

**SUBMISSION CASE NARRATIVE
NDMA**

MAXXAM L.I.M.S. No. A315096

PROJECT: Applied P&CH Laboratory NDMA Analysis

I. Receipt

Sample was received at Maxxam on May 2, 2003.
Sample was received in good condition.

II. Holding Times

- A. Sample preparation: all holding times were met.
- B. Sample analysis: all holding times were met.

III. Method

The method followed was Maxxam's in-house method for NDMA analysis,
Entitled "EXTRACTION & ANALYSIS OF NITROSAMINES AND
NDMA BY HRMS" SOP # TO.1021.08.

IV. Preparation

Sample preparation proceeded normally. Sample was extracted on
May 5, 2003.

V. Analysis

Analysis proceeded normally. Sample was analyzed on
May 14, 2003.

- A. Calibration: All criteria were met.
- B. Mass Resolution: All criteria met.

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- C. Method Blank: All acceptance criteria were met for the method blank and no detects have been observed above the MDL.
- D. Laboratory Control Spike: A LCS and LCSDUP were analyzed with all acceptance criteria met and they had a RPD of 10%.
- E. Matrix spike/Matrix spike duplicate: MS and MSD were analyzed not analyzed with these samples.
- F. Surrogate Standards: All samples and QC samples met surrogate Standard criteria
- G. Samples: Sample analysis proceeded normally.
- H. Glass blank: All acceptance criteria for the glass blank were met.

I certify that this data package is in compliance with the terms and conditions agreed to by the client and Maxxam Analytics Inc., both technically and for completeness, except for any conditions noted above. Release of the data contained in this hardcopy data package has been authorized by the HRMS Strategic Business Unit Operational Manager, as verified by the following signature.



AnnMarie Wright
B.Sc.
Laboratory Operations Manager

This report contains 103 pages.

00002

SUMMARY OF SAMPLES SUBMITTED-NDMA						
(YYYY/MM/DD)						
JPL SAMPLE NO.	MAXXAM L.I.M.S. ID	DATE SAMPLED	DATE RECEIVED	DATE EXTRACTED	DATE ANALYZED	ASSOCIATED QC LABEL
MW-17-4	A3 5096-A01352	2003/04/28	2003/05/02	2003/05/05	2003/05/14	472719

000003

MS	Mass Spectrometry
HRMS	High Resolution Mass Spectrometry

Acceptance Criteria

Values used by the laboratory in order to determine that a process is in control.

Accuracy It is the degree of agreement of a measured value with the true or expected value of the quantity of concern.

Analyte A Nitrosodimethylamine and/or 1,4-Dioxane parameter tested by a method.

Blind Sample It is a sample submitted for analysis whose composition is known to the submitter but unknown to the analyst. A blind sample is used to test the proficiency of a measurement process.

Calibration Standard (CAL)

Consist of a set of solutions containing known amounts of native & carbon-13-labelled NDMA and/or 1,4-Dioxane. These solutions are used to establish the relationship between the parameter's concentration & MS detector response over the expected range of sample concentration.

Calibration Verification Material

Consists of a calibration standard solution of intermediate level concentration (e.g. CS3), used to assess whether the initial calibration is still valid.

Certified Reference Material

It is a stable, homogenous, and well characterized reference material, one or more of whose property values are certified by repetitive analysis by several operators & different methodologies in one or more qualified laboratories of known precision & accuracy. This material is used to assess the accuracy of a measurement process.

CAS# Chemical Abstracts Compound Registry Number.

Control Sample

It is a reference material of known composition that is analyzed concurrently with test samples to evaluate the accuracy and/or precision of a measurement process.

EDL Estimated detection limit or detection limit.

Glassware Proof Rinse

It is the composite final solvent rinse of each piece of glassware intended for use in processing a batch of samples. Proof rinse samples are analyzed before sample processing begins.

Instrument Detection Limit

It is the smallest concentration/amount of analyte, in a solution containing only the analyte(s) of interest, which produces an instrumental response that satisfies all analyte detection & identification criteria.

IS Internal Standard, a deuterated or ^{13}C -labelled analyte that is added to a sample extract prior to instrument analysis.

Isomer A member of a group of compounds that differ from each other only in terms of locations of a specified number of common substituent atoms, or groups of atoms, on the parent compound.

Method Blank Laboratory control sample using reagents, purified water, soil or relevant matrix known to be free of contaminants.

Method Detection Limit (MDL)

It is the smallest test sample concentration/amount of analyte that produces an instrumental response that satisfies all analyte detection & identification criteria when the sample is processed & analyzed according to the requirements of a specific test method. Reported MDL values reflect the composite effect of sample-related variables as well as method-related variables.

MSDS Material Safety Data Sheet

NIOSH National Institute of Occupational Safety & Health

Precision It is the degree of agreement between the data generated from repetitive measurements under specified conditions. It is generally reported as the standard deviation (SD) or relative standard deviation (RSD).

%D Percent Difference.

Quality Assurance (QA)

It is a system of activities whose purpose is to provide the producer or user of a product with the assurance that the product meets a defined standard of quality. The system consists of two separate but related activities, quality control & quality assessment.

Quality Control (QC)

It is the overall system of activities whose purpose is to control the quality of a product so that it meets the needs of users.

Recovery Standards

They are selected compounds that are added to sample extracts immediately before instrumental analysis so that surrogate (internal standard) recoveries can be calculated.

RPD (%) Relative Percent Difference.

Relative Retention Factor (RRF)

It is the quotient of a target analyte response factor (instrument response per unit weight) divided by the response factor (RF) for its corresponding labelled surrogate. An RRF value remains constant over the range of concentration for which instrument response is linear.

RSD Relative Standard Deviation.

SDS Soxhlet/Dean-Stark extractor, an extraction device applied to the extraction of solid & semi-solid materials.

Spiked blank Laboratory control sample that has been fortified with native analytes of interest.

Stock Solution A solution containing an analyte that is prepared using a reference material traceable to EPA, the National Institute of Science & Technology (NIST), or a source that will attest to the purity & authenticity of the reference material.

Surrogate A compound whose composition and chemical properties are nearly identical to those of target analytes, but which is distinguishable from target analytes by some means of detection (i.e. MS). These include deuterated or ¹³C-labelled analogues of the target analytes, which are added to the sample prior to extraction or clean-up steps.

Window Defining Mixture

It is a solution containing the earliest & latest eluting congeners within each homologous group of target analytes on a specified GC column.

SAMPLE DATA

000007

Lab Name	<u>Maxxam Analytics Inc.</u>		
Matrix (soil/water):	<u>water</u>		
Sample wt/vol:	<u>1000</u>	(g/mL)	<u>mL</u>
Level (low/med)	<u>low</u>		
% Moisture	<u>Not applicable</u>	Decanted (Y/N):	<u>N</u>
Concentrated Extract Volume	<u>1000</u>	(uL)	
Injection Volume	<u>2</u>	(uL)	
Acid Wash Cleanup (Y/N):	<u>N</u>	pH	<u>Not analyzed</u>

Lab Sample ID:	<u>A315096-A01352</u>
Project Name:	<u>JPL</u>
Lab File ID:	<u>KR23490012</u>
Date Received:	<u>May 2, 2003</u>
Date Extracted:	<u>May 5, 2003</u>
Lab Batch:	<u>472719</u>
Date Analyzed:	<u>May 14, 2003</u>
Calib. Ref.:	<u>20030513</u>
Time Analyzed:	<u>11:55:48</u>
Dilution Factor:	<u>1</u>

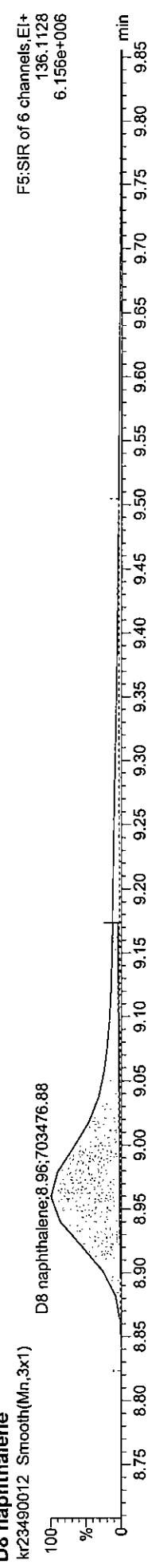
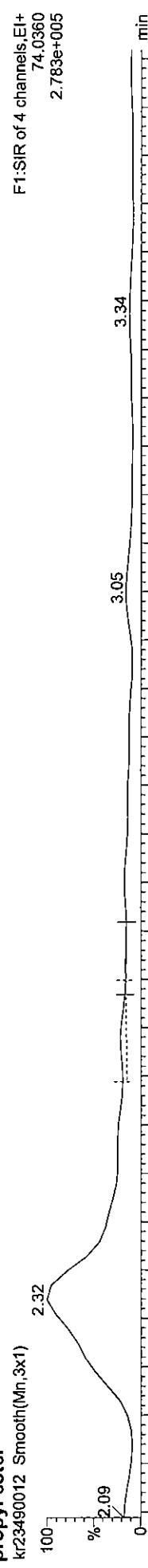
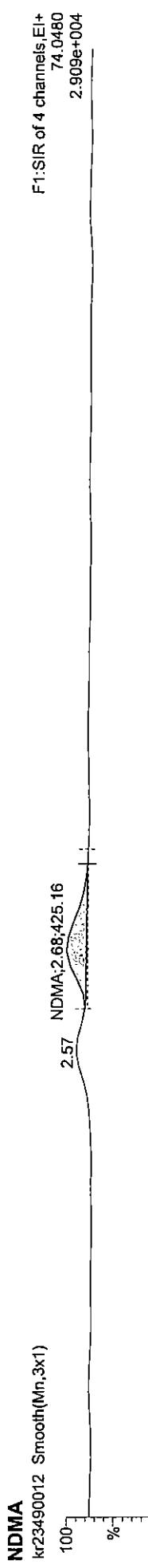
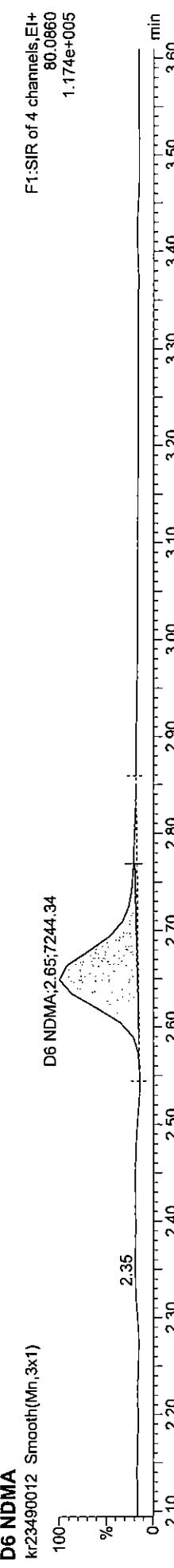
CAS No.	Compound	Conc. (ug/L)	Qualifier	EDL (ug/L)	RL (ug/L)
62-75-9	NDMA	0.00200	U	0.000370	0.00200
	Surrogate	Recovery (%)	Acceptance Criteria (%)		
000	D6-NDMA	25	10-85		

00008

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\Jobs\A315096_Rinj.qld, Time: Wed May 14 14:14:08 2003

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Name: kr23490012.* Date: 14-May-2003, Time: 11:55:48, Job: , Description: 472719,A01352-01R,N,1,2

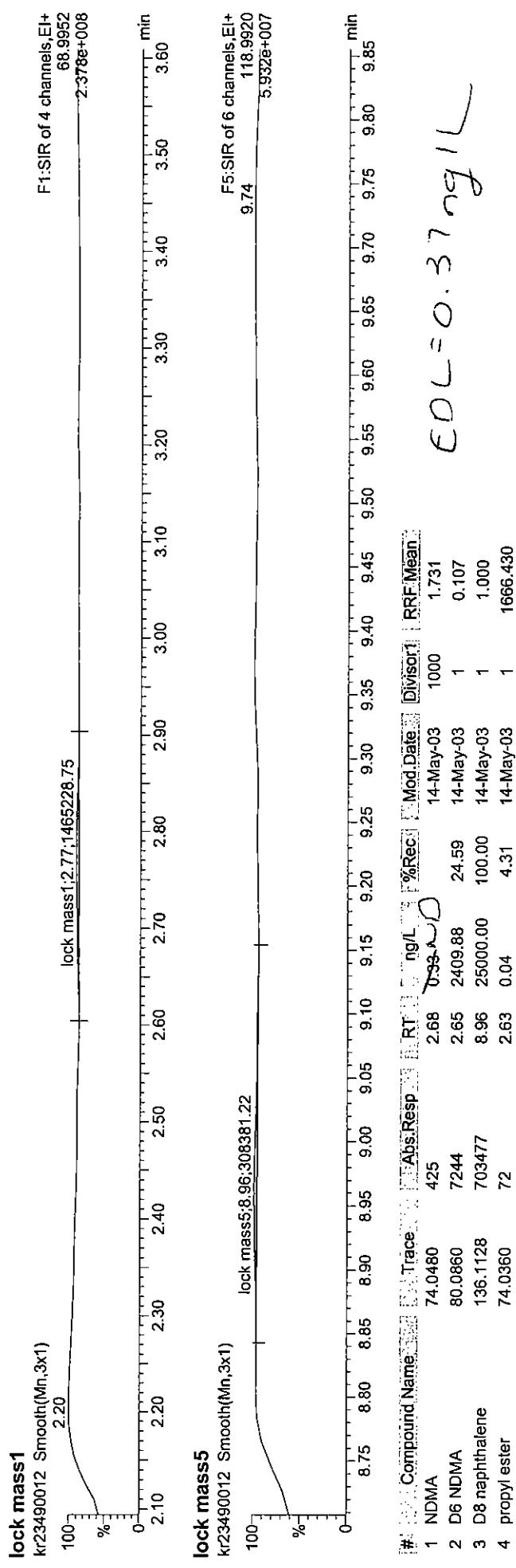
D8 naphthalene**propyl ester****NDMA****D6 NDMA**

000009

Quantify Sample Report

Printed: Wed May 14 14:14:32 2003, Page 2 of 3

Dataset: C:\MASSLYNX\Default.pro\QuanlynxFiles\Jobs\A315096_Rinj.qld, Time: Wed May 14 14:14:08 2003



LABORATORY BLANK

000011

WATER LABORATORY METHOD BLANK

Lab Name	Maxxam Analytics Inc.			
Matrix (soil/water):	water			Lab Sample ID:
Sample wt/vol:	1000	(g/mL)	mL	Project Name:
Level (low/med)	low			Lab File ID:
% Moisture	Not applicable	Decanted	N	Date Received:
Concentrated Extract Volume	1000	(uL)		Date Extracted:
Injection Volume	2	(uL)		Lab Batch:
Acid Wash Cleanup (Y/N):	N	pH	Not analyzed	Date Analyzed:
				Calib. Ref.:
				Time Analyzed:
				Dilution Factor:

CAS No.	Compound	Conc. (ug/L)	Qualifier	EDL (ug/L)	RL (ug/L)
62-75-9	NDMA	0.00200	U	0.000370	0.00200
	Surrogate	Recovery (%)		Acceptance Criteria (%)	
000	D6-NDMA	24		10-85	

000012

Quantify Sample Report

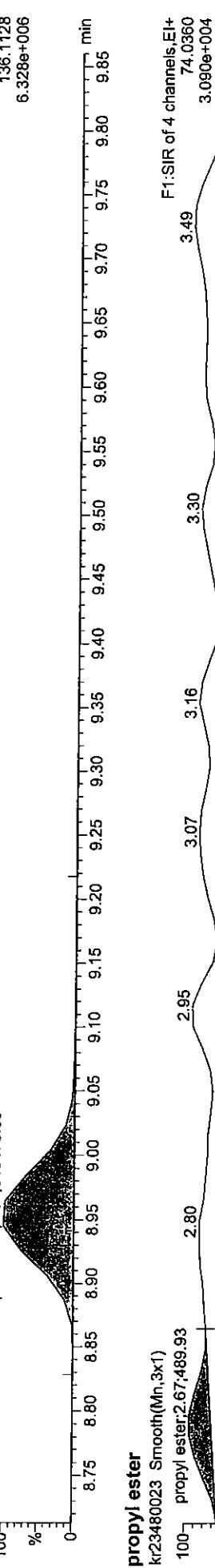
Printed: Wed May 14 08:36:39 2003, Page 1 of 5

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Name: kr23480023.* Date: 13-May-2003, Time: 16:37:28, Job: , Description: 472719,BLANK,N,1,2

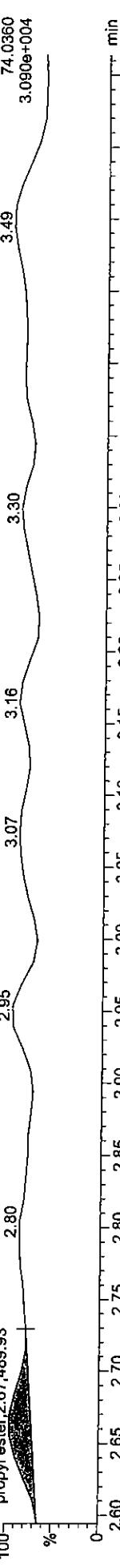
D8 naphthalene

kr23480023 Smooth(Mn,3x1) D8 naphthalene:8.94;545478.06



propyl ester

kr23480023 Smooth(Mn,3x1) propyl ester:2.67;469.93



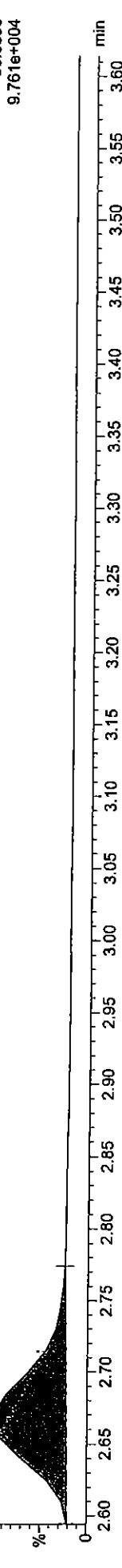
NDMA

kr23480023 Smooth(Mn,3x1) NDMA:2.70;195.54



D6 NDMA

kr23480023 Smooth(Mn,3x1) D6 NDMA:2.67;5409.38



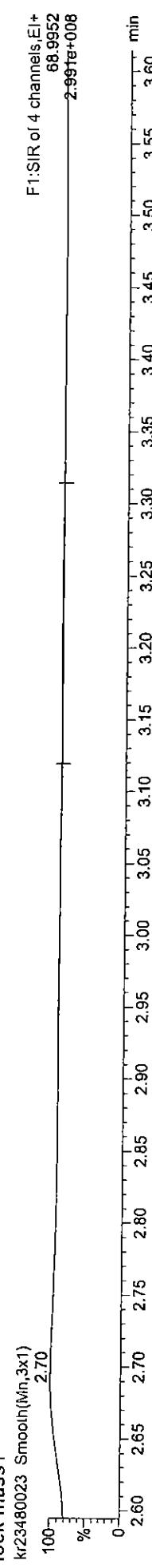
000013

Quantify Sample Report

Printed on May 14 08:36:36 2017, page 2 of 5

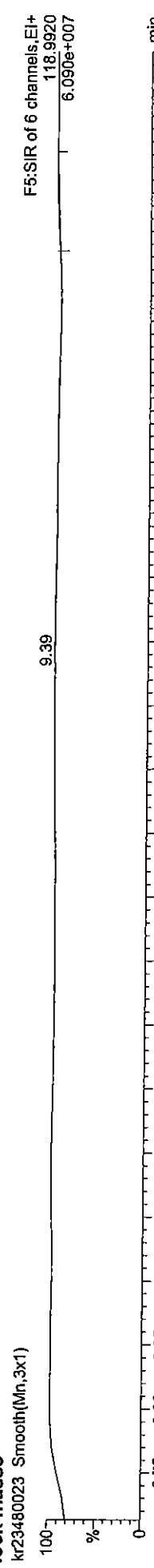
lock mass1

kr23480023 Smooth(Mn,3x1)
2.70



lock mass5

kr23480023 Smooth(Mn,3x1)



#	Found Name	Exact	% Abs. Reson.	% Intensity	% Rec.	% Mod. Distr.	Printed	Surveyed
1	NDMA	74.0480	186	2.70	0.9	14-May-03	1000	1.731
2	D6 NDMA	80.0860	5409	2.67	2320.68	23.68	14-May-03	1
3	D8 naphthalene	136.1128	545478	8.94	26000.00	100.00		0.107
4	propyl ester	74.0360	490	2.67	0.29	29.40	14-May-03	1
								1.000
								1666.430

EOL = O. 37ng/L

000014

LABORATORY CONTROL SAMPLE

000015

WATER LABORATORY SPIKED BLANK

Lab Name	Maxxam Analytics Inc.		
Matrix (soil/water):	water		
Sample wt/vol:	1000	(g/mL)	mL
Level (low/med)	low		
% Moisture	Not applicable	Decanted (Y/N):	N
Concentrated Extract Volume	1000	(uL)	
Injection Volume	2	(uL)	
Acid Wash Cleanup (Y/N):	N	pH	<u>Not analyzed</u>
Lab Sample ID:	A315096-472719S		
Project Name:	JPL		
Lab File ID:	KR23480021		
Date Received:	Not Applicable		
Date Extracted:	May 5, 2003		
Lab Batch:	472719		
Date Analyzed:	May 13, 2003		
Calib. Ref.:	20030513		
Time Analyzed:	15:59:44		
Dilution Factor:	1		

CAS No.	Compound	Extract Conc. (ug/L)	Spike Level (ug/L)	Recovery (%)	Acceptance Criteria (%)
62-75-9	NDMA	0.00416	0.00500	83	10-173
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		Surrogate	Recovery (%)	Acceptance Criteria (%)	
000		D6-NDMA	19	10-85	

000016

Quantify Sample Report

Printed: Mon May 26 10:57:51 2003, Page 1 of 5

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Blks_Spk\20030505\spks_ndma_20030505.qld, Time: Mon May 26 10:56:29 2003

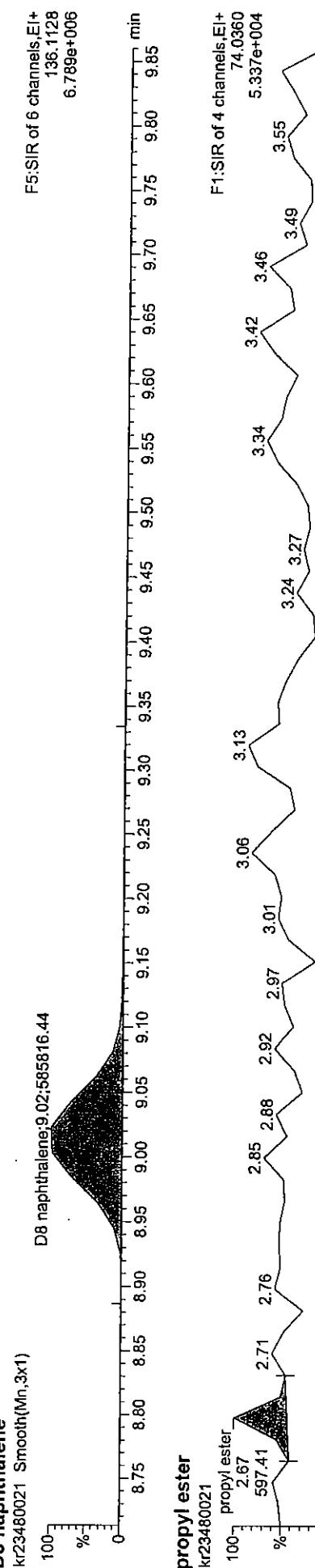
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Name: kr23480021.* Date: 13-May-2003, Time: 15:59:44, Job: , Description: 472719,SPIKE,N,1,2

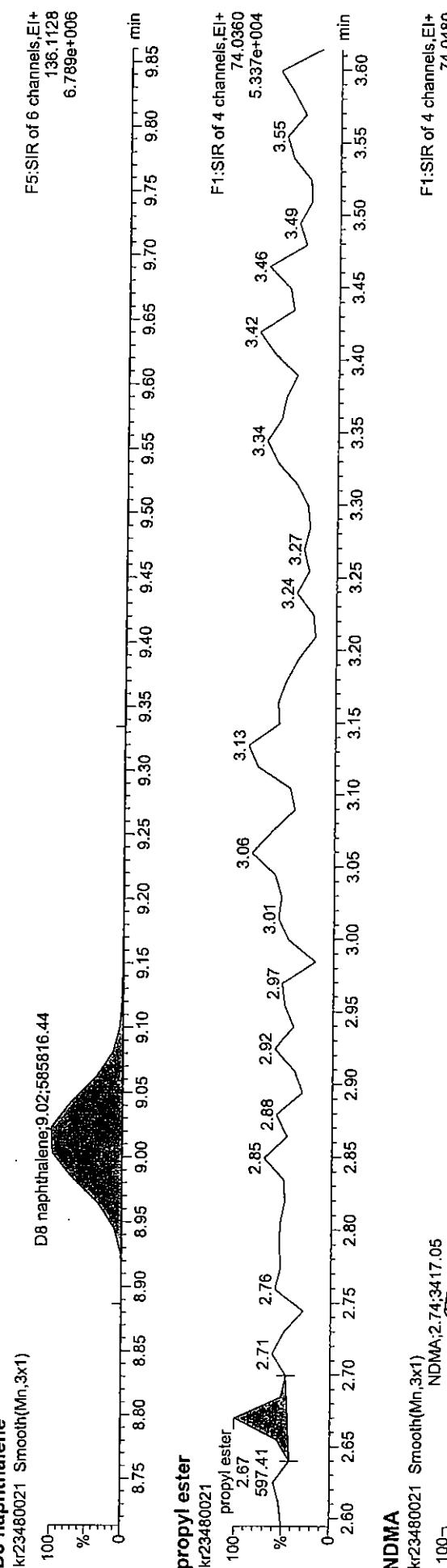
D8 naphthalene



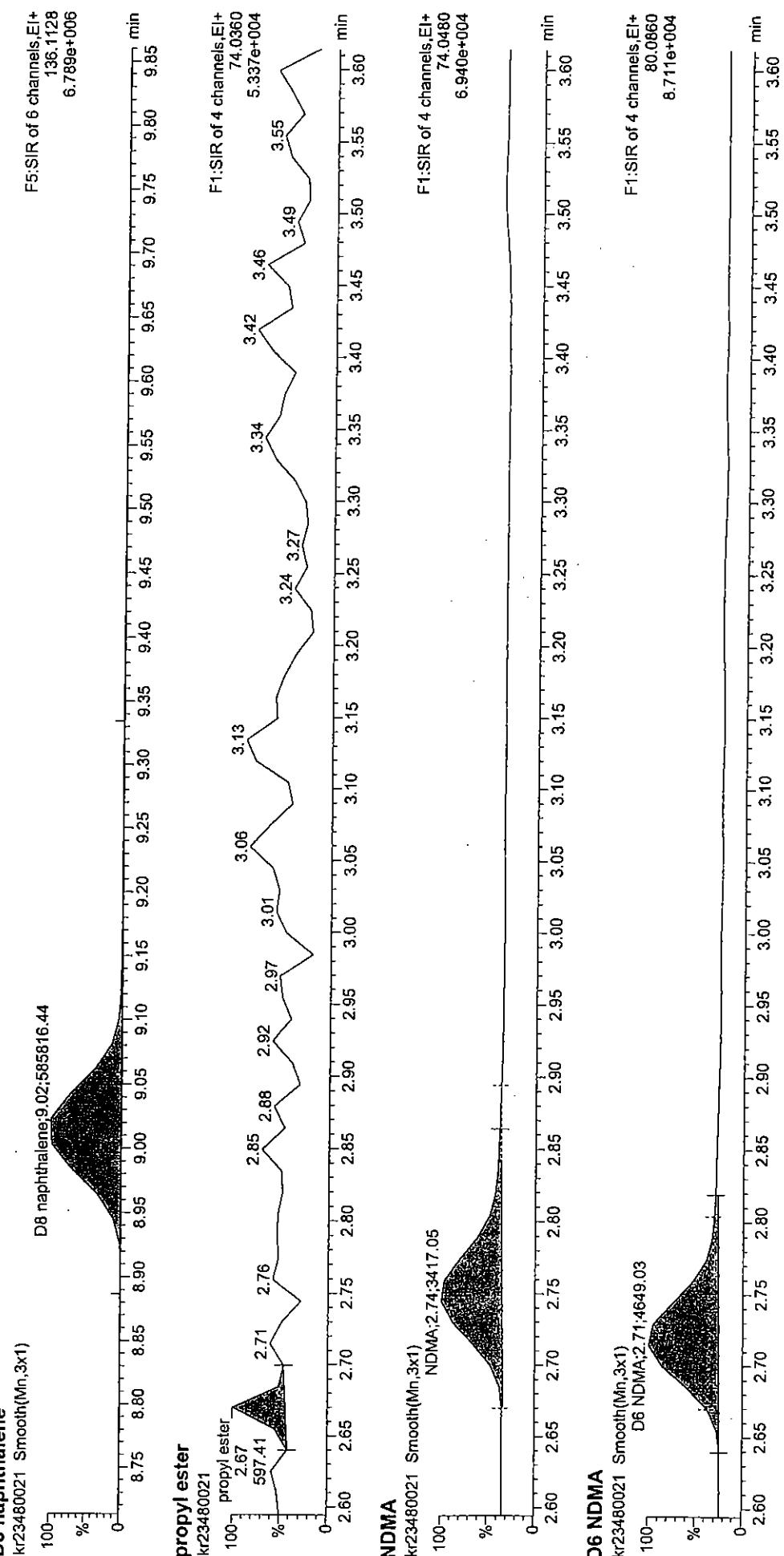
propyl ester



NDMA



D6 NDMA



000017

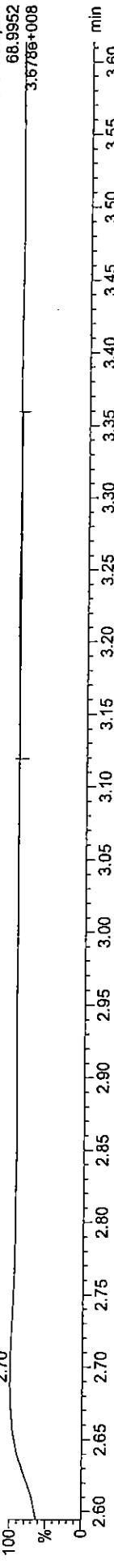
Quantify Sample Report

Printed: Mon May 26 10:57:51 2003, Page 2 of 5

Dataset: C:\MASSLYNX\Default\pro\QuantmrxFiles\QCBlks_Spkss\20030505\spks_ndma_20030505.qld, Time: Mon May 26 10:56:29 2003

lock mass1

kr23480021 Smooth(Mn,3x1)



lock mass5

kr23480021 Smooth(Mn,3x1)



#	Sample Name	Sample Description	Start Retention	End Retention	RT Range	RT Range	%RT Range	RT Mean	RT StdDev	RT StdDev
1	NDMA	74.0480	3417	2.74	4.16	83.21	26-May-03	1000	1.731	
2	D6 NDMA	80.0860	4649	2.71	1857.15	18.95	26-May-03	1	0.107	
3	D8 naphthalene	136.1128	588816	9.02	25000.00	100.00		1	1.000	
4	propyl ester	74.0360	597	2.67	0.36	35.85		1	1666.430	

000018

WATER LABORATORY SPIKED BLANK DUPLICATE

Lab Name	Maxxam Analytics Inc.		
Matrix (soil/water):	water		
Sample wt/vol:	1000	(g/mL)	mL
Level (low/med)	low		
% Moisture	Not applicable	Decanted (Y/N):	N
Concentrated Extract Volume	1000 (uL)		
Injection Volume	2 (uL)		
Acid Wash Cleanup (Y/N):	N	pH	Not analyzed
Lab Sample ID:	A315096-472719SD		
Project Name:	JPL		
Lab File ID:	KR23480022		
Date Received:	Not Applicable		
Date Extracted:	May 5, 2003		
Lab Batch:	472719		
Date Analyzed:	May 13, 2003		
Calib. Ref.:	20030513		
Time Analyzed:	16:18:32		
Dilution Factor:	1		

CAS No.	Compound	LCS Extract Conc (ug/L)	Spike Level (ug/L)	Recovery (%)	%RPD LCS/LCSD	Acceptance Criteria (%)
62-75-9	NDMA	0.00377	0.00500	75	10	25
	Surrogate	Recovery (%)		Acceptance Criteria (%)		
000	D6-NDMA	21		10-85		

000019

Quantify Sample Report

Printed: Mon May 26 10:57:51 2003, Page 3 of 5

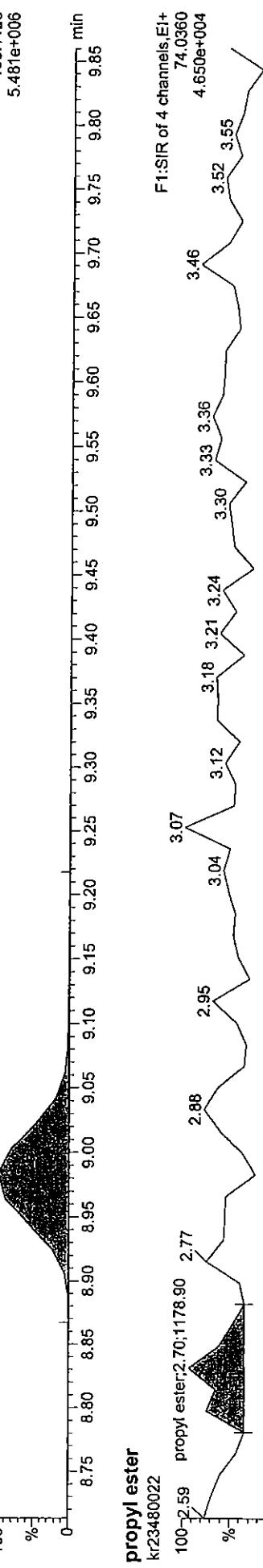
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Name: kr23480022.* , Date: 13-May-2003, Time: 16:18:32, Job: , Description: 472719, SPIKE,D,1,2

D8 naphthalene

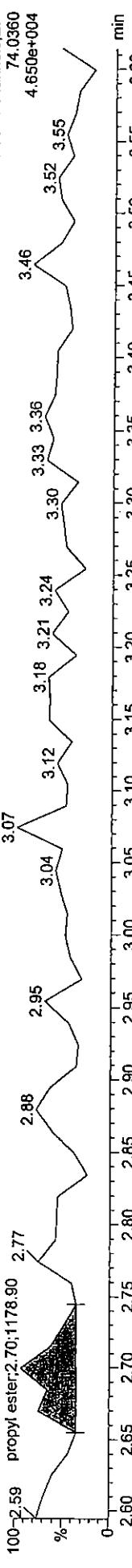
kr23480022 Smooth(Mn,3x1)

D8 naphthalene;8.98;459749.28



propyl ester

kr23480022 propyl ester;2.70;1178.90



NDMA

kr23480022 Smooth(Mn,3x1)

NDMA;2.71;2726.29



D6 NDMA

kr23480022 Smooth(Mn,3x1)

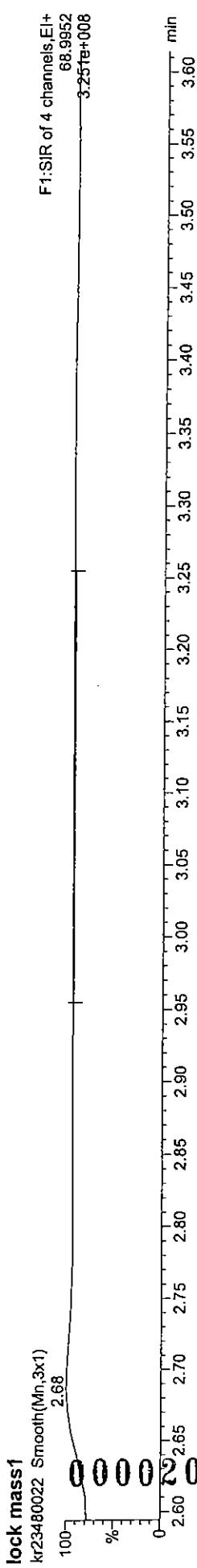
D6 NDMA;2.68;4095.40



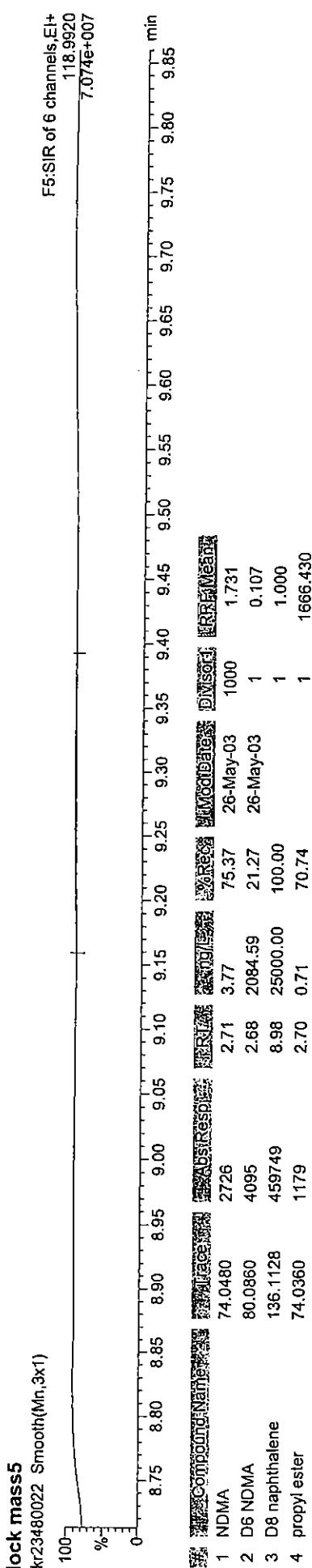
lock mass1

kr23480022 Smooth(Mn,3x1)

2.68



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000021

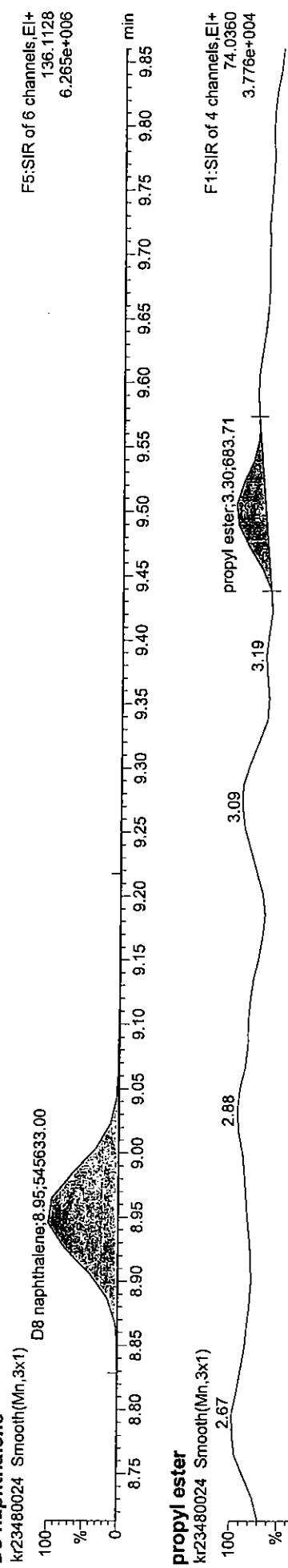
GLASS BLANK

000022

Quantify Sample Report

Name: kr23480024*, Date: 13-May-2003, Time: 16:56:25, Job: , Description: GLASS BLANK,2003/05/05,N,1,2

D8 naphthalene



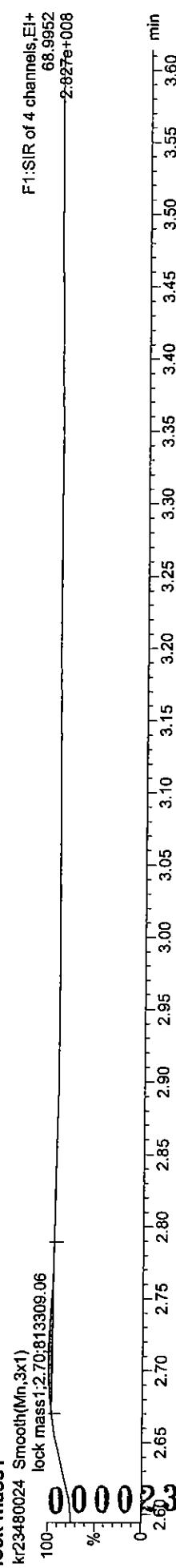
NDMA



D6 NDMA



lock mass1



F1:SIR of 4 channels,El+
80.0860
2.120e+005

F1:SIR of 4 channels,El+
68.9952
2.827e+008

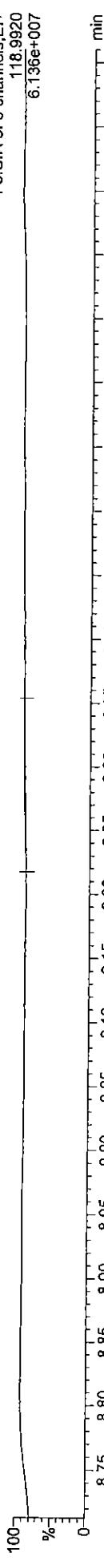
Quantitative Sample Report

Printed: Wed May 14 08:36:39 2003, Page 4 of 5

File: k23480024.Spectrum.Defined Scan Series - Sample200305.qd, Time: 14:00:36:17 2003

lock mass5

k23480024 Smooth(Mn,3x1)



#	Compound Name	Exact Mass	ABS.Resp.	PERCENT	RELATIVE	LAST DATE	LAST DATER	RELMETHOD	RELMETHOD
1	NDMA	74.0480	147	2.73	0.96	14-May-03	1000	1.731	
2	D6 NDMA	80.0860	13172	2.70	5649.13	14-May-03	1	0.107	
3	D8 naphthalene	136.1128	545633	8.95	25000.00	100.00	1	1.000	
4	propyl ester	74.0360	634	3.30	0.41	41.03	1	1666.430	

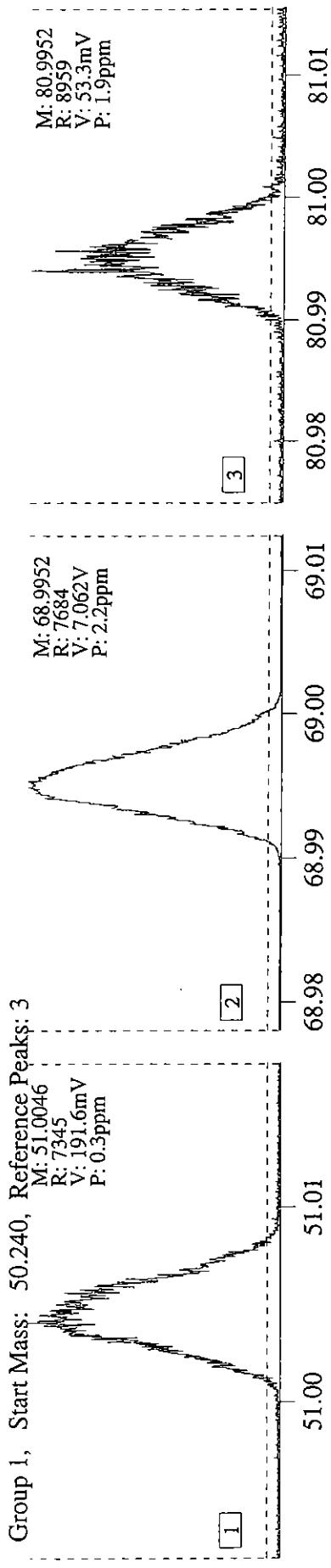
EDL = 0.37 mg/L

000024

MASS RESOLUTION CALIBRATION

000025

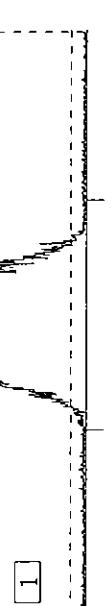
S.I.M. Calibration 13-May-2003 09:34, Run: kr23480003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



000026

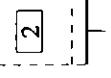
S.I.M. Calibration 13-May-2003 09:34, Run: kr23480003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm

Group 2, Start Mass: 50.240, Reference Peaks: 4
M: 51.0046
R: 7239
V: 181.1mV
P: 2.1ppm



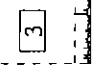
[1]

M: 68.9952
R: 7539
V: 7.084V
P: 1.2ppm



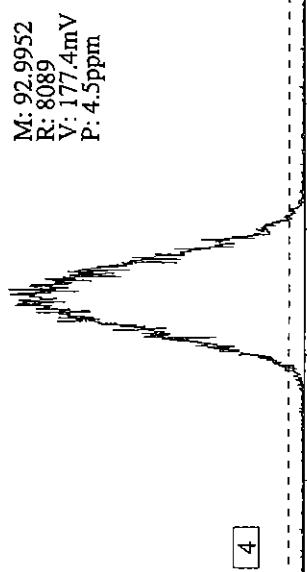
[2]

M: 80.9952
R: 8840
V: 48.5mV
P: 0.1ppm



[3]

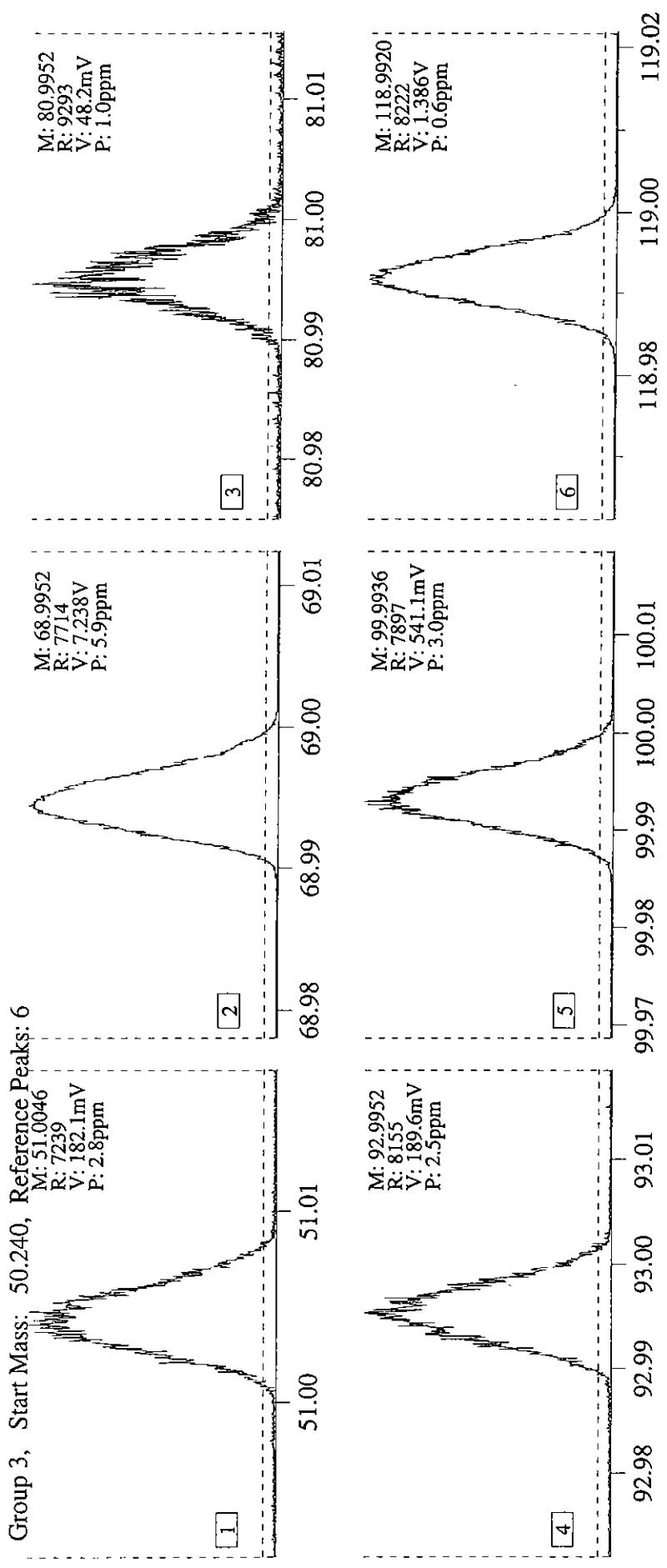
M: 92.9952
R: 8089
V: 177.4mV
P: 4.5ppm



[4]

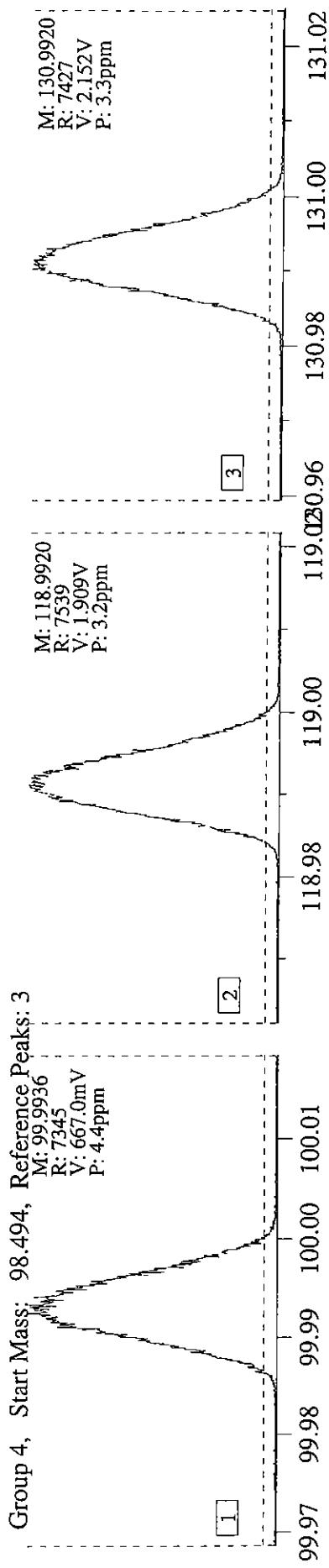
000027

S.I.M. Calibration 13-May-2003 09:34, Run: kr23480003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



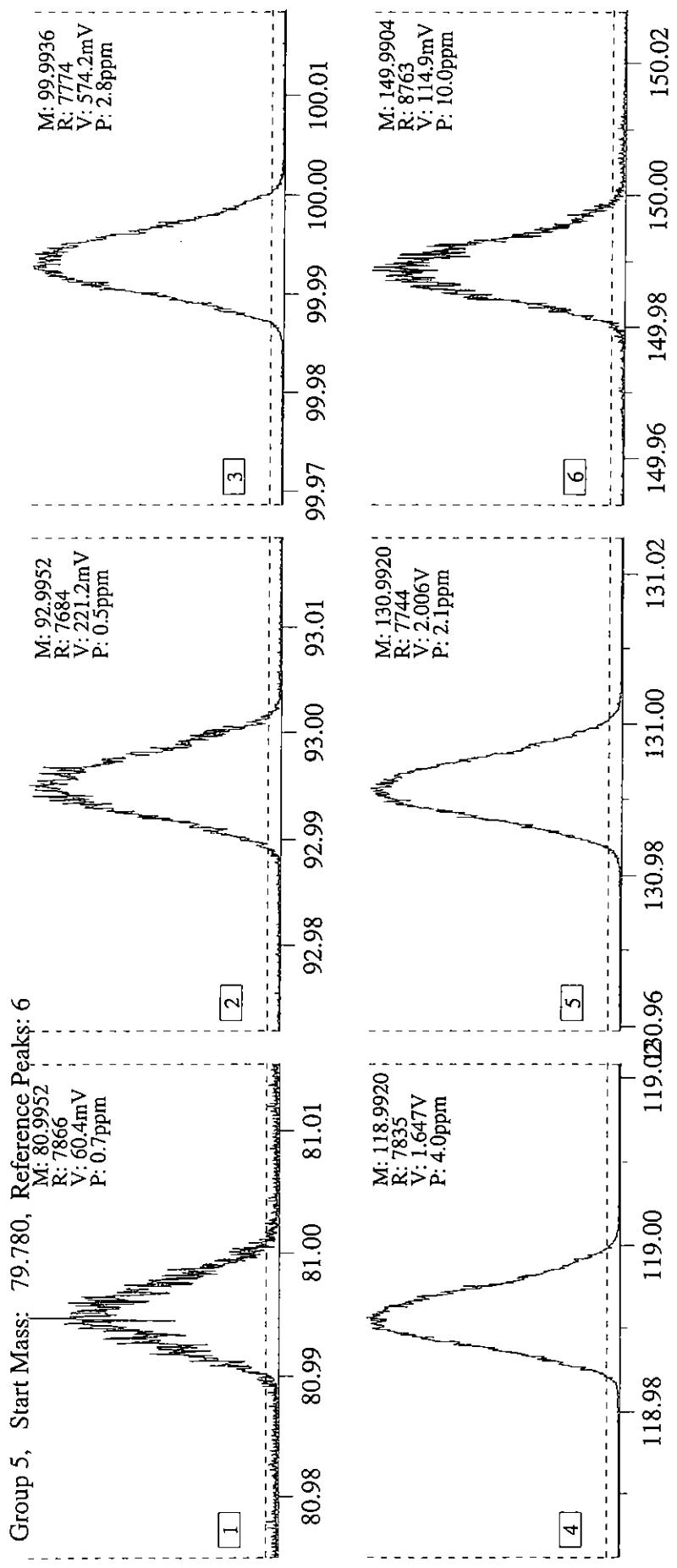
000028

S.I.M. Calibration 13-May-2003 09:34, Run: kr23480003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



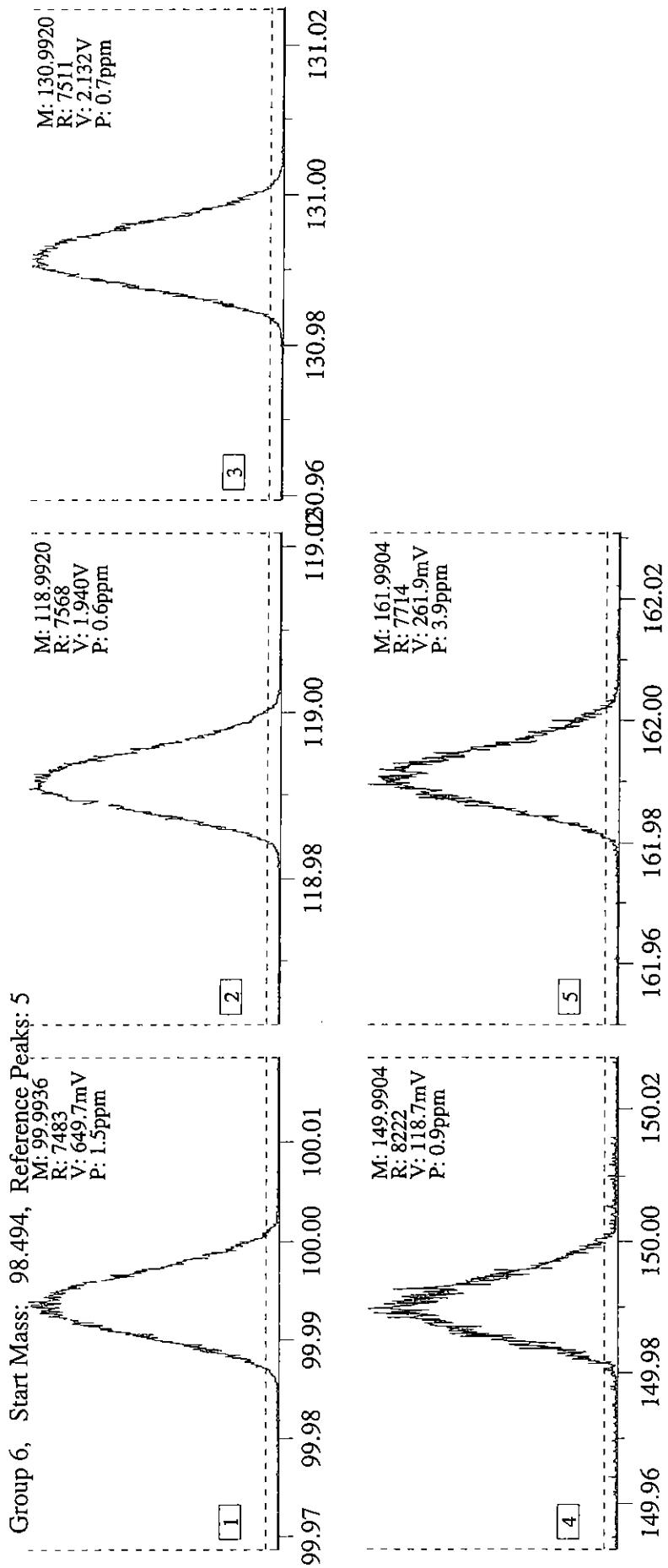
000029

S.I.M. Calibration 13-May-2003 09:34, Run: kr23480003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



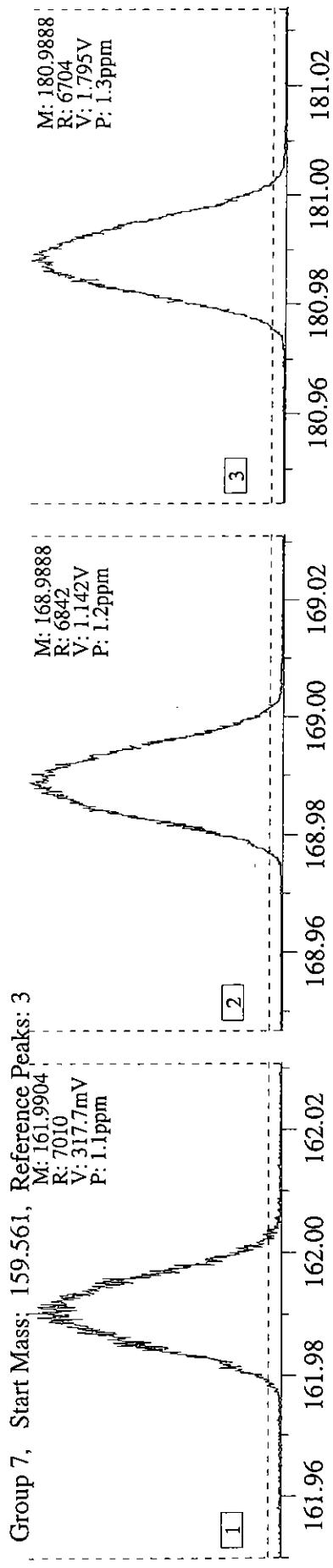
000030

S.I.M. Calibration 13-May-2003 09:34, Run: kr23480003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



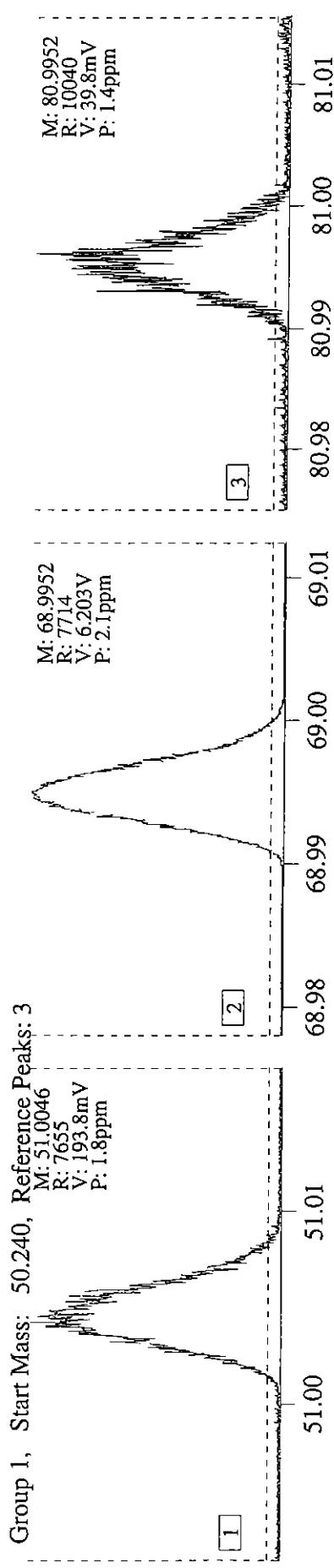
000031

S.I.M. Calibration 13-May-2003 09:34, Run: kr23480003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



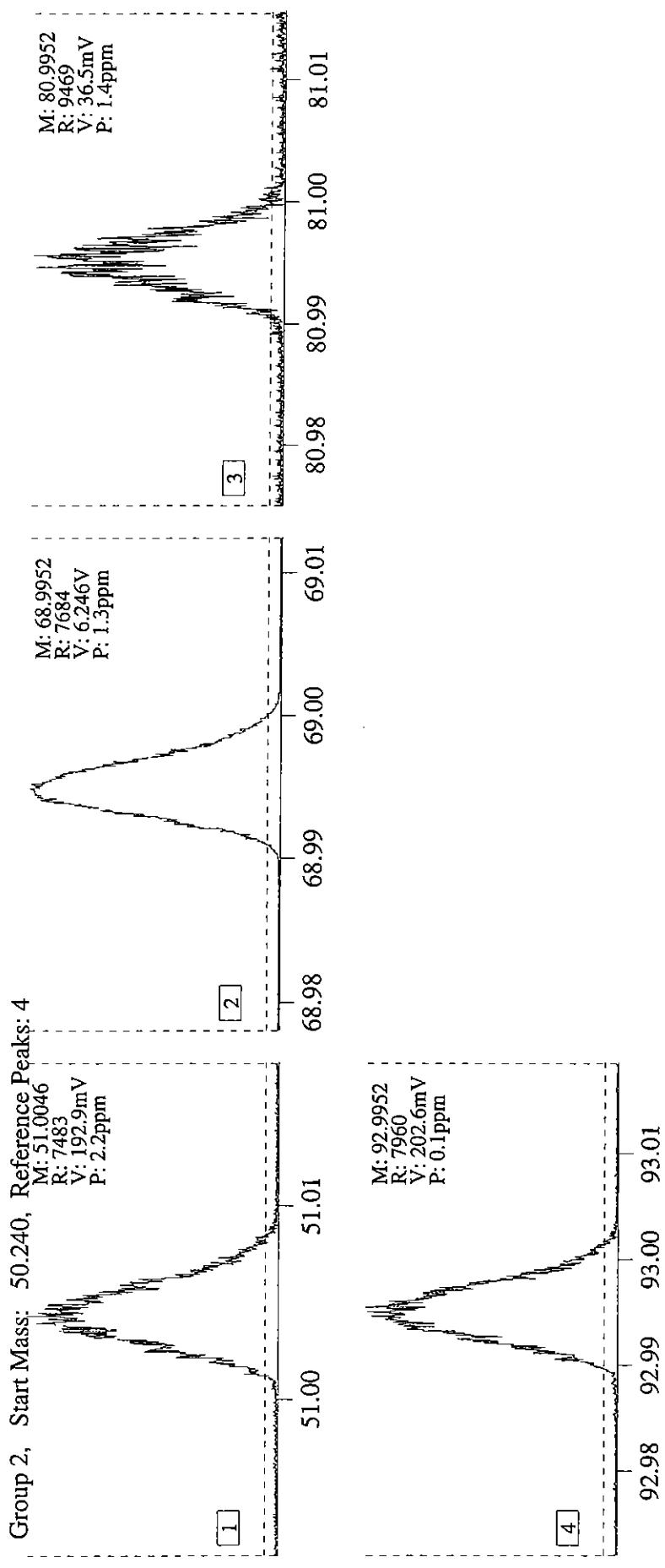
000032

S.I.M. Calibration 13-May-2003 15:23, Run: kr23480018, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



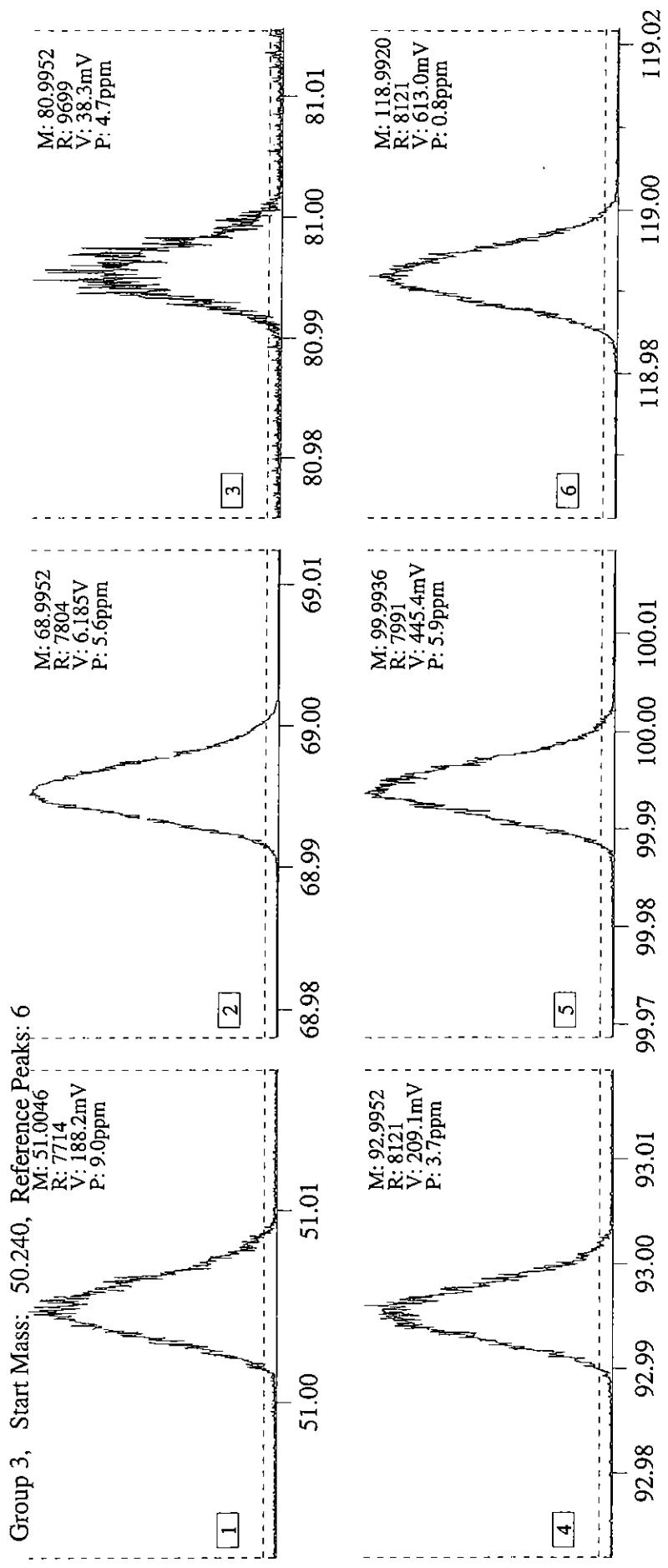
000033

S.I.M. Calibration 13-May-2003 15:23, Run: kr23480018, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



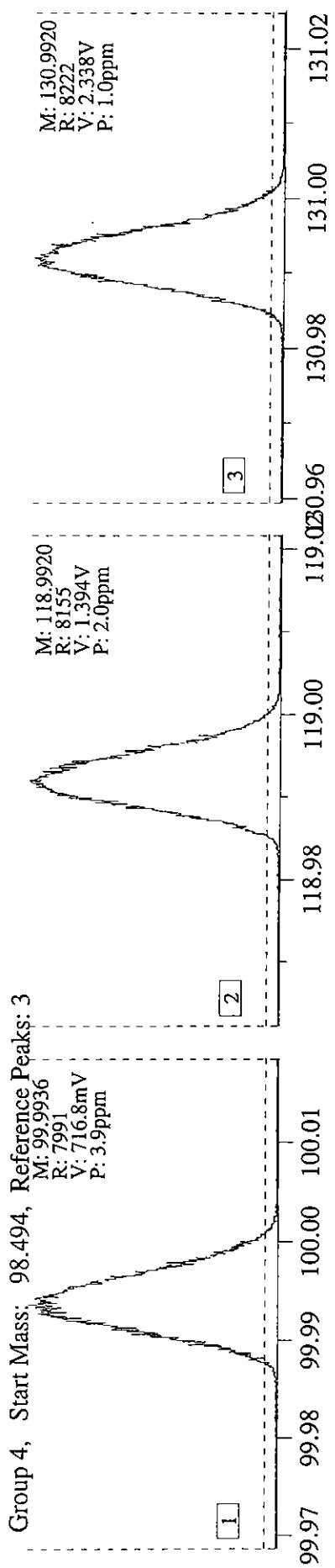
000034

S.I.M. Calibration 13-May-2003 15:23, Run: kr23480018, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



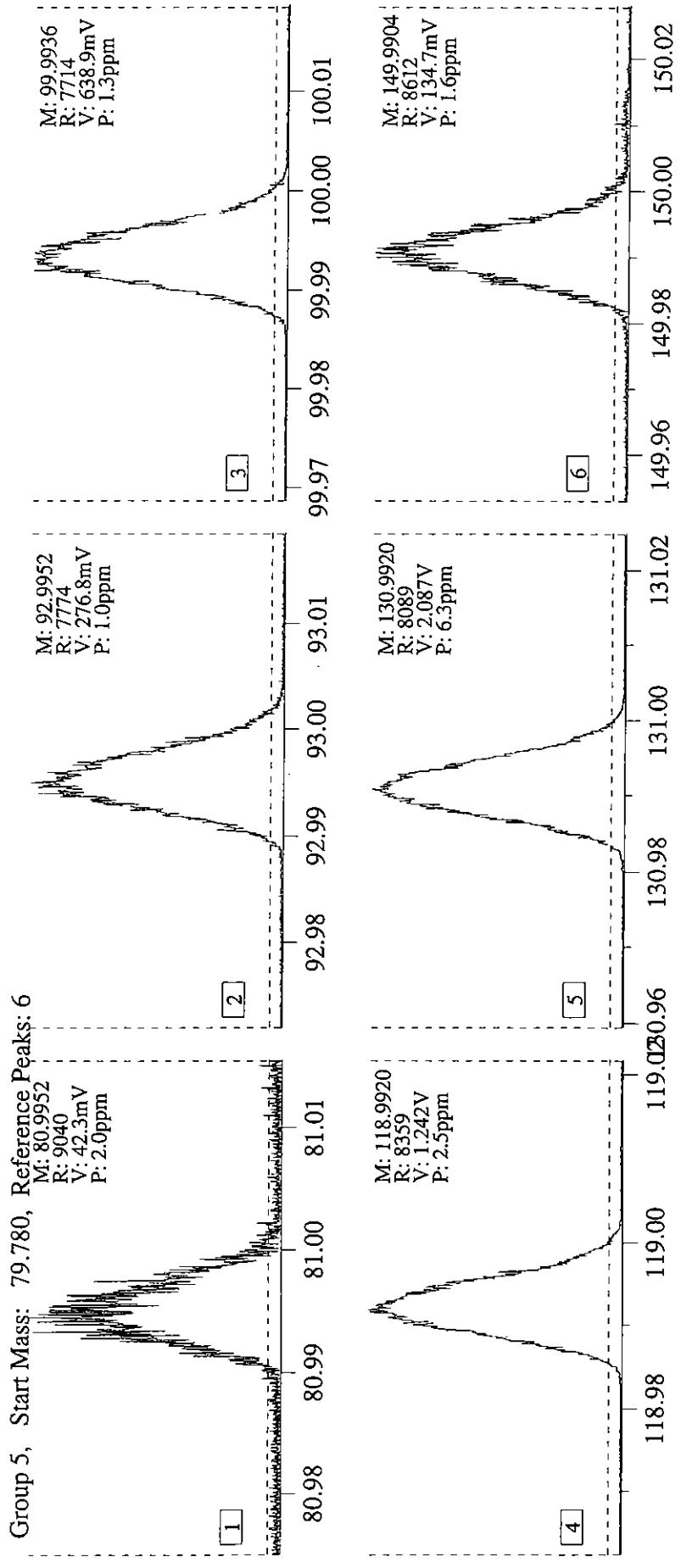
000035

S.I.M. Calibration 13-May-2003 15:23, Run: kr23480018, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm

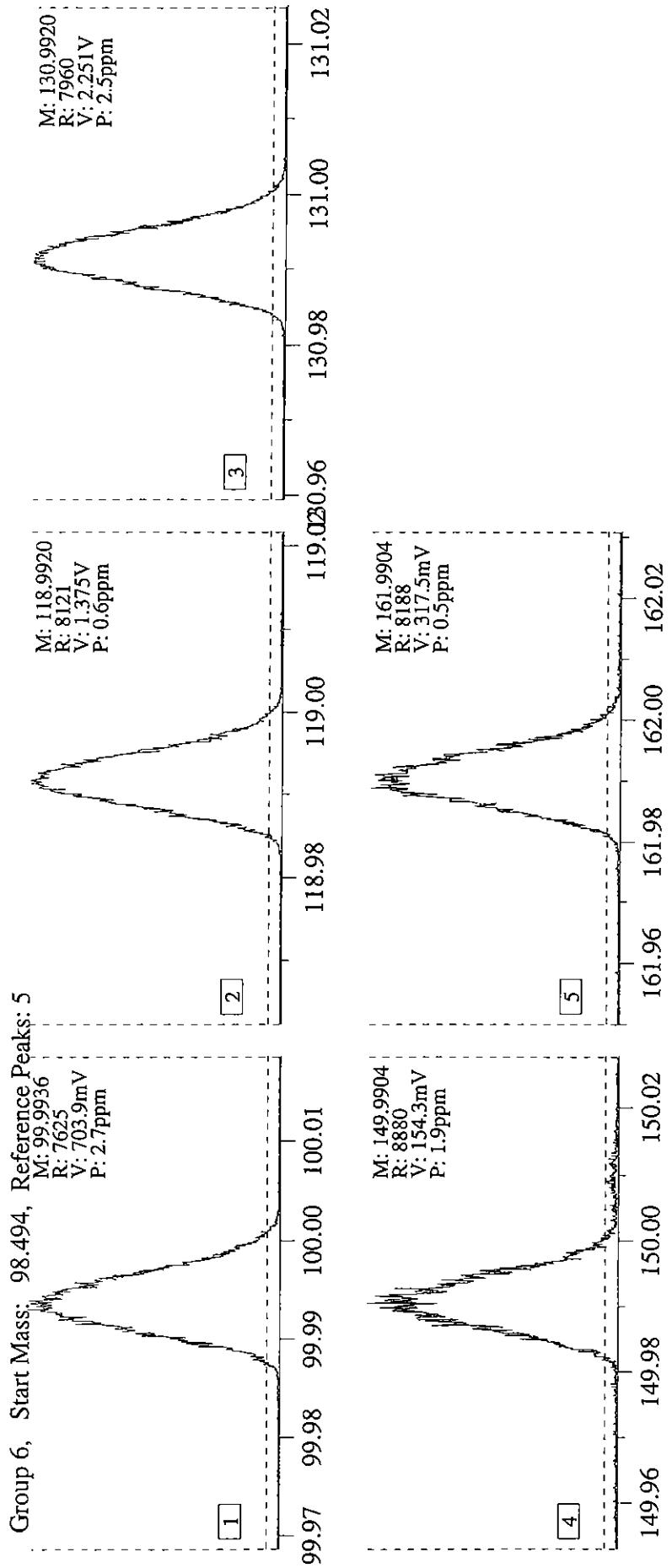


000036

S.I.M. Calibration 13-May-2003 15:23, Run: kr23480018, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm

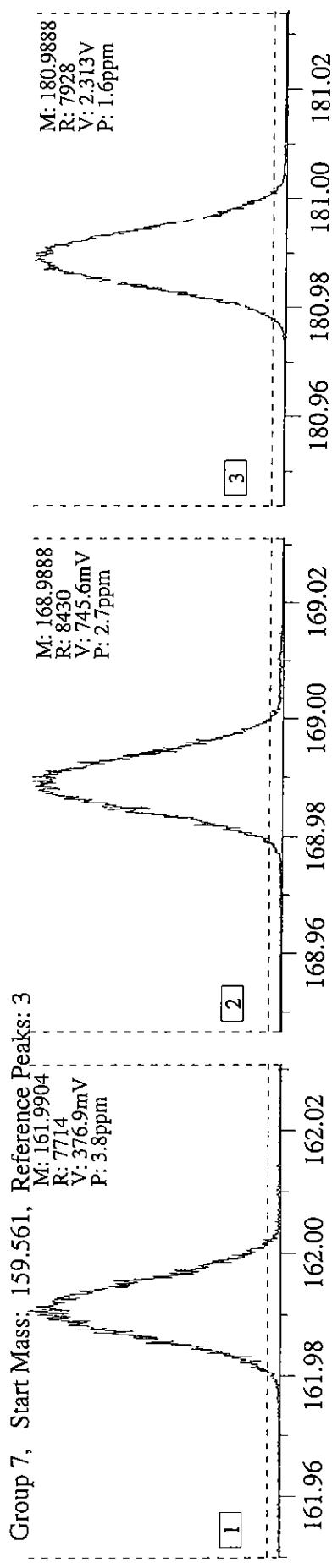


S.I.M. Calibration 13-May-2003 15:23, Run: kr23480018, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



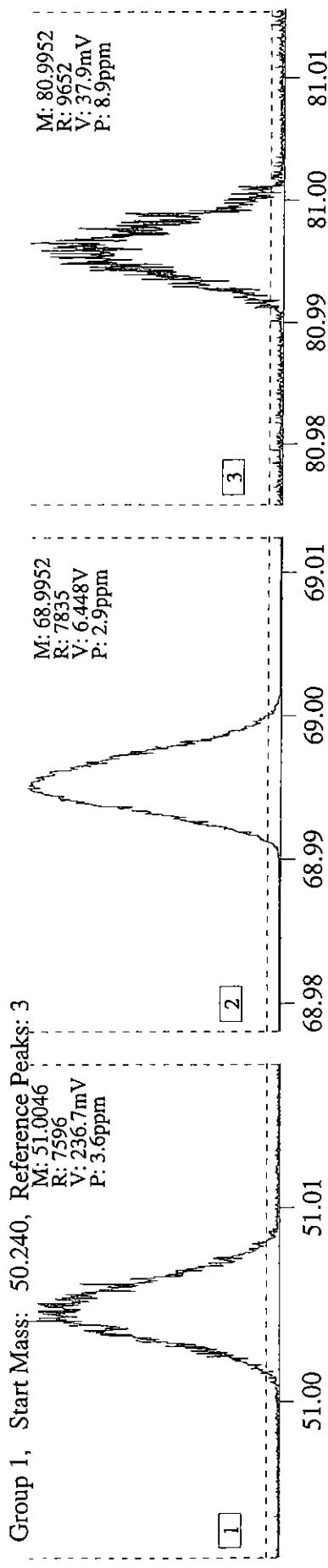
000038

S.I.M. Calibration 13-May-2003 15:23, Run: kr23480018, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



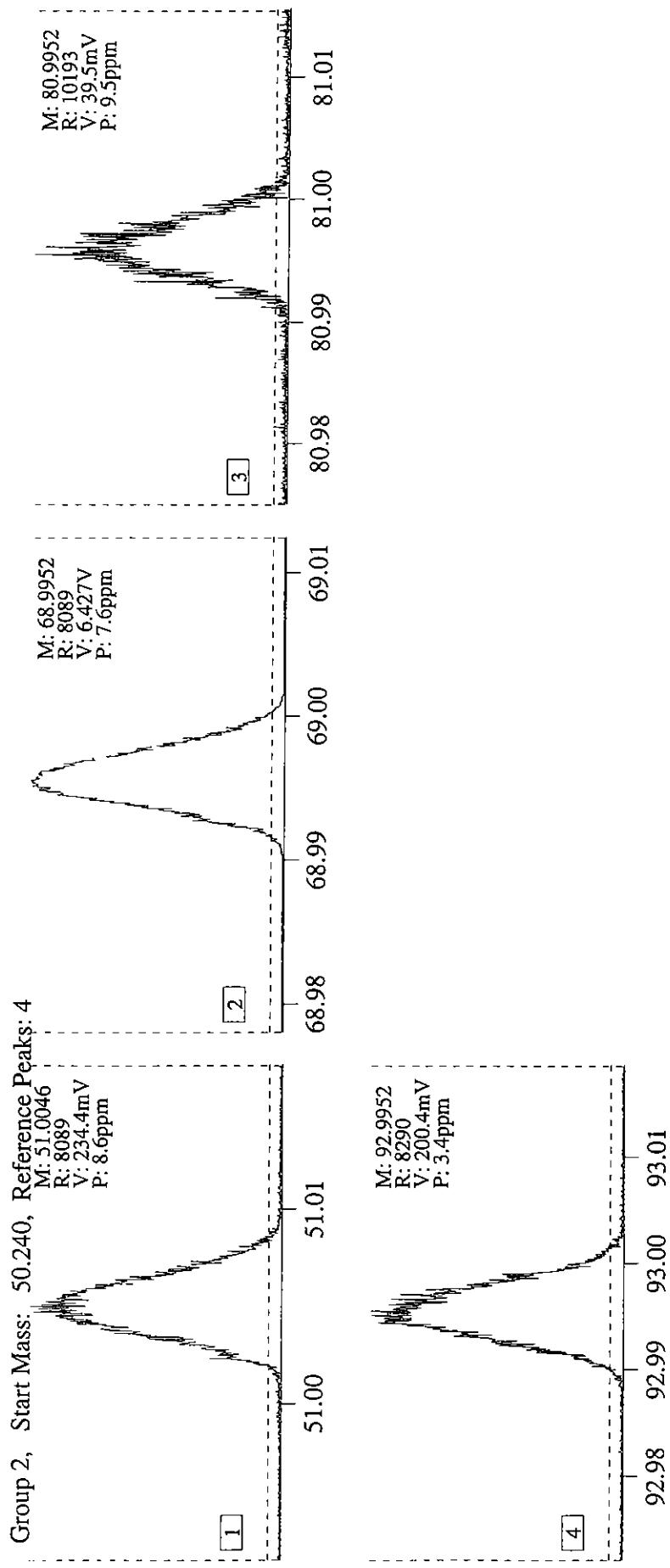
000039

S.I.M. Calibration 14-May-2003 08:47, Run: kr23490003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



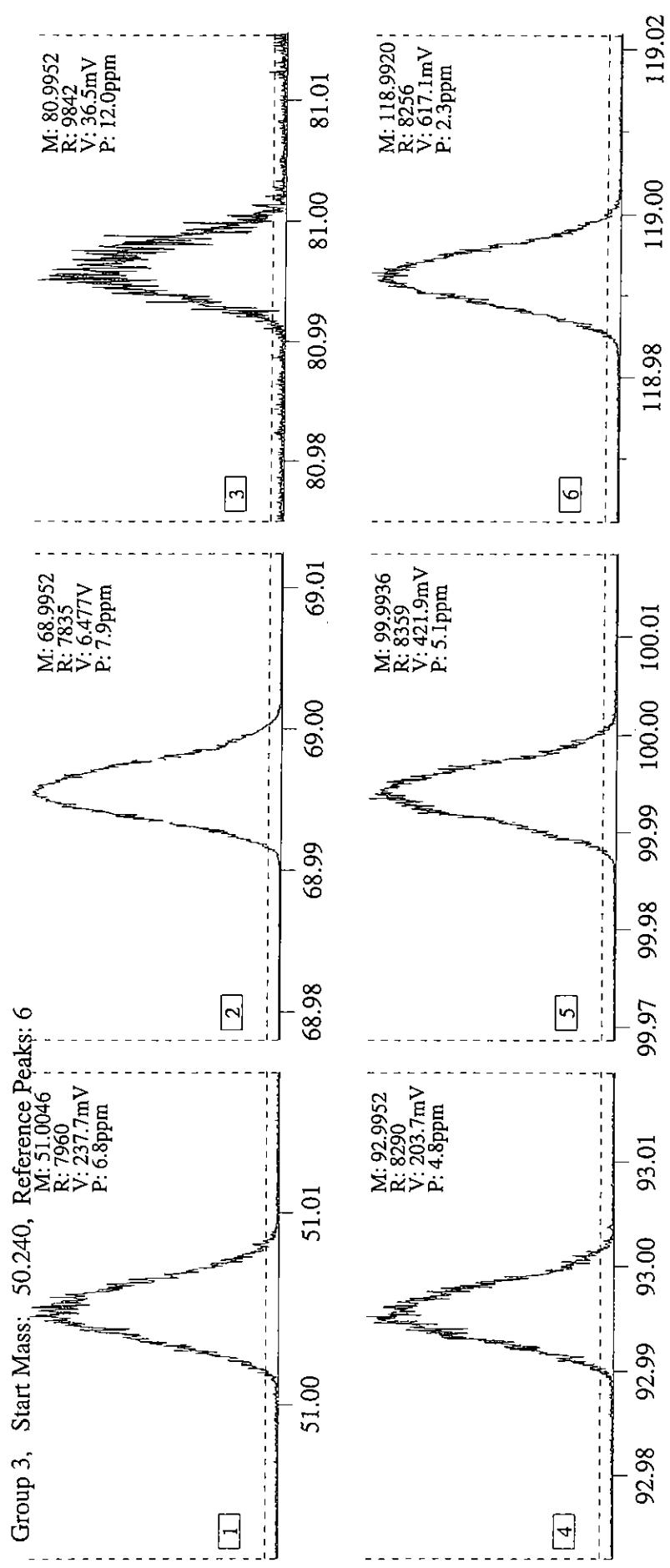
000040

S.I.M. Calibration 14-May-2003 08:47, Run: kr23490003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



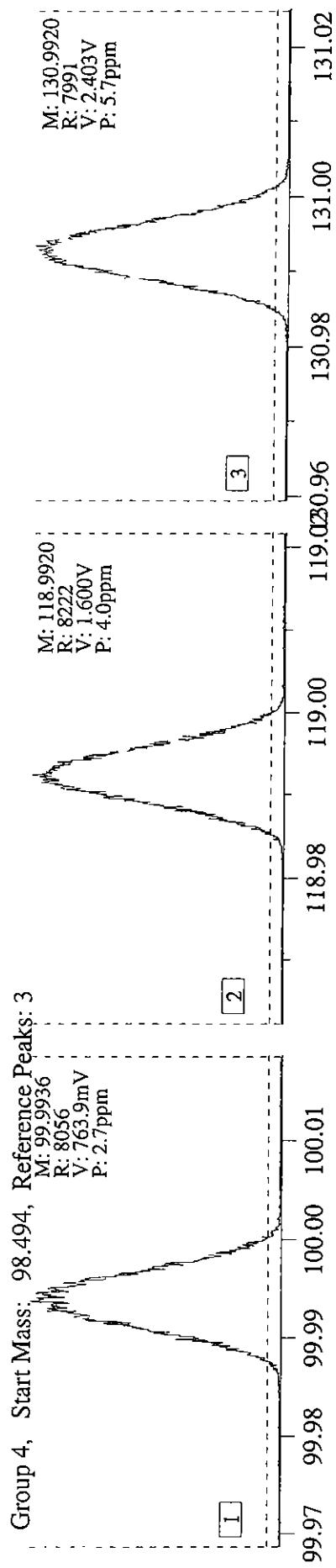
000041

S.I.M. Calibration 14-May-2003 08:47, Run: kr23490003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



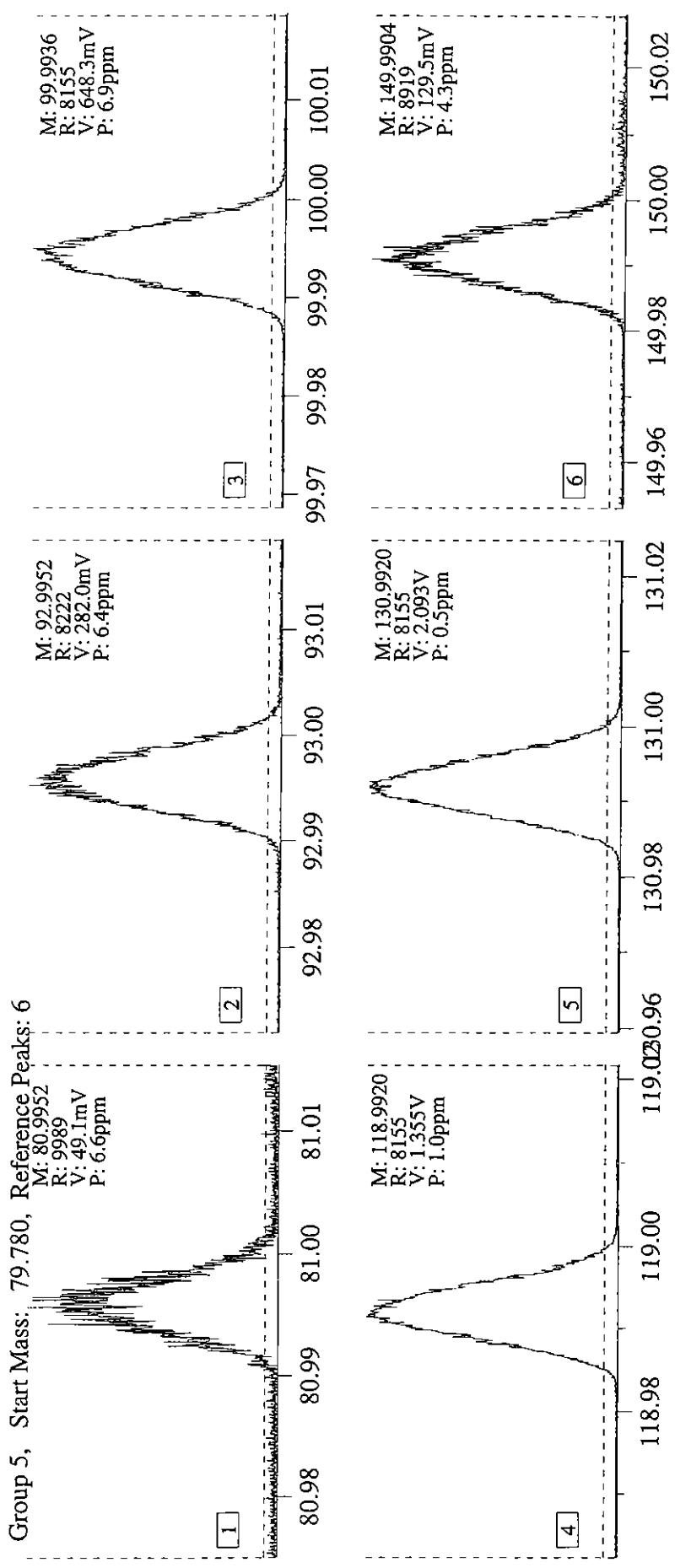
000042

S.I.M. Calibration 14-May-2003 08:47, Run: kr23490003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



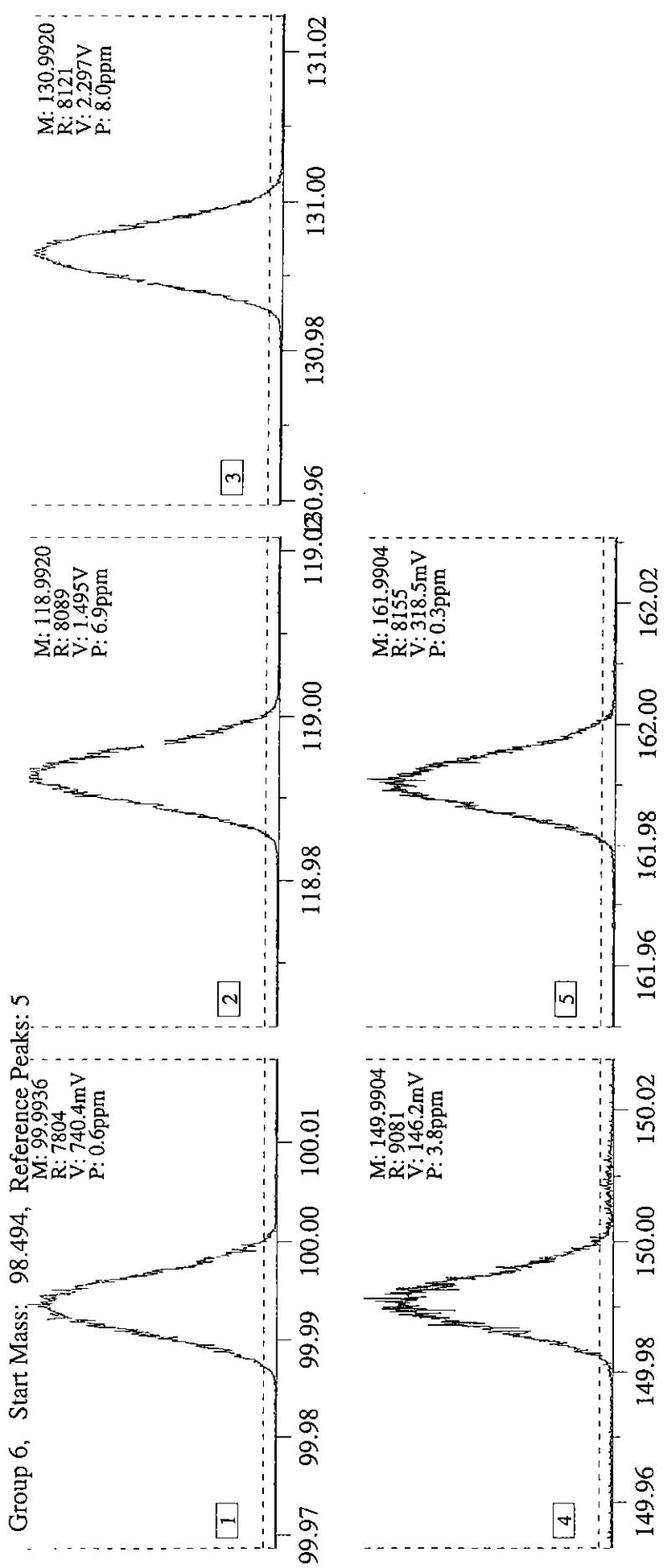
000043

S.I.M. Calibration 14-May-2003 08:47, Run: kr23490003, Expt: nitro200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



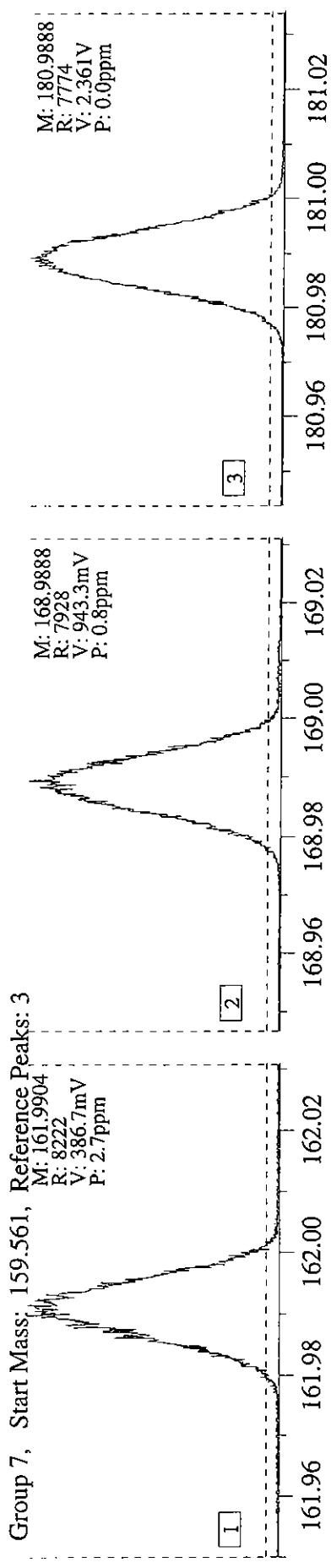
000044

S.I.M. Calibration 14-May-2003 08:47, Run: kr23490003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



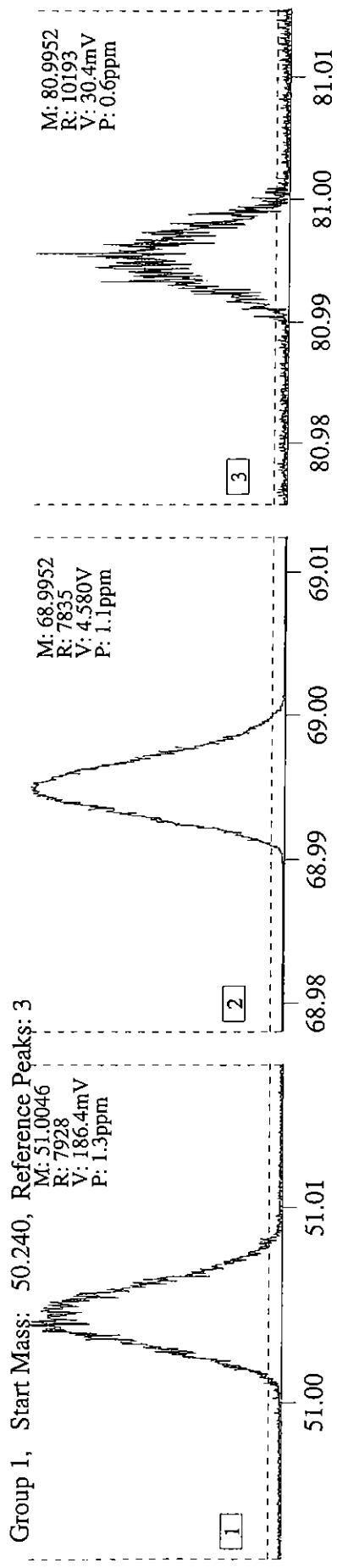
000045

S.I.M. Calibration 14-May-2003 08:47, Run: kr23490003, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



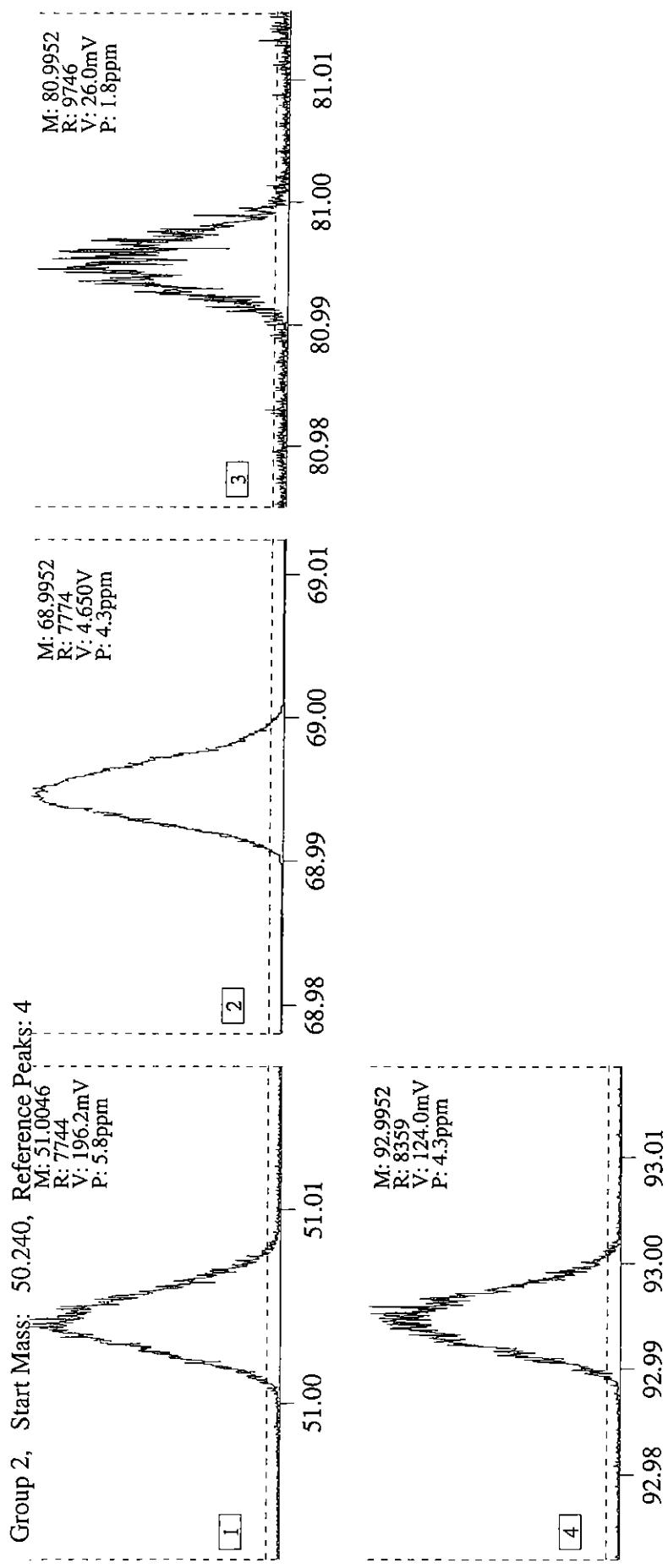
000046

S.I.M. Calibration 14-May-2003 17:30, Run: kr23490028, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



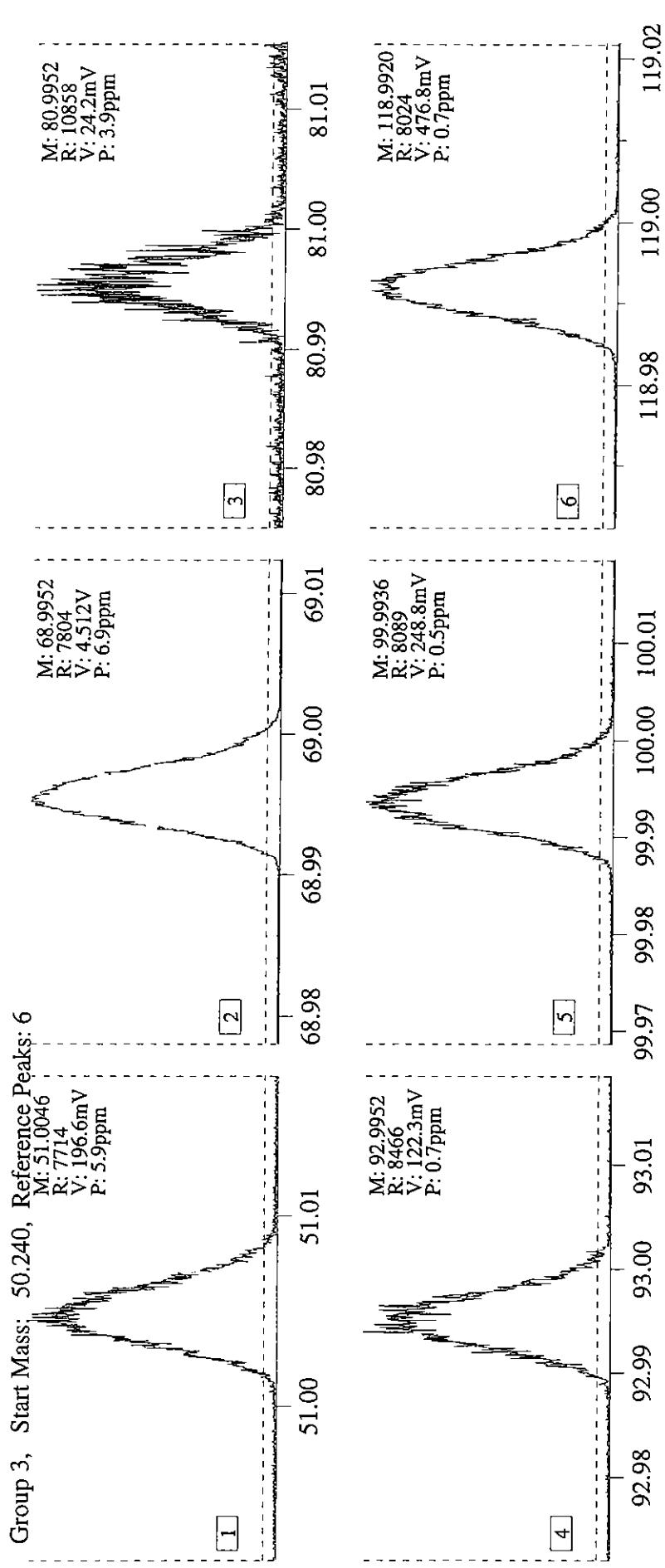
000047

S.I.M. Calibration 14-May-2003 17:30, Run: kr23490028, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



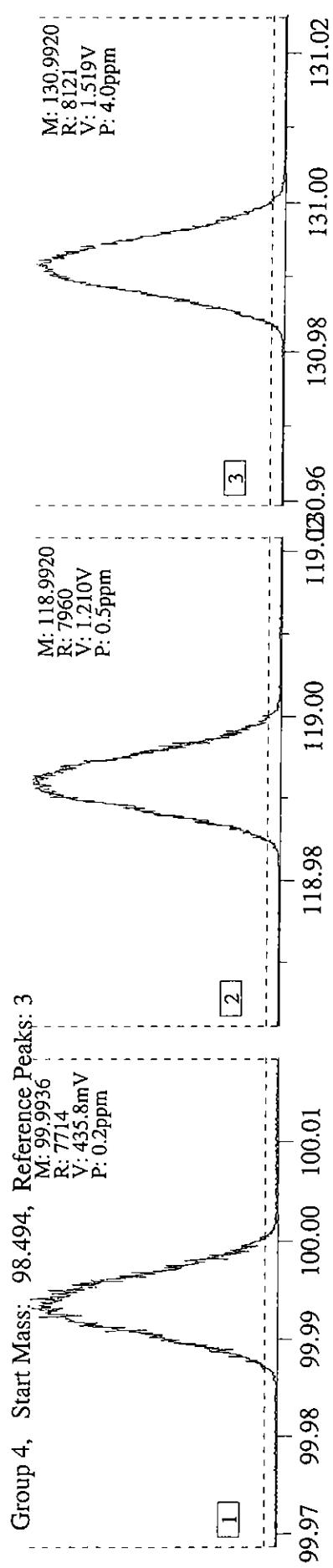
© JG 18

S.I.M. Calibration 14-May-2003 17:30, Run: kr23490028, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



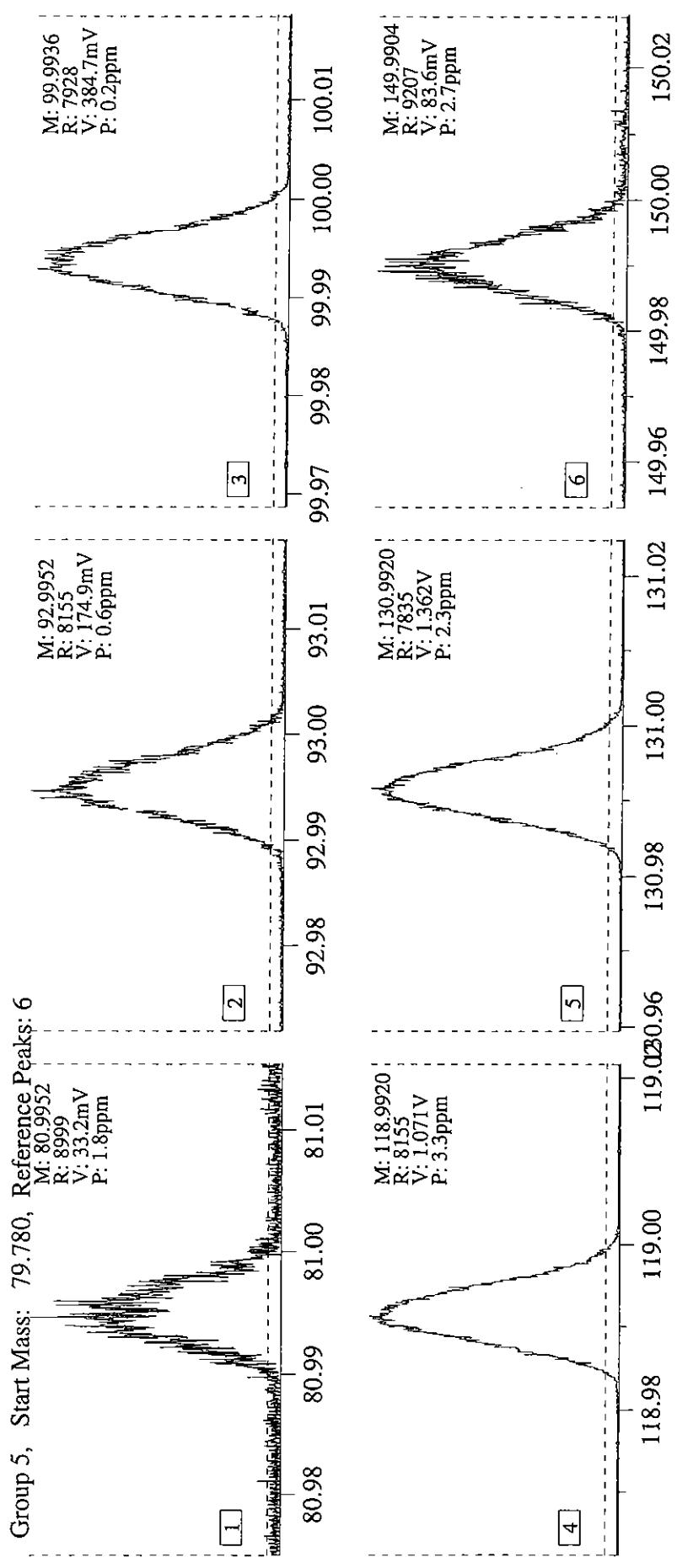
000049

S.I.M. Calibration 14-May-2003 17:30, Run: kr23490028, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



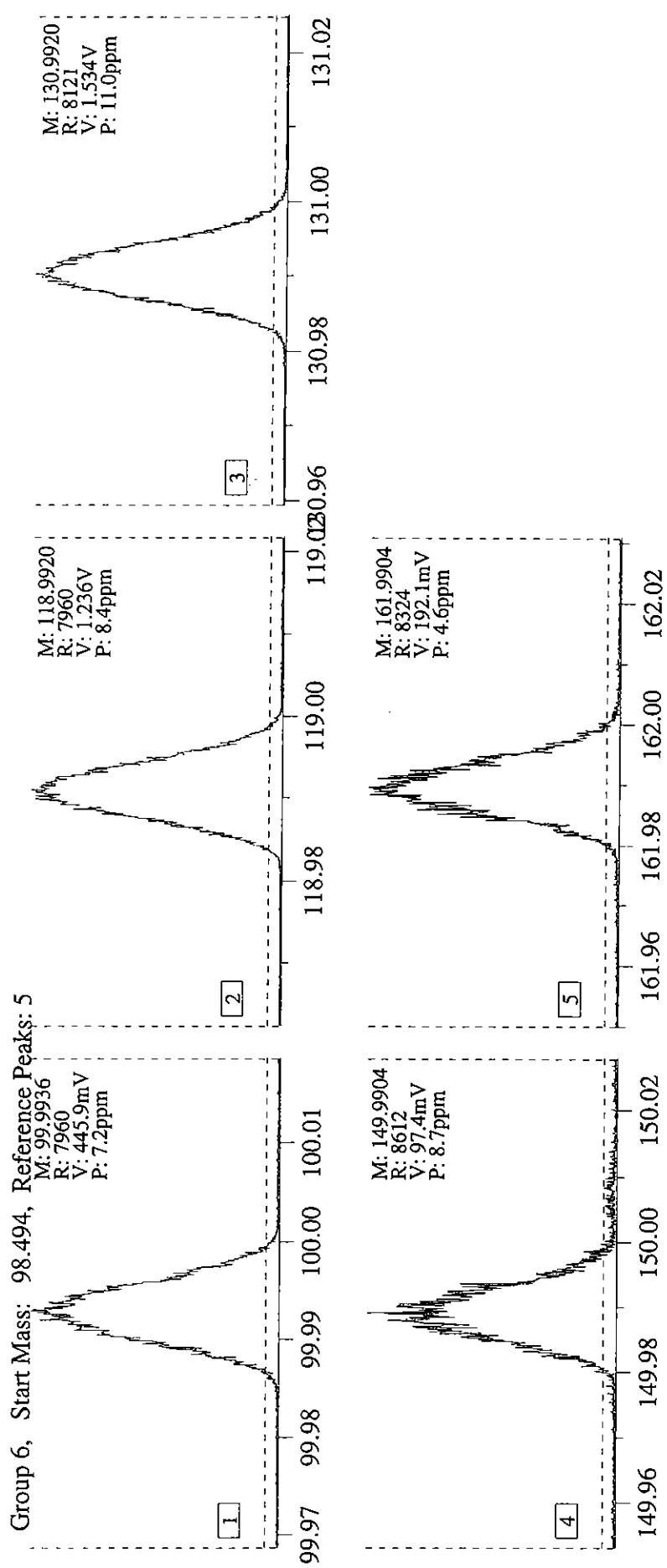
000050

S.I.M. Calibration 14-May-2003 17:30, Run: kr23490028, Expt: nitro200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm

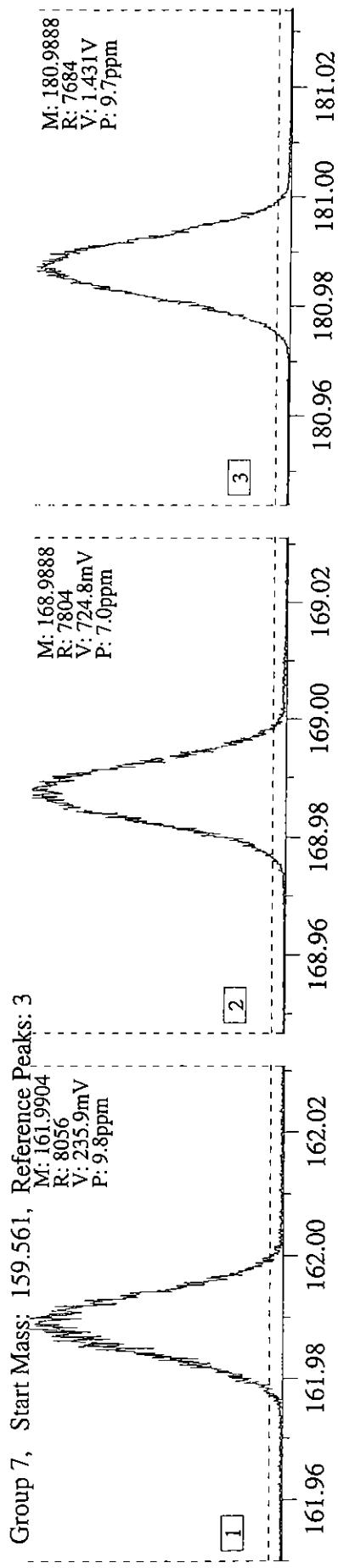


000051

S.I.M. Calibration 14-May-2003 17:30, Run: kr23490028, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



S.I.M. Calibration 14-May-2003 17:30, Run: kr23490028, Expt: nitros200 Normalised Plot Sweep: 500 ppm, Threshold: 0.00mV, Tolerance: 500 ppm



000053

INITIAL CALIBRATION

000054

INITIAL CALIBRATION

Lab Name Maxxam Analytics Inc.
Instrument: Kratos HRGC/HRMS Calibration Date 2003/05/13

LAB FILE ID. KR23480005 CS1
KR23480006 CS2
KR23480007 CS3
KR23480008 CS4
KR23480009 CS5
KR23480010 CS6

Compound	RRF CS1 (5.00ng/mL)	RRF CS2 (50.0ng/mL)	RRF CS3 (80.00ng/mL)	RRF CS4 (200.0ng/mL)	RRF CS5 (1000ng/mL)	RRF CS6 (2000ng/mL)	AVERAGE RRF	%RSD	Max %RSD
NDMA	2.15	1.77	1.51	1.81	1.58	1.57	1.73	14	25
D6 NDMA	0.115	0.0910	0.109	0.0910	0.117	0.118	0.107	12	25

000055

Quantify Sample Report

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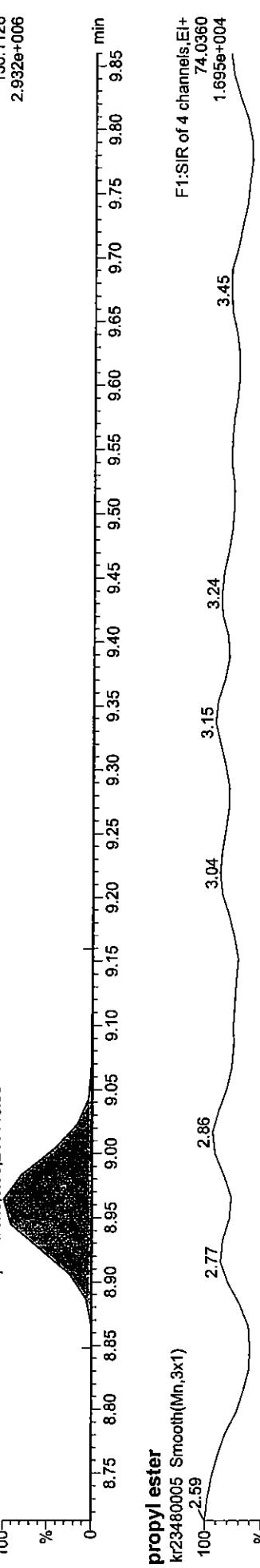
Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030513\ndmacali-20030513.qld, Time: Tue May 13 13:55:16 2003

Method: C:\MASSLYNX\Default\pro\METHDB\nitros_ET.mdb, Time: Tue May 13 13:54:07 2003
Calibration: Untitled, Time: Tue May 13 13:55:16 2003

Name: kr23480005.*, Date: 13-May-2003, Time: 10:09:06, ID: , Description: 5.00ng/ml 70-206NDMW-1254

D8 naphthalene

kr23480005 Smooth(Mn,3x1)
D8 naphthalene:8.96:241448.69



propyl ester

kr23480005 Smooth(Mn,3x1)
2.59

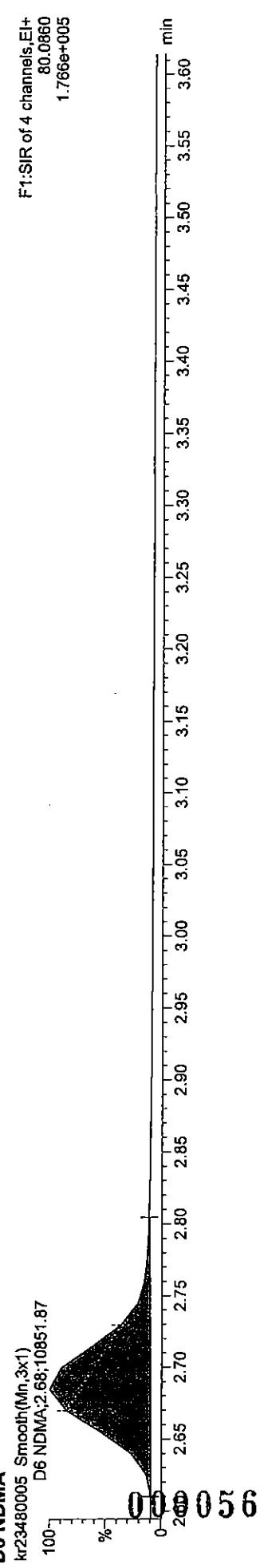


NDMA

kr23480005 Smooth(Mn,3x1)
NDMA:2.71:11881.27



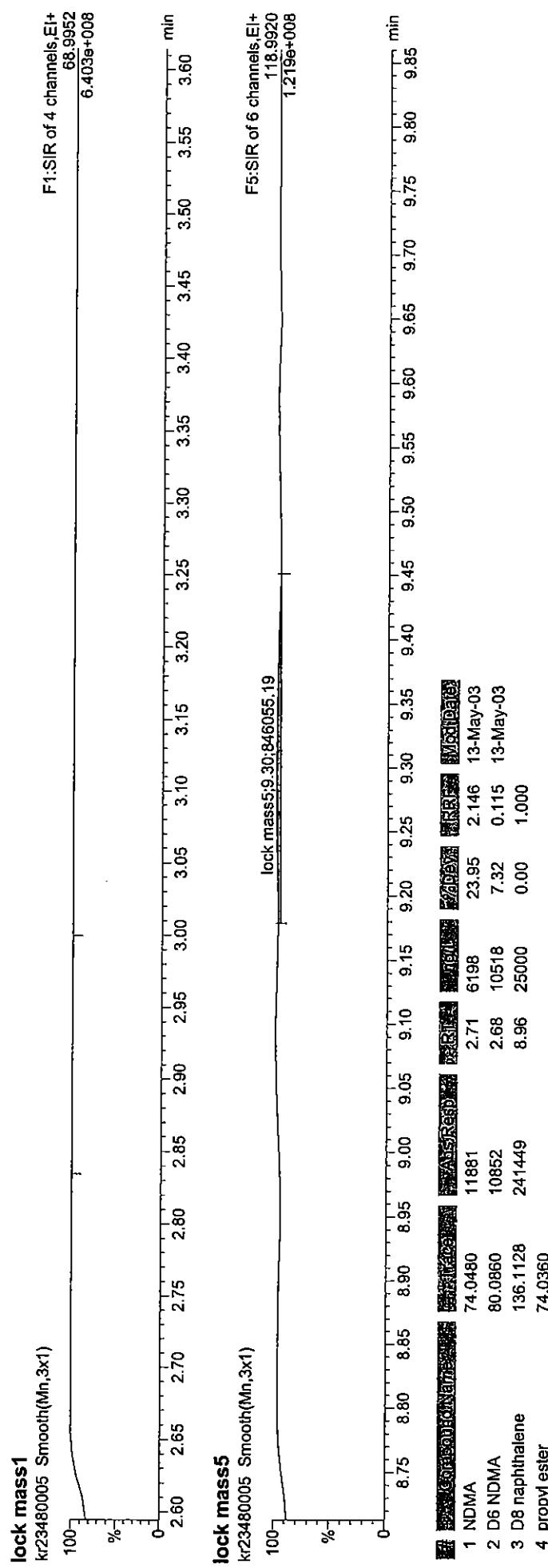
D6 NDMA
kr23480005 Smooth(Mn,3x1)
D6 NDMA:2.68:10851.87



Quantify Sample Report

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Dataset: C:\MASSLYNX\Default.pro\QuanlynxFiles\QC\Calibration\20030513\ndmacali-20030513.qld, Time: Tue May 13 13:55:16 2003



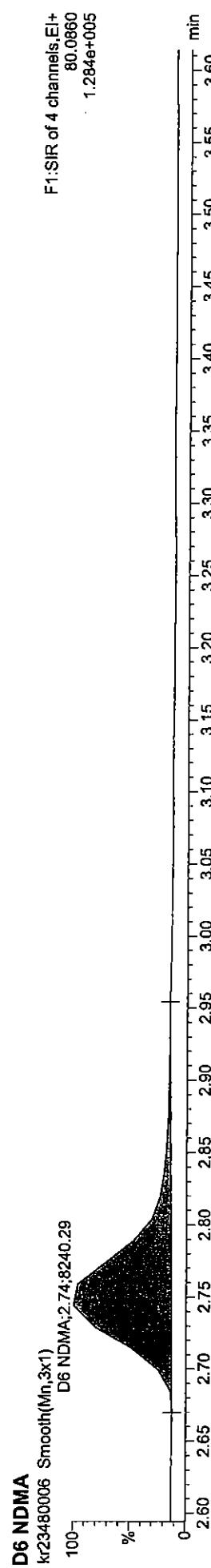
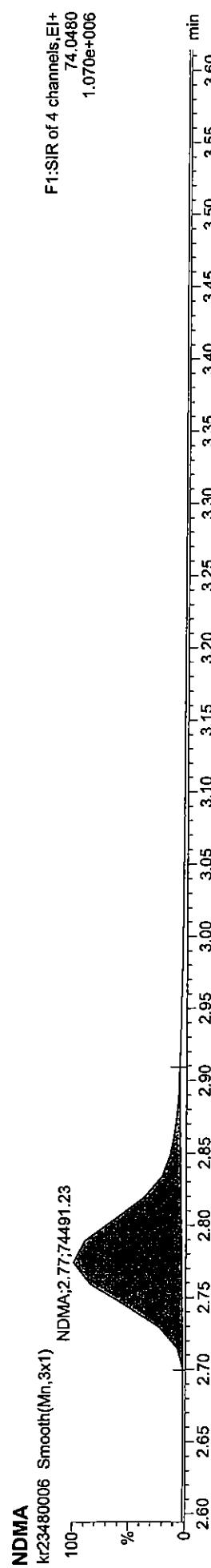
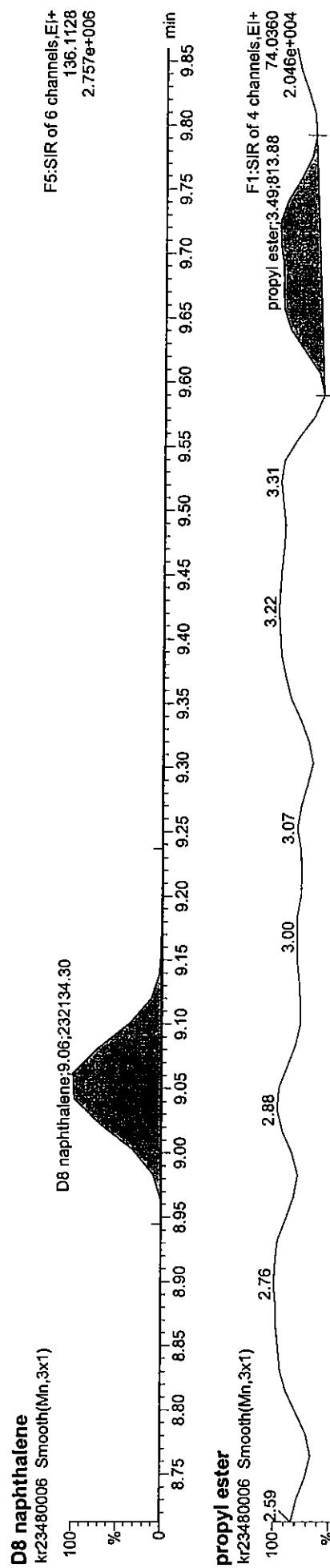
000057

Quantify Sample Report

Printed: Tue May 13 14:13:14 2003, Page 3 of 13

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030513\ndmamacali-20030513.qld, Time: Tue May 13 13:55:16 2003

Name: kr23480006.* , Date: 13-May-2003, Time: 11:10:31, ID: , Description: 50.0ng/mL 70-204NDMW-1247

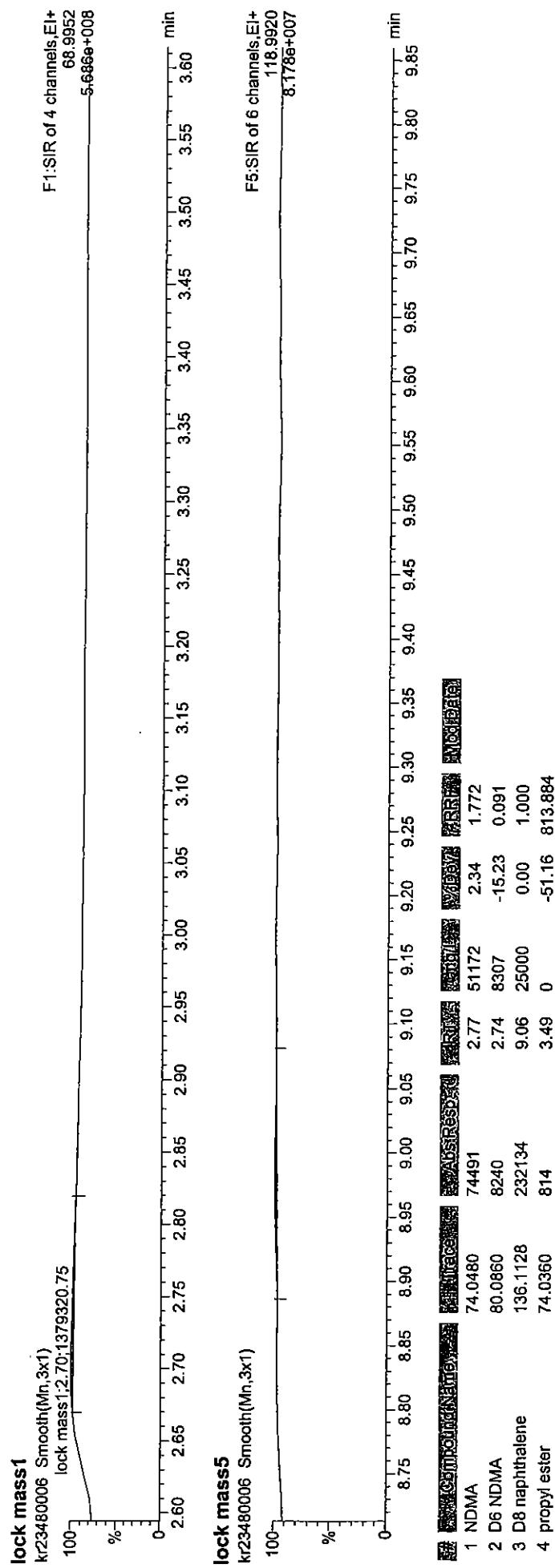


000058

Quantify Sample Report

Printed: Tue May 13 14:13:14 2003, Page 4 of 13

Dataset: C:\MASSLYN\X\Default.pro\QuanlynxFiles\QC\Calibration\20030513\ndmacali-20030513.qld, Time: Tue May 13 13:55:16 2003



000059

Quantify Sample Report

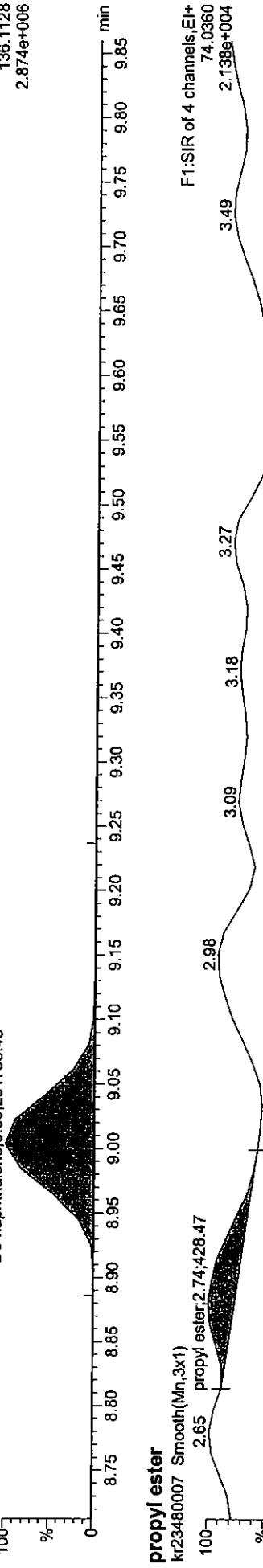
Printed: Tue May 13 14:13:14 2003, Page 5 of 13

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030513\ndmacali-20030513.qld, Time: Tue May 13 13:55:16 2003

Name: kr23480007.* Date: 13-May-2003, Time: 11:24:30, ID: , Description: 80.0ng/mL 70-204NDMW-1248

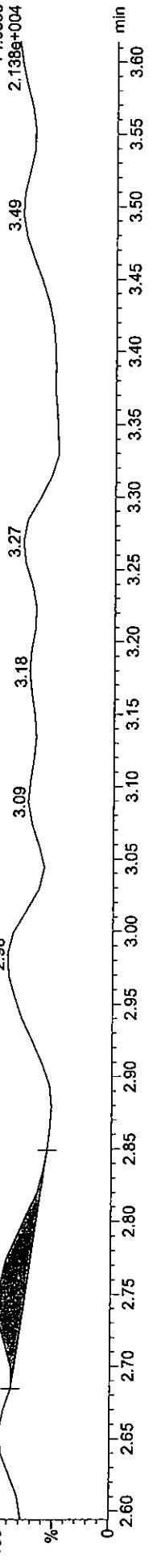
D8 naphthalene

Kr23480007 Smooth(Mn,3x1)
D8 naphthalene;9.00;234795.48



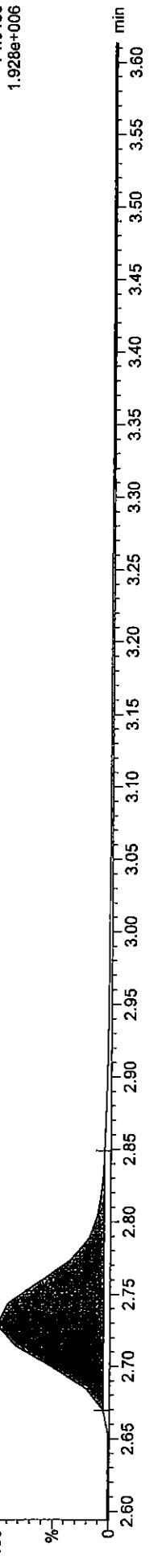
propyl ester

Kr23480007 Smooth(Mn,3x1)
2.65 propyl ester;2.74;428.47



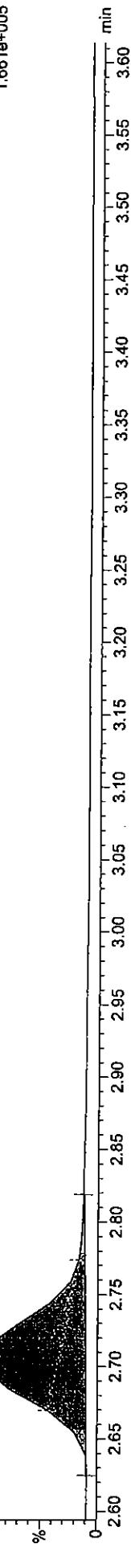
NDMA

Kr23480007 Smooth(Mn,3x1)
NDMA;2.73;123594.70



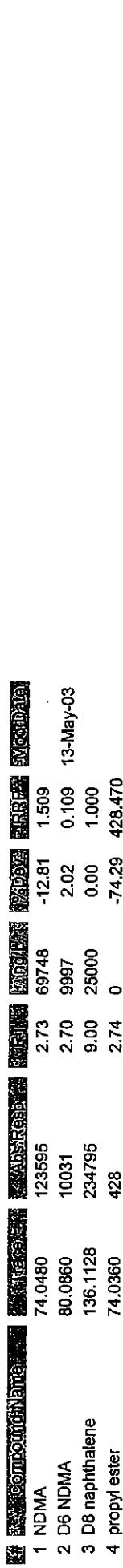
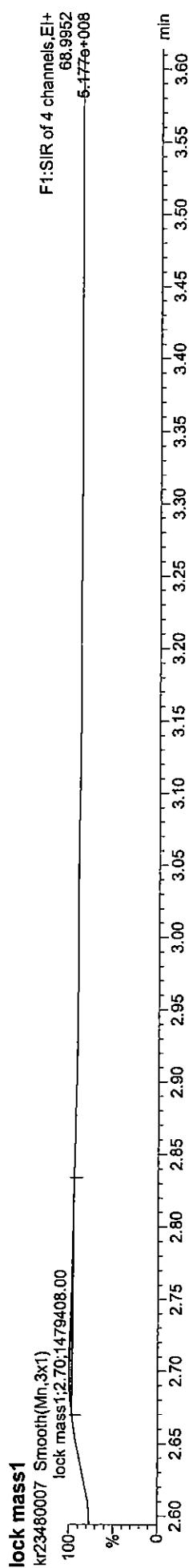
D6 NDMA

Kr23480007 Smooth(Mn,3x1)
D6 NDMA;2.70;10030.78



000060

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030513\ndmcali-20030513.qld, Time: Tue May 13 13:55:16 2003



000061

Quantify Sample Report

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Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030513\ndmacali-20030513.qld, Time: Tue May 13 13:55:16 2003

Name: kr23480008.* , Date: 13-May-2003, Time: 11:43:19, ID: , Description: 200ng/ml. 70-206NDMW-1255

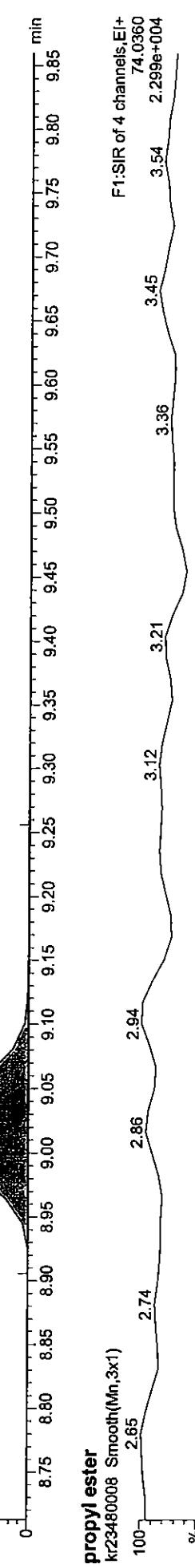
D8 naphthalene

kr23480008 Smooth(Mn,3x1)

D8 naphthalene;9.02:245059.30

F5:SIR of 6 channels, EI+

136.1128
2.964e+006



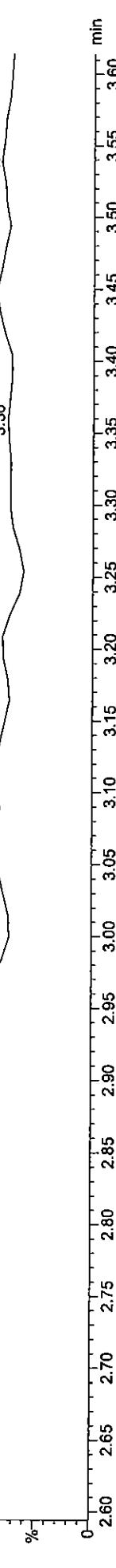
propyl ester

kr23480008 Smooth(Mn,3x1)

propyl ester;2.65:2.94

F1:SIR of 4 channels, EI+

74.0360
2.293e+006



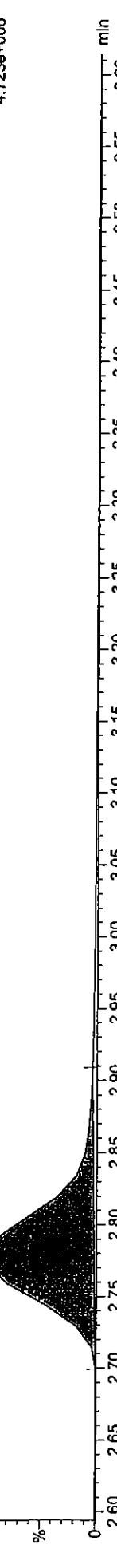
NDMA

kr23480008 Smooth(Mn,3x1)

NDMA;2.77:325171.00

F1:SIR of 4 channels, EI+

74.0480
4.723e+006



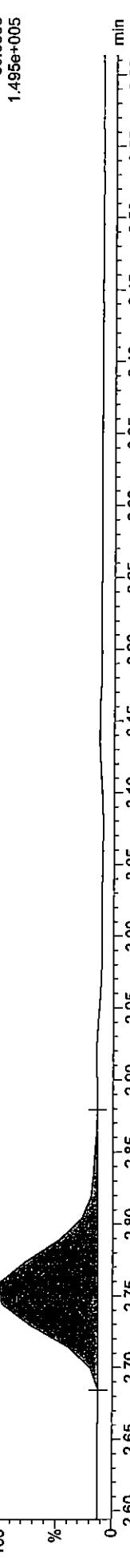
D6 NDMA

kr23480008 Smooth(Mn,3x1)

D6 NDMA;2.76:8781.85

F1:SIR of 4 channels, EI+

80.0860
1.495e+005

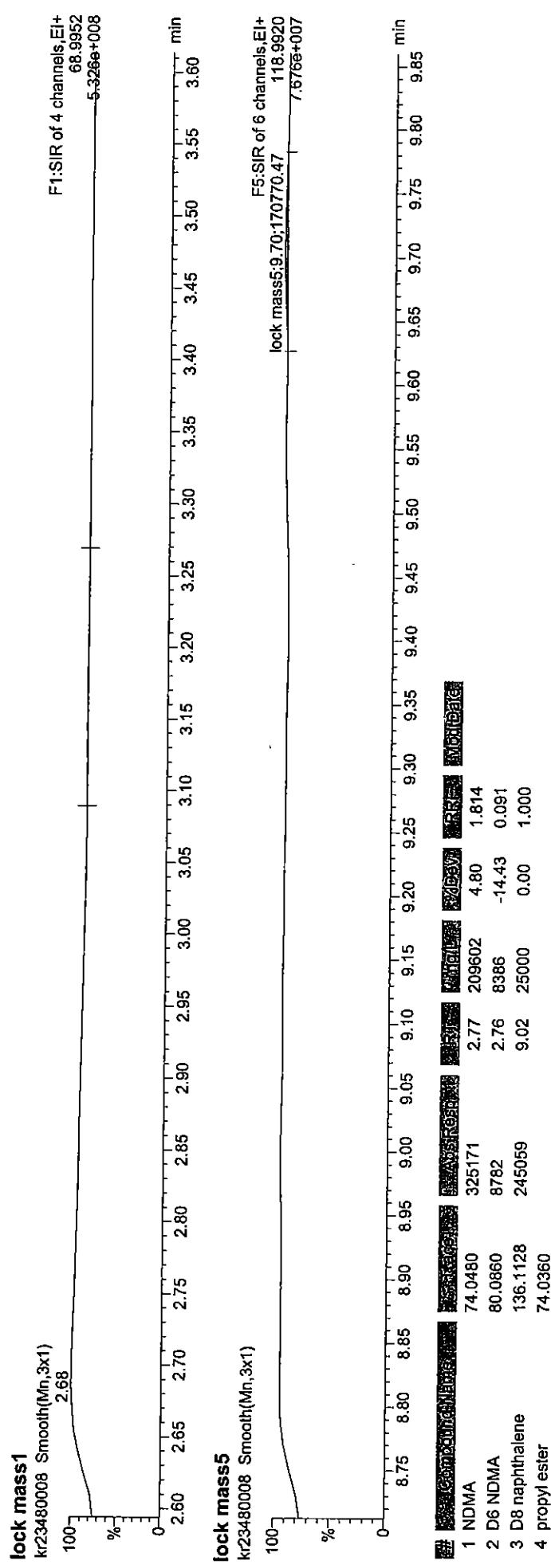


000062

Quantify Sample Report

Printed: Tue May 13 14:13:14 2003, Page 8 of 13

Dataset: C:\MASSLYNX\Default,pro\QuanlynxFiles\QC\Calibration\20030513\ndmacali-20030513.q\q, Time: Tue May 13 13:55:16 2003



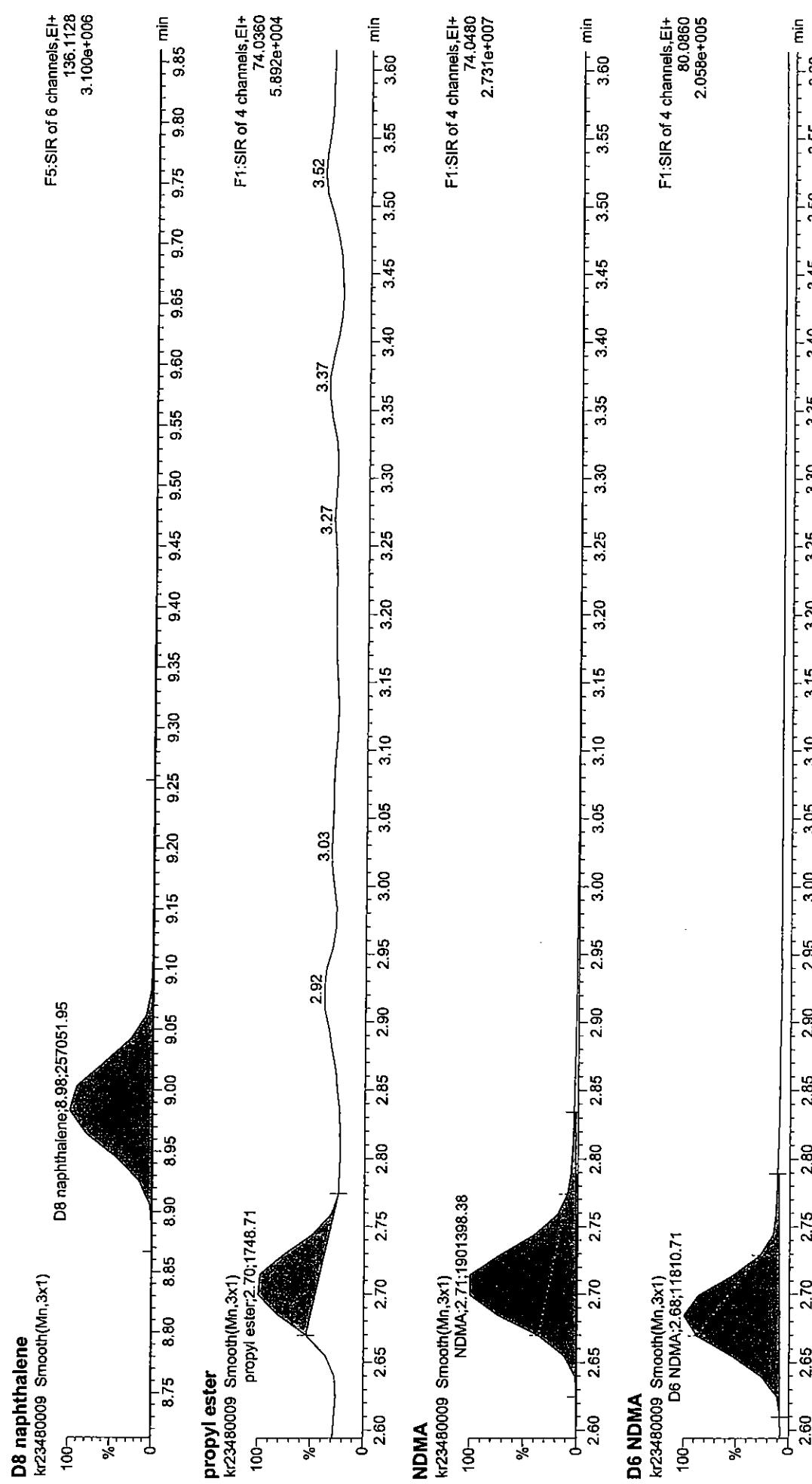
000063

Quantify Sample Report

Printed: Tue May 13 14:13:14 2003, Page 9 of 13

Dataset: C:\MASSLYNX\Default.pro\QuanlynxFiles\QC\Calibration\20030513\ndmacali-20030513.qld, Time: Tue May 13 13:55:16 2003

Name: kr23480009.* , Date: 13-May-2003, Time: 12:02:11, ID: , Description: 1000ng/mL 70-204NDMW-1250



000064

Quantify Sample Report

Printed: Tue May 13 14:13:14 2003, Page 10 of 13

Dataset: C:\MASSLYNX\Default.pro\QuanlynxFiles\QC\Calibration\20030513ndmacali-20030513.qid, Time: Tue May 13 13:55:16 2003

lock mass1



lock mass5



Sample Name	RT _{exp}	RT _{std}	R _{RT}	R _{RT} Dev	R _{RT} Err	RT _{std} Dev	RT _{std} Err
1 NDMA	74.0480	1901398	2.71	911311	-8.87	1.578	13-May-03
2 D6 NDMA	80.0860	11811	2.68	10752	9.72	0.117	13-May-03
3 D8 naphthalene	136.1128	257052	8.98	25000	0.00	1.000	
4 propyl ester	74.0360	1749	2.70	1	4.94	1748....	

000065

Quantify Sample Report

Printed: Tue May 13 14:13:14 2003, Page 11 of 13

Dataset: C:\MASSLYNX\Default.pro\QuanlynxFiles\QC\Calibration\20030513\ndmamacali-20030513.qid, Time: Tue May 13 13:55:16 2003

Name: kr23480010.* Date: 13-May-2003, Time: 12:21:14, ID: , Description: 2000ng/mL 70-204NDMW-1251

D8 naphthalene

kr23480010 Smooth(Mn,3x1)
100
%
0

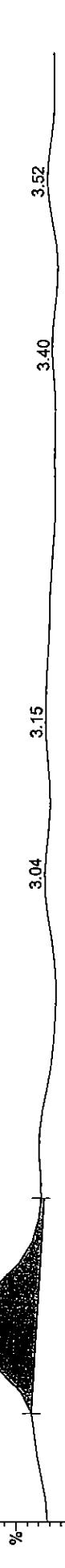
F5:SIR of 6 channels, EI+
136.1128
3.0469e+006



propyl ester

kr23480010 Smooth(Mn,3x1)
propyl ester, 2.73;3674.66
100
%
0

F1:SIR of 4 channels, EI+
74.0360
8.369e+004



NDMA

kr23480010 Smooth(Mn,3x1)
NDMA, 2.73;3819488.25
100
%
0

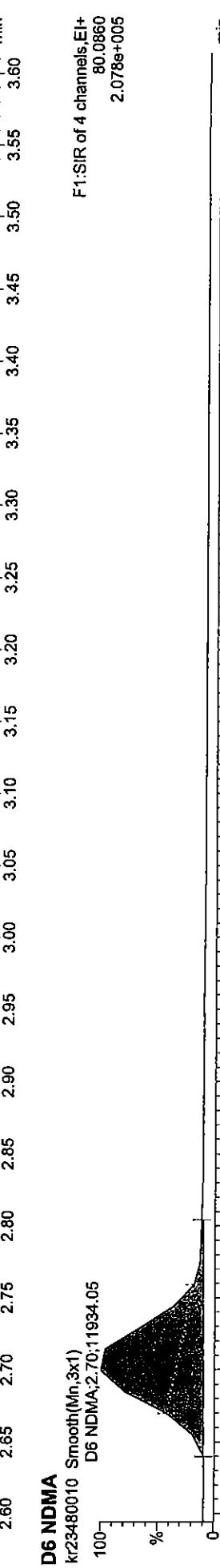
F1:SIR of 4 channels, EI+
74.0480
5.902e+007



D6 NDMA

kr23480010 Smooth(Mn,3x1)
D6 NDMA, 2.70;11934.05
100
%
0

F1:SIR of 4 channels, EI+
80.0860
2.078e+005

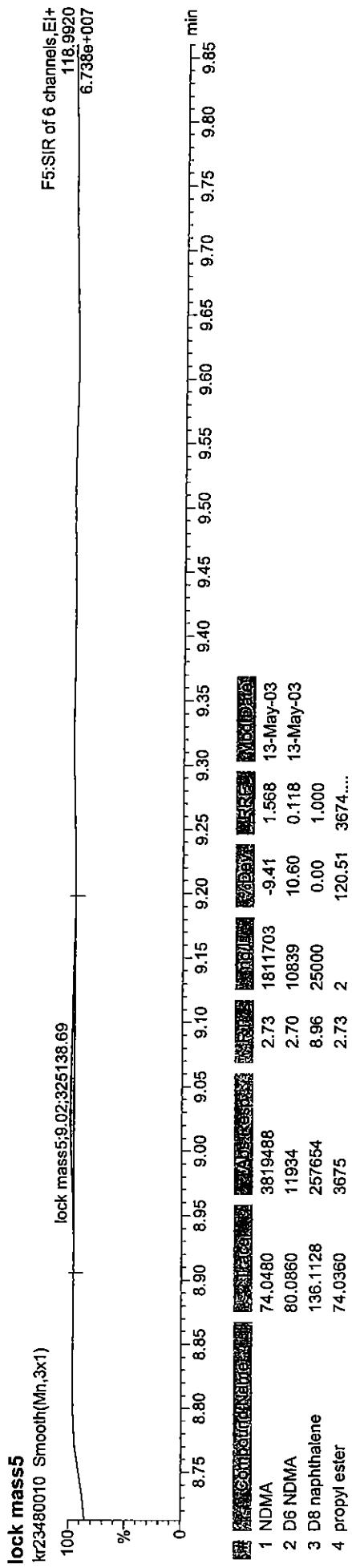
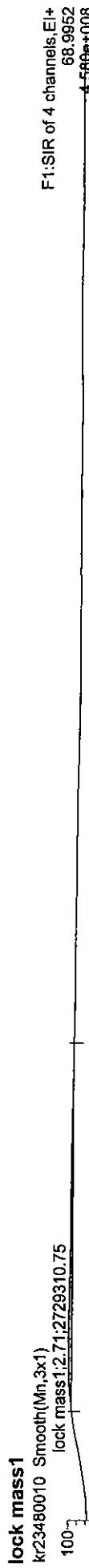


000066

Quantify Sample Report

Printed: Tue May 13 14:13:14 2003, Page 12 of 13

Dataset: C:\MASSLYNX\Default.prol\QuanlynxFiles\QC\Calibration\20030513\ndmamacali-20030513.qld, Time: Tue May 13 13:55:16 2003



000067

SECOND SOURCE CALIBRATION CHECK

000068

SECOND SOURCE CALIBRATION CHECK

Lab Name Maxxam Analytics Inc.
Instrument: Kratos HRGC/HRMS Calibration Date 2003/05/13

LAB FILE ID. KR23480012

Compound	REPORTED CONC. (ug/L)	ACTUAL CONC. (ug/L)	%D	% D LIMIT
NDMA	8.14	10.00	19	25

Compound	%RECOVERY
D6-NDMA	93

00069

Quantify Sample Report

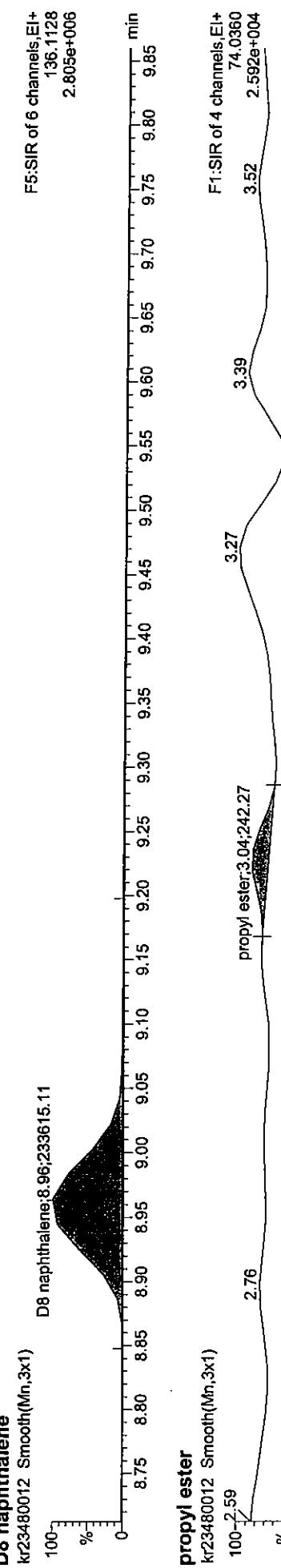
Printed: Tue May 13 14:12:45 2003, Page 1 of 3

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030513\2ndsource_20030513.qld, Time: Tue May 13 13:59:47 2003

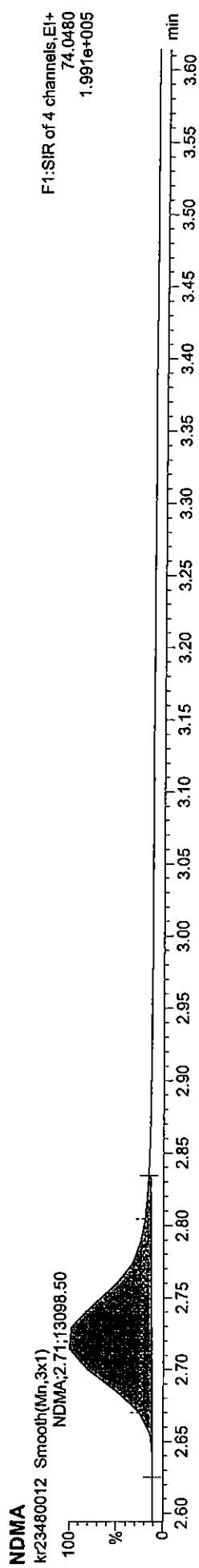
Method: C:\MASSLYNX\Default\pro\METHDB\nitros_ET.mdb, Time: Tue May 13 13:54:07 2003
Calibration: C:\MASSLYNX\Default\pro\CURVEDB\ndmacali_20030513.cdb, Time: Tue May 13 13:55:16 2003

Name: kr23480012.* , Date: 13-May-2003, Time: 12:58:36, Job: , Description: 10.00ng/mL 70-206NDMW-1256

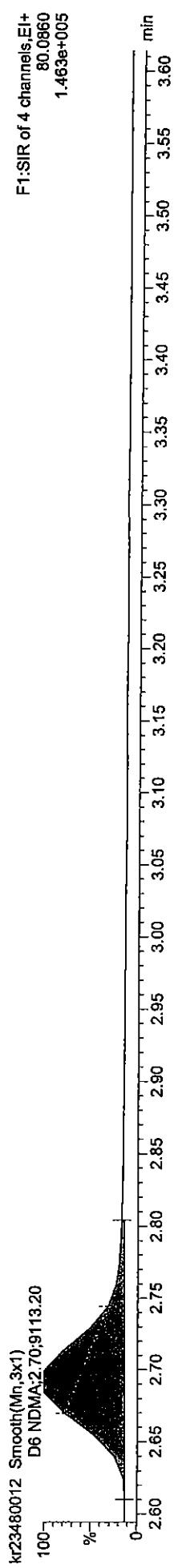
D8 naphthalene



NDMA



D6 NDMA

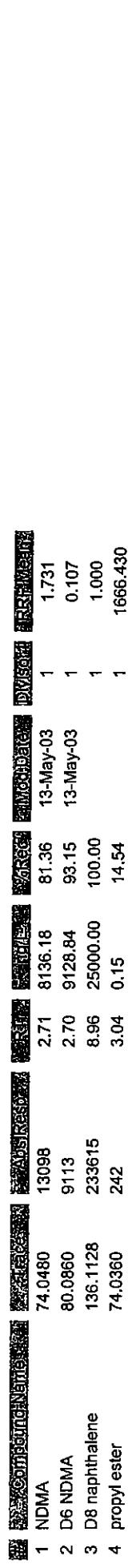
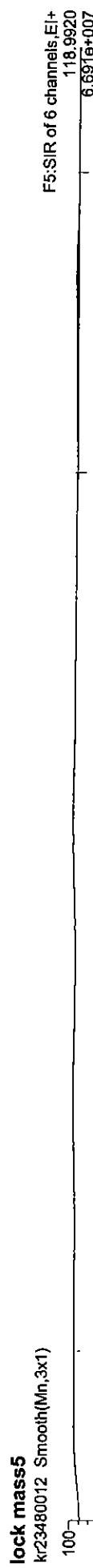
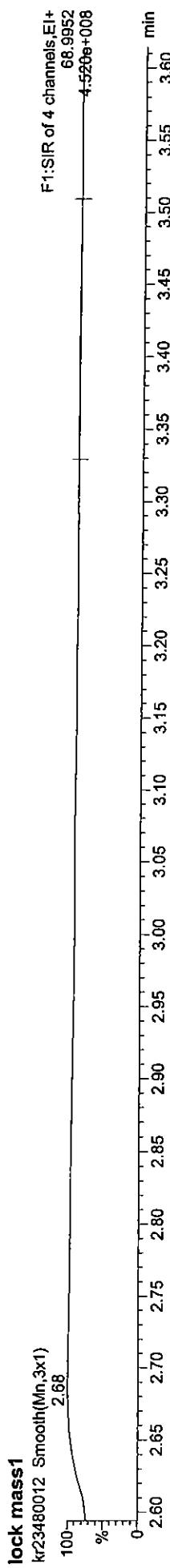


000070

Quantify Sample Report

Printed: Tue May 13 14:12:45 2003 Page 2 of 3

Dataset: C:\MASSLYNX\Default.pro\QuanlynxFiles\QC\Calibration\20030513\2ndsource_20030513.qld, Time: Tue May 13 13:59:47 2003



000071

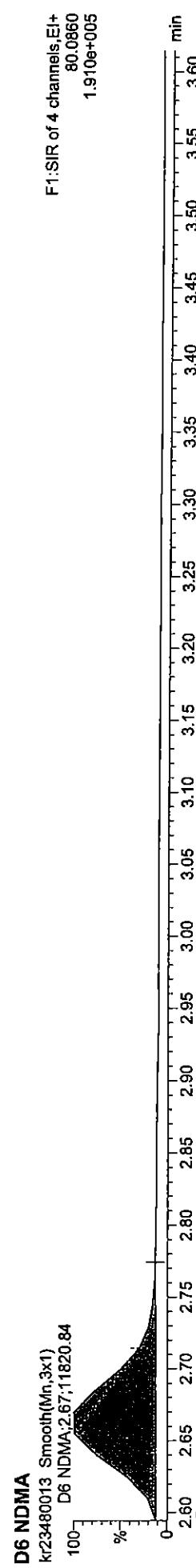
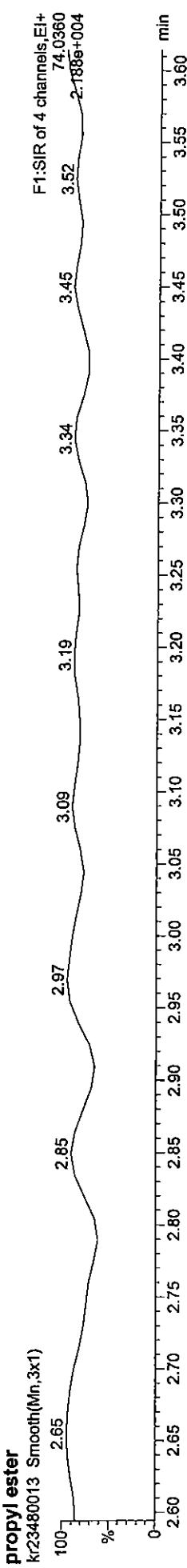
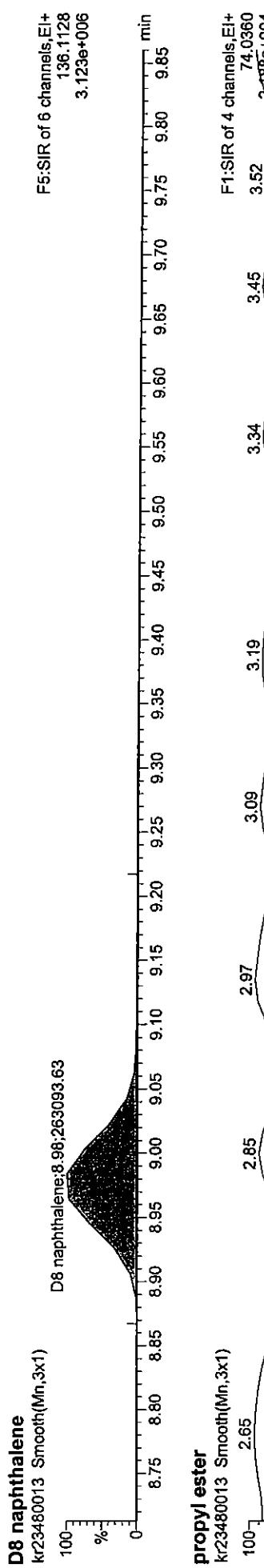
Quantify Sample Report

Printed: Tue May 13 14:12:58 2003. Page 1 of 3

Dataset: C:\MASSL\YNX\Default\pro\QuanlynxF\Files\QC\Calibration\20030513threshold_20030513.qld, Time: Tue May 13 14:00:48 2003

Method: C:\MASSLYNX\Default.pro|METHDB\nitros_ET.mdb, Time: Tue May 13 13:54:07 2003
Calibration: C:\WASSI\NX\Default.pro|CHYBED\ndmacall_20030513.cdh Time: Tue May 13 13:55:16 2003

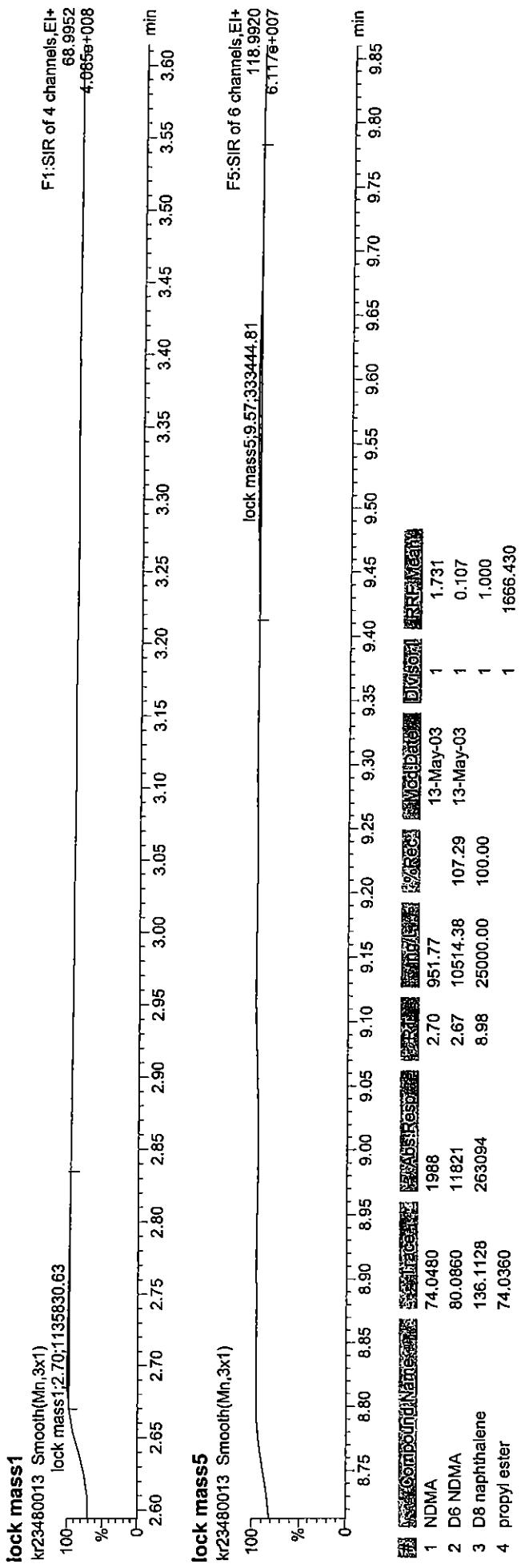
Name: kr23480013.; Date: 13-May-2003, Time: 13:17:31, Job: ; Description: 1.00mg/ml 70-206NPWW-1257



Quantify Sample Report

Printed: Tue May 13 14:12:58 2003, Page 2 of 3

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030513\threshold_20030513.qid, Time: Tue May 13 14:00:48 2003



Sample Point Number	Sample Name	Sample Description	Previous Result	Result	Method	Run Date	Run Time	Discard	Printed
1	NDMA	74.0480	1988	2.70	951.77	13-May-03	1	1	1.731
2	D6 NDMA	80.0860	11821	2.67	10514.38	107.29	13-May-03	1	0.107
3	D8 naphthalene	136.1128	263094	8.98	25000.00	100.00		1	1.000
4	propyl ester	74.0360						1	1666.430

000073

1.00ng/mL 70-206NDMW-1257
kr23480013

1: SIR of 4 Channels El+
74.048
6.44e4

2.68

100

0

5/n = 23/1

%

2.80

3.58

5mm

13mm

000074

Time
3.60
3.50
3.40
3.30
3.20
3.10
3.00
2.90
2.80
2.70
2.60

SECOND SOURCE CALIBRATION CHECK

Lab Name Maxxam Analytics Inc.
Instrument: Kratos HRGC/HRMS Calibration Date 2003/05/14

LAB FILE ID. KR23490005

Compound	REPORTED CONC. (ug/L)	ACTUAL CONC. (ug/L)	%D	% D LIMIT
NDMA	10.2	10.00	2	25

Compound	%RECOVERY
D6-NDMA	123

000075

Quantify Sample Report

Printed: Wed May 14 10:16:46 2003, Page 1 of 3

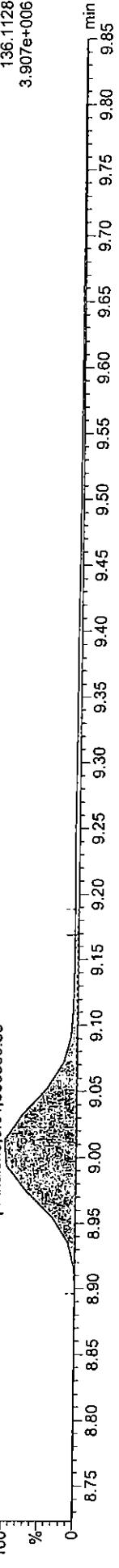
Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030514\2ndsource_20030514.qld, Time: Wed May 14 10:16:16 2003

Method: C:\MASSLYNX\Default\pro\METHDB\nitros_ET.mdb, Time: Tue May 13 13:54:07 2003
Calibration: C:\MASSLYNX\Default\pro\CURVEDB\bindmacali_20030513.cdb, Time: Tue May 13 13:55:16 2003

Name: kr23490005.* , Date: 14-May-2003, Time: 09:22:15, Job: , Description: 10.00ng/ml 70-206NDMW-1256

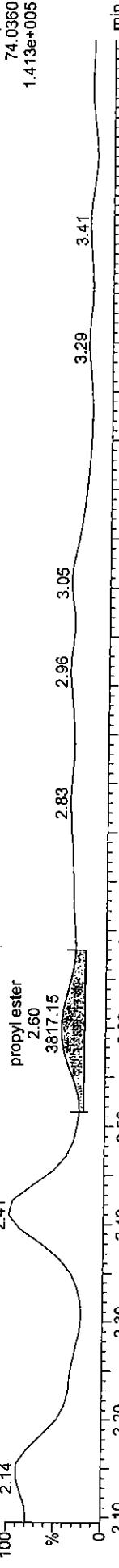
D8 naphthalene

kr23490005 Smooth(Mn,3x1)



propyl ester

kr23490005 Smooth(Mn,3x1)



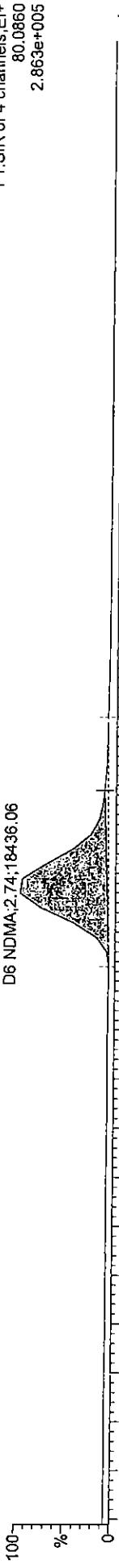
NDMA

kr23490005 Smooth(Mn,3x1)



D6 NDMA

kr23490005 Smooth(Mn,3x1)

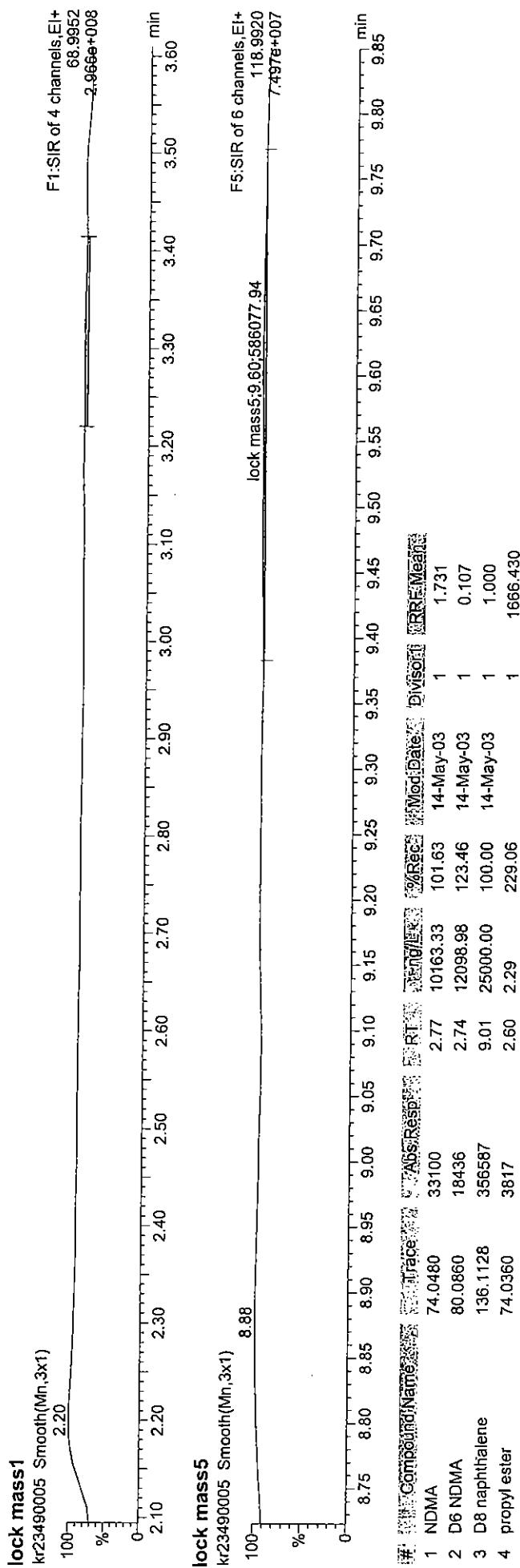


000076

Quantify Sample Report

Printed: Wed May 14 10:16:46 2003, Page 2 of 3

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030514\2ndsource_20030514.qd, Time: Wed May 14 10:16:16 2003



000077

Quantify Sample Report

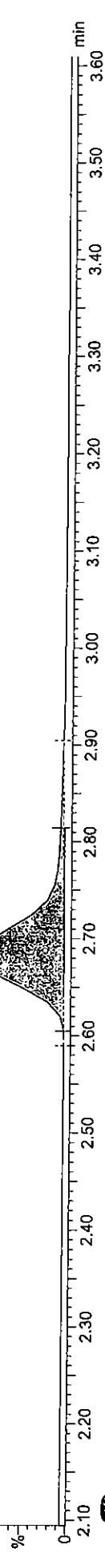
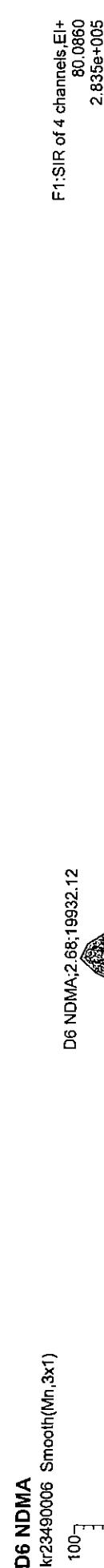
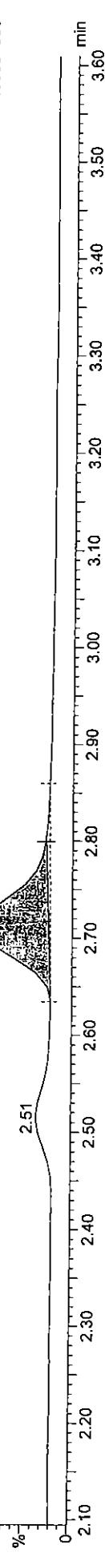
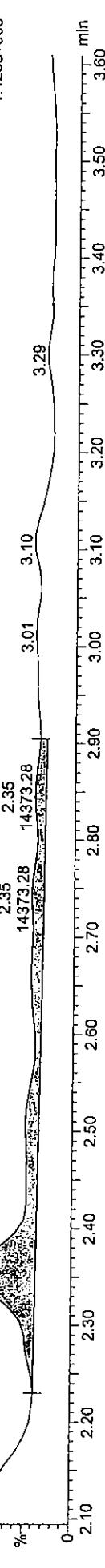
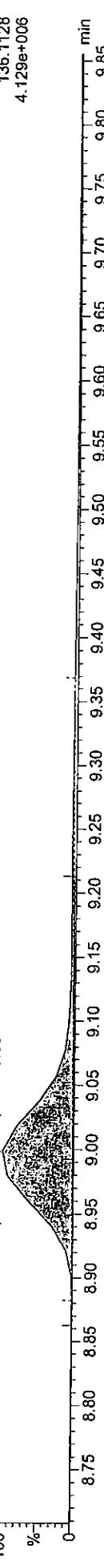
Printed: Wed May 14 10:19:14 2003, Page 1 of 3

Dataset: C:\MASSLYNX\Default.pro\QuanlynxFiles\QC\Calibration\20030514\threshold_20030514.qld, Time: Wed May 14 10:18:51 2003

Method: C:\MASSLYNX\Default.pro\METHDB\nitros_ET.mdb, **Time:** Tue May 13 13:54:07 2003
Calibration: C:\MASSLYNX\Default.pro\CURVEDB\ndmacali_20030513.cdb, **Time:** Tue May 13 13:55:16 2003

Name: kr23490006.*, **Date:** 14-May-2003, **Time:** 09:36:16, **Job:** , **Description:** 1.00 ng/ml 70-206NDMW-1257

D8 naphthalene

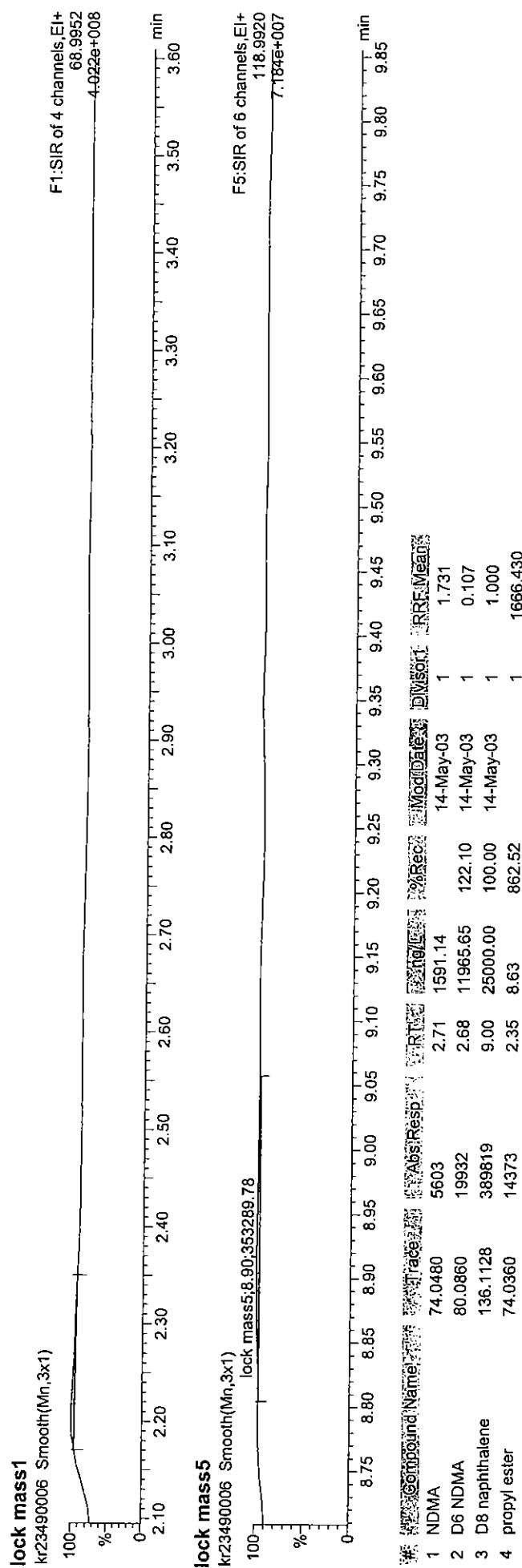


000078

Quantify Sample Report

Printed: Wed May 14 10:19:14 2003, Page 2 of 3

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030514\threshold_20030514.qld, Time: Wed May 14 10:18:51 2003



Retention Time	Name	Relative Abundance (%)	Abs. Resp.	WRTIME	WRTresp	%Recd	%Tgt	%Mod.Dex	DIV01	DIV02	PREF.Mean ₁	PREF.Mean ₂
1	NDMA	74.0480	5603	2.71	1591.14	14-May-03	1	1.731				
2	D6 NDMA	80.0860	19932	2.68	11965.65	122.10	14-May-03	1	0.107			
3	D8 naphthalene	136.1128	388819	9.00	25000.00	100.00	14-May-03	1	1.000			
4	propyl ester	74.0360	14373	2.35	8.63	862.52			1	1666.430		

000079

1.00 ng/ml 70-206NDMW-1257
kr23490006

2.71

1: SIR of 4 Channels El+
74.048
1.72e5

$\sigma/\nu = 4811$

%

000080

Time
2.10 2.20 2.30 2.40 2.50 2.60 2.70 2.80 2.90 3.00 3.10 3.20 3.30 3.40 3.50 3.60

3^2m_m

$1^4S_m m_m$

CONTINUING CALIBRATION

000081

CONTINUING CALIBRATION CHECK

Lab Name

Maxxam Analytics Inc.

Instrument:

Kratos HRGC/HRMS

Calibration Date

2003/05/13

Time

19:27:05

LAB FILE ID. KR23480032 CS4

Compound	AVERAGE RRF	RRF CS4	%D	% D LIMIT
NDMA	1.73	1.43	17	25
D6-NDMA	0.107	0.106	1	25

000082

Quantify Sample Report

Printed: Wed May 14 08:25:33 2003, Page 1 of 7

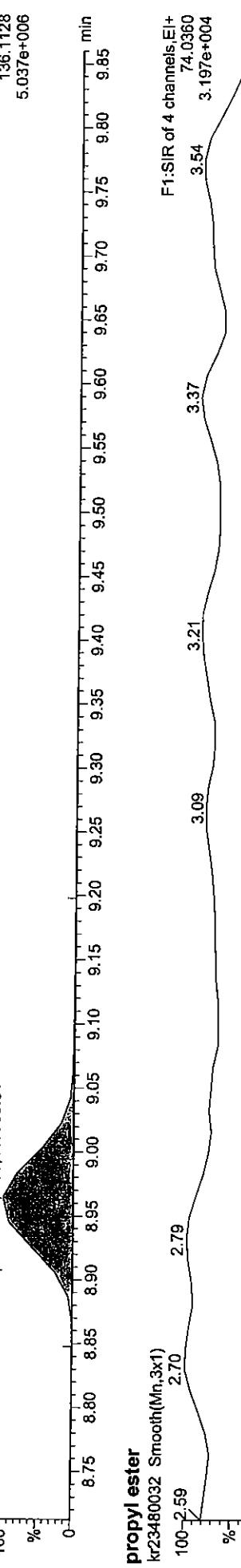
Dataset: C:\MASSLYNX\Default.pro\QuanlynxFiles\QC\Calibration\20030513\ndmaconcals_20030513.qld, Time: Wed May 14 08:25:05 2003

Method: C:\MASSLYNX\Default.pro\METHDB\nitros_EI.mdb, Time: Tue May 13 13:54:07 2003
Calibration: C:\MASSLYNX\Default.pro\CURVEDB\ndmacal1_20030513.cdb, Time: Tue May 13 13:55:16 2003

Name: kr23480032.* Date: 13-May-2003, Time: 19:27:05, Job: , Description: 20ng/mL 70-206NDMW-1255,N,1,2

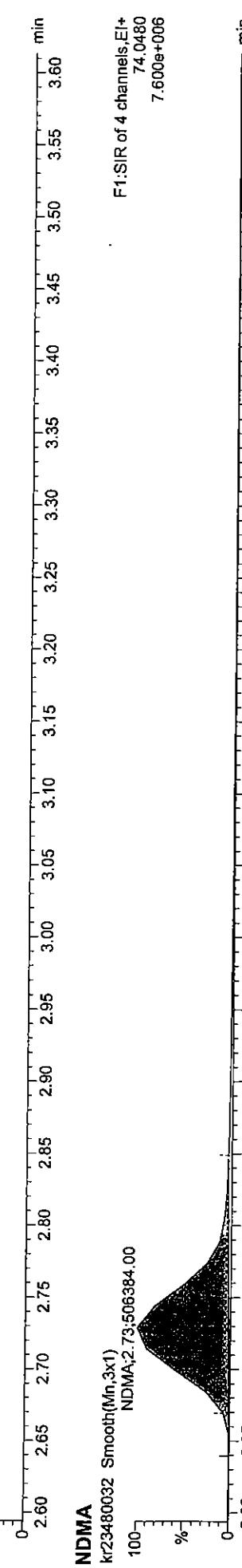
D8 naphthalene

kr23480032 Smooth(Mn,3x1)
D8 naphthalene:8.96:417769.34



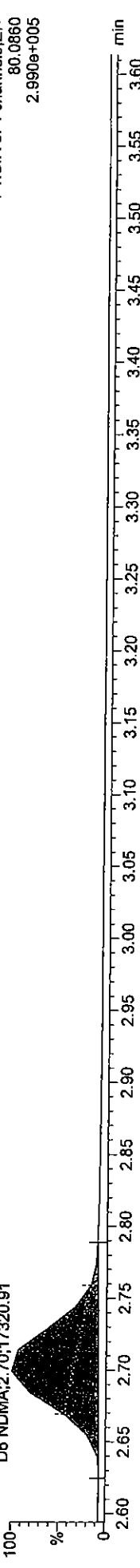
NDMA

kr23480032 Smooth(Mn,3x1)
NDMA:2.73:506384.00



D6 NDMA

kr23480032 Smooth(Mn,3x1)
D6 NDMA:2.70:17320.91

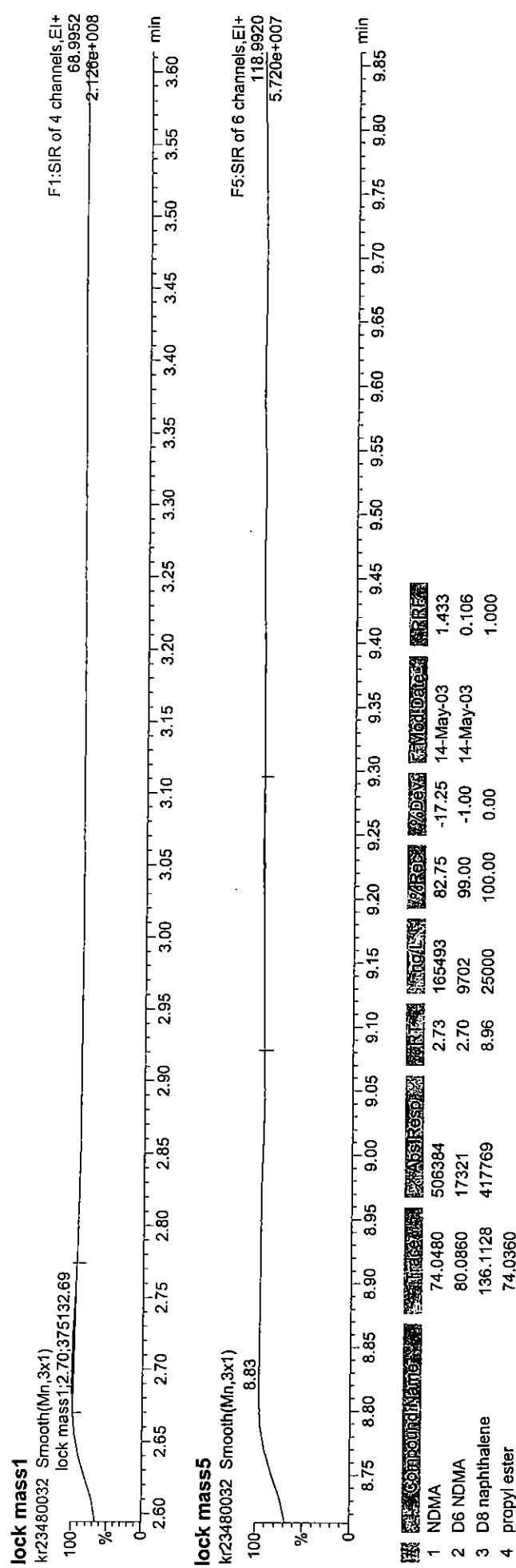


000083

Quantify Sample Report

Printed: Wed May 14 08:25:33 2003, Page 2 of 7

Dataset: C:\MASSLYNX\Defult.pro\QuanlynxFiles\QC\Calibration\20030513\ndmaconcals_20030513.qld, Time: Wed May 14 08:25:05 2003



000084

CONTINUING CALIBRATION CHECK

Lab Name Maxxam Analytics Inc.
Instrument: Kratos HRGC/HRMS Calibration Date 2003/05/14 Time 08:51:00

LAB FILE ID. KR23490004 CS4

Compound	AVERAGE RRF	RRF CS4	%D	% D LIMIT
NDMA	1.73	1.60	8	25
D6-NDMA	0.107	0.127	19	25

000085

Method: C:\MASSLYNX\Default.pro\MEITHDB\Nitros_EI.mdb, Time: Tue May 13 13:54:07 2003

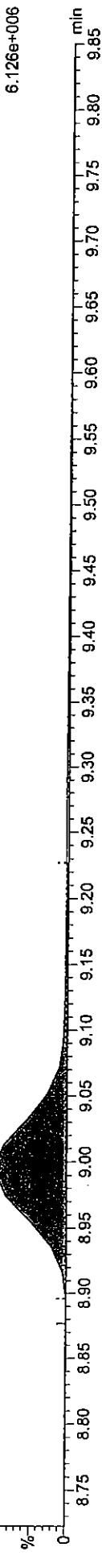
Calibration: C:\MASSLYNX\Default.pro\CURVEDB\bindmacali_20030513.cdb, Time: Tue May 13 13:55:16 2003

Name: kr2349004.*, Date: 14-May-2003, Time: 08:51:00, Job: , Description: 200ng/ml 70-206NDMW-1255

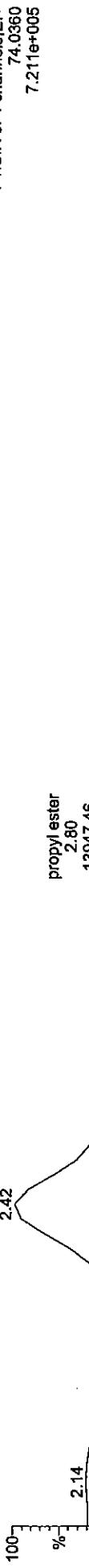
D8 naphthalene

kr2349004 Smooth(Mn,3x1)

D8 naphthalene;8.99:540389.94

**propyl ester**

kr2349004 Smooth(Mn,3x1)

**NDMA**

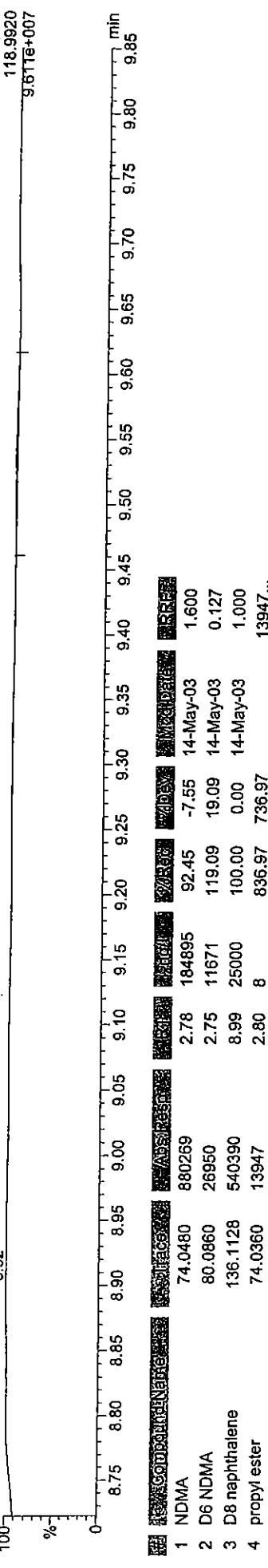
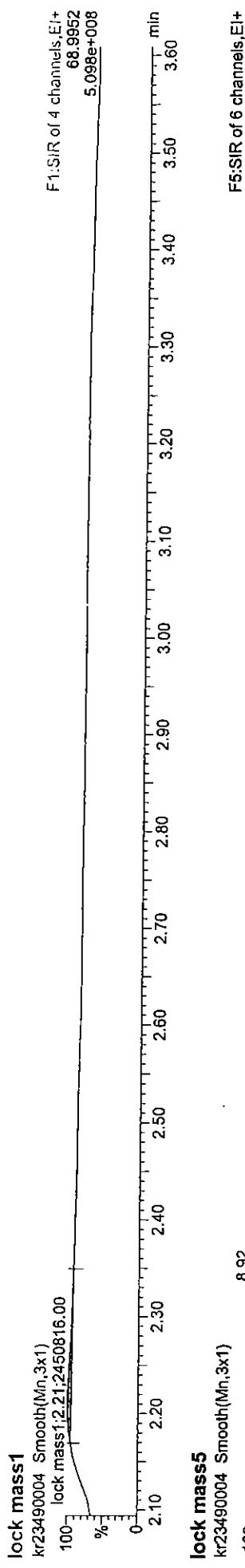
kr2349004 Smooth(Mn,3x1)

**D6 NDMA**

kr2349004 Smooth(Mn,3x1)



000086



000087

CONTINUING CALIBRATION CHECK

Lab Name Maxxam Analytics Inc.
Instrument: Kratos HRGC/HRMS Calibration Date 2003/05/14 Time 12:33:36

LAB FILE ID. KR23490014 CS4

Compound	AVERAGE RRF	RRF CS4	%D	% D LIMIT
NDMA	1.73	1.61	7	25
D6-NDMA	0.107	0.129	21	25

00088

Quantify Sample Report

Printed: Wed May 14 14:06:51 2003, Page 1 of 3

Dataset: C:\MASSLYNX\Default\pro\QuanlynxFiles\QC\Calibration\20030514\ndmaconcal2_20030514.qld, Time: Wed May 14 14:06:29 2003

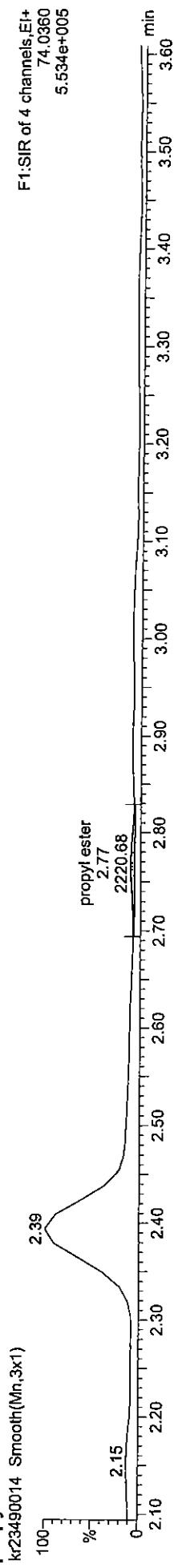
Method: C:\MASSLYNX\Default\pro\METHDB\nitros_ET.mdb, Time: Tue May 13 13:54:07 2003
Calibration: C:\MASSLYNX\Default\pro\CURVEDB\ndmacal_20030513.cdb, Time: Tue May 13 13:55:16 2003

Name: kr23490014.* , Date: 14-May-2003, Time: 12:33:36, Job: , Description: 200ng/mL 70-206NDMW-1255,N,1,2

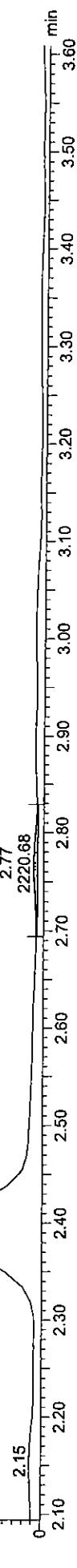
D8 naphthalene



propyl ester



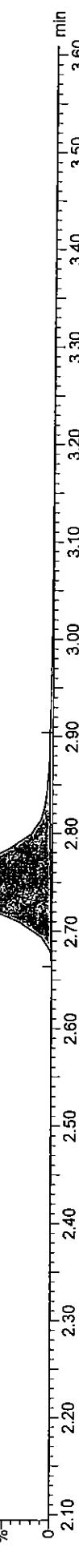
propyl ester



NDMA



D6 NDMA

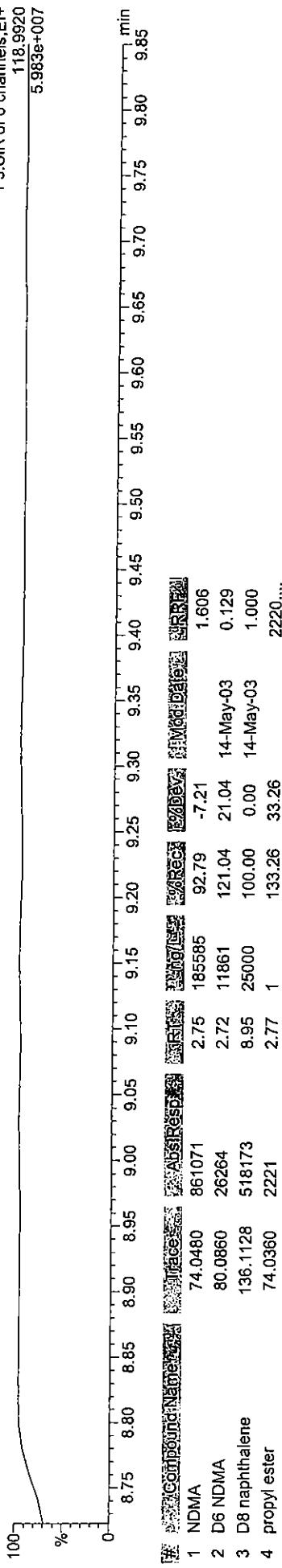
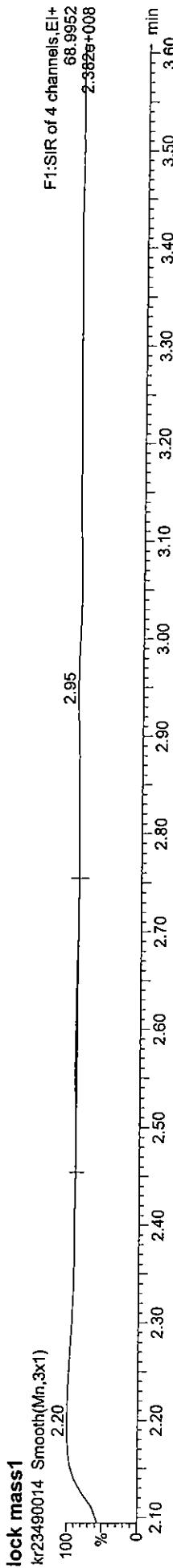


000089

Quantify Sample Report

Dataset: C:\MASSLYN\X\Default.prj\QuanlynxFiles\QC\Calibration\20030514\ndmaconcal2_20030514.qld, Time: Wed May 14 14:06:29 2003

Printed: Wed May 14 14:06:51 2003, Page 2 of 3



000090

SAMPLE PREPARATION RECORDS

000091

INSTRUMENT LOG

000093

Kr 2346 09	1.0 mg/ml	70 - 202 N DMW - 1245	IC	fail
10-13	Mass detection / Accuracy for nitros	IC		
↓	1.0 mg/ml	70 - 202 N DMW - 1245	IC	fail signal lost
2003/05/05				
Kr 2347 01-02	Mass resolution / Accuracy for gaseous 2MIs IC			
↓	03	no file		
↓	04	1.0 mg/ml	70 - 204 DMW - 157	lost signal
2003/05/13				
01-03				Sander Manners in - switched power supply.
Kr 2348 Mass Resolution/Accuracy for nitros & D		X		
04	5.0 mg/ml	70-202 N DMW - 1254 & D		
05	"	" 2.0	✓	
06	S. Ongfors	70-204 N DMW - 1247 & D	✓	
07	S. Ongfors	70-204 N DMW - 1248 & D	✓	
08	Zengyml	70-204 N DMW - 1255 & D	✓	
09	1000 mg/ml	70-204 N DMW - 1250 & D	✓	
10	2000 mg/ml	70-204 N DMW - 1251 & D	✓	
11	DC&1 Blank, 0.1, 2 & D		✓	
12	10.000 mg/ml	70-204 N DMW - 1256 & D	✓	
13	1.000 mg/ml	70-204 N DMW - 1257 & D	✓	
14-18	Mass Resolution/Accuracy for nitros & D	473037, 5015E, 0.1, 2 & D	✓	
19-24		473037, SPIKE, 0.1, 2 & D	✓	
20-25		472719, SPIKE, 0.1, 2 & D	✓	
21-22		472719, SPIKE, 0.1, 2 & D	✓	
23-28		472719, BLACK, 0.1, 2 & D	✓	
24-29		Glass Black, 2003/05/05 & D	✓	
25-29		472719, A01591-015, 0.1, 2 & D	✓	A3.5145 Ring, adjust window + die 1/2
		10000 mg/ml	✓	

2003/05/13 (cont'd)

26	472719, A01592-01C, N1,2 SD	A 315145	Ring, adjust window
27	" , A01609-01C, N1,2 SD	A 315163	
28	" , A01610-01R, N1,2 SD		
29	" , A01690-01C, N1,2 SD		
30	" , A01352-01R, N1,2 SD	A 315096	
31	" , A01366-01C, N1,2 SD	A 315100	
32	200ng/ml 70-200nmol/l N1,2 SD		
33	472719, A00937-01C, N1,2 SD	A 314983	
34	" , A00947-01R, N1,2 SD		
35	" , A00948-01C, N1,2 SD		dil 1/10, add 2003/05/14 back.
36	" , A00948-01R, N1,2 SD		
37	472175, SPIKE, N1,2 SD		
38	" , SPIKE, N1,2 SD		
39	" , BLANK, N1,2 SD		
40	200ng/ml, 2003/05/02 SD		
41	472175, A00713-01R, N1,2 SD	A 314940	
42	" , A00714-01C, N1,2 SD		dil 1/10, int's
43	" , A00715-01C, N1,2 SD		
44	" , A00718-01C, N1,2 SD		
45	" , A00719-01R, N1,2 SD		
46	" , A00720-01C, N1,2 SD		
47	" , A00721-01C, N1,2 SD		
48	200ng/ml 70-200nmol/l N1,2 SD		
49	470708, 1923102-00R, N1,2 SD		stds added back A313116 Ring, concn panel
50	None Blank, N1,2 SD		
51	200ng/ml 70-200nmol/l N1,2 SD		
52	no file		X

2003/05/14

K12349 01-03 Mass Resolution Accuracy for nitroso's

✓

✓

✓

04 2003/05/14 70-206000000-1255,10

05 10.000g load 70-206000000-1256,10

06 1.000g load 70-206000000-1257,10

07 472719, A01592-01r, '1,1,2,2D

08 " , A01591-01r, '2,1,2,2D

09 " , A01669-01r, '1,1,2,2D

10 " , A01670-01r, '1,1,2,2D

11 " , A01670-01r, '1,1,2,2D

12 " , A01352-01r, '1,1,2,2D

13 " , A01366-01r, '1,1,2,2D

14 2003/05/14 70-206000000-1257,10

15 472175, SPICE, '1,1,2,2D

16 472175, SPICE, '1,1,2,2D

17 " , BLANK, '1,1,2,2D

18 " , A00719-01r, '1,1,2,2D

19 " , A00720-01r, '1,1,2,2D

20 " , A00718-01r, '1,1,2,2D

21 " , A00714-01r, '1,1,2,2D

22 " , A00721-01r, '1,1,2,2D

23 472719, A00948-01r, '1,1,2,2D

24 2003/05/14 70-206000000-1255,10

25 470708, 992362-00L, '1,1,2,2D

26 2003/05/14 70-206000000-1255,10

27-28 Mass Resolution Accuracy for nitriles ✓

29 473037, A00620-01r, '2,1,2,2D

30 " , A00621-01r, '2,1,2,2D

A315145 ✓

A315100 ✓

A315096 ✓

A315100 ✓

A314920 ✓

A314920 ✓

A315163 ✓

STANDARDS PREPARATION RECORDS

000097

162

163

184	Anti	dit #	Antibody	Initial conc.	Final conc.	Code	Final conc.	Expiry date	Comments
2003/02/05	70-162 NDM/N-36	50 μ L	20,000 ng/ml	1 mL	500 ng/ml	70-184 NDM/W-1165	1000 ng/ml	2003/03/05	added to stock 5ng/70-174 NDM/P-20 5ng/70-182 NDM-120
↓	100 μ L	↓	↓	↓	↓	1166	2000 ng/ml	120	it worked
↓	70-160 NDM/N-35	100 μ L	100 ng/ml	100 ng/ml	10 ng/ml	70-184 NDM/W-1167	10 ng/ml	2004/10/06	it worked
↓	70-184 NDM/W-1167	100 μ L	10 ng/ml	10 ng/ml	1.00 ng/ml	1167	10 ng/ml	120	it worked
2003/02/06	Protocol for nuclease	1 mL	2000 ng/ml	10 mL	MeOH	70-184 NDM/W-1168	1.00 ng/ml	2003/03/06	it worked
70-184 NDM/N-38	100 μ L	2000 ng/ml	10 mL	MeOH	70-184 NDM/W-1169	2000 ng/ml	2003/03/06	it worked	
70-184 NDM/N-38	500 μ L	2000 ng/ml	10 mL	DCM	70-184 NDM/W-1170	100 ng/ml	2003/05/06	it worked	
70-184 NDM/N-39	100 μ L	100 ng/ml	1 mL	DCM	70-184 NDM/W-1171	10 ng/ml	2003/03/06	added by each 100 ng/ml	
70-184 NDM/W-1169	100 μ L	10 ng/ml	↓	↓	Threshhold	70-184 NDM/W-1172	1.00 ng/ml	2003/02/28	5ng/70-174 NDM/P-20 5ng/70-182 NDM-120
2003-02-06	70-162 NDM/SL-04	100 μ L	9.8 ng/ml	10 mL	MeOH	70-184 NDM/W-1173	50 ng/ml	2003/03/06	it worked
↓	↓	↓	↓	↓	↓	70-184 NDM/W-1174	200 ng/ml	2003/03/06	it worked
2003/02/07	70-162 NDM/N-37	100 mL	2000 ng/ml	1 mL	DCM	70-184 NDM/W-1175	2000 ng/ml	2003/03/07	it worked
2003/02/11	70-174 NDM/N-34	100 mL	50 ng/ml	1 mL	DCM	70-184 NDM/W-1176	50 ng/ml	2003/03/07	5ng/70-174 NDM/P-20 5ng/70-182 NDM-120
70-162 NDM/N-37	2.5 mL	2000 ng/ml	↓	↓	↓	70-184 NDM/W-1177	1000 ng/ml	2003/02/28	5ng/70-174 NDM/P-20 5ng/70-182 NDM-120
↓	↓	↓	↓	↓	↓	70-184 NDM/W-1178	1000 ng/ml	2003/02/28	5ng/70-174 NDM/P-20 5ng/70-182 NDM-120
70-162 NDM/N-36	50 μ L	20,000 ng/ml	100 μ L	100 ng/ml	Acet.	70-184 NDM/W-1179	1.00 ng/ml	2003/03/06	it worked
↓	100 μ L	↓	↓	↓	↓	70-184 NDM/W-1180	2000 ng/ml	2003/02/28	it worked
70-184 NDM/N-39	100 μ L	100 ng/ml	↓	↓	↓	70-184 NDM/W-1181	10 ng/ml	2003/02/28	it worked
70-184 NDM/W-1178	100 μ L	10 ng/ml	↓	↓	↓	70-184 NDM/W-1182	1.00 ng/ml	2003/02/28	it worked
2003/02/12	70-94 PCBN-02	100 μ L	10 ng/ml	10 mL	Tissue	70-184 PCBN-125	0.1 ng/ml	2003/03/26	use 1.0 mL tissue
↓	↓	↓	↓	↓	↓	70-184 PCBN-126	↓	↓	↓
2003/02/13	70-174 NDM/N-37	100 mL	2000 ng/ml	1 mL	DCM	70-184 PCBN-127	2000 ng/ml	2003/02/28	added to stock
70-184 NDM/N-39	100 μ L	100 ng/ml	↓	↓	↓	70-184 PCBN-128	10 ng/ml	2003/02/28	5ng/70-174 NDM/P-20 5ng/70-182 NDM-120
70-184 NDM/W-1181	100 μ L	10 ng/ml	↓	↓	↓	70-184 PCBN-129	1.00 ng/ml	2003/02/28	it worked
70-184 NDM/W-1182	100 μ L	10 ng/ml	↓	↓	↓	70-184 PCBN-130	1.00 ng/ml	2003/02/28	it worked

DATE	LOT #	Amount used	Initial conc.	Final conc.	Volume	SOLVENT	USE	From code	Expiry date	Comments	Wavelength
2003/02/17	13LC5002	100μL	1000ng/mL	100ng/mL	10mL	ACETONE	MF-SUBSTRATE	10-18816212-251	10-18816212-251		450nm
2003/02/17	70-174N0MN-37	100μL	2000ng/mL	200ng/mL	1mL	DCM	Nitratedimethylbenzene	10-18816212-252	2003/02/18	add 5μL 70-174N0MN-20	450nm
2003/02/17	70-146N0R0-20	500μL	5000ng/mL	500ng/mL	10mL	DCM	nitrochlorobiphenyls	10-18816212-253	2003/02/18	50μL 70-174N0MN-20	450nm
2003/02/18	70-176GEMN-10	10μL	500ng/mL	50ng/mL	1mL	DCM	Octadecylamine	10-18816212-254	2003/02/18	50μL 70-174N0MN-20	450nm
		50μL					Working soln.	10-18816212-255		- 450nm	
		10μL						10-18816212-256		- 450nm	
		25μL						10-18816212-257		- 450nm	
		50μL						10-18816212-258		- 450nm	
		100μL						10-18816212-259		- 450nm	
2003/02/18	70-174N0MN-34	100μL	50ng/mL	50ng/mL	1mL	DCM	Nitratedimethylbenzene	10-18816212-260	2003/02/18	50μL 70-174N0MN-20	450nm
2003/02/18	70-162N0MN-37	25μL	2000ng/mL	200ng/mL	1mL	DCM	Nitratedimethylbenzene	10-18816212-261	2003/02/18	50μL 70-174N0MN-20	450nm
		40μL						10-18816212-262		- 450nm	
		100μL						10-18816212-263		- 450nm	
		50μL						10-18816212-264		- 450nm	
		100μL						10-18816212-265		- 450nm	
		100μL						10-18816212-266		- 450nm	
		100μL						10-18816212-267		- 450nm	
2003/02/20	13LC5002	100μL	1000ng/mL	100ng/mL	10mL	Acetone	MF-POLY(4-VINYLPHENYL)	10-18816212-268	2003/02/20		450nm
2003/02/20	70-184N0MN-39	100μL	1000ng/mL	100ng/mL	10mL	Acetone	MF-POLY(4-VINYLPHENYL)	10-18816212-269	2003/02/20		450nm
2003/02/20	13CS50602	1.0mL	40...1.1	5...1	10mL	Hexane	hex-4-sol.	10-18816212-270	2003/02/20	use 25mL extract.	OK
2003/02/20	70-188N0MN-03	100μL	1000ng/mL	100ng/mL	10mL	Acetone	MF-POLY(4-VINYLPHENYL)	10-18816212-271	2003/02/20		450nm
		100μL						10-18816212-272		- 450nm	
		100μL						10-18816212-273		- 450nm	
		100μL						10-18816212-274		- 450nm	
		100μL						10-18816212-275		- 450nm	
		100μL						10-18816212-276		- 450nm	
		100μL						10-18816212-277		- 450nm	
		100μL						10-18816212-278		- 450nm	
		100μL						10-18816212-279		- 450nm	
		100μL						10-18816212-280		- 450nm	
		100μL						10-18816212-281		- 450nm	
		100μL						10-18816212-282		- 450nm	
		100μL						10-18816212-283		- 450nm	
		100μL						10-18816212-284		- 450nm	
		100μL						10-18816212-285		- 450nm	
		100μL						10-18816212-286		- 450nm	
		100μL						10-18816212-287		- 450nm	
		100μL						10-18816212-288		- 450nm	
		100μL						10-18816212-289		- 450nm	
		100μL						10-18816212-290		- 450nm	
		100μL						10-18816212-291		- 450nm	
		100μL						10-18816212-292		- 450nm	
		100μL						10-18816212-293		- 450nm	
		100μL						10-18816212-294		- 450nm	
		100μL						10-18816212-295		- 450nm	
		100μL						10-18816212-296		- 450nm	
		100μL						10-18816212-297		- 450nm	
		100μL						10-18816212-298		- 450nm	
		100μL						10-18816212-299		- 450nm	
		100μL						10-18816212-300		- 450nm	
		100μL						10-18816212-301		- 450nm	
		100μL						10-18816212-302		- 450nm	
		100μL						10-18816212-303		- 450nm	
		100μL						10-18816212-304		- 450nm	
		100μL						10-18816212-305		- 450nm	
		100μL						10-18816212-306		- 450nm	
		100μL						10-18816212-307		- 450nm	
		100μL						10-18816212-308		- 450nm	
		100μL						10-18816212-309		- 450nm	
		100μL						10-18816212-310		- 450nm	
		100μL						10-18816212-311		- 450nm	
		100μL						10-18816212-312		- 450nm	
		100μL						10-18816212-313		- 450nm	
		100μL						10-18816212-314		- 450nm	
		100μL						10-18816212-315		- 450nm	
		100μL						10-18816212-316		- 450nm	
		100μL						10-18816212-317		- 450nm	
		100μL						10-18816212-318		- 450nm	
		100μL						10-18816212-319		- 450nm	
		100μL						10-18816212-320		- 450nm	
		100μL						10-18816212-321		- 450nm	
		100μL						10-18816212-322		- 450nm	
		100μL						10-18816212-323		- 450nm	
		100μL						10-18816212-324		- 450nm	
		100μL						10-18816212-325		- 450nm	
		100μL						10-18816212-326		- 450nm	
		100μL						10-18816212-327		- 450nm	
		100μL						10-18816212-328		- 450nm	
		100μL						10-18816212-329		- 450nm	
		100μL						10-18816212-330		- 450nm	
		100μL						10-18816212-331		- 450nm	
		100μL						10-18816212-332		- 450nm	
		100μL						10-18816212-333		- 450nm	
		100μL						10-18816212-334		- 450nm	
		100μL						10-18816212-335		- 450nm	
		100μL						10-18816212-336		- 450nm	
		100μL						10-18816212-337		- 450nm	
		100μL						10-18816212-338		- 450nm	
		100μL						10-18816212-339		- 450nm	
		100μL						10-18816212-340		- 450nm	
		100μL						10-18816212-341		- 450nm	
		100μL						10-18816212-342		- 450nm	
		100μL						10-18816212-343		- 450nm	
		100μL						10-18816212-344		- 450nm	
		100μL						10-18816212-345		- 450nm	
		100μL						10-18816212-346		- 450nm	
		100μL						10-18816212-347		- 450nm	
		100μL						10-18816212-348		- 450nm	
		100μL						10-18816212-349		- 450nm	
		100μL						10-18816212-350		- 450nm	
		100μL						10-18816212-351		- 450nm	
		100μL						10-18816212-352		- 450nm	
		100μL						10-18816212-353		- 450nm	
		100μL						10-18816212-354		- 450nm	
		100μL						10-18816212-355		- 450nm	
		100μL						10-18816212-356		- 450nm	
		100μL						10-18816212-357		- 450nm	
		100μL						10-18816212-358		- 450nm	
		100μL						10-18816212-359		- 450nm	
		100μL						10-18816212-360		- 450nm	
		100μL						10-18816212-361		- 450nm	
		100μL						10-18816212-362		- 450nm	
		100μL						10-18816212-363		- 450nm	
		100μL						10-18816212-364		- 450nm	
		100μL						10-18816212-365		- 450nm	
		100μL						10-18816212-366		- 450nm	
		100μL						10-18816212-367		- 450nm	
		100μL						10-18816212-368		- 450nm	
		100μL						10-18816212-369		- 450nm	
		100μL						10-18816212-370		- 450nm	
		100μL						10-18816212-371		- 450nm	
		100μL						10-18816212-372		- 450nm	
		100μL						10-18816212-373		- 450nm	
		100μL						10-18816212-374		- 450nm	
		100μL						10-18816212-375		- 450nm	
		100μL						10-18816212-376		- 450nm	
		100μL						10-18816212-377		- 450nm	
		100μL						10-18816212-378		- 450nm	
		100μL						10-18816212-379		- 450nm	
		100μL						10-18816212-380		- 450nm	
		100μL						10-18816212-381		- 450nm	
		100μL						10-18816212-382		- 450nm	
		100μL						10-18816212-383		- 450nm	
		100μL						10-18816212-384		- 450nm	
		100μL						10-18816212-385		- 450nm	
		100μL						10-18816212-386		- 450nm	
		100μL						10-18816212-387		- 450nm	
		100μL						10-18816212-388		- 450nm	
		100μL						10-18816212-389		- 450nm	
		100μL						10-18816212-390		- 450nm	
		100μL						10-18816212-391		- 4	

190	Date	Lot #	Initial conc.	Final vol.	Solvent	loc.	Date	Final conc	Expiry date	Comments	
										Unit	Initial conc.
2003/02/26	70-188NDMN-40	1mL	2000ug/ml	10mL	MeOH	Nitroaromatics # 2	10-190NDMN-41	200 ug/ml	2003/08/26	INTERN. #2	NITROS
						Nitroaromatics (5AB)	10-190NDMN-41	50 ug/ml	2003/05/26	INTER. #2	NITROS LAB spike
	70-190NDMN-41	250µL	2000 ug/ml	10mL	MeOH	Nitroaromatics	10-190NDMN-41	50 ug/ml	2003/05/26	INTER. #2	NITROS LAB spike
	70-190NDMN-41	250µL	2000 ug/ml	10mL	MeOH	Nitroaromatics	10-190NDMN-41	50 ug/ml	2003/05/26	INTER. #2	NITROS WORKING SPIKE
	70-190NDMN-41	250µL	2000 ug/ml	10mL	MeOH	Nitroaromatics	10-190NDMN-41	50 ug/ml	2003/05/26	INTER. #2	NITROS WORKING SPIKE added: 5 µL 10-1770MPT-20
	70-190-NDMN-42	100.µL	50 ug/ml	50 µL	formic acid	Nitroaromatics	10-190NDMN-41	5.00 ug/ml	2003/03/26	INTER. #2	10-182NDMN-100
	70-190-NDMN-43	100.µL	100 ug/ml	100 µL	Acetone	Nitroaromatics	10-190NDMN-41	100 ug/ml	2003/03/26	INTER. #2	10-182NDMN-100
2003/02/26	13LC50602	100.1	100.1	100.1	Acetone	N/F-SURROGATE	70-190NDMN-41	1/2 mg/L	2003/08/26	OK	OK
								-260			
								-261			
								-262			
								-263			
								-264			
								-265			
								-266			
								-267			
								-268			
								-269			
2003/02/27	70-190NDMN-41	100 mL	2000 ug/ml	1 mL	DMS	Nitroaromatics	70-190NDMN-194	200 ug/ml	2003/03/27	added in each:	OK
	70-184NDMN-39	100 µL	100 ug/ml	1 mL	DMS	2nd fraction	70-190NDMN-195	10 ug/ml	5µL 70-1770MPT-20		
	70-190NDMN-195	100 µL	100 ug/ml	1 mL	DMS	3rd fraction	70-190NDMN-196	1.0 ug/ml	100µL 70-182NDMN-100		
2003/02/27	MCPS08048	100 mL	100 mg/L	10 mL	Acetone	Chlorophenols Sum	70-190CPH0-12	1 mg/L	2003/08/27	OK	OK
2003/02/27	MCBS50199	100 mL	100 mg/L	10 mL	Acetone	Chlorophenols Sum	70-190CPH0-12	1 mg/L	2003/08/27	OK	OK
2003/02/27	CPS9708	100 mL	100 mg/L	10 mL	MeOH	Chlorophenols Spike	70-190CPH0-1207	1 mg/L	2003/08/27	OK	OK
2003/02/27	CBS9708	100 mL	100 mg/L	10 mL	MeOH	Chlorophenols Spike	70-190CPH0-07	1 mg/L	2003/08/27	OK	OK
	MAX-SOL-4	1	1	1	1			1		1	
2003/03/03	BPA/BSTOCK	250 mL	1000 ug/ml	10 mL	Acetone	1F, 2F, 4F, 6F, 8F, 10F, 12F, 14F, 16F, 18F, 20F, 22F, 24F, 26F, 28F, 30F, 32F, 34F, 36F, 38F, 40F, 42F, 44F, 46F, 48F, 50F, 52F, 54F, 56F, 58F, 60F, 62F, 64F, 66F, 68F, 70F, 72F, 74F, 76F, 78F, 80F, 82F, 84F, 86F, 88F, 90F, 92F, 94F, 96F, 98F, 100F, 102F, 104F, 106F, 108F, 110F, 112F, 114F, 116F, 118F, 120F, 122F, 124F, 126F, 128F, 130F, 132F, 134F, 136F, 138F, 140F, 142F, 144F, 146F, 148F, 150F, 152F, 154F, 156F, 158F, 160F, 162F, 164F, 166F, 168F, 170F, 172F, 174F, 176F, 178F, 180F, 182F, 184F, 186F, 188F, 190F, 192F, 194F, 196F, 198F, 200F, 202F, 204F, 206F, 208F, 210F, 212F, 214F, 216F, 218F, 220F, 222F, 224F, 226F, 228F, 230F, 232F, 234F, 236F, 238F, 240F, 242F, 244F, 246F, 248F, 250F, 252F, 254F, 256F, 258F, 260F, 262F, 264F, 266F, 268F, 270F, 272F, 274F, 276F, 278F, 280F, 282F, 284F, 286F, 288F, 290F, 292F, 294F, 296F, 298F, 300F, 302F, 304F, 306F, 308F, 310F, 312F, 314F, 316F, 318F, 320F, 322F, 324F, 326F, 328F, 330F, 332F, 334F, 336F, 338F, 340F, 342F, 344F, 346F, 348F, 350F, 352F, 354F, 356F, 358F, 360F, 362F, 364F, 366F, 368F, 370F, 372F, 374F, 376F, 378F, 380F, 382F, 384F, 386F, 388F, 390F, 392F, 394F, 396F, 398F, 400F, 402F, 404F, 406F, 408F, 410F, 412F, 414F, 416F, 418F, 420F, 422F, 424F, 426F, 428F, 430F, 432F, 434F, 436F, 438F, 440F, 442F, 444F, 446F, 448F, 450F, 452F, 454F, 456F, 458F, 460F, 462F, 464F, 466F, 468F, 470F, 472F, 474F, 476F, 478F, 480F, 482F, 484F, 486F, 488F, 490F, 492F, 494F, 496F, 498F, 500F, 502F, 504F, 506F, 508F, 510F, 512F, 514F, 516F, 518F, 520F, 522F, 524F, 526F, 528F, 530F, 532F, 534F, 536F, 538F, 540F, 542F, 544F, 546F, 548F, 550F, 552F, 554F, 556F, 558F, 560F, 562F, 564F, 566F, 568F, 570F, 572F, 574F, 576F, 578F, 580F, 582F, 584F, 586F, 588F, 590F, 592F, 594F, 596F, 598F, 600F, 602F, 604F, 606F, 608F, 610F, 612F, 614F, 616F, 618F, 620F, 622F, 624F, 626F, 628F, 630F, 632F, 634F, 636F, 638F, 640F, 642F, 644F, 646F, 648F, 650F, 652F, 654F, 656F, 658F, 660F, 662F, 664F, 666F, 668F, 670F, 672F, 674F, 676F, 678F, 680F, 682F, 684F, 686F, 688F, 690F, 692F, 694F, 696F, 698F, 700F, 702F, 704F, 706F, 708F, 710F, 712F, 714F, 716F, 718F, 720F, 722F, 724F, 726F, 728F, 730F, 732F, 734F, 736F, 738F, 740F, 742F, 744F, 746F, 748F, 750F, 752F, 754F, 756F, 758F, 760F, 762F, 764F, 766F, 768F, 770F, 772F, 774F, 776F, 778F, 780F, 782F, 784F, 786F, 788F, 790F, 792F, 794F, 796F, 798F, 800F, 802F, 804F, 806F, 808F, 810F, 812F, 814F, 816F, 818F, 820F, 822F, 824F, 826F, 828F, 830F, 832F, 834F, 836F, 838F, 840F, 842F, 844F, 846F, 848F, 850F, 852F, 854F, 856F, 858F, 860F, 862F, 864F, 866F, 868F, 870F, 872F, 874F, 876F, 878F, 880F, 882F, 884F, 886F, 888F, 890F, 892F, 894F, 896F, 898F, 900F, 902F, 904F, 906F, 908F, 910F, 912F, 914F, 916F, 918F, 920F, 922F, 924F, 926F, 928F, 930F, 932F, 934F, 936F, 938F, 940F, 942F, 944F, 946F, 948F, 950F, 952F, 954F, 956F, 958F, 960F, 962F, 964F, 966F, 968F, 970F, 972F, 974F, 976F, 978F, 980F, 982F, 984F, 986F, 988F, 990F, 992F, 994F, 996F, 998F, 1000F, 1002F, 1004F, 1006F, 1008F, 1010F, 1012F, 1014F, 1016F, 1018F, 1020F, 1022F, 1024F, 1026F, 1028F, 1030F, 1032F, 1034F, 1036F, 1038F, 1040F, 1042F, 1044F, 1046F, 1048F, 1050F, 1052F, 1054F, 1056F, 1058F, 1060F, 1062F, 1064F, 1066F, 1068F, 1070F, 1072F, 1074F, 1076F, 1078F, 1080F, 1082F, 1084F, 1086F, 1088F, 1090F, 1092F, 1094F, 1096F, 1098F, 1100F, 1102F, 1104F, 1106F, 1108F, 1110F, 1112F, 1114F, 1116F, 1118F, 1120F, 1122F, 1124F, 1126F, 1128F, 1130F, 1132F, 1134F, 1136F, 1138F, 1140F, 1142F, 1144F, 1146F, 1148F, 1150F, 1152F, 1154F, 1156F, 1158F, 1160F, 1162F, 1164F, 1166F, 1168F, 1170F, 1172F, 1174F, 1176F, 1178F, 1180F, 1182F, 1184F, 1186F, 1188F, 1190F, 1192F, 1194F, 1196F, 1198F, 1200F, 1202F, 1204F, 1206F, 1208F, 1210F, 1212F, 1214F, 1216F, 1218F, 1220F, 1222F, 1224F, 1226F, 1228F, 1230F, 1232F, 1234F, 1236F, 1238F, 1240F, 1242F, 1244F, 1246F, 1248F, 1250F, 1252F, 1254F, 1256F, 1258F, 1260F, 1262F, 1264F, 1266F, 1268F, 1270F, 1272F, 1274F, 1276F, 1278F, 1280F, 1282F, 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1856F, 1858F, 1860F, 1862F, 1864F, 1866F, 1868F, 1870F, 1872F, 1874F, 1876F, 1878F, 1880F, 1882F, 1884F, 1886F, 1888F, 1890F, 1892F, 1894F, 1896F, 1898F, 1900F, 1902F, 1904F, 1906F, 1908F, 1910F, 1912F, 1914F, 1916F, 1918F, 1920F, 1922F, 1924F, 1926F, 1928F, 1930F, 1932F, 1934F, 1936F, 1938F, 1940F, 1942F, 1944F, 1946F, 1948F, 1950F, 1952F, 1954F, 1956F, 1958F, 1960F, 1962F, 1964F, 1966F, 1968F, 1970F, 1972F, 1974F, 1976F, 1978F, 1980F, 1982F, 1984F, 1986F, 1988F, 1990F, 1992F, 1994F, 1996F, 1998F, 2000F, 2002F, 2004F, 2006F, 2008F, 2010F, 2012F, 2014F, 2016F, 2018F, 2020F, 2022F, 2024F, 2026F, 2028F, 2030F, 2032F, 2034F, 2036F, 2038F, 2040F, 2042F, 2044F, 2046F, 2048F, 2050F, 2052F, 2054F, 2056F, 2058F, 2060F, 2062F, 2064F, 2066F, 2068F, 2070F, 2072F, 2074F, 2076F, 2078F, 2080F, 2082F, 2084F, 2086F, 2088F, 2090F, 2092F, 2094F, 2096F, 2098F, 2100F, 2102F, 2104F, 2106F, 2108F, 2110F, 2112F, 2114F, 2116F, 2118F, 2120F, 2122F, 2124F, 2126F, 2128F, 2130F, 2132F, 2134F, 2136F, 2138F, 2140F, 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2714F, 2716F, 2718F, 2720F, 2722F, 2724F, 2726F, 2728F, 2730F, 2732F, 2734F, 2736F, 2738F, 2740F, 2742F, 2744F, 2746F, 2748F, 2750F, 2752F,					

200								21							
Date	Lot #	Amt used	Initial conc.	Final vol	SOLVENT	WE CODE	DATE	Expiry DATE	Comments	INITN					
2003/03/24	192CS0602	100 μL	10/200	10 ± 1	ACETONE	01F-Saline	70-200000000-285	1/2 mg/L	2003/09/285	01F- Saline to 1.0 ml	OK				
2003/03/28	BPMS 0401	1 mL	1	1			-286				↓				
2003/03/28	TD-2000B000-B3	500 μL	2.0 μg/ml	10 mL	ACETONE	52B-C00045	70-200000000-03	0.2 μg/ml	2003/03/28	use 500 μL for Interf.	DIL				
2003/03/28	TD-2000B000-B3	100 μL	0.2 μg/ml	10 mL	ACETONE	52B-C00045	70-200000000-03	10 ng/ml	2004/03/28	use 100 μL for Tissue					
2003/03/28	TD-2000B000-B3	100 μL	10 ng/ml	10 mL	Acetone	PUB-TASME	70-200000000-24	0.1 ng/ml	2003/09/28	use 1.0 mL for Tissue					
2003-03-28	Q003-6328	1 mL	10 μ g/ml	10 mL	ACETONE	52B-C00045	70-200000000-285	1.0 g/ml	2003-06-28	use 100 μL	KL				
2003-03-28	Q003-6328	2 mL	20 μ g/ml	10 mL	ACETONE	52B-C00045	70-200000000-285	2.0 g/ml	2003-06-28	use 100 μL	J				
2003/04/01	70-192N000N-41	100 μL	2000 ng/ml	1 mL	SCM	N70-A000000000-126	500 ng/ml	500 ng/ml	2003/05/01	added 500 ng/ml	HC				
	70-194N000N-39	100 μL	100 ng/ml	100 ng/ml		N70-A000000000-126	200 ng/ml	200 ng/ml	2003/05/01	added 200 ng/ml					
	70-200N000N-027	100 μL	10 ng/ml	10 ng/ml		N70-A000000000-126	10.0 ng/ml	10.0 ng/ml	2003/05/01	added 10.0 ng/ml					
2003-04-04	70-192N000N-04	100 μL	9.84 ng/ml	10 mL	ACETONE	N000000000-125	9.84 ng/ml	9.84 ng/ml	2003-07-04	use 100 μL	KS				
	70-192N000N-40	100 μL	10 ng/ml	10 mL	ACETONE	N000000000-126	10 ng/ml	10 ng/ml	2003-07-04	use 100 μL	↓				
2003/04/08	70-192N000N-40	100 μL	50 ng/ml	1 mL	SCM	N70-A000000000-129	5.0 ng/ml	5.0 ng/ml	2003/05/08	added 5.0 ng/ml	HC				
	70-192N000N-41	100 μL	100 ng/ml	100 ng/ml		N70-A000000000-129	200 ng/ml	200 ng/ml	2003/05/08	added 200 ng/ml					
	70-194N000N-39	100 μL	100 ng/ml	100 ng/ml		N70-A000000000-129	10.0 ng/ml	10.0 ng/ml	2003/05/08	added 10.0 ng/ml					
	70-200N000N-029	100 μL	10.0 ng/ml	10.0 ng/ml		N70-A000000000-129	1.0 ng/ml	1.0 ng/ml	2003/05/08	added 1.0 ng/ml					
2003-04-11	70-192N000N-41	250 μL	1000 ng/ml	10 mL	ACETONE	N000000000-144	50 ng/ml	50 ng/ml	2003-07-11	use 100 μL (last day)	KS				
2003-04-11	70-192N000N-75	total	2003-04-11	10 mL	ACETONE	N70-A000000000-77	10-100 ng/ml	10-100 ng/ml	2003-07-12	use 100 μL	HC				
2003/04/15	70-192N000N-41	100 μL	2000 ng/ml	1 mL	SCM	N70-A000000000-129	200 ng/ml	200 ng/ml	2003/05/15	added in excess	HC				
	70-194N000N-39	100 μL	2000 ng/ml	100 ng/ml		N70-A000000000-129	10.0 ng/ml	10.0 ng/ml	2003/05/15	added 10.0 ng/ml					
	70-200N000N-029	100 μL	2000 ng/ml	100 ng/ml		N70-A000000000-129	1.0 ng/ml	1.0 ng/ml	2003/05/15	added 1.0 ng/ml					
2003/04/15 131CS0602	100 μL	100 μ g/ml	10 mL	Acetone	01F-100000000	70-200000000-287	1.0 mg/ml	1.0 mg/ml	2003/10/15	1F - 3 dilute	Y				
	100 μ g/ml	100 μ g/ml				10-100000000	70-200000000-288								
						10-200000000	70-200000000-289								
						10-200000000	70-200000000-290								

	Batch #	Initial conc.	Final conc.	Solvent	Exc.	Code	Final conc.	Expiry date	Comments	Others
2003/04/130	Ultra Seawater-4 R-1212	1ST 200	1 ml	1000ug/ml	5 ml	DCM	0.8 ug/ml	70-204 ND/NP-15	2003/10/30	wire Seal
2003/04/130	Ultra Seawater-5 S1116	1.5 ml	1000ug/ml	10 ml	MeOH	1.4 Disolve & k	70-204 ND/NP-0.9	15 ug/ml	2003/10/30	wire Seal
2003/04/130	C1L DCM-28 Bio 18-147	0.1018g	rest	10ml	MeOH	0.14 Disolve	70-204 ND/NP-17	10.18 mg/l	2003/10/30	wire Seal
2003/04/130	70-204 ND/NP-17	125 ml	10180ug/l	10 ml	MeOH	0.14 Disolve intermediate stock	70-204 ND/NP-17	10.18 mg/l	2003/10/30	use as stock
2003/04/130	70-204 ND/NP-18	1.0 ml	127.25ug/ml	10 ml	MeOH	0.14 Disolve intermediate stock	70-204 ND/NP-18	127.25 mg/l	2003/10/30	use as intermediate
2003/04/130	13LC50602	100μl	100/000ug/ml	10ml	ACETONE	NE-SOLUCATE	70-204 ND/NP-291	12.73 mg/l	2003/10/30	wire Seal
2003/04/30	water R1212	50 μl	1000ug/ml	10ml	DCM	NOMA D8 int. std.	70-204 ND/NP-292	11.2 ug/ml	2003/04/14	use 1.0mc
2003/05/01	70-190 ND/NP-04	100μl	9.8 ug/l	10ml	MeOH	NOMA D6 inter.	70-204 ND/NP-293	9.8 ug/ml	2003/07/30	wire Seal
2003/05/01	70-190 ND/NP-41	250μl	↓	↓	↓	70-204 ND/NP-127	9.8 ug/ml	2003/08/01	use 10ml	use
2003/05/01	70-190 ND/NP-41	2000ug/ml	10ml	MeOH	North daily opt.	70-204 ND/NP-45	50 ug/ml	2003/08/01	use 100 μl	R-21
2003/05/05	70-190 ND/NP-42	100μl	50 ng/ml	/ml	DCM	intermediates stock	70-204 ND/NP-126	5.0 ug/ml	2003/05/125	use 10 μl use 100 μl
2003/05/05	70-190 ND/NP-41	25 μl	2000ng/ml	40 μl	↓	70-204 ND/NP-127	50 ng/ml	2003/06/05	use 10 μl	R-25
2003/05/05	70-188 ND/NP-40	50 μl	20,000ng/ml	100 μl	↓	70-204 ND/NP-1247	50 ng/ml	2003/06/05	use 10 μl	R-25
2003/05/05	70-187 ND/NP-46	100 μl	100 ng/ml	100 μl	↓	70-204 ND/NP-1248	50 ng/ml	2003/06/05	use 10 μl	R-25
2003/05/05	70-184 ND/NP-38	500 μl	2000 ng/ml	10 ml	MeOH	2nd trace intermediates	70-204 ND/NP-1251	2000 ng/ml	2003/06/05	use 100 μl
2003/05/05	70-198 ND/NP-11	10 μl	5000ug/ml	1 ml	DCM	intermediate optical	70-204 ND/NP-1252	1.0 ug/ml	2003/06/05	use 10 μl
2003/05/05	70-198 ND/NP-11	50 μl	↓	↓	↓	70-204 ND/NP-1253	1.0 ug/ml	158	25 ng/ml	use 10 μl
2003/05/05	70-198 ND/NP-11	100 μl	↓	↓	↓	70-204 ND/NP-1254	1.0 ug/ml	159	50 ng/ml	use 10 μl

CHAIN OF CUSTODY DOCUMENTATION

000105

Report Name: Entry

Job #: A315096

Page #: 1

Client: APPLIED P & CH LABORATORY
13769 MAGNOLIA AVE
CHINO CA
USA 91710-7018

Inv Attn: Kenny Chan

Printed: 2003/05/02 Version 1
Reception Date: 2003/05/02
Reception Time: 12:31
Login Date: 2003/05/02
REQUIRED DATE: 2003/05/23
Quote Number: A20018

Report: same

Attention: Kenny Chan
Phone: (909) 590 - 1828 Ext: 263
Fax: (909) 902 - 1661

P.O. Number:
Project Number: JPL

Client Number: 9417
Rpt Address #:
Q.C. Samples: No

Project Coordinator: AGY

Maxxam Client
Number Sample ID
A01352-01R MW-17-4

Cont's	Store Recd.			Sampling		Test Codes
	Code	OK	Date	Matrix		
2-ILAG	WWI-538	Yes	2003/04/28	LIQ	W-NDMA-L	

Remarks: EPA 1625. LEVEL 5

Quote Remarks:

EPA Level 4 reporting (15% surcharge).
For Extract & Hold samples, charge U\$175

000106



SAMPLE RECEIPT RECORD

Way Bill #838068291068
Received 2003-05-02 12:34PM
Courier Company FEDEX
Assigned Job # A315100 / A315096
Project #JPL
Client Name Applied P & CH
Project Contact Kenny Chan

Observation	Yes	No
Were custody seals on the outside of the cooler?	✓	
Was the Chain of custody inside the cooler?	✓	
Was the Chain of Custody properly filled out?	✓	
Was ice or ice packs used to keep samples cool?	✓	
Temperature of the cooler or blank.	0.5°c,	
Was the temperature acceptance limit of <8 c met?	✓	
Were the sample containers in good condition?	✓	

If the answer to any of the questions above is NO, a sample exceptions report must be completed.

Date Logged in 2003-05-02

Tracy Strelau

Tracy Strelau

Maxxam Analytics Inc

50 Bathurst Dr, Unit #12
Waterloo, ON
N2V 2C5
(519) 747 2575 ext.21

Comments:

000108