCDD	1.03	1.04	1.03	1.02	1.02	1.03	0.66
2,3,7,8-TCDF	0.89	0.88	0.93	0.93	0.92	0.91	2.67
1,2,3,7,8-PeCDF	0.87	0.89	0.93	0.90	0.91	0.90	2.38
2,3,4,7,8-PeCDF	0.88	0.90	0.91	0.93	0.95	0.91	2.95
1,2,3,4,7,8-HxCDF	1.13	1.16	1.18	1.15	1.15	1.15	1.74
1,2,3,6,7,8-HxCDF	1.05	1.10	1.13	1.12	1.12	1.11	2.73
1,2,3,7,8,9-HxCDF	0.85	0.87	0.91	0.95	0.90	0.89	4.39
2,3,4,6,7,8-HxCDF	0.99	1.01	1.07	1.08	1.08	1.05	4.08
1,2,3,4,6,7,8-HpCDF	1.37	1.38	1.42	1.43	1.39	1.40	1.81
1,2,3,4,7,8,9-HpCDF	1.01	1.06	1.08	1.13	1.05	1.07	4.36
OCDF	1.13	1.19	1.14	1.17	1.15	1.16	1.91

(1) The %RSD for the 17 unlabeled standard must not exceed +/- 20%, see Section 7.7.2.1, Method 8290.

8290F3A

FORM 3B
PCDD/PCDF INITIAL CALIBRATION RELATIVE RESPONSES

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 12/10/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: U212889 HCC4 Data Filename: U212890

HCC2 Data Filename: U212888 HCC5 Data Filename: U212891

HCC3 Data Filename: U212887

	RELATIVE RESPONSE (RR)					MEAN RR	Cv (RSD) (1)
	HRCC1	HRCC2	HRCC3	HRCC4	HRCC5		
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	1.00	1.01	1.02	1.05	1.04	1.02	2.18
13C-1,2,3,7,8-PeCDD	0.98	0.94	0.89	1.03	1.02	0.97	5.96
13C-1,2,3,6,7,8-HxCDD	1.00	1.02	1.00	0.95	0.97	0.99	2.74
13C-1,2,3,4,6,7,8-HpCDD	0.90	0.91	0.83	0.91	0.91	0.89	4.02
13C-OCDD	0.97	1.00	0.89	1.00	0.97	0.96	4.79
13C-2,3,7,8-TCDF	1.31	1.32	1.29	1.36	1.35	1.32	2.03
13C-1,2,3,7,8-PeCDF	1.39	1.35	1.23	1.46	1.44	1.37	6.61
13C-1,2,3,4,7,8-HxCDF	1.33	1.37	1.15	1.25	1.27	1.27	6.79
13C-1,2,3,4,6,7,8-HpCDF	0.94	0.93	0.83	0.91	0.95	0.91	5.24
CLEANUP STANDARD							
37Cl-2,3,7,8-TCDD	0.89	0.95	0.99	1.00	0.97	0.96	4.67

(1) The %RSD for the nine labeled reference compounds must not exceed +/- 30%, see Section 7.7.2.1, Method 8290.

8290F3B

FORM 3C
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 12/10/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HCC1 Data Filename: U212889 HCC4 Data Filename: U212890

HCC2 Data Filename: U212888 HCC5 Data Filename: U212891

HCC3 Data Filename: U212887

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO					QC LIMITS (2)
		HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	
NATIVE ANALYTES							
2,3,7,8-TCDD	M/M+2	0.78	0.77	0.76	0.79	0.78	0.65-0.89
1,2,3,7,8-PeCDD	M+2/M+4	1.59	1.54	1.53	1.55	1.53	1.32-1.78
1,2,3,4,7,8-HxCDD	M+2/M+4	1.29	1.29	1.28	1.23	1.23	1.05-1.43
1,2,3,6,7,8-HxCDD	M+2/M+4	1.30	1.17	1.26	1.23	1.23	1.05-1.43
1,2,3,7,8,9-HxCDD	M+2/M+4	1.23	1.23	1.23	1.23	1.29	1.05-1.43
1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.02	1.05	1.04	1.04	1.07	0.88-1.20
OCDD	M+2/M+4	0.89	0.89	0.89	0.88	0.89	0.76-1.02
2,3,7,8-TCDF	M/M+2	0.75	0.81	0.78	0.79	0.77	0.65-0.89
1,2,3,7,8-PeCDF	M+2/M+4	1.49	1.50	1.56	1.54	1.52	1.32-1.78
2,3,4,7,8-PeCDF	M+2/M+4	1.55	1.56	1.55	1.53	1.55	1.32-1.78
1,2,3,4,7,8-HxCDF	M+2/M+4	1.24	1.24	1.26	1.25	1.20	1.05-1.43
1,2,3,6,7,8-HxCDF	M+2/M+4	1.18	1.21	1.18	1.18	1.21	1.05-1.43
1,2,3,7,8,9-HxCDF	M+2/M+4	1.22	1.28	1.23	1.21	1.21	1.05-1.43
2,3,4,6,7,8-HxCDF	M+2/M+4	1.20	1.25	1.20	1.23	1.25	1.05-1.43
1,2,3,4,6,7,8-HpCDF	M+2/M+4	1.04	1.00	1.00	1.01	1.03	0.88-1.20
1,2,3,4,7,8,9-HpCDF	M+2/M+4	1.01	0.98	0.98	1.01	1.01	0.88-1.20
OCDF	M+2/M+4	0.91	0.89	0.89	0.91	0.90	0.76-1.02

(1) See Table 6, Method 8290, for m/z specifications.

(2) Ion Abundance Ratio Control Limits from Table 8, Method 8290.

8290F3C

FORM 3D
PCDD/PCDF INITIAL CALIBRATION ION ABUNDANCE RATIOS

Lab Name: Columbia Analytical Services Episode No.:

Contract No.: SDG No.:

Initial Calibration Date: 12/10/07

Instrument ID: AutoSpec-Ultima GC Column ID: DB-5

HRCC1 Data Filename: U212889 HRCC4 Data Filename: U212890

HRCC2 Data Filename: U212888 HRCC5 Data Filename: U212891

HRCC3 Data Filename: U212887

	M/Z'S FORMING RATIO	ION ABUNDANCE RATIO					QC LIMITS (2)
		HRCC1	HRCC2	HRCC3	HRCC4	HRCC5	
LABELED COMPOUNDS							
13C-2,3,7,8-TCDD	M/M+2	0.78	0.76	0.80	0.78	0.81	0.65-0.89
13C-1,2,3,7,8-PeCDD	M+2/M+4	1.57	1.53	1.56	1.56	1.56	1.32-1.78
13C-1,2,3,6,7,8-HxCDD	M+2/M+4	1.26	1.26	1.26	1.26	1.24	1.05-1.43
13C-1,2,3,4,6,7,8-HpCDD	M+2/M+4	1.04	1.04	1.05	1.05	1.05	0.88-1.20
13C-OCDD	M+2/M+4	0.91	0.89	0.91	0.90	0.92	0.76-1.02
13C-2,3,7,8-TCDF	M/M+2	0.80	0.78	0.78	0.79	0.81	0.65-0.89
13C-1,2,3,7,8-PeCDF	M+2/M+4	1.56	1.56	1.56	1.56	1.56	1.32-1.78
13C-1,2,3,4,7,8-HxCDF	M/M+2	0.52	0.52	0.52	0.52	0.52	0.43-0.59
13C-1,2,3,4,6,7,8-HpCDF	M/M+2	0.46	0.46	0.45	0.44	0.45	0.37-0.51

(1) See Table 6, Method 8290, for m/z specifications.Method 8290.

(2) Ion Abundance Ratio Control Limits from Table 8,

8290F3D

Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC1

Run #1 Filename U212889 Samp: 1 Inj: 1 Acquired: 10-DEC-07 12:19:27
Processed: 10-DEC-07 15:07:09 Sample ID: ICAL HRCC1

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	28:14	1.204e+03	1.601e+03	0.75	yes	no
2	Unk	1,2,3,7,8-PeCDF	32:19	4.337e+03	2.915e+03	1.49	yes	no
3	Unk	2,3,4,7,8-PeCDF	33:01	4.457e+03	2.881e+03	1.55	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:44	3.769e+03	3.042e+03	1.24	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:50	3.448e+03	2.932e+03	1.18	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	36:18	3.261e+03	2.714e+03	1.20	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:59	2.823e+03	2.308e+03	1.22	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	38:29	2.969e+03	2.858e+03	1.04	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:51	2.158e+03	2.138e+03	1.01	yes	no
10	Unk	OCDF	42:48	4.765e+03	5.231e+03	0.91	yes	no
11	Unk	2,3,7,8-TCDD	29:00	9.273e+02	1.188e+03	0.78	yes	no
12	Unk	1,2,3,7,8-PeCDD	33:21	3.193e+03	2.014e+03	1.59	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	36:24	2.547e+03	1.979e+03	1.29	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	36:29	2.709e+03	2.086e+03	1.30	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:46	2.544e+03	2.064e+03	1.23	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	39:24	1.854e+03	1.822e+03	1.02	yes	no
17	Unk	OCDD	42:37	4.283e+03	4.816e+03	0.89	yes	no
18	IS	13C-2,3,7,8-TCDF	28:13	6.999e+04	8.696e+04	0.80	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	32:18	1.017e+05	6.505e+04	1.56	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:43	1.037e+05	1.990e+05	0.52	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	38:27	6.687e+04	1.464e+05	0.46	yes	no
22	IS	13C-2,3,7,8-TCDD	28:59	5.259e+04	6.721e+04	0.78	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	33:20	7.159e+04	4.570e+04	1.57	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	36:28	1.276e+05	1.011e+05	1.26	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	39:24	1.040e+05	1.005e+05	1.04	yes	no
26	IS	13C-OCDD	42:36	2.103e+05	2.311e+05	0.91	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	28:48	5.316e+04	6.692e+04	0.79	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:45	1.267e+05	1.012e+05	1.25	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	29:00	2.134e+03				

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC1

Run #1 Filename U212889 #1 Samp: 1 Inj: 1 Acquired: 10-DEC-07 12:19:27

Processed: 10-DEC-07 15:07:09 LAB. ID: ICAL HRCC1

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	2.05e+05	7.92e+02	2.6e+02	2.86e+05	1.20e+03	2.4e+02
2	1,2,3,7,8-PeCDF	8.80e+05	5.28e+02	1.7e+03	5.86e+05	7.80e+02	7.5e+02
3	2,3,4,7,8-PeCDF	9.09e+05	5.28e+02	1.7e+03	5.86e+05	7.80e+02	7.5e+02
4	1,2,3,4,7,8-HxCDF	8.48e+05	8.32e+02	1.0e+03	6.94e+05	1.18e+03	5.9e+02
5	1,2,3,6,7,8-HxCDF	7.56e+05	8.32e+02	9.1e+02	6.62e+05	1.18e+03	5.6e+02
6	2,3,4,6,7,8-HxCDF	7.09e+05	8.32e+02	8.5e+02	5.94e+05	1.18e+03	5.0e+02
7	1,2,3,7,8,9-HxCDF	6.02e+05	8.32e+02	7.2e+02	4.94e+05	1.18e+03	4.2e+02
8	1,2,3,4,6,7,8-HpCDF	6.20e+05	1.70e+03	3.6e+02	6.07e+05	6.56e+02	9.3e+02
9	1,2,3,4,7,8,9-HpCDF	4.08e+05	1.70e+03	2.4e+02	4.06e+05	6.56e+02	6.2e+02
10	OCDF	6.73e+05	8.64e+02	7.8e+02	7.64e+05	1.61e+03	4.7e+02
11	2,3,7,8-TCDD	1.83e+05	8.48e+02	2.2e+02	2.25e+05	3.12e+02	7.2e+02
12	1,2,3,7,8-PeCDD	6.66e+05	7.44e+02	9.0e+02	4.20e+05	6.52e+02	6.4e+02
13	1,2,3,4,7,8-HxCDD	6.09e+05	1.64e+03	3.7e+02	4.77e+05	1.10e+03	4.3e+02
14	1,2,3,6,7,8-HxCDD	5.93e+05	1.64e+03	3.6e+02	4.58e+05	1.10e+03	4.2e+02
15	1,2,3,7,8,9-HxCDD	5.71e+05	1.64e+03	3.5e+02	4.64e+05	1.10e+03	4.2e+02
16	1,2,3,4,6,7,8-HpCDD	3.74e+05	1.03e+03	3.6e+02	3.78e+05	5.68e+02	6.7e+02
17	OCDD	6.18e+05	1.16e+03	5.3e+02	6.78e+05	1.87e+03	3.6e+02
18	13C-2,3,7,8-TCDF	1.25e+07	2.80e+03	4.5e+03	1.55e+07	1.34e+03	1.2e+04
19	13C-1,2,3,7,8-PeCDF	2.03e+07	3.28e+02	6.2e+04	1.30e+07	4.88e+02	2.7e+04
20	13C-1,2,3,4,7,8-HxCDF	2.28e+07	5.32e+02	4.3e+04	4.42e+07	1.45e+03	3.1e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.39e+07	1.86e+03	7.4e+03	3.04e+07	4.01e+03	7.6e+03
22	13C-2,3,7,8-TCDD	9.69e+06	3.24e+03	3.0e+03	1.26e+07	1.32e+03	9.5e+03
23	13C-1,2,3,7,8-PeCDD	1.44e+07	7.80e+02	1.8e+04	9.27e+06	4.92e+02	1.9e+04
24	13C-1,2,3,6,7,8-HxCDD	2.92e+07	1.09e+03	2.7e+04	2.30e+07	1.42e+03	1.6e+04
25	13C-1,2,3,4,6,7,8-HpCDD	2.12e+07	2.13e+03	1.0e+04	2.06e+07	9.32e+02	2.2e+04
26	13C-OCDD	3.04e+07	1.49e+03	2.0e+04	3.33e+07	1.40e+03	2.4e+04
27	13C-1,2,3,4-TCDD	9.95e+06	3.24e+03	3.1e+03	1.24e+07	1.32e+03	9.4e+03
28	13C-1,2,3,7,8,9-HxCDD	2.88e+07	1.09e+03	2.6e+04	2.31e+07	1.42e+03	1.6e+04
29	37Cl-2,3,7,8-TCDD	4.07e+05	6.28e+02	6.5e+02			

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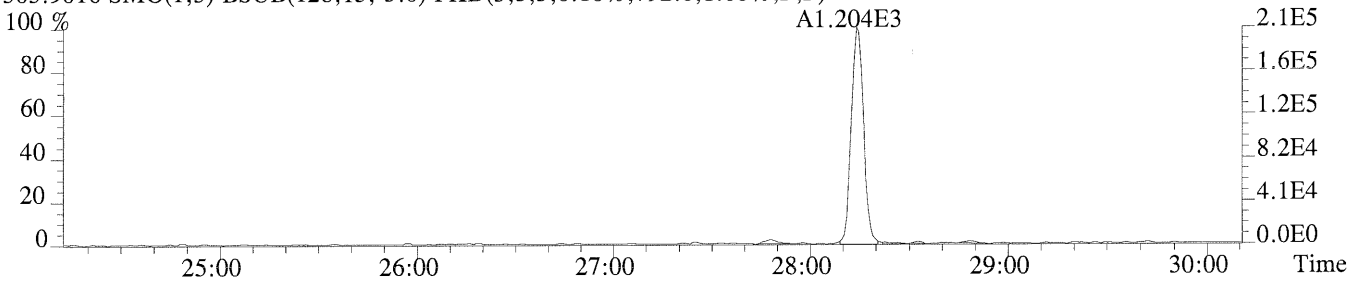
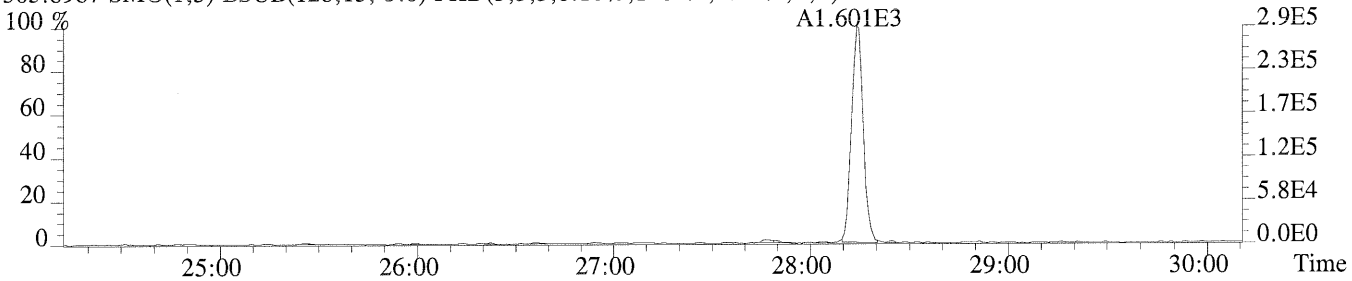
File:U212889 #1-498 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

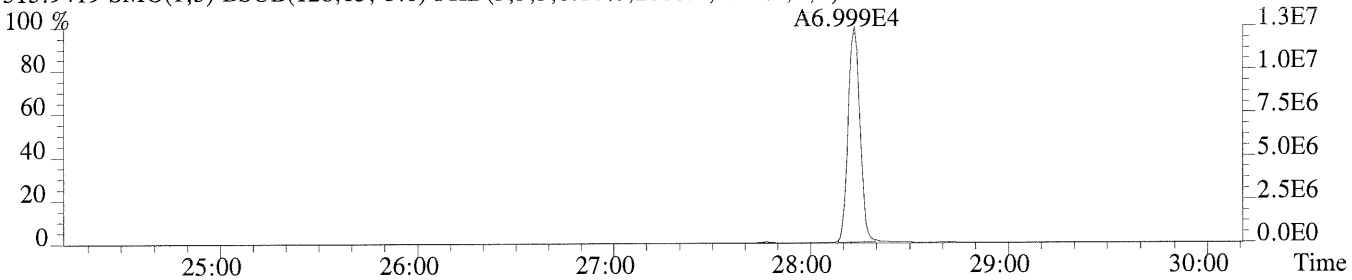
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,792.0,1.00%,F,F)



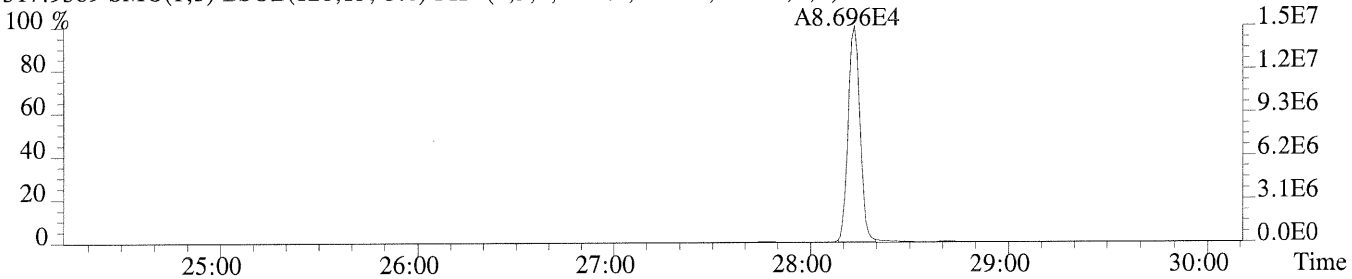
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1204.0,1.00%,F,F)



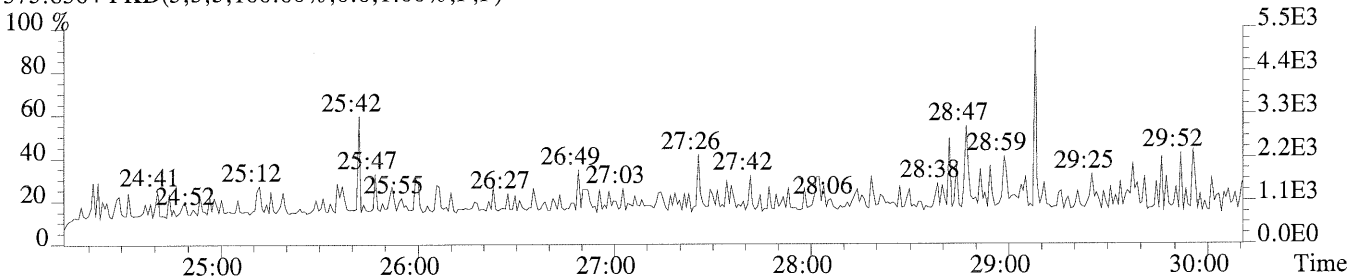
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2800.0,1.00%,F,F)



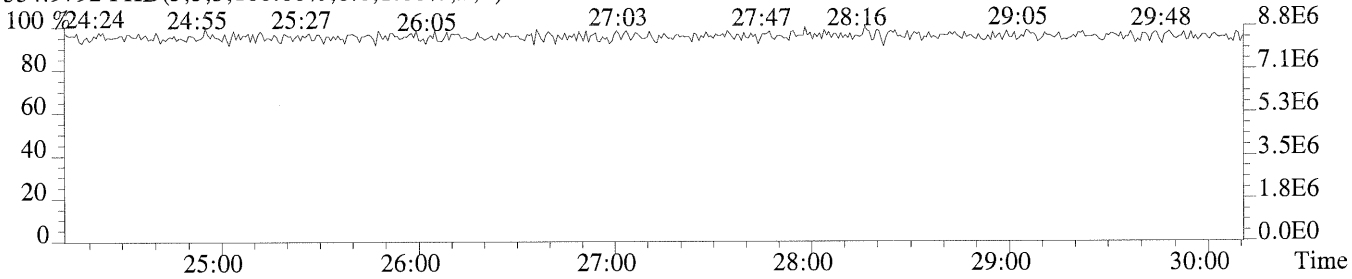
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1336.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

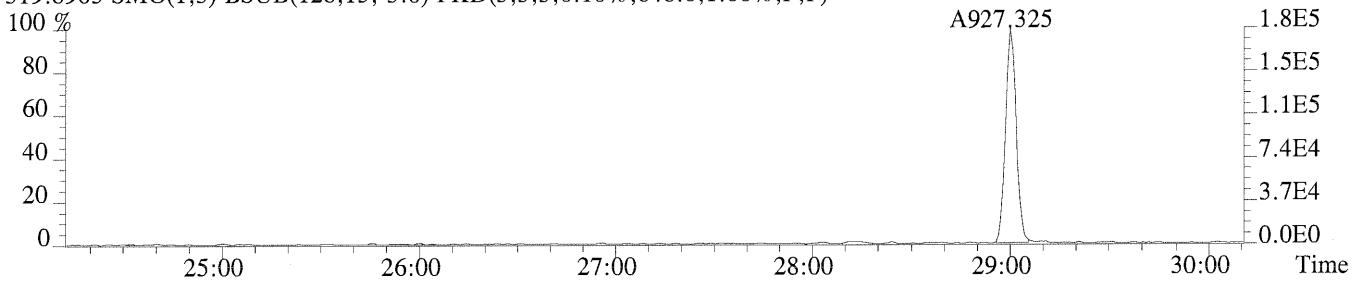


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

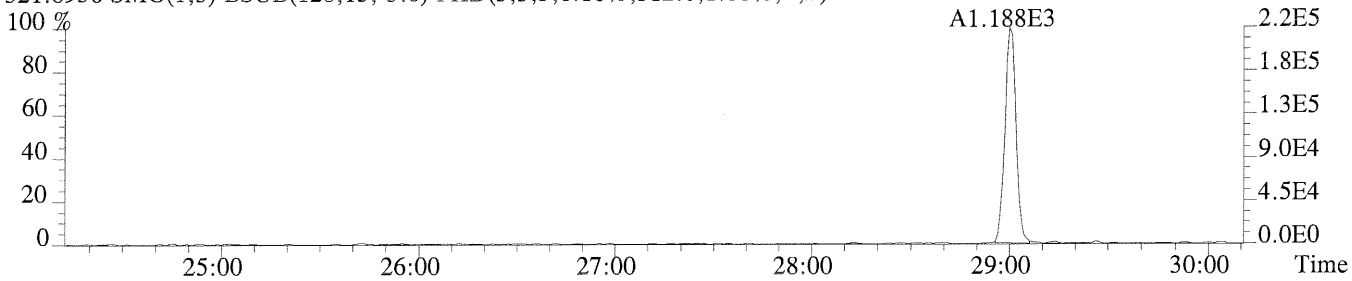


File:U212889 #1-498 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

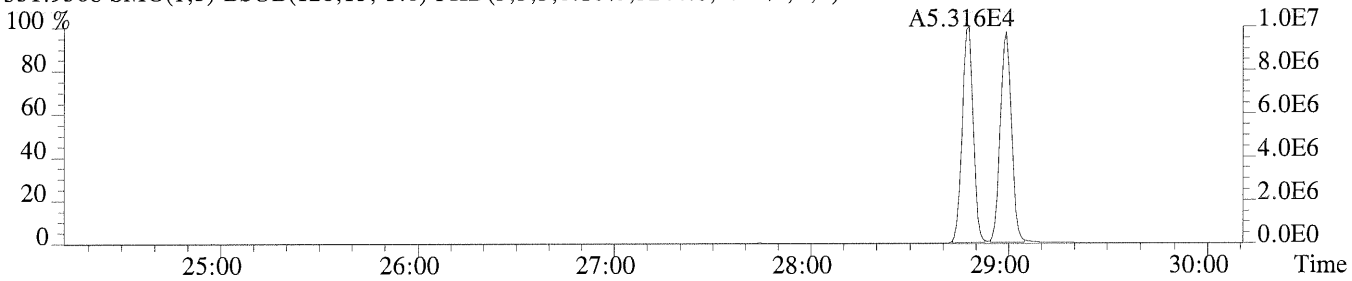
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,848.0,1.00%,F,F)



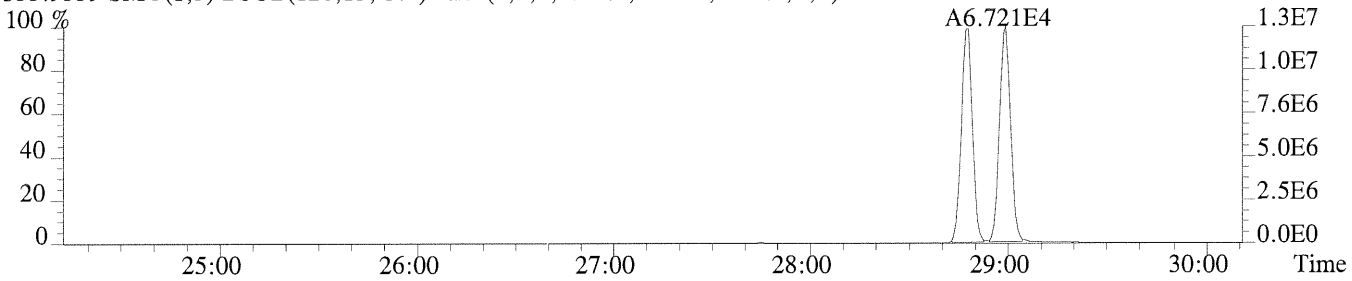
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,312.0,1.00%,F,F)



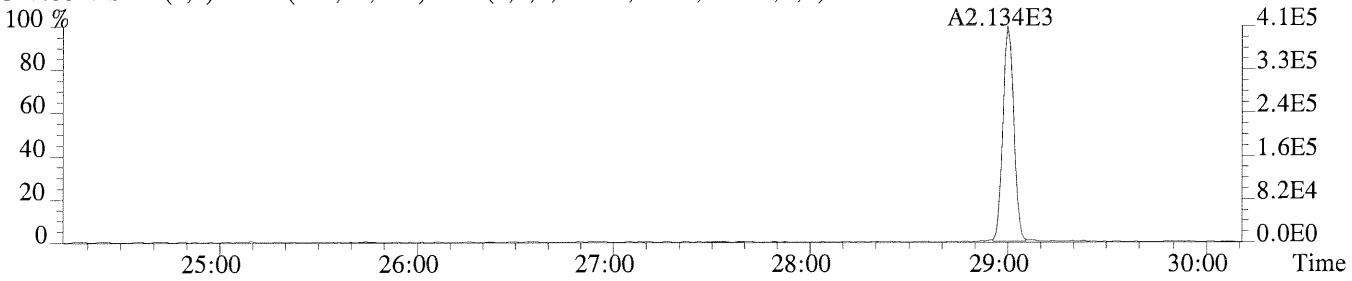
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3244.0,1.00%,F,F)



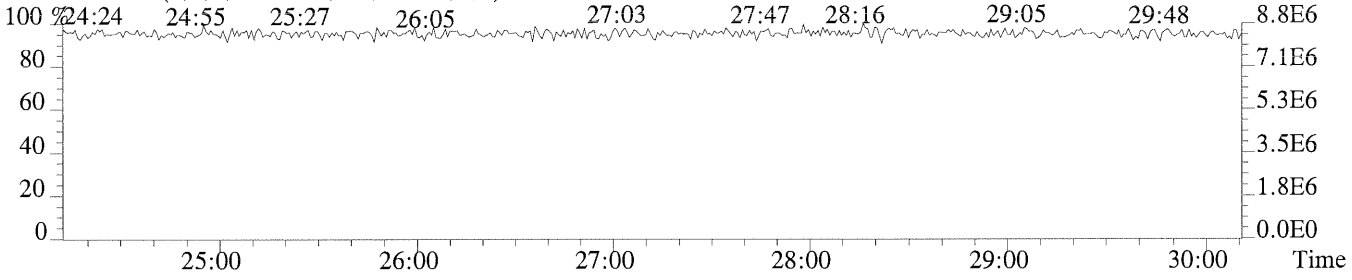
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1324.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,628.0,1.00%,F,F)

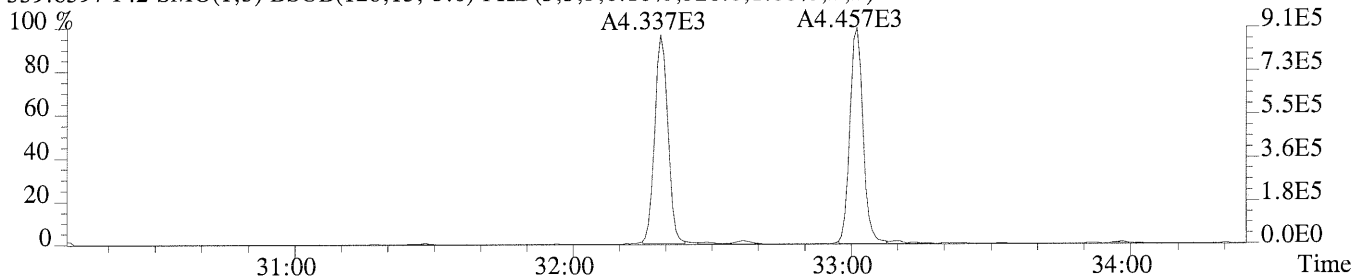


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

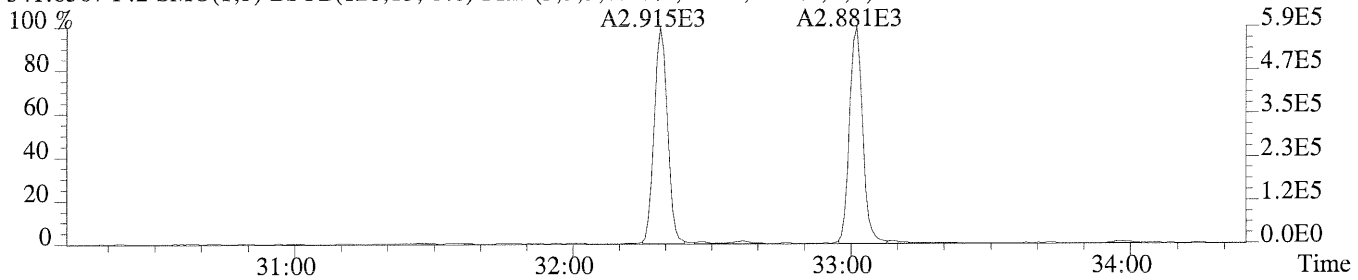


File:U212889 #1-384 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

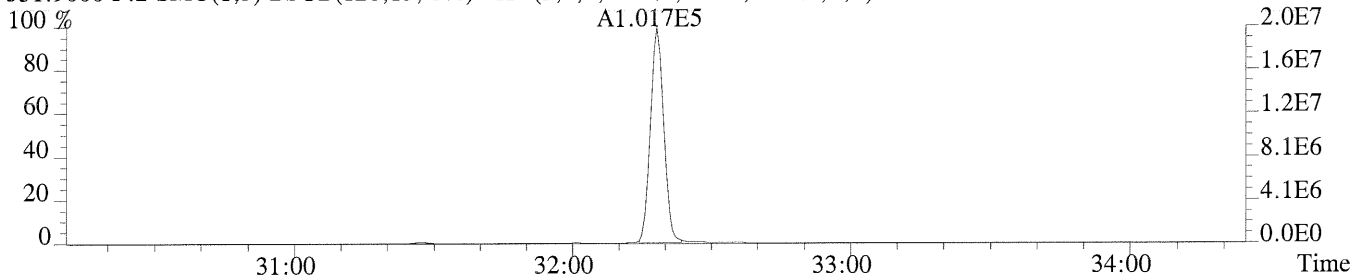
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,528.0,1.00%,F,F)



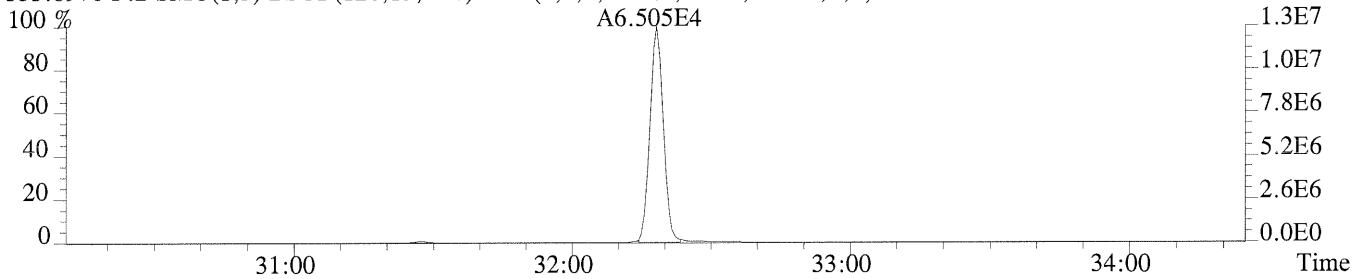
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,780.0,1.00%,F,F)



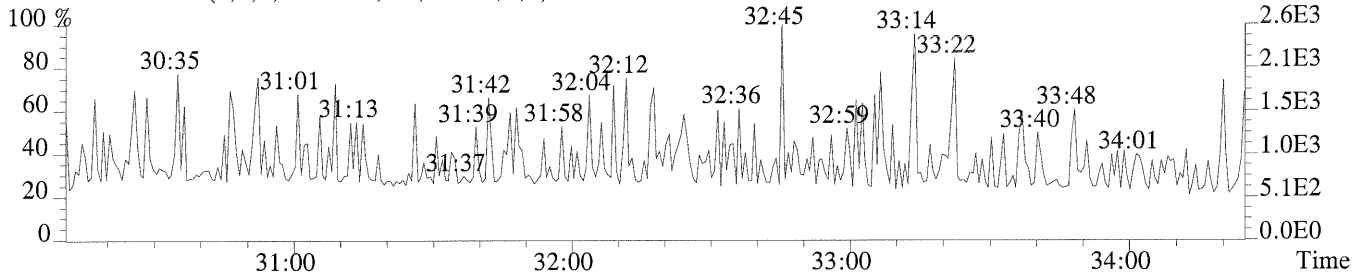
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,328.0,1.00%,F,F)



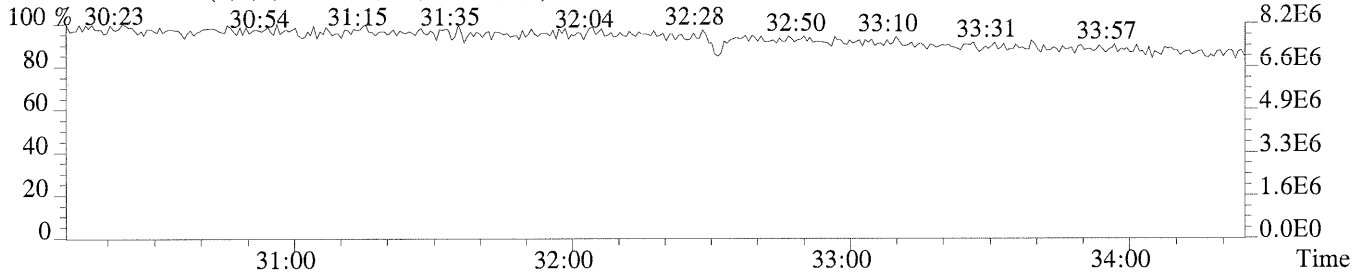
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,488.0,1.00%,F,F)



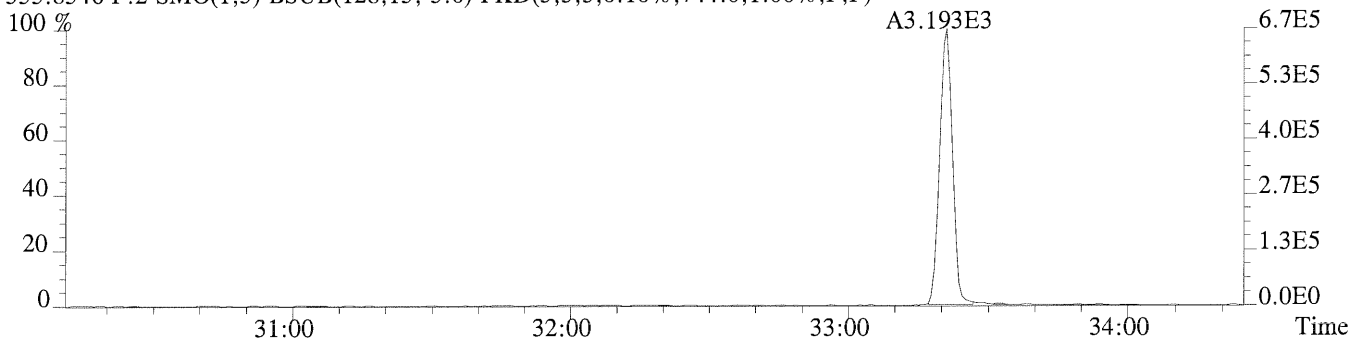
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



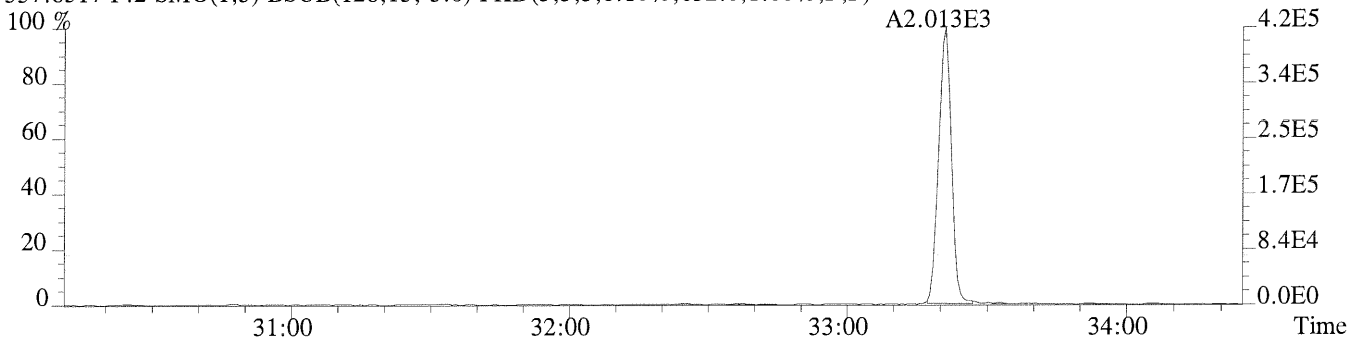
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



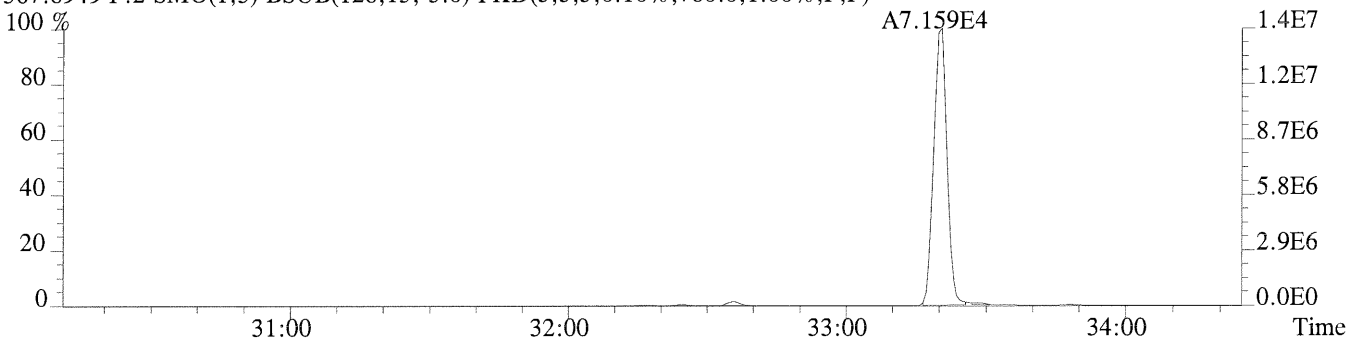
File:U212889 #1-384 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,744.0,1.00%,F,F)



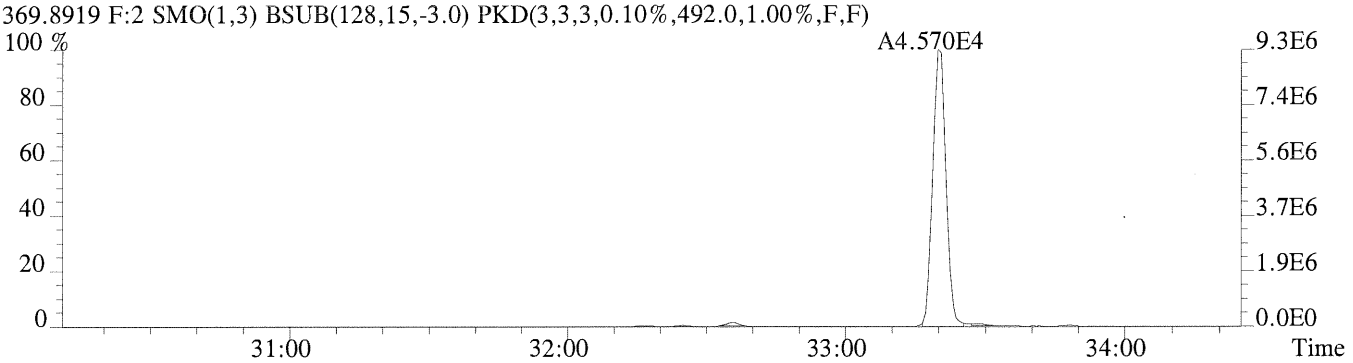
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,652.0,1.00%,F,F)



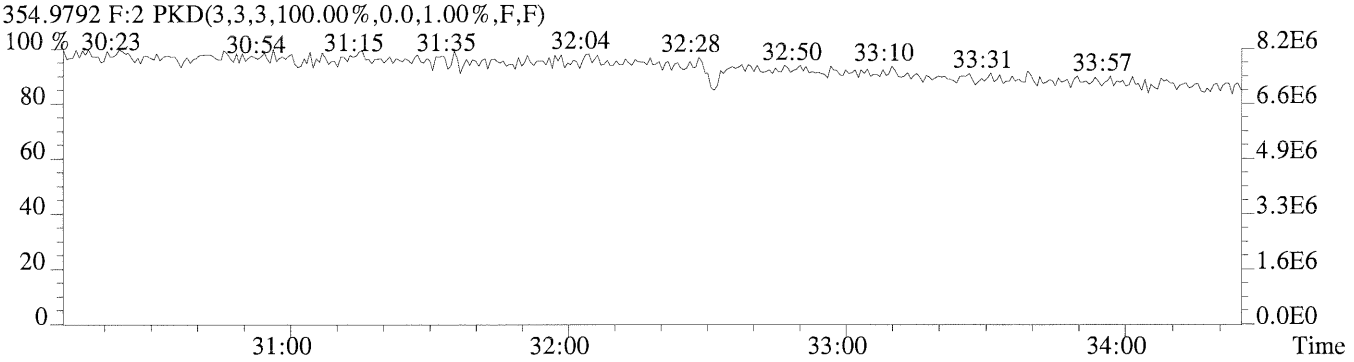
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,780.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,492.0,1.00%,F,F)

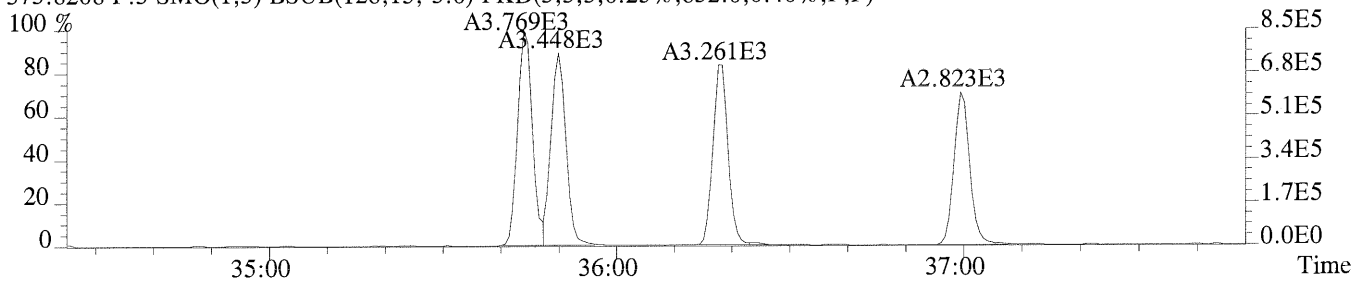


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

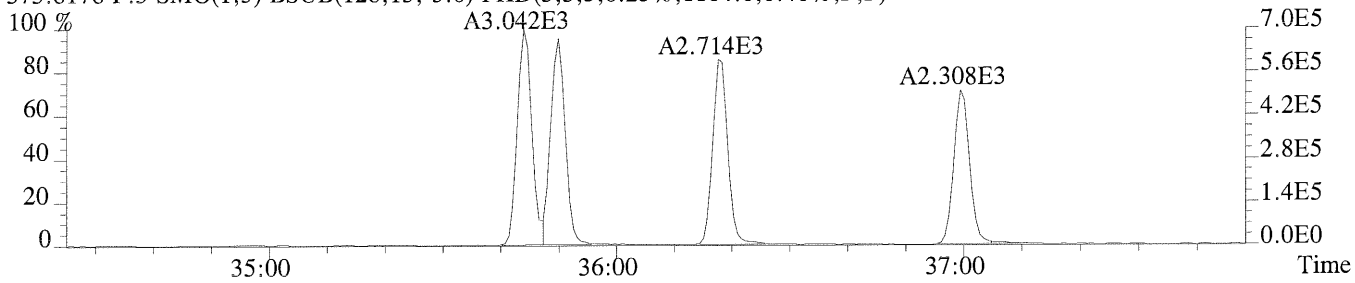


File:U212889 #1-308 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

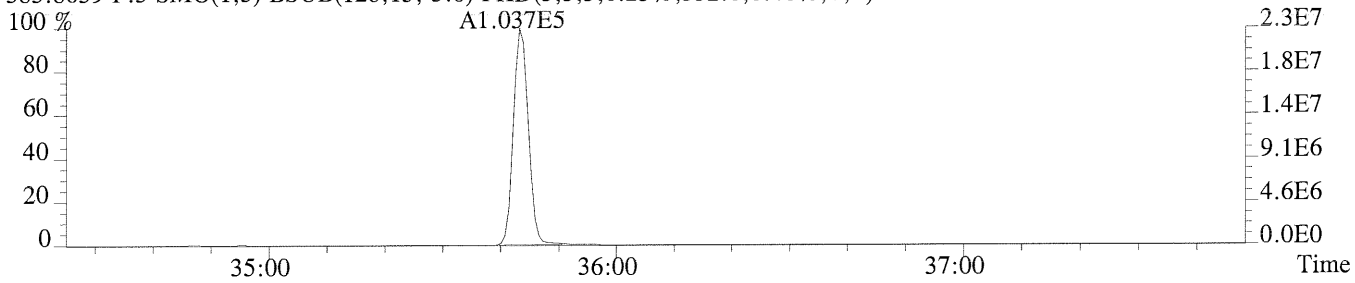
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,832.0,0.40%,F,F)



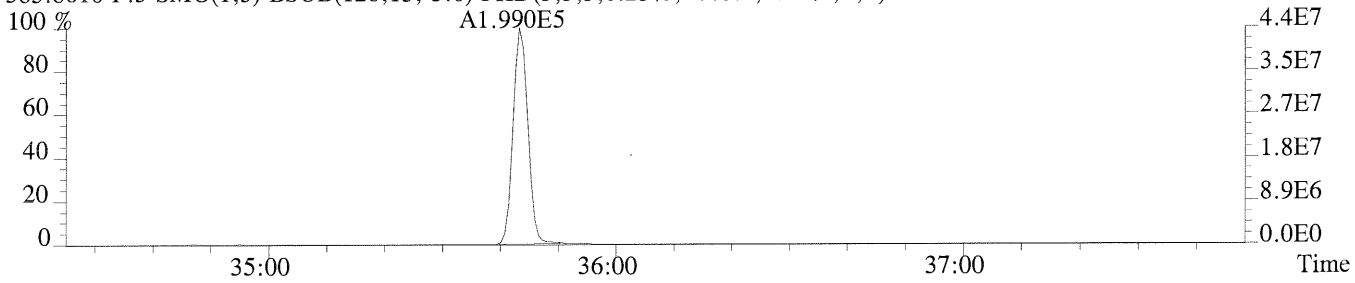
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1184.0,0.40%,F,F)



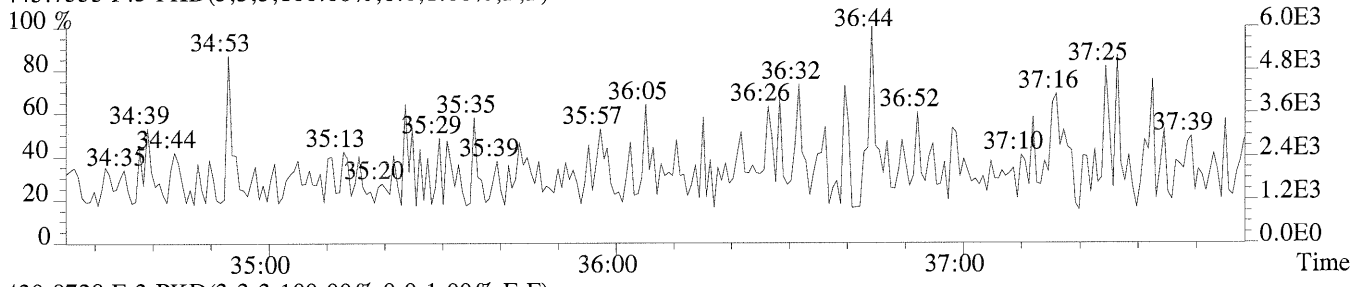
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,532.0,0.40%,F,F)



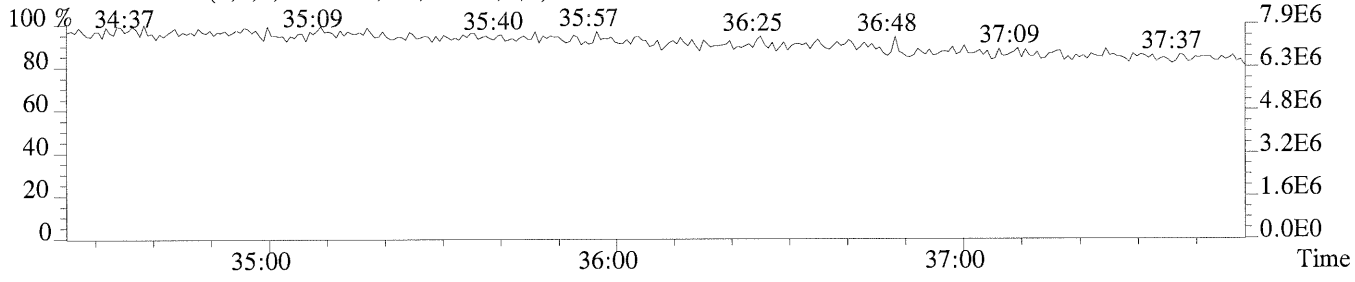
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1448.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

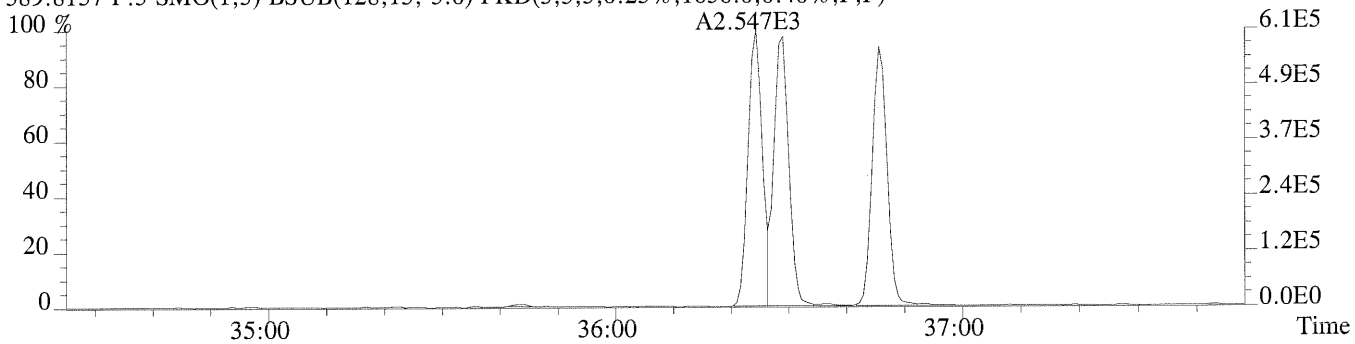


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

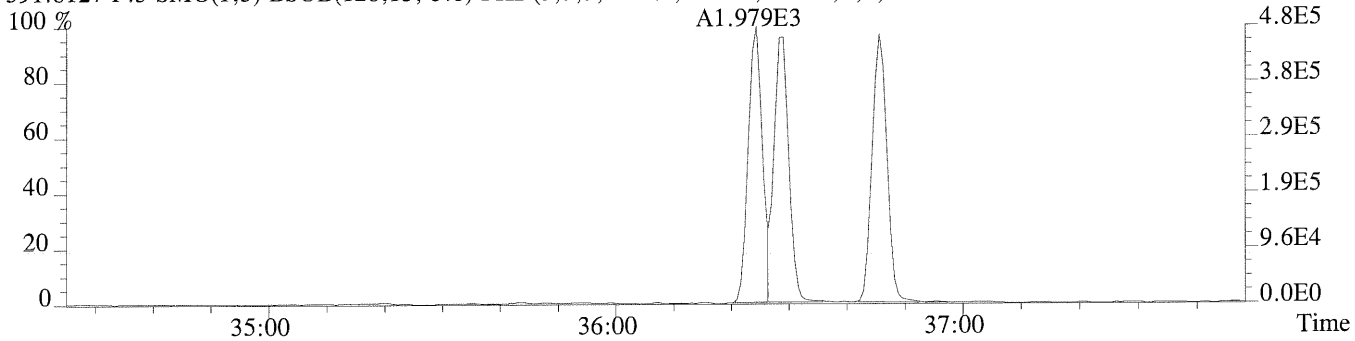


File:U212889 #1-308 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

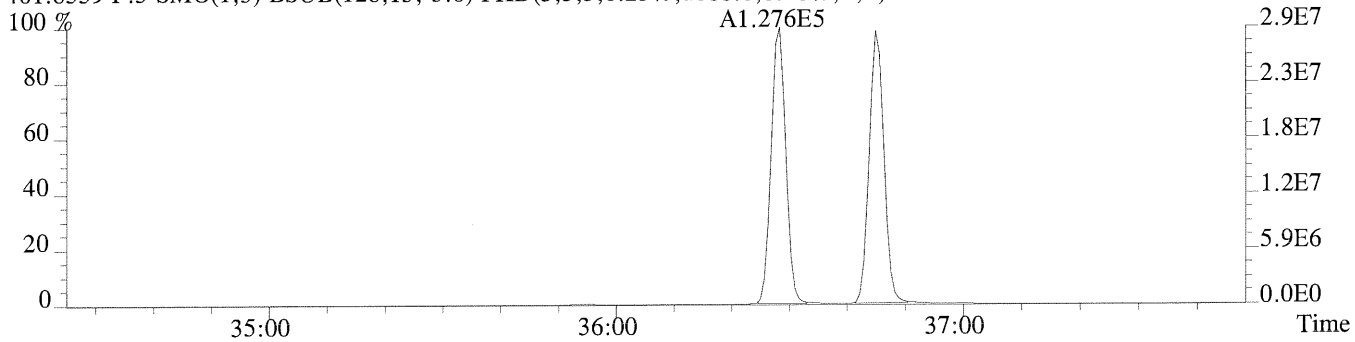
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1636.0,0.40%,F,F)



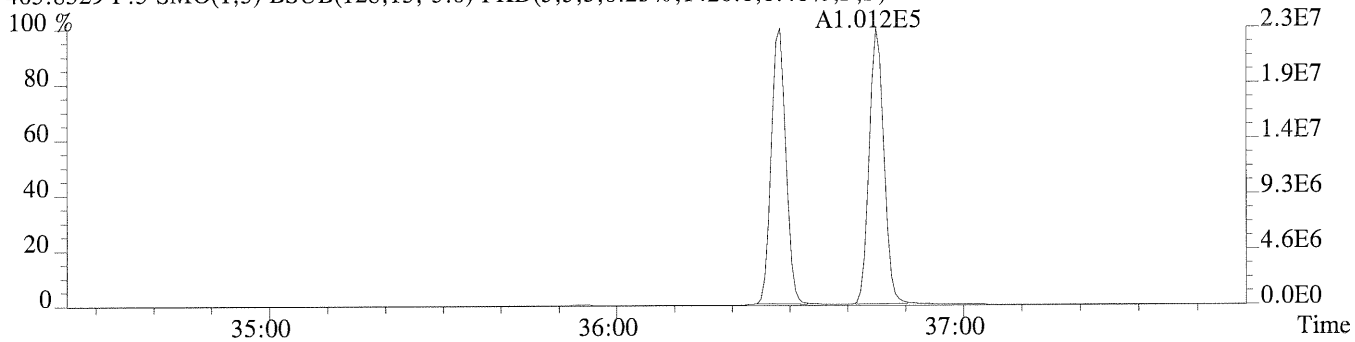
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1100.0,0.40%,F,F)



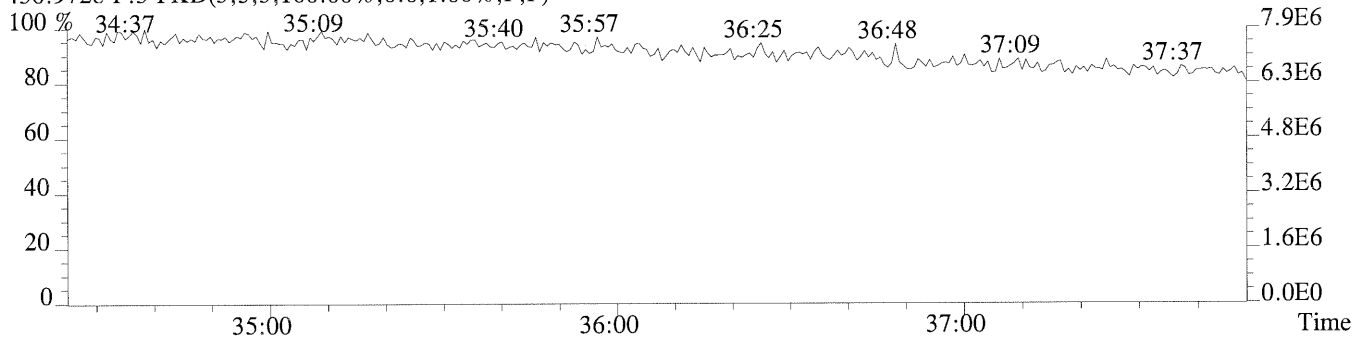
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1088.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1420.0,0.40%,F,F)

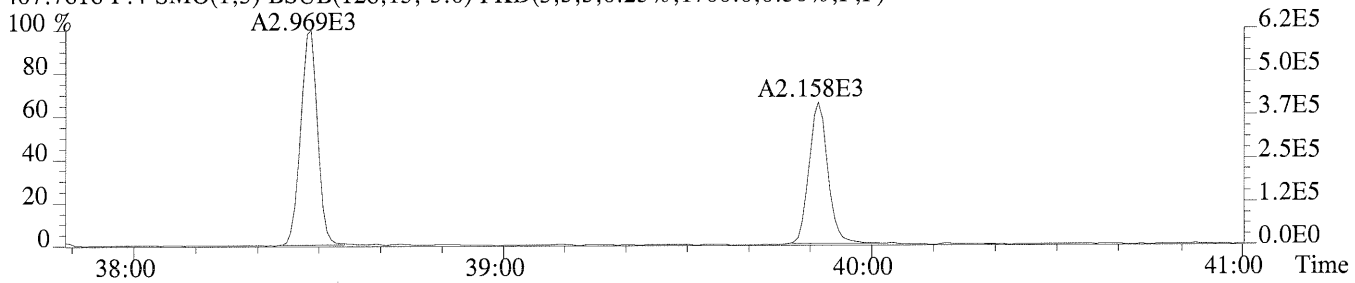


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

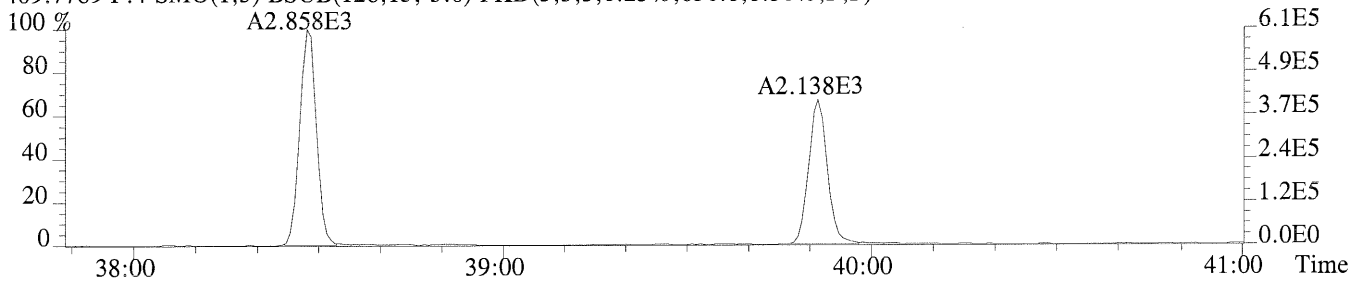


File:U212889 #1-290 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

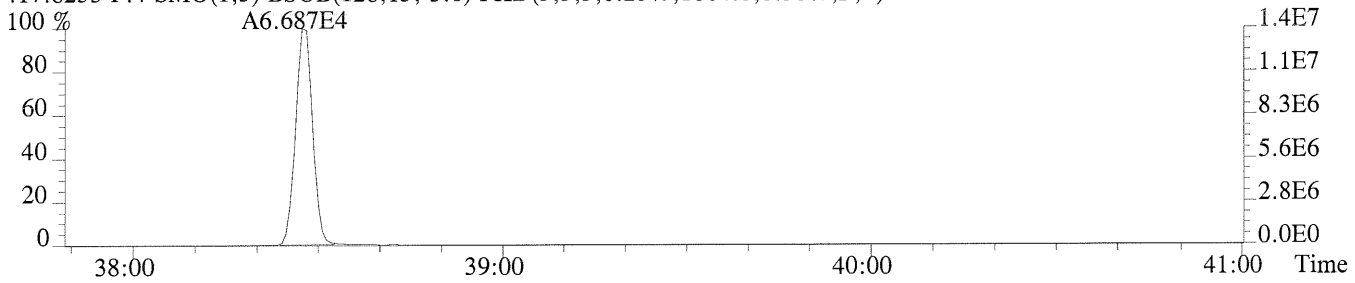
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1700.0,0.50%,F,F)



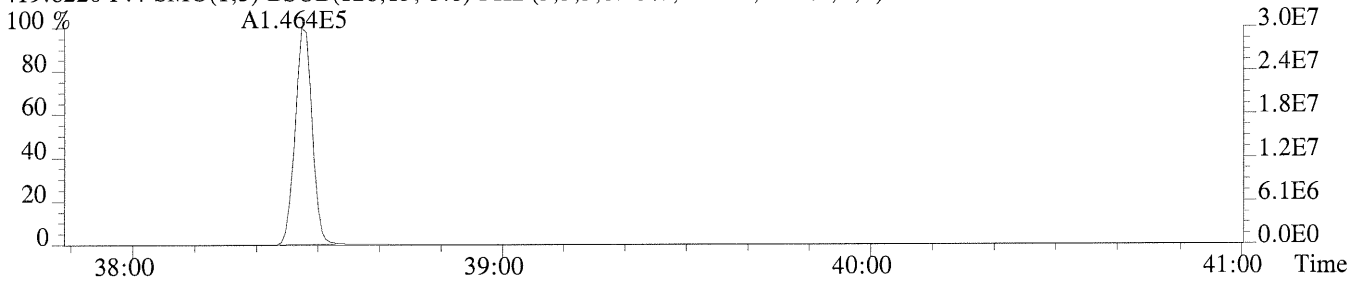
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,656.0,0.50%,F,F)



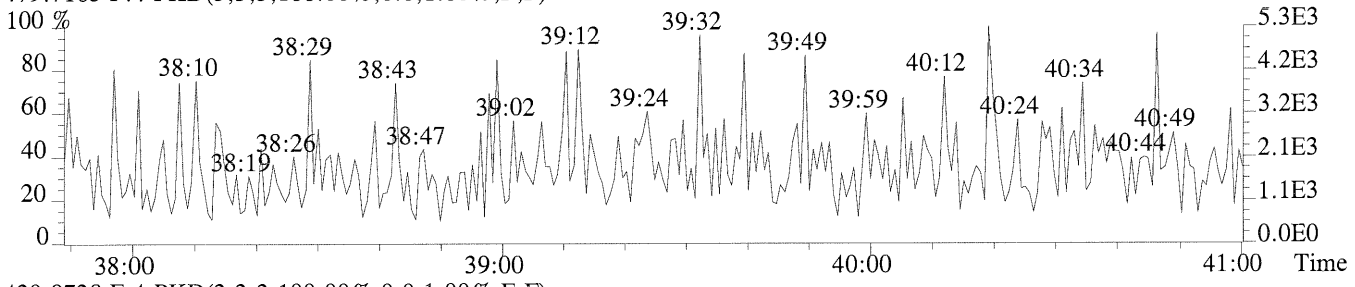
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1864.0,0.50%,F,F)



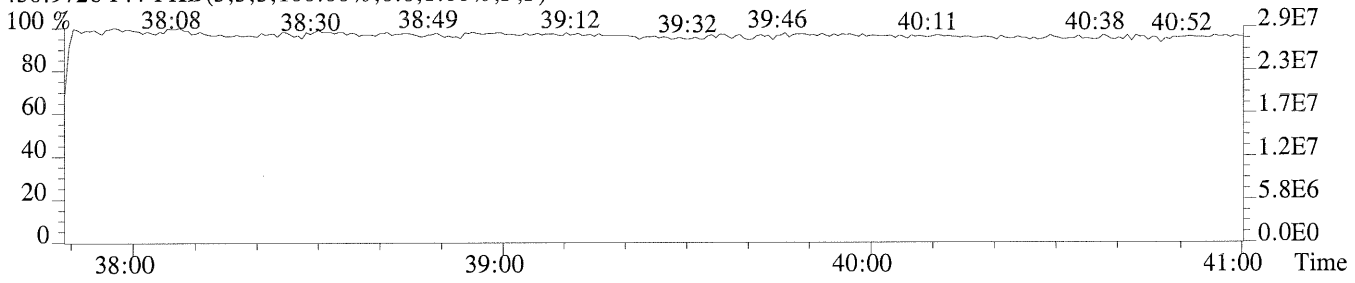
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4012.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

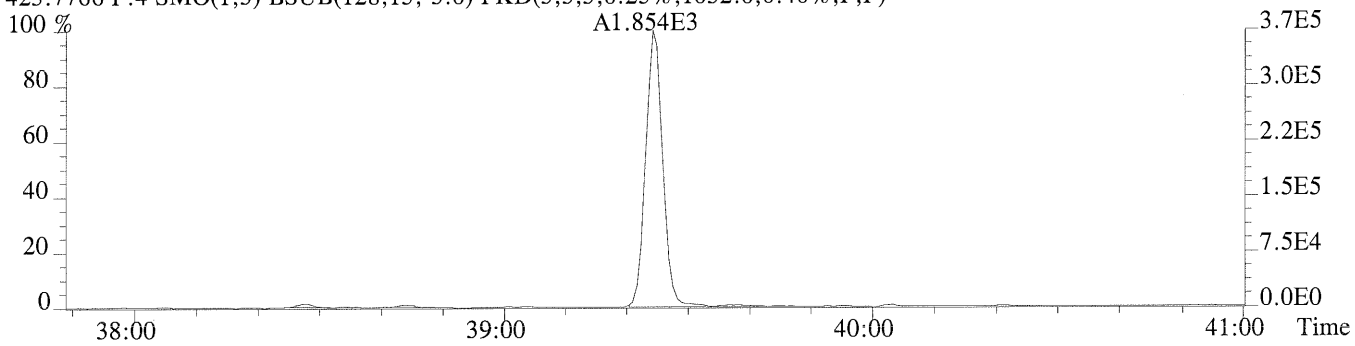


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

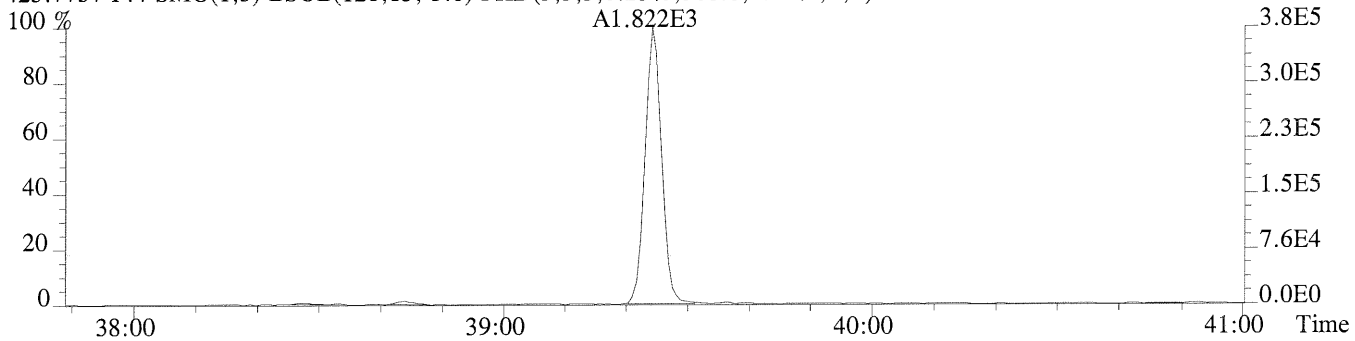


File:U212889 #1-290 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

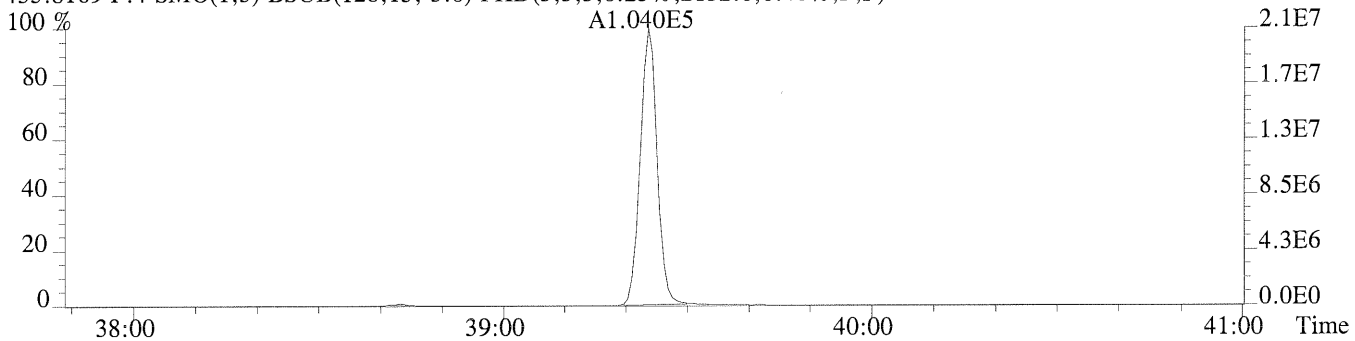
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1032.0,0.40%,F,F)



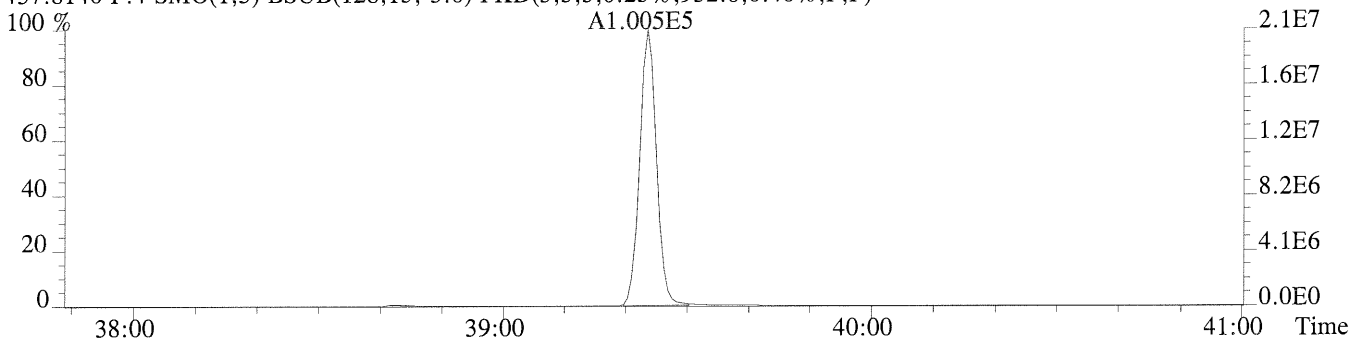
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,568.0,0.40%,F,F)



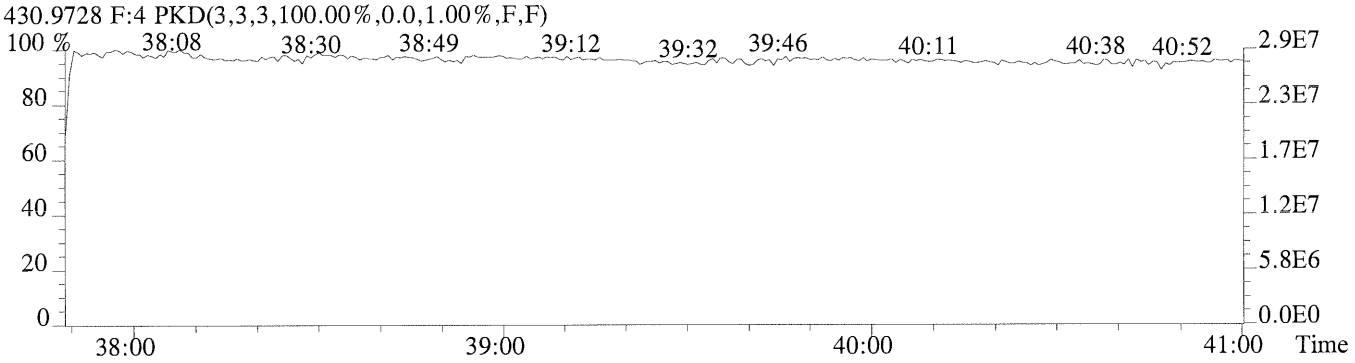
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2132.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,932.0,0.40%,F,F)

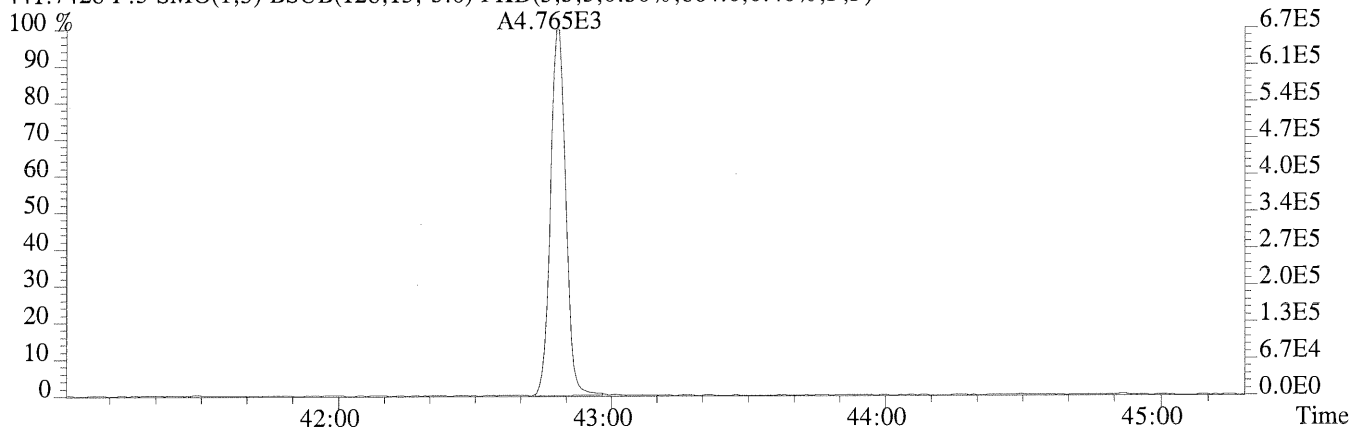


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

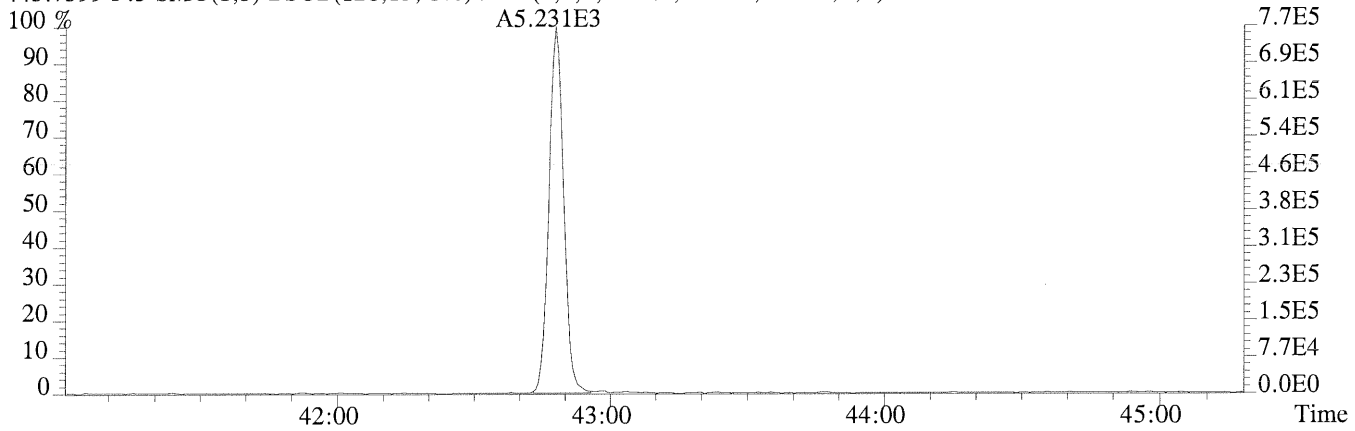


File:U212889 #1-474 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

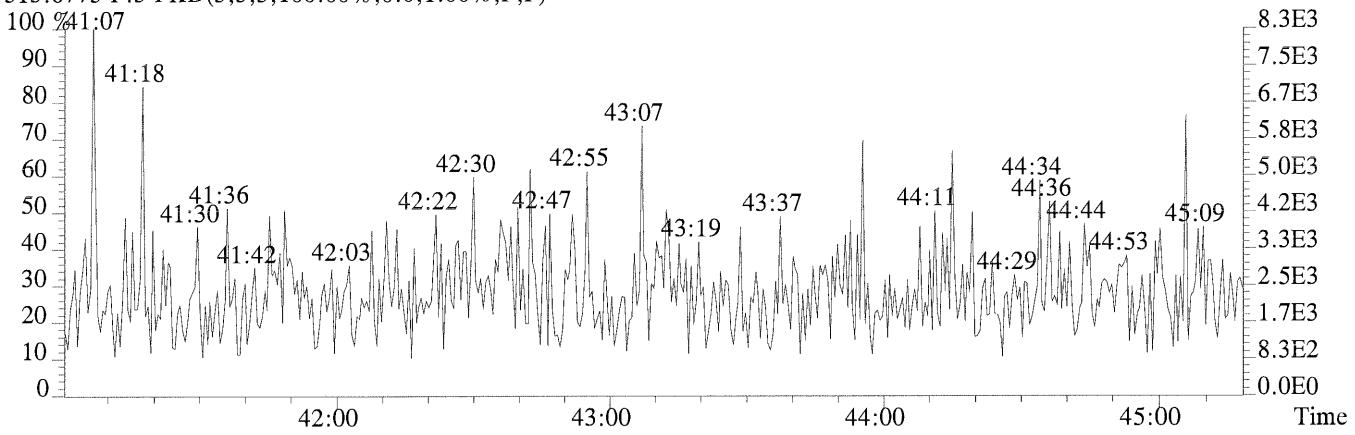
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,864.0,0.40%,F,F)



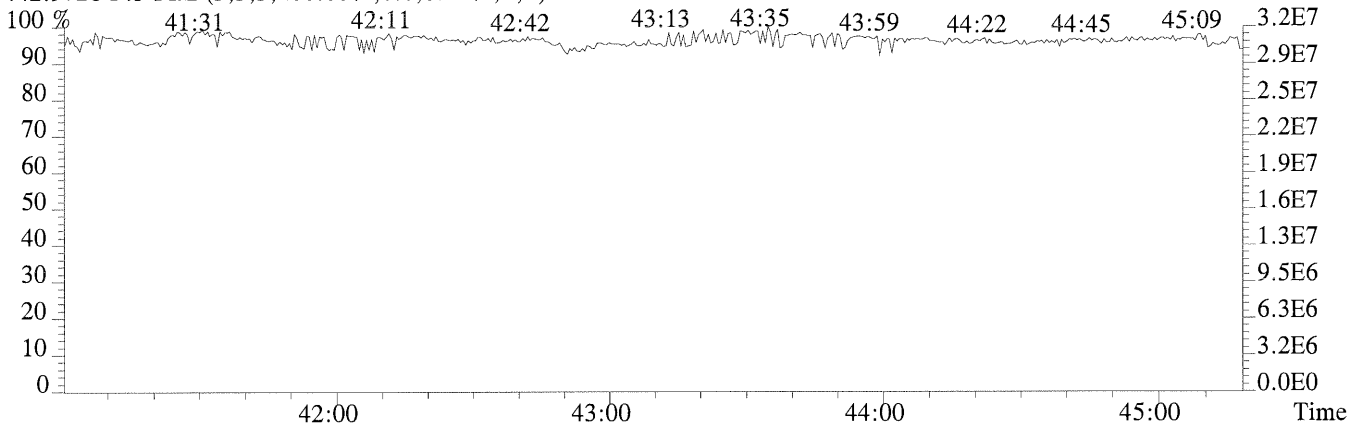
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1612.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

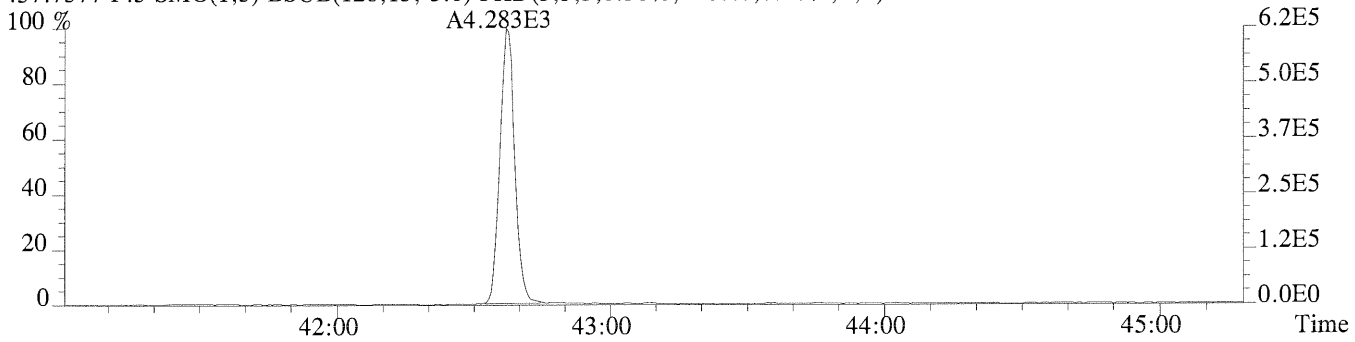


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

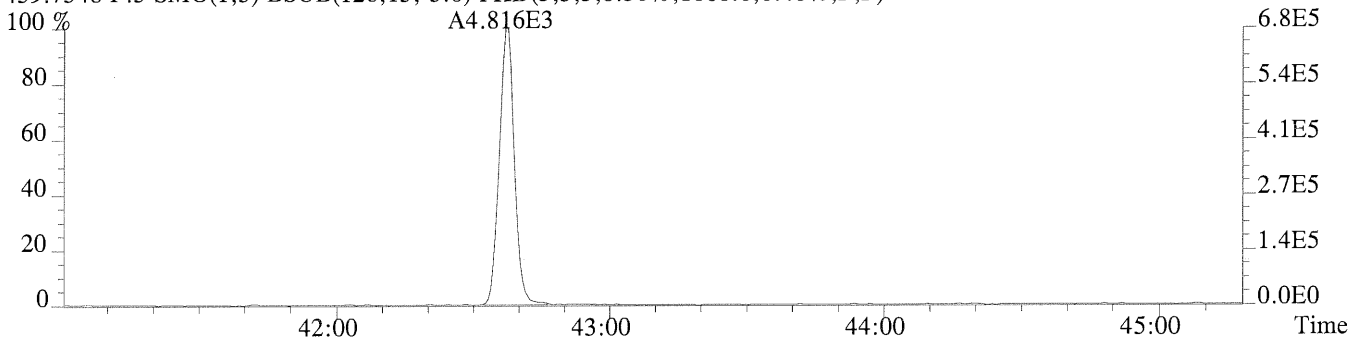


File:U212889 #1-474 Acq:10-DEC-2007 12:19:27 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC1

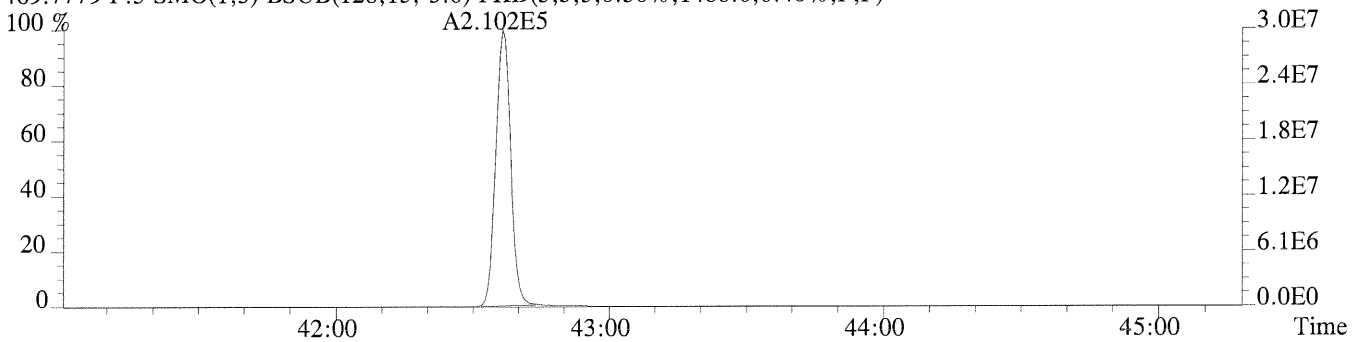
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1160.0,0.40%,F,F)



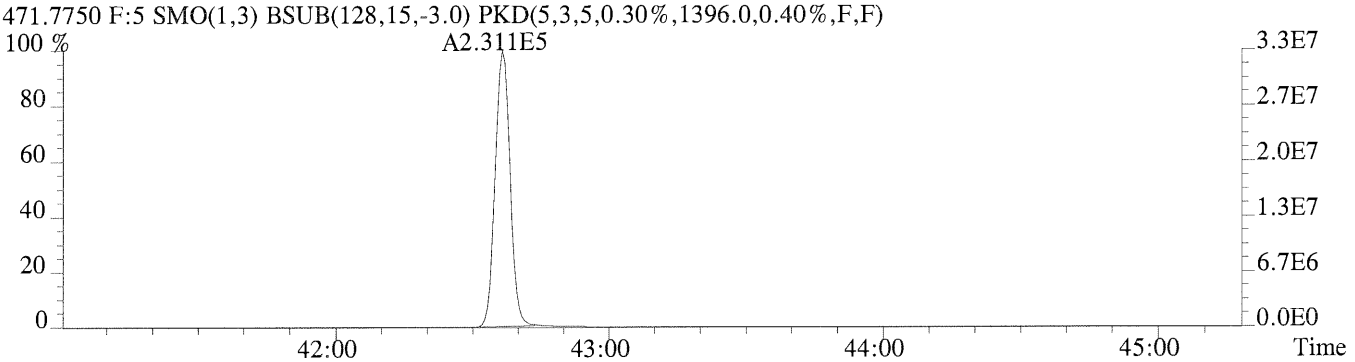
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1868.0,0.40%,F,F)



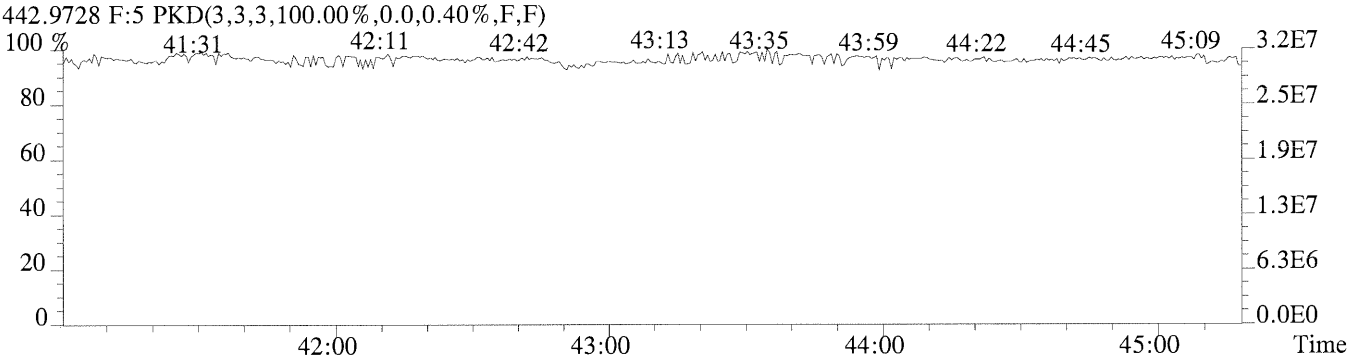
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1488.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1396.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC2

Run #2 Filename U212888 Samp: 1 Inj: 1 Acquired: 10-DEC-07 11:32:50
Processed: 10-DEC-07 15:07:10 Sample ID: ICAL HRCC2

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	28:15	3.124e+03	3.878e+03	0.81	yes	no
2	Unk	1,2,3,7,8-PeCDF	32:20	1.089e+04	7.257e+03	1.50	yes	no
3	Unk	2,3,4,7,8-PeCDF	33:01	1.120e+04	7.193e+03	1.56	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:45	8.827e+03	7.139e+03	1.24	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:50	8.341e+03	6.901e+03	1.21	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	36:18	7.757e+03	6.227e+03	1.25	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	37:00	6.745e+03	5.250e+03	1.28	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	38:29	6.406e+03	6.429e+03	1.00	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:51	4.872e+03	4.976e+03	0.98	yes	no
10	Unk	OCDF	42:48	1.117e+04	1.258e+04	0.89	yes	no
11	Unk	2,3,7,8-TCDD	29:01	2.349e+03	3.064e+03	0.77	yes	no
12	Unk	1,2,3,7,8-PeCDD	33:21	7.794e+03	5.058e+03	1.54	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	36:24	5.891e+03	4.553e+03	1.29	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	36:29	5.620e+03	4.818e+03	1.17	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:46	5.790e+03	4.691e+03	1.23	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	39:25	4.366e+03	4.162e+03	1.05	yes	no
17	Unk	OCDD	42:38	9.766e+03	1.101e+04	0.89	yes	no
18	IS	13C-2,3,7,8-TCDF	28:14	7.007e+04	8.996e+04	0.78	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	32:18	9.982e+04	6.408e+04	1.56	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:44	9.448e+04	1.816e+05	0.52	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	38:28	5.861e+04	1.274e+05	0.46	yes	no
22	IS	13C-2,3,7,8-TCDD	28:59	5.305e+04	6.943e+04	0.76	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	33:20	6.894e+04	4.496e+04	1.53	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	36:28	1.137e+05	9.034e+04	1.26	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	39:24	9.373e+04	8.980e+04	1.04	yes	no
26	IS	13C-OCDD	42:37	1.884e+05	2.122e+05	0.89	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	28:48	5.354e+04	6.773e+04	0.79	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:46	1.119e+05	8.898e+04	1.26	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	29:01	5.732e+03				

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC2

Run #2 Filename U212888 #1 Samp: 1 Inj: 1 Acquired: 10-DEC-07 11:32:50

Processed: 10-DEC-07 15:07:10 LAB. ID: ICAL HRCC2

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	5.74e+05	6.08e+02	9.4e+02	6.87e+05	1.09e+03	6.3e+02
2	1,2,3,7,8-PeCDF	2.19e+06	6.36e+02	3.5e+03	1.46e+06	1.04e+03	1.4e+03
3	2,3,4,7,8-PeCDF	2.35e+06	6.36e+02	3.7e+03	1.51e+06	1.04e+03	1.5e+03
4	1,2,3,4,7,8-HxCDF	1.95e+06	9.00e+02	2.2e+03	1.58e+06	1.40e+03	1.1e+03
5	1,2,3,6,7,8-HxCDF	1.85e+06	9.00e+02	2.1e+03	1.53e+06	1.40e+03	1.1e+03
6	2,3,4,6,7,8-HxCDF	1.80e+06	9.00e+02	2.0e+03	1.42e+06	1.40e+03	1.0e+03
7	1,2,3,7,8,9-HxCDF	1.42e+06	9.00e+02	1.6e+03	1.11e+06	1.40e+03	7.9e+02
8	1,2,3,4,6,7,8-HpCDF	1.38e+06	2.30e+03	6.0e+02	1.39e+06	1.01e+03	1.4e+03
9	1,2,3,4,7,8,9-HpCDF	9.39e+05	2.30e+03	4.1e+02	9.60e+05	1.01e+03	9.5e+02
10	OCDF	1.60e+06	1.02e+03	1.6e+03	1.77e+06	1.90e+03	9.3e+02
11	2,3,7,8-TCDD	4.42e+05	7.52e+02	5.9e+02	5.88e+05	3.96e+02	1.5e+03
12	1,2,3,7,8-PeCDD	1.61e+06	1.28e+03	1.3e+03	1.05e+06	8.56e+02	1.2e+03
13	1,2,3,4,7,8-HxCDD	1.35e+06	1.23e+03	1.1e+03	1.12e+06	1.51e+03	7.4e+02
14	1,2,3,6,7,8-HxCDD	1.33e+06	1.23e+03	1.1e+03	1.09e+06	1.51e+03	7.2e+02
15	1,2,3,7,8,9-HxCDD	1.28e+06	1.23e+03	1.0e+03	1.04e+06	1.51e+03	6.9e+02
16	1,2,3,4,6,7,8-HpCDD	8.56e+05	7.20e+02	1.2e+03	8.29e+05	7.32e+02	1.1e+03
17	OCDD	1.41e+06	1.12e+03	1.3e+03	1.58e+06	2.13e+03	7.4e+02
18	13C-2,3,7,8-TCDF	1.24e+07	2.33e+03	5.3e+03	1.58e+07	1.72e+03	9.2e+03
19	13C-1,2,3,7,8-PeCDF	1.97e+07	1.22e+03	1.6e+04	1.27e+07	1.10e+03	1.2e+04
20	13C-1,2,3,4,7,8-HxCDF	2.06e+07	1.17e+03	1.8e+04	3.93e+07	1.22e+03	3.2e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.25e+07	2.03e+03	6.1e+03	2.71e+07	3.28e+03	8.2e+03
22	13C-2,3,7,8-TCDD	1.00e+07	3.44e+03	2.9e+03	1.31e+07	1.20e+03	1.1e+04
23	13C-1,2,3,7,8-PeCDD	1.44e+07	7.68e+02	1.9e+04	9.38e+06	8.48e+02	1.1e+04
24	13C-1,2,3,6,7,8-HxCDD	2.63e+07	1.78e+03	1.5e+04	2.10e+07	1.38e+03	1.5e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.88e+07	2.44e+03	7.7e+03	1.81e+07	9.44e+02	1.9e+04
26	13C-OCDD	2.68e+07	1.29e+03	2.1e+04	3.00e+07	1.54e+03	1.9e+04
27	13C-1,2,3,4-TCDD	1.01e+07	3.44e+03	2.9e+03	1.28e+07	1.20e+03	1.1e+04
28	13C-1,2,3,7,8,9-HxCDD	2.50e+07	1.78e+03	1.4e+04	1.97e+07	1.38e+03	1.4e+04
29	37Cl-2,3,7,8-TCDD	1.07e+06	9.08e+02	1.2e+03			

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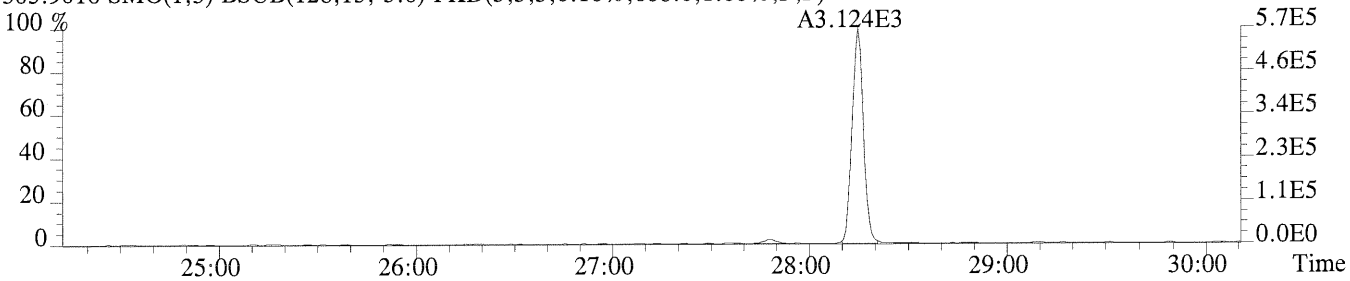
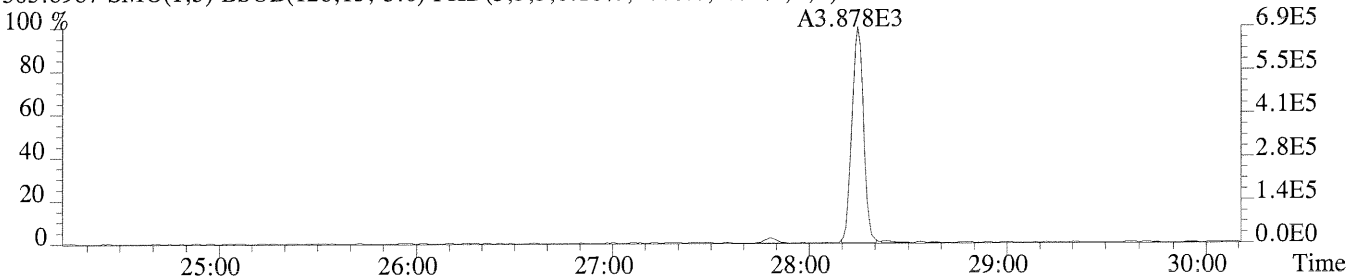
File:U212888 #1-498 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

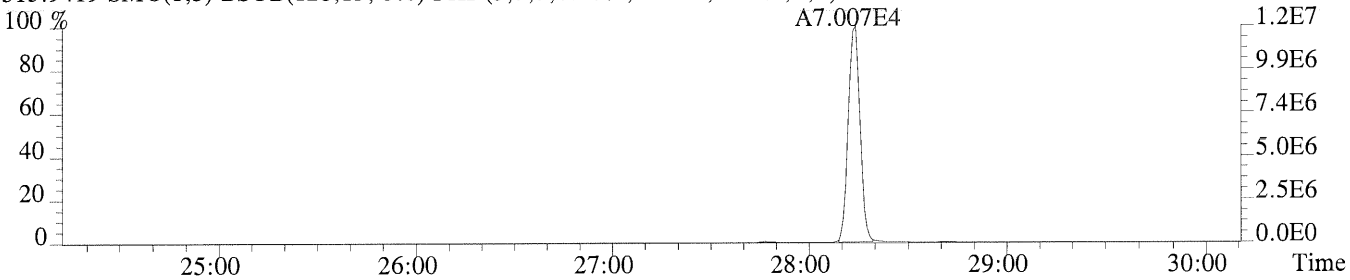
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,608.0,1.00%,F,F)



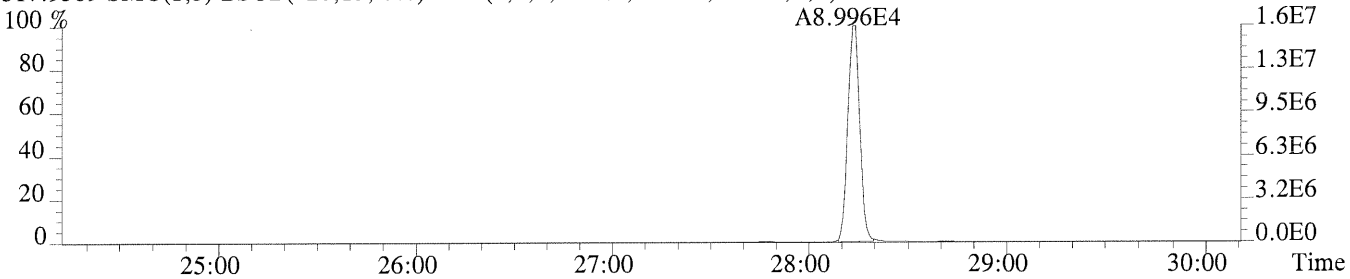
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1088.0,1.00%,F,F)



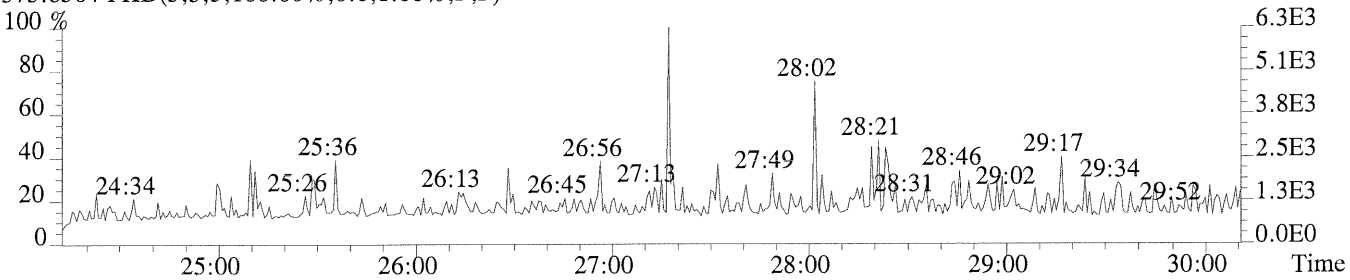
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2328.0,1.00%,F,F)



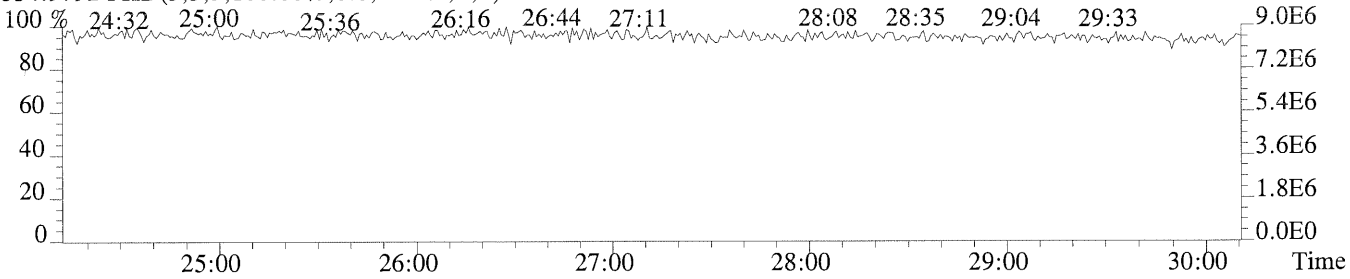
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1720.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

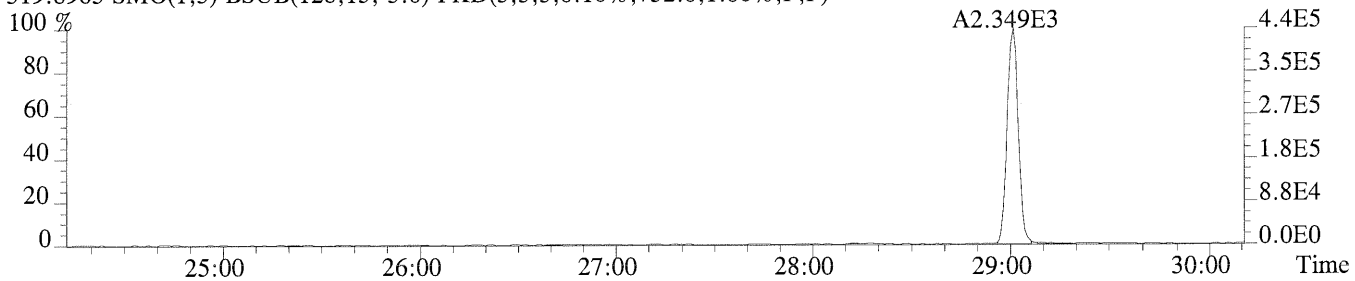


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

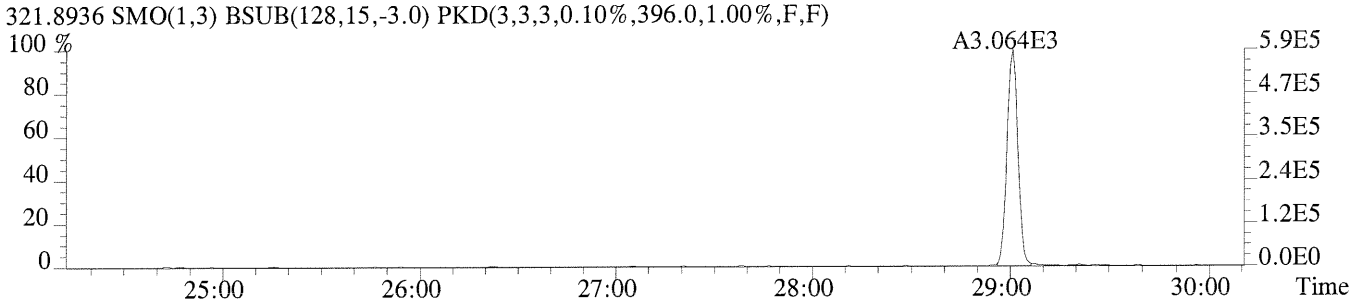


File:U212888 #1-498 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

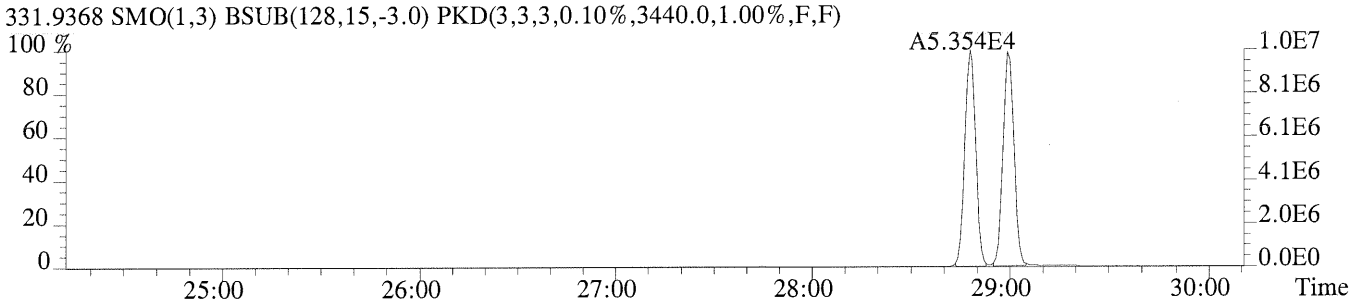
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,752.0,1.00%,F,F)



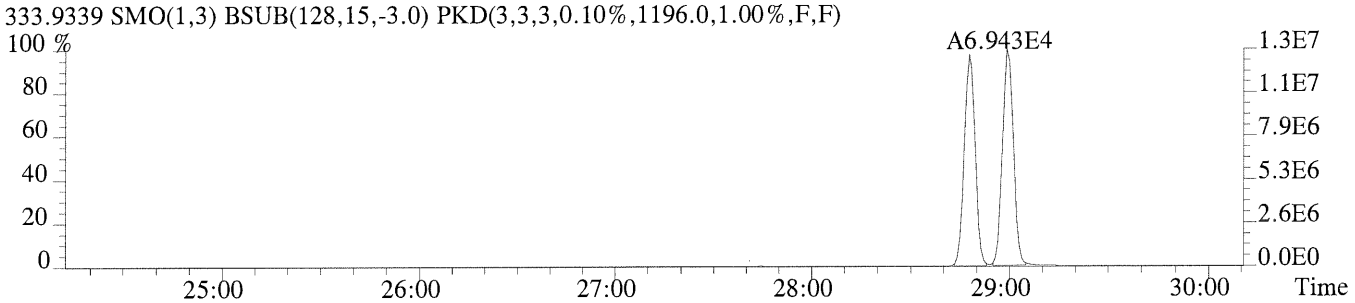
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,396.0,1.00%,F,F)



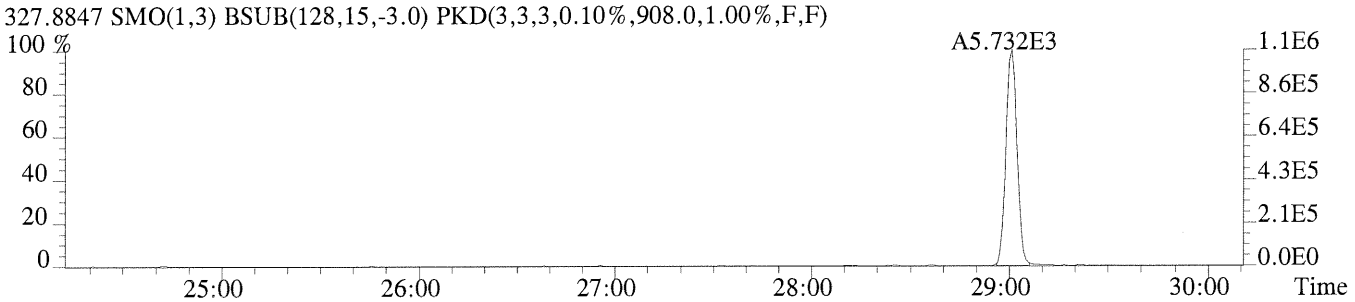
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3440.0,1.00%,F,F)



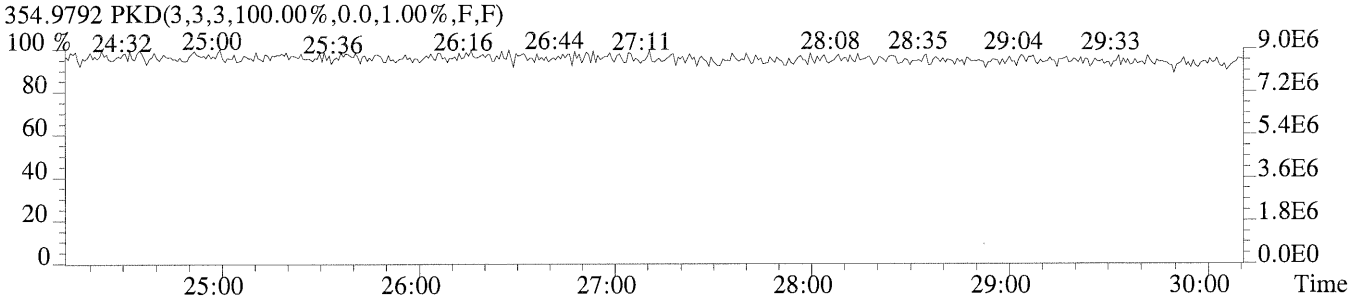
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1196.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,908.0,1.00%,F,F)

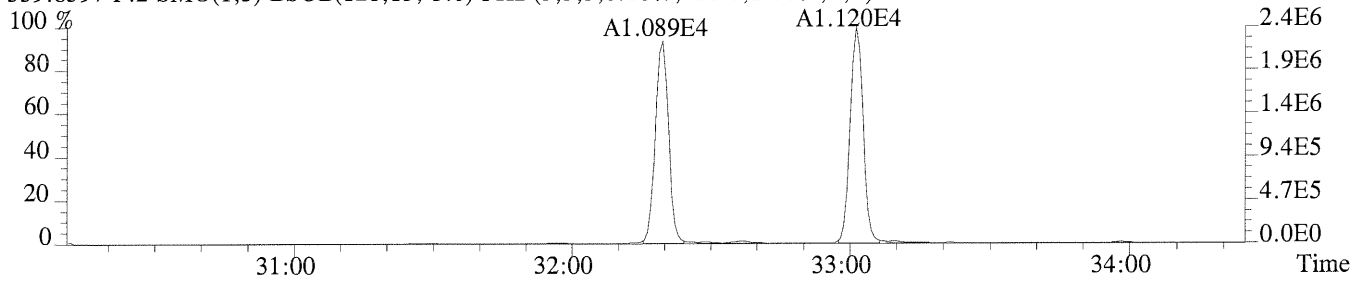


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

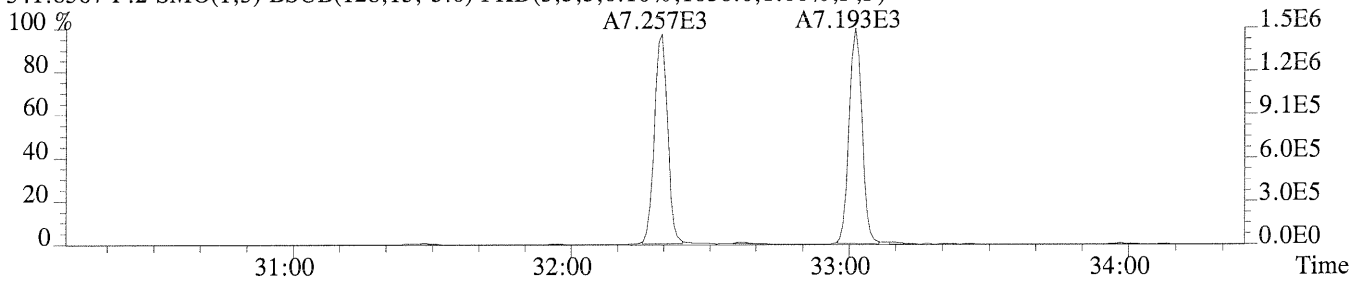


File:U212888 #1-384 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

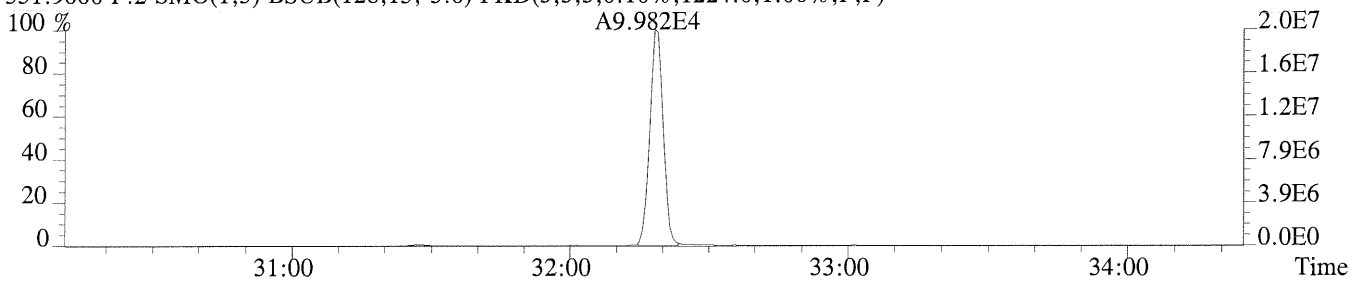
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,636.0,1.00%,F,F)



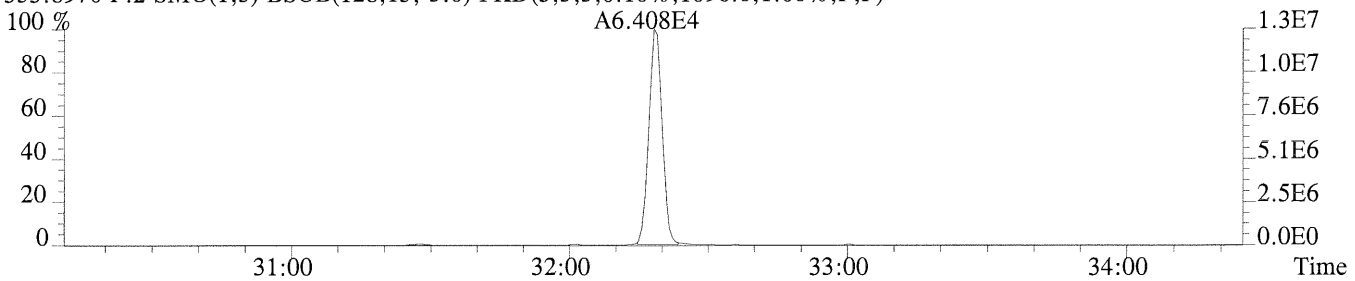
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1036.0,1.00%,F,F)



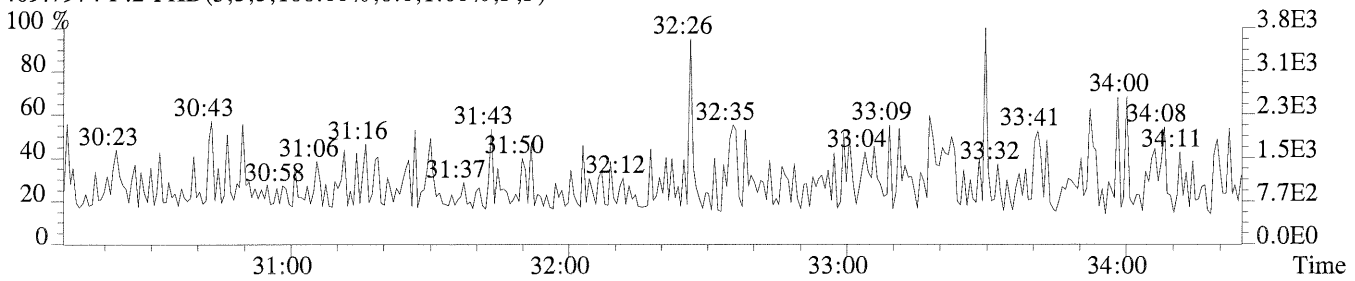
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1224.0,1.00%,F,F)



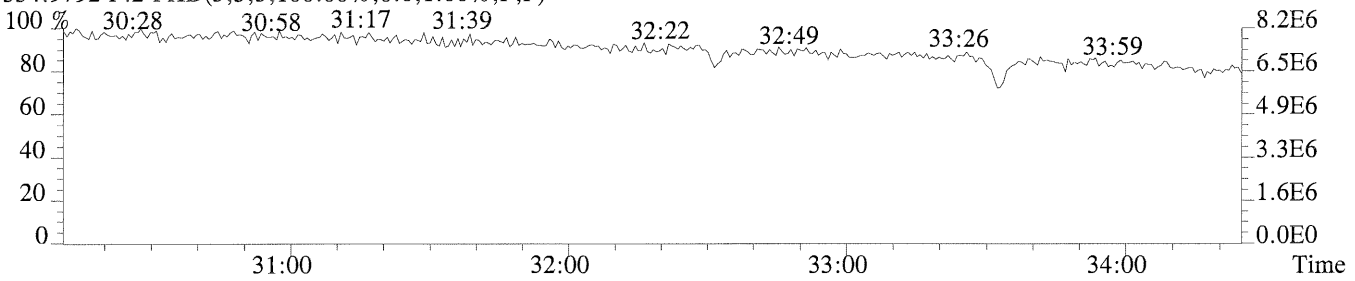
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1096.0,1.00%,F,F)



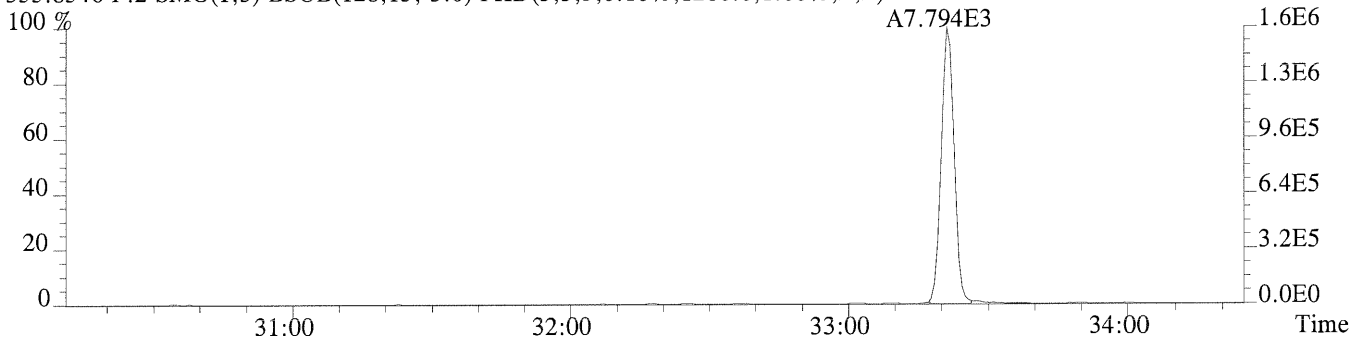
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



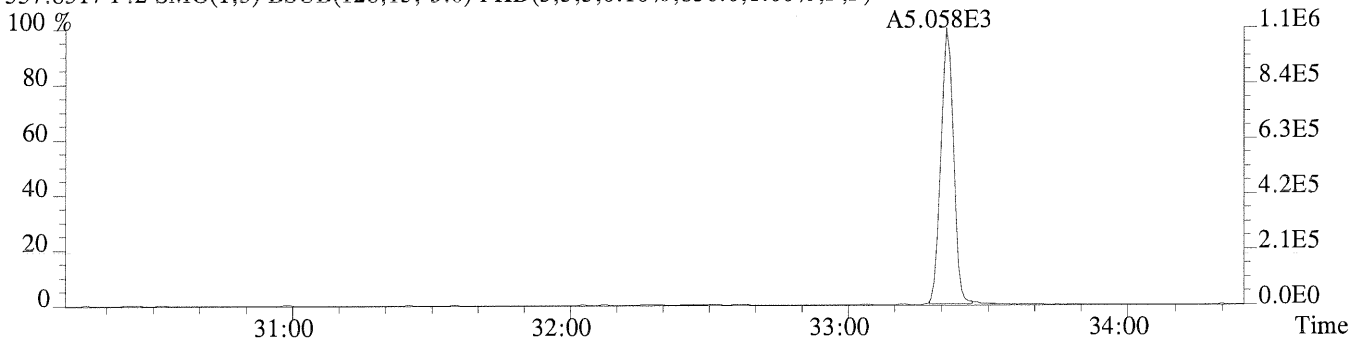
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



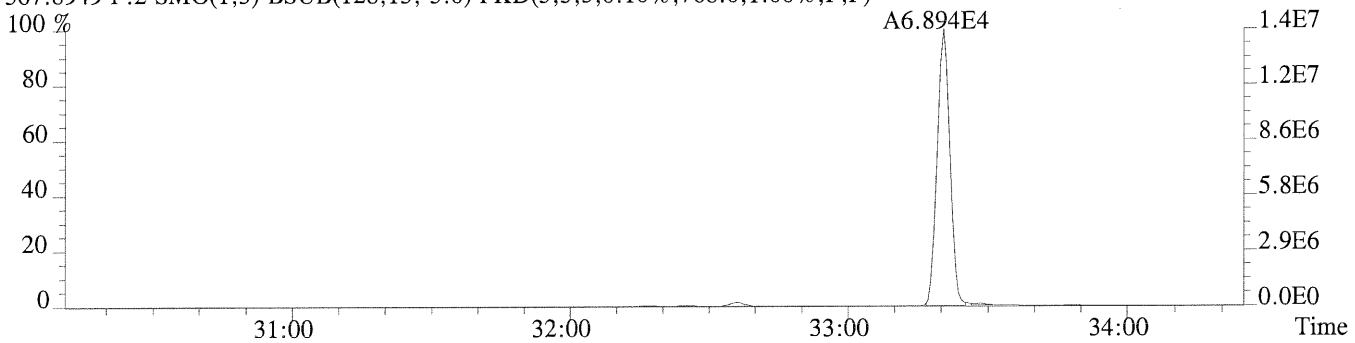
File:U212888 #1-384 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1280.0,1.00%,F,F)



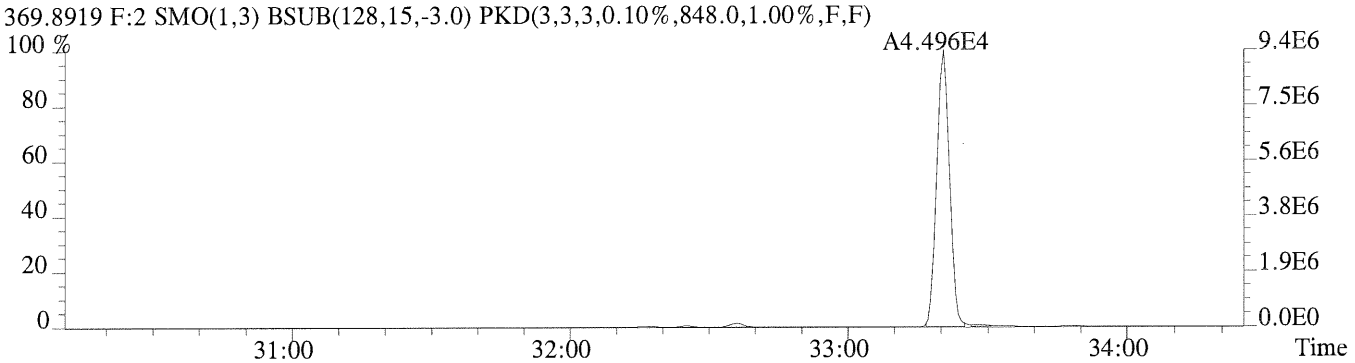
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,856.0,1.00%,F,F)



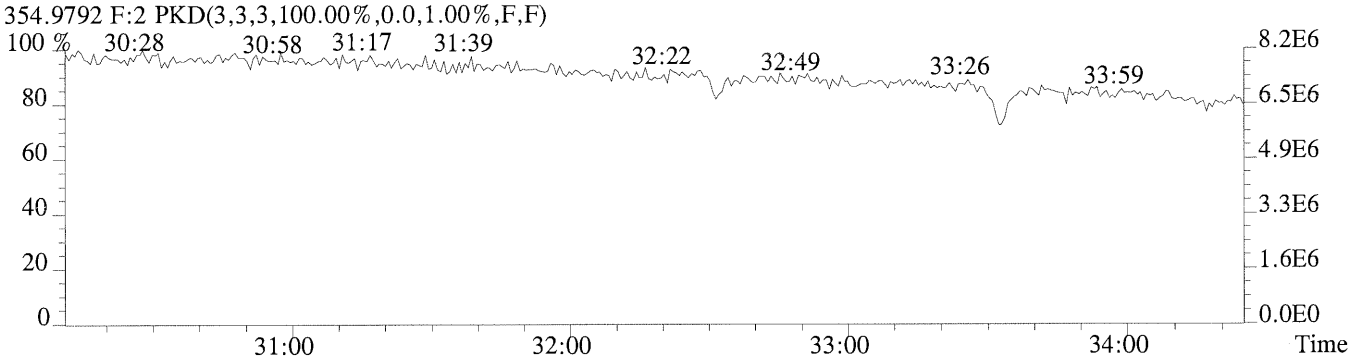
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,768.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,848.0,1.00%,F,F)

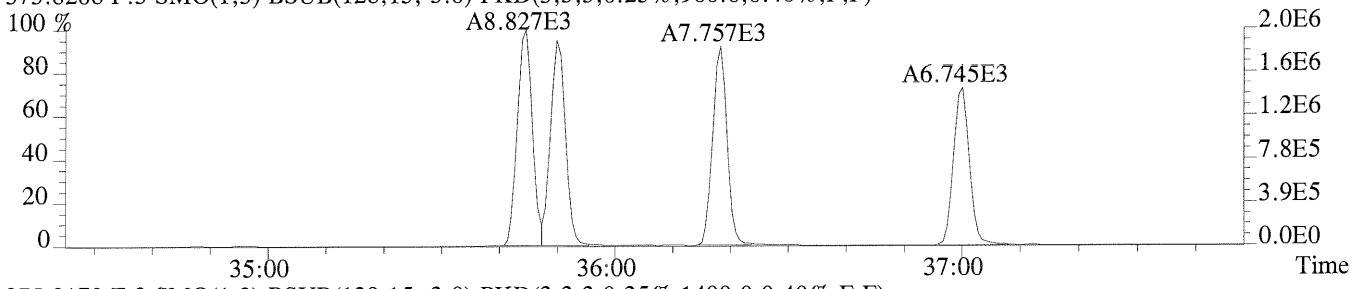


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

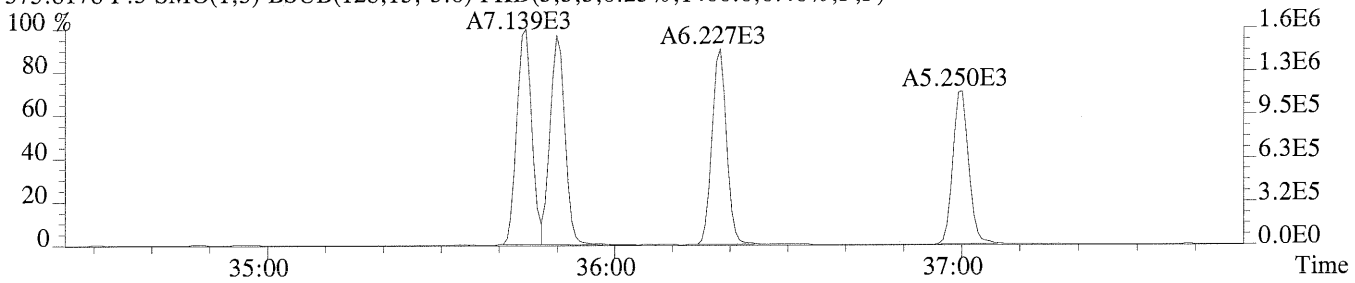


File:U212888 #1-308 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

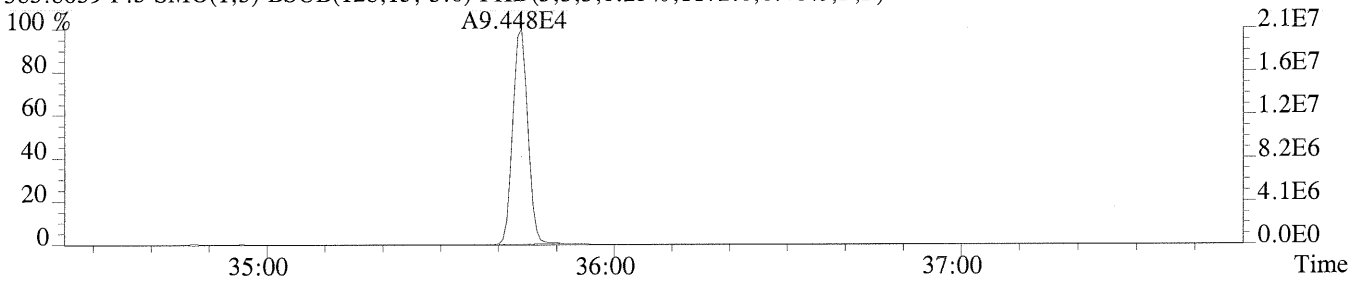
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,900.0,0.40%,F,F)



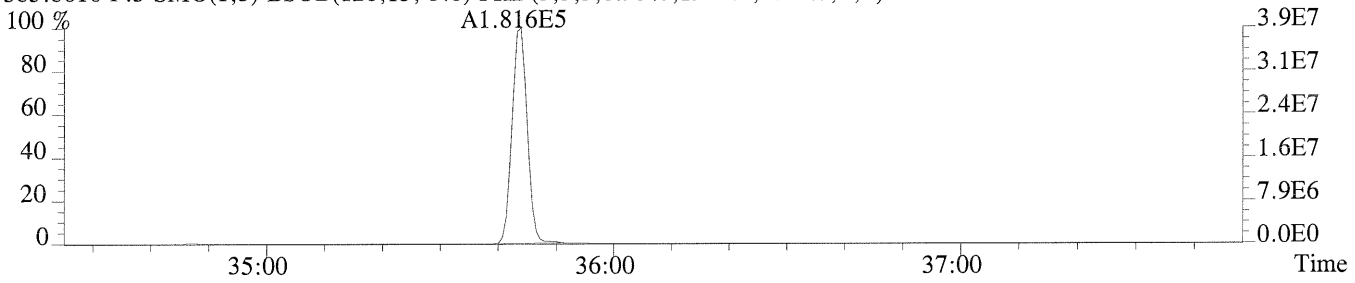
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1400.0,0.40%,F,F)



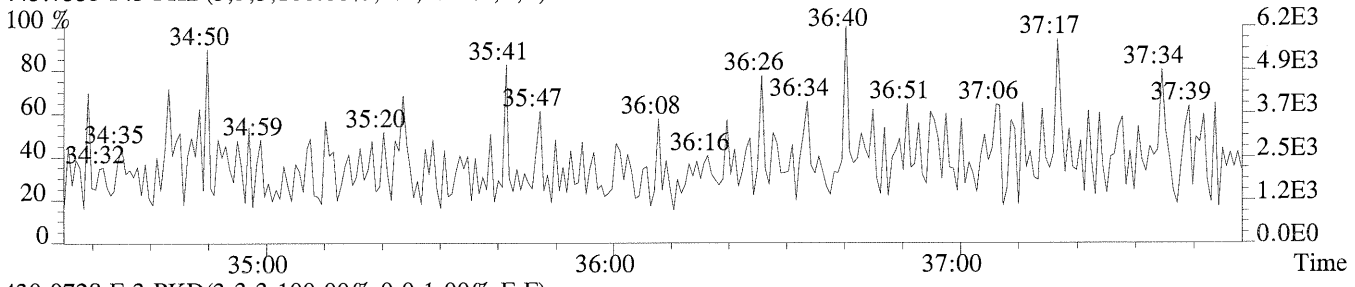
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1172.0,0.40%,F,F)



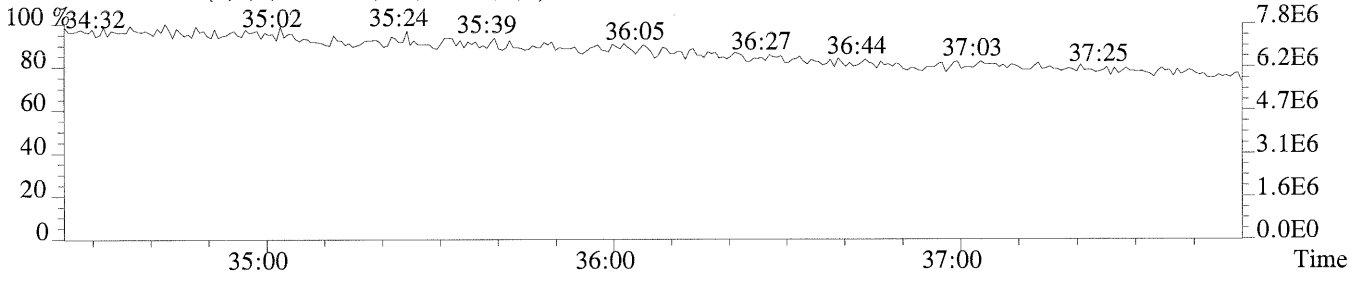
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1220.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

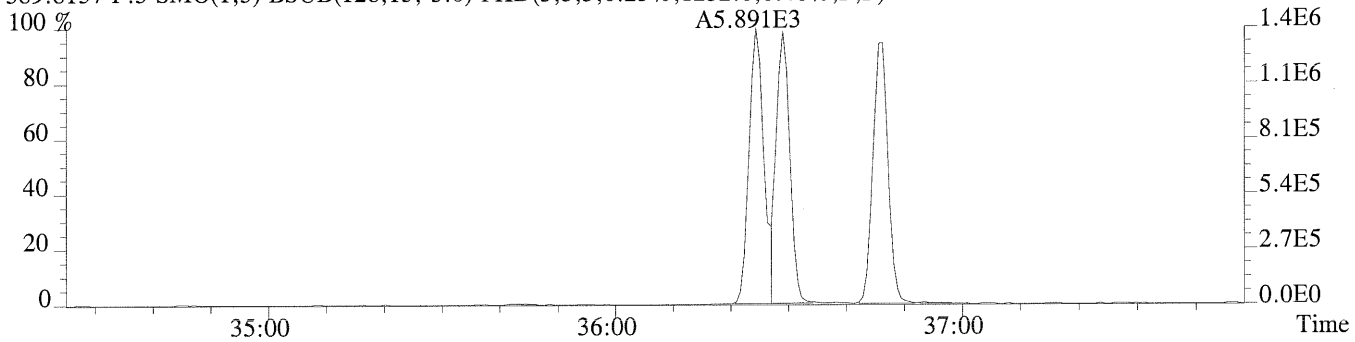


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

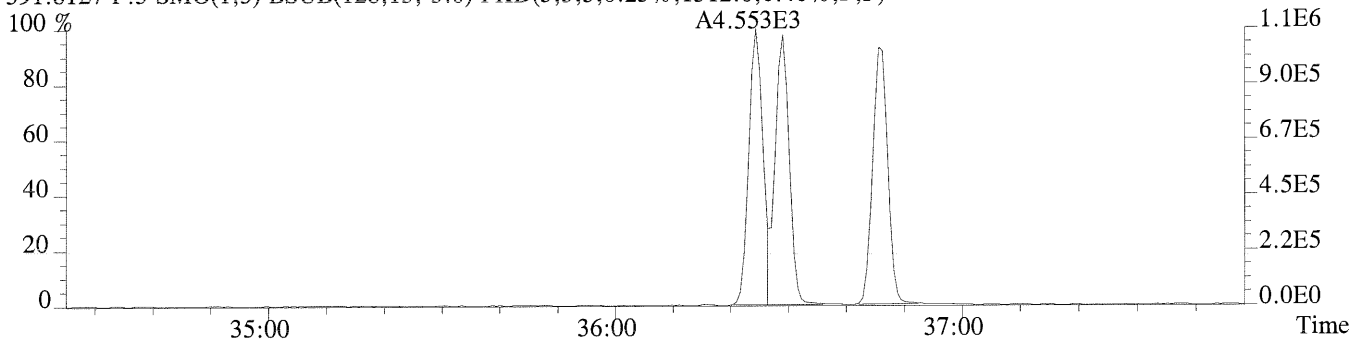


File:U212888 #1-308 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

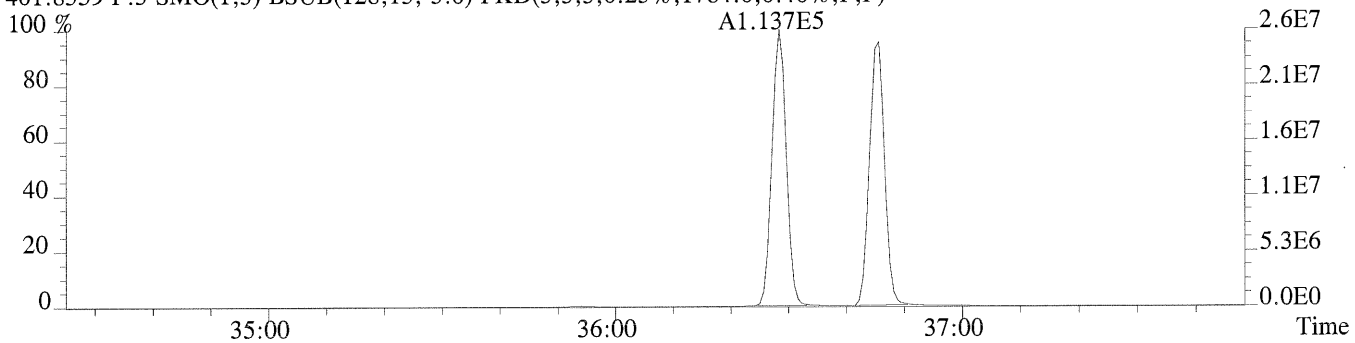
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1232.0,0.40%,F,F)



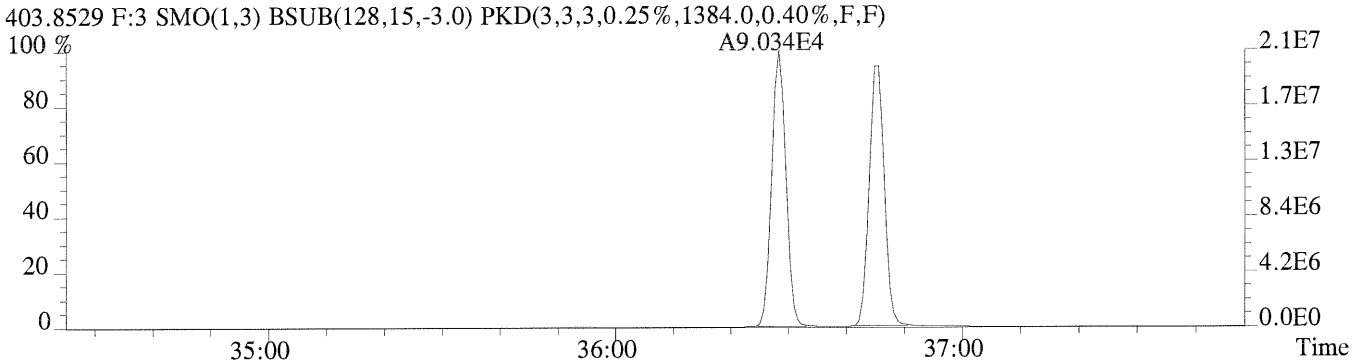
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1512.0,0.40%,F,F)



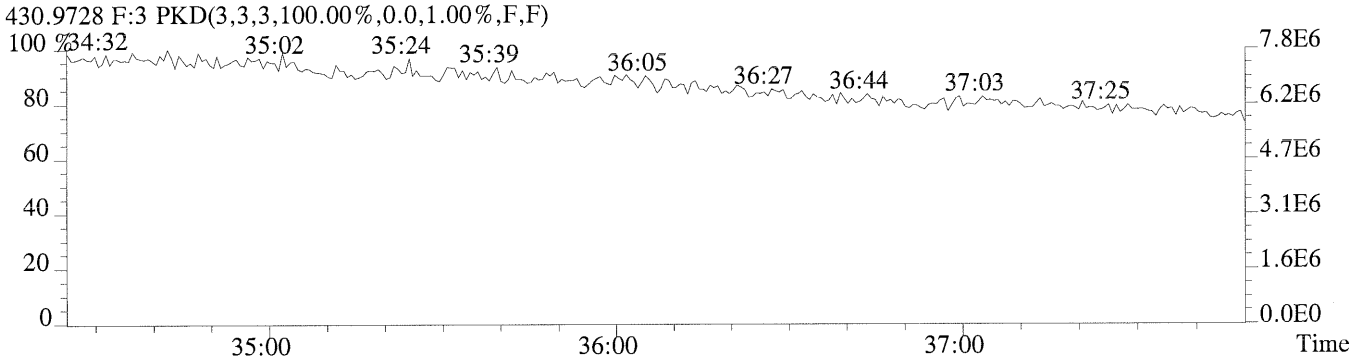
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1784.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1384.0,0.40%,F,F)

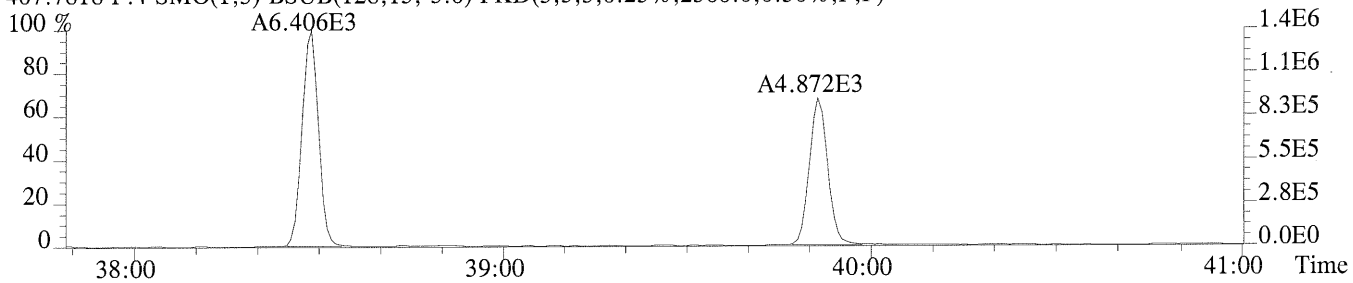


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

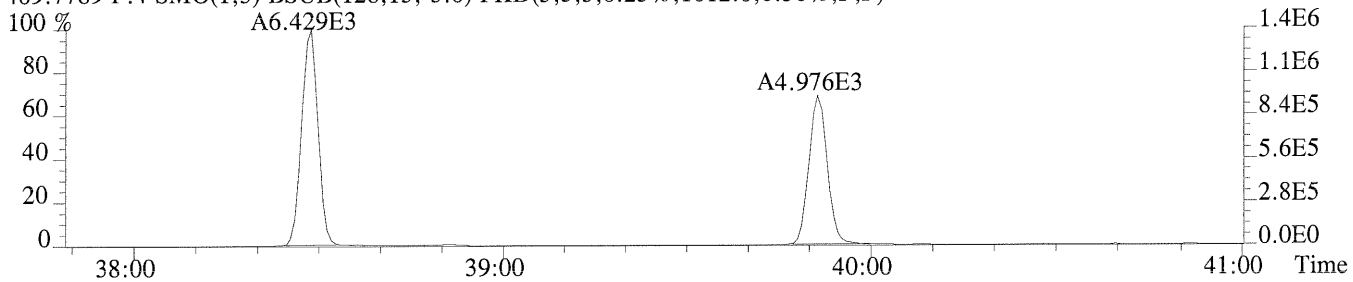


File:U212888 #1-290 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2

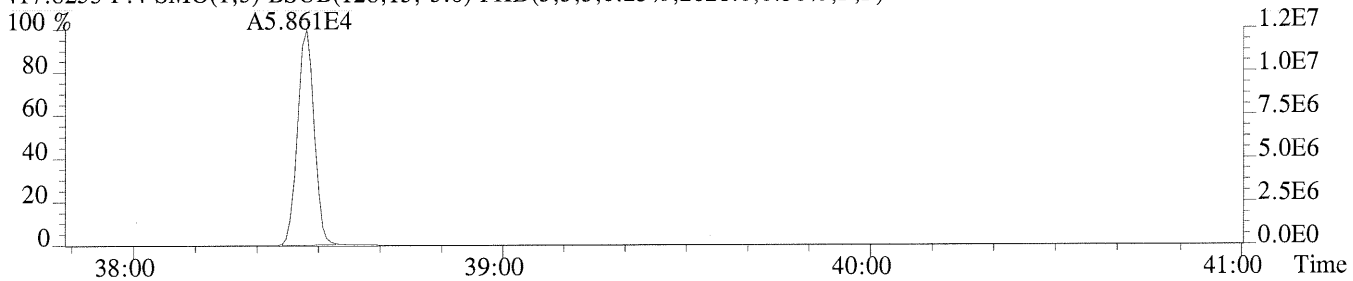
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2300.0,0.50%,F,F)



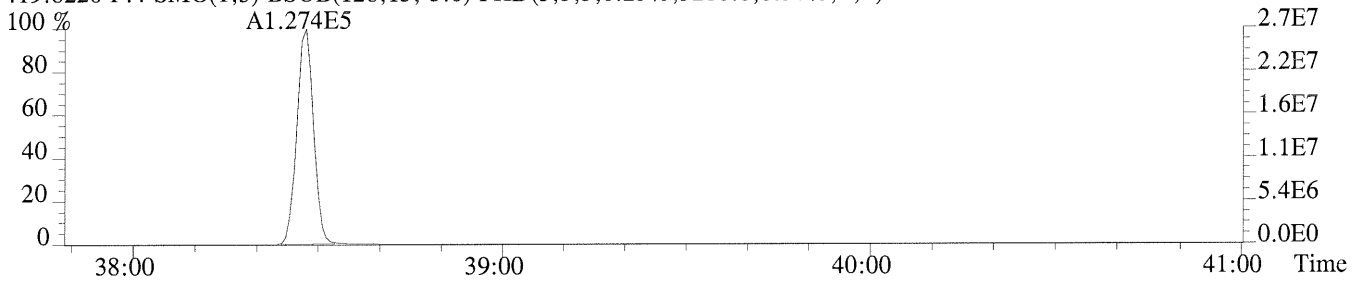
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1012.0,0.50%,F,F)



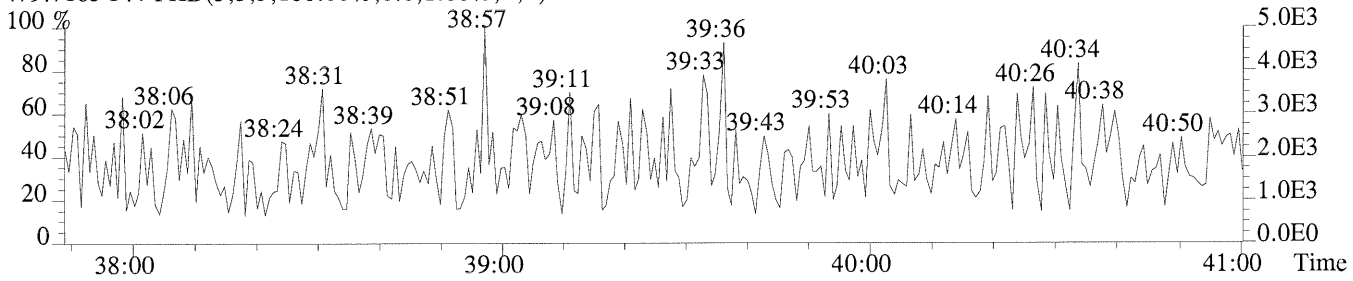
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2028.0,0.50%,F,F)



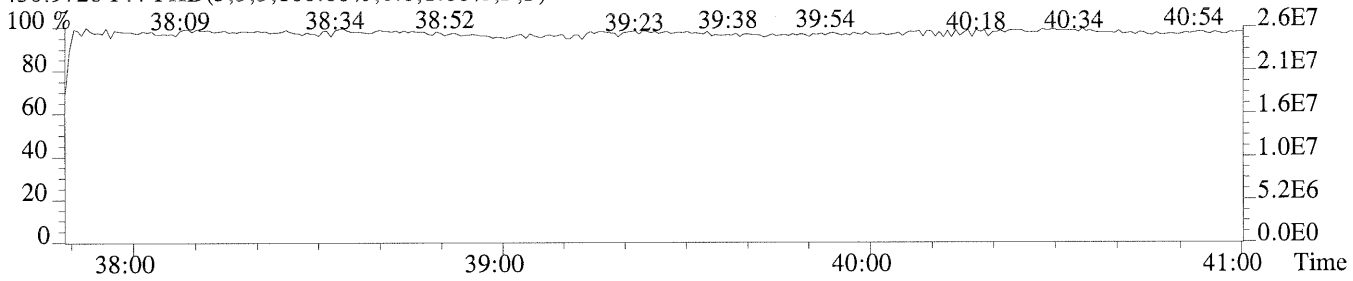
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3280.0,0.50%,F,F)



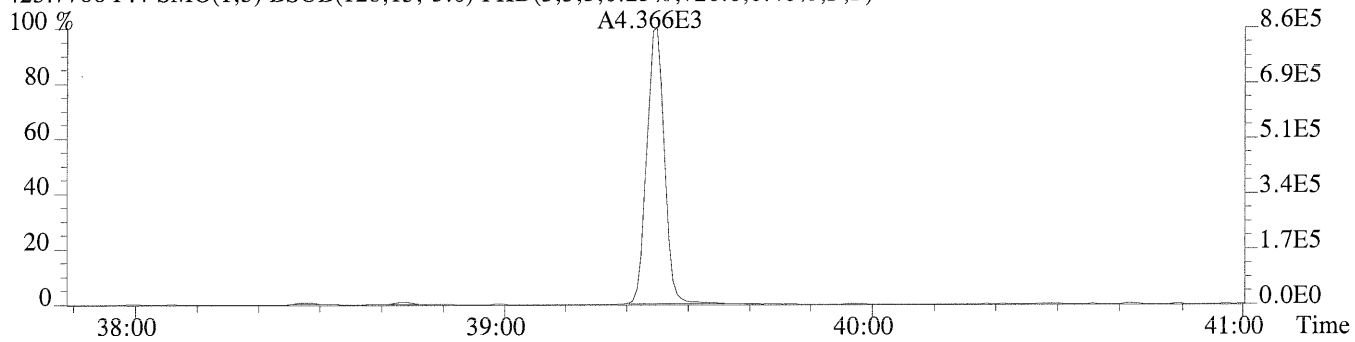
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



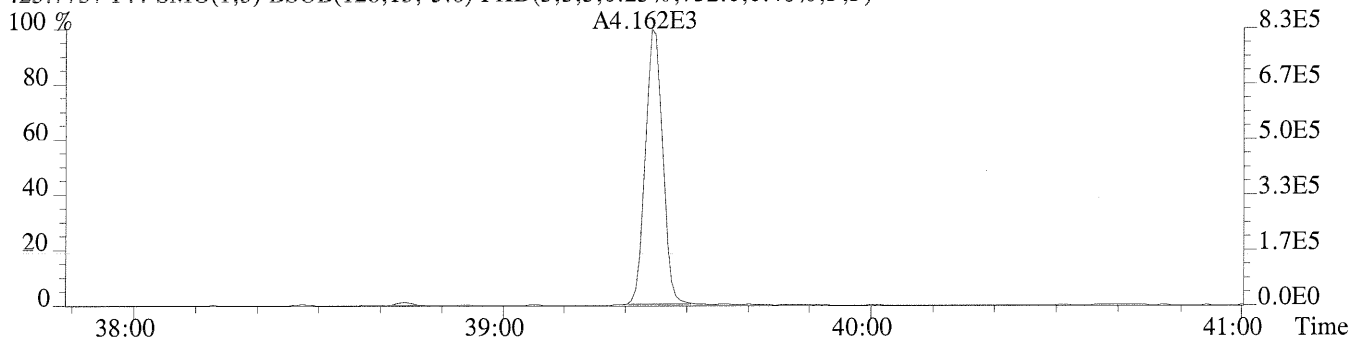
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



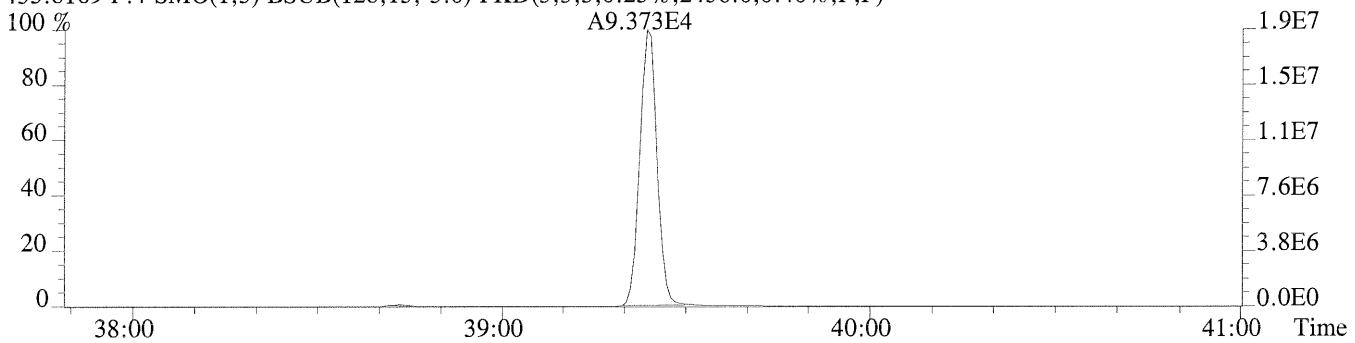
File:U212888 #1-290 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,720.0,0.40%,F,F)



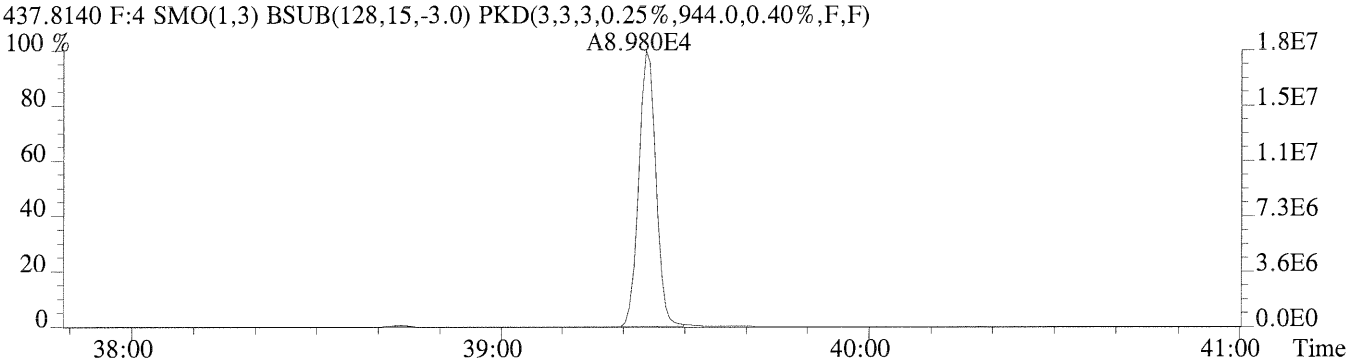
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,732.0,0.40%,F,F)



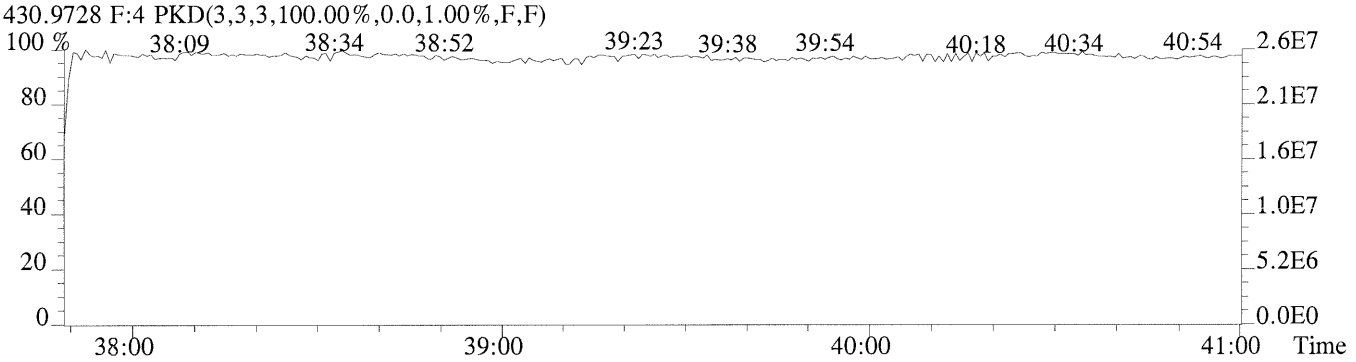
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2436.0,0.40%,F,F)



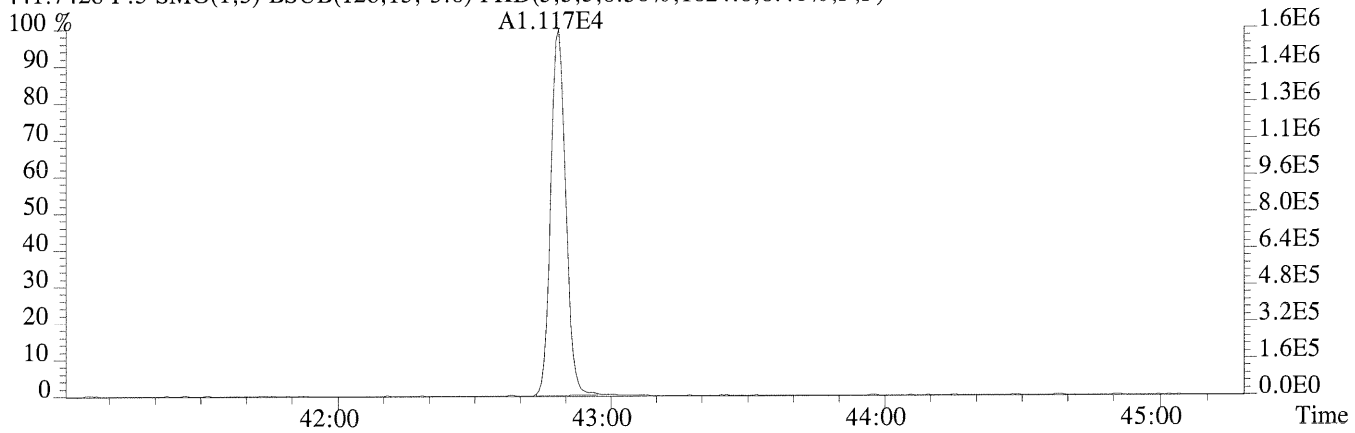
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,944.0,0.40%,F,F)



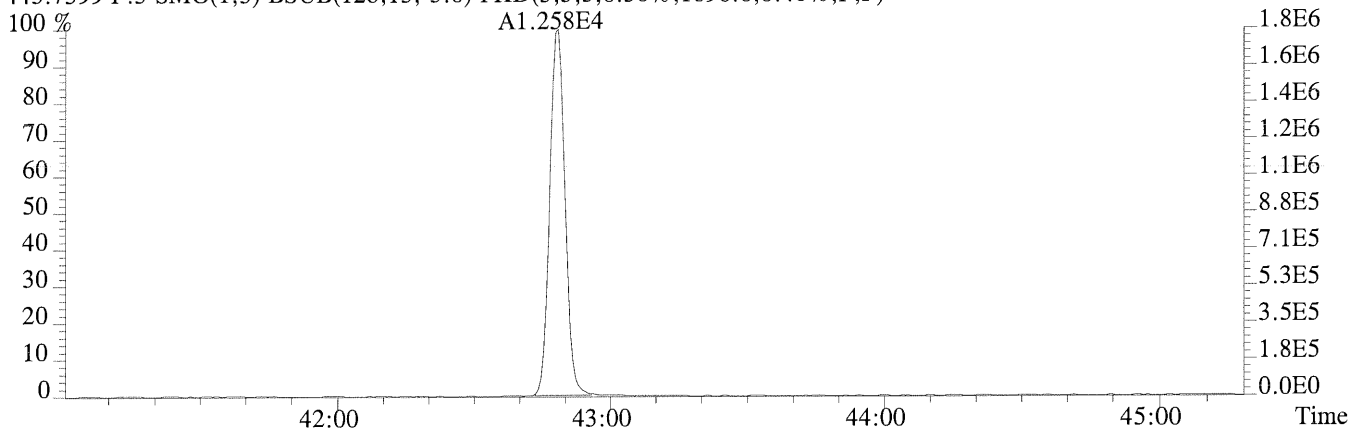
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



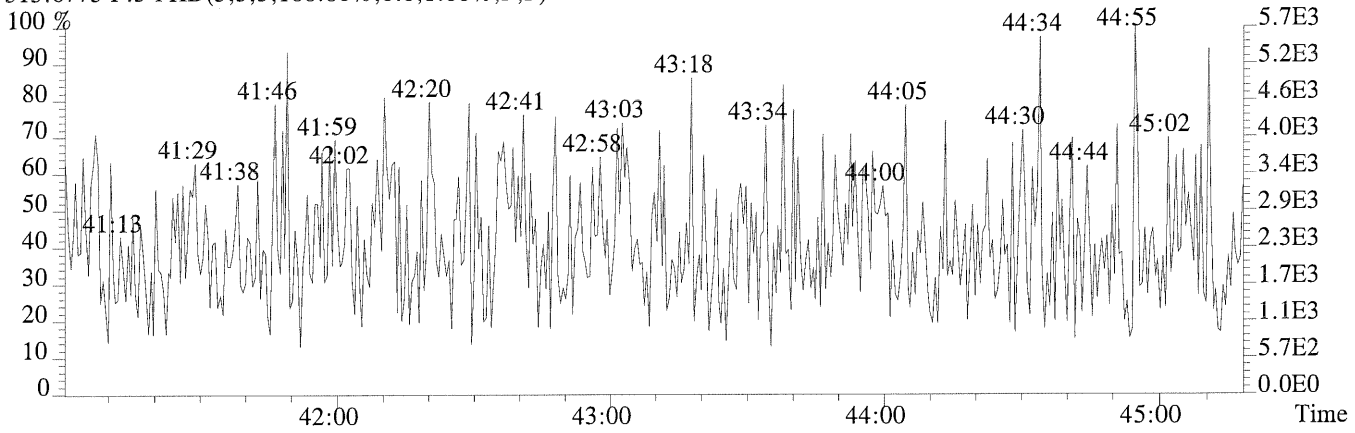
File:U212888 #1-474 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1024.0,0.40%,F,F)



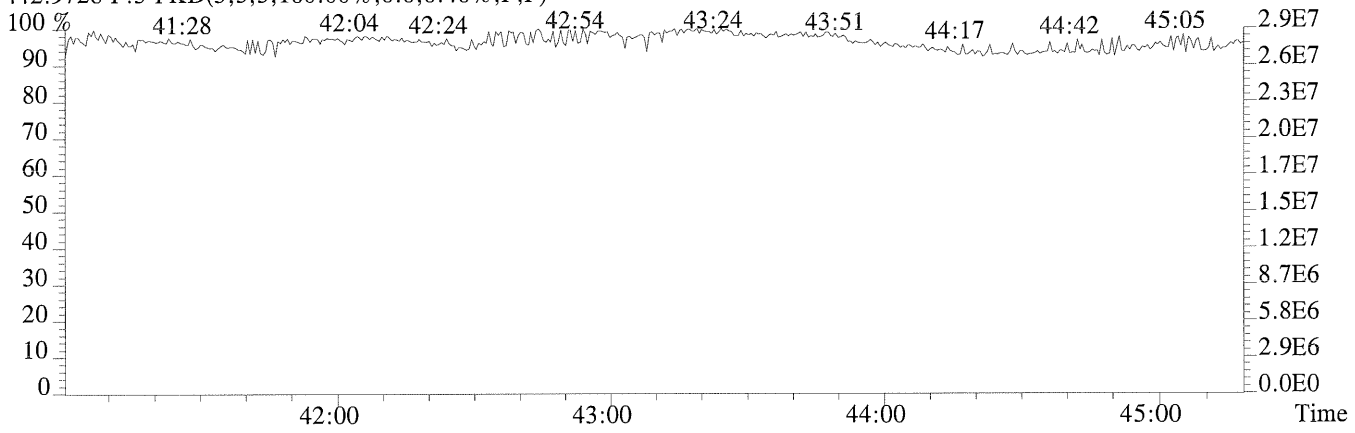
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1896.0,0.40%,F,F)



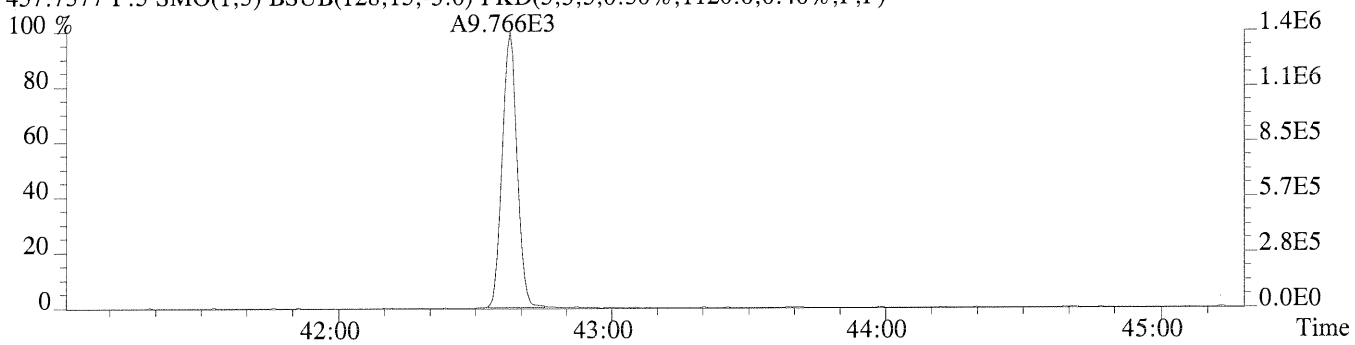
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



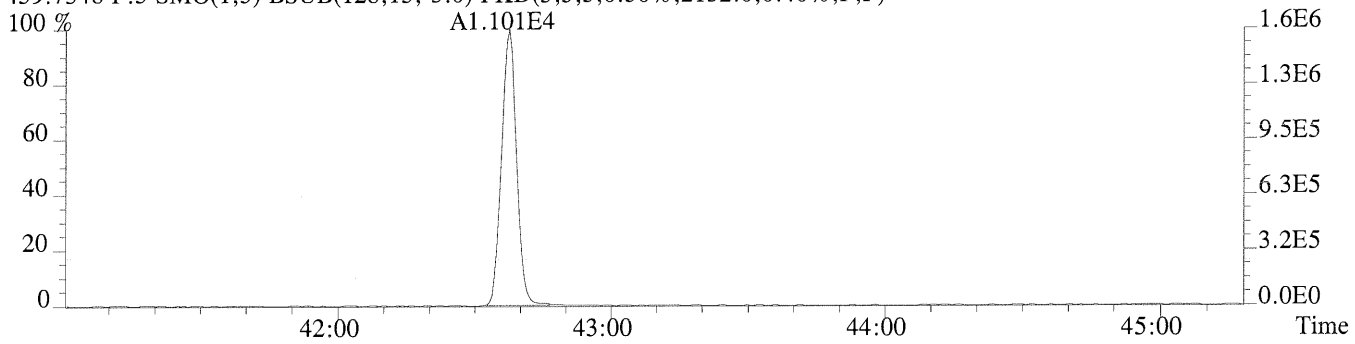
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



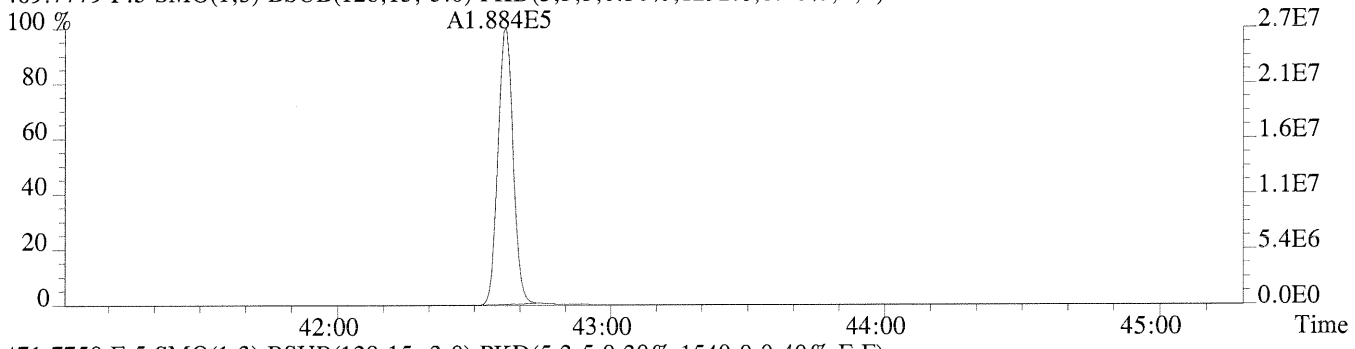
File:U212888 #1-474 Acq:10-DEC-2007 11:32:50 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC2
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1120.0,0.40%,F,F)



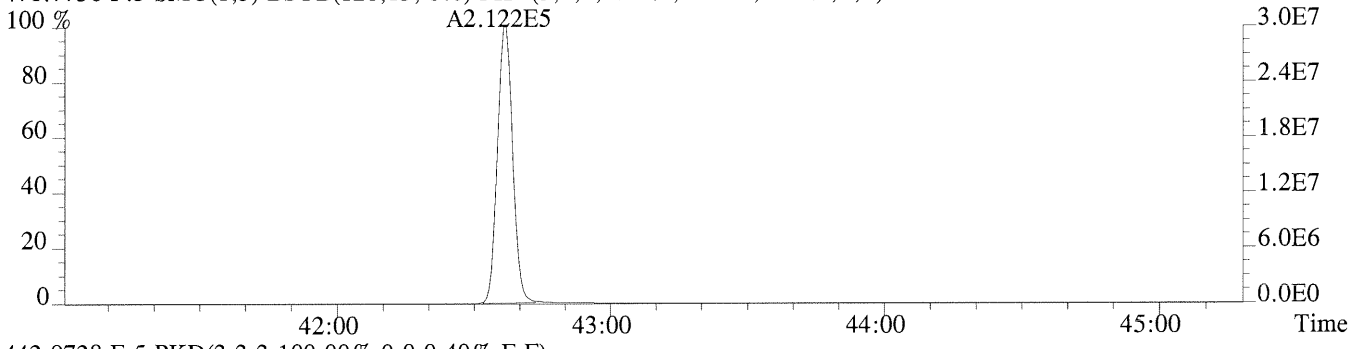
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,2132.0,0.40%,F,F)



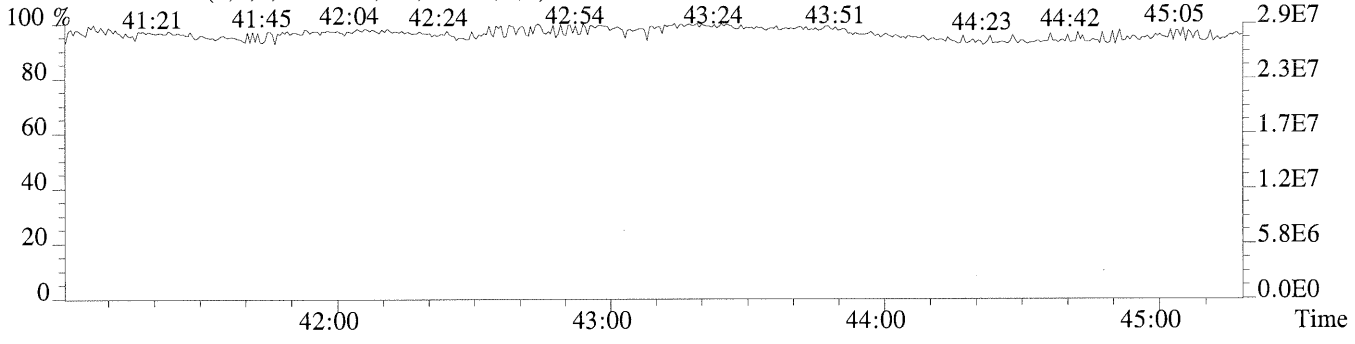
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1292.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1540.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC3

Run #3 Filename U212887 Samp: 1 Inj: 1 Acquired: 10-DEC-07 09:58:49
Processed: 10-DEC-07 15:07:11 Sample ID: ICAL HRCC3

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	28:15	1.274e+04	1.626e+04	0.78	yes	no
2	Unk	1,2,3,7,8-PeCDF	32:19	4.168e+04	2.664e+04	1.56	yes	no
3	Unk	2,3,4,7,8-PeCDF	33:01	4.085e+04	2.644e+04	1.55	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:44	3.014e+04	2.401e+04	1.26	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:50	2.801e+04	2.368e+04	1.18	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	36:18	2.665e+04	2.222e+04	1.20	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:59	2.287e+04	1.866e+04	1.23	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	38:28	2.354e+04	2.342e+04	1.00	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:51	1.768e+04	1.809e+04	0.98	yes	no
10	Unk	OCDF	42:48	3.805e+04	4.293e+04	0.89	yes	no
11	Unk	2,3,7,8-TCDD	29:01	1.020e+04	1.335e+04	0.76	yes	no
12	Unk	1,2,3,7,8-PeCDD	33:21	2.845e+04	1.857e+04	1.53	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	36:24	2.184e+04	1.703e+04	1.28	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	36:28	2.221e+04	1.756e+04	1.26	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:46	2.105e+04	1.709e+04	1.23	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	39:24	1.549e+04	1.495e+04	1.04	yes	no
17	Unk	OCDD	42:38	3.437e+04	3.856e+04	0.89	yes	no
18	IS	13C-2,3,7,8-TCDF	28:13	6.820e+04	8.718e+04	0.78	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	32:18	8.979e+04	5.771e+04	1.56	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:43	7.814e+04	1.510e+05	0.52	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	38:27	5.164e+04	1.140e+05	0.45	yes	no
22	IS	13C-2,3,7,8-TCDD	28:59	5.465e+04	6.822e+04	0.80	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	33:20	6.519e+04	4.179e+04	1.56	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	36:28	1.113e+05	8.825e+04	1.26	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	39:24	8.498e+04	8.076e+04	1.05	yes	no
26	IS	13C-OCDD	42:36	1.691e+05	1.856e+05	0.91	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	28:48	5.370e+04	6.653e+04	0.81	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:45	1.111e+05	8.897e+04	1.25	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	29:01	2.389e+04				

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC3

Run #3 Filename U212887 #1 Samp: 1 Inj: 1 Acquired: 10-DEC-07 09:58:49

Processed: 10-DEC-07 15:07:11 LAB. ID: ICAL HRCC3

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	2.25e+06	4.96e+02	4.5e+03	2.93e+06	6.80e+02	4.3e+03
2	1,2,3,7,8-PeCDF	8.30e+06	5.12e+02	1.6e+04	5.36e+06	1.02e+03	5.3e+03
3	2,3,4,7,8-PeCDF	8.37e+06	5.12e+02	1.6e+04	5.43e+06	1.02e+03	5.3e+03
4	1,2,3,4,7,8-HxCDF	6.77e+06	1.04e+03	6.5e+03	5.60e+06	1.23e+03	4.6e+03
5	1,2,3,6,7,8-HxCDF	6.28e+06	1.04e+03	6.0e+03	5.15e+06	1.23e+03	4.2e+03
6	2,3,4,6,7,8-HxCDF	6.12e+06	1.04e+03	5.9e+03	5.10e+06	1.23e+03	4.2e+03
7	1,2,3,7,8,9-HxCDF	5.01e+06	1.04e+03	4.8e+03	4.09e+06	1.23e+03	3.3e+03
8	1,2,3,4,6,7,8-HpCDF	5.08e+06	4.17e+03	1.2e+03	5.06e+06	1.32e+03	3.8e+03
9	1,2,3,4,7,8,9-HpCDF	3.43e+06	4.17e+03	8.2e+02	3.48e+06	1.32e+03	2.6e+03
10	OCDF	5.40e+06	9.76e+02	5.5e+03	6.17e+06	1.21e+03	5.1e+03
11	2,3,7,8-TCDD	1.92e+06	3.52e+02	5.5e+03	2.48e+06	2.84e+02	8.7e+03
12	1,2,3,7,8-PeCDD	6.09e+06	7.60e+02	8.0e+03	3.97e+06	5.84e+02	6.8e+03
13	1,2,3,4,7,8-HxCDD	5.09e+06	1.36e+03	3.8e+03	3.90e+06	1.68e+03	2.3e+03
14	1,2,3,6,7,8-HxCDD	4.92e+06	1.36e+03	3.6e+03	3.97e+06	1.68e+03	2.4e+03
15	1,2,3,7,8,9-HxCDD	4.84e+06	1.36e+03	3.6e+03	3.95e+06	1.68e+03	2.4e+03
16	1,2,3,4,6,7,8-HpCDD	3.12e+06	7.08e+02	4.4e+03	3.02e+06	6.56e+02	4.6e+03
17	OCDD	4.91e+06	1.32e+03	3.7e+03	5.53e+06	1.56e+03	3.5e+03
18	13C-2,3,7,8-TCDF	1.21e+07	2.20e+03	5.5e+03	1.55e+07	8.56e+02	1.8e+04
19	13C-1,2,3,7,8-PeCDF	1.83e+07	4.36e+02	4.2e+04	1.18e+07	5.16e+02	2.3e+04
20	13C-1,2,3,4,7,8-HxCDF	1.73e+07	1.00e+03	1.7e+04	3.38e+07	1.04e+03	3.3e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.08e+07	1.91e+03	5.7e+03	2.41e+07	3.52e+03	6.8e+03
22	13C-2,3,7,8-TCDD	1.02e+07	2.22e+03	4.6e+03	1.28e+07	1.30e+03	9.8e+03
23	13C-1,2,3,7,8-PeCDD	1.37e+07	4.68e+02	2.9e+04	8.77e+06	5.00e+02	1.8e+04
24	13C-1,2,3,6,7,8-HxCDD	2.51e+07	1.11e+03	2.3e+04	1.97e+07	1.64e+03	1.2e+04
25	13C-1,2,3,4,6,7,8-HpCDD	1.73e+07	2.68e+03	6.5e+03	1.65e+07	1.24e+03	1.3e+04
26	13C-OCDD	2.43e+07	1.17e+03	2.1e+04	2.67e+07	1.52e+03	1.8e+04
27	13C-1,2,3,4-TCDD	1.03e+07	2.22e+03	4.6e+03	1.26e+07	1.30e+03	9.7e+03
28	13C-1,2,3,7,8,9-HxCDD	2.54e+07	1.11e+03	2.3e+04	2.02e+07	1.64e+03	1.2e+04
29	37Cl-2,3,7,8-TCDD	4.45e+06	3.32e+02	1.3e+04			

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
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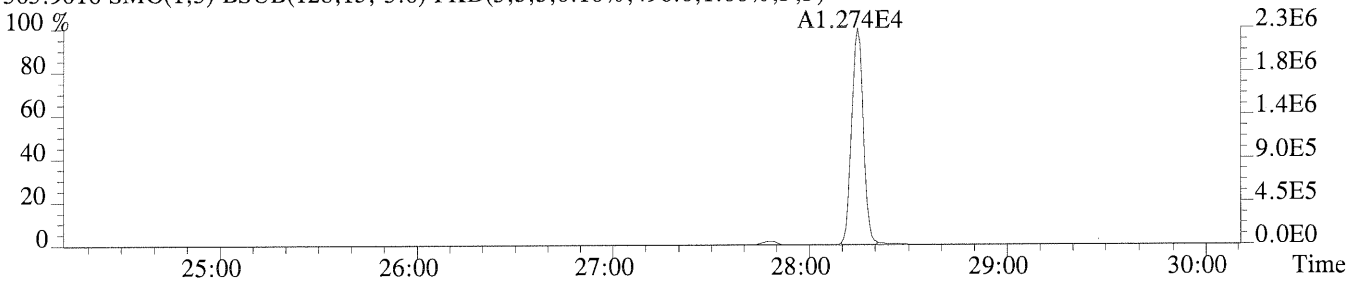
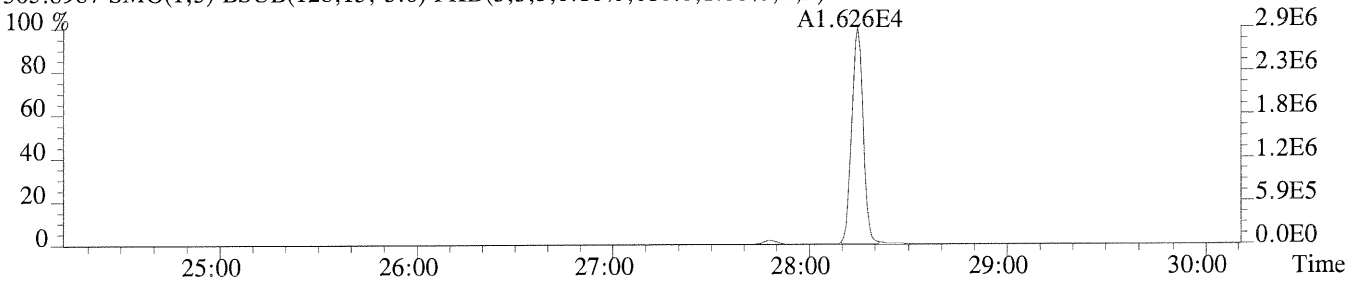
File:U212887 #1-498 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

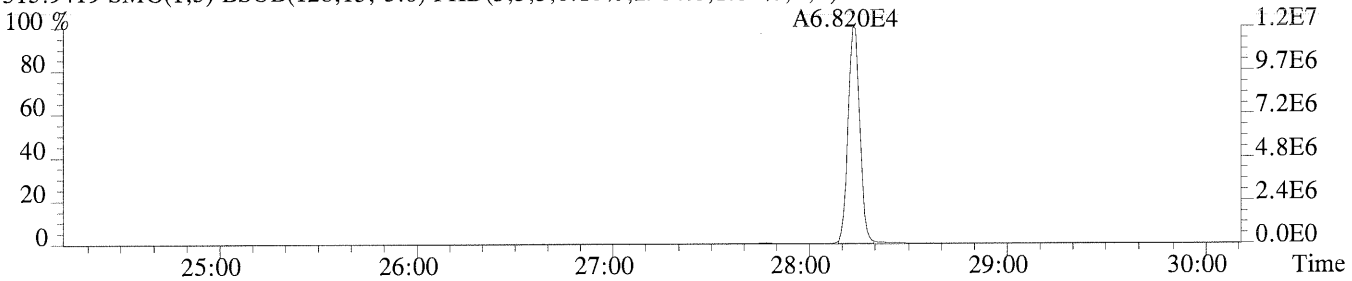
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,496.0,1.00%,F,F)



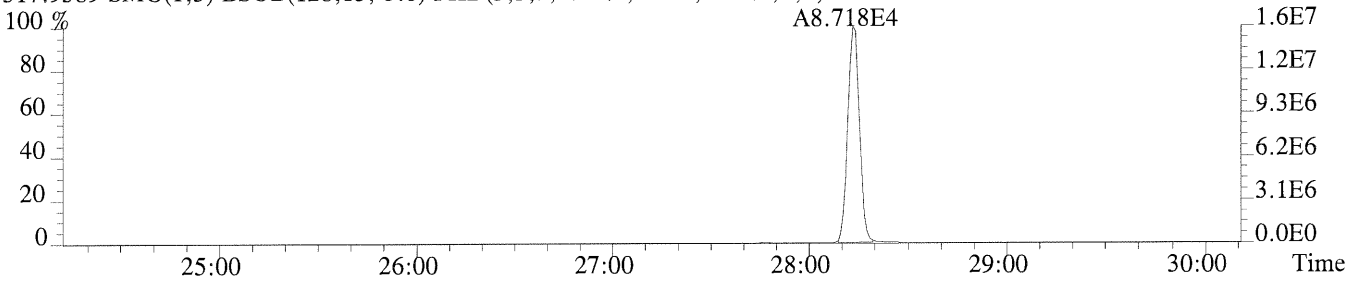
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,680.0,1.00%,F,F)



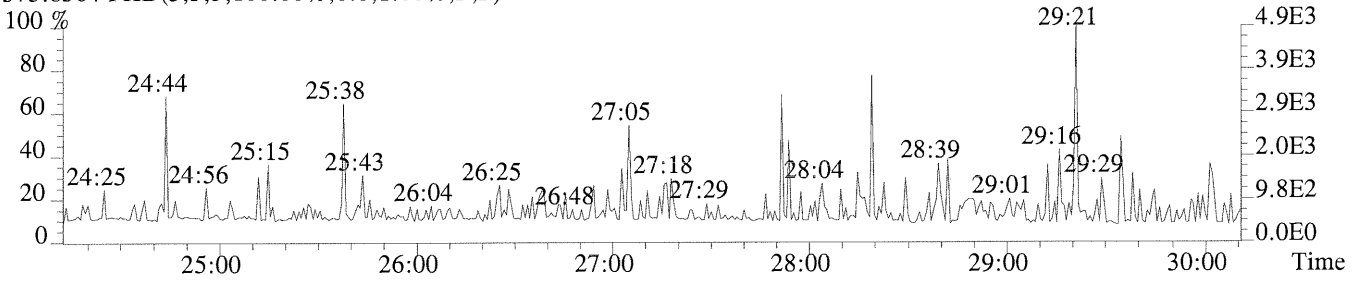
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2204.0,1.00%,F,F)



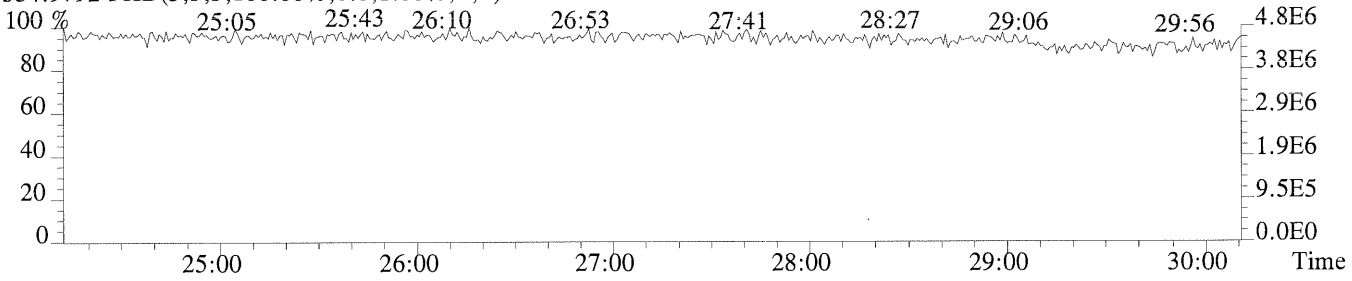
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,856.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

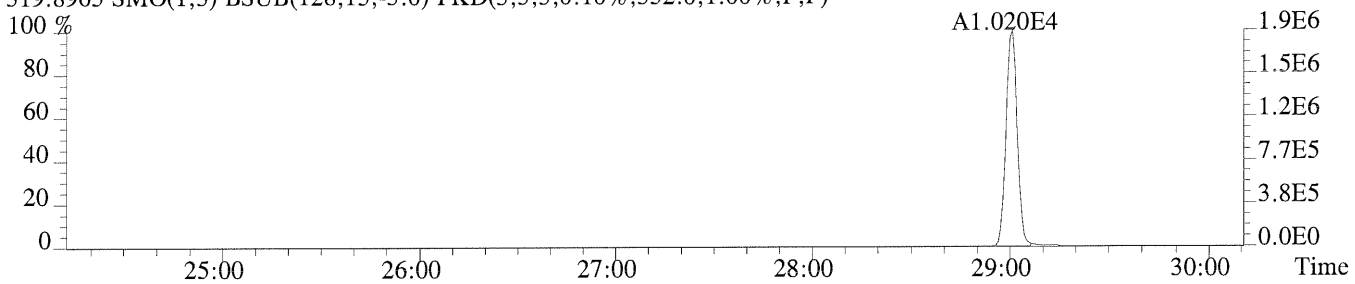


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

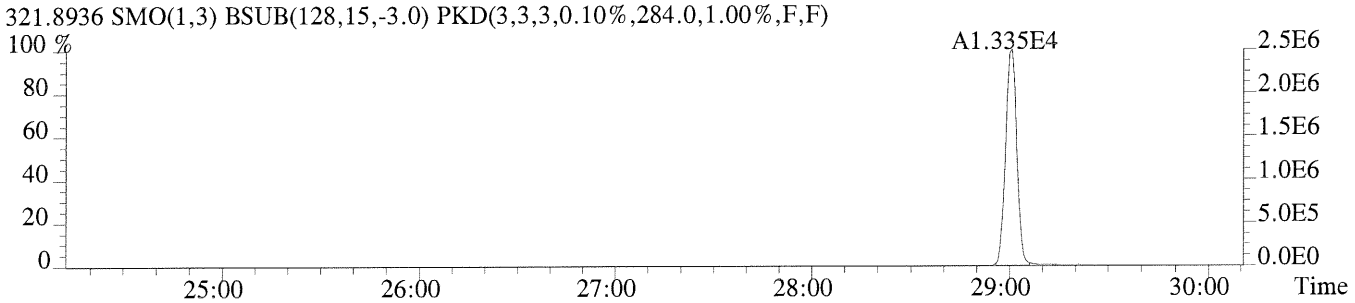


File:U212887 #1-498 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

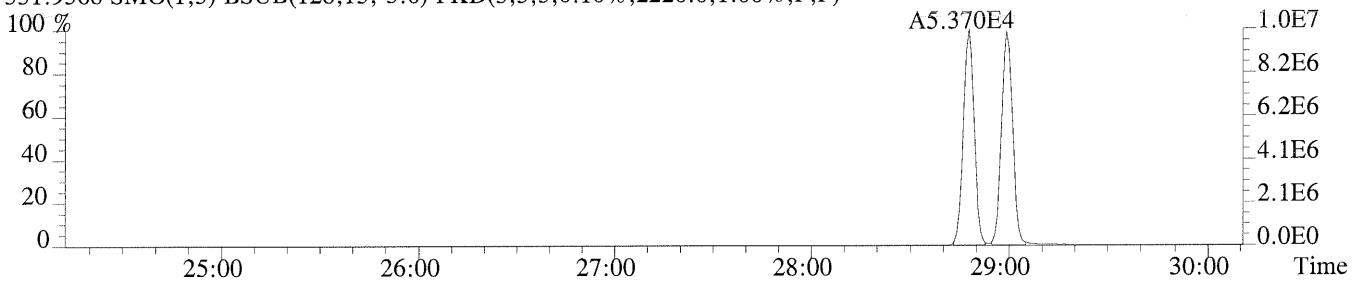
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,352.0,1.00%,F,F)



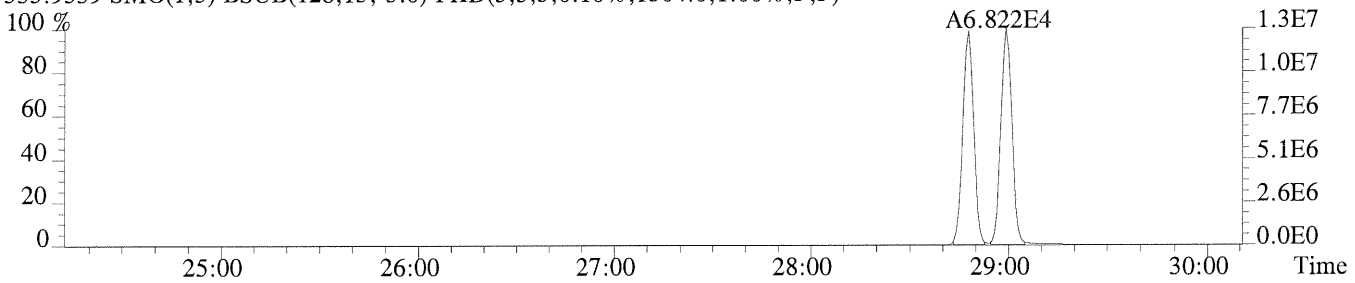
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,284.0,1.00%,F,F)



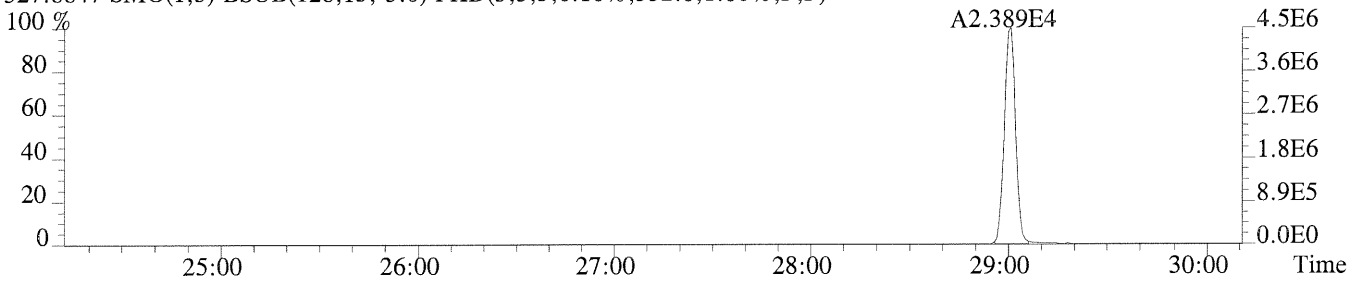
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2220.0,1.00%,F,F)



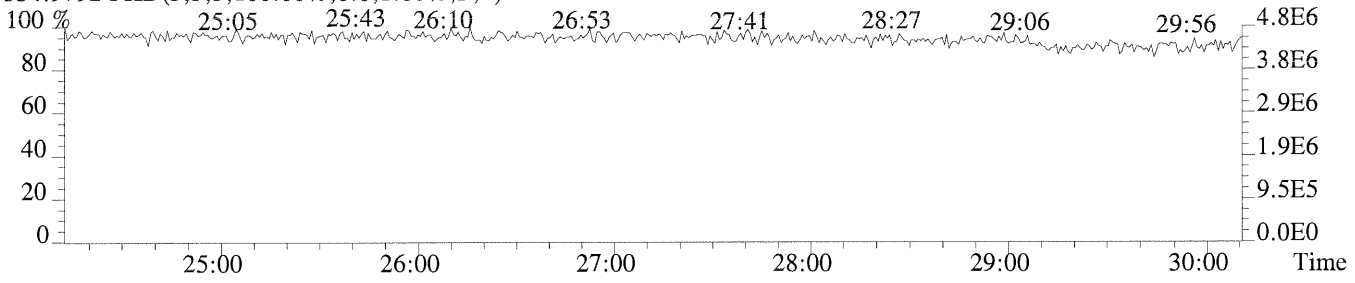
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1304.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,332.0,1.00%,F,F)

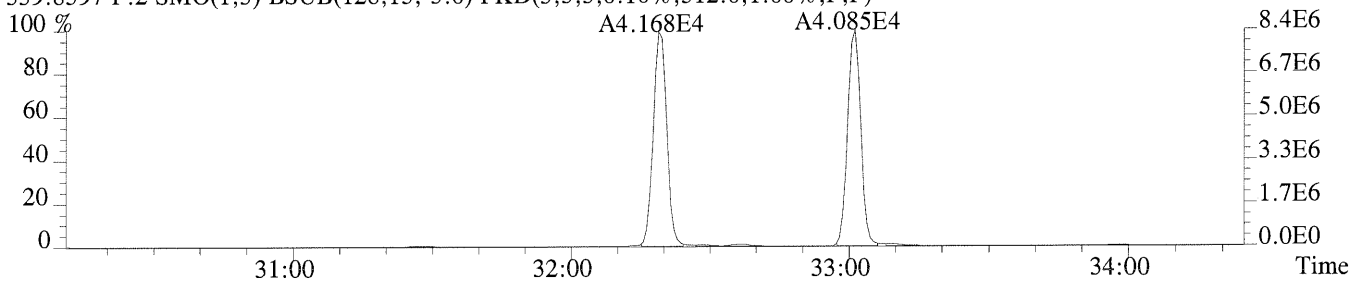


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

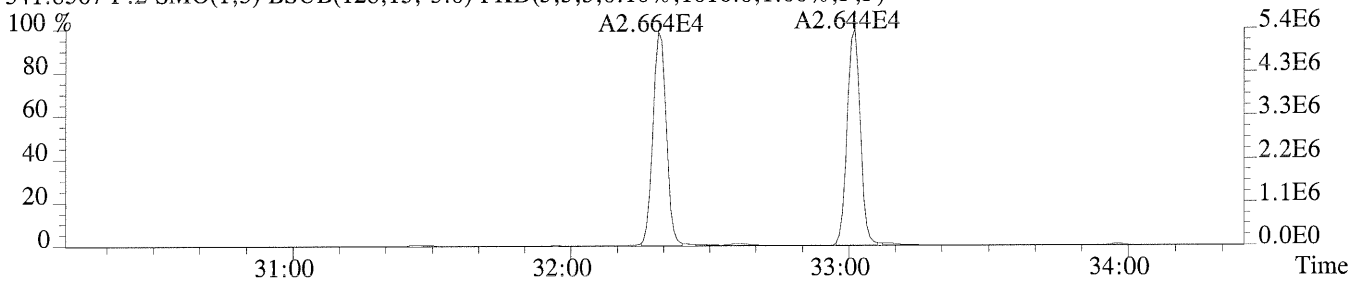


File:U212887 #1-384 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

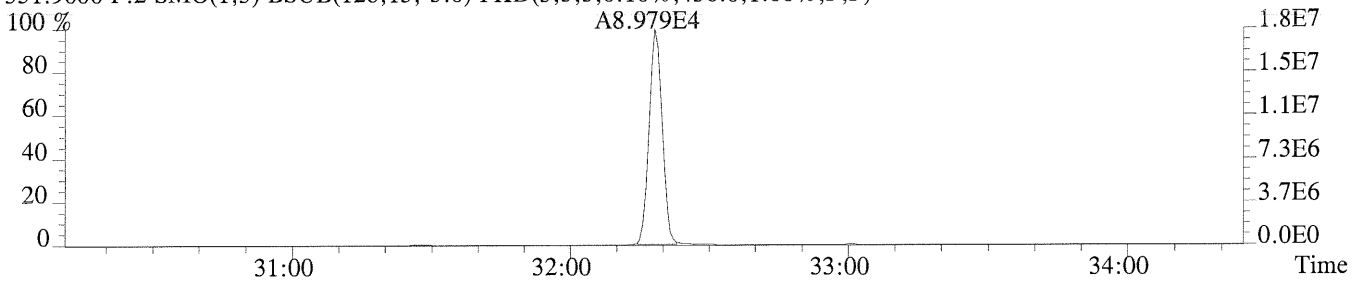
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,512.0,1.00%,F,F)



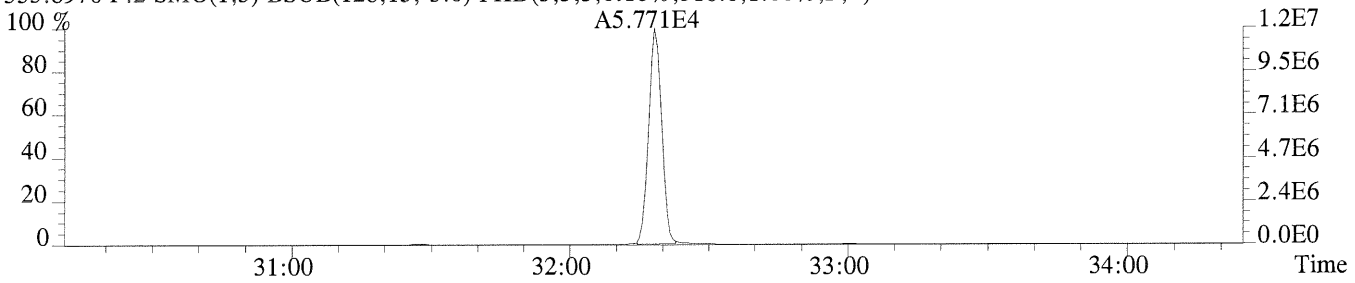
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1016.0,1.00%,F,F)



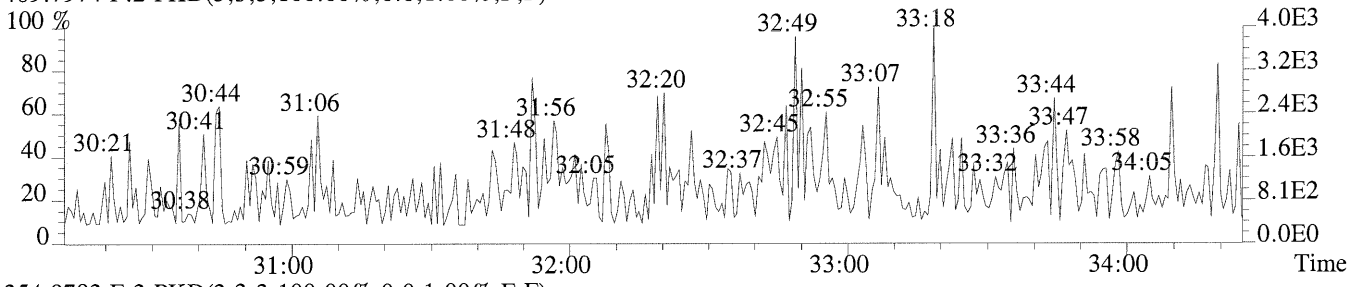
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,436.0,1.00%,F,F)



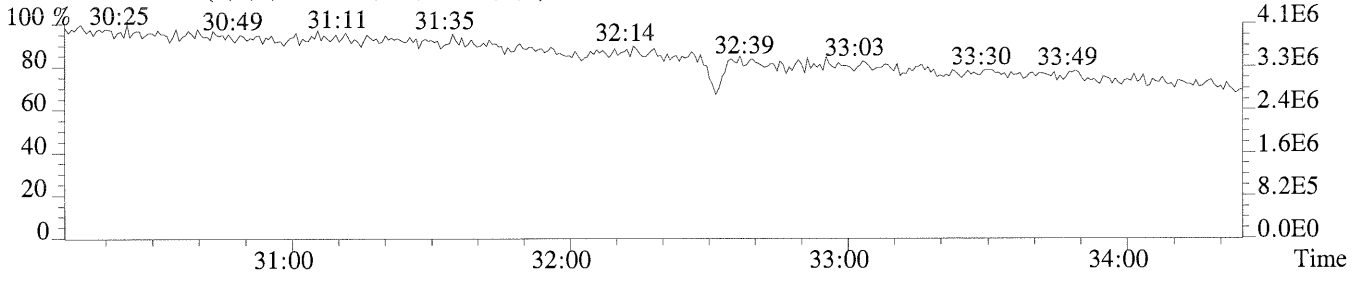
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,516.0,1.00%,F,F)



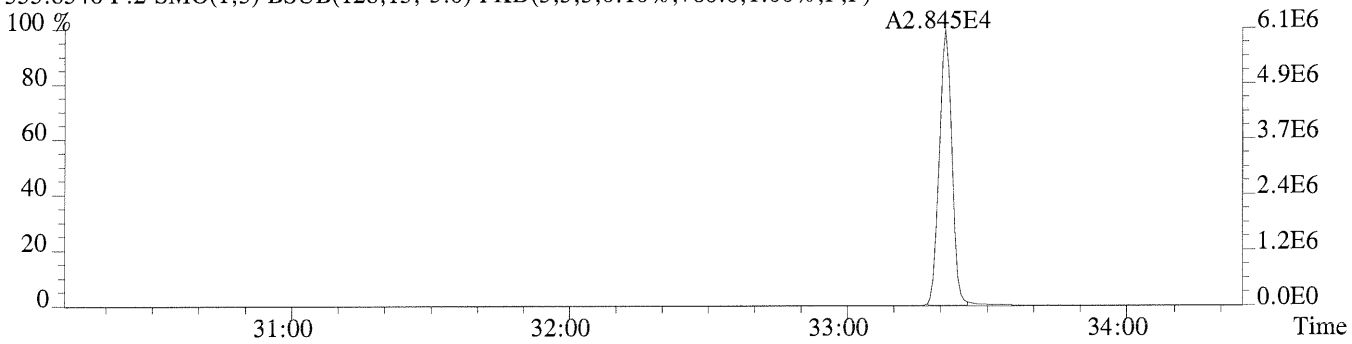
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



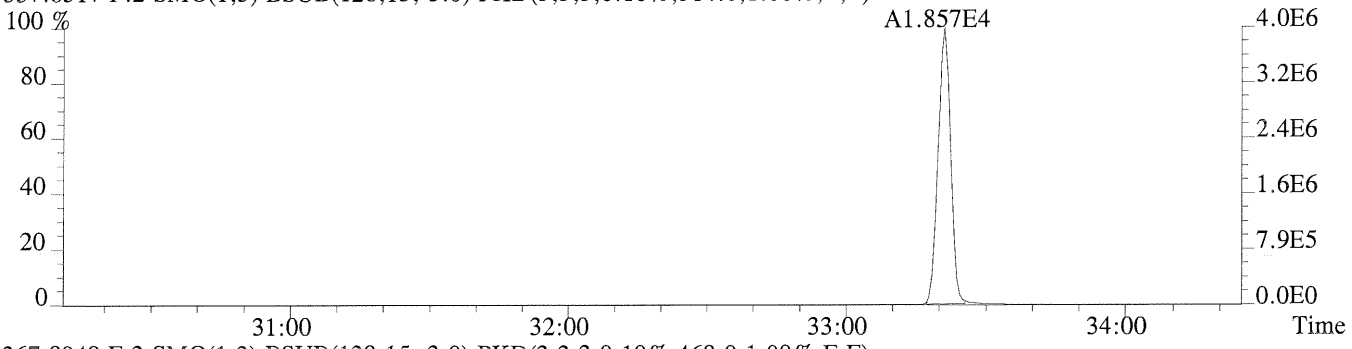
354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



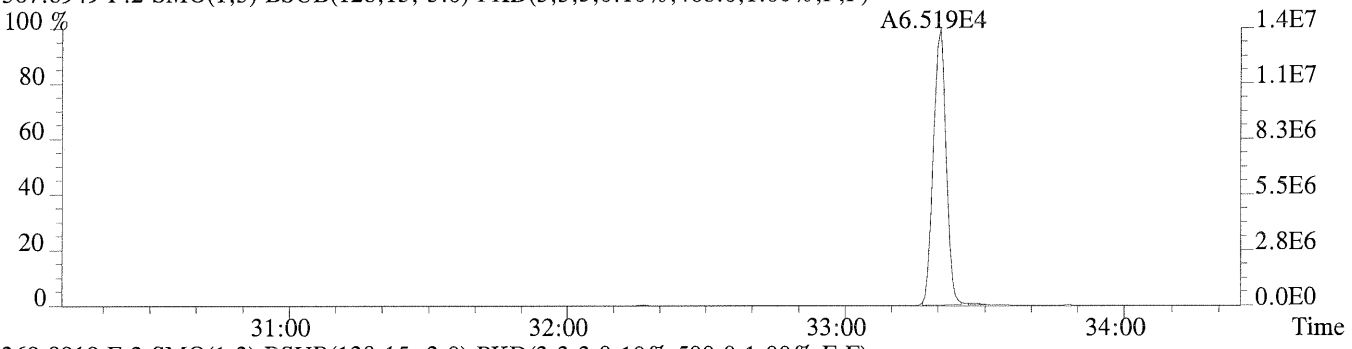
File:U212887 #1-384 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,760.0,1.00%,F,F)



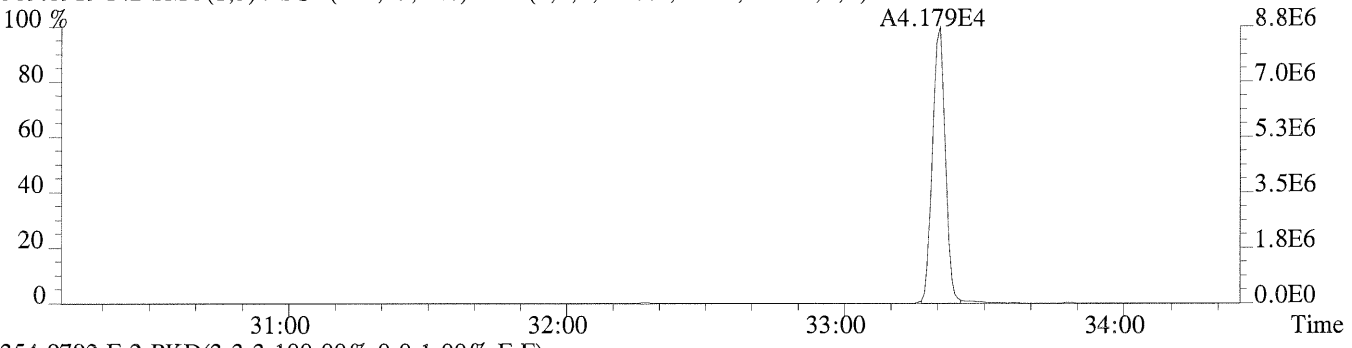
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,584.0,1.00%,F,F)



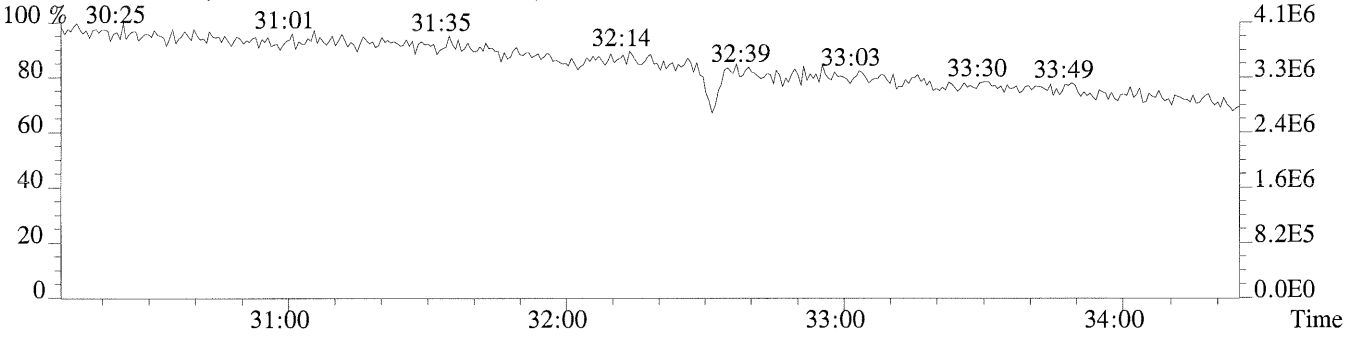
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,468.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,500.0,1.00%,F,F)

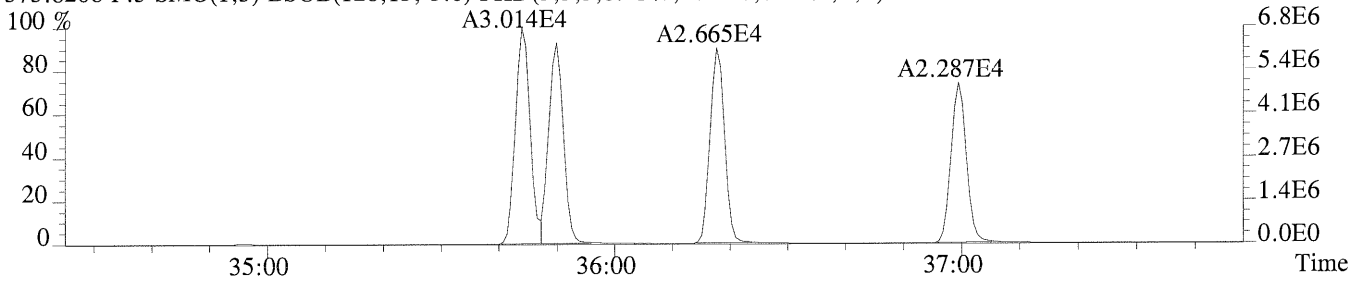


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

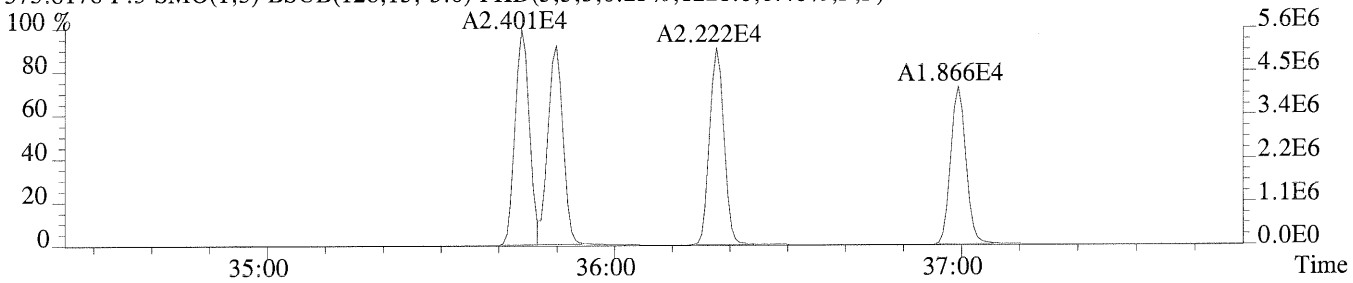


File:U212887 #1-308 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

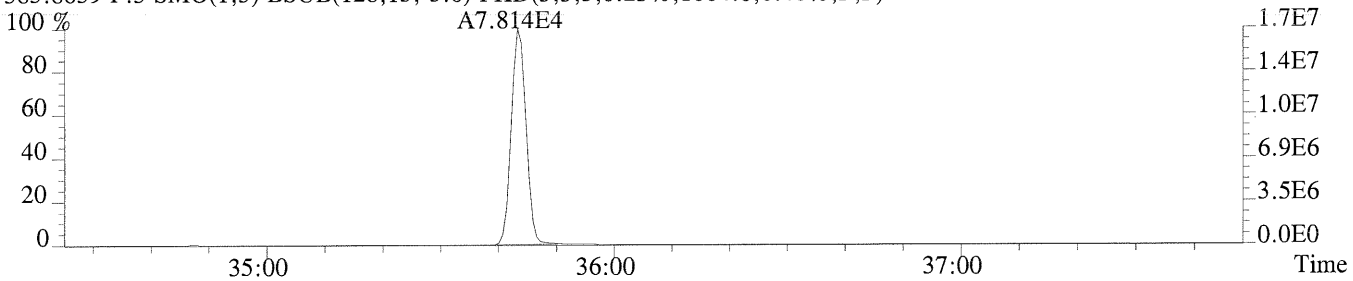
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1044.0,0.40%,F,F)



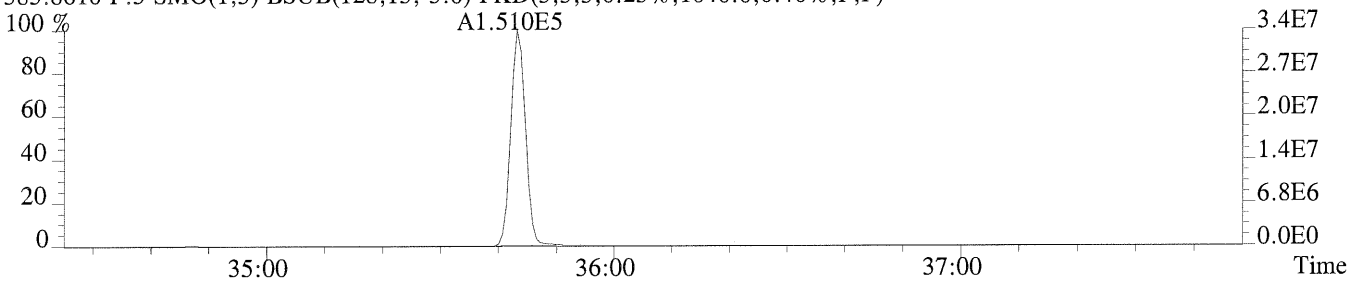
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1228.0,0.40%,F,F)



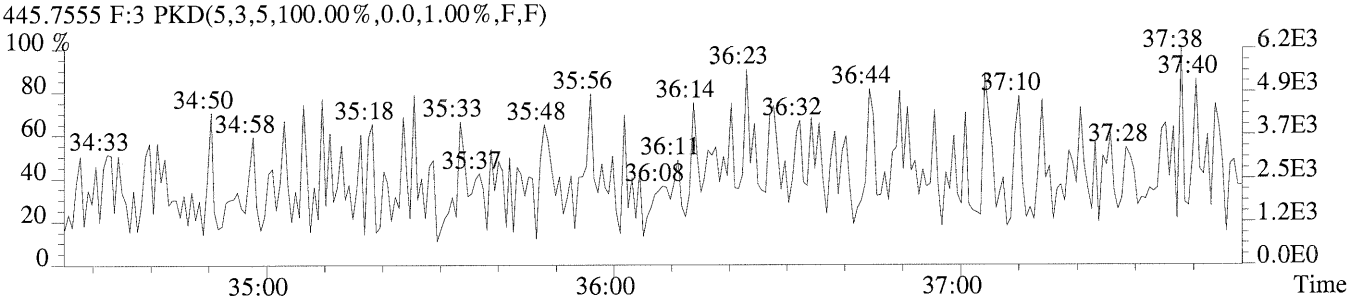
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1004.0,0.40%,F,F)



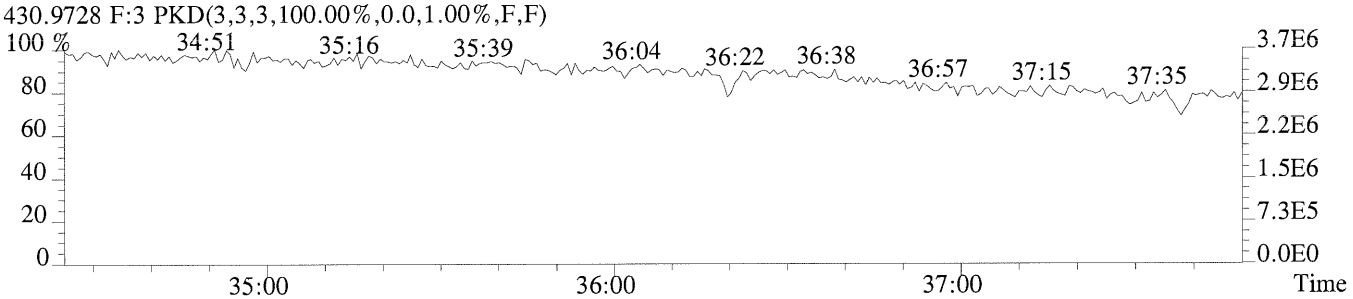
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1040.0,0.40%,F,F)



445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

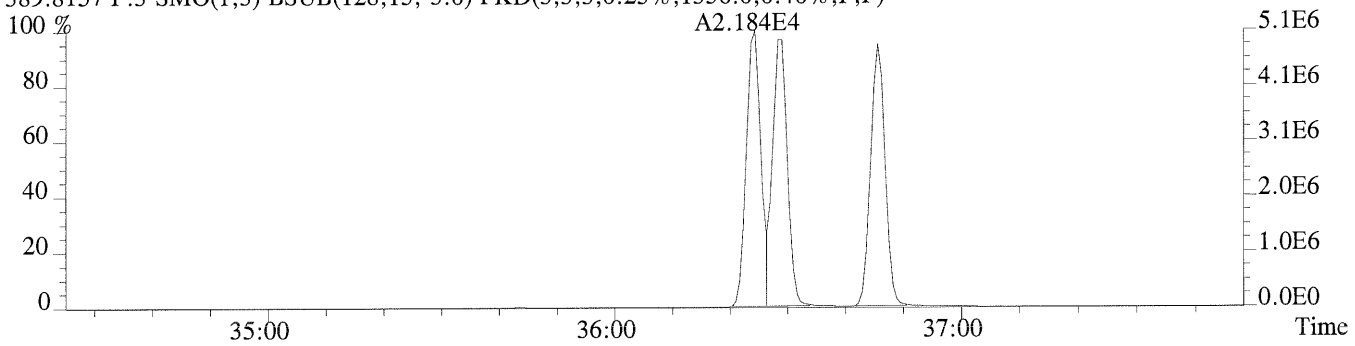


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

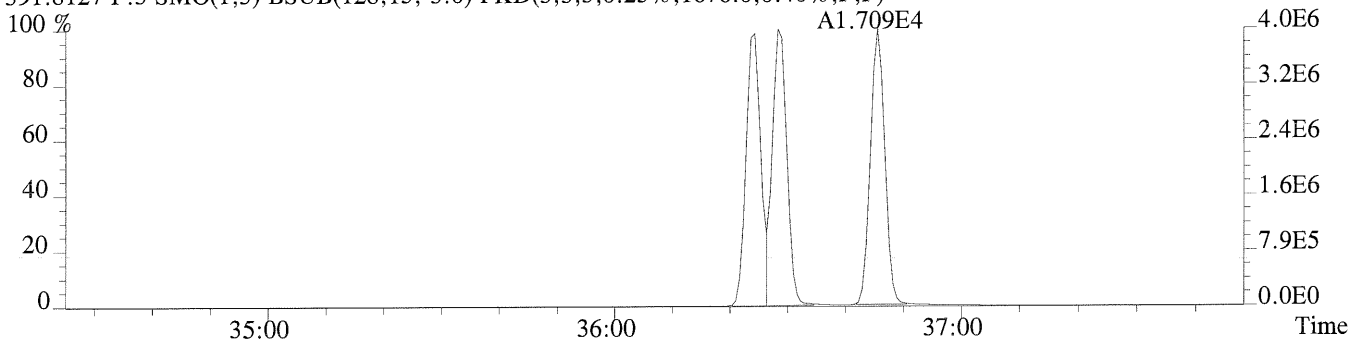


File:U212887 #1-308 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

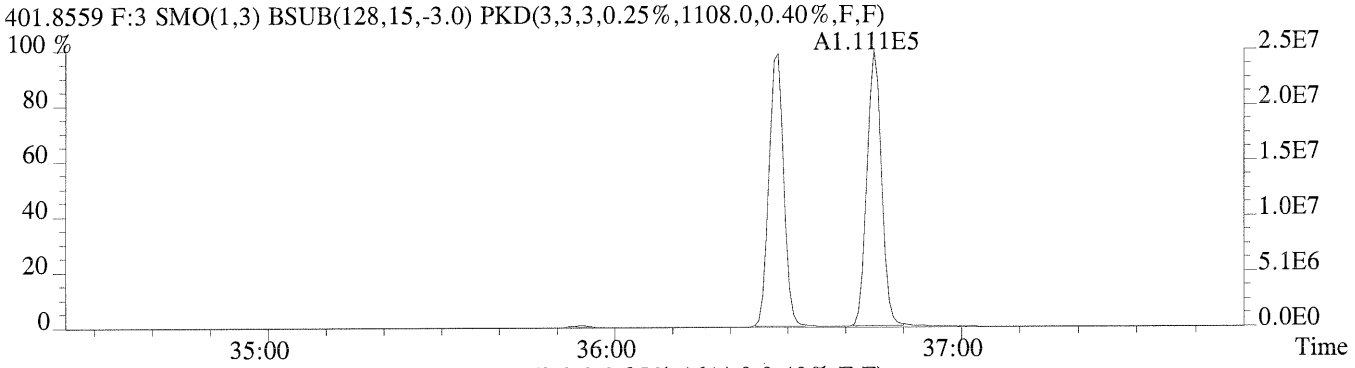
389.8157 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1356.0,0.40%,F,F)



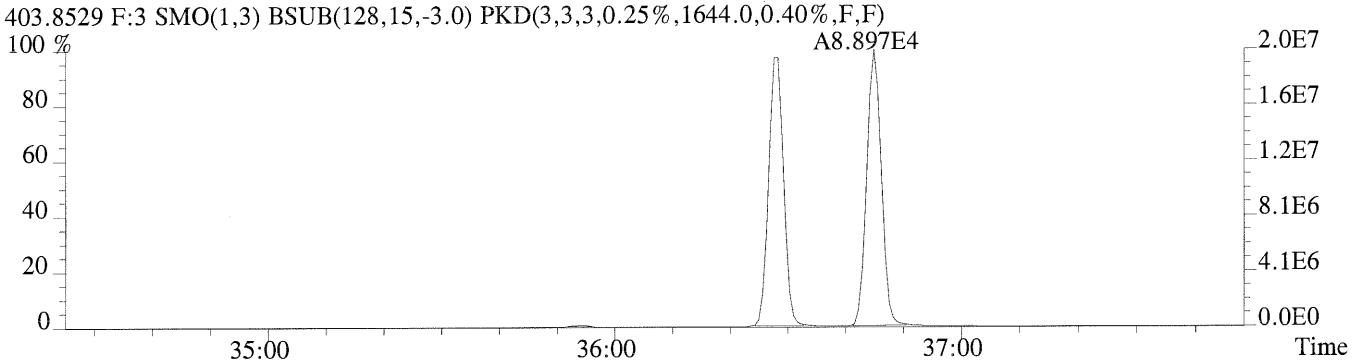
391.8127 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1676.0,0.40%,F,F)



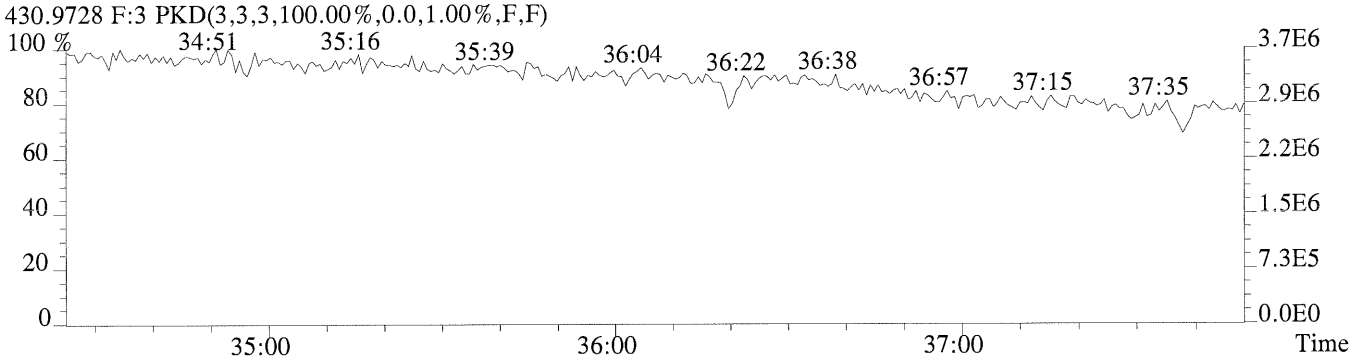
401.8559 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1108.0,0.40%,F,F)



403.8529 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1644.0,0.40%,F,F)

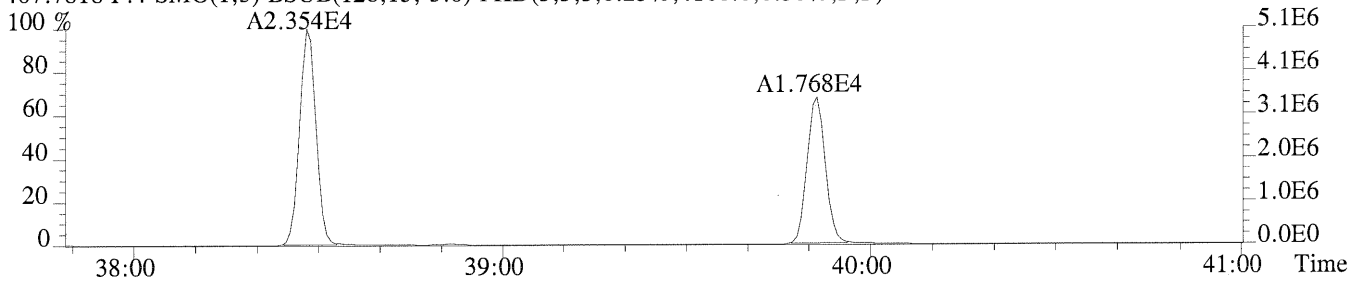


430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

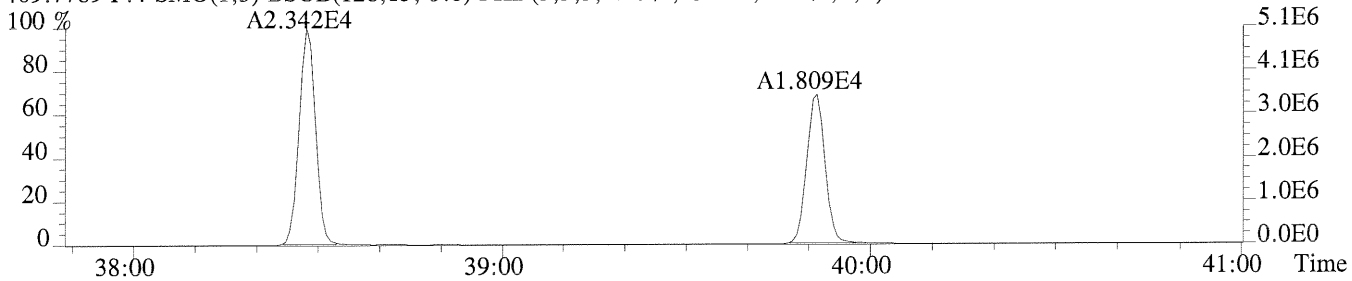


File:U212887 #1-290 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

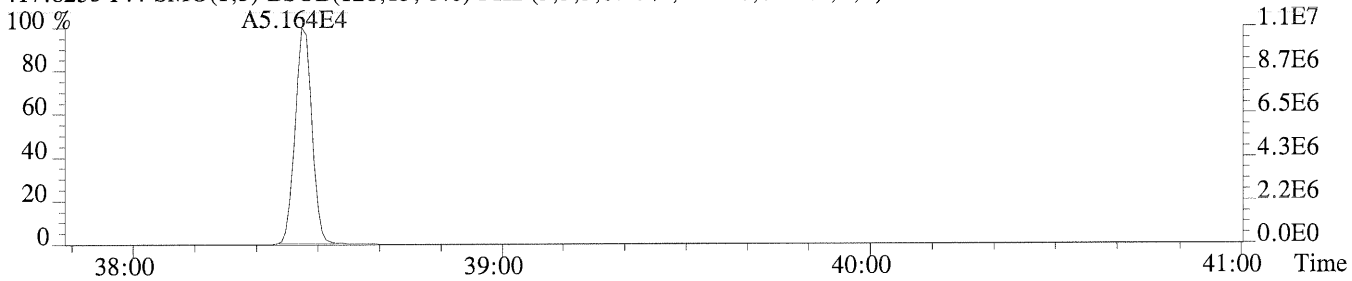
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,4168.0,0.50%,F,F)



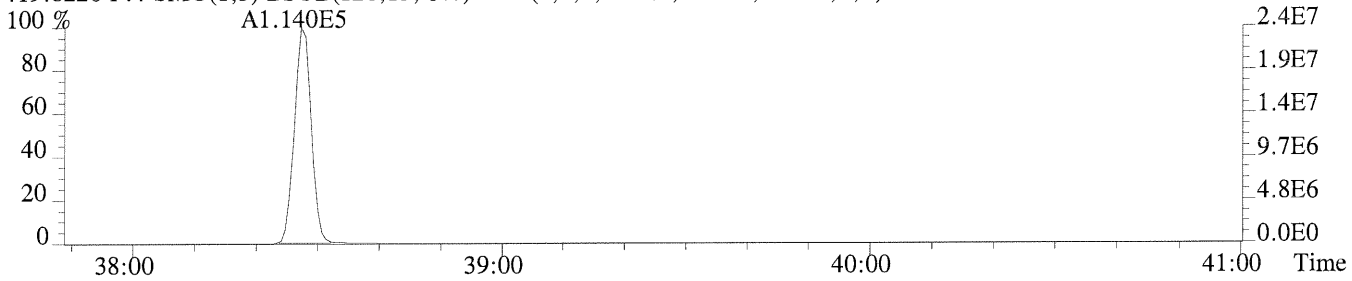
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1324.0,0.50%,F,F)



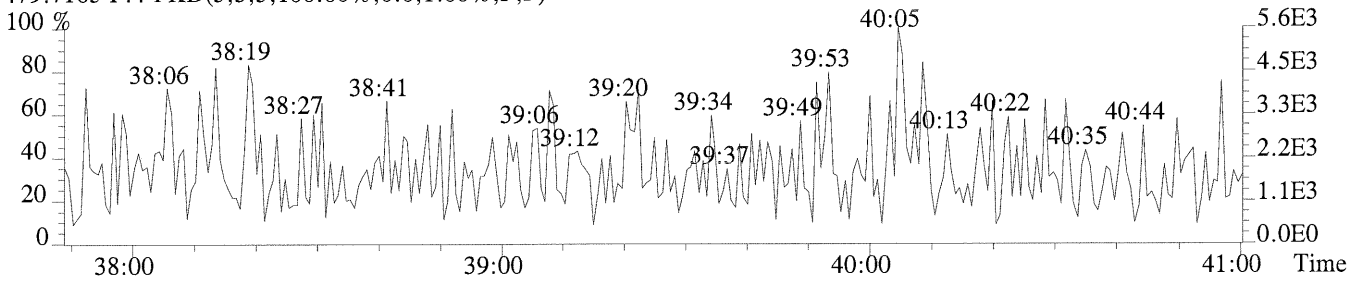
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1908.0,0.50%,F,F)



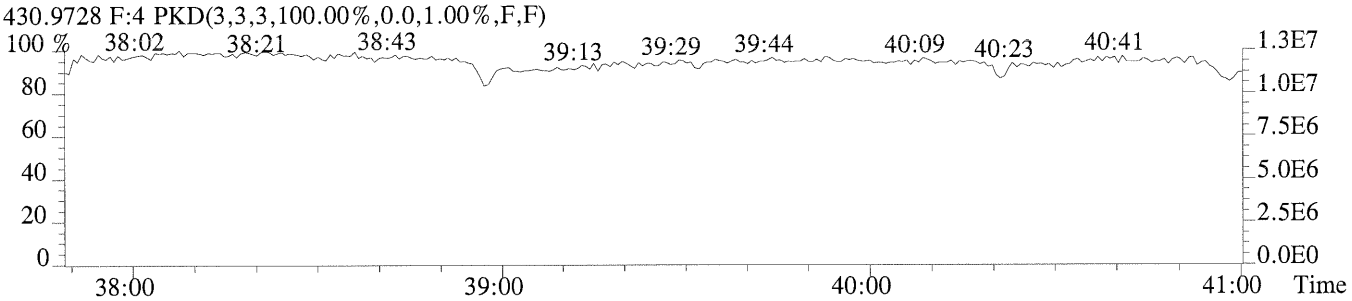
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3524.0,0.50%,F,F)



479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

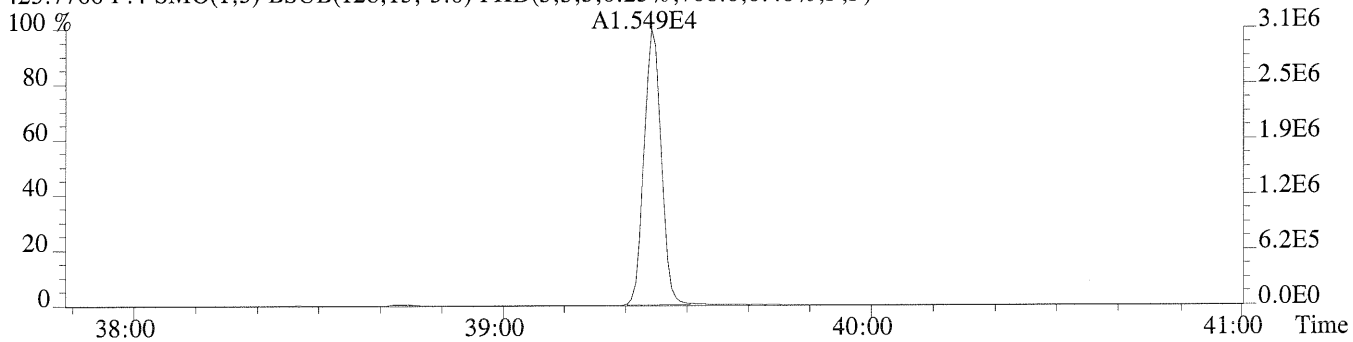


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

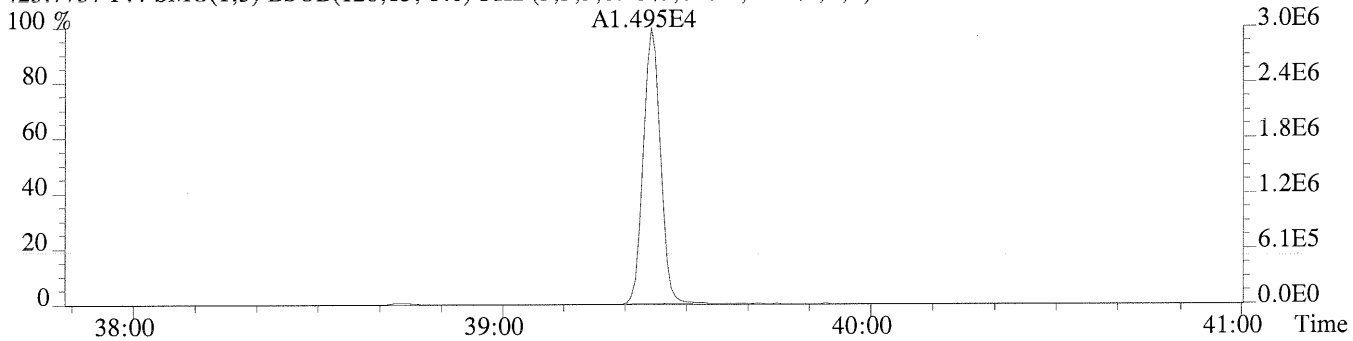


File:U212887 #1-290 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

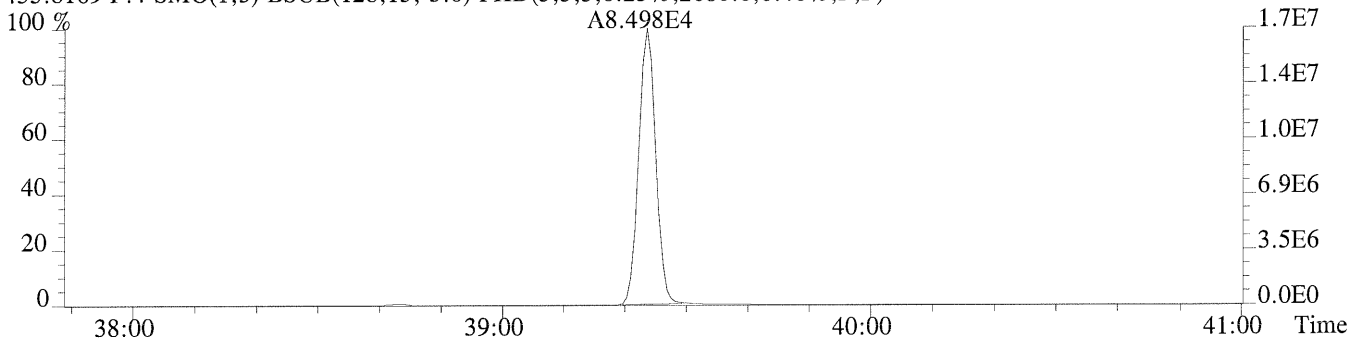
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,708.0,0.40%,F,F)



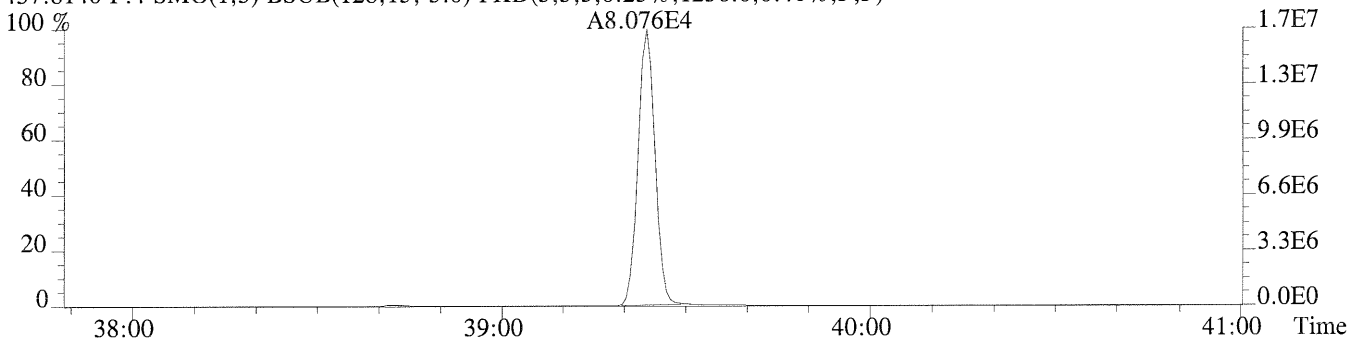
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,656.0,0.40%,F,F)



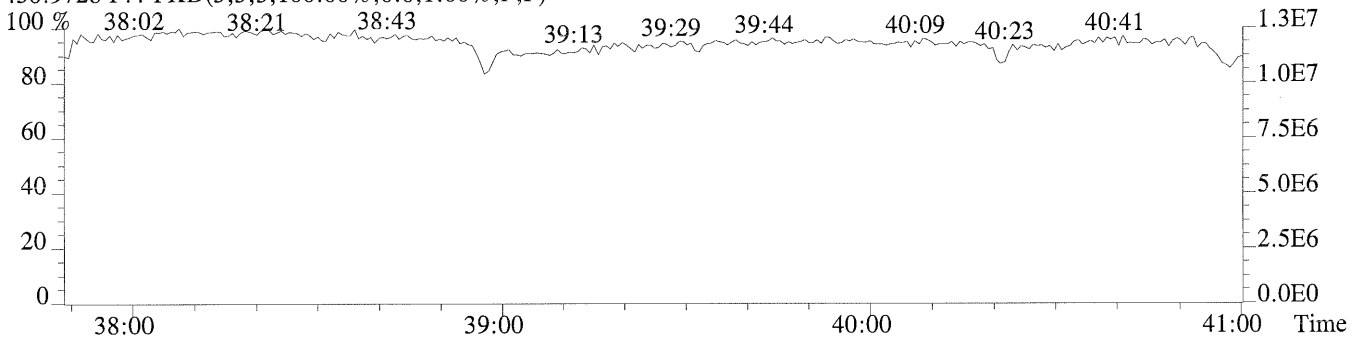
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2680.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1236.0,0.40%,F,F)

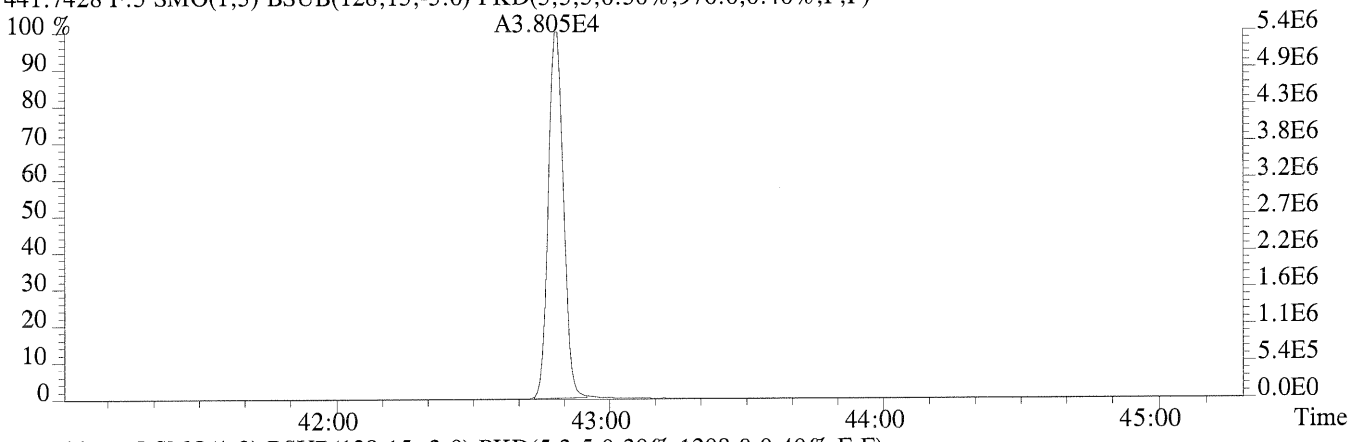


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

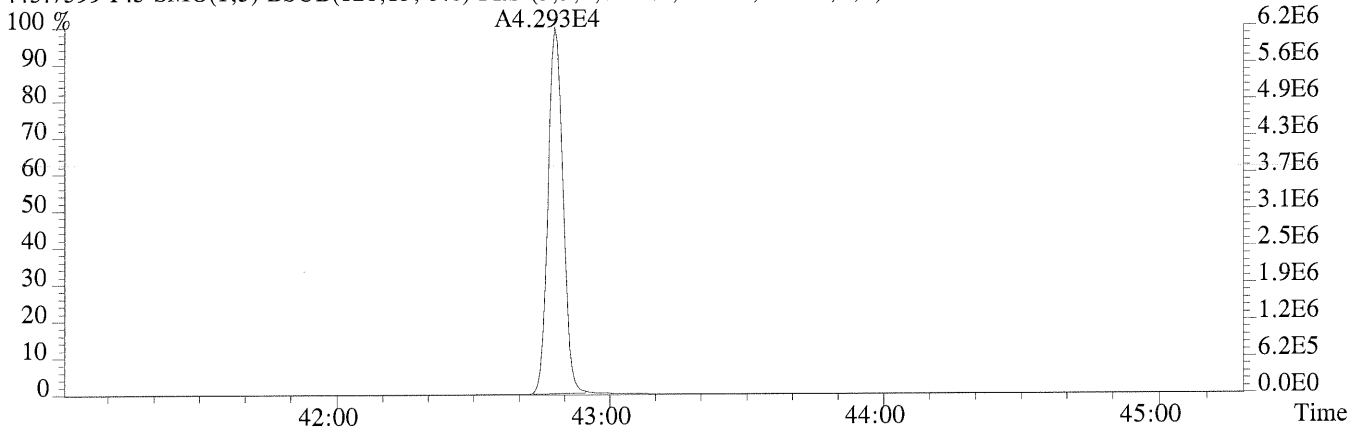


File:U212887 #1-474 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3

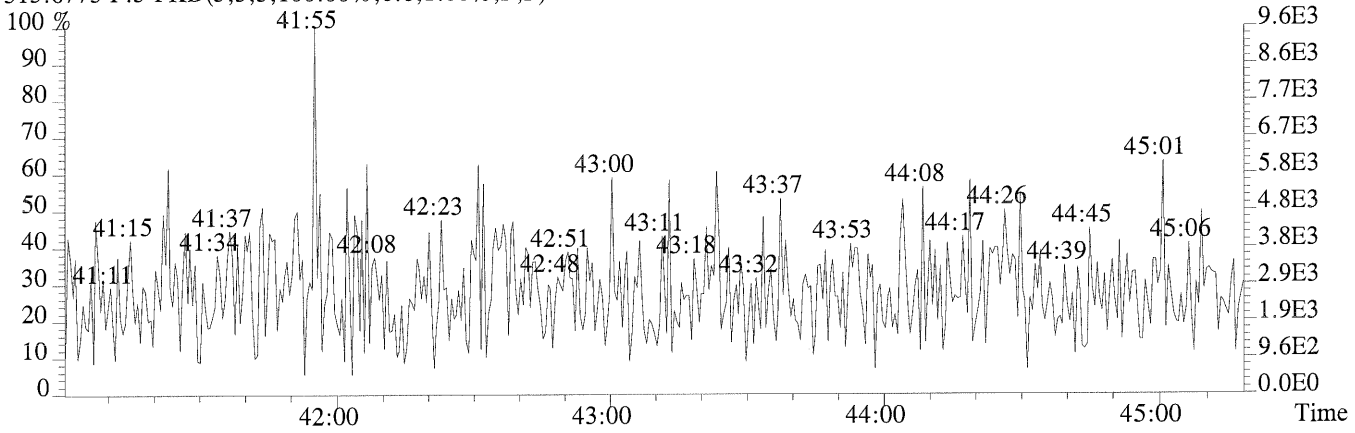
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,976.0,0.40%,F,F)



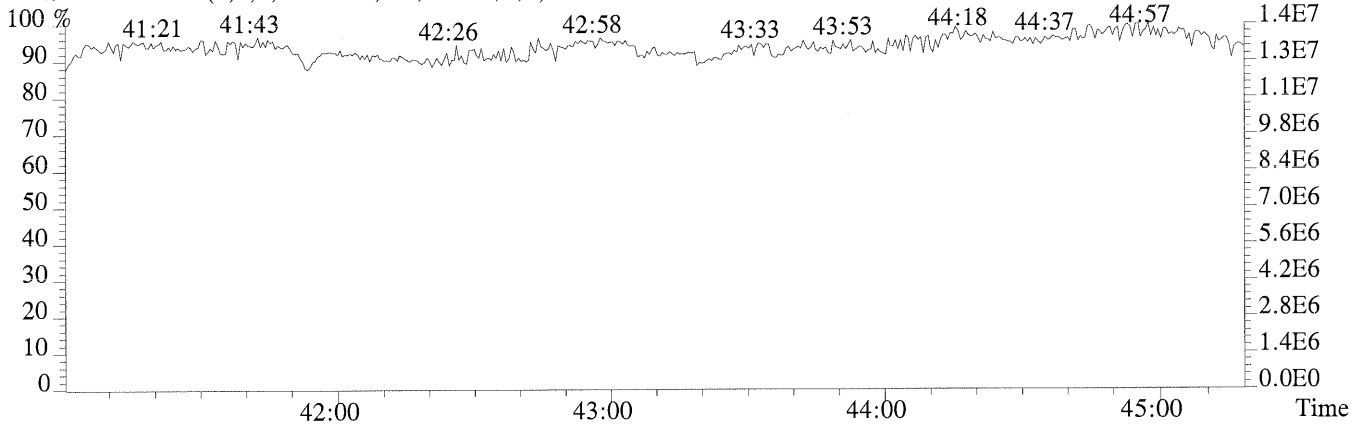
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1208.0,0.40%,F,F)



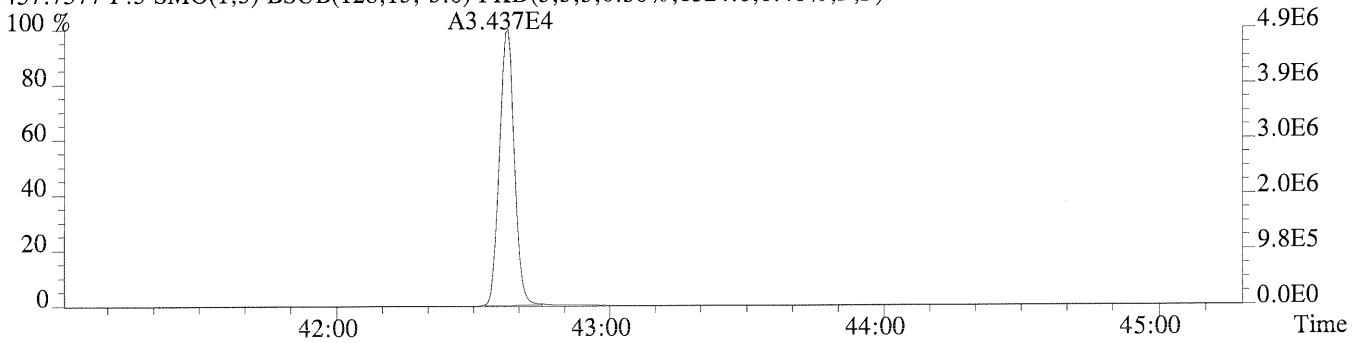
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



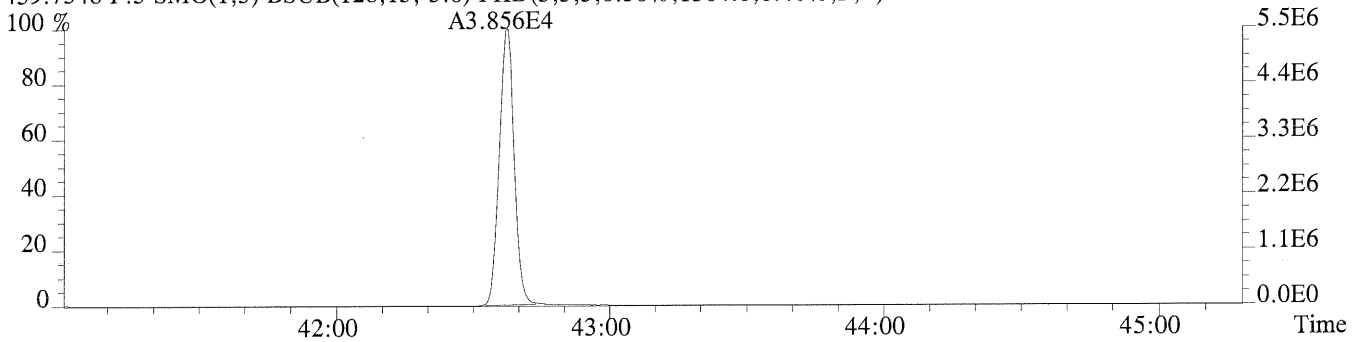
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



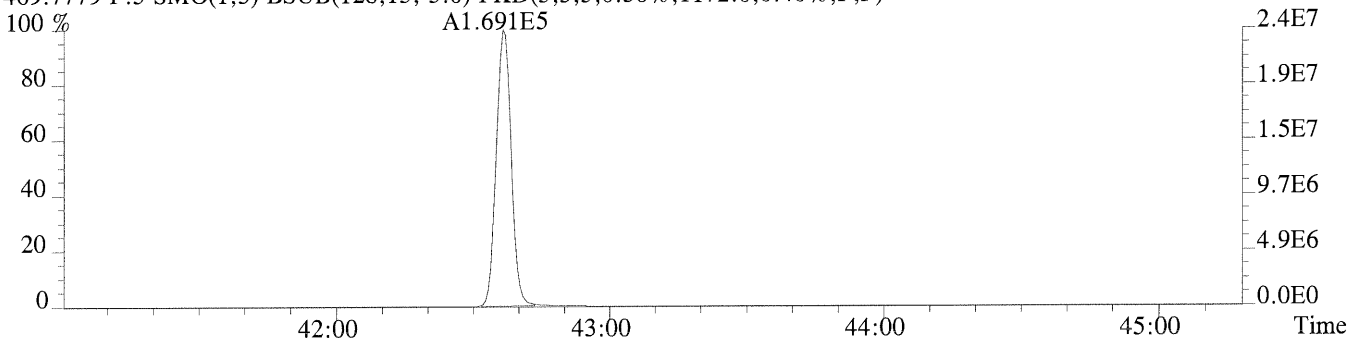
File:U212887 #1-474 Acq:10-DEC-2007 09:58:49 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC3
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1324.0,0.40%,F,F)



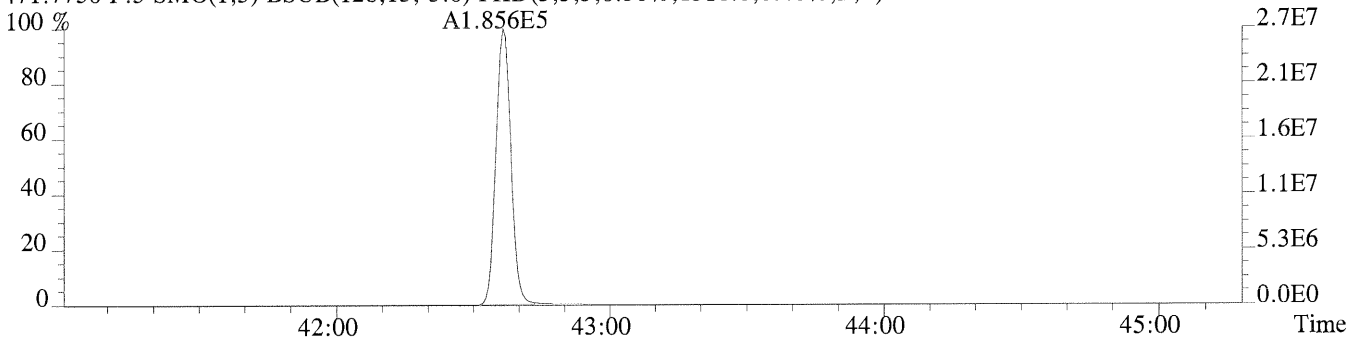
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1564.0,0.40%,F,F)



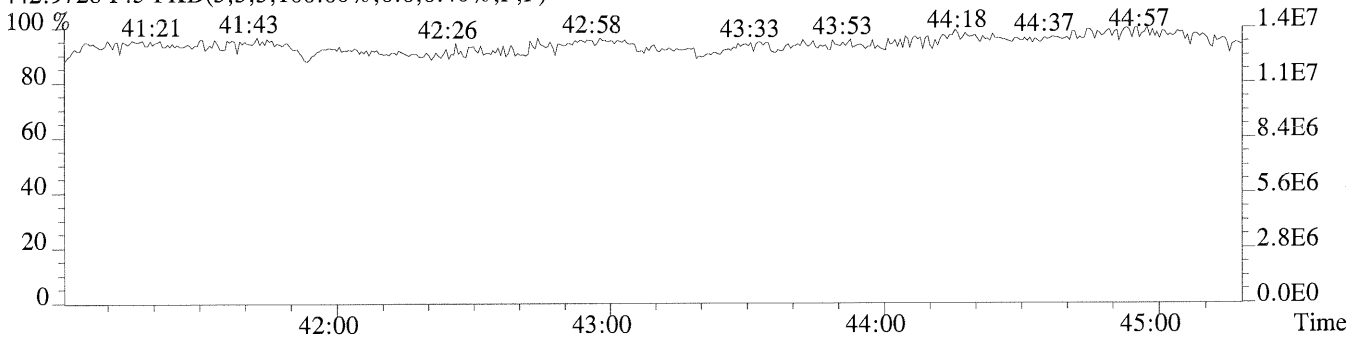
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1172.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1516.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC4

Run #4 Filename U212890 Samp: 1 Inj: 1 Acquired: 10-DEC-07 13:15:19
Processed: 10-DEC-07 15:07:33 Sample ID: ICAL HRCC4

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	28:14	6.583e+04	8.365e+04	0.79	yes	no
2	Unk	1,2,3,7,8-PeCDF	32:19	2.356e+05	1.528e+05	1.54	yes	no
3	Unk	2,3,4,7,8-PeCDF	33:01	2.431e+05	1.586e+05	1.53	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:44	2.065e+05	1.655e+05	1.25	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:50	1.958e+05	1.654e+05	1.18	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	36:18	1.913e+05	1.560e+05	1.23	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:59	1.681e+05	1.388e+05	1.21	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	38:28	1.669e+05	1.659e+05	1.01	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:51	1.333e+05	1.315e+05	1.01	yes	no
10	Unk	OCDF	42:48	2.889e+05	3.166e+05	0.91	yes	no
11	Unk	2,3,7,8-TCDD	29:00	5.276e+04	6.636e+04	0.79	yes	no
12	Unk	1,2,3,7,8-PeCDD	33:21	1.704e+05	1.099e+05	1.55	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	36:24	1.443e+05	1.175e+05	1.23	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	36:29	1.464e+05	1.191e+05	1.23	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:46	1.458e+05	1.188e+05	1.23	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	39:24	1.109e+05	1.066e+05	1.04	yes	no
17	Unk	OCDD	42:37	2.470e+05	2.801e+05	0.88	yes	no
18	IS	13C-2,3,7,8-TCDF	28:13	7.107e+04	9.023e+04	0.79	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	32:18	1.055e+05	6.744e+04	1.56	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:43	1.109e+05	2.120e+05	0.52	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	38:27	7.169e+04	1.617e+05	0.44	yes	no
22	IS	13C-2,3,7,8-TCDD	28:59	5.462e+04	7.035e+04	0.78	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	33:20	7.466e+04	4.800e+04	1.56	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	36:28	1.363e+05	1.078e+05	1.26	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	39:24	1.200e+05	1.142e+05	1.05	yes	no
26	IS	13C-OCDD	42:36	2.446e+05	2.712e+05	0.90	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	28:47	5.189e+04	6.693e+04	0.78	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:45	1.436e+05	1.140e+05	1.26	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	29:00	1.185e+05				

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Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC4

Run #4 Filename U212890 #1 Samp: 1 Inj: 1 Acquired: 10-DEC-07 13:15:19

Processed: 10-DEC-07 15:07:33 LAB. ID: ICAL HRCC4

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	1.17e+07	9.40e+02	1.2e+04	1.49e+07	9.56e+02	1.6e+04
2	1,2,3,7,8-PeCDF	4.73e+07	3.44e+02	1.4e+05	3.04e+07	1.12e+03	2.7e+04
3	2,3,4,7,8-PeCDF	4.95e+07	3.44e+02	1.4e+05	3.25e+07	1.12e+03	2.9e+04
4	1,2,3,4,7,8-HxCDF	4.53e+07	7.56e+02	6.0e+04	3.74e+07	6.80e+02	5.5e+04
5	1,2,3,6,7,8-HxCDF	4.40e+07	7.56e+02	5.8e+04	3.59e+07	6.80e+02	5.3e+04
6	2,3,4,6,7,8-HxCDF	4.36e+07	7.56e+02	5.8e+04	3.60e+07	6.80e+02	5.3e+04
7	1,2,3,7,8,9-HxCDF	3.67e+07	7.56e+02	4.9e+04	3.04e+07	6.80e+02	4.5e+04
8	1,2,3,4,6,7,8-HpCDF	3.54e+07	3.69e+03	9.6e+03	3.54e+07	3.50e+03	1.0e+04
9	1,2,3,4,7,8,9-HpCDF	2.56e+07	3.69e+03	6.9e+03	2.53e+07	3.50e+03	7.2e+03
10	OCDF	3.96e+07	8.16e+02	4.9e+04	4.41e+07	9.24e+02	4.8e+04
11	2,3,7,8-TCDD	1.01e+07	8.08e+02	1.3e+04	1.28e+07	3.00e+02	4.3e+04
12	1,2,3,7,8-PeCDD	3.47e+07	8.44e+02	4.1e+04	2.22e+07	7.92e+02	2.8e+04
13	1,2,3,4,7,8-HxCDD	3.35e+07	6.88e+02	4.9e+04	2.69e+07	9.04e+02	3.0e+04
14	1,2,3,6,7,8-HxCDD	3.24e+07	6.88e+02	4.7e+04	2.62e+07	9.04e+02	2.9e+04
15	1,2,3,7,8,9-HxCDD	3.34e+07	6.88e+02	4.9e+04	2.73e+07	9.04e+02	3.0e+04
16	1,2,3,4,6,7,8-HpCDD	2.28e+07	9.96e+02	2.3e+04	2.20e+07	8.64e+02	2.5e+04
17	OCDD	3.55e+07	1.17e+03	3.0e+04	4.04e+07	1.40e+03	2.9e+04
18	13C-2,3,7,8-TCDF	1.24e+07	3.08e+03	4.0e+03	1.59e+07	1.54e+03	1.0e+04
19	13C-1,2,3,7,8-PeCDF	2.15e+07	4.52e+02	4.7e+04	1.37e+07	8.64e+02	1.6e+04
20	13C-1,2,3,4,7,8-HxCDF	2.44e+07	5.88e+02	4.1e+04	4.68e+07	4.68e+02	1.0e+05
21	13C-1,2,3,4,6,7,8-HpCDF	1.51e+07	2.98e+03	5.0e+03	3.44e+07	5.43e+03	6.3e+03
22	13C-2,3,7,8-TCDD	1.00e+07	3.38e+03	3.0e+03	1.29e+07	1.36e+03	9.5e+03
23	13C-1,2,3,7,8-PeCDD	1.55e+07	7.68e+02	2.0e+04	1.01e+07	4.68e+02	2.1e+04
24	13C-1,2,3,6,7,8-HxCDD	3.08e+07	1.69e+03	1.8e+04	2.43e+07	1.43e+03	1.7e+04
25	13C-1,2,3,4,6,7,8-HpCDD	2.49e+07	1.25e+03	2.0e+04	2.38e+07	5.28e+02	4.5e+04
26	13C-OCDD	3.57e+07	1.04e+03	3.4e+04	3.94e+07	1.21e+03	3.3e+04
27	13C-1,2,3,4-TCDD	9.45e+06	3.38e+03	2.8e+03	1.23e+07	1.36e+03	9.1e+03
28	13C-1,2,3,7,8,9-HxCDD	3.26e+07	1.69e+03	1.9e+04	2.60e+07	1.43e+03	1.8e+04
29	37Cl-2,3,7,8-TCDD	2.26e+07	5.76e+02	3.9e+04			

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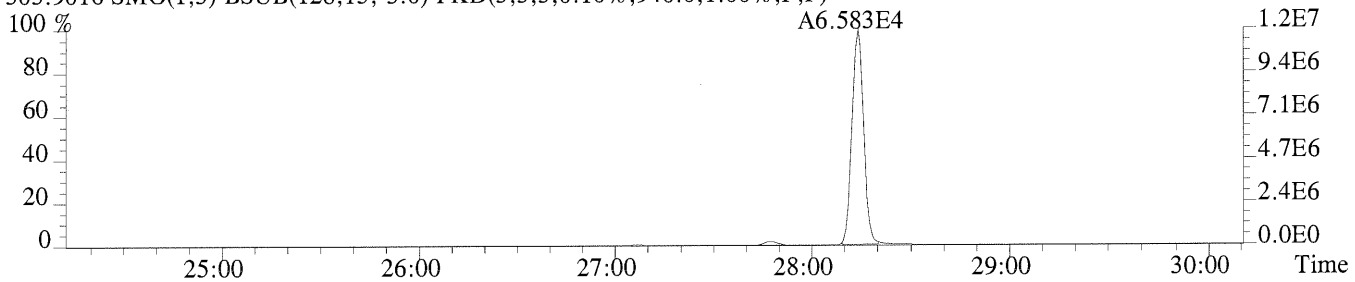
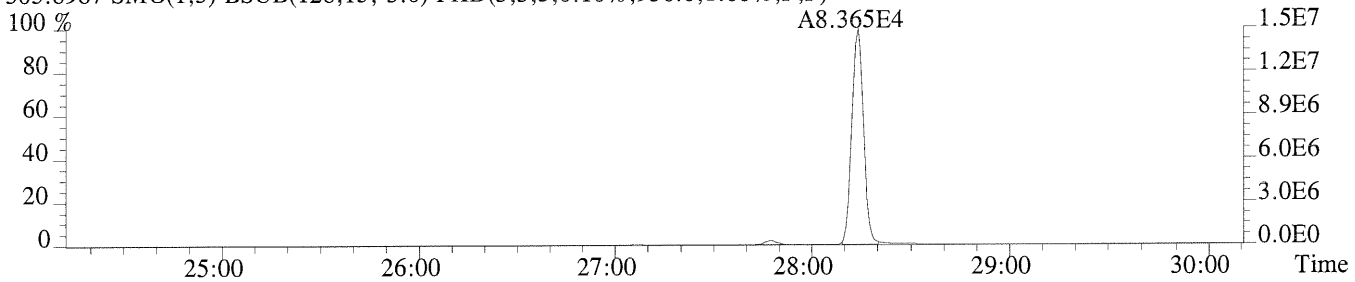
File:U212890 #1-498 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

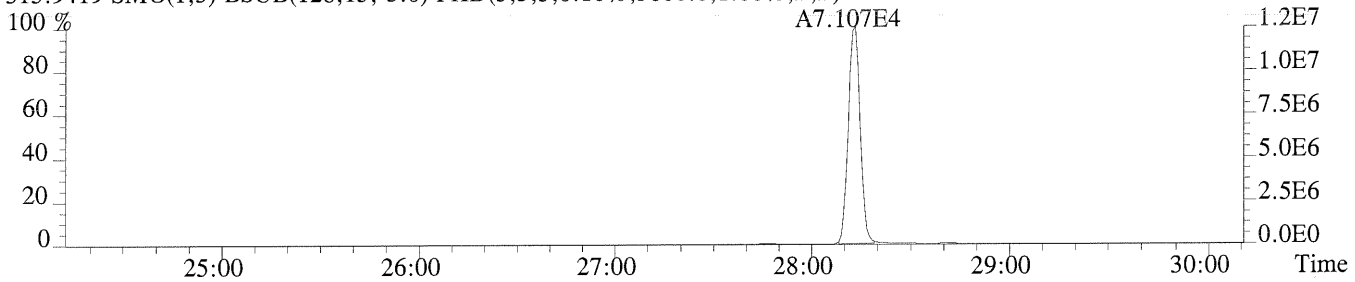
303.9016 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,940.0,1.00%,F,F)



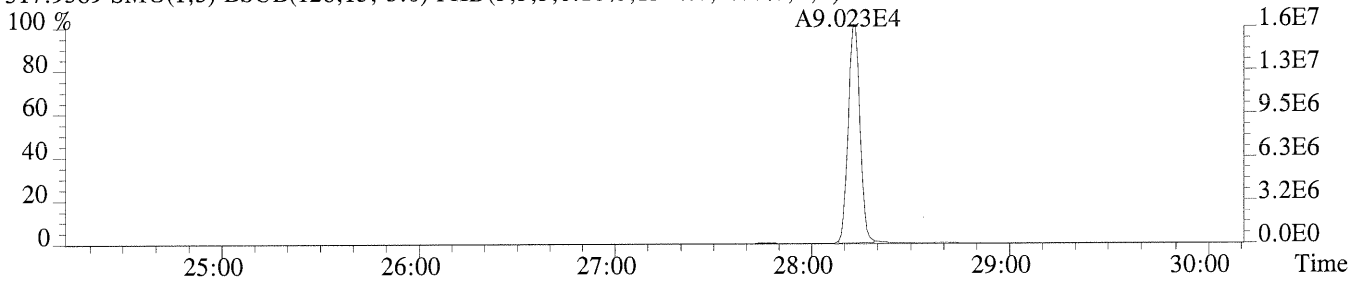
305.8987 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,956.0,1.00%,F,F)



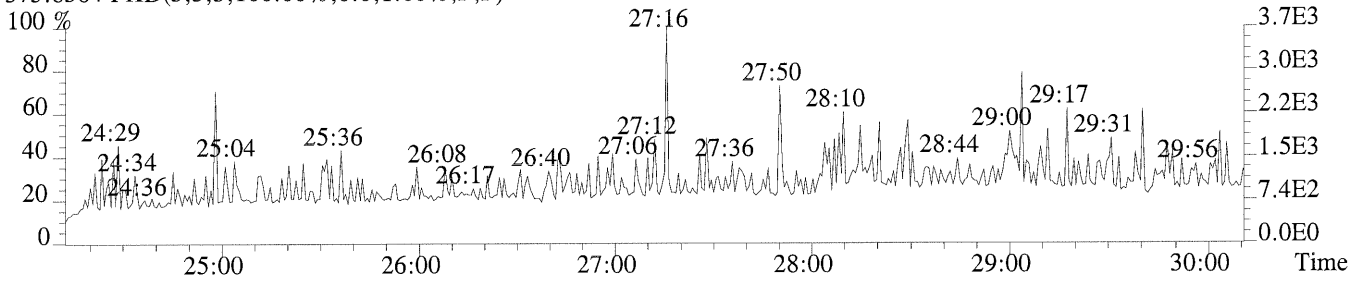
315.9419 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3080.0,1.00%,F,F)



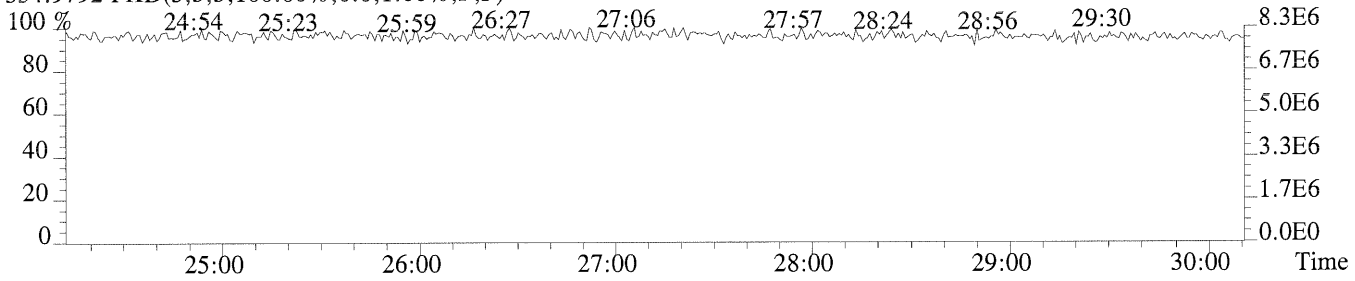
317.9389 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1544.0,1.00%,F,F)



375.8364 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

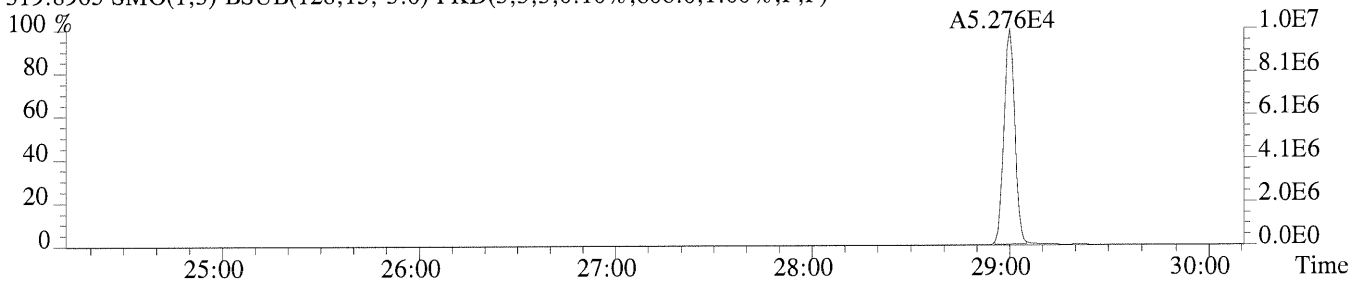


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

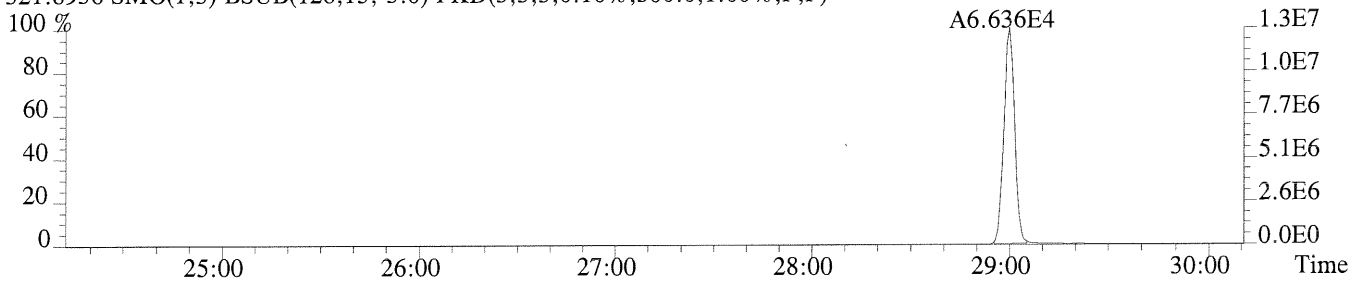


File:U212890 #1-498 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

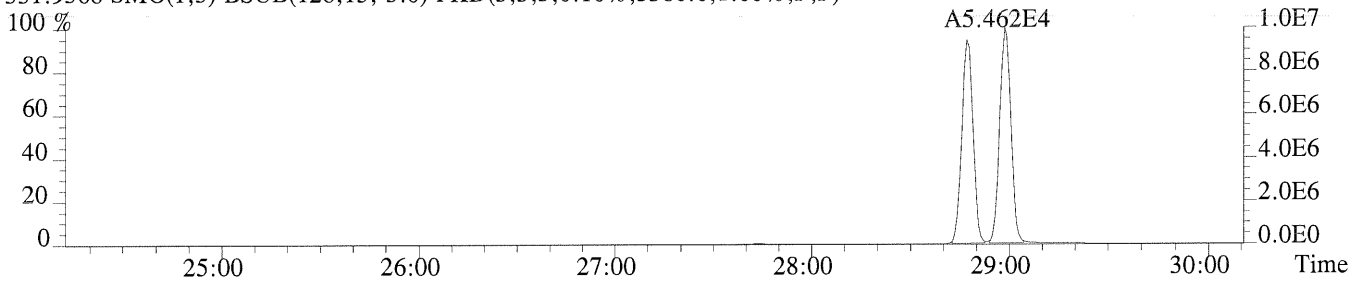
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,808.0,1.00%,F,F)



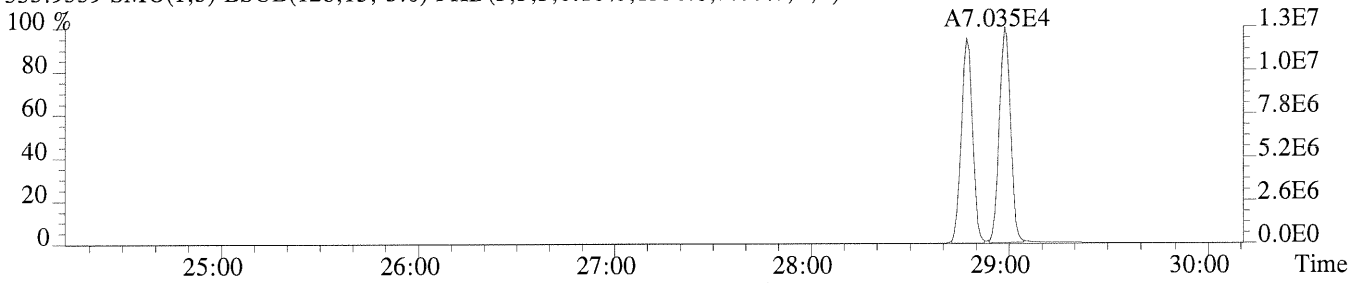
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,300.0,1.00%,F,F)



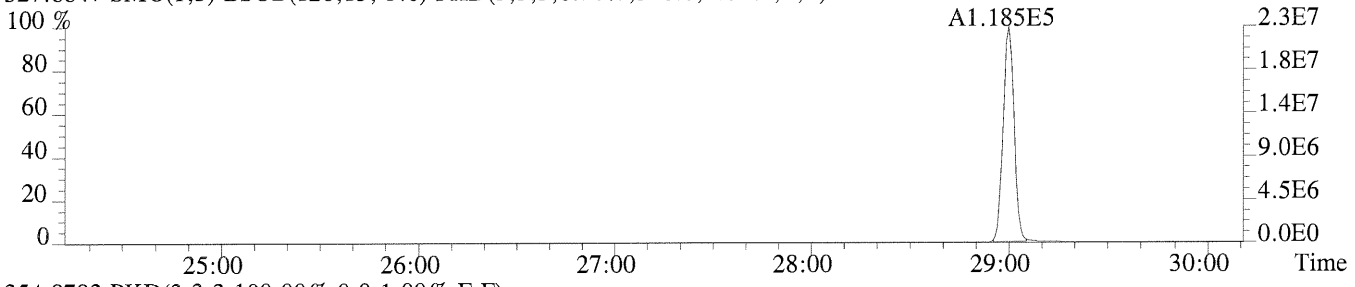
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,3380.0,1.00%,F,F)



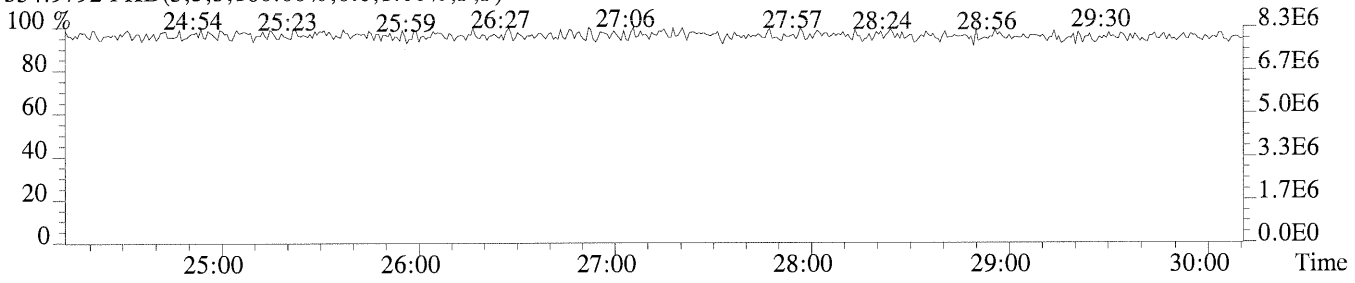
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1356.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,576.0,1.00%,F,F)

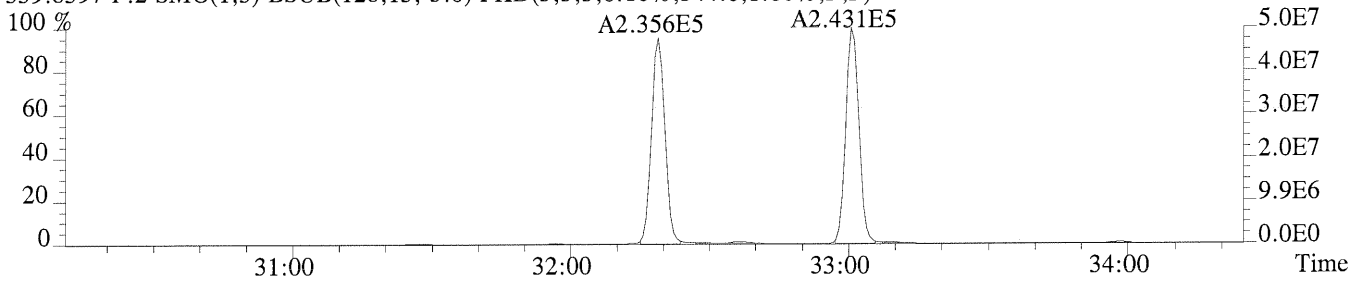


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

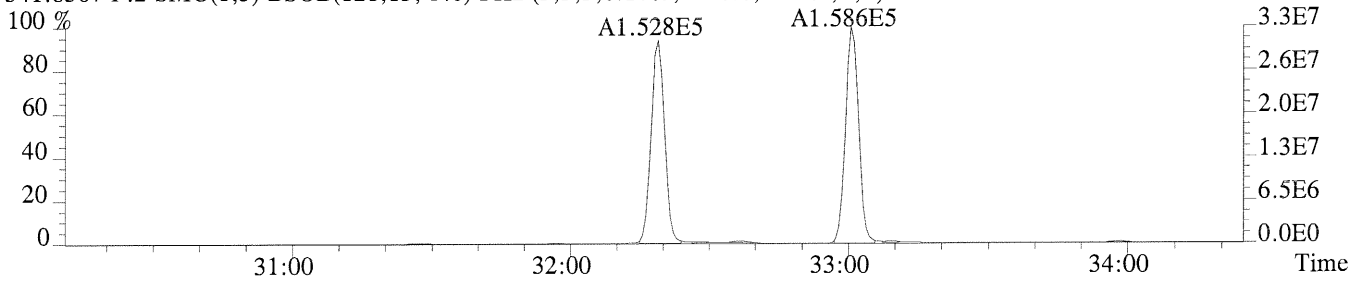


File:U212890 #1-384 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

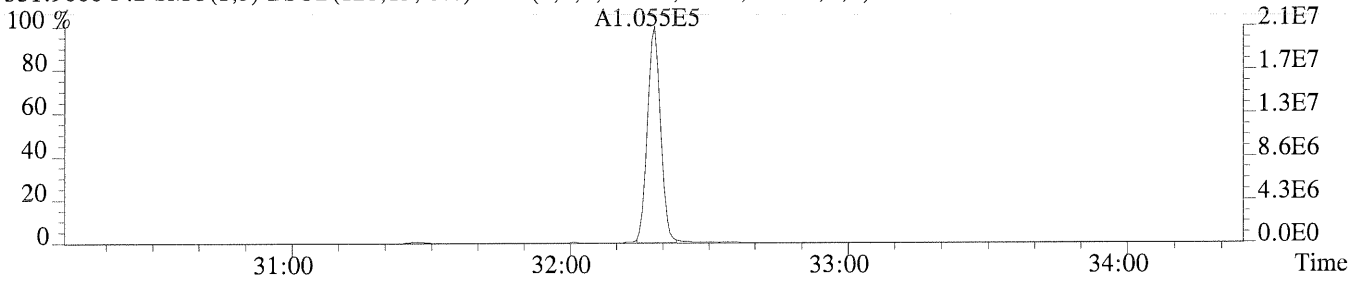
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,344.0,1.00%,F,F)



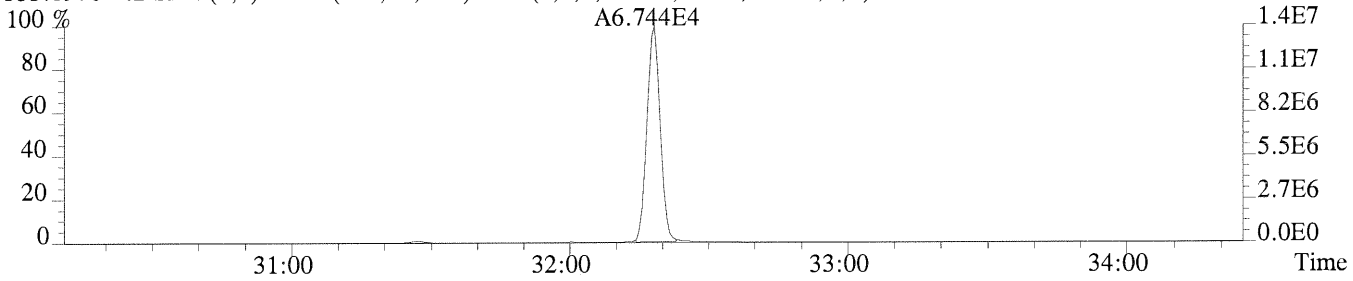
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1120.0,1.00%,F,F)



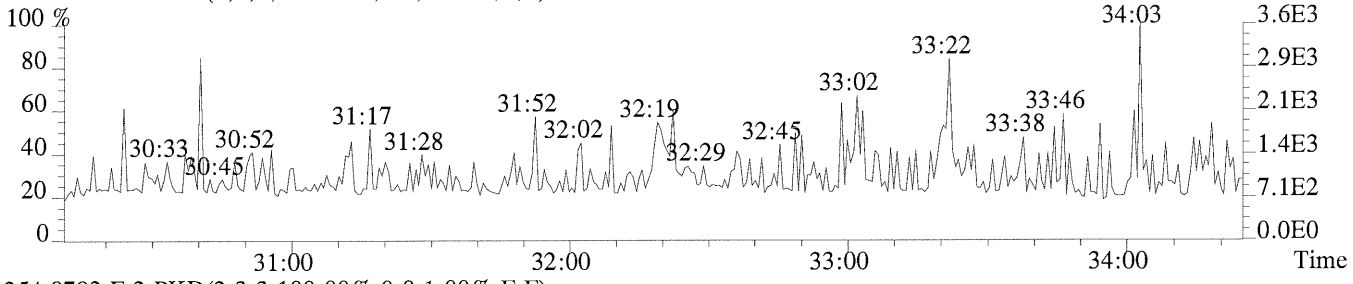
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,452.0,1.00%,F,F)



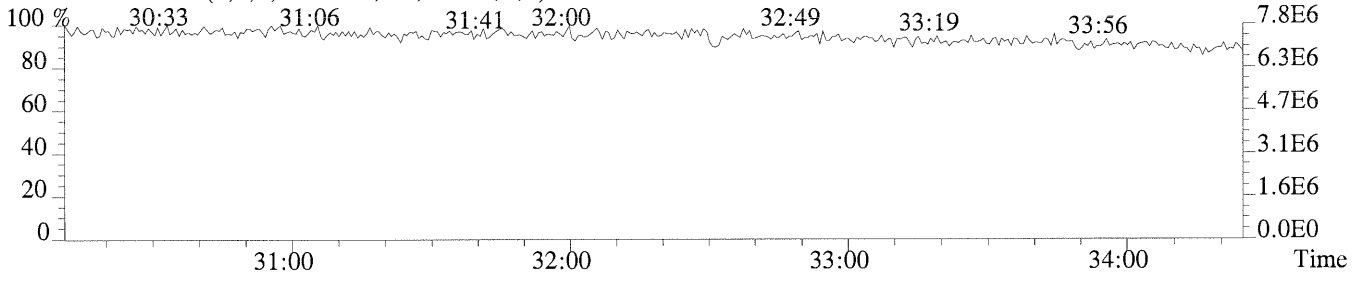
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,864.0,1.00%,F,F)



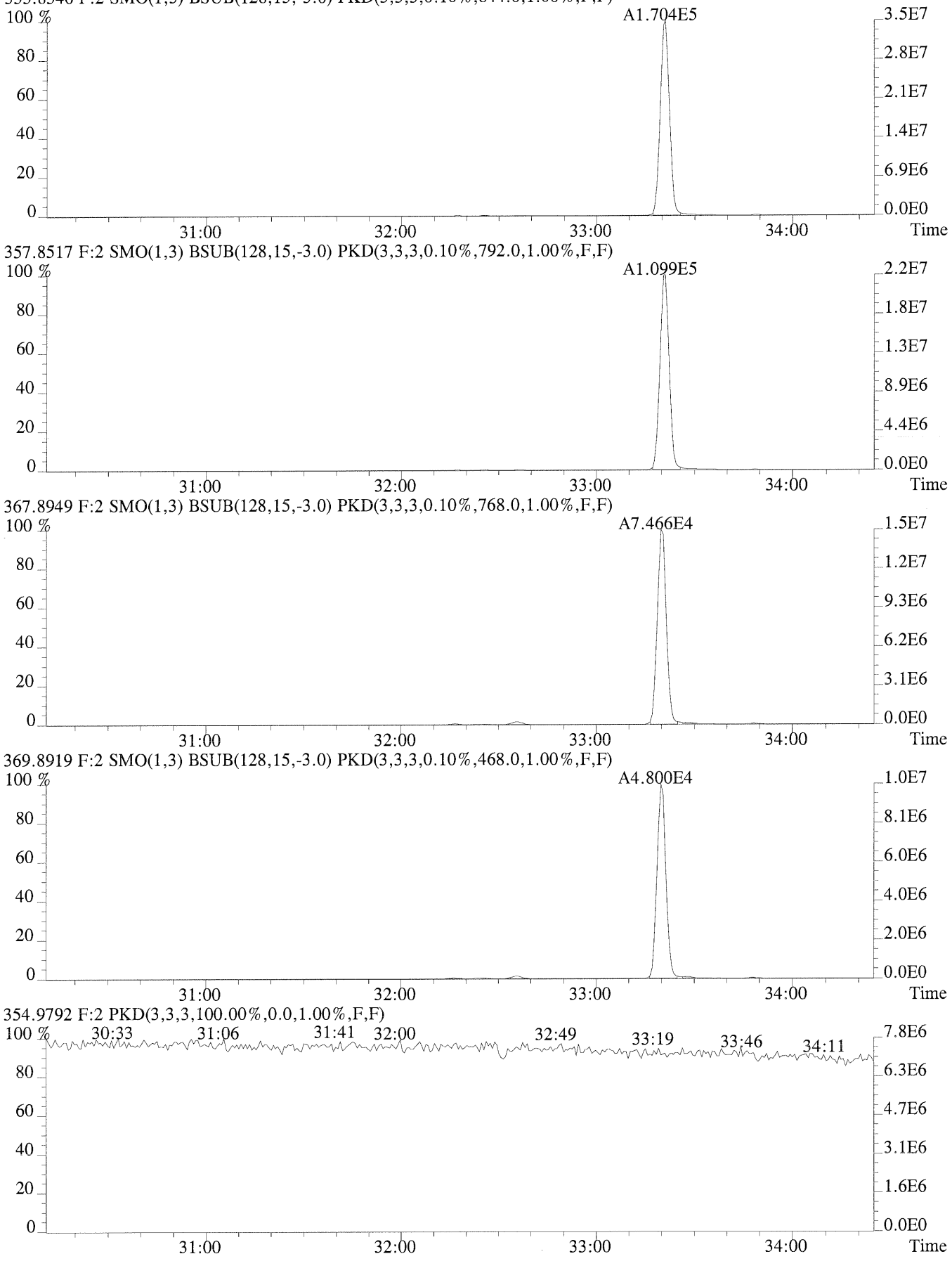
409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

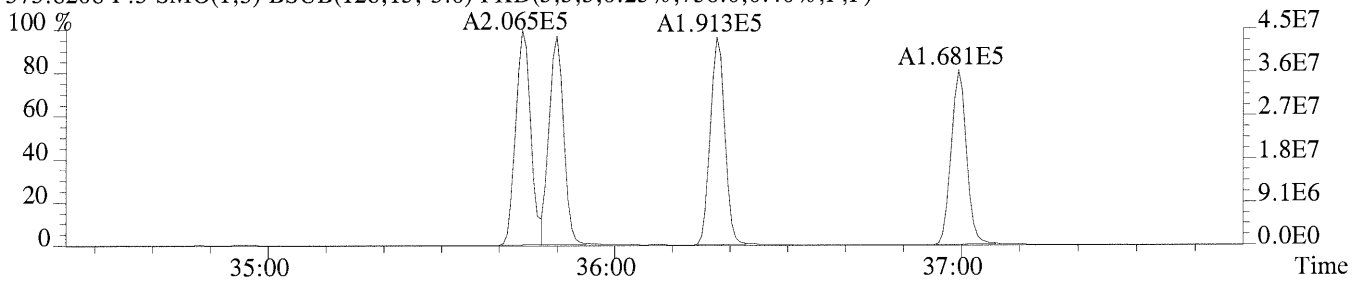


File:U212890 #1-384 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

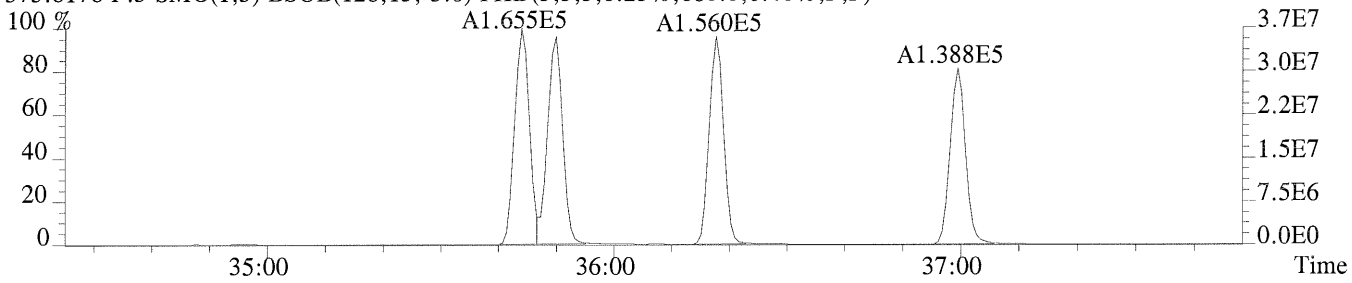


File:U212890 #1-308 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

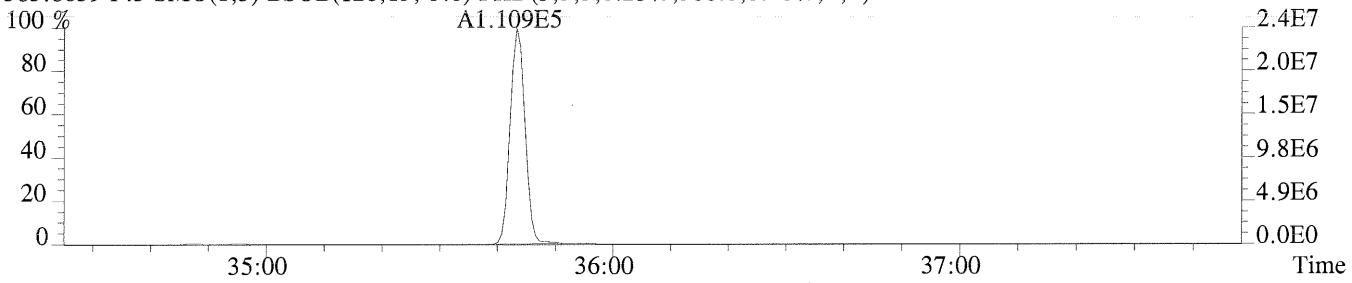
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,756.0,0.40%,F,F)



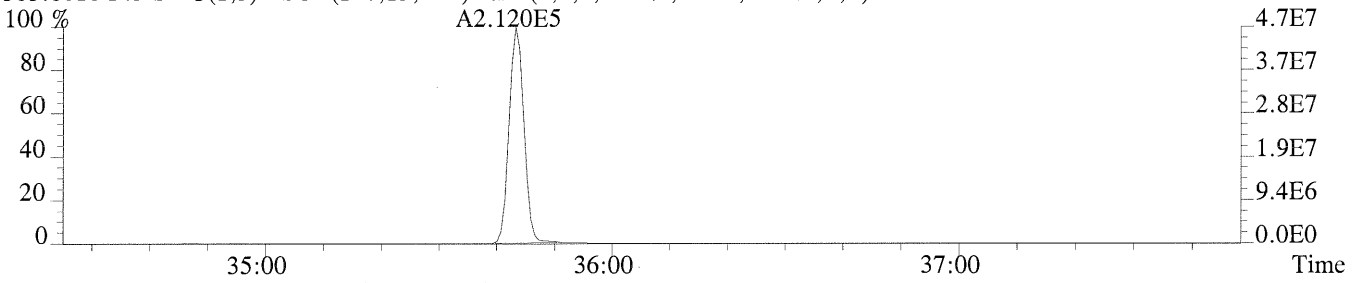
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,680.0,0.40%,F,F)



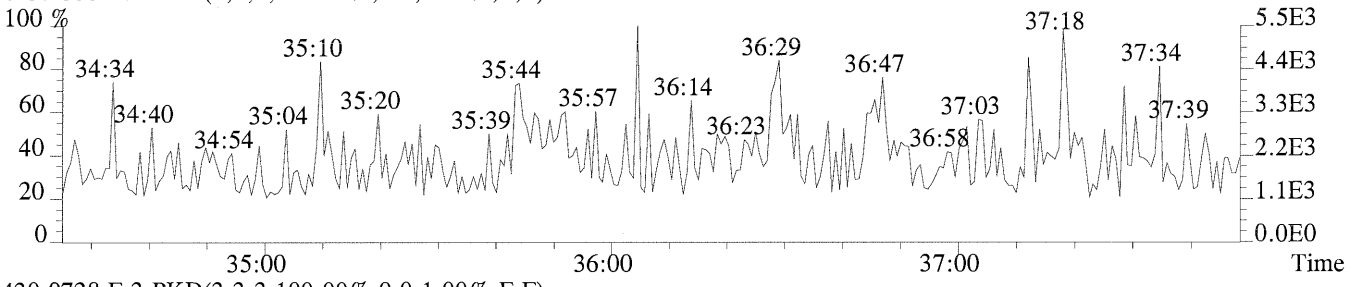
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,588.0,0.40%,F,F)



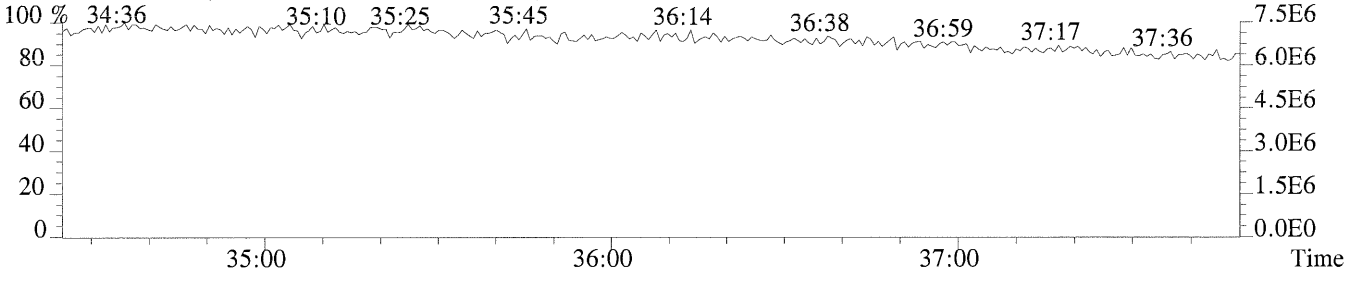
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,468.0,0.40%,F,F)



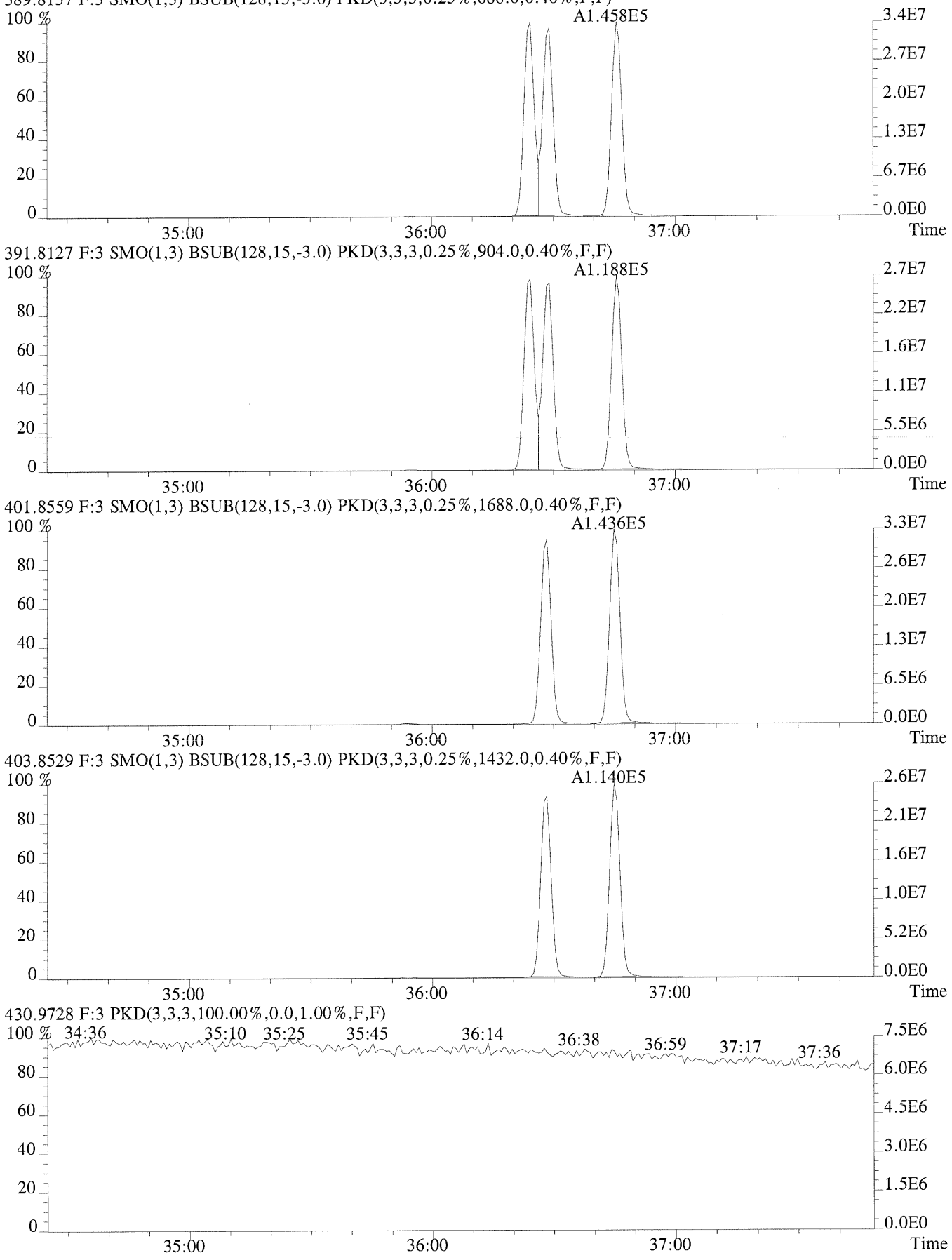
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

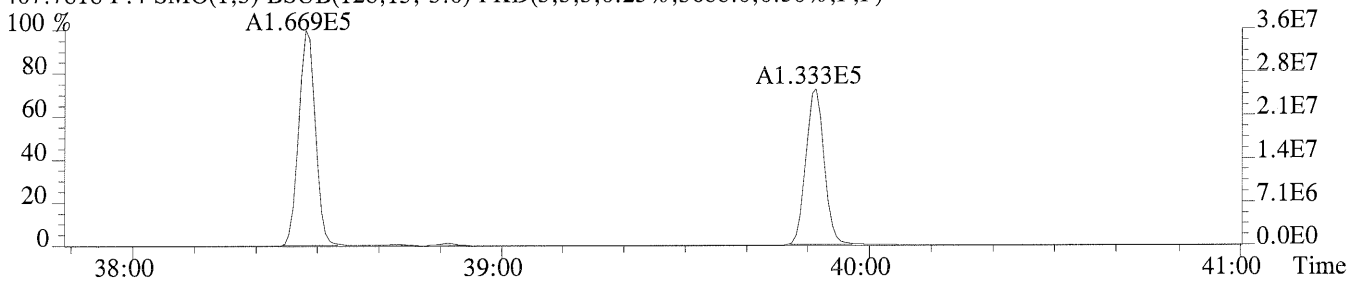


File:U212890 #1-308 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

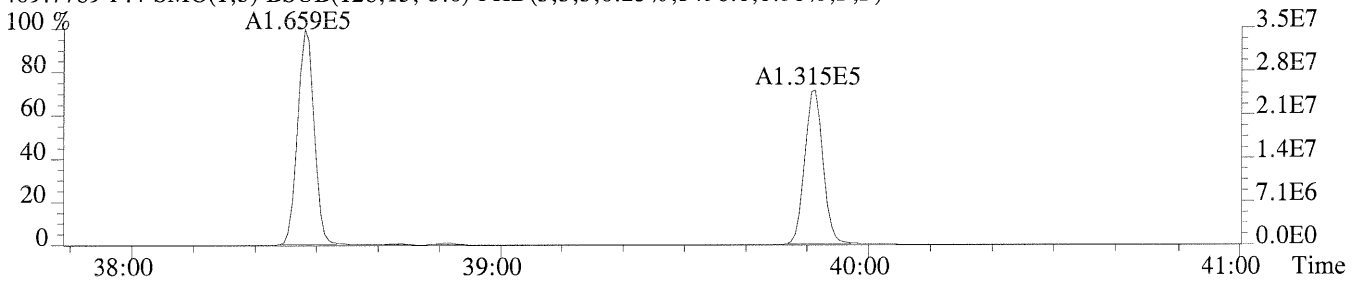


File:U212890 #1-290 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

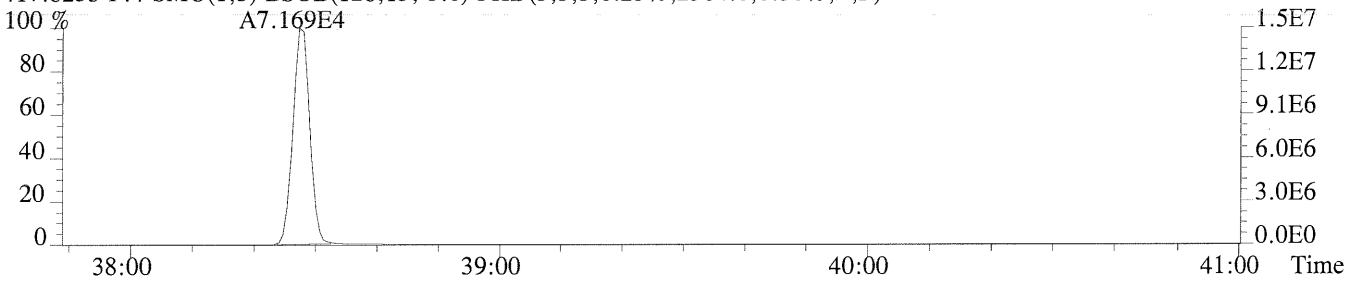
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3688.0,0.50%,F,F)



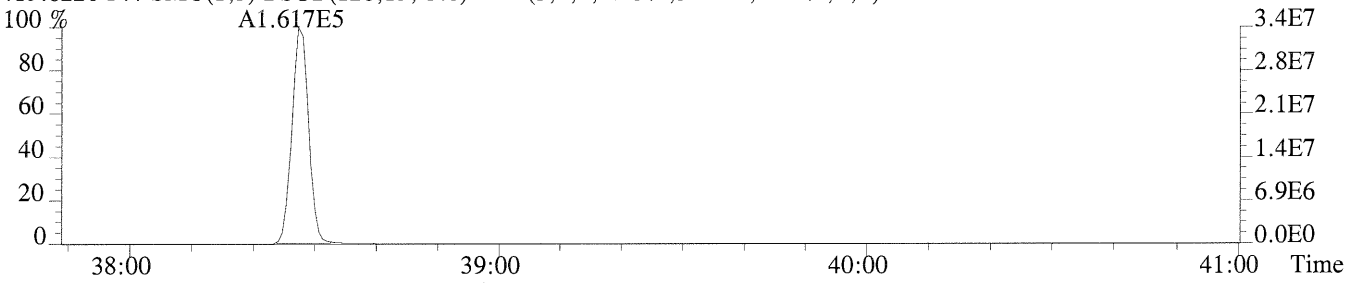
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,3496.0,0.50%,F,F)



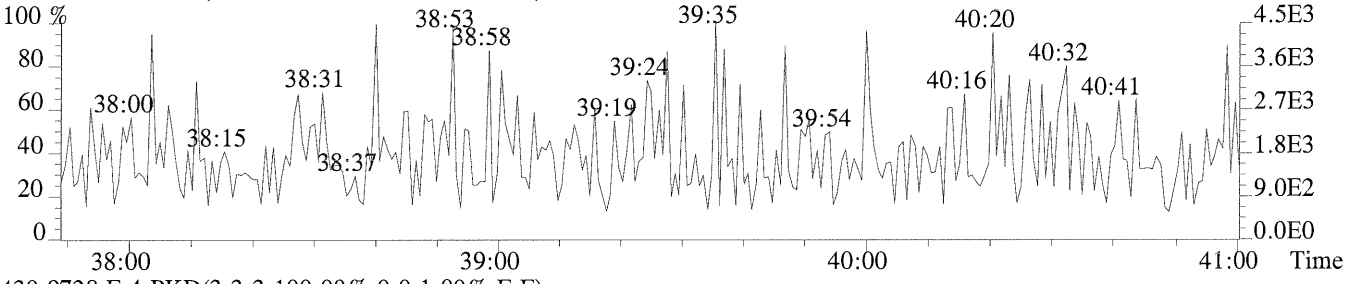
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2984.0,0.50%,F,F)



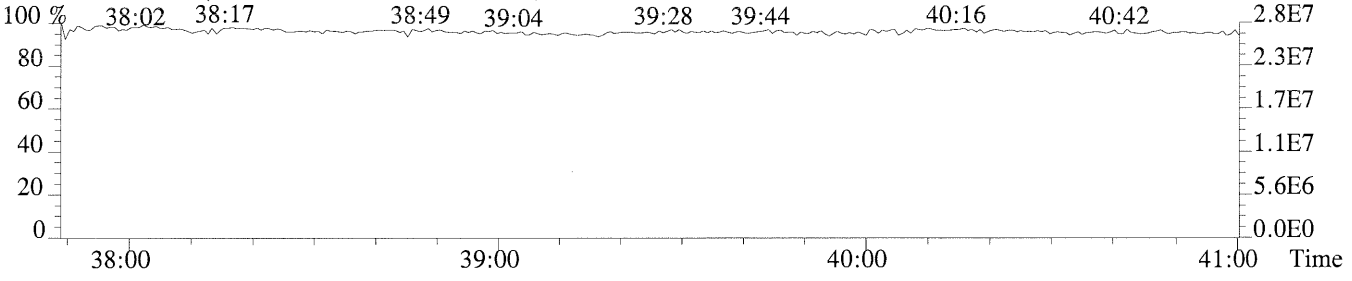
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,5432.0,0.50%,F,F)



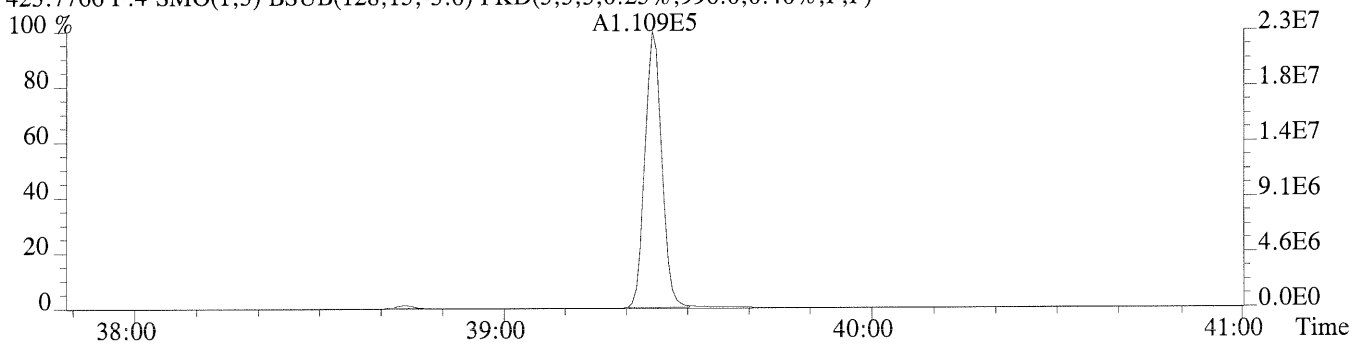
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



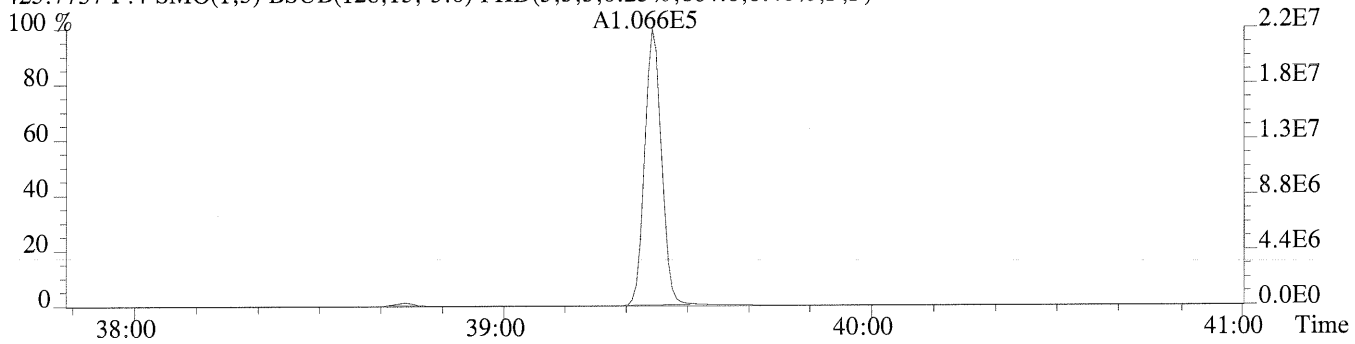
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



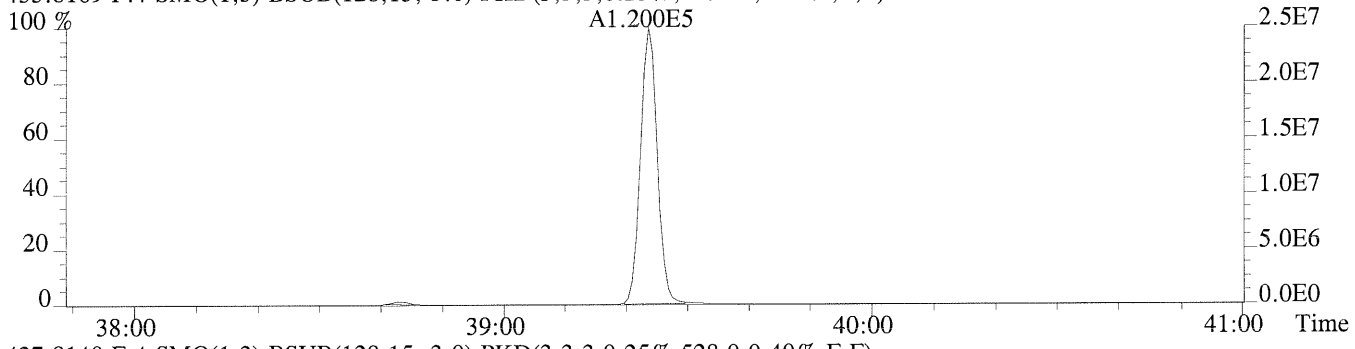
File:U212890 #1-290 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,996.0,0.40%,F,F)



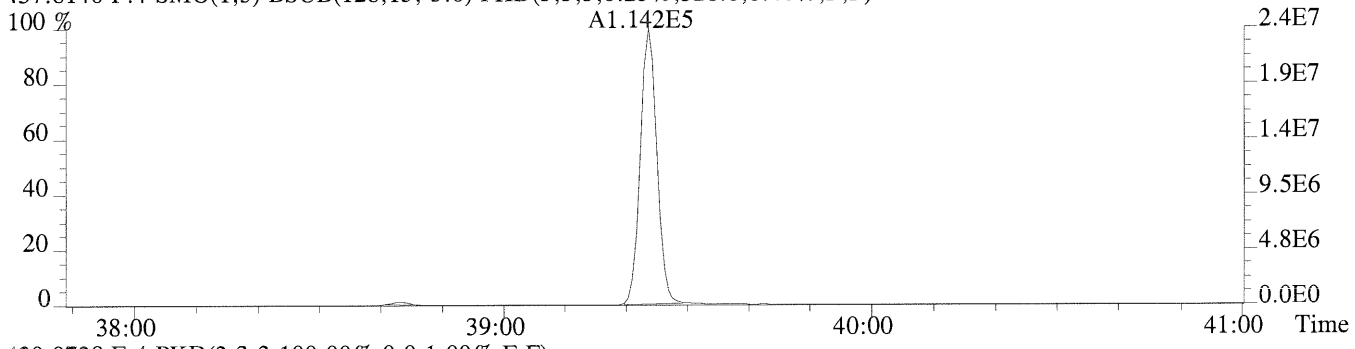
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,864.0,0.40%,F,F)



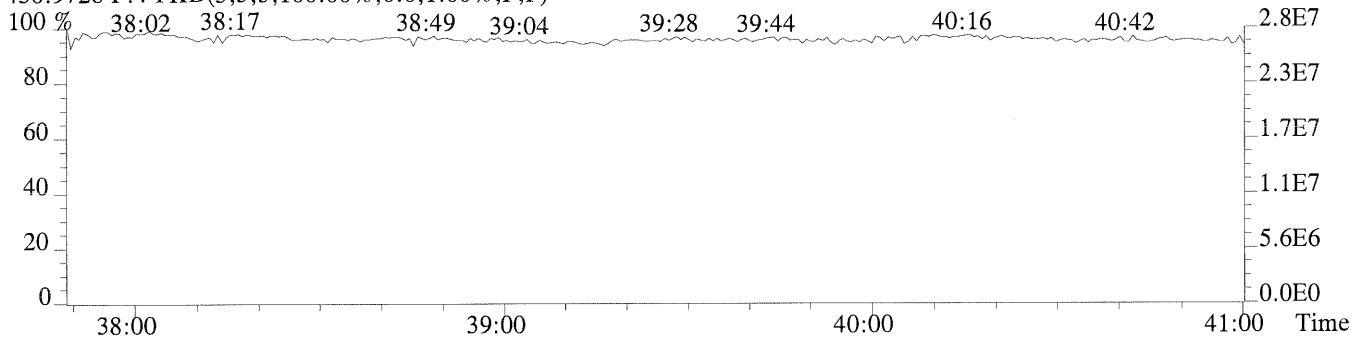
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1252.0,0.40%,F,F)



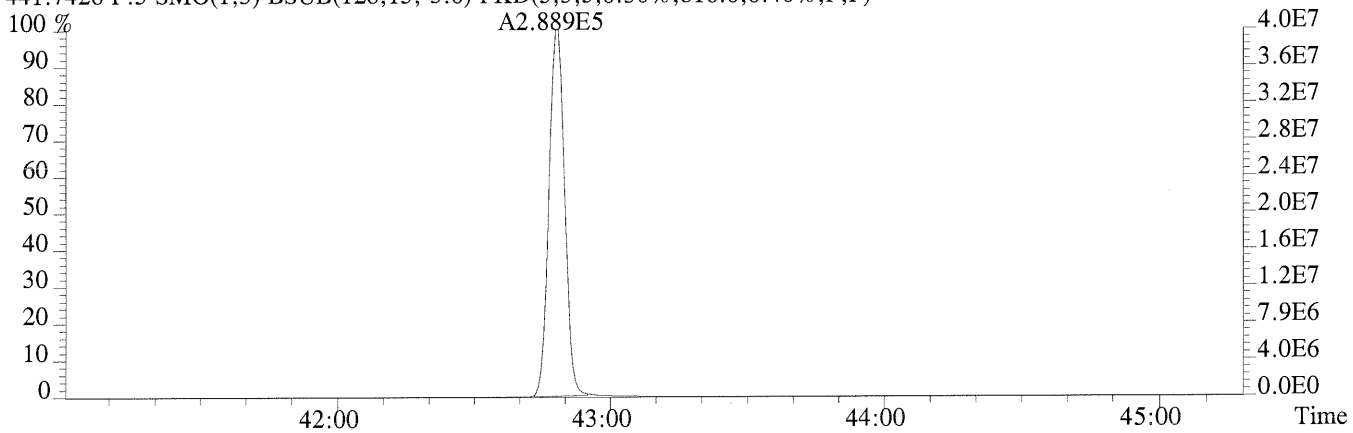
437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,528.0,0.40%,F,F)



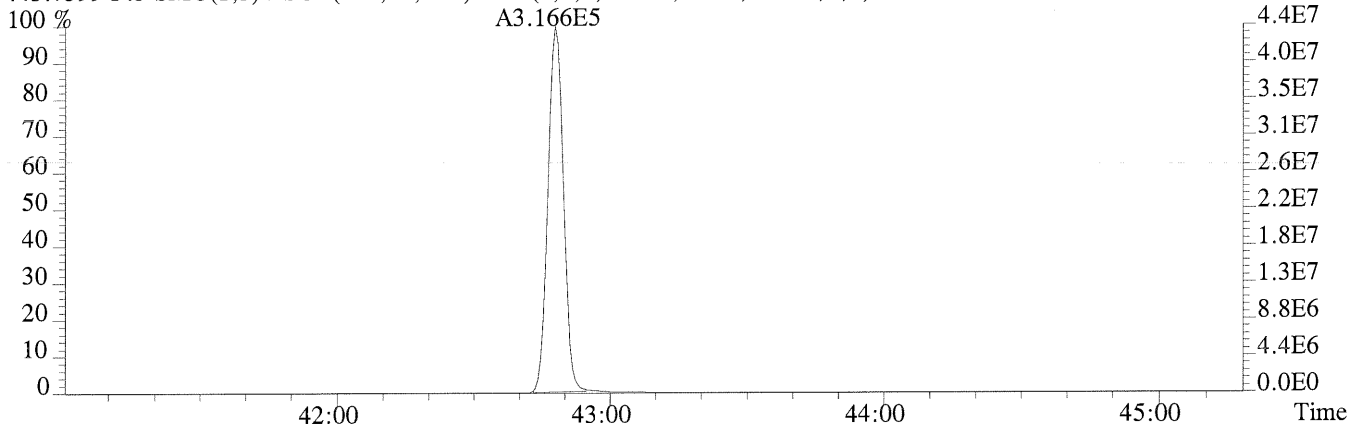
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



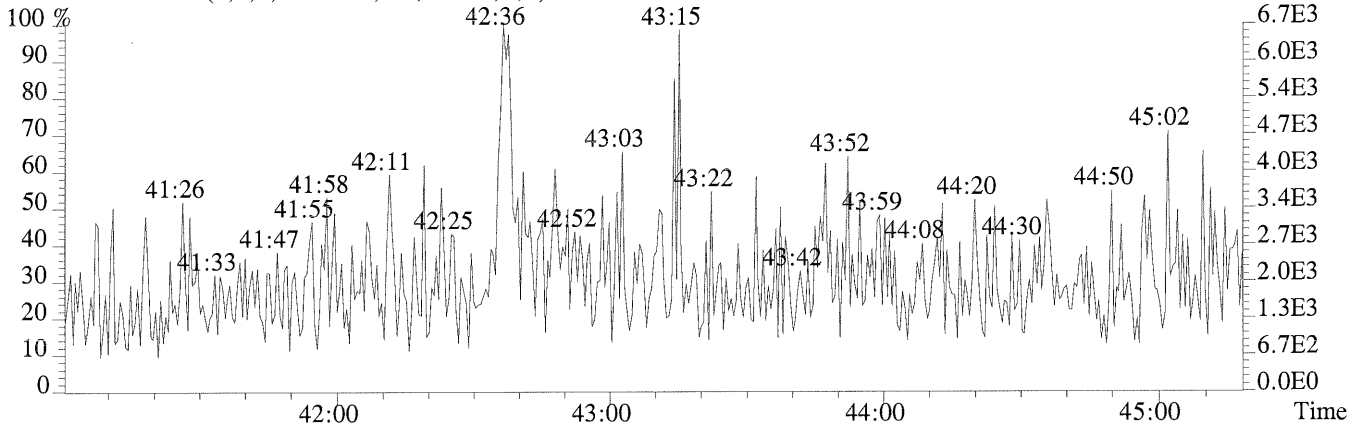
File:U212890 #1-474 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,816.0,0.40%,F,F)



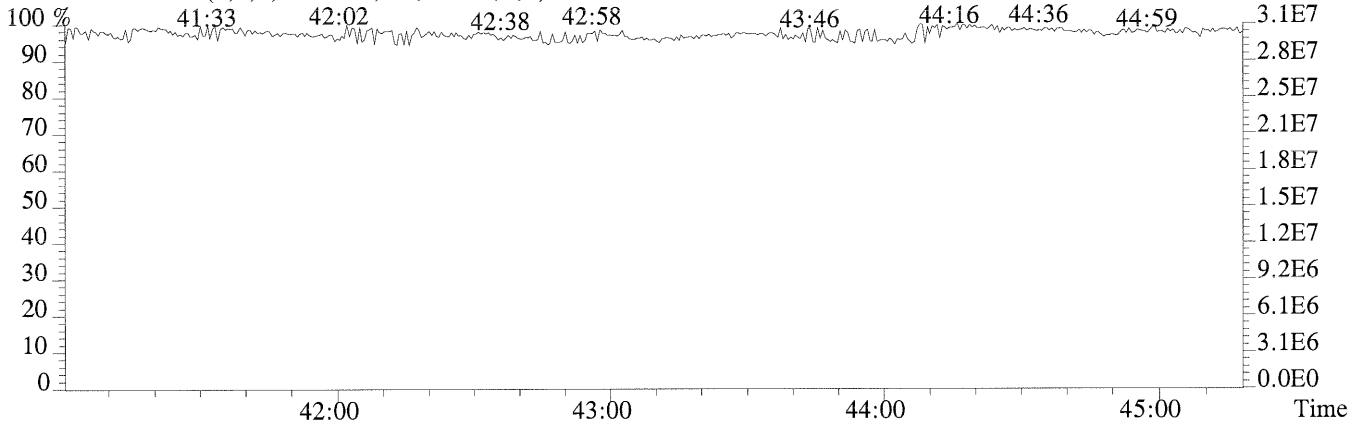
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,924.0,0.40%,F,F)



513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

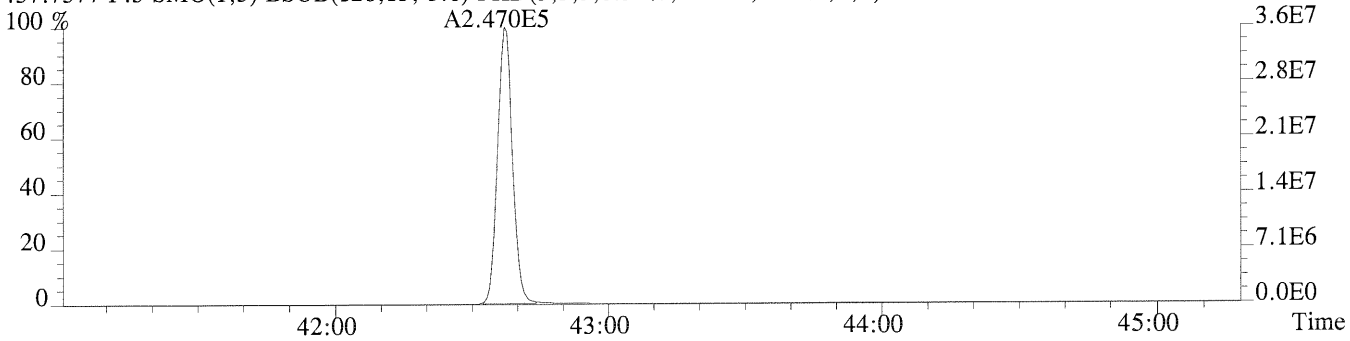


442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)

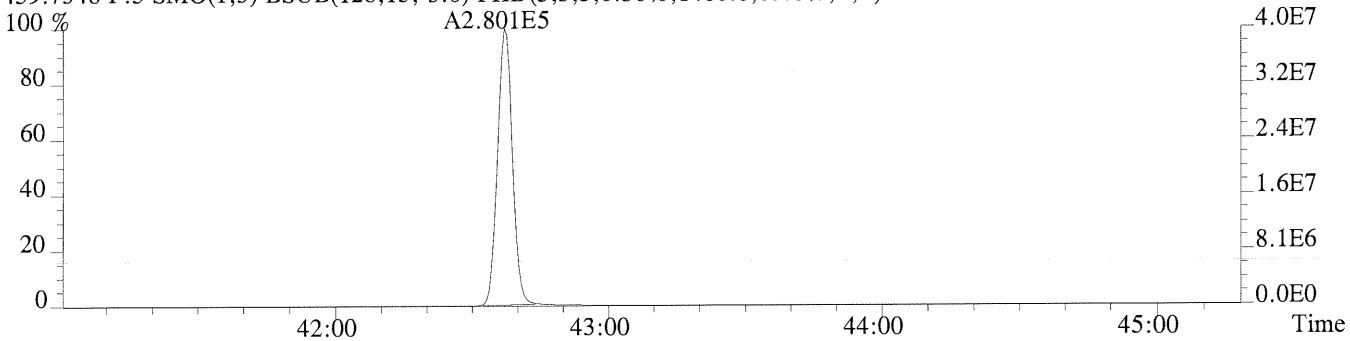


File:U212890 #1-474 Acq:10-DEC-2007 13:15:19 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC4

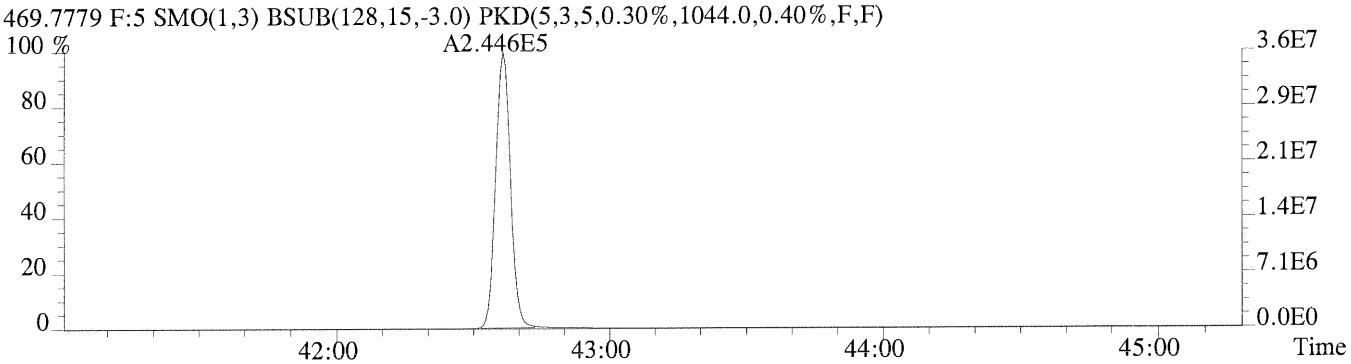
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1172.0,0.40%,F,F)



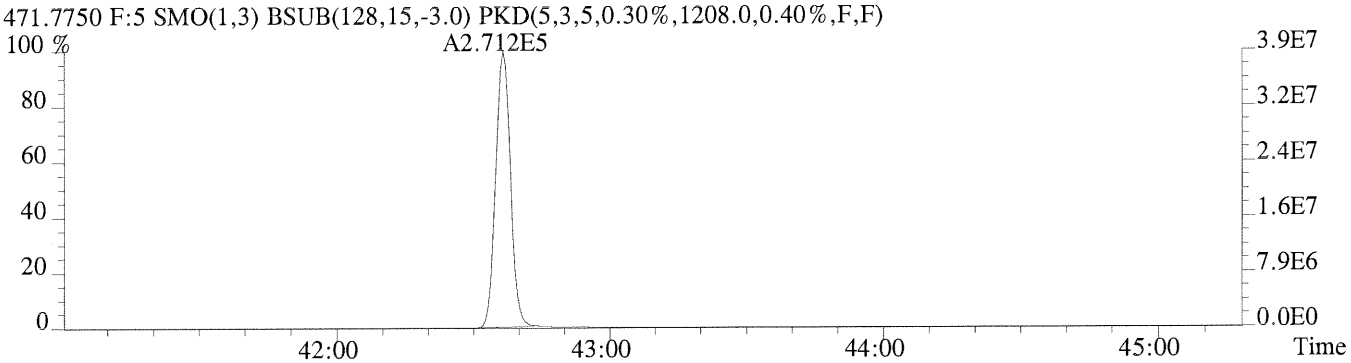
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1400.0,0.40%,F,F)



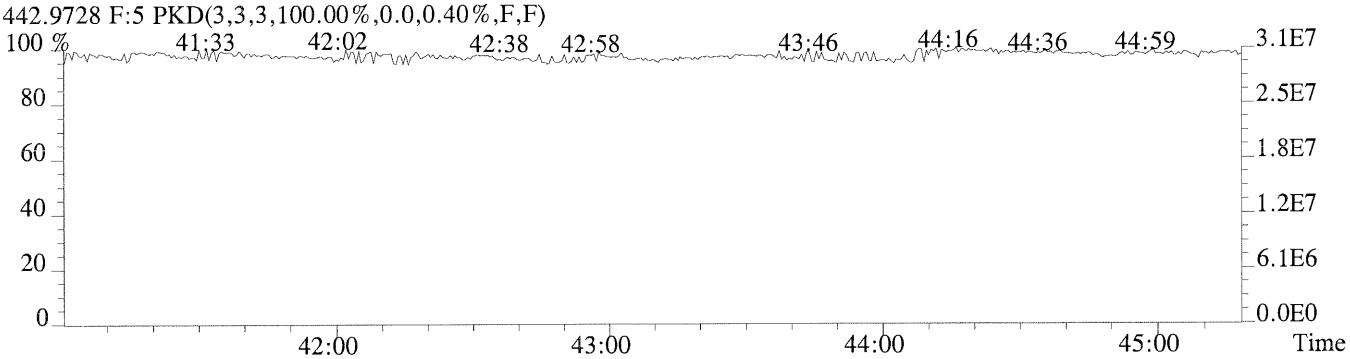
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1044.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1208.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



Columbia Analytical Services, Inc.
Sample Response Summary

CLIENT ID.
ICAL HRCC5

Run #5 Filename U212891 Samp: 1 Inj: 1 Acquired: 10-DEC-07 14:02:46
Processed: 10-DEC-07 15:07:35 Sample ID:

	Typ	Name	RT-1	Resp 1	Resp 2	Ratio	Meet	Mod?
1	Unk	2,3,7,8-TCDF	28:14	2.498e+05	3.260e+05	0.77	yes	no
2	Unk	1,2,3,7,8-PeCDF	32:19	9.172e+05	6.026e+05	1.52	yes	no
3	Unk	2,3,4,7,8-PeCDF	33:01	9.671e+05	6.232e+05	1.55	yes	no
4	Unk	1,2,3,4,7,8-HxCDF	35:44	8.081e+05	6.724e+05	1.20	yes	no
5	Unk	1,2,3,6,7,8-HxCDF	35:50	7.894e+05	6.542e+05	1.21	yes	no
6	Unk	2,3,4,6,7,8-HxCDF	36:18	7.738e+05	6.191e+05	1.25	yes	no
7	Unk	1,2,3,7,8,9-HxCDF	36:59	6.329e+05	5.238e+05	1.21	yes	no
8	Unk	1,2,3,4,6,7,8-HpCDF	38:28	6.766e+05	6.543e+05	1.03	yes	no
9	Unk	1,2,3,4,7,8,9-HpCDF	39:51	5.052e+05	5.015e+05	1.01	yes	no
10	Unk	OCDF	42:48	1.071e+06	1.193e+06	0.90	yes	no
11	Unk	2,3,7,8-TCDD	29:00	2.021e+05	2.601e+05	0.78	yes	no
12	Unk	1,2,3,7,8-PeCDD	33:20	6.495e+05	4.239e+05	1.53	yes	no
13	Unk	1,2,3,4,7,8-HxCDD	36:24	5.877e+05	4.777e+05	1.23	yes	no
14	Unk	1,2,3,6,7,8-HxCDD	36:28	5.622e+05	4.564e+05	1.23	yes	no
15	Unk	1,2,3,7,8,9-HxCDD	36:46	5.832e+05	4.528e+05	1.29	yes	no
16	Unk	1,2,3,4,6,7,8-HpCDD	39:24	4.466e+05	4.157e+05	1.07	yes	no
17	Unk	OCDD	42:37	9.420e+05	1.059e+06	0.89	yes	no
18	IS	13C-2,3,7,8-TCDF	28:13	7.020e+04	8.665e+04	0.81	yes	no
19	IS	13C-1,2,3,7,8-PeCDF	32:18	1.020e+05	6.548e+04	1.56	yes	no
20	IS	13C-1,2,3,4,7,8-HxCDF	35:43	1.101e+05	2.111e+05	0.52	yes	no
21	IS	13C-1,2,3,4,6,7,8-HpCDF	38:27	7.435e+04	1.653e+05	0.45	yes	no
22	IS	13C-2,3,7,8-TCDD	28:59	5.436e+04	6.714e+04	0.81	yes	no
23	IS	13C-1,2,3,7,8-PeCDD	33:20	7.216e+04	4.624e+04	1.56	yes	no
24	IS	13C-1,2,3,6,7,8-HxCDD	36:28	1.360e+05	1.099e+05	1.24	yes	no
25	IS	13C-1,2,3,4,6,7,8-HpCDD	39:24	1.177e+05	1.121e+05	1.05	yes	no
26	IS	13C-OCDD	42:36	2.344e+05	2.556e+05	0.92	yes	no
27	RS/RT	13C-1,2,3,4-TCDD	28:47	5.236e+04	6.422e+04	0.82	yes	no
28	RS/RT	13C-1,2,3,7,8,9-HxCDD	36:45	1.402e+05	1.125e+05	1.25	yes	no
29	C/Up	37Cl-2,3,7,8-TCDD	29:00	4.543e+05				

Columbia Analytical Services, Inc.
19408 Park Row, Suite 320
Houston, TX 77084
Office(713)266-1599. Fax(713)266-0130

Columbia Analytical Services,Inc. CLIENT ID.
Signal/Noise Height Ratio Summary ICAL HRCC5

Run #5 Filename U212891 #1 Samp: 1 Inj: 1 Acquired: 10-DEC-07 14:02:46

Processed: 10-DEC-07 15:07:35 LAB. ID: ICAL HRCC5

	Name	Signal 1	Noise 1	S/N Rat.1	Signal 2	Noise 2	S/N Rat.2
1	2,3,7,8-TCDF	4.50e+07	6.68e+02	6.7e+04	5.85e+07	1.14e+03	5.2e+04
2	1,2,3,7,8-PeCDF	1.85e+08	5.72e+02	3.2e+05	1.20e+08	8.84e+02	1.4e+05
3	2,3,4,7,8-PeCDF	2.04e+08	5.72e+02	3.6e+05	1.31e+08	8.84e+02	1.5e+05
4	1,2,3,4,7,8-HxCDF	1.83e+08	1.42e+03	1.3e+05	1.51e+08	2.34e+03	6.5e+04
5	1,2,3,6,7,8-HxCDF	1.70e+08	1.42e+03	1.2e+05	1.42e+08	2.34e+03	6.1e+04
6	2,3,4,6,7,8-HxCDF	1.76e+08	1.42e+03	1.2e+05	1.39e+08	2.34e+03	5.9e+04
7	1,2,3,7,8,9-HxCDF	1.39e+08	1.42e+03	9.8e+04	1.13e+08	2.34e+03	4.9e+04
8	1,2,3,4,6,7,8-HpCDF	1.45e+08	1.02e+04	1.4e+04	1.40e+08	1.42e+04	9.8e+03
9	1,2,3,4,7,8,9-HpCDF	9.84e+07	1.02e+04	9.6e+03	9.92e+07	1.42e+04	7.0e+03
10	OCDF	1.54e+08	8.00e+02	1.9e+05	1.71e+08	1.24e+03	1.4e+05
11	2,3,7,8-TCDD	3.86e+07	6.36e+02	6.1e+04	4.95e+07	6.56e+02	7.5e+04
12	1,2,3,7,8-PeCDD	1.36e+08	1.40e+03	9.7e+04	8.91e+07	5.48e+02	1.6e+05
13	1,2,3,4,7,8-HxCDD	1.34e+08	8.44e+02	1.6e+05	1.09e+08	9.36e+02	1.2e+05
14	1,2,3,6,7,8-HxCDD	1.29e+08	8.44e+02	1.5e+05	1.06e+08	9.36e+02	1.1e+05
15	1,2,3,7,8,9-HxCDD	1.34e+08	8.44e+02	1.6e+05	1.04e+08	9.36e+02	1.1e+05
16	1,2,3,4,6,7,8-HpCDD	9.17e+07	9.36e+02	9.8e+04	8.51e+07	1.02e+03	8.3e+04
17	OCDD	1.37e+08	1.03e+03	1.3e+05	1.54e+08	1.24e+03	1.2e+05
18	13C-2,3,7,8-TCDF	1.25e+07	2.65e+03	4.7e+03	1.55e+07	1.18e+03	1.3e+04
19	13C-1,2,3,7,8-PeCDF	2.03e+07	4.32e+02	4.7e+04	1.32e+07	6.32e+02	2.1e+04
20	13C-1,2,3,4,7,8-HxCDF	2.44e+07	7.80e+02	3.1e+04	4.67e+07	8.56e+02	5.5e+04
21	13C-1,2,3,4,6,7,8-HpCDF	1.60e+07	2.05e+03	7.8e+03	3.54e+07	2.79e+03	1.3e+04
22	13C-2,3,7,8-TCDD	1.05e+07	2.79e+03	3.8e+03	1.30e+07	1.36e+03	9.6e+03
23	13C-1,2,3,7,8-PeCDD	1.53e+07	6.44e+02	2.4e+04	9.87e+06	5.96e+02	1.7e+04
24	13C-1,2,3,6,7,8-HxCDD	3.09e+07	1.05e+03	2.9e+04	2.51e+07	9.60e+02	2.6e+04
25	13C-1,2,3,4,6,7,8-HpCDD	2.39e+07	1.29e+03	1.8e+04	2.25e+07	9.24e+02	2.4e+04
26	13C-OCDD	3.37e+07	7.76e+02	4.3e+04	3.65e+07	1.44e+03	2.5e+04
27	13C-1,2,3,4-TCDD	9.89e+06	2.79e+03	3.5e+03	1.21e+07	1.36e+03	8.9e+03
28	13C-1,2,3,7,8,9-HxCDD	3.21e+07	1.05e+03	3.1e+04	2.58e+07	9.60e+02	2.7e+04
29	37Cl-2,3,7,8-TCDD	8.61e+07	8.44e+02	1.0e+05			

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19408 Park Row, Suite 320
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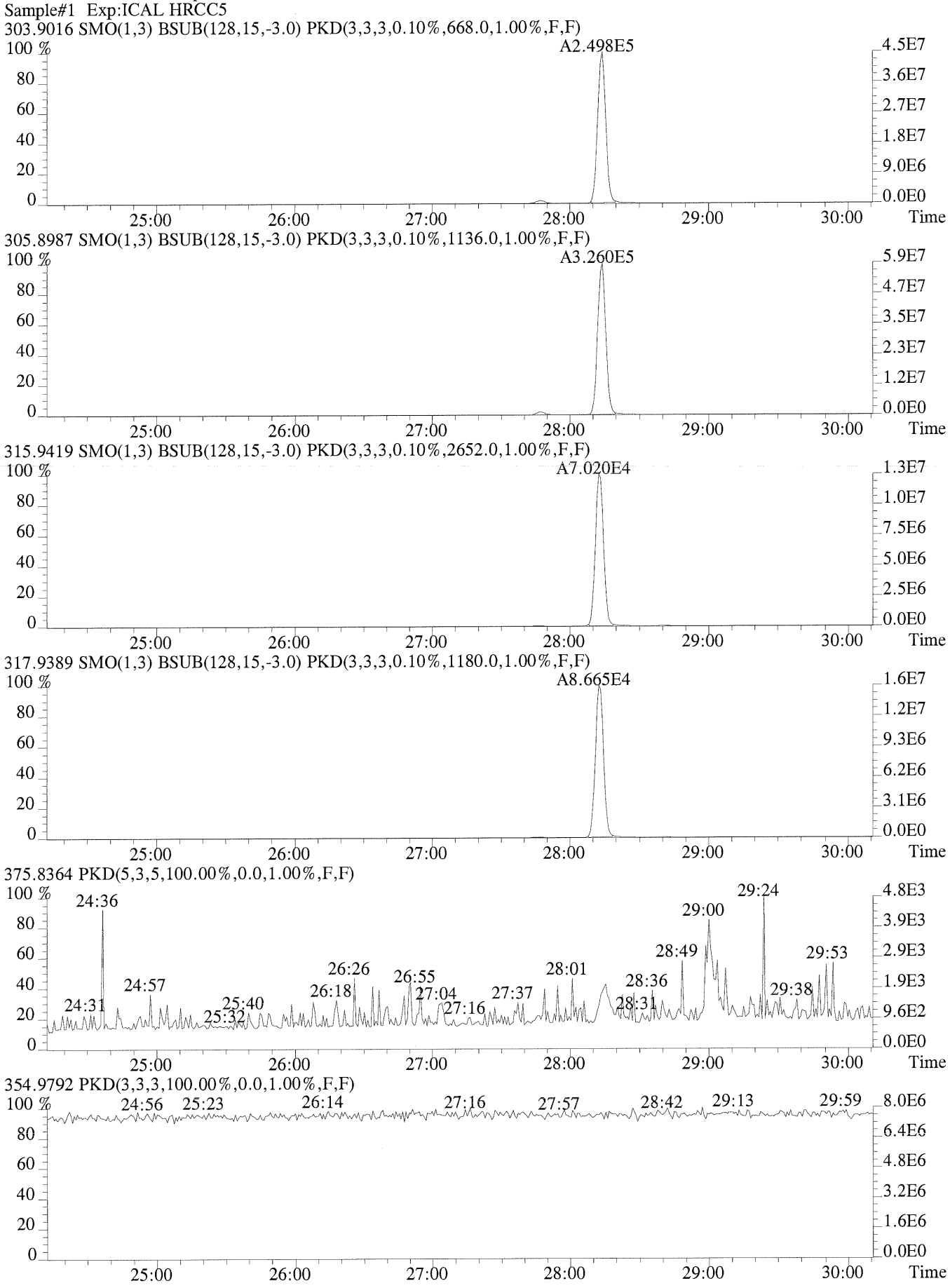
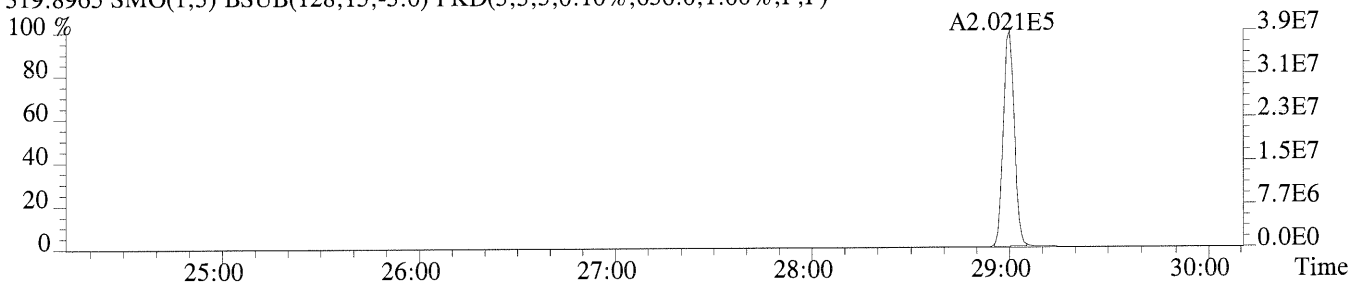
File:U212891 #1-498 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

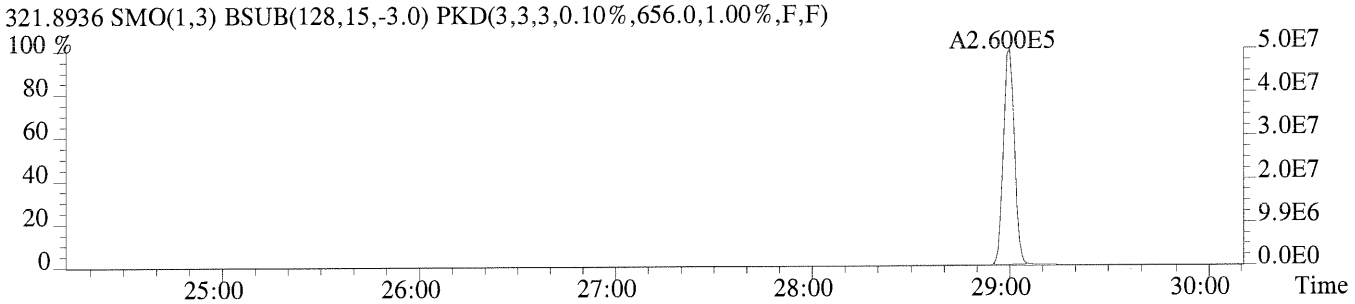


File:U212891 #1-498 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

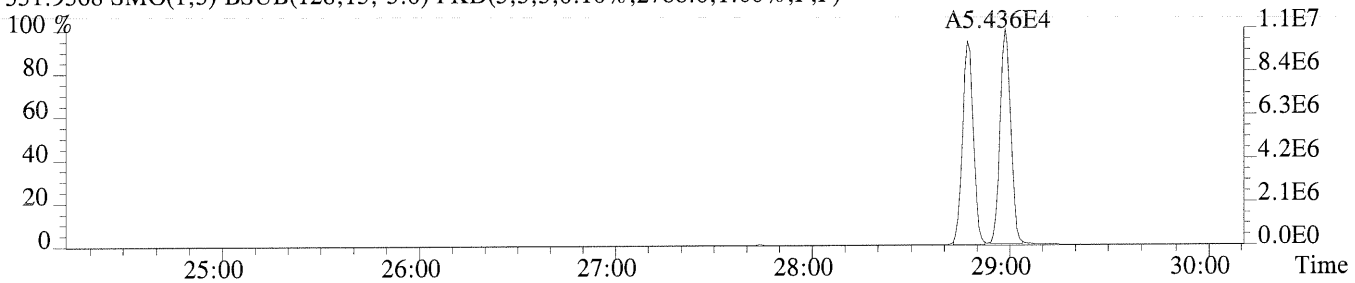
319.8965 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,636.0,1.00%,F,F)



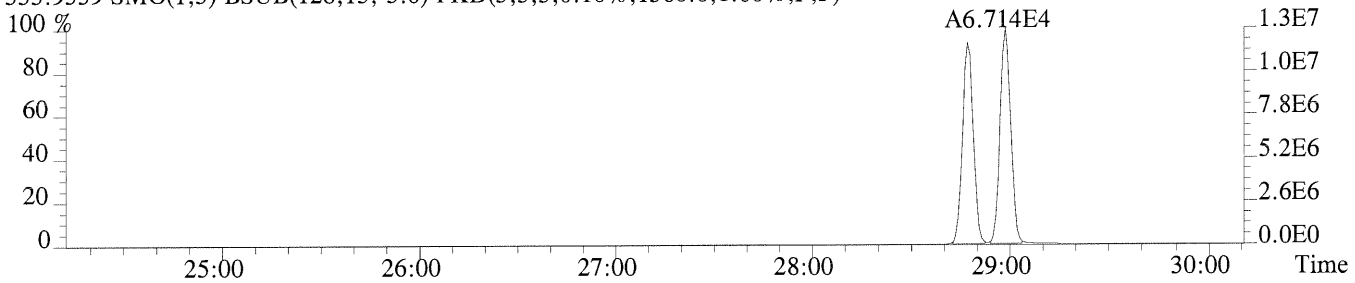
321.8936 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,656.0,1.00%,F,F)



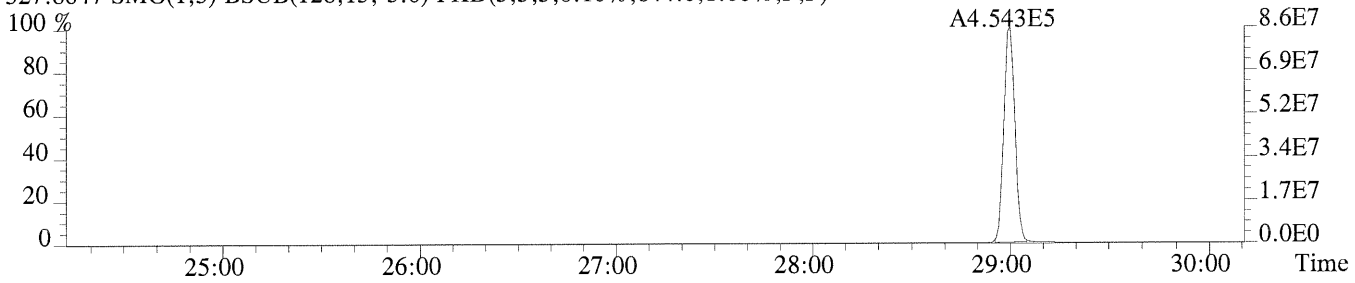
331.9368 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,2788.0,1.00%,F,F)



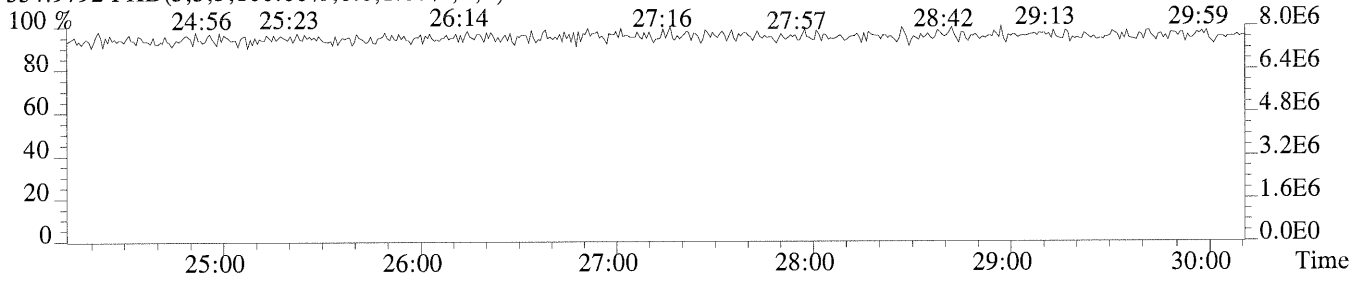
333.9339 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1360.0,1.00%,F,F)



327.8847 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,844.0,1.00%,F,F)

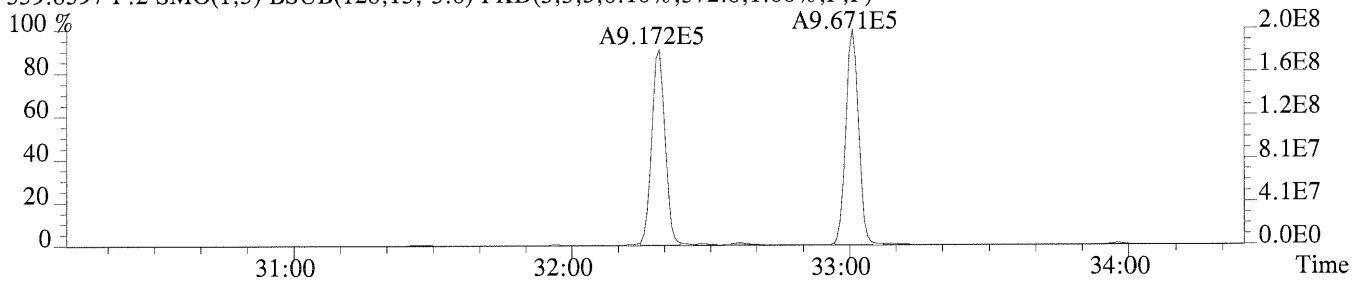


354.9792 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

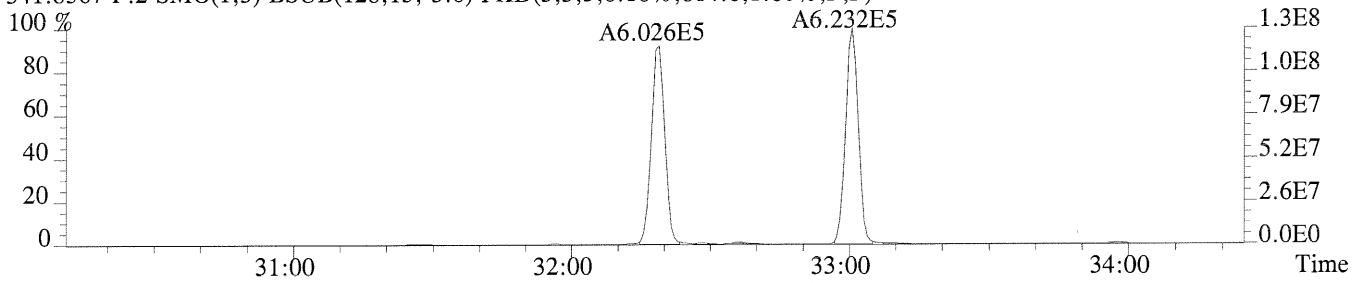


File:U212891 #1-384 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

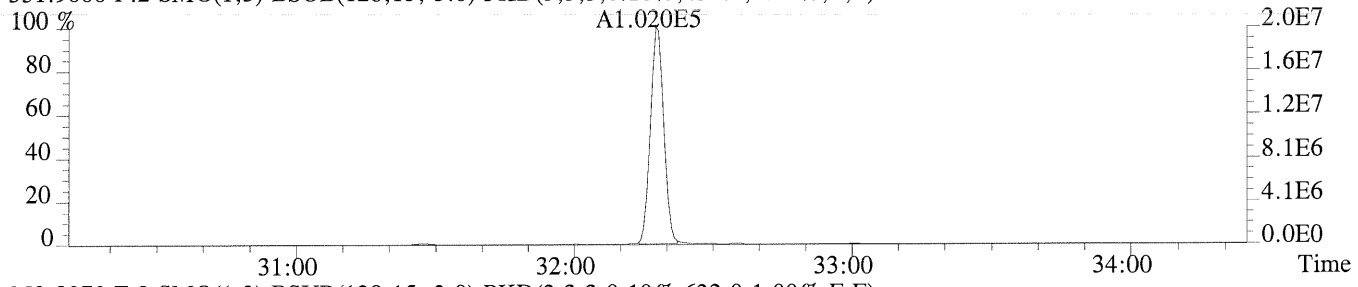
339.8597 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,572.0,1.00%,F,F)



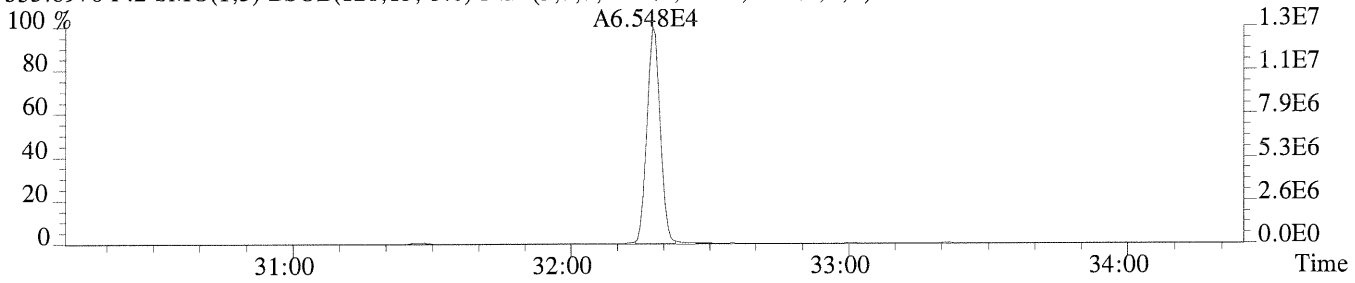
341.8567 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,884.0,1.00%,F,F)



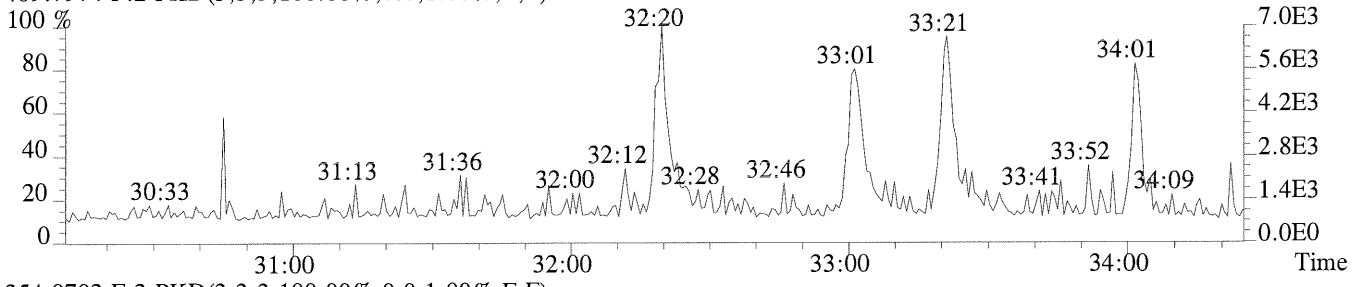
351.9000 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,432.0,1.00%,F,F)



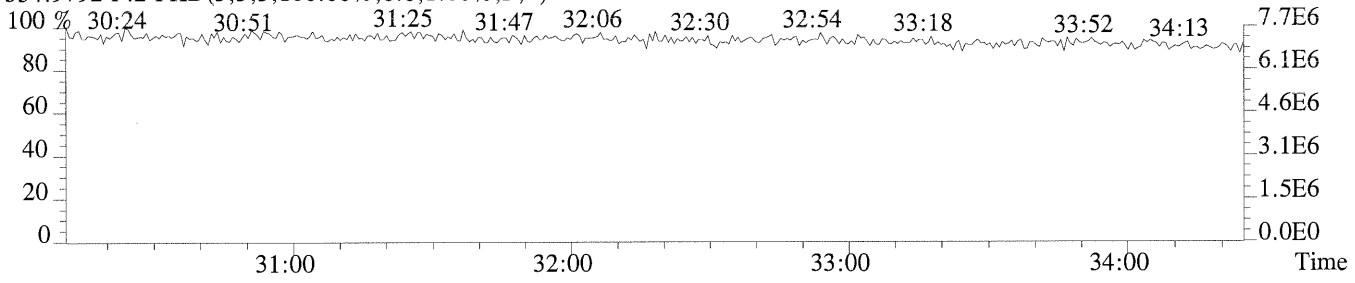
353.8970 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,632.0,1.00%,F,F)



409.7974 F:2 PKD(5,3,5,100.00%,0.0,1.00%,F,F)

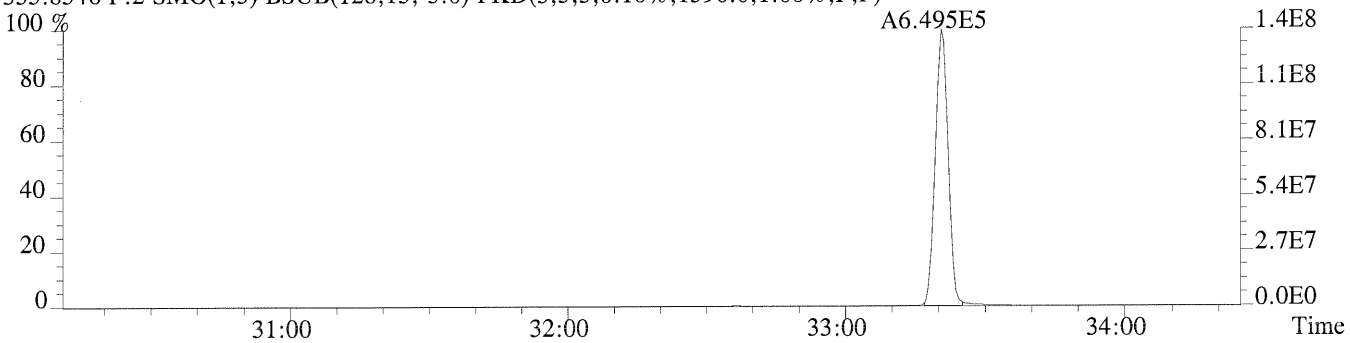


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

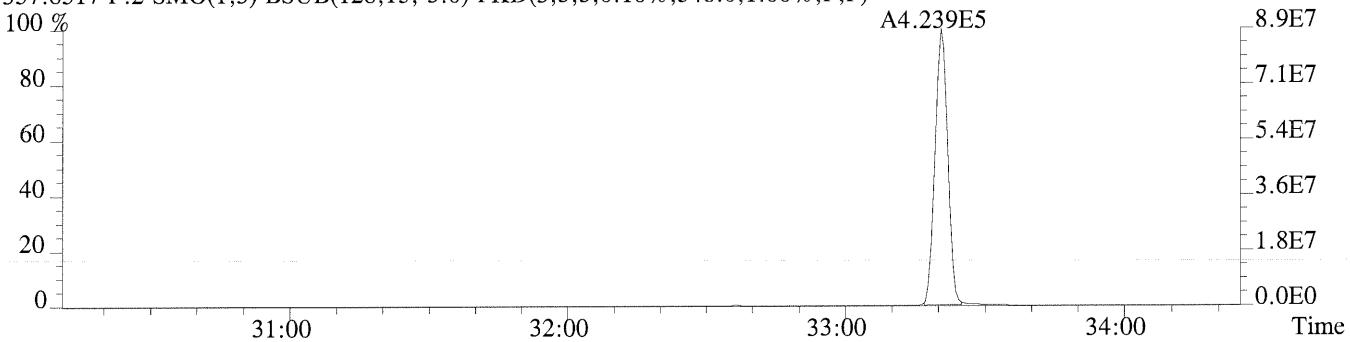


File:U212891 #1-384 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

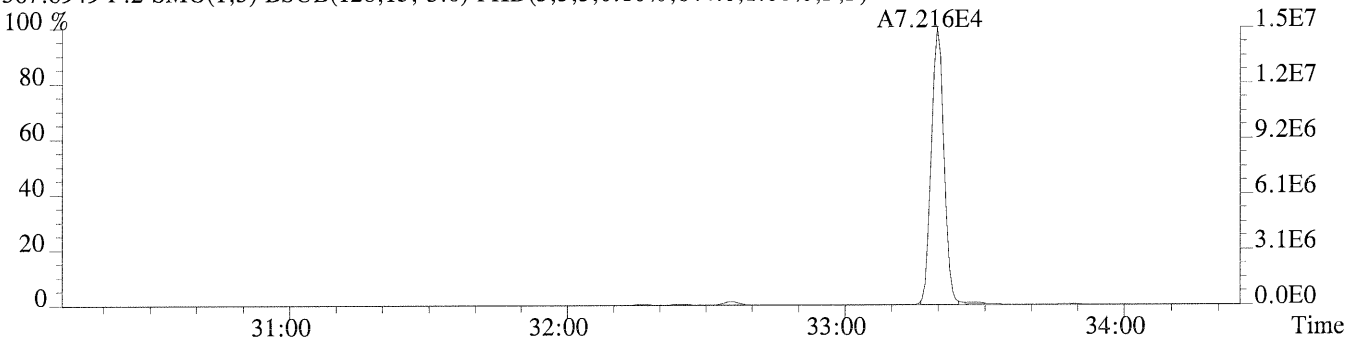
355.8546 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,1396.0,1.00%,F,F)



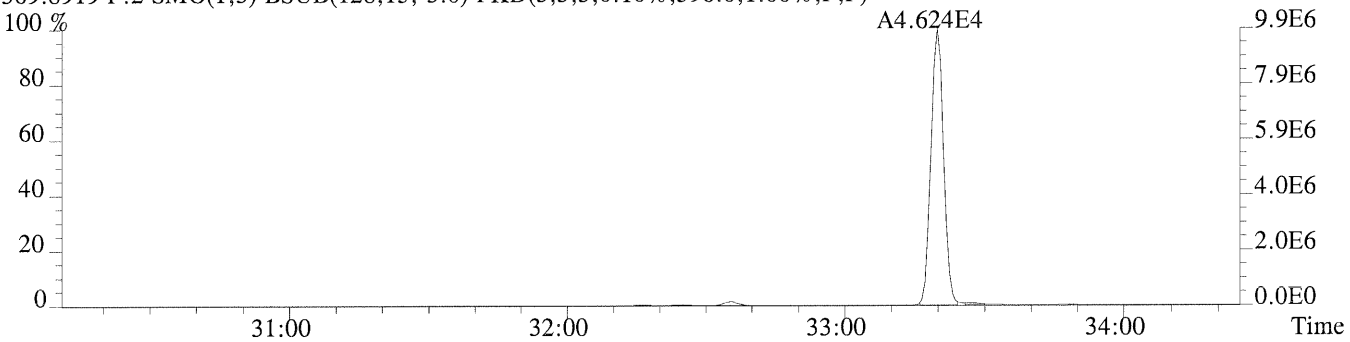
357.8517 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,548.0,1.00%,F,F)



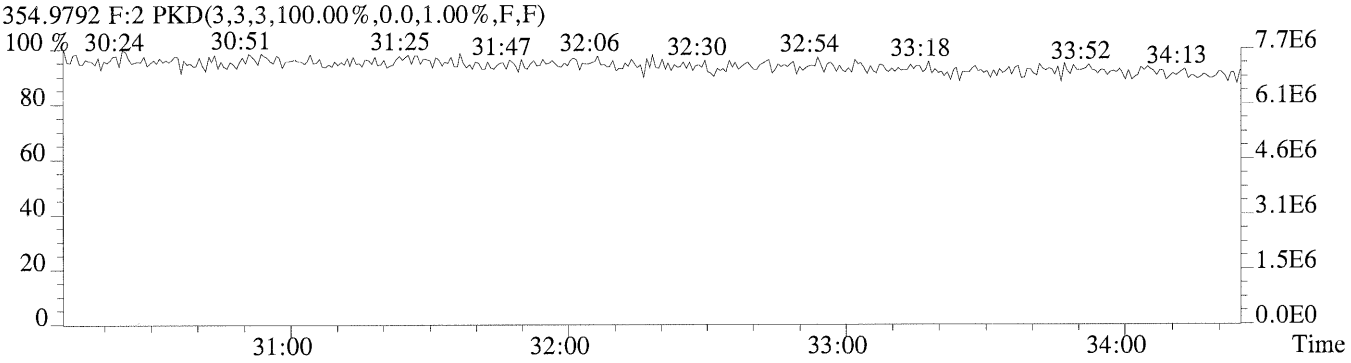
367.8949 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,644.0,1.00%,F,F)



369.8919 F:2 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.10%,596.0,1.00%,F,F)

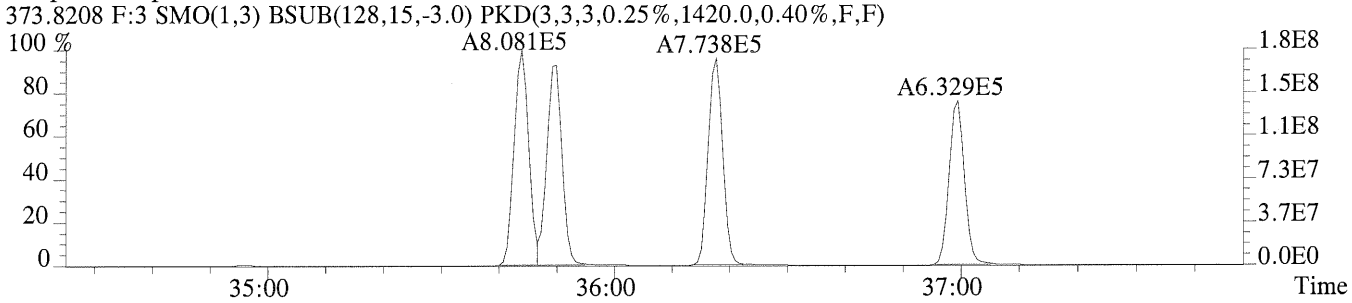


354.9792 F:2 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

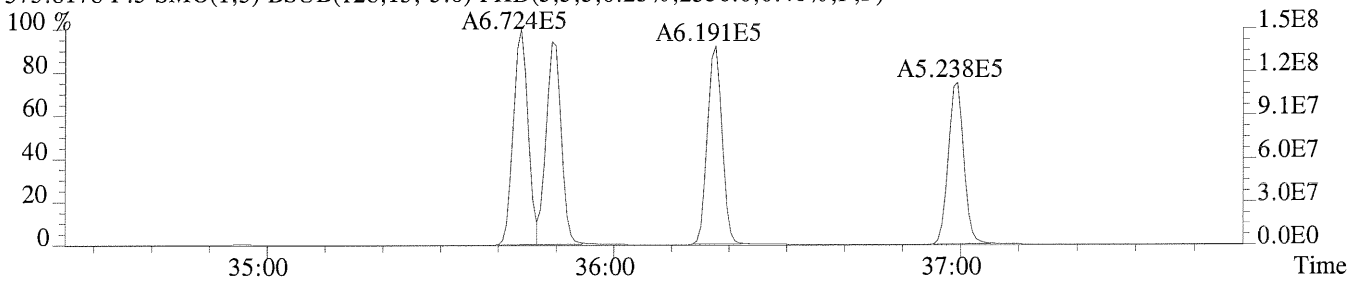


File:U212891 #1-308 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

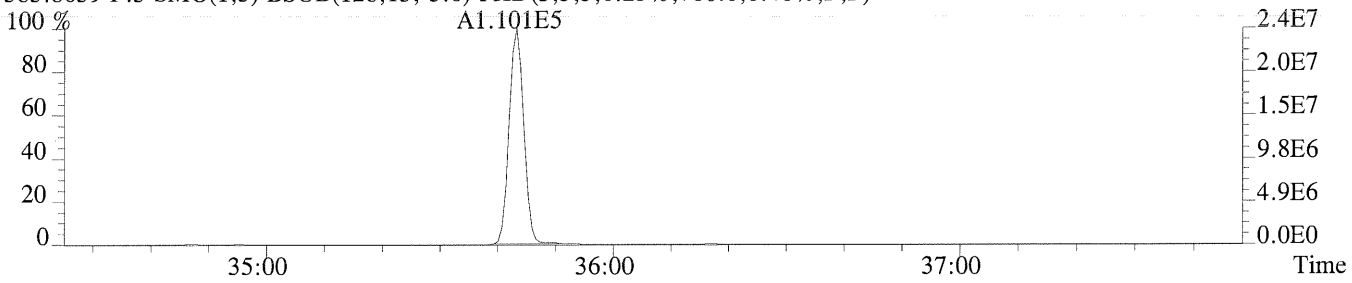
373.8208 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1420.0,0.40%,F,F)



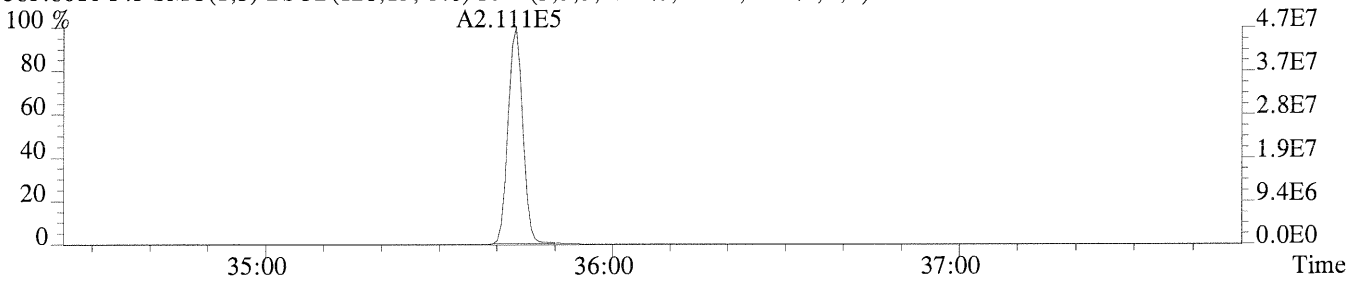
375.8178 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2336.0,0.40%,F,F)



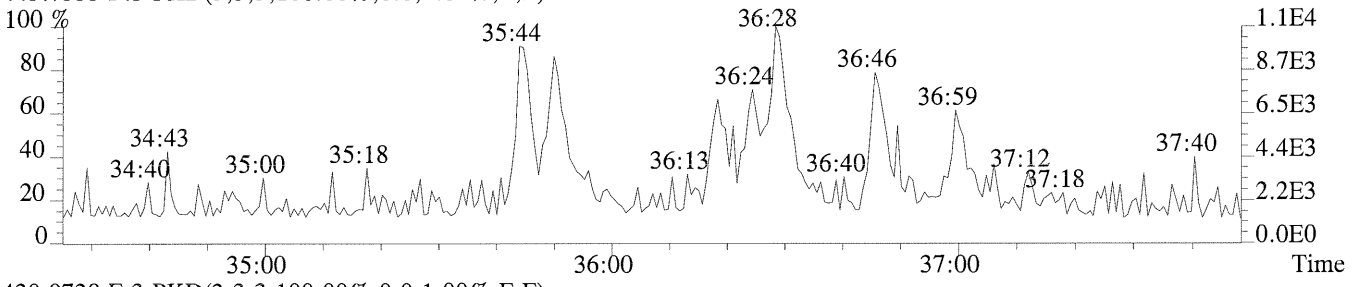
383.8639 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,780.0,0.40%,F,F)



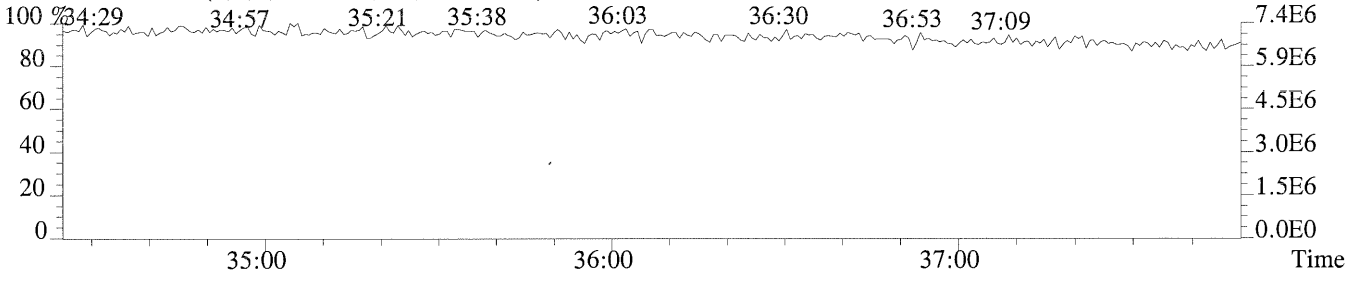
385.8610 F:3 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,856.0,0.40%,F,F)



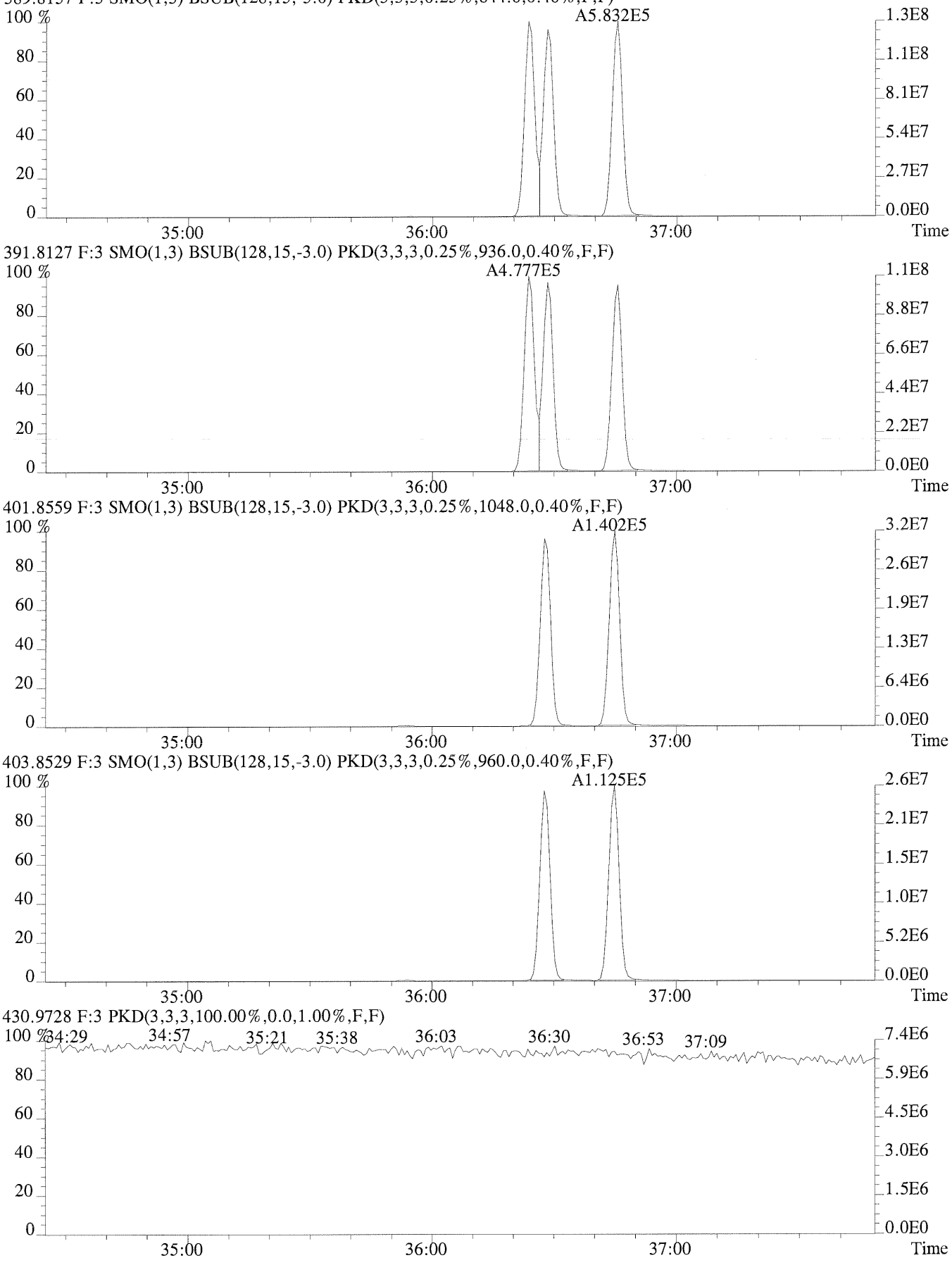
445.7555 F:3 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



430.9728 F:3 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

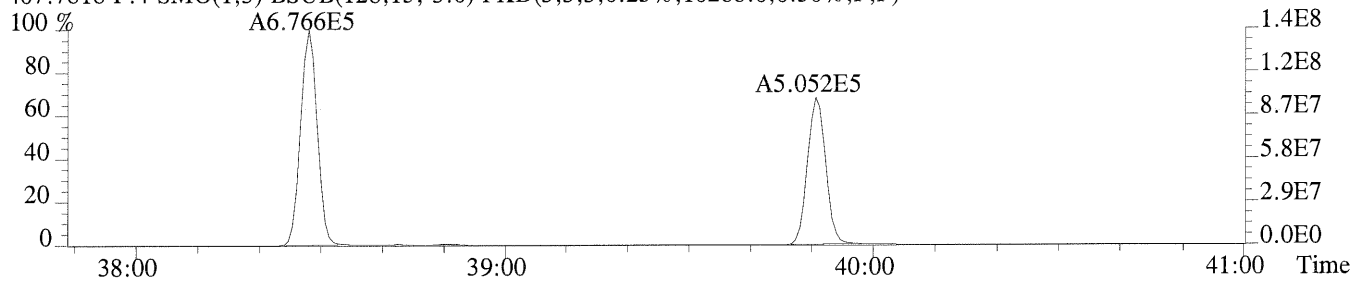


File:U212891 #1-308 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

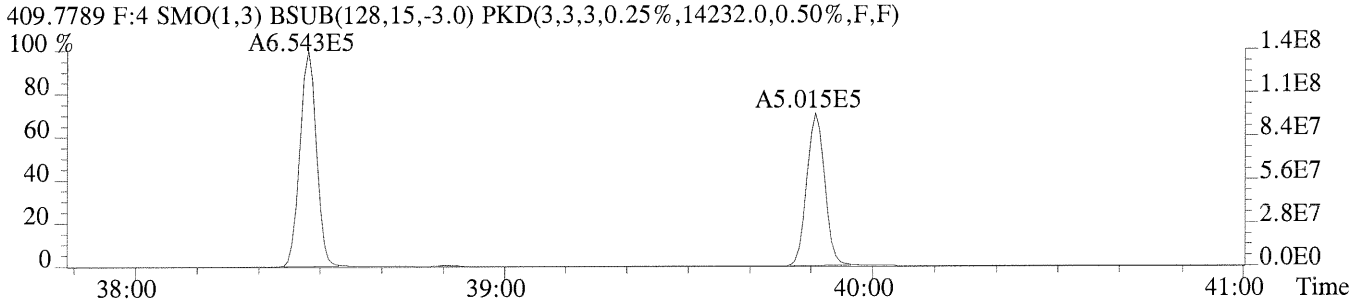


File:U212891 #1-290 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

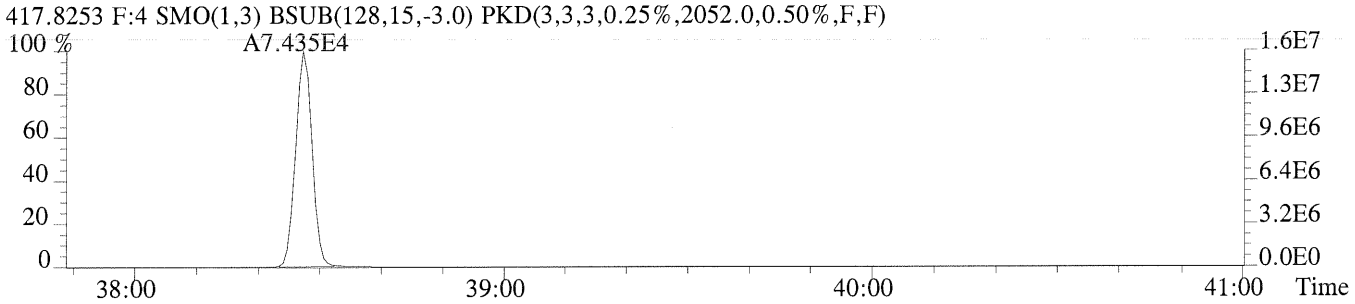
407.7818 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,10288.0,0.50%,F,F)



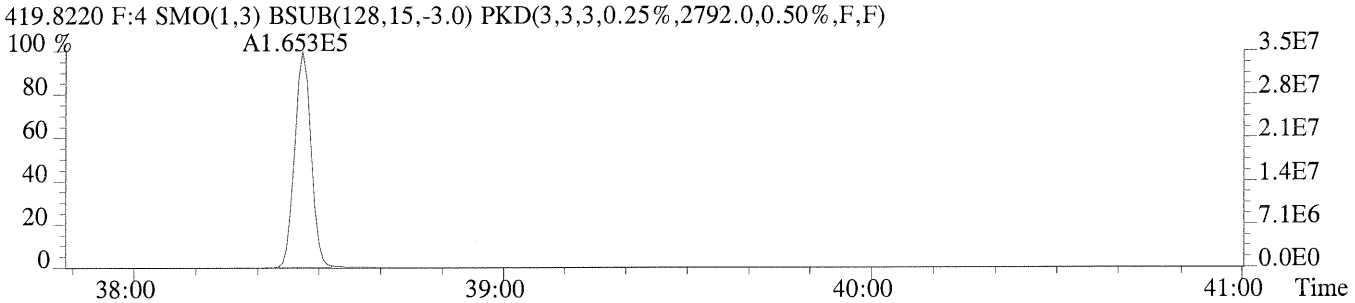
409.7789 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,14232.0,0.50%,F,F)



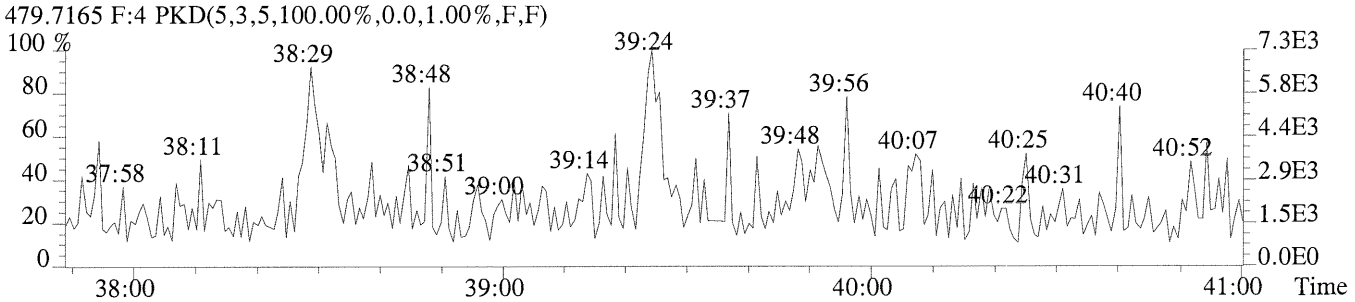
417.8253 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2052.0,0.50%,F,F)



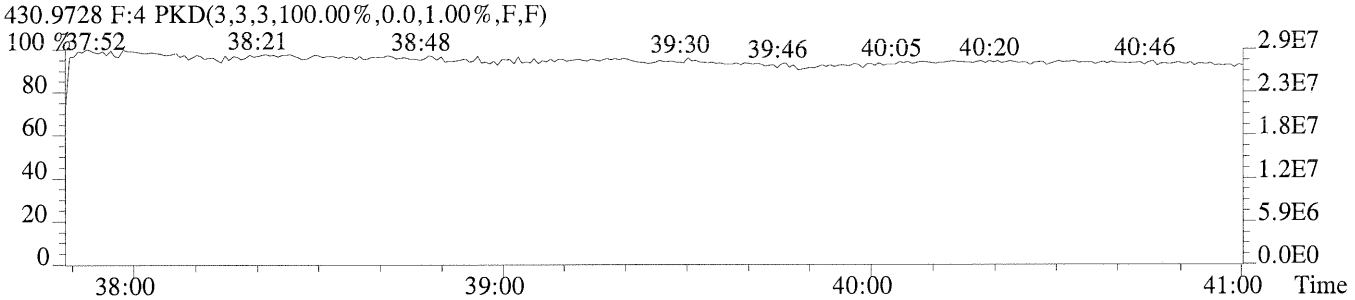
419.8220 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,2792.0,0.50%,F,F)



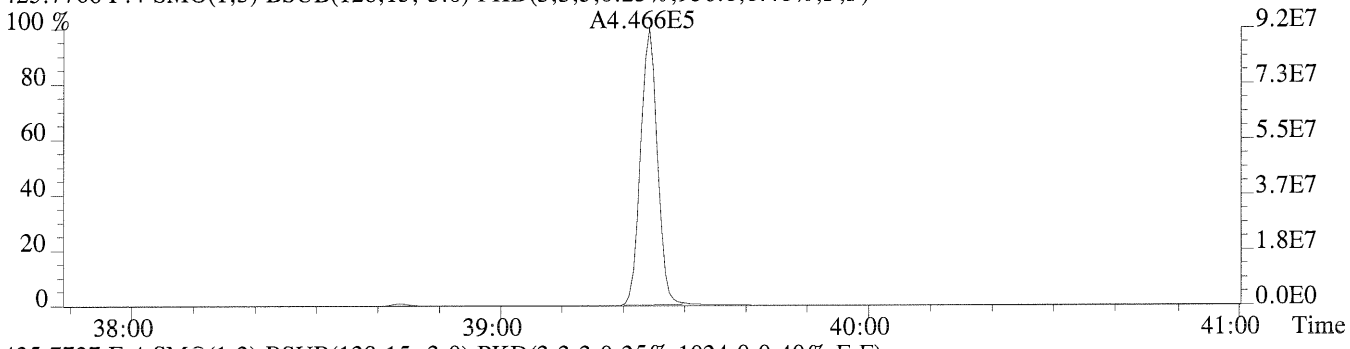
479.7165 F:4 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



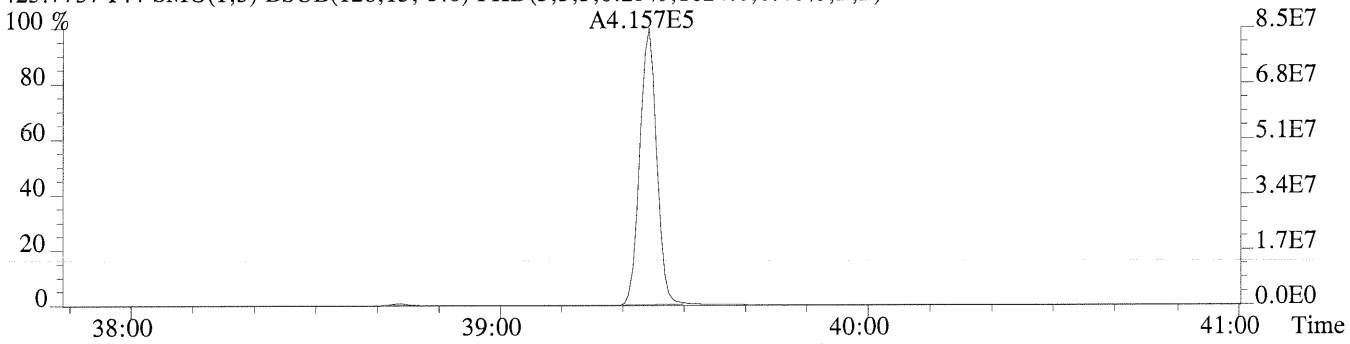
430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)



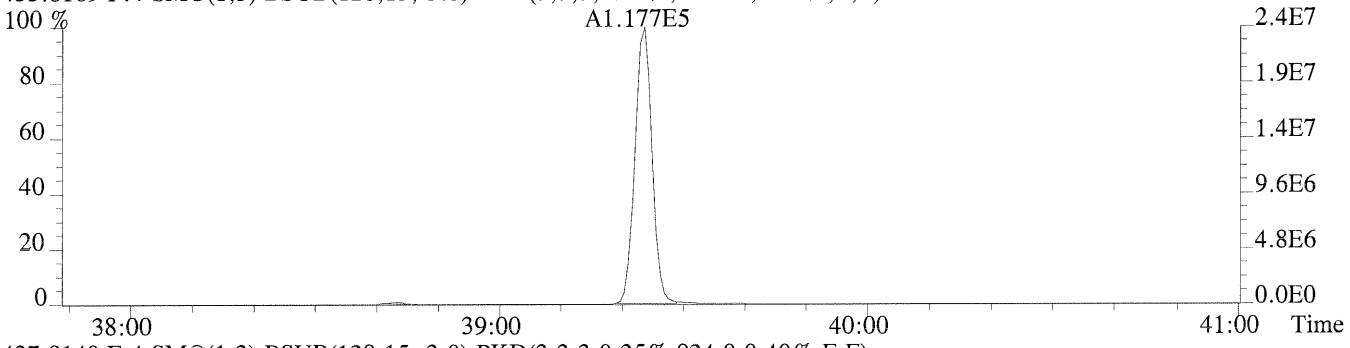
File:U212891 #1-290 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
423.7766 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,936.0,0.40%,F,F)



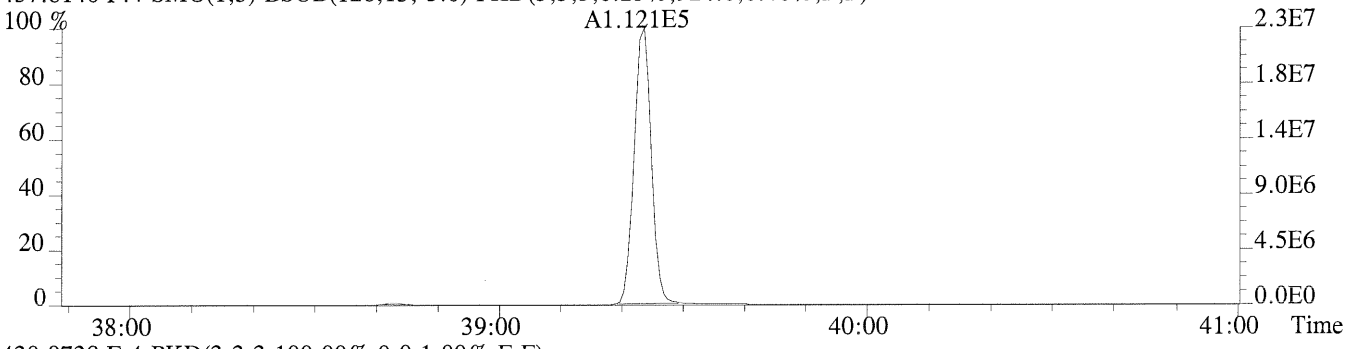
425.7737 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1024.0,0.40%,F,F)



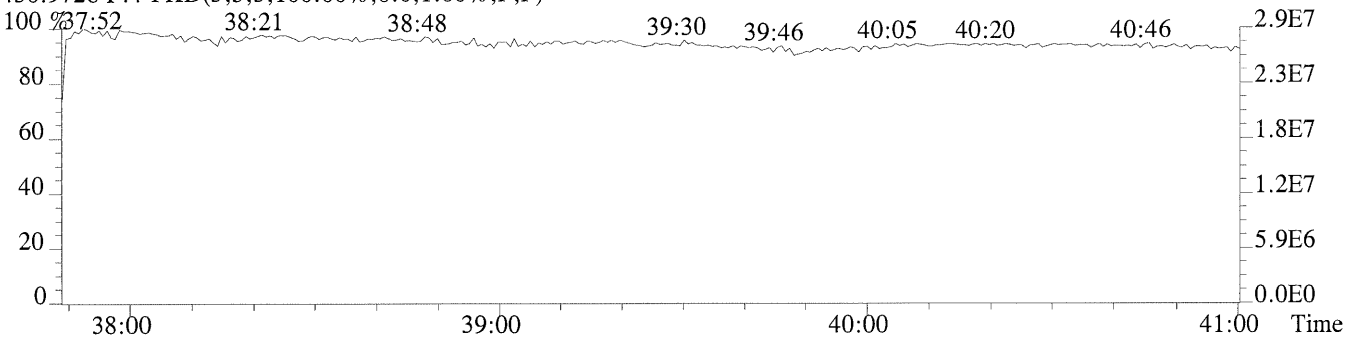
435.8169 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,1292.0,0.40%,F,F)



437.8140 F:4 SMO(1,3) BSUB(128,15,-3.0) PKD(3,3,3,0.25%,924.0,0.40%,F,F)

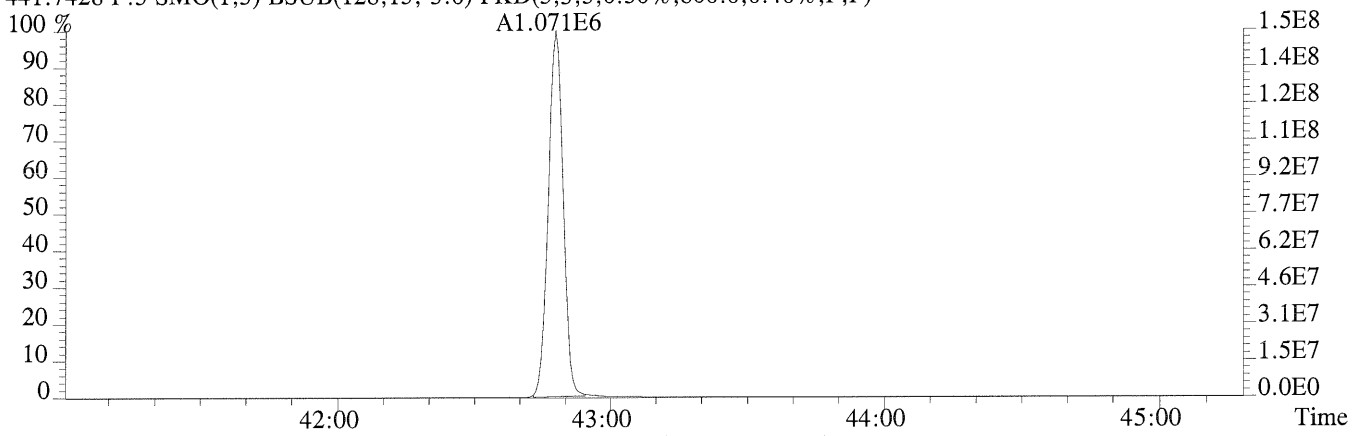


430.9728 F:4 PKD(3,3,3,100.00%,0.0,1.00%,F,F)

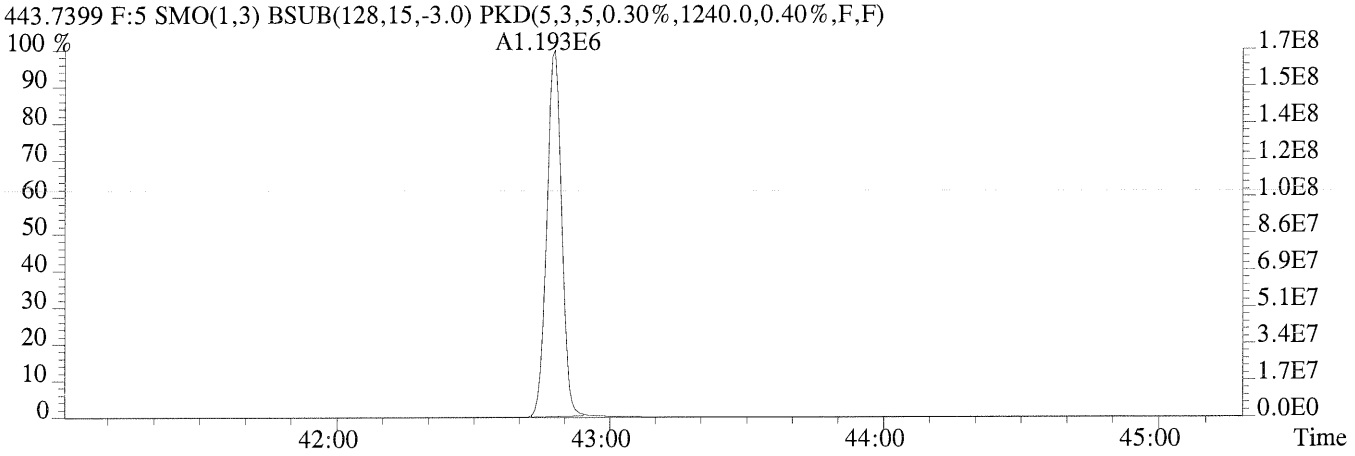


File:U212891 #1-474 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5

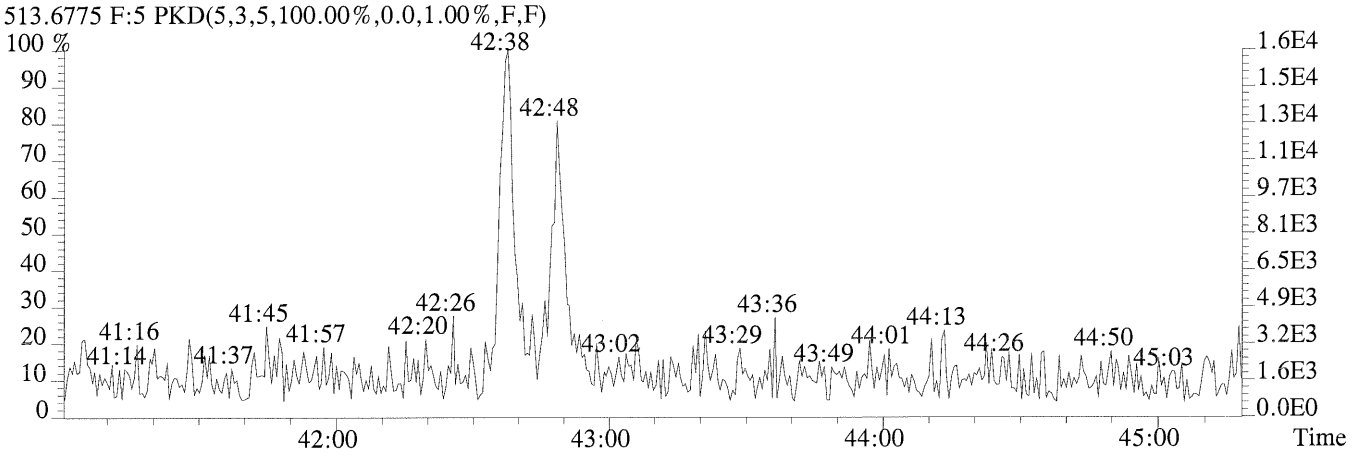
441.7428 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,800.0,0.40%,F,F)



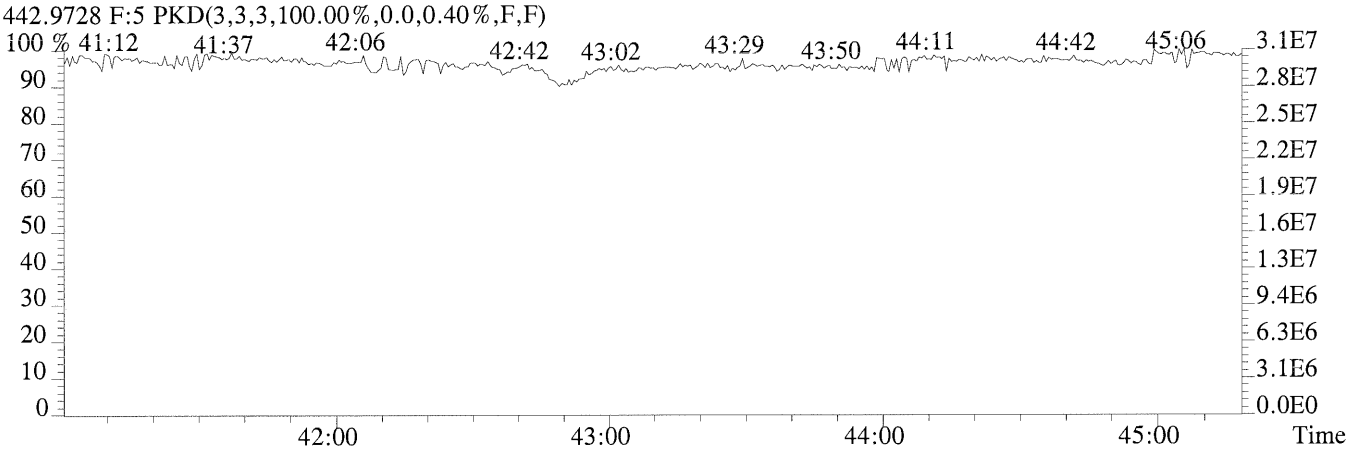
443.7399 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1240.0,0.40%,F,F)



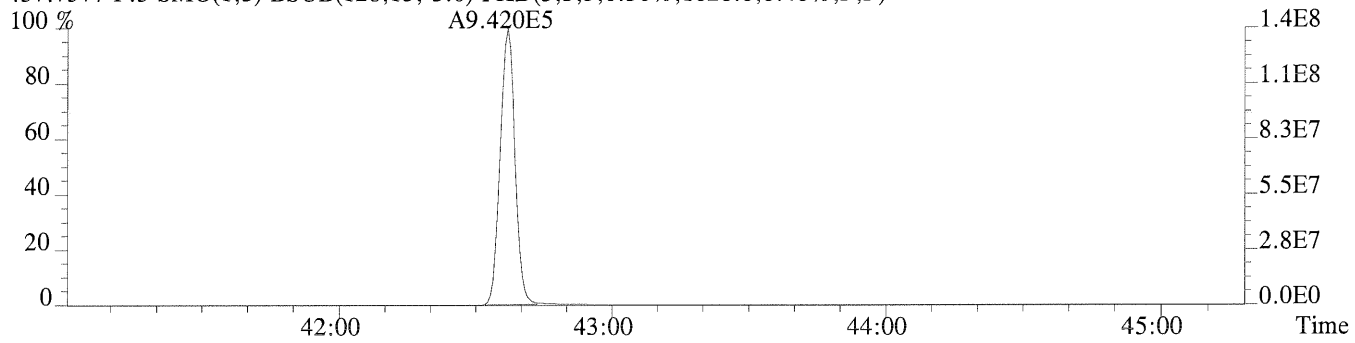
513.6775 F:5 PKD(5,3,5,100.00%,0.0,1.00%,F,F)



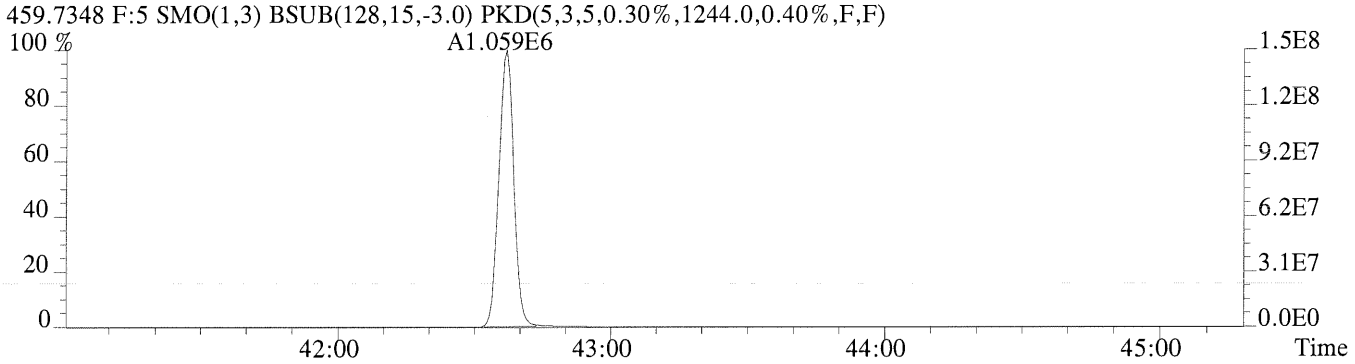
442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



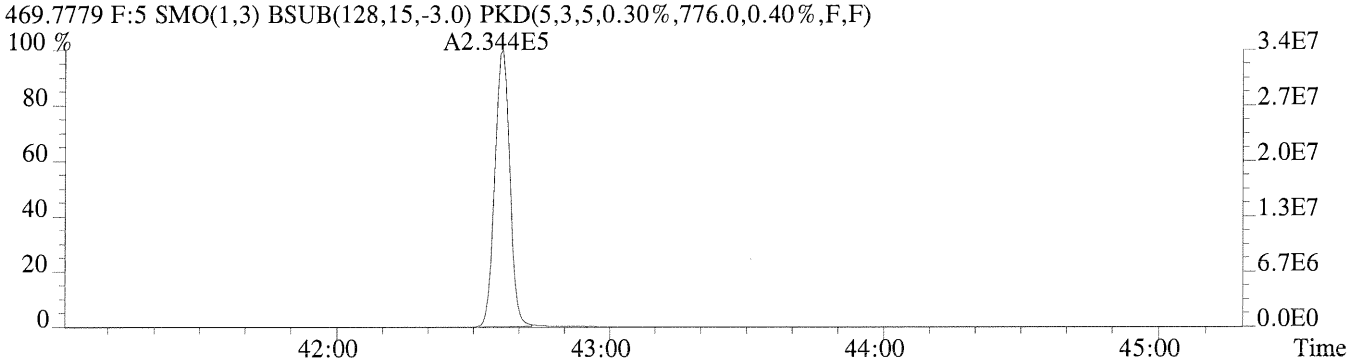
File:U212891 #1-474 Acq:10-DEC-2007 14:02:46 Probe EI+ Magnet SIR VG BioTech Mass spect£
Sample#1 Exp:ICAL HRCC5
457.7377 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1028.0,0.40%,F,F)



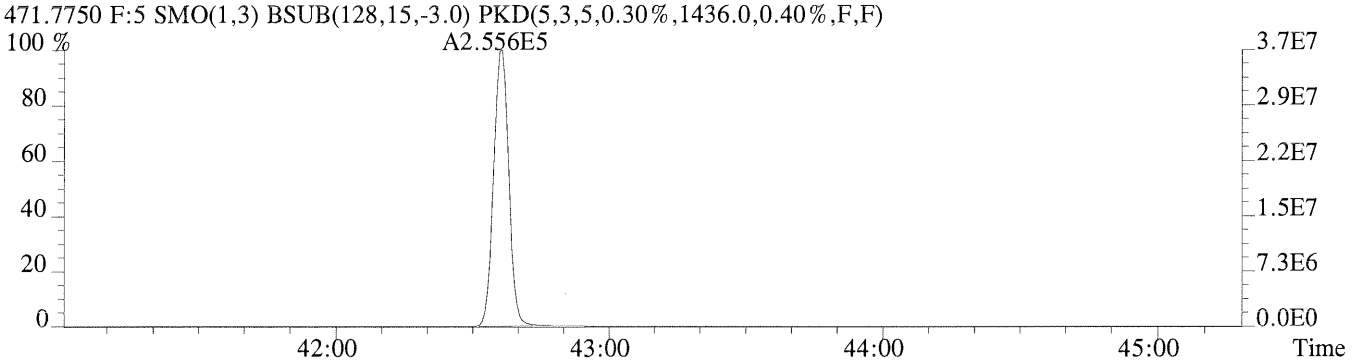
459.7348 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1244.0,0.40%,F,F)



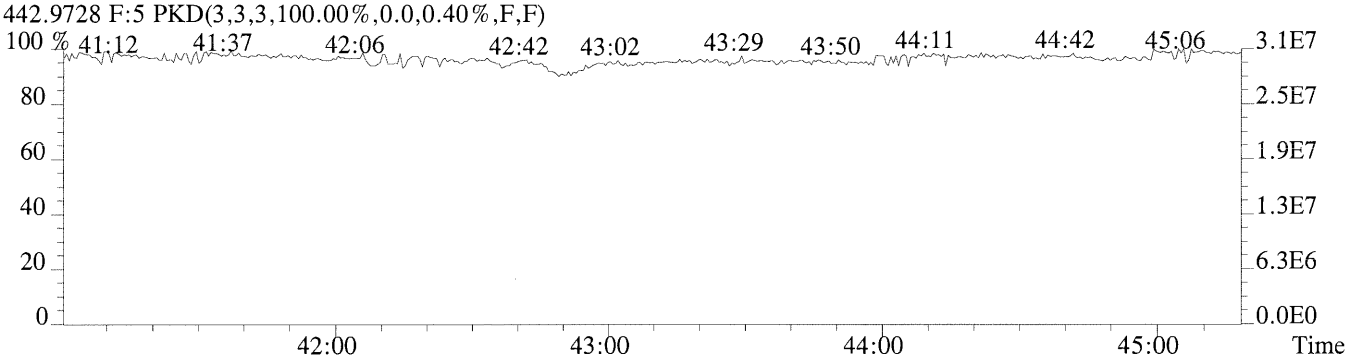
469.7779 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,776.0,0.40%,F,F)



471.7750 F:5 SMO(1,3) BSUB(128,15,-3.0) PKD(5,3,5,0.30%,1436.0,0.40%,F,F)



442.9728 F:5 PKD(3,3,3,100.00%,0.0,0.40%,F,F)



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PROJECT: **LMC BEAUMONT SITE 1**

SDG: **08G188**

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WET	METHOD 314.0	8000 – 8029
OTHERS	**	9000 –

** - Not Requested

EMAX
LABORATORIES, INC.
1835 W. 205th Street
Torrance, CA 90501
Tel: (310) 618-8889
Fax:(310) 618-0818

Date: 08-19-2008
EMAX Batch No.: 08G188

Attn: Michael Wilson

Tetra Tech, Inc.
348 W Hospitality Lane, Ste 100
San Bernardino CA 92408

Subject: Laboratory Report
Project: LMC Beaumont Site 1

Enclosed is the Laboratory report for samples received on 07/18/08.
The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
H-EB7172008	G188-01	07/17/08	WATER	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				METALS CAM
				MERCURY
				PCDDS AND PCDFS
				POLYCHLORINATED BIPHENYLS (PCBS)
H-T1-0.5	G188-02	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T1-2.0	G188-03	07/17/08	SOIL	PCDDS AND PCDFS
H-T1-7.0	G188-04	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T1-11	G188-05	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS

Sample ID	Control #	Col Date	Matrix	Analysis
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T2-0.5	G188-06	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T2-2.5	G188-07	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T2-5.0	G188-08	07/17/08	SOIL	HOLD
H-T2-5.0DUP	G188-09	07/17/08	SOIL	HOLD
H-T2-10	G188-10	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T2-10DUP	G188-11	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T3-0.5	G188-12	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T3-2.5	G188-13	07/17/08	SOIL	HOLD
H-T3-5.0	G188-14	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM
H-T3-10.0	G188-15	07/17/08	SOIL	PERCHLORATE BY IC
				SEMIVOLATILE ORGANICS BY GCMS
				POLYCHLORINATED BIPHENYLS (PCBS)
				MERCURY
				METALS CAM

Sample ID	Control #	Col Date	Matrix	Analysis
H-T4-0.5	G188-16	07/17/08	SOIL	PERCHLORATE BY IC SEMIVOLATILE ORGANICS BY GCMS POLYCHLORINATED BIPHENYLS (PCBS) MERCURY METALS CAM
H-T4-2.0	G188-17	07/17/08	SOIL	PERCHLORATE BY IC SEMIVOLATILE ORGANICS BY GCMS POLYCHLORINATED BIPHENYLS (PCBS) MERCURY METALS CAM
H-T6-0.5	G188-18	07/17/08	SOIL	PERCHLORATE BY IC SEMIVOLATILE ORGANICS BY GCMS POLYCHLORINATED BIPHENYLS (PCBS) MERCURY METALS CAM
H-T6-0.5DUP	G188-19	07/17/08	SOIL	PERCHLORATE BY IC SEMIVOLATILE ORGANICS BY GCMS POLYCHLORINATED BIPHENYLS (PCBS) MERCURY METALS CAM
H-T6-2.0	G188-20	07/17/08	SOIL	HOLD
H-T6-5.0	G188-21	07/17/08	SOIL	PERCHLORATE BY IC SEMIVOLATILE ORGANICS BY GCMS POLYCHLORINATED BIPHENYLS (PCBS) MERCURY METALS CAM
H-T6-10	G188-22	07/17/08	SOIL	PERCHLORATE BY IC SEMIVOLATILE ORGANICS BY GCMS POLYCHLORINATED BIPHENYLS (PCBS) MERCURY METALS CAM
H-T5-0.5	G188-23	07/17/08	SOIL	CANCELLED

Note: PCDDS AND PCDFS was subcontracted to Columbia Analytical Services, Inc and will be submitted at a later date.

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Caspar J. Pang
Acting Laboratory Director

This report is confidential and intended solely for the use of the individual or entity to whom it is addressed. This report shall not be reproduced except in full or without the written approval of EMAX.

EMAX certifies that the results included in this report meet all NELAC requirements unless noted in the Case Narrative.

EMAX LABORATORIES, INC.

SAMPLE RECEIPT FORM 1

Type of Delivery	Delivered By/Airbill	ECN 080188
☐ EMAX Courier		Recepient GONLUNA
☐ Client Delivery		Date 7-18-08
☒ Third Party TOP LINE		Time 1330

COC Inspection

☒ Client Name ☒ Client PM/FC ☒ Sampler Name ☒ Sampling Date/Time/Location ☒ Sample ID ☒ Matrix
☒ Address ☒ Tel # / Fax # ☒ Courier Signature ☒ Analysis Required ☐ Preservative (if any) ☒ TAT

Safety Issues

☒ None ☐ High concentrations expected ☐ Superfund Site samples ☐ Rad screening required

Comments:

Packaging Inspection

Container	☒ Cooler	☐ Box	☐ Other		
Condition	☐ Custody Seal	☒ Intact	☐ Damaged		
Packaging	☒ Bubble Pack	☐ Styrofoam	☐ Popcorn	☒ Sufficient	☐ _____
Temperatures	☒ Cooler 3.7 °C	☐ Cooler 2 _____ °C	☐ Cooler 3 _____ °C	☐ Cooler 4 _____ °C	☐ Cooler 5 _____ °C
	☐ Cooler 6 _____ °C	☐ Cooler 7 _____ °C	☐ Cooler 8 _____ °C	☐ Cooler 9 _____ °C	☐ Cooler 10 _____ °C

Comments: ☐ **PM was informed on non-compliant coolers imediately.**

DISCREPANCIES

LSID	LSCID	Sample Label ID/~~COC ID~~	Discrepancy Code	Corrective Action Code
-02		0913	D3	~~R5~~ R2 ym 7/21/08
-13			D2	R2
-23		H-TS-0.5		
		7/14/08, 0925	H1	R5
01-23			A2	R6
02-07			H2	R6

REVIEWS

Sample Labeling _____ Date 7/18/08

SRF _____ Date 7/18/08

PM _____ Date 7/21/08

LEGEND:

Code	Description- Sample Management
A1	Analysis is not indicated in COC
A2	Analysis is not indicated in label
A3	Analysis is inconsistent in COC vis-à-vis label
B1	Sample ID is not indicated in COC
B2	Sample ID is not indicated in label
B3	Sample ID is inconsistent in COC vis-à-vis label
C1	Wrong container
C2	Broken container
C3	Leaking container
D1	Date and/or time is not indicated in COC
D2	Date and/or time is not indicated in label
D3	Date and/or time is inconsistent in COC vis-à-vis label

Code	Description-Sample Management
E1	Preservative needed; sample has no preservative
E2	Preservative not needed but sample is preserved
F1	Not enough quantity of samples
F2	Bubble is> 6mm
G1	Temperature is out of range (4 +_ 2°C)
G2	Out of Holding Time
G3	>20 % solid particle
H1	RECVD 1 EXTRA JAR (NOT LISTED ON COC)
H2	MATRIX = SOIL (NOT INDICATED IN COC)

Code	Description-Project Management
R1	Hold sample(s); wait for further instructions
R2	Proceed as indicated in COC
R3	Refer to attached instruction
R4	Cancel the analysis
R5	Cancel
R6	Informed client.

1003

TT_0618_

086188

CHAIN OF CUSTODY RECORD

TETRA TECH, INC.
348 W. Hospitality Lane, Suite 100
San Bernardino, California 92408
Telephone: (909) 381-1674
FAX: (909) 889-1391

SHIP TO: EMAX Labs

DATE 7/17/08 PAGE 1 OF 3

CLIENT: Lockheed Martin Corp.
PROJECT NAME: Beaumont Site 1 Sanitary Landfill
PROJECT MANAGER: Bill Mohr
TC #: 20305-01
SAMPLERS (Signatures): Christie Espinoza

LINE ITEM	SAMPLE NO.	DATE	TIME	Perchlorate (314.1)	SVOCs (8270)	PCBs (8082)	Title 22 Metals (6010 7000)	Dioxins/Furans (8290)	VOCs (8260)	FILTERED/UNFILTERED	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	PRESERVATIVE	OBSERVATIONS/COMMENTS
1	1. H-EB7172008	7/17/08	905		X	X		X	#*		W	G	3		
1	2. H-EB7172008		905	X			X				W	P	2		C.E.
-	~~3. H-TB7172008~~		~~905~~						†				1		C.E.
-	~~4. H-EB7172008~~		~~905~~						X				2		
2	5. H-T1-0.5		1013	X	X	X	X						1		
3	6. H-T1-2.0		1031					X					2		
4	7. H-T1-7.0		1051	X	X	X	X						1		
5	8. H-T1-11		1112	X	X	X	X						1		
6	9. H-T2-0.5		1235	X	X	X	X						1		
7	10. H-T2-2.5		1251	X	X	X	X						1		Hold C.E.

PARAMETERS

TURN-AROUND TIME: STANDARD

T = 5.7 °C

FILTERING: ☐ FILTERED ☐ UNFILTERED

MATRIX TYPE: S - Soil; M - Sediment; W - Water

CONTAINER TYPE: G - Glass Bottle/Jar; SS - Stainless Steel Sleeve; SB - Brass Sleeve; P - Plastic Bottle/Jar

PRESERVATIVES: (Water Only) HCL; NaOH; NR (None required); H_2SO_4

RELINQUISHED BY: Christie Espinoza	SIGNATURE: Christie Espinoza	TETRA TECH, INC.	DATE: 7/17/08	TIME: 12:11	TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY: ~~15~~ 12 QP
RECEIVED BY: Carlos Morales	SIGNATURE:	COMPANY: Top Line	DATE: 7/18/08	TIME: 12:11	METHOD OF SHIPMENT/SHIPMENT NO.
RELINQUISHED BY: Carlos Morales	SIGNATURE:	COMPANY: Top Line	DATE: 7/18/08	TIME: 13:30	Special Shipping/Handling/Storage Requirements:
RECEIVED BY: PHONG NGUYEN	SIGNATURE:	COMPANY: EMAX LABS	DATE: 7/18/08	TIME: 13:30	

DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

1 of 1

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CHAIN OF CUSTODY RECORD

TETRA TECH, INC.
348 W. Hospitality Lane, Suite 100
San Bernardino, California 92408
Telephone: (909) 381-1674
FAX: (909) 889-1391

SHIP TO: EMAX Labs

DATE 7/17/08 PAGE 2 OF 3

CLIENT: Lockheed Martin Corp.
PROJECT NAME: Beaumont Site 1 Sanitary LF
PROJECT MANAGER: Bill Muir
TC #: 20305-01
SAMPLERS (Signatures): Christe Espinoza

LINE ITEM	SAMPLE NO.	DATE	TIME	Benzene (8141)	Styrene (8270)	PCBs (8082)	Title 22 Metals (6010/7000)	Dioxins/Furans (8290)	FILTERED/UNFILTERED	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	PRESERVATIVE	OBSERVATIONS/COMMENTS
8	H-T2-5.0	7/17/08	102	X	X	X	X			S	G	1		hold
9	H-T2-5.0dup		104	X	X	X	X			S	G	1		hold
10	H-T2-10		118	X	X	X	X			S	G	1		
11	H-T2-10dup		120	X	X	X	X			S	G	1		
12	H-T3-0.5		212	X	X	X	X			S	G	1		
13	H-T3-2.5		221	X	X	X	X			S	G	1		hold
14	H-T3-5.0		230	X	X	X	X			S	G	1		
15	H-T3-10.0		252	X	X	X	X			S	G	1		
16	H-T4-0.5		343	X	X	X	X			S	G	1		
17	H-T4-2.0		350	X	X	X	X			S	G	1		

T = 13.7°C

TURN-AROUND TIME: STANDARD

FILTERING: ☐ FILTERED ☐ UNFILTERED

MATRIX TYPE: S - Soil; M - Sediment; W - Water

CONTAINER TYPE: G - Glass Bottle/Jar; SS - Stainless Steel Sleeve; SB - Brass Sleeve; P - Plastic Bottle/Jar

PRESERVATIVES: (Water Only) HCL; NaOH; NR (None required); H_2SO_4

RELINQUISHED BY: Christe Espinoza	SIGNATURE: Christe Espinoza	TETRA TECH, INC.	DATE: 7/17/08	TIME: 1212	TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY: 10
RECEIVED BY: Carlos Morales	SIGNATURE:	COMPANY: Top Line	DATE: 7/18/08	TIME: 12:12	METHOD OF SHIPMENT/SHIPMENT NO.
RELINQUISHED BY: Carlos Morales	SIGNATURE:	COMPANY: Top Line	DATE: 7/18/08	TIME: 13:30	Special Shipping/Handling/Storage Requirements:
RECEIVED BY: PHONG NGUYEN	SIGNATURE:	COMPANY: EMAX Labs	DATE: 7/18/08	TIME: 13:30	

1955

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DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

08G188

CHAIN OF CUSTODY RECORD

TETRA TECH, INC.
348 W. Hospitality Lane, Suite 100
San Bernardino, California 92408
Telephone: (909) 381-1674
FAX: (909) 889-1391

SHIP TO: EMax Labs

DATE 7/17/08 PAGE 3 OF 3

CLIENT: Lockheed Martin Corp.
PROJECT NAME: Beaumont Site 1 Sanitary Landfill
PROJECT MANAGER: Bill Muir
TC #: 20305-01
SAMPLERS (Signatures): Christie Espinoza

LINE ITEM	SAMPLE NO.	DATE	TIME	Radionuclides (Gamma)	SVOCs (8270)	PCBs (8082)	Title 22 Metals (except Hg)	FILTERED/UNFILTERED	MATRIX TYPE	CONTAINER TYPE	NUMBER OF CONTAINERS	PRESERVATIVE	OBSERVATIONS/COMMENTS
18 1.	H-T6-0.5	7/17/08	418	X	X	X	X		S	G	1		
19 2.	H-T6-0.5dup		420	X	X	X	X		S	G	1		
20 3.	H-T6-2.0		432	X	X	X	X		S	G	1		Hold
21 4.	H-T6-5.0		445	X	X	X	X		S	G	1		
22 5.	H-T6-10		457	X	X	X	X		S	G	1		
6.													
7.													
8.													
9.													
10.													

TURN-AROUND TIME: STANDARD

FILTERING: ☐ FILTERED ☐ UNFILTERED

MATRIX TYPE: S - Soil; M - Sediment; W - Water

CONTAINER TYPE: G - Glass Bottle/Jar; SS - Stainless Steel Sleeve; SB - Brass Sleeve; P - Plastic Bottle/Jar

PRESERVATIVES: (Water Only) HCL; NaOH; NR (None required); H_2SO_4

RELINQUISHED BY	SIGNATURE		DATE	TIME	TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY:
Christie Espinoza	Christie Espinoza	TETRA TECH, INC.	7/17/08	12:12	5
RECEIVED BY: Carlos Morales	SIGNATURE	COMPANY: Top Line	DATE: 7/18/08	TIME: 12:12	METHOD OF SHIPMENT/SHIPMENT NO.
RELINQUISHED BY: Carlos Morales	SIGNATURE	COMPANY: Top Line	DATE: 7/18/08	TIME: 13:30	Special Shipping/Handling/Storage Requirements:
RECEIVED BY: PHONG NGUYEN	SIGNATURE	COMPANY: EMAX LABS	DATE: 7/18/08	TIME: 13:30	

9981

X:\GIS\ATT-MISC\COCR.CDR

DISTRIBUTION: White and Pink = Tetra Tech, Inc. Canary = Laboratory

Pick-up + Delivery: 310-235-2190
Fax: 310-235-2197
New Accounts: 310-235-2190

top line courier

Serving Southern California

Date	7/17/08
Ref. No.	
Invoice No.	26133
Order No. 1	
Order No. 2	

CALL IN TIME:

CHARGE TO:	ADDRESS:	ACCOUNT NO.

PICK-UP FROM: @CAO WP / MWH	DELIVER ASAP FROM (PLEASE CIRCLE ONE) Tetra tech
ADDRESS: Main St / 350 Royal Oak	ADDRESS: 348 W. Hospitality
CITY: CA / Monrovia	CITY: San Bernardino Zip: 92408
SENDER'S NAME: EXT. NO./DEPT.	RECEIVER'S NAME: TEL. NO. /DEPT.
30 MIN.: (30 MIN.) ☐ SUPER RUSH: (1 HOUR) ☐ RUSH (2 HOURS) ☐ REGULAR: (4 HOURS) ☐	DELIVER TO NO. 2: @ Mat
RETURN: ☐ WAIT TIME: ☐ NEXT DAY: ☐ 8:30 ☐ 10:00 ☐ 12:00	ADDRESS: 1835 Sath St
FILING: ☐ DEPT.: ☐ WINDOW: ☐	CITY: Torrance ZIP:
DRIVER # → → →	RECEIVER'S NAME: TEL. NO. /DEPT.

NO. PKG.	DESCRIPTION AND SPECIAL INSTRUCTIONS
	08/188

SIGNATURE ON RETURN X		DEL. TIME	print name
SIGNATURE ON DELIVERY X		DEL. TIME	PHONG NGUYEN

RELEASE SIGNATURE: *Sign to authorize delivery without obtaining signature*

By signing you authorize us to deliver this shipment without obtaining a signature and agree to indemnify and hold us harmless from any resulting claims.

1-95-1

REPORTING CONVENTIONS

DATA QUALIFIERS:

Lab Qualifier	AFCEE Qualifier	Description
J	F	Indicates that the analyte is positively identified and the result is less than RL but greater than MDL.
N		Indicates presumptive evidence of a compound.
B	B	Indicates that the analyte is found in the associated method blank as well as in the sample at above QC level.
E	J	Indicates that the result is above the maximum calibration range.
*	*	Out of QC limit.

Note: The above qualifiers are used to flag the results unless the project requires a different set of qualification criteria.

ACRONYMS AND ABBREVIATIONS:

CRDL	Contract Required Detection Limit
RL	Reporting Limit
MRL	Method Reporting Limit
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
DO	Diluted out

DATES

The date and time information for leaching and preparation reflect the beginning date and time of the procedure unless the method, protocol, or project specifically requires otherwise.

LABORATORY REPORT FOR

TETRA TECH, INC.

LMC BEAUMONT SITE 1

METHOD 314.0
PERCHLORATE

SDG#: 08G195

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G195

METHOD 314.0
PERCHLORATE

One (1) water sample and nine (9) soil samples were received on 07/18/08 for Perchlorate analysis by Method 314.0 in accordance with "Method for Determination of Perchlorate by Ion Chromatography", EPA 600/98-118.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control sample results were within QC limits.

4. **Duplicate**

   No Duplicate sample was designated in this SDG.

5. **Matrix Spike**

   No MS sample was designated in this SDG.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

SAMPLE

8002

METHOD 314.0
PERCHLORATE

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
Batch No. : 08G195

Matrix : WATER
Instrument ID : I57

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	PCG012WB	ND	1	NA	2.00	0.500	07/22/0813:00	NA	JG22002	JG22001	PCG012W	NA	NA
LCS1W	PCG012WL	25.2	1	NA	2.00	0.500	07/22/0813:42	NA	JG22004	JG22001	PCG012W	NA	NA
LCD1W	PCG012WC	25.6	1	NA	2.00	0.500	07/22/0814:03	NA	JG22005	JG22001	PCG012W	NA	NA
H-EB7182008	G195-01	ND	1	NA	2.00	0.500	07/22/0819:45	NA	JG22016	JG22012	PCG012W	07/18/0808:20	07/18/08

C0096

METHOD 314.0
PERCHLORATE

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
Batch No. : 08G195

Matrix : SOIL
Instrument ID : 157

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/kg)	DLF	MOIST	RL (ug/kg)	MDL (ug/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	PCG016SQ	ND	1	NA	20.0	10.0	07/25/0810:34	07/24/0810:40	JG25002	JG25001	PCG016S	NA	07/24/08
LCS1S	PCG016SX	257	1	NA	20.0	10.0	07/25/0811:16	07/24/0810:40	JG25004	JG25001	PCG016S	NA	07/24/08
LCD1S	PCG016SY	257	1	NA	20.0	10.0	07/25/0811:47	07/24/0810:40	JG25005	JG25001	PCG016S	NA	07/24/08
H-T11-0.5	G195-02R	ND	1	4.5	20.9	10.5	07/25/0815:54	07/24/0810:40	JG25008	JG25001	PCG016S	07/18/0808:43	07/18/08
H-T11-5.0	G195-04R	ND	1	12.7	22.9	11.5	07/25/0816:15	07/24/0810:40	JG25009	JG25001	PCG016S	07/18/0809:05	07/18/08
H-T11-10.0	G195-05R	ND	1	6.5	21.4	10.7	07/25/0816:36	07/24/0810:40	JG25010	JG25001	PCG016S	07/18/0809:32	07/18/08
H-T11-10.0DUP	G195-06R	ND	1	5.9	21.3	10.6	07/25/0818:02	07/24/0810:40	JG25013	JG25012	PCG016S	07/18/0809:35	07/18/08
H-T5-0.5	G195-07R	44.2	1	3.8	20.8	10.4	07/25/0818:23	07/24/0810:40	JG25014	JG25012	PCG016S	07/18/0810:25	07/18/08
H-T5-0.5DUP	G195-08R	44.0	1	3.7	20.8	10.4	07/25/0818:44	07/24/0810:40	JG25015	JG25012	PCG016S	07/18/0810:27	07/18/08
H-T5-2.5	G195-09R	117	1	8.4	21.8	10.9	07/25/0819:05	07/24/0810:40	JG25016	JG25012	PCG016S	07/18/0810:34	07/18/08
H-T5-6.0	G195-12R	195	1	14.9	23.5	11.8	07/25/0819:26	07/24/0810:40	JG25017	JG25012	PCG016S	07/18/0811:02	07/18/08
H-T5-12.0	G195-14R	110	1	13.6	23.1	11.6	07/25/0819:47	07/24/0810:40	JG25018	JG25012	PCG016S	07/18/0811:34	07/18/08

5021

QC SUMMARY

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 314.0

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	PCG012WB	PCG012WL	PCG012WC		
LAB FILE ID:	JG22002	JG22004	JG22005		
DATE EXTRACTED:	NA	NA	NA	DATE COLLECTED:	NA
DATE ANALYZED:	07/22/0813:00	07/22/0813:42	07/22/0814:03	DATE RECEIVED:	NA
PREP. BATCH:	PCG012W	PCG012W	PCG012W		
CALIB. REF:	JG22001	JG22001	JG22001		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Perchlorate	ND	25.0	25.2	101	25.0	25.6	102	2	85-115	20

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 314.0

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	PCG016SQ	PCG016SX	PCG016SY		
LAB FILE ID:	JG25002	JG25004	JG25005		
DATE EXTRACTED:	07/24/0810:40	07/24/0810:40	07/24/0810:40	DATE COLLECTED:	NA
DATE ANALYZED:	07/25/0810:34	07/25/0811:16	07/25/0811:47	DATE RECEIVED:	07/24/08
PREP. BATCH:	PCG016S	PCG016S	PCG016S		
CALIB. REF:	JG25001	JG25001	JG25001		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Perchlorate	ND	250	257	103	250	257	103	0	85-115	20

8001

INITIAL CALIBRATION

IC SEQ FORM (ESD)

LFID	LSID	SELCOMP	METHOD	DateTime	DF
JG03001	IPCS	P	IC57G03	07/03/0815:25	1
JG03002	PCG004WB	P	IC57G03	07/03/0815:46	1
JG03003	MRL	P	IC57G03	07/03/0816:07	1
JG03004	PCG004WL	P	IC57G03	07/03/0816:28	1
JG03005	PCG004WC	P	IC57G03	07/03/0816:49	1
JG03006	PCG004WX	P	IC57G03	07/03/0817:10	1
JG03007	PCG004WY	P	IC57G03	07/03/0817:31	1
JG03008	CCV15	P	IC57G03	07/03/0818:44	1
JG03009	IB	P	IC57G03	07/03/0819:05	1
JG03010	S-0	P	IC57G03	07/03/0819:26	1
JG03011	S-1	P	IC57G03	07/03/0819:47	1
JG03012	S-2	P	IC57G03	07/03/0820:08	1
JG03013	S-3	P	IC57G03	07/03/0820:29	1
JG03014	S-4	P	IC57G03	07/03/0820:50	1
JG03015	S-5	P	IC57G03	07/03/0821:11	1
JG03016	ICV	P	IC57G03	07/03/0821:32	1
JG03017	RINSE	P	IC57G03	07/03/0821:53	1
JG03018	ICB	P	IC57G03	07/03/0822:14	1
JG03019	CCV30	P	IC57G03	07/03/0822:35	1

AS 7/9/08

Method : c:\ezchrom\methods\ic57g03.met
Printed : Jul 07, 2008 10:11:11
Channel : A
Peak : PERCHLORATE

* - Replicate Not Used

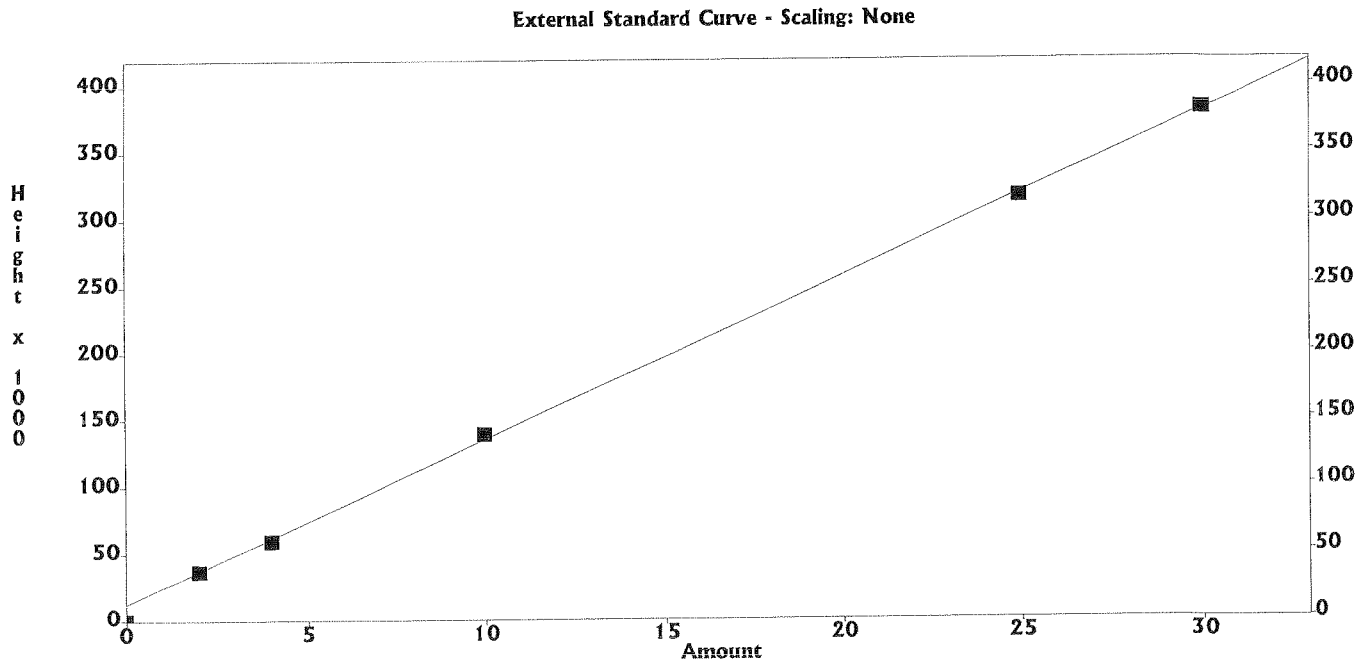
Level	Height	Amount	RF	Rep Hgt 1	Rep Hgt 2	Rep Hgt 3	Rep Hgt 4	Rep Hgt 5	Replic STD	Replic %RSD	Old Height
2	36462	2	18231.00	36462							0
3	59179	4	14794.75	59179							0
4	139045	10	13904.50	139045							0
5	316372	25	12654.88	316372							0
6	380960	30	12698.67	380960							0

Calib Flag: Replace

Average RF: 14456.8
RF StdDev: 2291.39
RF %RSD: 15.850

RF Definition: Height / Amount
Weighting Method: None
Fit Through Zero: No

Linear Fit: Amount = 8.15797e-005 x Height - 1.00674
R^2 = 0.999701



4x 7/9/08

8010

SECOND SOURCE

IC RESULT FORM CalVersion: PCHLO314.G03

LFID	LSID	SELCOMP	PERCHLORATE	DateTime	Df
JG03001	IPCS	P	86.4%	07/03/0815:25	1
JG03002	PCG004WB	P	.000	07/03/0815:46	1
JG03003	MRL	P	124%	07/03/0816:07	1
JG03004	PCG004WL	P	25.8	07/03/0816:28	1
JG03005	PCG004WC	P	26.3	07/03/0816:49	1
JG03006	PCG004WX	P	25.9	07/03/0817:10	1
JG03007	PCG004WY	P	26.3	07/03/0817:31	1
JG03008	CCV15	P	105%	07/03/0818:44	1
JG03009	IB	P	.000	07/03/0819:05	1
JG03010	S-0	P	.0000	07/03/0819:26	1
JG03011	S-1	P	2	07/03/0819:47	1
JG03012	S-2	P	4	07/03/0820:08	1
JG03013	S-3	P	10	07/03/0820:29	1
JG03014	S-4	P	25	07/03/0820:50	1
JG03015	S-5	P	30	07/03/0821:11	1
JG03016	ICV	P	99.9%	07/03/0821:32	1
JG03017	RINSE	P	.000	07/03/0821:53	1
JG03018	ICB	P	.000	07/03/0822:14	1
JG03019	CCV30	P	102%	07/03/0822:35	1

AS
7/9/08

DAILY CALIBRATION

IC RESULT FORM CalVersion: PCHLO314.G03

LFID	LSID	SELCOMP	PERCHLORATE	DateTime	Df
JG22001	IPCS	P	83.5%	07/22/0812:37	1
JG22002	PCG012WB	P	.000	07/22/0813:00	1
JG22003	MRL	P	86.5%	07/22/0813:21	1
JG22004	PCG012WL	P	25.2	07/22/0813:42	1
JG22005	PCG012WC	P	25.6	07/22/0814:03	1
JG22006	G112-05	P	71.4	07/22/0814:48	4
JG22007	G112-06	P	143	07/22/0815:09	8
JG22008	G131-01I	P	528	07/22/0815:30	40
JG22009	G131-02I	P	231	07/22/0816:09	20
JG22010	G131-03I	P	384	07/22/0816:30	20
JG22011	G131-04I	P	53	07/22/0816:51	10
JG22012	CCV16-30	P	103%	07/22/0818:21	1
JG22013	G131-06I	P	252	07/22/0818:42	20
JG22014	G131-11I	P	478	07/22/0819:03	20
JG22015	G188-01	P	.000	07/22/0819:24	1
JG22016	G195-01	P	.000	07/22/0819:45	1
JG22017	G146-02	*	35.1E	07/22/0820:06	1
JG22018	G146-03	P	438	07/22/0820:27	20
JG22019	G146-04	P	68.5	07/22/0820:48	10
JG22020	G146-05R	P	22.6	07/22/0821:09	1
JG22021	G146-05Z	P	22.1	07/22/0821:30	1
JG22022	RINSE	P	.000	07/22/0821:51	1
JG22023	CCV17-15	P	101%	07/22/0822:12	1
JG22024	G146-05G	*	32.5E	07/22/0822:33	1
JG22025	G146-07	P	493	07/22/0822:54	20
JG22026	G146-08	*	89.1E	07/22/0823:15	2
JG22027	RINSE	P	1.21	07/22/0823:36	1
JG22028	CCV18-30	P	107%	07/22/0823:57	1
JG22029	IPCS	P	86.2%	07/23/0800:18	1
JG22030	PCG013SB	P	.000	07/23/0800:39	1
JG22031	PCG013SL	P	26.5	07/23/0801:00	1
JG22032	PCG013SC	P	25.9	07/23/0801:21	1
JG22033	G177-02	P	23.5	07/23/0801:42	1
JG22034	G177-02D	P	23.7	07/23/0802:03	1
JG22035	G177-02M	P	33.6E	07/23/0802:24	1
JG22036	G177-03	P	4.16	07/23/0802:45	1
JG22037	G177-05	*	70.5E	07/23/0803:06	1
JG22038	RINSE	P	.000	07/23/0803:27	1
JG22039	CCV19-15	P	100%	07/23/0803:48	1
JG22040	G177-06	P	1.73	07/23/0804:10	1
JG22041	G177-08	P	.000	07/23/0804:31	1
JG22042	G177-09	P	1.82	07/23/0804:52	1
JG22043	G177-10	P	.000	07/23/0805:13	1
JG22044	G177-11	P	.000	07/23/0805:34	1
JG22045	G177-12	P	.000	07/23/0805:55	1
JG22046	G177-16	P	2.75	07/23/0806:16	1
JG22047	G177-17	*	52.5E	07/23/0806:37	1
JG22048	RINSE	P	.000	07/23/0806:58	1
JG22049	CCV20-30	P	104%	07/23/0807:19	1
JG22050	MRL	P	110%	07/23/0808:10	1
JG22051	G177-17	P	60	07/23/0808:38	2
JG22052	G177-05	P	105	07/23/0808:59	10
JG22053	G146-02	P	30.1	07/23/0810:00	5
JG22054	G146-08	P	66.7	07/23/0810:22	10
JG22055	G146-04	P	134	07/23/0810:47	10
JG22056	G146-02	*	39.8E	07/23/0811:12	1
JG22057	G146-08	P	88.4	07/23/0812:00	10
JG22058	G146-08	*	71.9E	07/23/0812:21	1
JG22059	RINSE	P	.000	07/23/0812:42	1
JG22060	CCV21-15	P	108%	07/23/0813:03	1

IC RESULT FORM CalVersion: PCHLO314.G03

LFID	LSID	SELCOMP	PERCHLORATE	DateTime	Df
JG25001	IPCS	P	92.5%	07/25/0810:12	1
JG25002	PCG016SQ	P	.000	07/25/0810:34	1
JG25003	MRL	*	.000%*	07/25/0810:55	1
JG25004	PCG016SX	P	25.7	07/25/0811:16	1
JG25005	PCG016SY	P	25.7	07/25/0811:47	1
JG25006	MRL	P	125%	07/25/0814:34	1
JG25007	TEST	P	2.52	07/25/0815:27	1
JG25008	G195-02R	P	.000	07/25/0815:54	1
JG25009	G195-04R	P	.000	07/25/0816:15	1
JG25010	G195-05R	P	.000	07/25/0816:36	1
JG25011	RINSE	P	.000	07/25/0817:20	1
JG25012	CCV28-15	P	94.1%	07/25/0817:41	1
JG25013	G195-06R	P	.000	07/25/0818:02	1
JG25014	G195-07R	P	4.25	07/25/0818:23	1
JG25015	G195-08R	P	4.24	07/25/0818:44	1
JG25016	G195-09R	P	10.7	07/25/0819:05	1
JG25017	G195-12R	P	16.6	07/25/0819:26	1
JG25018	G195-14R	P	9.51	07/25/0819:47	1
JG25019	G237-02	P	9.49	07/25/0820:08	1
JG25020	G237-03	*	65.5E	07/25/0820:30	1
JG25021	G237-04	P	20	07/25/0820:51	1
JG25022	RINSE	P	1.02	07/25/0821:12	1
JG25023	CCV29-30	P	99.6%	07/25/0821:33	1
JG25024	G237-05	P	.000	07/25/0821:54	1
JG25025	G225-02	P	.000	07/25/0822:15	1
JG25026	G225-03	P	2.97	07/25/0822:36	1
JG25027	G225-04	P	6.06	07/25/0822:57	1
JG25028	G225-05	P	.000	07/25/0823:18	1
JG25029	G225-05D	P	.000	07/25/0823:39	1
JG25030	G225-05M	P	10.9	07/26/0800:00	1
JG25031	G237-03	*	217E	07/26/0800:21	5
JG25032	G237-03	P	238	07/26/0800:42	20
JG25033	RINSE	P	.000	07/26/0801:03	1
JG25034	CCV30-15	P	98.4%	07/26/0801:24	1
JG25035	IPCS	P	82.5%	07/26/0801:45	1
JG25036	PCG017WB	P	.000	07/26/0802:06	1
JG25037	MRL	P	101%	07/26/0802:27	1
JG25038	PCG017WL	P	.000	07/26/0802:48	1
JG25039	PCG017WC	P	.406	07/26/0803:09	1
JG25040	W010309S	P	1030	07/26/0803:30	50
JG25041	W010309S	P	1140	07/26/0803:51	100
JG25042	W010309S	*	1020E	07/26/0804:12	20
JG25043	W010309S	P	.000	07/26/0804:33	50
JG25044	W010309S	P	150	07/26/0804:54	100
JG25045	RINSE	P	.000	07/26/0805:15	1
JG25046	CCV31-30	P	102%	07/26/0805:36	1
JG25047	P010309	P	2250	07/26/0805:57	1000
JG25048	P010309	P	6050	07/26/0806:18	5000
JG25051	P010309	P	.000	07/26/0806:39	10000
JG25052	P010309	P	55700	07/26/0807:00	50000
JG25053	RINSE	P	.000	07/26/0807:21	1
JG25054	CCV32-15	P	100%	07/26/0807:43	1

ANALYTICAL LOG

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

NaOH: SW9A -03-013

(JG22-019)

- Sample: G146-04, DF=10, Bad Injection, Not Evaluated.

- JG22-058; -.056; ~~-.057~~ ad 07/23/08; -.037, & -.0487 ad 07/25/08: For confirmation

- JG22.054: Bad injection; not used.

Book #:	A57-017
Instrument No.:	57
Analytical Sequence:	JG22
Method File:	jm 7/23/08 ~~PCG012~~ IC57903
Analytical Batch:	PCG012W, PCG013S

SOP #	Rev. #
☐ EMAX-300.0	3
☐ EMAX-300.0M	0
☑ EMAX-314.0	1
☐ EMAX-9056	2
☐ EMAX-	

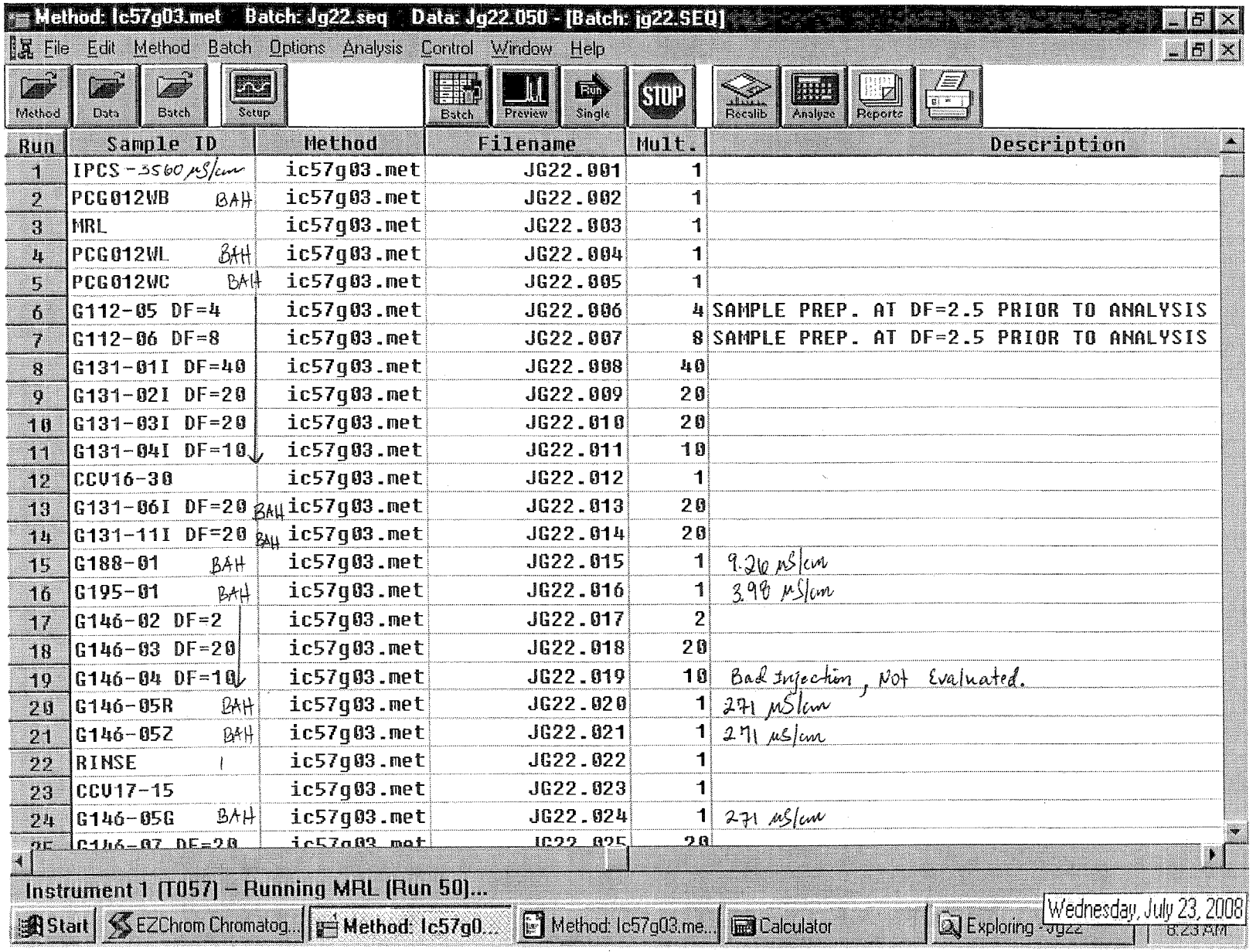
STANDARDS ID	
ICAL	SW9B -02 - 1130
ICV	- 1133
CCV-15	- 1140
CCV-30	- 1137
LCS	- 1133
MS	- 1126
IPC	- 1138
CMC	SW1 - 01 - 101
MRL	SW80 - 02 - 1134

CMC Reading (µS/cm)	QC Criteria (µS/cm)	Temp. (°C)
96.5 µS/cm	(±) 30	20°C

ELECTRONIC DATA ARCHIVAL	
Location	Date
☑ EZ-CHROM	
☐	

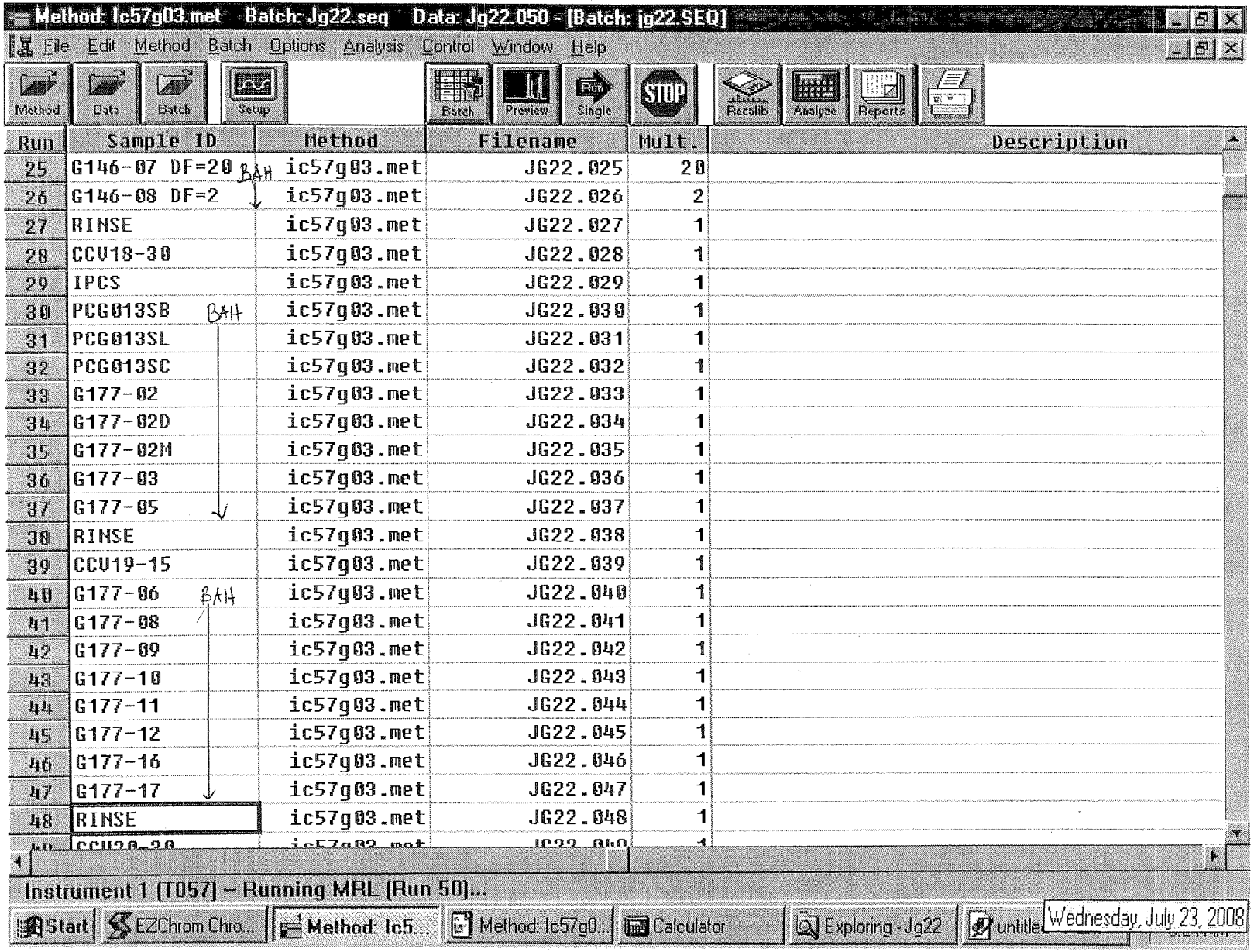
Analyzed By: jm / cd

Date: 07/22/08


Method: Ic57g03.met Batch: Jg22.seq Data: Jg22.050 - [Batch: jg22.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 | IPCS - 3560 µS/cm | ic57g03.met | JG22.001 | 1 |
2 | PCG012WB BAH | ic57g03.met | JG22.002 | 1 |
3 | MRL | ic57g03.met | JG22.003 | 1 |
4 | PCG012WL BAH | ic57g03.met | JG22.004 | 1 |
5 | PCG012WC BAH | ic57g03.met | JG22.005 | 1 |
6 | G112-05 DF=4 | ic57g03.met | JG22.006 | 4 | SAMPLE PREP. AT DF=2.5 PRIOR TO ANALYSIS
7 | G112-06 DF=8 | ic57g03.met | JG22.007 | 8 | SAMPLE PREP. AT DF=2.5 PRIOR TO ANALYSIS
8 | G131-01I DF=40 | ic57g03.met | JG22.008 | 40 |
9 | G131-02I DF=20 | ic57g03.met | JG22.009 | 20 |
10 | G131-03I DF=20 | ic57g03.met | JG22.010 | 20 |
11 | G131-04I DF=10 | ic57g03.met | JG22.011 | 10 |
12 | CCV16-30 | ic57g03.met | JG22.012 | 1 |
13 | G131-06I DF=20 BAH | ic57g03.met | JG22.013 | 20 |
14 | G131-11I DF=20 BAH | ic57g03.met | JG22.014 | 20 |
15 | G188-01 BAH | ic57g03.met | JG22.015 | 1 | 9.26 µS/cm
16 | G195-01 BAH | ic57g03.met | JG22.016 | 1 | 3.98 µS/cm
17 | G146-02 DF=2 | ic57g03.met | JG22.017 | 2 |
18 | G146-03 DF=20 | ic57g03.met | JG22.018 | 20 |
19 | G146-04 DF=10 | ic57g03.met | JG22.019 | 10 | Bad Injection, Not Evaluated.
20 | G146-05R BAH | ic57g03.met | JG22.020 | 1 | 271 µS/cm
21 | G146-05Z BAH | ic57g03.met | JG22.021 | 1 | 271 µS/cm
22 | RINSE | ic57g03.met | JG22.022 | 1 |
23 | CCV17-15 | ic57g03.met | JG22.023 | 1 |
24 | G146-05G BAH | ic57g03.met | JG22.024 | 1 | 271 µS/cm
Instrument 1 (T057) - Running MRL (Run 50)...
Start EZChrom Chromatog... Method: Ic57g0... Method: Ic57g03.me... Calculator Exploring - Jg22
Wednesday, July 23, 2008
8:23 AM

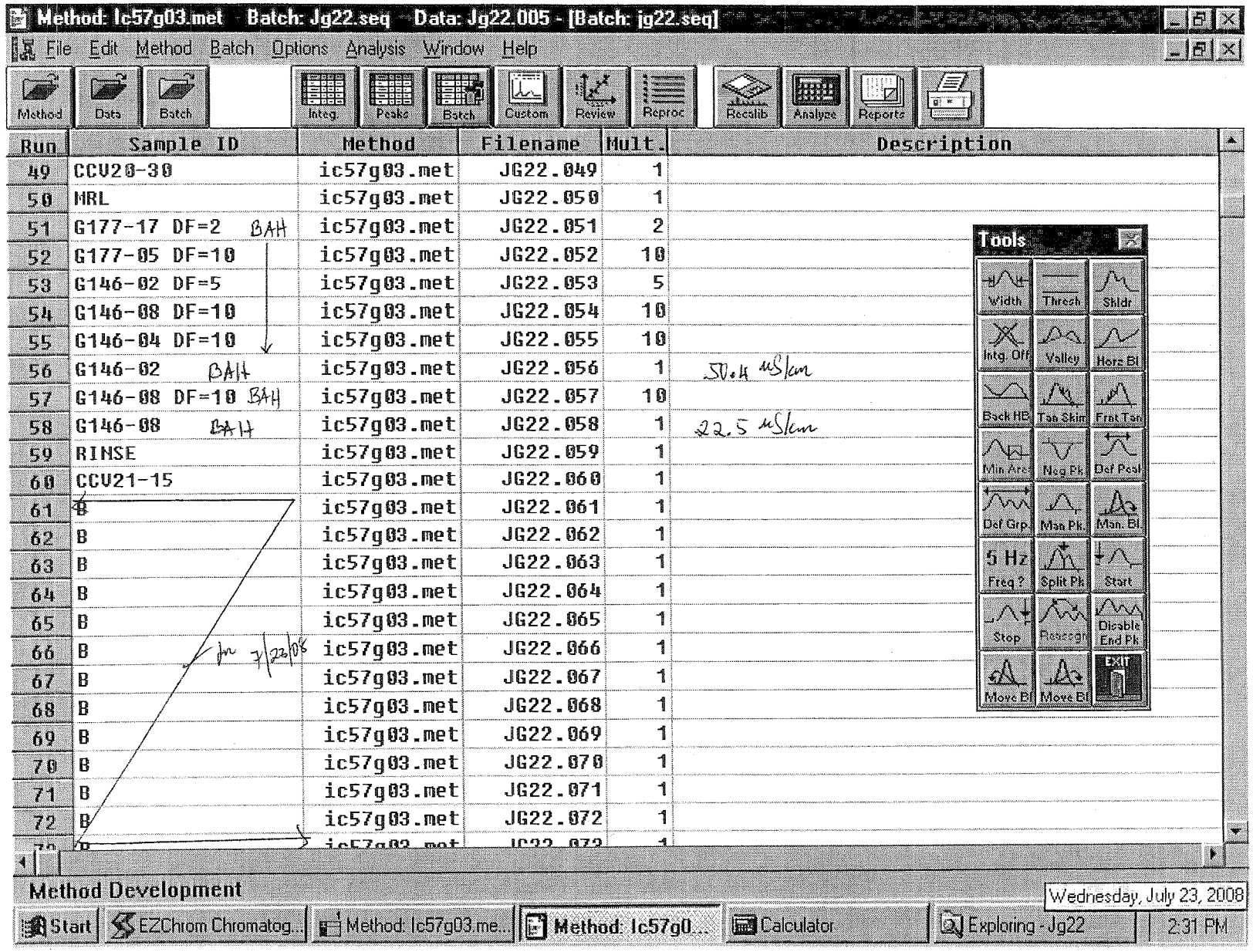
9016

FINAL


Method: Ic57g03.met Batch: Jg22.seq Data: Jg22.050 - [Batch: jg22.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run Sample ID Method Filename Mult. Description
25 G146-07 DF=20 BAH ic57g03.met JG22.025 20
26 G146-08 DF=2 ic57g03.met JG22.026 2
27 RINSE ic57g03.met JG22.027 1
28 CCV18-30 ic57g03.met JG22.028 1
29 IPCS ic57g03.met JG22.029 1
30 PCG013SB BAH ic57g03.met JG22.030 1
31 PCG013SL ic57g03.met JG22.031 1
32 PCG013SC ic57g03.met JG22.032 1
33 G177-02 ic57g03.met JG22.033 1
34 G177-02D ic57g03.met JG22.034 1
35 G177-02M ic57g03.met JG22.035 1
36 G177-03 ic57g03.met JG22.036 1
37 G177-05 ic57g03.met JG22.037 1
38 RINSE ic57g03.met JG22.038 1
39 CCV19-15 ic57g03.met JG22.039 1
40 G177-06 BAH ic57g03.met JG22.040 1
41 G177-08 ic57g03.met JG22.041 1
42 G177-09 ic57g03.met JG22.042 1
43 G177-10 ic57g03.met JG22.043 1
44 G177-11 ic57g03.met JG22.044 1
45 G177-12 ic57g03.met JG22.045 1
46 G177-16 ic57g03.met JG22.046 1
47 G177-17 ic57g03.met JG22.047 1
48 RINSE ic57g03.met JG22.048 1
Instrument 1 [T057] – Running MRL [Run 50]...
Start EZChrom Chro... Method: Ic5... Method: Ic57g0... Calculator Exploring - Jg22 untitle
Wednesday, July 23, 2008

8016

FINAL


Method: Ic57g03.met Batch: Jg22.seq Data: Jg22.005 - [Batch: jg22.seq]
File Edit Method Batch Options Analysis Window Help
Method Data Batch Integ. Peaks Batch Custom Review Reproc Recalib Analyze Reports
Run Sample ID Method Filename Mult. Description
49 CCV20-30 ic57g03.met JG22.049 1
50 MRL ic57g03.met JG22.050 1
51 G177-17 DF=2 BAH ic57g03.met JG22.051 2
52 G177-05 DF=10 ic57g03.met JG22.052 10
53 G146-02 DF=5 ic57g03.met JG22.053 5
54 G146-08 DF=10 ic57g03.met JG22.054 10
55 G146-04 DF=10 ic57g03.met JG22.055 10
56 G146-02 BAH ic57g03.met JG22.056 1 50.4 uS/cm
57 G146-08 DF=10 BAH ic57g03.met JG22.057 10
58 G146-08 BAH ic57g03.met JG22.058 1 22.5 uS/cm
59 RINSE ic57g03.met JG22.059 1
60 CCV21-15 ic57g03.met JG22.060 1
61 B ic57g03.met JG22.061 1
62 B ic57g03.met JG22.062 1
63 B ic57g03.met JG22.063 1
64 B ic57g03.met JG22.064 1
65 B ic57g03.met JG22.065 1
66 B ic57g03.met JG22.066 1
67 B ic57g03.met JG22.067 1
68 B ic57g03.met JG22.068 1
69 B ic57g03.met JG22.069 1
70 B ic57g03.met JG22.070 1
71 B ic57g03.met JG22.071 1
72 B ic57g03.met JG22.072 1
7/23/08
Tools
Width Thresh Shldr
Intg. Off Valley Horz Bl
Back HE Tan Skim Fnt Tan
Min Area Neg Pk Def Peak
Def Grp Man Pk Man. Bl
5 Hz Freq ? Split Pk Start
Stop Reassign Disable End Pk
Move Bl Move Bl EXIT
Method Development
Start EZChrom Chromatog... Method: Ic57g03.me... Method: Ic57g0... Calculator Exploring - Jg22
Wednesday, July 23, 2008
2:31 PM

2025

FINAL

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

NaOH: SW9A-03-013

JG25.003 - Bad Injection, not evaluated

JG25.038 - Not evaluated

JG25.040 (35 on 8/1/08) - JG25.054, Not val.

Book #: A57-017

Instrument No.: 57

Analytical Sequence: JG25

Method File: IC57q03

Analytical Batch: PCG0942 (on 07/28/08), PCG0971

SOP #	Rev. #
☐ EMAX-300.0	3
☐ EMAX-300.0M	0
☑ EMAX-314.0	1
☐ EMAX-9056	2
☐ EMAX-	

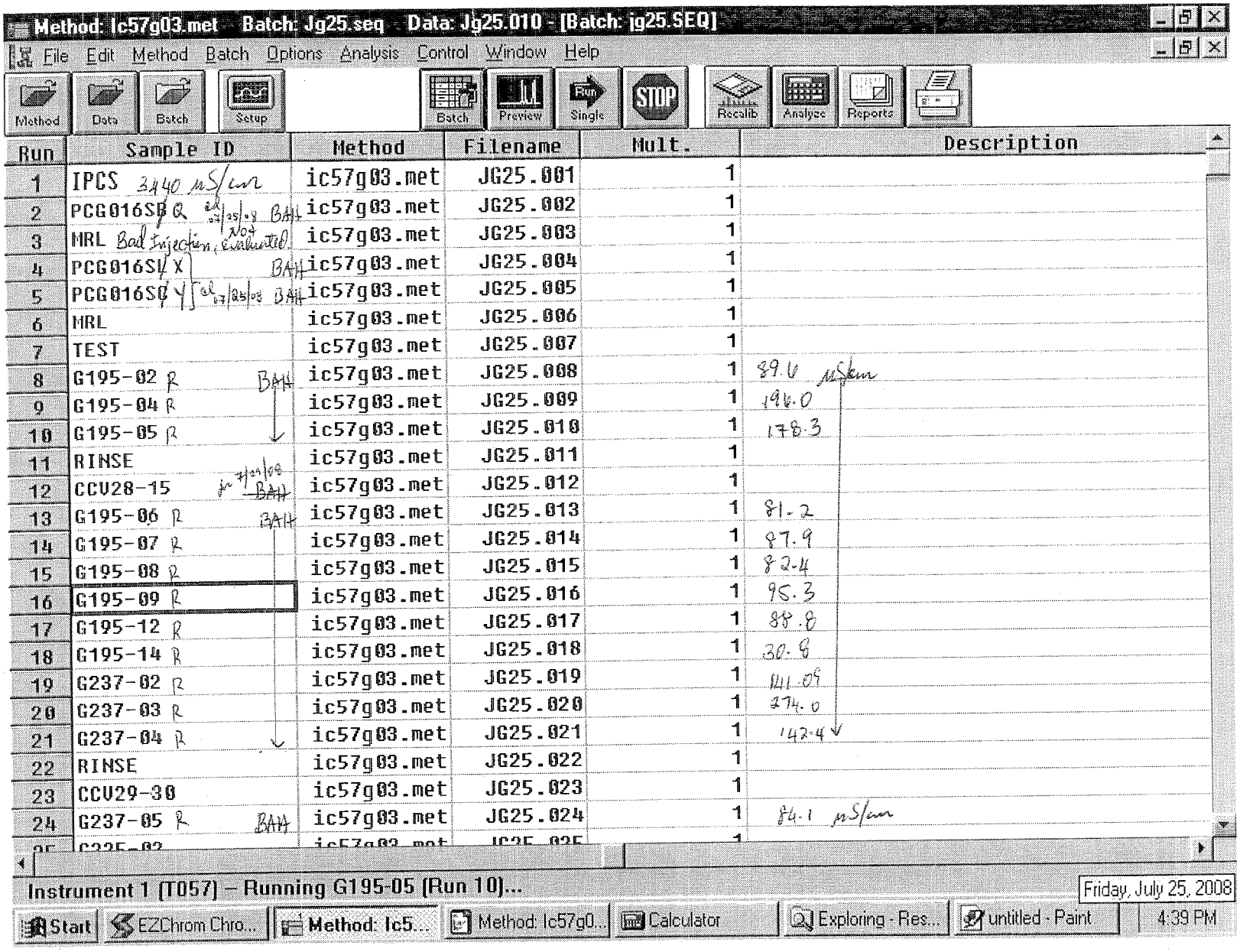
STANDARDS ID	
ICAL	SW8B - 02 - 1130
ICV	- 1133
CCV-15	- 1145
CCV-30	- 1146
LCS	- 1142
MS	8/1/08 SW8B-02- ~~N/A~~ - 1124
IPC	SW8B-02 - 1143
CMC	SW1 - 01 - 101
MRL	SW8B-02 - 1144

CMC Reading (µS/cm)	QC Criteria (µS/cm)	Temp. (°C)
96.6 µS/cm	(±) 30	20°C

ELECTRONIC DATA ARCHIVAL	
Location	Date
☑ EZ-CHROM	
☐	

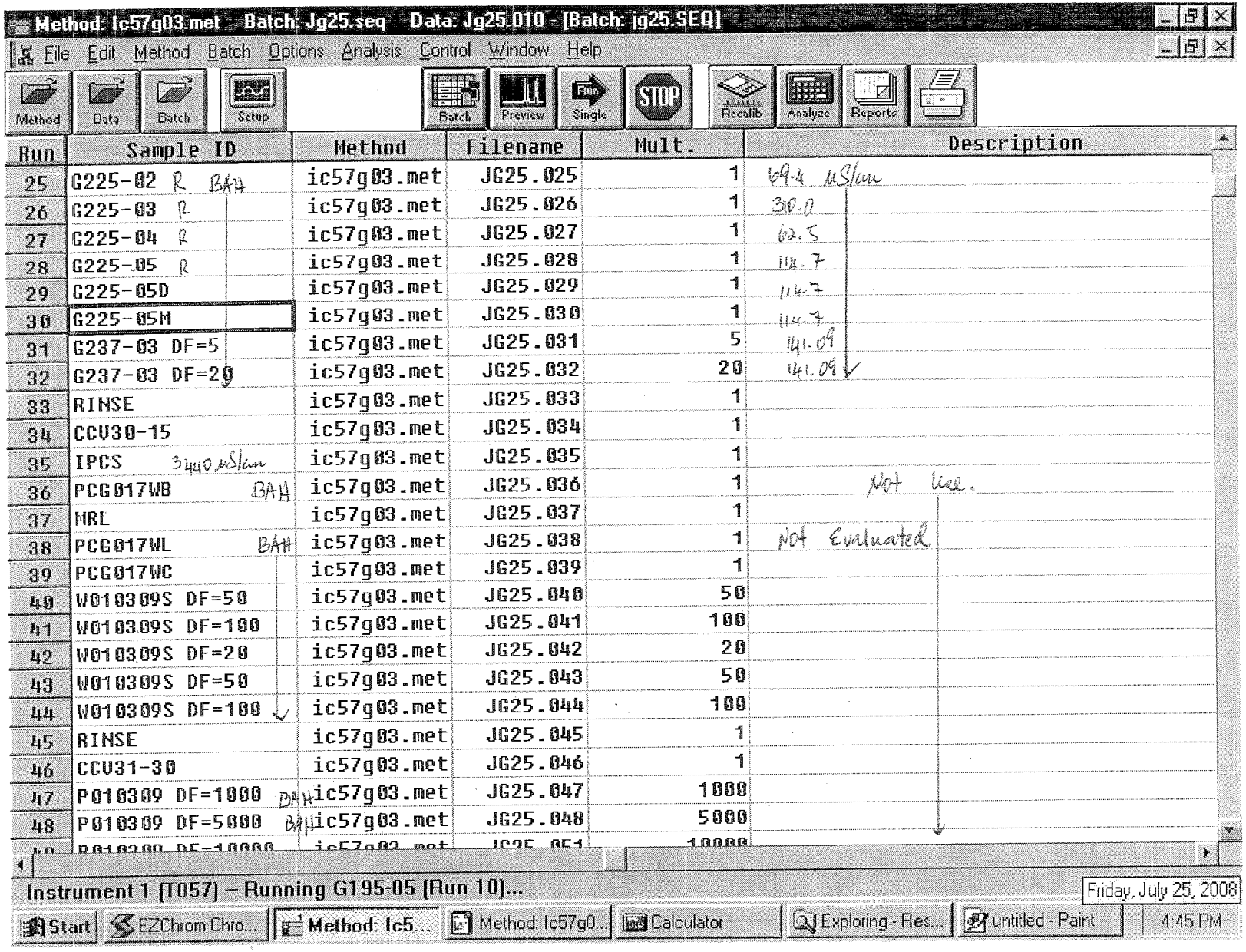
Analyzed By: [signature]

Date: 07/25/08


Method: Ic57g03.met Batch: Jg25.seq Data: Jg25.010 - [Batch: jg25.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyse Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 IPCS 3440 µS/cm ic57g03.met JG25.001 1
2 PCG016SP Q ic57g03.met JG25.002 1
3 MRL Bad Injection, Not evaluated ic57g03.met JG25.003 1
4 PCG016SP X ic57g03.met JG25.004 1
5 PCG016SP Y ic57g03.met JG25.005 1
6 MRL ic57g03.met JG25.006 1
7 TEST ic57g03.met JG25.007 1
8 G195-02 R ic57g03.met JG25.008 1 89.6 µS/cm
9 G195-04 R ic57g03.met JG25.009 1 196.0
10 G195-05 R ic57g03.met JG25.010 1 178.3
11 RINSE ic57g03.met JG25.011 1
12 CCV28-15 ic57g03.met JG25.012 1
13 G195-06 R ic57g03.met JG25.013 1 81.2
14 G195-07 R ic57g03.met JG25.014 1 87.9
15 G195-08 R ic57g03.met JG25.015 1 82.4
16 G195-09 R ic57g03.met JG25.016 1 95.3
17 G195-12 R ic57g03.met JG25.017 1 88.8
18 G195-14 R ic57g03.met JG25.018 1 30.8
19 G237-02 R ic57g03.met JG25.019 1 141.09
20 G237-03 R ic57g03.met JG25.020 1 274.0
21 G237-04 R ic57g03.met JG25.021 1 142.4
22 RINSE ic57g03.met JG25.022 1
23 CCV29-30 ic57g03.met JG25.023 1
24 G237-05 R ic57g03.met JG25.024 1 84.1 µS/cm
Instrument 1 (T057) – Running G195-05 (Run 10)...
Friday, July 25, 2008
Start EZChrom Chro... Method: Ic5... Method: Ic57g0... Calculator Exploring - Res... untitled - Paint 4:39 PM

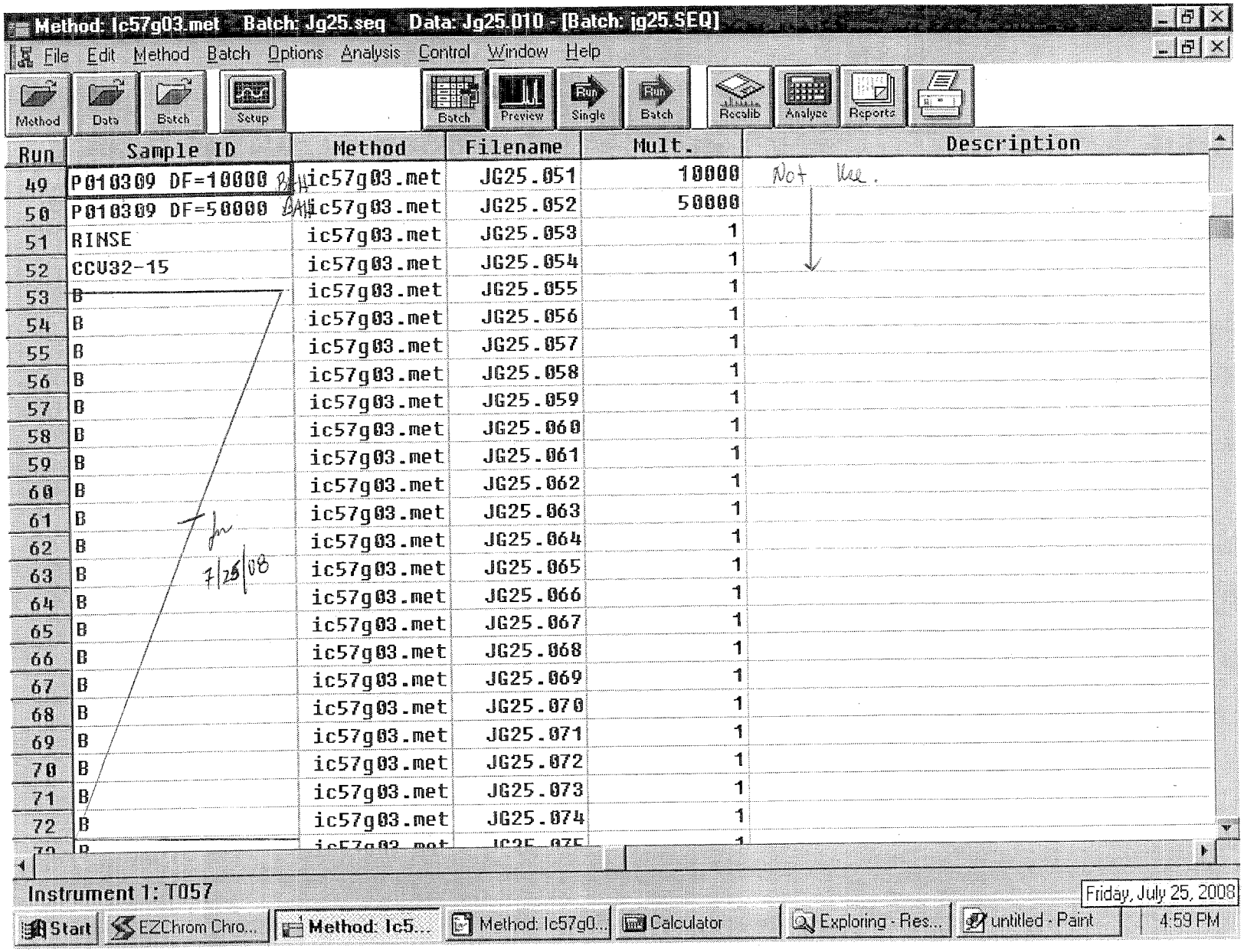
6922

FINAL


Method: Ic57g03.met Batch: Jg25.seq Data: Jg25.010 - [Batch: jg25.SEQ]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
25 | G225-02 R BAH | ic57g03.met | JG25.025 | 1 | 69.4 uS/cm
26 | G225-03 R | ic57g03.met | JG25.026 | 1 | 30.0
27 | G225-04 R | ic57g03.met | JG25.027 | 1 | 62.5
28 | G225-05 R | ic57g03.met | JG25.028 | 1 | 114.7
29 | G225-05D | ic57g03.met | JG25.029 | 1 | 114.7
30 | G225-05M | ic57g03.met | JG25.030 | 1 | 114.7
31 | G237-03 DF=5 | ic57g03.met | JG25.031 | 5 | 141.09
32 | G237-03 DF=20 | ic57g03.met | JG25.032 | 20 | 141.09
33 | RINSE | ic57g03.met | JG25.033 | 1
34 | CCV30-15 | ic57g03.met | JG25.034 | 1
35 | IPCS 3440 uS/cm | ic57g03.met | JG25.035 | 1
36 | PCG017WB BAH | ic57g03.met | JG25.036 | 1 | Not Use.
37 | MRL | ic57g03.met | JG25.037 | 1
38 | PCG017WL BAH | ic57g03.met | JG25.038 | 1 | Not Evaluated
39 | PCG017WC | ic57g03.met | JG25.039 | 1
40 | W010309S DF=50 | ic57g03.met | JG25.040 | 50
41 | W010309S DF=100 | ic57g03.met | JG25.041 | 100
42 | W010309S DF=20 | ic57g03.met | JG25.042 | 20
43 | W010309S DF=50 | ic57g03.met | JG25.043 | 50
44 | W010309S DF=100 | ic57g03.met | JG25.044 | 100
45 | RINSE | ic57g03.met | JG25.045 | 1
46 | CCV31-30 | ic57g03.met | JG25.046 | 1
47 | P010309 DF=1000 BAH | ic57g03.met | JG25.047 | 1000
48 | P010309 DF=5000 BAH | ic57g03.met | JG25.048 | 5000
Instrument 1 [T057] - Running G195-05 [Run 10]...
Friday, July 25, 2008
Start EZChrom Chro... Method: Ic5... Method: Ic57g0... Calculator Exploring - Res... untitled - Paint 4:45 PM

8522

FINAL



8621-08

FINAL

ANALYSIS RUN LOG
for
ION CHROMATOGRAPHY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

NaOH : SW9A-03-013

Book #:	A57-017
Instrument No.:	57
Analytical Sequence:	JG03
Method File:	IC57g03
Analytical Batch:	PCG004W

SOP #	Rev. #
☐ EMAX-300.0	3
☐ EMAX-300.0M	0
☑ EMAX-314.0	1
☐ EMAX-9056	2
☐ EMAX-	

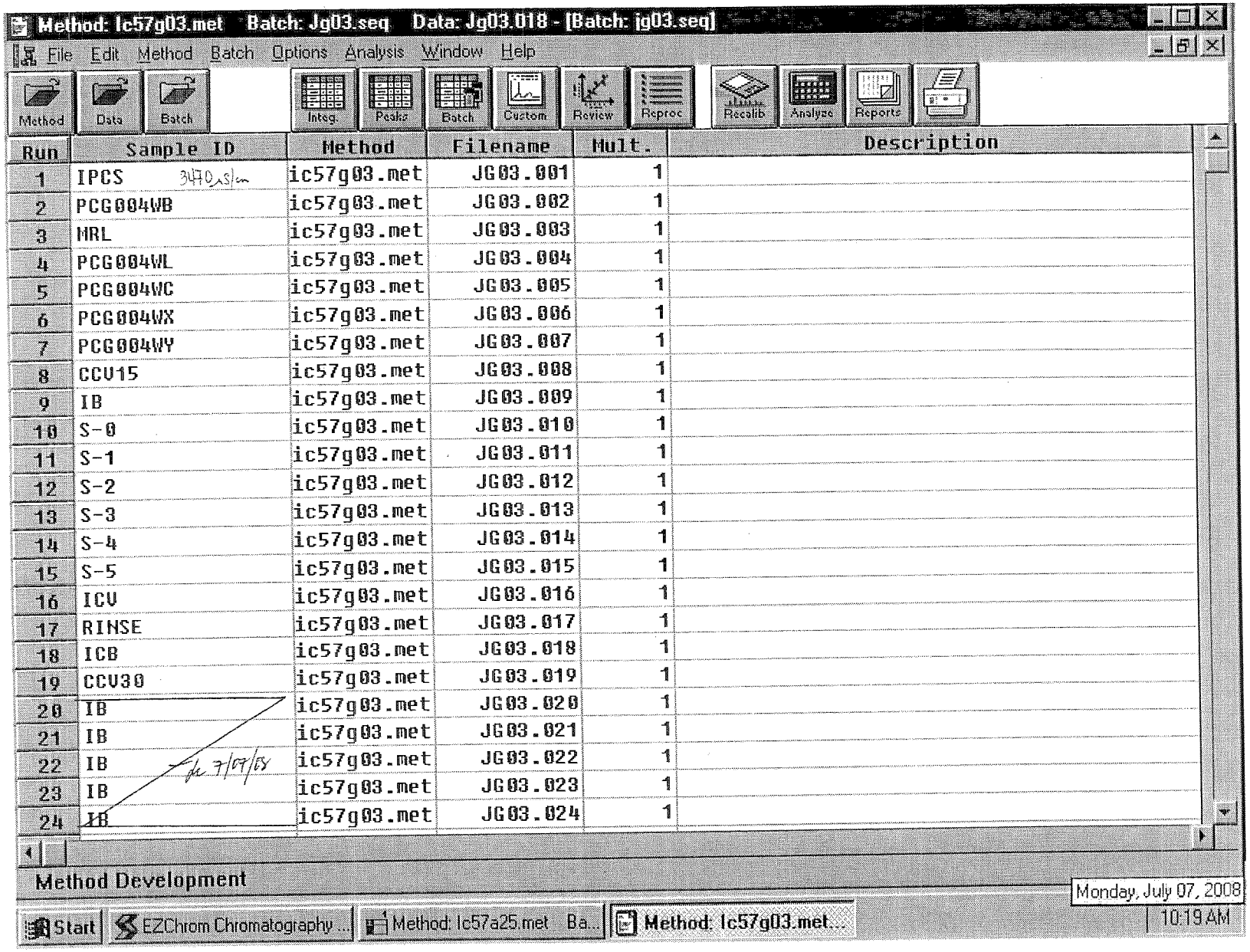
STANDARDS ID	
ICAL	SW8B-07-1130
ICV	-1127
CCV-15	-1131
CCV-30	-1132
LCS	-1128
MS	~~1125~~ 1n 4/07/08
IPC	-1125
CMC	SW1-01-095
MRL	SW8B-02-1114

CMC Reading (µS/cm)	QC Criteria (µS/cm)	Temp. (°C)
925 µS/cm	(±) 30	20°C

ELECTRONIC DATA ARCHIVAL	
Location	Date
☑ EZ-CHROM	
☐	

Analyzed By: JG

Date: 4/07/08


Method: Ic57g03.met Batch: Jg03.seq Data: Jg03.018 - [Batch: jg03.seq]
File Edit Method Batch Options Analysis Window Help
Method Data Batch Integ Peaks Batch Custom Review Reproc Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 | IPCS 3470 ug/L | ic57g03.met | JG03.001 | 1
2 | PCG004WB | ic57g03.met | JG03.002 | 1
3 | MRL | ic57g03.met | JG03.003 | 1
4 | PCG004WL | ic57g03.met | JG03.004 | 1
5 | PCG004WC | ic57g03.met | JG03.005 | 1
6 | PCG004WX | ic57g03.met | JG03.006 | 1
7 | PCG004WY | ic57g03.met | JG03.007 | 1
8 | CCV15 | ic57g03.met | JG03.008 | 1
9 | IB | ic57g03.met | JG03.009 | 1
10 | S-0 | ic57g03.met | JG03.010 | 1
11 | S-1 | ic57g03.met | JG03.011 | 1
12 | S-2 | ic57g03.met | JG03.012 | 1
13 | S-3 | ic57g03.met | JG03.013 | 1
14 | S-4 | ic57g03.met | JG03.014 | 1
15 | S-5 | ic57g03.met | JG03.015 | 1
16 | ICV | ic57g03.met | JG03.016 | 1
17 | RINSE | ic57g03.met | JG03.017 | 1
18 | ICB | ic57g03.met | JG03.018 | 1
19 | CCV30 | ic57g03.met | JG03.019 | 1
20 | IB | ic57g03.met | JG03.020 | 1
21 | IB | ic57g03.met | JG03.021 | 1
22 | IB 7/09/08 | ic57g03.met | JG03.022 | 1
23 | IB | ic57g03.met | JG03.023 | 1
24 | IB | ic57g03.met | JG03.024 | 1
Method Development
Monday, July 07, 2008
Start EZChrom Chromatography ... Method: Ic57a25.met Ba... Method: Ic57g03.met...
10:19 AM

FINAL

EXTRACTION LOG

SAMPLE PREPARATION LOG FOR ORGANIC ACID/PERCHLORATE

SOP ☒ EMAX-314.0 ☐ EMAX-300.0M Book # E0P-002

Matrix Soil Start Date 07/24/08 Time 10:40 End Date 07/24/08 Time 11:35

PREPARATION BATCH # PCG016S

Sample Prep ID	Lab Sample ID	Sample Amount (g)	Dilution Volume (ml)	Extract Volume (ml)	Notes
*01	PCG016SB	10.000g	100 ml	100ml	
*02	PCG016SL				
*03	PCG016SC				
*04	G195-02				
*05	-04				
*06	-05				
*07	-06				
*08	-07				
*09	-08				
*10	-09				
*11	-12				
*12	-14				
*13	~~G19~~ lm 7/24/08				
*14	G237-02				
*15	-03				
*16	-04				
*17	05				
*18	-04D				Not evaluated.
*19	-04M				
*20	G225-02				
*21	-03				
*22	-04				
*23	-05				
*24	G225-05D				
*25	G225-05M				Error lm 7/24/08

lm 7/28/08

Standards	ID	Amount Added (ml)
Acetate		
Butyrate		
Lactate		
Propionate		
Pyruvate		
Perchlorate MS/LCS	SWBB-02-1126	100 2.5 mL

Reagent	Lot # / ID
H_2SO_4	
Nanopure	DI H2O

Legend:

Color	Texture	Clarity	Artifacts
Bu = Blue Bl = Black	Cs = Coarse	Cr = Clear	Rk = Rocks
Bn = Brown Gn = Green	Md = Medium	Cy = Cloudy	Sl = Shale
Og = Orange Rd = Red	Fn = Fine	Td = turbid	Vg= Vegetation
Yw = Yellow			

Comments:

Prepared By: lm / ed

Standard Added By: lm / ed

Checked By:

EMAX LABORATORIES, INC. 1835 W. 205th St. Torrance, CA 90501

LABORATORY REPORT FOR

TETRA TECH, INC.

LMC BEAUMONT SITE 1

METHOD 3520C/3550B/8082
PCBs

SDG#: 08G195

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G195

METHOD 3520C/3550B/8082
PCBs

One (1) water and nine (9) soil samples were received on 07/18/08 for PCBs analysis by Method 3520C/3550B/8082 in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Instrument Performance and Calibration**

   Initial calibration was calibrated for PCB-1016, PCB-1254 and PCB-1260, all RSDs were within 20%. All continue calibrations were analyzed at 20 samples interval and all recoveries were within 85-115%.

3. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   All recoveries were within QC limits.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample G195-14 was spiked. All recoveries were within QC limit.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
PCBs

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1

SDG NO. : 08G195
Instrument ID : GCT008

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	CPG029WB	1	NA	07/23/0811:51	07/21/0813:30	SG23007A	SG23006A	CPG029W	Method Blank
LCS1W	60G029WL	1	NA	07/23/0812:44	07/21/0813:30	SG23010A	SG23006A	CPG029W	Lab Control Sample (LCS)
LCD1W	60G029WC	1	NA	07/23/0813:01	07/21/0813:30	SG23011A	SG23006A	CPG029W	LCS Duplicate
H-EB7182008	G195-01	1	NA	07/23/0818:34	07/21/0813:30	SG23030A	SG23020A	CPG029W	Field Sample

SOIL

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1S	60G034SB	1	NA	07/24/0820:18	07/24/0815:00	SG24023A	SG24020A	60G034S	Method Blank
LCS1S	60G034SL	1	NA	07/24/0820:35	07/24/0815:00	SG24024A	SG24020A	60G034S	Lab Control Sample (LCS)
LCD1S	60G034SC	1	NA	07/24/0820:53	07/24/0815:00	SG24025A	SG24020A	60G034S	LCS Duplicate
H-T11-0.5	G195-02	1	4.5	07/24/0821:10	07/24/0815:00	SG24026A	SG24020A	60G034S	Field Sample
H-T11-5.0	G195-04	1	12.7	07/24/0821:28	07/24/0815:00	SG24027A	SG24020A	60G034S	Field Sample
H-T11-10.0	G195-05	1	6.5	07/24/0821:45	07/24/0815:00	SG24028A	SG24020A	60G034S	Field Sample
H-T11-10.0DUP	G195-06	1	5.9	07/24/0822:03	07/24/0815:00	SG24029A	SG24020A	60G034S	Field Sample
H-T5-0.5	G195-07	1	3.8	07/24/0822:20	07/24/0815:00	SG24030A	SG24020A	60G034S	Field Sample
H-T5-0.5DUP	G195-08	1	3.7	07/24/0822:38	07/24/0815:00	SG24031A	SG24020A	60G034S	Field Sample
H-T5-2.5	G195-09	1	8.4	07/24/0822:55	07/24/0815:00	SG24032A	SG24020A	60G034S	Field Sample
H-T5-2.5DL	G195-09T	10	8.4	07/29/0815:22	07/24/0815:00	SG29012A	SG29010A	60G034S	Diluted Sample
H-T5-6.0	G195-12	1	14.9	07/24/0823:13	07/24/0815:00	SG24033A	SG24020A	60G034S	Field Sample
H-T5-12.0	G195-14	1	13.6	07/24/0823:30	07/24/0815:00	SG24034A	SG24020A	60G034S	Field Sample
H-T5-12.0MS	G195-14M	1	13.6	07/24/0823:47	07/24/0815:00	SG24035A	SG24020A	60G034S	Matrix Spike Sample (MS)
H-T5-12.0MSD	G195-14S	1	13.6	07/25/0800:05	07/24/0815:00	SG24036A	SG24020A	60G034S	MS Duplicate (MSD)

FN - Filename
% Moist - Percent Moisture

2005

SAMPLE RESULTS

METHOD 3520C/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/21/08 13:30
Sample ID: H-EB7182008	Date Analyzed: 07/23/08 18:34
Lab Samp ID: G195-01	Dilution Factor: 1
Lab File ID: SG23030A	Matrix : WATER
Ext Btch ID: CPG029W	% Moisture : NA
Calib. Ref.: SG23020A	Instrument ID : GCT008

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
PCB-1016	(ND) | ND	1.0	0.50 | 0.50
PCB-1221	(ND) | ND	1.0	0.50 | 0.50
PCB-1232	(ND) | ND	1.0	0.50 | 0.50
PCB-1242	(ND) | ND	1.0	0.50 | 0.50
PCB-1248	(ND) | ND	1.0	0.50 | 0.50
PCB-1254	(ND) | ND	1.0	0.50 | 0.50
PCB-1260	(ND) | ND	1.0	0.50 | 0.50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(104) | 93	30-140
DECACHLOROBIPHENYL	(104) | 98	40-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client	: TETRA TECH, INC.	Date Collected:	07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G195	Date Extracted:	07/24/08 15:00
Sample ID:	H-T11-0.5	Date Analyzed:	07/24/08 21:10
Lab Samp ID:	G195-02	Dilution Factor:	1
Lab File ID:	SG24026A	Matrix :	SOIL
Ext Btch ID:	60G034S	% Moisture :	4.5
Calib. Ref.:	SG24020A	Instrument ID :	GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	52	21 | 21
PCB-1221	(ND) | ND	52	21 | 21
PCB-1232	(ND) | ND	52	21 | 21
PCB-1242	(ND) | ND	52	21 | 21
PCB-1248	(ND) | ND	52	21 | 21
PCB-1254	(ND) | ND	52	21 | 21
PCB-1260	(ND) | ND	52	21 | 21

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(99) | 89	10-160
DECACHLOROBIPHENYL	(108) | 103	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/24/08 15:00
Sample ID: H-T11-5.0	Date Analyzed: 07/24/08 21:28
Lab Samp ID: G195-04	Dilution Factor: 1
Lab File ID: SG24027A	Matrix : SOIL
Ext Btch ID: 60G034S	% Moisture : 12.7
Calib. Ref.: SG24020A	Instrument ID : GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	57	23 | 23
PCB-1221	(ND) | ND	57	23 | 23
PCB-1232	(ND) | ND	57	23 | 23
PCB-1242	(ND) | ND	57	23 | 23
PCB-1248	(ND) | ND	57	23 | 23
PCB-1254	(ND) | ND	57	23 | 23
PCB-1260	(ND) | ND	57	23 | 23

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(98) | 93	10-160
DECACHLOROBIPHENYL	(108) | 102	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client	: TETRA TECH, INC.	Date Collected:	07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G195	Date Extracted:	07/24/08 15:00
Sample ID:	H-T11-10.0	Date Analyzed:	07/24/08 21:45
Lab Samp ID:	G195-05	Dilution Factor:	1
Lab File ID:	SG24028A	Matrix :	SOIL
Ext Btch ID:	60G034S	% Moisture :	6.5
Calib. Ref.:	SG24020A	Instrument ID :	GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	53	21 | 21
PCB-1221	(ND) | ND	53	21 | 21
PCB-1232	(ND) | ND	53	21 | 21
PCB-1242	(ND) | ND	53	21 | 21
PCB-1248	(ND) | ND	53	21 | 21
PCB-1254	(ND) | ND	53	21 | 21
PCB-1260	(ND) | ND	53	21 | 21

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(99) | 93	10-160
DECACHLOROBIPHENYL	(110) | 103	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/24/08 15:00
Sample ID: H-T11-10.0DUP	Date Analyzed: 07/24/08 22:03
Lab Samp ID: G195-06	Dilution Factor: 1
Lab File ID: SG24029A	Matrix : SOIL
Ext Btch ID: 60G034S	% Moisture : 5.9
Calib. Ref.: SG24020A	Instrument ID : GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	53	21 | 21
PCB-1221	(ND) | ND	53	21 | 21
PCB-1232	(ND) | ND	53	21 | 21
PCB-1242	(ND) | ND	53	21 | 21
PCB-1248	(ND) | ND	53	21 | 21
PCB-1254	(ND) | ND	53	21 | 21
PCB-1260	(ND) | ND	53	21 | 21

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(98) | 90	10-160
DECACHLOROBIPHENYL	(111) | 104	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
 * Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/24/08 15:00
Sample ID: H-T5-0.5	Date Analyzed: 07/24/08 22:20
Lab Samp ID: G195-07	Dilution Factor: 1
Lab File ID: SG24030A	Matrix : SOIL
Ext Btch ID: 60G034S	% Moisture : 3.8
Calib. Ref.: SG24020A	Instrument ID : GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND)|ND	52	21|21
PCB-1221	(ND)|ND	52	21|21
PCB-1232	(ND)|ND	52	21|21
PCB-1242	(ND)|ND	52	21|21
PCB-1248	(ND)|ND	52	21|21
PCB-1254	(ND)|ND	52	21|21
PCB-1260	(44J)|41J	52	21|21

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(104)|94	10-160
DECACHLOROBIPHENYL	(109)|106	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/24/08 15:00
Sample ID: H-T5-0.5DUP	Date Analyzed: 07/24/08 22:38
Lab Samp ID: G195-08	Dilution Factor: 1
Lab File ID: SG24031A	Matrix : SOIL
Ext Btch ID: 60G034S	% Moisture : 3.7
Calib. Ref.: SG24020A	Instrument ID : GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	52	21 | 21
PCB-1221	(ND) | ND	52	21 | 21
PCB-1232	(ND) | ND	52	21 | 21
PCB-1242	(ND) | ND	52	21 | 21
PCB-1248	(ND) | ND	52	21 | 21
PCB-1254	(ND) | ND	52	21 | 21
PCB-1260	(170) | 170	52	21 | 21

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(103) | 96	10-160
DECACHLOROBIPHENYL	(109) | 108	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client	: TETRA TECH, INC.	Date Collected:	07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G195	Date Extracted:	07/24/08 15:00
Sample ID:	H-T5-2.5	Date Analyzed:	07/24/08 22:55
Lab Samp ID:	G195-09	Dilution Factor:	1
Lab File ID:	SG24032A	Matrix :	SOIL
Ext Btch ID:	60G034S	% Moisture :	8.4
Calib. Ref.:	SG24020A	Instrument ID :	GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	55	22 | 22
PCB-1221	(ND) | ND	55	22 | 22
PCB-1232	(ND) | ND	55	22 | 22
PCB-1242	(ND) | ND	55	22 | 22
PCB-1248	(ND) | ND	55	22 | 22
PCB-1254	(1100E) | 980E	55	22 | 22
PCB-1260	(ND) | ND	55	22 | 22

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(100) | 91	10-160
DECACHLOROBIPHENYL	(111) | 111	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client	: TETRA TECH, INC.	Date Collected:	07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G195	Date Extracted:	07/24/08 15:00
Sample ID:	H-T5-2.5DL	Date Analyzed:	07/29/08 15:22
Lab Samp ID:	G195-09T	Dilution Factor:	10
Lab File ID:	SG29012A	Matrix :	SOIL
Ext Btch ID:	60G034S	% Moisture :	8.4
Calib. Ref.:	SG29010A	Instrument ID :	GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	550	220 | 220
PCB-1221	(ND) | ND	550	220 | 220
PCB-1232	(ND) | ND	550	220 | 220
PCB-1242	(ND) | ND	550	220 | 220
PCB-1248	(ND) | ND	550	220 | 220
PCB-1254	(1400) | 1200	550	220 | 220
PCB-1260	(ND) | ND	550	220 | 220

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(100) | 89	10-160
DECACHLOROBIPHENYL	115 | (117)	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client	: TETRA TECH, INC.	Date Collected:	07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G195	Date Extracted:	07/24/08 15:00
Sample ID:	H-T5-6.0	Date Analyzed:	07/24/08 23:13
Lab Samp ID:	G195-12	Dilution Factor:	1
Lab File ID:	SG24033A	Matrix :	SOIL
Ext Btch ID:	60G034S	% Moisture :	14.9
Calib. Ref.:	SG24020A	Instrument ID :	GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	59	24 | 24
PCB-1221	(ND) | ND	59	24 | 24
PCB-1232	(ND) | ND	59	24 | 24
PCB-1242	(ND) | ND	59	24 | 24
PCB-1248	(ND) | ND	59	24 | 24
PCB-1254	(ND) | ND	59	24 | 24
PCB-1260	(ND) | ND	59	24 | 24

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(95) | 87	10-160
DECACHLOROBIPHENYL	(112) | 106	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/24/08 15:00
Sample ID: H-T5-12.0	Date Analyzed: 07/24/08 23:30
Lab Samp ID: G195-14	Dilution Factor: 1
Lab File ID: SG24034A	Matrix : SOIL
Ext Btch ID: 60G034S	% Moisture : 13.6
Calib. Ref.: SG24020A	Instrument ID : GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	58	23 | 23
PCB-1221	(ND) | ND	58	23 | 23
PCB-1232	(ND) | ND	58	23 | 23
PCB-1242	(ND) | ND	58	23 | 23
PCB-1248	(ND) | ND	58	23 | 23
PCB-1254	(ND) | ND	58	23 | 23
PCB-1260	(ND) | ND	58	23 | 23

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(97) | 91	10-160
DECACHLOROBIPHENYL	(108) | 102	30-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

QC SUMMARIES

METHOD 3520C/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/21/08
Batch No. : 08G195	Date Extracted: 07/21/08 13:30
Sample ID: MBLK1W	Date Analyzed: 07/23/08 11:51
Lab Samp ID: CPG029WB	Dilution Factor: 1
Lab File ID: SG23007A	Matrix : WATER
Ext Btch ID: CPG029W	% Moisture : NA
Calib. Ref.: SG23006A	Instrument ID : GCT008

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
PCB-1016	(ND) | ND	1.0	0.50 | 0.50
PCB-1221	(ND) | ND	1.0	0.50 | 0.50
PCB-1232	(ND) | ND	1.0	0.50 | 0.50
PCB-1242	(ND) | ND	1.0	0.50 | 0.50
PCB-1248	(ND) | ND	1.0	0.50 | 0.50
PCB-1254	(ND) | ND	1.0	0.50 | 0.50
PCB-1260	(ND) | ND	1.0	0.50 | 0.50

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(91) | 84	30-130
DECACHLOROBIPHENYL	(100) | 93	40-150

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3520C/8082

MATRIX: WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	CPG029WB	60G029WL	60G029WC		
LAB FILE ID:	SG23007A	SG23010A	SG23011A		
DATE EXTRACTED:	07/21/0813:30	07/21/0813:30	07/21/0813:30	DATE COLLECTED:	NA
DATE ANALYZED:	07/23/0811:51	07/23/0812:44	07/23/0813:01	DATE RECEIVED:	07/21/08
PREP. BATCH:	CPG029W	CPG029W	CPG029W		
CALIB. REF:	SG23006A	SG23006A	SG23006A		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
PCB-1016	(ND) | ND	5.00	(5.05) | 4.67	(101) | 93	5.00	(5.16) | 4.30	(103) | 86	(2) | 8	50-130	30
PCB-1260	(ND) | ND	5.00	(4.77) | 4.77	(95) | 95	5.00	(5.14) | 4.73	(103) | 95	(7) | 1	70-150	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
Tetrachloro-m-xylene	0.400	(0.430) | 0.368	(108) | 92	0.400	(0.365) | 0.307	(91) | 77	30-130
Decachlorobiphenyl	0.400	(0.408) | 0.381	(102) | 95	0.400	(0.400) | 0.374	(100) | 94	40-150

LDCG

METHOD 3550B/8082
PCBs

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/24/08
Batch No. : 08G195	Date Extracted: 07/24/08 15:00
Sample ID: MBLK1S	Date Analyzed: 07/24/08 20:18
Lab Samp ID: 60G034SB	Dilution Factor: 1
Lab File ID: SG24023A	Matrix : SOIL
Ext Btch ID: 60G034S	% Moisture : NA
Calib. Ref.: SG24020A	Instrument ID : GCT008

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
PCB-1016	(ND) | ND	50	20 | 20
PCB-1221	(ND) | ND	50	20 | 20
PCB-1232	(ND) | ND	50	20 | 20
PCB-1242	(ND) | ND	50	20 | 20
PCB-1248	(ND) | ND	50	20 | 20
PCB-1254	(ND) | ND	50	20 | 20
PCB-1260	(ND) | ND	50	20 | 20

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(108) | 97	40-130
DECACHLOROBIPHENYL	(115) | 108	40-160

Left of | is related to first column ; Right of | related to second column
Final result indicated by ( )
* Out side of QC Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3550B/8082

MATRIX: SOIL
% MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID:	MBLK1S		
LAB SAMP ID:	60G034SB	60G034SL	60G034SC
LAB FILE ID:	SG24023A	SG24024A	SG24025A
DATE EXTRACTED:	07/24/0815:00	07/24/0815:00	07/24/0815:00
DATE ANALYZED:	07/24/0820:18	07/24/0820:35	07/24/0820:53
PREP. BATCH:	60G034S	60G034S	60G034S
CALIB. REF:	SG24020A	SG24020A	SG24020A

DATE COLLECTED: NA
DATE RECEIVED: 07/24/08

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
PCB-1016	(ND) | ND	167	184 | (188)	110 | (113)	167	(188) | 188	(113) | 113	(2) | 0	50-130	50
PCB-1260	(ND) | ND	167	175 | (185)	105 | (111)	167	174 | (183)	104 | (110)	1 | (1)	70-150	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
Tetrachloro-m-xylene	13.3	(14.6) | 13.5	(110) | 101	13.3	(14.6) | 13.4	(109) | 100	40-130
Decachlorobiphenyl	13.3	(15.4) | 14.4	(115) | 108	13.3	(15.0) | 14.0	(112) | 105	40-160

5B4.0

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3550B/8082

MATRIX: SOIL
% MOISTURE: 13.6

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	H-T5-12.0				
LAB SAMP ID:	G195-14	G195-14M	G195-14S		
LAB FILE ID:	SG24034A	SG24035A	SG24036A		
DATE EXTRACTED:	07/24/0815:00	07/24/0815:00	07/24/0815:00	DATE COLLECTED:	07/18/08
DATE ANALYZED:	07/24/0823:30	07/24/0823:47	07/25/0800:05	DATE RECEIVED:	07/18/08
PREP. BATCH:	60G034S	60G034S	60G034S		
CALIB. REF:	SG24020A	SG24020A	SG24020A		

ACCESSION:

PARAMETER	SMPL RSLT (ug/kg)	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	SPIKE AMT (ug/kg)	MSD RSLT (ug/kg)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
PCB-1016	(ND) | ND	193	183 | (192)	95 | (100)	193	187 | (194)	97 | (101)	2 | (1)	20-160	50
PCB-1260	(ND) | ND	193	198 | (201)	103 | (104)	193	(198) | 196	(103) | 102	(0) | 3	20-160	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	SPIKE AMT (ug/kg)	MSD RSLT (ug/kg)	MSD % REC	QC LIMIT (%)
Tetrachloro-m-xylene	15.4	(15.1) | 13.8	(98) | 89	15.4	(15.4) | 14.1	(100) | 91	10-160
Decachlorobiphenyl	15.4	(16.9) | 15.9	(110) | 103	15.4	(17.0) | 16.0	(110) | 104	30-150

* : Outside of QC limits

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INITIAL CALIBRATIONS

INITIAL CALIBRATION
METHOD EPA 8082

Lab Name : EMAX Inc
Instrument ID : GCTO08 HP-5890
GC Column : RTX-CLPEST
Column size ID : .32MMX30M
LFID & Datetime: SF16030A 06/16/08 20:58
LFID & Datetime: SF16031A 06/16/08 21:16
LFID & Datetime: SF16032A 06/16/08 21:33
LFID & Datetime: SF16033A 06/16/08 21:51
LFID & Datetime: SF16034A 06/16/08 22:08
LFID & Datetime: SF16035A 06/16/08 22:26
CONC UNIT: PPB

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	2.50X	5.00X	7.50X	10.00X	15.00X	MEAN	%RSD
PCB1016-1	20.00	1284.70	1602.86	1756.84	1718.83	1683.89	1649.80	1616.151	10.6
PCB1016-2	20.00	2977.90	2801.74	2699.87	2922.71	2519.18	2413.22	2722.435	8.2
PCB1016-3	20.00	7027.25	6635.92	6641.29	6373.18	6162.29	5896.58	6456.084	6.2
PCB1016-4	20.00	5358.55	4024.86	4014.23	4098.54	3603.31	3511.53	4101.837	16.1
PCB1016-5	20.00	2080.25	1914.00	2273.98	2125.73	1972.63	2226.12	2098.785	6.7
PCB1260-1	20.00	3604.30	3432.90	3323.22	3161.09	3045.59	3013.67	3263.463	7.1
PCB1260-2	20.00	7367.80	6454.72	6236.48	5739.76	5560.46	5286.19	6107.569	12.3
PCB1260-3	20.00	7676.10	6920.96	6408.55	6084.22	5827.52	5576.63	6415.662	12.1
PCB1260-4	20.00	8046.00	8151.92	8051.49	7696.17	7459.73	6712.52	7686.305	7.1
PCB1260-5	20.00	4320.35	4353.02	4200.52	4047.51	3818.91	3560.54	4050.142	7.7
SURROGATE	X	1.00X	2.50X	5.00X	7.50X	10.00X	15.00X	MEAN	%RSD
TCX	5.00	11435	12994	13394	13504	13459	13062	12974.7	6.0
DCB	5.00	18169	17424	16862	16302	15769	14867	16565.4	7.1

6/18/08

INITIAL CALIBRATION
METHOD EPA 8082

Lab Name : EMAX Inc
Instrument ID : GCT008 HP-5890
GC Column : RTX-CLPESTII
Column size ID : .32MMX30M
LFID & Datetime: SF16030B 06/16/08 20:58
LFID & Datetime: SF16031B 06/16/08 21:16
LFID & Datetime: SF16032B 06/16/08 21:33
LFID & Datetime: SF16033B 06/16/08 21:51
LFID & Datetime: SF16034B 06/16/08 22:08
LFID & Datetime: SF16035B 06/16/08 22:26
CONC UNIT: PPB

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	2.50X	5.00X	7.50X	10.00X	15.00X	MEAN	%RSD
PCB1016-1	20.00	1463.25	1459.20	1464.11	1385.63	1314.78	1212.32	1383.215	7.4
PCB1016-2	20.00	3062.35	2329.34	2611.16	2450.67	2328.36	2126.83	2484.784	13.1
PCB1016-3	20.00	5261.10	4657.04	4415.02	4152.02	3956.14	3638.95	4346.711	13.1
PCB1016-4	20.00	2271.80	1962.76	1903.01	1833.89	1699.44	1555.79	1871.115	13.1
PCB1016-5	20.00	1700.95	1522.10	1646.08	1542.98	1462.14	1341.49	1535.957	8.4
PCB1260-1	20.00	4867.70	4059.86	3911.78	3688.00	3495.54	3252.72	3879.267	14.5
PCB1260-2	20.00	4397.35	3816.28	3548.89	3306.31	3113.25	2835.97	3503.009	15.8
PCB1260-3	20.00	3146.15	2774.86	2595.32	2461.63	2326.10	2133.85	2572.985	13.9
PCB1260-4	20.00	6864.80	6354.18	6033.34	5766.81	5546.67	5149.90	5952.616	10.2
PCB1260-5	20.00	4873.45	4580.92	4441.89	4298.65	4136.65	3852.40	4363.993	8.1
SURROGATE	X	1.00X	2.50X	5.00X	7.50X	10.00X	15.00X	MEAN	%RSD
TCX	5.00	9558.80	9947.92	10127.00	10152.08	10053.80	9514.17	9892.295	2.9
DCB	5.00	14664	13762	12985	12365	11873	10901	12758.4	10.6

6/18/08

INITIAL CALIBRATION
METHOD EPA 8082

Lab Name : EMAX Inc
Instrument ID : GCT008 HP-5890
GC Column : RTX-CLPEST
Column size ID : .32MMX30M
LFID & Datetime: SF16037A 06/16/08 23:01
LFID & Datetime: SF16038A 06/16/08 23:18
LFID & Datetime: SF16039A 06/16/08 23:36
LFID & Datetime: SF16040A 06/16/08 23:53
LFID & Datetime: SF16041A 06/17/08 00:11
LFID & Datetime: SF16042A 06/17/08 00:28
CONC UNIT: PPB

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	2.50X	5.00X	7.50X	10.00X	15.00X	MEAN	%RSD
PCB1254-1	20.00	6936.95	7128.00	6358.67	5954.82	6371.87	5754.09	6417.400	8.3
PCB1254-2	20.00	5074.25	5149.14	4763.73	4497.43	4620.49	4264.53	4728.263	7.2
PCB1254-3	20.00	4281.25	4265.84	4020.48	3816.73	3943.12	3618.30	3990.953	6.5
PCB1254-4	20.00	3842.15	3837.36	3713.98	3551.92	3728.65	3427.03	3683.516	4.5
PCB1254-5	20.00	4757.00	4754.00	4554.50	4399.49	4417.62	4477.38	4559.998	3.5

6/18/08

INITIAL CALIBRATION
METHOD EPA 8082

Lab Name : EMAX Inc
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
LFID & Datetime: SF16037B 06/16/08 23:01
LFID & Datetime: SF16038B 06/16/08 23:18
LFID & Datetime: SF16039B 06/16/08 23:36
LFID & Datetime: SF16040B 06/16/08 23:53
LFID & Datetime: SF16041B 06/17/08 00:11
LFID & Datetime: SF16042B 06/17/08 00:28
CONC UNIT: PPB

COMPOUND	CONC X	CALIBRATION FACTORS (AREA or HEIGHT)/UNIT 1.00X	2.50X	5.00X	7.50X	10.00X	15.00X	MEAN	%RSD
PCB1254-1	20.00	2834.10	2572.68	2292.33	2138.84	2045.39	1909.66	2298.833	15.1
PCB1254-2	20.00	2807.05	2800.30	2626.80	2262.87	2089.56	1935.23	2420.303	15.5
PCB1254-3	20.00	4370.45	4028.50	3717.32	3532.38	3397.97	3204.73	3708.558	11.6
PCB1254-4	20.00	3275.40	3047.44	2830.85	2653.01	2728.25	2582.81	2852.961	9.2
PCB1254-5	20.00	4220.65	3956.90	3679.56	3519.27	3406.56	3228.91	3668.642	10.0

6/18/08

SECOND SOURCE VERIFICATION

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032A 06/16/2008 21:33
Conc Cont LFID & Datetime: SF16036A 06/16/2008 22:43
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			570.662	14		15
PCB1260				500.0			523.365	5		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	1.025	0.974	1.076	25.0	12974.7	339065	26.13	5		15
DCB	8.433	8.358	8.508	25.0	16565.4	426255	25.73	3		15

6/17/08

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CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Column : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032B 06/16/2008 21:33
Conc Cont LFID & Datetime: SF16036B 06/16/2008 22:43
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			547.158	9		15
PCB1260				500.0			554.055	11		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
TCX	1.233	1.204	1.262	25.0	9892.3	256361	25.92	4		15
DCB	11.292	11.249	11.335	25.0	12758.4	309649	24.27	-3		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO08 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039A 06/16/2008 23:36
Conc Cont LFID & Datetime: SF16043A 06/17/2008 00:45
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			528.503	6		15

6/18/08

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039B 06/16/2008 23:36
Conc Cont LFID & Datetime: SF16043B 06/17/2008 00:45
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			509.446	2		15

6/18/08

DAILY CALIBRATIONS

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Column : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032A 06/16/2008 21:33
Conc Cont LFID & Datetime: SG23006A 07/23/2008 11:34
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			552.852	11		15
PCB1260				500.0			494.303	1		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	0.892	0.841	0.943	25.0	12974.7	347419	26.78	7		15
DCB	7.658	7.583	7.733	25.0	16565.4	447222	27.00	8		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO08 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032B 06/16/2008 21:33
Conc Cont LFID & Datetime: SG23006B 07/23/2008 11:34
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			540.312	8		15
PCB1260				500.0			484.600	3		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	1.142	1.113	1.171	25.0	9892.3	245486	24.82	-1		15
DCB	10.833	10.790	10.876	25.0	12758.4	318052	24.93	-0		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Column : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032A 06/16/2008 21:33
Conc Cont LFID & Datetime: SG23020A 07/23/2008 15:39
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			544.726	9		15
PCB1260				500.0			531.960	6		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	0.883	0.832	0.934	25.0	12974.7	382368	29.47	18	*	15
DCB	7.642	7.567	7.717	25.0	16565.4	472707	28.54	14		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032B 06/16/2008 21:33
Conc Cont LFID & Datetime: SG23020B 07/23/2008 15:39
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			510.667	2		15
PCB1260				500.0			474.559	5		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	1.133	1.104	1.162	25.0	9892.3	253958	25.67	3		15
DCB	10.817	10.774	10.860	25.0	12758.4	340487	26.69	7		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO08 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032A 06/16/2008 21:33
Conc Cont LFID & Datetime: SG23036A 07/23/2008 20:18
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			563.283	13		15
PCB1260				500.0			509.778	2		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	0.883	0.832	0.934	25.0	12974.7	362771	27.96	12		15
DCB	7.642	7.567	7.717	25.0	16565.4	485783	29.33	17	*	15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032B 06/16/2008 21:33
Conc Cont LFID & Datetime: SG23036B 07/23/2008 20:18
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			545.298	9		15
PCB1260				500.0			508.827	2		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
TCX	1.133	1.104	1.162	25.0	9892.3	261406	26.42	6		15
DCB	10.808	10.765	10.851	25.0	12758.4	348659	27.33	9		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032A 06/16/2008 21:33
Conc Cont LFID & Datetime: SG24020A 07/24/2008 19:26
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			549.705	10		15
PCB1260				500.0			461.704	8		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	0.883	0.832	0.934	25.0	12974.7	382343	29.47	18	*	15
DCB	7.617	7.542	7.692	25.0	16565.4	485278	29.30	17	*	15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO08 HP-5890
GC Column : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032B 06/16/2008 21:33
Conc Cont LFID & Datetime: SG24020B 07/24/2008 19:26
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			552.566	11		15
PCB1260				500.0			484.500	3		15
SURROGATE	**MINUTES**	**FROM**	**TO**	**TRUECON**	**CF**	**AREA**	**CONC**	**%D**	**QL**	**LIMITS**
TCX	1.133	1.104	1.162	25.0	9892.3	260122	26.30	5		15
DCB	10.783	10.740	10.826	25.0	12758.4	348268	27.30	9		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039A 06/16/2008 23:36
Conc Cont LFID & Datetime: SG24021A 07/24/2008 19:43
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			525.261	5		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039B 06/16/2008 23:36
Conc Cont LFID & Datetime: SG24021B 07/24/2008 19:43
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			441.035	12		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032A 06/16/2008 21:33
Conc Cont LFID & Datetime: SG24040A 07/25/2008 01:15
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			560.186	12		15
PCB1260				500.0			529.032	6		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	0.883	0.832	0.934	25.0	12974.7	356462	27.47	10		15
DCB	7.608	7.533	7.683	25.0	16565.4	477058	28.80	15	*	15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032B 06/16/2008 21:33
Conc Cont LFID & Datetime: SG24040B 07/25/2008 01:15
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			541.440	8		15
PCB1260				500.0			500.940	0		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	1.125	1.096	1.154	25.0	9892.3	258086	26.09	4		15
DCB	10.775	10.732	10.818	25.0	12758.4	339387	26.60	6		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039A 06/16/2008 23:36
Conc Cont LFID & Datetime: SG24041A 07/25/2008 01:32
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			511.857	2		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039B 06/16/2008 23:36
Conc Cont LFID & Datetime: SG24041B 07/25/2008 01:32
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			477.443	5		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032A 06/16/2008 21:33
Conc Cont LFID & Datetime: SG29010A 07/29/2008 14:47
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			542.879	9		15
PCB1260				500.0			485.131	3		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	0.858	0.807	0.909	25.0	12974.7	356283	27.46	10		15
DCB	7.550	7.475	7.625	25.0	16565.4	488240	29.47	18	*	15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032B 06/16/2008 21:33
Conc Cont LFID & Datetime: SG29010B 07/29/2008 14:47
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			527.491	5		15
PCB1260				500.0			484.473	3		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	1.108	1.079	1.137	25.0	9892.3	258695	26.15	5		15
DCB	10.708	10.665	10.751	25.0	12758.4	354857	27.81	11		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039A 06/16/2008 23:36
Conc Cont LFID & Datetime: SG29011A 07/29/2008 15:04
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			486.966	3		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO08 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039B 06/16/2008 23:36
Conc Cont LFID & Datetime: SG29011B 07/29/2008 15:04
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			452.067	10		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO08 HP-5890
GC Column : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032A 06/16/2008 21:33
Conc Cont LFID & Datetime: SG29016A 07/29/2008 16:32
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			556.830	11		15
PCB1260				500.0			448.963	10		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	0.858	0.807	0.909	25.0	12974.7	359209	27.68	11		15
DCB	7.550	7.475	7.625	25.0	16565.4	488613	29.50	18	*	15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCT008 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16032B 06/16/2008 21:33
Conc Cont LFID & Datetime: SG29016B 07/29/2008 16:32
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1016				500.0			525.735	5		15
PCB1260				500.0			463.652	7		15
SURROGATE	MINUTES	FROM	TO	TRUECON	CF	AREA	CONC	%D	QL	LIMITS
TCX	1.108	1.079	1.137	25.0	9892.3	258454	26.13	5		15
DCB	10.708	10.665	10.751	25.0	12758.4	354600	27.79	11		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO08 HP-5890
GC Columm : RTX-CLPEST
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039A 06/16/2008 23:36
Conc Cont LFID & Datetime: SG29017A 07/29/2008 16:49
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			442.259	12		15

CONTINUE CALIBRATION
METHOD EPA 8082

Lab Name : EMAX
Instrument ID : GCTO08 HP-5890
GC Columm : RTX-CLPESTII
Column size ID : .32MMX30M
Mid Conc Init LFID & Datetime: SF16039B 06/16/2008 23:36
Conc Cont LFID & Datetime: SG29017B 07/29/2008 16:49
CONC UNIT : PPB

COMPOUND	RT MINUTES	RT WINDOW FROM	RT WINDOW TO	TRUE CONC	SUM CF	RESULT AREA	RESULT CONC	%D	QL	%D LIMITS
PCB1254				500.0			454.254	9		15

ANALYTICAL LOG

5051

ANALYSIS RUN LOG
for
PESTICIDES/PCBs

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A08- 21

Instrument No.: 8

Analytical Sequence: SF16

Method File: CP08F16, TD08F16, CR08F16, 6008F16

Analytical Batch: SF16011 / 5408F16, 4808F16

SOP #	Rev. #
☑ EMAX-8081	6
☑ EMAX-8082	2
☐ EMAX-608	0
☐ EMAX-CLP-PEST	
☐ EMAX-	

ICAL REFERENCE

ICAL ID	BATCH	DATE
CP08F16	SF16	06-16-2008
TD08F16, CR08F16	↓	↓
6008F16		
5408F16, 4808F16		
4208F16, 6208F16	↓	↓

STANDARDS ID		Conc (µg/L)
Hexane	47197	N.A.
PEM	SS1C-05-49-1	80 - 800
PEST ICAL	SS1B-05-96-2	160 - 320
PEST ICV	SS1B-05-96-1	200 - 2000
TOXA ICAL	SS1B-05-97-1	100 - 2000
TOXA ICV	SS1B-05-97-2	100 - 2000
CHLO ICAL	SS1B-05-94-2	100 - 2000
CHLO ICV	SS1B-05-94-3	100 - 2000
1660 ICAL	SS1B-05-99-1	100 - 2000
1660 ICV	SS1B-05-93-2	100 - 2000
1254 ICAL	SS1B-05-92-2	100 - 2000
1254 ICV	SS1B-05-93-3	100 - 2000

Column	(A) RTX CLPEST I (B) RTX CLPEST II

ELECTRONIC DATA ARCHIVAL

Location	Date
☑ EZC_4_Pesticides	
☐	

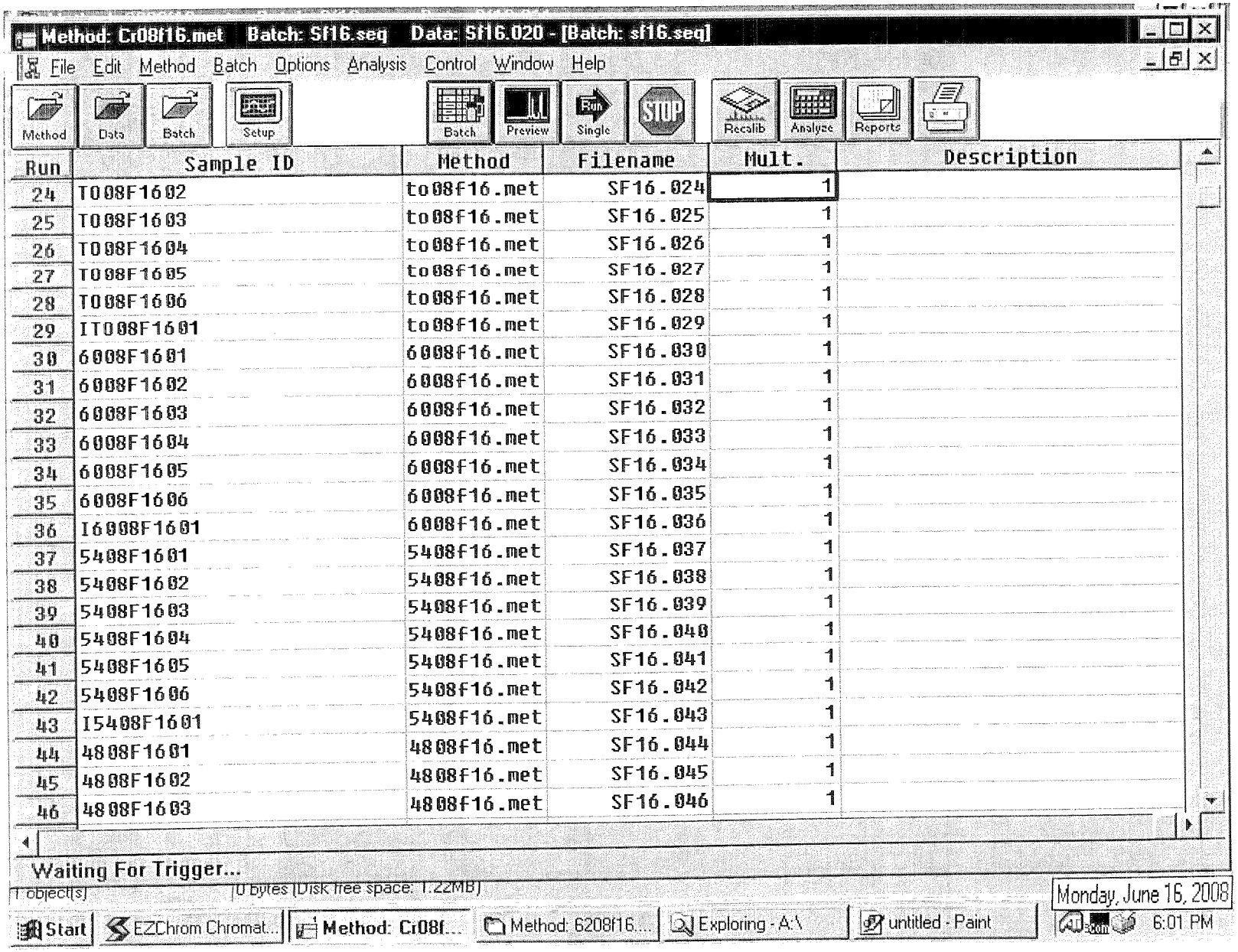
Analyzed By: [signature] Date: 06-16-2008

Date Disposed: Disposed By:

This page is checked during data review.

continuation:

1248	ICAL	SS1B-05-97-3	100 - 2000
1248	ICV	SS1B-05-98-1	
1242	ICAL	SS1B-05-90-3	
1242	ICV	SS1B-05-91-1	
1262	ICAL	SS1B-05-89-2	
1262	ICV	SS1B-05-98-2	
1221	ICAL	SS1B-05-84-2	
1232	ICAL	SS1B-05-88-2	
1268	ICAL	SS1B-05-89-3	
1016	ICAL	SS1B-05-98-3	
1260	ICAL	SS1B-05-94-1	↓


Method: Cr08f16.met Batch: Sf16.seq Data: Sf16.020 - [Batch: sf16.seq]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
24 | T008F1602 | to08f16.met | SF16.024 | 1
25 | T008F1603 | to08f16.met | SF16.025 | 1
26 | T008F1604 | to08f16.met | SF16.026 | 1
27 | T008F1605 | to08f16.met | SF16.027 | 1
28 | T008F1606 | to08f16.met | SF16.028 | 1
29 | IT008F1601 | to08f16.met | SF16.029 | 1
30 | 6008F1601 | 6008f16.met | SF16.030 | 1
31 | 6008F1602 | 6008f16.met | SF16.031 | 1
32 | 6008F1603 | 6008f16.met | SF16.032 | 1
33 | 6008F1604 | 6008f16.met | SF16.033 | 1
34 | 6008F1605 | 6008f16.met | SF16.034 | 1
35 | 6008F1606 | 6008f16.met | SF16.035 | 1
36 | I6008F1601 | 6008f16.met | SF16.036 | 1
37 | 5408F1601 | 5408f16.met | SF16.037 | 1
38 | 5408F1602 | 5408f16.met | SF16.038 | 1
39 | 5408F1603 | 5408f16.met | SF16.039 | 1
40 | 5408F1604 | 5408f16.met | SF16.040 | 1
41 | 5408F1605 | 5408f16.met | SF16.041 | 1
42 | 5408F1606 | 5408f16.met | SF16.042 | 1
43 | I5408F1601 | 5408f16.met | SF16.043 | 1
44 | 4808F1601 | 4808f16.met | SF16.044 | 1
45 | 4808F1602 | 4808f16.met | SF16.045 | 1
46 | 4808F1603 | 4808f16.met | SF16.046 | 1
Waiting For Trigger...
1 object(s) 0 bytes (Disk free space: 1.22MB)
Start EZChrom Chromat... Method: Cr08f... Method: 6208f16... Exploring - A:\ untitled - Paint
Monday, June 16, 2008 6:01 PM

ANALYSIS RUN LOG
for
PESTICIDES/PCBs

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A08- 21

Instrument No.: 8

Analytical Sequence: SG23

Method File: CP08F16, TD08F16, 6008F16

Analytical Batch: SG23004

SOP #	Rev. #
☑ EMAX-8081	6
☑ EMAX-8082	2
☐ EMAX-608	0
☐ EMAX-CLP-PEST	
☐ EMAX-	

ICAL REFERENCE

ICAL ID	BATCH	DATE
CP08F16	SF16	06-16-2008
TD08F16	↓	↓
6008F16		

STANDARDS ID		Conc (µg/L)
Hexane	47197	N.A.
PEM	SSIC-05-45-3	100 /100
PES ICAL	SSIB-05-95-2	80 /160 /800
TCX ICAL	SSIB-05-88-3	2000 /100
1616 ICAL	SSIB-05-99-1	2000 /100

Column: (A.) RTX CLPEST I (B.) RTX CLPEST II

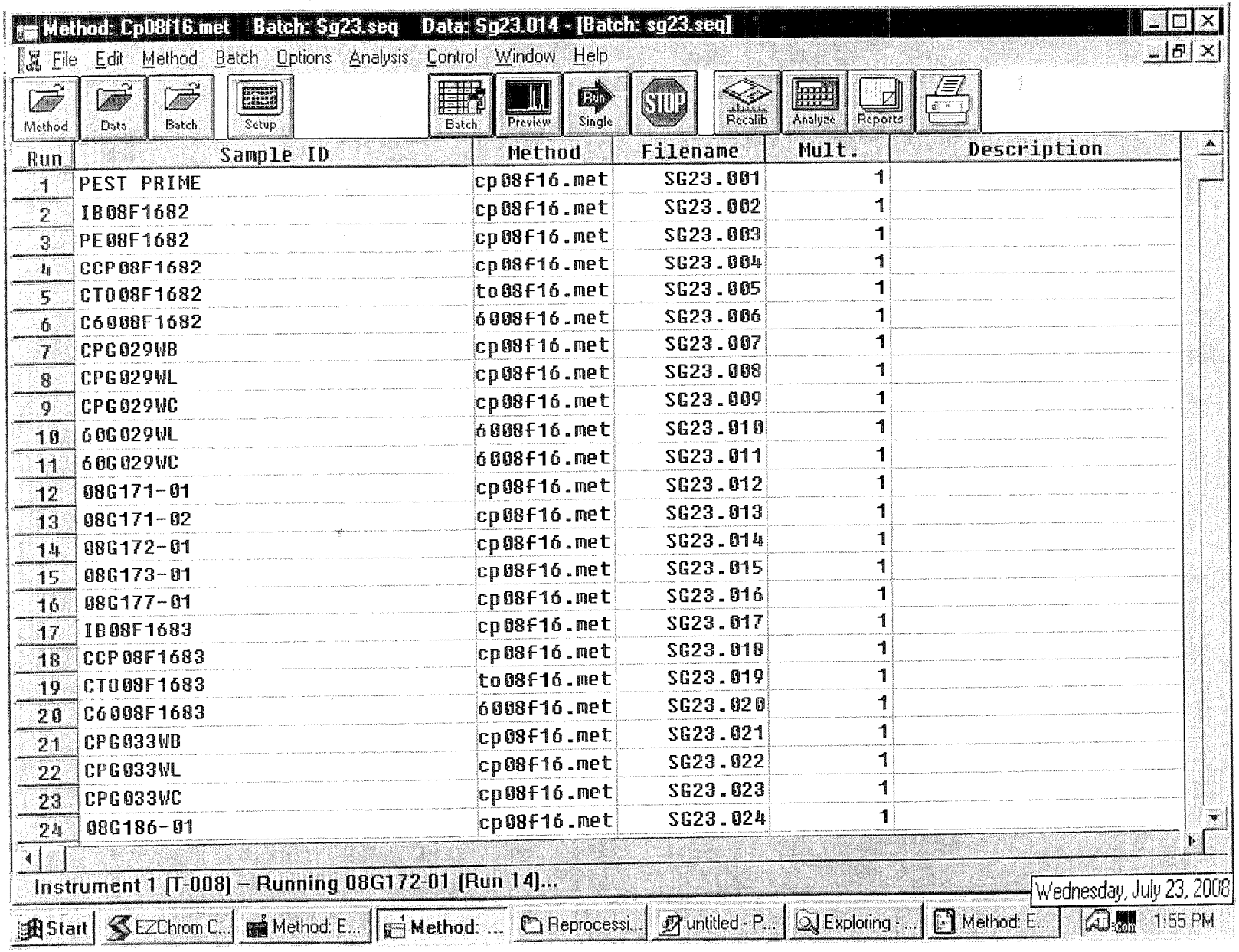
ELECTRONIC DATA ARCHIVAL

Location	Date
☐ EZC_4_Pesticides	
☐	

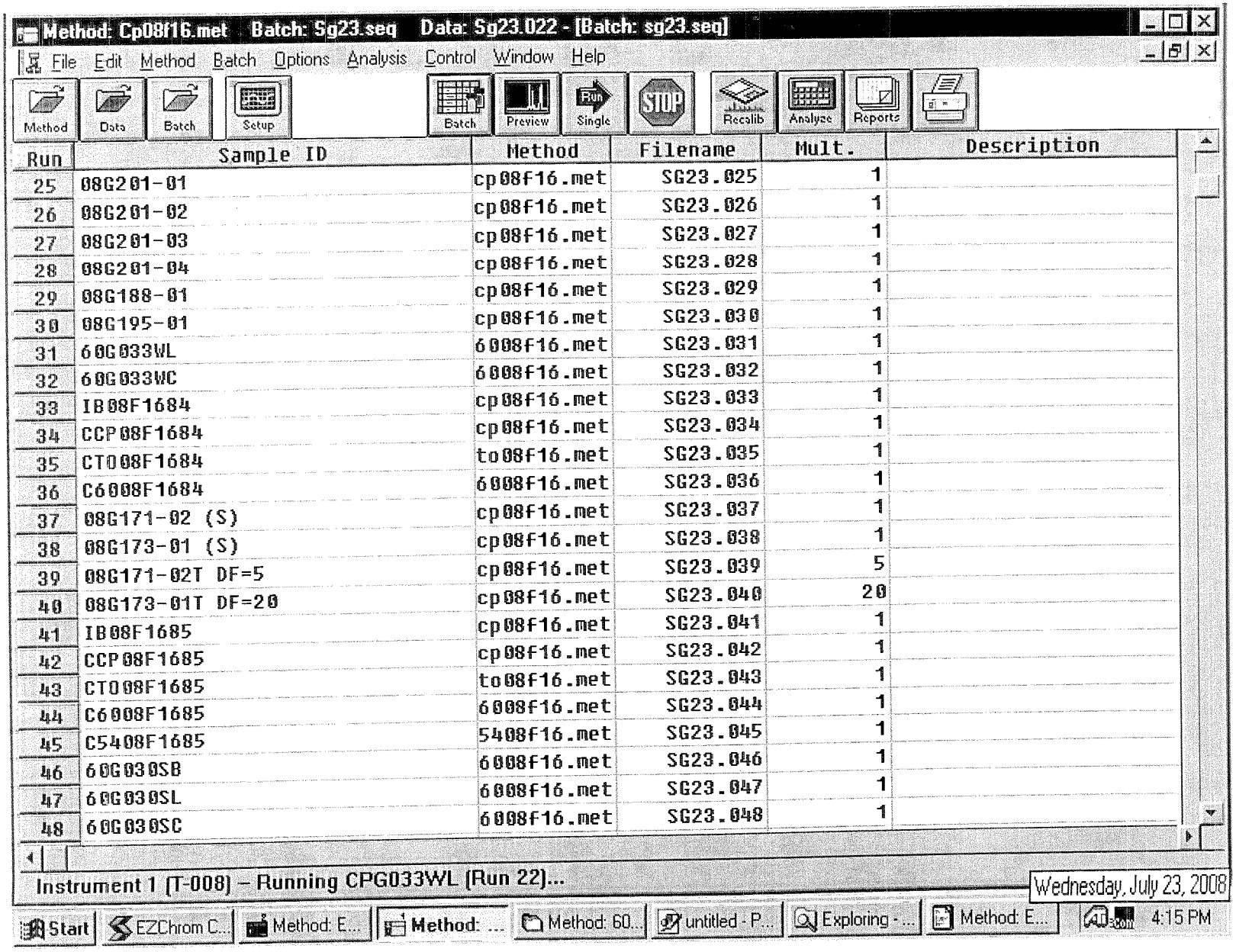
Analyzed By: [signature] Date: 07-23-2008

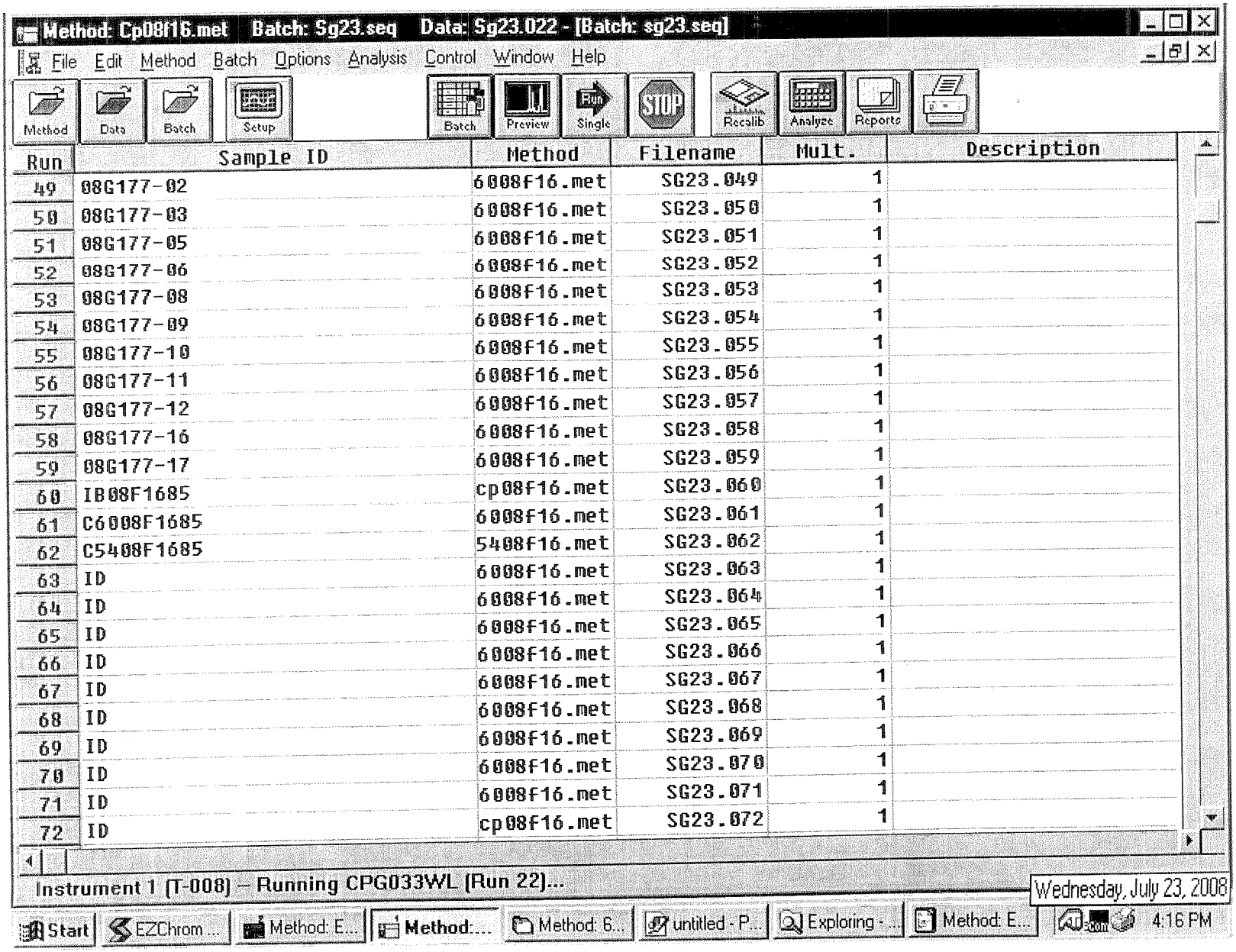
Date Disposed: Disposed By:

This page is checked during data review.


Method: Cp08f16.met Batch: Sg23.seq Data: Sg23.014 - [Batch: sg23.seq]
File Edit Method Batch Options Analysis Control Window Help
Method
Data
Batch
Setup
Batch
Preview
Run
Single
STOP
Recalib
Analyze
Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 | PEST PRIME | cp08f16.met | SG23.001 | 1
2 | IB08F1682 | cp08f16.met | SG23.002 | 1
3 | PE08F1682 | cp08f16.met | SG23.003 | 1
4 | CCP08F1682 | cp08f16.met | SG23.004 | 1
5 | CTO08F1682 | to08f16.met | SG23.005 | 1
6 | C6008F1682 | 6008f16.met | SG23.006 | 1
7 | CPG029WB | cp08f16.met | SG23.007 | 1
8 | CPG029WL | cp08f16.met | SG23.008 | 1
9 | CPG029WC | cp08f16.met | SG23.009 | 1
10 | 60G029WL | 6008f16.met | SG23.010 | 1
11 | 60G029WC | 6008f16.met | SG23.011 | 1
12 | 08G171-01 | cp08f16.met | SG23.012 | 1
13 | 08G171-02 | cp08f16.met | SG23.013 | 1
14 | 08G172-01 | cp08f16.met | SG23.014 | 1
15 | 08G173-01 | cp08f16.met | SG23.015 | 1
16 | 08G177-01 | cp08f16.met | SG23.016 | 1
17 | IB08F1683 | cp08f16.met | SG23.017 | 1
18 | CCP08F1683 | cp08f16.met | SG23.018 | 1
19 | CTO08F1683 | to08f16.met | SG23.019 | 1
20 | C6008F1683 | 6008f16.met | SG23.020 | 1
21 | CPG033WB | cp08f16.met | SG23.021 | 1
22 | CPG033WL | cp08f16.met | SG23.022 | 1
23 | CPG033WC | cp08f16.met | SG23.023 | 1
24 | 08G186-01 | cp08f16.met | SG23.024 | 1
Instrument 1 (T-008) – Running 08G172-01 (Run 14)...
Wednesday, July 23, 2008
Start
EZChrom C...
Method: E...
Method: ...
Reprocessi...
untitled - P...
Exploring - ...
Method: E...
1:55 PM

SG23


Method: Cp08f16.met Batch: Sg23.seq Data: Sg23.022 - [Batch: sg23.seq]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
25 | 08G201-01 | cp08f16.met | SG23.025 | 1
26 | 08G201-02 | cp08f16.met | SG23.026 | 1
27 | 08G201-03 | cp08f16.met | SG23.027 | 1
28 | 08G201-04 | cp08f16.met | SG23.028 | 1
29 | 08G188-01 | cp08f16.met | SG23.029 | 1
30 | 08G195-01 | cp08f16.met | SG23.030 | 1
31 | 60G033WL | 6008f16.met | SG23.031 | 1
32 | 60G033WC | 6008f16.met | SG23.032 | 1
33 | IB08F1684 | cp08f16.met | SG23.033 | 1
34 | CCP08F1684 | cp08f16.met | SG23.034 | 1
35 | CTO08F1684 | to08f16.met | SG23.035 | 1
36 | C6008F1684 | 6008f16.met | SG23.036 | 1
37 | 08G171-02 (S) | cp08f16.met | SG23.037 | 1
38 | 08G173-01 (S) | cp08f16.met | SG23.038 | 1
39 | 08G171-02T DF=5 | cp08f16.met | SG23.039 | 5
40 | 08G173-01T DF=20 | cp08f16.met | SG23.040 | 20
41 | IB08F1685 | cp08f16.met | SG23.041 | 1
42 | CCP08F1685 | cp08f16.met | SG23.042 | 1
43 | CTO08F1685 | to08f16.met | SG23.043 | 1
44 | C6008F1685 | 6008f16.met | SG23.044 | 1
45 | C5408F1685 | 5408f16.met | SG23.045 | 1
46 | 60G030SB | 6008f16.met | SG23.046 | 1
47 | 60G030SL | 6008f16.met | SG23.047 | 1
48 | 60G030SC | 6008f16.met | SG23.048 | 1
Instrument 1 (T-008) - Running CPG033WL (Run 22)...
Wednesday, July 23, 2008
Start EZChrom C... Method: E... Method: ... Method: 60... untitled - P... Exploring - ... Method: E... 4:15 PM


Method: CpD8f16.met Batch: Sg23.seq Data: Sg23.022 - [Batch: sg23.seq]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Run Single STOP Recalib Analyze Reports
Run Sample ID Method Filename Mult. Description
49 08G177-02 6008f16.met SG23.049 1
50 08G177-03 6008f16.met SG23.050 1
51 08G177-05 6008f16.met SG23.051 1
52 08G177-06 6008f16.met SG23.052 1
53 08G177-08 6008f16.met SG23.053 1
54 08G177-09 6008f16.met SG23.054 1
55 08G177-10 6008f16.met SG23.055 1
56 08G177-11 6008f16.met SG23.056 1
57 08G177-12 6008f16.met SG23.057 1
58 08G177-16 6008f16.met SG23.058 1
59 08G177-17 6008f16.met SG23.059 1
60 IB08F1685 cp08f16.met SG23.060 1
61 C6008F1685 6008f16.met SG23.061 1
62 C5408F1685 5408f16.met SG23.062 1
63 ID 6008f16.met SG23.063 1
64 ID 6008f16.met SG23.064 1
65 ID 6008f16.met SG23.065 1
66 ID 6008f16.met SG23.066 1
67 ID 6008f16.met SG23.067 1
68 ID 6008f16.met SG23.068 1
69 ID 6008f16.met SG23.069 1
70 ID 6008f16.met SG23.070 1
71 ID 6008f16.met SG23.071 1
72 ID cp08f16.met SG23.072 1
Instrument 1 (T-008) -- Running CPG033WL (Run 22)...
Wednesday, July 23, 2008
Start EZChrom ... Method: E... Method:... Method: 6... untitled - P... Exploring - ... Method: E... 4:16 PM

5998

ANALYSIS RUN LOG
for
PESTICIDES/PCBs

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A08- 21

Instrument No.: 8

Analytical Sequence: SG29

Method File: CP08F16 - TO08F16

Analytical Batch:

SOP #	Rev. #
☑ EMAX-8081	6
☐ EMAX-8082	2
☐ EMAX-608	0
☐ EMAX-CLP-PEST	
☐ EMAX-	

ICAL REFERENCE

ICAL ID	BATCH	DATE
CP08F16	SF16	06-16-2008
TO08F16	SF16	06-16-2008

STANDARDS ID		Conc (µg/L)
Hexane	47197	N.A.
PEM	SSIC-05-45-3	100 /100
PES ICAL	SSIB-05-95-2	80 /160 /320
TOX ICAL	SSIB-05-88-3	2000 /100

Column: (A) RTX CLPEST I (B) RTX CLPEST II

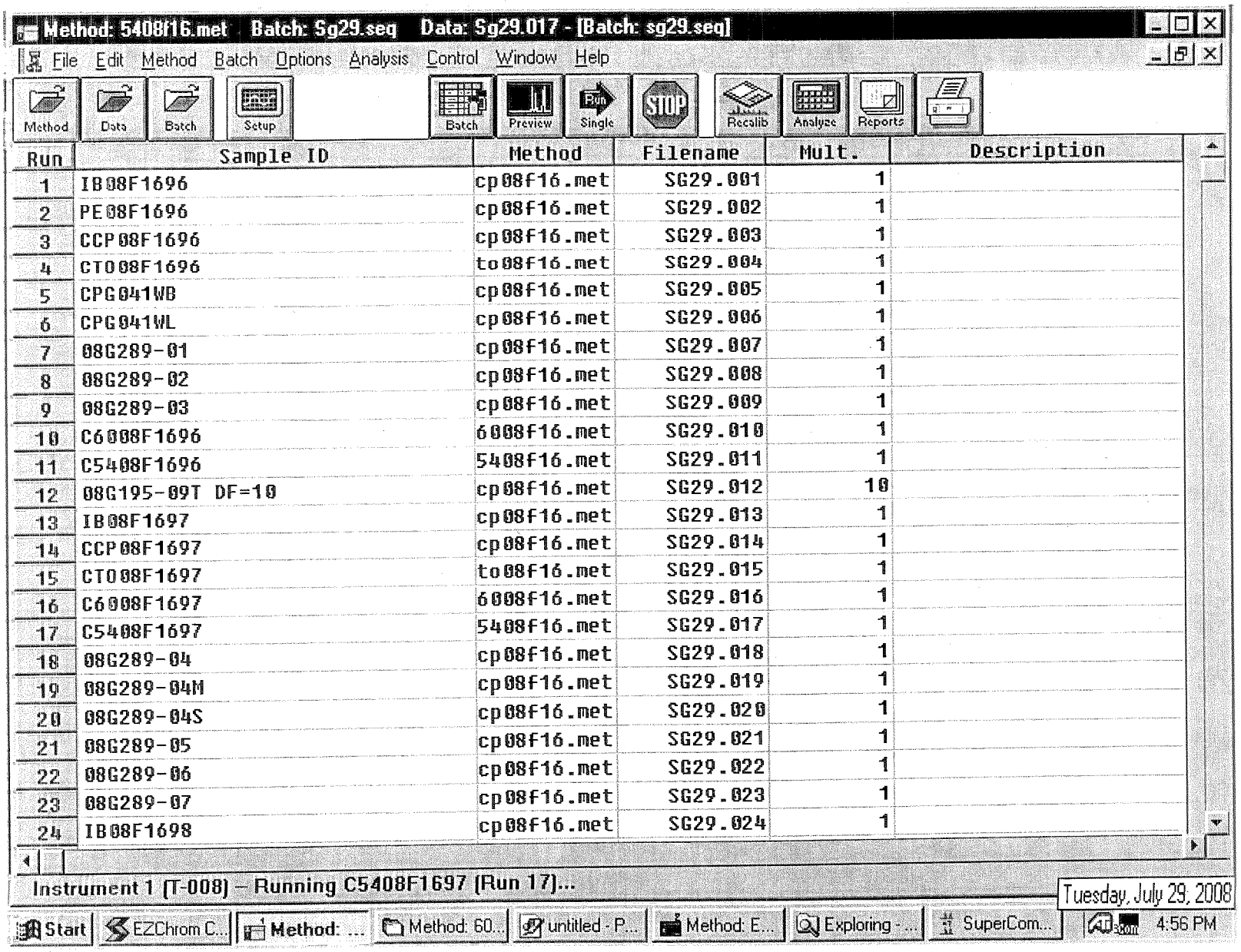
ELECTRONIC DATA ARCHIVAL

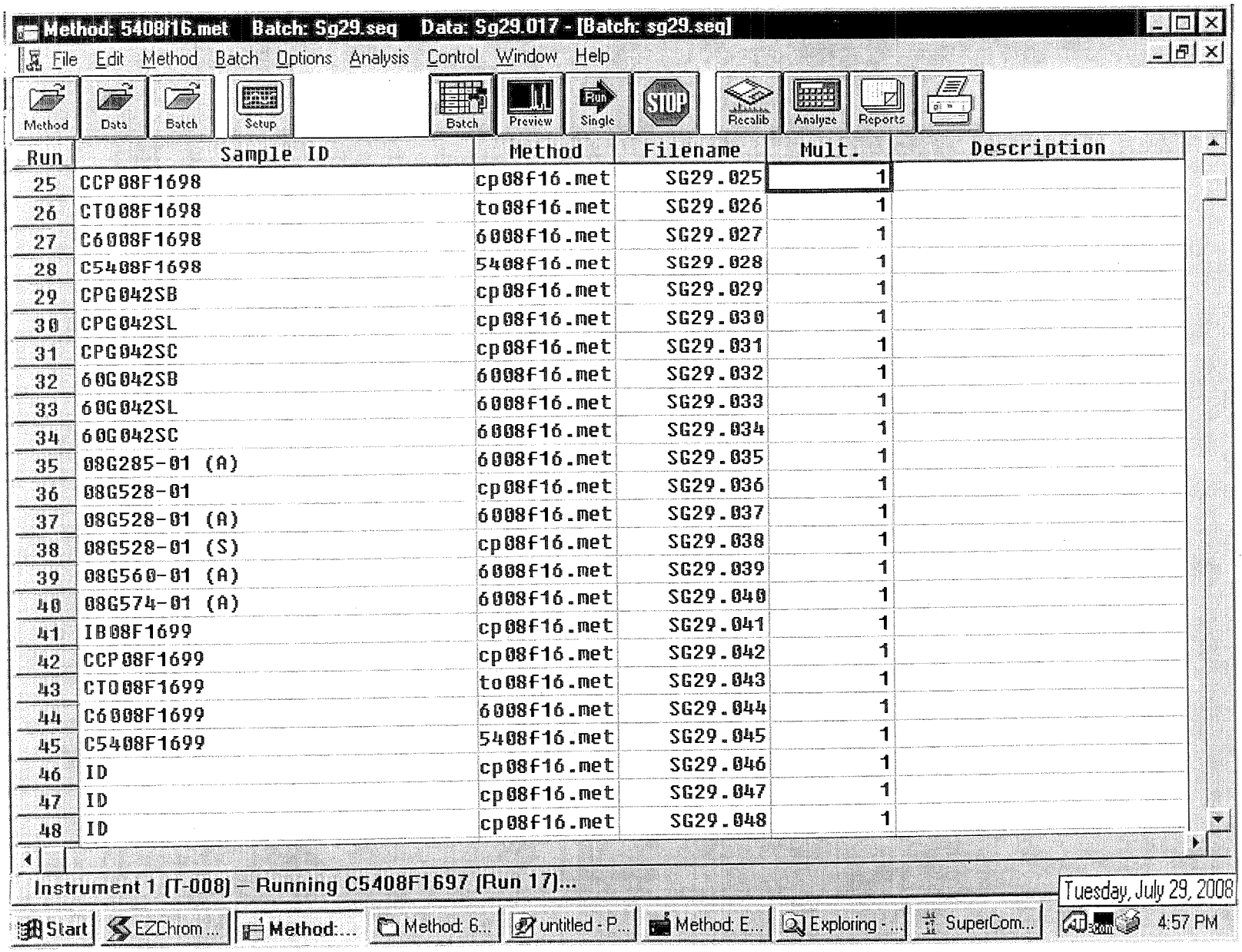
Location	Date
☐ EZC_4_Pesticides	
☐	

Analyzed By: [signature] Date: 07-29-2008

Date Disposed: Disposed By:

This page is checked during data review.


Method: 5408f16.met Batch: Sg29.seq Data: Sg29.017 - [Batch: sg29.seq]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyse Reports
Run Sample ID Method Filename Mult. Description
1 IB08F1696 cp08f16.met SG29.001 1
2 PE08F1696 cp08f16.met SG29.002 1
3 CCP08F1696 cp08f16.met SG29.003 1
4 CTO08F1696 to08f16.met SG29.004 1
5 CPG041WB cp08f16.met SG29.005 1
6 CPG041WL cp08f16.met SG29.006 1
7 08G289-01 cp08f16.met SG29.007 1
8 08G289-02 cp08f16.met SG29.008 1
9 08G289-03 cp08f16.met SG29.009 1
10 C6008F1696 6008f16.met SG29.010 1
11 C5408F1696 5408f16.met SG29.011 1
12 08G195-09T DF=10 cp08f16.met SG29.012 10
13 IB08F1697 cp08f16.met SG29.013 1
14 CCP08F1697 cp08f16.met SG29.014 1
15 CTO08F1697 to08f16.met SG29.015 1
16 C6008F1697 6008f16.met SG29.016 1
17 C5408F1697 5408f16.met SG29.017 1
18 08G289-04 cp08f16.met SG29.018 1
19 08G289-04M cp08f16.met SG29.019 1
20 08G289-04S cp08f16.met SG29.020 1
21 08G289-05 cp08f16.met SG29.021 1
22 08G289-06 cp08f16.met SG29.022 1
23 08G289-07 cp08f16.met SG29.023 1
24 IB08F1698 cp08f16.met SG29.024 1
Instrument 1 (T-008) – Running C5408F1697 (Run 17)...
Tuesday, July 29, 2008
Start EZChrom C... Method: ... Method: 60... untitled - P... Method: E... Exploring - ... SuperCom... 4:56 PM


Method: 5408f16.met Batch: Sg29.seq Data: Sg29.017 - [Batch: sg29.seq]
File Edit Method Batch Options Analysis Control Window Help
Method
Data
Batch
Setup
Batch
Preview
Single
STOP
Recalib
Analyze
Reports
Run | Sample ID | Method | Filename | Mult. | Description
25 | CCP08F1698 | cp08f16.met | SG29.025 | 1
26 | CTO08F1698 | to08f16.met | SG29.026 | 1
27 | C6008F1698 | 6008f16.met | SG29.027 | 1
28 | C5408F1698 | 5408f16.met | SG29.028 | 1
29 | CPG042SB | cp08f16.met | SG29.029 | 1
30 | CPG042SL | cp08f16.met | SG29.030 | 1
31 | CPG042SC | cp08f16.met | SG29.031 | 1
32 | 60G042SB | 6008f16.met | SG29.032 | 1
33 | 60G042SL | 6008f16.met | SG29.033 | 1
34 | 60G042SC | 6008f16.met | SG29.034 | 1
35 | 08G285-01 (A) | 6008f16.met | SG29.035 | 1
36 | 08G528-01 | cp08f16.met | SG29.036 | 1
37 | 08G528-01 (A) | 6008f16.met | SG29.037 | 1
38 | 08G528-01 (S) | cp08f16.met | SG29.038 | 1
39 | 08G560-01 (A) | 6008f16.met | SG29.039 | 1
40 | 08G574-01 (A) | 6008f16.met | SG29.040 | 1
41 | IB08F1699 | cp08f16.met | SG29.041 | 1
42 | CCP08F1699 | cp08f16.met | SG29.042 | 1
43 | CTO08F1699 | to08f16.met | SG29.043 | 1
44 | C6008F1699 | 6008f16.met | SG29.044 | 1
45 | C5408F1699 | 5408f16.met | SG29.045 | 1
46 | ID | cp08f16.met | SG29.046 | 1
47 | ID | cp08f16.met | SG29.047 | 1
48 | ID | cp08f16.met | SG29.048 | 1
Instrument 1 (T-008) – Running C5408F1697 (Run 17)...
Tuesday, July 29, 2008
Start
EZChrom...
Method:...
Method: 6...
untitled - P...
Method: E...
Exploring - ...
SuperCom...
4:57 PM

5093

ANALYSIS RUN LOG
for
PESTICIDES/PCBs

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Comments:

Book #: A08- 21

Instrument No.: 8

Analytical Sequence: SG24

Method File: 6008F16

Analytical Batch: SG24002

SOP #	Rev. #
☐ EMAX-8081	6
☑ EMAX-8082	2
☐ EMAX-608	0
☐ EMAX-CLP-PEST	
☐ EMAX-	

ICAL REFERENCE

ICAL ID	BATCH	DATE
6008F16	SF16	06-16-2008

STANDARDS ID		Conc (µg/L)
Hexane	47197	N.A.
1660 ICAL	SSLB-05-99-1	2000 /100

Column: (A.) RTX CLPEST I / B. RTX CLPEST II

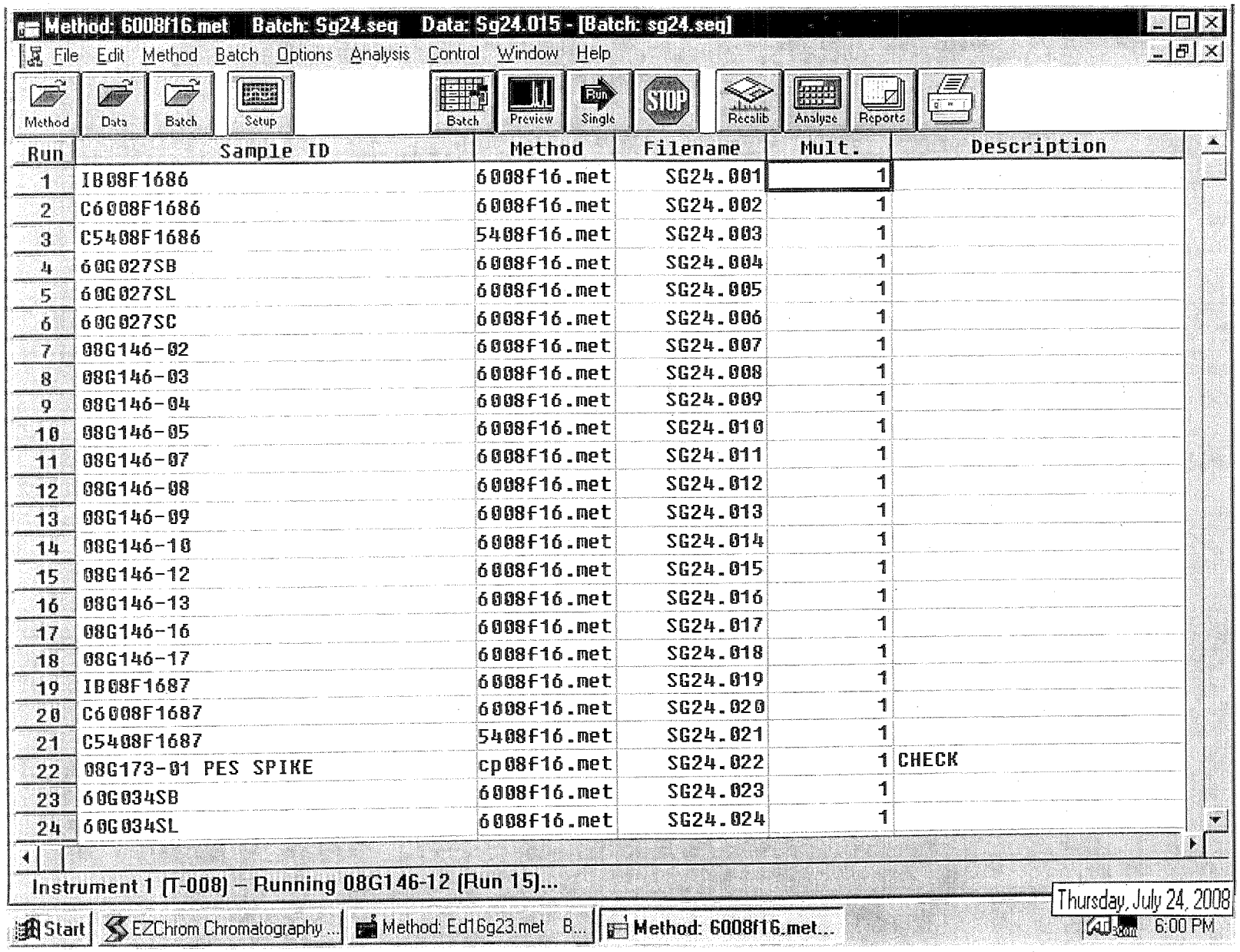
ELECTRONIC DATA ARCHIVAL

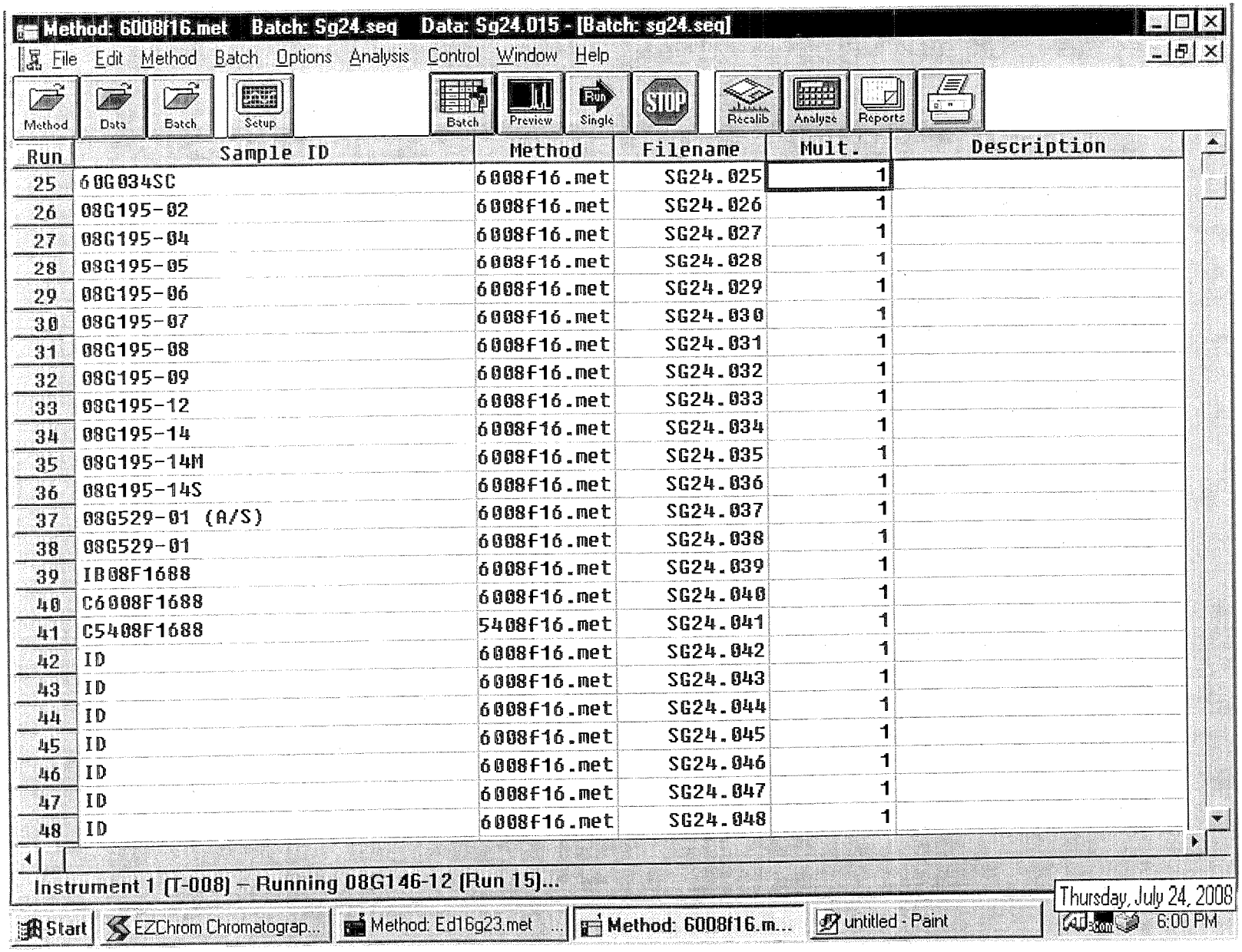
Location	Date
☐ EZC_4_Pesticides	
☐	

Analyzed By: [signature] Date: 07-24-2008

Date Disposed: Disposed By:

This page is checked during data review.


Method: 6008f16.met Batch: Sg24.seq Data: Sg24.015 - [Batch: sg24.seq]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Single STOP Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
1 | IB08F1686 | 6008f16.met | SG24.001 | 1 |
2 | C6008F1686 | 6008f16.met | SG24.002 | 1 |
3 | C5408F1686 | 5408f16.met | SG24.003 | 1 |
4 | 60G027SB | 6008f16.met | SG24.004 | 1 |
5 | 60G027SL | 6008f16.met | SG24.005 | 1 |
6 | 60G027SC | 6008f16.met | SG24.006 | 1 |
7 | 08G146-02 | 6008f16.met | SG24.007 | 1 |
8 | 08G146-03 | 6008f16.met | SG24.008 | 1 |
9 | 08G146-04 | 6008f16.met | SG24.009 | 1 |
10 | 08G146-05 | 6008f16.met | SG24.010 | 1 |
11 | 08G146-07 | 6008f16.met | SG24.011 | 1 |
12 | 08G146-08 | 6008f16.met | SG24.012 | 1 |
13 | 08G146-09 | 6008f16.met | SG24.013 | 1 |
14 | 08G146-10 | 6008f16.met | SG24.014 | 1 |
15 | 08G146-12 | 6008f16.met | SG24.015 | 1 |
16 | 08G146-13 | 6008f16.met | SG24.016 | 1 |
17 | 08G146-16 | 6008f16.met | SG24.017 | 1 |
18 | 08G146-17 | 6008f16.met | SG24.018 | 1 |
19 | IB08F1687 | 6008f16.met | SG24.019 | 1 |
20 | C6008F1687 | 6008f16.met | SG24.020 | 1 |
21 | C5408F1687 | 5408f16.met | SG24.021 | 1 |
22 | 08G173-01 PES SPIKE | cp08f16.met | SG24.022 | 1 | CHECK
23 | 60G034SB | 6008f16.met | SG24.023 | 1 |
24 | 60G034SL | 6008f16.met | SG24.024 | 1 |
Instrument 1 (T-008) – Running 08G146-12 (Run 15)...
Start EZChrom Chromatography... Method: Ed16g23.met B... Method: 6008f16.met...
Thursday, July 24, 2008
6:00 PM


Method: 6008f16.met Batch: Sg24.seq Data: Sg24.015 - [Batch: sg24.seq]
File Edit Method Batch Options Analysis Control Window Help
Method Data Batch Setup Batch Preview Run Single STOP Recalib Analyze Reports
Run | Sample ID | Method | Filename | Mult. | Description
25 | 60G034SC | 6008f16.met | SG24.025 | 1
26 | 08G195-02 | 6008f16.met | SG24.026 | 1
27 | 08G195-04 | 6008f16.met | SG24.027 | 1
28 | 08G195-05 | 6008f16.met | SG24.028 | 1
29 | 08G195-06 | 6008f16.met | SG24.029 | 1
30 | 08G195-07 | 6008f16.met | SG24.030 | 1
31 | 08G195-08 | 6008f16.met | SG24.031 | 1
32 | 08G195-09 | 6008f16.met | SG24.032 | 1
33 | 08G195-12 | 6008f16.met | SG24.033 | 1
34 | 08G195-14 | 6008f16.met | SG24.034 | 1
35 | 08G195-14M | 6008f16.met | SG24.035 | 1
36 | 08G195-14S | 6008f16.met | SG24.036 | 1
37 | 08G529-01 (A/S) | 6008f16.met | SG24.037 | 1
38 | 08G529-01 | 6008f16.met | SG24.038 | 1
39 | IB08F1688 | 6008f16.met | SG24.039 | 1
40 | C6008F1688 | 6008f16.met | SG24.040 | 1
41 | C5408F1688 | 5408f16.met | SG24.041 | 1
42 | ID | 6008f16.met | SG24.042 | 1
43 | ID | 6008f16.met | SG24.043 | 1
44 | ID | 6008f16.met | SG24.044 | 1
45 | ID | 6008f16.met | SG24.045 | 1
46 | ID | 6008f16.met | SG24.046 | 1
47 | ID | 6008f16.met | SG24.047 | 1
48 | ID | 6008f16.met | SG24.048 | 1
Instrument 1 (T-008) – Running 08G146-12 (Run 15)...
Start EZChrom Chromatograp... Method: Ed16g23.met ... Method: 6008f16.m... untitled - Paint
Thursday, July 24, 2008
6:00 PM

5959

EXTRACTION LOG

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Sulfur

EXTRACTION LOG FOR PESTICIDES

EMAX LABORATORIES, INC.

SOP ☒ EMAX-3520 Rev. No.: 2 ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3545 Rev. No.: 1 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 2 ☐ EMAX-3580 Rev. No.: 0 ☐ EMAX-CLP-PEST

Matrix: WATER Starting Date: 7/21/08 Time: 13:30 Ending Date: 7/22/08 Time: 7:30 Book # ECP-038

PREPARATION BATCH # CPG029W

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [S]	Notes
*01	CPG029-WB	N/A	1000	—	10		
*02	-WL		1000	—	10		
*03	-WC		1000	—	10		
*04	GOG029-WL		1600	—	10		
*05	-WC		1000	—	10		
*06	08G171-01		1060	5	10		
*07	-02		1060	7	10		
*08	08G172-01		1060	7	10		
*09	08G173-01		1060	7	10		
*10	08G177-01		1050	5	10		
*11	08G188-01		1050	5	10		
*12	08G195-01		1000	5	10		
*13							
*14							
*15							
*16							
*17							
*18							7/22/08 JM
*19							
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							
*29							
*30							

Standards	ID	Amount Added (ml)
Surrogate	VSIC-05-50-1	1.0
LCS/MS	FALL LIST (PEST #) VSIC-05-50-2	1.0
LCS (PCB #)	VSIC-05-49-2	0.5

Reagent	Lot# / ID
CH_2Cl_2	48064
Hexane	48119
Na_2SO_4	G10648
H_2SO_4	
NaOH	—
Silica Sand	—

TUNING

Sonicator #	Reading
	N/A

Concentrator Water Bath Temp.(oC)		
1	35	35
2	35	35
3		
4		
5	60	60

Comments: Test thermometer = T_1

Prepared By: JM Checked By: ML

Witnessed By: RS Received By: 7/22/08

Standard Added By: JM Disposed By:

Extract Location: VEO2-9 Disposal Date:

This page is checked during data review.

5962

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Sulfur

EXTRACTION LOG FOR PESTICIDES

SOP ☐ EMAX-3520 Rev. No.: 2 ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3545 Rev. No.: 1 ☐ EMAX-3510 Rev. No.: 1 ☒ EMAX-3550 Rev. No.: 2 ☐ EMAX-3580 Rev. No.: 0 ☐ EMAX-CLP-PEST

Matrix: Soil Starting Date: 07/24/08 Time: 15:00 Ending Date: 7/24/08 Time: 17:30 Book # ECP-038

PREPARATION BATCH # 08G0534-S

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [S]	Notes
*01	08G034 -SB	1	30.00		10	ACID	
*02	-SL	3	30.00		10		
*03	-SC	3	30.00		10		
*04	08G195 -02	1	30.02		10		
*05	-04	3	30.01		10		
*06	-05	3	30.04		10		
*07	-06	1	30.02		10		
*08	-07	3	30.03		10		
*09	-08	3	30.03		10		
*10	-09	1	30.01		10		
*11	-12	3	30.02		10		
*12	-14	3	30.01		10		
*13	-14M	3	30.03		10		
*14	-14S	3	30.02		10		
*15	08G529 -01	1	30.03		10		
*16							
*17							
*18							
*19			JV	7/24/08			
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							
*29							
*30							

Standards	ID	Amount Added (ml)
Surrogate	SSIC-05-50-1	1.0
LCS/MS (PCB)	SSIC-05-49-2	0.5

Reagent	Lot# / ID
CH_2Cl_2	48062
Hexane	48119
Na_2SO_4	Q10648
H_2SO_4	46137
NaOH	-
Silica Sand	47357807

TUNING

Sonicator #	Reading
1	N/A
3	95%

Concentrator Water Bath Temp.(oC)		
1	35	35
2	35	35
3	35	35
4		
5	60	60

Comments: Test thermometer = T_1

Prepared By: SS/JV Checked By: ML

Witnessed By: SS Received By: SD 7/24/08

Standard Added By: JV Disposed By:

Extract Location: SE02#16 Disposal Date:

This page is checked during data review.

LABORATORY REPORT FOR

TETRA TECH, INC.

LMC BEAUMONT SITE 1

METHOD 3520C/3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

SDG#: 08G195

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G195

METHOD 3520C/3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

One (1) water and nine (9) soil samples were received on 07/18/08 for Semi Volatile Organic analysis by Method 3520C/3550B/8270C in accordance with USEPA SW846, 3rd ed.

1. **Holding Time**

   Analytical holding time was met.

2. **Tuning and Calibration**

   Tuning and calibration were carried out at 12-hour interval. All QC requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

4. **Surrogate Recovery**

   Recoveries were within QC limit.

5. **Lab Control Sample/Lab Control Sample Duplicate**

   Recoveries were within QC limit.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample G195-06 was spiked. All recoveries were within QC limit.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

   One analyte was manually reintegrated in sample G195-06M/S to correct for improper integration. Chromatograms of before and after manual integration were kept on file for review.

LAB CHRONICLE
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1

SDG NO. : 08G195
Instrument ID : T-0E2

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	SVG033WB	1	NA	07/23/0816:47	07/21/0816:00	RGG238	RFG137	SVG033W	Method Blank
LCS1W	SVG033WL	1	NA	07/23/0817:07	07/21/0816:00	RGG239	RFG137	SVG033W	Lab Control Sample (LCS)
LCD1W	SVG033WC	1	NA	07/23/0817:27	07/21/0816:00	RGG240	RFG137	SVG033W	LCS Duplicate
H-EB7182008	G195-01	1	NA	07/23/0820:23	07/21/0816:00	RGG249	RFG137	SVG033W	Field Sample

SOIL

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1S!	SVG037SB	1	NA	07/24/0819:53	07/23/0815:00	RGZ327	RGZ193	SVG037S	Method Blank
LCS1S!	SVG037SL	1	NA	07/24/0820:11	07/23/0815:00	RGZ328	RGZ193	SVG037S	Lab Control Sample (LCS)
LCD1S!	SVG037SC	1	NA	07/24/0820:30	07/23/0815:00	RGZ329	RGZ193	SVG037S	LCS Duplicate
H-T11-0.5!	G195-02	1	4.5	07/24/0820:50	07/23/0815:00	RGZ330	RGZ193	SVG037S	Field Sample
H-T11-5.0!	G195-04	1	12.7	07/24/0821:09	07/23/0815:00	RGZ331	RGZ193	SVG037S	Field Sample
H-T11-10.0!	G195-05	1	6.5	07/24/0821:28	07/23/0815:00	RGZ332	RGZ193	SVG037S	Field Sample
H-T11-10.0DUP!	G195-06	1	5.9	07/24/0821:47	07/23/0815:00	RGZ333	RGZ193	SVG037S	Field Sample
H-T5-0.5!	G195-07	1	3.8	07/24/0822:07	07/23/0815:00	RGZ334	RGZ193	SVG037S	Field Sample
H-T5-0.5DUP!	G195-08	1	3.7	07/24/0822:26	07/23/0815:00	RGZ335	RGZ193	SVG037S	Field Sample
H-T5-2.5!	G195-09	1	8.4	07/24/0822:45	07/23/0815:00	RGZ336	RGZ193	SVG037S	Field Sample
H-T5-6.0!	G195-12	1	14.9	07/24/0823:04	07/23/0815:00	RGZ337	RGZ193	SVG037S	Field Sample
H-T5-12.0!	G195-14	1	13.6	07/24/0823:24	07/23/0815:00	RGZ338	RGZ193	SVG037S	Field Sample
MBLK2S!	SVG048SB	1	NA	07/31/0818:29	07/30/0811:30	RGZ381	RGZ193	SVG048S	Method Blank
LCS2S!	SVG048SL	1	NA	07/31/0818:48	07/30/0811:30	RGZ382	RGZ193	SVG048S	Lab Control Sample (LCS)
LCD2S!	SVG048SC	1	NA	07/31/0819:07	07/30/0811:30	RGZ383	RGZ193	SVG048S	LCS Duplicate
H-T11-10.0DUPRE!	G195-06R	1	5.9	07/31/0820:23	07/30/0811:30	RGZ387	RGZ193	SVG048S	Field Sample
H-T11-10.0DUPMS!	G195-06M	1	5.9	07/31/0820:42	07/30/0811:30	RGZ388	RGZ193	SVG048S	Matrix Spike Sample (MS)
H-T11-10.0DUPMSD!	G195-06S	1	5.9	07/31/0821:01	07/30/0811:30	RGZ389	RGZ193	SVG048S	MS Duplicate (MSD)

! Instrument ID : T-048
FN - Filename
% Moist - Percent Moisture

2003

SAMPLE RESULTS

METHOD 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected:	07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
Batch No.	: 08G195	Date Extracted:	07/21/08 16:00
Sample ID:	H-EB7182008	Date Analyzed:	07/23/08 20:23
Lab Samp ID:	G195-01	Dilution Factor:	1
Lab File ID:	RGG249	Matrix	: WATER
Ext Btch ID:	SVG033W	% Moisture	: NA
Calib. Ref.:	RFG137	Instrument ID	: T-0E2

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	10	5.0
1,2-DICHLOROBENZENE	ND	10	5.0
1,3-DICHLOROBENZENE	ND	10	5.0
1,4-DICHLOROBENZENE	ND	10	5.0
2,4,5-TRICHLOROPHENOL	ND	10	5.0
2,4,6-TRICHLOROPHENOL	ND	10	5.0
2,4-DICHLOROPHENOL	ND	10	5.0
2,4-DIMETHYLPHENOL	ND	10	5.0
2,4-DINITROPHENOL	ND	20	5.0
2,4-DINITROTOLUENE	ND	10	5.0
2,6-DINITROTOLUENE	ND	10	5.0
2-CHLORONAPHTHALENE	ND	10	5.0
2-CHLOROPHENOL	ND	10	5.0
2-METHYLNAPHTHALENE	ND	10	5.0
2-METHYLPHENOL	ND	10	5.0
2-NITROANILINE	ND	10	5.0
2-NITROPHENOL	ND	10	5.0
3,3'-DICHLOROBENZIDINE	ND	10	5.0
3-NITROANILINE	ND	10	5.0
4,6-DINITRO-2-METHYLPHENOL	ND	20	5.0
4-BROMOPHENYL-PHENYL ETHER	ND	10	5.0
4-CHLORO-3-METHYLPHENOL	ND	10	5.0
4-CHLOROANILINE	ND	10	5.0
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5.0
4-METHYLPHENOL (1)	ND	10	5.0
4-NITROANILINE	ND	10	5.0
4-NITROPHENOL	ND	20	5.0
ACENAPHTHENE	ND	10	5.0
ACENAPHTHYLENE	ND	10	5.0
ANTHRACENE	ND	10	5.0
BENZO(A)ANTHRACENE	ND	10	5.0
BENZO(A)PYRENE	ND	10	5.0
BENZO(B)FLUORANTHENE	ND	10	5.0
BENZO(K)FLUORANTHENE	ND	10	5.0
BENZO(G,H,I)PERYLENE	ND	10	5.0
BIS(2-CHLOROETHOXY)METHANE	ND	10	5.0
BIS(2-CHLOROETHYL)ETHER	ND	10	5.0
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5.0
BIS(2-ETHYLHEXYL)PHTHALATE	ND	10	5.0
BUTYLBENZYLPHTHALATE	ND	10	5.0
CHRYSENE	ND	10	5.0
DI-N-BUTYLPHTHALATE	ND	10	5.0
DI-N-OCTYLPHTHALATE	ND	10	5.0
DIBENZO(A,H)ANTHRACENE	ND	10	5.0
DIBENZOFURAN	ND	10	5.0
DIETHYLPHTHALATE	ND	10	5.0
DIMETHYLPHTHALATE	ND	10	5.0
FLUORANTHENE	ND	10	5.0
FLUORENE	ND	10	5.0
HEXACHLOROBENZENE	ND	10	5.0
HEXACHLOROBUTADIENE	ND	10	5.0
HEXACHLOROCYCLOPENTADIENE	ND	10	5.0
HEXACHLOROETHANE	ND	10	5.0
INDENO(1,2,3-CD)PYRENE	ND	10	5.0
ISOPHORONE	ND	10	5.0
N-NITROSO-DI-N-PROPYLAMINE	ND	10	5.0
N-NITROSODIPHENYLAMINE (2)	ND	10	5.0
NAPHTHALENE	ND	10	5.0
NITROBENZENE	ND	10	5.0
PENTACHLOROPHENOL	ND	20	5.0
PHENANTHRENE	ND	10	5.0
PHENOL	ND	10	5.0
PYRENE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	69	30-150
2-FLUOROBIPHENYL	62	30-130
2-FLUOROPHENOL	61	20-130
NITROBENZENE-D5	66	30-130
PHENOL-D5	61	30-130
TERPHENYL-D14	88	30-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/23/08 15:00
Sample ID: H-T11-0.5	Date Analyzed: 07/24/08 20:50
Lab Samp ID: G195-02	Dilution Factor: 1
Lab File ID: RGZ330	Matrix : SOIL
Ext Btch ID: SVG037S	% Moisture : 4.5
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	350	170
1,2-DICHLOROBENZENE	ND	350	170
1,3-DICHLOROBENZENE	ND	350	170
1,4-DICHLOROBENZENE	ND	350	170
2,4,5-TRICHLOROPHENOL	ND	350	170
2,4,6-TRICHLOROPHENOL	ND	350	190
2,4-DICHLOROPHENOL	ND	350	170
2,4-DIMETHYLPHENOL	ND	350	170
2,4-DINITROPHENOL	ND	690	170
2,4-DINITROTOLUENE	ND	350	170
2,6-DINITROTOLUENE	ND	350	170
2-CHLORONAPHTHALENE	ND	350	170
2-CHLOROPHENOL	ND	350	170
2-METHYLNAPHTHALENE	ND	350	170
2-METHYLPHENOL	ND	350	170
2-NITROANILINE	ND	350	170
2-NITROPHENOL	ND	350	170
3,3'-DICHLOROBENZIDINE	ND	350	170
3-NITROANILINE	ND	350	170
4,6-DINITRO-2-METHYLPHENOL	ND	690	170
4-BROMOPHENYL-PHENYL ETHER	ND	350	170
4-CHLORO-3-METHYLPHENOL	ND	350	170
4-CHLOROANILINE	ND	350	170
4-CHLOROPHENYL-PHENYL ETHER	ND	350	180
4-METHYLPHENOL (1)	ND	350	170
4-NITROANILINE	ND	350	170
4-NITROPHENOL	ND	690	170
ACENAPHTHENE	ND	350	170
ACENAPHTHYLENE	ND	350	170
ANTHRACENE	ND	350	170
BENZO(A)ANTHRACENE	ND	350	170
BENZO(A)PYRENE	ND	350	170
BENZO(B)FLUORANTHENE	ND	350	170
BENZO(K)FLUORANTHENE	ND	350	170
BENZO(G,H,I)PERYLENE	ND	350	170
BIS(2-CHLOROETHOXY)METHANE	ND	350	170
BIS(2-CHLOROETHYL)ETHER	ND	350	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	350	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	350	170
BUTYLBENZYLPHTHALATE	ND	350	170
CHRYSENE	ND	350	170
DI-N-BUTYLPHTHALATE	ND	350	170
DI-N-OCTYLPHTHALATE	ND	350	170
DIBENZO(A,H)ANTHRACENE	ND	350	170
DIBENZOFURAN	ND	350	170
DIETHYLPHTHALATE	ND	350	170
DIMETHYLPHTHALATE	ND	350	170
FLUORANTHENE	ND	350	170
FLUORENE	ND	350	170
HEXACHLOROBENZENE	ND	350	170
HEXACHLOROBUTADIENE	ND	350	200
HEXACHLOROCYCLOPENTADIENE	ND	350	170
HEXACHLOROETHANE	ND	350	170
INDENO(1,2,3-CD)PYRENE	ND	350	170
ISOPHORONE	ND	350	170
N-NITROSO-DI-N-PROPYLAMINE	ND	350	170
N-NITROSODIPHENYLAMINE (2)	ND	350	170
NAPHTHALENE	ND	350	170
NITROBENZENE	ND	350	170
PENTACHLOROPHENOL	ND	690	180
PHENANTHRENE	ND	350	170
PHENOL	ND	350	170
PYRENE	ND	350	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	83	20-140
2-FLUOROBIPHENYL	77	30-130
2-FLUOROPHENOL	75	20-130
NITROBENZENE-D5	76	20-130
PHENOL-D5	84	20-130
TERPHENYL-D14	89	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/23/08 15:00
Sample ID: H-T11-5.0	Date Analyzed: 07/24/08 21:09
Lab Samp ID: G195-04	Dilution Factor: 1
Lab File ID: RGZ331	Matrix : SOIL
Ext Btch ID: SVG037S	% Moisture : 12.7
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	380	190
1,2-DICHLOROBENZENE	ND	380	190
1,3-DICHLOROBENZENE	ND	380	190
1,4-DICHLOROBENZENE	ND	380	190
2,4,5-TRICHLOROPHENOL	ND	380	190
2,4,6-TRICHLOROPHENOL	ND	380	210
2,4-DICHLOROPHENOL	ND	380	190
2,4-DIMETHYLPHENOL	ND	380	190
2,4-DINITROPHENOL	ND	760	190
2,4-DINITROTOLUENE	ND	380	190
2,6-DINITROTOLUENE	ND	380	190
2-CHLORONAPHTHALENE	ND	380	190
2-CHLOROPHENOL	ND	380	190
2-METHYLNAPHTHALENE	ND	380	190
2-METHYLPHENOL	ND	380	190
2-NITROANILINE	ND	380	190
2-NITROPHENOL	ND	380	190
3,3'-DICHLOROBENZIDINE	ND	380	190
3-NITROANILINE	ND	380	190
4,6-DINITRO-2-METHYLPHENOL	ND	760	190
4-BROMOPHENYL-PHENYL ETHER	ND	380	190
4-CHLORO-3-METHYLPHENOL	ND	380	190
4-CHLOROANILINE	ND	380	190
4-CHLOROPHENYL-PHENYL ETHER	ND	380	190
4-METHYLPHENOL (1)	ND	380	190
4-NITROANILINE	ND	380	190
4-NITROPHENOL	ND	760	190
ACENAPHTHENE	ND	380	190
ACENAPHTHYLENE	ND	380	190
ANTHRACENE	ND	380	190
BENZO(A)ANTHRACENE	ND	380	190
BENZO(A)PYRENE	ND	380	190
BENZO(B)FLUORANTHENE	ND	380	190
BENZO(K)FLUORANTHENE	ND	380	190
BENZO(G,H,I)PERYLENE	ND	380	190
BIS(2-CHLOROETHOXY)METHANE	ND	380	190
BIS(2-CHLOROETHYL)ETHER	ND	380	190
BIS(2-CHLOROISOPROPYL)ETHER	ND	380	190
BIS(2-ETHYLHEXYL)PHTHALATE	ND	380	190
BUTYLBENZYLPHTHALATE	ND	380	190
CHRYSENE	ND	380	190
DI-N-BUTYLPHTHALATE	ND	380	190
DI-N-OCTYLPHTHALATE	ND	380	190
DIBENZO(A,H)ANTHRACENE	ND	380	190
DIBENZOFURAN	ND	380	190
DIETHYLPHTHALATE	ND	380	190
DIMETHYLPHTHALATE	ND	380	190
FLUORANTHENE	ND	380	190
FLUORENE	ND	380	190
HEXACHLOROBENZENE	ND	380	190
HEXACHLOROBUTADIENE	ND	380	220
HEXACHLOROCYCLOPENTADIENE	ND	380	190
HEXACHLOROETHANE	ND	380	190
INDENO(1,2,3-CD)PYRENE	ND	380	190
ISOPHORONE	ND	380	190
N-NITROSO-DI-N-PROPYLAMINE	ND	380	190
N-NITROSODIPHENYLAMINE (2)	ND	380	190
NAPHTHALENE	ND	380	190
NITROBENZENE	ND	380	190
PENTACHLOROPHENOL	ND	760	200
PHENANTHRENE	ND	380	190
PHENOL	ND	380	190
PYRENE	ND	380	190

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	74	20-140
2-FLUOROBIPHENYL	48	30-130
2-FLUOROPHENOL	58	20-130
NITROBENZENE-D5	49	20-130
PHENOL-D5	56	20-130
TERPHENYL-D14	95	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected	: 07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received	: 07/18/08
Batch No.	: 08G195	Date Extracted	: 07/23/08 15:00
Sample ID	: H-T11-10.0	Date Analyzed	: 07/24/08 21:28
Lab Samp ID	: G195-05	Dilution Factor	: 1
Lab File ID	: RGZ332	Matrix	: SOIL
Ext Btch ID	: SVG037S	% Moisture	: 6.5
Calib. Ref.	: RGZ193	Instrument ID	: T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	350	180
1,2-DICHLOROBENZENE	ND	350	180
1,3-DICHLOROBENZENE	ND	350	180
1,4-DICHLOROBENZENE	ND	350	180
2,4,5-TRICHLOROPHENOL	ND	350	180
2,4,6-TRICHLOROPHENOL	ND	350	200
2,4-DICHLOROPHENOL	ND	350	180
2,4-DIMETHYLPHENOL	ND	350	180
2,4-DINITROPHENOL	ND	710	180
2,4-DINITROTOLUENE	ND	350	180
2,6-DINITROTOLUENE	ND	350	180
2-CHLORONAPHTHALENE	ND	350	180
2-CHLOROPHENOL	ND	350	180
2-METHYLNAPHTHALENE	ND	350	180
2-METHYLPHENOL	ND	350	180
2-NITROANILINE	ND	350	180
2-NITROPHENOL	ND	350	180
3,3'-DICHLOROBENZIDINE	ND	350	180
3-NITROANILINE	ND	350	180
4,6-DINITRO-2-METHYLPHENOL	ND	710	180
4-BROMOPHENYL-PHENYL ETHER	ND	350	180
4-CHLORO-3-METHYLPHENOL	ND	350	180
4-CHLOROANILINE	ND	350	180
4-CHLOROPHENYL-PHENYL ETHER	ND	350	180
4-METHYLPHENOL (1)	ND	350	180
4-NITROANILINE	ND	350	180
4-NITROPHENOL	ND	710	180
ACENAPHTHENE	ND	350	180
ACENAPHTHYLENE	ND	350	180
ANTHRACENE	ND	350	180
BENZO(A)ANTHRACENE	ND	350	180
BENZO(A)PYRENE	ND	350	180
BENZO(B)FLUORANTHENE	ND	350	180
BENZO(K)FLUORANTHENE	ND	350	180
BENZO(G,H,I)PERYLENE	ND	350	180
BIS(2-CHLOROETHOXY)METHANE	ND	350	180
BIS(2-CHLOROETHYL)ETHER	ND	350	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	350	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	350	180
BUTYLBENZYLPHTHALATE	ND	350	180
CHRYSENE	ND	350	180
DI-N-BUTYLPHTHALATE	ND	350	180
DI-N-OCTYLPHTHALATE	ND	350	180
DIBENZO(A,H)ANTHRACENE	ND	350	180
DIBENZOFURAN	ND	350	180
DIETHYLPHTHALATE	ND	350	180
DIMETHYLPHTHALATE	ND	350	180
FLUORANTHENE	ND	350	180
FLUORENE	ND	350	180
HEXACHLOROBENZENE	ND	350	180
HEXACHLOROBUTADIENE	ND	350	200
HEXACHLOROCYCLOPENTADIENE	ND	350	180
HEXACHLOROETHANE	ND	350	180
INDENO(1,2,3-CD)PYRENE	ND	350	180
ISOPHORONE	ND	350	180
N-NITROSO-DI-N-PROPYLAMINE	ND	350	180
N-NITROSODIPHENYLAMINE (2)	ND	350	180
NAPHTHALENE	ND	350	180
NITROBENZENE	ND	350	180
PENTACHLOROPHENOL	ND	710	190
PHENANTHRENE	ND	350	180
PHENOL	ND	350	180
PYRENE	ND	350	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	78	20-140
2-FLUOROBIPHENYL	74	30-130
2-FLUOROPHENOL	76	20-130
NITROBENZENE-D5	78	20-130
PHENOL-D5	82	20-130
TERPHENYL-D14	85	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/23/08 15:00
Sample ID: H-T11-10.0DUP	Date Analyzed: 07/24/08 21:47
Lab Samp ID: G195-06	Dilution Factor: 1
Lab File ID: RGZ333	Matrix : SOIL
Ext Btch ID: SVG037S	% Moisture : 5.9
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	350	180
1,2-DICHLOROBENZENE	ND	350	180
1,3-DICHLOROBENZENE	ND	350	180
1,4-DICHLOROBENZENE	ND	350	180
2,4,5-TRICHLOROPHENOL	ND	350	180
2,4,6-TRICHLOROPHENOL	ND	350	200
2,4-DICHLOROPHENOL	ND	350	180
2,4-DIMETHYLPHENOL	ND	350	180
2,4-DINITROPHENOL	ND	700	180
2,4-DINITROTOLUENE	ND	350	180
2,6-DINITROTOLUENE	ND	350	180
2-CHLORONAPHTHALENE	ND	350	180
2-CHLOROPHENOL	ND	350	180
2-METHYLNAPHTHALENE	ND	350	180
2-METHYLPHENOL	ND	350	180
2-NITROANILINE	ND	350	180
2-NITROPHENOL	ND	350	180
3,3'-DICHLOROBENZIDINE	ND	350	180
3-NITROANILINE	ND	350	180
4,6-DINITRO-2-METHYLPHENOL	ND	700	180
4-BROMOPHENYL-PHENYL ETHER	ND	350	180
4-CHLORO-3-METHYLPHENOL	ND	350	180
4-CHLOROANILINE	ND	350	180
4-CHLOROPHENYL-PHENYL ETHER	ND	350	180
4-METHYLPHENOL (1)	ND	350	180
4-NITROANILINE	ND	350	180
4-NITROPHENOL	ND	700	180
ACENAPHTHENE	ND	350	180
ACENAPHTHYLENE	ND	350	180
ANTHRACENE	ND	350	180
BENZO(A)ANTHRACENE	ND	350	180
BENZO(A)PYRENE	ND	350	180
BENZO(B)FLUORANTHENE	ND	350	180
BENZO(K)FLUORANTHENE	ND	350	180
BENZO(G,H,I)PERYLENE	ND	350	180
BIS(2-CHLOROETHOXY)METHANE	ND	350	180
BIS(2-CHLOROETHYL)ETHER	ND	350	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	350	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	350	180
BUTYLBENZYLPHTHALATE	ND	350	180
CHRYSENE	ND	350	180
DI-N-BUTYLPHTHALATE	ND	350	180
DI-N-OCTYLPHTHALATE	ND	350	180
DIBENZO(A,H)ANTHRACENE	ND	350	180
DIBENZOFURAN	ND	350	180
DIETHYLPHTHALATE	ND	350	180
DIMETHYLPHTHALATE	ND	350	180
FLUORANTHENE	ND	350	180
FLUORENE	ND	350	180
HEXACHLOROBENZENE	ND	350	180
HEXACHLOROBUTADIENE	ND	350	200
HEXACHLOROCYCLOPENTADIENE	ND	350	180
HEXACHLOROETHANE	ND	350	180
INDENO(1,2,3-CD)PYRENE	ND	350	180
ISOPHORONE	ND	350	180
N-NITROSO-DI-N-PROPYLAMINE	ND	350	180
N-NITROSODIPHENYLAMINE (2)	ND	350	180
NAPHTHALENE	ND	350	180
NITROBENZENE	ND	350	180
PENTACHLOROPHENOL	ND	700	190
PHENANTHRENE	ND	350	180
PHENOL	ND	350	180
PYRENE	ND	350	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	86	20-140
2-FLUOROBIPHENYL	75	30-130
2-FLUOROPHENOL	81	20-130
NITROBENZENE-D5	75	20-130
PHENOL-D5	79	20-130
TERPHENYL-D14	91	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected	: 07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received	: 07/18/08
Batch No.	: 08G195	Date Extracted	: 07/30/08 11:30
Sample ID	: H-T11-10.0DUPRE	Date Analyzed	: 07/31/08 20:23
Lab Samp ID	: G195-06R	Dilution Factor	: 1
Lab File ID	: RGZ387	Matrix	: SOIL
Ext Btch ID	: SVG048S	% Moisture	: 5.9
Calib. Ref.	: RGZ193	Instrument ID	: T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	350	180
1,2-DICHLOROBENZENE	ND	350	180
1,3-DICHLOROBENZENE	ND	350	180
1,4-DICHLOROBENZENE	ND	350	180
2,4,5-TRICHLOROPHENOL	ND	350	180
2,4,6-TRICHLOROPHENOL	ND	350	200
2,4-DICHLOROPHENOL	ND	350	180
2,4-DIMETHYLPHENOL	ND	350	180
2,4-DINITROPHENOL	ND	700	180
2,4-DINITROTOLUENE	ND	350	180
2,6-DINITROTOLUENE	ND	350	180
2-CHLORONAPHTHALENE	ND	350	180
2-CHLOROPHENOL	ND	350	180
2-METHYLNAPHTHALENE	ND	350	180
2-METHYLPHENOL	ND	350	180
2-NITROANILINE	ND	350	180
2-NITROPHENOL	ND	350	180
3,3'-DICHLOROBENZIDINE	ND	350	180
3-NITROANILINE	ND	350	180
4,6-DINITRO-2-METHYLPHENOL	ND	700	180
4-BROMOPHENYL-PHENYL ETHER	ND	350	180
4-CHLORO-3-METHYLPHENOL	ND	350	180
4-CHLOROANILINE	ND	350	180
4-CHLOROPHENYL-PHENYL ETHER	ND	350	180
4-METHYLPHENOL (1)	ND	350	180
4-NITROANILINE	ND	350	180
4-NITROPHENOL	ND	700	180
ACENAPHTHENE	ND	350	180
ACENAPHTHYLENE	ND	350	180
ANTHRACENE	ND	350	180
BENZO(A)ANTHRACENE	ND	350	180
BENZO(A)PYRENE	ND	350	180
BENZO(B)FLUORANTHENE	ND	350	180
BENZO(K)FLUORANTHENE	ND	350	180
BENZO(G,H,I)PERYLENE	ND	350	180
BIS(2-CHLOROETHOXY)METHANE	ND	350	180
BIS(2-CHLOROETHYL)ETHER	ND	350	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	350	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	350	180
BUTYLBENZYLPHTHALATE	ND	350	180
CHRYSENE	ND	350	180
DI-N-BUTYLPHTHALATE	ND	350	180
DI-N-OCTYLPHTHALATE	ND	350	180
DIBENZO(A,H)ANTHRACENE	ND	350	180
DIBENZOFURAN	ND	350	180
DIETHYLPHTHALATE	ND	350	180
DIMETHYLPHTHALATE	ND	350	180
FLUORANTHENE	ND	350	180
FLUORENE	ND	350	180
HEXACHLOROBENZENE	ND	350	180
HEXACHLOROBUTADIENE	ND	350	200
HEXACHLOROCYCLOPENTADIENE	ND	350	180
HEXACHLOROETHANE	ND	350	180
INDENO(1,2,3-CD)PYRENE	ND	350	180
ISOPHORONE	ND	350	180
N-NITROSO-DI-N-PROPYLAMINE	ND	350	180
N-NITROSODIPHENYLAMINE (2)	ND	350	180
NAPHTHALENE	ND	350	180
NITROBENZENE	ND	350	180
PENTACHLOROPHENOL	ND	700	190
PHENANTHRENE	ND	350	180
PHENOL	ND	350	180
PYRENE	ND	350	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	71	20-140
2-FLUOROBIPHENYL	63	30-130
2-FLUOROPHENOL	70	20-130
NITROBENZENE-D5	59	20-130
PHENOL-D5	65	20-130
TERPHENYL-D14	90	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: TETRA TECH, INC.	Date Collected	: 07/18/08
Project	: LMC BEAUMONT SITE 1	Date Received	: 07/18/08
Batch No.	: 08G195	Date Extracted	: 07/23/08 15:00
Sample ID	: H-T5-0.5	Date Analyzed	: 07/24/08 22:07
Lab Samp ID	: G195-07	Dilution Factor	: 1
Lab File ID	: RGZ334	Matrix	: SOIL
Ext Btch ID	: SVG037S	% Moisture	: 3.8
Calib. Ref.	: RGZ193	Instrument ID	: T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	340	170
1,2-DICHLOROBENZENE	ND	340	170
1,3-DICHLOROBENZENE	ND	340	170
1,4-DICHLOROBENZENE	ND	340	170
2,4,5-TRICHLOROPHENOL	ND	340	170
2,4,6-TRICHLOROPHENOL	ND	340	190
2,4-DICHLOROPHENOL	ND	340	170
2,4-DIMETHYLPHENOL	ND	340	170
2,4-DINITROPHENOL	ND	690	170
2,4-DINITROTOLUENE	ND	340	170
2,6-DINITROTOLUENE	ND	340	170
2-CHLORONAPHTHALENE	ND	340	170
2-CHLOROPHENOL	ND	340	170
2-METHYLNAPHTHALENE	ND	340	170
2-METHYLPHENOL	ND	340	170
2-NITROANILINE	ND	340	170
2-NITROPHENOL	ND	340	170
3,3'-DICHLOROBENZIDINE	ND	340	170
3-NITROANILINE	ND	340	170
4,6-DINITRO-2-METHYLPHENOL	ND	690	170
4-BROMOPHENYL-PHENYL ETHER	ND	340	170
4-CHLORO-3-METHYLPHENOL	ND	340	170
4-CHLOROANILINE	ND	340	170
4-CHLOROPHENYL-PHENYL ETHER	ND	340	180
4-METHYLPHENOL (1)	ND	340	170
4-NITROANILINE	ND	340	170
4-NITROPHENOL	ND	690	170
ACENAPHTHENE	ND	340	170
ACENAPHTHYLENE	ND	340	170
ANTHRACENE	ND	340	170
BENZO(A)ANTHRACENE	ND	340	170
BENZO(A)PYRENE	ND	340	170
BENZO(B)FLUORANTHENE	ND	340	170
BENZO(K)FLUORANTHENE	ND	340	170
BENZO(G,H,I)PERYLENE	ND	340	170
BIS(2-CHLOROETHOXY)METHANE	ND	340	170
BIS(2-CHLOROETHYL)ETHER	ND	340	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	340	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	340	170
BUTYLBENZYLPHTHALATE	ND	340	170
CHRYSENE	ND	340	170
DI-N-BUTYLPHTHALATE	ND	340	170
DI-N-OCTYLPHTHALATE	ND	340	170
DIBENZO(A,H)ANTHRACENE	ND	340	170
DIBENZOFURAN	ND	340	170
DIETHYLPHTHALATE	ND	340	170
DIMETHYLPHTHALATE	ND	340	170
FLUORANTHENE	ND	340	170
FLUORENE	ND	340	170
HEXACHLOROBENZENE	ND	340	170
HEXACHLOROBUTADIENE	ND	340	200
HEXACHLOROCYCLOPENTADIENE	ND	340	170
HEXACHLOROETHANE	ND	340	170
INDENO(1,2,3-CD)PYRENE	ND	340	170
ISOPHORONE	ND	340	170
N-NITROSO-DI-N-PROPYLAMINE	ND	340	170
N-NITROSODIPHENYLAMINE (2)	ND	340	170
NAPHTHALENE	ND	340	170
NITROBENZENE	ND	340	170
PENTACHLOROPHENOL	ND	690	180
PHENANTHRENE	ND	340	170
PHENOL	ND	340	170
PYRENE	ND	340	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	91	20-140
2-FLUOROBIPHENYL	54	30-130
2-FLUOROPHENOL	58	20-130
NITROBENZENE-D5	58	20-130
PHENOL-D5	56	20-130
TERPHENYL-D14	94	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/23/08 15:00
Sample ID: H-T5-0.5DUP	Date Analyzed: 07/24/08 22:26
Lab Samp ID: G195-08	Dilution Factor: 1
Lab File ID: RGZ335	Matrix : SOIL
Ext Btch ID: SVG037S	% Moisture : 3.7
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	340	170
1,2-DICHLOROBENZENE	ND	340	170
1,3-DICHLOROBENZENE	ND	340	170
1,4-DICHLOROBENZENE	ND	340	170
2,4,5-TRICHLOROPHENOL	ND	340	170
2,4,6-TRICHLOROPHENOL	ND	340	190
2,4-DICHLOROPHENOL	ND	340	170
2,4-DIMETHYLPHENOL	ND	340	170
2,4-DINITROPHENOL	ND	690	170
2,4-DINITROTOLUENE	ND	340	170
2,6-DINITROTOLUENE	ND	340	170
2-CHLORONAPHTHALENE	ND	340	170
2-CHLOROPHENOL	ND	340	170
2-METHYLNAPHTHALENE	ND	340	170
2-METHYLPHENOL	ND	340	170
2-NITROANILINE	ND	340	170
2-NITROPHENOL	ND	340	170
3,3'-DICHLOROBENZIDINE	ND	340	170
3-NITROANILINE	ND	340	170
4,6-DINITRO-2-METHYLPHENOL	ND	690	170
4-BROMOPHENYL-PHENYL ETHER	ND	340	170
4-CHLORO-3-METHYLPHENOL	ND	340	170
4-CHLOROANILINE	ND	340	170
4-CHLOROPHENYL-PHENYL ETHER	ND	340	180
4-METHYLPHENOL (1)	ND	340	170
4-NITROANILINE	ND	340	170
4-NITROPHENOL	ND	690	170
ACENAPHTHENE	ND	340	170
ACENAPHTHYLENE	ND	340	170
ANTHRACENE	ND	340	170
BENZO(A)ANTHRACENE	ND	340	170
BENZO(A)PYRENE	ND	340	170
BENZO(B)FLUORANTHENE	ND	340	170
BENZO(K)FLUORANTHENE	ND	340	170
BENZO(G,H,I)PERYLENE	ND	340	170
BIS(2-CHLOROETHOXY)METHANE	ND	340	170
BIS(2-CHLOROETHYL)ETHER	ND	340	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	340	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	340	170
BUTYLBENZYLPHTHALATE	ND	340	170
CHRYSENE	ND	340	170
DI-N-BUTYLPHTHALATE	ND	340	170
DI-N-OCTYLPHTHALATE	ND	340	170
DIBENZO(A,H)ANTHRACENE	ND	340	170
DIBENZOFURAN	ND	340	170
DIETHYLPHTHALATE	ND	340	170
DIMETHYLPHTHALATE	ND	340	170
FLUORANTHENE	ND	340	170
FLUORENE	ND	340	170
HEXACHLOROBENZENE	ND	340	170
HEXACHLOROBUTADIENE	ND	340	200
HEXACHLOROCYCLOPENTADIENE	ND	340	170
HEXACHLOROETHANE	ND	340	170
INDENO(1,2,3-CD)PYRENE	ND	340	170
ISOPHORONE	ND	340	170
N-NITROSO-DI-N-PROPYLAMINE	ND	340	170
N-NITROSODIPHENYLAMINE (2)	ND	340	170
NAPHTHALENE	ND	340	170
NITROBENZENE	ND	340	170
PENTACHLOROPHENOL	ND	690	180
PHENANTHRENE	ND	340	170
PHENOL	ND	340	170
PYRENE	ND	340	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	85	20-140
2-FLUOROBIPHENYL	50	30-130
2-FLUOROPHENOL	47	20-130
NITROBENZENE-D5	48	20-130
PHENOL-D5	58	20-130
TERPHENYL-D14	89	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/23/08 15:00
Sample ID: H-T5-2.5	Date Analyzed: 07/24/08 22:45
Lab Samp ID: G195-09	Dilution Factor: 1
Lab File ID: RGZ336	Matrix : SOIL
Ext Btch ID: SVG037S	% Moisture : 8.4
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	360	180
1,2-DICHLOROBENZENE	ND	360	180
1,3-DICHLOROBENZENE	ND	360	180
1,4-DICHLOROBENZENE	ND	360	180
2,4,5-TRICHLOROPHENOL	ND	360	180
2,4,6-TRICHLOROPHENOL	ND	360	200
2,4-DICHLOROPHENOL	ND	360	180
2,4-DIMETHYLPHENOL	ND	360	180
2,4-DINITROPHENOL	ND	720	180
2,4-DINITROTOLUENE	ND	360	180
2,6-DINITROTOLUENE	ND	360	180
2-CHLORONAPHTHALENE	ND	360	180
2-CHLOROPHENOL	ND	360	180
2-METHYLNAPHTHALENE	ND	360	180
2-METHYLPHENOL	ND	360	180
2-NITROANILINE	ND	360	180
2-NITROPHENOL	ND	360	180
3,3'-DICHLOROBENZIDINE	ND	360	180
3-NITROANILINE	ND	360	180
4,6-DINITRO-2-METHYLPHENOL	ND	720	180
4-BROMOPHENYL-PHENYL ETHER	ND	360	180
4-CHLORO-3-METHYLPHENOL	ND	360	180
4-CHLOROANILINE	ND	360	180
4-CHLOROPHENYL-PHENYL ETHER	ND	360	190
4-METHYLPHENOL (1)	ND	360	180
4-NITROANILINE	ND	360	180
4-NITROPHENOL	ND	720	180
ACENAPHTHENE	ND	360	180
ACENAPHTHYLENE	ND	360	180
ANTHRACENE	ND	360	180
BENZO(A)ANTHRACENE	ND	360	180
BENZO(A)PYRENE	ND	360	180
BENZO(B)FLUORANTHENE	ND	360	180
BENZO(K)FLUORANTHENE	ND	360	180
BENZO(G,H,I)PERYLENE	ND	360	180
BIS(2-CHLOROETHOXY)METHANE	ND	360	180
BIS(2-CHLOROETHYL)ETHER	ND	360	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	360	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	360	180
BUTYLBENZYLPHTHALATE	ND	360	180
CHRYSENE	ND	360	180
DI-N-BUTYLPHTHALATE	ND	360	180
DI-N-OCTYLPHTHALATE	ND	360	180
DIBENZO(A,H)ANTHRACENE	ND	360	180
DIBENZOFURAN	ND	360	180
DIETHYLPHTHALATE	ND	360	180
DIMETHYLPHTHALATE	ND	360	180
FLUORANTHENE	ND	360	180
FLUORENE	ND	360	180
HEXACHLOROBENZENE	ND	360	180
HEXACHLOROBUTADIENE	ND	360	210
HEXACHLOROCYCLOPENTADIENE	ND	360	180
HEXACHLOROETHANE	ND	360	180
INDENO(1,2,3-CD)PYRENE	ND	360	180
ISOPHORONE	ND	360	180
N-NITROSO-DI-N-PROPYLAMINE	ND	360	180
N-NITROSODIPHENYLAMINE (2)	ND	360	180
NAPHTHALENE	ND	360	180
NITROBENZENE	ND	360	180
PENTACHLOROPHENOL	ND	720	190
PHENANTHRENE	ND	360	180
PHENOL	ND	360	180
PYRENE	ND	360	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	88	20-140
2-FLUOROBIPHENYL	60	30-130
2-FLUOROPHENOL	52	20-130
NITROBENZENE-D5	44	20-130
PHENOL-D5	55	20-130
TERPHENYL-D14	88	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/23/08 15:00
Sample ID: H-T5-6.0	Date Analyzed: 07/24/08 23:04
Lab Samp ID: G195-12	Dilution Factor: 1
Lab File ID: RGZ337	Matrix : SOIL
Ext Btch ID: SVG037S	% Moisture : 14.9
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	390	200
1,2-DICHLOROBENZENE	ND	390	200
1,3-DICHLOROBENZENE	ND	390	200
1,4-DICHLOROBENZENE	ND	390	200
2,4,5-TRICHLOROPHENOL	ND	390	200
2,4,6-TRICHLOROPHENOL	ND	390	220
2,4-DICHLOROPHENOL	ND	390	200
2,4-DIMETHYLPHENOL	ND	390	200
2,4-DINITROPHENOL	ND	780	200
2,4-DINITROTOLUENE	ND	390	200
2,6-DINITROTOLUENE	ND	390	200
2-CHLORONAPHTHALENE	ND	390	200
2-CHLOROPHENOL	ND	390	200
2-METHYLNAPHTHALENE	ND	390	200
2-METHYLPHENOL	ND	390	200
2-NITROANILINE	ND	390	200
2-NITROPHENOL	ND	390	200
3,3'-DICHLOROBENZIDINE	ND	390	200
3-NITROANILINE	ND	390	200
4,6-DINITRO-2-METHYLPHENOL	ND	780	200
4-BROMOPHENYL-PHENYL ETHER	ND	390	200
4-CHLORO-3-METHYLPHENOL	ND	390	200
4-CHLOROANILINE	ND	390	200
4-CHLOROPHENYL-PHENYL ETHER	ND	390	200
4-METHYLPHENOL (1)	ND	390	200
4-NITROANILINE	ND	390	200
4-NITROPHENOL	ND	780	200
ACENAPHTHENE	ND	390	200
ACENAPHTHYLENE	ND	390	200
ANTHRACENE	ND	390	200
BENZO(A)ANTHRACENE	ND	390	200
BENZO(A)PYRENE	ND	390	200
BENZO(B)FLUORANTHENE	ND	390	200
BENZO(K)FLUORANTHENE	ND	390	200
BENZO(G,H,I)PERYLENE	ND	390	200
BIS(2-CHLOROETHOXY)METHANE	ND	390	200
BIS(2-CHLOROETHYL)ETHER	ND	390	200
BIS(2-CHLOROISOPROPYL)ETHER	ND	390	200
BIS(2-ETHYLHEXYL)PHTHALATE	ND	390	200
BUTYLBENZYLPHTHALATE	ND	390	200
CHRYSENE	ND	390	200
DI-N-BUTYLPHTHALATE	ND	390	200
DI-N-OCTYLPHTHALATE	ND	390	200
DIBENZO(A,H)ANTHRACENE	ND	390	200
DIBENZOFURAN	ND	390	200
DIETHYLPHTHALATE	ND	390	200
DIMETHYLPHTHALATE	ND	390	200
FLUORANTHENE	ND	390	200
FLUORENE	ND	390	200
HEXACHLOROBENZENE	ND	390	200
HEXACHLOROBUTADIENE	ND	390	220
HEXACHLOROCYCLOPENTADIENE	ND	390	200
HEXACHLOROETHANE	ND	390	200
INDENO(1,2,3-CD)PYRENE	ND	390	200
ISOPHORONE	ND	390	200
N-NITROSO-DI-N-PROPYLAMINE	ND	390	200
N-NITROSODIPHENYLAMINE (2)	ND	390	200
NAPHTHALENE	ND	390	200
NITROBENZENE	ND	390	200
PENTACHLOROPHENOL	ND	780	210
PHENANTHRENE	ND	390	200
PHENOL	ND	390	200
PYRENE	ND	390	200

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	85	20-140
2-FLUOROBIPHENYL	74	30-130
2-FLUOROPHENOL	80	20-130
NITROBENZENE-D5	75	20-130
PHENOL-D5	75	20-130
TERPHENYL-D14	86	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: 07/18/08
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
Batch No. : 08G195	Date Extracted: 07/23/08 15:00
Sample ID: H-T5-12.0	Date Analyzed: 07/24/08 23:24
Lab Samp ID: G195-14	Dilution Factor: 1
Lab File ID: RGZ338	Matrix : SOIL
Ext Btch ID: SVG037S	% Moisture : 13.6
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	380	190
1,2-DICHLOROBENZENE	ND	380	190
1,3-DICHLOROBENZENE	ND	380	190
1,4-DICHLOROBENZENE	ND	380	190
2,4,5-TRICHLOROPHENOL	ND	380	190
2,4,6-TRICHLOROPHENOL	ND	380	210
2,4-DICHLOROPHENOL	ND	380	190
2,4-DIMETHYLPHENOL	ND	380	190
2,4-DINITROPHENOL	ND	760	190
2,4-DINITROTOLUENE	ND	380	190
2,6-DINITROTOLUENE	ND	380	190
2-CHLORONAPHTHALENE	ND	380	190
2-CHLOROPHENOL	ND	380	190
2-METHYLNAPHTHALENE	ND	380	190
2-METHYLPHENOL	ND	380	190
2-NITROANILINE	ND	380	190
2-NITROPHENOL	ND	380	190
3,3'-DICHLOROBENZIDINE	ND	380	190
3-NITROANILINE	ND	380	190
4,6-DINITRO-2-METHYLPHENOL	ND	760	190
4-BROMOPHENYL-PHENYL ETHER	ND	380	190
4-CHLORO-3-METHYLPHENOL	ND	380	190
4-CHLOROANILINE	ND	380	190
4-CHLOROPHENYL-PHENYL ETHER	ND	380	200
4-METHYLPHENOL (1)	ND	380	190
4-NITROANILINE	ND	380	190
4-NITROPHENOL	ND	760	190
ACENAPHTHENE	ND	380	190
ACENAPHTHYLENE	ND	380	190
ANTHRACENE	ND	380	190
BENZO(A)ANTHRACENE	ND	380	190
BENZO(A)PYRENE	ND	380	190
BENZO(B)FLUORANTHENE	ND	380	190
BENZO(K)FLUORANTHENE	ND	380	190
BENZO(G,H,I)PERYLENE	ND	380	190
BIS(2-CHLOROETHOXY)METHANE	ND	380	190
BIS(2-CHLOROETHYL)ETHER	ND	380	190
BIS(2-CHLOROISOPROPYL)ETHER	ND	380	190
BIS(2-ETHYLHEXYL)PHTHALATE	ND	380	190
BUTYLBENZYLPHTHALATE	ND	380	190
CHRYSENE	ND	380	190
DI-N-BUTYLPHTHALATE	ND	380	190
DI-N-OCTYLPHTHALATE	ND	380	190
DIBENZO(A,H)ANTHRACENE	ND	380	190
DIBENZOFURAN	ND	380	190
DIETHYLPHTHALATE	ND	380	190
DIMETHYLPHTHALATE	ND	380	190
FLUORANTHENE	ND	380	190
FLUORENE	ND	380	190
HEXACHLOROBENZENE	ND	380	190
HEXACHLOROBUTADIENE	ND	380	220
HEXACHLOROCYCLOPENTADIENE	ND	380	190
HEXACHLOROETHANE	ND	380	190
INDENO(1,2,3-CD)PYRENE	ND	380	190
ISOPHORONE	ND	380	190
N-NITROSO-DI-N-PROPYLAMINE	ND	380	190
N-NITROSODIPHENYLAMINE (2)	ND	380	190
NAPHTHALENE	ND	380	190
NITROBENZENE	ND	380	190
PENTACHLOROPHENOL	ND	760	200
PHENANTHRENE	ND	380	190
PHENOL	ND	380	190
PYRENE	ND	380	190

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	82	20-140
2-FLUOROBIPHENYL	67	30-130
2-FLUOROPHENOL	69	20-130
NITROBENZENE-D5	73	20-130
PHENOL-D5	76	20-130
TERPHENYL-D14	89	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

QC SUMMARIES

METHOD 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/21/08
Batch No. : 08G195	Date Extracted: 07/21/08 16:00
Sample ID: MBLK1W	Date Analyzed: 07/23/08 16:47
Lab Samp ID: SVG033WB	Dilution Factor: 1
Lab File ID: RGG238	Matrix : WATER
Ext Btch ID: SVG033W	% Moisture : NA
Calib. Ref.: RFG137	Instrument ID : T-0E2

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	10	5.0
1,2-DICHLOROBENZENE	ND	10	5.0
1,3-DICHLOROBENZENE	ND	10	5.0
1,4-DICHLOROBENZENE	ND	10	5.0
2,4,5-TRICHLOROPHENOL	ND	10	5.0
2,4,6-TRICHLOROPHENOL	ND	10	5.0
2,4-DICHLOROPHENOL	ND	10	5.0
2,4-DIMETHYLPHENOL	ND	10	5.0
2,4-DINITROPHENOL	ND	20	5.0
2,4-DINITROTOLUENE	ND	10	5.0
2,6-DINITROTOLUENE	ND	10	5.0
2-CHLORONAPHTHALENE	ND	10	5.0
2-CHLOROPHENOL	ND	10	5.0
2-METHYLNAPHTHALENE	ND	10	5.0
2-METHYLPHENOL	ND	10	5.0
2-NITROANILINE	ND	10	5.0
2-NITROPHENOL	ND	10	5.0
3,3'-DICHLOROBENZIDINE	ND	10	5.0
3-NITROANILINE	ND	10	5.0
4,6-DINITRO-2-METHYLPHENOL	ND	20	5.0
4-BROMOPHENYL-PHENYL ETHER	ND	10	5.0
4-CHLORO-3-METHYLPHENOL	ND	10	5.0
4-CHLOROANILINE	ND	10	5.0
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5.0
4-METHYLPHENOL (1)	ND	10	5.0
4-NITROANILINE	ND	10	5.0
4-NITROPHENOL	ND	20	5.0
ACENAPHTHENE	ND	10	5.0
ACENAPHTHYLENE	ND	10	5.0
ANTHRACENE	ND	10	5.0
BENZO(A)ANTHRACENE	ND	10	5.0
BENZO(A)PYRENE	ND	10	5.0
BENZO(B)FLUORANTHENE	ND	10	5.0
BENZO(K)FLUORANTHENE	ND	10	5.0
BENZO(G,H,I)PERYLENE	ND	10	5.0
BIS(2-CHLOROETHOXY)METHANE	ND	10	5.0
BIS(2-CHLOROETHYL)ETHER	ND	10	5.0
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5.0
BIS(2-ETHYLHEXYL)PHTHALATE	ND	10	5.0
BUTYLBENZYLPHTHALATE	ND	10	5.0
CHRYSENE	ND	10	5.0
DI-N-BUTYLPHTHALATE	ND	10	5.0
DI-N-OCTYLPHTHALATE	ND	10	5.0
DIBENZO(A,H)ANTHRACENE	ND	10	5.0
DIBENZOFURAN	ND	10	5.0
DIETHYLPHTHALATE	ND	10	5.0
DIMETHYLPHTHALATE	ND	10	5.0
FLUORANTHENE	ND	10	5.0
FLUORENE	ND	10	5.0
HEXACHLOROBENZENE	ND	10	5.0
HEXACHLOROBUTADIENE	ND	10	5.0
HEXACHLOROCYCLOPENTADIENE	ND	10	5.0
HEXACHLOROETHANE	ND	10	5.0
INDENO(1,2,3-CD)PYRENE	ND	10	5.0
ISOPHORONE	ND	10	5.0
N-NITROSO-DI-N-PROPYLAMINE	ND	10	5.0
N-NITROSODIPHENYLAMINE (2)	ND	10	5.0
NAPHTHALENE	ND	10	5.0
NITROBENZENE	ND	10	5.0
PENTACHLOROPHENOL	ND	20	5.0
PHENANTHRENE	ND	10	5.0
PHENOL	ND	10	5.0
PYRENE	ND	10	5.0

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	74	40-140
2-FLUOROBIPHENYL	66	40-130
2-FLUOROPHENOL	66	30-130
NITROBENZENE-D5	70	40-130
PHENOL-D5	67	30-130
TERPHENYL-D14	92	50-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3520C/8270C

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 1 1
SAMPLE ID: MBLK1W
LAB SAMP ID: SVG033WB SVG033WL SVG033WC
LAB FILE ID: RGG238 RGG239 RGG240
DATE EXTRACTED: 07/21/0816:00 07/21/0816:00 07/21/0816:00 DATE COLLECTED: NA
DATE ANALYZED: 07/23/0816:47 07/23/0817:07 07/23/0817:27 DATE RECEIVED: 07/21/08
PREP. BATCH: SVG033W SVG033W SVG033W
CALIB. REF: RFG137 RFG137 RFG137

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	80.0	41.1	51	80.0	44.2	55	7	30-130	30
1,4-Dichlorobenzene	ND	80.0	38.9	49	80.0	47.9	60	21	30-130	30
2,4-Dinitrotoluene	ND	80.0	64.1	80	80.0	68.1	85	6	40-130	30
2-Chlorophenol	ND	80.0	37.8	47	80.0	47.3	59	22	30-130	30
4-Chloro-3-Methylphenol	ND	80.0	48.7	61	80.0	53.1	66	9	40-130	30
4-Nitrophenol	ND	80.0	52.8	66	80.0	53.2	67	1	30-130	30
Acenaphthene	ND	80.0	48.4	61	80.0	52.8	66	9	40-130	30
n-Nitroso-di-n-propylamine	ND	80.0	39.8	50	80.0	48.7	61	20	30-130	30
Pentachlorophenol	ND	80.0	48.9	61	80.0	49.2	61	1	30-130	30
Phenol	ND	80.0	36.4	45	80.0	45.6	57	23	20-130	30
Pyrene	ND	80.0	63.4	79	80.0	65.4	82	3	50-130	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	150	110	74	150	128	85	40-140
2-Fluorobiphenyl	50.0	24.3	49	50.0	28.0	56	40-130
2-Fluorophenol	150	63.2	42	150	80.2	53	30-130
Nitrobenzene-d5	50.0	25.9	52	50.0	29.0	58	40-130
Phenol-d5	150	65.8	44	150	82.8	55	30-130
Terphenyl-d14	50.0	38.4	77	50.0	40.5	81	50-130

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/23/08
Batch No. : 08G195	Date Extracted: 07/23/08 15:00
Sample ID: MBLK1S	Date Analyzed: 07/24/08 19:53
Lab Samp ID: SVG037SB	Dilution Factor: 1
Lab File ID: RGZ327	Matrix : SOIL
Ext Btch ID: SVG037S	% Moisture : NA
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	180
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	660	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	660	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	660	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	660	170
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	92	40-130
2-FLUOROBIPHENYL	78	30-130
2-FLUOROPHENOL	80	30-130
NITROBENZENE-D5	84	30-130
PHENOL-D5	88	30-130
TERPHENYL-D14	102	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3550B/8270C

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	SVG037SB	SVG037SL	SVG037SC		
LAB FILE ID:	RGZ327	RGZ328	RGZ329		
DATE EXTRACTED:	07/23/0815:00	07/23/0815:00	07/23/0815:00	DATE COLLECTED:	NA
DATE ANALYZED:	07/24/0819:53	07/24/0820:11	07/24/0820:30	DATE RECEIVED:	07/23/08
PREP. BATCH:	SVG037S	SVG037S	SVG037S		
CALIB. REF:	RGZ193	RGZ193	RGZ193		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	2670	2110	79	2670	2110	79	0	30-130	50
1,4-Dichlorobenzene	ND	2670	2130	80	2670	2080	78	2	30-130	50
2,4-Dinitrotoluene	ND	2670	2100	79	2670	2180	82	4	30-130	50
2-Chlorophenol	ND	2670	2200	83	2670	2140	80	3	30-130	50
4-Chloro-3-Methylphenol	ND	2670	2150	81	2670	2130	80	1	30-130	50
4-Nitrophenol	ND	2670	2520	95	2670	2710	102	7	20-130	50
Acenaphthene	ND	2670	2130	80	2670	2180	82	2	30-130	50
n-Nitroso-di-n-propylamine	ND	2670	2310	87	2670	2350	88	2	30-130	50
Pentachlorophenol	ND	2670	1780	67	2670	1930	72	8	20-130	50
Phenol	ND	2670	2060	77	2670	1920	72	7	30-130	50
Pyrene	ND	2670	2180	82	2670	2230	83	2	30-130	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	5000	4830	97	5000	4960	99	40-130
2-Fluorobiphenyl	1670	1440	86	1670	1490	89	30-130
2-Fluorophenol	5000	4700	94	5000	4690	94	30-130
Nitrobenzene-d5	1670	1400	84	1670	1440	86	30-130
Phenol-d5	5000	4350	87	5000	4500	90	30-130
Terphenyl-d14	1670	1650	99	1670	1600	96	40-130

METHOD 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/30/08
Batch No. : 08G195	Date Extracted: 07/30/08 11:30
Sample ID: MBLK2S	Date Analyzed: 07/31/08 18:29
Lab Samp ID: SVG048SB	Dilution Factor: 1
Lab File ID: RGZ381	Matrix : SOIL
Ext Btch ID: SVG048S	% Moisture : NA
Calib. Ref.: RGZ193	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	330	170
2,4,6-TRICHLOROPHENOL	ND	330	180
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	660	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	330	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	330	170
4,6-DINITRO-2-METHYLPHENOL	ND	660	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	330	170
4-NITROPHENOL	ND	660	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(A)PYRENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROETHYL)ETHER	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZO(A,H)ANTHRACENE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBENZENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	190
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
INDENO(1,2,3-CD)PYRENE	ND	330	170
ISOPHORONE	ND	330	170
N-NITROSO-DI-N-PROPYLAMINE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	660	170
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	92	40-130
2-FLUOROBIPHENYL	87	30-130
2-FLUOROPHENOL	92	30-130
NITROBENZENE-D5	95	30-130
PHENOL-D5	92	30-130
TERPHENYL-D14	104	40-130

(1): Cannot be separated from 3-Methylphenol
(2): Cannot be separated from Diphenylamine

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3550B/8270C

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2S				
LAB SAMP ID:	SVG048SB	SVG048SL	SVG048SC		
LAB FILE ID:	RGZ381	RGZ382	RGZ383		
DATE EXTRACTED:	07/30/0811:30	07/30/0811:30	07/30/0811:30	DATE COLLECTED:	NA
DATE ANALYZED:	07/31/0818:29	07/31/0818:48	07/31/0819:07	DATE RECEIVED:	07/30/08
PREP. BATCH:	SVG048S	SVG048S	SVG048S		
CALIB. REF:	RGZ193	RGZ193	RGZ193		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	2670	2280	85	2670	2250	84	1	30-130	50
1,4-Dichlorobenzene	ND	2670	2080	78	2670	2080	78	0	30-130	50
2,4-Dinitrotoluene	ND	2670	2290	86	2670	2400	90	5	30-130	50
2-Chlorophenol	ND	2670	2100	79	2670	2200	83	5	30-130	50
4-Chloro-3-Methylphenol	ND	2670	2160	81	2670	2110	79	2	30-130	50
4-Nitrophenol	ND	2670	1790	67	2670	2380	89	28	20-130	50
Acenaphthene	ND	2670	2250	84	2670	2240	84	0	30-130	50
n-Nitroso-di-n-propylamine	ND	2670	2240	84	2670	2370	89	6	30-130	50
Pentachlorophenol	ND	2670	1970	74	2670	2060	77	5	20-130	50
Phenol	ND	2670	2120	79	2670	2120	79	0	30-130	50
Pyrene	ND	2670	2410	90	2670	2540	95	5	30-130	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	5000	4770	95	5000	5190	104	40-130
2-Fluorobiphenyl	1670	1510	90	1670	1590	96	30-130
2-Fluorophenol	5000	4630	93	5000	5080	102	30-130
Nitrobenzene-d5	1670	1510	90	1670	1450	87	30-130
Phenol-d5	5000	4320	86	5000	4340	87	30-130
Terphenyl-d14	1670	1790	107	1670	1720	103	40-130

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3550B/8270C

MATRIX: SOIL % MOISTURE: 5.9

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	H-T11-10.0DUPRE				
LAB SAMP ID:	G195-06R	G195-06M	G195-06S		
LAB FILE ID:	RGZ387	RGZ388	RGZ389		
DATE EXTRACTED:	07/30/0811:30	07/30/0811:30	07/30/0811:30	DATE COLLECTED:	07/18/08
DATE ANALYZED:	07/31/0820:23	07/31/0820:42	07/31/0821:01	DATE RECEIVED:	07/18/08
PREP. BATCH:	SVG048S	SVG048S	SVG048S		
CALIB. REF:	RGZ193	RGZ193	RGZ193		

ACCESSION:

PARAMETER	SMPL RSLT (ug/kg)	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	SPIKE AMT (ug/kg)	MSD RSLT (ug/kg)	MSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	2830	2080	73	2830	1970	69	5	10-130	50
1,4-Dichlorobenzene	ND	2830	1770	63	2830	1640	58	8	10-130	50
2,4-Dinitrotoluene	ND	2830	2350	83	2830	2400	85	2	20-130	50
2-Chlorophenol	ND	2830	1900	67	2830	1830	65	4	20-130	50
4-Chloro-3-Methylphenol	ND	2830	2140	75	2830	1990	70	7	30-130	50
4-Nitrophenol	ND	2830	2430	86	2830	2330	82	5	20-130	50
Acenaphthene	ND	2830	2140	76	2830	2110	74	1	20-130	50
n-Nitroso-di-n-propylamine	ND	2830	2300	81	2830	2000	70	14	20-130	50
Pentachlorophenol	ND	2830	1940	68	2830	1800	63	8	20-130	50
Phenol	ND	2830	2120	75	2830	1790	63	17	20-130	50
Pyrene	ND	2830	2430	86	2830	2420	85	0	10-160	50

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	MS RSLT (ug/kg)	MS % REC	SPIKE AMT (ug/kg)	MSD RSLT (ug/kg)	MSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	5310	5020	94	5310	5130	96	20-140
2-Fluorobiphenyl	1770	1360	77	1770	1390	78	30-130
2-Fluorophenol	5310	3640	69	5310	4240	80	20-130
Nitrobenzene-d5	1770	1340	75	1770	1260	71	20-130
Phenol-d5	5310	4030	76	5310	3790	71	20-130
Terphenyl-d14	1770	1710	96	1770	1680	95	40-130

INITIAL CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG129
Instrument ID: T-0E2

Project: ICAL
SDG No.: 08G195
DFTPP Injection Date: 06/30/08
DFTPP Injection Time: 09:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.92
68	Less than 2% of mass 69	0.53(1.7)1
69	Relative abundance of mass 198	32.18
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	49.78
197	Less than 1.0% of mass 198	0.26
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.72
275	10.0 - 30.0% of mass 198	25.44
365	Greater than 1.00% of mass 198	3.24
441	Present, but less than mass 443	15.93
442	Greater than 40.0% of mass 198	94.86
443	17.0 - 23.0% of mass 442	17.86(18.8)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD00.5	SVE2F302	RFG131	06/30/08	10:26
2	STD0001	SVE2F303	RFG132	06/30/08	10:46
3	SSTD002	SVE2F304	RFG133	06/30/08	11:05
4	SSTD005	SVE2F305	RFG134	06/30/08	11:25
5	SSTD010	SVE2F306	RFG135	06/30/08	11:44
6	SSTD020	SVE2F307	RFG136	06/30/08	12:04
7	SSTD050	SVE2F308	RFG137	06/30/08	12:24
8	SSTD080	SVE2F309	RFG138	06/30/08	12:43
9	SSTD100	SVE2F3010	RFG139	06/30/08	13:03
10	SSTD120	SVE2F3011	RFG140	06/30/08	13:23
11	SSTD160	SVE2F3012	RFG141	06/30/08	13:42
12	SSTD050	ISVE2F301	RFG142	06/30/08	14:02

INITIAL_CALIBRATION - RELATIVE_RESPONSE_FACTOR

Instrument ID :E2
Beginning DateTime :06/30/08 10:26
Spike Units :PPM
IC File :RFG137

Column Spec :DB-5.625 ID :0.1
Ending DateTime :06/30/08 13:
HPChem Method :SVE2F30

IDX	Parameters	.5 10:26 RFG131	1 10:46 RFG132	2 11:05 RFG133	5 11:25 RFG134	10 11:44 RFG135	20 12:04 RFG136	50 12:24 RFG137	80 12:43 RFG138	100 13:03 RFG139	120 13:23 RFG140	160 13:42 RFG141	Av_RRF	%_RSD	Av_Rt
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	1	1	1	1	1	0	2.95
2	N-nitrosodimethylamine	0.445	0.507	0.506	0.515	0.527	0.508	0.520	0.511	0.498	------	------	0.504	4.71	1.39
3	Pyridine	0.793	0.864	0.892	1.001	1.000	0.984	1.019	1.012	0.981	------	------	0.950	8.41	1.42
4	2-Fluorophenol	1.194	1.061	1.065	1.087	1.108	1.094	1.113	1.118	1.108	1.034	1.016	1.091	4.38	2.01
5	Phenol-d5	1.205	1.241	1.187	1.261	1.232	1.237	1.268	1.277	1.269	1.165	1.144	1.226	3.66	2.60
6	Phenol	1.135	1.312	1.318	1.326	1.299	1.270	1.315	1.325	1.302	------	------	1.289	4.67	2.61
7	Aniline	1.469	1.360	1.398	1.499	1.464	1.444	1.465	1.462	1.432	------	------	1.444	2.92	2.67
8	bis(2-chloroethyl) ether	1.060	0.940	0.942	0.946	0.921	0.906	0.912	0.913	0.895	------	------	0.937	5.27	2.70
9	2-Chlorophenol	1.285	1.410	1.337	1.555	1.555	1.547	1.487	1.531	1.492	------	------	1.467	6.84	2.77
10	1,3-Dichlorobenzene	1.581	1.649	1.524	1.546	1.528	1.499	1.529	1.541	1.528	------	------	1.547	2.85	2.90
11	1,2-Dichlorobenzene-d4	1.058	0.965	0.885	0.969	0.949	0.927	0.925	0.933	0.930	0.889	0.875	0.937	5.42	3.08
12	1,4-Dichlorobenzene	1.635	1.647	1.570	1.587	1.589	1.547	1.781	1.795	1.830	------	------	1.665	6.49	2.96
13	Benzyl alcohol	0.762	0.635	0.699	0.766	0.754	0.729	0.762	0.774	0.762	------	------	0.738	6.12	3.04
14	1,2-Dichlorobenzene	1.562	1.489	1.435	1.523	1.507	1.485	1.479	1.494	1.465	------	------	1.493	2.39	3.10
15	2-Methylphenol	0.793	0.891	0.908	0.931	0.954	0.905	0.938	0.941	0.933	------	------	0.911	5.31	3.12
16	bis(2-chloroisopropyl)ether	2.115	2.109	2.025	2.028	2.006	1.942	1.959	1.964	1.982	------	------	2.015	3.11	3.16
17	4-Methylphenol	1.206	1.322	1.336	1.405	1.400	1.378	1.398	1.405	1.389	------	------	1.360	4.78	3.26
18	N-Nitroso-di-n-propylamine	0.496	0.496	0.491	0.538	0.547	0.537	0.552	0.551	0.544	------	------	0.528	4.88	3.28
19	Hexachloroethane	0.491	0.564	0.569	0.568	0.566	0.561	0.572	0.570	0.576	------	------	0.559	4.68	3.40
20	Naphthalene-d8	1	1	1	1	1	1	1	1	1	1	1	1	0	4.17
21	Nitrobenzene-d5	0.235	0.239	0.238	0.251	0.250	0.249	0.263	0.260	0.256	0.242	0.244	0.248	3.69	3.46
22	Nitrobenzene	0.264	0.264	0.249	0.250	0.249	0.244	0.254	0.252	0.250	------	------	0.253	2.69	3.46
23	Isophorone	0.415	0.391	0.398	0.403	0.394	0.397	0.422	0.417	0.411	------	------	0.405	2.73	3.66
24	2-Nitrophenol	0.166	0.155	0.168	0.159	0.173	0.176	0.191	0.191	0.191	------	------	0.175	7.95	3.77
25	2,4-Dimethylphenol	0.297	0.281	0.302	0.286	0.292	0.283	0.300	0.298	0.296	------	------	0.293	2.65	3.77
26	Benzoic acid	------	------	------	0.057	0.106	0.150	0.210	0.228	0.229	------	------	0.163	43.68	3.88
27	bis(2-Chloroethoxy)methane	0.317	0.315	0.325	0.321	0.318	0.311	0.326	0.323	0.347	------	------	0.323	3.18	3.88
28	2,4-Dichlorophenol	0.222	0.267	0.290	0.273	0.280	0.284	0.301	0.300	0.299	------	------	0.280	8.84	4.01
29	1,2,4-Trichlorobenzene	0.349	0.356	0.324	0.324	0.318	0.308	0.326	0.322	0.317	------	------	0.327	4.73	4.11
30	Naphthalene	1.157	1.081	1.053	1.037	1.033	1.014	1.063	1.042	1.029	------	------	1.056	4.01	4.21
31	4-Chloroaniline	0.376	0.378	0.408	0.424	0.412	0.412	0.431	0.426	0.419	------	------	0.410	4.89	4.21
32	Hexachlorobutadiene	0.197	0.196	0.186	0.188	0.184	0.176	0.188	0.187	0.185	------	------	0.187	3.37	4.31
33	4-Chloro-3-methylphenol	0.226	0.219	0.229	0.243	0.241	0.239	0.258	0.256	0.256	------	------	0.241	5.89	4.77
34	2-Methylnaphthalene	0.693	0.679	0.683	0.690	0.679	0.669	0.705	0.697	0.686	------	------	0.687	1.58	4.99
35	1-Methylnaphthalene	0.692	0.673	0.650	0.640	0.650	0.622	0.664	0.652	0.643	------	------	0.654	3.07	5.08
36	Acenaphthene-d10	1	1	1	1	1	1	1	1	1	1	1	1	0	6.22
37	Hexachlorocyclopentadiene	------	0.152	0.197	0.271	0.303	0.332	0.393	0.410	0.410	------	------	0.308	31.59	5.11
38	2,4,6-Trichlorophenol	0.327	0.327	0.348	0.377	0.374	0.381	0.404	0.405	0.408	------	------	0.372	8.55	5.22
39	2,4,5-Trichlorophenol	0.308	0.341	0.381	0.391	0.409	0.415	0.440	0.438	0.439	------	------	0.396	11.66	5.33
40	2-Fluorobiphenyl	1.520	1.371	1.419	1.407	1.395	1.369	1.433	1.414	1.420	1.298	1.341	1.399	4.06	5.33
41	2-Chloronaphthalene	1.373	1.198	1.296	1.263	1.224	1.195	1.241	1.229	1.227	------	------	1.249	4.46	5.55
42	2-Nitroaniline	0.194	0.211	0.214	0.237	0.250	0.254	0.271	0.275	0.275	------	------	0.242	12.41	5.66
43	Dimethylphthalate	1.484	1.333	1.353	1.390	1.379	1.342	1.439	1.424	1.423	------	------	1.396	3.60	5.88
44	2,6-Dinitrotoluene	0.233	0.229	0.249	0.273	0.276	0.273	0.305	0.310	0.308	------	------	0.273	11.45	5.99
45	Acenaphthylene	2.040	1.992	2.010	2.030	2.027	1.971	2.099	2.071	2.062	------	------	2.034	1.96	6.01
46	3-Nitroaniline	0.230	0.266	0.298	0.329	0.339	0.340	0.367	0.367	0.366	------	------	0.322	15.06	6.11
47	Acenaphthene	1.433	1.400	1.348	1.345	1.336	1.285	1.365	1.342	1.337	------	------	1.355	3.10	6.21
48	2,4-Dinitrophenol	------	------	------	0.050	0.084	0.102	0.155	0.168	0.173	------	------	0.122	41.49	6.21
49	4-Nitrophenol	------	------	0.081	0.115	0.124	0.137	0.155	0.163	0.163	------	------	0.134	22.30	6.31
50	2,4-Dinitrotoluene	0.259	0.290	0.310	0.349	0.383	0.378	0.413	0.412	0.416	------	------	0.357	16.33	6.41
51	Dibenzofuran	1.957	1.750	1.813	1.767	1.749	1.696	1.802	1.759	1.770	------	------	1.785	4.07	6.41
52	2,3,4,6-Tetrachlorophenol	------	0.135	0.201	0.206	0.228	0.237	0.268	0.266	0.270	------	------	0.227	20.25	6.51
53	Diethylphthalate	1.459	1.594	1.365	1.614	1.599	1.506	1.590	1.546	1.575	------	------	1.539	5.35	6.71
54	Fluorene	1.440	1.354	1.384	1.359	1.374	1.326	1.555	1.537	1.521	------	------	1.428	6.17	6.81
55	4-Chlorophenyl-phenylether	0.655	0.654	0.646	0.629	0.609	0.607	0.713	0.706	0.701	------	------	0.658	6.17	6.81
56	4-Nitroaniline	0.222	0.274	0.342	0.364	0.383	0.390	0.378	0.264	------	------	------	0.327	19.70	6.81
57	Phenanthrene-d10	1	1	1	1	1	1	1	1	1	1	1	1	0	7.9
58	4,6-Dinitro-2-methylphenol	------	------	0.055	0.081	0.102	0.115	0.135	0.145	0.144	------	------	0.111	30.62	6.9

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59	N-Nitrosodiphenylamine	0.535	0.519	0.536	0.543	0.534	0.522	0.551	0.552	0.548	------	------	0.538	2.20	7.009
60	Azobenzene	0.579	0.530	0.581	0.576	0.576	0.571	0.596	0.592	0.594	------	------	0.577	3.44	7.057
61	2,4,6-Tribromophenol	------	0.091	0.099	0.108	0.116	0.119	0.125	0.141	0.140	0.118	0.122	0.118	13.49	7.147
62	4-Bromophenyl-phenylether	0.244	0.225	0.236	0.224	0.224	0.227	0.240	0.240	0.239	------	------	0.233	3.45	7.440
63	Hexachlorobenzene	0.262	0.259	0.262	0.268	0.257	0.252	0.266	0.266	0.269	------	------	0.262	2.11	7.502
64	Pentachlorophenol	------	------	0.082	0.130	0.148	0.164	0.199	0.210	0.212	------	------	0.164	29.26	7.730
65	Phenanthrene	1.359	1.239	1.213	1.214	1.167	1.156	1.201	1.198	1.186	------	------	1.215	4.91	7.967
66	Anthracene	1.286	1.196	1.202	1.185	1.188	1.155	1.213	1.204	1.195	------	------	1.202	2.93	8.025
67	Carbazole	1.111	1.051	1.054	1.091	1.051	1.025	1.049	1.044	1.051	------	------	1.058	2.48	8.204
68	Di-n-butylphthalate	1.428	1.284	1.313	1.346	1.345	1.354	1.456	1.443	1.458	------	------	1.381	4.79	8.591
69	Fluoranthene	1.224	1.214	1.220	1.241	1.239	1.220	1.287	1.579	1.571	------	------	1.310	11.57	9.247
70	Chrysene-d12	1	1	1	1	1	1	1	1	1	1	1	1	0	10.727
71	Benzidine	------	------	------	------	------	------	------	------	------	------	------	0.000	0.00	0.000
72	Pyrene	1.405	1.337	1.423	1.402	1.399	1.378	1.449	1.409	1.472	------	------	1.408	2.76	9.484
73	Terphenyl-d14	0.807	0.740	0.765	0.824	0.805	0.802	0.850	0.844	0.866	0.865	0.882	0.823	5.36	9.641
74	Butylbenzylphthalate	0.555	0.545	0.569	0.613	0.627	0.638	0.683	0.693	0.720	------	------	0.627	10.04	10.151
75	3,3'-Dichlorobenzidine	0.445	0.436	0.427	0.454	0.443	0.445	0.472	0.491	0.490	------	------	0.456	5.08	10.682
76	Benzo(a)anthracene	1.561	1.407	1.330	1.329	1.296	1.286	1.353	1.319	1.342	------	------	1.358	6.17	10.719
77	bis(2-Ethylhexyl)phthalate	0.873	0.871	0.920	0.960	0.996	0.989	1.060	1.060	1.075	------	------	0.978	8.03	10.735
78	Chrysene	1.343	1.237	1.273	1.266	1.227	1.209	1.252	1.226	1.240	------	------	1.253	3.15	10.756
79	Perylene-d12	1	1	1	1	1	1	1	1	1	1	1	1	0	12.141
80	Di-n-octylphthalate	1.505	1.493	1.617	1.675	1.758	1.762	1.982	1.948	2.023	------	------	1.752	11.37	11.351
81	Benzo(b)fluoranthene	1.298	1.290	1.308	1.328	1.304	1.294	1.421	1.390	1.504	------	------	1.349	5.51	11.741
82	Benzo(k)fluoranthene	1.382	1.395	1.354	1.337	1.390	1.354	1.453	1.393	1.390	------	------	1.383	2.43	11.771
83	Benzo(a)pyrene	1.369	1.320	1.296	1.305	1.317	1.309	1.410	1.376	1.439	------	------	1.349	3.82	12.082
84	Indeno(1,2,3-cd)pyrene	1.611	1.541	1.518	1.540	1.541	1.508	1.652	1.594	1.657	------	------	1.574	3.59	13.462
85	Dibenzo(a,h)anthracene	1.212	1.125	1.095	1.095	1.094	1.103	1.199	1.165	1.212	------	------	1.144	4.60	13.482
86	Benzo(g,h,i)perylene	1.440	1.342	1.297	1.323	1.333	1.295	1.399	1.337	1.372	------	------	1.349	3.53	13.866

Ave_%RSD : 7.9 Max_%RSD : 43.7

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
26	Benzoic acid	-0.02802	0.23653	0.9981
37	Hexachlorocyclopentadiene	-0.01007	0.40379	0.9981
46	3-Nitroaniline	-0.00246	0.36495	0.9997
48	2,4-Dinitrophenol	-0.02047	0.17560	0.9968
49	4-Nitrophenol	-0.00554	0.16228	0.9991
50	2,4-Dinitrotoluene	-0.00319	0.41189	0.9996
52	2,3,4,6-Tetrachlorophenol	-0.00434	0.26759	0.9993
56	4-Nitroaniline	0.00019	0.32363	0.9825*
58	4,6-Dinitro-2-methylphenol	-0.00641	0.14373	0.9984
64	Pentachlorophenol	-0.00906	0.20979	0.9983

Use Quadratic Regression for comps of linear reg of inverse conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
56	4-Nitroaniline	-0.01445	0.52831	-0.12641	0.9975

7-8-08

Quantitation Limit from Lowest Initial Calibration Concentration

Instrument ID :E2
Beginning DateTime :06/30/08 10:26
IC File :RFG137

Column Spec :DB-5.625 ID :0.18MM
Ending DateTime :06/30/08 13:42
HPChem Method :SVE2F30

WATER Init. Vol. (ml) : 1000
SOIL Init. Weight (gm) : 30

Final Vol. (ml) : 2
Final Vol. (ml) : 2

IDX	Parameters	ON COL MG/L	WATER UG/L	SOIL MG/KG	R_FILE
1	1,4-Dichlorobenzene-d4	IntSTD	IntSTD	IntSTD	IntSTD
2	N-nitrosodimethylamine	.5	1	.03333	RFG131
3	Pyridine	.5	1	.03333	RFG131
4	2-Fluorophenol	.5	1	.03333	RFG131
5	Phenol-d5	.5	1	.03333	RFG131
6	Phenol	.5	1	.03333	RFG131
7	Aniline	.5	1	.03333	RFG131
8	bis(2-chloroethyl) ether	.5	1	.03333	RFG131
9	2-Chlorophenol	.5	1	.03333	RFG131
10	1,3-Dichlorobenzene	.5	1	.03333	RFG131
11	1,2-Dichlorobenzene-d4	.5	1	.03333	RFG131
12	1,4-Dichlorobenzene	.5	1	.03333	RFG131
13	Benzyl alcohol	.5	1	.03333	RFG131
14	1,2-Dichlorobenzene	.5	1	.03333	RFG131
15	2-Methylphenol	.5	1	.03333	RFG131
16	bis(2-chloroisopropyl)ether	.5	1	.03333	RFG131
17	4-Methylphenol	.5	1	.03333	RFG131
18	N-Nitroso-di-n-propylamine	.5	1	.03333	RFG131
19	Hexachloroethane	.5	1	.03333	RFG131
20	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
21	Nitrobenzene-d5	.5	1	.03333	RFG131
22	Nitrobenzene	.5	1	.03333	RFG131
23	Isophorone	.5	1	.03333	RFG131
24	2-Nitrophenol	.5	1	.03333	RFG131
25	2,4-Dimethylphenol	.5	1	.03333	RFG131
26	Benzoic acid	5	10	.3333	RFG134
27	bis(2-Chloroethoxy)methane	.5	1	.03333	RFG131
28	2,4-Dichlorophenol	.5	1	.03333	RFG131
29	1,2,4-Trichlorobenzene	.5	1	.03333	RFG131
30	Naphthalene	.5	1	.03333	RFG131
31	4-Chloroaniline	.5	1	.03333	RFG131
32	Hexachlorobutadiene	.5	1	.03333	RFG131
33	4-Chloro-3-methylphenol	.5	1	.03333	RFG131
34	2-Methylnaphthalene	.5	1	.03333	RFG131
35	1-Methylnaphthalene	.5	1	.03333	RFG131
36	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
37	Hexachlorocyclopentadiene	1	2	.06667	RFG132
38	2,4,6-Trichlorophenol	.5	1	.03333	RFG131
39	2,4,5-Trichlorophenol	.5	1	.03333	RFG131
40	2-Fluorobiphenyl	.5	1	.03333	RFG131
41	2-Chloronaphthalene	.5	1	.03333	RFG131
42	2-Nitroaniline	.5	1	.03333	RFG131
43	Dimethylphthalate	.5	1	.03333	RFG131
44	2,6-Dinitrotoluene	.5	1	.03333	RFG131
45	Acenaphthylene	.5	1	.03333	RFG131
46	3-Nitroaniline	.5	1	.03333	RFG131
47	Acenaphthene	.5	1	.03333	RFG131
48	2,4-Dinitrophenol	5	10	.3333	RFG134
49	4-Nitrophenol	2	4	.1333	RFG133
50	2,4-Dinitrotoluene	.5	1	.03333	RFG131
51	Dibenzofuran	.5	1	.03333	RFG131
52	2,3,4,6-Tetrachlorophenol	1	2	.06667	RFG132
53	Diethylphthalate	.5	1	.03333	RFG131
54	Fluorene	.5	1	.03333	RFG131
55	4-Chlorophenyl-phenylether	.5	1	.03333	RFG131
56	4-Nitroaniline	.5	1	.03333	RFG131
57	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
58	4,6-Dinitro-2-methylphenol	2	4	.1333	RFG133
59	N-Nitrosodiphenylamine	.5	1	.03333	RFG131
60	Azobenzene	.5	1	.03333	RFG131
61	2,4,6-Tribromophenol	1	2	.06667	RFG132
62	4-Bromophenyl-phenylether	.5	1	.03333	RFG131
63	Hexachlorobenzene	.5	1	.03333	RFG131
64	Pentachlorophenol	2	4	.1333	RFG133
65	Phenanthrene	.5	1	.03333	RFG131
66	Anthracene	.5	1	.03333	RFG131
67	Carbazole	.5	1	.03333	RFG131
68	Di-n-butylphthalate	.5	1	.03333	RFG131
69	Fluoranthene	.5	1	.03333	RFG131
70	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
71	Benzidine	NA	NA	NA	NA
72	Pyrene	.5	1	.03333	RFG131
73	Terphenyl-d14	.5	1	.03333	RFG131
74	Butylbenzylphthalate	.5	1	.03333	RFG131
75	3,3'-Dichlorobenzidine	.5	1	.03333	RFG131
76	Benzo(a)anthracene	.5	1	.03333	RFG131
77	bis(2-Ethylhexyl)phthalate	.5	1	.03333	RFG131
78	Chrysene	.5	1	.03333	RFG131
79	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
80	Di-n-octylphthalate	.5	1	.03333	RFG131
81	Benzo(b)fluoranthene	.5	1	.03333	RFG131
82	Benzo(k)fluoranthene	.5	1	.03333	RFG131
83	Benzo(a)pyrene	.5	1	.03333	RFG131
84	Indeno(1,2,3-cd)pyrene	.5	1	.03333	RFG131
85	Dibenzo(a,h)anthracene	.5	1	.03333	RFG131
86	Benzo(g,h,i)perylene	.5	1	.03333	RFG131

7-2-08

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ188
Instrument ID: T-048

Project: ICAL
SDG No.: 08G195
DFTPP Injection Date: 07/16/08
DFTPP Injection Time: 10:02

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.83
68	Less than 2% of mass 69	0.08(0.2)1
69	Relative abundance of mass 198	44.01
70	Less than 2.0% of mass 69	0.06(0.1)1
127	40.0 - 60.0% of mass 198	47.50
197	Less than 1.0% of mass 198	0.48
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.45
275	10.0 - 30.0% of mass 198	17.49
365	Greater than 1.00% of mass 198	1.82
441	Present, but less than mass 443	15.11
442	Greater than 40.0% of mass 198	86.66
443	17.0 - 23.0% of mass 442	19.43(22.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD02	SV48G161	RGZ189	07/16/08	10:16
2	SSTD05	SV48G162	RGZ190	07/16/08	10:37
3	SSTD010	SV48G163	RGZ191	07/16/08	10:57
4	SSTD020	SV48G164	RGZ192	07/16/08	11:16
5	SSTD050	SV48G165	RGZ193	07/16/08	11:35
6	SSTD080	SV48G166	RGZ194	07/16/08	11:54
7	SSTD100	SV48G167	RGZ195	07/16/08	12:13
8	SSTD120	SV48G168	RGZ196	07/16/08	12:32
9	SSTD160	SV48G169	RGZ197	07/16/08	12:51
10	SSTD050	ISV48G161	RGZ198	07/16/08	13:11

Instrument ID :TO48
Beginning DateTime :07/16/08 10:16
Spike Units :PPM
IC File :RGZ193

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :07/16/08 12:51
HPChem Method :SV48G16

IDX	Parameters	2 10:16 RGZ189	5 10:37 RGZ190	10 10:57 RGZ191	20 11:16 RGZ192	50 11:35 RGZ193	80 11:54 RGZ194	100 12:13 RGZ195	120 12:32 RGZ196	160 12:51 RGZ197	Av_RRF	%_RSD	Av_Rt_M
1	1,4-Dichlorobenzene-d4	1	1	1	1	1	1	1	1	1	1	0	2.8158
2	N-Nitrosodimethylamine	0.624	0.676	0.690	0.658	0.816	0.608	0.750	------	------	0.689	10.57	1.2643
3	Pyridine	1.055	1.143	1.214	1.361	1.522	1.482	1.163	------	------	1.277	14.06	1.2857
4	2-Fluorophenol	1.039	1.029	1.164	1.229	1.209	1.283	1.248	1.116	1.232	1.172	7.84	1.8945
5	Phenol	1.651	1.601	1.609	1.619	1.679	1.815	1.578	------	------	1.650	4.83	2.5583
6	Aniline	1.418	1.523	1.546	1.694	1.779	1.781	1.736	------	------	1.640	8.74	2.5738
7	Bis(2-chloroethyl)ether	1.398	1.294	1.212	1.305	1.243	1.253	1.343	------	------	1.292	4.92	2.6274
8	Phenol-d5	1.443	1.446	1.622	1.551	1.567	1.483	1.616	1.351	1.549	1.514	5.94	2.5454
9	2-Chlorophenol	1.117	1.336	1.426	1.402	1.455	1.507	1.372	------	------	1.374	9.17	2.6524
10	1,3-Dichlorobenzene	1.430	1.374	1.470	1.448	1.548	1.500	1.555	------	------	1.475	4.40	2.7691
11	1,4-Dichlorobenzene	1.565	1.530	1.528	1.557	1.505	1.607	1.469	------	------	1.537	2.90	2.8309
12	Benzyl alcohol	0.577	0.727	0.714	0.769	0.815	0.811	0.843	------	------	0.751	12.00	2.9500
13	1,2-Dichlorobenzene-d4	0.975	0.903	0.885	0.891	0.934	0.922	0.892	0.877	0.839	0.902	4.25	2.9398
14	1,2-Dichlorobenzene	1.457	1.427	1.455	1.463	1.509	1.418	1.483	------	------	1.459	2.14	2.9524
15	2-Methylphenol	0.788	0.915	0.975	1.008	1.027	1.026	1.091	------	------	0.976	10.12	3.0441
16	Bis(2-chloroisopropyl)ether	3.060	3.059	3.027	3.041	3.144	3.282	3.169	------	------	3.112	2.96	3.0607
17	4-Methylphenol	1.243	1.406	1.427	1.500	1.433	1.472	1.491	------	------	1.425	6.13	3.1786
18	N-Nitroso-di-n-propylamine	0.640	0.675	0.691	0.714	0.772	0.800	0.700	------	------	0.713	7.82	3.1750
19	Hexachloroethane	0.762	0.728	0.667	0.716	0.707	0.711	0.700	------	------	0.713	4.01	3.2309
20	Naphthalene-d8	1	1	1	1	1	1	1	1	1	1	0	3.9250
21	Nitrobenzene-d5	0.310	0.280	0.286	0.285	0.298	0.320	0.320	0.297	0.319	0.302	5.33	3.2926
22	Nitrobenzene	0.288	0.274	0.275	0.283	0.299	0.333	0.315	------	------	0.295	7.41	3.3095
23	Isophorone	0.539	0.492	0.492	0.503	0.542	0.563	0.553	------	------	0.526	5.69	3.5274
24	2-Nitrophenol	0.113	0.127	0.154	0.169	0.202	0.223	0.217	------	------	0.172	25.22	3.5881
25	2,4-Dimethylphenol	0.238	0.240	0.254	0.268	0.298	0.311	0.294	------	------	0.272	10.79	3.6512
26	bis(2-Chloroethoxy)methane	0.409	0.385	0.389	0.405	0.433	0.438	0.470	------	------	0.418	7.25	3.7417
27	Benzoic Acid	------	0.102	0.138	0.161	0.204	0.224	0.227	------	------	0.176	28.76	3.7861
28	2,4-Dichlorophenol	0.143	0.212	0.211	0.232	0.256	0.280	0.271	------	------	0.229	20.44	3.8107
29	1,2,4-Trichlorobenzene	0.271	0.261	0.266	0.266	0.285	0.302	0.301	------	------	0.279	6.15	3.8774
30	Naphthalene	0.954	0.972	0.981	0.929	0.997	1.089	1.007	------	------	0.990	5.13	3.9441
31	4-Chloroaniline	0.353	0.370	0.397	0.393	0.453	0.478	0.461	------	------	0.415	11.75	4.0203
32	Hexachlorobutadiene	0.111	0.115	0.127	0.131	0.133	0.145	0.141	------	------	0.129	9.63	4.0655
33	4-Chloro-3-methylphenol	0.170	0.231	0.237	0.238	0.264	0.271	0.287	------	------	0.243	15.70	4.5012
34	2-Methylnaphthalene	0.531	0.542	0.547	0.559	0.590	0.632	0.589	------	------	0.570	6.19	4.6047
35	1-Methylnaphthalene	0.523	0.552	0.543	0.515	0.538	0.598	0.536	------	------	0.544	4.95	4.6953
36	Acenaphthene-d10	1	1	1	1	1	1	1	1	1	1	0	5.6092
37	Hexachlorocyclopentadiene	0.157	0.194	0.227	0.284	0.361	0.389	0.421	------	------	0.290	35.25	4.7524
38	2,4,6-Trichlorophenol	0.188	0.263	0.338	0.350	0.368	0.389	0.365	------	------	0.323	22.27	4.8905
39	2,4,5-Trichlorophenol	0.198	0.263	0.330	0.351	0.422	0.431	0.415	------	------	0.344	25.65	4.9191
40	2-Fluorobiphenyl	1.159	1.268	1.296	1.277	1.329	1.334	1.384	1.194	1.340	1.287	5.63	4.9759
41	2-Chloronaphthalene	0.962	1.172	1.204	1.202	1.220	1.288	1.224	------	------	1.182	8.72	5.0703
42	2-Nitroaniline	0.232	0.300	0.304	0.316	0.335	0.333	0.348	------	------	0.310	12.42	5.2000
43	Dimethylphthalate	1.083	1.236	1.226	1.287	1.369	1.369	1.260	------	------	1.261	7.78	5.4000
44	2,6-Dinitrotoluene	0.186	0.222	0.269	0.305	0.340	0.353	0.288	------	------	0.280	21.57	5.4500
45	Acenaphthylene	1.766	2.018	1.969	2.001	2.091	2.195	1.992	------	------	2.005	6.51	5.4691
46	3-Nitroaniline	0.247	0.319	0.364	0.388	0.442	0.470	0.391	------	------	0.374	19.96	5.6083
47	Acenaphthene	1.071	1.144	1.098	1.106	1.160	1.192	1.081	------	------	1.122	3.97	5.6429
48	2,4-Dinitrophenol	------	0.049	0.103	0.123	0.191	0.206	0.207	------	------	0.147	44.39	5.7167
49	4-Nitrophenol	------	0.102	0.106	0.114	0.140	0.143	0.126	------	------	0.122	14.13	5.8125
50	Dibenzofuran	1.458	1.564	1.602	1.657	1.769	1.679	1.723	------	------	1.636	6.39	5.8167
51	2,4-Dinitrotoluene	0.202	0.312	0.344	0.384	0.460	0.470	0.393	------	------	0.366	25.14	5.8429
52	2,3,4,6-Tetrachlorophenol	0.119	0.188	0.183	0.202	0.235	0.256	0.234	------	------	0.203	22.52	5.9476
53	Diethylphthalate	1.164	1.287	1.295	1.369	1.393	1.454	1.294	------	------	1.322	7.07	6.1000
54	Fluorene	1.109	1.205	1.195	1.190	1.243	1.303	1.174	------	------	1.203	4.98	6.1512
55	4-Chlorophenyl-phenylether	0.465	0.519	0.522	0.543	0.554	0.545	0.573	------	------	0.532	6.54	6.1750
56	4-Nitroaniline	0.135	0.277	0.333	0.374	0.412	0.430	0.389	------	------	0.336	30.43	6.2107
57	4,6-Dinitro-2-methylphenol	------	0.084	0.156	0.187	0.225	0.251	0.228	------	------	0.188	32.47	6.2389
58	N-Nitrosodiphenylamine	0.611	0.769	0.815	0.829	0.858	0.859	0.787	------	------	0.790	10.83	6.3012
59	Azobenzene	1.435	1.537	1.514	1.575	1.656	1.623	1.575	------	------	1.559	4.67	6.3345
60	2,4,6-Tribromophenol	0.133	0.187	0.220	0.248	0.296	0.308	0.306	0.264	0.292	0.250	24.11	6.3870
61	Phenanthrene-d10	1	1	1	1	1	1	1	1	1	1	0	7.1074
62	4-Bromophenyl-phenylether	0.189	0.311	0.220	0.213	0.240	0.256	0.248	------	------	0.239	16.22	6.6607
63	Hexachlorobenzene	0.334	0.287	0.308	0.320	0.339	0.363	0.346	------	------	0.328	7.69	6.6929
64	Pentachlorophenol	0.128	0.173	0.171	0.173	0.216	0.229	0.233	------	------	0.189	20.22	6.9226
65	Phenanthrene	1.160	1.177	1.179	1.154	1.184	1.229	1.204	------	------	1.184	2.18	7.1345
66	Anthracene	1.112	1.261	1.163	1.150	1.194	1.238	1.164	------	------	1.183	4.38	7.1845
67	Carbazole	0.923	1.046	1.063	1.050	1.140	1.118	1.173	------	------	1.073	7.65	7.3738
68	Di-n-butylphthalate	1.351	1.558	1.526	1.552	1.688	1.653	1.592	------	------	1.560	6.97	7.7738

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	Fluoranthene												0	9.5768
70	Chrysene-d12	1	1	1	1	1	1	1	1	1	1	0.000	0.00	0.0000
71	Benzidine	------	------	------	------	------	------	------	------	------	1.501	6.75	8.5000	
72	Pyrene	1.378	1.426	1.472	1.477	1.608	1.479	1.666	------	------	0.866	6.48	8.6787	
73	Terphenyl-d14	0.763	0.829	0.842	0.826	0.892	0.878	0.941	0.911	0.916	0.786	22.44	9.1441	
74	Butylbenzylphthalate	0.467	0.663	0.760	0.809	0.935	0.896	0.970	------	------	0.394	24.05	9.5726	
75	3,3'-Dichlorobenzidine	0.220	0.348	0.372	0.385	0.476	0.471	0.485	------	------	1.216	2.48	9.5691	
76	Benzo(a)anthracene	1.244	1.185	1.235	1.252	1.227	1.192	1.178	------	------	1.156	4.44	9.6012	
77	Chrysene	1.072	1.135	1.193	1.171	1.220	1.186	1.114	------	------	1.152	17.38	9.6524	
78	bis(2-Ethylhexyl)phthalate	0.824	0.999	1.070	1.159	1.326	1.325	1.358	------	------	1	0	10.7167	
79	Perylene-d12	1	1	1	1	1	1	1	1	1	2.052	22.51	10.1774	
80	Di-n-octylphthalate	1.394	1.620	1.870	2.012	2.307	2.554	2.607	------	------	1.282	11.41	10.4309	
81	Benzo(b)fluoranthene	1.088	1.253	1.122	1.303	1.286	1.477	1.442	------	------	1.151	9.06	10.4536	
82	Benzo(k)fluoranthene	1.084	1.122	1.211	1.114	1.343	1.018	1.168	------	------	1.202	7.93	10.6714	
83	Benzo(a)pyrene	1.069	1.125	1.197	1.168	1.242	1.248	1.363	------	------	1.309	15.16	11.4500	
84	Indeno(1,2,3-cd)pyrene	0.956	1.187	1.252	1.327	1.437	1.465	1.539	------	------	1.003	17.56	11.4619	
85	Dibenzo(a,h)anthracene	0.726	0.859	0.932	1.017	1.091	1.202	1.191	------	------	1.188	10.05	11.6226	
86	Benzo(g,h,i)perylene	1.020	1.089	1.103	1.200	1.296	1.267	1.338	------	------				

Ave_%RSD : 11.9 Max_%RSD : 44.4

Use Least Square Linear Regression with weighting factor of inverse concentration for comps with %_RSD > 15
Resp_Ratio = xo + x1 * Amt_Ratio

IDX	Parameter	x0	x1	CCF
24	2-Nitrophenol	-0.00874	0.21668	0.9974
27	Benzoic Acid	-0.02049	0.22961	0.9982
28	2,4-Dichlorophenol	-0.00850	0.27262	0.9988
33	4-Chloro-3-methylphenol	-0.00690	0.27790	0.9989
37	Hexachlorocyclopentadiene	-0.02123	0.39866	0.9945*
38	2,4,6-Trichlorophenol	-0.01096	0.37899	0.9994
39	2,4,5-Trichlorophenol	-0.01586	0.42506	0.9988
44	2,6-Dinitrotoluene	-0.00871	0.32490	0.9950
46	3-Nitroaniline	-0.01138	0.43235	0.9959
48	2,4-Dinitrophenol	-0.02569	0.21377	0.9972
51	2,4-Dinitrotoluene	-0.01402	0.43789	0.9956
52	2,3,4,6-Tetrachlorophenol	-0.00796	0.24317	0.9980
56	4-Nitroaniline	-0.01546	0.41483	0.9987
57	4,6-Dinitro-2-methylphenol	-0.02186	0.24568	0.9983
60	2,4,6-Tribromophenol	-0.01076	0.29383	0.9978
62	4-Bromophenyl-phenylether	-0.00158	0.24751	0.9976
64	Pentachlorophenol	-0.00760	0.22759	0.9975
74	Butylbenzylphthalate	-0.03115	0.94463	0.9989
75	3,3'-Dichlorobenzidine	-0.01705	0.48083	0.9988
78	bis(2-Ethylhexyl)phthalate	-0.03802	1.34551	0.9992
80	Di-n-octylphthalate	-0.09460	2.53431	0.9974
84	Indeno(1,2,3-cd)pyrene	-0.03726	1.49913	0.9992
85	Dibenzo(a,h)anthracene	-0.03475	1.17992	0.9987

Use Quadratic Regression for comps of linear reg of inverse conc w.f. with CCF < .995
Resp_Ratio = xo + x1 * Amt_Ratio + x2 * Amt_Ratio * Amt_Ratio

IDX	Parameter	x0	x1	x2	CCF2
37	Hexachlorocyclopentadiene	-0.01454	0.30090	0.04989	0.9998

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Instrument ID :T048 Column Spec :ZB-5MS ID :0.18MM
Beginning DateTime :07/16/08 10:16 Ending DateTime :07/16/08 12:51
IC File :RGZ193 HPChem Method :SV48G16

WATER Init. Vol. (ml) : 1000 Final Vol. (ml) : 2
SOIL Init. Weight (gm) : 30 Final Vol. (ml) : 2

IDX	Parameters	ON COL MG/L	WATER UG/L	SOIL MG/KG	R_FILE
1	1,4-Dichlorobenzene-d4	IntSTD	IntSTD	IntSTD	IntSTD
2	N-Nitrosodimethylamine	2	4	.1333	RGZ189
3	Pyridine	2	4	.1333	RGZ189
4	2-Fluorophenol	2	4	.1333	RGZ189
5	Phenol	2	4	.1333	RGZ189
6	Aniline	2	4	.1333	RGZ189
7	Bis(2-chloroethyl)ether	2	4	.1333	RGZ189
8	Phenol-d5	2	4	.1333	RGZ189
9	2-Chlorophenol	2	4	.1333	RGZ189
10	1,3-Dichlorobenzene	2	4	.1333	RGZ189
11	1,4-Dichlorobenzene	2	4	.1333	RGZ189
12	Benzyl alcohol	2	4	.1333	RGZ189
13	1,2-Dichlorobenzene-d4	2	4	.1333	RGZ189
14	1,2-Dichlorobenzene	2	4	.1333	RGZ189
15	2-Methylphenol	2	4	.1333	RGZ189
16	Bis(2-chloroisopropyl)ether	2	4	.1333	RGZ189
17	4-Methylphenol	2	4	.1333	RGZ189
18	N-Nitroso-di-n-propylamine	2	4	.1333	RGZ189
19	Hexachloroethane	2	4	.1333	RGZ189
20	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
21	Nitrobenzene-d5	2	4	.1333	RGZ189
22	Nitrobenzene	2	4	.1333	RGZ189
23	Isophorone	2	4	.1333	RGZ189
24	2-Nitrophenol	2	4	.1333	RGZ189
25	2,4-Dimethylphenol	2	4	.1333	RGZ189
26	bis(2-Chloroethoxy)methane	2	4	.1333	RGZ189
27	Benzoic Acid	5	10	.3333	RGZ190
28	2,4-Dichlorophenol	2	4	.1333	RGZ189
29	1,2,4-Trichlorobenzene	2	4	.1333	RGZ189
30	Naphthalene	2	4	.1333	RGZ189
31	4-Chloroaniline	2	4	.1333	RGZ189
32	Hexachlorobutadiene	2	4	.1333	RGZ189
33	4-Chloro-3-methylphenol	2	4	.1333	RGZ189
34	2-Methylnaphthalene	2	4	.1333	RGZ189
35	1-Methylnaphthalene	2	4	.1333	RGZ189
36	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
37	Hexachlorocyclopentadiene	2	4	.1333	RGZ189
38	2,4,6-Trichlorophenol	2	4	.1333	RGZ189
39	2,4,5-Trichlorophenol	2	4	.1333	RGZ189
40	2-Fluorobiphenyl	2	4	.1333	RGZ189
41	2-Chloronaphthalene	2	4	.1333	RGZ189
42	2-Nitroaniline	2	4	.1333	RGZ189
43	Dimethylphthalate	2	4	.1333	RGZ189
44	2,6-Dinitrotoluene	2	4	.1333	RGZ189
45	Acenaphthylene	2	4	.1333	RGZ189
46	3-Nitroaniline	2	4	.1333	RGZ189
47	Acenaphthene	2	4	.1333	RGZ189
48	2,4-Dinitrophenol	5	10	.3333	RGZ190
49	4-Nitrophenol	5	10	.3333	RGZ190
50	Dibenzofuran	2	4	.1333	RGZ189
51	2,4-Dinitrotoluene	2	4	.1333	RGZ189
52	2,3,4,6-Tetrachlorophenol	2	4	.1333	RGZ189
53	Diethylphthalate	2	4	.1333	RGZ189
54	Fluorene	2	4	.1333	RGZ189
55	4-Chlorophenyl-phenylether	2	4	.1333	RGZ189
56	4-Nitroaniline	2	4	.1333	RGZ189
57	4,6-Dinitro-2-methylphenol	5	10	.3333	RGZ190
58	N-Nitrosodiphenylamine	2	4	.1333	RGZ189
59	Azobenzene	2	4	.1333	RGZ189
60	2,4,6-Tribromophenol	2	4	.1333	RGZ189
61	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
62	4-Bromophenyl-phenylether	2	4	.1333	RGZ189
63	Hexachlorobenzene	2	4	.1333	RGZ189
64	Pentachlorophenol	2	4	.1333	RGZ189
65	Phenanthrene	2	4	.1333	RGZ189
66	Anthracene	2	4	.1333	RGZ189
67	Carbazole	2	4	.1333	RGZ189
68	Di-n-butylphthalate	2	4	.1333	RGZ189
69	Fluoranthene	2	4	.1333	RGZ189
70	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
71	Benzidine	NA	NA	NA	NA
72	Pyrene	2	4	.1333	RGZ189
73	Terphenyl-d14	2	4	.1333	RGZ189
74	Butylbenzylphthalate	2	4	.1333	RGZ189
75	3,3'-Dichlorobenzidine	2	4	.1333	RGZ189
76	Benzo(a)anthracene	2	4	.1333	RGZ189
77	Chrysene	2	4	.1333	RGZ189
78	bis(2-Ethylhexyl)phthalate	2	4	.1333	RGZ189
79	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
80	Di-n-octylphthalate	2	4	.1333	RGZ189
81	Benzo(b)fluoranthene	2	4	.1333	RGZ189
82	Benzo(k)fluoranthene	2	4	.1333	RGZ189
83	Benzo(a)pyrene	2	4	.1333	RGZ189
84	Indeno(1,2,3-cd)pyrene	2	4	.1333	RGZ189
85	Dibenzo(a,h)anthracene	2	4	.1333	RGZ189
86	Benzo(g,h,i)perylene	2	4	.1333	RGZ189

7-17-08

Instrument ID :TO48
Beginning DateTime :07/16/08 10:16
IC File :RGZ193

Column Spec :ZB-5MS ID :0.18MM
Ending DateTime :07/16/08 12:51
HPChem Method :SV48G16

WATER Init. Vol. (ml) : 1000 Final Vol. (ml) : 1
SOIL Init. Weight (gm) : 30 Final Vol. (ml) : 1

IDX	Parameters	ON COL MG/L	WATER UG/L	SOIL MG/KG	R_FILE
1	1,4-Dichlorobenzene-d4	IntSTD	IntSTD	IntSTD	IntSTD
2	N-Nitrosodimethylamine	2	2	.06667	RGZ189
3	Pyridine	2	2	.06667	RGZ189
4	2-Fluorophenol	2	2	.06667	RGZ189
5	Phenol	2	2	.06667	RGZ189
6	Aniline	2	2	.06667	RGZ189
7	Bis(2-chloroethyl)ether	2	2	.06667	RGZ189
8	Phenol-d5	2	2	.06667	RGZ189
9	2-Chlorophenol	2	2	.06667	RGZ189
10	1,3-Dichlorobenzene	2	2	.06667	RGZ189
11	1,4-Dichlorobenzene	2	2	.06667	RGZ189
12	Benzyl alcohol	2	2	.06667	RGZ189
13	1,2-Dichlorobenzene-d4	2	2	.06667	RGZ189
14	1,2-Dichlorobenzene	2	2	.06667	RGZ189
15	2-Methylphenol	2	2	.06667	RGZ189
16	Bis(2-chloroisopropyl)ether	2	2	.06667	RGZ189
17	4-Methylphenol	2	2	.06667	RGZ189
18	N-Nitroso-di-n-propylamine	2	2	.06667	RGZ189
19	Hexachloroethane	2	2	.06667	RGZ189
20	Naphthalene-d8	IntSTD	IntSTD	IntSTD	IntSTD
21	Nitrobenzene-d5	2	2	.06667	RGZ189
22	Nitrobenzene	2	2	.06667	RGZ189
23	Isophorone	2	2	.06667	RGZ189
24	2-Nitrophenol	2	2	.06667	RGZ189
25	2,4-Dimethylphenol	2	2	.06667	RGZ189
26	bis(2-Chloroethoxy)methane	2	2	.06667	RGZ189
27	Benzoic Acid	5	5	.1667	RGZ190
28	2,4-Dichlorophenol	2	2	.06667	RGZ189
29	1,2,4-Trichlorobenzene	2	2	.06667	RGZ189
30	Naphthalene	2	2	.06667	RGZ189
31	4-Chloroaniline	2	2	.06667	RGZ189
32	Hexachlorobutadiene	2	2	.06667	RGZ189
33	4-Chloro-3-methylphenol	2	2	.06667	RGZ189
34	2-Methylnaphthalene	2	2	.06667	RGZ189
35	1-Methylnaphthalene	2	2	.06667	RGZ189
36	Acenaphthene-d10	IntSTD	IntSTD	IntSTD	IntSTD
37	Hexachlorocyclopentadiene	2	2	.06667	RGZ189
38	2,4,6-Trichlorophenol	2	2	.06667	RGZ189
39	2,4,5-Trichlorophenol	2	2	.06667	RGZ189
40	2-Fluorobiphenyl	2	2	.06667	RGZ189
41	2-Chloronaphthalene	2	2	.06667	RGZ189
42	2-Nitroaniline	2	2	.06667	RGZ189
43	Dimethylphthalate	2	2	.06667	RGZ189
44	2,6-Dinitrotoluene	2	2	.06667	RGZ189
45	Acenaphthylene	2	2	.06667	RGZ189
46	3-Nitroaniline	2	2	.06667	RGZ189
47	Acenaphthene	2	2	.06667	RGZ189
48	2,4-Dinitrophenol	5	5	.1667	RGZ190
49	4-Nitrophenol	5	5	.1667	RGZ190
50	Dibenzofuran	2	2	.06667	RGZ189
51	2,4-Dinitrotoluene	2	2	.06667	RGZ189
52	2,3,4,6-Tetrachlorophenol	2	2	.06667	RGZ189
53	Diethylphthalate	2	2	.06667	RGZ189
54	Fluorene	2	2	.06667	RGZ189
55	4-Chlorophenyl-phenylether	2	2	.06667	RGZ189
56	4-Nitroaniline	2	2	.06667	RGZ189
57	4,6-Dinitro-2-methylphenol	5	5	.1667	RGZ190
58	N-Nitrosodiphenylamine	2	2	.06667	RGZ189
59	Azobenzene	2	2	.06667	RGZ189
60	2,4,6-Tribromophenol	2	2	.06667	RGZ189
61	Phenanthrene-d10	IntSTD	IntSTD	IntSTD	IntSTD
62	4-Bromophenyl-phenylether	2	2	.06667	RGZ189
63	Hexachlorobenzene	2	2	.06667	RGZ189
64	Pentachlorophenol	2	2	.06667	RGZ189
65	Phenanthrene	2	2	.06667	RGZ189
66	Anthracene	2	2	.06667	RGZ189
67	Carbazole	2	2	.06667	RGZ189
68	Di-n-butylphthalate	2	2	.06667	RGZ189
69	Fluoranthene	2	2	.06667	RGZ189
70	Chrysene-d12	IntSTD	IntSTD	IntSTD	IntSTD
71	Benzidine	NA	NA	NA	NA
72	Pyrene	2	2	.06667	RGZ189
73	Terphenyl-d14	2	2	.06667	RGZ189
74	Butylbenzylphthalate	2	2	.06667	RGZ189
75	3,3'-Dichlorobenzidine	2	2	.06667	RGZ189
76	Benzo(a)anthracene	2	2	.06667	RGZ189
77	Chrysene	2	2	.06667	RGZ189
78	bis(2-Ethylhexyl)phthalate	2	2	.06667	RGZ189
79	Perylene-d12	IntSTD	IntSTD	IntSTD	IntSTD
80	Di-n-octylphthalate	2	2	.06667	RGZ189
81	Benzo(b)fluoranthene	2	2	.06667	RGZ189
82	Benzo(k)fluoranthene	2	2	.06667	RGZ189
83	Benzo(a)pyrene	2	2	.06667	RGZ189
84	Indeno(1,2,3-cd)pyrene	2	2	.06667	RGZ189
85	Dibenzo(a,h)anthracene	2	2	.06667	RGZ189
86	Benzo(g,h,i)perylene	2	2	.06667	RGZ189

7-17-08

SECOND SOURCE VERIFICATION

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :E2
IC_Beginning DateTime :06/30/08 10:26
Spike Amount :50 PPM
CC/CV File :RFG142
IC File :RFG137

Column Spec :DB-5.625 ID :0.18MM
IC_Ending DateTime :06/30/08 13:42
HPChem Method :SVE2F30
Date_Time :06/30/08 14:02

M_IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
1	1,4-Dichlorobenzene-d4	40.000	0	215715	1	1	2.950	2.951	0				
2	N-nitrosodimethylamine	49.148	-1.7	133627	0.496	0.504	1.395	1.399	4.71				
3	Pyridine	50.516	1.0	258690	0.959	0.950	1.425	1.429	8.41				
4	2-Fluorophenol												
5	Phenol-d5												
6	Phenol	47.937	-4.1	333273	1.236	1.289	2.613	2.614	4.67				
7	Aniline	49.185	-1.6	382982	1.420	1.444	2.676	2.678	2.92				
8	bis(2-chloroethyl) ether	46.991	-6.0	237544	0.881	0.937	2.709	2.707	5.27				
9	2-Chlorophenol	48.866	-2.3	386496	1.433	1.467	2.775	2.775	6.84				
10	1,3-Dichlorobenzene	47.742	-4.5	398357	1.477	1.547	2.905	2.906	2.85				
11	1,2-Dichlorobenzene-d4												
12	1,4-Dichlorobenzene	53.244	6.5	477950	1.773	1.665	2.965	2.966	6.49				
13	Benzyl alcohol	48.555	-2.9	193278	0.717	0.738	3.050	3.044	6.12				
14	1,2-Dichlorobenzene	48.219	-3.6	388296	1.440	1.493	3.099	3.100	2.39				
15	2-Methylphenol	49.016	-2.0	240702	0.893	0.911	3.126	3.124	5.31				
16	bis(2-chloroisopropyl)ether	48.320	-3.4	524948	1.947	2.015	3.164	3.160	3.11				
17	4-Methylphenol	48.394	-3.2	354887	1.316	1.360	3.267	3.263	4.78				
18	N-Nitroso-di-n-propylamine	49.683	-0.6	141489	0.525	0.528	3.289	3.285	4.88				
19	Hexachloroethane	49.550	-0.9	149498	0.554	0.559	3.408	3.408	4.68				
20	Naphthalene-d8	40.000	0	834713	1	1	4.180	4.179	0				
21	Nitrobenzene-d5												
22	Nitrobenzene	46.771	-6.5	246661	0.236	0.253	3.462	3.462	2.69				
23	Isophorone	47.397	-5.2	400762	0.384	0.405	3.691	3.689	2.73				
24	2-Nitrophenol	50.439	0.9	183707	0.176	0.175	3.776	3.774	7.95				
25	2,4-Dimethylphenol	46.837	-6.3	286186	0.274	0.293	3.795	3.793	2.65				
26	Benzoic acid	44.550	-10.9	196512	0.188	0.163	3.903	3.891	43.68	-0.0280	0.2365		0.9981
27	bis(2-Chloroethoxy)methane	47.241	-5.5	317961	0.305	0.323	3.899	3.898	3.18				
28	2,4-Dichlorophenol	50.550	1.1	294900	0.283	0.280	4.016	4.017	8.84				
29	1,2,4-Trichlorobenzene	46.598	-6.8	318221	0.305	0.327	4.115	4.113	4.73				
30	Naphthalene	46.796	-6.4	1031665	0.989	1.056	4.205	4.202	4.01				
31	4-Chloroaniline	49.282	-1.4	421357	0.404	0.410	4.250	4.249	4.89				
32	Hexachlorobutadiene	46.840	-6.3	183038	0.175	0.187	4.328	4.325	3.37				
33	4-Chloro-3-methylphenol	48.996	-2.0	245963	0.236	0.241	4.782	4.780	5.89				
34	2-Methylnaphthalene	47.741	-4.5	684172	0.656	0.687	4.973	4.971	1.58				
35	1-Methylnaphthalene	49.898	-0.2	680955	0.653	0.654	5.087	5.084	3.07				
36	Acenaphthene-d10	40.000	0	440807	1	1	6.204	6.201	0				
37	Hexachlorocyclopentadiene	45.613	-8.8	198530	0.360	0.308	5.149	5.146	31.59	-0.0101	0.4038		0.9981
38	2,4,6-Trichlorophenol	49.516	-1.0	203111	0.369	0.372	5.292	5.293	8.55				
39	2,4,5-Trichlorophenol	50.933	1.9	222224	0.403	0.396	5.334	5.334	11.66				
40	2-Fluorobiphenyl												
41	2-Chloronaphthalene	46.313	-7.4	637709	1.157	1.249	5.539	5.538	4.46				
42	2-Nitroaniline	51.631	3.3	137831	0.250	0.242	5.658	5.656	12.41				
43	Dimethylphthalate	47.619	-4.8	732757	1.330	1.396	5.884	5.880	3.60				
44	2,6-Dinitrotoluene	50.877	1.8	152981	0.278	0.273	5.957	5.953	11.45				
45	Acenaphthylene	47.744	-4.5	1070071	1.942	2.034	6.035	6.030	1.96				
46	3-Nitroaniline	45.662	-8.7	182561	0.331	0.322	6.154	6.151	15.06	-0.0025	0.3650		0.9997
47	Acenaphthene	46.351	-7.3	691939	1.256	1.355	6.241	6.240	3.10				
48	2,4-Dinitrophenol	43.578	-12.8	75306	0.137	0.122	6.282	6.282	41.49	-0.0205	0.1756		0.9968
49	4-Nitrophenol	46.709	-6.6	81091	0.147	0.134	6.360	6.360	22.30	-0.0055	0.1623		0.9991
50	2,4-Dinitrotoluene	46.433	-7.1	209357	0.380	0.357	6.442	6.438	16.33	-0.0032	0.4119		0.9996
51	Dibenzofuran	46.450	-7.1	913567	1.658	1.785	6.451	6.449	4.07				
52	2,3,4,6-Tetrachlorophenol	45.219	-9.6	131437	0.239	0.227	6.598	6.597	20.25	-0.0043	0.2676		0.9993
53	Diethylphthalate	48.967	-2.1	830295	1.507	1.539	6.742	6.739	5.35				
54	Fluorene	50.536	1.1	795190	1.443	1.428	6.865	6.863	6.17				
55	4-Chlorophenyl-phenylether	44.539	-10.9	322850	0.586	0.658	6.872	6.869	6.17				
56	4-Nitroaniline	54.439	8.9	207364	0.376	0.327	6.898	6.883	19.70	-0.0144	0.5283	-0.1264	0.9975
57	Phenanthrene-d10	40.000	0	760309	1	1	7.944	7.941	0				
58	4,6-Dinitro-2-methylphenol	45.750	-8.5	120115	0.126	0.111	6.935	6.933	30.62	-0.0064	0.1437		0.9984
59	N-Nitrosodiphenylamine	47.870	-4.3	489296	0.515	0.538	7.013	7.010	2.20				
60	Azobenzene	48.761	-2.5	535035	0.563	0.577	7.059	7.057	3.44				
61	2,4,6-Tribromophenol												
62	4-Bromophenyl-phenylether	47.567	-4.9	210865	0.222	0.233	7.442	7.440	3.45				
63	Hexachlorobenzene	47.467	-5.1	236575	0.249	0.262	7.502	7.502	2.11				
64	Pentachlorophenol	43.621	-12.8	167052	0.176	0.164	7.728	7.730	29.26	-0.0091	0.2098		0.9983
65	Phenanthrene	46.165	-7.7	1065938	1.122	1.215	7.972	7.968	4.91				
66	Anthracene	47.296	-5.4	1080996	1.137	1.202	8.028	8.025	2.93				
67	Carbazole	47.533	-4.9	956331	1.006	1.058	8.206	8.204	2.48				
68	Di-n-butylphthalate	48.765	-2.5	1279885	1.347	1.381	8.595	8.591	4.79				
69	Fluoranthene	51.841	3.7	1291174	1.359	1.310	9.251	9.248	11.57				
70	Chrysene-d12	40.000	0	691739	1	1	10.730	10.728	0				
71	Benzidine												
72	Pyrene	48.473	-3.1	1180515	1.365	1.408	9.487	9.485	2.76				
73	Terphenyl-d14												
74	Butylbenzylphthalate	51.912	3.8	562761	0.651	0.627	10.153	10.152	10.04				
75	3,3'-Dichlorobenzidine	50.024	0.0	394331	0.456	0.456	10.688	10.688	5.08				
76	Benzo(a)anthracene	46.868	-6.3	1100724	1.273	1.358	10.720	10.716	6.17				
77	bis(2-Ethylhexyl)phthalate	50.770	1.5	858919	0.993	0.978	10.734	10.732	8.03				
78	Chrysene	46.820	-6.4	1014284	1.173	1.253	10.757	10.753	3.15				
79	Perylene-d12	40.000	0	617528	1	1	12.144	12.147	0				
80	Di-n-octylphthalate	53.238	6.5	1439593	1.865	1.752	11.359	11.357	11.37				
81	Benzo(b)fluoranthene	50.084	0.2	1042776	1.351	1.349	11.753	11.749	5.51				
82	Benzo(k)fluoranthene	48.030	-3.9	1025460	1.328	1.383	11.781	11.777	2.43				
83	Benzo(a)pyrene	49.009	-2.0	1020633	1.322	1.349	12.089	12.084	3.82				
84	Indeno(1,2,3-cd)pyrene	50.011	0.0	1214991	1.574	1.574	13.476	13.468	3.59				
85	Dibenzo(a,h)anthracene	55.132	10.3	973962	1.262	1.144	13.498	13.487	4.60				
86	Benzo(g,h,i)perylene	48.660	-2.7	1013026	1.312	1.349	13.880	13.867	3.53				

1-2-08

CONTINUE_CALIBRATION - CALIBRATION VERIFICATION

Instrument ID :TO48
IC_Beginning DateTime :07/16/08 10:16
SpTke Amount :50 PPM
CC/CV File :RGZ198
IC File :RGZ193

Column Spec :ZB-5MS ID :0.18MM
IC_Ending DateTime :07/16/08 12:51
HPChem Method :SV48G16
Date_Time :07/16/08 13:11

M_IDX	Parameters	CC_Con	CC%_D	CC_Resp	CCRRF	AvRRF	CC_Rtm	AvRtm	%_RSD	Co_X0	Co_X1	Co_X2	Co_Cor
1	1,4-Dichlorobenzene-d4	40.000	0	325921	1	1	2.817	2.816	0				
2	N-Nitrosodimethylamine	58.874	17.7	330575	0.811	0.689	1.233	1.264	10.57				
3	Pyridine	54.607	9.2	568238	1.395	1.277	1.250	1.286	14.06				
4	2-Fluorophenol												
5	Phenol	47.997	-4.0	645371	1.584	1.650	2.558	2.558	4.83				
6	Aniline	51.753	3.5	691413	1.697	1.640	2.567	2.574	8.74				
7	Bis(2-chloroethyl)ether	47.337	-5.3	498512	1.224	1.292	2.625	2.627	4.92				
8	Phenol-d5												
9	2-Chlorophenol	48.310	-3.4	540699	1.327	1.374	2.650	2.652	9.17				
10	1,3-Dichlorobenzene	48.701	-2.6	585221	1.436	1.475	2.767	2.769	4.40				
11	1,4-Dichlorobenzene	50.101	0.2	627564	1.540	1.537	2.833	2.831	2.90				
12	Benzyl alcohol	50.921	1.8	311518	0.765	0.751	2.950	2.950	12.00				
13	1,2-Dichlorobenzene-d4												
14	1,2-Dichlorobenzene	48.888	-2.2	581089	1.426	1.459	2.950	2.952	2.14				
15	2-Methylphenol	50.603	1.2	402335	0.988	0.976	3.042	3.044	10.12				
16	Bis(2-chloroisopropyl)ether	47.432	-5.1	1202597	2.952	3.112	3.058	3.061	2.96				
17	4-Methylphenol	47.629	-4.7	552885	1.357	1.425	3.183	3.179	6.13				
18	N-Nitroso-di-n-propylamine	49.946	-0.1	290232	0.712	0.713	3.175	3.175	7.82				
19	Hexachloroethane	46.574	-6.9	270652	0.664	0.713	3.233	3.231	4.01				
20	Naphthalene-d8	40.000	0	1164611	1	1	3.925	3.925	0				
21	Nitrobenzene-d5												
22	Nitrobenzene	52.143	4.3	448318	0.308	0.295	3.308	3.309	7.41				
23	Isophorone	47.557	-4.9	728664	0.501	0.526	3.525	3.527	5.69				
24	2-Nitrophenol	46.067	-7.9	280434	0.193	0.172	3.583	3.588	25.22	-0.0087	0.2167		0.9974
25	2,4-Dimethylphenol	49.166	-1.7	389222	0.267	0.272	3.650	3.651	10.79				
26	bis(2-Chloroethoxy)methane	50.984	2.0	621123	0.427	0.418	3.742	3.742	7.25				
27	Benzoic Acid	43.061	-13.9	264015	0.181	0.176	3.800	3.786	28.76	-0.0205	0.2296		0.9982
28	2,4-Dichlorophenol	46.062	-7.9	355713	0.244	0.229	3.808	3.811	20.44	-0.0085	0.2726		0.9988
29	1,2,4-Trichlorobenzene	49.381	-1.2	400968	0.275	0.279	3.875	3.877	6.15				
30	Naphthalene	48.940	-2.1	1410377	0.969	0.990	3.942	3.944	5.13				
31	4-Chloroaniline	49.630	-0.7	599515	0.412	0.415	4.017	4.020	11.75				
32	Hexachlorobutadiene	55.591	11.2	208828	0.143	0.129	4.067	4.065	9.63				
33	4-Chloro-3-methylphenol	44.834	-10.3	354723	0.244	0.243	4.500	4.501	15.70	-0.0069	0.2779		0.9989
34	2-Methylnaphthalene	48.862	-2.3	810928	0.557	0.570	4.600	4.605	6.19				
35	1-Methylnaphthalene	52.830	5.7	836156	0.574	0.544	4.700	4.695	4.95				
36	Acenaphthene-d10	40.000	0	475435	1	1	5.608	5.609	0				
37	Hexachlorocyclopentadiene	51.227	2.5	215198	0.362	0.290	4.750	4.752	35.25	-0.0145	0.3009	0.0499	0.9998
38	2,4,6-Trichlorophenol	48.063	-3.9	211297	0.356	0.323	4.892	4.891	22.27	-0.0110	0.3790		0.9994
39	2,4,5-Trichlorophenol	44.867	-10.3	219135	0.369	0.344	4.917	4.919	25.65	-0.0159	0.4251		0.9988
40	2-Fluorobiphenyl												
41	2-Chloronaphthalene	51.050	2.1	716992	1.206	1.182	5.067	5.070	8.72				
42	2-Nitroaniline	50.472	0.9	185728	0.313	0.310	5.200	5.200	12.42				
43	Dimethylphthalate	48.000	-4.0	719597	1.211	1.261	5.400	5.400	7.78				
44	2,6-Dinitrotoluene	45.590	-8.8	171917	0.289	0.280	5.450	5.450	21.57	-0.0087	0.3249		0.9950
45	Acenaphthylene	46.587	-6.8	1110057	1.868	2.005	5.467	5.469	6.51				
46	3-Nitroaniline	47.257	-5.5	237438	0.400	0.374	5.608	5.608	19.96	-0.0114	0.4324		0.9959
47	Acenaphthene	46.262	-7.5	616800	1.038	1.122	5.642	5.643	3.97				
48	2,4-Dinitrophenol	40.443	-19.1	90542	0.152	0.147	5.708	5.717	44.39	-0.0257	0.2138		0.9972
49	4-Nitrophenol	47.892	-4.2	69278	0.117	0.122	5.808	5.813	14.13				
50	Dibenzofuran	49.514	-1.0	962868	1.620	1.636	5.817	5.817	6.39				
51	2,4-Dinitrotoluene	45.584	-8.8	230585	0.388	0.366	5.842	5.843	25.14	-0.0140	0.4379		0.9956
52	2,3,4,6-Tetrachlorophenol	42.493	-15.0	119035	0.200	0.203	5.950	5.948	22.52	-0.0080	0.2432		0.9980
53	Diethylphthalate	46.507	-7.0	730942	1.230	1.322	6.100	6.100	7.07				
54	Fluorene	46.315	-7.4	662007	1.114	1.203	6.150	6.151	4.98				
55	4-Chlorophenyl-phenylether	48.090	-3.8	303838	0.511	0.532	6.175	6.175	6.54				
56	4-Nitroaniline	44.892	-10.2	213997	0.360	0.336	6.208	6.211	30.43	-0.0155	0.4148		0.9987
57	4,6-Dinitro-2-methylphenol	43.028	-13.9	115256	0.194	0.188	6.233	6.239	32.47	-0.0219	0.2457		0.9983
58	N-Nitrosodiphenylamine	47.733	-4.5	448019	0.754	0.790	6.300	6.301	10.83				
59	Azobenzene	47.369	-5.3	877963	1.477	1.559	6.333	6.334	4.67				
60	2,4,6-Tribromophenol												
61	Phenanthrene-d10	40.000	0	639302	1	1	7.108	7.107	0				
62	4-Bromophenyl-phenylether	47.272	-5.5	185994	0.233	0.239	6.658	6.661	16.22	-0.0016	0.2475		0.9976
63	Hexachlorobenzene	50.261	0.5	263440	0.330	0.328	6.692	6.693	7.69				
64	Pentachlorophenol	45.716	-8.6	161435	0.202	0.189	6.925	6.923	20.22	-0.0076	0.2276		0.9975
65	Phenanthrene	46.722	-6.6	884057	1.106	1.184	7.133	7.135	2.18				
66	Anthracene	46.398	-7.2	877442	1.098	1.183	7.183	7.185	4.38				
67	Carbazole	50.280	0.6	862526	1.079	1.073	7.375	7.374	7.65				
68	Di-n-butylphthalate	49.169	-1.7	1226044	1.534	1.560	7.775	7.774	6.97				
69	Fluoranthene	48.799	-2.4	808003	1.011	1.036	8.300	8.294	3.65				
70	Chrysene-d12	40.000	0	455183	1	1	9.583	9.577	0				
71	Benzidine												
72	Pyrene	48.647	-2.7	830885	1.460	1.501	8.500	8.500	6.75				
73	Terphenyl-d14												
74	Butylbenzylphthalate	43.216	-13.6	450369	0.792	0.786	9.150	9.144	22.44	-0.0312	0.9446		0.9989
75	3,3'-Dichlorobenzidine	49.161	-1.7	261231	0.459	0.394	9.575	9.573	24.05	-0.0170	0.4808		0.9988
76	Benzo(a)anthracene	49.268	-1.5	681844	1.198	1.216	9.575	9.569	2.48				
77	Chrysene	45.592	-8.8	599636	1.054	1.156	9.600	9.601	4.44				
78	bis(2-Ethylhexyl)phthalate	44.059	-11.9	657303	1.155	1.152	9.658	9.652	17.38	-0.0380	1.3455		0.9992
79	Perylene-d12	40.000	0	410484	1	1	10.725	10.717	0				
80	Di-n-octylphthalate	45.729	-8.5	1150445	2.242	2.052	10.183	10.177	22.51	-0.0946	2.5343		0.9974
81	Benzo(b)fluoranthene	48.574	-2.9	638876	1.245	1.282	10.442	10.431	11.41				
82	Benzo(k)fluoranthene	47.372	-5.3	559744	1.091	1.151	10.458	10.454	9.06				
83	Benzo(a)pyrene	50.618	1.2	624201	1.217	1.202	10.683	10.671	7.93				
84	Indeno(1,2,3-cd)pyrene	49.269	-1.5	742664	1.447	1.309	11.475	11.450	15.16	-0.0373	1.4991		0.9992
85	Dibenzo(a,h)anthracene	51.348	2.7	607480	1.184	1.003	11.483	11.462	17.56	-0.0347	1.1799		0.9987
86	Benzo(g,h,i)perylene	55.269	10.5	673568	1.313	1.188	11.650	11.623	10.05				

7-17-08

DAILY CALIBRATIONS

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGG234
Instrument ID: T-0E2

Project: LMC BEAUMONT SITE 1
SDG No.: 08G195
DFTPP Injection Date: 07/23/08
DFTPP Injection Time: 15:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.97
68	Less than 2% of mass 69	0.34(1.0)1
69	Relative abundance of mass 198	34.21
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	51.93
197	Less than 1.0% of mass 198	0.36
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.04
275	10.0 - 30.0% of mass 198	25.00
365	Greater than 1.00% of mass 198	3.36
441	Present, but less than mass 443	15.01
442	Greater than 40.0% of mass 198	83.64
443	17.0 - 23.0% of mass 442	17.03(20.4)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	CSVE2F3011	RGG235	07/23/08	15:47
2	MBLK1W	SVG033WB	RGG238	07/23/08	16:47
3	LCS1W	SVG033WL	RGG239	07/23/08	17:07
4	LCD1W	SVG033WC	RGG240	07/23/08	17:27
5	H-EB7182008	G195-01	RGG249	07/23/08	20:23

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG137
Instrument ID: T-OE2

Project:LMC BEAUMONT SITE 1
SDG No.: 08G195
Date Analyzed: 06/30/08
Time Analyzed: 12:24

	SAMPLE ID	IS1(DCB) AREA #	IS1(DCB) RT #	IS2(NPT) AREA #	IS2(NPT) RT #	IS3(ANT) AREA #	IS3(ANT) RT #
	12 HOUR STD	242978	2.95	915325	4.18	481654	6.20
	UPPER LIMIT	485956	3.45	1830650	4.68	963308	6.70
	LOWER LIMIT	121489	2.45	457663	3.68	240827	5.70
1	SSTD050	208600	2.95	798013	4.17	411962	6.20
2	MBLK1W	174312	2.94	659597	4.17	340842	6.19
3	LCS1W	201953	2.94	702434	4.17	359465	6.19
4	LCD1W	147230	2.94	579304	4.17	290581	6.19
5	H-EB7182008	213293	2.94	809040	4.17	420296	6.19

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RFG137
Instrument ID: T-0E2

Project:LMC BEAUMONT SITE 1
SDG No.: 08G195
Date Analyzed: 06/30/08
Time Analyzed: 12:24

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	840051		7.94		765923		10.73		679066		12.15	
	UPPER LIMIT	1680102		8.44		1531846		11.23		1358132		12.65	
	LOWER LIMIT	420026		7.44		382962		10.23		339533		11.65	
	SAMPLE ID												
1	SSTD050	738216		7.94		643948		10.73		579697		12.14	
2	MBLK1W	591074		7.93		611814		10.72		627839		12.13	
3	LCS1W	616679		7.93		616110		10.72		634309		12.14	
4	LCD1W	513474		7.93		517612		10.72		533341		12.13	
5	H-EB7182008	715813		7.93		732750		10.71		751182		12.13	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

Data File : D:\Data\08G23\RGG235.D
Acq On : 23 Jul 2008 15:47
Sample : CSVE2F3011
Misc :
Integrator: RTE
Quant Time: Jul 23 16:04:00 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	86	0.00
2	T	N-nitrosodimethylamine	50.000	49.270	1.5	82	0.00
3	T	Pyridine	50.000	50.267	-0.5	80	0.00
4	S	2-Fluorophenol	50.000	51.203	-2.4	86	0.00
5	S	Phenol-d5	50.000	51.992	-4.0	86	0.00
6	C	Phenol	50.000	50.123	-0.2	84	0.00
7	T	Aniline	50.000	46.912	6.2	79	0.00
8	T	bis(2-chloroethyl) ether	50.000	47.911	4.2	85	0.00
9	T	2-Chlorophenol	50.000	51.140	-2.3	87	0.00
10	T	1,3-Dichlorobenzene	50.000	49.332	1.3	86	0.00
11	S	1,2-Dichlorobenzene-d4	50.000	50.270	-0.5	87	0.00
12	C	1,4-Dichlorobenzene	50.000	55.389	-10.8	89	0.00
13	T	Benzyl alcohol	50.000	50.837	-1.7	85	0.00
14	T	1,2-Dichlorobenzene	50.000	50.903	-1.8	88	-0.01
15	T	2-Methylphenol	50.000	51.064	-2.1	85	0.00
16	T	bis(2-chloroisopropyl)ether	50.000	45.621	8.8	81	0.00
17	T	4-Methylphenol	50.000	51.648	-3.3	86	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	50.022	-0.0	82	-0.01
19	T	Hexachloroethane	50.000	49.990	0.0	84	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	87	0.00
21	S	Nitrobenzene-d5	50.000	51.735	-3.5	85	0.00
22	T	Nitrobenzene	50.000	50.461	-0.9	88	0.00
23	T	Isophorone	50.000	50.451	-0.9	85	0.00
24	C	2-Nitrophenol	50.000	55.019	-10.0	88	0.00
25	T	2,4-Dimethylphenol	50.000	50.613	-1.2	86	0.00
26	T	Benzoic acid	50.000	34.518	31.0#	59	-0.02
27	T	bis(2-Chloroethoxy)methane	50.000	53.926	-7.9	93	0.00
28	C	2,4-Dichlorophenol	50.000	53.273	-6.5	86	0.00
29	T	1,2,4-Trichlorobenzene	50.000	49.717	0.6	87	0.00
30	T	Naphthalene	50.000	49.827	0.3	86	0.00
31	T	4-Chloroaniline	50.000	52.317	-4.6	87	0.00
32	C	Hexachlorobutadiene	50.000	48.724	2.6	85	0.00
33	C	4-Chloro-3-methylphenol	50.000	53.087	-6.2	86	0.00
34	T	2-Methylnaphthalene	50.000	51.079	-2.2	87	0.00
35	T	1-Methylnaphthalene	50.000	50.028	-0.1	86	0.00
36	I	Acenaphthene-d10	40.000	40.000	0.0	86	0.00
37	P	Hexachlorocyclopentadiene	50.000	41.425	17.2	71	0.00
38	C	2,4,6-Trichlorophenol	50.000	54.765	-9.5	86	0.00
39	T	2,4,5-Trichlorophenol	50.000	55.042	-10.1	85	0.00
40	S	2-Fluorobiphenyl	50.000	51.853	-3.7	87	0.00
41	T	2-Chloronaphthalene	50.000	50.859	-1.7	88	0.00
42	T	2-Nitroaniline	50.000	56.153	-12.3	86	0.00
43	T	Dimethylphthalate	50.000	52.552	-5.1	87	0.00
44	T	2,6-Dinitrotoluene	50.000	57.990	-16.0	89	0.00
45	T	Acenaphthylene	50.000	52.417	-4.8	87	0.00
46	T	3-Nitroaniline	50.000	51.397	-2.8	87	0.00
47	C	Acenaphthene	50.000	51.556	-3.1	88	0.00
48	P	2,4-Dinitrophenol	50.000	45.845	8.3	80	0.00
49	P	4-Nitrophenol	50.000	47.282	5.4	82	0.00

Data File : D:\Data\08G23\RGG235.D
Acq On : 23 Jul 2008 15:47
Sample : CSVE2F3011
Misc :
Integrator: RTE
Quant Time: Jul 23 16:04:00 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
50	T	2,4-Dinitrotoluene	50.000	51.751	-3.5	88	0.00
51	T	Dibenzofuran	50.000	51.457	-2.9	87	0.00
52	T	2,3,4,6-Tetrachlorophenol	50.000	52.096	-4.2	88	0.00
53	T	Diethylphthalate	50.000	54.591	-9.2	90	0.00
54	T	Fluorene	50.000	55.188	-10.4	87	0.00
55	T	4-Chlorophenyl-phenylether	50.000	54.534	-9.1	86	0.00
56	T	4-Nitroaniline	50.000	58.952	-17.9	89	0.00
57	I	Phenanthrene-d10	40.000	40.000	0.0	88	0.00
58	T	4,6-Dinitro-2-methylphenol	50.000	45.740	8.5	82	0.00
59	C	N-Nitrosodiphenylamine	50.000	51.731	-3.5	89	0.00
60	T	Azobenzene	50.000	51.536	-3.1	88	0.00
61	S	2,4,6-Tribromophenol	50.000	52.317	-4.6	87	0.00
62	T	4-Bromophenyl-phenylether	50.000	49.356	1.3	84	0.00
63	T	Hexachlorobenzene	50.000	49.198	1.6	85	0.00
64	C	Pentachlorophenol	50.000	50.141	-0.3	90	0.00
65	T	Phenanthrene	50.000	49.847	0.3	89	0.00
66	T	Anthracene	50.000	50.971	-1.9	89	0.00
67	T	Carbazole	50.000	52.040	-4.1	92	0.00
68	T	Di-n-butylphthalate	50.000	53.913	-7.8	90	0.00
69	C	Fluoranthene	50.000	57.758	-15.5	103	0.00
70	I	Chrysene-d12	40.000	40.000	0.0	84	0.00
71	T	Benzidine	-1.000	0.000	0.0	0	0.00
72	T	Pyrene	50.000	53.290	-6.6	87	0.00
73	S	Terphenyl-d14	50.000	58.054	-16.1	94	0.00
74	T	Butylbenzylphthalate	50.000	59.200	-18.4	91	-0.01
75		3,3'-Dichlorobenzidine	50.000	53.868	-7.7	88	0.00
76	T	Benzo(a)anthracene	50.000	50.065	-0.1	85	0.01
77	T	bis(2-Ethylhexyl)phthalate	50.000	58.093	-16.2	90	0.00
78	T	Chrysene	50.000	50.837	-1.7	86	0.00
79	I	Perylene-d12	40.000	40.000	0.0	85	0.00
80	C	Di-n-octylphthalate	50.000	59.730	-19.5	90	0.00
81	T	Benzo(b)fluoranthene	50.000	52.995	-6.0	86	0.05
82	T	Benzo(k)fluoranthene	50.000	51.294	-2.6	83	0.00
83	C	Benzo(a)pyrene	50.000	51.917	-3.8	85	0.00
84	T	Indeno(1,2,3-cd)pyrene	50.000	51.965	-3.9	85	0.00
85	T	Dibenzo(a,h)anthracene	50.000	57.615	-15.2	94	0.00
86	T	Benzo(g,h,i)perylene	50.000	50.142	-0.3	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data File : D:\Data\08G23\RGG235.D
Acq On : 23 Jul 2008 15:47
Sample : CSVE2F3011
Misc :
Integrator: RTE
Quant Time: Jul 23 16:04:00 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	86	0.00
2	T	N-nitrosodimethylamine	0.504	0.497	1.4	82	0.00
3	T	Pyridine	0.950	0.955	-0.5	80	0.00
4	S	2-Fluorophenol	1.091	1.117	-2.4	86	0.00
5	S	Phenol-d5	1.226	1.275	-4.0	86	0.00
6	C	Phenol	1.289	1.292	-0.2	84	0.00
7	T	Aniline	1.444	1.355	6.2	79	0.00
8	T	bis(2-chloroethyl) ether	0.937	0.898	4.2	85	0.00
9	T	2-Chlorophenol	1.467	1.500	-2.2	87	0.00
10	T	1,3-Dichlorobenzene	1.547	1.527	1.3	86	0.00
11	S	1,2-Dichlorobenzene-d4	0.937	0.942	-0.5	87	0.00
12	C	1,4-Dichlorobenzene	1.665	1.844	-10.8	89	0.00
13	T	Benzyl alcohol	0.738	0.750	-1.6	85	0.00
14	T	1,2-Dichlorobenzene	1.493	1.520	-1.8	88	-0.01
15	T	2-Methylphenol	0.911	0.930	-2.1	85	0.00
16	T	bis(2-chloroisopropyl)ether	2.015	1.838	8.8	81	0.00
17	T	4-Methylphenol	1.360	1.405	-3.3	86	0.00
18	P	N-Nitroso-di-n-propylamine	0.528	0.528	0.0	82	-0.01
19	T	Hexachloroethane	0.559	0.559	0.0	84	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	87	0.00
21	S	Nitrobenzene-d5	0.248	0.257	-3.6	85	0.00
22	T	Nitrobenzene	0.253	0.255	-0.8	88	0.00
23	T	Isophorone	0.405	0.409	-1.0	85	0.00
24	C	2-Nitrophenol	0.175	0.192	-9.7	88	0.00
25	T	2,4-Dimethylphenol	0.293	0.296	-1.0	86	0.00
26	T	Benzoic acid	0.163	0.141	13.5	59	-0.02
27	T	bis(2-Chloroethoxy)methane	0.323	0.348	-7.7	93	0.00
28	C	2,4-Dichlorophenol	0.280	0.298	-6.4	86	0.00
29	T	1,2,4-Trichlorobenzene	0.327	0.325	0.6	87	0.00
30	T	Naphthalene	1.056	1.053	0.3	86	0.00
31	T	4-Chloroaniline	0.410	0.429	-4.6	87	0.00
32	C	Hexachlorobutadiene	0.187	0.182	2.7	85	0.00
33	C	4-Chloro-3-methylphenol	0.241	0.255	-5.8	86	0.00
34	T	2-Methylnaphthalene	0.687	0.702	-2.2	87	0.00
35	T	1-Methylnaphthalene	0.654	0.654	0.0	86	0.00
36	I	Acenaphthene-d10	1.000	1.000	0.0	86	0.00
37	P	Hexachlorocyclopentadiene	0.308	0.326	-5.8	71	0.00
38	C	2,4,6-Trichlorophenol	0.372	0.408	-9.7	86	0.00
39	T	2,4,5-Trichlorophenol	0.396	0.436	-10.1	85	0.00
40	S	2-Fluorobiphenyl	1.399	1.451	-3.7	87	0.00
41	T	2-Chloronaphthalene	1.249	1.271	-1.8	88	0.00
42	T	2-Nitroaniline	0.242	0.272	-12.4	86	0.00
43	T	Dimethylphthalate	1.396	1.468	-5.2	87	0.00
44	T	2,6-Dinitrotoluene	0.273	0.316	-15.8	89	0.00
45	T	Acenaphthylene	2.034	2.132	-4.8	87	0.00
46	T	3-Nitroaniline	0.322	0.373	-15.8	87	0.00
47	C	Acenaphthene	1.355	1.397	-3.1	88	0.00
48	P	2,4-Dinitrophenol	0.122	0.145	-18.9	80	0.00
49	P	4-Nitrophenol	0.134	0.149	-11.2	82	0.00

Data File : D:\Data\08G23\RGG235.D
Acq On : 23 Jul 2008 15:47
Sample : CSVE2F3011
Misc :
Integrator: RTE
Quant Time: Jul 23 16:04:00 2008
Quant Results File: SVE2F30.RES

Vial: 3
Operator: KV
Inst : E2
Multiplr: 1.00

Quant Method : C:\msdchem\1\METHODS\SVE2F30.M
Quant Title : SEMIVOLATILES
QLast Update : Mon Jun 30 15:21:48 2008
Response via : Initial Calibration
DataAcq Meth:SVE2F30S.M

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
50	T	2,4-Dinitrotoluene	0.357	0.424	-18.8	88	0.00
51	T	Dibenzofuran	1.785	1.837	-2.9	87	0.00
52	T	2,3,4,6-Tetrachlorophenol	0.227	0.275	-21.1#	88	0.00
53	T	Diethylphthalate	1.539	1.680	-9.2	90	0.00
54	T	Fluorene	1.428	1.576	-10.4	87	0.00
55	T	4-Chlorophenyl-phenylether	0.658	0.717	-9.0	86	0.00
56	T	4-Nitroaniline	0.327	0.392	-19.9	89	0.00
57	I	Phenanthrene-d10	1.000	1.000	0.0	88	0.00
58	T	4,6-Dinitro-2-methylphenol	0.111	0.126	-13.5	82	0.00
59	C	N-Nitrosodiphenylamine	0.538	0.556	-3.3	89	0.00
60	T	Azobenzene	0.577	0.595	-3.1	88	0.00
61	S	2,4,6-Tribromophenol	0.118	0.123	-4.2	87	0.00
62	T	4-Bromophenyl-phenylether	0.233	0.230	1.3	84	0.00
63	T	Hexachlorobenzene	0.262	0.258	1.5	85	0.00
64	C	Pentachlorophenol	0.164	0.203	-23.8#	90	0.00
65	T	Phenanthrene	1.215	1.211	0.3	89	0.00
66	T	Anthracene	1.202	1.226	-2.0	89	0.00
67	T	Carbazole	1.058	1.102	-4.2	92	0.00
68	T	Di-n-butylphthalate	1.381	1.489	-7.8	90	0.00
69	C	Fluoranthene	1.310	1.514	-15.6	103	0.00
70	I	Chrysene-d12	1.000	1.000	0.0	84	0.00
71	T	Benzidine	0.000	0.000#	0.0	0#	0.00
72	T	Pyrene	1.408	1.501	-6.6	87	0.00
73	S	Terphenyl-d14	0.823	0.955	-16.0	94	0.00
74	T	Butylbenzylphthalate	0.627	0.742	-18.3	91	-0.01
75		3,3'-Dichlorobenzidine	0.456	0.491	-7.7	88	0.00
76	T	Benzo(a)anthracene	1.358	1.360	-0.1	85	0.01
77	T	bis(2-Ethylhexyl)phthalate	0.978	1.137	-16.3	90	0.00
78	T	Chrysene	1.253	1.274	-1.7	86	0.00
79	I	Perylene-d12	1.000	1.000	0.0	85	0.00
80	C	Di-n-octylphthalate	1.752	2.092	-19.4	90	0.00
81	T	Benzo(b)fluoranthene	1.349	1.429	-5.9	86	0.05
82	T	Benzo(k)fluoranthene	1.383	1.419	-2.6	83	0.00
83	C	Benzo(a)pyrene	1.349	1.401	-3.9	85	0.00
84	T	Indeno(1,2,3-cd)pyrene	1.574	1.635	-3.9	85	0.00
85	T	Dibenzo(a,h)anthracene	1.144	1.319	-15.3	94	0.00
86	T	Benzo(g,h,i)perylene	1.349	1.352	-0.2	83	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 1

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ309
Instrument ID: T-048

Project: LMC BEAUMONT SITE 1
SDG No.: 08G195
DFTPP Injection Date: 07/24/08
DFTPP Injection Time: 13:54

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	36.42
68	Less than 2% of mass 69	0.31(0.7)1
69	Relative abundance of mass 198	41.94
70	Less than 2.0% of mass 69	0.00(0.0)1
127	40.0 - 60.0% of mass 198	44.10
197	Less than 1.0% of mass 198	0.39
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.84
275	10.0 - 30.0% of mass 198	19.24
365	Greater than 1.00% of mass 198	1.36
441	Present, but less than mass 443	15.94
442	Greater than 40.0% of mass 198	87.76
443	17.0 - 23.0% of mass 442	19.81(22.6)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	CSV48G1606A	RGZ311	07/24/08	14:41
2	MBLK1S	SVG037SB	RGZ327	07/24/08	19:53
3	LCS1S	SVG037SL	RGZ328	07/24/08	20:11
4	LCD1S	SVG037SC	RGZ329	07/24/08	20:30
5	H-T11-0.5	G195-02	RGZ330	07/24/08	20:50
6	H-T11-5.0	G195-04	RGZ331	07/24/08	21:09
7	H-T11-10.0	G195-05	RGZ332	07/24/08	21:28
8	H-T11-10.0DUP	G195-06	RGZ333	07/24/08	21:47
9	H-T5-0.5	G195-07	RGZ334	07/24/08	22:07
10	H-T5-0.5DUP	G195-08	RGZ335	07/24/08	22:26
11	H-T5-2.5	G195-09	RGZ336	07/24/08	22:45
12	H-T5-6.0	G195-12	RGZ337	07/24/08	23:04
13	H-T5-12.0	G195-14	RGZ338	07/24/08	23:24

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ193
Instrument ID: T-048

Project: LMC BEAUMONT SITE 1
SDG No.: 08G195
Date Analyzed: 07/16/08
Time Analyzed: 11:35

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	296750	2.82	1136590	3.92	469649	5.61
	UPPER LIMIT	593500	3.32	2273180	4.43	939298	6.11
	LOWER LIMIT	148375	2.32	568295	3.42	234825	5.11
	SAMPLE ID						
1	SSTD050	393215	2.82	1389619	3.92	581036	5.62
2	MBLK1S	367334	2.82	1354056	3.92	566703	5.61
3	LCS1S	389351	2.81	1440459	3.92	568977	5.60
4	LCD1S	372487	2.82	1407457	3.92	547912	5.61
5	H-T11-0.5	381647	2.82	1381507	3.92	553631	5.61
6	H-T11-5.0	382810	2.81	1473276	3.92	589803	5.61
7	H-T11-10.0	369567	2.82	1392378	3.92	557176	5.61
8	H-T11-10.0DUP	382795	2.82	1446346	3.92	573013	5.61
9	H-T5-0.5	381605	2.81	1403406	3.92	577732	5.61
10	H-T5-0.5DUP	385634	2.82	1429896	3.92	614674	5.61
11	H-T5-2.5	391268	2.81	1475101	3.92	568577	5.60
12	H-T5-6.0	374660	2.81	1413553	3.92	547740	5.60
13	H-T5-12.0	376342	2.82	1404126	3.92	584557	5.61

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ193
Instrument ID: T-048

Project: LMC BEAUMONT SITE 1
SDG No.: 08G195
Date Analyzed: 07/16/08
Time Analyzed: 11:35

		IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
	12 HOUR STD	683193		7.11		483414		9.57		449667		10.72	
	UPPER LIMIT	1366386		7.61		966828		10.07		899334		11.22	
	LOWER LIMIT	341597		6.61		241707		9.07		224834		10.22	
	SAMPLE ID												
1	SSTD050	802944		7.11		606360		9.58		547914		10.71	
2	MBLK1S	744400		7.11		615840		9.57		649287		10.70	
3	LCS1S	771947		7.10		621764		9.57		653984		10.69	
4	LCD1S	757109		7.11		664167		9.57		660179		10.70	
5	H-T11-0.5	790648		7.11		680973		9.57		688502		10.70	
6	H-T11-5.0	784104		7.10		633493		9.57		648525		10.69	
7	H-T11-10.0	780990		7.11		691081		9.57		738460		10.70	
8	H-T11-10.0DUP	829858		7.11		710864		9.57		746917		10.70	
9	H-T5-0.5	781195		7.10		678586		9.57		697932		10.69	
10	H-T5-0.5DUP	856728		7.11		695456		9.57		782544		10.70	
11	H-T5-2.5	810867		7.10		681092		9.57		710722		10.69	
12	H-T5-6.0	781859		7.10		720361		9.57		681004		10.69	
13	H-T5-12.0	809045		7.11		715003		9.57		752649		10.70	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

Data File : D:\CHEMDATA\08G24\RGZ311.D
Acq On : 24 JUL 2008 14:41
Sample : CSV48G1606A
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	133	0.00
2	T	N-Nitrosodimethylamine	50.000	52.129	-4.3	117	0.00
3	T	Pyridine	50.000	55.987	-12.0	124	0.00
4	S	2-Fluorophenol	50.000	54.140	-8.3	139	0.00
5	C	Phenol	50.000	49.906	0.2	130	0.00
6	T	Aniline	50.000	47.073	5.9	115	0.00
7	T	Bis(2-chloroethyl)ether	50.000	44.964	10.1	124	0.00
8	S	Phenol-d5	50.000	49.803	0.4	128	0.00
9	T	2-Chlorophenol	50.000	47.781	4.4	120	0.00
10	T	1,3-Dichlorobenzene	50.000	47.819	4.4	121	0.00
11	C	1,4-Dichlorobenzene	50.000	46.908	6.2	127	0.00
12	T	Benzyl alcohol	50.000	50.937	-1.9	124	0.00
13	S	1,2-Dichlorobenzene-d4	50.000	48.329	3.3	124	0.00
14	T	1,2-Dichlorobenzene	50.000	47.738	4.5	122	0.00
15	T	2-Methylphenol	50.000	47.906	4.2	121	0.00
16	T	Bis(2-chloroisopropyl)ether	50.000	47.686	4.6	125	0.00
17	T	4-Methylphenol	50.000	52.288	-4.6	138	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	49.072	1.9	120	0.00
19	T	Hexachloroethane	50.000	44.702	10.6	119	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	122	0.00
21	S	Nitrobenzene-d5	50.000	49.330	1.3	122	0.00
22	T	Nitrobenzene	50.000	47.669	4.7	115	0.00
23	T	Isophorone	50.000	49.695	0.6	118	0.00
24	C	2-Nitrophenol	50.000	46.046	7.9	117	0.00
25	T	2,4-Dimethylphenol	50.000	51.203	-2.4	114	0.00
26	T	bis(2-Chloroethoxy)methane	50.000	51.015	-2.0	121	0.00
27	T	Benzoic Acid	50.000	48.959	2.1	125	0.00
28	C	2,4-Dichlorophenol	50.000	46.337	7.3	117	0.00
29	T	1,2,4-Trichlorobenzene	50.000	47.847	4.3	114	0.00
30	T	Naphthalene	50.000	49.474	1.1	120	0.00
31	T	4-Chloroaniline	50.000	48.245	3.5	108	0.00
32	C	Hexachlorobutadiene	50.000	55.902	-11.8	132	0.00
33	C	4-Chloro-3-methylphenol	50.000	47.933	4.1	121	0.00
34	T	2-Methylnaphthalene	50.000	50.860	-1.7	120	0.00
35	T	1-Methylnaphthalene	50.000	50.917	-1.8	126	0.00
36	I	Acenaphthene-d10	40.000	40.000	0.0	124	0.00
37	P	Hexachlorocyclopentadiene	50.000	47.805	4.4	114	0.00
38	C	2,4,6-Trichlorophenol	50.000	48.729	2.5	121	0.00
39	T	2,4,5-Trichlorophenol	50.000	47.084	5.8	114	0.00

(#) = Out of Range

Data File : D:\CHEMDATA\08G24\RGZ311.D
Acq On : 24 JUL 2008 14:41
Sample : CSV48G1606A
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	S	2-Fluorobiphenyl	50.000	48.650	2.7	117	0.00
41	T	2-Chloronaphthalene	50.000	53.265	-6.5	128	0.00
42	T	2-Nitroaniline	50.000	53.214	-6.4	122	0.00
43	T	Dimethylphthalate	50.000	50.015	-0.0	114	0.00
44	T	2,6-Dinitrotoluene	50.000	43.620	12.8	100	0.00
45	T	Acenaphthylene	50.000	50.828	-1.7	121	0.00
46	T	3-Nitroaniline	50.000	44.026	11.9	104	0.00
47	C	Acenaphthene	50.000	46.948	6.1	112	0.00
48	P	2,4-Dinitrophenol	50.000	45.605	8.8	113	0.00
49	P	4-Nitrophenol	50.000	63.072	-26.1#	136	0.02
50	T	Dibenzofuran	50.000	49.854	0.3	114	0.00
51	T	2,4-Dinitrotoluene	50.000	46.662	6.7	107	0.00
52	T	2,3,4,6-Tetrachlorophenol	50.000	48.866	2.3	122	0.00
53	T	Diethylphthalate	50.000	49.808	0.4	117	0.00
54	T	Fluorene	50.000	49.006	2.0	117	0.00
55	T	4-Chlorophenyl-phenylether	50.000	48.983	2.0	116	0.00
56	T	4-Nitroaniline	50.000	45.824	8.4	110	0.00
57	T	4,6-Dinitro-2-methylphenol	50.000	47.591	4.8	119	0.00
58	C	N-Nitrosodiphenylamine	50.000	50.130	-0.3	114	0.00
59	T	Azobenzene	50.000	45.137	9.7	105	0.00
60	S	2,4,6-Tribromophenol	50.000	47.764	4.5	114	0.00
61	I	Phenanthrene-d10	40.000	40.000	0.0	118	0.00
62	T	4-Bromophenyl-phenylether	50.000	49.671	0.7	120	0.00
63	T	Hexachlorobenzene	50.000	52.218	-4.4	119	0.00
64	C	Pentachlorophenol	50.000	47.334	5.3	114	0.00
65	T	Phenanthrene	50.000	47.055	5.9	111	0.00
66	T	Anthracene	50.000	50.770	-1.5	118	0.00
67	T	Carbazole	50.000	50.446	-0.9	112	0.00
68	T	Di-n-butylphthalate	50.000	53.464	-6.9	116	0.00
69	C	Fluoranthene	50.000	52.314	-4.6	120	0.00
70	I	Chrysene-d12	40.000	40.000	0.0	125	0.00
71	T	Benzidine	-1.000	0.000	0.0	0	0.00
72	T	Pyrene	50.000	45.972	8.1	108	0.00
73	S	Terphenyl-d14	50.000	53.119	-6.2	129	0.00
74	T	Butylbenzylphthalate	50.000	49.328	1.3	122	0.00
75	T	3,3'-Dichlorobenzidine	50.000	53.261	-6.5	132	0.00
76	T	Benzo(a)anthracene	50.000	50.344	-0.7	125	0.00
77	T	Chrysene	50.000	49.232	1.5	117	0.00
78	T	bis(2-Ethylhexyl)phthalate	50.000	50.417	-0.8	125	0.00

(#) = Out of Range

Data File : D:\CHEMDATA\08G24\RGZ311.D
Acq On : 24 JUL 2008 14:41
Sample : CSV48G1606A
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
79	I	Perylene-d12	40.000	40.000	0.0	122	0.00
80	C	Di-n-octylphthalate	50.000	50.696	-1.4	132	0.00
81	T	Benzo(b)fluoranthene	50.000	54.018	-8.0	131	0.00
82	T	Benzo(k)fluoranthene	50.000	50.686	-1.4	106	-0.01
83	C	Benzo(a)pyrene	50.000	49.292	1.4	116	0.00
84	T	Indeno(1,2,3-cd)pyrene	50.000	49.409	1.2	123	-0.03
85	T	Dibenzo(a,h)anthracene	50.000	52.737	-5.5	136	-0.02
86	T	Benzo(g,h,i)perylene	50.000	54.095	-8.2	121	-0.03

Data File : D:\CHEMDATA\08G24\RGZ311.D
Acq On : 24 JUL 2008 14:41
Sample : CSV48G1606A
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	133	0.00
2	T	N-Nitrosodimethylamine	0.689	0.718	-4.2	117	0.00
3	T	Pyridine	1.277	1.430	-12.0	124	0.00
4	S	2-Fluorophenol	1.172	1.269	-8.3	139	0.00
5	C	Phenol	1.650	1.647	0.2	130	0.00
6	T	Aniline	1.640	1.544	5.9	115	0.00
7	T	Bis(2-chloroethyl)ether	1.292	1.162	10.1	124	0.00
8	S	Phenol-d5	1.514	1.508	0.4	128	0.00
9	T	2-Chlorophenol	1.374	1.313	4.4	120	0.00
10	T	1,3-Dichlorobenzene	1.475	1.410	4.4	121	0.00
11	C	1,4-Dichlorobenzene	1.537	1.442	6.2	127	0.00
12	T	Benzyl alcohol	0.751	0.765	-1.9	124	0.00
13	S	1,2-Dichlorobenzene-d4	0.902	0.872	3.3	124	0.00
14	T	1,2-Dichlorobenzene	1.459	1.393	4.5	122	0.00
15	T	2-Methylphenol	0.976	0.935	4.2	121	0.00
16	T	Bis(2-chloroisopropyl)ether	3.112	2.968	4.6	125	0.00
17	T	4-Methylphenol	1.425	1.490	-4.6	138	0.00
18	P	N-Nitroso-di-n-propylamine	0.713	0.700	1.8	120	0.00
19	T	Hexachloroethane	0.713	0.638	10.5	119	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	122	0.00
21	S	Nitrobenzene-d5	0.302	0.297	1.7	122	0.00
22	T	Nitrobenzene	0.295	0.282	4.4	115	0.00
23	T	Isophorone	0.526	0.523	0.6	118	0.00
24	C	2-Nitrophenol	0.172	0.193	-12.2	117	0.00
25	T	2,4-Dimethylphenol	0.272	0.278	-2.2	114	0.00
26	T	bis(2-Chloroethoxy)methane	0.418	0.427	-2.2	121	0.00
27	T	Benzoic Acid	0.176	0.208	-18.2	125	0.00
28	C	2,4-Dichlorophenol	0.229	0.246	-7.4	117	0.00
29	T	1,2,4-Trichlorobenzene	0.279	0.267	4.3	114	0.00
30	T	Naphthalene	0.990	0.979	1.1	120	0.00
31	T	4-Chloroaniline	0.415	0.400	3.6	108	0.00
32	C	Hexachlorobutadiene	0.129	0.144	-11.6	132	0.00
33	C	4-Chloro-3-methylphenol	0.243	0.261	-7.4	121	0.00
34	T	2-Methylnaphthalene	0.570	0.580	-1.8	120	0.00
35	T	1-Methylnaphthalene	0.544	0.554	-1.8	126	0.00
36	I	Acenaphthene-d10	1.000	1.000	0.0	124	0.00
37	P	Hexachlorocyclopentadiene	0.290	0.333	-14.8	114	0.00
38	C	2,4,6-Trichlorophenol	0.323	0.361	-11.8	121	0.00
39	T	2,4,5-Trichlorophenol	0.344	0.388	-12.8	114	0.00

(#) = Out of Range

30650

Data File : D:\CHEMDATA\08G24\RGZ311.D
Acq On : 24 JUL 2008 14:41
Sample : CSV48G1606A
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	S	2-Fluorobiphenyl	1.287	1.252	2.7	117	0.00
41	T	2-Chloronaphthalene	1.182	1.259	-6.5	128	0.00
42	T	2-Nitroaniline	0.310	0.329	-6.1	122	0.00
43	T	Dimethylphthalate	1.261	1.262	-0.1	114	0.00
44	T	2,6-Dinitrotoluene	0.280	0.276	1.4	100	0.00
45	T	Acenaphthylene	2.005	2.038	-1.6	121	0.00
46	T	3-Nitroaniline	0.374	0.372	0.5	104	0.00
47	C	Acenaphthene	1.122	1.053	6.1	112	0.00
48	P	2,4-Dinitrophenol	0.147	0.174	-18.4	113	0.00
49	P	4-Nitrophenol	0.122	0.154	-26.2#	136	0.02
50	T	Dibenzofuran	1.636	1.631	0.3	114	0.00
51	T	2,4-Dinitrotoluene	0.366	0.397	-8.5	107	0.00
52	T	2,3,4,6-Tetrachlorophenol	0.203	0.231	-13.8	122	0.00
53	T	Diethylphthalate	1.322	1.317	0.4	117	0.00
54	T	Fluorene	1.203	1.179	2.0	117	0.00
55	T	4-Chlorophenyl-phenylether	0.532	0.521	2.1	116	0.00
56	T	4-Nitroaniline	0.336	0.368	-9.5	110	0.00
57	T	4,6-Dinitro-2-methylphenol	0.188	0.216	-14.9	119	0.00
58	C	N-Nitrosodiphenylamine	0.790	0.792	-0.3	114	0.00
59	T	Azobenzene	1.559	1.408	9.7	105	0.00
60	S	2,4,6-Tribromophenol	0.250	0.272	-8.8	114	0.00
61	I	Phenanthrene-d10	1.000	1.000	0.0	118	0.00
62	T	4-Bromophenyl-phenylether	0.239	0.245	-2.5	120	0.00
63	T	Hexachlorobenzene	0.328	0.342	-4.3	119	0.00
64	C	Pentachlorophenol	0.189	0.209	-10.6	114	0.00
65	T	Phenanthrene	1.184	1.114	5.9	111	0.00
66	T	Anthracene	1.183	1.201	-1.5	118	0.00
67	T	Carbazole	1.073	1.083	-0.9	112	0.00
68	T	Di-n-butylphthalate	1.560	1.668	-6.9	116	0.00
69	C	Fluoranthene	1.036	1.084	-4.6	120	0.00
70	I	Chrysene-d12	1.000	1.000	0.0	125	0.00
71	T	Benzidine	0.000	0.000#	0.0	0#	0.00
72	T	Pyrene	1.501	1.380	8.1	108	0.00
73	S	Terphenyl-d14	0.866	0.921	-6.4	129	0.00
74	T	Butylbenzylphthalate	0.786	0.907	-15.4	122	0.00
75	T	3,3'-Dichlorobenzidine	0.394	0.499	-26.6#	132	0.00
76	T	Benzo(a)anthracene	1.216	1.225	-0.7	125	0.00
77	T	Chrysene	1.156	1.138	1.6	117	0.00
78	T	bis(2-Ethylhexyl)phthalate	1.152	1.326	-15.1	125	0.00

(#) = Out of Range

3051

Data File : D:\CHEMDATA\08G24\RGZ311.D
Acq On : 24 JUL 2008 14:41
Sample : CSV48G1606A
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
79	I	Perylene-d12	1.000	1.000	0.0	122	0.00
80	C	Di-n-octylphthalate	2.052	2.494	-21.5#	132	0.00
81	T	Benzo(b)fluoranthene	1.282	1.385	-8.0	131	0.00
82	T	Benzo(k)fluoranthene	1.151	1.167	-1.4	106	-0.01
83	C	Benzo(a)pyrene	1.202	1.185	1.4	116	0.00
84	T	Indeno(1,2,3-cd)pyrene	1.309	1.452	-10.9	123	-0.03
85	T	Dibenzo(a,h)anthracene	1.003	1.217	-21.3#	136	-0.02
86	T	Benzo(g,h,i)perylene	1.188	1.285	-8.2	121	-0.03

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ378
Instrument ID: T-048

Project: LMC BEAUMONT SITE 1
SDG No.: 08G195
DFTPP Injection Date: 07/31/08
DFTPP Injection Time: 17:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	31.00
68	Less than 2% of mass 69	0.05(0.2)1
69	Relative abundance of mass 198	43.88
70	Less than 2.0% of mass 69	0.19(0.4)1
127	40.0 - 60.0% of mass 198	43.91
197	Less than 1.0% of mass 198	0.77
198	Base Peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.43
275	10.0 - 30.0% of mass 198	17.90
365	Greater than 1.00% of mass 198	1.07
441	Present, but less than mass 443	16.62
442	Greater than 40.0% of mass 198	92.82
443	17.0 - 23.0% of mass 442	20.42(22.0)2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD,BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
1	SSTD050	CSV48G1609	RGZ379	07/31/08	17:51
2	MBLK2S	SVG048SB	RGZ381	07/31/08	18:29
3	LCS2S	SVG048SL	RGZ382	07/31/08	18:48
4	LCD2S	SVG048SC	RGZ383	07/31/08	19:07
5	H-T11-10.0DUPRE	G195-06R	RGZ387	07/31/08	20:23
6	H-T11-10.0DUPMS	G195-06M	RGZ388	07/31/08	20:42
7	H-T11-10.0DUPMSD	G195-06S	RGZ389	07/31/08	21:01

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ193
Instrument ID: T-048

Project: LMC BEAUMONT SITE 1
SDG No.: 08G195
Date Analyzed: 07/16/08
Time Analyzed: 11:35

		IS1(DCB) AREA	#	RT	#	IS2(NPT) AREA	#	RT	#	IS3(ANT) AREA	#	RT	#
	12 HOUR STD	296750		2.82		1136590		3.92		469649		5.61	
	UPPER LIMIT	593500		3.32		2273180		4.43		939298		6.11	
	LOWER LIMIT	148375		2.32		568295		3.42		234825		5.11	
	SAMPLE ID												
1	SSTD050	318216		2.81		1156970		3.92		479934		5.60	
2	MBLK2S	310377		2.80		1058452		3.91		447879		5.60	
3	LCS2S	369084		2.81		1243551		3.92		495958		5.60	
4	LCD2S	367555		2.81		1276942		3.92		486834		5.60	
5	H-T11-10.0DUPRE	322403		2.81		1125032		3.92		470694		5.60	
6	H-T11-10.0DUPMS	348047		2.80		1220008		3.91		508669		5.59	
7	H-T11-10.0DUPMSD	375417		2.81		1302003		3.92		518298		5.60	

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMAX Inc
Lab Code: EMXT
Lab File ID: RGZ193
Instrument ID: T-048

Project: LMC BEAUMONT SITE 1
SDG No.: 08G195
Date Analyzed: 07/16/08
Time Analyzed: 11:35

	IS4(PHN) AREA	#	RT	#	IS5(CRY) AREA	#	RT	#	IS6(PRY) AREA	#	RT	#
12 HOUR STD	683193		7.11		483414		9.57		449667		10.72	
UPPER LIMIT	1366386		7.61		966828		10.07		899334		11.22	
LOWER LIMIT	341597		6.61		241707		9.07		224834		10.22	
SAMPLE ID												
1 SSTD050	651866		7.10		463926		9.57		402122		10.69	
2 MBLK2S	592206		7.09		462657		9.57		438880		10.69	
3 LCS2S	596372		7.09		431184		9.57		401689		10.69	
4 LCD2S	606764		7.10		439464		9.57		425289		10.69	
5 H-T11-10.0DUPRE	639459		7.10		508114		9.57		532615		10.69	
6 H-T11-10.0DUPMS	630002		7.09		500138		9.57		484307		10.69	
7 H-T11-10.0DUPMSD	640186		7.10		482178		9.57		490510		10.69	

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal satndard area
AREA LOWER LIMIT = - 50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk
* Values outside of QC limits.

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	40.000	40.000	0.0	107	0.00
2	T	N-Nitrosodimethylamine	50.000	59.802	-19.6	108	0.00
3	T	Pyridine	50.000	53.736	-7.5	97	0.00
4	S	2-Fluorophenol	50.000	51.191	-2.4	106	0.00
5	C	Phenol	50.000	49.638	0.7	105	0.00
6	T	Aniline	50.000	45.630	8.7	90	0.00
7	T	Bis(2-chloroethyl)ether	50.000	46.754	6.5	104	0.00
8	S	Phenol-d5	50.000	53.396	-6.8	111	0.00
9	T	2-Chlorophenol	50.000	51.250	-2.5	104	0.00
10	T	1,3-Dichlorobenzene	50.000	49.941	0.1	102	0.00
11	C	1,4-Dichlorobenzene	50.000	51.036	-2.1	112	0.00
12	T	Benzyl alcohol	50.000	57.030	-14.1	113	0.00
13	S	1,2-Dichlorobenzene-d4	50.000	52.029	-4.1	108	0.00
14	T	1,2-Dichlorobenzene	50.000	48.157	3.7	100	0.00
15	T	2-Methylphenol	50.000	51.954	-3.9	106	0.00
16	T	Bis(2-chloroisopropyl)ether	50.000	45.971	8.1	98	0.00
17	T	4-Methylphenol	50.000	55.671	-11.3	119	0.00
18	P	N-Nitroso-di-n-propylamine	50.000	52.046	-4.1	103	0.00
19	T	Hexachloroethane	50.000	48.714	2.6	105	0.00
20	I	Naphthalene-d8	40.000	40.000	0.0	102	0.00
21	S	Nitrobenzene-d5	50.000	48.987	2.0	101	0.00
22	T	Nitrobenzene	50.000	50.580	-1.2	102	0.00
23	T	Isophorone	50.000	49.205	1.6	97	0.00
24	C	2-Nitrophenol	50.000	47.328	5.3	100	0.00
25	T	2,4-Dimethylphenol	50.000	49.825	0.3	93	0.00
26	T	bis(2-Chloroethoxy)methane	50.000	51.250	-2.5	101	0.00
27	T	Benzoic Acid	50.000	41.229	17.5	86	0.00
28	C	2,4-Dichlorophenol	50.000	49.091	1.8	104	0.00
29	T	1,2,4-Trichlorobenzene	50.000	49.621	0.8	99	0.00
30	T	Naphthalene	50.000	51.159	-2.3	103	0.00
31	T	4-Chloroaniline	50.000	45.488	9.0	85	0.00
32	C	Hexachlorobutadiene	50.000	57.086	-14.2	112	0.00
33	C	4-Chloro-3-methylphenol	50.000	46.231	7.5	97	0.00
34	T	2-Methylnaphthalene	50.000	50.911	-1.8	100	0.00
35	T	1-Methylnaphthalene	50.000	50.617	-1.2	104	0.00
36	I	Acenaphthene-d10	40.000	40.000	0.0	102	0.00
37	P	Hexachlorocyclopentadiene	50.000	45.892	8.2	90	0.00
38	C	2,4,6-Trichlorophenol	50.000	50.813	-1.6	104	0.00
39	T	2,4,5-Trichlorophenol	50.000	48.777	2.4	97	0.00

(#) = Out of Range

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial : 3
Operator : KV
Inst : TO48
Multiplr : 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
40	S	2-Fluorobiphenyl	50.000	50.726	-1.5	100	0.00
41	T	2-Chloronaphthalene	50.000	54.734	-9.5	108	0.00
42	T	2-Nitroaniline	50.000	53.193	-6.4	100	0.00
43	T	Dimethylphthalate	50.000	51.930	-3.9	98	0.00
44	T	2,6-Dinitrotoluene	50.000	47.896	4.2	91	0.00
45	T	Acenaphthylene	50.000	49.511	1.0	97	0.00
46	T	3-Nitroaniline	50.000	45.758	8.5	89	0.00
47	C	Acenaphthene	50.000	47.115	5.8	93	0.00
48	P	2,4-Dinitrophenol	50.000	44.472	11.1	91	0.00
49	P	4-Nitrophenol	50.000	57.726	-15.5	103	0.00
50	T	Dibenzofuran	50.000	51.680	-3.4	98	0.00
51	T	2,4-Dinitrotoluene	50.000	47.923	4.2	91	0.00
52	T	2,3,4,6-Tetrachlorophenol	50.000	48.747	2.5	100	0.00
53	T	Diethylphthalate	50.000	50.281	-0.6	98	0.00
54	T	Fluorene	50.000	49.104	1.8	97	0.00
55	T	4-Chlorophenyl-phenylether	50.000	50.952	-1.9	100	0.00
56	T	4-Nitroaniline	50.000	47.649	4.7	95	0.00
57	T	4,6-Dinitro-2-methylphenol	50.000	46.694	6.6	96	0.00
58	C	N-Nitrosodiphenylamine	50.000	48.921	2.2	92	0.00
59	T	Azobenzene	50.000	47.082	5.8	91	0.00
60	S	2,4,6-Tribromophenol	50.000	51.672	-3.3	102	0.00
61	I	Phenanthrene-d10	40.000	40.000	0.0	95	0.00
62	T	4-Bromophenyl-phenylether	50.000	50.345	-0.7	99	0.00
63	T	Hexachlorobenzene	50.000	53.592	-7.2	99	0.00
64	C	Pentachlorophenol	50.000	50.866	-1.7	100	0.00
65	T	Phenanthrene	50.000	48.575	2.8	93	0.00
66	T	Anthracene	50.000	47.208	5.6	89	0.00
67	T	Carbazole	50.000	53.880	-7.8	97	0.00
68	T	Di-n-butylphthalate	50.000	54.262	-8.5	96	0.00
69	C	Fluoranthene	50.000	49.412	1.2	92	0.00
70	I	Chrysene-d12	40.000	40.000	0.0	96	0.00
71	T	Benzidine	-1.000	0.000	0.0	0	0.00
72	T	Pyrene	50.000	50.733	-1.5	91	0.00
73	S	Terphenyl-d14	50.000	50.397	-0.8	94	0.00
74	T	Butylbenzylphthalate	50.000	45.553	8.9	86	0.00
75	T	3,3'-Dichlorobenzidine	50.000	46.973	6.1	88	0.00
76	T	Benzo(a)anthracene	50.000	49.137	1.7	93	0.00
77	T	Chrysene	50.000	46.195	7.6	84	0.00
78	T	bis(2-Ethylhexyl)phthalate	50.000	45.211	9.6	86	0.00

(#) = Out of Range

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial : 3
Operator : KV
Inst : TO48
Multiplr : 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
79	I	Perylene-d12	40.000	40.000	0.0	89	-0.03
80	C	Di-n-octylphthalate	50.000	45.496	9.0	86	0.00
81	T	Benzo(b)fluoranthene	50.000	52.920	-5.8	94	-0.02
82	T	Benzo(k)fluoranthene	50.000	50.369	-0.7	77	-0.02
83	C	Benzo(a)pyrene	50.000	49.635	0.7	86	-0.02
84	T	Indeno(1,2,3-cd)pyrene	50.000	46.761	6.5	85	-0.06
85	T	Dibenzo(a,h)anthracene	50.000	49.072	1.9	93	-0.06
86	T	Benzo(g,h,i)perylene	50.000	51.186	-2.4	84	-0.07

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	107	0.00
2	T	N-Nitrosodimethylamine	0.689	0.824	-19.6	108	0.00
3	T	Pyridine	1.277	1.373	-7.5	97	0.00
4	S	2-Fluorophenol	1.172	1.200	-2.4	106	0.00
5	C	Phenol	1.650	1.638	0.7	105	0.00
6	T	Aniline	1.640	1.496	8.8	90	0.00
7	T	Bis(2-chloroethyl)ether	1.292	1.209	6.4	104	0.00
8	S	Phenol-d5	1.514	1.617	-6.8	111	0.00
9	T	2-Chlorophenol	1.374	1.408	-2.5	104	0.00
10	T	1,3-Dichlorobenzene	1.475	1.473	0.1	102	0.00
11	C	1,4-Dichlorobenzene	1.537	1.569	-2.1	112	0.00
12	T	Benzyl alcohol	0.751	0.856	-14.0	113	0.00
13	S	1,2-Dichlorobenzene-d4	0.902	0.939	-4.1	108	0.00
14	T	1,2-Dichlorobenzene	1.459	1.405	3.7	100	0.00
15	T	2-Methylphenol	0.976	1.014	-3.9	106	0.00
16	T	Bis(2-chloroisopropyl)ether	3.112	2.861	8.1	98	0.00
17	T	4-Methylphenol	1.425	1.586	-11.3	119	0.00
18	P	N-Nitroso-di-n-propylamine	0.713	0.742	-4.1	103	0.00
19	T	Hexachloroethane	0.713	0.695	2.5	105	0.00
20	I	Naphthalene-d8	1.000	1.000	0.0	102	0.00
21	S	Nitrobenzene-d5	0.302	0.295	2.3	101	0.00
22	T	Nitrobenzene	0.295	0.299	-1.4	102	0.00
23	T	Isophorone	0.526	0.518	1.5	97	0.00
24	C	2-Nitrophenol	0.172	0.198	-15.1	100	0.00
25	T	2,4-Dimethylphenol	0.272	0.271	0.4	93	0.00
26	T	bis(2-Chloroethoxy)methane	0.418	0.429	-2.6	101	0.00
27	T	Benzoic Acid	0.176	0.173	1.7	86	0.00
28	C	2,4-Dichlorophenol	0.229	0.261	-14.0	104	0.00
29	T	1,2,4-Trichlorobenzene	0.279	0.277	0.7	99	0.00
30	T	Naphthalene	0.990	1.013	-2.3	103	0.00
31	T	4-Chloroaniline	0.415	0.377	9.2	85	0.00
32	C	Hexachlorobutadiene	0.129	0.147	-14.0	112	0.00
33	C	4-Chloro-3-methylphenol	0.243	0.251	-3.3	97	0.00
34	T	2-Methylnaphthalene	0.570	0.580	-1.8	100	0.00
35	T	1-Methylnaphthalene	0.544	0.550	-1.1	104	0.00
36	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00
37	P	Hexachlorocyclopentadiene	0.290	0.317	-9.3	90	0.00
38	C	2,4,6-Trichlorophenol	0.323	0.376	-16.4	104	0.00
39	T	2,4,5-Trichlorophenol	0.344	0.402	-16.9	97	0.00

(#) = Out of Range

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
40	S	2-Fluorobiphenyl	1.287	1.306	-1.5	100	0.00
41	T	2-Chloronaphthalene	1.182	1.294	-9.5	108	0.00
42	T	2-Nitroaniline	0.310	0.329	-6.1	100	0.00
43	T	Dimethylphthalate	1.261	1.310	-3.9	98	0.00
44	T	2,6-Dinitrotoluene	0.280	0.304	-8.6	91	0.00
45	T	Acenaphthylene	2.005	1.985	1.0	97	0.00
46	T	3-Nitroaniline	0.374	0.387	-3.5	89	0.00
47	C	Acenaphthene	1.122	1.057	5.8	93	0.00
48	P	2,4-Dinitrophenol	0.147	0.170	-15.6	91	0.00
49	P	4-Nitrophenol	0.122	0.141	-15.6	103	0.00
50	T	Dibenzofuran	1.636	1.691	-3.4	98	0.00
51	T	2,4-Dinitrotoluene	0.366	0.408	-11.5	91	0.00
52	T	2,3,4,6-Tetrachlorophenol	0.203	0.231	-13.8	100	0.00
53	T	Diethylphthalate	1.322	1.330	-0.6	98	0.00
54	T	Fluorene	1.203	1.181	1.8	97	0.00
55	T	4-Chlorophenyl-phenylether	0.532	0.542	-1.9	100	0.00
56	T	4-Nitroaniline	0.336	0.383	-14.0	95	0.00
57	T	4,6-Dinitro-2-methylphenol	0.188	0.212	-12.8	96	0.00
58	C	N-Nitrosodiphenylamine	0.790	0.773	2.2	92	0.00
59	T	Azobenzene	1.559	1.468	5.8	91	0.00
60	S	2,4,6-Tribromophenol	0.250	0.295	-18.0	102	0.00
61	I	Phenanthrene-d10	1.000	1.000	0.0	95	0.00
62	T	4-Bromophenyl-phenylether	0.239	0.248	-3.8	99	0.00
63	T	Hexachlorobenzene	0.328	0.352	-7.3	99	0.00
64	C	Pentachlorophenol	0.189	0.225	-19.0	100	0.00
65	T	Phenanthrene	1.184	1.150	2.9	93	0.00
66	T	Anthracene	1.183	1.117	5.6	89	0.00
67	T	Carbazole	1.073	1.157	-7.8	97	0.00
68	T	Di-n-butylphthalate	1.560	1.693	-8.5	96	0.00
69	C	Fluoranthene	1.036	1.024	1.2	92	0.00
70	I	Chrysene-d12	1.000	1.000	0.0	96	0.00
71	T	Benzidine	0.000	0.000#	0.0	0#	0.00
72	T	Pyrene	1.501	1.523	-1.5	91	0.00
73	S	Terphenyl-d14	0.866	0.873	-0.8	94	0.00
74	T	Butylbenzylphthalate	0.786	0.836	-6.4	86	0.00
75	T	3,3'-Dichlorobenzidine	0.394	0.438	-11.2	88	0.00
76	T	Benzo(a)anthracene	1.216	1.195	1.7	93	0.00
77	T	Chrysene	1.156	1.068	7.6	84	0.00
78	T	bis(2-Ethylhexyl)phthalate	1.152	1.186	-3.0	86	0.00

(#) = Out of Range

3060

Data File : D:\CHEMDATA\08G31\RGZ379.D
Acq On : 31 JUL 2008 17:51
Sample : CSV48G1609
Misc :
MS Integration Params: RTEINT.P

Vial: 3
Operator: KV
Inst : TO48
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\SV48G16.M (RTE Integrator)
Title : METHOD 8270C
Last Update : Wed Jul 16 14:49:55 2008
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
79	I	Perylene-d12	1.000	1.000	0.0	89	-0.03
80	C	Di-n-octylphthalate	2.052	2.230	-8.7	86	0.00
81	T	Benzo(b)fluoranthene	1.282	1.357	-5.9	94	-0.02
82	T	Benzo(k)fluoranthene	1.151	1.160	-0.8	77	-0.02
83	C	Benzo(a)pyrene	1.202	1.193	0.7	86	-0.02
84	T	Indeno(1,2,3-cd)pyrene	1.309	1.372	-4.8	85	-0.06
85	T	Dibenzo(a,h)anthracene	1.003	1.130	-12.7	93	-0.06
86	T	Benzo(g,h,i)perylene	1.188	1.216	-2.4	84	-0.07

ANALYTICAL LOG

ANALYSIS LOG FOR SEMIVOLATILES

SOP ☒ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A48- 20

Method File: SV48G16 Tune File: DFTPP Start Date/Time: 7/16/08 10:02 End Date/Time: 7/16/08 15:4

ANALYTICAL BATCH SV48D15

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
NA	RG2187	IB48G1601				
	188	DFT48G1601	1			
	189	SV48G16 1	1			2 ppm 8270
	190	2				5
	191	3				10
	192	4				20
	193	5				50
	194	6				80
	195	7				100
	196	8				120
	197	9				150
	198	ISV48G161				ICV
	199	SV48G16A1				2ppm Benzidine
	200	2				5
	201	3				10
	202	4				50
	203	5				100
	204	6				120
	205	7				150
	206	ISV48G16A1				ICV

KV 7/16/08

Instrument No:	48

INITIAL CALIBRATION REFERENCE	
Date	7/16/08
ICAL ID	SV48G16 & SV48G16A

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-36-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-34-1	2000
ICV	SS2C-05-73-3	50

Solvent	ID
CH_2Cl_2	48064

DATA FILE	08G16

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T048	7/17/08

Comments: Benzidine ID
SS2C-05-75-1 50ppm DCC
SS2C-05-75-2 50ppm ICV

Analyzed By: KV
Date Disposed: 7/17/08
Disposed by: KV

This page is checked during data review.

ANALYSIS LOG FOR SEMIVOLATILES

EMAX LABORATORIES, INC.

SOP ☑ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A48- 20

Method File: SV48G16 Tune File: DFTPP Start Date/Time: 7/24/08 13:54 End Date/Time: 7/24/08 23:24

ANALYTICAL BATCH CSV48G1606A

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RG2308	IB48G1606				
	309	DFT48G1606				
	310	CSV48G1606				2 > 20%
	311	CSV48G1606A				OK
	312	CSV48G16A06				Benzidine
SVG0315	313	SVG0315B	1	x		
	314	SL				
	315	SC				
	316	08G177-02				
	317	03				
	318	05				
	319	06				
	320	08				
	321	09				
	322	10				
	323	11				
	324	12				
	325	16				
	326	17	✓	✓		
SVG0375	327	SVG0375B	1	x		
	328	SL				
	329	SC				
	330	08G195-02				
	331	04				
	332	05				
	333	06				
	334	07				
	335	08				
	336	09				
	337	12				
	338	14				

KV 7/24/08

Instrument No:	48

INITIAL CALIBRATION REFERENCE	
Date	7/16/08
ICAL ID	SV48G16

Standards		
Name	ID KV 7/24/08	Conc. (mg/L)
DFTPP	SS2B-05-36-2	50
DCC	SS2BE 05-73-1	50
INT. STD.	SS2B-05-34-1	2000

Solvent	ID
CH_2Cl_2	48064

DATA FILE	08G24

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T048	7/25/08

Comments:

Analyzed By: KV

Date Disposed: 7/25/08

Disposed by: KV

This page is checked during data review.

ANALYSIS LOG FOR SEMIVOLATILES

EMAX LABORATORIES, INC.

SOP ☑ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #A48- 20

Method File: SV48G16 Tune File: DFTPP Start Date/Time: 7/31/08 17:19 End Date/Time: 7/31/08 23:36

ANALYTICAL BATCH CSV48G16.CEM

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RG2 376	IB48G1609				
	377	DFT48G1609				Tailing ok
	378	DFT48G1609A				
	379	CSV48G1609				
	380	CSV48G16A09				Benzidine
SVG0485	381	SVG0485B	1	X		
	382	SL				
	383	SC				
	384	08G168-05R				
	385	05M				*
	386	05S				*
	387	08G195-06R				
	388	06M				*
	389	06S	↓	↓		*
SVG0486W	390	SVG0486WB	1	X	X	KV 7/31/08
	391	WL				
	392	WC				
	393	08G486-03R	↓		↓	
SVG039W	394	SVG039WB	1		X	
	395	WL				
	396	WC				
	397	08G419-01R	↓		↓	KV 7/31/08

Instrument No:	48

INITIAL CALIBRATION REFERENCE	
Date	7/15/08
ICAL ID	SV48G16 & SV48G16A

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-36-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-37-1	2000
Benzidine	SS2C-05-75-1	50

Solvent	ID
CH_2Cl_2	45064

DATA FILE	08G31

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T048	8/1/08

Comments: * client requested for MS/MSD later

Analyzed By: KV

Date Disposed: 8/1/08

Disposed by: KV

This page is checked during data review.

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ANALYSIS LOG FOR SEMIVOLATILES

SOP ☑ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #AE2- 001

Method File: SVE2F30S Tune File: DFTPP Start Date/Time: 6/30/08 End Date/Time: 6/30/08 14:21

ANALYTICAL BATCH SVE2F308

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
NA	RFG128	IBE2F3001				
	129	DFTE2F3001	1			
	130	SVE2F3011	1			0.15 ppm
	131	2				0.5
	132	3				1
	133	4				2
	134	5				5
	135	6				10
	136	7				20
	137	8				50
	138	9				80
	139	10				100
	140	11				120
	141	12				150
	142	ISVE2F301				ICV
	143	50 ppm				Benzidine check KV 6/30/08

Instrument No:	E2

INITIAL CALIBRATION REFERENCE	
Date	6/30/08
ICAL ID	SVE2F30

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-28-3	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-34-1	2000
ICV	SS2C-05-74-1	50

Solvent	ID
CH_2Cl_2	48064

DATA FILE	08F30

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T0E2	7/1/08

Comments:

low: SS2C-05-72-3 0.15 ppm

Benzidine: SS2C-05-75-1 50ppm

Analyzed By: KV

Date Disposed: NA

Disposed by: NA

This page is checked during data review.

3999

ANALYSIS LOG FOR SEMIVOLATILES

SOP ☐ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #AE2- 001

Method File: SVE2F30S Tune File: DFTPP Start Date/Time: 7/23/08 15:36 End Date/Time: 7/24/08 2:35

ANALYTICAL BATCH SSVE2F3011

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
	RGG233	IDE2F3011				
	234	DFTE2F3011				
	235	CSVE2F3011				
	236	CSVE2G1605				App 9
	237	CSVE2D21A16				Benzidine
SVG033W	238	SVG033WB	1		x	
↓	239	WL	↓		↓	
	240	WC				
	241	TXG0115B				
	242	08G156-09				
	243	08G146-01				
	244	08G167-18				x
	245	08G177-01				
	246	08G186-02				
	247	08G187-01				
	248	08G188-01				
↓	249	08G195-01	↓		↓	
SVG034W	250	SVG034WB	1		x	
↓	251	WL	↓		↓	
	252	WC				
	253	08G534-01				
↓	254	↓ 02	↓		↓	
SVG027S	255	SVG027SB	1	x		
↓	256	SL	↓	↓		
	257	SC				
	258	08G146-02				
	259	03				
	260	05				
	261	07				
↓	262	08	↓	↓		

	Instrument No:	E2
INITIAL CALIBRATION REFERENCE		
Date	6/30/08 5/21/08	6/16/08
ICAL ID	SVE2F30 SVE2D21A	SVE2G16

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-35-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-34-1	50
Benzidine	SS2C-05-75-1	50
App 9	SS2C-05-78-1	50
Solvent	ID	
CH_2Cl_2	A8054	

DATA FILE	08G23

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T0E2	

Comments:

Analyzed By: KK

Date Disposed: 7/24/08

Disposed by: KK

This page is checked during data review.

1985

ANALYSIS LOG FOR SEMIVOLATILES

SOP ☐ ✓ EMAX-8270 Rev. No. 3 ☐ EMAX-8270SIM Rev. No. 1 ☐ EMAX-CLPSVOA ☐ EMAX-M8270SIM Rev. No. 1 ☐ Book #AE2- 001

Method File: SVE2F30S **Tune File:** DFTPP **Start Date/Time:** 7/23/08 15:36 **End Date/Time:** 7/24/08 2035

ANALYTICAL BATCH SVE2F30

Preparative Batch	Data File Name	Run ID	DF	Matrix S	Matrix W	Notes
SVG0275	RGG253	08G146-09	1	✓		
	254	10				
	255	12				
	256	13				
	257	16				
	258	17				
						KV 7/23/08

	Instrument No:	E2
INITIAL CALIBRATION REFERENCE		
Date	6/20/08	5/21/08 6/15/08
ICAL ID	SVE2F30	SVE2D21A SVE2G16

Standards		
Name	ID	Conc. (mg/L)
DFTPP	SS2B-05-35-2	50
DCC	SS2C-05-73-1	50
INT. STD.	SS2B-05-34-1	2000
Benzidine	SS2C-05-75-1	50
App 9	SS2C-05-78-1	50

Solvent	ID
CH_2Cl_2	48054

DATA FILE	08G23

Electronic Data Archival	
Location	Date
HPCHEM_SVOA/T0E2	

Comments:

Analyzed By: KV

Date Disposed: 7/24/08

Disposed by: KV

This page is checked during data review.

8008

EXTRACTION LOG

EXTRACTION LOG SEMIVOLATILES

EMAX LABORATORIES, INC.

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☐ EMAX-3550 Rev. No.: 2 ☒ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-044

Matrix: WATER Init.Start Date/Time: 7/22/08 16:00 End Date/Time: 7/22/08 10:00 Final Start Date/Time: 7/22/08 12:00 End Date/Time: 7/23/08 6:00

TCLP EXTRACT

PREPARATION BATCH: * SVG033W

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVG033 – WB	N/A	1000	–	2		
*02	– WL		1000	–	2		
*03	– WC		1000	–	2		
*04	TXG011 – SB		100	–	2		TCLP EXTRACT
*05	08G166 – 09		100		2		
*06	08G146 – 01		1060	5	2		
*07	08G167 – 18		1060	5	2		
*08	08G177 – 01		1050	5	2		
*09	08G186 – 02		930	7	2		
*10	08G187 – 01		1050	7	2		
*11	08G188 – 01		1050	5	2		
*12	08G195 – 01		1000	5	2		
*13							7/23/0 PM
*14							
*15							
*16							
*17							
*18							
*19							
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	VP2A-05-163	1.0
LCS/MS FINAL 21.57	VP2A-05-94	0.5
Micropipette Check		

Reagent	Lot# / ID
CH_2Cl_2	48064
Na_2SO_4	G10648
H_2SO_4	46137
NaOH	VP1B-03-021
Silica Sand	

TUNING

Sonicator #	Reading
	N/A

Concentrator	Water Bath Temperature Setting (°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3		
4		
5		
6		

Comments: Thermometer ID = T_1

Prepared By: JM Witnessed By: JK

Standard Added By: JM

Checked By: ML

Extract Received by: KU 7/23/08 Location: F603-8

Disposed by: Disposed on:

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Silica

EXTRACTION LOG SEMIVOLATILES

EMAX LABORATORIES, INC.

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☑ EMAX-3550 Rev. No.: 2 ☐ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐

Book # ESV-044

Matrix: Soil Init.Start Date/Time: 7/23/08 / 15:00 End Date/Time: Final Start Date/Time: End Date/Time: 7/23/08 / 16:45

PREPARATION BATCH: # SVG037

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVG037 - SB	1	30.01		2		
*02	- SL	3	30.00		2		
*03	- SC	3	30.08		2		
*04	08 @195 - 02	1	30.01		2		
*05	JW 7/23/8 - 04	3	30.03		2		
*06	- 05	3	30.03		2		
*07	- 06	1	30.01		2		
*08	- 07	3	30.02		2		
*09	- 08	3	30.01		2		
*10	- 09	1	30.02		2		
*11	- 12	3	30.01		2		
*12	- 14	3	30.03		2		
*13							
*14							
*15							
*16							
*17							
*18			JW	7/23/08			
*19							
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	SS2A-05-163	1.0
LCS/MS (Short List)	SS2B-05-31-2	0.4
Micropipette Check		

Reagent	Lot# / ID
CH_2Cl_2	480611
Na_2SO_4	G10648
H_2SO_4	-
NaOH	-
Silica Sand	47351807

TUNING

Sonicator #	Reading
1	N/A
3	95%

Concentrator	Water Bath Temperature Setting (°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3		
4		
5		
6		

Comments: Thermometer ID = T_1

Prepared By: JW Witnessed By: YK

Standard Added By: JW

Checked By: JW

Extract Received by: KV 7/23/08 Location: SE01 # 09

Disposed by: Disposed on: (4mL Vials)

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Silica

T1.95

EXTRACTION LOG SEMIVOLATILES

EMAX LABORATORIES, INC.

SOP ☐ EMAX-3540 Rev. No.: 0 ☐ EMAX-3510 Rev. No.: 1 ☑ EMAX-3550 Rev. No.: 2 ☐ EMAX-3520 Rev. No.: 2 ☐ EMAX-CLP-SVOA ☐ Book # ESV-044

Matrix: SOIL Init.Start Date/Time: 7/30/08 / 11:30 End Date/Time: Final Start Date/Time: End Date/Time: 7/30/08 / 1810

PREPARATION BATCH: * SVG0483

Sample Prep ID	Lab Sample ID	Sonicator Number	Sample Amount (g/ml)	pH	Extract Volume (ml)	Clean-up [G] [F] [A] [C]	Notes
*01	SVG0483 -SB	1	30.00		2		
*02	-SL	3	30.01		2		
*03	-SC	3	30.03		2		
*04	08G188 -05R	1	30.03		2		
*05	-05M	3	30.02		2		
*06	-05S	3	30.00		2		
*07	08G195 -06R	1	30.01		2		
*08	-06M	3	30.03		2		
*09	-06S	3	30.02		2		
*10							
*11							
*12			JW	7/30/08			
*13							
*14							
*15							
*16							
*17							
*18							
*19							
*20							
*21							
*22							
*23							
*24							
*25							
*26							
*27							
*28							

Standards	ID	Amount Added (ml)
Surrogate	SS24-05-163	1.0
LCS/MS	SS24-05-155 (FULL LIST)	0.4
Micropipette Check		

Reagent	Lot# / ID
CH_2Cl_2	148064
Na_2SO_4	JW 7/30/8 G10808 G10848
H_2SO_4	
NaOH	
Silica Sand	4735/807

TUNING

Sonicator #	Reading
1	N/A
3	95%

Concentrator	Water Bath Temperature Setting (°C)	Thermometer Reading (°C)
1	35	35
2	35	35
3		
4		
5		
6		

Comments: Thermometer ID = T_1

Prepared By: JW Witnessed By: SS

Standard Added By: JW

Checked By: ML

Extract Received by: KV 7/30/08 Location: SEC1 # 2

Disposed by: Disposed on: 4mL VIAL

Clean-up Legend :[G]=GPC [A]=Acid [F]=Florisil [S]=Silica

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G195

METHOD 7470A/7471A
MERCURY BY COLD VAPOR

One (1) water and nine (9) soil samples were received on 07/18/08 for Mercury analysis by Method 7470A/7471A in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

3. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

4. **Serial Dilution/Post-Analytical Spike**

   Sample G195-02 and G511-01 from another SDG were analyzed for serial dilution and post-analytical spike. All QC requirements were met.

5. **Matrix Spike/Matrix Spike Duplicate**

   MS/MSD sample was not designated in this SDG.

6. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met.

LAB CHRONICLE
MERCURY BY COLD VAPOR

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
SDG NO. : 08G195
Instrument ID : TI047

SOIL

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1S	HGG045SB	1	NA	07/29/0814:44	07/29/0811:00	M47G027038	M47G027032	HGG045S	Method Blank
LCS1S	HGG045SL	1	NA	07/29/0814:46	07/29/0811:00	M47G027039	M47G027032	HGG045S	Lab Control Sample (LCS)
LCD1S	HGG045SC	1	NA	07/29/0814:48	07/29/0811:00	M47G027040	M47G027032	HGG045S	LCS Duplicate
H-T11-0.5AS	G195-02A	1	4.5	07/29/0814:50	07/29/0811:00	M47G027041	M47G027032	HGG045S	Analytical Spike Sample
H-T11-0.5	G195-02	1	4.5	07/29/0814:52	07/29/0811:00	M47G027042	M47G027032	HGG045S	Field Sample
H-T11-0.5DL	G195-02J	5	4.5	07/29/0814:55	07/29/0811:00	M47G027043	M47G027032	HGG045S	Diluted Sample
H-T11-5.0	G195-04	1	12.7	07/29/0815:01	07/29/0811:00	M47G027046	M47G027044	HGG045S	Field Sample
H-T11-10.0	G195-05	1	6.5	07/29/0815:04	07/29/0811:00	M47G027047	M47G027044	HGG045S	Field Sample
H-T11-10.0DUP	G195-06	1	5.9	07/29/0815:06	07/29/0811:00	M47G027048	M47G027044	HGG045S	Field Sample
H-T5-0.5	G195-07	1	3.8	07/29/0815:08	07/29/0811:00	M47G027049	M47G027044	HGG045S	Field Sample
H-T5-0.5DUP	G195-08	1	3.7	07/29/0815:10	07/29/0811:00	M47G027050	M47G027044	HGG045S	Field Sample
H-T5-2.5	G195-09	1	8.4	07/29/0815:12	07/29/0811:00	M47G027051	M47G027044	HGG045S	Field Sample
H-T5-6.0	G195-12	1	14.9	07/29/0815:14	07/29/0811:00	M47G027052	M47G027044	HGG045S	Field Sample
H-T5-12.0	G195-14	1	13.6	07/29/0815:16	07/29/0811:00	M47G027053	M47G027044	HGG045S	Field Sample

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	HGG037WB	1	NA	07/22/0819:16	07/22/0814:30	M47G022038	M47G022032	HGG037W	Method Blank
LCS1W	HGG037WL	1	NA	07/22/0819:18	07/22/0814:30	M47G022039	M47G022032	HGG037W	Lab Control Sample (LCS)
LCD1W	HGG037WC	1	NA	07/22/0819:20	07/22/0814:30	M47G022040	M47G022032	HGG037W	LCS Duplicate
SKID RINSE PLUSAS	G511-01A	1	NA	07/22/0819:23	07/22/0814:30	M47G022041	M47G022032	HGG037W	Analytical Spike Sample
SKID RINSE PLUS	G511-01	1	NA	07/22/0819:25	07/22/0814:30	M47G022042	M47G022032	HGG037W	Field Sample
SKID RINSE PLUSDL	G511-01J	5	NA	07/22/0819:27	07/22/0814:30	M47G022043	M47G022032	HGG037W	Diluted Sample
H-EB7182008	G195-01	1	NA	07/22/0819:46	07/22/0814:30	M47G022052	M47G022044	HGG037W	Field Sample

FN - Filename
% Moist - Percent Moisture

7089

METHOD 7470A
MERCURY BY COLD VAPOR

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
Batch No. : 08G195

Matrix : WATER
Instrument ID : TI047

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGG037WB	ND	1	NA	0.500	0.100	07/22/0819:16	07/22/0814:30	M47G022038	M47G022032	HGG037W	NA	07/22/08
LCS1W	HGG037WL	5.43	1	NA	0.500	0.100	07/22/0819:18	07/22/0814:30	M47G022039	M47G022032	HGG037W	NA	07/22/08
LCD1W	HGG037WC	5.48	1	NA	0.500	0.100	07/22/0819:20	07/22/0814:30	M47G022040	M47G022032	HGG037W	NA	07/22/08
SKID RINSE PLUSAS	G511-01A	2.26	1	NA	0.500	0.100	07/22/0819:23	07/22/0814:30	M47G022041	M47G022032	HGG037W	07/14/08	07/17/08
SKID RINSE PLUS	G511-01	ND	1	NA	0.500	0.100	07/22/0819:25	07/22/0814:30	M47G022042	M47G022032	HGG037W	07/14/08	07/17/08
SKID RINSE PLUSDL	G511-01J	0.535J	5	NA	2.50	0.500	07/22/0819:27	07/22/0814:30	M47G022043	M47G022032	HGG037W	07/14/08	07/17/08
H-EB7182008	G195-01	ND	1	NA	0.500	0.100	07/22/0819:46	07/22/0814:30	M47G022052	M47G022044	HGG037W	07/18/08	07/18/08

7684

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 7470A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	HGG037WB	HGG037WL	HGG037WC		
LAB FILE ID:	M47G022038	M47G022039	M47G022040		
DATIME EXTRCTD:	07/22/0814:30	07/22/0814:30	07/22/0814:30	DATE COLLECTED:	NA
DATIME ANALYZD:	07/22/0819:16	07/22/0819:18	07/22/0819:20	DATE RECEIVED:	07/22/08
PREP. BATCH:	HGG037W	HGG037W	HGG037W		
CALIB. REF:	M47G022032	M47G022032	M47G022032		

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	5.00	5.43	109	5.00	5.48	110	1	80-120	20

JSD 2

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 7470A

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	SKID RINSE PLUS	SKID RINSE PLUSDL		
EMAX SAMP ID:	G511-01	G511-01J		
LAB FILE ID:	M47G022042	M47G022043		
DATE EXTRACTED:	07/22/0814:30	07/22/0814:30	DATE COLLECTED:	07/14/08
DATE ANALYZED:	07/22/0819:25	07/22/0819:27	DATE RECEIVED:	07/17/08
PREP. BATCH:	HGG037W	HGG037W		
CALIB. REF:	M47G022032	M47G022032		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	0.535J	NA	10

C881

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 7470A

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: SKID RINSE PLUS
CONTROL NO.: G511-01 G511-01A
LAB FILE ID: M47G022042 M47G022041
DATIME EXTRCTD: 07/22/0814:30 07/22/0814:30 DATE COLLECTED: 07/14/08
DATIME ANALYZD: 07/22/0819:25 07/22/0819:23 DATE RECEIVED: 07/17/08
PREP. BATCH: HGG037W HGG037W
CALIB. REF: M47G022032 M47G022032

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Mercury	ND	2.00	2.26	113	85-115

7094

METHOD 7471A
MERCURY BY COLD VAPOR

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1
Batch No. : 08G195

Matrix : SOIL
Instrument ID : TI047

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/kg)	DLF	MOIST	RL (mg/kg)	MDL (mg/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	HGG045SB	ND	1	NA	0.100	0.0330	07/29/0814:44	07/29/0811:00	M47G027038	M47G027032	HGG045S	NA	07/29/08
LCS1S	HGG045SL	0.842	1	NA	0.100	0.0330	07/29/0814:46	07/29/0811:00	M47G027039	M47G027032	HGG045S	NA	07/29/08
LCD1S	HGG045SC	0.855	1	NA	0.100	0.0330	07/29/0814:48	07/29/0811:00	M47G027040	M47G027032	HGG045S	NA	07/29/08
H-T11-0.5AS	G195-02A	0.333	1	4.5	0.105	0.0346	07/29/0814:50	07/29/0811:00	M47G027041	M47G027032	HGG045S	07/18/08	07/18/08
H-T11-0.5	G195-02	ND	1	4.5	0.105	0.0346	07/29/0814:52	07/29/0811:00	M47G027042	M47G027032	HGG045S	07/18/08	07/18/08
H-T11-0.5DL	G195-02J	ND	5	4.5	0.524	0.173	07/29/0814:55	07/29/0811:00	M47G027043	M47G027032	HGG045S	07/18/08	07/18/08
H-T11-5.0	G195-04	ND	1	12.7	0.115	0.0378	07/29/0815:01	07/29/0811:00	M47G027046	M47G027044	HGG045S	07/18/08	07/18/08
H-T11-10.0	G195-05	ND	1	6.5	0.107	0.0353	07/29/0815:04	07/29/0811:00	M47G027047	M47G027044	HGG045S	07/18/08	07/18/08
H-T11-10.0DUP	G195-06	ND	1	5.9	0.106	0.0351	07/29/0815:06	07/29/0811:00	M47G027048	M47G027044	HGG045S	07/18/08	07/18/08
H-T5-0.5	G195-07	0.0357J	1	3.8	0.104	0.0343	07/29/0815:08	07/29/0811:00	M47G027049	M47G027044	HGG045S	07/18/08	07/18/08
H-T5-0.5DUP	G195-08	0.0353J	1	3.7	0.104	0.0343	07/29/0815:10	07/29/0811:00	M47G027050	M47G027044	HGG045S	07/18/08	07/18/08
H-T5-2.5	G195-09	ND	1	8.4	0.109	0.0360	07/29/0815:12	07/29/0811:00	M47G027051	M47G027044	HGG045S	07/18/08	07/18/08
H-T5-6.0	G195-12	ND	1	14.9	0.118	0.0388	07/29/0815:14	07/29/0811:00	M47G027052	M47G027044	HGG045S	07/18/08	07/18/08
H-T5-12.0	G195-14	ND	1	13.6	0.116	0.0382	07/29/0815:16	07/29/0811:00	M47G027053	M47G027044	HGG045S	07/18/08	07/18/08

J9805

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 7471A

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1S				
CONTROL NO.:	HGG045SB	HGG045SL	HGG045SC		
LAB FILE ID:	M47G027038	M47G027039	M47G027040		
DATIME EXTRCTD:	07/29/0811:00	07/29/0811:00	07/29/0811:00	DATE COLLECTED:	NA
DATIME ANALYZD:	07/29/0814:44	07/29/0814:46	07/29/0814:48	DATE RECEIVED:	07/29/08
PREP. BATCH:	HGG045S	HGG045S	HGG045S		
CALIB. REF:	M47G027032	M47G027032	M47G027032		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	0.833	0.842	101	0.833	0.855	103	2	80-120	20

7939

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 7471A

MATRIX:	SOIL		% MOISTURE:	4.5
DILUTION FACTOR:	1	5		
SAMPLE ID:	H-T11-0.5	H-T11-0.5DL		
EMAX SAMP ID:	G195-02	G195-02J		
LAB FILE ID:	M47G027042	M47G027043		
DATE EXTRACTED:	07/29/0811:00	07/29/0811:00	DATE COLLECTED:	07/18/08
DATE ANALYZED:	07/29/0814:52	07/29/0814:55	DATE RECEIVED:	07/18/08
PREP. BATCH:	HGG045S	HGG045S		
CALIB. REF:	M47G027032	M47G027032		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	ND	0	10

2.3021

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 7471A

MATRIX:	SOIL		% MOISTURE:	4.5
DILTN FACTR:	1	1		
SAMPLE ID:	H-T11-0.5			
CONTROL NO.:	G195-02	G195-02A		
LAB FILE ID:	M47G027042	M47G027041		
DATIME EXTRCTD:	07/29/0811:00	07/29/0811:00	DATE COLLECTED:	07/18/08
DATIME ANALYZD:	07/29/0814:52	07/29/0814:50	DATE RECEIVED:	07/18/08
PREP. BATCH:	HGG045S	HGG045S		
CALIB. REF:	M47G027032	M47G027032		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Mercury	ND	0.349	0.333	95	85-115

J956

ANALYSIS RUN LOG
for
MERCURY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/22/08 **Start Time:** 17:58

End Date: 7/22/08 **End Time:** 19:50

Comments:

QC OK

G204-05A was out of QC limit.
For Confirmation

Book #: A47-59

Instrument No.: 47

Analytical Sequence/Batch: M47G022

Method File: Hg

SOP #	Rev. #
☑ EMAX-7470	4
☐ EMAX-7471	4
☐ EMAX-CLP-245.5	1
☐ EMAX-CLP-245.1	0
☐ EMAX-	

STANDARDS ID	
S1	BLANK
S2	SM3B-08-137
S3	
S4	
S5	
S6	
ICV	SM3B-08-138
CCV	
LCS	
Analytical Spike	SM3B-08-100

Analyzed By: NT

Date: 7/22/08

"M47G022"

EMAXlfid	EMAXlsid	conc	Raw_resp	rsd/rf	adatetime	DF
M47G022000	STD1REP1	0	4951		07/22/0817:58	1
M47G022001	STD2REP1	.2	13282		07/22/0818:00	1
M47G022002	STD3REP1	1	58743		07/22/0818:02	1
M47G022003	STD4REP1	2	110155		07/22/0818:04	1
M47G022004	STD5REP1	5	282585		07/22/0818:06	1
M47G022005	STD6REP1	10	541895		07/22/0818:08	1
M47G022006	ICV	2.02	113901	0	07/22/0818:10	1
M47G022007	ICB	-.001	4541	0	07/22/0818:12	1
M47G022008	CCV1	5.55	304652	0	07/22/0818:14	1
M47G022009	CCB1	-.05	1888	0	07/22/0818:16	1
M47G022010	HGG036WB	-.049	1939	0	07/22/0818:18	1
M47G022011	HGG036WL	5.53	303653	0	07/22/0818:20	1
M47G022012	HGG036WC	5.57	305804	0	07/22/0818:23	1
M47G022013	TXG012SB	-.028	3083	0	07/22/0818:25	1
M47G022014	G204-05A	2.33	130794	0	07/22/0818:26	1
M47G022015	G204-05	.014	5308	0	07/22/0818:29	1
M47G022016	G204-05J	-.003	4431	0	07/22/0818:31	5
M47G022017	G204-05M	5.63	309156	0	07/22/0818:33	1
M47G022018	G204-05S	5.52	303060	0	07/22/0818:35	1
M47G022019	G204-01	-.017	3662	0	07/22/0818:37	1
M47G022020	CCV2	5.55	304465	0	07/22/0818:39	1
M47G022021	CCB2	-.052	1740	0	07/22/0818:41	1
M47G022022	G204-02	.049	7220	0	07/22/0818:43	1
M47G022023	G204-03	.251	18137	0	07/22/0818:45	1
M47G022024	G204-04	-.012	3907	0	07/22/0818:47	1
M47G022025	G203-01	-.073	623	0	07/22/0818:50	1
M47G022026	TXG008SB	-.007	4205	0	07/22/0818:52	1
M47G022027	G483-01	-.048	1986	0	07/22/0818:54	1
M47G022028	G483-02	-.035	2699	0	07/22/0818:56	1
M47G022029	TXG009WB	.004	4783	0	07/22/0818:58	1
M47G022030	G483-04A	2.15	120662	0	07/22/0819:00	1
M47G022031	G483-04	-.024	3267	0	07/22/0819:02	1
M47G022032	CCV3	5.51	302514	0	07/22/0819:04	1
M47G022033	CCB3	-.021	3464	0	07/22/0819:06	1
M47G022034	G483-04J	-.011	4004	0	07/22/0819:08	5
M47G022035	G483-04M	4.3	236916	0	07/22/0819:10	1
M47G022036	G483-04S	4.21	232133	0	07/22/0819:12	1
M47G022037	G483-03	-.112	-1504	0	07/22/0819:14	1
M47G022038	HGG037WB	-.006	4255	0	07/22/0819:16	1
M47G022039	HGG037WL	5.43	298170	0	07/22/0819:18	1
M47G022040	HGG037WC	5.48	301100	0	07/22/0819:20	1
M47G022041	G511-01A	2.26	126900	0	07/22/0819:23	1
M47G022042	G511-01	-.037	2596	0	07/22/0819:25	1
M47G022043	G511-01J	.107	10353	0	07/22/0819:27	5
M47G022044	CCV4	5.56	305246	0	07/22/0819:29	1
M47G022045	CCB4	.06	7811	0	07/22/0819:31	1
M47G022046	G511-02	-.018	3602	0	07/22/0819:34	1
M47G022047	G511-03	.039	6676	0	07/22/0819:36	1
M47G022048	G511-04	-.076	492	0	07/22/0819:38	1
M47G022049	G511-05	-.056	1524	0	07/22/0819:40	1
M47G022050	G486-01	.035	6468	0	07/22/0819:42	1
M47G022051	G188-01	-.044	2184	0	07/22/0819:44	1
M47G022052	G195-01	-.07	785	0	07/22/0819:46	1
M47G022053	CCV5	5.35	293907	0	07/22/0819:48	1
M47G022054	CCB5	-.037	2603	0	07/22/0819:50	1
**********	**********	**********	**********	**********	**********	***
EMAXlfid	EMAXlsid	Xint	Yint	rrf	adatetime	DF
M47G022000	BLANK	-8.581136E-02	4638.436	.9998143	07/22/0819:50	1

RunProt: HGCOM

RunFold: M47G022 Seq: 6 Batch:

Prnt: R/T On Pump: On

Rev: 4.2 18:08:50 22 Jul 2008 Xmit: Off Gas: 0.35 LPM

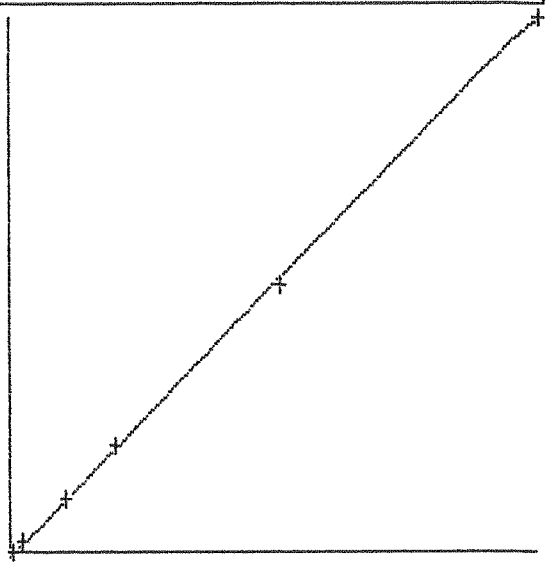
State: Idle User: NT\TH A/S: On

CALIBRATION: Line proto: HGCOM

	Hg Conc.	Calc.	Dev.	Accepted liNear
S1	.000	.007	.007	Quadratic
S2	.200	.161	-.039	->wtdlinear
S3	1.00	1.00	.002	C
S4	2.00	1.95	-.048	Accept o
S5	5.00	5.14	.141	n
S6	10.0	9.94	-.063	c

A .0000000 r .999814

B 1.84932e-5 C -8.46531e-2



Relative Absorbance

	Mean		
S1	4951	0 SD	4951
S2	13282	0 %RSD	13282
S3	58743	0 %RSD	58743
S4	110155	0 %RSD	110155
S5	282585	0 %RSD	282585
S6	541895	0 %RSD	541895

New cal coefficients stored

ANALYSIS RUN LOG
for
MERCURY

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/29/08 **Start Time:** 13:25

End Date: 7/29/08 **End Time:** 15:42

Comments:

QC OK

Book #: A47-59

Instrument No.: 47

Analytical Sequence/Batch: M47G027

Method File: Hg

SOP #	Rev. #
☐ EMAX-7470	4
☑ EMAX-7471	4
☐ EMAX-CLP-245.5	1
☐ EMAX-CLP-245.1	0
☐ EMAX-	

STANDARDS ID	
S1	BLANK
S2	SM3B-08-149
S3	
S4	
S5	
S6	
ICV	SM3B-08-150
CCV	
LCS	
Analytical Spike	SM3B-08-141

Analyzed By: NT

Date: 7/29/08

"M47G027"

EMAXlfid	EMAXlsid	conc	Raw_resp	rsd/rf	adatetime	DF
M47G027000	STD1REP1	0	10316		07/29/0813:25	1
M47G027001	STD2REP1	.2	25759		07/29/0813:27	1
M47G027002	STD3REP1	1	89079		07/29/0813:29	1
M47G027003	STD4REP1	2	178450		07/29/0813:31	1
M47G027004	STD5REP1	5	429687		07/29/0813:33	1
M47G027005	STD6REP1	10	823700		07/29/0813:36	1
M47G027006	ICV	2.03	177132	0	07/29/0813:38	1
M47G027007	ICB	-.052	7345	0	07/29/0813:40	1
M47G027008	CCV1	5.25	441051	0	07/29/0813:42	1
M47G027009	CCB1	-.097	3645	0	07/29/0813:44	1
M47G027010	HGG044SB	-.075	5461	0	07/29/0813:46	1
M47G027011	HGG044SL	5.15	432578	0	07/29/0813:48	1
M47G027012	HGG044SC	5.13	430563	0	07/29/0813:50	1
M47G027013	G521-01A	1.83	161118	0	07/29/0813:52	1
M47G027014	G521-01	-.045	7916	0	07/29/0813:54	1
M47G027015	G521-01J	-.089	4374	0	07/29/0813:56	5
M47G027016	G521-02	-.089	4314	0	07/29/0813:58	1
M47G027017	G521-03	.008	12265	0	07/29/0814:00	1
M47G027018	G521-04	-.087	4520	0	07/29/0814:02	1
M47G027019	G521-05	.002	11760	0	07/29/0814:04	1
M47G027020	CCV2	5.31	445323	0	07/29/0814:06	1
M47G027021	CCB2	-.069	5947	0	07/29/0814:09	1
M47G027022	G521-06	-.068	6088	0	07/29/0814:11	1
M47G027023	G521-07	-.042	8158	0	07/29/0814:13	1
M47G027024	G521-08	-.089	4350	0	07/29/0814:15	1
M47G027025	G521-09	-.082	4925	0	07/29/0814:17	1
M47G027026	G521-10	-.065	6311	0	07/29/0814:19	1
M47G027027	G521-11	-.018	10101	0	07/29/0814:21	1
M47G027028	G521-12	-.011	10672	0	07/29/0814:23	1
M47G027029	G521-13	-.066	6239	0	07/29/0814:25	1
M47G027030	G521-14	-.05	7543	0	07/29/0814:28	1
M47G027031	G521-15	-.04	8300	0	07/29/0814:30	1
M47G027032	CCV3	5.23	438871	0	07/29/0814:32	1
M47G027033	CCB3	-.053	7308	0	07/29/0814:34	1
M47G027034	G521-16	-.078	5218	0	07/29/0814:36	1
M47G027035	G521-17	-.066	6213	0	07/29/0814:38	1
M47G027036	G521-18	-.073	5621	0	07/29/0814:40	1
M47G027037	MDLV	.128	22031	0	07/29/0814:42	1
M47G027038	HGG045SB	-.049	7594	0	07/29/0814:44	1
M47G027039	HGG045SL	5.05	423900	0	07/29/0814:46	1
M47G027040	HGG045SC	5.13	430856	0	07/29/0814:48	1
M47G027041	G195-02A	1.91	167622	0	07/29/0814:50	1
M47G027042	G195-02	.019	13197	0	07/29/0814:52	1
M47G027043	G195-02J	-.05	7548	0	07/29/0814:55	5
M47G027044	CCV4	5.23	438667	0	07/29/0814:57	1
M47G027045	CCB4	-.07	5876	0	07/29/0814:59	1
M47G027046	G195-04	.004	11956	0	07/29/0815:01	1
M47G027047	G195-05	-.014	10431	0	07/29/0815:04	1
M47G027048	G195-06	-.055	7121	0	07/29/0815:06	1
M47G027049	G195-07	.206	28443	0	07/29/0815:08	1
M47G027050	G195-08	.204	28268	0	07/29/0815:10	1
M47G027051	G195-09	.133	22466	0	07/29/0815:12	1
M47G027052	G195-12	.082	18269	0	07/29/0815:14	1
M47G027053	G195-14	-.04	8354	0	07/29/0815:16	1
M47G027054	G192-17	-.032	9033	0	07/29/0815:18	1
M47G027055	G558-01	-.047	7749	0	07/29/0815:20	1
M47G027056	CCV5	5.21	437518	0	07/29/0815:22	1
M47G027057	CCB5	-.074	5591	0	07/29/0815:24	1
M47G027058	G558-02	.008	12253	0	07/29/0815:26	1
M47G027059	G518-13	-.083	4815	0	07/29/0815:28	1
M47G027060	G527-03	-.052	7350	0	07/29/0815:30	1
M47G027061	G527-04	-.056	7000	0	07/29/0815:32	1
M47G027062	G527-05	-.048	7651	0	07/29/0815:34	1
M47G027063	G527-06	-.041	8295	0	07/29/0815:36	1
M47G027064	G285-01	.094	19252	0	07/29/0815:38	1
M47G027065	CCV6	5.26	441143	0	07/29/0815:40	1
M47G027066	CCB6	-.064	6415	0	07/29/0815:42	1
**********	**********	**********	**********	**********	**********	***
EMAXlfid	EMAXlsid	Xint	Yint	rrf	adatetime	DF
M47G027000	BLANK	-.1430016	11682.87	.9998479	07/29/0815:42	1

RunProt: HGCOM

RunFold: M476027 Seq: 6 Batch:

Prnt: R/T On Pump: On

Rev: 4.2 13:36:22 29 Jul 2006 Xmit: Off Gas: 0.35 LPM

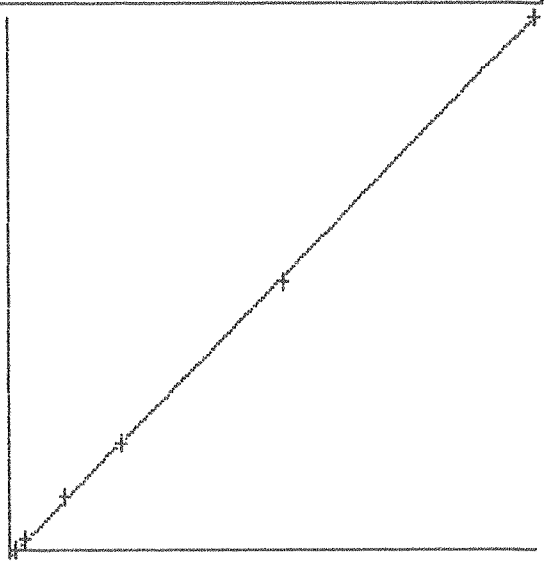
State: Idle User: MTNTH A/S: On

CALIBRATION: Line proto: HGCOM

	Hg Conc.	Calc.	Dev.	Accepted liNear
S1	.000	-.016	-.016	Quadratic
S2	.200	.173	-.027	->wtdlinear
S3	1.00	.948	-.052	C
S4	2.00	2.04	.042	Accept o
S5	5.00	5.12	.116	n
S6	10.0	9.94	-.063	c

A .0000000 r .999848

B 1.22366e-5 C -1.42035e-1



Relative Absorbance

	Mean		SD	10316
S1	10316	0	%RSD	10316
S2	25759	0	%RSD	25759
S3	89079	0	%RSD	89079
S4	178450	0	%RSD	178450
S5	429687	0	%RSD	429687
S6	823700	0	%RSD	823700

New cal coefficients stored

EMAX LABORATORIES, INC.

DIGESTION LOG FOR MERCURY

SOP ☑ EMAX-7470 Rev. No.4 ☐ EMAX-7471 Rev. No.4 ☐ EMAX-CLP-245.5 ☐ EMAX-CLP-245.1 ☐ EMAX EPA 245.2 ☐

Matrix: Water Start Date: 7/22/08 Time: 14:30 Ending Date: 7/22/08 Time: 17:00 Book # E47-064

BATCH: HG0037W

	Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Sample Amount (g | ml)	Dry Weight	pH	Extract Volume (ml)	Matrix Description: Color	Matrix Description: Clarity
01		0	Cr	Cr	N/A	0	N/A	N/A	75	Cr	Cr
02		0.2				0.2					
03		1				1					
04		2				2					
05		5				5					
06		10				10					
07		ICV				2					
08		ICB				0					
09		CCV				5					
10		CCB				0					
11		HG0037W8				50					
12		WL									
13		WC									
14		G511-01				5		<2			
15		02						<2			
16		03						<2			
17		04						<2			
18		05						<2			
19		G486-01						<2			
20		G188-01						<2			
21		G195-01						<2			
22											
23											
24								NT			
25								7/22/08			
26											
27											
28											

Standards	ID	Conc. (µg/L)	Amount Added (ml)
ICAL SM	SB-08-137	50	0.2,1,2,5,10
ICV SM	SB-08-138		2
CCV/MS			5
LCS			5
Reagent	Lot# / ID		
HNO_3	SW1A-03-721		
HCl	N/A		
H_2SO_4	SW1A-03-669		
$KMnO_4$	SM5B-02-85		
$K_2S_2O_8$			82
$NH_2OH.HCl$			83
$SnCl_2$			84

Temp of Digestion Bath: 95 °C

Legend

Color			
Bu = blue	Cs = Coarse	Cr = Clear	Rk = rocks
Bk = black	Md = Medium	Cy = Cloudy	Sl = Shale
Bn = Brown	Fn = Fine	Td = Turbid	Vg=Vegetation
Gn = Green			
Og = Orange			
Rd = Red			
Yw = Yellow			

Comments:

Prepared By: NT

Standard Added By: NT Witnessed By: TH

Checked By:

Disposed By: Date Disposed:

SOP No. EM-7470, Rev. No. 4, Effective Date: 7/28/08

EMAX LABORATORIES, INC.

DIGESTION LOG FOR MERCURY

SOP ☐ EMAX-7470 Rev. No.4 ☑ EMAX-7471 Rev. No.4 ☐ EMAX-CLP-245.5 ☐ EMAX-CLP-245.1 ☐ EMAX EPA 245.2 ☐

Matrix: Soil | Start Date: 7/29/08 Time: 11:00 | Ending Date: 7/29/08 Time: 12:00 | Book # E47-064

BATCH: HG0455

Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Sample Amount (g/ml)	Dry Weight	pH	Extract Volume (ml)	Matrix Description: Color	Matrix Description: Clarity
01	S-0	Cr	Cr	N/A	0	N/A	N/A	100	Cr	Cr
02	0.2				0.2					
03	1				1					
04	2				2					
05	5				5					
06	10				10					
07	ICV				2					
08	ICB				0					
09	CCV				5					
10	CCB				0					
11	HG0455SB				0.600g					
12	SL				0.600					
13	SC				0.600					
14	G195-02	Bn	Fn		0.603					
15	04				0.603					
16	05				0.604					
17	06				0.604					
18	07				0.602					
19	08				0.604					
20	09				0.604					
21	12				0.603					
22	14				0.603					
23	G192-17				0.603					
24	G558-01	WHT			0.602					
25	02				0.604					
26	G518-13	BK	Td		0.602					
27	G527-03				0.602					
28	04				0.602					

Standards	ID	Conc. (µg/L)	Amount Added (ml)
ICAL SM	3B-08-149	100	0.2,1,2,5,10
ICV SM	3B-08-150		2
CCV/MS			5
LCS			5

Reagent	Lot# / ID
HNO_3 / aqua	SW1A-03-721
HCl / regia	SW1A-03-644
H_2SO_4	N/A
$KMnO_4$	SM5B-02-85
$K_2S_2O_8$	N/A
$NH_2OH.HCl$	SM5B-02-83
$SnCl_2$	84

Temp of Digestion Bath: 95 °C

Legend

Color			
Bu = blue	Cs = Coarse	Cr = Clear	Rk = rocks
Bk = black	Md = Medium	Cy = Cloudy	Sl = Shale
Bn = Brown	Fn = Fine	Td = Turbid	Vg=Vegetation
Gn = Green			
Og = Orange			
Rd = Red			
Yw = Yellow			

Comments:

Prepared By: NT

Standard Added By: NT Witnessed By: TH

Checked By:

Disposed By: Date Disposed:

EMAX LABORATORIES, INC.

DIGESTION LOG FOR MERCURY

SOP ☐ EMAX-7470 Rev. No.4 ☑ EMAX-7471 Rev. No.4 ☐ EMAX-CLP-245.5 ☐ EMAX-CLP-245.1 ☐ EMAX EPA 245.2 ☐

Matrix: Soil **Start Date:** 7/29/08 **Time:** 11:00 **Ending Date:** 7/29/08 **Time:** 12:00 **Book #** E47-064

BATCH: HG0455

Sample Prep ID	Lab Sample ID	Matrix Description: Color	Matrix Description: Texture / Clarity	Matrix Description: Artifacts	Sample Amount (g | ml)	Dry Weight	pH	Extract Volume (ml)	Matrix Description: Color	Matrix Description: Clarity
01	G527-05	Bk	Td	N/A	0.603	N/A	N/A	100	Cr	Cr
02	↓ 06	↓	↓	↓	0.602	↓	↓	↓	↓	↓
03	G285-01	Bn	Fn	N/A	0.602	N/A	N/A	100	Cr	Cr
04										
05										
06										
07										
08										
09										
10										
11										
12						NT				
13						7/29/08				
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										

Standards	ID	Conc. (µg/L)	Amount Added (ml)
ICAL			
ICV			
CCV/MS			
LCS			

Reagent	Lot# / ID
HNO_3	
HCl	
H_2SO_4	
$KMnO_4$	
$K_2S_2O_8$	
$NH_2OH.HCl$	
$SnCl_2$	

SAME AS PAGE 60

Temp of Digestion Bath: °C

Legend

Color			
Bu = blue	Cs = Coarse	Cr = Clear	Rk = rocks
Bk = black	Md = Medium	Cy = Cloudy	Sl = Shale
Bn = Brown	Fn = Fine	Td = Turbid	Vg=Vegetation
Gn = Green			
Og = Orange			
Rd = Red			
Yw = Yellow			

Comments:

Prepared By: NT

Standard Added By: NT Witnessed By: TH

Checked By:

Disposed By: Date Disposed:

LABORATORY REPORT FOR

TETRA TECH, INC.

LMC BEAUMONT SITE 1

METALS / MERCURY

SDG#: 08G195

CASE NARRATIVE

CLIENT: TETRA TECH, INC.

PROJECT: LMC BEAUMONT SITE 1

SDG: 08G195

METHOD 3010A/3050B/6010B
METALS BY ICP

One (1) water and nine (9) soil samples were received on 07/18/08 for Metals analysis by Method 3010A/3050B/6010B in accordance with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW846, 3rd edition.

1. **Holding Time**

   Analysis met holding time criteria.

2. **Continuing Calibrations (CCV's) and ICSA/ICSAB**

   CCV's and ICSA/ICSAB were analyzed at a frequency specified by the project. All project requirements were met.

3. **Method Blank**

   Method blanks were free of contamination at the reporting limit.

4. **Lab Control Sample/Lab Control Sample Duplicate**

   Lab control results were within QC limit.

5. **Serial Dilution/Post-Analytical Spike**

   Samples G195-02 and -06 and sample G234-03 from another SDG were analyzed for serial dilution and post-analytical spike. All QC requirements were met.

6. **Matrix Spike/Matrix Spike Duplicate**

   Sample G195-06 was spiked. All recoveries were within QC limit except one element in both MS/MSD was out of the limit.

7. **Sample Analysis**

   Samples were analyzed according to the prescribed QC procedures. All criteria were met with the aforementioned exception.

LAB CHRONICLE
METALS BY ICP

Client : TETRA TECH, INC.
Project : LMC BEAUMONT SITE 1

SDG NO. : 08G195
Instrument ID : T-ID8

SOIL

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1S	IPG069SB	1	NA	07/24/0821:35	07/23/0812:10	ID8G029060	ID8G029058	IPG069S	Method Blank
LCS1S	IPG069SL	1	NA	07/24/0821:40	07/23/0812:10	ID8G029061	ID8G029058	IPG069S	Lab Control Sample (LCS)
LCD1S	IPG069SC	1	NA	07/24/0821:45	07/23/0812:10	ID8G029062	ID8G029058	IPG069S	LCS Duplicate
H-T11-0.5AS	G195-02A	1	4.5	07/24/0821:50	07/23/0812:10	ID8G029063	ID8G029058	IPG069S	Analytical Spike Sample
H-T11-0.5	G195-02	1	4.5	07/24/0821:55	07/23/0812:10	ID8G029064	ID8G029058	IPG069S	Field Sample
H-T11-0.5DL	G195-02J	5	4.5	07/24/0822:00	07/23/0812:10	ID8G029065	ID8G029058	IPG069S	Diluted Sample
H-T11-5.0	G195-04	1	12.7	07/24/0822:05	07/23/0812:10	ID8G029066	ID8G029058	IPG069S	Field Sample
H-T11-10.0	G195-05	1	6.5	07/24/0822:10	07/23/0812:10	ID8G029067	ID8G029058	IPG069S	Field Sample
H-T5-0.5	G195-07	1	3.8	07/24/0822:35	07/23/0812:10	ID8G029072	ID8G029069	IPG069S	Field Sample
H-T5-0.5DUP	G195-08	1	3.7	07/24/0822:40	07/23/0812:10	ID8G029073	ID8G029069	IPG069S	Field Sample
H-T5-2.5	G195-09	1	8.4	07/24/0822:45	07/23/0812:10	ID8G029074	ID8G029069	IPG069S	Field Sample
H-T5-6.0	G195-12	1	14.9	07/24/0822:50	07/23/0812:10	ID8G029075	ID8G029069	IPG069S	Field Sample
H-T5-12.0	G195-14	1	13.6	07/24/0822:55	07/23/0812:10	ID8G029076	ID8G029069	IPG069S	Field Sample
MBLK2S	IPG092SB	1	NA	07/31/0820:30	07/31/0809:45	ID8G037073	ID8G037071	IPG092S	Method Blank
LCS2S	IPG092SL	1	NA	07/31/0820:35	07/31/0809:45	ID8G037074	ID8G037071	IPG092S	Lab Control Sample (LCS)
LCD2S	IPG092SC	1	NA	07/31/0820:40	07/31/0809:45	ID8G037075	ID8G037071	IPG092S	LCS Duplicate
H-T11-10.0DUPMS	G195-06M	1	5.9	07/31/0820:45	07/31/0809:45	ID8G037076	ID8G037071	IPG092S	Matrix Spike Sample (MS)
H-T11-10.0DUPMSD	G195-06S	1	5.9	07/31/0820:50	07/31/0809:45	ID8G037077	ID8G037071	IPG092S	MS Duplicate (MSD)
H-T11-10.0DUPAS	G195-06A	1	5.9	07/31/0820:55	07/31/0809:45	ID8G037078	ID8G037071	IPG092S	Analytical Spike Sample
H-T11-10.0DUP	G195-06	1	5.9	07/31/0820:59	07/31/0809:45	ID8G037079	ID8G037071	IPG092S	Field Sample
H-T11-10.0DUPDL	G195-06J	5	5.9	07/31/0821:04	07/31/0809:45	ID8G037080	ID8G037071	IPG092S	Diluted Sample

WATER

Client Sample ID	Laboratory Sample ID	Dilution Factor	% Moist	Analysis DateTime	Extraction DateTime	Sample Data FN	Calibration Data FN	Prep. Batch	Notes
MBLK1W	IPG068WB	1	NA	07/24/0823:20	07/23/0812:00	ID8G029081	ID8G029079	IPG068W	Method Blank
LCS1W	IPG068WL	1	NA	07/24/0823:25	07/23/0812:00	ID8G029082	ID8G029079	IPG068W	Lab Control Sample (LCS)
LCD1W	IPG068WC	1	NA	07/24/0823:30	07/23/0812:00	ID8G029083	ID8G029079	IPG068W	LCS Duplicate
H-EB7182008	G195-01	1	NA	07/25/0800:26	07/23/0812:00	ID8G029094	ID8G029091	IPG068W	Field Sample
03831GW120AS	G234-03A	1	NA	07/25/0820:29	07/23/0812:00	ID8G031067	ID8G031065	IPG068W	Analytical Spike Sample
03831GW120	G234-03	1	NA	07/25/0820:34	07/23/0812:00	ID8G031068	ID8G031065	IPG068W	Field Sample
03831GW120DL	G234-03J	5	NA	07/25/0820:39	07/23/0812:00	ID8G031069	ID8G031065	IPG068W	Diluted Sample

FN - Filename
% Moist - Percent Moisture

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METHOD 3010A/6010B
METALS BY ICP

Client : TETRA TECH, INC.	Date Collected: 07/18/08 08:20
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
SDG NO. : 08G195	Date Extracted: 07/23/08 12:00
Sample ID: H-EB7182008	Date Analyzed: 07/25/08 00:26
Lab Samp ID: G195-01	Dilution Factor: 1
Lab File ID: ID8G029094	Matrix : WATER
Ext Btch ID: IPG068W	% Moisture : NA
Calib. Ref.: ID8G029091	Instrument ID : EMAXTID8

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Antimony	ND	0.100	0.0400
Arsenic	ND	0.0100	0.00500
Barium	ND	0.0100	0.00200
Beryllium	ND	0.0100	0.00100
Cadmium	ND	0.0100	0.00200
Chromium	ND	0.0100	0.00500
Cobalt	ND	0.0100	0.00500
Copper	ND	0.0100	0.00500
Lead	ND	0.0100	0.00300
Molybdenum	ND	0.0500	0.0100
Nickel	ND	0.0200	0.0100
Selenium	ND	0.0100	0.00500
Silver	ND	0.0100	0.00500
Thallium	ND	0.0100	0.00500
Vanadium	ND	0.0100	0.00500
Zinc	ND	0.0100	0.00500

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/18/08 08:43
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:10
Sample ID:	H-T11-0.5	Date Analyzed:	07/24/08 21:55
Lab Samp ID:	G195-02	Dilution Factor:	1
Lab File ID:	ID8G029064	Matrix :	SOIL
Ext Btch ID:	IPG069S	% Moisture :	4.5
Calib. Ref.:	ID8G029058	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.5	2.09
Arsenic	5.97	1.05	0.419
Barium	271	1.05	0.209
Beryllium	0.581J	1.05	0.209
Cadmium	ND	1.05	0.524
Chromium	17.4	2.09	1.05
Cobalt	9.50	2.09	1.05
Copper	20.3	2.09	0.524
Lead	10.8	1.05	0.209
Molybdenum	ND	5.24	0.524
Nickel	14.1	2.09	1.05
Selenium	ND	1.05	0.524
Silver	ND	2.09	0.524
Thallium	ND	1.05	0.524
Vanadium	45.0	2.09	0.524
Zinc	75.1	2.09	0.524

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/18/08 09:05
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:10
Sample ID:	H-T11-5.0	Date Analyzed:	07/24/08 22:05
Lab Samp ID:	G195-04	Dilution Factor:	1
Lab File ID:	ID8G029066	Matrix :	SOIL
Ext Btch ID:	IPG069S	% Moisture :	12.7
Calib. Ref.:	ID8G029058	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	11.5	2.29
Arsenic	1.86	1.15	0.458
Barium	467	1.15	0.229
Beryllium	0.497J	1.15	0.229
Cadmium	ND	1.15	0.573
Chromium	23.5	2.29	1.15
Cobalt	9.02	2.29	1.15
Copper	23.2	2.29	0.573
Lead	7.89	1.15	0.229
Molybdenum	ND	5.73	0.573
Nickel	13.3	2.29	1.15
Selenium	ND	1.15	0.573
Silver	ND	2.29	0.573
Thallium	1.58	1.15	0.573
Vanadium	60.9	2.29	0.573
Zinc	78.7	2.29	0.573

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/18/08 09:32
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:10
Sample ID:	H-T11-10.0	Date Analyzed:	07/24/08 22:10
Lab Samp ID:	G195-05	Dilution Factor:	1
Lab File ID:	ID8G029067	Matrix :	SOIL
Ext Btch ID:	IPG069S	% Moisture :	6.5
Calib. Ref.:	ID8G029058	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.7	2.14
Arsenic	2.56	1.07	0.428
Barium	115	1.07	0.214
Beryllium	0.246J	1.07	0.214
Cadmium	ND	1.07	0.535
Chromium	6.04	2.14	1.07
Cobalt	3.40	2.14	1.07
Copper	3.95	2.14	0.535
Lead	2.63	1.07	0.214
Molybdenum	ND	5.35	0.535
Nickel	3.25	2.14	1.07
Selenium	ND	1.07	0.535
Silver	ND	2.14	0.535
Thallium	0.627J	1.07	0.535
Vanadium	22.2	2.14	0.535
Zinc	48.5	2.14	0.535

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/18/08 09:35
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G195	Date Extracted:	07/31/08 09:45
Sample ID:	H-T11-10.0DUP	Date Analyzed:	07/31/08 20:59
Lab Samp ID:	G195-06	Dilution Factor:	1
Lab File ID:	ID8G037079	Matrix :	SOIL
Ext Btch ID:	IPG092S	% Moisture :	5.9
Calib. Ref.:	ID8G037071	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.6	2.13
Arsenic	2.89	1.06	0.425
Barium	85.1	1.06	0.213
Beryllium	0.271J	1.06	0.213
Cadmium	ND	1.06	0.531
Chromium	4.89	2.13	1.06
Cobalt	3.31	2.13	1.06
Copper	ND	2.13	0.531
Lead	2.35	1.06	0.213
Molybdenum	ND	5.31	0.531
Nickel	2.69	2.13	1.06
Selenium	0.578J	1.06	0.531
Silver	ND	2.13	0.531
Thallium	ND	1.06	0.531
Vanadium	20.0	2.13	0.531
Zinc	42.8	2.13	0.531

METHOD 3050B/6010B
METALS BY ICP

Client : TETRA TECH, INC.	Date Collected: 07/18/08 10:25
Project : LMC BEAUMONT SITE 1	Date Received: 07/18/08
SDG NO. : 08G195	Date Extracted: 07/23/08 12:10
Sample ID: H-T5-0.5	Date Analyzed: 07/24/08 22:35
Lab Samp ID: G195-07	Dilution Factor: 1
Lab File ID: ID8G029072	Matrix : SOIL
Ext Btch ID: IPG069S	% Moisture : 3.8
Calib. Ref.: ID8G029069	Instrument ID : EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.4	2.08
Arsenic	1.81	1.04	0.416
Barium	194	1.04	0.208
Beryllium	0.399J	1.04	0.208
Cadmium	ND	1.04	0.520
Chromium	13.7	2.08	1.04
Cobalt	7.22	2.08	1.04
Copper	14.8	2.08	0.520
Lead	8.35	1.04	0.208
Molybdenum	ND	5.20	0.520
Nickel	11.0	2.08	1.04
Selenium	ND	1.04	0.520
Silver	ND	2.08	0.520
Thallium	1.35	1.04	0.520
Vanadium	34.8	2.08	0.520
Zinc	72.9	2.08	0.520

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/18/08 10:27
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:10
Sample ID:	H-T5-0.5DUP	Date Analyzed:	07/24/08 22:40
Lab Samp ID:	G195-08	Dilution Factor:	1
Lab File ID:	ID8G029073	Matrix :	SOIL
Ext Btch ID:	IPG069S	% Moisture :	3.7
Calib. Ref.:	ID8G029069	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.4	2.08
Arsenic	2.00	1.04	0.415
Barium	203	1.04	0.208
Beryllium	0.427J	1.04	0.208
Cadmium	ND	1.04	0.519
Chromium	16.2	2.08	1.04
Cobalt	7.84	2.08	1.04
Copper	16.6	2.08	0.519
Lead	11.6	1.04	0.208
Molybdenum	1.41J	5.19	0.519
Nickel	11.9	2.08	1.04
Selenium	ND	1.04	0.519
Silver	ND	2.08	0.519
Thallium	1.39	1.04	0.519
Vanadium	37.1	2.08	0.519
Zinc	104	2.08	0.519

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/18/08 10:34
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:10
Sample ID:	H-T5-2.5	Date Analyzed:	07/24/08 22:45
Lab Samp ID:	G195-09	Dilution Factor:	1
Lab File ID:	ID8G029074	Matrix :	SOIL
Ext Btch ID:	IPG069S	% Moisture :	8.4
Calib. Ref.:	ID8G029069	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.9	2.18
Arsenic	1.87	1.09	0.437
Barium	167	1.09	0.218
Beryllium	0.377J	1.09	0.218
Cadmium	ND	1.09	0.546
Chromium	23.9	2.18	1.09
Cobalt	6.99	2.18	1.09
Copper	13.3	2.18	0.546
Lead	52.7	1.09	0.218
Molybdenum	1.44J	5.46	0.546
Nickel	10.6	2.18	1.09
Selenium	ND	1.09	0.546
Silver	1.15J	2.18	0.546
Thallium	1.43	1.09	0.546
Vanadium	33.3	2.18	0.546
Zinc	98.5	2.18	0.546

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/18/08 11:02
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:10
Sample ID:	H-T5-6.0	Date Analyzed:	07/24/08 22:50
Lab Samp ID:	G195-12	Dilution Factor:	1
Lab File ID:	ID8G029075	Matrix :	SOIL
Ext Btch ID:	IPG069S	% Moisture :	14.9
Calib. Ref.:	ID8G029069	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	11.8	2.35
Arsenic	3.76	1.18	0.470
Barium	282	1.18	0.235
Beryllium	0.618J	1.18	0.235
Cadmium	ND	1.18	0.588
Chromium	28.0	2.35	1.18
Cobalt	14.3	2.35	1.18
Copper	36.1	2.35	0.588
Lead	10.7	1.18	0.235
Molybdenum	ND	5.88	0.588
Nickel	21.4	2.35	1.18
Selenium	ND	1.18	0.588
Silver	ND	2.35	0.588
Thallium	1.98	1.18	0.588
Vanadium	68.2	2.35	0.588
Zinc	101	2.35	0.588

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	07/18/08 11:34
Project	: LMC BEAUMONT SITE 1	Date Received:	07/18/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:10
Sample ID:	H-T5-12.0	Date Analyzed:	07/24/08 22:55
Lab Samp ID:	G195-14	Dilution Factor:	1
Lab File ID:	ID8G029076	Matrix :	SOIL
Ext Btch ID:	IPG069S	% Moisture :	13.6
Calib. Ref.:	ID8G029069	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	11.6	2.31
Arsenic	2.04	1.16	0.463
Barium	187	1.16	0.231
Beryllium	0.404J	1.16	0.231
Cadmium	ND	1.16	0.579
Chromium	15.0	2.31	1.16
Cobalt	8.80	2.31	1.16
Copper	16.1	2.31	0.579
Lead	6.19	1.16	0.231
Molybdenum	ND	5.79	0.579
Nickel	10.9	2.31	1.16
Selenium	ND	1.16	0.579
Silver	ND	2.31	0.579
Thallium	1.18	1.16	0.579
Vanadium	38.5	2.31	0.579
Zinc	66.3	2.31	0.579

METHOD 3010A/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	NA
Project	: LMC BEAUMONT SITE 1	Date Received:	07/23/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:00
Sample ID:	MBLK1W	Date Analyzed:	07/24/08 23:20
Lab Samp ID:	IPG068WB	Dilution Factor:	1
Lab File ID:	ID8G029081	Matrix :	WATER
Ext Btch ID:	IPG068W	% Moisture :	NA
Calib. Ref.:	ID8G029079	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/L)	RL (mg/L)	MDL (mg/L)
Antimony	ND	0.100	0.0400
Arsenic	ND	0.0100	0.00500
Barium	ND	0.0100	0.00200
Beryllium	ND	0.0100	0.00100
Cadmium	ND	0.0100	0.00200
Chromium	ND	0.0100	0.00500
Cobalt	ND	0.0100	0.00500
Copper	ND	0.0100	0.00500
Lead	ND	0.0100	0.00300
Molybdenum	ND	0.0500	0.0100
Nickel	ND	0.0200	0.0100
Selenium	ND	0.0100	0.00500
Silver	ND	0.0100	0.00500
Thallium	ND	0.0100	0.00500
Vanadium	ND	0.0100	0.00500
Zinc	ND	0.0100	0.00500

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 3010A/6010B

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	IPG068WB	IPG068WL	IPG068WC		
LAB FILE ID:	ID8G029081	ID8G029082	ID8G029083		
DATIME EXTRCTD:	07/23/0812:00	07/23/0812:00	07/23/0812:00	DATE COLLECTED:	NA
DATIME ANALYZD:	07/24/0823:20	07/24/0823:25	07/24/0823:30	DATE RECEIVED:	07/23/08
PREP. BATCH:	IPG068W	IPG068W	IPG068W		
CALIB. REF:	ID8G029079	ID8G029079	ID8G029079		

ACCESSION:

PARAMETER	BLNK RSLT mg/L	SPIKE AMT mg/L	BS RSLT mg/L	BS % REC	SPIKE AMT mg/L	BSD RSLT mg/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	5	4.92	98	5	5	100	2	80-120	20
Arsenic	ND	1	1.07	107	1	1.11	111	3	80-120	20
Barium	ND	1	1.02	102	1	1.06	106	5	80-120	20
Beryllium	ND	1	1.01	101	1	1.04	104	4	80-120	20
Cadmium	ND	1	1.05	105	1	1.09	109	4	80-120	20
Chromium	ND	1	1.0	100	1	1.04	104	4	80-120	20
Cobalt	ND	1	1.01	101	1	1.05	105	4	80-120	20
Copper	ND	1	.99	99	1	1.03	103	4	80-120	20
Lead	ND	1	.998	100	1	1.04	104	4	80-120	20
Molybdenum	ND	1	1.04	104	1	1.05	105	1	80-120	20
Nickel	ND	1	1.02	102	1	1.06	106	4	80-120	20
Selenium	ND	1	1.03	103	1	1.07	107	4	80-120	20
Silver	ND	1	.978	98	1	1.02	102	4	80-120	20
Thallium	ND	1	.91	91	1	.94	94	3	80-120	20
Vanadium	ND	1	1.1	110	1	1.14	114	4	80-120	20
Zinc	ND	1	1.06	106	1	1.09	109	3	80-120	20

METHOD 3050B/6010B
METALS BY ICP

Client	: TETRA TECH, INC.	Date Collected:	NA
Project	: LMC BEAUMONT SITE 1	Date Received:	07/23/08
SDG NO.	: 08G195	Date Extracted:	07/23/08 12:10
Sample ID:	MBLK1S	Date Analyzed:	07/24/08 21:35
Lab Samp ID:	IPG069SB	Dilution Factor:	1
Lab File ID:	ID8G029060	Matrix :	SOIL
Ext Btch ID:	IPG069S	% Moisture :	NA
Calib. Ref.:	ID8G029058	Instrument ID :	EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.0	2.00
Arsenic	ND	1.00	0.400
Barium	ND	1.00	0.200
Beryllium	ND	1.00	0.200
Cadmium	ND	1.00	0.500
Chromium	ND	2.00	1.00
Cobalt	ND	2.00	1.00
Copper	ND	2.00	0.500
Lead	ND	1.00	0.200
Molybdenum	ND	5.00	0.500
Nickel	ND	2.00	1.00
Selenium	ND	1.00	0.500
Silver	ND	2.00	0.500
Thallium	ND	1.00	0.500
Vanadium	ND	2.00	0.500
Zinc	ND	2.00	0.500

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1S				
CONTROL NO.:	IPG069SB	IPG069SL	IPG069SC		
LAB FILE ID:	ID8G029060	ID8G029061	ID8G029062		
DATIME EXTRCTD:	07/23/0812:10	07/23/0812:10	07/23/0812:10	DATE COLLECTED:	NA
DATIME ANALYZD:	07/24/0821:35	07/24/0821:40	07/24/0821:45	DATE RECEIVED:	07/23/08
PREP. BATCH:	IPG069S	IPG069S	IPG069S		
CALIB. REF:	ID8G029058	ID8G029058	ID8G029058		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	500	513	103	500	501	100	2	80-120	20
Arsenic	ND	100	109	109	100	107	107	2	80-120	20
Barium	ND	100	102	102	100	97.9	98	4	80-120	20
Beryllium	ND	100	107	107	100	103	103	4	80-120	20
Cadmium	ND	100	107	107	100	105	105	2	80-120	20
Chromium	ND	100	102	102	100	99.4	99	2	80-120	20
Cobalt	ND	100	102	102	100	101	101	2	80-120	20
Copper	ND	100	99.2	99	100	96.6	97	3	80-120	20
Lead	ND	100	101	101	100	99	99	2	80-120	20
Molybdenum	ND	100	105	105	100	103	103	2	80-120	20
Nickel	ND	100	103	103	100	101	101	2	80-120	20
Selenium	ND	100	105	105	100	103	103	2	80-120	20
Silver	ND	100	98.5	98	100	96.4	96	2	80-120	20
Thallium	ND	100	94.1	94	100	92.2	92	2	80-120	20
Vanadium	ND	100	114	114	100	110	110	3	80-120	20
Zinc	ND	100	109	109	100	107	107	2	80-120	20

METHOD 3050B/6010B
METALS BY ICP

Client : TETRA TECH, INC.	Date Collected: NA
Project : LMC BEAUMONT SITE 1	Date Received: 07/31/08
SDG NO. : 08G195	Date Extracted: 07/31/08 09:45
Sample ID: MBLK2S	Date Analyzed: 07/31/08 20:30
Lab Samp ID: IPG092SB	Dilution Factor: 1
Lab File ID: ID8G037073	Matrix : SOIL
Ext Btch ID: IPG092S	% Moisture : NA
Calib. Ref.: ID8G037071	Instrument ID : EMAXTID8

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Antimony	ND	10.0	2.00
Arsenic	ND	1.00	0.400
Barium	ND	1.00	0.200
Beryllium	ND	1.00	0.200
Cadmium	ND	1.00	0.500
Chromium	ND	2.00	1.00
Cobalt	ND	2.00	1.00
Copper	ND	2.00	0.500
Lead	ND	1.00	0.200
Molybdenum	ND	5.00	0.500
Nickel	ND	2.00	1.00
Selenium	ND	1.00	0.500
Silver	ND	2.00	0.500
Thallium	ND	1.00	0.500
Vanadium	ND	2.00	0.500
Zinc	ND	2.00	0.500

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK2S				
CONTROL NO.:	IPG092SB	IPG092SL	IPG092SC		
LAB FILE ID:	ID8G037073	ID8G037074	ID8G037075		
DATIME EXTRCTD:	07/31/0809:45	07/31/0809:45	07/31/0809:45	DATE COLLECTED:	NA
DATIME ANALYZD:	07/31/0820:30	07/31/0820:35	07/31/0820:40	DATE RECEIVED:	07/31/08
PREP. BATCH:	IPG092S	IPG092S	IPG092S		
CALIB. REF:	ID8G037071	ID8G037071	ID8G037071		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	500	493	99	500	487	97	1	80-120	20
Arsenic	ND	100	99.6	100	100	97	97	3	80-120	20
Barium	ND	100	97.8	98	100	99.6	100	2	80-120	20
Beryllium	ND	100	102	102	100	104	104	2	80-120	20
Cadmium	ND	100	101	101	100	101	101	0	80-120	20
Chromium	ND	100	95.8	96	100	94.7	95	1	80-120	20
Cobalt	ND	100	99.3	99	100	98.7	99	1	80-120	20
Copper	ND	100	97.1	97	100	98.4	98	1	80-120	20
Lead	ND	100	96.9	97	100	96.7	97	0	80-120	20
Molybdenum	ND	100	101	101	100	102	102	1	80-120	20
Nickel	ND	100	98.6	99	100	98.4	98	0	80-120	20
Selenium	ND	100	97.5	98	100	95.2	95	2	80-120	20
Silver	ND	100	96.5	96	100	95.9	96	1	80-120	20
Thallium	ND	100	95.8	96	100	96	96	0	80-120	20
Vanadium	ND	100	107	107	100	109	109	1	80-120	20
Zinc	ND	100	99.2	99	100	98	98	1	80-120	20

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 3050B/6010B

MATRIX: SOIL % MOISTURE: 5.9

DILTN FACTR:	1	1	1		
SAMPLE ID:	H-T11-10.0DUP				
CONTROL NO.:	G195-06	G195-06M	G195-06S		
LAB FILE ID:	ID8G037079	ID8G037076	ID8G037077		
DATIME EXTRCTD:	07/31/0809:45	07/31/0809:45	07/31/0809:45	DATE COLLECTED:	07/18/08 09:35
DATIME ANALYZD:	07/31/0820:59	07/31/0820:45	07/31/0820:50	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG092S	IPG092S	IPG092S		
CALIB. REF:	ID8G037071	ID8G037071	ID8G037071		

ACCESSION:

PARAMETER	SMPL RSLT mg/kg	SPIKE AMT mg/kg	MS RSLT mg/kg	MS % REC	SPIKE AMT mg/kg	MSD RSLT mg/kg	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Antimony	ND	531	109	21*	531	109	20*	1	75-125	20
Arsenic	2.89	106	96.5	88	106	97.4	89	1	75-125	20
Barium	85.1	106	184	93	106	178	88	3	75-125	20
Beryllium	.271J	106	98.4	92	106	95	89	4	75-125	20
Cadmium	ND	106	97.1	91	106	96.3	91	1	75-125	20
Chromium	4.89	106	96.4	86	106	96	86	0	75-125	20
Cobalt	3.31	106	99.2	90	106	98.7	90	0	75-125	20
Copper	ND	106	96.8	91	106	93.7	88	3	75-125	20
Lead	2.35	106	95.7	88	106	94.8	87	1	75-125	20
Molybdenum	ND	106	92.4	87	106	91.2	86	1	75-125	20
Nickel	2.69	106	98.2	90	106	97.1	89	1	75-125	20
Selenium	.578J	106	91.5	86	106	92.7	87	1	75-125	20
Silver	ND	106	95.1	90	106	94.5	89	1	75-125	20
Thallium	ND	106	91.6	86	106	90.9	86	1	75-125	20
Vanadium	20	106	124	98	106	120	95	3	75-125	20
Zinc	42.8	106	135	87	106	135	87	1	75-125	20

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3010A/6010B

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	03831GW120	03831GW120DL		
EMAX SAMP ID:	G234-03	G234-03J		
LAB FILE ID:	ID8G031068	ID8G031069		
DATE EXTRACTED:	07/23/0812:00	07/23/0812:00	DATE COLLECTED:	07/22/08 17:20
DATE ANALYZED:	07/25/0820:34	07/25/0820:39	DATE RECEIVED:	07/23/08
PREP. BATCH:	IPG068W	IPG068W		
CALIB. REF:	ID8G031065	ID8G031065		

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SERIAL DIL RSLT (mg/L)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Arsenic	0.833	0.771	8	10
Barium	0.136	0.137	1	10
Beryllium	ND	ND	0	10
Cadmium	ND	ND	0	10
Chromium	ND	ND	0	10
Cobalt	ND	ND	0	10
Copper	ND	ND	0	10
Lead	0.00321J	ND	NA	10
Molybdenum	ND	ND	0	10
Nickel	0.0450	ND	NA	10
Selenium	0.0132	ND	NA	10
Silver	ND	ND	0	10
Thallium	ND	ND	0	10
Vanadium	0.120	0.118	2	10
Zinc	0.00584J	ND	NA	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL		% MOISTURE:	4.5
DILUTION FACTOR:	1	5		
SAMPLE ID:	H-T11-0.5	H-T11-0.5DL		
EMAX SAMP ID:	G195-02	G195-02J		
LAB FILE ID:	ID8G029064	ID8G029065		
DATE EXTRACTED:	07/23/0812:10	07/23/0812:10	DATE COLLECTED:	07/18/08 08:43
DATE ANALYZED:	07/24/0821:55	07/24/0822:00	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG069S	IPG069S		
CALIB. REF:	ID8G029058	ID8G029058		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Arsenic	5.97	6.62	11*	10
Barium	271	287	6	10
Beryllium	0.581J	ND	NA	10
Cadmium	ND	ND	0	10
Chromium	17.4	18.7	8	10
Cobalt	9.50	9.70J	NA	10
Copper	20.3	21.5	6	10
Lead	10.8	11.8	9	10
Molybdenum	ND	ND	0	10
Nickel	14.1	14.6	4	10
Selenium	ND	ND	0	10
Silver	ND	ND	0	10
Thallium	ND	ND	0	10
Vanadium	45.0	48.1	7	10
Zinc	75.1	78.3	4	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
BATCH NO.: 08G195
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL		% MOISTURE:	5.9
DILUTION FACTOR:	1	5		
SAMPLE ID:	H-T11-10.0DUP	H-T11-10.0DUPDL		
EMAX SAMP ID:	G195-06	G195-06J		
LAB FILE ID:	ID8G037079	ID8G037080		
DATE EXTRACTED:	07/31/0809:45	07/31/0809:45	DATE COLLECTED:	07/18/08 09:35
DATE ANALYZED:	07/31/0820:59	07/31/0821:04	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG092S	IPG092S		
CALIB. REF:	ID8G037071	ID8G037071		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Antimony	ND	ND	0	10
Arsenic	2.89	2.73J	NA	10
Barium	85.1	90.3	6	10
Beryllium	0.271J	ND	NA	10
Cadmium	ND	ND	0	10
Chromium	4.89	ND	NA	10
Cobalt	3.31	ND	NA	10
Copper	ND	ND	0	10
Lead	2.35	2.50J	NA	10
Molybdenum	ND	ND	0	10
Nickel	2.69	ND	NA	10
Selenium	0.578J	ND	NA	10
Silver	ND	ND	0	10
Thallium	ND	ND	0	10
Vanadium	20.0	20.6	3	10
Zinc	42.8	42.6	0	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 3010A/6010B

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: 03831GW120
CONTROL NO.: G234-03 G234-03A
LAB FILE ID: ID8G031068 ID8G031067
DATIME EXTRCTD: 07/23/0812:00 07/23/0812:00 DATE COLLECTED: 07/22/08 17:20
DATIME ANALYZD: 07/25/0820:34 07/25/0820:29 DATE RECEIVED: 07/23/08
PREP. BATCH: IPG068W IPG068W
CALIB. REF: ID8G031065 ID8G031065

ACCESSION:

PARAMETER	SMPL RSLT (mg/L)	SPIKE AMT (mg/L)	AS RSLT (mg/L)	AS % REC	QC LIMIT (%)
Antimony	ND	5	5.18	104	75-125
Arsenic	.833	1	1.93	110	75-125
Barium	.136	1	1.13	99	75-125
Beryllium	ND	1	.995	99	75-125
Cadmium	ND	1	1.08	108	75-125
Chromium	ND	1	.994	99	75-125
Cobalt	ND	1	1.01	101	75-125
Copper	ND	1	.989	99	75-125
Lead	.00321J	1	1.01	101	75-125
Molybdenum	ND	1	1.01	101	75-125
Nickel	.045	1	1.05	101	75-125
Selenium	.0132	1	1.18	116	75-125
Silver	ND	1	.882	88	75-125
Thallium	ND	1	.952	95	75-125
Vanadium	.12	1	1.23	111	75-125
Zinc	.00584J	1	1.07	106	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 3050B/6010B

MATRIX: SOIL % MOISTURE: 4.5
DILTN FACTR: 1 1
SAMPLE ID: H-T11-0.5
CONTROL NO.: G195-02 G195-02A
LAB FILE ID: ID8G029064 ID8G029063
DATIME EXTRCTD: 07/23/0812:10 07/23/0812:10 DATE COLLECTED: 07/18/08 08:43
DATIME ANALYZD: 07/24/0821:55 07/24/0821:50 DATE RECEIVED: 07/18/08
PREP. BATCH: IPG069S IPG069S
CALIB. REF: ID8G029058 ID8G029058

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Antimony	ND	524	520	99	75-125
Arsenic	5.97	105	122	111	75-125
Barium	271	105	381	105	75-125
Beryllium	.581J	105	109	103	75-125
Cadmium	ND	105	114	109	75-125
Chromium	17.4	105	123	100	75-125
Cobalt	9.5	105	119	104	75-125
Copper	20.3	105	128	103	75-125
Lead	10.8	105	117	101	75-125
Molybdenum	ND	105	110	105	75-125
Nickel	14.1	105	123	104	75-125
Selenium	ND	105	111	106	75-125
Silver	ND	105	109	104	75-125
Thallium	ND	105	96.3	92	75-125
Vanadium	45	105	163	113	75-125
Zinc	75.1	105	189	109	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: TETRA TECH, INC.
PROJECT: LMC BEAUMONT SITE 1
SDG NO.: 08G195
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL		% MOISTURE:	5.9
DILTN FACTR:	1	1		
SAMPLE ID:	H-T11-10.0DUP			
CONTROL NO.:	G195-06	G195-06A		
LAB FILE ID:	ID8G037079	ID8G037078		
DATIME EXTRCTD:	07/31/0809:45	07/31/0809:45	DATE COLLECTED:	07/18/08 09:35
DATIME ANALYZD:	07/31/0820:59	07/31/0820:55	DATE RECEIVED:	07/18/08
PREP. BATCH:	IPG092S	IPG092S		
CALIB. REF:	ID8G037071	ID8G037071		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Antimony	ND	531	518	98	75-125
Arsenic	2.89	106	114	105	75-125
Barium	85.1	106	191	99	75-125
Beryllium	.271J	106	110	103	75-125
Cadmium	ND	106	111	104	75-125
Chromium	4.89	106	110	99	75-125
Cobalt	3.31	106	113	103	75-125
Copper	ND	106	108	101	75-125
Lead	2.35	106	109	100	75-125
Molybdenum	ND	106	105	99	75-125
Nickel	2.69	106	111	102	75-125
Selenium	.578J	106	109	102	75-125
Silver	ND	106	110	103	75-125
Thallium	ND	106	104	98	75-125
Vanadium	20	106	137	110	75-125
Zinc	42.8	106	150	101	75-125

TRACE-LOW ICP QC CHECK TABLE

QC	ICV HIGH	ICV	CCV	ICSAB	ICSA
Limit%	95-105	90-110	90-110	80-120	80-120
Comp	mg/L	mg/L	mg/L	mg/L	mg/L
Al	10	5	5	500	500
Sb	1	0.5	0.5	1	0
As	1	0.5	0.5	1	0
Ba	1	0.5	0.5	0.5	0
Be	1	0.5	0.5	0.5	0
B	1	0.5	0.5	0.5	0
Cd	1	0.5	0.5	1	0
Ca	100	50	50	500	500
Cr	1	0.5	0.5	0.5	0
Co	1	0.5	0.5	0.5	0
Cu	1	0.5	0.5	0.5	0
Fe	10	5	5	200	200
Pb	1	0.5	0.5	1	0
Li	1	0.5	0.5	0.5	0
Mg	100	50	50	500	500
Mn	1	0.5	0.5	0.5	0
Mo	1	0.5	0.5	1	0
Ni	1	0.5	0.5	1	0
K	100	50	50	75	0
Se	1	0.5	0.5	1	0
Si	1	0.5	0.5	1	0
Ag	1	0.5	0.5	1	0
Na	100	50	50	75	0
Sr	1	0.5	0.5	0.5	0
Tl	1	0.5	0.5	1	0
Sn	1	0.5	0.5	1	0
Ti	1	0.5	0.5	1	0
U	10	5	5	1	0
V	1	0.5	0.5	0.5	0
Zn	1	0.5	0.5	1	0

ANALYSIS RUN LOG
for
ICP

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/24/08 16:38

End Date: 7/25/08 9:07

Comments:

- CCB16,17,18 Zn 73xIDL
- Associated samples - Zn result greater than 10X Zn contamination level.

Book #: AD8-006

Instrument No.: D8

Analytical Batch: ID86029

Analytical Sequence: S_6086010(v45)

Method File: 6086010(v45)

SOP #	Rev. #
☑ EMAX-6010	5
☐ EMAX-200.7	0
☐ EMAX-	

STANDARDS ID	
S0	Sm1B11·32·01
S1	NA
S2	Sm1B11·29.04
S3	NA
S4	NA
S5	Sm1B11·19·06
S6	NA
S7	NA
S8	Sm1B11·28·02
S9	NA
S11	Sm1B11·29.04
S17	·29.05
ICV	·28·03
CCV	·33·04
ICSA	·32·02
ICSAB	·30.02
CRI/MRL MRL 2 Bumplow	Sm1B11.25·01
MRL Station	·29·02

Analyzed By: JC

Date: 7/25/08

SEQUENCE FILE : ID8G029

4-18	19-33	34-43	44-53	54-63
LFID	LSID	TIME	DATE	DF
ID8G029001	Blank	16:38	07/24/08	1.000
ID8G029002	S2	16:43	07/24/08	1.000
ID8G029003	S5	16:48	07/24/08	1.000
ID8G029004	S8	16:53	07/24/08	1.000
ID8G029005	S11	16:58	07/24/08	1.000
ID8G029006	S17	17:03	07/24/08	1.000
ID8G029007	ICV	17:08	07/24/08	1.000
ID8G029008	ICB	17:13	07/24/08	1.000
ID8G029009	MRL	17:18	07/24/08	1.000
ID8G029010	ICSA	17:23	07/24/08	1.000
ID8G029011	ICSAB	17:29	07/24/08	1.000
ID8G029012	CCV1	17:34	07/24/08	1.000
ID8G029013	CCB1	17:39	07/24/08	1.000
ID8G029014	MRL2	17:44	07/24/08	1.000
ID8G029015	IPG056WB	17:49	07/24/08	1.000
ID8G029016	IPG056WL	17:54	07/24/08	1.000
ID8G029017	IPG056WC	17:59	07/24/08	1.000
ID8G029018	G153-02M	18:04	07/24/08	1.000
ID8G029019	G153-02S	18:09	07/24/08	1.000
ID8G029020	G153-02A	18:14	07/24/08	1.000
ID8G029021	G153-02	18:19	07/24/08	1.000
ID8G029022	G153-02J	18:24	07/24/08	5.000
ID8G029023	BLANK	18:29	07/24/08	1.000
ID8G029024	CCV2	18:34	07/24/08	1.000
ID8G029025	CCB2	18:39	07/24/08	1.000
ID8G029026	G153-03	18:44	07/24/08	1.000
ID8G029027	G153-05	18:49	07/24/08	1.000
ID8G029028	G153-06	18:54	07/24/08	1.000
ID8G029029	G153-07	19:00	07/24/08	1.000
ID8G029030	G153-08	19:05	07/24/08	1.000
ID8G029031	G146-01	19:10	07/24/08	1.000
ID8G029032	G194-01	19:15	07/24/08	1.000
ID8G029033	BLANK	19:20	07/24/08	1.000
ID8G029034	CCV3	19:25	07/24/08	1.000
ID8G029035	CCB3	19:30	07/24/08	1.000
ID8G029036	IPG066SB	19:35	07/24/08	1.000
ID8G029037	IPG066SL	19:40	07/24/08	1.000
ID8G029038	IPG066SC	19:45	07/24/08	1.000
ID8G029039	G485-01A	19:50	07/24/08	1.000
ID8G029040	G485-01	19:54	07/24/08	1.000
ID8G029041	G485-01J	19:59	07/24/08	5.000
ID8G029042	G485-02	20:05	07/24/08	1.000
ID8G029043	G485-03	20:10	07/24/08	1.000
ID8G029044	G485-04	20:15	07/24/08	1.000
ID8G029045	BLANK	20:20	07/24/08	1.000
ID8G029046	CCV4	20:25	07/24/08	1.000
ID8G029047	CCB4	20:30	07/24/08	1.000
ID8G029048	G485-05	20:35	07/24/08	1.000
ID8G029049	G485-06	20:40	07/24/08	1.000
ID8G029050	G485-07	20:45	07/24/08	1.000
ID8G029051	G485-08	20:50	07/24/08	1.000
ID8G029052	G485-09	20:55	07/24/08	1.000
ID8G029053	G485-10	21:00	07/24/08	1.000

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ID8G029054	G485-11	21:05	07/24/08	1.000
ID8G029055	G485-12	21:10	07/24/08	1.000
ID8G029056	G485-13	21:15	07/24/08	1.000
ID8G029057	BLANK	21:20	07/24/08	1.000
ID8G029058	CCV5	21:25	07/24/08	1.000
ID8G029059	CCB5	21:30	07/24/08	1.000
ID8G029060	IPG069SB	21:35	07/24/08	1.000
ID8G029061	IPG069SL	21:40	07/24/08	1.000
ID8G029062	IPG069SC	21:45	07/24/08	1.000
ID8G029063	G195-02A	21:50	07/24/08	1.000
ID8G029064	G195-02	21:55	07/24/08	1.000
ID8G029065	G195-02J	22:00	07/24/08	5.000
ID8G029066	G195-04	22:05	07/24/08	1.000
ID8G029067	G195-05	22:10	07/24/08	1.000
ID8G029068	BLANK	22:15	07/24/08	1.000
ID8G029069	CCV6	22:20	07/24/08	1.000
ID8G029070	CCB6	22:25	07/24/08	1.000
ID8G029071	G195-06	22:30	07/24/08	1.000
ID8G029072	G195-07	22:35	07/24/08	1.000
ID8G029073	G195-08	22:40	07/24/08	1.000
ID8G029074	G195-09	22:45	07/24/08	1.000
ID8G029075	G195-12	22:50	07/24/08	1.000
ID8G029076	G195-14	22:55	07/24/08	1.000
ID8G029077	G234-01	23:00	07/24/08	1.000
ID8G029078	BLANK	23:05	07/24/08	1.000
ID8G029079	CCV7	23:10	07/24/08	1.000
ID8G029080	CCB7	23:15	07/24/08	1.000
ID8G029081	IPG068WB	23:20	07/24/08	1.000
ID8G029082	IPG068WL	23:25	07/24/08	1.000
ID8G029083	IPG068WC	23:30	07/24/08	1.000
ID8G029084	G234-03A	23:35	07/24/08	1.000
ID8G029085	G234-03	23:40	07/24/08	1.000
ID8G029086	G234-03J	23:45	07/24/08	5.000
ID8G029087	G234-03	23:50	07/24/08	1.000
ID8G029088	G234-02	23:55	07/24/08	1.000
ID8G029089	G234-02	00:01	07/25/08	5.000
ID8G029090	BLANK	00:06	07/25/08	1.000
ID8G029091	CCV8	00:11	07/25/08	1.000
ID8G029092	CCB8	00:16	07/25/08	1.000
ID8G029093	G188-01	00:21	07/25/08	1.000
ID8G029094	G195-01	00:26	07/25/08	1.000
ID8G029095	G511-01	00:31	07/25/08	1.000
ID8G029096	G511-02	00:36	07/25/08	1.000
ID8G029097	G511-03	00:41	07/25/08	1.000
ID8G029098	G511-04	00:46	07/25/08	1.000
ID8G029099	G511-05	00:52	07/25/08	1.000
ID8G029100	BLANK	00:57	07/25/08	1.000
ID8G029101	CCV9	01:02	07/25/08	1.000
ID8G029102	CCB9	01:07	07/25/08	1.000
ID8G029103	IPG065SB	01:12	07/25/08	1.000
ID8G029104	IPG065SL	01:17	07/25/08	1.000
ID8G029105	IPG065SC	01:22	07/25/08	1.000
ID8G029106	G521-01A	01:27	07/25/08	1.000
ID8G029107	G521-01	01:31	07/25/08	1.000
ID8G029108	G521-01J	01:36	07/25/08	5.000
ID8G029109	G521-02	01:41	07/25/08	1.000

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ID8G029110	G521-03	01:46	07/25/08	1.000
ID8G029111	G521-04	01:51	07/25/08	1.000
ID8G029112	BLANK	01:56	07/25/08	1.000
ID8G029113	CCV10	02:01	07/25/08	1.000
ID8G029114	CCB10	02:06	07/25/08	1.000
ID8G029115	G521-05	02:11	07/25/08	1.000
ID8G029116	G521-06	02:16	07/25/08	1.000
ID8G029117	G521-07	02:21	07/25/08	1.000
ID8G029118	G521-08	02:26	07/25/08	1.000
ID8G029119	G521-09	02:31	07/25/08	1.000
ID8G029120	G521-10	02:36	07/25/08	1.000
ID8G029121	G521-11	02:41	07/25/08	1.000
ID8G029122	G521-12	02:46	07/25/08	1.000
ID8G029123	G521-13	02:51	07/25/08	1.000
ID8G029124	BLANK	02:56	07/25/08	1.000
ID8G029125	CCV11	03:01	07/25/08	1.000
ID8G029126	CCB11	03:06	07/25/08	1.000
ID8G029127	G521-14	03:11	07/25/08	1.000
ID8G029128	G521-15	03:16	07/25/08	1.000
ID8G029129	G521-16	03:21	07/25/08	1.000
ID8G029130	G521-17	03:26	07/25/08	1.000
ID8G029131	G521-18	03:31	07/25/08	1.000
ID8G029132	BLANK	03:36	07/25/08	1.000
ID8G029133	CCV12	03:41	07/25/08	1.000
ID8G029134	CCB12	03:46	07/25/08	1.000
ID8G029135	IPG064WB	03:51	07/25/08	1.000
ID8G029136	IPG064WL	03:56	07/25/08	1.000
ID8G029137	IPG064WC	04:00	07/25/08	1.000
ID8G029138	TXG009WB	04:05	07/25/08	1.000
ID8G029139	G483-04A	04:10	07/25/08	5.000
ID8G029140	G483-04	04:15	07/25/08	5.000
ID8G029141	G483-04J	04:20	07/25/08	25.00
ID8G029142	BLANK	04:25	07/25/08	1.000
ID8G029143	BLANK	04:31	07/25/08	1.000
ID8G029144	BLANK	04:36	07/25/08	1.000
ID8G029145	CCV13	04:41	07/25/08	1.000
ID8G029146	CCB13	04:45	07/25/08	1.000
ID8G029147	G483-04A	04:51	07/25/08	10.00
ID8G029148	G483-04	04:55	07/25/08	10.00
ID8G029149	G483-04J	05:00	07/25/08	50.00
ID8G029150	BLANK	05:05	07/25/08	1.000
ID8G029151	BLANK	05:11	07/25/08	1.000
ID8G029152	BLANK	05:16	07/25/08	1.000
ID8G029153	CCV14	05:21	07/25/08	1.000
ID8G029154	CCB14	05:25	07/25/08	1.000
ID8G029155	G481-16	05:31	07/25/08	50.00
ID8G029156	G481-21A	05:36	07/25/08	10.00
ID8G029157	G481-21	05:41	07/25/08	10.00
ID8G029158	G481-21J	05:46	07/25/08	50.00
ID8G029159	G481-48	05:51	07/25/08	10.00
ID8G029160	G482-23	05:56	07/25/08	10.00
ID8G029161	G482-26	06:01	07/25/08	10.00
ID8G029162	G482-39	06:06	07/25/08	50.00
ID8G029163	BLANK	06:11	07/25/08	1.000
ID8G029164	BLANK	06:16	07/25/08	1.000
ID8G029165	CCV15	06:21	07/25/08	1.000

ID8G029166	CCB15	06:26	07/25/08	1.000
ID8G029167	G482-67	06:31	07/25/08	10.00
ID8G029168	G482-71	06:36	07/25/08	10.00
ID8G029169	G482-74	06:41	07/25/08	100.0
ID8G029170	G482-110	06:46	07/25/08	50.00
ID8G029171	G482-112	06:51	07/25/08	50.00
ID8G029172	G482-115	06:56	07/25/08	50.00
ID8G029173	G482-116	07:01	07/25/08	10.00
ID8G029174	BLANK	07:06	07/25/08	1.000
ID8G029175	BLANK	07:11	07/25/08	1.000
ID8G029176	CCV16	07:16	07/25/08	1.000
ID8G029177	CCB16	07:21	07/25/08	1.000
ID8G029178	IPG073WB	07:26	07/25/08	1.000
ID8G029179	IPG073WL	07:31	07/25/08	1.000
ID8G029180	IPG073WC	07:36	07/25/08	1.000
ID8G029181	WTG006SB	07:41	07/25/08	1.000
ID8G029182	G531-03A	07:46	07/25/08	5.000
ID8G029183	G531-03	07:51	07/25/08	5.000
ID8G029184	G531-03J	07:56	07/25/08	25.00
ID8G029185	BLANK	08:01	07/25/08	1.000
ID8G029186	BLANK	08:06	07/25/08	1.000
ID8G029187	BLANK	08:11	07/25/08	1.000
ID8G029188	CCV17	08:16	07/25/08	1.000
ID8G029189	CCB17	08:21	07/25/08	1.000
ID8G029190	G531-03M	08:26	07/25/08	5.000
ID8G029191	G531-03S	08:31	07/25/08	5.000
ID8G029192	G531-01	08:36	07/25/08	5.000
ID8G029193	G531-02	08:41	07/25/08	5.000
ID8G029194	BLANK	08:47	07/25/08	1.000
ID8G029195	BLANK	08:52	07/25/08	1.000
ID8G029196	BLANK	08:57	07/25/08	1.000
ID8G029197	CCV18	09:02	07/25/08	1.000
ID8G029198	CCB18	09:07	07/25/08	1.000

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SDG : 8G195 UNIT : % SUMMARY of ICV and CCV : ID8G029 DATE : 07/24/08

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	98	100	102	95	96	101	99	97	100	95	97	98	97	94	101	100	97	100	98	97	95	97	103
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	88	----	----	----	----	----	93	----	----	----	86	----	98	----	----	----	----	----	----	----	----	----	----
ICSAB	88	104	106	104	95	105	93	94	101	103	89	96	99	92	109	100	105	105	110	103	93	99	103
CCV1	100	102	102	100	97	105	99	97	104	99	96	99	98	96	105	103	99	101	99	100	98	101	104
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
MRL2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	98	103	103	103	101	106	102	97	105	100	95	100	99	100	106	104	103	102	99	102	100	103	105
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G146-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G194-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	97	102	102	100	97	106	99	98	105	99	96	100	98	97	106	104	100	101	100	100	98	102	105
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	100	102	104	103	101	107	103	98	105	100	97	100	101	101	106	104	103	103	100	102	99	103	107
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G485-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	100	102	104	101	98	106	101	99	104	100	98	100	100	97	106	103	100	103	101	101	97	103	106	
CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	99	103	109	100	99	105	103	102	102	99	102	100	106	97	104	102	96	109	101	101	93	103	107	
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	102	103	107	103	99	105	102	100	103	100	102	100	104	97	105	102	98	106	102	103	93	102	105	
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	100	102	109	102	97	105	101	101	102	99	103	100	105	95	106	102	96	109	101	103	91	102	106	
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	101	101	106	102	94	104	97	100	103	100	102	100	101	90	107	103	95	106	102	104	92	101	104	
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G521-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	102	102	108	105	98	105	101	101	102	100	103	100	104	95	106	102	99	108	102	105	92	103	106	
CCB10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	101	102	107	103	95	105	98	100	103	100	102	100	100	91	106	103	98	107	101	104	92	102	105	
CCB11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	95	106	110	102	94	105	98	97	104	97	94	101	98	91	106	104	106	111*	98	107	95	100	107	
CCB12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG009WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	100	101	105	103	93	105	97	99	104	100	100	100	98	90	107	103	98	104	101	104	93	101	104	
CCB13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	100	102	106	103	95	105	98	100	104	100	100	100	99	91	106	103	98	106	101	105	93	102	105	
CCB14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-48	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-39	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	101	102	106	106	96	106	99	99	104	101	100	100	99	93	107	104	101	105	101	106	96	102	105	

CCB15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-74	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-110	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-112	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-115	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-116	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV16	99	101	105	102	94	105	97	100	104	100	100	101	98	90	107	103	98	105	101	104	94	101	105	
CCB16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WTG006SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV17	100	101	105	103	94	105	97	100	103	100	100	101	98	90	107	103	99	105	101	105	94	101	105	
CCB17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV18	99	101	106	103	96	104	99	100	103	99	99	100	99	91	106	102	101	105	101	105	93	101	105	
CCB18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

SGS

SDG : 8G195 UNIT : UG/L SUMMARY of CALIBRATION BLANKS : ID8G029 (WATER) DATE : 07/24/08

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	-2.19	-.090	-.980	-.080	.210	.130	16.4	.130	.060	-.090	-.660	.220	16.8	.340	.230	.010	-83.1	-1.11	.200	.280	-.490	.170	-.200
MRL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	----	-1.99	-1.75	-.220	-.050	-1.02	----	.230	-1.16	2.47	----	1.66	----	-.470	-3.24	3.72	14.3	4.04	.420	91.1	6.04	.330	5.11
ICSAB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	34.8	.320	-.510	.260	.230	.120	122	.140	-.010	.200	13.6	-.200	41.0	.400	.360	.080	-101	-.230	.320	12.6	.580	.290	2.57
MRL2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	3.91	1.37	-.870	.250	.430	.090	46.7	.200	.000	.250	1.63	.640	37.5	.310	.290	.020	-37.1	.040	.200	66.1	.280	.350	-.030
G153-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G146-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G194-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	4.49	.560	-.500	.340	.450	.080	55.4	.200	.110	.360	3.56	.310	33.9	.510	.220	-.050	-50.1	-.220	.390	85.5	.120	.360	.480
IPG066SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	1.62	.980	-.650	.110	.360	.130	40.5	.160	-.020	.400	1.51	.260	25.9	.650	.370	.040	-23.6	.330	.400	50.9	.210	.460	.020
G485-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

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G485-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB5	.740	.870	-.960	.310	.550	.070	55.6	.160	-.040	.250	1.62	.150	28.0	.770	.190	-.100	-55.4	-1.03	.280	52.7	-.080	.490	.000	
IPG069SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	-1.05	1.08	-1.10	.270	.410	.120	55.7	.390	.030	.330	-.330	.850	23.0	.760	.210	.060	39.1	-.560	.160	40.7	.700	.410	.950	
G195-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	-1.98	-.830	-1.05	-.080	.040	.060	8.94	.110	-.100	.370	.100	.180	-3.81	.060	.050	.110	-5.33	-2.22	.050	-.540	.570	.100	.200	
IPG068WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	-6.54	.370	-.660	-.310	.080	.000	.050	.040	-.020	.260	-6.73	.300	-9.47	.090	.130	.020	-5.82	-.490	.170	62.1	.250	.160	-.050	
G188-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	-3.08	.520	-.600	.160	.450	.100	40.9	.270	-.020	.830	-.550	.750	37.4	.650	.150	.350	-16.0	-.650	.270	119	-.290	.430	.300	
IPG065SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

JCG

G521-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB10	-2.53	1.59	-.590	.000	.430	.090	42.6	.280	-.110	.610	-6.25	.420	43.8	.510	.250	.010	-10.9	-1.05	.100	84.0	-.090	.380	.020
G521-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB11	-3.08	-.910	-2.18	.190	.390	.060	45.5	.190	.000	.420	.000	-.040	21.5	.680	.150	.010	21.1	-1.36	.200	60.2	.220	.490	.500
G521-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB12	-4.50	-.840	-1.32	-.170	.320	.070	26.3	.120	.030	.440	.020	.540	31.2	.460	.120	.090	-1.51	.370	.180	43.6	.960	.450	1.04
IPG064WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG009WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB13	-1.23	.020	-1.24	.100	.460	.090	156	.190	.040	.450	1.53	.140	35.1	.580	.160	.050	6.46	-.740	.200	52.1	-.190	.560	5.26
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB14	-1.78	.400	-1.01	.100	.390	.070	149	.260	-.090	.560	-.490	.690	39.3	.580	.260	.100	5.76	-1.11	.230	52.3	.970	.390	5.22
G481-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-48	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-39	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CCB15	.640	.000	-1.47	.050	.360	.030	159	.150	.040	.410	-.260	.720	22.3	.880	.210	.010	-16.4	-.450	.250	37.9	-.100	.500	6.35
G482-67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-74	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-110	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-112	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-115	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-116	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB16	-.860	.070	-1.94	.140	.350	.070	133	.060	.110	.630	-1.49	.820	23.7	.410	.150	.080	-15.6	-.430	.160	39.5	-.140	.390	4.81
IPG073WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WTG006SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB17	-1.09	-.730	-.830	-.130	.290	.090	150	.090	.020	.180	.660	.260	8.87	.360	.250	.120	33.1	-1.25	.170	131	-.210	.330	6.11
G531-03M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB18	-2.98	1.35	-1.76	.220	.510	.090	49.8	.220	.020	.350	-1.68	.610	25.2	.640	.220	.120	12.7	-.360	.270	144	.610	.310	.190

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

7039

SDG : 08G029 UNIT : UG/L SUMMARY of CALIBRATION BLANKS : ID8G029 (SOIL) DATE : 07/24/08

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	-2.19	-.090	-.980	-.080	.210	.130	16.4	.130	.060	-.090	-.660	.220	16.8	.340	.230	.010	-83.1	-1.11	.200	.280	-.490	.170	-.200
MRL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	----	-1.99	-1.75	-.220	-.050	-1.02	----	.230	-1.16	2.47	----	1.66	----	-.470	-3.24	3.72	14.3	4.04	.420	91.1	6.04	.330	5.11
ICSAB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	34.8	.320	-.510	.260	.230	.120	122	.140	-.010	.200	13.6	-.200	41.0	.400	.360	.080	-101	-.230	.320	12.6	.580	.290	2.57
MRL2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG056WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	3.91	1.37	-.870	.250	.430	.090	46.7	.200	.000	.250	1.63	.640	37.5	.310	.290	.020	-37.1	.040	.200	66.1	.280	.350	-.030
G153-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G153-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G146-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G194-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	4.49	.560	-.500	.340	.450	.080	55.4	.200	.110	.360	3.56	.310	33.9	.510	.220	-.050	-50.1	-.220	.390	85.5	.120	.360	.480
IPG066SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG066SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	1.62	.980	-.650	.110	.360	.130	40.5	.160	-.020	.400	1.51	.260	25.9	.650	.370	.040	-23.6	.330	.400	50.9	.210	.460	.020
G485-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G485-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G485-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB5	.740	.870	-.960	.310	.550	.070	55.6	.160	-.040	.250	1.62	.150	28.0	.770	.190	-.100	-55.4	-1.03	.280	52.7	-.080	.490	.000	
IPG069SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG069SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-02J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	-1.05	1.08	-1.10	.270	.410	.120	55.7	.390	.030	.330	-.330	.850	23.0	.760	.210	.060	39.1	-.560	.160	40.7	.700	.410	.950	
G195-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	-1.98	-.830	-1.05	-.080	.040	.060	8.94	.110	-.100	.370	.100	.180	-3.81	.060	.050	.110	-5.33	-2.22	.050	-.540	.570	.100	.200	
IPG068WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG068WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	-6.54	.370	-.660	-.310	.080	.000	.050	.040	-.020	.260	-6.73	.300	-9.47	.090	.130	.020	-5.82	-.490	.170	62.1	.250	.160	-.050	
G188-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	-3.08	.520	-.600	.160	.450	.100	40.9	.270	-.020	.830	-.550	.750	37.4	.650	.150	.350	-16.0	-.650	.270	119	-.290	.430	.300	
IPG065SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG065SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G521-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB10	-2.53	1.59	-.590	.000	.430	.090	42.6	.280	-.110	.610	-6.25	.420	43.8	.510	.250	.010	-10.9	-1.05	.100	84.0	-.090	.380	.020	
G521-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB11	-3.08	-.910	-2.18	.190	.390	.060	45.5	.190	.000	.420	.000	-.040	21.5	.680	.150	.010	21.1	-1.36	.200	60.2	.220	.490	.500	
G521-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB12	-4.50	-.840	-1.32	-.170	.320	.070	26.3	.120	.030	.440	.020	.540	31.2	.460	.120	.090	-1.51	.370	.180	43.6	.960	.450	1.04	
IPG064WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG064WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG009WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB13	-1.23	.020	-1.24	.100	.460	.090	156	.190	.040	.450	1.53	.140	35.1	.580	.160	.050	6.46	-.740	.200	52.1	-.190	.560	5.26	
G483-04A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G483-04J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB14	-1.78	.400	-1.01	.100	.390	.070	149	.260	-.090	.560	-.490	.690	39.3	.580	.260	.100	5.76	-1.11	.230	52.3	.970	.390	5.22	
G481-16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-21J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-48	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-23	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-26	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-39	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV15	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CCB15	.640	.000	-1.47	.050	.360	.030	159	.150	.040	.410	-.260	.720	22.3	.880	.210	.010	-16.4	-.450	.250	37.9	-.100	.500	6.35
G482-67	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-71	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-74	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-110	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-112	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-115	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G482-116	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV16	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB16	-.860	.070	-1.94	.140	.350	.070	133	.060	.110	.630	-1.49	.820	23.7	.410	.150	.080	-15.6	-.430	.160	39.5	-.140	.390	4.81
IPG073WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG073WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
WTG006SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB17	-1.09	-.730	-.830	-.130	.290	.090	150	.090	.020	.180	.660	.260	8.87	.360	.250	.120	33.1	-1.25	.170	131	-.210	.330	6.11
G531-03M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-03S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G531-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB18	-2.98	1.35	-1.76	.220	.510	.090	49.8	.220	.020	.350	-1.68	.610	25.2	.640	.220	.120	12.7	-.360	.270	144	.610	.310	.190

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

Sub J

manual (V45) ... incl ID8G029 results to ID8G028.txt

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dil'n Factor	CorrFact	Check	Check Table	Fail Action
1	0	Unk	S0		ID8G029001			1	☐		Continue
2	0	Unk	S2		ID8G029002			1	☐		Continue
3	0	Unk	S5		ID8G029003			1	☐		Continue
4	0	Unk	S8		ID8G029004			1	☐		Continue
5	0	Unk	S11		ID8G029005			1	☐		Continue
6	0	Unk	S17		ID8G029006			1	☐		Continue
7	1	QC	ICV		ID8G029007			1	☒	ICV	Continue
8	2	QC	ICB	Be	ID8G029008			1	☒	3XIDL	Continue
9	3	Unk	MRL	CATIONS	ID8G029009			1	☐		Continue
10	4	QC	ICSA		ID8G029010			1	☒	ICSA	Continue
11	5	QC	ICSAB		ID8G029011			1	☒	ICSAB	Continue
12	6	QC	CCV1		ID8G029012			1	☒	CCV	Continue
13	7	QC	CCB1	Al Be Co Fe 0.01	ID8G029013			1	☒	3XIDL	Continue
14	169	Unk	MRL2	BGMP LOW	ID8G029014			1	☐		Continue
15	8	QC	IPG056WB		ID8G029015			1	☒	CCB1	Continue
16	9	QC	IPG056WL		ID8G029016			1	☒	LCS	Continue
17	10	QC	IPG056WC		ID8G029017			1	☒	LCS	Continue
18	11	Unk	G153-02M		ID8G029018			1	☐		Continue
19	12	Unk	G153-02S		ID8G029019			1	☐		Continue
20	13	Unk	G153-02A		ID8G029020			1	☐		Continue
21	14	Unk	G153-02		ID8G029021			1	☐		Continue
22	15	Unk	G153-02J		ID8G029022			1	☐		Continue
23	17	Unk	BLANK		ID8G029023			1	☐		Continue
24	18	QC	CCV2	Be B. Na	ID8G029024			1	☒	CCV	Continue
25	19	QC	CCB2		ID8G029025			1	☒	3XIDL	Continue
26	16	Unk	G153-03		ID8G029026			1	☐		Continue
27	20	Unk	G153-05		ID8G029027			1	☐		Continue
28	21	Unk	G153-06		ID8G029028			1	☐		Continue
29	22	Unk	G153-07		ID8G029029			1	☐		Continue
30	23	Unk	G153-08		ID8G029030			1	☐		Continue
31	24	Unk	G146-01		ID8G029031			1	☐		Continue
32	25	Unk	G194-01		ID8G029032			1	☐		Continue
33	26	Unk	BLANK		ID8G029033			1	☐		Continue
34	27	QC	CCV3		ID8G029034			1	☒	CCV	Continue
35	28	QC	CCB3	Be Na	ID8G029035			1	☒	3XIDL	Continue
36	29	QC	IPG066SB		ID8G029036			1	☒	CCB1	Continue
37	30	QC	IPG066SL		ID8G029037			1	☒	LCS	Continue
38	31	QC	IPG066SC		ID8G029038			1	☒	LCS	Continue
39	32	Unk	G485-01A		ID8G029039			1	☐		Continue
40	33	Unk	G485-01		ID8G029040			1	☐		Continue
41	34	Unk	G485-01J		ID8G029041			1	☐		Continue
42	35	Unk	G485-02		ID8G029042			1	☐		Continue
43	36	Unk	G485-03		ID8G029043			1	☐		Continue
44	37	Unk	G485-04		ID8G029044			1	☐		Continue
45	38	Unk	BLANK		ID8G029045			1	☐		Continue
46	39	QC	CCV4		ID8G029046			1	☒	CCV	Continue

:15:42

Sequence Sample List (S_G086010(v45)) ← should be (V46). Exported manually to ID8G029

07/25/08 09:15:42

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
47	40	QC	CCB4	Be No	ID8G029047			1	☒	3XIDL	Continue
48	41	Unk	G485-05		ID8G029048			1	☐		Continue
49	42	Unk	G485-06		ID8G029049			1	☐		Continue
50	43	Unk	G485-07		ID8G029050			1	☐		Continue
51	44	Unk	G485-08		ID8G029051			1	☐		Continue
52	45	Unk	G485-09		ID8G029052			1	☐		Continue
53	46	Unk	G485-10		ID8G029053			1	☐		Continue
54	47	Unk	G485-11		ID8G029054			1	☐		Continue
55	48	Unk	G485-12		ID8G029055			1	☐		Continue
56	49	Unk	G485-13		ID8G029056			1	☐		Continue
57	50	Unk	BLANK		ID8G029057			1	☐		Continue
58	51	QC	CCV5		ID8G029058			1	☒	CCV	Continue
59	52	QC	CCB5	Be No	ID8G029059			1	☒	3XIDL	Continue
60	53	QC	IPG069SB	K	ID8G029060			1	☒	CCB1	Continue
61	54	QC	IPG069SL		ID8G029061			1	☒	LCS	Continue
62	55	QC	IPG069SC		ID8G029062			1	☒	LCS	Continue
63	56	Unk	G195-02A		ID8G029063			1	☐		Continue
64	57	Unk	G195-02		ID8G029064			1	☐		Continue
65	58	Unk	G195-02J		ID8G029065			1	☐		Continue
66	59	Unk	G195-04		ID8G029066			1	☐		Continue
67	60	Unk	G195-05		ID8G029067			1	☐		Continue
68	61	Unk	BLANK		ID8G029068			1	☐		Continue
69	62	QC	CCV6		ID8G029069			1	☒	CCV	Continue
70	63	QC	CCB6	Be	ID8G029070			1	☒	3XIDL	Continue
71	64	Unk	G195-06		ID8G029071			1	☐		Continue
72	65	Unk	G195-07		ID8G029072			1	☐		Continue
73	66	Unk	G195-08		ID8G029073			1	☐		Continue
74	67	Unk	G195-09		ID8G029074			1	☐		Continue
75	68	Unk	G195-12		ID8G029075			1	☐		Continue
76	69	Unk	G195-14		ID8G029076			1	☐		Continue
77	70	Unk	G234-01		ID8G029077			1	☐		Continue
78	71	Unk	BLANK		ID8G029078			1	☐		Continue
79	72	QC	CCV7		ID8G029079			1	☒	CCV	Continue
80	73	QC	CCB7		ID8G029080			1	☒	3XIDL	Continue
81	74	QC	IPG068WB		ID8G029081			1	☒	CCB1	Continue
82	75	QC	IPG068WL		ID8G029082			1	☒	LCS	Continue
83	76	QC	IPG068WC		ID8G029083			1	☒	LCS	Continue
84	77	Unk	G234-03A	TOT	ID8G029084			1	☐		Continue
85	78	Unk	G234-03	TOT	ID8G029085			1	☐		Continue
86	79	Unk	G234-03J	TOT	ID8G029086			1	☐		Continue
87	80	Unk	G234-03	DISS	ID8G029087			1	☐		Continue
88	81	Unk	G234-02		ID8G029088			1	☐		Continue
89	82	Unk	G234-02	5X	ID8G029089			1	☐		Continue
90	83	Unk	BLANK		ID8G029090			1	☐		Continue
91	84	QC	CCV8		ID8G029091			1	☒	CCV	Continue
92	85	QC	CCB8		ID8G029092			1	☒	3XIDL	Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Diln Factor	CorrFact	Check	Check Table	Fail Action
93	86	Unk	G188-01		ID8G029093			1	☐		Continue
94	87	Unk	G195-01		ID8G029094			1	☐		Continue
95	88	Unk	G511-01		ID8G029095			1	☐		Continue
96	89	Unk	G511-02	OR Cu. Pb=62	ID8G029096			1	☐		Continue
97	90	Unk	G511-03	OR Cu Zn=52 Ni=138	ID8G029097			1	☐		Continue
98	91	Unk	G511-04	OR Ni=62	ID8G029098			1	☐		Continue
99	92	Unk	G511-05		ID8G029099			1	☐		Continue
100	93	Unk	BLANK		ID8G029100			1	☐		Continue
101	94	QC	CCV9		ID8G029101			1	☒	CCV	Continue
102	95	QC	CCB9		ID8G029102			1	☒	3XIDL	Continue
103	161	QC	IPG065SB		ID8G029103			1	☒	CCB1	Continue
104	162	QC	IPG065SL		ID8G029104			1	☒	LCS	Continue
105	163	QC	IPG065SC		ID8G029105			1	☒	LCS	Continue
106	164	Unk	G521-01A		ID8G029106			1	☐		Continue
107	165	Unk	G521-01		ID8G029107			1	☐		Continue
108	166	Unk	G521-01J		ID8G029108			1	☐		Continue
109	167	Unk	G521-02		ID8G029109			1	☐		Continue
110	168	Unk	G521-03		ID8G029110			1	☐		Continue
111	170	Unk	G521-04		ID8G029111			1	☐		Continue
112	171	Unk	BLANK		ID8G029112			1	☐		Continue
113	172	QC	CCV10		ID8G029113			1	☒	CCV	Continue
114	173	QC	CCB10		ID8G029114			1	☒	3XIDL	Continue
115	174	Unk	G521-05		ID8G029115			1	☐		Continue
116	175	Unk	G521-06		ID8G029116			1	☐		Continue
117	176	Unk	G521-07		ID8G029117			1	☐		Continue
118	177	Unk	G521-08		ID8G029118			1	☐		Continue
119	178	Unk	G521-09		ID8G029119			1	☐		Continue
120	179	Unk	G521-10		ID8G029120			1	☐		Continue
121	180	Unk	G521-11		ID8G029121			1	☐		Continue
122	181	Unk	G521-12		ID8G029122			1	☐		Continue
123	182	Unk	G521-13		ID8G029123			1	☐		Continue
124	183	Unk	BLANK		ID8G029124			1	☐		Continue
125	184	QC	CCV11		ID8G029125			1	☒	CCV	Continue
126	185	QC	CCB11		ID8G029126			1	☒	3XIDL	Continue
127	186	Unk	G521-14		ID8G029127			1	☐		Continue
128	187	Unk	G521-15		ID8G029128			1	☐		Continue
129	188	Unk	G521-16		ID8G029129			1	☐		Continue
130	189	Unk	G521-17	OR Zn=52	ID8G029130			1	☐		Continue
131	190	Unk	G521-18	OR Zn=38	ID8G029131			1	☐		Continue
132	191	Unk	BLANK		ID8G029132			1	☐		Continue
133	192	QC	CCV12		ID8G029133			1	☒	CCV	Continue
134	193	QC	CCB12		ID8G029134			1	☒	3XIDL	Continue
135	96	QC	IPG064WB	Zn?	ID8G029135			1	☒	CCB1	Continue
136	97	QC	IPG064WL		ID8G029136			1	☒	LCS	Continue
137	98	QC	IPG064WC		ID8G029137			1	☒	LCS	Continue
138	99	QC	TXG009WB	TCLP	ID8G029138			1	☒	CCB1	Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilu Factor	CorrFact	Check	Check Table	Fail Action
139	100	Unk	G483-04A	5X TCLP A5✓	ID8G029139			1	☐		Continue
140	101	Unk	G483-04	5X TCLP Zn=0.03328	ID8G029140			1	☐		Continue
141	102	Unk	G483-04J	25X TCLP	ID8G029141			1	☐		Continue
142	103	Unk	BLANK		ID8G029142			1	☐		Continue
143	104	Unk	BLANK		ID8G029143			1	☐		Continue
144	105	Unk	BLANK		ID8G029144			1	☐		Continue
145	106	QC	CCV13		ID8G029145			1	☒	CCV	Continue
146	107	QC	CCB13	Zn=0.00526	ID8G029146			1	☒	3XIDL	Continue
147	108	Unk	G483-04A	10X TCLP A5 50✓	ID8G029147			1	☐		Continue
148	109	Unk	G483-04	10X TCLP 7H	ID8G029148			1	☐		Continue
149	110	Unk	G483-04J	50X TCLP 7H+LW✓	ID8G029149			1	☐		Continue
150	111	Unk	BLANK		ID8G029150			1	☐		Continue
151	112	Unk	BLANK		ID8G029151			1	☐		Continue
152	113	Unk	BLANK		ID8G029152			1	☐		Continue
153	114	QC	CCV14		ID8G029153			1	☒	CCV	Continue
154	115	QC	CCB14	Zn=0.00522	ID8G029154			1	☒	3XIDL	Continue
155	116	Unk	G481-16	50X	ID8G029155			1	☐		Continue
156	117	Unk	G481-21A	10X	ID8G029156			1	☐		Continue
157	118	Unk	G481-21	10X	ID8G029157			1	☐		Continue
158	119	Unk	G481-21J	50X	ID8G029158			1	☐		Continue
159	120	Unk	G481-48	10X	ID8G029159			1	☐		Continue
160	121	Unk	G482-23	10X	ID8G029160			1	☐		Continue
161	122	Unk	G482-26	10X	ID8G029161			1	☐		Continue
162	123	Unk	G482-39	50X	ID8G029162			1	☐		Continue
163	124	Unk	BLANK		ID8G029163			1	☐		Continue
164	125	Unk	BLANK		ID8G029164			1	☐		Continue
165	126	QC	CCV15		ID8G029165			1	☒	CCV	Continue
166	127	QC	CCB15	Zn=0.00635	ID8G029166			1	☒	3XIDL	Continue
167	128	Unk	G482-67	10X	ID8G029167			1	☐		Continue
168	129	Unk	G482-71	10X	ID8G029168			1	☐		Continue
169	130	Unk	G482-74	100X	ID8G029169			1	☐		Continue
170	131	Unk	G482-110	50X	ID8G029170			1	☐		Continue
171	132	Unk	G482-12 112	50X	ID8G029171			1	☐		Continue
172	133	Unk	G482-115 7H+LW68	50X	ID8G029172			1	☐		Continue
173	134	Unk	G482-116	10X	ID8G029173			1	☐		Continue
174	135	Unk	BLANK		ID8G029174			1	☐		Continue
175	136	Unk	BLANK		ID8G029175			1	☐		Continue
176	137	QC	CCV16		ID8G029176			1	☒	CCV	Continue
177	138	QC	CCB16	Zn=0.00481	ID8G029177			1	☒	3XIDL	Continue
178	139	QC	IPG073WB		ID8G029178			1	☒	CCB1	Continue
179	140	QC	IPG073WL		ID8G029179			1	☒	LCS	Continue
180	141	QC	IPG073WC		ID8G029180			1	☒	LCS	Continue
181	142	QC	WTG006SB	STLC	ID8G029181			1	☒	CCB1	Continue
182	143	Unk	G531-03A	5X STLC	ID8G029182			1	☐		Continue
183	144	Unk	G531-03	5X STLC Zn=0.6414	ID8G029183			1	☐		Continue
184	145	Unk	G531-03J	25X STLC	ID8G029184			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
185	146	Unk	BLANK		ID8G029185			1	☐		Continue
186	147	Unk	BLANK		ID8G029186			1	☐		Continue
187	148	Unk	BLANK	TH 7/25/08	ID8G029187			1	☐		Continue
188	149	QC	CCV17	must be 90%	ID8G029188			1	☒	CCV	Continue
189	150	QC	CCB17	Zn = 0.006	ID8G029189			1	☒	3XIDL	Continue
190	151	Unk	G531-03M	5X STLC	ID8G029190			1	☐		Continue
191	152	Unk	G531-03S	5X STLC	ID8G029191			1	☐		Continue
192	153	Unk	G531-01	5X STLC	ID8G029192			1	☐		Continue
193	154	Unk	G531-02	5X STLC	ID8G029193			1	☐		Continue
194	155	Unk	BLANK		ID8G029194			1	☐		Continue
195	156	Unk	BLANK		ID8G029195			1	☐		Continue
196	157	Unk	BLANK		ID8G029196			1	☐		Continue
197	158	QC	CCV18		ID8G029197			1	☒	CCV	Continue
198	159	QC	CCB18		ID8G029198			1	☒	3XIDL	Continue

:15:42

7918

ANALYSIS RUN LOG
for
ICP

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/25/08 14:46

End Date: 7/26/08 01:26

Comments:

CCV5 Cu ↓

CCV 12 Zn ↑

Book #:	AD8-006
Instrument No.:	D8
Analytical Batch:	ID860031
Analytical Sequence:	S_G086010(V49)
Method File:	G086010(V49)

SOP #	Rev. #
☑ EMAX-6010	5
☐ EMAX-200.7	0
☐ EMAX-	

STANDARDS ID	
S0	SM1B11.32.01
S1	NA
S2	SM1B11.29.03
S3	NA
S4	NA
S5	SM1B11.19.06
S6	NA
S7	NA
S8	SM1B11.28.02
S9	NA
S11	SM1B11.29.04
S17	29.05
ICV	28.03
CCV	33.04
ICSA	32.02
ICSAB	30.02
CRI/MRL	NA

Analyzed By: TH

Date:

SEQUENCE FILE : ID8G031

4-18	19-33	34-43	44-53	54-63
LFID	LSID	TIME	DATE	DF
ID8G031001	Blank	14:46	07/25/08	1.000
ID8G031002	S2	14:51	07/25/08	1.000
ID8G031003	S5	14:56	07/25/08	1.000
ID8G031004	S8	15:01	07/25/08	1.000
ID8G031005	S11	15:07	07/25/08	1.000
ID8G031006	S17	15:12	07/25/08	1.000
ID8G031007	ICV	15:17	07/25/08	1.000
ID8G031008	ICB	15:22	07/25/08	1.000
ID8G031009	ICSA	15:27	07/25/08	1.000
ID8G031010	ICSAB	15:32	07/25/08	1.000
ID8G031011	CCV1	15:37	07/25/08	1.000
ID8G031012	CCB1	15:42	07/25/08	1.000
ID8G031013	IPG075SB	15:47	07/25/08	1.000
ID8G031014	IPG075SL	15:52	07/25/08	1.000
ID8G031015	IPG075SC	15:57	07/25/08	1.000
ID8G031016	G560-01A	16:02	07/25/08	1.000
ID8G031017	G560-01	16:07	07/25/08	1.000
ID8G031018	G560-01J	16:12	07/25/08	5.000
ID8G031019	G243-01	16:17	07/25/08	1.000
ID8G031020	G527-03	16:22	07/25/08	1.000
ID8G031021	G527-06	16:27	07/25/08	1.000
ID8G031022	BLANK	16:32	07/25/08	1.000
ID8G031023	CCV2	16:37	07/25/08	1.000
ID8G031024	CCB2	16:42	07/25/08	1.000
ID8G031025	IPG076WB	16:47	07/25/08	1.000
ID8G031026	IPG076WL	16:52	07/25/08	1.000
ID8G031027	IPG076WC	16:57	07/25/08	1.000
ID8G031028	G201-01A	17:02	07/25/08	1.000
ID8G031029	G201-01	17:07	07/25/08	1.000
ID8G031030	G201-01J	17:12	07/25/08	5.000
ID8G031031	G201-02	17:17	07/25/08	1.000
ID8G031032	G201-03	17:22	07/25/08	1.000
ID8G031033	G201-04	17:27	07/25/08	1.000
ID8G031034	BLANK	17:32	07/25/08	1.000
ID8G031035	CCV3	17:48	07/25/08	1.000
ID8G031036	CCB3	17:53	07/25/08	1.000
ID8G031037	G201-01	17:58	07/25/08	1.000
ID8G031038	G201-02	18:03	07/25/08	1.000
ID8G031039	BLANK	18:08	07/25/08	1.000
ID8G031040	G201-03	18:13	07/25/08	1.000
ID8G031041	BLANK	18:18	07/25/08	1.000
ID8G031042	BLANK	18:23	07/25/08	1.000
ID8G031043	BLANK	18:28	07/25/08	1.000
ID8G031044	CCV4	18:33	07/25/08	1.000
ID8G031045	CCB4	18:38	07/25/08	1.000
ID8G031046	G201-02	18:43	07/25/08	20.00
ID8G031047	G201-03	18:48	07/25/08	20.00
ID8G031048	G201-02	18:53	07/25/08	20.00
ID8G031049	G201-03	18:58	07/25/08	20.00
ID8G031050	BLANK	19:04	07/25/08	1.000
ID8G031051	BLANK	19:09	07/25/08	1.000
ID8G031052	BLANK	19:14	07/25/08	1.000
ID8G031053	CCV5	19:19	07/25/08	1.000

7/25/08

ID8G031054	CCB5	19:24	07/25/08	1.000
ID8G031055	G518-13	19:29	07/25/08	1.000
ID8G031056	G521-17	19:34	07/25/08	5.000
ID8G031057	G521-18	19:39	07/25/08	5.000
ID8G031058	G511-01	19:43	07/25/08	5.000
ID8G031059	G511-02	19:49	07/25/08	5.000
ID8G031060	G511-03	19:54	07/25/08	5.000
ID8G031061	G511-01	19:59	07/25/08	20.00
ID8G031062	G511-02	20:04	07/25/08	20.00
ID8G031063	G511-03	20:09	07/25/08	20.00
ID8G031064	BLANK	20:14	07/25/08	1.000
ID8G031065	CCV6	20:19	07/25/08	1.000
ID8G031066	CCB6	20:24	07/25/08	1.000
ID8G031067	G234-03A	20:29	07/25/08	1.000
ID8G031068	G234-03	20:34	07/25/08	1.000
ID8G031069	G234-03J	20:39	07/25/08	5.000
ID8G031070	G234-03A	20:44	07/25/08	5.000
ID8G031071	G234-03	20:49	07/25/08	5.000
ID8G031072	G234-03J	20:54	07/25/08	25.00
ID8G031073	BLANK	20:59	07/25/08	1.000
ID8G031074	CCV7	21:04	07/25/08	1.000
ID8G031075	CCB7	21:09	07/25/08	1.000
ID8G031076	IPG074WB	21:14	07/25/08	1.000
ID8G031077	IPG074WL	21:19	07/25/08	1.000
ID8G031078	IPG074WC	21:23	07/25/08	1.000
ID8G031079	TXG013SB	21:28	07/25/08	1.000
ID8G031080	G518-14A	21:33	07/25/08	1.000
ID8G031081	G518-14	21:38	07/25/08	1.000
ID8G031082	G518-14J	21:43	07/25/08	5.000
ID8G031083	BLANK	21:49	07/25/08	1.000
ID8G031084	BLANK	21:54	07/25/08	1.000
ID8G031085	BLANK	21:59	07/25/08	1.000
ID8G031086	CCV8	22:04	07/25/08	1.000
ID8G031087	CCB8	22:09	07/25/08	1.000
ID8G031088	G518-14M	22:14	07/25/08	1.000
ID8G031089	G518-14S	22:19	07/25/08	1.000
ID8G031090	G518-02	22:24	07/25/08	1.000
ID8G031091	G518-05	22:29	07/25/08	1.000
ID8G031092	G518-06	22:34	07/25/08	1.000
ID8G031093	G518-07	22:39	07/25/08	1.000
ID8G031094	G518-08	22:44	07/25/08	1.000
ID8G031095	BLANK	22:49	07/25/08	1.000
ID8G031096	BLANK	22:54	07/25/08	1.000
ID8G031097	BLANK	22:59	07/25/08	1.000
ID8G031098	CCV9	23:04	07/25/08	1.000
ID8G031099	CCB9	23:09	07/25/08	1.000
ID8G031100	G518-09	23:14	07/25/08	1.000
ID8G031101	G518-11	23:19	07/25/08	1.000
ID8G031102	G518-12	23:24	07/25/08	1.000
ID8G031103	G243-01	23:30	07/25/08	1.000
ID8G031104	G520-01	23:35	07/25/08	1.000
ID8G031105	G530-01	23:40	07/25/08	1.000
ID8G031106	BLANK	23:45	07/25/08	1.000
ID8G031107	BLANK	23:50	07/25/08	1.000
ID8G031108	BLANK	23:55	07/25/08	1.000
ID8G031109	CCV10	00:00	07/26/08	1.000

TSGL

ID8G031110	CCB10	00:05	07/26/08	1.000
ID8G031111	TXG014WB	00:10	07/26/08	1.000
ID8G031112	G518-01A	00:15	07/26/08	1.000
ID8G031113	G518-01	00:20	07/26/08	1.000
ID8G031114	G518-01J	00:25	07/26/08	5.000
ID8G031115	G518-03	00:30	07/26/08	1.000
ID8G031116	BLANK	00:36	07/26/08	1.000
ID8G031117	BLANK	00:41	07/26/08	1.000
ID8G031118	BLANK	00:46	07/26/08	1.000
ID8G031119	CCV11	00:51	07/26/08	1.000
ID8G031120	CCB11	00:56	07/26/08	1.000
ID8G031121	G481-01A	01:01	07/26/08	1.000
ID8G031122	G481-01	01:06	07/26/08	1.000
ID8G031123	G481-01J	01:11	07/26/08	5.000
ID8G031124	BLANK	01:16	07/26/08	1.000
ID8G031125	CCV12	01:21	07/26/08	1.000
ID8G031126	CCB12	01:26	07/26/08	1.000

SDG : 8GMS UNIT : % SUMMARY of ICV and CCV : ID8G031 DATE : 07/25/08

ANALYTE	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	96	101	103	97	99	109	102	100	99	100	94	99	99	98	96	101	101	98	100	98	98	95	97	103
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA	87	----	----	----	----	----	----	97	----	----	----	91	----	102	----	----	----	----	----	----	----	----	----	----
ICSAB	86	105	108	107	99	110	108	95	97	101	100	91	98	101	94	111	101	108	107	110	106	90	100	106
CCV1	96	101	103	101	102	107	107	100	101	104	96	98	100	100	100	106	104	101	102	98	101	97	102	106
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	96	102	103	99	102	108	107	100	101	104	96	98	100	99	101	105	103	102	102	99	101	97	102	108
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	95	101	102	101	104	108	107	101	101	103	96	97	100	100	102	105	103	103	102	99	102	97	103	107
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	94	101	102	99	103	107	107	100	101	104	96	97	101	99	101	105	103	103	101	99	102	98	103	107
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	90	96	97	93	96	101	101	94	95	98	89*	92	95	94	94	98	97	97	96	93	96	92	96	100

8GMS

CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	95	101	104	101	103	108	107	100	102	103	97	98	101	99	102	105	103	105	102	99	103	96	103	107
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	96	101	103	103	104	108	107	102	101	103	97	99	100	101	102	106	103	106	102	99	104	96	103	107
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG013SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	96	103	106	100	101	109	107	102	102	103	96	100	101	101	99	105	103	106	105	99	104	96	102	108
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	97	102	105	101	102	109	107	102	102	103	96	100	100	101	100	105	103	107	104	100	105	95	102	107
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G520-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G530-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	96	102	105	101	101	109	107	101	101	103	96	99	101	100	99	105	103	107	105	99	105	96	102	107

CCB10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG014WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	97	103	106	101	102	110	107	102	102	103	97	100	100	100	99	105	103	107	105	100	105	95	102	108	
CCB11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	97	101	103	102	103	108	106	103	102	102	96	100	100	102	100	105	102	108	102	99	106	94	102	111*	
CCB12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

ESSL

SDG : G6M5 UNIT : UG/L SUMMARY of CALIBRATION BLANKS : ID8G031 (WATER) DATE : 07/25/08

ANALYTE	Al	Sb	As	Ba	Be	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICB	-1.40	-.440	1.19	.000	.110	-1.00	.140	16.3	.280	.110	-.090	-1.52	-.190	8.78	.000	.160	.090	7.57	.000	.040	4.69	-.130	.150	.370
ICSA	----	-1.09	-3.75	.470	.120	-1.19	-.480	----	.400	-1.36	2.70	----	-.160	----	-1.35	-2.73	-.410	69.0	4.85	.680	103	-9.79	-.030	6.55
ICSAB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB1	49.5	-1.00	1.18	.150	.330	-1.34	.040	110	.180	.100	-.220	14.9	-.040	106	-.220	.090	-.090	63.8	-.380	.090	29.1	.340	.070	.130
IPG075SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG075SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G560-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G527-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB2	-.460	-1.03	-.230	.360	.390	-1.08	.060	40.0	.230	.120	.230	-2.12	.380	26.4	.820	.120	.060	65.8	-1.58	.070	23.7	.590	.130	.350
IPG076WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG076WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB3	2.15	-.600	1.03	.650	.500	-1.45	.120	70.9	.370	.090	.110	-4.06	-.040	64.6	.670	.130	.020	61.1	-1.69	.240	139	.340	.210	1.08
G201-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB4	1.63	-1.06	.380	.450	.490	-1.42	.100	51.1	.430	.100	-.040	-2.87	.460	36.4	.350	.010	-.080	33.6	.120	.140	154	-.440	.160	.050
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G201-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

9504

CCB5	-1.31	-1.29	.860	.600	.480	-1.92	.070	51.3	.330	.160	-.440	-3.58	-.100	48.0	.790	.160	-.120	69.2	-1.12	.160	92.3	.230	.170	.320
G518-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G521-18	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB6	.400	-1.06	.240	.600	.460	-1.29	.080	45.3	.590	.050	.460	.330	.820	47.3	.580	.030	-.040	28.7	-.230	.070	71.8	-1.34	.220	.380
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G234-03J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB7	-.300	.330	.010	.610	.590	-1.28	.090	96.7	.210	.040	.180	-3.93	.070	67.6	.550	.110	.110	72.2	-.600	.330	88.8	.420	.210	2.76
IPG074WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG074WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
TXG013SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB8	-2.85	-1.03	-.330	.690	.480	-1.32	.060	44.6	.080	.080	.380	-1.99	.340	33.9	.480	.090	-.170	78.2	1.11	.260	95.1	-.740	.180	.170
G518-14M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-14S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB9	.490	-.190	-.670	.420	.560	-1.41	.070	61.2	.310	-.010	.010	1.26	-.220	60.2	.530	.150	.010	77.1	-.230	.130	159	.110	.230	2.50
G518-09	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G243-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G520-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G530-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV10	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

CCB10	-2.15	-.940	1.02	.530	.240	-1.52	.070	51.4	.170	.120	.160	1.15	-.720	17.3	.750	.170	.010	58.8	.370	.180	109	-.590	.060	1.78
TXG014WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G518-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB11	-1.38	-.890	.430	.310	.480	-1.70	.070	52.9	.190	-.030	.070	-1.15	-.010	56.3	-.280	.180	-.120	86.1	-.470	.190	174	.230	.070	5.41
G481-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G481-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV12	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCB12	-.360	-.030	1.20	.690	.300	-1.68	.050	49.4	.290	.150	.040	-1.21	.180	30.2	.260	.120	.010	55.9	.220	.060	73.7	.190	-.020	11.4

QC limit of each parameter are listed in a table attached next to all the ICP check forms
* : Out of QC Limit

ESSJ

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
1	0	Unk	S0		ID8G031001			1	☐		Continue
2	0	Unk	S2		ID8G031002			1	☐		Continue
3	0	Unk	S5		ID8G031003			1	☐		Continue
4	0	Unk	S8		ID8G031004			1	☐		Continue
5	0	Unk	S11		ID8G031005			1	☐		Continue
6	0	Unk	S17		ID8G031006			1	☐		Continue
7	1	QC	ICV		ID8G031007			1	☒	ICV	Continue
8	2	QC	ICB		ID8G031008			1	☒	3XIDL	Continue
9	3	QC	ICSA		ID8G031009			1	☒	ICSA	Continue
10	4	QC	ICSAB		ID8G031010			1	☒	ICSAB	Continue
11	5	QC	CCV1		ID8G031011			1	☒	CCV	Continue
12	6	QC	CCB1	Al Be B Ca Fe Mg	ID8G031012			1	☒	3XIDL	Continue
13	25	QC	~~IPG025SB~~ IPG075SB		ID8G031013			1	☒	CCB1	Continue
14	26	QC	~~IPG025SL~~ IPG075SL		ID8G031014			1	☒	LCS	Continue
15	27	QC	~~IPG025SC~~ IPG075SC		ID8G031015			1	☒	LCS	Continue
16	28	Unk	G560-01A		ID8G031016			1	☐		Continue
17	29	Unk	G560-01		ID8G031017			1	☐		Continue
18	30	Unk	G560-01J		ID8G031018			1	☐		Continue
19	31	Unk	G243-01		ID8G031019			1	☐		Continue
20	32	Unk	G527-03		ID8G031020			1	☐		Continue
21	33	Unk	G527-06		ID8G031021			1	☐		Continue
22	34	Unk	BLANK		ID8G031022			1	☐		Continue
23	35	QC	CCV2		ID8G031023			1	☒	CCV	Continue
24	36	QC	CCB2	Be	ID8G031024			1	☒	3XIDL	Continue
25	7	QC	IPG076WB		ID8G031025			1	☒	CCB1	Continue
26	8	QC	IPG076WL		ID8G031026			1	☒	LCS	Continue
27	9	QC	IPG076WC		ID8G031027			1	☒	LCS	Continue
28	10	Unk	G201-01A	TOT	ID8G031028			1	☐		Continue
29	11	Unk	G201-01	TOT	ID8G031029			1	☐		Continue
30	12	Unk	G201-01J	TOT	ID8G031030			1	☐		Continue
31	13	Unk	G201-02	TOT	ID8G031031			1	☐		Continue
32	14	Unk	G201-03	TOT	ID8G031032			1	☐		Continue
33	15	Unk	G201-04	TOT	ID8G031033			1	☐		Continue
34	16	Unk	BLANK		ID8G031034			1	☐		Continue
35	17	QC	CCV3		ID8G031035			1	☒	CCV	Continue
36	18	QC	CCB3	Be Ca Mg Mn	ID8G031036			1	☒	3XIDL	Continue
37	19	Unk	G201-01	DISS	ID8G031037			1	☐		Continue
38	20	Unk	G201-02	DISS	ID8G031038			1	☐		Continue
39	112	Unk	BLANK		ID8G031039			1	☐		Continue
40	21	Unk	G201-03	DISS	ID8G031040			1	☐		Continue
41	113	Unk	BLANK		ID8G031041			1	☐		Continue
42	114	Unk	BLANK		ID8G031042			1	☐		Continue
43	22	Unk	BLANK		ID8G031043			1	☐		Continue
44	23	QC	CCV4		ID8G031044			1	☒	CCV	Continue
45	24	QC	CCB4	Be Na	ID8G031045			1	☒	3XIDL	Continue
46	103	Unk	G201-02	20X TOT	ID8G031046			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
47	104	Unk	G201-03	20X TOT	ID8G031047			1	☐		Continue
48	105	Unk	G201-02	20X DISS	ID8G031048			1	☐		Continue
49	106	Unk	G201-03	20X DISS	ID8G031049			1	☐		Continue
50	107	Unk	BLANK		ID8G031050			1	☐		Continue
51	108	Unk	BLANK		ID8G031051			1	☐		Continue
52	109	Unk	BLANK		ID8G031052			1	☐		Continue
53	110	QC	CCV5	Al90% Cut	ID8G031053			1	☒	CCV	Continue
54	111	QC	CCB5	Be Na	ID8G031054			1	☒	3XIDL	Continue
55	37	Unk	G518-13		ID8G031055			1	☐		Continue
56	38	Unk	G521-17	5X Zn	ID8G031056			1	☐		Continue
57	39	Unk	G521-18	5X Zn	ID8G031057			1	☐		Continue
58	40	Unk	G511-01	5X	ID8G031058			1	☐		Continue
59	41	Unk	G511-02	5X	ID8G031059			1	☐		Continue
60	42	Unk	G511-03	5X	ID8G031060			1	☐		Continue
61	43	Unk	G511-01	20X	ID8G031061			1	☐		Continue
62	44	Unk	G511-02	20X	ID8G031062			1	☐		Continue
63	45	Unk	G511-03	20X	ID8G031063			1	☐		Continue
64	46	Unk	BLANK		ID8G031064			1	☐		Continue
65	47	QC	CCV6		ID8G031065			1	☒	CCV	Continue
66	48	QC	CCB6	Be Na	ID8G031066			1	☒	3XIDL	Continue
67	94	Unk	G234-01A 03	TOT	ID8G031067			1	☐		Continue
68	95	Unk	G234-01		ID8G031068			1	☐		Continue
69	96	Unk	G234-01J		ID8G031069			1	☐		Continue
70	97	Unk	G234-01A	5X	ID8G031070			1	☐		Continue
71	98	Unk	G234-01	5X	ID8G031071			1	☐		Continue
72	99	Unk	G234-01J	25X	ID8G031072			1	☐		Continue
73	100	Unk	BLANK		ID8G031073			1	☐		Continue
74	101	QC	CCV7		ID8G031074			1	☒	CCV	Continue
75	102	QC	CCB7	Be	ID8G031075			1	☒	3XIDL	Continue
76	49	QC	IPG074WB		ID8G031076			1	☒	CCB1	Continue
77	50	QC	IPG074WL		ID8G031077			1	☒	LCS	Continue
78	51	QC	IPG074WC		ID8G031078			1	☒	LCS	Continue
79	52	QC	TXG013SB	TCLP	ID8G031079			1	☒	CCB1	Continue
80	53	Unk	G518-14A	TCLP	ID8G031080			1	☐		Continue
81	54	Unk	G518-14	TCLP	ID8G031081			1	☐		Continue
82	55	Unk	G518-14J	TCLP	ID8G031082			1	☐		Continue
83	56	Unk	BLANK		ID8G031083			1	☐		Continue
84	57	Unk	BLANK		ID8G031084			1	☐		Continue
85	58	Unk	BLANK		ID8G031085			1	☐		Continue
86	59	QC	CCV8		ID8G031086			1	☒	CCV	Continue
87	60	QC	CCB8		ID8G031087			1	☒	3XIDL	Continue
88	61	Unk	G518-14M	TCLP	ID8G031088			1	☐		Continue
89	62	Unk	G518-14S	TCLP	ID8G031089			1	☐		Continue
90	63	Unk	G518-02	TCLP	ID8G031090			1	☐		Continue
91	64	Unk	G518-05	TCLP	ID8G031091			1	☐		Continue
92	65	Unk	G518-06	TCLP	ID8G031092			1	☐		Continue

	Pos ID	Type	Samplename	Comment	Data File	Type*	Dilln Factor	CorrFact	Check	Check Table	Fail Action
93	66	Unk	G518-07	TCLP	ID8G031093			1	☐		Continue
94	67	Unk	G518-08	TCLP	ID8G031094			1	☐		Continue
95	68	Unk	BLANK		ID8G031095			1	☐		Continue
96	69	Unk	BLANK		ID8G031096			1	☐		Continue
97	70	Unk	BLANK		ID8G031097			1	☐		Continue
98	71	QC	CCV9		ID8G031098			1	☒	CCV	Continue
99	72	QC	CCB9		ID8G031099			1	☒	3XIDL	Continue
100	73	Unk	G518-09	TCLP	ID8G031100			1	☐		Continue
101	74	Unk	G518-11	TCLP	ID8G031101			1	☐		Continue
102	75	Unk	G518-12	TCLP	ID8G031102			1	☐		Continue
103	76	Unk	G243-01	TCLP	ID8G031103			1	☐		Continue
104	77	Unk	G520-01	TCLP	ID8G031104			1	☐		Continue
105	78	Unk	G530-01	TCLP	ID8G031105			1	☐		Continue
106	79	Unk	BLANK		ID8G031106			1	☐		Continue
107	80	Unk	BLANK		ID8G031107			1	☐		Continue
108	81	Unk	BLANK		ID8G031108			1	☐		Continue
109	82	QC	CCV10		ID8G031109			1	☒	CCV	Continue
110	83	QC	CCB10		ID8G031110			1	☒	3XIDL	Continue
111	84	QC	TXG014WB	TCLP	ID8G031111			1	☒	CCB1	Continue
112	85	Unk	G518-01A	TCLP	ID8G031112			1	☐		Continue
113	86	Unk	G518-01	TCLP	ID8G031113			1	☐		Continue
114	87	Unk	G518-01J	TCLP	ID8G031114			1	☐		Continue
115	88	Unk	G518-03	TCLP	ID8G031115			1	☐		Continue
116	89	Unk	BLANK		ID8G031116			1	☐		Continue
117	90	Unk	BLANK		ID8G031117			1	☐		Continue
118	91	Unk	BLANK		ID8G031118			1	☐		Continue
119	92	QC	CCV11		ID8G031119			1	☒	CCV	Continue
120	93	QC	CCB11		ID8G031120			1	☒	3XIDL	Continue
121	115	Unk	G481-01A		ID8G031121			1	☐		Continue
122	116	Unk	G481-01		ID8G031122			1	☐		Continue
123	117	Unk	G481-01J		ID8G031123			1	☐		Continue
124	118	Unk	BLANK		ID8G031124			1	☐		Continue
125	119	QC	CCV12		ID8G031125			1	☒	CCV	Continue
126	120	QC	CCB12		ID8G031126			1	☒	3XIDL	Continue

ANALYSIS RUN LOG
for
ICP

Note: For samples and relevant QCs/Standards analyzed, refer to attached analytical sequence.

Start Date: 7/31/08 14:29

End Date: 8/1/08 2:23

Comments:

QC OK.

Book #:	AD8-006
Instrument No.:	D8
Analytical Batch:	ID86037
Analytical Sequence:	S-G086010(V61)
Method File:	G086010(V61)

SOP #	Rev. #
☑ EMAX-6010	5
☑ EMAX-200.7	0
☐ EMAX-	

STANDARDS ID	
S0	SM1B11.35.02
S1	NA
S2	SM1B11.29.03
S3	NA
S4	NA
S5	SM1B11.35.01
S6	NA
S7	NA
S8	SM1B11.28.02
S9	NA
S11	SM1B11.29.04
S17	↓ 29.05
ICV ICV-2 ICV-5	SM1B11.33.05 ~~SM1B11.33.04~~ 32.04 TH 8/1/08
CCV CCV-2 CCV-5	SM1B11.34.01 ↓ 32.06
ICSA	SM1B11.32.02
ICSAB	↓ 30.02
CRI/MRL	NA
CCV	SM1B11.33.04

Analyzed By: TH

Date: 8/1/08

SEQUENCE FILE : ID8G037

4-18	19-33	34-43	44-53	54-63
LFID	LSID	TIME	DATE	DF
ID8G037001	Blank	14:29	07/31/08	1.000
ID8G037002	S2	14:34	07/31/08	1.000
ID8G037003	S5	14:39	07/31/08	1.000
ID8G037004	S8	14:44	07/31/08	1.000
ID8G037005	S11	14:49	07/31/08	1.000
ID8G037006	S17	14:54	07/31/08	1.000
ID8G037007	ICV-2	14:59	07/31/08	1.000
ID8G037008	ICV-5	15:04	07/31/08	1.000
ID8G037009	ICB	15:09	07/31/08	1.000
ID8G037010	CCV-2	15:14	07/31/08	1.000
ID8G037011	CCV-5	15:19	07/31/08	1.000
ID8G037012	CCB	15:24	07/31/08	1.000
ID8G037013	ICSA1	15:29	07/31/08	1.000
ID8G037014	ICSAB1	15:34	07/31/08	1.000
ID8G037015	CCV1	15:39	07/31/08	1.000
ID8G037016	CCB1	15:44	07/31/08	1.000
ID8G037017	IPG091WB	15:49	07/31/08	1.000
ID8G037018	IPG091WL	15:54	07/31/08	1.000
ID8G037019	IPG091WC	15:59	07/31/08	1.000
ID8G037020	G511-05A	16:04	07/31/08	1.000
ID8G037021	G511-05	16:09	07/31/08	1.000
ID8G037022	G511-05J	16:14	07/31/08	5.000
ID8G037023	BLANK	16:19	07/31/08	1.000
ID8G037024	BLANK	16:24	07/31/08	1.000
ID8G037025	CCV2	16:29	07/31/08	1.000
ID8G037026	CCB2	16:34	07/31/08	1.000
ID8G037027	G511-01	16:39	07/31/08	20.00
ID8G037028	G511-02	16:44	07/31/08	20.00
ID8G037029	G511-03	16:49	07/31/08	20.00
ID8G037030	G511-04	16:55	07/31/08	20.00
ID8G037031	G511-01	17:00	07/31/08	5.000
ID8G037032	G511-02	17:05	07/31/08	5.000
ID8G037033	G511-03	17:10	07/31/08	5.000
ID8G037034	BLANK	17:15	07/31/08	1.000
ID8G037035	BLANK	17:20	07/31/08	1.000
ID8G037036	CCV3	17:25	07/31/08	1.000
ID8G037037	CCB3	17:30	07/31/08	1.000
ID8G037038	G511-01	17:35	07/31/08	1.000
ID8G037039	G511-02	17:40	07/31/08	1.000
ID8G037040	G511-03	17:45	07/31/08	1.000
ID8G037041	G511-04	17:50	07/31/08	1.000
ID8G037042	BLANK	17:56	07/31/08	1.000
ID8G037043	BLANK	18:01	07/31/08	1.000
ID8G037044	ICSA2	18:06	07/31/08	1.000
ID8G037045	ICSAB2	18:11	07/31/08	1.000
ID8G037046	BLANK	18:16	07/31/08	1.000
ID8G037047	CCV4	18:21	07/31/08	1.000
ID8G037048	CCB4	18:26	07/31/08	1.000
ID8G037049	IPG088SB	18:31	07/31/08	1.000
ID8G037050	IPG088SL	18:36	07/31/08	1.000
ID8G037051	IPG088SC	18:41	07/31/08	1.000
ID8G037052	G549-01A	18:45	07/31/08	1.000
ID8G037053	G549-01	18:50	07/31/08	1.000

G549

ID8G037054	G549-01J	18:55	07/31/08	5.000
ID8G037055	G549-02	19:00	07/31/08	1.000
ID8G037056	G549-03	19:05	07/31/08	1.000
ID8G037057	G549-04	19:10	07/31/08	1.000
ID8G037058	BLANK	19:15	07/31/08	1.000
ID8G037059	CCV5	19:20	07/31/08	1.000
ID8G037060	CCB5	19:25	07/31/08	1.000
ID8G037061	G549-05	19:30	07/31/08	1.000
ID8G037062	G549-06	19:35	07/31/08	1.000
ID8G037063	G549-07	19:40	07/31/08	1.000
ID8G037064	G549-13	19:45	07/31/08	1.000
ID8G037065	G563-08	19:50	07/31/08	1.000
ID8G037066	G564-01	19:55	07/31/08	1.000
ID8G037067	G528-01	20:00	07/31/08	1.000
ID8G037068	G528-02	20:05	07/31/08	1.000
ID8G037069	G593-01	20:10	07/31/08	1.000
ID8G037070	BLANK	20:15	07/31/08	1.000
ID8G037071	CCV6	20:20	07/31/08	1.000
ID8G037072	CCB6	20:25	07/31/08	1.000
ID8G037073	IPG092SB	20:30	07/31/08	1.000
ID8G037074	IPG092SL	20:35	07/31/08	1.000
ID8G037075	IPG092SC	20:40	07/31/08	1.000
ID8G037076	G195-06M	20:45	07/31/08	1.000
ID8G037077	G195-06S	20:50	07/31/08	1.000
ID8G037078	G195-06A	20:55	07/31/08	1.000
ID8G037079	G195-06	20:59	07/31/08	1.000
ID8G037080	G195-06J	21:04	07/31/08	5.000
ID8G037081	BLANK	21:09	07/31/08	1.000
ID8G037082	CCV7	21:14	07/31/08	1.000
ID8G037083	CCB7	21:19	07/31/08	1.000
ID8G037084	G188-05M	21:24	07/31/08	1.000
ID8G037085	G188-05S	21:29	07/31/08	1.000
ID8G037086	G188-05	21:34	07/31/08	1.000
ID8G037087	G559-27	21:39	07/31/08	1.000
ID8G037088	BLANK	21:44	07/31/08	1.000
ID8G037089	CCV8	21:49	07/31/08	1.000
ID8G037090	CCB8	21:54	07/31/08	1.000
ID8G037091	G314-01	21:59	07/31/08	1.000
ID8G037092	G314-02	22:05	07/31/08	1.000
ID8G037093	G314-03	22:10	07/31/08	1.000
ID8G037094	G314-04	22:15	07/31/08	1.000
ID8G037095	G314-05	22:20	07/31/08	1.000
ID8G037096	G314-06	22:25	07/31/08	1.000
ID8G037097	G314-07	22:30	07/31/08	1.000
ID8G037098	G314-08	22:35	07/31/08	1.000
ID8G037099	BLANK	22:40	07/31/08	1.000
ID8G037100	CCV9	22:45	07/31/08	1.000
ID8G037101	CCB9	22:50	07/31/08	1.000
ID8G037102	IPG086WB	22:55	07/31/08	1.000
ID8G037103	IPG086WL	23:00	07/31/08	1.000
ID8G037104	IPG086WC	23:05	07/31/08	1.000
ID8G037105	G545-01A	23:10	07/31/08	5.000
ID8G037106	G545-01	23:15	07/31/08	5.000
ID8G037107	G545-01J	23:20	07/31/08	25.00
ID8G037108	G543-01	23:25	07/31/08	5.000
ID8G037109	BLANK	23:30	07/31/08	1.000

Page 1 of 1

ID8G037110	BLANK	23:35	07/31/08	1.000
ID8G037111	CCV10	23:40	07/31/08	1.000
ID8G037112	CCB10	23:45	07/31/08	1.000
ID8G037113	G563-01	23:50	07/31/08	5.000
ID8G037114	G563-02	23:55	07/31/08	5.000
ID8G037115	G563-03	00:00	08/01/08	5.000
ID8G037116	G563-04	00:05	08/01/08	5.000
ID8G037117	BLANK	00:11	08/01/08	1.000
ID8G037118	BLANK	00:16	08/01/08	1.000
ID8G037119	CCV11	00:21	08/01/08	1.000
ID8G037120	CCB11	00:26	08/01/08	1.000
ID8G037121	G511-05A	00:31	08/01/08	5.000
ID8G037122	G511-05	00:36	08/01/08	5.000
ID8G037123	G511-05J	00:40	08/01/08	25.00
ID8G037124	BLANK	00:45	08/01/08	1.000
ID8G037125	BLANK	00:51	08/01/08	1.000
ID8G037126	BLANK	00:56	08/01/08	1.000
ID8G037127	ICSA3	01:01	08/01/08	1.000
ID8G037128	ICSAB3	01:06	08/01/08	1.000
ID8G037129	BLANK	01:11	08/01/08	1.000
ID8G037130	CCV13	01:16	08/01/08	1.000
ID8G037131	CCB13	01:21	08/01/08	1.000
ID8G037132	F315-01	01:26	08/01/08	1.000
ID8G037133	F315-02	01:32	08/01/08	1.000
ID8G037134	F315-03	01:37	08/01/08	1.000
ID8G037135	BLANK	01:43	08/01/08	1.000
ID8G037136	BLANK	01:48	08/01/08	1.000
ID8G037137	BLANK	01:53	08/01/08	1.000
ID8G037138	BLANK	01:58	08/01/08	1.000
ID8G037139	BLANK	02:03	08/01/08	1.000
ID8G037140	ICSA4	02:08	08/01/08	1.000
ID8G037141	ICSAB4	02:13	08/01/08	1.000
ID8G037142	CCV14	02:18	08/01/08	1.000
ID8G037143	CCB14	02:23	08/01/08	1.000

6695

SDG : 07G196 UNIT : % SUMMARY of ICV and CCV : ID8G037 DATE : 07/31/08 I

ANALYTE	Al	Sb	As	Ba	Be	Cd	Ca	Cr	Co	Cu	Fe	Pb	Mg	Mn	Mo	Ni	K	Se	Ag	Na	Tl	Sn	V	Zn
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S11	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
S17	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICV-2	0*	0*	0*	103	99	102	0*	102	101	100	1*	101	0*	100	0*	102	0*	0*	101	-1*	101	0*	99	0*
ICV-5	-1*	98	98	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	98	0*	0*	98	0*	-1*	0*	0*	0*	97
ICB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV-2	0*	0*	0*	102	97	101	0*	100	101	99	1*	100	0*	98	0*	101	0*	0*	101	-1*	101	0*	98	-1*
CCV-5	-1*	98	98	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	0*	98	0*	0*	98	0*	-1*	0*	0*	0*	97
CCB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA1	100	----	----	----	----	----	93	----	----	----	89	----	99	----	----	----	----	----	----	----	----	----	----	----
ICSAB1	100	102	105	106	98	99	92	94	96	103	88	94	97	91	103	94	104	105	110	103	91	98	97	97
CCV1	103	96	99	97	98	101	98	97	100	95	97	97	95	94	100	99	96	101	98	96	96	100	97	100
CCB1	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG091WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG091WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG091WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-05J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV2	101	97	100	97	99	101	98	98	100	96	97	97	96	94	100	99	96	101	99	97	96	100	99	100
CCB2	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV3	100	95	97	99	100	101	97	97	100	98	95	97	96	94	100	99	97	98	98	97	96	100	99	99
CCB3	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G511-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
ICSA2	98	----	----	----	----	----	91	----	----	----	88	----	96	----	----	----	----	----	----	----	----	----	----	----
ICSAB2	98	99	101	105	98	99	90	92	96	103	87	94	95	88	103	95	104	102	109	102	93	99	97	95
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV4	100	94	98	97	98	101	97	97	100	95	96	96	94	90	99	99	97	99	98	97	97	101	98	99
CCB4	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG088SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG088SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG088SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

G549-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV5	100	94	97	98	99	101	96	96	100	96	95	97	93	91	100	99	97	97	98	98	97	100	98	98	
CCB5	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G549-13	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G563-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G564-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G528-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G528-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G593-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV6	100	96	97	101	102	101	97	97	101	98	94	97	96	94	101	99	98	97	99	99	96	100	100	99	
CCB6	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG092SB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG092SL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG092SC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G195-06J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV7	101	97	99	98	98	101	96	97	100	97	95	97	92	90	100	99	98	100	99	98	96	100	98	99	
CCB7	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05M	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05S	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G188-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G559-27	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV8	102	101	105	98	103	101	102	101	98	95	98	97	99	95	98	98	99	105	100	99	92	99	100	102	
CCB8	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-02	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-03	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-04	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-05	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-06	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-07	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G314-08	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
CCV9	102	101	101	104	102	101	99	99	99	99	94	97	96	96	101	99	103	102	100	103	93	99	101	100	
CCB9	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG086WB	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG086WL	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
IPG086WC	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01A	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G545-01J	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
G543-01	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----
BLANK	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----