Columbia Analytical Services™ 1317 S. 13th Avenue, Kelso, WA 98626 360.577.7222 360.636.1068 (fax) www.caslab.com

February 28, 2011 Analytical Report for Service Request No: K1100692

Melissa Kleven
Exponent
15375 Southeast 30th Place, Suite 250
Bellevue, WA 98007

RE: Heglar Kronquist/0907194.000.0901

Dear Melissa:

Enclosed are the results of the samples submitted to our laboratory on January 26, 2011. For your reference, these analyses have been assigned our service request number K1100692.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.caslab.com. 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.

Please call if you have any questions. My extension is 3281. You may also contact me via Email at MShelton@caslab.com.

Respectfully submitted,

Columbia Analytical Services, Inc.

Mike Shelton

Mike Shelton
Project Chemist

MS/ln

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value that was detected outside the quantitation range.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	In accordance with the 2007 EPA Methods Update Rule published in the Federal Register, the holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value that was detected outside the quantitation range.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value that was detected outside the quantitation range.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.1 definition*: Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

Columbia Analytical Services, Inc.
Kelso, WA
State Certifications, Accreditations, and Licenses

Program	Number
Alaska DEC UST	UST-040
Arizona DHS	AZ0339
Arkansas - DEQ	88-0637
California DHS	2286
Florida DOH	E87412
Hawaii DOH	-
Idaho DHW	-
Indiana DOH	C-WA-01
Louisiana DEQ	3016
Louisiana DHH	LA050010
Maine DHS	WA0035
Michigan DEQ	9949
Minnesota DOH	053-999-368
Montana DPHHS	CERT0047
Nevada DEP	WA35
New Jersey DEP	WA005
New Mexico ED	-
North Carolina DWQ	605
Oklahoma DEQ	9801
Oregon - DHS	WA200001
South Carolina DHEC	61002
Washington DOE	C1203
Wisconsin DNR	998386840
Wyoming (EPA Region 8)	-

Case Narrative

COLUMBIA ANALYTICAL SERVICES, INC.

Client:	Exponent	**Service Request No.:**	K1100692
Project:	Heglar Kronquist	**Date Received:**	1/26/11
Sample Matrix:	Water		

CASE NARRATIVE

All analyses were performed consistent with the quality assurance program of Columbia Analytical Services, Inc. (CAS). This report contains analytical results for samples designated for Tier IV validation deliverables including summary forms and all of the associated raw data for each of the analyses. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Three water samples and a trip blank were received for analysis at Columbia Analytical Services on 1/26/11 The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

General Chemistry Parameters

No anomalies associated with the analysis of these samples were observed.

Dissolved Metals

Matrix Spike Recovery Exceptions:
The control criteria for matrix spike recovery of Calcium, Magnesium and Sodium for sample MW-7 were not applicable. The analyzed concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

No other anomalies associated with the analysis of these samples were observed.

PCB Aroclors by EPA Method 8082

No anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260B

No anomalies associated with the analysis of these samples were observed.

Approved by Mike Shelton **Date** 3/1/11

Chain of Custody

Columbia Analytical Services

CHAIN OF CUSTODY

SR#: K1100692

1317 South 13th Ave, Kelso, WA 98626 | 360.577.7222 | 800.695.7222 | 360.636.1068 (fax)

PAGE 1 OF 1 COC #

PROJECT NAME: Heglar - Kronquist
PROJECT NUMBER: 0967194.008.0901
PROJECT MANAGER: Melissa Kleuen
COMPANY/ADDRESS: 15375 SE 30th Pl Suite 250
CITY/STATE/ZIP: Bellevue, WA 98007
E-MAIL ADDRESS: mkleuen@exponent.com
PHONE #: 425-519-8774 FAX #: 425-519-8799
SAMPLER'S SIGNATURE: Keri Whetter

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	Semivolatile Organics by GC/MS 625 ☐ 8270 ☐ 8270LL ☐	Volatile Organics 624 X 8260 ☐	Hydrocarbons (*see below) Gas ☐ Diesel ☐ Oil ☐ ☐ Fuel Fingerprint (FIQ) ☐ NW-HCID Screen	Oil & Grease/TRPH 1664 HEM ☐ 1664 SGT ☐	PCB's Aroclors X 608 LAW LEVEL Congeners ☐	Pesticides/Herbicides 608 ☐ 8081A ☐ 8141A ☐ 8151A ☐	Chlorophenolics - 8151M Tri ☐ Tetra ☐ PCP ☐	PAHS 8310 ☐ SIM ☐	Metals, Total or Dissolved (See list below)	Cyanide ☐	Hex-Chrom ☐	pH, Cond, Cl, SO4, PO4, F, NO2 (circle) NO3 BOD, TSS, TDS	NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020 ☐ AOX 1650 ☐ 506 ☐	Alkalinity				REMARKS
MW-3	1/25/11	1215		L	10		X			X				X		X	X		X				run
MW-7	↓	900		L	10		X			X				X		X	X		X				NO_2 and
EB-012511		1300		L	10		X			X				X		X	X		X				NO_3
TB		—		L	2		X																W/I
																							48-hr
																							hold

REPORT REQUIREMENTS

___ I. Routine Report: Method Blank, Surrogate, as required
___ II. Report Dup., MS, MSD as required
X III. Data Validation Report (includes all raw data)
___ IV. CLP Deliverable Report
X V. EDD

INVOICE INFORMATION

P.O. #
Bill To: same as above

TURNAROUND REQUIREMENTS

___ 24 hr. ___ 48 hr.
___ 5 Day
X Standard (10-15 working days)
___ Provide FAX Results

Requested Report Date

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: (Al) (As) Sb Ba Be B (Ca) Cd Co Cr Cu (Fe) Pb (Mg) (Mn) Mo Ni (K) Ag (Na) Se Sr Tl Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER:_____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

- 500 mL w/ H_2SO_4, 1L unpreserved, and 500 mL w/ HNO_3 are field-filtered
- run NO_2 and NO_3 ASAP w/I 48hr hold
- run VOCs and PCBs by Low Level

☐ Sample Shipment contains USDA regulated soil samples (check box if applicable)

RELINQUISHED BY:		RECEIVED BY:		RELINQUISHED BY:		RECEIVED BY:	
Signature	Date/Time	Signature	Date/Time	Signature	Date/Time	Signature	Date/Time
Keri Whetter	1-25-11 1448	SHOPKINS	1/26/11 0850				
Printed Name	Firm	Printed Name	Firm	Printed Name	Firm	Printed Name	Firm
	Exponent		CAS				

RCOC #1 03/10

Columbia Analytical Services, Inc.
Cooler Receipt and Preservation Form

PC MS

Client / Project: Exponent Service Request *K11* 0692

Received: 1/20/11 Opened: 1/20/11 By: SX Unloaded: 1/20/11 By: SX

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? one, front
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Cooler Temp °C	Temp Blank °C	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
-0.4	4.2	300	1083	7955 3634 2568	
-0.5	—	290	2083	7955 3634 2557	

7. Packing material used. *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Sleeves* *Other* _____
8. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
9. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA Y N
10. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
11. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
12. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
13. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
14. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
15. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

SHORT HOLD TIME

Notes, Discrepancies, & Resolutions: _____

General Chemistry Parameters

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/2011
Sample Matrix:	Water	**Date Received:**	1/26/2011

Chloride, Dissolved

Prep Method:	NONE	Units:	mg/L (ppm)
Analysis Method:	300.0	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
MW-3	K1100692-001	20	3	100	1/26/2011	656	
MW-7	K1100692-002	20	3	100	1/26/2011	641	
EB-012511	K1100692-003	0.40	0.06	2	1/26/2011	ND	
Method Blank	K1100692-MB	0.20	0.03	1	1/26/2011	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 1/26/2011

Duplicate Summary
Inorganic Parameters

Sample Name: Batch QC
Lab Code: K1100699-001DUP
Test Notes:

Units: mg/L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Chloride, Dissolved	NONE	300.0	0.40	3.40	3.31	3.34	1	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/2011

Matrix Spike Summary
Inorganic Parameters

300.0

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	K1100699-001MS	Basis:	NA

Test Notes:

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride, Dissolved	NONE	300.0	0.40	4.00	3.40	6.94	89	80-120	

MS/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/2011

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	300.0	Units:	mg/L (ppm)
Lab Code:	K1100692-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Chloride, Dissolved	NONE	300.0	5.00	4.77	95	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 1/26/2011

Chloride, Dissolved
EPA Method 300.0
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	5.00	4.72	94
CCV 2 Result	5.00	4.75	95
CCV 3 Result	5.00	4.72	94
CCV 4 Result	5.00	4.79	96
CCV 5 Result	5.00	4.79	96
CCV 6 Result	5.00	4.75	95
CCV 7 Result	5.00	4.79	96

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.20	ND
CCB 2 Result	0.20	ND
CCB 3 Result	0.20	ND
CCB 4 Result	0.20	ND
CCB 5 Result	0.20	ND
CCB 6 Result	0.20	ND
CCB 7 Result	0.20	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/2011
Sample Matrix:	Water	**Date Received:**	1/26/2011

Fluoride, Dissolved

Prep Method:	NONE	Units:	mg/L (ppm)
Analysis Method:	300.0	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
MW-3	K1100692-001	0.40	0.006	2	1/26/2011	0.16	J
MW-7	K1100692-002	0.40	0.006	2	1/26/2011	0.17	J
EB-012511	K1100692-003	0.40	0.006	2	1/26/2011	ND	J
Method Blank	K1100692-MB	0.20	0.003	1	1/26/2011	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 1/26/2011

Duplicate Summary
Inorganic Parameters

Sample Name: Batch QC
Lab Code: K1100699-001DUP
Test Notes:

Units: mg/L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Fluoride, Dissolved	NONE	300.0	0.40	ND	0.12	NC	NC	

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/2011

Matrix Spike Summary
Inorganic Parameters

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	K1100699-001MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride, Dissolved	NONE	300.0	0.40	4.00	ND	3.99	100	80-120	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/2011

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K1100692-LCS	Basis:	NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Fluoride, Dissolved	NONE	300.0	11.0	10.6	96	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 1/26/2011

Fluoride, Dissolved
EPA Method 300.0
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	5.00	4.97	99
CCV 2 Result	5.00	5.02	100
CCV 3 Result	5.00	4.99	100
CCV 4 Result	5.00	5.01	100
CCV 5 Result	5.00	5.04	101
CCV 6 Result	5.00	5.02	100
CCV 7 Result	5.00	5.03	101

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.20	ND
CCB 2 Result	0.20	ND
CCB 3 Result	0.20	ND
CCB 4 Result	0.20	ND
CCB 5 Result	0.20	ND
CCB 6 Result	0.20	ND
CCB 7 Result	0.20	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/2011
Sample Matrix:	Water	**Date Received:**	1/26/2011

Sulfate, Dissolved

Prep Method:	NONE	Units:	mg/L (ppm)
Analysis Method:	300.0	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
MW-3	K1100692-001	2.0	0.1	10	1/26/2011	26.5	
MW-7	K1100692-002	2.0	0.1	10	1/26/2011	26.7	
EB-012511	K1100692-003	0.40	0.02	2	1/26/2011	ND	
Method Blank	K1100692-MB	0.20	0.01	1	1/26/2011	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Extracted: NA
Date Analyzed: 1/26/2011

Duplicate Summary
Inorganic Parameters

Sample Name: Batch QC
Lab Code: K1100699-001DUP
Test Notes:

Units: mg/L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Sulfate, Dissolved	NONE	300.0	2.0	28.8	28.8	28.8	< 1	

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/2011

Matrix Spike Summary
Inorganic Parameters

Sample Name:	Batch QC	Units:	mg/L (ppm)
Lab Code:	K1100699-001MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate, Dissolved	NONE	300.0	2.0	20.0	28.8	49.7	104	80-120	

QA/QC Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/2011

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K1100692-LCS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Sulfate, Dissolved	NONE	300.0	5.00	4.64	93	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 1/26/2011

Sulfate, Dissolved
EPA Method 300.0
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	5.00	4.75	95
CCV 2 Result	5.00	4.82	96
CCV 3 Result	5.00	4.71	94
CCV 4 Result	5.00	4.78	96
CCV 5 Result	5.00	4.75	95
CCV 6 Result	5.00	4.75	95
CCV 7 Result	5.00	4.81	96

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.20	ND
CCB 2 Result	0.20	ND
CCB 3 Result	0.20	ND
CCB 4 Result	0.20	ND
CCB 5 Result	0.20	ND
CCB 6 Result	0.20	ND
CCB 7 Result	0.20	ND

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/11
Sample Matrix:	Water	**Date Received:**	1/26/11
Analysis Method:	350.1	**Units:**	mg/L
		Basis:	NA

Ammonia as Nitrogen, Dissolved

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MW-3	K1100692-001	ND	U	0.050	0.020	1	NA	2/1/11 09:33	
MW-7	K1100692-002	ND	U	0.050	0.020	1	NA	2/1/11 09:33	
EB-012511	K1100692-003	ND	U	0.050	0.020	1	NA	2/1/11 09:33	
Method Blank	K1100692-MB	ND	U	0.050	0.020	1	NA	2/1/11 09:33	

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 1/25/11
Date Received: 1/26/11
Date Analyzed: 2/ 1/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: MW-3
Lab Code: K1100692-001

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	MW-3DUP Duplicate Sample K1100692-001DUP1 Result	Average	RPD	RPD Limit
Ammonia as Nitrogen, Dissolved	350.1	0.050	0.020	ND U	ND U	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 1/25/11
Date Received: 1/26/11
Date Analyzed: 2/ 1/11

Matrix Spike Summary
General Chemistry Parameters

Sample Name: MW-3
Lab Code: K1100692-001

Units: mg/L
Basis: NA

Analytical Method: 350.1

		MW-3MS Matrix Spike K1100692-001MS1			MW-3DMS Duplicate Matrix Spike K1100692-001DMS1					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Ammonia as Nitrogen, Dissolved	ND	2.00	2.00	100	2.00	2.00	100	90 - 110	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Analyzed: 2/ 1/11

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample K1100692-LCS Result	Spike Amount	% Rec	% Rec Limits
Ammonia as Nitrogen, Dissolved	350.1	2.84	2.81	101	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692

Continuing Calibration Verification (CCV) Summary
Ammonia as Nitrogen, Dissolved

Analytical Method: 350.1

Units: mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	234440	KQ1100886-07	2/1/11 09:33	2.00	1.98	99	90 - 110
CCV2	234440	KQ1100886-08	2/1/11 09:33	2.00	1.97	99	90 - 110
CCV3	234440	KQ1100886-09	2/1/11 09:33	2.00	1.97	98	90 - 110
CCV4	234440	KQ1100886-10	2/1/11 09:33	2.00	1.96	98	90 - 110

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692

Continuing Calibration Blank (CCB) Summary
Ammonia as Nitrogen, Dissolved

Analytical Method: 350.1

Units: mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	Result	Q
CCB1	234440	KQ1100886-03	2/1/11 09:33	0.050	ND	U
CCB2	234440	KQ1100886-04	2/1/11 09:33	0.050	ND	U
CCB3	234440	KQ1100886-05	2/1/11 09:33	0.050	ND	U
CCB4	234440	KQ1100886-06	2/1/11 09:33	0.050	ND	U

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/2011
Sample Matrix:	Water	**Date Received:**	1/26/2011

Nitrite as Nitrogen, Dissolved

Prep Method:	NONE	Units:	mg/L (ppm)
Analysis Method:	353.2	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
MW-3	K1100692-001	0.050	0.005	1	1/26/2011	ND	
MW-7	K1100692-002	0.050	0.005	1	1/26/2011	0.006	J
EB-012511	K1100692-003	0.050	0.005	1	1/26/2011	ND	
Method Blank	K1100692-MB	0.050	0.005	1	1/26/2011	ND	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 1/25/2011
Date Received: 1/26/2011
Date Extracted: NA
Date Analyzed: 1/26/2011

Duplicate Summary
Inorganic Parameters

Sample Name: MW-3
Lab Code: K1100692-001DUP
Test Notes:

Units: mg/L (ppm)
Basis: NA

Analyte	Prep Method	Analysis Method	MRL	Sample Result	Duplicate Sample Result	Average	Relative Percent Difference	Result Notes
Nitrite as Nitrogen, Dissolved	NONE	353.2	0.050	ND	ND	NC	NC	

DUP/020597p

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/2011
Sample Matrix:	Water	**Date Received:**	1/26/2011
		Date Extracted:	NA
		Date Analyzed:	1/26/2011

Matrix Spike Summary
Inorganic Parameters

Sample Name:	MW-3	Units:	mg/L (ppm)
Lab Code:	K1100692-001MS	Basis:	NA
Test Notes:			

Analyte	Prep Method	Analysis Method	MRL	Spike Level	Sample Result	Spiked Sample Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen, Dissolved	NONE	353.2	0.050	2.00	ND	2.00	100	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
LCS Matrix:	Water	**Date Received:**	NA
		Date Extracted:	NA
		Date Analyzed:	1/26/2011

Laboratory Control Sample Summary
Inorganic Parameters

Sample Name:	Lab Control Sample	Units:	mg/L (ppm)
Lab Code:	K1100692-LCS	Basis:	NA

Test Notes:

Analyte	Prep Method	Analysis Method	True Value	Result	Percent Recovery	CAS Percent Recovery Acceptance Limits	Result Notes
Nitrite as Nitrogen, Dissolved	NONE	353.2	4.00	4.02	100	90-110	

COLUMBIA ANALYTICAL SERVICES, INC.

QA/QC Report

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 1/26/2011

Nitrite as Nitrogen, Dissolved
EPA Method 353.2
Units: mg/L (ppm)

CONTINUING CALIBRATION VERIFICATION (CCV)

	True Value	Measured Value	Percent Recovery
CCV 1 Result	2.00	1.98	99
CCV 2 Result	2.00	1.99	99

CONTINUING CALIBRATION BLANK (CCB)

	MRL	Blank Value
CCB 1 Result	0.050	ND
CCB 2 Result	0.050	ND

COLUMBIA ANALYTICAL SERVICES, INC.

Analytical Report

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/2011
Sample Matrix:	Water	**Date Received:**	1/26/2011

Nitrate as Nitrogen

Prep Method:	Calculation	Units:	mg/L
Analysis Method:	353.2/353.2	Basis:	NA
Test Notes:			

Sample Name	Lab Code	MRL	MDL	Dilution Factor	Date Analyzed	Result	Result Notes
MW-3	K1100692-001	1.3	0.3	1	1/31/2011	29.4	
MW-7	K1100692-002	1.3	0.3	1	1/31/2011	29.5	
EB-012511	K1100692-003	0.050	0.009	1	1/31/2011	0.020	J

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 1/25/11
Date Received: 1/26/11

Analysis Method: 353.2

Units: mg/L
Basis: NA

Nitrate+Nitrite as Nitrogen

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MW-3	K1100692-001	**29.4**		1.3	0.3	25	NA	1/31/11 13:22	
MW-7	K1100692-002	**29.5**		1.3	0.3	25	NA	1/31/11 13:22	
EB-012511	K1100692-003	**0.020**	BJ	0.050	0.009	1	NA	1/31/11 13:22	
Method Blank	K1100692-MB	**0.017**	J	0.050	0.009	1	NA	1/31/11 13:22	

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 1/31/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Batch QC
Lab Code: K1100766-001

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	Batch QCDUP Duplicate Sample K1100766-001DUP5 Result	Average	RPD	RPD Limit
Nitrate+Nitrite as Nitrogen	353.2	0.050	0.009	2.78	2.81	2.79	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 1/31/11

Matrix Spike Summary
General Chemistry Parameters

Sample Name: Batch QC
Lab Code: K1100766-001

Units: mg/L
Basis: NA

Analytical Method: 353.2

		Batch QCMS Matrix Spike K1100766-001MS2			Batch QCDMS Duplicate Matrix Spike K1100766-001DMS2					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Nitrate+Nitrite as Nitrogen	2.78	4.65	2.00	93	4.76	2.00	99	86 - 117	2	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Analyzed: 1/31/11

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

Analyte Name	Method	Lab Control Sample K1100692-LCS Result	Spike Amount	% Rec	% Rec Limits
Nitrate+Nitrite as Nitrogen	353.2	15.5	15.2	102	90 - 110

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692

Continuing Calibration Verification (CCV) Summary
Nitrate+Nitrite as Nitrogen

Analytical Method: 353.2

Units: mg/L

	Analysis Lot	Lab Code	Date Analyzed	True Value	Measured Value	Percent Recovery	Acceptance Limits
CCV1	234379	KQ1100875-03	1/31/11 13:22	2.00	1.99	100	90 - 110
CCV2	234379	KQ1100875-04	1/31/11 13:22	2.00	1.99	100	90 - 110
CCV3	234379	KQ1100875-05	1/31/11 13:22	2.00	1.97	98	90 - 110
CCV4	234379	KQ1100875-06	1/31/11 13:22	2.00	2.02	101	90 - 110
CCV5	234379	KQ1100875-07	1/31/11 13:22	2.00	1.97	98	90 - 110

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692

Continuing Calibration Blank (CCB) Summary
Nitrate+Nitrite as Nitrogen

Analytical Method: 353.2

Units: mg/L

	Analysis Lot	Lab Code	Date Analyzed	MRL	Result	Q
CCB1	234379	KQ1100875-08	1/31/11 13:22	0.050	ND	U
CCB2	234379	KQ1100875-09	1/31/11 13:22	0.050	ND	U
CCB3	234379	KQ1100875-10	1/31/11 13:22	0.050	ND	U
CCB4	234379	KQ1100875-11	1/31/11 13:22	0.050	ND	U
CCB5	234379	KQ1100875-12	1/31/11 13:22	0.050	ND	U

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/11
Sample Matrix:	Water	**Date Received:**	1/26/11
		Units:	mg/L
Analysis Method:	SM 2320 B	**Basis:**	NA

Alkalinity as CaCO3, Total

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MW-3	K1100692-001	**172**		2.0	1.0	1	NA	2/1/11 10:30	
MW-7	K1100692-002	**176**		2.0	1.0	1	NA	2/1/11 10:30	
EB-012511	K1100692-003	ND	U	2.0	1.0	1	NA	2/1/11 10:30	
Method Blank	K1100692-MB	ND	U	2.0	1.0	1	NA	2/1/11 10:30	

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 2/ 1/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Batch QC
Lab Code: K1100733-001

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	Batch QCDUP Duplicate Sample K1100733-001DUP3 Result	Average	RPD	RPD Limit
Alkalinity as CaCO3, Total	SM 2320 B	2.0	1.0	39.8	39.6	39.7	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 2/ 1/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Batch QC
Lab Code: K1100752-002

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	Batch QCDUP Duplicate Sample K1100752-002DUP4 Result	Average	RPD	RPD Limit
Alkalinity as CaCO3, Total	SM 2320 B	2.0	1.0	26.0	26.2	26.1	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 2/ 1/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Batch QC
Lab Code: KQ1100904-05

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	Batch QCDUP Duplicate Sample KQ1100904-05DUP7 Result	Average	RPD	RPD Limit
Alkalinity as CaCO3, Total	SM 2320 B	2.0	1.0	26.0	26.2	26.1	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Analyzed: 2/ 1/11

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

		Lab Control Sample K1100692-LCS			
Analyte Name	**Method**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**
Alkalinity as CaCO3, Total	SM 2320 B	78.0	80.0	98	94 - 106

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/11
Sample Matrix:	Water	**Date Received:**	1/26/11
		Units:	mg/L
Analysis Method:	SM 2320 B	**Basis:**	NA

Bicarbonate as CaCO3

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MW-3	K1100692-001	**172**		2.0	1.0	1	NA	2/1/11 10:30	
MW-7	K1100692-002	**176**		2.0	1.0	1	NA	2/1/11 10:30	
EB-012511	K1100692-003	ND	U	2.0	1.0	1	NA	2/1/11 10:30	
Method Blank	K1100692-MB	ND	U	2.0	1.0	1	NA	2/1/11 10:30	

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 2/ 1/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Batch QC
Lab Code: KQ1100904-05

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	Batch QCDUP Duplicate Sample KQ1100904-05DUP7 Result	Average	RPD	RPD Limit
Bicarbonate as CaCO3	SM 2320 B	2.0	1.0	26.0	26.2	26.1	<1	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 1/25/11
Date Received: 1/26/11

Analysis Method: SM 2320 B

Units: mg/L
Basis: NA

Carbonate as CaCO3

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MW-3	K1100692-001	ND	U	2.0	1.0	1	NA	2/1/11 10:30	
MW-7	K1100692-002	ND	U	2.0	1.0	1	NA	2/1/11 10:30	
EB-012511	K1100692-003	ND	U	2.0	1.0	1	NA	2/1/11 10:30	
Method Blank	K1100692-MB	ND	U	2.0	1.0	1	NA	2/1/11 10:30	

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 2/ 1/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Batch QC
Lab Code: KQ1100904-05

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	Batch QCDUP Duplicate Sample KQ1100904-05DUP7 Result	Average	RPD	RPD Limit
Carbonate as CaCO3	SM 2320 B	2.0	1.0	ND U	ND U	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/11
Sample Matrix:	Water	**Date Received:**	1/26/11
		Units:	mg/L
Analysis Method:	SM 2320 B	**Basis:**	NA

Hydroxide as CaCO3

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MW-3	K1100692-001	ND	U	2.0	1.0	1	NA	2/1/11 10:30	
MW-7	K1100692-002	ND	U	2.0	1.0	1	NA	2/1/11 10:30	
EB-012511	K1100692-003	ND	U	2.0	1.0	1	NA	2/1/11 10:30	
Method Blank	K1100692-MB	ND	U	2.0	1.0	1	NA	2/1/11 10:30	

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA
Date Analyzed: 2/ 1/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: Batch QC
Lab Code: KQ1100904-05

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	Batch QCDUP Duplicate Sample KQ1100904-05DUP7 Result	Average	RPD	RPD Limit
Hydroxide as CaCO3	SM 2320 B	2.0	1.0	ND U	ND U	NC	NC	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	1/25/11
Sample Matrix:	Water	**Date Received:**	1/26/11
Analysis Method:	SM 2540 C	**Units:**	mg/L
		Basis:	NA

Solids, Total Dissolved

Sample Name	Lab Code	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Note
MW-3	K1100692-001	**975**		14	14	1	NA	1/27/11 07:30	
MW-7	K1100692-002	**1600**		14	14	1	NA	1/27/11 07:30	
EB-012511	K1100692-003	ND	U	5.0	5.0	1	NA	1/27/11 07:30	
Method Blank	K1100692-MB	ND	U	5.0	5.0	1	NA	1/27/11 07:30	

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 1/25/11
Date Received: 1/26/11
Date Analyzed: 1/27/11

Replicate Sample Summary
General Chemistry Parameters

Sample Name: MW-7
Lab Code: K1100692-002

Units: mg/L
Basis: NA

Analyte Name	Method	MRL	MDL	Sample Result	MW-7DUP Duplicate Sample K1100692-002DUP2 Result	Average	RPD	RPD Limit
Solids, Total Dissolved	SM 2540 C	14	14	1600	1600	1600	<1	10

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Analyzed: 1/27/11

Lab Control Sample Summary
General Chemistry Parameters

Units: mg/L
Basis: NA

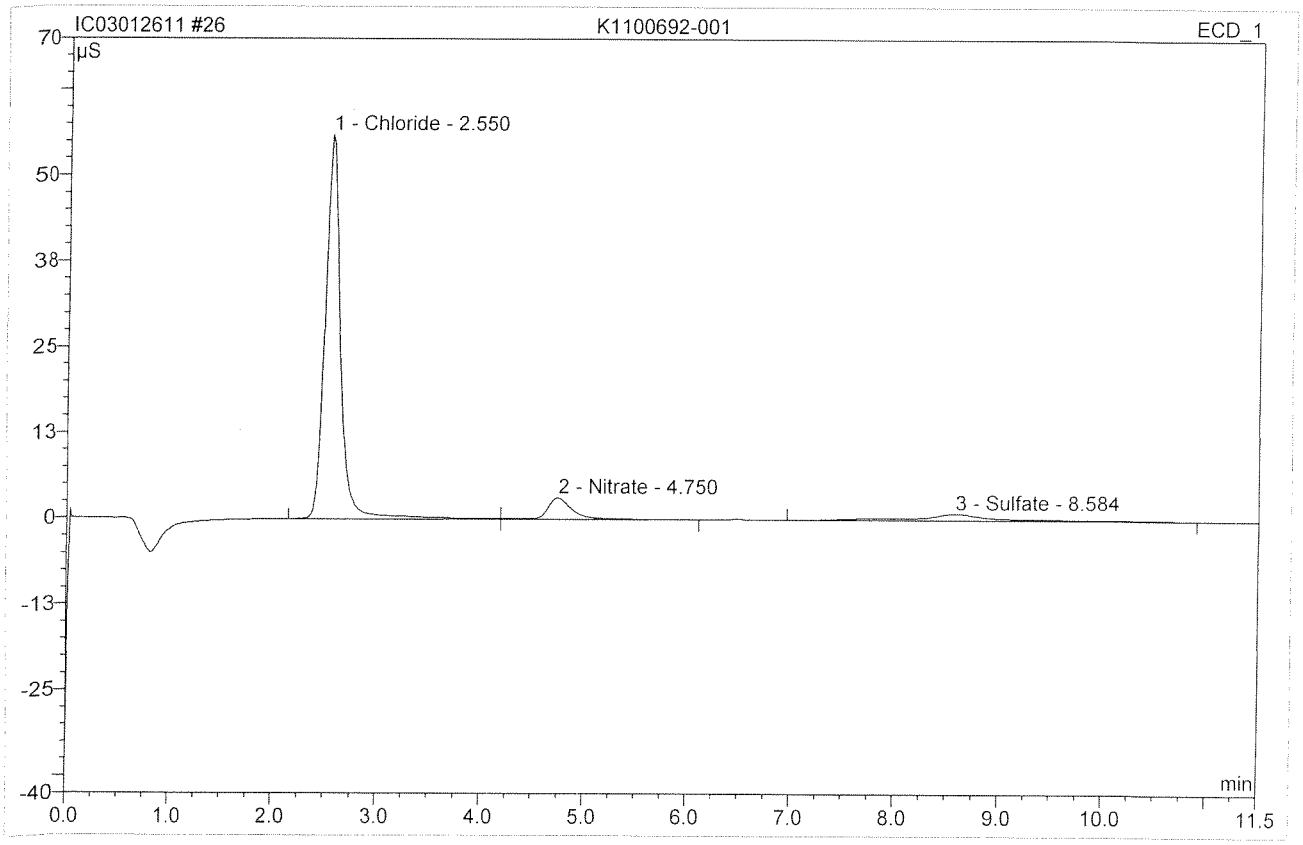
Analyte Name	Method	Lab Control Sample K1100692-LCS Result	Spike Amount	% Rec	% Rec Limits
Solids, Total Dissolved	SM 2540 C	1070	1090	99	83 - 117

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

26 K1100692-001

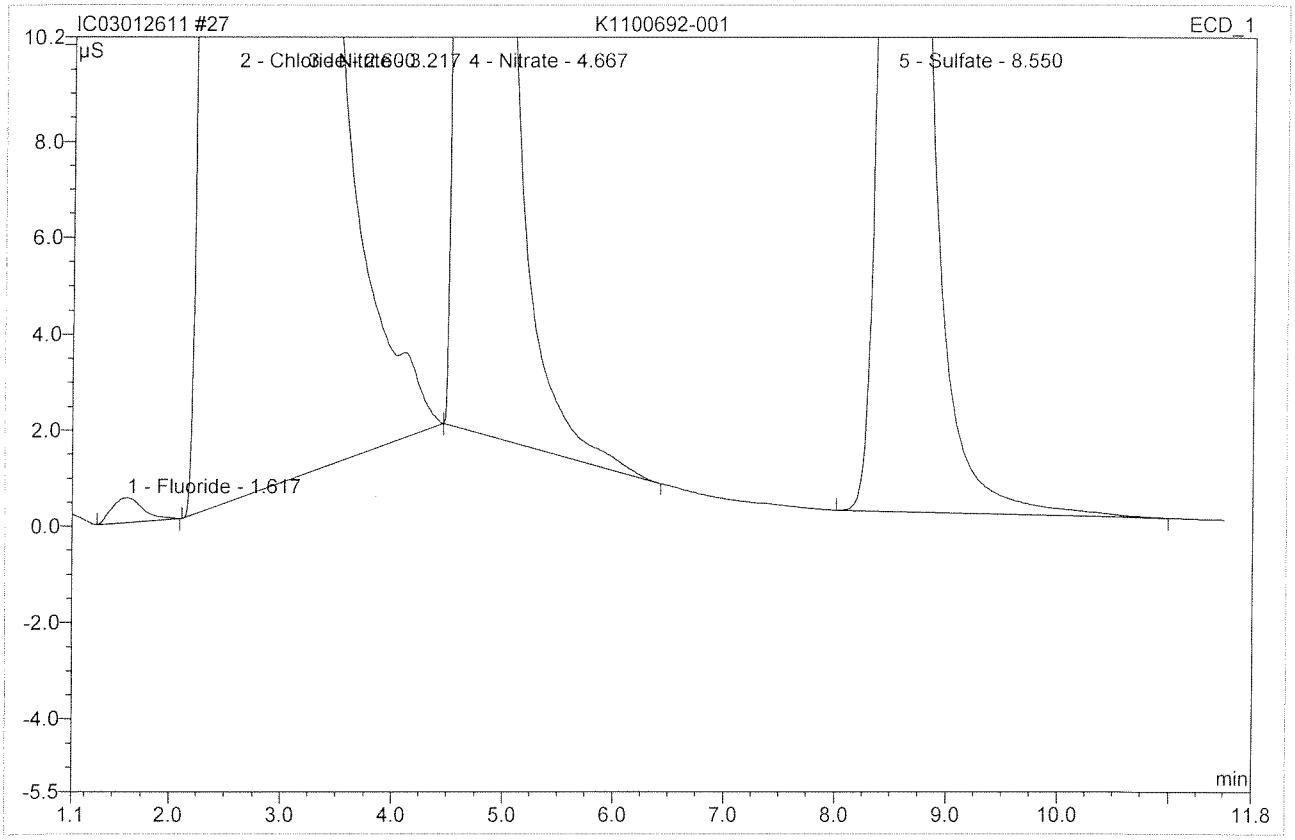
Sample Name:	**K1100692-001**	*Injection Volume:*	**200.0**
Vial Number:	**28**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**100.0000**
Recording Time:	**1/26/2011 13:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	56.129	9.653	84.27	656.006	BM
2	4.75	Nitrate	3.147	0.923	8.06	25.654	MB
3	8.58	Sulfate	0.973	0.879	7.67	92.654	BMB
Total:			60.249	11.455	100.00	774.314	

27 K1100692-001

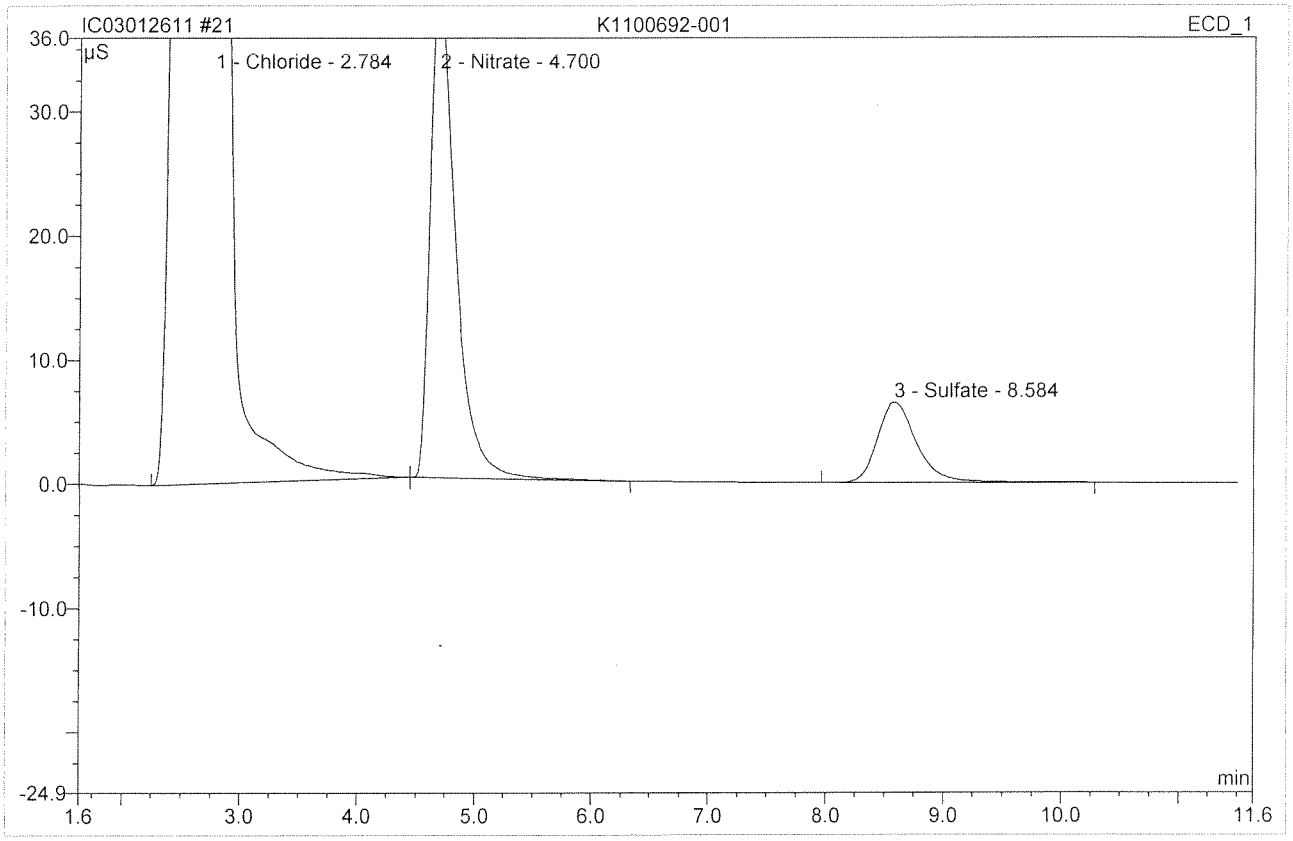
Sample Name:	**K1100692-001**	*Injection Volume:*	**200.0**
Vial Number:	**29**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 13:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	0.516	0.166	0.03	0.164	BMB
2	2.60	Chloride	142.997	39.147	6.20	53.209	Ru
3	3.22	Nitrite	752.997	517.221	81.92	360.413	BMB
4	4.67	Nitrate	236.464	59.979	9.50	33.324	bMB
5	8.55	Sulfate	39.080	14.883	2.36	31.377	BMB
Total:			1172.055	631.395	100.00	478.487	

21 K1100692-001

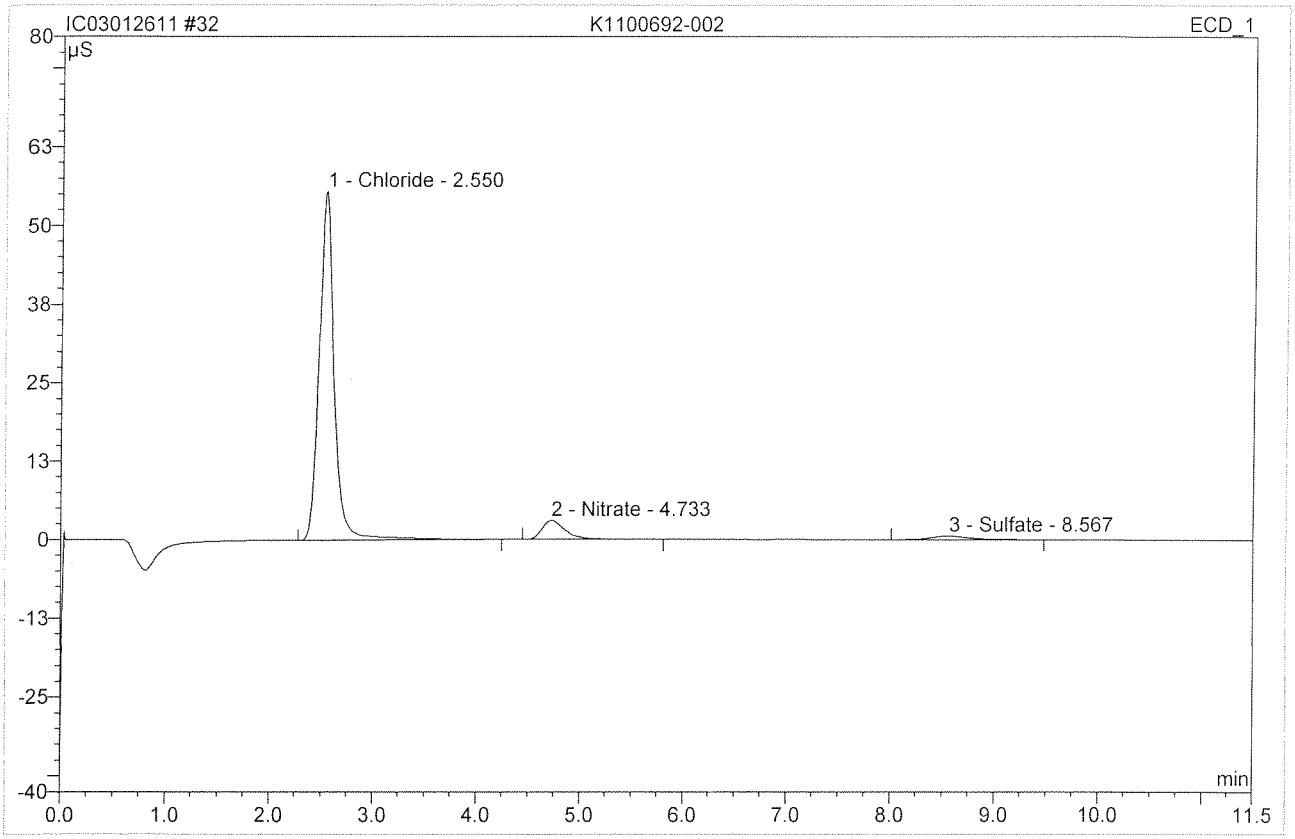
Sample Name:	**K1100692-001**	*Injection Volume:*	**200.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**1/26/2011 12:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.78	Chloride	363.010	110.506	89.90	751.000	BMb
2	4.70	Nitrate	39.593	9.905	8.06	27.516	bMB
3	8.58	Sulfate	6.503	2.513	2.04	26.493	BMB
Total:			409.105	122.924	100.00	805.008	

32 K1100692-002

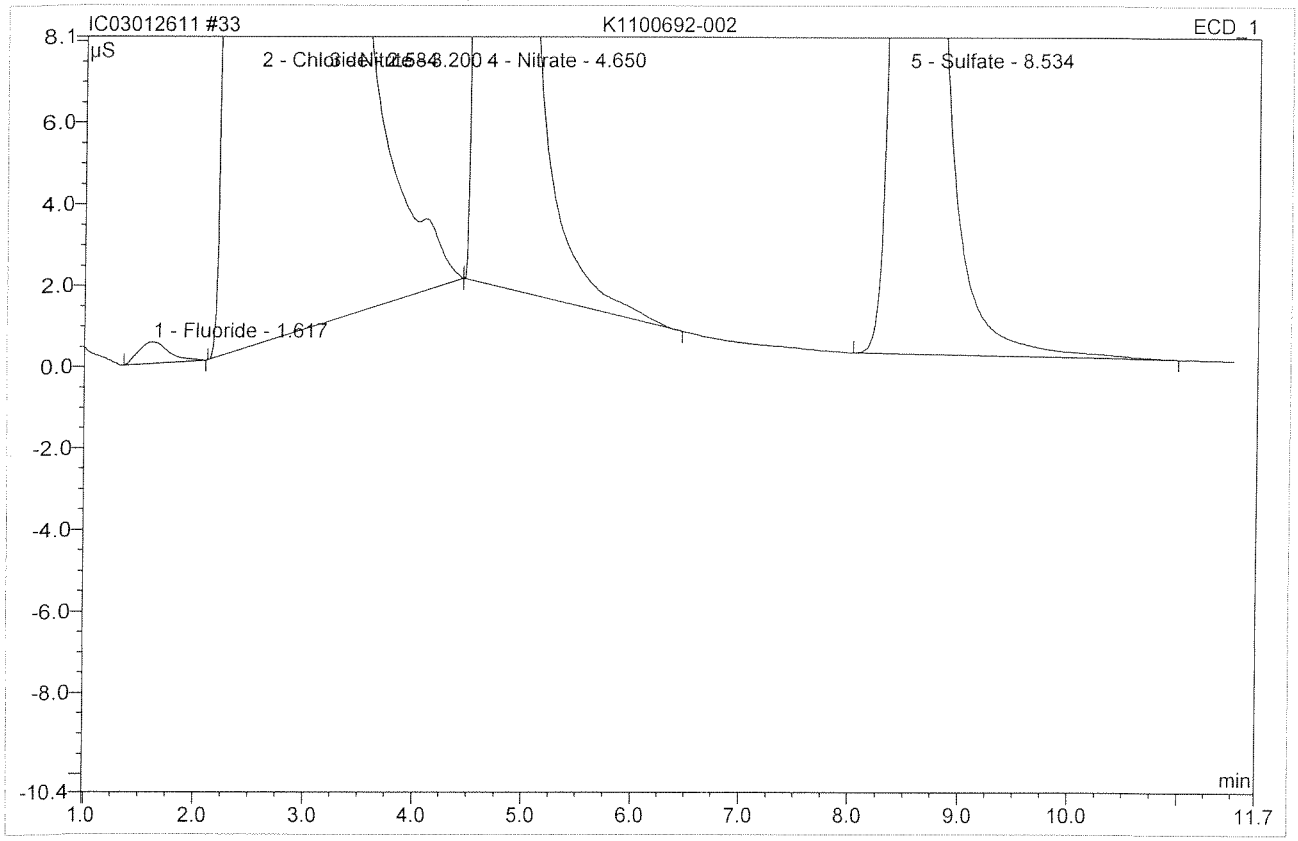
Sample Name:	**K1100692-002**	*Injection Volume:*	**200.0**
Vial Number:	**34**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**100.0000**
Recording Time:	**1/26/2011 14:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.55	Chloride	55.532	9.428	90.22	640.746	BMB
2	4.73	Nitrate	3.023	0.780	7.47	21.672	BMB
3	8.57	Sulfate	0.587	0.242	2.31	25.463	BMB
Total:			59.142	10.450	100.00	687.881	

33 K1100692-002

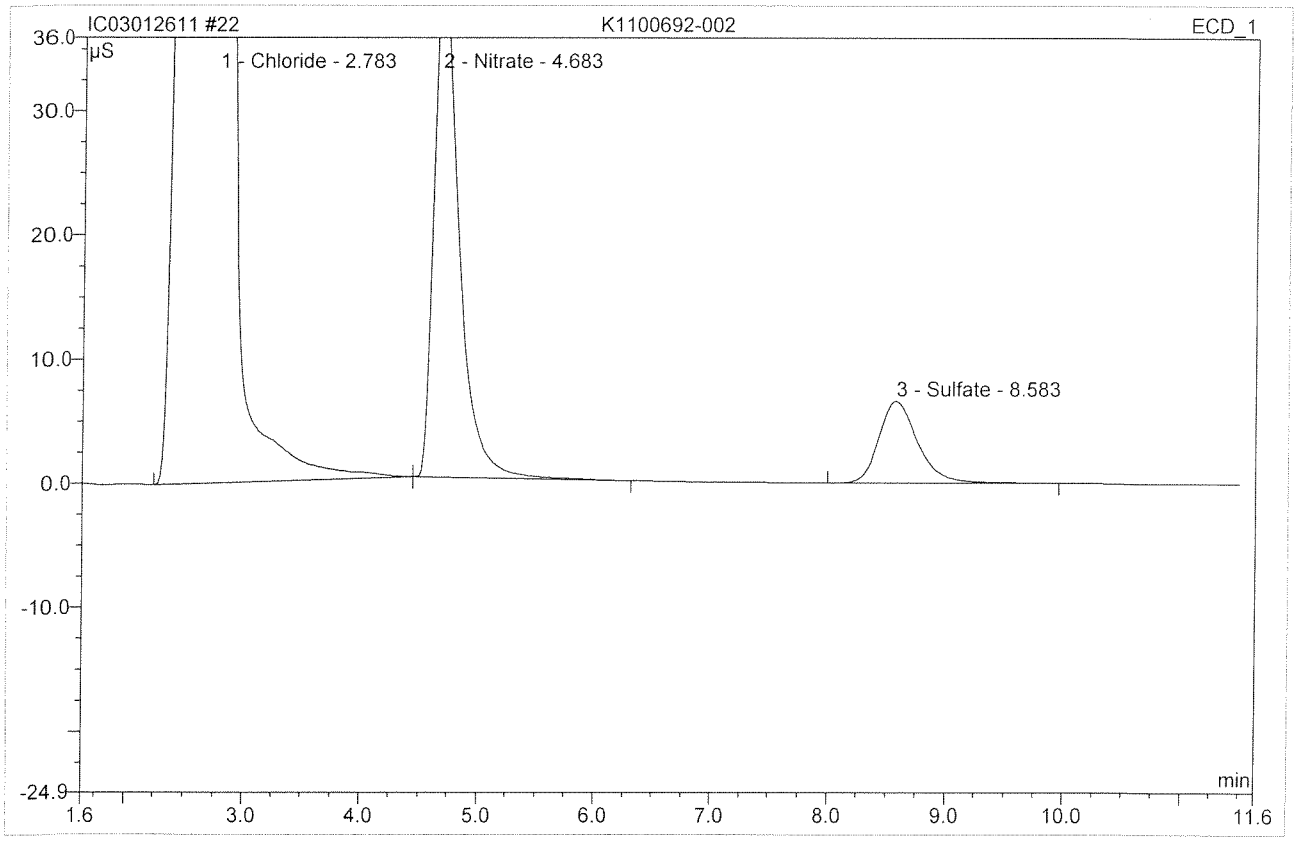
Sample Name:	**K1100692-002**	*Injection Volume:*	**200.0**
Vial Number:	**35**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 14:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	0.530	0.170	0.03	0.168	BMB
2	2.58	Chloride	144.910	36.461	5.81	49.558	Ru
3	3.20	Nitrite	754.928	515.844	82.26	359.453	BMB
4	4.65	Nitrate	235.939	59.788	9.53	33.218	bMB
5	8.53	Sulfate	38.826	14.832	2.37	31.269	BMB
Total:			1175.134	627.095	100.00	473.667	

22 K1100692-002

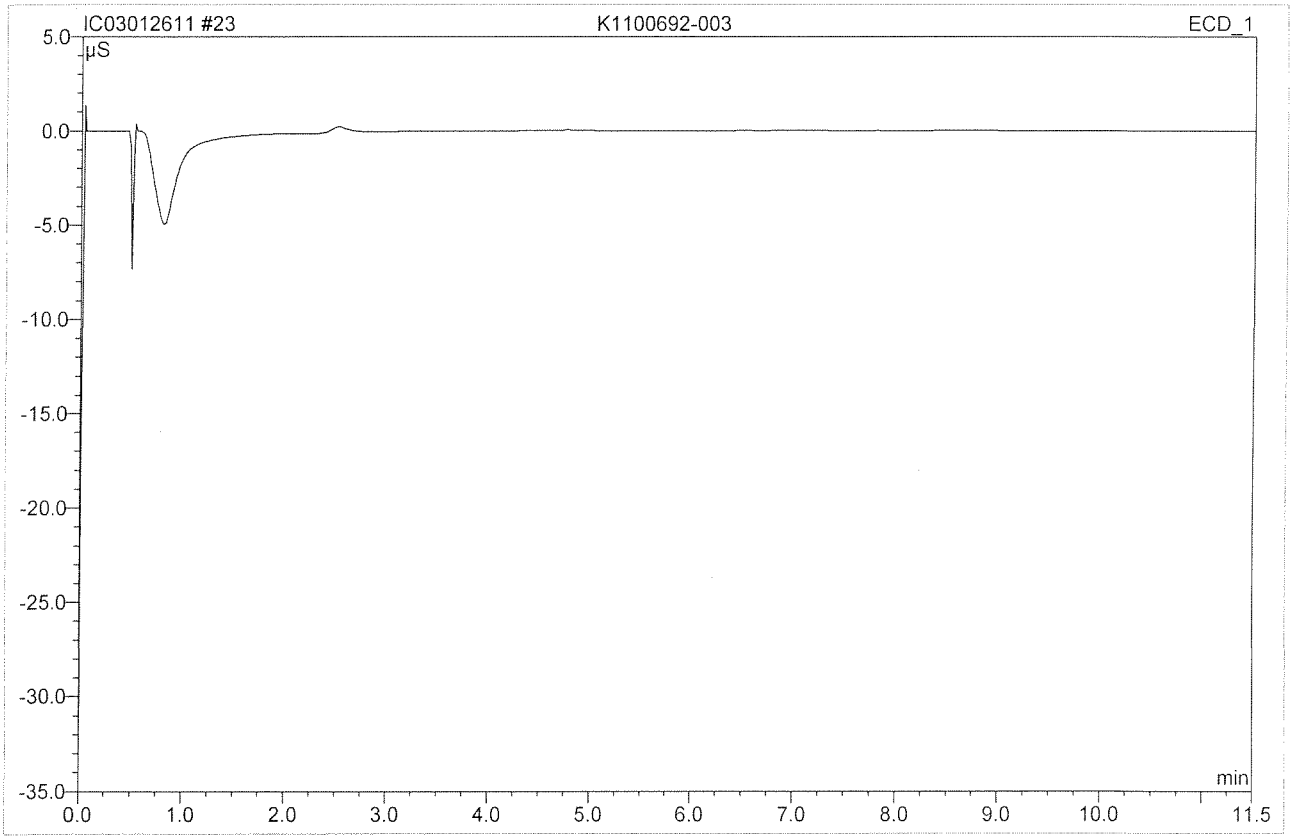
Sample Name:	**K1100692-002**	*Injection Volume:*	**200.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**1/26/2011 12:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.78	Chloride	369.231	112.727	89.97	766.088	BMb
2	4.68	Nitrate	40.383	10.040	8.01	27.890	bMB
3	8.58	Sulfate	6.596	2.528	2.02	26.650	BMB
Total:			416.210	125.294	100.00	820.629	

23 K1100692-003

Sample Name:	**K1100692-003**	*Injection Volume:*	**200.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 12:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

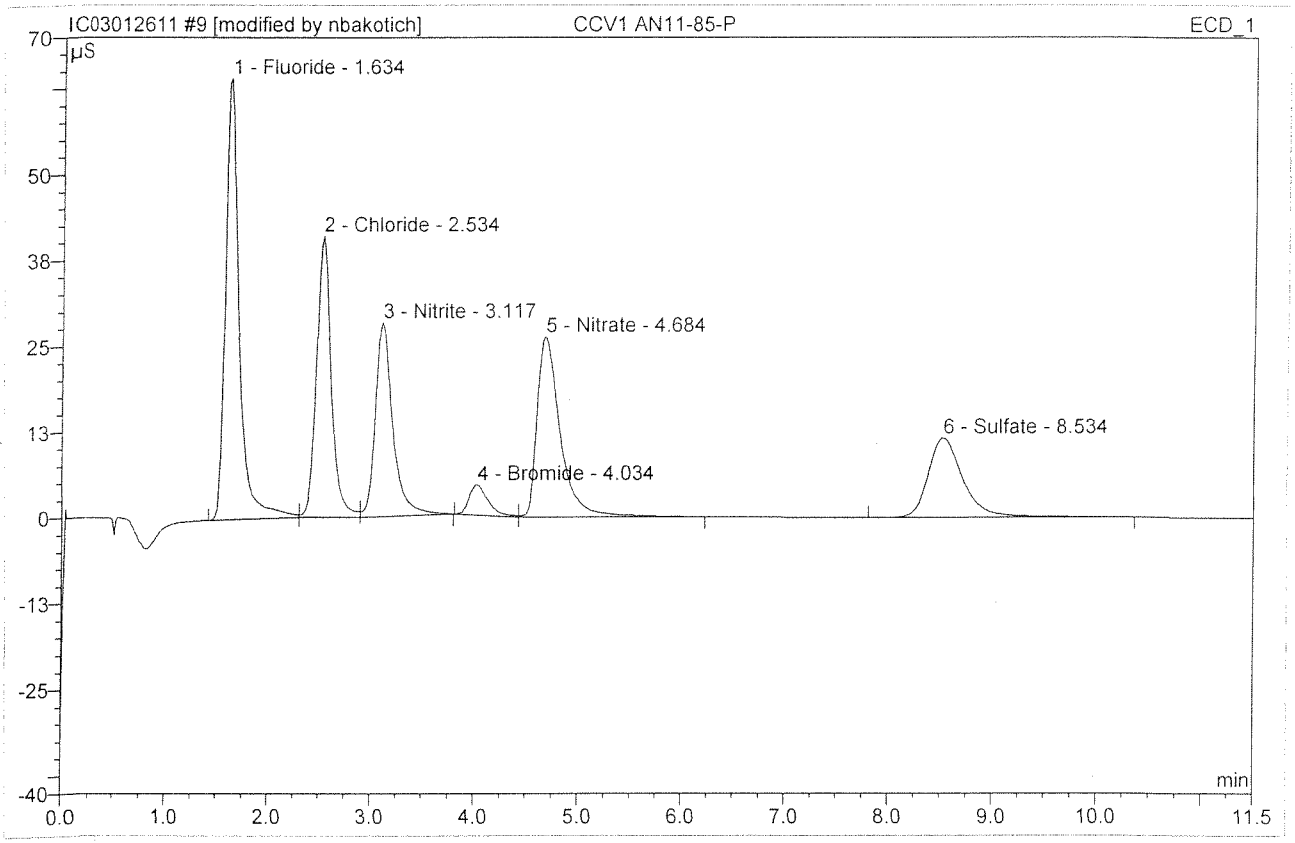


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

F <0.20
Cl
SO4

9 CCV1 AN11-85-P

Sample Name:	**CCV1 AN11-85-P**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 9:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	64.213	10.021	28.80	99 4.970	BM *
2	2.53	Chloride	40.938	6.946	19.97	94 4.721	M *
3	3.12	Nitrite	28.241	5.618	16.15	98 1.957	MB*
4	4.03	Bromide	4.430	0.949	2.73	95 1.897	BM *
5	4.68	Nitrate	26.294	6.746	19.39	94 1.874	MB*
6	8.53	Sulfate	11.576	4.510	12.96	95 4.754	BMB
Total:			175.692	34.790	100.00	20.174	

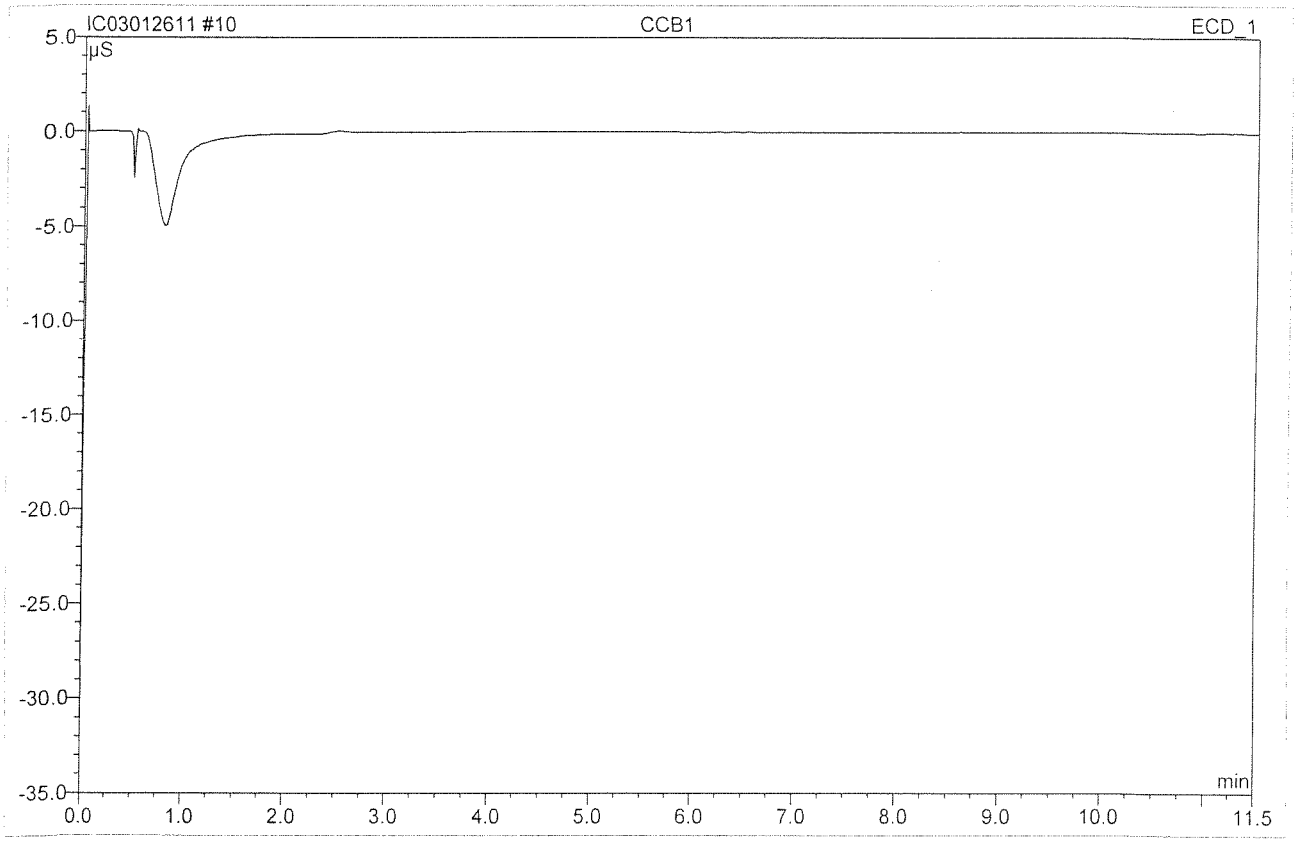
After Initials nb

JAN 2 7 2011

Wrong Peak/Peak not Found
Baseline/shoulder Incorrect

10 CCB1

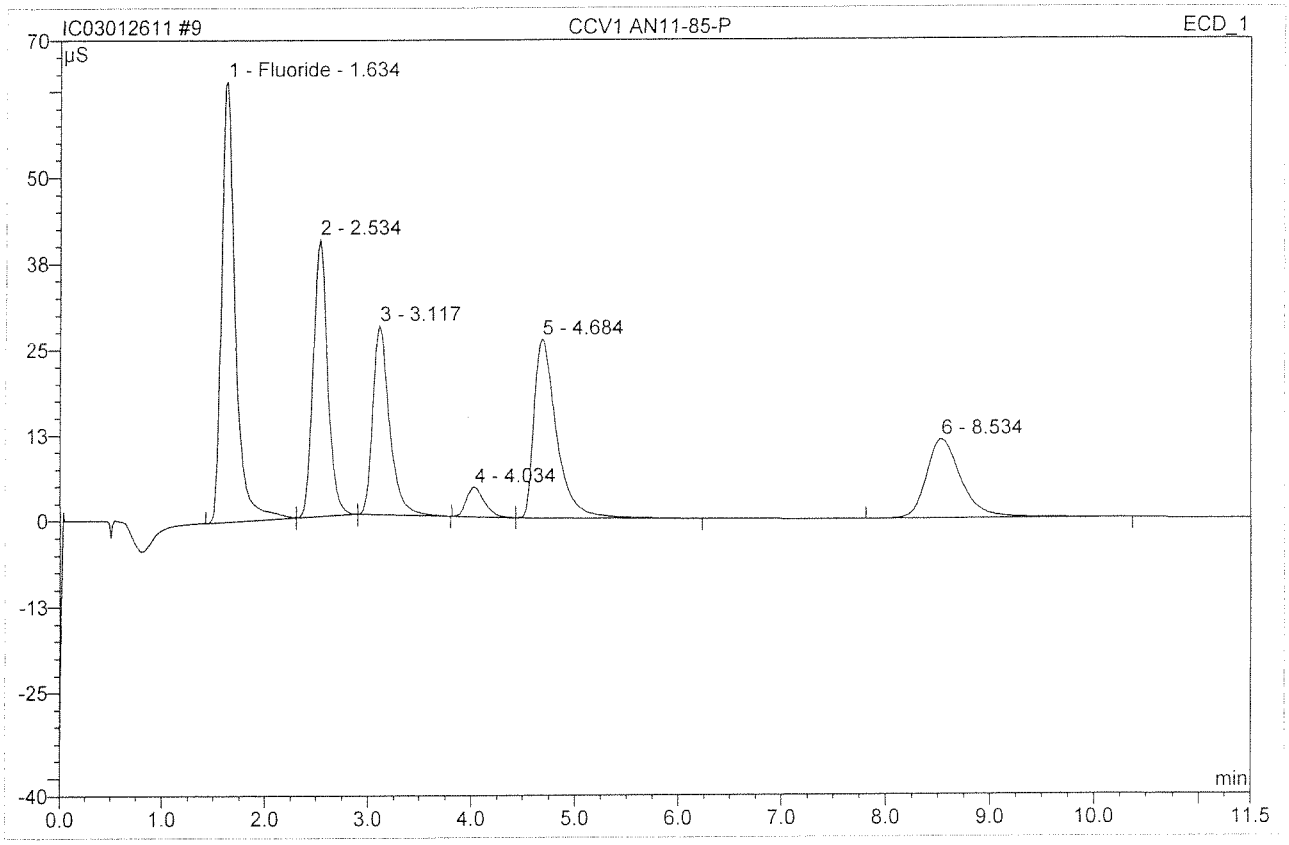
Sample Name:	**CCB1**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 9:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

9 CCV1 AN11-85-P

Sample Name:	**CCV1 AN11-85-P**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 9:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	64.137	9.884	29.34	4.902	BM
2	2.53	n.a.	40.431	6.608	19.61	n.a.	Mb
3	3.12	n.a.	27.620	5.250	15.58	n.a.	bMB
4	4.03	n.a.	4.356	0.884	2.62	n.a.	BMb
5	4.68	n.a.	26.112	6.556	19.46	n.a.	bMB
6	8.53	n.a.	11.576	4.510	13.39	n.a.	BMB
Total:			174.232	33.693	100.00	4.902	

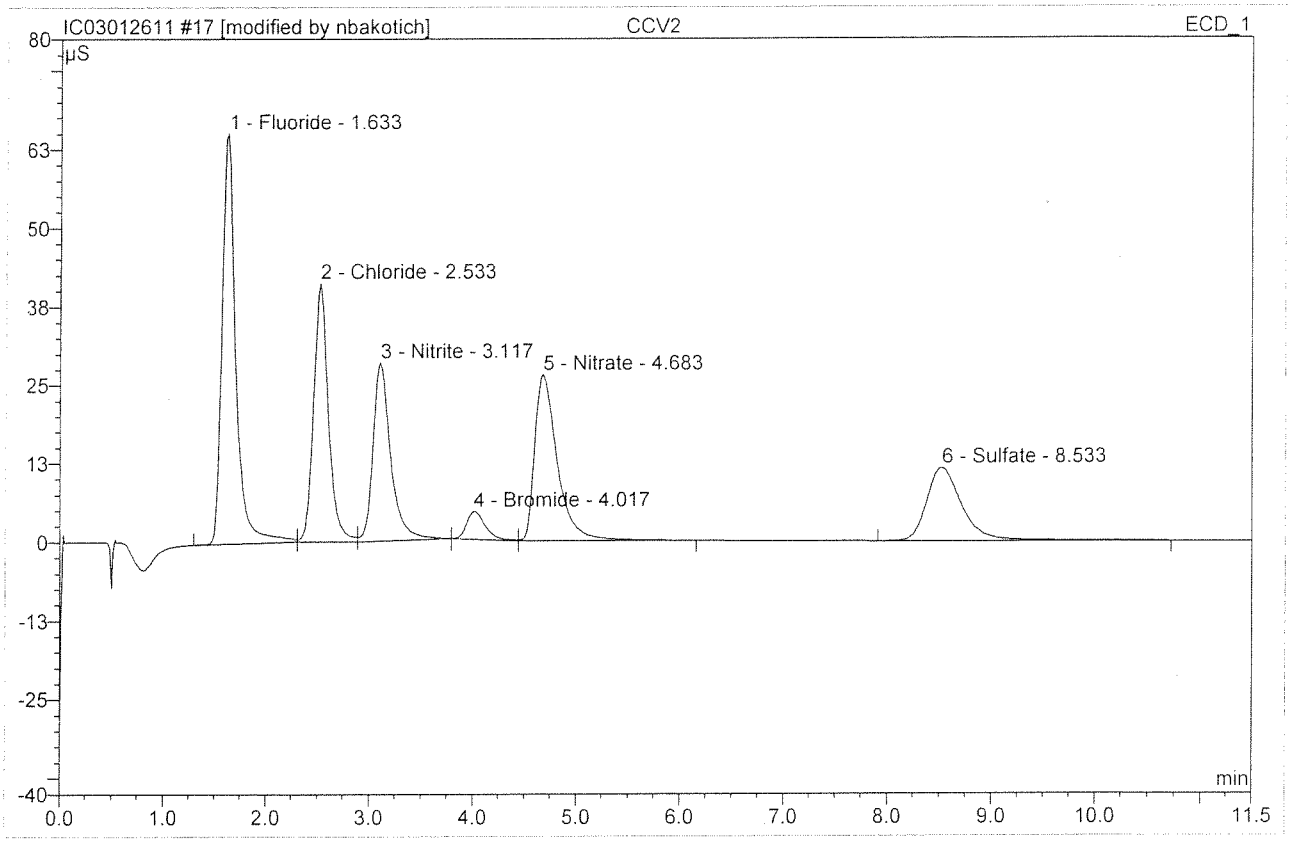
Before

JAN 2 7 2011

17 CCV2

CCV2

Sample Name:	**CCV2**	*Injection Volume:*	**200.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 11:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	65.289	10.114	28.89	100 5.017	BM *
2	2.53	Chloride	41.124	6.983	19.94	95 4.745	M *
3	3.12	Nitrite	28.446	5.614	16.03	98 1.956	Mb*
4	4.02	Bromide	4.484	0.965	2.76	97 1.930	bM *
5	4.68	Nitrate	26.502	6.768	19.33	94 1.880	MB*
6	8.53	Sulfate	11.696	4.569	13.05	96 4.817	BMB
Total:			177.541	35.013	100.00	20.344	

After
Initials nb

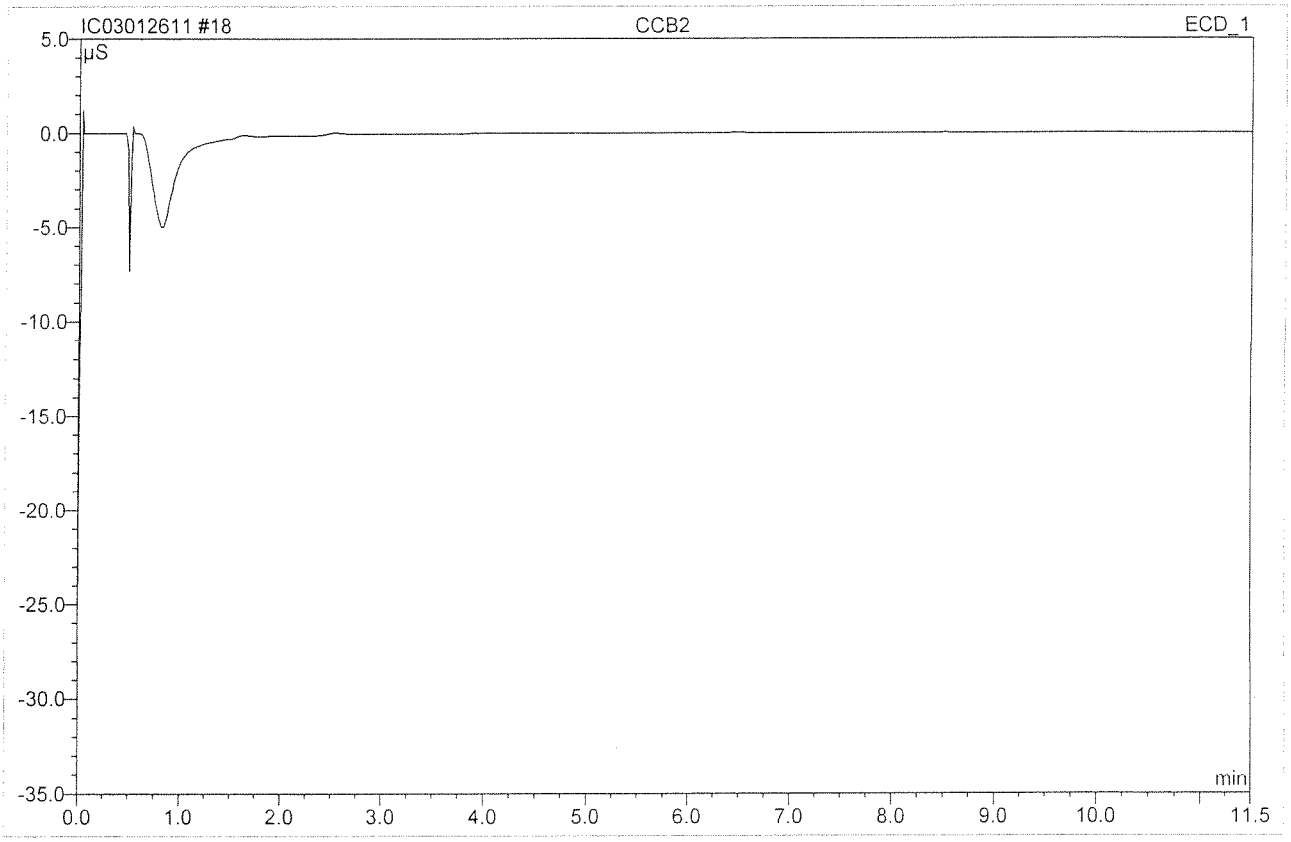
JAN 2 7 2011

☐ Wrong Peak/Peak not Found
☒ Baseline/shoulder Incorrect
☐ Other

18 CCB2

CCB2

Sample Name:	**CCB2**	*Injection Volume:*	**200.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 11:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

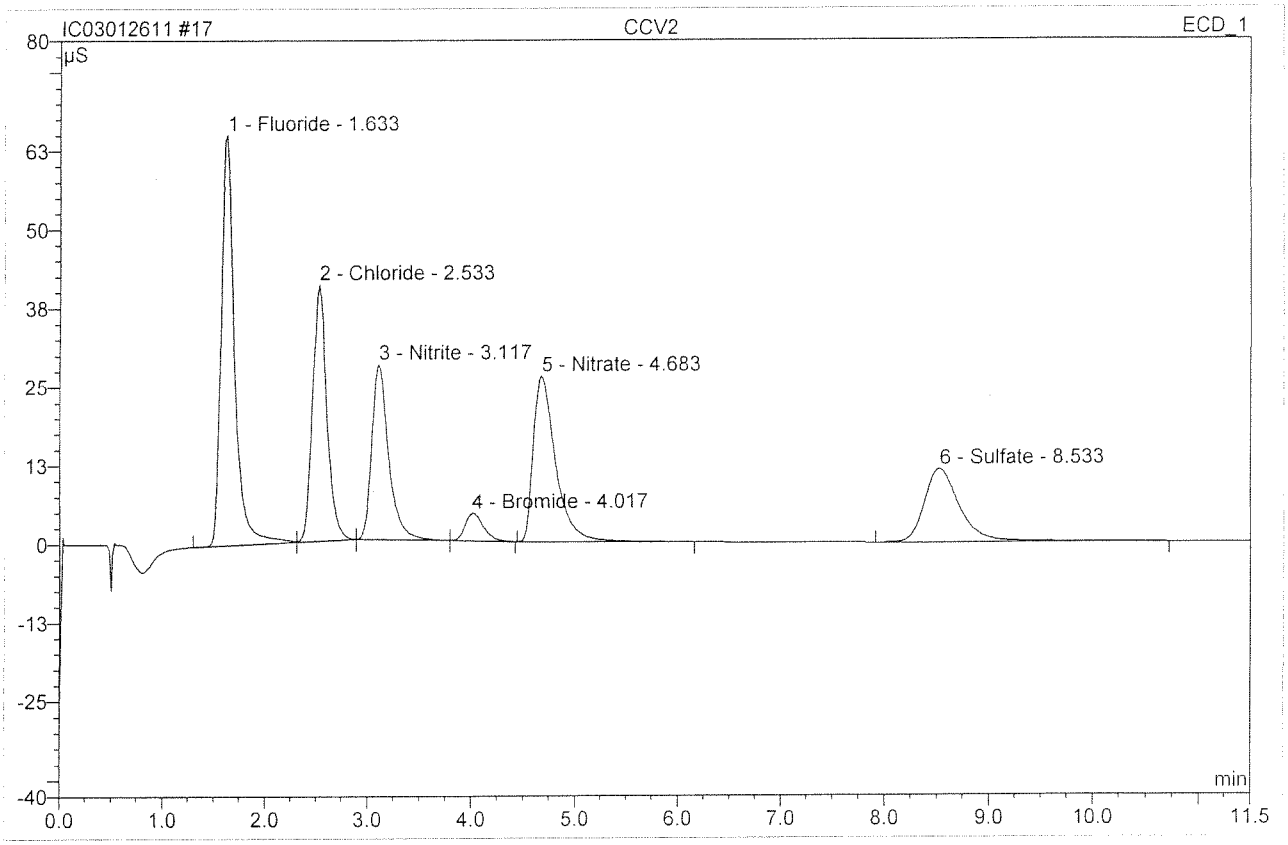


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

17 CCV2

CCV2

Sample Name:	**CCV2**	*Injection Volume:*	**200.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 11:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	65.202	9.980	29.30	4.950	BM
2	2.53	Chloride	40.695	6.699	19.67	4.553	Mb
3	3.12	Nitrite	27.910	5.296	15.55	1.845	bMb
4	4.02	Bromide	4.424	0.907	2.66	1.813	bMB
5	4.68	Nitrate	26.344	6.611	19.41	1.836	BMB
6	8.53	Sulfate	11.696	4.569	13.41	4.817	BMB
Total:			176.272	34.062	100.00	19.814	

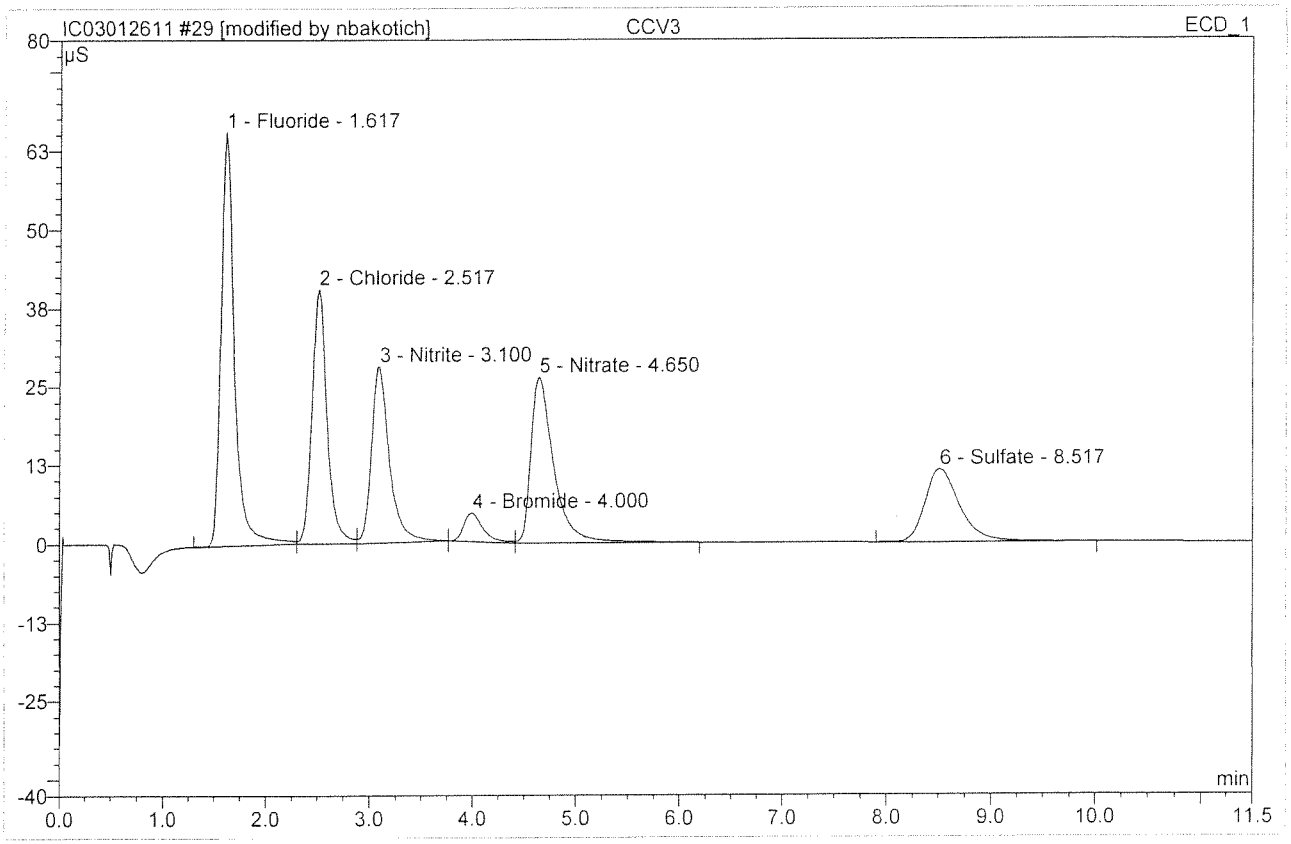
Before

JAN 2 7 2011

29 CCV3

CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 13:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	65.677	10.062	28.88	100 4.990	BM *
2	2.52	Chloride	40.444	6.951	19.95	94 4.724	M *
3	3.10	Nitrite	27.995	5.615	16.12	98 1.956	Mb*
4	4.00	Bromide	4.491	0.984	2.83	97 1.968	bM *
5	4.65	Nitrate	26.295	6.764	19.42	94 1.879	MB*
6	8.52	Sulfate	11.555	4.465	12.82	94 4.706	BMB
Total:			176.458	34.840	100.00	20.224	

After
Initials AB

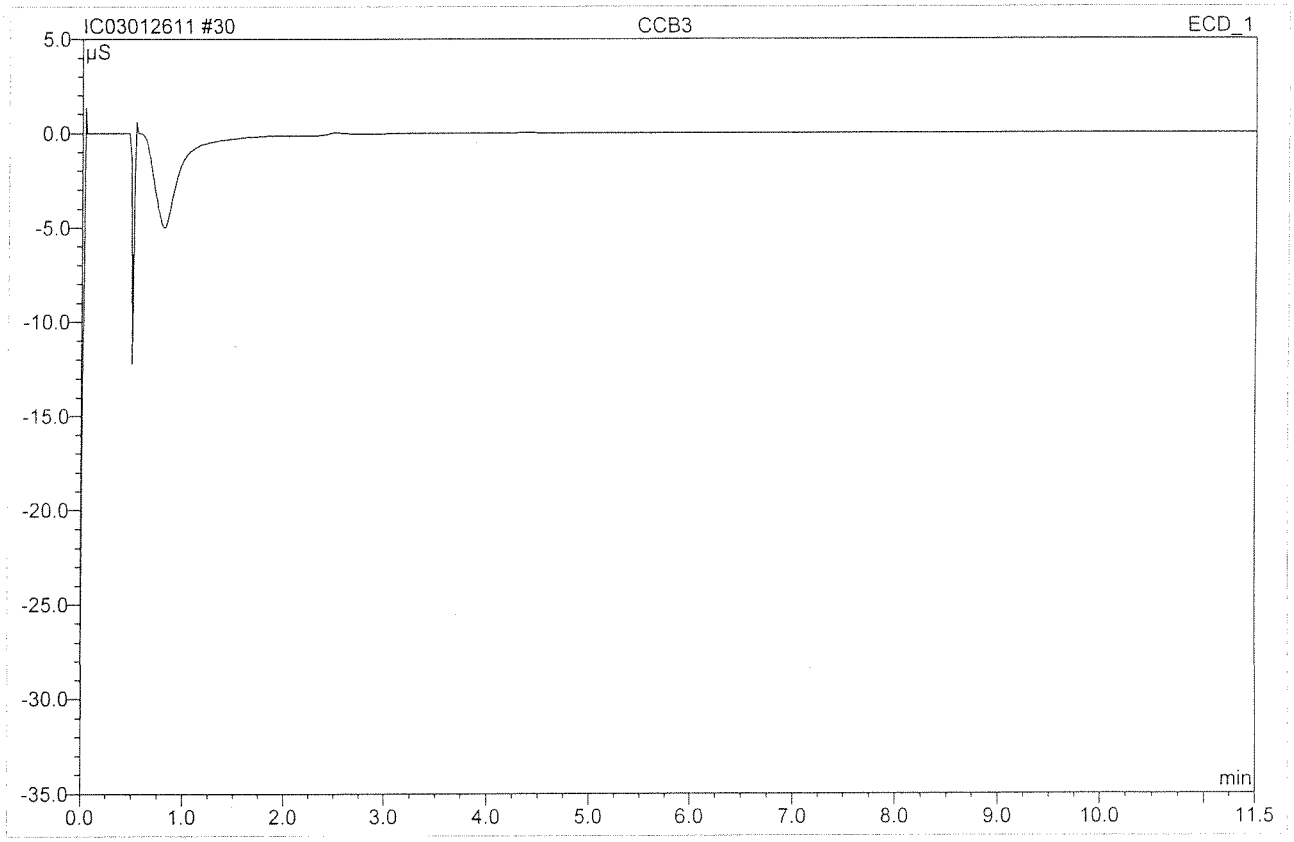
JAN 2 7 2011

☐ Wrong Peak/Peak not Found
☒ Baseline/shoulder Incorrect
☐ Other

30 CCB3

CCB3

Sample Name:	**CCB3**	*Injection Volume:*	**200.0**
Vial Number:	**32**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 14:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

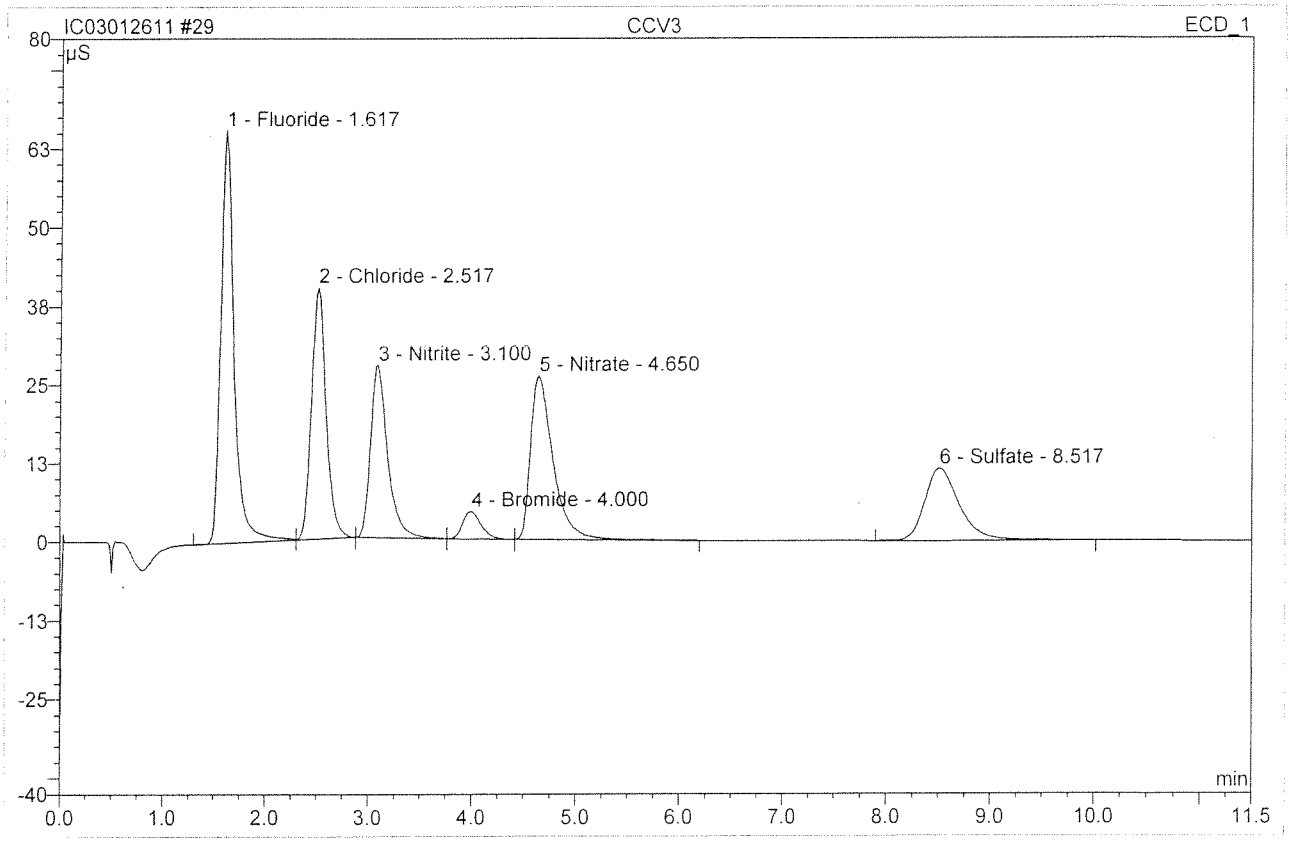


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

29 CCV3

CCV3

Sample Name:	**CCV3**	*Injection Volume:*	**200.0**
Vial Number:	**31**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 13:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	65.595	9.931	29.33	4.926	BM
2	2.52	Chloride	40.024	6.673	19.71	4.535	Mb
3	3.10	Nitrite	27.474	5.310	15.68	1.850	bMb
4	4.00	Bromide	4.414	0.914	2.70	1.827	bMb
5	4.65	Nitrate	26.106	6.571	19.40	1.825	bMB
6	8.52	Sulfate	11.555	4.465	13.18	4.706	BMB
Total:			175.168	33.864	100.00	19.669	

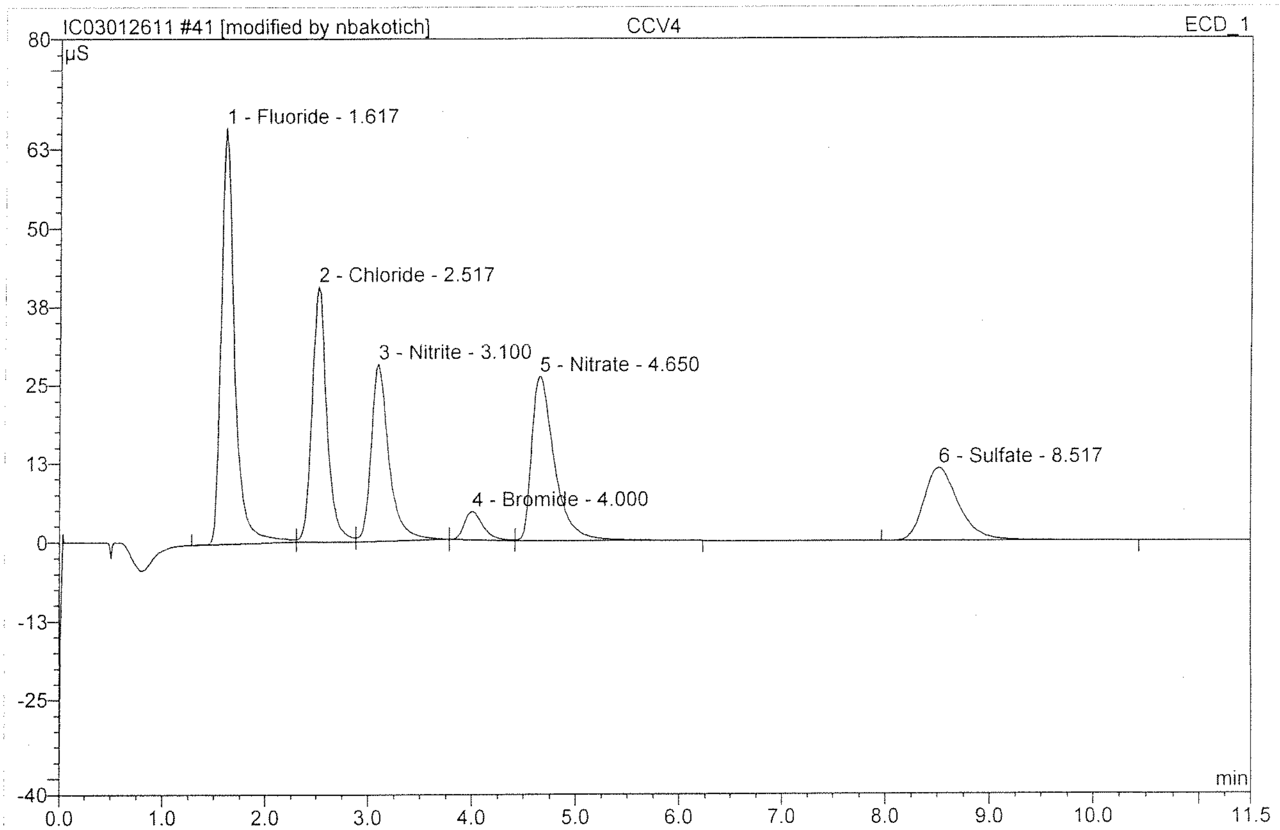
Before

JAN 2 7 2011

41 CCV4

CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 16:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	66.167	10.094	28.80	100 5.006	BM *
2	2.52	Chloride	40.733	7.042	20.09	96 4.786	M *
3	3.10	Nitrite	28.232	5.644	16.10	99 1.966	Mb*
4	4.00	Bromide	4.513	0.977	2.79	98 1.953	bM *
5	4.65	Nitrate	26.252	6.757	19.28	94 1.877	MB*
6	8.52	Sulfate	11.650	4.539	12.95	96 4.784	BMB
Total:			177.547	35.053	100.00	20.373	

After
Initials nb
After
Initials

JAN 27 2011
JAN 27 2011

☐ Wrong Peak/Peak not Found
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

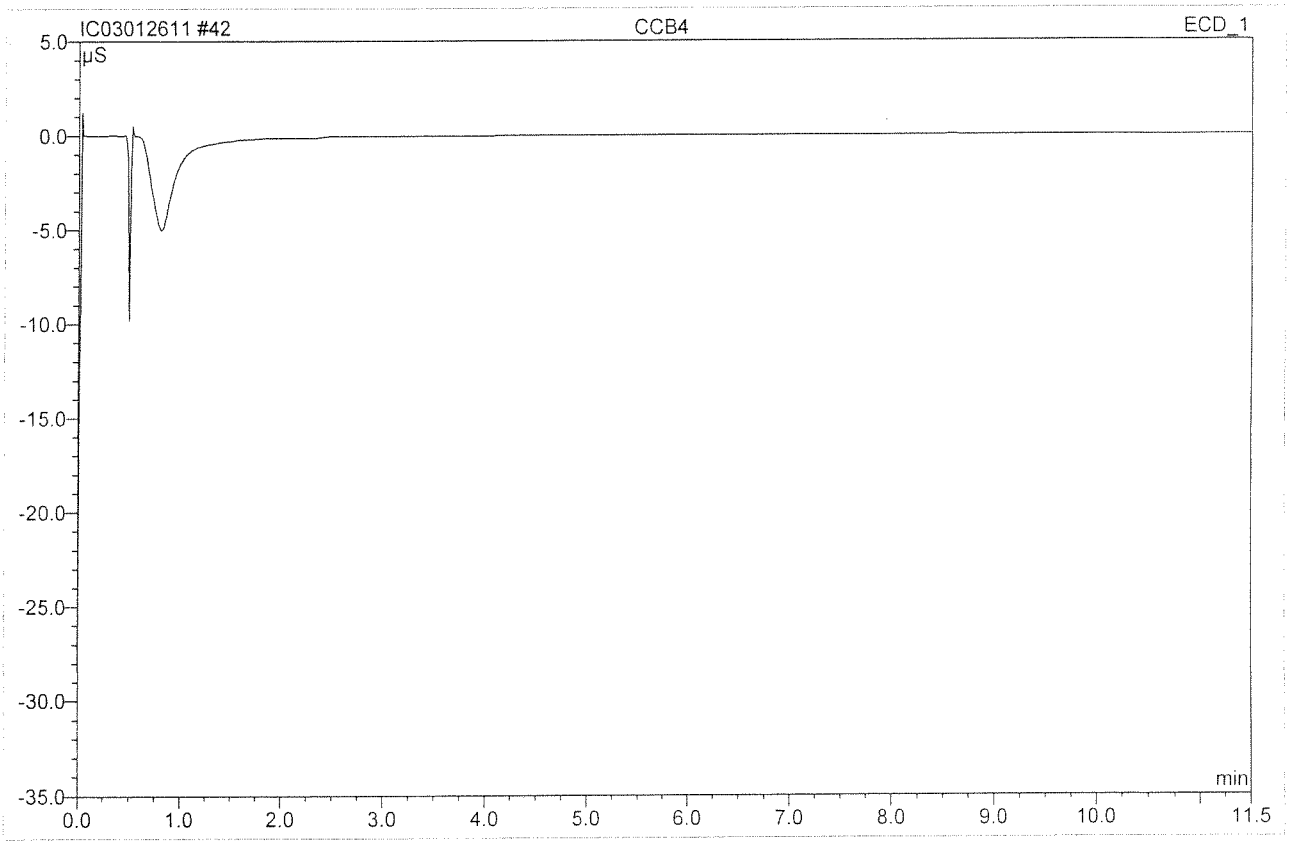
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

42 CCB4

CCB4

Sample Name:	**CCB4**	*Injection Volume:*	**200.0**
Vial Number:	**44**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 16:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

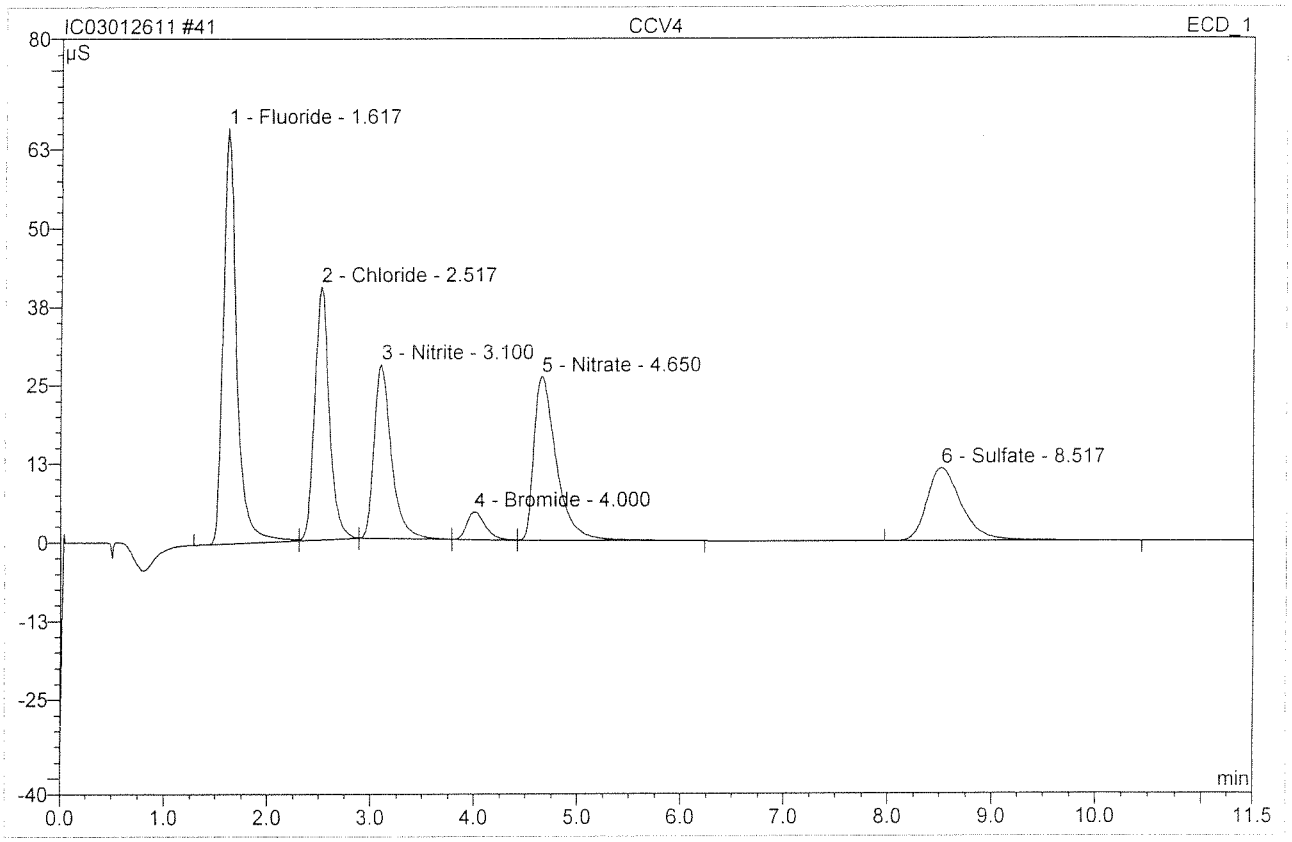


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

41 CCV4

CCV4

Sample Name:	**CCV4**	*Injection Volume:*	**200.0**
Vial Number:	**43**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 16:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	66.077	9.955	29.22	4.938	BM
2	2.52	Chloride	40.304	6.760	19.84	4.594	Mb
3	3.10	Nitrite	27.706	5.333	15.65	1.858	bMb
4	4.00	Bromide	4.444	0.913	2.68	1.826	bMb
5	4.65	Nitrate	26.076	6.574	19.29	1.826	bMB
6	8.52	Sulfate	11.650	4.539	13.32	4.784	BMB
Total:			176.258	34.074	100.00	19.826	

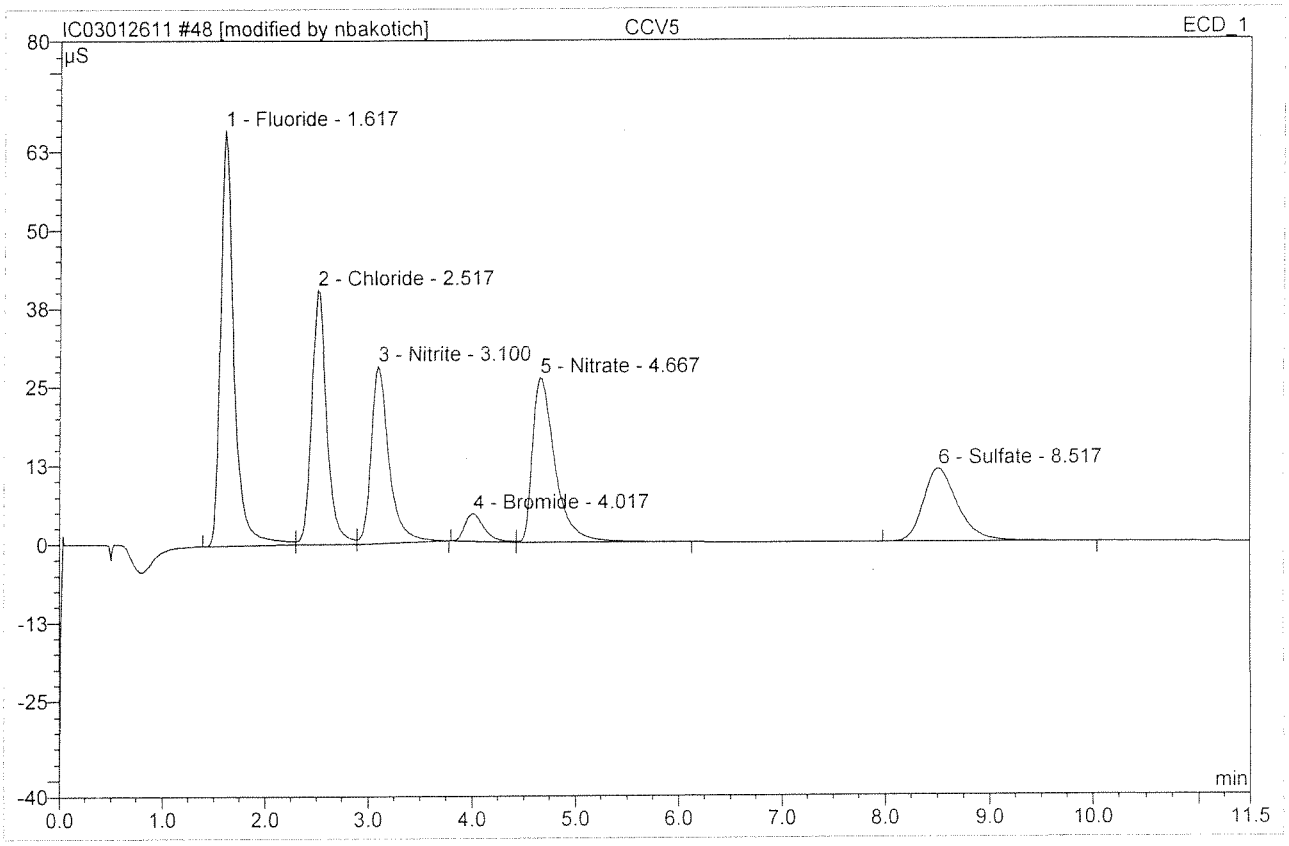
Before

JAN 2 7 2011

48 CCV5

CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 18:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	66.148	10.156	29.00	101 5.037	BM *
2	2.52	Chloride	40.401	7.046	20.12	96 4.788	M *
3	3.10	Nitrite	28.168	5.666	16.18	79 1.974	MB*
4	4.02	Bromide	4.487	0.981	2.80	98 1.961	BM *
5	4.67	Nitrate	26.216	6.675	19.06	93 1.854	MB*
6	8.52	Sulfate	11.623	4.502	12.85	95 4.745	BMB
Total:			177.043	35.025	100.00	20.360	

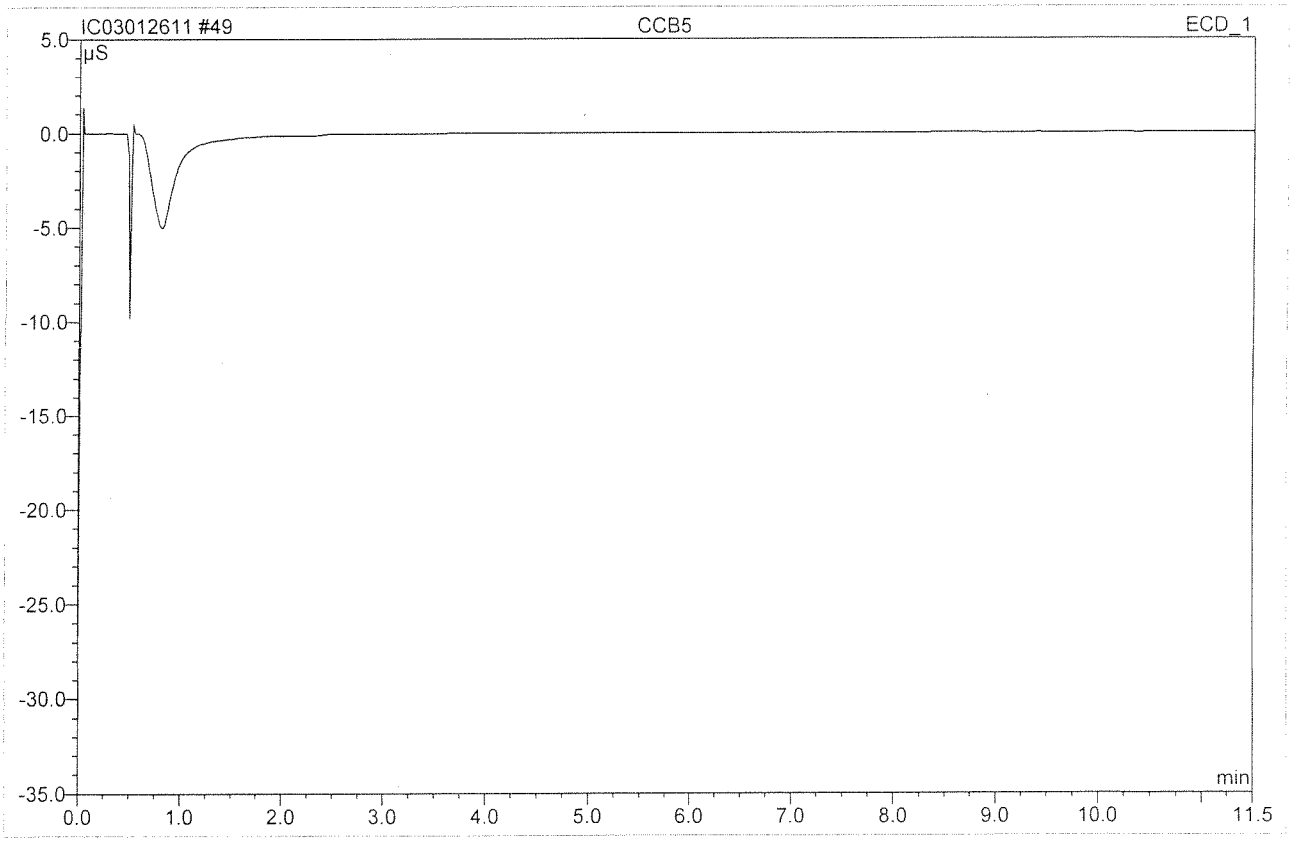
Allen Williams

JAN 27 2011

49 CCB5

CCB5

Sample Name:	**CCB5**	*Injection Volume:*	**200.0**
Vial Number:	**51**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 18:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

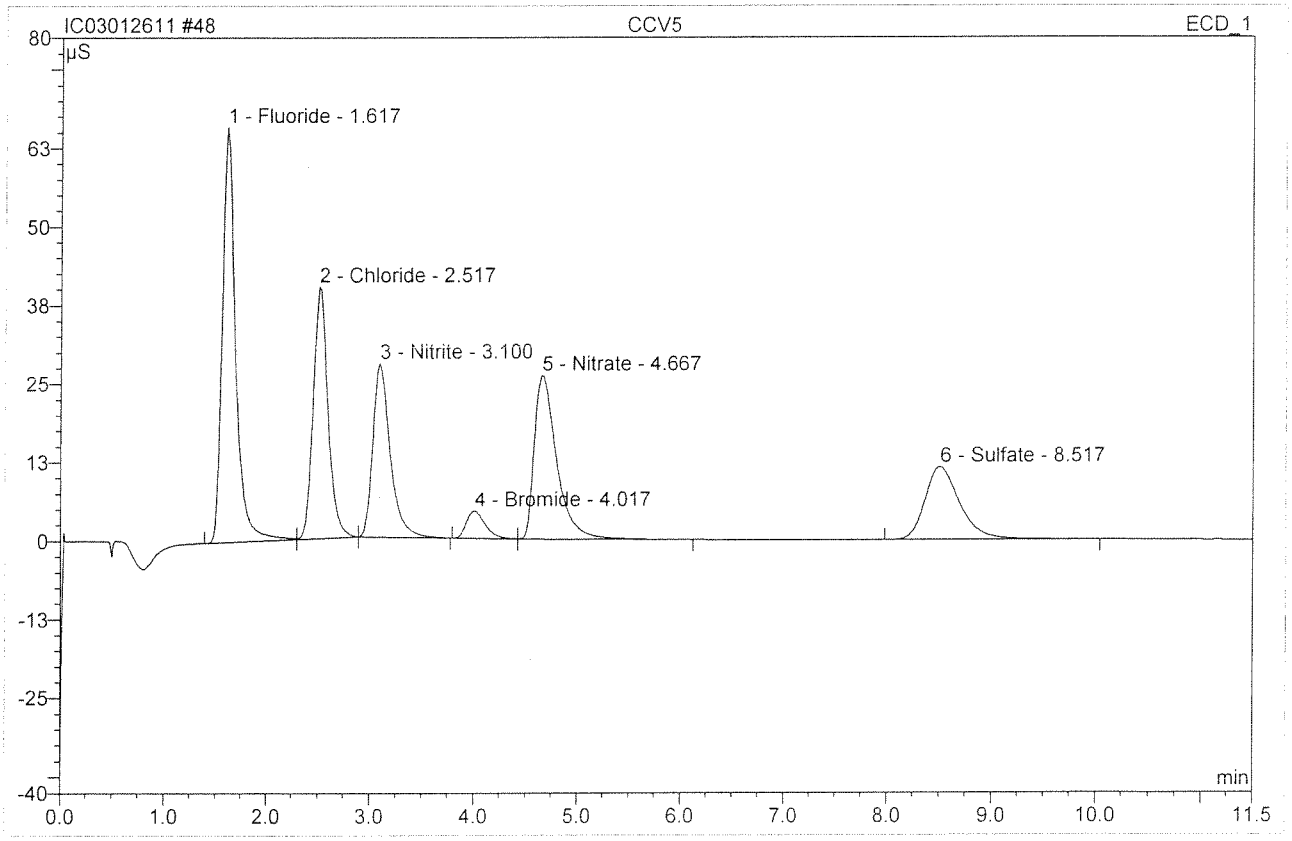


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

48 CCV5

CCV5

Sample Name:	**CCV5**	*Injection Volume:*	**200.0**
Vial Number:	**50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 18:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	66.071	10.012	29.43	4.966	BM
2	2.52	Chloride	39.929	6.728	19.77	4.572	Mb
3	3.10	Nitrite	27.595	5.339	15.69	1.860	bMB
4	4.02	Bromide	4.425	0.924	2.71	1.846	BMb
5	4.67	Nitrate	26.060	6.522	19.17	1.812	bMB
6	8.52	Sulfate	11.623	4.502	13.23	4.745	BMB
Total:			175.704	34.025	100.00	19.801	

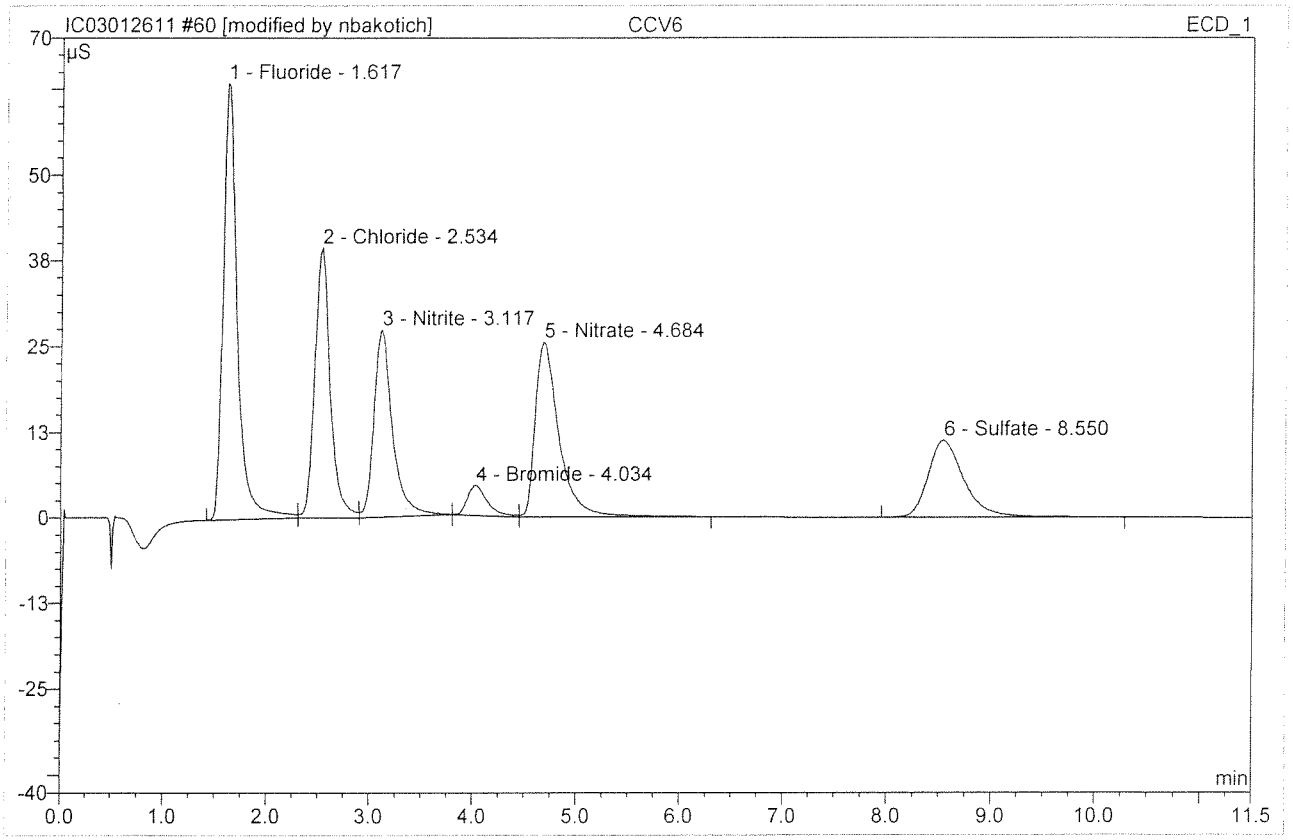
Before

JAN 2 7 2011

60 CCV6

CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**55**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 21:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	63.547	10.114	28.89	100 5.016	BM *
2	2.53	Chloride	39.328	6.989	19.96	95 4.750	M *
3	3.12	Nitrite	27.280	5.650	16.14	99 1.968	Mb*
4	4.03	Bromide	4.353	0.982	2.80	98 1.962	bM *
5	4.68	Nitrate	25.479	6.769	19.33	94 1.880	MB*
6	8.55	Sulfate	11.268	4.506	12.87	95 4.750	BMB
Total:			171.255	35.009	100.00	20.327	

After Initials _____

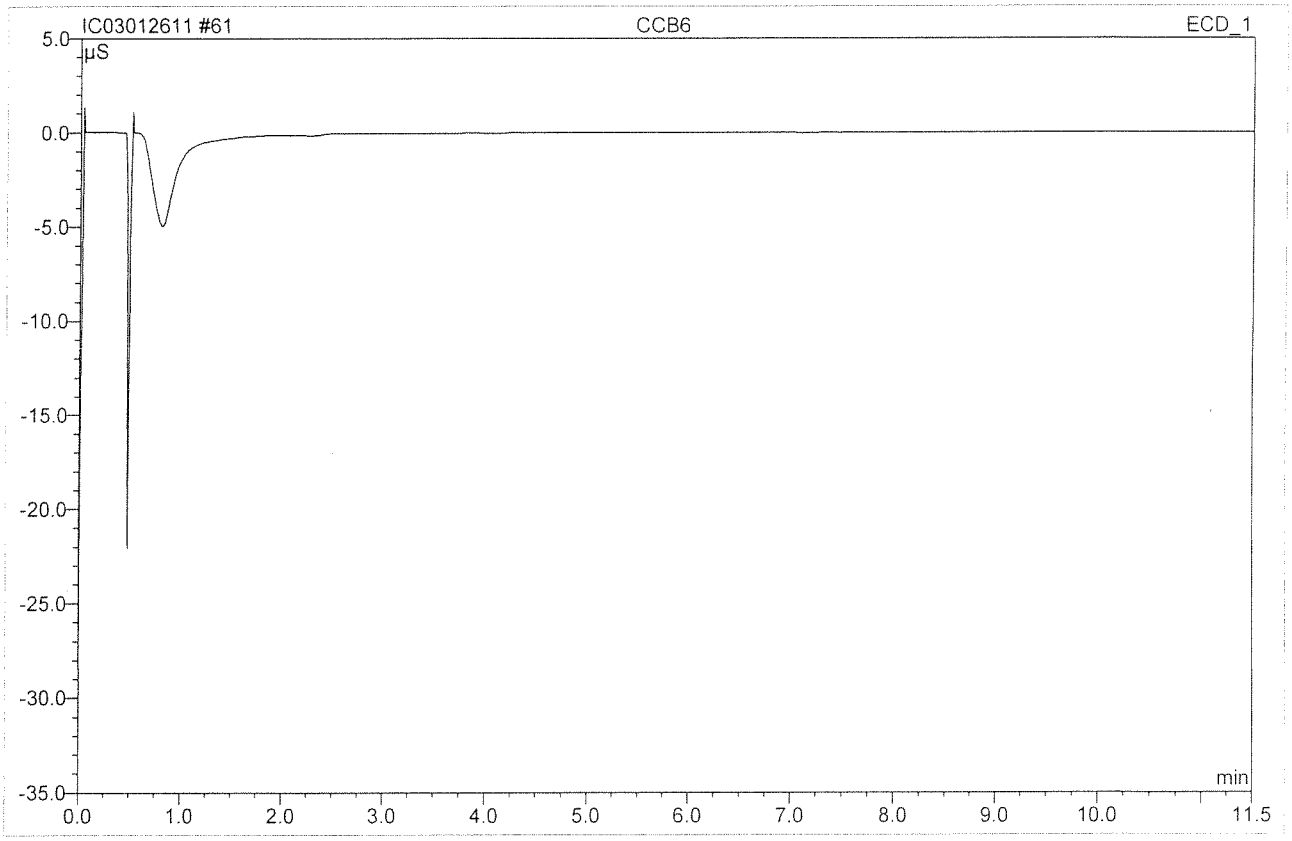
JAN 2 7 2011

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other 80

61 CCB6

CCB6

Sample Name:	**CCB6**	*Injection Volume:*	**200.0**
Vial Number:	**56**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 21:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

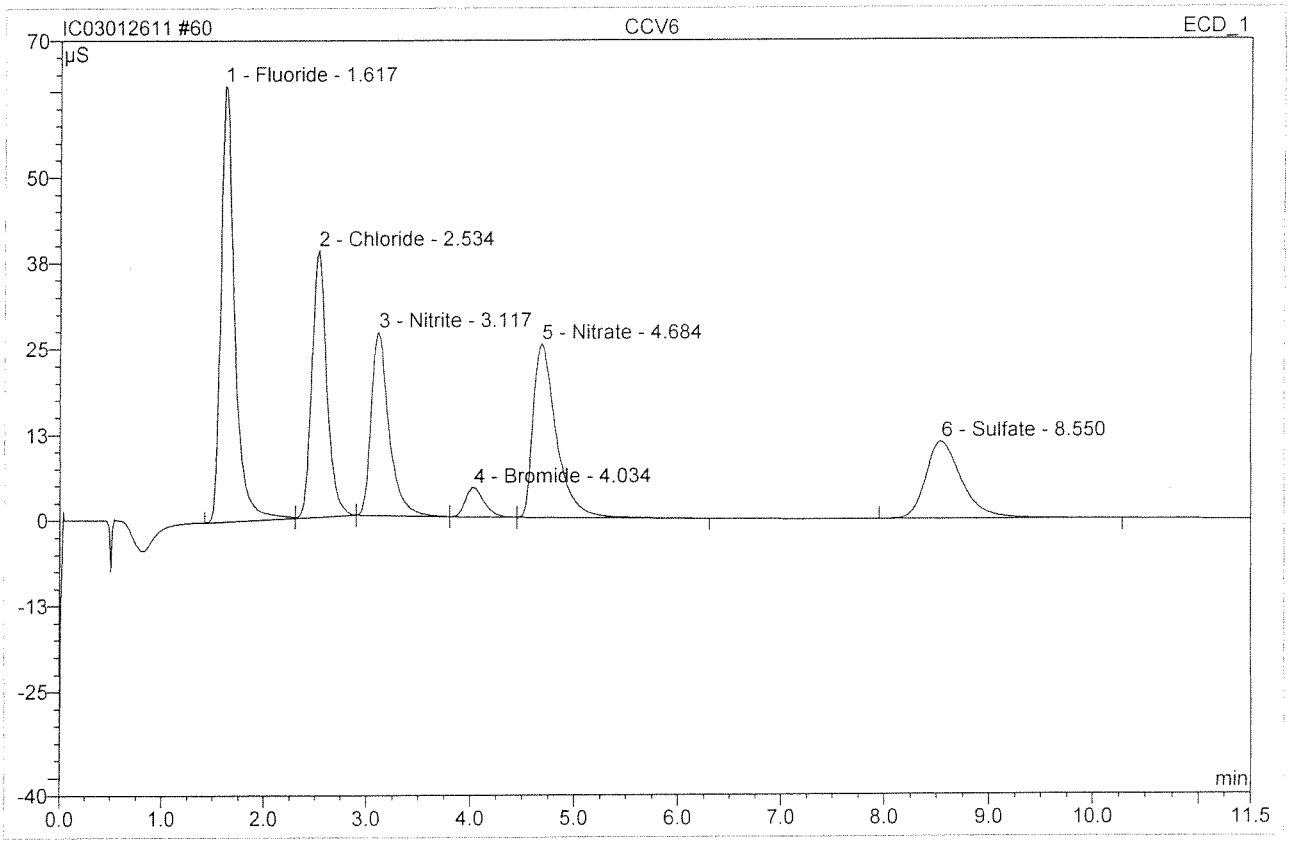


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

60 CCV6

CCV6

Sample Name:	**CCV6**	*Injection Volume:*	**200.0**
Vial Number:	**55**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 21:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	63.480	9.982	29.41	4.951	BM
2	2.53	Chloride	38.855	6.676	19.67	4.537	Mb
3	3.12	Nitrite	26.713	5.314	15.66	1.851	bMb
4	4.03	Bromide	4.271	0.907	2.67	1.814	bMb
5	4.68	Nitrate	25.279	6.557	19.32	1.822	bMB
6	8.55	Sulfate	11.268	4.506	13.28	4.750	BMB
Total:			169.866	33.943	100.00	19.725	

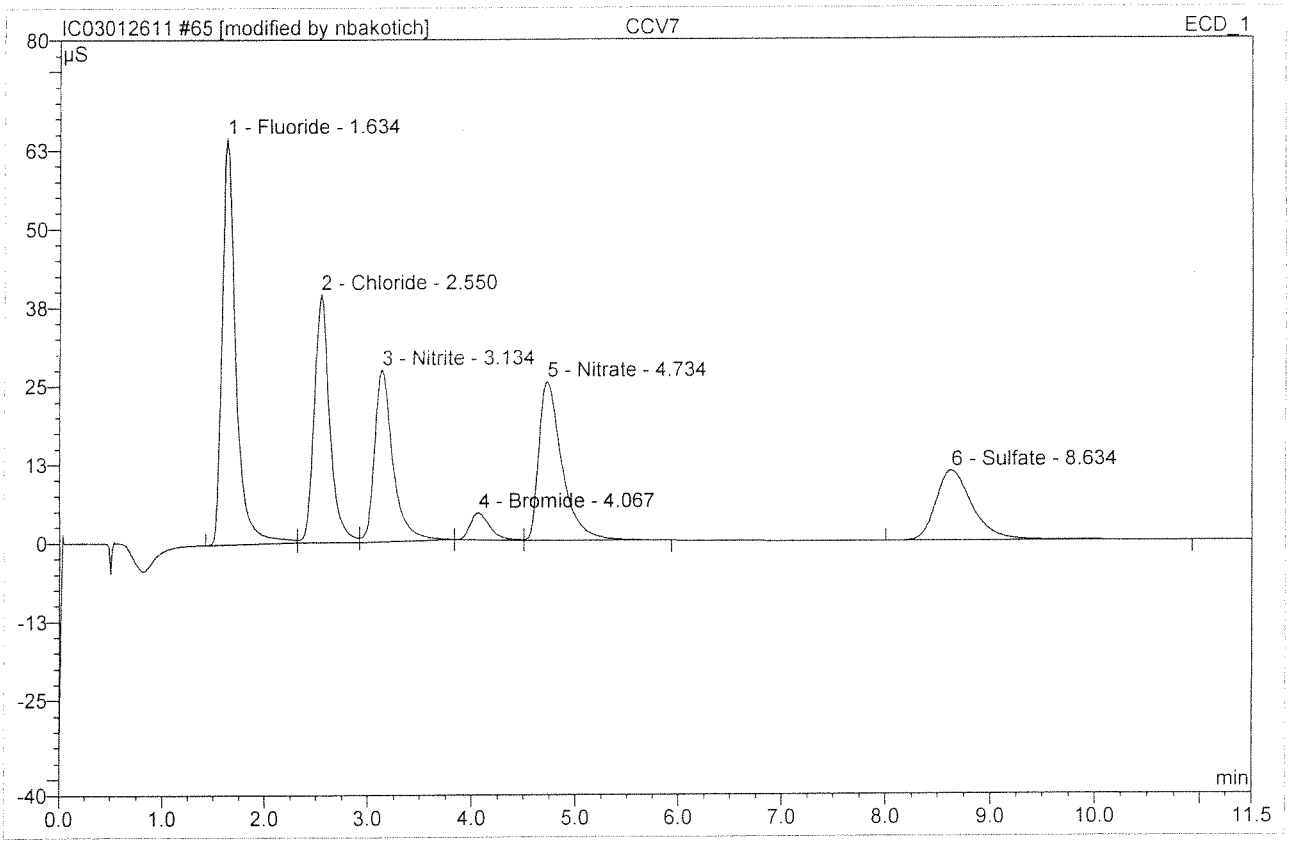
Before

JAN 2 7 2011

65 CCV7

CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**60**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 22:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



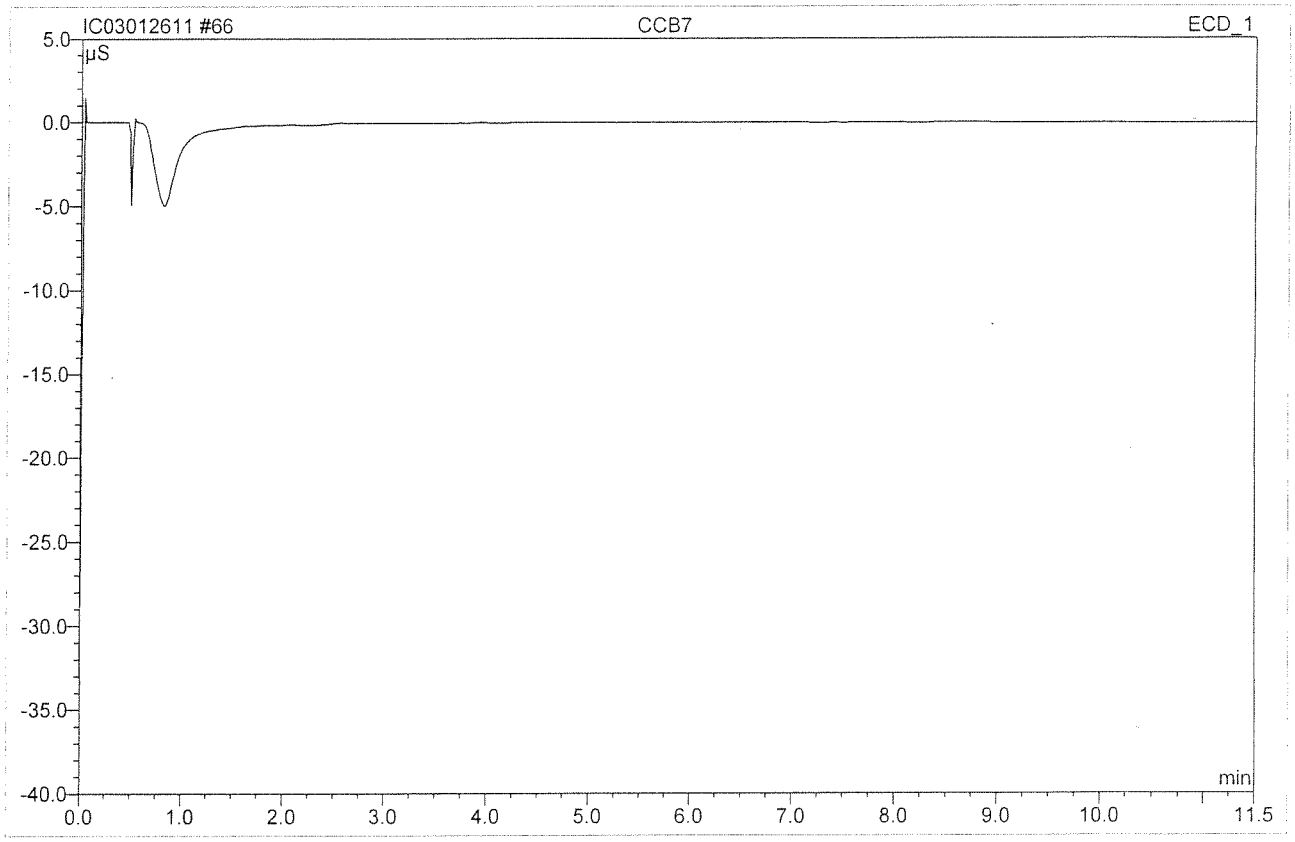
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	64.660	10.142	28.97	5.030	BM *
2	2.55	Chloride	39.571	7.049	20.14	4.790	M *
3	3.13	Nitrite	27.373	5.662	16.18	1.973	Mb*
4	4.07	Bromide	4.331	0.969	2.77	1.937	bM *
5	4.73	Nitrate	25.388	6.619	18.91	1.839	MB*
6	8.63	Sulfate	11.233	4.562	13.03	4.809	BMB
Total:			172.556	35.003	100.00	20.378	

JAN 27 2011

66 CCB7

CCB7

Sample Name:	**CCB7**	*Injection Volume:*	**200.0**
Vial Number:	**61**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 22:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

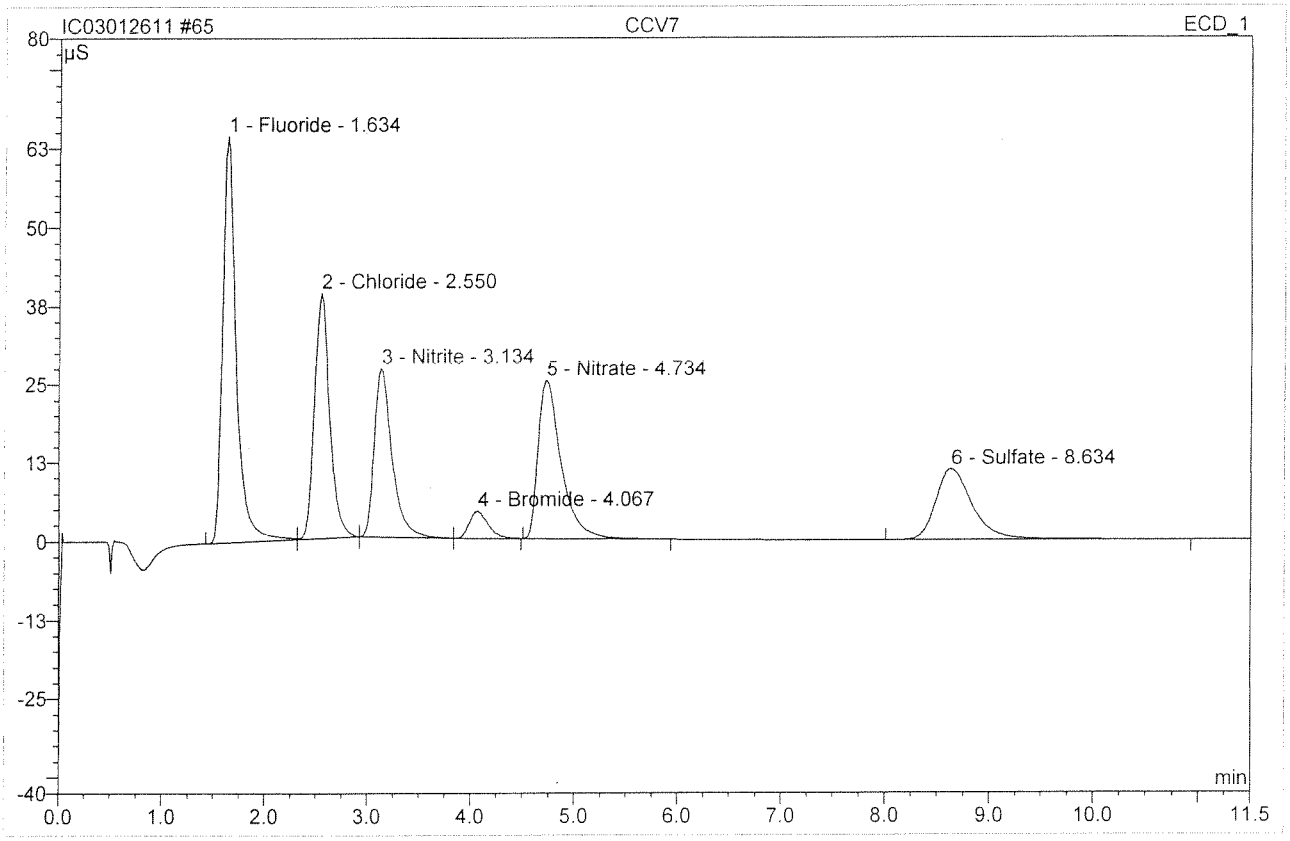


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

65 CCV7

CCV7

Sample Name:	**CCV7**	*Injection Volume:*	**200.0**
Vial Number:	**60**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 22:16**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	64.590	10.012	29.42	4.966	BM
2	2.55	Chloride	39.111	6.743	19.81	4.582	Mb
3	3.13	Nitrite	26.815	5.326	15.65	1.856	bMb
4	4.07	Bromide	4.264	0.905	2.66	1.810	bMB
5	4.73	Nitrate	25.228	6.482	19.05	1.801	BMB
6	8.63	Sulfate	11.233	4.562	13.41	4.809	BMB
Total:			171.240	34.031	100.00	19.824	

Before

JAN 2 7 2011

Sequence: IC03112210c **Date: 11/22/10**

Anion	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Level 7	Level 8	Corr.Coeff.	Slope
F	0.0	0.1	0.2	0.5	1.0	5.0	7.5	10.0	99.9841	2.0281
Cl	0.0	0.1	0.2	0.5	1.0	5.0	7.5	10.0	99.8121	1.6325
NO2	0.0	0.05	0.1	0.5	1.0	2.0	5.0	-	99.9963	2.9528
Br	0.0	0.05	0.1	0.5	1.0	2.0	5.0	-	99.8997	0.5632
NO3	0.0	0.05	0.1	0.5	1.0	2.0	5.0	-	99.8567	4.0451
SO4	0.0	0.1	0.2	0.5	1.0	5.0	7.5	10.0	99.9341	1.0586

All calibration standard concentrations are in mg/L unless otherwise noted.
Zero point forced through zero.

No.	Peak Name	Cal.Type	#Points	Rel.Std.Dev. %	Corr.Coeff. %	Offset	Slope	Curve
1	Fluoride	Lin	7	1.538	99.9934	0	2.0162	0
2	Chloride	Lin	7	6.3839	99.8962	0	1.4715	0
n.a.	Nitrite	Lin	6	3.47	99.9844	0	2.8702	0
n.a.	Bromide	Lin	6	5.0433	99.9621	0	0.5002	0
n.a.	Nitrate	Lin	6	9.5703	99.8817	0	3.5997	0
3	Sulfate	Lin	7	4.5792	99.9463	0	0.9487	0
Average:			6.5	5.0975	99.944	0	1.9011	0

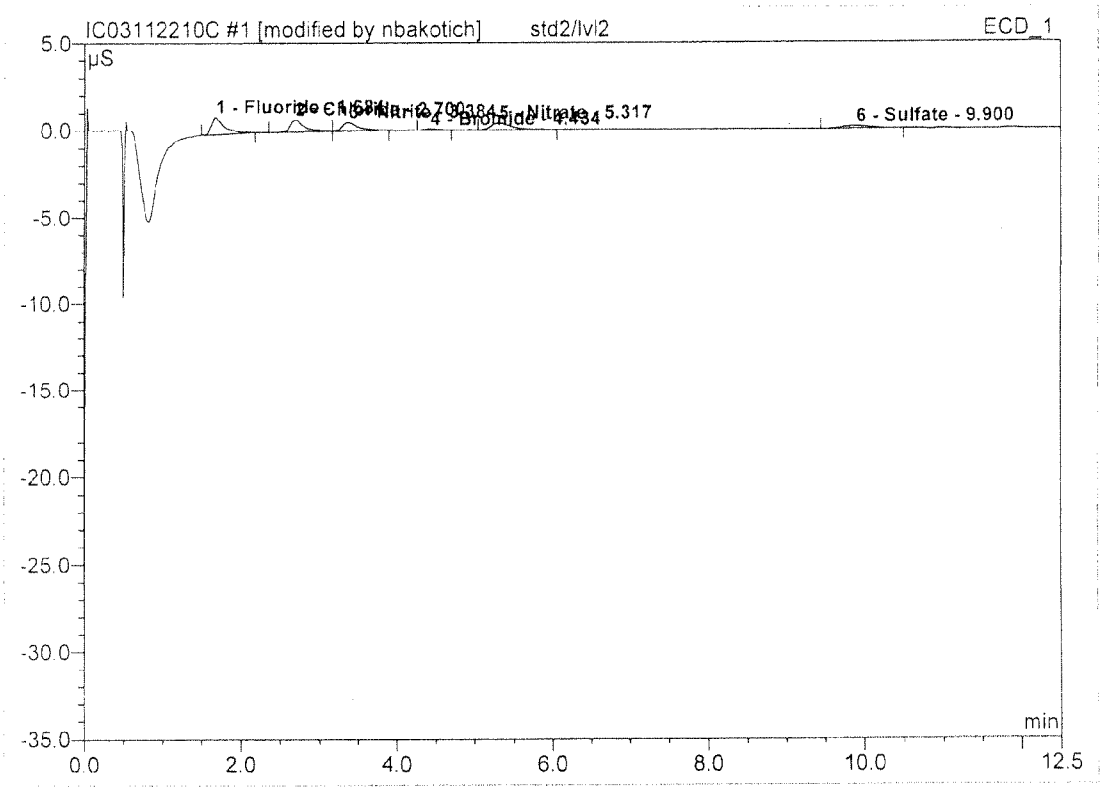
AN11-54-A 100PPM NO2, BR, NO3
AN11-54-B 100PPM F, CL, SO4

	AN11-54-C STD2	AN11-54-D STD3	AN11-54-E STD4	AN11-54-F STD5	AN11-54-G STD6	AN11-54-H STD7	AN11-54-I STD8	STD1
ml								0
F	0.100	0.200	0.500	1.000	5.00	7.50	10.00	0
CL	0.100	0.200	0.500	1.000	5.00	7.50	10.00	0
SO4	0.100	0.200	0.500	1.000	5.00	7.50	10.00	0
NO2	0.050	0.100	0.500	1.000	2.00	5.00	--	0
NO3	0.050	0.100	0.500	1.000	2.00	5.00	--	0
Br	0.050	0.100	0.500	1.000	2.00	5.00		

Columbia Analytical Services, Inc.

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 14:11**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	0.989	0.192	28.60	0.095	BMB*
2	2.70	Chloride	0.677	0.148	22.03	0.101	BM *
3	3.38	Nitrite	0.504	0.125	18.58	0.043	MB*
4	4.43	Bromide	0.074	0.015	2.22	0.030	BMB*
5	5.32	Nitrate	0.399	0.125	18.66	0.035	BMB
6	9.90	Sulfate	0.155	0.067	9.91	0.070	BMB*
Total:			2.798	0.672	100.00	0.374	

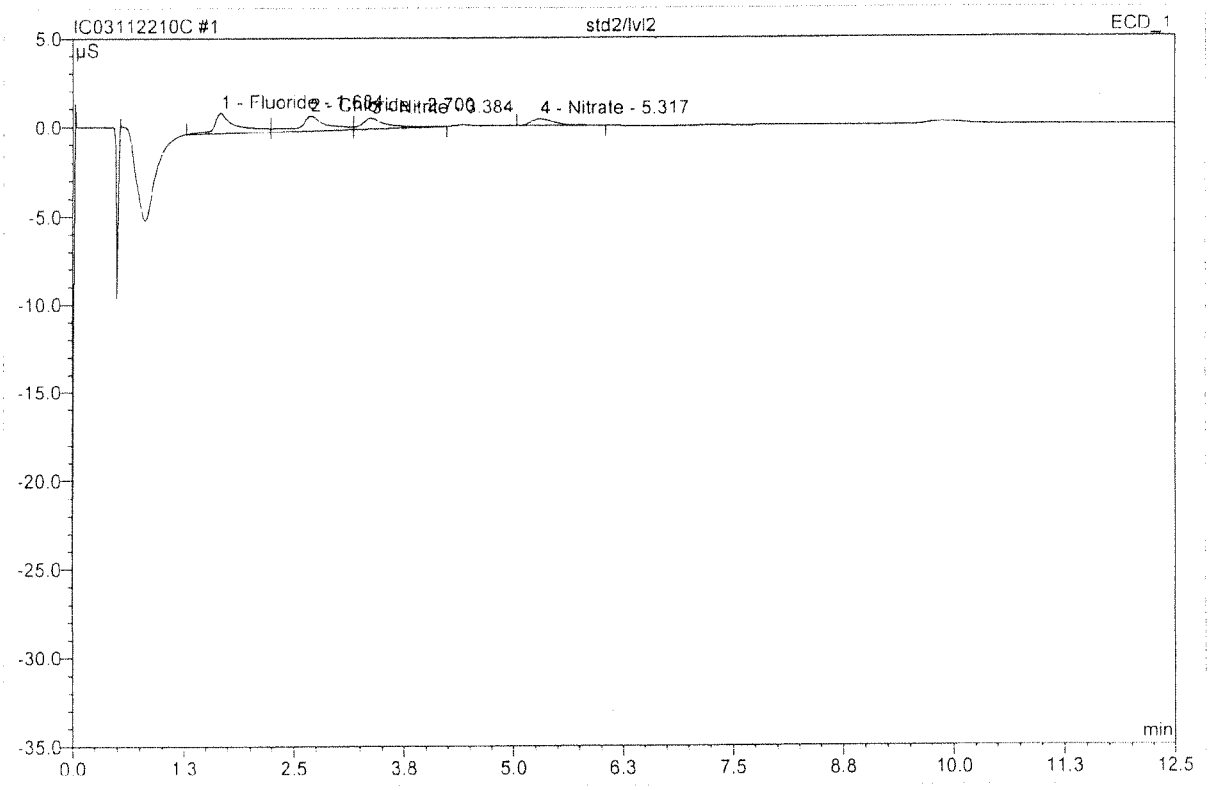
After
Initials

NOV 2 2 2010

☑Wrong Peak/Peak not Found
☑Baseline/shoulder Incorrect
☐Other

1 std2/lvl2

Sample Name:	**std2/lvl2**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/22/2010 14:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.68	Fluoride	1.128	0.329	35.50	0.163	BM
2	2.70	Chloride	0.822	0.282	30.45	0.192	M
3	3.38	Nitrite	0.597	0.190	20.52	0.066	MB
4	5.32	Nitrate	0.399	0.125	13.53	0.035	BMB
Total:			2.945	0.926	100.00	0.456	

Before

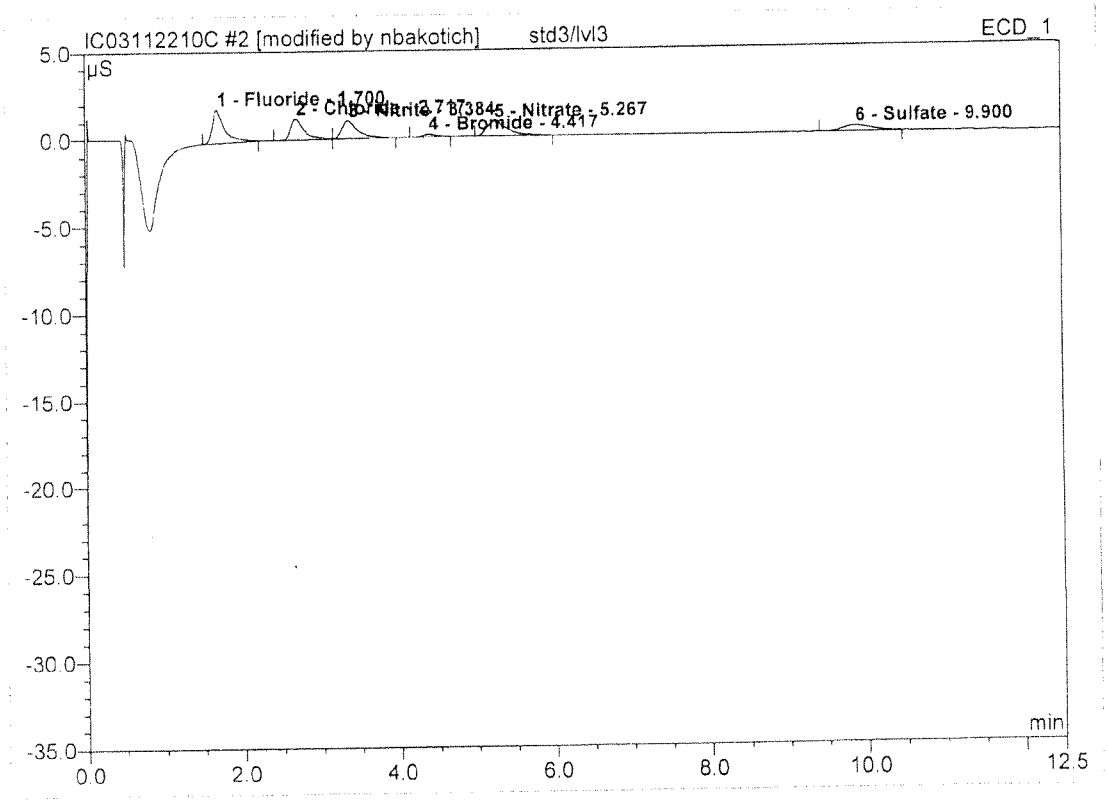
NOV 22 2010

default/Integration

Columbia Analytical Services, Inc.

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 14:26**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	1.893	0.360	27.52	0.178	BMB*
2	2.72	Chloride	1.204	0.252	19.27	0.171	BM *
3	3.38	Nitrite	1.048	0.257	19.71	0.090	MB*
4	4.42	Bromide	0.160	0.035	2.71	0.071	BMB*
5	5.27	Nitrate	0.847	0.262	20.09	0.073	BMB
6	9.90	Sulfate	0.325	0.140	10.70	0.147	BMB
Total:			6.477	1.306	100.00	0.730	

After
Initials MB

NOV 2 2 2010

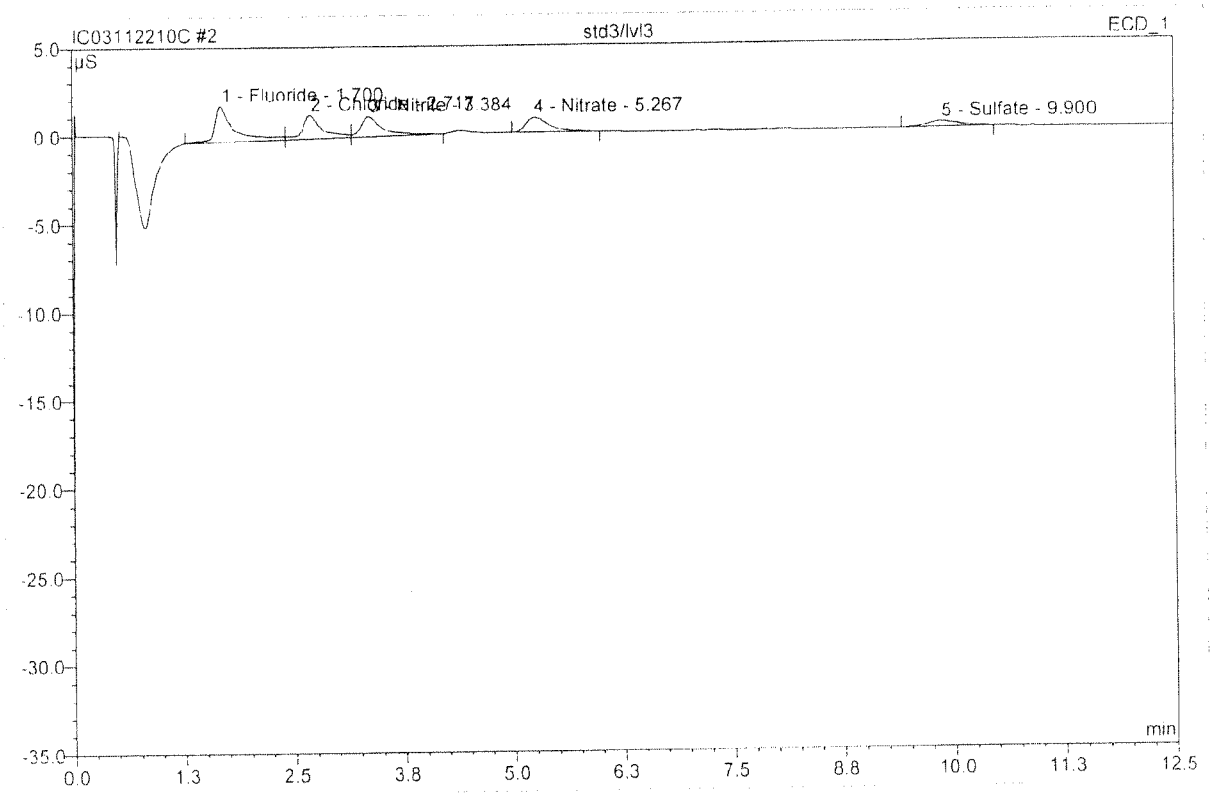
☑Wrong Peak/Peak not Found
☑Baseline/shoulder Incorrect
☐Other _____

CASLIMS_300-0/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

2 std3/lvl3

Sample Name:	**std3/lvl3**	*Injection Volume:*	**200.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/22/2010 14:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	2.043	0.538	33.21	0.267	BM
2	2.72	Chloride	1.351	0.356	21.99	0.242	M
3	3.38	Nitrite	1.140	0.324	19.97	0.113	MB
4	5.27	Nitrate	0.847	0.262	16.20	0.073	BMB
5	9.90	Sulfate	0.325	0.140	8.63	0.147	BMB
Total:			5.707	1.620	100.00	0.842	

Before

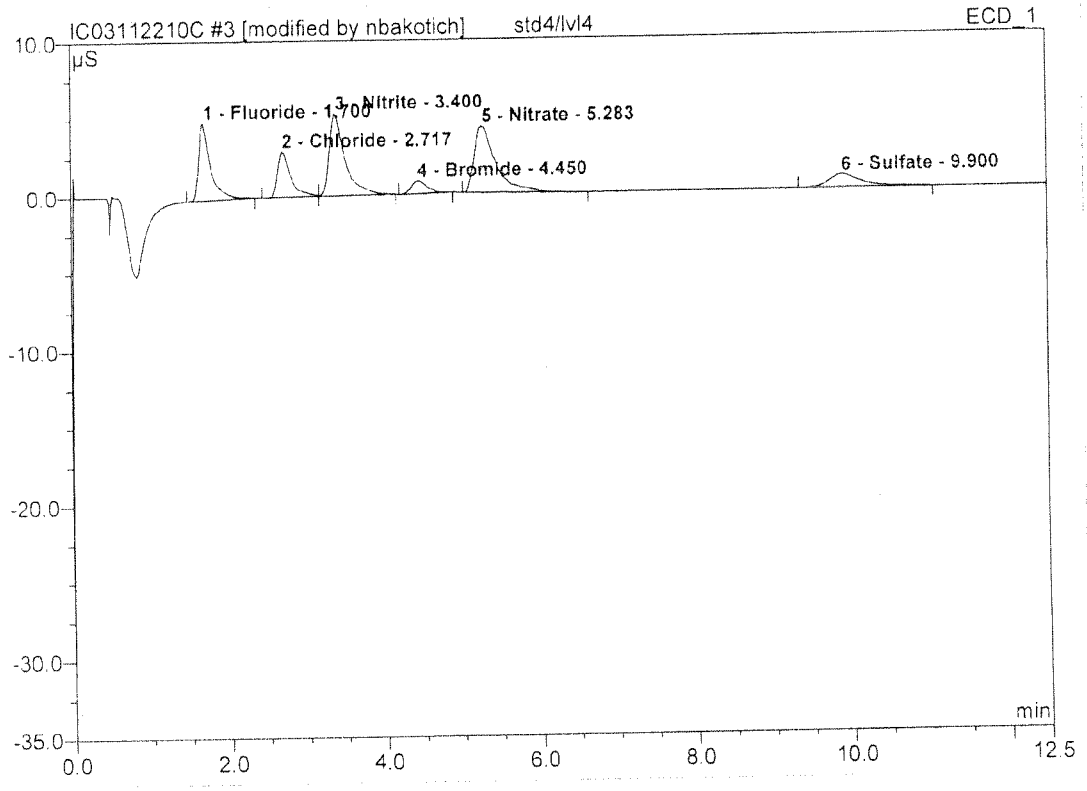
NOV 22 2010

default/Integration

Columbia Analytical Services, Inc.

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 14:41**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	5.003	0.894	18.81	0.443	BMB*
2	2.72	Chloride	2.933	0.584	12.30	0.397	BM *
3	3.40	Nitrite	5.309	1.275	26.83	0.444	MB*
4	4.45	Bromide	0.826	0.194	4.08	0.388	BMB*
5	5.28	Nitrate	4.320	1.392	29.29	0.387	BMB*
6	9.90	Sulfate	0.849	0.413	8.69	0.435	BMB
Total:			19.240	4.752	100.00	2.495	

After
Initials AB

NOV 2 2 2010

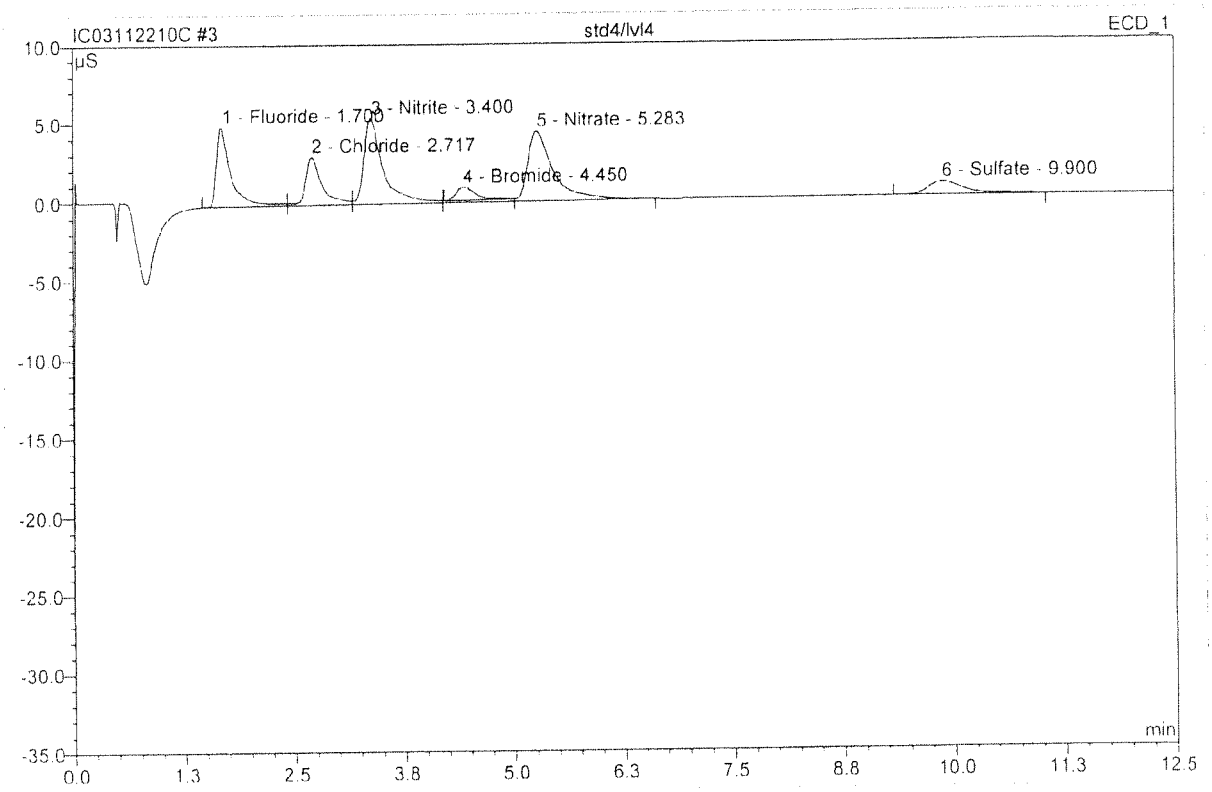
CASLIMS_300-0/Integration

☑Wrong Peak/Peak not Found
☑Baseline/shoulder Incorrect
☐Other _____

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

3 std4/lvl4

Sample Name:	**std4/lvl4**	*Injection Volume:*	**200.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/22/2010 14:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	5.041	0.974	18.14	0.483	BM
2	2.72	Chloride	3.071	0.687	12.79	0.467	M
3	3.40	Nitrite	5.457	1.432	26.65	0.498	M
4	4.45	Bromide	0.842	0.213	3.97	0.426	Ru
5	5.28	Nitrate	4.459	1.653	30.77	0.459	MB
6	9.90	Sulfate	0.849	0.413	7.69	0.435	BMB
Total:			19.719	5.371	100.00	2.768	

Before

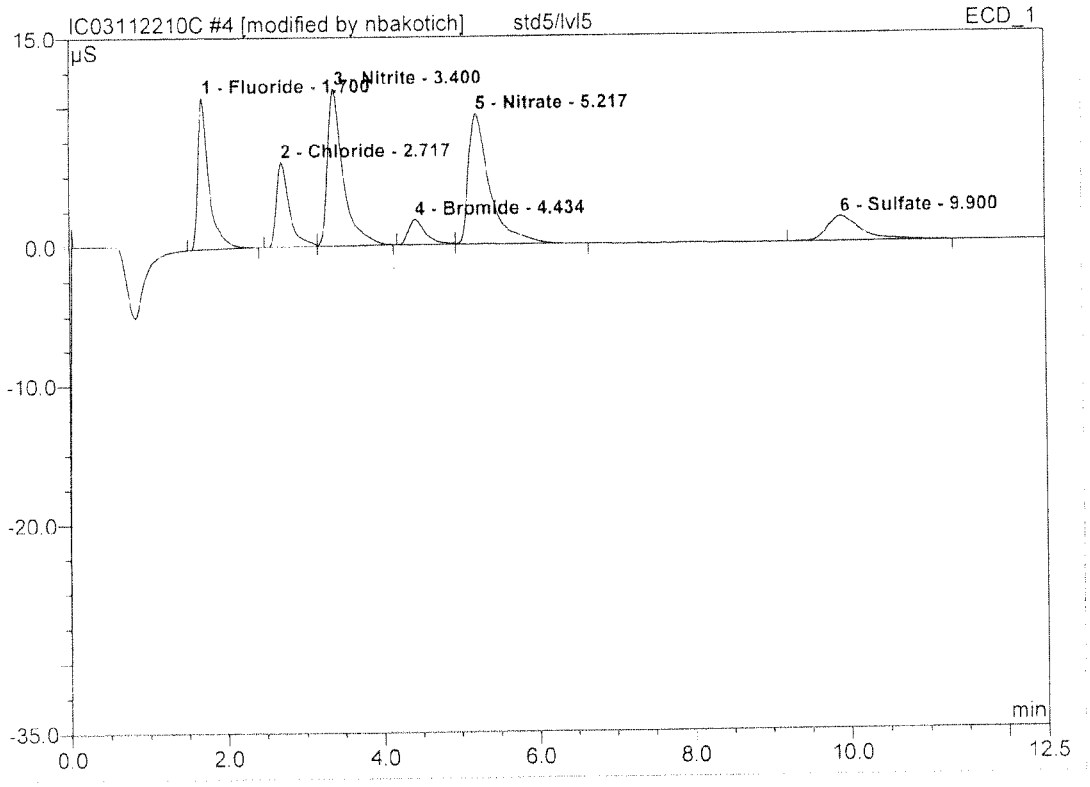
NOV 4 2 2010

default/Integration

Columbia Analytical Services, Inc.

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 14:56**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	10.940	1.843	18.50	0.914	BMB*
2	2.72	Chloride	6.077	1.180	11.85	0.802	BM *
3	3.40	Nitrite	11.282	2.633	26.44	0.917	MB*
4	4.43	Bromide	1.794	0.452	4.54	0.904	BM *
5	5.22	Nitrate	9.359	2.982	29.95	0.828	MB*
6	9.90	Sulfate	1.753	0.868	8.72	0.915	BMB
Total:			41.205	9.958	100.00	5.281	

After Initials AE

NOV 2 2 2010

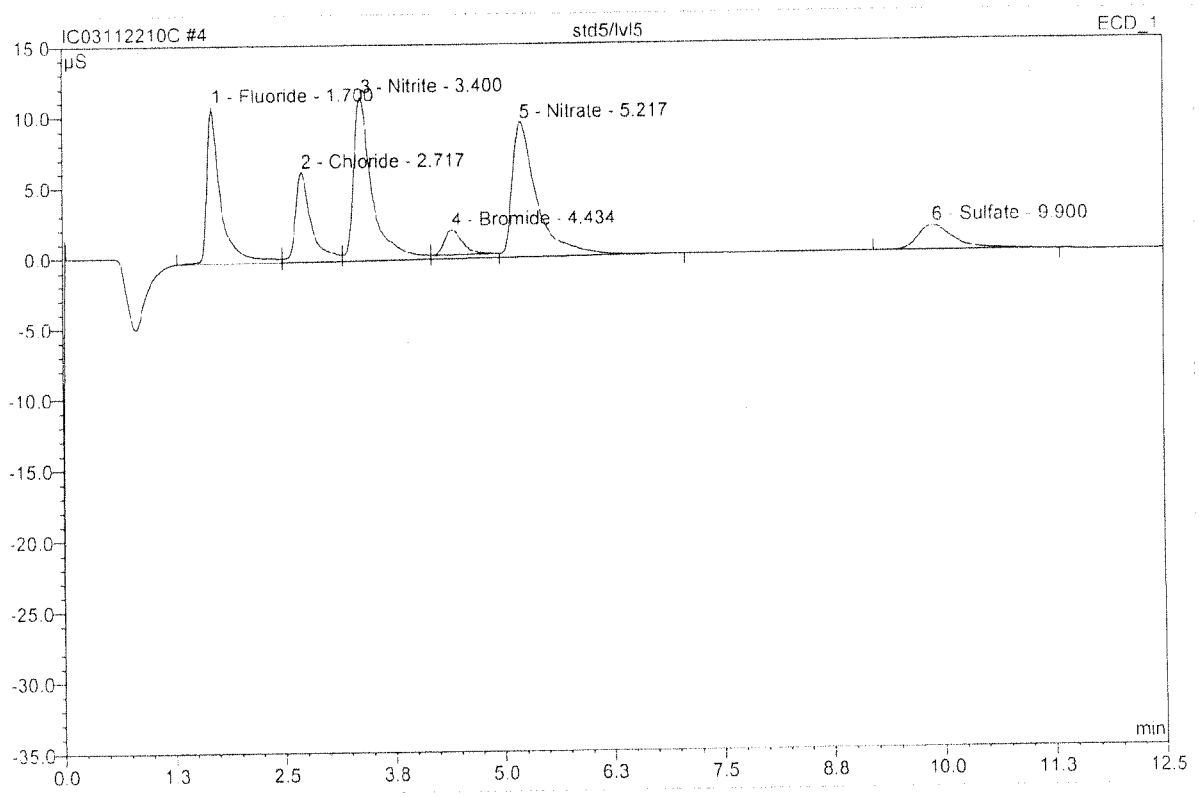
☑ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other _____

CASLIMS_300-0/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

4 std5/lvl5

Sample Name:	**std5/lvl5**	*Injection Volume:*	**200.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/22/2010 14:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	11.106	2.068	18.66	1.025	BM
2	2.72	Chloride	6.341	1.362	12.28	0.925	M
3	3.40	Nitrite	11.559	2.921	26.35	1.014	M
4	4.43	Bromide	1.778	0.433	3.90	0.867	Ru
5	5.22	Nitrate	9.558	3.435	30.98	0.950	MB
6	9.90	Sulfate	1.753	0.868	7.83	0.915	BMB
Total:			42.095	11.087	100.00	5.696	

Before

NOV 4 2 2010

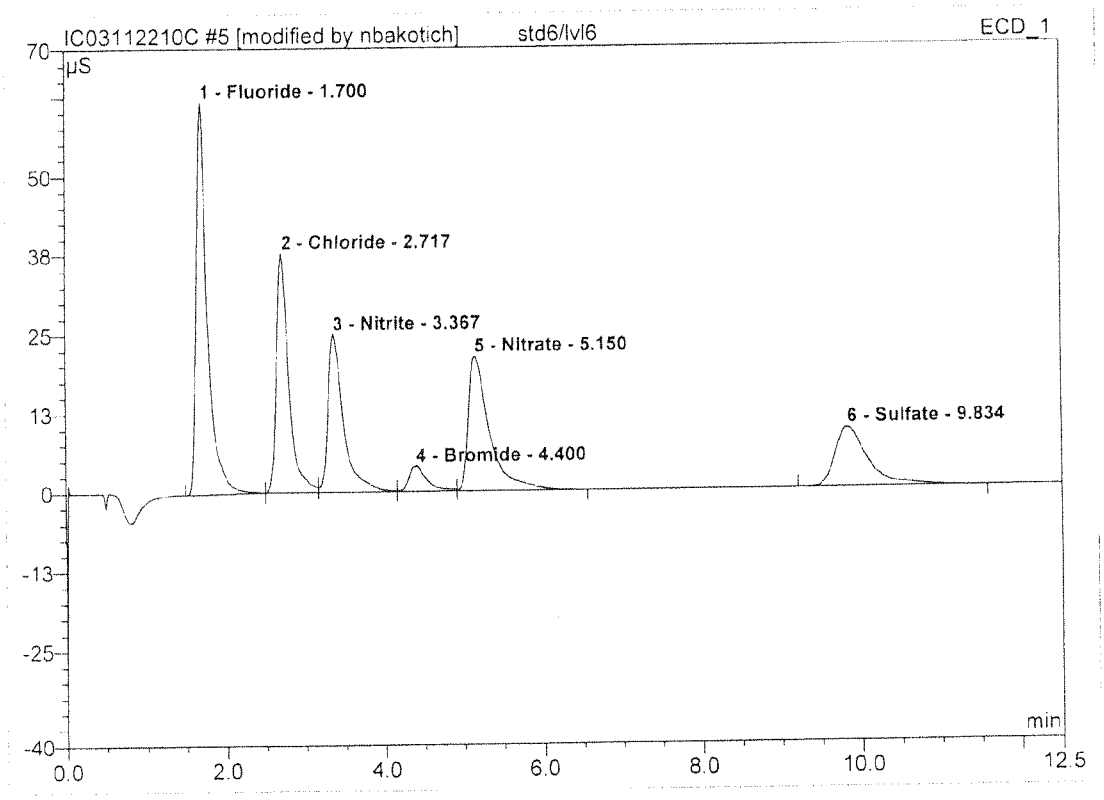
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

Columbia Analytical Services, Inc.

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 15:11**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	61.919	10.194	29.36	5.056	BMb*
2	2.72	Chloride	37.693	6.806	19.60	4.625	bM *
3	3.37	Nitrite	24.857	5.657	16.29	1.971	M *
4	4.40	Bromide	3.966	1.023	2.95	2.045	M *
5	5.15	Nitrate	21.252	6.574	18.93	1.826	MB*
6	9.83	Sulfate	9.417	4.472	12.88	4.714	BMB
Total:		After	159.103	34.725	100.00	20.237	

Initials AB

NOV 4 2 2010

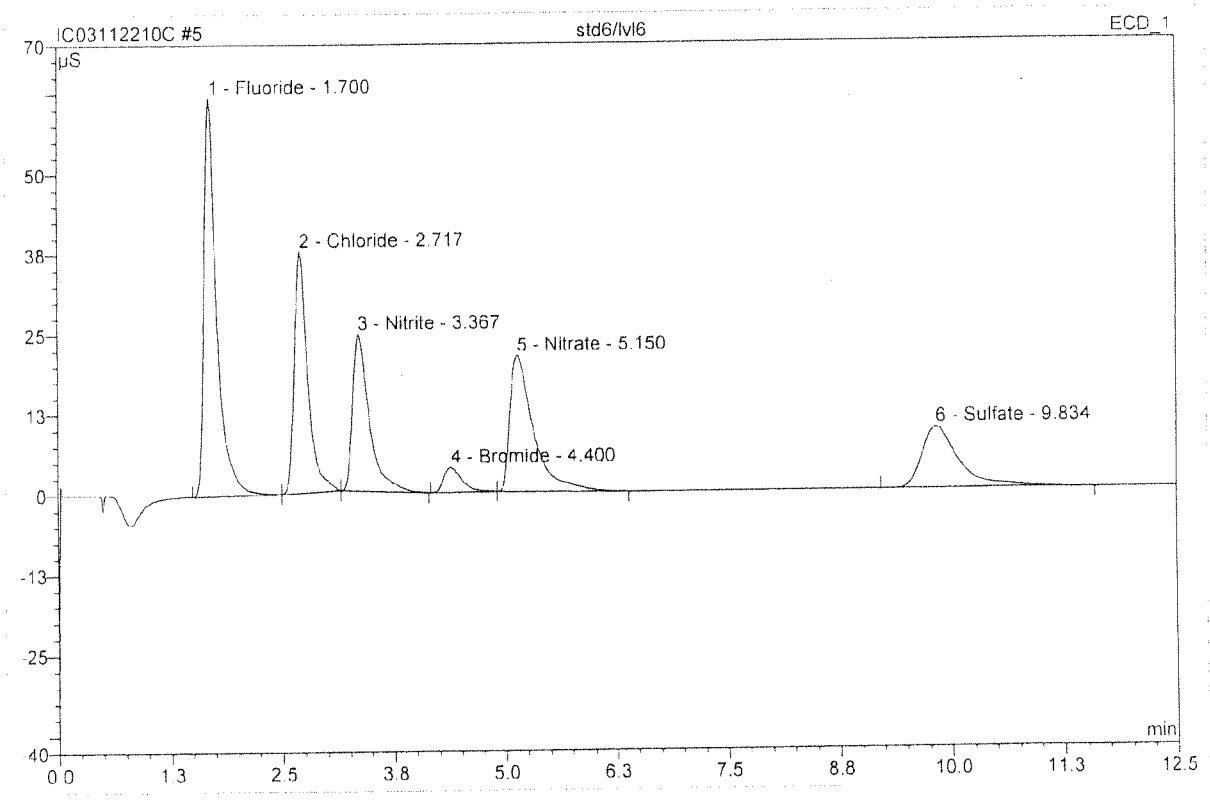
Shorter

CASLIMS_300-0/Integration

☑Wrong Peak/Peak not Found
☑Baseline/shoulder incorrect
☐Other _____

5 std6/lvl6

Sample Name:	**std6/lvl6**	*Injection Volume:*	**200.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/22/2010 15:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	61.919	10.194	30.08	5.056	BMB
2	2.72	Chloride	37.503	6.612	19.51	4.510	bMb
3	3.37	Nitrite	24.368	5.310	15.67	1.865	bMB
4	4.40	Bromide	3.823	0.902	2.66	1.833	BMb
5	5.15	Nitrate	21.074	6.399	18.88	1.783	bMB
6	9.83	Sulfate	9.417	4.472	13.19	4.714	BMB
Total:			158.103	33.888	100.00	19.761	

Before

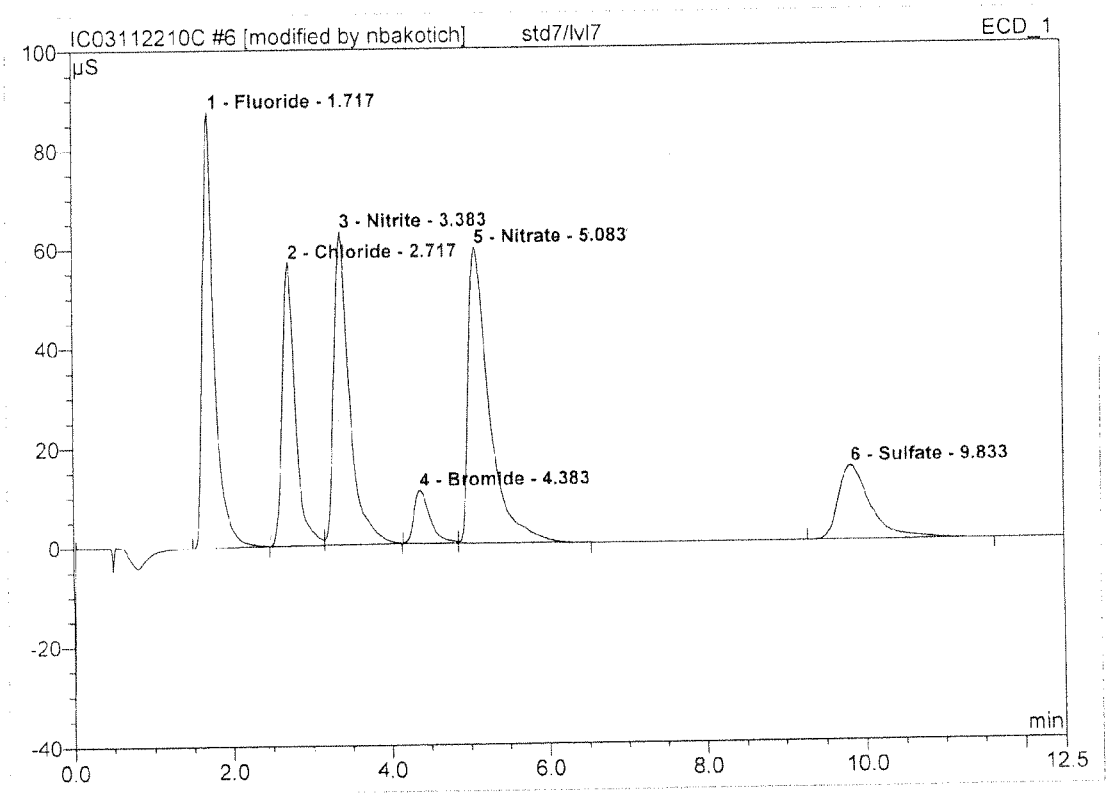
NOV 4 2 2010

default/Integration

Columbia Analytical Services, Inc.

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 15:26**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	87.714	15.187	22.17	7.532	BMB
2	2.72	Chloride	56.910	10.892	15.90	7.402	BM *
3	3.38	Nitrite	62.916	14.448	21.09	5.034	MB*
4	4.38	Bromide	10.676	2.508	3.66	5.013	BM *
5	5.08	Nitrate	59.432	18.416	26.89	5.116	MB*
6	9.83	Sulfate	14.943	7.046	10.29	7.427	BMB
Total:			292.592	68.496	100.00	37.525	

After
Initials MD

NOV 2 2 2010

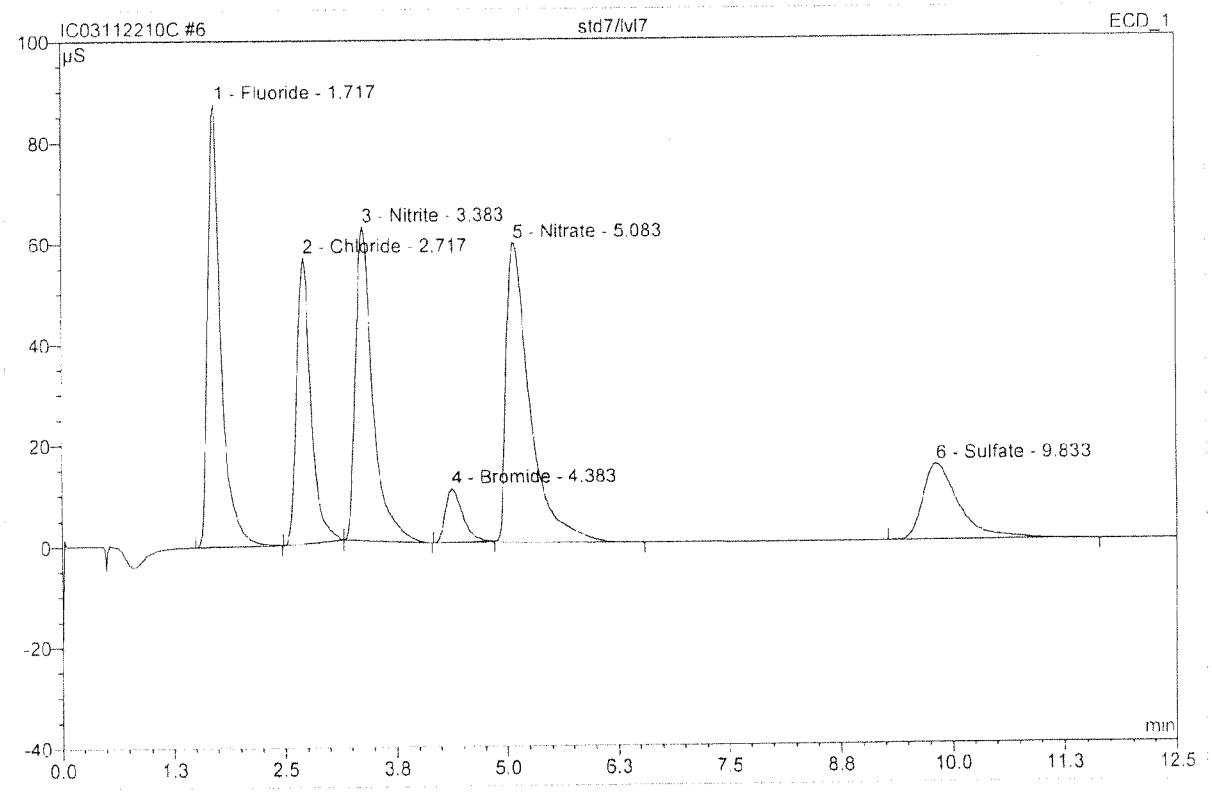
CASLIMS_300-0/Integration

☑Wrong Peak/Peak not Found
☑Baseline/shoulder Incorrect
☐Other _____

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

6 std7/lvl7

Sample Name:	**std7/lvl7**	*Injection Volume:*	**200.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/22/2010 15:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	87.714	15.187	22.41	7.532	BMB
2	2.72	Chloride	56.611	10.593	15.63	7.259	BMb
3	3.38	Nitrite	62.232	14.017	20.68	5.008	bMB
4	4.38	Bromide	10.581	2.401	3.54	4.975	Ru
5	5.08	Nitrate	59.432	18.523	27.33	5.120	BMB
6	9.83	Sulfate	14.943	7.046	10.40	7.427	BMB
Total:			291.513	67.765	100.00	37.322	

Before

NOV 4 2 2010

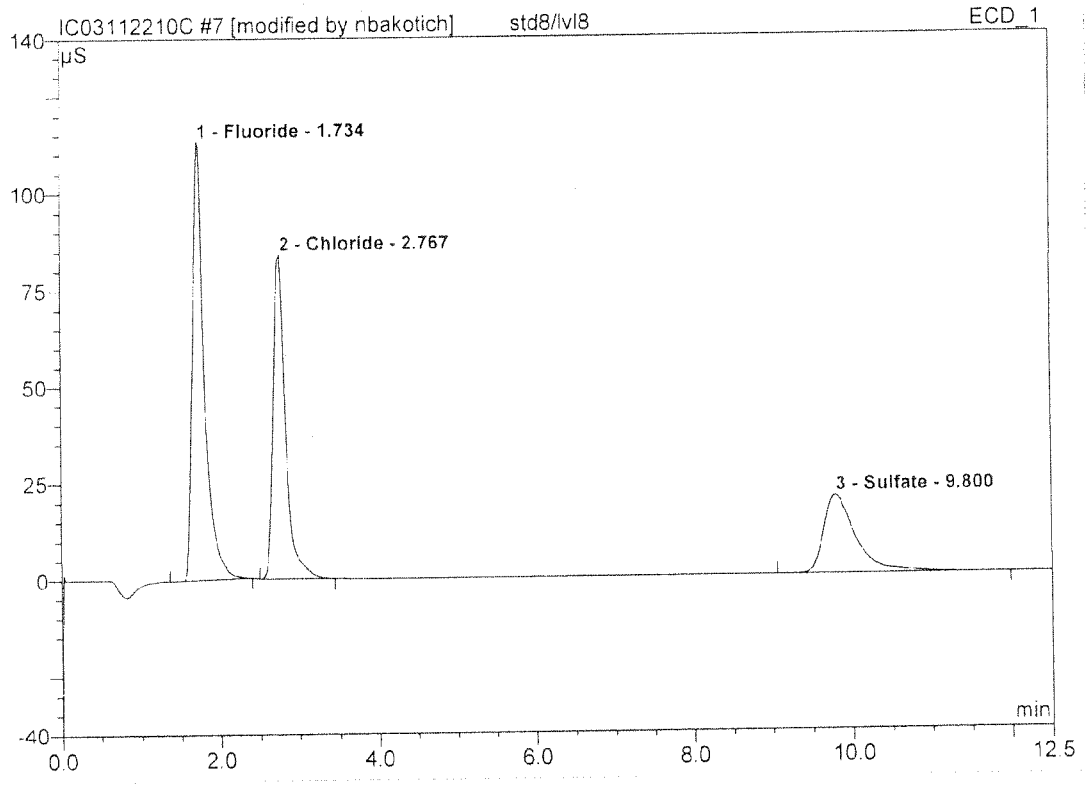
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

Columbia Analytical Services, Inc.

7 std8/lvl8

Sample Name:	**std8/lvl8**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 15:41**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	113.420	20.081	44.72	9.960	BMB*
2	2.77	Chloride	83.885	15.135	33.71	10.286	BMB*
3	9.80	Sulfate	20.407	9.687	21.57	10.211	BMB
Total:		After	217.713	44.903	100.00	30.457	

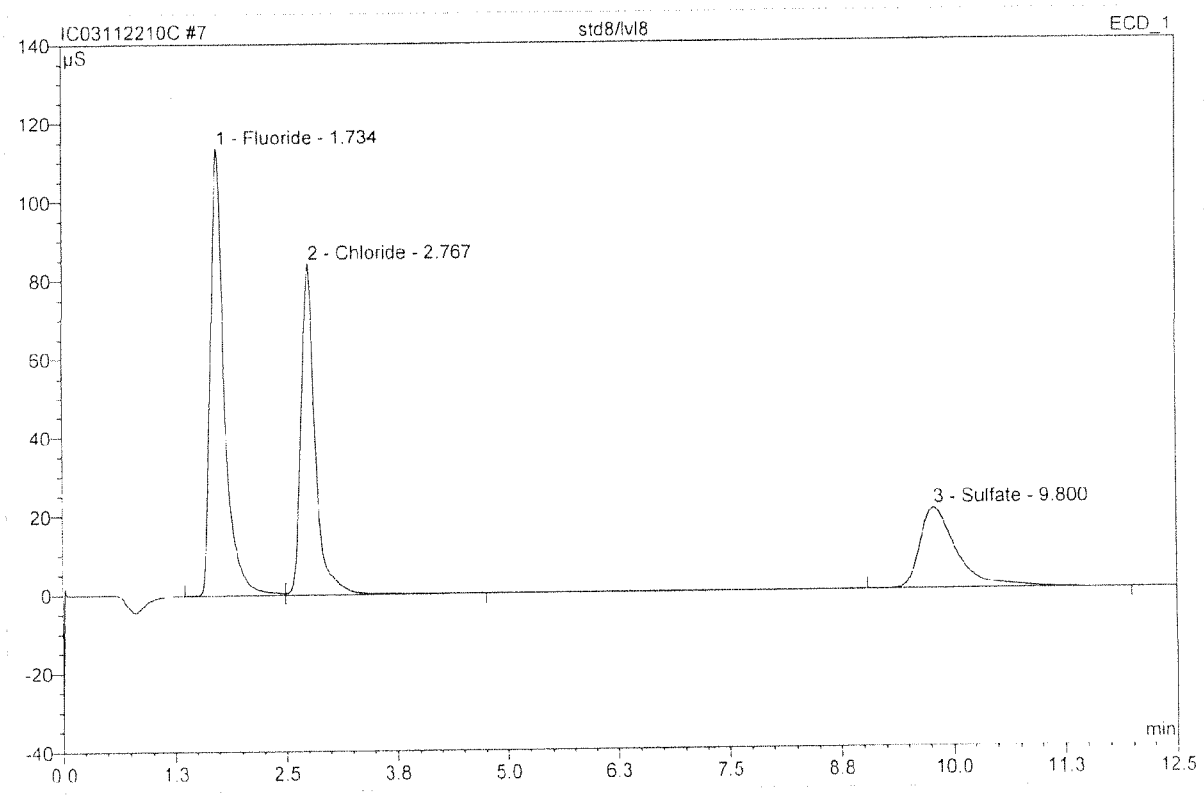
Initials AD

NOV 4 2 2010

☐Wrong Peak/Peak not Found
☑Baseline/shoulder Incorrect
☐Other

7 std8/lvl8

Sample Name:	**std8/lvl8**	*Injection Volume:*	**200.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/22/2010 15:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	Fluoride	113.629	20.434	44.74	10.039	BM
2	2.77	Chloride	84.251	15.552	34.05	10.408	MB
3	9.80	Sulfate	20.407	9.687	21.21	10.211	BMB
Total:			218.287	45.673	100.00	30.657	

Before

NOV 12 2010

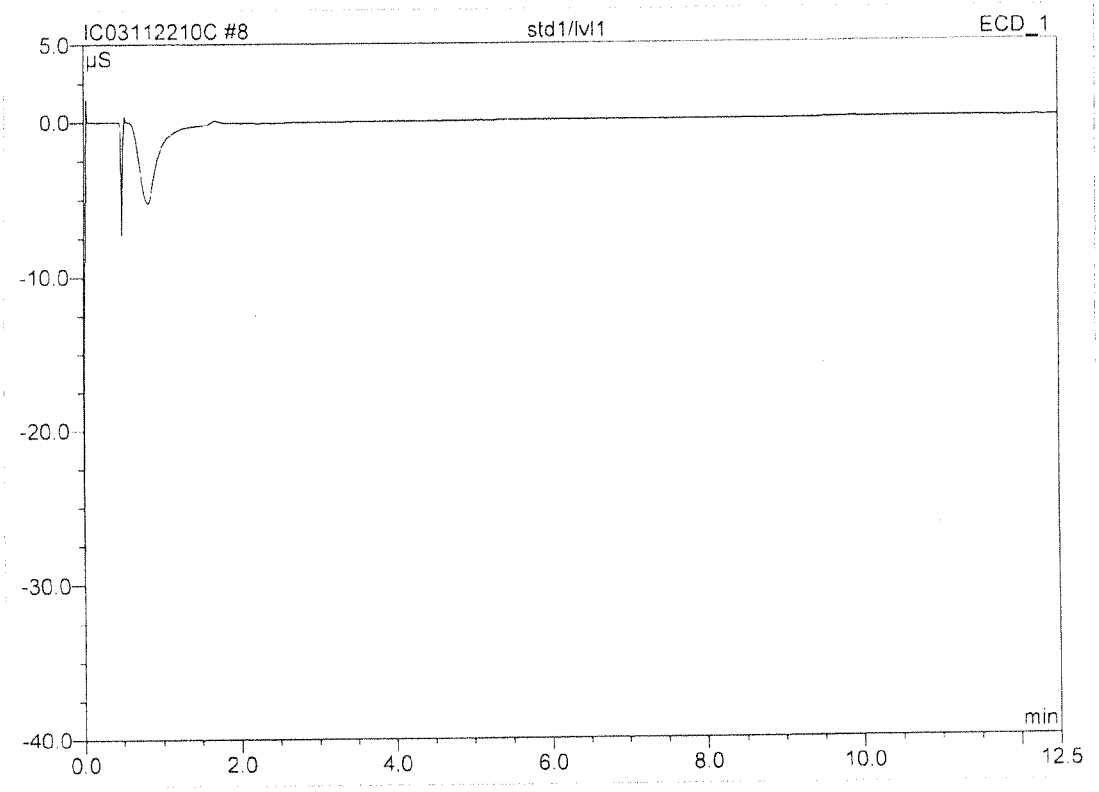
default/Integration

Chromeleon (c) Dionex 1996-2001
Version 6.80 SP1 Build 2238

Columbia Analytical Services, Inc.

8 std1/lvl1

Sample Name:	**std1/lvl1**	*Injection Volume:*	**200.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 15:56**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**

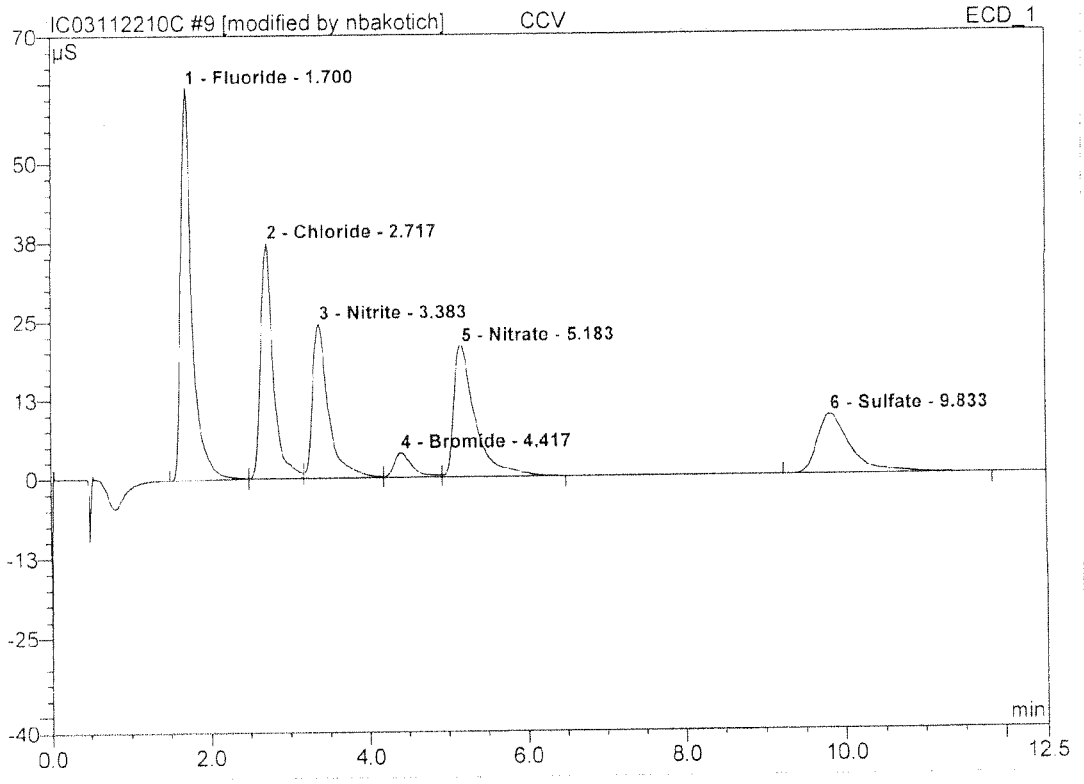


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

Columbia Analytical Services, Inc.

9 CCV

Sample Name:	**CCV**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 16:11**	*Analyst:*	**JS / EM**
Run Time (min):	**12.52**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	62.081	10.293	29.50	5.105	BMb
2	2.72	Chloride	37.316	6.836	19.59	4.646	bM *
3	3.38	Nitrite	24.508	5.662	16.22	1.973	M *
4	4.42	Bromide	3.899	1.014	2.91	2.027	M *
5	5.18	Nitrate	20.744	6.560	18.80	1.822	MB*
6	9.83	Sulfate	9.395	4.531	12.98	4.777	BMB
Total:			157.944	34.896	100.00	20.350	

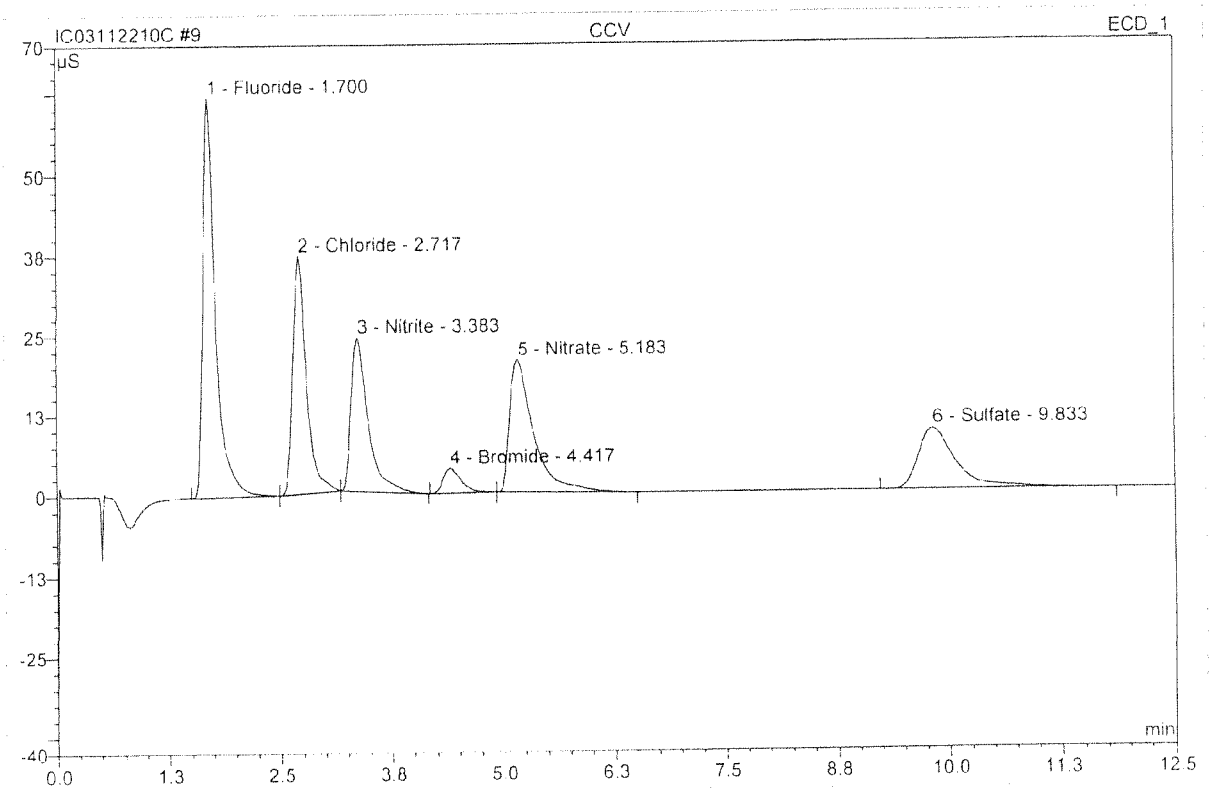
After
Initials _____

NOV 2 2 2010

☐Wrong Peak/Peak not Found
☑Baseline/shoulder Incorrect
☐Other _____

9 CCV

Sample Name:	**CCV**	*Injection Volume:*	**200.0**
Vial Number:	**8**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**11/22/2010 16:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**12.52**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	Fluoride	62.081	10.293	30.28	5.105	BMb
2	2.72	Chloride	37.108	6.612	19.45	4.493	bMb
3	3.38	Nitrite	23.960	5.280	15.53	1.840	bMB
4	4.42	Bromide	3.755	0.890	2.62	1.780	BMb
5	5.18	Nitrate	20.558	6.387	18.79	1.774	bMB
6	9.83	Sulfate	9.395	4.531	13.33	4.777	BMB
Total:			156.858	33.992	100.00	19.768	

Before

NOV 4 2 2010

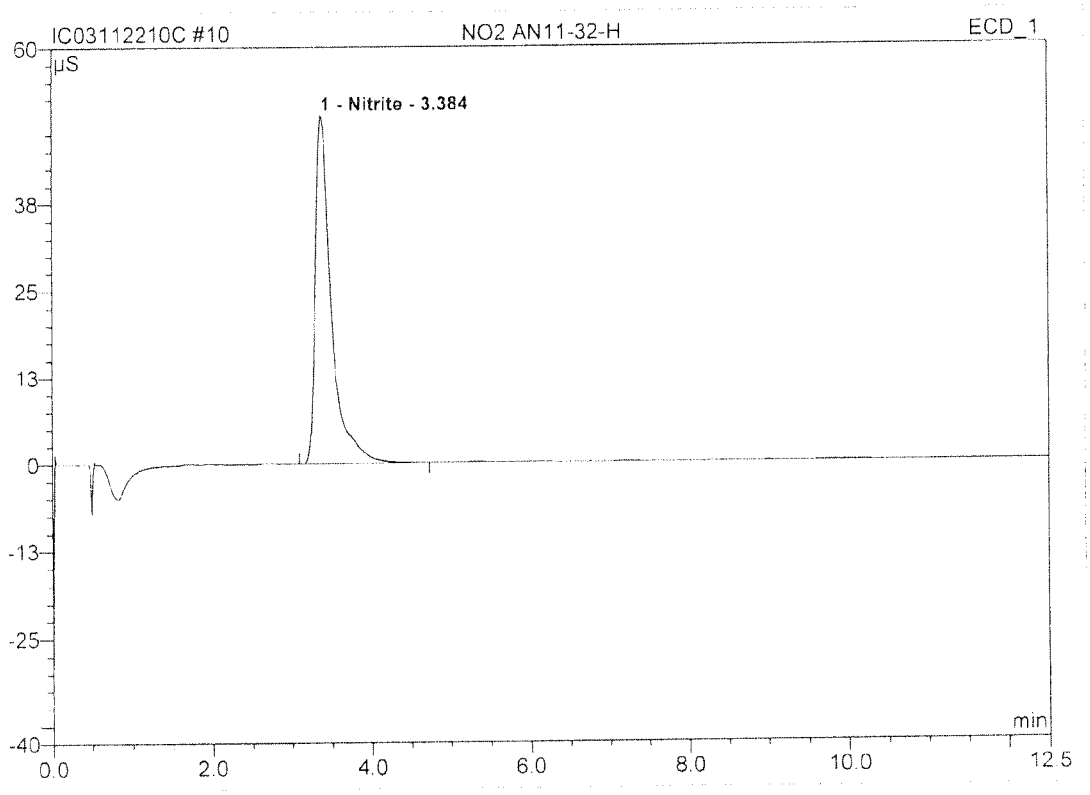
default/Integration

Columbia Analytical Services, Inc.

10 NO2 AN11-32-H

NO2

Sample Name:	**NO2 AN11-32-H**	*Injection Volume:*	**200.0**
Vial Number:	**10**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0**
Recording Time:	**11/22/2010 16:26**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



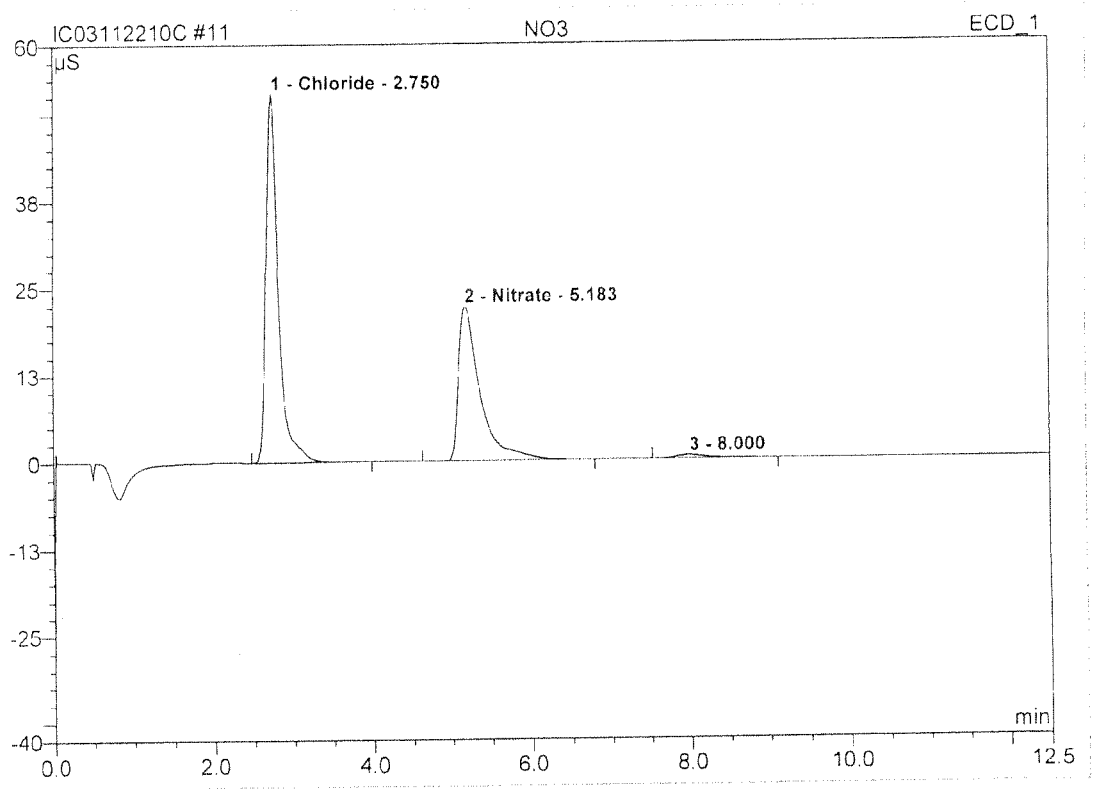
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.38	Nitrite	50.270	11.728	100.00	102.158	BMB
Total:			50.270	11.728	100.00	102.158	

Columbia Analytical Services, Inc.

11 NO3

NO3

Sample Name:	**NO3**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0**
Recording Time:	**11/22/2010 16:41**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



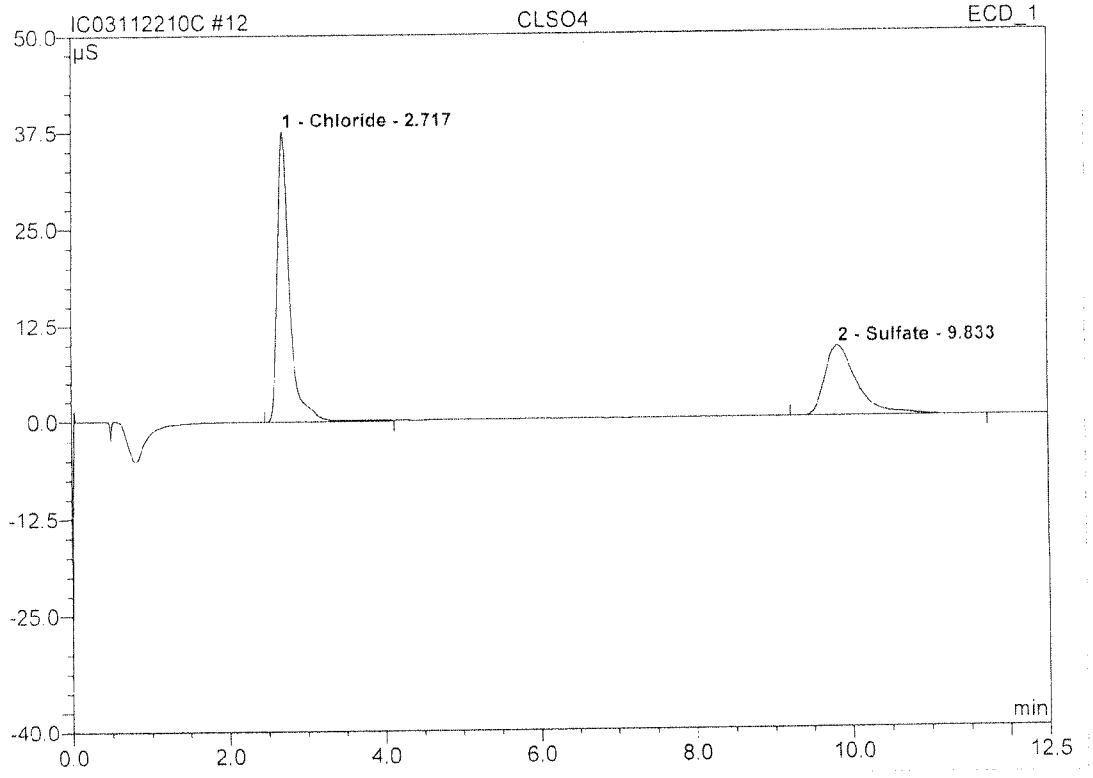
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.75	Chloride	53.078	9.510	56.79	64.626	BMB
2	5.18	Nitrate	22.119	7.007	41.84	19.466	BMB
3	8.00	n.a.	0.491	0.230	1.37	n.a.	BMB
Total:			75.688	16.746	100.00	84.092	

Columbia Analytical Services, Inc.

12 CLSO4

CLSO4

Sample Name:	**CLSO4**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0**
Recording Time:	**11/22/2010 16:56**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



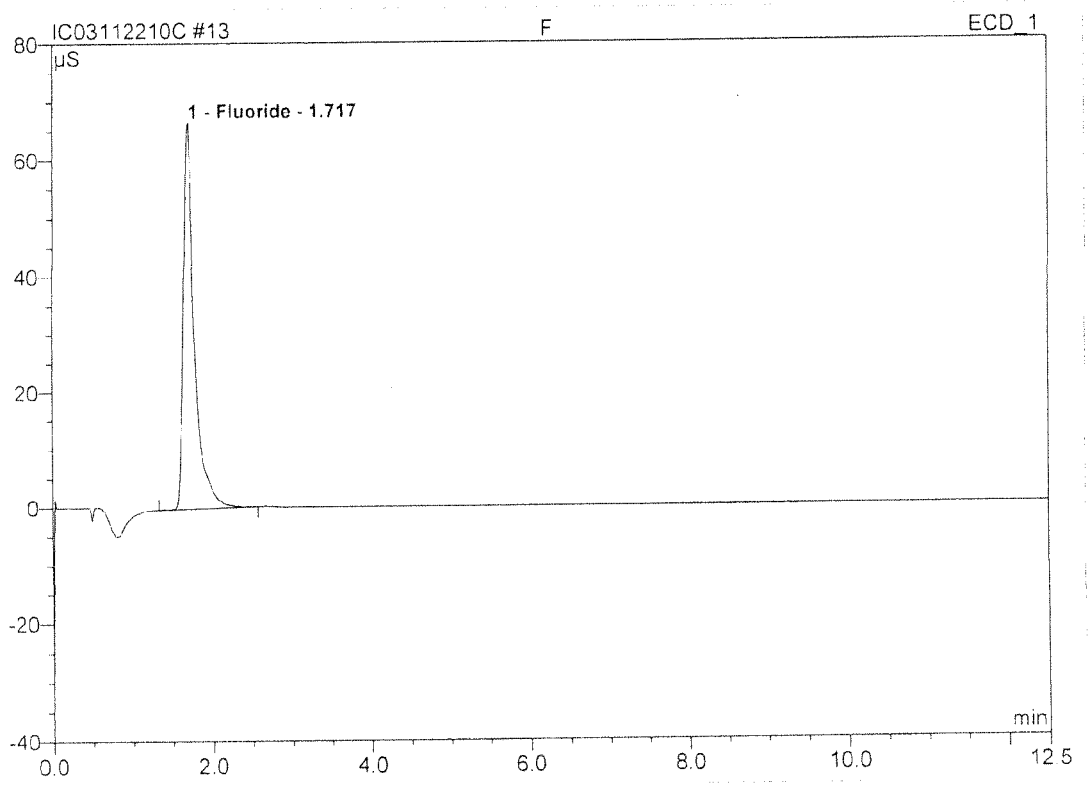
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.72	Chloride	37.687	6.916	61.01	4.700	BMB
2	9.83	Sulfate	9.129	4.421	38.99	4.660	BMB
Total:			46.817	11.337	100.00	9.360	

Columbia Analytical Services, Inc.

13 F

F

Sample Name:	F	*Injection Volume:*	200.0
Vial Number:	13	*Channel:*	ECD_1
Sample Type:	unknown	*ICAL Date:*	
Control Program:	epa300	*ICAL ID#:*	
Quantif. Method:	epa300	*Dilution Factor:*	2.0
Recording Time:	11/22/2010 17:11	*Analyst:*	JS / EM
Run Time (min):	12.50	*Inst. ID:*	K-IC-03



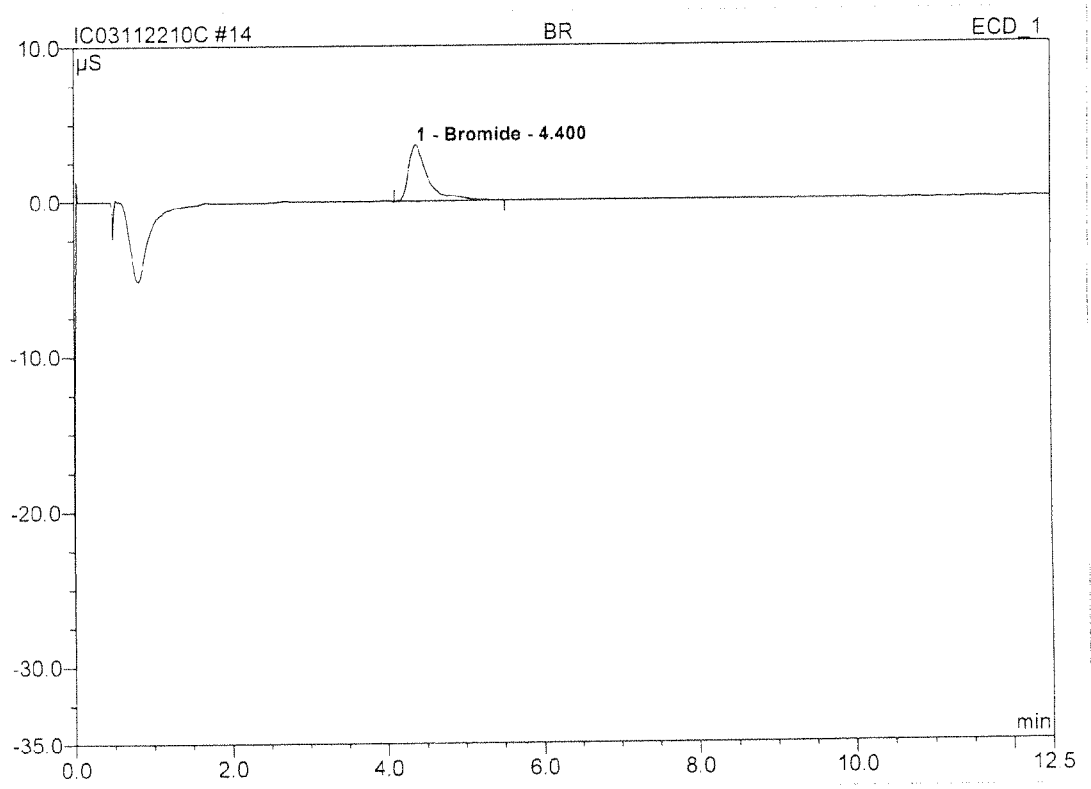
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	Fluoride	66.734	11.007	100.00	10.919	BMB
Total:			66.734	11.007	100.00	10.919	

Columbia Analytical Services, Inc.

14 BR

BR

Sample Name:	**BR**	*Injection Volume:*	**200.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*ICAL Date:*	
Control Program:	**epa300**	*ICAL ID#:*	
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0**
Recording Time:	**11/22/2010 17:26**	*Analyst:*	**JS / EM**
Run Time (min):	**12.50**	*Inst. ID:*	**K-IC-03**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	4.40	Bromide	3.615	1.033	100.00	4.130	BMB
Total:			3.615	1.033	100.00	4.130	

Sequence # IC030126I1 | Ion Chromatography Data Quality Report Inorganics | Run # 233858

1. Holding times met for all samples analyzed? yes/no/NA
2. Are dilutions within upper limits of the curve? yes/no/NA
3. Are analysis/extraction stickers included on report? yes/no/NA
4. Are detection limits reported correctly? yes/no/NA
5. Are all quality control criteria met?
   a. Method Blanks, CCV's, CCB's, LCS's, Dups, and Spikes analyzed at the proper frequency? yes/no/NA
   b. Are CCV's and CCB's all within acceptance limits? yes/no/NA
   c. Are results for Method Blanks all ND? yes/no/NA
   d. Are all QC samples within acceptance criteria? (LCS% rec, MS% rec, Duplicate RPD's, etc.) yes/no/NA
   e. Are all exceptions explained? yes/no/NA
6. Are all samples labelled correctly? yes/no/NA

CAS Standard Identification Codes and Abbreviated Footnotes for Chromatograms

G1 Sample was analyzed past the end of recommended holding time. See Nonconformity sheet.
G2 Sample was reanalyzed past holding time. Initial analysis was performed within recommended holding time.
G4 Sample was received past the end of recommended holding time.
R1 High RPD is because the duplicate sample results are less than three times the method reporting limit.
i MRL is elevated because of matrix interferences and the sample required diluting.
F Sample filtered primary to analysis.
A KO133-1,2 Received analyzed past hold.

LCS

Fluoride	True Value = 11.0 ppm	CAS ID # = AN1-33-CC	Expires: 3.3.11
Chloride	True Value = 5.0ppm	CAS ID # = ERA#0824-10-01	Expires: 3.11
Nitrite	True Value = 100 ppm	CAS ID # = AN1-33-Y	Expires: 1.26.11
Bromide	True Value = 4.0 ppm	CAS ID # = AN1-33-Z	Expires: —
Nitrate	True Value = 15.2 ppm	CAS ID # = AN1-34-F	Expires: 3.24.11
Sulfate	True Value = 5.0 ppm	CAS ID # = ERA#0824-10-01	Expires: 3.11

CCV CAS ID # = AN11-85-P Expires 1.26.11

Fluoride	True Value = 5.0 ppm	10K CAS ID # = AN1-33-DD	Expires: 4.28.11
Chloride	True Value = 5.0 ppm	10K CAS ID # = AN1-33-AA	Expires: 2.5.11
Nitrite	True Value = 2.0 ppm	10K CAS ID # = AN1-33-EE	Expires: 4.28.11
Bromide	True Value = 2.0 ppm	10K CAS ID # = AN1-34-E	Expires: 2 —
Nitrate	True Value = 2.0 ppm	10K CAS ID # = AN1-33-W	Expires: 1.30.11
Sulfate	True Value = 5.0 ppm	10K CAS ID # = AN1-33-BB	Expires: 2.5.11

Spike
2.0ppm X dilution factor CAS ID# = AN11-75-O Expires 1.26.11

Fluoride	10K CAS ID # = AN1-33-DD	Expires: ccv
Chloride	10K CAS ID # = AN1-33-AA	Expires:
Nitrite	10K CAS ID # = AN1-33-EE	Expires:
Bromide	10K CAS ID # = AN1-33-U	Expires:
Nitrate	10K CAS ID # = AN1-33-W	Expires:
Sulfate	10K CAS ID # = AN1-33-BB	Expires: ✓

Analyst: ND Date: 1.26.11

First Review: ✓ Date: 1-27-11

Final Review: BH Date: 1/27/11

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Analytical Results Summary

strument Name: K-IC-03 **Analyst:** NBAKOTICH **Analysis Lot:** 233888 **Method/Testcode:** 300.0/SO4

Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
)0659-001	Sulfate	N/A		Water	6.42 mg/L	5 mL	6.42 mg/L	2	0.02	0.40			1/26/11 12:56:00	N	II
)0661-002	Chloride	N/A		Water	55.62 mg/L	5 mL	55.6 mg/L	10	0.3	2.0			1/26/11 12:42:00	N	IV
)0661-002	Sulfate	N/A		Water	37.13 mg/L	5 mL	37.1 mg/L	10	0.1	2.0			1/26/11 12:42:00	N	IV
)0682-001	Sulfur	N/A		Misc. Solid	0.00 mg/L	1 g	2.6 µg U	2		2.6			1/26/11 19:56:00	N	V
)0683-001	Sulfur	N/A		Misc. Solid	0.00 mg/L	1 g	2.6 µg U	2		2.6			1/26/11 20:10:00	N	V
)0692-001	Chloride	N/A		Water	656.01 mg/L	5 mL	656 mg/L	100	3	20			1/26/11 13:10:00	N	IV
)0692-001	Fluoride	N/A		Water	0.16 mg/L	5 mL	0.16 mg/L J	2	0.006	0.40			1/26/11 13:24:00	N	IV
)0692-001	Sulfate	N/A		Water	26.49 mg/L	5 mL	26.5 mg/L	10	0.1	2.0			1/26/11 12:00:00	N	IV
)0692-002	Chloride	N/A		Water	640.75 mg/L	5 mL	641 mg/L	100	3	20			1/26/11 14:34:00	N	IV
)0692-002	Fluoride	N/A		Water	0.17 mg/L	5 mL	0.17 mg/L J	2	0.006	0.40			1/26/11 14:47:00	N	IV
)0692-002	Sulfate	N/A		Water	26.65 mg/L	5 mL	26.7 mg/L	10	0.1	2.0			1/26/11 12:14:00	N	IV
00692-003	Chloride	N/A		Water	0.00 mg/L	5 mL	0.40 mg/L U	2	0.06	0.40			1/26/11 12:28:00	N	IV
00692-003	Fluoride	N/A		Water	0.00 mg/L	5 mL	0.40 mg/L U	2	0.006	0.40			1/26/11 12:28:00	N	IV
00692-003	Sulfate	N/A		Water	0.00 mg/L	5 mL	0.40 mg/L U	2	0.02	0.40			1/26/11 12:28:00	N	IV
00699-001	Nitrate as Nitrogen	N/A		Water	0.71 mg/L	5 mL	0.71 mg/L	2	0.008	0.10			1/26/11 11:46:00	N	I
00699-001	Nitrite as Nitrogen	N/A		Water	0.00 mg/L	5 mL	0.10 mg/L U	2	0.004	0.10			1/26/11 11:46:00	N	I
00712-001	Fluoride	N/A		Drinking Water	0.39 mg/L	5 mL	0.40 mg/L U	2	0.006	0.40			1/26/11 14:20:00	N	I
00712-001	Sulfate	N/A		Drinking Water	1.97 mg/L	5 mL	1.97 mg/L	2	0.02	0.40			1/26/11 14:20:00	N	I
00733-001	Chloride	N/A		Water	6.76 mg/L	5 mL	6.8 mg/L	2	0.06	2.0			1/26/11 17:22:00	N	V
00733-001	Nitrate as Nitrogen	N/A		Water	0.28 mg/L	5 mL	0.28 mg/L	2	0.008	0.10			1/26/11 17:22:00	N	V
00733-001	Sulfate	N/A		Water	69.32 mg/L	5 mL	69.3 mg/L	10	0.1	1.0			1/26/11 21:34:00	N	V
00733-002	Chloride	N/A		Water	9.74 mg/L	5 mL	9.7 mg/L	2	0.06	2.0			1/26/11 17:36:00	N	V
00733-002	Nitrate as Nitrogen	N/A		Water	0.13 mg/L	5 mL	0.13 mg/L	2	0.008	0.10			1/26/11 17:36:00	N	V
00733-002	Sulfate	N/A		Water	31.89 mg/L	5 mL	31.9 mg/L	10	0.1	1.0			1/26/11 21:48:00	N	V
00733-003	Chloride	N/A		Water	3.38 mg/L	5 mL	3.4 mg/L	2	0.06	2.0			1/26/11 16:27:00	N	V
00733-003	Nitrate as Nitrogen	N/A		Water	0.02 mg/L	5 mL	0.10 mg/L U	2	0.008	0.10			1/26/11 16:27:00	N	V
00733-003	Sulfate	N/A		Water	2.19 mg/L	5 mL	2.19 mg/L	2	0.02	0.20			1/26/11 16:27:00	N	V
00733-004	Chloride	N/A		Water	6.82 mg/L	5 mL	6.8 mg/L	2	0.06	2.0			1/26/11 17:08:00	N	V
00733-004	Nitrate as Nitrogen	N/A		Water	0.28 mg/L	5 mL	0.28 mg/L	2	0.008	0.10			1/26/11 17:08:00	N	V
00733-004	Sulfate	N/A		Water	69.10 mg/L	5 mL	69.1 mg/L	10	0.1	1.0			1/26/11 22:02:00	N	V
1100783-01	Sulfur	MB		Misc. Solid	0.00 mg/L	50 g	0.14 mg/Kg U	2		0.14			1/26/11 18:46:00	N	V

110

licates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

strument Name: K-IC-03 **Analyst:** NBAKOTICH **Analysis Lot:** 233888 **Method/Testcode:** 300.0/Sulfur Tot H2O2

Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
100783-02	Sulfur	MB		Misc. Solid	0.00 mg/L	50 g	0.14 mg/Kg U	2		0.14			1/26/11 19:00:00	N	V
100783-03	Sulfur	MB		Misc. Solid	0.00 mg/L	50 g	0.14 mg/Kg U	2		0.14			1/26/11 19:14:00	N	V
100783-04	Sulfur	LCS		Misc. Solid	141.21 mg/L	2 g	3530 mg/Kg	100		7.0	83		1/26/11 19:28:00	N	V
100783-05	Sulfur	LCS		Misc. Solid	317.67 mg/L	4 g	3970 mg/Kg	200		14	93		1/26/11 19:42:00	N	V
1100784-01	Chloride	N/A		Water	3.36 mg/L	5 mL	3.4 mg/L	10	0.3	2.0			1/26/11 15:43:00	N	I
1100784-01	Fluoride	N/A		Water	0.00 mg/L	5 mL	2.0 mg/L U	10	0.03	2.0			1/26/11 15:43:00	N	I
1100784-01	Nitrate as Nitrogen	N/A		Water	0.67 mg/L	5 mL	0.67 mg/L	10	0.04	0.50			1/26/11 15:43:00	N	I
1100784-01	Nitrite as Nitrogen	N/A		Water	0.00 mg/L	5 mL	0.50 mg/L U	10	0.02	0.50			1/26/11 15:43:00	N	I
1100784-01	Sulfate	N/A		Water	28.80 mg/L	5 mL	28.8 mg/L	10	0.1	2.0			1/26/11 15:43:00	N	I
1100784-02	Chloride	MS	KQ1100784-01	Water	6.94 mg/L	5 mL	6.94 mg/L	2	0.06	0.40	89		1/26/11 15:15:00	N	I
1100784-02	Fluoride	MS	KQ1100784-01	Water	3.99 mg/L	5 mL	3.99 mg/L	2	0.006	0.40	100		1/26/11 15:15:00	N	I
1100784-02	Nitrate as Nitrogen	MS	KQ1100784-01	Water	4.81 mg/L	5 mL	4.81 mg/L	2	0.008	0.10	103		1/26/11 15:15:00	N	I
1100784-02	Nitrite as Nitrogen	MS	KQ1100784-01	Water	3.87 mg/L	5 mL	3.87 mg/L	2	0.004	0.10	97		1/26/11 15:15:00	N	I
1100784-02	Sulfate	MS	KQ1100784-01	Water	49.68 mg/L	5 mL	49.7 mg/L	10	0.1	2.0	104		1/26/11 16:11:00	N	I
1100784-03	Chloride	DMS	KQ1100784-01	Water	6.96 mg/L	5 mL	6.96 mg/L	2	0.06	0.40	90	<1	1/26/11 15:29:00	N	I
1100784-03	Fluoride	DMS	KQ1100784-01	Water	4.02 mg/L	5 mL	4.02 mg/L	2	0.006	0.40	101	<1	1/26/11 15:29:00	N	I
1100784-03	Nitrate as Nitrogen	DMS	KQ1100784-01	Water	4.85 mg/L	5 mL	4.85 mg/L	2	0.008	0.10	105	<1	1/26/11 15:29:00	N	I
1100784-03	Nitrite as Nitrogen	DMS	KQ1100784-01	Water	3.91 mg/L	5 mL	3.91 mg/L	2	0.004	0.10	98	1	1/26/11 15:29:00	N	I
1100784-03	Sulfate	DMS	KQ1100784-01	Water	49.82 mg/L	5 mL	49.8 mg/L	10	0.1	2.0	105	<1	1/26/11 17:50:00	N	I
1100784-04	Chloride	DUP	KQ1100784-01	Water	3.31 mg/L	5 mL	3.31 mg/L	2	0.06	0.40		1	1/26/11 15:01:00	N	I
1100784-04	Fluoride	DUP	KQ1100784-01	Water	0.12 mg/L	5 mL	0.12 mg/L J	2	0.006	0.40		NC	1/26/11 15:01:00	N	I
1100784-04	Nitrate as Nitrogen	DUP	KQ1100784-01	Water	0.71 mg/L	5 mL	0.71 mg/L	2	0.008	0.10		6	1/26/11 15:01:00	N	I
1100784-04	Nitrite as Nitrogen	DUP	KQ1100784-01	Water	0.00 mg/L	5 mL	0.10 mg/L U	2	0.004	0.10		NC	1/26/11 15:01:00	N	I
1100784-04	Sulfate	DUP	KQ1100784-01	Water	28.76 mg/L	5 mL	28.8 mg/L	10	0.1	2.0		<1	1/26/11 15:57:00	N	I
1100784-05	Chloride	LCS		Water	4.77 mg/L	5 mL	4.77 mg/L	1	0.03	0.20	95		1/26/11 10:22:00	N	I
1100784-05	Fluoride	LCS		Water	10.61 mg/L	5 mL	10.6 mg/L	2	0.006	0.40	96		1/26/11 10:36:00	N	I
1100784-05	Nitrate as Nitrogen	LCS		Water	14.87 mg/L	5 mL	14.9 mg/L	5	0.02	0.25	98		1/26/11 10:08:00	N	I
1100784-05	Nitrite as Nitrogen	LCS		Water	100.31 mg/L	5 mL	100 mg/L	25	0.05	1.3	100		1/26/11 09:40:00	N	I
1100784-05	Sulfate	LCS		Water	4.64 mg/L	5 mL	4.64 mg/L	1	0.01	0.20	93		1/26/11 10:22:00	N	I
1100784-06	Chloride	MB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.03	0.20			1/26/11 09:54:00	N	I
1100784-06	Fluoride	MB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.003	0.20			1/26/11 09:54:00	N	I
1100784-06	Nitrate as Nitrogen	MB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.004	0.050			1/26/11 09:54:00	N	I

licates Final Result is not yet adjusted for Solids because it has not yet been determined.

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Analytical Results Summary

strument Name: K-IC-03 **Analyst:** NBAKOTICH **Analysis Lot:** 233888 **Method/Testcode:** 300.0/NO3

Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
100784-06	Nitrite as Nitrogen	MB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.002	0.050			1/26/11 09:54:00	N	I
100784-06	Sulfate	MB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.01	0.20			1/26/11 09:54:00	N	I
100784-07	Chloride	CCV		Water	4.72 mg/L	5 mL	4.72 mg/L	1					1/26/11 09:12:00	N	V
100784-07	Fluoride	CCV		Water	4.97 mg/L	5 mL	4.97 mg/L	1					1/26/11 09:12:00	N	V
100784-07	Nitrate as Nitrogen	CCV		Water	1.87 mg/L	5 mL	1.87 mg/L	1					1/26/11 09:12:00	N	V
100784-07	Nitrite as Nitrogen	CCV		Water	1.96 mg/L	5 mL	1.96 mg/L	1					1/26/11 09:12:00	N	V
100784-07	Sulfate	CCV		Water	4.75 mg/L	5 mL	4.75 mg/L	1					1/26/11 09:12:00	N	V
100784-08	Chloride	CCV		Water	4.75 mg/L	5 mL	4.75 mg/L	1					1/26/11 11:04:00	N	V
100784-08	Fluoride	CCV		Water	5.02 mg/L	5 mL	5.02 mg/L	1					1/26/11 11:04:00	N	V
100784-08	Nitrate as Nitrogen	CCV		Water	1.88 mg/L	5 mL	1.88 mg/L	1					1/26/11 11:04:00	N	V
100784-08	Nitrite as Nitrogen	CCV		Water	1.96 mg/L	5 mL	1.96 mg/L	1					1/26/11 11:04:00	N	V
100784-08	Sulfate	CCV		Water	4.82 mg/L	5 mL	4.82 mg/L	1					1/26/11 11:04:00	N	V
100784-09	Chloride	CCV		Water	4.72 mg/L	5 mL	4.72 mg/L	1					1/26/11 13:52:00	N	V
100784-09	Fluoride	CCV		Water	4.99 mg/L	5 mL	4.99 mg/L	1					1/26/11 13:52:00	N	V
100784-09	Nitrate as Nitrogen	CCV		Water	1.88 mg/L	5 mL	1.88 mg/L	1					1/26/11 13:52:00	N	V
100784-09	Nitrite as Nitrogen	CCV		Water	1.96 mg/L	5 mL	1.96 mg/L	1					1/26/11 13:52:00	N	V
100784-09	Sulfate	CCV		Water	4.71 mg/L	5 mL	4.71 mg/L	1					1/26/11 13:52:00	N	V
100784-10	Chloride	CCV		Water	4.79 mg/L	5 mL	4.79 mg/L	1					1/26/11 16:41:00	N	V
100784-10	Fluoride	CCV		Water	5.01 mg/L	5 mL	5.01 mg/L	1					1/26/11 16:41:00	N	V
100784-10	Nitrate as Nitrogen	CCV		Water	1.88 mg/L	5 mL	1.88 mg/L	1					1/26/11 16:41:00	N	V
100784-10	Nitrite as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					1/26/11 16:41:00	N	V
100784-10	Sulfate	CCV		Water	4.78 mg/L	5 mL	4.78 mg/L	1					1/26/11 16:41:00	N	V
100784-11	Chloride	CCV		Water	4.79 mg/L	5 mL	4.79 mg/L	1					1/26/11 18:18:00	N	V
100784-11	Fluoride	CCV		Water	5.04 mg/L	5 mL	5.04 mg/L	1					1/26/11 18:18:00	N	V
100784-11	Nitrate as Nitrogen	CCV		Water	1.85 mg/L	5 mL	1.85 mg/L	1					1/26/11 18:18:00	N	V
100784-11	Nitrite as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					1/26/11 18:18:00	N	V
100784-11	Sulfate	CCV		Water	4.75 mg/L	5 mL	4.75 mg/L	1					1/26/11 18:18:00	N	V
100784-12	Chloride	CCV		Water	4.75 mg/L	5 mL	4.75 mg/L	1					1/26/11 21:06:00	N	V
100784-12	Fluoride	CCV		Water	5.02 mg/L	5 mL	5.02 mg/L	1					1/26/11 21:06:00	N	V
100784-12	Nitrate as Nitrogen	CCV		Water	1.88 mg/L	5 mL	1.88 mg/L	1					1/26/11 21:06:00	N	V
100784-12	Nitrite as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					1/26/11 21:06:00	N	V
100784-12	Sulfate	CCV		Water	4.75 mg/L	5 mL	4.75 mg/L	1					1/26/11 21:06:00	N	V
100784-13	Chloride	CCV		Water	4.79 mg/L	5 mL	4.79 mg/L	1					1/26/11 22:16:00	N	V
100784-13	Fluoride	CCV		Water	5.03 mg/L	5 mL	5.03 mg/L	1					1/26/11 22:16:00	N	V

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licates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

strument Name: K-IC-03 **Analyst:** NBAKOTICH **Analysis Lot:** 233888 **Method/Testcode:** 300.0/NO3

Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
100784-13	Nitrate as Nitrogen	CCV		Water	1.84 mg/L	5 mL	1.84 mg/L	1					1/26/11 22:16:00	N	V
100784-13	Nitrite as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					1/26/11 22:16:00	N	V
100784-13	Sulfate	CCV		Water	4.81 mg/L	5 mL	4.81 mg/L	1					1/26/11 22:16:00	N	V
100784-14	Chloride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 09:26:00	N	V
100784-14	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 09:26:00	N	V
100784-14	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 09:26:00	N	V
100784-14	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 09:26:00	N	V
100784-14	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 09:26:00	N	V
100784-15	Chloride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 11:18:00	N	V
100784-15	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 11:18:00	N	V
100784-15	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 11:18:00	N	V
100784-15	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 11:18:00	N	V
100784-15	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 11:18:00	N	V
100784-16	Chloride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 14:06:00	N	V
100784-16	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 14:06:00	N	V
100784-16	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 14:06:00	N	V
100784-16	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 14:06:00	N	V
100784-16	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 14:06:00	N	V
100784-17	Chloride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 16:55:00	N	V
100784-17	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 16:55:00	N	V
100784-17	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 16:55:00	N	V
100784-17	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 16:55:00	N	V
100784-17	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 16:55:00	N	V
100784-18	Chloride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 18:32:00	N	V
100784-18	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 18:32:00	N	V
100784-18	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 18:32:00	N	V
100784-18	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 18:32:00	N	V
100784-18	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 18:32:00	N	V
100784-19	Chloride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 21:20:00	N	V
100784-19	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 21:20:00	N	V
100784-19	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 21:20:00	N	V
100784-19	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 21:20:00	N	V
100784-19	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 21:20:00	N	V
100784-20	Chloride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 22:30:00	N	V

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licates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

strument Name: K-IC-03 **Analyst:** NBAKOTICH **Analysis Lot:** 233888 **Method/Testcode:** 300.0/F

Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
100784-20	Fluoride	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 22:30:00	N	V
100784-20	Nitrate as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 22:30:00	N	V
100784-20	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 22:30:00	N	V
100784-20	Sulfate	CCB		Water	0.00 mg/L	5 mL	0.20 mg/L U	1	0.20	0.20			1/26/11 22:30:00	N	V

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licates Final Result is not yet adjusted for Solids because it has not yet been determined.

1386-1					F	1/100 → 1/5			
					Cl				
✓ for accidental preservation					NO2				
					Br				
					NO3				
					SO4				
661-2					F				
					Cl	0.5/5		✓	
					NO2				
					Br				
					NO3				
					SO4			✓	
599-1	1	X			F				
					Cl				
					NO2	2.5/5		✓	
					Br				
					NO3			✓	
					SO4	→ 1/5 for RL			
659-1					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4			✓	
592-1					F	0.5/5	2.5/5		
					Cl		1/100		
					NO2				
					Br				
					NO3				
					SO4			✓	
-2					F		2.5/5		
					Cl		1/100		
					NO2				
					Br				
					NO3				
					SO4			✓	
-3					F	2.5/5		✓	
					Cl			✓	
					NO2				
					Br				
					NO3				
					SO4			✓	✓
732-1	1				F			✓	
					Cl				
					NO2				
					Br				
					NO3				
					SO4			✓	
733-1					F				
					Cl			✓	
					NO2				
					Br				
					NO3			✓	
					SO4		0.5/5		
-2					F				
					Cl			✓	
					NO2				
					Br				
					NO3			✓	
					SO4		0.5/5		

733-3					F				
					Cl	2.515		✓	
					NO2				
					Br				
					NO3			✓	
					SO4			✓	
-4					F				
					Cl			✓	
					NO2				
					Br				
					NO3			✓	
					SO4		0.515		
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				
					F				
					Cl				
					NO2				
					Br				
					NO3				
					SO4				

Sequence: IC03012611
Operator: nbakotich
Printed: 1/27/2011 12:20:07 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 67

Created: 1/26/2011 9:11:47 AM by ACQWET10
Last Update: 1/26/2011 9:09:40 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
1	std2/lvl2	Standard	2	200.0	epa300	epa300	Finished	11/22/2010 2:11:37 PM
2	std3/lvl3	Standard	1	200.0	epa300	epa300	Finished	11/22/2010 2:26:35 PM
3	std4/lvl4	Standard	2	200.0	epa300	epa300	Finished	11/22/2010 2:41:33 PM
4	std5/lvl5	Standard	3	200.0	epa300	epa300	Finished	11/22/2010 2:56:30 PM
5	std6/lvl6	Standard	4	200.0	epa300	epa300	Finished	11/22/2010 3:11:28 PM
6	std7/lvl7	Standard	5	200.0	epa300	epa300	Finished	11/22/2010 3:26:25 PM
7	std8/lvl8	Standard	6	200.0	epa300	epa300	Finished	11/22/2010 3:41:23 PM
8	std1/lvl1	Standard	7	200.0	epa300	epa300	Finished	11/22/2010 3:56:20 PM
9	CCV1 AN11-85-P	Unknown	8	200.0	epa300	epa300	Finished	1/26/2011 9:12:54 AM
10	CCB1	Unknown	10	200.0	epa300	epa300	Finished	1/26/2011 9:26:51 AM
11	NO2 AN11-33-Y	Unknown	11	200.0	epa300	epa300	Finished	1/26/2011 9:40:49 AM
12	MB	Unknown	12	200.0	epa300	epa300	Finished	1/26/2011 9:54:47 AM
13	NO3	Unknown	13	200.0	epa300	epa300	Finished	1/26/2011 10:08:45 AM
14	CLSO4	Unknown	14	200.0	epa300	epa300	Finished	1/26/2011 10:22:43 AM
15	F	Unknown	15	200.0	epa300	epa300	Finished	1/26/2011 10:36:40 AM
16	SPKCHK AN11-75-O	Unknown	18	200.0	epa300	epa300	Finished	1/26/2011 10:50:38 AM
17	CCV2	Unknown	19	200.0	epa300	epa300	Finished	1/26/2011 11:04:36 AM
18	CCB2	Unknown	20	200.0	epa300	epa300	Finished	1/26/2011 11:18:33 AM
19	K1014386-001	Unknown	21	200.0	epa300	epa300	Finished	1/26/2011 11:32:31 AM
20	K1100699-001	Unknown	22	200.0	epa300	epa300	Finished	1/26/2011 11:46:30 AM
21	K1100692-001	Unknown	23	200.0	epa300	epa300	Finished	1/26/2011 12:00:28 PM
22	K1100692-002	Unknown	24	200.0	epa300	epa300	Finished	1/26/2011 12:14:26 PM
23	K1100692-003	Unknown	25	200.0	epa300	epa300	Finished	1/26/2011 12:28:23 PM
24	K1100661-002	Unknown	26	200.0	epa300	epa300	Finished	1/26/2011 12:42:21 PM
25	K1100659-001	Unknown	27	200.0	epa300	epa300	Finished	1/26/2011 12:56:18 PM
26	K1100692-001	Unknown	28	200.0	epa300	epa300	Finished	1/26/2011 1:10:16 PM
27	K1100692-001	Unknown	29	200.0	epa300	epa300	Finished	1/26/2011 1:24:13 PM
28	RB	Unknown	30	200.0	epa300	epa300	Finished	1/26/2011 1:38:11 PM
29	CCV3	Unknown	31	200.0	epa300	epa300	Finished	1/26/2011 1:52:09 PM
30	CCB3	Unknown	32	200.0	epa300	epa300	Finished	1/26/2011 2:06:06 PM
31	K1100712-001	Unknown	33	200.0	epa300	epa300	Finished	1/26/2011 2:20:04 PM
32	K1100692-002	Unknown	34	200.0	epa300	epa300	Finished	1/26/2011 2:34:02 PM
33	K1100692-002	Unknown	35	200.0	epa300	epa300	Finished	1/26/2011 2:47:59 PM
34	K1100699-001	Unknown	36	200.0	epa300	epa300	Finished	1/26/2011 3:01:57 PM
35	K1100699-001	Unknown	37	200.0	epa300	epa300	Finished	1/26/2011 3:15:55 PM
36	K1100699-001	Unknown	38	200.0	epa300	epa300	Finished	1/26/2011 3:29:53 PM
37	K1100699-001	Unknown	39	200.0	epa300	epa300	Finished	1/26/2011 3:43:50 PM
38	K1100699-001	Unknown	40	200.0	epa300	epa300	Finished	1/26/2011 3:57:48 PM
39	K1100699-001	Unknown	41	200.0	epa300	epa300	Finished	1/26/2011 4:11:45 PM
40	K1100733-003	Unknown	42	200.0	epa300	epa300	Finished	1/26/2011 4:27:05 PM
41	CCV4	Unknown	43	200.0	epa300	epa300	Finished	1/26/2011 4:41:03 PM
42	CCB4	Unknown	44	200.0	epa300	epa300	Finished	1/26/2011 4:55:00 PM

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 67
Created: 1/26/2011 9:11:47 AM by ACQWET10
Last Update: 1/26/2011 9:09:40 PM by ACQWET10

No.	Name	Dil. Factor	Comment
1	std2/lvl2	1.0000	
2	std3/lvl3	1.0000	
3	std4/lvl4	1.0000	
4	std5/lvl5	1.0000	
5	std6/lvl6	1.0000	
6	std7/lvl7	1.0000	
7	std8/lvl8	1.0000	
8	std1/lvl1	1.0000	
9	CCV1 AN11-85-P	1.0000	
10	CCB1	1.0000	
11	NO2 AN11-33-Y	25.0000	NO2
12	MB	1.0000	MB
13	NO3	5.0000	NO3
14	CLSO4	1.0000	CLSO4
15	F	2.0000	F
16	SPKCHK AN11-75-O	1.0000	SPKCHK
17	CCV2	1.0000	CCV2
18	CCB2	1.0000	CCB2
19	K1014386-001	500.0000	
20	K1100699-001	2.0000	
21	K1100692-001	10.0000	
22	K1100692-002	10.0000	
23	K1100692-003	2.0000	
24	K1100661-002	10.0000	
25	K1100659-001	2.0000	
26	K1100692-001	100.0000	
27	K1100692-001	2.0000	
28	RB	1.0000	
29	CCV3	1.0000	CCV3
30	CCB3	1.0000	CCB3
31	K1100712-001	2.0000	
32	K1100692-002	100.0000	
33	K1100692-002	2.0000	
34	K1100699-001	2.0000	D
35	K1100699-001	2.0000	MS
36	K1100699-001	2.0000	MSD
37	K1100699-001	10.0000	
38	K1100699-001	10.0000	D
39	K1100699-001	10.0000	MS
40	K1100733-003	2.0000	
41	CCV4	1.0000	CCV4
42	CCB4	1.0000	CCB4

Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 67
Created: 1/26/2011 9:11:47 AM by ACQWET10
Last Update: 1/26/2011 9:09:40 PM by ACQWET10

No.	Name	Type	Pos.	Inj. Vol.	Program	Method	Status	Inj. Date/Time
43	K1100733-004	Unknown	45	200.0	epa300	epa300	Finished	1/26/2011 5:08:58 PM
44	K1100733-001	Unknown	46	200.0	epa300	epa300	Finished	1/26/2011 5:22:56 PM
45	K1100733-002	Unknown	47	200.0	epa300	epa300	Finished	1/26/2011 5:36:54 PM
46	K1100669-001	Unknown	48	200.0	epa300	epa300	Finished	1/26/2011 5:50:52 PM
47	RB	Unknown	49	200.0	epa300	epa300	Finished	1/26/2011 6:04:50 PM
48	CCV5	Unknown	50	200.0	epa300	epa300	Finished	1/26/2011 6:18:48 PM
49	CCB5	Unknown	51	200.0	epa300	epa300	Finished	1/26/2011 6:32:45 PM
50	MB1 TS	Unknown	45	200.0	epa300	epa300	Finished	1/26/2011 6:46:43 PM
51	MB2 TS	Unknown	46	200.0	epa300	epa300	Finished	1/26/2011 7:00:42 PM
52	MB3 TS	Unknown	47	200.0	epa300	epa300	Finished	1/26/2011 7:14:40 PM
53	LCS1 TS	Unknown	48	200.0	epa300	epa300	Finished	1/26/2011 7:28:38 PM
54	LCS2 TS	Unknown	49	200.0	epa300	epa300	Finished	1/26/2011 7:42:36 PM
55	K1100682-001	Unknown	50	200.0	epa300	epa300	Finished	1/26/2011 7:56:34 PM
56	K1100683-001	Unknown	51	200.0	epa300	epa300	Finished	1/26/2011 8:10:32 PM
57	K1100682-001	Unknown	52	200.0	epa300	epa300	Finished	1/26/2011 8:24:29 PM
58	K1100683-001	Unknown	53	200.0	epa300	epa300	Finished	1/26/2011 8:38:27 PM
59	RB	Unknown	54	200.0	epa300	epa300	Finished	1/26/2011 8:52:25 PM
60	CCV6	Unknown	55	200.0	epa300	epa300	Finished	1/26/2011 9:06:23 PM
61	CCB6	Unknown	56	200.0	epa300	epa300	Finished	1/26/2011 9:20:21 PM
62	K1100733-001	Unknown	57	200.0	epa300	epa300	Finished	1/26/2011 9:34:19 PM
63	K1100733-002	Unknown	58	200.0	epa300	epa300	Finished	1/26/2011 9:48:16 PM
64	K1100733-004	Unknown	59	200.0	epa300	epa300	Finished	1/26/2011 10:02:15 PM
65	CCV7	Unknown	60	200.0	epa300	epa300	Finished	1/26/2011 10:16:12 PM
66	CCB7	Unknown	61	200.0	epa300	epa300	Finished	1/26/2011 10:30:10 PM
67	STOP	Unknown	62	200.0	shutdown 120	epa300	Finished	1/26/2011 10:44:07 PM

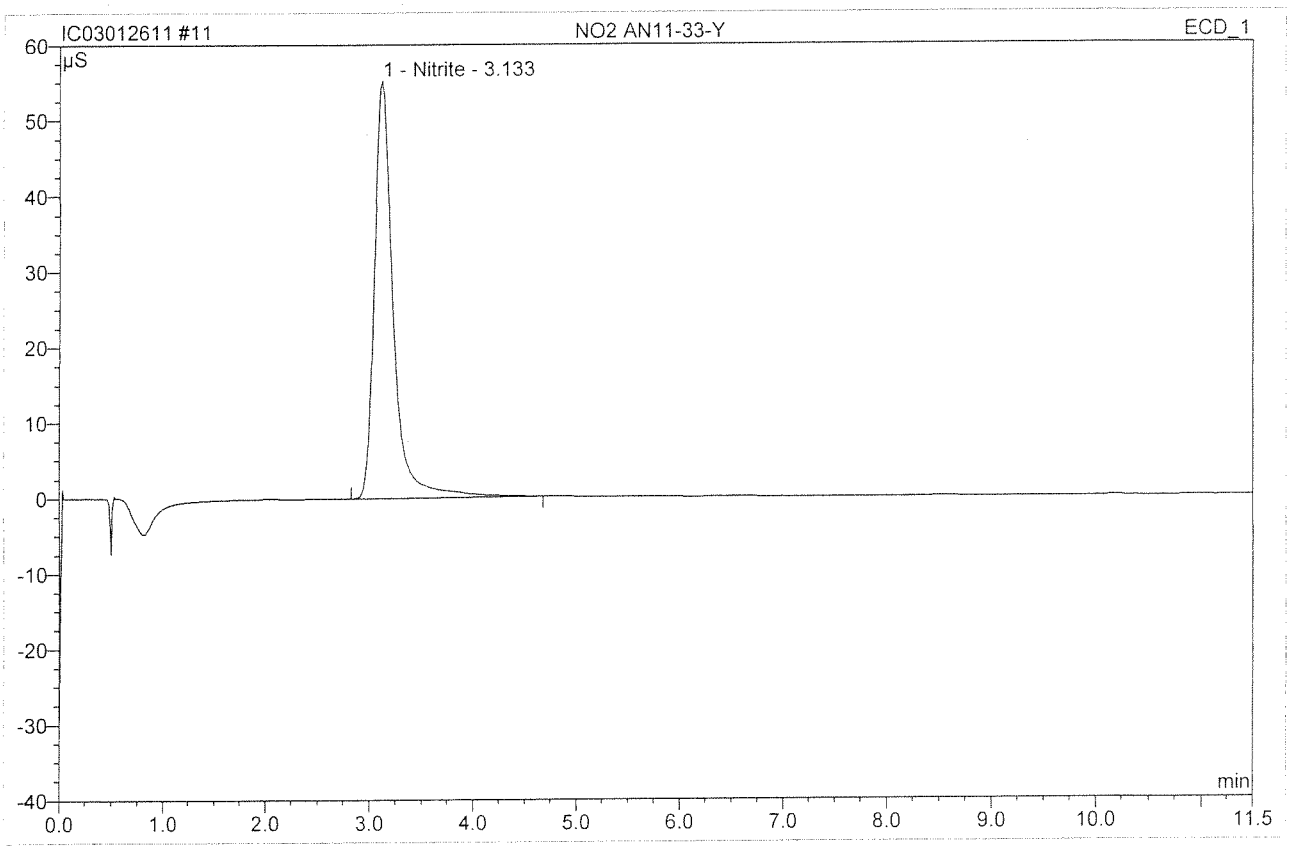
Title:
Datasource: ACQWET10_local
Location: DX120A
Timebase: DX120
#Samples: 67
Created: 1/26/2011 9:11:47 AM by ACQWET10
Last Update: 1/26/2011 9:09:40 PM by ACQWET10

No.	Name	Dil. Factor	Comment
43	K1100733-004	2.0000	
44	K1100733-001	2.0000	
45	K1100733-002	2.0000	
46	K1100669-001	10.0000	MSD
47	RB	1.0000	
48	CCV5	1.0000	CCV5
49	CCB5	1.0000	CCB5
50	MB1 TS	2.0000	
51	MB2 TS	2.0000	
52	MB3 TS	2.0000	
53	LCS1 TS	100.0000	
54	LCS2 TS	200.0000	
55	K1100682-001	2.0000	
56	K1100683-001	2.0000	
57	K1100682-001	20.0000	
58	K1100683-001	20.0000	
59	RB	1.0000	
60	CCV6	1.0000	CCV6
61	CCB6	1.0000	CCB6
62	K1100733-001	10.0000	
63	K1100733-002	10.0000	
64	K1100733-004	10.0000	
65	CCV7	1.0000	CCV7
66	CCB7	1.0000	CCB7
67	STOP	1.0000	CCB7

11 NO2 AN11-33-Y

NO2

Sample Name:	**NO2 AN11-33-Y**	*Injection Volume:*	**200.0**
Vial Number:	**11**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**25.0000**
Recording Time:	**1/26/2011 9:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

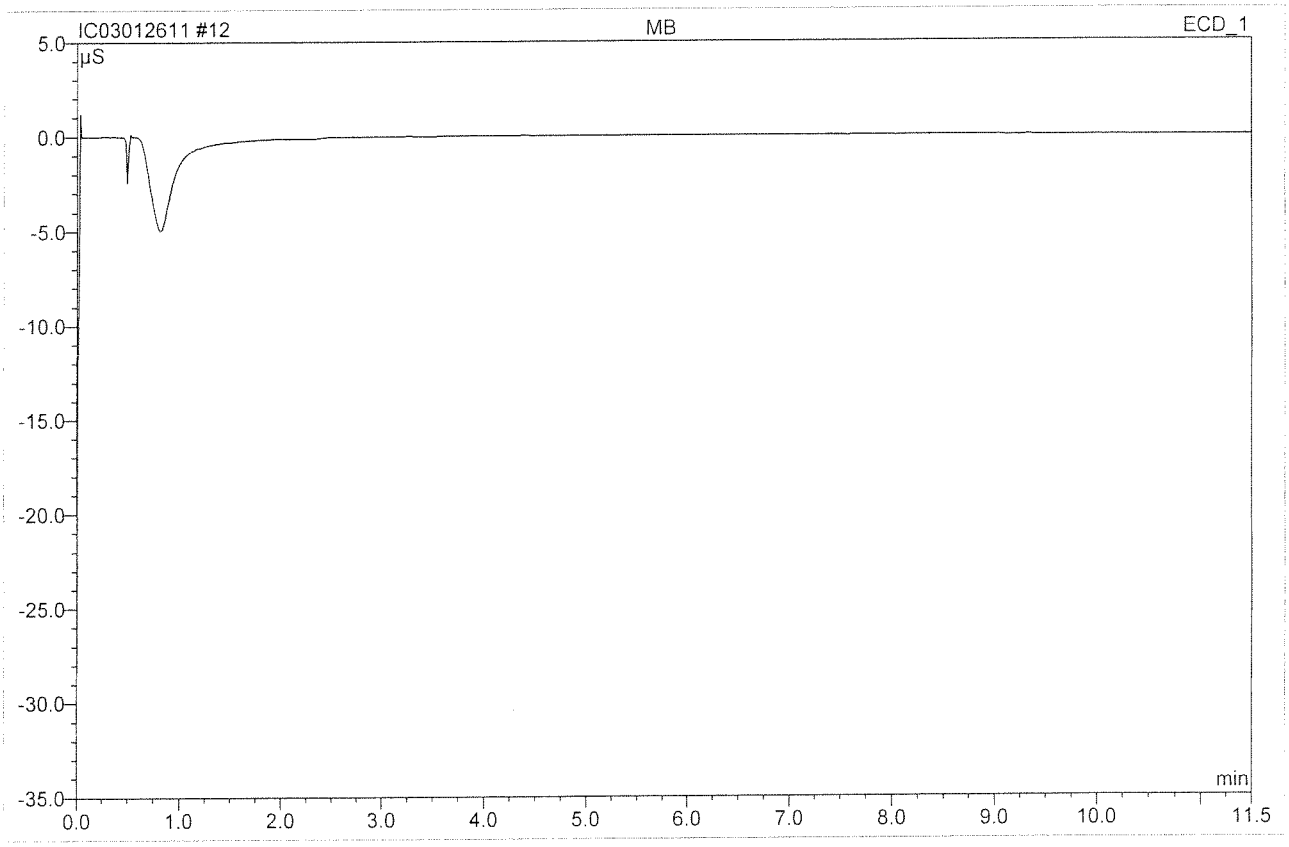


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	3.13	Nitrite	55.186	11.517	100.00	100.313	BMB
Total:			55.186	11.517	100.00	100.313	

12 MB

MB

Sample Name:	**MB**	*Injection Volume:*	**200.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 9:54**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

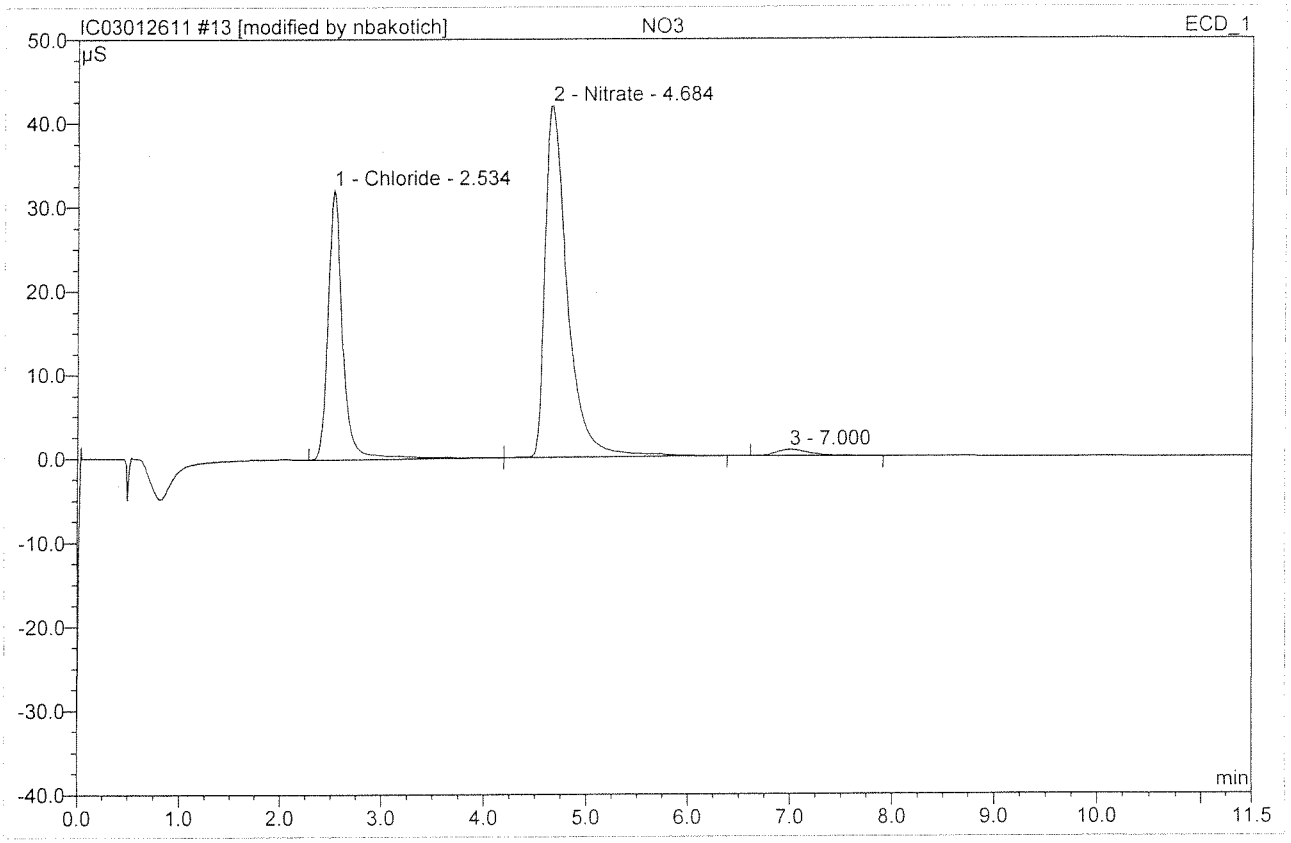


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

13 NO3

NO3

Sample Name:	**NO3**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0000**
Recording Time:	**1/26/2011 10:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.53	Chloride	32.193	5.513	33.38	18.732	BMb*
2	4.68	Nitrate	41.908	10.707	64.84	14.872	bMB*
3	7.00	n.a.	0.744	0.294	1.78	n.a.	BMB*
Total:			74.845	16.513	100.00	33.604	

After Initials nb

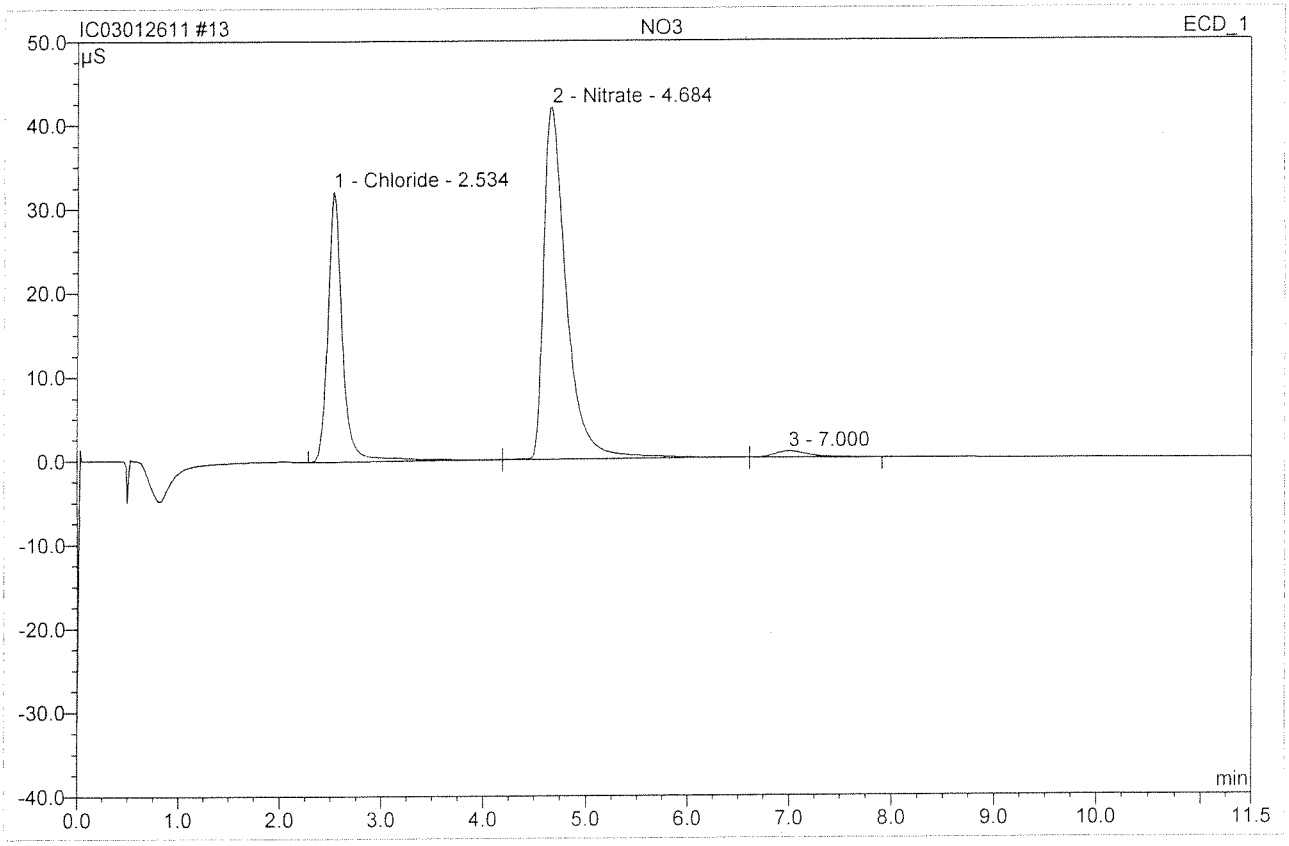
JAN 2 7 2011

☐ Wrong Peak/Peak not Found
☒ Baseline/shoulder Incorrect
☐ Other

13 NO3

NO3

Sample Name:	**NO3**	*Injection Volume:*	**200.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**5.0000**
Recording Time:	**1/26/2011 10:08**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.53	Chloride	32.193	5.513	33.30	18.732	BMB
2	4.68	Nitrate	41.915	10.747	64.92	14.928	bMb
3	7.00	n.a.	0.744	0.294	1.77	n.a.	bMB
Total:			74.852	16.553	100.00	33.660	

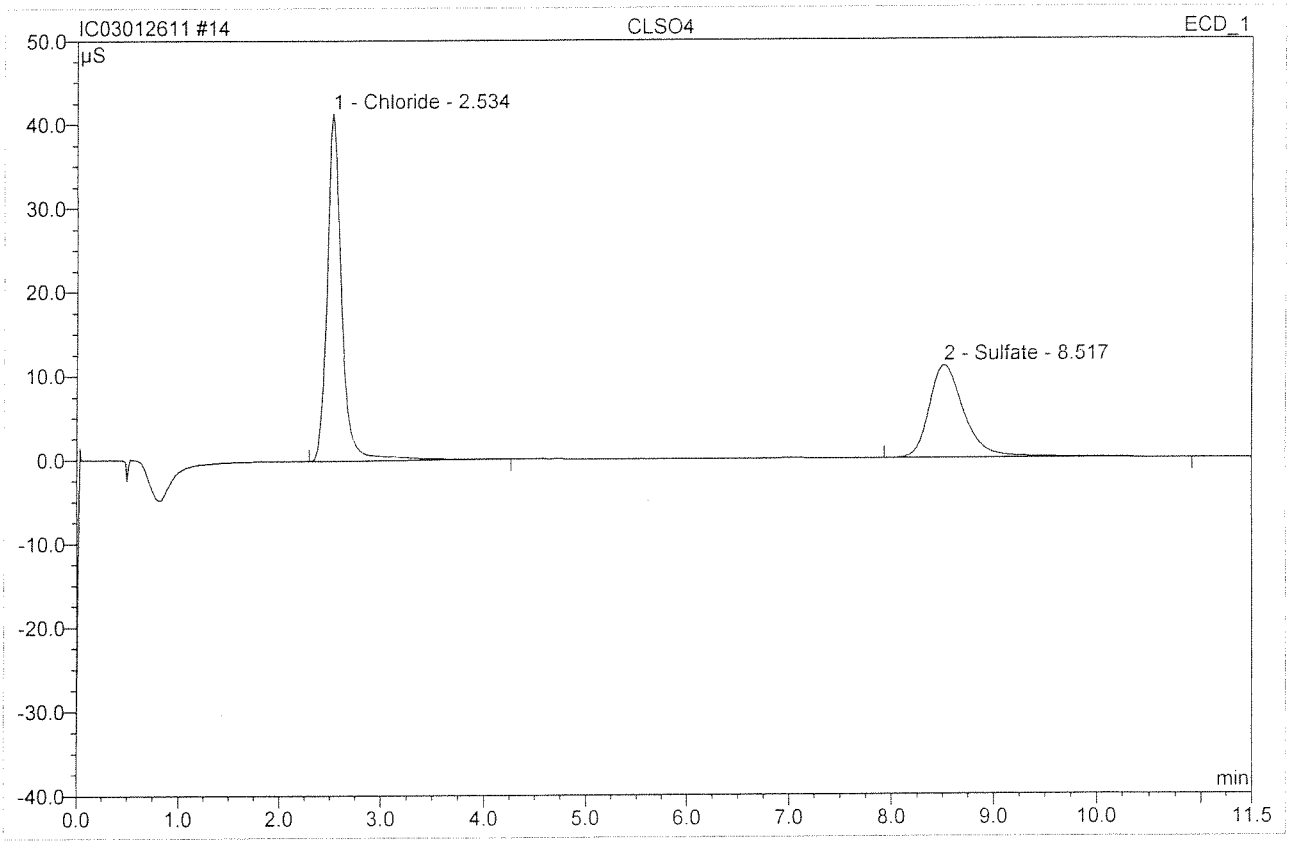
Before

JAN 2 7 2011

14 CLSO4

CLSO4

Sample Name:	**CLSO4**	*Injection Volume:*	**200.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 10:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

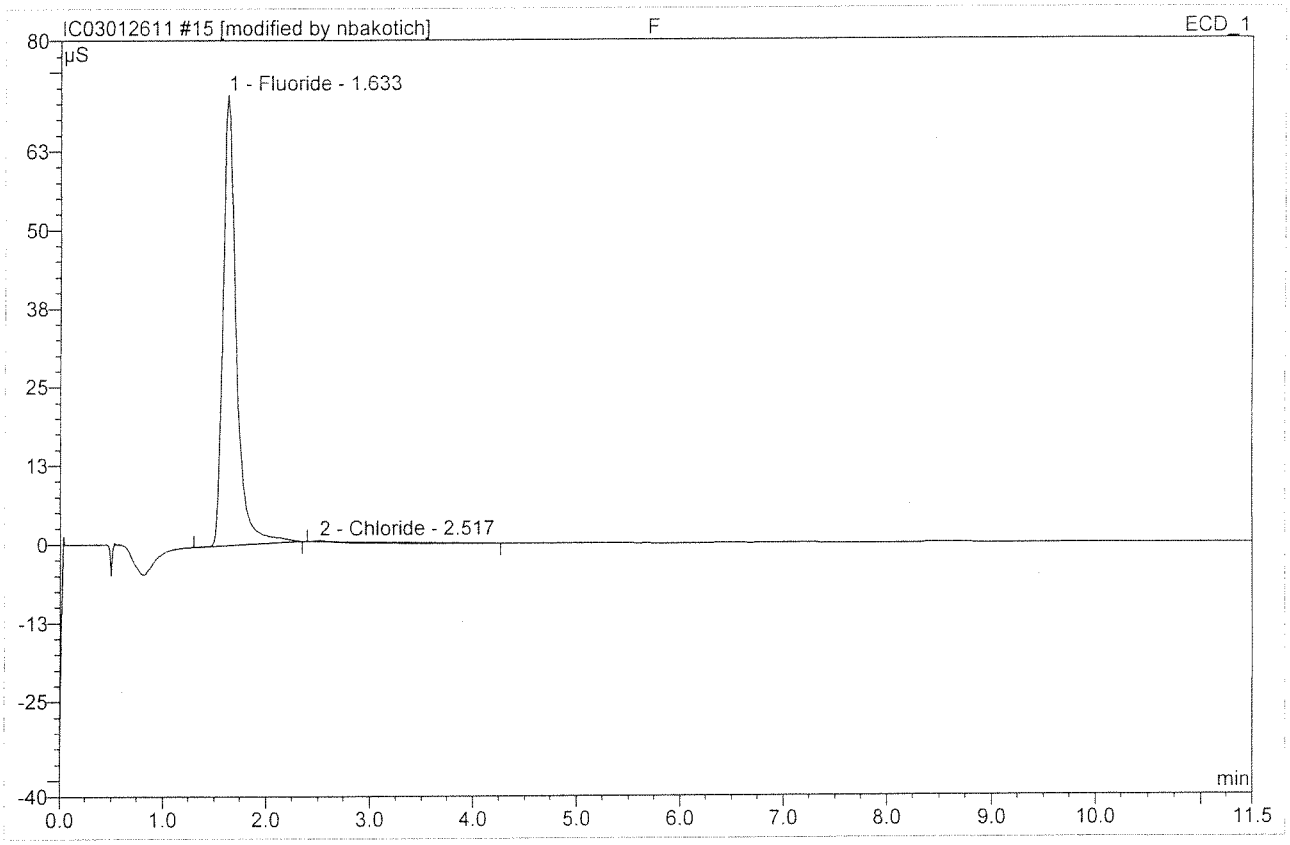


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.53	Chloride	41.473	7.025	61.48	95 4.774	BMB
2	8.52	Sulfate	11.019	4.401	38.52	93 4.639	BMB
Total:			52.492	11.425	100.00	9.413	

15 F

F

Sample Name:	**F**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 10:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	71.603	10.698	98.59	96 10.612	BMB*
2	2.52	Chloride	0.203	0.153	1.41	0.209	BMB*
Total:			71.806	10.851	100.00	10.820	

After
Initials NB

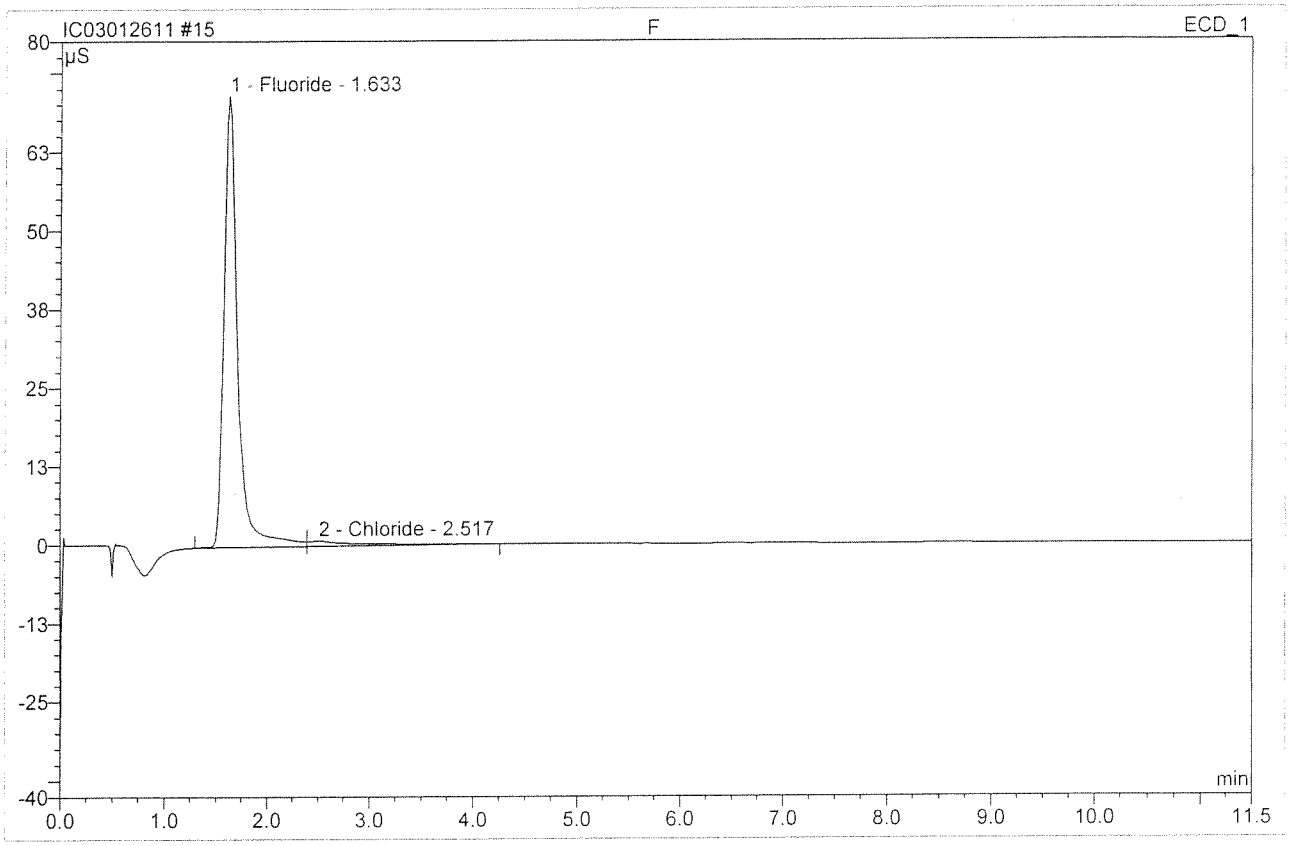
JAN 2 7 2011

☐ Wrong Peak/Peak not Found
☒ Baseline/shoulder incorrect
☐ Other_____

15 F

F

Sample Name:	**F**	*Injection Volume:*	**200.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 10:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.63	Fluoride	71.847	11.138	95.45	11.049	BM
2	2.52	Chloride	0.890	0.531	4.55	0.721	MB
Total:			72.737	11.669	100.00	11.770	

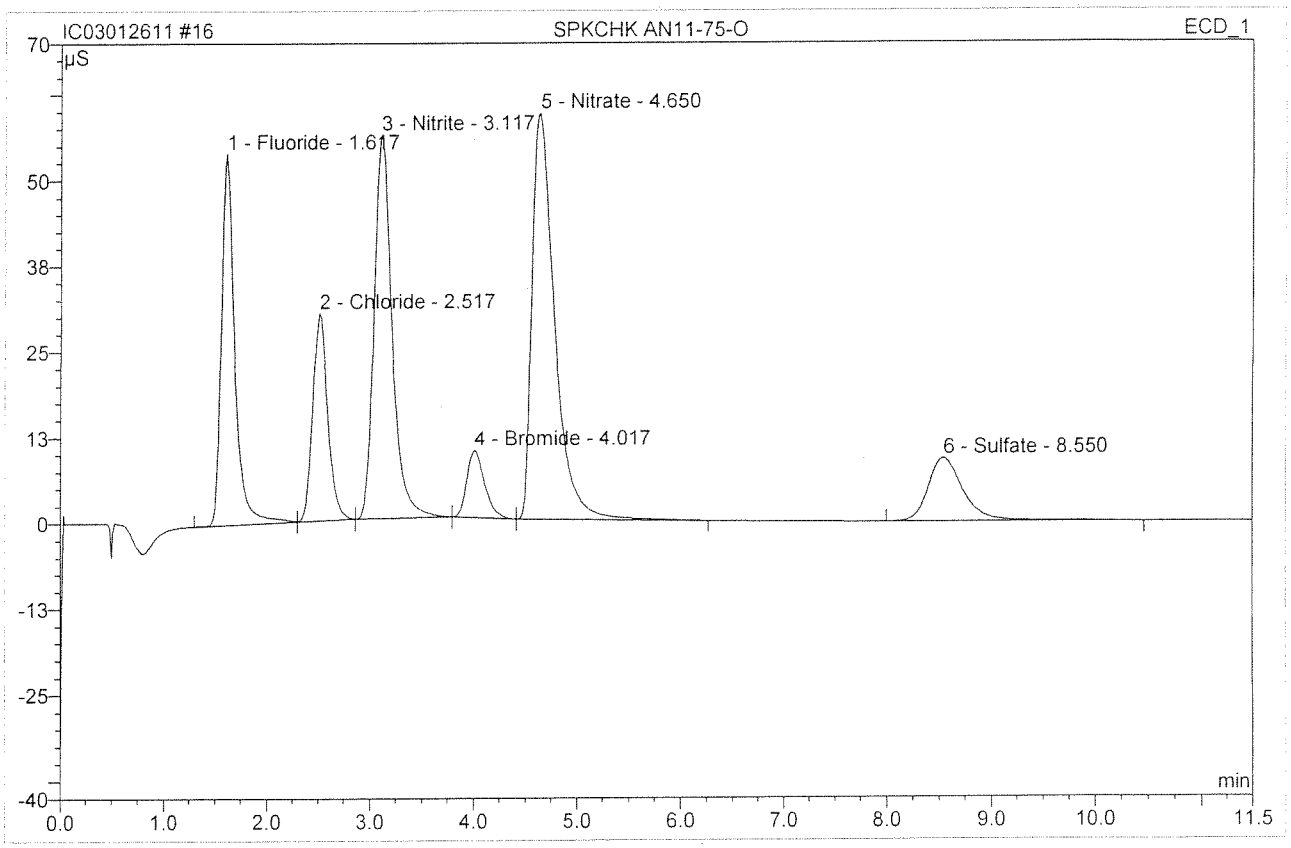
Before

JAN 2 7 2011

16 SPKCHK AN11-75-O

SPKCHK

Sample Name:	**SPKCHK AN11-75-O**	*Injection Volume:*	**200.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**1.0000**
Recording Time:	**1/26/2011 10:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

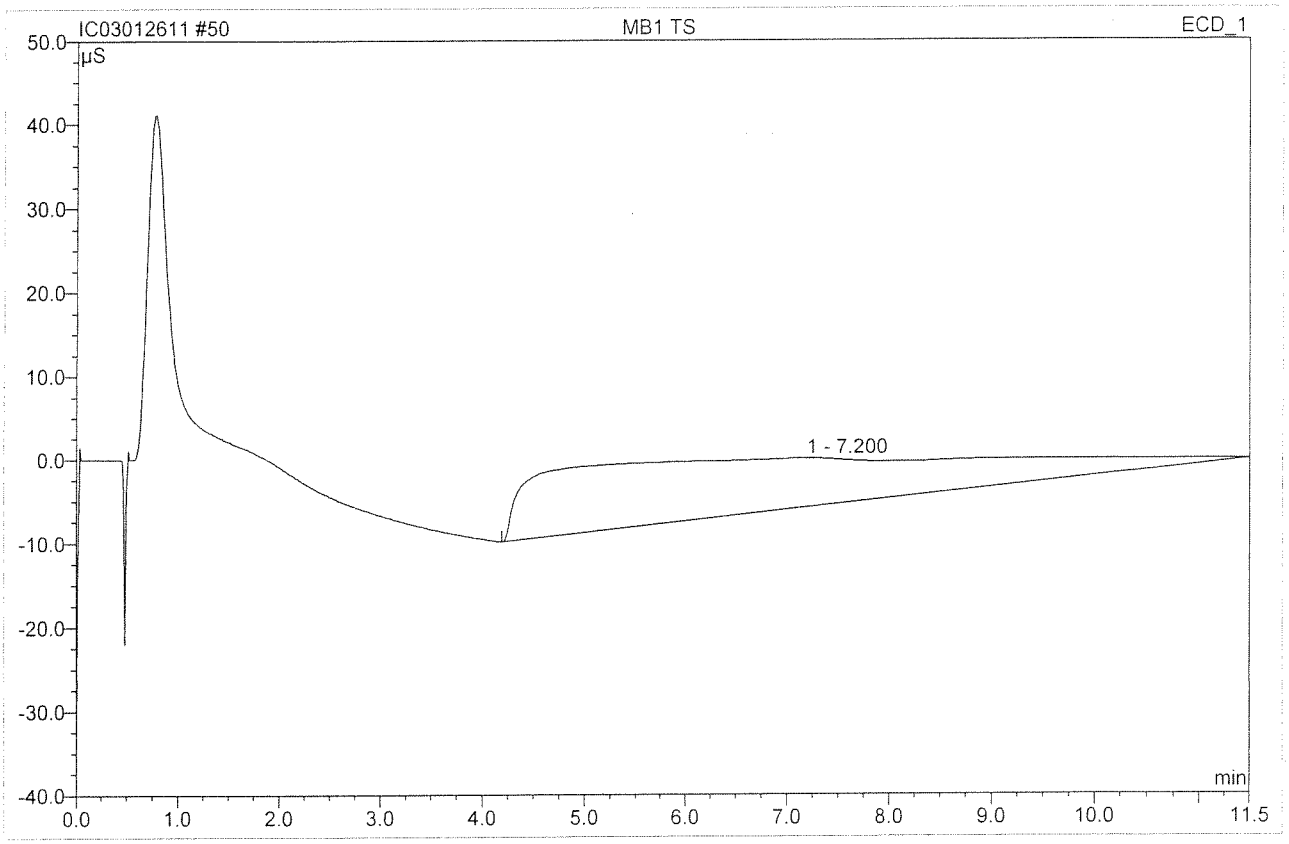


TV=4.0

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	54.165	8.154	18.10	4.044	BM
2	2.52	Chloride	30.220	5.211	11.57	3.541	Mb
3	3.12	Nitrite	55.922	11.154	24.75	3.886	bMb
4	4.02	Bromide	9.799	1.952	4.33	3.903	bMb
5	4.65	Nitrate	59.203	15.004	33.30	4.168	bMB
6	8.55	Sulfate	9.247	3.583	7.95	3.777	BMB
Total:			218.557	45.057	100.00	23.319	

50 MB1 TS

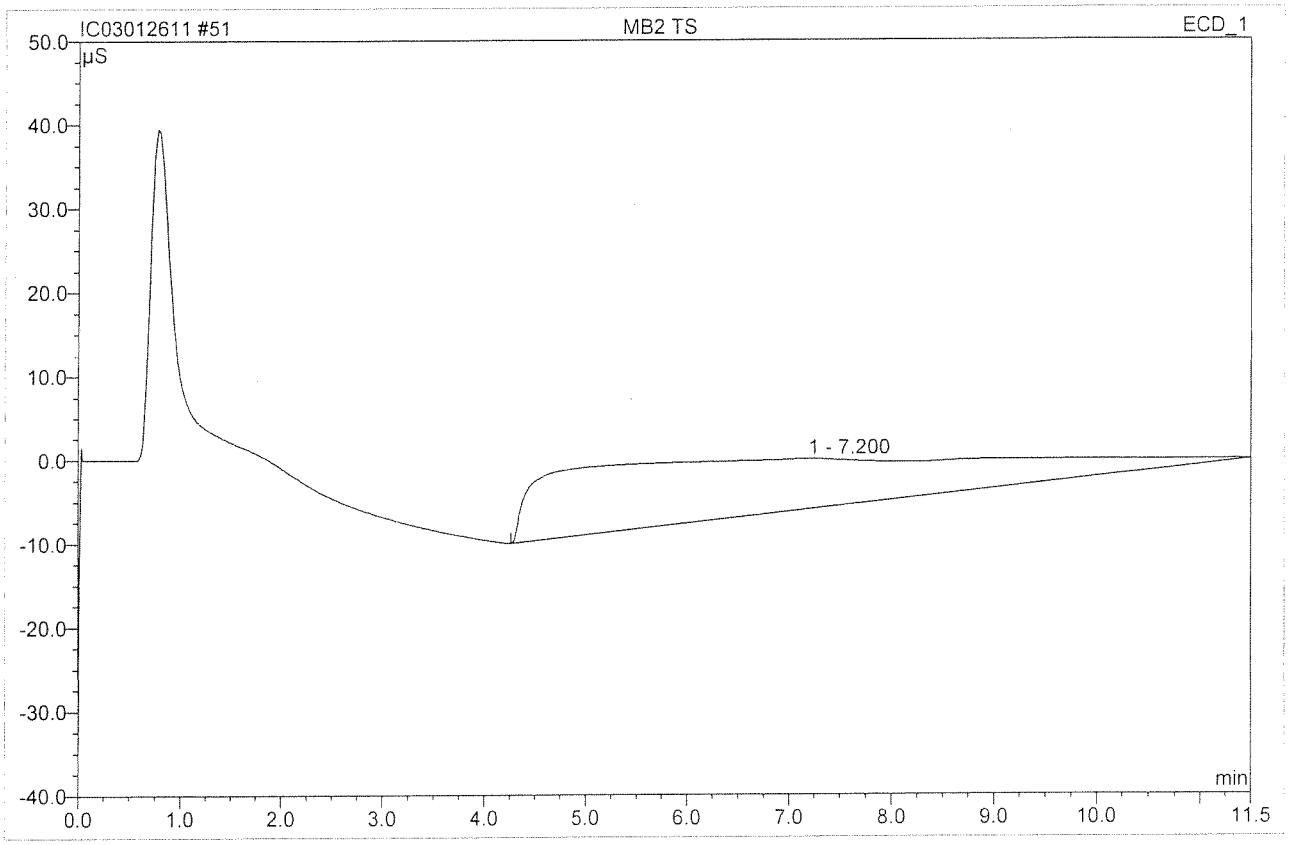
Sample Name:	**MB1 TS**	*Injection Volume:*	**200.0**
Vial Number:	**45**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 18:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	7.20	n.a.	5.855	32.698	100.00	n.a.	BMB
Total:			5.855	32.698	100.00	0.000	

51 MB2 TS

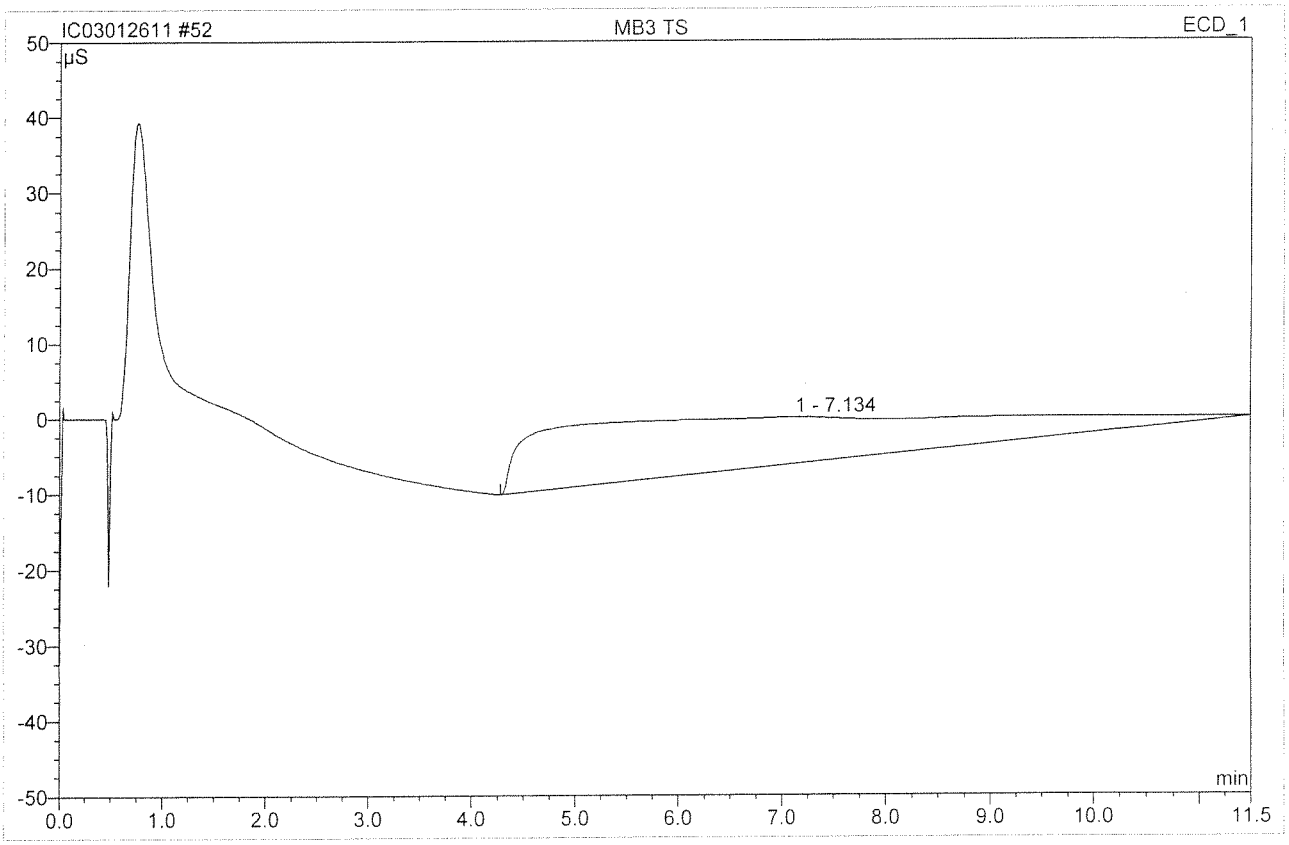
Sample Name:	**MB2 TS**	*Injection Volume:*	**200.0**
Vial Number:	**46**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 19:00**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	7.20	n.a.	5.984	32.887	100.00	n.a.	BMB
Total:			5.984	32.887	100.00	0.000	

52 MB3 TS

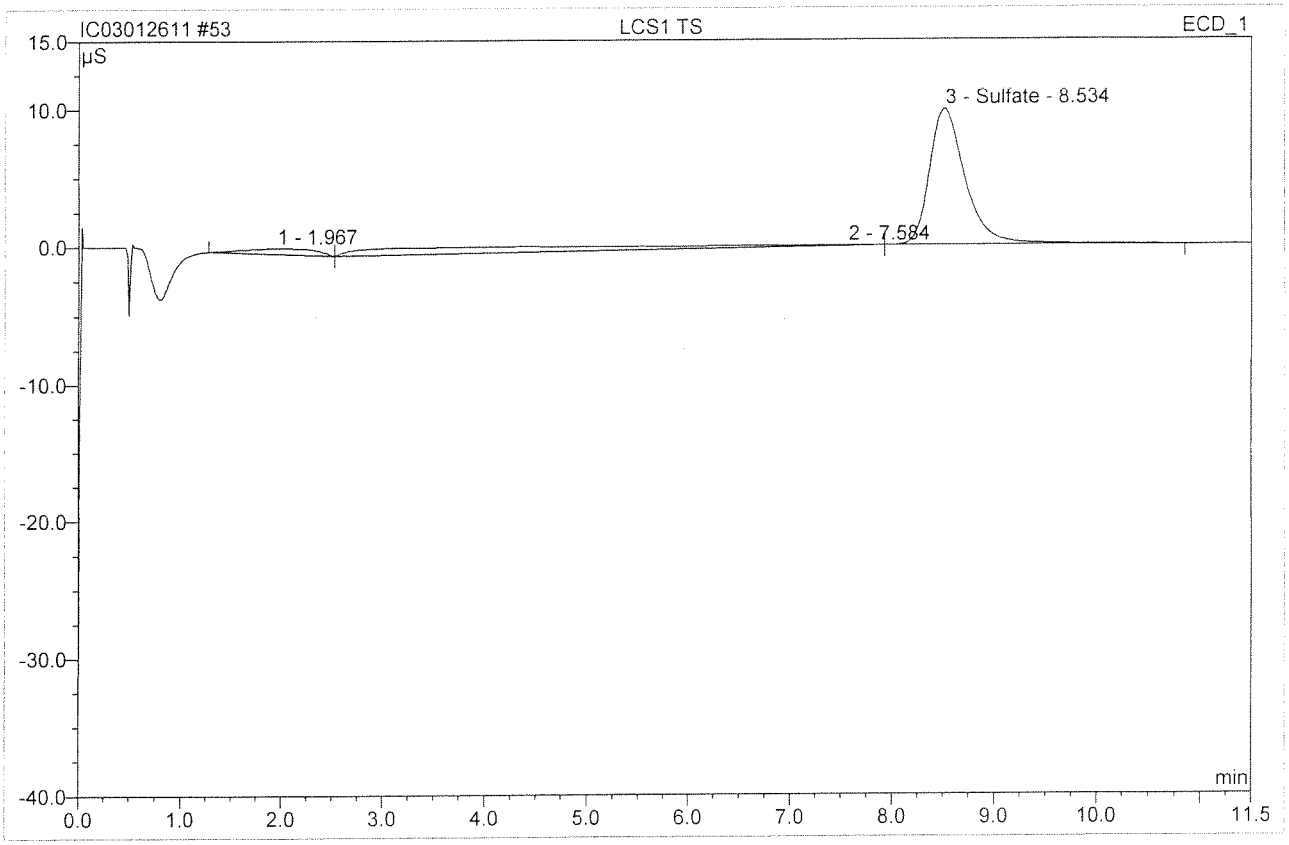
Sample Name:	**MB3 TS**	*Injection Volume:*	**200.0**
Vial Number:	**47**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 19:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	7.13	n.a.	6.216	33.406	100.00	n.a.	BMB
Total:			6.216	33.406	100.00	0.000	

53 LCS1 TS

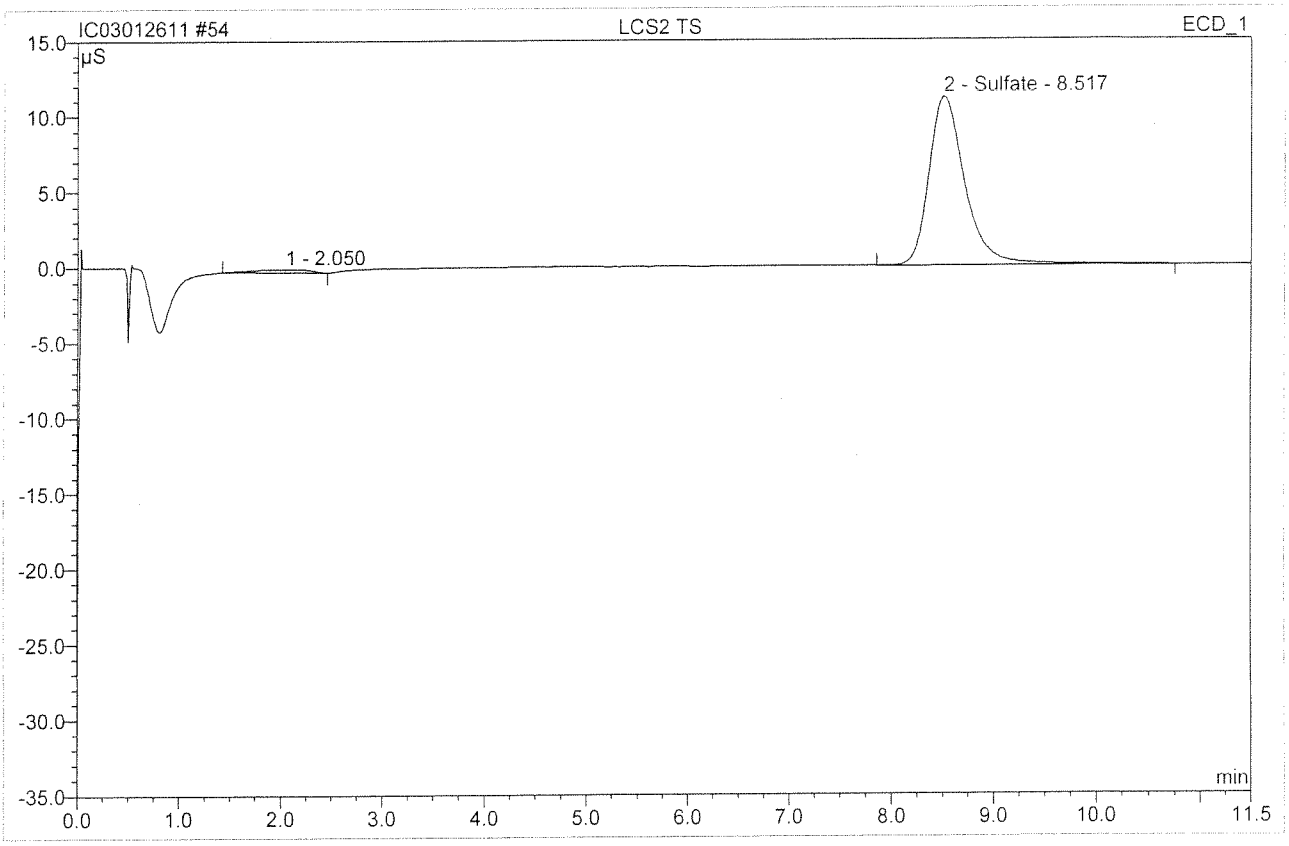
Sample Name:	**LCS1 TS**	*Injection Volume:*	**200.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**100.0000**
Recording Time:	**1/26/2011 19:28**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.97	n.a.	0.401	0.347	5.94	n.a.	BMb
2	7.58	n.a.	0.050	1.481	25.36	n.a.	bMB
3	8.53	Sulfate	9.876	4.013	68.70	423.038	bMB
Total:			10.326	5.841	100.00	423.038	

54 LCS2 TS

Sample Name:	**LCS2 TS**	*Injection Volume:*	**200.0**
Vial Number:	**49**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**200.0000**
Recording Time:	**1/26/2011 19:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.05	n.a.	0.207	0.142	3.06	n.a.	BMB
2	8.52	Sulfate	11.166	4.514	96.94	951.714	BMB
Total:			11.373	4.657	100.00	951.714	

Work Request # Original (K731) K732 K770 K732 K732 K732

Tier: I I I IV IV I

Date Analyzed: 02/01/11

Analyst: Hargrave

Analysis: NH_3-N - 350.1/SM 4500-NH_3 G

034440

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	(yes)/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	(yes)/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
d.	Are results for methods blanks all ND?	(yes)/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
f.	Are all exceptions explained?	yes/no/(NA)
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	(yes)/no/NA
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	yes/(no)/NA

COMMENTS:

12. K731, K732 - Rush - due date: 02/02/11
K770 - Rush - due date: 02/03/11

Final Approved by: BDK Date: 2/1/11

DQREPORT

Analytical Results Summary

strument Name: K-FIA-01 **Analyst:** THANGANU **Analysis Lot:** 234440 **Method/Testcode:** 350.1/Ammonia D

Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
00692-001	Ammonia as Nitrogen, Dissolved	N/A		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	IV
00692-002	Ammonia as Nitrogen, Dissolved	N/A		Water	0.01 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	IV
00692-003	Ammonia as Nitrogen, Dissolved	N/A		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	IV
00731-002	Ammonia as Nitrogen	N/A		Water	0.63 mg/L	5 mL	0.632 mg/L	1	0.020	0.050			2/1/11 09:33	N	I
00732-001	Ammonia as Nitrogen	N/A		Water	0.01 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	I
00732-002	Ammonia as Nitrogen	N/A		Water	1.25 mg/L	5 mL	1.25 mg/L	1	0.020	0.050			2/1/11 09:33	N	I
00732-003	Ammonia as Nitrogen	N/A		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	I
00733-001	Ammonia as Nitrogen	N/A		Water	0.30 mg/L	5 mL	0.30 mg/L	1	0.02	0.10			2/1/11 09:33	N	V
00733-002	Ammonia as Nitrogen	N/A		Water	0.11 mg/L	5 mL	0.11 mg/L	1	0.02	0.10			2/1/11 09:33	N	V
00733-003	Ammonia as Nitrogen	N/A		Water	0.00 mg/L	5 mL	0.10 mg/L U	1	0.02	0.10			2/1/11 09:33	N	V
00733-004	Ammonia as Nitrogen	N/A		Water	0.21 mg/L	5 mL	0.21 mg/L	1	0.02	0.10			2/1/11 09:33	N	V
00770-001	Ammonia as Nitrogen	N/A		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	I
00770-002	Ammonia as Nitrogen	N/A		Water	3.51 mg/L	5 mL	3.51 mg/L	1	0.020	0.050			2/1/11 09:33	N	I
00770-003	Ammonia as Nitrogen	N/A		Water	0.02 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	I
00805-005	Ammonia as Nitrogen	N/A		Water	1.68 mg/L	5 mL	1.68 mg/L	1	0.020	0.050			2/1/11 09:33	N	I
1100886-01	Ammonia as Nitrogen	MB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	I
1100886-01	Ammonia as Nitrogen	MB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	I
1100886-01	Ammonia as Nitrogen, Dissolved	MB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050			2/1/11 09:33	N	I
1100886-02	Ammonia as Nitrogen	LCS		Water	2.84 mg/L	5 mL	2.84 mg/L	1	0.020	0.050	101		2/1/11 09:33	N	I
1100886-02	Ammonia as Nitrogen	LCS		Water	2.84 mg/L	5 mL	2.84 mg/L	1	0.020	0.050	101		2/1/11 09:33	N	I
1100886-02	Ammonia as Nitrogen, Dissolved	LCS		Water	2.84 mg/L	5 mL	2.84 mg/L	1	0.020	0.050	101		2/1/11 09:33	N	I
1100886-03	Ammonia as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-03	Ammonia as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-03	Ammonia as Nitrogen, Dissolved	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-04	Ammonia as Nitrogen	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-04	Ammonia as Nitrogen	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-04	Ammonia as Nitrogen, Dissolved	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-05	Ammonia as Nitrogen	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-05	Ammonia as Nitrogen	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-05	Ammonia as Nitrogen, Dissolved	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-06	Ammonia as Nitrogen	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-06	Ammonia as Nitrogen	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I

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dicates Final Result is not yet adjusted for Solids because it has not yet been determined.

02/01/11

Analytical Results Summary

ıstrument Name: K-FIA-01 **Analyst:** THANGANU **Analysis Lot:** 234440 **Method/Testcode:** 350.1/Ammonia D

) Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
1100886-06	Ammonia as Nitrogen, Dissolved	CCB		Water	-0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			2/1/11 09:33	N	I
1100886-07	Ammonia as Nitrogen	CCV		Water	1.98 mg/L	5 mL	1.98 mg/L	1	99 %				2/1/11 09:33	N	I
1100886-07	Ammonia as Nitrogen	CCV		Water	1.98 mg/L	5 mL	1.98 mg/L	1					2/1/11 09:33	N	I
1100886-07	Ammonia as Nitrogen, Dissolved	CCV		Water	1.98 mg/L	5 mL	1.98 mg/L	1					2/1/11 09:33	N	I
1100886-08	Ammonia as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					2/1/11 09:33	N	I
1100886-08	Ammonia as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					2/1/11 09:33	N	I
1100886-08	Ammonia as Nitrogen, Dissolved	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					2/1/11 09:33	N	I
1100886-09	Ammonia as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					2/1/11 09:33	N	I
1100886-09	Ammonia as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					2/1/11 09:33	N	I
1100886-09	Ammonia as Nitrogen, Dissolved	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1					2/1/11 09:33	N	I
1100886-10	Ammonia as Nitrogen	CCV		Water	1.96 mg/L	5 mL	1.96 mg/L	1	98 %				2/1/11 09:33	N	I
1100886-10	Ammonia as Nitrogen	CCV		Water	1.96 mg/L	5 mL	1.96 mg/L	1					2/1/11 09:33	N	I
1100886-10	Ammonia as Nitrogen, Dissolved	CCV		Water	1.96 mg/L	5 mL	1.96 mg/L	1					2/1/11 09:33	N	I
1100886-11	Ammonia as Nitrogen, Dissolved	MS	K1100692-001	Water	2.00 mg/L	5 mL	2.00 mg/L	1	0.020	0.050	100		2/1/11 09:33	N	IV
1100886-12	Ammonia as Nitrogen, Dissolved	DMS	K1100692-001	Water	2.00 mg/L	5 mL	2.00 mg/L	1	0.020	0.050	100	<1	2/1/11 09:33	N	IV
1100886-13	Ammonia as Nitrogen, Dissolved	DUP	K1100692-001	Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050		NC	2/1/11 09:33	N	IV
1100886-14	Ammonia as Nitrogen	MS	K1100733-003	Water	1.96 mg/L	5 mL	1.96 mg/L	1	0.020	0.050	98		2/1/11 09:33	N	V
1100886-15	Ammonia as Nitrogen	DMS	K1100733-003	Water	1.97 mg/L	5 mL	1.97 mg/L	1	0.020	0.050	99	1	2/1/11 09:33	N	V
1100886-16	Ammonia as Nitrogen	DUP	K1100733-003	Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.020	0.050		NC	2/1/11 09:33	N	V

LCS ID#: PO3/3-79-E T.V. = 2.81
Spike ID#: B+LNH3/-86-GG T.V. = 2.00
Curve, CCV ID#: B+LNH3/-57-R T.V. = 2.00
MB MS = 2.00

BDIC
2/1/11

02/01/11
[illegible signature]

ıdicates Final Result is not yet adjusted for Solids because it has not yet been determined.

BRAN+LUEBBE

Post-run report

Name of Run : 110201A
Date of Report : 2/1/2011
Date of Run : 2/1/2011
Operator :
Comment :

Name of Analysis :Ammonia
System No. :1
Type of System :AA3
Start/Stop time :09:33 - 10:45

Channel	:	2
Method	:	Method 2
Unit	:	mg/L
Calibr. Fit	:	Linear
Corr. Coeff.	:	1.0000
Base	:	-24483
Gain	:	22
Sensitivity	:	0.3857
Sample Limit 1	:	
Sample Limit 2	:	

BDK 2/1/11

Pk	Cup		Sample Id	Value	
0	0	B	Baseline	-0.0069	
1	1	P	Primer	4.9914	
2	1	D	Drift	5.0056	
3	1	C	5.00	5.0089	
4	2	C	2.00	1.9784	
5	3	C	0.50	0.4923	
6	4	C	0.05	0.0750	
7	5	C	0	-0.0046	
8	0	B	Baseline	-0.0069	
9	1	H1	High	5.0141	
10	0	L1	Low	-0.0015	
11	0	L1	Low	-0.0014	
12	5	QC2	CCB1	-0.0030	
13	2	QC1	CCV1	1.9773	
14	10	QC3	LCS1*10	2.8430	
15	11	S	MB MS	2.0796	
16	0	N	Null	-0.0002N	
17	5	QC2	MB1	0.0010	
18	12	S	k1100731-002	0.6317	
19	13	S	k1100732-001	0.0098	
20	14	S	k1100732-002*10	0.1237	NA
21	15	S	k1100732-003	-0.0017	
22	16	S	k1100770-001	-0.0035	
23	0	B	Baseline	-0.0069	
24	5	QC2	CCB2	-0.0067	
25	2	QC1	CCV2	1.9734	
26	17	S	k1100770-002*10	0.3614	NA

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27	18	S	k1100770-003	0.0231
28	19	S	k1100692-001	-0.0011
29	20	S	k1100692-001d	-0.0024
30	21	S	k1100692-001ms	2.0040
31	22	S	k1100692-001msd	2.0022
32	23	S	k1100692-002	0.0116
33	24	S	k1100692-003	-0.0012
34	25	S	k1100733-001	0.3014
35	0	B	BASELINE	-0.0069
36	5	QC2	CCB-3	-0.0057
37	2	QC1	CCV-3	1.9695
38	26	S	k1100733-002	0.1059
39	27	S	k1100733-003	-0.0017
40	28	S	k1100733-003d	-0.0010
41	29	S	k1100733-003ms	1.9622
42	30	S	k1100733-003msd	1.9718
43	31	S	k1100733-004	0.2072
44	32	S	k1100805-005	1.6807
45	33	S	k1100732-002	1.2479
46	34	S	k1100770-002	3.5130
47	0	B	Baseline	-0.0069
48	5	QC2	CCB4	-0.0077
49	2	QC1	CCV4	1.9637
50	35	S	k1100756-005*10	0.0843
51	36	S	k1100756-004	0.1109
52	0	B	Baseline	-0.0069
53	5	QC2	CCB5	-0.0087
54	2	QC1	CCV5	1.9695
55	1	D	Drift	5.0056
56	0	B	Baseline	-0.0069
57	0	B	FinalBase	-0.0069

NA

QC Limits

Channel :	2
QC 1	Unused
QC 2	Unused
QC 3	Unused
QC 4	Unused
QC 5	Unused
QC 6	Unused
QC 7	Unused
QC 8	Unused
QC 9	Unused
QC10	Unused

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CORRECTIONS

Channel :	2
Baseline :	Yes
Drift :	Yes
Carry over :	Yes

```
* ... Sample offscale
+ ... Result higher than sample limit
- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed
N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

** <END OF REPORT> **
```

02/01/11

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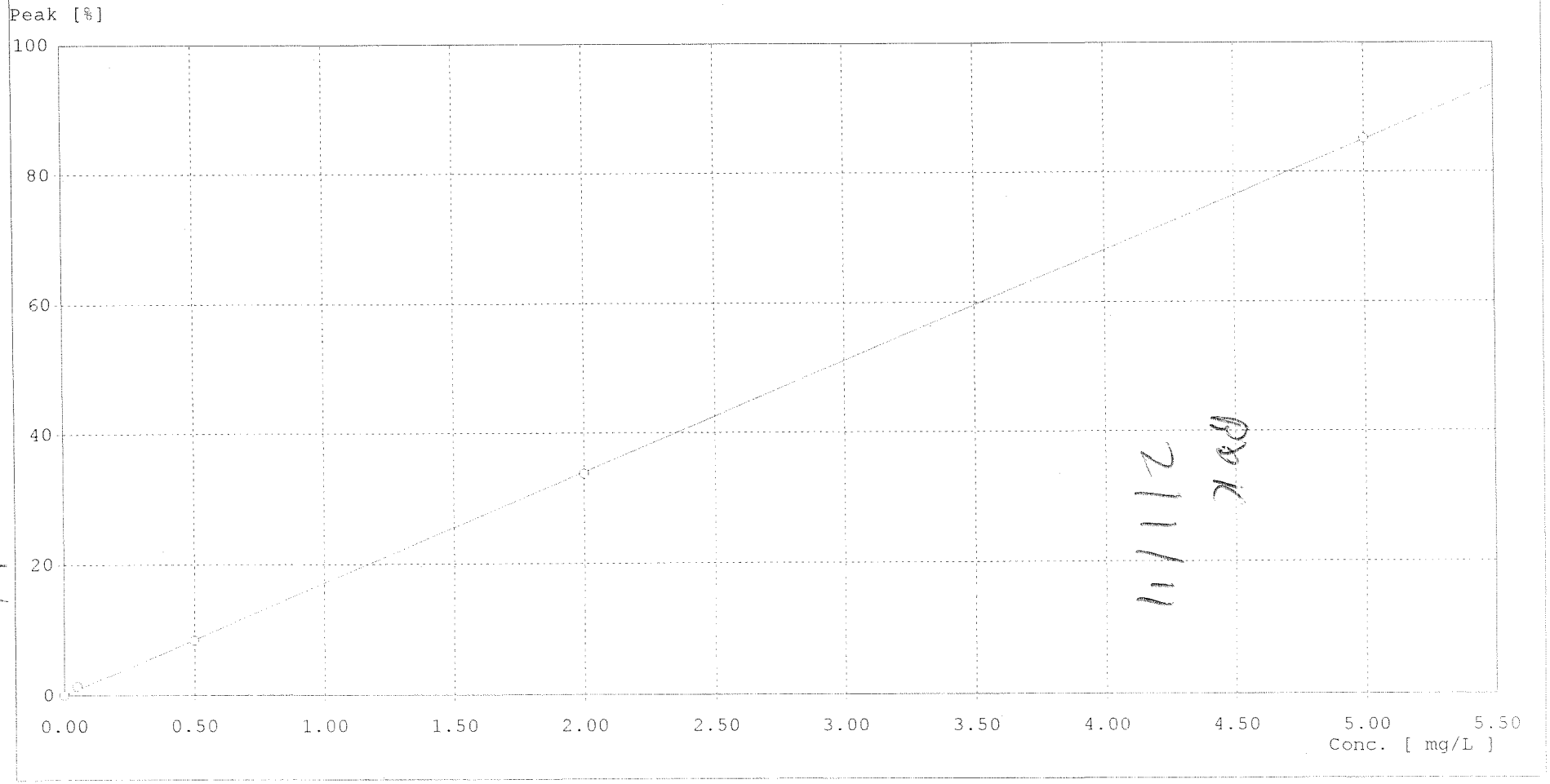
Calibration Curve

Name of run :110201A.run
Comment :

Name of analysis :Ammonia

Channel :2
Method :Method 2
Curve fit :linear a=-2.8373E-001 b=8.9861E-005
Corr. coeff. :1.0000



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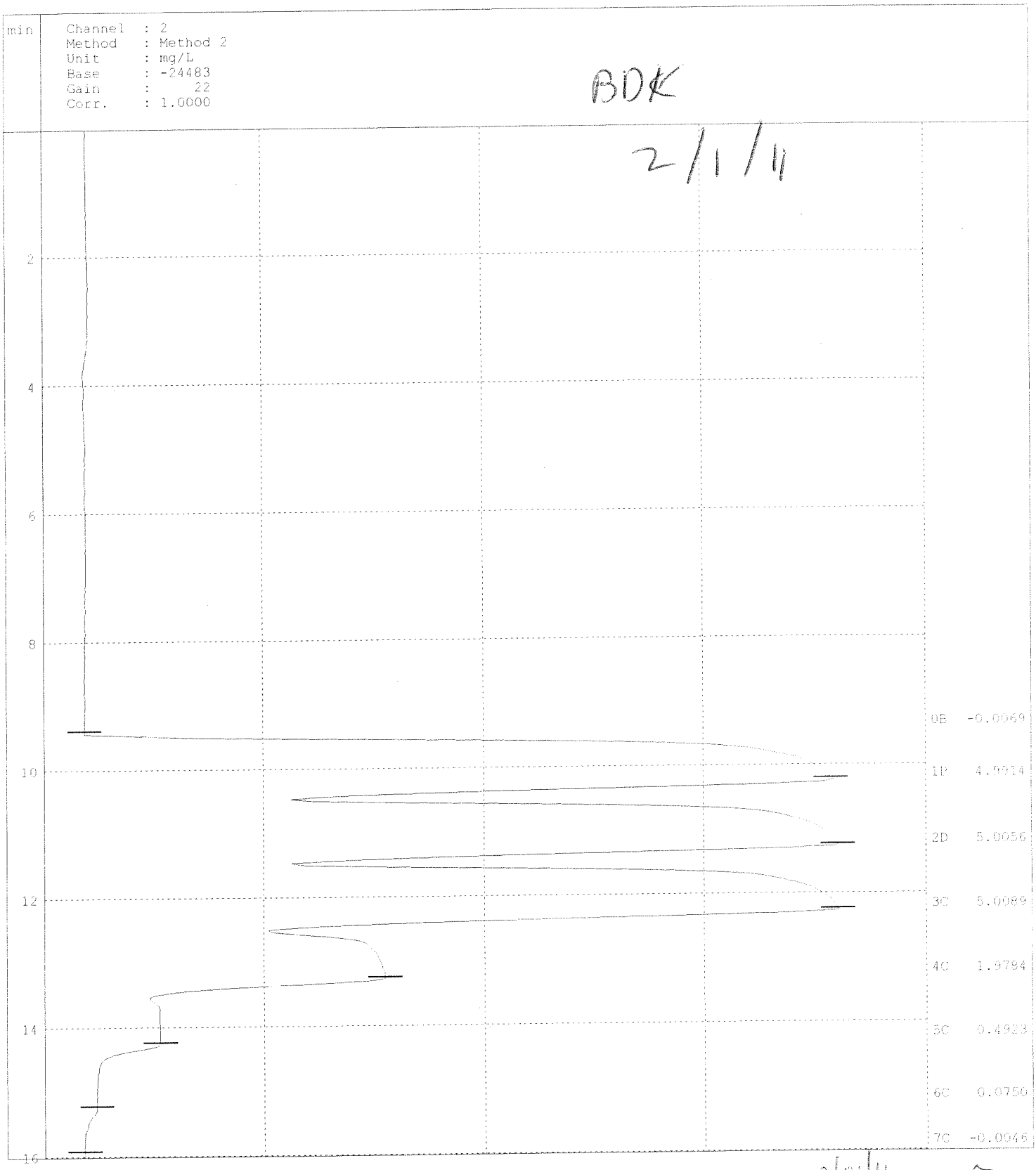
Post-run chart

Name of run :110201A.RUN
Comment :

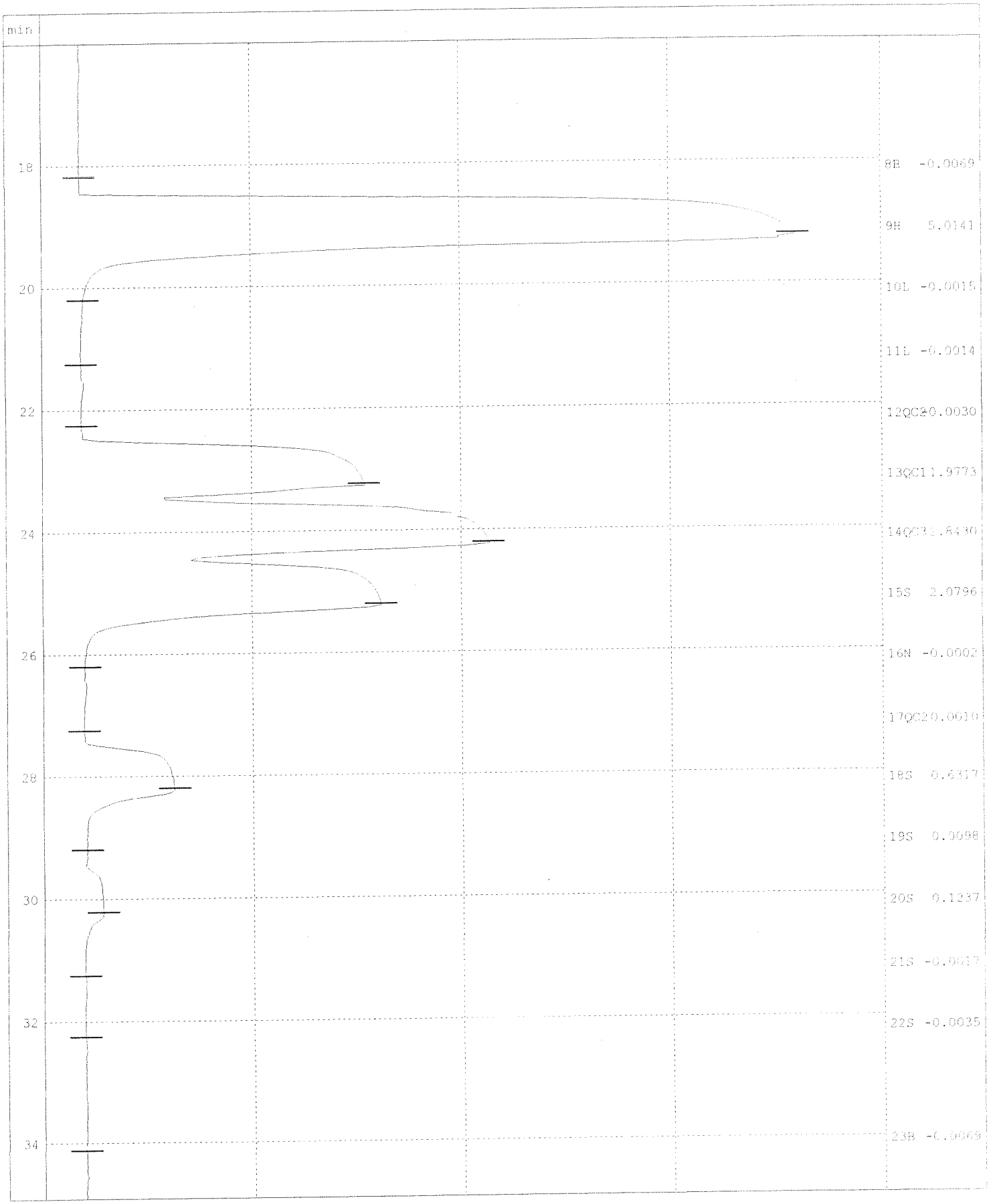
Name of analysis :Ammonia



02/01/11

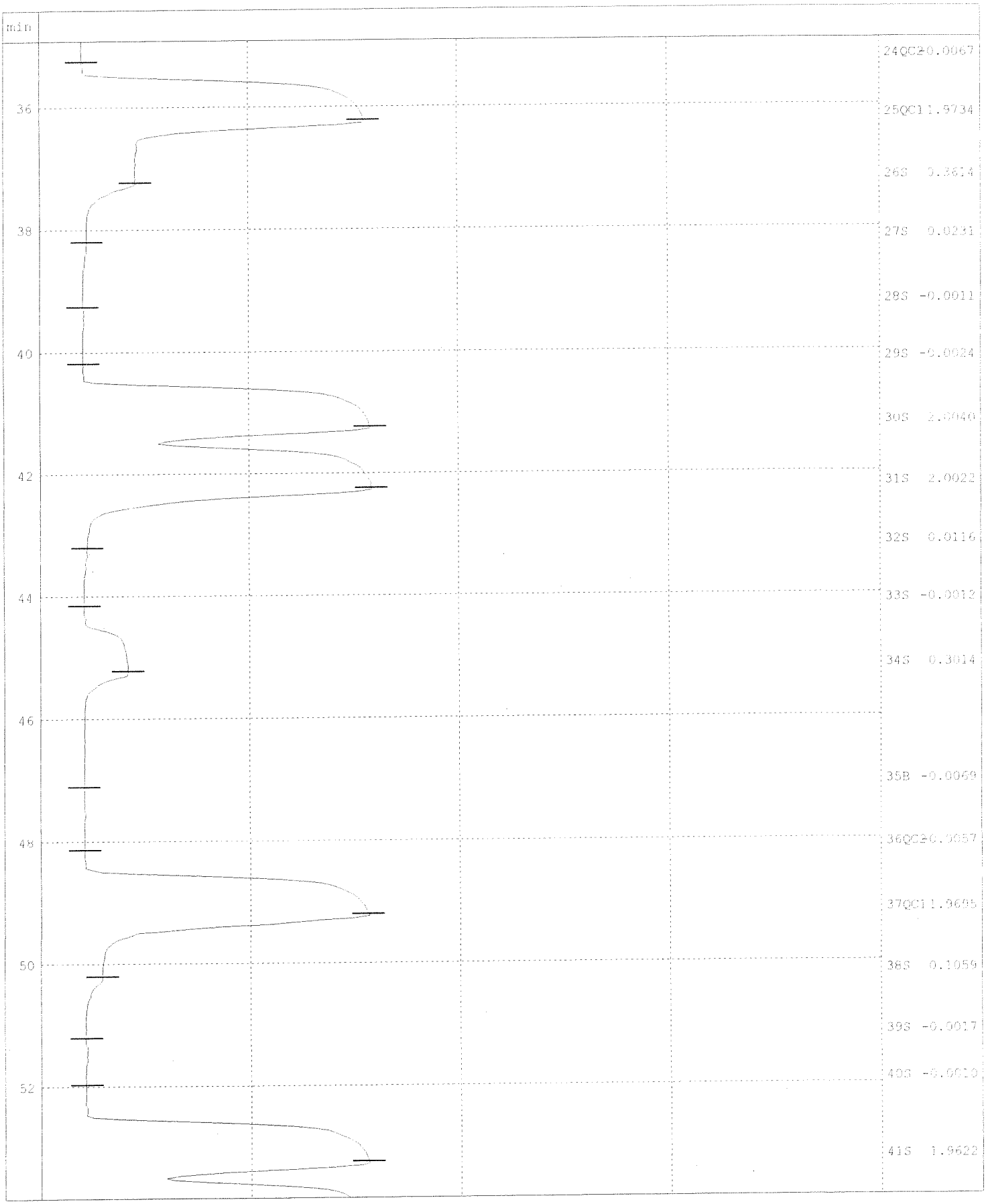
Name of run :110201A.RUN
Comment :

Name of analysis :Ammonia



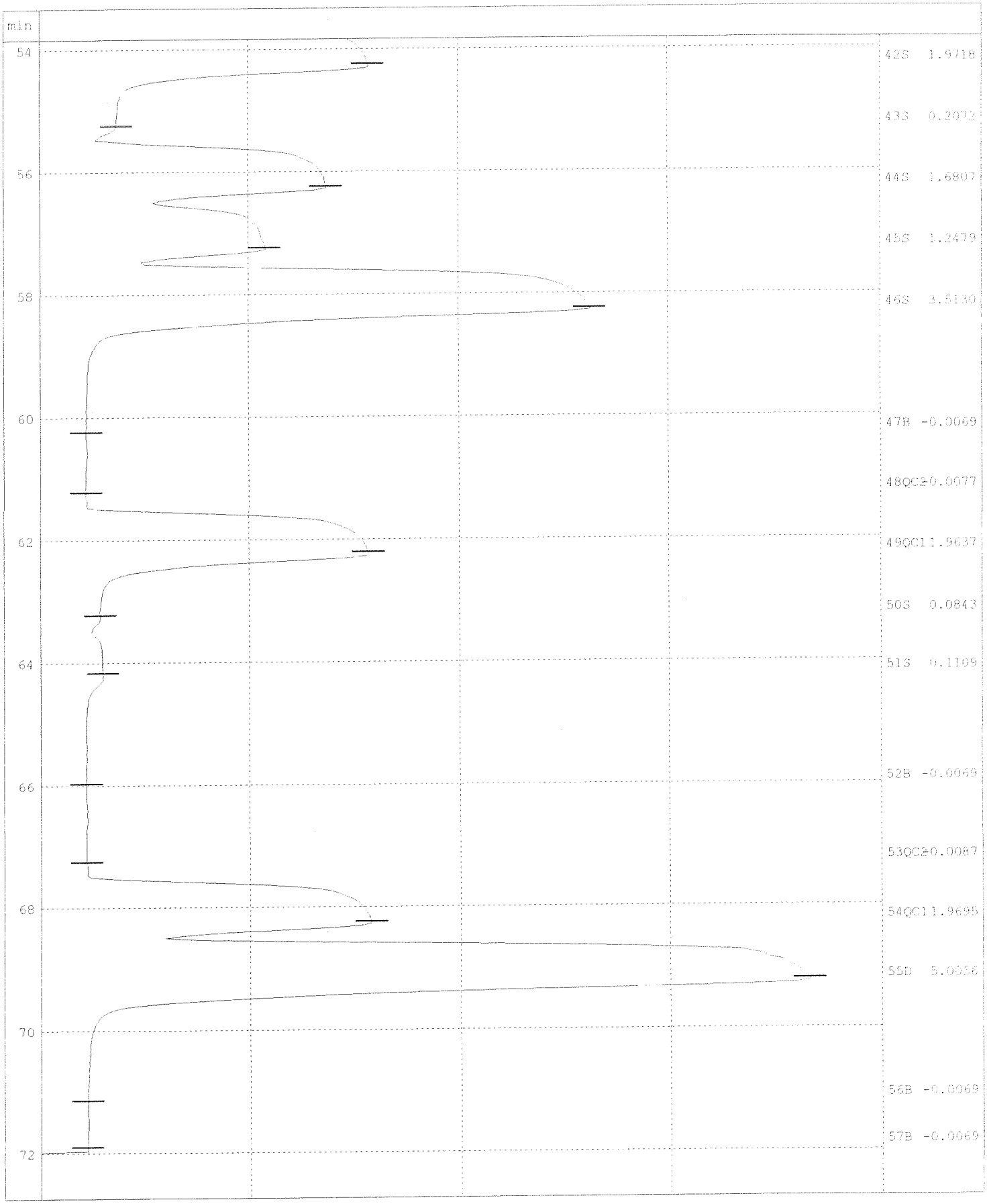
Name of run :110201A.RUN
Comment :

Name of analysis :Ammonia



Name of run :110201A.RUN
Comment :

Name of analysis :Ammonia



Work Request # Original (K692)

Tier: IV

Date Analyzed: 01/26/11

Analyst: Thuyen

Analysis: NO_2-N - 353.2 233930

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/(NA)
5.	All quality control criteria met?	(yes)/no/NA
a.	Is the calibration curve correlation coefficient ≥ 0.995?	(yes)/no/NA
b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
d.	Are results for methods blanks all ND?	(yes)/no/NA
e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
f.	Are all exceptions explained?	yes/no/(NA)
6.	Are all service requests that apply attached?	(yes)/no/NA
7.	Are all samples labelled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	(yes)/no/NA
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes)/no/NA

COMMENTS:

Final Approved by: BVK Date: 1/27/11

DQREPORT

Analytical Results Summary

nstrument Name: K-FIA-01 **Analyst:** THANGANU **Analysis Lot:** 233930 **Method/Testcode:** 353.2/NO2

b Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
100692-001	Nitrite as Nitrogen	N/A		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			1/26/11 14:57	N	IV
100692-002	Nitrite as Nitrogen	N/A		Water	0.01 mg/L	5 mL	0.006 mg/L J	1	0.005	0.050			1/26/11 14:57	N	IV
100692-003	Nitrite as Nitrogen	N/A		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			1/26/11 14:57	N	IV
1100756-01	Nitrite as Nitrogen	MS	K1100692-001	Water	2.00 mg/L	5 mL	2.00 mg/L	1	0.005	0.050	100		1/26/11 14:57	N	IV
1100756-02	Nitrite as Nitrogen	DMS	K1100692-001	Water	1.99 mg/L	5 mL	1.99 mg/L	1	0.005	0.050	100	<1	1/26/11 14:57	N	IV
1100756-03	Nitrite as Nitrogen	DUP	K1100692-001	Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050		NC	1/26/11 14:57	N	IV
1100756-04	Nitrite as Nitrogen	MB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.005	0.050			1/26/11 14:57	N	IV
1100756-05	Nitrite as Nitrogen	LCS		Water	4.02 mg/L	5 mL	4.02 mg/L	1	0.005	0.050	100		1/26/11 14:57	N	IV
1100756-06	Nitrite as Nitrogen	CCB		Water	0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 14:57	N	IV
1100756-07	Nitrite as Nitrogen	CCB		Water	0.00 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/26/11 14:57	N	IV
1100756-08	Nitrite as Nitrogen	CCV		Water	1.98 mg/L	5 mL	1.98 mg/L	1	99%				1/26/11 14:57	N	IV
1100756-09	Nitrite as Nitrogen	CCV		Water	1.99 mg/L	5 mL	1.99 mg/L	1	100%				1/26/11 14:57	N	IV

LCS ID#: AN/11-33-Y T.V. = 4.00

Spike ID#: B+LNO3/-99-V T.V. = 2.00

Curve, CCV ID#: B+LNO3/-70-A T.V. = 2.00

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BDK 1/27/11

01/26/11

Thangavel

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

BRAN+LUEBBE

Post-run report

Name of Run	: 110126C	Name of Analysis	:Nitrite.ANL
Date of Report	: 1/26/2011	System No.	:1
Date of Run	: 1/26/2011	Type of System	:AA3
Operator	:	Start/Stop time	:14:57 - 15:34
Comment	:		

Channel	:	2
Method	:	Method 2
Unit	:	
Calibr. Fit	:	Linear
Corr. Coeff.	:	1.0000
Base	:	-26098
Gain	:	5
Sensitivity	:	1.6094
Sample Limit 1	:	
Sample Limit 2	:	

BDIC
1/27/11

Pk	Cup		Sample Id	Value
0	0	B	Baseline	0.0015
1	1	P	Primer	4.9772
2	1	D	Drift	4.9905
3	1	C	5.00	5.0040
4	2	C	2.00	1.9907
5	3	C	0.50	0.4960
6	4	C	0.05	0.0527
7	5	C	0	0.0065
8	1	H1	High	4.9885
9	0	L1	Low	0.0125
10	0	L1	Low	0.0030
11	5	QC2	CCB1	0.0124
12	2	QC1	CCV1	1.9767
13	10	QC3	LCS1	4.0182
14	0	N	Null	0.0107N
15	5	QC2	MB1	0.0049
16	11	S	k1100692-001	0.0035
17	12	S	k1100692-001d	0.0008
18	13	S	k1100692-001ms	2.0017
19	14	S	k1100692-001msd	1.9916
20	15	S	k1100692-002	0.0059
21	16	S	k1100692-003	0.0024
22	0	B	Baseline	-0.0010
23	5	QC2	CCB2	0.0038
24	2	QC1	CCV2	1.9866
25	1	D	Drift	5.0106
26	0	B	Baseline	0.0010

01/26/11

27 0 B FinalBase 0.0007

QC Limits

Channel :	2
QC 1	Unused
QC 2	Unused
QC 3	Unused
QC 4	Unused
QC 5	Unused
QC 6	Unused
QC 7	Unused
QC 8	Unused
QC 9	Unused
QC10	Unused

CORRECTIONS

Channel :	2
Baseline :	No
Drift :	No
Carry over :	No
%:	0.0

* ... Sample offscale
\+ ... Result higher than sample limit
\- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed
N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

** <END OF REPORT> **

01/26/11

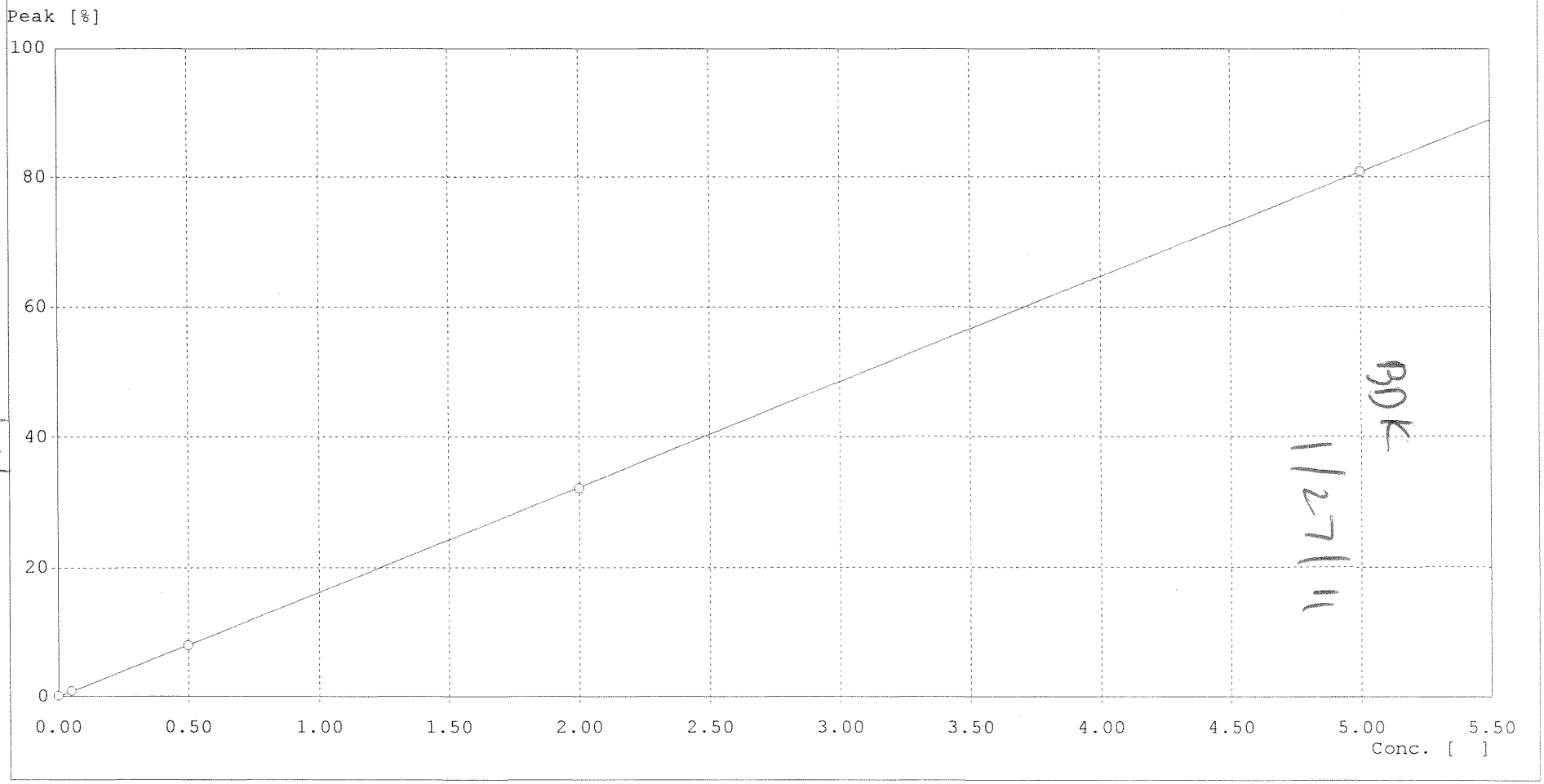
BRAN+LUEBBE

Calibration Curve

Name of run :110126C.run
Comment :

Name of analysis :Nitrite.ANL

Channel :2
Method :Method 2
Curve fit :linear a=-3.0203E-001 b=9.4357E-005
Corr. coeff. :1.0000



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01/26/11 Thurs

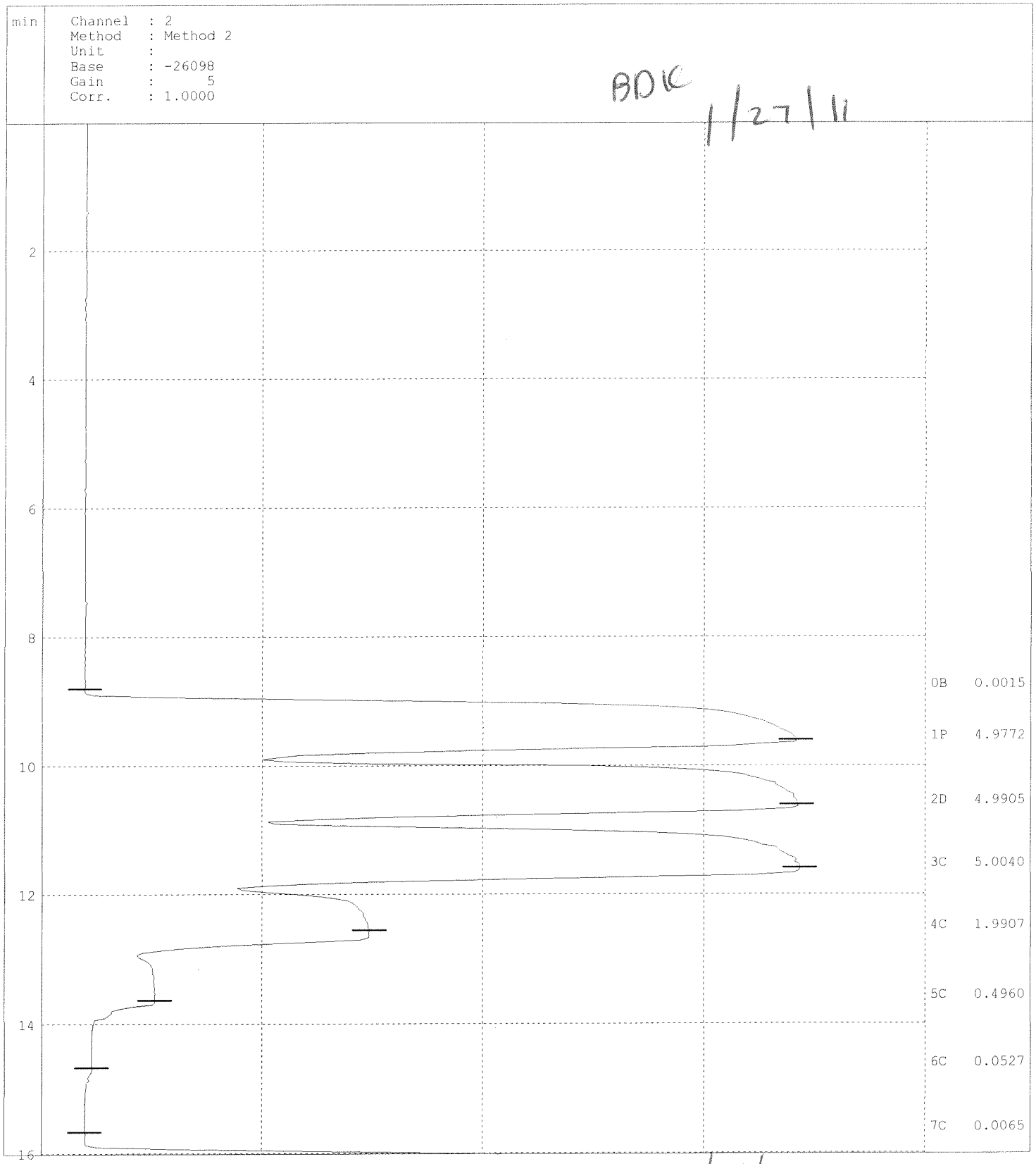
BDK 1/27/11

BRAN+LUEBBE

Post-run chart

Name of run :110126C.RUN
Comment :

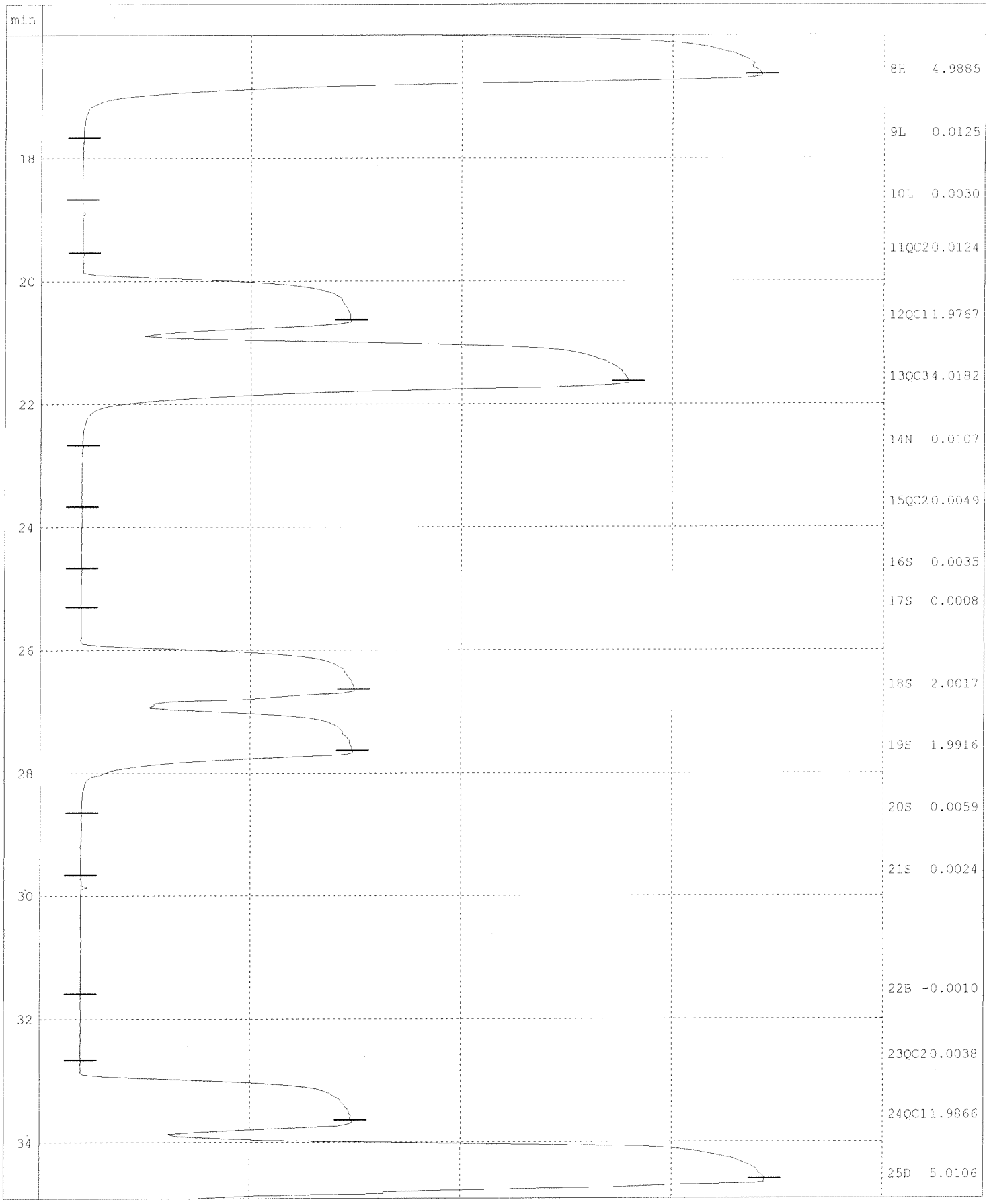
Name of analysis :Nitrite.ANL



01/26/11

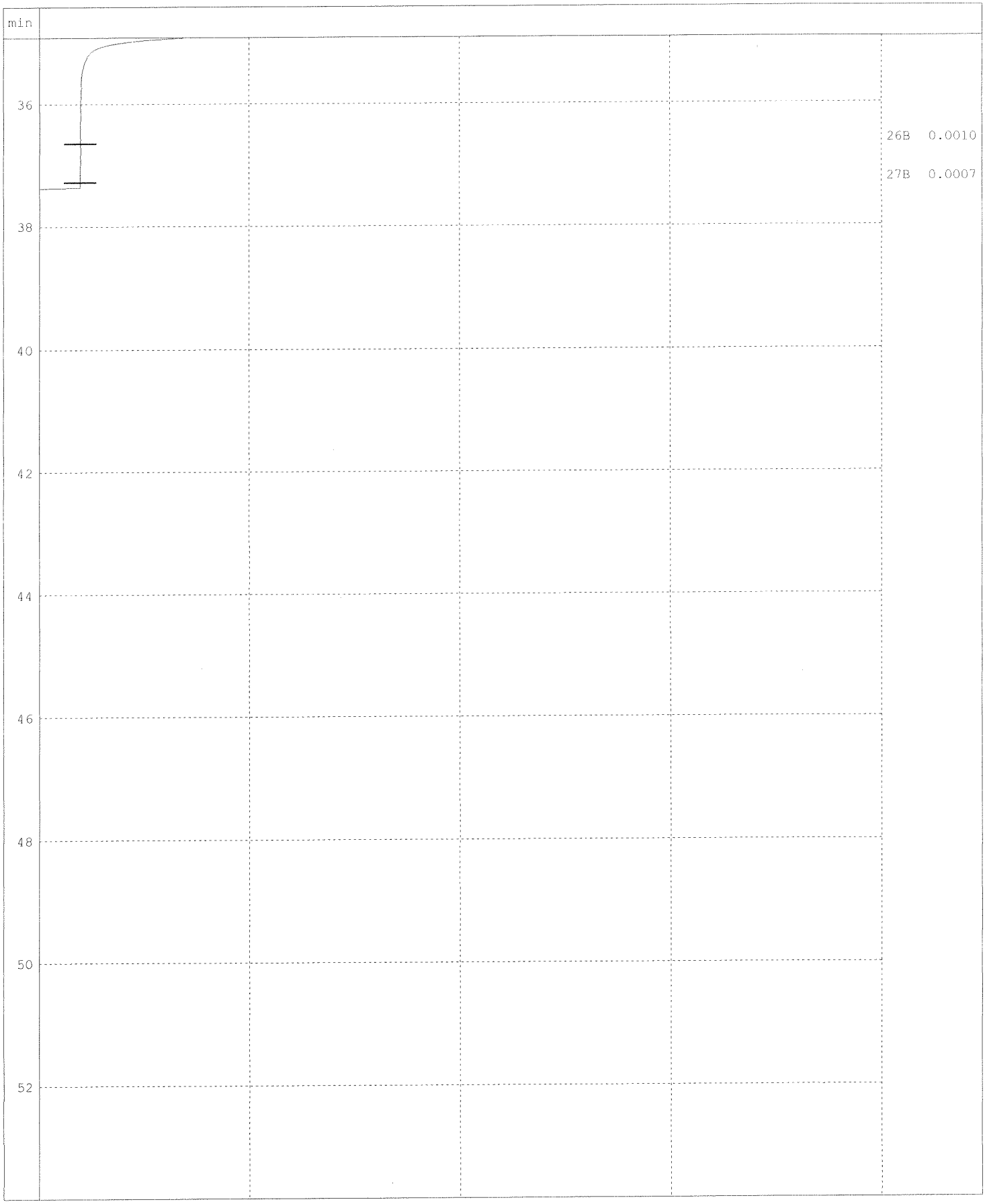
Name of run :110126C.RUN
Comment :

Name of analysis :Nitrite.ANL



Name of run :110126C.RUN
Comment :

Name of analysis :Nitrite.ANL



Work Request # Original (K0692) K0661 K0731 K0778 K0766 K0712

Tier: III III I I II I

Date Analyzed: 1/31/11

Analyst: B. Hetland

Analysis: NO_2/NO_3 - N / 353.2

DATA QUALITY REPORT
INORGANICS

Run # 234379

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?		(yes)/no/NA
2.	Holding times met for all analyses and for all samples?		(yes)/no/NA
3.	Are calculations correct?		(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)		yes/no/(NA)
5.	All quality control criteria met?		(yes)/no/NA
	a.	Is the calibration curve correlation coefficient ≥ 0.995?	(yes)/no/NA
	b.	MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
	c.	Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
	d.	Are results for methods blanks all ND?	(yes)/no/NA
	e.	Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
	f.	Are all exceptions explained?	yes/no/(NA)
6.	Are all service requests that apply attached?		(yes)/no/NA
7.	Are all samples labelled correctly?		(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)		(yes)/no/NA
9.	Are detection limits and units reported correctly?		(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?		yes/no/(NA)
11.	Is the unused space on the benchsheet crossed out?		(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)		(yes)/no/NA

COMMENTS: 12.) K0731 Rush due 2/2/11

Final Approved by: BDK Date: 1/31/11

DQREPORT

Analytical Results Summary

nstrument Name: K-FIA-01 **Analyst:** BHETLAND **Analysis Lot:** 234379 **Method/Testcode:** 353.2/NO2 NO3 T

b Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
100661-003	Nitrate+Nitrite as Nitrogen	N/A		Water	2.69 mg/L	5 mL	53.8 mg/L	20	0.2	1.0			1/31/11 13:22	N	IV
100661-004	Nitrate+Nitrite as Nitrogen	N/A		Water	1.42 mg/L	5 mL	14.2 mg/L	10	0.09	0.50			1/31/11 13:22	N	IV
100692-001	Nitrate+Nitrite as Nitrogen	N/A		Water	1.18 mg/L	5 mL	29.4 mg/L	25	0.3	1.3			1/31/11 13:22	N	IV
100692-002	Nitrate+Nitrite as Nitrogen	N/A		Water	1.18 mg/L	5 mL	29.5 mg/L	25	0.3	1.3			1/31/11 13:22	N	IV
100692-003	Nitrate+Nitrite as Nitrogen	N/A		Water	0.02 mg/L	5 mL	0.020 mg/L BJ	1	0.009	0.050			1/31/11 13:22	N	IV
100712-001	Nitrate+Nitrite as Nitrogen	N/A		Drinking Water	0.32 mg/L	5 mL	0.318 mg/L	1	0.009	0.050			1/31/11 13:22	N	I
100731-002	Nitrate+Nitrite as Nitrogen	N/A		Water	0.71 mg/L	5 mL	7.09 mg/L	10	0.09	0.50			1/31/11 13:22	N	I
100766-001	Nitrate+Nitrite as Nitrogen	N/A		Water	2.78 mg/L	5 mL	2.78 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-002	Nitrate+Nitrite as Nitrogen	N/A		Water	2.46 mg/L	5 mL	2.46 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-003	Nitrate+Nitrite as Nitrogen	N/A		Water	2.68 mg/L	5 mL	2.68 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-004	Nitrate+Nitrite as Nitrogen	N/A		Water	2.72 mg/L	5 mL	2.72 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-005	Nitrate+Nitrite as Nitrogen	N/A		Water	2.99 mg/L	5 mL	2.99 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-006	Nitrate+Nitrite as Nitrogen	N/A		Water	2.15 mg/L	5 mL	2.15 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-007	Nitrate+Nitrite as Nitrogen	N/A		Water	1.46 mg/L	5 mL	1.46 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-008	Nitrate+Nitrite as Nitrogen	N/A		Water	1.68 mg/L	5 mL	1.68 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-009	Nitrate+Nitrite as Nitrogen	N/A		Water	1.31 mg/L	5 mL	1.31 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-010	Nitrate+Nitrite as Nitrogen	N/A		Water	1.78 mg/L	5 mL	1.78 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-011	Nitrate+Nitrite as Nitrogen	N/A		Water	1.76 mg/L	5 mL	1.76 mg/L	1	0.009	0.050			1/31/11 13:22	N	II
100766-012	Nitrate+Nitrite as Nitrogen	N/A		Water	0.03 mg/L	5 mL	0.050 mg/L U	1	0.009	0.050			1/31/11 13:22	N	II
100778-001	Nitrate+Nitrite as Nitrogen	N/A		Water	0.08 mg/L	5 mL	0.078 mg/L	1	0.009	0.050			1/31/11 13:22	N	I
Q1100875-01	Nitrate+Nitrite as Nitrogen	MB		Water	0.02 mg/L	5 mL	0.017 mg/L J	1	0.009	0.050			1/31/11 13:22	N	IV
Q1100875-02	Nitrate+Nitrite as Nitrogen	LCS		Water	1.55 mg/L	5 mL	15.5 mg/L	10	0.09	0.50	102		1/31/11 13:22	N	IV
Q1100875-03	Nitrate+Nitrite as Nitrogen	CCV		Water	1.99 mg/L	5 mL	1.99 mg/L	1	100%				1/31/11 13:22	N	IV
Q1100875-04	Nitrate+Nitrite as Nitrogen	CCV		Water	1.99 mg/L	5 mL	1.99 mg/L	1	100%				1/31/11 13:22	N	IV
Q1100875-05	Nitrate+Nitrite as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1	99%				1/31/11 13:22	N	IV
Q1100875-06	Nitrate+Nitrite as Nitrogen	CCV		Water	2.02 mg/L	5 mL	2.02 mg/L	1	101%				1/31/11 13:22	N	IV
Q1100875-07	Nitrate+Nitrite as Nitrogen	CCV		Water	1.97 mg/L	5 mL	1.97 mg/L	1	99%				1/31/11 13:22	N	IV
Q1100875-08	Nitrate+Nitrite as Nitrogen	CCB		Water	0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/31/11 13:22	N	IV
Q1100875-09	Nitrate+Nitrite as Nitrogen	CCB		Water	0.02 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/31/11 13:22	N	IV
Q1100875-10	Nitrate+Nitrite as Nitrogen	CCB		Water	0.01 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/31/11 13:22	N	IV
Q1100875-11	Nitrate+Nitrite as Nitrogen	CCB		Water	0.02 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/31/11 13:22	N	IV
Q1100875-12	Nitrate+Nitrite as Nitrogen	CCB		Water	0.03 mg/L	5 mL	0.050 mg/L U	1	0.050	0.050			1/31/11 13:22	N	IV
Q1100875-13	Nitrate+Nitrite as Nitrogen	MS	K1100766-001	Water	4.65 mg/L	5 mL	4.65 mg/L	1	0.009	0.050	93		1/31/11 13:22	N	II
Q1100875-14	Nitrate+Nitrite as Nitrogen	DMS	K1100766-001	Water	4.76 mg/L	5 mL	4.76 mg/L	1	0.009	0.050	99	2	1/31/11 13:22	N	II
Q1100875-15	Nitrate+Nitrite as Nitrogen	DUP	K1100766-001	Water	2.81 mg/L	5 mL	2.81 mg/L	1	0.009	0.050		<1	1/31/11 13:22	N	II

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ndicates Final Result is not yet adjusted for Solids because it has not yet been determined.

BDK 1/31/11 BDK W.D.

ICV: B+LNO3/1-70-3 T.V.: 2.0 mg/L
LCS: PO3/3-79-E T.V.: 15.2 mg/L
CCV: B+LNO3/1-87-F T.V.: 2.0 mg/L
Spike: B+LNO3/1-99-AA T.V.: 2.0 mg/L

BH 1/31/11

BRAN+LUEBBE

Post-run report

Name of Run : 110131B
Date of Report : 1/31/2011
Date of Run : 1/31/2011
Operator :
Comment :

Name of Analysis :NO2+NO3
System No. :1
Type of System :AA3
Start/Stop time :13:22 - 14:46

Channel : 2
Method : Method 2
Unit : mg/L
Calibr. Fit : Linear
Corr. Coeff. : 1.0000
Base : -26161
Gain : 5
Sensitivity : 1.5391
Sample Limit 1 :
Sample Limit 2 :

BDK 1/31/11

Pk	Cup		Sample Id	Value
0	0	B	Baseline	-0.0041
1	1	P	primer	5.0101
2	1	D	Drift	5.0307
3	1	C	5.00	5.0049
4	2	C	2.00	1.9878
5	3	C	0.50	0.4987
6	4	C	0.05	0.0549
7	5	C	0	0.0037
8	1	H1	High	5.0729
9	0	L1	Low	0.0065
10	0	L1	Low	0.0069
11	9	QC3	ICV	1.9652 99
12	5	QC2	ICB	0.0091
13	5	QC2	CCB1	0.0089
14	2	QC1	CCV1	1.9900
15	10	QC4	LCS1*10	1.5507
16	11	S	MB MS	2.0016 100
17	0	N	Null	0.0403N
18	5	QC2	MB1	0.0168
19	12	S	k1100692-001*25	1.1760
20	13	S	k1100692-002*25	1.1791
21	14	S	0692-2 10x nr	2.9023 NR
22	15	S	0692-2 nr	15.9953* NR
23	16	S	rinse	0.1953
24	0	B	Baseline	-0.0041
25	5	QC2	CCB2	0.0248
26	2	QC1	CCV2	1.9906

BK 1/31/11

27	17	S	k1100692-003	0.0198
28	18	S	0661-3 10x nr	5.3875 NR
29	19	S	0661-4 10x nr	1.4138 NR
30	20	S	k1100731-002*10	0.7091
31	21	S	k1100778-001	0.0779
32	22	S	k1100766-001	2.7809
33	23	S	k1100766-001d	2.8052
34	24	S	k1100766-001ms	4.6463
35	25	S	k1100766-001msd	4.7603
36	0	B	Baseline	-0.0041
37	5	QC2	CCB3	0.0149
38	2	QC1	CCV3	1.9699
39	26	S	k1100766-002	2.4552
40	27	S	k1100766-003	2.6846
41	28	S	k1100766-004	2.7154
42	29	S	k1100766-005	2.9926
43	30	S	k1100766-006	2.1549
44	31	S	k1100766-007	1.4616
45	32	S	k1100766-008	1.6751
46	33	S	k1100766-009	1.3092
47	34	S	k1100766-010	1.7830
48	0	B	Baseline	-0.0041
49	5	QC2	CCB4	0.0194
50	2	QC1	CCV4	2.0181
51	35	S	k1100766-011	1.7582
52	36	S	k1100766-012	0.0297
53	37	S	k1100712-001	0.3184
54	38	S	rinse	0.0215
55	39	S	k1100661-003*20	2.6896
56	19	S	k1100661-004*10	1.4173
57	0	B	Baseline	-0.0041
58	5	QC2	CCB5	0.0320
59	2	QC1	CCV5	1.9680
60	1	D	Drift	5.0307
61	0	B	Baseline	-0.0041
62	0	B	FinalBase	0.0000

QC Limits

Channel : 2

QC 1 Unused
QC 2 Unused
QC 3 Unused
QC 4 Unused
QC 5 Unused
QC 6 Unused
QC 7 Unused
QC 8 Unused
QC 9 Unused
QC10 Unused

BA 1131111

CORRECTIONS

Channel	:	2
Baseline	:	Yes
Drift	:	Yes
Carry over	:	Yes
%:		0.9

---

* ... Sample offscale
\+ ... Result higher than sample limit
\- ... Result lower than sample limit
P ... Standard passed
F ... Standard failed
N ... Value not calculated or not used
R ... Resample after offscale
M ... Peak marker moved manually
D ... Diluted sample

** <END OF REPORT> **

5/14/91

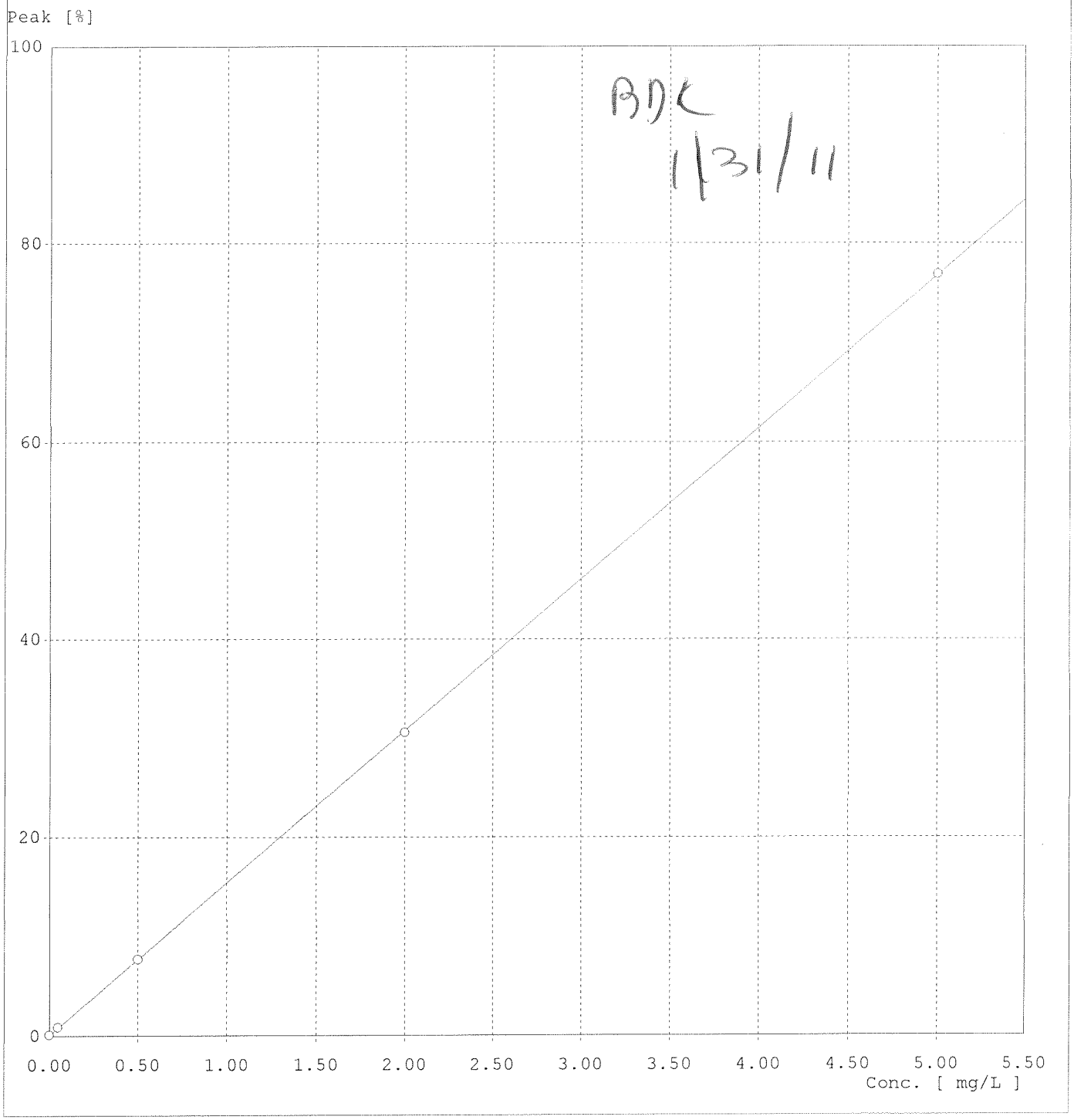
BRAN+LUEBBE

Calibration Curve

Name of run :110131B.run
Comment :

Name of analysis :NO2+NO3

Channel :2
Method :Method 2
Curve fit :linear a=-3.2937E-001 b=9.9448E-005
Corr. coeff. :1.0000



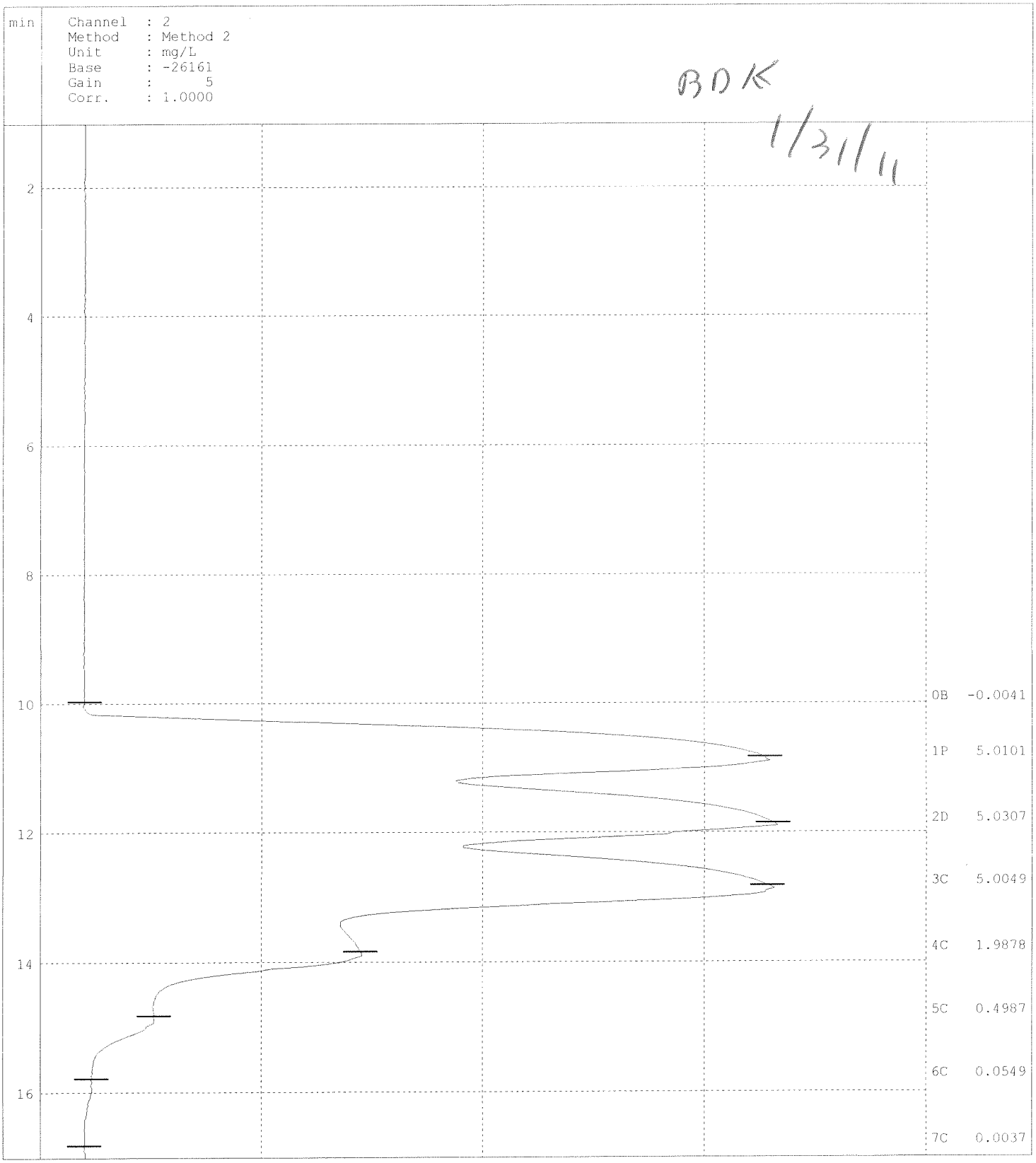
BH 1/31/11

BRAN+LUEBBE

Post-run chart

Name of run :110131B.RUN
Comment :

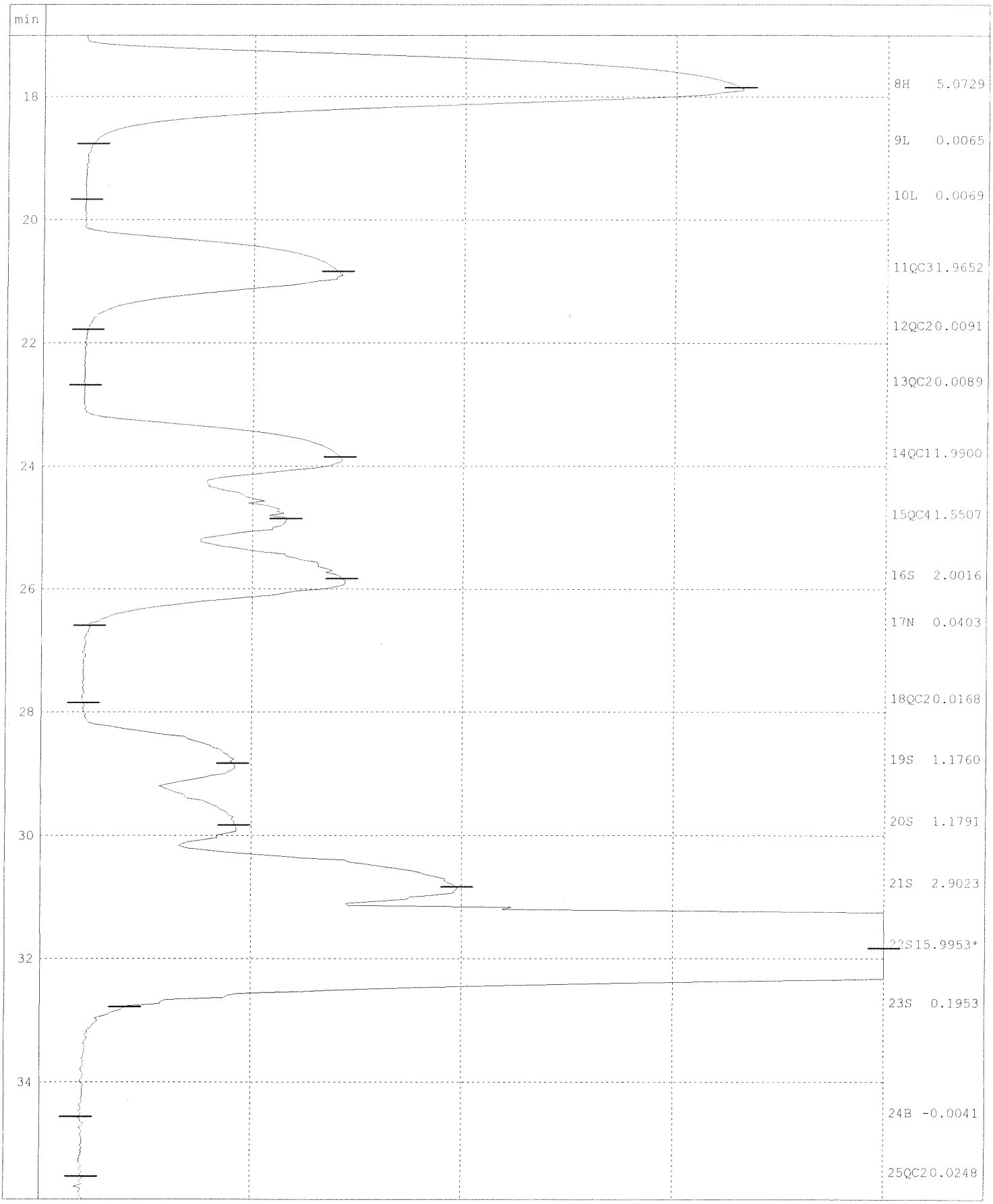
Name of analysis :NO2+NO3



BDK 1/31/11

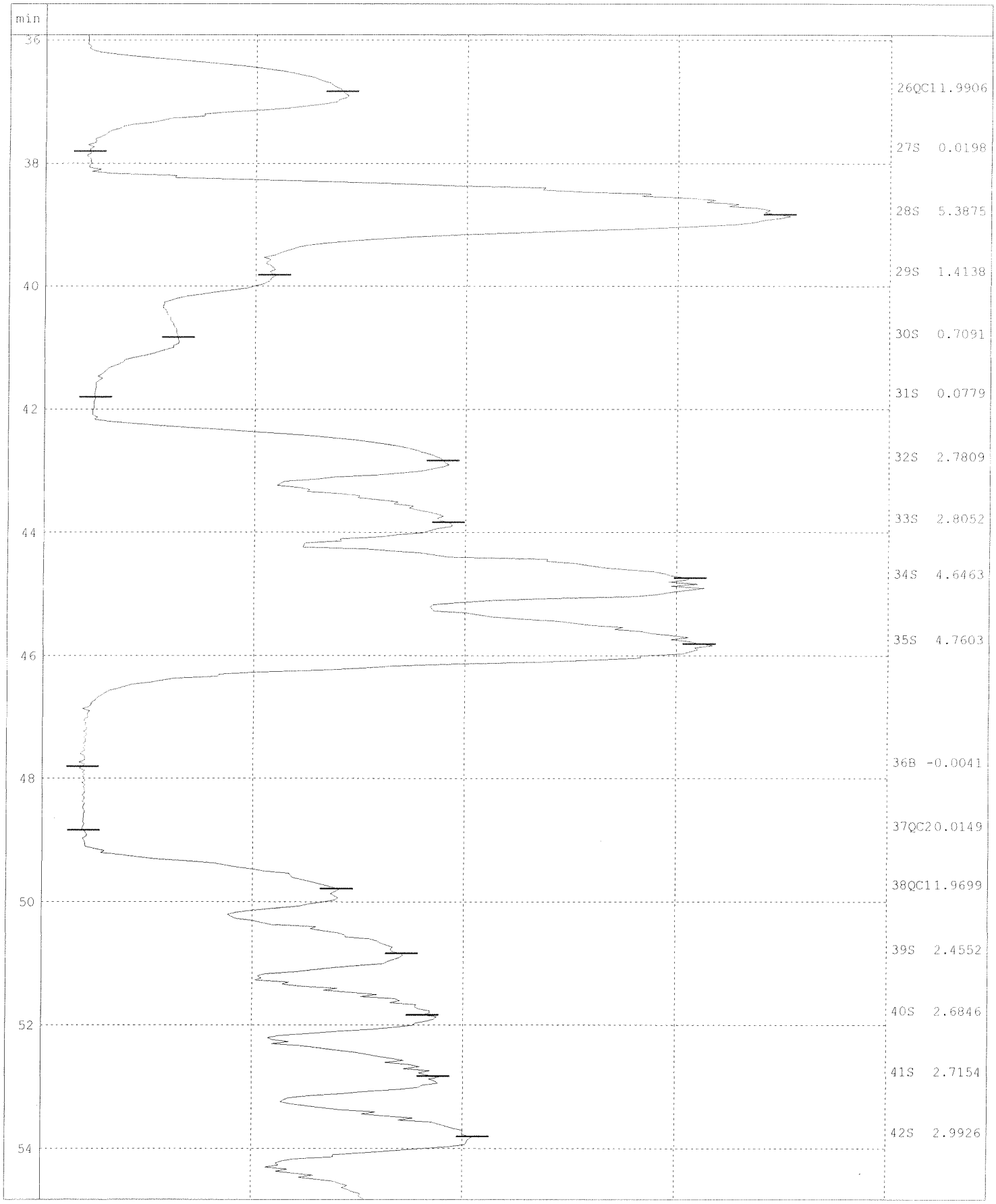
Name of run :110131B.RUN
Comment :

Name of analysis :NO2+NO3



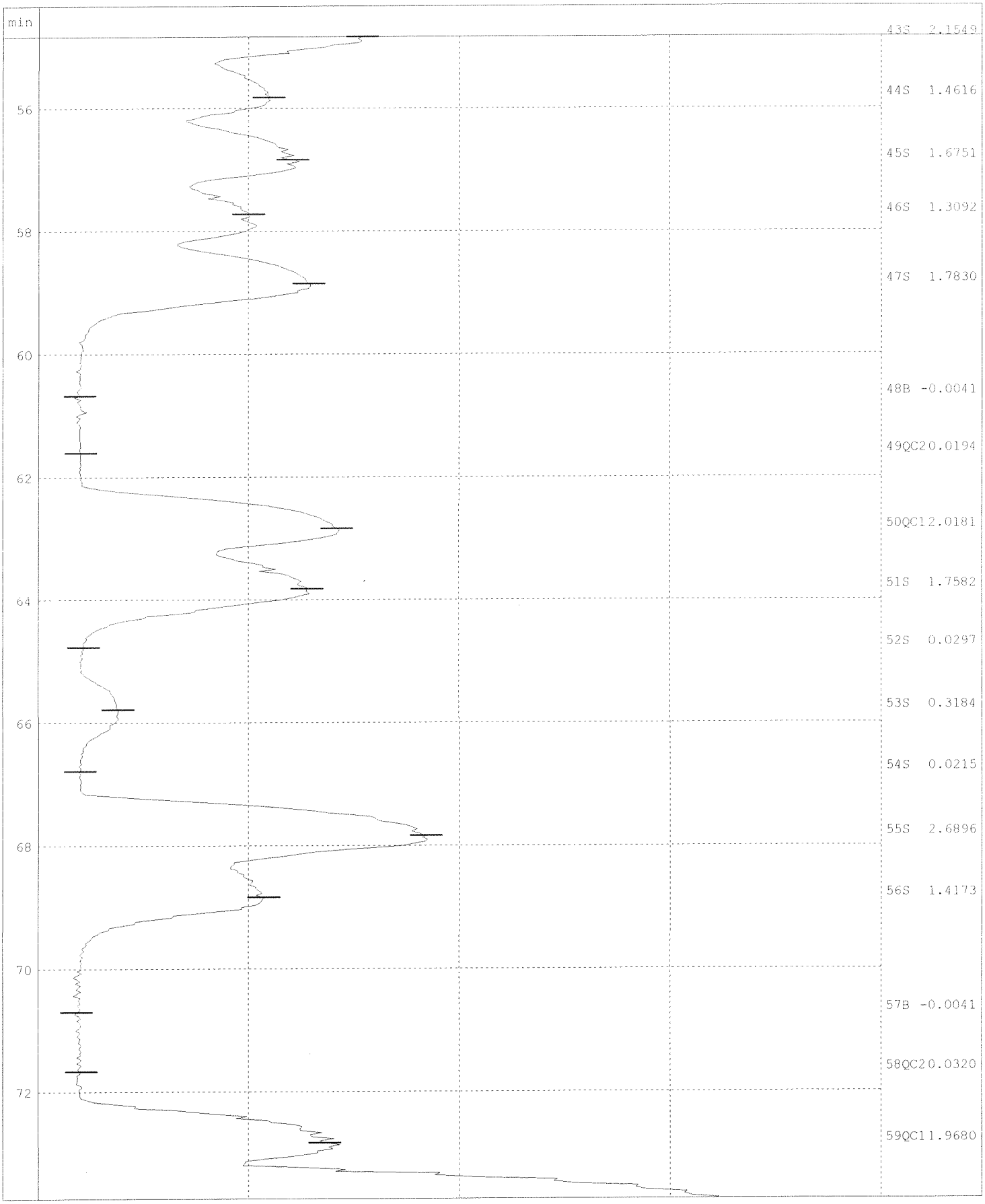
Name of run :110131B.RUN
Comment :

Name of analysis :NO2+NO3



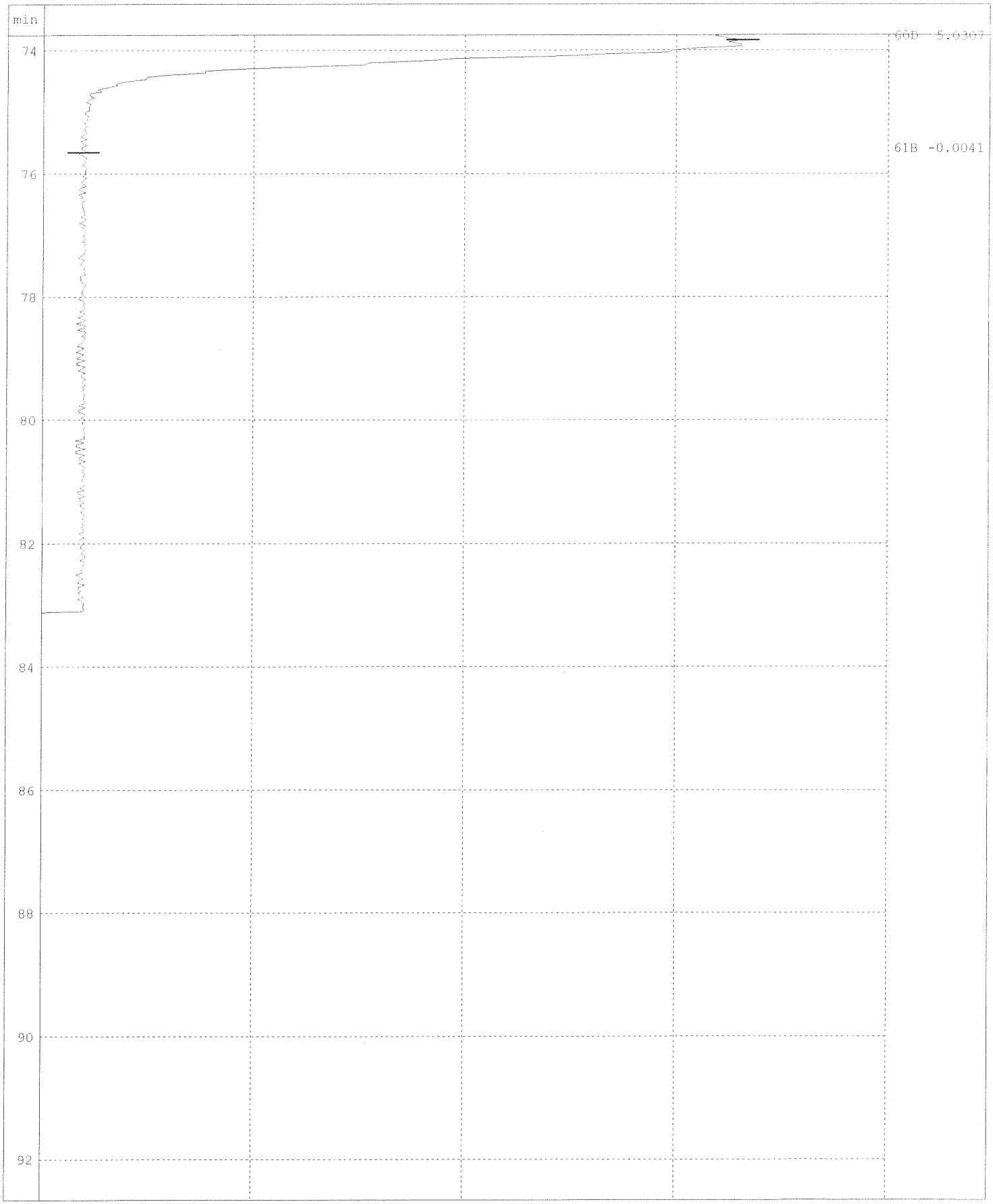
Name of run :110131B.RUN
Comment :

Name of analysis :NO2+NO3



Name of run :110131B.RUN
Comment :

Name of analysis :NO2+NO3



Work Request # Original (T3) 745, 752, 697

Tier: ✓ ✓ ✓ IV

Date Analyzed: 2/1/11

Analyst: CY

Analysis: Alk on buret

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	(yes)/no/NA
2.	Holding times met for all analyses and for all samples?	(yes)/no/NA
3.	Are calculations correct?	(yes)/no/NA
4.	Is the reporting basis correct? (Dry Weight)	(yes)/no/NA
5.	All quality control criteria met?	(yes)/no/NA
	a. Is the calibration curve correlation coefficient ≥ 0.995?	(yes)/no/NA
	b. MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	(yes)/no/NA
	c. Are ICVs, CCVs, and CCBs all within acceptance limits?	(yes)/no/NA
	d. Are results for methods blanks all ND?	(yes)/no/NA
	e. Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	(yes)/no/NA
	f. Are all exceptions explained?	(yes)/no/NA
6.	Are all service requests that apply attached?	(yes)/no/NA
7.	Are all samples labelled correctly?	(yes)/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	(yes)/no/NA
9.	Are detection limits and units reported correctly?	(yes)/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	(yes)/no/NA
11.	Is the unused space on the benchsheet crossed out?	(yes)/no/NA
12.	Was analysis turned in by the due date? (n-2) (If not record SR#)	(yes)/no/NA

COMMENTS:

1

Final Approved by: BDC Date: 2/2/11

DQREPORT

234489

nalyte: Alkalinity
ethod: 310.1 / SM20 2320 B

Regular Level x
High Level
Low Level

Analyst: cv
Pipette: k-pH-01

Date: 2/1/11
Time: 10:30

Table 403.1 Alkalinaty Relationships

Result of titration	Hydroxide Alkalinaty as CaCO3	Carbonate Alkalinaty as CaCO3	Bicarbonate Concentration as CaCO3
P = 0	0.0	0.0	T
P < 1/2T	0.0	2P	T - 2P
P = 1/2T	0.0	2P	0
P > 1/2T	2P - T	2(T- P)	0
P = T	T	0.0	0

P = Phenolphthalein Alkalinity T = Total Alkalinaty

pH meter cal:

pH meter ID# K-pH-1

4.0	4
7.0	7.00
10.0	10

Buffer Log #:
cond/1-75-o
cond/1-77-p
cond/1-79-n

Reagents:

	Concentration		Lot #	Date
HCl:	0.020	N	1002359	
LCS TV=	80	mg/L	S166-698	

Phenolphthalein alkalinity = the quantity measured by titration to pH 8.3

Alkalinity, mg CaCO3 /L = ($A_{(mL\ acid\ used)}$ x $N_{(HCl)}$ x 50,000) /mL sample

Alkalinity Low level , mg CaCO3 /L = (($2A_{(mL\ acid\ used\ to\ pH4.5)}$ -$B_{(mL\ acid\ used\ to\ pH4.2)}$)x $N_{(HCl)}$ x 50,000) /mL sample

BNK 2/2/11

R:\WET\ANALYSES\ALK\TEMPLATE\alk page HL-LL-RL- revision 1

	Service Request#	Sample Vol (mL)	pH Initial	Vol to pH 8.3	Vol to pH 4.5	Vol to pH 4.2	Phen. Alk. mg/L	OH- Alk. mg/L	Carb Alk. mg/L	Bicarb Alk. mg/L	Total Alk. mg/L	Low Level Alk. mg/L	Notes/Comments
1	MB-1	100.0	5.81		0.15	0.31					~~1.5~~	-0.1	
2	LCS-1	50.0	9.12		3.90						78.0		%REC=98
3	K1100733-001	50.0	7.52		1.99						39.8		x=39.7 RPD=<1
4	K1100733-001d	50.0	7.55		1.98						39.6		
5	K1100733-002	50.0	7.45		1.75						35.0		
6	K1100733-003	50.0	7.27		1.70						34.0		
7	K1100733-004	65.0	7.51		2.55						39.2		
8	K1100745-001	52.0	7.26		1.20						23.1		
9	K1100745-002	50.0	7.27		1.55						31.0		
10	K1100745-003	50.0	7.17		1.08						21.6		
11	K1100745-004	50.0	7.17		1.10						22.0		
12	K1100752-001	100.0	6.94		1.51	1.72					~~15.1~~	13.0	
13	K1100752-002	50.0	7.16		1.30						26.0		x= 26.1 RPD=<1
14	K1100752-002d	50.0	7.15		1.31						26.2		
15	K1100752-003	50.0	7.32		1.30						26.0		
16	K1100752-004	50.0	7.55		1.30						26.0		
16	K1100692-001	50.0	6.91		8.58			—	—	171.6	171.6		
17	K1100692-002	50.0	6.96		8.80			—	—	176.0	176.0		
18	K1100692-003	100.0	5.78		0.15	0.28		—	—	0.2	~~1.5~~	0.2	
19	buffer check		3.98								#DIV/0!		
20											#DIV/0!		

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Analytical Results Summary

ıstrument Name: K-pH-01 **Analyst:** CVECCHITTO **Analysis Lot:** 234489 **Method/Testcode:** SM 2320 B/Alkalinity Titr

ɔ Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
100692-001	Alkalinity as CaCO3, Total	N/A		Water	172.00 mg/L	30 mL	172 mg/L	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-001	Bicarbonate as CaCO3	N/A		Water	172.00 mg/L	30 mL	172 mg/L	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-001	Carbonate as CaCO3	N/A		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-001	Hydroxide as CaCO3	N/A		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-002	Alkalinity as CaCO3, Total	N/A		Water	176.00 mg/L	30 mL	176 mg/L	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-002	Bicarbonate as CaCO3	N/A		Water	176.00 mg/L	30 mL	176 mg/L	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-002	Carbonate as CaCO3	N/A		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-002	Hydroxide as CaCO3	N/A		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-003	Alkalinity as CaCO3, Total	N/A		Water	0.20 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-003	Bicarbonate as CaCO3	N/A		Water	0.20 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-003	Carbonate as CaCO3	N/A		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	IV
100692-003	Hydroxide as CaCO3	N/A		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	IV
100733-001	Alkalinity as CaCO3, Total	N/A		Water	39.80 mg/L	30 mL	39.8 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100733-002	Alkalinity as CaCO3, Total	N/A		Water	35.00 mg/L	30 mL	35.0 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100733-003	Alkalinity as CaCO3, Total	N/A		Water	34.00 mg/L	30 mL	34.0 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100733-004	Alkalinity as CaCO3, Total	N/A		Water	39.20 mg/L	30 mL	39.2 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100745-001	Alkalinity as CaCO3, Total	N/A		Water	23.10 mg/L	30 mL	23.1 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100745-002	Alkalinity as CaCO3, Total	N/A		Water	31.00 mg/L	30 mL	31.0 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100745-003	Alkalinity as CaCO3, Total	N/A		Water	21.60 mg/L	30 mL	21.6 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100745-004	Alkalinity as CaCO3, Total	N/A		Water	22.00 mg/L	30 mL	22.0 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100752-001	Alkalinity as CaCO3, Total	N/A		Water	13.00 mg/L	30 mL	13.0 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100752-002	Alkalinity as CaCO3, Total	N/A		Water	26.00 mg/L	30 mL	26.0 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100752-003	Alkalinity as CaCO3, Total	N/A		Water	26.00 mg/L	30 mL	26.0 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
100752-004	Alkalinity as CaCO3, Total	N/A		Water	26.00 mg/L	30 mL	26.0 mg/L	1	3.0	5.0			2/1/11 10:30:00	N	V
21100904-01	Alkalinity as CaCO3, Total	DUP	K1100752-002	Water	26.20 mg/L	30 mL	26.2 mg/L	1	3.0	9.0		<1	2/1/11 10:30:00	N	V
21100904-02	Alkalinity as CaCO3, Total	DUP	K1100733-001	Water	39.60 mg/L	30 mL	39.6 mg/L	1	3.0	9.0		<1	2/1/11 10:30:00	N	V
21100904-03	Alkalinity as CaCO3, Total	MB		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	V
21100904-03	Bicarbonate as CaCO3	MB		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	V
21100904-03	Carbonate as CaCO3	MB		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	V

ndicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Analytical Results Summary

nstrument Name: K-pH-01 **Analyst:** CVECCHITTO **Analysis Lot:** 234489 **Method/Testcode:** SM 2320 B/Hydroxide Alk

b Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
)1100904-03	Hydroxide as CaCO3	MB		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	V
)1100904-05	Alkalinity as CaCO3, Total	N/A		Water	26.00 mg/L	30 mL	26.0 mg/L	1	3.0	9.0			2/1/11 10:30:00	N	V
)1100904-05	Bicarbonate as CaCO3	N/A		Water	26.00 mg/L	30 mL	26.0 mg/L	1	3.0	9.0			2/1/11 10:30:00	N	V
)1100904-05	Carbonate as CaCO3	N/A		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	V
)1100904-05	Hydroxide as CaCO3	N/A		Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0			2/1/11 10:30:00	N	V
)1100904-06	Alkalinity as CaCO3, Total	DUP	KQ1100904-05	Water	26.20 mg/L	30 mL	26.2 mg/L	1	3.0	9.0		<1	2/1/11 10:30:00	N	V
)1100904-06	Bicarbonate as CaCO3	DUP	KQ1100904-05	Water	26.20 mg/L	30 mL	26.2 mg/L	1	3.0	9.0		<1	2/1/11 10:30:00	N	V
)1100904-06	Carbonate as CaCO3	DUP	KQ1100904-05	Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0		NC	2/1/11 10:30:00	N	V
)1100904-06	Hydroxide as CaCO3	DUP	KQ1100904-05	Water	0.00 mg/L	30 mL	9.0 mg/L U	1	3.0	9.0		NC	2/1/11 10:30:00	N	V
)1100904-07	Alkalinity as CaCO3, Total	LCS		Water	78.00 mg/L	30 mL	78.0 mg/L	1	3.0	9.0	98		2/1/11 10:30:00	N	V

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BDIC

2/2/11

indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Original

Work Request # (KL712) KL733 KL731

Tier: I II IV I

Date Analyzed: 1/27/11

Analyst: KC

Analysis: TDS

DATA QUALITY REPORT
INORGANICS

Explain any "no" responses to questions below, and any corrective actions in the comments section below.

1.	Is the method name and number correct and appropriate?	yes/no/NA
2.	Holding times met for all analyses and for all samples?	yes/no/NA
3.	Are calculations correct?	yes/no/NA
4.	Is the reporting basis correct? (Dry Weight)	yes/no/NA
5.	All quality control criteria met?	yes/no/NA
	a. Is the calibration curve correlation coefficient ≥ 0.995?	yes/no/NA
	b. MBs, CCVs, CCBs, LCSs, Dups, and Spikes, analyzed at proper frequency?	yes/no/NA
	c. Are ICVs, CCVs, and CCBs all within acceptance limits?	yes/no/NA
	d. Are results for methods blanks all ND?	yes/no/NA
	e. Are all QC samples within acceptance criteria? (LCS % rec, MS/DMS % rec, DUP or MS/DMS RPDs, etc.)	yes/no/NA
	f. Are all exceptions explained?	yes/no/NA
6.	Are all service requests that apply attached?	yes/no/NA
7.	Are all samples labelled correctly?	yes/no/NA
8.	Have all instructions on the service request been followed? (e.g. Special MRLs, QC on a specific sample)	yes/no/NA
9.	Are detection limits and units reported correctly?	yes/no/NA
10.	Are proper Analysis/Extraction stickers included on report?	yes/no/NA
11.	Is the unused space on the benchsheet crossed out?	yes/no/NA
12.	Was analysis turned in by the due date? (n-2) (if not record SR#)	yes/no/NA

COMMENTS:

KL731- Rush

2/1/11

Final Approved by: BDK Date: 2/4

DQREPORT

WO BDC

Analytical Results Summary

nstrument Name: K-Balance-31 **Analyst:** KCUEVAS **Analysis Lot:** 233979 **Method/Testcode:** SM 2540 C/TDS

b Code	Target Analytes	QC	Parent Sample	Matrix	Raw Result	Sample Amt.	Final Result	Dil	MDL	PQL	% Rec	% RSD	Date Analyzed	QC?	Tier
100692-001	Solids, Total Dissolved	N/A		Water	974.70 mg/L	75 ml	975 mg/L	1	14	14			1/27/11 07:30	N	IV
100692-002	Solids, Total Dissolved	N/A		Water	1604.00 mg/L	75 ml	1600 mg/L	1	14	14			1/27/11 07:30	N	IV
100692-003	Solids, Total Dissolved	N/A		Water	2.00 mg/L	200 ml	5.0 mg/L U	1	5.0	5.0			1/27/11 07:30	N	IV
100712-001	Solids, Total Dissolved	N/A		Drinking Water	359.00 mg/L	100 ml	359 mg/L	1	10	10			1/27/11 07:30	N	I
100731-002	Solids, Total Dissolved	N/A		Water	124.00 mg/L	100 ml	124 mg/L	1	10	10			1/27/11 07:30	N	I
100733-001	Solids, Total Dissolved	N/A		Water	156.00 mg/L	100 ml	156 mg/L	1	(1) 10	~~20~~			1/27/11 07:30	N	V
100733-002	Solids, Total Dissolved	N/A		Water	129.00 mg/L	100 ml	129 mg/L	1	10	(1) ~~20~~			1/27/11 07:30	N	V
100733-003	Solids, Total Dissolved	N/A		Water	34.00 mg/L	100 ml	34 mg/L	1	10	~~20~~			1/27/11 07:30	N	V
100733-004	Solids, Total Dissolved	N/A		Water	189.00 mg/L	100 ml	189 mg/L	1	10	~~20~~			1/27/11 07:30	N	V
Q1100766-02	Solids, Total Dissolved	MB		Water	1.50 mg/L	200 ml	5.0 mg/L U	1	5.0	5.0			1/27/11 07:30	N	IV
Q1100766-03	Solids, Total Dissolved	LCS		Water	1074.00 mg/L	50 ml	1070 mg/L	1	20	20	99		1/27/11 07:30	N	IV
Q1100766-04	Solids, Total Dissolved	DUP	K1100692-002	Water	1602.70 mg/L	75 ml	1600 mg/L	1	14	14		<1	1/27/11 07:30	N	IV

PQL = (1) MDL

KC 2/1/11

BDK

2/1/11

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indicates Final Result is not yet adjusted for Solids because it has not yet been determined.

Work Order #.: _____ Method: EPA SM 2540 C

Analysis: Total Dissolved Solids

Sample #	Crucible #	Conductivity	Sample Volume (ml)	Wt, Cru. + Dry sample (1) (g)	Wt, Cru. + Dry sample (2) (g)	Wt, Cru. + Dry sample (3) (g)	Wt. Crucible (g)	Wt. Dry Sample (g)	TDS (mg/L)	TDS (mg/L) reported
MB	4Z		200	110.7117	110.7115		110.7114	0.0003	2	<5
LCS	J16		50	75.1416	75.1420		75.0879	0.0537	1074	1070
LK1100712-001	E85	545	100	86.4642	86.4640		86.4283	0.0359	359	359
K1100733-001	J6	222	100	70.7148	70.7151		70.6992	0.0156	156	156
K1100733-002	15Y	165	100	76.2711	76.2709		76.2582	0.0129	129	129
K1100733-003	22A	106	100	77.8640	77.8638		77.8606	0.0034	34	34.0
K1100733-004	[35]	258	100	83.5656	83.5660		83.5467	0.0189	189	189
K1100692-001	11C	2610	75	73.2671	73.2673		73.1940	0.0731	975	975
K1100692-002	35C	2657	75	75.0994	75.0997		74.9791	0.1203	1604	1600
K1100692-003	[20A]	45	200	132.2466	132.2465		132.2462	0.0004	2.00	<5
K1100731-002	L L	221	100	80.9300	80.9303		80.9176	0.0124	124	124
K1100692-002D	*7	2657	75	69.2216	69.2215		69.1014	0.1202	1603	1600

Calculation: Dissolved Solids (mg/L) = Wt. Dry Sample (g) x 1000 x 1000 / Volume (ml) Balance#31

APG #:4033 Lot# 280610 ID# TDS-1-28-FF T.V. =1090 % Rec =98

Wt (1)	Start	8:30	Wt (2)	Start 07:30	Wt (3)	Start	
	Stop	6:00		Stop 09:00		Stop	
Wt (1)	Start	180	Wt (2)	Start180	Wt (3)	Start	K-BALANCE # 31
Temp	Stop	180	Temp	Stop 180	Temp	Stop	date time

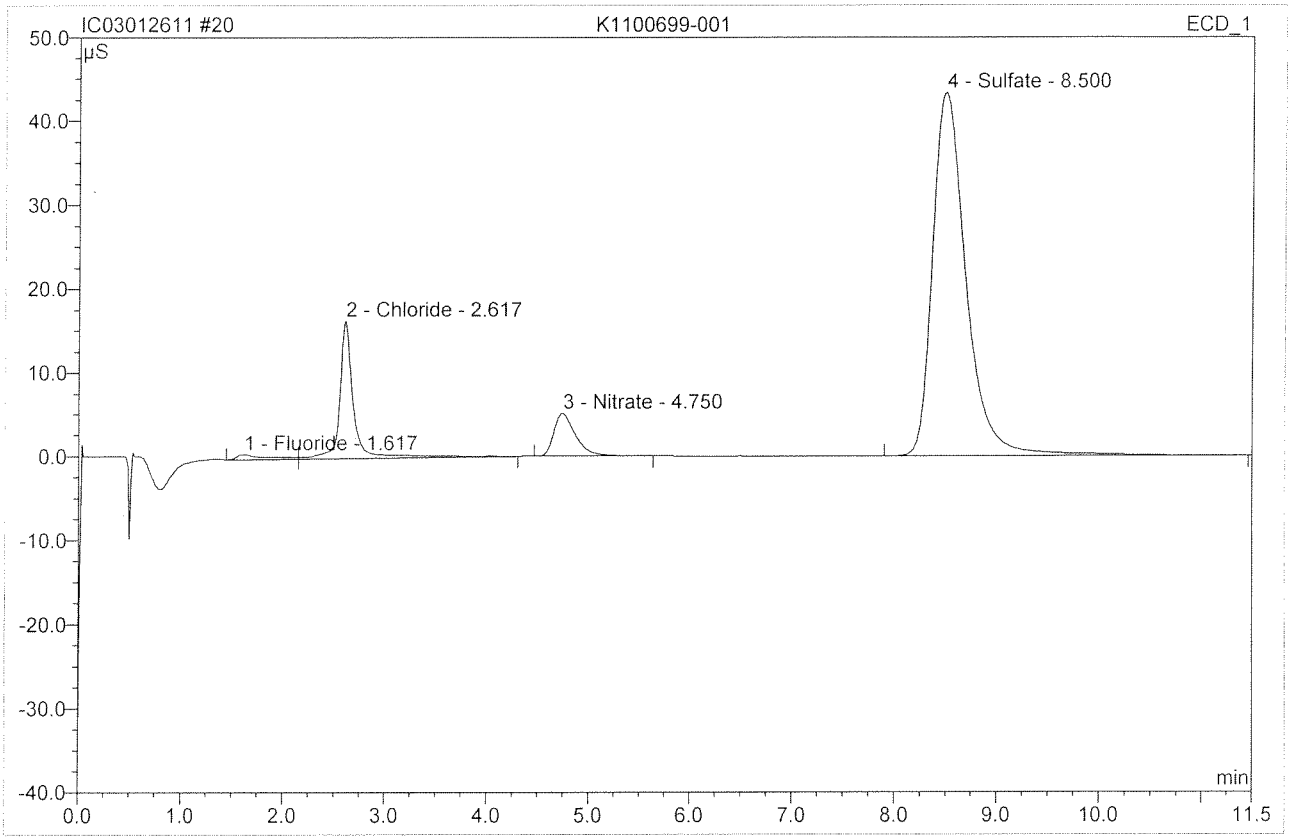
Analyzed By: KC Date Analyzed: 1/27/2011 7:30

Reviewed By: DOK Date Reviewed: 2/1/11

K0692-2/2d $\bar{x}$ = 1600 RPD = 2.1%

20 K1100699-001

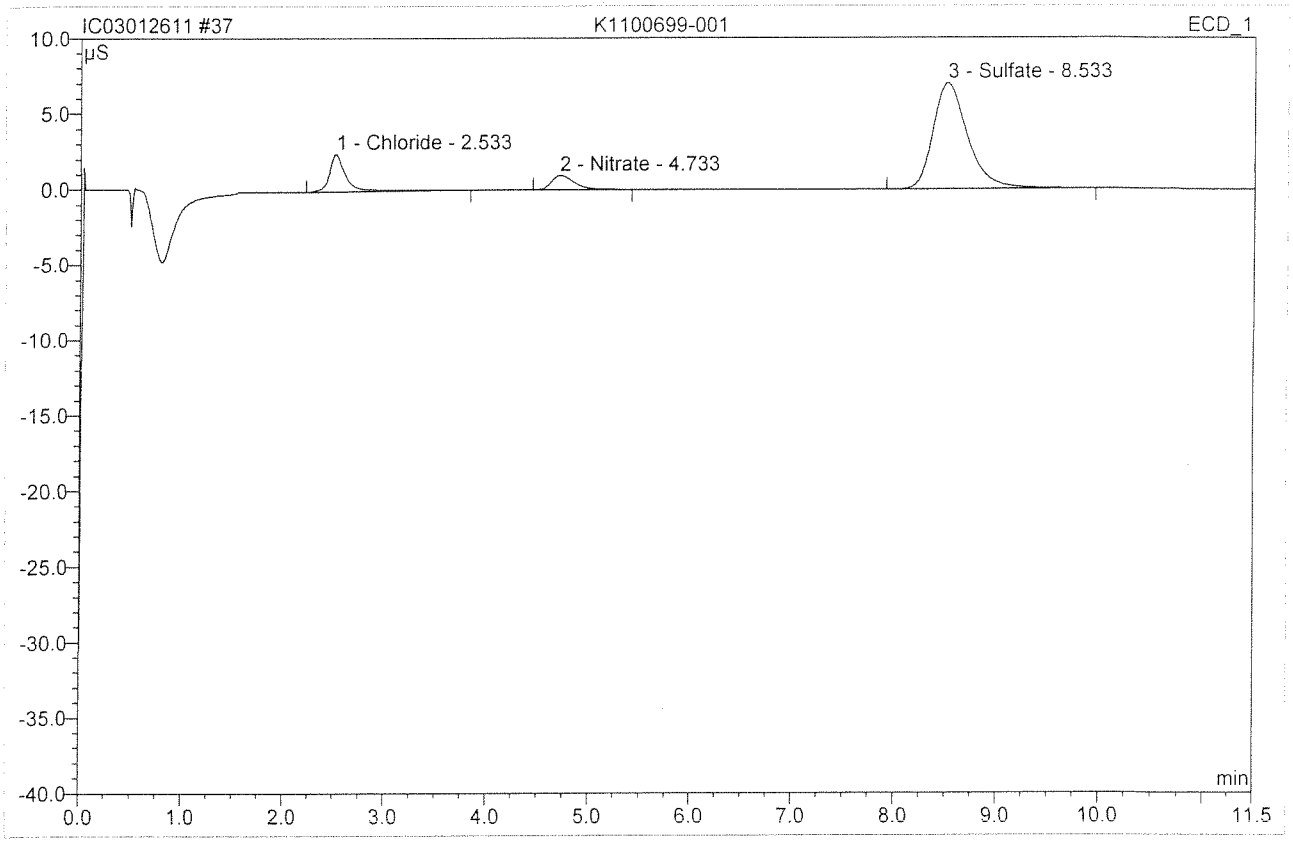
Sample Name:	**K1100699-001**	*Injection Volume:*	**200.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 11:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.62	Fluoride	0.588	0.184	0.90	0.183	BM
2	2.62	Chloride	16.374	2.577	12.52	3.502	MB
3	4.75	Nitrate	5.097	1.278	6.21	0.710	BMB
4	8.50	Sulfate	43.365	16.543	80.37	34.876	BMB
Total:			65.425	20.582	100.00	39.272	

37 K1100699-001

Sample Name:	**K1100699-001**	*Injection Volume:*	**200.0**
Vial Number:	**39**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**1/26/2011 15:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

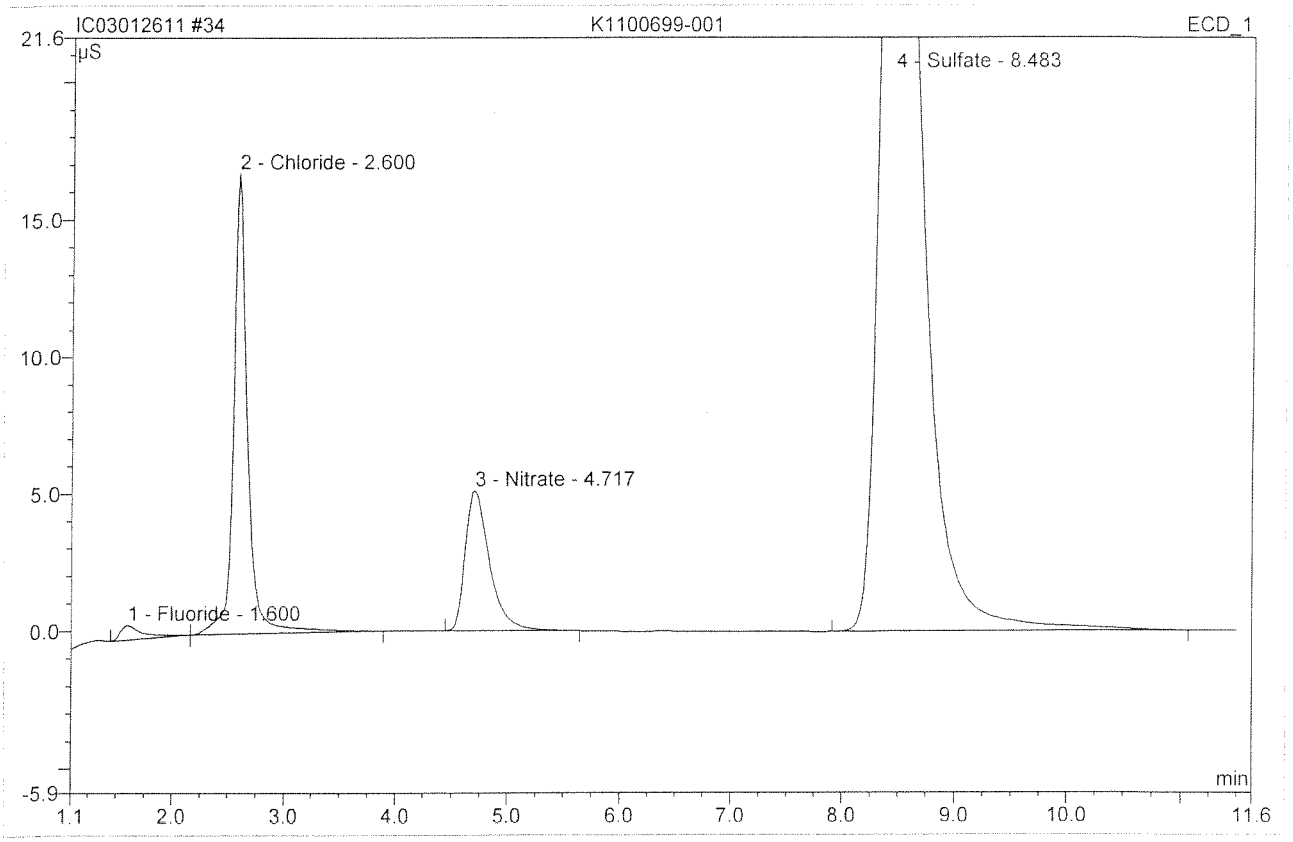


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.53	Chloride	2.479	0.494	14.26	3.360	BMB
2	4.73	Nitrate	0.949	0.241	6.94	0.669	BMB
3	8.53	Sulfate x2 28.8 RPD<	7.005	2.732	78.80	28.802	BMB
Total:			10.434	3.468	100.00	32.831	

34 K1100699-001

D

Sample Name:	**K1100699-001**	*Injection Volume:*	**200.0**
Vial Number:	**36**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 15:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



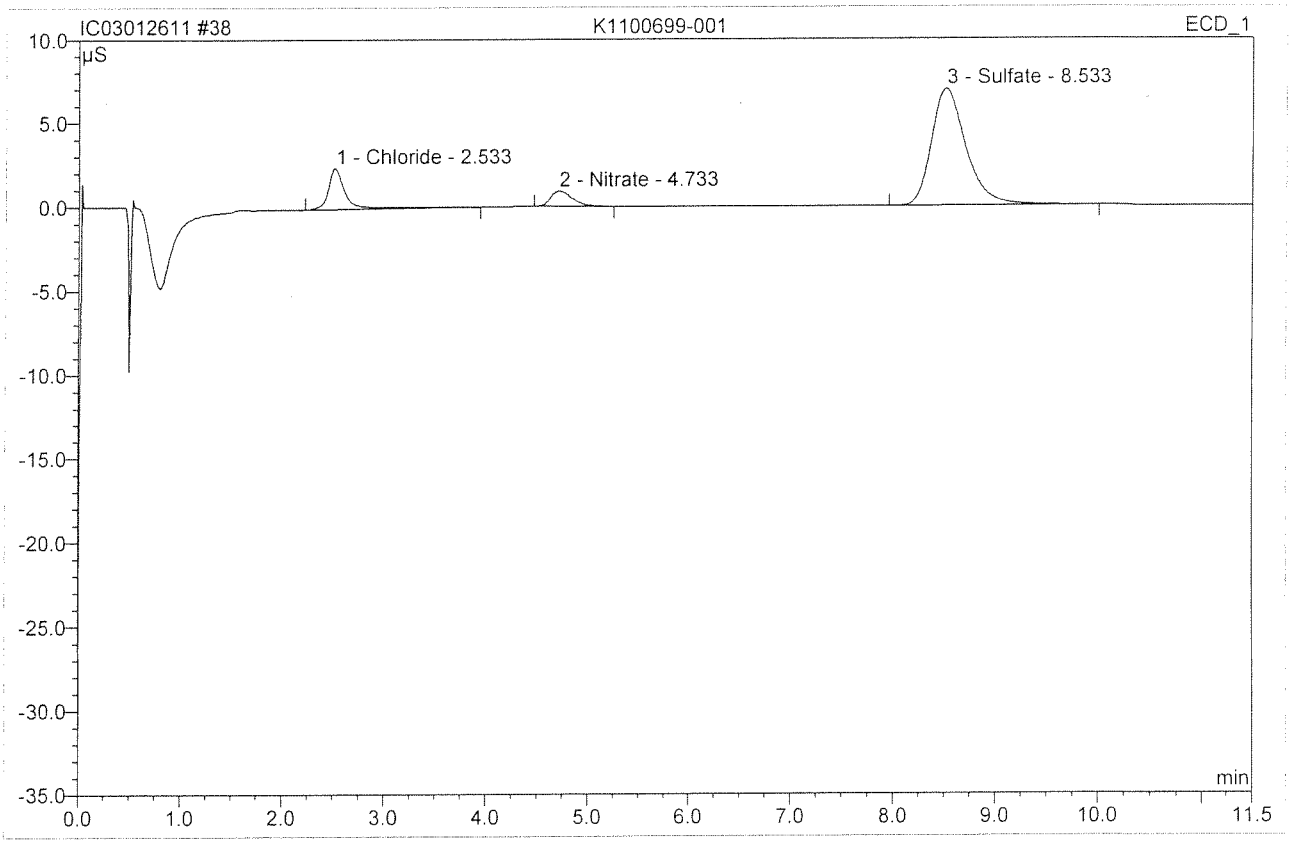
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride	0.529	0.124	0.61	0.123	BMB
2	2.60	Chloride	16.774	2.438	12.09	3.314	bMB
3	4.72	Nitrate	5.091	1.280	6.35	0.711	BMB
4	8.48	Sulfate	42.412	16.318	80.94	34.402	BMB
Total:			64.806	20.160	100.00	38.550	

NO_2 <0.10

38 K1100699-001

D

Sample Name:	**K1100699-001**	*Injection Volume:*	**200.0**
Vial Number:	**40**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**1/26/2011 15:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**

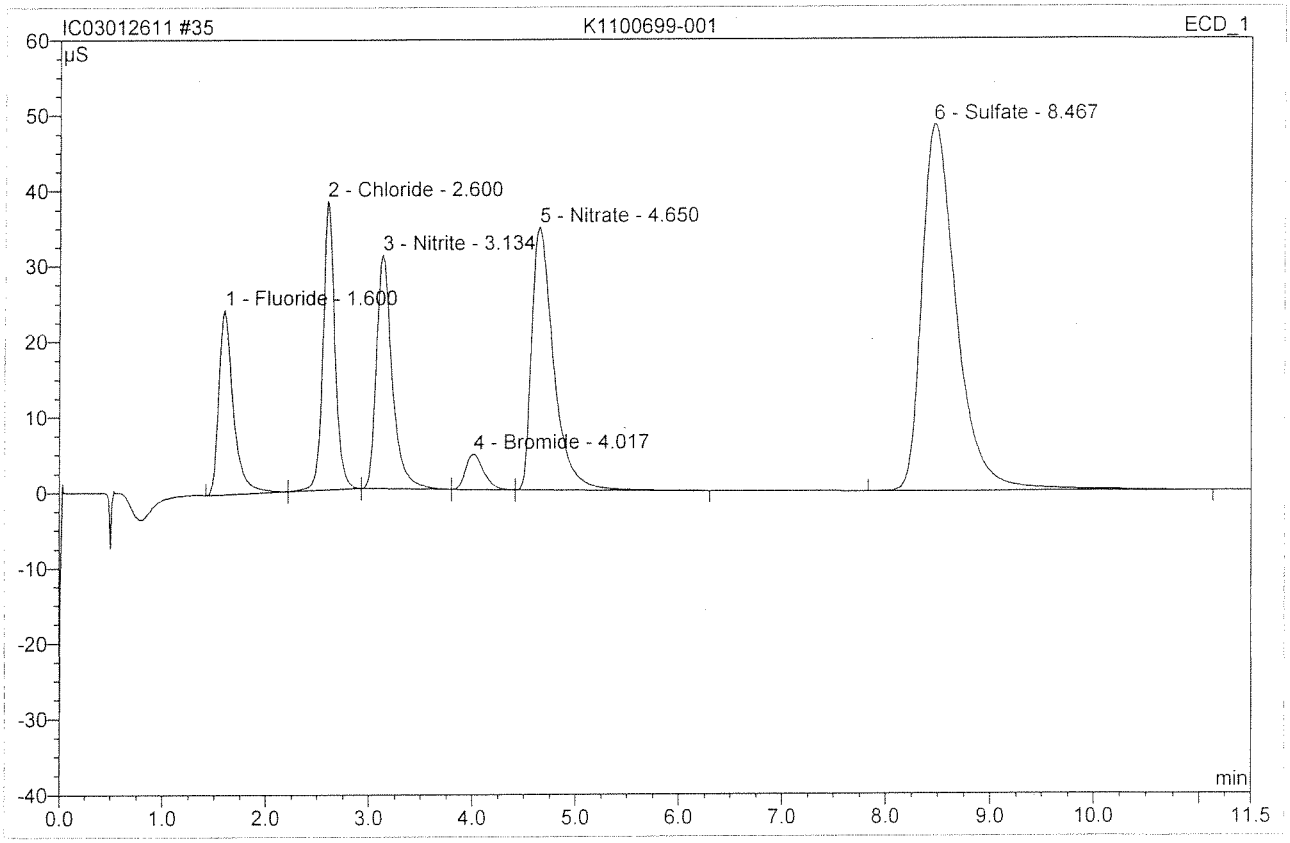


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	2.53	Chloride	2.439	0.499	14.43	3.389	BMB
2	4.73	Nitrate	0.925	0.228	6.60	0.634	BMB
3	8.53	Sulfate	6.970	2.728	78.96	28.756	BMB
Total:			10.334	3.455	100.00	32.778	

35 K1100699-001

MS

Sample Name:	**K1100699-001**	*Injection Volume:*	**200.0**
Vial Number:	**37**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 15:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



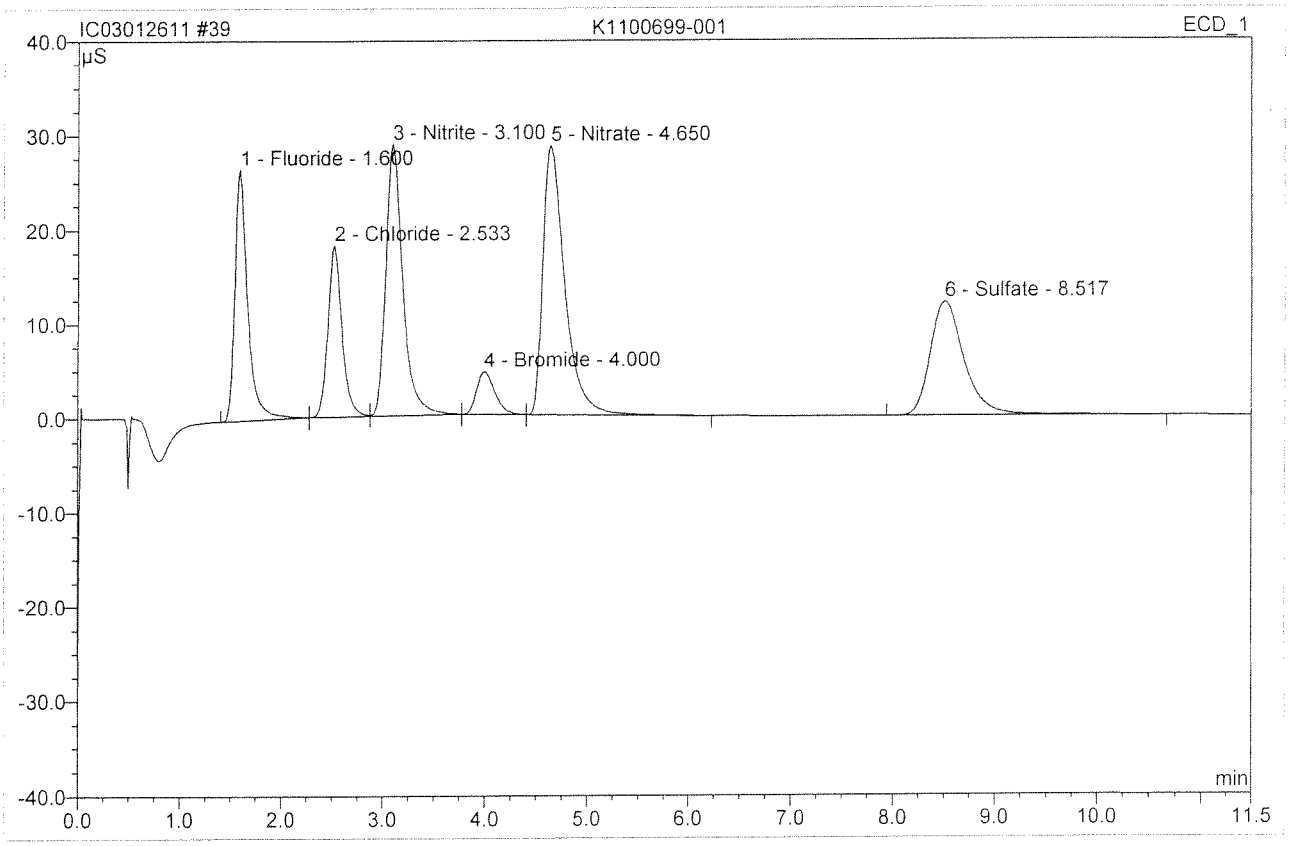
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride REC=100	24.388	4.025	9.35	3.993	BMB
2	2.60	Chloride REC=86	38.240	5.103	11.86	6.936	bMb
3	3.13	Nitrite REC=97	30.959	5.549	12.90	3.867	bMb
4	4.02	Bromide ~	4.743	0.961	2.23	3.843	bMb
5	4.65	Nitrate REC=103	34.853	8.655	20.11	4.809	bMB
6	8.47	Sulfate ~	48.569	18.737	43.54	39.502	BMB
Total:			181.751	43.030	100.00	62.949	

spk 1/1 4/

39 K1100699-001

MS

Sample Name:	**K1100699-001**	*Injection Volume:*	**200.0**
Vial Number:	**41**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**1/26/2011 16:11**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



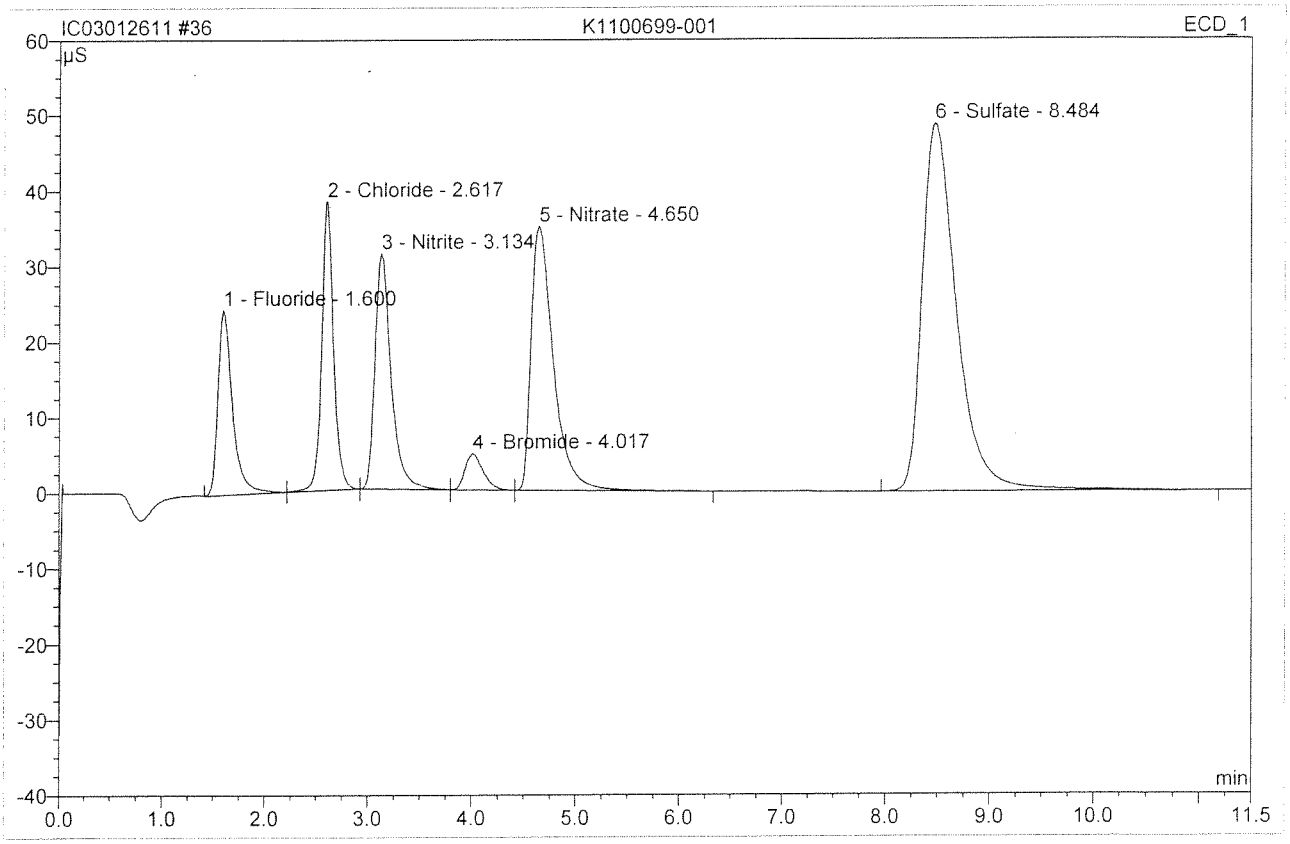
spk w/ 20

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride	26.631	3.967	15.68	19.676	BMB
2	2.53	Chloride	18.223	2.951	11.67	20.057	bM
3	3.10	Nitrite	28.824	5.574	22.03	19.420	Mb
4	4.00	Bromide	4.573	0.945	3.74	18.895	bMb
5	4.65	Nitrate	28.566	7.149	28.26	19.861	bMB
6	8.52	Sulfate RFC=105	12.151	4.713	18.63	49.680	BMB
Total:			118.968	25.300	100.00	147.589	

36 K1100699-001

MSD

Sample Name:	**K1100699-001**	*Injection Volume:*	**200.0**
Vial Number:	**38**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**2.0000**
Recording Time:	**1/26/2011 15:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



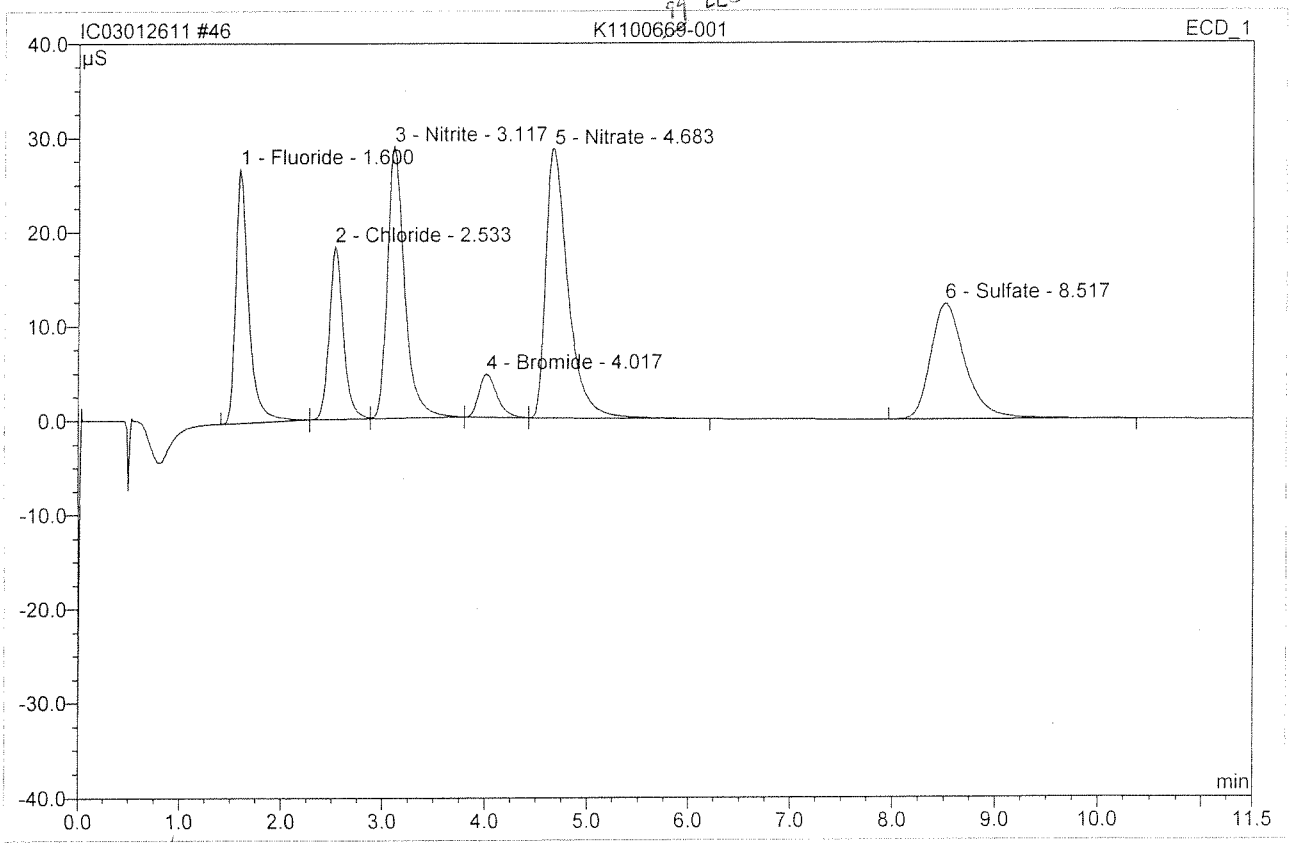
spk lvl 4/

No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride REC=101	24.505	4.054	9.38	4.022	BMB
2	2.62	Chloride REC=87	38.235	5.122	11.85	NR 6.961	bMb
3	3.13	Nitrite REC=98	31.167	5.605	12.97	3.906	bMb
4	4.02	Bromide —	4.787	0.967	2.24	3.868	bMb
5	4.65	Nitrate REC=101	35.076	8.736	20.22	4.854	bMB
6	8.48	Sulfate —	48.701	18.722	43.33	39.471	BMB
Total:			182.471	43.207	100.00	63.081	

46 K1100669-001

MSD

Sample Name:	**K1100669-001**	*Injection Volume:*	**200.0**
Vial Number:	**48**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**epa300**	*Bandwidth:*	**n.a.**
Quantif. Method:	**epa300**	*Dilution Factor:*	**10.0000**
Recording Time:	**1/26/2011 17:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**11.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.60	Fluoride	26.969	4.020	15.73	19.940	BMB
2	2.53	Chloride	18.282	2.994	11.72	20.349	bM
3	3.12	Nitrite	28.889	5.619	21.99	19.579	Mb
4	4.02	Bromide	4.590	0.951	3.72	19.012	bMb
5	4.68	Nitrate	28.569	7.242	28.34	20.119	bMB
6	8.52	Sulfate Rec=105	12.203	4.726	18.49	49.817	BMB
Total:			119.502	25.553	100.00	148.815	

Metals

Columbia Analytical Services

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Exponent
Project Name: Heglar Kronquist
Project No.: 0907194.000.0901

Service Request: K1100692

Sample Name:	Lab Code:
MW-3	K1100692-001DISS
MW-7D	K1100692-002DDISS
MW-7	K1100692-002DISS
MW-7S	K1100692-002SDISS
EB-012511	K1100692-003DISS
Method Blank	K1100692-MB

Comments:

Approved By: SC **Date:** 2/23/11

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Exponent
Project No.: 0907194.000.0901
Project Name: Heglar Kronquist
Matrix: WATER

Service Request: K1100692
Date Collected: 01/25/11
Date Received: 01/26/11
Units: ug/L
Basis: NA

Sample Name: MW-3
Lab Code: K1100692-001DISS

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	01/31/11	02/01/11	30	U	
Arsenic	200.8	0.50	0.07	1.0	01/31/11	02/02/11	0.89		
Calcium	200.7	50.0	6.0	1.0	01/31/11	02/01/11	155000		
Iron	200.7	20.0	0.8	1.0	01/31/11	02/01/11	12.6	J	
Magnesium	200.7	20.0	0.3	1.0	01/31/11	02/01/11	46700		
Manganese	200.7	5.0	0.2	1.0	01/31/11	02/01/11	3.2	J	
Potassium	200.7	400	40	1.0	01/31/11	02/01/11	27600		
Sodium	200.7	1000	200	10.0	01/31/11	02/01/11	245000		

% Solids: 0.0

Comments:

Metals

- 1 -
INORGANIC ANALYSIS DATA PACKAGE

Client: Exponent
Project No.: 0907194.000.0901
Project Name: Heglar Kronquist
Matrix: WATER

Service Request: K1100692
Date Collected: 01/25/11
Date Received: 01/26/11
Units: ug/L
Basis: NA

Sample Name: MW-7
Lab Code: K1100692-002DISS

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	01/31/11	02/01/11	30	U	
Arsenic	200.8	0.50	0.07	1.0	01/31/11	02/02/11	0.85		
Calcium	200.7	50.0	6.0	1.0	01/31/11	02/01/11	155000		
Iron	200.7	20.0	0.8	1.0	01/31/11	02/01/11	13.3	J	
Magnesium	200.7	20.0	0.3	1.0	01/31/11	02/01/11	46500		
Manganese	200.7	5.0	0.2	1.0	01/31/11	02/01/11	3.4	J	
Potassium	200.7	400	40	1.0	01/31/11	02/01/11	27900		
Sodium	200.7	1000	200	10.0	01/31/11	02/01/11	258000		

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Exponent
Project No.: 0907194.000.0901
Project Name: Heglar Kronquist
Matrix: WATER

Service Request: K1100692
Date Collected: 01/25/11
Date Received: 01/26/11
Units: ug/L
Basis: NA

Sample Name: EB-012511 **Lab Code:** K1100692-003DISS

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	01/31/11	02/01/11	30	U	
Arsenic	200.8	0.50	0.07	1.0	01/31/11	02/02/11	0.07	U	
Calcium	200.7	50.0	6.0	1.0	01/31/11	02/01/11	22.3	J	
Iron	200.7	20.0	0.8	1.0	01/31/11	02/01/11	0.8	U	
Magnesium	200.7	20.0	0.3	1.0	01/31/11	02/01/11	4.2	J	
Manganese	200.7	5.0	0.2	1.0	01/31/11	02/01/11	0.2	U	
Potassium	200.7	400	40	1.0	01/31/11	02/01/11	40	U	
Sodium	200.7	100	20	1.0	01/31/11	02/01/11	64	J	

% Solids: 0.0

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client: Exponent
Project No.: 0907194.000.0901
Project Name: Heglar Kronquist
Matrix: WATER

Service Request: K1100692
Date Collected:
Date Received:
Units: ug/L
Basis: NA

Sample Name: Method Blank
Lab Code: K1100692-MB

Analyte	Analysis Method	MRL	MDL	Dil. Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.7	50	30	1.0	01/31/11	02/01/11	30	U	
Arsenic	200.8	0.50	0.07	1.0	01/31/11	02/02/11	0.07	U	
Calcium	200.7	50.0	6.0	1.0	01/31/11	02/01/11	6.0	U	
Iron	200.7	20.0	0.8	1.0	01/31/11	02/01/11	0.8	U	
Magnesium	200.7	20.0	0.3	1.0	01/31/11	02/01/11	0.3	U	
Manganese	200.7	5.0	0.2	1.0	01/31/11	02/01/11	0.2	U	
Potassium	200.7	400	40	1.0	01/31/11	02/01/11	40	U	
Sodium	200.7	100	20	1.0	01/31/11	02/01/11	20	U	

% Solids: 0.0

Comments:

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum	5000	5029	101	5000	5125	102	5215	104	200.7
Arsenic	25.0	24.9	100	25.0	24.7	99	24.9	100	200.8
Calcium	5000	5095	102	2500	2577	103	2579	103	200.7
Calcium	12500	13057	104	25000	26042	104	25950	104	200.7
Iron	2500	2380	95	500	515	103	532	106	200.7
Iron	10000	10223	102	25000	25891	104	25799	103	200.7
Magnesium	5000	5026	101	2000	2075	104	2071	104	200.7
Magnesium	12500	12676	101	25000	25562	102	25764	103	200.7
Manganese	1250	1200	96	1000	1018	102	1023	102	200.7
Manganese	10000	10225	102	5000	5152	103	5126	103	200.7
Potassium	12500	12486	100	10000	10110	101	10235	102	200.7
Sodium	12500	11935	95	10000	10176	102	10180	102	200.7

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures CCV Source: CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5030	101	5024	100	200.7
Arsenic				25.0	24.9	100			200.8
Calcium				2500	2568	103	2494	100	200.7
Calcium				25000	25717	103	25541	102	200.7
Iron				500	523	105	503	101	200.7
Iron				25000	25402	102	24758	99	200.7
Magnesium				2000	2085	104	2059	103	200.7
Magnesium				25000	25399	102	25371	101	200.7
Manganese				1000	996	100	952	95	200.7
Manganese				5000	5058	101	4972	99	200.7
Potassium				10000	10002	100	10005	100	200.7
Sodium				10000	9898	99	9366	94	200.7

Metals

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICV Source: Inorganic Ventures **CCV Source:** CAS MIXED

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					Method
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				5000	5048	101			200.7
Calcium				2500	2542	102			200.7
Calcium				25000	25283	101			200.7
Iron				500	512	102			200.7
Iron				25000	24724	99			200.7
Magnesium				2000	2064	103			200.7
Magnesium				25000	25213	101			200.7
Manganese				1000	979	98			200.7
Manganese				5000	4985	100			200.7
Potassium				10000	10138	101			200.7
Sodium				10000	9550	96			200.7

Metals
- 2b -
CRDL STANDARD FOR AA AND ICP

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP Initial			CRDL Standard for ICP Final	
	True	Found	%R	True	Found	%R	Found	%R
Aluminum				50.00	57.73	115		
Arsenic				0.50	0.52	104		
Calcium				50.00	40.59	81		
Iron				20.00	19.63	98		
Magnesium				20.00	17.83	89		
Manganese				5.00	5.30	106		
Potassium				400.00	391.78	98		
Sodium				200.00	195.51	98		

Metals

- 3 -

BLANKS

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	Initial Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Method
Aluminum	30	U	30	U	30	U	30	U	200.7
Arsenic	0.07	U	0.07	U	0.07	U	0.07	U	200.8
Calcium	-7.6	J	6.0	U	6.0	U	6.0	U	200.7
Iron	0.8	U	0.8	U	1.1	J	0.8	U	200.7
Magnesium	-0.7	J	1.8	J	2.1	J	2.9	J	200.7
Manganese	0.8	J	0.3	J	0.6	J	0.5	J	200.7
Potassium	40	U	40	U	40	U	40	U	200.7
Sodium	20	U	20	U	20	U	20	U	200.7

Metals

- 3 -

BLANKS

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Concentration Units: ug/L

Analyte	Initial Calib. Blank	C	Continuing Calibration Blank 1	C	2	C	3	C	Method
Aluminum			30	U	30	U			200.7
Calcium			6.0	U	6.0	U			200.7
Iron			0.8	U	1.7	J			200.7
Magnesium			3.1	J	3.8	J			200.7
Manganese			0.4	J	0.6	J			200.7
Potassium			40	U	40	U			200.7
Sodium			20	U	20	U			200.7

Metals

- 4 -

ICP INTERFERENCE CHECK SAMPLE

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-02 **ICS Source:** Inorganic Ventures

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Aluminum	500000	500000	515538	513262.0	102.7			
Calcium	500000	500000	503104	499208.5	99.8			
Iron	200000	200000	199536	195025.0	97.5			
Magnesium	500000	500000	538686	527879.9	105.6			
Manganese		500	-17	419.6	83.9			
Potassium			-75	-62.7				
Sodium			16	18.4				

80-120% control criteria is not applicable to interfering elements (Al,Ca,Fe,Mg).

Metals

- 5A -

SPIKE SAMPLE RECOVERY

Client: Exponent

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Matrix: WATER

Service Request: K1100692

Units: UG/L

Basis: NA

% Solids: 0.0

Sample Name: MW-7S

Lab Code: K1100692-002SDISS

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	2000		30	U	2000.00	100.0		200.7
Arsenic	70 - 130	21.0		0.85		20.00	100.8		200.8
Calcium		165000		155000		10000.00	100.0		200.7
Iron	70 - 130	943		13.3	J	1000.00	93.0		200.7
Magnesium		57200		46500		10000.00	107.0		200.7
Manganese	70 - 130	441		3.4	J	500.00	87.5		200.7
Potassium	70 - 130	37900		27900		10000.00	100.0		200.7
Sodium		261000		258000		10000.00	30.0		200.7

An empty field in the Control Limit column indicates the control limit is not applicable

Metals

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DUPLICATES

Client: Exponent

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Matrix: WATER

Service Request: K1100692

Units: UG/L

Basis: NA

% Solids: 0.0

Sample Name: MW-7D

Lab Code: K1100692-002DDISS

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum		30	U	30	U			200.7
Arsenic		0.85		0.88		3.5		200.8
Calcium	20	155000		153000		1.3		200.7
Iron		13.3	J	12.4	J	7.0		200.7
Magnesium	20	46500		45900		1.3		200.7
Manganese		3.4	J	3.3	J	3.0		200.7
Potassium	20	27900		27500		1.4		200.7
Sodium	20	258000		254000		1.6		200.7

An empty field in the Control Limit column indicates the control limit is not applicable.

Metals

- 7 -

LABORATORY CONTROL SAMPLE

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Aqueous LCS Source: CAS MIXED **Solid LCS Source:**

Analyte	Aqueous: ug/L			Solid: mg/kg				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	5000	5150	103.0					
Arsenic	20	19.6	98.0					
Calcium	12500	13200	105.6					
Iron	2500	2430	97.2					
Magnesium	12500	12900	103.2					
Manganese	1250	1230	98.4					
Potassium	12500	12700	101.6					
Sodium	12500	12300	98.4					

Metals

- 9 -

ICP SERIAL DILUTIONS

Client: Exponent

Service Request: K1100692

Project No.: 0907194.000.0901

Units: UG/L

Project Name: Heglar Kronquist

Sample Name: Batch QC1L

Lab Code: K1100661-001LDISS

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Aluminum	30.00	U	150.00	U			P
Calcium	46529.66		47228.20		1.5		P
Iron	15.53	J	6.90	J	55.6		P
Magnesium	12823.21		13480.25		5.1		P
Manganese	3.48	J	2.25	J	35.3		P
Potassium	28272		27934		1		P
Sodium	85534.55		87363.75		2.1		P

Metals

- 10 -

DETECTION LIMITS

Client: Exponent

Service Request: K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICP/ICP-MS ID #: K-ICP-AES-02

GFAA ID #:

AA ID #:

Analyte	Wave-length (nm)	Back-ground	MRL ug/L	MDL ug/L	M
Aluminum	237.3		50	30.0	P
Calcium	211.2		50	6.0	P
Iron	259.90		20	0.8	P
Magnesium	202.5		20	0.3	P
Manganese	257.61		5	0.2	P
Potassium	766.49		400	40.0	P
Sodium	589.5		100	20.0	P

Comments:

Metals

- 10 -

DETECTION LIMITS

Client: Exponent

Service Request: K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICP/ICP-MS ID #: K-ICP-MS-02

GFAA ID #:

AA ID #:

Analyte	Isotope	Back-ground	MRL ug/L	MDL ug/L	M
Arsenic	75		0.5	0.07	MS

Comments:

Metals

- 11A -

ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent Service Request: K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	As
Aluminum	237.312	0.0000000	0.0000000	0.0006350	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Arsenic	189.042	0.0000000	0.0000000	-0.0001090	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.773	0.0000000	0.0000000	0.0011600	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0001010	0.0000000	0.0000000
Calcium	211.276	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	-0.0000260	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Copper	324.754	0.0000000	0.0000000	-0.0000260	0.0000000	0.0000000
Iron	271.441	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	-0.0001140	0.0000000	0.0000000	0.0000000	0.0000000
Lithium	670.784	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	202.582	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	293.930	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0000000	0.0000000	-0.0000740	0.0000000	0.0000000
Phosphorus	214.914	0.0000000	0.0000000	0.0007010	0.0000000	0.0000000
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.612	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	407.771	0.0000000	0.0000740	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.452	0.0000000	0.0000000	0.0000250	0.0000000	0.0000000
Vanadium	310.230	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Comments:

Metals

- 11B -

ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent Service Request: K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Co	Cr	Cu	Mn	Mo
Aluminum	237.312	-0.0037980	-0.0033950	0.0000000	0.0000000	0.0000000
Antimony	206.838	0.0000000	0.0131320	0.0000000	0.0000000	-0.0170290
Arsenic	189.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Barium	493.409	0.0000000	0.0000000	0.0000000	0.0000000	0.0000510
Beryllium	313.042	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Boron	249.773	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	226.502	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Calcium	211.276	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.716	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cobalt	228.616	0.0000000	0.0000000	0.0000000	0.0000000	-0.0013420
Copper	324.754	0.0000000	0.0000000	0.0000000	0.0000000	0.0001660
Iron	271.441	0.0815870	0.0000000	0.0000000	0.0000000	0.0000000
Lead	220.353	0.0000000	0.0000000	0.0005610	0.0000000	-0.0014670
Lithium	670.784	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	202.582	0.0695310	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	293.930	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Molybdenum	202.030	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.604	0.0003250	0.0000000	0.0000000	0.0000000	0.0000000
Phosphorus	214.914	0.0000000	0.0000000	-0.2315800	0.0000000	0.0031710
Potassium	766.490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silicon	251.612	0.0000000	0.0000000	0.0000000	-0.0019550	0.0346950
Silver	328.068	0.0000000	0.0000000	0.0000000	0.0001660	-0.0004050
Sodium	589.592	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Strontium	407.771	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.864	0.0040310	0.0000000	0.0000000	0.0000000	0.0000000
Tin	189.989	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	323.452	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	310.230	0.0000000	-0.0002710	0.0000000	0.0000000	0.0000000
Zinc	206.200	0.0000000	-0.0013270	0.0000000	0.0000000	-0.0001480

Comments:

Metals

- 11B -

ICP INTERELEMENT CORRECTION FACTORS

Client: Exponent

Service Request: K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-02

Analyte	Wave-length (nm)	Interelement Correction Factors for: Ni	Ti	V		
Aluminum	237.312	0.0000000	0.0000000	0.0000000		
Antimony	206.838	0.0000000	0.0000000	0.0000000		
Arsenic	189.042	0.0000000	0.0000000	0.0000000		
Barium	493.409	0.0000000	0.0000000	-0.0005630		
Beryllium	313.042	0.0000000	-0.0000770	0.0002550		
Boron	249.773	0.0000000	0.0000000	0.0000000		
Cadmium	226.502	-0.0000840	0.0000000	0.0000000		
Calcium	211.276	0.0000000	0.0000000	0.0000000		
Chromium	267.716	0.0000000	0.0000000	-0.0002700		
Cobalt	228.616	0.0000000	0.0017170	0.0000000		
Copper	324.754	0.0000000	0.0000000	-0.0001920		
Iron	271.441	0.0000000	0.0000000	-0.1662750		
Lead	220.353	0.0000000	0.0000000	0.0000000		
Lithium	670.784	0.0000000	0.0000000	0.0000000		
Magnesium	202.582	0.0000000	0.0000000	0.0000000		
Manganese	293.930	0.0000000	0.0000000	0.0000000		
Molybdenum	202.030	0.0000000	0.0000000	0.0000000		
Nickel	231.604	0.0000000	0.0000000	0.0000000		
Phosphorus	214.914	0.0000000	0.0000000	0.0000000		
Potassium	766.490	0.0000000	0.0000000	0.0000000		
Selenium	196.090	0.0000000	0.0000000	0.0000000		
Silicon	251.612	0.0000000	0.0072650	0.0000000		
Silver	328.068	0.0000000	0.0001620	0.0000000		
Sodium	589.592	0.0000000	0.0000000	0.0000000		
Strontium	407.771	0.0000000	0.0000000	0.0000000		
Thallium	190.864	0.0000000	0.0000000	0.0019330		
Tin	189.989	0.0000000	-0.0030900	0.0000000		
Titanium	323.452	0.0004260	0.0000000	0.0000000		
Vanadium	310.230	0.0000000	0.0000000	0.0000000		
Zinc	206.200	0.0000000	0.0000000	0.0000000		

Comments:

Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Client: Exponent Service Request: K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-AES-02

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Aluminum	5.000	900000	200.7
Calcium	5.000	1800000	200.7
Iron	5.000	900000	200.7
Magnesium	5.000	900000	200.7
Manganese	5.000	180000	200.7
Potassium	5.000	450000	200.7
Sodium	5.000	180000	200.7

Comments:

Metals
-12-
ICP LINEAR RANGES (QUARTERLY)

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

ICP ID Number: K-ICP-MS-02

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Arsenic	15.000	900	200.8

Comments:

Metals
-13-
PREPARATION LOG

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Method: P

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
K1100692-001DISS	01/31/11	50.0	50.0
K1100692-002DDISS	01/31/11	50.0	50.0
K1100692-002DISS	01/31/11	50.0	50.0
K1100692-002SDISS	01/31/11	50.0	50.0
K1100692-003DISS	01/31/11	50.0	50.0
K1100692-MB	01/31/11	50.0	50.0
LCSW	01/31/11	50.0	50.0

Metals
-13-
PREPARATION LOG

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Method: MS

Sample ID	Preparation Date	Initial Volume	Final Volume(mL)
K1100692-001DISS	01/31/11	50.0	50.0
K1100692-002DDISS	01/31/11	50.0	50.0
K1100692-002DISS	01/31/11	50.0	50.0
K1100692-002SDISS	01/31/11	50.0	50.0
K1100692-003DISS	01/31/11	50.0	50.0
K1100692-MB	01/31/11	50.0	50.0
LCSW	01/31/11	50.0	50.0

Metals
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ANALYSIS RUN LOG

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Instrument ID Number: K-ICP-AES-02 **Method:** P

Start Date: 02/01/11 **End Date:** 02/01/11

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN			
Blank	1	15:31		X						X				X		X	X			X			X							
STDB	1	15:34		X						X				X		X	X			X			X							
STDA	1	15:37								X				X		X	X													
ICV1	1	15:40		X						X				X		X	X			X			X							
ICV1	1	15:43								X				X		X	X													
ICB1	1	15:46		X						X				X		X	X			X			X							
CCV1	1	15:50		X						X				X		X	X			X			X							
CCV1	1	15:56								X				X		X	X													
CCB1	1	16:01		X						X				X		X	X			X			X							
CRA1	1	16:04		X						X				X		X	X			X			X							
ZZZZZZ	1	16:07																												
ICS-A1	1	16:10		X						X				X		X	X			X			X							
ICS-AB1	1	16:13		X						X				X		X	X			X			X							
ZZZZZZ	1	16:16																												
CCV2	1	16:19		X						X				X		X	X			X			X							
CCV2	1	16:22								X				X		X	X													
CCB2	1	16:25		X						X				X		X	X			X			X							
ZZZZZZ	1	16:28																												
K1100692-MB	1	16:31		X						X				X		X	X			X			X							
LCSW	1	16:34		X						X				X		X	X			X			X							
ZZZZZZ	1	16:36																												
ZZZZZZ	1	16:39																												
K1100661-001LDISS	5	16:42		X						X				X		X	X			X			X							
ZZZZZZ	1	16:45																												
ZZZZZZ	1	16:48																												
K1100692-002DISS	1	16:51		X						X				X		X	X			X										
K1100692-002DDISS	1	16:54		X						X				X		X	X			X										
CCV3	1	16:57		X						X				X		X	X			X			X							
CCV3	1	17:00								X				X		X	X													
CCB3	1	17:03		X						X				X		X	X			X			X							
K1100692-002SDISS	1	17:08		X						X				X		X	X			X										
ZZZZZZ	1	17:11																												

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals
- 14 -
ANALYSIS RUN LOG

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Instrument ID Number: K-ICP-AES-02 **Method:** P

Start Date: 02/01/11 **End Date:** 02/01/11

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1	17:14																												
ZZZZZZ	1	17:17																												
ZZZZZZ	1	17:20																												
ZZZZZZ	1	17:23																												
ZZZZZZ	1	17:26																												
ZZZZZZ	1	17:29																												
K1100692-001DISS	1	17:32		X						X				X		X	X			X										
K1100692-003DISS	1	17:35		X						X				X		X	X			X			X							
CCV4	1	17:38		X						X				X		X	X			X			X							
CCV4	1	17:41								X				X		X	X													
CCB4	1	17:44		X						X				X		X	X			X			X							
ZZZZZZ	1	17:47																												
ZZZZZZ	1	17:50																												
ZZZZZZ	1	17:53																												
K1100692-002DISS	10	17:56																					X							
K1100692-002DDISS	10	17:59																					X							
K1100692-002SDISS	10	18:02																					X							
K1100692-001DISS	10	18:05																					X							
CCV5	1	18:08		X						X				X		X	X			X			X							
CCV5	1	18:11								X				X		X	X													
CCB5	1	18:14		X						X				X		X	X			X			X							

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals
- 14 -
ANALYSIS RUN LOG

Client: Exponent **Service Request:** K1100692

Project No.: 0907194.000.0901

Project Name: Heglar Kronquist

Instrument ID Number: K-ICP-MS-02 **Method:** MS

Start Date: 02/02/11 **End Date:** 02/02/11

Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
Cal. Blk	1	12:25				X																								
Cal. Stn	1	12:27				X																								
ICV1	1	12:30				X																								
CCV1	1	12:32				X																								
ICB1	1	12:34				X																								
CCB1	1	12:36				X																								
CRA1	1	12:39				X																								
K1100692-MB	1	12:41				X																								
LCSW	1	12:43				X																								
ZZZZZZ	1	12:45																												
ZZZZZZ	1	12:47																												
ZZZZZZ	1	12:50																												
ZZZZZZ	1	12:52																												
ZZZZZZ	1	12:54																												
ZZZZZZ	1	12:56																												
ZZZZZZ	1	12:58																												
ZZZZZZ	1	13:01																												
CCV2	1	13:03				X																								
CCB2	1	13:05				X																								
ZZZZZZ	1	13:07																												
ZZZZZZ	1	13:10																												
K1100692-002DISS	1	13:12				X																								
K1100692-002DDISS	1	13:14				X																								
K1100692-002SDISS	1	13:16				X																								
K1100692-001DISS	1	13:18				X																								
K1100692-003DISS	1	13:21				X																								
CCV3	1	13:23				X																								
CCB3	1	13:25				X																								

* - Denotes additional elements (other than the standard CLP elements) are represented on another Form 14

Metals

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Columbia Analytical Services Contract: 0907194.000.0901

Lab Code: CAS Case No.: NRAS No.: SDG NO.: K1100692

ICP-MS Instrument ID: K-ICP-MS-02 Start Date: 02/02/2011 End Date: 02/02/2011

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Ga_71	Q	Element Rh_103	Q	Element	Q	Element	Q	Element	Q	Element	Q
Cal. Blk	Cal. Blk	1225	100		100									
Cal. Stn	Cal. Stn	1227	96		98									
ICV1	ICV1	1230	92		94									
CCV1	CCV1	1232	90		93									
ICB1	ICB1	1234	89		92									
CCB1	CCB1	1236	88		92									
CRA1	WATER CRA	1239	88		92									
K1100692-MB	Method Blank	1241	89		91									
LCSW	LCSW	1243	87		89									
ZZZZZZ	ZZZZZZ	1245												
ZZZZZZ	ZZZZZZ	1247												
ZZZZZZ	ZZZZZZ	1250												
ZZZZZZ	ZZZZZZ	1252												
ZZZZZZ	ZZZZZZ	1254												
ZZZZZZ	ZZZZZZ	1256												
ZZZZZZ	ZZZZZZ	1258												
ZZZZZZ	ZZZZZZ	1301												
CCV2	CCV2	1303	93		92									
CCB2	CCB2	1305	92		90									
ZZZZZZ	ZZZZZZ	1307												
ZZZZZZ	ZZZZZZ	1310												
K1100692-002DISS	MW-7	1312	70		65									
K1100692-002DDIS	MW-7D	1314	70		66									
K1100692-002SDIS	MW-7S	1316	71		66									
K1100692-001DISS	MW-3	1318	70		65									
K1100692-003DISS	EB-012511	1321	89		88									
CCV3	CCV3	1323	91		88									
CCB3	CCB3	1325	90		86									

Analytical Services™ Preparation Information Benchsheet

Prep Run: 128041
Team: Metals
Analyst: KRisteska

Prep Workflow: MetDigAqMS
Prep Method: EPA CLP-METALS ILM04.0,
Rush/NPDES: NPDES

Status: Prepped
Current Step: Digestion

Prep Date: 01/31/2011 14:35
Due Date: 02/06/2011

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	TestNo List	Comments
KQ1100869-01	Method Blank		50 mL	50 mL			Metals T	1%HNO3 Ultrex
KQ1100869-02	Lab Control Sample		50 mL	50 mL	1 mL 0.1 mL 1 mL	20439 21053 21569	Metals T	1%HNO3 Ultrex
KQ1100869-03	Lab Control Sample		50 mL	50 mL	0.5 mL	23359	Metals T	1%HNO3 Ultrex
K1100661-001	MW-1	.05	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100661-001: KQ1100869-04	Duplicate	.05	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100661-001: KQ1100869-05	Matrix Spike	.05	50 mL	50 mL	1 mL 0.1 mL 1 mL	20439 21053 21569	Metals D	1%HNO3 Ultrex
K1100661-002	MW-2	.05	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100661-003	MW-4	.05	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100661-004	MW-5	.05	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100661-005	MW-6	.05	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100661-006	EB-012311	.05	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100661-007	EB-012411	.05	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100671-001	T67520-1/AB33830	.07	50 mL	50 mL			Metals T	1%HNO3 Ultrex
K1100681-001	Well Head	.04	50 mL	50 mL			Metals T	1%HNO3 Ultrex
K1100692-001	MW-3	.11	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100692-002	MW-7	.11	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100692-002: KQ1100869-06	Duplicate	.11	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100692-002: KQ1100869-07	Matrix Spike	.11	50 mL	50 mL	1 mL 0.1 mL 1 mL	20439 21053 21569	Metals D	1%HNO3 Ultrex
K1100692-003	EB-012511	.11	50 mL	50 mL			Metals D	1%HNO3 Ultrex
K1100712-001	Toma #23	.04	50 mL	50 mL			Metals T	1%HNO3 Ultrex
K1100735-001	B.G. Kinsman/Boberg	.03	50 mL	50 mL			Metals T	1%HNO3 Ultrex
K1100736-001	B.G. Utility Vault	.03	50 mL	50 mL			Metals T	1%HNO3 Ultrex

K1100767-001	ASB Out	.08	50 mL	50 mL			Metals T	1%HNO3 Ultrex

23 Total Samples consisting of 16 Client Samples, 4 Client QC Samples, 3 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET 200.8 1000ug/L Stock	Spike	21569	3/21/2011	K-MET Alt 200.8 spiking solution	Spike	21053	8/24/2011
K-MET Ag 1000 ppb Stock	Spike	20439	4/28/2011	K-MET ICP/MS DW MRL Check	Spike	23359	2/13/2011

Preparation Materials

Step	Name	ID	Step	Name	ID
Digestion	K-MET HNO3 ULTREX	21674	Digestion	K-MET 50ml Centrifuge Tube	22573

Preparation Hardware / Equipment

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	31-JAN-11 14:35	31-JAN-11 16:35	KRisteska	BSodorff	N	

Comments

Review

Reviewed by: _____ Date: 2/2/11

Columbia Analytical Services™ **Preparation Information Benchsheet**

Prep Run:	128035	**Prep Workflow**:	MetDigAqICP	**Status**:	Prepped	**Prep Date**:	01/31/2011 14:35
Team:	Metals	**Prep Method**:	EPA CLP-METALS ILM04.0	**Current Step**:	Digestion	**Due Date**:	02/11/2011
Analyst:	KRisteska	**Rush/NPDES**:	NPDES				

Lab Code	Client ID	Bottle #	Initial Amt	Final Volume	Spike Amt	Spike ID	TestNo List	Comments
KQ1100868-01	Method Blank		50 mL	50 mL			Metals T	1%HNO3 5%HCl
KQ1100868-02	Lab Control Sample		50 mL	50 mL	0.5 mL 0.25 mL 0.25 mL 0.25 mL 0.5 mL	15571 18109 20255 20797 25536	Metals T	1%HNO3 5%HCl
KQ1100868-03	Lab Control Sample		50 mL	50 mL			Metals T	1%HNO3 5%HCl
K1100661-001	MW-1	.05	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100661-001: KQ1100868-07	Duplicate	.05	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100661-001: KQ1100868-06	Matrix Spike	.05	50 mL	50 mL	0.5 mL 0.5 mL 0.5 mL 0.5 mL 0.5 mL	15571 24706 25104 25344 25536	Metals D	1%HNO3 5%HCl
K1100661-002	MW-2	.05	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100661-003	MW-4	.05	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100661-004	MW-5	.05	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100661-005	MW-6	.05	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100661-006	EB-012311	.05	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100661-007	EB-012411	.05	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100681-001	Well Head	.04	50 mL	50 mL			Metals T	1%HNO3 5%HCl
K1100692-001	MW-3	.11	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100692-002	MW-7	.11	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100692-002: KQ1100868-05	Duplicate	.11	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100692-002: KQ1100868-04	Matrix Spike	.11	50 mL	50 mL	0.5 mL 0.5 mL 0.5 mL 0.5 mL 0.5 mL	15571 24706 25104 25344 25536	Metals D	1%HNO3 5%HCl
K1100692-003	EB-012511	.11	50 mL	50 mL			Metals D	1%HNO3 5%HCl
K1100712-001	Toma #23	.04	50 mL	50 mL			Metals T	1%HNO3 5%HCl
K1100767-001	ASB Out	.08	50 mL	50 mL			Metals T	1%HNO3 5%HCl

20 Total Samples consisting of 13 Client Samples, 4 Client QC Samples, 3 Batch QC Samples associated with the current Prep Run.

Spiking Solutions

Name	Type	ID	Expires	Name	Type	ID	Expires
K-MET QCP-CICV-1	Spike	18109	6/1/2011	K-MET SS3	Spike	25104	5/31/2011
K-MET QCP-CICV-2	Spike	20797	8/1/2011	K-MET SS4	Spike	25536	7/5/2011
K-MET QCP-CICV-3	Spike	20255	8/1/2011	K-MET SS5	Spike	25344	5/5/2011
K-MET SS1	Spike	24706	11/1/2011	Titanium 1000 ug/mL Ti	Spike	15571	5/5/2011

Preparation Materials

Step	Name	ID
Digestion	K-MET 50ml Centrifuge Tube	22573
Digestion	K-MET HNO3	23064

Step	Name	ID
Digestion	K-MET HCL	23237

Preparation Hardware / Equipment

Step	Name	Property	Value	
Digestion	K-BlockDigester-06	Temperature	96	deg C

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Digestion	31-JAN-11 14:35	31-JAN-11 16:35	KRisteska	BSodorff	N	

Comments

Review

Reviewed by: _____ Date: 2/2/11

METALS SPIKING SOLUTIONS CONCENTRATIONS FORM

Solution Name	Element	mLs of 1000ppm Solution	Final Volume	Solution Conc. mg/L	Enter mls Added
K-MET SS1	HNO3	50.0	1000ml	-	0.5 → To MS
	Al	100*	1000ml	200	
	Ag	100*	1000ml	5	
	Ba	100*	1000ml	200	
	Be	100*	1000ml	5	
	Cd	100*	1000ml	5	
	Co	100*	1000ml	50	
	Cr	100*	1000ml	20	
	Cu	100*	1000ml	25	
	Fe	100*	1000ml	100	
	Pb	100*	1000ml	50	
	Mn	100*	1000ml	50	
	Ni	100*	1000ml	50	
	Sb	50	1000ml	50	
	V	100*	1000ml	50	
	Zn	100*	1000ml	50	
K-MET SS2	HNO3	25.0	500ml	-	
	As	2.0	500ml	4	
	Cd	2.0	500ml	4	
	Pb	2.0	500ml	4	
	Se	2.0	500ml	4	
	Tl	2.0	500ml	4	
	Cu	2.0	500ml	4	
K-MET SS3	HNO3	25.0	500ml	-	0.5 → To MS
	As	50.0	500ml	100	
	Se	50.0	500ml	100	
	Tl	50.0	500ml	100	
K-MET SS4	HNO3	25	500ml	-	0.5 → To LCS : MS
	B	50	500ml	100	
	Mo	50	500ml	100	
K-MET SS5	HNO3	10.0	200ml	-	0.5 → To MS
	K**	20	200ml	1000	
	Na**	20	200ml	1000	
	Mg**	20	200ml	1000	
	Ca**	20	200ml	1000	
K-MET GFLCSW	HNO3	10.0	1000ml	-	
	As, Pb, Se, Tl	5.0	1000ml	2.5	
	Cd	-	-	1.25	
	Cu	2.5	1000ml	2.5	
K-MET QCP-CICV-1	Ca, Mg, Na, K	no dilution	-	2500	0.25 → To LCS
	Al, Ba	no dilution	-	1000	
	Fe	no dilution	-	500	
	Co, Mn, Ni, V, Zn	no dilution	-	250	
	Cu, Ag	no dilution	-	125	
	Cr	no dilution	-	100	
	Be	no dilution	-	25	
K-MET QCP-CICV-2	Sb	no dilution	-	500	0.25
K-MET QCP-CICV-3	As, Pb, Se, Tl	no dilution	-	500	0.25
	Cd	no dilution	-	250	

* Denotes volume of mixed stock standard.

** Denotes 10,000 ppm individual stock standards.

Standard	mls of standard	ppm	Logbook #	Exp. Date
Ti	0.5	1000	Met 1 - 56 - 0	5/5/11

Service Request # K1100692
Instrument ID# K-ICP-AES-02

ICP-OES Data Review Form

	Yes	No
1. Standardization completed	✓	
2. ICV within 10 % of true value	✓	
3. ICB below MRL	✓	
4. CRI standard analyzed.	✓	
5. ICS standards within 20% of true value	✓	
6. All preceding CCVs within 10 % of true value	✓	
7. Following CCV within 10 % of true value	✓	
8. Bracketing CCBs below MRL	✓	
9. Method Blank below MRL	✓	
10. MS-MSD or Dup-MS and LCS within CAS control limits	✓	
11. All analytes within instrument linear range	✓	
12. Adequate rinse out time allowed between samples to eliminate memory effect	✓	

Comments:
File Name: 020111BICP02
Star Lims: 234443
NR Mo.
200.7 Only.

Primary Review by WS Date 2/2/11

Secondary Review by [illegible] Date 2/2/11

Method: 2011A Sample Name: Blank Operator:
Comment:
Run Time: 02/01/11 15:31 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335
Line	237.312 {141}	206.833 {162}	189.042 {177}	233.527 {144}
Avg	.1796	.0594	.0131	.00027
Stddev	.0312	.0293	.0010	.00010
%RSD	17.38	49.31	7.419	35.970
#1	.2017	.0801	.0138	.00034
#2	.1576	.0387	.0124	.00020

Elem	Be3130	B_2497	Cd2265	Ca2112
Line	313.042 {107}	249.773 {134}	226.502 {148}	211.276 {159}
Avg	-.00129	.4864	.0002	.4166
Stddev	.00048	.0275	.0001	.0048
%RSD	37.411	5.650	60.12	1.147
#1	-.00095	.4670	.0002	.4200
#2	-.00164	.5058	.0001	.4132

Elem	Ca3179	Cr2677	Co2286	Cu3247
Line	317.933 {105}	267.716 {125}	228.616 {147}	324.754 {103}
Avg	-.0981	-.0003	.0004	.0249
Stddev	.0137	.0000	.0001	.0039
%RSD	13.98	10.88	28.52	15.68
#1	-.0884	-.0002	.0005	.0276
#2	-.1078	-.0003	.0003	.0221

Elem	Fe2599	Fe2714	Pb2203	Mg2025
Line	259.940 {129}	271.441 {124}	220.353 {152}	202.582 {166}
Avg	.0023	.0006	.0001	.1396
Stddev	.0008	.0001	.0001	.0254
%RSD	33.65	16.11	60.41	18.23
#1	.0028	.0006	.0001	.1216
#2	.0017	.0005	.0001	.1576

Elem	Mg2795	Mn2576	Mn2939	Mo2020
Line	279.553 {120}	257.610 {131}	293.930 {114}	202.030 {166}
Avg	.43403	.00103	-.0002	.0007
Stddev	.05458	.00025	.0002	.0004
%RSD	12.576	23.941	65.72	56.17
#1	.47262	.00120	-.0004	.0010
#2	.39543	.00085	-.0001	.0004

Elem	Ni2316	K_7664	Se1960	Ag3280
Line	231.604 {145}	766.490 { 44}	196.090 {171}	328.068 {102}
Avg	.0000	.3816	.0028	.0553
Stddev	.000	.0585	.0039	.0860
%RSD	4002.	15.34	141.4	155.6
#1	.0001	.4230	.0000	.1161
#2	-.0001	.3402	.0055	-.0055

Sample Name: Blank Run Time: 02/01/11 15:31

Elem	Na5895	Sn1899	V_3102	Zn2062
Line	589.592 { 57}	189.989 {176}	310.230 {108}	206.200 {163}
Avg	.0013	.0005	.0049	.0006
Stddev	.0004	.0000	.0000	.0000
%RSD	31.80	6.098	.4590	5.528
#1	.0010	.0005	.0049	.0007
#2	.0015	.0005	.0049	.0006

Elem	P_2149	Si2516	Ti3234	Tl1908
Line	214.914 {156}	251.612 {134}	323.452 {104}	190.864 {176}
Avg	.0684	.2266	.00389	.0001
Stddev	.0264	.0665	.00009	.0000
%RSD	38.55	29.34	2.3562	54.19
#1	.0870	.1796	.00383	.0000
#2	.0498	.2736	.00396	.0001

Elem	Li6707	Sr4077
Line	670.784 { 50}	407.771 { 82}
Avg	.29166	.00226
Stddev	.00967	.00006
%RSD	3.3165	2.4638
#1	.29850	.00230
#2	.28482	.00222

Int. Std.	Sc3572
Line	357.253 { 94}
Avg	232.84
Stddev	.62
%RSD	.26639
#1	232.41
#2	233.28

WS 2/1/11

2/2/11

Method: 2011A Sample Name: STDB 1(98-52-A Operator:
Comment:
Run Time: 02/01/11 15:34 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al2373	Ba2335	Be3130	Ca2112
Line	237.312 {141}	233.527 {144}	313.042 {107}	211.276 {159}
Avg	18.40	2.2316	.41131	37.76
Stddev	.10	.0096	.00018	.23
%RSD	.5358	.43120	.04353	.6131
#1	18.33	2.2248	.41118	37.60
#2	18.47	2.2384	.41143	37.92

Elem	Fe2714	Mg2025	Mn2939	K_7664
Line	271.441 {124}	202.582 {166}	293.930 {114}	766.490 { 44}
Avg	.6123	54.83	.6496	205.0
Stddev	.0029	.07	.0013	.6
%RSD	.4768	.1325	.1973	.2757
#1	.6103	54.88	.6487	205.4
#2	.6144	54.78	.6505	204.6

Elem	Na5895	P_2149	Si2516	Li6707
Line	589.592 { 57}	214.914 {156}	251.612 {134}	670.784 { 50}
Avg	3.513	36.29	85.98	437.82
Stddev	.005	.22	.25	.87
%RSD	.1450	.6081	.2882	.19773
#1	3.509	36.13	85.81	438.44
#2	3.516	36.44	86.16	437.21

Elem	Sr4077
Line	407.771 { 82}
Avg	9.0960
Stddev	.0061
%RSD	.06679
#1	9.1003
#2	9.0917

Int. Std.	Sc3572
Line	357.253 { 94}
Avg	235.14
Stddev	.12
%RSD	.04915
#1	235.06
#2	235.22

Method: 2011A Sample Name: STDA ICP8-29-B Operator:
Comment:
Run Time: 02/01/11 15:37 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Sb2068	As1890	B_2497	Cd2265
Line	206.833 {162}	189.042 {177}	249.773 {134}	226.502 {148}
Avg	14.48	9.720	38.82	.2029
Stddev	.10	.031	.18	.0003
%RSD	.7252	.3173	.4591	.1253
#1	14.41	9.698	38.70	.2027
#2	14.56	9.742	38.95	.2031

Elem	Ca3179	Cr2677	Co2286	Cu3247
Line	317.933 {105}	267.716 {125}	228.616 {147}	324.754 {103}
Avg	43.31	.0834	.1379	25.25
Stddev	.17	.0002	.0001	.10
%RSD	.3837	.2756	.0826	.4104
#1	43.19	.0836	.1378	25.17
#2	43.43	.0833	.1380	25.32

Elem	Fe2599	Pb2203	Mg2795	Mn2576
Line	259.940 {129}	220.353 {152}	279.553 {120}	257.610 {131}
Avg	.3145	.0709	1683.5	2.3200
Stddev	.0118	.0001	5.6	.0529
%RSD	3.736	.1175	.33329	2.2802
#1	.3228	.0710	1679.6	2.2826
#2	.3062	.0709	1687.5	2.3574

Elem	Mo2020	Ni2316	Se1960	Ag3280
Line	202.030 {166}	231.604 {145}	196.090 {171}	328.068 {102}
Avg	.1154	.1234	8.467	23.82
Stddev	.0009	.0002	.017	.17
%RSD	.7696	.1219	.1966	.7058
#1	.1148	.1235	8.479	23.70
#2	.1161	.1233	8.455	23.94

Elem	Sn1899	V_3102	Zn2062	Ti3234
Line	189.989 {176}	310.230 {108}	206.200 {163}	323.452 {104}
Avg	.0678	.1414	.1145	.16129
Stddev	.0002	.0003	.0002	.00083
%RSD	.2694	.2369	.2026	.51764
#1	.0680	.1411	.1143	.16188
#2	.0677	.1416	.1147	.16070

Elem	Tl1908
Line	190.864 {176}
Avg	.0612
Stddev	.0001
%RSD	.1212
#1	.0611
#2	.0612

Sample Name: STDA Run Time: 02/01/11 15:37

Int. Std.	Sc3572
Line	357.253 { 94}
Avg	238.18
Stddev	1.62
%RSD	.68047
#1	237.04
#2	239.33

Method: 2011A Sample Name: ICV1 ICP6-58-C Operator:
Comment:
Run Time: 02/01/11 15:40 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.029	2.465	2.534	5.1750	.12658	.0012
Stddev	.074	.002	.004	.0375	.00002	.0009
%RSD	1.475	.0759	.1412	.72479	.01520	69.82
#1	4.976	2.466	2.537	5.1485	.12660	.0006
#2	5.081	2.464	2.532	5.2015	.12657	.0018
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	None
Value	5.000	2.500	2.500	5.0000	.12500	
Range	5.000%	5.000%	5.000%	5.0000%	5.0000%	

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.227	13.06	.5003	1.231	.6139	2.380
Stddev	.006	.26	.0026	.013	.0037	.016
%RSD	.4603	2.028	.5218	1.041	.6024	.6758
#1	1.223	12.87	.4984	1.222	.6165	2.369
#2	1.231	13.24	.5021	1.240	.6113	2.391
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1.250	12.50	.5000	1.250	.6250	2.500
Range	5.000%	5.000%	5.000%	5.000%	5.000%	5.000%

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.465	12.68	1.2001	2.008	1.229	12.49
Stddev	.005	.11	.0033	.014	.012	.03
%RSD	.1884	.8674	.27865	.6951	.9596	.2440
#1	2.461	12.60	1.2025	1.998	1.221	12.51
#2	2.468	12.75	1.1978	2.018	1.237	12.46
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	2.500	12.50	1.2500	2.000	1.250	12.50
Range	5.000%	5.000%	5.0000%	5.000%	5.000%	5.000%

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.518	.6140	11.94	.0123	1.220	1.236
Stddev	.030	.0027	.00	.0024	.001	.015
%RSD	1.194	.4336	.0399	19.87	.0573	1.180
#1	2.497	.6121	11.93	.0140	1.221	1.225
#2	2.539	.6158	11.94	.0106	1.220	1.246
Check ?	QC Pass	QC Pass	QC Pass	None	QC Pass	QC Pass
Value	2.500	.6250	12.50		1.250	1.250
Range	5.000%	5.000%	5.000%		5.000%	5.000%

Sample Name: ICV1 Run Time: 02/01/11 15:40

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0043	-.0668	1.9369	2.474	-.00007	.00454
Stddev	.0004	.0014	.0028	.038	.00023	.00000
%RSD	8.675	2.133	.14236	1.531	328.26	.09244
#1	-.0040	-.0658	1.9350	2.447	.00009	.00454
#2	-.0045	-.0678	1.9389	2.501	-.00023	.00453
Check ?	None	None	QC Pass	QC Pass	None	None
Value			2.0000	2.500		
Range			5.0000%	5.000%		

Int. Std.	Sc3572
Units	Cts/S
Avg	241.10
Stddev	.19
%RSD	.07862
#1	240.97
#2	241.23

Method: 2011A Sample Name: ICVB1 TCLP8-44-13 Operator:
Comment:
Run Time: 02/01/11 15:43 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.021	.0052	.0065	.00114	-.00003	2.028
Stddev	.005	.0096	.0061	.00187	.00004	.014
%RSD	.5337	184.5	93.42	163.72	104.44	.6935
#1	1.025	.0119	.0022	.00247	-.00006	2.018
#2	1.017	-.0016	.0108	-.00018	-.00001	2.038
Check ?	None	None	None	None	None	QC Pass
Value						2.000
Range						5.000%

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0007	5.095	.0130	-.0008	-.0015	10.22
Stddev	.0010	.032	.0022	.0013	.0009	.03
%RSD	135.1	.6258	16.86	162.2	55.23	.2881
#1	.0014	5.072	.0146	.0001	-.0009	10.20
#2	.0000	5.117	.0115	-.0017	-.0021	10.24
Check ?	None	QC Pass	None	None	None	QC Pass
Value		5.000				10.00
Range		5.000%				5.000%

Elem	Pb2203	Mg2795	Mn2939	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0019	5.0264	10.23	.0018	.0017	-.0308
Stddev	.0075	.0080	.04	.0067	.0012	.0027
%RSD	388.4	.15899	.4116	371.9	71.09	8.680
#1	-.0072	5.0208	10.20	.0065	.0025	-.0289
#2	.0034	5.0321	10.25	-.0029	.0008	-.0327
Check ?	None	QC Pass	QC Pass	None	None	None
Value		5.0000	10.00			
Range		5.0000%	5.000%			

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0082	.0003	8.102	5.120	-.0005	.0012
Stddev	.0139	.0002	.010	.029	.0019	.0009
%RSD	169.6	54.55	.1255	.5761	419.7	76.89
#1	-.0016	.0002	8.095	5.099	.0009	.0019
#2	.0180	.0004	8.110	5.141	-.0018	.0006
Check ?	None	None	None	QC Pass	None	None
Value				5.000		
Range				5.000%		

Sample Name: ICVB1 Run Time: 02/01/11 15:43

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.018	5.224	-.00060	.0176	2.0626	1.9896
Stddev	.009	.041	.00040	.0027	.0027	.0084
%RSD	.1756	.7918	65.928	15.14	.12879	.42448
#1	5.012	5.194	-.00089	.0157	2.0607	1.9836
#2	5.024	5.253	-.00032	.0194	2.0644	1.9956
Check ?	QC Pass	QC Pass	None	None	QC Pass	QC Pass
Value	5.000	5.000			2.0000	2.0000
Range	5.000%	5.000%			5.0000%	5.0000%

Int. Std.	Sc3572
Units	Cts/S
Avg	240.53
Stddev	.14
%RSD	.05748
#1	240.43
#2	240.63

Method: 2011A Sample Name: ICB Operator:
Comment:
Run Time: 02/01/11 15:46 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0015	-.0092	.0164	-.00058	-.00003
Stddev	.0022	.0054	.0086	.00003	.00001
%RSD	144.4	58.70	52.28	4.8711	43.632
#1	.0000	-.0054	.0224	-.00060	-.00002
#2	-.0030	-.0130	.0103	-.00056	-.00004
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000
Range	±.0500	±.0500	±.1000	±.00500	±.00500

Elem	B_2497	Cd2265	Ca3179	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0002	-.0076	.0005	-.0008
Stddev	.0013	.0004	.0025	.0006	.0008
%RSD	165.5	153.1	32.38	115.4	99.33
#1	.0018	-.0005	-.0059	.0009	-.0002
#2	-.0001	.0000	-.0094	.0001	-.0014
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.0500	±.0050	±.0500	±.0050	±.0100

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0005	.0019	-.00069	.00081
Stddev	.0014	.0061	.0083	.00007	.00103
%RSD	181.4	1301.	434.6	10.059	127.07
#1	.0018	.0048	-.0040	-.00064	.00153
#2	-.0002	-.0038	.0078	-.00074	.00008
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000
Range	±.0100	±.0200	±.0500	±.02000	±.00500

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0080	-.0005	-.0147	-.0033	-.0024
Stddev	.0006	.0009	.0010	.0139	.0002
%RSD	7.159	173.2	6.510	424.4	6.736
#1	-.0076	.0001	-.0141	.0065	-.0026
#2	-.0084	-.0012	-.0154	-.0131	-.0023
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.0100	±.0200	±.4000	±.1000	±.0100

Sample Name: ICB Run Time: 02/01/11 15:46

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0034	.0036	.0033	-.0008	-.0032
Stddev	.0022	.0004	.0000	.0005	.0057
%RSD	65.06	12.06	.0769	55.08	177.5
#1	-.0018	.0033	.0033	-.0005	.0008
#2	-.0049	.0040	.0033	-.0012	-.0073
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.2000	±.0500	±.0100	±.0100	±.2000

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0001	-.00175	-.0136	.00003	.00003
Stddev	.0015	.00164	.0069	.00023	.00005
%RSD	2747.	93.723	50.72	905.18	164.61
#1	.0011	-.00059	-.0185	.00019	.00006
#2	-.0010	-.00291	-.0087	-.00014	.00000
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.00000	.0000	.00000	.00000
Range	±.2000	±.01000	±.2000	±.01000	±.01000

Int. Std.	Sc3572
Units	Cts/S
Avg	232.14
Stddev	.79
%RSD	.33864
#1	232.70
#2	231.58

Method: 2011A Sample Name: CCVB Operator:
Comment:
Run Time: 02/01/11 15:50 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.125	.0020	.0003	2.5627	.05169	.0065
Stddev	.034	.0153	.0073	.0103	.00009	.0003
%RSD	.6681	773.9	2115.	.40071	.16825	4.610
#1	5.139	.0194	-.0025	2.5485	.05161	.0066
#2	5.160	.0032	-.0075	2.5689	.05173	.0068
#3	5.121	.0031	.0018	2.5714	.05162	.0061
#4	5.079	-.0178	.0096	2.5621	.05179	.0066
Check ?	QC Pass	None	None	QC Pass	QC Pass	None
Value	5.000			2.5000	.05000	
Range	5.000%			5.0000%	5.0000%	

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0016	26.04	.0050	-.0019	-.0016	25.89
Stddev	.0003	.15	.0014	.0006	.0013	.11
%RSD	20.29	.5822	27.76	33.91	81.14	.4384
#1	.0017	25.82	.0056	-.0010	-.0030	25.78
#2	.0017	26.13	.0030	-.0021	-.0003	26.03
#3	.0019	26.10	.0061	-.0020	-.0022	25.83
#4	.0011	26.12	.0054	-.0024	-.0007	25.93
Check ?	None	QC Pass	None	None	None	QC Pass
Value		25.00				25.00
Range		5.000%				5.000%

Elem	Pb2203	Mg2025	Mn2939	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0131	25.56	5.152	-.0100	-.0039	10.11
Stddev	.0073	.07	.008	.0017	.0014	.03
%RSD	55.68	.2548	.1636	17.35	37.51	.2888
#1	-.0043	25.62	5.145	-.0098	-.0059	10.12
#2	-.0200	25.62	5.164	-.0119	-.0035	10.09
#3	-.0180	25.50	5.151	-.0107	-.0037	10.15
#4	-.0101	25.51	5.148	-.0077	-.0024	10.08
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		25.00	5.000			10.00
Range		5.000%	5.000%			5.000%

Sample Name: CCVB Run Time: 02/01/11 15:50

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0065	-.0027	10.18	.0031	.0058	.0013
Stddev	.0048	.0034	.02	.0060	.0031	.0007
%RSD	73.65	123.6	.2377	192.5	53.04	58.03
#1	-.0049	-.0034	10.20	.0022	.0040	.0020
#2	-.0065	.0015	10.15	-.0031	.0105	.0005
#3	-.0131	-.0067	10.19	.0113	.0046	.0018
#4	-.0016	-.0023	10.17	.0021	.0043	.0007
Check ?	None	None	QC Pass	None	None	None
Value			10.00			
Range			5.000%			

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.18	2.568	.00075	.0086	.50445	.51854
Stddev	.02	.010	.00081	.0098	.00157	.00078
%RSD	.1915	.3996	108.15	114.5	.31040	.14983
#1	10.18	2.559	.00018	.0183	.50500	.51879
#2	10.20	2.580	.00044	.0124	.50518	.51928
#3	10.15	2.574	.00043	-.0049	.50549	.51864
#4	10.18	2.560	.00196	.0086	.50212	.51745
Check ?	QC Pass	QC Pass	None	None	QC Pass	QC Pass
Value	10.00	2.500			.50000	.50000
Range	5.000%	5.000%			5.0000%	5.0000%

Int. Std.	Sc3572
Units	Cts/S
Avg	235.26
Stddev	.19
%RSD	.08174
#1	235.05
#2	235.35
#3	235.48
#4	235.15

Method: 2011A Sample Name: CCVA Operator:
Comment:
Run Time: 02/01/11 15:56 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4810	2.472	2.519	.47282	.56338	.5045
Stddev	.0197	.011	.009	.00184	.00211	.0023
%RSD	4.100	.4415	.3402	.38965	.37365	.4530
#1	.4540	2.468	2.511	.47156	.56413	.5016
#2	.4906	2.481	2.513	.47555	.56532	.5038
#3	.4798	2.480	2.530	.47193	.56367	.5057
#4	.4996	2.458	2.521	.47223	.56040	.5068
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		2.500	2.500			.5000
Range		5.000%	5.000%			5.000%

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5178	2.577	.5024	.5055	.5108	.5149
Stddev	.0027	.007	.0027	.0034	.0037	.0076
%RSD	.5151	.2911	.5301	.6660	.7172	1.479
#1	.5193	2.572	.4989	.5019	.5108	.5249
#2	.5208	2.572	.5054	.5098	.5065	.5168
#3	.5151	2.576	.5028	.5061	.5105	.5098
#4	.5162	2.588	.5025	.5041	.5155	.5082
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5000	2.500	.5000	.5000	.5000	.5000
Range	5.000%	5.000%	5.000%	5.000%	5.000%	5.000%

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.521	2.0752	1.0184	.9953	.5043	5.038
Stddev	.016	.0065	.0052	.0057	.0020	.019
%RSD	.6221	.31338	.50965	.5703	.3880	.3807
#1	2.532	2.0694	1.0228	.9884	.5042	5.058
#2	2.522	2.0716	1.0227	1.001	.5071	5.013
#3	2.530	2.0757	1.0154	.9929	.5034	5.046
#4	2.498	2.0842	1.0125	.9991	.5025	5.036
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	None
Value	2.500	2.0000	1.0000	1.000	.5000	
Range	5.000%	5.0000%	5.0000%	5.000%	5.000%	

Sample Name: CCVA Run Time: 02/01/11 15:56

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.498	.4997	.5036	2.511	.5044	.5160
Stddev	.040	.0040	.0073	.015	.0040	.0030
%RSD	1.607	.8076	1.453	.6153	.7842	.5889
#1	2.454	.5049	.5145	2.497	.5093	.5169
#2	2.475	.4963	.5011	2.528	.5056	.5195
#3	2.537	.4968	.4992	2.521	.5003	.5152
#4	2.527	.5009	.4997	2.499	.5024	.5123
Check ?	QC Pass	QC Pass	None	QC Pass	QC Pass	QC Pass
Value	2.500	.5000		2.500	.5000	.5000
Range	5.000%	5.000%		5.000%	5.000%	5.000%

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0154	.2486	.49960	5.044	.50068	.50846
Stddev	.0130	.0009	.00223	.040	.00115	.00310
%RSD	84.19	.3513	.44709	.8012	.22876	.60950
#1	-.0286	.2488	.50263	5.022	.49990	.51114
#2	-.0036	.2495	.49982	5.105	.49955	.51083
#3	-.0050	.2486	.49847	5.023	.50197	.50723
#4	-.0245	.2474	.49748	5.026	.50130	.50465
Check ?	None	None	QC Pass	QC Pass	None	None
Value			.50000	5.000		
Range			5.0000%	5.000%		

Int. Std.	Sc3572
Units	Cts/S
Avg	238.93
Stddev	1.46
%RSD	.60942
#1	237.63
#2	237.90
#3	239.45
#4	240.76

Method: 2011A Sample Name: CCB Operator:
Comment:
Run Time: 02/01/11 16:01 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0091	-.0197	.0096	-.00045	.00006
Stddev	.0064	.0081	.0050	.00005	.00008
%RSD	70.67	41.24	52.41	10.135	126.47
#1	-.0137	-.0139	.0060	-.00042	.00001
#2	-.0046	-.0254	.0132	-.00049	.00012
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000
Range	±.0500	±.0500	±.1000	±.00500	±.00500

Elem	B_2497	Cd2265	Ca3179	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.0006	.0033	.0006	-.0010
Stddev	.0008	.0006	.0041	.0012	.0002
%RSD	149.6	100.5	121.1	210.6	21.04
#1	.0000	.0010	.0005	.0014	-.0009
#2	-.0012	.0002	.0062	-.0003	-.0012
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.0500	±.0050	±.0500	±.0050	±.0100

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0004	.0018	.00183	.00032
Stddev	.0006	.0006	.0012	.00007	.00014
%RSD	113.3	155.9	66.47	4.0219	45.121
#1	-.0010	.0000	.0026	.00178	.00042
#2	-.0001	-.0008	.0009	.00188	.00022
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000
Range	±.0100	±.0200	±.0500	±.02000	±.00500

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0062	.0001	-.0306	-.0065	-.0009
Stddev	.0020	.0001	.0321	.0000	.0010
%RSD	31.54	70.98	105.1	.0099	105.9
#1	-.0048	.0001	-.0532	-.0065	-.0002
#2	-.0076	.0002	-.0079	-.0065	-.0016
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.0100	±.0200	±.4000	±.1000	±.0100

Sample Name: CCB Run Time: 02/01/11 16:01

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0018	.0043	-.0002	-.0005	-.0165
Stddev	.0008	.0015	.0006	.0003	.0163
%RSD	44.66	35.53	299.1	55.29	98.93
#1	-.0024	.0032	-.0006	-.0006	-.0281
#2	-.0012	.0054	.0002	-.0003	-.0050
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.2000	±.0500	±.0100	±.0100	±.2000

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0011	.00058	.0123	.00044	.00010
Stddev	.0012	.00125	.0000	.00067	.00001
%RSD	109.0	216.19	.0336	154.90	13.922
#1	.0019	-.00031	.0123	.00091	.00011
#2	.0003	.00146	.0123	-.00004	.00009
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.00000	.0000	.00000	.00000
Range	±.2000	±.01000	±.2000	±.01000	±.01000

Int. Std.	Sc3572
Units	Cts/S
Avg	235.73
Stddev	.07
%RSD	.02948
#1	235.68
#2	235.78

Method: 2011A Sample Name: CRI Icp3-44-4 Operator:
Comment:
Run Time: 02/01/11 16:04 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0577	.0324	.0854	.00411	.00506	.0495
Stddev	.0064	.0047	.0045	.00016	.00001	.0004
%RSD	11.12	14.66	5.313	4.0144	.19861	.8878
#1	.0532	.0357	.0887	.00422	.00505	.0498
#2	.0623	.0290	.0822	.00399	.00507	.0492
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0500	.0500	.1000	.00500	.00500	.0500
Range	30.00%	50.00%	50.00%	50.000%	50.000%	50.00%

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0046	.0406	.0055	.0092	.0090	.0196
Stddev	.0008	.0009	.0006	.0010	.0009	.0002
%RSD	18.16	2.214	10.49	10.88	10.35	.9321
#1	.0051	.0412	.0051	.0099	.0083	.0198
#2	.0040	.0400	.0059	.0085	.0096	.0195
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0050	.0500	.0050	.0100	.0100	.0200
Range	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0496	.01783	.00530	Q .0002	.0187	.3918
Stddev	.0024	.00041	.00016	.0007	.0003	.0031
%RSD	4.789	2.3231	2.9839	358.7	1.569	.7860
#1	.0480	.01754	.00541	.0007	.0185	.3896
#2	.0513	.01813	.00518	-.0003	.0189	.3940
Check ?	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.0500	.02000	.00500	.0100	.0200	.4000
Range	50.00%	50.000%	50.000%	50.00%	50.00%	50.00%

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0727	.0074	.1955	.0352	.0086	.0085
Stddev	.0150	.0003	.0046	.0030	.0001	.0000
%RSD	20.67	4.418	2.354	8.567	.8734	.2112
#1	.0833	.0077	.1923	.0373	.0085	.0085
#2	.0621	.0072	.1988	.0330	.0086	.0085
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.1000	.0100	.2000	.0500	.0100	.0100
Range	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%

Sample Name: CRI Run Time: 02/01/11 16:04

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1616	.4177	.00810	.1522	.01036	.00955
Stddev	.0025	.0000	.00019	.0033	.00042	.00002
%RSD	1.546	.0041	2.3354	2.178	4.0906	.25134
#1	.1634	.4178	.00797	.1545	.01066	.00953
#2	.1598	.4177	.00824	.1498	.01006	.00957
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.2000	.4000	.01000	.2000	.01000	.01000
Range	50.00%	50.00%	50.000%	50.00%	50.000%	50.000%

Int. Std.	Sc3572
Units	Cts/S
Avg	238.91
Stddev	.90
%RSD	.37820
#1	238.27
#2	239.55

Method: 2011A Sample Name: CRI Operator:
Comment:
Run Time: 02/01/11 16:07 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0463	.0405	.0851	.00437	.00509	.0504
Stddev	.0162	.0081	.0061	.00039	.00006	.0008
%RSD	34.94	20.08	7.172	8.8417	1.2404	1.652
#1	.0349	.0347	.0807	.00410	.00505	.0498
#2	.0578	.0462	.0894	.00465	.00514	.0510
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0500	.0500	.1000	.00500	.00500	.0500
Range	30.00%	50.00%	50.00%	50.000%	50.000%	50.00%

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043	.0409	.0056	.0098	.0067	.0198
Stddev	.0002	.0031	.0004	.0004	.0002	.0001
%RSD	5.587	7.657	6.991	4.239	2.244	.4514
#1	.0045	.0387	.0058	.0101	.0066	.0197
#2	.0041	.0431	.0053	.0095	.0068	.0198
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0050	.0500	.0050	.0100	.0100	.0200
Range	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0425	.01779	.00549	Q -.0004	.0196	.3883
Stddev	.0064	.00000	.00003	.0008	.0014	.0064
%RSD	15.00	.01771	.55992	184.4	6.896	1.647
#1	.0380	.01780	.00546	.0001	.0205	.3929
#2	.0470	.01779	.00551	-.0010	.0186	.3838
Check ?	QC Pass	QC Pass	QC Pass	QC Fail	QC Pass	QC Pass
Value	.0500	.02000	.00500	.0100	.0200	.4000
Range	50.00%	50.000%	50.000%	50.00%	50.00%	50.00%

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0873	.0101	.1966	.0366	.0090	.0092
Stddev	.0080	.0015	.0064	.0036	.0001	.0009
%RSD	9.184	14.54	3.269	9.840	.8666	10.20
#1	.0930	.0091	.1921	.0392	.0090	.0085
#2	.0817	.0112	.2012	.0341	.0091	.0099
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.1000	.0100	.2000	.0500	.0100	.0100
Range	50.00%	50.00%	50.00%	50.00%	50.00%	50.00%

WS 2/1/11

Sample Name: CRI Run Time: 02/01/11 16:07

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1740	.4189	.00936	.1738	.01007	.00955
Stddev	.0137	.0014	.00309	.0121	.00033	.00000
%RSD	7.854	.3418	32.991	6.975	3.2587	.05087
#1	.1643	.4179	.00718	.1652	.00984	.00955
#2	.1837	.4199	.01155	.1824	.01030	.00954
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.2000	.4000	.01000	.2000	.01000	.01000
Range	50.00%	50.00%	50.000%	50.00%	50.000%	50.000%

Int. Std.	Sc3572
Units	Cts/S
Avg	239.01
Stddev	.06
%RSD	.02716
#1	238.96
#2	239.06

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Method: 2011A Sample Name: ICSA ICPS-23-C Operator:
Comment:
Run Time: 02/01/11 16:10 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	515.5	.0408	-.0532	-.00033	.00014	.0009
Stddev	3.9	.0088	.0164	.00009	.00007	.0019
%RSD	.7478	21.50	30.90	27.674	53.188	215.3
#1	512.8	.0346	-.0416	-.00040	.00008	-.0004
#2	518.3	.0470	-.0648	-.00027	.00019	.0022
Check ?	QC Pass	None	None	None	None	None
Value	500.0					
Range	20.00%					

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0035	503.1	.0010	.0001	-.0039	199.5
Stddev	.0001	4.8	.0003	.0000	.0003	2.1
%RSD	3.607	.9534	33.78	25.20	7.606	1.035
#1	.0034	499.7	.0008	.0001	-.0041	198.1
#2	.0036	506.5	.0012	.0001	-.0037	201.0
Check ?	None	QC Pass	None	None	None	QC Pass
Value		500.0				200.0
Range		20.00%				20.00%

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0073	538.7	-.01655	-.0234	-.0068	-.0754
Stddev	.0039	.3	.00022	.0011	.0008	.0168
%RSD	53.87	.0645	1.3588	4.845	11.46	22.25
#1	-.0045	538.9	-.01671	-.0226	-.0062	-.0636
#2	-.0100	538.4	-.01639	-.0242	-.0073	-.0873
Check ?	None	QC Pass	None	None	None	None
Value		500.0				
Range		20.00%				

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0385	.0027	.0160	-.0326	-.0023	.0047
Stddev	.0174	.0025	.0040	.0020	.0015	.0033
%RSD	45.14	92.14	24.73	5.999	65.73	71.27
#1	-.0507	.0009	.0188	-.0312	-.0034	.0070
#2	-.0262	.0044	.0132	-.0339	-.0013	.0023
Check ?	None	None	None	None	None	None
Value						
Range						

Sample Name: ICSA Run Time: 02/01/11 16:10

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.1322	-.0182	.00527	.0429	.01297	.03211
Stddev	.0052	.0004	.00018	.0032	.00006	.00018
%RSD	3.905	2.094	3.3320	7.378	.46060	.54697
#1	-.1285	-.0185	.00514	.0406	.01301	.03223
#2	-.1358	-.0179	.00539	.0451	.01293	.03198
Check ?	None	None	None	None	None	None
Value						
Range						

Int. Std.	Sc3572
Units	Cts/S
Avg	220.91
Stddev	1.03
%RSD	.46806
#1	221.64
#2	220.17

Method: 2011A Sample Name: ICSAB ICP8-31-C Operator:
Comment:
Run Time: 02/01/11 16:13 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	513.3	1.012	-.0333	.44454	.53769	.0040
Stddev	3.9	.019	.0324	.00507	.00147	.0003
%RSD	.7570	1.856	97.26	1.1398	.27298	7.077
#1	510.5	.9984	-.0562	.44096	.53873	.0042
#2	516.0	1.025	-.0104	.44812	.53665	.0038
Check ?	None	QC Pass	None	QC Pass	QC Pass	None
Value		1.000		.50000	.50000	
Range		20.00%		20.000%	20.000%	

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9016	499.2	.4752	.4615	.4581	195.0
Stddev	.0096	5.1	.0075	.0035	.0011	1.0
%RSD	1.067	1.023	1.569	.7680	.2383	.5219
#1	.8948	495.6	.4699	.4590	.4588	194.3
#2	.9084	502.8	.4805	.4640	.4573	195.7
Check ?	QC Pass	None	QC Pass	QC Pass	QC Pass	None
Value	1.000		.5000	.5000	.5000	
Range	20.00%		20.00%	20.00%	20.00%	

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9450	527.9	.41960	-.0226	.8945	-.0627
Stddev	.0112	15.9	.00312	.0040	.0111	.0119
%RSD	1.180	3.014	.74270	17.53	1.246	18.90
#1	.9372	516.6	.41740	-.0198	.8866	-.0711
#2	.9529	539.1	.42180	-.0254	.9024	-.0543
Check ?	QC Pass	None	QC Pass	None	QC Pass	None
Value	1.000		.50000		1.000	
Range	20.00%		20.000%		20.00%	

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0262	.9462	.0184	-.0177	.4778	.9184
Stddev	.0069	.0043	.0014	.0133	.0054	.0089
%RSD	26.52	.4595	7.865	75.07	1.131	.9698
#1	-.0311	.9492	.0174	-.0083	.4816	.9121
#2	-.0213	.9431	.0194	-.0271	.4739	.9247
Check ?	None	QC Pass	None	None	QC Pass	QC Pass
Value		1.000			.5000	1.000
Range		20.00%			20.00%	20.00%

Sample Name: ICSAB Run Time: 02/01/11 16:13

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.1406	.0054	.00446	.0494	.01276	.03207
Stddev	.0058	.0021	.00275	.0143	.00014	.00016
%RSD	4.141	38.22	61.684	29.02	1.0780	.49500
#1	-.1365	.0039	.00251	.0393	.01266	.03219
#2	-.1448	.0069	.00640	.0595	.01286	.03196
Check ?	None	None	None	None	None	None
Value						
Range						

Int. Std.	Sc3572
Units	Cts/S
Avg	224.10
Stddev	.06
%RSD	.02465
#1	224.13
#2	224.06

Method: 2011A Sample Name: ICSAB Operator:
Comment:
Run Time: 02/01/11 16:16 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	513.8	1.047	-.0583	.45077	.54551	.0027
Stddev	5.2	.024	.0048	.00422	.00238	.0002
%RSD	1.021	2.250	8.189	.93575	.43546	7.149
#1	510.1	1.031	-.0617	.44778	.54383	.0028
#2	517.5	1.064	-.0549	.45375	.54719	.0026
Check ?	None	QC Pass	None	QC Pass	QC Pass	None
Value		1.000		.50000	.50000	
Range		20.00%		20.000%	20.000%	

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9154	502.3	.4810	.4662	.4639	198.1
Stddev	.0144	5.4	.0063	.0041	.0060	2.1
%RSD	1.570	1.084	1.310	.8879	1.298	1.071
#1	.9052	498.4	.4766	.4633	.4597	196.6
#2	.9255	506.2	.4855	.4691	.4682	199.6
Check ?	QC Pass	None	QC Pass	QC Pass	QC Pass	None
Value	1.000		.5000	.5000	.5000	
Range	20.00%		20.00%	20.00%	20.00%	

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9519	529.6	.42540	-.0239	.9050	-.0731
Stddev	.0015	11.2	.00562	.0010	.0089	.0250
%RSD	.1535	2.116	1.3200	4.078	.9854	34.24
#1	.9530	521.7	.42142	-.0246	.8987	-.0908
#2	.9509	537.5	.42937	-.0233	.9113	-.0554
Check ?	QC Pass	None	QC Pass	None	QC Pass	None
Value	1.000		.50000		1.000	
Range	20.00%		20.000%		20.00%	

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0295	.9454	.0170	-.0169	.4895	.9346
Stddev	.0347	.0034	.0010	.0039	.0069	.0156
%RSD	117.9	.3645	5.913	23.06	1.413	1.667
#1	-.0049	.9429	.0177	-.0141	.4846	.9235
#2	-.0540	.9478	.0163	-.0196	.4944	.9456
Check ?	None	QC Pass	None	None	QC Pass	QC Pass
Value		1.000			.5000	1.000
Range		20.00%			20.00%	20.00%

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Sample Name: ICSAB Run Time: 02/01/11 16:16

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.1361	.0037	.00551	.0386	.01304	.03228
Stddev	.0277	.0024	.00088	.0100	.00002	.00051
%RSD	20.35	64.77	16.034	25.97	.17223	1.5830
#1	-.1165	.0020	.00613	.0457	.01305	.03264
#2	-.1557	.0054	.00488	.0315	.01302	.03192
Check ?	None	None	None	None	None	None
Value						
Range						

Int. Std.	Sc3572
Units	Cts/S
Avg	222.39
Stddev	.42
%RSD	.18982
#1	222.69
#2	222.09

WS
2/11/11

Method: 2011A Sample Name: CCVB Operator:
Comment:
Run Time: 02/01/11 16:19 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.215	-.0007	.0007	2.5460	.05107	.0073
Stddev	.100	.0014	.0146	.0236	.00014	.0001
%RSD	1.917	199.0	2123.	.92823	.26696	1.254
#1	5.286	.0003	.0110	2.5292	.05097	.0073
#2	5.145	-.0017	-.0097	2.5627	.05116	.0074
Check ?	QC Pass	None	None	QC Pass	QC Pass	None
Value	5.000			2.5000	.05000	
Range	10.00%			10.000%	10.000%	

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0024	25.95	.0050	-.0021	-.0011	25.80
Stddev	.0009	.27	.0004	.0001	.0014	.04
%RSD	39.38	1.052	7.876	5.727	129.8	.1366
#1	.0031	25.76	.0053	-.0022	-.0021	25.82
#2	.0017	26.14	.0047	-.0020	-.0001	25.77
Check ?	None	QC Pass	None	None	None	QC Pass
Value		25.00				25.00
Range		10.00%				10.00%

Elem	Pb2203	Mg2025	Mn2939	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0059	25.76	5.126	-.0123	-.0046	10.23
Stddev	.0006	.18	.017	.0022	.0015	.04
%RSD	9.636	.6953	.3381	18.18	33.14	.3785
#1	-.0063	25.89	5.114	-.0107	-.0035	10.26
#2	-.0055	25.64	5.139	-.0139	-.0057	10.21
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		25.00	5.000			10.00
Range		10.00%	10.00%			10.00%

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0041	-.0012	10.18	-.0022	.0066	.0016
Stddev	.0266	.0025	.02	.0004	.0007	.0009
%RSD	651.2	205.4	.1926	15.92	10.09	58.00
#1	-.0229	.0005	10.19	-.0025	.0061	.0022
#2	.0147	-.0030	10.17	-.0020	.0070	.0009
Check ?	None	None	QC Pass	None	None	None
Value			10.00			
Range			10.00%			

Sample Name: CCVB Run Time: 02/01/11 16:19

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.14	2.567	.00069	.0008	.50691	.51610
Stddev	.01	.006	.00028	.0027	.00295	.00002
%RSD	.1370	.2449	40.256	336.8	.58188	.00439
#1	10.13	2.562	.00089	.0027	.50900	.51611
#2	10.15	2.571	.00050	-.0011	.50483	.51608
Check ?	QC Pass	QC Pass	None	None	QC Pass	QC Pass
Value	10.00	2.500			.50000	.50000
Range	10.00%	10.00%			10.000%	10.000%

Int. Std.	Sc3572
Units	Cts/S
Avg	236.49
Stddev	.31
%RSD	.13047
#1	236.71
#2	236.27

Method: 2011A Sample Name: CCVA Operator:
Comment:
Run Time: 02/01/11 16:22 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4959	2.491	2.500	.47073	.56538	.5039
Stddev	.0054	.005	.023	.00335	.00183	.0005
%RSD	1.084	.2207	.9259	.71204	.32421	.0958
#1	.4921	2.487	2.483	.46836	.56409	.5043
#2	.4997	2.495	2.516	.47310	.56668	.5036
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		2.500	2.500			.5000
Range		10.00%	10.00%			10.00%

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5172	2.579	.5013	.5034	.5134	.5323
Stddev	.0030	.021	.0021	.0012	.0029	.0174
%RSD	.5889	.8304	.4285	.2285	.5657	3.271
#1	.5150	2.564	.4998	.5042	.5114	.5446
#2	.5193	2.595	.5028	.5026	.5155	.5200
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5000	2.500	.5000	.5000	.5000	.5000
Range	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.526	2.0715	1.0231	.9971	.5062	5.100
Stddev	.035	.0002	.0067	.0112	.0029	.038
%RSD	1.371	.01173	.65938	1.122	.5765	.7423
#1	2.501	2.0713	1.0183	.9892	.5041	5.127
#2	2.550	2.0716	1.0279	1.005	.5082	5.073
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	None
Value	2.500	2.0000	1.0000	1.000	.5000	
Range	10.00%	10.000%	10.000%	10.00%	10.00%	

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.446	.4976	.5152	2.496	.5102	.5158
Stddev	.022	.0005	.0068	.013	.0064	.0045
%RSD	.9027	.1062	1.323	.5206	1.248	.8690
#1	2.462	.4980	.5104	2.487	.5057	.5126
#2	2.431	.4972	.5200	2.505	.5147	.5190
Check ?	QC Pass	QC Pass	None	QC Pass	QC Pass	QC Pass
Value	2.500	.5000		2.500	.5000	.5000
Range	10.00%	10.00%		10.00%	10.00%	10.00%

Sample Name: CCVA Run Time: 02/01/11 16:22

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0089	.2506	.49844	5.024	.50370	.51301
Stddev	.0071	.0035	.00153	.064	.00097	.00158
%RSD	80.22	1.402	.30680	1.274	.19230	.30833
#1	-.0140	.2481	.49952	4.979	.50438	.51189
#2	-.0039	.2531	.49736	5.070	.50301	.51413
Check ?	None	None	QC Pass	QC Pass	None	None
Value			.50000	5.000		
Range			10.000%	10.00%		

Int. Std.	Sc3572
Units	Cts/S
Avg	237.60
Stddev	.80
%RSD	.33525
#1	238.16
#2	237.04

Method: 2011A Sample Name: CCB Operator:
Comment:
Run Time: 02/01/11 16:25 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0038	-.0163	.0050	-.00043	.00015	-.0004
Stddev	.0097	.0114	.0076	.00047	.00009	.0000
%RSD	252.6	69.95	151.5	110.64	61.865	6.248
#1	-.0030	-.0244	-.0004	-.00009	.00021	-.0004
#2	.0107	-.0082	.0103	-.00076	.00008	-.0004
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000	.0000
Range	±.0500	±.0500	±.1000	±.00500	±.00500	±.0500

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0005	.0009	-.0014	-.0004	.0011
Stddev	.0006	.0095	.0004	.0007	.0007	.0010
%RSD	147.4	1995.	44.26	51.53	182.7	92.27
#1	.0009	.0072	.0007	-.0009	-.0009	.0018
#2	.0000	-.0062	.0012	-.0020	.0001	.0004
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000
Range	±.0050	±.0500	±.0050	±.0100	±.0100	±.0200

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0040	.00213	.00057	-.0053	-.0012	-.0364
Stddev	.0060	.00007	.00032	.0031	.0015	.0002
%RSD	149.7	3.0552	57.098	58.37	116.6	.5266
#1	.0083	.00218	.00080	-.0031	-.0002	-.0365
#2	-.0002	.00208	.00034	-.0074	-.0023	-.0362
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.00000	.00000	.0000	.0000	.0000
Range	±.0500	±.02000	±.00500	±.0100	±.0200	±.4000

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0220	-.0034	-.0006	.0043	.0025	-.0002
Stddev	.0035	.0012	.0028	.0047	.0019	.0003
%RSD	15.71	34.15	490.4	109.4	78.24	109.0
#1	-.0245	-.0026	-.0025	.0077	.0038	-.0001
#2	-.0196	-.0042	.0014	.0010	.0011	-.0004
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000
Range	±.1000	±.0100	±.2000	±.0500	±.0100	±.0100

Sample Name: CCB Run Time: 02/01/11 16:25

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0054	-.0004	.00197	-.0019	.00010	.00007
Stddev	.0072	.0041	.00226	.0013	.00021	.00004
%RSD	133.1	1046.	114.58	67.78	205.21	57.952
#1	-.0105	.0025	.00357	-.0028	.00026	.00010
#2	-.0003	-.0033	.00037	-.0010	-.00005	.00004
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.00000	.0000	.00000	.00000
Range	±.2000	±.2000	±.01000	±.2000	±.01000	±.01000

Int. Std.	Sc3572
Units	Cts/S
Avg	232.27
Stddev	1.98
%RSD	.85093
#1	230.87
#2	233.67

Method: 2011A Sample Name: RB Operator:
Comment: 020111B
Run Time: 02/01/11 16:28 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0098	-.0083	-.0014	-.00082	.00005
#1	-.0106	-.0045	-.0068	-.00090	.00015
#2	-.0091	-.0121	.0039	-.00075	-.00004

Elem	B_2497	Cd2265	Ca3179	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0015	.0002	-.0008	.0006	-.0019
#1	-.0016	.0005	.0002	.0016	-.0028
#2	-.0014	-.0001	-.0018	-.0003	-.0010

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0005	-.0025	-.0017	-.00061	-.00046
#1	-.0003	-.0028	.0019	-.00060	-.00045
#2	-.0007	-.0022	-.0053	-.00062	-.00048

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0094	-.0009	-.0241	-.0008	-.0001
#1	-.0092	-.0001	-.0224	.0180	-.0012
#2	-.0096	-.0018	-.0257	-.0196	.0009

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0045	-.0010	-.0002	-.0009	-.0043
#1	.0071	.0015	.0006	-.0006	-.0103
#2	.0018	-.0035	-.0009	-.0011	.0018

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0035	.00065	-.0174	-.00030	-.00006
#1	-.0047	-.00053	-.0163	-.00038	-.00008
#2	-.0023	.00182	-.0184	-.00023	-.00003

Int. Std.	Sc3572
Units	Cts/S
Avg	238.93
#1	243.64
#2	234.22

Method: 2011A Sample Name: K1100767-MB Operator:
Comment: 020111B
Run Time: 02/01/11 16:31 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0060	-.0116	.0093	-.00088	.00001
#1	-.0106	-.0083	.0125	-.00099	.00002
#2	-.0015	-.0150	.0061	-.00078	.00001

Elem	B_2497	Cd2265	Ca3179	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0018	-.0003	.0014	.0007	-.0016
#1	-.0022	-.0004	-.0011	.0008	-.0006
#2	-.0013	-.0003	.0040	.0007	-.0026

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	-.0027	.0042	-.00070	-.00032
#1	-.0012	-.0025	-.0007	-.00072	-.00026
#2	-.0010	-.0028	.0091	-.00068	-.00038

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0095	-.0008	-.0330	-.0106	-.0030
#1	-.0089	-.0017	-.0330	-.0180	-.0026
#2	-.0101	.0001	-.0330	-.0033	-.0035

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0045	-.0018	-.0005	.1929
#1	-.0024	-.0047	-.0021	-.0003	.1849
#2	.0020	-.0043	-.0014	-.0007	.2009

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0064	.00065	.0103	.00020	-.00006
#1	-.0042	.00095	.0142	.00073	-.00008
#2	-.0085	.00035	.0065	-.00033	-.00005

Int. Std.	Sc3572
Units	Cts/S
Avg	236.67
#1	236.66
#2	236.68

Method: 2011A Sample Name: LCSW Operator:
Comment: 020111B
Run Time: 02/01/11 16:34 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.152	2.555	2.565	5.2469	.12945	.9928
#1	5.134	2.538	2.547	5.2085	.12956	.9910
#2	5.169	2.573	2.583	5.2852	.12934	.9947

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.238	13.19	.5097	1.254	.6330	2.431
#1	1.232	13.05	.5075	1.245	.6316	2.422
#2	1.244	13.32	.5120	1.262	.6344	2.441

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.489	12.91	1.2338	.9760	1.248	12.74
#1	2.467	12.90	1.2303	.9683	1.239	12.71
#2	2.512	12.93	1.2372	.9837	1.256	12.78

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.533	.6252	12.31	.0103	1.239	1.251
#1	2.529	.6232	12.31	.0118	1.240	1.243
#2	2.536	.6272	12.30	.0089	1.239	1.260

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2276	-.0588	10.470	2.490	-.00001	.00468
#1	.2223	-.0607	10.446	2.461	.00045	.00463
#2	.2329	-.0570	10.494	2.520	-.00046	.00472

Int. Std.	Sc3572
Units	Cts/S
Avg	240.77
#1	240.31
#2	241.22

Method: 2011A Sample Name: DW MRL Operator:
Comment: 020111B
Run Time: 02/01/11 16:36 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0372	-.0092	.0025	.01000	-.00003	-.0004
#1	.0410	-.0139	.0053	.01138	-.00003	-.0003
#2	.0334	-.0045	-.0004	.00861	-.00003	-.0005

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	.0427	.0017	-.0015	.0084	.0187
#1	.0005	.0413	.0019	-.0006	.0077	.0205
#2	.0000	.0441	.0015	-.0025	.0092	.0168

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0041	.01683	.00912	-.0065	.0001	-.0351
#1	-.0057	.01708	.00942	-.0038	.0007	-.0487
#2	-.0025	.01659	.00882	-.0092	-.0006	-.0216

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0090	.0008	.1897	-.0003	-.0029	.0083
#1	.0000	.0000	.1884	.0028	-.0036	.0094
#2	-.0180	.0016	.1911	-.0034	-.0023	.0072

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2256	.3867	.00118	.0099	.00016	-.00002
#1	.2129	.3869	.00136	.0137	.00012	-.00003
#2	.2384	.3865	.00101	.0060	.00020	-.00001

Int. Std.	Sc3572
Units	Cts/S
Avg	241.99
#1	241.12
#2	242.85

Method: 2011A Sample Name: K1100661-001 Operator:
Comment: 020111B
Run Time: 02/01/11 16:39 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	-.0106	-.0010	.07919	-.00004	.0182
#1	.0033	-.0035	-.0046	.07777	-.00005	.0178
#2	.0003	-.0178	.0025	.08061	-.00003	.0187

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0003	46.53	.0020	-.0005	-.0029	.0155
#1	-.0002	45.95	.0025	-.0009	-.0026	.0147
#2	.0008	47.11	.0015	-.0002	-.0032	.0164

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0050	12.82	.00348	-.0090	.0000	28.27
#1	.0088	12.70	.00351	-.0080	.0001	28.18
#2	.0011	12.95	.00344	-.0101	-.0001	28.36

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0074	-.0035	85.53	-.0044	.0055	.0004
#1	-.0065	-.0016	85.39	-.0080	.0061	.0010
#2	-.0082	-.0054	85.67	-.0008	.0050	-.0002

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2615	24.91	.00086	-.0014	.00701	.22984
#1	.2624	24.74	.00003	.0079	.00723	.23004
#2	.2607	25.08	.00170	-.0108	.00679	.22964

Int. Std.	Sc3572
Units	Cts/S
Avg	242.86
#1	242.56
#2	243.16

Method: 2011A Sample Name: K1100661-001L Operator:
Comment: 020111B 5
Run Time: 02/01/11 16:42 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0075	-.0207	-.0018	.01542	-.00003
#1	-.0045	-.0188	-.0060	.01519	-.00006
#2	-.0106	-.0226	.0025	.01564	.00000

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0031	-.0002	9.446	-.0001	-.0009
#1	.0027	-.0001	9.474	.0000	-.0012
#2	.0035	-.0002	9.418	-.0002	-.0007

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	.0014	-.0009	2.6960	.00045
#1	.0004	.0013	-.0041	2.6959	.00047
#2	-.0022	.0015	.0024	2.6962	.00044

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0100	-.0008	5.587	-.0049	-.0038
#1	-.0105	-.0003	5.597	-.0033	-.0030
#2	-.0095	-.0012	5.576	-.0065	-.0047

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	17.47	-.0019	-.0020	-.0006	.0594
#1	17.23	-.0007	-.0030	-.0005	.0540
#2	17.72	-.0031	-.0011	-.0007	.0648

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	4.606	.00086	-.0023	.00162	.04559
#1	4.594	.00173	-.0033	.00166	.04510
#2	4.617	-.00002	-.0013	.00159	.04608

Int. Std.	Sc3572
Units	Cts/S
Avg	242.18
#1	244.15
#2	240.20

Method: 2011A Sample Name: K1100661-001D Operator:
Comment: 020111B
Run Time: 02/01/11 16:45 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0042	-.0173	.0040	.08044	-.00006	.0195
#1	.0019	-.0178	-.0068	.08016	-.00009	.0191
#2	.0064	-.0168	.0147	.08071	-.00004	.0199

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0004	46.73	.0009	-.0001	-.0021	.0153
#1	.0002	46.34	.0003	-.0008	-.0024	.0151
#2	.0006	47.13	.0014	.0005	-.0019	.0155

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0043	13.06	.00347	-.0100	-.0003	28.87
#1	.0065	12.99	.00335	-.0112	-.0011	28.89
#2	.0020	13.13	.00360	-.0089	.0004	28.85

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0016	.0016	89.41	-.0049	.0042	.0008
#1	.0016	-.0007	89.61	-.0076	.0042	-.0001
#2	-.0049	.0040	89.20	-.0022	.0042	.0017

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2972	25.16	.00039	-.0013	.00740	.23666
#1	.3048	25.04	.00090	.0006	.00693	.23706
#2	.2895	25.29	-.00012	-.0032	.00786	.23625

Int. Std.	Sc3572
Units	Cts/S
Avg	240.46
#1	239.76
#2	241.15

Method: 2011A Sample Name: K1100661-001S Operator:
Comment: 020111B
Run Time: 02/01/11 16:48 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.104	.4828	1.028	2.1501	.05195	1.050
#1	2.101	.4754	1.018	2.1428	.05218	1.044
#2	2.106	.4902	1.038	2.1574	.05171	1.056

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0507	57.87	.2037	.4942	.2406	.9993
#1	.0499	57.35	.2055	.4910	.2398	.9959
#2	.0515	58.40	.2018	.4974	.2414	1.003

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4873	23.70	.47144	1.036	.4926	39.42
#1	.4772	23.62	.46879	1.026	.4900	39.39
#2	.4973	23.78	.47409	1.046	.4952	39.46

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.9749	.0433	101.8	.0020	.5074	.5016
#1	.9479	.0429	102.1	-.0008	.5061	.4941
#2	1.002	.0437	101.5	.0048	.5088	.5091

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3258	25.46	10.934	.9558	.00758	.24184
#1	.3214	25.36	10.943	.9325	.00744	.24223
#2	.3301	25.55	10.924	.9790	.00772	.24145

Int. Std.	Sc3572
Units	Cts/S
Avg	236.14
#1	235.50
#2	236.78

Method: 2011A Sample Name: K1100692-002 Operator:
Comment: 020111B
Run Time: 02/01/11 16:51 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0302	-.0087	-.0025	.36241	-.00007
#1	-.0332	-.0130	-.0039	.36143	.00000
#2	-.0271	-.0044	-.0010	.36339	-.00014

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0464	.0004	154.7	.0009	-.0026
#1	.0463	.0004	153.3	.0027	-.0020
#2	.0466	.0004	156.1	-.0008	-.0031

Elem	Cu3247	Fe2599	Pb2203	Mg2025	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0031	.0133	.0006	46.53	.00338
#1	-.0041	.0148	.0055	46.49	.00351
#2	-.0022	.0119	-.0044	46.58	.00325

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0066	-.0013	27.86	-.0106	.0003
#1	-.0040	-.0014	27.77	-.0147	.0009
#2	-.0092	-.0012	27.94	-.0065	-.0002

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm *	ppm	ppm	ppm	ppm
Avg	>180.0	.0000	.0053	.0009	.2007
#1	>180.0	-.0049	.0055	.0007	.2115
#2	>180.0	.0049	.0051	.0012	.1898

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	24.81	.00215	.0161	.01920	.79758
#1	24.69	.00424	.0131	.01958	.79736
#2	24.93	.00005	.0190	.01882	.79781

Int. Std.	Sc3572
Units	Cts/S
Avg	229.34
#1	229.12
#2	229.56

* 500 dilution WS 2/2/11

Method: 2011A Sample Name: K1100692-002D Operator:
Comment: 020111B
Run Time: 02/01/11 16:54 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0081	-.0092	.0000	.35722	-.00003
#1	-.0301	-.0034	.0018	.35643	.00000
#2	.0140	-.0150	-.0018	.35801	-.00007

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0457	.0007	152.7	.0016	-.0025
#1	.0455	.0002	151.9	.0003	-.0027
#2	.0459	.0012	153.6	.0028	-.0023

Elem	Cu3247	Fe2599	Pb2203	Mg2025	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0045	.0124	-.0003	45.90	.00331
#1	-.0046	.0123	.0029	45.87	.00325
#2	-.0044	.0125	-.0035	45.94	.00337

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0102	-.0005	27.50	-.0016	-.0006
#1	-.0077	-.0013	27.44	.0000	-.0019
#2	-.0127	.0004	27.56	-.0033	.0007

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm *	ppm	ppm	ppm	ppm
Avg	>180.0	-.0036	.0040	.0004	.2081
#1	>180.0	-.0058	.0040	.0012	.2055
#2	>180.0	-.0015	.0039	-.0004	.2107

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	24.49	.00143	.0081	.01875	.78842
#1	24.42	.00118	.0072	.01827	.79125
#2	24.57	.00167	.0091	.01922	.78558

Int. Std.	Sc3572
Units	Cts/S
Avg	229.58
#1	229.01
#2	230.15

* 500 dilution
WS
2/4/11

Method: 2011A Sample Name: CCVB Operator:
Comment:
Run Time: 02/01/11 16:57 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.030	-.0102	.0096	2.5535	.05082	.0060
Stddev	.041	.0068	.0081	.0160	.00012	.0004
%RSD	.8174	66.67	84.33	.62527	.24236	6.483
#1	5.059	-.0054	.0153	2.5422	.05091	.0057
#2	5.001	-.0151	.0039	2.5647	.05073	.0062
Check ?	QC Pass	None	None	QC Pass	QC Pass	None
Value	5.000			2.5000	.05000	
Range	10.00%			10.000%	10.000%	

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0010	25.72	.0058	-.0020	.0008	25.40
Stddev	.0007	.07	.0012	.0002	.0012	.17
%RSD	69.38	.2724	20.40	12.06	139.1	.6518
#1	.0005	25.67	.0050	-.0018	.0017	25.29
#2	.0015	25.77	.0067	-.0022	.0000	25.52
Check ?	None	QC Pass	None	None	None	QC Pass
Value		25.00				25.00
Range		10.00%				10.00%

Elem	Pb2203	Mg2025	Mn2939	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0009	25.40	5.058	-.0109	-.0023	10.00
Stddev	.0044	.07	.022	.0018	.0012	.03
%RSD	497.3	.2949	.4421	16.59	53.76	.3351
#1	.0040	25.35	5.043	-.0096	-.0031	10.03
#2	-.0022	25.45	5.074	-.0122	-.0014	9.978
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		25.00	5.000			10.00
Range		10.00%	10.00%			10.00%

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0008	.0004	9.898	-.0009	.0037	.0013
Stddev	.0012	.0015	.052	.0021	.0017	.0004
%RSD	142.5	337.9	.5296	237.8	46.95	32.85
#1	.0000	-.0006	9.935	-.0024	.0025	.0016
#2	-.0016	.0015	9.861	.0006	.0050	.0010
Check ?	None	None	QC Pass	None	None	None
Value			10.00			
Range			10.00%			

Sample Name: CCVB Run Time: 02/01/11 16:57

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.09	2.545	.00114	.0162	.49789	.50836
Stddev	.02	.009	.00175	.0109	.00142	.00095
%RSD	.1520	.3616	154.13	67.18	.28557	.18734
#1	10.07	2.539	.00238	.0238	.49889	.50904
#2	10.10	2.552	-.00010	.0085	.49688	.50769
Check ?	QC Pass	QC Pass	None	None	QC Pass	QC Pass
Value	10.00	2.500			.50000	.50000
Range	10.00%	10.00%			10.000%	10.000%

Int. Std.	Sc3572
Units	Cts/S
Avg	236.56
Stddev	.31
%RSD	.12922
#1	236.78
#2	236.35

Method: 2011A Sample Name: CCVA Operator:
Comment:
Run Time: 02/01/11 17:00 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4747	2.473	2.493	.47141	.55833	.5061
Stddev	.0099	.012	.010	.00117	.00281	.0014
%RSD	2.086	.4879	.3870	.24908	.50326	.2785
#1	.4817	2.464	2.486	.47224	.56031	.5051
#2	.4677	2.482	2.500	.47058	.55634	.5071
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		2.500	2.500			.5000
Range		10.00%	10.00%			10.00%

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5049	2.568	.5034	.5043	.5044	.5229
Stddev	.0012	.022	.0010	.0034	.0031	.0179
%RSD	.2449	.8602	.1917	.6705	.6134	3.429
#1	.5058	2.584	.5027	.5067	.5022	.5355
#2	.5040	2.553	.5040	.5019	.5065	.5102
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5000	2.500	.5000	.5000	.5000	.5000
Range	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.503	2.0852	.99553	.9925	.5073	5.070
Stddev	.004	.0053	.01095	.0099	.0025	.030
%RSD	.1393	.25438	1.1002	.9997	.4920	.6024
#1	2.500	2.0890	1.0033	.9855	.5055	5.048
#2	2.505	2.0815	.98778	.9995	.5090	5.091
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	None
Value	2.500	2.0000	1.0000	1.000	.5000	
Range	10.00%	10.000%	10.000%	10.00%	10.00%	

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.475	.4985	.4943	2.491	.5000	.5081
Stddev	.001	.0074	.0035	.029	.0048	.0016
%RSD	.0382	1.484	.7052	1.173	.9531	.3208
#1	2.476	.5038	.4967	2.511	.5033	.5070
#2	2.474	.4933	.4918	2.470	.4966	.5093
Check ?	QC Pass	QC Pass	None	QC Pass	QC Pass	QC Pass
Value	2.500	.5000		2.500	.5000	.5000
Range	10.00%	10.00%		10.00%	10.00%	10.00%

Sample Name: CCVA Run Time: 02/01/11 17:00

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0091	.2527	.50070	4.953	.49917	.50245
Stddev	.0215	.0008	.00086	.004	.00147	.00230
%RSD	236.5	.3097	.17256	.0772	.29463	.45859
#1	.0061	.2522	.50131	4.950	.49813	.50408
#2	-.0243	.2533	.50009	4.956	.50021	.50083
Check ?	None	None	QC Pass	QC Pass	None	None
Value			.50000	5.000		
Range			10.000%	10.00%		

Int. Std.	Sc3572
Units	Cts/S
Avg	240.84
Stddev	1.34
%RSD	.55608
#1	239.90
#2	241.79

Method: 2011A Sample Name: CCB Operator:
Comment:
Run Time: 02/01/11 17:03 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0061	-.0197	-.0064	-.00043	.00014	-.0007
Stddev	.0065	.0067	.0045	.00016	.00000	.0010
%RSD	107.0	34.12	70.69	36.648	.47407	133.0
#1	.0015	-.0244	-.0032	-.00032	.00014	.0000
#2	.0106	-.0149	-.0096	-.00054	.00014	-.0014
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000	.0000
Range	±.0500	±.0500	±.1000	±.00500	±.00500	±.0500

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.0013	.0007	-.0009	.0003	.0004
Stddev	.0009	.0025	.0032	.0003	.0005	.0004
%RSD	934.9	194.2	498.8	26.90	140.9	93.01
#1	.0007	-.0005	.0029	-.0008	.0007	.0007
#2	-.0005	.0030	-.0016	-.0011	.0000	.0001
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000
Range	±.0050	±.0500	±.0050	±.0100	±.0100	±.0200

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0029	.00286	.00047	-.0060	-.0016	-.0242
Stddev	.0110	.00006	.00018	.0045	.0021	.0178
%RSD	375.7	2.2467	39.358	75.08	130.8	73.50
#1	.0108	.00290	.00060	-.0028	-.0001	-.0368
#2	-.0049	.00281	.00034	-.0092	-.0030	-.0116
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.00000	.00000	.0000	.0000	.0000
Range	±.0500	±.02000	±.00500	±.0100	±.0200	±.4000

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0114	-.0026	-.0004	.0023	-.0014	.0001
Stddev	.0231	.0007	.0014	.0021	.0015	.0005
%RSD	202.0	25.78	371.9	92.32	108.4	638.5
#1	.0049	-.0021	-.0013	.0038	-.0003	-.0003
#2	-.0278	-.0030	.0006	.0008	-.0024	.0004
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000	.0000
Range	±.1000	±.0100	±.2000	±.0500	±.0100	±.0100

Sample Name: CCB Run Time: 02/01/11 17:03

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0155	-.0005	.00057	.0084	-.00027	.00012
Stddev	.0022	.0011	.00292	.0027	.00010	.00004
%RSD	14.41	212.9	511.04	32.29	38.760	31.473
#1	-.0140	.0003	-.00149	.0103	-.00034	.00015
#2	-.0171	-.0013	.00264	.0064	-.00019	.00010
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.00000	.0000	.00000	.00000
Range	±.2000	±.2000	±.01000	±.2000	±.01000	±.01000

Int. Std.	Sc3572
Units	Cts/S
Avg	237.31
Stddev	.17
%RSD	.07240
#1	237.19
#2	237.43

Method: 2011A Sample Name: K1100692-002S Operator:
Comment: 020111B
Run Time: 02/01/11 17:08 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.997	.4641	.9422	2.3701	.04942	1.002
#1	1.998	.4629	.9355	2.3407	.04921	.9952
#2	1.996	.4653	.9490	2.3994	.04963	1.008

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0476	165.4	.1969	.4695	.2218	.9432
#1	.0476	164.0	.1946	.4656	.2220	.9347
#2	.0476	166.8	.1993	.4733	.2216	.9518

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4832	57.20	.44069	.9715	.4659	37.89
#1	.4844	56.91	.43849	.9562	.4599	37.89
#2	.4821	57.49	.44289	.9867	.4718	37.89

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm *	ppm	ppm	ppm
Avg	.9569	.0402	>180.0	.0030	.4813	.4662
#1	.9479	.0404	>180.0	.0049	.4811	.4620
#2	.9659	.0401	>180.0	.0011	.4815	.4704

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2337	24.95	10.514	.8985	.01887	.78017
#1	.2464	24.90	10.483	.9085	.01893	.78025
#2	.2209	25.00	10.544	.8885	.01881	.78009

Int. Std.	Sc3572
Units	Cts/S
Avg	232.86
#1	232.79
#2	232.92

* 500 dilution
2/2/11
WS

Method: 2011A Sample Name: K1100661-002 Operator:
Comment: 020111B
Run Time: 02/01/11 17:11 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4824	-.0139	-.0038	.05122	-.00005	.0062
#1	.4824	-.0149	-.0117	.05105	-.00006	.0058
#2	.4824	-.0130	.0041	.05138	-.00004	.0067

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0005	95.65	.0031	.0001	-.0003	.9411
#1	.0005	94.90	.0030	.0002	-.0001	.9397
#2	.0005	96.41	.0032	.0000	-.0005	.9426

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0083	29.72	.16744	-.0049	.0012	5.899
#1	-.0016	29.58	.16700	-.0038	.0013	5.898
#2	-.0150	29.86	.16789	-.0060	.0011	5.901

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0016	-.0007	24.26	-.0040	.0013	.0043
#1	-.0016	.0002	24.31	-.0008	.0015	.0044
#2	-.0016	-.0017	24.21	-.0073	.0012	.0041

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2453	22.95	.04233	-.0136	.01128	.34253
#1	.2319	22.86	.04219	-.0107	.01112	.34315
#2	.2586	23.03	.04248	-.0164	.01144	.34191

Int. Std.	Sc3572
Units	Cts/S
Avg	241.46
#1	240.91
#2	242.02

Method: 2011A Sample Name: K1100661-003 Operator:
Comment: 020111B
Run Time: 02/01/11 17:14 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0058	-.0063	.0000	.17521	-.00003
#1	-.0241	-.0073	.0025	.17317	-.00002
#2	.0125	-.0054	-.0025	.17726	-.00005

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0195	.0007	178.4	.0010	-.0011
#1	.0197	.0003	176.0	.0005	-.0015
#2	.0193	.0011	180.7	.0015	-.0007

Elem	Cu3247	Fe2599	Pb2203	Mg2025	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0030	.0096	.0014	58.16	.11610
#1	-.0021	.0102	-.0028	57.98	.11475
#2	-.0039	.0091	.0056	58.34	.11745

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0107	.0001	29.93	-.0180	-.0005
#1	-.0111	.0002	29.85	-.0426	.0009
#2	-.0103	.0000	30.00	.0066	-.0019

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	153.6	.0008	.0032	.0087	.2123
#1	152.6	.0042	.0015	.0090	.1952
#2	154.6	-.0027	.0048	.0085	.2294

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	24.66	.00087	.0134	.01337	.95395
#1	24.52	.00166	.0278	.01289	.95035
#2	24.80	.00007	-.0011	.01385	.95755

Int. Std.	Sc3572
Units	Cts/S
Avg	235.71
#1	235.99
#2	235.43

Method: 2011A Sample Name: K1100661-004 Operator:
Comment: 020111B
Run Time: 02/01/11 17:17 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0179	-.0025	-.0057	.03923	-.00005
#1	.0064	-.0006	-.0082	.03904	.00003
#2	-.0423	-.0044	-.0032	.03942	-.00013

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0029	.0004	81.99	.0012	-.0019
#1	.0025	-.0001	81.24	.0016	-.0013
#2	.0034	.0009	82.74	.0007	-.0024

Elem	Cu3247	Fe2599	Pb2203	Mg2025	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0025	.0031	.0038	32.47	.00420
#1	-.0023	.0037	.0060	32.38	.00409
#2	-.0027	.0025	.0016	32.56	.00431

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0098	-.0017	4.249	-.0090	.0017
#1	-.0107	-.0008	4.256	-.0213	.0035
#2	-.0089	-.0026	4.242	.0033	.0000

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	31.78	-.0044	.0052	-.0001	.2480
#1	31.74	-.0027	.0065	-.0004	.2458
#2	31.83	-.0060	.0039	.0001	.2502

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	23.86	.00195	-.0004	.00685	.40051
#1	23.75	.00253	-.0051	.00758	.40079
#2	23.97	.00138	.0043	.00612	.40023

Int. Std.	Sc3572
Units	Cts/S
Avg	241.10
#1	241.41
#2	240.79

Method: 2011A Sample Name: K1100661-005 Operator:
Comment: 020111B
Run Time: 02/01/11 17:20 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0239	-.0116	-.0018	.12314	-.00004	.0062
#1	.0109	-.0025	-.0010	.12263	-.00006	.0064
#2	.0368	-.0207	-.0025	.12365	-.00002	.0060

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	73.34	.0023	-.0002	-.0035	.0220
#1	-.0002	72.75	.0030	.0000	-.0019	.0220
#2	.0006	73.93	.0015	-.0004	-.0050	.0220

Elem	Pb2203	Mg2025	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0036	22.83	.02505	-.0085	-.0006	5.090
#1	-.0077	22.74	.02487	-.0081	-.0006	5.082
#2	.0005	22.93	.02523	-.0088	-.0006	5.097

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0188	.0014	23.61	-.0019	.0040	-.0002
#1	-.0213	.0021	23.56	.0011	.0033	-.0001
#2	-.0164	.0007	23.66	-.0049	.0047	-.0003

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.2844	23.18	-.00012	.0092	.00953	.26209
#1	.2848	23.13	.00009	.0026	.00952	.26217
#2	.2841	23.24	-.00032	.0159	.00953	.26200

Int. Std.	Sc3572
Units	Cts/S
Avg	238.99
#1	239.14
#2	238.84

Method: 2011A Sample Name: K1100661-006 Operator:
Comment: 020111B
Run Time: 02/01/11 17:23 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0091	-.0102	.0096	-.00039	-.00002
#1	-.0197	-.0035	.0210	-.00057	-.00007
#2	.0015	-.0169	-.0018	-.00021	.00003

Elem	B_2497	Cd2265	Ca3179	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0021	.0001	.0594	.0008	-.0016
#1	-.0021	.0003	.0588	.0015	-.0020
#2	-.0021	-.0001	.0600	.0001	-.0013

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.0012	-.0047	.01743	-.00011
#1	.0009	.0013	-.0065	.01776	-.00009
#2	-.0005	.0010	-.0028	.01709	-.00014

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0101	.0006	-.0151	-.0188	-.0005
#1	-.0108	-.0003	-.0135	-.0082	-.0007
#2	-.0095	.0016	-.0168	-.0294	-.0002

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	.1714	-.0029	-.0009	.0003	.2694
#1	.1715	-.0025	-.0023	.0007	.2607
#2	.1713	-.0032	.0005	-.0001	.2781

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0112	-.00143	-.0003	-.00032	.00027
#1	.0134	-.00214	-.0013	-.00047	.00027
#2	.0090	-.00072	.0007	-.00017	.00027

Int. Std.	Sc3572
Units	Cts/S
Avg	238.84
#1	239.35
#2	238.33

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Method: 2011A Sample Name: K1100681-001 Operator:
Comment: 020111B
Run Time: 02/01/11 17:26 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0114	-.0169	-.0007	-.00004	-.00008	-.0023
#1	.0106	-.0246	-.0018	-.00017	-.00004	-.0027
#2	.0121	-.0092	.0004	.00008	-.00011	-.0019

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0002	.1773	.0029	-.0011	.0021	.0204
#1	-.0005	.1773	.0036	-.0019	.0036	.0201
#2	.0009	.1772	.0021	-.0003	.0007	.0207

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0033	.05887	.00186	-.0103	.0001	.0167
#1	.0022	.05877	.00177	-.0114	.0008	.0108
#2	.0043	.05898	.00196	-.0092	-.0005	.0225

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0131	.0020	.8616	-.0016	.0023	.0017
#1	-.0033	.0019	.8563	-.0009	.0022	.0020
#2	-.0229	.0021	.8669	-.0022	.0024	.0014

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.3339	.0605	.00040	.0009	-.00045	.00085
#1	.3370	.0618	-.00060	.0009	.00016	.00085
#2	.3308	.0593	.00139	.0009	-.00107	.00086

Int. Std.	Sc3572
Units	Cts/S
Avg	234.38
#1	234.40
#2	234.37

Method: 2011A Sample Name: K1100~~692-001~~ 6641-001 Operator:
Comment: 020111B WS 2/3/11
Run Time: 02/01/11 17:29 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0066	-.0120	-.0071	-.00002	.00000
#1	.0018	-.0216	.0061	-.00015	-.00003
#2	-.0149	-.0025	-.0203	.00012	.00002

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0112	-.0002	19.63	.0005	-.0012
#1	.0114	-.0002	19.37	.0003	-.0011
#2	.0111	-.0002	19.89	.0007	-.0013

Elem	Cu3247	Fe2599	Pb2203	Mg2025	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0024	.0215	-.0013	10.01	.14241
#1	-.0022	.0208	-.0008	9.938	.14093
#2	-.0026	.0223	-.0017	10.08	.14390

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0084	-.0019	1.046	-.0180	-.0017
#1	-.0074	-.0024	1.051	-.0229	.0004
#2	-.0094	-.0014	1.042	-.0131	-.0037

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	11.50	-.0069	-.0001	.0125	.2334
#1	11.52	-.0074	.0008	.0120	.2158
#2	11.49	-.0065	-.0010	.0130	.2510

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	25.73	-.00071	.0043	.00279	.07394
#1	25.55	-.00202	.0081	.00274	.07391
#2	25.91	.00061	.0006	.00285	.07397

Int. Std.	Sc3572
Units	Cts/S
Avg	241.18
#1	241.24
#2	241.11

Method: 2011A Sample Name: K1100692-~~003~~ 001 Operator:
Comment: 020111B WS 2/3/11
Run Time: 02/01/11 17:32 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0157	-.0068	-.0135	.35826	.00002
#1	-.0148	-.0121	-.0175	.35678	-.00004
#2	-.0165	-.0016	-.0096	.35974	.00008

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0441	.0011	155.4	.0010	-.0013
#1	.0446	.0010	154.4	.0012	-.0007
#2	.0436	.0013	156.4	.0009	-.0018

Elem	Cu3247	Fe2599	Pb2203	Mg2025	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0031	.0126	.0023	46.72	.00315
#1	-.0030	.0121	.0035	46.78	.00317
#2	-.0033	.0131	.0010	46.65	.00313

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0116	-.0015	27.60	-.0057	.0038
#1	-.0109	-.0022	27.62	-.0098	.0035
#2	-.0123	-.0009	27.59	-.0016	.0042

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm *	ppm	ppm	ppm	ppm
Avg	>180.0	-.0056	.0027	-.0004	.1832
#1	>180.0	.0015	.0028	-.0003	.1761
#2	>180.0	-.0127	.0027	-.0005	.1903

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	24.85	.00033	.0251	.01836	.77478
#1	24.79	.00093	.0145	.01815	.77680
#2	24.91	-.00026	.0356	.01856	.77276

Int. Std.	Sc3572
Units	Cts/S
Avg	234.59
#1	234.08
#2	235.10

* see dilution WS 2/2/11

Method: 2011A Sample Name: K1100~~712-001~~ 693-003 Operator:
Comment: 020111B WS 2/3/11
Run Time: 02/01/11 17:35 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0068	-.0117	-.0032	-.00072	-.00002	-.0020
#1	.0121	-.0083	.0018	-.00054	-.00002	-.0024
#2	.0016	-.0150	-.0082	-.00090	-.00002	-.0016

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	.0223	.0021	-.0012	-.0016	-.0023
#1	-.0008	.0234	.0019	-.0010	-.0026	-.0025
#2	.0003	.0212	.0024	-.0014	-.0007	-.0022

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	.00423	-.00013	-.0110	-.0022	-.0057
#1	.0133	.00498	-.00025	-.0110	-.0027	.0038
#2	-.0130	.00349	.00000	-.0111	-.0017	-.0151

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0098	-.0008	.0644	-.0001	-.0021	.0005
#1	-.0049	.0014	.0724	-.0015	-.0009	.0008
#2	-.0147	-.0030	.0564	.0013	-.0032	.0003

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1950	.0010	.00018	.0014	-.00015	.00011
#1	.1928	.0029	.00031	.0043	.00016	.00013
#2	.1972	-.0009	.00005	-.0014	-.00046	.00009

Int. Std.	Sc3572
Units	Cts/S
Avg	241.86
#1	241.29
#2	242.43

Method: 2011A Sample Name: CCVB Operator:
Comment:
Run Time: 02/01/11 17:38 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.024	-.0055	.0049	2.5284	.04925	.0047
Stddev	.028	.0013	.0025	.0086	.00000	.0009
%RSD	.5553	24.69	51.64	.34077	.00304	18.47
#1	5.004	-.0045	.0066	2.5223	.04925	.0053
#2	5.044	-.0064	.0031	2.5345	.04925	.0041
Check ?	QC Pass	None	None	QC Pass	QC Pass	None
Value	5.000			2.5000	.05000	
Range	10.00%			10.000%	10.000%	

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0017	25.54	.0049	-.0022	-.0006	24.76
Stddev	.0001	.33	.0019	.0010	.0032	.13
%RSD	4.049	1.310	39.59	45.15	520.7	.5391
#1	.0016	25.30	.0035	-.0029	.0016	24.66
#2	.0017	25.78	.0063	-.0015	-.0029	24.85
Check ?	None	QC Pass	None	None	None	QC Pass
Value		25.00				25.00
Range		10.00%				10.00%

Elem	Pb2203	Mg2025	Mn2939	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0039	25.37	4.972	-.0117	-.0030	10.01
Stddev	.0074	.17	.010	.0017	.0002	.02
%RSD	189.7	.6848	.2029	14.52	5.260	.2144
#1	.0013	25.25	4.965	-.0129	-.0031	9.990
#2	-.0092	25.49	4.979	-.0105	-.0029	10.02
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		25.00	5.000			10.00
Range		10.00%	10.00%			10.00%

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0008	-.0023	9.366	-.0074	.0011	.0008
Stddev	.0012	.0028	.103	.0011	.0005	.0007
%RSD	140.7	119.5	1.103	14.68	43.50	94.82
#1	.0016	-.0043	9.439	-.0082	.0015	.0013
#2	.0000	-.0004	9.293	-.0067	.0008	.0003
Check ?	None	None	QC Pass	None	None	None
Value			10.00			
Range			10.00%			

Sample Name: CCVB Run Time: 02/01/11 17:38

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.24	2.547	-.00057	.0015	.49455	.49161
Stddev	.13	.018	.00081	.0093	.00278	.00193
%RSD	1.313	.7255	142.08	632.0	.56250	.39254
#1	10.14	2.534	.00000	.0081	.49652	.49297
#2	10.33	2.560	-.00115	-.0051	.49259	.49024
Check ?	QC Pass	QC Pass	None	None	QC Pass	QC Pass
Value	10.00	2.500			.50000	.50000
Range	10.00%	10.00%			10.000%	10.000%

Int. Std.	Sc3572
Units	Cts/S
Avg	241.73
Stddev	.88
%RSD	.36417
#1	241.11
#2	242.35

Method: 2011A Sample Name: CCVA Operator:
Comment:
Run Time: 02/01/11 17:41 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4775	2.508	2.415	.46467	.54080	.5034
Stddev	.0034	.013	.002	.00156	.00018	.0021
%RSD	.7050	.5239	.0859	.33502	.03358	.4096
#1	.4799	2.499	2.417	.46577	.54093	.5049
#2	.4751	2.517	2.414	.46357	.54068	.5020
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		2.500	2.500			.5000
Range		10.00%	10.00%			10.00%

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4791	2.494	.4983	.4953	.4805	.5029
Stddev	.0004	.013	.0032	.0030	.0002	.0240
%RSD	.0885	.5053	.6338	.6022	.0491	4.772
#1	.4788	2.485	.5005	.4974	.4807	.5199
#2	.4794	2.503	.4960	.4932	.4803	.4859
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5000	2.500	.5000	.5000	.5000	.5000
Range	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.437	2.0590	.95163	.9792	.5010	5.022
Stddev	.003	.0033	.00882	.0086	.0014	.026
%RSD	.1114	.16054	.92719	.8763	.2887	.5210
#1	2.438	2.0614	.94539	.9731	.5020	5.004
#2	2.435	2.0567	.95787	.9852	.5000	5.041
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	None
Value	2.500	2.0000	1.0000	1.000	.5000	
Range	10.00%	10.000%	10.000%	10.00%	10.00%	

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.438	.4978	.4613	2.425	.4881	.4853
Stddev	.032	.0031	.0068	.003	.0024	.0003
%RSD	1.307	.6278	1.479	.1116	.4893	.0611
#1	2.416	.4956	.4565	2.427	.4864	.4851
#2	2.461	.5001	.4662	2.423	.4898	.4855
Check ?	QC Pass	QC Pass	None	QC Pass	QC Pass	QC Pass
Value	2.500	.5000		2.500	.5000	.5000
Range	10.00%	10.00%		10.00%	10.00%	10.00%

Sample Name: CCVA Run Time: 02/01/11 17:41

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0103	.2487	.49409	4.803	.48922	.48259
Stddev	.0000	.0007	.00098	.049	.00125	.00040
%RSD	.4506	.2704	.19859	1.025	.25519	.08271
#1	-.0103	.2483	.49340	4.768	.49010	.48231
#2	-.0103	.2492	.49478	4.838	.48833	.48288
Check ?	None	None	QC Pass	QC Pass	None	None
Value			.50000	5.000		
Range			10.000%	10.00%		

Int. Std.	Sc3572
Units	Cts/S
Avg	245.26
Stddev	.30
%RSD	.12320
#1	245.05
#2	245.48

Method: 2011A Sample Name: CCB Operator:
Comment:
Run Time: 02/01/11 17:44 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0068	-.0164	-.0039	-.00068	.00011
Stddev	.0011	.0101	.0010	.00023	.00007
%RSD	16.73	61.48	25.65	33.756	62.290
#1	-.0060	-.0235	-.0046	-.00052	.00006
#2	-.0076	-.0092	-.0032	-.00084	.00016
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000
Range	±.0500	±.0500	±.1000	±.00500	±.00500

Elem	B_2497	Cd2265	Ca3179	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0016	.0006	-.0011	.0020	-.0016
Stddev	.0004	.0000	.0000	.0009	.0006
%RSD	26.11	8.151	.5813	43.92	36.89
#1	-.0013	.0006	-.0011	.0026	-.0012
#2	-.0019	.0006	-.0011	.0014	-.0020
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.0500	±.0050	±.0500	±.0050	±.0100

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0004	.0005	.0043	.00306	.00044
Stddev	.0012	.0012	.0096	.00007	.00021
%RSD	302.7	217.3	222.8	2.3585	47.625
#1	.0012	.0014	.0111	.00301	.00059
#2	-.0004	-.0003	-.0025	.00311	.00029
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000
Range	±.0100	±.0200	±.0500	±.02000	±.00500

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0070	.0000	-.0166	-.0033	-.0024
Stddev	.0038	.0002	.0002	.0162	.0015
%RSD	54.45	500.4	1.084	495.8	60.46
#1	-.0043	-.0001	-.0168	.0082	-.0035
#2	-.0097	.0002	-.0165	-.0147	-.0014
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.0100	±.0200	±.4000	±.1000	±.0100

Sample Name: CCB Run Time: 02/01/11 17:44

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0072	.0054	-.0032	-.0011	-.0117
Stddev	.0028	.0001	.0011	.0003	.0181
%RSD	38.63	1.349	35.18	31.18	154.2
#1	.0091	.0053	-.0024	-.0013	-.0245
#2	.0052	.0054	-.0040	-.0008	.0011
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.2000	±.0500	±.0100	±.0100	±.2000

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0006	.00026	.0063	.00028	.00008
Stddev	.0015	.00065	.0161	.00052	.00003
%RSD	259.8	248.92	254.9	184.11	38.030
#1	.0005	.00072	.0177	.00065	.00010
#2	-.0016	-.00020	-.0051	-.00009	.00006
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.00000	.0000	.00000	.00000
Range	±.2000	±.01000	±.2000	±.01000	±.01000

Int. Std.	Sc3572
Units	Cts/S
Avg	239.48
Stddev	1.11
%RSD	.46439
#1	238.69
#2	240.26

712-001
WS 2/2/11

Method: 2011A Sample Name: K1100~~767-001~~ Operator:
Comment: 020111B
Run Time: 02/01/11 17:47 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0127	-.0139	-.0014	.17956	-.00005
#1	-.0241	-.0130	.0032	.18162	-.00006
#2	-.0012	-.0149	-.0060	.17750	-.00003

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0150	.0013	27.73	.0011	-.0021
#1	.0151	.0010	27.45	.0005	-.0030
#2	.0148	.0017	28.02	.0016	-.0012

Elem	Cu3247	Fe2599	Pb2203	Mg2025	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0018	.0065	.0078	22.01	.72606
#1	.0007	.0062	.0105	21.89	.73337
#2	.0030	.0069	.0052	22.14	.71875

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0060	-.0010	4.561	.0000	-.0006
#1	-.0056	-.0008	4.554	.0066	-.0004
#2	-.0063	-.0012	4.568	-.0065	-.0008

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	52.19	-.0007	-.0005	.0314	.4011
#1	53.06	.0012	-.0014	.0318	.3993
#2	51.32	-.0027	.0004	.0311	.4029

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	47.80	.00130	.0227	.00278	.24192
#1	47.31	.00180	.0326	.00328	.24616
#2	48.30	.00081	.0128	.00228	.23768

Int. Std.	Sc3572
Units	Cts/S
Avg	245.60
#1	240.93
#2	250.26

Method: 2011A Sample Name: ~~RB~~ K1100767-001 Operator:
Comment: 020111B ws 2/2/11
Run Time: 02/01/11 17:50 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.5361	-.0087	-.0007	.07045	-.00008	.0422
#1	.5194	-.0035	.0018	.06955	-.00001	.0420
#2	.5529	-.0140	-.0032	.07135	-.00015	.0424

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0001	35.22	.0057	-.0018	.0031	.2529
#1	-.0002	34.91	.0054	-.0009	.0035	.2513
#2	.0004	35.52	.0059	-.0026	.0026	.2546

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0036	6.4015	.26054	-.0080	.0011	10.92
#1	-.0065	6.3946	.25851	-.0083	-.0001	10.91
#2	-.0008	6.4084	.26257	-.0077	.0024	10.92

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0106	-.0016	>180.0	-.0056	.0023	.0290
#1	-.0115	-.0033	>180.0	-.0083	.0030	.0284
#2	-.0098	.0002	>180.0	-.0030	.0015	.0295

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	1.152	9.451	.00792	.0165	.00278	.12367
#1	1.134	9.421	.00765	.0174	.00258	.12338
#2	1.170	9.481	.00818	.0156	.00298	.12397

Int. Std.	Sc3572
Units	Cts/S
Avg	241.48
#1	241.86
#2	241.10

* dilute
ws 2/2/11

Method: 2011A Sample Name: ~~K1100692-002~~ RB Operator:
Comment: 020111B 10 WS 2/3/11
Run Time: 02/01/11 17:53 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0175	-.0221	-.0036	-.00079	.00000
#1	.0000	-.0226	.0089	-.00065	-.00002
#2	-.0349	-.0216	-.0160	-.00094	.00003

Elem	B_2497	Cd2265	Ca3179	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0009	-.0001	-.0034	.0012	-.0008
#1	-.0011	.0000	-.0024	.0010	-.0004
#2	-.0008	-.0003	-.0043	.0014	-.0013

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0006	-.0034	-.0034	-.00030	-.00030
#1	-.0008	-.0032	-.0069	-.00012	-.00021
#2	.0020	-.0037	.0001	-.00048	-.00039

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0094	-.0015	-.0105	-.0131	-.0022
#1	-.0088	-.0024	-.0292	-.0016	-.0016
#2	-.0099	-.0006	.0082	-.0245	-.0028

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0115	-.0017	-.0024	-.0001	-.0063
#1	.0173	.0003	-.0028	.0005	-.0097
#2	.0057	-.0037	-.0020	-.0007	-.0029

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0017	-.00051	-.0007	-.00001	-.00004
#1	.0027	-.00110	-.0088	.00034	-.00003
#2	.0007	.00008	.0075	-.00036	-.00005

Int. Std.	Sc3572
Units	Cts/S
Avg	242.82
#1	237.78
#2	247.85

Method: 2011A √ Sample Name: K1100692-002D 10 Operator:
WS 2/2/11
Comment: 020111B 10
Run Time: 02/01/11 17:56 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0061	-.0111	.0011	.03545	-.00005
#1	-.0121	-.0207	-.0082	.03528	-.00006
#2	-.0001	-.0016	.0103	.03563	-.00004

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0033	.0004	15.81	-.0008	-.0021
#1	.0035	.0005	15.65	-.0013	-.0019
#2	.0032	.0003	15.97	-.0004	-.0022

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0002	-.0011	-.0094	4.6901	-.00010
#1	.0005	-.0015	-.0171	4.6961	.00000
#2	-.0010	-.0008	-.0016	4.6842	-.00020

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0103	-.0012	2.707	-.0098	.0005
#1	-.0097	-.0011	2.726	-.0016	.0016
#2	-.0110	-.0013	2.688	-.0179	-.0007

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	25.78	.0022	-.0009	-.0012	.0126
#1	25.78	.0051	-.0005	-.0016	.0112
#2	25.79	-.0008	-.0013	-.0009	.0139

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	2.267	-.00039	.0034	.00187	.07568
#1	2.259	-.00190	-.0013	.00170	.07581
#2	2.275	.00112	.0082	.00204	.07556

Int. Std.	Sc3572
Units	Cts/S
Avg	239.55
#1	239.98
#2	239.11

Method: 2011A Sample Name: K1100692-002 Operator:
Comment: 020111B 10
Run Time: 02/01/11 17:59 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0182	-.0083	-.0025	.03586	.00000
#1	-.0197	-.0140	-.0025	.03555	-.00003
#2	-.0166	-.0025	-.0025	.03616	.00004

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0027	.0002	15.68	-.0001	-.0013
#1	.0029	.0005	15.57	.0000	-.0020
#2	.0026	-.0001	15.79	-.0001	-.0006

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0013	-.0017	-.0019	4.6499	.00000
#1	.0004	-.0014	-.0049	4.6359	.00003
#2	-.0030	-.0020	.0011	4.6638	-.00004

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0101	-.0009	2.694	-.0318	-.0023
#1	-.0110	-.0006	2.705	-.0245	-.0030
#2	-.0092	-.0011	2.683	-.0392	-.0016

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	25.43	-.0065	-.0007	-.0009	.0131
#1	25.53	-.0072	-.0005	-.0008	.0104
#2	25.33	-.0058	-.0009	-.0011	.0158

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	2.255	.00074	.0071	.00166	.07500
#1	2.248	.00063	.0082	.00220	.07519
#2	2.262	.00086	.0061	.00112	.07480

Int. Std.	Sc3572
Units	Cts/S
Avg	240.55
#1	239.53
#2	241.57

Method: 2011A Sample Name: K1100692-~~001~~ 0025 10 Operator:
Comment: 020111B 10 W5H2H11
Run Time: 02/01/11 18:02 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.1618	.0249	.0709	.21714	.00470	.1002
#1	.1414	.0206	.0709	.21579	.00467	.1004
#2	.1823	.0292	.0709	.21850	.00474	.1000

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0039	16.94	.0197	.0449	.0198	.0929
#1	.0042	16.86	.0184	.0440	.0185	.0923
#2	.0037	17.02	.0209	.0457	.0210	.0934

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0496	5.6423	.04358	.0770	.0460	3.703
#1	.0498	5.6301	.04345	.0760	.0452	3.706
#2	.0493	5.6544	.04370	.0779	.0467	3.700

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0931	.0051	26.12	-.0073	.0438	.0424
#1	.1094	.0052	26.18	-.0018	.0442	.0411
#2	.0768	.0050	26.06	-.0128	.0434	.0436

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0066	2.292	.94937	.0756	.00185	.07522
#1	-.0017	2.288	.94786	.0747	.00219	.07525
#2	.0149	2.296	.95087	.0764	.00150	.07520

Int. Std.	Sc3572
Units	Cts/S
Avg	243.13
#1	242.92
#2	243.35

Method: 2011A Sample Name: K1100692-~~003~~ 001 10 Operator:
Comment: 020111B 10 WS 2/3/11
Run Time: 02/01/11 18:05 Type: Unk Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0136	-.0078	-.0014	.03577	-.00008
#1	-.0046	-.0045	-.0011	.03556	-.00007
#2	-.0227	-.0112	-.0018	.03598	-.00008

Elem	B_2497	Cd2265	Ca2112	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0036	-.0004	15.92	.0011	-.0011
#1	.0032	-.0004	15.79	.0005	-.0013
#2	.0040	-.0005	16.05	.0017	-.0008

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0016	-.0014	-.0054	4.6970	.00001
#1	-.0018	-.0009	-.0053	4.6920	.00000
#2	-.0014	-.0019	-.0054	4.7019	.00001

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0106	-.0021	2.698	-.0229	-.0026
#1	-.0117	-.0020	2.694	-.0343	-.0035
#2	-.0096	-.0021	2.702	-.0114	-.0016

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	24.50	-.0028	-.0029	-.0016	.0081
#1	24.54	-.0071	-.0021	-.0014	.0183
#2	24.46	.0015	-.0038	-.0018	-.0022

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	2.275	-.00021	.0058	.00181	.07353
#1	2.271	-.00135	.0133	.00154	.07353
#2	2.279	.00093	-.0016	.00209	.07352

Int. Std.	Sc3572
Units	Cts/S
Avg	245.56
#1	244.81
#2	246.30

Method: 2011A Sample Name: CCVB Operator:
Comment:
Run Time: 02/01/11 18:08 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	5.048	-.0012	.0031	2.5053	.04937	.0054
Stddev	.036	.0115	.0050	.0326	.00027	.0003
%RSD	.7159	989.7	163.0	1.3008	.55546	5.567
#1	5.023	.0070	.0066	2.4822	.04917	.0056
#2	5.074	-.0093	-.0005	2.5283	.04956	.0052
Check ?	QC Pass	None	None	QC Pass	QC Pass	None
Value	5.000			2.5000	.05000	
Range	10.00%			10.000%	10.000%	

Elem	Cd2265	Ca2112	Cr2677	Co2286	Cu3247	Fe2714
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0018	25.28	.0049	-.0014	-.0017	24.72
Stddev	.0006	.34	.0020	.0015	.0030	.39
%RSD	35.52	1.356	40.58	110.6	176.5	1.579
#1	.0014	25.04	.0035	-.0003	.0004	24.45
#2	.0023	25.53	.0063	-.0025	-.0038	25.00
Check ?	None	QC Pass	None	None	None	QC Pass
Value		25.00				25.00
Range		10.00%				10.00%

Elem	Pb2203	Mg2025	Mn2939	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0055	25.21	4.985	-.0119	-.0028	10.14
Stddev	.0006	.26	.043	.0006	.0004	.09
%RSD	10.44	1.041	.8521	5.345	13.69	.8505
#1	-.0060	25.03	4.955	-.0115	-.0031	10.08
#2	-.0051	25.40	5.015	-.0124	-.0025	10.20
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		25.00	5.000			10.00
Range		10.00%	10.00%			10.00%

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.0074	-.0006	9.550	-.0014	.0012	.0006
Stddev	.0197	.0036	.095	.0006	.0021	.0015
%RSD	267.0	603.9	.9947	39.88	172.6	261.8
#1	-.0065	-.0032	9.483	-.0010	-.0003	.0016
#2	.0213	.0020	9.617	-.0018	.0026	-.0005
Check ?	None	None	QC Pass	None	None	None
Value			10.00			
Range			10.00%			

Sample Name: CCVB Run Time: 02/01/11 18:08

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	10.10	2.530	.00049	.0062	.49944	.49583
Stddev	.09	.015	.00091	.0266	.00410	.00411
%RSD	.9029	.5744	184.74	429.3	.82035	.82792
#1	10.03	2.520	.00113	-.0126	.49654	.49293
#2	10.16	2.540	-.00015	.0250	.50234	.49873
Check ?	QC Pass	QC Pass	None	None	QC Pass	QC Pass
Value	10.00	2.500			.50000	.50000
Range	10.00%	10.00%			10.000%	10.000%

Int. Std.	Sc3572
Units	Cts/S
Avg	241.28
Stddev	.28
%RSD	.11723
#1	241.48
#2	241.08

Method: 2011A Sample Name: CCVA Operator:
Comment:
Run Time: 02/01/11 18:11 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130	B_2497
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4799	2.506	2.458	.46398	.54894	.5035
Stddev	.0085	.014	.037	.00155	.00293	.0001
%RSD	1.777	.5513	1.490	.33404	.53459	.0229
#1	.4859	2.516	2.432	.46508	.55102	.5034
#2	.4738	2.496	2.484	.46289	.54687	.5036
Check ?	None	QC Pass	QC Pass	None	None	QC Pass
Value		2.500	2.500			.5000
Range		10.00%	10.00%			10.00%

Elem	Cd2265	Ca3179	Cr2677	Co2286	Cu3247	Fe2599
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	.4920	2.542	.4968	.4971	.4955	.5117
Stddev	.0029	.021	.0016	.0005	.0001	.0268
%RSD	.5996	.8116	.3247	.1032	.0263	5.243
#1	.4899	2.527	.4980	.4968	.4956	.5307
#2	.4941	2.557	.4957	.4975	.4954	.4927
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.5000	2.500	.5000	.5000	.5000	.5000
Range	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%

Elem	Pb2203	Mg2795	Mn2576	Mo2020	Ni2316	K_7664
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.450	2.0636	.97916	.9822	.5002	5.124
Stddev	.007	.0033	.00102	.0051	.0038	.046
%RSD	.3072	.16183	.10413	.5213	.7608	.9084
#1	2.445	2.0660	.97988	.9786	.5029	5.157
#2	2.456	2.0613	.97844	.9859	.4975	5.091
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	None
Value	2.500	2.0000	1.0000	1.000	.5000	
Range	10.00%	10.000%	10.000%	10.00%	10.00%	

Elem	Se1960	Ag3280	Na5895	Sn1899	V_3102	Zn2062
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	2.481	.5001	.4868	2.454	.4987	.4945
Stddev	.001	.0023	.0020	.008	.0038	.0029
%RSD	.0581	.4545	.4016	.3332	.7542	.5933
#1	2.480	.5017	.4855	2.448	.5014	.4924
#2	2.482	.4985	.4882	2.460	.4960	.4966
Check ?	QC Pass	QC Pass	None	QC Pass	QC Pass	QC Pass
Value	2.500	.5000		2.500	.5000	.5000
Range	10.00%	10.00%		10.00%	10.00%	10.00%

Sample Name: CCVA Run Time: 02/01/11 18:11

Elem	P_2149	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avg	-.0011	.2482	.49308	4.867	.49901	.49774
Stddev	.0200	.0017	.00257	.007	.00171	.00275
%RSD	1767.	.6858	.52197	.1500	.34291	.55306
#1	-.0153	.2470	.49490	4.872	.50022	.49969
#2	.0130	.2494	.49127	4.862	.49780	.49580
Check ?	None	None	QC Pass	QC Pass	None	None
Value			.50000	5.000		
Range			10.000%	10.00%		

Int. Std.	Sc3572
Units	Cts/S
Avg	242.90
Stddev	1.51
%RSD	.62117
#1	241.83
#2	243.97

Method: 2011A Sample Name: CCB Operator:
Comment:
Run Time: 02/01/11 18:14 Type: QC Mode: CONC Corr.Fact: 1.000000

Elem	Al2373	Sb2068	As1890	Ba2335	Be3130
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0144	-.0039	.0078	-.00019	.00017
Stddev	.0011	.0102	.0015	.00040	.00001
%RSD	7.508	258.7	19.27	209.13	4.6871
#1	-.0151	.0033	.0089	.00009	.00017
#2	-.0136	-.0111	.0068	-.00047	.00016
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000
Range	±.0500	±.0500	±.1000	±.00500	±.00500

Elem	B_2497	Cd2265	Ca3179	Cr2677	Co2286
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0007	.0001	.0022	.0024	-.0014
Stddev	.0002	.0003	.0007	.0009	.0010
%RSD	30.20	221.3	30.41	38.91	74.63
#1	-.0008	-.0001	.0017	.0031	-.0021
#2	-.0005	.0004	.0027	.0018	-.0007
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.0500	±.0050	±.0500	±.0050	±.0100

Elem	Cu3247	Fe2599	Pb2203	Mg2795	Mn2576
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0008	.0017	.0047	.00376	.00063
Stddev	.0009	.0011	.0047	.00004	.00028
%RSD	121.0	68.26	100.2	1.1428	44.576
#1	.0014	.0025	.0014	.00379	.00082
#2	.0001	.0009	.0080	.00373	.00043
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.00000	.00000
Range	±.0100	±.0200	±.0500	±.02000	±.00500

Elem	Mo2020	Ni2316	K_7664	Se1960	Ag3280
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0058	-.0017	-.0262	-.0065	-.0020
Stddev	.0047	.0004	.0023	.0046	.0012
%RSD	81.38	26.25	8.738	70.71	58.29
#1	-.0025	-.0020	-.0278	-.0098	-.0012
#2	-.0091	-.0014	-.0246	-.0033	-.0028
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.0100	±.0200	±.4000	±.1000	±.0100

Sample Name: CCB Run Time: 02/01/11 18:14

Elem	Na5895	Sn1899	V_3102	Zn2062	P_2149
Units	ppm	ppm	ppm	ppm	ppm
Avg	.0056	.0009	-.0003	.0010	-.0009
Stddev	.0011	.0022	.0010	.0014	.0074
%RSD	20.38	252.0	377.4	143.5	789.3
#1	.0064	.0024	.0004	.0020	-.0061
#2	.0048	-.0007	-.0010	.0000	.0043
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.0000	.0000	.0000	.0000
Range	±.2000	±.0500	±.0100	±.0100	±.2000

Elem	Si2516	Ti3234	Tl1908	Li6707	Sr4077
Units	ppm	ppm	ppm	ppm	ppm
Avg	-.0004	-.00075	.0095	.00012	.00013
Stddev	.0005	.00064	.0014	.00007	.00003
%RSD	144.7	86.136	14.28	58.125	23.045
#1	-.0007	-.00029	.0085	.00017	.00015
#2	.0000	-.00120	.0104	.00007	.00011
Check ?	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.0000	.00000	.0000	.00000	.00000
Range	±.2000	±.01000	±.2000	±.01000	±.01000

Int. Std.	Sc3572
Units	Cts/S
Avg	235.74
Stddev	.06
%RSD	.02432
#1	235.70
#2	235.78

Service Request K1100692_____
Calibration _____020211C_____
QC in calibration 020211C_____
QC Service Request # K1100692_____
STARLIMS Batch # 234653_____

ICP-MS Data Review Form

	Yes	No	NA
1. Appropriate standardization completed	X		
2. ICV within 10 % of true value	X		
3. CCV's in control	X		
4. CCB's and/or ICB's below MRL	X		
5. Method blank below MRL	X		
6. LCS in control	X		
7. Spike and duplicate in control	X		
8. All analytes within instrument linear range	X		
9. Adequate rinse out time allowed	X		
10. Internal standards in control	X		
11. Interferences checked	X		
12. Se over MRL		X	
13. CRA run	X		
14. ICSA and ICSAB in control			X
15. Serial dilution run			X
16. Post spike in control			X

Comments:

Primary Review by _____ Date 2/2/11
Secondary Review by JDB Date 2/2/11
R:\icp\misc\data review forms\PQ ExCell review form

Sample List

Num	Label	Type	Weight	Volume	Dilution	Rack	Row	Column	Height
1	Cal. Blk	Blank	0 kg	0 ml	1.00	0	1	1	145
2	Cal. Stn	Fully Quant Standard	0 kg	0 ml	1.00	0	1	2	145
3	ICV1	Unknown	0 kg	0 ml	1.00	0	1	3	145
4	CCV1	Unknown	0 kg	0 ml	1.00	0	1	2	145
5	ICB1	Unknown	0 kg	0 ml	1.00	0	1	1	145
6	CCB1	Unknown	0 kg	0 ml	1.00	0	1	1	145
7	WATER CRA	Unknown	0 kg	0 ml	1.00	0	1	4	145
8	K1100661-MB	Unknown	0 kg	0 ml	1.00	1	1	1	145
9	LCSW K1100661	Unknown	0 kg	0 ml	1.00	1	1	2	145
10	MRL CHECK	Unknown	0 kg	0 ml	1.00	1	1	3	145
11	K1100661-001	Unknown	0 kg	0 ml	1.00	1	1	4	145
12	K1100661-001D	Unknown	0 kg	0 ml	1.00	1	1	5	145
13	K1100661-001S	Unknown	0 kg	0 ml	1.00	1	1	6	145
14	K1100661-002	Unknown	0 kg	0 ml	1.00	1	1	7	145
15	K1100661-003	Unknown	0 kg	0 ml	1.00	1	1	8	145
16	K1100661-004	Unknown	0 kg	0 ml	1.00	1	1	9	145
17	K1100661-005	Unknown	0 kg	0 ml	1.00	1	1	10	145
18	CCV2	Unknown	0 kg	0 ml	1.00	0	1	2	145
19	CCB2	Unknown	0 kg	0 ml	1.00	0	1	1	145
20	K1100661-006	Unknown	0 kg	0 ml	1.00	1	1	11	145
21	K1100661-007	Unknown	0 kg	0 ml	1.00	1	1	12	145
22	K1100692-002	Unknown	0 kg	0 ml	1.00	1	2	1	145
23	K1100692-002D	Unknown	0 kg	0 ml	1.00	1	2	2	145
24	K1100692-002S	Unknown	0 kg	0 ml	1.00	1	2	3	145
25	K1100692-001	Unknown	0 kg	0 ml	1.00	1	2	4	145
26	K1100692-003	Unknown	0 kg	0 ml	1.00	1	2	5	145
27	CCV3	Unknown	0 kg	0 ml	1.00	0	1	2	145
28	CCB3	Unknown	0 kg	0 ml	1.00	0	1	1	145

Instrument Setup - Sample Configuration

Sample	Configuration	Date
All Samples	acqmet11	12:08:09 2/2/11

Instrument Setup - Configurations

Configuration Name - acqmet11
Description - PQExcell CCT Sim Default
Date - 12:08:09 2/2/11
Maximum Uptake Time - 0
Maximum Washout Time - 0
S-Option Pump Running - No
Plasma Screen Forward - No
Makeup Gas On - No
Use CCT - No
Use Accessory Gas - No

Setting	Value
Extraction	-650.00
Lens1	5.00
Lens2	-35.00
Lens3	-30.00
Pole Bias	5.00
Sampling Depth	375.00
Horizontal	-5.00
Vertical	65.00
Cool	13.00
Auxiliary	0.90
Nebuliser	0.83
Forward power	1,350.00
HT1 Voltage	1,900.00
HT2 Voltage	2,600.00
D1	-36.00
Focus	10.00

ExCell Mass Calibration

Date: 2/2/2011

Mass	Mass DAC	Peak Width (AMU)	Error (AMU)	Include	Masses in Tune Solution
6.015	1287	0.716	-0.036	TRUE	
7.016	1547	0.716	-0.015	TRUE	Li-7
9.012	2060	0.767	0.006	TRUE	Be-9
23.985	5874	0.715	0.026	TRUE	Mg-24
25.983	6381	0.715	0.021	TRUE	Co-59
45.953	11471	0.715	0.055	TRUE	In-115
50.944	12725	0.766	-0.009	TRUE	Ce-140
51.94	12972	0.766	-0.035	TRUE	Pb-208
53.949	13492	0.766	0	TRUE	Bi-209
55.935	13999	0.766	0.006	TRUE	U-238
56.935	14259	0.766	0.027	TRUE	
58.933	14753	0.766	-0.03	TRUE	
69.925	17561	0.766	0.011	TRUE	
75.92	19082	0.766	-0.01	TRUE	
112.904	28495	0.766	-0.026	TRUE	
114.904	29009	0.715	-0.007	TRUE	
139.905	35379	0.714	-0.002	TRUE	
141.908	35892	0.765	0.009	TRUE	
205.974	52220	0.663	0.007	TRUE	
206.976	52474	0.714	0.002	TRUE	
207.977	52727	0.663	-0.007	TRUE	
208.98	52987	0.663	0.009	TRUE	
238.051	60397	0.663	-0.005	TRUE	

Excluded In Calib | Excluded In Results | Peak Rep Excluded | Multi Element | Semi Quant | Internal Standard | Standard Addition

Uncorrected ICPS Per Mass

S-Calibration Has Edited Standard E-Calibration Edited I-Invalid Calibration V-Valley Integration Failed
F-Interference Correction Failed T-Tripped P-Pulse Counting M-Result Over Max

Run	Label	TimeStamp	58Ni	7Li	9Be	59Co	115In	208Pb
1	Stability 02-02-2011	2/2/2011 7:55:47 AM	(P)0.167	(P)22393.204	(P)5588.593	(P)20711.340	(P)32448.483	(P)15612.360
2	Stability 02-02-2011	2/2/2011 7:57:03 AM	(P)0.000	(P)22672.310	(P)5458.709	(P)20256.188	(P)32116.062	(P)15644.397
3	Stability 02-02-2011	2/2/2011 7:58:18 AM	(P)0.167	(P)22025.800	(P)5433.200	(P)19916.042	(P)31606.427	(P)15518.592
4	Stability 02-02-2011	2/2/2011 7:59:33 AM	(P)0.167	(P)22237.297	(P)5572.587	(P)20186.753	(P)31710.493	(P)15404.136
5	Stability 02-02-2011	2/2/2011 8:00:48 AM	(P)0.000	(P)22154.165	(P)5502.226	(P)20071.761	(P)31586.887	(P)15200.752
	Mean of Stability 02-02	2/2/2011 7:55:47 AM	(P)0.100	(P)22296.555	(P)5511.063	(P)20228.417	(P)31893.671	(P)15476.047
	SD of Stability 02-02-20		(P)0.091	(P)248.811	(P)68.333	(P)299.099	(P)376.647	(P)180.063
	%RSD of Stability 02		(P)91.287	(P)1.116	(P)1.240	(P)1.479	(P)1.181	(P)1.163

Run	Label	TimeStamp	209Bi	232Th	238U
1	Stability 02-02-2011	2/2/2011 7:55:47 AM	(P)25626.634	(P)0.000	(P)30739.038
2	Stability 02-02-2011	2/2/2011 7:57:03 AM	(P)25286.528	(P)0.167	(P)30640.660
3	Stability 02-02-2011	2/2/2011 7:58:18 AM	(P)24885.998	(P)0.000	(P)30299.439
4	Stability 02-02-2011	2/2/2011 7:59:33 AM	(P)24885.993	(P)0.167	(P)30427.538
5	Stability 02-02-2011	2/2/2011 8:00:48 AM	(P)24555.256	(P)0.167	(P)29656.255
	Mean of Stability 02-02	2/2/2011 7:55:47 AM	(P)25048.082	(P)0.100	(P)30352.586
	SD of Stability 02-02-20		(P)414.427	(P)0.091	(P)425.925
	%RSD of Stability 02		(P)1.655	(P)91.287	(P)1.403

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		Cal. Blk			Mean	SD	%RSD
TimeStamp		2/2/11 12:25					
Arsenic	75	-0.0178	0.0293	-0.0115	**0**	0.0256	0
Selenium	77	0.0771	-0.0336	-0.0435	**0**	0.067	0
Selenium	78	-0.1059	-0.03	0.136	**0**	0.1237	0
Selenium	82	-0.0982	0.0998	-0.0016	**0**	0.099	0

Internal Standard Factors:

Gallium	71	1.009	0.985	1.006	**1.009**	n/a	n/a
Rhodium	103	1.021	0.973	1.008	**1.021**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		Cal. Stn			Mean	SD	%RSD
TimeStamp		2/2/11 12:27					
Arsenic	75	24.77	25.46	24.77	**25**	0.3958	1.583
Selenium	77	24.64	25	25.36	**25**	0.3571	1.428
Selenium	78	24.15	25.98	24.87	**25**	0.92	3.68
Selenium	82	24.41	25.3	25.28	**25**	0.5079	2.031

Internal Standard Factors:

Gallium	71	1.037	1.049	1.047	**1.037**	n/a	n/a
Rhodium	103	1.011	1.033	1.03	**1.011**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		ICV1			Mean	SD	%RSD
TimeStamp		2/2/11 12:30					
Arsenic	75	25.02	24.52	25.05	**24.87**	0.2958	1.19
Selenium	77	26.35	25.23	25.95	**25.84**	0.5662	2.191
Selenium	78	25.68	24.88	24.56	**25.04**	0.5779	2.308
Selenium	82	25.67	25.07	25.6	**25.45**	0.3297	1.296

Internal Standard Factors:

Gallium	71	1.098	1.074	1.094	**1.098**	n/a	n/a
Rhodium	103	1.078	1.062	1.084	**1.078**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		CCV1			Mean	SD	%RSD
TimeStamp		2/2/11 12:32					
Arsenic	75	25.03	24.73	24.34	**24.7**	0.3426	1.387
Selenium	77	24.51	25.27	24.74	**24.84**	0.3889	1.566
Selenium	78	24.69	24.46	24.36	**24.5**	0.1692	0.6904
Selenium	82	24.83	24.38	24.6	**24.6**	0.2233	0.9076

Internal Standard Factors:

Gallium	71	1.111	1.108	1.12	**1.111**	n/a	n/a
Rhodium	103	1.078	1.074	1.104	**1.078**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		ICB1			Mean	SD	%RSD
TimeStamp		2/2/11 12:34					
Arsenic	75	-0.0145	-0.0791	0	**-0.0312**	0.0421	135
Selenium	77	-0.14	-0.2749	-0.3337	**-0.2495**	0.0993	39.81
Selenium	78	-0.0169	-0.1711	-0.0129	**-0.067**	0.0902	134.7
Selenium	82	-0.0963	-0.3773	-0.0735	**-0.1823**	0.1692	92.8

Internal Standard Factors:

Gallium	71	1.134	1.12	1.125	**1.134**	n/a	n/a
Rhodium	103	1.098	1.088	1.106	**1.098**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		CCB1			Mean	SD	%RSD
TimeStamp		**2/2/11 12:36**					
Arsenic	75	-0.0824	-0.0992	0.0364	**-0.0484**	0.0739	152.8
Selenium	77	-0.1028	-0.1156	-0.3888	**-0.2024**	0.1615	79.79
Selenium	78	-0.1735	0.1697	-0.0909	**-0.0316**	0.1791	567.6
Selenium	82	-0.275	-0.2563	0.0743	**-0.1523**	0.1965	129

Internal Standard Factors:

Gallium	71	1.124	1.161	1.117	**1.124**	n/a	n/a
Rhodium	103	1.081	1.111	1.095	**1.081**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		WATER CRA			Mean	SD	%RSD
TimeStamp		2/2/11 12:39					
Arsenic	75	0.4724	0.5761	0.508	**0.5188**	0.0527	10.15
Selenium	77	1.026	0.7526	0.7291	**0.836**	0.1652	19.76
Selenium	78	0.7468	1.058	0.9213	**0.9088**	0.156	17.17
Selenium	82	0.9115	1.171	0.9653	**1.016**	0.1372	13.51

Internal Standard Factors:

Gallium	71	1.148	1.144	1.132	**1.148**	n/a	n/a
Rhodium	103	1.106	1.089	1.097	**1.106**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-MB			Mean	SD	%RSD
TimeStamp		2/2/11 12:41					
Arsenic	75	-0.0469	0.0066	-0.0449	**-0.0284**	0.0303	106.7
Selenium	77	-0.1607	-0.1976	-0.2469	**-0.2017**	0.0433	21.45
Selenium	78	-0.0934	-0.2236	-0.1009	**-0.1393**	0.0731	52.51
Selenium	82	-0.2143	-0.0022	-0.159	**-0.1252**	0.11	87.87

Internal Standard Factors:

Gallium	71	1.119	1.126	1.138	**1.119**	n/a	n/a
Rhodium	103	1.096	1.106	1.125	**1.096**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		LCSW K1100661			Mean	SD	%RSD
TimeStamp		2/2/11 12:43					
Arsenic	75	19.72	19.65	19.5	**19.62**	0.1121	0.5711
Selenium	77	19.57	19.74	20.1	**19.8**	0.2732	1.38
Selenium	78	19.9	19.84	19.51	**19.75**	0.2121	1.074
Selenium	82	19.82	19.34	19.92	**19.69**	0.3094	1.571

Internal Standard Factors:

Gallium	71	1.139	1.153	1.159	**1.139** n/a		n/a
Rhodium	103	1.112	1.129	1.133	**1.112** n/a		n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		MRL CHECK			Mean	SD	%RSD
TimeStamp		2/2/11 12:45					
Arsenic	75	1.071	0.9726	1.009	**1.017**	0.0497	4.887
Selenium	77	1.09	1.013	0.9907	**1.031**	0.0519	5.037
Selenium	78	0.8902	0.7219	1.143	**0.9183**	0.2118	23.07
Selenium	82	1.099	0.8431	0.944	**0.9622**	0.1291	13.42

Internal Standard Factors:

Gallium	71	1.144	1.143	1.166	**1.144**	n/a	n/a
Rhodium	103	1.127	1.13	1.127	**1.127**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-001			Mean	SD	%RSD
TimeStamp		2/2/11 12:47					
Arsenic	75	0.9017	0.893	0.9131	**0.9026**	0.0101	1.12
Selenium	77	1.302	1.057	0.8776	**1.079**	0.2131	19.75
Selenium	78	0.9635	1.101	0.997	**1.021**	0.0719	7.044
Selenium	82	0.2502	0.2414	0.0119	**0.1678**	0.1351	80.51

Internal Standard Factors:

Gallium	71	1.262	1.244	1.259	**1.262**	n/a	n/a
Rhodium	103	1.335	1.351	1.328	**1.335**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-001D			Mean	SD	%RSD
TimeStamp		2/2/11 12:50					
Arsenic	75	1.009	0.9427	0.8986	**0.9499**	0.0553	5.825
Selenium	77	1.534	1.167	1.11	**1.27**	0.2298	18.09
Selenium	78	0.8513	0.6651	0.7926	**0.7696**	0.0952	12.37
Selenium	82	0.2134	0.1485	-0.1765	**0.0618**	0.2089	338.1

Internal Standard Factors:

Gallium	71	1.235	1.226	1.246	**1.235**	n/a	n/a
Rhodium	103	1.338	1.3	1.341	**1.338**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-001S			Mean	SD	%RSD
TimeStamp		2/2/11 12:52					
Arsenic	75	21.12	22.45	21.78	**21.78**	0.6658	3.057
Selenium	77	21.91	22.03	21.37	**21.77**	0.3523	1.618
Selenium	78	20.61	21.59	21.09	**21.1**	0.4898	2.322
Selenium	82	20.21	21.14	20.75	**20.7**	0.465	2.246

Internal Standard Factors:

Gallium	71	1.236	1.282	1.258	**1.236**	n/a	n/a
Rhodium	103	1.321	1.355	1.345	**1.321**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-002			Mean	SD	%RSD
TimeStamp		2/2/11 12:54					
Arsenic	75	0.8481	0.9975	0.8663	**0.904**	0.0815	9.021
Selenium	77	2.15	1.668	1.567	**1.795**	0.3113	17.35
Selenium	78	1.09	1.268	0.871	**1.076**	0.1989	18.48
Selenium	82	0.0996	0.5073	0.109	**0.2386**	0.2327	97.51

Internal Standard Factors:

Gallium	71	1.18	1.214	1.228	**1.18**	n/a	n/a
Rhodium	103	1.238	1.279	1.308	**1.238**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-003			Mean	SD	%RSD
TimeStamp		2/2/11 12:56					
Arsenic	75	0.4699	0.5235	0.5009	**0.4981**	0.0269	5.401
Selenium	77	4.724	4.874	4.773	**4.79**	0.0766	1.599
Selenium	78	1.174	1.339	1.606	**1.373**	0.2176	15.85
Selenium	82	0.317	0.4975	0.6181	**0.4775**	0.1516	31.74

Internal Standard Factors:

Gallium	71	1.353	1.41	1.406	**1.353**	n/a	n/a
Rhodium	103	1.473	1.521	1.55	**1.473**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-004			Mean	SD	%RSD
TimeStamp		2/2/11 12:58					
Arsenic	75	0.8053	0.7653	0.7591	**0.7765**	0.0251	3.232
Selenium	77	2.597	2.097	1.796	**2.163**	0.4044	18.69
Selenium	78	1.513	1.692	1.04	**1.415**	0.3372	23.82
Selenium	82	0.4534	0.079	0.4482	**0.3269**	0.2146	65.67

Internal Standard Factors:

Gallium	71	1.201	1.227	1.181	**1.201**	n/a	n/a
Rhodium	103	1.223	1.276	1.224	**1.223**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-005			Mean	SD	%RSD
TimeStamp		2/2/11 13:01					
Arsenic	75	2.726	2.702	2.735	**2.721**	0.017	0.6243
Selenium	77	2.16	1.966	1.67	**1.932**	0.2471	12.79
Selenium	78	1.318	1.452	1.147	**1.306**	0.1529	11.71
Selenium	82	0.0751	0.1692	0.2546	**0.1663**	0.0898	53.99

Internal Standard Factors:

Gallium	71	1.185	1.195	1.196	**1.185**	n/a	n/a
Rhodium	103	1.219	1.212	1.238	**1.219**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		CCV2			Mean	SD	%RSD
TimeStamp		2/2/11 13:03					
Arsenic	75	24.53	25.44	24.84	**24.94**	0.4635	1.859
Selenium	77	26.75	26.23	27.04	**26.67**	0.4071	1.526
Selenium	78	25.59	26.05	25.6	**25.75**	0.2639	1.025
Selenium	82	24.73	25.05	24.91	**24.89**	0.1599	0.6425

Internal Standard Factors:

Gallium	71	1.048	1.078	1.092	**1.048**	n/a	n/a
Rhodium	103	1.087	1.088	1.112	**1.087**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		CCB2			Mean	SD	%RSD
TimeStamp		2/2/11 13:05					
Arsenic	75	-0.0716	-0.0106	-0.0104	**-0.0309**	0.0353	114.3
Selenium	77	1.713	1.205	0.9467	**1.288**	0.39	30.28
Selenium	78	0.3341	0.5807	0.484	**0.4663**	0.1243	26.65
Selenium	82	-0.3131	-0.2187	-0.124	**-0.2186**	0.0946	43.26

Internal Standard Factors:

Gallium	71	1.087	1.09	1.096	**1.087**	n/a	n/a
Rhodium	103	1.111	1.118	1.123	**1.111**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-006			Mean	SD	%RSD
TimeStamp		2/2/11 13:07					
Arsenic	75	-0.0251	-0.0094	-0.0076	**-0.014**	0.0096	68.53
Selenium	77	1.383	1.087	0.6564	**1.042**	0.3654	35.06
Selenium	78	0.3028	0.6281	0.4983	**0.4764**	0.1638	34.38
Selenium	82	-0.3064	-0.2431	-0.4466	**-0.332**	0.1041	31.37

Internal Standard Factors:

Gallium	71	1.09	1.089	1.086	**1.09**	n/a	n/a
Rhodium	103	1.102	1.107	1.119	**1.102**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100661-007			Mean	SD	%RSD
TimeStamp		2/2/11 13:10					
Arsenic	75	0.0053	-0.0282	0.0224	**-0.0002**	0.0257	14480
Selenium	77	1.241	1.05	0.6189	**0.9699**	0.3186	32.85
Selenium	78	0.1754	0.0227	0.3961	**0.1981**	0.1877	94.77
Selenium	82	-0.211	-0.177	-0.2013	**-0.1964**	0.0175	8.91

Internal Standard Factors:

Gallium	71	1.111	1.079	1.099	**1.111**	n/a	n/a
Rhodium	103	1.11	1.13	1.132	**1.11**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100692-002			Mean	SD	%RSD
TimeStamp		2/2/11 13:12					
Arsenic	75	0.7579	0.8638	0.9232	**0.8483**	0.0837	9.868
Selenium	77	5.69	5.261	5.115	**5.355**	0.2987	5.578
Selenium	78	1.323	1.707	1.401	**1.477**	0.2027	13.73
Selenium	82	0.4181	0.4564	0.407	**0.4272**	0.0259	6.066

Internal Standard Factors:

Gallium	71	1.407	1.44	1.457	**1.407**	n/a	n/a
Rhodium	103	1.528	1.544	1.574	**1.528**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100692-002D			Mean	SD	%RSD
TimeStamp		2/2/11 13:14					
Arsenic	75	0.8987	0.945	0.8023	**0.882**	0.0728	8.253
Selenium	77	5.64	5.438	5.758	**5.612**	0.1615	2.878
Selenium	78	1.816	1.613	1.753	**1.727**	0.104	6.024
Selenium	82	0.8085	0.795	0.4892	**0.6976**	0.1806	25.89

Internal Standard Factors:

Gallium	71	1.409	1.412	1.448	**1.409**	n/a	n/a
Rhodium	103	1.531	1.496	1.554	**1.531**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100692-002S			Mean	SD	%RSD
TimeStamp		2/2/11 13:16					
Arsenic	75	21.38	20.94	20.79	**21.04**	0.3081	1.465
Selenium	77	25.63	26.26	25.77	**25.89**	0.3286	1.269
Selenium	78	21.44	21.32	21.16	**21.3**	0.1387	0.651
Selenium	82	20.59	19.8	19.34	**19.91**	0.636	3.194

Internal Standard Factors:

Gallium	71	1.392	1.417	1.434	**1.392**	n/a	n/a
Rhodium	103	1.488	1.521	1.529	**1.488**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100692-001			Mean	SD	%RSD
TimeStamp		2/2/11 13:18					
Arsenic	75	0.8752	0.8553	0.9402	**0.8902**	0.0444	4.988
Selenium	77	5.923	5.88	5.857	**5.887**	0.0339	0.5749
Selenium	78	2.284	2.256	2.076	**2.206**	0.1127	5.112
Selenium	82	0.7532	0.7858	0.78	**0.773**	0.0174	2.251

Internal Standard Factors:

Gallium	71	1.411	1.435	1.454	**1.411**	n/a	n/a
Rhodium	103	1.544	1.514	1.561	**1.544**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		K1100692-003			Mean	SD	%RSD
TimeStamp		2/2/11 13:21					
Arsenic	75	0.009	0.0499	-0.0971	**-0.0127**	0.0759	596
Selenium	77	1.084	0.823	1.008	**0.9717**	0.1344	13.83
Selenium	78	1.094	0.9935	0.9951	**1.027**	0.0573	5.581
Selenium	82	-0.0411	-0.0807	-0.3159	**-0.1459**	0.1486	101.8

Internal Standard Factors:

Gallium	71	1.114	1.127	1.125	**1.114**	n/a	n/a
Rhodium	103	1.131	1.153	1.145	**1.131**	n/a	n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		CCV3			Mean	SD	%RSD
TimeStamp		2/2/11 13:23					
Arsenic	75	24.76	25.17	24.83	**24.92**	0.2173	0.8721
Selenium	77	25.87	25.79	25.41	**25.69**	0.2448	0.9528
Selenium	78	27.66	29.98	28.24	**28.63**	1.205	4.208
Selenium	82	24.54	25.05	24.43	**24.67**	0.3352	1.358

Internal Standard Factors:

Gallium	71	1.085	1.105	1.116	**1.085** n/a		n/a
Rhodium	103	1.105	1.142	1.169	**1.105** n/a		n/a

Instrument ID: K-ICP-MS-02
Experiment: 02-02-11C
Units: µg/L (ppb)

Method: EPA 200.8
Analyst: Greg Jasper
STARLIMS #234653

Sample Name:		CCB3			Mean	SD	%RSD
TimeStamp		2/2/11 13:25					
Arsenic	75	-0.07	-0.0155	-0.0223	**-0.0359**	0.0297	82.7
Selenium	77	0.0338	-0.1528	-0.1802	**-0.0997**	0.1164	116.7
Selenium	78	3.721	3.092	2.546	**3.12**	0.5878	18.84
Selenium	82	-0.2336	-0.1526	-0.1706	**-0.1856**	0.0425	22.92

Internal Standard Factors:

Gallium	71	1.093	1.111	1.124	**1.093**	n/a	n/a
Rhodium	103	1.146	1.173	1.184	**1.146**	n/a	n/a

Volatile Organic Compounds

Organic Analysis:
Volatile Organic Compounds

Summary Package

Sample and QC Results

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692

Cover Page - Organic Analysis Data Package
Volatile Organic Compounds

Sample Name	Lab Code	Date Collected	Date Received
MW-3	K1100692-001	01/25/2011	01/26/2011
MW-7	K1100692-002	01/25/2011	01/26/2011
EB-012511	K1100692-003	01/25/2011	01/26/2011
Trip Blank	K1100692-004	01/25/2011	01/26/2011

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: 2-7-11 Title: _____

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: MW-3
Lab Code: K1100692-001

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 624

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Volatile Organic Compounds

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	K1100692-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	107	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	100	83-113	01/28/11	Acceptable
Dibromofluoromethane	106	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: MW-7
Lab Code: K1100692-002

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: MW-7
Lab Code: K1100692-002

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	107	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	95	83-113	01/28/11	Acceptable
Dibromofluoromethane	105	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: EB-012511
Lab Code: K1100692-003

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	**0.28**	J	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Volatile Organic Compounds

Sample Name:	EB-012511	**Units:**	ug/L
Lab Code:	K1100692-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	106	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	98	83-113	01/28/11	Acceptable
Dibromofluoromethane	107	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: Trip Blank
Lab Code: K1100692-004

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 624

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Volatile Organic Compounds

Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	K1100692-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	107	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	98	83-113	01/28/11	Acceptable
Dibromofluoromethane	106	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1100975-4

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1100975-4

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	105	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	102	83-113	01/28/11	Acceptable
Dibromofluoromethane	106	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: METHOD
Analysis Method: 624

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
MW-3	K1100692-001	107	100	106
MW-7	K1100692-002	107	95	105
EB-012511	K1100692-003	106	98	107
Trip Blank	K1100692-004	107	98	106
Batch QC	K1100710-005	104	98	105
Method Blank	KWG1100975-4	105	102	106
Batch QCMS	KWG1100975-1	109	99	105
Batch QCDMS	KWG1100975-2	107	102	102
Lab Control Sample	KWG1100975-3	109	102	106

Surrogate Recovery Control Limits (%)

Sur1 =	Toluene-d8	84-115
Sur2 =	4-Bromofluorobenzene	83-113
Sur3 =	Dibromofluoromethane	71-115

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 01/28/2011
Time Analyzed: 13:57

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: J:\MS23\DATA\012811\0128F003.D
Instrument ID: MS23
Analysis Method: 624

Lab Code: KWG1100972-2
Analysis Lot: KWG1100972

		Fluorobenzene		1,4-Dichlorobenzene-d4		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	396,047	5.76	150,722	11.61	181,960	9.20
	Upper Limit ==>	792,094	6.26	301,444	12.11	363,920	9.70
	Lower Limit ==>	198,024	5.26	75,361	11.11	90,980	8.70
	ICAL Result ==>	486,875	5.77	169,109	11.61	202,840	9.20
Associated Analyses							
Lab Control Sample	KWG1100975-3	394,117	5.76	152,274	11.61	186,471	9.20
Batch QCMS	KWG1100975-1	389,902	5.76	147,319	11.61	182,444	9.20
Batch QCDMS	KWG1100975-2	391,348	5.76	149,224	11.61	182,287	9.20
Method Blank	KWG1100975-4	399,883	5.76	148,744	11.61	184,783	9.20
Batch QC	K1100710-005	387,417	5.76	142,063	11.61	179,925	9.20
MW-3	K1100692-001	391,055	5.76	146,542	11.61	182,403	9.20
MW-7	K1100692-002	392,446	5.76	146,099	11.61	185,618	9.20
EB-012511	K1100692-003	384,675	5.76	143,516	11.61	184,679	9.20
Trip Blank	K1100692-004	378,436	5.76	143,210	11.61	179,573	9.20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Extracted: 01/28/2011
Date Analyzed: 01/28/2011

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name: Batch QC
Lab Code: K1100710-005

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 624

Level: Low
Extraction Lot: KWG1100975

Analyte Name	Sample Result	Batch QCMS KWG1100975-1 Matrix Spike			Batch QCDMS KWG1100975-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,1-Dichloroethene	ND	12.5	10.0	125	12.1	10.0	121	63-153	4	30
Benzene	ND	12.3	10.0	123	11.8	10.0	118	69-128	5	30
Trichloroethene (TCE)	ND	11.9	10.0	119	11.3	10.0	113	33-174	6	30
Toluene	0.13	12.4	10.0	123	12.0	10.0	119	62-132	3	30
Chlorobenzene	ND	10.7	10.0	107	10.6	10.0	106	71-120	2	30
1,2-Dichlorobenzene	ND	10.9	10.0	109	10.7	10.0	107	72-117	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	01/28/2011
Sample Matrix:	Water	**Date Analyzed:**	01/28/2011

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	624	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1100975

	Lab Control Sample KWG1100975-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Chloromethane	11.5	10.0	115	45-137
Vinyl Chloride	10.9	10.0	109	54-145
Bromomethane	11.6	10.0	116	20-175
Chloroethane	11.1	10.0	111	56-137
Trichlorofluoromethane	10.0	10.0	100	50-135
1,1-Dichloroethene	11.7	10.0	117	74-139
Methylene Chloride	11.2	10.0	112	76-120
trans-1,2-Dichloroethene	11.6	10.0	116	76-125
1,1-Dichloroethane	11.5	10.0	115	68-127
Chloroform	12.0	10.0	120	69-126
1,1,1-Trichloroethane (TCA)	11.4	10.0	114	61-135
Carbon Tetrachloride	10.9	10.0	109	54-142
Benzene	11.8	10.0	118	73-122
1,2-Dichloroethane (EDC)	12.4	10.0	124	66-132
Trichloroethene (TCE)	11.2	10.0	112	70-123
1,2-Dichloropropane	11.5	10.0	115	73-122
Bromodichloromethane	11.7	10.0	117	68-136
2-Chloroethyl Vinyl Ether	12.0	10.0	120	30-155
trans-1,3-Dichloropropene	8.72	10.0	87	56-121
Toluene	11.9	10.0	119	71-124
cis-1,3-Dichloropropene	11.0	10.0	110	64-131
1,1,2-Trichloroethane	10.7	10.0	107	75-118
Tetrachloroethene (PCE)	10.2	10.0	102	65-125
Dibromochloromethane	10.2	10.0	102	65-132
Chlorobenzene	10.5	10.0	105	77-115
Ethylbenzene	10.2	10.0	102	72-123
Bromoform	9.45	10.0	95	51-145
1,1,2,2-Tetrachloroethane	11.6	10.0	116	62-135
1,3-Dichlorobenzene	10.9	10.0	109	74-116
1,4-Dichlorobenzene	10.9	10.0	109	74-114
1,2-Dichlorobenzene	10.7	10.0	107	76-113
Acrolein	110	100	110	10-185
Acrylonitrile	12.0	10.0	120	63-138

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	01/28/2011
Sample Matrix:	Water	**Date Analyzed:**	01/28/2011
		Time Analyzed:	16:36

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS23\DATA\012811\0128F007.D
Lab Code:	KWG1100975-4	**Instrument ID:**	MS23
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	624	**Extraction Lot:**	KWG1100975

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1100975-3	J:\MS23\DATA\012811\0128F004.D	01/28/11	14:26
Batch QCMS	KWG1100975-1	J:\MS23\DATA\012811\0128F005.D	01/28/11	15:39
Batch QCDMS	KWG1100975-2	J:\MS23\DATA\012811\0128F006.D	01/28/11	16:07
Batch QC	K1100710-005	J:\MS23\DATA\012811\0128F011.D	01/28/11	18:31
MW-3	K1100692-001	J:\MS23\DATA\012811\0128F013.D	01/28/11	19:29
MW-7	K1100692-002	J:\MS23\DATA\012811\0128F014.D	01/28/11	19:57
EB-012511	K1100692-003	J:\MS23\DATA\012811\0128F015.D	01/28/11	20:26
Trip Blank	K1100692-004	J:\MS23\DATA\012811\0128F016.D	01/28/11	20:55

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	01/28/2011
Sample Matrix:	Water	**Date Analyzed:**	01/28/2011
		Time Analyzed:	14:26

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS23\DATA\012811\0128F004.D
Lab Code:	KWG1100975-3	**Instrument ID:**	MS23
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	624	**Extraction Lot:**	KWG1100975

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG1100975-1	J:\MS23\DATA\012811\0128F005.D	01/28/11	15:39
Batch QCDMS	KWG1100975-2	J:\MS23\DATA\012811\0128F006.D	01/28/11	16:07
Method Blank	KWG1100975-4	J:\MS23\DATA\012811\0128F007.D	01/28/11	16:36
Batch QC	K1100710-005	J:\MS23\DATA\012811\0128F011.D	01/28/11	18:31
MW-3	K1100692-001	J:\MS23\DATA\012811\0128F013.D	01/28/11	19:29
MW-7	K1100692-002	J:\MS23\DATA\012811\0128F014.D	01/28/11	19:57
EB-012511	K1100692-003	J:\MS23\DATA\012811\0128F015.D	01/28/11	20:26
Trip Blank	K1100692-004	J:\MS23\DATA\012811\0128F016.D	01/28/11	20:55

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 01/28/2011
Time Analyzed: 13:28

Tune Summary
Volatile Organic Compounds

File ID: J:\MS23\DATA\012811\0128F002.D
Instrument ID: MS23
Column:

Analysis Method: 624
Analysis Lot: KWG1100972

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	25.5	10507	PASS
75	95	30	60	58.0	23949	PASS
95	95	100	100	100.0	41258	PASS
96	95	5	9	7.5	3101	PASS
173	174	0	2	0.4	122	PASS
174	95	50	120	69.9	28840	PASS
175	174	5	9	5.3	1523	PASS
176	174	95	101	96.8	27917	PASS
177	176	5	9	7.1	1978	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1100972-2	J:\MS23\DATA\012811\0128F003.D	01/28/2011	13:57	
Lab Control Sample	KWG1100975-3	J:\MS23\DATA\012811\0128F004.D	01/28/2011	14:26	
Batch QCMS	KWG1100975-1	J:\MS23\DATA\012811\0128F005.D	01/28/2011	15:39	
Batch QCDMS	KWG1100975-2	J:\MS23\DATA\012811\0128F006.D	01/28/2011	16:07	
Method Blank	KWG1100975-4	J:\MS23\DATA\012811\0128F007.D	01/28/2011	16:36	
Batch QC	K1100710-005	J:\MS23\DATA\012811\0128F011.D	01/28/2011	18:31	
MW-3	K1100692-001	J:\MS23\DATA\012811\0128F013.D	01/28/2011	19:29	
MW-7	K1100692-002	J:\MS23\DATA\012811\0128F014.D	01/28/2011	19:57	
EB-012511	K1100692-003	J:\MS23\DATA\012811\0128F015.D	01/28/2011	20:26	
Trip Blank	K1100692-004	J:\MS23\DATA\012811\0128F016.D	01/28/2011	20:55	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL10216
Instrument ID: MS23

Column: MS

Level ID	File ID
A	J:\MS23\DATA\011211\0112F005.D
B	J:\MS23\DATA\011211\0112F006.D
C	J:\MS23\DATA\011211\0112F007.D
D	J:\MS23\DATA\011211\0112F008.D
E	J:\MS23\DATA\011211\0112F009.D
F	J:\MS23\DATA\011211\0112F010.D
G	J:\MS23\DATA\011211\0112F011.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Chloromethane	A	0.50	0.438	B	1.0	0.371	C	5.0	0.392	D	10	0.479	E	40	0.394
	F	80	0.423	G	120	0.442									
Vinyl Chloride	A	0.50	0.359	B	1.0	0.373	C	5.0	0.416	D	10	0.437	E	40	0.434
	F	80	0.434	G	120	0.428									
Bromomethane	A	0.50	0.0820	B	1.0	0.0966	C	5.0	0.100	D	10	0.155	E	40	0.178
	F	80	0.193	G	120	0.188									
Chloroethane	A	0.50	0.0746	B	1.0	0.0627	C	5.0	0.0674	D	10	0.0721	E	40	0.0676
	F	80	0.0666	G	120	0.0657									
Trichlorofluoromethane	A	0.50	0.427	B	1.0	0.454	C	5.0	0.524	D	10	0.508	E	40	0.525
	F	80	0.500	G	120	0.471									
1,1-Dichloroethene	A	0.50	0.198	B	1.0	0.186	C	5.0	0.213	D	10	0.206	E	40	0.219
	F	80	0.215	G	120	0.210									
Methylene Chloride	A	0.50	0.323	B	1.0	0.274	C	5.0	0.250	D	10	0.259	E	40	0.246
	F	80	0.248	G	120	0.249									
trans-1,2-Dichloroethene	A	0.50	0.235	B	1.0	0.228	C	5.0	0.253	D	10	0.255	E	40	0.264
	F	80	0.263	G	120	0.260									
1,1-Dichloroethane	A	0.50	0.445	B	1.0	0.463	C	5.0	0.515	D	10	0.525	E	40	0.527
	F	80	0.525	G	120	0.524									
Chloroform	A	0.50	0.429	B	1.0	0.430	C	5.0	0.454	D	10	0.470	E	40	0.471
	F	80	0.473	G	120	0.471									
1,1,1-Trichloroethane (TCA)	A	0.50	0.312	B	1.0	0.300	C	5.0	0.359	D	10	0.371	E	40	0.397
	F	80	0.410	G	120	0.412									
Carbon Tetrachloride	A	0.50	0.209	B	1.0	0.208	C	5.0	0.236	D	10	0.250	E	40	0.283
	F	80	0.307	G	120	0.319									
Benzene	A	0.50	0.981	B	1.0	1.01	C	5.0	1.08	D	10	1.10	E	40	1.10
	F	80	1.09	G	120	1.08									
1,2-Dichloroethane (EDC)	A	0.50	0.315	B	1.0	0.337	C	5.0	0.354	D	10	0.366	E	40	0.359
	F	80	0.356	G	120	0.355									
Trichloroethene (TCE)	A	0.50	0.245	B	1.0	0.243	C	5.0	0.262	D	10	0.264	E	40	0.269
	F	80	0.271	G	120	0.274									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL10216
Instrument ID: MS23

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichloropropane	A	0.50	0.263	B	1.0	0.272	C	5.0	0.275	D	10	0.279	E	40	0.285
	F	80	0.284	G	120	0.285									
Bromodichloromethane	A	0.50	0.262	B	1.0	0.251	C	5.0	0.274	D	10	0.292	E	40	0.316
	F	80	0.327	G	120	0.334									
2-Chloroethyl Vinyl Ether	A	0.50	0.0991	B	1.0	0.0909	C	5.0	0.103	D	10	0.120	E	40	0.118
	F	80	0.121	G	120	0.122									
trans-1,3-Dichloropropene	A	0.50	0.567	B	1.0	0.611	C	5.0	0.675	D	10	0.705	E	40	0.799
	F	80	0.832	G	120	0.828									
Toluene	A	0.50	0.547	B	1.0	0.578	C	5.0	0.640	D	10	0.655	E	40	0.659
	F	80	0.659	G	120	0.658									
cis-1,3-Dichloropropene	A	0.50	0.284	B	1.0	0.314	C	5.0	0.357	D	10	0.374	E	40	0.399
	F	80	0.417	G	120	0.423									
1,1,2-Trichloroethane	A	0.50	0.306	B	1.0	0.338	C	5.0	0.352	D	10	0.366	E	40	0.368
	F	80	0.369	G	120	0.360									
Tetrachloroethene (PCE)	A	0.50	0.364	B	1.0	0.383	C	5.0	0.457	D	10	0.432	E	40	0.470
	F	80	0.474	G	120	0.468									
Dibromochloromethane	A	0.50	0.303	B	1.0	0.292	C	5.0	0.319	D	10	0.346	E	40	0.406
	F	80	0.444	G	120	0.450									
Chlorobenzene	A	0.50	1.39	B	1.0	1.46	C	5.0	1.53	D	10	1.57	E	40	1.60
	F	80	1.60	G	120	1.55									
Ethylbenzene	A	0.50	0.699	B	1.0	0.754	C	5.0	0.851	D	10	0.863	E	40	0.910
	F	80	0.915	G	120	0.898									
Bromoform	A	0.50	0.157	B	1.0	0.115	C	5.0	0.130	D	10	0.139	E	40	0.176
	F	80	0.204	G	120	0.213									
1,1,2,2-Tetrachloroethane	A	0.50	0.537	B	1.0	0.475	C	5.0	0.461	D	10	0.480	E	40	0.476
	F	80	0.483	G	120	0.459									
1,3-Dichlorobenzene	A	0.50	1.20	B	1.0	1.25	C	5.0	1.31	D	10	1.33	E	40	1.36
	F	80	1.37	G	120	1.37									
1,4-Dichlorobenzene	A	0.50	1.25	B	1.0	1.32	C	5.0	1.33	D	10	1.37	E	40	1.37
	F	80	1.37	G	120	1.36									
1,2-Dichlorobenzene	A	0.50	1.13	B	1.0	1.23	C	5.0	1.17	D	10	1.21	E	40	1.21
	F	80	1.22	G	120	1.21									
Acrolein	A	10	0.0258	B	20	0.0277	C	100	0.0271	D	200	0.0253	E	800	0.0281
	F	1600	0.0272	G	2400	0.0254									
Acrylonitrile	A	1.0	0.0713	B	2.0	0.0595	C	10	0.0598	D	20	0.0632	E	80	0.0629
	F	160	0.0627	G	240	0.0634									

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† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL10216
Instrument ID: MS23

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Toluene-d8	A	4.0	0.840	B	6.0	0.885	C	8.0	0.905	D	10	0.919	E	20	0.916
	F	40	0.912	G	60	0.951									
4-Bromofluorobenzene	A	4.0	0.719	B	6.0	0.755	C	8.0	0.783	D	10	0.795	E	20	0.794
	F	40	0.797	G	60	0.770									
Dibromofluoromethane	A	4.0	0.208	B	6.0	0.214	C	8.0	0.223	D	10	0.224	E	20	0.226
	F	40	0.229	G	60	0.233									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL10216
Instrument ID: MS23

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Chloromethane	TRG	AverageRF	% RSD	8.8		≤ 35	0.420		0.01
Vinyl Chloride	TRG	AverageRF	% RSD	7.9		≤ 35	0.411		0.01
Bromomethane	TRG	AverageRF	% RSD	33.6		≤ 35	0.142		0.01
Chloroethane	TRG	AverageRF	% RSD	5.9		≤ 35	0.0681		0.01
Trichlorofluoromethane	TRG	AverageRF	% RSD	7.7		≤ 35	0.487		0.01
1,1-Dichloroethene	MS	AverageRF	% RSD	5.5		≤ 35	0.207		0.01
Methylene Chloride	TRG	AverageRF	% RSD	10.5		≤ 35	0.264		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	5.6		≤ 35	0.251		0.01
1,1-Dichloroethane	TRG	AverageRF	% RSD	6.8		≤ 35	0.503		0.01
Chloroform	TRG	AverageRF	% RSD	4.3		≤ 35	0.457		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	12.4		≤ 35	0.366		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	17.4		≤ 35	0.259		0.01
Benzene	MS	AverageRF	% RSD	4.5		≤ 35	1.06		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.9		≤ 35	0.349		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	4.8		≤ 35	0.261		0.01
1,2-Dichloropropane	TRG	AverageRF	% RSD	3.0		≤ 35	0.278		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	11.2		≤ 35	0.294		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	11.5		≤ 35	0.111		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	14.8		≤ 35	0.717		0.01
Toluene	MS	AverageRF	% RSD	7.4		≤ 35	0.628		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	14.3		≤ 35	0.367		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	6.5		≤ 35	0.351		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	10.4		≤ 35	0.435		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	18.2		≤ 35	0.366		0.01
Chlorobenzene	MS	AverageRF	% RSD	5.1		≤ 35	1.53		0.01
Ethylbenzene	TRG	AverageRF	% RSD	9.9		≤ 35	0.841		0.01
Bromoform	TRG	AverageRF	% RSD	22.9		≤ 35	0.162		0.01
1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	5.4		≤ 35	0.482		0.01
1,3-Dichlorobenzene	TRG	AverageRF	% RSD	5.1		≤ 35	1.31		0.01
1,4-Dichlorobenzene	TRG	AverageRF	% RSD	3.2		≤ 35	1.34		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	2.8		≤ 35	1.20		0.01
Acrolein	TRG	AverageRF	% RSD	4.3		≤ 35	0.0266		0.01
Acrylonitrile	TRG	AverageRF	% RSD	6.2		≤ 35	0.0633		0.01
Toluene-d8	SURR	AverageRF	% RSD	3.8		≤ 35	0.904		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	3.7		≤ 35	0.773		0.01
Dibromofluoromethane	SURR	AverageRF	% RSD	3.9		≤ 35	0.223		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011
Date Analyzed: 01/12/2011

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 624

Calibration ID: CAL10216
Units: PPB

File ID: J:\MS23\DATA\011211\0112F014.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Chloromethane	10	9.1	0.420	0.381	-9	NA	± 104 %	AverageRF
Vinyl Chloride	10	11	0.411	0.437	6	NA	± 96 %	AverageRF
Bromomethane	10	14	0.142	0.201	42	NA	± 86 %	AverageRF
Chloroethane	10	10	0.0681	0.0695	2	NA	± 62 %	AverageRF
Trichlorofluoromethane	10	9.2	0.487	0.446	-8	NA	± 52 %	AverageRF
1,1-Dichloroethene	10	12	0.207	0.241	17	NA	± 49 %	AverageRF
Methylene Chloride	10	11	0.264	0.281	6	NA	± 39 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.251	0.288	15	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	11	0.503	0.565	12	NA	± 27 %	AverageRF
Chloroform	10	11	0.457	0.516	13	NA	± 32 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.366	0.419	15	NA	± 25 %	AverageRF
Carbon Tetrachloride	10	11	0.259	0.290	12	NA	± 27 %	AverageRF
Benzene	10	11	1.06	1.20	13	NA	± 36 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.349	0.399	14	NA	± 32 %	AverageRF
Trichloroethene (TCE)	10	11	0.261	0.289	11	NA	± 33 %	AverageRF
1,2-Dichloropropane	10	11	0.278	0.306	10	NA	± 66 %	AverageRF
Bromodichloromethane	10	11	0.294	0.332	13	NA	± 34 %	AverageRF
2-Chloroethyl Vinyl Ether	10	11	0.111	0.122	10	NA	± 124 %	AverageRF
trans-1,3-Dichloropropene	10	11	0.717	0.758	6	NA	± 50 %	AverageRF
Toluene	10	11	0.628	0.708	13	NA	± 25 %	AverageRF
cis-1,3-Dichloropropene	10	11	0.367	0.415	13	NA	± 76 %	AverageRF
1,1,2-Trichloroethane	10	12	0.351	0.412	17	NA	± 29 %	AverageRF
Tetrachloroethene (PCE)	10	12	0.435	0.502	15	NA	± 26 %	AverageRF
Dibromochloromethane	10	11	0.366	0.414	13	NA	± 32 %	AverageRF
Chlorobenzene	10	11	1.53	1.72	13	NA	± 34 %	AverageRF
Ethylbenzene	10	11	0.841	0.950	13	NA	± 41 %	AverageRF
Bromoform	10	11	0.162	0.173	7	NA	± 29 %	AverageRF
1,1,2,2-Tetrachloroethane	10	11	0.482	0.551	14	NA	± 39 %	AverageRF
1,3-Dichlorobenzene	10	12	1.31	1.51	15	NA	± 27 %	AverageRF
1,4-Dichlorobenzene	10	12	1.34	1.56	17	NA	± 37 %	AverageRF
1,2-Dichlorobenzene	10	11	1.20	1.36	14	NA	± 37 %	AverageRF
Acrolein	100	94	0.0266	0.0250	-6	NA	± 80 %	AverageRF
Acrylonitrile	10	10	0.0633	0.0657	4	NA	± 40 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 01/28/2011

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 624

Calibration Date: 01/12/2011
Calibration ID: CAL10216
Analysis Lot: KWG1100972
Units: PPB

File ID: J:\MS23\DATA\012811\0128F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Chloromethane	10	11	0.01	0.420	0.482	15	NA	± 104 %	AverageRF
Vinyl Chloride	10	11	0.01	0.411	0.438	7	NA	± 96 %	AverageRF
Bromomethane	10	9.1	0.01	0.142	0.129	-9	NA	± 86 %	AverageRF
Chloroethane	10	11	0.01	0.0681	0.0756	11	NA	± 62 %	AverageRF
Trichlorofluoromethane	10	11	0.01	0.487	0.558	15	NA	± 52 %	AverageRF
1,1-Dichloroethene	10	11	0.01	0.207	0.231	12	NA	± 49 %	AverageRF
Methylene Chloride	10	11	0.01	0.264	0.283	7	NA	± 39 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.251	0.282	12	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	11	0.01	0.503	0.571	13	NA	± 27 %	AverageRF
Chloroform	10	11	0.01	0.457	0.515	13	NA	± 32 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.366	0.399	9	NA	± 25 %	AverageRF
Carbon Tetrachloride	10	10	0.01	0.259	0.267	3	NA	± 27 %	AverageRF
Benzene	10	11	0.01	1.06	1.20	13	NA	± 36 %	AverageRF
1,2-Dichloroethane (EDC)	10	12	0.01	0.349	0.402	15	NA	± 32 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.261	0.289	11	NA	± 33 %	AverageRF
1,2-Dichloropropane	10	11	0.01	0.278	0.305	10	NA	± 66 %	AverageRF
Bromodichloromethane	10	11	0.01	0.294	0.328	12	NA	± 34 %	AverageRF
2-Chloroethyl Vinyl Ether	10	11	0.01	0.111	0.119	7	NA	± 124 %	AverageRF
trans-1,3-Dichloropropene	10	9.0	0.01	0.717	0.641	-11	NA	± 50 %	AverageRF
Toluene	10	11	0.01	0.628	0.704	12	NA	± 25 %	AverageRF
cis-1,3-Dichloropropene	10	11	0.01	0.367	0.388	6	NA	± 76 %	AverageRF
1,1,2-Trichloroethane	10	10	0.01	0.351	0.361	3	NA	± 29 %	AverageRF
Tetrachloroethene (PCE)	10	10	0.01	0.435	0.441	1	NA	± 26 %	AverageRF
Dibromochloromethane	10	9.5	0.01	0.366	0.348	-5	NA	± 32 %	AverageRF
Chlorobenzene	10	10	0.01	1.53	1.53	0	NA	± 34 %	AverageRF
Ethylbenzene	10	10	0.01	0.841	0.856	2	NA	± 41 %	AverageRF
Bromoform	10	8.4	0.01	0.162	0.136	-16	NA	± 29 %	AverageRF
1,1,2,2-Tetrachloroethane	10	9.8	0.01	0.482	0.473	-2	NA	± 39 %	AverageRF
1,3-Dichlorobenzene	10	9.5	0.01	1.31	1.24	-5	NA	± 27 %	AverageRF
1,4-Dichlorobenzene	10	9.5	0.01	1.34	1.28	-5	NA	± 37 %	AverageRF
1,2-Dichlorobenzene	10	9.3	0.01	1.20	1.11	-7	NA	± 37 %	AverageRF
Acrolein	200	190	0.01	0.0266	0.0255	-4	NA	± 80 %	AverageRF
Acrylonitrile	20	23	0.01	0.0633	0.0717	13	NA	± 40 %	AverageRF
Toluene-d8	10	11	0.01	0.904	1.00	11	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	11	0.01	0.773	0.837	8	NA	± 30 %	AverageRF
Dibromofluoromethane	10	11	0.01	0.223	0.235	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692

Analysis Run Log
Volatile Organic Compounds

Analysis Method: 624

Analysis Lot: KWG1100972
Instrument ID: MS23

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0128F002.D	GC/MS Tuning - Bromofluorobenzene	KWG1100972-1	1/28/2011	13:28		1/28/2011	13:43
0128F003.D	Continuing Calibration Verification	KWG1100972-2	1/28/2011	13:57		1/28/2011	14:12
0128F004.D	Lab Control Sample	KWG1100975-3	1/28/2011	14:26		1/28/2011	14:41
0128F005.D	Batch QCMS	KWG1100975-1	1/28/2011	15:39		1/28/2011	15:54
0128F006.D	Batch QCDMS	KWG1100975-2	1/28/2011	16:07		1/28/2011	16:22
0128F007.D	Method Blank	KWG1100975-4	1/28/2011	16:36		1/28/2011	16:51
0128F008.D	ZZZZZZ	ZZZZZZ	1/28/2011	17:05		1/28/2011	17:20
0128F009.D	ZZZZZZ	ZZZZZZ	1/28/2011	17:34		1/28/2011	17:49
0128F011.D	Batch QC	K1100710-005	1/28/2011	18:31		1/28/2011	18:46
0128F012.D	ZZZZZZ	ZZZZZZ	1/28/2011	19:00		1/28/2011	19:15
0128F013.D	MW-3	K1100692-001	1/28/2011	19:29		1/28/2011	19:44
0128F014.D	MW-7	K1100692-002	1/28/2011	19:57		1/28/2011	20:12
0128F015.D	EB-012511	K1100692-003	1/28/2011	20:26		1/28/2011	20:41
0128F016.D	Trip Blank	K1100692-004	1/28/2011	20:55		1/28/2011	21:10
0128F017.D	ZZZZZZ	ZZZZZZ	1/28/2011	21:24		1/28/2011	21:39
0128F018.D	ZZZZZZ	ZZZZZZ	1/28/2011	21:52		1/28/2011	22:07
0128F019.D	ZZZZZZ	ZZZZZZ	1/28/2011	22:21		1/28/2011	22:36
0128F020.D	ZZZZZZ	ZZZZZZ	1/28/2011	22:50		1/28/2011	23:05
0128F021.D	ZZZZZZ	ZZZZZZ	1/28/2011	23:19		1/28/2011	23:34

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Extracted: 01/28/2011

Extraction Prep Log
Volatile Organic Compounds

Extraction Method: METHOD
Analysis Method: 624

Extraction Lot: KWG1100975
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-3	K1100692-001	01/25/11	01/26/11	10ml	10ml	NA	
MW-7	K1100692-002	01/25/11	01/26/11	10ml	10ml	NA	
EB-012511	K1100692-003	01/25/11	01/26/11	10ml	10ml	NA	
Trip Blank	K1100692-004	01/25/11	01/26/11	10ml	10ml	NA	
Method Blank	KWG1100975-4	NA	NA	10ml	10ml	NA	
Batch QC	K1100710-005	NA	NA	10ml	10ml	NA	
Batch QCMS	KWG1100975-1	NA	NA	10ml	10ml	NA	
Batch QCDMS	KWG1100975-2	NA	NA	10ml	10ml	NA	
Lab Control Sample	KWG1100975-3	NA	NA	10ml	10ml	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Volatile Organic Compounds

Validation Package

Organic Analysis:
Volatile Organic Compounds

Validation Package

QC Reports

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: METHOD
Analysis Method: 624

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
MW-3	K1100692-001	107	100	106
MW-7	K1100692-002	107	95	105
EB-012511	K1100692-003	106	98	107
Trip Blank	K1100692-004	107	98	106
Batch QC	K1100710-005	104	98	105
Method Blank	KWG1100975-4	105	102	106
Batch QCMS	KWG1100975-1	109	99	105
Batch QCDMS	KWG1100975-2	107	102	102
Lab Control Sample	KWG1100975-3	109	102	106

Surrogate Recovery Control Limits (%)

Sur1 =	Toluene-d8	84-115
Sur2 =	4-Bromofluorobenzene	83-113
Sur3 =	Dibromofluoromethane	71-115

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 01/28/2011
Time Analyzed: 13:57

Internal Standard Area and RT Summary
Volatile Organic Compounds

File ID: J:\MS23\DATA\012811\0128F003.D
Instrument ID: MS23
Analysis Method: 624

Lab Code: KWG1100972-2
Analysis Lot: KWG1100972

		Fluorobenzene		1,4-Dichlorobenzene-d4		Chlorobenzene-d5	
		Area	RT	Area	RT	Area	RT
	Results ==>	396,047	5.76	150,722	11.61	181,960	9.20
	Upper Limit ==>	792,094	6.26	301,444	12.11	363,920	9.70
	Lower Limit ==>	198,024	5.26	75,361	11.11	90,980	8.70
	ICAL Result ==>	486,875	5.77	169,109	11.61	202,840	9.20
Associated Analyses							
Lab Control Sample	KWG1100975-3	394,117	5.76	152,274	11.61	186,471	9.20
Batch QCMS	KWG1100975-1	389,902	5.76	147,319	11.61	182,444	9.20
Batch QCDMS	KWG1100975-2	391,348	5.76	149,224	11.61	182,287	9.20
Method Blank	KWG1100975-4	399,883	5.76	148,744	11.61	184,783	9.20
Batch QC	K1100710-005	387,417	5.76	142,063	11.61	179,925	9.20
MW-3	K1100692-001	391,055	5.76	146,542	11.61	182,403	9.20
MW-7	K1100692-002	392,446	5.76	146,099	11.61	185,618	9.20
EB-012511	K1100692-003	384,675	5.76	143,516	11.61	184,679	9.20
Trip Blank	K1100692-004	378,436	5.76	143,210	11.61	179,573	9.20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Extracted: 01/28/2011
Date Analyzed: 01/28/2011

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name: Batch QC
Lab Code: K1100710-005

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA

Level: Low
Extraction Lot: KWG1100975

Analyte Name	Sample Result	Batch QCMS KWG1100975-1 Matrix Spike			Batch QCDMS KWG1100975-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
1,1-Dichloroethene	ND	12.5	10.0	125	12.1	10.0	121	63-153	4	30
Benzene	ND	12.3	10.0	123	11.8	10.0	118	69-128	5	30
Trichloroethene (TCE)	ND	11.9	10.0	119	11.3	10.0	113	33-174	6	30
Toluene	0.13	12.4	10.0	123	12.0	10.0	119	62-132	3	30
Chlorobenzene	ND	10.7	10.0	107	10.6	10.0	106	71-120	2	30
1,2-Dichlorobenzene	ND	10.9	10.0	109	10.7	10.0	107	72-117	2	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Extracted: 01/28/2011
Date Analyzed: 01/28/2011

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1100975

	Lab Control Sample KWG1100975-3 Lab Control Spike			
Analyte Name	**Result**	**Expected**	**%Rec**	**%Rec Limits**
Chloromethane	11.5	10.0	115	45-137
Vinyl Chloride	10.9	10.0	109	54-145
Bromomethane	11.6	10.0	116	20-175
Chloroethane	11.1	10.0	111	56-137
Trichlorofluoromethane	10.0	10.0	100	50-135
1,1-Dichloroethene	11.7	10.0	117	74-139
Methylene Chloride	11.2	10.0	112	76-120
trans-1,2-Dichloroethene	11.6	10.0	116	76-125
1,1-Dichloroethane	11.5	10.0	115	68-127
Chloroform	12.0	10.0	120	69-126
1,1,1-Trichloroethane (TCA)	11.4	10.0	114	61-135
Carbon Tetrachloride	10.9	10.0	109	54-142
Benzene	11.8	10.0	118	73-122
1,2-Dichloroethane (EDC)	12.4	10.0	124	66-132
Trichloroethene (TCE)	11.2	10.0	112	70-123
1,2-Dichloropropane	11.5	10.0	115	73-122
Bromodichloromethane	11.7	10.0	117	68-136
2-Chloroethyl Vinyl Ether	12.0	10.0	120	30-155
trans-1,3-Dichloropropene	8.72	10.0	87	56-121
Toluene	11.9	10.0	119	71-124
cis-1,3-Dichloropropene	11.0	10.0	110	64-131
1,1,2-Trichloroethane	10.7	10.0	107	75-118
Tetrachloroethene (PCE)	10.2	10.0	102	65-125
Dibromochloromethane	10.2	10.0	102	65-132
Chlorobenzene	10.5	10.0	105	77-115
Ethylbenzene	10.2	10.0	102	72-123
Bromoform	9.45	10.0	95	51-145
1,1,2,2-Tetrachloroethane	11.6	10.0	116	62-135
1,3-Dichlorobenzene	10.9	10.0	109	74-116
1,4-Dichlorobenzene	10.9	10.0	109	74-114
1,2-Dichlorobenzene	10.7	10.0	107	76-113
Acrolein	110	100	110	10-185
Acrylonitrile	12.0	10.0	120	63-138

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	01/28/2011
Sample Matrix:	Water	**Date Analyzed:**	01/28/2011
		Time Analyzed:	16:36

Method Blank Summary
Volatile Organic Compounds

Sample Name:	Method Blank	**File ID:**	J:\MS23\DATA\012811\0128F007.D
Lab Code:	KWG1100975-4	**Instrument ID:**	MS23
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	624	**Extraction Lot:**	KWG1100975

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1100975-3	J:\MS23\DATA\012811\0128F004.D	01/28/11	14:26
Batch QCMS	KWG1100975-1	J:\MS23\DATA\012811\0128F005.D	01/28/11	15:39
Batch QCDMS	KWG1100975-2	J:\MS23\DATA\012811\0128F006.D	01/28/11	16:07
Batch QC	K1100710-005	J:\MS23\DATA\012811\0128F011.D	01/28/11	18:31
MW-3	K1100692-001	J:\MS23\DATA\012811\0128F013.D	01/28/11	19:29
MW-7	K1100692-002	J:\MS23\DATA\012811\0128F014.D	01/28/11	19:57
EB-012511	K1100692-003	J:\MS23\DATA\012811\0128F015.D	01/28/11	20:26
Trip Blank	K1100692-004	J:\MS23\DATA\012811\0128F016.D	01/28/11	20:55

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	01/28/2011
Sample Matrix:	Water	**Date Analyzed:**	01/28/2011
		Time Analyzed:	14:26

Lab Control Sample Summary
Volatile Organic Compounds

Sample Name:	Lab Control Sample	**File ID:**	J:\MS23\DATA\012811\0128F004.D
Lab Code:	KWG1100975-3	**Instrument ID:**	MS23
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	624	**Extraction Lot:**	KWG1100975

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Batch QCMS	KWG1100975-1	J:\MS23\DATA\012811\0128F005.D	01/28/11	15:39
Batch QCDMS	KWG1100975-2	J:\MS23\DATA\012811\0128F006.D	01/28/11	16:07
Method Blank	KWG1100975-4	J:\MS23\DATA\012811\0128F007.D	01/28/11	16:36
Batch QC	K1100710-005	J:\MS23\DATA\012811\0128F011.D	01/28/11	18:31
MW-3	K1100692-001	J:\MS23\DATA\012811\0128F013.D	01/28/11	19:29
MW-7	K1100692-002	J:\MS23\DATA\012811\0128F014.D	01/28/11	19:57
EB-012511	K1100692-003	J:\MS23\DATA\012811\0128F015.D	01/28/11	20:26
Trip Blank	K1100692-004	J:\MS23\DATA\012811\0128F016.D	01/28/11	20:55

Organic Analysis:
Volatile Organic Compounds

Validation Package

Raw Data

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: MW-3
Lab Code: K1100692-001

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 624

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Volatile Organic Compounds

Sample Name:	MW-3	**Units:**	ug/L
Lab Code:	K1100692-001	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	107	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	100	83-113	01/28/11	Acceptable
Dibromofluoromethane	106	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Exception Report

Data File: J:\MS23\DATA\012811\0128F013.D
Lab ID: K1100692-001
RunType: SMPL
Matrix: WATER

Date Acquired: 01/28/2011 19:29
Date Quantitated: 02/02/2011 08:06
Batch ID: KWG1100972
Analysis Method: 624
ListJoinID: LJ5789

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: kr 2/2/11

Secondary Review: HB 2-2-11

Quantitation Report

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**	01/25/2011	**Receive Date:**	01/26/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	K1100692
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996317	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:	Volatile Organic Compounds	**Report List ID:**	LJ5789
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:	J:\MS23\DATA\012811\0128F007.D	**Quant based on Report List**	

Data File:	J:\MS23\DATA\012811\0128F013.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 19:29	**Quant Date:**	02/02/2011 08:06	**Vial:**	12
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100692-001			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	391055	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	182403	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	146542	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.91	0.01	0.00	113	92057	10.58	106	71-115	OK	
1	Toluene-d8	7.62	0.00	0.00	98	378146	10.70	107	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	140807	9.98	100	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane	1.23		0.00	50	1200	0.0700	0.20	U	
1	Vinyl Chloride				62	0		0.19	U	
1	Bromomethane				96	0d		0.20	U	
1	Chloroethane				49	0d		0.25	U	
1	Trichlorofluoromethane				101	0		0.16	U	
1	Acrolein				56	0		2.9	U	
1	1,1-Dichloroethene				96	0		0.18	U	
1	Methylene Chloride				84	0		0.15	U	
1	Acrylonitrile				53	0		0.43	U	
1	trans-1,2-Dichloroethene				96	0		0.21	U	
1	1,1-Dichloroethane				63	0		0.15	U	
1	Chloroform				83	0		0.19	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.16	U	
1	Carbon Tetrachloride				117	0		0.13	U	
1	Benzene				78	0		0.20	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F013.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 19:29	**Quant Date:**	02/02/2011 08:06	**Vial:**	12
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100692-001			**Soln Conc. Units:**	PPB

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,2-Dichloroethane (EDC)				62	0		0.17	U	
1	Trichloroethene (TCE)				95	0		0.17	U	
1	1,2-Dichloropropane				63	0		0.16	U	
1	Bromodichloromethane				83	0		0.15	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.31	U	
1	cis-1,3-Dichloropropene				75	0		0.15	U	
1	Toluene	7.70		0.00	92	1440	0.0600	0.13	U	
2	trans-1,3-Dichloropropene				75	0		0.13	U	
2	1,1,2-Trichloroethane				83	0		0.23	U	
2	Tetrachloroethene (PCE)				164	0		0.19	U	
2	Dibromochloromethane				129	0		0.19	U	
2	Chlorobenzene				112	0		0.16	U	
2	Ethylbenzene				106	0		0.12	U	
2	Bromoform				173	0		0.43	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.28	U	
3	1,3-Dichlorobenzene				146	0		0.13	U	
3	1,4-Dichlorobenzene				146	0		0.13	U	
3	1,2-Dichlorobenzene				146	0		0.12	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F013.D Vial: 12
Acq On : 28 Jan 2011 7:29 pm Operator: KR
Sample : K692-001 Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 08:06:10 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	391055	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	182403	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	146542	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.91	113	92057	10.58	PPB		0.00
Spiked Amount 10.000			Recovery =	105.80%			
24) 1,2-Dichloroethane-d4	5.40	65	124256	10.65	PPB		0.00
Spiked Amount 10.000			Recovery =	106.50%			
33) Toluene-d8	7.62	98	378146	10.70	PPB		0.00
Spiked Amount 10.000			Recovery =	107.00%			
47) 4-Bromofluorobenzene	10.44	95	140807	9.98	PPB		0.00
Spiked Amount 10.000			Recovery =	99.80%			
Target Compounds							Qvalue
3) Chloromethane	1.23	50	1200	0.07	PPB		81
11) Acetone	2.41	43	2851	1.55	PPB		94
34) Toluene	7.70	92	1440	0.06	PPB		76
43) m,p-Xylenes	9.45	106	921	0.05	PPB		82
44) o-Xylene	9.88	106	763	0.04	PPB	#	24

(#) = qualifier out of range (m) = manual integration
0128F013.D 011211624.M Wed Feb 02 08:06:48 2011 Page 1

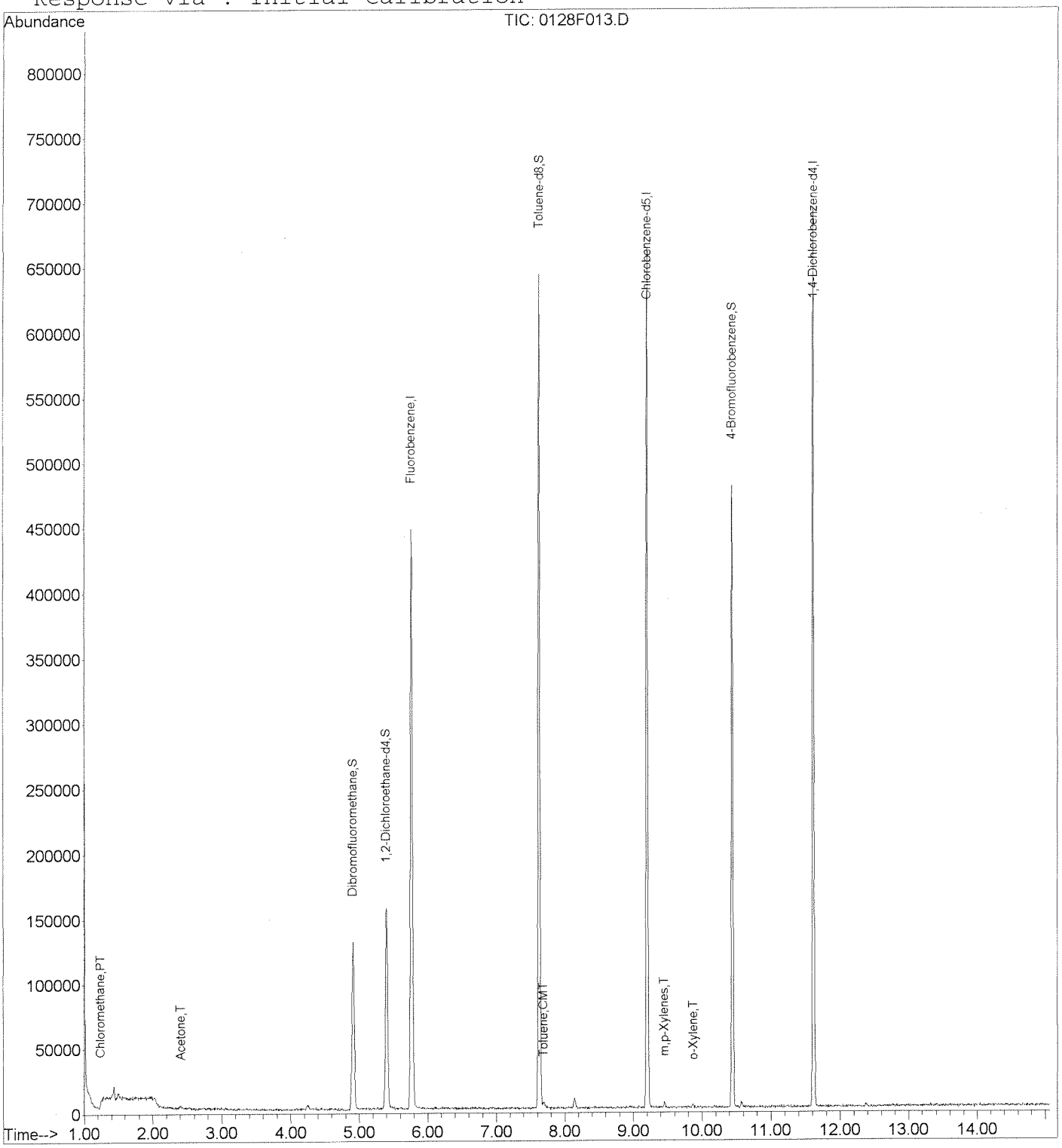
Quantitation Report (QT Reviewed)

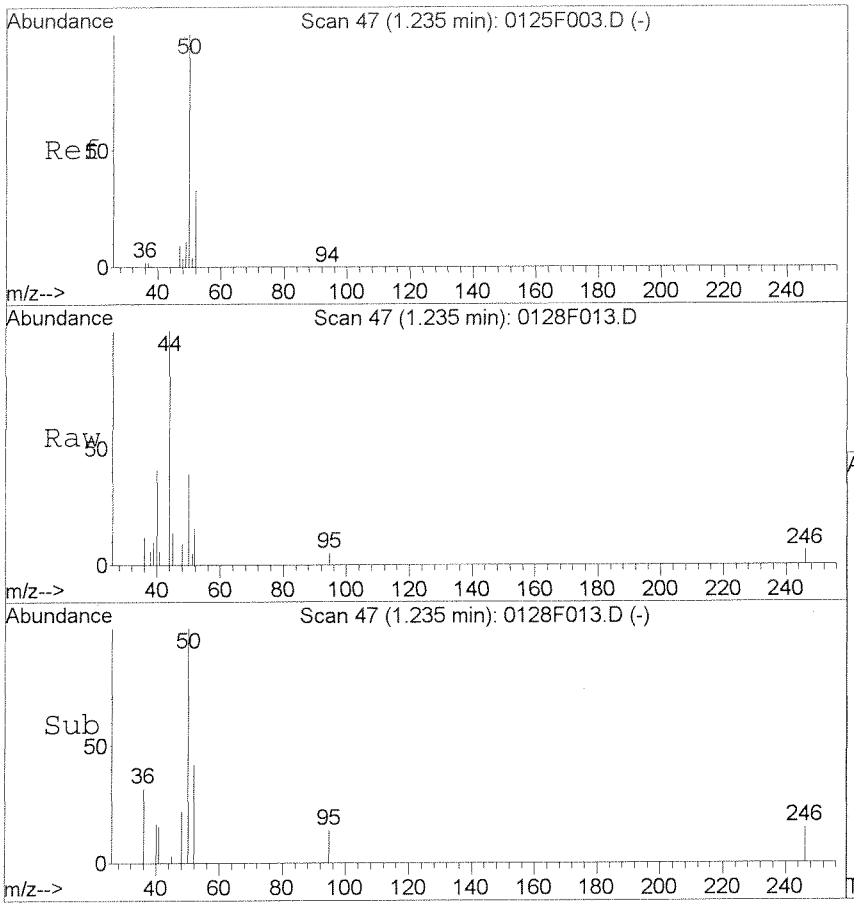
Data File : J:\MS23\DATA\012811\0128F013.D
Acq On : 28 Jan 2011 7:29 pm
Sample : K692-001
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 8:06 2011

Vial: 12
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration

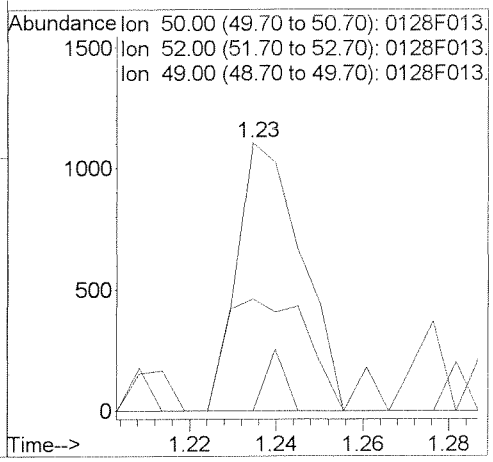


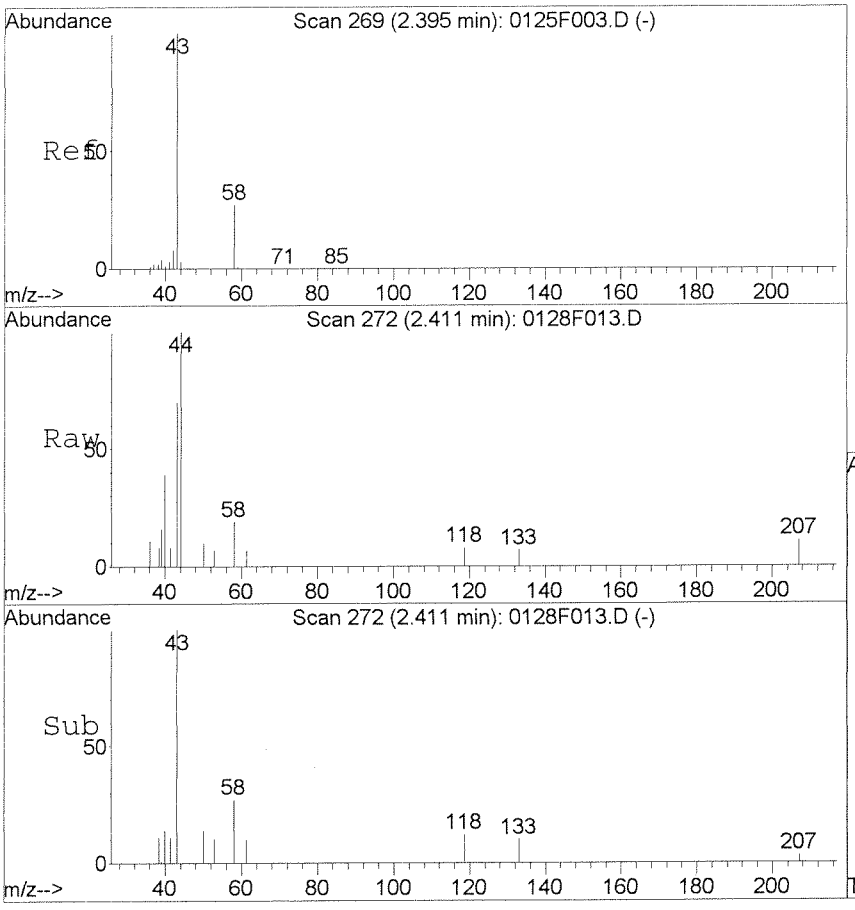


#3
Chloromethane
Concen: 0.07 PPB
RT: 1.23 min Scan# 47
Delta R.T. -0.00 min
Lab File: 0128F013.D
Acq: 28 Jan 2011 7:29 pm

Tgt Ion: 50 Resp: 1200

Ion	Ratio	Lower	Upper
50	100		
52	41.8	3.1	63.1
49	0.0	0.0	41.2

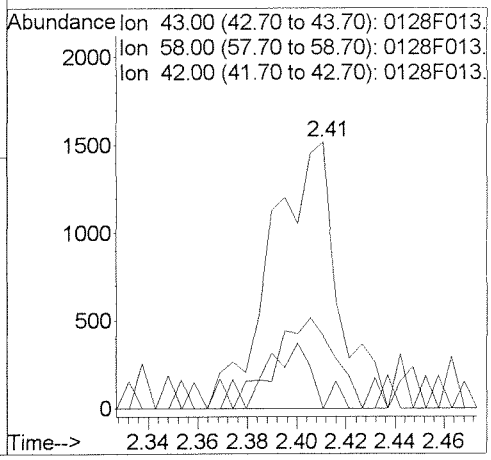


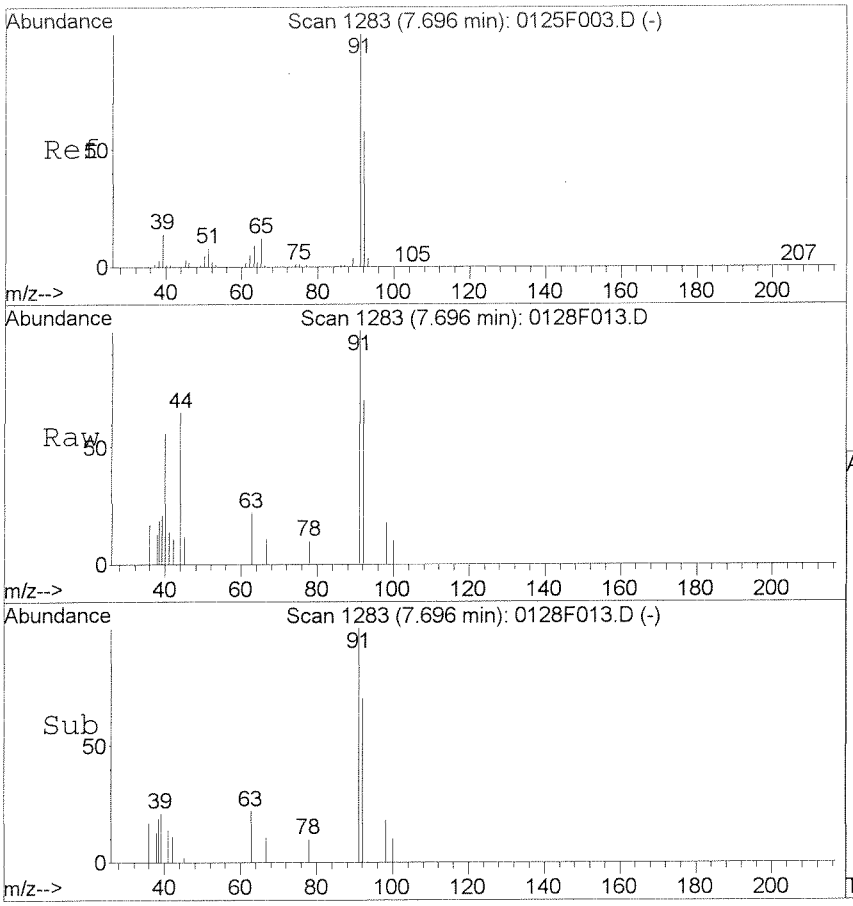


#11
Acetone
Concen: 1.55 PPB
RT: 2.41 min Scan# 272
Delta R.T. 0.02 min
Lab File: 0128F013.D
Acq: 28 Jan 2011 7:29 pm

Tgt Ion: 43 Resp: 2851

Ion	Ratio	Lower	Upper
43	100		
58	27.2	0.0	56.6
42	0.0	0.0	38.3

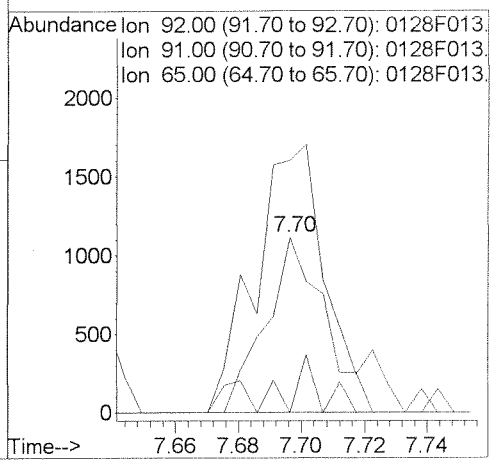


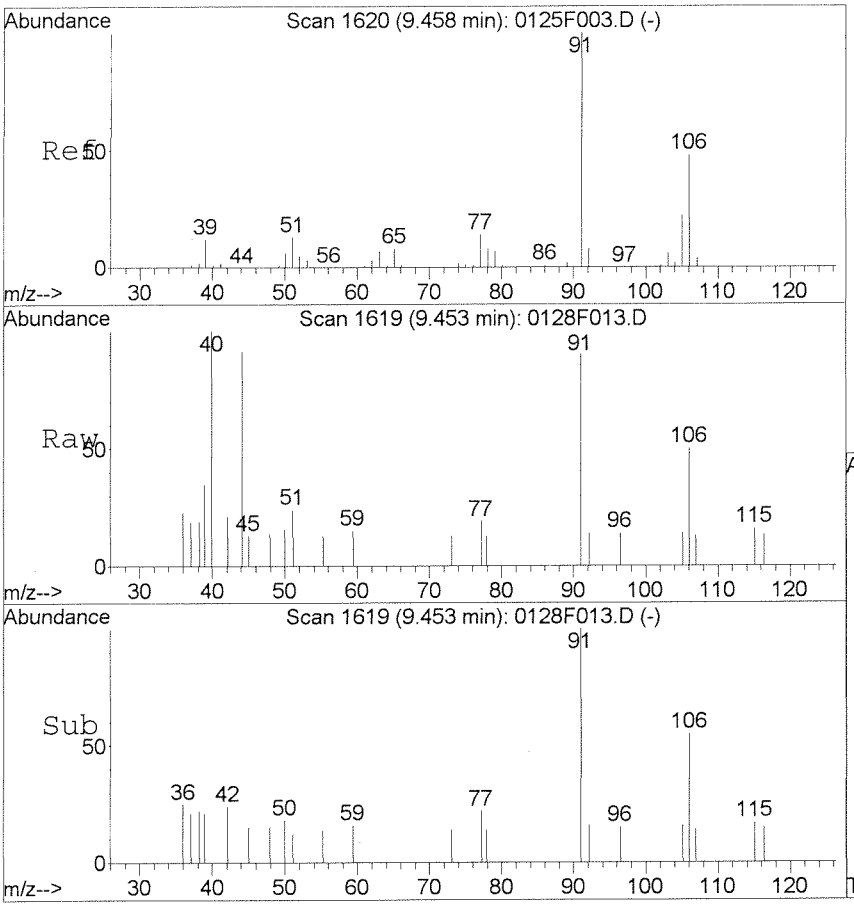


#34
Toluene
Concen: 0.06 PPB
RT: 7.70 min Scan# 1283
Delta R.T. -0.00 min
Lab File: 0128F013.D
Acq: 28 Jan 2011 7:29 pm

Tgt Ion: 92 Resp: 1440

Ion	Ratio	Lower	Upper
92	100		
91	143.6	143.0	203.0
65	0.0	0.0	50.9

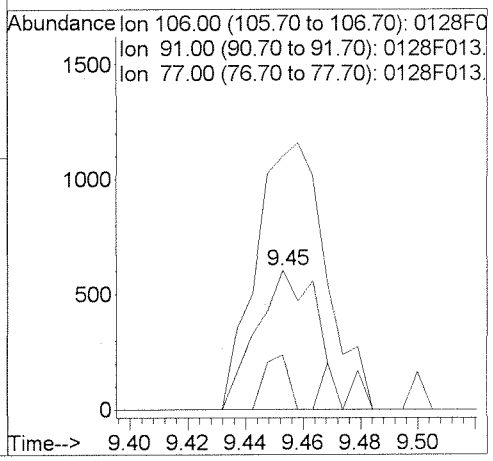


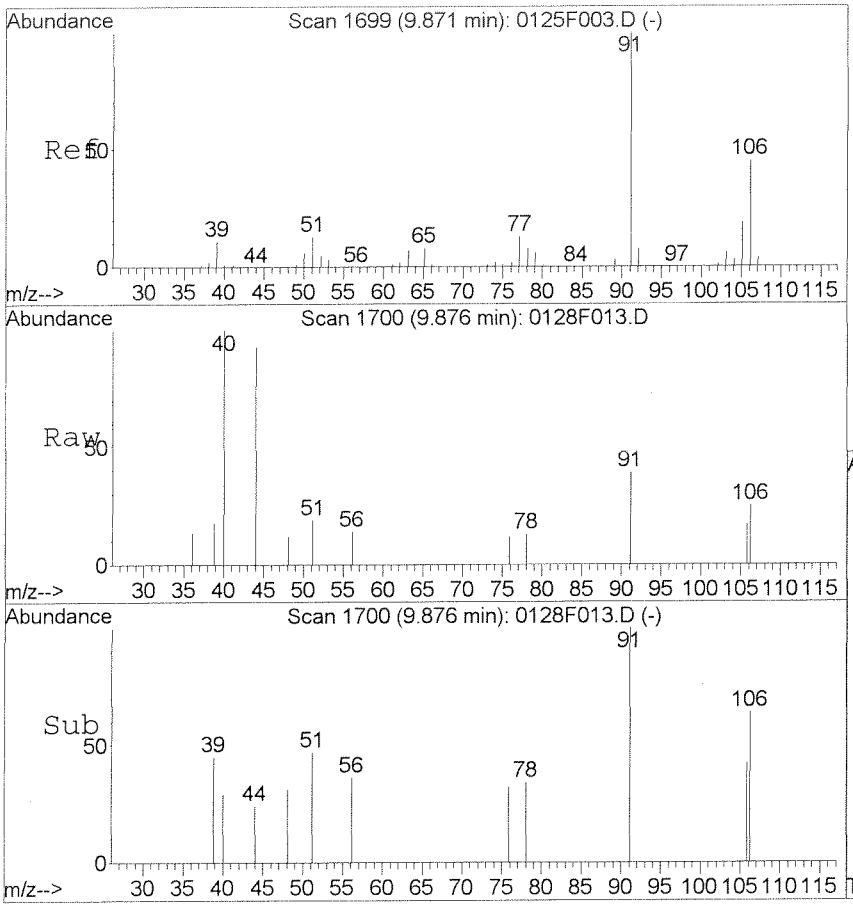


#43
m,p-Xylenes
Concen: 0.05 PPB
RT: 9.45 min Scan# 1619
Delta R.T. -0.01 min
Lab File: 0128F013.D
Acq: 28 Jan 2011 7:29 pm

Tgt Ion:106 Resp: 921

Ion	Ratio	Lower	Upper
106	100		
91	181.7	178.5	238.5
77	39.3	0.0	58.6

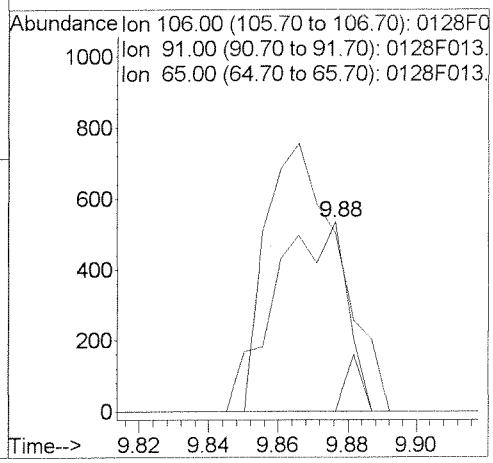




#44
o-Xylene
Concen: 0.04 PPB
RT: 9.88 min Scan# 1700
Delta R.T. 0.01 min
Lab File: 0128F013.D
Acq: 28 Jan 2011 7:29 pm

Tgt Ion:106 Resp: 763

Ion	Ratio	Lower	Upper
106	100		
91	94.0	191.9	251.9#
65	0.0	0.0	47.4



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: MW-7
Lab Code: K1100692-002

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Volatile Organic Compounds

Sample Name:	MW-7	**Units:**	ug/L
Lab Code:	K1100692-002	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	107	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	95	83-113	01/28/11	Acceptable
Dibromofluoromethane	105	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Exception Report

Data File: J:\MS23\DATA\012811\0128F014.D
Lab ID: K1100692-002
RunType: SMPL
Matrix: WATER

Date Acquired: 01/28/2011 19:57
Date Quantitated: 02/02/2011 08:07
Batch ID: KWG1100972
Analysis Method: 624
ListJoinID: LJ5789

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: KW 2/2/11

Secondary Review: HB 2-2-11

Quantitation Report

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**	01/25/2011	**Receive Date:**	01/26/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	K1100692
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996318	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:	Volatile Organic Compounds	**Report List ID:**	LJ5789
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:	J:\MS23\DATA\012811\0128F007.D	**Quant based on Report List**	

Data File:	J:\MS23\DATA\012811\0128F014.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 19:57	**Quant Date:**	02/02/2011 08:07	**Vial:**	13
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100692-002			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	392446	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	185618	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	146099	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.90	0.00	0.00	113	91735	10.50	105	71-115	OK	
1	Toluene-d8	7.62	0.00	0.00	98	380992	10.74	107	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	136761	9.53	95	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane	1.23		0.00	50	1672	0.1000	0.20	U	
1	Vinyl Chloride				62	0		0.19	U	
1	Bromomethane				96	0		0.20	U	
1	Chloroethane				49	0		0.25	U	
1	Trichlorofluoromethane				101	0		0.16	U	
1	Acrolein				56	0		2.9	U	
1	1,1-Dichloroethene				96	0		0.18	U	
1	Methylene Chloride				84	0		0.15	U	
1	Acrylonitrile				53	0		0.43	U	
1	trans-1,2-Dichloroethene				96	0		0.21	U	
1	1,1-Dichloroethane				63	0		0.15	U	
1	Chloroform				83	0		0.19	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.16	U	
1	Carbon Tetrachloride				117	0		0.13	U	
1	Benzene				78	0		0.20	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F014.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 19:57	**Quant Date:**	02/02/2011 08:07	**Vial:**	13
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100692-002			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,2-Dichloroethane (EDC)				62	0		0.17	U	
1	Trichloroethene (TCE)				95	0		0.17	U	
1	1,2-Dichloropropane				63	0		0.16	U	
1	Bromodichloromethane				83	0		0.15	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.31	U	
1	cis-1,3-Dichloropropene				75	0		0.15	U	
1	Toluene	7.70		0.00	92	1120	0.0500	0.13	U	
2	trans-1,3-Dichloropropene				75	0		0.13	U	
2	1,1,2-Trichloroethane				83	0		0.23	U	
2	Tetrachloroethene (PCE)				164	0		0.19	U	
2	Dibromochloromethane				129	0		0.19	U	
2	Chlorobenzene				112	0		0.16	U	
2	Ethylbenzene				106	0		0.12	U	
2	Bromoform				173	0		0.43	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.28	U	
3	1,3-Dichlorobenzene				146	0		0.13	U	
3	1,4-Dichlorobenzene				146	0		0.13	U	
3	1,2-Dichlorobenzene				146	0		0.12	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F014.D Vial: 13
Acq On : 28 Jan 2011 7:57 pm Operator: KR
Sample : K692-002 Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 08:07:04 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	392446	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	185618	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	146099	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.90	113	91735	10.50	PPB		0.00
Spiked Amount 10.000			Recovery =	105.00%			
24) 1,2-Dichloroethane-d4	5.40	65	125039	10.68	PPB		0.00
Spiked Amount 10.000			Recovery =	106.80%			
33) Toluene-d8	7.62	98	380992	10.74	PPB		0.00
Spiked Amount 10.000			Recovery =	107.40%			
47) 4-Bromofluorobenzene	10.44	95	136761	9.53	PPB		0.00
Spiked Amount 10.000			Recovery =	95.30%			
Target Compounds							Qvalue
3) Chloromethane	1.23	50	1672	0.10	PPB		90
11) Acetone	2.40	43	2397	1.30	PPB		83
34) Toluene	7.70	92	1120	0.05	PPB		92
43) m,p-Xylenes	9.46	106	744	0.04	PPB	#	92
44) o-Xylene	9.87	106	538	0.03	PPB	#	39

(#) = qualifier out of range (m) = manual integration

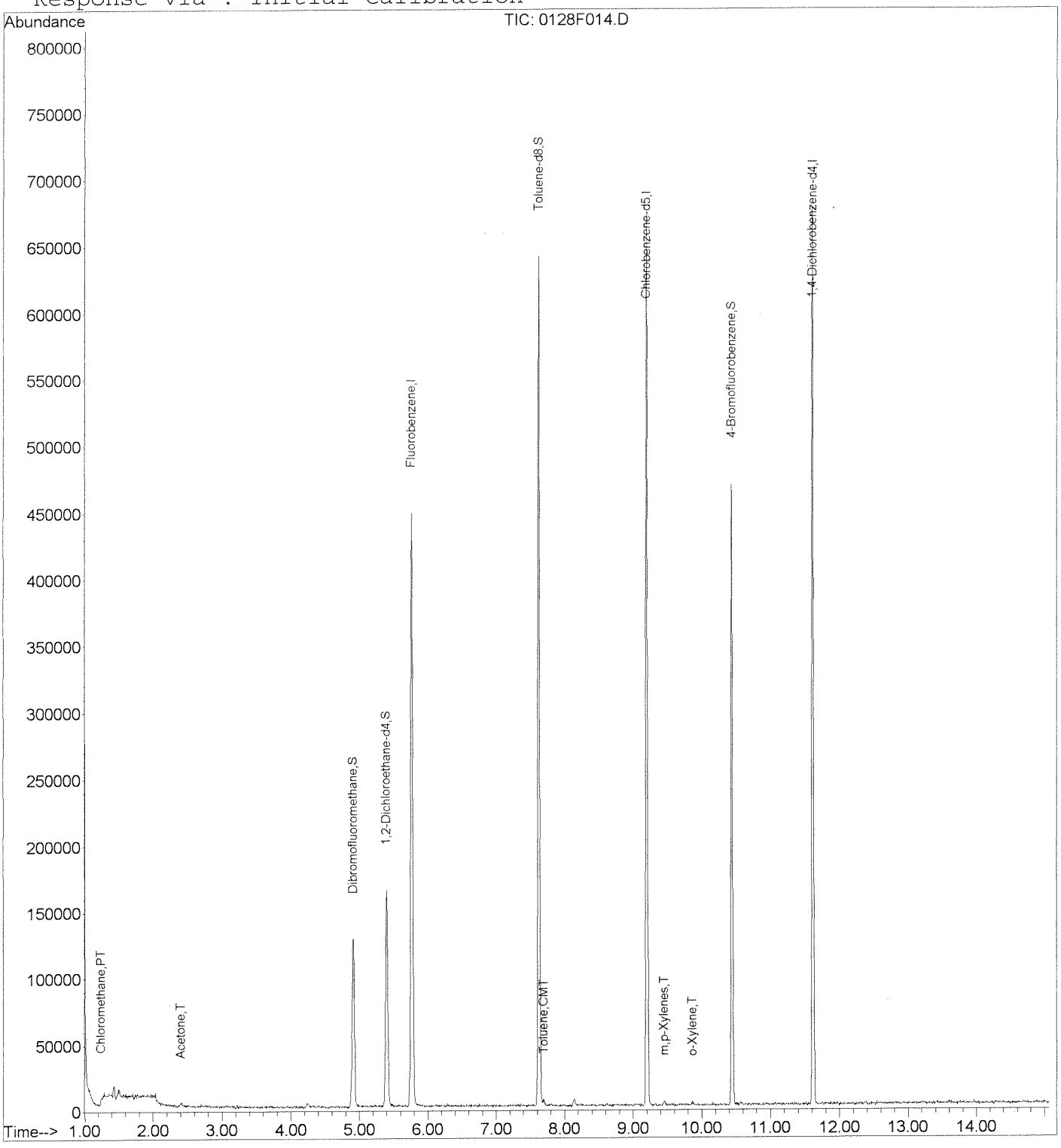
Quantitation Report (QT Reviewed)

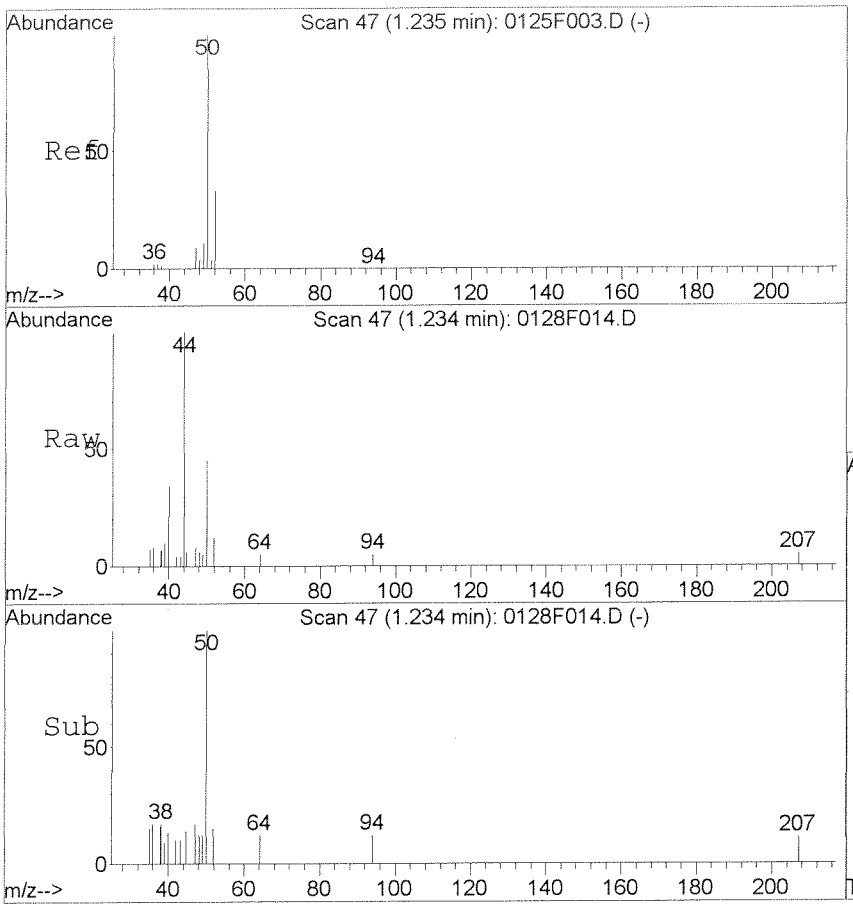
Data File : J:\MS23\DATA\012811\0128F014.D
Acq On : 28 Jan 2011 7:57 pm
Sample : K692-002
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 8:07 2011

Vial: 13
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration

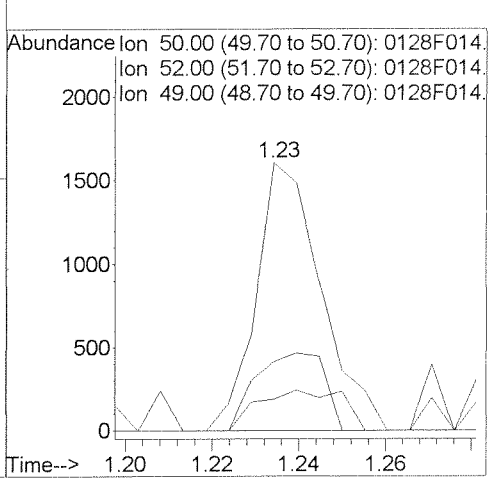


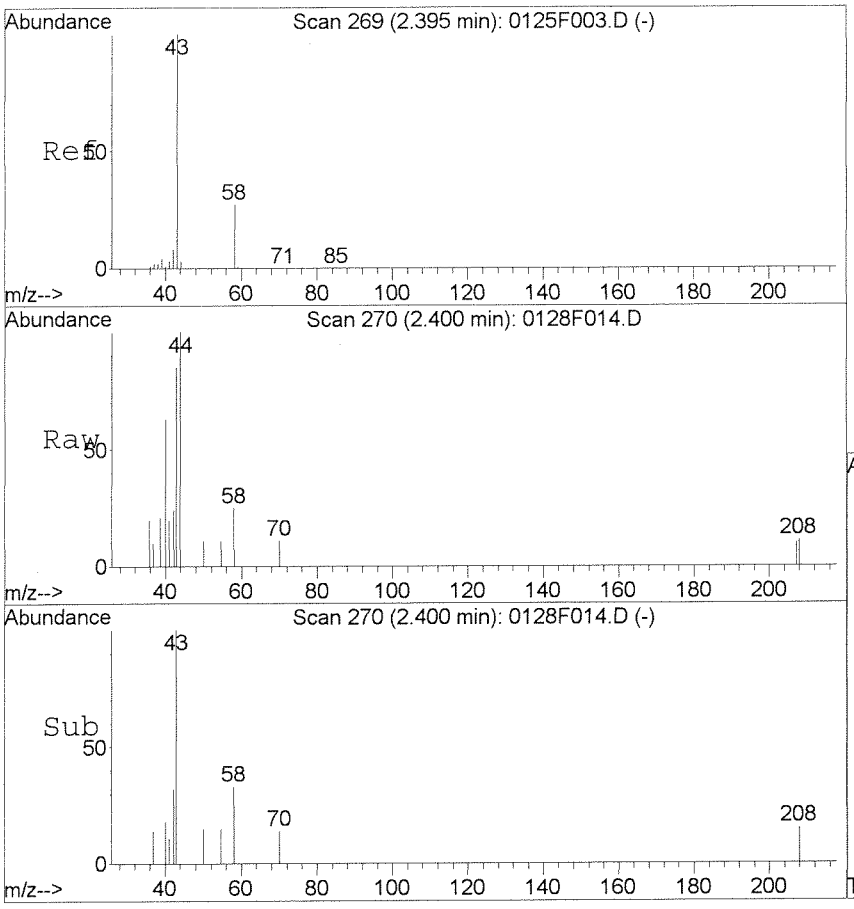


#3
Chloromethane
Concen: 0.10 PPB
RT: 1.23 min Scan# 47
Delta R.T. -0.00 min
Lab File: 0128F014.D
Acq: 28 Jan 2011 7:57 pm

Tgt Ion: 50 Resp: 1672

Ion	Ratio	Lower	Upper
50	100		
52	25.7	3.1	63.1
49	11.7	0.0	41.2

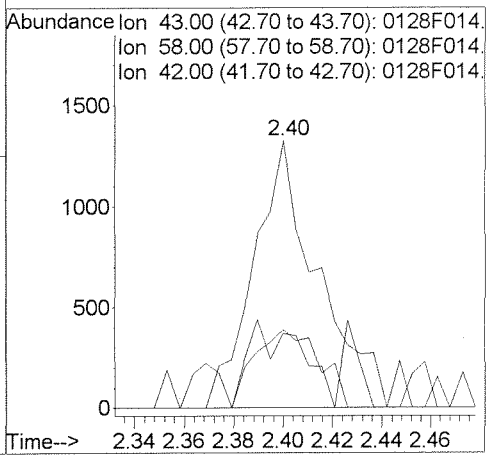


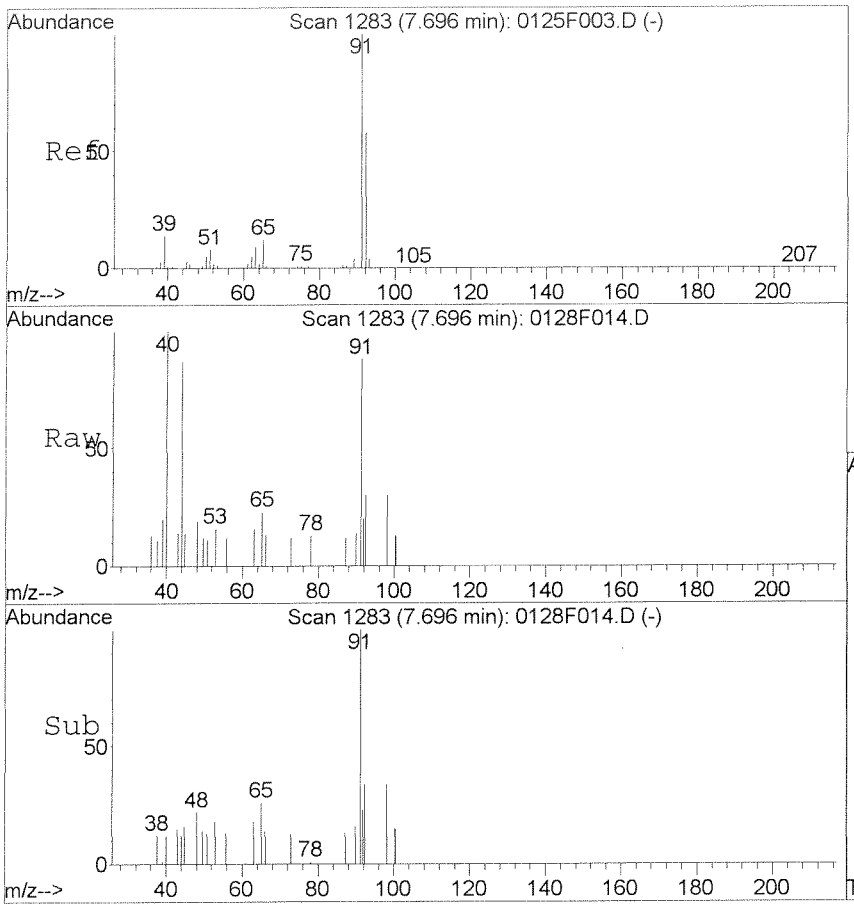


#11
Acetone
Concen: 1.30 PPB
RT: 2.40 min Scan# 270
Delta R.T. 0.00 min
Lab File: 0128F014.D
Acq: 28 Jan 2011 7:57 pm

Tgt Ion: 43 Resp: 2397

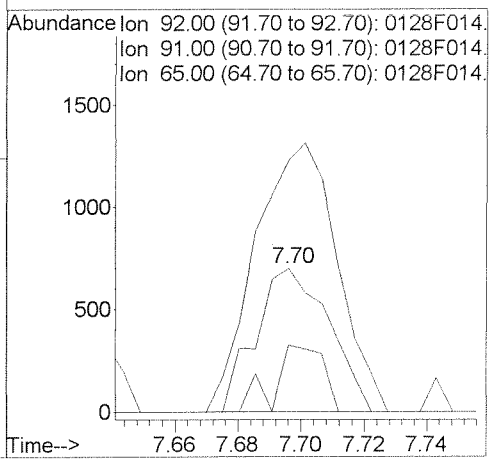
Ion	Ratio	Lower	Upper
43	100		
58	29.4	0.0	56.6
42	27.9	0.0	38.3

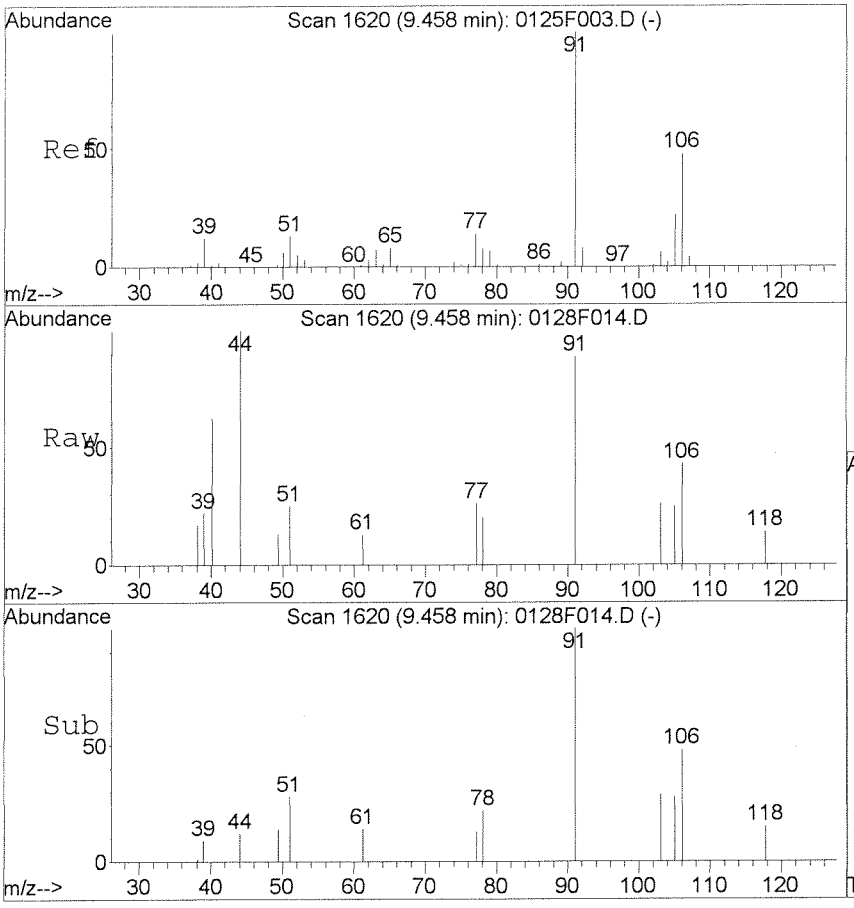




#34
Toluene
Concen: 0.05 PPB
RT: 7.70 min Scan# 1283
Delta R.T. -0.00 min
Lab File: 0128F014.D
Acq: 28 Jan 2011 7:57 pm

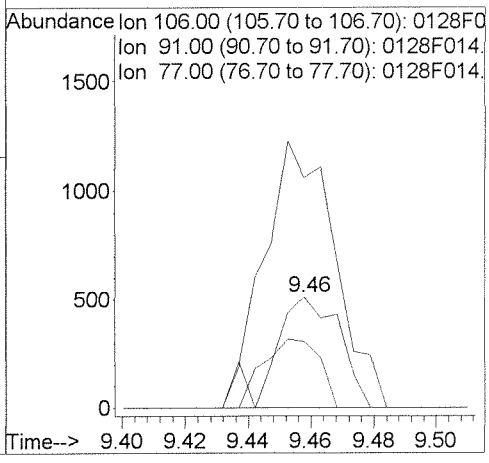
Tgt Ion: 92	Resp:	1120	
Ion	Ratio	Lower	Upper
92	100		
91	176.3	143.0	203.0
65	46.3	0.0	50.9

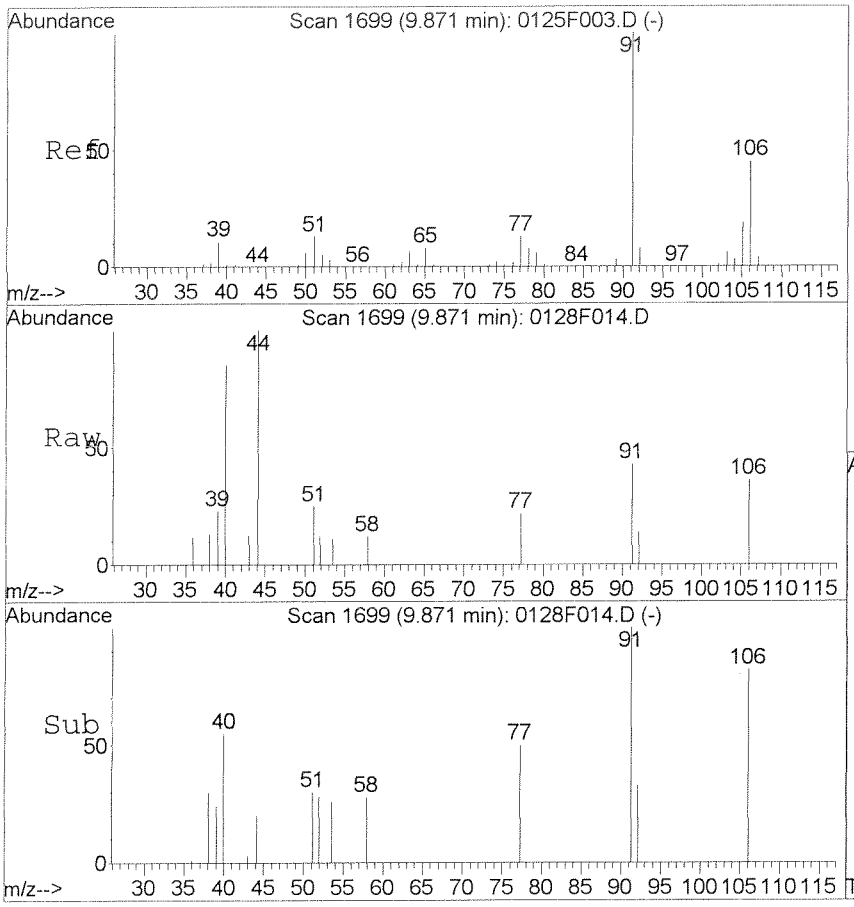




#43
m,p-Xylenes
Concen: 0.04 PPB
RT: 9.46 min Scan# 1620
Delta R.T. -0.00 min
Lab File: 0128F014.D
Acq: 28 Jan 2011 7:57 pm

Tgt Ion:106	Resp:	744	
Ion	Ratio	Lower	Upper
106	100		
91	207.0	178.5	238.5
77	59.8	0.0	58.6#

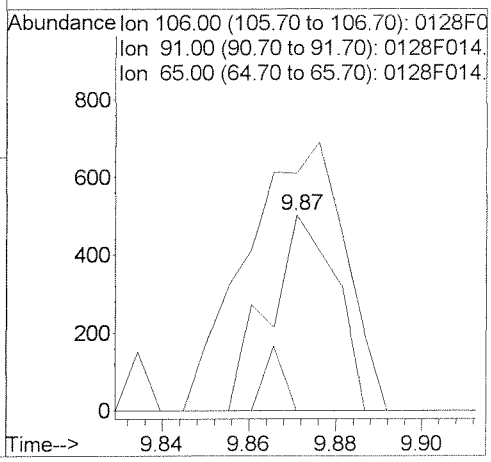




#44
o-Xylene
Concen: 0.03 PPB
RT: 9.87 min Scan# 1699
Delta R.T. -0.00 min
Lab File: 0128F014.D
Acq: 28 Jan 2011 7:57 pm

Tgt Ion:106 Resp: 538

Ion	Ratio	Lower	Upper
106	100		
91	121.3	191.9	251.9#
65	0.0	0.0	47.4



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: EB-012511
Lab Code: K1100692-003

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	**0.28**	J	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Volatile Organic Compounds

Sample Name:	EB-012511	**Units:**	ug/L
Lab Code:	K1100692-003	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	106	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	98	83-113	01/28/11	Acceptable
Dibromofluoromethane	107	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Exception Report

Data File: J:\MS23\DATA\012811\0128F015.D
Lab ID: K1100692-003
RunType: SMPL
Matrix: WATER

Date Acquired: 01/28/2011 20:26
Date Quantitated: 02/02/2011 08:07
Batch ID: KWG1100972
Analysis Method: 624
ListJoinID: LJ5789

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: [signature] 2/2/11

Secondary Review: HB 2-2-11

Quantitation Report

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**	01/25/2011	**Receive Date:**	01/26/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	K1100692
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996319	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:	Volatile Organic Compounds	**Report List ID:**	LJ5789
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:	J:\MS23\DATA\012811\0128F007.D	**Quant based on Report List**	

Data File:	J:\MS23\DATA\012811\0128F015.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 20:26	**Quant Date:**	02/02/2011 08:07	**Vial:**	14
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100692-003			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	384675	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	184679	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	143516	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.91	0.01	0.00	113	91578	10.70	107	71-115	OK	
1	Toluene-d8	7.62	0.00	0.00	98	368957	10.61	106	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	140339	9.83	98	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane	1.24	0.01	0.00	50	1284	0.0800	0.20	U	
1	Vinyl Chloride				62	0		0.19	U	
1	Bromomethane				96	0		0.20	U	
1	Chloroethane				49	0d		0.25	U	
1	Trichlorofluoromethane				101	0		0.16	U	
1	Acrolein				56	0		2.9	U	
1	1,1-Dichloroethene				96	0		0.18	U	
1	Methylene Chloride	2.80		0.00	84	602	0.0600	0.15	U	
1	Acrylonitrile				53	0		0.43	U	
1	trans-1,2-Dichloroethene				96	0		0.21	U	
1	1,1-Dichloroethane				63	0		0.15	U	
1	Chloroform	4.68		0.00	83	2197	0.1300	0.19	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.16	U	
1	Carbon Tetrachloride				117	0		0.13	U	
1	Benzene				78	0		0.20	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F015.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 20:26	**Quant Date:**	02/02/2011 08:07	**Vial:**	14
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100692-003			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,2-Dichloroethane (EDC)				62	0		0.17	U	
1	Trichloroethene (TCE)				95	0		0.17	U	
1	1,2-Dichloropropane				63	0		0.16	U	
1	Bromodichloromethane				83	0		0.15	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.31	U	
1	cis-1,3-Dichloropropene				75	0		0.15	U	
1	Toluene	7.70		0.00	92	6773	0.2800	0.28	J	
2	trans-1,3-Dichloropropene				75	0		0.13	U	
2	1,1,2-Trichloroethane				83	0d		0.23	U	
2	Tetrachloroethene (PCE)				164	0		0.19	U	
2	Dibromochloromethane				129	0		0.19	U	
2	Chlorobenzene				112	0		0.16	U	
2	Ethylbenzene				106	0		0.12	U	
2	Bromoform				173	0		0.43	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.28	U	
3	1,3-Dichlorobenzene				146	0		0.13	U	
3	1,4-Dichlorobenzene				146	0		0.13	U	
3	1,2-Dichlorobenzene				146	0		0.12	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F015.D Vial: 14
Acq On : 28 Jan 2011 8:26 pm Operator: KR
Sample : K692-003 Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 08:07:38 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	384675	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	184679	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	143516	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.91	113	91578	10.70	PPB		0.00
Spiked Amount 10.000			Recovery = 107.00%				
24) 1,2-Dichloroethane-d4	5.40	65	119382	10.40	PPB		0.00
Spiked Amount 10.000			Recovery = 104.00%				
33) Toluene-d8	7.62	98	368957	10.61	PPB		0.00
Spiked Amount 10.000			Recovery = 106.10%				
47) 4-Bromofluorobenzene	10.44	95	140339	9.83	PPB		0.00
Spiked Amount 10.000			Recovery = 98.30%				
Target Compounds							Qvalue
3) Chloromethane	1.24	50	1284	0.08	PPB		83
11) Acetone	2.40	43	4641	2.56	PPB		91
13) Methylene Chloride	2.80	84	602	0.06	PPB	#	69
20) Chloroform	4.68	83	2197	0.13	PPB		86
34) Toluene	7.70	92	6773	0.28	PPB		87
43) m,p-Xylenes	9.46	106	1351	0.07	PPB	#	72
44) o-Xylene	9.87	106	595	0.03	PPB	#	41

(#) = qualifier out of range (m) = manual integration

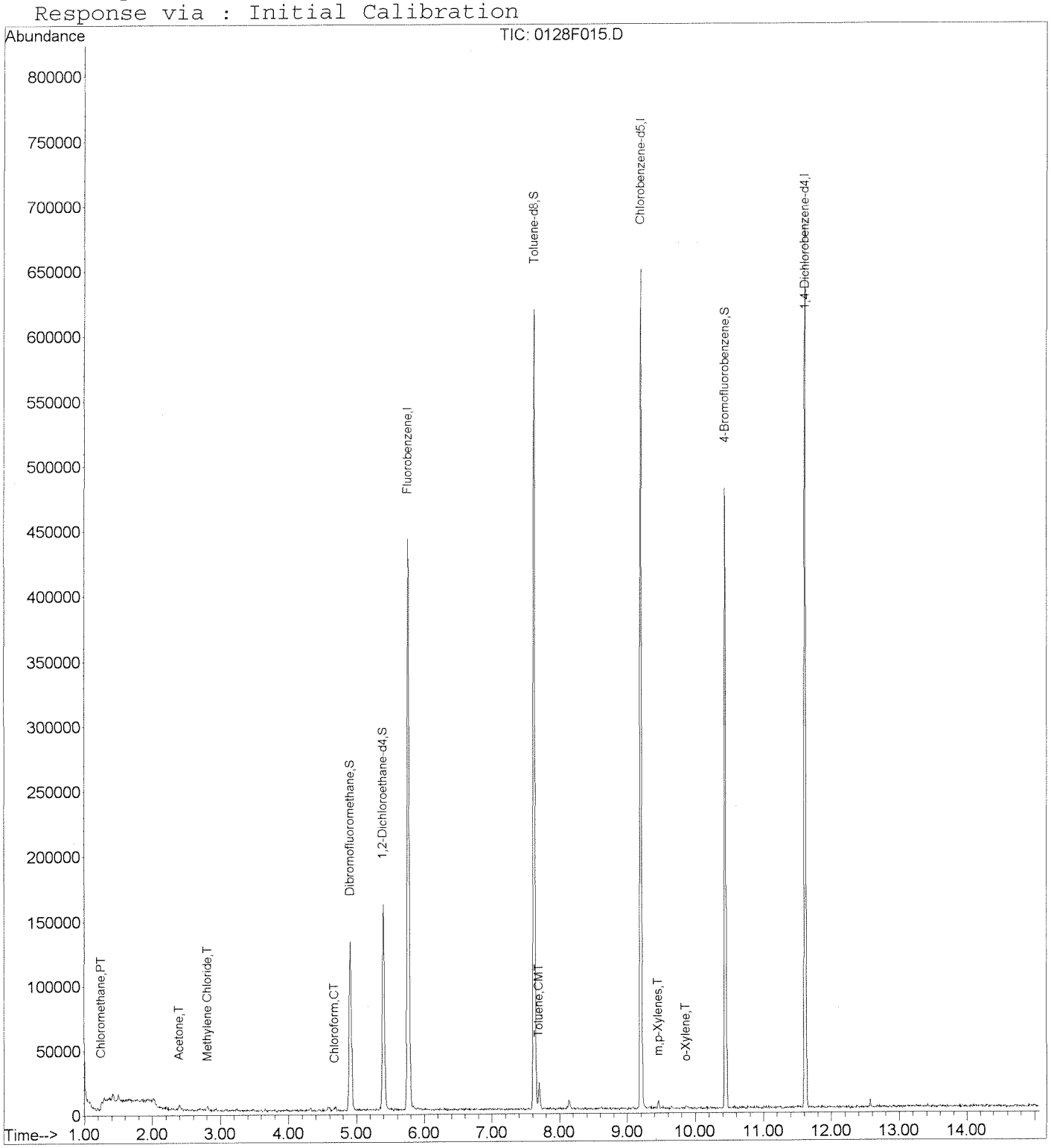
Quantitation Report (QT Reviewed)

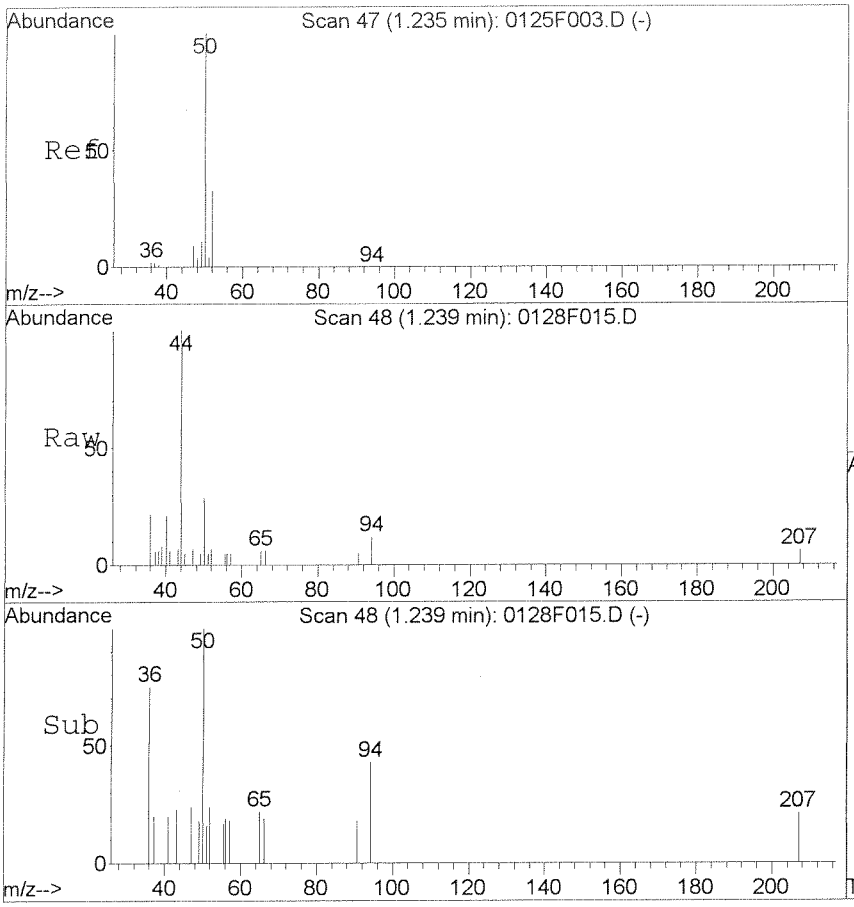
Data File : J:\MS23\DATA\012811\0128F015.D
Acq On : 28 Jan 2011 8:26 pm
Sample : K692-003
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 8:07 2011

Vial: 14
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration

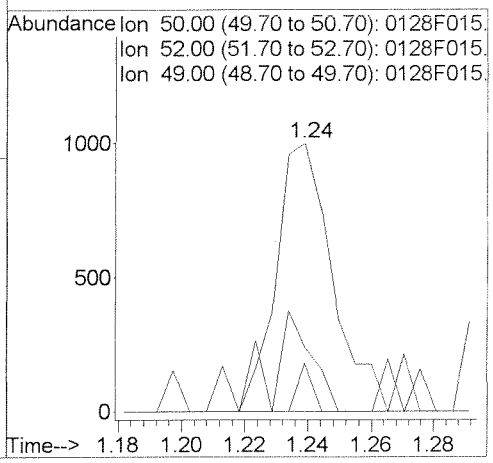


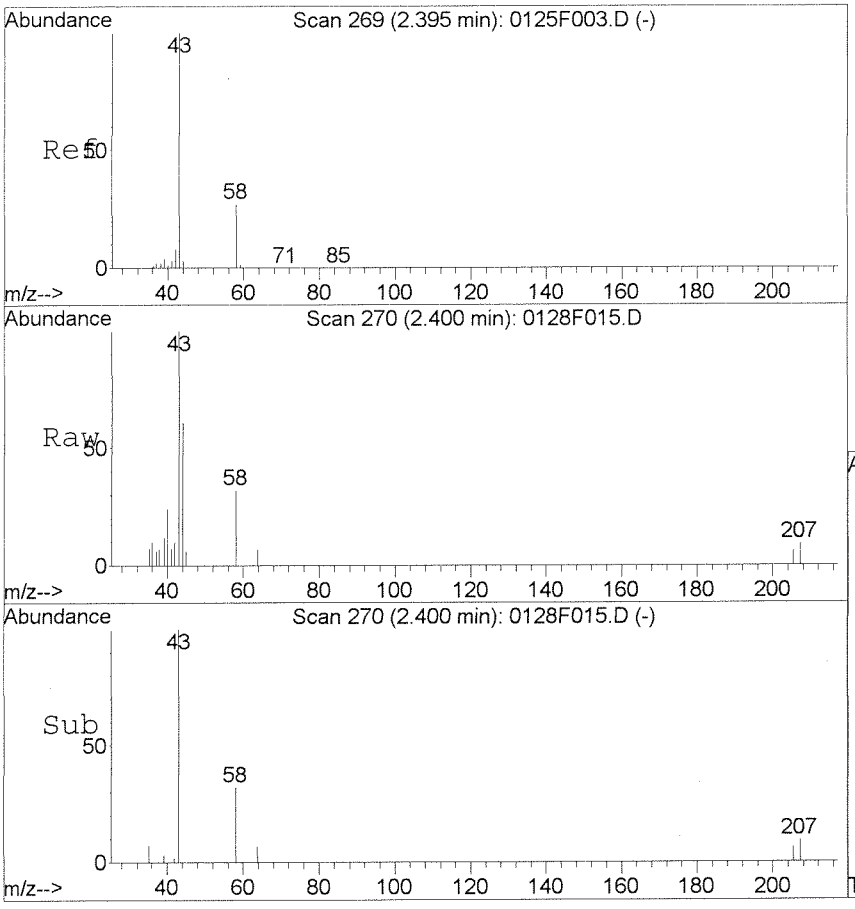


#3
Chloromethane
Concen: 0.08 PPB
RT: 1.24 min Scan# 48
Delta R.T. 0.00 min
Lab File: 0128F015.D
Acq: 28 Jan 2011 8:26 pm

Tgt Ion: 50 Resp: 1284

Ion	Ratio	Lower	Upper
50	100		
52	24.0	3.1	63.1
49	18.0	0.0	41.2

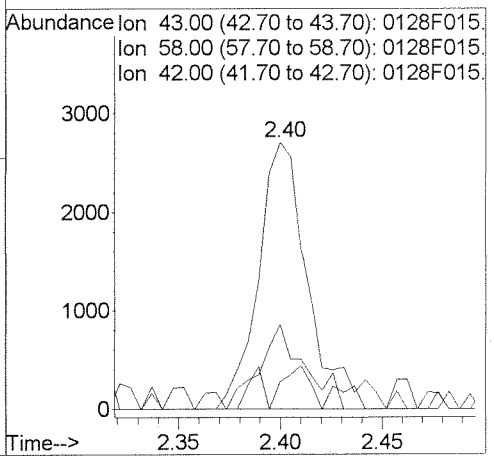


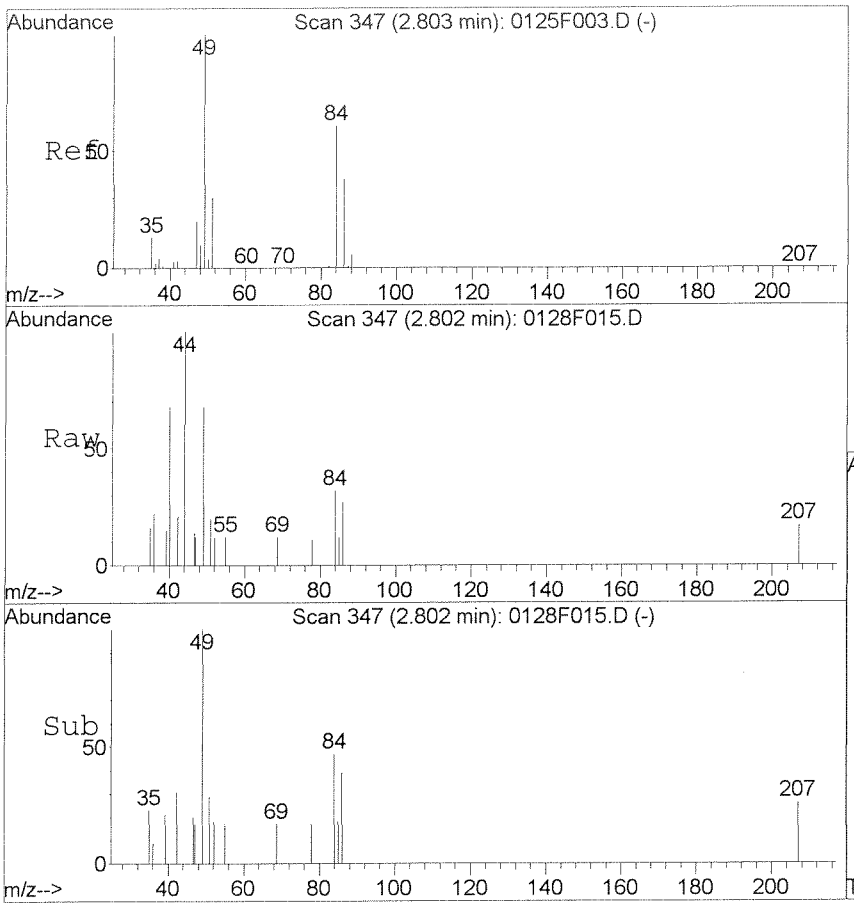


#11
Acetone
Concen: 2.56 PPB
RT: 2.40 min Scan# 270
Delta R.T. 0.00 min
Lab File: 0128F015.D
Acq: 28 Jan 2011 8:26 pm

Tgt Ion: 43 Resp: 4641

Ion	Ratio	Lower	Upper
43	100		
58	31.7	0.0	56.6
42	10.2	0.0	38.3

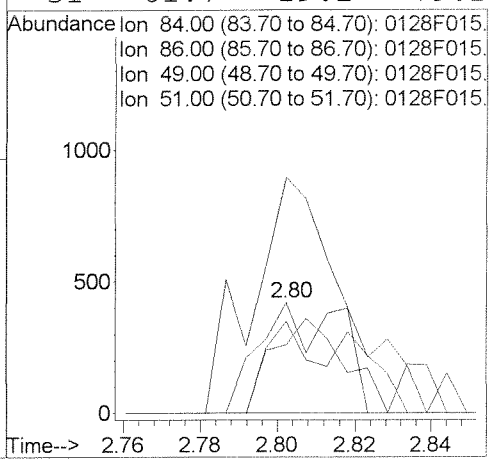


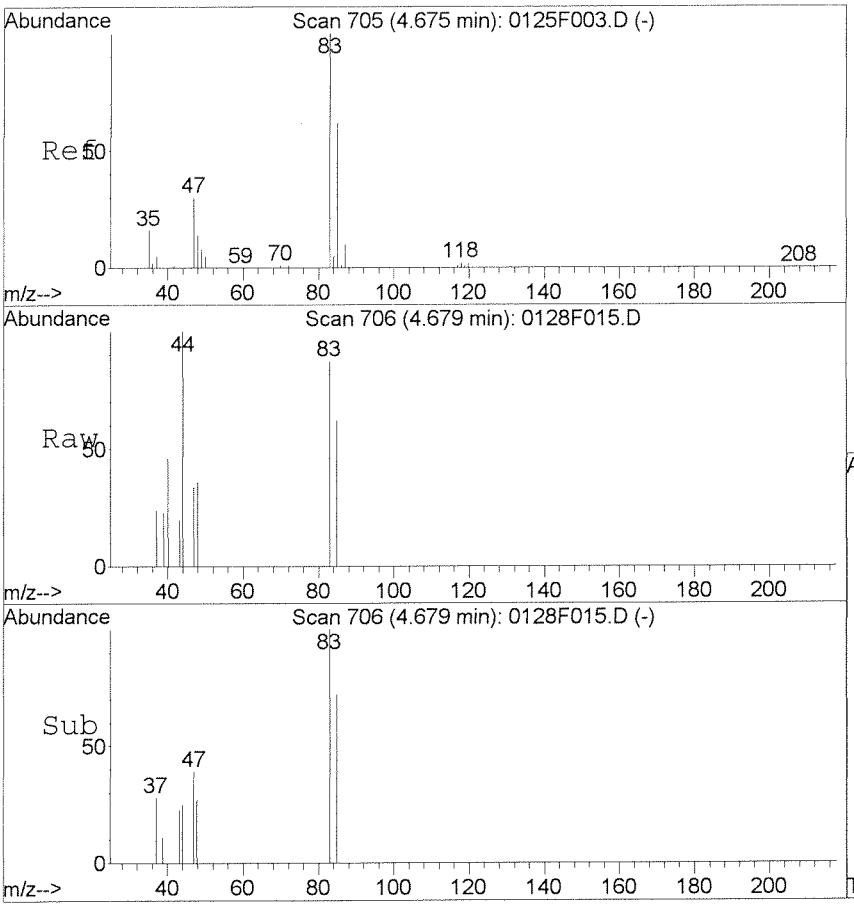


#13
Methylene Chloride
Concen: 0.06 PPB
RT: 2.80 min Scan# 347
Delta R.T. -0.00 min
Lab File: 0128F015.D
Acq: 28 Jan 2011 8:26 pm

Tgt Ion: 84 Resp: 602

Ion	Ratio	Lower	Upper
84	100		
86	83.1	32.3	92.3
49	213.1	134.3	194.3#
51	61.7	19.2	79.2

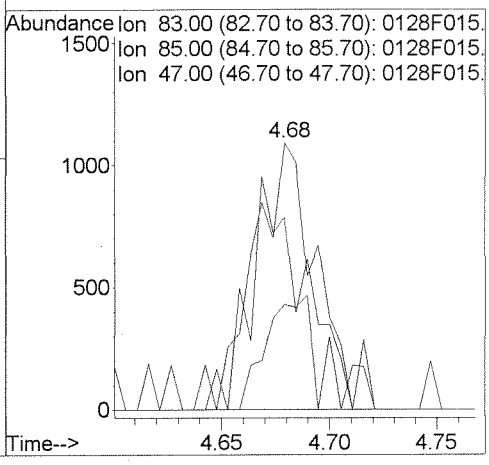


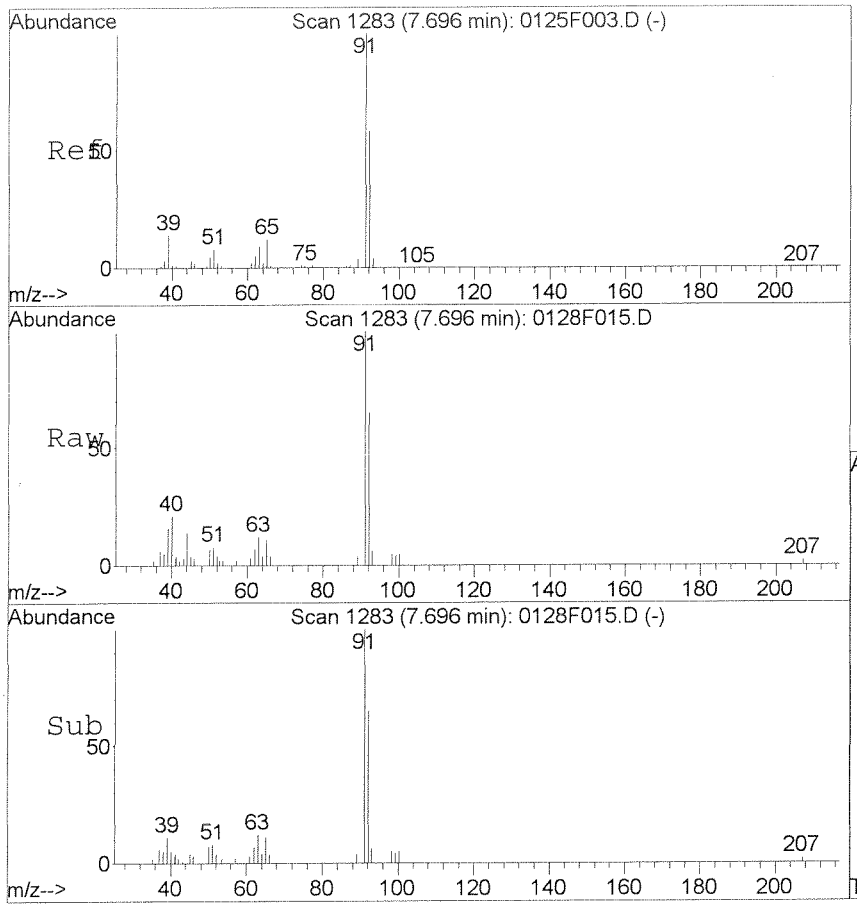


#20
Chloroform
Concen: 0.13 PPB
RT: 4.68 min Scan# 706
Delta R.T. 0.00 min
Lab File: 0128F015.D
Acq: 28 Jan 2011 8:26 pm

Tgt Ion: 83 Resp: 2197

Ion	Ratio	Lower	Upper
83	100		
85	72.2	31.9	91.9
47	39.4	0.3	60.3

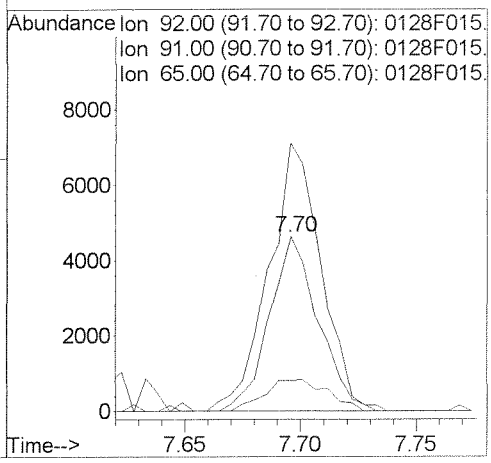


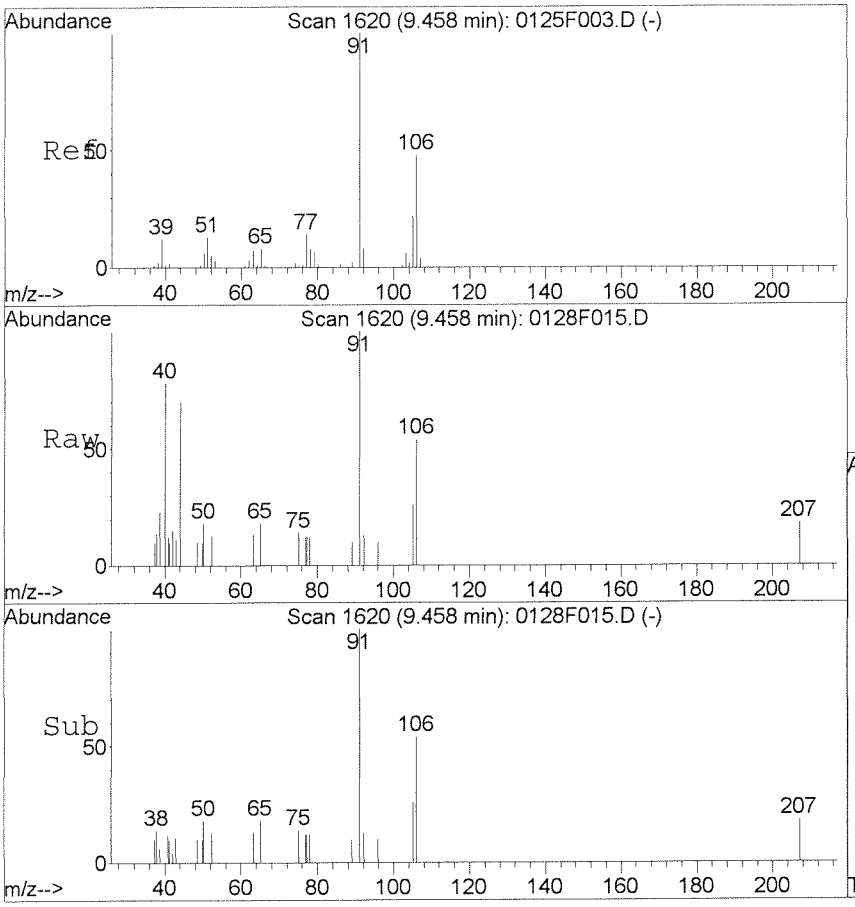


#34
Toluene
Concen: 0.28 PPB
RT: 7.70 min Scan# 1283
Delta R.T. -0.00 min
Lab File: 0128F015.D
Acq: 28 Jan 2011 8:26 pm

Tgt Ion: 92 Resp: 6773

Ion	Ratio	Lower	Upper
92	100		
91	153.5	143.0	203.0
65	17.2	0.0	50.9

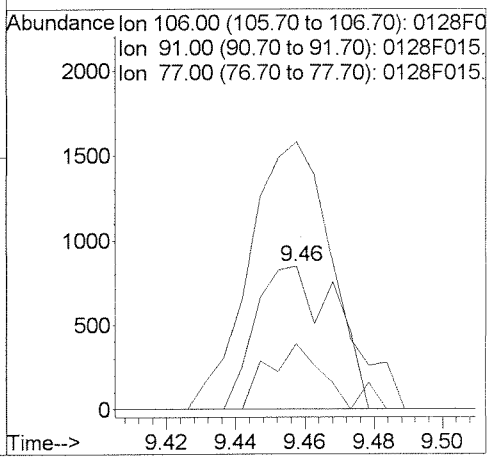


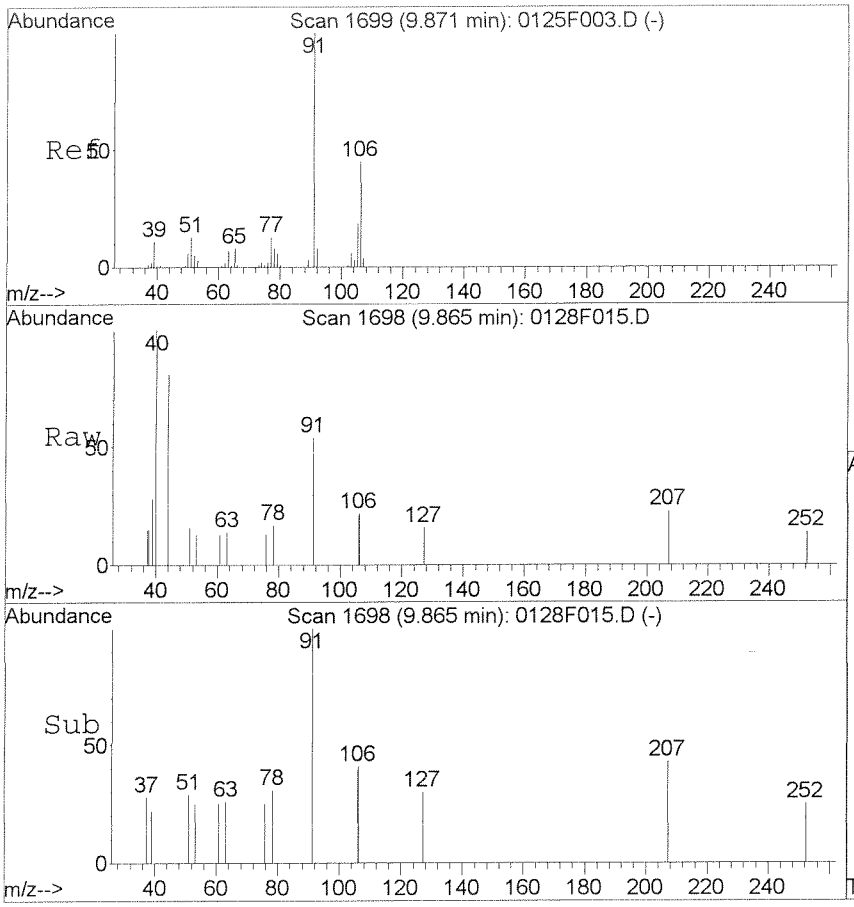


#43
m,p-Xylenes
Concen: 0.07 PPB
RT: 9.46 min Scan# 1620
Delta R.T. -0.00 min
Lab File: 0128F015.D
Acq: 28 Jan 2011 8:26 pm

Tgt Ion:106 Resp: 1351

Ion	Ratio	Lower	Upper
106	100		
91	166.7	178.5	238.5#
77	45.8	0.0	58.6

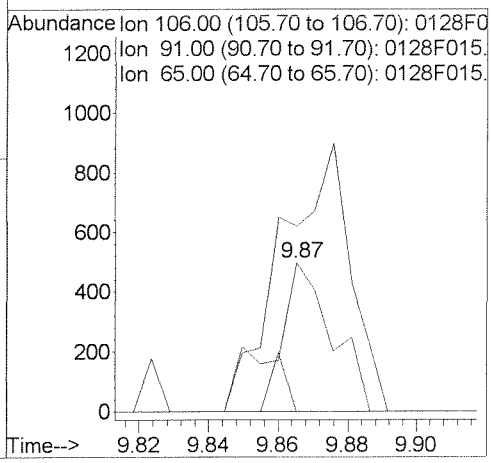




#44
o-Xylene
Concen: 0.03 PPB
RT: 9.87 min Scan# 1698
Delta R.T. -0.01 min
Lab File: 0128F015.D
Acq: 28 Jan 2011 8:26 pm

Tgt Ion:106 Resp: 595

Ion	Ratio	Lower	Upper
106	100		
91	124.5	191.9	251.9#
65	0.0	0.0	47.4



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Volatile Organic Compounds

Sample Name: Trip Blank
Lab Code: K1100692-004

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 624

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Volatile Organic Compounds

Sample Name:	Trip Blank	**Units:**	ug/L
Lab Code:	K1100692-004	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	107	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	98	83-113	01/28/11	Acceptable
Dibromofluoromethane	106	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Exception Report

Data File: J:\MS23\DATA\012811\0128F016.D
Lab ID: K1100692-004
RunType: SMPL
Matrix: WATER

Date Acquired: 01/28/2011 20:55
Date Quantitated: 02/02/2011 08:08
Batch ID: KWG1100972
Analysis Method: 624
ListJoinID: LJ5789

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: KA 2/2/11

Secondary Review: HB 2-2-11

Quantitation Report

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**	01/25/2011	**Receive Date:**	01/26/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	K1100692
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996320	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:	Volatile Organic Compounds	**Report List ID:**	LJ5789
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:	J:\MS23\DATA\012811\0128F007.D	**Quant based on Report List**	

Data File:	J:\MS23\DATA\012811\0128F016.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 20:55	**Quant Date:**	02/02/2011 08:08	**Vial:**	15
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100692-004			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	378436	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	179573	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	143210	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.91	0.01	0.00	113	89237	10.60	106	71-115	OK	
1	Toluene-d8	7.63	0.01	0.00	98	364776	10.66	107	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	136330	9.82	98	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Chloromethane	1.24	0.01	0.00	50	1584	0.1000	0.20	U	
1	Vinyl Chloride				62	0		0.19	U	
1	Bromomethane				96	0		0.20	U	
1	Chloroethane				49	0d		0.25	U	
1	Trichlorofluoromethane				101	0		0.16	U	
1	Acrolein				56	0		2.9	U	
1	1,1-Dichloroethene				96	0		0.18	U	
1	Methylene Chloride	2.81	0.01	0.00	84	710	0.0700	0.15	U	
1	Acrylonitrile				53	0		0.43	U	
1	trans-1,2-Dichloroethene				96	0		0.21	U	
1	1,1-Dichloroethane				63	0		0.15	U	
1	Chloroform				83	0		0.19	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.16	U	
1	Carbon Tetrachloride				117	0		0.13	U	
1	Benzene				78	0		0.20	U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F016.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 20:55	**Quant Date:**	02/02/2011 08:08	**Vial:**	15
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100692-004			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,2-Dichloroethane (EDC)				62	0		0.17	U	
1	Trichloroethene (TCE)				95	0		0.17	U	
1	1,2-Dichloropropane				63	0		0.16	U	
1	Bromodichloromethane				83	0		0.15	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.31	U	
1	cis-1,3-Dichloropropene				75	0		0.15	U	
1	Toluene	7.69	-0.01	0.00	92	525	0.0200	0.13	U	
2	trans-1,3-Dichloropropene				75	0		0.13	U	
2	1,1,2-Trichloroethane				83	0		0.23	U	
2	Tetrachloroethene (PCE)				164	0		0.19	U	
2	Dibromochloromethane				129	0		0.19	U	
2	Chlorobenzene				112	0		0.16	U	
2	Ethylbenzene				106	0		0.12	U	
2	Bromoform				173	0		0.43	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.28	U	
3	1,3-Dichlorobenzene				146	0		0.13	U	
3	1,4-Dichlorobenzene				146	0		0.13	U	
3	1,2-Dichlorobenzene				146	0		0.12	U	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F016.D Vial: 15
Acq On : 28 Jan 2011 8:55 pm Operator: KR
Sample : K692-004 TB44411 Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 08:08:25 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	378436	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	179573	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	143210	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.91	113	89237	10.60	PPB		0.00
Spiked Amount 10.000			Recovery =	106.00%			
24) 1,2-Dichloroethane-d4	5.40	65	116292	10.30	PPB		0.00
Spiked Amount 10.000			Recovery =	103.00%			
33) Toluene-d8	7.63	98	364776	10.66	PPB		0.00
Spiked Amount 10.000			Recovery =	106.60%			
47) 4-Bromofluorobenzene	10.44	95	136330	9.82	PPB		0.00
Spiked Amount 10.000			Recovery =	98.20%			
Target Compounds							Qvalue
3) Chloromethane	1.24	50	1584	0.10	PPB		81
11) Acetone	2.40	43	2816	1.58	PPB		97
13) Methylene Chloride	2.81	84	710	0.07	PPB	#	73
34) Toluene	7.69	92	525	0.02	PPB	#	56

(#) = qualifier out of range (m) = manual integration

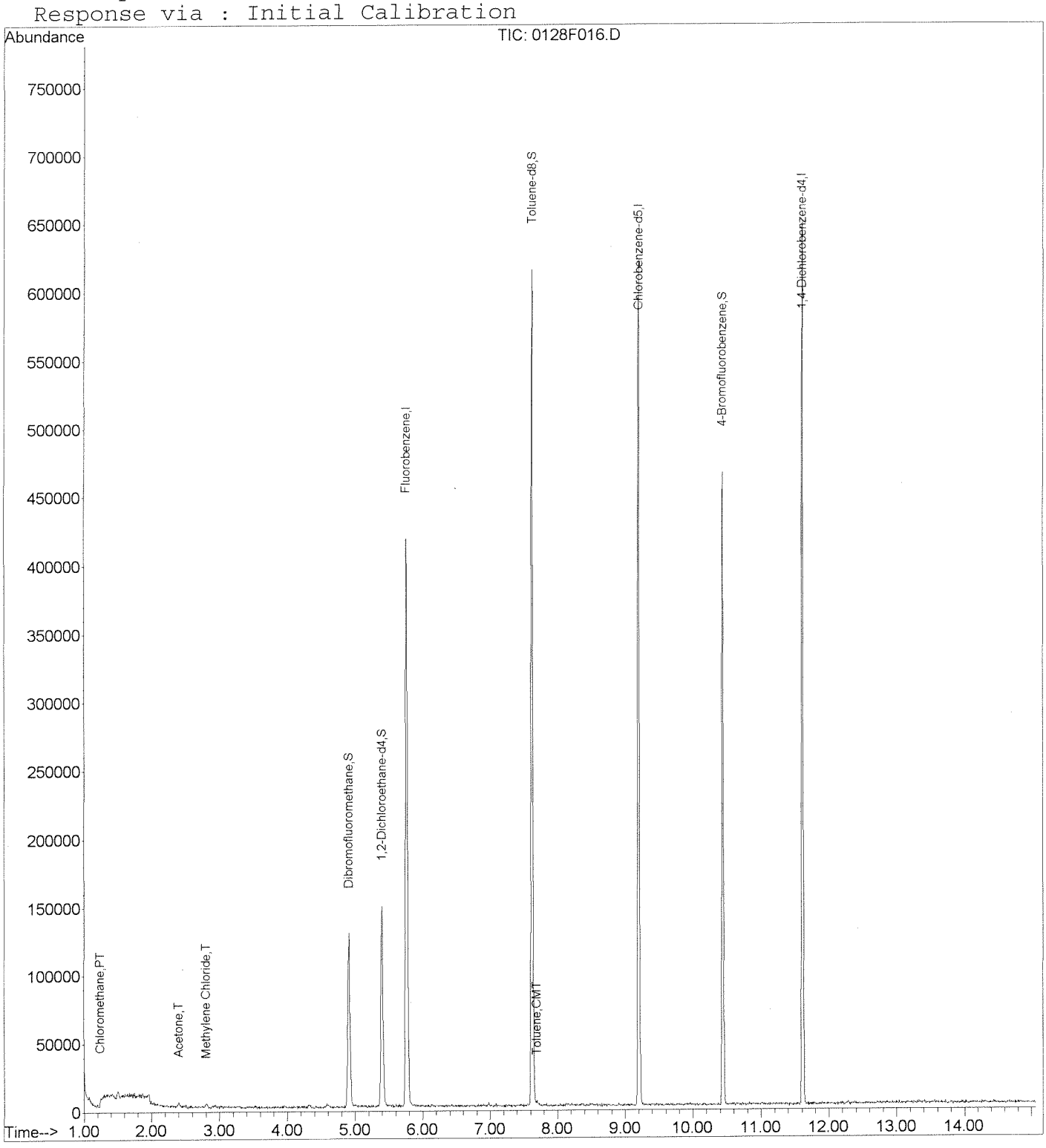
Quantitation Report (QT Reviewed)

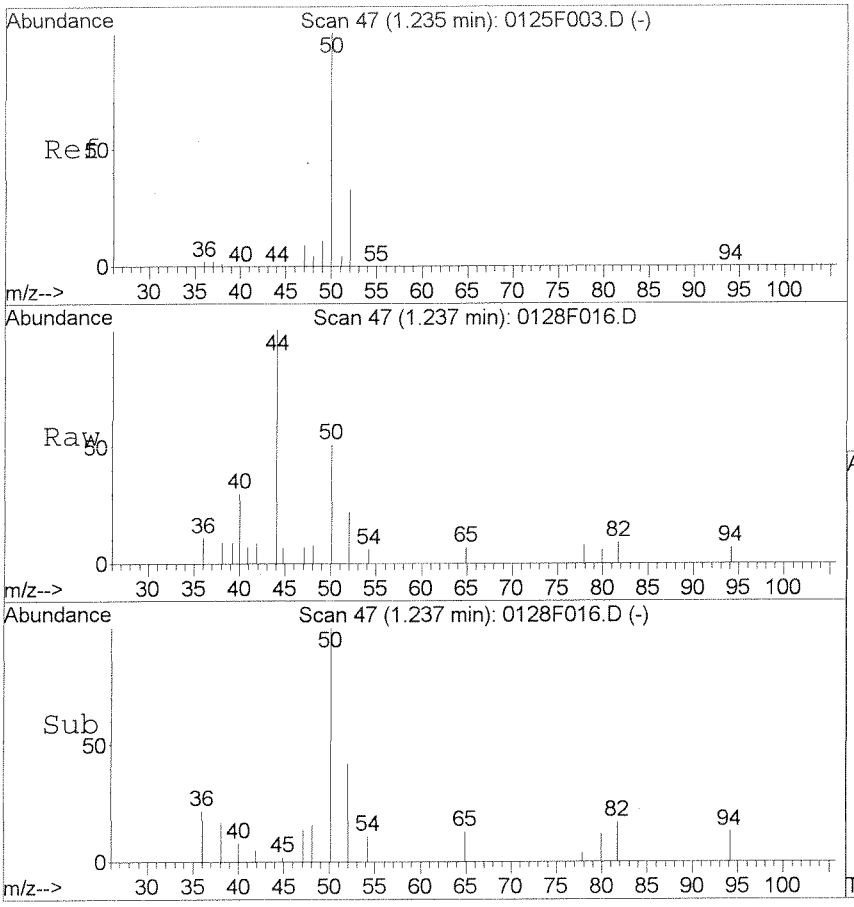
Data File : J:\MS23\DATA\012811\0128F016.D
Acq On : 28 Jan 2011 8:55 pm
Sample : K692-004 TB44411
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 8:08 2011

Vial: 15
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration

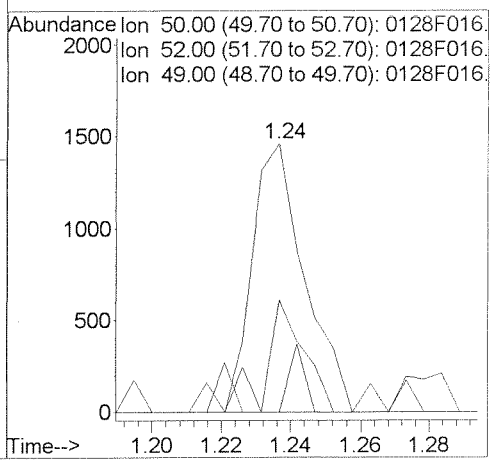


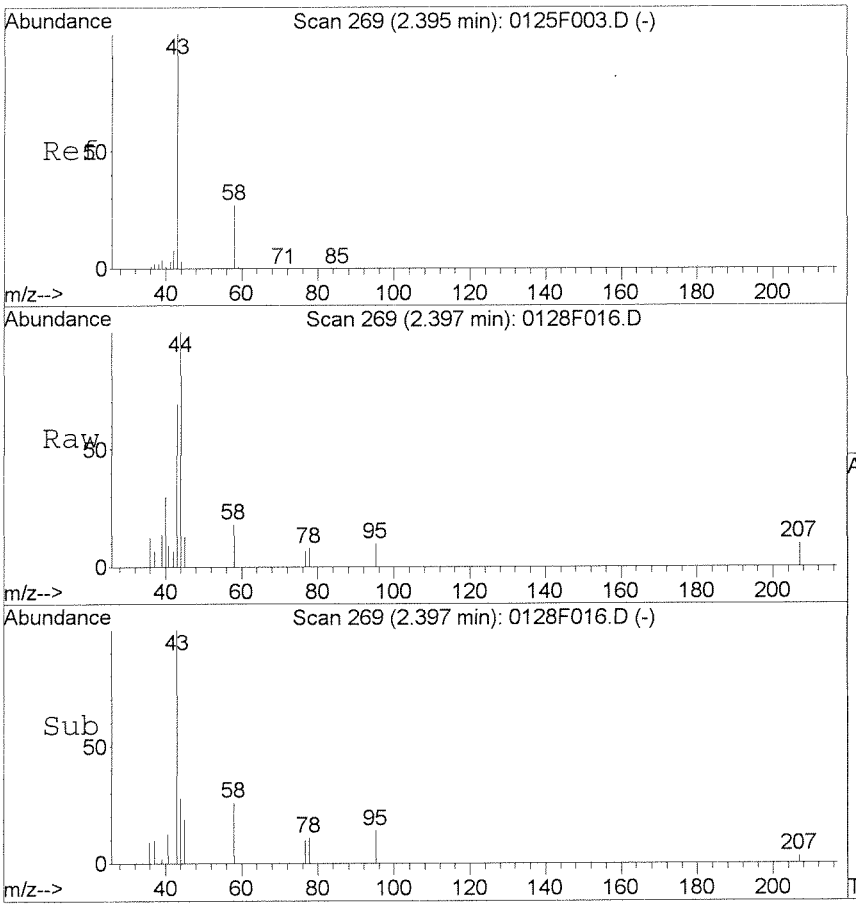


#3
Chloromethane
Concen: 0.10 PPB
RT: 1.24 min Scan# 47
Delta R.T. 0.00 min
Lab File: 0128F016.D
Acq: 28 Jan 2011 8:55 pm

Tgt Ion: 50 Resp: 1584

Ion	Ratio	Lower	Upper
50	100		
52	42.0	3.1	63.1
49	0.0	0.0	41.2

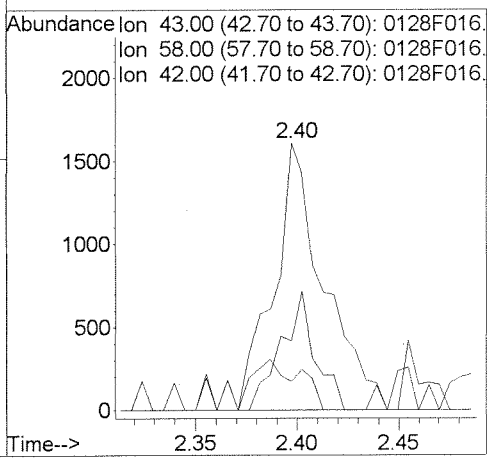


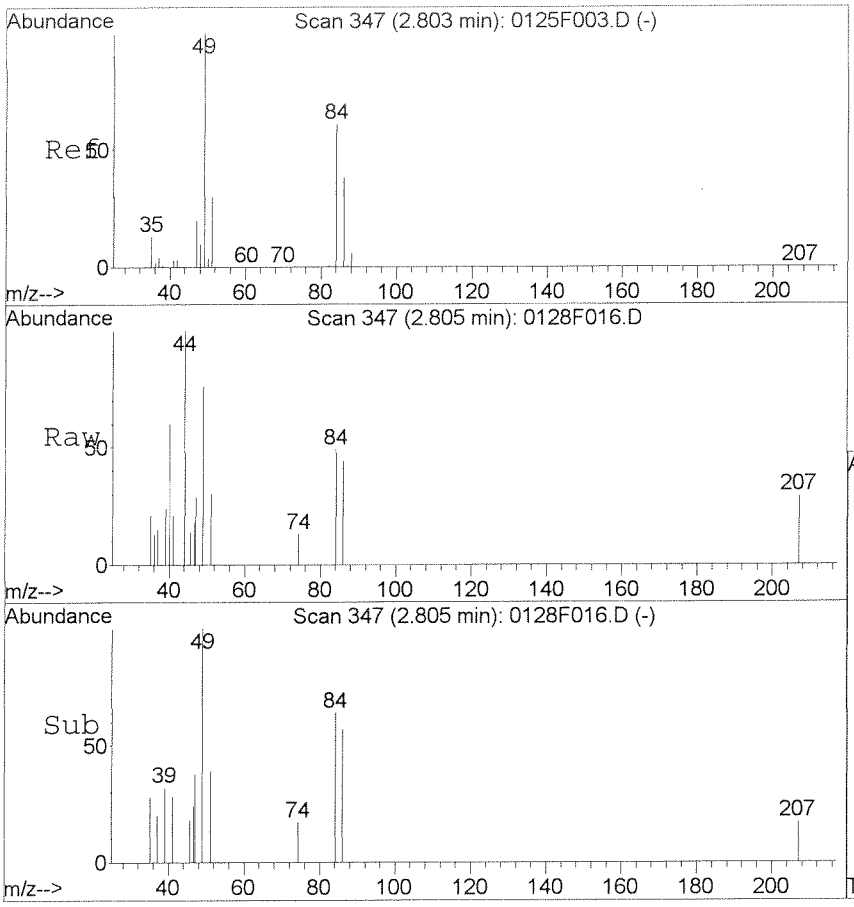


#11
Acetone
Concen: 1.58 PPB
RT: 2.40 min Scan# 269
Delta R.T. 0.00 min
Lab File: 0128F016.D
Acq: 28 Jan 2011 8:55 pm

Tgt Ion: 43 Resp: 2816

Ion	Ratio	Lower	Upper
43	100		
58	25.9	0.0	56.6
42	10.8	0.0	38.3

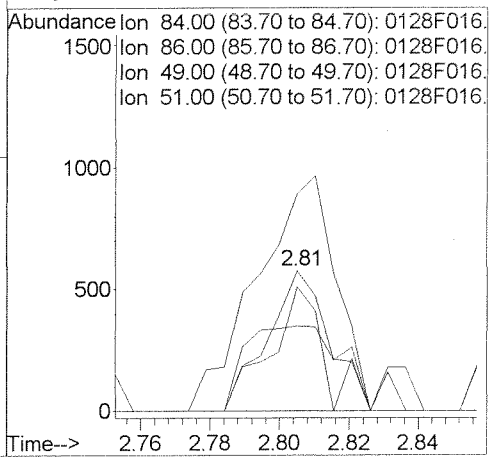


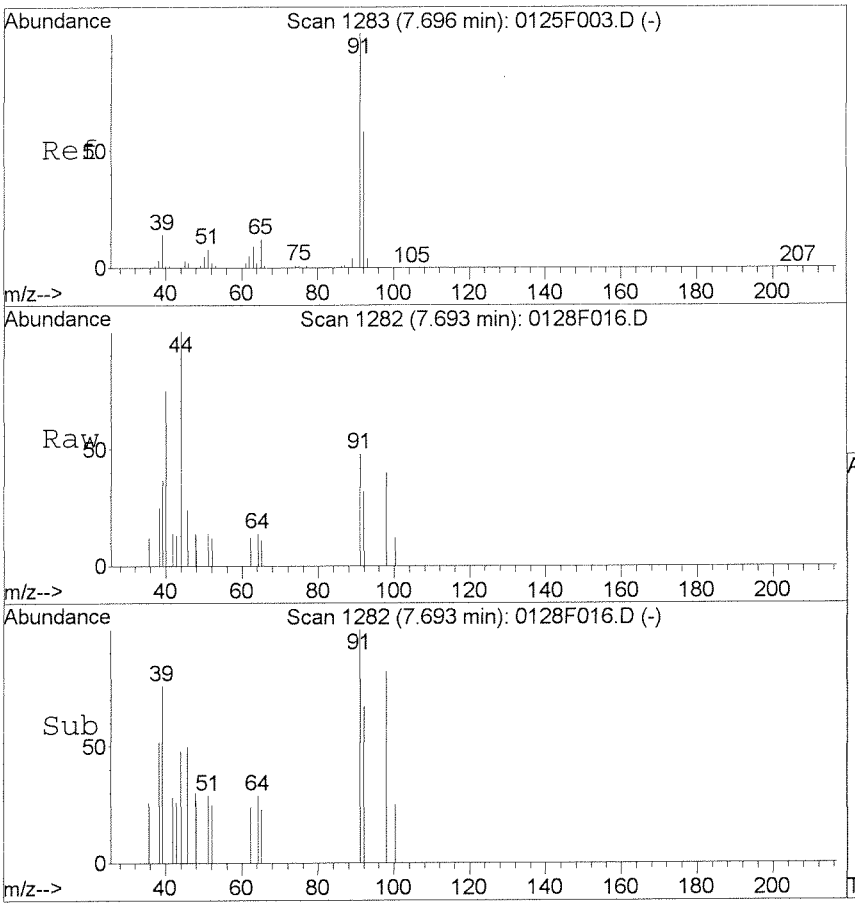


#13
Methylene Chloride
Concen: 0.07 PPB
RT: 2.81 min Scan# 347
Delta R.T. 0.00 min
Lab File: 0128F016.D
Acq: 28 Jan 2011 8:55 pm

Tgt Ion: 84 Resp: 710

Ion	Ratio	Lower	Upper
84	100		
86	88.7	32.3	92.3
49	127.7	134.3	194.3#
51	60.5	19.2	79.2

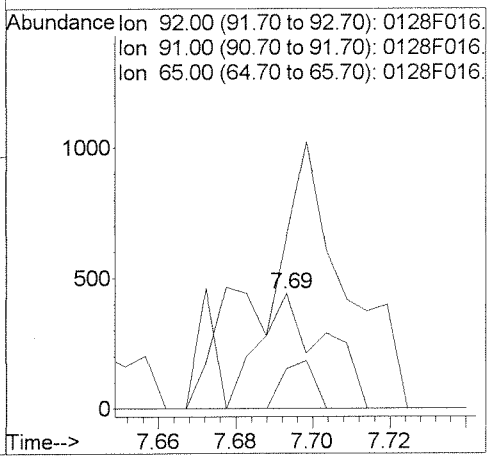




#34
Toluene
Concen: 0.02 PPB
RT: 7.69 min Scan# 1282
Delta R.T. -0.00 min
Lab File: 0128F016.D
Acq: 28 Jan 2011 8:55 pm

Tgt Ion: 92 Resp: 525

Ion	Ratio	Lower	Upper
92	100		
91	109.3	143.0	203.0#
65	34.9	0.0	50.9



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1100975-4

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Method Blank
Lab Code: KWG1100975-4

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	105	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	102	83-113	01/28/11	Acceptable
Dibromofluoromethane	106	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Exception Report

Data File: J:\MS23\DATA\012811\0128F007.D
Lab ID: KWG1100975-4
RunType: MB
Matrix: WATER

Date Acquired: 01/28/2011 16:36
Date Quantitated: 02/02/2011 07:56
Batch ID: KWG1100972
Analysis Method: 624
MethodJoinID: MJ158

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: KW

Secondary Review: HB 2-2-11

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**		**Receive Date:**	02/02/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996326	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:			
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:		**Quant based on Method**	

Data File:	J:\MS23\DATA\012811\0128F007.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 16:36	**Quant Date:**	02/02/2011 07:56	**Vial:**	6
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG1100975-4			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	399883	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	184783	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	148744	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.91	0.01	0.00	113	93925	10.55	106	71-115	OK	
1	1,2-Dichloroethane-d4	5.39	-0.01	0.00	65	124330	10.42	104	69-116	OK	
1	Toluene-d8	7.63	0.01	0.00	98	380363	10.52	105	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	145455	10.18	102	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane				85	0		0.18	U	
1	Chloromethane	1.24	0.01	0.00	50	1267	0.0800	0.20	U	
1	Vinyl Chloride				62	0		0.19	U	
1	Bromomethane				96	0		0.20	U	
1	Chloroethane	~~1.50~~	-0.15	~~0.03~~	~~49~~	~~751~~	~~0.2800~~	~~0.280~~	~~J~~	
1	Trichlorofluoromethane				101	0		0.16	U	
1	Acrolein				56	0		2.9	U	
1	Trichlorotrifluoroethane				151	0		0.23	U	
1	1,1-Dichloroethene				96	0		0.18	U	
1	Acetone	2.40		0.00	43	8835	4.70	4.70	J	
1	Carbon Disulfide	2.47		0.00	76	569	0.0200	0.16	U	
1	Methylene Chloride				84	0		0.15	U	
1	Acrylonitrile				53	0		0.43	U	
1	trans-1,2-Dichloroethene				96	0		0.21	U	

deleted mb2:2/11

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F007.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 16:36	**Quant Date:**	02/02/2011 07:56	**Vial:**	6
Run Type:	MB			**Dilution:**	1.0
Lab ID:	KWG1100975-4			**Soln Conc. Units:**	PPB

Target Compounds **Final Conc. Units:** ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1-Dichloroethane				63	0		0.15	U	
1	Vinyl Acetate				86	0		1.1	U	
1	cis-1,2-Dichloroethene				96	0		0.19	U	
1	2-Butanone (MEK)				72	0		3.5	U	
1	Chloroform				83	0		0.19	U	
1	1,1,1-Trichloroethane (TCA)				97	0		0.16	U	
1	Carbon Tetrachloride				117	0		0.13	U	
1	Benzene				78	0		0.20	U	
1	1,2-Dichloroethane (EDC)				62	0		0.17	U	
1	Trichloroethene (TCE)				95	0		0.17	U	
1	1,2-Dichloropropane				63	0		0.16	U	
1	Bromodichloromethane				83	0		0.15	U	
1	2-Chloroethyl Vinyl Ether				63	0		0.31	U	
1	cis-1,3-Dichloropropene				75	0		0.15	U	
1	4-Methyl-2-pentanone (MIBK)				58	0		3.3	U	
1	Toluene				92	0		0.13	U	
2	trans-1,3-Dichloropropene				75	0		0.13	U	
2	1,1,2-Trichloroethane				83	0		0.23	U	
2	Tetrachloroethene (PCE)				164	0		0.19	U	
2	2-Hexanone				43	0		3.0	U	
2	Dibromochloromethane				129	0		0.19	U	
2	Chlorobenzene				112	0		0.16	U	
2	Ethylbenzene				106	0		0.12	U	
2	m,p-Xylenes				106	0		0.29	U	
2	o-Xylene				106	0		0.15	U	
2	Styrene				103	0		0.11	U	
2	Bromoform				173	0		0.43	U	
3	1,1,2,2-Tetrachloroethane				83	0		0.28	U	
3	1,3-Dichlorobenzene	11.54	0.01	0.00	146	546	0.0300	0.13	U	
3	1,4-Dichlorobenzene	11.64	0.01	0.00	146	470**m**	0.0200	0.13	U	
3	1,2-Dichlorobenzene	12.01		0.00	146	691	0.0400	0.12	U	
	Isopropyl Acetate				0	0		10	U	NR
	Ethyl Acetate				0	0		10	U	NR
	Bis(chloromethyl) Ether				0	0		10	U	NR
	Amyl Acetate				0	0		10	U	NR

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F007.D Vial: 6
Acq On : 28 Jan 2011 4:36 pm Operator: KR
Sample : MB Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 07:56:00 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	399883	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	184783	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	148744	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.91	113	93925	10.55	PPB		0.00
Spiked Amount 10.000			Recovery =	105.50%			
24) 1,2-Dichloroethane-d4	5.39	65	124330	10.42	PPB		0.00
Spiked Amount 10.000			Recovery =	104.20%			
33) Toluene-d8	7.63	98	380363	10.52	PPB		0.00
Spiked Amount 10.000			Recovery =	105.20%			
47) 4-Bromofluorobenzene	10.44	95	145455	10.18	PPB		0.00
Spiked Amount 10.000			Recovery =	101.80%			
Target Compounds							Qvalue
3) Chloromethane	1.24	50	1267	0.08	PPB		89
6) Chloroethane	1.50	49	751	0.28	PPB	#	1
11) Acetone	2.40	43	8835	4.70	PPB		94
12) Carbon Disulfide	2.47	76	569	0.02	PPB		80
51) 1,3-Dichlorobenzene	11.54	146	546	0.03	PPB	#	68
52) 1,4-Dichlorobenzene	11.64	146	470m	0.02	PPB		
53) 1,2-Dichlorobenzene	12.01	146	691	0.04	PPB	#	70

(#) = qualifier out of range (m) = manual integration
0128F007.D 011211624.M Wed Feb 02 07:56:47 2011 Page 1

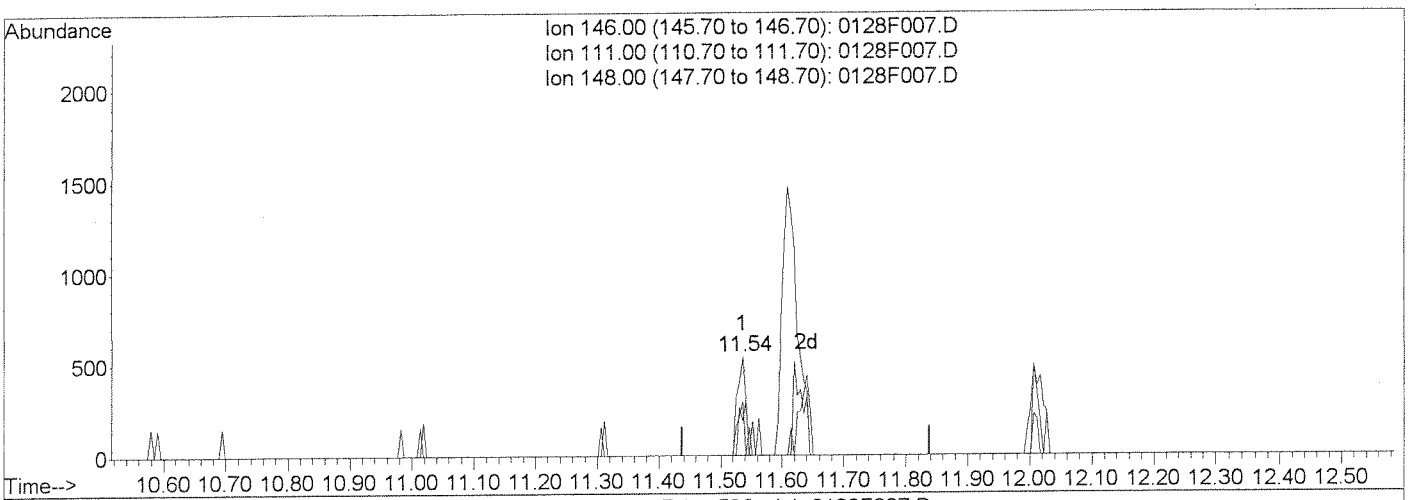
Quantitation Report (Qedit)

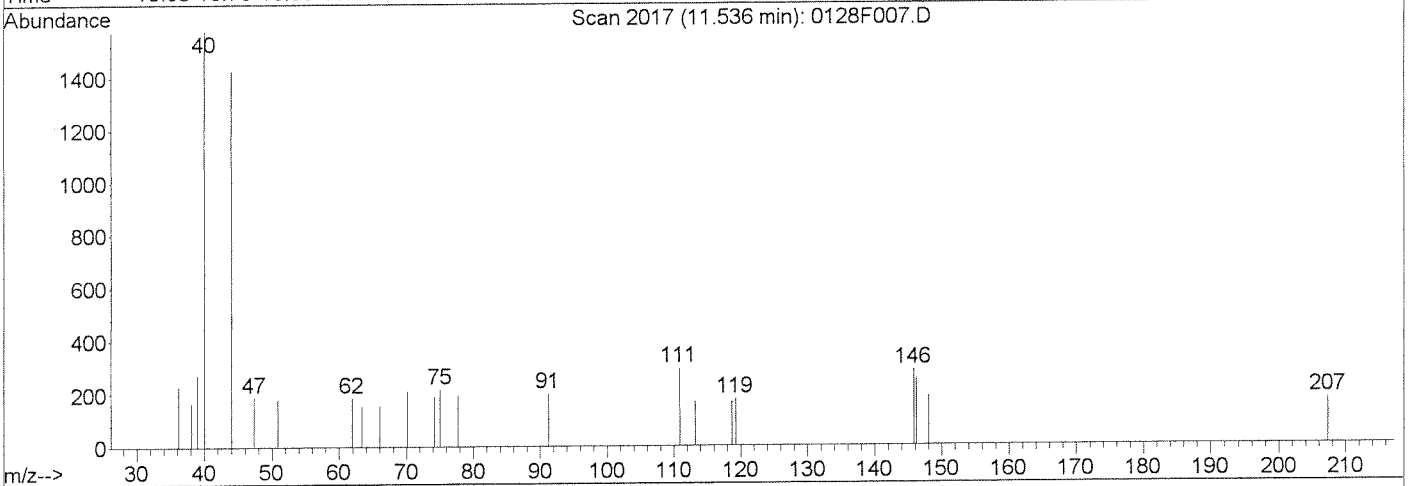
Data File : J:\MS23\DATA\012811\0128F007.D
Acq On : 28 Jan 2011 4:36 pm
Sample : MB
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 7:56 2011

Vial: 6
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Multiple Level Calibration





TIC: 0128F007.D

(52) 1,4-Dichlorobenzene (T)

11.54min 0.03PPB

response 546

Ion	Exp%	Act%
146.00	100	100
111.00	38.50	54.55
148.00	62.10	34.88
0.00	0.00	0.00

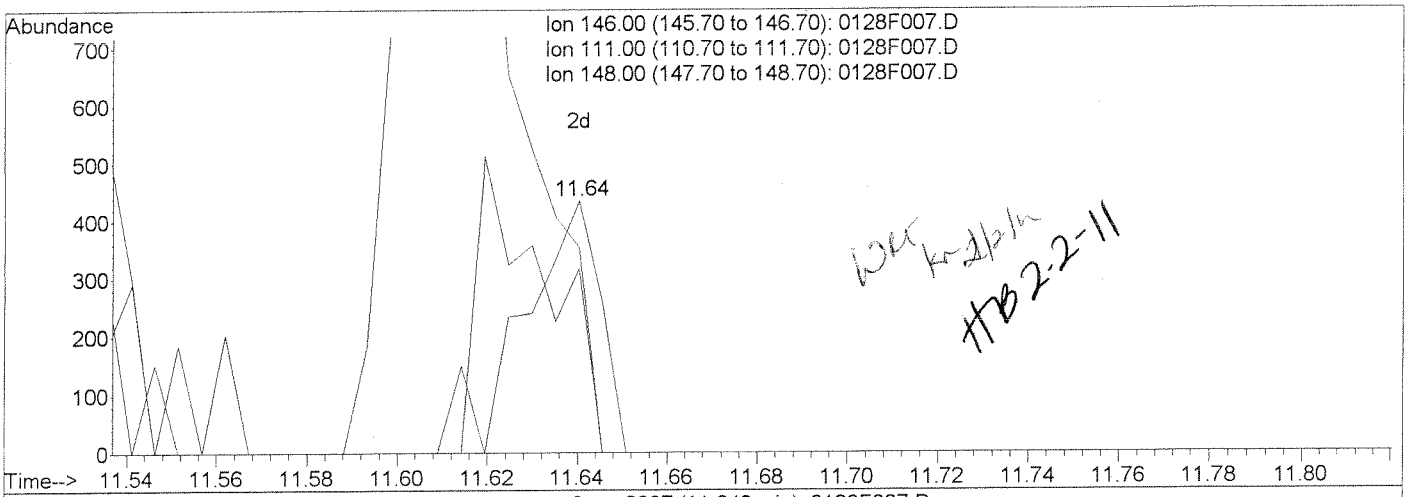
Quantitation Report (Qedit)

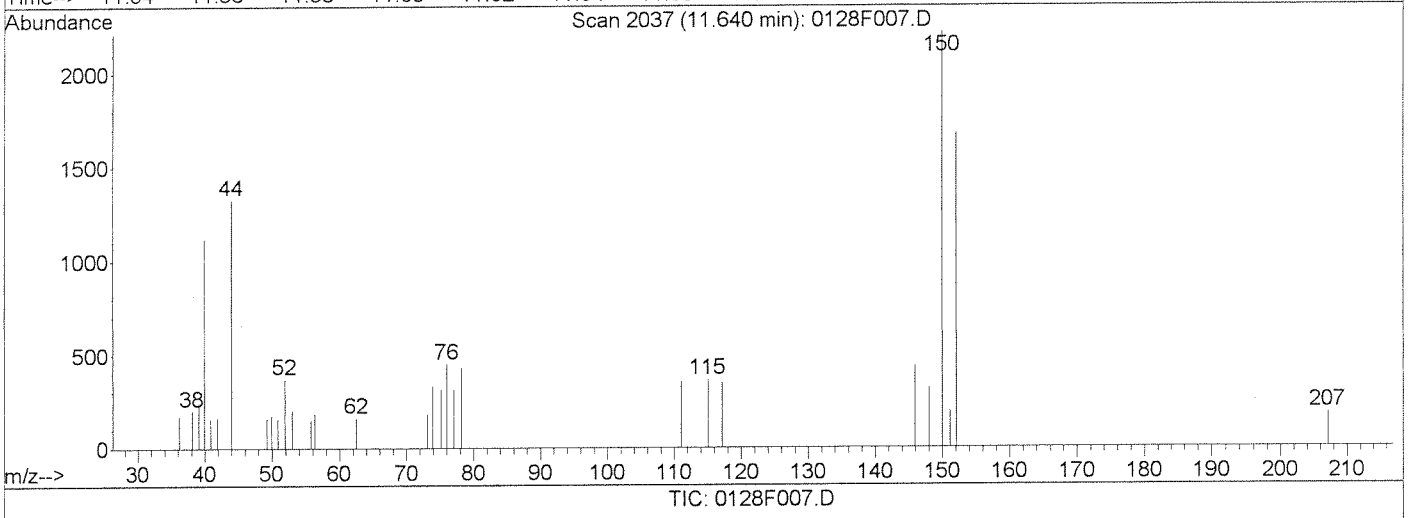
Data File : J:\MS23\DATA\012811\0128F007.D
Acq On : 28 Jan 2011 4:36 pm
Sample : MB
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 7:56 2011

Vial: 6
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Multiple Level Calibration





TIC: 0128F007.D

(52) 1,4-Dichlorobenzene (T)

11.64min 0.02PPB m

response 470

Ion	Exp%	Act%
146.00	100	100
111.00	38.50	81.38#
148.00	62.10	73.10
0.00	0.00	0.00

0128F007.D 011211624.M Wed Feb 02 07:56:43 2011

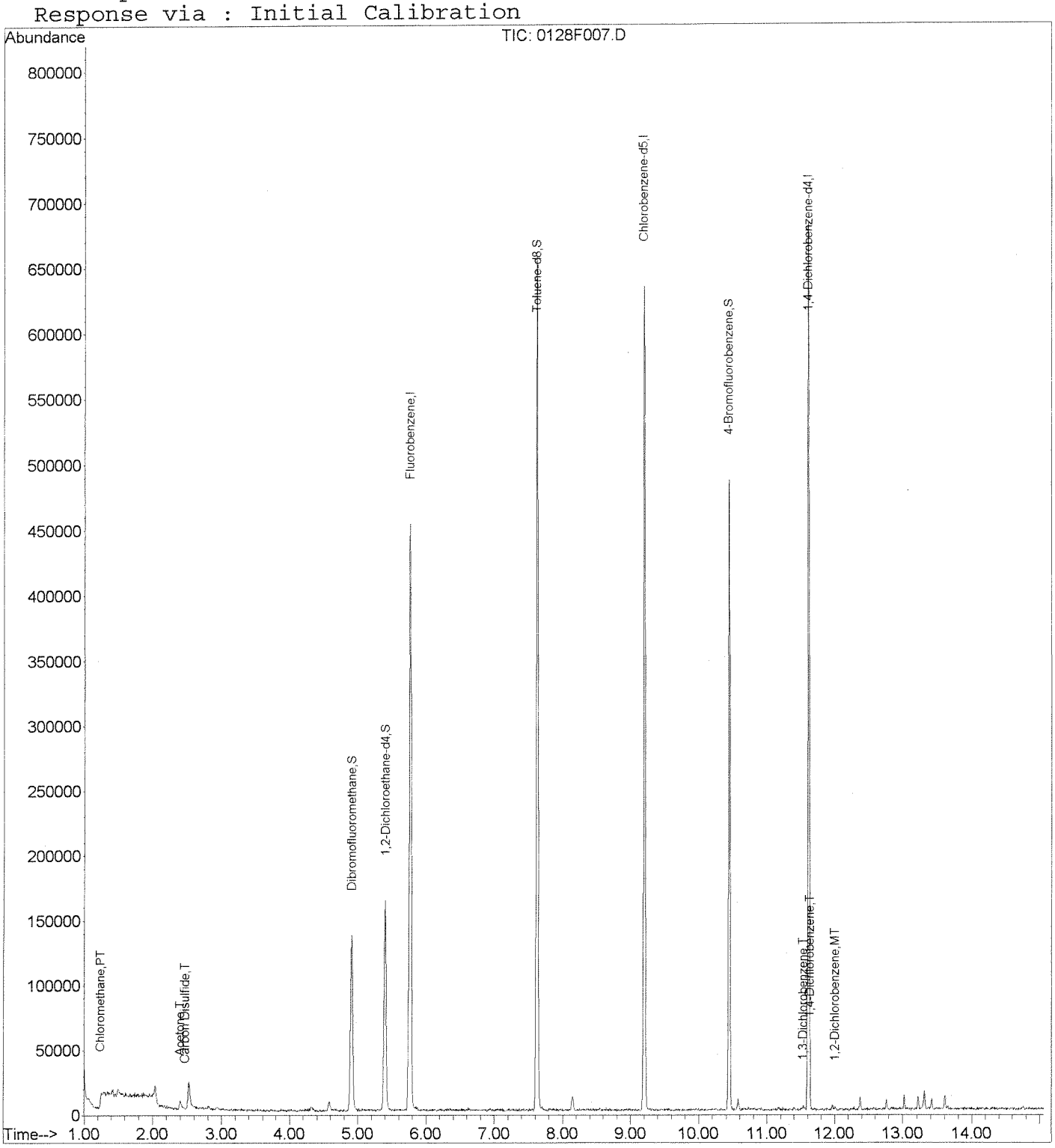
Quantitation Report (QT Reviewed)

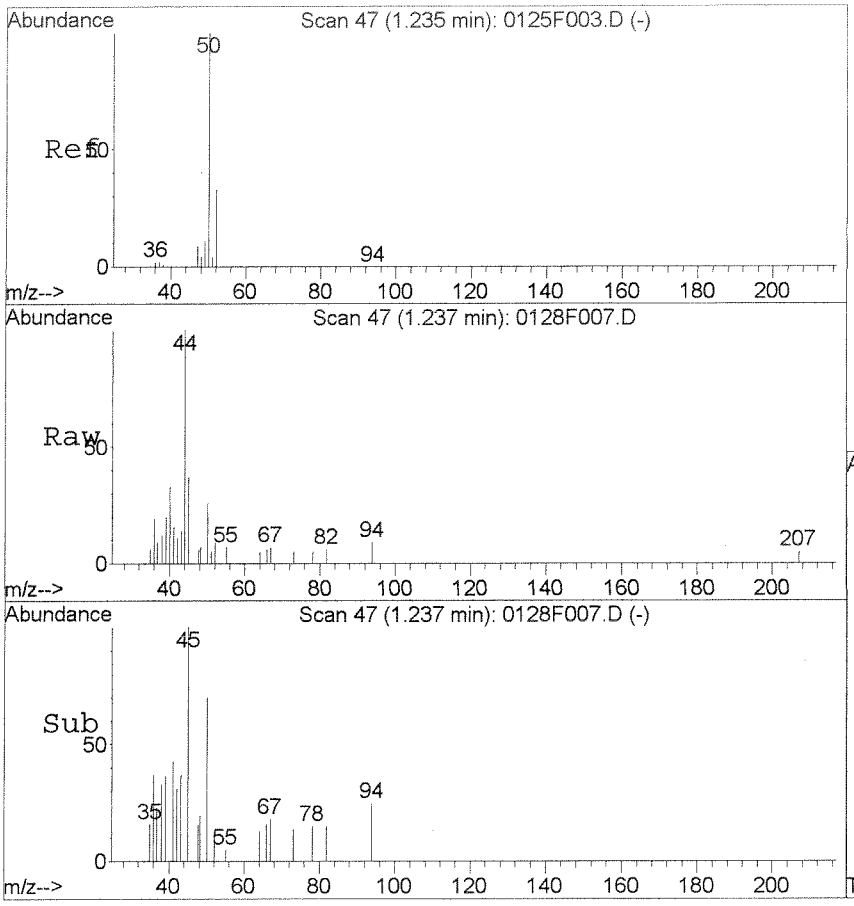
Data File : J:\MS23\DATA\012811\0128F007.D
Acq On : 28 Jan 2011 4:36 pm
Sample : MB
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 12:58 2011

Vial: 6
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration

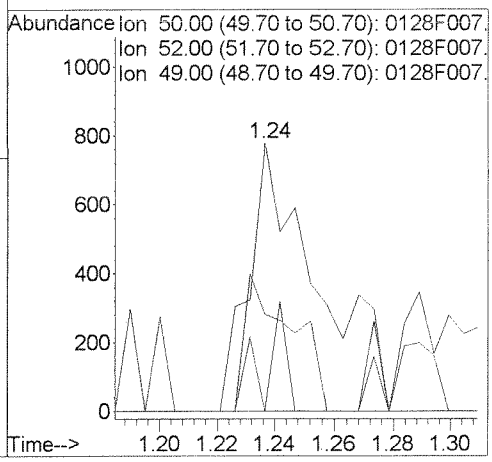


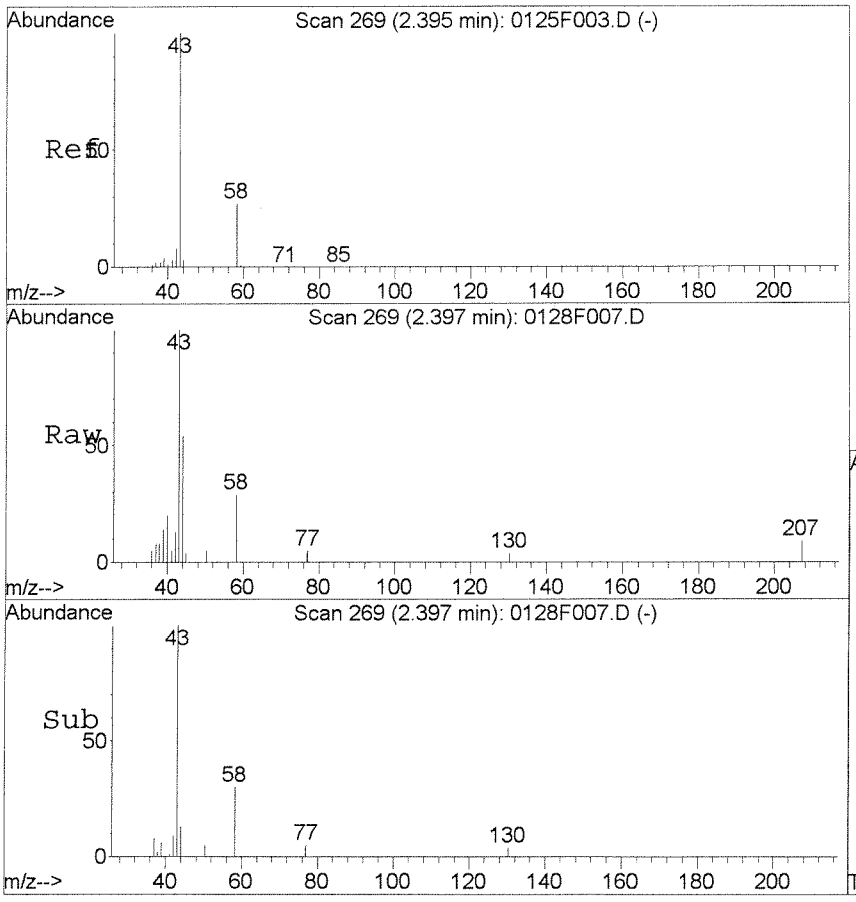


#3
Chloromethane
Concen: 0.08 PPB
RT: 1.24 min Scan# 47
Delta R.T. 0.00 min
Lab File: 0128F007.D
Acq: 28 Jan 2011 4:36 pm

Tgt Ion: 50 Resp: 1267

Ion	Ratio	Lower	Upper
50	100		
52	36.1	3.1	63.1
49	0.0	0.0	41.2

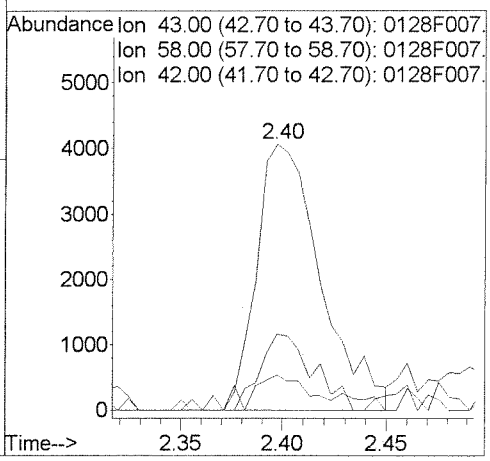


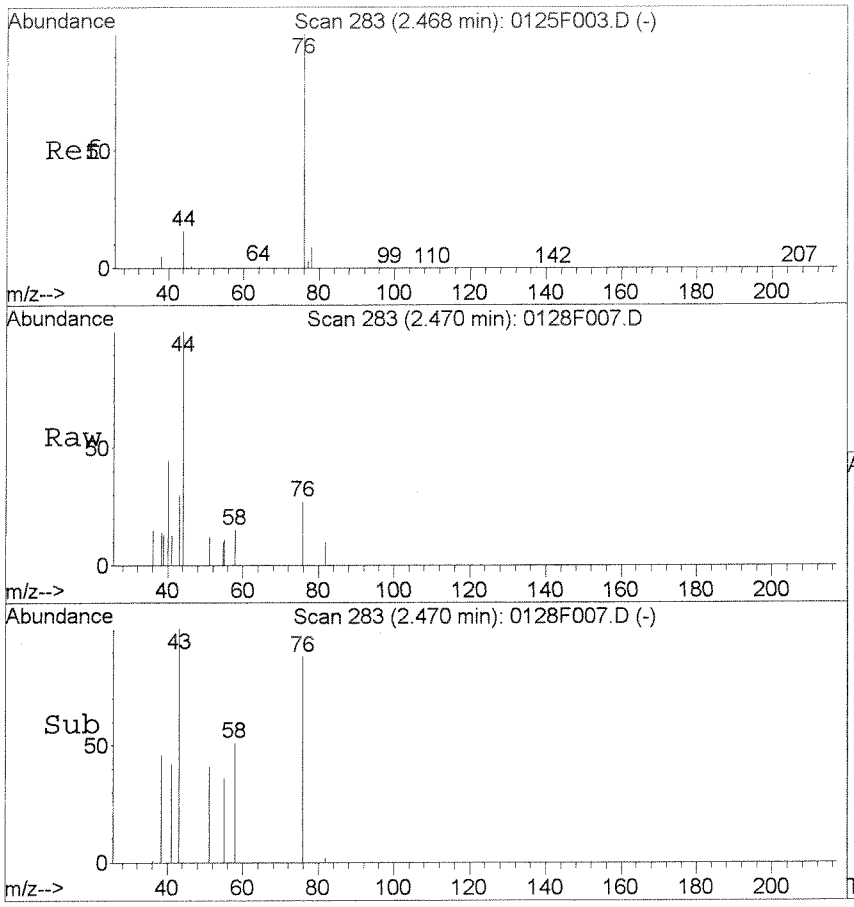


#11
Acetone
Concen: 4.70 PPB
RT: 2.40 min Scan# 269
Delta R.T. 0.00 min
Lab File: 0128F007.D
Acq: 28 Jan 2011 4:36 pm

Tgt Ion: 43 Resp: 8835

Ion	Ratio	Lower	Upper
43	100		
58	28.7	0.0	56.6
42	13.2	0.0	38.3

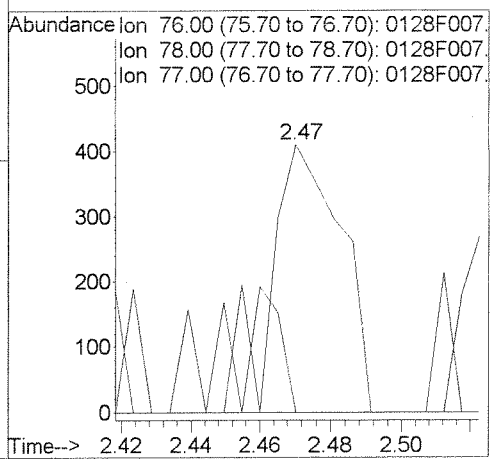


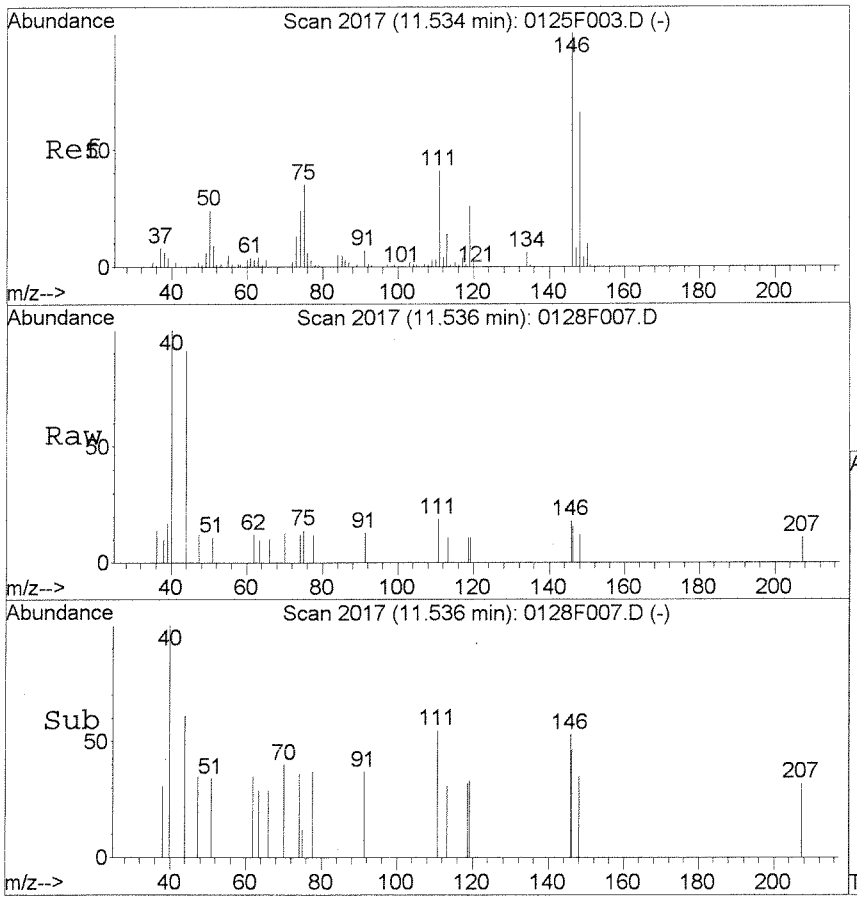


#12
Carbon Disulfide
Concen: 0.02 PPB
RT: 2.47 min Scan# 283
Delta R.T. 0.00 min
Lab File: 0128F007.D
Acq: 28 Jan 2011 4:36 pm

Tgt Ion: 76 Resp: 569

Ion	Ratio	Lower	Upper
76	100		
78	0.0	0.0	38.6
77	0.0	0.0	32.7

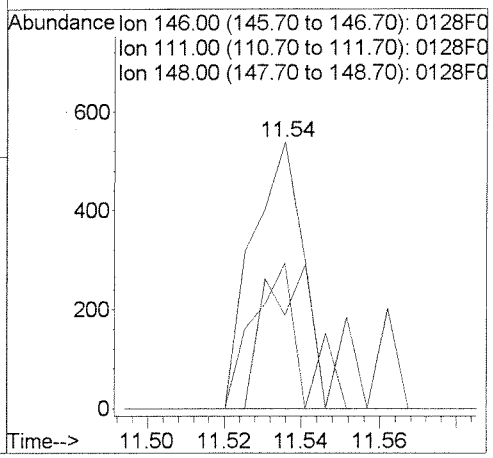


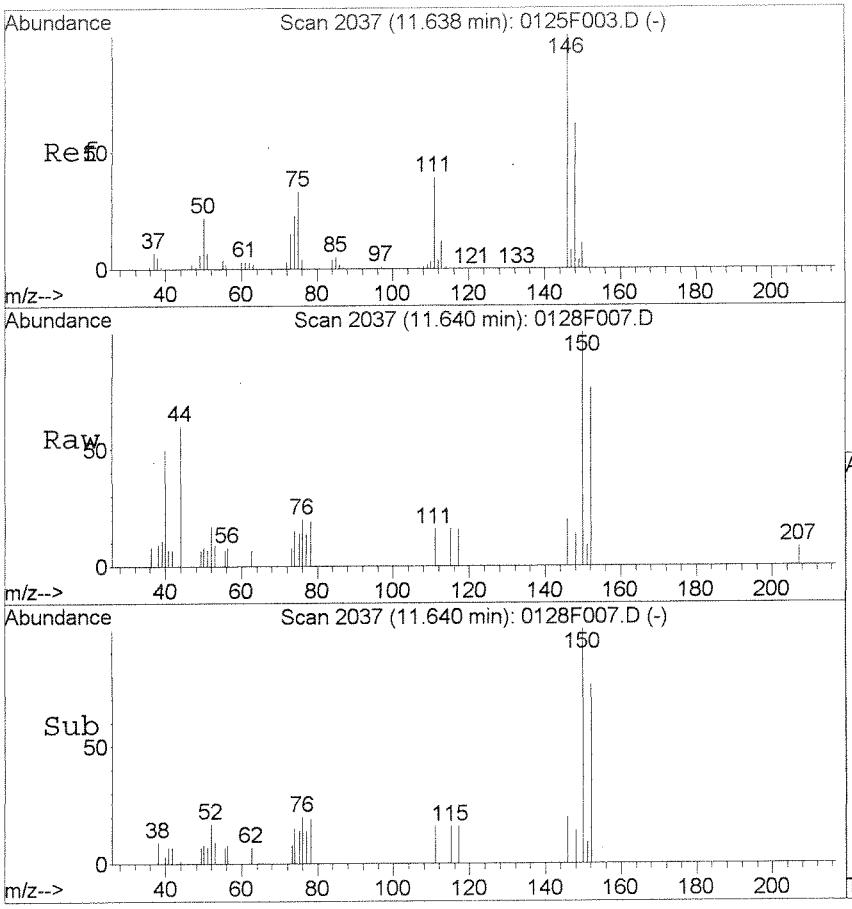


#51
1,3-Dichlorobenzene
Concen: 0.03 PPB
RT: 11.54 min Scan# 2017
Delta R.T. 0.00 min
Lab File: 0128F007.D
Acq: 28 Jan 2011 4:36 pm

Tgt Ion:146 Resp: 546

Ion	Ratio	Lower	Upper
146	100		
111	54.5	11.0	71.0
148	34.9	35.9	95.9#

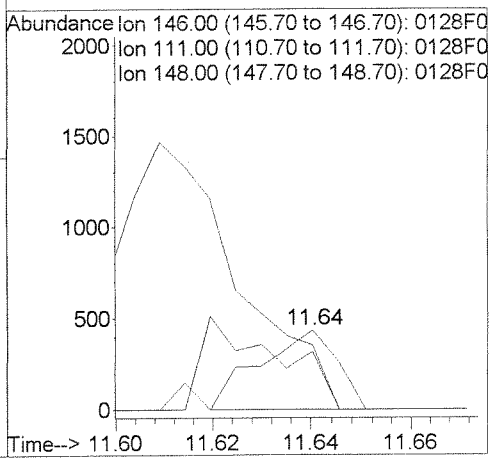


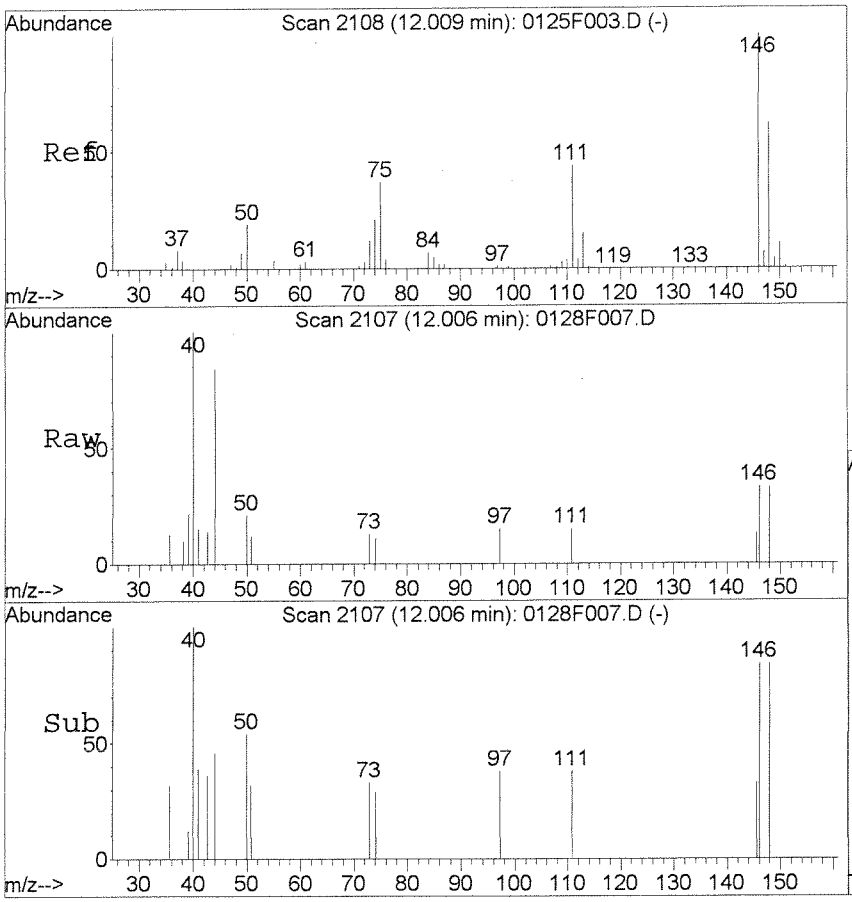


#52
1,4-Dichlorobenzene
Concen: 0.02 PPB m
RT: 11.64 min Scan# 2037
Delta R.T. 0.00 min
Lab File: 0128F007.D
Acq: 28 Jan 2011 4:36 pm

Tgt Ion:146 Resp: 470

Ion	Ratio	Lower	Upper
146	100		
111	81.4	8.5	68.5#
148	73.1	32.1	92.1

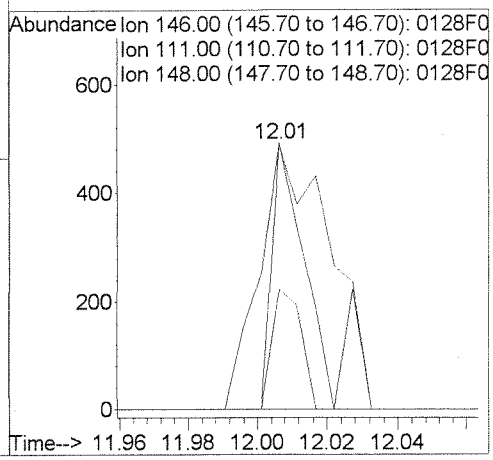




#53
1,2-Dichlorobenzene
Concen: 0.04 PPB
RT: 12.01 min Scan# 2107
Delta R.T. -0.00 min
Lab File: 0128F007.D
Acq: 28 Jan 2011 4:36 pm

Tgt Ion:146 Resp: 691

Ion	Ratio	Lower	Upper
146	100		
111	45.3	14.3	74.3
148	100.4	31.9	91.9#



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Batch QC
Lab Code: K1100710-005

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 624

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	**0.22**	J	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	ND	U	5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	ND	U	5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	ND	U	5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	**2.2**	J	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	ND	U	5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	ND	U	5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	**0.13**	J	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	ND	U	5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	ND	U	5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	ND	U	5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	ND	U	5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	ND	U	5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	ND	U	5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	ND	U	5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	ND	U	5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	ND	U	50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	ND	U	10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Batch QC
Lab Code: K1100710-005

Units: ug/L
Basis: NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	104	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	98	83-113	01/28/11	Acceptable
Dibromofluoromethane	105	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Exception Report

Data File: J:\MS23\DATA\012811\0128F011.D
Lab ID: K1100710-005
RunType: SMPL
Matrix: WATER

Date Acquired: 01/28/2011 18:31
Date Quantitated: 02/02/2011 08:04
Batch ID: KWG1100972
Analysis Method: 624
ListJoinID: LJ~~5790~~ 7904 HB 2.2.11

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/2/11

Secondary Review: HB 2-2-11

Quantitation Report

Bottle ID:		**Tier:**	II	**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**	01/24/2011	**Receive Date:**	01/26/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	K1100710
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996321	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:	Volatile Organic Compounds	**Report List ID:**	LJ7904
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:	J:\MS23\DATA\012811\0128F007.D	**Quant based on Report List**	

Data File:	J:\MS23\DATA\012811\0128F011.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 18:31	**Quant Date:**	02/02/2011 08:04	**Vial:**	10
Run Type:	SMPL			**Dilution:**	1.0
Lab ID:	K1100710-005			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	387417	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	179925	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	142063	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.90	0.00	0.00	113	90474	10.49	105	71-115	OK	
1	Toluene-d8	7.62	0.00	0.00	98	362421	10.35	104	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	136564	9.82	98	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Methylene Chloride	2.81	0.01	0.00	84	1107	0.1100	0.15	U	
1	Chloroform	4.68		0.00	83	38338	2.17	2.2	J	
1	Benzene	5.35		0.00	78	589	0.0100	0.20	U	
1	Toluene	7.70		0.00	92	3142	0.1300	0.13	J	

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F011.D Vial: 10
Acq On : 28 Jan 2011 6:31 pm Operator: KR
Sample : K710-005 Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 08:04:17 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

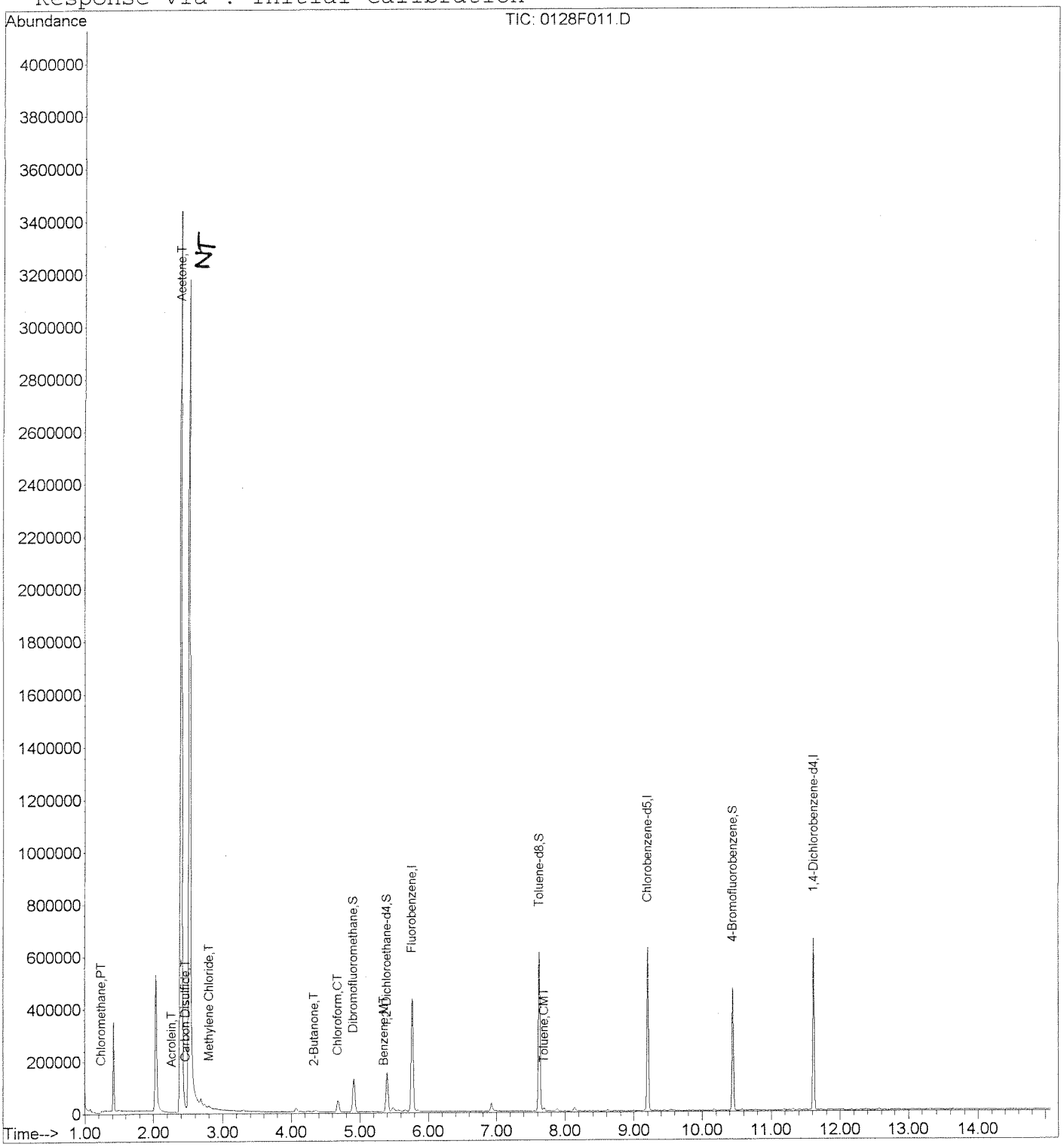
Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	387417	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	179925	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	142063	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.90	113	90474	10.49	PPB		0.00
Spiked Amount 10.000			Recovery =	104.90%			
24) 1,2-Dichloroethane-d4	5.40	65	119381	10.33	PPB		0.00
Spiked Amount 10.000			Recovery =	103.30%			
33) Toluene-d8	7.62	98	362421	10.35	PPB		0.00
Spiked Amount 10.000			Recovery =	103.50%			
47) 4-Bromofluorobenzene	10.44	95	136564	9.82	PPB		0.00
Spiked Amount 10.000			Recovery =	98.20%			
Target Compounds							Qvalue
3) Chloromethane	1.23	50	3566	0.22	PPB		92
8) Acrolein	2.27	56	917	0.89	PPB	#	46
11) Acetone	2.40	43	3772883	2069.71	PPB		99
12) Carbon Disulfide	2.47	76	1053	0.03	PPB		92
13) Methylene Chloride	2.81	84	1107	0.11	PPB	#	82
19) 2-Butanone	4.33	72	770	1.26	PPB	#	7
20) Chloroform	4.68	83	38338	2.17	PPB		95
25) Benzene	5.35	78	589	0.01	PPB	#	32
34) Toluene	7.70	92	3142	0.13	PPB	#	68

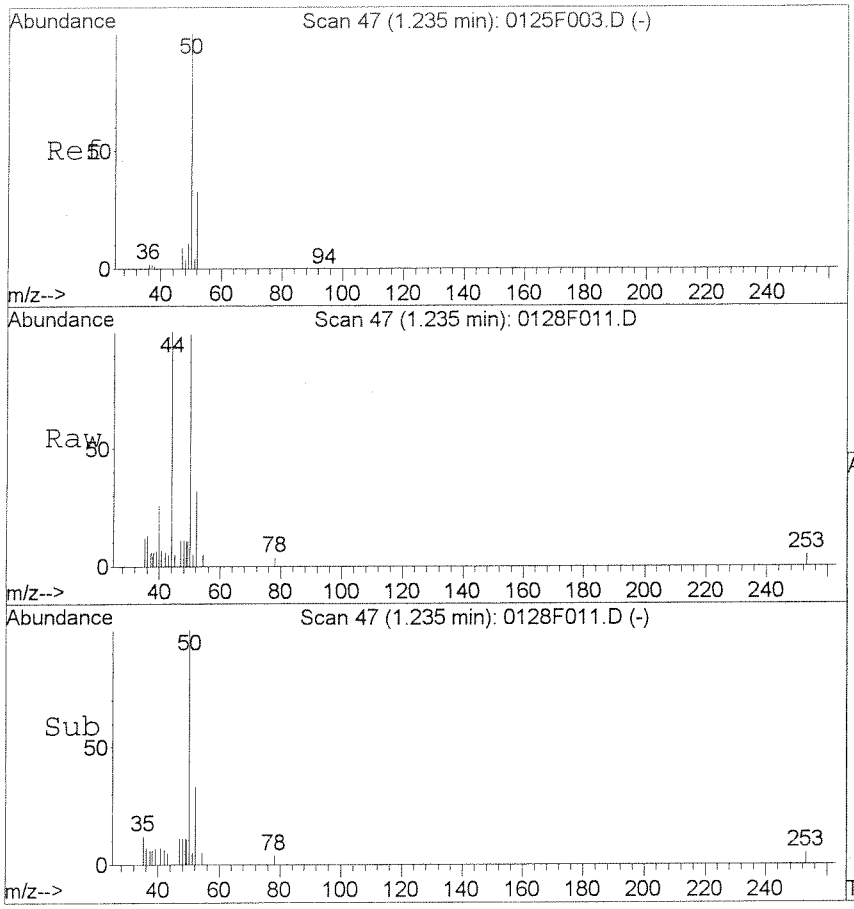
(#) = qualifier out of range (m) = manual integration
0128F011.D 011211624.M Wed Feb 02 08:05:13 2011 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F011.D Vial: 10
Acq On : 28 Jan 2011 6:31 pm Operator: KR
Sample : K710-005 Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 2 8:04 2011 Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration

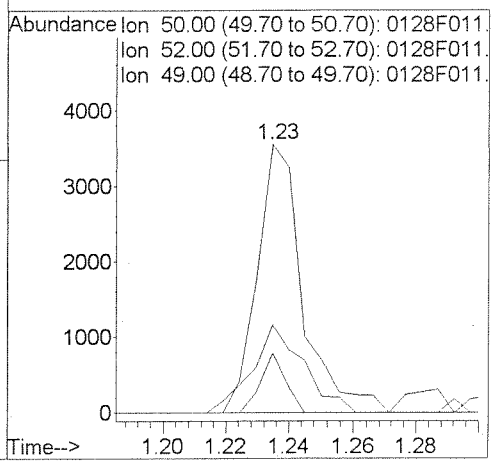


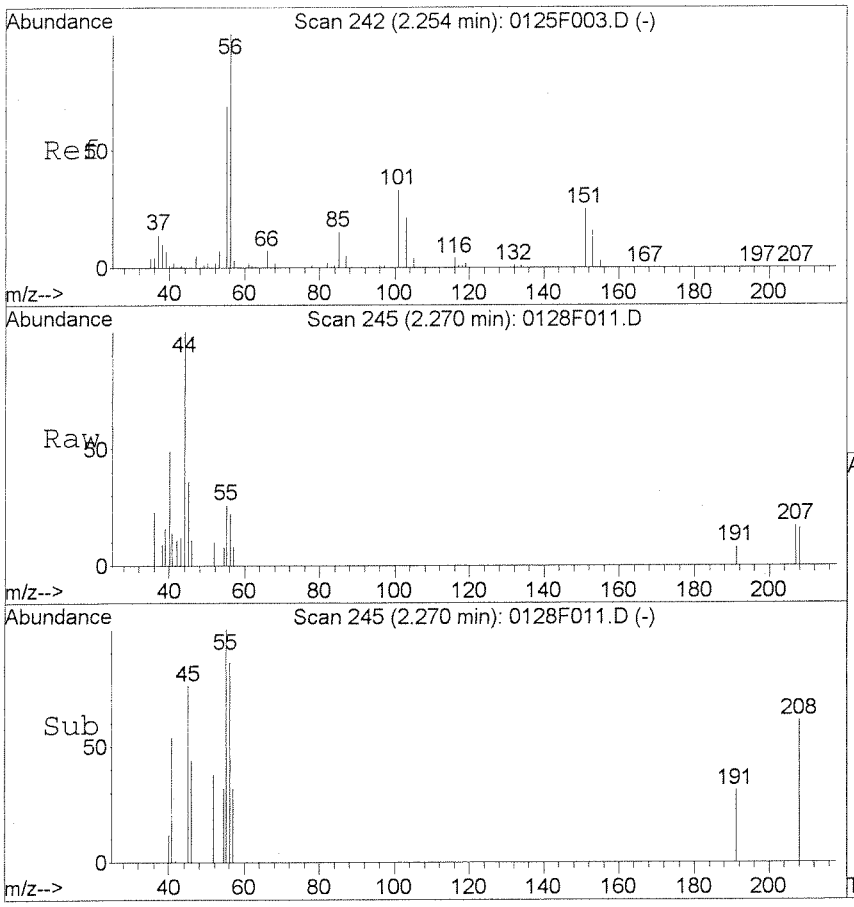


#3
Chloromethane
Concen: 0.22 PPB
RT: 1.23 min Scan# 47
Delta R.T. 0.00 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 50 Resp: 3566

Ion	Ratio	Lower	Upper
50	100		
52	32.6	3.1	63.1
49	22.1	0.0	41.2

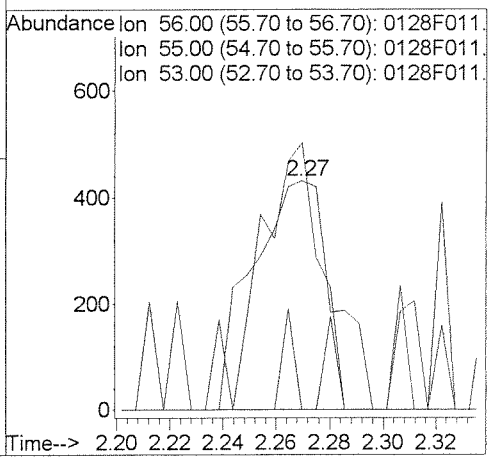


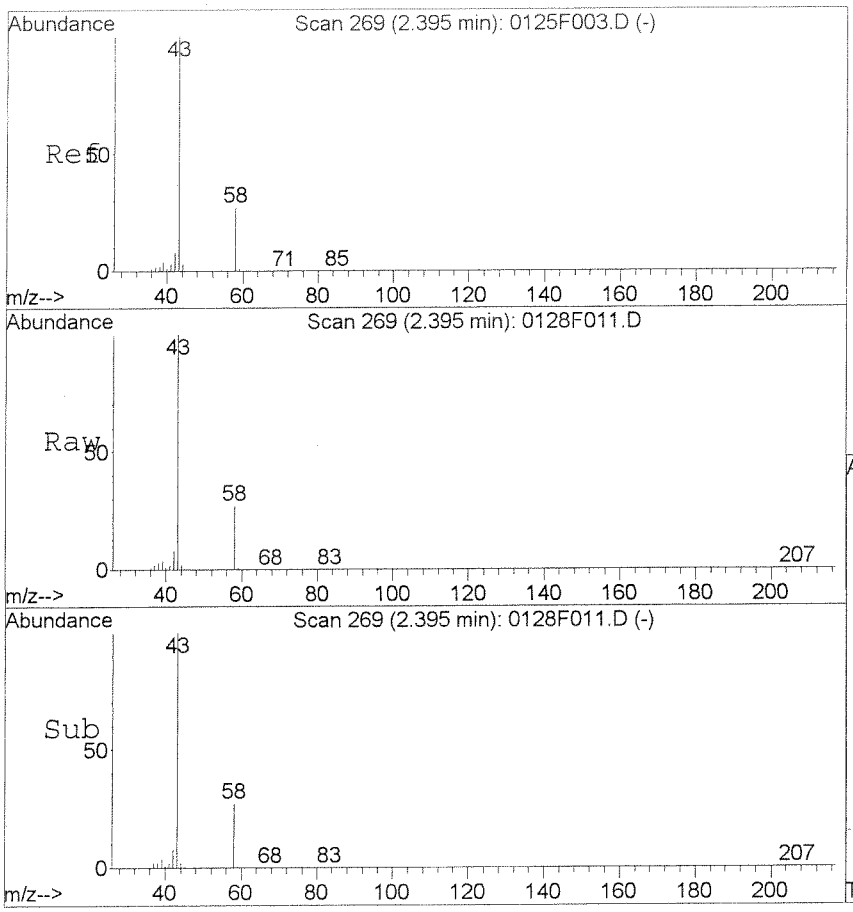


#8
Acrolein
Concen: 0.89 PPB
RT: 2.27 min Scan# 245
Delta R.T. 0.02 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 56 Resp: 917

Ion	Ratio	Lower	Upper
56	100		
55	116.5	39.5	99.5#
53	0.0	0.0	37.1

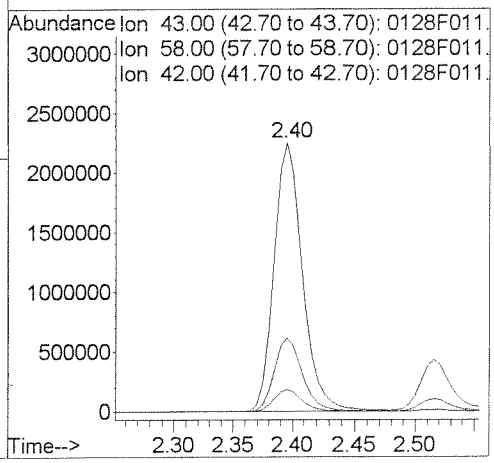


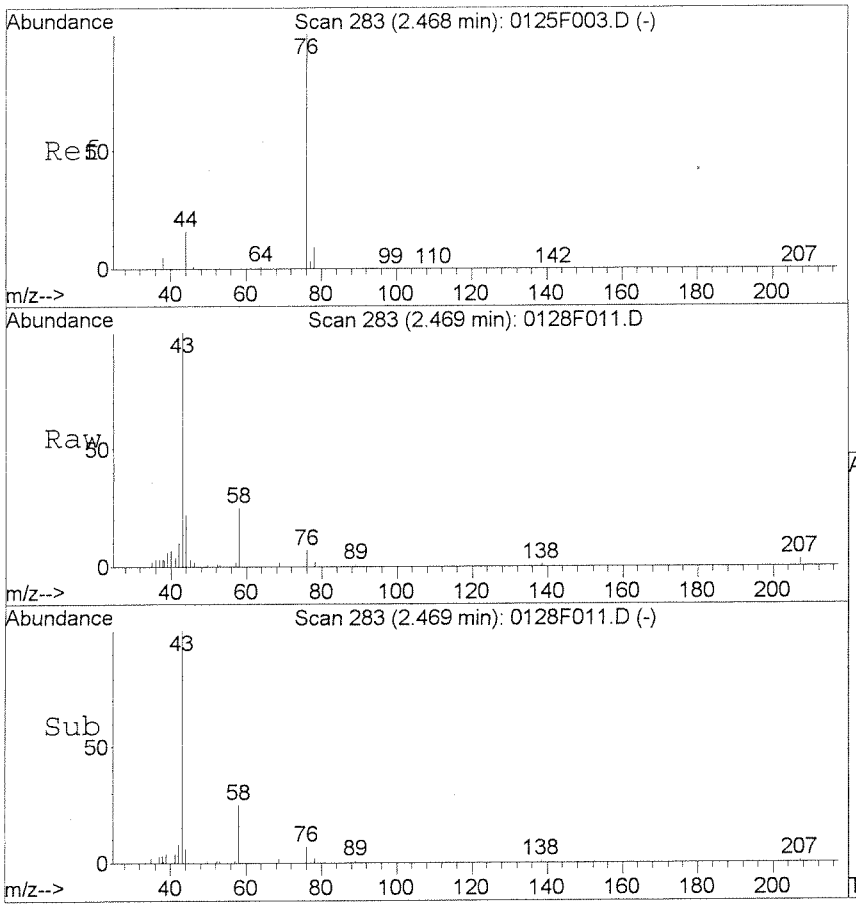


#11
Acetone
Concen: 2069.71 PPB
RT: 2.40 min Scan# 269
Delta R.T. 0.00 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 43 Resp: 3772883

Ion	Ratio	Lower	Upper
43	100		
58	27.4	0.0	56.6
42	8.2	0.0	38.3

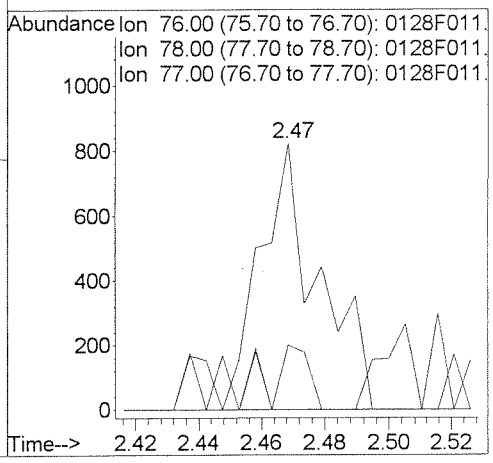


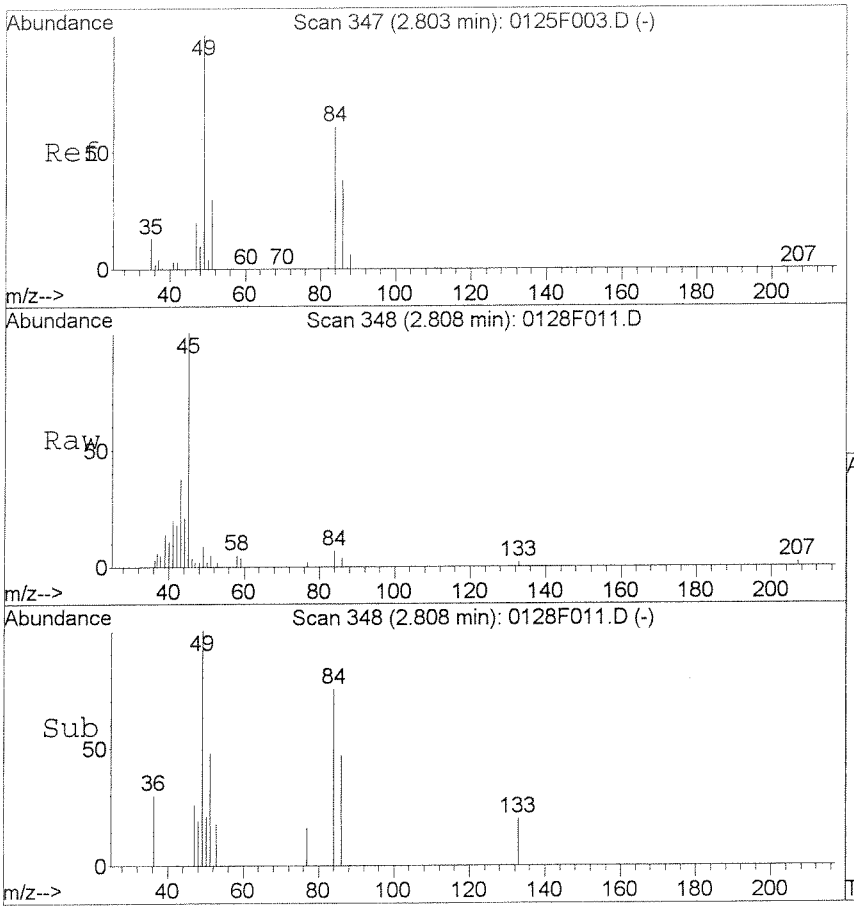


#12
Carbon Disulfide
Concen: 0.03 PPB
RT: 2.47 min Scan# 283
Delta R.T. 0.00 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 76 Resp: 1053

Ion	Ratio	Lower	Upper
76	100		
78	5.7	0.0	38.6
77	0.0	0.0	32.7

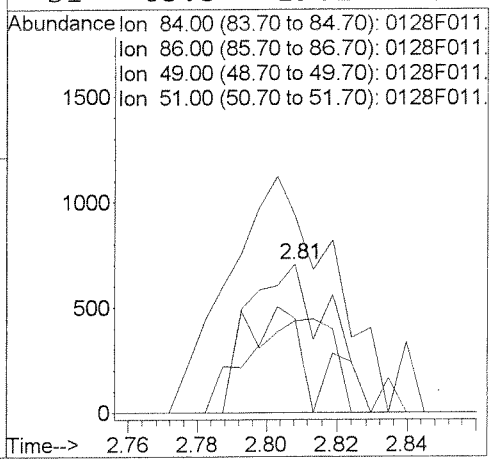


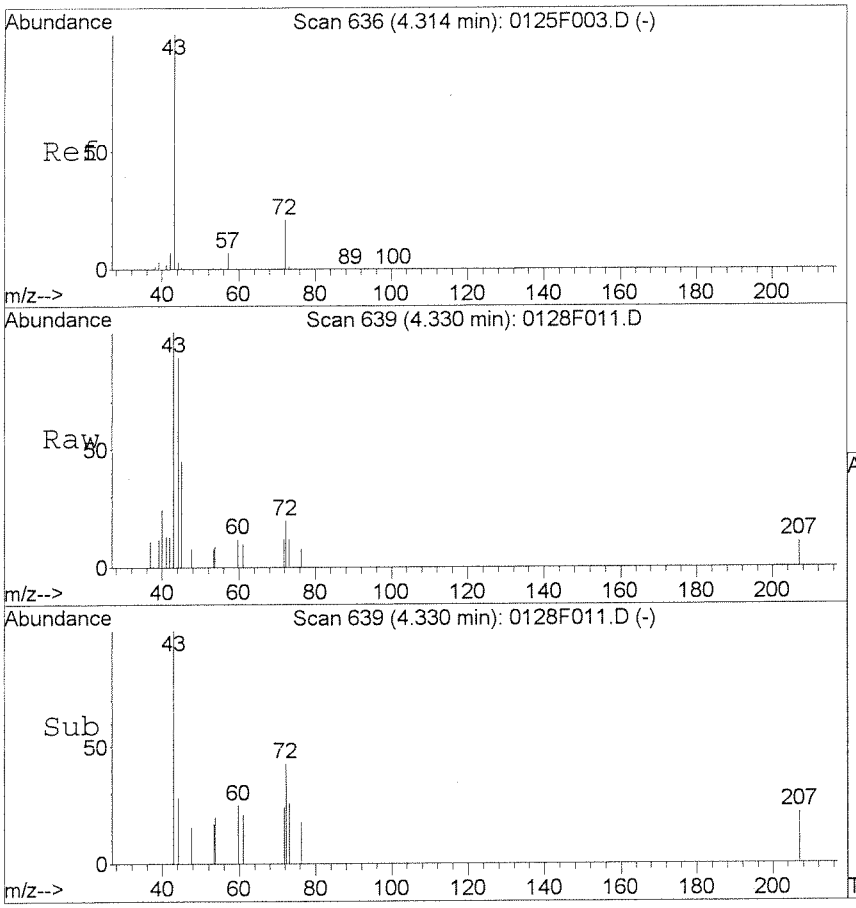


#13
Methylene Chloride
Concen: 0.11 PPB
RT: 2.81 min Scan# 348
Delta R.T. 0.01 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 84 Resp: 1107

Ion	Ratio	Lower	Upper
84	100		
86	61.8	32.3	92.3
49	132.6	134.3	194.3#
51	63.3	19.2	79.2

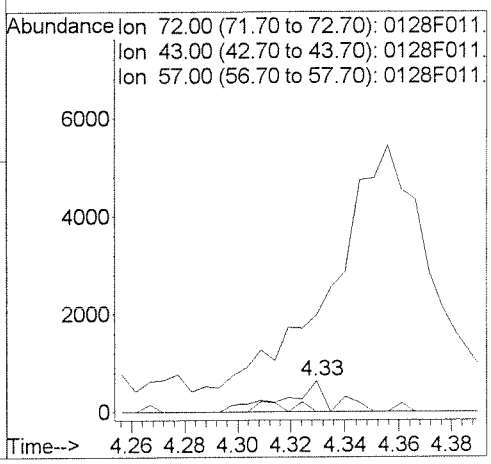


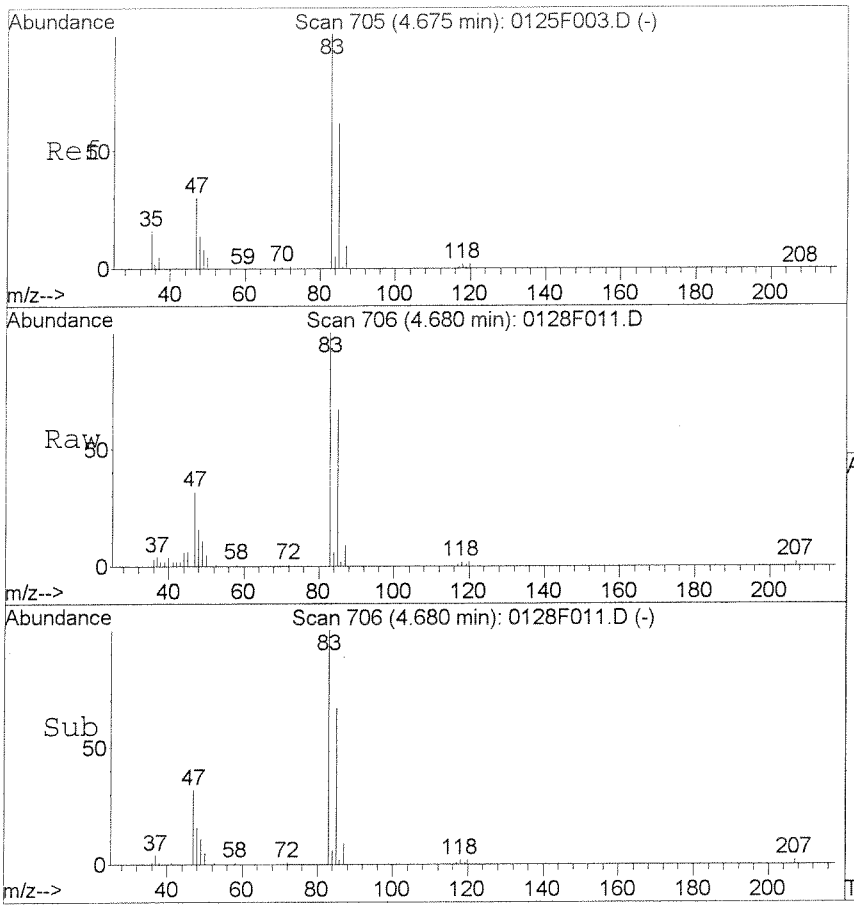


#19
2-Butanone
Concen: 1.26 PPB
RT: 4.33 min Scan# 639
Delta R.T. 0.02 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 72 Resp: 770

Ion	Ratio	Lower	Upper	
72	100			
43	229.3	456.7	516.7#	NT
57	0.0	5.0	65.0#	

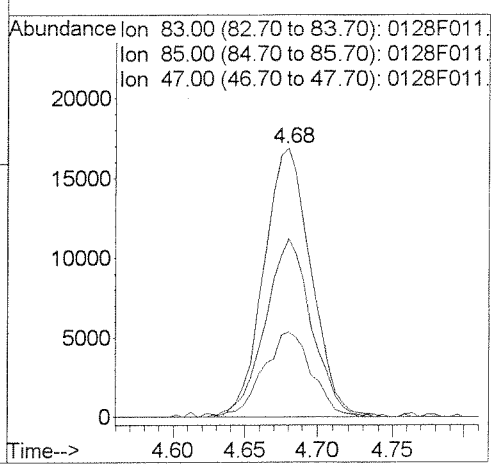


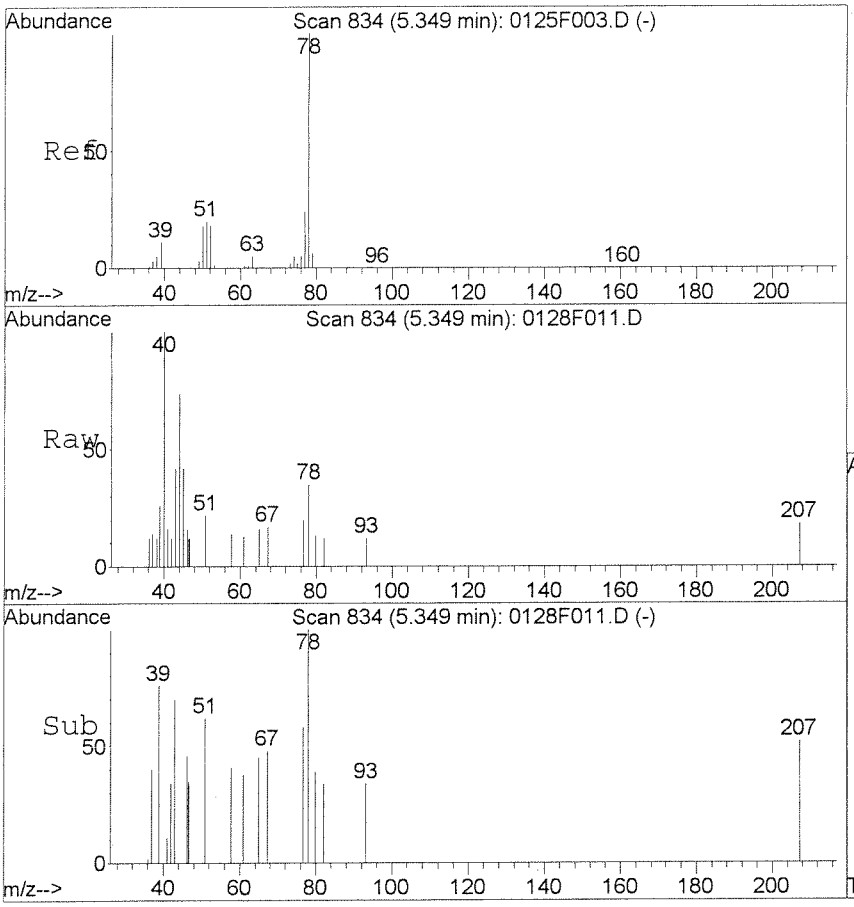


#20
Chloroform
Concen: 2.17 PPB
RT: 4.68 min Scan# 706
Delta R.T. 0.01 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 83 Resp: 38338

Ion	Ratio	Lower	Upper
83	100		
85	66.6	31.9	91.9
47	31.8	0.3	60.3

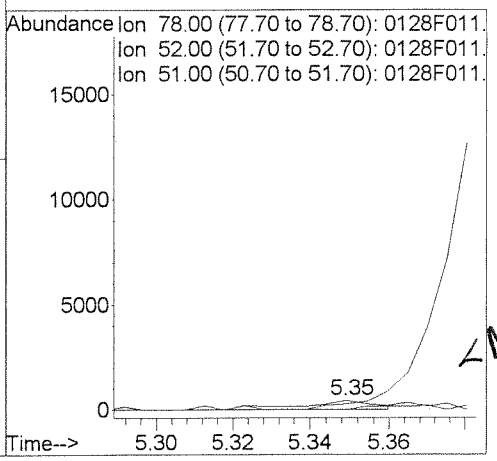




#25
Benzene
Concen: 0.01 PPB
RT: 5.35 min Scan# 834
Delta R.T. 0.00 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 78 Resp: 589

Ion	Ratio	Lower	Upper
78	100		
52	0.0	0.0	47.6
51	62.1	0.0	49.8#



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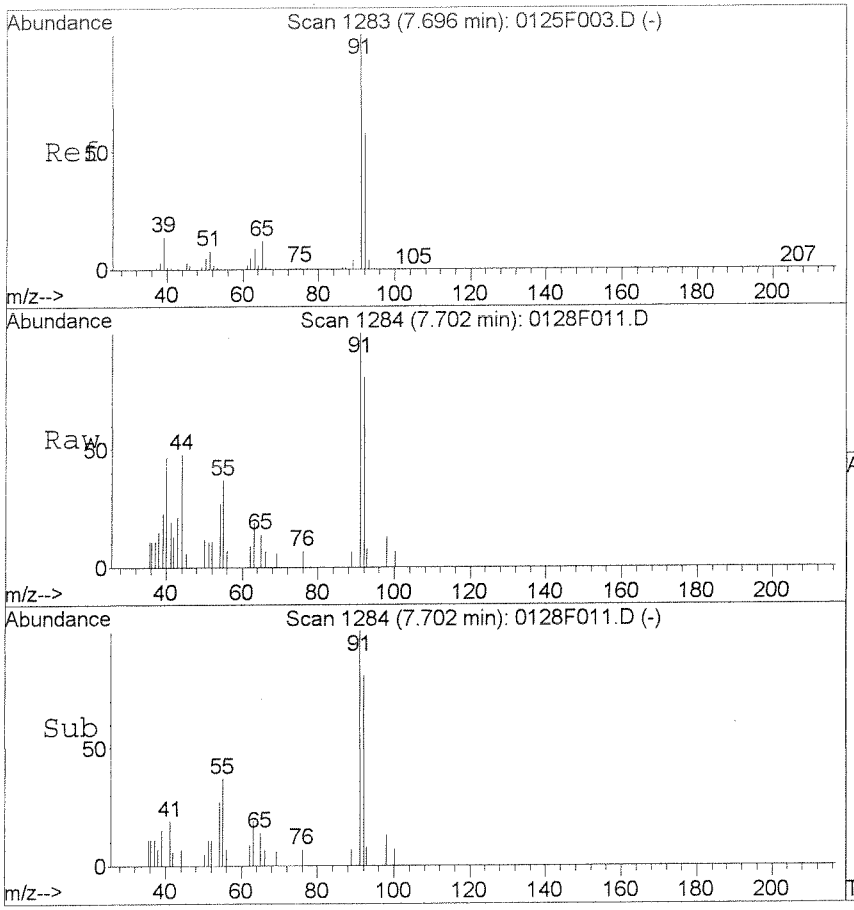
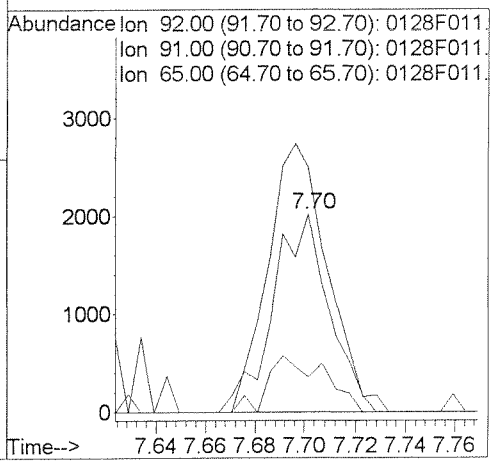


#34
Toluene
Concen: 0.13 PPB
RT: 7.70 min Scan# 1284
Delta R.T. 0.01 min
Lab File: 0128F011.D
Acq: 28 Jan 2011 6:31 pm

Tgt Ion: 92 Resp: 3142

Ion	Ratio	Lower	Upper
92	100		
91	123.8	143.0	203.0#
65	17.7	0.0	50.9



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Batch QCMS
Lab Code: KWG1100975-1

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 624

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	**13.7**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	**11.8**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	**12.0**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	**11.9**		5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	**10.7**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	**12.5**		5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	**11.2**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	**12.4**		5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	**12.1**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	**14.5**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	**12.3**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	**11.8**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	**12.3**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	**12.5**		5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	**11.9**		5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	**11.6**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	**12.0**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	**9.03**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	**12.4**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	**11.1**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	**11.3**		5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	**10.9**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	**10.4**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	**10.7**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	**10.7**		5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	**10.4**		5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	**11.8**		5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	**11.1**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	**11.0**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	**10.9**		5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	**104**		50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	**12.3**		10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCMS	**Units:**	ug/L
Lab Code:	KWG1100975-1	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	109	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	99	83-113	01/28/11	Acceptable
Dibromofluoromethane	105	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Exception Report

Data File: J:\MS23\DATA\012811\0128F005.D
Lab ID: KWG1100975-1 -- K1100710-005MS
RunType: MS
Matrix: WATER

Date Acquired: 01/28/2011 15:39
Date Quantitated: 02/02/2011 07:55
Batch ID: KWG1100972
Analysis Method: 624
MethodJoinID: MJ158

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/2/11

Secondary Review: HB 2.2.11

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**		**Receive Date:**	01/28/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996323	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:			
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:	J:\MS23\DATA\012811\0128F007.D	**Quant based on Method**	

Data File:	J:\MS23\DATA\012811\0128F005.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 15:39	**Quant Date:**	02/02/2011 07:55	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG1100975-1 -- K1100710-005MS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	389902	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	182444	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	147319	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.90	0.00	0.00	113	90903	10.48	105	71-115	OK	
1	1,2-Dichloroethane-d4	5.40	0.00	0.00	65	120509	10.36	104	69-116	OK	
1	Toluene-d8	7.62	0.00	0.00	98	385003	10.92	109	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	140072	9.93	99	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.09		0.00	85	176051	11.47	11.5		
1	Chloromethane	1.23		0.00	50	223974	13.67	13.7		
1	Vinyl Chloride	1.31		0.00	62	189810	11.83	11.8		
1	Bromomethane	1.56	-0.01	0.00	96	66203	11.97	12.0		
1	Chloroethane	1.65		0.00	49	31449	11.85	11.9		
1	Trichlorofluoromethane	1.82		0.00	101	203313	10.71	10.7		
1	Acrolein	2.25		0.00	56	107749	103.71	104		
1	Trichlorotrifluoroethane	2.25		0.00	151	81926	11.80	11.8		
1	1,1-Dichloroethene	2.28		0.00	96	100833	12.51	12.5		
1	Acetone	2.39	-0.01	0.00	43	3785393	2,063	2060		
1	Carbon Disulfide	2.47		0.00	76	833502	25.91	25.9		
1	Methylene Chloride	2.80		0.00	84	115484	11.20	11.2		
1	Acrylonitrile	3.14		0.00	53	30253	12.26	12.3		
1	trans-1,2-Dichloroethene	3.03		0.00	96	121446	12.41	12.4		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F005.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 15:39	**Quant Date:**	02/02/2011 07:55	**Vial:**	5
Run Type:	MS			**Dilution:**	1.0
Lab ID:	KWG1100975-1 -- K1100710-005MS			**Soln Conc. Units:**	PPB

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1-Dichloroethane	3.55	0.01	0.00	63	237688	12.11	12.1		
1	Vinyl Acetate	3.60		0.00	86	3726	3.24	3.24	J	
1	cis-1,2-Dichloroethene	4.26		0.00	96	125286	11.78	11.8		
1	2-Butanone (MEK)	4.31		0.00	72	37378	60.99	61.0		
1	Chloroform	4.68		0.00	83	258431	14.51	14.5		
1	1,1,1-Trichloroethane (TCA)	4.84	-0.01	0.00	97	175348	12.29	12.3		
1	Carbon Tetrachloride	5.01		0.00	117	119556	11.84	11.8		
1	Benzene	5.35		0.00	78	509328	12.30	12.3		
1	1,2-Dichloroethane (EDC)	5.50		0.00	62	170083	12.50	12.5		
1	Trichloroethene (TCE)	6.20		0.00	95	121575	11.94	11.9		
1	1,2-Dichloropropane	6.53	-0.01	0.00	63	125661	11.61	11.6		
1	Bromodichloromethane	6.86	-0.01	0.00	83	137855	12.04	12.0		
1	2-Chloroethyl Vinyl Ether				63	0d		0.31	U	
1	cis-1,3-Dichloropropene	7.40		0.00	75	158325	11.07	11.1		
1	4-Methyl-2-pentanone (MIBK)	8.51		0.00	58	113383	57.87	57.9		
1	Toluene	7.70		0.00	92	303862	12.41	12.4		
2	trans-1,3-Dichloropropene	8.06		0.00	75	118097	9.03	9.03		
2	1,1,2-Trichloroethane	8.25		0.00	83	72251	11.27	11.3		
2	Tetrachloroethene (PCE)	8.25	-0.01	0.00	164	86661	10.91	10.9		
2	2-Hexanone	8.51		0.00	43	238192	52.21	52.2		
2	Dibromochloromethane	8.62		0.00	129	69116	10.36	10.4		
2	Chlorobenzene	9.23		0.00	112	298727	10.72	10.7		
2	Ethylbenzene	9.33		0.00	106	164347	10.71	10.7		
2	m,p-Xylenes	9.46		0.00	106	395762	20.89	20.9		
2	o-Xylene	9.87		0.00	106	189321	10.57	10.6		
2	Styrene				103	0d		0.11	U	
2	Bromoform	10.11		0.00	173	30604	10.35	10.4		
3	1,1,2,2-Tetrachloroethane	10.64	-0.01	0.00	83	83698	11.79	11.8		
3	1,3-Dichlorobenzene	11.53		0.00	146	213344	11.05	11.1		
3	1,4-Dichlorobenzene	11.64	0.01	0.00	146	217795	11.04	11.0		
3	1,2-Dichlorobenzene	12.01		0.00	146	192217	10.91	10.9		
	Isopropyl Acetate				0	0		10	U	NR
	Ethyl Acetate				0	0		10	U	NR
	Bis(chloromethyl) Ether				0	0		10	U	NR
	Amyl Acetate				0	0		10	U	NR

Prep Amount:	10 ml	**Dilution:**	1.0
Prep Final Vol:	10 ml	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F005.D
Acq On : 28 Jan 2011 3:39 pm
Sample : K710-005MS
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 02 07:53:49 2011

Vial: 5
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	389902	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	182444	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	147319	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.90	113	90903	10.48	PPB		0.00
Spiked Amount 10.000			Recovery =	104.80%			
24) 1,2-Dichloroethane-d4	5.40	65	120509	10.36	PPB		0.00
Spiked Amount 10.000			Recovery =	103.60%			
33) Toluene-d8	7.62	98	385003	10.92	PPB		0.00
Spiked Amount 10.000			Recovery =	109.20%			
47) 4-Bromofluorobenzene	10.44	95	140072	9.93	PPB		0.00
Spiked Amount 10.000			Recovery =	99.30%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.09	85	176051	11.47	PPB		98
3) Chloromethane	1.23	50	223974	13.67	PPB		97
4) Vinyl Chloride	1.31	62	189810	11.83	PPB		99
5) Bromomethane	1.56	96	66203	11.97	PPB		98
6) Chloroethane	1.65	49	31449	11.85	PPB	#	86
7) Trichlorofluoromethane	1.82	101	203313	10.71	PPB		95
8) Acrolein	2.25	56	107749	103.71	PPB		97
9) Trichlorotrifluoroethane	2.25	151	81926	11.80	PPB		89
10) 1,1-Dichloroethene	2.28	96	100833	12.51	PPB		97
11) Acetone	2.39	43	3785393	2063.33	PPB		98
12) Carbon Disulfide	2.47	76	833502	25.91	PPB		99
13) Methylene Chloride	2.80	84	115484	11.20	PPB		97
14) Acrylonitrile	3.14	53	30253	12.26	PPB		97
15) trans-1,2-Dichloroethene	3.03	96	121446	12.41	PPB		98
16) 1,1-Dichloroethane	3.55	63	237688	12.11	PPB		98
17) Vinyl Acetate	3.60	86	3726	3.24	PPB	#	72
18) cis-1,2-Dichloroethene	4.26	96	125286	11.78	PPB		98
19) 2-Butanone	4.31	72	37378	60.99	PPB		94
20) Chloroform	4.68	83	258431	14.51	PPB		96
21) 1,1,1-Trichloroethane	4.84	97	175348	12.29	PPB		92
23) Carbon Tetrachloride	5.01	117	119556	11.84	PPB		96
25) Benzene	5.35	78	509328	12.30	PPB		99
26) 1,2-Dichloroethane	5.50	62	170083	12.50	PPB		97
27) Trichloroethene	6.20	95	121575	11.94	PPB		97
28) 1,2-Dichloropropane	6.53	63	125661	11.61	PPB		95
29) Bromodichloromethane	6.86	83	137855	12.04	PPB		94
31) cis-1,3-Dichloropropene	7.40	75	158325	11.07	PPB		99

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F005.D
Acq On : 28 Jan 2011 3:39 pm
Sample : K710-005MS
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 02 07:53:49 2011

Vial: 5
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
32) 4-Methyl-2-pentanone (MIBK	8.51	58	113383	57.87	PPB	98
34) Toluene	7.70	92	303862	12.41	PPB	98
36) trans-1,3-Dichloropropene	8.06	75	118097	9.03	PPB	98
37) 1,1,2-Trichloroethane	8.25	83	72251	11.27	PPB	92
38) Tetrachloroethene	8.25	164	86661	10.91	PPB	96
39) 2-Hexanone	8.51	43	238192	52.21	PPB	99
40) Dibromochloromethane	8.62	129	69116	10.36	PPB	98
41) Chlorobenzene	9.23	112	298727	10.72	PPB	98
42) Ethylbenzene	9.33	106	164347	10.71	PPB	98
43) m,p-Xylenes	9.46	106	395762	20.89	PPB	100
44) o-Xylene	9.87	106	189321	10.57	PPB	97
46) Bromoform	10.11	173	30604	10.35	PPB	97
49) 1,1,2,2-Tetrachloroethane	10.64	83	83698	11.79	PPB	100
51) 1,3-Dichlorobenzene	11.53	146	213344	11.05	PPB	97
52) 1,4-Dichlorobenzene	11.64	146	217795	11.04	PPB	99
53) 1,2-Dichlorobenzene	12.01	146	192217	10.91	PPB	95

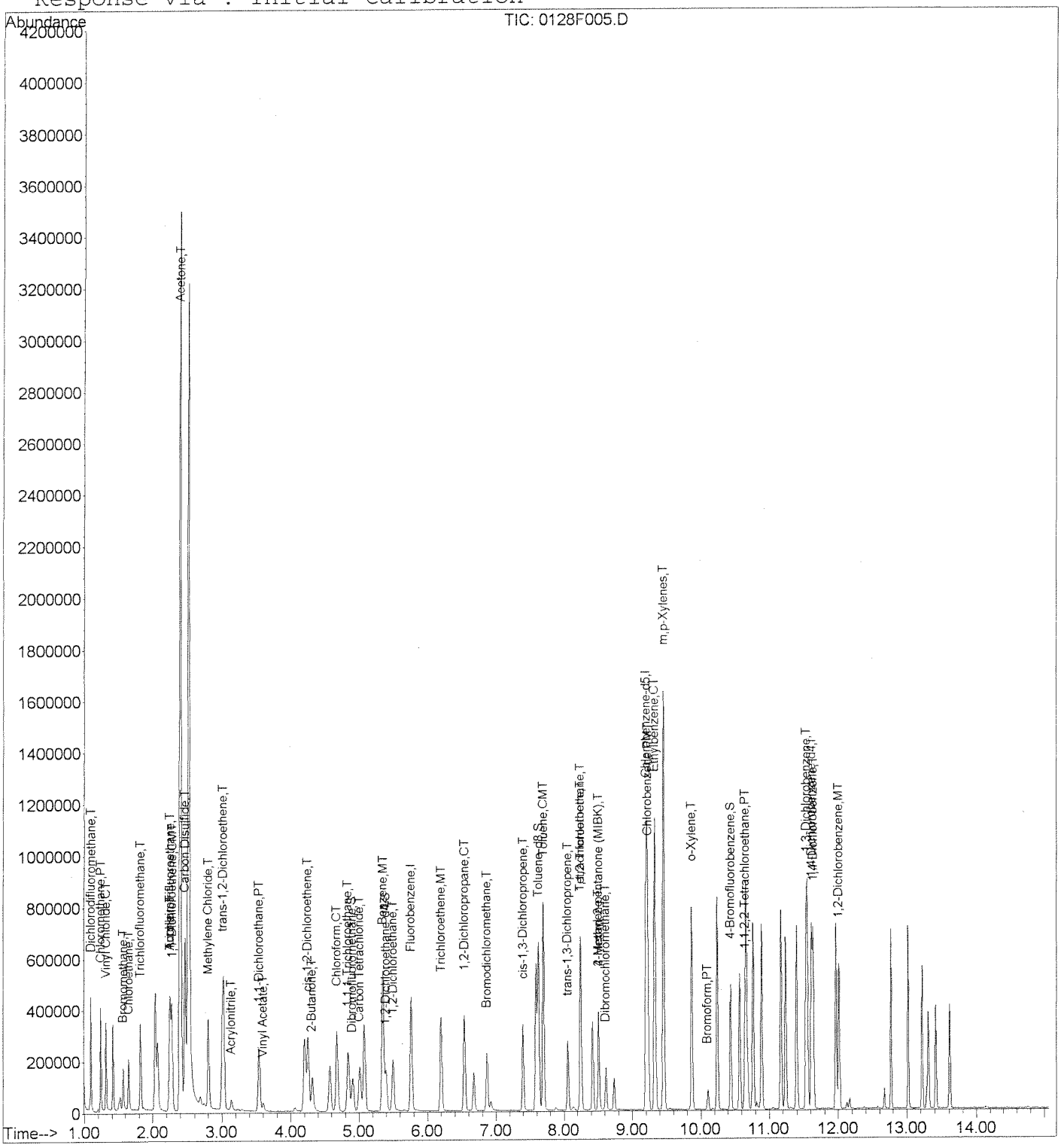
(#) = qualifier out of range (m) = manual integration

Data File : J:\MS23\DATA\012811\0128F005.D
Acq On : 28 Jan 2011 3:39 pm
Sample : K710-005MS
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 7:55 2011

Vial: 5
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Batch QCDMS
Lab Code: KWG1100975-2

Extraction Method: METHOD
Analysis Method: 624

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	**12.7**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	**10.9**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	**11.2**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	**11.0**		5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	**9.99**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	**12.1**		5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	**11.2**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	**11.6**		5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	**11.6**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	**13.8**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	**11.7**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	**11.3**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	**11.8**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	**12.1**		5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	**11.3**		5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	**11.5**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	**11.7**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	ND	U	10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	**8.94**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	**12.0**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	**10.8**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	**10.9**		5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	**10.5**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	**10.3**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	**10.6**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	**10.2**		5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	**10.1**		5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	**11.8**		5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	**10.7**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	**10.6**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	**10.7**		5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	**90.0**		50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	**12.5**		10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Batch QCDMS	**Units:**	ug/L
Lab Code:	KWG1100975-2	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	107	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	102	83-113	01/28/11	Acceptable
Dibromofluoromethane	102	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments:

Exception Report

Data File: J:\MS23\DATA\012811\0128F006.D
Lab ID: KWG1100975-2 -- K1100710-005DMS
RunType: DMS
Matrix: WATER

Date Acquired: 01/28/2011 16:07
Date Quantitated: 02/02/2011 07:55
Batch ID: KWG1100972
Analysis Method: 624
MethodJoinID: MJ158

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: KW 2/2/11

Secondary Review: HB 2-2-11

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**		**Receive Date:**	02/02/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996324	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:			
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:	J:\MS23\DATA\012811\0128F007.D	**Quant based on Method**	

Data File:	J:\MS23\DATA\012811\0128F006.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 16:07	**Quant Date:**	02/02/2011 07:55	**Vial:**	5
Run Type:	DMS			**Dilution:**	1.0
Lab ID:	KWG1100975-2 -- K1100710-005DMS			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	391348	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	182287	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	149224	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.90	0.00	0.00	113	88419	10.15	102	71-115	OK	
1	1,2-Dichloroethane-d4	5.40	0.00	0.00	65	117804	10.09	101	69-116	OK	
1	Toluene-d8	7.62	0.00	0.00	98	377390	10.67	107	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	144159	10.23	102	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.09		0.00	85	166911	10.83	10.8		
1	Chloromethane	1.23		0.00	50	208868	12.70	12.7		
1	Vinyl Chloride	1.31		0.00	62	175451	10.89	10.9		
1	Bromomethane	1.56	-0.01	0.00	96	62152	11.20	11.2		
1	Chloroethane	1.65		0.00	49	29355	11.02	11.0		
1	Trichlorofluoromethane	1.82		0.00	101	190440	9.99	9.99		
1	Acrolein	2.25		0.00	56	93841	89.99	90.0		
1	Trichlorotrifluoroethane	2.25		0.00	151	76481	10.98	11.0		
1	1,1-Dichloroethene	2.28		0.00	96	97498	12.05	12.1		
1	Acetone	2.40		0.00	43	3845084	2,088	2090		
1	Carbon Disulfide	2.47		0.00	76	772961	23.94	23.9		
1	Methylene Chloride	2.80		0.00	84	116294	11.24	11.2		
1	Acrylonitrile	3.14		0.00	53	30862	12.46	12.5		
1	trans-1,2-Dichloroethene	3.03		0.00	96	113535	11.56	11.6		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F006.D		**Instrument:** MS23
Acqu Date:	01/28/2011 16:07	**Quant Date:** 02/02/2011 07:55	**Vial:** 5
Run Type:	DMS		**Dilution:** 1.0
Lab ID:	KWG1100975-2 -- K1100710-005DMS		**Soln Conc. Units:** PPB

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1-Dichloroethane	3.54		0.00	63	227667	11.55	11.6		
1	Vinyl Acetate				86	0		1.1	U	
1	cis-1,2-Dichloroethene	4.26		0.00	96	121564	11.39	11.4		
1	2-Butanone (MEK)	4.31		0.00	72	39887	64.84	64.8		
1	Chloroform	4.68		0.00	83	246975	13.82	13.8		
1	1,1,1-Trichloroethane (TCA)	4.84	-0.01	0.00	97	168046	11.74	11.7		
1	Carbon Tetrachloride	5.01		0.00	117	114405	11.29	11.3		
1	Benzene	5.35		0.00	78	488325	11.75	11.8		
1	1,2-Dichloroethane (EDC)	5.50		0.00	62	164660	12.06	12.1		
1	Trichloroethene (TCE)	6.20		0.00	95	115354	11.28	11.3		
1	1,2-Dichloropropane	6.54		0.00	63	124985	11.50	11.5		
1	Bromodichloromethane	6.87		0.00	83	134032	11.66	11.7		
1	2-Chloroethyl Vinyl Ether				63	0d		0.31	U	
1	cis-1,3-Dichloropropene	7.40		0.00	75	154891	10.79	10.8		
1	4-Methyl-2-pentanone (MIBK)	8.51		0.00	58	117475	59.74	59.7		
1	Toluene	7.70		0.00	92	294888	12.00	12.0		
2	trans-1,3-Dichloropropene	8.06		0.00	75	116853	8.94	8.94		
2	1,1,2-Trichloroethane	8.25		0.00	83	70038	10.94	10.9		
2	Tetrachloroethene (PCE)	8.25	-0.01	0.00	164	83246	10.49	10.5		
2	2-Hexanone	8.51		0.00	43	249275	54.68	54.7		
2	Dibromochloromethane	8.62		0.00	129	68600	10.29	10.3		
2	Chlorobenzene	9.23		0.00	112	294193	10.56	10.6		
2	Ethylbenzene	9.33		0.00	106	156876	10.23	10.2		
2	m,p-Xylenes	9.46		0.00	106	354016	18.70	18.7		
2	o-Xylene	9.87		0.00	106	178071	9.95	9.95		
2	Styrene				103	0d		0.11	U	
2	Bromoform	10.10	-0.01	0.00	173	29904	10.12	10.1		
3	1,1,2,2-Tetrachloroethane	10.65		0.00	83	84624	11.77	11.8		
3	1,3-Dichlorobenzene	11.53		0.00	146	208524	10.66	10.7		
3	1,4-Dichlorobenzene	11.63		0.00	146	212100	10.61	10.6		
3	1,2-Dichlorobenzene	12.01		0.00	146	190362	10.67	10.7		
	Isopropyl Acetate				0	0		10	U	NR
	Ethyl Acetate				0	0		10	U	NR
	Bis(chloromethyl) Ether				0	0		10	U	NR
	Amyl Acetate				0	0		10	U	NR

Prep Amount: 10 ml **Dilution:** 1.0
Prep Final Vol: 10 ml **Unit Factor:** 1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F006.D Vial: 5
Acq On : 28 Jan 2011 4:07 pm Operator: KR
Sample : K710-005DMS Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Feb 02 07:55:12 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.76	96	391348	10.00	PPB	0.00
35) Chlorobenzene-d5	9.20	82	182287	10.00	PPB	0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	149224	10.00	PPB	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	4.90	113	88419	10.15	PPB	0.00
Spiked Amount 10.000			Recovery =	101.50%		
24) 1,2-Dichloroethane-d4	5.40	65	117804	10.09	PPB	0.00
Spiked Amount 10.000			Recovery =	100.90%		
33) Toluene-d8	7.62	98	377390	10.67	PPB	0.00
Spiked Amount 10.000			Recovery =	106.70%		
47) 4-Bromofluorobenzene	10.44	95	144159	10.23	PPB	0.00
Spiked Amount 10.000			Recovery =	102.30%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.09	85	166911	10.83	PPB	98
3) Chloromethane	1.23	50	208868	12.70	PPB	99
4) Vinyl Chloride	1.31	62	175451	10.89	PPB	99
5) Bromomethane	1.56	96	62152	11.20	PPB	99
6) Chloroethane	1.65	49	29355	11.02	PPB	89
7) Trichlorofluoromethane	1.82	101	190440	9.99	PPB	94
8) Acrolein	2.25	56	93841	89.99	PPB	94
9) Trichlorotrifluoroethane	2.25	151	76481	10.98	PPB	99
10) 1,1-Dichloroethene	2.28	96	97498	12.05	PPB	89
11) Acetone	2.40	43	3845084	2088.13	PPB	99
12) Carbon Disulfide	2.47	76	772961	23.94	PPB	99
13) Methylene Chloride	2.80	84	116294	11.24	PPB	93
14) Acrylonitrile	3.14	53	30862	12.46	PPB	92
15) trans-1,2-Dichloroethene	3.03	96	113535	11.56	PPB	98
16) 1,1-Dichloroethane	3.54	63	227667	11.55	PPB	99
18) cis-1,2-Dichloroethene	4.26	96	121564	11.39	PPB	99
19) 2-Butanone	4.31	72	39887	64.84	PPB	97
20) Chloroform	4.68	83	246975	13.82	PPB	96
21) 1,1,1-Trichloroethane	4.84	97	168046	11.74	PPB	99
23) Carbon Tetrachloride	5.01	117	114405	11.29	PPB	98
25) Benzene	5.35	78	488325	11.75	PPB	98
26) 1,2-Dichloroethane	5.50	62	164660	12.06	PPB	95
27) Trichloroethene	6.20	95	115354	11.28	PPB	97
28) 1,2-Dichloropropane	6.54	63	124985	11.50	PPB	97
29) Bromodichloromethane	6.87	83	134032	11.66	PPB	96
31) cis-1,3-Dichloropropene	7.40	75	154891	10.79	PPB	99
32) 4-Methyl-2-pentanone (MIBK	8.51	58	117475	59.74	PPB	96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F006.D
Acq On : 28 Jan 2011 4:07 pm
Sample : K710-005DMS
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 02 07:55:12 2011

Vial: 5
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
34)	Toluene	7.70	92	294888	12.00	PPB	95
36)	trans-1,3-Dichloropropene	8.06	75	116853	8.94	PPB	97
37)	1,1,2-Trichloroethane	8.25	83	70038	10.94	PPB	85
38)	Tetrachloroethene	8.25	164	83246	10.49	PPB	97
39)	2-Hexanone	8.51	43	249275	54.68	PPB	97
40)	Dibromochloromethane	8.62	129	68600	10.29	PPB	97
41)	Chlorobenzene	9.23	112	294193	10.56	PPB	97
42)	Ethylbenzene	9.33	106	156876	10.23	PPB	93
43)	m,p-Xylenes	9.46	106	354016	18.70	PPB	99
44)	o-Xylene	9.87	106	178071	9.95	PPB	95
46)	Bromoform	10.10	173	29904	10.12	PPB	98
49)	1,1,2,2-Tetrachloroethane	10.65	83	84624	11.77	PPB	97
51)	1,3-Dichlorobenzene	11.53	146	208524	10.66	PPB	96
52)	1,4-Dichlorobenzene	11.63	146	212100	10.61	PPB	97
53)	1,2-Dichlorobenzene	12.01	146	190362	10.67	PPB	98

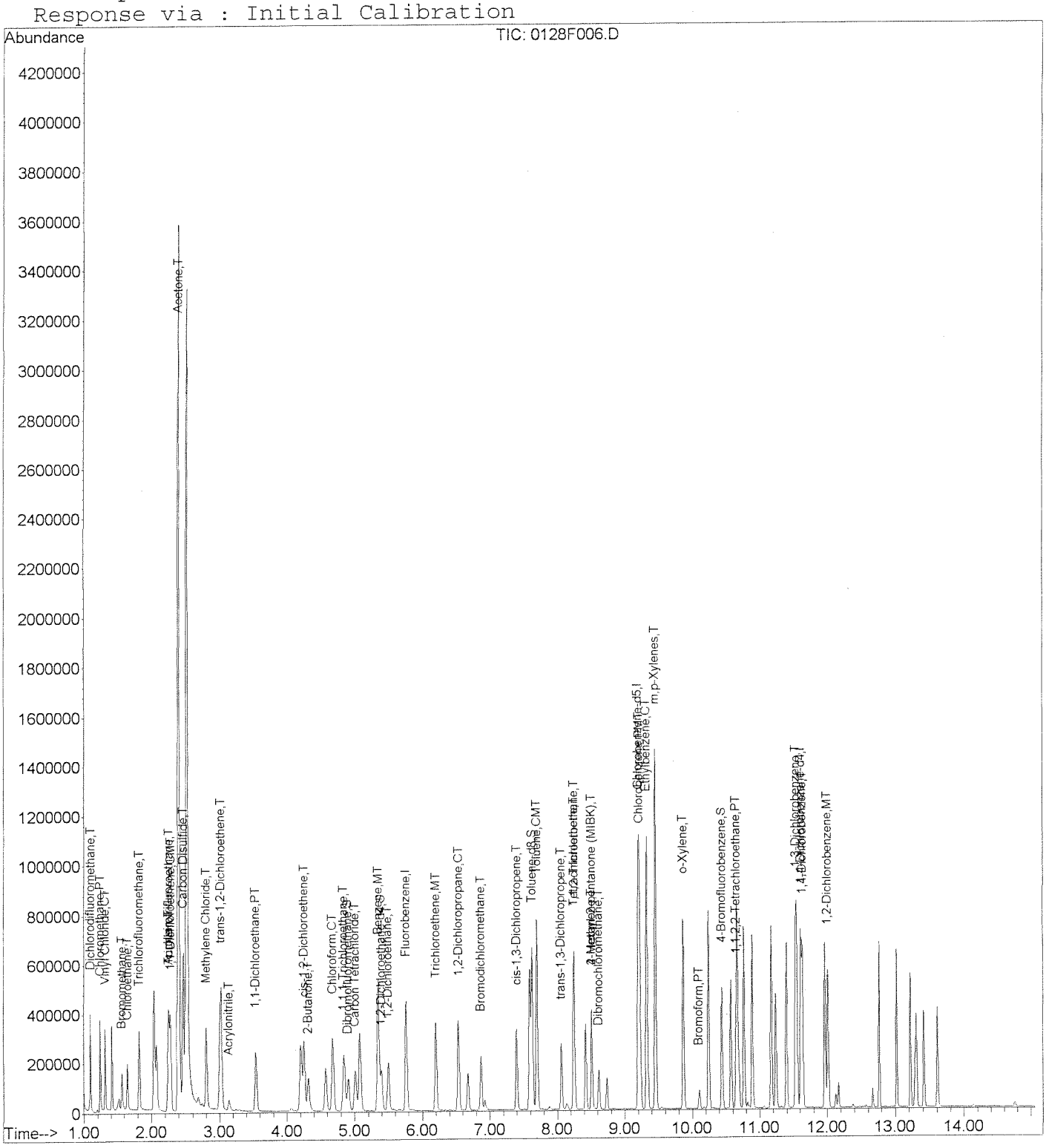
(#) = qualifier out of range (m) = manual integration

Data File : J:\MS23\DATA\012811\0128F006.D
Acq On : 28 Jan 2011 4:07 pm
Sample : K710-005DMS
Misc :
MS Integration Params: rteint.p
Quant Time: Feb 2 7:55 2011

Vial: 5
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Volatile Organic Compounds

Sample Name: Lab Control Sample
Lab Code: KWG1100975-3

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 624

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Chloromethane	**11.5**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Vinyl Chloride	**10.9**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Bromomethane	**11.6**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
Chloroethane	**11.1**		5.0	0.25	1	01/28/11	01/28/11	KWG1100975	
Trichlorofluoromethane	**10.0**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethene	**11.7**		5.0	0.18	1	01/28/11	01/28/11	KWG1100975	
Methylene Chloride	**11.2**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
trans-1,2-Dichloroethene	**11.6**		5.0	0.21	1	01/28/11	01/28/11	KWG1100975	
1,1-Dichloroethane	**11.5**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
Chloroform	**12.0**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
1,1,1-Trichloroethane (TCA)	**11.4**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Carbon Tetrachloride	**10.9**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Benzene	**11.8**		5.0	0.20	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloroethane (EDC)	**12.4**		5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
Trichloroethene (TCE)	**11.2**		5.0	0.17	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichloropropane	**11.5**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Bromodichloromethane	**11.7**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
2-Chloroethyl Vinyl Ether	**12.0**		10	0.31	1	01/28/11	01/28/11	KWG1100975	
trans-1,3-Dichloropropene	**8.72**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
Toluene	**11.9**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
cis-1,3-Dichloropropene	**11.0**		5.0	0.15	1	01/28/11	01/28/11	KWG1100975	
1,1,2-Trichloroethane	**10.7**		5.0	0.23	1	01/28/11	01/28/11	KWG1100975	
Tetrachloroethene (PCE)	**10.2**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Dibromochloromethane	**10.2**		5.0	0.19	1	01/28/11	01/28/11	KWG1100975	
Chlorobenzene	**10.5**		5.0	0.16	1	01/28/11	01/28/11	KWG1100975	
Ethylbenzene	**10.2**		5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Bromoform	**9.45**		5.0	0.43	1	01/28/11	01/28/11	KWG1100975	
1,1,2,2-Tetrachloroethane	**11.6**		5.0	0.28	1	01/28/11	01/28/11	KWG1100975	
1,3-Dichlorobenzene	**10.9**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,4-Dichlorobenzene	**10.9**		5.0	0.13	1	01/28/11	01/28/11	KWG1100975	
1,2-Dichlorobenzene	**10.7**		5.0	0.12	1	01/28/11	01/28/11	KWG1100975	
Acrolein†	**110**		50	2.9	1	01/28/11	01/28/11	KWG1100975	
Acrylonitrile†	**12.0**		10	0.43	1	01/28/11	01/28/11	KWG1100975	

Comments

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Lab Control Sample	**Units:**	ug/L
Lab Code:	KWG1100975-3	**Basis:**	NA

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Toluene-d8	109	84-115	01/28/11	Acceptable
4-Bromofluorobenzene	102	83-113	01/28/11	Acceptable
Dibromofluoromethane	106	71-115	01/28/11	Acceptable

† Analyte Comments

Acrolein	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.
Acrylonitrile	This compound is unstable under normal conditions. As per EPA Method 624 guidelines, the reported value was an estimate.

Comments

Exception Report

Data File: J:\MS23\DATA\012811\0128F004.D
Lab ID: KWG1100975-3
RunType: LCS
Matrix: WATER

Date Acquired: 01/28/2011 14:26
Date Quantitated: 01/28/2011 14:49
Batch ID: KWG1100972
Analysis Method: 624
MethodJoinID: MJ158

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
Analytical Holding Time	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Minimum RF	NA	NA	NA	x	
Continuing Calibration SPCC/CCC	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Relative Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: [signature] 1/28/11

Secondary Review: HB 2-2-11

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	624 VOC_FP	**Collect Date:**		**Receive Date:**	01/28/2011

Analysis Lot:	KWG1100972	**Prep Lot:**	KWG1100975	**Report Group:**	
Analysis Method:	624	**Prep Method:**	METHOD		
Prep Ref:	996325	**Prep Date:**	01/28/2011		

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:			
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:		**Quant based on Method**	

Data File:	J:\MS23\DATA\012811\0128F004.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 14:26	**Quant Date:**	01/28/2011 14:49	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG1100975-3			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	394117	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	186471	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	152274	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits		Rpt?
1	Dibromofluoromethane	4.91	0.01	0.00	113	92771	10.58	106	71-115	OK	
1	1,2-Dichloroethane-d4	5.39	-0.01	0.00	65	123460	10.50	105	69-116	OK	
1	Toluene-d8	7.62	0.00	0.00	98	388619	10.91	109	84-115	OK	
2	4-Bromofluorobenzene	10.44	0.00	0.00	95	146488	10.16	102	83-113	OK	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.09		0.00	85	169247	10.91	10.9		
1	Chloromethane	1.23		0.00	50	189532	11.45	11.5		
1	Vinyl Chloride	1.31		0.00	62	175948	10.85	10.9		
1	Bromomethane	1.57		0.00	96	64783	11.59	11.6		
1	Chloroethane	1.65		0.00	49	29844	11.12	11.1		
1	Trichlorofluoromethane	1.82		0.00	101	192390	10.03	10.0		
1	Acrolein	2.26	0.01	0.00	56	115585	110.06	110		
1	Trichlorotrifluoroethane	2.25		0.00	151	76876	10.96	11.0		
1	1,1-Dichloroethene	2.28		0.00	96	95106	11.68	11.7		
1	Acetone	2.40		0.00	43	122927	66.29	66.3		
1	Carbon Disulfide	2.47		0.00	76	786121	24.18	24.2		
1	Methylene Chloride	2.80		0.00	84	116317	11.16	11.2		
1	Acrylonitrile	3.14		0.00	53	29880	11.98	12.0		
1	trans-1,2-Dichloroethene	3.03		0.00	96	114610	11.59	11.6		

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F004.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 14:26	**Quant Date:**	01/28/2011 14:49	**Vial:**	4
Run Type:	LCS			**Dilution:**	1.0
Lab ID:	KWG1100975-3			**Soln Conc. Units:**	PPB

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1-Dichloroethane	3.54		0.00	63	228805	11.53	11.5		
1	Vinyl Acetate	3.60		0.00	86	26879	23.12	23.1		
1	cis-1,2-Dichloroethene	4.26		0.00	96	122851	11.43	11.4		
1	2-Butanone (MEK)	4.31		0.00	72	36215	58.46	58.5		
1	Chloroform	4.68		0.00	83	215476	11.97	12.0		
1	1,1,1-Trichloroethane (TCA)	4.84	-0.01	0.00	97	163776	11.36	11.4		
1	Carbon Tetrachloride	5.01		0.00	117	110861	10.86	10.9		
1	Benzene	5.35		0.00	78	494666	11.81	11.8		
1	1,2-Dichloroethane (EDC)	5.50		0.00	62	170233	12.38	12.4		
1	Trichloroethene (TCE)	6.20		0.00	95	115105	11.18	11.2		
1	1,2-Dichloropropane	6.53	-0.01	0.00	63	125785	11.49	11.5		
1	Bromodichloromethane	6.87		0.00	83	135501	11.71	11.7		
1	2-Chloroethyl Vinyl Ether	7.27		0.00	63	52231	11.97	12.0		
1	cis-1,3-Dichloropropene	7.40		0.00	75	159541	11.03	11.0		
1	4-Methyl-2-pentanone (MIBK)	8.51		0.00	58	108460	54.77	54.8		
1	Toluene	7.70		0.00	92	293470	11.86	11.9		
2	trans-1,3-Dichloropropene	8.06		0.00	75	116547	8.72	8.72		
2	1,1,2-Trichloroethane	8.24	-0.01	0.00	83	70081	10.70	10.7		
2	Tetrachloroethene (PCE)	8.25	-0.01	0.00	164	82918	10.22	10.2		
2	2-Hexanone	8.51		0.00	43	233282	50.03	50.0		
2	Dibromochloromethane	8.62		0.00	129	69747	10.23	10.2		
2	Chlorobenzene	9.23		0.00	112	300013	10.53	10.5		
2	Ethylbenzene	9.33		0.00	106	160437	10.23	10.2		
2	m,p-Xylenes	9.46		0.00	106	401957	20.76	20.8		
2	o-Xylene	9.87		0.00	106	189821	10.37	10.4		
2	Styrene	9.90		0.00	103	149470**m**	10.68	10.7		
2	Bromoform	10.10	-0.01	0.00	173	28574	9.45	9.45		
3	1,1,2,2-Tetrachloroethane	10.64	-0.01	0.00	83	84710	11.55	11.6		
3	1,3-Dichlorobenzene	11.53		0.00	146	218481	10.94	10.9		
3	1,4-Dichlorobenzene	11.64	0.01	0.00	146	221184	10.85	10.9		
3	1,2-Dichlorobenzene	12.01		0.00	146	194626	10.69	10.7		
	Isopropyl Acetate				0	0		10	U	NR
	Ethyl Acetate				0	0		10	U	NR
	Bis(chloromethyl) Ether				0	0		10	U	NR
	Amyl Acetate				0	0		10	U	NR

Prep Amount: 10 ml **Dilution:** 1.0
Prep Final Vol: 10 ml **Unit Factor:** 1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F004.D Vial: 4
Acq On : 28 Jan 2011 2:26 pm Operator: KR
Sample : LCS Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 28 14:48:44 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	394117	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	186471	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	152274	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.91	113	92771	10.58	PPB		0.00
Spiked Amount 10.000			Recovery =	105.80%			
24) 1,2-Dichloroethane-d4	5.39	65	123460	10.50	PPB		0.00
Spiked Amount 10.000			Recovery =	105.00%			
33) Toluene-d8	7.62	98	388619	10.91	PPB		0.00
Spiked Amount 10.000			Recovery =	109.10%			
47) 4-Bromofluorobenzene	10.44	95	146488	10.16	PPB		0.00
Spiked Amount 10.000			Recovery =	101.60%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.09	85	169247	10.91	PPB		99
3) Chloromethane	1.23	50	189532	11.45	PPB		98
4) Vinyl Chloride	1.31	62	175948	10.85	PPB		100
5) Bromomethane	1.57	96	64783	11.59	PPB		97
6) Chloroethane	1.65	49	29844	11.12	PPB		98
7) Trichlorofluoromethane	1.82	101	192390	10.03	PPB		96
8) Acrolein	2.26	56	115585	110.06	PPB		100
9) Trichlorotrifluoroethane	2.25	151	76876	10.96	PPB		99
10) 1,1-Dichloroethene	2.28	96	95106	11.68	PPB		94
11) Acetone	2.40	43	122927	66.29	PPB		98
12) Carbon Disulfide	2.47	76	786121	24.18	PPB		99
13) Methylene Chloride	2.80	84	116317	11.16	PPB		99
14) Acrylonitrile	3.14	53	29880	11.98	PPB		99
15) trans-1,2-Dichloroethene	3.03	96	114610	11.59	PPB		99
16) 1,1-Dichloroethane	3.54	63	228805	11.53	PPB		97
17) Vinyl Acetate	3.60	86	26879	23.12	PPB	#	76
18) cis-1,2-Dichloroethene	4.26	96	122851	11.43	PPB		99
19) 2-Butanone	4.31	72	36215	58.46	PPB		98
20) Chloroform	4.68	83	215476	11.97	PPB		99
21) 1,1,1-Trichloroethane	4.84	97	163776	11.36	PPB		94
23) Carbon Tetrachloride	5.01	117	110861	10.86	PPB		99
25) Benzene	5.35	78	494666	11.81	PPB		98
26) 1,2-Dichloroethane	5.50	62	170233	12.38	PPB		97
27) Trichloroethene	6.20	95	115105	11.18	PPB		98
28) 1,2-Dichloropropane	6.53	63	125785	11.49	PPB		99
29) Bromodichloromethane	6.87	83	135501	11.71	PPB		97
30) 2-Chloroethyl Vinyl Ether	7.27	63	52231	11.97	PPB		98

(#) = qualifier out of range (m) = manual integration
0128F004.D 011211624.M Fri Jan 28 14:50:14 2011 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F004.D Vial: 4
Acq On : 28 Jan 2011 2:26 pm Operator: KR
Sample : LCS Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 28 14:48:44 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	7.40	75	159541	11.03	PPB	100
32)	4-Methyl-2-pentanone (MIBK	8.51	58	108460	54.77	PPB	97
34)	Toluene	7.70	92	293470	11.86	PPB	98
36)	trans-1,3-Dichloropropene	8.06	75	116547	8.72	PPB	100
37)	1,1,2-Trichloroethane	8.24	83	70081	10.70	PPB	89
38)	Tetrachloroethene	8.25	164	82918	10.22	PPB	96
39)	2-Hexanone	8.51	43	233282	50.03	PPB	98
40)	Dibromochloromethane	8.62	129	69747	10.23	PPB	96
41)	Chlorobenzene	9.23	112	300013	10.53	PPB	99
42)	Ethylbenzene	9.33	106	160437	10.23	PPB	90
43)	m,p-Xylenes	9.46	106	401957	20.76	PPB	96
44)	o-Xylene	9.87	106	189821	10.37	PPB	95
45)	Styrene	9.90	103	149470m	10.68	PPB	
46)	Bromoform	10.10	173	28574	9.45	PPB	98
49)	1,1,2,2-Tetrachloroethane	10.64	83	84710	11.55	PPB	97
51)	1,3-Dichlorobenzene	11.53	146	218481	10.94	PPB	98
52)	1,4-Dichlorobenzene	11.64	146	221184	10.85	PPB	96
53)	1,2-Dichlorobenzene	12.01	146	194626	10.69	PPB	99

(#) = qualifier out of range (m) = manual integration
0128F004.D 011211624.M Fri Jan 28 14:50:14 2011 Page 2

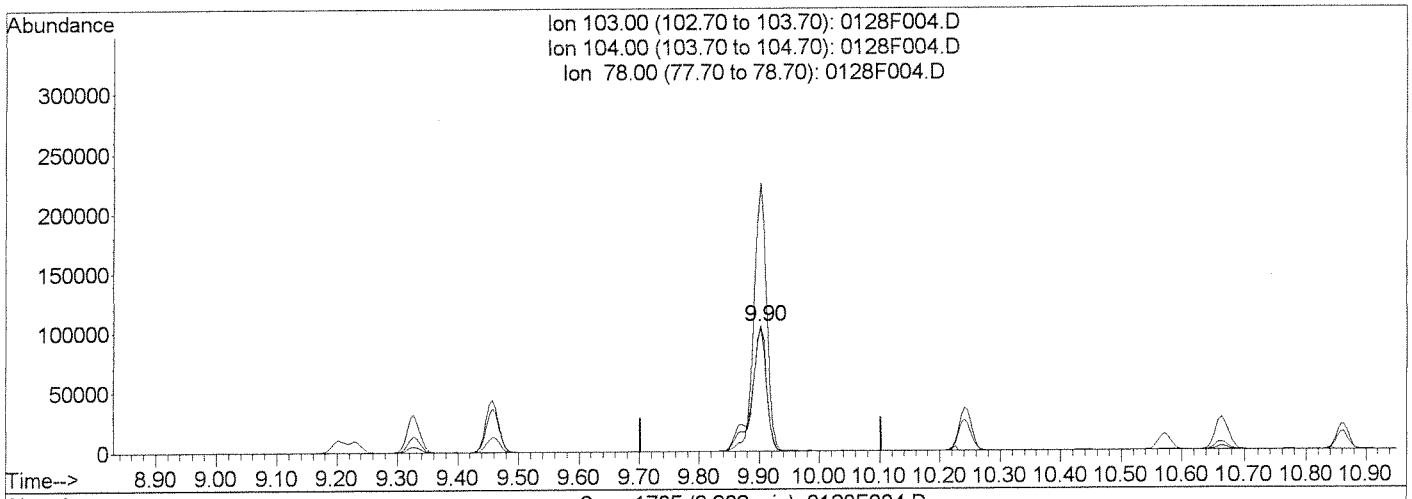
Quantitation Report (Qedit)

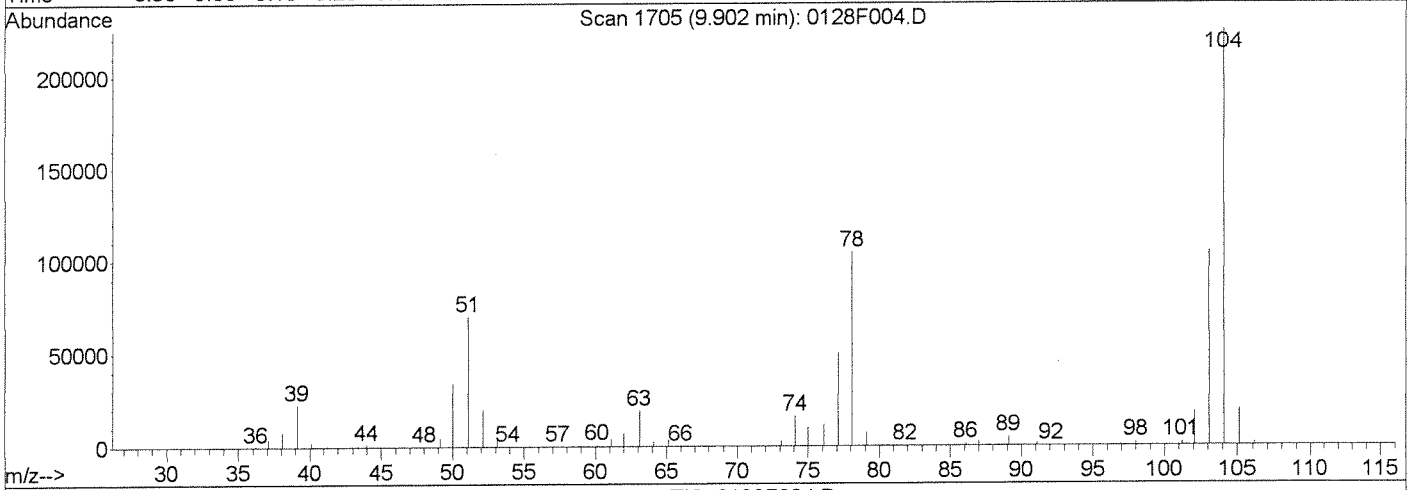
Data File : J:\MS23\DATA\012811\0128F004.D
Acq On : 28 Jan 2011 2:26 pm
Sample : LCS
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 28 14:48 2011

Vial: 4
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Multiple Level Calibration





TIC: 0128F004.D

(45) Styrene (T)

9.90min 12.61PPB

response 176518

Ion	Exp%	Act%
103.00	100	100
104.00	207.80	214.18
78.00	91.10	99.27
0.00	0.00	0.00

0128F004.D 011211624.M Fri Jan 28 14:49:18 2011

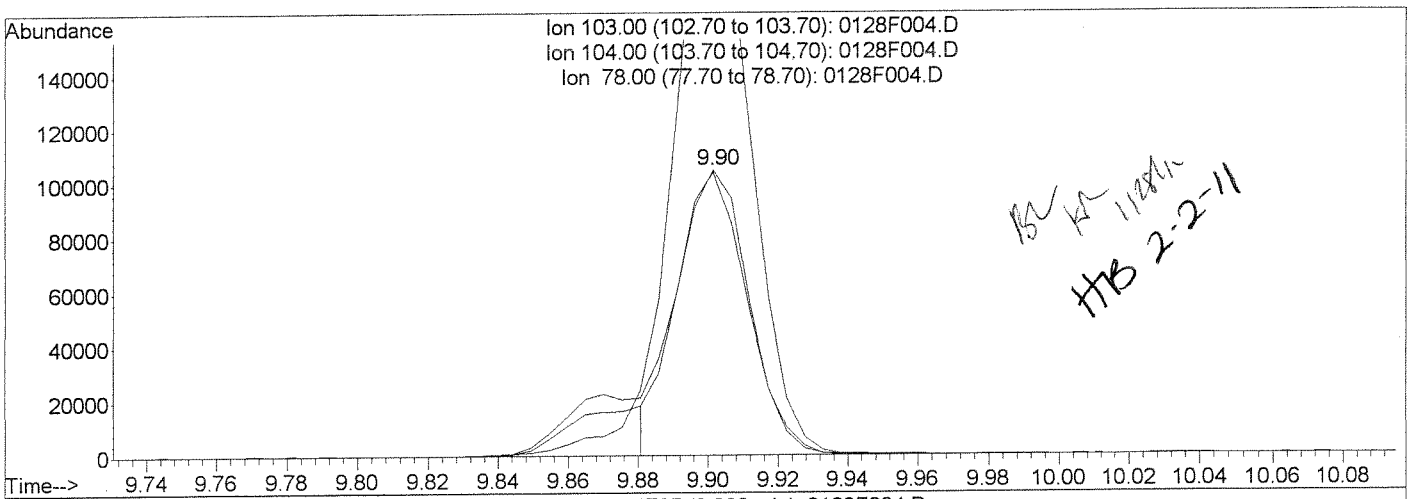
Quantitation Report (Qedit)

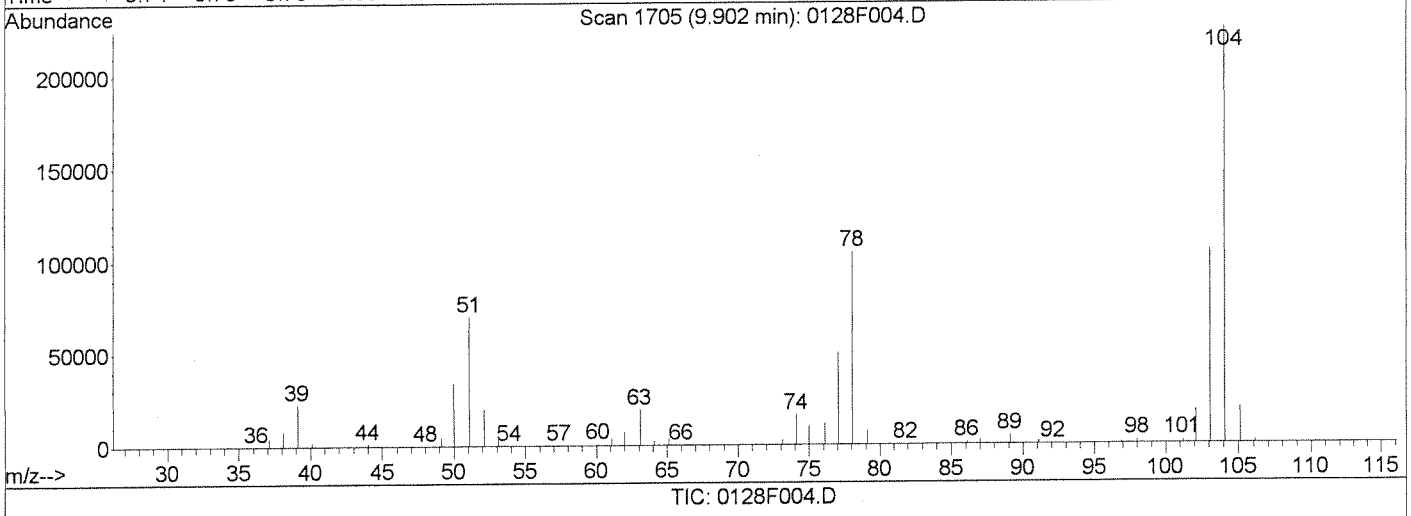
Data File : J:\MS23\DATA\012811\0128F004.D
Acq On : 28 Jan 2011 2:26 pm
Sample : LCS
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 28 14:49 2011

Vial: 4
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Multiple Level Calibration





TIC: 0128F004.D

(45) Styrene (T)

9.90min 10.68PPB m

response 149470

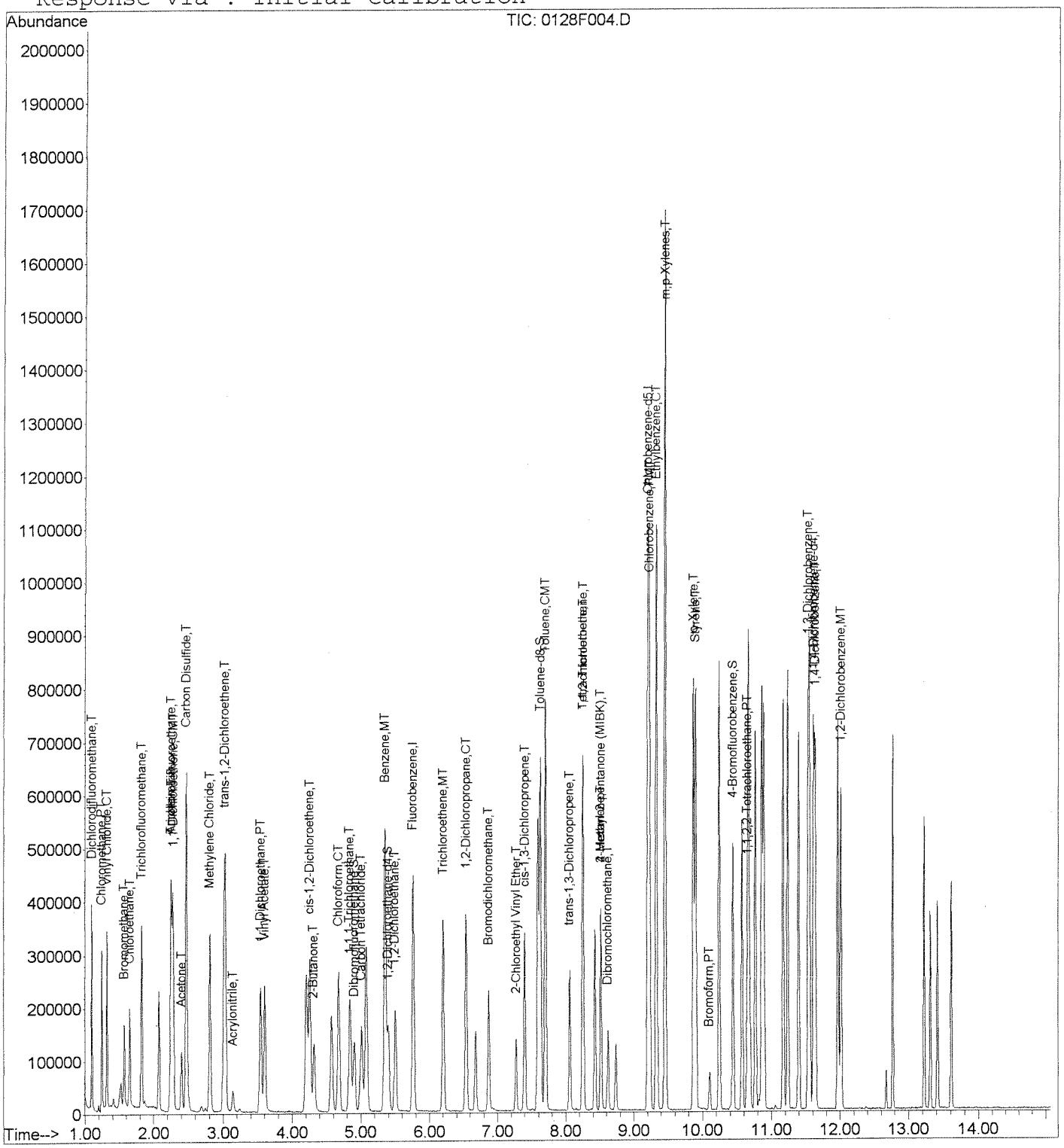
Ion	Exp%	Act%
103.00	100	100
104.00	207.80	214.18
78.00	91.10	99.27
0.00	0.00	0.00

0128F004.D 011211624.M Fri Jan 28 14:49:25 2011

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F004.D Vial: 4
Acq On : 28 Jan 2011 2:26 pm Operator: KR
Sample : LCS Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 28 14:49 2011 Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Standards Data

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 01/28/2011
Time Analyzed: 13:28

Tune Summary
Volatile Organic Compounds

File ID: J:\MS23\DATA\012811\0128F002.D
Instrument ID: MS23
Column:

Analysis Method: 624
Analysis Lot: KWG1100972

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	25.5	10507	PASS
75	95	30	60	58.0	23949	PASS
95	95	100	100	100.0	41258	PASS
96	95	5	9	7.5	3101	PASS
173	174	0	2	0.4	122	PASS
174	95	50	120	69.9	28840	PASS
175	174	5	9	5.3	1523	PASS
176	174	95	101	96.8	27917	PASS
177	176	5	9	7.1	1978	PASS

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed	Q
Continuing Calibration Verification	KWG1100972-2	J:\MS23\DATA\012811\0128F003.D	01/28/2011	13:57	
Lab Control Sample	KWG1100975-3	J:\MS23\DATA\012811\0128F004.D	01/28/2011	14:26	
Batch QCMS	KWG1100975-1	J:\MS23\DATA\012811\0128F005.D	01/28/2011	15:39	
Batch QCDMS	KWG1100975-2	J:\MS23\DATA\012811\0128F006.D	01/28/2011	16:07	
Method Blank	KWG1100975-4	J:\MS23\DATA\012811\0128F007.D	01/28/2011	16:36	
Batch QC	K1100710-005	J:\MS23\DATA\012811\0128F011.D	01/28/2011	18:31	
MW-3	K1100692-001	J:\MS23\DATA\012811\0128F013.D	01/28/2011	19:29	
MW-7	K1100692-002	J:\MS23\DATA\012811\0128F014.D	01/28/2011	19:57	
EB-012511	K1100692-003	J:\MS23\DATA\012811\0128F015.D	01/28/2011	20:26	
Trip Blank	K1100692-004	J:\MS23\DATA\012811\0128F016.D	01/28/2011	20:55	

Results flagged with an asterisk (*) indicate the analysis performed outside specified tune window

Exception Report

Data File: J:\MS23\DATA\012811\0128F002.D
Lab ID: KWG1100972-1
RunType: BFB
Matrix: WATER

Date Acquired: 01/28/2011 13:28
Date Quantitated:
Batch ID: KWG1100972
Analysis Method: BFB
ListJoinID: LJ774

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Ion Ratio	NA	NA	NA	x	

Primary Review: KW 1/28/11

Secondary Review: HB 2.2.11

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	624	**Collect Date:**		**Receive Date:**	01/28/2011

Analysis Lot:	KWG1100972	**Prep Lot:**		**Report Group:**	
Analysis Method:	BFB	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:	GC/MS Tuning Evaluation	**Report List ID:**	LJ774
Tune Ref:		**Method ID:**	MJ159
MB Ref:		**Quant based on Report List**	

Data File:	J:\MS23\DATA\012811\0128F002.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 13:28	**Quant Date:**		**Vial:**	2
Run Type:	BFB			**Dilution:**	1.0
Lab ID:	KWG1100972-1			**Soln Conc. Units:**	

Tune Results

Target Mass	Relative to Mass	Lower Limit%	Upper Limit%	Relative Abundance %	Raw Abundance	Result Pass/Fail
50	95	15	40	25.5	10507	Pass
75	95	30	60	58.0	23949	Pass
95	95	100	100	100.0	41258	Pass
96	95	5	9	7.5	3101	Pass
173	174	0	2	0.4	122	Pass
174	95	50	120	69.9	28840	Pass
175	174	5	9	5.3	1523	Pass
176	174	95	101	96.8	27917	Pass
177	176	5	9	7.1	1978	Pass

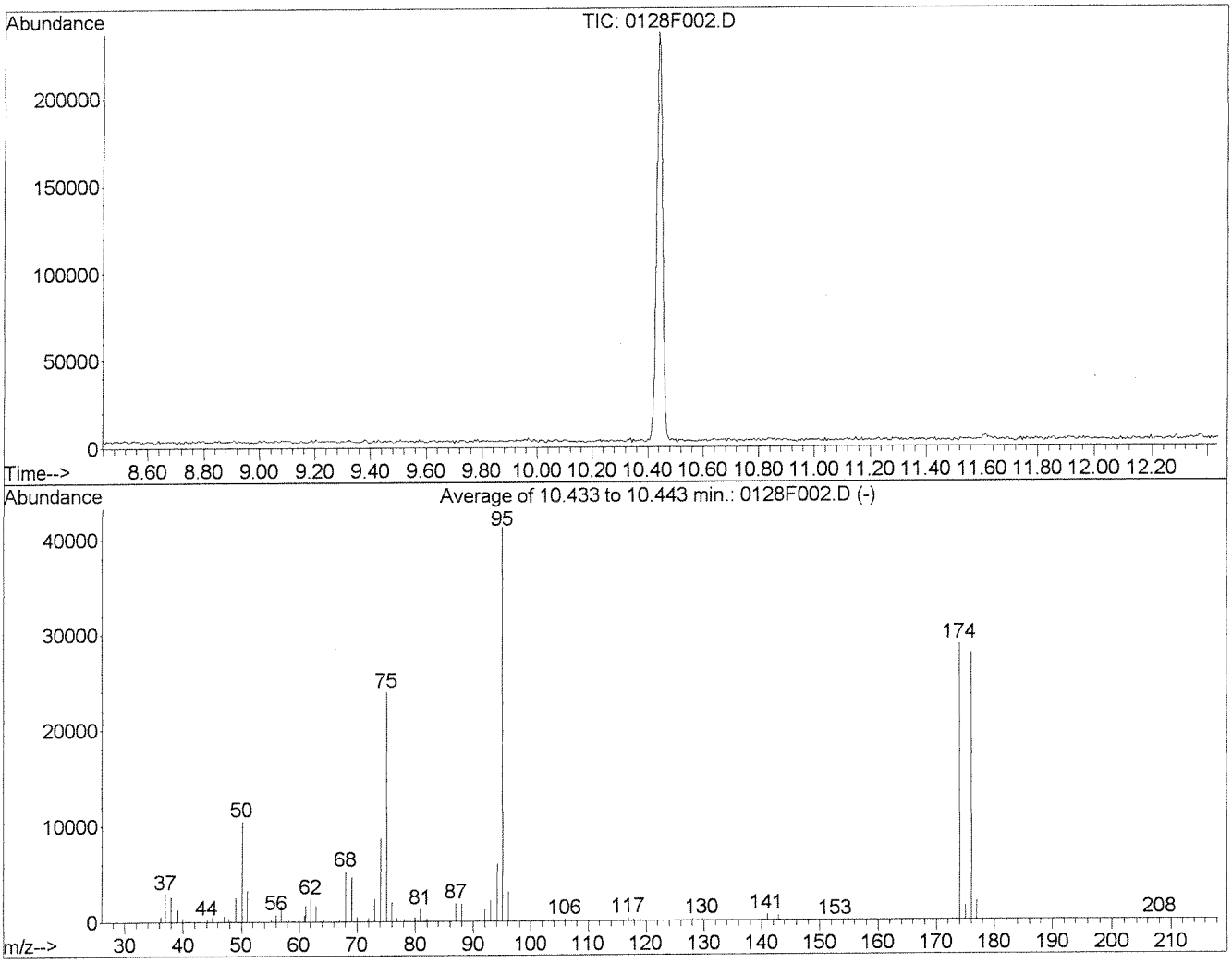
U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File : J:\MS23\DATA\012811\0128F002.D
Acq On : 28 Jan 2011 1:28 pm
Sample : BFB
Misc :
MS Integration Params: rteint.p
Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624

Vial: 2
Operator: KR
Inst : MS23
Multiplr: 1.00



AutoFind: Scans 1806, 1807, 1808; Background Corrected with Scan 1798

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	25.5	10507	PASS
75	95	30	60	58.0	23949	PASS
95	95	100	100	100.0	41258	PASS
96	95	5	9	7.5	3101	PASS
173	174	0.00	2	0.4	122	PASS
174	95	50	120	69.9	28840	PASS
175	174	5	9	5.3	1523	PASS
176	174	95	101	96.8	27917	PASS
177	176	5	9	7.1	1978	PASS

0128F002.D 011211624.M Fri Jan 28 14:36:56 2011

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL10216
Instrument ID: MS23

Column: MS

Level ID	File ID
A	J:\MS23\DATA\011211\0112F005.D
B	J:\MS23\DATA\011211\0112F006.D
C	J:\MS23\DATA\011211\0112F007.D
D	J:\MS23\DATA\011211\0112F008.D
E	J:\MS23\DATA\011211\0112F009.D
F	J:\MS23\DATA\011211\0112F010.D
G	J:\MS23\DATA\011211\0112F011.D

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Chloromethane	A	0.50	0.438	B	1.0	0.371	C	5.0	0.392	D	10	0.479	E	40	0.394
	F	80	0.423	G	120	0.442									
Vinyl Chloride	A	0.50	0.359	B	1.0	0.373	C	5.0	0.416	D	10	0.437	E	40	0.434
	F	80	0.434	G	120	0.428									
Bromomethane	A	0.50	0.0820	B	1.0	0.0966	C	5.0	0.100	D	10	0.155	E	40	0.178
	F	80	0.193	G	120	0.188									
Chloroethane	A	0.50	0.0746	B	1.0	0.0627	C	5.0	0.0674	D	10	0.0721	E	40	0.0676
	F	80	0.0666	G	120	0.0657									
Trichlorofluoromethane	A	0.50	0.427	B	1.0	0.454	C	5.0	0.524	D	10	0.508	E	40	0.525
	F	80	0.500	G	120	0.471									
1,1-Dichloroethene	A	0.50	0.198	B	1.0	0.186	C	5.0	0.213	D	10	0.206	E	40	0.219
	F	80	0.215	G	120	0.210									
Methylene Chloride	A	0.50	0.323	B	1.0	0.274	C	5.0	0.250	D	10	0.259	E	40	0.246
	F	80	0.248	G	120	0.249									
trans-1,2-Dichloroethene	A	0.50	0.235	B	1.0	0.228	C	5.0	0.253	D	10	0.255	E	40	0.264
	F	80	0.263	G	120	0.260									
1,1-Dichloroethane	A	0.50	0.445	B	1.0	0.463	C	5.0	0.515	D	10	0.525	E	40	0.527
	F	80	0.525	G	120	0.524									
Chloroform	A	0.50	0.429	B	1.0	0.430	C	5.0	0.454	D	10	0.470	E	40	0.471
	F	80	0.473	G	120	0.471									
1,1,1-Trichloroethane (TCA)	A	0.50	0.312	B	1.0	0.300	C	5.0	0.359	D	10	0.371	E	40	0.397
	F	80	0.410	G	120	0.412									
Carbon Tetrachloride	A	0.50	0.209	B	1.0	0.208	C	5.0	0.236	D	10	0.250	E	40	0.283
	F	80	0.307	G	120	0.319									
Benzene	A	0.50	0.981	B	1.0	1.01	C	5.0	1.08	D	10	1.10	E	40	1.10
	F	80	1.09	G	120	1.08									
1,2-Dichloroethane (EDC)	A	0.50	0.315	B	1.0	0.337	C	5.0	0.354	D	10	0.366	E	40	0.359
	F	80	0.356	G	120	0.355									
Trichloroethene (TCE)	A	0.50	0.245	B	1.0	0.243	C	5.0	0.262	D	10	0.264	E	40	0.269
	F	80	0.271	G	120	0.274									

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL10216
Instrument ID: MS23

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
1,2-Dichloropropane	A	0.50	0.263	B	1.0	0.272	C	5.0	0.275	D	10	0.279	E	40	0.285
	F	80	0.284	G	120	0.285									
Bromodichloromethane	A	0.50	0.262	B	1.0	0.251	C	5.0	0.274	D	10	0.292	E	40	0.316
	F	80	0.327	G	120	0.334									
2-Chloroethyl Vinyl Ether	A	0.50	0.0991	B	1.0	0.0909	C	5.0	0.103	D	10	0.120	E	40	0.118
	F	80	0.121	G	120	0.122									
trans-1,3-Dichloropropene	A	0.50	0.567	B	1.0	0.611	C	5.0	0.675	D	10	0.705	E	40	0.799
	F	80	0.832	G	120	0.828									
Toluene	A	0.50	0.547	B	1.0	0.578	C	5.0	0.640	D	10	0.655	E	40	0.659
	F	80	0.659	G	120	0.658									
cis-1,3-Dichloropropene	A	0.50	0.284	B	1.0	0.314	C	5.0	0.357	D	10	0.374	E	40	0.399
	F	80	0.417	G	120	0.423									
1,1,2-Trichloroethane	A	0.50	0.306	B	1.0	0.338	C	5.0	0.352	D	10	0.366	E	40	0.368
	F	80	0.369	G	120	0.360									
Tetrachloroethene (PCE)	A	0.50	0.364	B	1.0	0.383	C	5.0	0.457	D	10	0.432	E	40	0.470
	F	80	0.474	G	120	0.468									
Dibromochloromethane	A	0.50	0.303	B	1.0	0.292	C	5.0	0.319	D	10	0.346	E	40	0.406
	F	80	0.444	G	120	0.450									
Chlorobenzene	A	0.50	1.39	B	1.0	1.46	C	5.0	1.53	D	10	1.57	E	40	1.60
	F	80	1.60	G	120	1.55									
Ethylbenzene	A	0.50	0.699	B	1.0	0.754	C	5.0	0.851	D	10	0.863	E	40	0.910
	F	80	0.915	G	120	0.898									
Bromoform	A	0.50	0.157	B	1.0	0.115	C	5.0	0.130	D	10	0.139	E	40	0.176
	F	80	0.204	G	120	0.213									
1,1,2,2-Tetrachloroethane	A	0.50	0.537	B	1.0	0.475	C	5.0	0.461	D	10	0.480	E	40	0.476
	F	80	0.483	G	120	0.459									
1,3-Dichlorobenzene	A	0.50	1.20	B	1.0	1.25	C	5.0	1.31	D	10	1.33	E	40	1.36
	F	80	1.37	G	120	1.37									
1,4-Dichlorobenzene	A	0.50	1.25	B	1.0	1.32	C	5.0	1.33	D	10	1.37	E	40	1.37
	F	80	1.37	G	120	1.36									
1,2-Dichlorobenzene	A	0.50	1.13	B	1.0	1.23	C	5.0	1.17	D	10	1.21	E	40	1.21
	F	80	1.22	G	120	1.21									
Acrolein	A	10	0.0258	B	20	0.0277	C	100	0.0271	D	200	0.0253	E	800	0.0281
	F	1600	0.0272	G	2400	0.0254									
Acrylonitrile	A	1.0	0.0713	B	2.0	0.0595	C	10	0.0598	D	20	0.0632	E	80	0.0629
	F	160	0.0627	G	240	0.0634									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL10216
Instrument ID: MS23

Column: MS

Analyte Name	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF	Level ID	Amt	RRF
Toluene-d8	A	4.0	0.840	B	6.0	0.885	C	8.0	0.905	D	10	0.919	E	20	0.916
	F	40	0.912	G	60	0.951									
4-Bromofluorobenzene	A	4.0	0.719	B	6.0	0.755	C	8.0	0.783	D	10	0.795	E	20	0.794
	F	40	0.797	G	60	0.770									
Dibromofluoromethane	A	4.0	0.208	B	6.0	0.214	C	8.0	0.223	D	10	0.224	E	20	0.226
	F	40	0.229	G	60	0.233									

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011

Initial Calibration Summary
Volatile Organic Compounds

Calibration ID: CAL10216
Instrument ID: MS23

Column: MS

Analyte Name	Compound Type	Calibration Evaluation					RRF Evaluation		
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	Average RRF	Q	Minimum RRF
Chloromethane	TRG	AverageRF	% RSD	8.8		≤ 35	0.420		0.01
Vinyl Chloride	TRG	AverageRF	% RSD	7.9		≤ 35	0.411		0.01
Bromomethane	TRG	AverageRF	% RSD	33.6		≤ 35	0.142		0.01
Chloroethane	TRG	AverageRF	% RSD	5.9		≤ 35	0.0681		0.01
Trichlorofluoromethane	TRG	AverageRF	% RSD	7.7		≤ 35	0.487		0.01
1,1-Dichloroethene	MS	AverageRF	% RSD	5.5		≤ 35	0.207		0.01
Methylene Chloride	TRG	AverageRF	% RSD	10.5		≤ 35	0.264		0.01
trans-1,2-Dichloroethene	TRG	AverageRF	% RSD	5.6		≤ 35	0.251		0.01
1,1-Dichloroethane	TRG	AverageRF	% RSD	6.8		≤ 35	0.503		0.01
Chloroform	TRG	AverageRF	% RSD	4.3		≤ 35	0.457		0.01
1,1,1-Trichloroethane (TCA)	TRG	AverageRF	% RSD	12.4		≤ 35	0.366		0.01
Carbon Tetrachloride	TRG	AverageRF	% RSD	17.4		≤ 35	0.259		0.01
Benzene	MS	AverageRF	% RSD	4.5		≤ 35	1.06		0.01
1,2-Dichloroethane (EDC)	TRG	AverageRF	% RSD	4.9		≤ 35	0.349		0.01
Trichloroethene (TCE)	MS	AverageRF	% RSD	4.8		≤ 35	0.261		0.01
1,2-Dichloropropane	TRG	AverageRF	% RSD	3.0		≤ 35	0.278		0.01
Bromodichloromethane	TRG	AverageRF	% RSD	11.2		≤ 35	0.294		0.01
2-Chloroethyl Vinyl Ether	TRG	AverageRF	% RSD	11.5		≤ 35	0.111		0.01
trans-1,3-Dichloropropene	TRG	AverageRF	% RSD	14.8		≤ 35	0.717		0.01
Toluene	MS	AverageRF	% RSD	7.4		≤ 35	0.628		0.01
cis-1,3-Dichloropropene	TRG	AverageRF	% RSD	14.3		≤ 35	0.367		0.01
1,1,2-Trichloroethane	TRG	AverageRF	% RSD	6.5		≤ 35	0.351		0.01
Tetrachloroethene (PCE)	TRG	AverageRF	% RSD	10.4		≤ 35	0.435		0.01
Dibromochloromethane	TRG	AverageRF	% RSD	18.2		≤ 35	0.366		0.01
Chlorobenzene	MS	AverageRF	% RSD	5.1		≤ 35	1.53		0.01
Ethylbenzene	TRG	AverageRF	% RSD	9.9		≤ 35	0.841		0.01
Bromoform	TRG	AverageRF	% RSD	22.9		≤ 35	0.162		0.01
1,1,2,2-Tetrachloroethane	TRG	AverageRF	% RSD	5.4		≤ 35	0.482		0.01
1,3-Dichlorobenzene	TRG	AverageRF	% RSD	5.1		≤ 35	1.31		0.01
1,4-Dichlorobenzene	TRG	AverageRF	% RSD	3.2		≤ 35	1.34		0.01
1,2-Dichlorobenzene	MS	AverageRF	% RSD	2.8		≤ 35	1.20		0.01
Acrolein	TRG	AverageRF	% RSD	4.3		≤ 35	0.0266		0.01
Acrylonitrile	TRG	AverageRF	% RSD	6.2		≤ 35	0.0633		0.01
Toluene-d8	SURR	AverageRF	% RSD	3.8		≤ 35	0.904		0.01
4-Bromofluorobenzene	SURR	AverageRF	% RSD	3.7		≤ 35	0.773		0.01
Dibromofluoromethane	SURR	AverageRF	% RSD	3.9		≤ 35	0.223		0.01

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 01/12/2011
Date Analyzed: 01/12/2011

Second Source Calibration Verification
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 624

Calibration ID: CAL10216
Units: PPB

File ID: J:\MS23\DATA\011211\0112F014.D

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Chloromethane	10	9.1	0.420	0.381	-9	NA	± 104 %	AverageRF
Vinyl Chloride	10	11	0.411	0.437	6	NA	± 96 %	AverageRF
Bromomethane	10	14	0.142	0.201	42	NA	± 86 %	AverageRF
Chloroethane	10	10	0.0681	0.0695	2	NA	± 62 %	AverageRF
Trichlorofluoromethane	10	9.2	0.487	0.446	-8	NA	± 52 %	AverageRF
1,1-Dichloroethene	10	12	0.207	0.241	17	NA	± 49 %	AverageRF
Methylene Chloride	10	11	0.264	0.281	6	NA	± 39 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.251	0.288	15	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	11	0.503	0.565	12	NA	± 27 %	AverageRF
Chloroform	10	11	0.457	0.516	13	NA	± 32 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.366	0.419	15	NA	± 25 %	AverageRF
Carbon Tetrachloride	10	11	0.259	0.290	12	NA	± 27 %	AverageRF
Benzene	10	11	1.06	1.20	13	NA	± 36 %	AverageRF
1,2-Dichloroethane (EDC)	10	11	0.349	0.399	14	NA	± 32 %	AverageRF
Trichloroethene (TCE)	10	11	0.261	0.289	11	NA	± 33 %	AverageRF
1,2-Dichloropropane	10	11	0.278	0.306	10	NA	± 66 %	AverageRF
Bromodichloromethane	10	11	0.294	0.332	13	NA	± 34 %	AverageRF
2-Chloroethyl Vinyl Ether	10	11	0.111	0.122	10	NA	± 124 %	AverageRF
trans-1,3-Dichloropropene	10	11	0.717	0.758	6	NA	± 50 %	AverageRF
Toluene	10	11	0.628	0.708	13	NA	± 25 %	AverageRF
cis-1,3-Dichloropropene	10	11	0.367	0.415	13	NA	± 76 %	AverageRF
1,1,2-Trichloroethane	10	12	0.351	0.412	17	NA	± 29 %	AverageRF
Tetrachloroethene (PCE)	10	12	0.435	0.502	15	NA	± 26 %	AverageRF
Dibromochloromethane	10	11	0.366	0.414	13	NA	± 32 %	AverageRF
Chlorobenzene	10	11	1.53	1.72	13	NA	± 34 %	AverageRF
Ethylbenzene	10	11	0.841	0.950	13	NA	± 41 %	AverageRF
Bromoform	10	11	0.162	0.173	7	NA	± 29 %	AverageRF
1,1,2,2-Tetrachloroethane	10	11	0.482	0.551	14	NA	± 39 %	AverageRF
1,3-Dichlorobenzene	10	12	1.31	1.51	15	NA	± 27 %	AverageRF
1,4-Dichlorobenzene	10	12	1.34	1.56	17	NA	± 37 %	AverageRF
1,2-Dichlorobenzene	10	11	1.20	1.36	14	NA	± 37 %	AverageRF
Acrolein	100	94	0.0266	0.0250	-6	NA	± 80 %	AverageRF
Acrylonitrile	10	10	0.0633	0.0657	4	NA	± 40 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Date: 1/12/11

Columbia Analytical Services, Inc.

Tune File: BFB4

By: KN

Injection Log

New Tune: NO

IS/SS Std. ID: 5Y0409-22C

MS23 - Agilent 5973

RUN #:

CCV Std ID: See preprint

ICAL Date: 1/12/11 Cal 10216

MS/DMS/LCS/ICV Std ID: 1

Second RV: HB 1-14-11

BFB Std. ID: 5Y0409-20E

LIMS ID:

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	BFB	0112F002	8260.M	4.4µL-144mL			
2	IB	3					
3	624/cal 0.2	4					
4	0.5	5					
5	1	6					
6	5	7					
7	10	8					
8	40	9					
9	80	10					
10	120	11					
11	IB	12					
12	IB	13					
13	ICV	14					
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							

Date 1/12/11
Prepared By KR

Analysis: 624
Instrument: MS23
Matrix: Water

Stock Solution #1 SGUOA-32F
Stock Solution #2 1 33B
Stock Solution #3 1 28B

Analytes: Surrogates 100ppm
Analytes: 624 50ppm
Analytes: Ketones 2000ppm

Aliquot of Stock Solution #1 (µL)	Final Conc. of #1 (µg/L)	Aliquot of Stock Solution #2 (µL)	Final Conc. of #2 (µg/L)	Aliquot of Stock Solution #3 (µL)	Final Conc. of #3 (µg/L)	Final Volume (mL)
2.0	4.0	0.5	0.5	0.5	20	50
3.0	6.0	1	1	2	80	50
4.0	8.0	5.0	5	5	200	50
5.0	10.0	10	10	10	400	50
10.0	20	40	40	20	800	50
20	40	80	80	40	1600	50
30	60	120	120	60	2400	50
—	—	0.2	~~0.5~~ 0.2 KR 1/12/11			

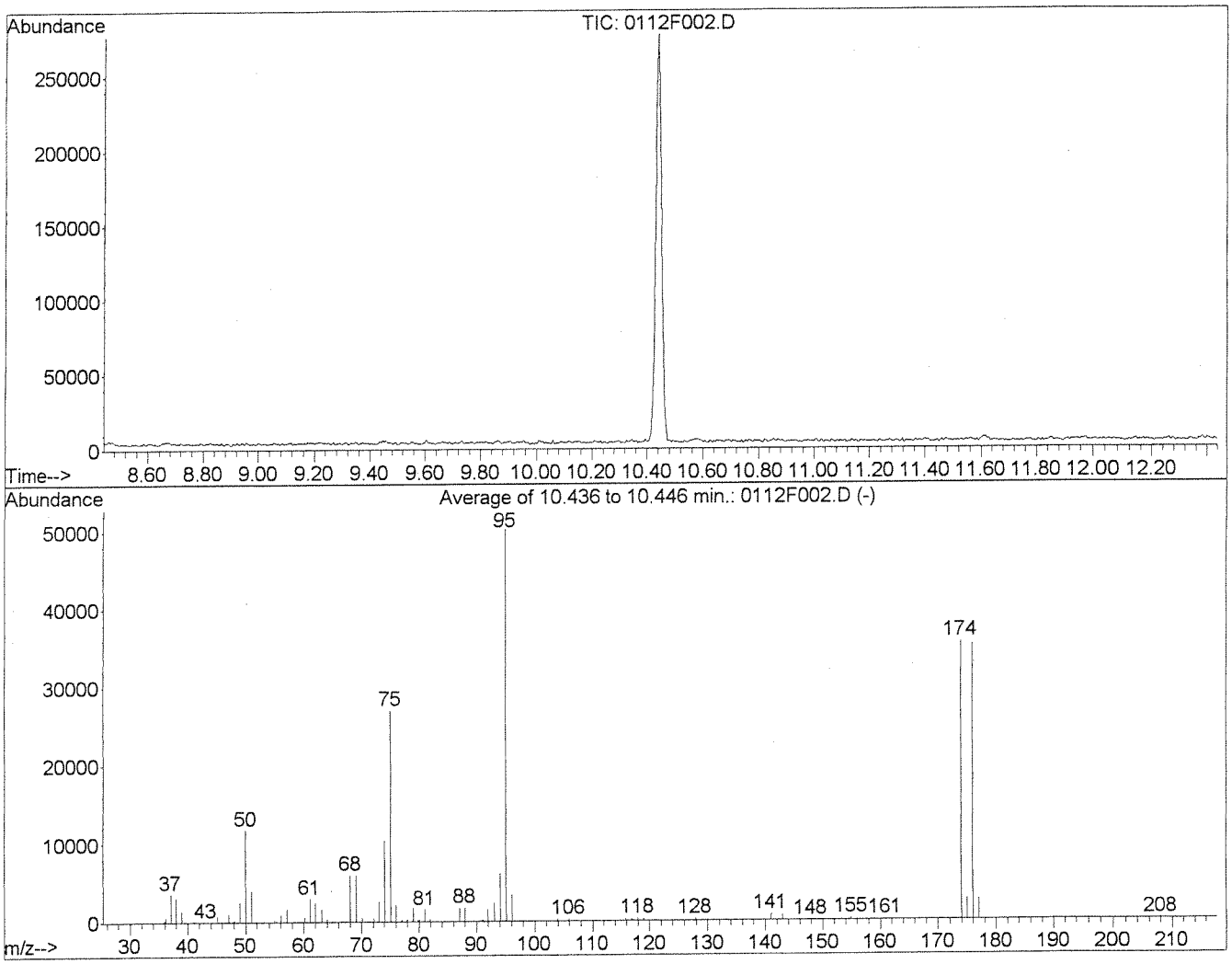
– for e260 only

624 ICV: ~~200~~ 10 µL of 50/250ppm Accustd ICV (SGUOA- ~~32B~~ 32D KR 1/12/11) + 50uL of 100ppm Acrolein ICV (SGUOA ~~32D~~ 32B KR 1/12/11

HBI-14-11

Data File : J:\MS23\DATA\011211\0112F002.D
Acq On : 12 Jan 2011 8:15 am
Sample : BFB
Misc :
MS Integration Params: rteint.p
Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624

Vial: 20
Operator: KR
Inst : MS23
Multiplr: 1.00



AutoFind: Scans 1807, 1808, 1809; Background Corrected with Scan 1799

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	23.4	11758	PASS
75	95	30	60	53.6	26960	PASS
95	95	100	100	100.0	50320	PASS
96	95	5	9	6.9	3467	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	120	70.7	35576	PASS
175	174	5	9	7.8	2784	PASS
176	174	95	101	99.2	35280	PASS
177	176	5	9	7.4	2626	PASS

KR 1/12/11
MB 1.14.11

0112F002.D 122310624.M Wed Jan 12 13:59:52 2011

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F003.D
Acq On : 12 Jan 2011 8:44 am
Sample : IB
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 13:59:58 2011

Vial: 21
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 11 07:23:28 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.76	96	478646	10.00	PPB	0.00
35) Chlorobenzene-d5	9.20	82	195470	10.00	PPB	0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	153323	10.00	PPB	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	0.00	113	0	0.00	PPB	
Spiked Amount 10.000			Recovery =	0.00%		
24) 1,2-Dichloroethane-d4	0.00	65	0	0.00	PPB	
Spiked Amount 10.000			Recovery =	0.00%		
33) Toluene-d8	0.00	98	0	0.00	PPB	
Spiked Amount 10.000			Recovery =	0.00%		
47) 4-Bromofluorobenzene	0.00	95	0	0.00	PPB	
Spiked Amount 10.000			Recovery =	0.00%		
Target Compounds						Qvalue
11) Acetone	2.41	43	4158	1.70	PPB	69
13) Methylene Chloride	2.81	84	3095	0.23	PPB	91

KR 1/12/11
HB 1.14.11

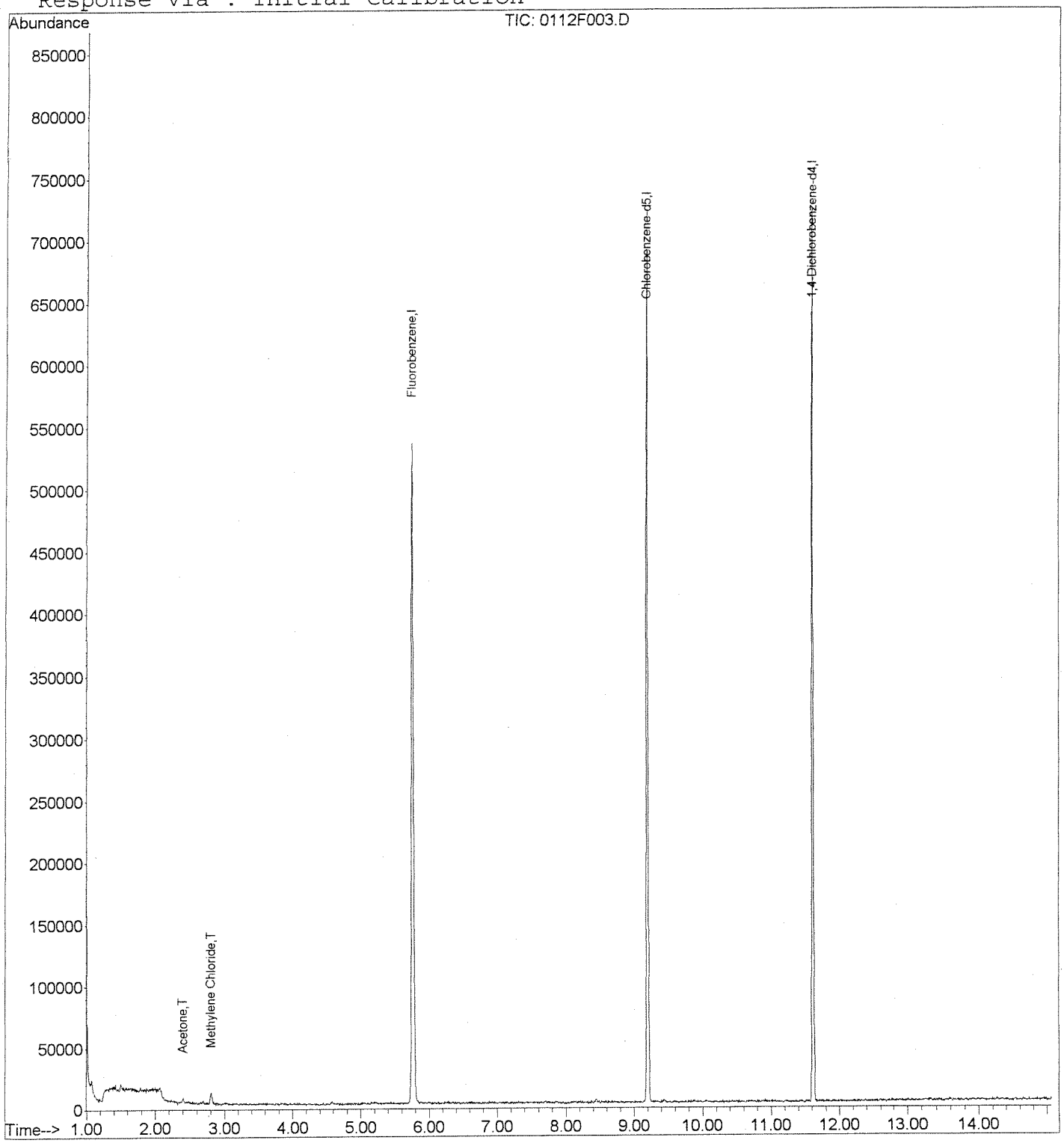
(#) = qualifier out of range (m) = manual integration
0112F003.D 122310624.M Wed Jan 12 14:00:17 2011 Page 1

Data File : J:\MS23\DATA\011211\0112F003.D
Acq On : 12 Jan 2011 8:44 am
Sample : IB
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:00 2011

Vial: 21
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 11 07:23:28 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F004.D
Acq On : 12 Jan 2011 9:51 am
Sample : 624 ICAL 0.2
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:12:46 2011

Vial: 22
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

kr 1/12/11

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	480897	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	192288	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	151131	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	0.00	113	0	0.00	PPB		
Spiked Amount 10.000			Recovery =	0.00%			
24) 1,2-Dichloroethane-d4	0.00	65	0	0.00	PPB		
Spiked Amount 10.000			Recovery =	0.00%			
33) Toluene-d8	0.00	98	0	0.00	PPB		
Spiked Amount 10.000			Recovery =	0.00%			
47) 4-Bromofluorobenzene	0.00	95	0	0.00	PPB		
Spiked Amount 10.000			Recovery =	0.00%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.09	85	4454	0.25	PPB		91
3) Chloromethane	1.23	50	4566	0.21	PPB		94
4) Vinyl Chloride	1.31	62	4820	0.24	PPB		95
7) Trichlorofluoromethane	1.82	101	5664	0.25	PPB		82
8) Acrolein	2.25	56	5946	4.46	PPB		89
9) Trichlorotrifluoroethane	2.25	151	1739	0.21	PPB	#	59
10) 1,1-Dichloroethene	2.27	96	1988	0.18	PPB	#	82
11) Acetone	2.40	43	6810	2.77	PPB		96
12) Carbon Disulfide	2.46	76	9920	0.31	PPB		98
13) Methylene Chloride	2.81	84	5145	0.38	PPB		90
14) Acrylonitrile	3.14	53	1336	0.41	PPB	#	56
15) trans-1,2-Dichloroethene	3.04	96	2895	0.22	PPB	#	68
16) 1,1-Dichloroethane	3.54	63	5636	0.21	PPB		97
18) cis-1,2-Dichloroethene	4.26	96	2752	0.19	PPB	#	80
19) 2-Butanone	4.32	72	519	0.64	PPB	#	1
20) Chloroform	4.68	83	5031	0.21	PPB		90
21) 1,1,1-Trichloroethane	4.84	97	3662	0.18	PPB		92
23) Carbon Tetrachloride	5.01	117	2295	0.14	PPB		90
25) Benzene	5.35	78	11327	0.21	PPB		91
26) 1,2-Dichloroethane	5.49	62	3531	0.19	PPB		92
27) Trichloroethene	6.20	95	2859	0.22	PPB		86
28) 1,2-Dichloropropane	6.53	63	2901	0.20	PPB		70
29) Bromodichloromethane	6.86	83	2803	0.17	PPB		88
30) 2-Chloroethyl Vinyl Ether	7.27	63	1123	0.17	PPB		94
31) cis-1,3-Dichloropropene	7.40	75	2798	0.13	PPB		95
34) Toluene	7.70	92	6055	0.18	PPB		88
36) trans-1,3-Dichloropropene	8.06	75	2608	0.16	PPB	#	58

(#) = qualifier out of range (m) = manual integration

HTB1-14-11

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F004.D
Acq On : 12 Jan 2011 9:51 am
Sample : 624 ICAL 0.2
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:12:46 2011

Vial: 22
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
37)	1,1,2-Trichloroethane	8.24	83	1250	0.17	PPB		89
38)	Tetrachloroethene	8.25	164	1346	0.15	PPB	#	67
40)	Dibromochloromethane	8.61	129	1058	0.13	PPB		87
41)	Chlorobenzene	9.23	112	6080	0.20	PPB		93
42)	Ethylbenzene	9.32	106	2730	0.16	PPB		94
43)	m,p-Xylenes	9.46	106	6763	0.33	PPB		99
44)	o-Xylene	9.87	106	3325	0.17	PPB	#	76
45)	Styrene	9.90	103	2238m	0.14	PPB		
49)	1,1,2,2-Tetrachloroethane	10.64	83	1262	0.17	PPB		91
51)	1,3-Dichlorobenzene	11.53	146	4201	0.21	PPB		85
52)	1,4-Dichlorobenzene	11.64	146	3467	0.17	PPB		93
53)	1,2-Dichlorobenzene	12.01	146	2957	0.16	PPB		91

(#) = qualifier out of range (m) = manual integration

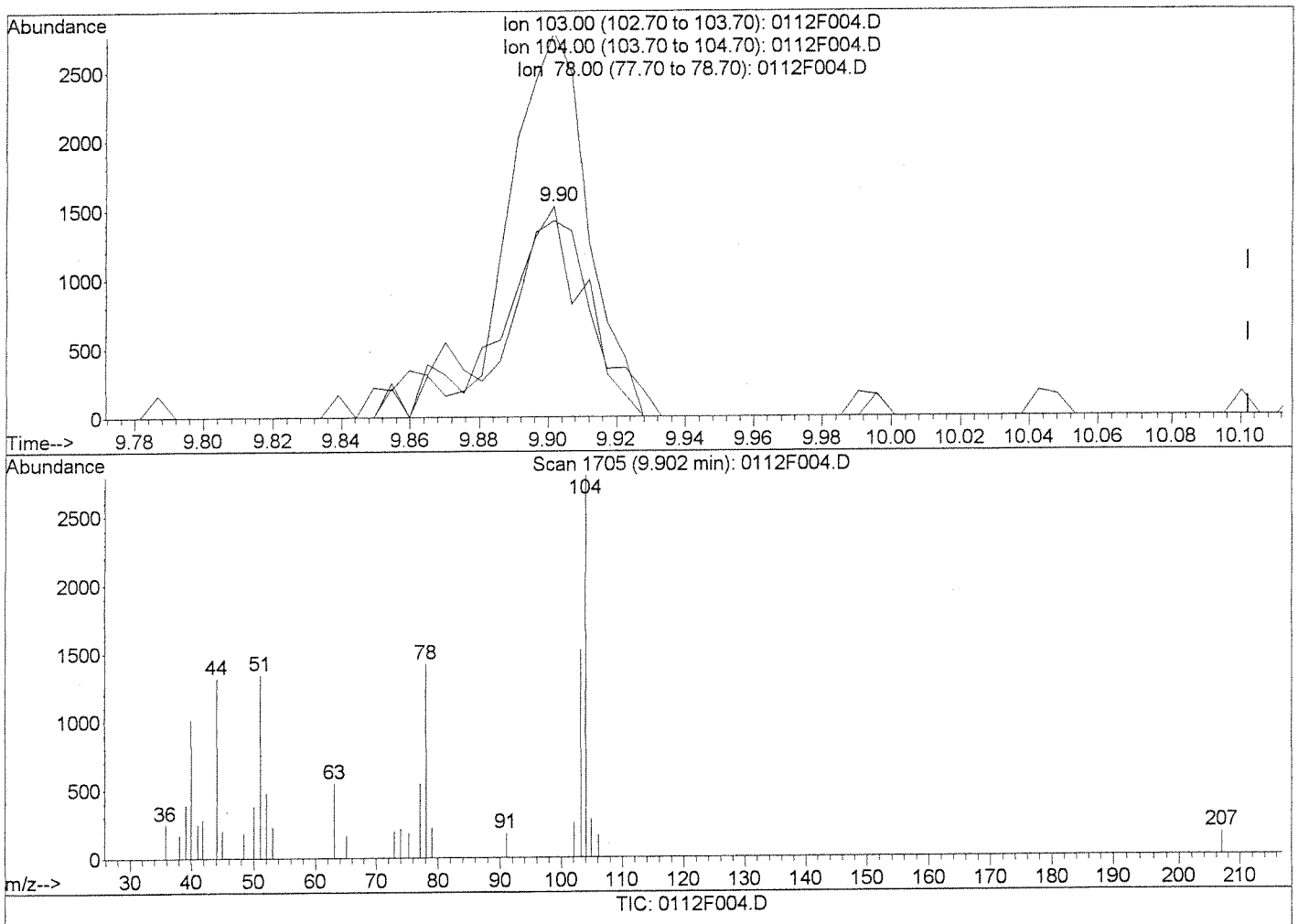
Quantitation Report (Qedit)

Data File : J:\MS23\DATA\011211\0112F004.D
Acq On : 12 Jan 2011 9:51 am
Sample : 624 ICAL 0.2
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:13 2011

Vial: 22
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration



TIC: 0112F004.D

(45) Styrene (T)

9.90min 0.16PPB

response 2587

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	183.21
78.00	95.50	93.11
0.00	0.00	0.00

0112F004.D 122310624.M Wed Jan 12 14:13:28 2011

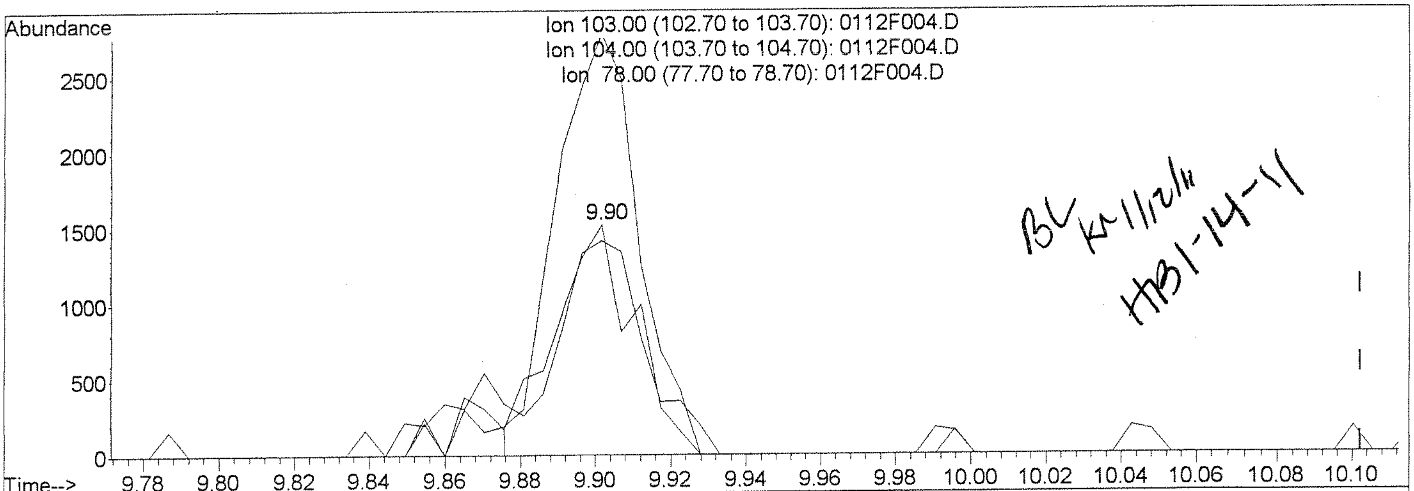
Quantitation Report (Qedit)

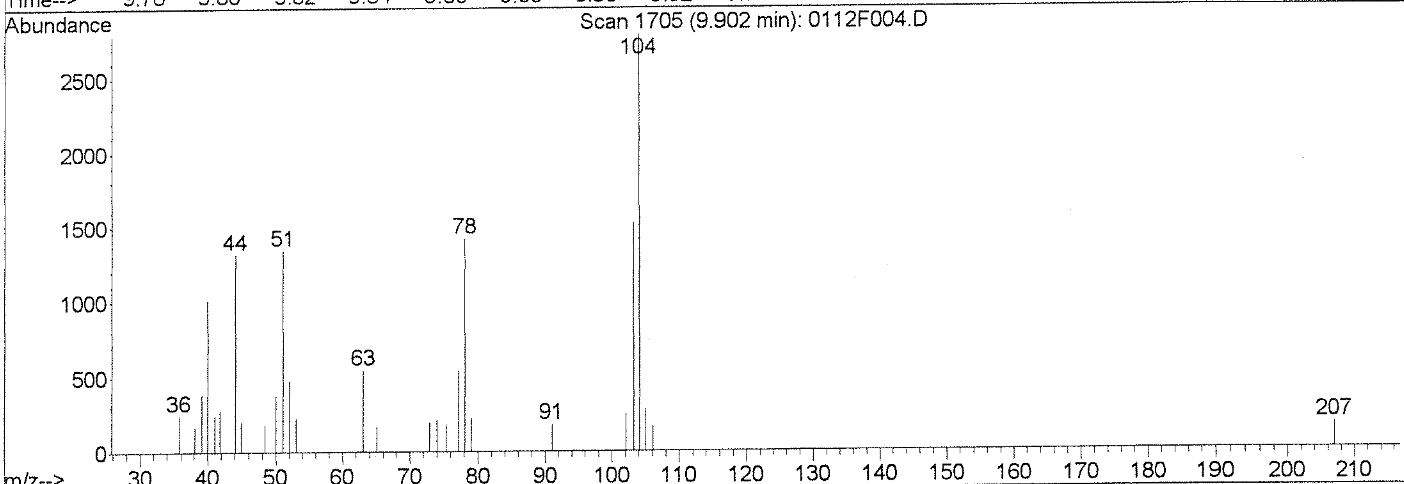
Data File : J:\MS23\DATA\011211\0112F004.D
Acq On : 12 Jan 2011 9:51 am
Sample : 624 ICAL 0.2
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:13 2011

Vial: 22
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F004.D

(45) Styrene (T)

9.90min 0.14PPB m

response 2238

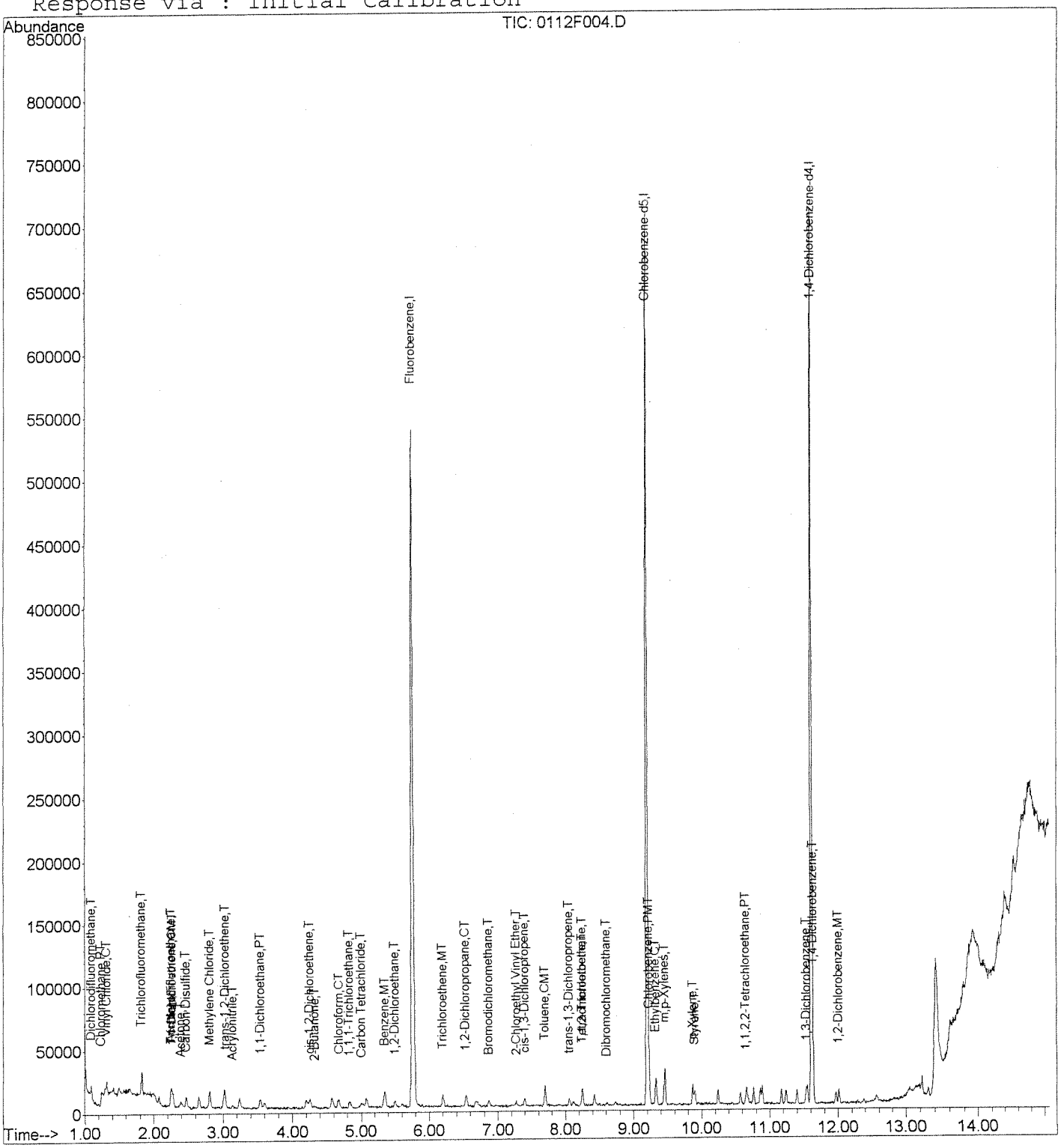
Ion	Exp%	Act%
103.00	100	100
104.00	206.20	183.21
78.00	95.50	93.11
0.00	0.00	0.00

Data File : J:\MS23\DATA\011211\0112F004.D
Acq On : 12 Jan 2011 9:51 am
Sample : 624 ICAL 0.2
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:13 2011

Vial: 22
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F005.D
Acq On : 12 Jan 2011 10:20 am
Sample : 624 ICAL 0.5
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:13:56 2011

Vial: 23
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

kr 1/16/11 HBI-14-11

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	495877	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	201846	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	159099	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.90	113	41217	3.56	PPB		0.00
Spiked Amount 10.000			Recovery =	35.60%			
24) 1,2-Dichloroethane-d4	5.40	65	55764	3.54	PPB		0.00
Spiked Amount 10.000			Recovery =	35.40%			
33) Toluene-d8	7.62	98	166529	3.61	PPB		0.00
Spiked Amount 10.000			Recovery =	36.10%			
47) 4-Bromofluorobenzene	10.44	95	58069	3.81	PPB		0.00
Spiked Amount 10.000			Recovery =	38.10%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.09	85	7976	0.44	PPB		94
3) Chloromethane	1.23	50	10862	0.49	PPB		93
4) Vinyl Chloride	1.31	62	8892	0.43	PPB		95
5) Bromomethane	1.57	96	2033m	0.27	PPB		
6) Chloroethane	1.65	49	1849	0.50	PPB	#	83
7) Trichlorofluoromethane	1.82	101	10583	0.46	PPB		87
8) Acrolein	2.26	56	12802	9.31	PPB		95
9) Trichlorotrifluoroethane	2.25	151	3667	0.43	PPB		82
10) 1,1-Dichloroethene	2.28	96	4905	0.44	PPB	#	79
11) Acetone	2.40	43	44393	17.54	PPB		99
12) Carbon Disulfide	2.46	76	18748	0.56	PPB		92
13) Methylene Chloride	2.80	84	8014	0.58	PPB		94
14) Acrylonitrile	3.14	53	3537	1.04	PPB		87
15) trans-1,2-Dichloroethene	3.03	96	5820	0.43	PPB		85
16) 1,1-Dichloroethane	3.54	63	11040	0.40	PPB		92
17) Vinyl Acetate	3.61	86	1689	0.79	PPB	#	5
18) cis-1,2-Dichloroethene	4.25	96	6599	0.45	PPB		85
19) 2-Butanone	4.32	72	13362	15.93	PPB	#	87
20) Chloroform	4.68	83	10646	0.44	PPB		88
21) 1,1,1-Trichloroethane	4.84	97	7729	0.36	PPB		96
23) Carbon Tetrachloride	5.01	117	5175	0.32	PPB		95
25) Benzene	5.35	78	24322	0.43	PPB		98
26) 1,2-Dichloroethane	5.49	62	7809	0.40	PPB		92
27) Trichloroethene	6.20	95	6070	0.45	PPB		88
28) 1,2-Dichloropropane	6.54	63	6526	0.43	PPB		85
29) Bromodichloromethane	6.86	83	6494	0.39	PPB		96
30) 2-Chloroethyl Vinyl Ether	7.26	63	2458	0.37	PPB		84

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F005.D
Acq On : 12 Jan 2011 10:20 am
Sample : 624 ICAL 0.5
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:13:56 2011

Vial: 23
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	7.40	75	7038	0.31	PPB	82
32)	4-Methyl-2-pentanone (MIBK	8.51	58	35773	12.66	PPB	99
34)	Toluene	7.70	92	13561	0.39	PPB	87
36)	trans-1,3-Dichloropropene	8.06	75	5723	0.33	PPB	96
37)	1,1,2-Trichloroethane	8.24	83	3086	0.41	PPB	94
38)	Tetrachloroethene	8.26	164	3670	0.40	PPB	94
39)	2-Hexanone	8.51	43	75720	14.38	PPB	95
40)	Dibromochloromethane	8.62	129	3057	0.37	PPB	74
41)	Chlorobenzene	9.23	112	14003	0.44	PPB	92
42)	Ethylbenzene	9.32	106	7056	0.40	PPB	96
43)	m,p-Xylenes	9.46	106	16442	0.75	PPB	95
44)	o-Xylene	9.87	106	7861	0.38	PPB	97
45)	Styrene	9.90	103	5474	0.33	PPB	89
46)	Bromoform	10.11	173	1589	0.42	PPB	65
49)	1,1,2,2-Tetrachloroethane	10.64	83	4274	0.53	PPB	88
51)	1,3-Dichlorobenzene	11.53	146	9522	0.44	PPB	92
52)	1,4-Dichlorobenzene	11.63	146	9982	0.46	PPB	99
53)	1,2-Dichlorobenzene	12.01	146	8983	0.47	PPB	87

(#) = qualifier out of range (m) = manual integration

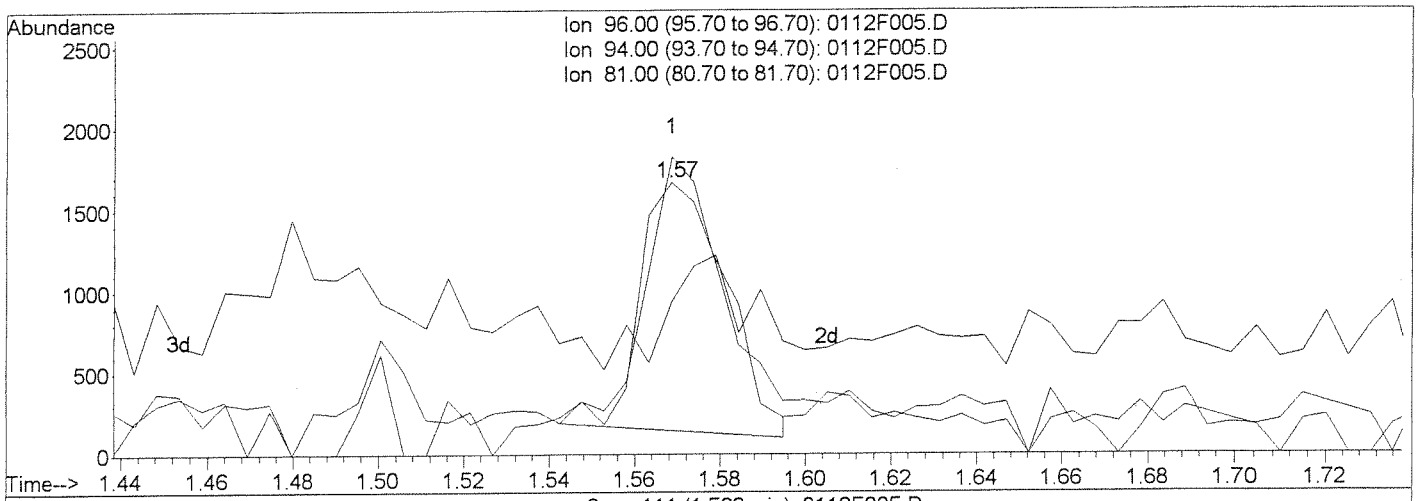
Quantitation Report (Qedit)

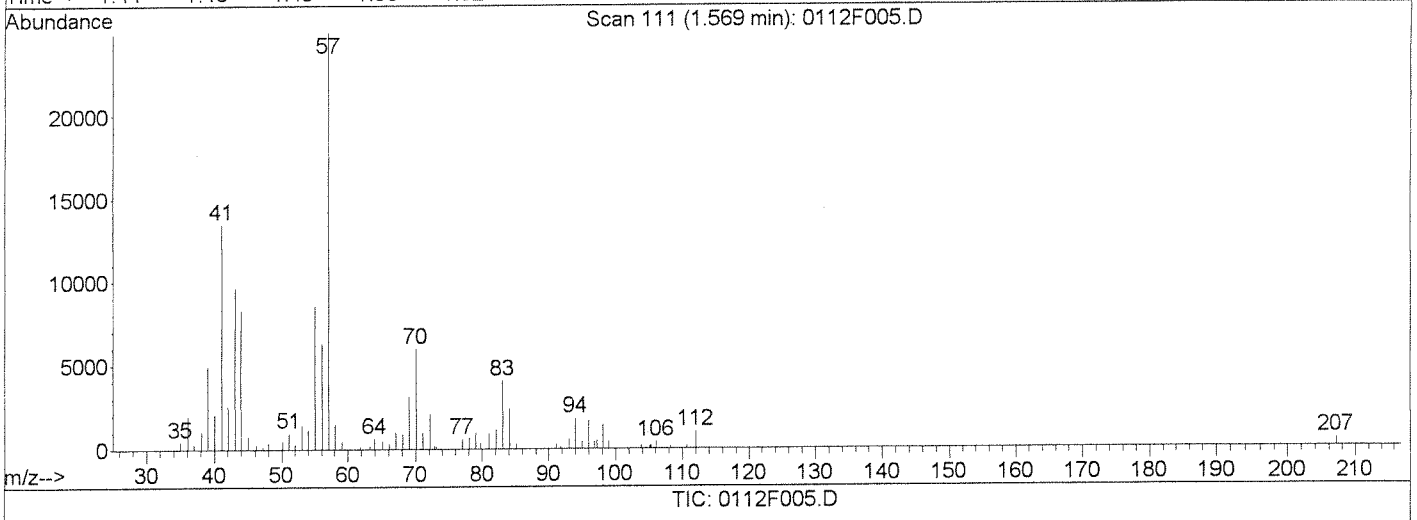
Data File : J:\MS23\DATA\011211\0112F005.D
Acq On : 12 Jan 2011 10:20 am
Sample : 624 ICAL 0.5
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:13 2011

Vial: 23
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F005.D

(5) Bromomethane (T)

1.57min 0.28PPB

response 2130

Ion	Exp%	Act%
96.00	100	100
94.00	106.00	108.27
81.00	18.20	17.34
0.00	0.00	0.00

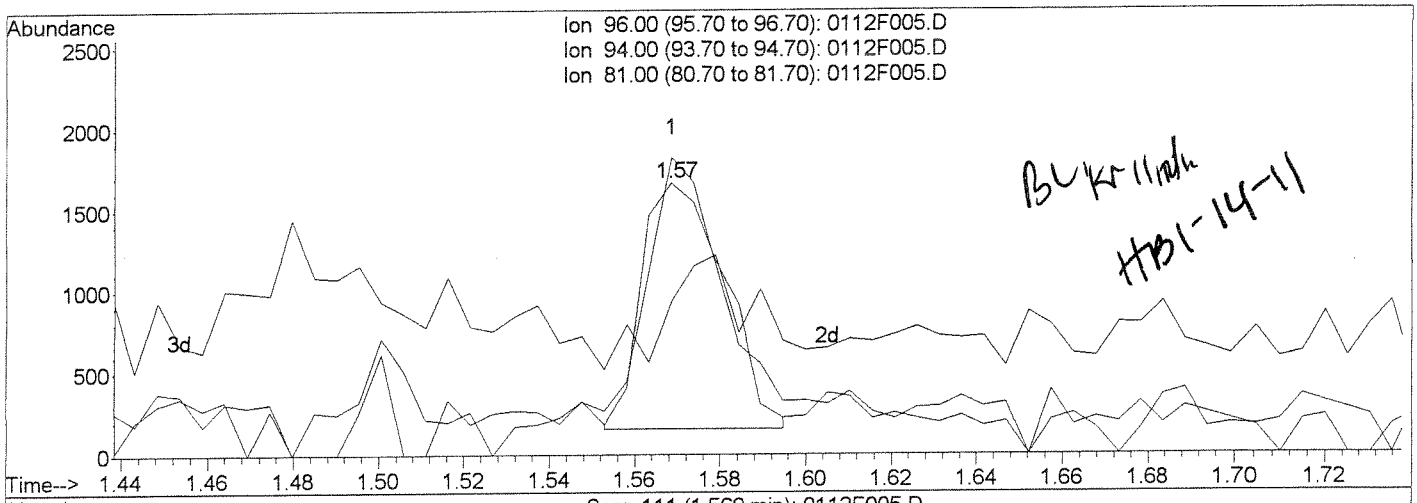
Quantitation Report (Qedit)

Data File : J:\MS23\DATA\011211\0112F005.D
Acq On : 12 Jan 2011 10:20 am
Sample : 624 ICAL 0.5
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:14 2011

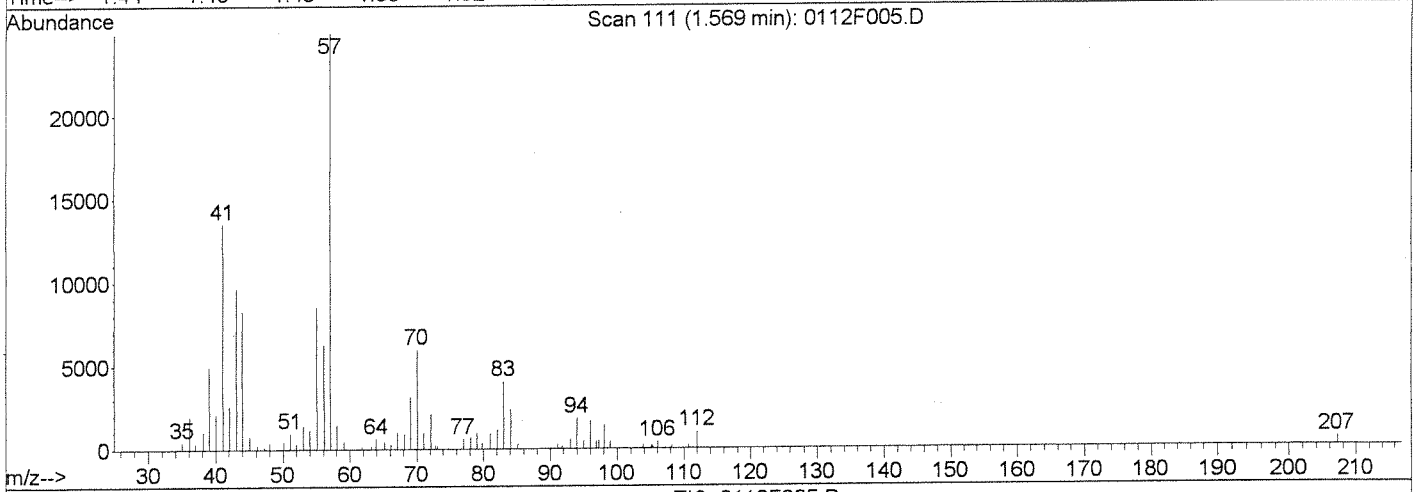
Vial: 23
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration



BL KR 1/12/11
HBI-14-11



TIC: 0112F005.D

(5) Bromomethane (T)

1.57min 0.27PPB m

response 2033

Ion	Exp%	Act%
96.00	100	100
94.00	106.00	109.42
81.00	18.20	56.36#
0.00	0.00	0.00

0112F005.D 122310624.M Wed Jan 12 14:14:15 2011

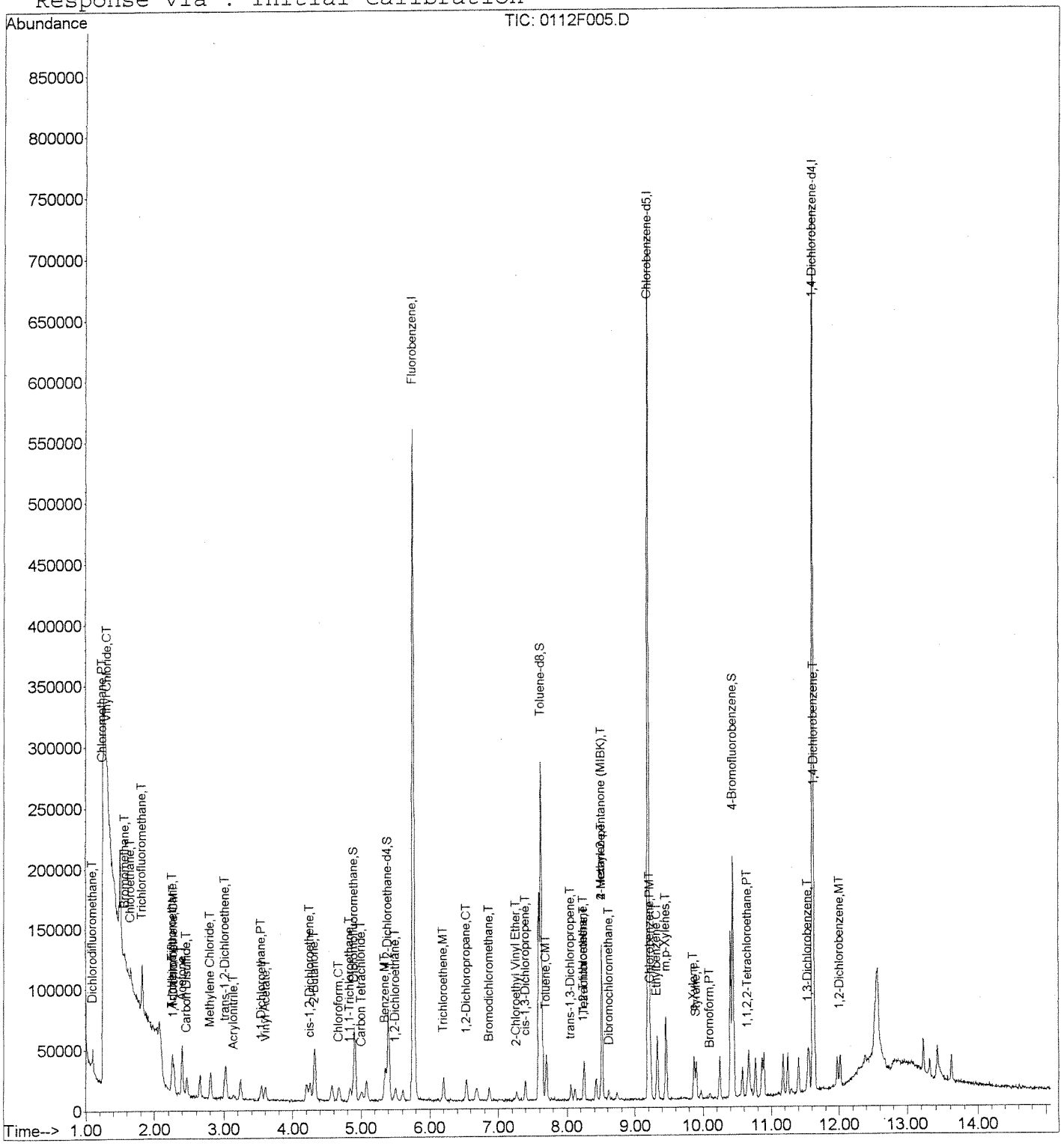
Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F005.D
Acq On : 12 Jan 2011 10:20 am
Sample : 624 ICAL 0.5
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:14 2011

Vial: 23
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F006.D
Acq On : 12 Jan 2011 10:49 am
Sample : 624 ICAL 1
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:15:00 2011

Vial: 24
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

KT 1/12/11

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	501133	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	203825	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	164256	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.91	113	64485	5.51	PPB		0.00
Spiked Amount 10.000			Recovery =	55.10%			
24) 1,2-Dichloroethane-d4	5.39	65	87575	5.50	PPB		0.00
Spiked Amount 10.000			Recovery =	55.00%			
33) Toluene-d8	7.63	98	266190	5.70	PPB		0.00
Spiked Amount 10.000			Recovery =	57.00%			
47) 4-Bromofluorobenzene	10.44	95	92283	5.99	PPB		0.00
Spiked Amount 10.000			Recovery =	59.90%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.10	85	17085	0.94	PPB		99
3) Chloromethane	1.24	50	18603m	0.83	PPB		
4) Vinyl Chloride	1.31	62	18681	0.90	PPB		98
5) Bromomethane	1.57	96	4839	0.63	PPB		93
6) Chloroethane	1.65	49	3142	0.84	PPB		94
7) Trichlorofluoromethane	1.82	101	22754	0.97	PPB		97
8) Acrolein	2.26	56	27742	19.97	PPB		89
9) Trichlorotrifluoroethane	2.25	151	8004	0.94	PPB		97
10) 1,1-Dichloroethene	2.28	96	9321	0.82	PPB		95
11) Acetone	2.40	43	175310	68.52	PPB		97
12) Carbon Disulfide	2.46	76	37961	1.13	PPB		98
13) Methylene Chloride	2.80	84	13746	0.98	PPB		96
14) Acrylonitrile	3.14	53	5961	1.74	PPB		81
15) trans-1,2-Dichloroethene	3.03	96	11427	0.83	PPB		96
16) 1,1-Dichloroethane	3.55	63	23200	0.84	PPB		94
17) Vinyl Acetate	3.60	86	2834	1.32	PPB	#	28
18) cis-1,2-Dichloroethene	4.25	96	12653	0.85	PPB		84
19) 2-Butanone	4.32	72	53783	63.46	PPB		90
20) Chloroform	4.68	83	21541	0.88	PPB		94
21) 1,1,1-Trichloroethane	4.84	97	15059	0.69	PPB		93
23) Carbon Tetrachloride	5.01	117	10448	0.63	PPB		92
25) Benzene	5.35	78	50459	0.89	PPB		94
26) 1,2-Dichloroethane	5.50	62	16912	0.86	PPB		91
27) Trichloroethene	6.20	95	12172	0.89	PPB		82
28) 1,2-Dichloropropane	6.53	63	13637	0.89	PPB		89
29) Bromodichloromethane	6.87	83	12568	0.74	PPB		97
30) 2-Chloroethyl Vinyl Ether	7.27	63	4556	0.68	PPB		89

(#) = qualifier out of range (m) = manual integration

HB1-14-11

Data File : J:\MS23\DATA\011211\0112F006.D
Acq On : 12 Jan 2011 10:49 am
Sample : 624 ICAL 1
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:15:00 2011

Vial: 24
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	7.39	75	15754	0.69	PPB	97
32)	4-Methyl-2-pentanone (MIBK	8.51	58	172952	60.54	PPB	97
34)	Toluene	7.70	92	28949	0.83	PPB	99
36)	trans-1,3-Dichloropropene	8.05	75	12451	0.72	PPB	94
37)	1,1,2-Trichloroethane	8.24	83	6893	0.91	PPB	90
38)	Tetrachloroethene	8.25	164	7797	0.84	PPB	97
39)	2-Hexanone	8.51	43	363323	68.34	PPB	99
40)	Dibromochloromethane	8.62	129	5960	0.72	PPB	98
41)	Chlorobenzene	9.23	112	29706	0.93	PPB	92
42)	Ethylbenzene	9.33	106	15365	0.86	PPB	89
43)	m,p-Xylenes	9.46	106	38099	1.73	PPB	98
44)	o-Xylene	9.87	106	17618	0.84	PPB	93
45)	Styrene	9.90	103	12874m	0.77	PPB	
46)	Bromoform	10.10	173	2353	0.61	PPB	87
49)	1,1,2,2-Tetrachloroethane	10.65	83	7804	0.94	PPB	94
51)	1,3-Dichlorobenzene	11.54	146	20482	0.92	PPB	95
52)	1,4-Dichlorobenzene	11.64	146	21651	0.97	PPB	99
53)	1,2-Dichlorobenzene	12.02	146	20156	1.02	PPB	89

(#) = qualifier out of range (m) = manual integration

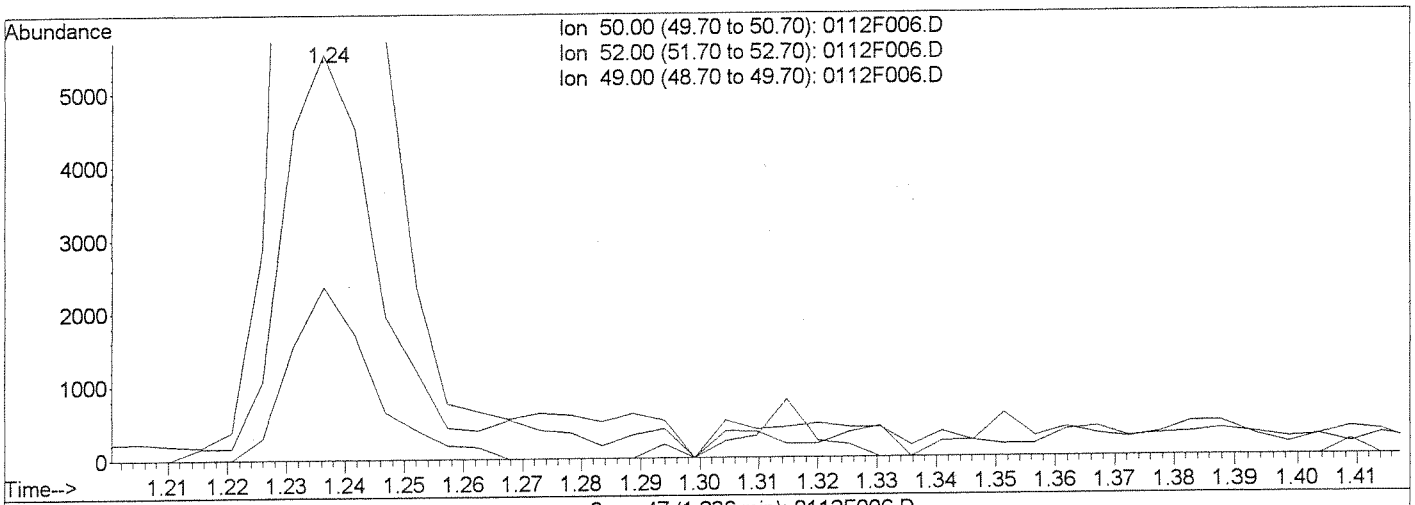
Quantitation Report (Qedit)

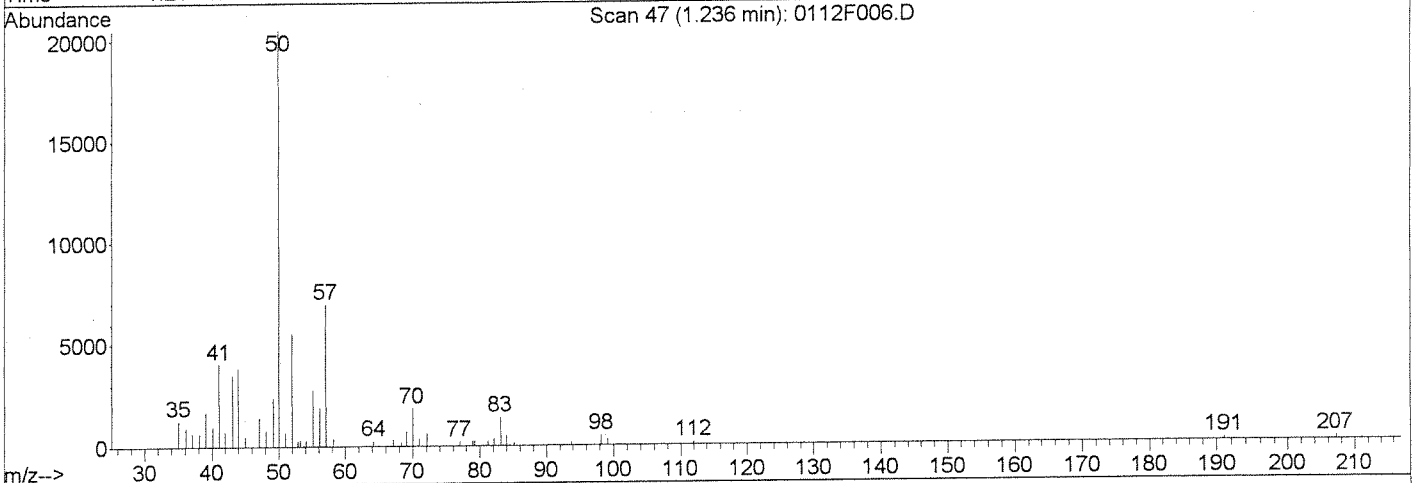
Data File : J:\MS23\DATA\011211\0112F006.D
Acq On : 12 Jan 2011 10:49 am
Sample : 624 ICAL 1
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:15 2011

Vial: 24
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F006.D

(3) Chloromethane (PT)

1.24min 0.89PPB

response 20033

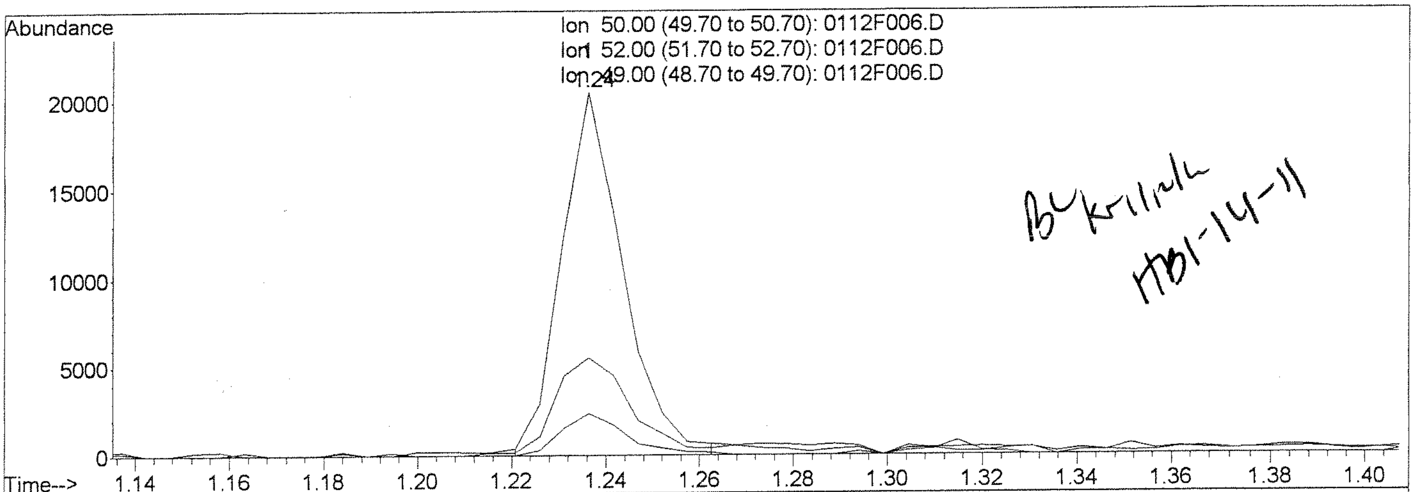
Ion	Exp%	Act%
50.00	100	100
52.00	31.20	26.98
49.00	11.00	11.53
0.00	0.00	0.00

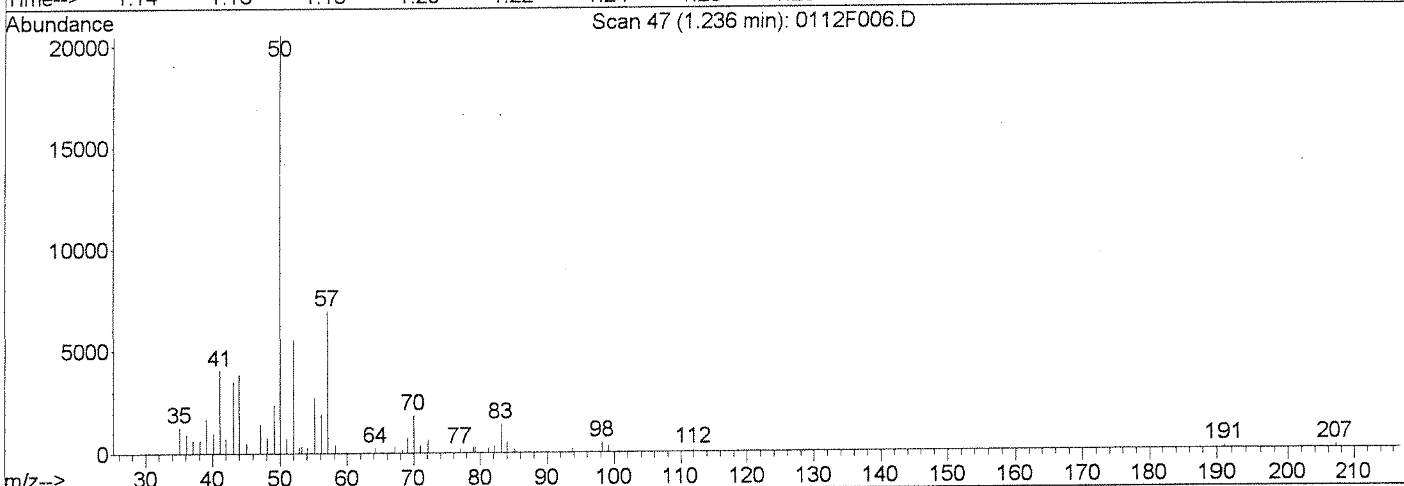
Data File : J:\MS23\DATA\011211\0112F006.D
Acq On : 12 Jan 2011 10:49 am
Sample : 624 ICAL 1
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:15 2011

Vial: 24
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F006.D

(3) Chloromethane (PT)

1.24min 0.83PPB m

response 18603

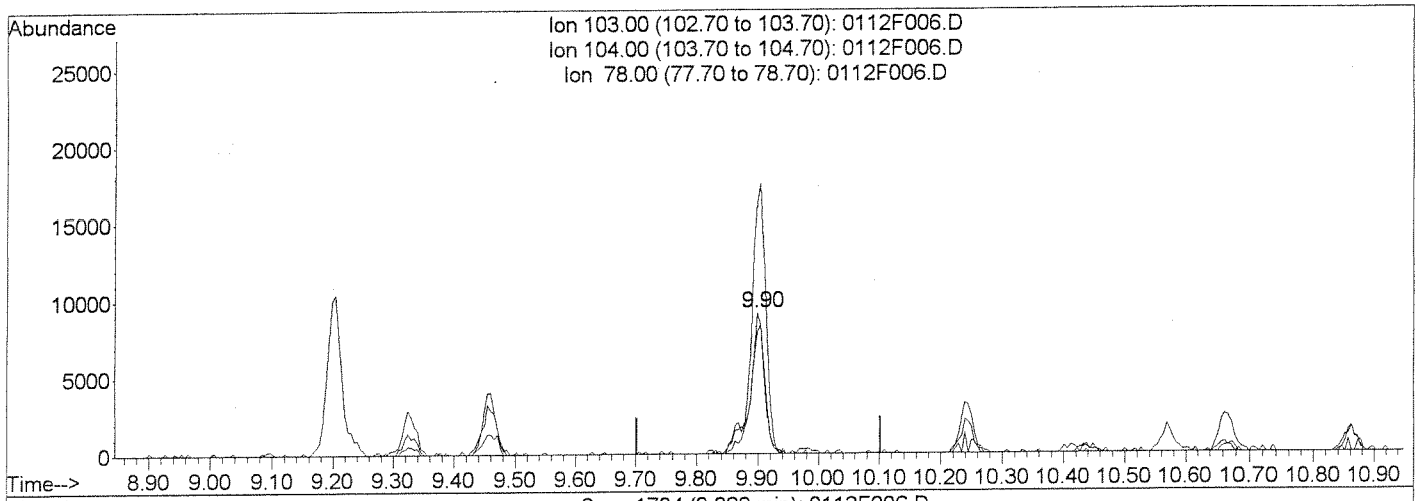
Ion	Exp%	Act%
50.00	100	100
52.00	31.20	26.98
49.00	11.00	11.53
0.00	0.00	0.00

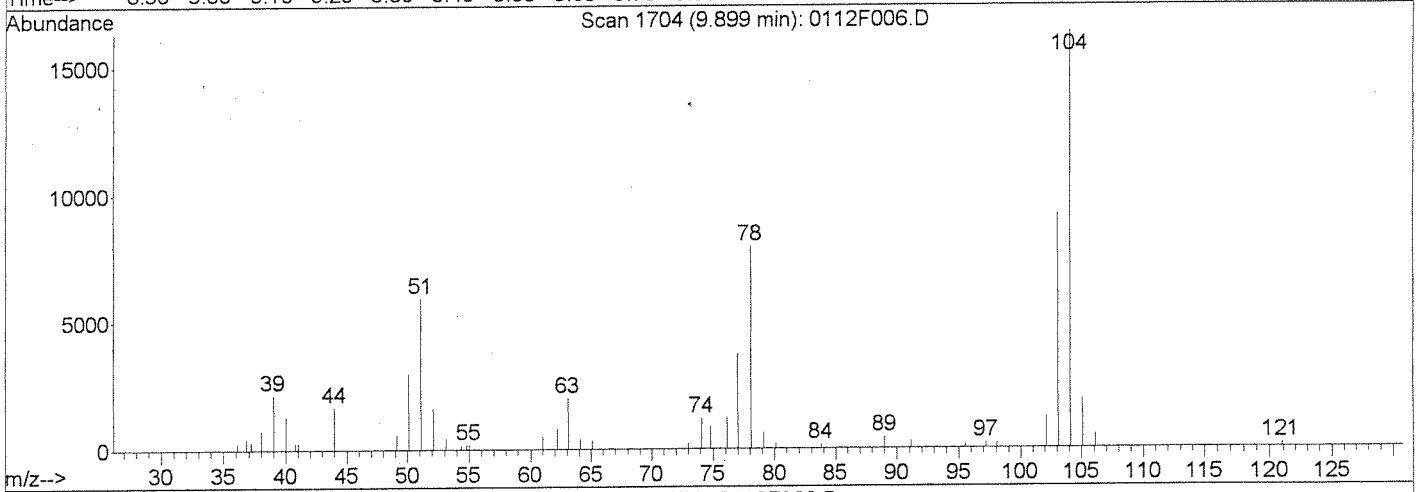
Quantitation Report (Qedit)

Data File : J:\MS23\DATA\011211\0112F006.D
Acq On : 12 Jan 2011 10:49 am
Sample : 624 ICAL 1
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:15 2011

Vial: 24
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F006.D

(45) Styrene (T)

9.90min 0.92PPB

response 15400

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	178.01
78.00	95.50	86.69
0.00	0.00	0.00

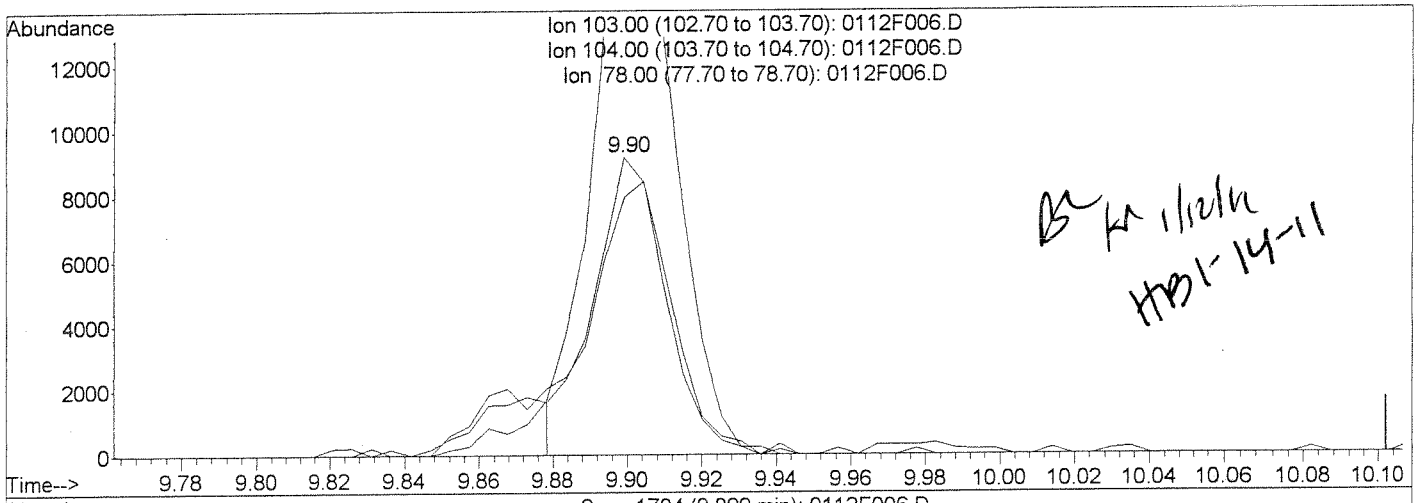
0112F006.D 122310624.M Wed Jan 12 14:15:48 2011

Data File : J:\MS23\DATA\011211\0112F006.D
Acq On : 12 Jan 2011 10:49 am
Sample : 624 ICAL 1
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:15 2011

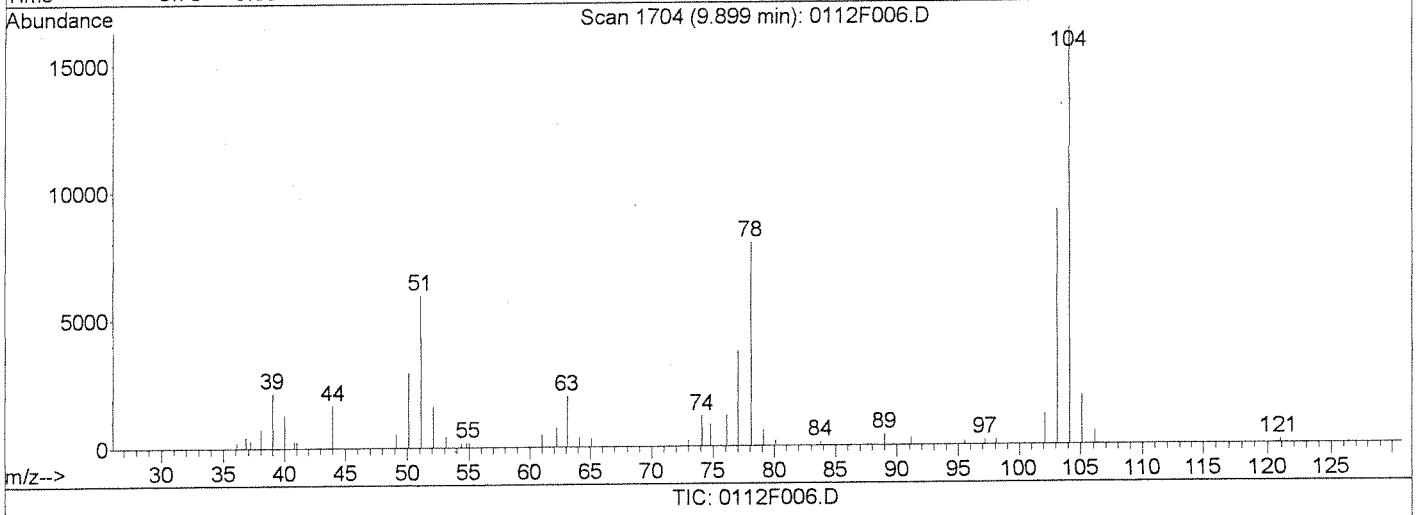
Vial: 24
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration



BK 1/12/11
HBI-14-11



TIC: 0112F006.D

(45) Styrene (T)

9.90min 0.77PPB m

response 12874

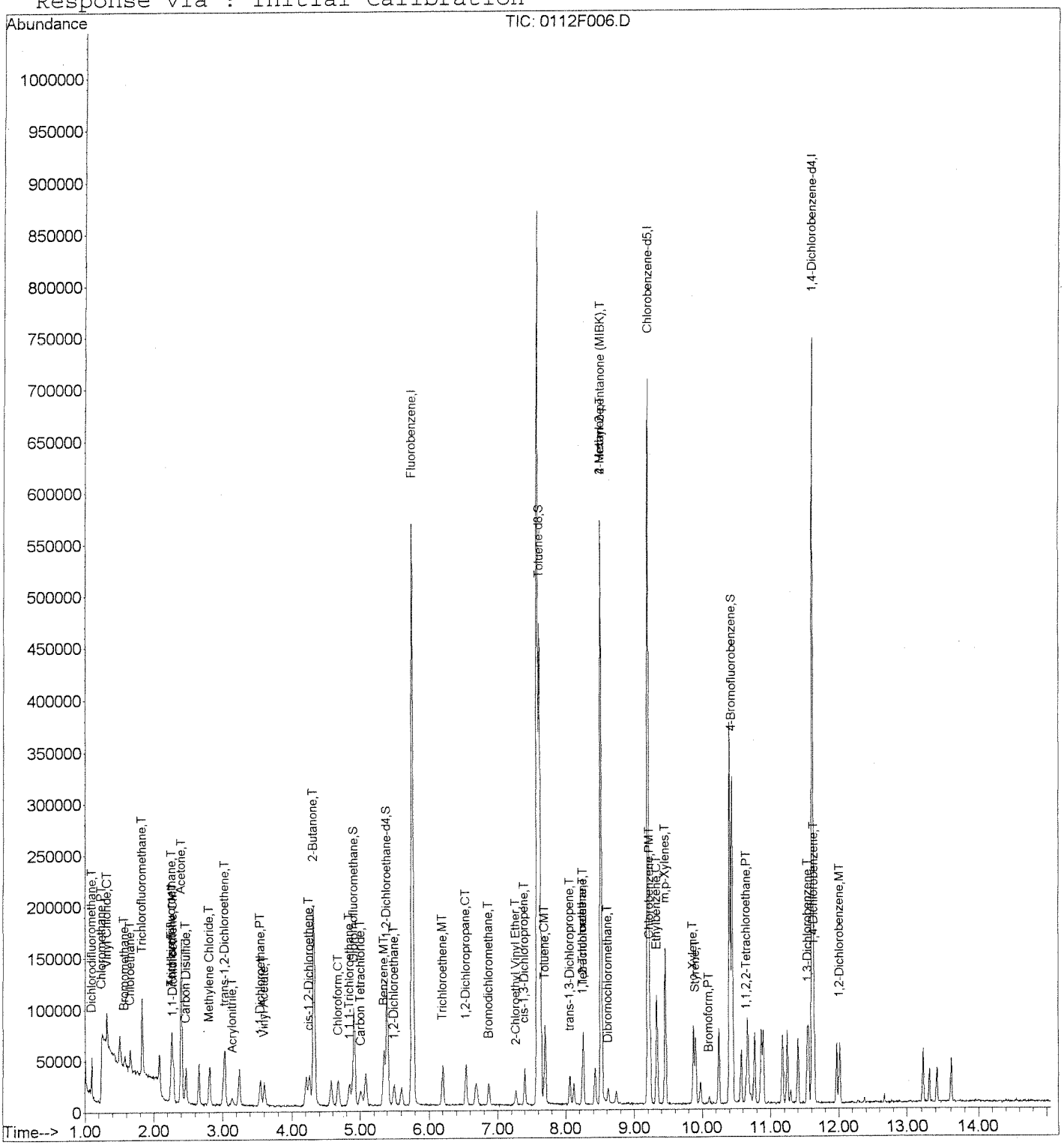
Ion	Exp%	Act%
103.00	100	100
104.00	206.20	178.01
78.00	95.50	86.69
0.00	0.00	0.00

Data File : J:\MS23\DATA\011211\0112F006.D
Acq On : 12 Jan 2011 10:49 am
Sample : 624 ICAL 1
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:15 2011

Vial: 24
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F007.D
Acq On : 12 Jan 2011 11:17 am
Sample : 624 ICAL #5 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:16:11 2011

Vial: 25
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

KR 1/12/11

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	502274	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	204714	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	165824	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.90	113	89755	7.65	PPB		0.00
Spiked Amount 10.000			Recovery =	76.50%			
24) 1,2-Dichloroethane-d4	5.39	65	118097	7.40	PPB		0.00
Spiked Amount 10.000			Recovery =	74.00%			
33) Toluene-d8	7.62	98	363709	7.77	PPB		0.00
Spiked Amount 10.000			Recovery =	77.70%			
47) 4-Bromofluorobenzene	10.44	95	128205	8.28	PPB		0.00
Spiked Amount 10.000			Recovery =	82.80%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.10	85	104730	5.73	PPB		98
3) Chloromethane	1.24	50	98520	4.37	PPB		98
4) Vinyl Chloride	1.31	62	104357	5.01	PPB		98
5) Bromomethane	1.57	96	25173	3.28	PPB		97
6) Chloroethane	1.65	49	16924	4.53	PPB	#	87
7) Trichlorofluoromethane	1.82	101	131541	5.61	PPB		98
8) Acrolein	2.26	56	136081	97.72	PPB		97
9) Trichlorotrifluoroethane	2.25	151	45991	5.38	PPB		98
10) 1,1-Dichloroethene	2.28	96	53510	4.71	PPB		92
11) Acetone	2.39	43	463970	180.93	PPB		99
12) Carbon Disulfide	2.47	76	206734	6.14	PPB		98
13) Methylene Chloride	2.80	84	62868	4.49	PPB		96
14) Acrylonitrile	3.14	53	30046	8.73	PPB		98
15) trans-1,2-Dichloroethene	3.03	96	63565	4.63	PPB		98
16) 1,1-Dichloroethane	3.54	63	129237	4.66	PPB		97
17) Vinyl Acetate	3.60	86	13554	6.29	PPB	#	67
18) cis-1,2-Dichloroethene	4.26	96	66768	4.49	PPB		96
19) 2-Butanone	4.31	72	156498	184.23	PPB		98
20) Chloroform	4.68	83	113900	4.62	PPB		98
21) 1,1,1-Trichloroethane	4.84	97	90097	4.13	PPB		97
23) Carbon Tetrachloride	5.01	117	59252	3.58	PPB		96
25) Benzene	5.35	78	271555	4.76	PPB		99
26) 1,2-Dichloroethane	5.50	62	88926	4.53	PPB		96
27) Trichloroethene	6.20	95	65922	4.81	PPB		98
28) 1,2-Dichloropropane	6.53	63	69006	4.47	PPB		97
29) Bromodichloromethane	6.87	83	68880	4.04	PPB		89
30) 2-Chloroethyl Vinyl Ether	7.27	63	25944	3.85	PPB		93

(#) = qualifier out of range (m) = manual integration

HB1-14-11

Data File : J:\MS23\DATA\011211\0112F007.D
Acq On : 12 Jan 2011 11:17 am
Sample : 624 ICAL 25 lw 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:16:11 2011

Vial: 25
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	7.40	75	89624	3.94	PPB	99
32)	4-Methyl-2-pentanone (MIBK	8.51	58	505626	176.59	PPB	97
34)	Toluene	7.70	92	160808	4.62	PPB	98
36)	trans-1,3-Dichloropropene	8.06	75	69140	3.97	PPB	95
37)	1,1,2-Trichloroethane	8.24	83	36031	4.72	PPB	98
38)	Tetrachloroethene	8.25	164	46737	5.04	PPB	99
39)	2-Hexanone	8.51	43	1056615	197.88	PPB	99
40)	Dibromochloromethane	8.62	129	32701	3.91	PPB	99
41)	Chlorobenzene	9.23	112	156993	4.91	PPB	96
42)	Ethylbenzene	9.33	106	87061	4.87	PPB	99
43)	m,p-Xylenes	9.46	106	214051	9.67	PPB	97
44)	o-Xylene	9.87	106	101268	4.80	PPB	100
45)	Styrene	9.90	103	75465m	4.48	PPB	
46)	Bromoform	10.11	173	13292	3.45	PPB	91
49)	1,1,2,2-Tetrachloroethane	10.64	83	38225	4.56	PPB	97
51)	1,3-Dichlorobenzene	11.53	146	108257	4.82	PPB	97
52)	1,4-Dichlorobenzene	11.64	146	110387	4.88	PPB	98
53)	1,2-Dichlorobenzene	12.01	146	97128	4.85	PPB	98

(#) = qualifier out of range (m) = manual integration
0112F007.D 122310624.M Wed Jan 12 14:17:04 2011 Page 2

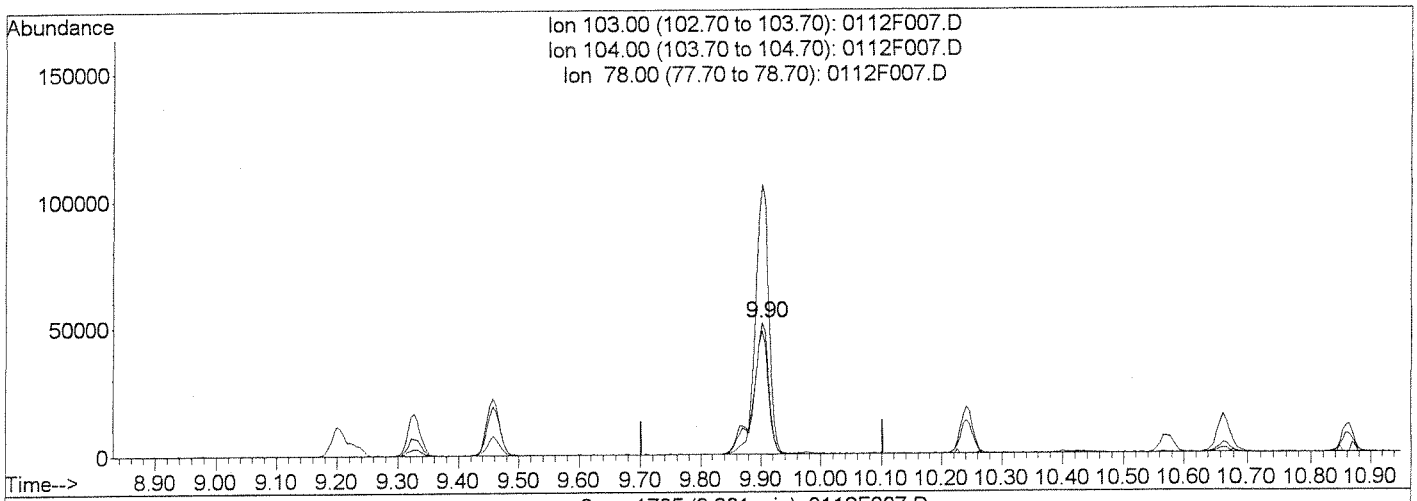
Quantitation Report (Qedit)

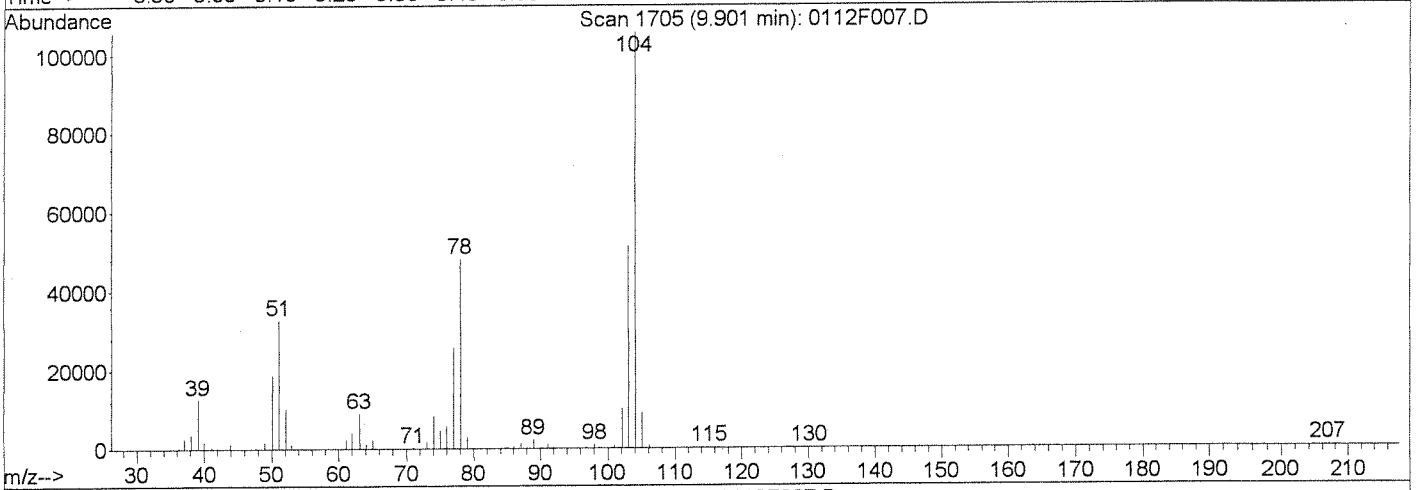
Data File : J:\MS23\DATA\011211\0112F007.D
Acq On : 12 Jan 2011 11:17 am
Sample : 624 ICAL 2 5 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:16 2011

Vial: 25
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F007.D

(45) Styrene (T)

9.90min 5.34PPB

response 90118

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	206.05
78.00	95.50	93.66
0.00	0.00	0.00

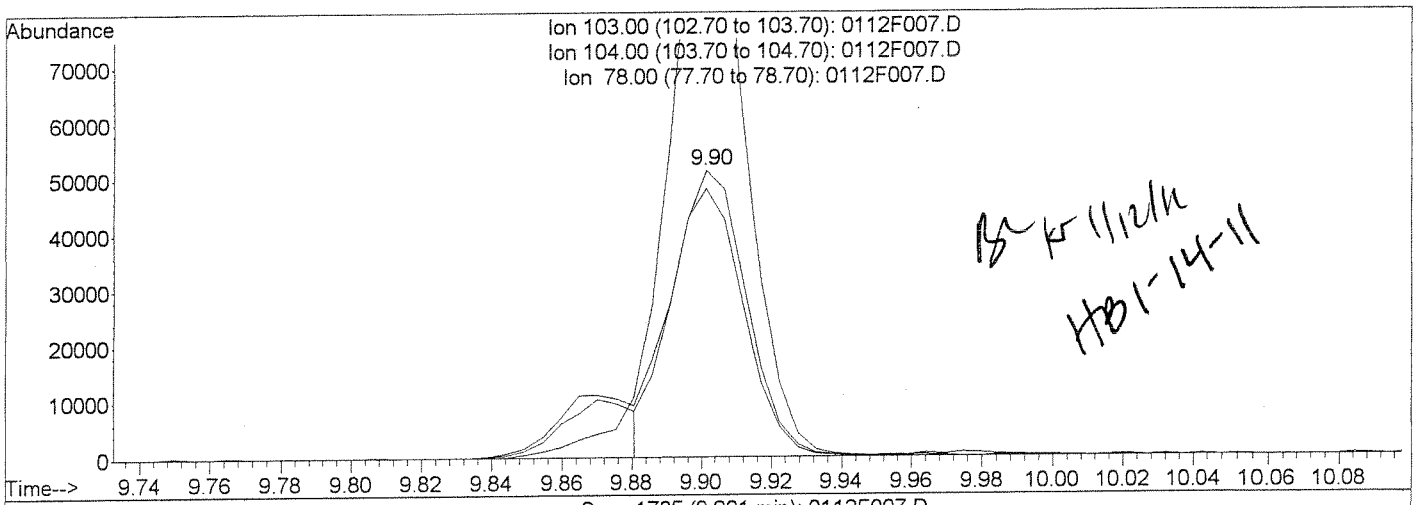
Quantitation Report (Qedit)

Data File : J:\MS23\DATA\011211\0112F007.D
Acq On : 12 Jan 2011 11:17 am
Sample : 624 ICAL 25 kr 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:16 2011

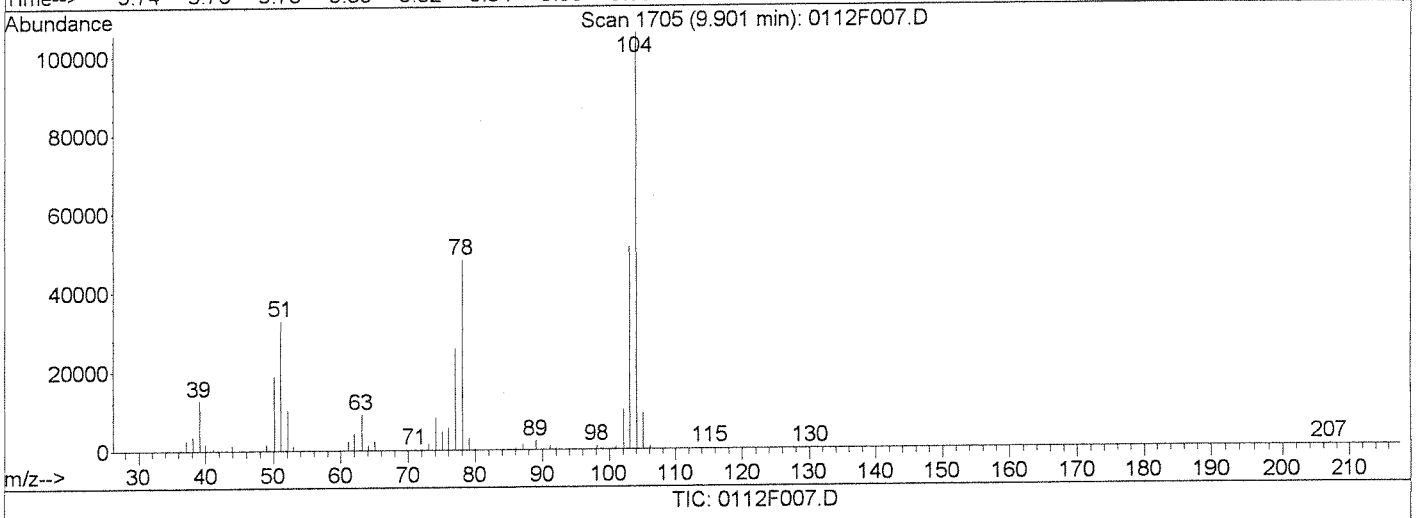
Vial: 25
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration



kr 1/12/11
HB1-14-11



TIC: 0112F007.D

(45) Styrene (T)

9.90min 4.48PPB m

response 75465

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	206.05
78.00	95.50	93.66
0.00	0.00	0.00

0112F007.D 122310624.M Wed Jan 12 14:16:53 2011

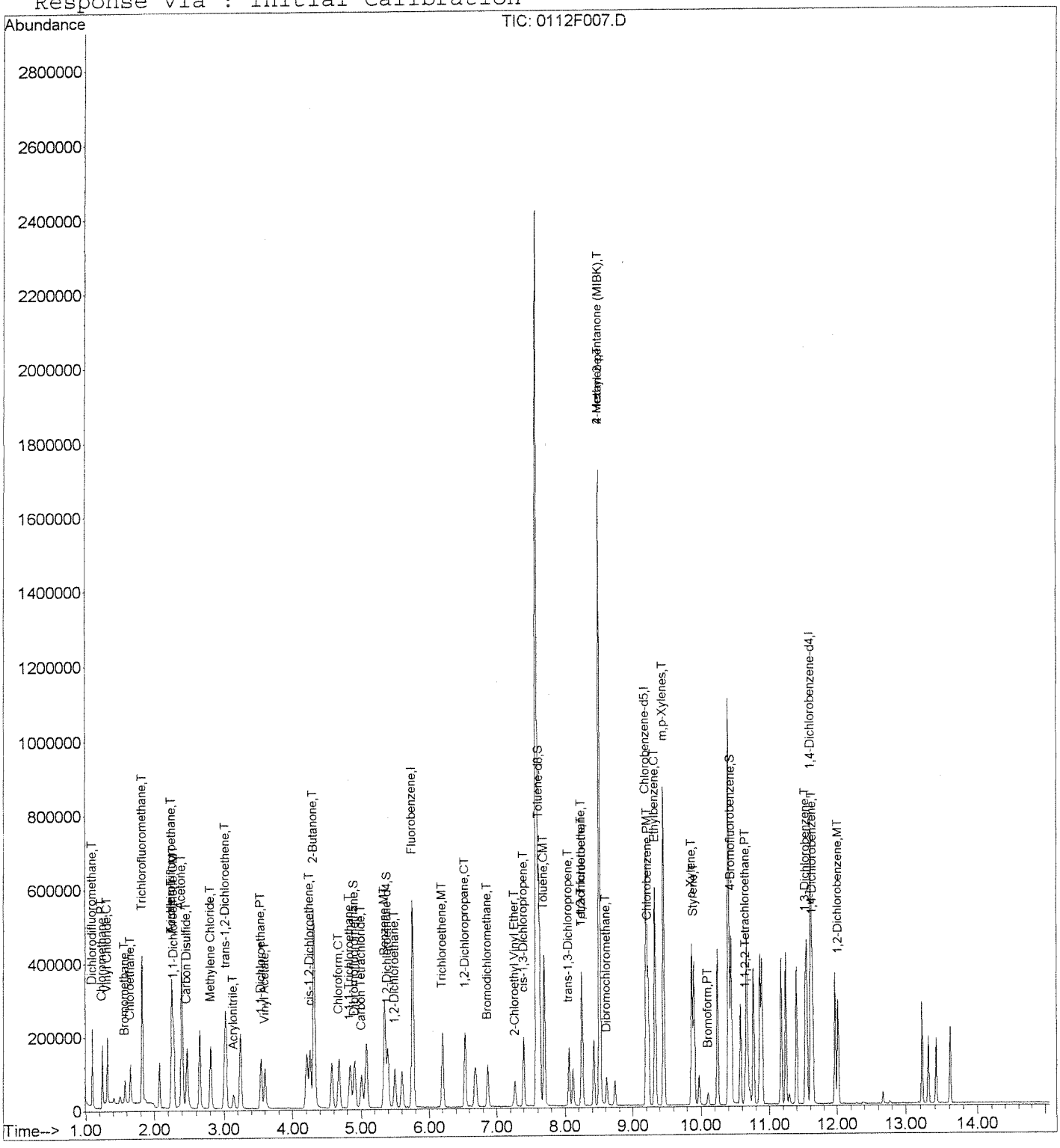
Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F007.D
Acq On : 12 Jan 2011 11:17 am
Sample : 624 ICAL 75 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:16 2011

Vial: 25
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F008.D
Acq On : 12 Jan 2011 11:46 am
Sample : 624 ICAL 5 10 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:17:11 2011

Vial: 26
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

KR 1/12/11

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.77	96	486875	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	202840	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	169109	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.91	113	109139	9.60	PPB		0.00
Spiked Amount 10.000			Recovery =	96.00%			
24) 1,2-Dichloroethane-d4	5.40	65	148394	9.59	PPB		0.00
Spiked Amount 10.000			Recovery =	95.90%			
33) Toluene-d8	7.63	98	447590	9.87	PPB		0.00
Spiked Amount 10.000			Recovery =	98.70%			
47) 4-Bromofluorobenzene	10.44	95	161218	10.51	PPB		0.00
Spiked Amount 10.000			Recovery =	105.10%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.10	85	204572	11.54	PPB		100
3) Chloromethane	1.24	50	233391	10.68	PPB		99
4) Vinyl Chloride	1.31	62	212881	10.54	PPB		99
5) Bromomethane	1.57	96	75375	10.15	PPB		97
6) Chloroethane	1.65	49	35082	9.69	PPB		96
7) Trichlorofluoromethane	1.82	101	247121	10.88	PPB		98
8) Acrolein	2.26	56	246585	182.68	PPB		99
9) Trichlorotrifluoroethane	2.26	151	89761	10.82	PPB		97
10) 1,1-Dichloroethene	2.28	96	100403	9.12	PPB		95
11) Acetone	2.40	43	973725	391.73	PPB		100
12) Carbon Disulfide	2.47	76	425283	13.02	PPB		98
13) Methylene Chloride	2.81	84	126064	9.29	PPB		94
14) Acrylonitrile	3.14	53	61528	18.44	PPB		95
15) trans-1,2-Dichloroethene	3.03	96	124098	9.33	PPB		96
16) 1,1-Dichloroethane	3.55	63	255812	9.51	PPB		98
17) Vinyl Acetate	3.61	86	28609	13.69	PPB	#	88
18) cis-1,2-Dichloroethene	4.26	96	134521	9.34	PPB		98
19) 2-Butanone	4.32	72	321011	389.85	PPB		90
20) Chloroform	4.68	83	228781	9.57	PPB		100
21) 1,1,1-Trichloroethane	4.84	97	180811	8.55	PPB		99
23) Carbon Tetrachloride	5.01	117	121845	7.59	PPB		95
25) Benzene	5.36	78	534609	9.67	PPB		99
26) 1,2-Dichloroethane	5.50	62	178154	9.37	PPB		97
27) Trichloroethene	6.20	95	128725	9.69	PPB		93
28) 1,2-Dichloropropane	6.54	63	135907	9.09	PPB		99
29) Bromodichloromethane	6.87	83	141930	8.60	PPB		95
30) 2-Chloroethyl Vinyl Ether	7.27	63	58280	8.92	PPB		93

(#) = qualifier out of range (m) = manual integration

HB 1-14-11

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F008.D
Acq On : 12 Jan 2011 11:46 am
Sample : 624 ICAL 5/10 ppb
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:17:11 2011

Vial: 26
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31) cis-1,3-Dichloropropene	7.40	75	182044	8.25	PPB	98
32) 4-Methyl-2-pentanone (MIBK	8.51	58	1075231	387.41	PPB	98
34) Toluene	7.70	92	319017	9.45	PPB	97
36) trans-1,3-Dichloropropene	8.06	75	143064	8.28	PPB	98
37) 1,1,2-Trichloroethane	8.25	83	74209	9.82	PPB	96
38) Tetrachloroethene	8.26	164	87566	9.53	PPB	97
39) 2-Hexanone	8.51	43	2238073	423.01	PPB	99
40) Dibromochloromethane	8.62	129	70102	8.45	PPB	98
41) Chlorobenzene	9.23	112	317589	10.03	PPB	99
42) Ethylbenzene	9.33	106	174986	9.88	PPB	95
43) m,p-Xylenes	9.46	106	442077	20.15	PPB	96
44) o-Xylene	9.87	106	208855	9.98	PPB	97
45) Styrene	9.90	103	167677m	10.04	PPB	
46) Bromoform	10.10	173	28252	7.40	PPB	95
49) 1,1,2,2-Tetrachloroethane	10.65	83	81230	9.49	PPB	98
51) 1,3-Dichlorobenzene	11.54	146	225139	9.83	PPB	98
52) 1,4-Dichlorobenzene	11.63	146	232310	10.07	PPB	97
53) 1,2-Dichlorobenzene	12.01	146	204116	10.00	PPB	98

(#) = qualifier out of range (m) = manual integration

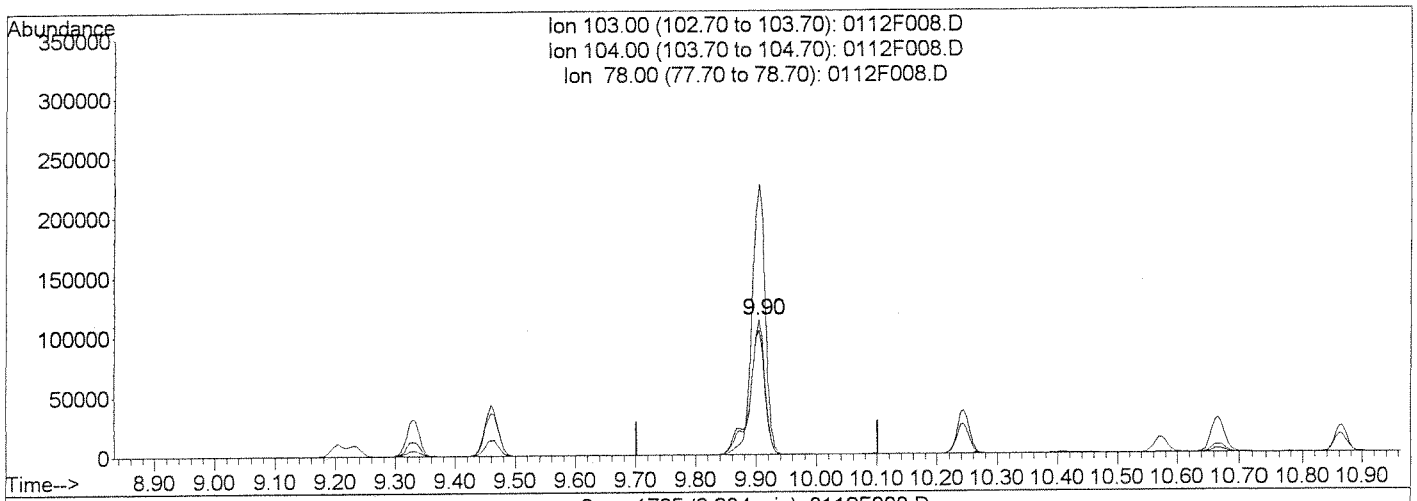
Quantitation Report (Qedit)

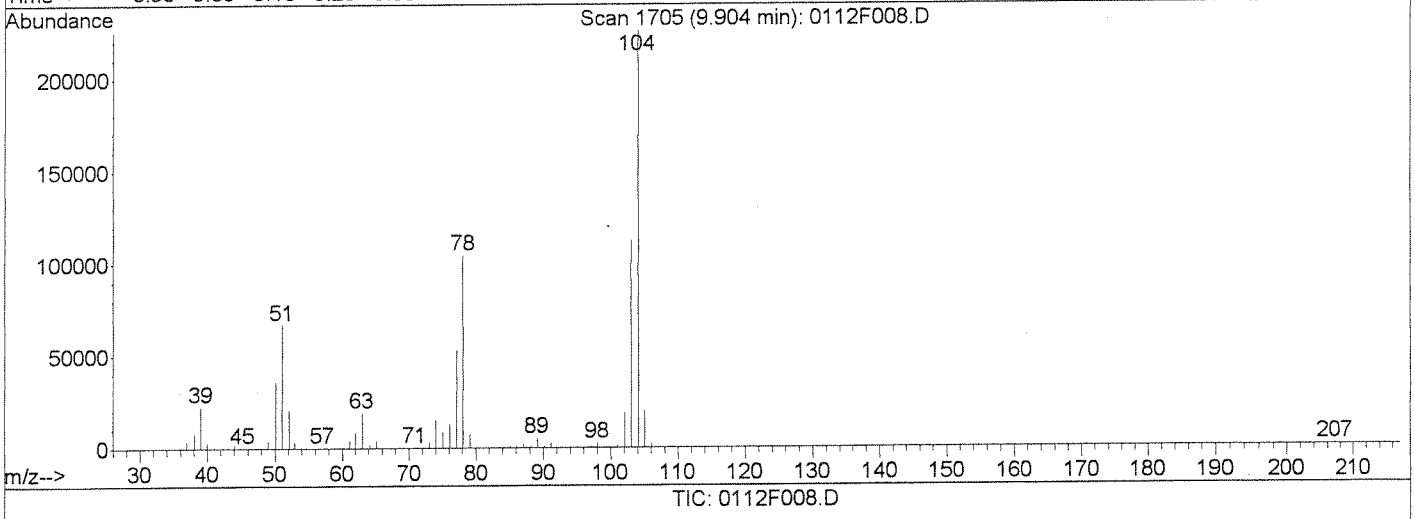
Data File : J:\MS23\DATA\011211\0112F008.D
Acq On : 12 Jan 2011 11:46 am
Sample : 624 ICAL 5/10 ppb/ml
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:17 2011

Vial: 26
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F008.D

(45) Styrene (T)

9.90min 11.53PPB

response 192564

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	200.58
78.00	95.50	92.62
0.00	0.00	0.00

0112F008.D 122310624.M Wed Jan 12 14:17:40 2011

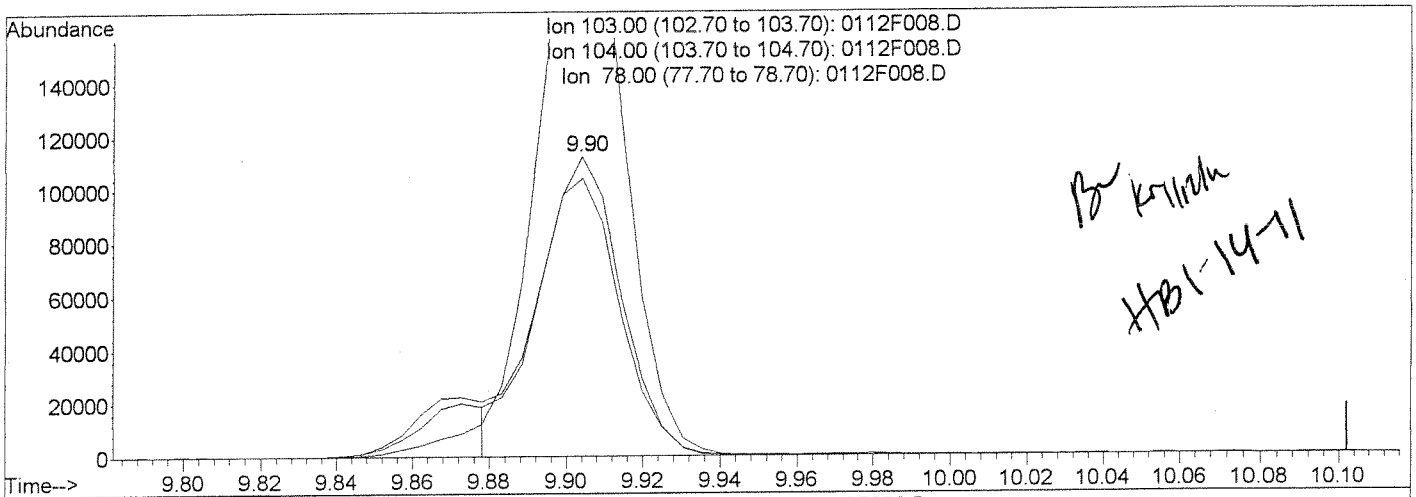
Quantitation Report (Qedit)

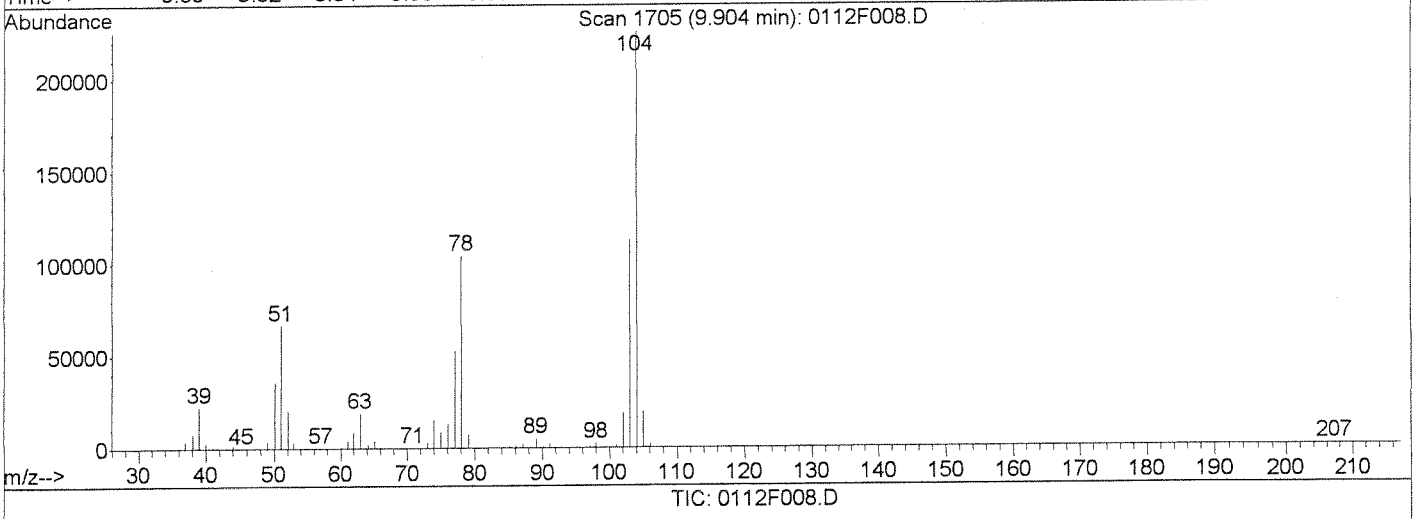
Data File : J:\MS23\DATA\011211\0112F008.D
Acq On : 12 Jan 2011 11:46 am
Sample : 624 ICAL 5/10 kr 1/14/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:17 2011

Vial: 26
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F008.D

(45) Styrene (T)

9.90min 10.04PPB m

response 167677

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	200.58
78.00	95.50	92.62
0.00	0.00	0.00

HBI-14-11

0112F008.D 122310624.M Wed Jan 12 14:17:46 2011

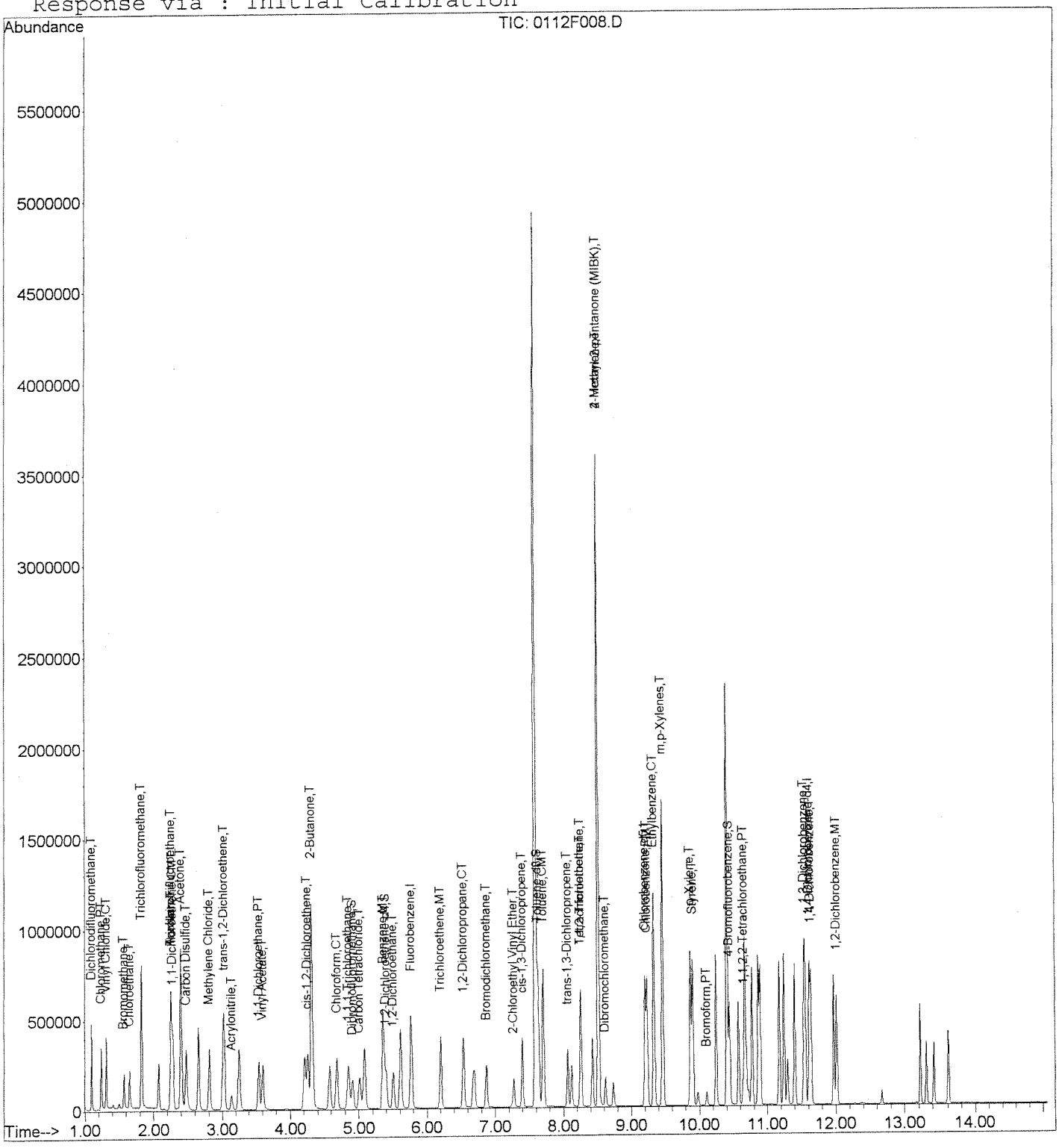
Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F008.D
Acq On : 12 Jan 2011 11:46 am
Sample : 624 ICAL 8/0 KR 1/19/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:17 2011

Vial: 26
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F009.D
Acq On : 12 Jan 2011 12:14 pm
Sample : 624 ICAL 1/40 kr 1/14/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:18:03 2011

Vial: 27
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

kr 1/14/11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.76	96	507610	10.00	PPB	0.00
35) Chlorobenzene-d5	9.20	82	205833	10.00	PPB	0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	173034	10.00	PPB	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	4.91	113	229195	19.33	PPB	0.00
Spiked Amount 10.000			Recovery =	193.30%		
24) 1,2-Dichloroethane-d4	5.40	65	307099	19.04	PPB	0.00
Spiked Amount 10.000			Recovery =	190.40%		
33) Toluene-d8	7.62	98	930094	19.67	PPB	0.00
Spiked Amount 10.000			Recovery =	196.70%		
47) 4-Bromofluorobenzene	10.44	95	326950	21.01	PPB	0.00
Spiked Amount 10.000			Recovery =	210.10%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.09	85	880465	47.63	PPB	100
3) Chloromethane	1.23	50	800781	35.15	PPB	100
4) Vinyl Chloride	1.31	62	881393	41.87	PPB	100
5) Bromomethane	1.57	96	361007	46.61	PPB	100
6) Chloroethane	1.65	49	137242	36.35	PPB	100
7) Trichlorofluoromethane	1.82	101	1066618	45.03	PPB	100
8) Acrolein	2.25	56	1140561	810.44	PPB	100
9) Trichlorotrifluoroethane	2.25	151	391753	45.30	PPB	100
10) 1,1-Dichloroethene	2.28	96	444327	38.71	PPB	100
11) Acetone	2.39	43	1926690	743.45	PPB	100
12) Carbon Disulfide	2.47	76	1746424	51.29	PPB	100
13) Methylene Chloride	2.80	84	499715	35.30	PPB	100
14) Acrylonitrile	3.14	53	255590	73.48	PPB	100
15) trans-1,2-Dichloroethene	3.03	96	535271	38.60	PPB	100
16) 1,1-Dichloroethane	3.54	63	1070268	38.15	PPB	100
17) Vinyl Acetate	3.60	86	119780	54.99	PPB	100
18) cis-1,2-Dichloroethene	4.26	96	577480	38.45	PPB	100
19) 2-Butanone	4.31	72	672803	783.70	PPB	100
20) Chloroform	4.68	83	956399	38.39	PPB	100
21) 1,1,1-Trichloroethane	4.84	97	806748	36.58	PPB	100
23) Carbon Tetrachloride	5.01	117	573817	34.26	PPB	100
25) Benzene	5.35	78	2232251	38.74	PPB	100
26) 1,2-Dichloroethane	5.50	62	728434	36.75	PPB	100
27) Trichloroethene	6.20	95	545816	39.40	PPB	100
28) 1,2-Dichloropropane	6.54	63	578724	37.11	PPB	100
29) Bromodichloromethane	6.87	83	641178	37.26	PPB	100
30) 2-Chloroethyl Vinyl Ether	7.27	63	240345	35.28	PPB	100

(#) = qualifier out of range (m) = manual integration HBI-1-14-11
0112F009.D 122310624.M Wed Jan 12 14:29:20 2011 Page 1

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F009.D
Acq On : 12 Jan 2011 12:14 pm
Sample : 624 ICAL ~~10~~ 40 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:18:03 2011

Vial: 27
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	7.40	75	809415	35.20	PPB	100
32)	4-Methyl-2-pentanone (MIBK	8.51	58	2220382	767.33	PPB	100
34)	Toluene	7.70	92	1338203	38.04	PPB	100
36)	trans-1,3-Dichloropropene	8.06	75	657960	37.53	PPB	100
37)	1,1,2-Trichloroethane	8.25	83	302929	39.50	PPB	100
38)	Tetrachloroethene	8.26	164	387237	41.54	PPB	100
39)	2-Hexanone	8.51	43	4569655	851.13	PPB	100
40)	Dibromochloromethane	8.62	129	334115	39.71	PPB	100
41)	Chlorobenzene	9.23	112	1315014	40.94	PPB	100
42)	Ethylbenzene	9.33	106	749307	41.67	PPB	100
43)	m,p-Xylenes	9.46	106	1867583	83.90	PPB	100
44)	o-Xylene	9.87	106	886684	41.77	PPB	100
45)	Styrene	9.90	103	684554m	40.38	PPB	
46)	Bromoform	10.11	173	144608	37.33	PPB	97
49)	1,1,2,2-Tetrachloroethane	10.64	83	329653	37.66	PPB	100
51)	1,3-Dichlorobenzene	11.53	146	942517	40.21	PPB	100
52)	1,4-Dichlorobenzene	11.64	146	946158	40.07	PPB	100
53)	1,2-Dichlorobenzene	12.01	146	834843	39.97	PPB	100

(#) = qualifier out of range (m) = manual integration

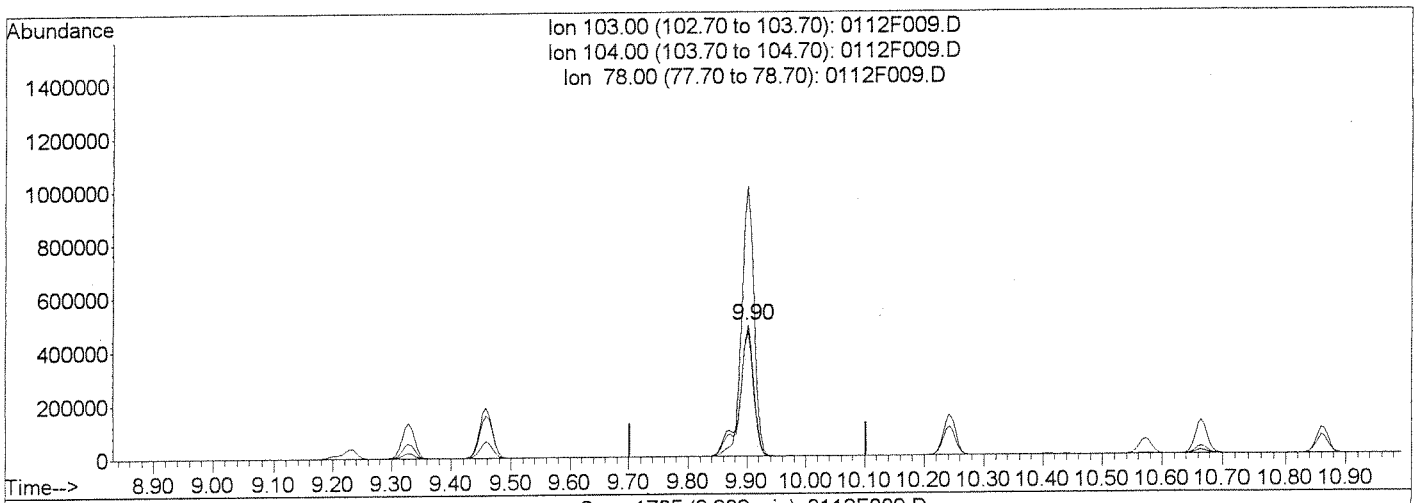
Quantitation Report (Qedit)

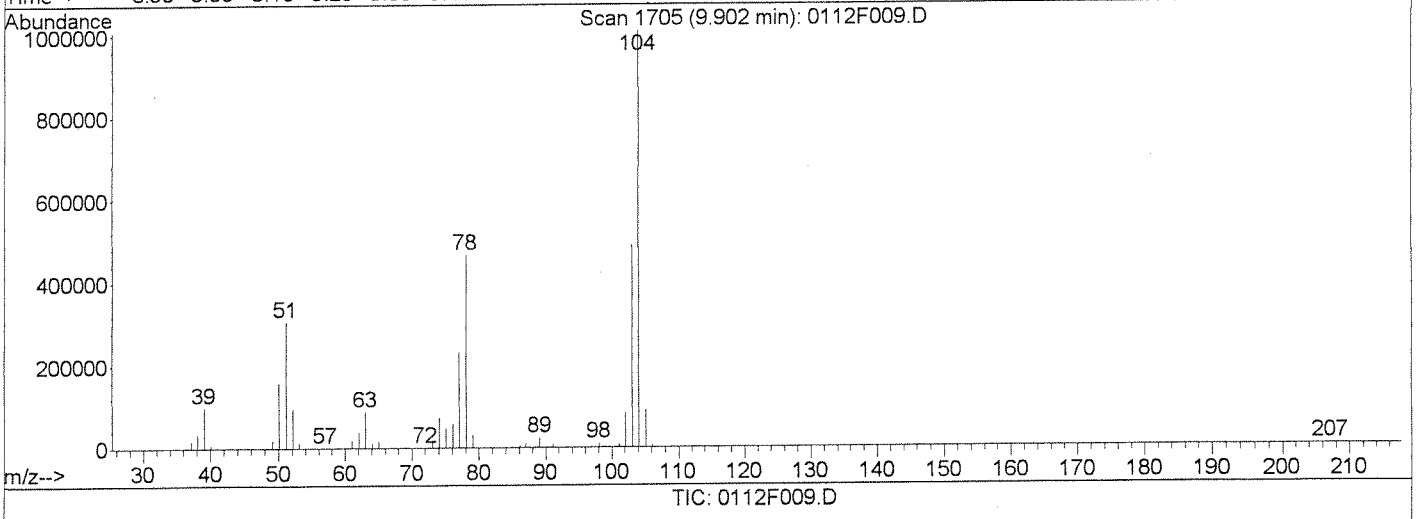
Data File : J:\MS23\DATA\011211\0112F009.D
Acq On : 12 Jan 2011 12:14 pm
Sample : 624 ICAL ~~10~~ 26 KR 1/11/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:18 2011

Vial: 27
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F009.D

(45) Styrene (T)

9.90min 48.04PPB

response 814395

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	206.19
78.00	95.50	95.42
0.00	0.00	0.00

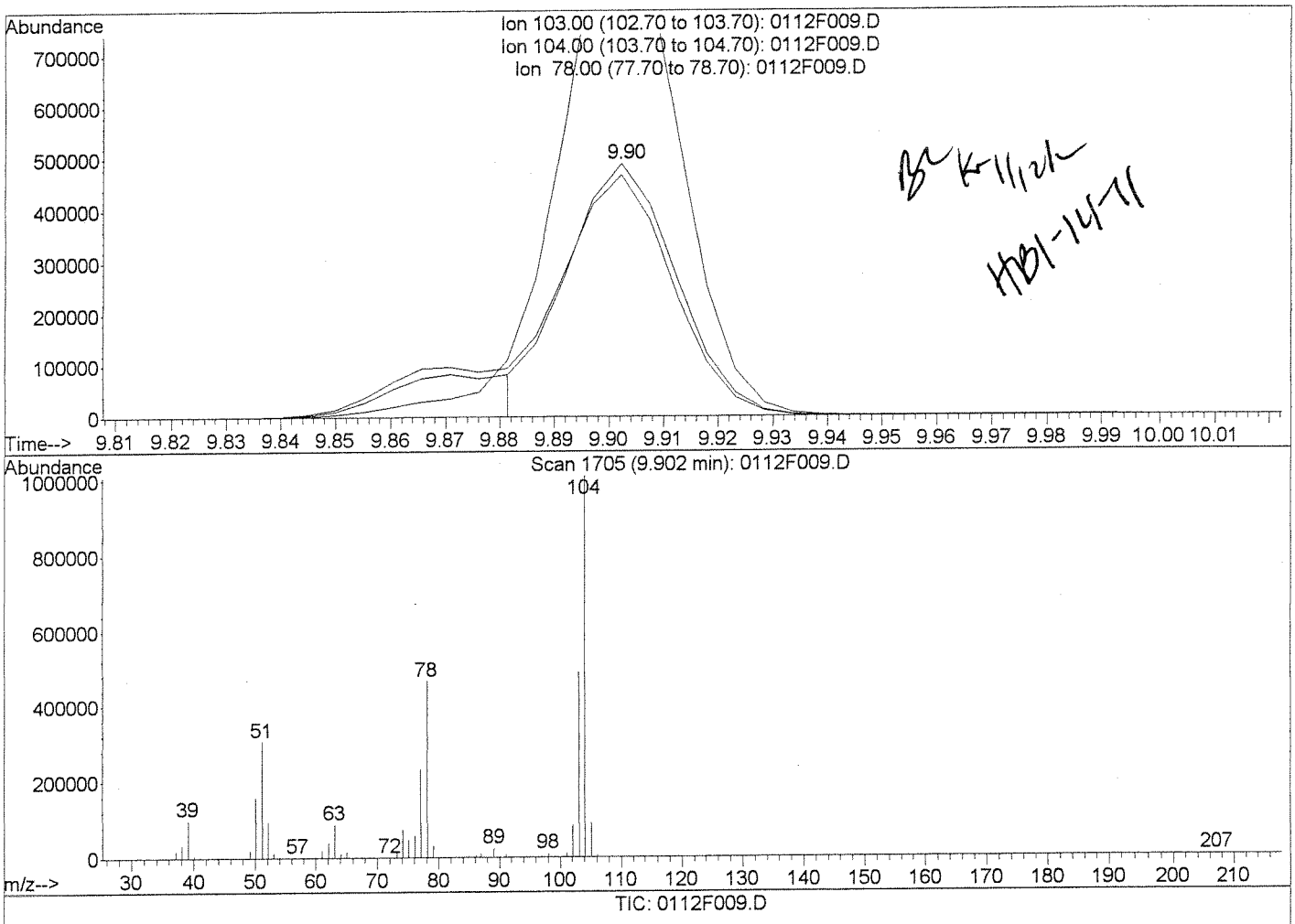
Quantitation Report (Qedit)

Data File : J:\MS23\DATA\011211\0112F009.D
Acq On : 12 Jan 2011 12:14 pm
Sample : 624 ICAL ~~10~~ BC KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:18 2011

Vial: 27
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration



TIC: 0112F009.D

BC KR 1/12/11
HBI-14-11

(45) Styrene (T)

9.90min 40.38PPB m

response 684554

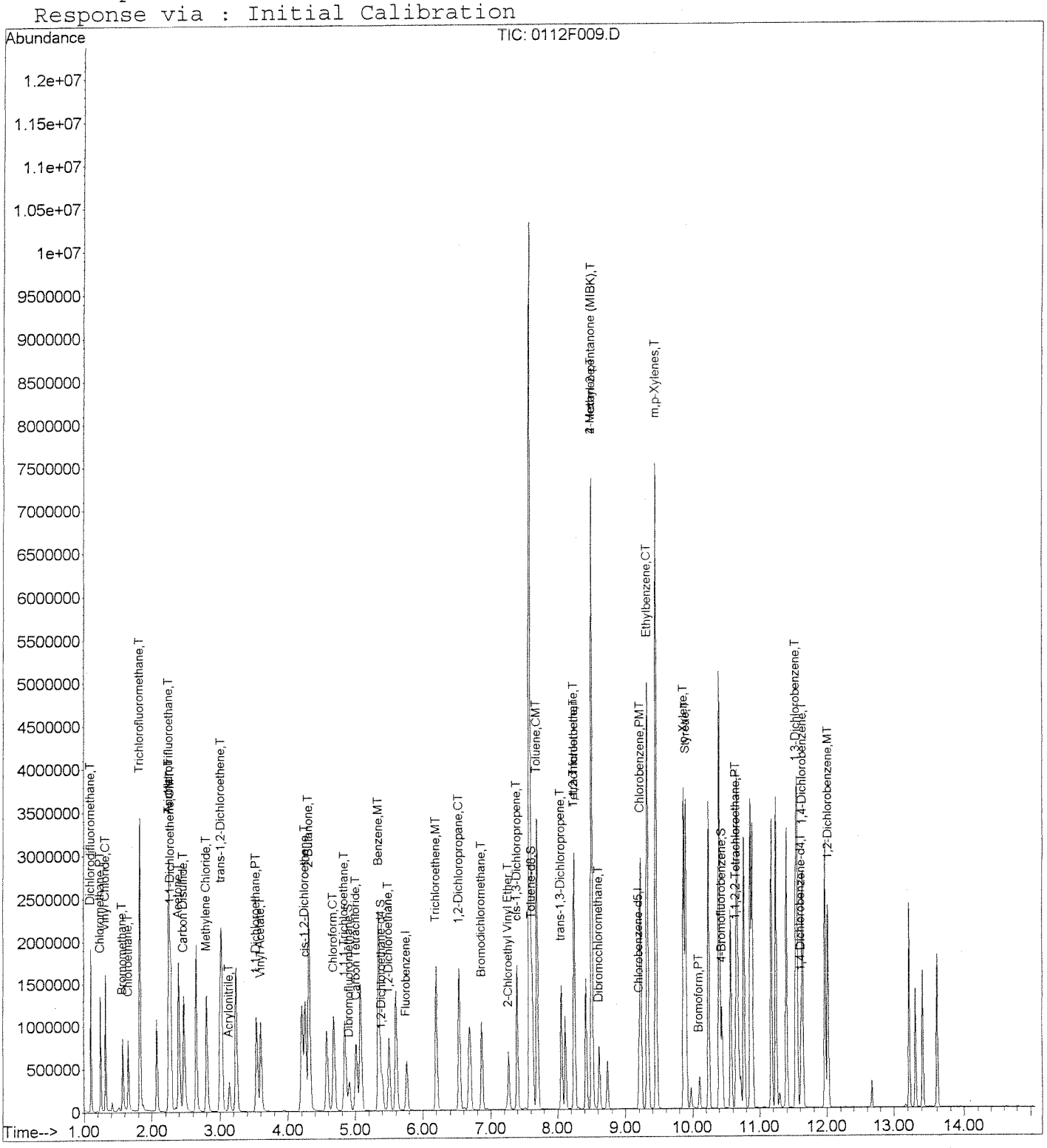
Ion	Exp%	Act%
103.00	100	100
104.00	206.20	206.24
78.00	95.50	95.46
0.00	0.00	0.00

Data File : J:\MS23\DATA\011211\0112F009.D
Acq On : 12 Jan 2011 12:14 pm
Sample : 624 ICAL ~~10~~ 40 KR 1/21/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:18 2011

Vial: 27
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F010.D
Acq On : 12 Jan 2011 12:43 pm
Sample : 624 ICAL 4/30 kr 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:18:49 2011

Vial: 28
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

kr 1/12/11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.76	96	520296	10.00	PPB	0.00
35) Chlorobenzene-d5	9.20	82	213544	10.00	PPB	0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	178165	10.00	PPB	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	4.91	113	476489	39.21	PPB	0.00
Spiked Amount 10.000			Recovery =	392.10%		
24) 1,2-Dichloroethane-d4	5.39	65	646862	39.13	PPB	0.00
Spiked Amount 10.000			Recovery =	391.30%		
33) Toluene-d8	7.63	98	1897231	39.15	PPB	0.00
Spiked Amount 10.000			Recovery =	391.50%		
47) 4-Bromofluorobenzene	10.44	95	680540	42.15	PPB	0.00
Spiked Amount 10.000			Recovery =	421.50%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.09	85	1762720	93.03	PPB	99
3) Chloromethane	1.23	50	1762197	75.48	PPB	99
4) Vinyl Chloride	1.31	62	1806687	83.73	PPB	100
5) Bromomethane	1.56	96	804661	101.36	PPB	99
6) Chloroethane	1.65	49	277325	71.66	PPB	96
7) Trichlorofluoromethane	1.82	101	2079683	85.65	PPB	98
8) Acrolein	2.26	56	2262014	1568.12	PPB	100
9) Trichlorotrifluoroethane	2.25	151	791131	89.26	PPB	98
10) 1,1-Dichloroethene	2.28	96	895711	76.14	PPB	99
11) Acetone	2.39	43	3987708	1501.22	PPB	100
12) Carbon Disulfide	2.47	76	3579301	102.55	PPB	100
13) Methylene Chloride	2.80	84	1033426	71.23	PPB	99
14) Acrylonitrile	3.14	53	522015	146.41	PPB	95
15) trans-1,2-Dichloroethene	3.03	96	1093889	76.97	PPB	96
16) 1,1-Dichloroethane	3.54	63	2184185	75.95	PPB	99
17) Vinyl Acetate	3.60	86	266650	119.44	PPB	95
18) cis-1,2-Dichloroethene	4.26	96	1173856	76.24	PPB	99
19) 2-Butanone	4.31	72	1408136	1600.24	PPB	97
20) Chloroform	4.68	83	1967515	77.04	PPB	99
21) 1,1,1-Trichloroethane	4.84	97	1705356	75.44	PPB	99
23) Carbon Tetrachloride	5.01	117	1279346	74.53	PPB	97
25) Benzene	5.35	78	4523152	76.59	PPB	99
26) 1,2-Dichloroethane	5.50	62	1480018	72.84	PPB	98
27) Trichloroethene	6.20	95	1126612	79.34	PPB	98
28) 1,2-Dichloropropane	6.53	63	1183058	74.01	PPB	99
29) Bromodichloromethane	6.87	83	1359639	77.08	PPB	98
30) 2-Chloroethyl Vinyl Ether	7.27	63	505324	72.36	PPB	98

(#) = qualifier out of range (m) = manual integration

HBF-1471

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F010.D
Acq On : 12 Jan 2011 12:43 pm
Sample : 624 ICAL ~~40~~ 80 kr 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:18:49 2011

Vial: 28
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	7.40	75	1737183	73.70	PPB	100
32)	4-Methyl-2-pentanone (MIBK	8.51	58	4633940	1562.38	PPB	97
34)	Toluene	7.70	92	2741187	76.01	PPB	99
36)	trans-1,3-Dichloropropene	8.06	75	1420497	78.10	PPB	99
37)	1,1,2-Trichloroethane	8.24	83	631053	79.32	PPB	98
38)	Tetrachloroethene	8.25	164	809695	83.72	PPB	97
39)	2-Hexanone	8.51	43	9269257	1664.12	PPB	98
40)	Dibromochloromethane	8.62	129	758094	86.84	PPB	99
41)	Chlorobenzene	9.23	112	2738898	82.19	PPB	99
42)	Ethylbenzene	9.33	106	1563550	83.82	PPB	97
43)	m,p-Xylenes	9.46	106	3875306	167.81	PPB	96
44)	o-Xylene	9.87	106	1848175	83.91	PPB	97
45)	Styrene	9.90	103	1449175m	82.39	PPB	
46)	Bromoform	10.11	173	348284	86.65	PPB	96
49)	1,1,2,2-Tetrachloroethane	10.64	83	688608	76.40	PPB	99
51)	1,3-Dichlorobenzene	11.54	146	1948311	80.73	PPB	98
52)	1,4-Dichlorobenzene	11.64	146	1955202	80.43	PPB	99
53)	1,2-Dichlorobenzene	12.01	146	1736638	80.75	PPB	98

(#) = qualifier out of range (m) = manual integration

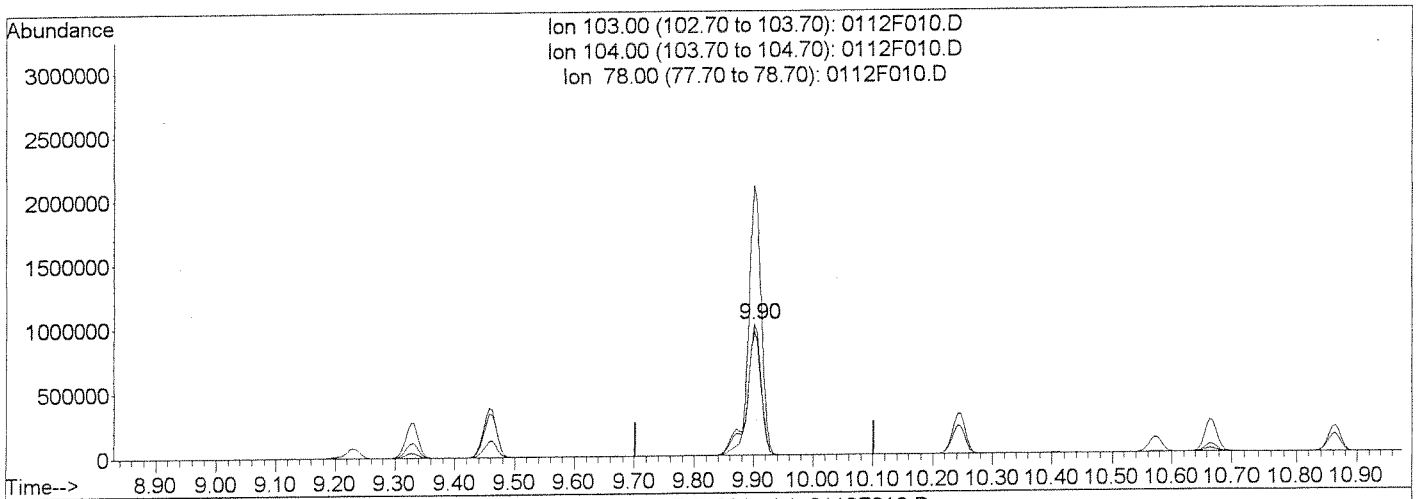
Quantitation Report (Qedit)

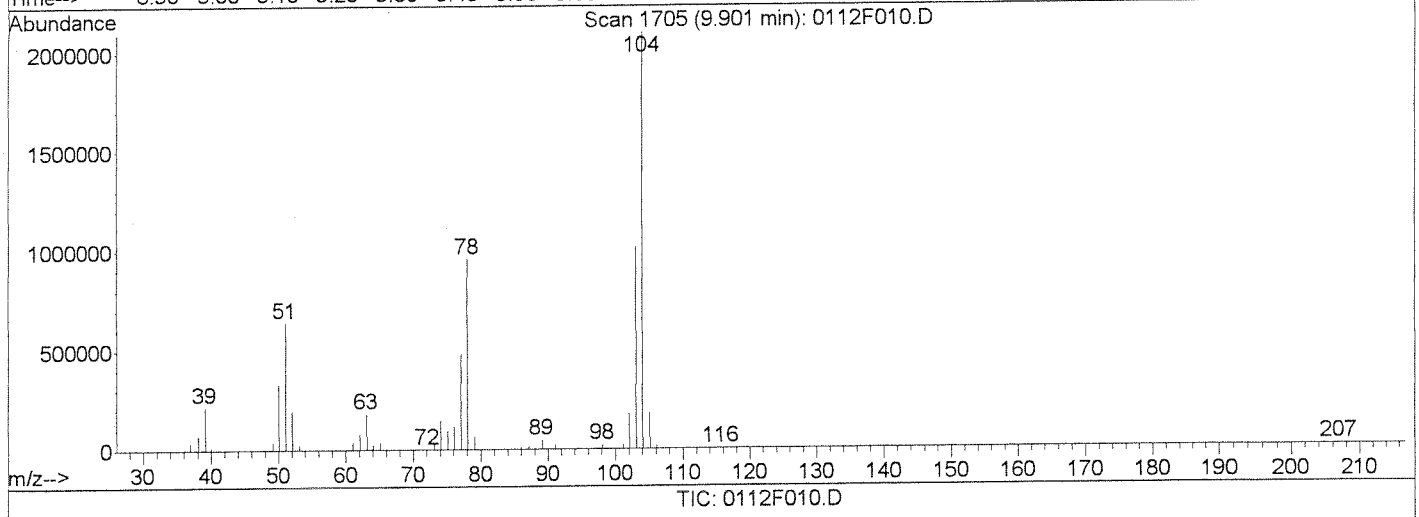
Data File : J:\MS23\DATA\011211\0112F010.D
Acq On : 12 Jan 2011 12:43 pm
Sample : 624 ICAL 40 80 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:18 2011

Vial: 28
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F010.D

(45) Styrene (T)

9.90min 96.73PPB

response 1701324

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	206.93
78.00	95.50	94.51
0.00	0.00	0.00

0112F010.D 122310624.M Wed Jan 12 14:19:14 2011

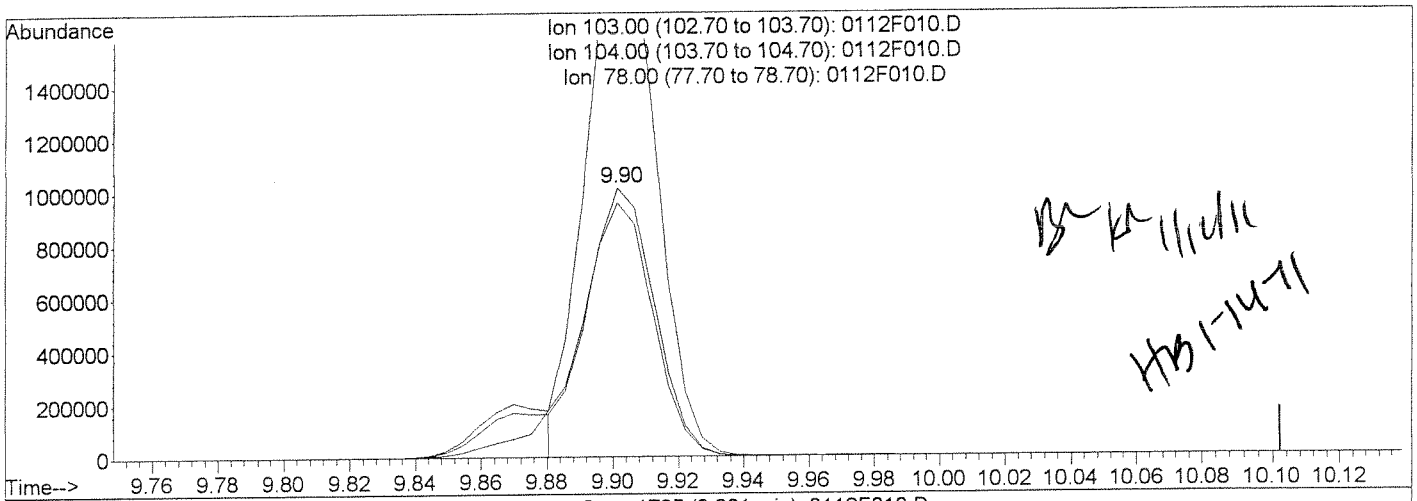
Quantitation Report (Qedit)

Data File : J:\MS23\DATA\011211\0112F010.D
Acq On : 12 Jan 2011 12:43 pm
Sample : 624 ICAL 40 80 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:19 2011

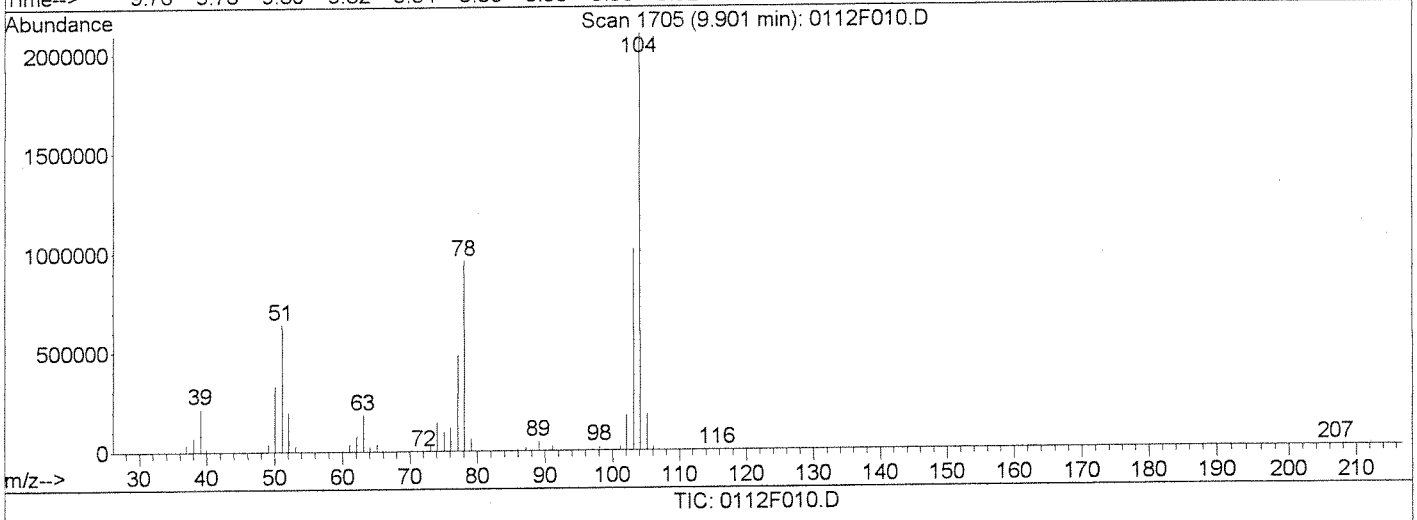
Vial: 28
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration



BK KR 1/12/11
HB1-1471



TIC: 0112F010.D

(45) Styrene (T)

9.90min 82.39PPB m

response 1449175

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	206.93
78.00	95.50	94.51
0.00	0.00	0.00

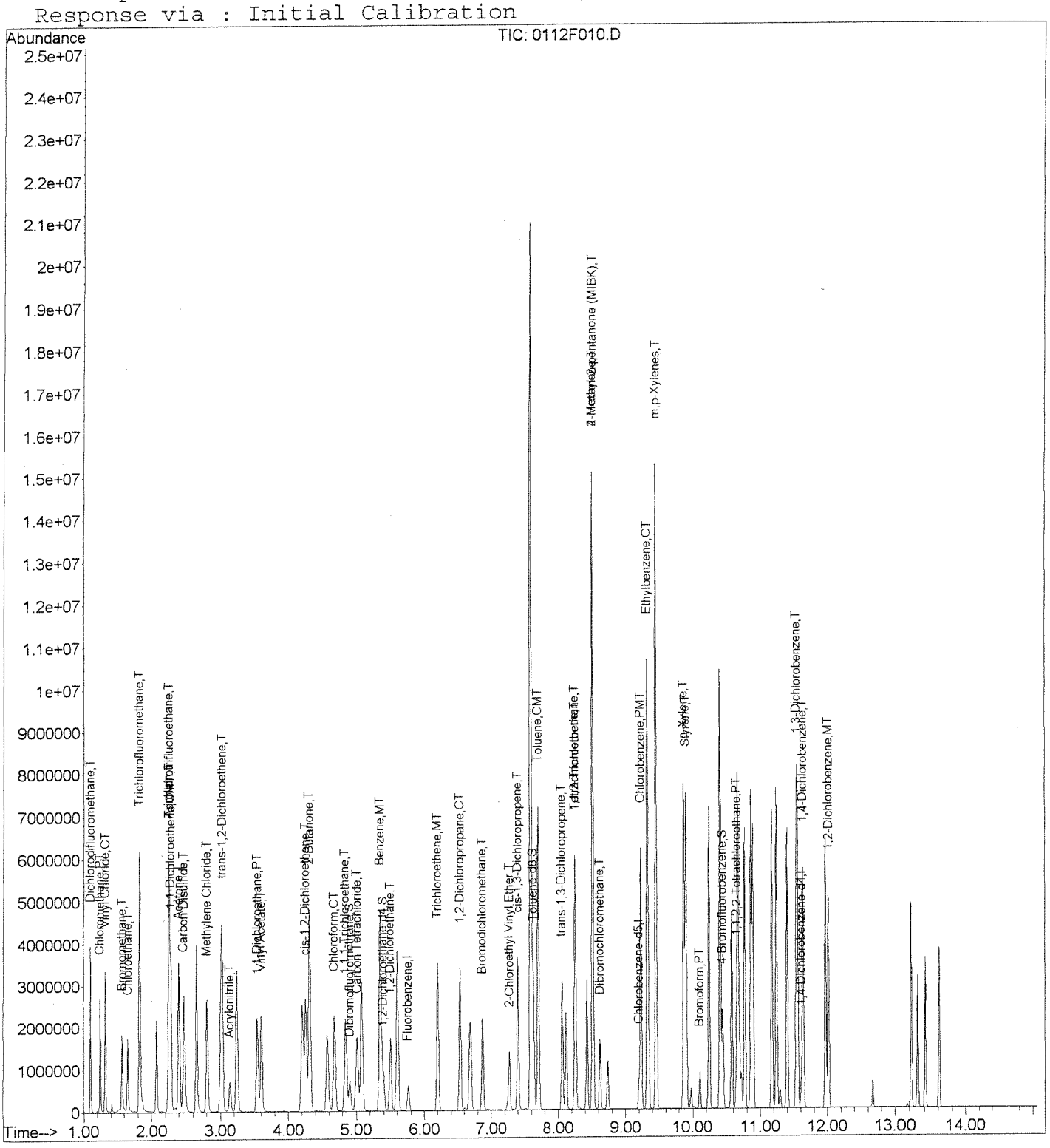
Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F010.D
Acq On : 12 Jan 2011 12:43 pm
Sample : 624 ICAL 4/30 kr 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:19 2011

Vial: 28
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F011.D
Acq On : 12 Jan 2011 1:12 pm
Sample : 624 ICAL 8/20 lw 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:19:39 2011

Vial: 29
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

lw 1/12/11

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	5.76	96	525920	10.00	PPB	0.00
35) Chlorobenzene-d5	9.20	82	221050	10.00	PPB	0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	182123	10.00	PPB	0.00
System Monitoring Compounds						
22) Dibromofluoromethane	4.91	113	736158	59.93	PPB	0.00
Spiked Amount 10.000			Recovery =	599.30%		
24) 1,2-Dichloroethane-d4	5.40	65	957647	57.32	PPB	0.00
Spiked Amount 10.000			Recovery =	573.20%		
33) Toluene-d8	7.63	98	3001778	61.28	PPB	0.00
Spiked Amount 10.000			Recovery =	612.80%		
47) 4-Bromofluorobenzene	10.44	95	1021259	61.11	PPB	0.00
Spiked Amount 10.000			Recovery =	611.10%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.09	85	2520978	131.63	PPB	100
3) Chloromethane	1.23	50	2792150	118.31	PPB	98
4) Vinyl Chloride	1.31	62	2702128	123.88	PPB	99
5) Bromomethane	1.56	96	1187271	147.95	PPB	99
6) Chloroethane	1.64	49	414454	105.95	PPB	98
7) Trichlorofluoromethane	1.82	101	2973848	121.17	PPB	98
8) Acrolein	2.25	56	3200446	2194.95	PPB	99
9) Trichlorotrifluoroethane	2.25	151	1186579	132.44	PPB	98
10) 1,1-Dichloroethene	2.28	96	1323167	111.27	PPB	100
11) Acetone	2.39	43	6228570	2319.74	PPB	99
12) Carbon Disulfide	2.47	76	5333493	151.18	PPB	99
13) Methylene Chloride	2.80	84	1573142	107.27	PPB	96
14) Acrylonitrile	3.14	53	800696	222.17	PPB	97
15) trans-1,2-Dichloroethene	3.03	96	1637938	114.01	PPB	100
16) 1,1-Dichloroethane	3.54	63	3309435	113.85	PPB	100
17) Vinyl Acetate	3.60	86	332002	147.12	PPB	99
18) cis-1,2-Dichloroethene	4.26	96	1779202	114.33	PPB	98
19) 2-Butanone	4.31	72	2220551	2496.50	PPB	95
20) Chloroform	4.68	83	2971393	115.11	PPB	98
21) 1,1,1-Trichloroethane	4.84	97	2599916	113.79	PPB	98
23) Carbon Tetrachloride	5.01	117	2015146	116.14	PPB	98
25) Benzene	5.35	78	6834468	114.49	PPB	99
26) 1,2-Dichloroethane	5.50	62	2242847	109.21	PPB	98
27) Trichloroethene	6.20	95	1731714	120.64	PPB	97
28) 1,2-Dichloropropane	6.54	63	1799607	111.38	PPB	98
29) Bromodichloromethane	6.87	83	2110201	118.35	PPB	98
30) 2-Chloroethyl Vinyl Ether	7.27	63	771304	109.26	PPB	98

(#) = qualifier out of range (m) = manual integration
0112F011.D 122310624.M Wed Jan 12 14:20:31 2011

HBI-14-1

Data File : J:\MS23\DATA\011211\0112F011.D
Acq On : 12 Jan 2011 1:12 pm
Sample : 624 ICAL 80 120 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:19:39 2011

Vial: 29
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RES

Quant Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
31)	cis-1,3-Dichloropropene	7.40	75	2671930	112.15	PPB	99
32)	4-Methyl-2-pentanone (MIBK	8.51	58	7148027	2384.25	PPB	87
34)	Toluene	7.70	92	4154361	113.97	PPB	97
36)	trans-1,3-Dichloropropene	8.06	75	2197487	116.72	PPB	99
37)	1,1,2-Trichloroethane	8.24	83	955917	116.07	PPB	97
38)	Tetrachloroethene	8.26	164	1242164	124.07	PPB	98
39)	2-Hexanone	8.51	43	13655940	2368.42	PPB	94
40)	Dibromochloromethane	8.62	129	1194143	132.15	PPB	99
41)	Chlorobenzene	9.23	112	4110164	119.15	PPB	100
42)	Ethylbenzene	9.33	106	2383117	123.41	PPB	91
43)	m,p-Xylenes	9.46	106	5915517	247.46	PPB	91
44)	o-Xylene	9.87	106	2787542	122.26	PPB	95
45)	Styrene	9.90	103	2216183m	121.72	PPB	
46)	Bromoform	10.11	173	565518	135.93	PPB	96
49)	1,1,2,2-Tetrachloroethane	10.64	83	1003206	108.89	PPB	99
51)	1,3-Dichlorobenzene	11.53	146	2990139	121.21	PPB	99
52)	1,4-Dichlorobenzene	11.64	146	2965300	119.33	PPB	99
53)	1,2-Dichlorobenzene	12.01	146	2643571	120.25	PPB	99

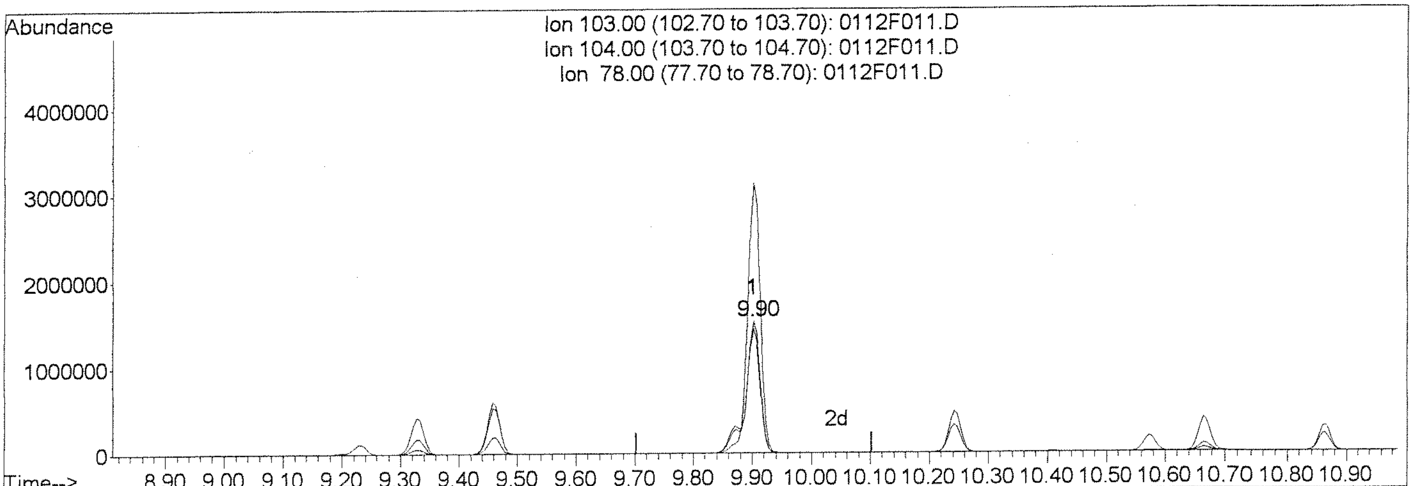
(#) = qualifier out of range (m) = manual integration

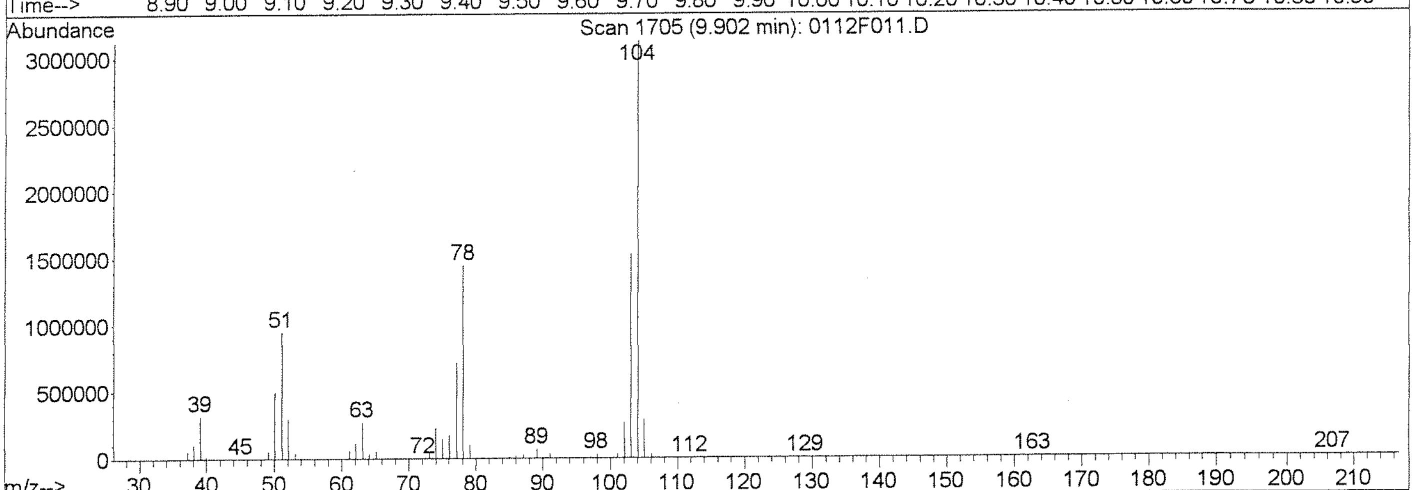
Data File : J:\MS23\DATA\011211\0112F011.D
Acq On : 12 Jan 2011 1:12 pm
Sample : 624 ICAL ~~80~~ 160 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:19 2011

Vial: 29
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F011.D

(45) Styrene (T)

9.90min 143.60PPB

response 2614507

Ion	Exp%	Act%
103.00	100	100
104.00	206.20	204.62
78.00	95.50	94.86
0.00	0.00	0.00

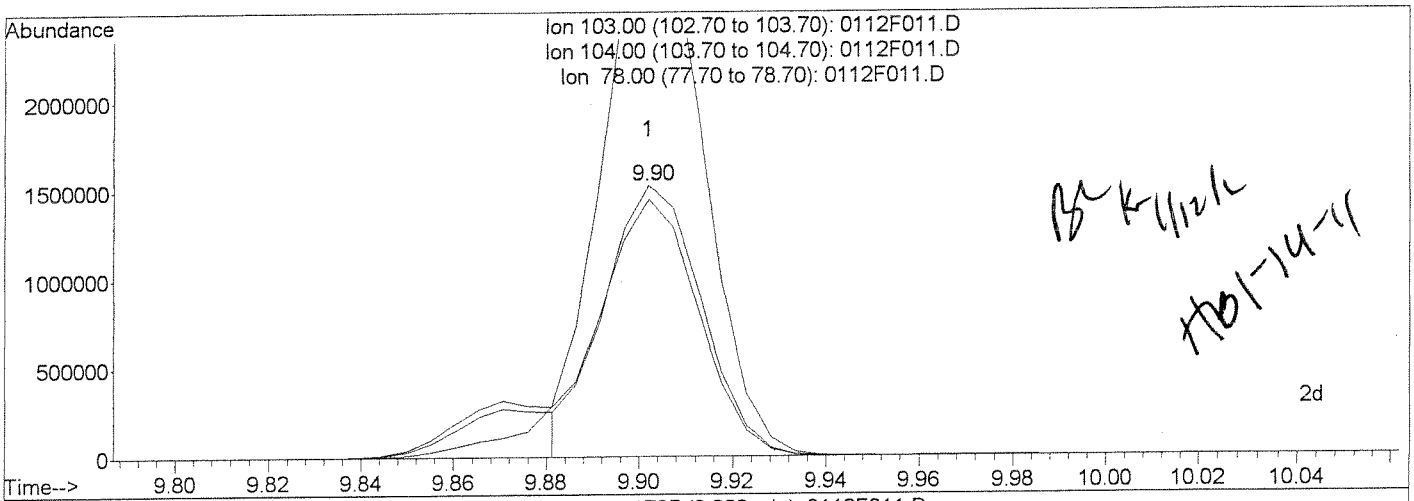
Quantitation Report (Qedit)

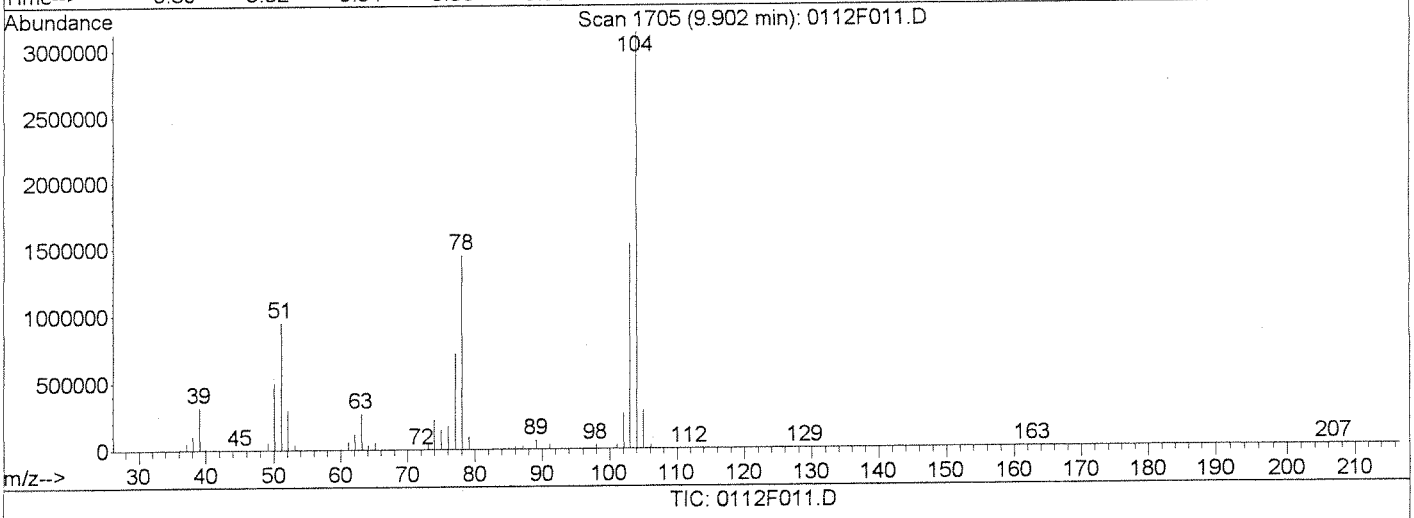
Data File : J:\MS23\DATA\011211\0112F011.D
Acq On : 12 Jan 2011 1:12 pm
Sample : 624 ICAL ~~80~~ 90 KR 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:20 2011

Vial: 29
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Multiple Level Calibration





TIC: 0112F011.D

(45) Styrene (T)

9.90min 121.72PPB m

response 2216183

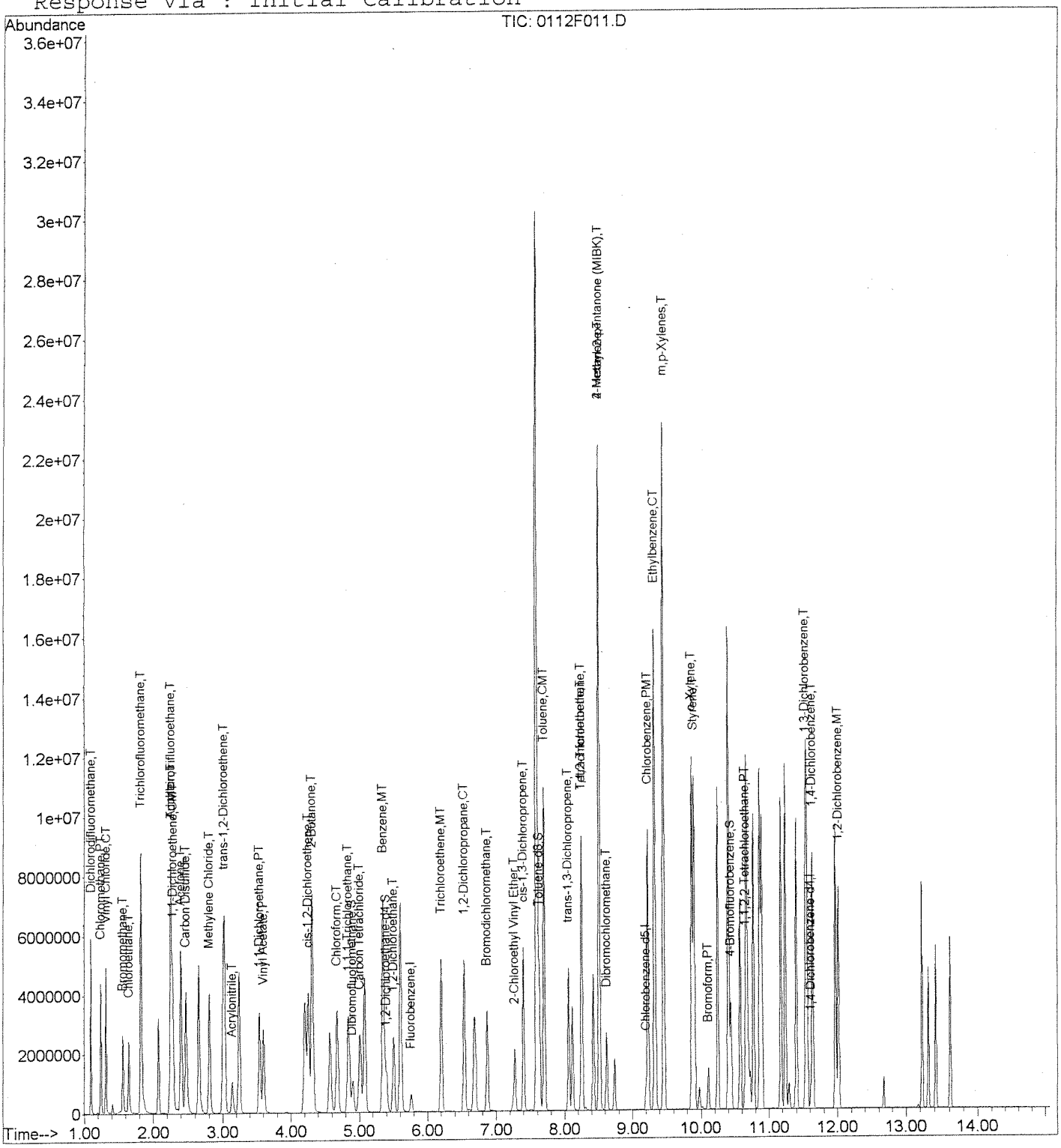
Ion	Exp%	Act%
103.00	100	100
104.00	206.20	204.62
78.00	95.50	94.88
0.00	0.00	0.00

Data File : J:\MS23\DATA\011211\0112F011.D
Acq On : 12 Jan 2011 1:12 pm
Sample : 624 ICAL 80 1/20 kr 1/12/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 12 14:20 2011

Vial: 29
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 122310624.RE

Method : J:\MS23\METHODS\122310624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 14:09:57 2011
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F014.D
Acq On : 12 Jan 2011 2:42 pm
Sample : ~~IB~~ ICV
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 13 12:52:46 2011

Vial: 32
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 15:04:23 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	534057	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	222154	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	180481	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.91	113	120670	10.15	PPB		0.00
Spiked Amount 10.000			Recovery =	101.50%			
24) 1,2-Dichloroethane-d4	5.39	65	156134	9.80	PPB		0.00
Spiked Amount 10.000			Recovery =	98.00%			
33) Toluene-d8	7.63	98	494701	10.25	PPB		0.00
Spiked Amount 10.000			Recovery =	102.50%			
47) 4-Bromofluorobenzene	10.44	95	174561	10.16	PPB		0.00
Spiked Amount 10.000			Recovery =	101.60%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.10	85	218052	10.37	PPB		96
3) Chloromethane	1.24	50	203449	9.07	PPB		99
4) Vinyl Chloride	1.31	62	233168	10.61	PPB		99
5) Bromomethane	1.57	96	107320	14.17	PPB		96
6) Chloroethane	1.65	49	37114	10.21	PPB		93
7) Trichlorofluoromethane	1.82	101	238074	9.16	PPB		96
8) Acrolein	2.26	56	133706	93.95	PPB		96
9) Trichlorotrifluoroethane	2.25	151	92251	9.70	PPB		97
10) 1,1-Dichloroethene	2.28	96	128870	11.67	PPB		97
11) Acetone	2.40	43	149302	59.41	PPB		99
12) Carbon Disulfide	2.47	76	928789	21.08	PPB		100
13) Methylene Chloride	2.80	84	149967	10.62	PPB		92
14) Acrylonitrile	3.14	53	35086	10.38	PPB		90
15) trans-1,2-Dichloroethene	3.03	96	153763	11.47	PPB		99
16) 1,1-Dichloroethane	3.54	63	301747	11.22	PPB		97
17) Vinyl Acetate	3.60	86	37965	24.09	PPB	#	88
18) cis-1,2-Dichloroethene	4.26	96	164032	11.26	PPB		93
19) 2-Butanone	4.32	72	48159	57.37	PPB		96
20) Chloroform	4.68	83	275427	11.29	PPB		95
21) 1,1,1-Trichloroethane	4.84	97	223753	11.45	PPB		99
23) Carbon Tetrachloride	5.01	117	154981	11.21	PPB		99
25) Benzene	5.35	78	640892	11.30	PPB		99
26) 1,2-Dichloroethane	5.50	62	212905	11.43	PPB		98
27) Trichloroethene	6.20	95	154176	11.05	PPB		92
28) 1,2-Dichloropropane	6.53	63	163664	11.04	PPB		97
29) Bromodichloromethane	6.87	83	177491	11.32	PPB		98
30) 2-Chloroethyl Vinyl Ether	7.27	63	64943	10.98	PPB		97

(#) = qualifier out of range (m) = manual integration

HB1-14-11

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\011211\0112F014.D
Acq On : 12 Jan 2011 2:42 pm
Sample : ~~IB~~ ICV KR 1/13/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 13 12:52:46 2011

Vial: 32
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 15:04:23 2011
Response via : Initial Calibration
DataAcq Meth : 8260

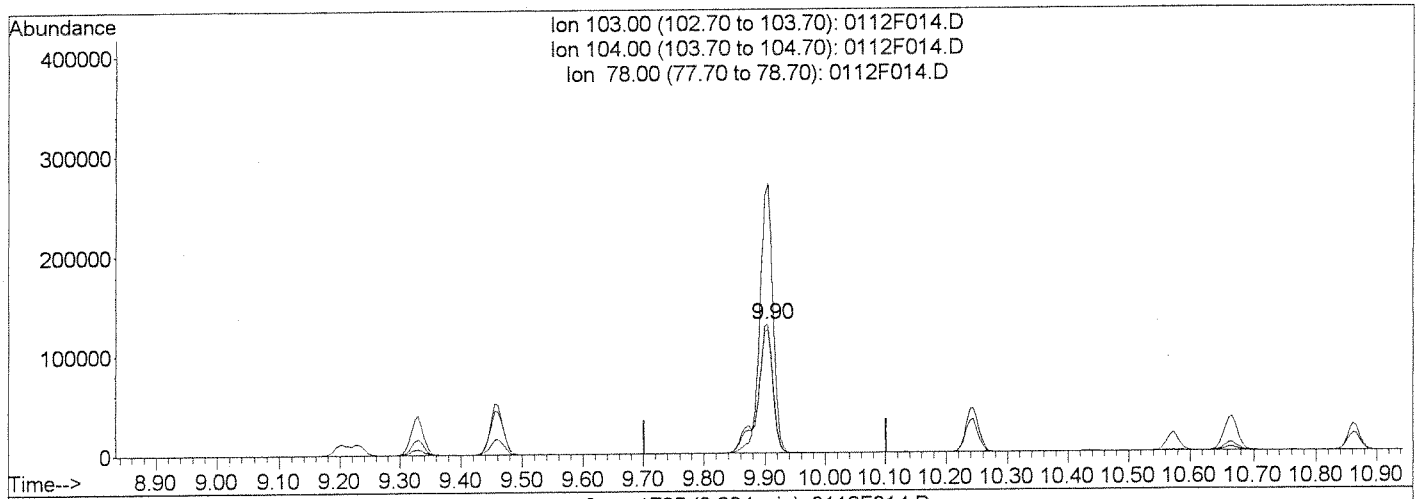
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	7.40	75	221462	11.30	PPB	99
32)	4-Methyl-2-pentanone (MIBK	8.51	58	142131	52.97	PPB	98
34)	Toluene	7.70	92	377962	11.27	PPB	99
36)	trans-1,3-Dichloropropene	8.06	75	168452	10.58	PPB	97
37)	1,1,2-Trichloroethane	8.25	83	91450	11.72	PPB	96
38)	Tetrachloroethene	8.25	164	111578	11.54	PPB	100
39)	2-Hexanone	8.51	43	299306	53.88	PPB	99
40)	Dibromochloromethane	8.62	129	91923	11.31	PPB	98
41)	Chlorobenzene	9.23	112	382212	11.26	PPB	99
42)	Ethylbenzene	9.33	106	211139	11.30	PPB	99
43)	m,p-Xylenes	9.46	106	508626	22.05	PPB	98
44)	o-Xylene	9.87	106	245775	11.27	PPB	99
45)	Styrene	9.90	103	194181m	11.65	PPB	
46)	Bromoform	10.10	173	38400	10.66	PPB	96
49)	1,1,2,2-Tetrachloroethane	10.65	83	99502	11.44	PPB	97
51)	1,3-Dichlorobenzene	11.54	146	272426	11.51	PPB	99
52)	1,4-Dichlorobenzene	11.63	146	281724	11.66	PPB	98
53)	1,2-Dichlorobenzene	12.01	146	245797	11.39	PPB	98

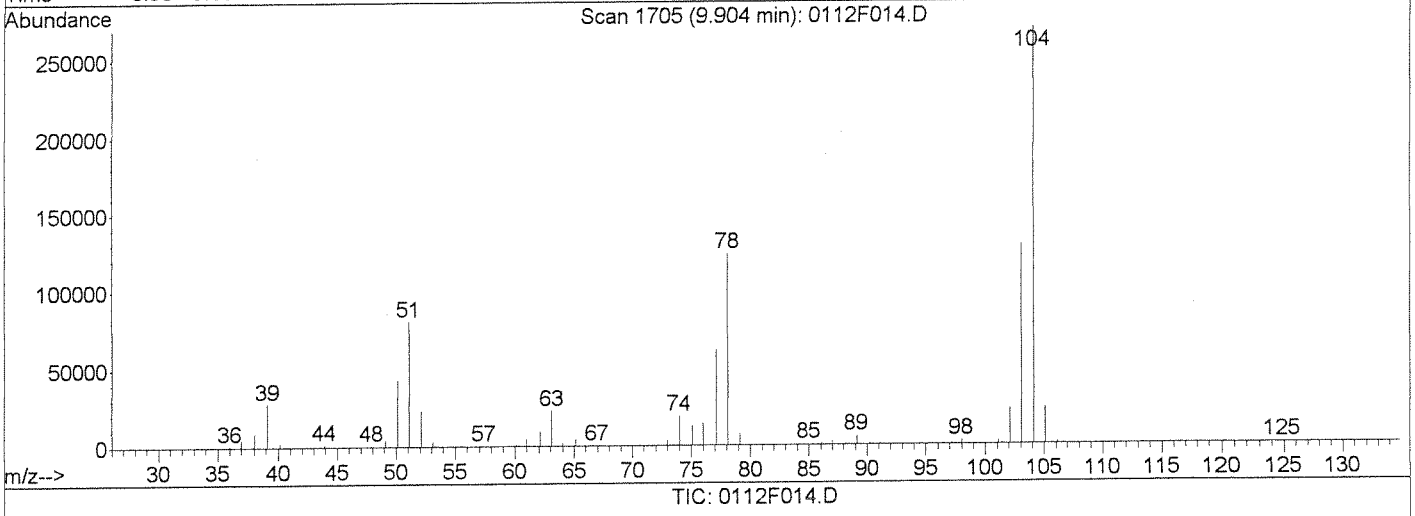
(#) = qualifier out of range (m) = manual integration

Data File : J:\MS23\DATA\011211\0112F014.D
Acq On : 12 Jan 2011 2:42 pm
Sample : ~~IB~~ ICW
Misc : KR 1/13/11
MS Integration Params: rteint.p
Quant Time: Jan 13 12:52 2011

Vial: 32
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 15:04:23 2011
Response via : Multiple Level Calibration





TIC: 0112F014.D

(45) Styrene (T)

9.90min 13.49PPB

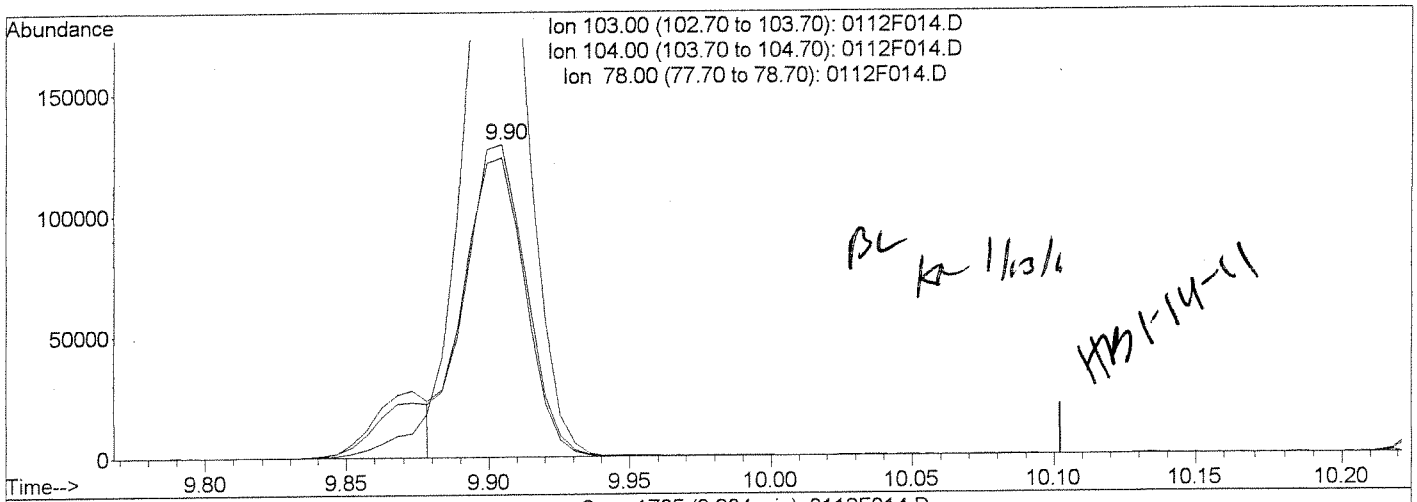
response 224909

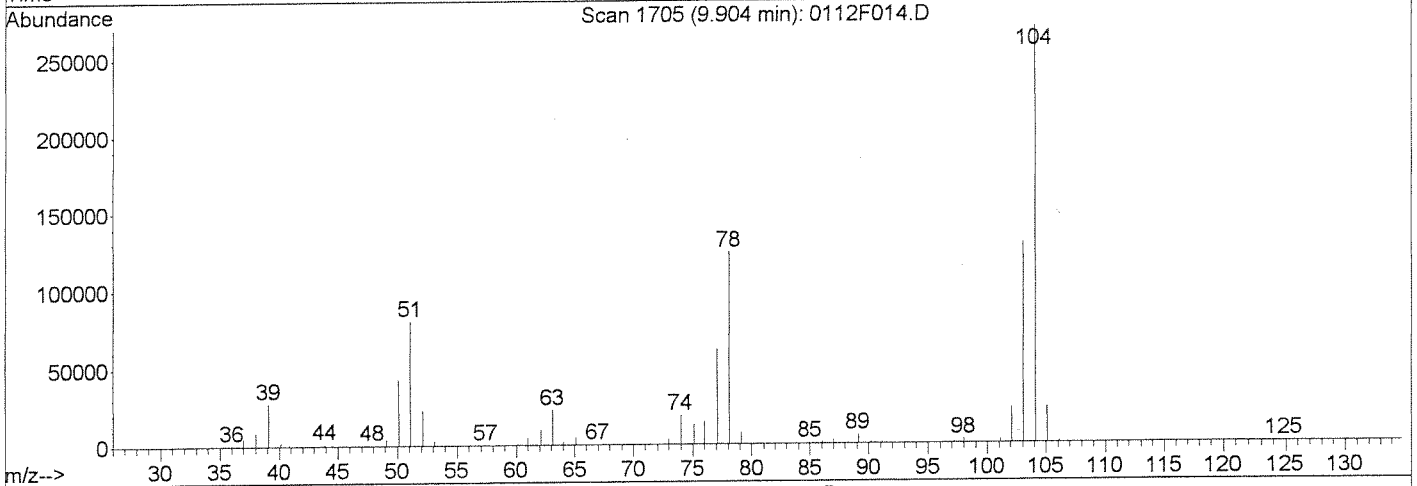
Ion	Exp%	Act%
103.00	100	100
104.00	206.20	208.96
78.00	95.50	95.74
0.00	0.00	0.00

Data File : J:\MS23\DATA\011211\0112F014.D
Acq On : 12 Jan 2011 2:42 pm
Sample : ~~IB~~ ICV
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 13 12:53 2011

Vial: 32
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 15:04:23 2011
Response via : Multiple Level Calibration





(45) Styrene (T)

9.90min 11.65PPB m

response 194181

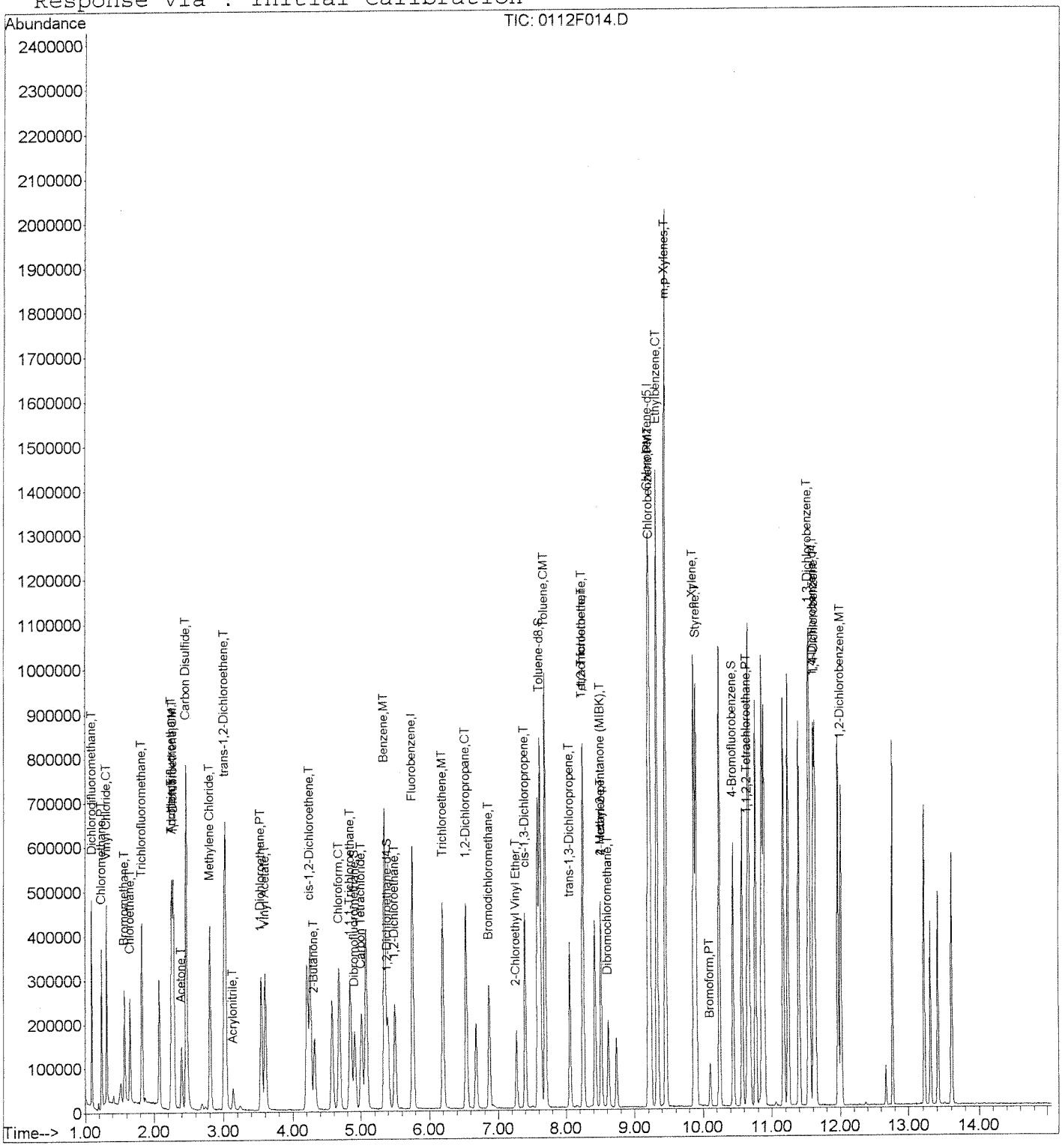
Ion	Exp%	Act%
103.00	100	100
104.00	206.20	208.96
78.00	95.50	95.74
0.00	0.00	0.00

Data File : J:\MS23\DATA\011211\0112F014.D
Acq On : 12 Jan 2011 2:42 pm
Sample : ~~IB~~ ICV KR 1/13/11
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 13 12:53 2011

Vial: 32
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Wed Jan 12 15:04:23 2011
Response via : Initial Calibration



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 01/28/2011

Continuing Calibration Verification Summary
Volatile Organic Compounds

Calibration Type: Internal Standard
Analysis Method: 624

Calibration Date: 01/12/2011
Calibration ID: CAL10216
Analysis Lot: KWG1100972
Units: PPB

File ID: J:\MS23\DATA\012811\0128F003.D

Analyte Name	Expected	Result	Min RF	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Chloromethane	10	11	0.01	0.420	0.482	15	NA	± 104 %	AverageRF
Vinyl Chloride	10	11	0.01	0.411	0.438	7	NA	± 96 %	AverageRF
Bromomethane	10	9.1	0.01	0.142	0.129	-9	NA	± 86 %	AverageRF
Chloroethane	10	11	0.01	0.0681	0.0756	11	NA	± 62 %	AverageRF
Trichlorofluoromethane	10	11	0.01	0.487	0.558	15	NA	± 52 %	AverageRF
1,1-Dichloroethene	10	11	0.01	0.207	0.231	12	NA	± 49 %	AverageRF
Methylene Chloride	10	11	0.01	0.264	0.283	7	NA	± 39 %	AverageRF
trans-1,2-Dichloroethene	10	11	0.01	0.251	0.282	12	NA	± 30 %	AverageRF
1,1-Dichloroethane	10	11	0.01	0.503	0.571	13	NA	± 27 %	AverageRF
Chloroform	10	11	0.01	0.457	0.515	13	NA	± 32 %	AverageRF
1,1,1-Trichloroethane (TCA)	10	11	0.01	0.366	0.399	9	NA	± 25 %	AverageRF
Carbon Tetrachloride	10	10	0.01	0.259	0.267	3	NA	± 27 %	AverageRF
Benzene	10	11	0.01	1.06	1.20	13	NA	± 36 %	AverageRF
1,2-Dichloroethane (EDC)	10	12	0.01	0.349	0.402	15	NA	± 32 %	AverageRF
Trichloroethene (TCE)	10	11	0.01	0.261	0.289	11	NA	± 33 %	AverageRF
1,2-Dichloropropane	10	11	0.01	0.278	0.305	10	NA	± 66 %	AverageRF
Bromodichloromethane	10	11	0.01	0.294	0.328	12	NA	± 34 %	AverageRF
2-Chloroethyl Vinyl Ether	10	11	0.01	0.111	0.119	7	NA	± 124 %	AverageRF
trans-1,3-Dichloropropene	10	9.0	0.01	0.717	0.641	-11	NA	± 50 %	AverageRF
Toluene	10	11	0.01	0.628	0.704	12	NA	± 25 %	AverageRF
cis-1,3-Dichloropropene	10	11	0.01	0.367	0.388	6	NA	± 76 %	AverageRF
1,1,2-Trichloroethane	10	10	0.01	0.351	0.361	3	NA	± 29 %	AverageRF
Tetrachloroethene (PCE)	10	10	0.01	0.435	0.441	1	NA	± 26 %	AverageRF
Dibromochloromethane	10	9.5	0.01	0.366	0.348	-5	NA	± 32 %	AverageRF
Chlorobenzene	10	10	0.01	1.53	1.53	0	NA	± 34 %	AverageRF
Ethylbenzene	10	10	0.01	0.841	0.856	2	NA	± 41 %	AverageRF
Bromoform	10	8.4	0.01	0.162	0.136	-16	NA	± 29 %	AverageRF
1,1,2,2-Tetrachloroethane	10	9.8	0.01	0.482	0.473	-2	NA	± 39 %	AverageRF
1,3-Dichlorobenzene	10	9.5	0.01	1.31	1.24	-5	NA	± 27 %	AverageRF
1,4-Dichlorobenzene	10	9.5	0.01	1.34	1.28	-5	NA	± 37 %	AverageRF
1,2-Dichlorobenzene	10	9.3	0.01	1.20	1.11	-7	NA	± 37 %	AverageRF
Acrolein	200	190	0.01	0.0266	0.0255	-4	NA	± 80 %	AverageRF
Acrylonitrile	20	23	0.01	0.0633	0.0717	13	NA	± 40 %	AverageRF
Toluene-d8	10	11	0.01	0.904	1.00	11	NA	± 30 %	AverageRF
4-Bromofluorobenzene	10	11	0.01	0.773	0.837	8	NA	± 30 %	AverageRF
Dibromofluoromethane	10	11	0.01	0.223	0.235	5	NA	± 30 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound **‡ CCC Compound**

Exception Report

Data File: J:\MS23\DATA\012811\0128F003.D
Lab ID: KWG1100972-2
RunType: CCV
Matrix: WATER

Date Acquired: 01/28/2011 13:57
Date Quantitated: 01/28/2011 14:40
Batch ID: KWG1100972
Analysis Method: 624
MethodJoinID: MJ158

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Tune Window	NA	NA	NA	x	
ICAL Pass/Fail	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Initial Calibration Minimum RF	NA	NA	NA	x	
Initial Calibration SPCC/CCC	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Internal Standards	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: [signature] 2/2/11

Secondary Review: HB 2.2.11

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	624	**Collect Date:**		**Receive Date:**	01/28/2011

Analysis Lot:	KWG1100972	**Prep Lot:**		**Report Group:**	
Analysis Method:	624	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	J:\MS23\METHODS\011211624.M	**Calibration ID:**	CAL10216
Title:			
Tune Ref:	J:\MS23\DATA\012811\0128F002.D	**Method ID:**	MJ158
MB Ref:		**Quant based on Method**	

Data File:	J:\MS23\DATA\012811\0128F003.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 13:57	**Quant Date:**	01/28/2011 14:40	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1100972-2			**Soln Conc. Units:**	PPB

Internal Standard Compounds

IS Ref	Parameter Name	RT	RT Dev	Quant Mass	Response	Solution Conc	Area Criteria
1	Fluorobenzene	5.76	0.00	96	396047	10.00	OK
2	Chlorobenzene-d5	9.20	0.00	82	181960	10.00	OK
3	1,4-Dichlorobenzene-d4	11.61	0.00	152	150722	10.00	OK

Surrogate Compounds

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	%Rec	%Rec Limits	Rpt?
1	Dibromofluoromethane	4.90			113	92901	10.54		71-115 NA	
1	1,2-Dichloroethane-d4	5.40			65	121746	10.31		69-116 NA	
1	Toluene-d8	7.62			98	397719	11.11		84-115 NA	
2	4-Bromofluorobenzene	10.44			95	152264	10.82		83-113 NA	

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	Dichlorodifluoromethane	1.09			85	162920	10.45			
1	Chloromethane	1.23			50	191079	11.48			
1	Vinyl Chloride	1.31			62	173662	10.66			
1	Bromomethane	1.57			96	51190	9.11			
1	Chloroethane	1.65			49	29923	11.10			
1	Trichlorofluoromethane	1.82			101	220959	11.46			
1	Acrolein	2.25			56	202229	191.63			
1	Trichlorotrifluoroethane	2.25			151	80641	11.44			
1	1,1-Dichloroethene	2.28			96	91599	11.19			
1	Acetone	2.40			43	496503	266.43			
1	Carbon Disulfide	2.47			76	369811	11.32			
1	Methylene Chloride	2.80			84	112036	10.70			
1	Acrylonitrile	3.14			53	56796	22.67			
1	trans-1,2-Dichloroethene	3.03			96	111489	11.22			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File:	J:\MS23\DATA\012811\0128F003.D			**Instrument:**	MS23
Acqu Date:	01/28/2011 13:57	**Quant Date:**	01/28/2011 14:40	**Vial:**	3
Run Type:	CCV			**Dilution:**	1.0
Lab ID:	KWG1100972-2			**Soln Conc. Units:**	PPB

Target Compounds

Final Conc. Units: ug/L

IS Ref	Parameter Name	RT	RT Dev	RRT Dev	Quant Mass	Response	Solution Conc	Final Conc	Q	Rpt?
1	1,1-Dichloroethane	3.54			63	226101	11.34			
1	Vinyl Acetate	3.60			86	22940	19.63			
1	cis-1,2-Dichloroethene	4.26			96	119267	11.04			
1	2-Butanone (MEK)	4.31			72	162695	261.35			
1	Chloroform	4.68			83	203941	11.27			
1	1,1,1-Trichloroethane (TCA)	4.85			97	158137	10.91			
1	Carbon Tetrachloride	5.01			117	105668	10.30			
1	Benzene	5.35			78	477219	11.34			
1	1,2-Dichloroethane (EDC)	5.50			62	159375	11.53			
1	Trichloroethene (TCE)	6.20			95	114330	11.05			
1	1,2-Dichloropropane	6.54			63	120911	11.00			
1	Bromodichloromethane	6.87			83	129715	11.15			
1	2-Chloroethyl Vinyl Ether	7.27			63	46972	10.71			
1	cis-1,3-Dichloropropene	7.40			75	153825	10.59			
1	4-Methyl-2-pentanone (MIBK)	8.51			58	517991	260.30			
1	Toluene	7.70			92	278935	11.21			
2	trans-1,3-Dichloropropene	8.06			75	116686	8.95			
2	1,1,2-Trichloroethane	8.25			83	65625	10.26			
2	Tetrachloroethene (PCE)	8.26			164	80275	10.13			
2	2-Hexanone	8.51			43	1102857	242.37			
2	Dibromochloromethane	8.62			129	63325	9.52			
2	Chlorobenzene	9.23			112	278420	10.02			
2	Ethylbenzene	9.33			106	155747	10.17			
2	m,p-Xylenes	9.46			106	387349	20.50			
2	o-Xylene	9.87			106	179528	10.05			
2	Styrene	9.90			103	144512**m**	10.58			
2	Bromoform	10.11			173	24712	8.38			
3	1,1,2,2-Tetrachloroethane	10.65			83	71245	9.81			
3	1,3-Dichlorobenzene	11.53			146	187315	9.48			
3	1,4-Dichlorobenzene	11.63			146	192336	9.53			
3	1,2-Dichlorobenzene	12.01			146	167351	9.29			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F003.D Vial: 3
Acq On : 28 Jan 2011 1:57 pm Operator: KR
Sample : CCV Inst : MS23
Misc : Multiplr: 1.00
MS Integration Params: rteint.p
Quant Time: Jan 28 14:37:10 2011 Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	5.76	96	396047	10.00	PPB		0.00
35) Chlorobenzene-d5	9.20	82	181960	10.00	PPB		0.00
48) 1,4-Dichlorobenzene-d4	11.61	152	150722	10.00	PPB		0.00
System Monitoring Compounds							
22) Dibromofluoromethane	4.90	113	92901	10.54	PPB		0.00
Spiked Amount 10.000			Recovery =	105.40%			
24) 1,2-Dichloroethane-d4	5.40	65	121746	10.31	PPB		0.00
Spiked Amount 10.000			Recovery =	103.10%			
33) Toluene-d8	7.62	98	397719	11.11	PPB		0.00
Spiked Amount 10.000			Recovery =	111.10%			
47) 4-Bromofluorobenzene	10.44	95	152264	10.82	PPB		0.00
Spiked Amount 10.000			Recovery =	108.20%			
Target Compounds							Qvalue
2) Dichlorodifluoromethane	1.09	85	162920	10.45	PPB		99
3) Chloromethane	1.23	50	191079	11.48	PPB		97
4) Vinyl Chloride	1.31	62	173662	10.66	PPB		99
5) Bromomethane	1.57	96	51190	9.11	PPB		98
6) Chloroethane	1.65	49	29923	11.10	PPB	#	80
7) Trichlorofluoromethane	1.82	101	220959	11.46	PPB		97
8) Acrolein	2.25	56	202229	191.63	PPB		99
9) Trichlorotrifluoroethane	2.25	151	80641	11.44	PPB		97
10) 1,1-Dichloroethene	2.28	96	91599	11.19	PPB		96
11) Acetone	2.40	43	496503	266.43	PPB		99
12) Carbon Disulfide	2.47	76	369811	11.32	PPB		98
13) Methylene Chloride	2.80	84	112036	10.70	PPB		97
14) Acrylonitrile	3.14	53	56796	22.67	PPB		96
15) trans-1,2-Dichloroethene	3.03	96	111489	11.22	PPB		96
16) 1,1-Dichloroethane	3.54	63	226101	11.34	PPB		99
17) Vinyl Acetate	3.60	86	22940	19.63	PPB	#	83
18) cis-1,2-Dichloroethene	4.26	96	119267	11.04	PPB		97
19) 2-Butanone	4.31	72	162695	261.35	PPB		99
20) Chloroform	4.68	83	203941	11.27	PPB		97
21) 1,1,1-Trichloroethane	4.85	97	158137	10.91	PPB		97
23) Carbon Tetrachloride	5.01	117	105668	10.30	PPB		97
25) Benzene	5.35	78	477219	11.34	PPB		97
26) 1,2-Dichloroethane	5.50	62	159375	11.53	PPB		99
27) Trichloroethene	6.20	95	114330	11.05	PPB		96
28) 1,2-Dichloropropane	6.54	63	120911	11.00	PPB		96
29) Bromodichloromethane	6.87	83	129715	11.15	PPB		94
30) 2-Chloroethyl Vinyl Ether	7.27	63	46972	10.71	PPB		96

(#) = qualifier out of range (m) = manual integration

Quantitation Report (QT Reviewed)

Data File : J:\MS23\DATA\012811\0128F003.D
Acq On : 28 Jan 2011 1:57 pm
Sample : CCV
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 28 14:37:10 2011

Vial: 3
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: 011211624.RES

Quant Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration
DataAcq Meth : 8260

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
31)	cis-1,3-Dichloropropene	7.40	75	153825	10.59	PPB	96
32)	4-Methyl-2-pentanone (MIBK	8.51	58	517991	260.30	PPB	100
34)	Toluene	7.70	92	278935	11.21	PPB	99
36)	trans-1,3-Dichloropropene	8.06	75	116686	8.95	PPB	98
37)	1,1,2-Trichloroethane	8.25	83	65625	10.26	PPB	95
38)	Tetrachloroethene	8.26	164	80275	10.13	PPB	97
39)	2-Hexanone	8.51	43	1102857	242.37	PPB	100
40)	Dibromochloromethane	8.62	129	63325	9.52	PPB	96
41)	Chlorobenzene	9.23	112	278420	10.02	PPB	95
42)	Ethylbenzene	9.33	106	155747	10.17	PPB	99
43)	m,p-Xylenes	9.46	106	387349	20.50	PPB	97
44)	o-Xylene	9.87	106	179528	10.05	PPB	97
45)	Styrene	9.90	103	144512m	10.58	PPB	
46)	Bromoform	10.11	173	24712	8.38	PPB	96
49)	1,1,2,2-Tetrachloroethane	10.65	83	71245	9.81	PPB	95
51)	1,3-Dichlorobenzene	11.53	146	187315	9.48	PPB	98
52)	1,4-Dichlorobenzene	11.63	146	192336	9.53	PPB	96
53)	1,2-Dichlorobenzene	12.01	146	167351	9.29	PPB	98

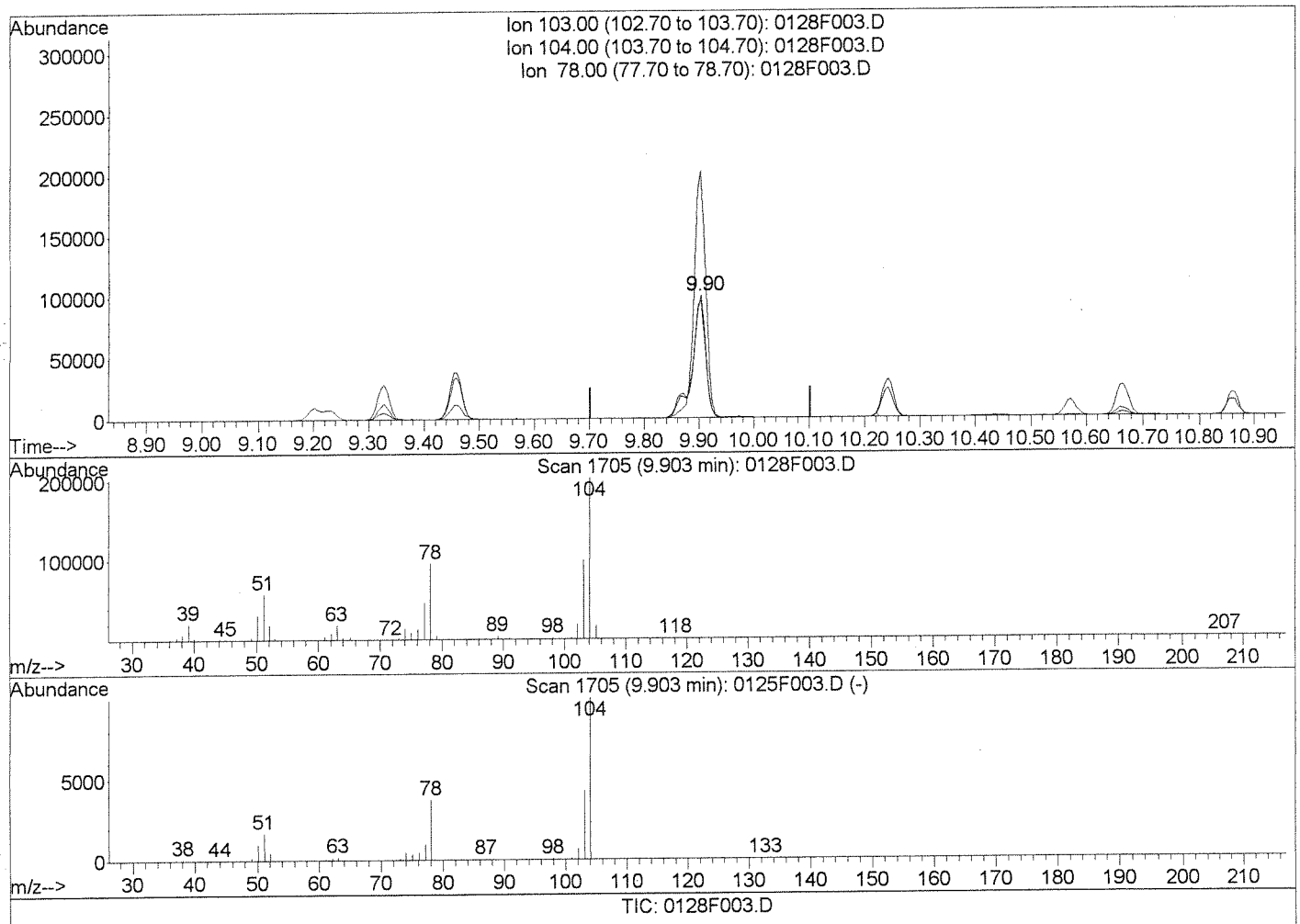
(#) = qualifier out of range (m) = manual integration

Quantitation Report (Qedit)

Data File : J:\MS23\DATA\012811\0128F003.D
Acq On : 28 Jan 2011 1:57 pm
Sample : CCV
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 28 14:37 2011

Vial: 3
Operator: KR
Inst : MS23
Multiplr: 1.00
Quant Results File: temp.res

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Multiple Level Calibration



TIC: 0128F003.D

(45) Styrene (T)

9.90min 12.30PPB

response 167998

Ion	Exp%	Act%
103.00	100	100
104.00	207.80	202.72
78.00	91.10	95.85
0.00	0.00	0.00

0128F003.D 011211624.M Fri Jan 28 14:39:59 2011

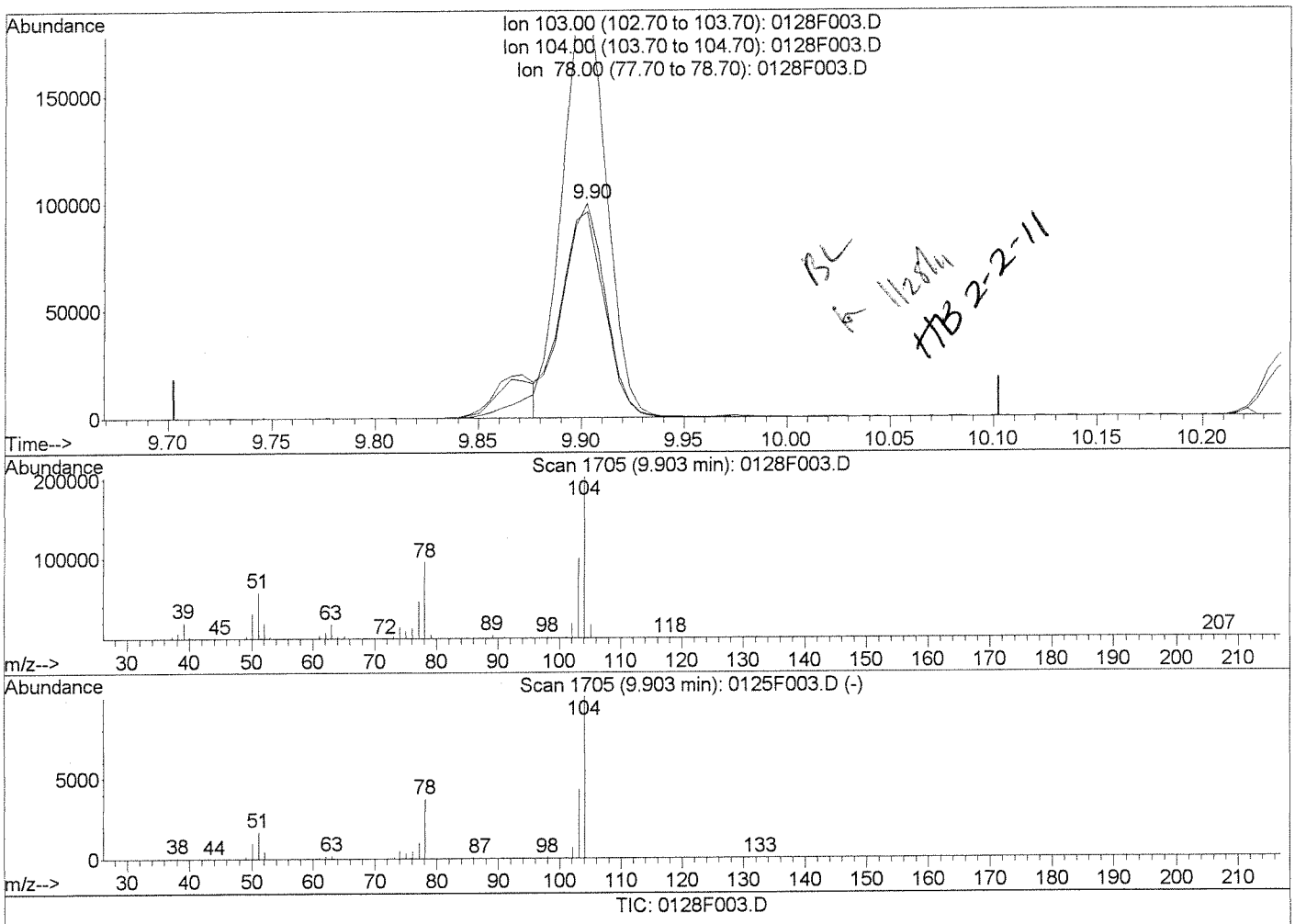
Quantitation Report (Qedit)

Data File : J:\MS23\DATA\012811\0128F003.D
Acq On : 28 Jan 2011 1:57 pm
Sample : CCV
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 28 14:40 2011

Vial: 3
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: temp.res

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Multiple Level Calibration



TIC: 0128F003.D

(45) Styrene (T)

9.90min 10.58PPB m

response 144512

Ion	Exp%	Act%
103.00	100	100
104.00	207.80	202.72
78.00	91.10	95.85
0.00	0.00	0.00

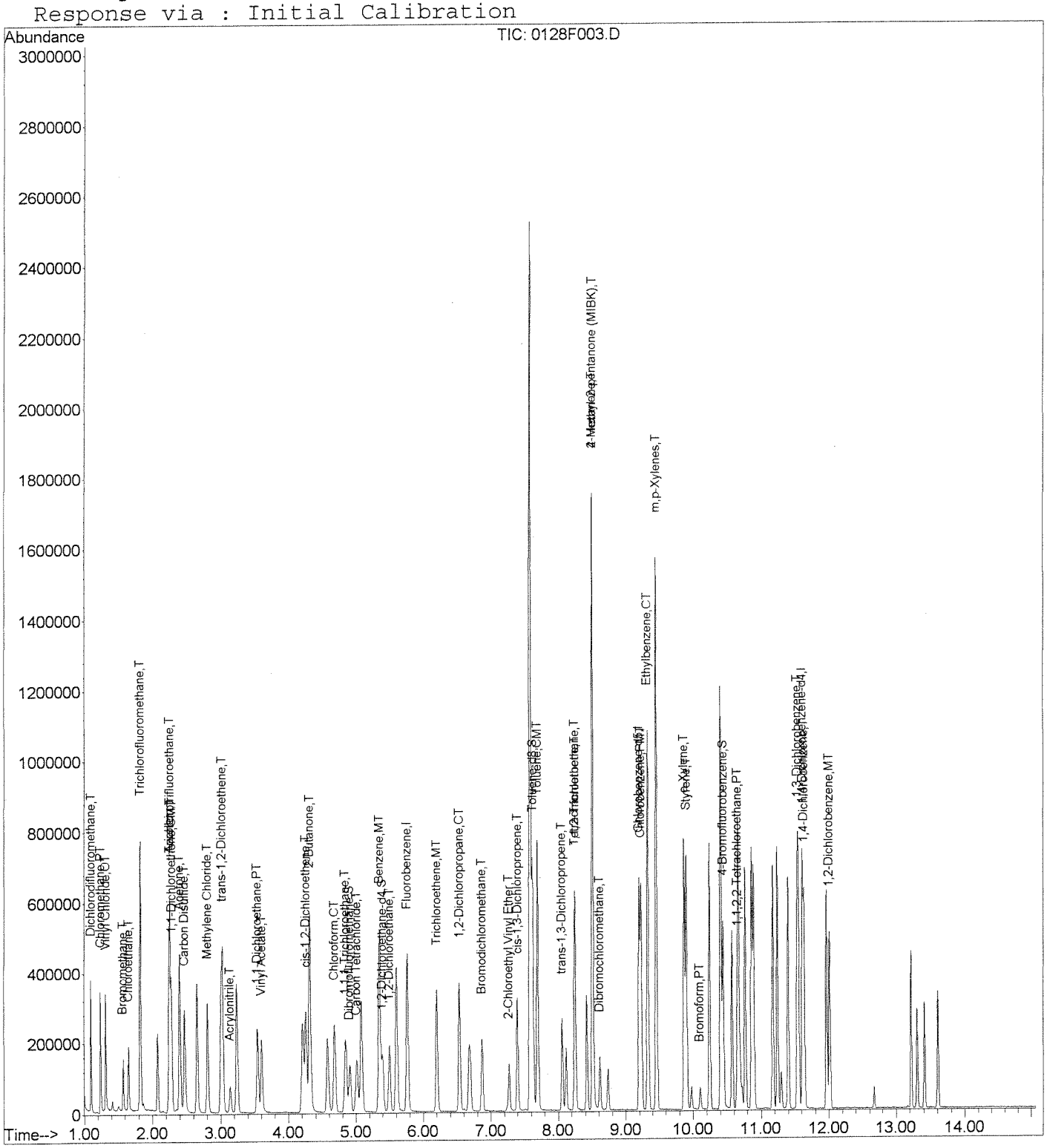
0128F003.D 011211624.M Fri Jan 28 14:40:10 2011

Data File : J:\MS23\DATA\012811\0128F003.D
Acq On : 28 Jan 2011 1:57 pm
Sample : CCV
Misc :
MS Integration Params: rteint.p
Quant Time: Jan 28 14:40 2011

Vial: 3
Operator: KR
Inst : MS23
Multiplr: 1.00

Quant Results File: 011211624.RE

Method : J:\MS23\METHODS\011211624.M (RTE Integrator)
Title : VOA MS23 EPA Method 624
Last Update : Tue Jan 25 09:57:57 2011
Response via : Initial Calibration



Organic Analysis:
Volatile Organic Compounds

Validation Package

Sample Prep and Screen Data

Date: 1/28/11

Columbia Analytical Services, Inc.

Tune File: BFB.U

By: KL

Injection Log

New Tune: NO

IS/SS Std. ID: SMM9-200

MS23 - Agilent 5973

RUN #: 234225

CCV Std ID: SMM9-45A/200

ICAL Date: 1/12/11 10216

MS/DMS/LCS/ICV Std ID: SMM-44B/46A

Second RV: HB 2-2-11

BFB Std. ID: SMM9-44G

LIMS ID: KWO-1100972/1975

	Sample Name	File Name	Method	Dilution	pH	R	Comments
1	IB	012EF001	8260.M				
2	BFB	2		4.4µl + 44ml			
3	L24 CCV	3		10/5µl + 50ml			
4	LCS	4		10/50µl + 50ml			
5	K710-SMS	5		8/40µl + 40ml			
6	SDMS	6		"			
7	MB	7					
8	K694-1	8			<2		
9	2	9			12		
10	IB	10					
11	K710-5	11			<2		
12	6	12					TB 42932
13	K692-1	13					
14	2	14					
15	3	15					
16	4	16					TB 44911
17	K717-1	17					
18	K800-50 Base	18		10x5ml-10ml			
19	59	19			12		
20	60	20			<2		
21	61	21			12		
22							
23							
24							
25							
26							
27							

All req. met criteria

Polychlorinated Biphenyls

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Summary Package

Sample and QC Results

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692

Cover Page - Organic Analysis Data Package
Polychlorinated Biphenyls (PCBs)

Sample Name	Lab Code	Date Collected	Date Received
MW-3	K1100692-001	01/25/2011	01/26/2011
MW-7	K1100692-002	01/25/2011	01/26/2011
EB-012511	K1100692-003	01/25/2011	01/26/2011

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on floppy diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: LISA HARRIS

Date: February 13, 2011 Title: Scientist

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Polychlorinated Biphenyls (PCBs)

Sample Name: MW-3
Lab Code: K1100692-001

Extraction Method: EPA 3535A
Analysis Method: 8082A

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	88	36-113	02/07/11	Acceptable

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Polychlorinated Biphenyls (PCBs)

Sample Name: MW-7
Lab Code: K1100692-002

Units: ug/L
Basis: NA

Extraction Method: EPA 3535A
Analysis Method: 8082A

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	85	36-113	02/07/11	Acceptable

Comments:

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Polychlorinated Biphenyls (PCBs)

Sample Name:	EB-012511	**Units:**	ug/L
Lab Code:	K1100692-003	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	71	36-113	02/07/11	Acceptable

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Method Blank
Lab Code: KWG1101180-7

Extraction Method: EPA 3535A
Analysis Method: 8082A

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.039	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	79	36-113	02/07/11	Acceptable

Comments:

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Extraction Method: EPA 3535A
Analysis Method: 8082A

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
MW-3	K1100692-001	88
MW-7	K1100692-002	85
EB-012511	K1100692-003	71
Batch QC	K1100806-002	88
Method Blank	KWG1101180-7	79
Batch QCMS	KWG1101180-1	89
Batch QCDMS	KWG1101180-2	82
Lab Control Sample	KWG1101180-3	84
Duplicate Lab Control Sample	KWG1101180-4	93

Surrogate Recovery Control Limits (%)

Sur1 = Decachlorobiphenyl	36-113

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	02/01/2011
Sample Matrix:	Water	**Date Analyzed:**	02/08/2011

Matrix Spike/Duplicate Matrix Spike Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1100806-002	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A	**Extraction Lot:**	KWG1101180

Analyte Name	Sample Result	Batch QCMS KWG1101180-1 Matrix Spike			Batch QCDMS KWG1101180-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Aroclor 1016	ND	0.155	0.196	79	0.153	0.196	78	31-118	1	30
Aroclor 1260	ND	0.166	0.196	85	0.157	0.196	80	47-115	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Extracted: 02/01/2011
Date Analyzed: 02/07/2011

Lab Control Spike/Duplicate Lab Control Spike Summary
Polychlorinated Biphenyls (PCBs)

Extraction Method: EPA 3535A
Analysis Method: 8082A

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1101180

	Lab Control Sample KWG1101180-3 Lab Control Spike			Duplicate Lab Control Sample KWG1101180-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Aroclor 1016	0.149	0.200	75	0.152	0.200	76	41-113	2	30
Aroclor 1260	0.156	0.200	78	0.158	0.200	79	47-117	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Extracted: 02/01/2011
Date Analyzed: 02/07/2011
Time Analyzed: 21:51

Method Blank Summary
Polychlorinated Biphenyls (PCBs)

Sample Name: Method Blank
Lab Code: KWG1101180-7

File ID: J:\GC22\DATA\020711.B\0207F010.D
Instrument ID: GC22.i

Extraction Method: EPA 3535A
Analysis Method: 8082A

Level: Low
Extraction Lot: KWG1101180

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1101180-3	J:\GC22\DATA\020711.B\0207F008.D	02/07/11	21:02
Duplicate Lab Control Sample	KWG1101180-4	J:\GC22\DATA\020711.B\0207F009.D	02/07/11	21:26
MW-3	K1100692-001	J:\GC22\DATA\020711.B\0207F011.D	02/07/11	22:15
MW-7	K1100692-002	J:\GC22\DATA\020711.B\0207F012.D	02/07/11	22:39
EB-012511	K1100692-003	J:\GC22\DATA\020711.B\0207F013.D	02/07/11	23:04
Batch QC	K1100806-002	J:\GC22\DATA\020711.B\0207F026.D	02/08/11	04:22
Batch QCMS	KWG1101180-1	J:\GC22\DATA\020711.B\0207F027.D	02/08/11	04:46
Batch QCDMS	KWG1101180-2	J:\GC22\DATA\020711.B\0207F028.D	02/08/11	05:11

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	02/01/2011
Sample Matrix:	Water	**Date Analyzed:**	02/07/2011
		Time Analyzed:	21:02

Lab Control Sample Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Lab Control Sample	**File ID:**	J:\GC22\DATA\020711.B\0207F008.D
Lab Code:	KWG1101180-3	**Instrument ID:**	GC22.i
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A	**Extraction Lot:**	KWG1101180

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1101180-7	J:\GC22\DATA\020711.B\0207F010.D	02/07/11	21:51
MW-3	K1100692-001	J:\GC22\DATA\020711.B\0207F011.D	02/07/11	22:15
MW-7	K1100692-002	J:\GC22\DATA\020711.B\0207F012.D	02/07/11	22:39
EB-012511	K1100692-003	J:\GC22\DATA\020711.B\0207F013.D	02/07/11	23:04
Batch QC	K1100806-002	J:\GC22\DATA\020711.B\0207F026.D	02/08/11	04:22
Batch QCMS	KWG1101180-1	J:\GC22\DATA\020711.B\0207F027.D	02/08/11	04:46
Batch QCDMS	KWG1101180-2	J:\GC22\DATA\020711.B\0207F028.D	02/08/11	05:11

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-35MS

Level ID	File ID
A	\\cash1\acqudata\GC22\data\120810.b\1208F003.D
B	\\cash1\acqudata\GC22\data\120810.b\1208F004.D
C	\\cash1\acqudata\GC22\data\120810.b\1208F005.D
D	\\cash1\acqudata\GC22\data\120810.b\1208F006.D
E	\\cash1\acqudata\GC22\data\120810.b\1208F007.D
F	\\cash1\acqudata\GC22\data\120810.b\1208F008.D
G	\\cash1\acqudata\GC22\data\120810.b\1208F009.D
H	\\cash1\acqudata\GC22\data\120810.b\1208F010.D
I	\\cash1\acqudata\GC22\data\120810.b\1208F011.D
J	\\cash1\acqudata\GC22\data\120810.b\1208F012.D
K	\\cash1\acqudata\GC22\data\120810.b\1208F013.D
L	\\cash1\acqudata\GC22\data\120810.b\1208F014.D
M	\\cash1\acqudata\GC22\data\120810.b\1208F015.D
N	\\cash1\acqudata\GC22\data\120810.b\1208F016.D
O	\\cash1\acqudata\GC22\data\120810.b\1208F017.D
P	\\cash1\acqudata\GC22\data\120810.b\1208F018.D
Q	\\cash1\acqudata\GC22\data\120810.b\1208F019.D
R	\\cash1\acqudata\GC22\data\120810.b\1208F020.D
S	\\cash1\acqudata\GC22\data\120810.b\1208F021.D
T	\\cash1\acqudata\GC22\data\120810.b\1208F022.D
U	\\cash1\acqudata\GC22\data\120810.b\1208F023.D
V	\\cash1\acqudata\GC22\data\120810.b\1208F024.D
W	\\cash1\acqudata\GC22\data\120810.b\1208F025.D
X	\\cash1\acqudata\GC22\data\120810.b\1208F026.D
Y	\\cash1\acqudata\GC22\data\120810.b\1208F027.D
Z	\\cash1\acqudata\GC22\data\120810.b\1208F028.D
AA	\\cash1\acqudata\GC22\data\120810.b\1208F029.D
AB	\\cash1\acqudata\GC22\data\120810.b\1208F030.D
AC	\\cash1\acqudata\GC22\data\120810.b\1208F031.D
AD	\\cash1\acqudata\GC22\data\120810.b\1208F032.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Decachlorobiphenyl	A	0.25	2.23E+6	B	0.50	2.31E+6	C	5.0	2.09E+6	D	10	2.05E+6	E	20	2.03E+6
	F	50	2.00E+6												
Aroclor 1016 {1}	A	2.5	24300	B	5.0	25500	C	50	22300	D	100	22100	E	200	21200
	F	500	21100												
Aroclor 1016 {2}	A	2.5	35400	B	5.0	36300	C	50	30600	D	100	28900	E	200	28000
	F	500	26600												
Aroclor 1016 {3}	A	2.5	76500	B	5.0	74300	C	50	65300	D	100	64100	E	200	61600
	F	500	60200												
Aroclor 1016 {4}	A	2.5	43800	B	5.0	43600	C	50	41200	D	100	40500	E	200	39500
	F	500	38900												
Aroclor 1016 {5}	A	2.5	54700	B	5.0	55900	C	50	51100	D	100	50000	E	200	46800
	F	500	44700												
Aroclor 1260 {1}	A	2.5	1.33E+5	B	5.0	1.34E+5	C	50	1.16E+5	D	100	1.12E+5	E	200	1.09E+5
	F	500	1.04E+5												
Aroclor 1260 {2}	A	2.5	1.88E+5	B	5.0	1.89E+5	C	50	1.65E+5	D	100	1.60E+5	E	200	1.60E+5
	F	500	1.56E+5												
Aroclor 1260 {3}	A	2.5	1.63E+5	B	5.0	1.67E+5	C	50	1.44E+5	D	100	1.42E+5	E	200	1.39E+5
	F	500	1.38E+5												
Aroclor 1260 {4}	A	2.5	1.23E+5	B	5.0	1.17E+5	C	50	1.07E+5	D	100	1.05E+5	E	200	1.03E+5
	F	500	1.01E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Aroclor 1260 {5}	A	2.5	2.98E+5	B	5.0	2.85E+5	C	50	2.70E+5	D	100	2.74E+5	E	200	2.76E+5
	F	500	2.74E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SURR	AverageRF	% RSD	5.8		≤ 20
Aroclor 1016 {1}	MULTI	AverageRF	% RSD	7.8		≤ 20
Aroclor 1016 {2}	MULTI	AverageRF	% RSD	13.0		≤ 20
Aroclor 1016 {3}	MULTI	AverageRF	% RSD	10.1		≤ 20
Aroclor 1016 {4}	MULTI	AverageRF	% RSD	5.0		≤ 20
Aroclor 1016 {5}	MULTI	AverageRF	% RSD	8.6		≤ 20
Aroclor 1260 {1}	MULTI	AverageRF	% RSD	10.7		≤ 20
Aroclor 1260 {2}	MULTI	AverageRF	% RSD	8.6		≤ 20
Aroclor 1260 {3}	MULTI	AverageRF	% RSD	8.4		≤ 20
Aroclor 1260 {4}	MULTI	AverageRF	% RSD	8.0		≤ 20
Aroclor 1260 {5}	MULTI	AverageRF	% RSD	3.7		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010
Date Analyzed: 12/09/2010

Second Source Calibration Verification
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration ID: CAL10114
Units: ng/mL

File ID:
\\cash1\acqudata\GC22\data\120810.b\1208F033.D
\\cash1\acqudata\GC22\data\120810.b\1208F034.D
\\cash1\acqudata\GC22\data\120810.b\1208F035.D
\\cash1\acqudata\GC22\data\120810.b\1208F036.D
\\cash1\acqudata\GC22\data\120810.b\1208F037.D
\\cash1\acqudata\GC22\data\120810.b\1208F038.D
\\cash1\acqudata\GC22\data\120810.b\1208F039.D
\\cash1\acqudata\GC22\data\120810.b\1208F040.D
\\cash1\acqudata\GC22\data\120810.b\1208F041.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Aroclor 1016	100	87	NA	NA	NA	-13	± 20 %	NA
Aroclor 1016 {1}	100	87	22800	19800	-13	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	88	31000	27100	-12	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	86	67000	57400	-14	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	88	41300	36200	-12	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	86	50500	43400	-14	NA	± 100 %	AverageRF
Aroclor 1260	100	98	NA	NA	NA	-2	± 20 %	NA
Aroclor 1260 {1}	100	94	118000	111000	-6	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	94	170000	160000	-6	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	80	149000	120000	-20	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	110	109000	122000	11	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	110	280000	311000	11	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound**

‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-XLB

Level ID	File ID
A	\\cash1\acqudata\GC22\data\120810_r.b\1208F003.D
B	\\cash1\acqudata\GC22\data\120810_r.b\1208F004.D
C	\\cash1\acqudata\GC22\data\120810_r.b\1208F005.D
D	\\cash1\acqudata\GC22\data\120810_r.b\1208F006.D
E	\\cash1\acqudata\GC22\data\120810_r.b\1208F007.D
F	\\cash1\acqudata\GC22\data\120810_r.b\1208F008.D
G	\\cash1\acqudata\GC22\data\120810_r.b\1208F009.D
H	\\cash1\acqudata\GC22\data\120810_r.b\1208F010.D
I	\\cash1\acqudata\GC22\data\120810_r.b\1208F011.D
J	\\cash1\acqudata\GC22\data\120810_r.b\1208F012.D
K	\\cash1\acqudata\GC22\data\120810_r.b\1208F013.D
L	\\cash1\acqudata\GC22\data\120810_r.b\1208F014.D
M	\\cash1\acqudata\GC22\data\120810_r.b\1208F015.D
N	\\cash1\acqudata\GC22\data\120810_r.b\1208F016.D
O	\\cash1\acqudata\GC22\data\120810_r.b\1208F017.D
P	\\cash1\acqudata\GC22\data\120810_r.b\1208F018.D
Q	\\cash1\acqudata\GC22\data\120810_r.b\1208F019.D
R	\\cash1\acqudata\GC22\data\120810_r.b\1208F020.D
S	\\cash1\acqudata\GC22\data\120810_r.b\1208F021.D
T	\\cash1\acqudata\GC22\data\120810_r.b\1208F022.D
U	\\cash1\acqudata\GC22\data\120810_r.b\1208F023.D
V	\\cash1\acqudata\GC22\data\120810_r.b\1208F024.D
W	\\cash1\acqudata\GC22\data\120810_r.b\1208F025.D
X	\\cash1\acqudata\GC22\data\120810_r.b\1208F026.D
Y	\\cash1\acqudata\GC22\data\120810_r.b\1208F027.D
Z	\\cash1\acqudata\GC22\data\120810_r.b\1208F028.D
AA	\\cash1\acqudata\GC22\data\120810_r.b\1208F029.D
AB	\\cash1\acqudata\GC22\data\120810_r.b\1208F030.D
AC	\\cash1\acqudata\GC22\data\120810_r.b\1208F031.D
AD	\\cash1\acqudata\GC22\data\120810_r.b\1208F032.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Decachlorobiphenyl	A	0.25	8.73E+6	B	0.50	8.19E+6	C	5.0	6.88E+6	D	10	6.47E+6	E	20	5.87E+6
	F	50	6.09E+6												
Aroclor 1016 {1}	A	2.5	2.14E+5	B	5.0	2.08E+5	C	50	1.73E+5	D	100	1.64E+5	E	200	1.48E+5
	F	500	1.41E+5												
Aroclor 1016 {2}	A	2.5	4.25E+5	B	5.0	4.09E+5	C	50	3.33E+5	D	100	3.30E+5	E	200	3.03E+5
	F	500	3.06E+5												
Aroclor 1016 {3}	A	2.5	1.78E+5	B	5.0	1.89E+5	C	50	1.79E+5	D	100	1.76E+5	E	200	1.63E+5
	F	500	1.62E+5												
Aroclor 1016 {4}	A	2.5	1.74E+5	B	5.0	1.70E+5	C	50	1.44E+5	D	100	1.38E+5	E	200	1.24E+5
	F	500	1.21E+5												
Aroclor 1016 {5}	A	2.5	2.15E+5	B	5.0	2.03E+5	C	50	1.63E+5	D	100	1.56E+5	E	200	1.41E+5
	F	500	1.38E+5												
Aroclor 1260 {1}	A	2.5	5.50E+5	B	5.0	5.55E+5	C	50	4.66E+5	D	100	4.35E+5	E	200	4.03E+5
	F	500	4.12E+5												
Aroclor 1260 {2}	A	2.5	6.64E+5	B	5.0	6.31E+5	C	50	5.52E+5	D	100	5.27E+5	E	200	4.89E+5
	F	500	5.04E+5												
Aroclor 1260 {3}	A	2.5	3.71E+5	B	5.0	3.56E+5	C	50	3.22E+5	D	100	3.04E+5	E	200	2.78E+5
	F	500	2.83E+5												
Aroclor 1260 {4}	A	2.5	3.55E+5	B	5.0	3.51E+5	C	50	3.15E+5	D	100	2.96E+5	E	200	2.69E+5
	F	500	2.79E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Aroclor 1260 {5}	A	2.5	8.74E+5	B	5.0	8.19E+5	C	50	7.32E+5	D	100	7.06E+5	E	200	6.62E+5
	F	500	7.03E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SURR	AverageRF	% RSD	16.6		≤ 20
Aroclor 1016 {1}	MULTI	AverageRF	% RSD	17.5		≤ 20
Aroclor 1016 {2}	MULTI	AverageRF	% RSD	15.1		≤ 20
Aroclor 1016 {3}	MULTI	AverageRF	% RSD	6.0		≤ 20
Aroclor 1016 {4}	MULTI	AverageRF	% RSD	15.6		≤ 20
Aroclor 1016 {5}	MULTI	AverageRF	% RSD	19.0		≤ 20
Aroclor 1260 {1}	MULTI	AverageRF	% RSD	14.3		≤ 20
Aroclor 1260 {2}	MULTI	AverageRF	% RSD	12.6		≤ 20
Aroclor 1260 {3}	MULTI	AverageRF	% RSD	12.0		≤ 20
Aroclor 1260 {4}	MULTI	AverageRF	% RSD	11.6		≤ 20
Aroclor 1260 {5}	MULTI	AverageRF	% RSD	10.8		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010
Date Analyzed: 12/09/2010

Second Source Calibration Verification
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration ID: CAL10114
Units: ng/mL

File ID:
\\cash1\acqudata\GC22\data\120810_r.b\1208F033.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F034.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F035.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F036.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F037.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F038.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F039.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F040.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F041.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Aroclor 1016	100	85	NA	NA	NA	-15	± 20 %	NA
Aroclor 1016 {1}	100	86	175000	150000	-14	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	82	351000	288000	-18	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	91	175000	159000	-9	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	84	145000	121000	-16	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	84	169000	142000	-16	NA	± 100 %	AverageRF
Aroclor 1260	100	99	NA	NA	NA	-1	± 20 %	NA
Aroclor 1260 {1}	100	90	470000	423000	-10	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	84	561000	474000	-16	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	110	319000	355000	11	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	100	311000	326000	5	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	110	749000	795000	6	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/07/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F006.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	9.8	2120000	2080000	-2	NA	± 20 %	AverageRF
Aroclor 1016	100	93	NA	NA	NA	-7	± 20 %	NA
Aroclor 1016 {1}	100	91	22800	20700	-9	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	92	31000	28500	-8	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	91	67000	61300	-9	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	94	41300	38900	-6	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	94	50500	47700	-6	NA	± 100 %	AverageRF
Aroclor 1260	100	93	NA	NA	NA	-7	± 20 %	NA
Aroclor 1260 {1}	100	91	118000	107000	-9	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	90	170000	154000	-10	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	94	149000	140000	-6	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	93	109000	102000	-7	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	95	280000	265000	-5	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/07/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F006.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	9.6	7040000	6760000	-4	NA	± 20 %	AverageRF
Aroclor 1016	100	96	NA	NA	NA	-4	± 20 %	NA
Aroclor 1016 {1}	100	95	175000	165000	-5	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	92	351000	322000	-8	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	100	175000	178000	2	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	97	145000	140000	-3	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	94	169000	158000	-6	NA	± 100 %	AverageRF
Aroclor 1260	100	95	NA	NA	NA	-5	± 20 %	NA
Aroclor 1260 {1}	100	96	470000	449000	-4	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	97	561000	543000	-3	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	99	319000	317000	-1	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	89	311000	276000	-11	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	95	749000	715000	-5	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/08/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F020.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	10	2120000	2120000	0	NA	± 20 %	AverageRF
Aroclor 1016	100	95	NA	NA	NA	-5	± 20 %	NA
Aroclor 1016 {1}	100	93	22800	21200	-7	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	94	31000	29000	-6	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	95	67000	63500	-5	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	98	41300	40600	-2	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	96	50500	48700	-4	NA	± 100 %	AverageRF
Aroclor 1260	100	95	NA	NA	NA	-5	± 20 %	NA
Aroclor 1260 {1}	100	94	118000	110000	-6	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	93	170000	158000	-7	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	95	149000	141000	-5	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	96	109000	105000	-4	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	98	280000	274000	-2	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/08/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F020.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	9.7	7040000	6830000	-3	NA	± 20 %	AverageRF
Aroclor 1016	100	98	NA	NA	NA	-2	± 20 %	NA
Aroclor 1016 {1}	100	96	175000	168000	-4	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	94	351000	331000	-6	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	100	175000	181000	4	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	98	145000	142000	-2	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	96	169000	163000	-4	NA	± 100 %	AverageRF
Aroclor 1260	100	93	NA	NA	NA	-7	± 20 %	NA
Aroclor 1260 {1}	100	97	470000	455000	-3	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	98	561000	552000	-2	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	99	319000	316000	-1	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	78	311000	244000	-22	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	94	749000	706000	-6	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/08/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F034.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	10	2120000	2190000	3	NA	± 20 %	AverageRF
Aroclor 1016	100	96	NA	NA	NA	-4	± 20 %	NA
Aroclor 1016 {1}	100	98	22800	22300	-2	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	93	31000	28800	-7	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	96	67000	64300	-4	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	99	41300	40700	-1	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	97	50500	49000	-3	NA	± 100 %	AverageRF
Aroclor 1260	100	96	NA	NA	NA	-4	± 20 %	NA
Aroclor 1260 {1}	100	95	118000	112000	-5	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	93	170000	159000	-7	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	95	149000	142000	-5	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	97	109000	106000	-3	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	100	280000	280000	0	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/08/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F034.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	9.9	7040000	6960000	-1	NA	± 20 %	AverageRF
Aroclor 1016	100	100	NA	NA	NA	0	± 20 %	NA
Aroclor 1016 {1}	100	99	175000	174000	-1	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	99	351000	346000	-1	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	110	175000	183000	5	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	99	145000	144000	-1	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	100	169000	169000	0	NA	± 100 %	AverageRF
Aroclor 1260	100	91	NA	NA	NA	-9	± 20 %	NA
Aroclor 1260 {1}	100	98	470000	460000	-2	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	98	561000	551000	-2	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	97	319000	310000	-3	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	66	311000	206000	-34	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	95	749000	709000	-5	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692

Analysis Run Log
Polychlorinated Biphenyls (PCBs)

Analysis Method: 8082A

Analysis Lot: KWG1101323
Instrument ID: GC22.i
Column: DB-35MS

File ID	Sample Name	Lab Code	Date Analysis Started	Start Time	Q	Date Analysis Finished	Finish Time
0207F006.D	Continuing Calibration Verification	KWG1101323-1	2/7/2011	20:13		2/7/2011	20:13
0207F007.D	Instrument Blank	KWG1101323-2	2/7/2011	20:37		2/7/2011	20:37
0207F008.D	Lab Control Sample	KWG1101180-3	2/7/2011	21:02		2/7/2011	21:02
0207F009.D	Duplicate Lab Control Sample	KWG1101180-4	2/7/2011	21:26		2/7/2011	21:26
0207F010.D	Method Blank	KWG1101180-7	2/7/2011	21:51		2/7/2011	21:51
0207F011.D	MW-3	K1100692-001	2/7/2011	22:15		2/7/2011	22:15
0207F012.D	MW-7	K1100692-002	2/7/2011	22:39		2/7/2011	22:39
0207F013.D	EB-012511	K1100692-003	2/7/2011	23:04		2/7/2011	23:04
0207F014.D	ZZZZZZ	ZZZZZZ	2/7/2011	23:28		2/7/2011	23:28
0207F015.D	ZZZZZZ	ZZZZZZ	2/7/2011	23:53		2/7/2011	23:53
0207F016.D	ZZZZZZ	ZZZZZZ	2/8/2011	00:17		2/8/2011	00:17
0207F017.D	ZZZZZZ	ZZZZZZ	2/8/2011	00:42		2/8/2011	00:42
0207F020.D	Continuing Calibration Verification	KWG1101323-3	2/8/2011	01:55		2/8/2011	01:55
0207F021.D	Instrument Blank	KWG1101323-4	2/8/2011	02:19		2/8/2011	02:19
0207F023.D	ZZZZZZ	ZZZZZZ	2/8/2011	03:08		2/8/2011	03:08
0207F025.D	ZZZZZZ	ZZZZZZ	2/8/2011	03:57		2/8/2011	03:57
0207F026.D	Batch QC	K1100806-002	2/8/2011	04:22		2/8/2011	04:22
0207F027.D	Batch QCMS	KWG1101180-1	2/8/2011	04:46		2/8/2011	04:46
0207F028.D	Batch QCDMS	KWG1101180-2	2/8/2011	05:11		2/8/2011	05:11
0207F029.D	ZZZZZZ	ZZZZZZ	2/8/2011	05:35		2/8/2011	05:35
0207F030.D	ZZZZZZ	ZZZZZZ	2/8/2011	06:00		2/8/2011	06:00
0207F031.D	ZZZZZZ	ZZZZZZ	2/8/2011	06:24		2/8/2011	06:24
0207F034.D	Continuing Calibration Verification	KWG1101323-5	2/8/2011	07:38		2/8/2011	07:38
0207F035.D	Instrument Blank	KWG1101323-6	2/8/2011	08:02		2/8/2011	08:02

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Extracted: 02/01/2011

Extraction Prep Log
Polychlorinated Biphenyls (PCBs)

Extraction Method: EPA 3535A
Analysis Method: 8082A

Extraction Lot: KWG1101180
Level: Low

Sample Name	Lab Code	Date Collected	Date Received	Sample Amount	Final Volume	% Solids	Note
MW-3	K1100692-001	01/25/11	01/26/11	1020mL	2mL	NA	
MW-7	K1100692-002	01/25/11	01/26/11	1020mL	2mL	NA	
EB-012511	K1100692-003	01/25/11	01/26/11	1000mL	2mL	NA	
Method Blank	KWG1101180-7	NA	NA	1040mL	2mL	NA	
Batch QC	K1100806-002	NA	NA	1020mL	2mL	NA	
Batch QCMS	KWG1101180-1	NA	NA	1020mL	2mL	NA	
Batch QCDMS	KWG1101180-2	NA	NA	1020mL	2mL	NA	
Lab Control Sample	KWG1101180-3	NA	NA	1000mL	2mL	NA	
Duplicate Lab Control Sample	KWG1101180-4	NA	NA	1000mL	2mL	NA	

Results flagged with an asterisk (*) indicate the holding time was exceeded for the analysis

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

QC Reports

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692

Surrogate Recovery Summary
Polychlorinated Biphenyls (PCBs)

Extraction Method: EPA 3535A
Analysis Method: 8082A

Units: PERCENT
Level: Low

Sample Name	Lab Code	Sur1
MW-3	K1100692-001	88
MW-7	K1100692-002	85
EB-012511	K1100692-003	71
Batch QC	K1100806-002	88
Method Blank	KWG1101180-7	79
Batch QCMS	KWG1101180-1	89
Batch QCDMS	KWG1101180-2	82
Lab Control Sample	KWG1101180-3	84
Duplicate Lab Control Sample	KWG1101180-4	93

Surrogate Recovery Control Limits (%)

Sur1 = Decachlorobiphenyl 36-113

Results flagged with an asterisk (*) indicate values outside control criteria.
Results flagged with a pound (#) indicate the control criteria is not applicable.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	02/01/2011
Sample Matrix:	Water	**Date Analyzed:**	02/08/2011

Matrix Spike/Duplicate Matrix Spike Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1100806-002	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A	**Extraction Lot:**	KWG1101180

Analyte Name	Sample Result	Batch QCMS KWG1101180-1 Matrix Spike			Batch QCDMS KWG1101180-2 Duplicate Matrix Spike			%Rec Limits	RPD	RPD Limit
		Result	Expected	%Rec	Result	Expected	%Rec			
Aroclor 1016	ND	0.155	0.196	79	0.153	0.196	78	31-118	1	30
Aroclor 1260	ND	0.166	0.196	85	0.157	0.196	80	47-115	6	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	02/01/2011
Sample Matrix:	Water	**Date Analyzed:**	02/07/2011

Lab Control Spike/Duplicate Lab Control Spike Summary
Polychlorinated Biphenyls (PCBs)

Extraction Method:	EPA 3535A	**Units:**	ug/L
Analysis Method:	8082A	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1101180

	Lab Control Sample KWG1101180-3 Lab Control Spike			Duplicate Lab Control Sample KWG1101180-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Expected**	**%Rec**	**Result**	**Expected**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Aroclor 1016	0.149	0.200	75	0.152	0.200	76	41-113	2	30
Aroclor 1260	0.156	0.200	78	0.158	0.200	79	47-117	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	02/01/2011
Sample Matrix:	Water	**Date Analyzed:**	02/07/2011
		Time Analyzed:	21:51

Method Blank Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Method Blank	**File ID:**	J:\GC22\DATA\020711.B\0207F010.D
Lab Code:	KWG1101180-7	**Instrument ID:**	GC22.i
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A	**Extraction Lot:**	KWG1101180

This Method Blank applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Lab Control Sample	KWG1101180-3	J:\GC22\DATA\020711.B\0207F008.D	02/07/11	21:02
Duplicate Lab Control Sample	KWG1101180-4	J:\GC22\DATA\020711.B\0207F009.D	02/07/11	21:26
MW-3	K1100692-001	J:\GC22\DATA\020711.B\0207F011.D	02/07/11	22:15
MW-7	K1100692-002	J:\GC22\DATA\020711.B\0207F012.D	02/07/11	22:39
EB-012511	K1100692-003	J:\GC22\DATA\020711.B\0207F013.D	02/07/11	23:04
Batch QC	K1100806-002	J:\GC22\DATA\020711.B\0207F026.D	02/08/11	04:22
Batch QCMS	KWG1101180-1	J:\GC22\DATA\020711.B\0207F027.D	02/08/11	04:46
Batch QCDMS	KWG1101180-2	J:\GC22\DATA\020711.B\0207F028.D	02/08/11	05:11

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Extracted:**	02/01/2011
Sample Matrix:	Water	**Date Analyzed:**	02/07/2011
		Time Analyzed:	21:02

Lab Control Sample Summary
Polychlorinated Biphenyls (PCBs)

Sample Name:	Lab Control Sample	**File ID:**	J:\GC22\DATA\020711.B\0207F008.D
Lab Code:	KWG1101180-3	**Instrument ID:**	GC22.i
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A	**Extraction Lot:**	KWG1101180

This Lab Control Sample applies to the following analyses:

Sample Name	Lab Code	File ID	Date Analyzed	Time Analyzed
Method Blank	KWG1101180-7	J:\GC22\DATA\020711.B\0207F010.D	02/07/11	21:51
MW-3	K1100692-001	J:\GC22\DATA\020711.B\0207F011.D	02/07/11	22:15
MW-7	K1100692-002	J:\GC22\DATA\020711.B\0207F012.D	02/07/11	22:39
EB-012511	K1100692-003	J:\GC22\DATA\020711.B\0207F013.D	02/07/11	23:04
Batch QC	K1100806-002	J:\GC22\DATA\020711.B\0207F026.D	02/08/11	04:22
Batch QCMS	KWG1101180-1	J:\GC22\DATA\020711.B\0207F027.D	02/08/11	04:46
Batch QCDMS	KWG1101180-2	J:\GC22\DATA\020711.B\0207F028.D	02/08/11	05:11

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

Raw Data

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Polychlorinated Biphenyls (PCBs)

Sample Name: MW-3
Lab Code: K1100692-001

Units: ug/L
Basis: NA

Extraction Method: EPA 3535A
Analysis Method: 8082A

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	88	36-113	02/07/11	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F011.D
Lab ID: K1100692-001
RunType: SMPL
Matrix: WATER

Date Acquired: 02/07/2011 22:15
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
ListJoinID: LJ6227

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F011.D
Lab ID: K1100692-001
RunType: SMPL
Matrix: WATER

Date Acquired: 02/07/2011 22:15
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
ListJoinID: LJ6227

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8082 PCB_LL	**Collect Date:**	01/25/2011	**Receive Date:**	01/26/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	K1100692
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997126	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:	Polychlorinated Biphenyls (PCBs)	**Report List ID:**	LJ6227
MB Ref:	J:\GC22\DATA\020711.B\0207F010.D	**Method ID:**	MJ706
		Quant based on Report List	

Data File #1:	J:\GC22\DATA\020711.B\0207F011.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F011.D			**Vial:**	4
Acqu Date:	02/07/2011 22:15	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K1100692-001				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Decachlorobiphenyl	13.33	14.36 +0.00	9248689m	30888323m	4.37	4.39			88OK
			%Recovery =		87OK	88OK	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1016 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F011.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F011.D			**Vial:**	4
Acqu Date:	02/07/2011 22:15	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K1100692-001				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1260 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1020 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F011.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F011.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F011.D
Inj Date : 07-FEB-2011 22:15
Sample Info: K1100692-001
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.278	5.835	6502241	22479799	3.43	3.56		100.00(R)
Decachlorobiphenyl	13.331	14.355	9248689	30888323	4.36	4.39		100.00(RM)

QC Flag Legend

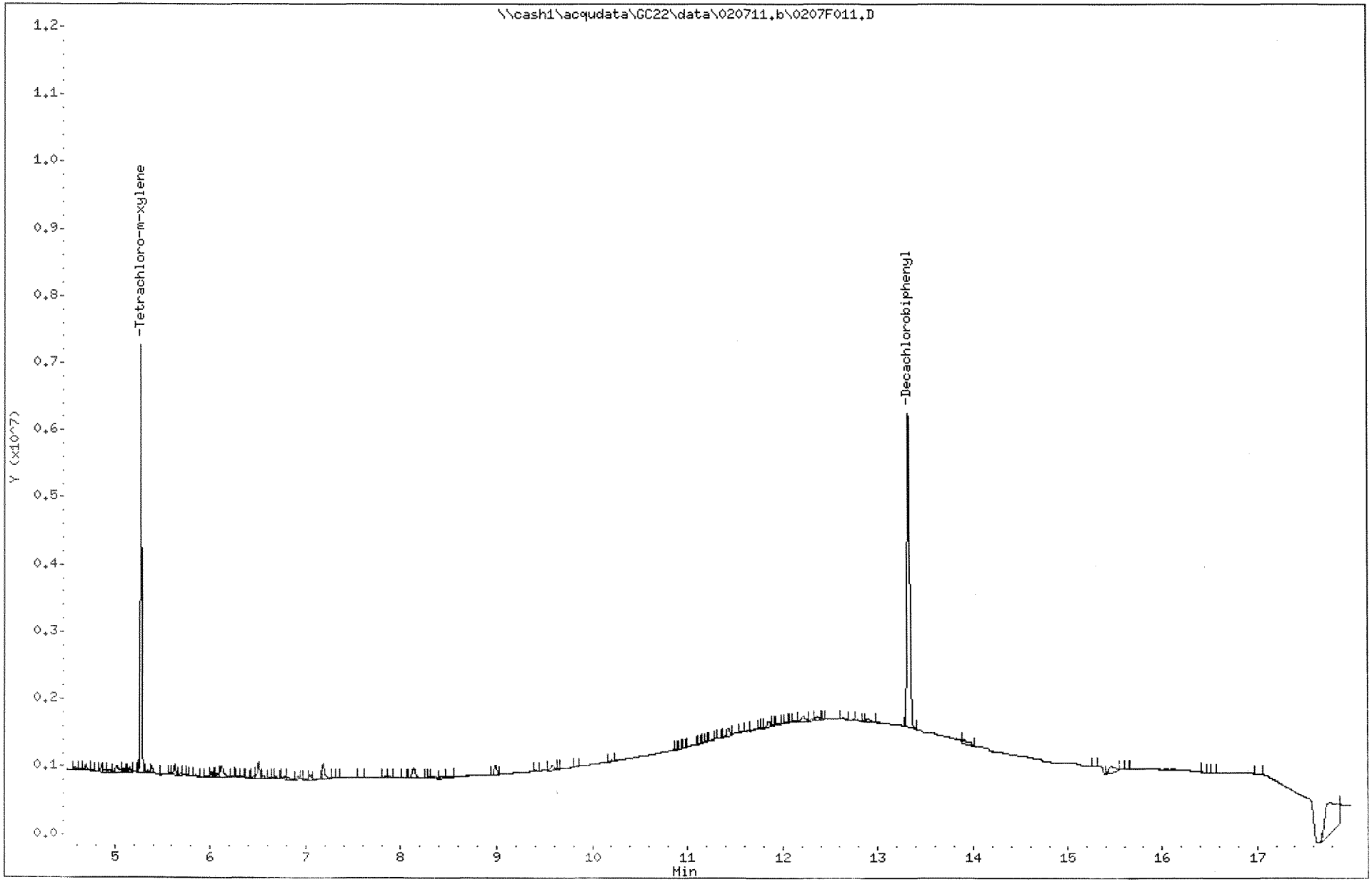
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F011.D
Date : 07-FEB-2011 22:15
Client ID:
Sample Info: K1100692-001

Instrument: GC22.i

Operator: JMSmith
Column diameter: 0.32

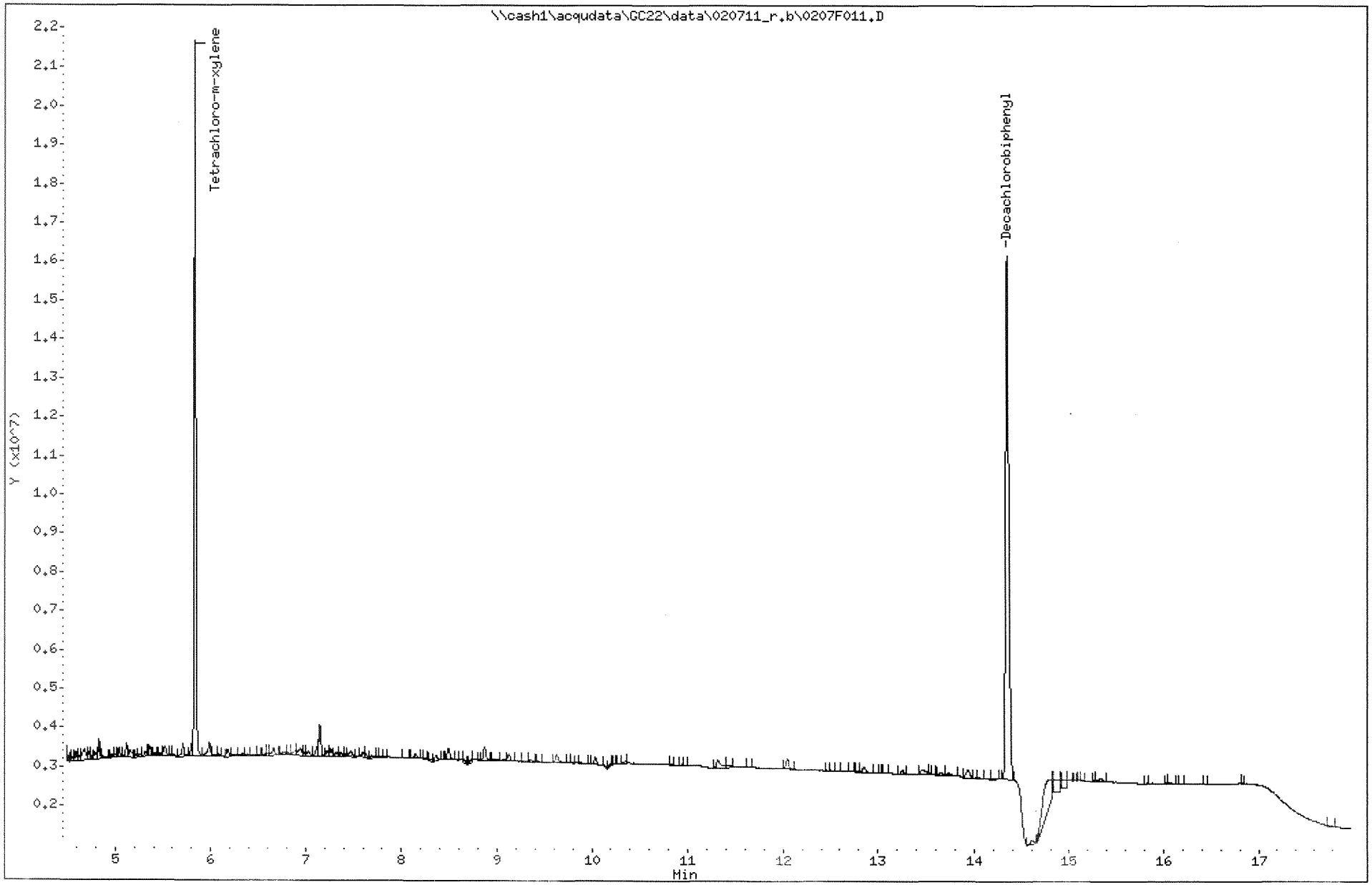
Column phase: DB-35MS

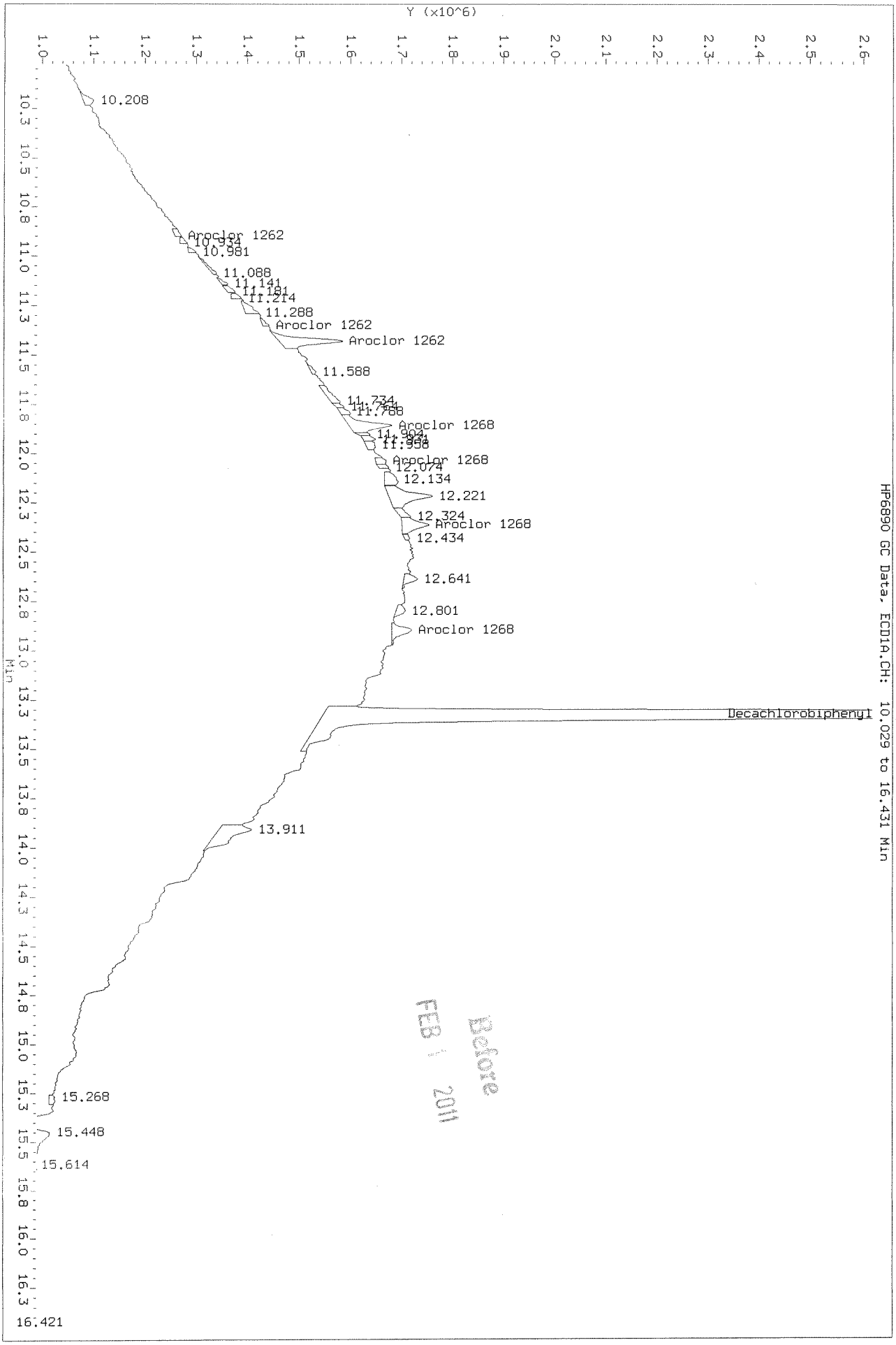


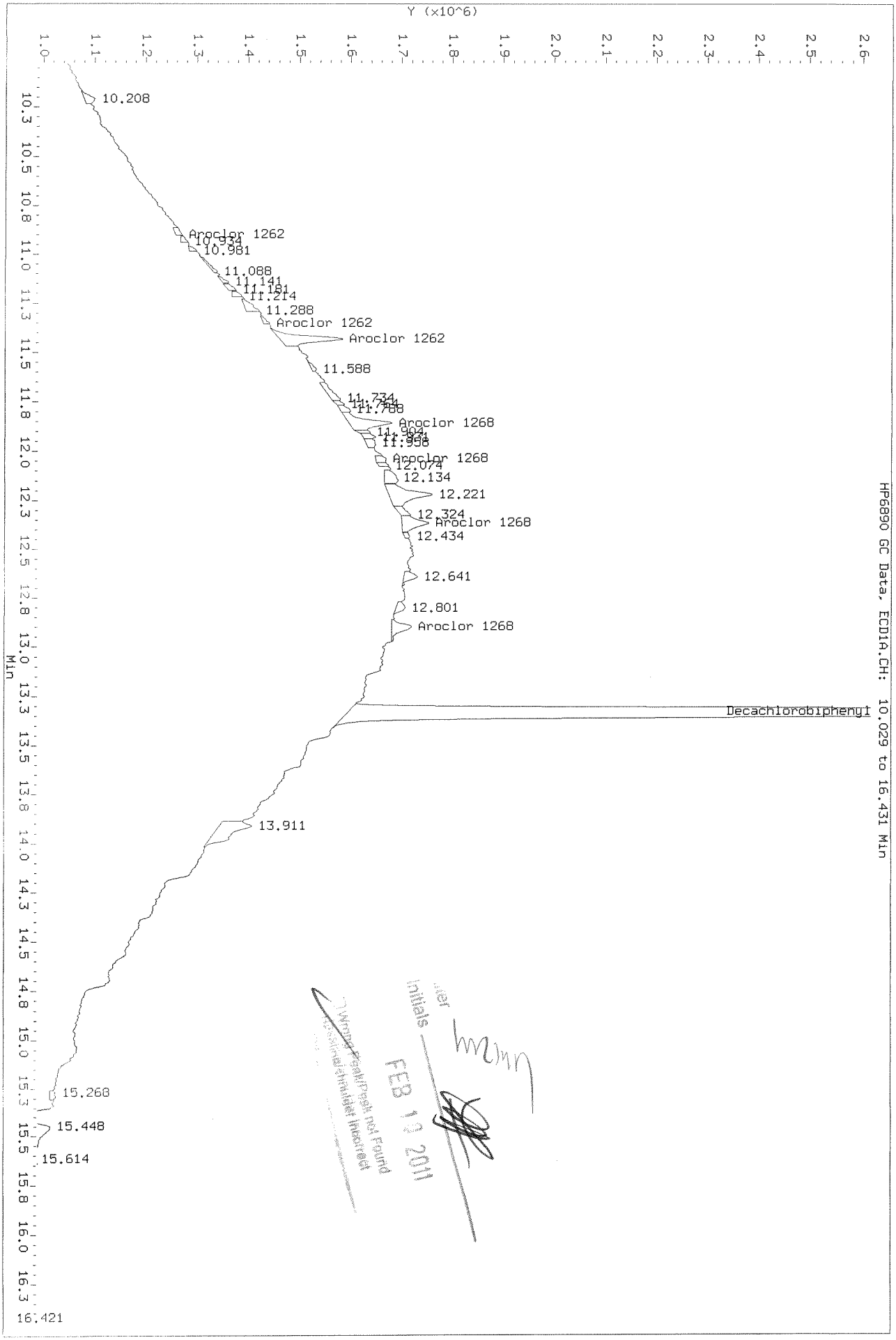
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F011.D
Date : 07-FEB-2011 22:15
Client ID:
Sample Info: K1100692-001

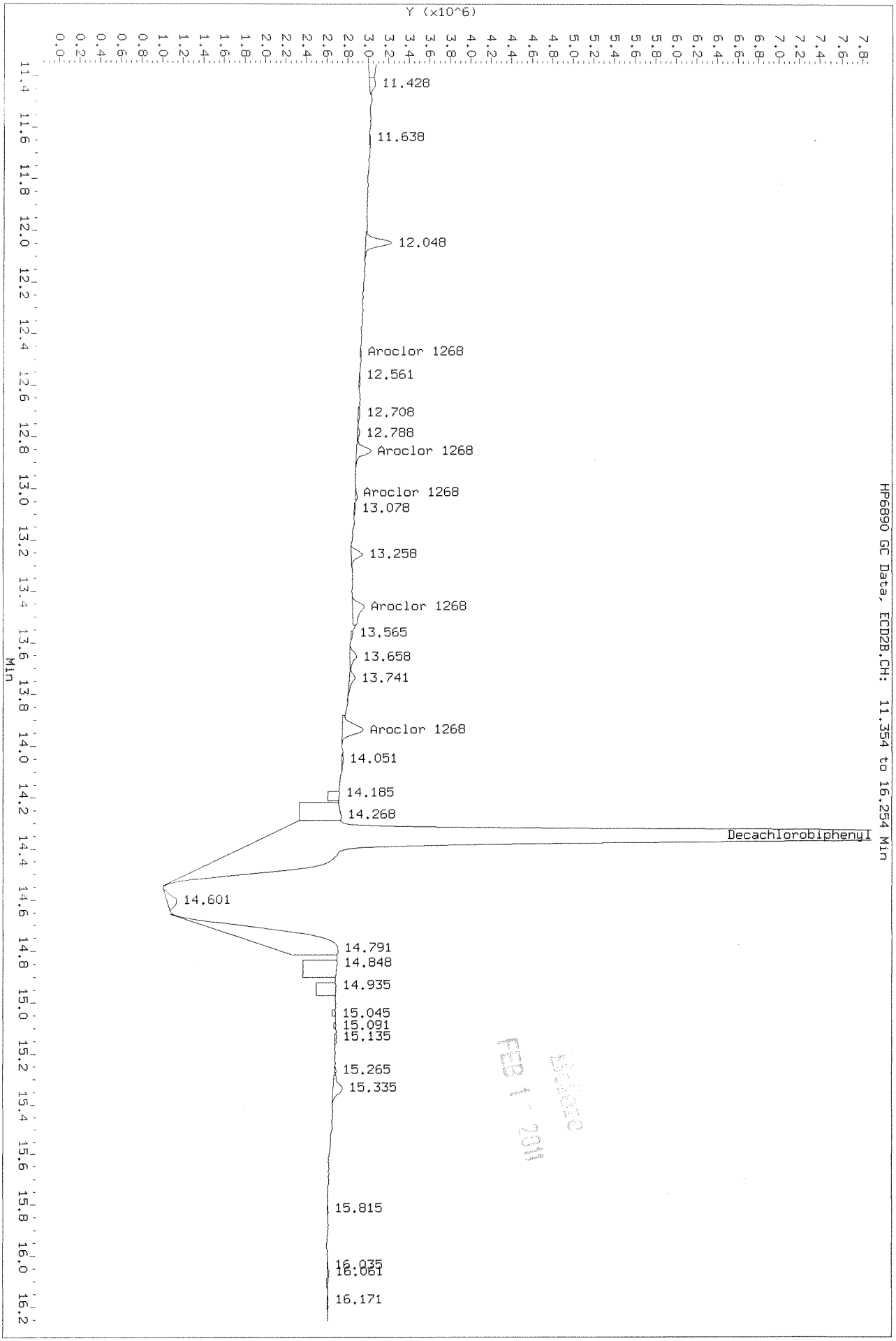
Instrument: GC22.i

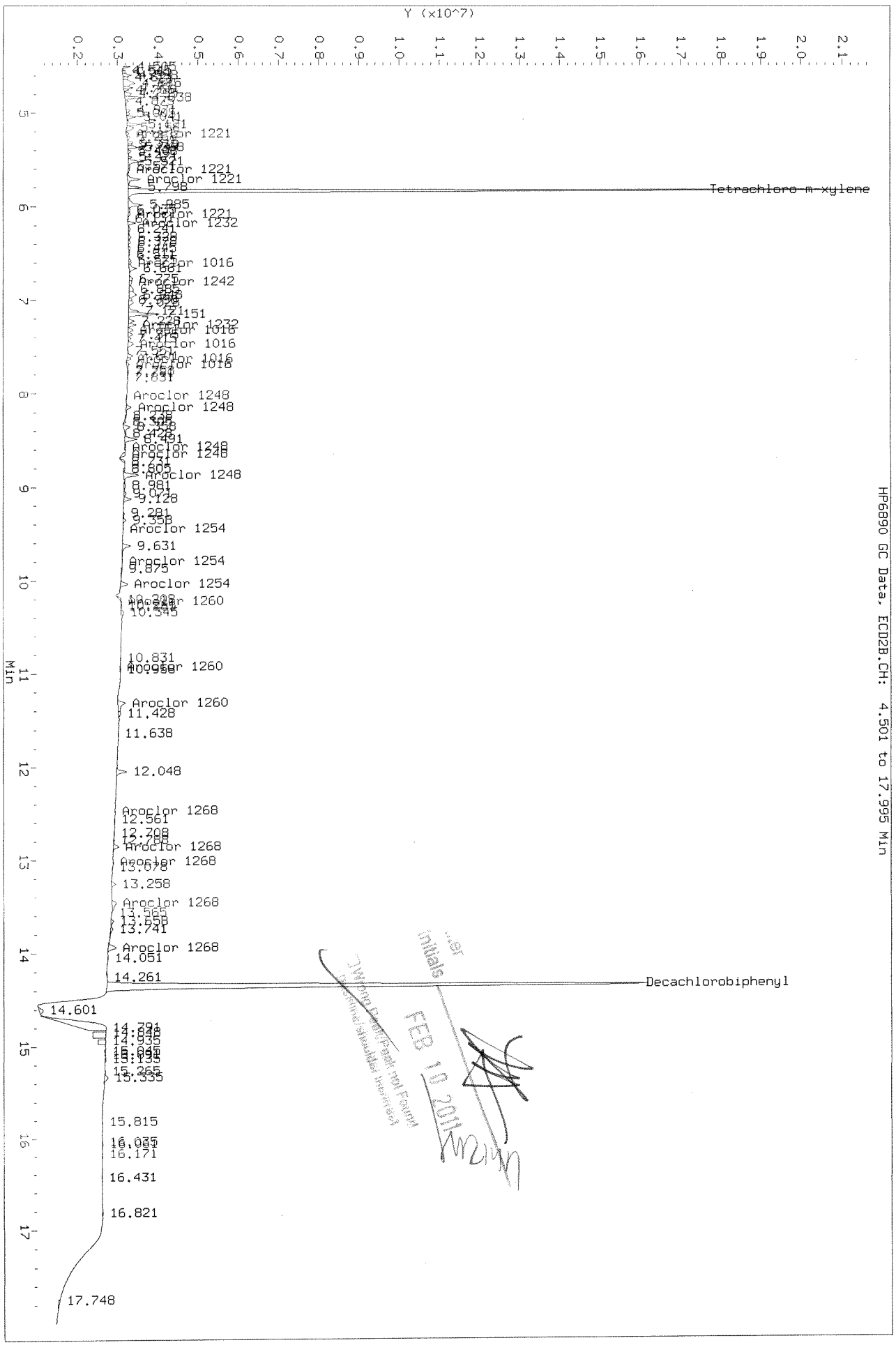
Operator: JMSmith
Column phase: DB-XLB
Column diameter: 0.32






Data File: \\cash1\acqudata\GC22\data\020711.b\0207F011.D
Injection Date: 07-FEB-2011 22:15
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 10.029 to 16.431 Min
Y (x10^6)
Min
10.208
Aroclor 1262
10.934
10.981
11.088
11.141
11.181
11.214
11.288
Aroclor 1262
Aroclor 1262
11.588
11.734
11.788
Aroclor 1268
11.904
11.958
Aroclor 1268
12.074
12.134
12.221
12.324
Aroclor 1268
12.434
12.641
12.801
Aroclor 1268
Decachlorobiphenyl
13.911
15.268
15.448
15.614
16.421
Initials
FEB 17 2011


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F011.D
Injection Date: 07-FEB-2011 22:15
Instrument: GC22.1
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD2B.CH: 11.354 to 16.254 Min
11.428
11.638
12.048
Aroclor 1268
12.561
12.708
12.788
Aroclor 1268
Aroclor 1268
13.078
13.258
Aroclor 1268
13.565
13.658
13.741
Aroclor 1268
14.051
14.185
14.268
Decachlorobiphenyl
14.601
14.791
14.848
14.935
15.045
15.091
15.135
15.265
15.335
15.815
16.035
16.061
16.171


Data File: \cash1\acqudata\GC22\data\020711_r.b\0207f011.D
Injection Date: 07-FEB-2011 22:15
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.501 to 17.995 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Decachlorobiphenyl
Aroclor 1221
Aroclor 1232
Aroclor 1016
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Aroclor 1268
5.798
9.631
9.875
10.545
10.831
11.428
11.638
12.048
12.561
13.258
13.741
14.051
14.261
14.601
15.335
15.815
16.171
16.431
16.821
17.748
FEB 10 2011

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: 01/25/2011
Date Received: 01/26/2011

Polychlorinated Biphenyls (PCBs)

Sample Name: MW-7
Lab Code: K1100692-002

Extraction Method: EPA 3535A
Analysis Method: 8082A

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	85	36-113	02/07/11	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F012.D
Lab ID: K1100692-002
RunType: SMPL
Matrix: WATER

Date Acquired: 02/07/2011 22:39
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
ListJoinID: LJ6227

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F012.D
Lab ID: K1100692-002
RunType: SMPL
Matrix: WATER

Date Acquired: 02/07/2011 22:39
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
ListJoinID: LJ6227

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8082 PCB_LL	**Collect Date:**	01/25/2011	**Receive Date:**	01/26/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	K1100692
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997127	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:	Polychlorinated Biphenyls (PCBs)	**Report List ID:**	LJ6227
MB Ref:	J:\GC22\DATA\020711.B\0207F010.D	**Method ID:**	MJ706
		Quant based on Report List	

Data File #1:	J:\GC22\DATA\020711.B\0207F012.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F012.D			**Vial:**	5
Acqu Date:	02/07/2011 22:39	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K1100692-002				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Decachlorobiphenyl	13.33 +0.00	14.35 0.00	9033168m	30003179m	4.26	4.26			85OK
			%Recovery =		85OK	85OK	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1016 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F012.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F012.D			**Vial:**	5
Acqu Date:	02/07/2011 22:39	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K1100692-002				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1260 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1020 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F012.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F012.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F012.D
Inj Date : 07-FEB-2011 22:39
Sample Info: K1100692-002
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.275	5.832	6780755	22428944	3.57	3.55		100.00(R)
Decachlorobiphenyl	13.332	14.352	9033168	30003179	4.26	4.26		100.00(RM)

QC Flag Legend

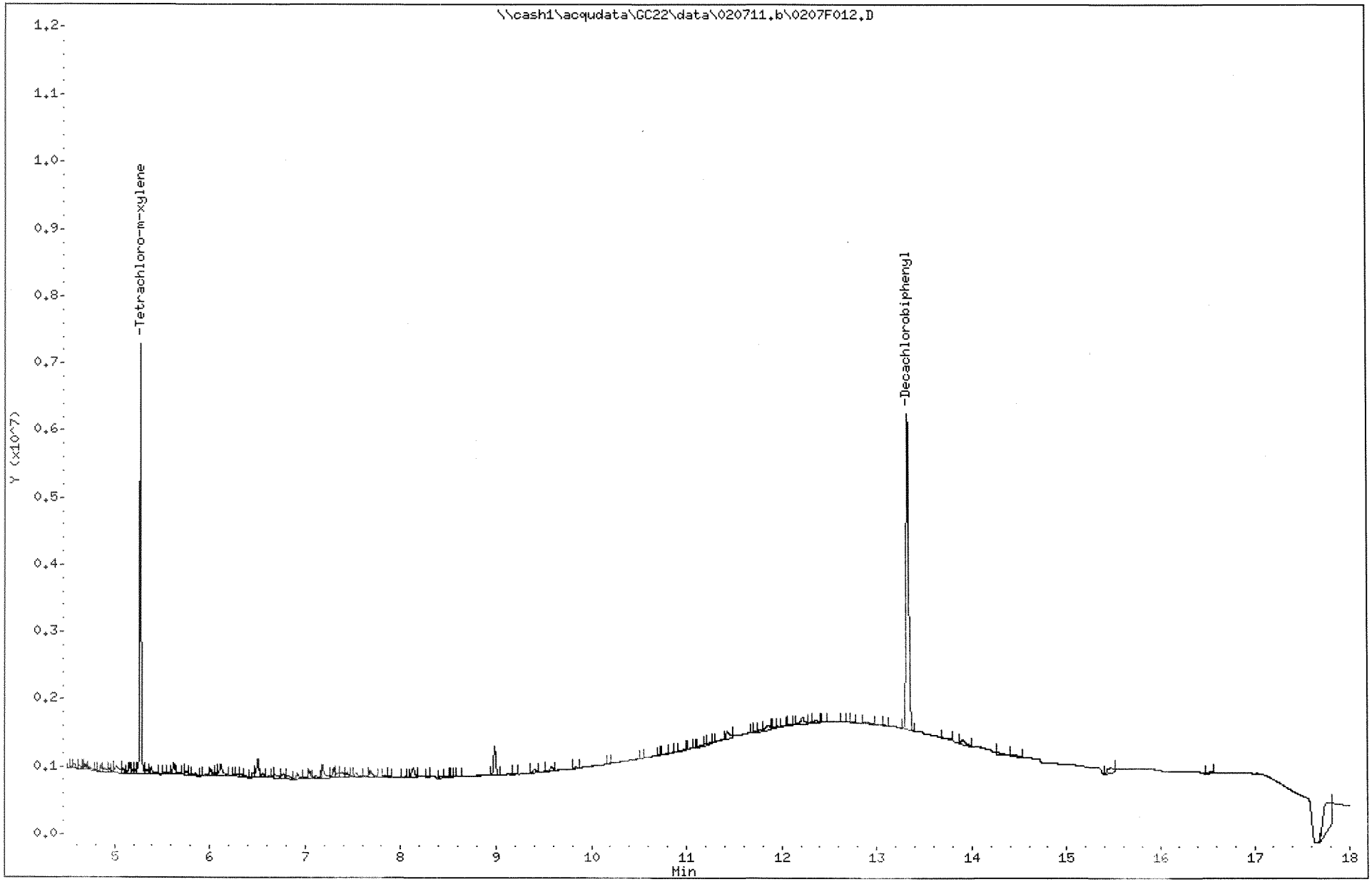
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F012.D
Date : 07-FEB-2011 22:39
Client ID:
Sample Info: K1100692-002

Instrument: GC22.i

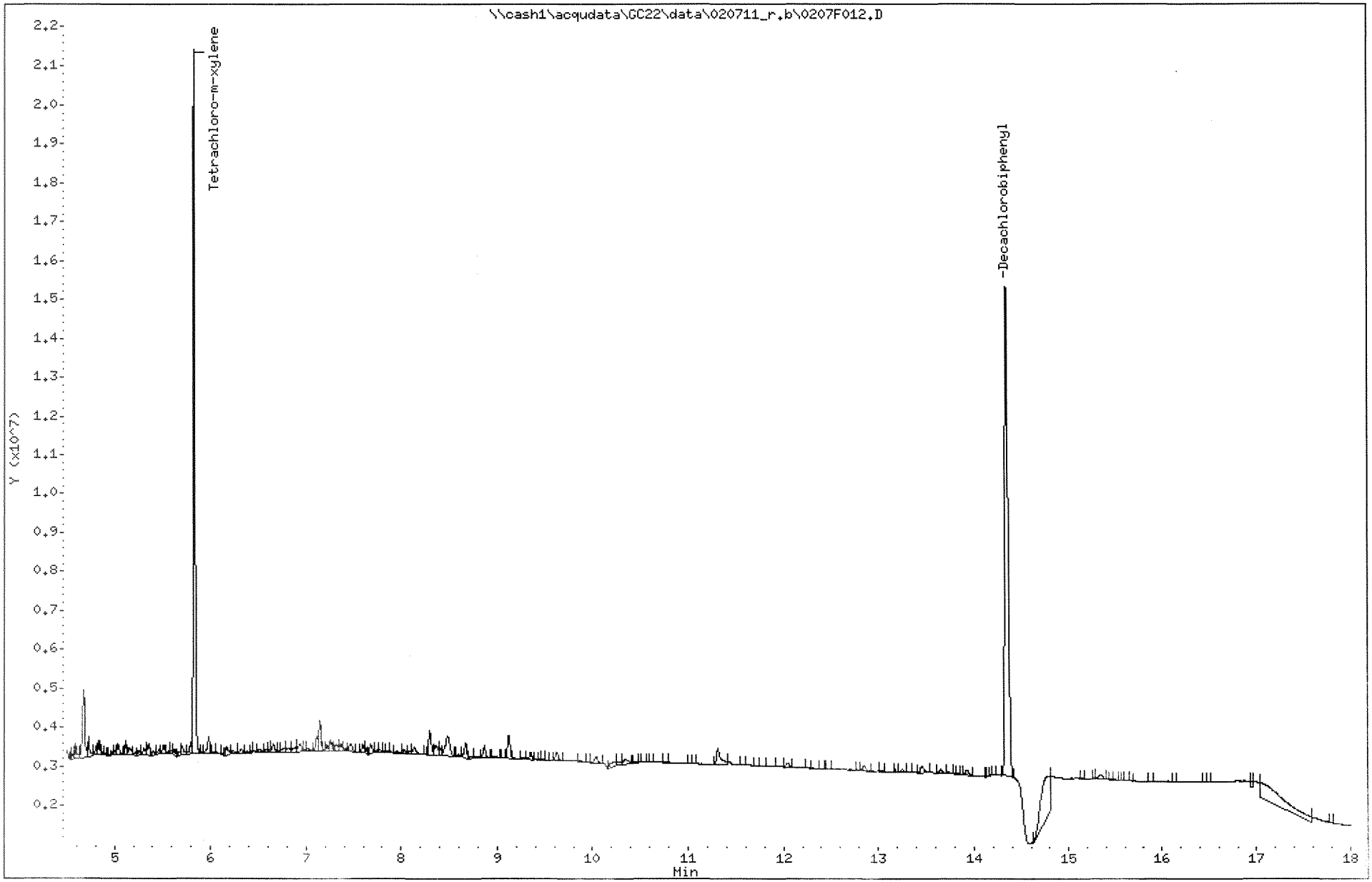
Operator: JHSmith
Column diameter: 0.32

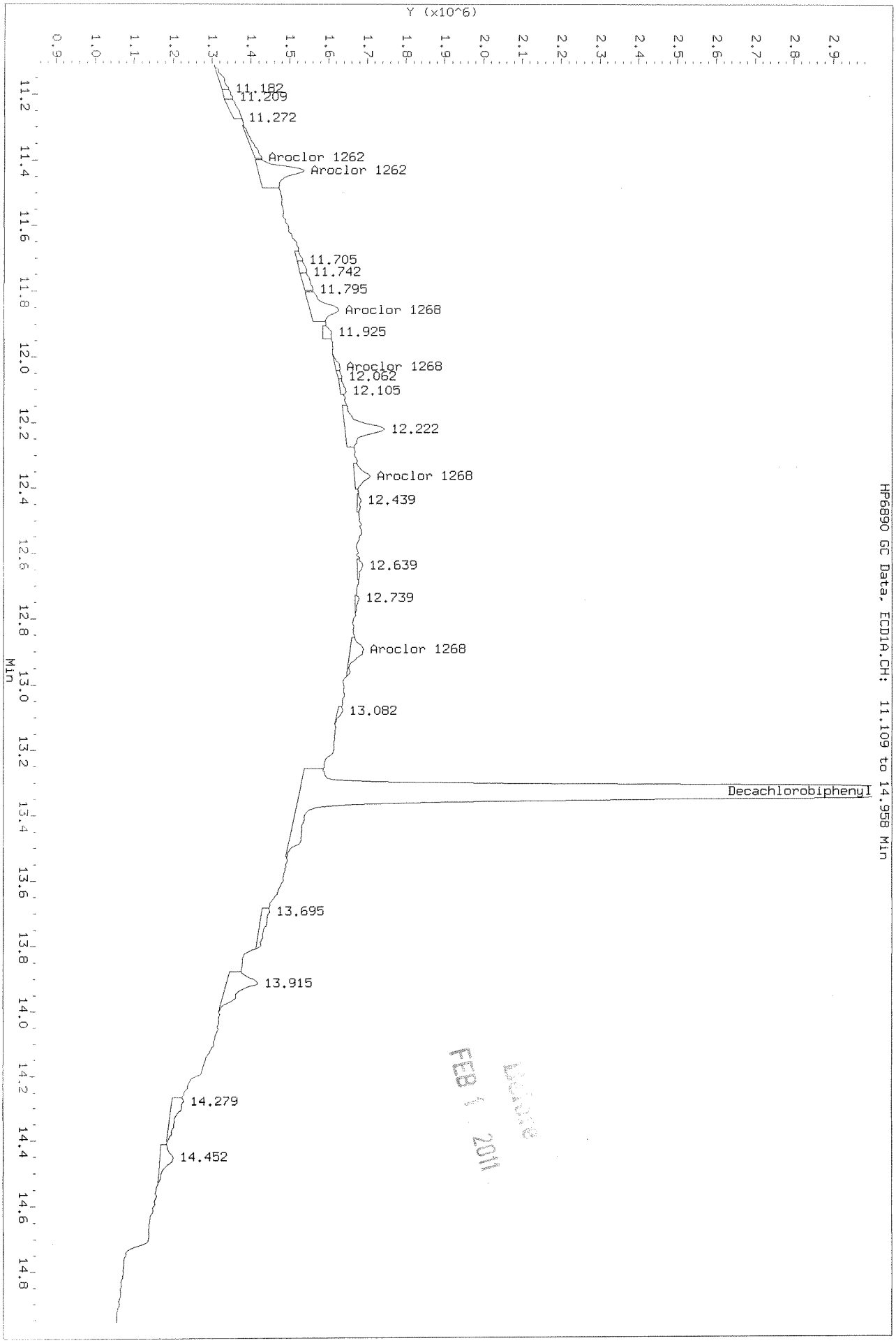
Column phase: DB-35MS

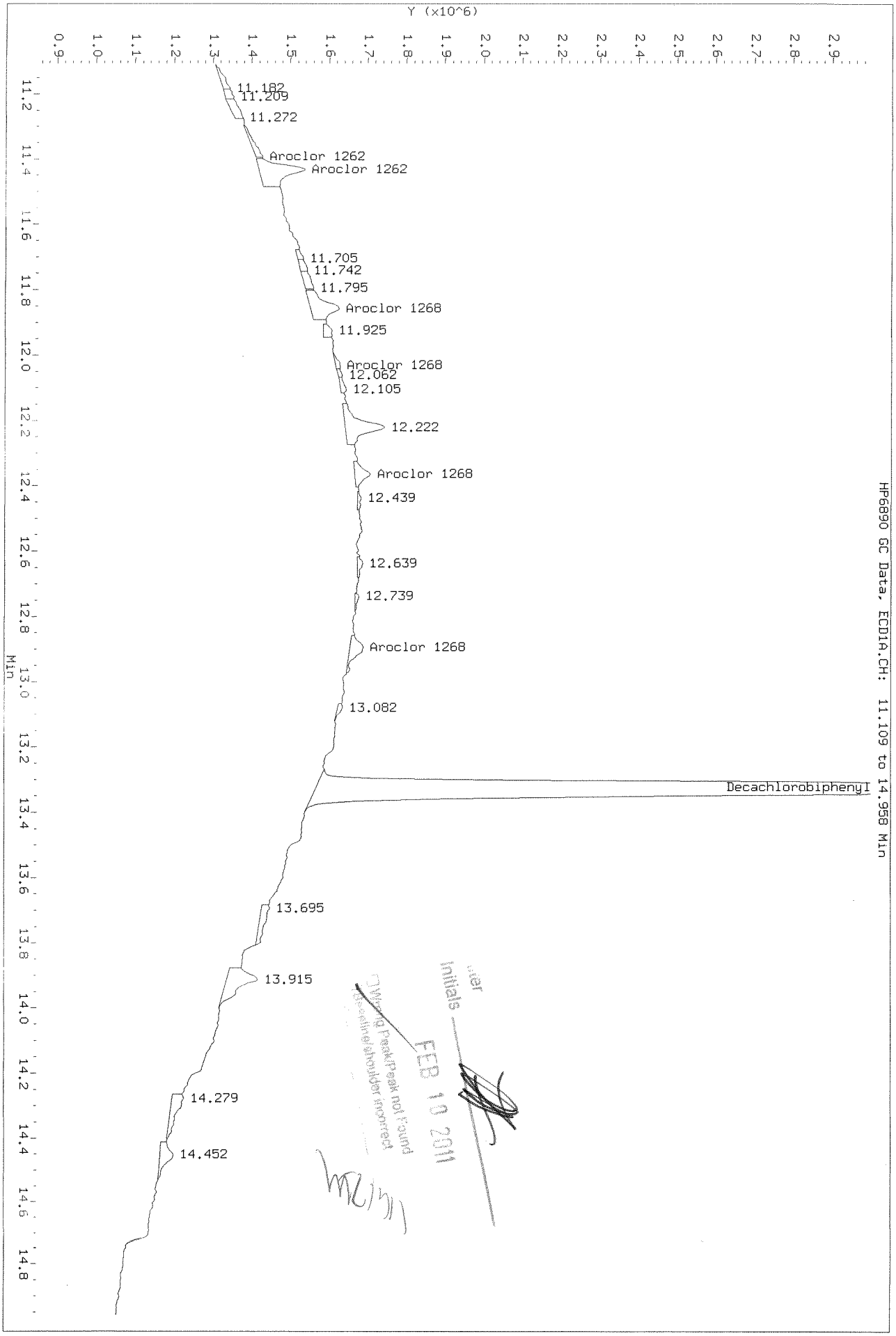


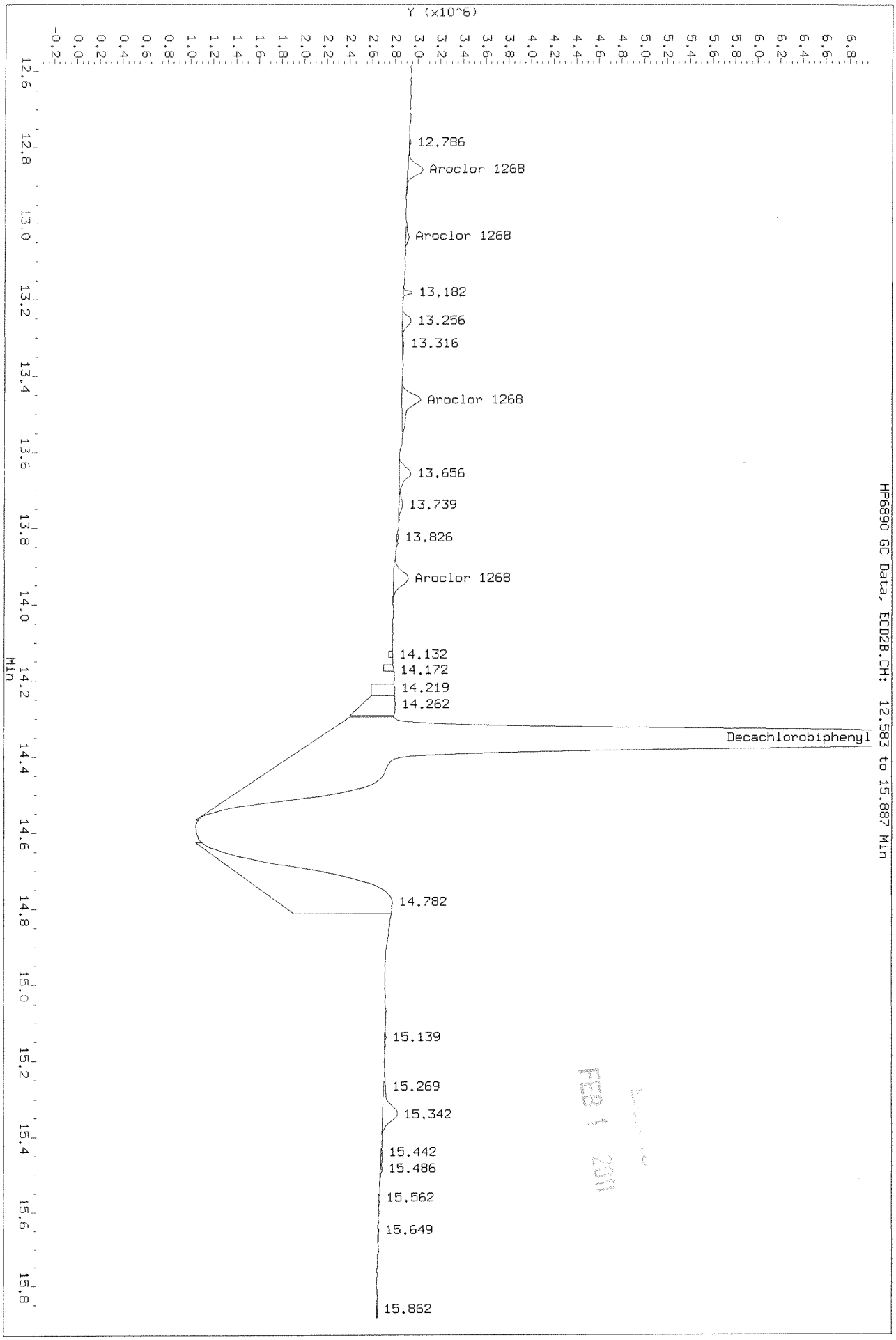
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F012.D
Date : 07-FEB-2011 22:39
Client ID:
Sample Info: K1100692-002

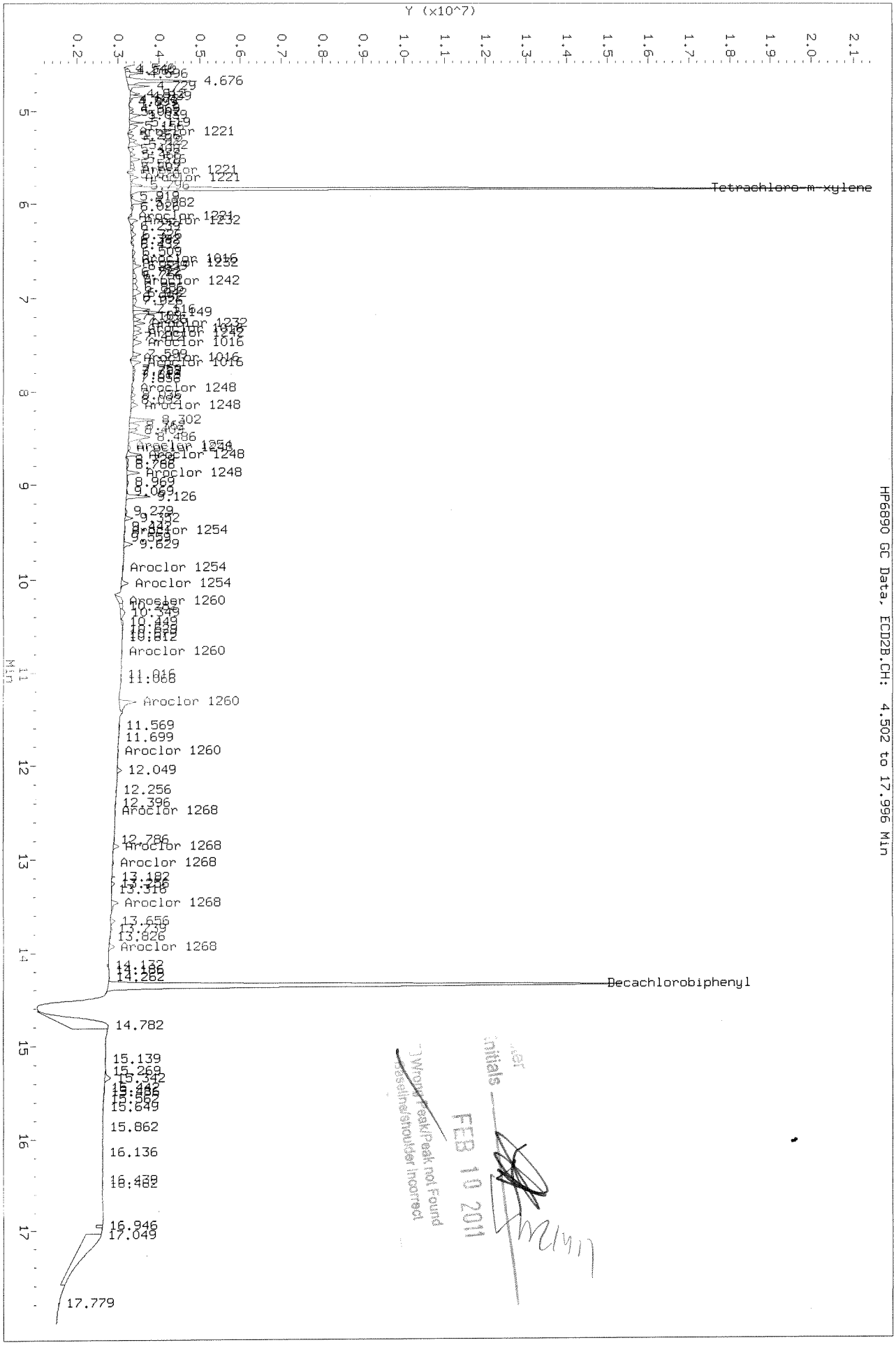
Instrument: GC22.i
Operator: JMSmith
Column phase: DB-XLB
Column diameter: 0.32






Data File: \\cash1\acqudata\GC22\data\020711.b\0207F012.D
Injection Date: 07-FEB-2011 22:39
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 11.109 to 14.958 Min
Y (x10^6)
Min
11.182
11.209
11.272
Aroclor 1262
Aroclor 1262
11.705
11.742
11.795
Aroclor 1268
11.925
Aroclor 1268
12.062
12.105
12.222
Aroclor 1268
12.439
12.639
12.739
Aroclor 1268
13.082
Decachlorobiphenyl
13.695
13.915
14.279
14.452
Initials
FEB 10 2011


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F012.D
Injection Date: 07-FEB-2011 22:39
Instrument: GC22.1
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD2B.CH: 12.583 to 15.887 Min
12.786
Aroclor 1268
Aroclor 1268
13.182
13.256
13.316
Aroclor 1268
13.656
13.739
13.826
Aroclor 1268
14.132
14.172
14.219
14.262
Decachlorobiphenyl
14.782
15.139
15.269
15.342
15.442
15.486
15.562
15.649
15.862


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F012.D
Injection Date: 07-FEB-2011 22:39
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.502 to 17.996 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Decachlorobiphenyl
4.676
Aroclor 1221
Aroclor 1232
Aroclor 1016
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Aroclor 1268
14.782
15.139
15.268
15.649
15.862
16.136
16.946
17.049
17.779
Peak not Found
shoulder incorrect
FEB 10 2011

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	01/25/2011
Sample Matrix:	Water	**Date Received:**	01/26/2011

Polychlorinated Biphenyls (PCBs)

Sample Name:	EB-012511	**Units:**	ug/L
Lab Code:	K1100692-003	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	71	36-113	02/07/11	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F013.D
Lab ID: K1100692-003
RunType: SMPL
Matrix: WATER

Date Acquired: 02/07/2011 23:04
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
ListJoinID: LJ6227

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F013.D
Lab ID: K1100692-003
RunType: SMPL
Matrix: WATER

Date Acquired: 02/07/2011 23:04
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
ListJoinID: LJ6227

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review: 2/10/11

Quantitation Report

Bottle ID:		**Tier:**	IV	**Matrix:**	WATER
Prod Code:	8082 PCB_LL	**Collect Date:**	01/25/2011	**Receive Date:**	01/26/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	K1100692
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997128	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:	Polychlorinated Biphenyls (PCBs)	**Report List ID:**	LJ6227
MB Ref:	J:\GC22\DATA\020711.B\0207F010.D	**Method ID:**	MJ706
		Quant based on Report List	

Data File #1:	J:\GC22\DATA\020711.B\0207F013.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F013.D			**Vial:**	6
Acqu Date:	02/07/2011 23:04	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K1100692-003				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Decachlorobiphenyl	13.33 0.00	14.35 0.00	7504336	24474065m	3.54	3.48			71OK
				%Recovery =	71OK	70OK	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1016 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F013.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F013.D			**Vial:**	6
Acqu Date:	02/07/2011 23:04	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K1100692-003				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1260 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F013.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F013.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F013.D
Inj Date : 07-FEB-2011 23:04
Sample Info: K1100692-003
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.276	5.833	6318810	21684089	3.33	3.43		100.00(R)
Decachlorobiphenyl	13.330	14.353	7504336	24474065	3.54	3.48		100.00(R)

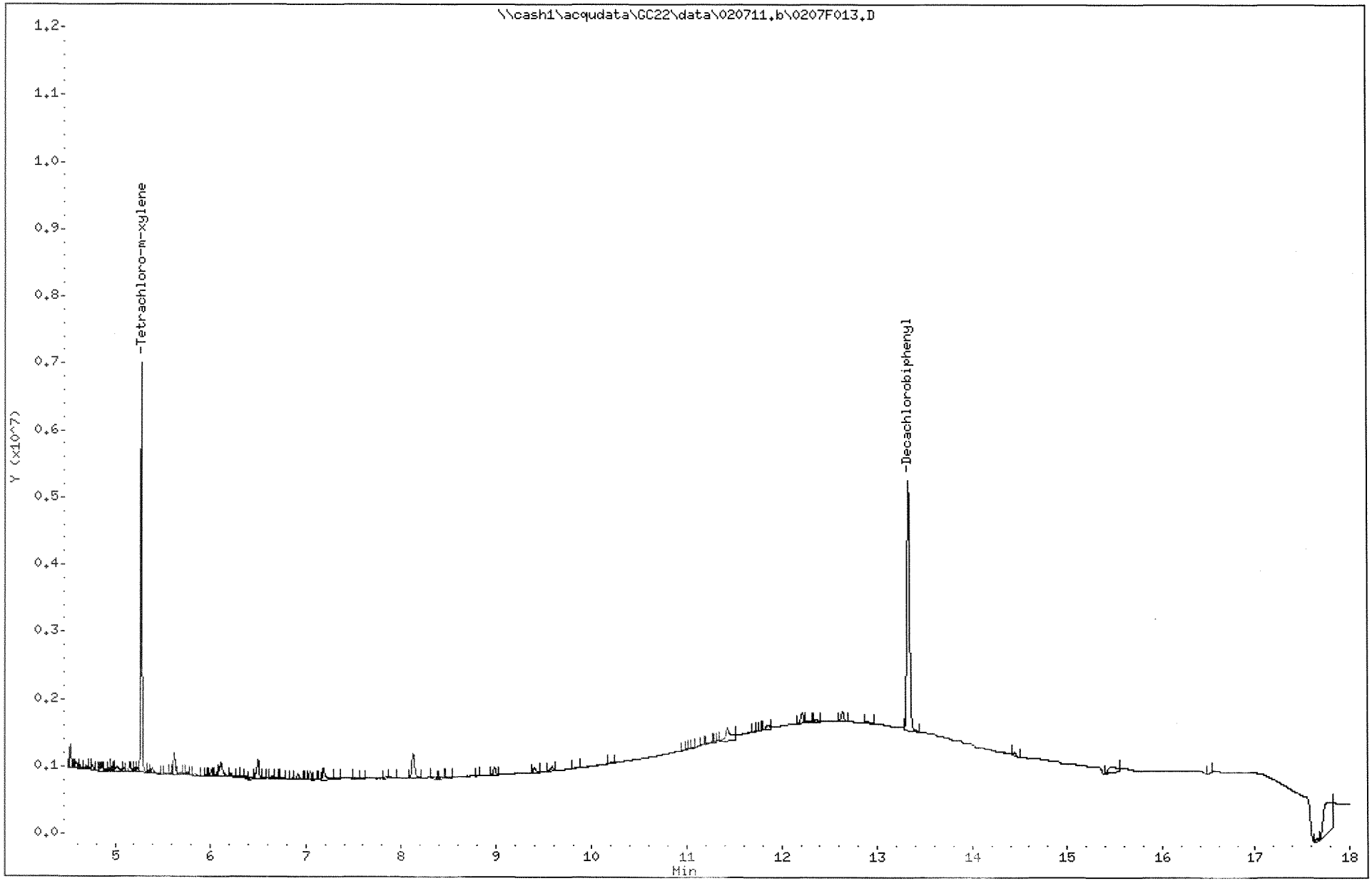
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F013.D
Date : 07-FEB-2011 23:04
Client ID:
Sample Info: K1100692-003

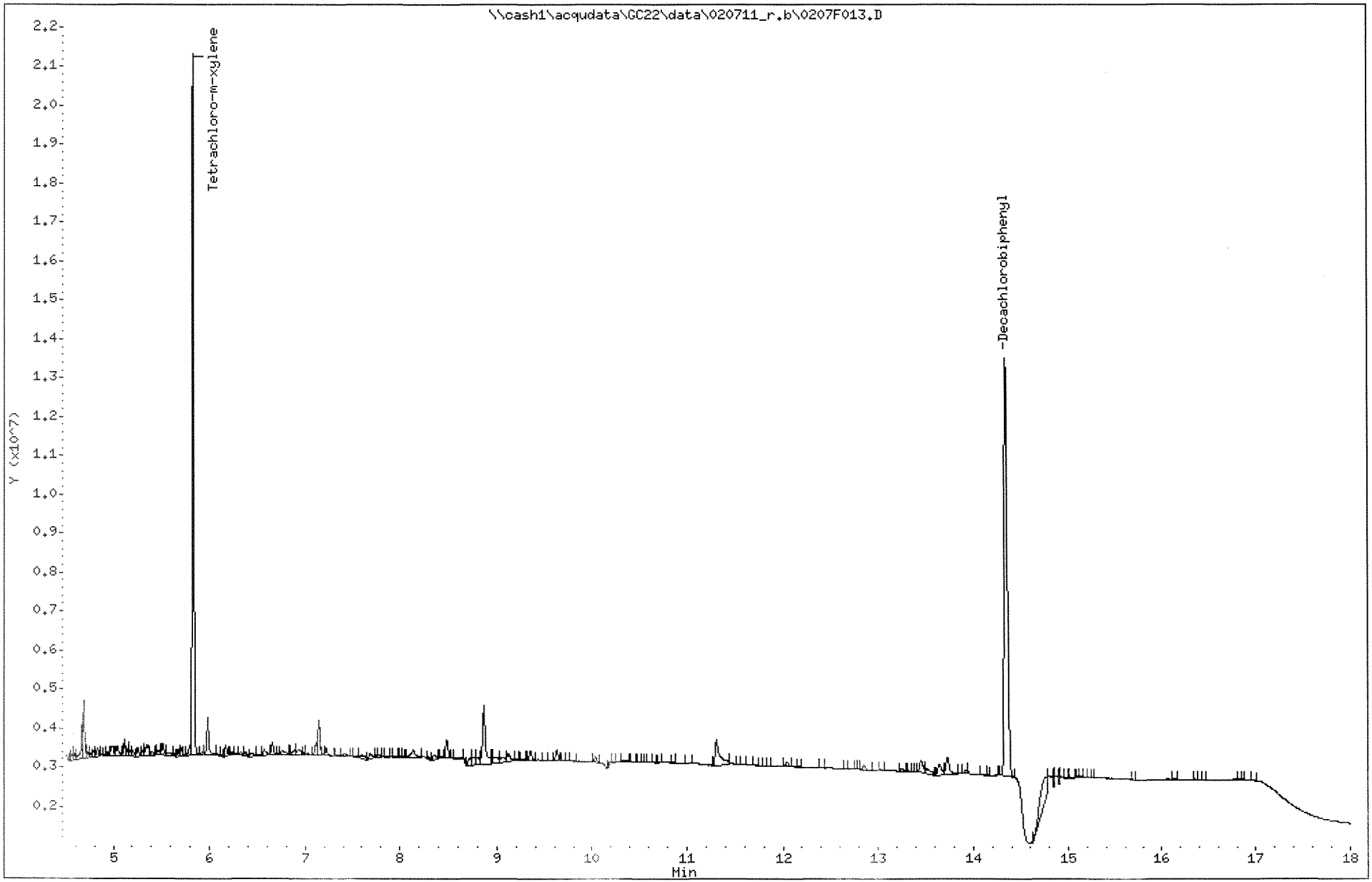
Instrument: GC22.i

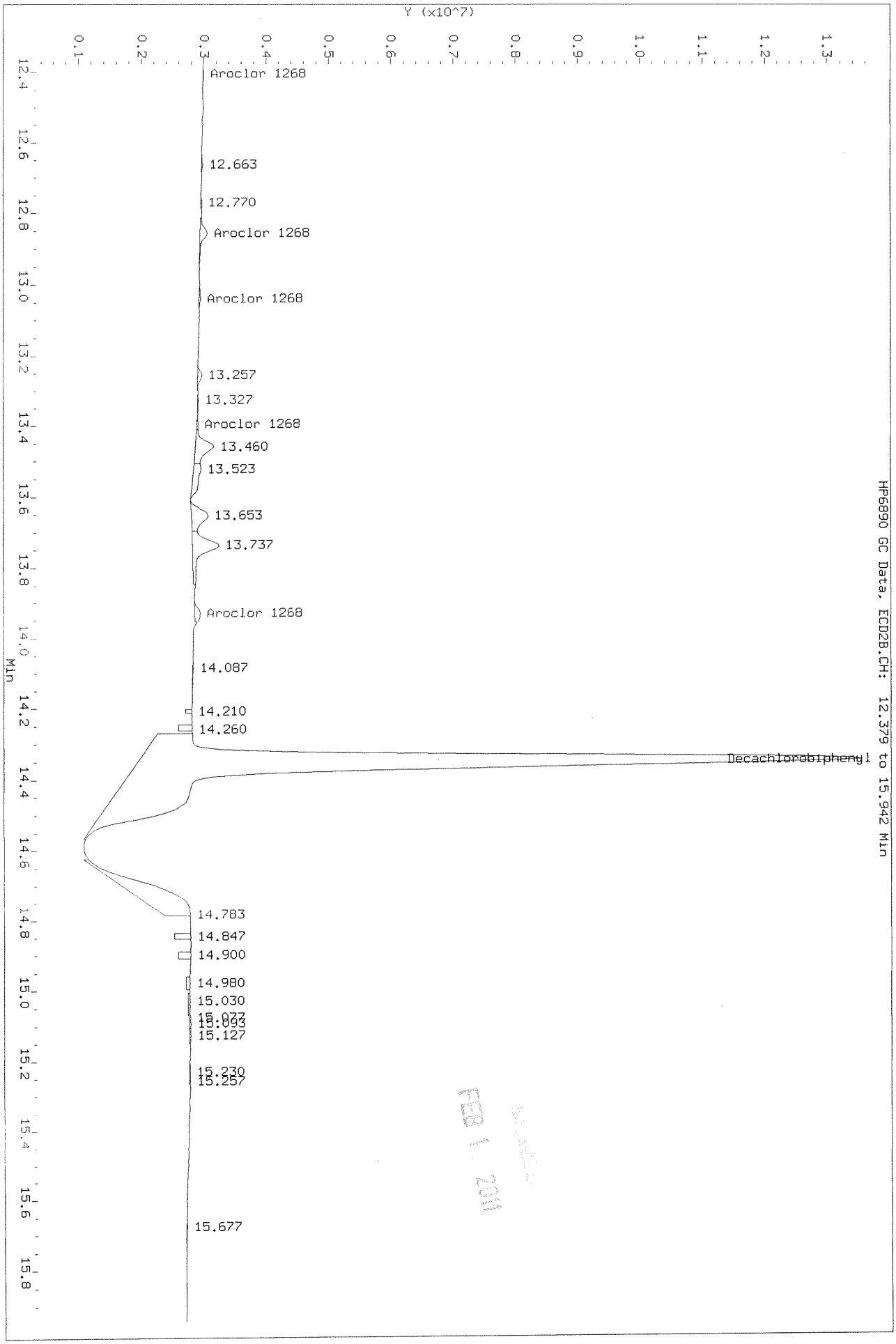
Operator: JMSmith
Column phase: DB-35MS
Column diameter: 0.32



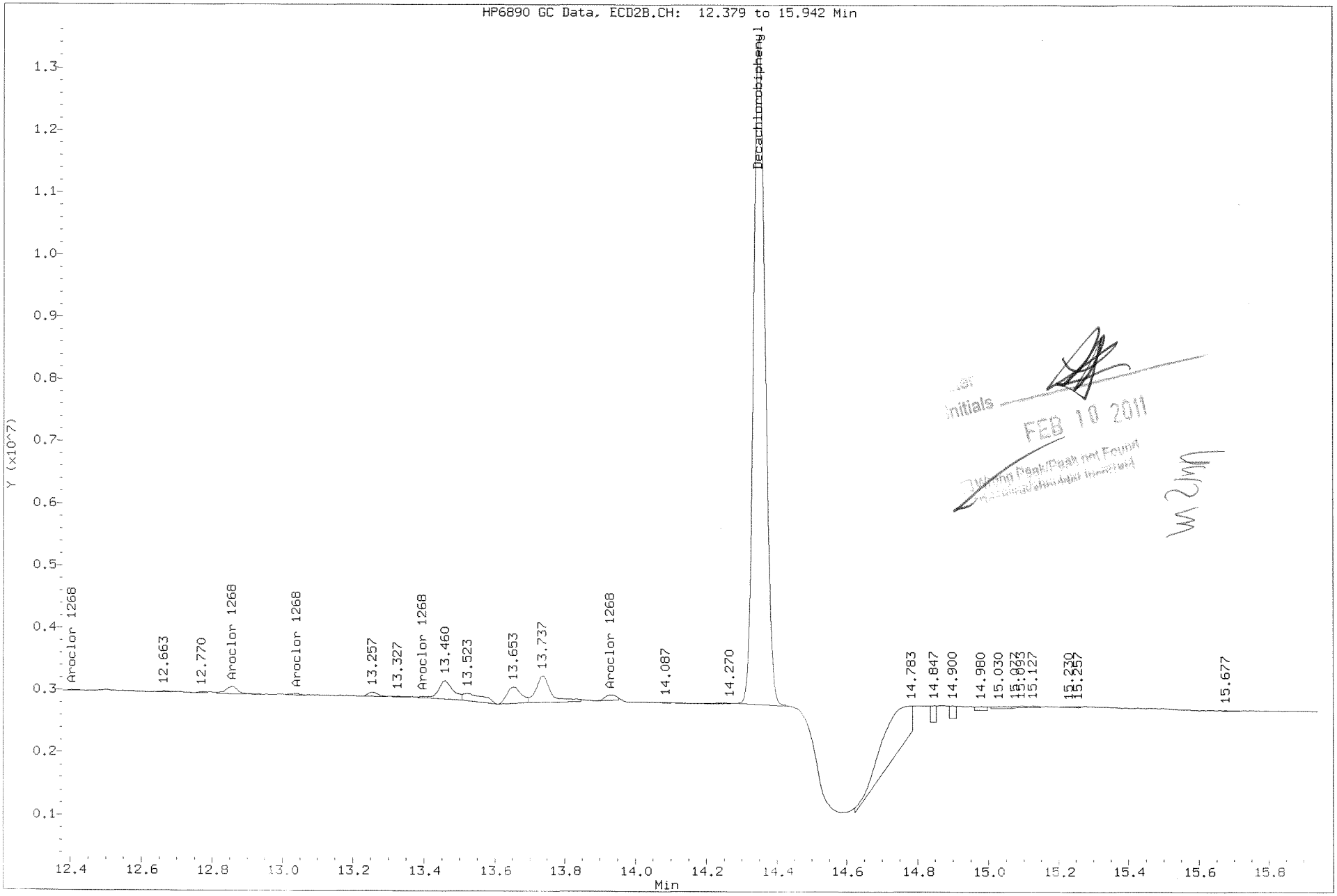
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F013.D
Date : 07-FEB-2011 23:04
Client ID:
Sample Info: K1100692-003

Instrument: GC22.i
Operator: JMSmith
Column phase: DB-XLB
Column diameter: 0.32




Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F013.D
Injection Date: 07-FEB-2011 23:04
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 12.379 to 15.942 Min
Y (x10^7)
Min
Aroclor 1268
12.663
12.770
Aroclor 1268
Aroclor 1268
13.257
13.327
Aroclor 1268
13.460
13.523
13.653
13.737
Aroclor 1268
14.087
14.210
14.260
Decachlorobiphenyl
14.783
14.847
14.900
14.980
15.030
15.077
15.093
15.127
15.230
15.257
15.677

Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F013.D
Injection Date: 07-FEB-2011 23:04
Instrument: GC22.i
Client Sample ID:



595

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polychlorinated Biphenyls (PCBs)

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1101180-7	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.039	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	79	36-113	02/07/11	Acceptable

Comments:

Exception Report

Data File:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F010.D	**Date Acquired:**	02/07/2011 21:51
Lab ID:	KWG1101180-7	**Date Quantitated:**	02/10/2011 16:40
RunType:	MB	**Batch ID:**	KWG1101323
Matrix:	WATER	**Analysis Method:**	8082A
		MethodJoinID:	MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F010.D
Lab ID: KWG1101180-7
RunType: MB
Matrix: WATER

Date Acquired: 02/07/2011 21:51
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8082 PCB_ULL	**Collect Date:**		**Receive Date:**	02/07/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997150	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:		**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F010.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F010.D			**Vial:**	3
Acqu Date:	02/07/2011 21:51	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-7				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	5.28 +0.00	5.84 +0.00	4329384	14332025	2.28	2.27			46OK
				%Recovery =	46OK	45OK	Limits =	21-114	
Decachlorobiphenyl	13.33 +0.00	14.35 0.00	8225777	27634799m	3.88	3.93			79OK
				%Recovery =	78OK	79OK	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1016 {1}			0	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {2}			0	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {3}			0	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {4}			0	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {5}			0	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F010.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F010.D			**Vial:**	3
Acqu Date:	02/07/2011 21:51	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	MB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-7				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1260 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1262 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1268 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1040 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F010.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F010.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F010.D
Inj Date : 07-FEB-2011 21:51
Sample Info: KQ1100885-07MB
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.279	5.836	4329384	14332025	2.28	2.27		100.00(R)
Decachlorobiphenyl	13.332	14.353	8225777	27634799	3.88	3.93		100.00(R)

QC Flag Legend

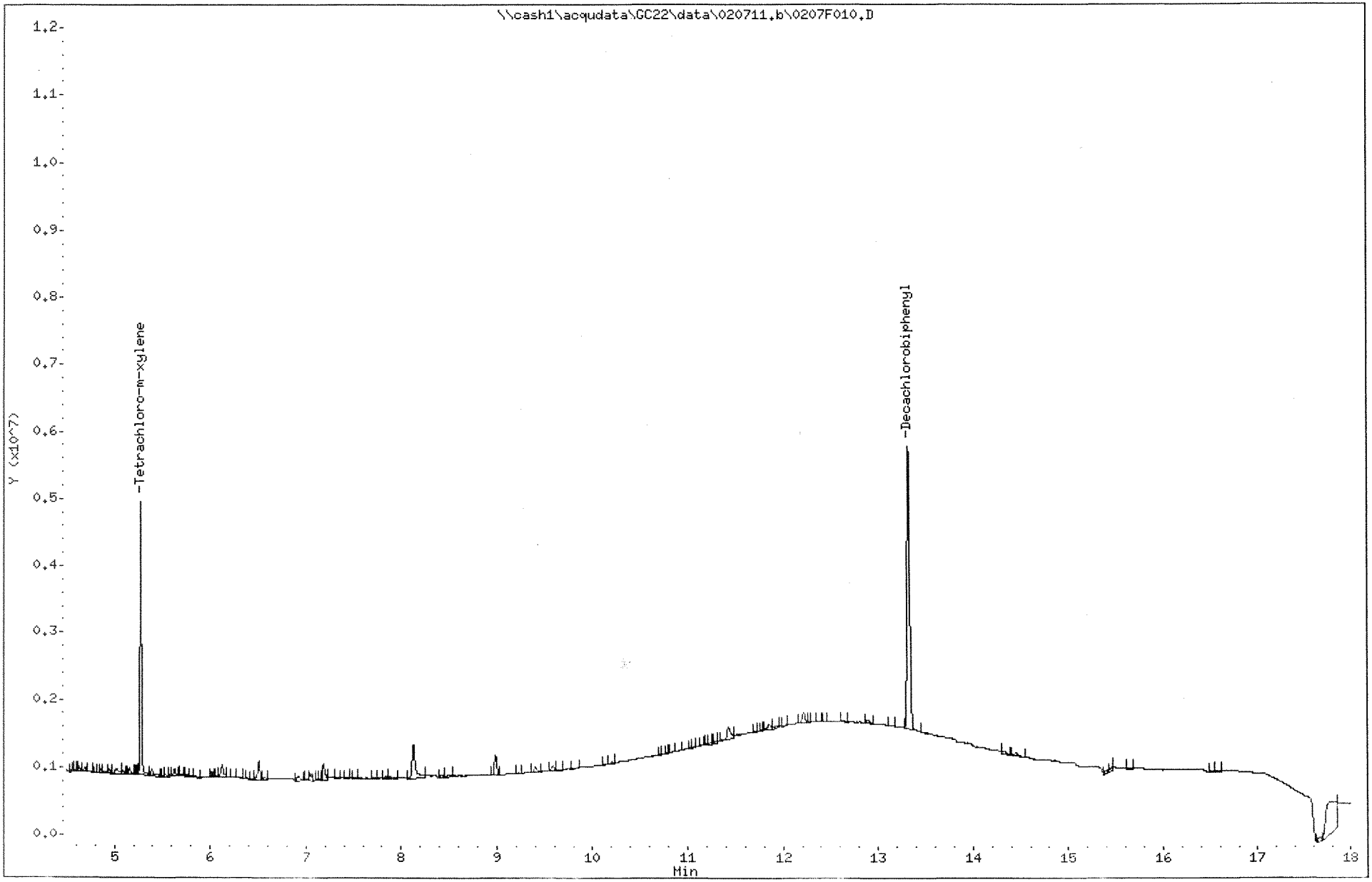
R - Spike/Surrogate failed recovery limits.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F010.D
Date : 07-FEB-2011 21:51
Client ID:
Sample Info: KQ1100885-07MB

Instrument: GC22.i

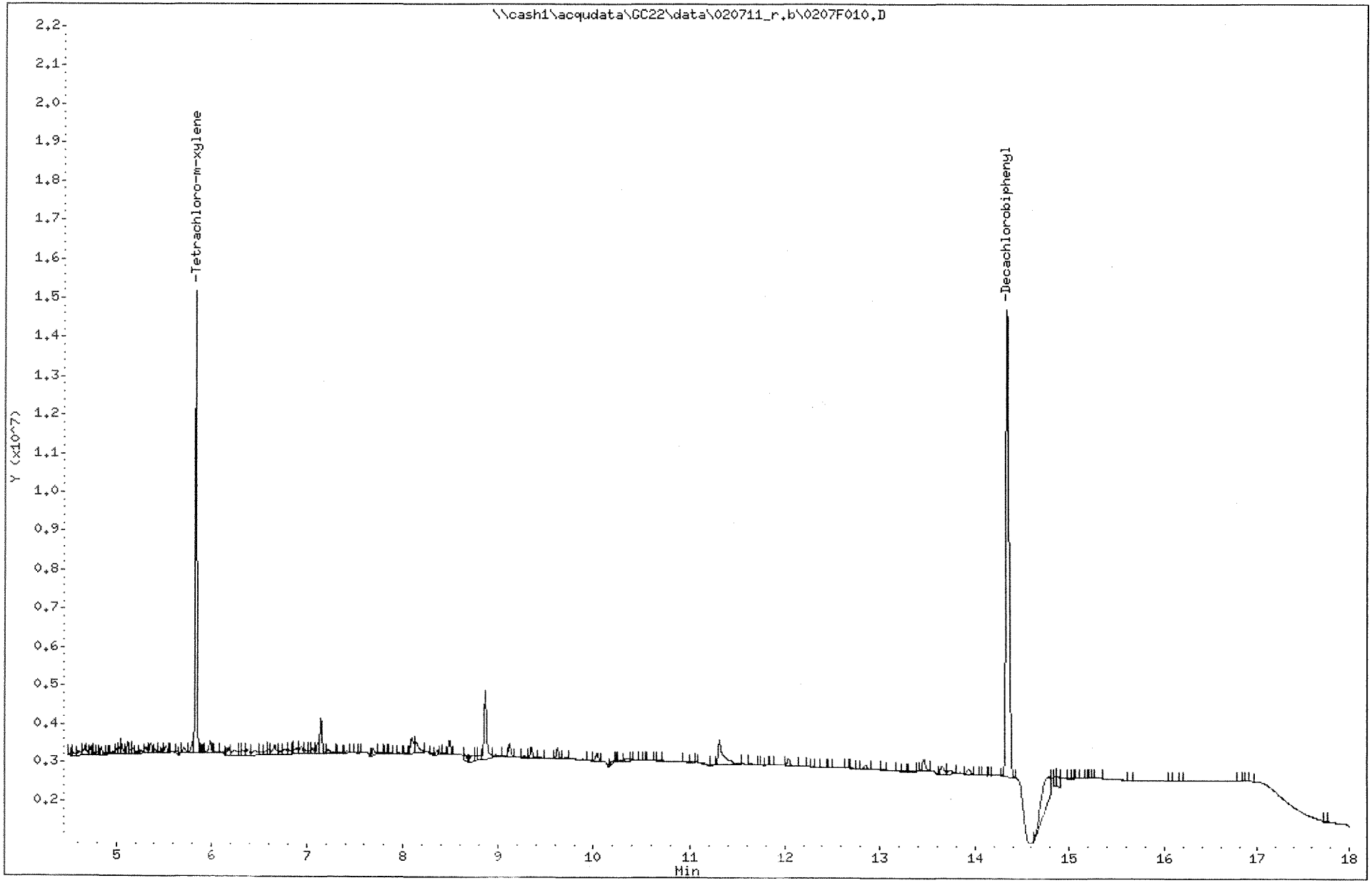
Operator: JMSmith
Column diameter: 0.32

Column phase: DB-35MS

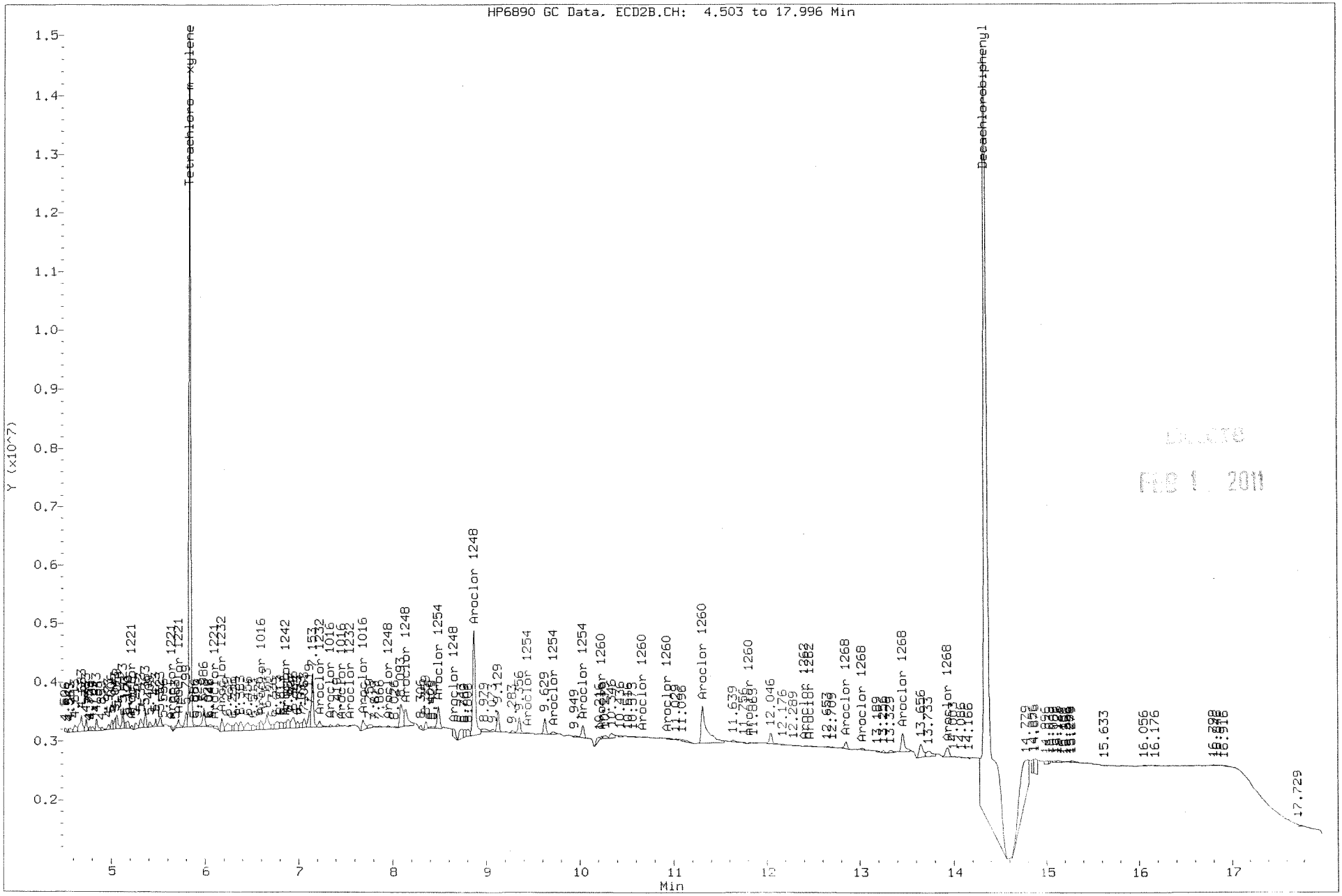


602

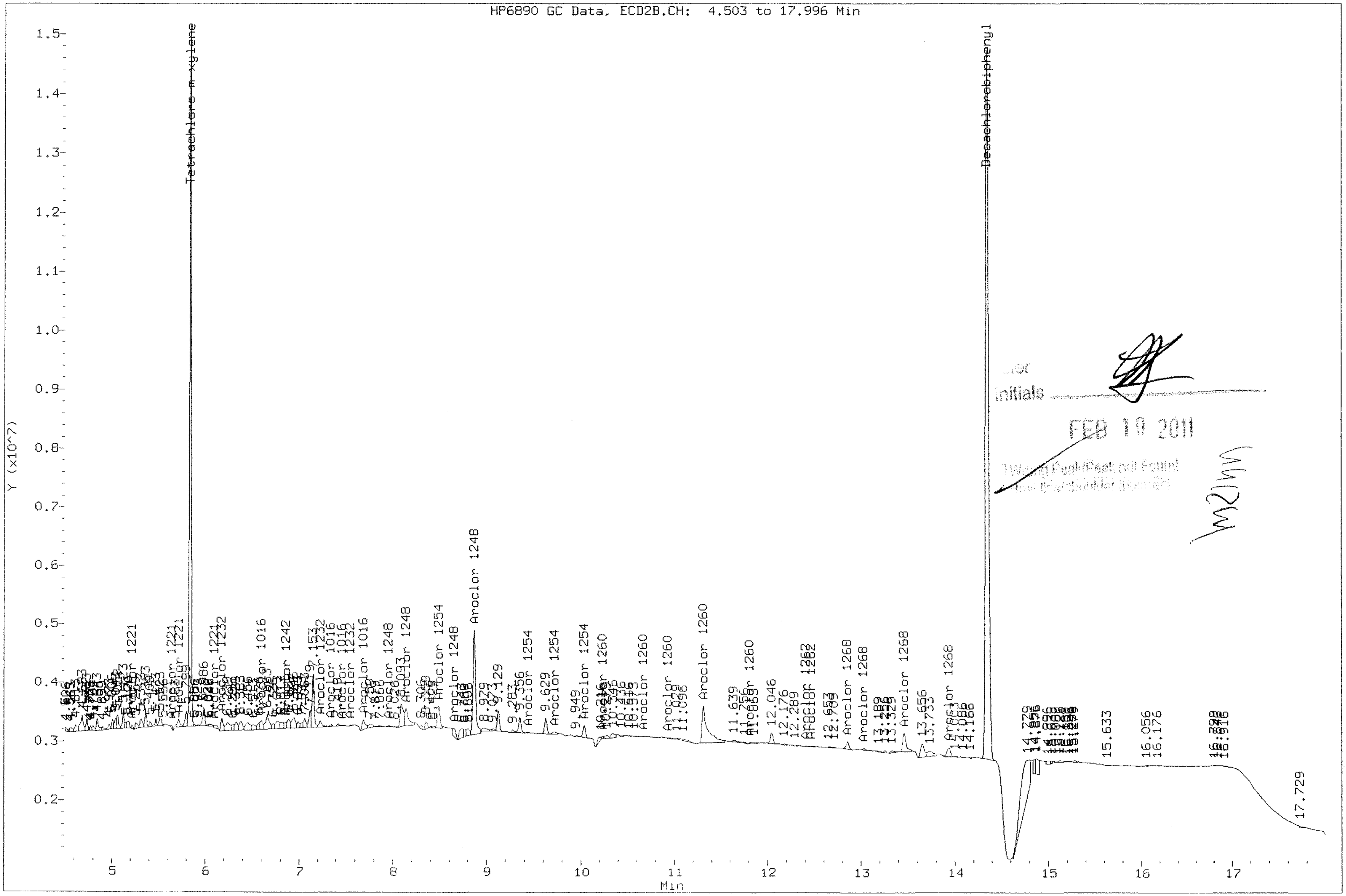
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F010.D
Date : 07-FEB-2011 21:51
Client ID:
Instrument: GC22.i
Sample Info: KQ1100885-07MB
Operator: JMSmith
Column phase: DB-XLB
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F010.D
Injection Date: 07-FEB-2011 21:51
Instrument: GC22.i
Client Sample ID:



Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F010.D
Injection Date: 07-FEB-2011 21:51
Instrument: GC22.i
Client Sample ID:



Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Polychlorinated Biphenyls (PCBs)

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1100806-002	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	8082A		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1260	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	88	36-113	02/08/11	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F026.D
Lab ID: K1100806-002
RunType: SMPL
Matrix: WATER

Date Acquired: 02/08/2011 04:22
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
ListJoinID: LJ6211

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review: MM2/11/11

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F026.D
Lab ID: K1100806-002
RunType: SMPL
Matrix: WATER

Date Acquired: 02/08/2011 04:22
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
ListJoinID: LJ6211

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
Preparation Holding Time	NA	NA	NA	x	
Pre-Preparation Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Method Blank	NA	NA	NA	x	
MB Surrogate Recovery	NA	NA	NA	x	
Lab Control Spike	NA	NA	NA	x	
Duplicate Lab Control Spike	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**	V	**Matrix:**	WATER
Prod Code:	8082 PCB_ULL	**Collect Date:**	01/27/2011	**Receive Date:**	01/29/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	K1100806
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997140	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:	Polychlorinated Biphenyls (PCBs)	**Report List ID:**	LJ6211
MB Ref:	J:\GC22\DATA\020711.B\0207F010.D	**Method ID:**	MJ702
		Quant based on Report List	

Data File #1:	J:\GC22\DATA\020711.B\0207F026.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F026.D			**Vial:**	15
Acqu Date:	02/08/2011 04:22	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K1100806-002				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Decachlorobiphenyl	13.33 +0.00	14.35 +0.00	9343407	29775713m	4.41	4.23			88OK
			%Recovery =		88OK	85OK	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1016 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1016 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F026.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F026.D			**Vial:**	15
Acqu Date:	02/08/2011 04:22	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	SMPL			**Soln Conc. Units:**	ng/mL
Lab ID:	K1100806-002				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1260 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1020 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F026.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F026.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F026.D
Inj Date : 08-FEB-2011 04:22
Sample Info: K1100806-002
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.279	5.840	6468760	23948444	3.41	3.79		100.00(R)
Decachlorobiphenyl	13.333	14.353	9343407	29775713	4.41	4.23		100.00(R)

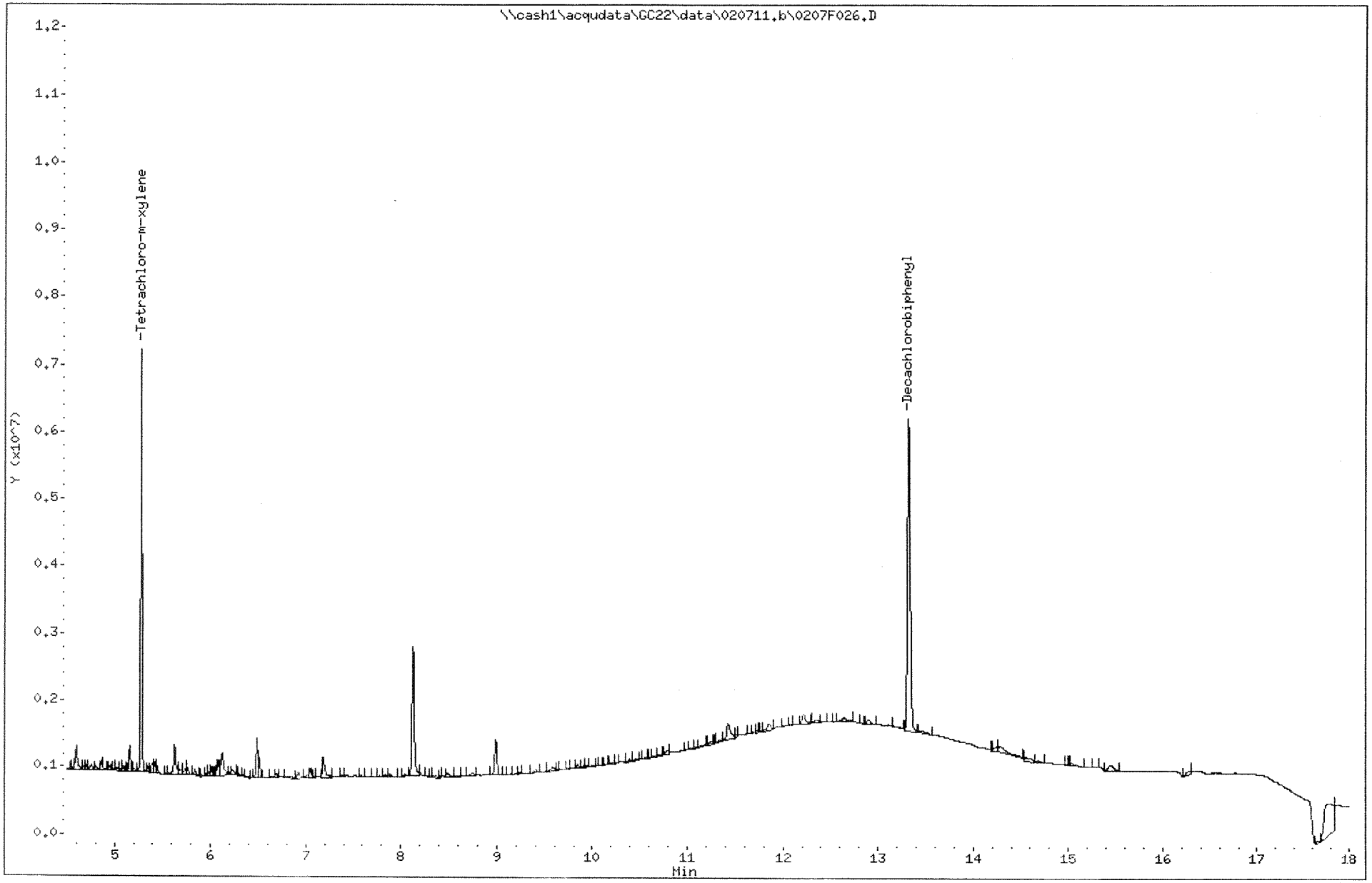
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F026.D
Date : 08-FEB-2011 04:22
Client ID:
Sample Info: K1100806-002

Instrument: GC22.i

Operator: JHSmith
Column phase: DB-35MS
Column diameter: 0.32



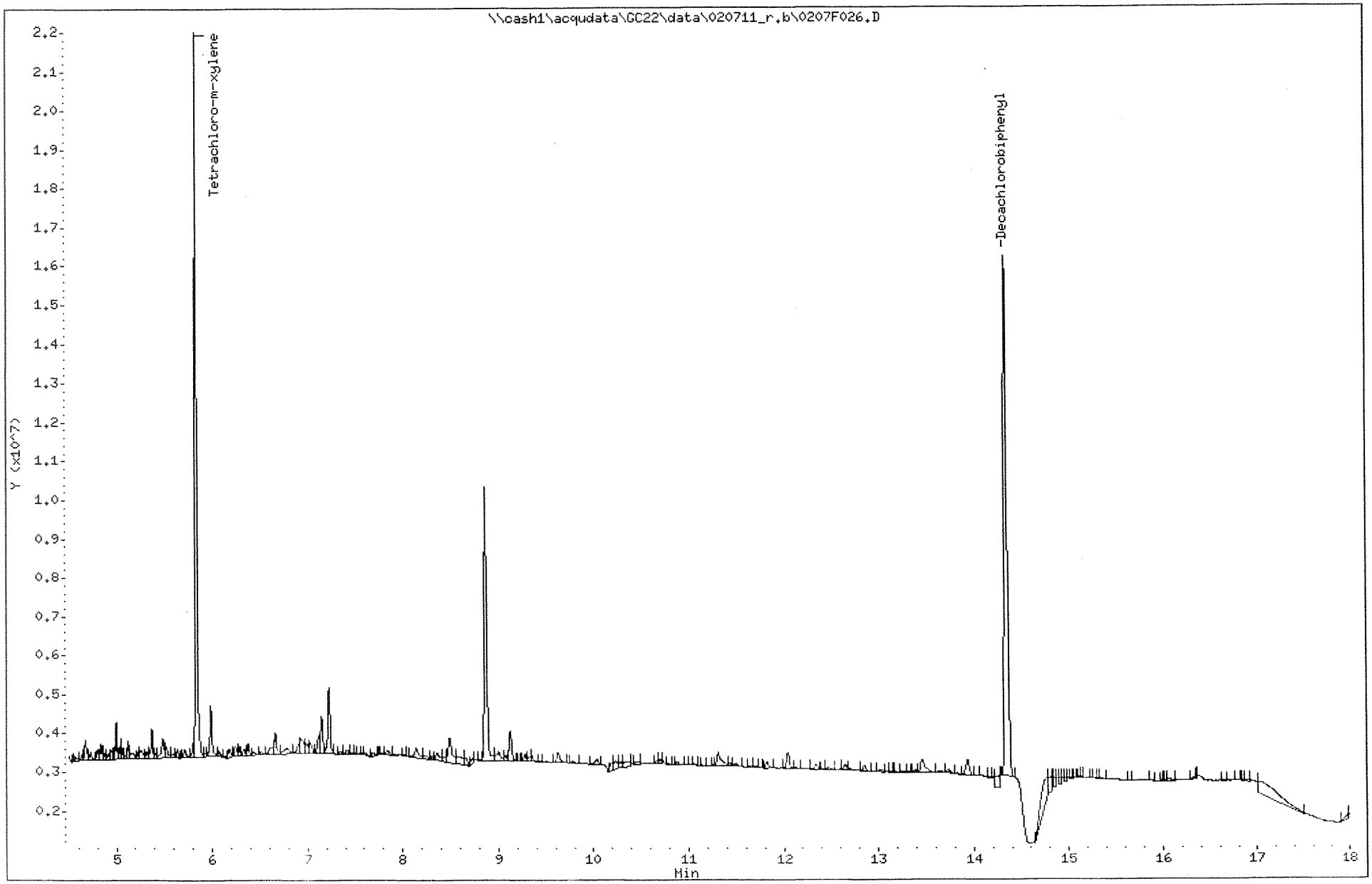
612

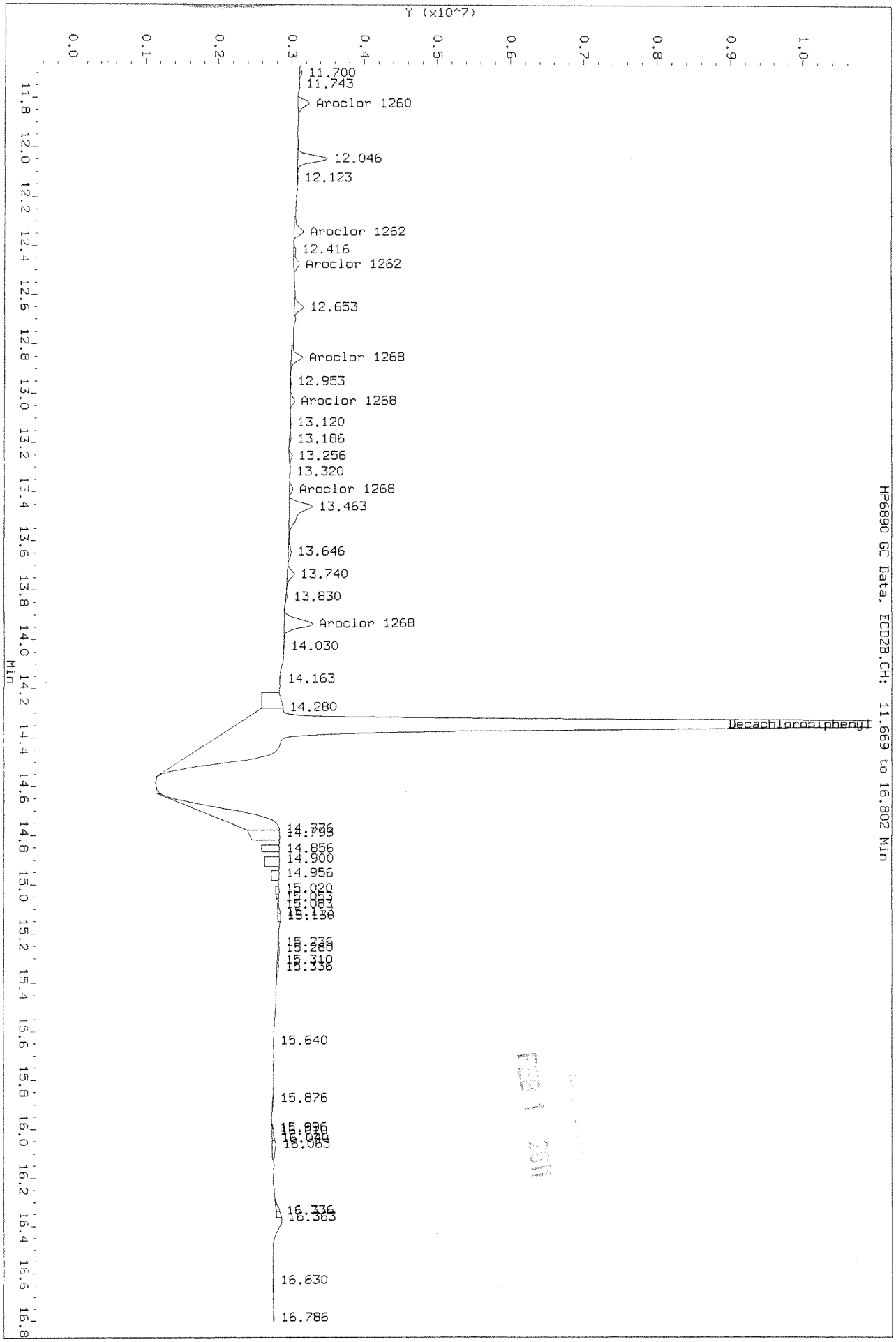
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F026.D
Date : 08-FEB-2011 04:22
Client ID:
Sample Info: K1100806-002

Instrument: GC22.i

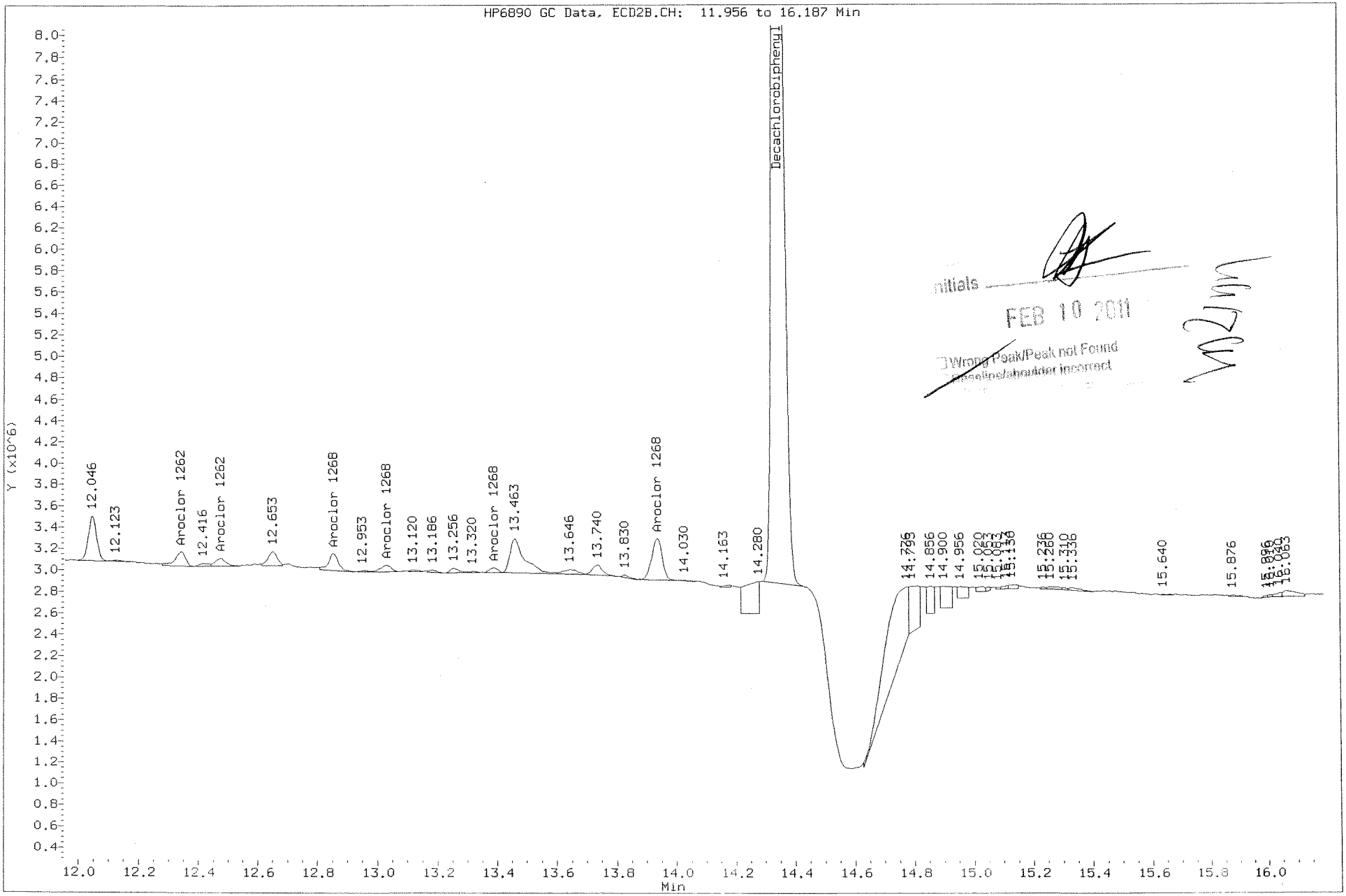
Operator: JMSmith
Column diameter: 0.32

Column phase: DB-XLB




Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F026.D
Injection Date: 08-FEB-2011 04:22
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 11.669 to 16.802 Min
Y (x10^7)
Min
11.700
11.743
Aroclor 1260
12.046
12.123
Aroclor 1262
12.416
Aroclor 1262
12.653
Aroclor 1268
12.953
Aroclor 1268
13.120
13.186
13.256
13.320
Aroclor 1268
13.463
13.646
13.740
13.830
Aroclor 1268
14.030
14.163
14.280
Decachlorobiphenyl
14.856
14.900
14.956
15.640
15.876
16.336
16.363
16.630
16.786

Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F026.D
Injection Date: 08-FEB-2011 04:22
Instrument: GC22.i
Client Sample ID:



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Batch QCMS
Lab Code: KWG1101180-1

Units: ug/L
Basis: NA

Extraction Method: EPA 3535A
Analysis Method: 8082A

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	**0.155**		0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1260	**0.166**		0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	89	36-113	02/08/11	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F027.D
Lab ID: KWG1101180-1 -- K1100806-002MS
RunType: MS
Matrix: WATER

Date Acquired: 02/08/2011 04:46
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F027.D
Lab ID: KWG1101180-1 -- K1100806-002MS
RunType: MS
Matrix: WATER

Date Acquired: 02/08/2011 04:46
Date Quantitated: 02/10/2011 16:41
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8082 PCB_ULL	**Collect Date:**		**Receive Date:**	02/07/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997144	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:	J:\GC22\DATA\020711.B\0207F010.D	**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F027.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F027.D			**Vial:**	16
Acqu Date:	02/08/2011 04:46	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-1 -- K1100806-002MS				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	5.28	0.00	5.84		6357467	23546756m	3.35	3.73			75OK
					%Recovery =		67OK	75OK	Limits =	21-114	
Decachlorobiphenyl	13.33	+0.00	14.36	+0.00	9408566	29926075m	4.44	4.25			89OK
					%Recovery =		89OK	85OK	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2		Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016					0	0	78.90	82.24	0.155	0.161	**0.155**
Aroclor 1016 {1}	6.35		6.60	+0.00	1754495	14845209m	77.12	84.97	0.151	0.167	
Aroclor 1016 {2}	6.38	0.00	7.30	+0.00	2364874	28688815m	76.39	81.75	0.150	0.160	
Aroclor 1016 {3}	6.74		7.50	+0.00	5333356	15447065m	79.60	88.46	0.156	0.173	
Aroclor 1016 {4}	6.90	+0.00	7.64	+0.00	3414369	11239307m	82.74	77.44	0.162	0.152	
Aroclor 1016 {5}	6.96		7.71		3973756	13311062m	78.64	78.59	0.154	0.154	
Aroclor 1221					0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232					0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242					0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}					0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F027.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F027.D			**Vial:**	16
Acqu Date:	02/08/2011 04:46	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	MS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-1 -- K1100806-002MS				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	84.61	88.02	0.166	0.173	**0.166**
Aroclor 1260 {1}	8.96	10.24	10814487	38989535m	91.80	82.92	0.180	0.163	
Aroclor 1260 {2}	9.24	10.73	13133470	42599484m	77.32	75.92	0.152	0.149	
Aroclor 1260 {3}	9.84	10.88	10382058	30854569m	69.76	96.76	0.137	0.190	
Aroclor 1260 {4}	10.40 +0.00	11.27	9938419	28130822m	90.84	90.47	0.178	0.177	
Aroclor 1260 {5}	10.80 0.00	11.82 +0.00	26108933	70466466m	93.35	94.05	0.183	0.184	
Aroclor 1262			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1262 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1268 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1020 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F027.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F027.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F027.D
Inj Date : 08-FEB-2011 04:46
Sample Info: K1100806-002MS
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.275	5.835	6357467	23546756	3.35	3.73		100.00(R)
Aroclor 1016	6.348	6.599	1754495	14845209	77.1	85.0	80.00- 120.00	100.00
	6.382	7.299	2364874	28688815	76.4	81.7	103.28- 154.92	134.79
	6.738	7.499	5333356	15447065	79.6	88.5	231.04- 346.55	303.98
	6.902	7.639	3414369	11239307	82.7	77.4	146.37- 219.55	194.61
	6.958	7.712	3973756	13311062	78.6	78.6	176.02- 264.04	226.49
			Average of Peak Amounts =		78.9	82.2		
Aroclor 1260	8.958	10.235	10814487	38989535	91.8	82.9	80.00- 120.00	100.00
	9.238	10.725	13133470	42599484	77.3	75.9	113.06- 169.59	121.44
	9.838	10.882	10382058	30854569	69.8	96.8	101.19- 151.78	96.00
	10.402	11.265	9938419	28130822	90.8	90.5	75.73- 113.59	91.90
	10.795	11.822	26108933	70466466	93.3	94.0	199.54- 299.31	241.43
			Average of Peak Amounts =		84.6	88.0		
Decachlorobiphenyl	13.332	14.355	9408566	29926075	4.44	4.25		100.00(R)

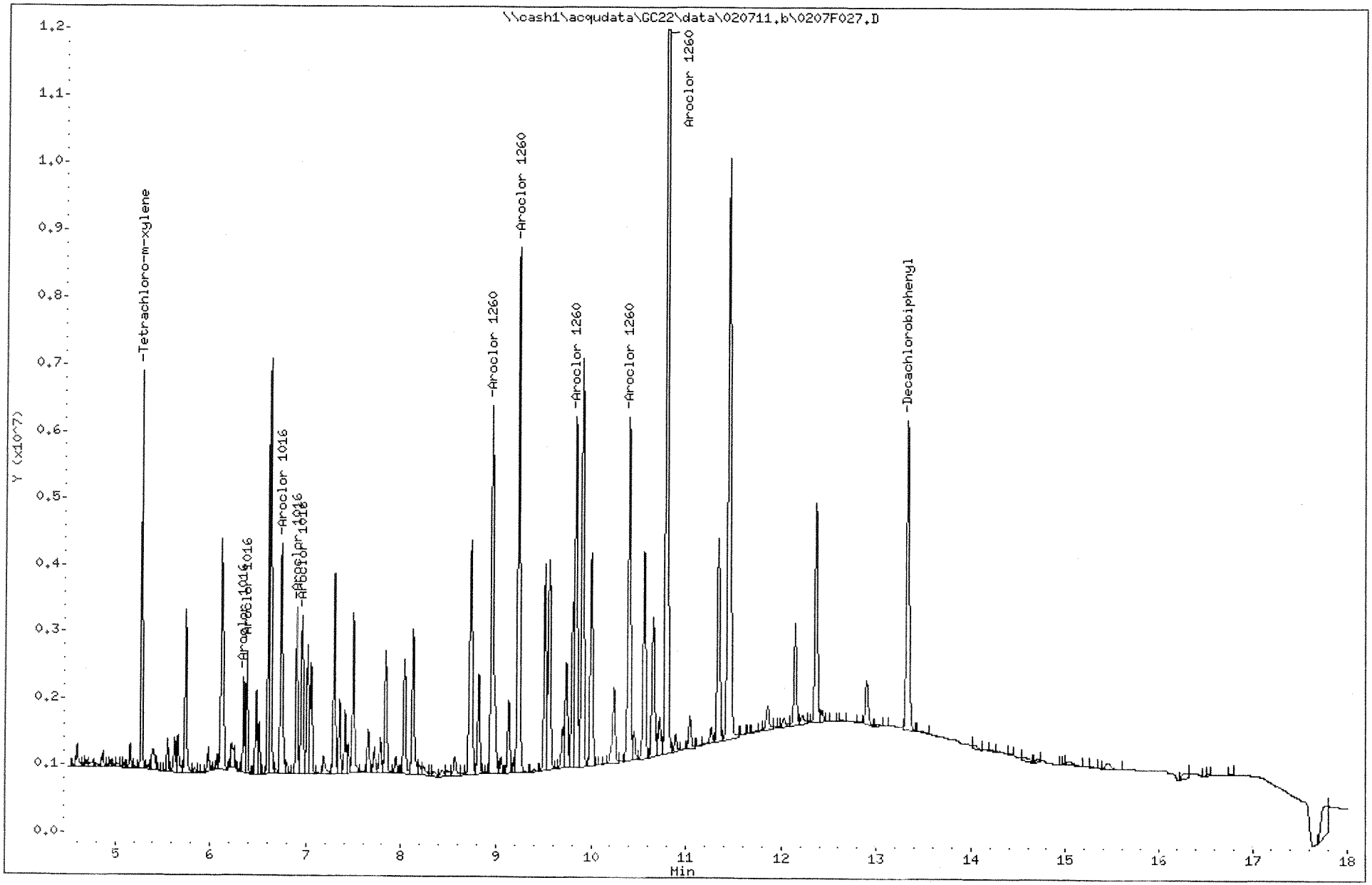
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F027.D
Date : 08-FEB-2011 04:46
Client ID:
Sample Info: K1100806-002MS

Instrument: GC22.i

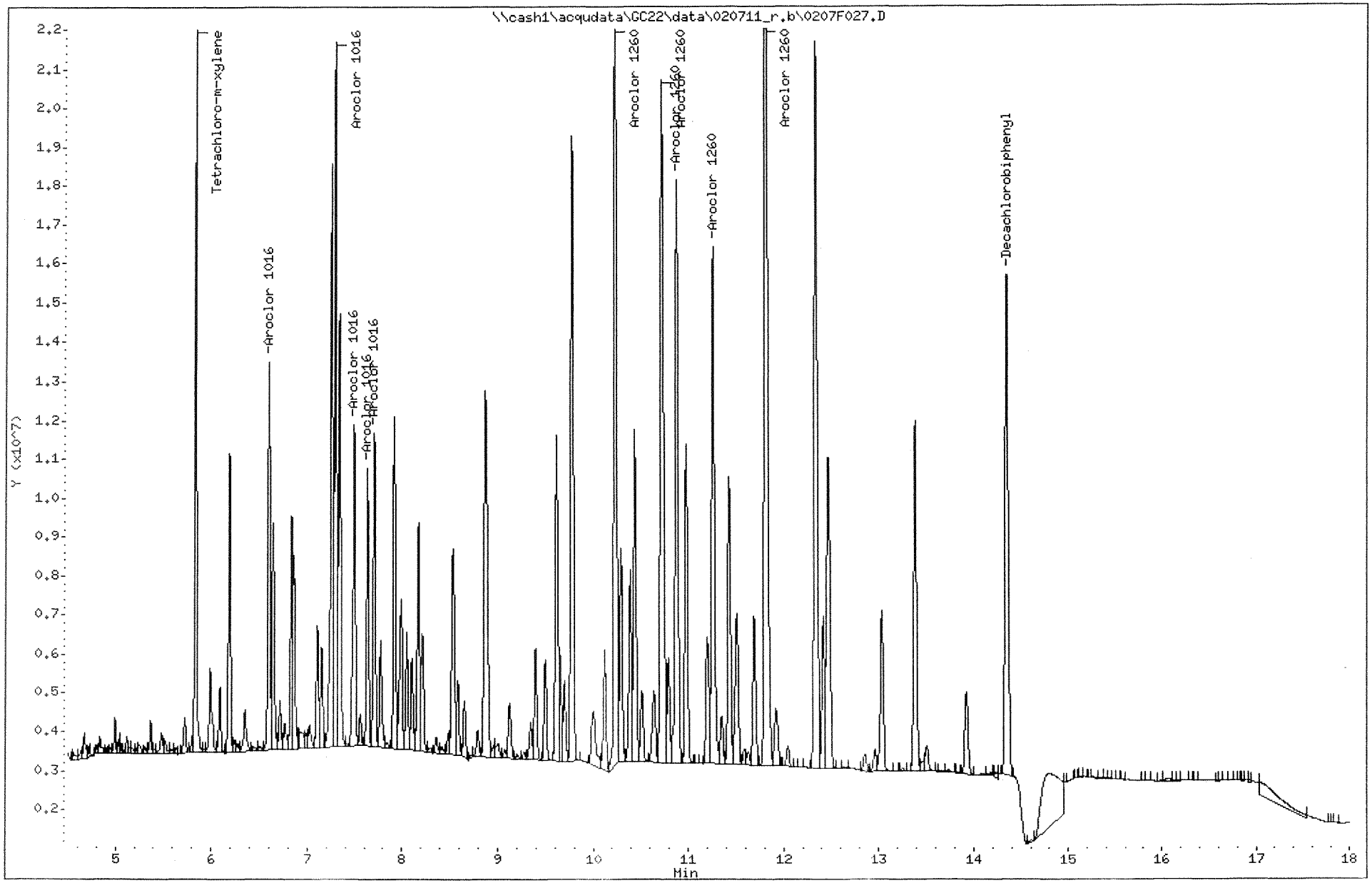
Operator: JMSmith
Column phase: DB-35MS
Column diameter: 0.32

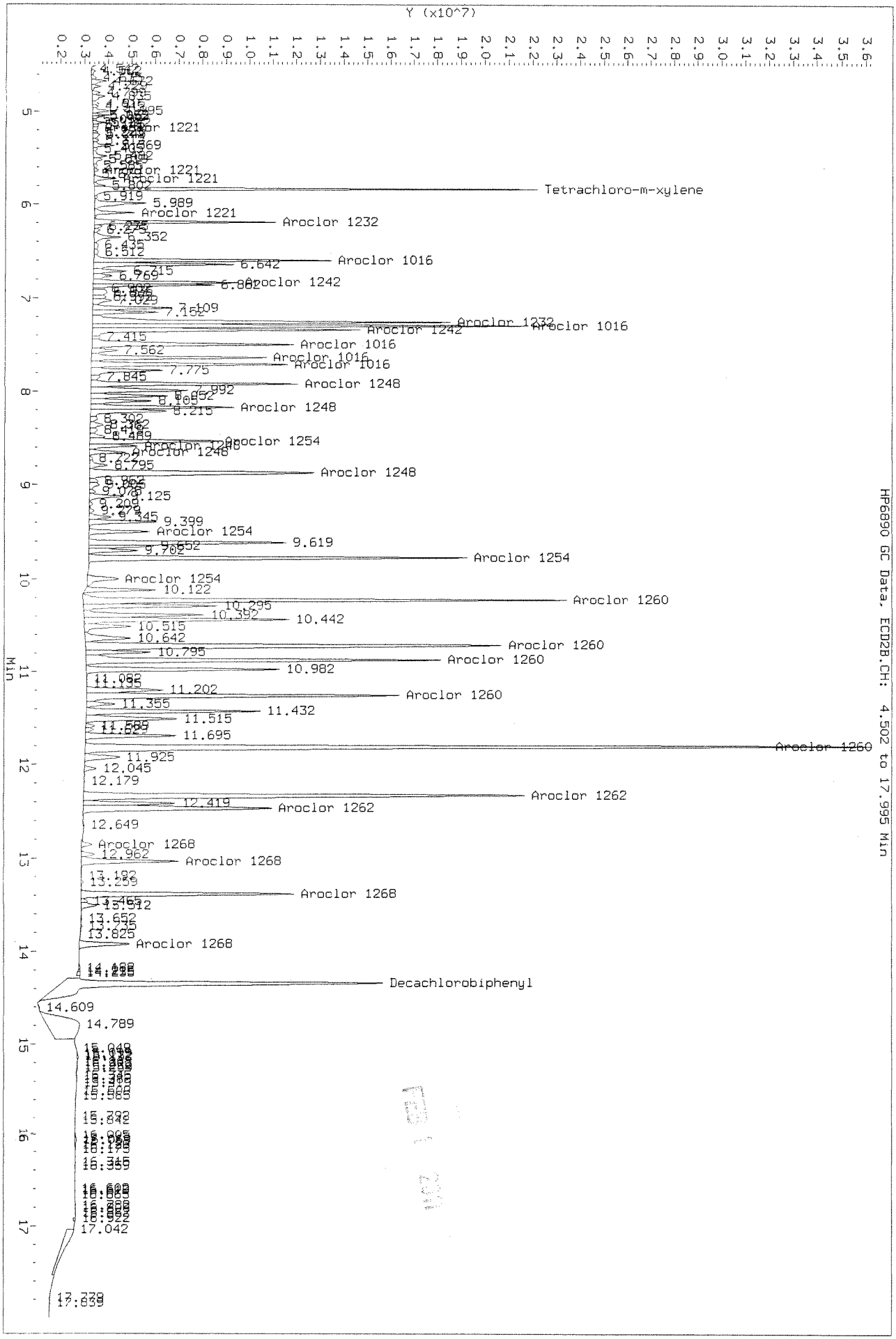


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F027.D
Date : 08-FEB-2011 04:46
Client ID:
Sample Info: K1100806-002MS

Instrument: GC22.i

Operator: JMSmith
Column phase: DB-XLB
Column diameter: 0.32

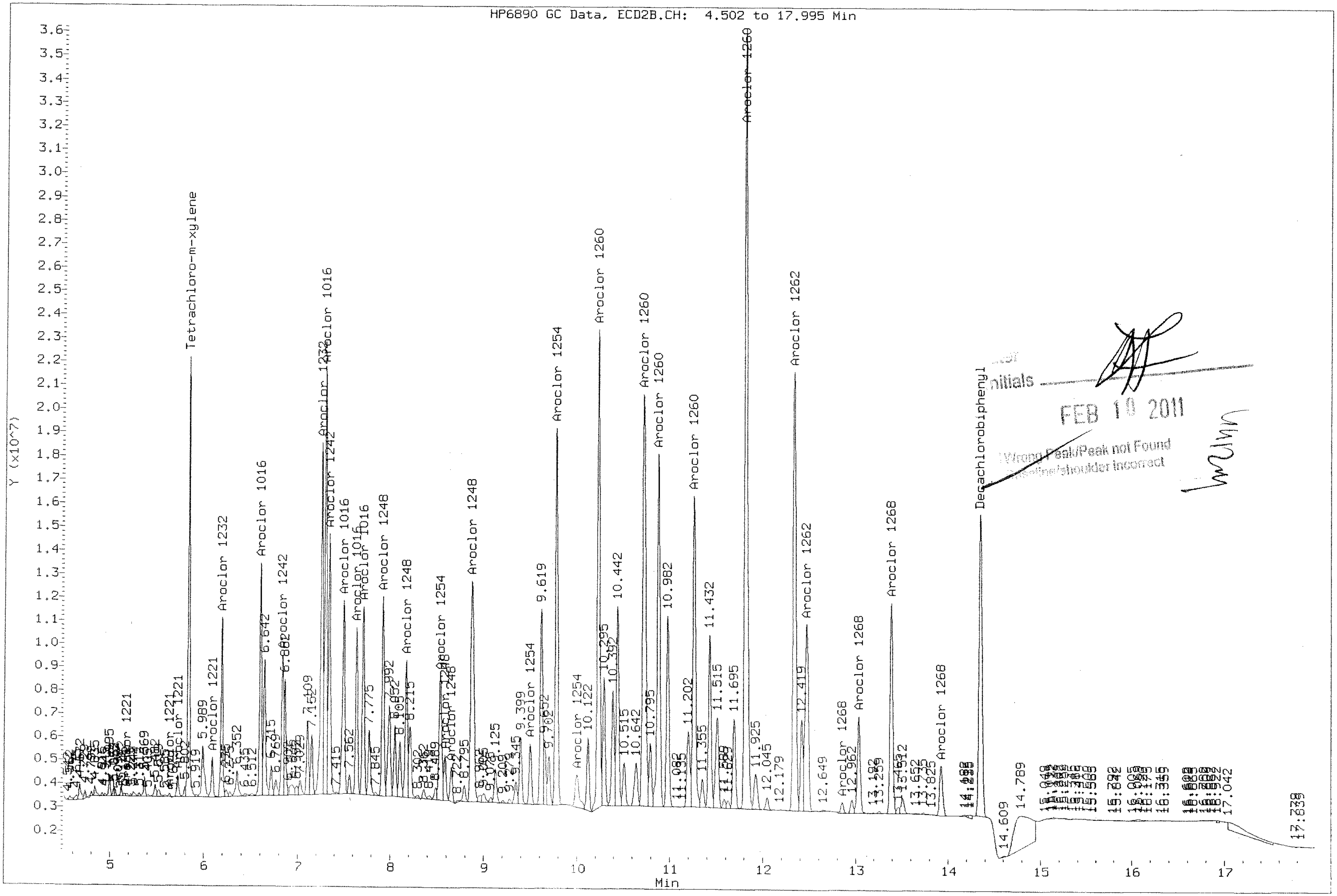




Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F027.D
Injection Date: 08-FEB-2011 04:46
Instrument: GC22.1
Client Sample ID:

HP6890 GC Data, ECD2B.CH: 4.502 to 17.995 Min

Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F027.D
Injection Date: 08-FEB-2011 04:46
Instrument: GC22.i
Client Sample ID:



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Batch QCDMS
Lab Code: KWG1101180-2

Extraction Method: EPA 3535A
Analysis Method: 8082A

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	**0.153**		0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	
Aroclor 1260	**0.157**		0.020	0.00096	1	02/01/11	02/08/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	82	36-113	02/08/11	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F028.D
Lab ID: KWG1101180-2 -- K1100806-002DMS
RunType: DMS
Matrix: WATER

Date Acquired: 02/08/2011 05:11
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F028.D
Lab ID: KWG1101180-2 -- K1100806-002DMS
RunType: DMS
Matrix: WATER

Date Acquired: 02/08/2011 05:11
Date Quantitated: 02/10/2011 16:41
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8082 PCB_ULL	**Collect Date:**		**Receive Date:**	02/07/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997145	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:	J:\GC22\DATA\020711.B\0207F010.D	**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F028.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F028.D			**Vial:**	17
Acqu Date:	02/08/2011 05:11	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	DMS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-2 -- K1100806-002DMS				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	5.28 0.00	5.83 0.00	6288052	22855320	3.32	3.62			72OK
			%Recovery =		66OK	72OK	**Limits =**	21-114	
Decachlorobiphenyl	13.33	14.35 +0.00	8649365m	28586112m	4.08	4.06			82OK
			%Recovery =		82OK	81OK	**Limits =**	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	78.23	80.22	0.153	0.157	**0.153**
Aroclor 1016 {1}	6.35 0.00	6.60 +0.00	1762863m	14707020m	77.48	84.18	0.152	0.165	
Aroclor 1016 {2}	6.38 0.00	7.30	2428157m	27639634m	78.43	78.76	0.154	0.154	
Aroclor 1016 {3}	6.74 +0.00	7.50	5203607m	15001579m	77.66	85.91	0.152	0.168	
Aroclor 1016 {4}	6.90	7.64 +0.00	3324289m	10988563m	80.56	75.71	0.158	0.148	
Aroclor 1016 {5}	6.96 0.00	7.71 0.00	3891296m	12963999m	77.01	76.54	0.151	0.150	
Aroclor 1221			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F028.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F028.D			**Vial:**	17
Acqu Date:	02/08/2011 05:11	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	DMS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-2 -- K1100806-002DMS				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	80.01	86.00	0.157	0.169	**0.157**
Aroclor 1260 {1}	8.96 0.00	10.23 0.00	9338188m	37738233m	79.27	80.26	0.155	0.157	
Aroclor 1260 {2}	9.24 +0.00	10.73 +0.00	12830305m	41735488m	75.53	74.38	0.148	0.146	
Aroclor 1260 {3}	9.84 0.00	10.88 +0.00	9827047m	30485527m	66.03	95.60	0.129	0.187	
Aroclor 1260 {4}	10.40	11.27 +0.00	9692263m	27306293m	88.59	87.82	0.174	0.172	
Aroclor 1260 {5}	10.80 0.00	11.82 +0.00	25347623m	68870857m	90.63	91.92	0.178	0.180	
Aroclor 1262			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1262 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1268 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1020 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F028.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F028.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F028.D
Inj Date : 08-FEB-2011 05:11
Sample Info: K1100806-002DMS
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.277	5.834	6288052	22855320	3.31	3.62		100.00(R)
Aroclor 1016	6.347	6.601	1762863	14707020	77.5	84.2	80.00- 120.00	100.00(M)
	6.384	7.298	2428157	27639634	78.4	78.8	103.28- 154.92	137.74(M)
	6.741	7.498	5203607	15001579	77.7	85.9	231.04- 346.55	295.18(M)
	6.901	7.641	3324289	10988563	80.6	75.7	146.37- 219.55	188.57(M)
	6.957	7.711	3891296	12963999	77.0	76.5	176.02- 264.04	220.74(M)
			Average of Peak Amounts =		78.2	80.2		
Aroclor 1260	8.957	10.234	9338188	37738233	79.3	80.3	80.00- 120.00	100.00(M)
	9.241	10.728	12830305	41735488	75.5	74.4	113.06- 169.59	137.40(M)
	9.837	10.884	9827047	30485527	66.0	95.6	101.19- 151.78	105.24(M)
	10.401	11.268	9692263	27306293	88.6	87.8	75.73- 113.59	103.79(M)
	10.797	11.821	25347623	68870857	90.6	91.9	199.54- 299.31	271.44(M)
			Average of Peak Amounts =		80.0	86.0		
Decachlorobiphenyl	13.331	14.354	8649365	28586112	4.08	4.06		100.00(RM)

QC Flag Legend

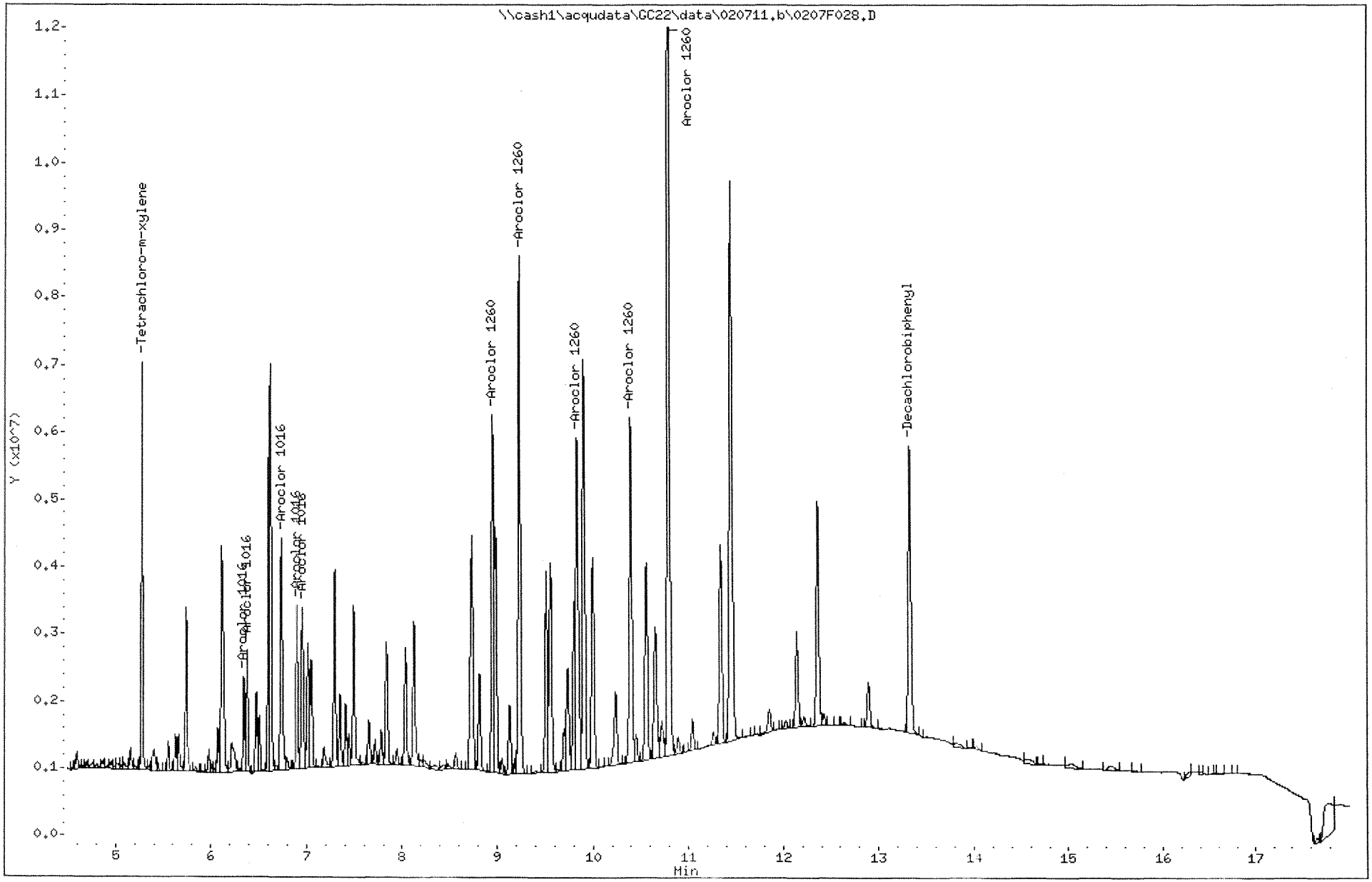
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F028.D
Date : 08-FEB-2011 05:11
Client ID:
Sample Info: K1100806-002DMS

Instrument: GC22.i

Operator: JMSmith
Column diameter: 0.32

Column phase: DB-35MS

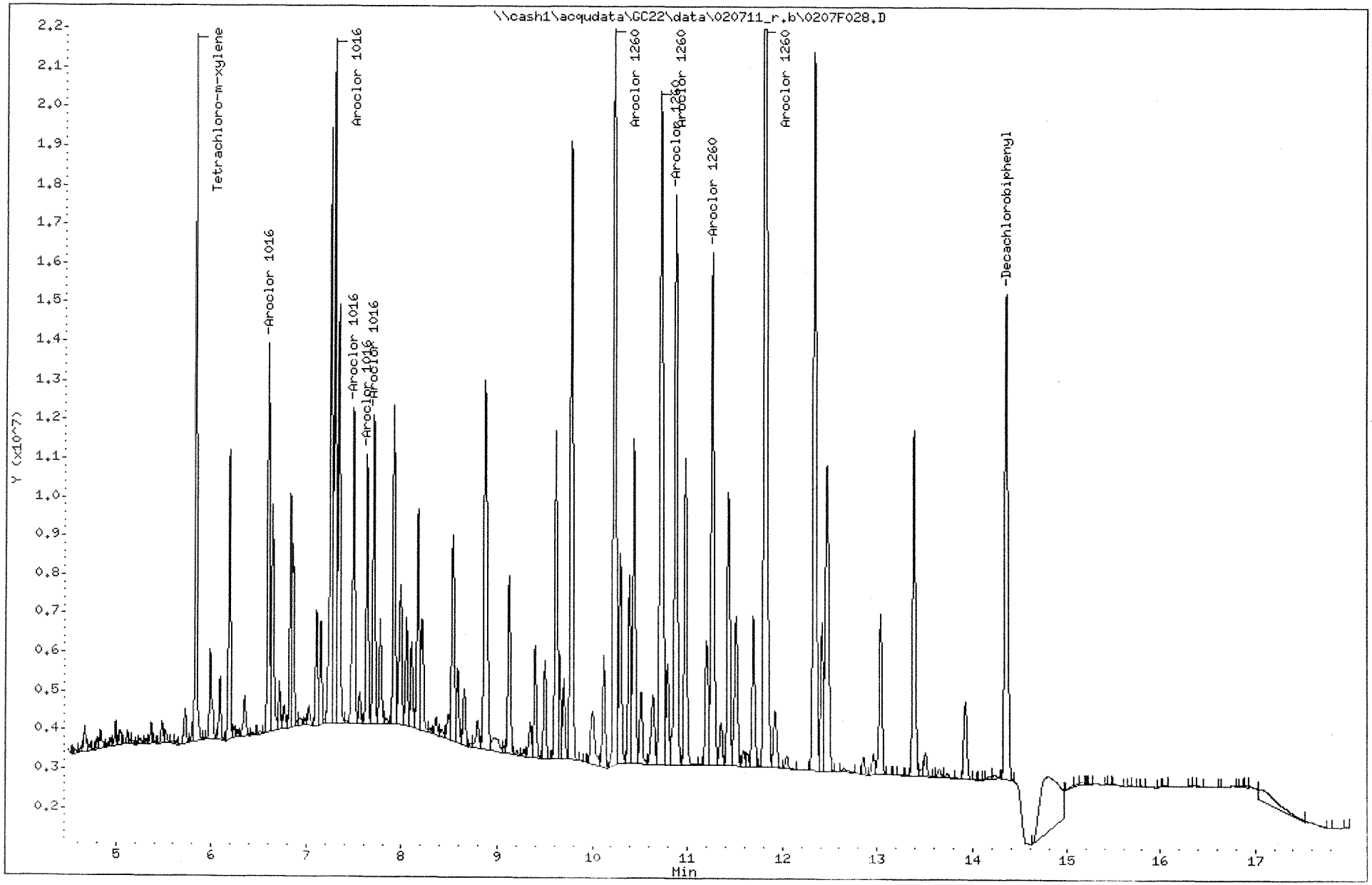


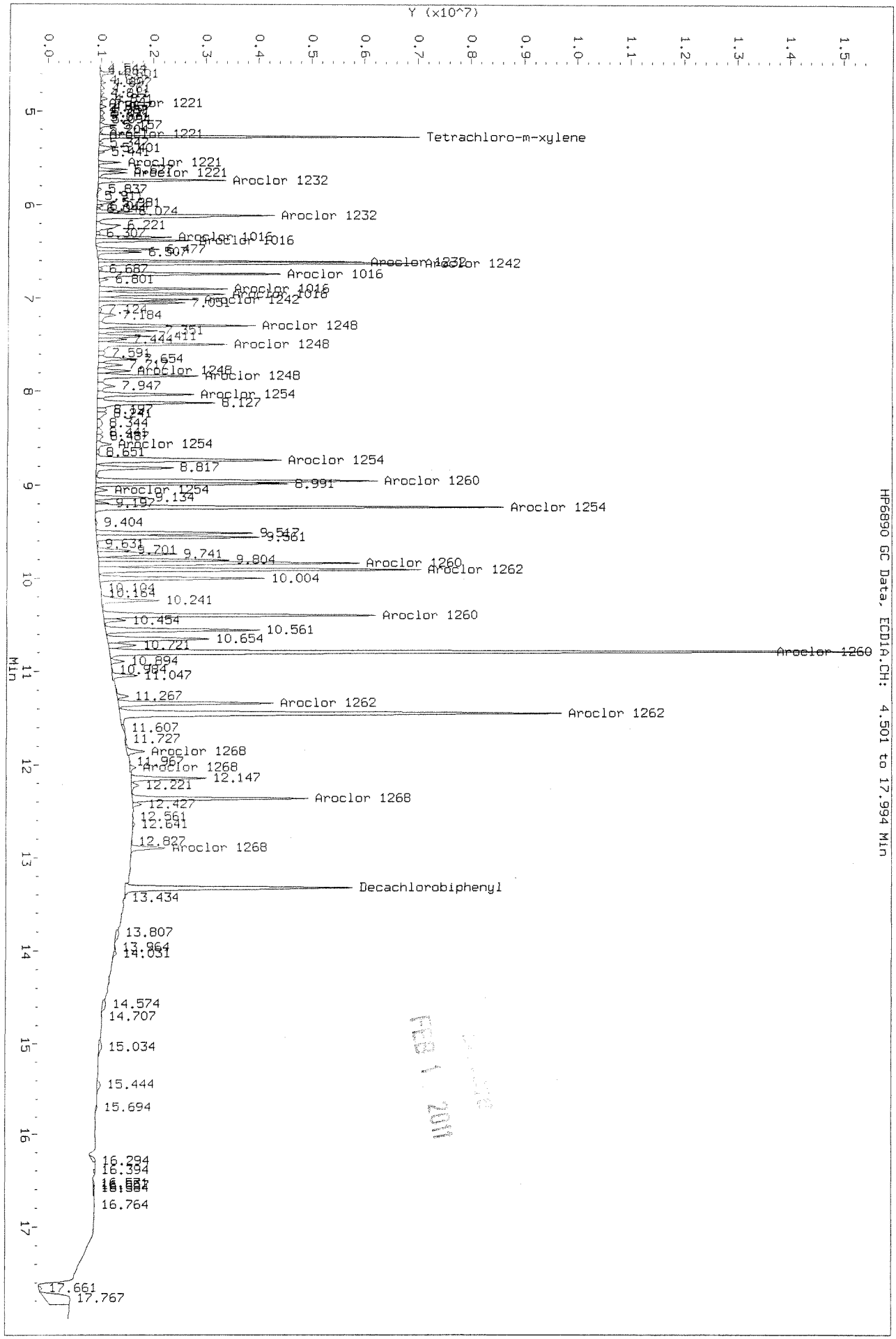
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F028.D
Date : 08-FEB-2011 05:11
Client ID:
Sample Info: K1100806-002DMS

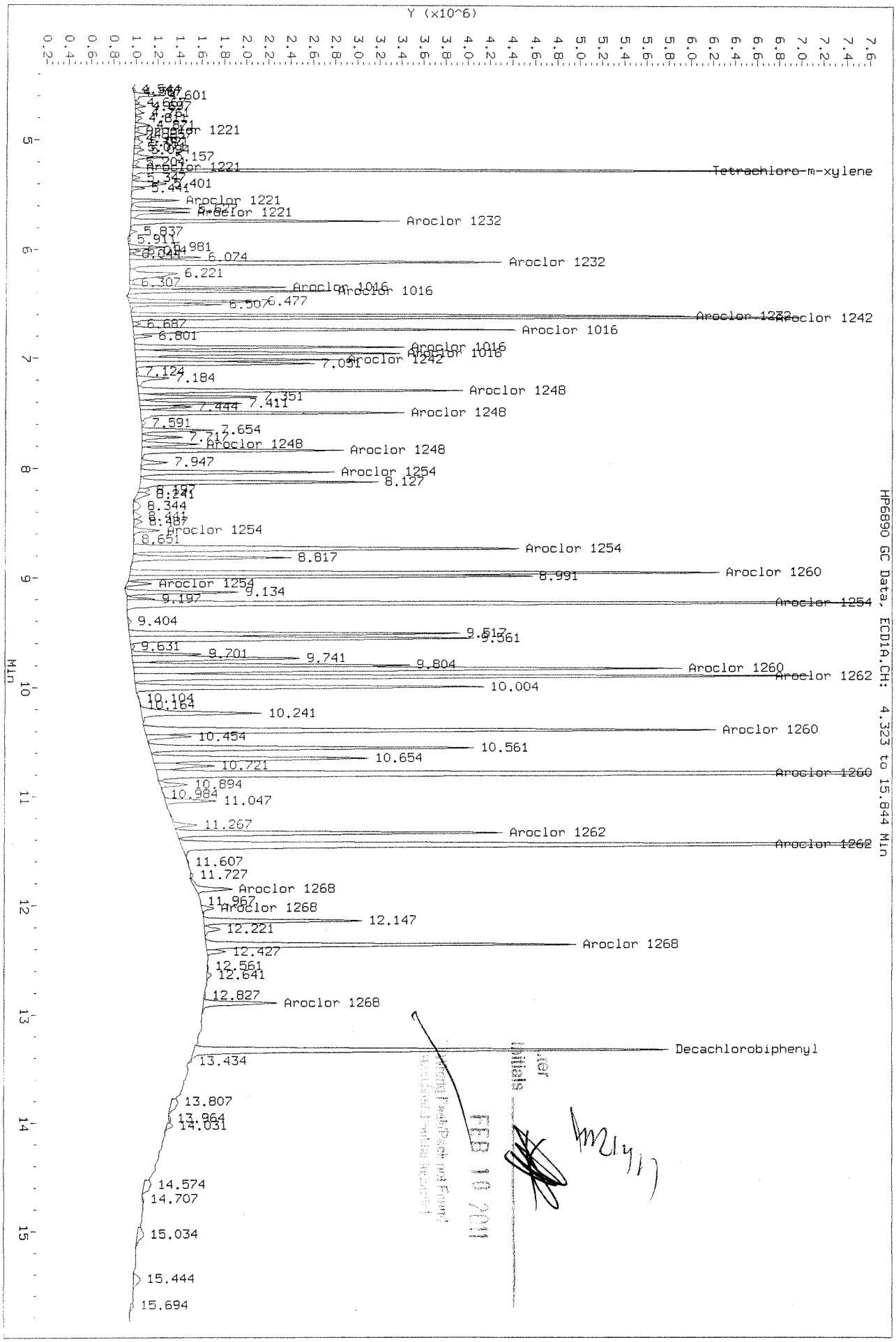
Instrument: GC22.i

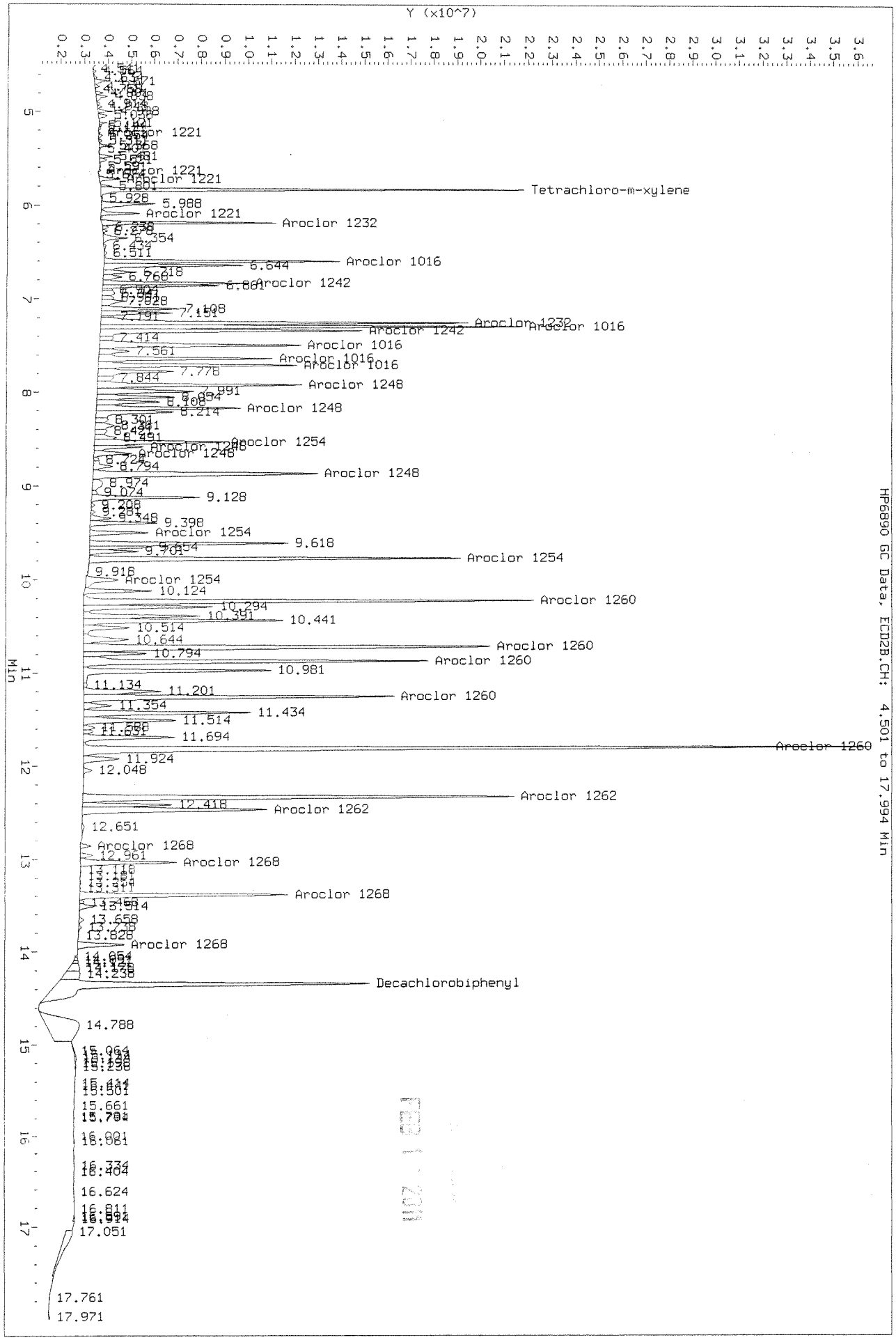
Operator: JMSmith
Column diameter: 0.32

Column phase: DB-XLB




Y (x10^7)
Min
Tetrachloro-m-xylene
Aroclor 1221
Aroclor 1232
Aroclor 1016
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Aroclor 1262
Aroclor 1268
Decachlorobiphenyl
HP6890 GC Data, ECD1A.CH: 4.501 to 17.994 Min
Data File: \\cash1\acqudata\GC22\data\020711.b\0207F028.D
Injection Date: 08-FEB-2011 05:11
Instrument: GC22.i
Client Sample ID:


Y (x10^6)
Min
Tetrachloro-m-xylene
Decachlorobiphenyl
HP6890 GC Data, ECD1A.CH: 4.323 to 15.844 Min
Data File: \\cash1\acqudata\GC22\data\020711.b\0207F028.D
Injection Date: 08-FEB-2011 05:11
Instrument: GC22.1
Client Sample ID:


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F028.D
Injection Date: 08-FEB-2011 05:11
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.501 to 17.994 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Aroclor 1221
Aroclor 1232
Aroclor 1016
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Aroclor 1262
Aroclor 1268
Decachlorobiphenyl
5.988
6.644
6.880
7.151
7.414
7.561
7.778
8.214
9.128
9.398
9.618
9.704
10.124
10.294
10.391
10.441
10.514
10.644
10.794
10.981
11.134
11.201
11.354
11.434
11.514
11.694
11.924
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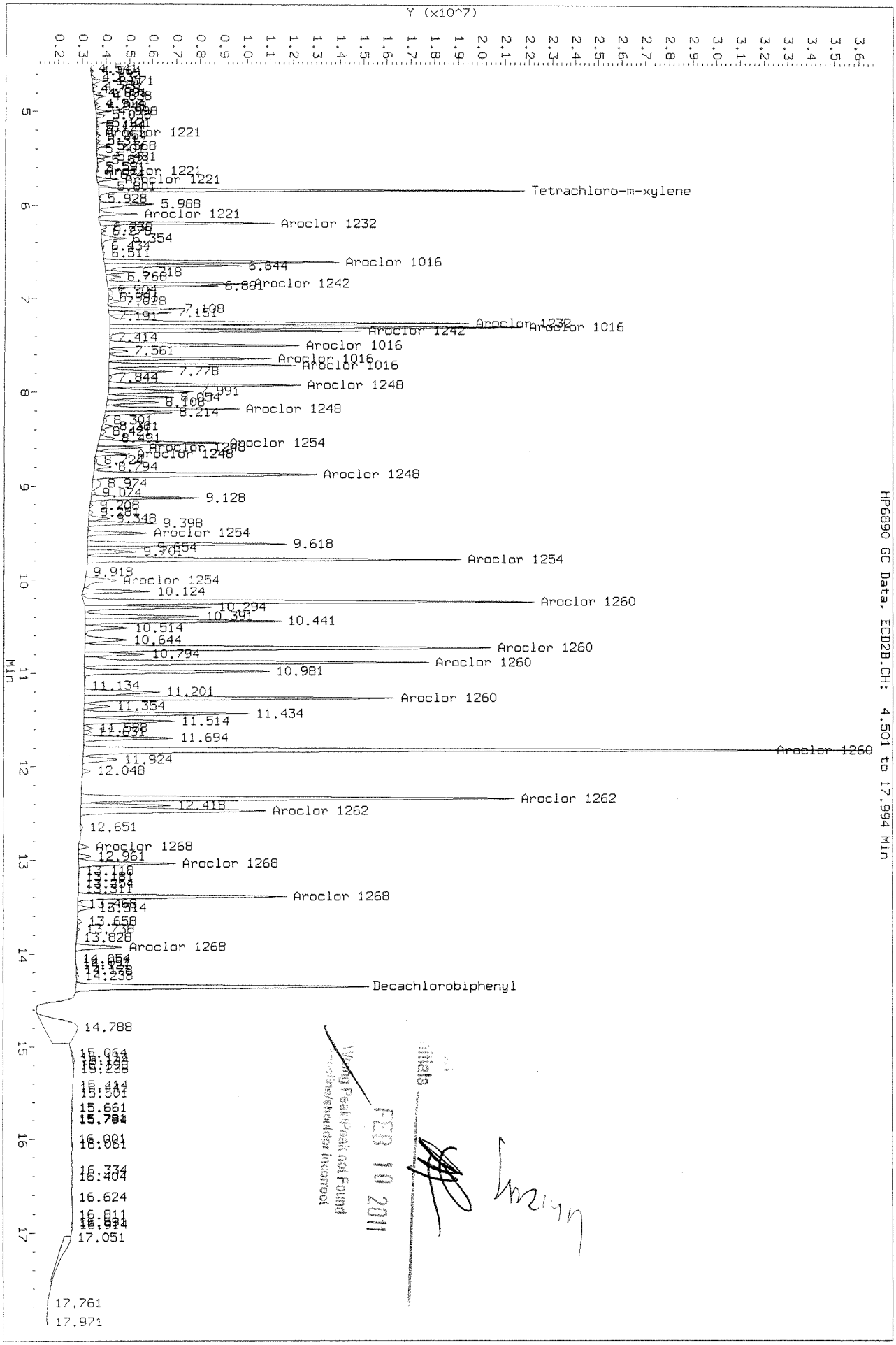
13.828
14.788
17.051
17.761
17.971



Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F028.D
Injection Date: 08-FEB-2011 05:11
Instrument: GC22.1
Client Sample ID:

Wrong Peak/Peak not Found
Chromatogram incorrect

FEB 09 2011

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Lab Control Sample
Lab Code: KWG1101180-3

Units: ug/L
Basis: NA

Extraction Method: EPA 3535A
Analysis Method: 8082A

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	**0.149**		0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	**0.156**		0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	84	36-113	02/07/11	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F008.D
Lab ID: KWG1101180-3
RunType: LCS
Matrix: WATER

Date Acquired: 02/07/2011 21:02
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F008.D
Lab ID: KWG1101180-3
RunType: LCS
Matrix: WATER

Date Acquired: 02/07/2011 21:02
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8082 PCB_ULL	**Collect Date:**		**Receive Date:**	02/07/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997146	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:	J:\GC22\DATA\020711.B\0207F010.D	**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F008.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F008.D			**Vial:**	1
Acqu Date:	02/07/2011 21:02	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-3				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	5.28 0.00	5.83 0.00	5980449	19898183	3.15	3.15			63OK
				%Recovery =	63OK	63OK	Limits =	21-114	
Decachlorobiphenyl	13.33 +0.00	14.35 0.00	8852794	29032586	4.18	4.13			84OK
				%Recovery =	84OK	83OK	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	74.51	77.06	0.149	0.154	**0.149**
Aroclor 1016 {1}	6.35 0.00	6.60 +0.00	1659683	13273446	72.95	75.97	0.146	0.152	
Aroclor 1016 {2}	6.38 0.00	7.30 0.00	2302439	25765379	74.37	73.42	0.149	0.147	
Aroclor 1016 {3}	6.74 0.00	7.50 0.00	4971791	14576548	74.20	83.48	0.148	0.167	
Aroclor 1016 {4}	6.90 0.00	7.64 +0.00	3146039	11148945	76.24	76.82	0.152	0.154	
Aroclor 1016 {5}	6.96 0.00	7.71 0.00	3779859	12804521	74.80	75.60	0.150	0.151	
Aroclor 1221			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F008.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F008.D			**Vial:**	1
Acqu Date:	02/07/2011 21:02	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	LCS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-3				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	78.17	84.86	0.156	0.170	**0.156**
Aroclor 1260 {1}	8.96 +0.00	10.24 +0.00	8901183	36548304m	75.56	77.73	0.151	0.155	
Aroclor 1260 {2}	9.24 +0.00	10.73 +0.00	12540883	40396687m	73.83	72.00	0.148	0.144	
Aroclor 1260 {3}	9.84 +0.00	10.88 0.00	9679193	29804908m	65.04	93.46	0.130	0.187	
Aroclor 1260 {4}	10.40 0.00	11.26 0.00	9594383	28226919m	87.70	90.78	0.175	0.182	
Aroclor 1260 {5}	10.80 0.00	11.82 0.00	24813079	67663678m	88.72	90.31	0.177	0.181	
Aroclor 1262			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1262 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1268 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F008.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F008.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F008.D
Inj Date : 07-FEB-2011 21:02
Sample Info: KQ1100885-05LCS
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.276	5.833	5980449	19898183	3.15	3.15		100.00(R)
Aroclor 1016	6.346	6.600	1659683	13273446	72.9	76.0	80.00- 120.00	100.00
	6.383	7.297	2302439	25765379	74.4	73.4	103.28- 154.92	138.73
	6.736	7.497	4971791	14576548	74.2	83.5	231.04- 346.55	299.56
	6.900	7.640	3146039	11148945	76.2	76.8	146.37- 219.55	189.56
	6.956	7.710	3779859	12804521	74.8	75.6	176.02- 264.04	227.75
			Average of Peak Amounts =		74.5	77.1		
Aroclor 1260	8.960	10.237	8901183	36548304	75.6	77.7	80.00- 120.00	100.00
	9.240	10.727	12540883	40396687	73.8	72.0	113.06- 169.59	140.89
	9.840	10.883	9679193	29804908	65.0	93.5	101.19- 151.78	108.74
	10.400	11.263	9594383	28226919	87.7	90.8	75.73- 113.59	107.79
	10.796	11.820	24813079	67663678	88.7	90.3	199.54- 299.31	278.76
			Average of Peak Amounts =		78.2	84.9		
Decachlorobiphenyl	13.333	14.353	8852794	29032586	4.18	4.12		100.00(R)

QC Flag Legend

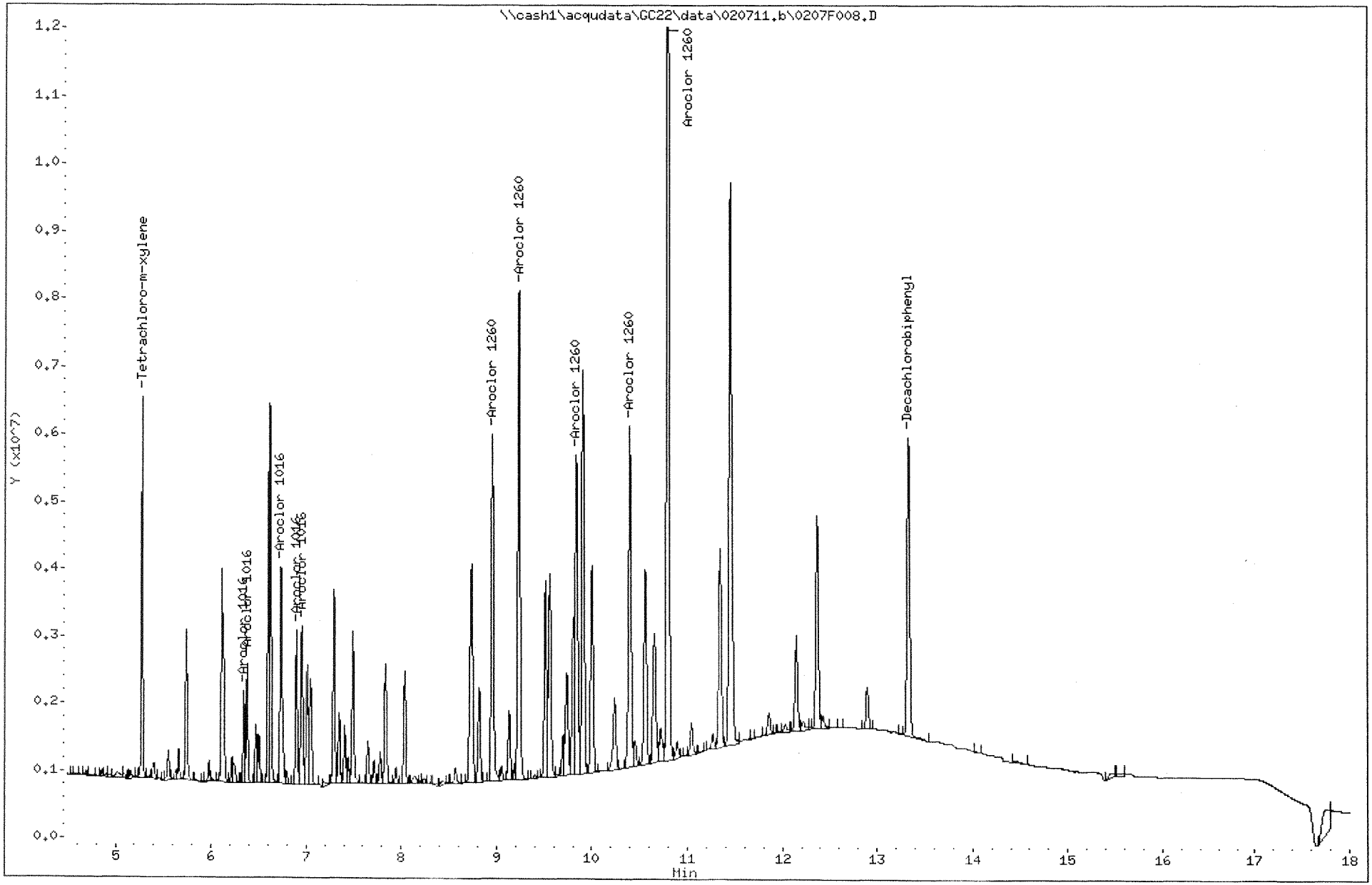
R - Spike/Surrogate failed recovery limits.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F008.D
Date : 07-FEB-2011 21:02
Client ID:
Sample Info: KQ1100885-05LCS

Instrument: GC22.i

Operator: JHSmith
Column diameter: 0.32

Column phase: DB-35MS

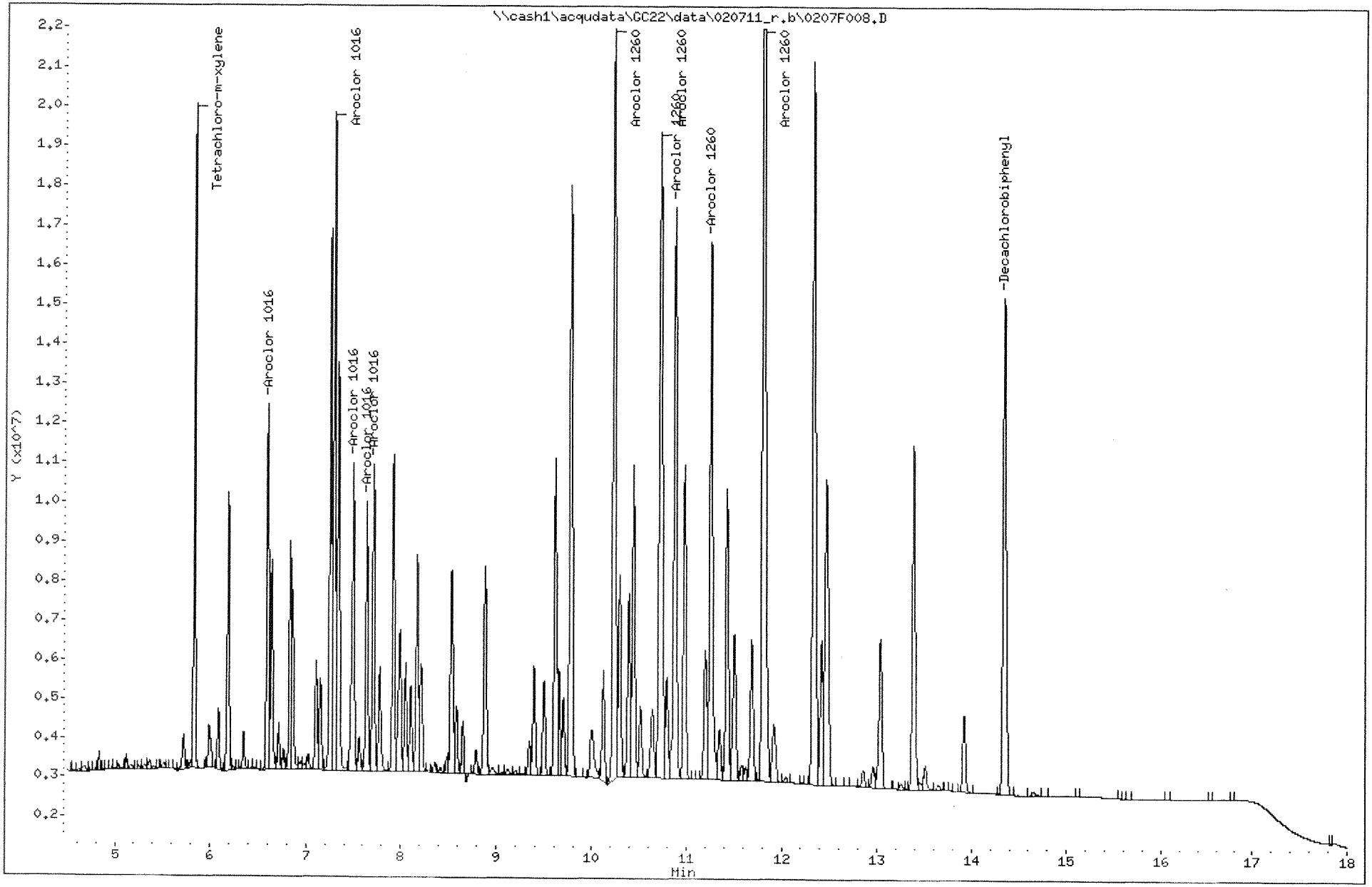


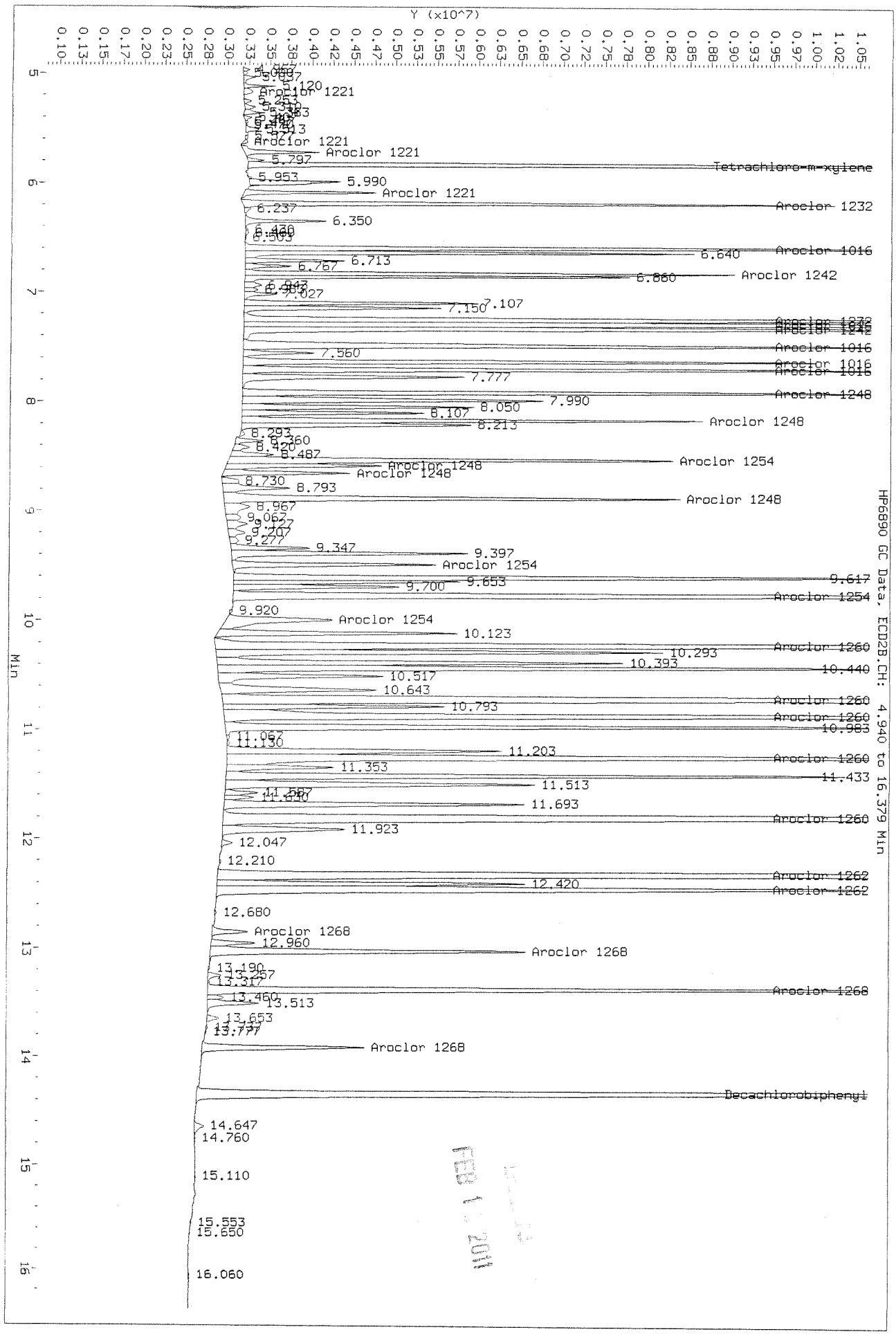
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F008.D
Date : 07-FEB-2011 21:02
Client ID:
Sample Info: KQ1100885-05LCS

Instrument: GC22.i

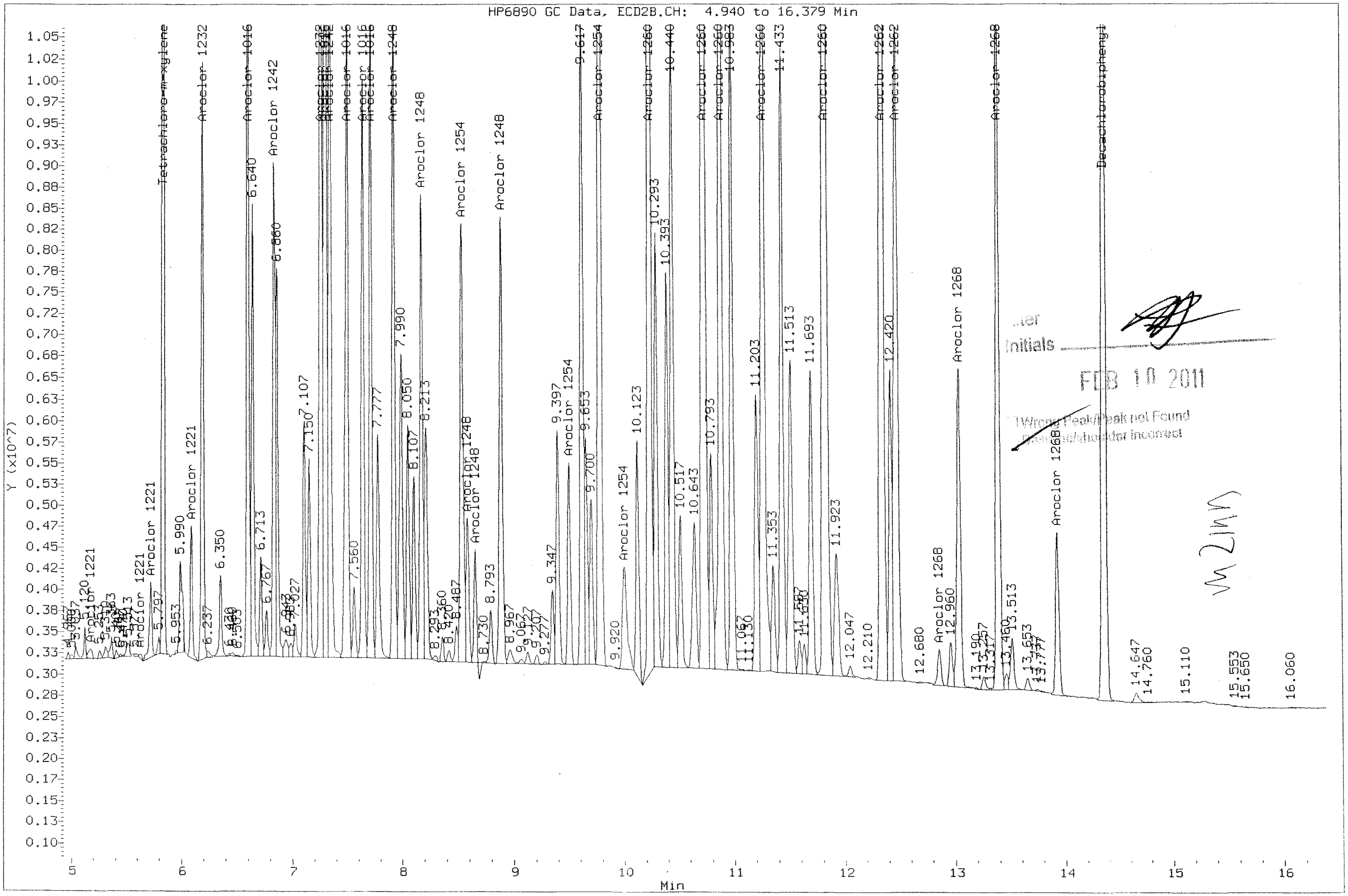
Operator: JMSmith
Column diameter: 0.32

Column phase: DB-XLB




Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F008.D
Injection Date: 07-FEB-2011 21:02
Instrument: GC22.1
Client Sample ID:
Y (x10^7)
Min
HP6890 GC Data, ECD2B.CH: 4.940 to 16.379 Min
Aroclor 1221
Aroclor 1221
Tetrachloro-m-xylene
Aroclor 1221
Aroclor 1232
6.350
Aroclor 1016
6.640
6.713
6.767
Aroclor 1242
6.860
7.107
7.150
Aroclor 1016
7.560
7.777
Aroclor 1248
7.990
8.050
8.107
8.213
Aroclor 1248
8.293
8.360
8.420
8.487
Aroclor 1254
Aroclor 1248
Aroclor 1248
8.730
8.793
Aroclor 1248
8.967
9.062
9.127
9.207
9.277
9.347
9.397
Aroclor 1254
9.617
9.653
9.700
Aroclor 1254
9.920
Aroclor 1254
10.123
Aroclor 1260
10.293
10.393
10.440
10.517
10.643
Aroclor 1260
10.793
Aroclor 1260
10.983
11.067
11.130
11.203
Aroclor 1260
11.353
11.433
11.513
11.587
11.693
Aroclor 1260
11.923
12.047
12.210
Aroclor 1262
12.420
Aroclor 1262
12.680
Aroclor 1268
12.960
Aroclor 1268
13.190
13.257
13.317
Aroclor 1268
13.460
13.513
13.653
13.777
Aroclor 1268
Decachlorobiphenyl
14.647
14.760
15.110
15.553
15.650
16.060

Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F008.D
Injection Date: 07-FEB-2011 21:02
Instrument: GC22.i
Client Sample ID:



Client: Exponent
Project: Heglar Kronquist/0907194.000.0901
Sample Matrix: Water

Service Request: K1100692
Date Collected: NA
Date Received: NA

Polychlorinated Biphenyls (PCBs)

Sample Name: Duplicate Lab Control Sample
Lab Code: KWG1101180-4

Extraction Method: EPA 3535A
Analysis Method: 8082A

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Aroclor 1016	**0.152**		0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1221	ND	U	0.040	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1232	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1242	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1248	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1254	ND	U	0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	
Aroclor 1260	**0.158**		0.020	0.00096	1	02/01/11	02/07/11	KWG1101180	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Decachlorobiphenyl	93	36-113	02/07/11	Acceptable

Comments:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F009.D
Lab ID: KWG1101180-4
RunType: DLCS
Matrix: WATER

Date Acquired: 02/07/2011 21:26
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File:	\\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F009.D	**Date Acquired:**	02/07/2011 21:26
Lab ID:	KWG1101180-4	**Date Quantitated:**	02/10/2011 16:40
RunType:	DLCS	**Batch ID:**	KWG1101323
Matrix:	WATER	**Analysis Method:**	8082A
		MethodJoinID:	MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
Analytical Holding Time	NA	NA	NA	x	
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Calibration Verification Pass/Fail	NA	NA	NA	x	
Continuing Calibration Recovery	NA	NA	NA	x	
Continuing Calibration Recovery (Closing)	NA	NA	NA	x	
Surrogates	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Retention Time	NA	NA	NA	x	
Std MRL Unsupported by ICAL	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	
Overdiluted Analysis	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	WATER
Prod Code:	8082 PCB_ULL	**Collect Date:**		**Receive Date:**	02/07/2011

Analysis Lot:	KWG1101323	**Prep Lot:**	KWG1101180	**Report Group:**	
Analysis Method:	8082A	**Prep Method:**	EPA 3535A		
Prep Ref:	997147	**Prep Date:**	02/01/2011		

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:	J:\GC22\DATA\020711.B\0207F010.D	**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F009.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F009.D			**Vial:**	2
Acqu Date:	02/07/2011 21:26	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-4				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1		RT #2		Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	5.28	+0.00	5.84	+0.00	5834152	19472184	3.08	3.08			62OK
						%Recovery =	62OK	62OK	Limits =	21-114	
Decachlorobiphenyl	13.33		14.35	0.00	9898841	27904918m	4.67	3.97			93OK
						%Recovery =	93OK	79OK	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1		RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016				0	0	75.83	78.24	0.152	0.156	**0.152**
Aroclor 1016 {1}	6.35	+0.00	6.60	1711444	13467432m	75.22	77.08	0.150	0.154	
Aroclor 1016 {2}	6.38		7.30	2315994	26930905m	74.81	76.74	0.150	0.153	
Aroclor 1016 {3}	6.74	+0.00	7.50	5059423	14836547m	75.51	84.97	0.151	0.170	
Aroclor 1016 {4}	6.90		7.64	3210148	10935741m	77.79	75.35	0.156	0.151	
Aroclor 1016 {5}	6.96	+0.00	7.71	3831736	13050303m	75.83	77.05	0.152	0.154	
Aroclor 1221				0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1221 {1}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {2}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {3}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1221 {4}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232				0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1232 {1}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {2}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {3}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1232 {4}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242				0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1242 {1}				0d	0d	0.0000	0.0000	0.00096U	0.00096U	

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F009.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F009.D			**Vial:**	2
Acqu Date:	02/07/2011 21:26	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	DLCS			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101180-4				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1242 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1248 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1248 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1254 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1254 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1260			0	0	78.77	86.01	0.158	0.172	**0.158**
Aroclor 1260 {1}	8.96 +0.00	10.24 +0.00	9022861	37178654m	76.59	79.07	0.153	0.158	
Aroclor 1260 {2}	9.24 +0.00	10.73 +0.00	12629135	41074583m	74.35	73.20	0.149	0.146	
Aroclor 1260 {3}	9.84 +0.00	10.89 +0.00	9587270	30258607m	64.42	94.89	0.129	0.190	
Aroclor 1260 {4}	10.40	11.27 +0.00	9680778	28286436m	88.49	90.97	0.177	0.182	
Aroclor 1260 {5}	10.80 +0.00	11.82	25172282	68886612m	90.00	91.94	0.180	0.184	
Aroclor 1262			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1262 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1262 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268			0	0	0.0000	0.0000	0.00096U	0.00096U	0.00096U
Aroclor 1268 {1}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {2}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {3}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {4}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	
Aroclor 1268 {5}			0d	0d	0.0000	0.0000	0.00096U	0.00096U	

The -/+ after Retention Time symbolize the direction of the RT shift

Prep Amount:	1000 mL	**Dilution:**	1.0
Prep Final Vol:	2 mL	**Unit Factor:**	1

Final Concentration = ((Soln Conc x Prep Final Vol x Dilution) / Prep Amount) x Unit Factor

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F009.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F009.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F009.D
Inj Date : 07-FEB-2011 21:26
Sample Info: KQ1100885-06DLCS
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.278	5.835	5834152	19472184	3.08	3.08		100.00(R)
Aroclor 1016	6.348	6.598	1711444	13467432	75.2	77.1	80.00- 120.00	100.00
	6.384	7.298	2315994	26930905	74.8	76.7	103.28- 154.92	135.32
	6.738	7.498	5059423	14836547	75.5	85.0	231.04- 346.55	295.62
	6.901	7.638	3210148	10935741	77.8	75.3	146.37- 219.55	187.57
	6.958	7.711	3831736	13050303	75.8	77.0	176.02- 264.04	223.89
			Average of Peak Amounts =		75.8	78.2		
Aroclor 1260	8.958	10.235	9022861	37178654	76.6	79.1	80.00- 120.00	100.00
	9.238	10.728	12629135	41074583	74.3	73.2	113.06- 169.59	139.97
	9.838	10.885	9587270	30258607	64.4	94.9	101.19- 151.78	106.26
	10.401	11.265	9680778	28286436	88.5	91.0	75.73- 113.59	107.29
	10.798	11.821	25172282	68886612	90.0	91.9	199.54- 299.31	278.98
			Average of Peak Amounts =		78.8	86.0		
Decachlorobiphenyl	13.331	14.351	9898841	27904918	4.67	3.96		100.00(R)

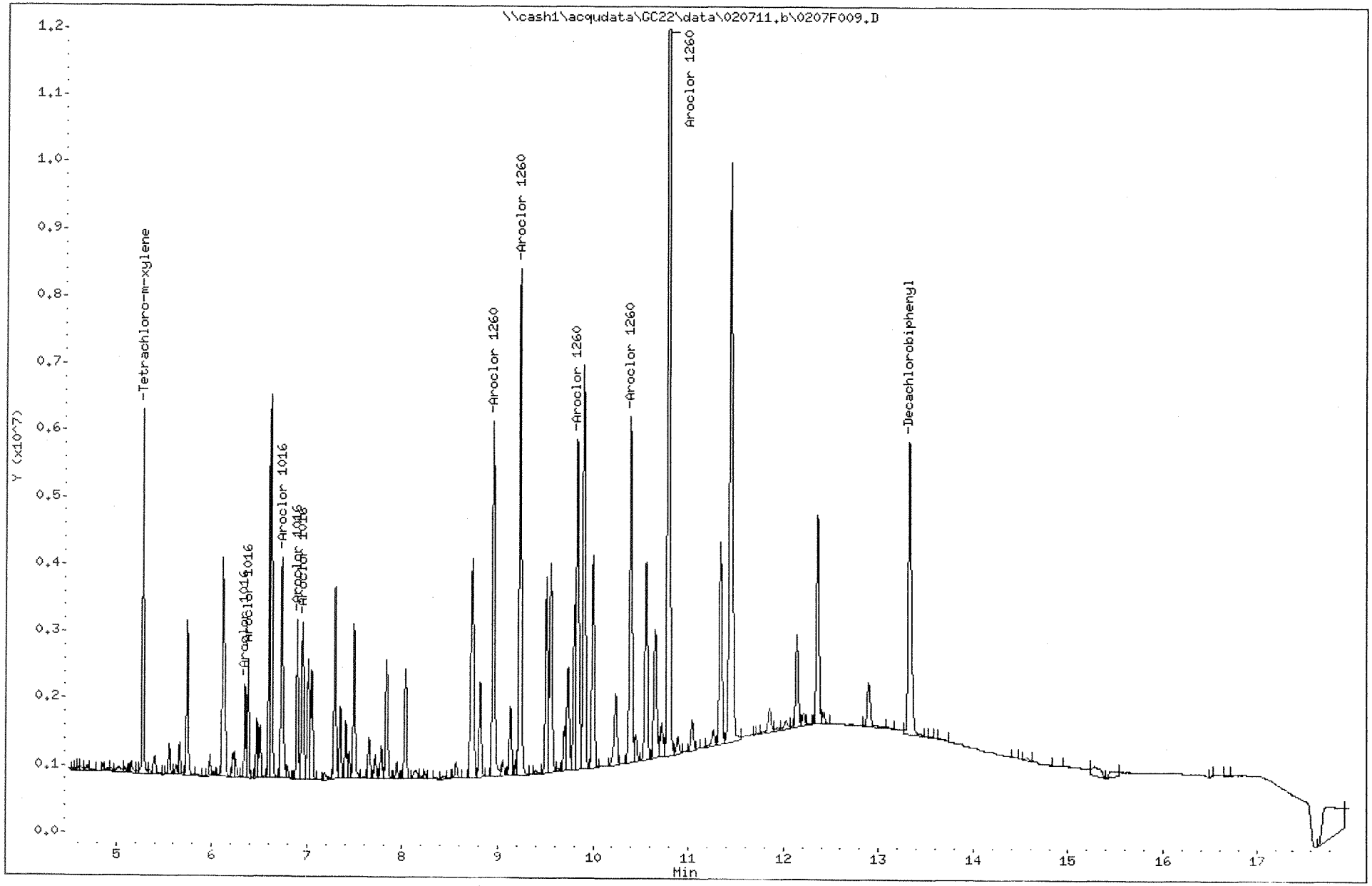
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F009.D
Date : 07-FEB-2011 21:26
Client ID:
Sample Info: KQ1100885-06DLCS

Instrument: GC22.i

Operator: JMSmith
Column phase: DB-35MS
Column diameter: 0.32

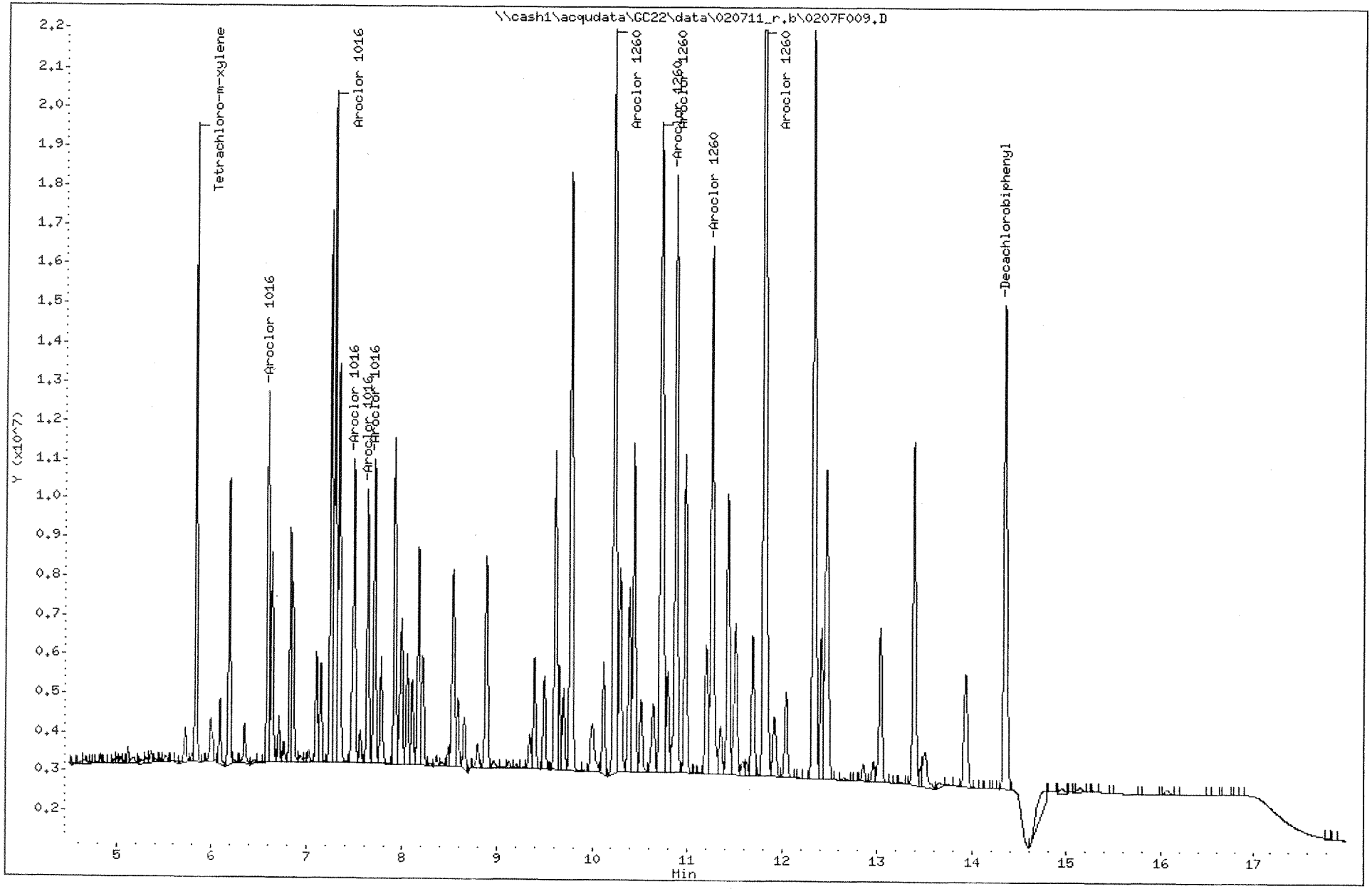


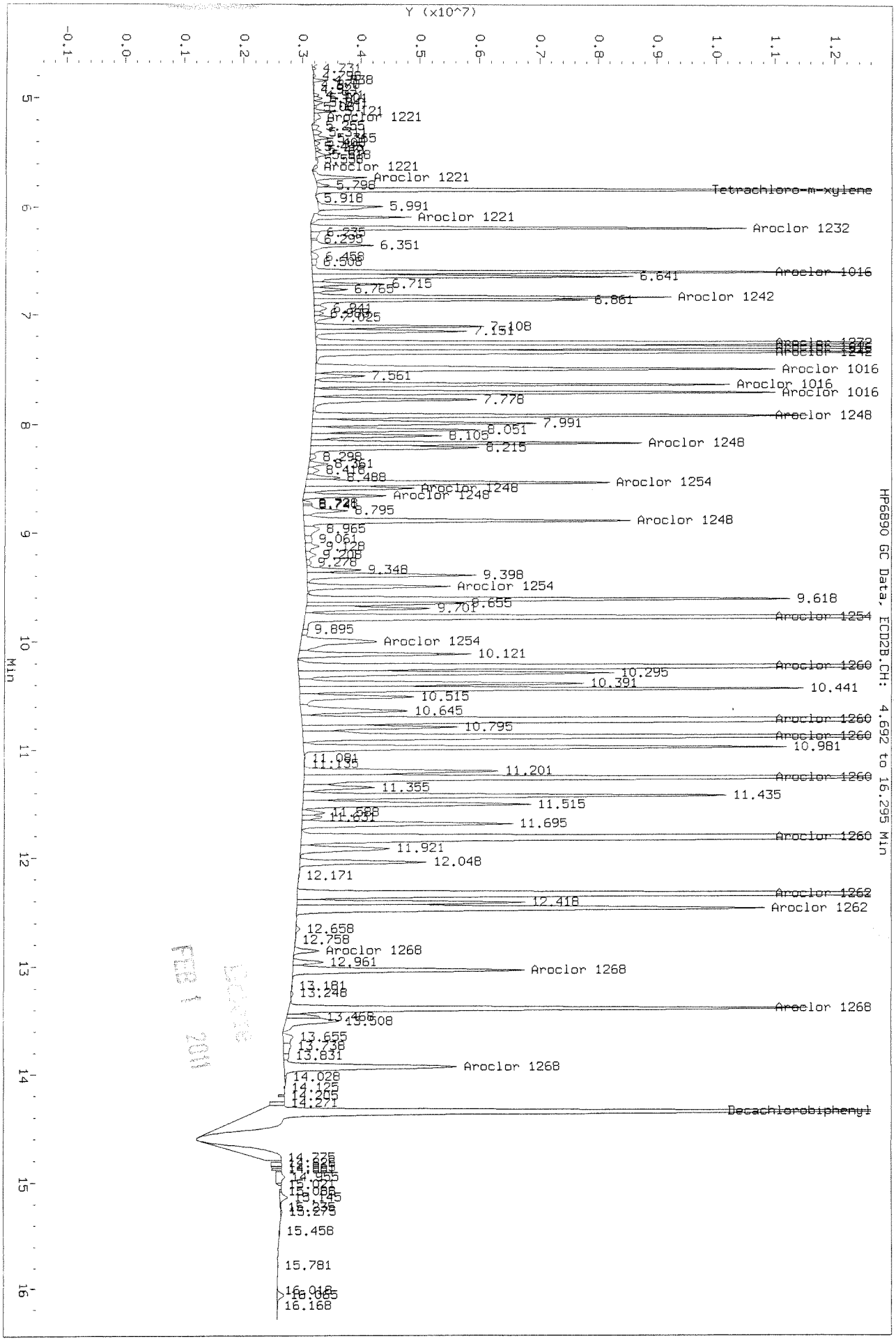
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F009.D
Date : 07-FEB-2011 21:26
Client ID:
Sample Info: KQ1100885-06DLCS

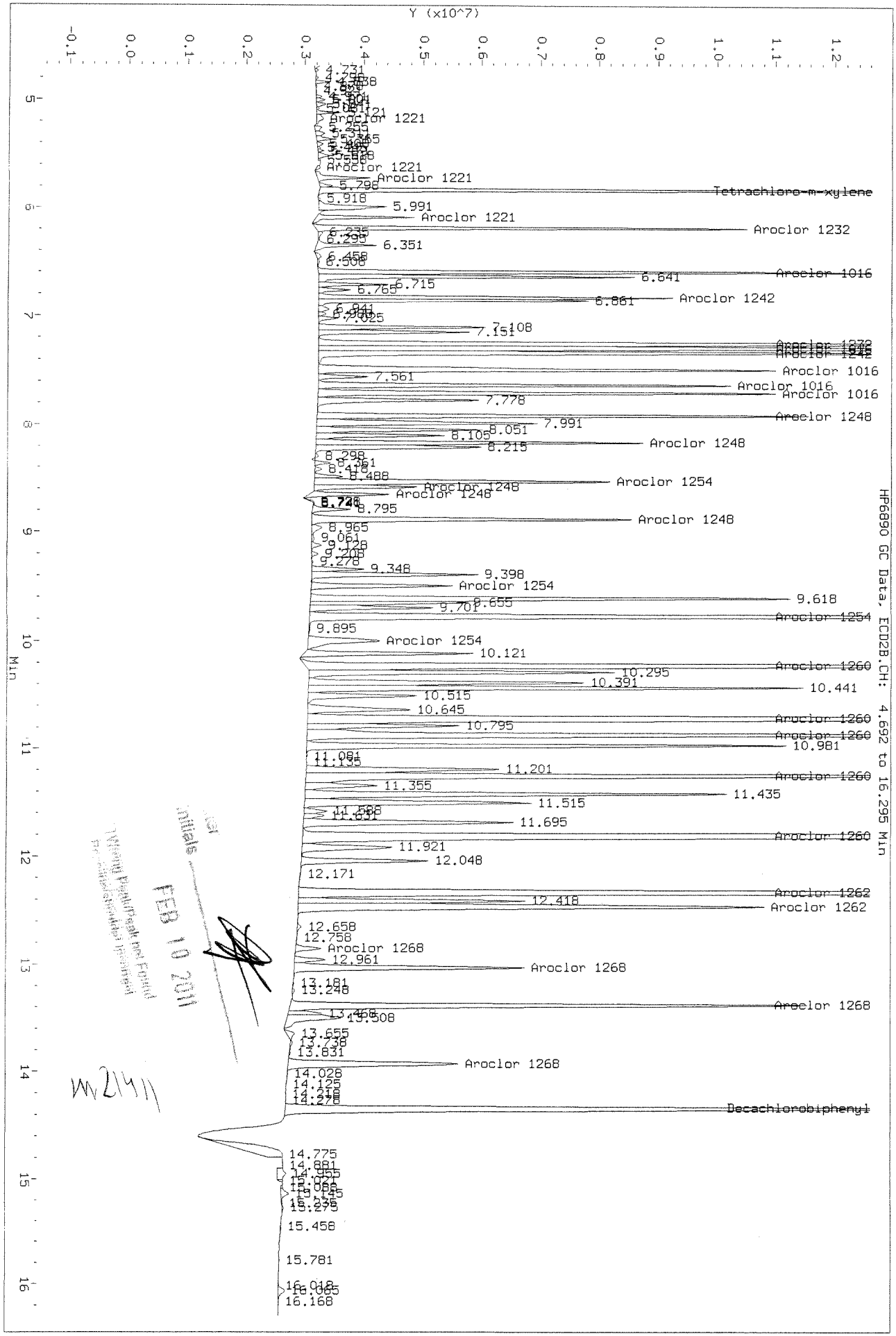
Instrument: GC22.i

Operator: JMSmith
Column diameter: 0.32

Column phase: DB-XLB




Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F009.D
Injection Date: 07-FEB-2011 21:26
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.692 to 16.295 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Decachlorobiphenyl
Aroclor 1221
Aroclor 1232
Aroclor 1016
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Aroclor 1262
Aroclor 1268


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F009.D
Injection Date: 07-FEB-2011 21:26
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.692 to 16.295 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Decachlorobiphenyl
Aroclor 1221
Aroclor 1232
Aroclor 1016
Aroclor 1242
Aroclor 1248
Aroclor 1254
Aroclor 1260
Aroclor 1262
Aroclor 1268
5.796
5.918
5.991
6.235
6.295
6.351
6.458
6.508
6.641
6.715
6.765
6.881
7.108
7.151
7.561
7.778
7.991
8.051
8.105
8.215
8.298
8.361
8.415
8.488
8.728
8.795
8.965
9.061
9.128
9.205
9.278
9.348
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9.618
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9.895
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10.295
10.391
10.441
10.515
10.645
10.795
10.981
11.081
11.135
11.201
11.355
11.435
11.515
11.588
11.651
11.695
11.921
12.048
12.171
12.418
12.658
12.758
12.961
13.181
13.248
13.468
13.508
13.655
13.738
13.831
14.028
14.125
14.218
14.278
14.775
14.881
14.955
15.062
15.275
15.458
15.781
16.018
16.065
16.168
FEB 10 2011

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

Standards Data

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-35MS

Level ID	File ID
A	\\cash1\acqudata\GC22\data\120810.b\1208F003.D
B	\\cash1\acqudata\GC22\data\120810.b\1208F004.D
C	\\cash1\acqudata\GC22\data\120810.b\1208F005.D
D	\\cash1\acqudata\GC22\data\120810.b\1208F006.D
E	\\cash1\acqudata\GC22\data\120810.b\1208F007.D
F	\\cash1\acqudata\GC22\data\120810.b\1208F008.D
G	\\cash1\acqudata\GC22\data\120810.b\1208F009.D
H	\\cash1\acqudata\GC22\data\120810.b\1208F010.D
I	\\cash1\acqudata\GC22\data\120810.b\1208F011.D
J	\\cash1\acqudata\GC22\data\120810.b\1208F012.D
K	\\cash1\acqudata\GC22\data\120810.b\1208F013.D
L	\\cash1\acqudata\GC22\data\120810.b\1208F014.D
M	\\cash1\acqudata\GC22\data\120810.b\1208F015.D
N	\\cash1\acqudata\GC22\data\120810.b\1208F016.D
O	\\cash1\acqudata\GC22\data\120810.b\1208F017.D
P	\\cash1\acqudata\GC22\data\120810.b\1208F018.D
Q	\\cash1\acqudata\GC22\data\120810.b\1208F019.D
R	\\cash1\acqudata\GC22\data\120810.b\1208F020.D
S	\\cash1\acqudata\GC22\data\120810.b\1208F021.D
T	\\cash1\acqudata\GC22\data\120810.b\1208F022.D
U	\\cash1\acqudata\GC22\data\120810.b\1208F023.D
V	\\cash1\acqudata\GC22\data\120810.b\1208F024.D
W	\\cash1\acqudata\GC22\data\120810.b\1208F025.D
X	\\cash1\acqudata\GC22\data\120810.b\1208F026.D
Y	\\cash1\acqudata\GC22\data\120810.b\1208F027.D
Z	\\cash1\acqudata\GC22\data\120810.b\1208F028.D
AA	\\cash1\acqudata\GC22\data\120810.b\1208F029.D
AB	\\cash1\acqudata\GC22\data\120810.b\1208F030.D
AC	\\cash1\acqudata\GC22\data\120810.b\1208F031.D
AD	\\cash1\acqudata\GC22\data\120810.b\1208F032.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Decachlorobiphenyl	A	0.25	2.23E+6	B	0.50	2.31E+6	C	5.0	2.09E+6	D	10	2.05E+6	E	20	2.03E+6
	F	50	2.00E+6												
Aroclor 1016 {1}	A	2.5	24300	B	5.0	25500	C	50	22300	D	100	22100	E	200	21200
	F	500	21100												
Aroclor 1016 {2}	A	2.5	35400	B	5.0	36300	C	50	30600	D	100	28900	E	200	28000
	F	500	26600												
Aroclor 1016 {3}	A	2.5	76500	B	5.0	74300	C	50	65300	D	100	64100	E	200	61600
	F	500	60200												
Aroclor 1016 {4}	A	2.5	43800	B	5.0	43600	C	50	41200	D	100	40500	E	200	39500
	F	500	38900												
Aroclor 1016 {5}	A	2.5	54700	B	5.0	55900	C	50	51100	D	100	50000	E	200	46800
	F	500	44700												
Aroclor 1260 {1}	A	2.5	1.33E+5	B	5.0	1.34E+5	C	50	1.16E+5	D	100	1.12E+5	E	200	1.09E+5
	F	500	1.04E+5												
Aroclor 1260 {2}	A	2.5	1.88E+5	B	5.0	1.89E+5	C	50	1.65E+5	D	100	1.60E+5	E	200	1.60E+5
	F	500	1.56E+5												
Aroclor 1260 {3}	A	2.5	1.63E+5	B	5.0	1.67E+5	C	50	1.44E+5	D	100	1.42E+5	E	200	1.39E+5
	F	500	1.38E+5												
Aroclor 1260 {4}	A	2.5	1.23E+5	B	5.0	1.17E+5	C	50	1.07E+5	D	100	1.05E+5	E	200	1.03E+5
	F	500	1.01E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-35MS

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Aroclor 1260 {5}	A	2.5	2.98E+5	B	5.0	2.85E+5	C	50	2.70E+5	D	100	2.74E+5	E	200	2.76E+5
	F	500	2.74E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-35MS

Analyte Name	Compound Type	Calibration Evaluation					
		Fit Type	Eval.	Eval. Result	Q	Control Criteria	
Decachlorobiphenyl	SURR	AverageRF	% RSD	5.8		≤ 20	
Aroclor 1016 {1}	MULTI	AverageRF	% RSD	7.8		≤ 20	
Aroclor 1016 {2}	MULTI	AverageRF	% RSD	13.0		≤ 20	
Aroclor 1016 {3}	MULTI	AverageRF	% RSD	10.1		≤ 20	
Aroclor 1016 {4}	MULTI	AverageRF	% RSD	5.0		≤ 20	
Aroclor 1016 {5}	MULTI	AverageRF	% RSD	8.6		≤ 20	
Aroclor 1260 {1}	MULTI	AverageRF	% RSD	10.7		≤ 20	
Aroclor 1260 {2}	MULTI	AverageRF	% RSD	8.6		≤ 20	
Aroclor 1260 {3}	MULTI	AverageRF	% RSD	8.4		≤ 20	
Aroclor 1260 {4}	MULTI	AverageRF	% RSD	8.0		≤ 20	
Aroclor 1260 {5}	MULTI	AverageRF	% RSD	3.7		≤ 20	

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010
Date Analyzed: 12/09/2010

Second Source Calibration Verification
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration ID: CAL10114
Units: ng/mL

File ID: \\cash1\acqudata\GC22\data\120810.b\1208F033.D
\\cash1\acqudata\GC22\data\120810.b\1208F034.D
\\cash1\acqudata\GC22\data\120810.b\1208F035.D
\\cash1\acqudata\GC22\data\120810.b\1208F036.D
\\cash1\acqudata\GC22\data\120810.b\1208F037.D
\\cash1\acqudata\GC22\data\120810.b\1208F038.D
\\cash1\acqudata\GC22\data\120810.b\1208F039.D
\\cash1\acqudata\GC22\data\120810.b\1208F040.D
\\cash1\acqudata\GC22\data\120810.b\1208F041.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Aroclor 1016	100	87	NA	NA	NA	-13	± 20 %	NA
Aroclor 1016 {1}	100	87	22800	19800	-13	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	88	31000	27100	-12	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	86	67000	57400	-14	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	88	41300	36200	-12	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	86	50500	43400	-14	NA	± 100 %	AverageRF
Aroclor 1260	100	98	NA	NA	NA	-2	± 20 %	NA
Aroclor 1260 {1}	100	94	118000	111000	-6	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	94	170000	160000	-6	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	80	149000	120000	-20	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	110	109000	122000	11	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	110	280000	311000	11	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† **SPCC Compound** ‡ **CCC Compound**

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-XLB

Level ID	File ID
A	\\cash1\acqudata\GC22\data\120810_r.b\1208F003.D
B	\\cash1\acqudata\GC22\data\120810_r.b\1208F004.D
C	\\cash1\acqudata\GC22\data\120810_r.b\1208F005.D
D	\\cash1\acqudata\GC22\data\120810_r.b\1208F006.D
E	\\cash1\acqudata\GC22\data\120810_r.b\1208F007.D
F	\\cash1\acqudata\GC22\data\120810_r.b\1208F008.D
G	\\cash1\acqudata\GC22\data\120810_r.b\1208F009.D
H	\\cash1\acqudata\GC22\data\120810_r.b\1208F010.D
I	\\cash1\acqudata\GC22\data\120810_r.b\1208F011.D
J	\\cash1\acqudata\GC22\data\120810_r.b\1208F012.D
K	\\cash1\acqudata\GC22\data\120810_r.b\1208F013.D
L	\\cash1\acqudata\GC22\data\120810_r.b\1208F014.D
M	\\cash1\acqudata\GC22\data\120810_r.b\1208F015.D
N	\\cash1\acqudata\GC22\data\120810_r.b\1208F016.D
O	\\cash1\acqudata\GC22\data\120810_r.b\1208F017.D
P	\\cash1\acqudata\GC22\data\120810_r.b\1208F018.D
Q	\\cash1\acqudata\GC22\data\120810_r.b\1208F019.D
R	\\cash1\acqudata\GC22\data\120810_r.b\1208F020.D
S	\\cash1\acqudata\GC22\data\120810_r.b\1208F021.D
T	\\cash1\acqudata\GC22\data\120810_r.b\1208F022.D
U	\\cash1\acqudata\GC22\data\120810_r.b\1208F023.D
V	\\cash1\acqudata\GC22\data\120810_r.b\1208F024.D
W	\\cash1\acqudata\GC22\data\120810_r.b\1208F025.D
X	\\cash1\acqudata\GC22\data\120810_r.b\1208F026.D
Y	\\cash1\acqudata\GC22\data\120810_r.b\1208F027.D
Z	\\cash1\acqudata\GC22\data\120810_r.b\1208F028.D
AA	\\cash1\acqudata\GC22\data\120810_r.b\1208F029.D
AB	\\cash1\acqudata\GC22\data\120810_r.b\1208F030.D
AC	\\cash1\acqudata\GC22\data\120810_r.b\1208F031.D
AD	\\cash1\acqudata\GC22\data\120810_r.b\1208F032.D

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Decachlorobiphenyl	A	0.25	8.73E+6	B	0.50	8.19E+6	C	5.0	6.88E+6	D	10	6.47E+6	E	20	5.87E+6
	F	50	6.09E+6												
Aroclor 1016 {1}	A	2.5	2.14E+5	B	5.0	2.08E+5	C	50	1.73E+5	D	100	1.64E+5	E	200	1.48E+5
	F	500	1.41E+5												
Aroclor 1016 {2}	A	2.5	4.25E+5	B	5.0	4.09E+5	C	50	3.33E+5	D	100	3.30E+5	E	200	3.03E+5
	F	500	3.06E+5												
Aroclor 1016 {3}	A	2.5	1.78E+5	B	5.0	1.89E+5	C	50	1.79E+5	D	100	1.76E+5	E	200	1.63E+5
	F	500	1.62E+5												
Aroclor 1016 {4}	A	2.5	1.74E+5	B	5.0	1.70E+5	C	50	1.44E+5	D	100	1.38E+5	E	200	1.24E+5
	F	500	1.21E+5												
Aroclor 1016 {5}	A	2.5	2.15E+5	B	5.0	2.03E+5	C	50	1.63E+5	D	100	1.56E+5	E	200	1.41E+5
	F	500	1.38E+5												
Aroclor 1260 {1}	A	2.5	5.50E+5	B	5.0	5.55E+5	C	50	4.66E+5	D	100	4.35E+5	E	200	4.03E+5
	F	500	4.12E+5												
Aroclor 1260 {2}	A	2.5	6.64E+5	B	5.0	6.31E+5	C	50	5.52E+5	D	100	5.27E+5	E	200	4.89E+5
	F	500	5.04E+5												
Aroclor 1260 {3}	A	2.5	3.71E+5	B	5.0	3.56E+5	C	50	3.22E+5	D	100	3.04E+5	E	200	2.78E+5
	F	500	2.83E+5												
Aroclor 1260 {4}	A	2.5	3.55E+5	B	5.0	3.51E+5	C	50	3.15E+5	D	100	2.96E+5	E	200	2.69E+5
	F	500	2.79E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-XLB

Analyte Name	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF	Level ID	Amt	RF
Aroclor 1260 {5}	A	2.5	8.74E+5	B	5.0	8.19E+5	C	50	7.32E+5	D	100	7.06E+5	E	200	6.62E+5
	F	500	7.03E+5												

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010

Initial Calibration Summary
Polychlorinated Biphenyls (PCBs)

Calibration ID: CAL10114
Instrument ID: GC22.i

Column: DB-XLB

Analyte Name	Compound Type	Calibration Evaluation				
		Fit Type	Eval.	Eval. Result	Q	Control Criteria
Decachlorobiphenyl	SURR	AverageRF	% RSD	16.6		≤ 20
Aroclor 1016 {1}	MULTI	AverageRF	% RSD	17.5		≤ 20
Aroclor 1016 {2}	MULTI	AverageRF	% RSD	15.1		≤ 20
Aroclor 1016 {3}	MULTI	AverageRF	% RSD	6.0		≤ 20
Aroclor 1016 {4}	MULTI	AverageRF	% RSD	15.6		≤ 20
Aroclor 1016 {5}	MULTI	AverageRF	% RSD	19.0		≤ 20
Aroclor 1260 {1}	MULTI	AverageRF	% RSD	14.3		≤ 20
Aroclor 1260 {2}	MULTI	AverageRF	% RSD	12.6		≤ 20
Aroclor 1260 {3}	MULTI	AverageRF	% RSD	12.0		≤ 20
Aroclor 1260 {4}	MULTI	AverageRF	% RSD	11.6		≤ 20
Aroclor 1260 {5}	MULTI	AverageRF	% RSD	10.8		≤ 20

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Calibration Date: 12/08/2010
Date Analyzed: 12/09/2010

Second Source Calibration Verification
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration ID: CAL10114
Units: ng/mL

File ID: \\cash1\acqudata\GC22\data\120810_r.b\1208F033.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F034.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F035.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F036.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F037.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F038.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F039.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F040.D
\\cash1\acqudata\GC22\data\120810_r.b\1208F041.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	SSV RF	%D	%Drift	Criteria	Curve Fit
Aroclor 1016	100	85	NA	NA	NA	-15	± 20 %	NA
Aroclor 1016 {1}	100	86	175000	150000	-14	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	82	351000	288000	-18	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	91	175000	159000	-9	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	84	145000	121000	-16	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	84	169000	142000	-16	NA	± 100 %	AverageRF
Aroclor 1260	100	99	NA	NA	NA	-1	± 20 %	NA
Aroclor 1260 {1}	100	90	470000	423000	-10	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	84	561000	474000	-16	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	110	319000	355000	11	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	100	311000	326000	5	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	110	749000	795000	6	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

† SPCC Compound ‡ CCC Compound

Sequence Name: C:\GC22\SEQUENCE\120810.S
Comment: PCB Aroclors by EPA 8082
Operator: LHarris
Data Path: C:\GC22\DATA\120810\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

ICAL 10114
ultra Low level

Do not report hits for AR1221 for DOD 4.1 AH 12/15/10

Line	Type	Vial	DataFile	Method	Sample Name
1	SOLN	100	1208FP01	PCB_UL	PRIMER
2	SOLN	100	1208FP02	PCB_UL	PRIMER
3	SOLN	100	1208FP03	PCB_UL	PRIMER
4	SOLN	100	1208FP04	PCB_UL	PRIMER
5	SOLN	100	1208FP05	PCB_UL	PRIMER
6	IB	1	1208F001	PCB_UL	IB
7	IB	2	1208F002	PCB_UL	IB | 8082 PCB_ULL
8	ICAL	3	1208F003	PCB_UL	1660 @ 0.25-2.5ppb | PCB5-~~62A~~ 62L
9	ICAL	4	1208F004	PCB_UL	1660 @ 0.50-5.0ppb | PCB5-~~62B~~ 62K
10	ICAL	5	1208F005	PCB_UL	1660 @ 5.0-50ppb | PCB5-~~62C~~ 62J
11	ICAL	6	1208F006	PCB_UL	1660 @ 10-100ppb | PCB5-~~62F~~ 62L
12	ICAL	7	1208F007	PCB_UL	1660 @ 20-200ppb | PCB5-~~62D~~ 62H
13	ICAL	8	1208F008	PCB_UL	1660 @ 50-500ppb | PCB5-~~62E~~ 62G
14	ICAL	9	1208F009	PCB_UL	1221/1254 @ 5.0-2.5ppb | PCB5
15	ICAL	10	1208F010	PCB_UL	1221/1254 @ 10-5.0ppb | PCB5-
16	ICAL	11	1208F011	PCB_UL	1221/1254 @ 100-50ppb | PCB5-
17	ICAL	12	1208F012	PCB_UL	1221/1254 @ 200-100ppb | PCB5
18	ICAL	13	1208F013	PCB_UL	1221/1254 @ 400-200ppb | PCB5
19	ICAL	14	1208F014	PCB_UL	1221/1254 @ 1000-500ppb | PCB
20	ICAL	15	1208F015	PCB_UL	1232/1262 @ 2.5ppb | PCB5-61B
21	ICAL	16	1208F016	PCB_UL	1232/1262 @ 5.0ppb | PCB5-61C
22	ICAL	17	1208F017	PCB_UL	1232/1262 @ 50ppb | PCB5-61D
23	ICAL	18	1208F018	PCB_UL	1232/1262 @ 100ppb | PCB5-61E
24	ICAL	19	1208F019	PCB_UL	1232/1262 @ 200ppb | PCB5-61F
25	ICAL	20	1208F020	PCB_UL	1232/1262 @ 500ppb | PCB5-61G
26	ICAL	21	1208F021	PCB_UL	1242/1268 @ 2.5ppb | PCB5-61H
27	ICAL	22	1208F022	PCB_UL	1242/1268 @ 5.0ppb | PCB5-61I
28	ICAL	23	1208F023	PCB_UL	1242/1268 @ 50ppb | PCB5-61J
29	ICAL	24	1208F024	PCB_UL	1242/1268 @ 100ppb | PCB5-61K
30	ICAL	25	1208F025	PCB_UL	1242/1268 @ 200ppb | PCB5-61L
31	ICAL	26	1208F026	PCB_UL	1242/1268 @ 500ppb | PCB5-61M
32	ICAL	27	1208F027	PCB_UL	1248 @ 2.5ppb | PCB5-61N | KW
33	ICAL	28	1208F028	PCB_UL	1248 @ 5.0ppb | PCB5-61O | KW
34	ICAL	29	1208F029	PCB_UL	1248 @ 50ppb | PCB5-61P | KWG
35	ICAL	30	1208F030	PCB_UL	1248 @ 100ppb | PCB5-61Q | KW
36	ICAL	31	1208F031	PCB_UL	1248 @ 200ppb | PCB5-61R | KW
37	ICAL	32	1208F032	PCB_UL	1248 @ 500ppb | PCB5-61S | KW
38	ICV	33	1208F033	PCB_UL	1016 @ 100ppb | PCB5-62F | KW
39	ICV	34	1208F034	PCB_UL	1221 @ 100ppb | PCB5-67H | KW
40	ICV	35	1208F035	PCB_UL	1232 @ 100ppb | PCB5-67I | KW
41	ICV	36	1208F036	PCB_UL	1242 @ 100ppb | PCB5-67J | KW
42	ICV	37	1208F037	PCB_UL	1248 @ 100ppb | PCB5-67K | KW
43	ICV	38	1208F038	PCB_UL	1254 @ 100ppb | PCB5-67L | KW

AH 12/8/10

Last Modified: Wed Dec 08 18:04:30 2010 Page: 1

Sequence Name: C:\GC22\SEQUENCE\120810.S

Line	Type	Vial	DataFile	Method	Sample Name		
44	ICV	39	1208F039	PCB_UL	1260 @ 100ppb	PCB5-67M	KW
45	ICV	40	1208F040	PCB_UL	1262 @ 100ppb	PCB5-67N	KW
46	ICV	41	1208F041	PCB_UL	1268 @ 100ppb	PCB5-67O	KW

Report Date : 09-Dec-2010 12:16

Columbia Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 08-DEC-2010 20:58
End Cal Date : 09-DEC-2010 08:48
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Cal Date : 09-Dec-2010 11:18 tuser
Curve Type : Average

Calibration File Names:
Level 1: \\cash1\acqudata\GC22\data\120810.b\1208F027.D
Level 2: \\cash1\acqudata\GC22\data\120810.b\1208F028.D
Level 3: \\cash1\acqudata\GC22\data\120810.b\1208F029.D
Level 4: \\cash1\acqudata\GC22\data\120810.b\1208F030.D
Level 5: \\cash1\acqudata\GC22\data\120810.b\1208F031.D
Level 6: \\cash1\acqudata\GC22\data\120810.b\1208F032.D

Compound	2.500 Level 1	5.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	500.000 Level 6	___ RRF	% RSD
2 Aroclor 1016(1)	24320	25471	22312	22105	21159	21141	22751	7.762
(2)	35400	36302	30562	28867	28028	26588	30958	12.961
(3)	76473	74350	65288	64077	61649	60181	67003	10.131
(4)	43822	43600	41199	40536	39550	38883	41265	4.983
(5)	54698	55911	51079	50019	46816	44659	50530	8.633
3 Aroclor 1221(1)	13791	14261	11860	11305	10562	9945	11954	14.536
(2)	5097	4641	3867	3689	3456	3082	3972	19.054
(3)	19894	20287	19425	19516	18889	18107	19353	3.979
(4)	12026	12335	12459	12544	12057	11317	12123	3.687
4 Aroclor 1232(1)	44898	47689	40915	40959	39276	35910	41608	10.003
(2)	42621	43798	35473	35573	33957	30548	36995	13.945
(3)	36994	38779	28670	28773	25169	27901	31048	17.666
(4)	33938	34547	28723	28718	27730	25885	29924	11.721
5 Aroclor 1242(1)	27696	28873	24358	22682	22609	21414	24605	12.287
(2)	90103	87663	80296	77199	81507	83939	83451	5.748
(3)	56003	58694	51981	49995	48790	47509	52162	8.364
(4)	35048	39007	39633	38033	36480	35006	37201	5.355
(5)	27842	27327	26741	26151	25390	23329	26130	6.201
6 Aroclor 1248(1)	72279	70457	62837	61792	59322	58062	64125	9.187
(2)	73114	75698	66721	66196	64617	63834	68363	7.116
(3)	53811	59873	54162	54148	53503	53249	54791	4.590
(4)	83804	87054	79089	78308	75944	75931	80022	5.614
(5)	97046	98896	88810	88327	85732	86145	90826	6.267
7 Aroclor 1254(1)	116535	110808	100185	97817	95638	92510	102249	9.173
(2)	85524	83094	79206	78724	77393	75603	79924	4.629
(3)	182947	180016	161126	161362	160365	157424	167207	6.689
(4)	116646	117902	111034	111110	110753	108677	112687	3.271
(5)	75650	80455	76184	76403	75692	73350	76289	3.033

12/9/10

Report Date : 09-Dec-2010 12:16

Columbia Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 08-DEC-2010 20:58
End Cal Date : 09-DEC-2010 08:48
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Cal Date : 09-Dec-2010 11:18 tuser
Curve Type : Average

Compound	2.500 Level 1	5.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	500.000 Level 6	RRF	% RSD
8 Aroclor 1260(1)	132966	133711	115594	111851	108574	104147	117807	10.703
(2)	187597	189271	165174	160445	160311	156367	169861	8.633
(3)	162512	166535	144489	142303	139166	137925	148822	8.363
(4)	122910	117058	107462	105362	103106	100539	109406	7.961
(5)	298145	285076	270461	273535	276473	274444	279689	3.683
9 Aroclor 1262(1)	202239	206370	178215	179614	177064	169221	185454	8.141
(2)	154733	166160	140830	141383	138262	132200	145595	8.579
(3)	334067	336102	300017	313190	315163	309272	317969	4.484
(4)	141440	144430	127240	130268	128135	123629	132524	6.337
(5)	287166	247632	214672	222657	221070	215964	234860	12.047
10 Aroclor 1268(1)	430156	413106	364998	360601	364545	368241	383608	7.831
(2)	310820	322180	294252	289745	292328	296348	300945	4.240
(3)	95499	76047	71490	68192	67259	67668	74359	14.623
(4)	122466	122842	114827	113498	115380	119049	118010	3.425
(5)	805575	817187	780901	777043	788423	784770	792316	1.980
$ 1 Tetrachloro-m-xylene	1972376	1918082	1828013	1868764	1889180	1904934	1896892	2.562
$ 11 Decachlorobiphenyl	2230060	2309796	2089261	2054865	2033124	1996741	2118974	5.820

Report Date : 09-Dec-2010 14:28

Columbia Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 08-DEC-2010 20:58
End Cal Date : 09-DEC-2010 08:48
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Cal Date : 09-Dec-2010 14:26 tuser
Curve Type : Average

Calibration File Names:
Level 1: \\cash1\acqudata\GC22\data\120810_r.b\1208F027.D
Level 2: \\cash1\acqudata\GC22\data\120810_r.b\1208F028.D
Level 3: \\cash1\acqudata\GC22\data\120810_r.b\1208F029.D
Level 4: \\cash1\acqudata\GC22\data\120810_r.b\1208F030.D
Level 5: \\cash1\acqudata\GC22\data\120810_r.b\1208F031.D
Level 6: \\cash1\acqudata\GC22\data\120810_r.b\1208F032.D

Compound	2.500 Level 1	5.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	500.000 Level 6	___ RRF	% RSD
2 Aroclor 1016(1)	214321	208373	172599	163849	147954	141206	174717	17.479
(2)	424943	409258	332615	329891	302684	306344	350956	15.063
(3)	178425	189201	179434	175991	162586	162055	174615	6.033
(4)	173811	170321	144247	137616	124038	120781	145136	15.567
(5)	215014	202968	162603	156135	141221	138263	169368	19.028
3 Aroclor 1221(1)	+++++	+++++	33999	+++++	+++++	+++++	33999	0.000
(2)	+++++	+++++	11947	+++++	+++++	+++++	11947	0.000
(3)	+++++	+++++	21405	+++++	+++++	+++++	21405	0.000
(4)	+++++	+++++	43481	+++++	+++++	+++++	43481	0.000
4 Aroclor 1232(1)	167646	168598	138357	138171	128624	113162	142426	15.391
(2)	91863	93351	75933	75654	70762	60812	78063	16.055
(3)	138911	139724	123290	120493	113103	101899	122903	11.971
(4)	52856	63013	75088	77612	74125	66144	68140	13.731
5 Aroclor 1242(1)	166503	168617	140047	129986	124346	116354	140976	15.606
(2)	97740	96689	92901	83032	81512	74911	87798	10.590
(3)	173724	187268	178870	164375	158682	155457	169729	7.271
(4)	91765	128057	144628	134704	131076	129611	126640	14.281
(5)	120521	124449	114435	102566	98272	94577	109137	11.336
6 Aroclor 1248(1)	251008	255187	213059	214749	202357	196124	222081	11.268
(2)	162520	165990	148620	150037	143005	143779	152325	6.362
(3)	352790	347295	276851	273860	264718	252515	294671	14.848
(4)	284624	283986	254235	253703	242908	239335	259799	7.647
(5)	318794	317141	266853	269639	254567	249445	279406	11.023
7 Aroclor 1254(1)	340286	339894	280861	282654	265195	244159	292175	13.556
(2)	547384	528176	433411	436234	413099	387451	457626	14.157
(3)	530486	520376	442368	456120	440387	421867	468601	9.702
(4)	208845	213548	177645	179754	167025	155238	183676	12.566
(5)	477321	441652	352281	359488	338141	322301	381864	16.363

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Report Date : 09-Dec-2010 14:28

Columbia Analytical Services

INITIAL CALIBRATION DATA

Start Cal Date : 08-DEC-2010 20:58
End Cal Date : 09-DEC-2010 08:48
Quant Method : ESTD
Origin : Disabled
Target Version : 4.04
Integrator : Falcon
Method file : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Cal Date : 09-Dec-2010 14:26 tuser
Curve Type : Average

Compound	2.500 Level 1	5.000 Level 2	50.000 Level 3	100.000 Level 4	200.000 Level 5	500.000 Level 6	RRF	% RSD
8 Aroclor 1260(1)	549832	555366	465617	435344	403328	411607	470182	14.342
(2)	663796	630817	552326	526826	488663	504207	561106	12.638
(3)	370594	356383	321755	303914	277816	282893	318892	11.978
(4)	355367	350693	314842	296451	269103	279163	310937	11.631
(5)	874058	819305	731936	706037	661645	702583	749261	10.761
9 Aroclor 1262(1)	576035	570546	456183	480725	452914	394693	488516	14.637
(2)	389399	401517	330564	348326	330901	292877	348931	11.612
(3)	963922	929631	761314	825907	798194	721651	833437	11.418
(4)	663125	636356	521017	556598	532258	472826	563697	12.862
(5)	465133	441055	366452	389202	369873	320916	392105	13.475
10 Aroclor 1268(1)	1240727	1204773	1092800	1009678	1020341	1054272	1103765	8.816
(2)	999501	961507	874324	806367	809725	831499	880487	9.320
(3)	255403	255819	234785	214911	210703	210714	230389	9.321
(4)	386010	374653	348163	320807	320313	324443	345731	8.368
(5)	2697836	2558158	2342030	2170873	2218207	2300798	2381317	8.614
$ 1 Tetrachloro-m-xylene	6970192	6819552	6019468	6060308	6040530	5969398	6313241	7.192
$ 11 Decachlorobiphenyl	8730608	8187942	6884179	6466198	5866439	6091682	7037841	16.578

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F002.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F002.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F002.D
Inj Date : 08-DEC-2010 20:34
Sample Info: IB | 8082 PCB_ULL
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

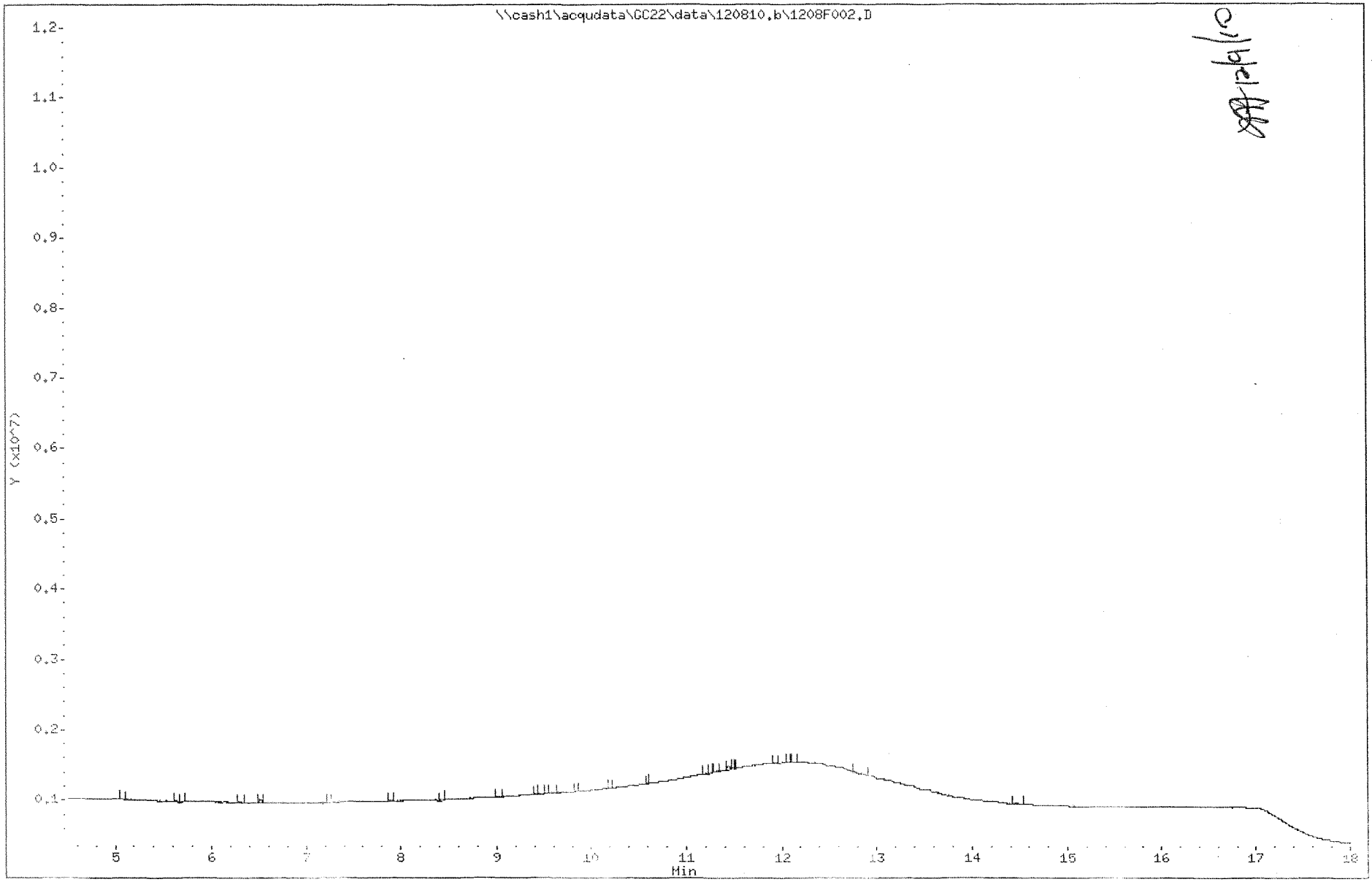
Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio

12/9/10

Data File: \\cash1\acqudata\GC22\data\120810,b\1208F002.D
Date : 08-DEC-2010 20:34
Client ID:
Sample Info: IB | 8082 PCB_ULL

Instrument: GC22,i

Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



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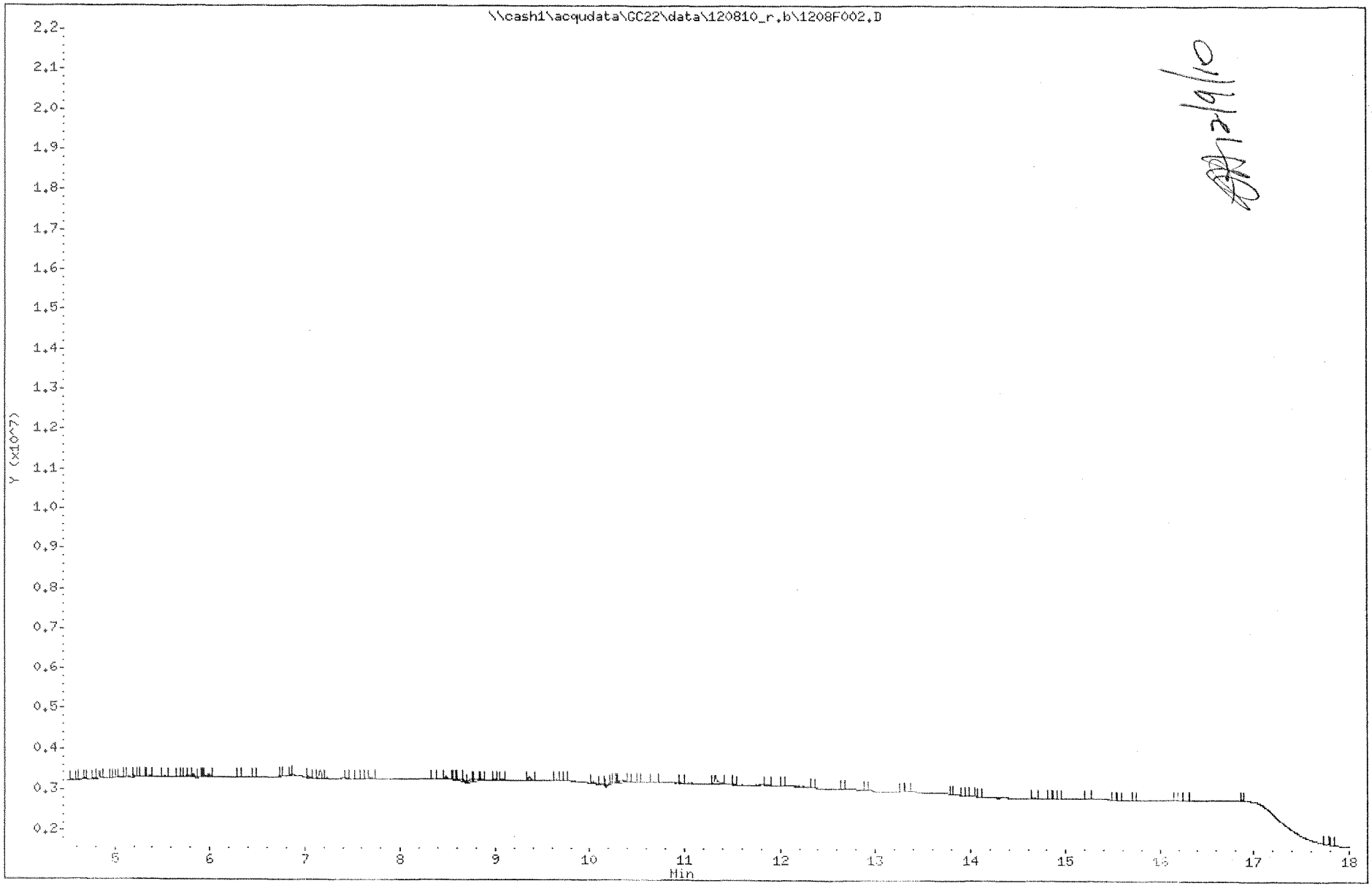
Date : 08-DEC-2010 20:34
Client ID:
Sample Info: IB | 8082 PCB_ULL

Instrument: GC22.i

Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F003.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F003.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F003.D
Inj Date : 08-DEC-2010 20:58
Sample Info: 1660 @ 0.25-2.5ppb | PCB5-62A | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.285	5.847	493094	1742548	0.260	0.276		100.00(M)
Aroclor 1016	6.358	6.611	60800	535803	2.68	3.07	80.00- 120.00	100.00(M)
	6.391	7.311	88500	1062357	2.87	3.03	100.61- 150.92	145.56(M)
	6.748	7.511	191183	446063	2.84	2.55	227.73- 341.59	314.45(M)
	6.911	7.651	109555	434527	2.64	2.99	147.14- 220.70	180.19(M)
	6.968	7.724	136746	537536	2.70	3.17	168.99- 253.49	224.91(M)
			Average of Peak Amounts =		2.75	2.96		
Aroclor 1260	8.968	10.247	332416	1374580	2.81	2.92	80.00- 120.00	100.00(M)
	9.248	10.737	468993	1659491	2.73	2.96	120.11- 180.17	141.09(M)
	9.648	10.894	406280	926486	2.72	2.90	105.95- 158.92	122.22(M)
	10.408	11.277	307275	888418	2.76	2.86	77.23- 115.84	92.44(M)
	10.805	11.831	745363	2185146	2.63	2.92	210.81- 316.22	224.23(M)
			Average of Peak Amounts =		2.73	2.91		
Decachlorobiphenyl	13.338	14.367	557515	2182652	0.227	0.310		100.00(M)

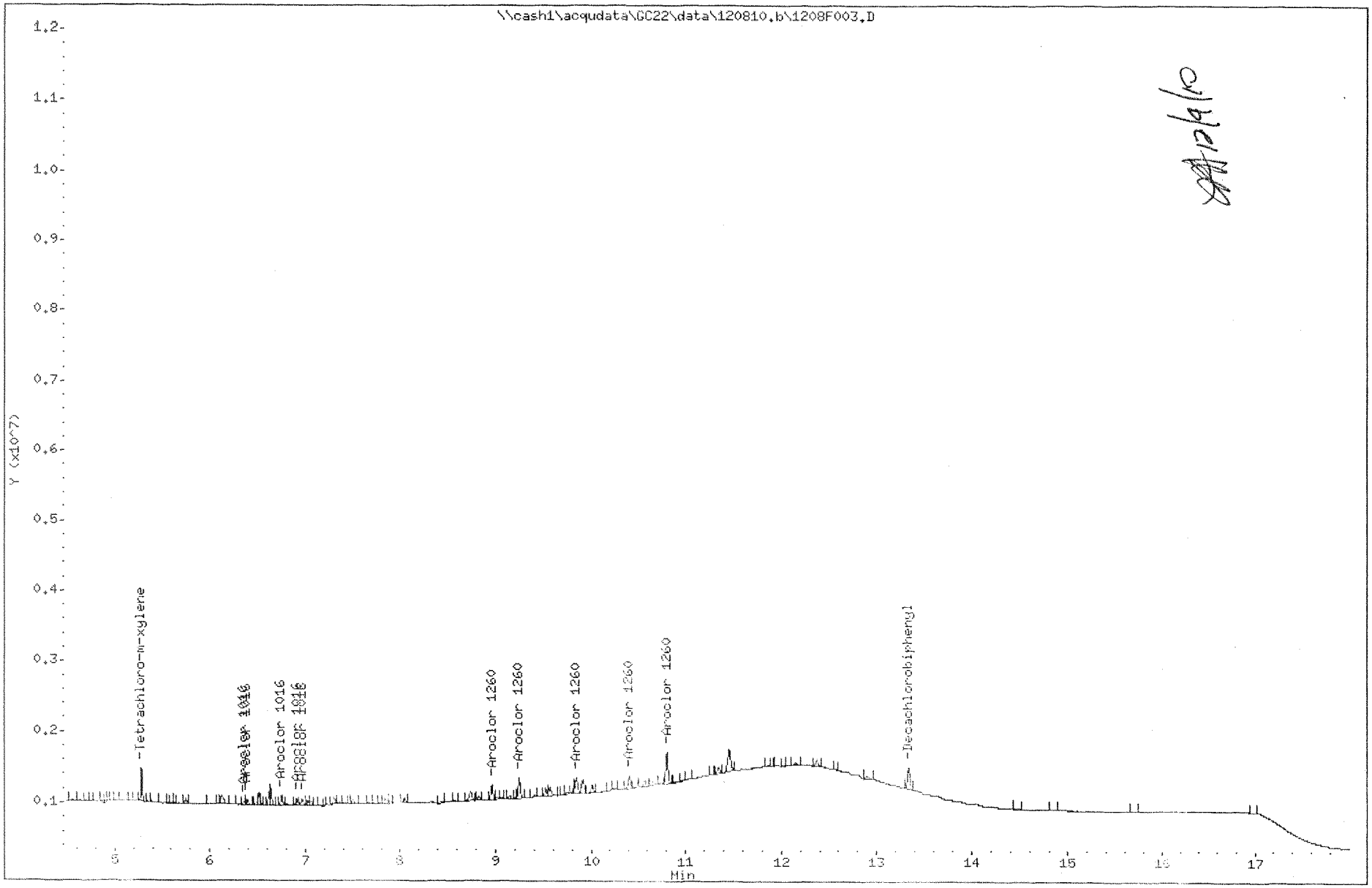
QC Flag Legend

M - Compound response manually integrated.

AR 12/9/10

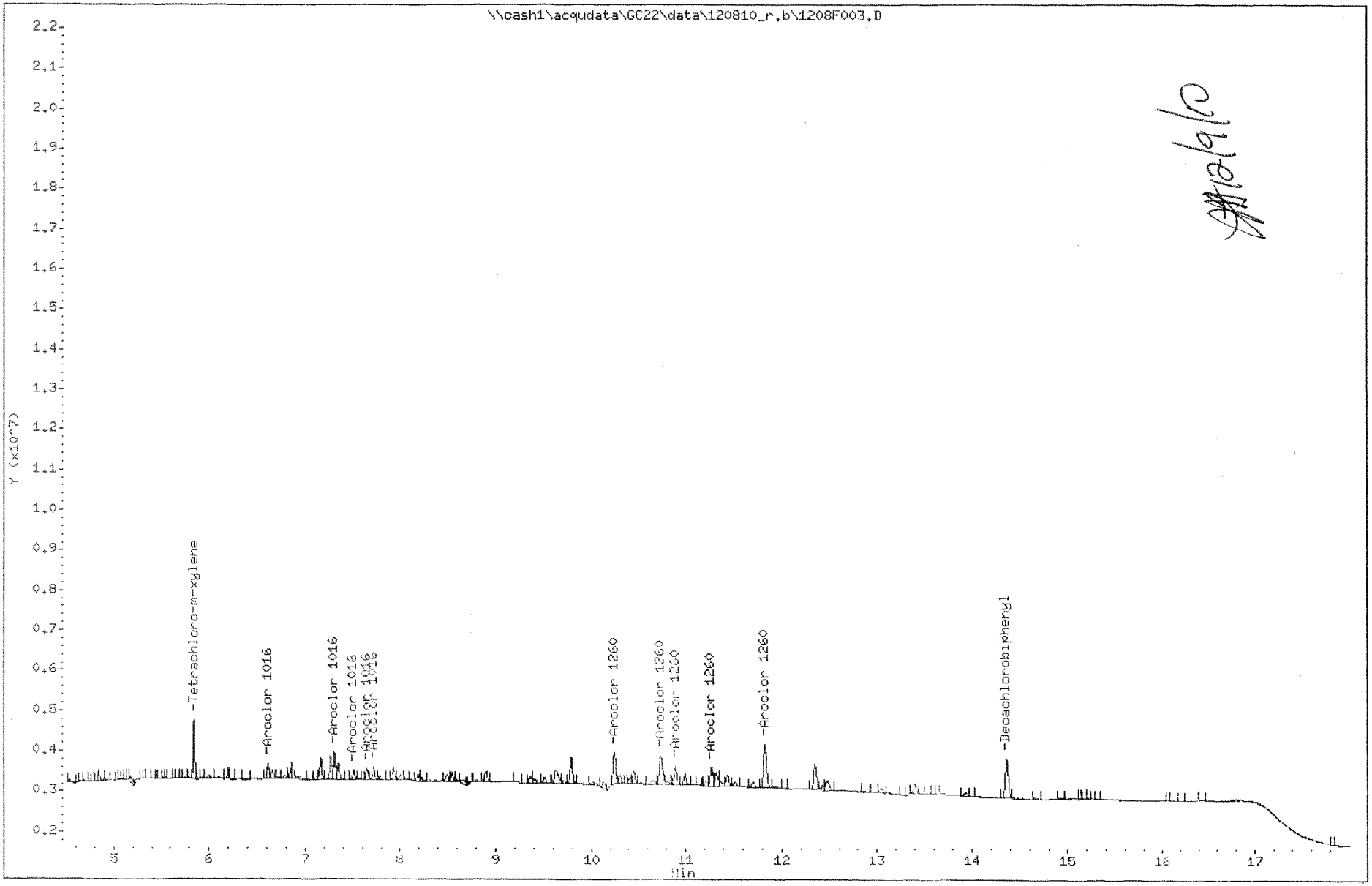
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F003.D
Date : 08-DEC-2010 20:58
Client ID:
Sample Info: 1660 @ 0.25-2.5ppb | PCB5-62A | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32

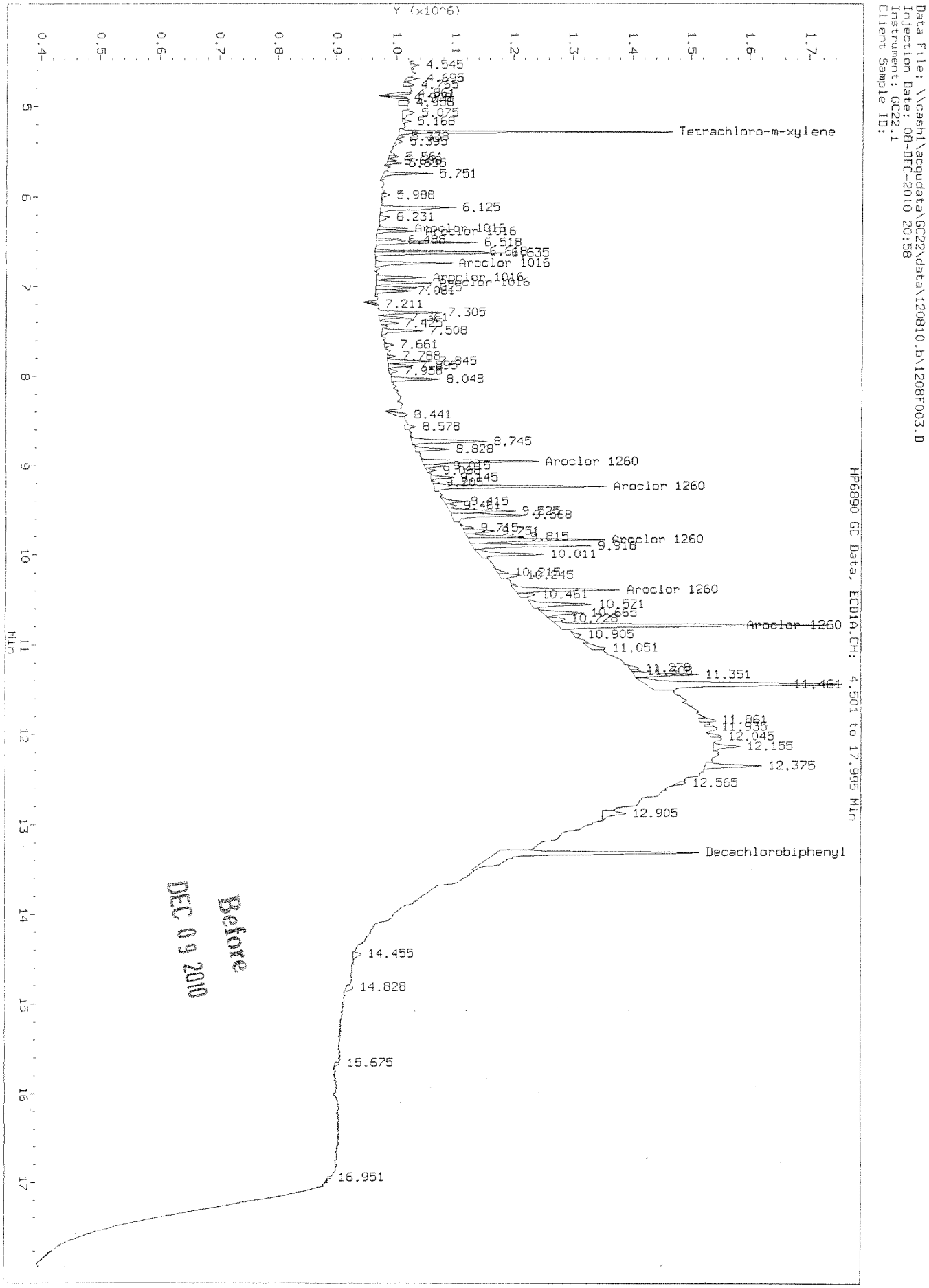


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F003.D
Date : 08-DEC-2010 20:58
Client ID:
Sample Info: 1660 @ 0.25-2.5ppb | PCB5-62A | KWG1006746-3

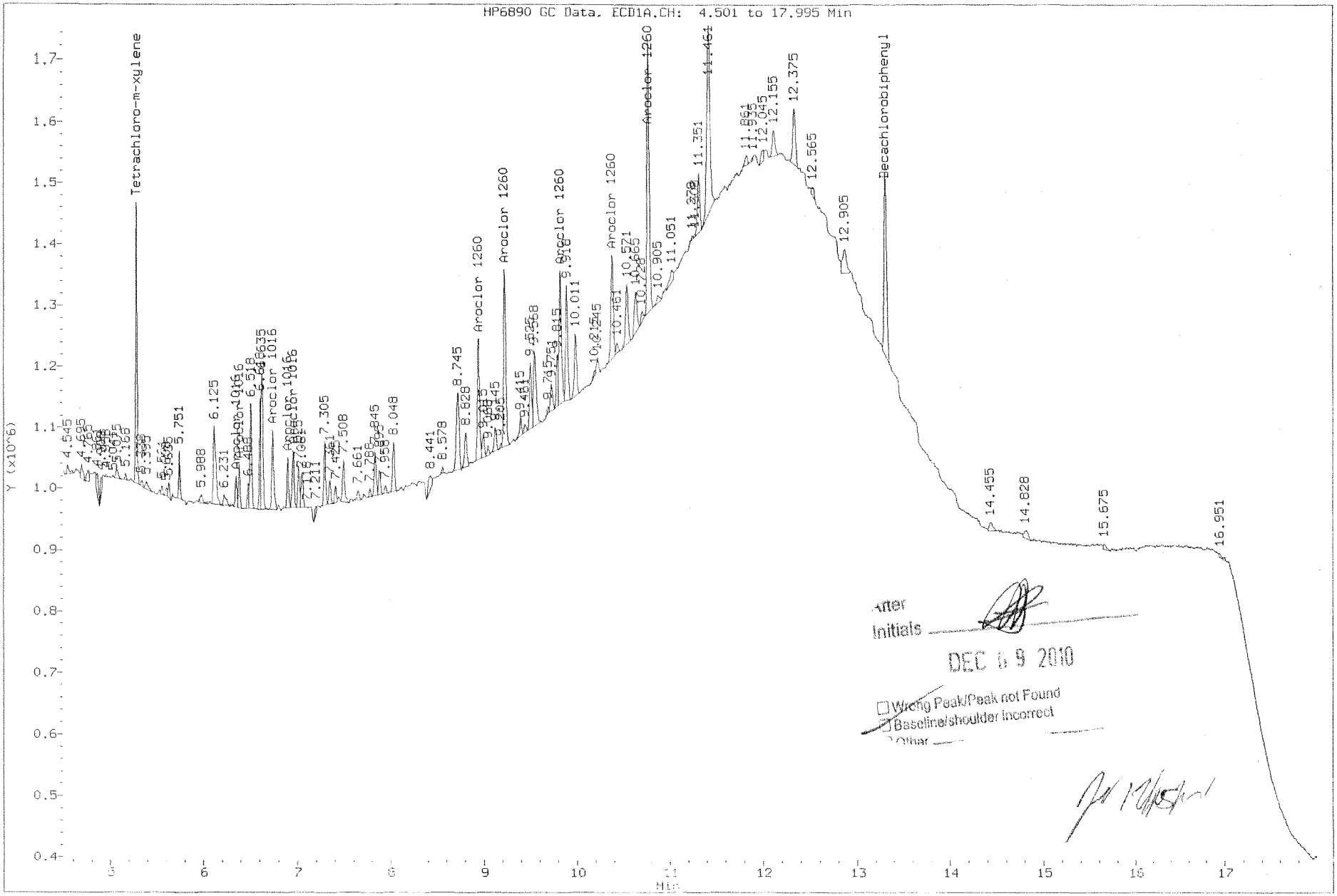
Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



678

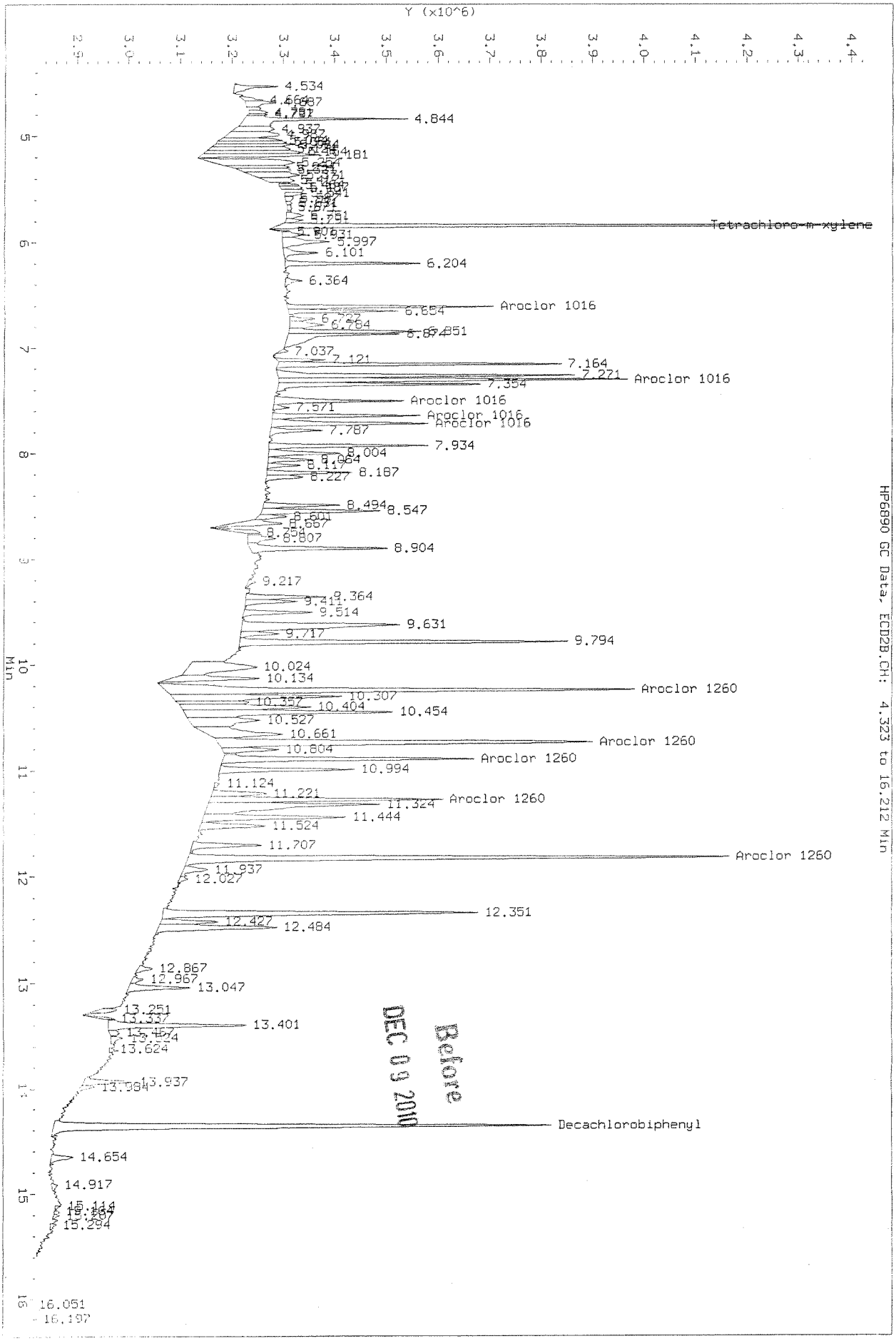

Data File: \\cashl\acqudata\GC22\data\120810.b\1208F003.D
Injection Date: 08-DEC-2010 20:58
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD1A.CH: 4.501 to 17.995 Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F003.D
Injection Date: 08-DEC-2010 20:58
Instrument: GC22.i
Client Sample ID:



After
Initials
DEC 09 2010
☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder Incorrect
☐ Other

680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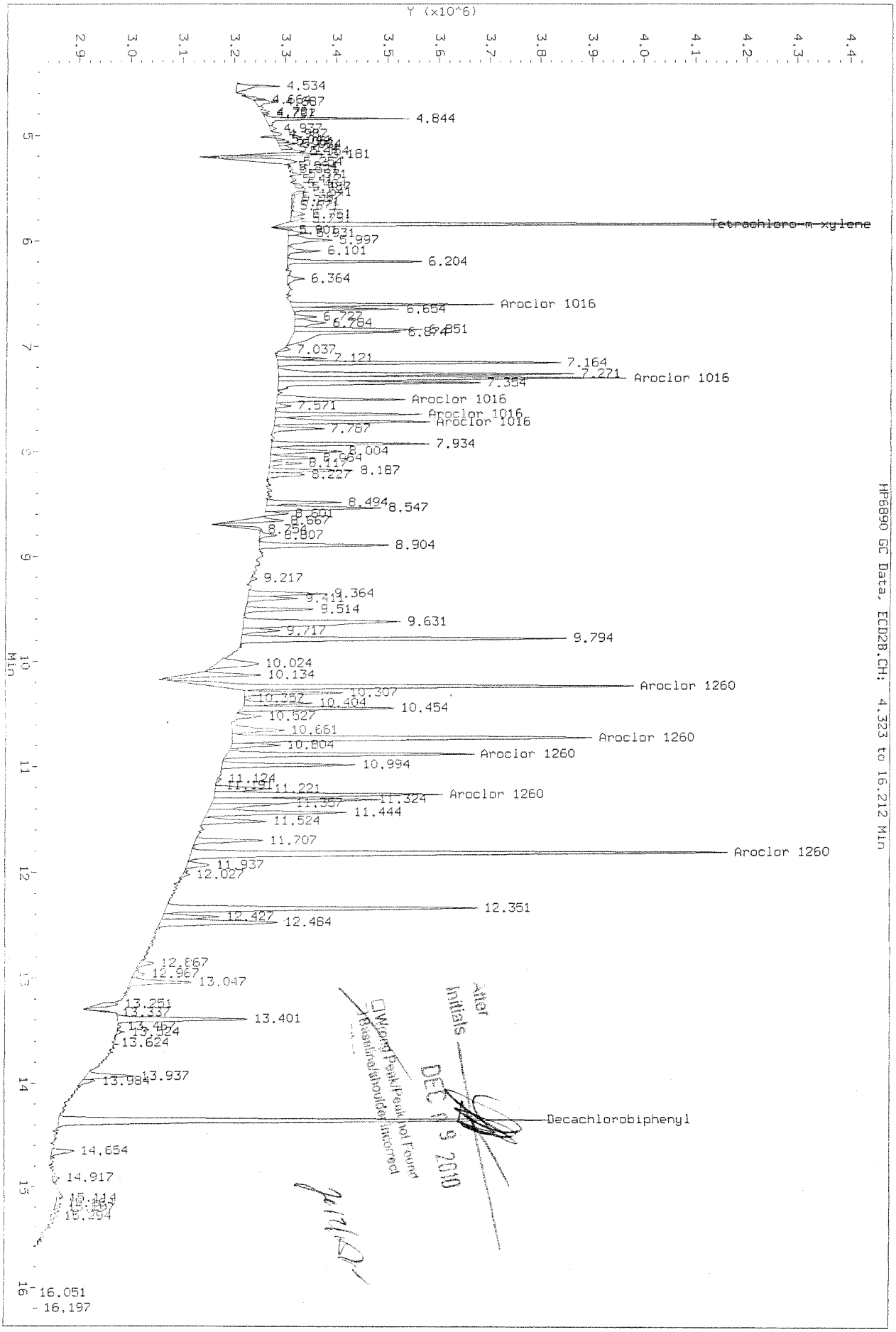
Injection Date: 08-DEC-2010 20:58
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.323 to 16.212 Min
Y (x10^6)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Before
DEC 09 2010



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F003.D
Injection Date: 08-DEC-2010 20:58
Instrument: GC22.i
Client Sample ID:

HP6890 GC Data, ECD2B.CH; 4.323 to 16.212 Min

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F004.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F004.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F004.D
Inj Date : 08-DEC-2010 21:23
Sample Info: 1660 @ 0.50-5.0ppb | PCB5-62B | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.283	5.845	959041	3409776	0.506	0.540		100.00(M)
Aroclor 1016	6.356	6.609	127355	1041866	5.63	5.97	80.00- 120.00	100.00(M)
	6.389	7.309	181510	2046291	5.89	5.90	100.61- 150.92	142.52(M)
	6.746	7.509	371749	946006	5.56	5.41	227.73- 341.59	291.90(M)
	6.906	7.649	217998	851603	5.29	5.87	147.14- 220.70	171.17(M)
	6.966	7.719	279556	1014842	5.54	6.00	168.99- 253.49	219.51(M)
			Average of Peak Amounts =		5.58	5.83		
Aroclor 1260	8.966	10.249	668557	2776829	5.68	5.66	80.00- 120.00	100.00(M)
	9.246	10.735	946356	3154085	5.57	5.60	120.11- 180.17	141.55(M)
	9.846	10.895	832675	1781915	5.61	5.55	105.95- 158.92	124.55(M)
	10.406	11.275	585290	1753465	5.34	5.63	77.23- 115.84	87.55(M)
	10.803	11.832	1425381	4096526	5.09	5.46	210.81- 316.22	213.20(M)
			Average of Peak Amounts =		5.46	5.58		
Decachlorobiphenyl	13.339	14.362	1154898	4093971	0.530	0.582		100.00(M)

QC Flag Legend

M - Compound response manually integrated.

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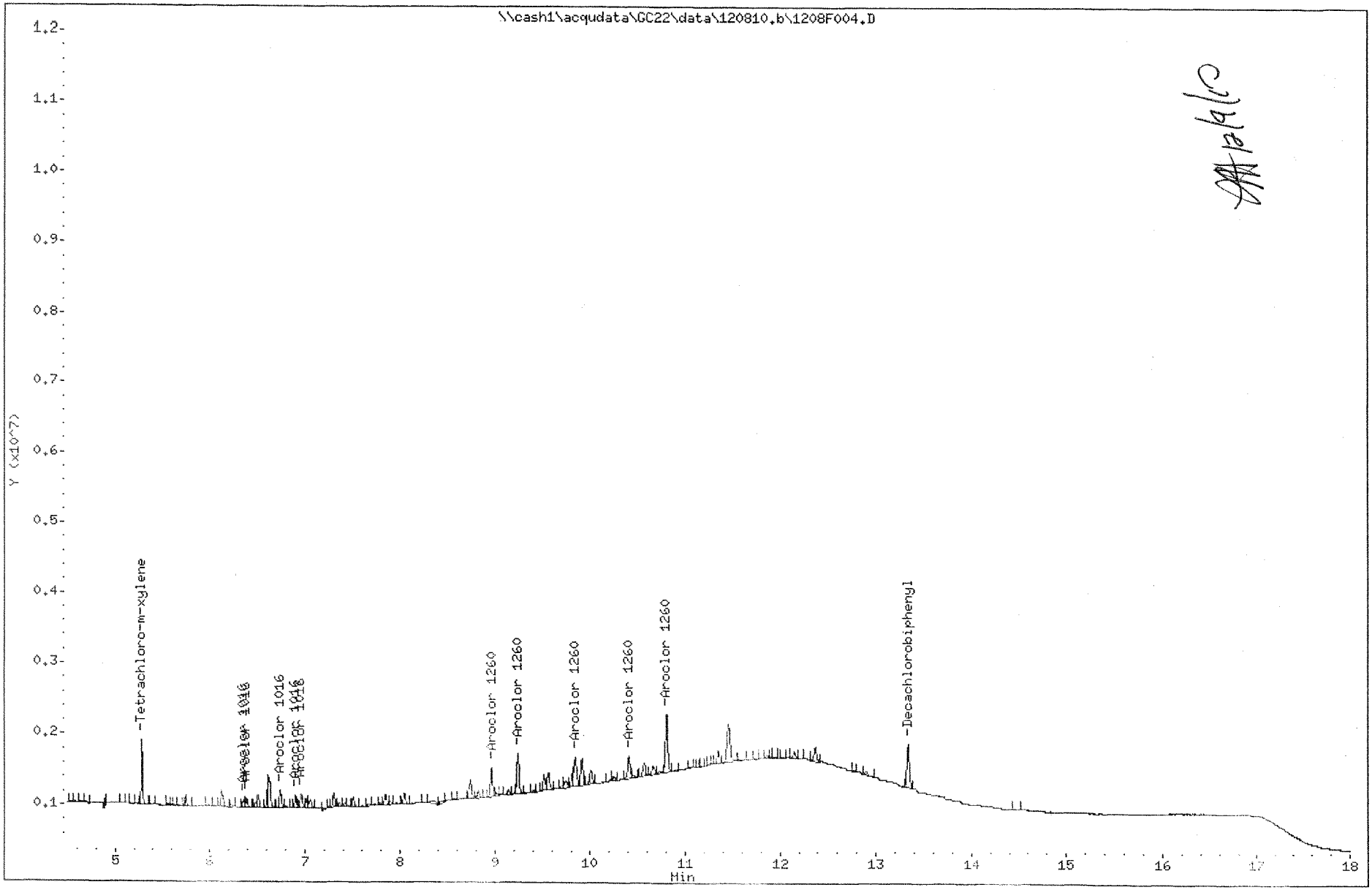
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F004.D
Date : 08-DEC-2010 21:23
Client ID:
Sample Info: 1660 @ 0.50-5.0ppb | PCB5-62B | KWG1006746-3

Instrument: GC22.i

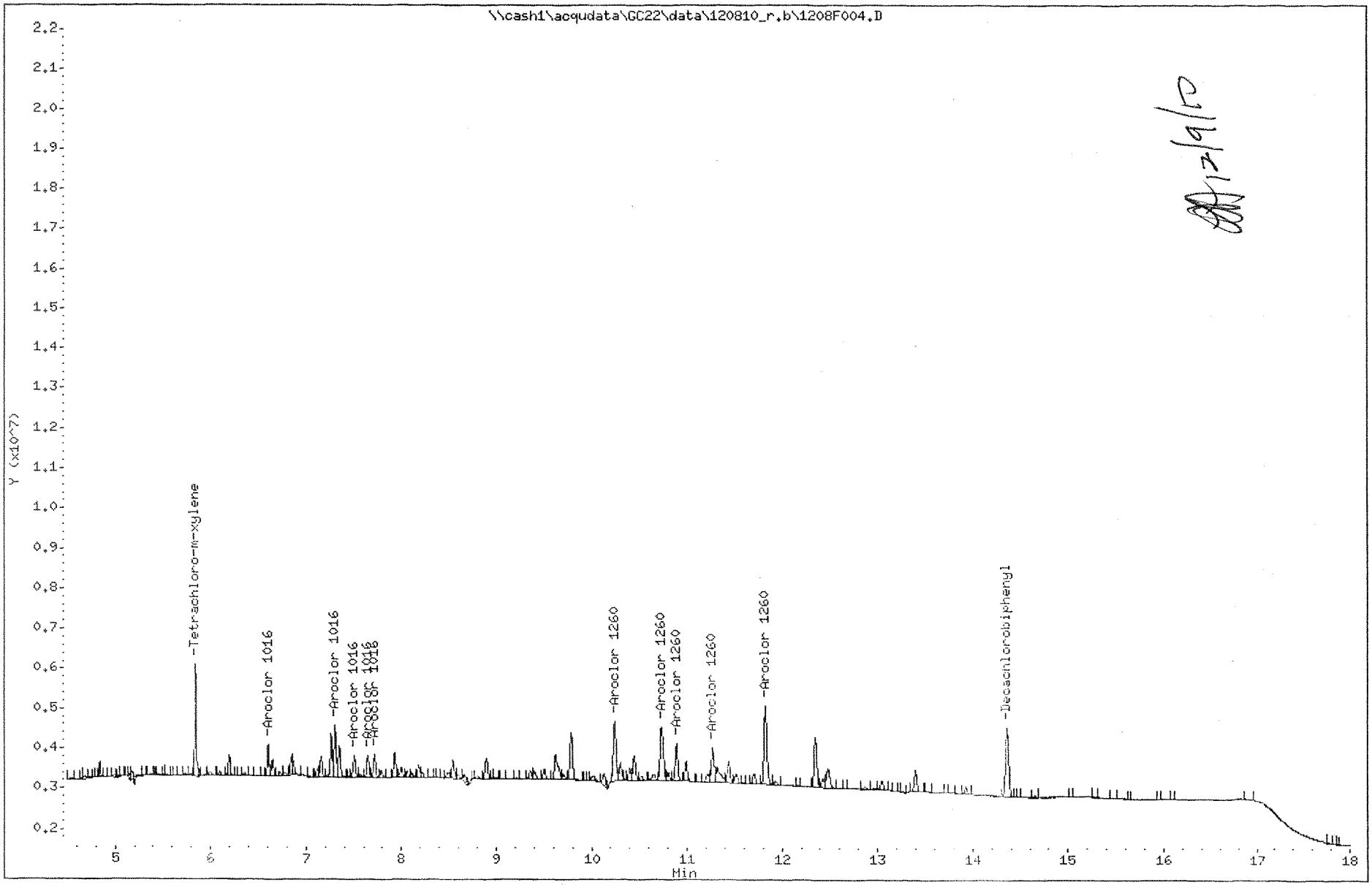
Operator: LHarris
Column diameter: 0.32

Column phase: DB-35MS



684

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F004.D
Date : 08-DEC-2010 21:23
Client ID:
Instrument: GC22.i
Sample Info: 1660 @ 0.50-5.0ppb | PCB5-62B | KWG1006746-3
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F004.D
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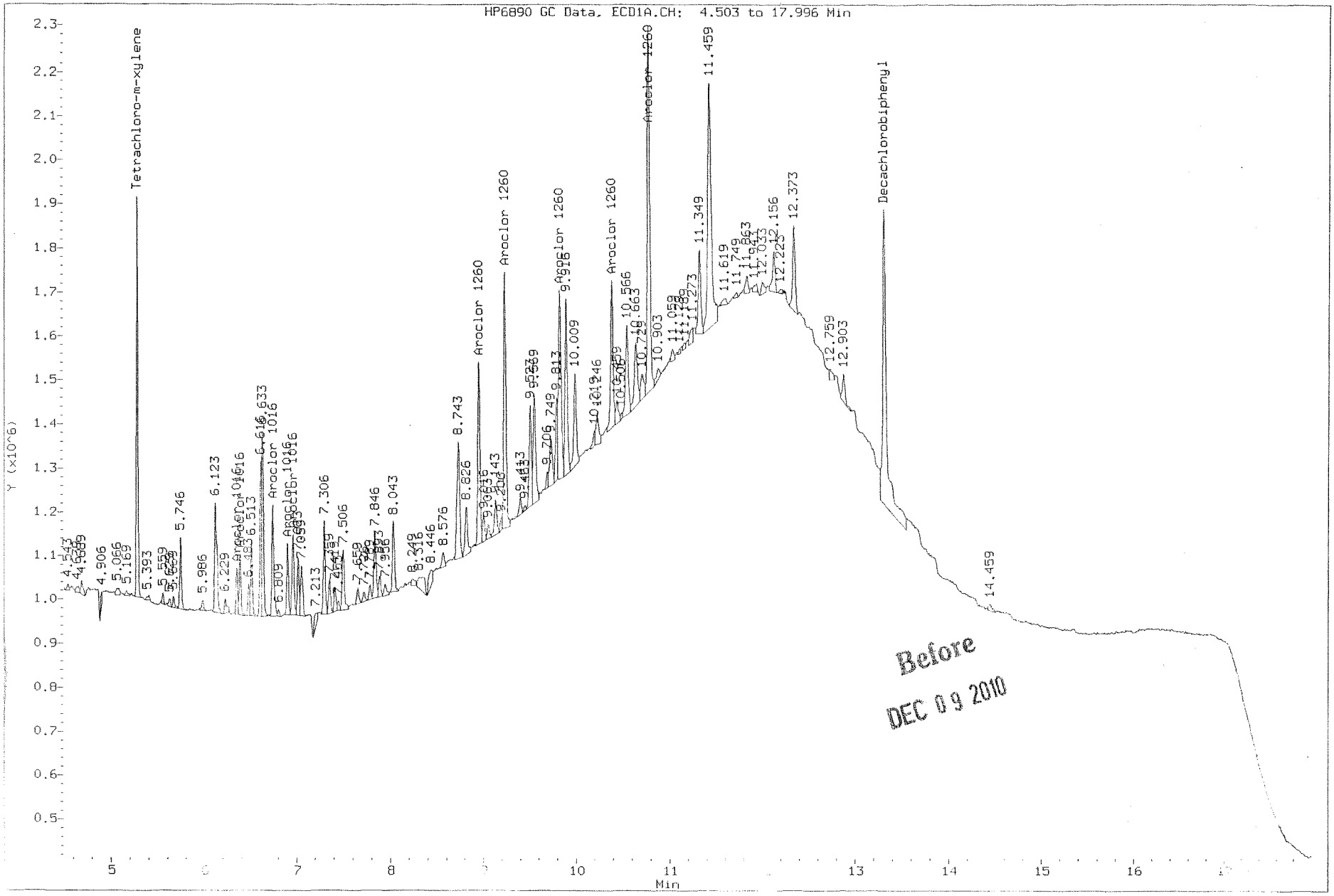
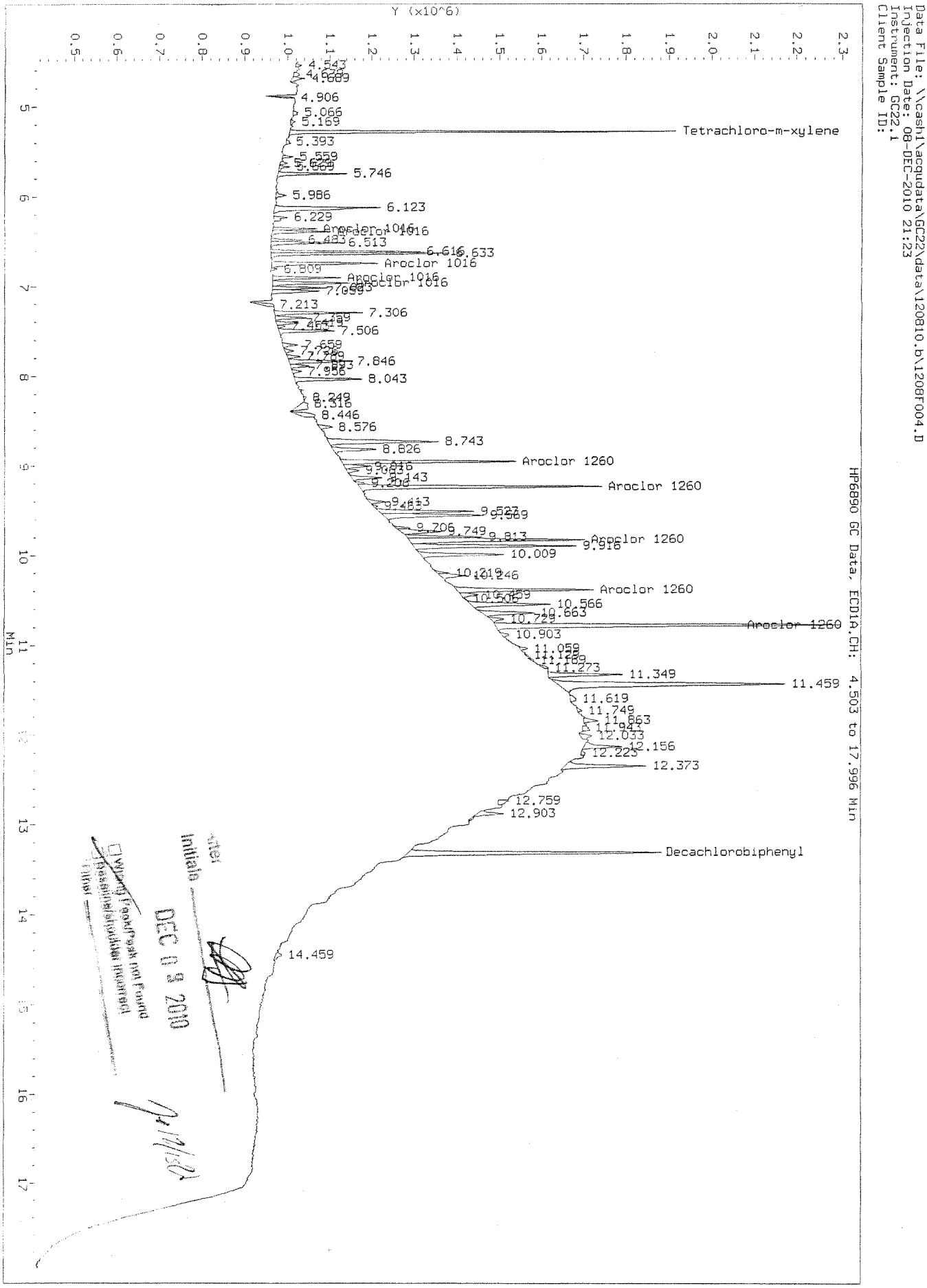
Instrument: GC22.i
Client Sample ID:

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Injection Date: 08-DEC-2010 21:23
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.503 to 17.996 Min
Y (x10^6)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
4.543
4.906
5.066
5.169
5.393
5.746
5.986
6.123
6.229
6.513
6.633
7.213
7.306
7.506
7.846
8.043
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8.743
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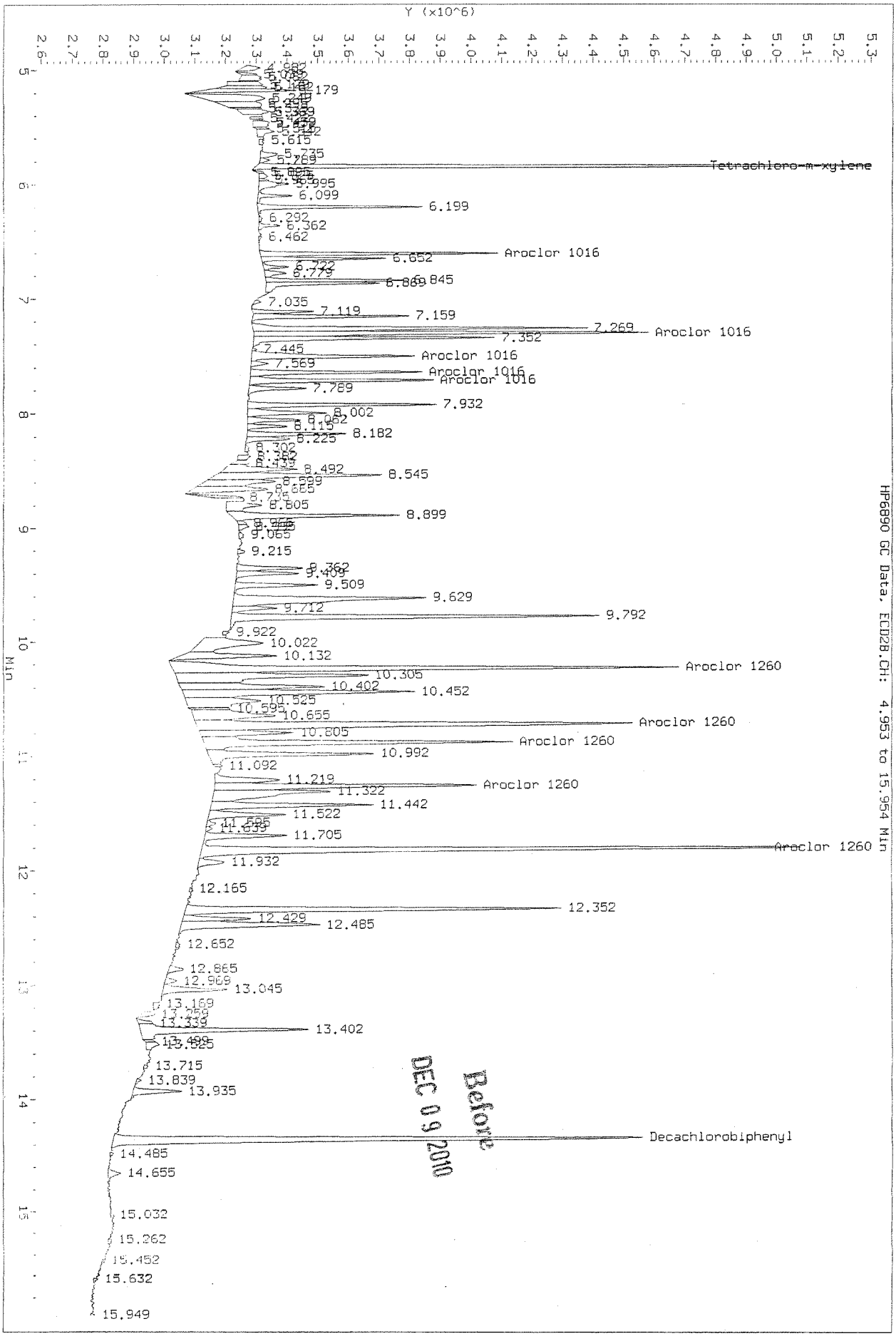
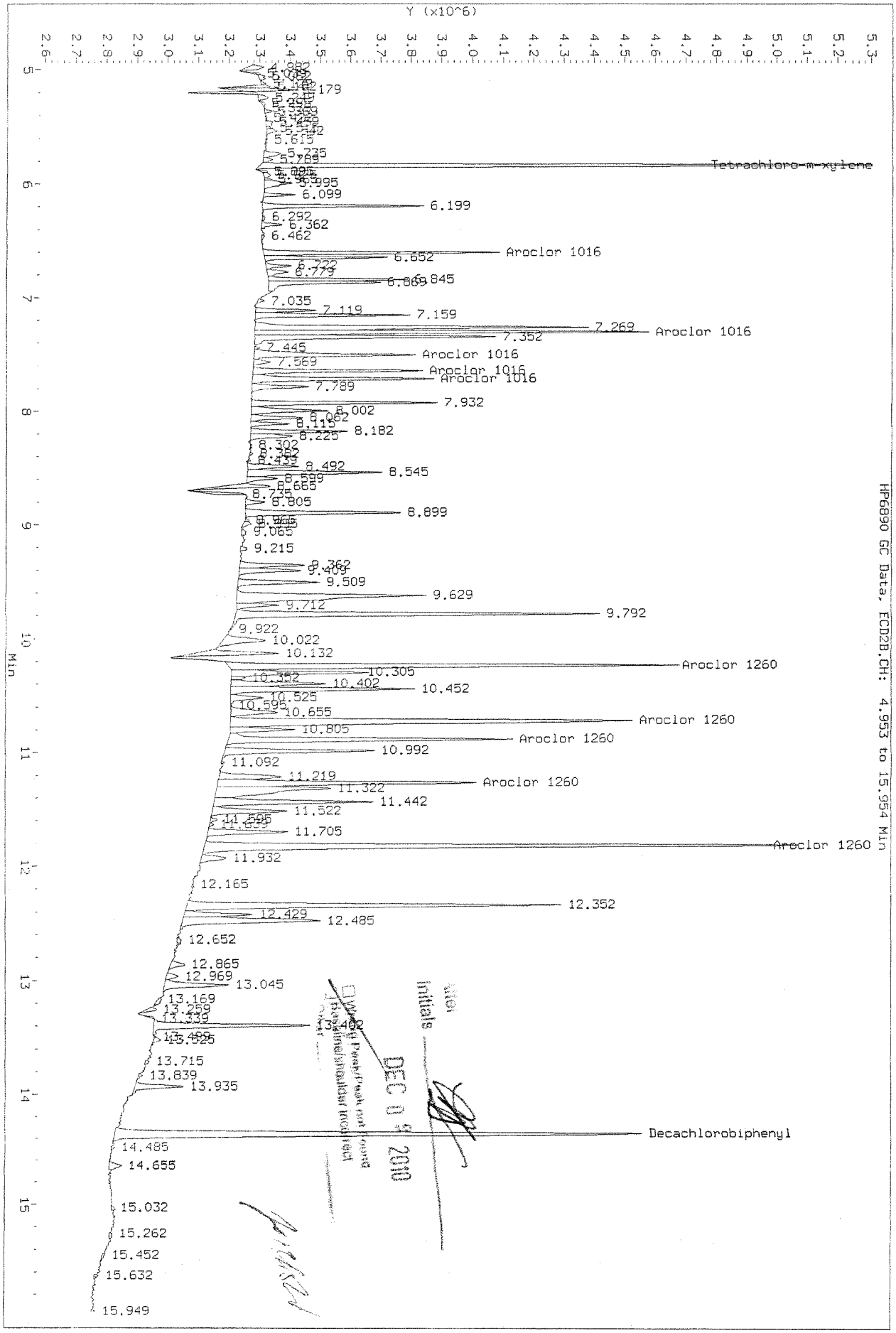
Initials
DEC 08 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F004.D
Injection Date: 08-DEC-2010 21:23
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.953 to 15.954 Min
Y (x10^6)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Before
DEC 09 2010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Injection Date: 08-DEC-2010 21:23
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.953 to 15.954 Min
Y (x10^6)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
DEC 0 9 2010
Initials

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F005.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F005.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F005.D
Inj Date : 08-DEC-2010 21:48
Sample Info: 1660 @ 5.0-50ppb | PCB5-62C | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.286	5.849	9140067	30097342	4.82	4.77		100.00
Aroclor 1016	6.360	6.612	1115590	8629940	49.2	49.5	80.00- 120.00	100.00(M)
	6.396	7.312	1528111	16630773	49.5	48.0	100.61- 150.92	136.98(M)
	6.750	7.512	3264377	8971696	48.8	51.3	227.73- 341.59	292.61(M)
	6.913	7.652	2059949	7212326	50.0	49.7	147.14- 220.70	184.65(M)
	6.970	7.726	2553927	8130163	50.6	48.1	168.99- 253.49	228.93(M)
			Average of Peak Amounts =		49.6	49.3		
Aroclor 1260	8.966	10.249	5779695	23280831	49.1	47.6	80.00- 120.00	100.00(M)
	9.250	10.739	8258676	27616291	48.6	49.2	120.11- 180.17	142.89(M)
	9.850	10.896	7224435	16087766	48.5	50.4	105.95- 158.92	125.00(M)
	10.406	11.279	5373121	15742081	49.1	50.7	77.23- 115.84	92.97(M)
	10.806	11.832	13523053	36596791	48.4	48.8	210.81- 316.22	233.98(M)
			Average of Peak Amounts =		48.7	49.3		
Decachlorobiphenyl	13.340	14.369	10446303	34420895	4.90	4.89		100.00(M)

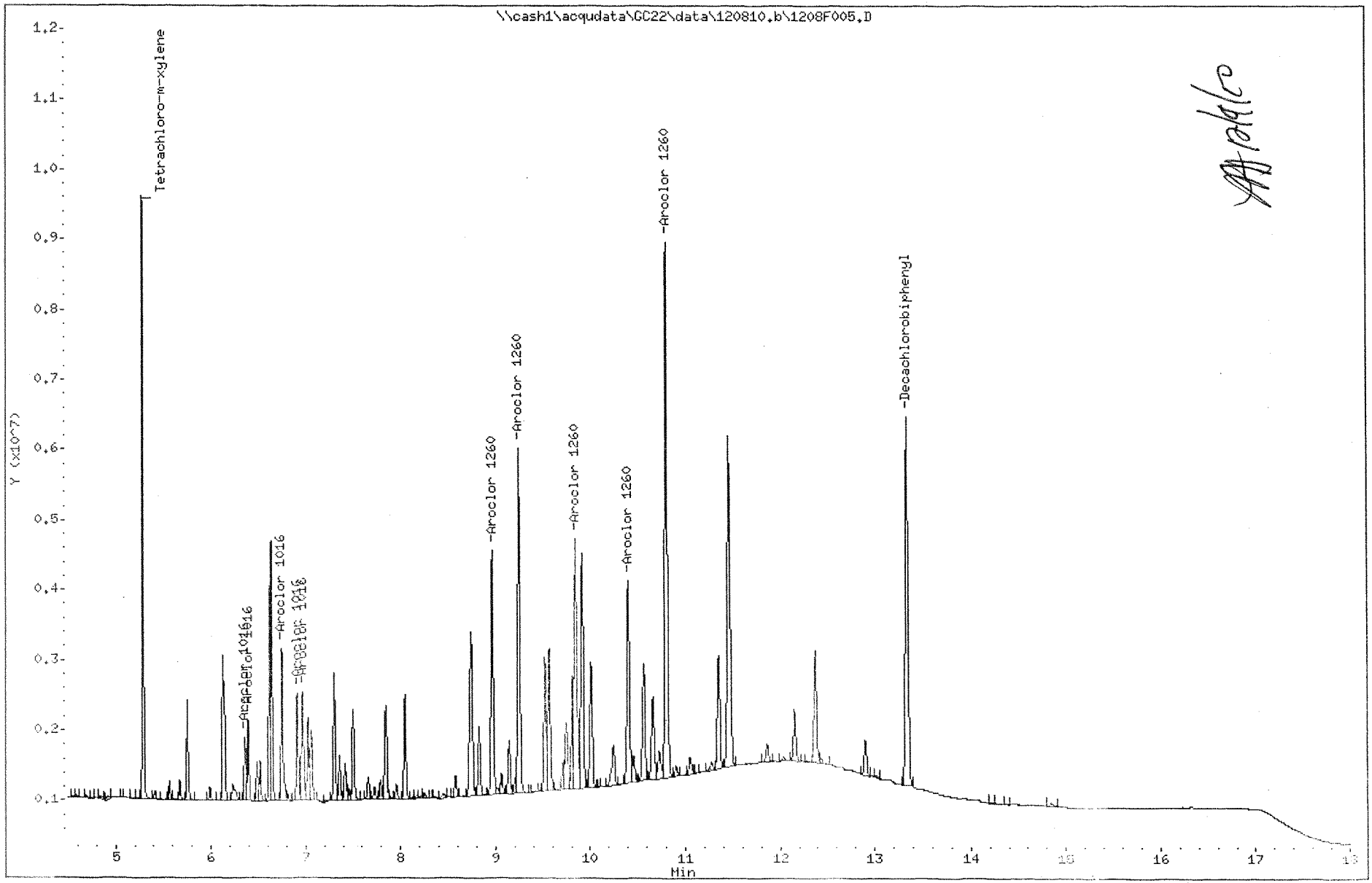
QC Flag Legend

M - Compound response manually integrated.

12/9/10

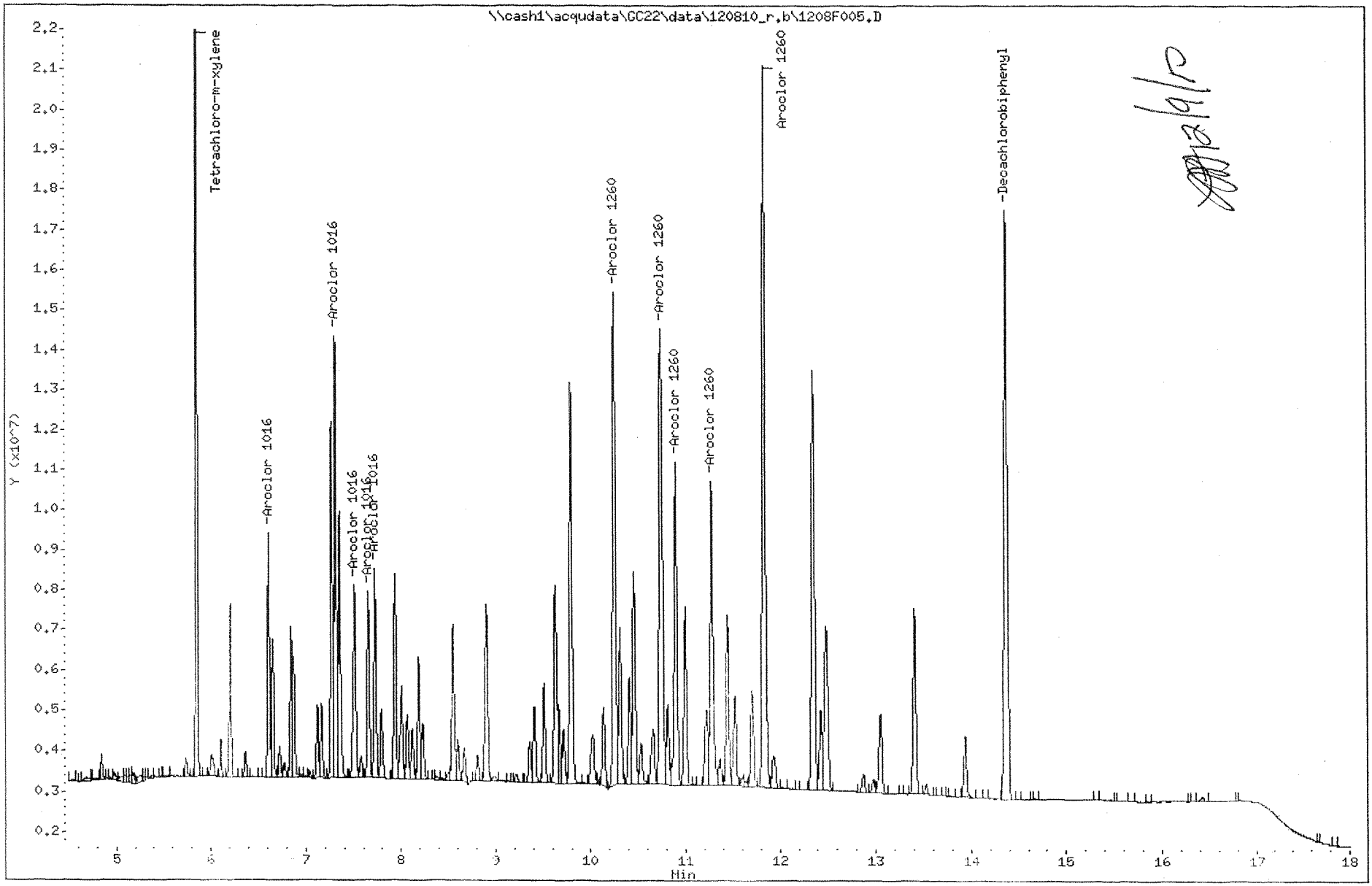
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F005.D
Date : 08-DEC-2010 21:48
Client ID:
Sample Info: 1660 @ 5.0-50ppb | PCB5-62C | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



691

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F005.D
Date : 08-DEC-2010 21:48
Client ID:
Instrument: GC22.i
Sample Info: 1660 @ 5.0-50ppb | PCB5-62C | KWG1006746-3
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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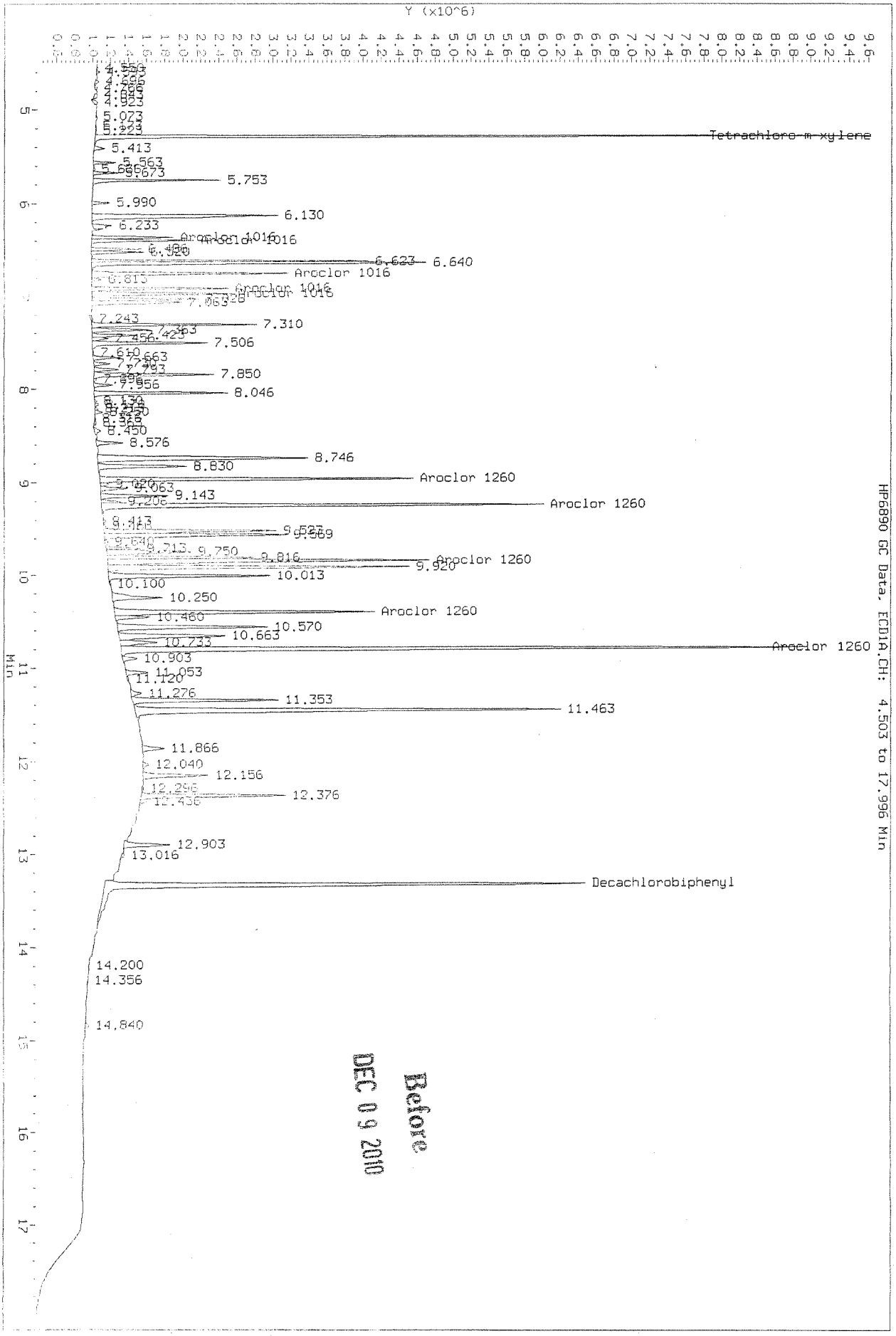
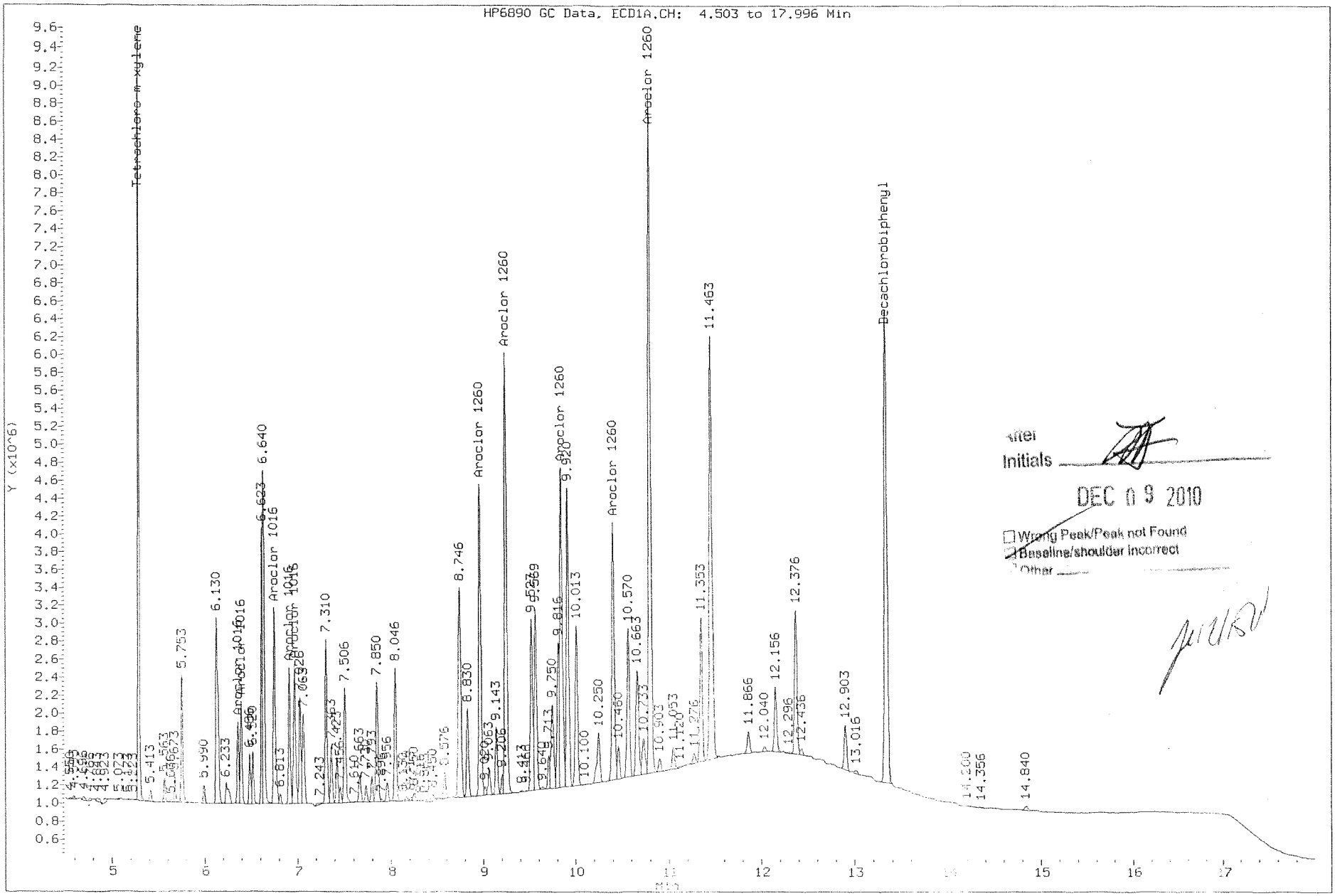


Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F005.D
Injection Date: 08-DEC-2010 21:48
Instrument: GC22.i
Client Sample ID:

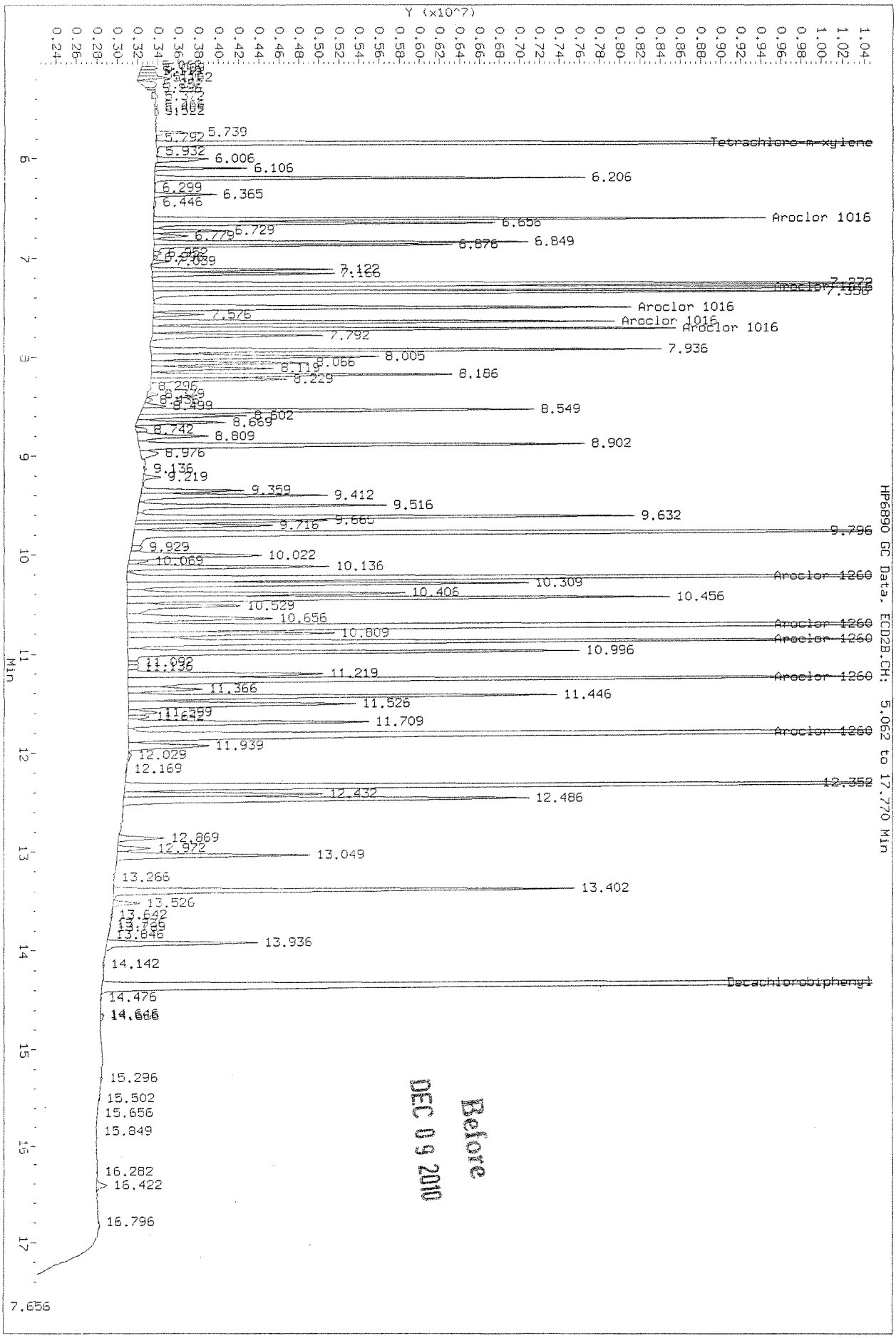


Initials

DEC 09 2010

☐ Wrong Peak/Peak not Found
☑ Baseline/shoulder incorrect
☐ Other

694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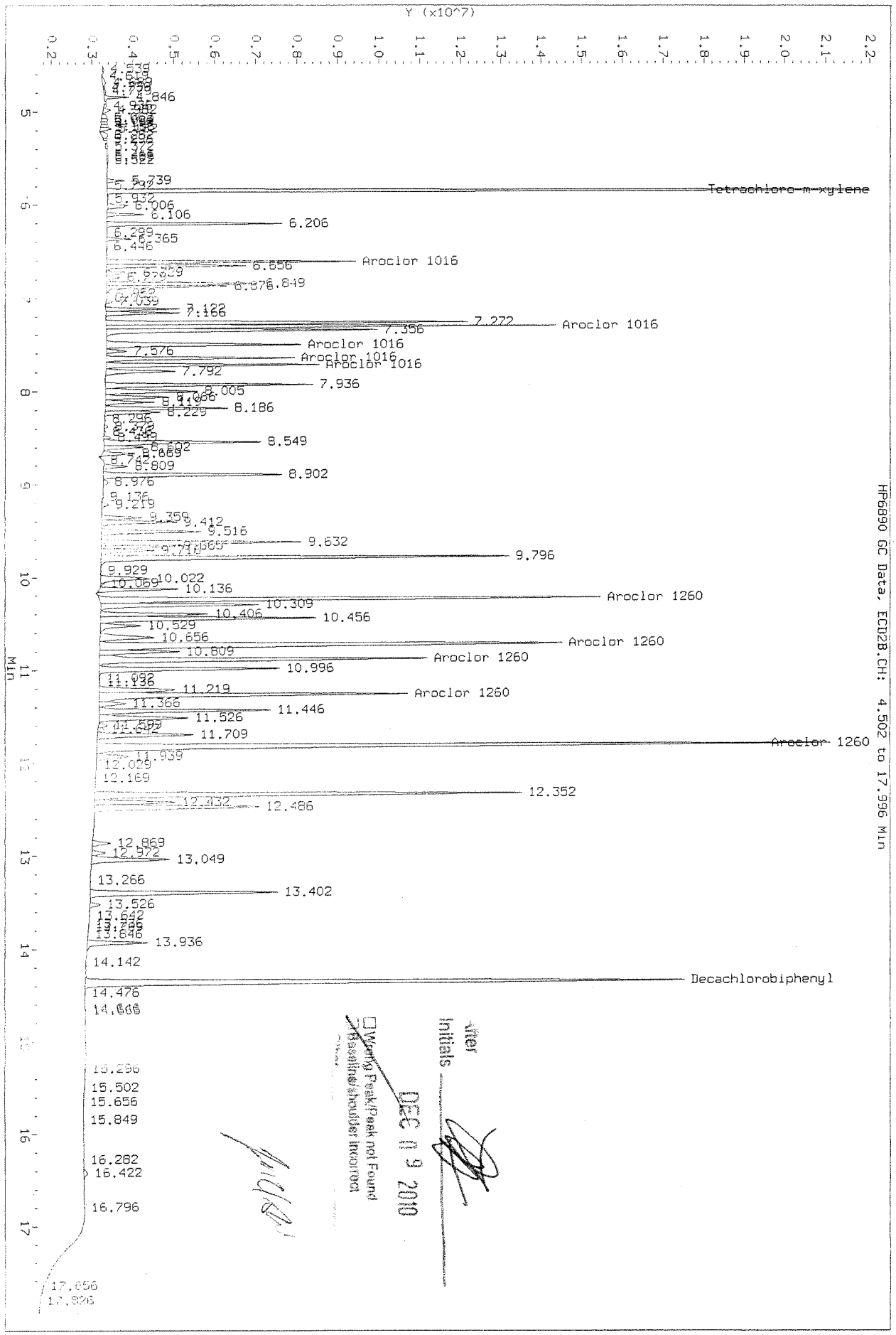
Injection Date: 08-DEC-2010 21:48
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
HP6890 GC Data, ECD2B.CH: 5.062 to 17.770 Min
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
7.656
Before
DEC 09 2010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Injection Date: 08-DEC-2010 21:48
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.502 to 17.996 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Working Peak/Peak not Found
Baseline/shoulder incorrect
Initials
DEC 16 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F006.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F006.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F006.D
Inj Date : 08-DEC-2010 22:12
Sample Info: 1660 @ 10-100ppb | PCB5-56F | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.286	5.845	18687644	60603075	9.85	9.60		100.00
Aroclor 1016	6.359	6.612	2210522	16384932	97.5	93.9	80.00- 120.00	100.00(M)
	6.393	7.312	2886714	32989085	93.5	94.8	100.61- 150.92	130.59(M)
	6.749	7.509	6407668	17599053	95.8	101	227.73- 341.59	289.87(M)
	6.909	7.652	4053578	13761645	98.4	95.3	147.14- 220.70	183.38(M)
	6.969	7.722	5001873	15613480	99.1	92.7	168.99- 253.49	226.28(M)
			Average of Peak Amounts =		96.9	95.5		
Aroclor 1260	8.966	10.245	11185131	43534408	94.9	89.4	80.00- 120.00	100.00
	9.246	10.735	16044495	52682634	94.4	94.1	120.11- 180.17	143.44
	9.846	10.895	14230311	30391372	95.6	95.7	105.95- 158.92	127.23
	10.406	11.275	10536247	29645112	96.3	95.6	77.23- 115.84	94.20
	10.806	11.832	27353453	70603710	97.8	94.3	210.81- 316.22	244.55
			Average of Peak Amounts =		95.8	93.8		
Decachlorobiphenyl	13.339	14.365	20548650	64661983	9.66	9.19		100.00(M)

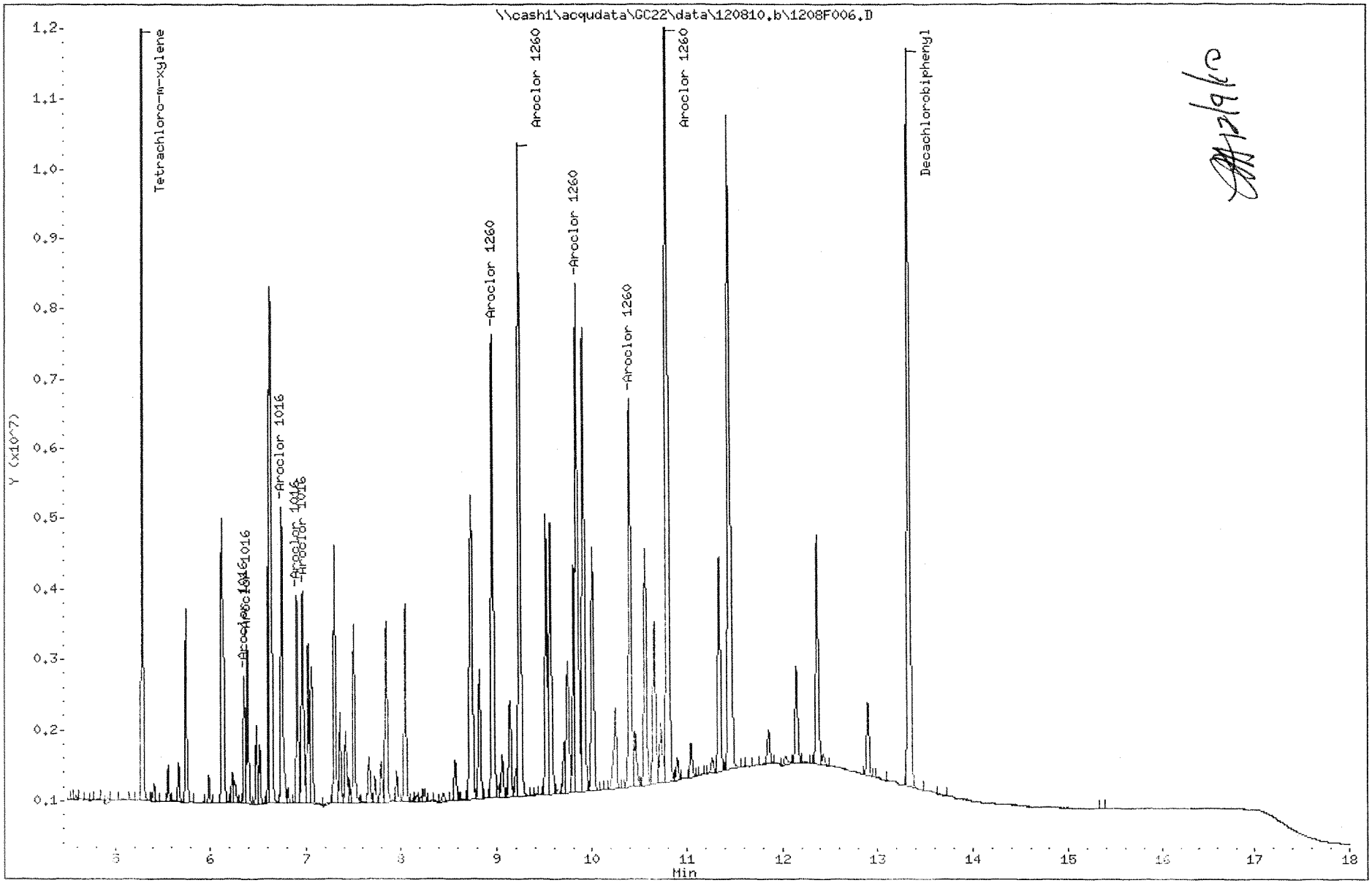
QC Flag Legend

M - Compound response manually integrated.

12/9/10

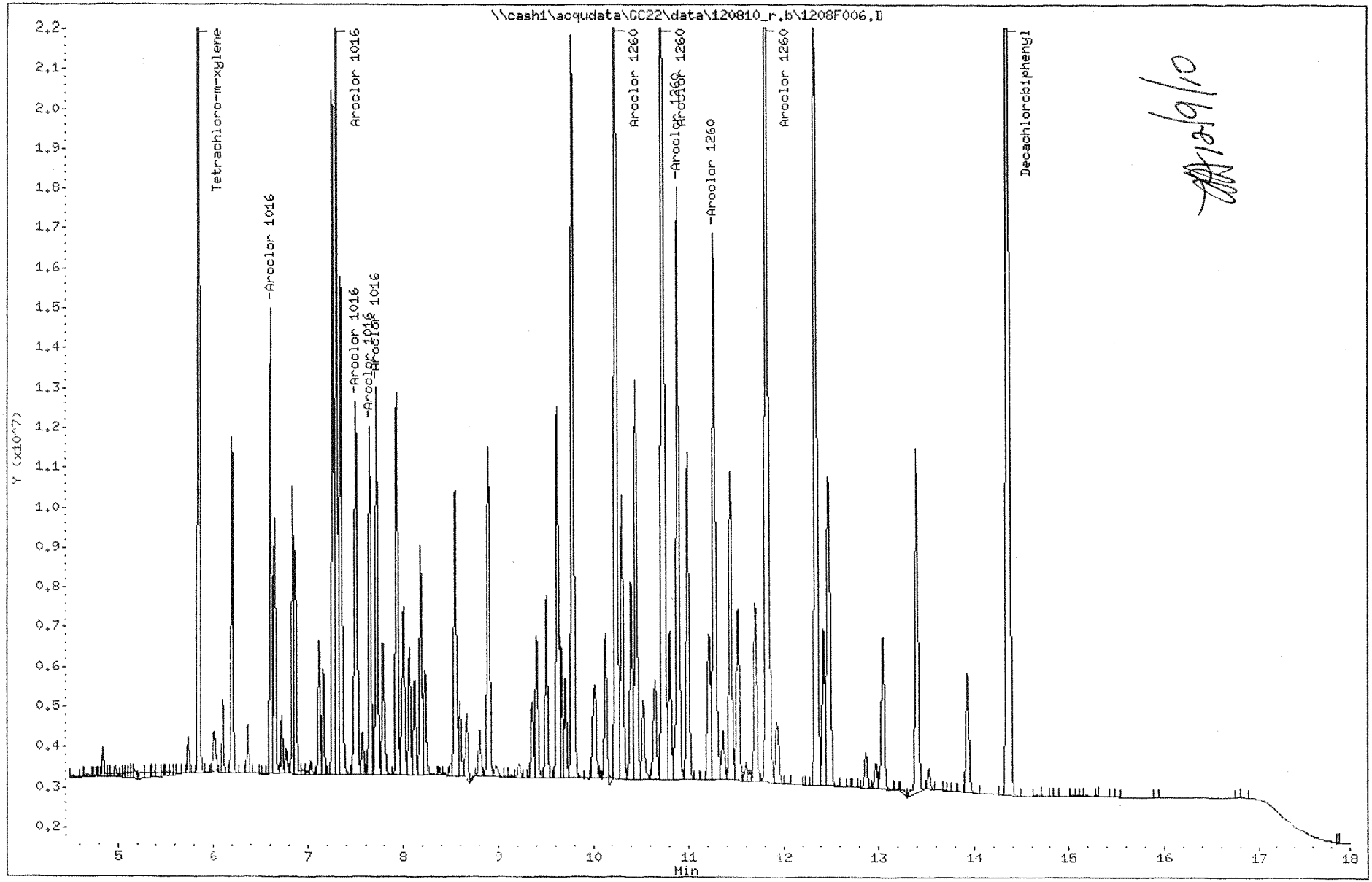
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F006.D
Date : 08-DEC-2010 22:12
Client ID:
Sample Info: 1660 @ 10-100ppb | PCB5-56F | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32

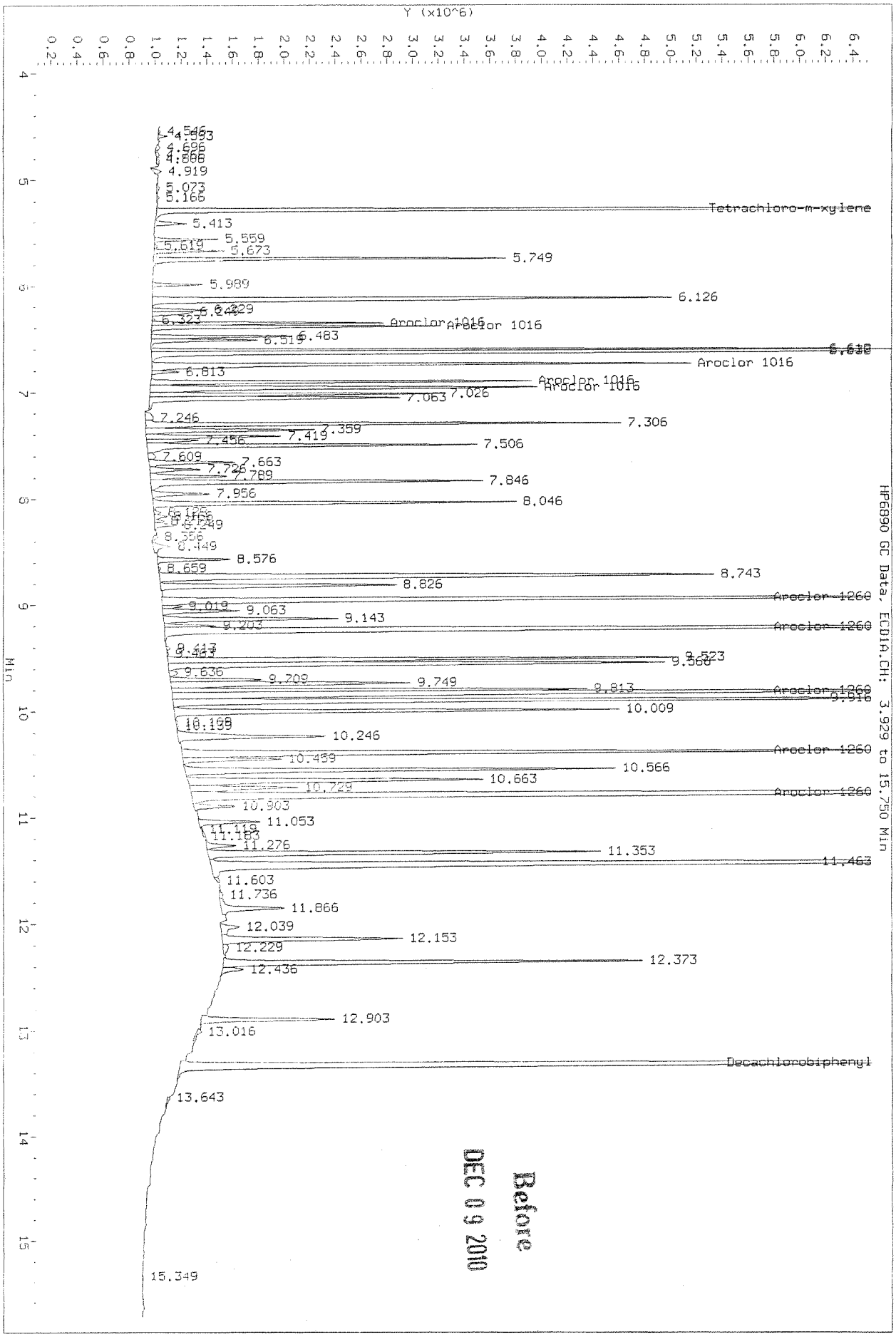


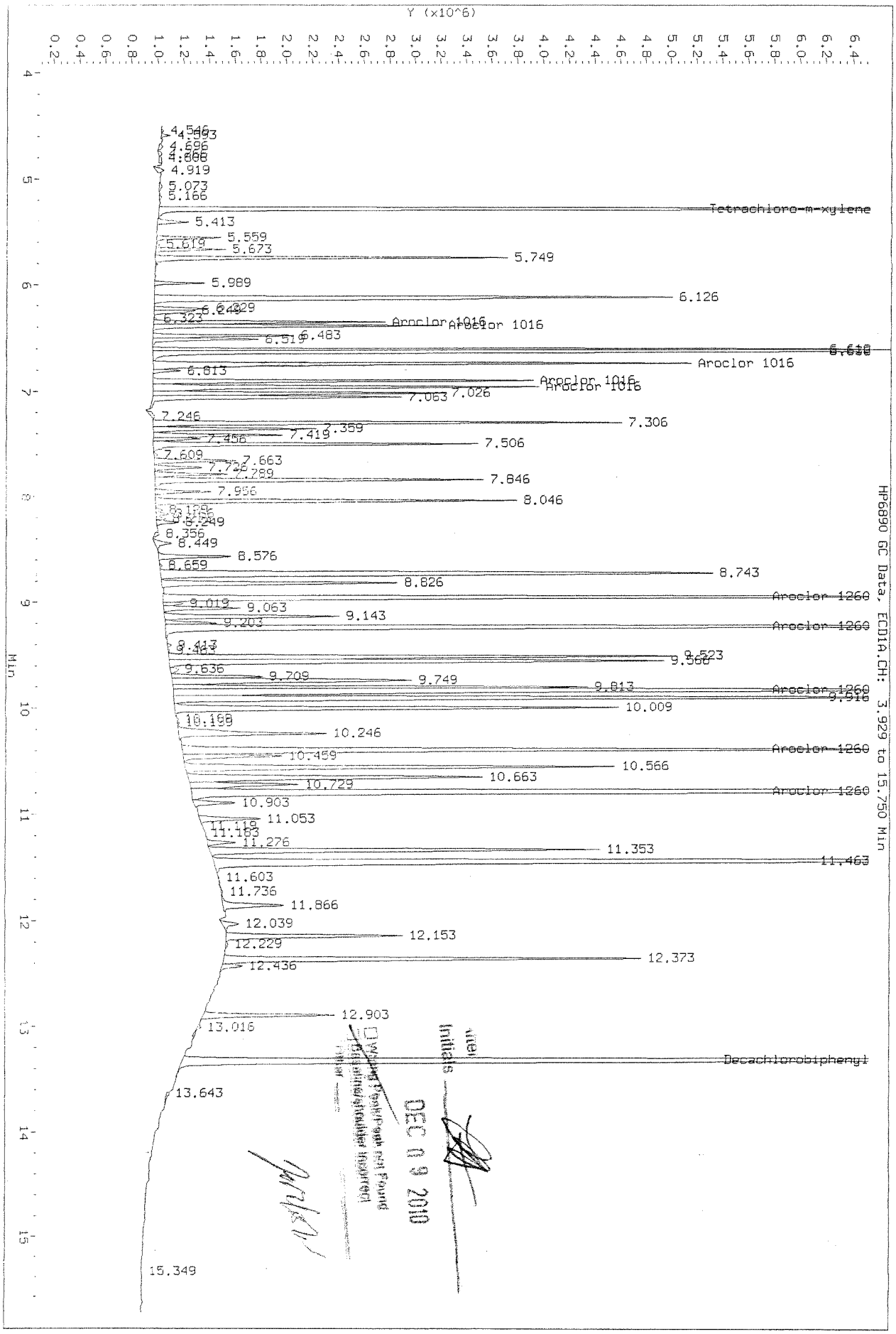
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F006.D
Date : 08-DEC-2010 22:12
Client ID:
Sample Info: 1660 @ 10-100ppb | PCB5-56F | KWG1006746-3

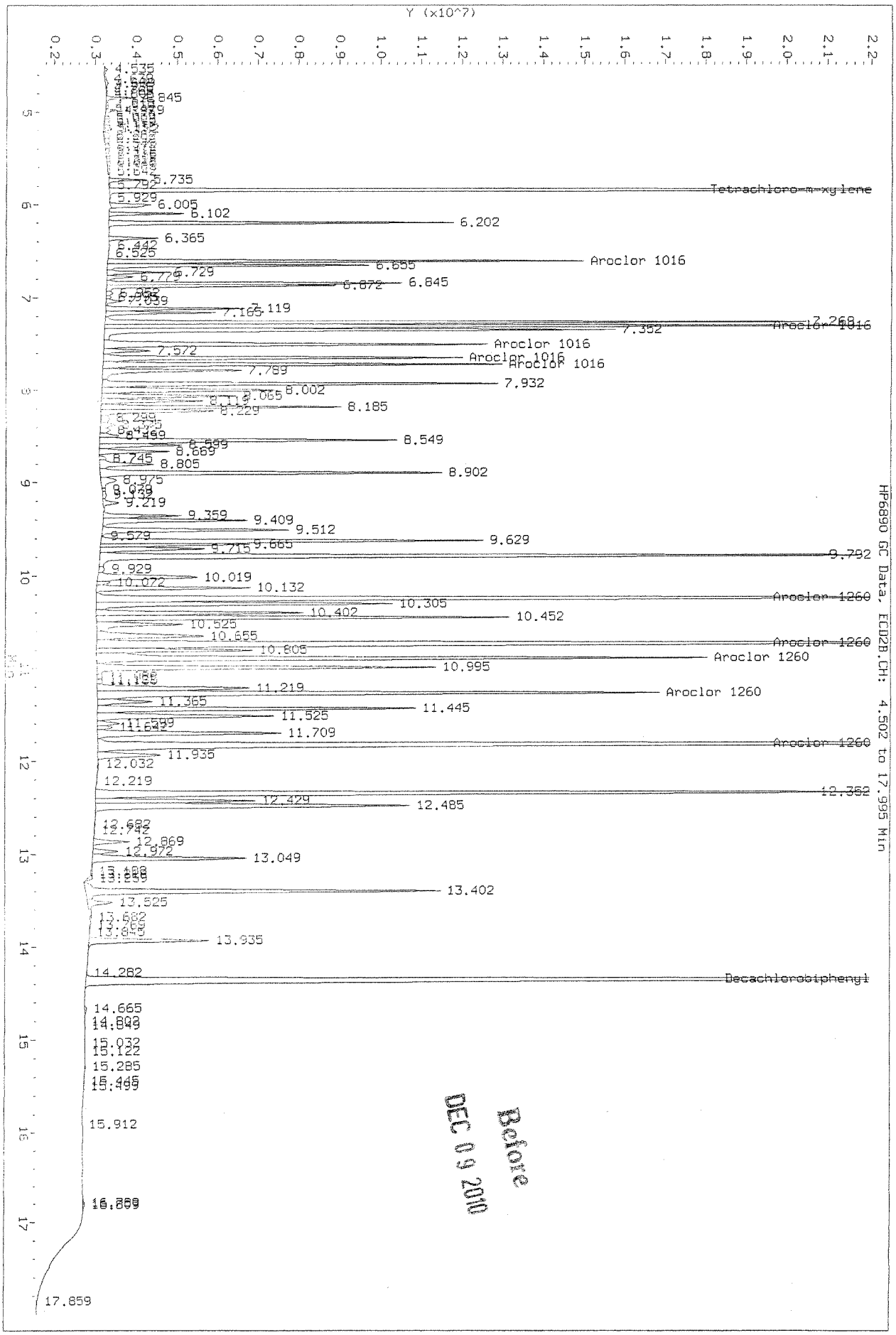
Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



12/9/10

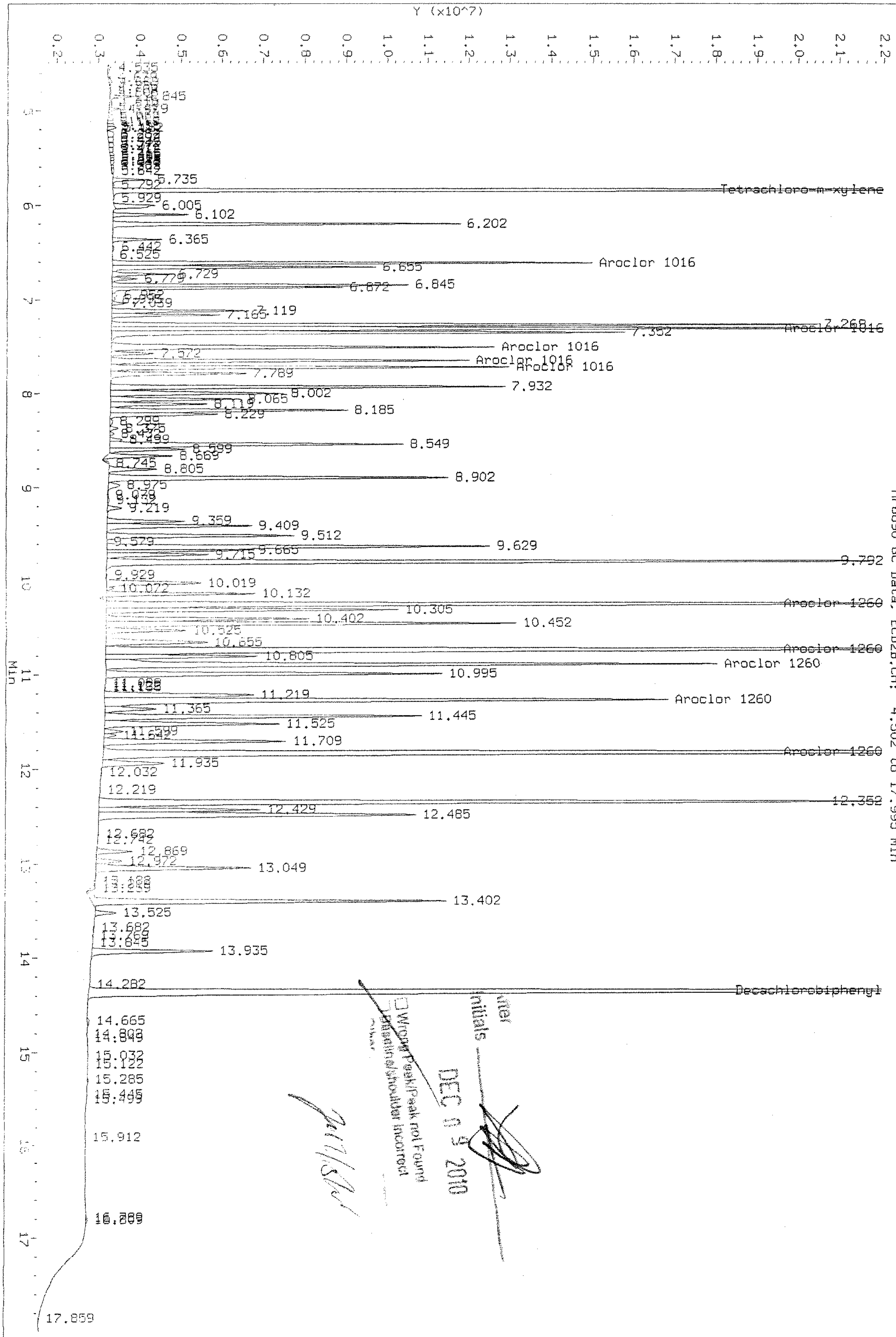

Data File: \\cash1\acqudata\GC22\data\120810_b\1208F006.D
Injection Date: 08-DEC-2010 22:12
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 3.929 to 15.750 Min
Y (x10^6)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F006.D
Injection Date: 08-DEC-2010 22:12
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 3.929 to 15.750 Min
Y (x10^6)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
DEC 09 2010
Initials


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F006.D
Injection Date: 08-DEC-2010 22:12
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.502 to 17.995 Min
Y (x10^7)
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F006.D
Injection Date: 08-DEC-2010 22:12
Instrument: GC22.i
Client Sample ID:

HP6890 GC Data, ECD2B.CH: 4.502 to 17.995 Min



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F007.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F007.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F007.D
Inj Date : 08-DEC-2010 22:37
Sample Info: 1660 @ 20-200ppb | PCB5-62D | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.281	5.844	37783602	120810609	19.9	19.1		100.00
Aroclor 1016	6.355	6.607	4231894	29590827	187	170	80.00- 120.00	100.00
	6.388	7.307	5605545	60536821	182	173	100.61- 150.92	132.46
	6.745	7.507	12329816	32517211	184	186	227.73- 341.59	291.35
	6.908	7.647	7909998	24807555	192	171	147.14- 220.70	186.91
	6.965	7.721	9363250	28244290	186	167	168.99- 253.49	221.25
			Average of Peak Amounts =		186	173		
Aroclor 1260	8.965	10.247	21714857	80665553	184	165	80.00- 120.00	100.00
	9.245	10.737	32062288	97732522	189	174	120.11- 180.17	147.65
	9.845	10.894	27833298	55563133	187	174	105.95- 158.92	128.18
	10.405	11.277	20621187	53820677	188	173	77.23- 115.84	94.96
	10.805	11.831	55294515	132329044	198	177	210.81- 316.22	254.64
			Average of Peak Amounts =		189	173		
Decachlorobiphenyl	13.338	14.364	40662478	117328786	19.2	16.7		100.00(M)

QC Flag Legend

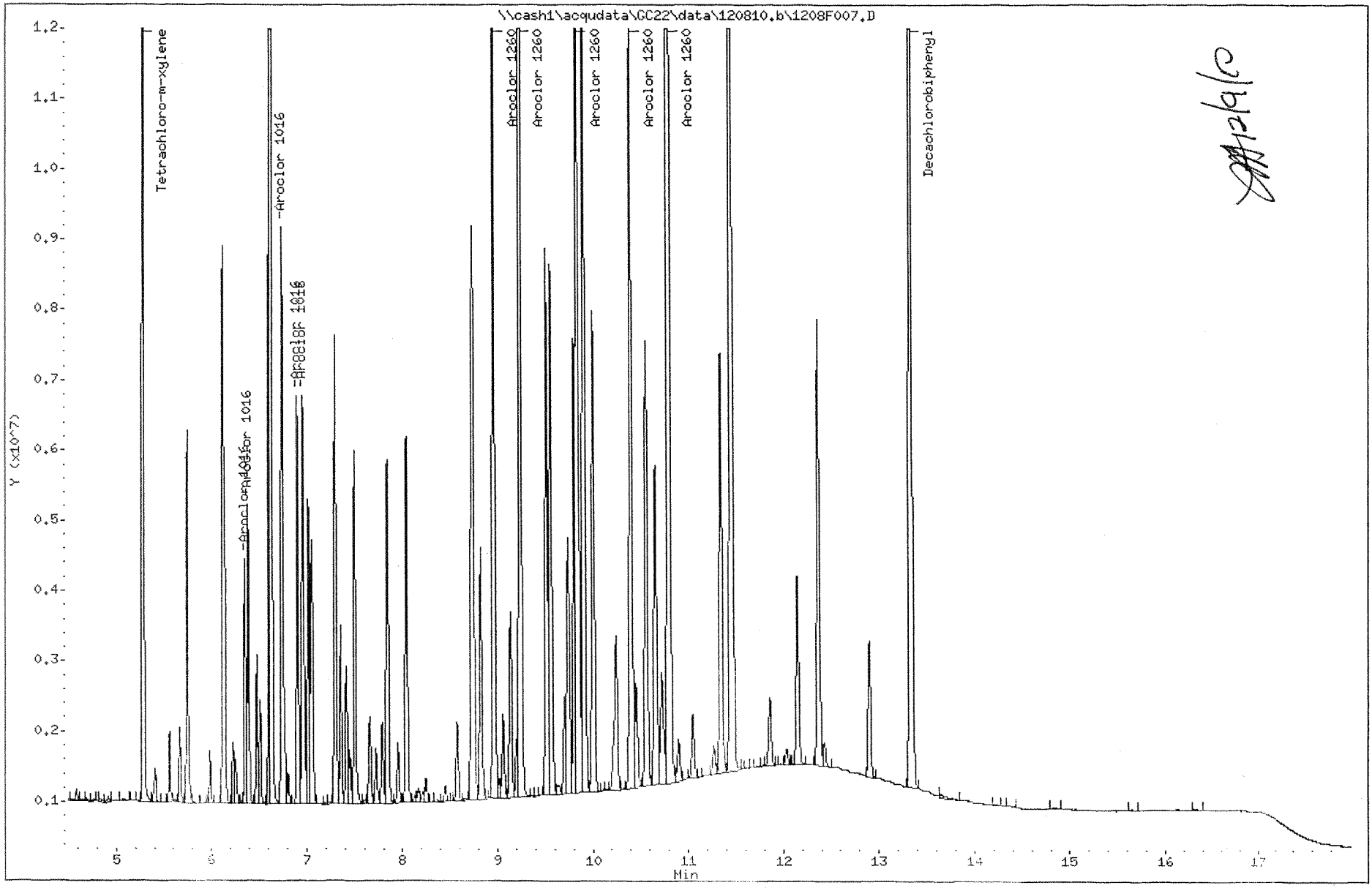
M - Compound response manually integrated.

12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F007.D
Date : 08-DEC-2010 22:37
Client ID:
Sample Info: 1660 @ 20-200ppb | PCB5-62D | KWG1006746-3

Instrument: GC22.i

Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32

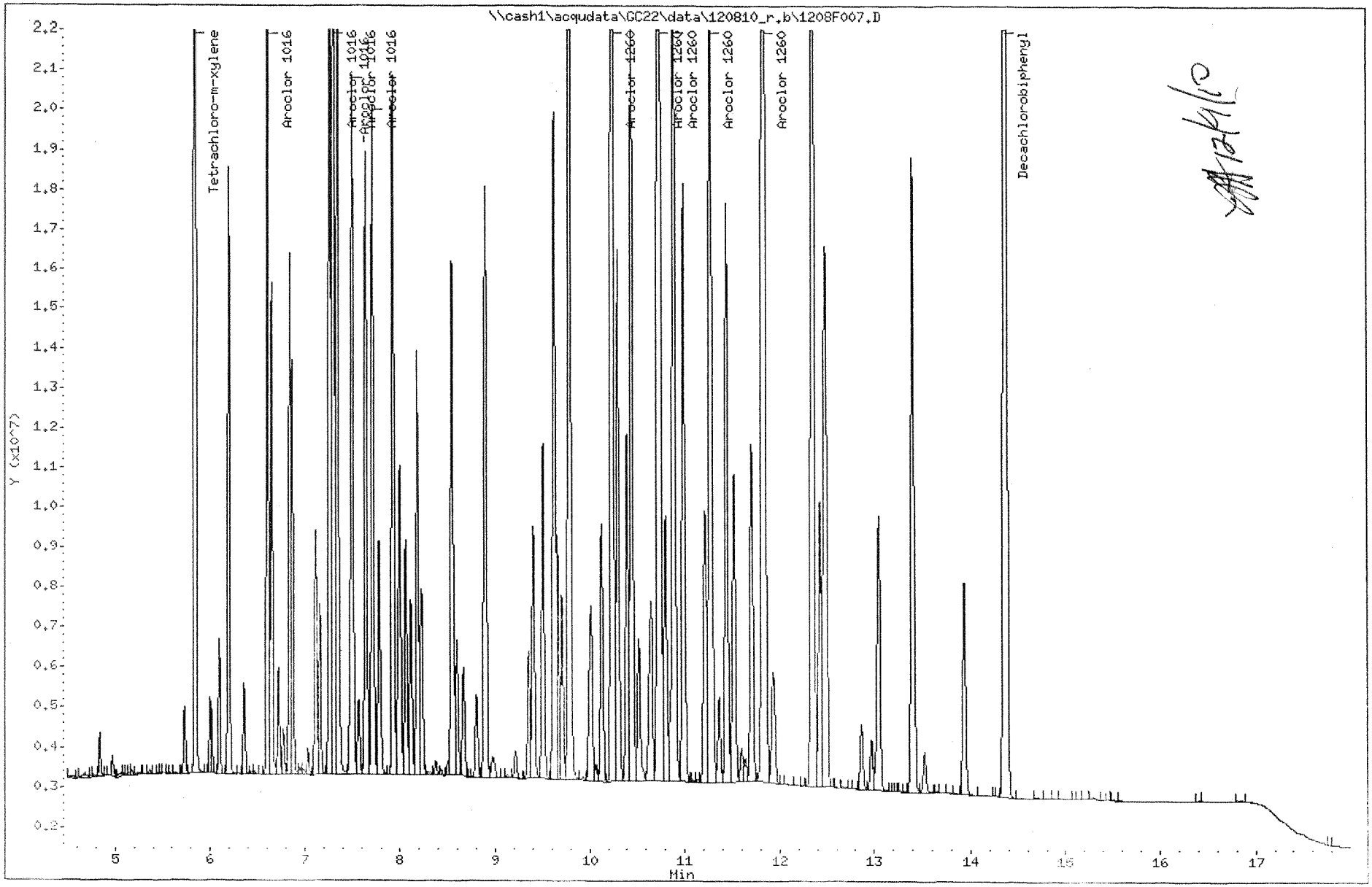


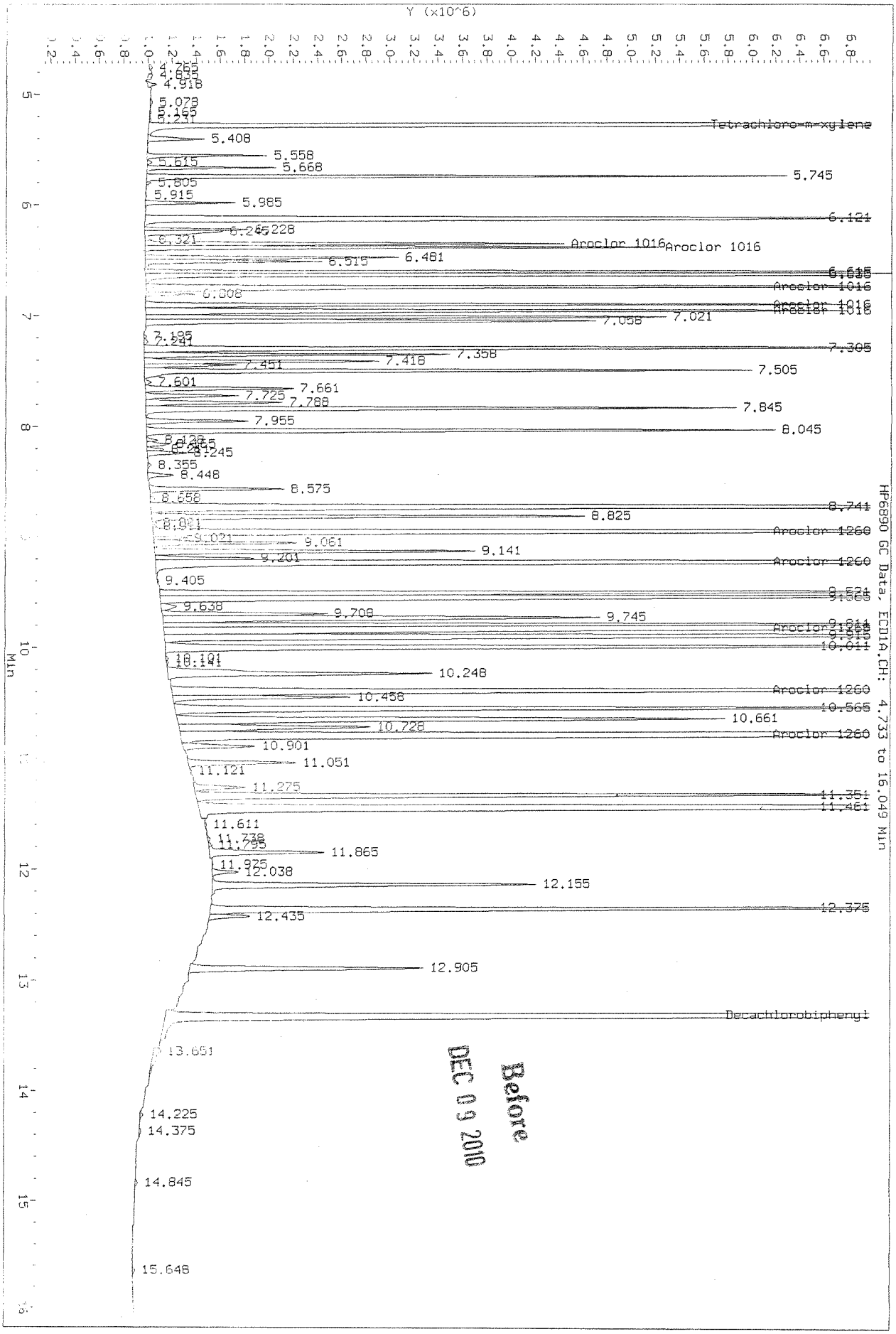
12/9/10

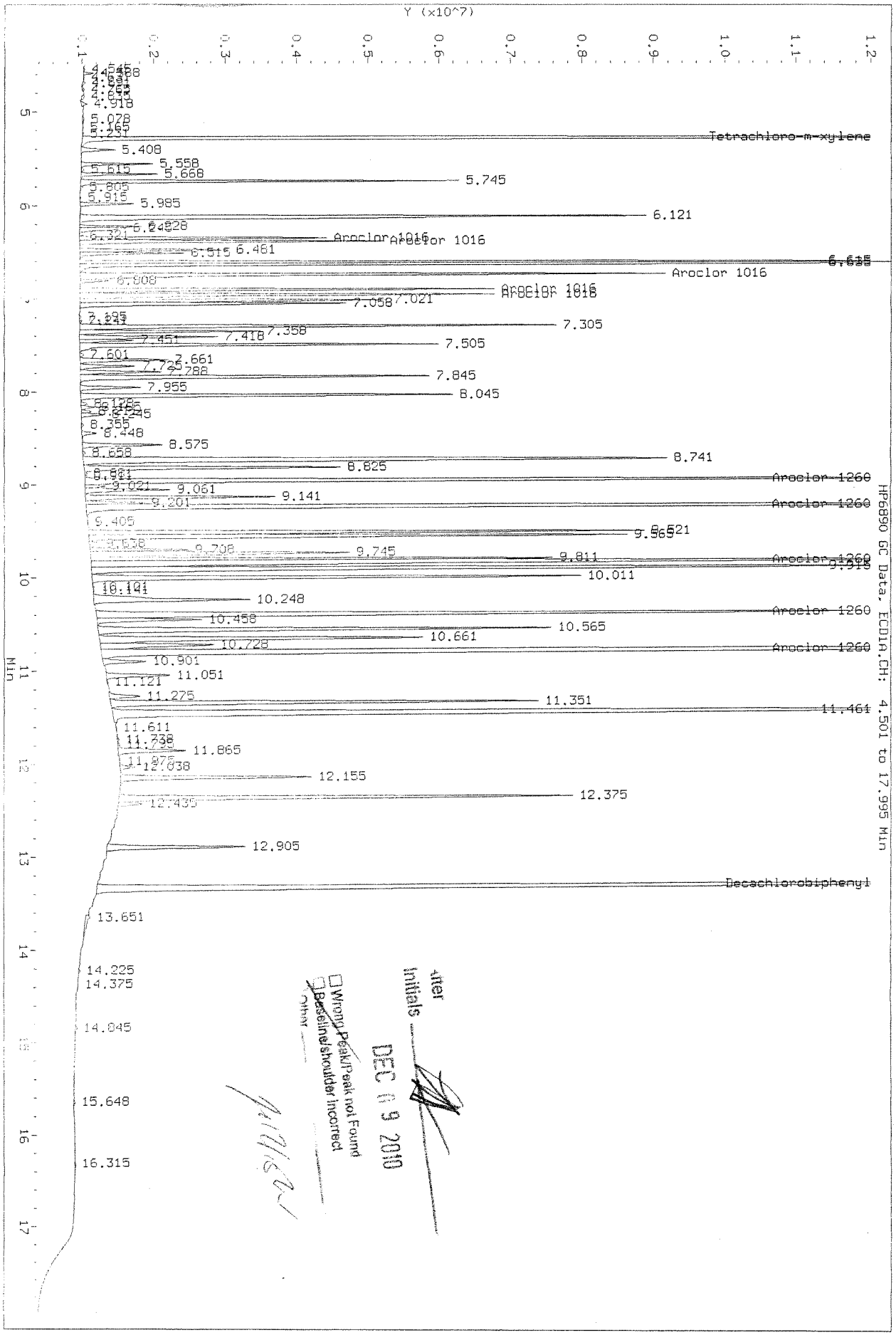
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F007.D
Date : 08-DEC-2010 22:37
Client ID:
Sample Info: 1660 @ 20-200ppb | PCB5-62D | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column diameter: 0.32

Column phase: DB-XLB




Data File: \\cash1\acqudata\GC22\data\120810.b\1208F007.D
Injection Date: 08-DEC-2010 22:37
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.733 to 16.049 Min
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Before
DEC 09 2010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Injection Date: 08-DEC-2010 22:37
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.501 to 17.995 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
5.408
5.558
5.668
5.745
5.985
6.121
6.461
7.021
7.305
7.358
7.505
7.661
7.788
7.845
7.955
8.045
8.448
8.575
8.741
8.825
9.061
9.141
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9.745
9.811
10.011
10.248
10.458
10.565
10.661
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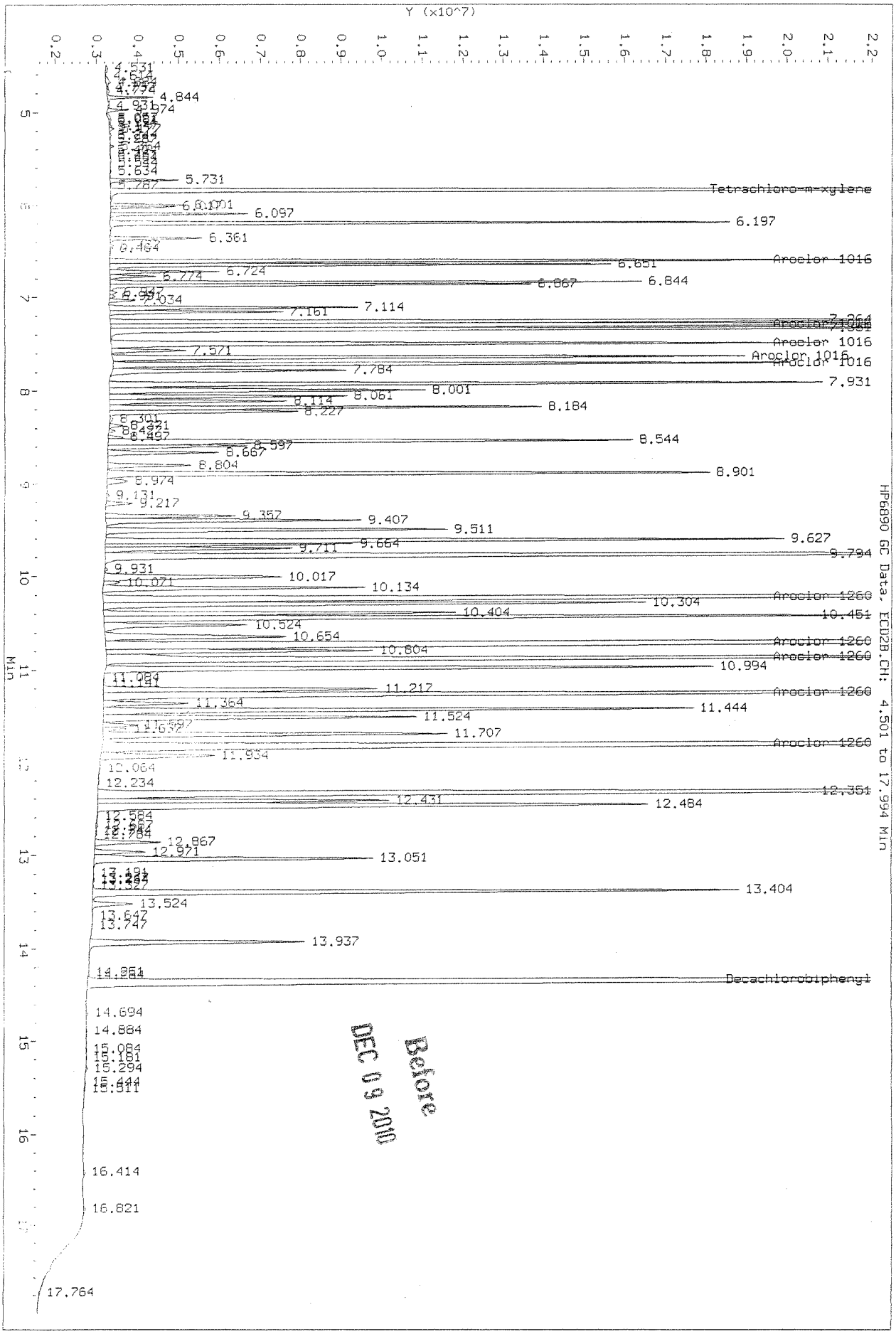
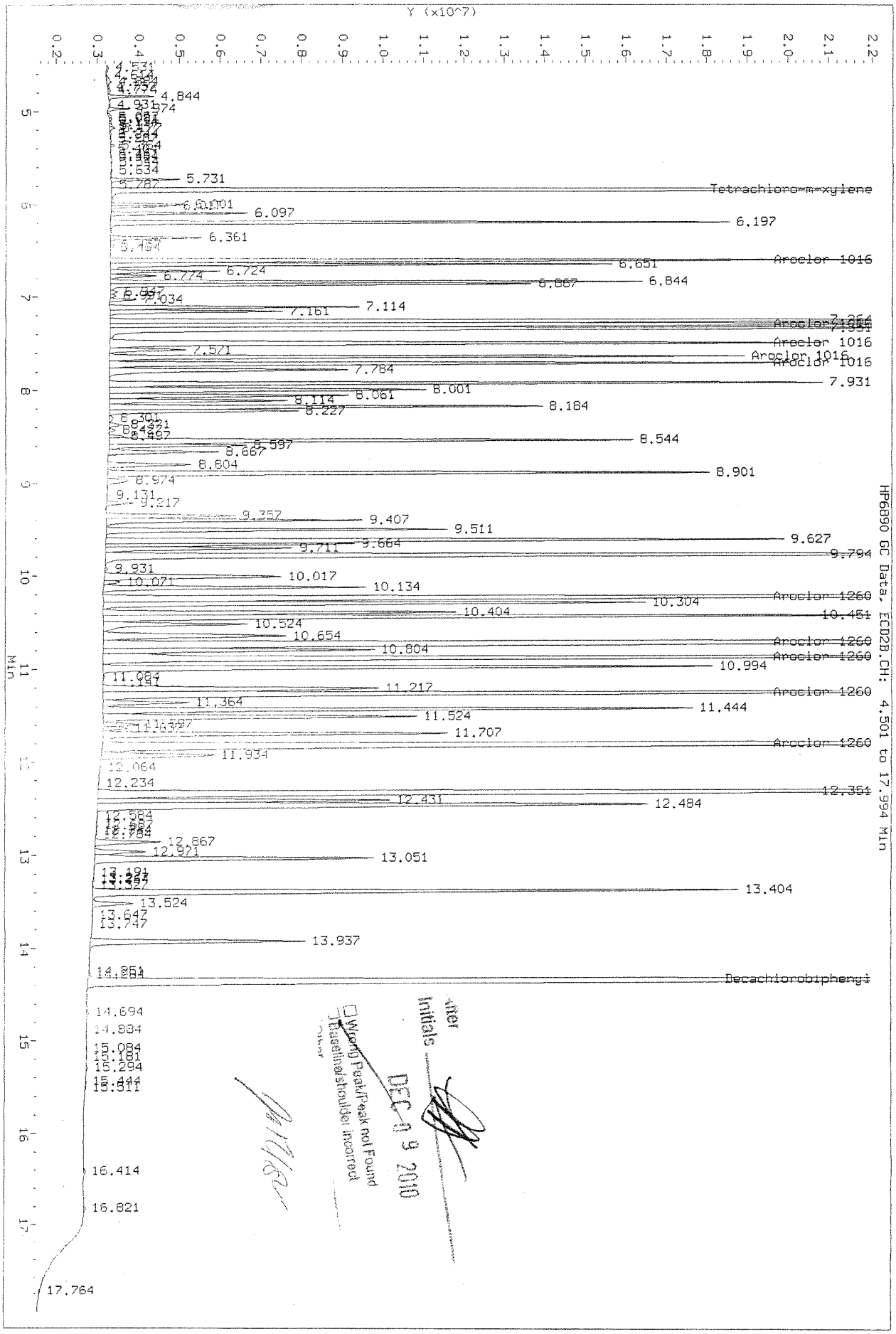
11.611
11.865
12.155
12.375
12.905
13.651
14.225
14.375
14.945
15.648
16.315
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other
Initials
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F007.D
Injection Date: 08-DEC-2010 22:37
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.501 to 17.994 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\120F007.D
Injection Date: 08-DEC-2010 22:37
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH; 4.501 to 17.994 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other
Initials
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F008.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F008.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F008.D
Inj Date : 08-DEC-2010 23:01
Sample Info: 1660 @ 50-500ppb | PCB5-62E | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.284	5.844	95246696	298469905	50.2	47.3		100.00
Aroclor 1016	6.358	6.610	10570661	70603061	465	404	80.00- 120.00	100.00(M)
	6.391	7.310	13294175	153172128	429	436	100.61- 150.92	125.76(M)
	6.748	7.510	30090281	81027523	449	464	227.73- 341.59	284.66(M)
	6.908	7.650	19441442	60390445	471	416	147.14- 220.70	183.92(M)
	6.964	7.720	22329739	69131600	442	408	168.99- 253.49	211.24(M)
			Average of Peak Amounts =		451	426		
Aroclor 1260	8.964	10.247	52073487	205803571	442	422	80.00- 120.00	100.00
	9.244	10.737	78183401	252103442	460	449	120.11- 180.17	150.14
	9.844	10.894	68962379	141446445	463	444	105.95- 158.92	132.43
	10.408	11.277	50269644	139581537	459	449	77.23- 115.84	96.54
	10.804	11.834	137221907	351291688	491	469	210.81- 316.22	263.52
			Average of Peak Amounts =		463	447		
Decachlorobiphenyl	13.341	14.367	99837025	304584092	47.1	43.3		100.00(M)

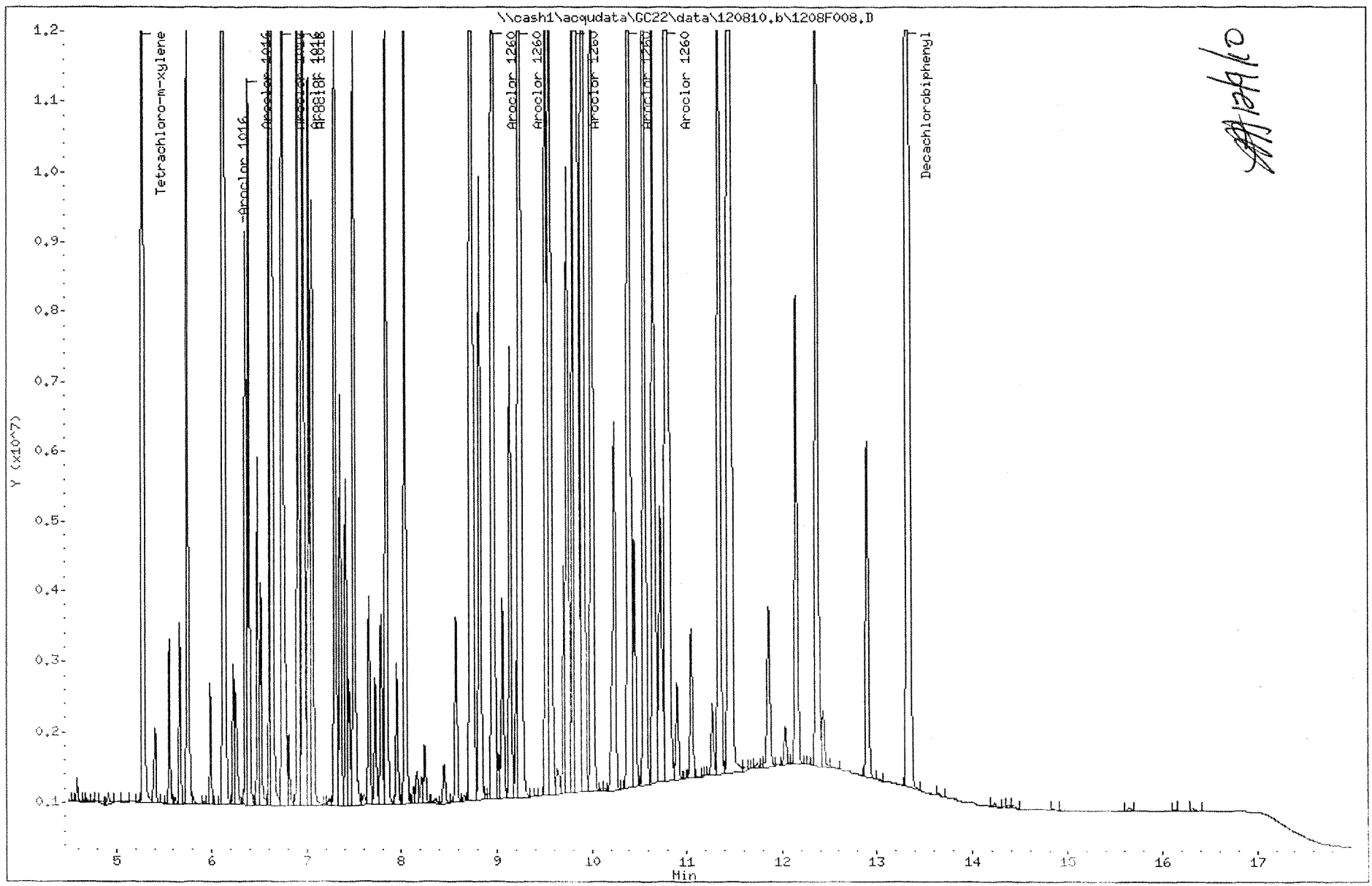
QC Flag Legend

M - Compound response manually integrated.

12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F008.D
Date : 08-DEC-2010 23:01
Client ID:
Sample Info: 1660 @ 50-500ppb | PCB5-62E | KWG1006746-3

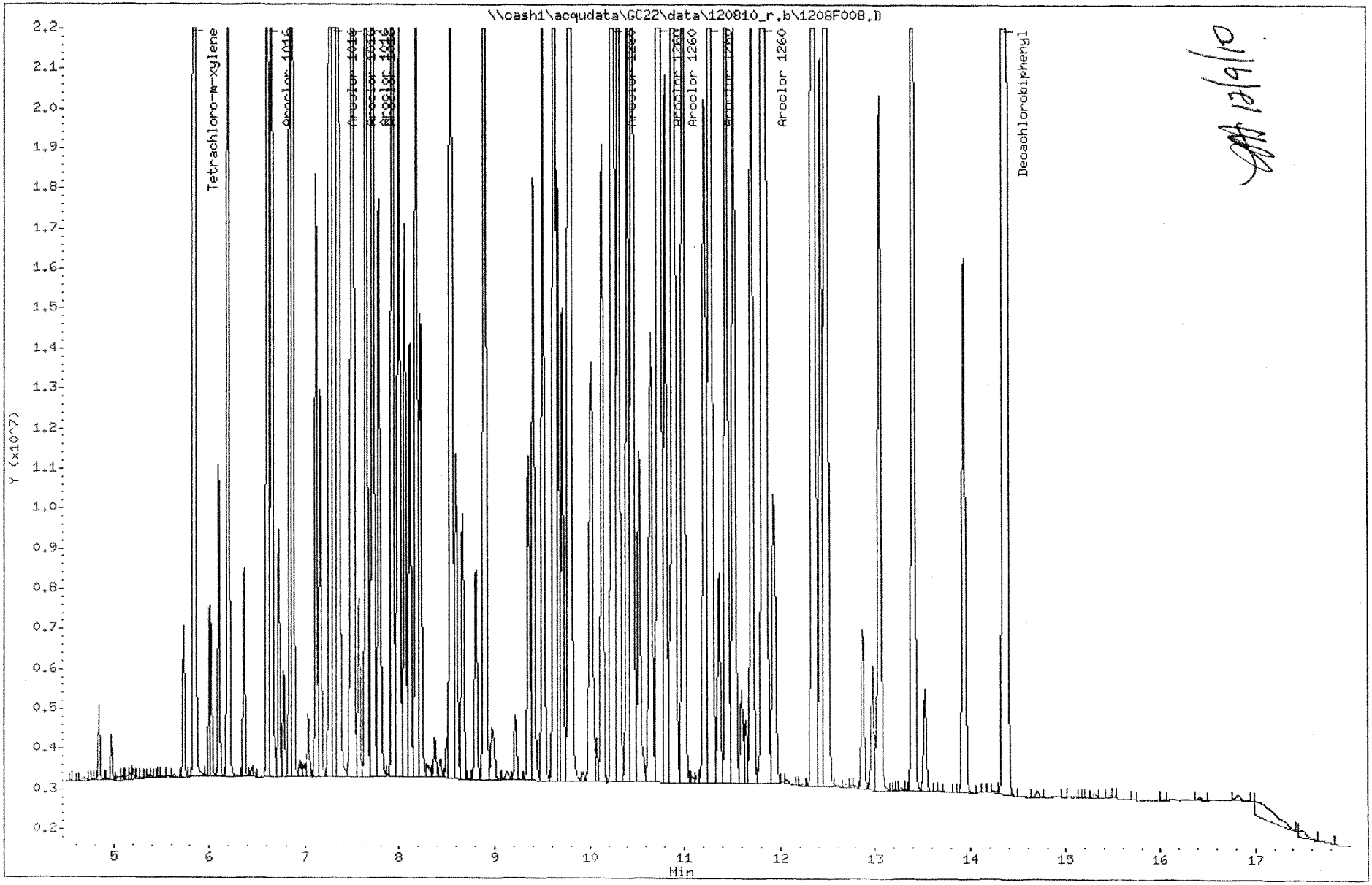
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



712

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F008.D
Date : 08-DEC-2010 23:01
Client ID:
Sample Info: 1660 @ 50-500ppb | PCB5-62E | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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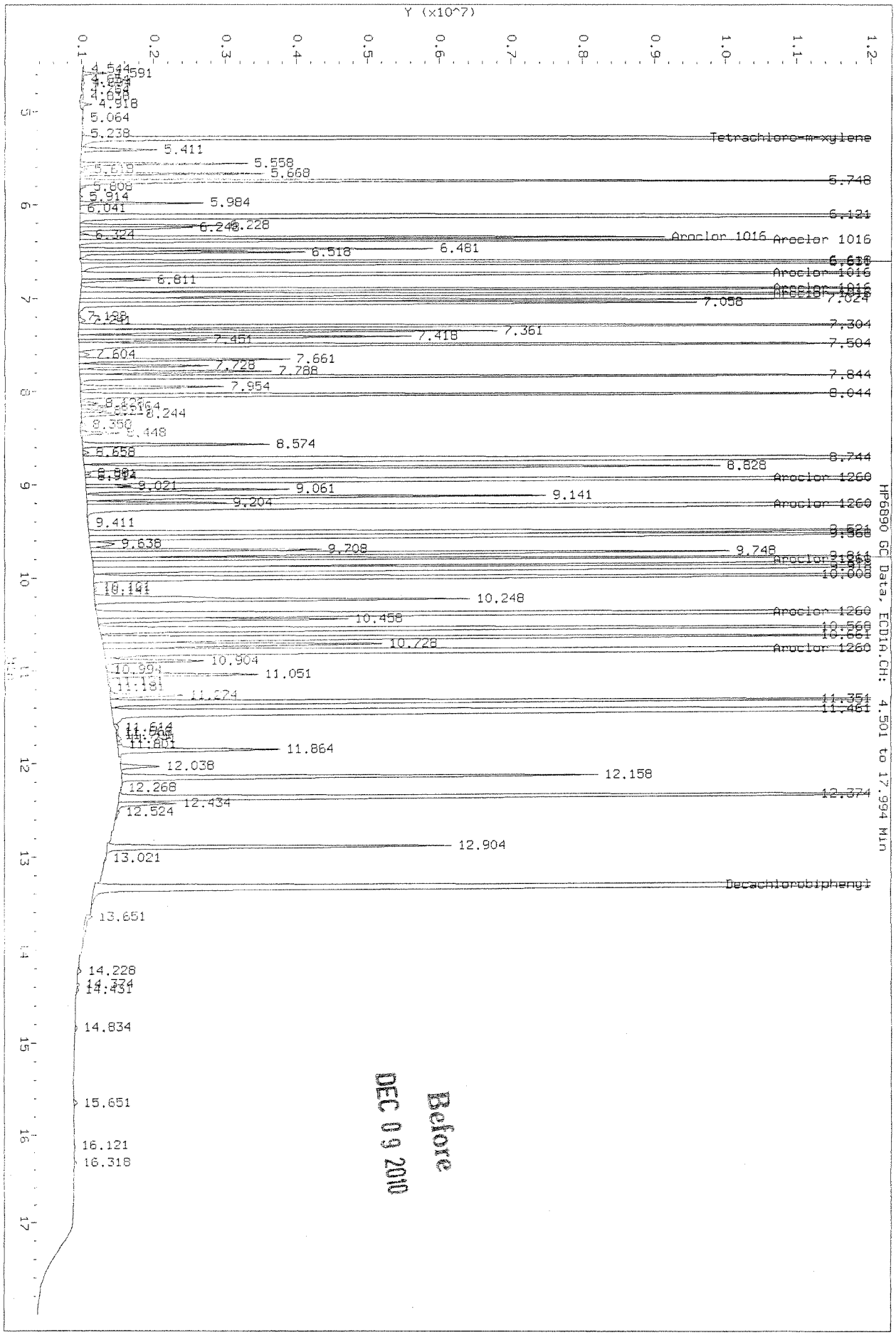
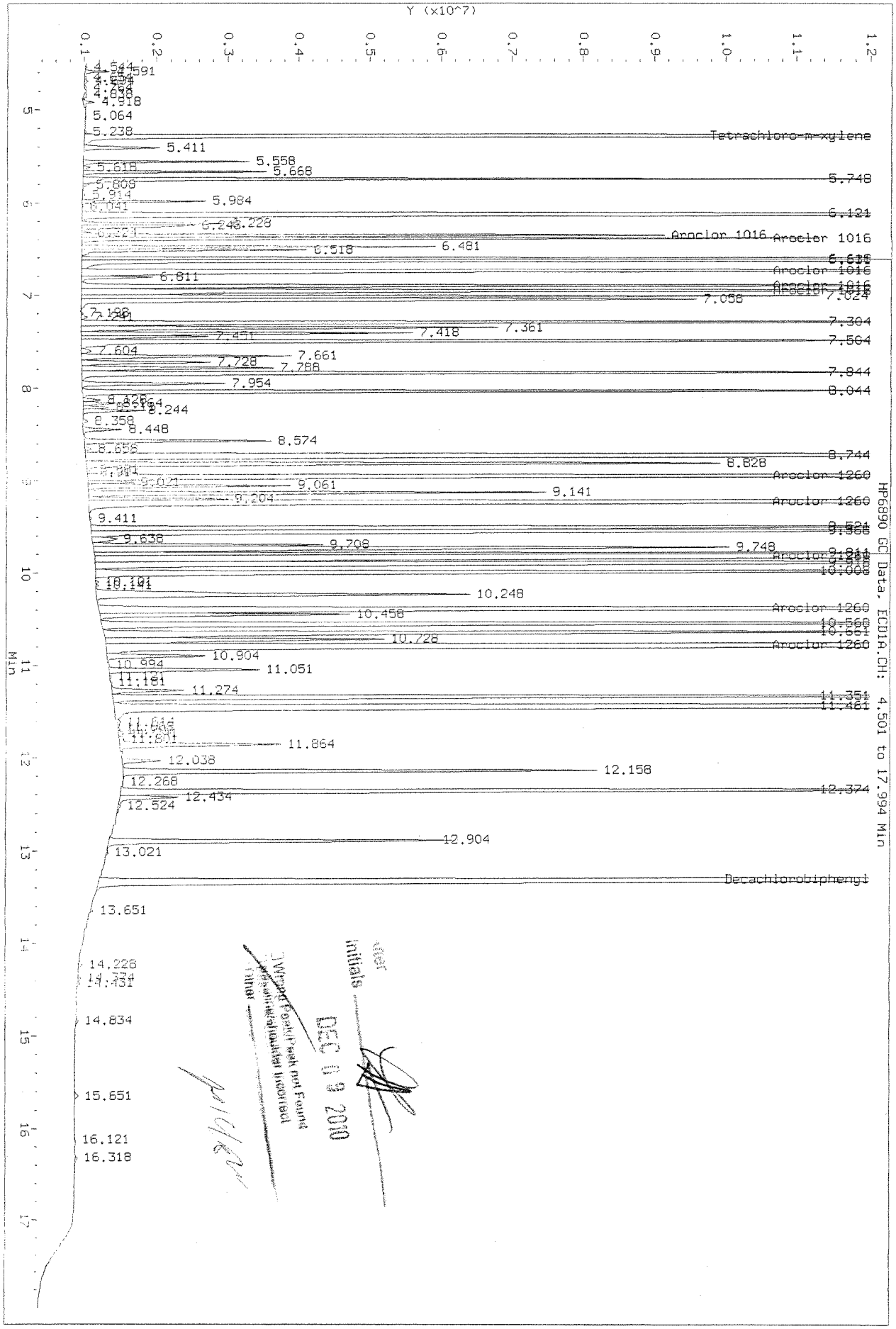
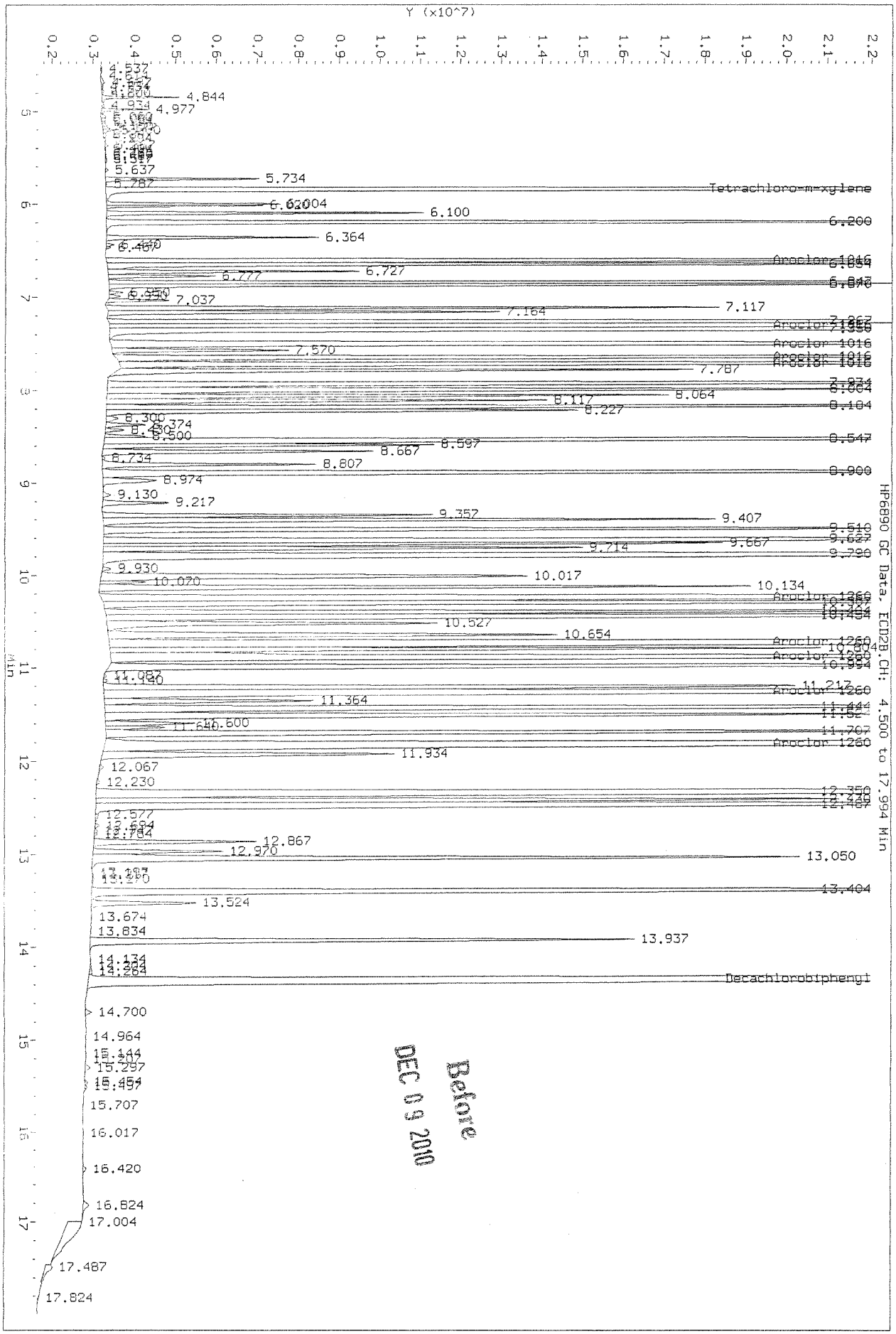
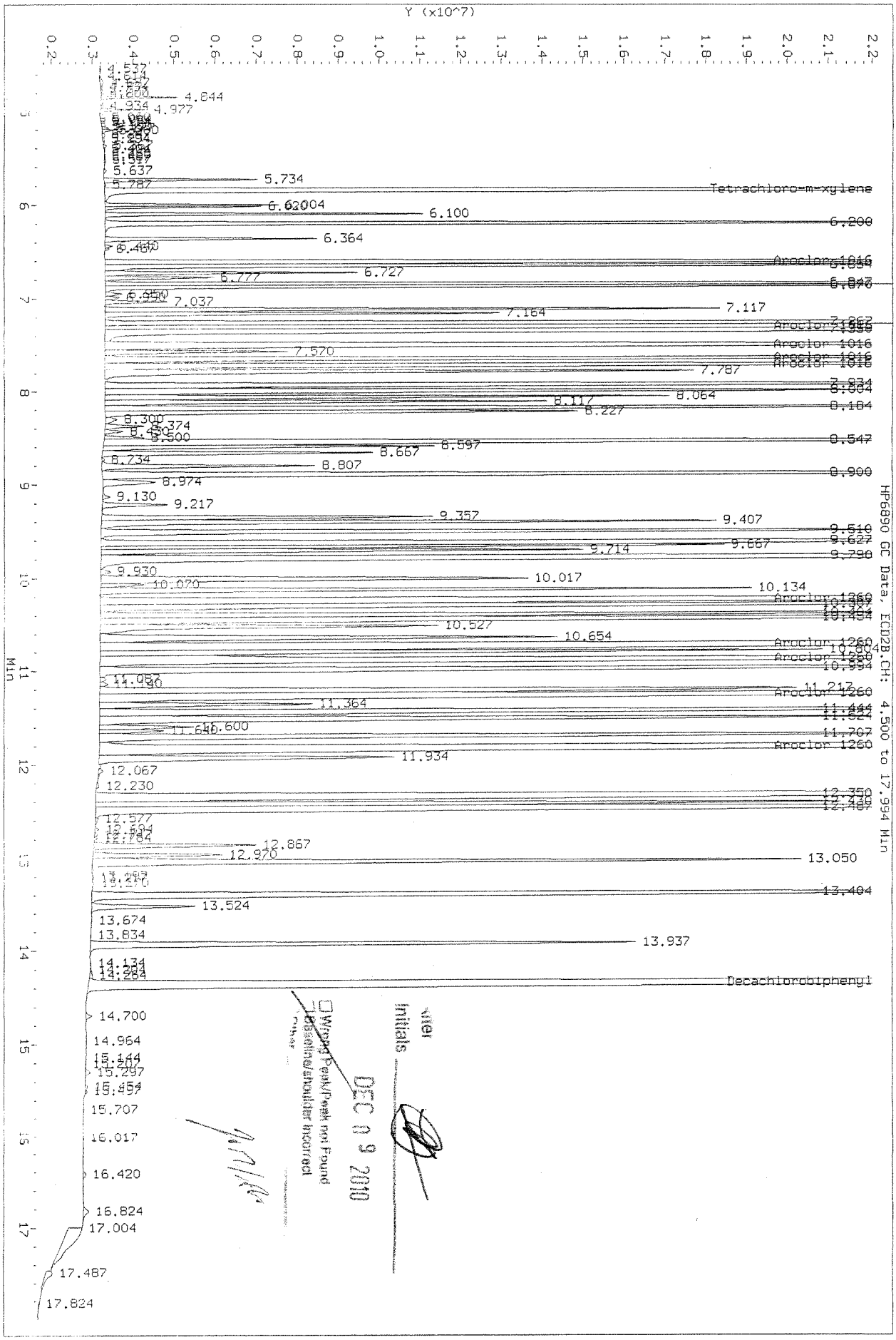

Y (x10^7)
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F008.D
Injection Date: 08-DEC-2010 23:01
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.501 to 17.994 Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F008.D
Injection Date: 08-DEC-2010 23:01
Instrument: GC22.1
Client Sample ID:
Y (x10^7)
HP6890 GC Data, ECD1A.CH: 4.501 to 17.994 Min
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F008.D
Injection Date: 08-DEC-2010 23:01
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.500 to 17.994 Min
Y (x10^7)
Min
4.844
4.977
5.637
5.734
Tetrachloro-m-xylene
6.100
6.200
6.364
6.727
7.037
7.117
7.570
7.787
8.064
8.117
8.227
8.300
8.500
8.597
8.667
8.734
8.807
8.974
9.130
9.217
9.352
9.407
9.667
9.714
9.930
10.017
10.070
10.134
10.527
10.654
11.087
11.364
11.600
11.934
12.067
12.230
12.577
12.867
12.970
13.050
13.524
13.674
13.834
13.937
Decachlorobiphenyl
14.700
14.964
15.297
15.707
16.017
16.420
16.824
17.004
17.487
17.824
Beloit
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F008.D
Injection Date: 08-DEC-2010 23:01
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.500 to 17.994 Min
Y (x10^7)
Min
Tetrachloro-m-xylene
Decachlorobiphenyl
Aroclor 1016
Aroclor 1260
4.844
4.977
5.637
5.734
6.100
6.364
6.727
7.037
7.117
7.570
7.787
8.064
8.227
8.667
8.807
8.974
9.130
9.217
9.407
9.714
10.017
10.134
10.527
10.654
11.364
11.934
12.067
12.230
12.867
12.970
13.050
13.524
13.674
13.834
13.937
14.700
14.964
15.707
16.017
16.420
16.824
17.004
17.487
17.824
Initials
DEC 09 2010
Wrong Peak/Peak not Found
Baseline/Shoulder Incorrect

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F009.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F009.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F009.D
Inj Date : 08-DEC-2010 23:26
Sample Info: 1221/1254 @ 5.0-2.5ppb | PCB5-60J | KWG100674
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1221+1254.sub
Sub List #2 : 1221+1254.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	4.920	5.183	68955	75310	4.60	4.22	80.00- 120.00	100.00(M)
	5.240	5.636	25486	59750	6.34	4.99	24.79- 37.19	36.96(M)
	5.560	5.736	99472	136931	5.06	5.99	145.66- 218.48	159.10(M)
	5.670	6.103	60131	265749	4.74	6.02	91.03- 136.55	92.84(M)
			Average of Peak Amounts =		5.18	5.30		
Aroclor 1254	8.047	8.546	291338	850716	2.85	2.91	80.00- 120.00	100.00(M)
	8.577	8.899	213810	1368459	2.66	2.99	65.38- 98.07	73.39(M)
	8.730	9.513	457368	1326215	2.73	2.83	136.14- 204.20	156.99(M)
	9.063	9.793	291615	522112	2.60	2.84	93.98- 140.97	100.09(M)
	9.247	10.023	189126	1193303	2.48	3.12	63.43- 95.15	64.92(M)
			Average of Peak Amounts =		2.66	2.94		

QC Flag Legend

M - Compound response manually integrated.

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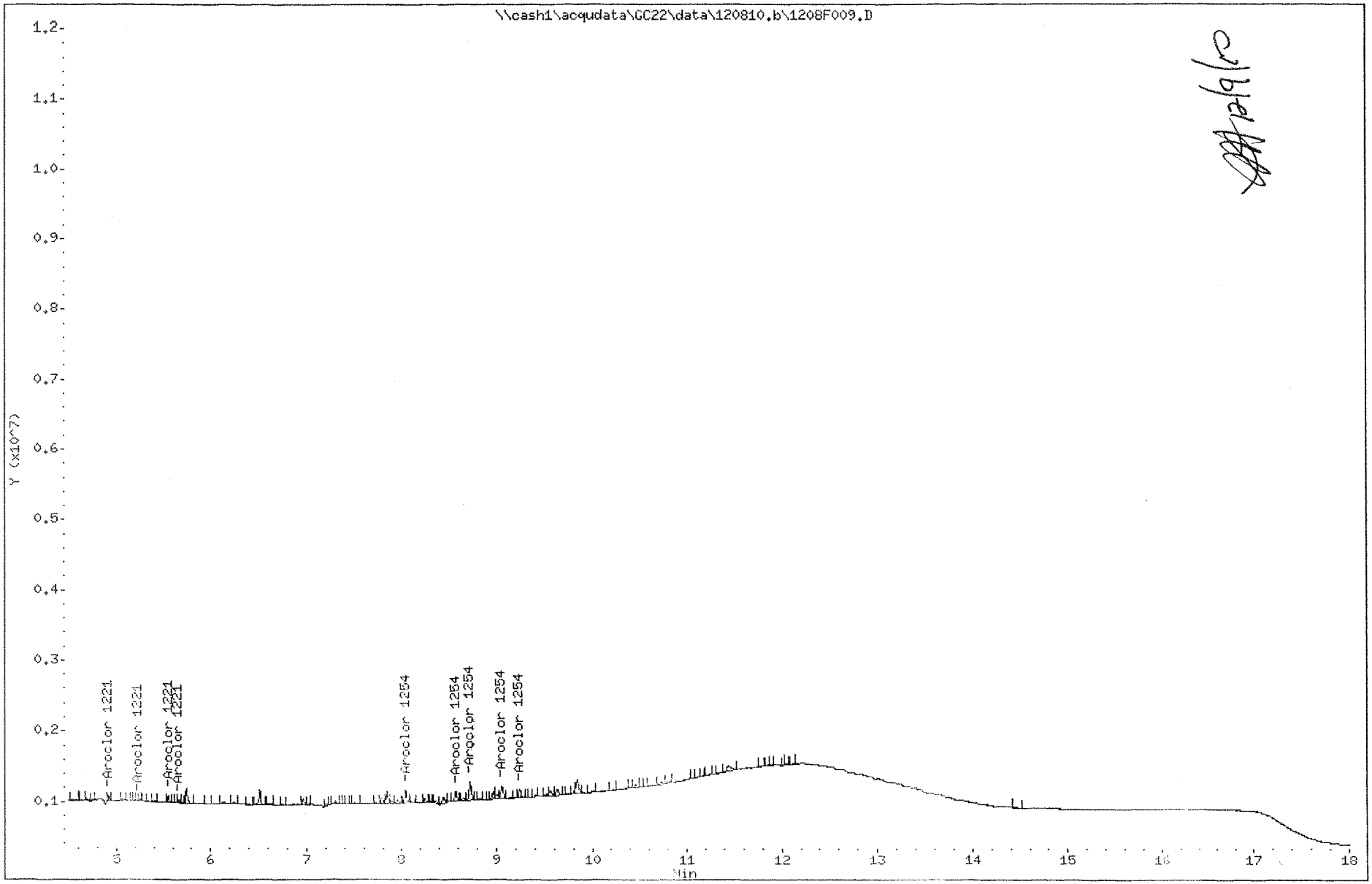
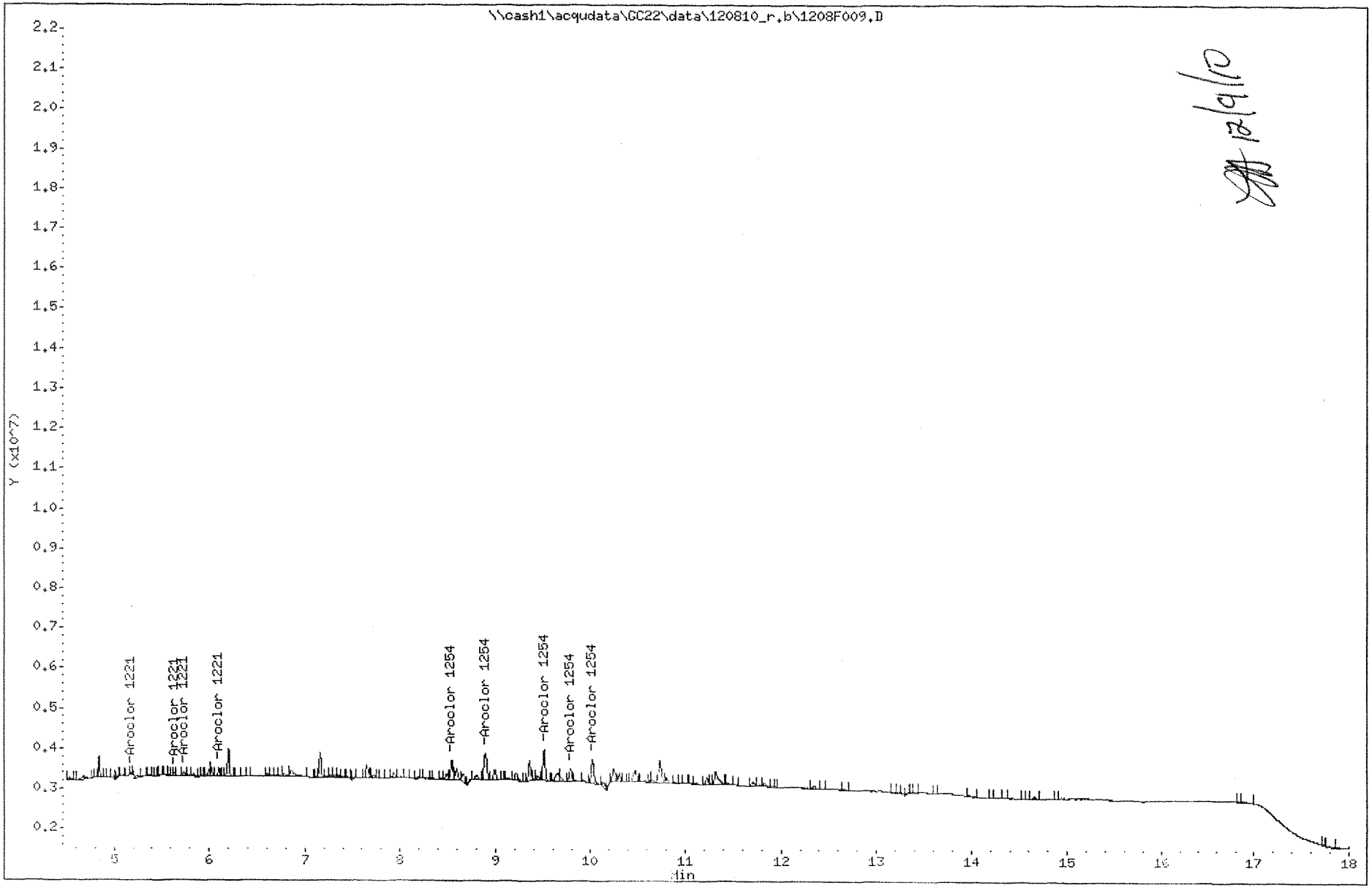
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F009.D
Date : 08-DEC-2010 23:26
Client ID:
Instrument: GC22.i
Sample Info: 1221/1254 @ 5.0-2.5ppb | PCB5-60J | KWG100674
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



719

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F009.D
Date : 08-DEC-2010 23:26
Client ID:
Sample Info: 1221/1254 @ 5.0-2.5ppb | PCB5-60J | KWG100674

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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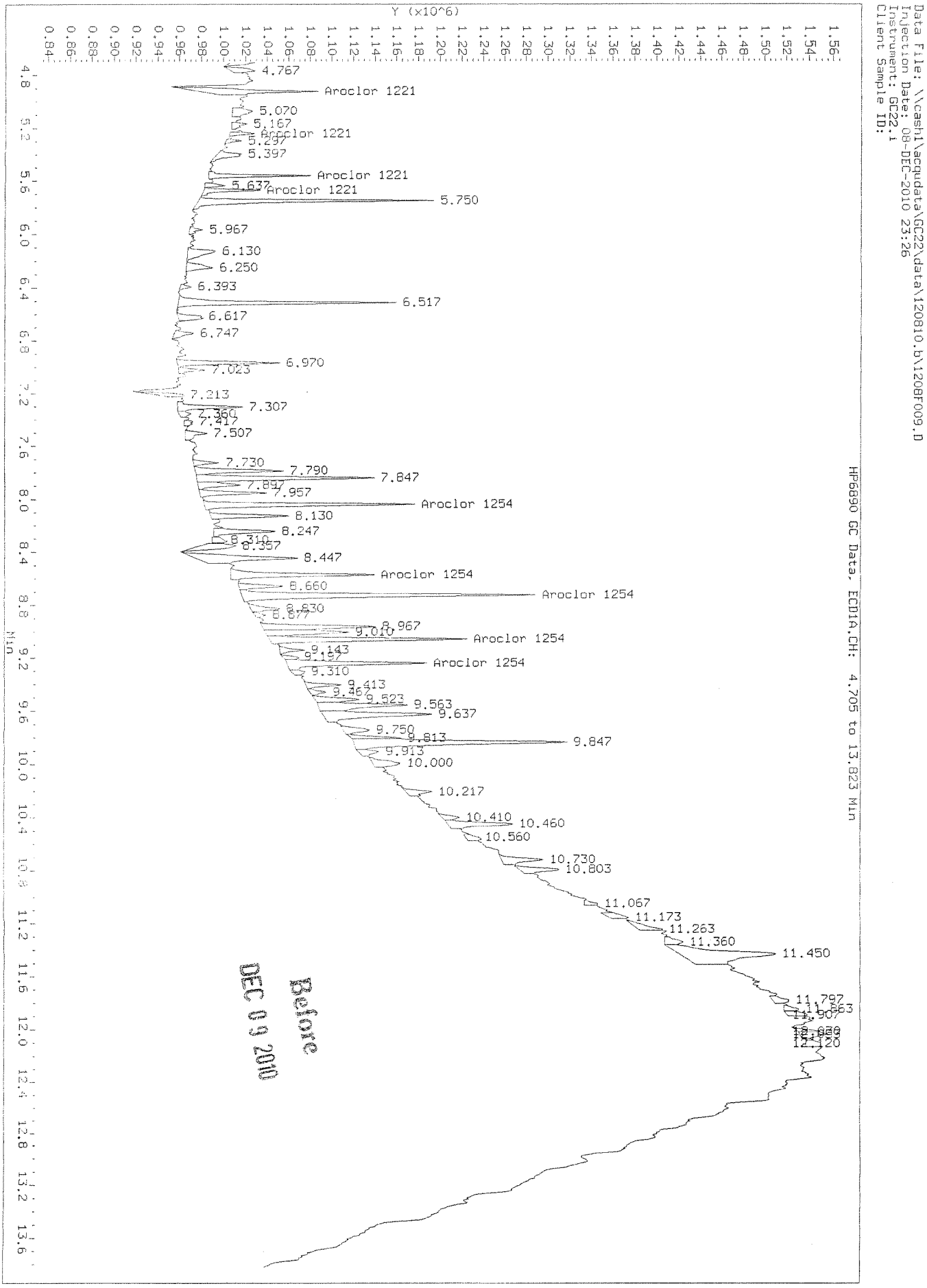
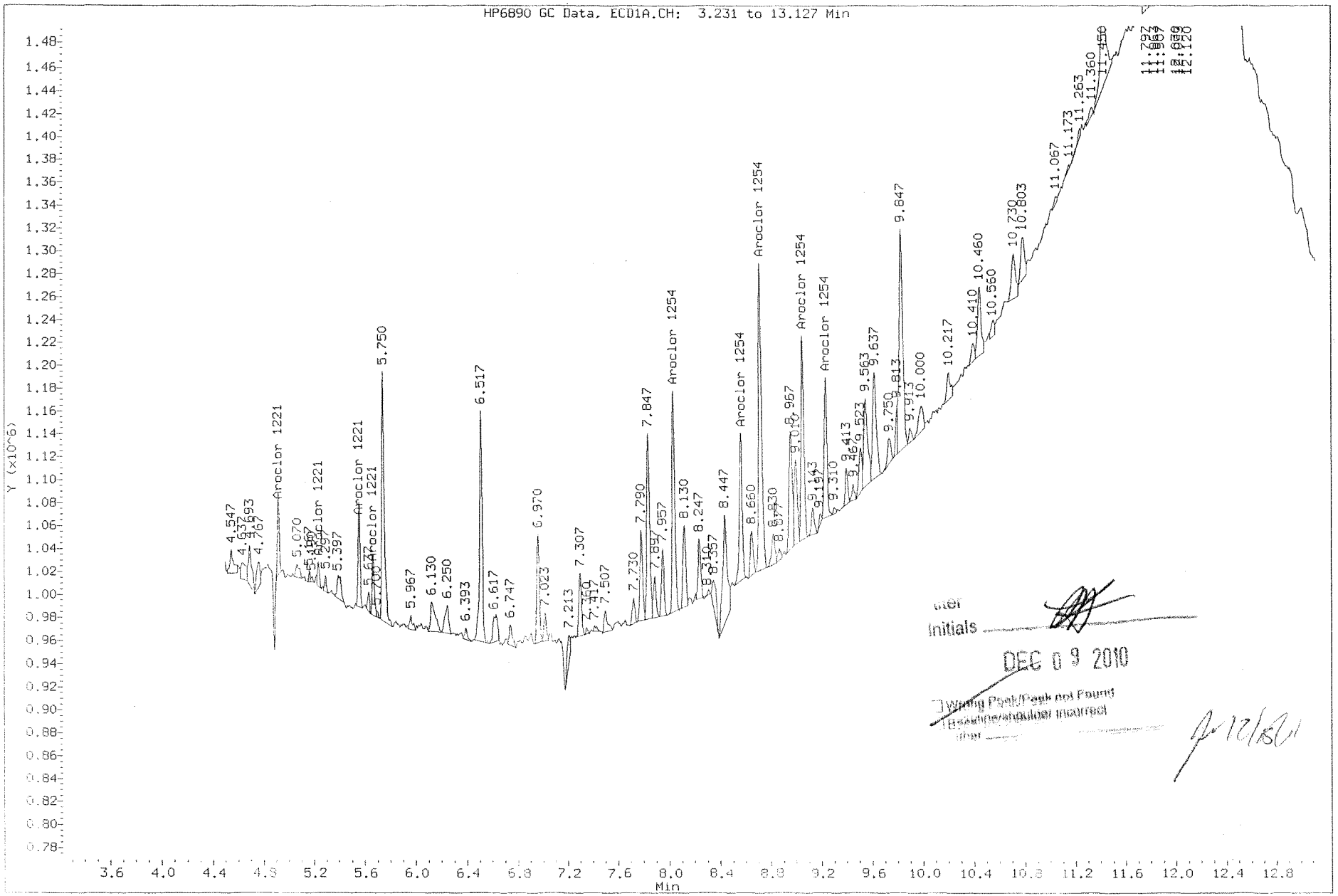
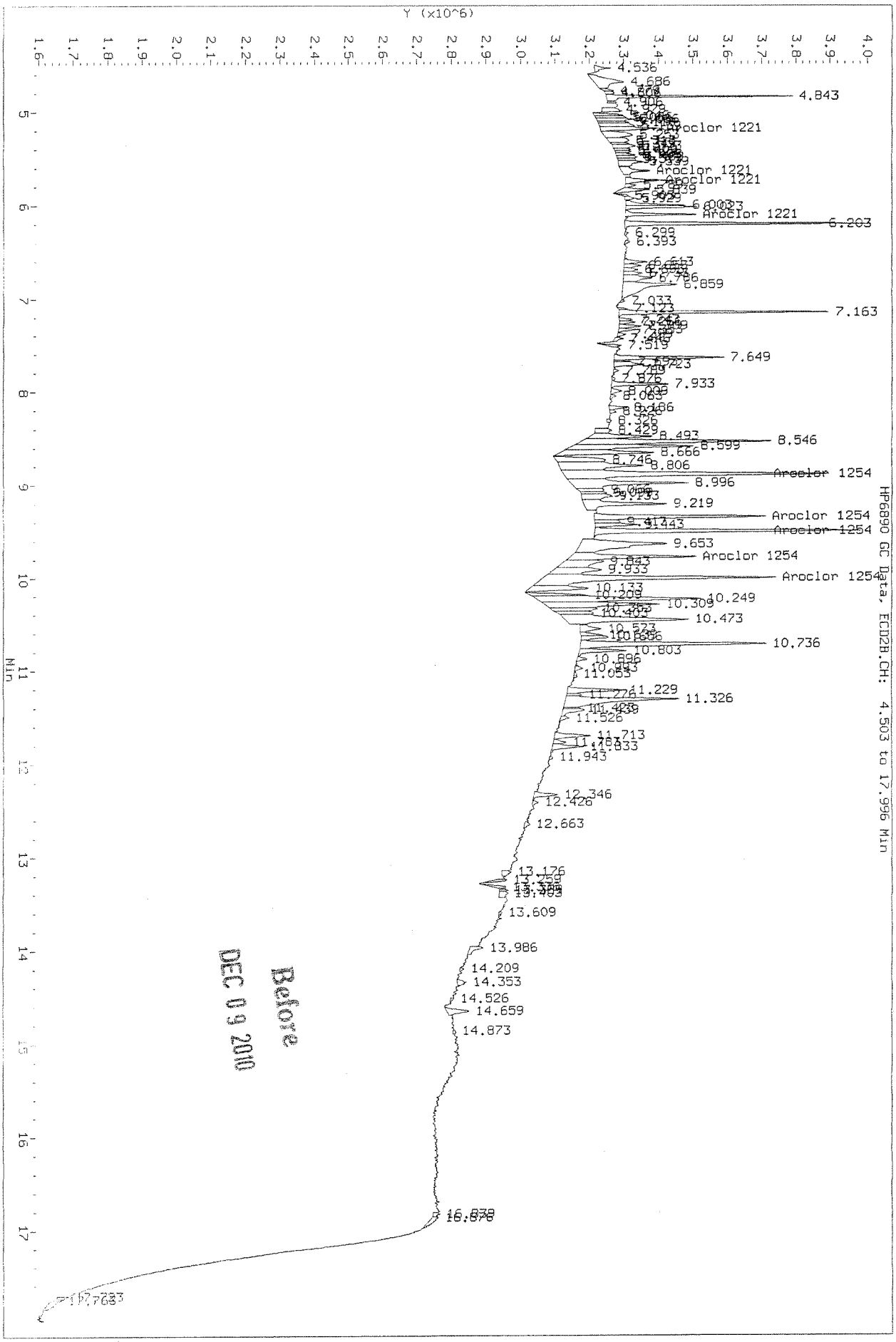
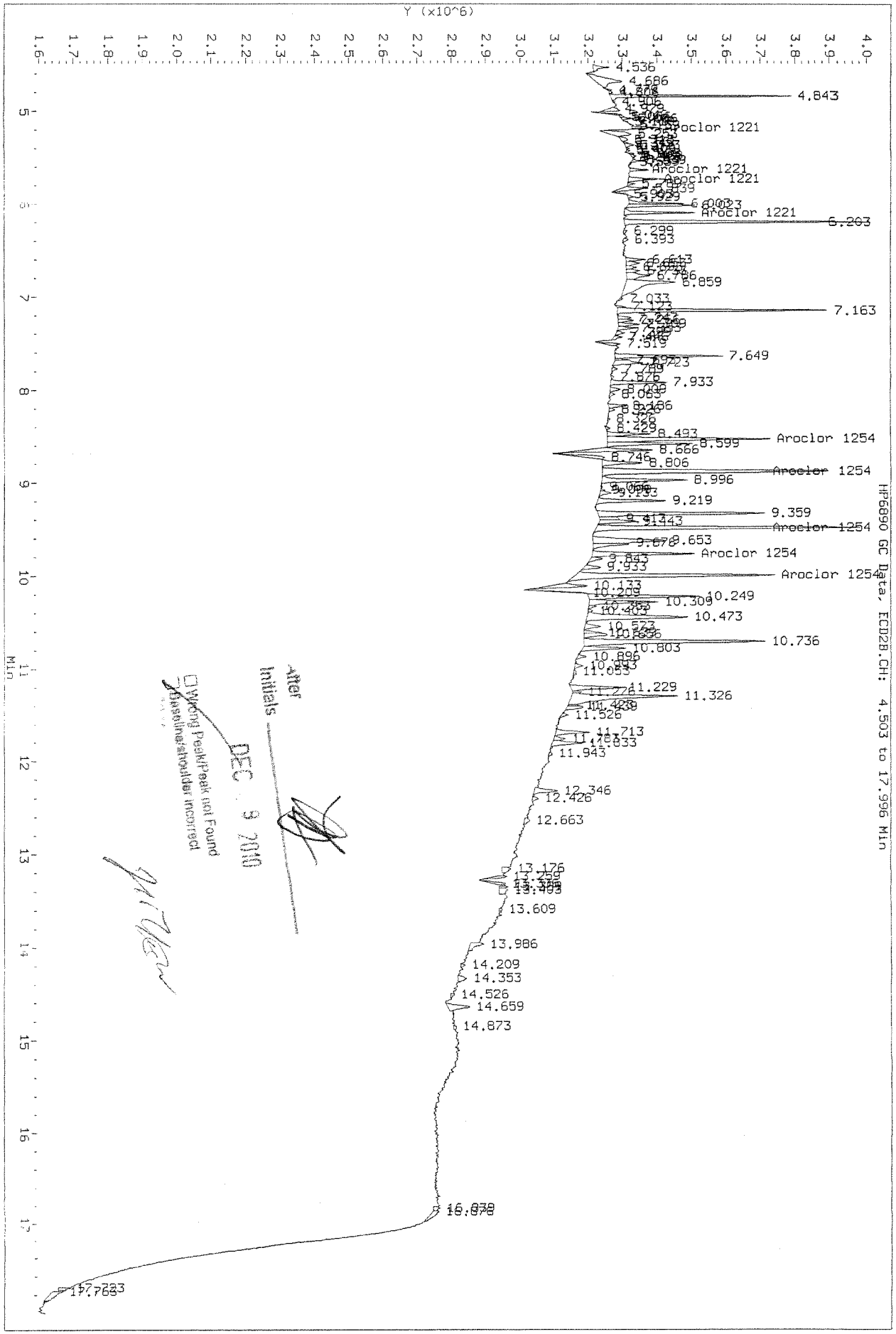

Data File: \\cash1\acqudata\GC22\data\120810.b\120BF009.D
Injection Date: 08-DEC-2010 23:26
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.705 to 13.823 Min
Y (x10^6)
Min
4.767
Aroclor 1221
5.070
5.167
Aroclor 1221
5.297
5.397
Aroclor 1221
5.637
Aroclor 1221
5.750
5.967
6.130
6.250
6.393
6.517
6.617
6.747
6.970
7.023
7.213
7.307
7.360
7.417
7.507
7.730
7.790
7.847
7.897
7.957
Aroclor 1254
8.130
8.247
8.310
8.357
8.447
Aroclor 1254
8.660
Aroclor 1254
8.830
8.877
8.967
9.010
Aroclor 1254
9.143
9.197
Aroclor 1254
9.310
9.413
9.467
9.523
9.563
9.637
9.750
9.813
9.847
9.913
10.000
10.217
10.410
10.460
10.560
10.730
10.803
11.067
11.173
11.263
11.360
11.450
11.797
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F009.D
Injection Date: 08-DEC-2010 23:26
Instrument: GC22.i
Client Sample ID:




Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F009.D
Injection Date: 08-DEC-2010 23:26
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, EC02B.CH: 4.503 to 17.996 Min
Y (x10^6)
Min
Aroclor 1221
Aroclor 1254
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\120F009.D
Injection Date: 08-DEC-2010 23:26
Instrument: GC22.1
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD2B.CH: 4.503 to 17.996 Min
4.536
4.686
4.843
Aroclor 1221
Aroclor 1221
Aroclor 1221
Aroclor 1221
6.203
6.299
6.393
6.859
7.163
7.519
7.649
7.933
8.493
Aroclor 1254
8.599
8.666
8.746
8.806
Aroclor 1254
8.996
9.219
9.359
Aroclor 1254
9.653
Aroclor 1254
9.933
Aroclor 1254
10.249
10.309
10.473
10.736
10.803
10.896
11.229
11.326
11.526
11.713
11.833
11.943
12.346
12.426
12.663
13.176
13.609
13.986
14.209
14.353
14.526
14.659
14.873
17.783
Initials
After
DEC 9 2010
Wrong Peak/Peak not Found
Baseline/shoulder incorrect

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F010.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F010.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F010.D
Inj Date : 08-DEC-2010 23:50
Sample Info: 1221/1254 @ 10-5.0ppb | PCB5-60K | KWG1006746
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1221+1254.sub
Sub List #2 : 1221+1254.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	4.919	5.198	142606	108807	9.52	4.41	80.00- 120.00	100.00(M)
	5.236	5.632	46410	137823	11.5	11.5	24.79- 37.19	12.47(M)
	5.559	5.735	202868	257457	10.3	11.3	145.66- 218.48	58.19(M)
	5.669	6.098	123347	500734	9.73	11.3	91.03- 136.55	33.14(M)
			Average of Peak Amounts =		10.3	9.63		
Aroclor 1254	8.042	8.545	554041	1699472	5.42	5.82	80.00- 120.00	100.00(M)
	8.576	8.898	415471	2640879	5.20	5.77	65.38- 98.07	74.99(M)
	8.729	9.512	900082	2601879	5.38	5.55	136.14- 204.20	162.46(M)
	9.062	9.792	589512	1067739	5.24	5.81	93.98- 140.97	106.40(M)
	9.246	10.022	402274	2208260	5.29	5.78	63.43- 95.15	72.61(M)
			Average of Peak Amounts =		5.31	5.75		

QC Flag Legend

M - Compound response manually integrated.

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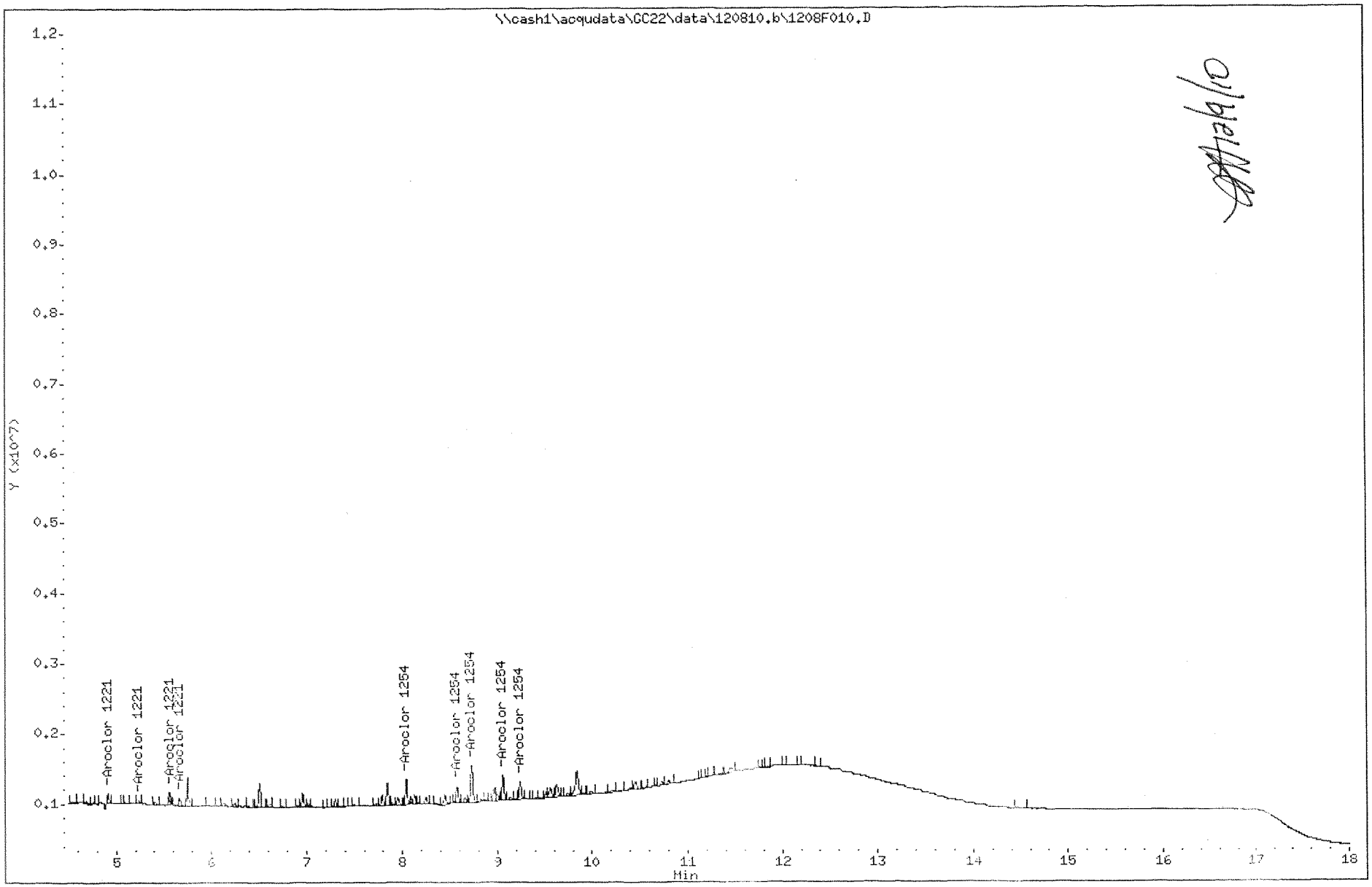
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F010.D
Date : 08-DEC-2010 23:50
Client ID:
Sample Info: 1221/1254 @ 10-5.0ppb | PCB5-60K | KWG1006746

Instrument: GC22.i

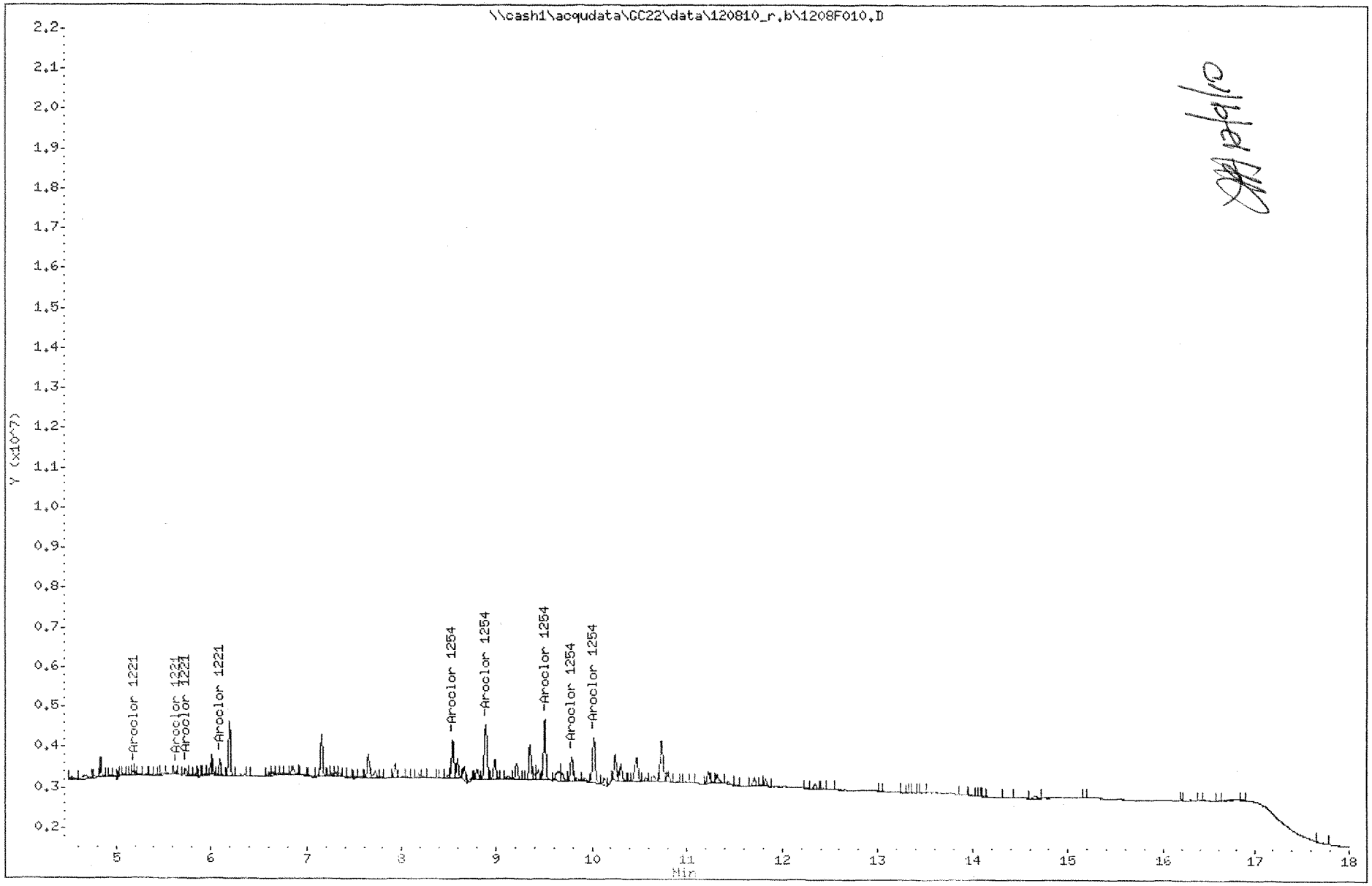
Operator: LHarris
Column diameter: 0.32

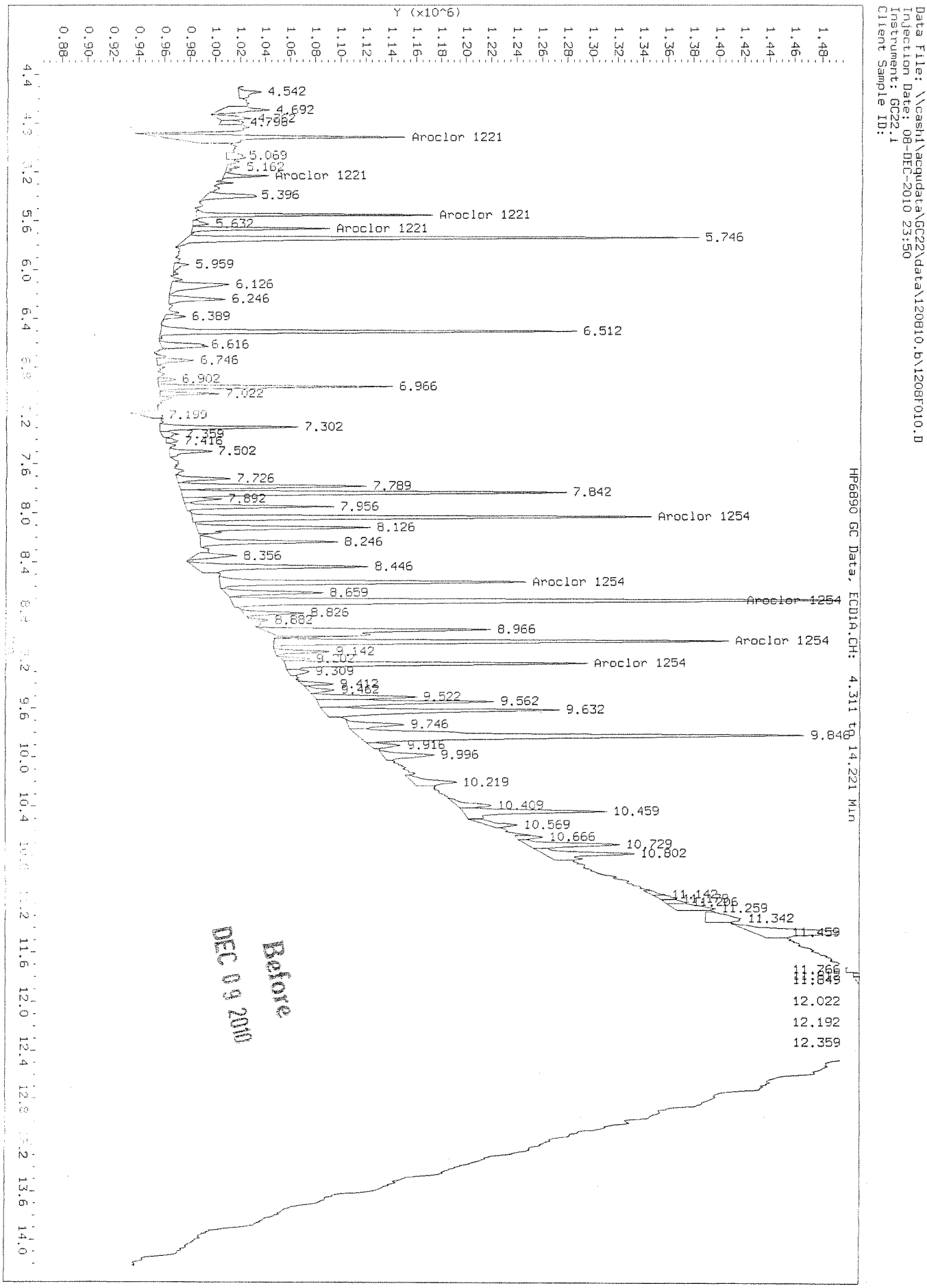
Column phase: DB-35MS

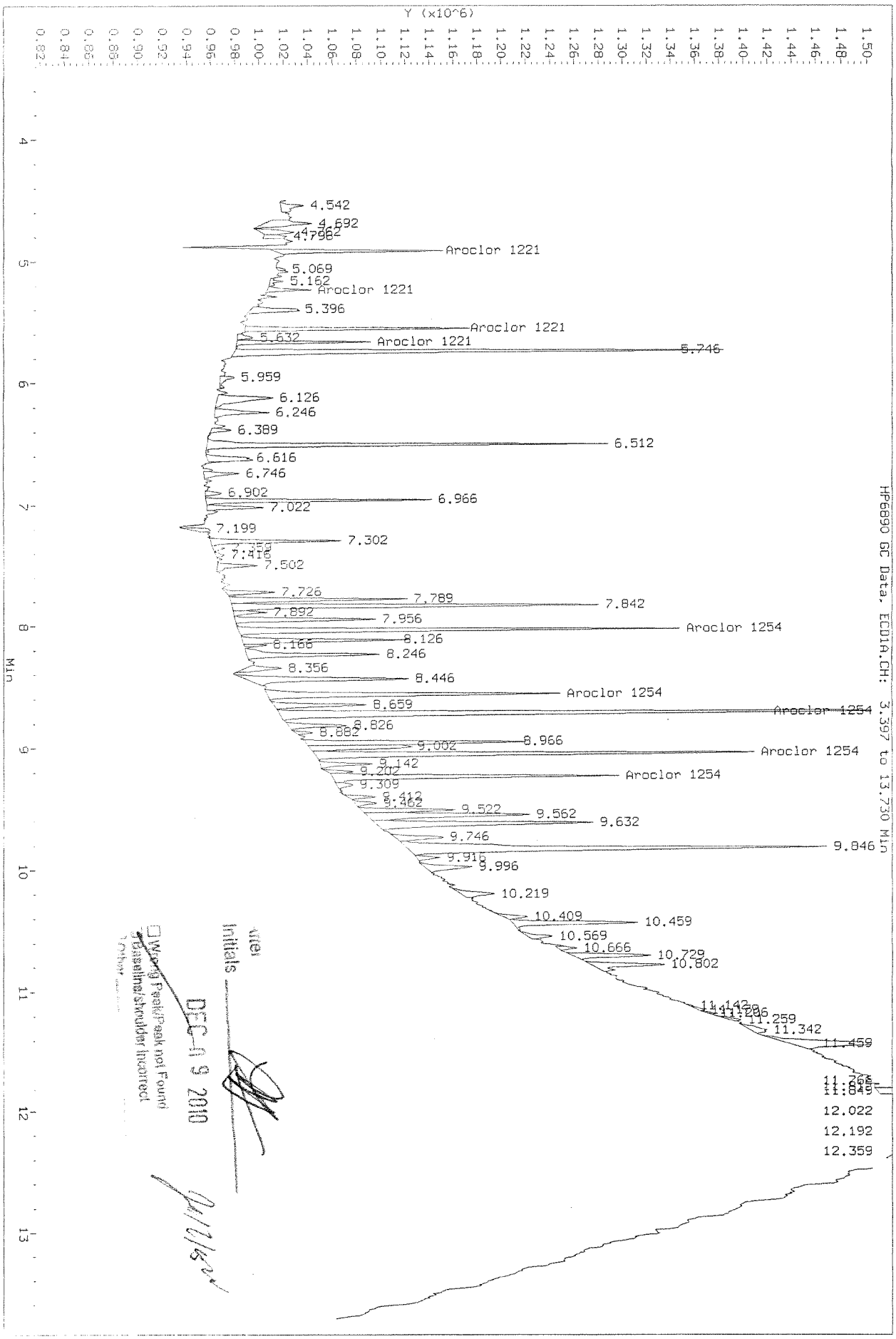


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F010.D
Date : 08-DEC-2010 23:50
Client ID:
Sample Info: 1221/1254 @ 10-5.0ppb | PCB5-60K | KWG1006746

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32




Data File: \\cash1\acqudata\GC22\data\120810.b\1208F010.D
Injection Date: 08-DEC-2010 23:50
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.311 to 14.221 Min
4.542
4.692
4.798
Aroclor 1221
5.069
5.162
Aroclor 1221
5.396
Aroclor 1221
5.632
Aroclor 1221
5.746
5.959
6.126
6.246
6.389
6.512
6.616
6.746
6.902
7.022
6.966
7.199
7.302
7.359
7.416
7.502
7.726
7.789
7.842
7.892
7.956
Aroclor 1254
8.126
8.246
8.356
8.446
Aroclor 1254
8.659
Aroclor 1254
8.826
8.682
8.966
Aroclor 1254
9.142
9.202
Aroclor 1254
9.309
9.412
9.462
9.522
9.562
9.632
9.746
9.846
9.916
9.996
10.219
10.409
10.459
10.569
10.666
10.729
10.802
11.142
11.259
11.342
11.459
12.022
12.192
12.359
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208f010.D
Injection Date: 08-DEC-2010 23:50
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 3.397 to 13.730 Min
Y (x10^6)
Min
4.542
4.692
4.798
Aroclor 1221
5.069
5.162
Aroclor 1221
5.396
Aroclor 1221
5.632
Aroclor 1221
5.746
5.959
6.126
6.246
6.389
6.512
6.616
6.746
6.902
6.966
7.022
7.199
7.302
7.417
7.502
7.726
7.789
7.842
7.892
7.956
Aroclor 1254
8.126
8.166
8.246
8.356
8.446
Aroclor 1254
8.659
Aroclor 1254
8.826
8.882
9.002
8.966
Aroclor 1254
9.142
9.202
Aroclor 1254
9.309
9.412
9.462
9.522
9.562
9.632
9.746
9.846
9.918
9.996
10.219
10.409
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10.729
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11.342
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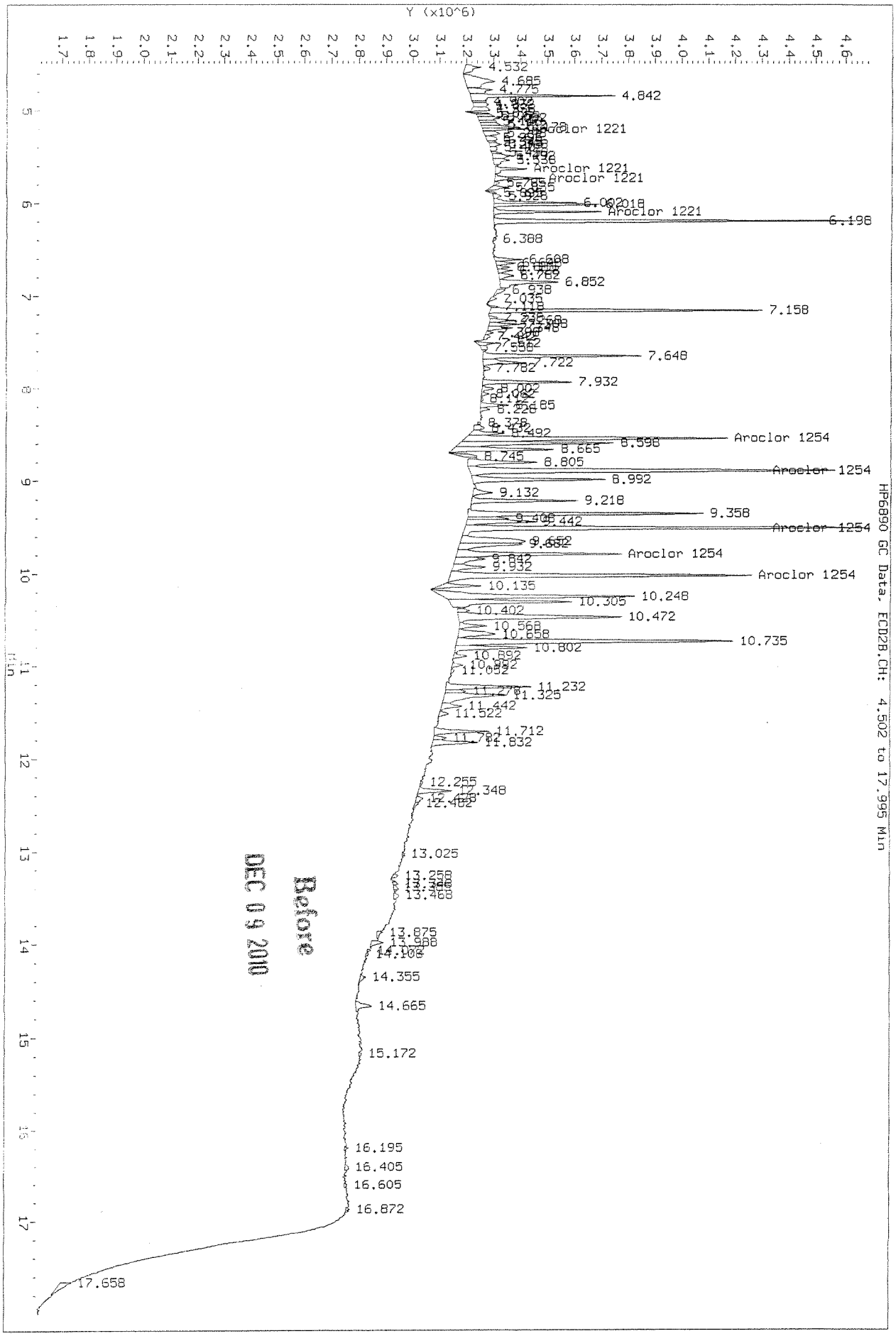
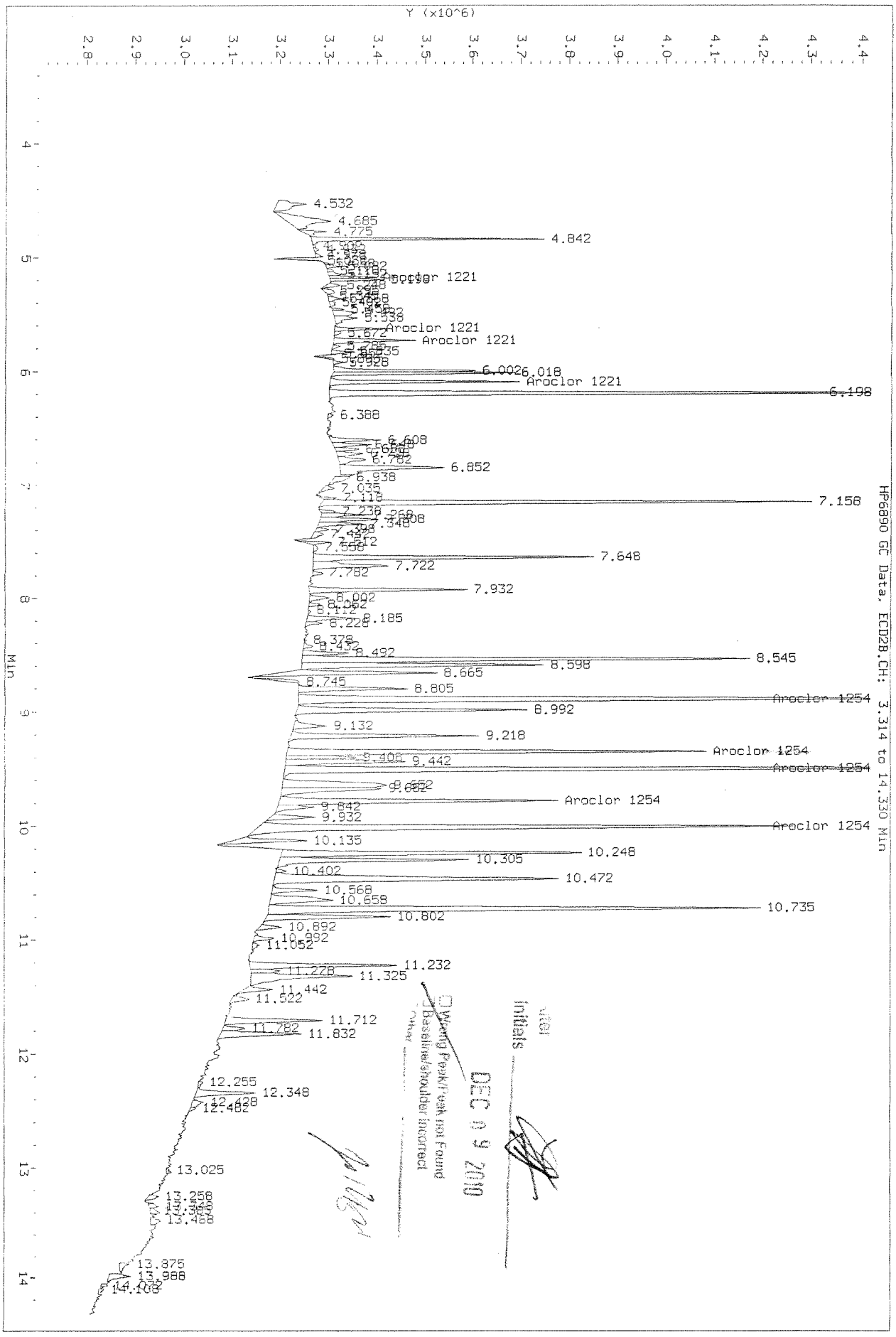
12.022
12.192
12.359
Initials
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F010.D
Injection Date: 08-DEC-2010 23:50
Instrument: GC22.1
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data. ECD2B.CH: 4.502 to 17.995 Min
4.532
4.685
4.842
Aroclor 1221
Aroclor 1221
Aroclor 1221
6.198
6.388
6.852
7.158
7.648
7.932
Aroclor 1254
8.598
8.665
8.745
8.805
Aroclor 1254
8.992
9.132
9.218
9.358
Aroclor 1254
Aroclor 1254
Aroclor 1254
10.135
10.248
10.305
10.402
10.472
10.568
10.658
10.735
10.802
10.892
11.052
11.232
11.325
11.442
11.522
11.712
11.832
12.255
12.348
12.402
13.025
13.250
13.468
13.875
14.355
14.665
15.172
16.195
16.405
16.605
16.872
17.658
Before
DEC 09 2010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Injection Date: 08-DEC-2010 23:50
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B,CH: 3.314 to 14.330 Min
Y (x10^6)
Min
4.532
4.685
4.775
4.842
Aroclor 1221
5.672
Aroclor 1221
Aroclor 1221
6.0026.018
Aroclor 1221
6.198
6.388
6.608
6.782
6.852
6.938
7.158
7.348
7.558
7.648
7.722
7.782
7.932
8.002
8.185
8.492
8.545
8.598
8.665
8.745
8.805
Aroclor 1254
8.992
9.132
9.218
Aroclor 1254
9.408
9.442
Aroclor 1254
Aroclor 1254
9.842
9.932
Aroclor 1254
10.135
10.248
10.305
10.402
10.472
10.568
10.658
10.735
10.802
10.892
10.992
11.052
11.232
11.278
11.325
11.442
11.522
11.712
11.782
11.832
12.255
12.348
12.482
13.025
13.375
13.988
14.108
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
DEC 09 2010
initials

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F011.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F011.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F011.D
Inj Date : 09-DEC-2010 00:15
Sample Info: 1221/1254 @ 100-50ppb | PCB5-60L | KWG1006746
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1221+1254.sub
Sub List #2 : 1221+1254.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

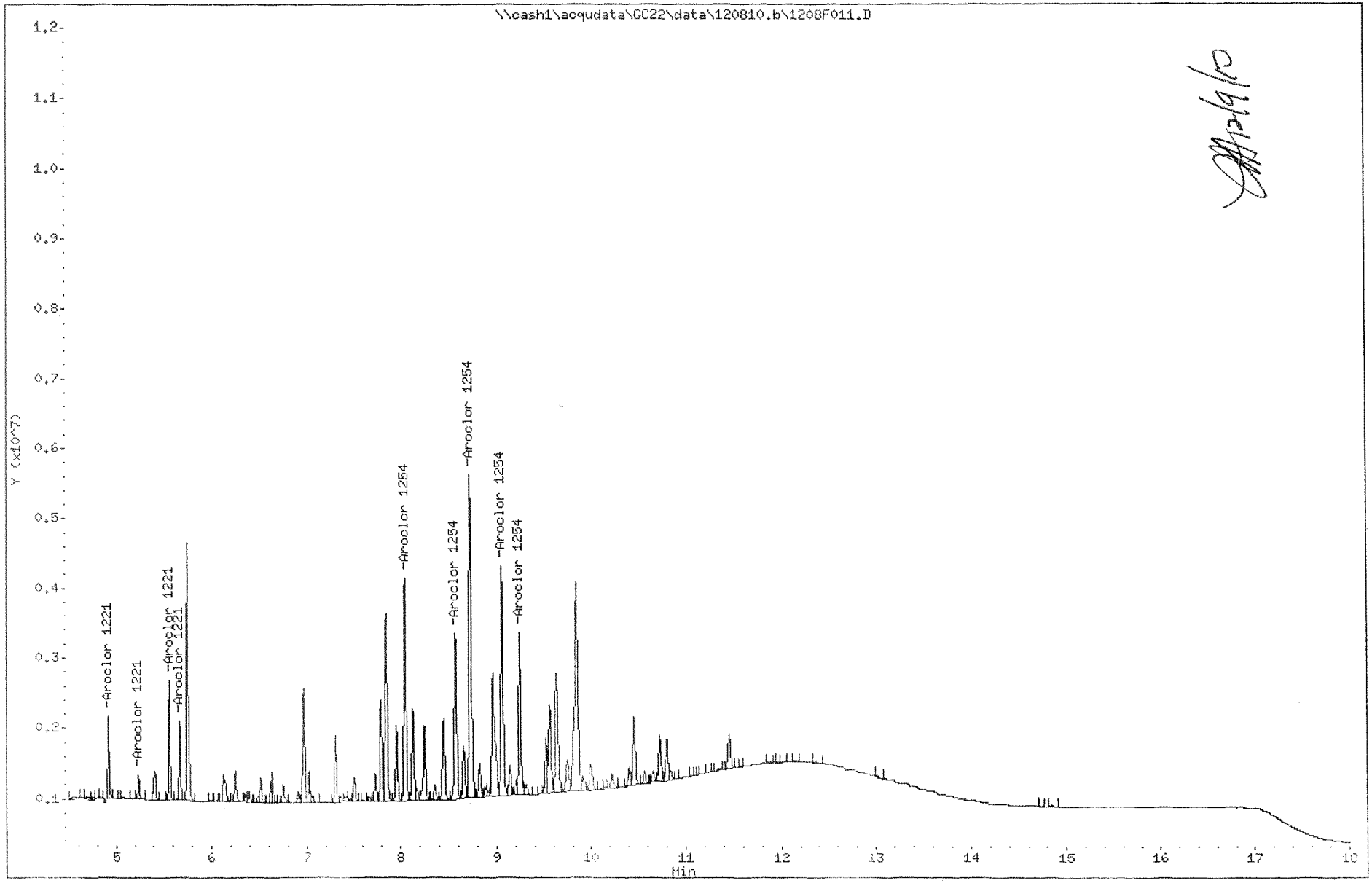
Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	4.919	5.205	1186036	3399905	100	138	80.00- 120.00	100.00(M)
	5.239	5.635	386652	1194673	100	99.8	24.79- 37.19	32.60(M)
	5.563	5.739	1942535	2140472	100	93.7	145.66- 218.48	163.78(M)
	5.673	6.102	1245923	4348104	100	98.5	91.03- 136.55	105.05(M)
			Average of Peak Amounts =		100	108		
Aroclor 1254	8.046	8.549	5009268	14043032	49.0	48.1	80.00- 120.00	100.00
	8.576	8.902	3960309	21670568	49.6	47.4	65.38- 98.07	79.06
	8.729	9.512	8056314	22118421	48.2	47.2	136.14- 204.20	160.83
	9.063	9.792	5551677	8882271	49.3	48.4	93.98- 140.97	110.83
	9.246	10.022	3809184	17614074	50.1	46.1	63.43- 95.15	76.04
			Average of Peak Amounts =		49.2	47.4		

QC Flag Legend

M - Compound response manually integrated.

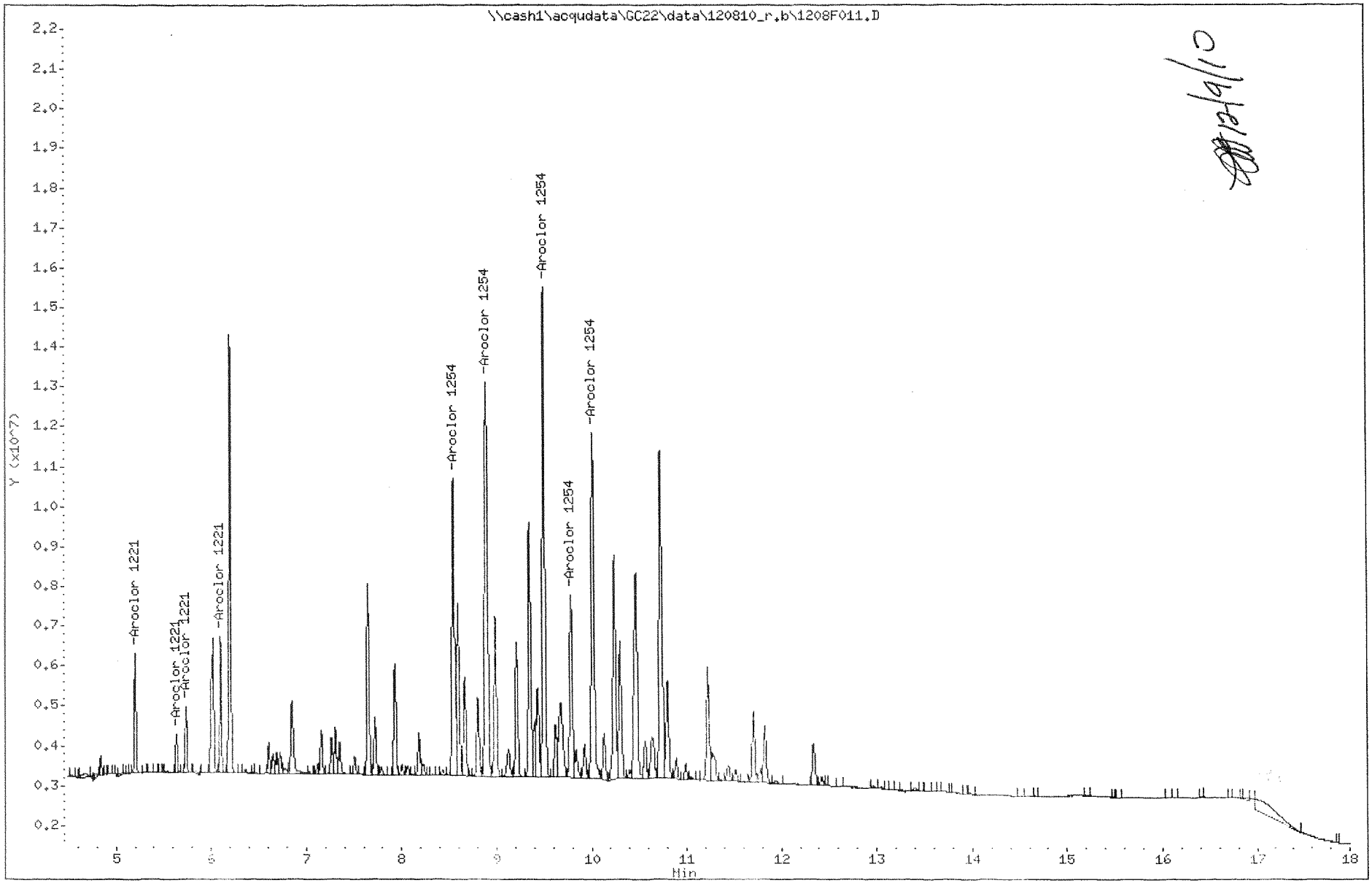
12/9/10

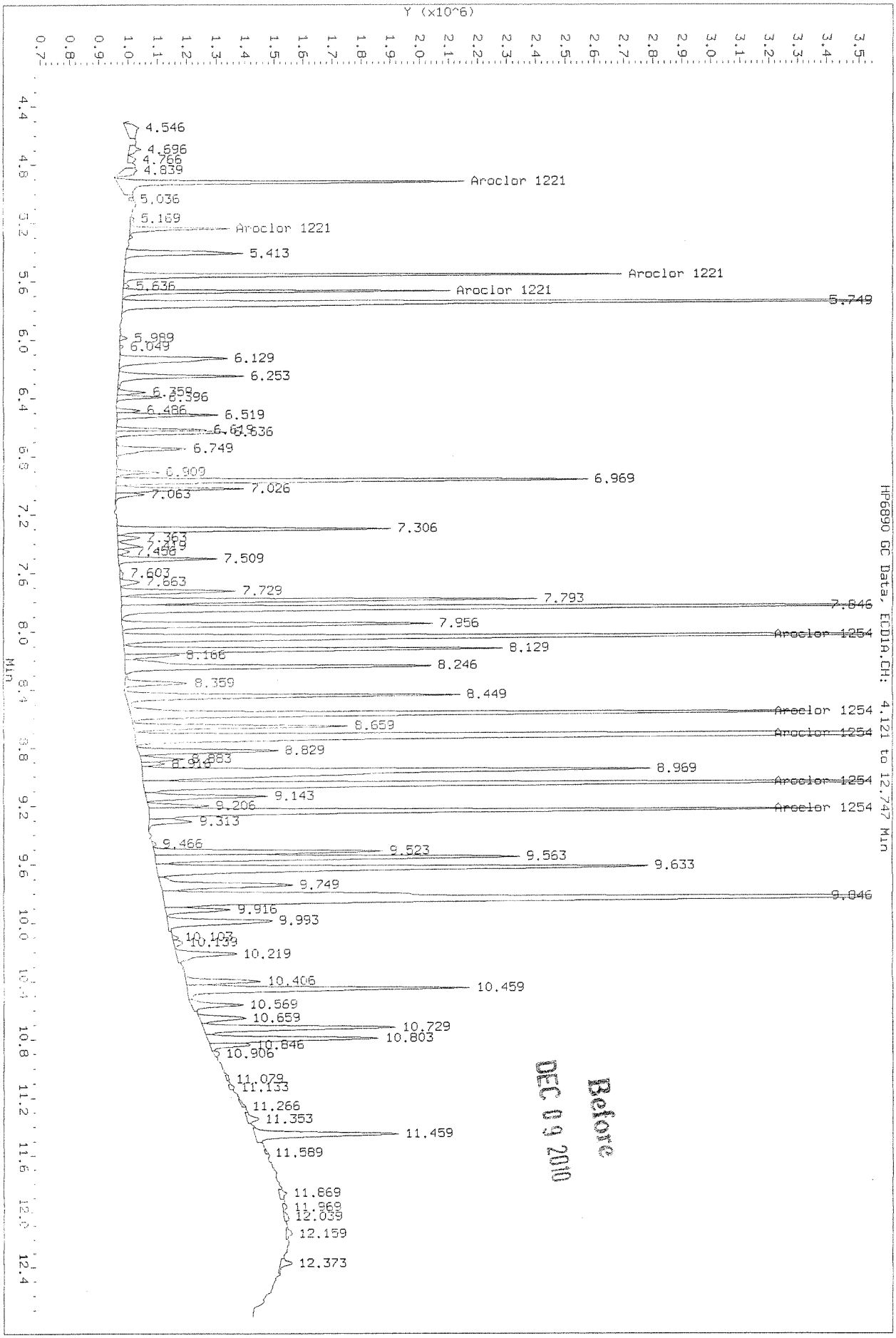
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F011.D
Date : 09-DEC-2010 00:15
Client ID:
Instrument: GC22.i
Sample Info: 1221/1254 @ 100-50ppb | PCB5-60L | KWG1006746
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32

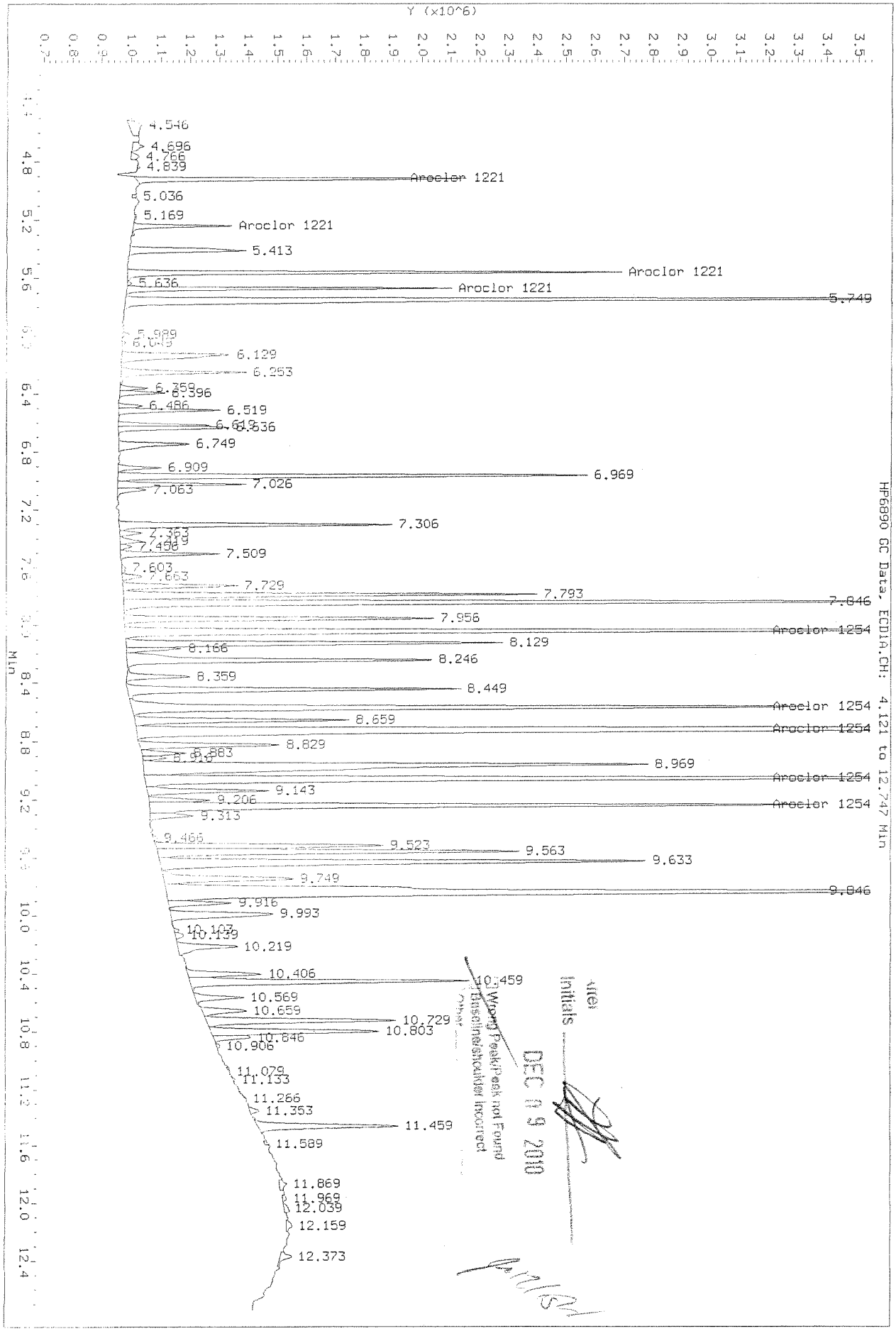


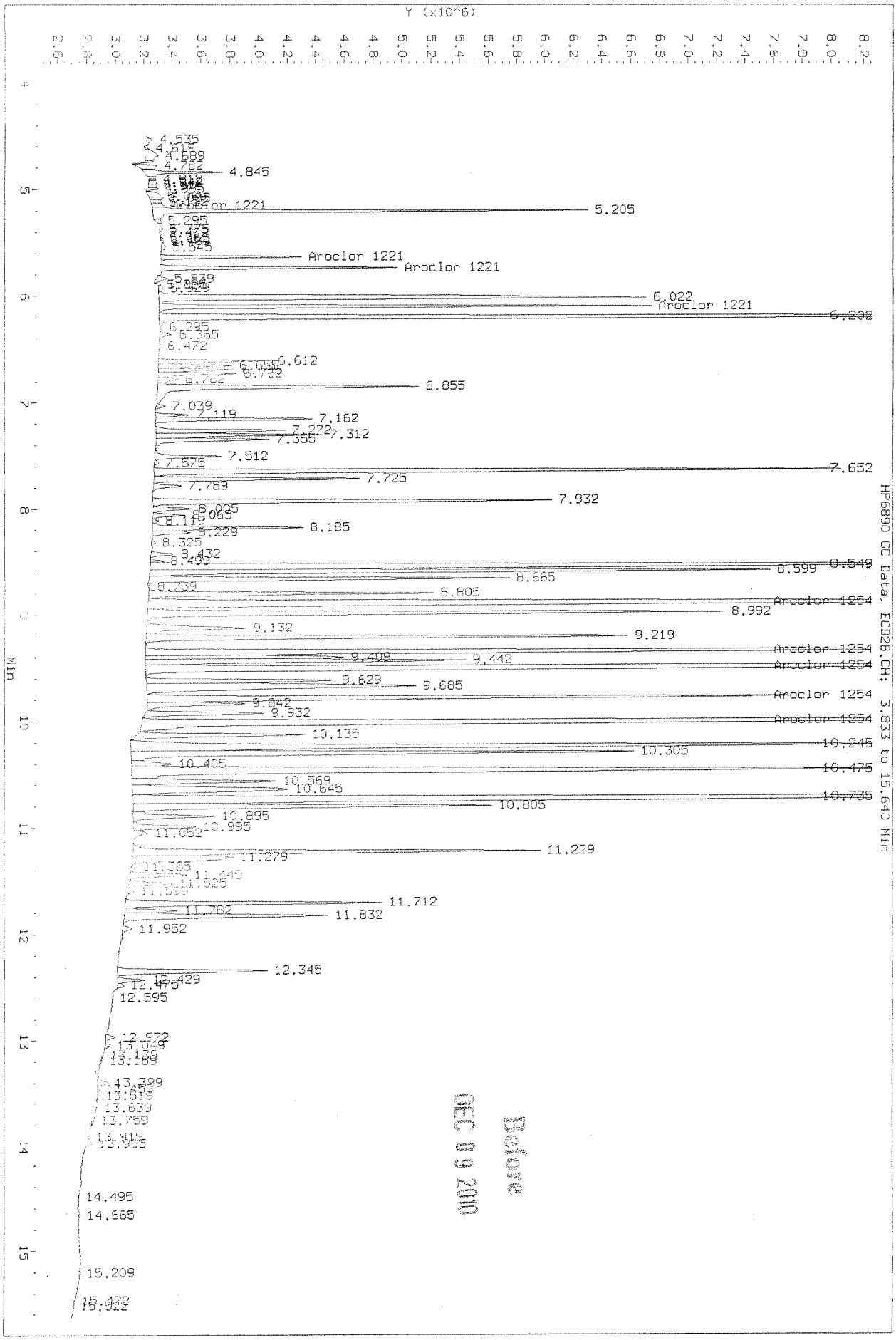
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F011.D
Date : 09-DEC-2010 00:15
Client ID:
Sample Info: 1221/1254 @ 100-50ppb | PCB5-60L | KWG1006746

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32




Data File: \\cash1\acqudata\GC22\data\120810.b\120BF011.D
Injection Date: 09-DEC-2010 00:15
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.121 to 12.747 Min
Min
4.546
4.696
4.766
4.839
Aroclor 1221
5.036
5.169
Aroclor 1221
5.413
Aroclor 1221
5.636
Aroclor 1221
5.749
5.989
6.049
6.129
6.253
6.358
6.396
6.486
6.519
6.536
6.749
6.909
6.969
7.026
7.063
7.306
7.363
7.419
7.456
7.509
7.603
7.663
7.729
7.793
7.846
7.956
Aroclor 1254
8.129
8.166
8.246
8.359
8.449
Aroclor 1254
8.659
Aroclor 1254
8.829
8.883
8.969
Aroclor 1254
9.143
9.206
Aroclor 1254
9.313
9.466
9.523
9.563
9.633
9.749
9.846
9.916
9.993
10.103
10.219
10.406
10.459
10.569
10.659
10.729
10.803
10.846
10.906
11.079
11.133
11.266
11.353
11.459
11.589
11.869
11.969
12.039
12.159
12.373
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_b\1208F011.D
Injection Date: 09-DEC-2010 00:15
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.121 to 12.747 Min
Min
4.546
4.696
4.766
4.839
Aroclor 1221
5.036
5.169
Aroclor 1221
5.413
Aroclor 1221
5.636
Aroclor 1221
5.749
5.989
6.129
6.253
6.359
6.396
6.486
6.519
6.636
6.749
6.909
6.969
7.063
7.026
7.306
7.363
7.509
7.603
7.663
7.729
7.793
7.846
7.956
Aroclor 1254
8.129
8.166
8.246
8.359
8.449
Aroclor 1254
8.659
Aroclor 1254
8.829
8.883
8.969
Aroclor 1254
9.143
9.206
Aroclor 1254
9.313
9.466
9.523
9.563
9.633
9.749
9.846
9.916
9.993
10.107
10.139
10.219
10.406
10.459
10.569
10.659
10.729
10.803
10.846
10.906
11.079
11.133
11.266
11.353
11.459
11.589
11.869
11.969
12.039
12.159
12.373
Wrong Peak/Peak not Found
Baseline/scaler incorrect
DEC 09 2010
initials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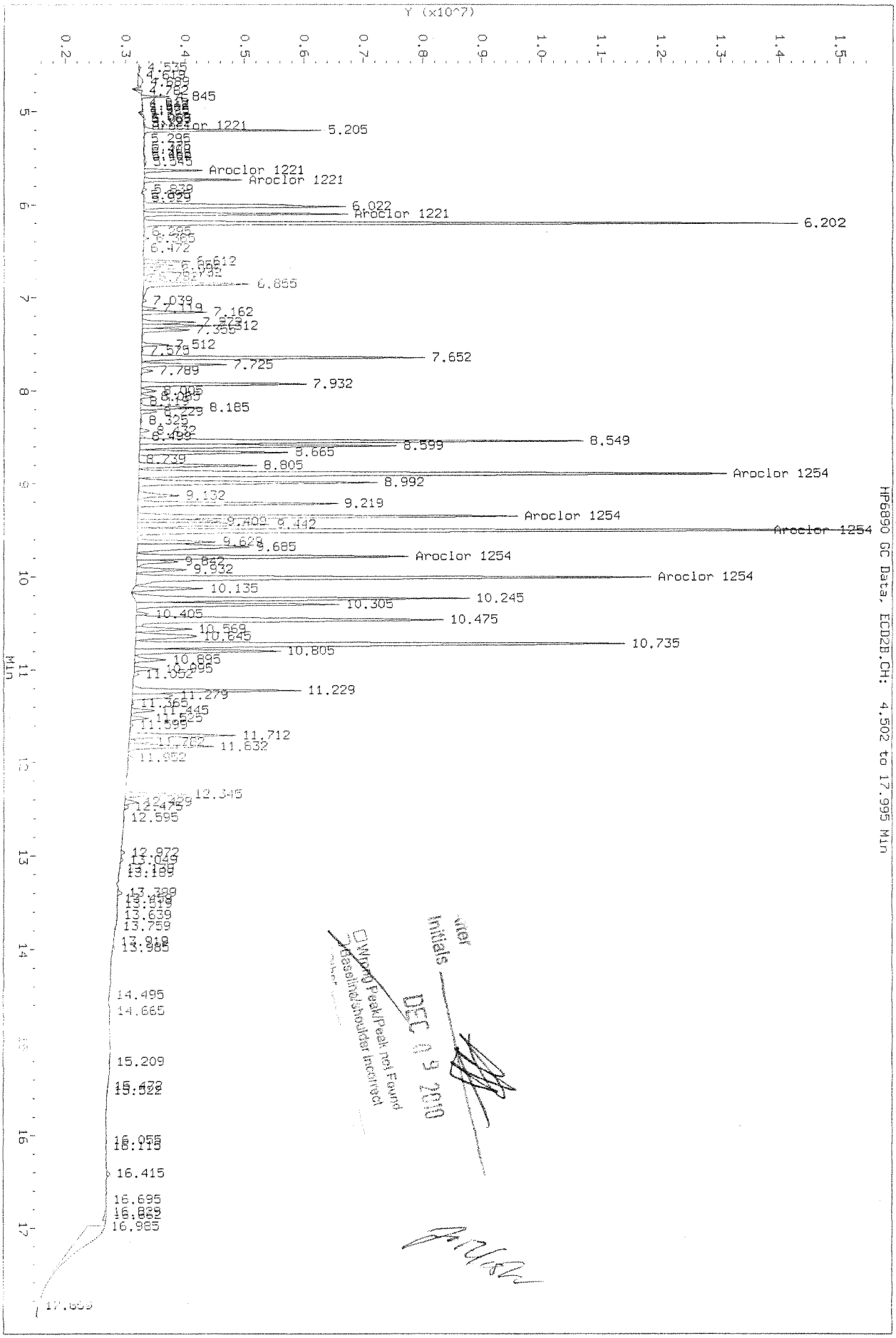
Injection Date: 09-DEC-2010 00:15
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD2B.CH: 3.833 to 15.640 Min
Min
4.535
4.589
4.762
4.845
Aroclor 1221
5.205
5.545
Aroclor 1221
Aroclor 1221
6.022
Aroclor 1221
6.202
6.472
6.612
6.855
7.039
7.119
7.162
7.355
7.312
7.512
7.575
7.652
7.725
7.789
7.932
8.185
8.325
8.599
8.549
8.665
8.739
8.605
Aroclor 1254
8.992
9.132
9.219
Aroclor 1254
9.409
9.442
Aroclor 1254
9.629
9.685
Aroclor 1254
9.842
9.932
Aroclor 1254
10.135
10.245
10.305
10.405
10.475
10.569
10.645
10.735
10.805
10.895
10.995
11.052
11.229
11.279
11.365
11.445
11.712
11.782
11.832
11.952
12.345
12.429
12.475
12.595
14.495
14.665
15.209
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F011.D
Injection Date: 09-DEC-2010 00:15
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.502 to 17.995 Min
Y (x10^7)
Min
Aroclor 1221
Aroclor 1254
Wrong Peak/Peak not Found
Baseline/Shoulder Incorrect
Initials
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F012.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F012.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F012.D
Inj Date : 09-DEC-2010 00:39
Sample Info: 1221/1254 @ 200-100ppb | PCB5-60M | KWG100674
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1221+1254.sub
Sub List #2 : 1221+1254.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	4.917	5.203	2261042	6559895	191	558	80.00- 120.00	100.00(M)
	5.237	5.633	737704	2309514	191	193	24.79- 37.19	28.76(M)
	5.557	5.733	3903229	4131513	201	181	145.66- 218.48	152.15(M)
	5.667	6.099	2508769	8541710	201	193	91.03- 136.55	97.80(M)
			Average of Peak Amounts =		196	281		
Aroclor 1254	8.043	8.546	9781686	28265441	95.6	96.7	80.00- 120.00	100.00
	8.573	8.899	7872397	43623419	98.5	95.3	65.38- 98.07	80.48
	8.727	9.509	16136192	45611996	96.5	97.3	136.14- 204.20	164.96
	9.060	9.793	11110953	17975369	98.7	97.9	93.98- 140.97	113.59
	9.243	10.019	7640265	35948813	100	94.1	63.43- 95.15	78.11
			Average of Peak Amounts =		97.9	96.3		

QC Flag Legend

M - Compound response manually integrated.

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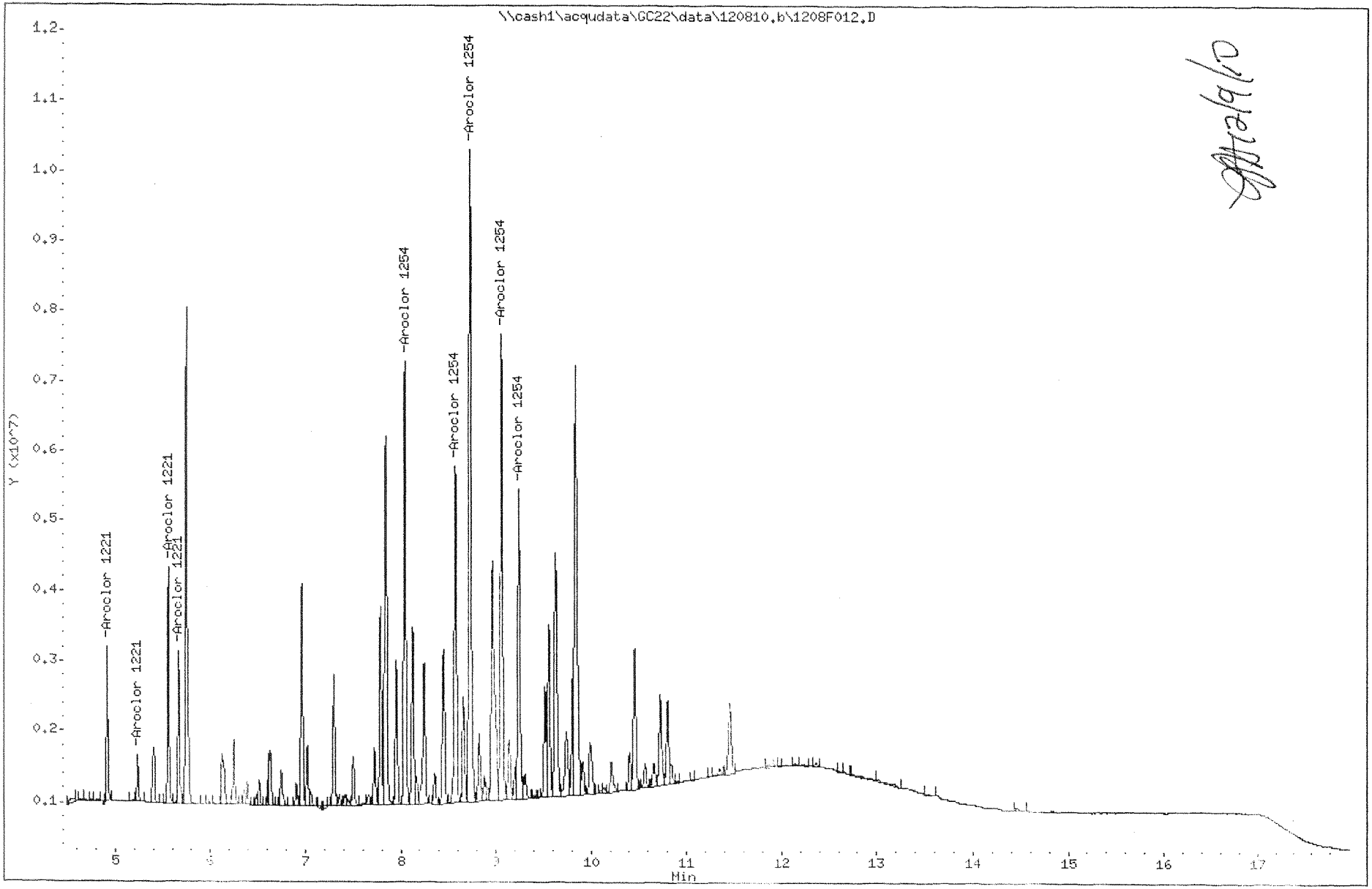
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F012.D
Date : 09-DEC-2010 00:39
Client ID:
Sample Info: 1221/1254 @ 200-100ppb | PCB5-60M | KWG100674

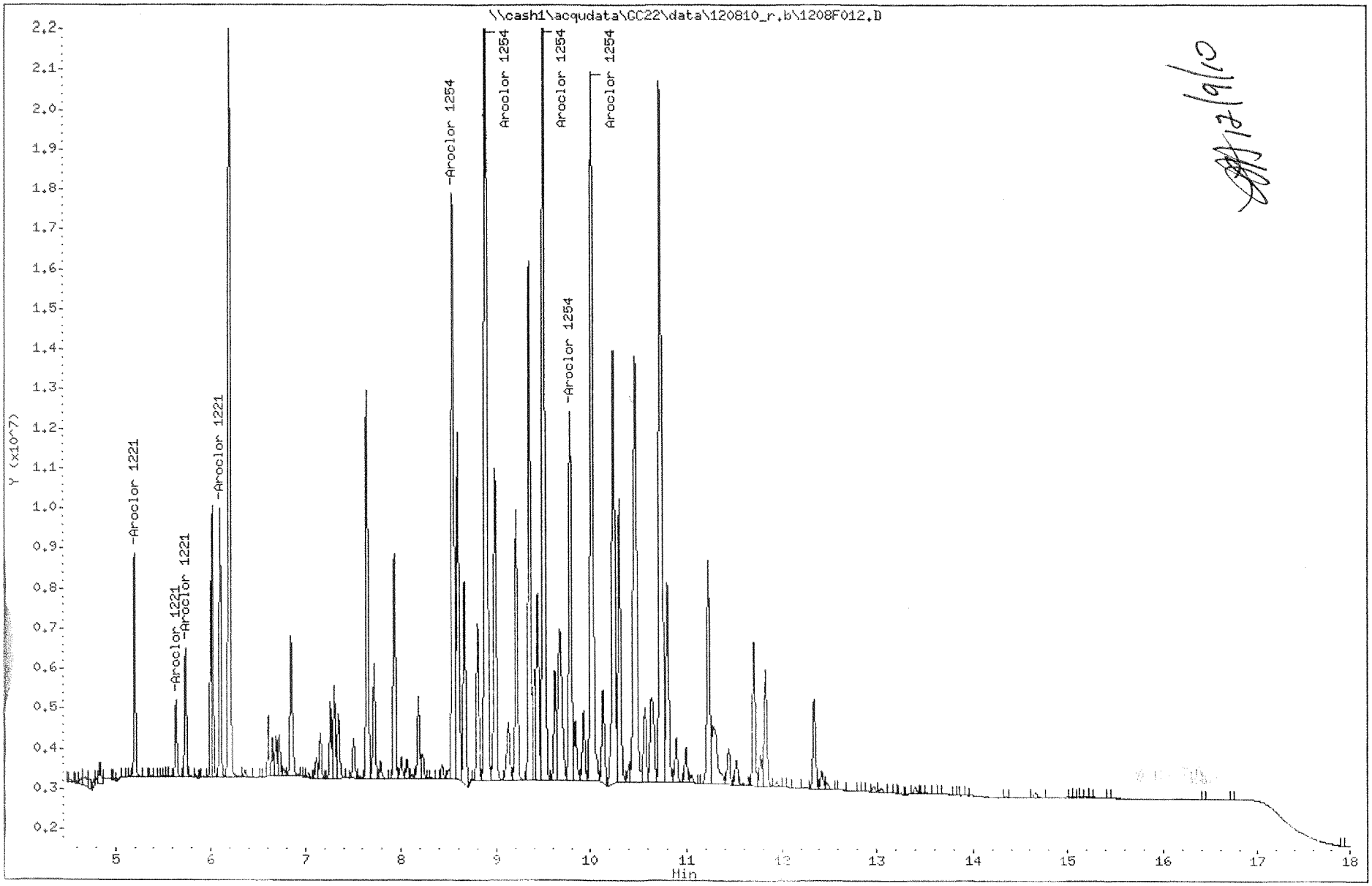
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



740

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F012.D
Date : 09-DEC-2010 00:39
Client ID:
Sample Info: 1221/1254 @ 200-100ppb | PCB5-60M | KWG100674

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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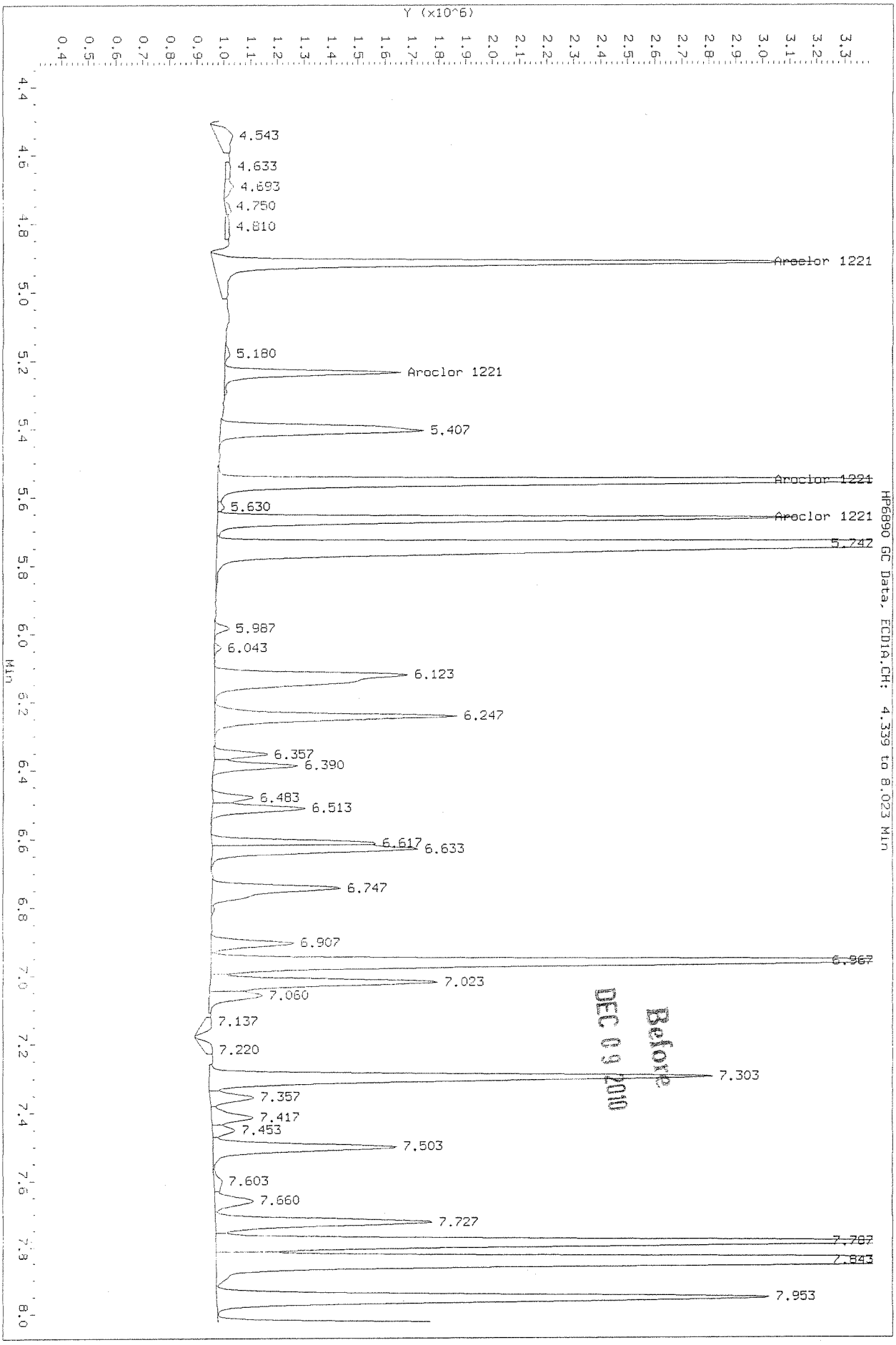
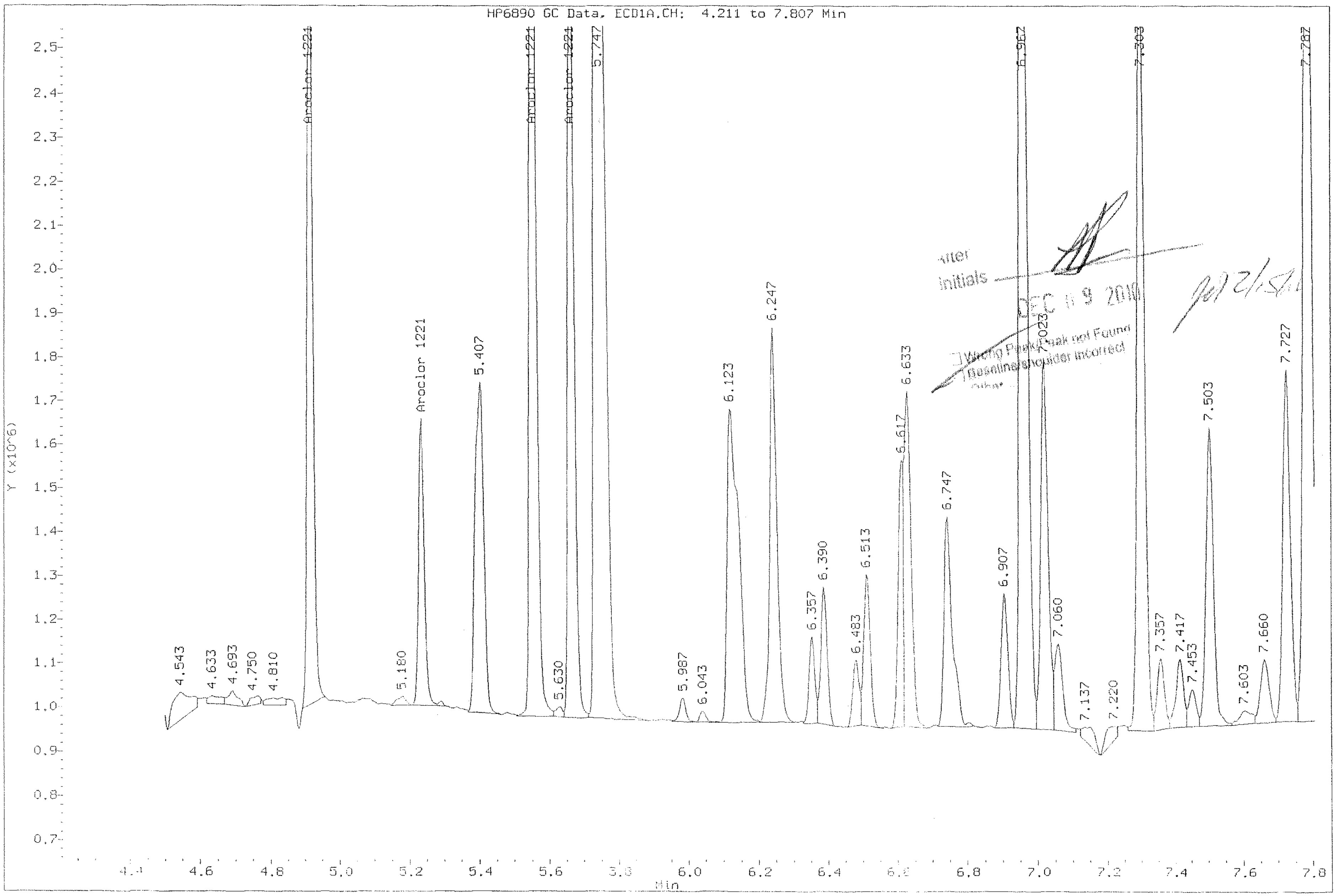
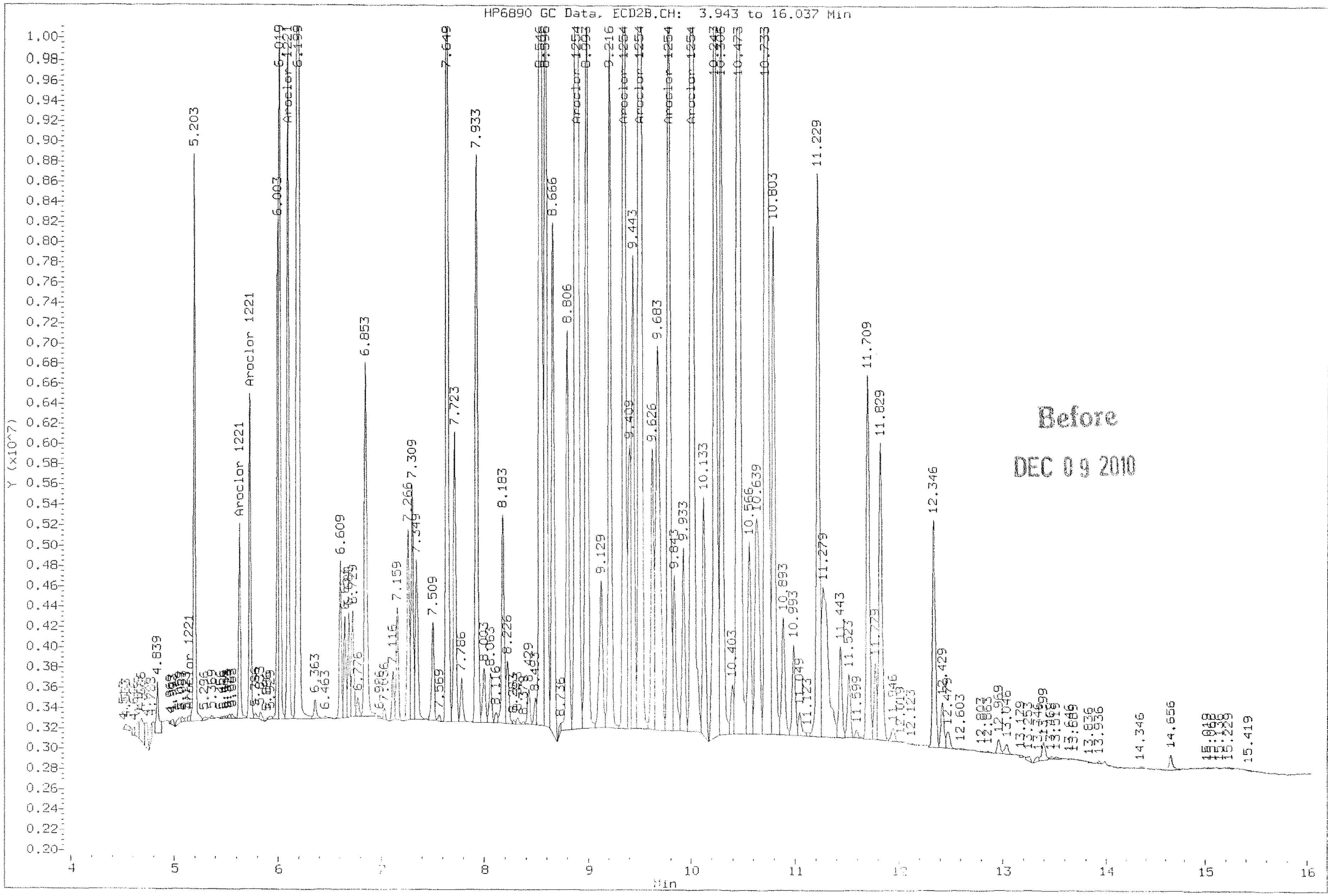
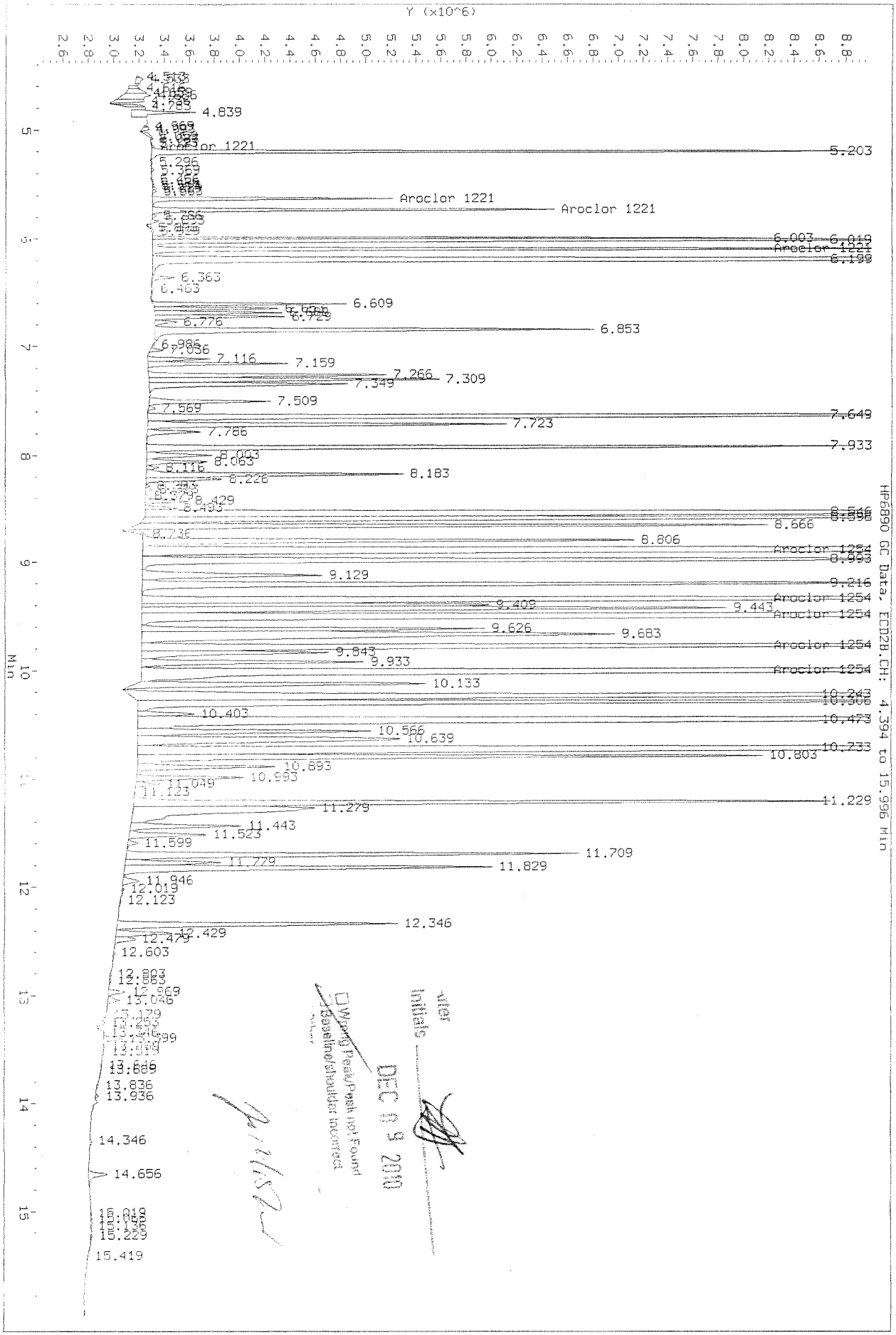

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F012.D
Injection Date: 09-DEC-2010 00:39
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.339 to 8.023 Min
Min
4.543
4.633
4.693
4.750
4.810
Aroclor 1221
5.180
Aroclor 1221
5.407
Aroclor 1221
5.630
Aroclor 1221
5.742
5.987
6.043
6.123
6.247
6.357
6.390
6.483
6.513
6.617
6.633
6.747
6.907
6.967
7.023
7.060
7.137
7.220
7.303
7.357
7.417
7.453
7.503
7.603
7.660
7.727
7.787
7.843
7.953
DEC 9 2010
Before

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F012.D
Injection Date: 09-DEC-2010 00:39
Instrument: GC22.i
Client Sample ID:



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F012.D
Injection Date: 09-DEC-2010 00:39
Instrument: GC22.i
Client Sample ID:




Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F012.D
Injection Date: 09-DEC-2010 00:39
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, EC028.CH: 4.394 to 15.996 Min
4.839
Aroclor 1221
5.203
Aroclor 1221
Aroclor 1221
6.363
6.483
6.609
6.778
6.853
7.116
7.159
7.266
7.309
7.349
7.509
7.569
7.649
7.723
7.786
7.933
8.063
8.116
8.183
8.226
8.429
8.666
8.806
9.129
9.216
Aroclor 1254
9.409
9.443
Aroclor 1254
9.626
9.683
Aroclor 1254
9.843
9.933
Aroclor 1254
10.133
10.403
10.473
10.566
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11.779
11.829
11.846
12.019
12.123
12.346
12.429
12.479
12.603
13.046
13.836
13.936
14.346
14.656
15.419
Baseline/shoulder incorrect
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F013.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F013.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F013.D
Inj Date : 09-DEC-2010 01:04
Sample Info: 1221/1254 @ 400-200ppb | PCB5-60N | KWG100674
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1221+1254.sub
Sub List #2 : 1221+1254.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	4.919	5.205	4224860	12291546	356	689	80.00- 120.00	100.00(M)
	5.239	5.635	1382314	4236623	358	354	24.79- 37.19	30.20(M)
	5.562	5.738	7555785	7619809	389	333	145.66- 218.48	165.08(M)
	5.672	6.101	4822922	15917507	387	360	91.03- 136.55	105.37(M)
			Average of Peak Amounts =		372	434		
Aroclor 1254	8.045	8.548	19127592	53039066	187	182	80.00- 120.00	100.00(M)
	8.575	8.901	15478560	82619865	194	180	65.38- 98.07	80.92(M)
	8.729	9.511	32073050	88077354	192	188	136.14- 204.20	167.68(M)
	9.062	9.791	22150562	33405052	197	182	93.98- 140.97	115.80(M)
	9.245	10.021	15138483	67628149	199	177	63.43- 95.15	79.14(M)
			Average of Peak Amounts =		194	182		

QC Flag Legend

M - Compound response manually integrated.

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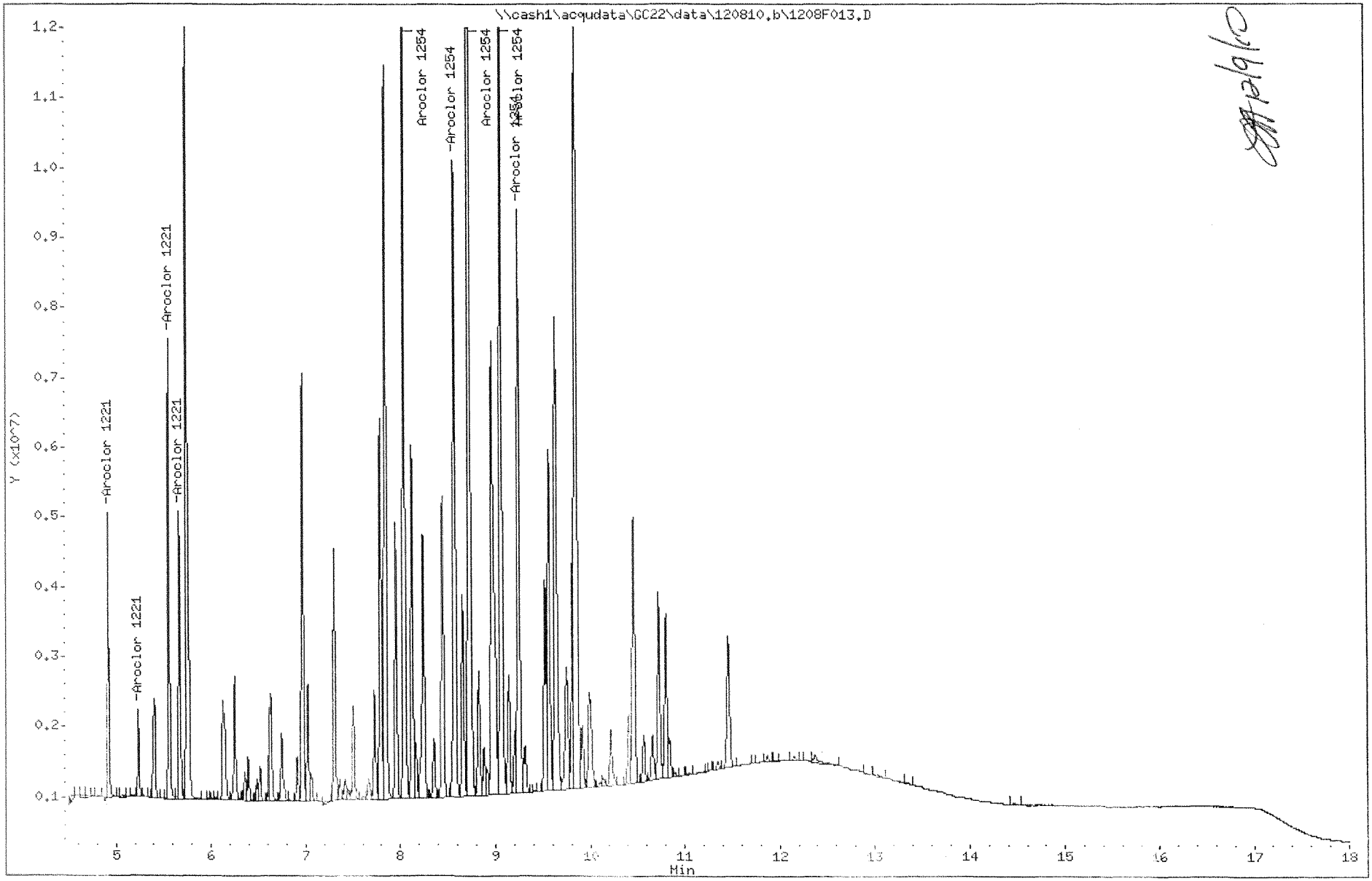
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F013.D
Date : 09-DEC-2010 01:04
Client ID:
Sample Info: 1221/1254 @ 400-200ppb | PCB5-60N | KWG100674

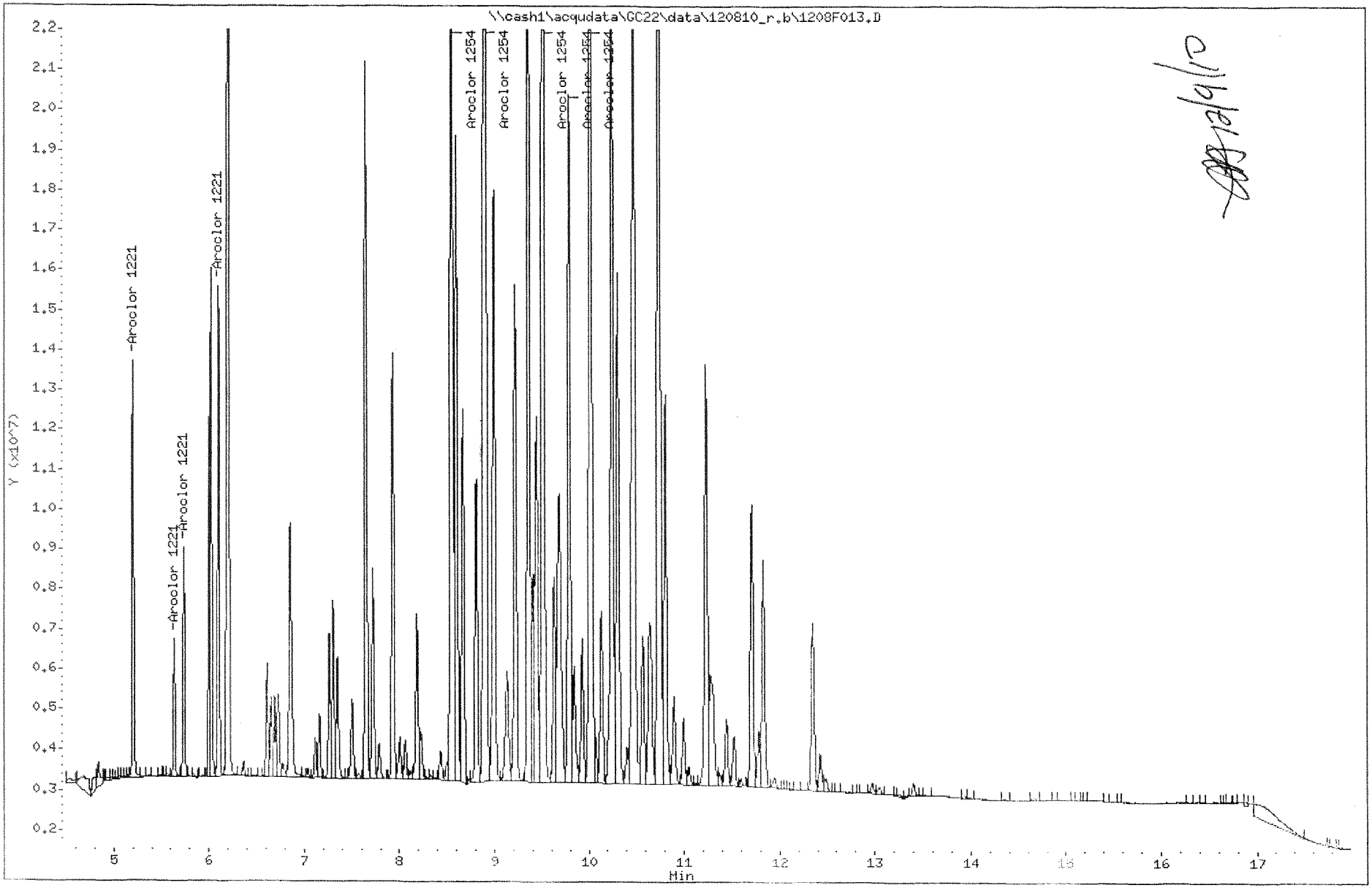
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F013.D
Date : 09-DEC-2010 01:04
Client ID:
Sample Info: 1221/1254 @ 400-200ppb | PCB5-60N | KWG100674

Instrument: GC22.i

Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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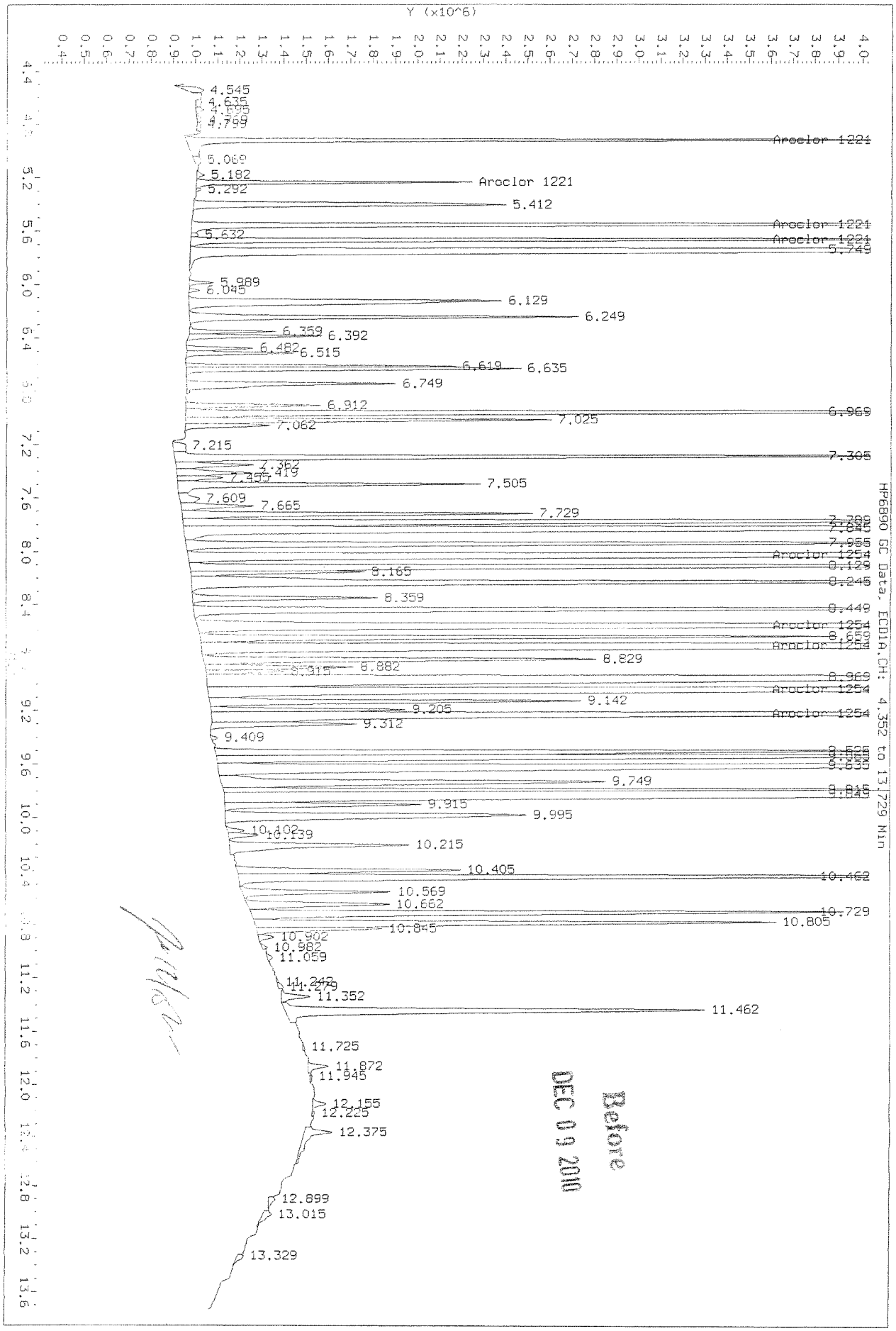
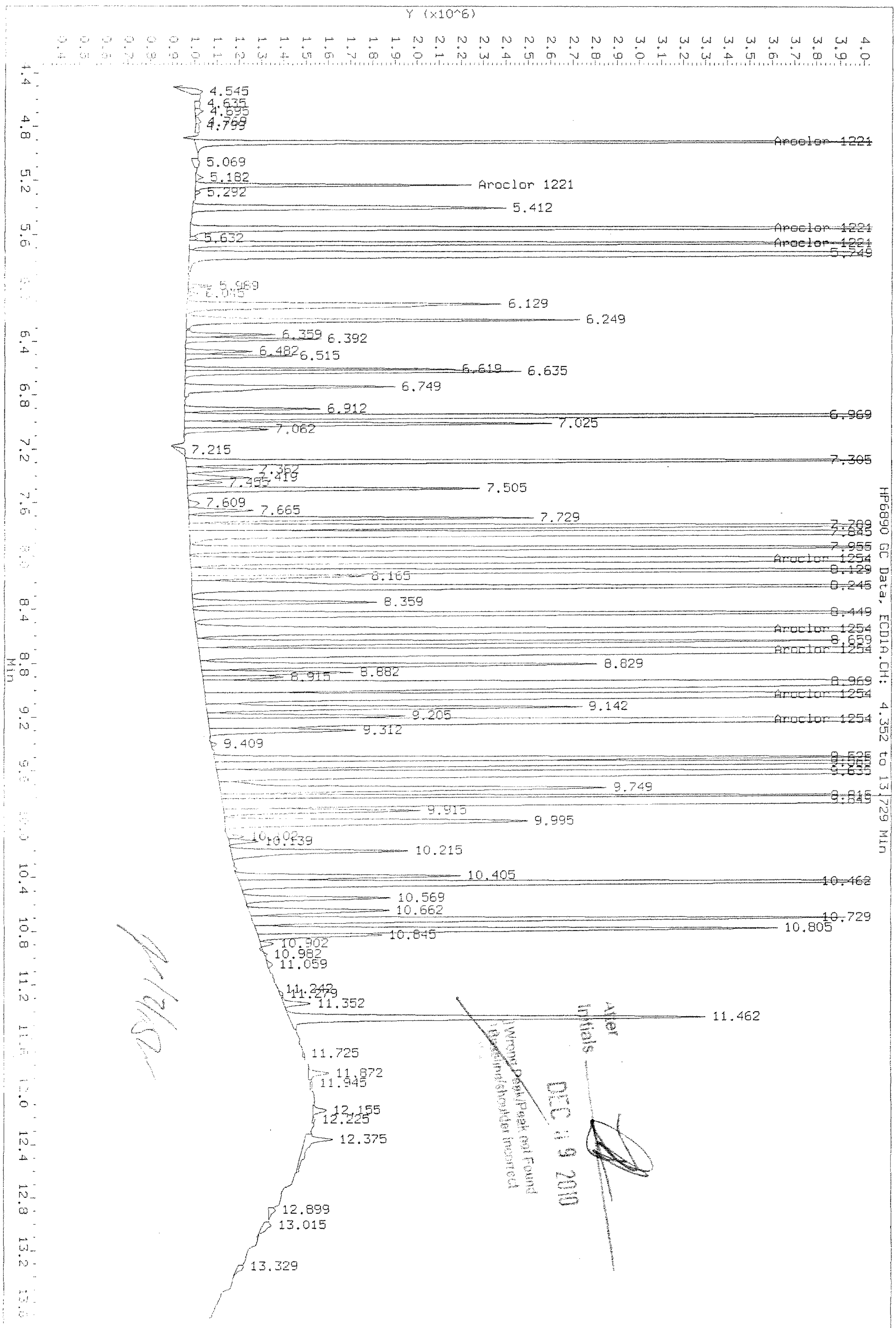

Data File: \\cash1\acqudata\GC22\data\120810.b\120F013.D
Injection Date: 09-DEC-2010 01:04
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.352 to 13.729 Min
4.545
4.635
4.799
Aroclor 1221
5.069
5.182
Aroclor 1221
5.292
5.412
5.632
5.989
6.045
6.129
6.249
6.359
6.392
6.482
6.515
6.619
6.635
6.749
6.912
6.969
7.025
7.062
7.215
7.305
7.419
7.505
7.609
7.665
7.729
Aroclor 1254
9.165
8.359
8.829
8.882
8.969
Aroclor 1254
9.142
8.205
Aroclor 1254
9.312
9.409
9.749
9.915
9.995
10.102
10.139
10.215
10.405
10.462
10.569
10.662
10.729
10.805
10.845
10.902
10.982
11.059
11.352
11.462
11.725
11.872
11.945
12.155
12.225
12.375
12.899
13.015
13.329
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F013.D
Injection Date: 09-DEC-2010 01:04
Instrument: GC22.i
Client Sample ID:



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F014.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F014.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F014.D
Inj Date : 09-DEC-2010 01:28
Sample Info: 1221/1254 @ 1000-500ppb | PCB5-61A | KWG10067
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1221+1254.sub
Sub List #2 : 1221+1254.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	4.916	5.199	9945149	26359432	838	1070	80.00- 120.00	100.00(M)
	5.236	5.632	3082008	9205513	797	769	24.79- 37.19	30.99(M)
	5.556	5.732	18106871	16500635	932	722	145.66- 218.48	182.07(M)
	5.666	6.096	11316522	35752542	908	810	91.03- 136.55	113.79(M)
			Average of Peak Amounts =		869	843		
Aroclor 1254	8.043	8.542	46254838	122079738	452	418	80.00- 120.00	100.00(M)
	8.573	8.896	37801632	193725302	473	423	65.38- 98.07	81.72(M)
	8.726	9.509	78711884	210933588	471	450	136.14- 204.20	170.17(M)
	9.060	9.789	54338342	77619120	482	422	93.98- 140.97	117.48(M)
	9.246	10.019	36675236	161150384	481	422	63.43- 95.15	79.29(M)
			Average of Peak Amounts =		472	427		

QC Flag Legend

M - Compound response manually integrated.

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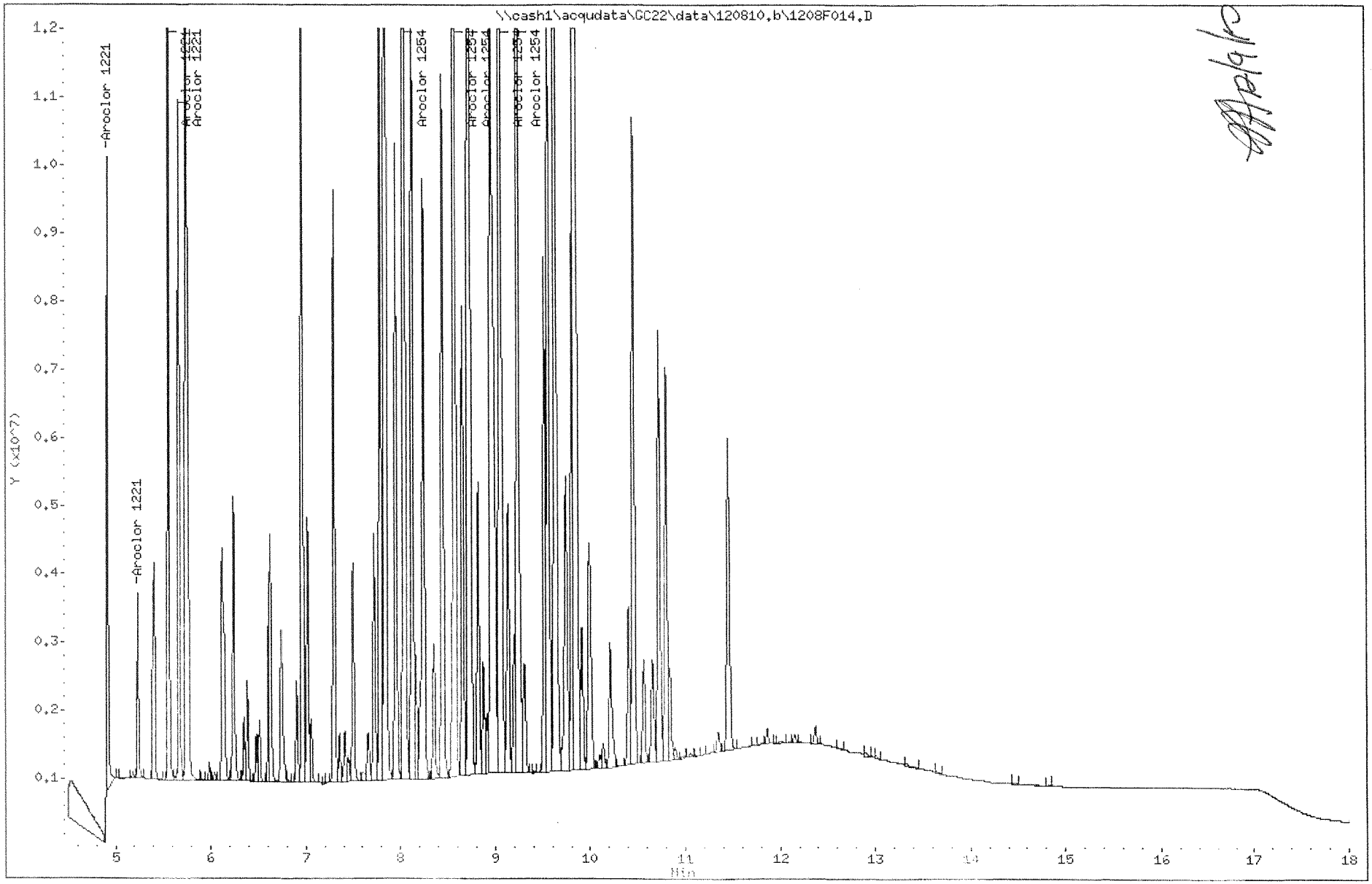
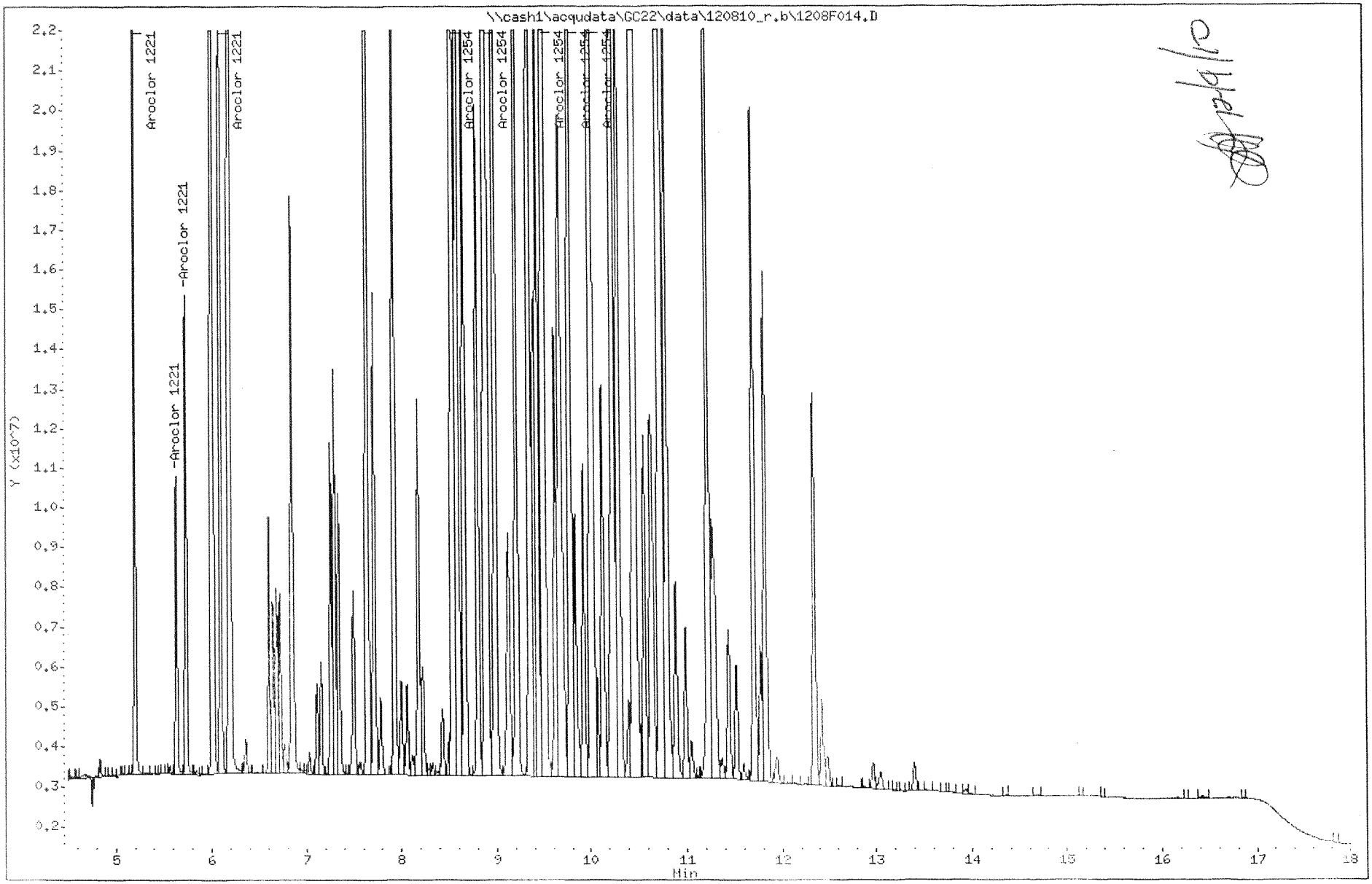
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F014.D
Date : 09-DEC-2010 01:28
Client ID:
Sample Info: 1221/1254 @ 1000-500ppb | PCB5-61A | KWG10067

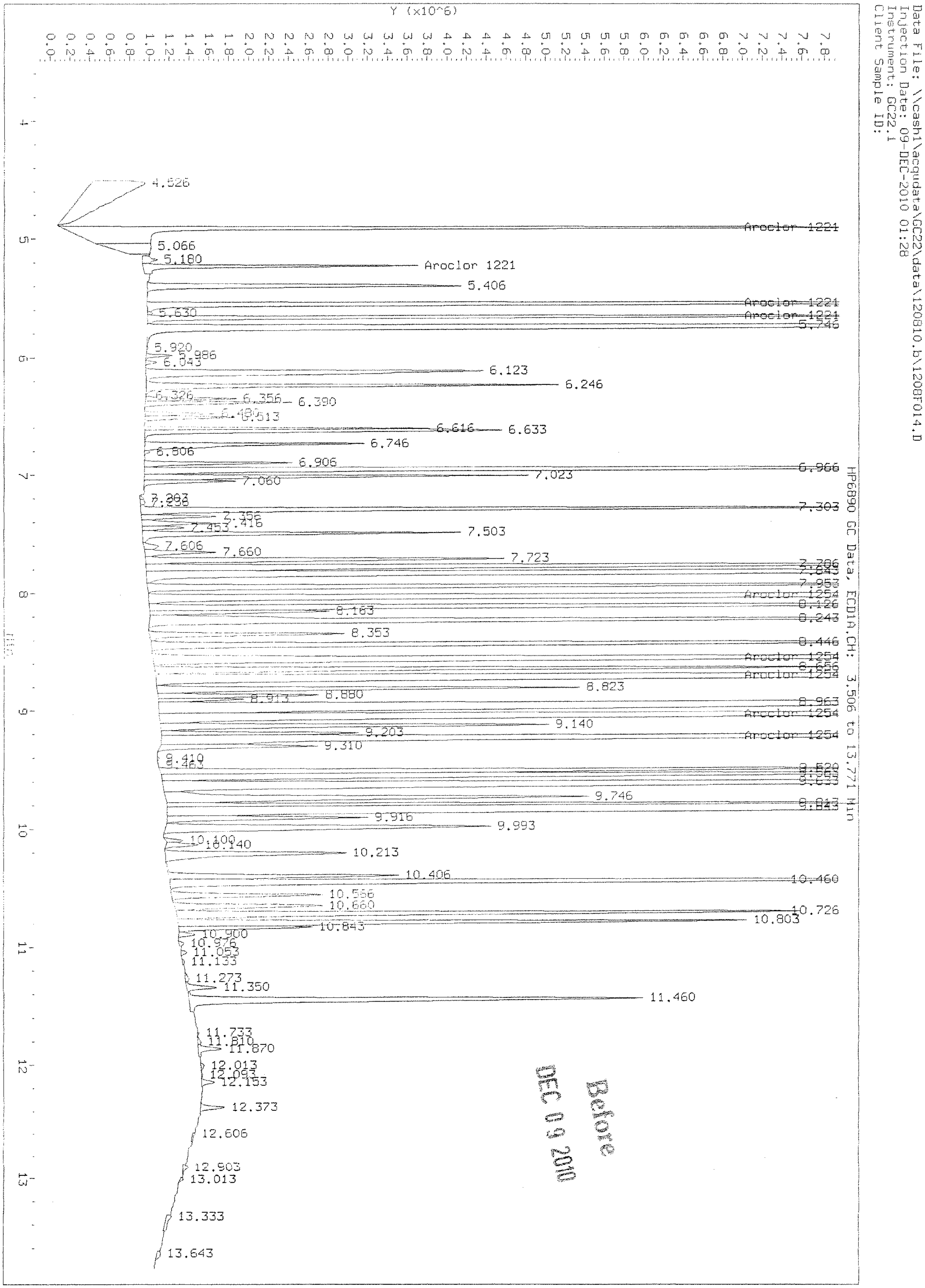
Instrument: GC22.i

Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



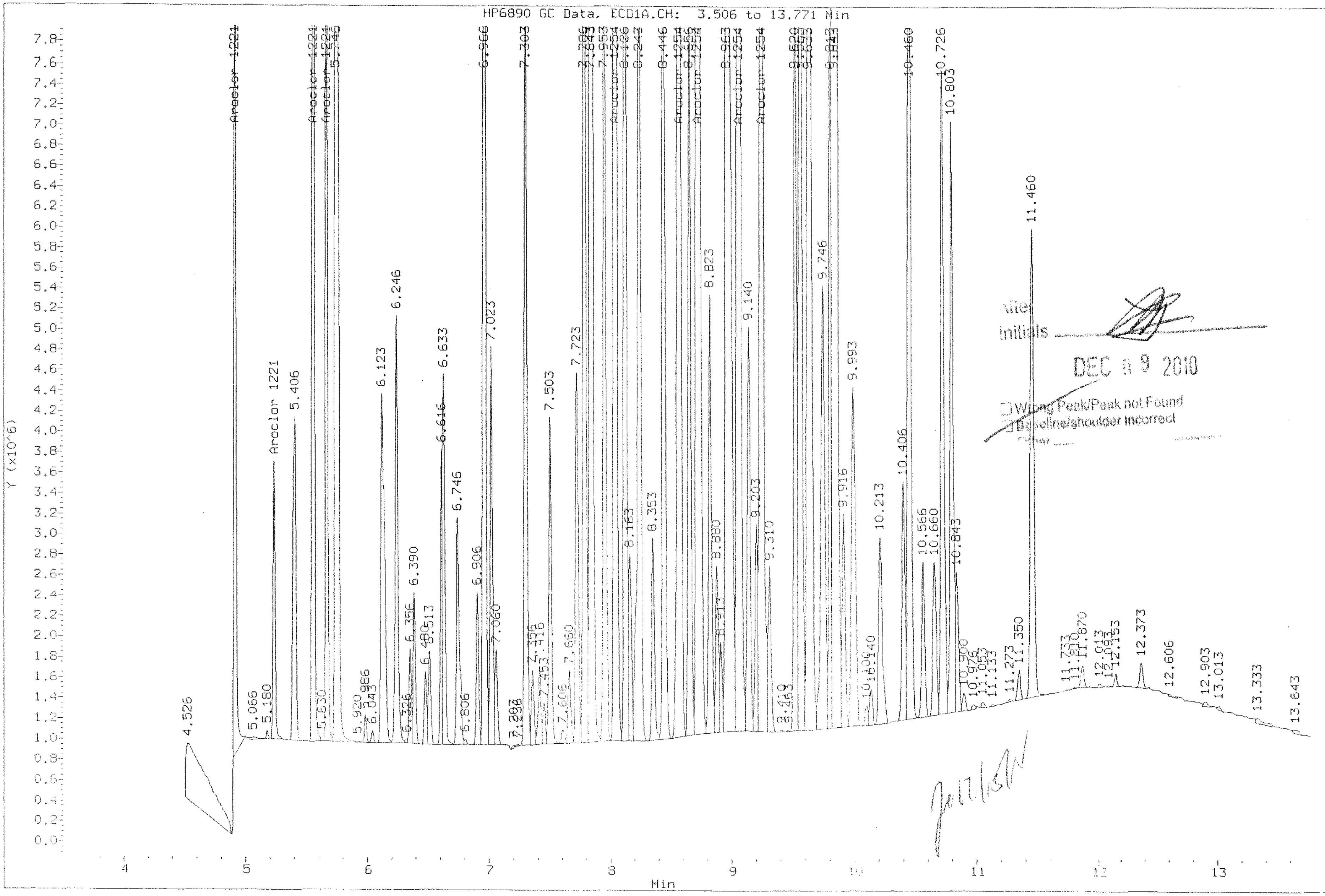
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F014.D
Date : 09-DEC-2010 01:28
Client ID:
Instrument: GC22.i
Sample Info: 1221/1254 @ 1000-500ppb | PCB5-61A | KWG10067
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32

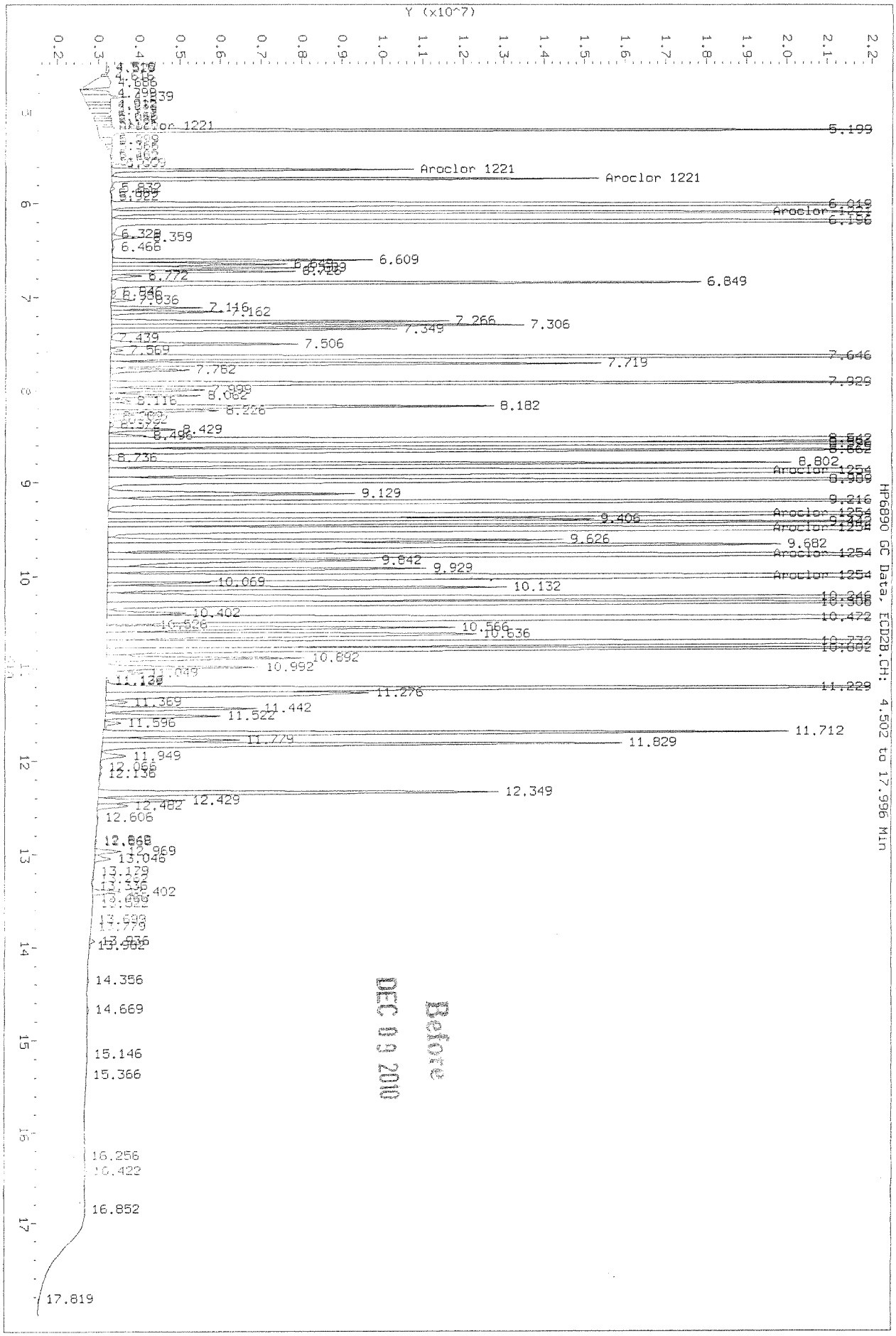


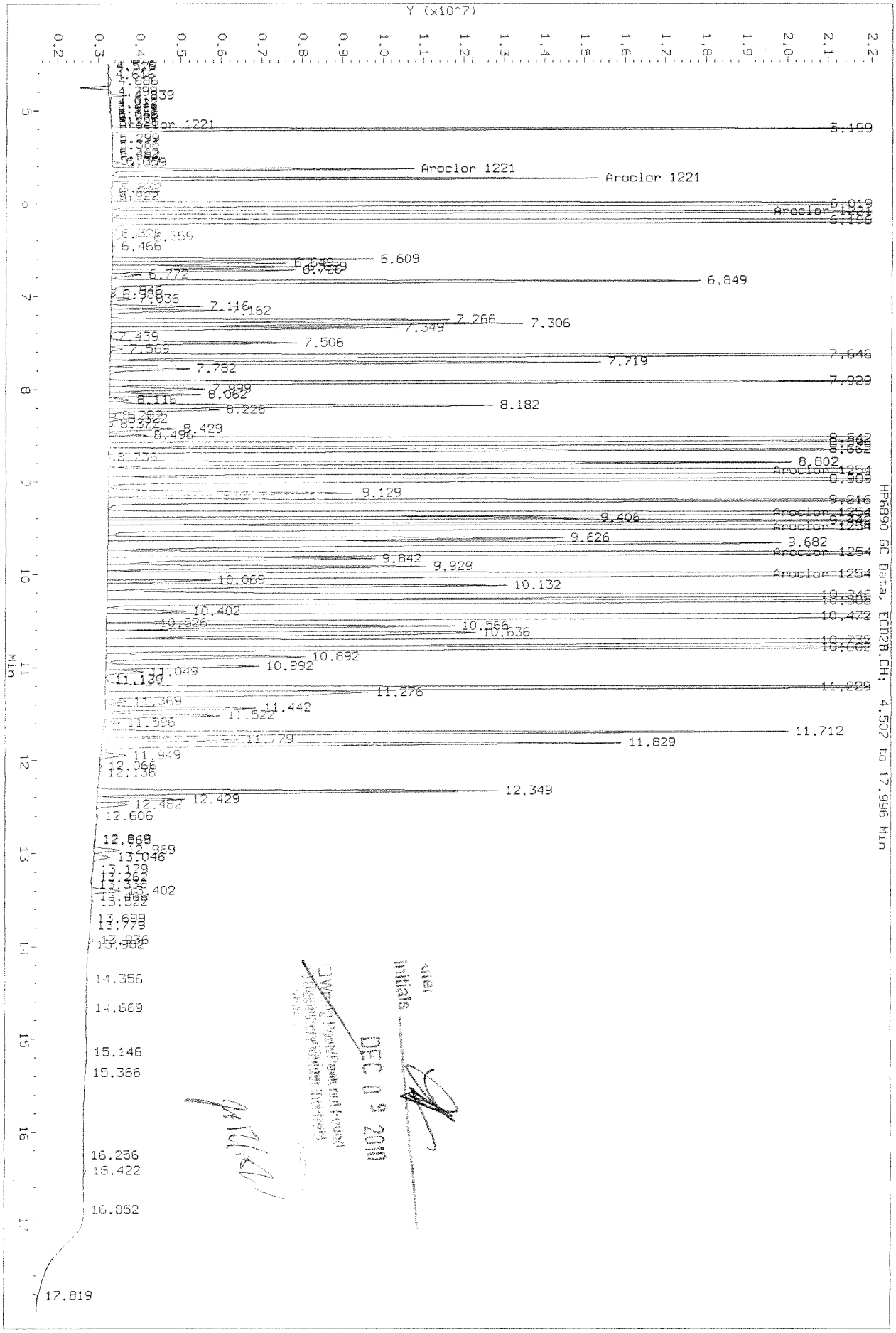


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F014.D
Injection Date: 09-DEC-2010 01:28
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 3.506 to 13.771 Min
Y (x10^6)
Aroclor 1221
Aroclor 1254
4.526
5.066
5.180
5.406
5.630
5.746
5.920
5.986
6.043
6.123
6.246
6.326
6.356
6.390
6.513
6.616
6.633
6.746
6.806
6.906
6.966
7.023
7.060
7.303
7.356
7.416
7.453
7.503
7.606
7.660
7.723
8.163
8.353
8.446
8.823
8.880
8.913
8.963
9.140
9.203
9.310
9.410
9.463
9.746
9.916
9.993
10.100
10.140
10.213
10.406
10.460
10.566
10.660
10.726
10.803
10.843
10.900
10.976
11.053
11.133
11.273
11.350
11.460
11.733
11.810
11.870
12.013
12.093
12.153
12.373
12.606
12.903
13.013
13.333
13.643
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F014.D
Injection Date: 09-DEC-2010 01:28
Instrument: GC22.i
Client Sample ID:




Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F014.D
Injection Date: 09-DEC-2010 01:28
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.502 to 17.996 Min
Y (x10^7)
Aroclor 1221
Aroclor 1221
Aroclor 1254
Aroclor 1254
Aroclor 1254
Aroclor 1254
5.199
6.609
6.849
7.306
7.506
7.646
7.719
7.929
8.182
8.802
9.129
9.406
9.626
9.682
9.842
9.929
10.069
10.132
10.402
10.566
10.636
10.892
10.992
11.229
11.276
11.442
11.522
11.712
11.829
12.349
12.429
12.606
13.046
14.356
14.669
15.146
15.366
16.256
16.852
17.819


Data File: \\cashl\acqudata\GC22\data\120810_r.b\1208F014.D
Injection Date: 09-DEC-2010 01:28
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, EC02B.CH; 4.502 to 17.996 Min
Y (x10^7)
Min
Aroclor 1221
Aroclor 1221
Aroclor 1221
5.199
6.609
6.849
7.306
7.506
7.719
7.929
8.182
8.429
8.802
9.129
9.406
9.626
9.682
9.842
9.929
10.069
10.132
10.402
10.526
10.566
10.636
10.892
10.992
11.276
11.442
11.522
11.712
11.829
12.349
12.429
17.819

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F015.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F015.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F015.D
Inj Date : 09-DEC-2010 01:53
Sample Info: 1232/1262 @ 2.5ppb | PCB5-61B | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1232+1262.sub
Sub List #2 : 1232+1262.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.748	6.200	112245	419114	2.70	2.94	80.00- 120.00	100.00(M)
	6.124	6.610	106553	229657	2.84	2.94	68.05- 102.08	95.19(M)
	6.618	7.267	92484	347278	3.06	2.84	62.16- 93.24	74.59(M)
	6.748	7.514	84844	132141	2.82	1.94	57.67- 86.50	68.43(M)
			Average of Peak Amounts =		2.86	2.66		
Aroclor 1262	9.918	10.894	505597	1440088	2.71	2.93	80.00- 120.00	100.00(M)
	10.408	11.277	386832	973497	2.62	2.78	62.50- 93.75	76.51(M)
	10.804	11.834	835168	2409805	2.62	2.89	146.21- 219.31	165.18(M)
	11.351	12.354	353601	1657813	2.58	2.94	58.45- 87.67	69.94(M)
	11.461	12.487	717916	1162832	2.98	2.96	102.10- 153.15	141.99(M)
			Average of Peak Amounts =		2.70	2.90		

QC Flag Legend

M - Compound response manually integrated.

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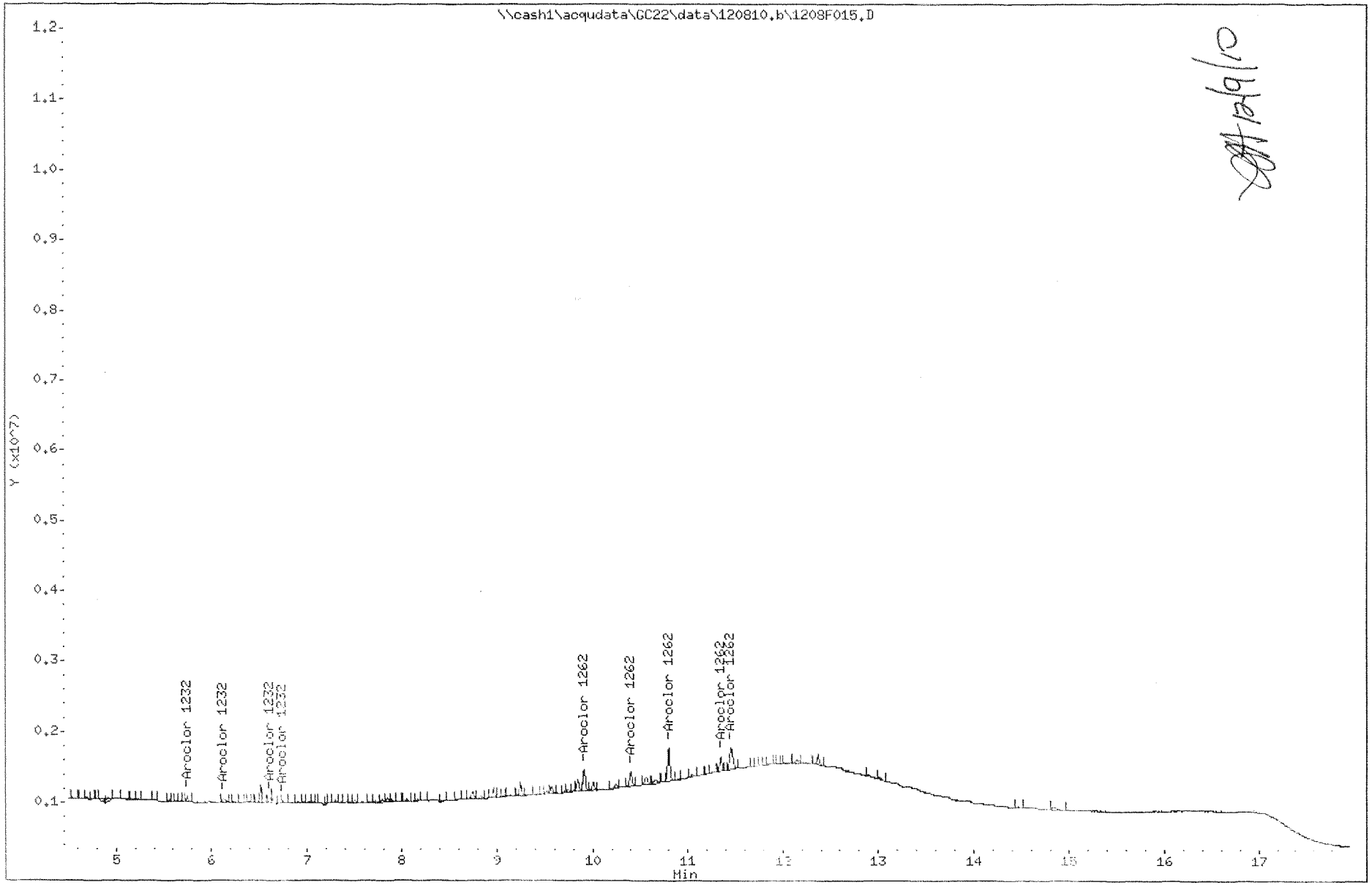
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F015.D
Date : 09-DEC-2010 01:53
Client ID:
Sample Info: 1232/1262 @ 2.5ppb | PCB5-61B | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



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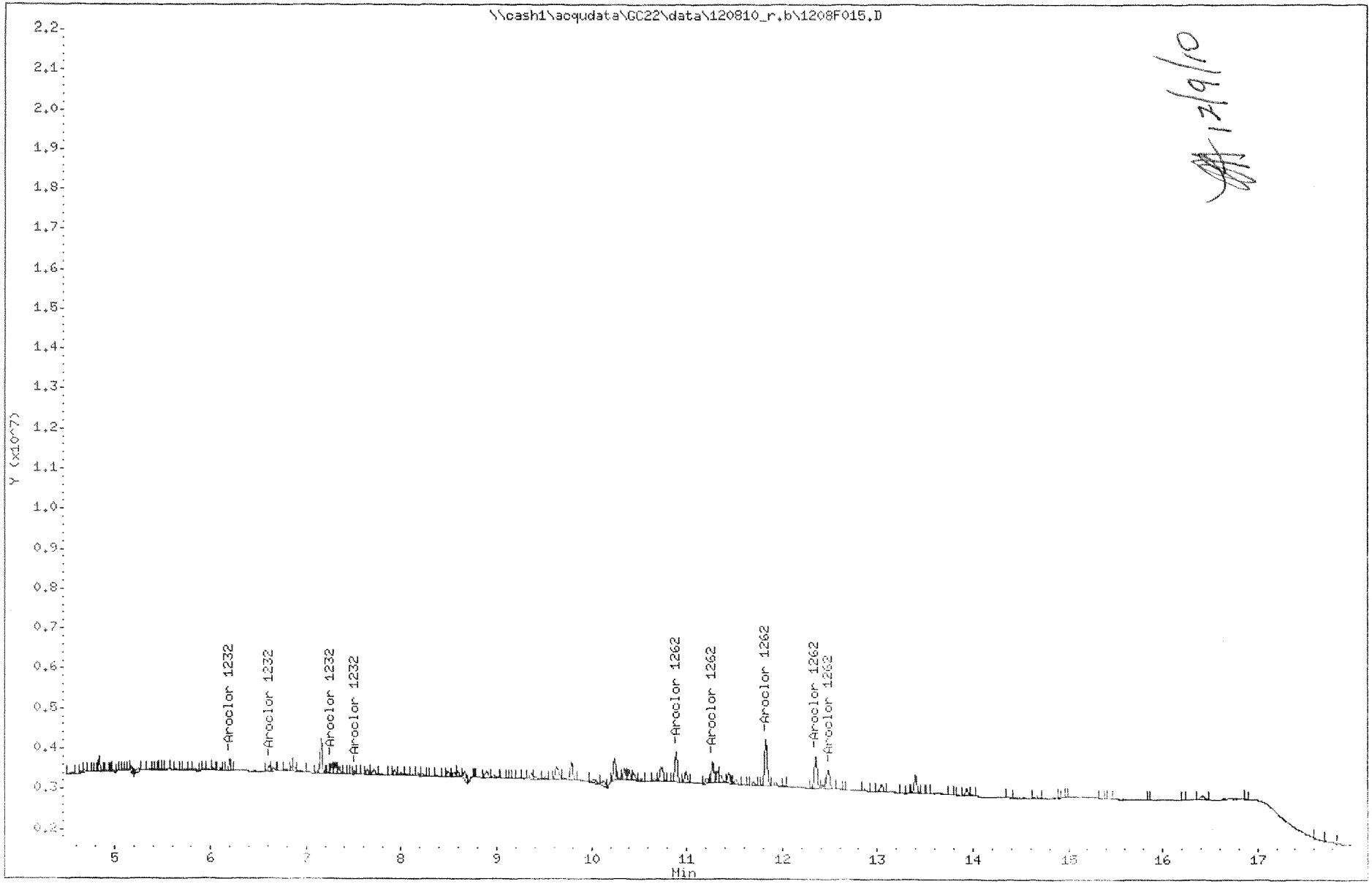
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F015.D
Date : 09-DEC-2010 01:53
Client ID:
Sample Info: 1232/1262 @ 2.5ppb | PCB5-61B | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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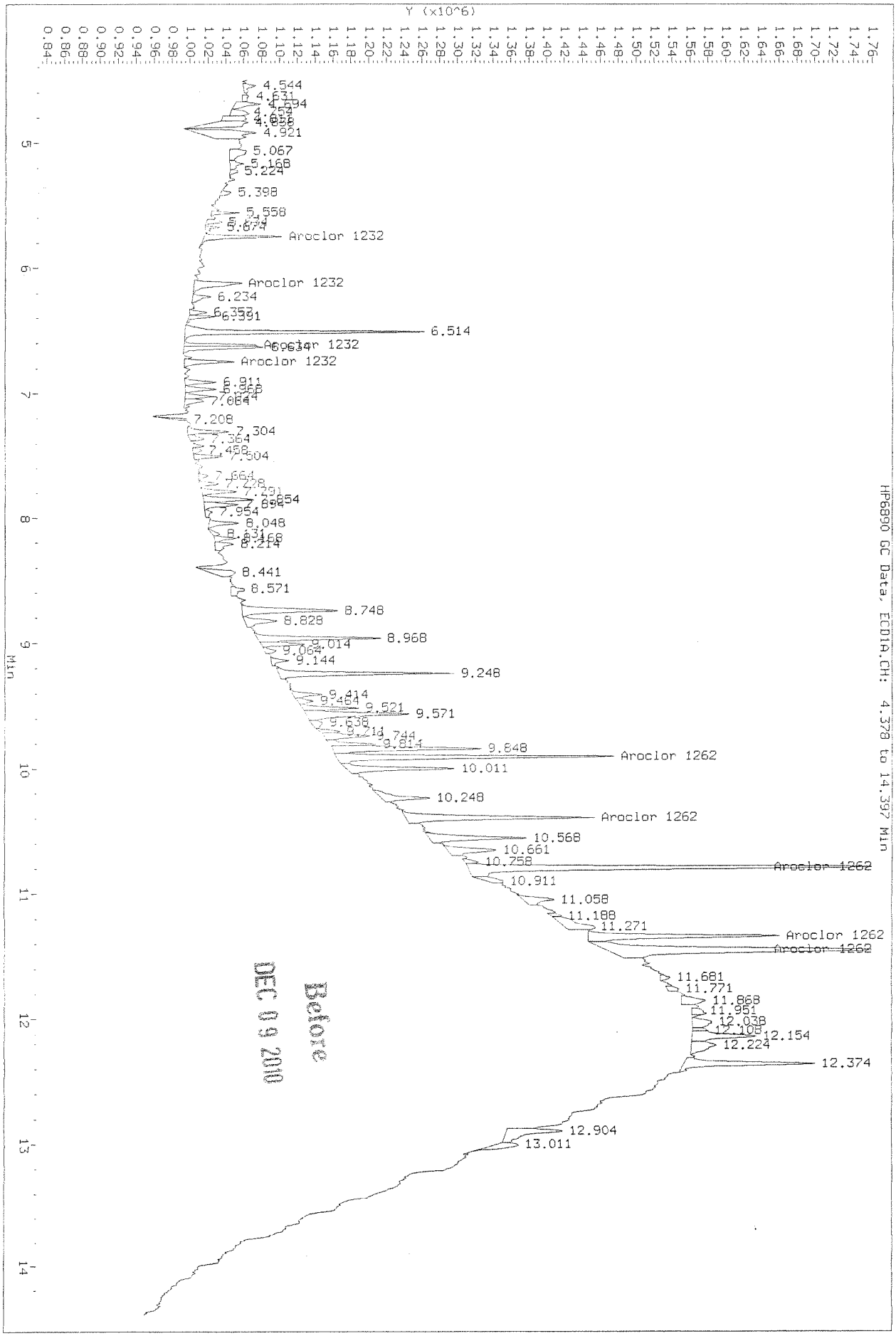
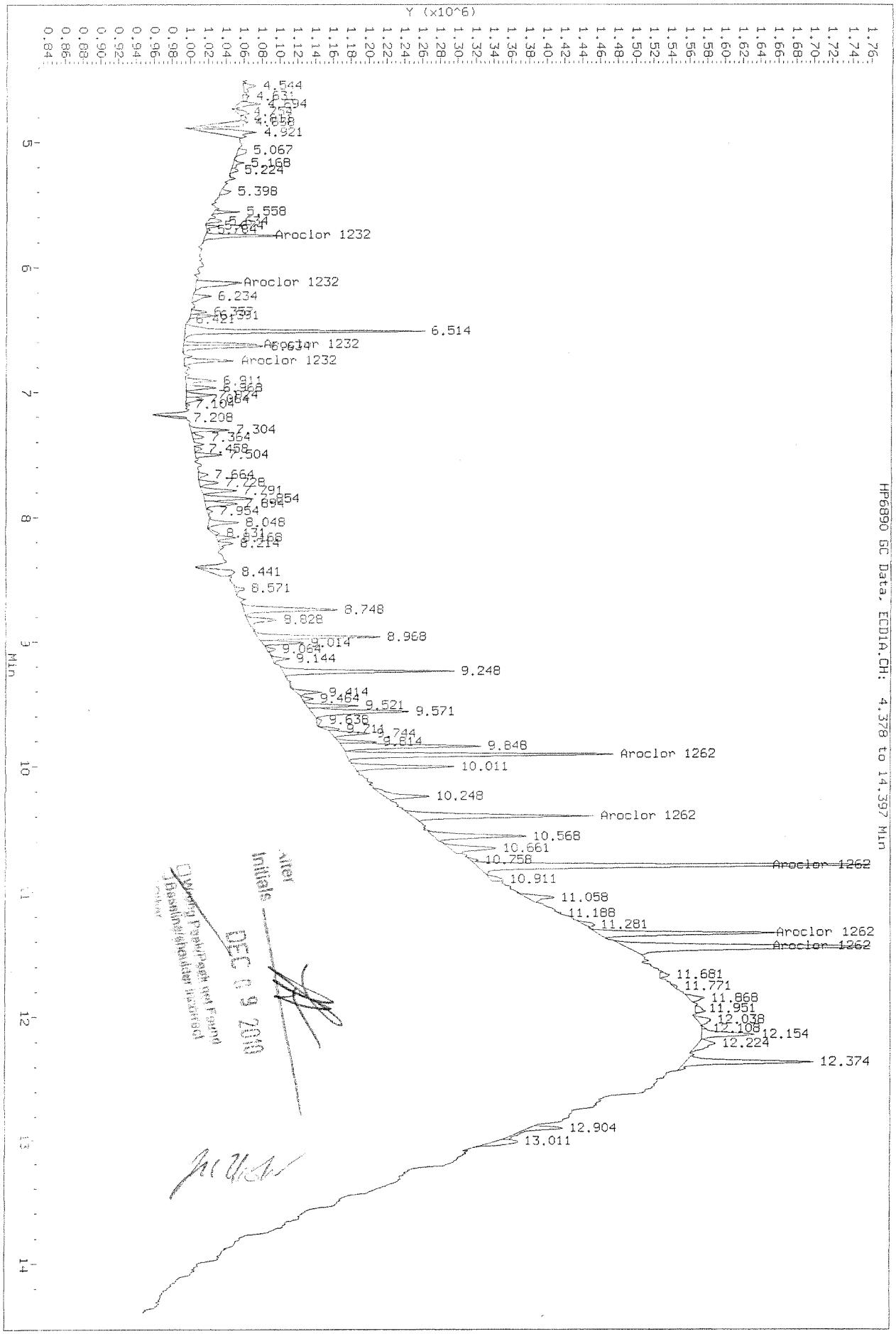

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F015.D
Injection Date: 09-DEC-2010 01:53
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.378 to 14.397 Min
Y (x10^6)
Min
4.544
4.921
5.067
5.168
5.224
5.398
5.558
5.674
Aroclor 1232
Aroclor 1232
6.234
6.514
Aroclor 1232
Aroclor 1232
7.208
7.304
7.504
7.954
8.048
8.214
8.441
8.571
8.748
8.828
8.968
9.014
9.064
9.144
9.248
9.414
9.521
9.571
9.744
9.814
9.848
Aroclor 1262
10.011
10.248
Aroclor 1262
10.568
10.661
10.758
Aroclor 1262
10.911
11.058
11.188
11.271
Aroclor 1262
Aroclor 1262
11.681
11.771
11.868
11.951
12.038
12.154
12.224
12.374
12.904
13.011
DEC 09 2010
Evidence


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F015.D
Injection Date: 09-DEC-2010 01:53
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.378 to 14.397 Min
Y (x10^6)
Min
4.544
4.921
5.067
5.168
5.224
5.398
5.558
Aroclor 1232
Aroclor 1232
6.234
6.514
Aroclor 1232
Aroclor 1232
7.208
7.304
7.364
7.458
7.504
7.954
8.048
8.441
8.571
8.748
8.828
8.968
9.144
9.248
9.414
9.521
9.571
9.848
Aroclor 1262
10.011
10.248
Aroclor 1262
10.568
10.661
10.758
Aroclor 1262
10.911
11.058
11.188
11.281
Aroclor 1262
Aroclor 1262
11.681
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11.951
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12.108
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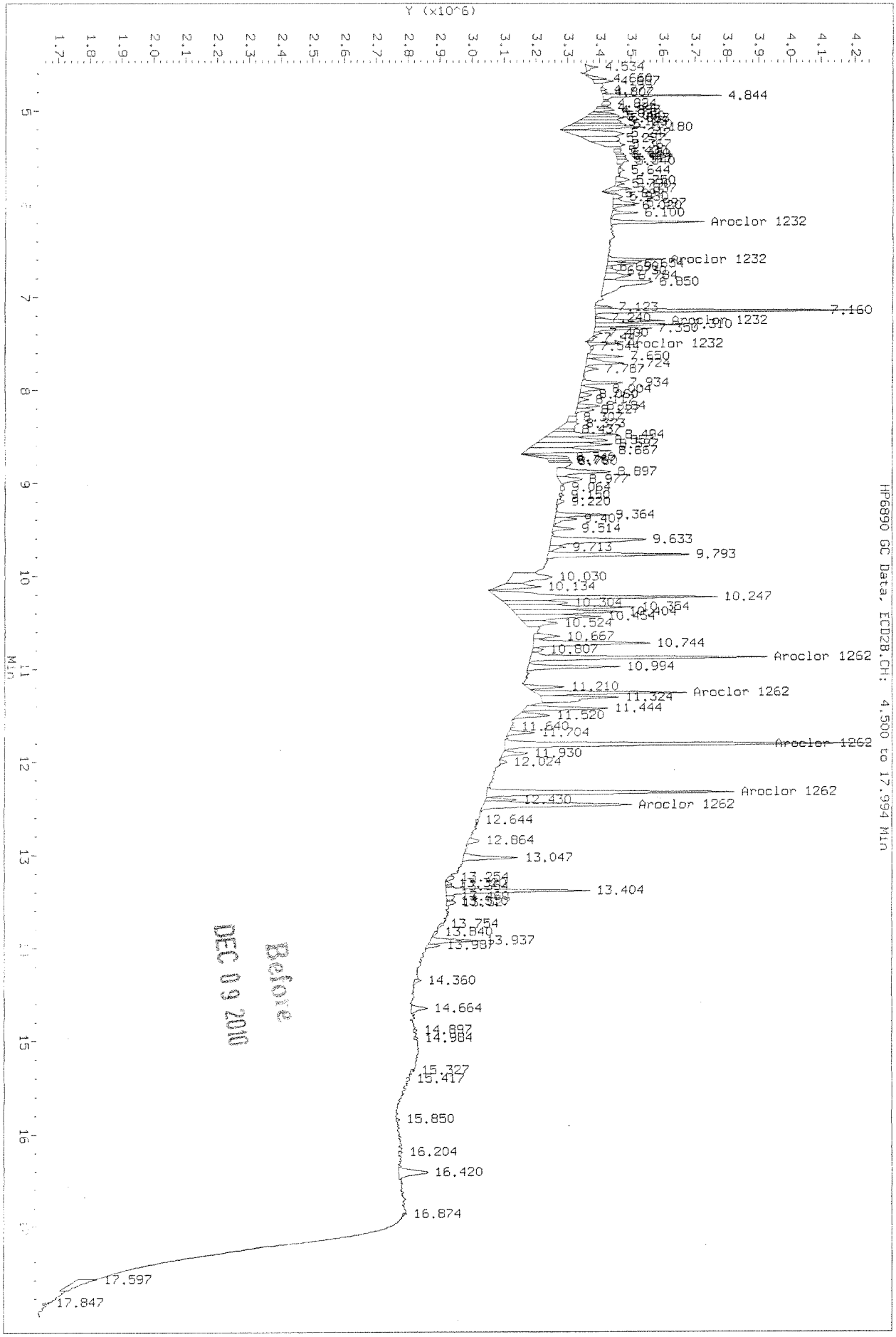
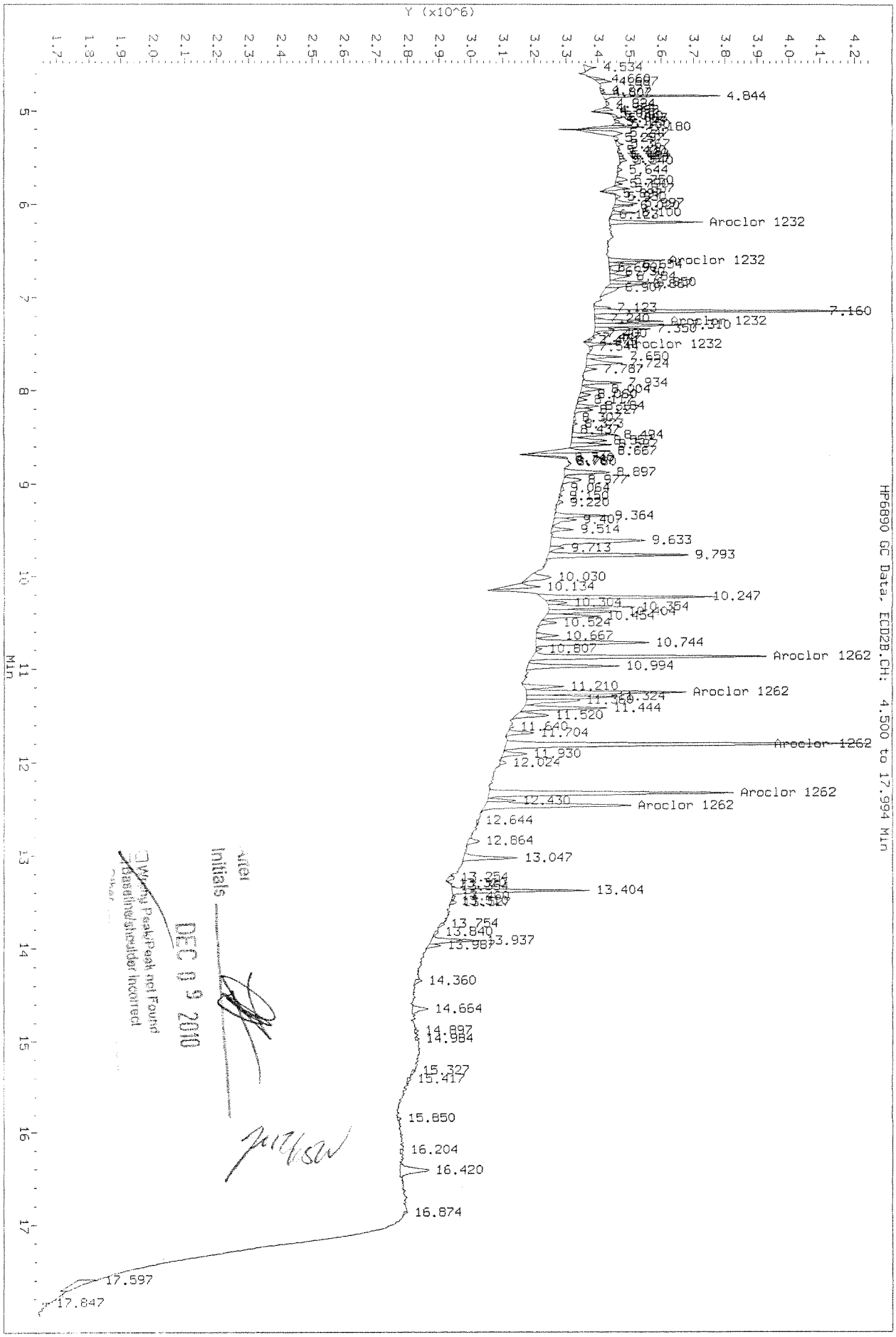
12.224
12.374
12.904
13.011
Initials
Date


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F015.D
Injection Date: 09-DEC-2010 01:53
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD2B.CH: 4.500 to 17.994 Min
4.844
Aroclor 1232
Aroclor 1232
7.160
Aroclor 1232
Aroclor 1232
Aroclor 1262
Aroclor 1262
Aroclor 1262
Aroclor 1262
Aroclor 1262
13.404
16.420
Before
DEC 13 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F015.D
Injection Date: 09-DEC-2010 01:53
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.500 to 17.994 Min
Y (x10^6)
Min
4.844
Aroclor 1232
Aroclor 1232
7.160
Aroclor 1232
Aroclor 1232
9.633
9.793
10.247
10.744
Aroclor 1262
Aroclor 1262
Aroclor 1262
Aroclor 1262
13.404
16.874
17.597
17.847
Initials
DEC 0 9 2010
Missing Peak/Peak not Found
Baseline/shoulder incorrect

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F016.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F016.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F016.D
Inj Date : 09-DEC-2010 02:17
Sample Info: 1232/1262 @ 5.0ppb | PCB5-61C | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1232+1262.sub
Sub List #2 : 1232+1262.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.716	6.199	238445	842988	5.73	5.92	80.00- 120.00	100.00(M)
	6.123	6.609	218988	466755	5.92	5.98	68.05- 102.08	91.84(M)
	6.616	7.265	193897	698620	6.33	5.72	62.16- 93.24	81.32(M)
	6.746	7.509	172735	315065	5.78	4.64	57.67- 86.50	72.44(M)
			Average of Peak Amounts =		5.94	5.56		
Aroclor 1262	9.916	10.892	1031852	2852731	5.57	5.83	80.00- 120.00	100.00(M)
	10.403	11.275	830802	2007587	5.70	5.75	62.50- 93.75	80.52(M)
	10.803	11.832	1680512	4648155	5.29	5.58	146.21- 219.31	162.86(M)
	11.349	12.355	722150	3181782	5.43	5.64	58.45- 87.67	69.99(M)
	11.463	12.482	1238162	2205273	5.25	5.62	102.10- 153.15	119.99(M)
			Average of Peak Amounts =		5.45	5.68		

QC Flag Legend

M - Compound response manually integrated.

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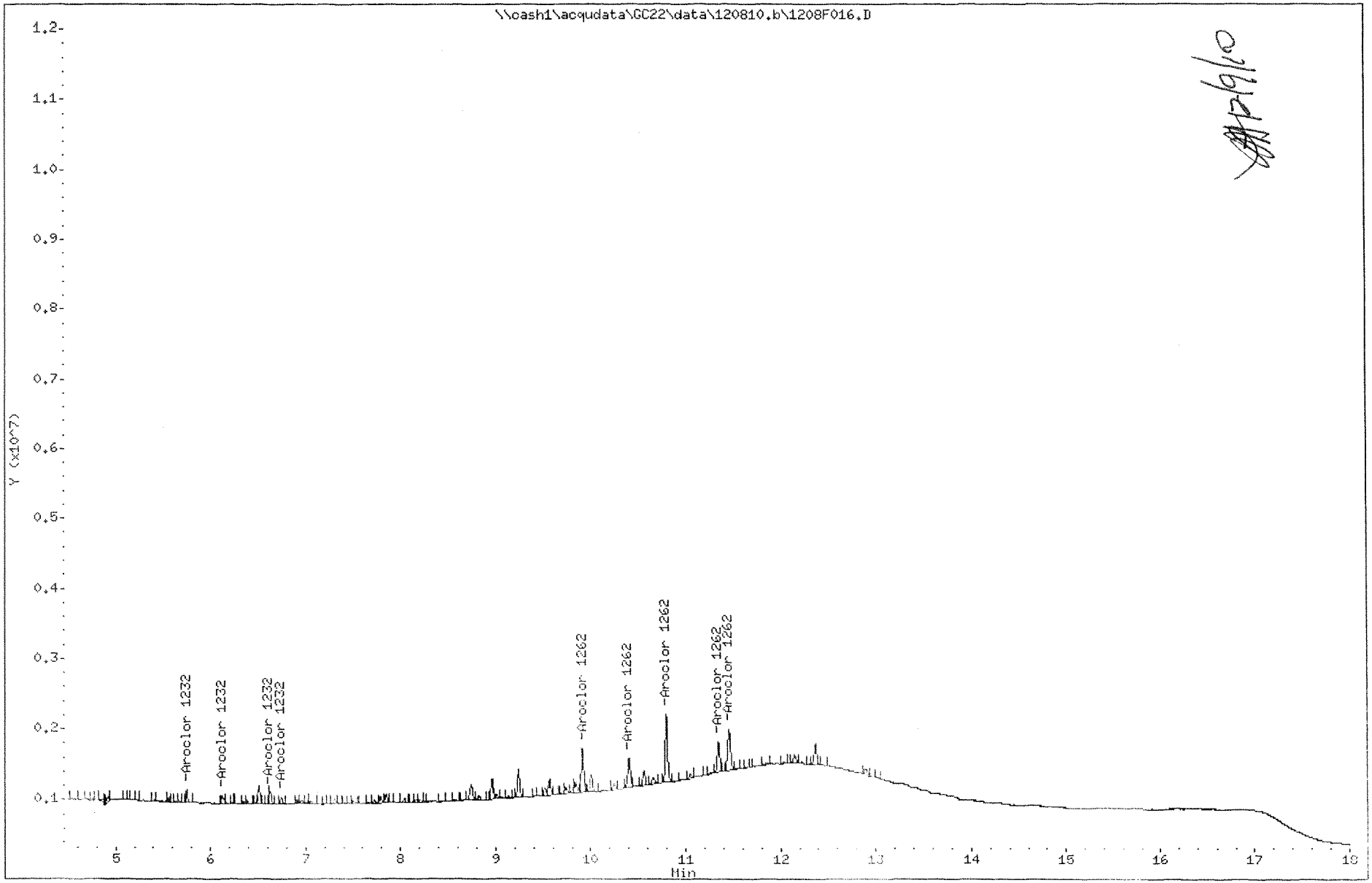
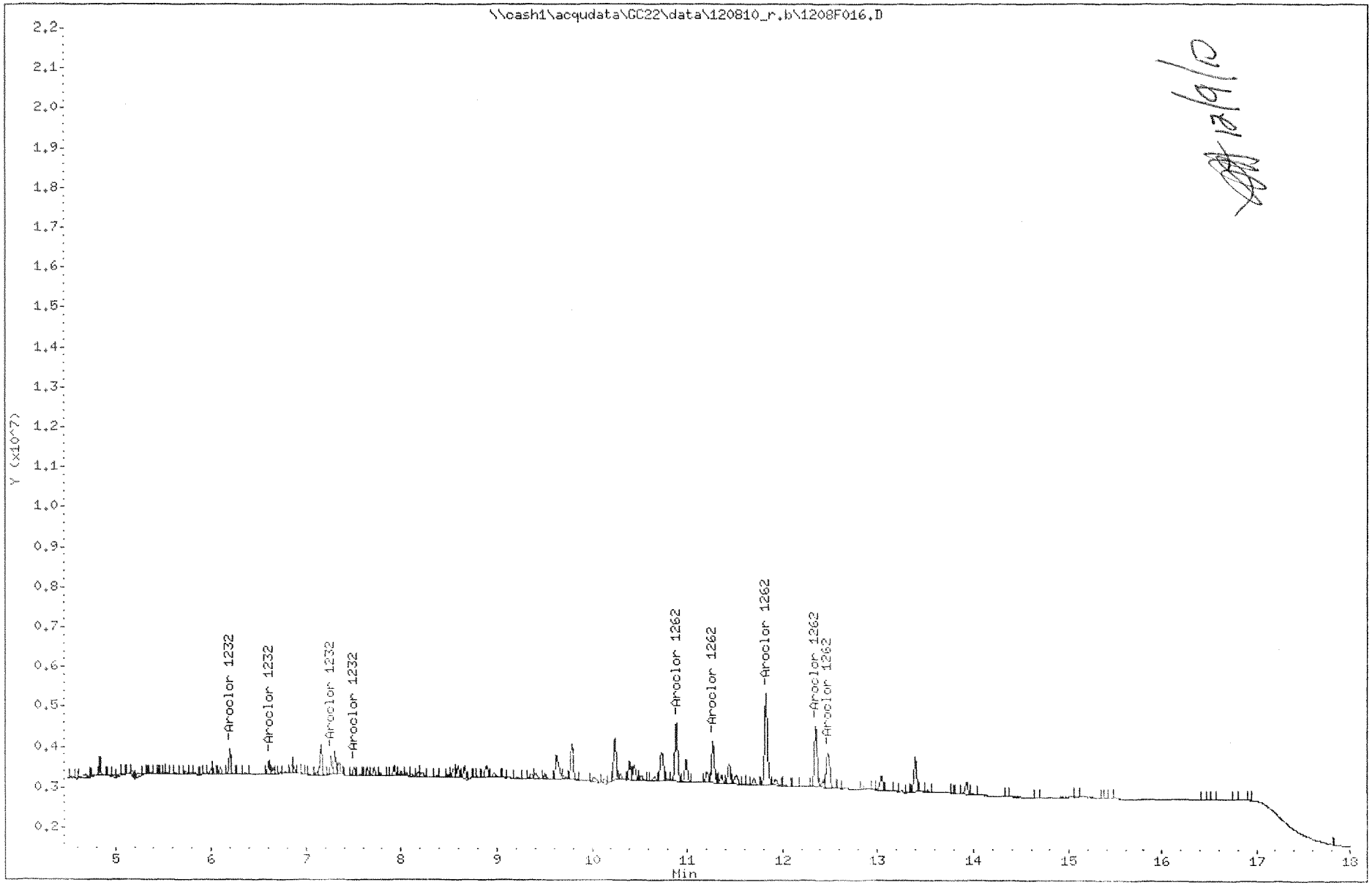
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F016.D
Date : 09-DEC-2010 02:17
Client ID:
Instrument: GC22.i
Sample Info: 1232/1262 @ 5.0ppb | PCB5-61C | KWG1006746-3
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



12/9/10

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F016.D
Date : 09-DEC-2010 02:17
Client ID:
Instrument: GC22.i
Sample Info: 1232/1262 @ 5.0ppb | PCB5-61C | KWG1006746-3
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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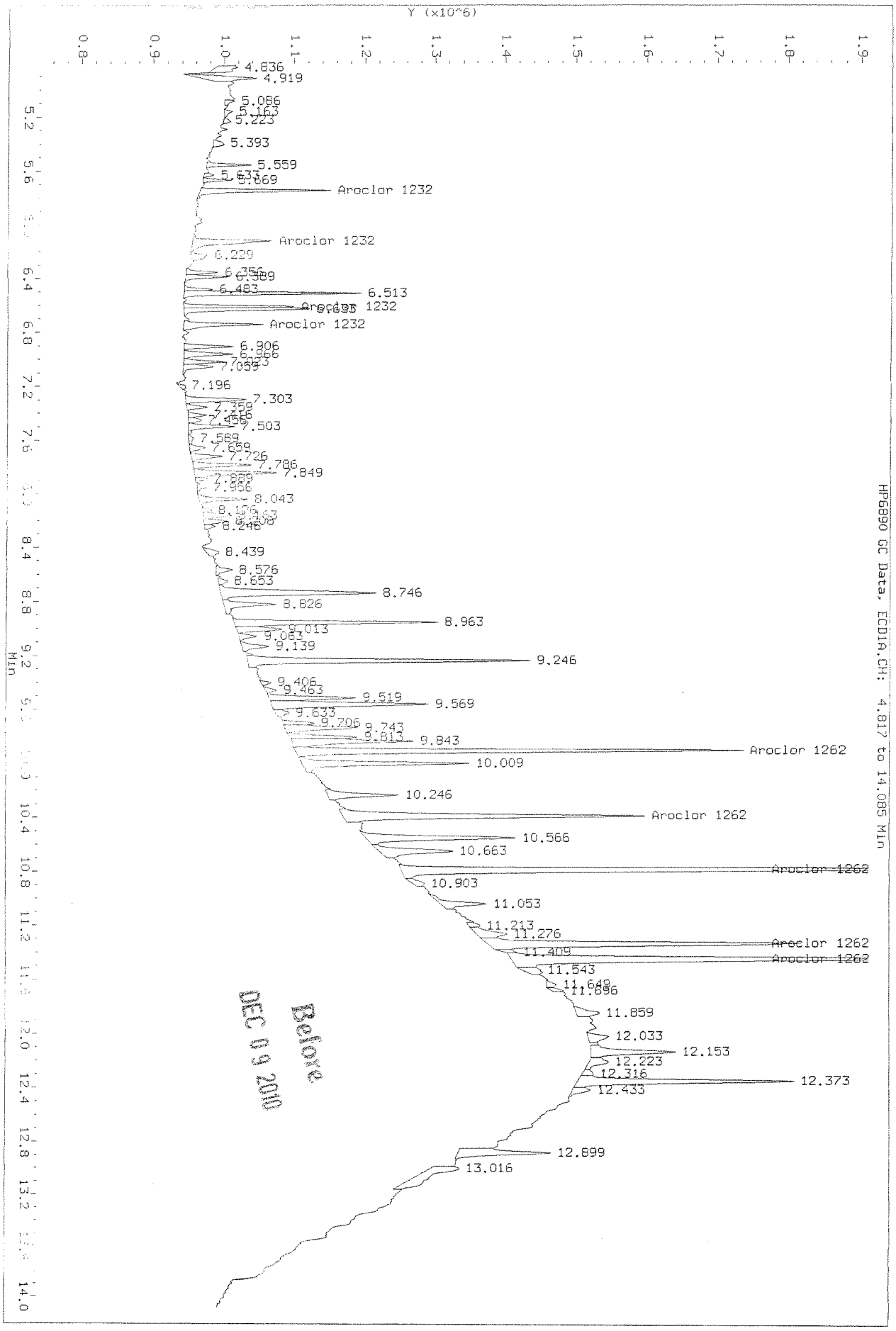
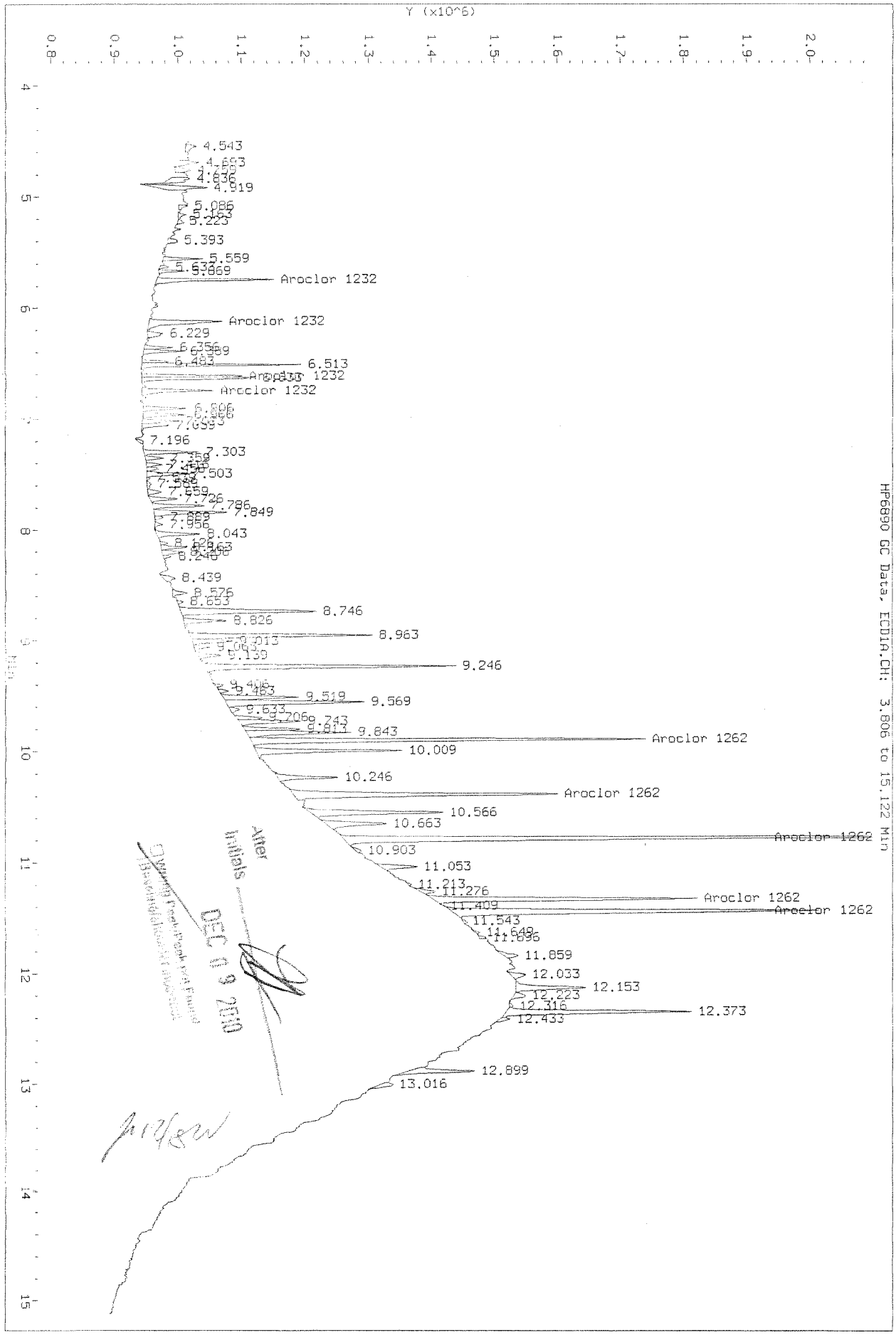
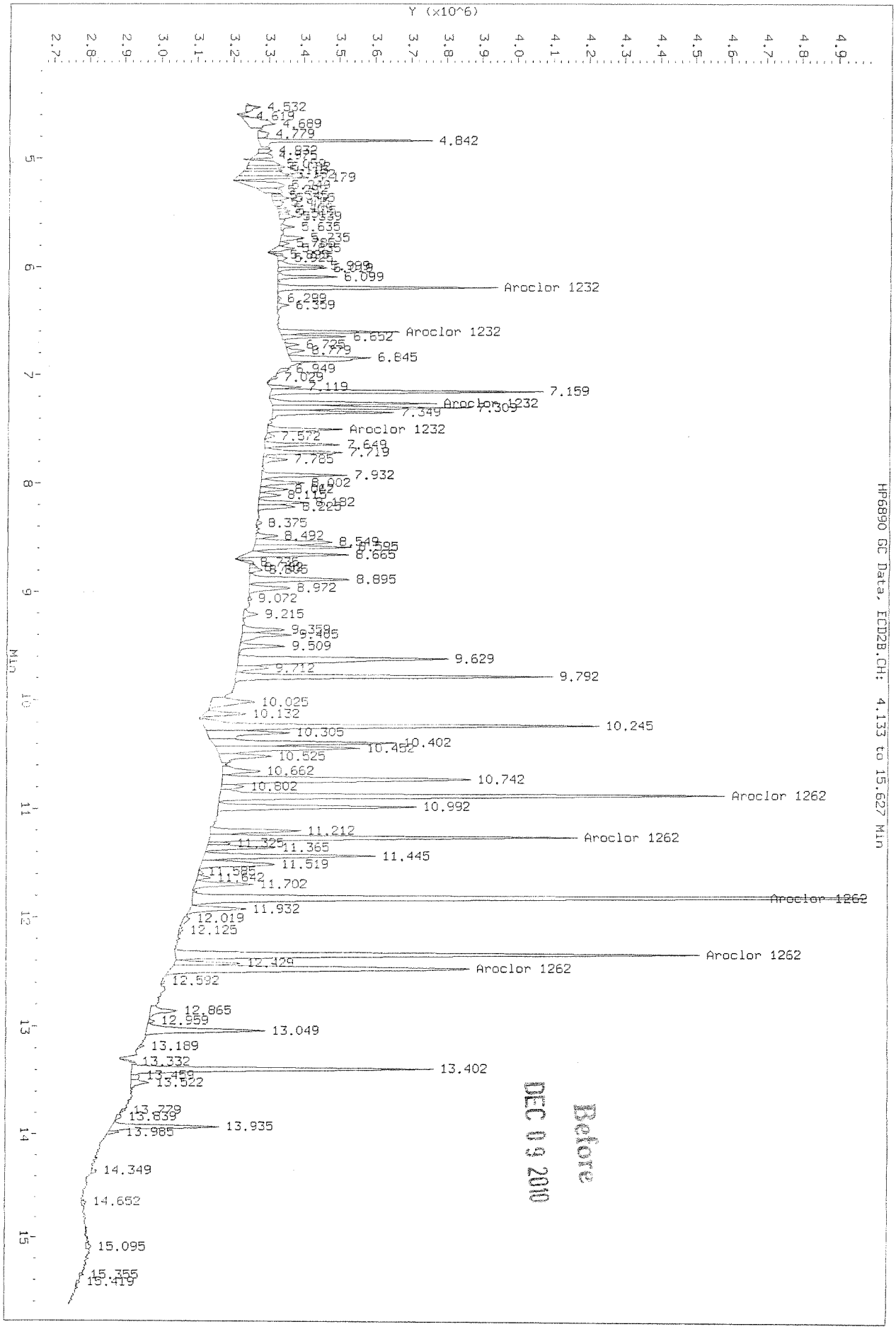
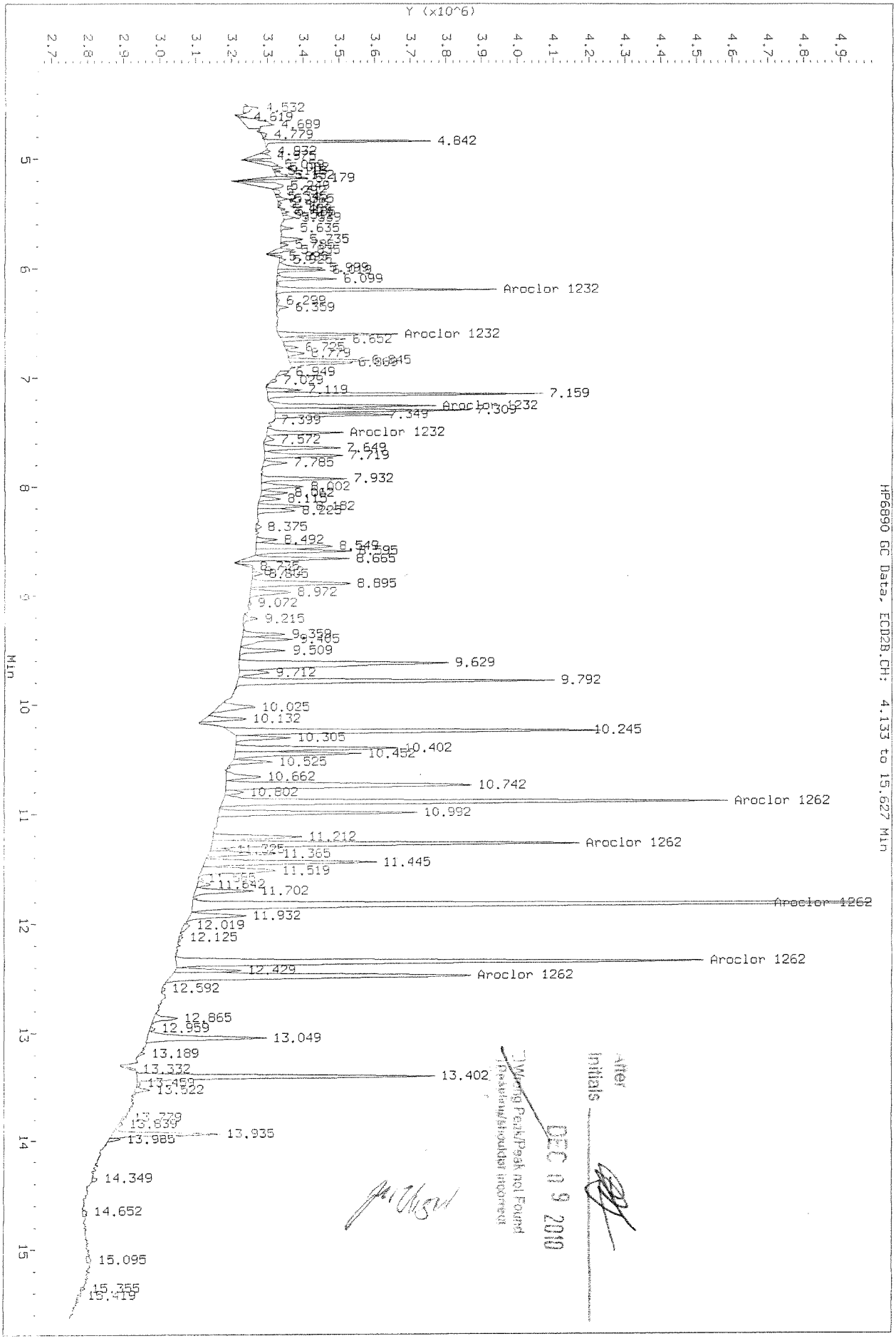

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F016.D
Injection Date: 09-DEC-2010 02:17
Instrument: GC22.I
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.817 to 14.085 Min
Y (x10^6)
Min
Aroclor 1232
Aroclor 1262
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F016.D
Injection Date: 09-DEC-2010 02:17
Instrument: GC22.I
Client Sample ID:
HP6890 GC Data, ECDIA,CH: 3.806 to 15.122 Min
Y (x10^6)
4.543
4.693
4.836
4.919
5.086
5.223
5.393
5.559
Aroclor 1232
Aroclor 1232
6.229
6.513
Aroclor 1232
7.196
7.303
7.503
7.786
7.849
8.043
8.439
8.576
8.653
8.746
8.826
8.963
9.246
9.519
9.569
9.743
9.843
Aroclor 1262
10.009
10.246
Aroclor 1262
10.566
10.663
Aroclor 1262
10.903
11.053
11.213
11.276
Aroclor 1262
11.409
Aroclor 1262
11.543
11.859
12.033
12.153
12.223
12.316
12.373
12.433
12.899
13.016
After
Initials
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F016.D
Injection Date: 09-DEC-2010 02:17
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH; 4.133 to 15.627 Min
Y (x10^6)
Min
4.532
4.619
4.689
4.779
4.842
Aroclor 1232
6.652
Aroclor 1232
6.845
7.159
Aroclor 1232
Aroclor 1232
7.932
8.375
8.665
8.895
9.629
9.792
10.245
10.742
Aroclor 1262
10.992
11.212
Aroclor 1262
11.445
11.702
Aroclor 1262
11.932
Aroclor 1262
Aroclor 1262
13.049
13.402
13.935
14.349
14.652
15.095
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F016.D
Injection Date: 09-DEC-2010 02:17
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.133 to 15.627 Min
Y (x10^6)
Min
4.842
Aroclor 1232
Aroclor 1232
7.159
Aroclor 1232
Aroclor 1232
7.932
8.895
9.629
9.792
10.245
10.742
Aroclor 1262
10.992
Aroclor 1262
11.445
11.702
Aroclor 1262
Aroclor 1262
Aroclor 1262
13.049
13.402
13.935
14.349
14.652
15.095
Missing Peak/Peak not Found
Breakthrough/shoulder incorrect
DEC 09 2010
After
Initials

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F017.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F017.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F017.D
Inj Date : 09-DEC-2010 02:42
Sample Info: 1232/1262 @ 50ppb | PCB5-61D | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1232+1262.sub
Sub List #2 : 1232+1262.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.744	6.196	2045730	6917836	49.2	48.6	80.00- 120.00	100.00
	6.120	6.606	1773637	3796655	47.9	48.6	68.05- 102.08	86.70
	6.614	7.263	1433496	6164510	46.8	50.3	62.16- 93.24	70.07
	6.744	7.506	1436174	3754406	48.0	55.2	57.67- 86.50	70.20
			Average of Peak Amounts =		48.0	50.7		
Aroclor 1262	9.914	10.893	8910755	22809146	48.1	46.7	80.00- 120.00	100.00(M)
	10.407	11.273	7041490	16528211	48.4	47.4	62.50- 93.75	79.02(M)
	10.804	11.830	15000869	38065722	47.2	45.7	146.21- 219.31	168.35(M)
	11.350	12.353	6362005	26050832	48.0	46.2	58.45- 87.67	71.40(M)
	11.460	12.486	10733600	18322592	45.7	46.7	102.10- 153.15	120.46(M)
			Average of Peak Amounts =		47.5	46.5		

QC Flag Legend

M - Compound response manually integrated.

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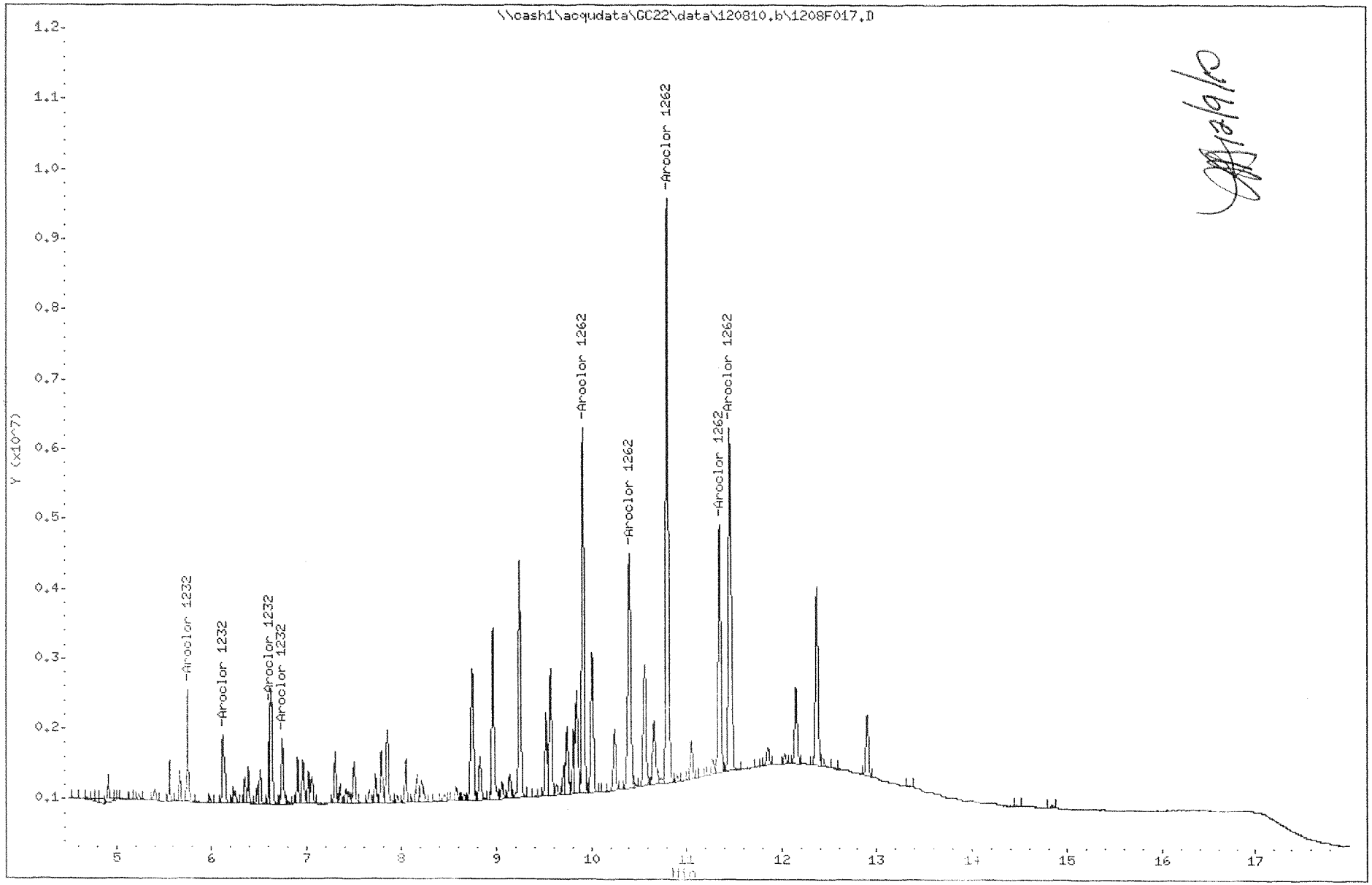
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F017.D
Date : 09-DEC-2010 02:42
Client ID:
Sample Info: 1232/1262 @ 50ppb | PCB5-61D | KWG1006746-3

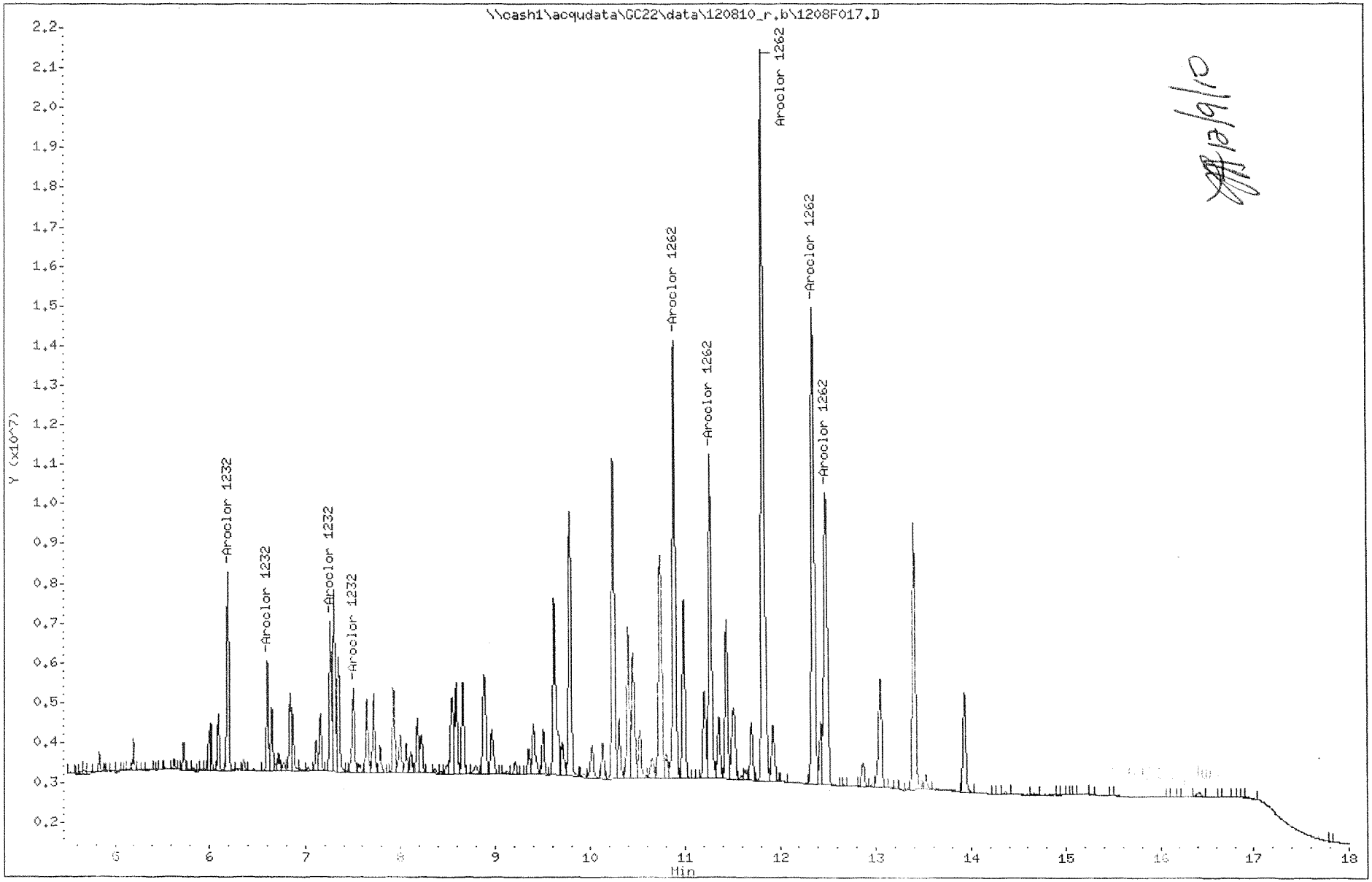
Instrument: GC22.i

Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F017.D
Date : 09-DEC-2010 02:42
Client ID:
Sample Info: 1232/1262 @ 50ppb | PCB5-61D | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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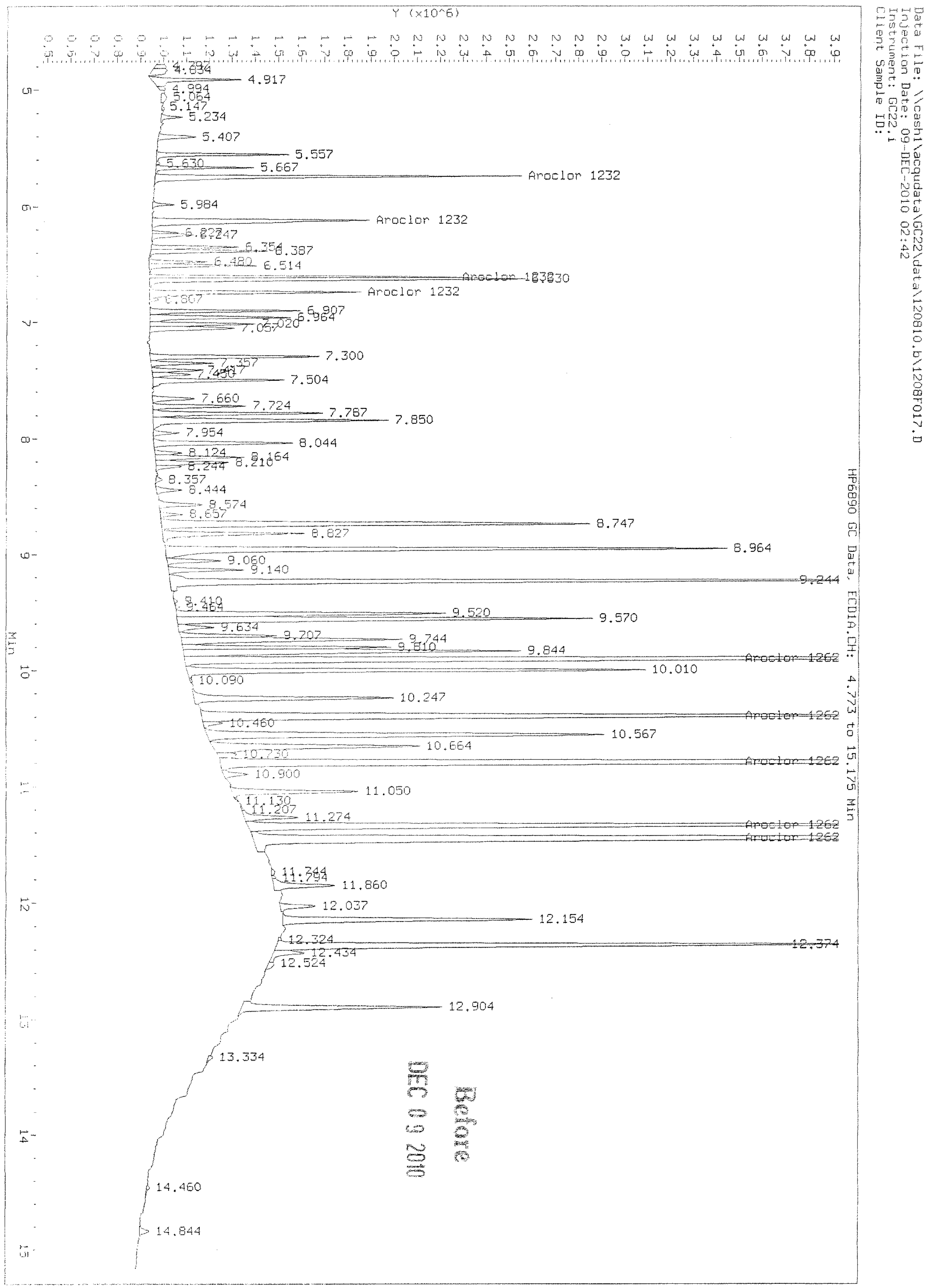
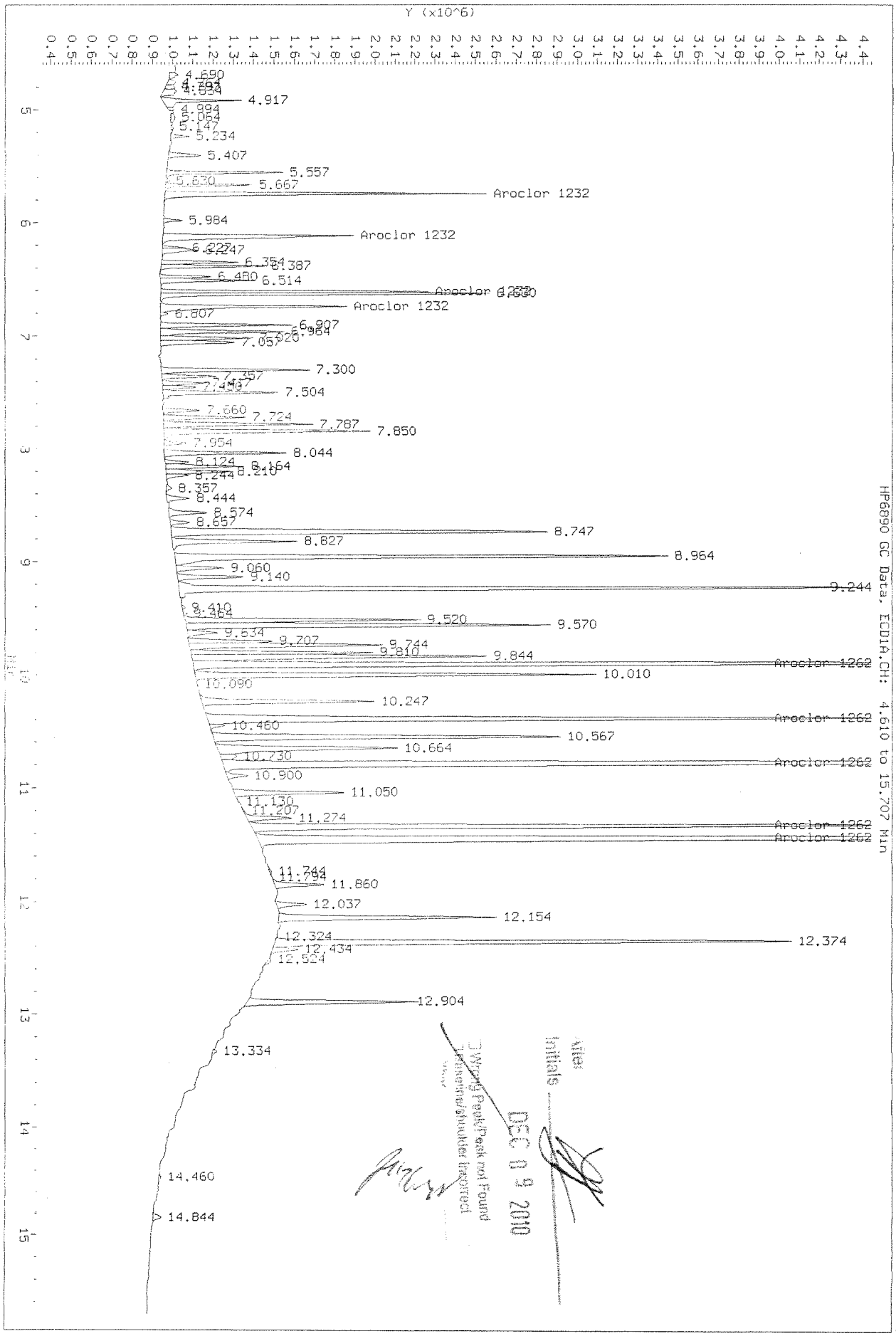
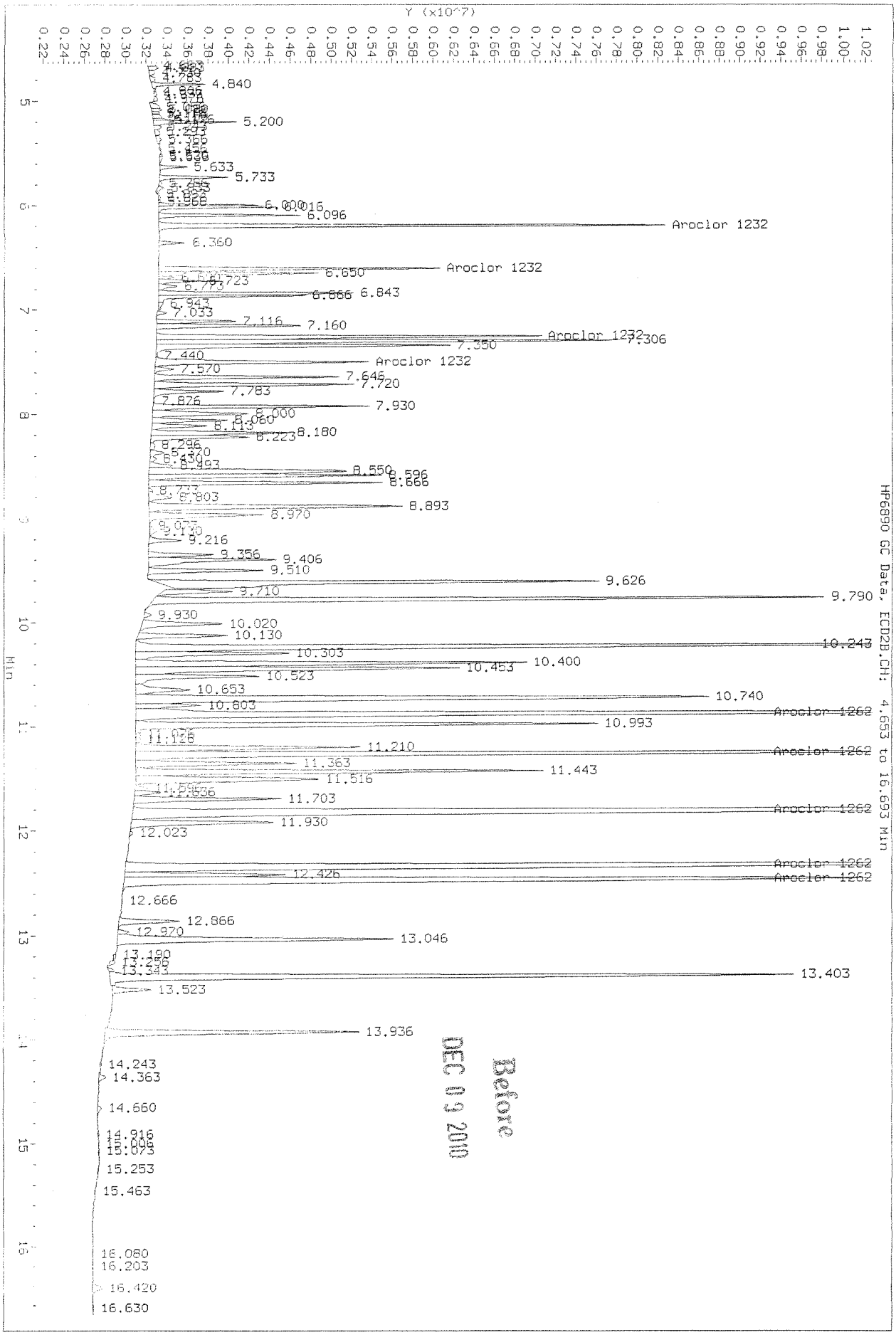
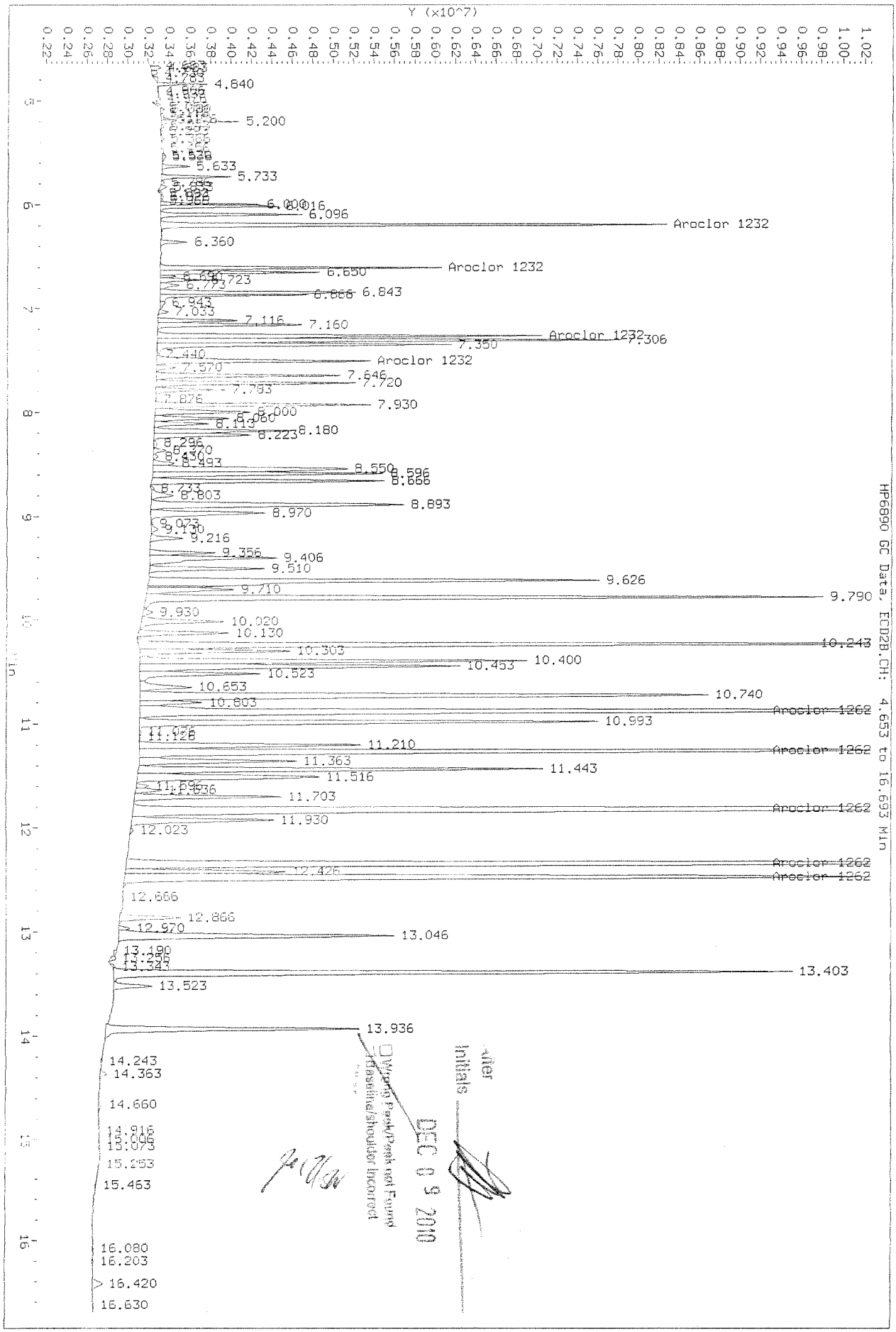


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F017.D
Injection Date: 09-DEC-2010 02:42
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.773 to 15.175 Min
Y (x10^6)
Min
Aroclor 1232
Aroclor 1262
4.917
5.234
5.407
5.557
5.630
5.667
5.984
6.387
6.514
7.300
7.504
7.660
7.724
7.787
7.850
7.954
8.044
8.357
8.444
8.574
8.747
8.827
8.964
9.060
9.140
9.244
9.520
9.570
9.634
9.707
9.744
9.844
10.010
10.090
10.247
10.460
10.567
10.664
10.900
11.050
11.274
11.860
12.037
12.154
12.324
12.374
12.434
12.524
12.904
13.334
14.460
14.844
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F017.D
Injection Date: 09-DEC-2010 02:42
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.610 to 15.707 Min
Y (x10^6)
4.690
4.917
5.234
5.407
5.557
5.667
Aroclor 1232
5.984
Aroclor 1232
6.354
6.514
Aroclor 1232
6.807
7.300
7.504
7.660
7.724
7.787
7.850
7.954
8.044
8.747
8.827
8.964
9.060
9.140
9.244
9.520
9.570
9.744
9.844
Aroclor 1262
10.010
10.247
Aroclor 1262
10.460
10.567
10.664
Aroclor 1262
10.900
11.050
11.274
Aroclor 1262
Aroclor 1262
11.860
12.037
12.154
12.324
12.374
12.524
12.904
13.334
14.460
14.844
Peak/Peak not Found
DEC 09 2010
Initials


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F017.D
Injection Date: 09-DEC-2010 02:42
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.653 to 16.693 Min
Y (x10^7)
Min
Aroclor 1232
Aroclor 1232
Aroclor 1232
Aroclor 1232
Aroclor 1262
Aroclor 1262
Aroclor 1262
Aroclor 1262
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\120BF017.D
Injection Date: 09-DEC-2010 02:42
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.653 to 16.693 Min
Y (x10^7)
4.640
5.200
5.633
5.733
6.096
Aroclor 1232
6.360
6.650
Aroclor 1232
6.843
7.116
7.160
Aroclor 1232
7.306
7.350
Aroclor 1232
7.646
7.720
7.930
8.180
8.550
8.596
8.666
8.893
8.970
9.216
9.406
9.510
9.626
9.790
10.020
10.130
10.243
10.400
10.523
10.740
Aroclor 1262
10.993
11.210
Aroclor 1262
11.363
11.443
11.516
11.703
Aroclor 1262
11.930
12.023
Aroclor 1262
Aroclor 1262
12.666
12.866
12.970
13.046
13.403
13.523
13.936
14.243
14.363
14.660
15.463
16.080
16.203
16.420
16.630
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
DEC 09 2010
Reviewer Initials

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F018.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F018.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F018.D
Inj Date : 09-DEC-2010 03:06
Sample Info: 1232/1262 @ 100ppb | PCB5-61E | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1232+1262.sub
Sub List #2 : 1232+1262.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.745	6.201	4095946	13817052	91.9	90.1	80.00- 120.00	100.00
	6.122	6.608	3557265	7565448	86.3	86.9	68.05- 102.08	86.85
	6.615	7.268	2877264	12049270	88.0	92.6	62.16- 93.24	70.25
	6.745	7.508	2871756	7761210	90.5	117	57.67- 86.50	70.11
			Average of Peak Amounts =		89.2	96.6		
Aroclor 1262	9.915	10.895	17961374	48072549	90.4	90.7	80.00- 120.00	100.00
	10.405	11.275	14138272	34832599	89.6	97.4	62.50- 93.75	78.71
	10.802	11.631	31318985	82590665	94.9	94.5	146.21- 219.31	174.37
	11.352	12.355	13026786	55659757	88.2	92.9	58.45- 87.67	72.53
	11.462	12.485	22265739	38920237	82.7	93.1	102.10- 153.15	123.96
			Average of Peak Amounts =		89.2	93.7		

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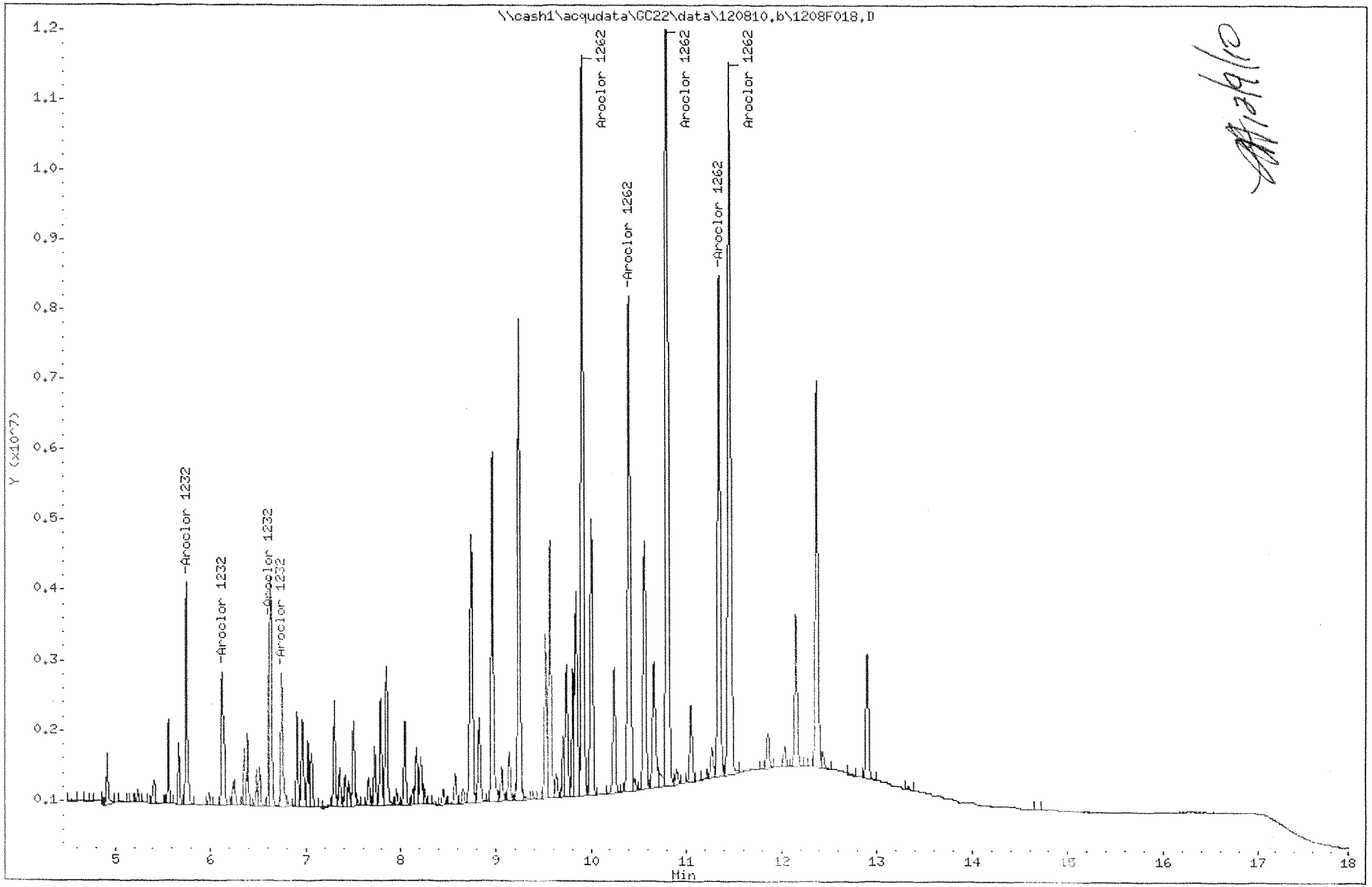
Data File: \\cash1\acqudata\GC22\data\120810,b\1208F018.D
Date : 09-DEC-2010 03:06
Client ID:
Sample Info: 1232/1262 @ 100ppb | PCB5-61E | KWG1006746-3

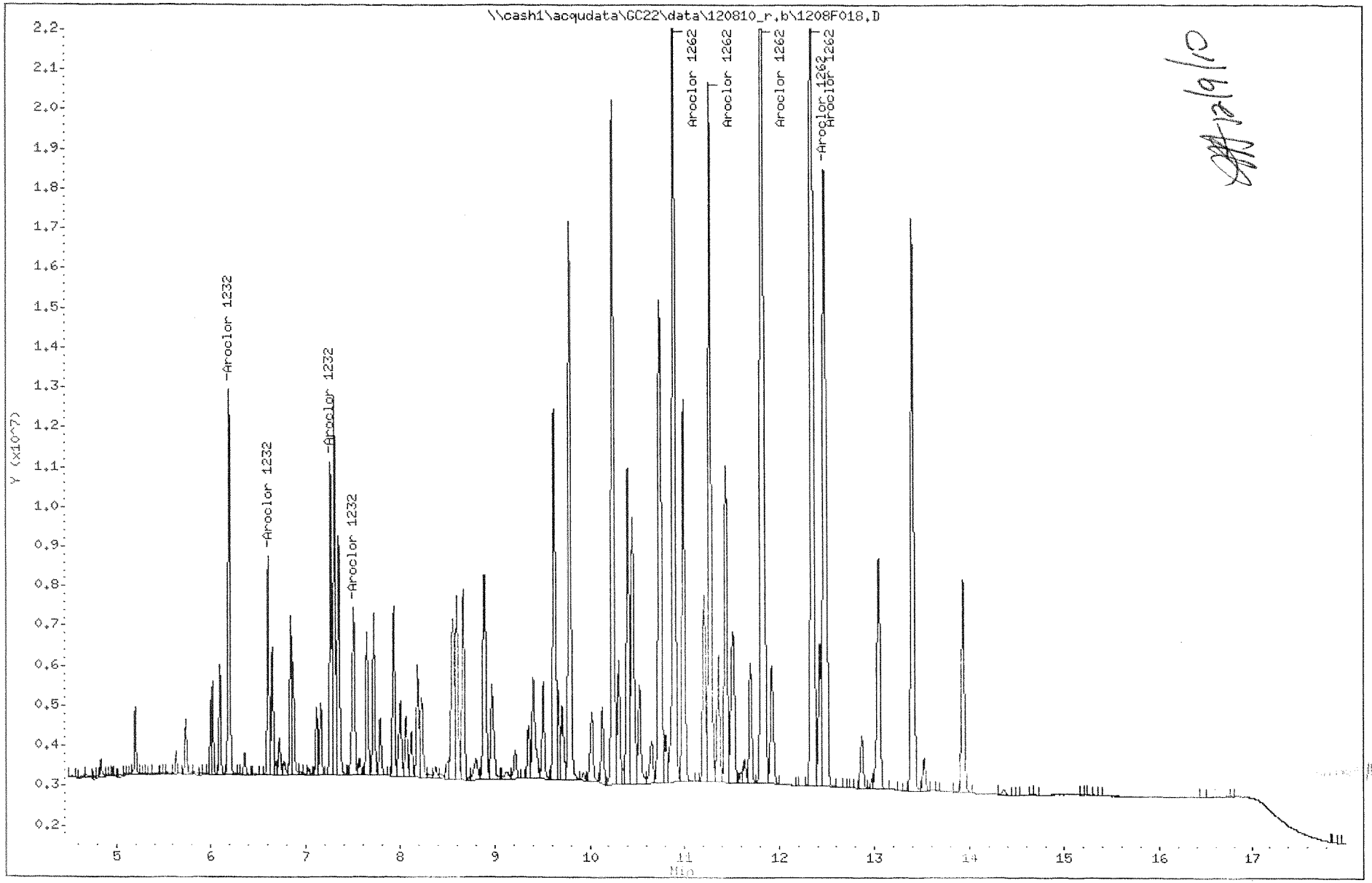
Instrument: GC22.i
Operator: LHarris
Column diameter: 0.32

Column phase: DB-35MS



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F018.D
Date : 09-DEC-2010 03:06
Client ID:
Sample Info: 1232/1262 @ 100ppb | PCB5-61E | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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Data File: \\cash1\acqudata\GC22\data\120810.b\1208F019.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F019.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F019.D
Inj Date : 09-DEC-2010 03:30
Sample Info: 1232/1262 @ 200ppb | PCB5-61F | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1232+1262.sub
Sub List #2 : 1232+1262.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.743	6.196	7855168	25724721	180	173	80.00- 120.00	100.00
	6.120	6.606	6791432	14152317	171	169	68.05- 102.08	86.46
	6.613	7.266	5033737	22620670	161	178	62.16- 93.24	64.08
	6.743	7.506	5546020	14825095	179	218	57.67- 86.50	70.60
			Average of Peak Amounts =		173	184		
Aroclor 1262	9.913	10.892	35412729	90582821	182	176	80.00- 120.00	100.00
	10.403	11.272	27652303	66180192	180	188	62.50- 93.75	78.09
	10.803	11.829	63032506	159638884	193	186	146.21- 219.31	177.99
	11.350	12.352	25626953	106451671	178	182	58.45- 87.67	72.37
	11.460	12.482	44214039	73974671	170	181	102.10- 153.15	124.85
			Average of Peak Amounts =		181	183		

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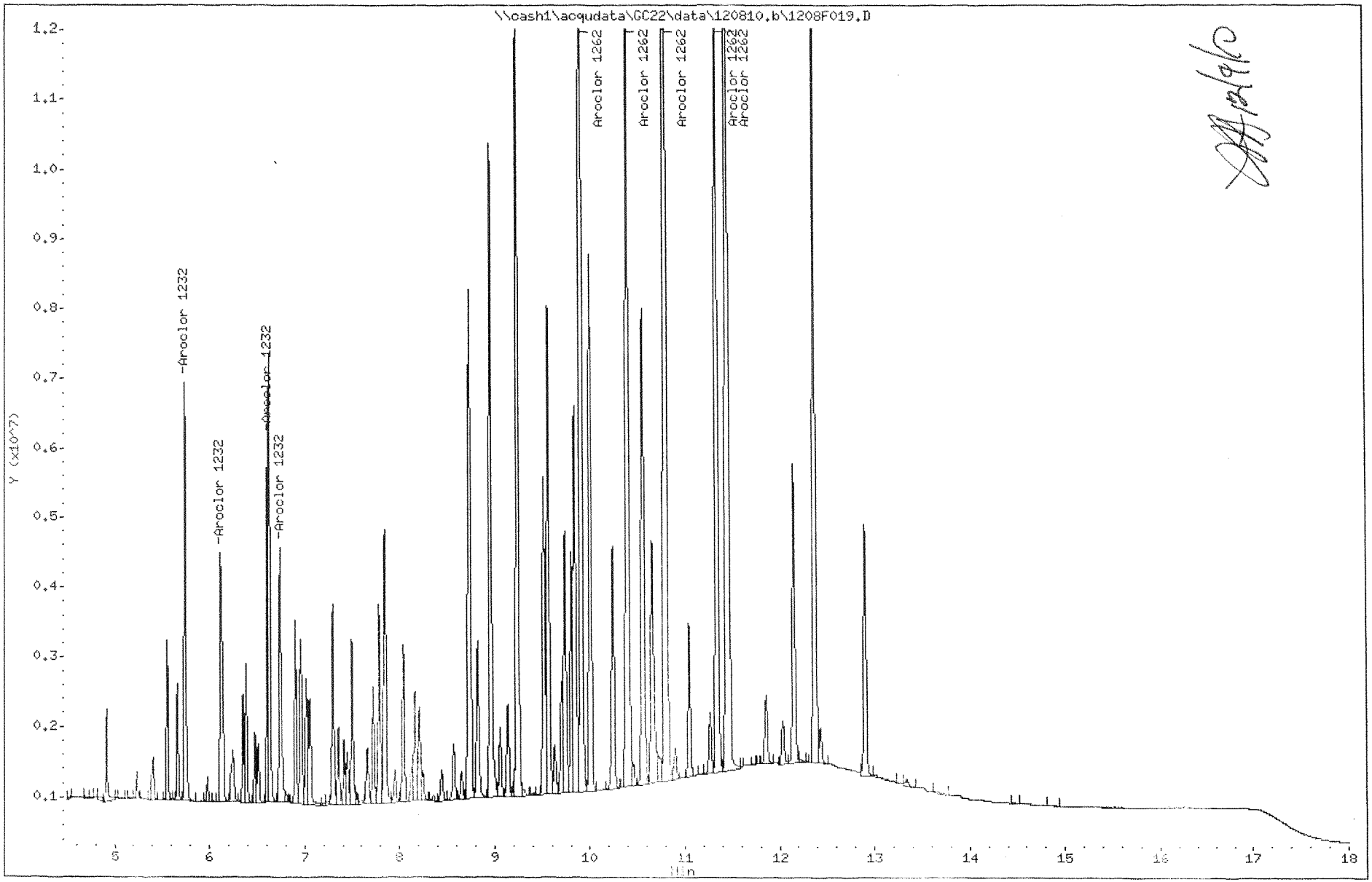
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F019.D
Date : 09-DEC-2010 03:30
Client ID:
Sample Info: 1232/1262 @ 200ppb | PCB5-61F | KWG1006746-3

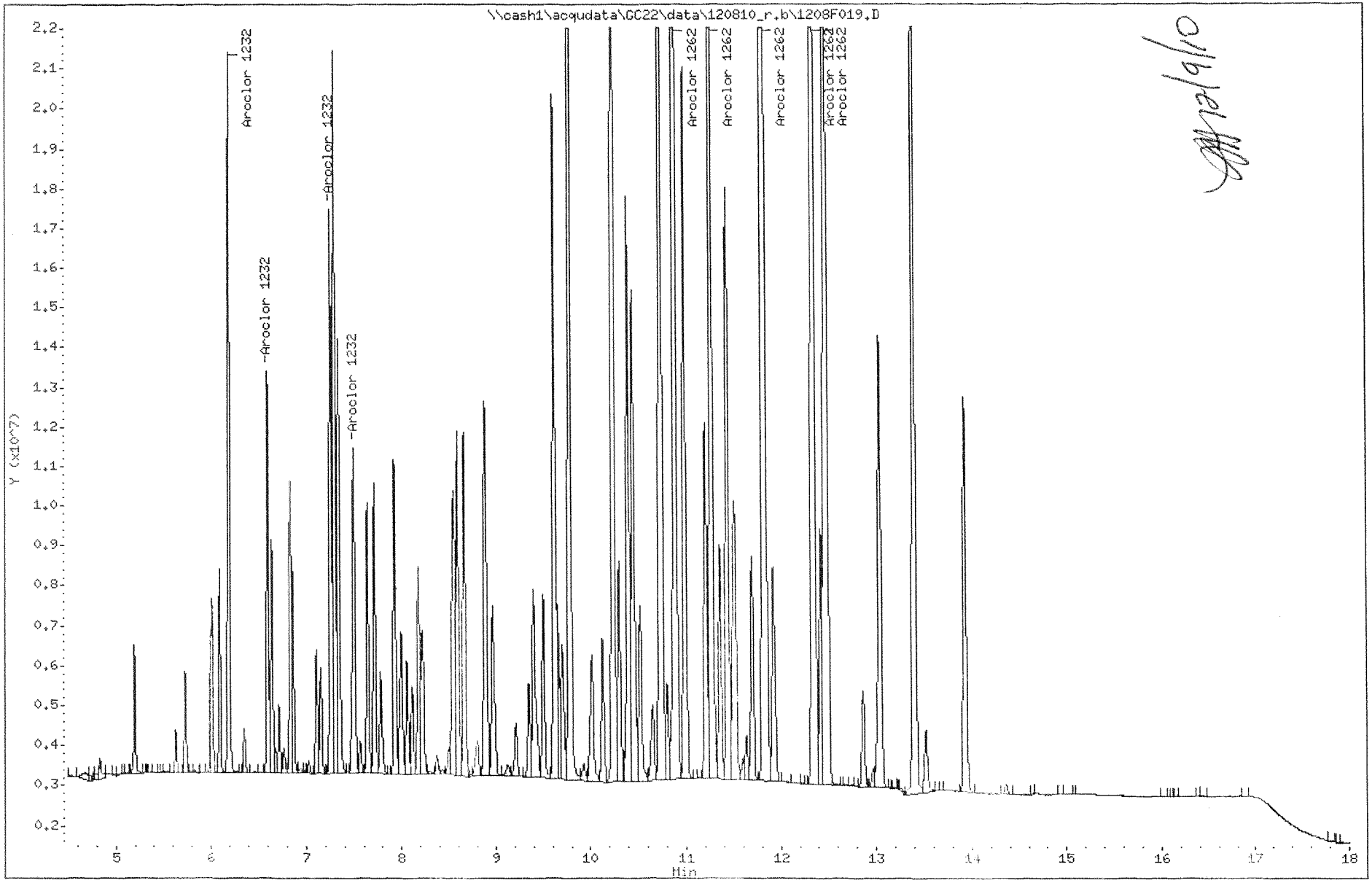
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F019.D
Date : 09-DEC-2010 03:30
Client ID:
Sample Info: 1232/1262 @ 200ppb | PCB5-61F | KWG1006746-3

Instrument: GC22.i

Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F020.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F020.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F020.D
Inj Date : 09-DEC-2010 03:55
Sample Info: 1232/1262 @ 500ppb | PCB5-61G | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1232+1262.sub
Sub List #2 : 1232+1262.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.745	6.198	17954876	56580909	432	397	80.00- 120.00	100.00(M)
	6.122	6.608	15273813	30406158	413	390	68.05- 102.08	85.07(M)
	6.615	7.268	13950671	50949483	449	414	62.16- 93.24	77.70(M)
	6.745	7.508	12942670	33071871	432	485	57.67- 86.50	72.08(M)
			Average of Peak Amounts =		432	422		
Aroclor 1262	9.915	10.891	84610341	197346661	456	404	80.00- 120.00	100.00(M)
	10.405	11.274	66100020	146438362	454	420	62.50- 93.75	78.12(M)
	10.802	11.828	154635874	360825410	486	433	146.21- 219.31	182.76(M)
	11.348	12.351	61814370	236413219	466	419	58.45- 87.67	73.06(M)
	11.462	12.484	107981815	160458081	460	409	102.10- 153.15	127.62(M)
			Average of Peak Amounts =		464	417		

QC Flag Legend

M - Compound response manually integrated.

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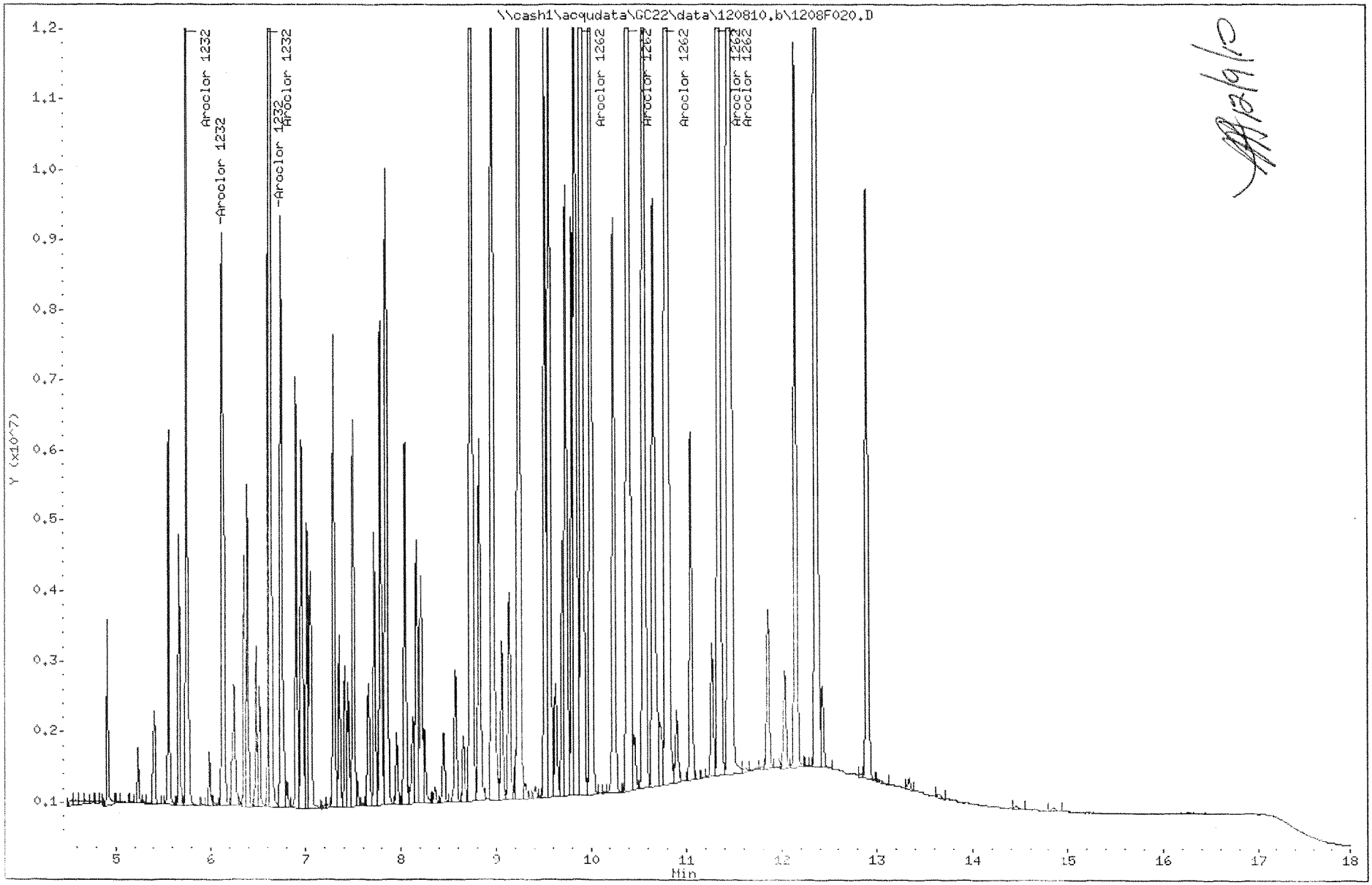
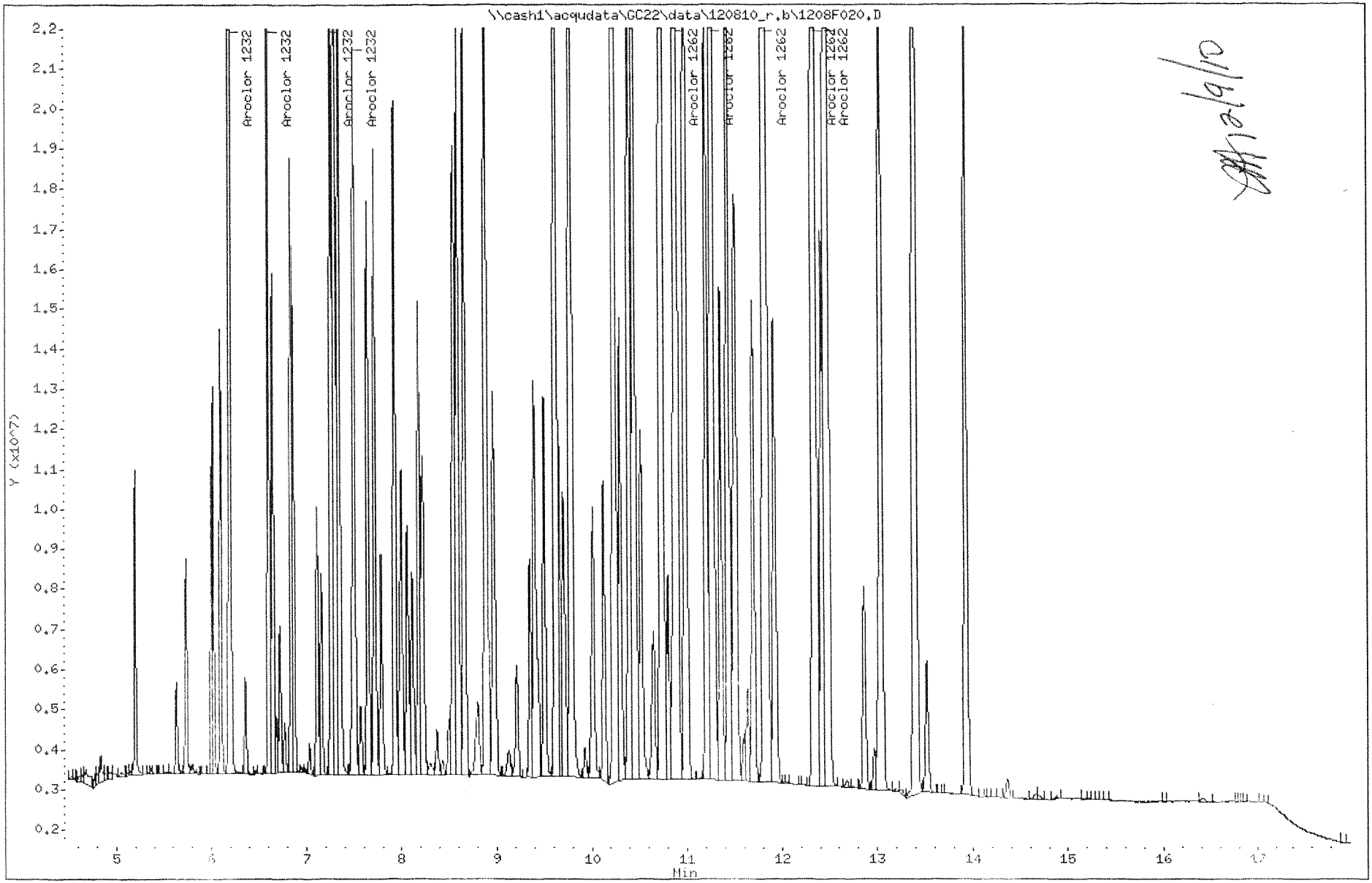
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F020.D
Date : 09-DEC-2010 03:55
Client ID:
Sample Info: 1232/1262 @ 500ppb | PCB5-61G | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F020.D
Date : 09-DEC-2010 03:55
Client ID:
Sample Info: 1232/1262 @ 500ppb | PCB5-61C | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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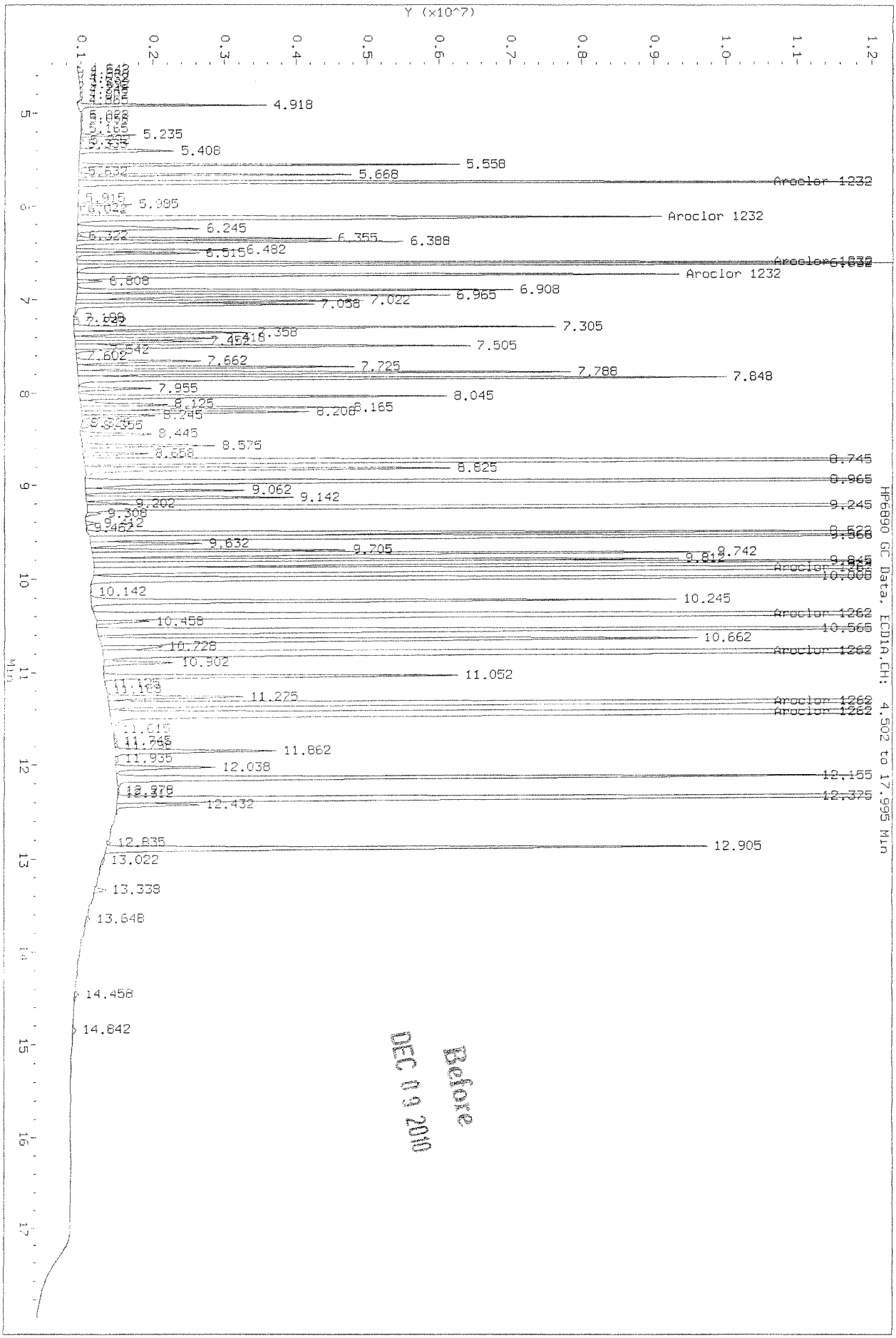
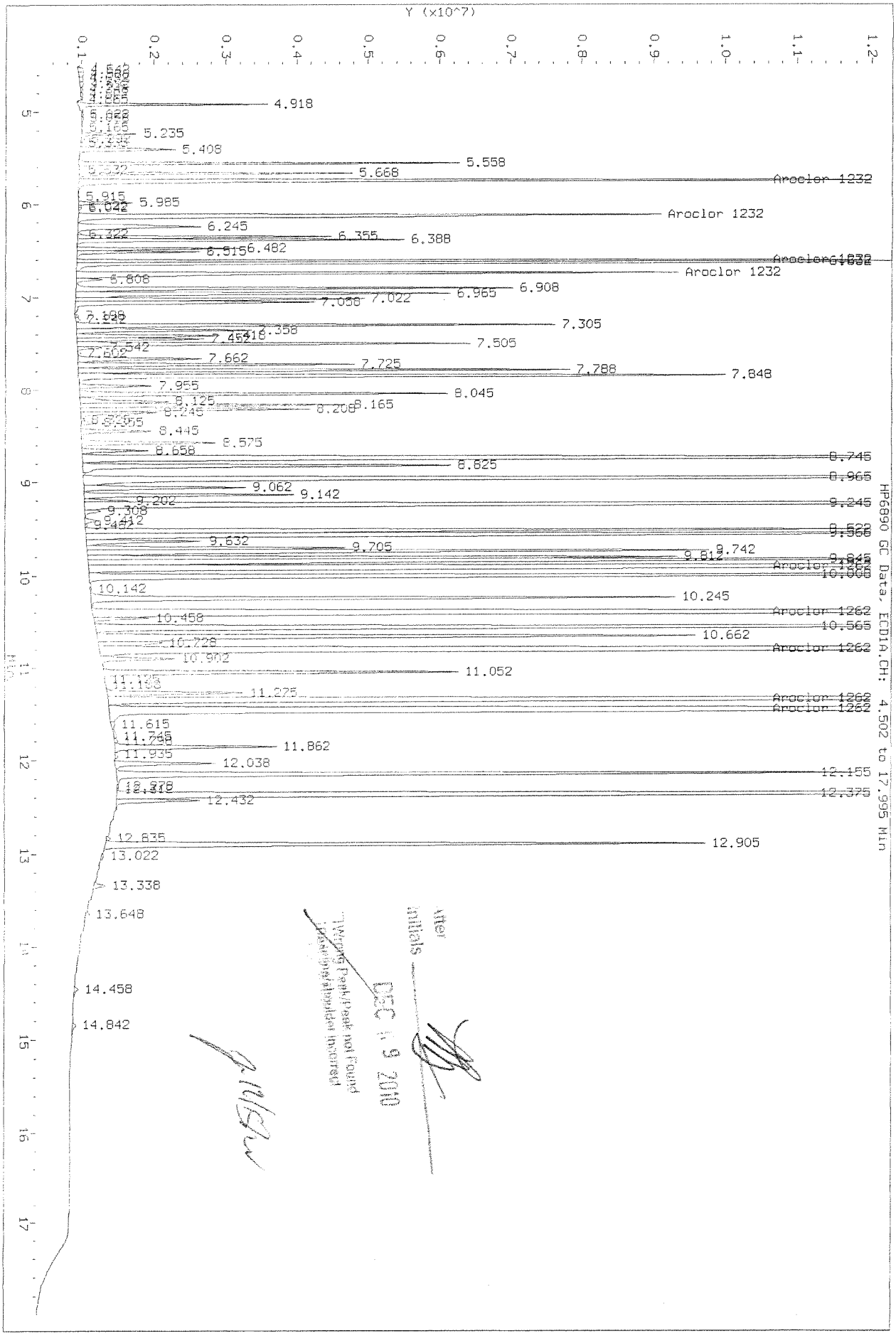
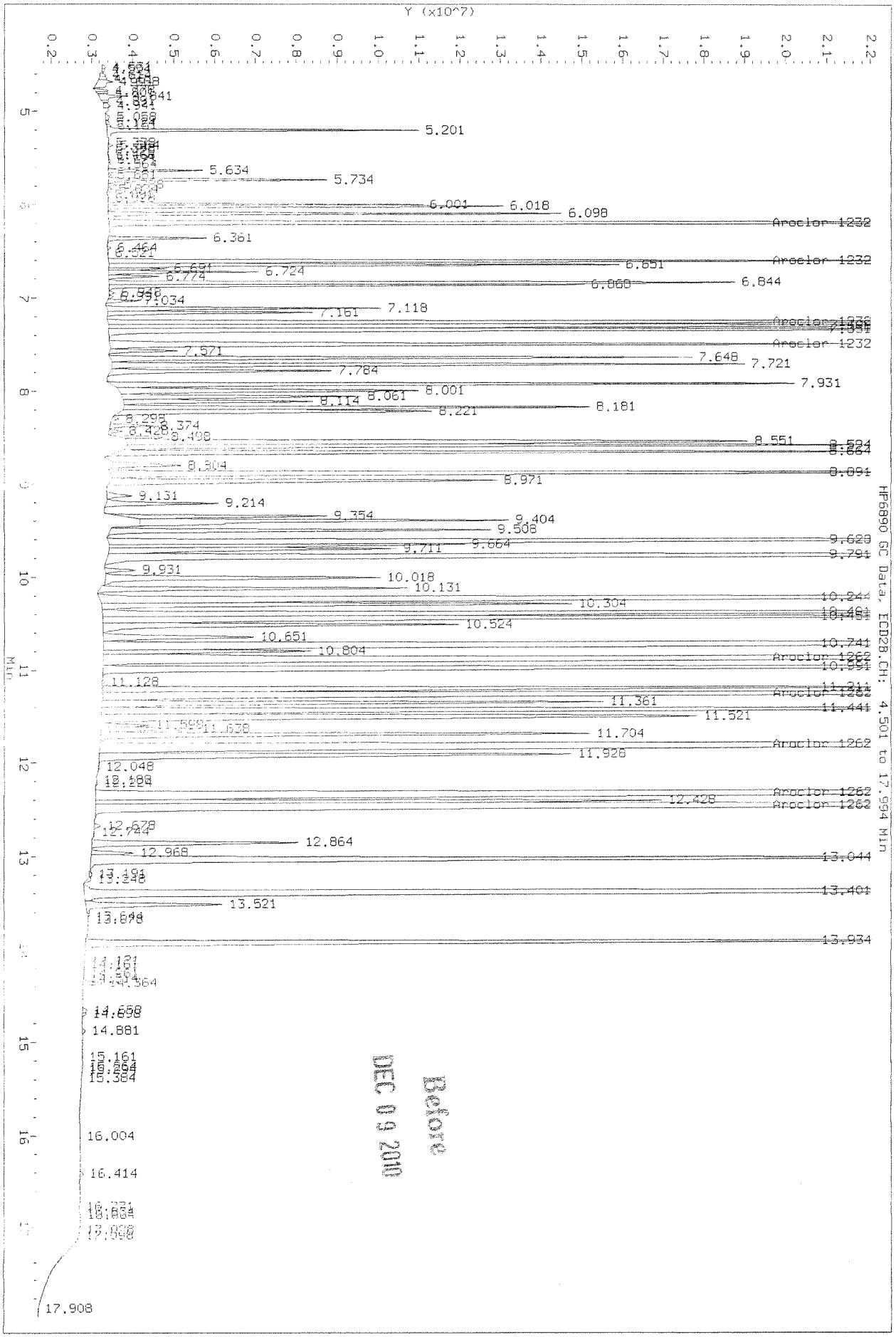
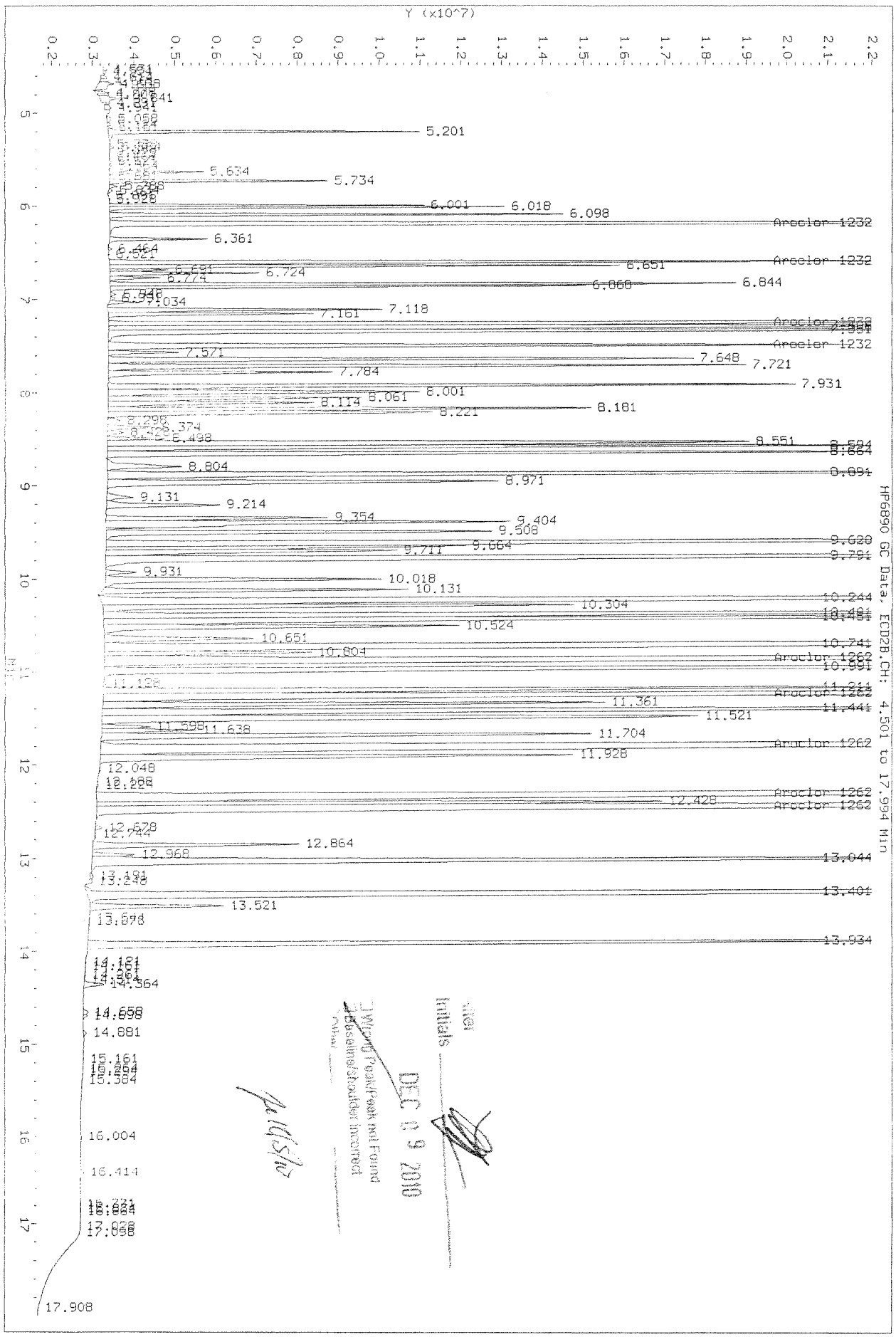


Received
DEC 13 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F020.D
Injection Date: 09-DEC-2010 03:55
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
HP6890 GC Data, ECD1A.CH: 4.502 to 17.995 Min
4.918
5.235
5.408
5.558
5.668
Aroclor 1232
5.985
Aroclor 1232
6.245
6.355
6.388
6.482
Aroclor 1232
6.908
6.965
7.022
7.058
7.305
7.505
7.662
7.725
7.788
7.848
7.955
8.045
8.165
8.208
8.445
8.575
8.658
8.825
9.062
9.142
9.632
9.705
9.742
Aroclor 1262
10.142
10.245
Aroclor 1262
10.458
10.662
Aroclor 1262
10.728
10.902
11.052
11.225
Aroclor 1262
Aroclor 1262
11.615
11.862
11.935
12.038
12.155
12.375
12.432
12.835
12.905
13.022
13.338
13.648
14.458
14.842


Y (x10^7)
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2.0
2.1
2.2
Min
5
6
7
8
9
10
11
12
13
14
15
16
17
5.201
5.634
5.734
6.001
6.018
6.098
Aroclor 1232
6.361
6.464
6.521
6.651
Aroclor 1232
6.691
6.724
6.774
6.844
6.868
7.034
7.118
7.161
Aroclor 1232
7.571
7.648
7.721
7.784
7.931
8.001
8.061
8.114
8.181
8.221
8.298
8.374
8.408
8.551
8.584
8.664
8.304
8.691
8.971
9.131
9.214
9.354
9.404
9.508
9.620
9.664
9.711
9.791
9.931
10.018
10.131
10.304
10.524
10.651
10.741
10.804
Aroclor 1262
11.128
11.211
Aroclor 1262
11.361
11.441
11.521
11.704
Aroclor 1262
11.928
12.048
Aroclor 1262
12.428
Aroclor 1262
12.744
12.864
12.968
13.044
13.191
13.401
13.521
13.934
14.881
15.161
15.384
16.004
16.414
17.908
HP6890 GC Data, ECD2B.CH: 4.501 to 17.994 Min
Data File: \\cash1\acqudata\GC22\data\120810_r.b\120F020.D
Injection Date: 09-DEC-2010 03:55
Instrument: GC22.1
Client Sample ID:
DEC 09 2010
326.036


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F020.D
Injection Date: 09-DEC-2010 03:55
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
HP6890 GC Data, ECD2B.CH: 4.501 to 17.994 Min
Aroclor 1232
Aroclor 1262
5.201
5.734
6.098
6.361
6.651
6.844
7.118
7.721
7.931
8.181
8.551
8.804
8.971
9.214
9.404
9.931
10.018
10.131
10.524
10.651
11.361
11.521
11.704
11.928
12.428
12.864
13.521
17.908

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F021.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F021.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F021.D
Inj Date : 09-DEC-2010 04:19
Sample Info: 1242/1268 @ 2.5ppb | PCB5-61H | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1242+1268.sub
Sub List #2 : 1242+1268.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	6.386	6.605	69239	416258	2.82	2.95	80.00- 120.00	100.00(M)
	6.629	6.845	225258	244351	2.78	2.78	313.59- 470.38	325.33(M)
	6.742	7.345	140008	434309	2.70	2.56	177.49- 266.23	202.21(M)
	6.962	7.508	87620	229412	2.33	2.10	130.78- 196.17	126.55(M)
	7.019	7.645	69604	301303	2.68	2.43	87.16- 130.73	100.53(M)
			Average of Peak Amounts =		2.66	2.56		
Aroclor 1268	11.459	12.488	1075391	3101818	2.73	2.81	80.00- 120.00	100.00(M)
	11.859	12.865	777050	2498752	2.55	2.84	64.38- 96.57	72.26(M)
	12.036	13.015	238747	638508	3.13	2.77	14.70- 22.05	22.20(M)
	12.372	13.398	306165	965026	2.55	2.79	25.86- 38.79	28.47(M)
	12.902	13.935	2013938	6744591	2.51	2.83	170.49- 255.74	187.27(M)
			Average of Peak Amounts =		2.69	2.81		

QC Flag Legend

M - Compound response manually integrated.

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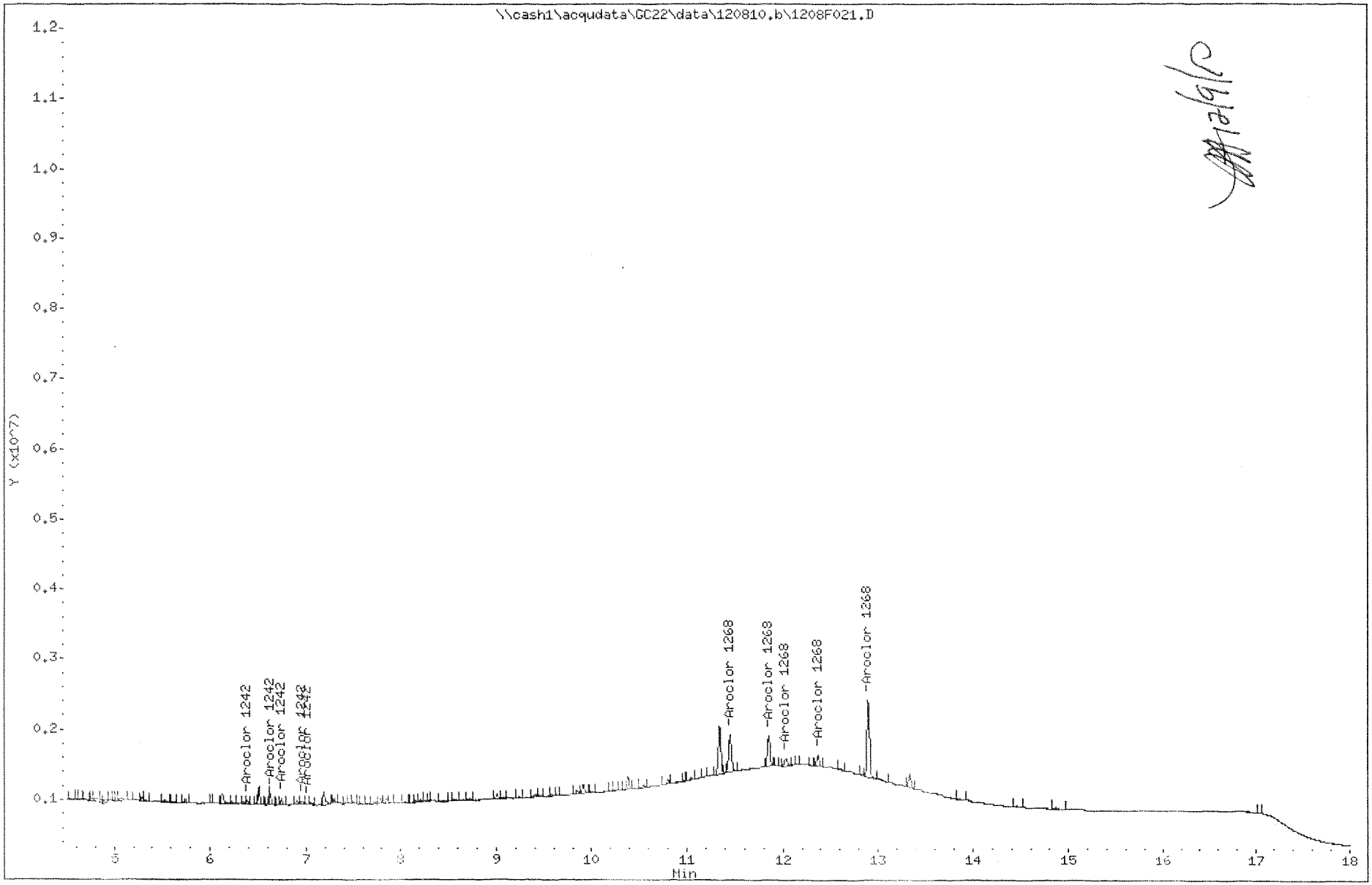
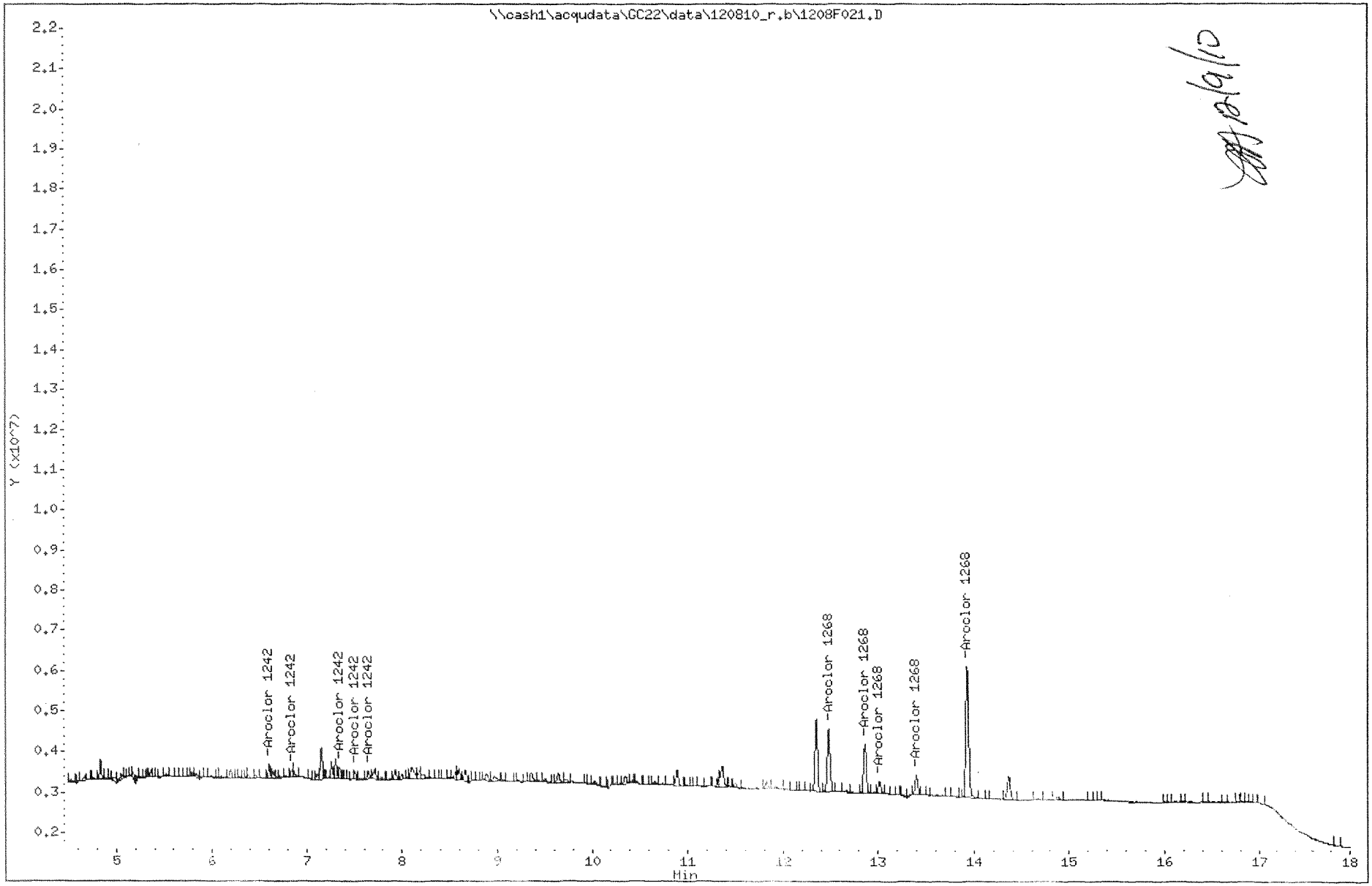
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F021.D
Date : 09-DEC-2010 04:19
Client ID:
Sample Info: 1242/1268 @ 2.5ppb | PCB5-61H | KWG1006746-3

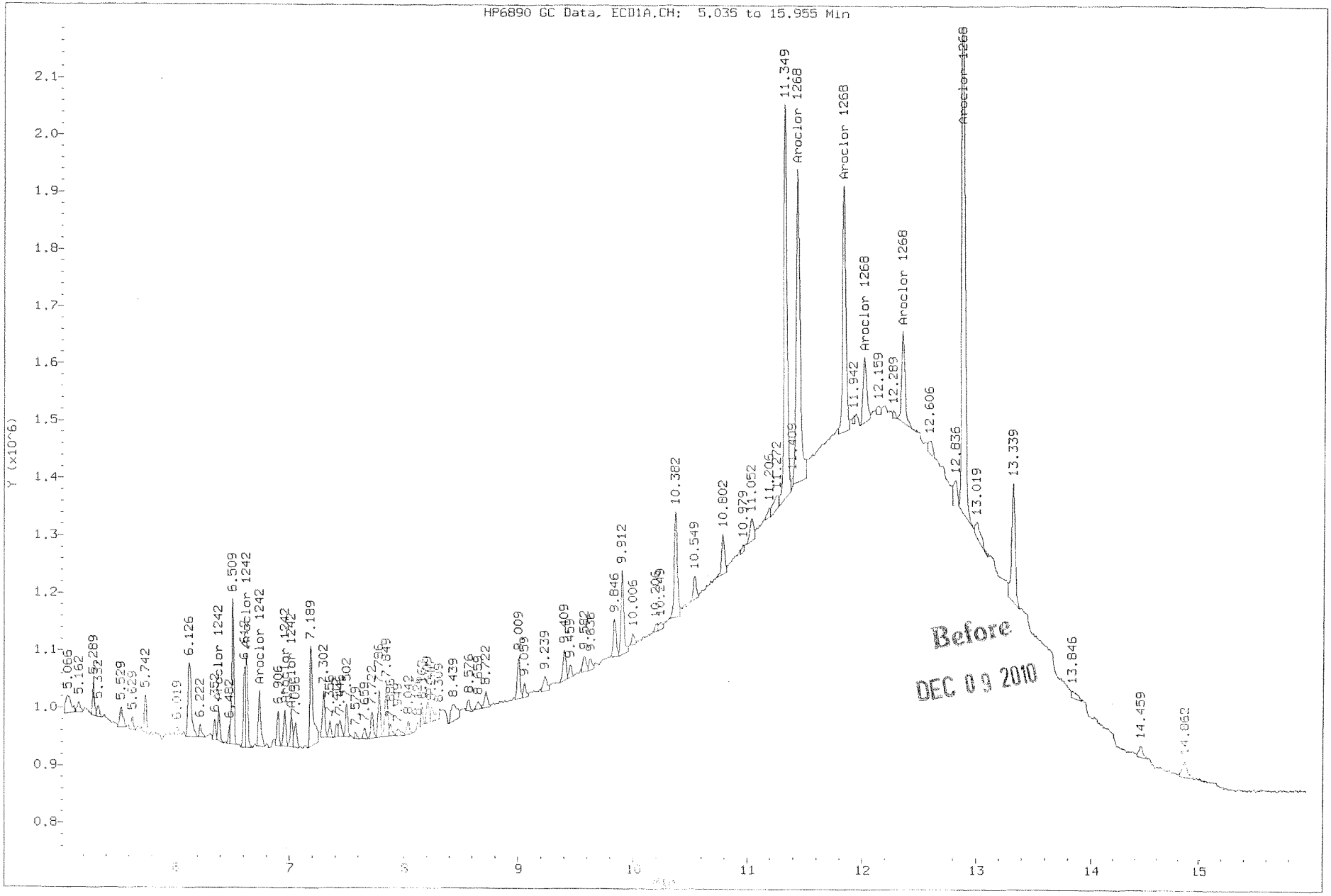
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32

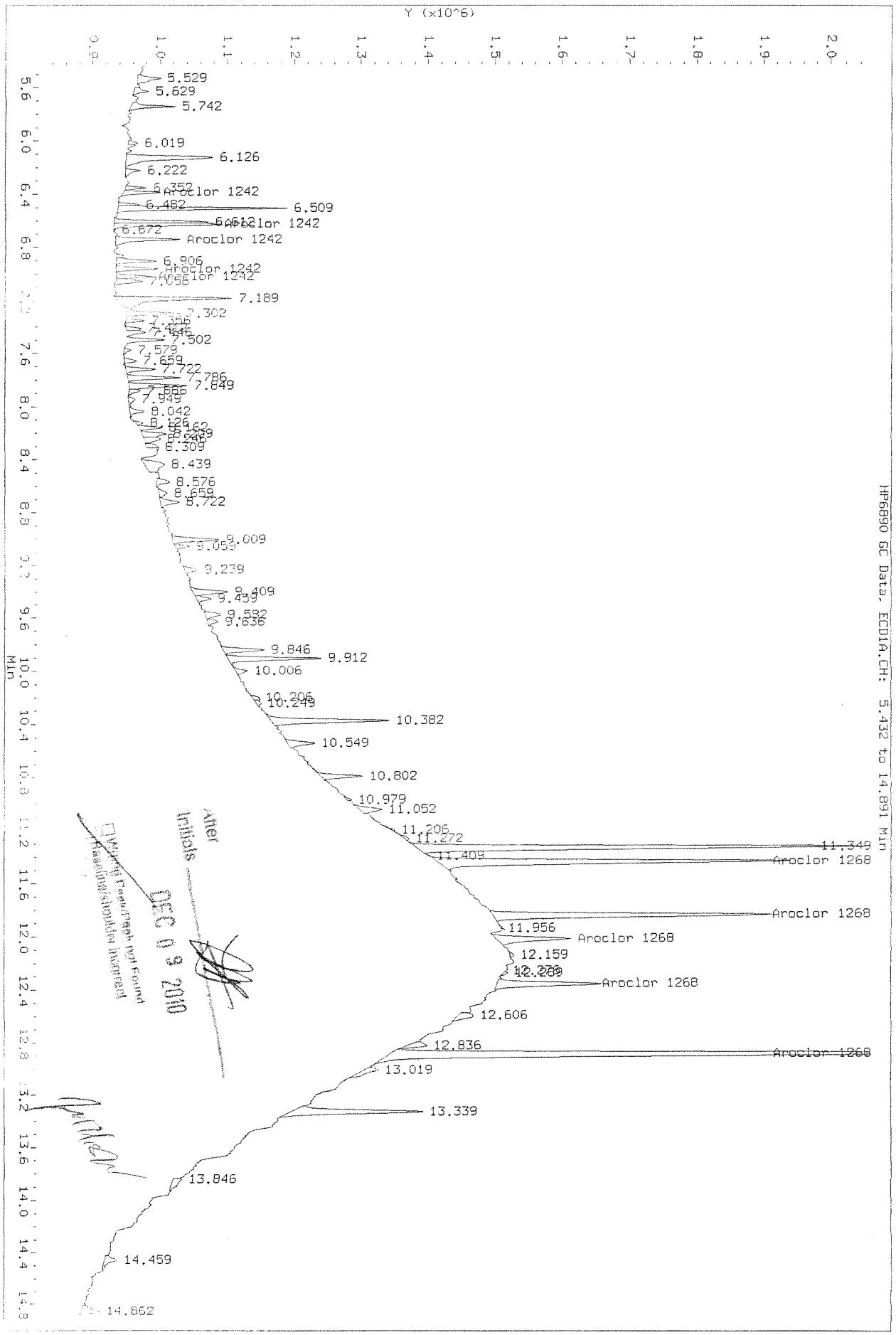


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F021.D
Date : 09-DEC-2010 04:19
Client ID:
Instrument: GC22.i
Sample Info: 1242/1268 @ 2.5ppb | PCB5-61H | KWG1006746-3
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32

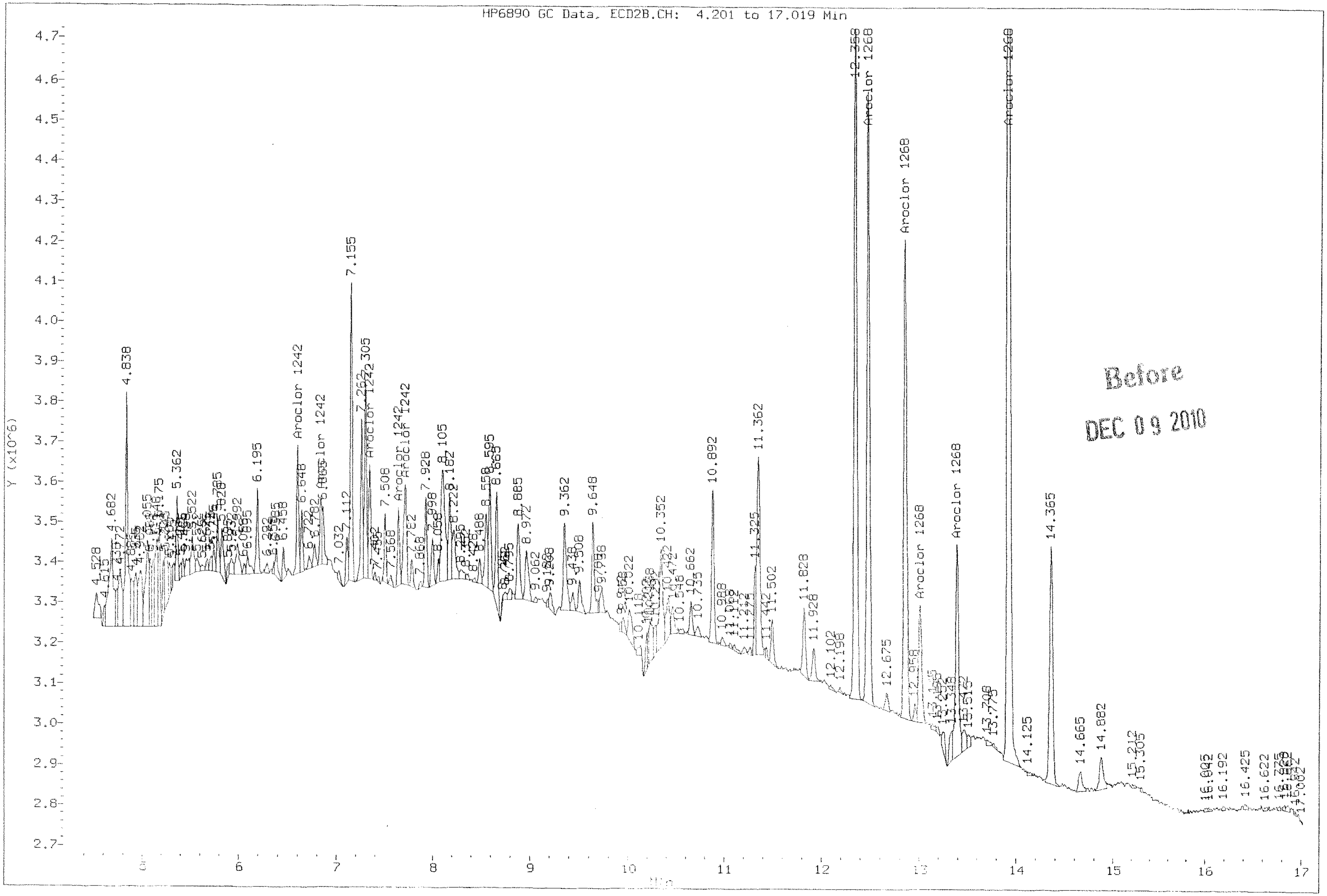


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F021.D
Injection Date: 09-DEC-2010 04:19
Instrument: GC22.i
Client Sample ID:

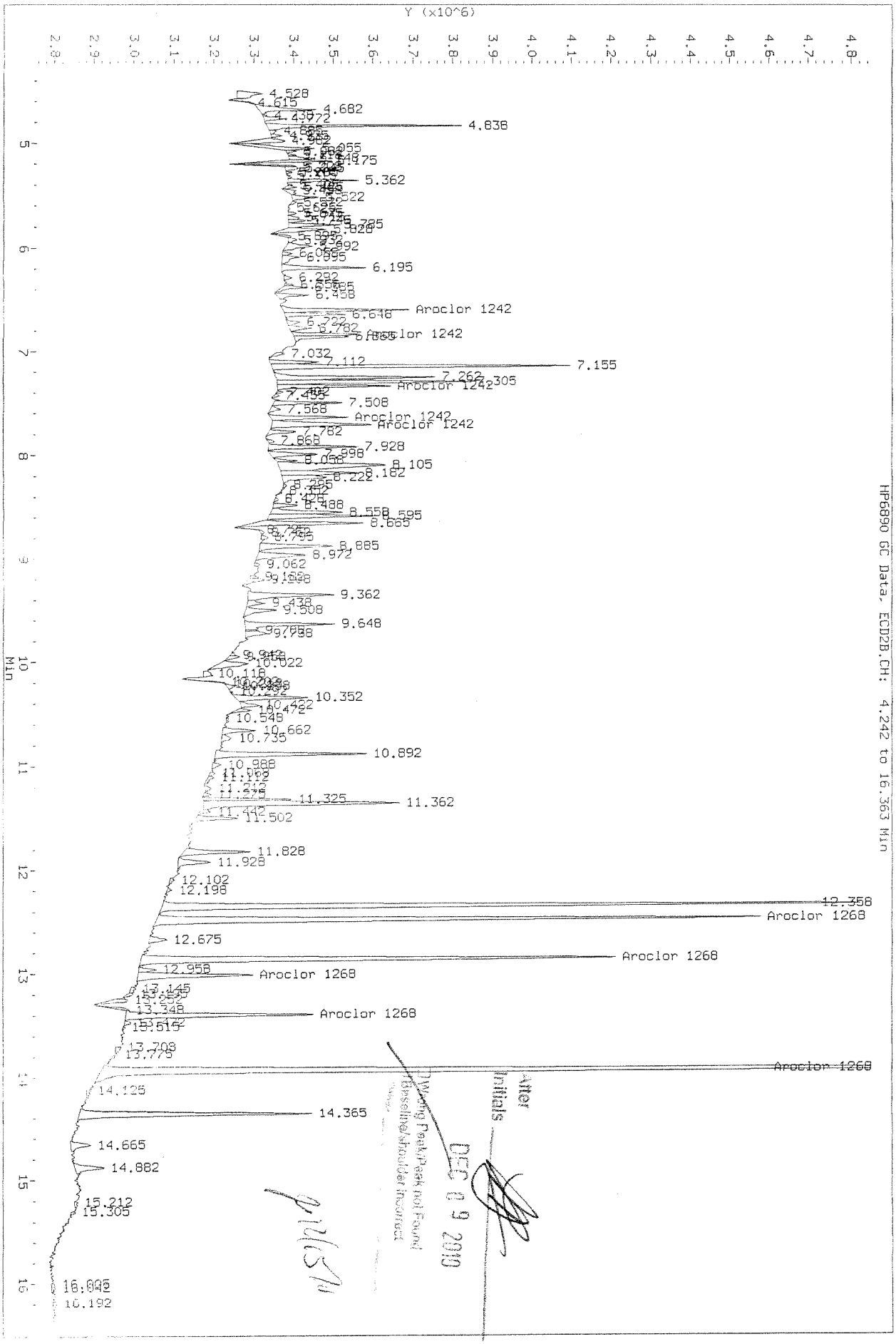



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F021.D
Injection Date: 09-DEC-2010 04:19
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECDIA.CH: 5.432 to 14.891 Min
Y (x10^6)
Min
5.529
5.629
5.742
6.019
6.126
6.222
6.352
Aroclor 1242
6.482
6.509
6.612
Aroclor 1242
6.672
Aroclor 1242
6.906
Aroclor 1242
7.056
Aroclor 1242
7.189
7.302
7.502
7.579
7.659
7.722
7.786
7.849
7.949
8.042
8.309
8.439
8.576
8.659
8.722
9.009
9.059
9.239
9.409
9.459
9.582
9.636
9.846
9.912
10.006
10.205
10.249
10.382
10.549
10.802
10.979
11.052
11.205
11.272
11.349
11.409
Aroclor 1268
Aroclor 1268
11.956
Aroclor 1268
12.159
12.269
Aroclor 1268
12.606
12.836
Aroclor 1268
13.019
13.339
13.846
14.459
14.862
After
Initials
DEC 0 8 2010

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F021.D
Injection Date: 09-DEC-2010 04:19
Instrument: GC22.i
Client Sample ID:



Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F021.D
Injection Date: 09-DEC-2010 04:19
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.242 to 16.363 Min
Y (x10^6)
Min
4.528
4.615
4.682
4.838
5.362
6.195
Aroclor 1242
6.648
Aroclor 1242
7.032
7.112
7.155
7.262
Aroclor 1242
7.508
Aroclor 1242
Aroclor 1242
7.928
8.105
8.558
8.595
8.885
8.972
9.062
9.362
9.508
9.648
10.022
10.352
10.548
10.662
10.735
10.892
10.988
11.325
11.362
11.502
11.828
11.928
12.102
12.198
12.358
Aroclor 1268
12.675
Aroclor 1268
12.958
Aroclor 1268
13.348
Aroclor 1268
13.775
14.125
14.365
14.665
14.882
15.212
15.305
16.192
Dipping Peak/Peak not Found
Baseline/shoulder incorrect
After
Initials
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F022.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F022.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F022.D
Inj Date : 09-DEC-2010 04:44
Sample Info: 1242/1268 @ 5.0ppb | PCB5-61I | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1242+1268.sub
Sub List #2 : 1242+1268.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	6.388	6.604	144367	843087	5.88	5.98	80.00- 120.00	100.00(M)
	6.628	6.841	438315	483447	5.41	5.51	313.59- 470.38	303.61(M)
	6.741	7.347	293469	936339	5.65	5.52	177.49- 266.23	203.28(M)
	6.961	7.504	195036	640285	5.27	5.82	130.78- 196.17	135.10(M)
	7.018	7.647	136637	622246	5.31	5.28	87.16- 130.73	94.65(M)
			Average of Peak Amounts =		5.50	5.62		
Aroclor 1268	11.458	12.487	2065530	6023863	5.36	5.46	80.00- 120.00	100.00(M)
	11.858	12.864	1610899	4807535	5.33	5.46	64.38- 96.57	77.99(M)
	12.035	13.017	380233	1279096	5.10	5.55	14.70- 22.05	18.41(M)
	12.375	13.401	614210	1873264	5.14	5.42	25.86- 38.79	29.74(M)
	12.901	13.934	4085933	12790792	5.14	5.37	170.49- 255.74	200.21(M)
			Average of Peak Amounts =		5.21	5.45		

QC Flag Legend

M - Compound response manually integrated.

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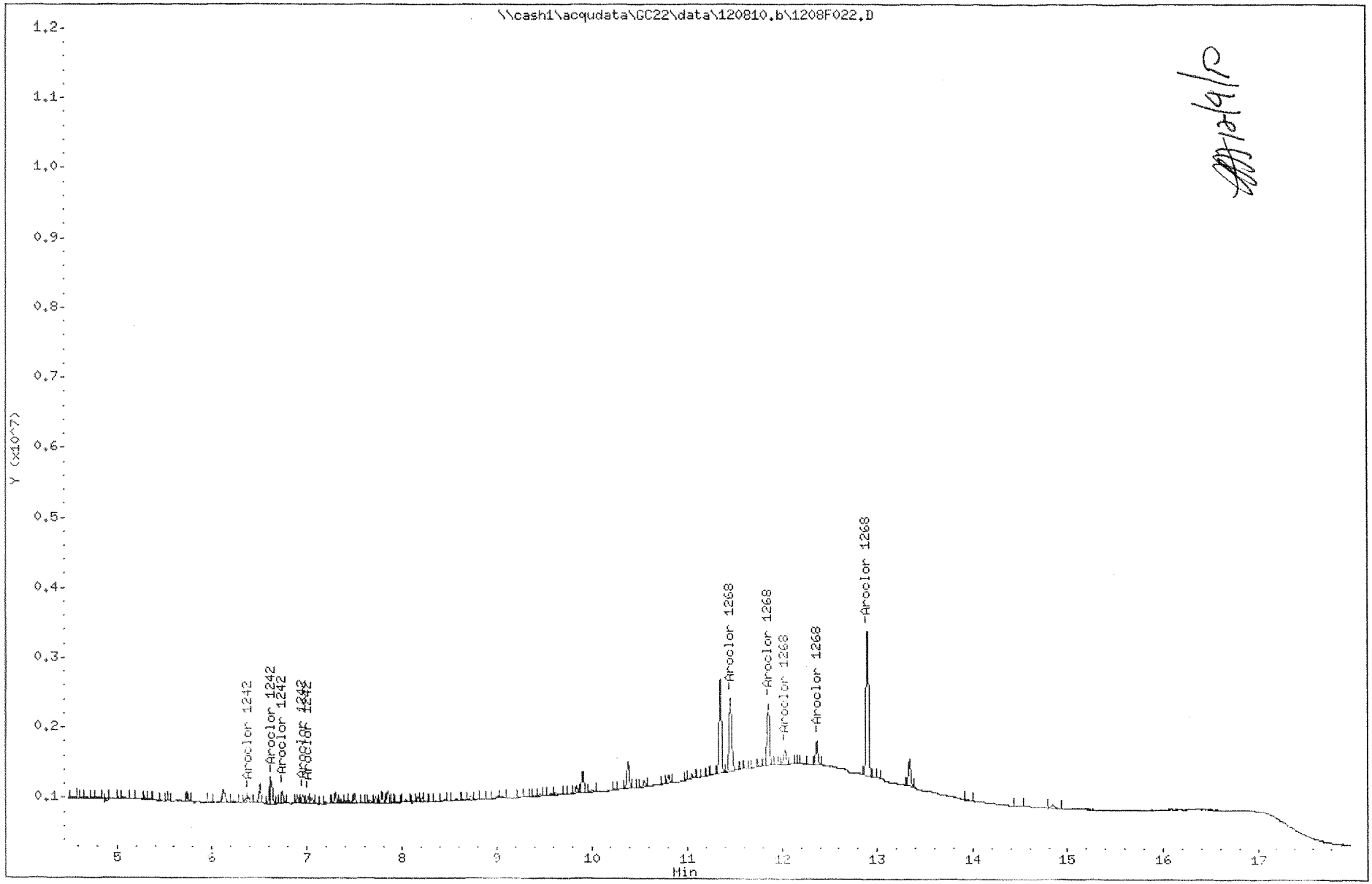
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F022.D
Date : 09-DEC-2010 04:44
Client ID:
Sample Info: 1242/1268 @ 5.0ppb | PCB5-61I | KWG1006746-3

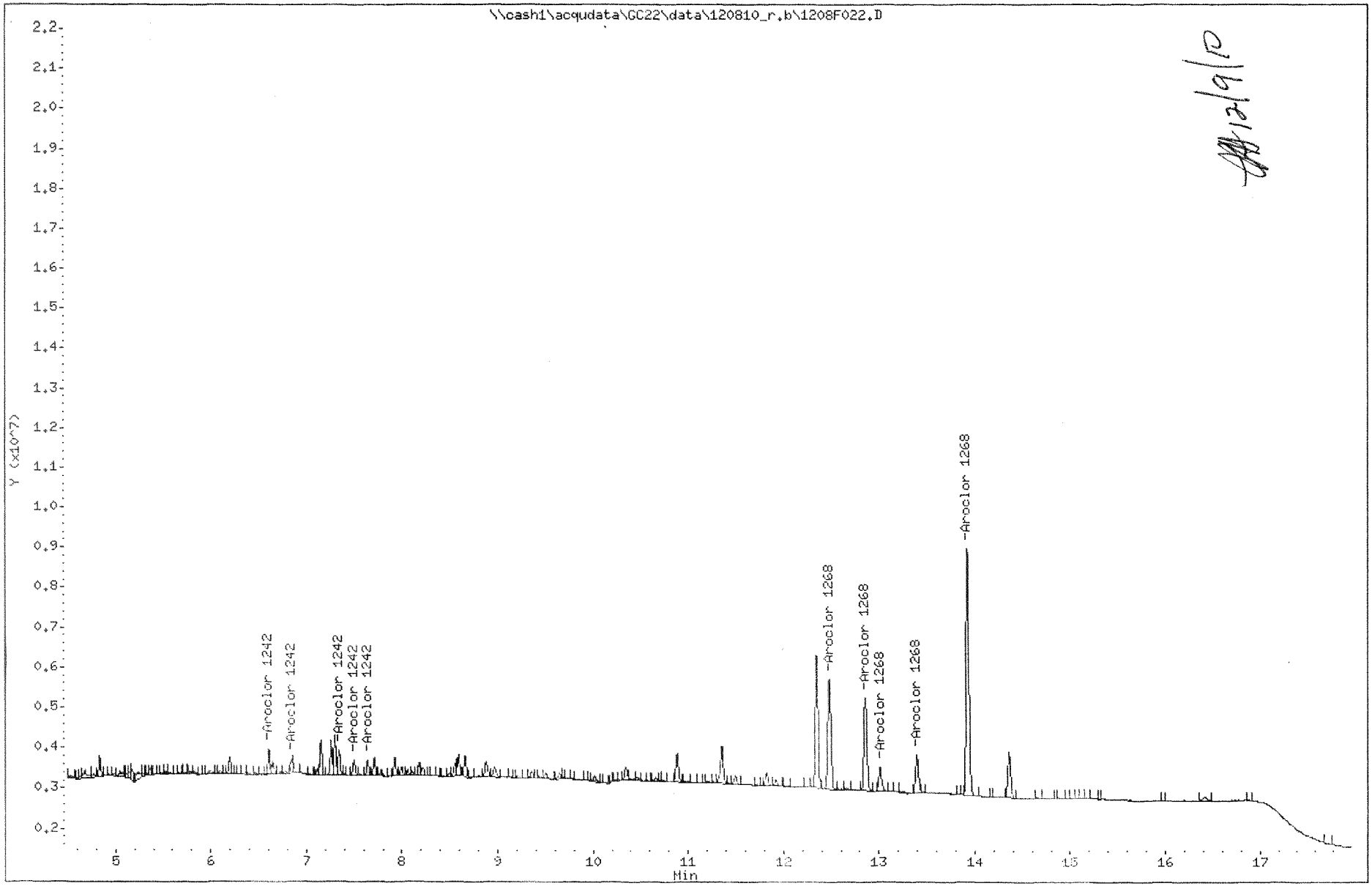
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



800

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F022.D
Date : 09-DEC-2010 04:44
Client ID:
Sample Info: 1242/1268 @ 5.0ppb | PCB5-61I | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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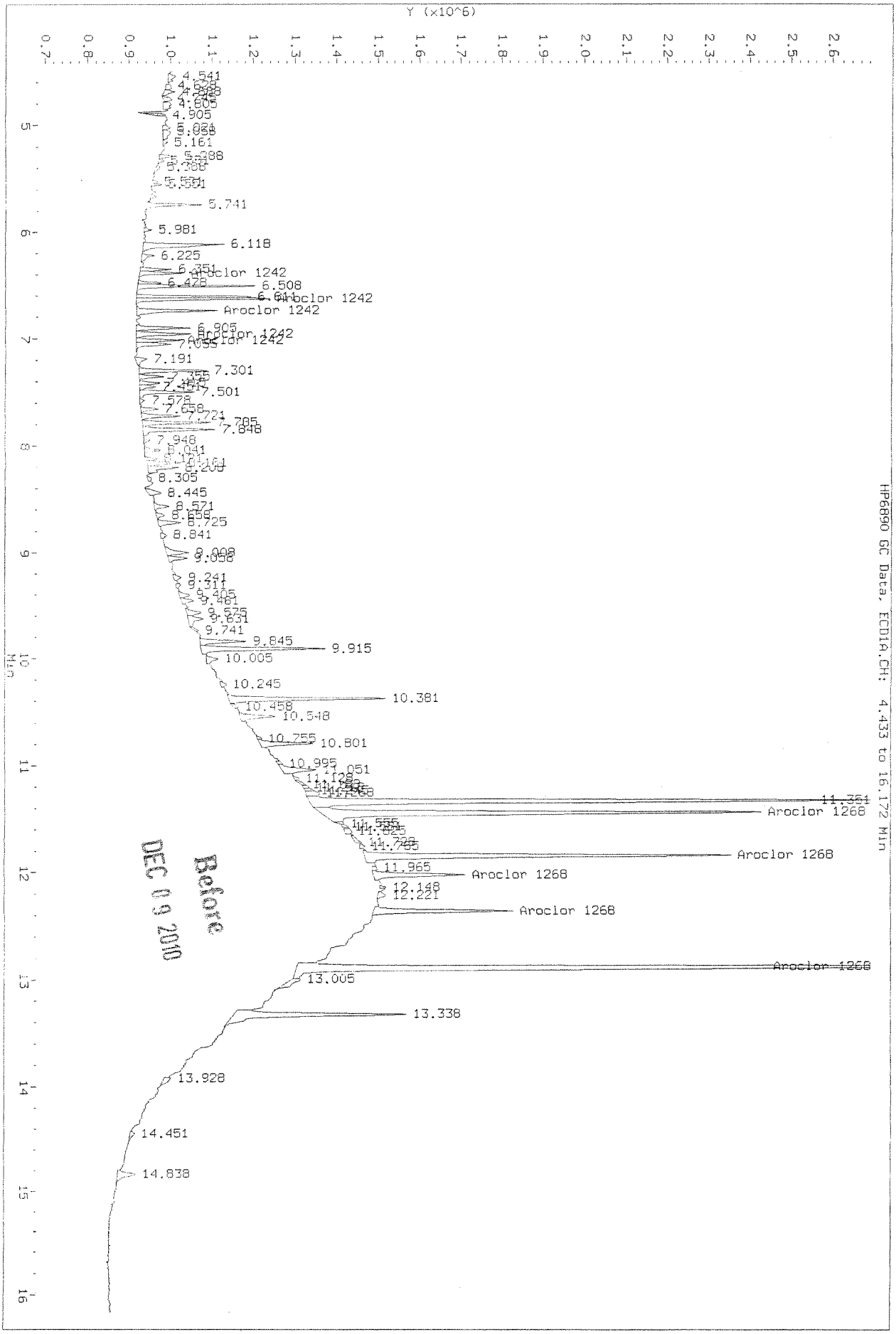
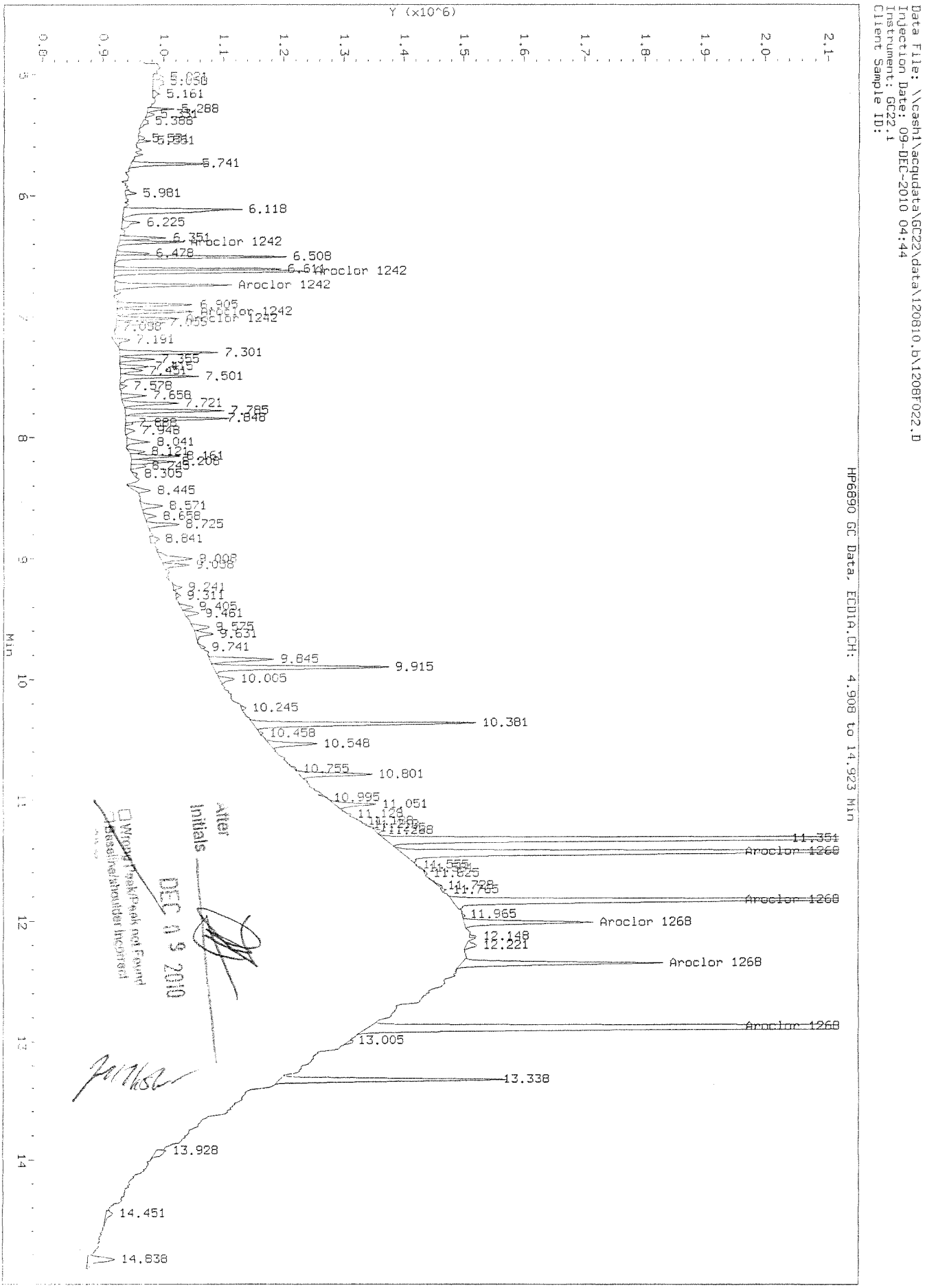
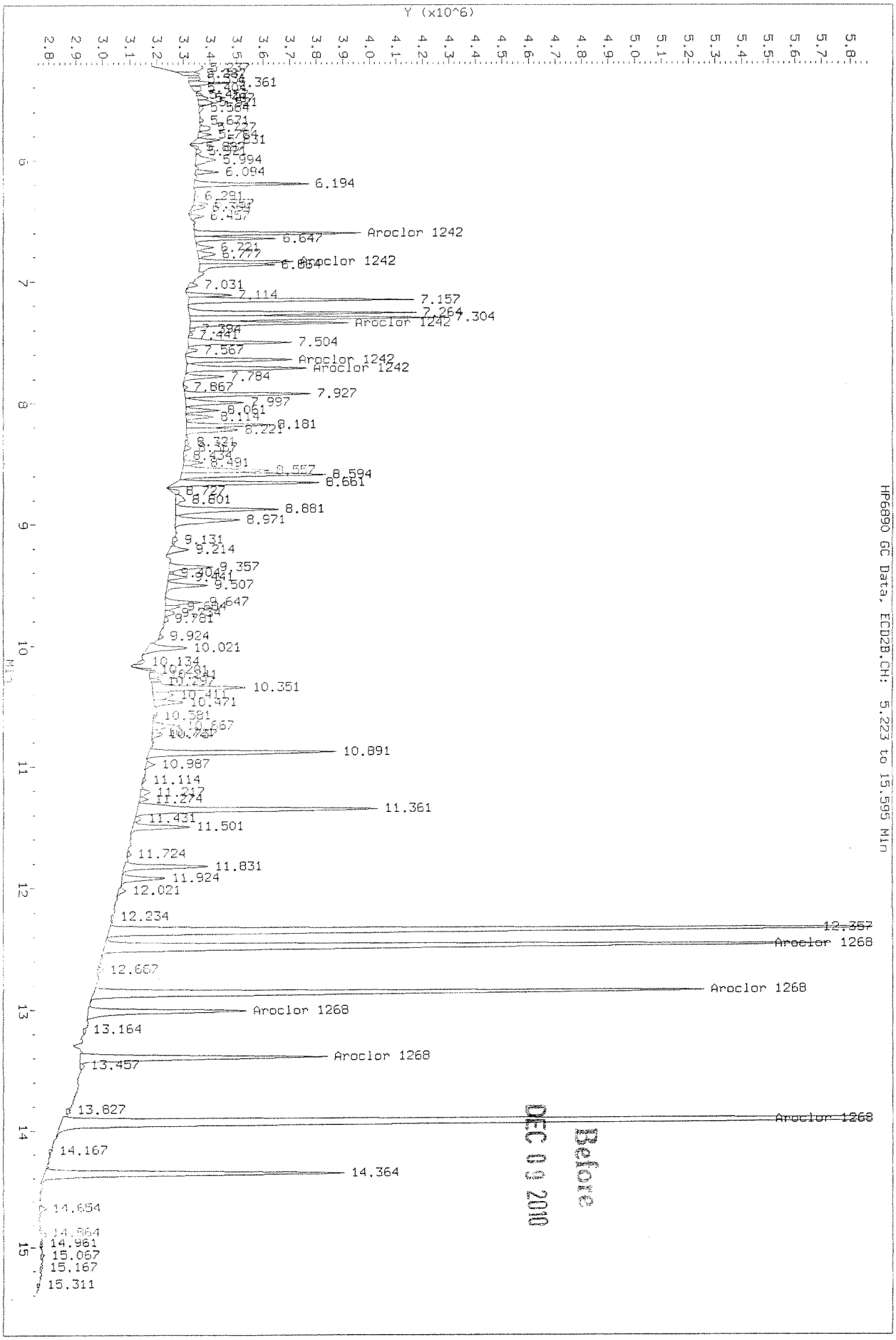
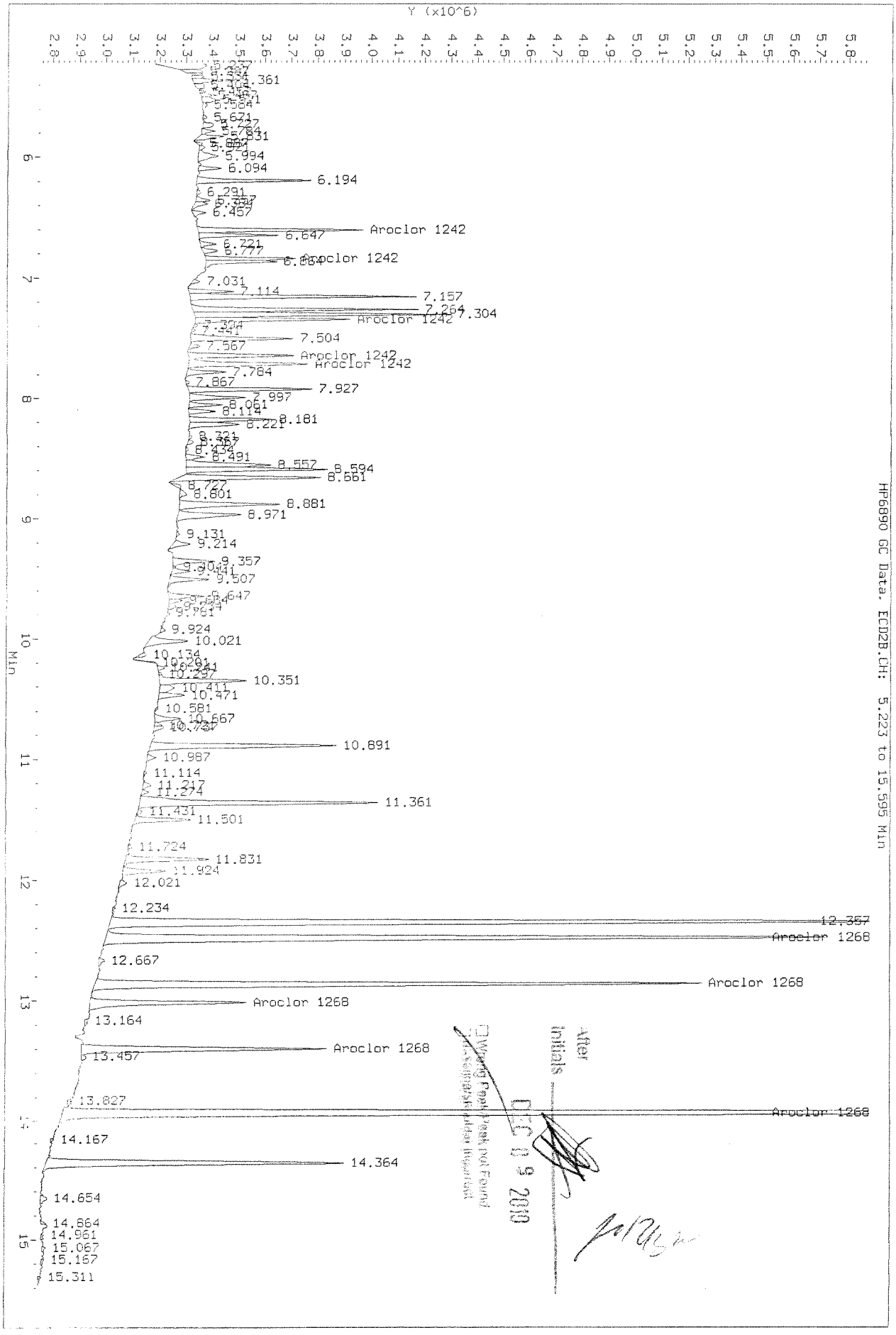

Data File: \\cash1\acqudata\GC22\data\120810.b\1208f022.D
Injection Date: 09-DEC-2010 04:44
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH; 4.433 to 16.172 Min
4.541
4.905
5.161
5.741
5.981
6.118
6.225
6.508
Aroclor 1242
Aroclor 1242
Aroclor 1242
7.191
7.301
7.501
7.848
8.305
8.445
8.725
8.841
9.241
9.405
9.741
9.845
9.915
10.005
10.245
10.381
10.458
10.548
10.755
10.801
11.351
Aroclor 1268
Aroclor 1268
11.965
Aroclor 1268
12.148
12.221
Aroclor 1268
13.005
13.338
13.928
14.451
14.838
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F022.D
Injection Date: 09-DEC-2010 04:44
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECDIA.CH: 4.908 to 14.923 Min
Y (x10^6)
Min
5.161
5.741
5.981
6.118
6.225
Aroclor 1242
6.478
6.508
Aroclor 1242
Aroclor 1242
6.905
Aroclor 1242
7.191
7.301
7.501
7.578
7.658
7.721
7.785
7.848
7.948
8.041
8.305
8.445
8.571
8.658
8.725
8.841
9.241
9.311
9.405
9.461
9.575
9.631
9.741
9.845
9.915
10.005
10.245
10.381
10.458
10.548
10.755
10.801
10.995
11.051
11.354
Aroclor 1268
11.555
11.625
11.728
11.765
Aroclor 1268
11.965
Aroclor 1268
12.148
12.221
Aroclor 1268
Aroclor 1268
13.005
13.338
13.928
14.451
14.838
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other
Initials
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F022.D
Injection Date: 09-DEC-2010 04:44
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 5.223 to 15.595 Min
Y (x10^6)
Min
6.194
Aroclor 1242
6.647
Aroclor 1242
7.031
7.157
7.304
Aroclor 1242
7.504
Aroclor 1242
Aroclor 1242
7.784
7.927
8.181
8.594
8.661
8.881
8.971
9.357
9.507
9.924
10.021
10.351
10.891
10.987
11.114
11.361
11.501
11.724
11.831
11.924
12.021
12.234
12.357
Aroclor 1268
12.667
Aroclor 1268
Aroclor 1268
13.164
Aroclor 1268
13.457
13.827
Aroclor 1268
14.167
14.364
14.654
14.961
15.067
15.167
15.311
DEC 09 2010
Peaks


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F022.D
Injection Date: 09-DEC-2010 04:44
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 5.223 to 15.595 Min
Y (x10^6)
Min
Aroclor 1242
Aroclor 1268
6.361
6.094
6.194
6.647
7.031
7.114
7.157
7.264
7.304
7.504
7.567
7.784
7.867
7.927
7.997
8.181
8.557
8.594
8.661
8.881
8.971
9.131
9.214
9.357
9.507
9.924
10.021
10.351
10.891
10.987
11.114
11.361
11.501
11.724
11.831
12.021
12.234
12.667
13.164
13.457
13.827
14.167
14.364
14.654
14.864
14.961
15.067
15.167
15.311
After Initials
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F023.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F023.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F023.D
Inj Date : 09-DEC-2010 05:08
Sample Info: 1242/1268 @ 50ppb | PCB5-61J | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1242+1268.sub
Sub List #2 : 1242+1268.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	6.391	6.610	1217880	7002356	49.6	49.7	80.00- 120.00	100.00
	6.634	6.844	4014778	4645029	49.6	52.9	313.59- 470.38	329.65
	6.744	7.350	2599042	8943478	50.1	52.7	177.49- 266.23	213.41
	6.964	7.507	1981638	7231410	53.6	65.8	130.78- 196.17	162.71
	7.021	7.647	1337052	5721766	52.0	48.5	87.16- 130.73	109.79
			Average of Peak Amounts =		51.0	53.9		
Aroclor 1268	11.461	12.490	18249889	54640003	47.5	49.5	80.00- 120.00	100.00(M)
	11.861	12.867	14712586	43716219	48.8	49.6	64.38- 96.57	80.61(M)
	12.038	13.020	3574516	11739231	48.0	51.0	14.70- 22.05	19.42(M)
	12.374	13.400	5741331	17408125	48.4	50.4	25.86- 38.79	32.84(M)
	12.904	13.937	39045029	117101504	49.2	49.2	170.49- 255.74	214.92(M)
			Average of Peak Amounts =		48.4	49.9		

QC Flag Legend

M - Compound response manually integrated.

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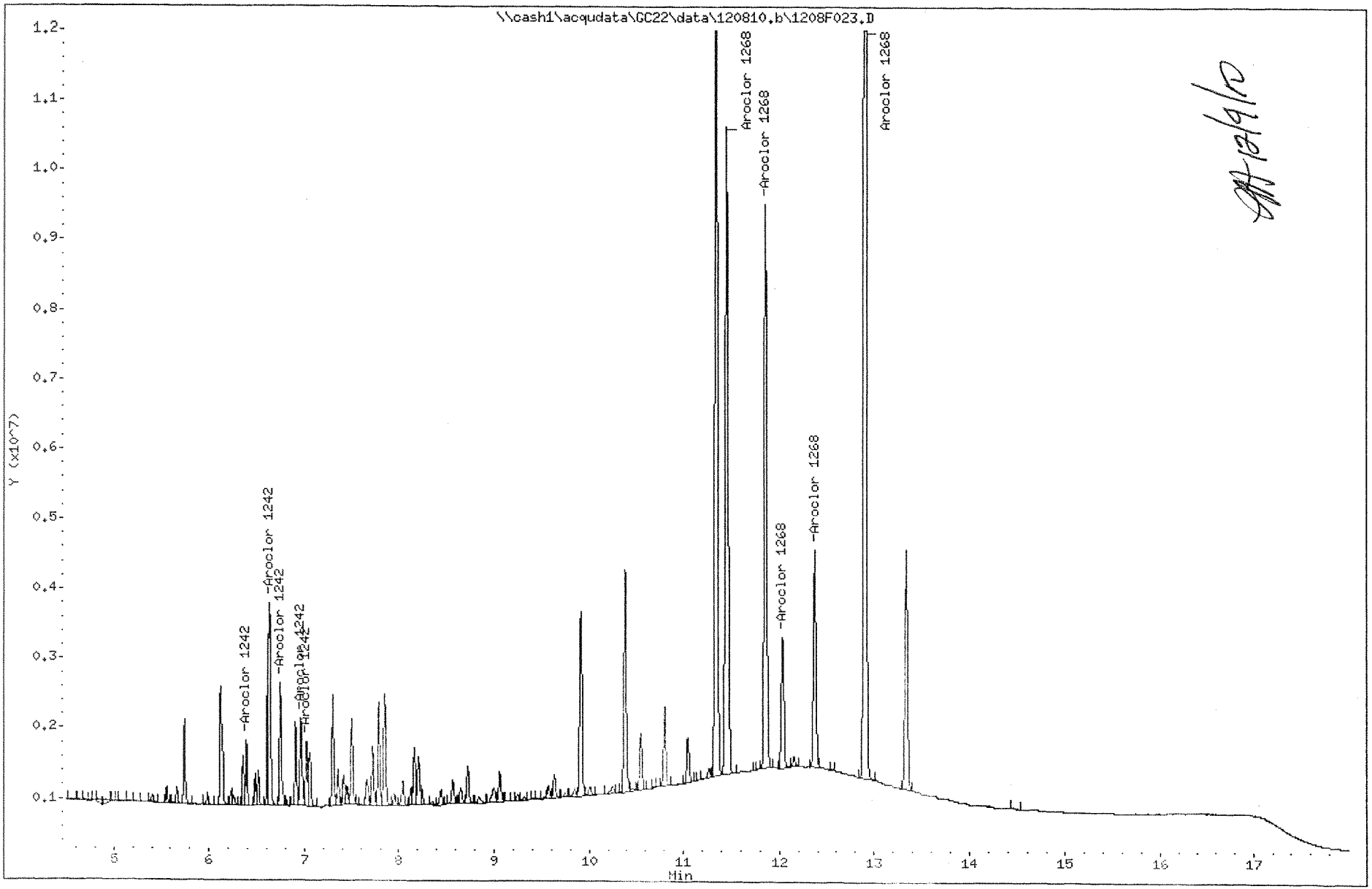
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F023.D
Date : 09-DEC-2010 05:08
Client ID:
Sample Info: 1242/1268 @ 50ppb | PCB5-61J | KWG1006746-3

Instrument: GC22.i

Operator: LHarris
Column diameter: 0.32

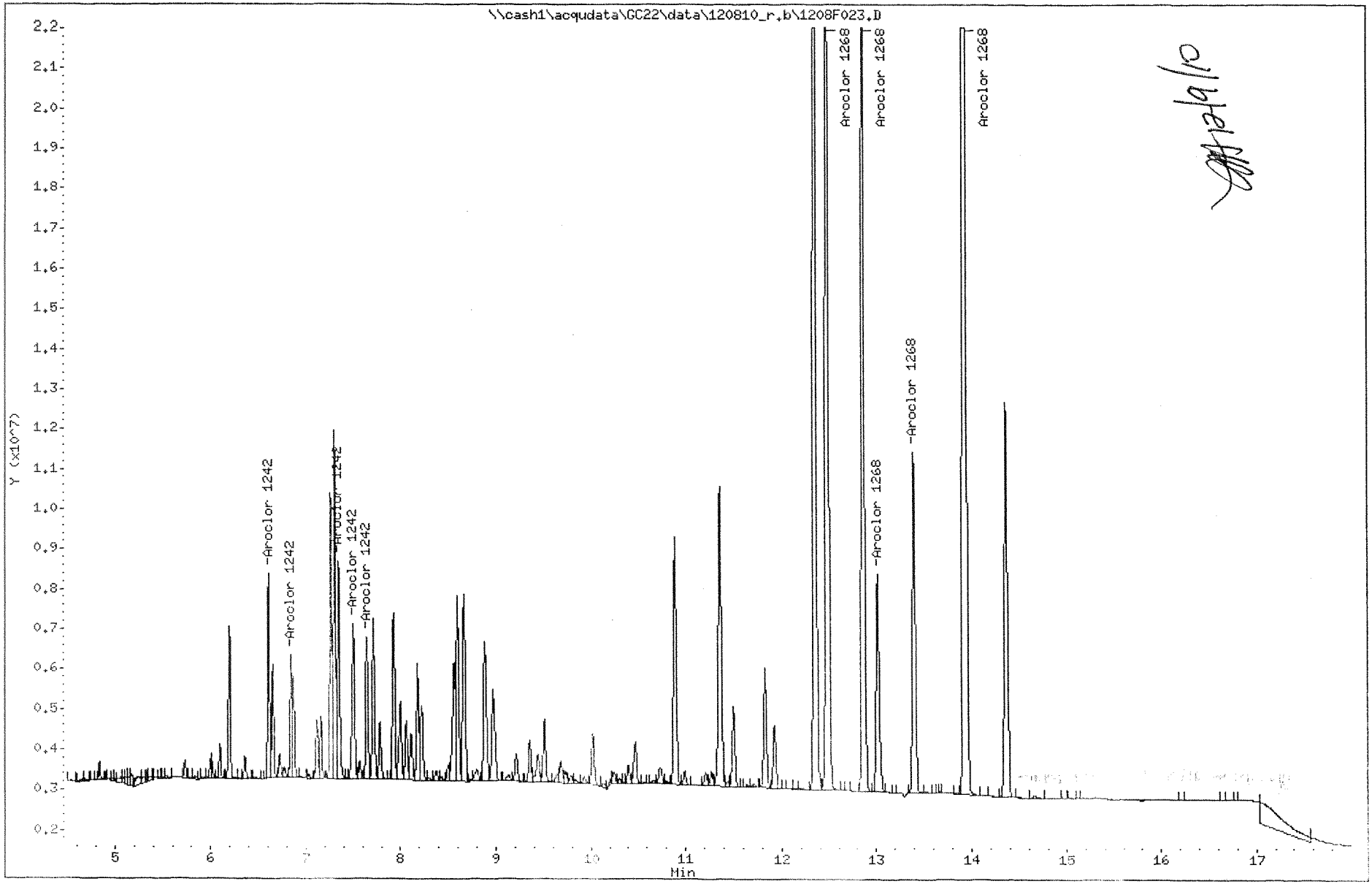
Column phase: DB-35MS

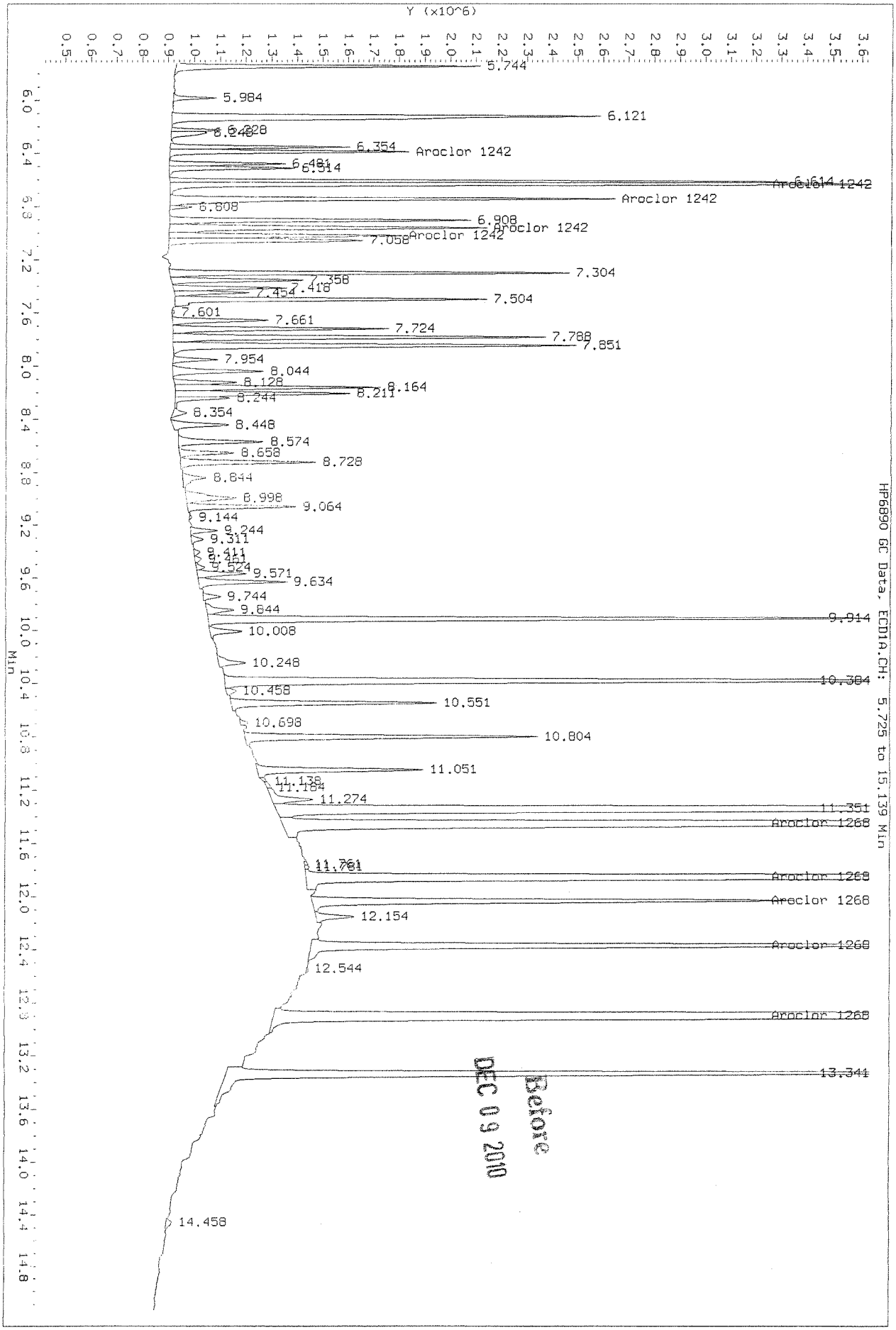


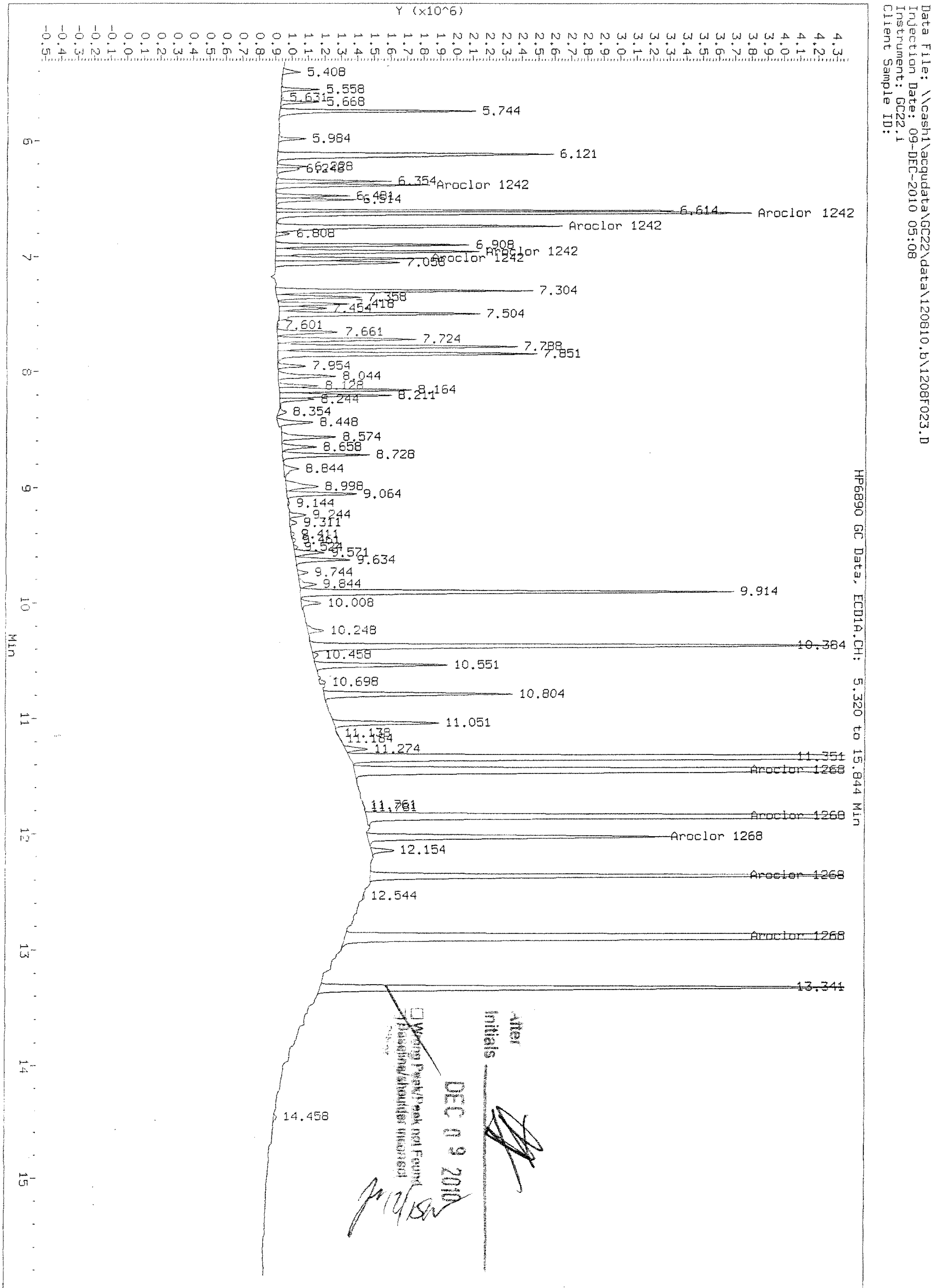
12/9/10

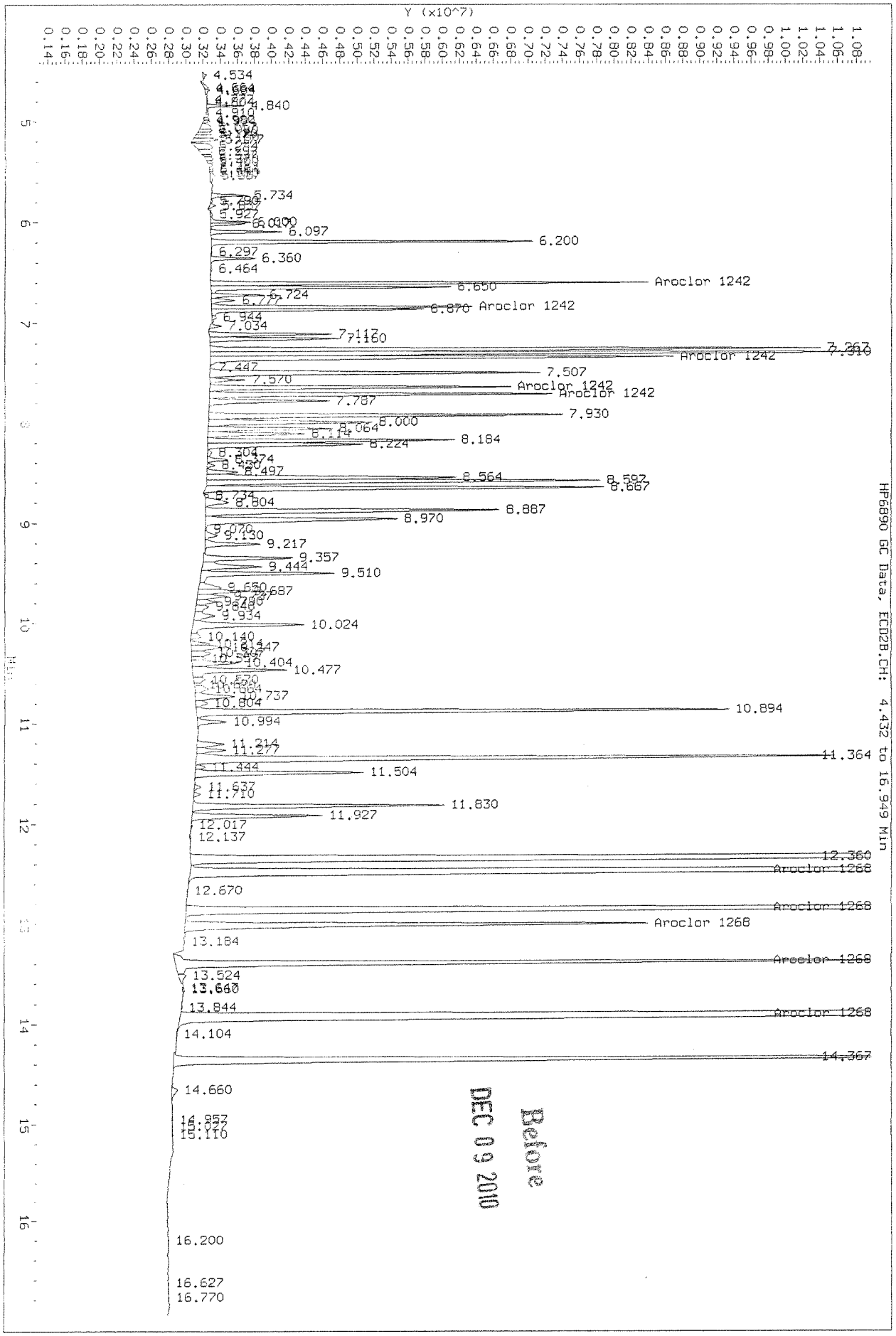
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F023.D
Date : 09-DEC-2010 05:08
Client ID:
Sample Info: 1242/1268 @ 50ppb | PCB5-61J | KWG1006746-3

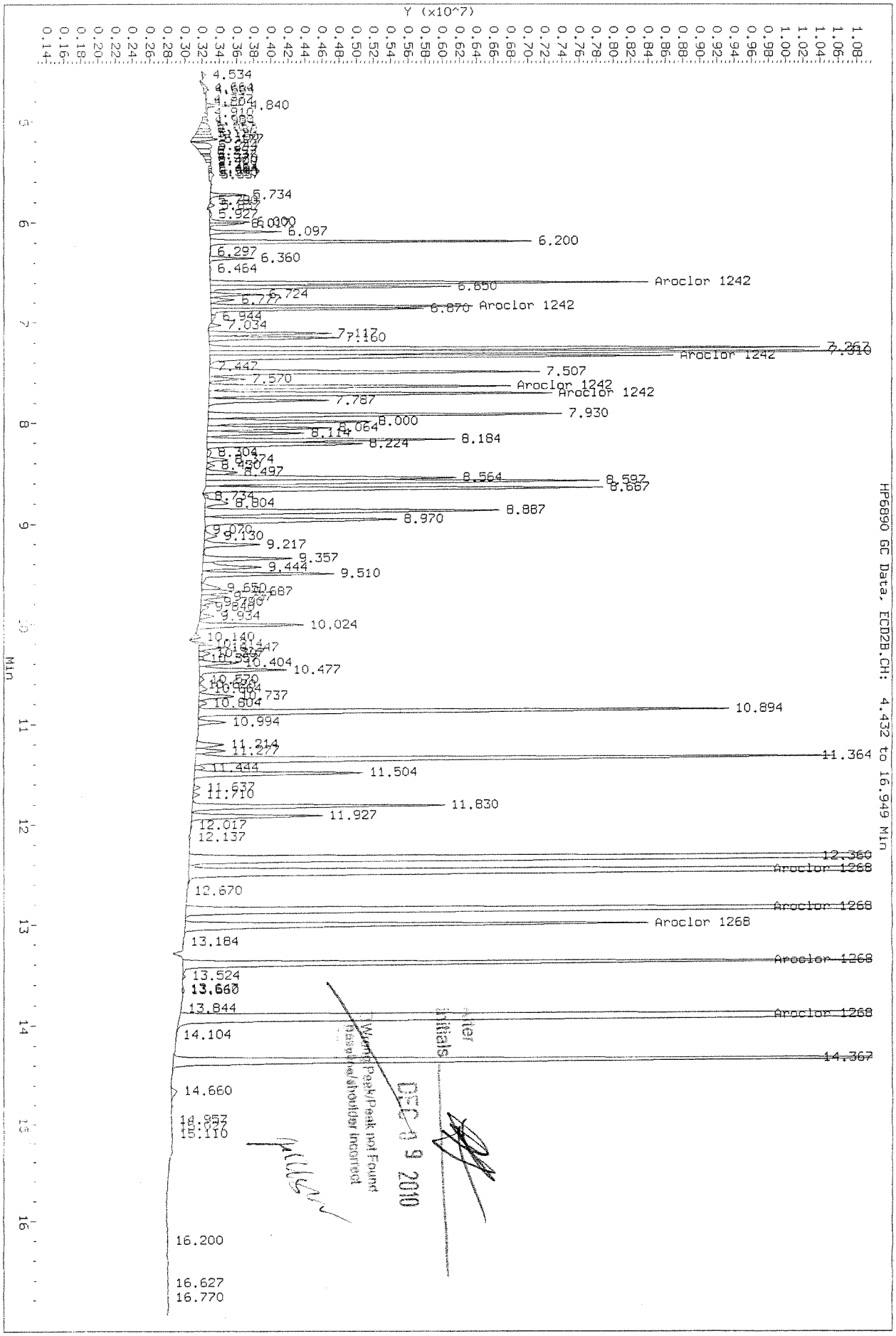
Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32




Data File: \\cash1\acqudata\GC22\data\120810.b\1208f023.D
Injection Date: 09-DEC-2010 05:08
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 5.725 to 15.139 Min
Y (x10^6)
Min
5.744
5.984
6.121
6.354
Aroclor 1242
6.481
6.514
6.614
Aroclor 1242
Aroclor 1242
6.808
6.908
Aroclor 1242
Aroclor 1242
7.058
7.304
7.358
7.418
7.454
7.504
7.601
7.661
7.724
7.788
7.851
7.954
8.044
8.128
8.164
8.211
8.244
8.354
8.448
8.574
8.658
8.728
8.844
8.998
9.064
9.144
9.244
9.311
9.411
9.524
9.571
9.634
9.744
9.844
9.914
10.008
10.248
10.384
10.458
10.551
10.698
10.804
11.051
11.138
11.184
11.274
11.351
Aroclor 1268
11.761
Aroclor 1268
Aroclor 1268
12.154
Aroclor 1268
12.544
Aroclor 1268
13.341
14.458
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F023.D
Injection Date: 09-DEC-2010 05:08
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 5.320 to 15.844 Min
Y (x10^6)
Min
DEC 0 9 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1209F023.D
Injection Date: 09-DEC-2010 05:08
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.432 to 16.949 Min
Y (x10^7)
Min
4.534
4.664
4.840
5.734
6.097
6.200
6.297
6.360
6.464
6.650
Aroclor 1242
6.724
6.870
Aroclor 1242
6.944
7.034
7.117
7.160
7.267
7.910
Aroclor 1242
7.442
7.507
7.570
Aroclor 1242
Aroclor 1242
7.787
7.930
8.000
8.064
8.184
8.224
8.374
8.497
8.564
8.592
8.667
8.804
8.887
8.970
9.130
9.217
9.357
9.444
9.510
9.650
9.687
9.934
10.024
10.140
10.404
10.477
10.737
10.804
10.894
10.994
11.214
11.277
11.364
11.444
11.504
11.637
11.710
11.830
11.927
12.017
12.137
12.360
Aroclor 1268
12.670
Aroclor 1268
Aroclor 1268
13.184
Aroclor 1268
13.524
13.660
13.844
Aroclor 1268
14.104
14.367
14.660
14.857
15.110
16.200
16.627
16.770
Before
DEC 09 2010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Injection Date: 09-DEC-2010 05:08
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.432 to 16.949 Min
Y (x10^7)
Min
4.534
4.664
4.840
5.734
6.097
6.200
6.297
6.360
6.484
6.650
Aroclor 1242
6.724
6.870
Aroclor 1242
6.944
7.034
7.160
7.267
7.310
Aroclor 1242
7.447
7.507
7.570
Aroclor 1242
Aroclor 1242
7.787
7.930
8.000
8.064
8.184
8.224
8.304
8.564
8.597
8.687
8.734
8.804
8.887
8.970
9.130
9.217
9.357
9.444
9.510
9.650
9.687
9.934
10.024
10.140
10.404
10.477
10.604
10.737
10.894
10.994
11.214
11.277
11.364
11.444
11.504
11.637
11.710
11.830
11.927
12.017
12.137
12.360
Aroclor 1268
12.670
Aroclor 1268
Aroclor 1268
13.184
Aroclor 1268
13.524
13.660
13.844
Aroclor 1268
14.104
14.367
14.660
15.057
15.110
16.200
16.627
16.770
Peak/Peak not Found
Baseline/shoulder incorrect
Initials
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F024.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F024.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F024.D
Inj Date : 09-DEC-2010 05:33
Sample Info: 1242/1268 @ 100ppb | PCB5-61K | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1242+1268.sub
Sub List #2 : 1242+1268.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	6.389	6.608	2268197	12998645	92.4	92.2	80.00- 120.00	100.00(M)
	6.632	6.845	7719935	8303225	94.4	94.6	313.59- 470.38	340.36(M)
	6.745	7.348	4999526	16437522	96.2	96.8	177.49- 266.23	220.42(M)
	6.962	7.508	3803257	13470449	103	117	130.78- 196.17	167.68(M)
	7.022	7.648	2615095	10256593	101	89.2	87.16- 130.73	115.29(M)
			Average of Peak Amounts =		97.4	98.0		
Aroclor 1268	11.459	12.488	36060136	100967832	93.9	91.5	80.00- 120.00	100.00(M)
	11.859	12.868	28974532	80636738	96.2	91.6	64.38- 96.57	80.35(M)
	12.035	13.018	6819211	21491122	91.6	93.3	14.70- 22.05	18.91(M)
	12.375	13.401	11349817	32080672	95.9	92.8	25.86- 38.79	31.47(M)
	12.905	13.935	77704283	217087253	98.0	91.2	170.49- 255.74	217.25(M)
			Average of Peak Amounts =		95.1	92.1		

QC Flag Legend

M - Compound response manually integrated.

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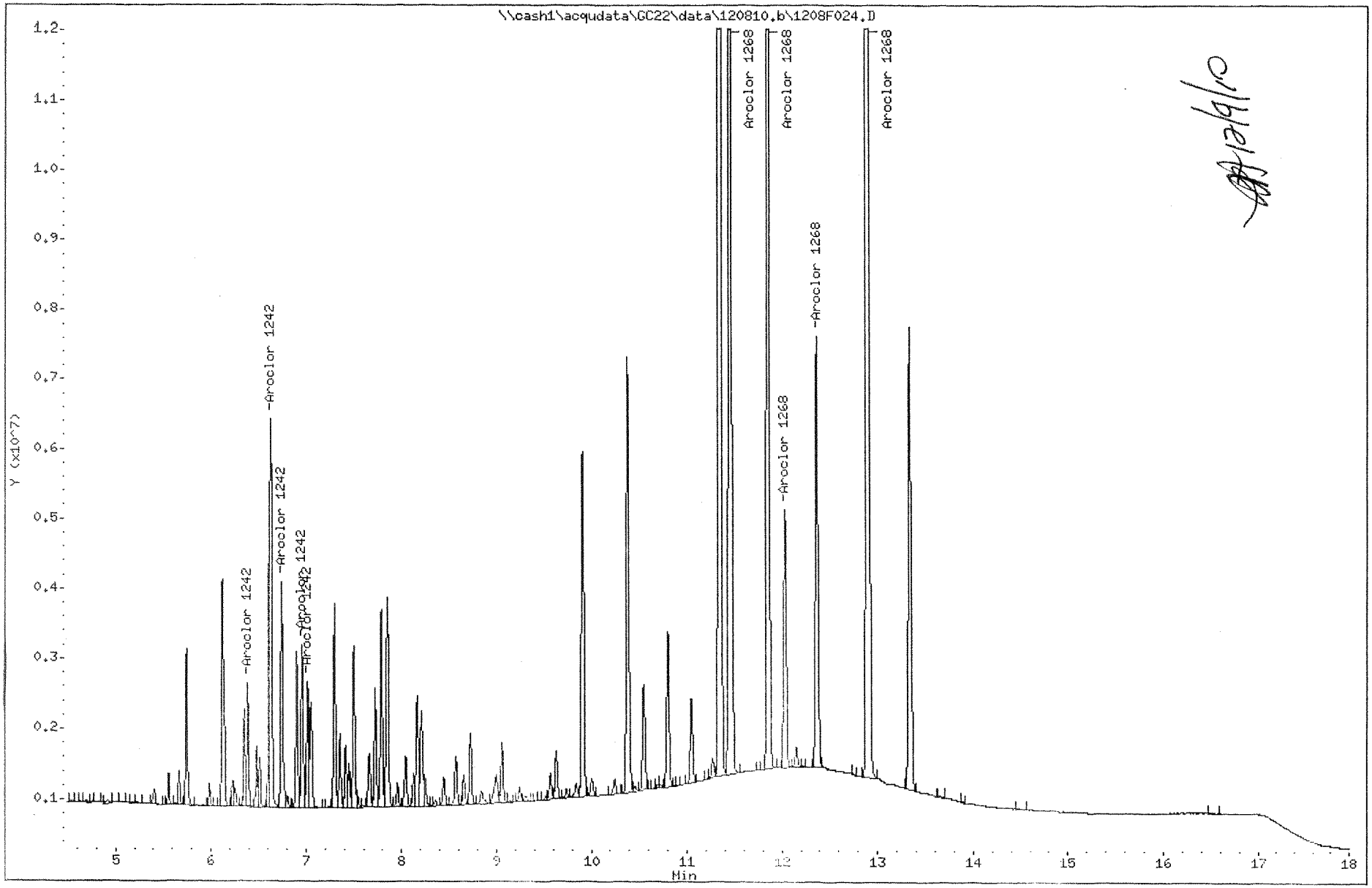
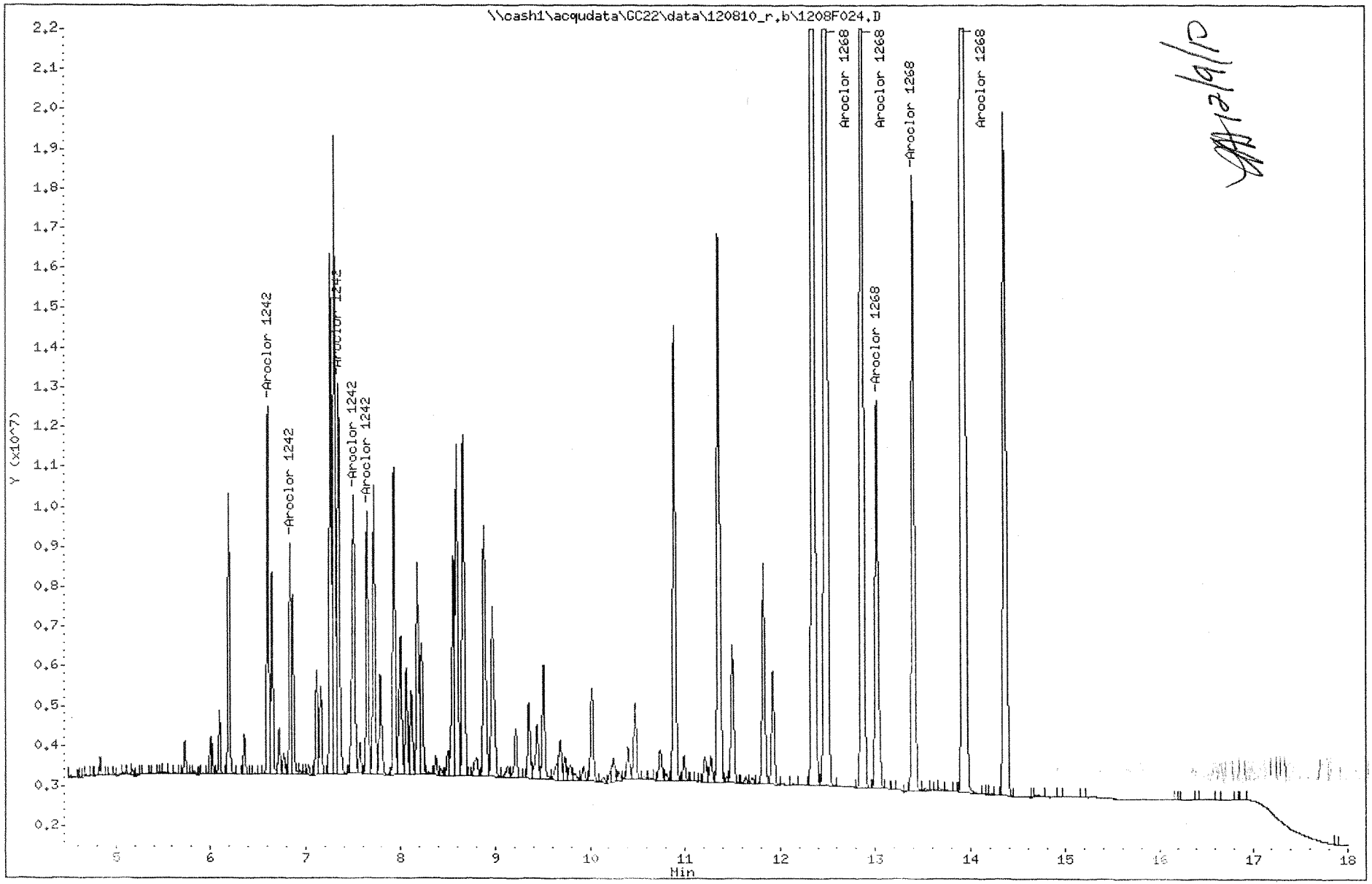
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F024.D
Date : 09-DEC-2010 05:33
Client ID:
Sample Info: 1242/1268 @ 100ppb | PCB5-61K | KWG1006746-3

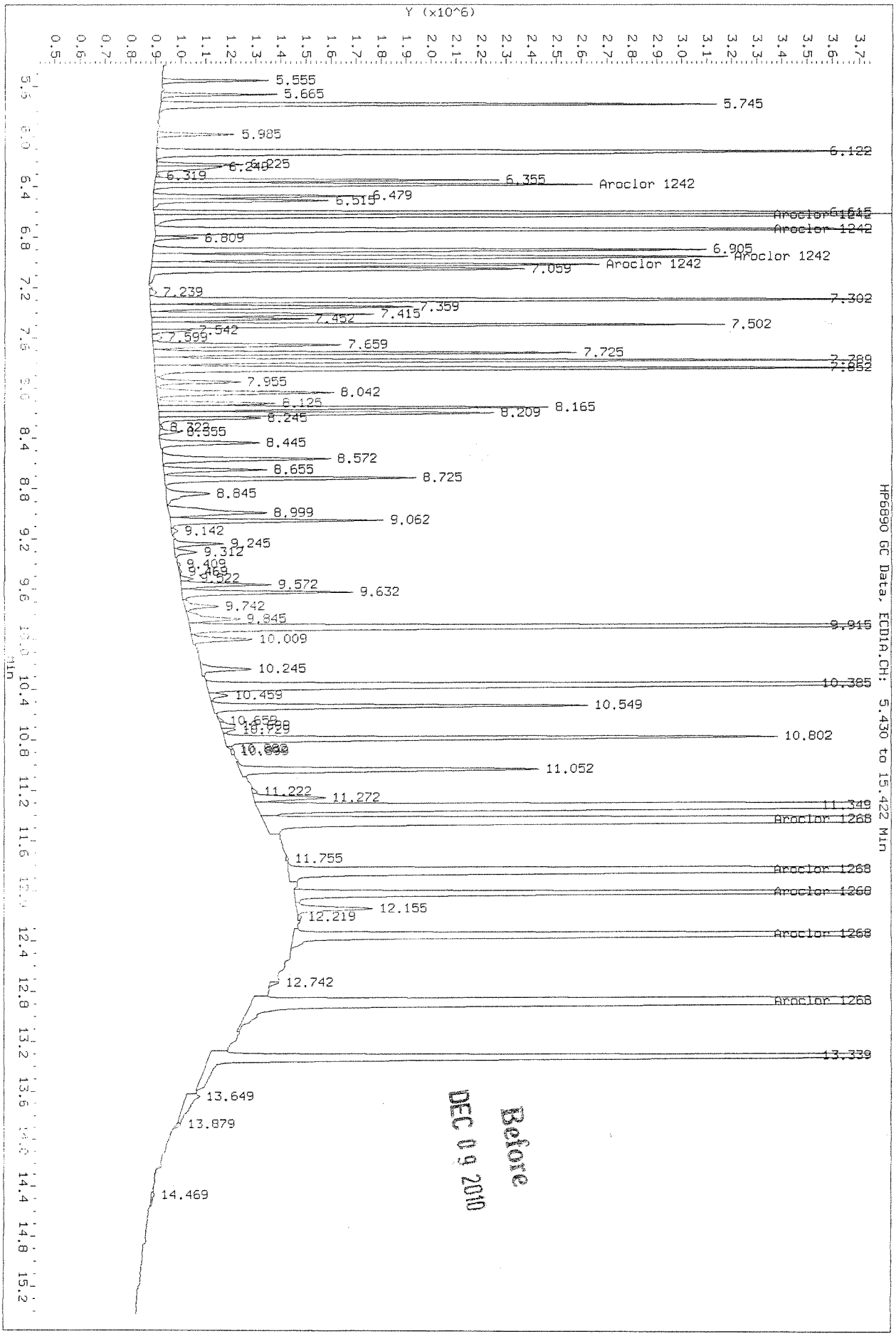
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32

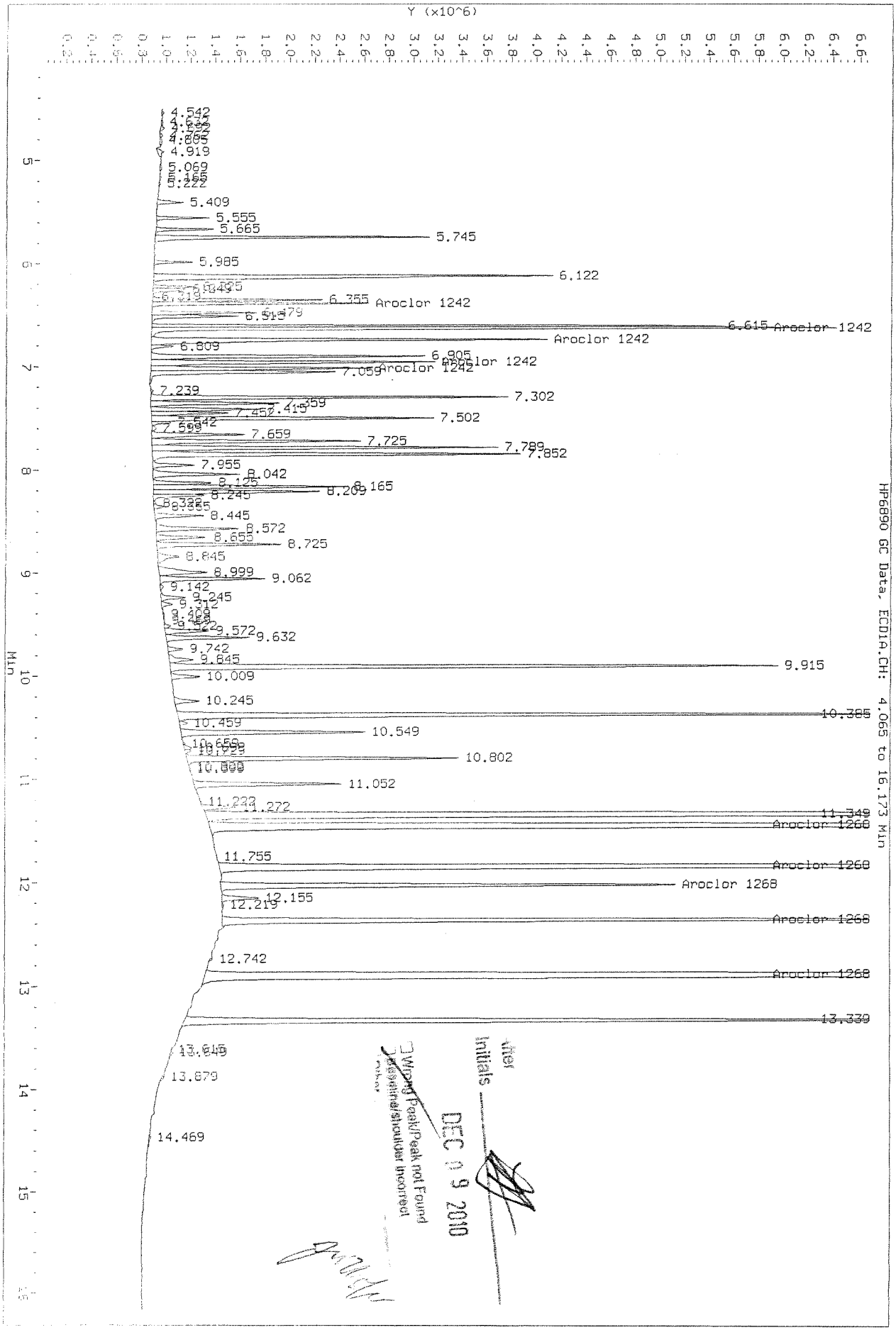


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F024.D
Date : 09-DEC-2010 05:33
Client ID:
Sample Info: 1242/1268 @ 100ppb | PCB5-61K | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32




Y (x10^6)
Min
5.555
5.665
5.745
5.985
6.122
6.319
6.355
Aroclor 1242
6.515
6.479
Aroclor 1242
Aroclor 1242
6.809
6.905
Aroclor 1242
Aroclor 1242
7.059
7.239
7.302
7.359
7.415
7.452
7.502
7.542
7.599
7.659
7.725
7.955
8.042
8.125
8.165
8.209
8.245
8.445
8.572
8.655
8.725
8.845
8.999
9.062
9.142
9.245
9.312
9.572
9.632
9.742
9.845
9.915
10.009
10.245
10.385
10.459
10.549
10.802
11.052
11.222
11.272
11.349
Aroclor 1268
11.755
Aroclor 1268
Aroclor 1268
12.155
12.219
Aroclor 1268
12.742
Aroclor 1268
13.339
13.649
13.879
14.469
Before
DEC 09 2010
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F024.D
Injection Date: 09-DEC-2010 05:33
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 5.430 to 15.422 Min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Injection Date: 09-DEC-2010 05:33
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.065 to 16.173 Min
Y (x10^6)
Min
4.542
5.409
5.555
5.665
5.745
5.985
6.122
6.355 Aroclor 1242
6.615 Aroclor 1242
Aroclor 1242
6.809
6.905
Aroclor 1242
7.059 Aroclor 1242
7.239
7.302
7.502
7.659
7.725
7.789
7.852
7.955
8.042
8.165
8.445
8.572
8.725
8.845
8.999
9.062
9.572
9.632
9.742
9.915
10.009
10.245
10.385
10.459
10.549
10.802
11.052
11.272
11.349
Aroclor 1268
11.755
Aroclor 1268
Aroclor 1268
12.155
12.219
Aroclor 1268
12.742
Aroclor 1268
13.339
13.645
13.879
14.469
Wrong Peak/Peak not Found
Designation/Location Incorrect
Other
Initials
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F025.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F025.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F025.D
Inj Date : 09-DEC-2010 05:57
Sample Info: 1242/1268 @ 200ppb | PCB5-61L | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1242+1268.sub
Sub List #2 : 1242+1268.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	6.388	6.607	4521859	24869188	184	176	80.00- 120.00	100.00(M)
	6.628	6.841	16301397	16302310	197	186	313.59- 470.38	360.50(M)
	6.741	7.347	9757951	31736482	187	187	177.49- 266.23	215.80(M)
	6.961	7.504	7295923	26215135	196	217	130.78- 196.17	161.35(M)
	7.018	7.644	5078072	19654435	195	175	87.16- 130.73	112.30(M)
			Average of Peak Amounts =		192	188		
Aroclor 1268	11.458	12.487	72909005	204068294	190	185	80.00- 120.00	100.00(M)
	11.858	12.867	58465536	161945057	194	184	64.38- 96.57	80.19(M)
	12.038	13.017	13451807	42140513	181	183	14.70- 22.05	18.47(M)
	12.371	13.401	23075912	64062509	195	185	25.86- 38.79	31.85(M)
	12.905	13.934	157684513	443641346	199	186	170.49- 255.74	216.28(M)
			Average of Peak Amounts =		192	185		

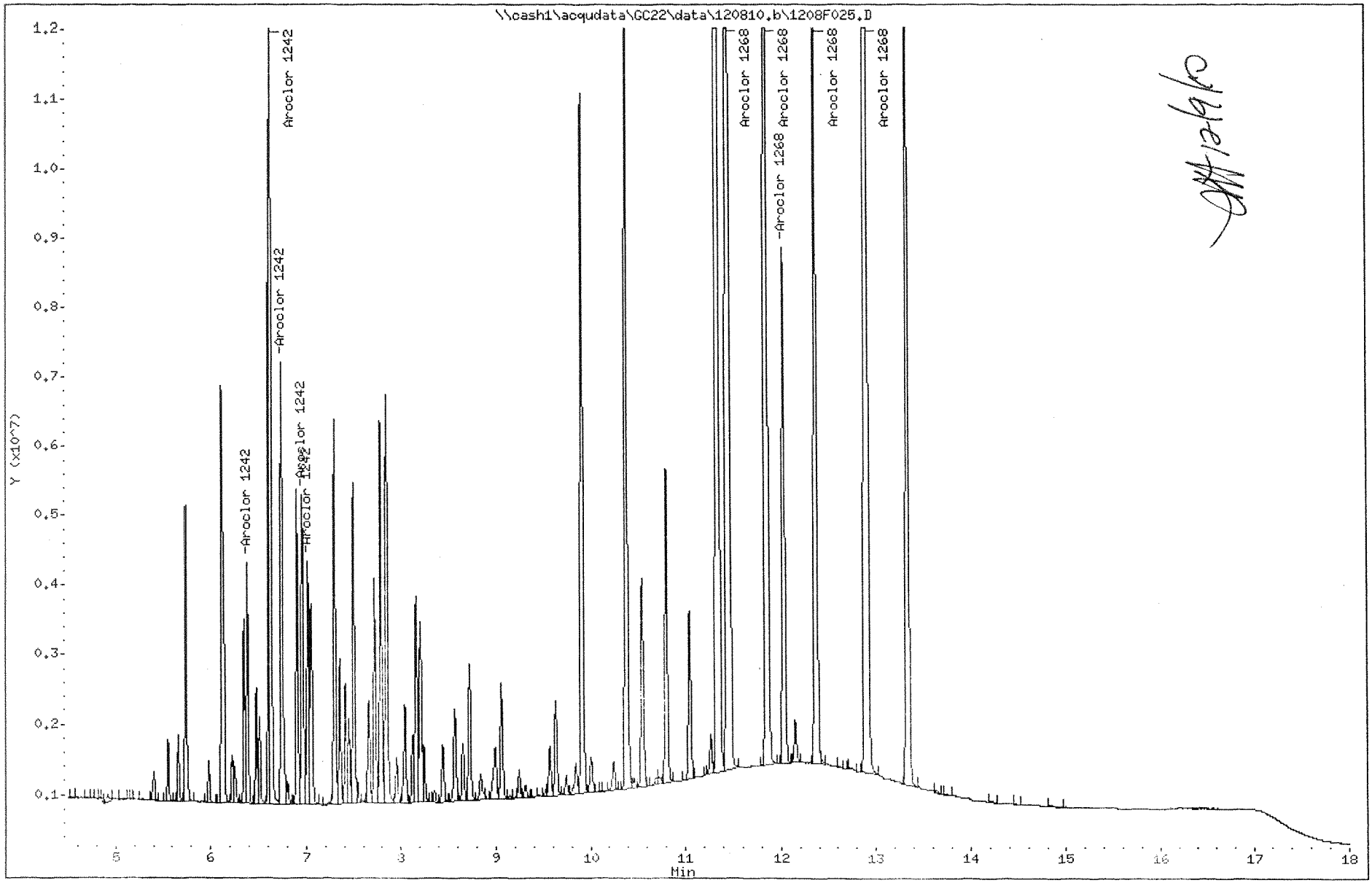
QC Flag Legend

M - Compound response manually integrated.

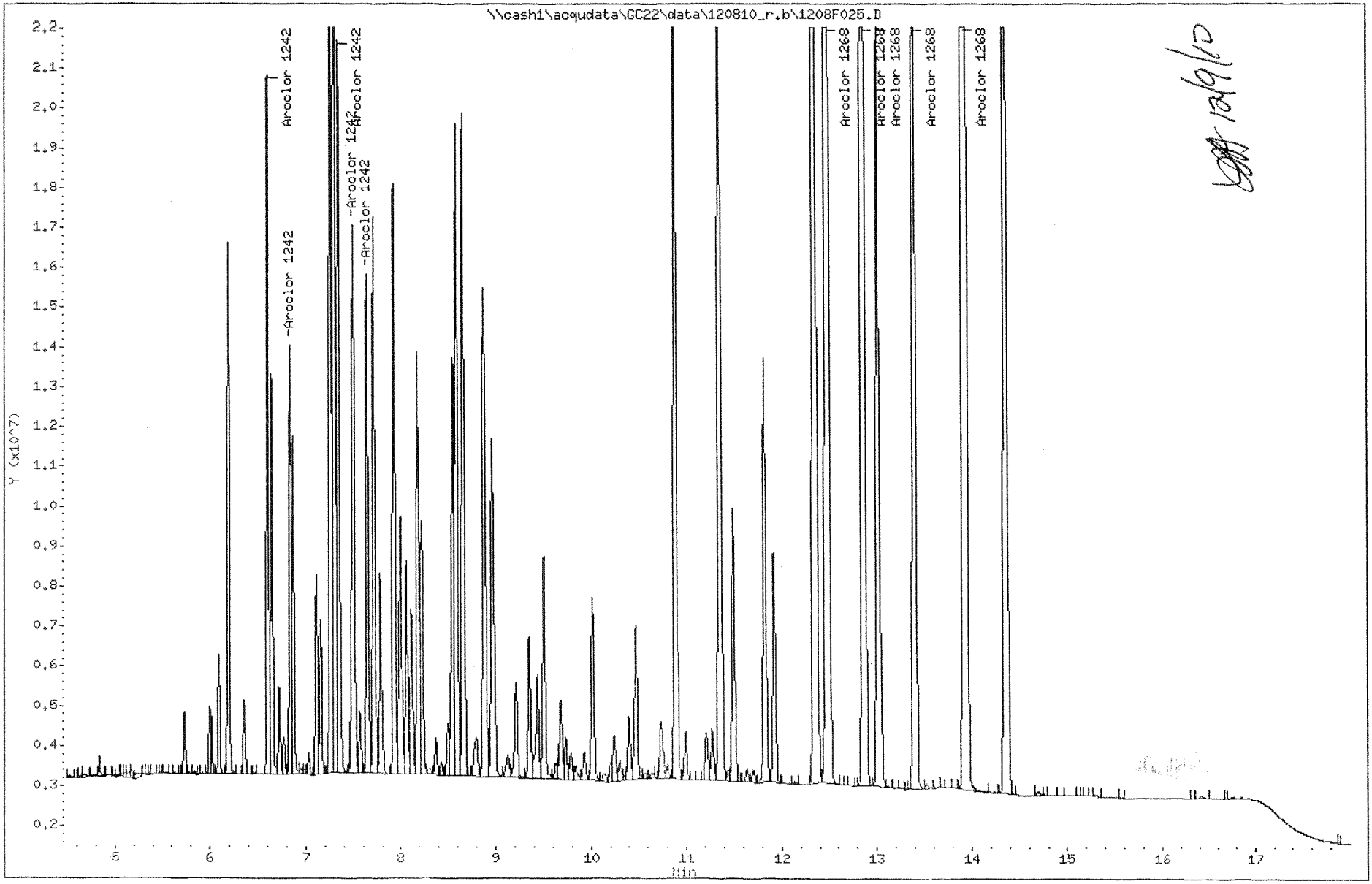
12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F025.D
Date : 09-DEC-2010 05:57
Client ID:
Sample Info: 1242/1268 @ 200ppb | PCB5-61L | KWG1006746-3

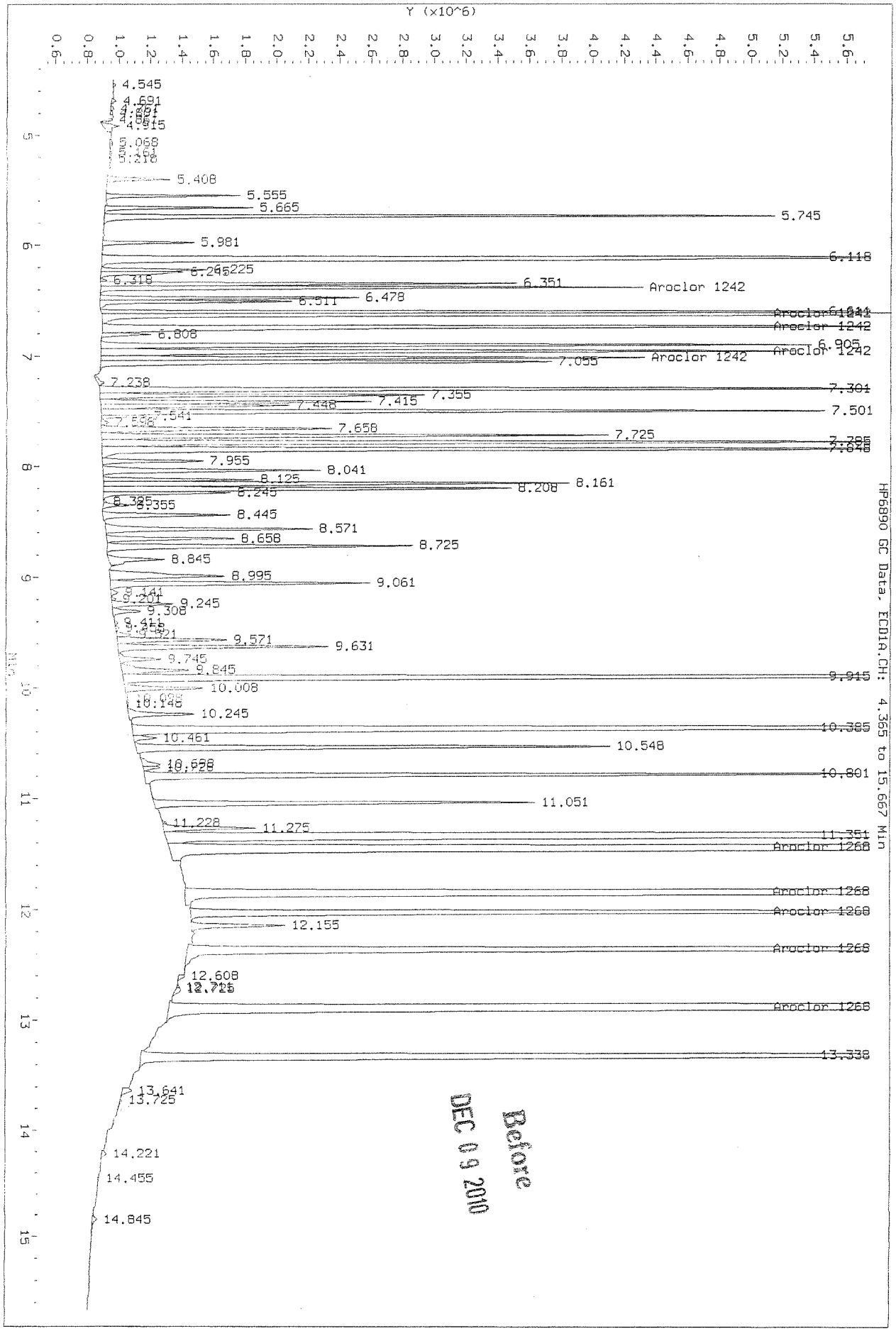
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



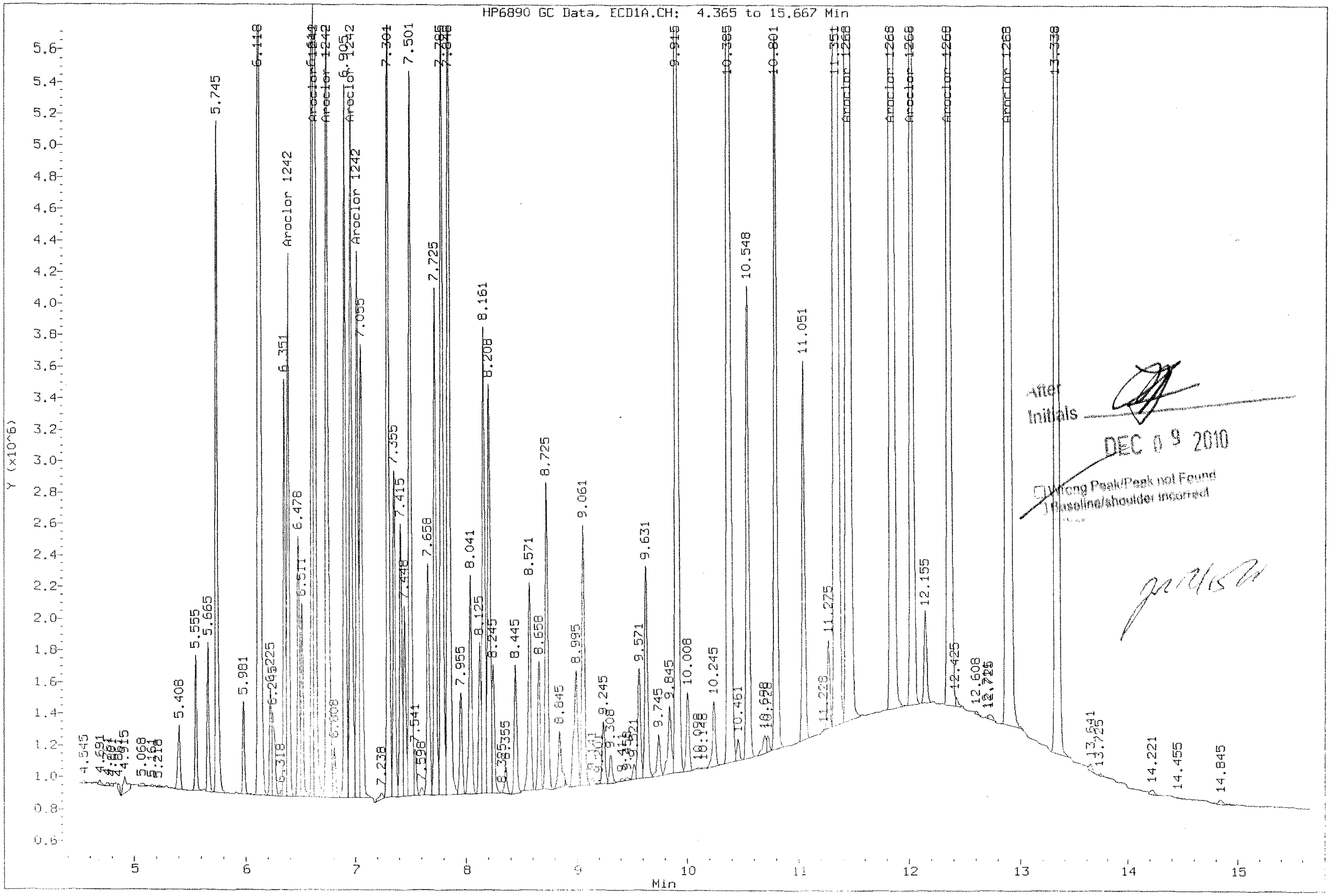
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F025.D
Date : 09-DEC-2010 05:57
Client ID:
Instrument: GC22.i
Sample Info: 1242/1268 @ 200ppb | PCB5-61L | KWG1006746-3
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



12/9/10


Data File: \\cash1\acqudata\GC22\data\120810.b\120F025.D
Injection Date: 09-DEC-2010 05:57
Instrument: GC22.1
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A,CH: 4.365 to 15.667 Min
4.545
5.408
5.555
5.665
5.745
5.981
6.118
6.351
Aroclor 1242
6.478
6.808
6.905
Aroclor 1242
7.055
Aroclor 1242
7.238
7.301
7.355
7.415
7.448
7.501
7.541
7.658
7.725
7.955
8.041
8.125
8.161
8.208
8.245
8.355
8.445
8.571
8.658
8.725
8.845
8.995
9.061
9.201
9.245
9.308
9.571
9.631
9.745
9.845
9.915
10.008
10.245
10.385
10.461
10.548
10.801
11.051
11.228
11.275
11.351
Aroclor 1268
Aroclor 1268
Aroclor 1268
12.155
Aroclor 1268
12.608
Aroclor 1268
13.338
13.641
13.725
14.221
14.455
14.845
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F025.D
Injection Date: 09-DEC-2010 05:57
Instrument: GC22.i
Client Sample ID:



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F026.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F026.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F026.D
Inj Date : 09-DEC-2010 06:22
Sample Info: 1242/1268 @ 500ppb | PCB5-61M | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : 1242+1268.sub
Sub List #2 : 1242+1268.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	6.386	6.605	10706923	58177128	435	413	80.00- 120.00	100.00(M)
	6.629	6.842	41969681	37455729	503	427	313.59- 470.38	391.99(M)
	6.743	7.349	23754346	77728471	455	458	177.49- 266.23	221.86(M)
	6.963	7.505	17502773	64805446	470	512	130.78- 196.17	163.47(M)
	7.019	7.645	11664712	47288571	446	433	87.16- 130.73	108.95(M)
			Average of Peak Amounts =		462	449		
Aroclor 1268	11.459	12.489	184120411	527136089	480	478	80.00- 120.00	100.00(M)
	11.859	12.869	148173760	415749702	492	472	64.38- 96.57	80.48(M)
	12.036	13.019	33833904	105356899	455	457	14.70- 22.05	18.38(M)
	12.373	13.402	59524429	162221438	504	469	25.86- 38.79	32.33(M)
	12.903	13.935	392385223	1150399199	495	483	170.49- 255.74	213.74(M)
			Average of Peak Amounts =		485	472		

QC Flag Legend

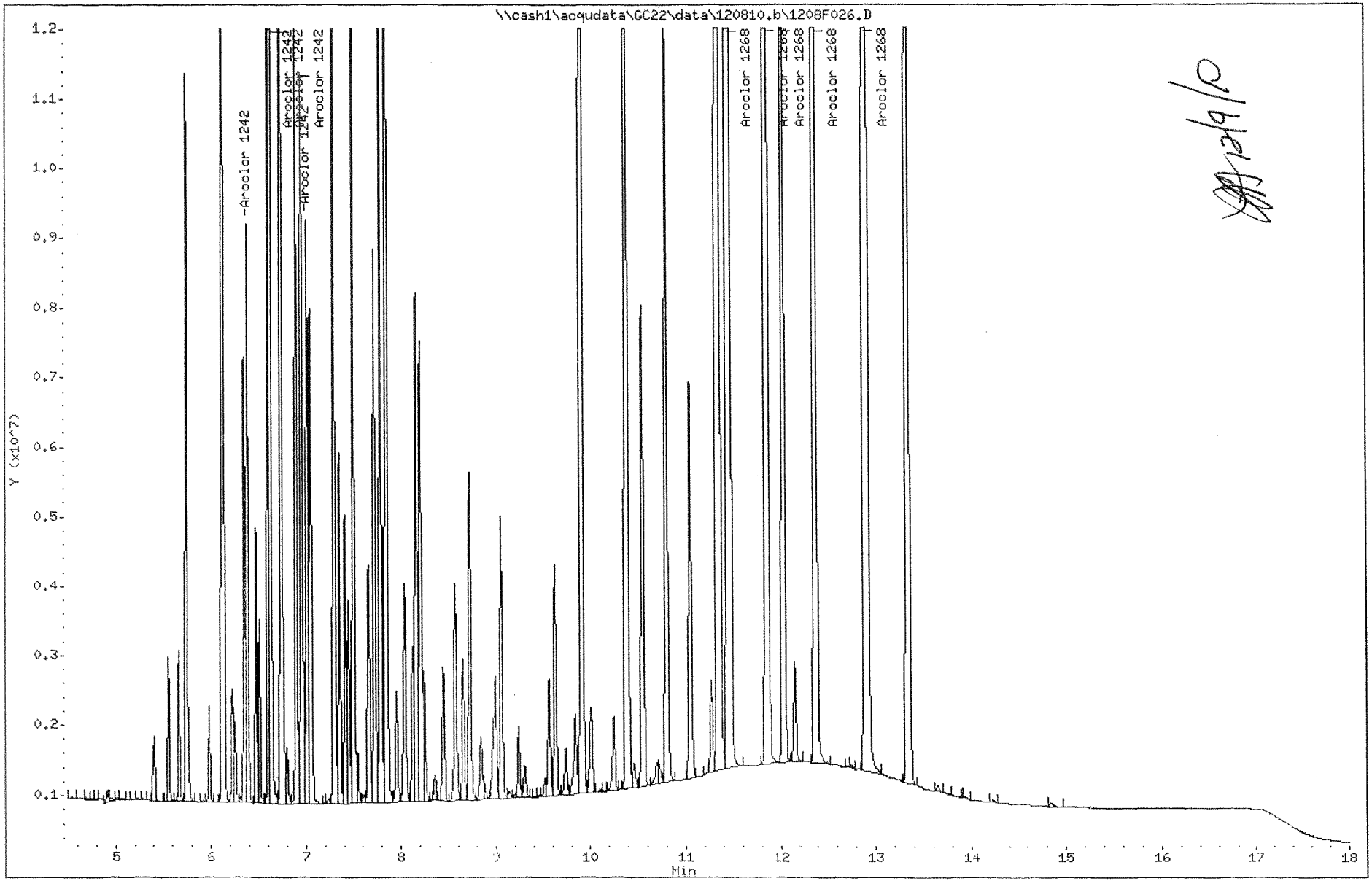
M - Compound response manually integrated.

12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F026.D
Date : 09-DEC-2010 06:22
Client ID:
Sample Info: 1242/1268 @ 500ppb | PCB5-61M | KWG1006746-3

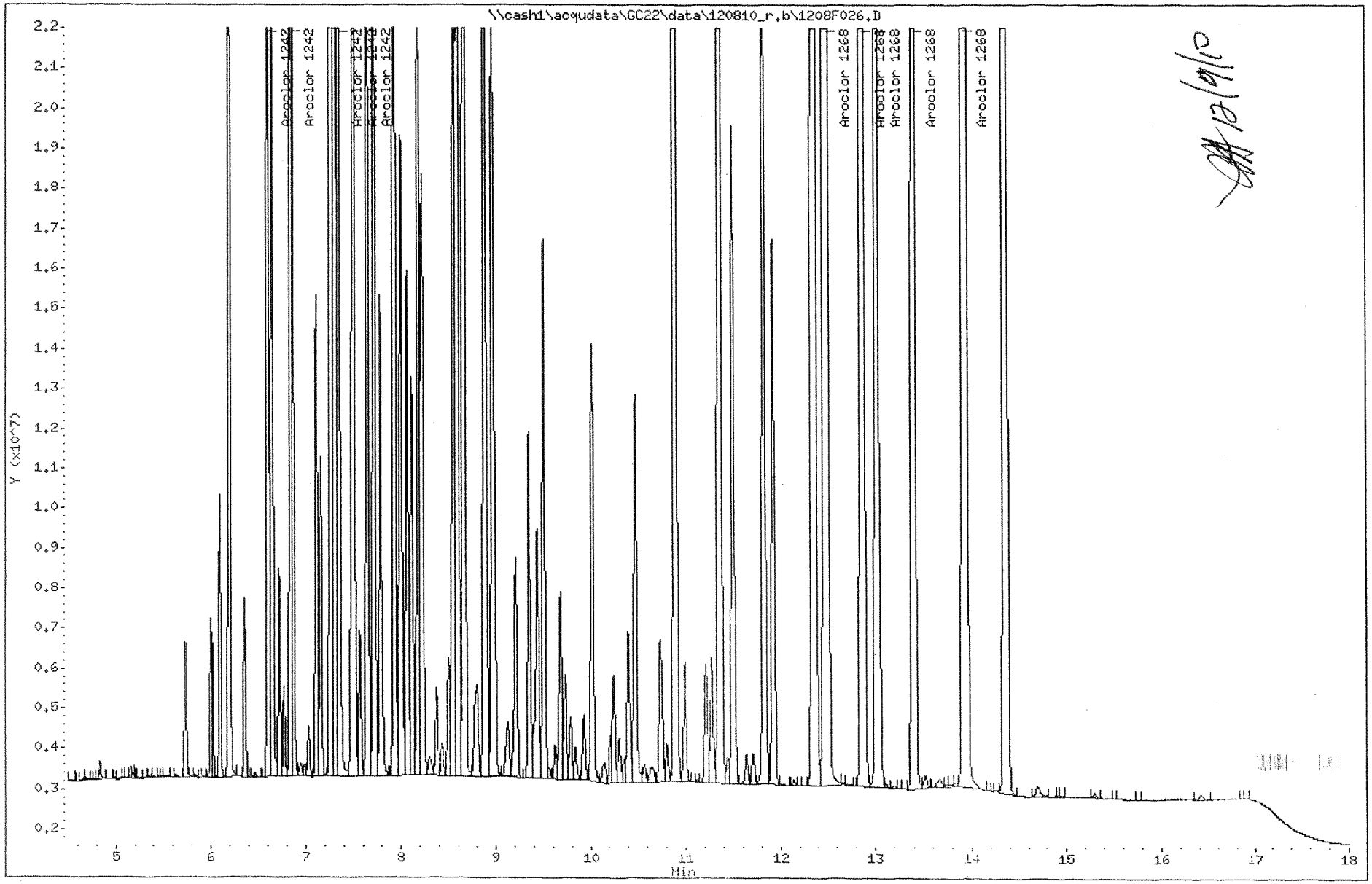
Instrument: GC22.i

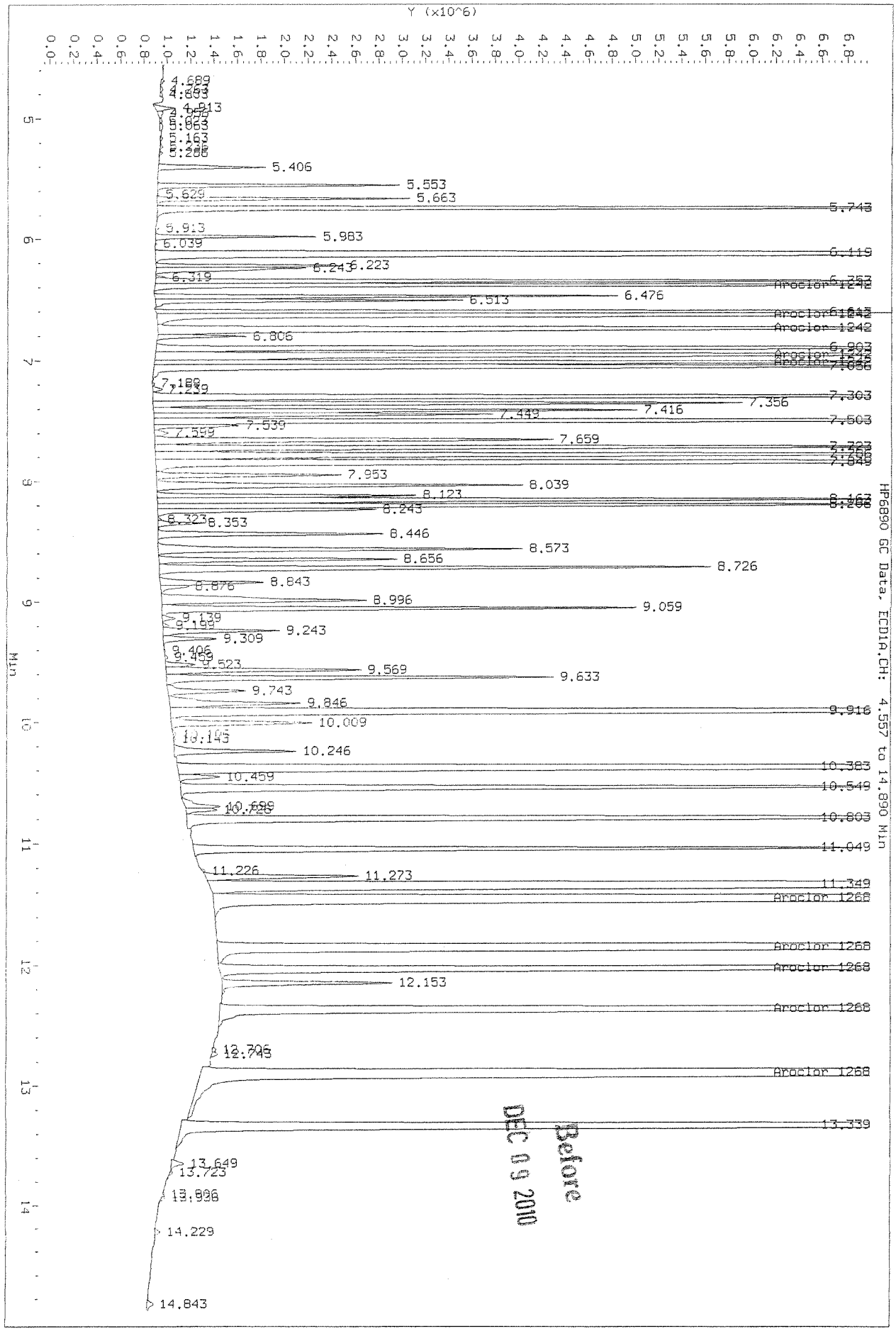
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



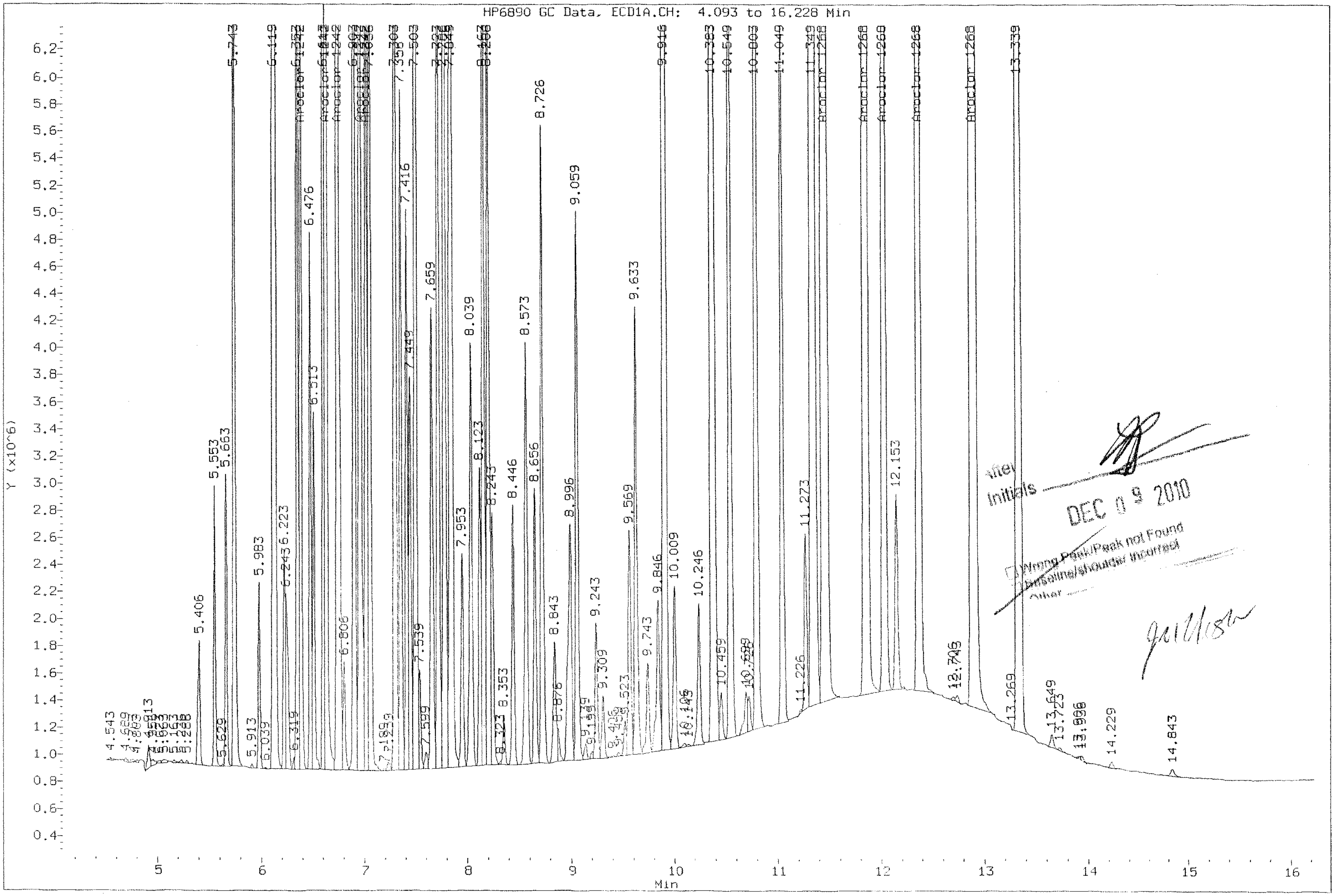
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F026.D
Date : 09-DEC-2010 06:22
Client ID:
Sample Info: 1242/1268 @ 500ppb | PCB5-61M | KWG1006746-3

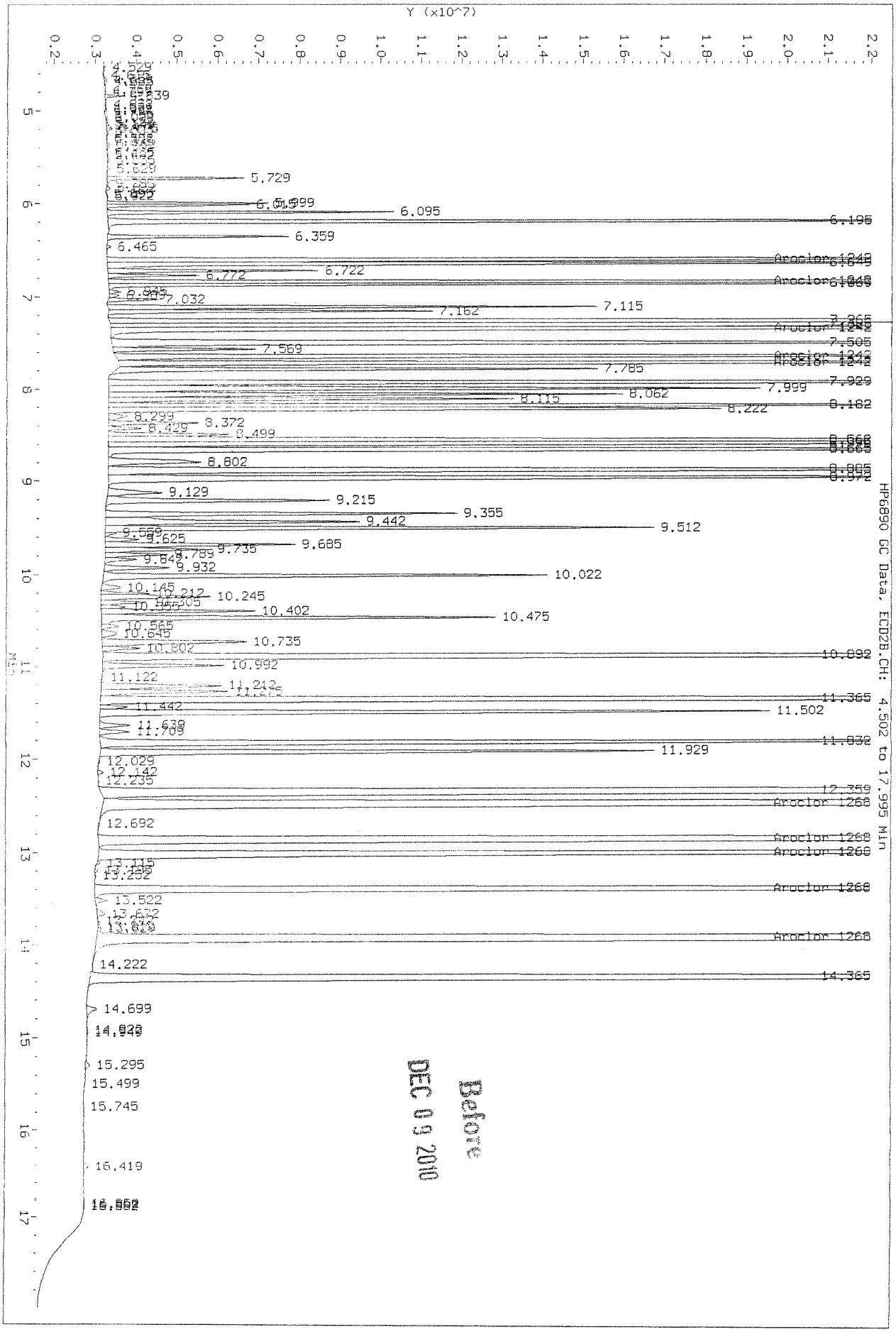
Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32

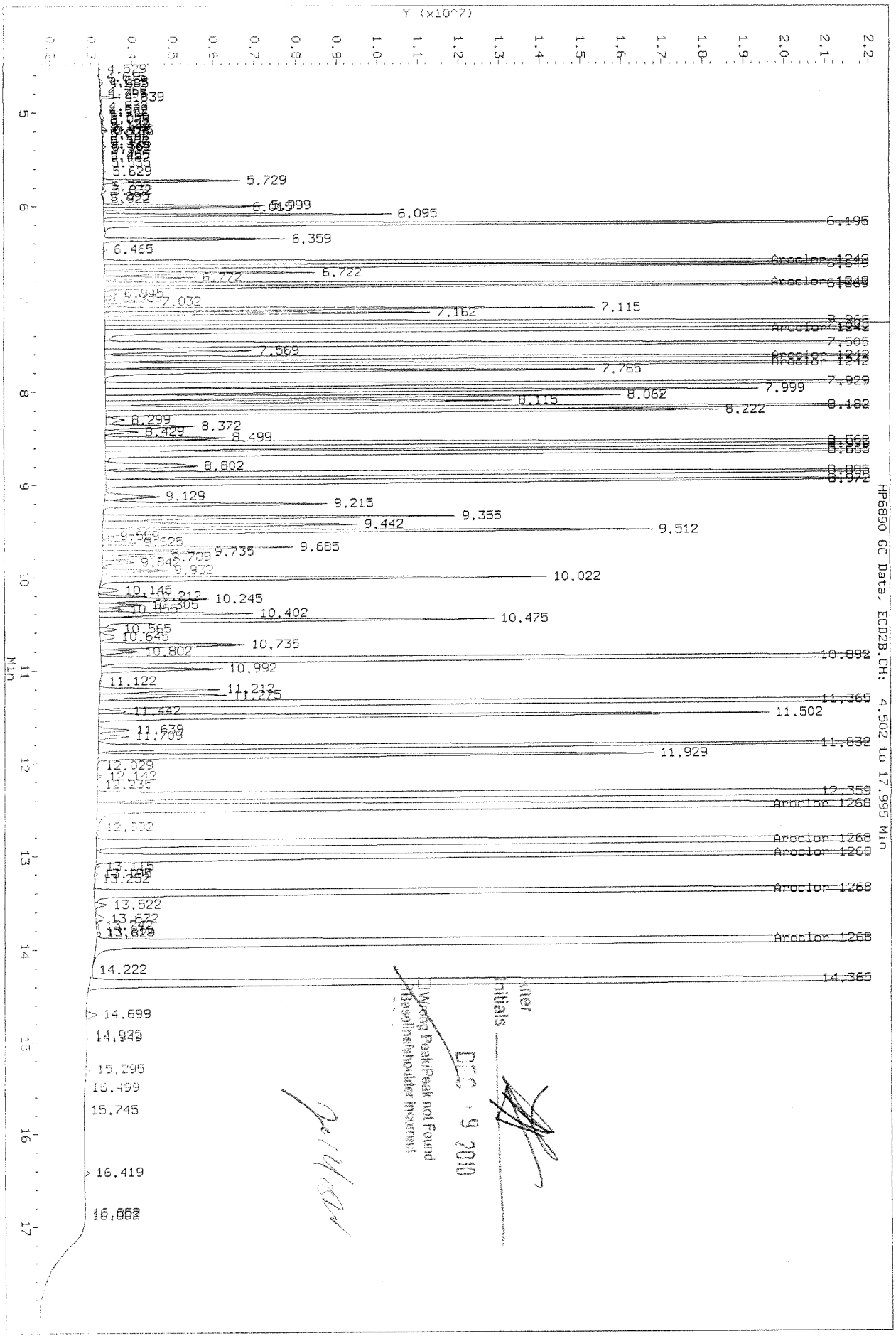



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F026.D
Injection Date: 09-DEC-2010 06:22
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.557 to 14.890 Min
Min
4.689
4.813
5.406
5.553
5.628
5.663
5.743
5.913
5.983
6.039
6.119
6.223
6.319
6.476
6.513
Aroclor 1242
6.806
7.303
7.356
7.416
7.449
7.503
7.539
7.559
7.659
7.849
7.953
8.039
8.123
8.243
8.323
8.353
8.446
8.573
8.656
8.726
8.843
8.876
8.996
9.059
9.139
9.243
9.309
9.406
9.523
9.569
9.633
9.743
9.846
9.916
10.009
10.246
10.383
10.459
10.549
10.803
11.049
11.226
11.273
11.349
Aroclor 1268
12.153
12.706
12.743
13.339
13.649
13.723
14.229
14.843
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F026.D
Injection Date: 09-DEC-2010 06:22
Instrument: GC22.i
Client Sample ID:




Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F026.D
Injection Date: 09-DEC-2010 06:22
Instrument: GC22.I
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.502 to 17.995 Min
Y (x10^7)
5.729
6.095
6.195
6.359
6.465
6.722
6.772
7.032
7.115
7.162
7.569
7.785
7.999
8.062
8.115
8.222
8.372
8.802
9.129
9.215
9.355
9.442
9.512
9.625
9.685
9.735
9.932
10.022
10.245
10.402
10.475
10.735
10.992
11.122
11.442
11.502
11.929
12.029
12.142
12.235
12.692
13.522
14.222
14.699
15.295
15.499
15.745
16.419
Aroclor 1268
DEC 09 2010
RECEIVED


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F026.D
Injection Date: 09-DEC-2010 06:22
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.502 to 17.995 Min
Y (x10^7)
Min
5.729
6.095
6.359
6.465
6.722
7.032
7.162
7.115
7.569
7.785
7.999
8.062
8.115
8.222
8.299
8.372
8.429
8.499
8.802
9.129
9.215
9.355
9.442
9.512
9.625
9.685
9.735
9.789
9.932
10.022
10.145
10.245
10.305
10.402
10.475
10.565
10.645
10.735
10.802
10.992
11.122
11.212
11.275
11.442
11.502
11.639
11.700
11.929
12.029
12.142
12.235
13.522
13.622
14.222
14.699
15.295
15.499
15.745
16.419
Aroclor 1268
Peak/Peak not Found
Baseline/Shoulder incorrect
Initials
DEC 9 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F027.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F027.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F027.D
Inj Date : 09-DEC-2010 06:46
Sample Info: 1248 @ 2.5ppb | PCB5-61N | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	6.964	7.930	180698	627521	2.82	2.70	80.00- 120.00	100.00(M)
	7.301	8.180	182785	406301	2.65	2.45	87.95- 131.93	101.15(M)
	7.501	8.597	134528	881974	2.48	2.81	73.37- 110.05	74.45(M)
	7.787	8.663	209509	711560	2.65	2.51	104.62- 156.93	115.94(M)
	7.851	8.887	242616	796984	2.67	2.63	118.69- 178.04	134.27(M)
			Average of Peak Amounts =		2.65	2.62		

QC Flag Legend

M - Compound response manually integrated.

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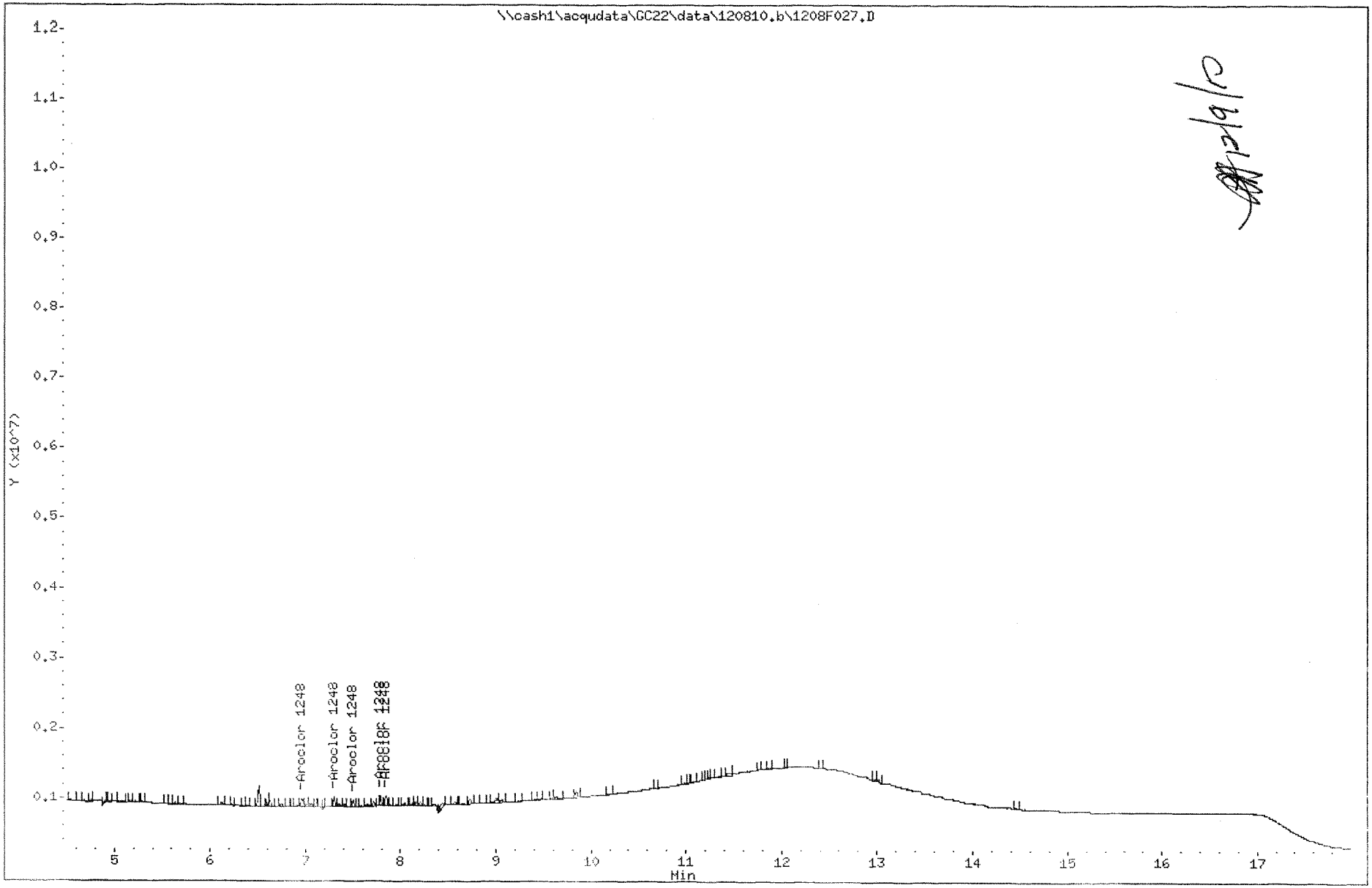
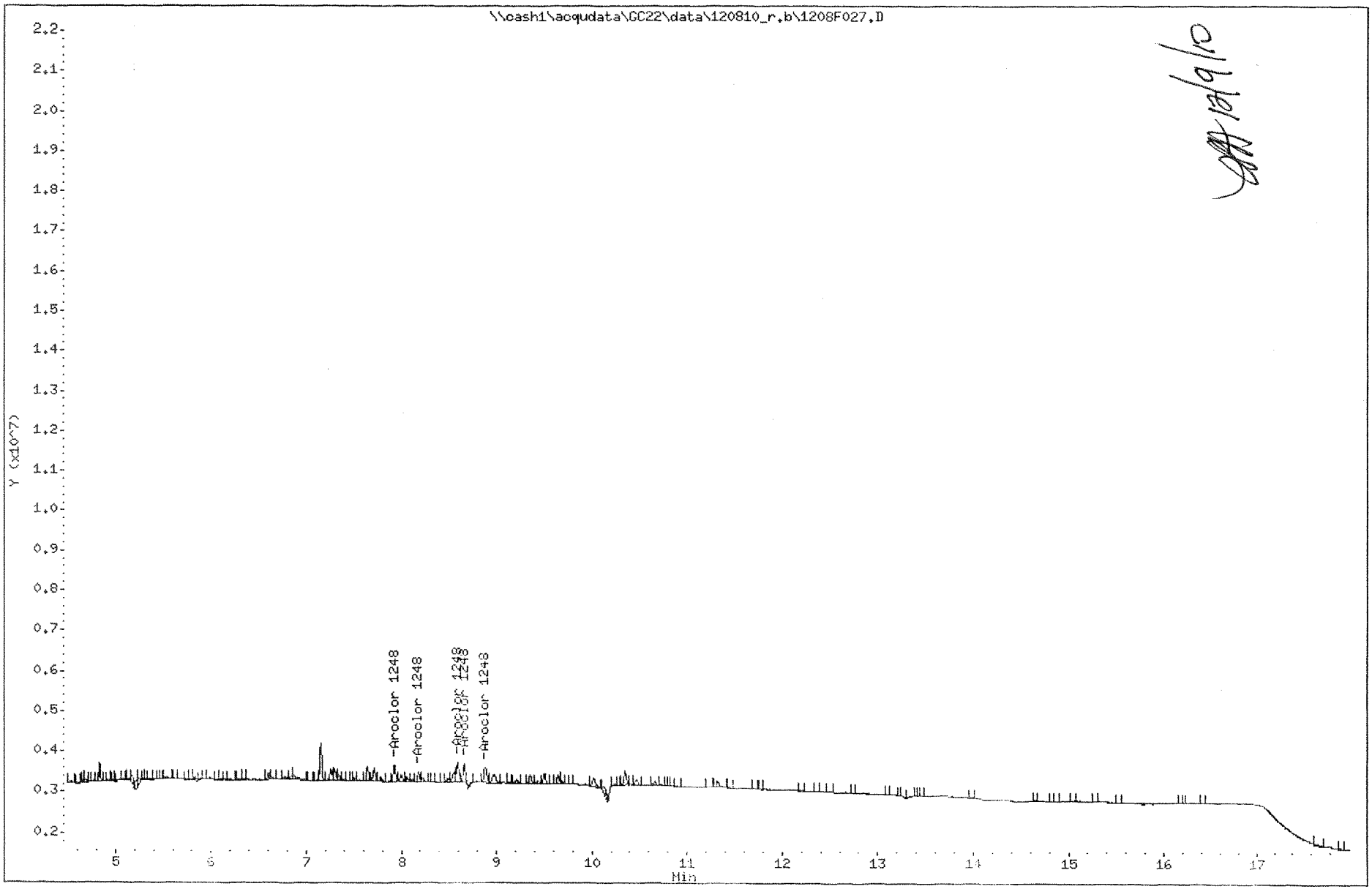
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F027.D
Date : 09-DEC-2010 06:46
Client ID:
Sample Info: 1248 @ 2.5ppb | PCB5-61N | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F027.D
Date : 09-DEC-2010 06:46
Client ID:
Instrument: GC22.i
Sample Info: 1248 @ 2.5ppb | PCB5-61N | KWG1006746-3
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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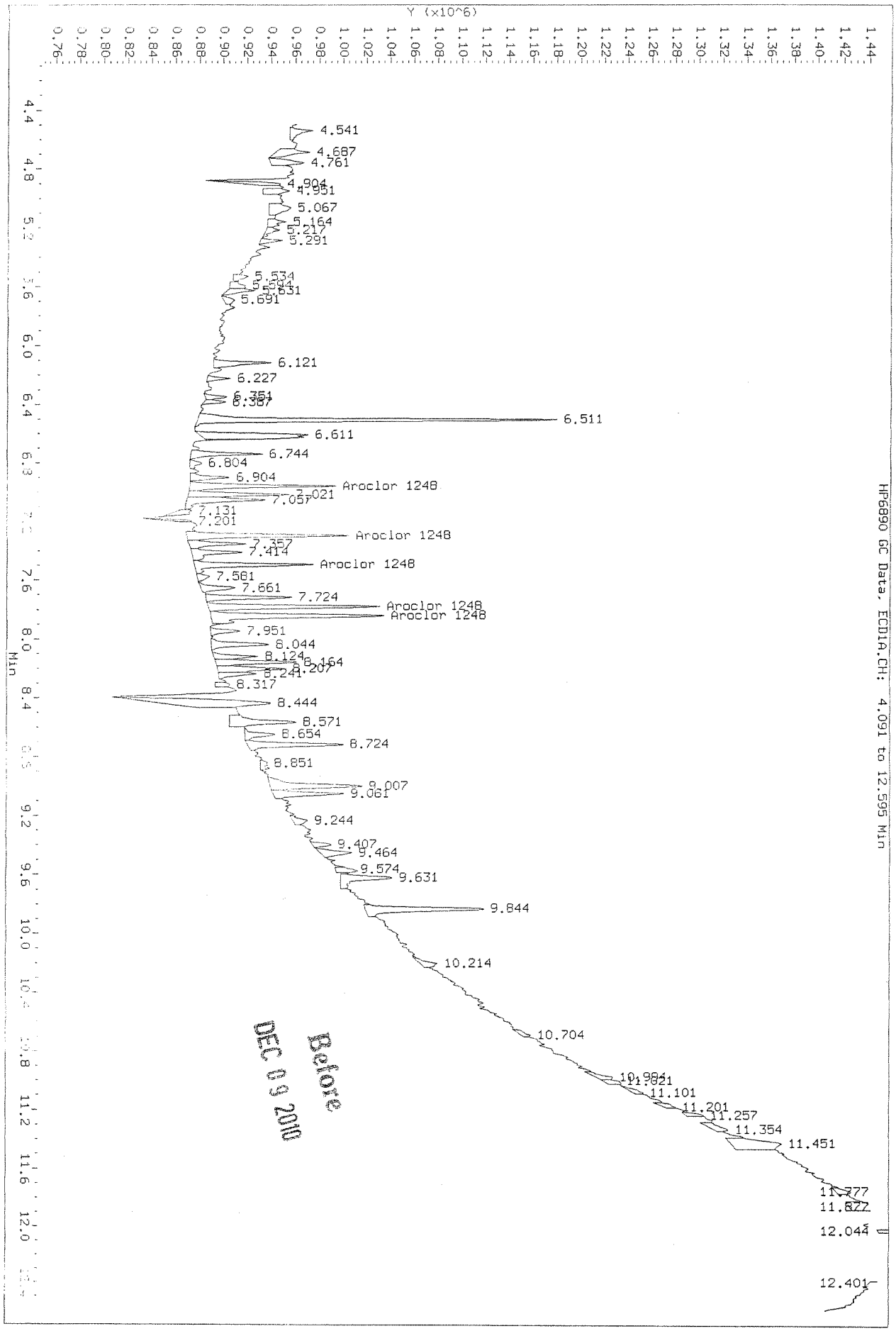
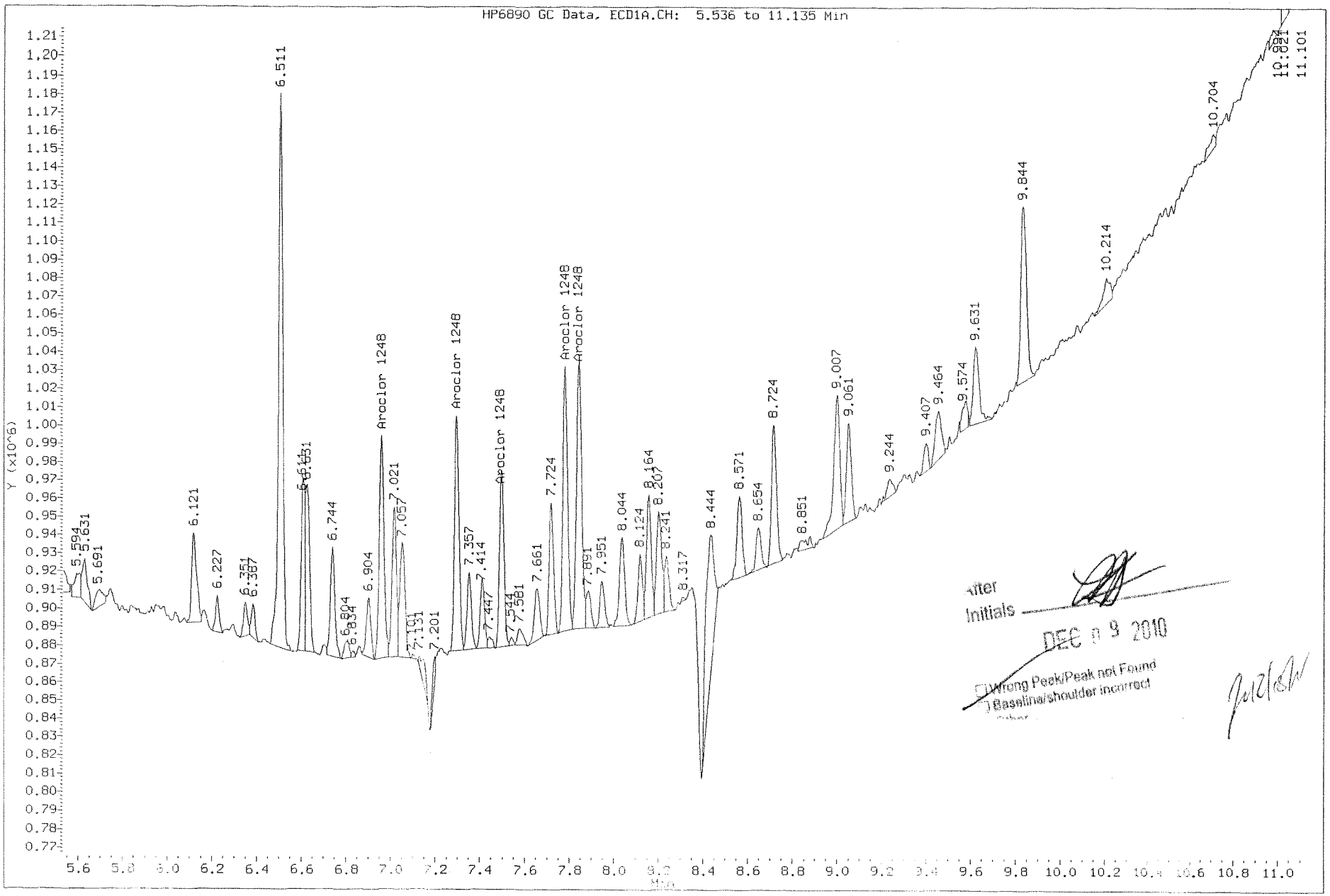
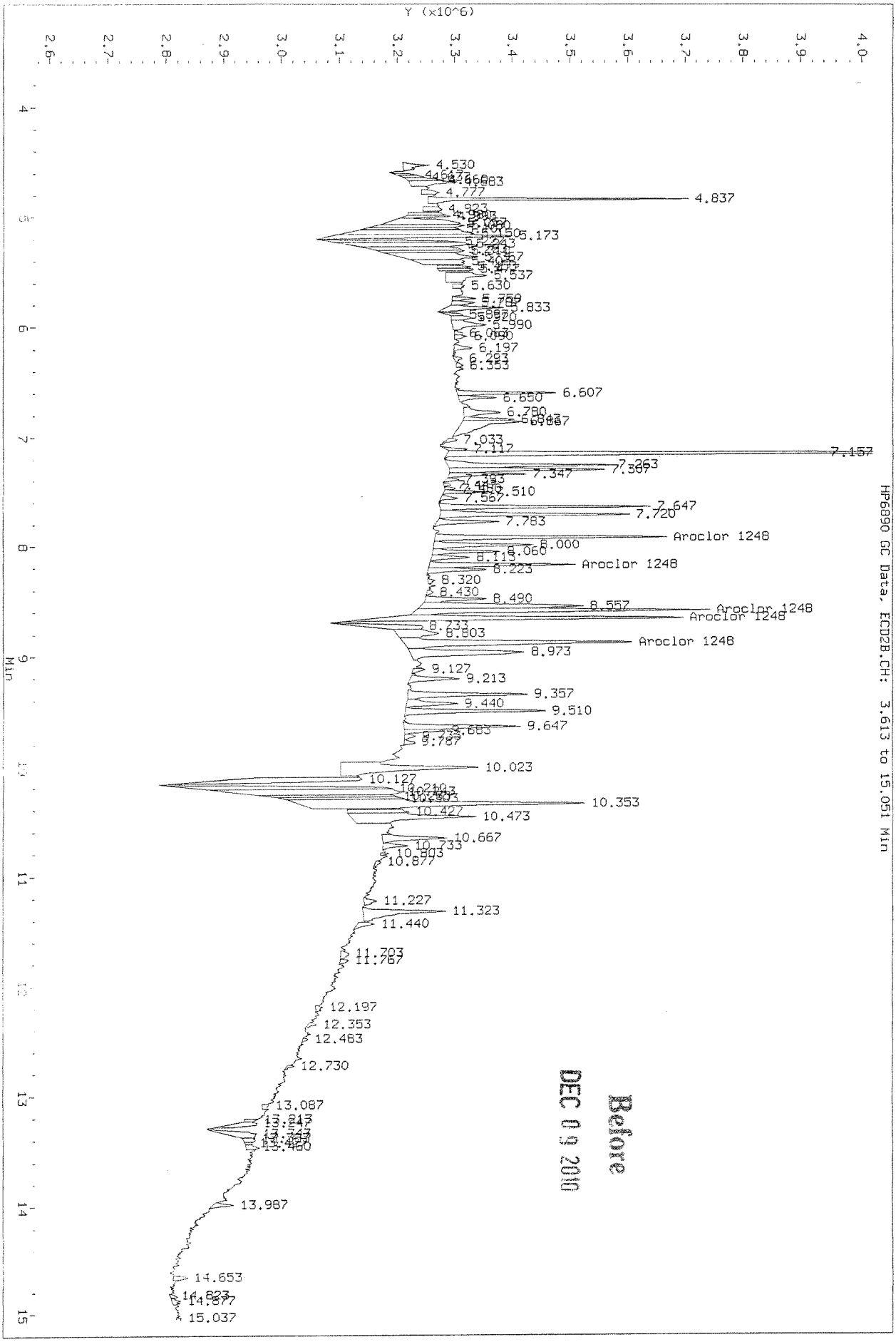
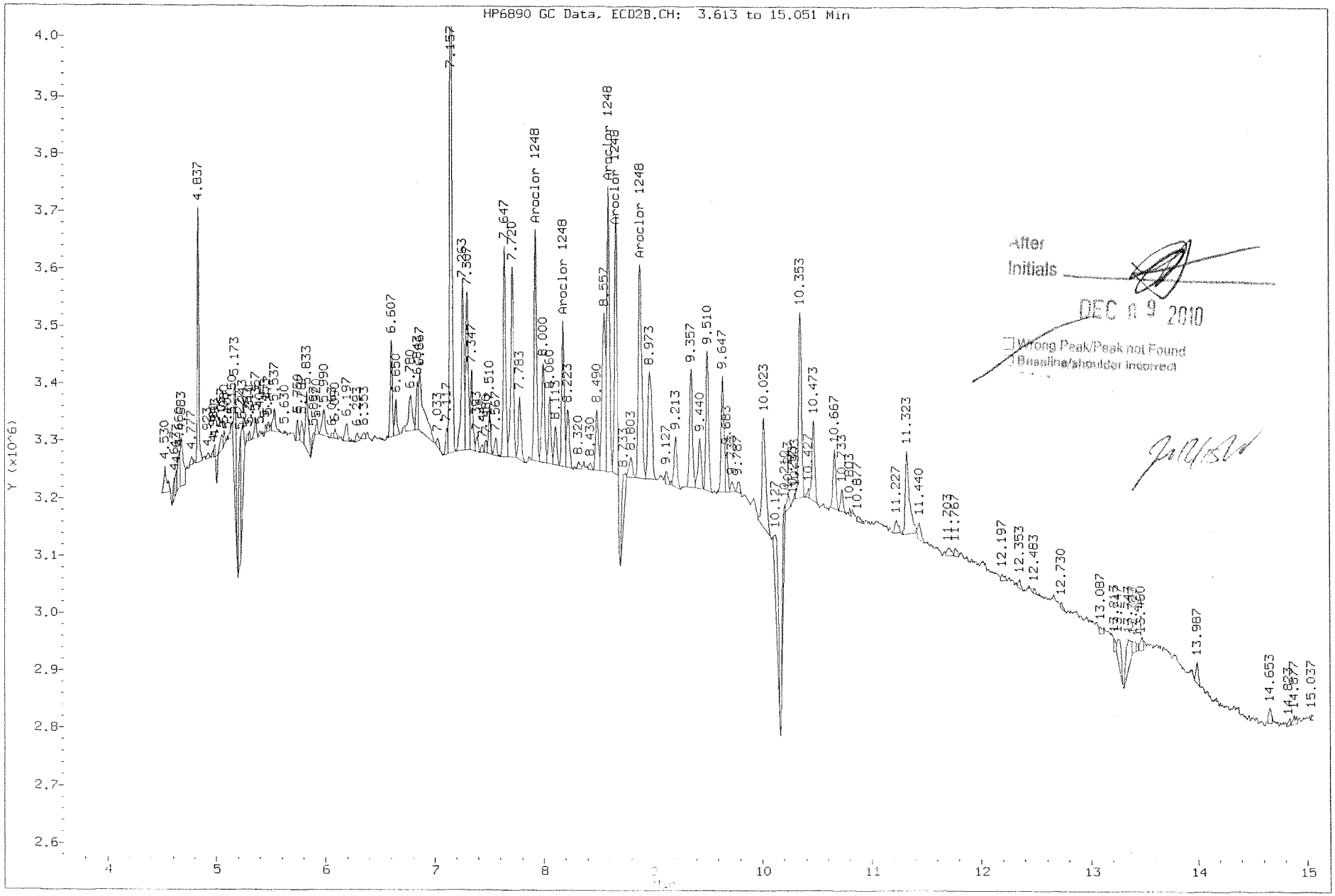

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F027.D
Injection Date: 09-DEC-2010 06:46
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH; 4.091 to 12.595 Min
Y (x10^6)
Min
4.541
4.687
4.761
4.904
4.951
5.067
5.164
5.217
5.291
5.534
5.584
5.631
5.691
6.121
6.227
6.387
6.511
6.611
6.744
6.804
6.904
Aroclor 1248
7.021
7.057
7.131
7.201
Aroclor 1248
7.357
7.414
Aroclor 1248
7.581
7.661
7.724
Aroclor 1248
Aroclor 1248
7.951
8.044
8.124
8.164
8.207
8.241
8.317
8.444
8.571
8.654
8.724
8.851
9.007
9.061
9.244
9.407
9.464
9.574
9.631
9.844
10.214
10.704
10.984
11.021
11.101
11.201
11.257
11.354
11.451
11.777
11.822
12.044
12.401
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F027.D
Injection Date: 09-DEC-2010 06:46
Instrument: GC22.i
Client Sample ID:




Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F027.D
Injection Date: 09-DEC-2010 06:46
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 3.613 to 15.051 Min
Y (x10^6)
Min
Aroclor 1248
Aroclor 1248
Aroclor 1248
Aroclor 1248
Aroclor 1248
Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F027.D
Injection Date: 09-DEC-2010 06:46
Instrument: GC22.i
Client Sample ID:



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F028.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F028.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F028.D
Inj Date : 09-DEC-2010 07:10
Sample Info: 1248 @ 5.0ppb | PCB5-610 | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	6.960	7.929	352285	1275935	5.50	5.74	80.00- 120.00	100.00(M)
	7.300	8.179	378491	829952	5.55	5.45	87.95- 131.93	107.44(M)
	7.500	8.596	299364	1736475	5.50	5.89	73.37- 110.05	84.98(M)
	7.787	8.663	435271	1419930	5.45	5.46	104.62- 156.93	123.56(M)
	7.847	8.883	494480	1585705	5.46	5.68	118.69- 178.04	152.12(M)
			Average of Peak Amounts =		5.49	5.64		

QC Flag Legend

M - Compound response manually integrated.

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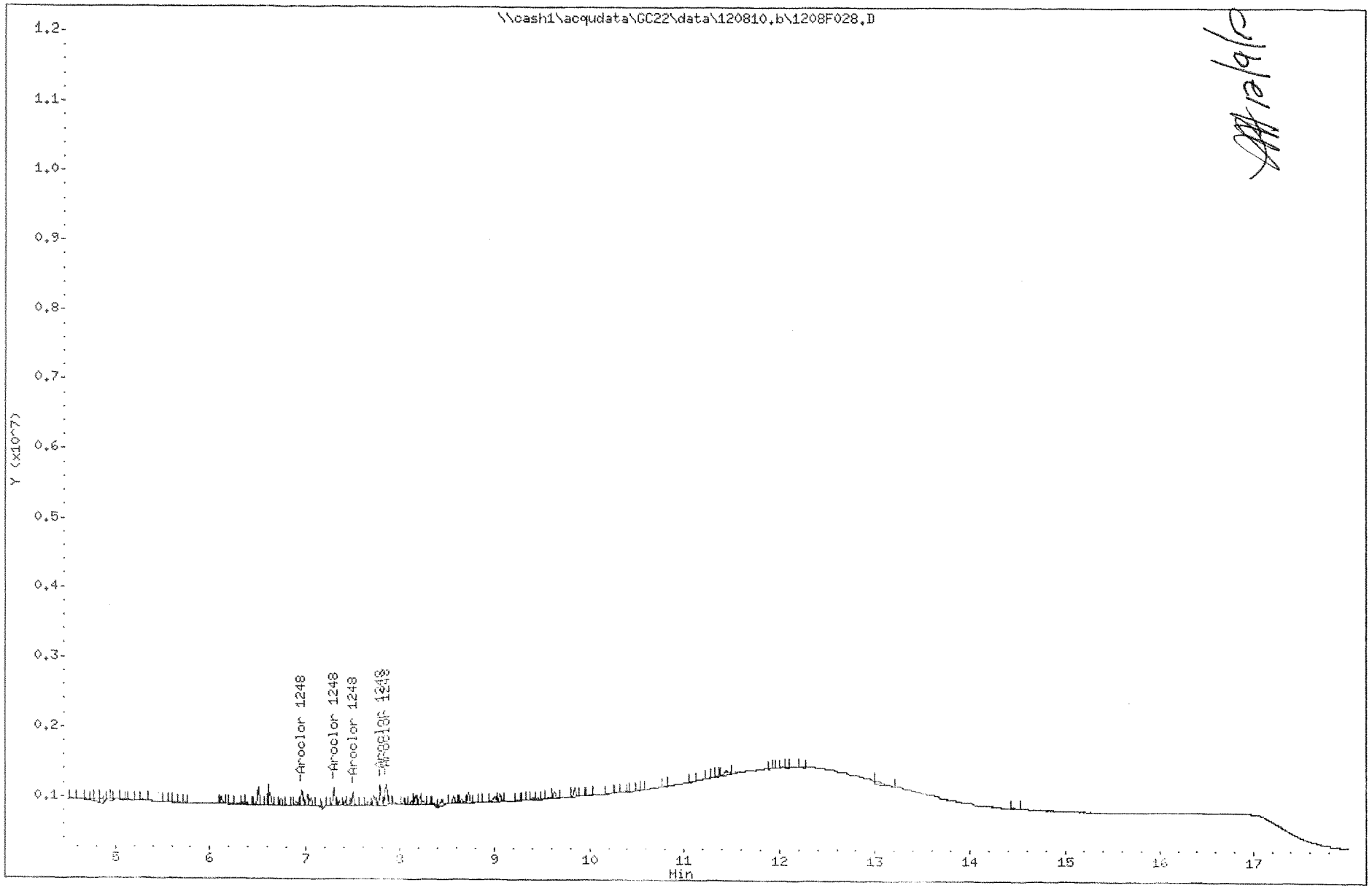
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F028.D
Date : 09-DEC-2010 07:10
Client ID:
Sample Info: 1248 @ 5.0ppb | PCB5-610 | KWG1006746-3

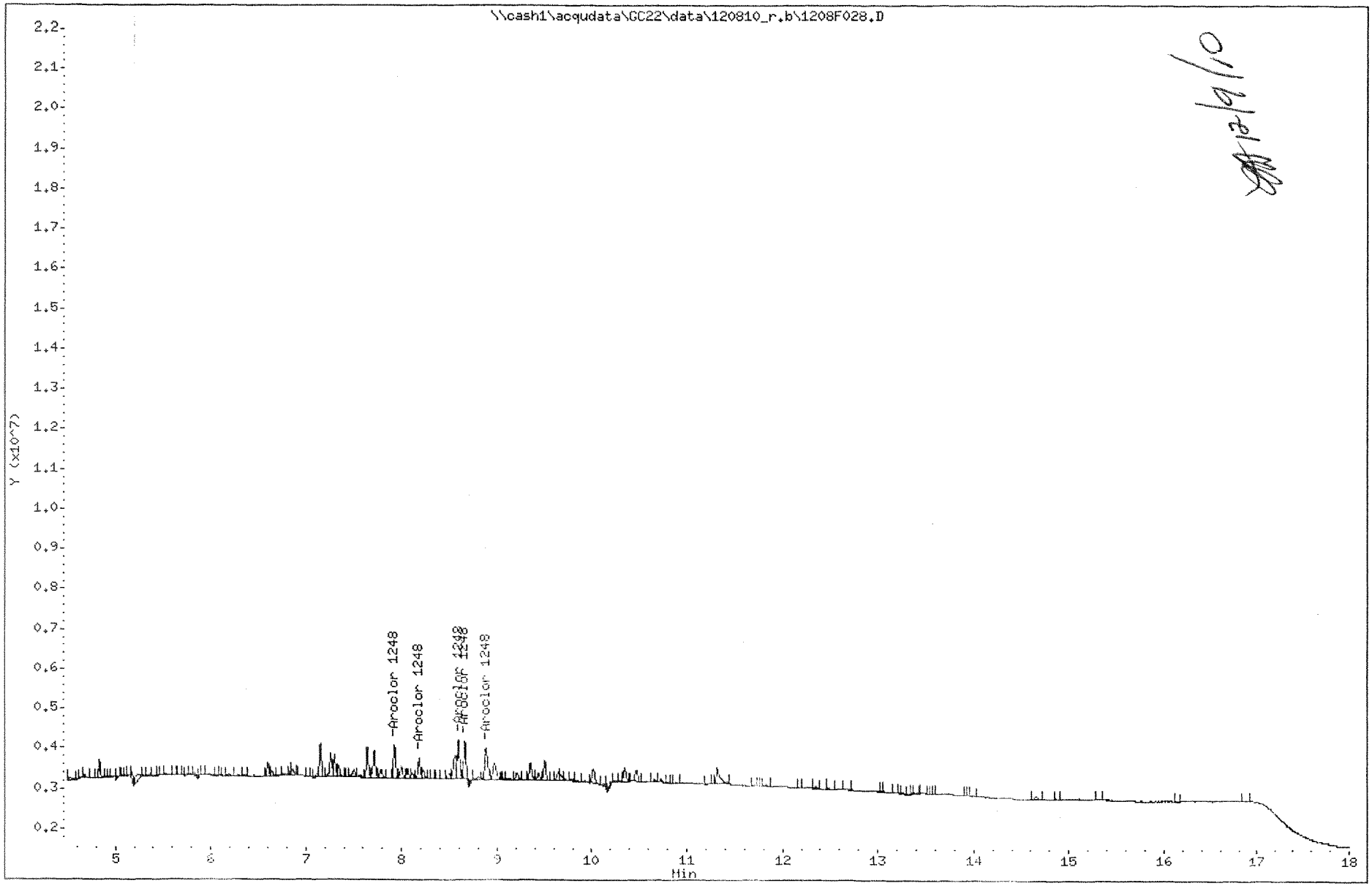
Instrument: GC22.i

Operator: LHarris
Column diameter: 0.32

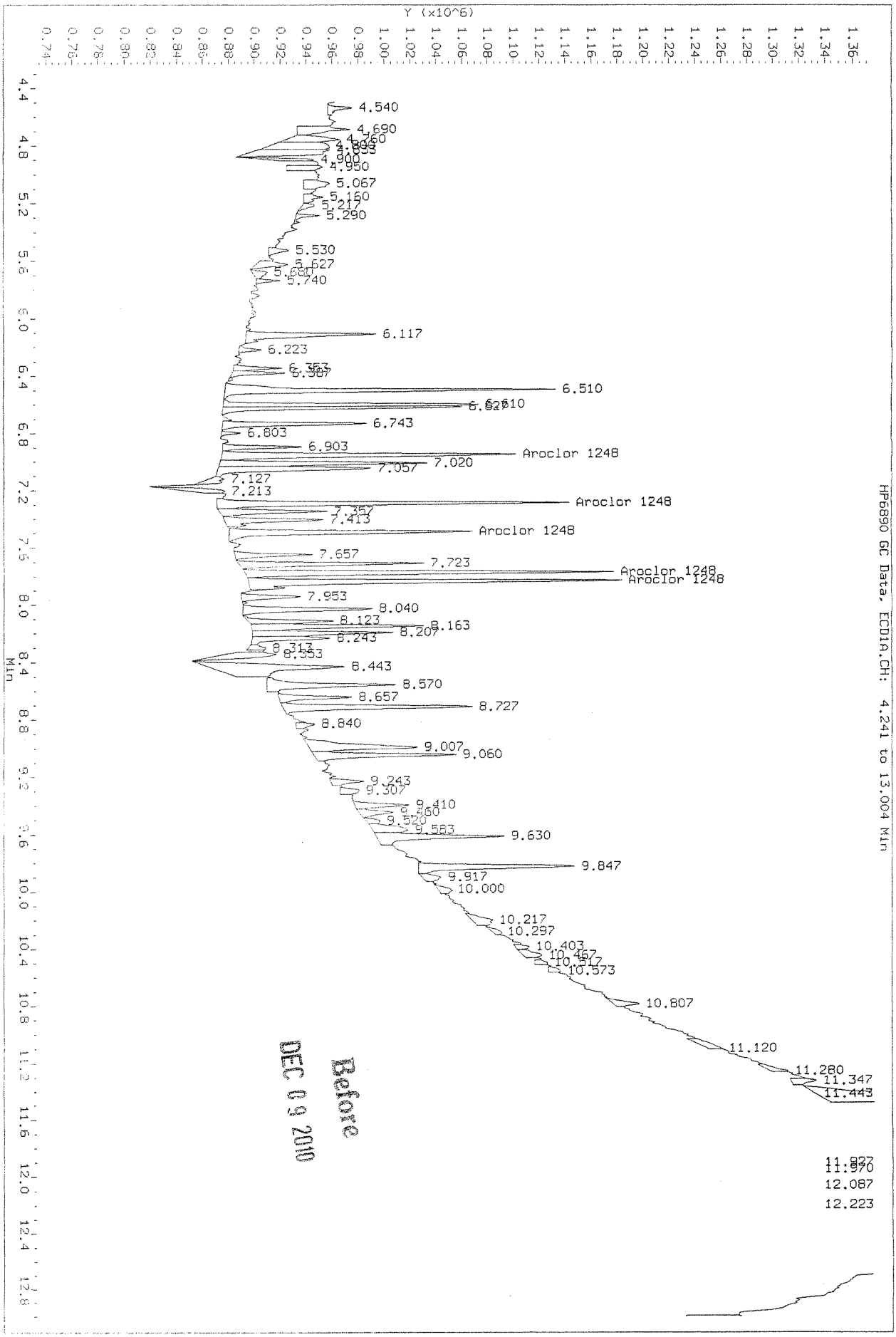
Column phase: DB-35MS

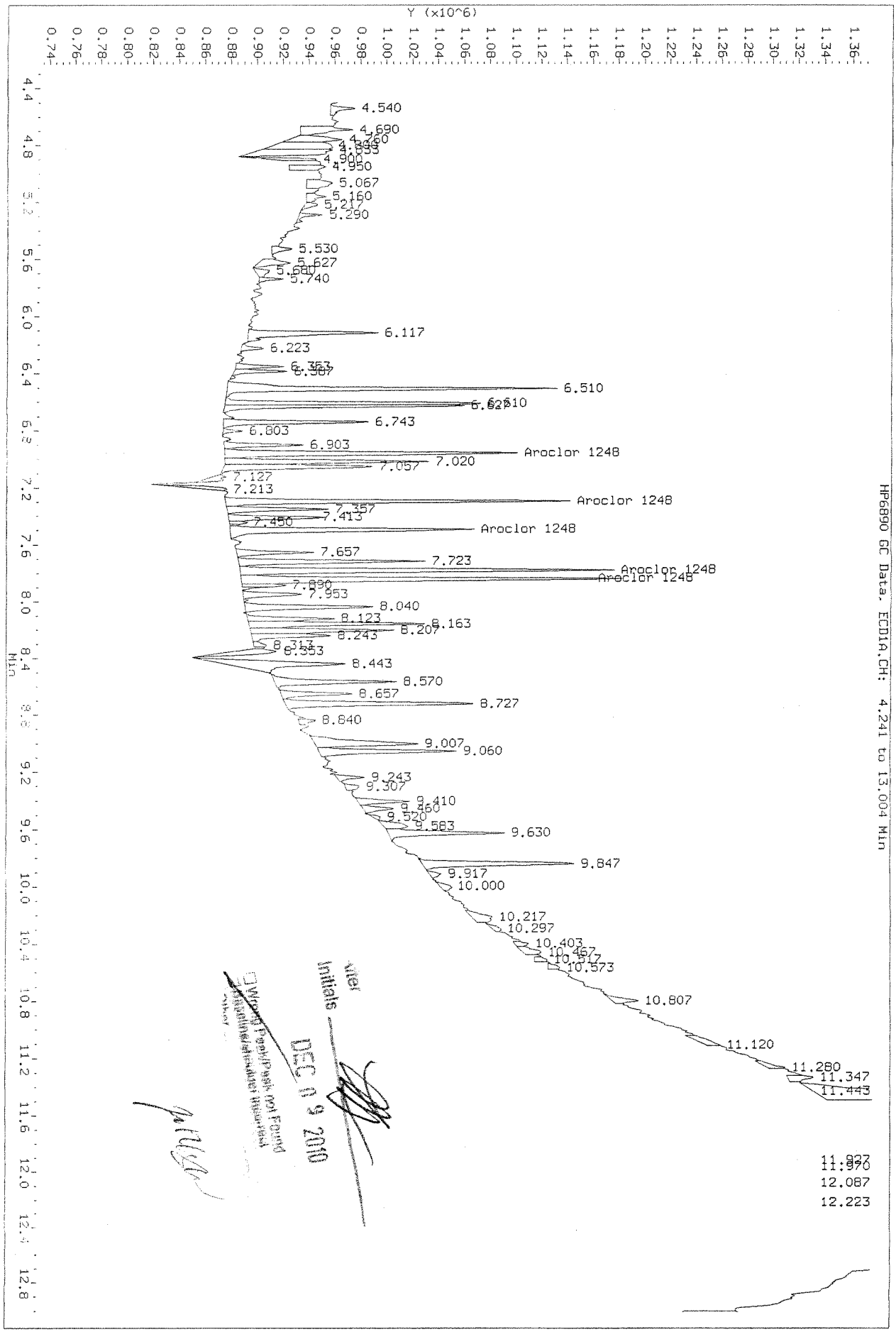


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F028.D
Date : 09-DEC-2010 07:10
Client ID:
Instrument: GC22.i
Sample Info: 1248 @ 5.0ppb | PCB5-610 | KWG1006746-3
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



12/9/10


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F028.D
Injection Date: 09-DEC-2010 07:10
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.241 to 13.004 Min
Y (x10^6)
Min
4.540
4.690
4.950
5.067
5.160
5.217
5.290
5.530
5.627
5.740
6.117
6.223
6.510
6.743
6.803
6.903
Aroclor 1248
7.020
7.057
7.127
7.213
Aroclor 1248
7.413
Aroclor 1248
7.657
7.723
Aroclor 1248
Aroclor 1248
7.953
8.040
8.123
8.163
8.207
8.243
8.313
8.443
8.570
8.657
8.727
8.840
9.007
9.060
9.243
9.307
9.410
9.520
9.583
9.630
9.847
9.917
10.000
10.217
10.297
10.403
10.467
10.573
10.807
11.120
11.280
11.347
11.443
12.087
12.223
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F028.D
Injection Date: 09-DEC-2010 07:10
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data. ECD1A.CH: 4.241 to 13.004 Min
Y (x10^6)
Min
4.540
4.690
5.067
5.160
5.290
5.530
5.740
6.117
6.223
6.510
6.743
6.803
6.903
Aroclor 1248
7.020
7.057
7.213
Aroclor 1248
7.450
Aroclor 1248
7.657
7.723
Aroclor 1248
Aroclor 1248
7.953
8.040
8.123
8.163
8.207
8.243
8.443
8.570
8.657
8.727
8.840
9.007
9.060
9.243
9.307
9.410
9.520
9.583
9.630
9.847
9.917
10.000
10.217
10.297
10.403
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11.347
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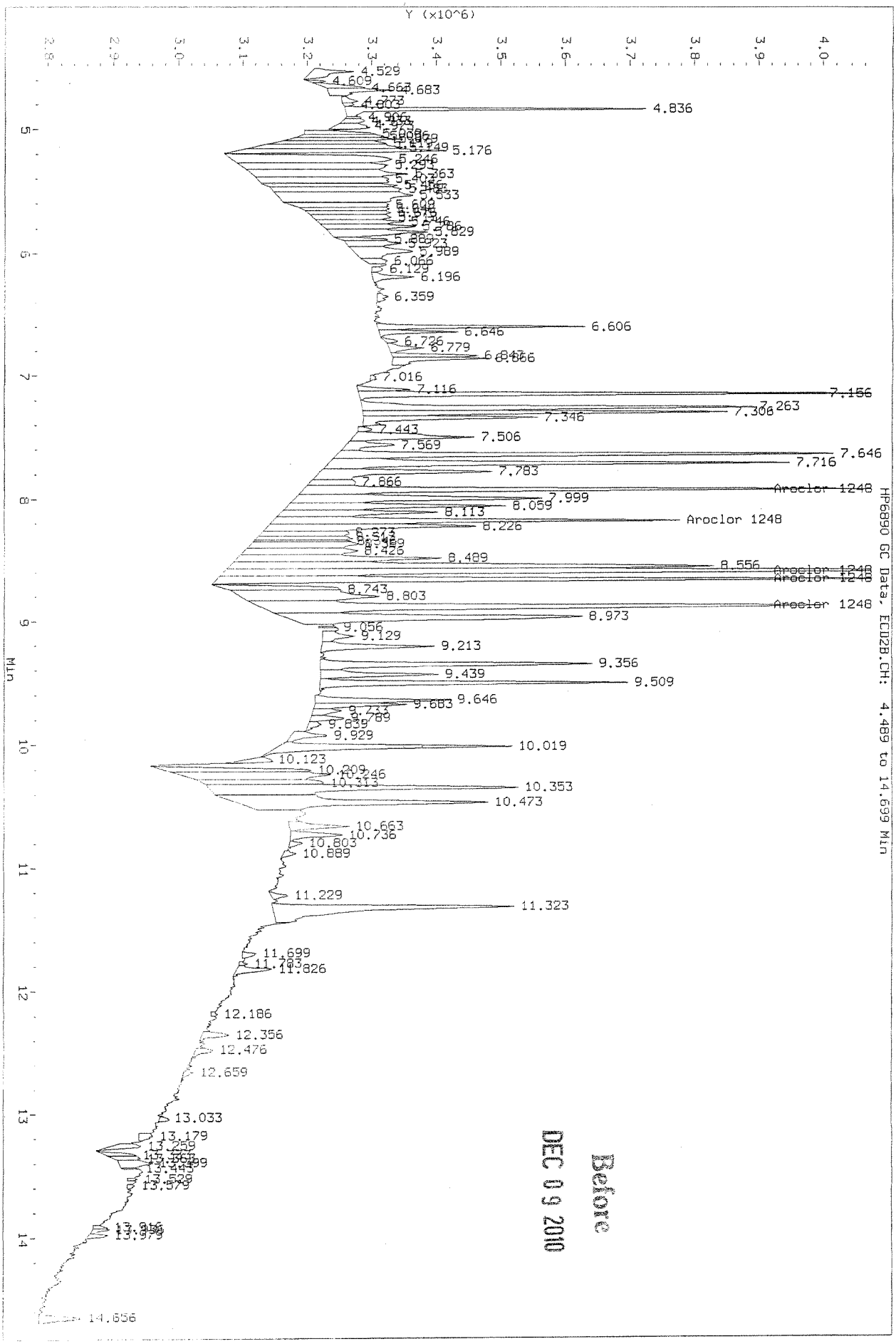
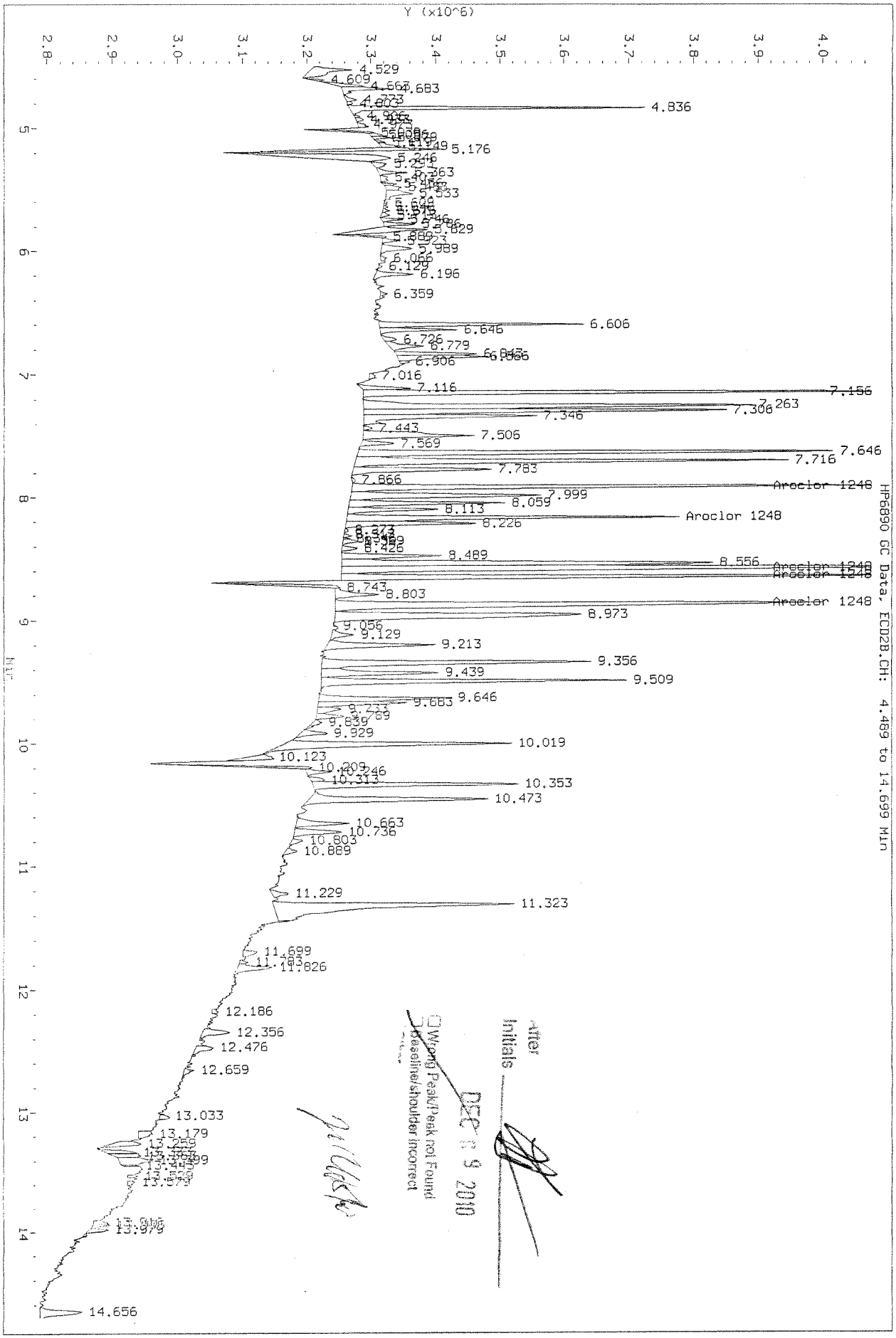
11.827
11.970
12.087
12.223
Initials
DEC 0 9 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F028.D
Injection Date: 09-DEC-2010 07:10
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD2B.CH: 4.489 to 14.699 Min
4.529
4.609
4.836
5.176
6.196
6.359
6.606
6.646
6.726
6.779
7.016
7.116
7.156
7.263
7.306
7.346
7.443
7.506
7.569
7.646
7.716
7.783
7.866
Aroclor 1248
7.999
8.059
8.113
Aroclor 1248
8.226
8.373
8.426
8.489
8.556
Aroclor 1248
Aroclor 1248
8.743
8.803
Aroclor 1248
8.973
9.056
9.129
9.213
9.356
9.439
9.509
9.646
9.683
9.789
9.839
9.929
10.019
10.123
10.209
10.246
10.313
10.353
10.473
10.663
10.736
10.803
10.889
11.229
11.323
11.699
11.826
12.186
12.356
12.476
12.659
13.033
13.179
13.529
13.579
14.656
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F028.D
Injection Date: 09-DEC-2010 07:10
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.469 to 14.699 Min
Y (x10^6)
Min
4.529
4.609
4.667
4.683
4.773
4.803
4.836
5.176
5.246
5.263
5.333
5.829
5.889
5.989
6.056
6.129
6.196
6.359
6.606
6.646
6.726
6.779
6.906
7.016
7.116
7.156
7.263
7.306
7.346
7.443
7.506
7.569
7.646
7.716
7.783
7.866
Aroclor 1248
7.999
8.059
8.113
Aroclor 1248
8.226
8.373
8.426
8.489
8.556
Aroclor 1248
Aroclor 1248
8.743
8.803
Aroclor 1248
8.973
9.056
9.129
9.213
9.356
9.439
9.509
9.646
9.683
9.769
9.839
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10.019
10.123
10.209
10.246
10.313
10.353
10.473
10.663
10.736
10.803
10.889
11.229
11.323
11.699
11.826
12.186
12.356
12.476
12.659
13.033
13.179
13.979
14.656
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Other
Initials
DEC 9 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F029.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F029.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F029.D
Inj Date : 09-DEC-2010 07:35
Sample Info: 1248 @ 50ppb | PCB5-61P | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	6.964	7.930	3141842	10652945	45.5	48.0	80.00- 120.00	100.00
	7.301	8.180	3336065	7431013	43.4	48.8	87.95- 131.93	106.18
	7.504	8.594	2708113	13842525	46.3	47.0	73.37- 110.05	86.20
	7.788	8.664	3954455	12711756	48.2	48.9	104.62- 156.93	125.86
	7.848	8.887	4440497	13342631	45.5	47.8	118.69- 178.04	141.33
			Average of Peak Amounts =		45.8	48.1		

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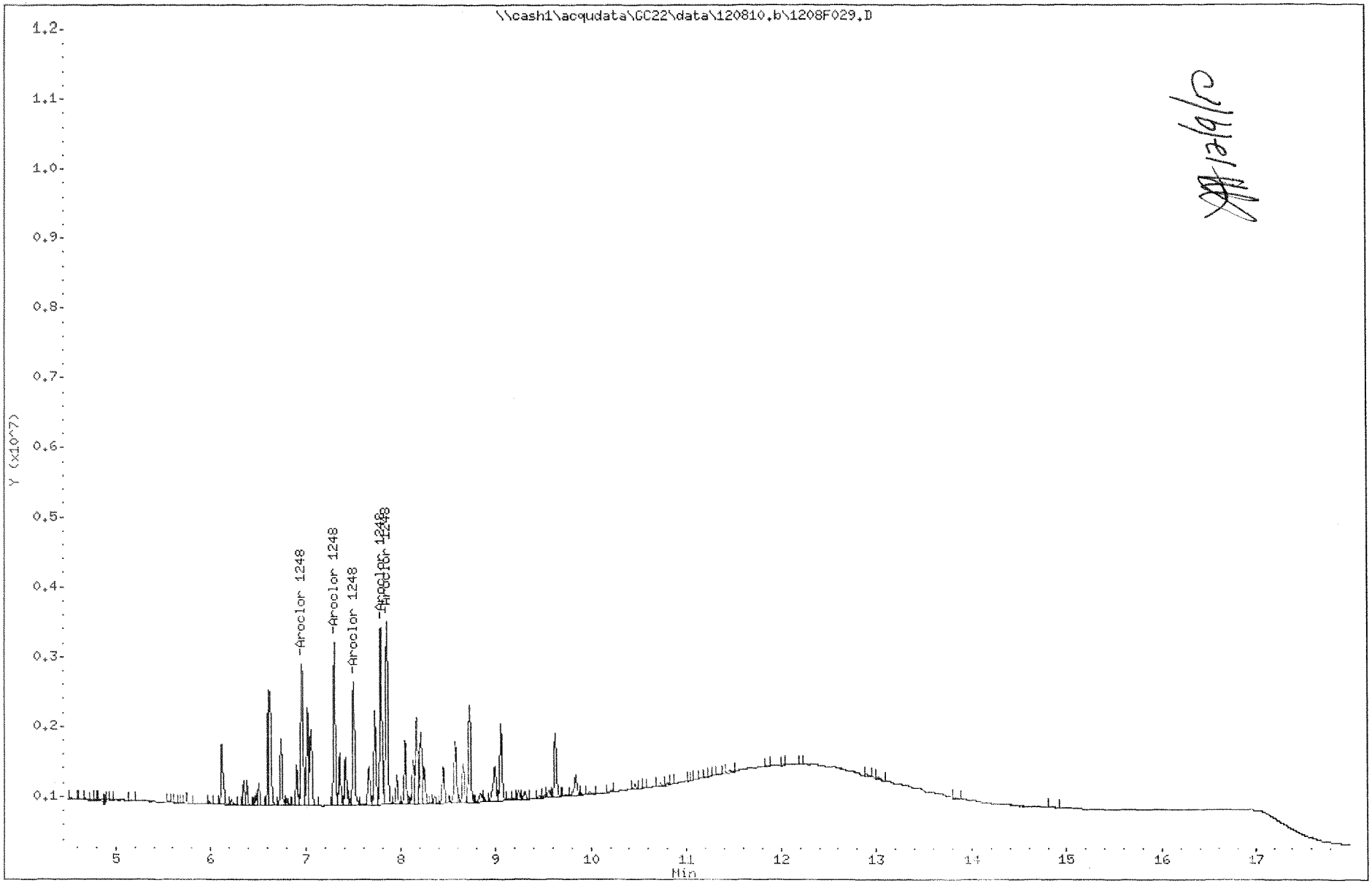
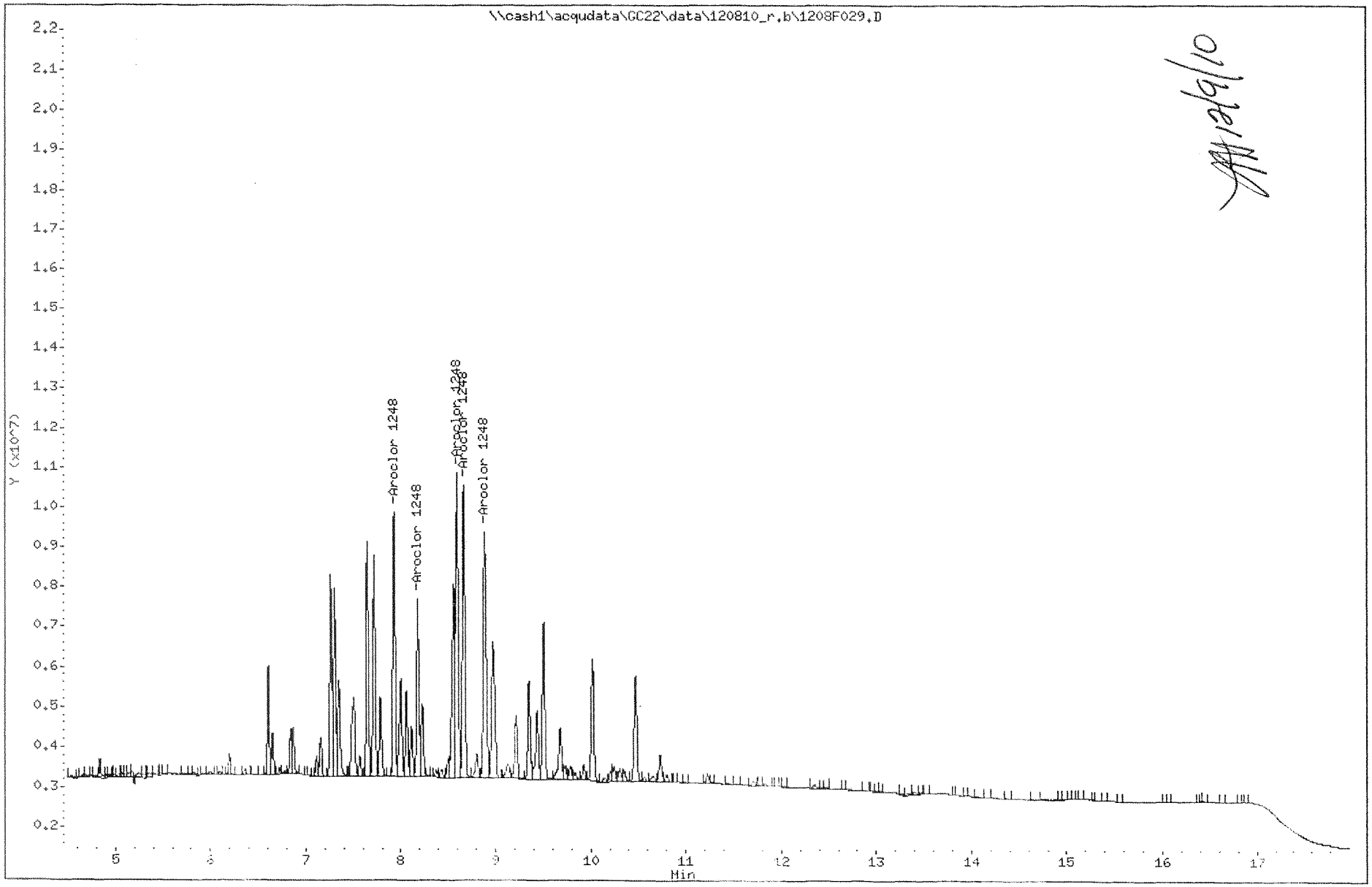
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F029.D
Date : 09-DEC-2010 07:35
Client ID:
Instrument: GC22.i
Sample Info: 1248 @ 50ppb | PCB5-61P | KWG1006746-3
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



845

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F029.D
Date : 09-DEC-2010 07:35
Client ID:
Sample Info: 1248 @ 50ppb | PCB5-61P | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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Data File: \\cash1\acqudata\GC22\data\120810.b\1208F030.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F030.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F030.D
Inj Date : 09-DEC-2010 07:59
Sample Info: 1248 @ 100ppb | PCB5-61Q | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	6.962	7.928	6179163	21474940	96.4	96.7	80.00- 120.00	100.00(M)
	7.299	8.178	6619637	15003685	96.9	98.5	87.95- 131.93	107.13(M)
	7.502	8.595	5414791	27386042	99.3	92.9	73.37- 110.05	87.63(M)
	7.786	8.665	7830796	25370285	98.0	97.6	104.62- 156.93	126.73(M)
	7.846	8.885	8832650	26963850	97.4	96.5	118.69- 178.04	142.94(M)
			Average of Peak Amounts =		97.6	96.4		

QC Flag Legend

M - Compound response manually integrated.

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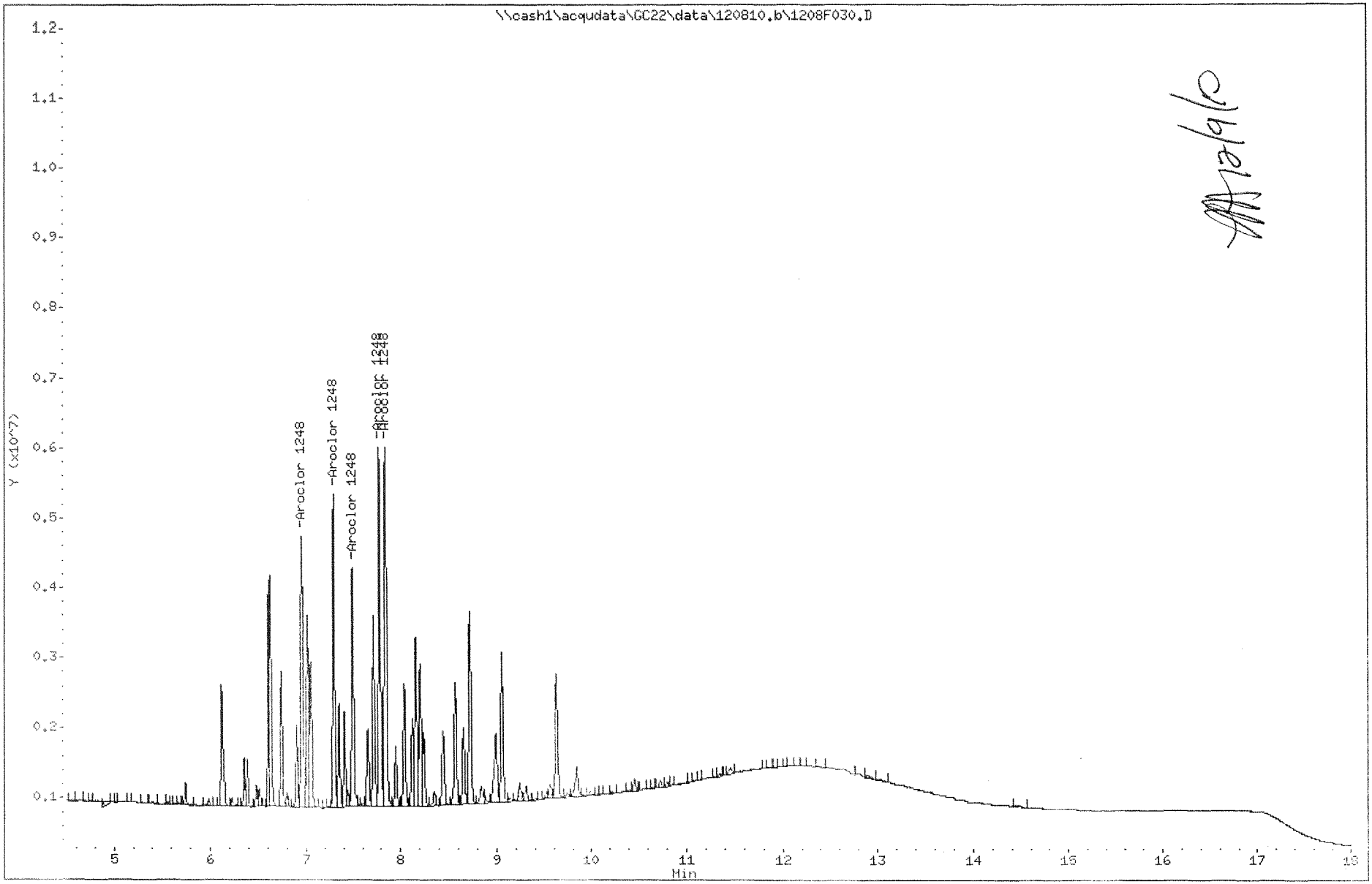
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F030.D
Date : 09-DEC-2010 07:59
Client ID:
Sample Info: 1248 @ 100ppb | PCB5-61Q | KWG1006746-3

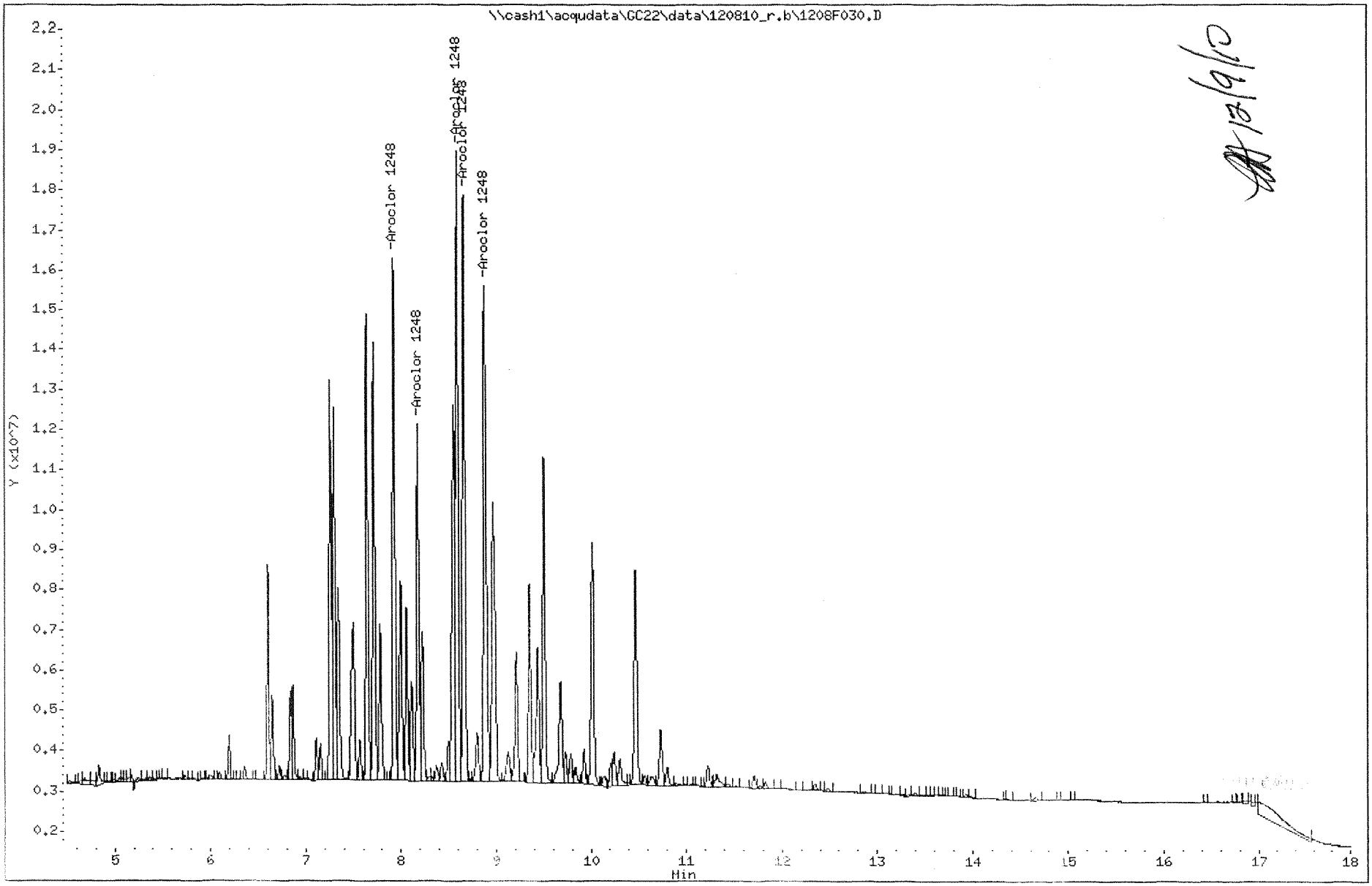
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F030.D
Date : 09-DEC-2010 07:59
Client ID:
Sample Info: 1248 @ 100ppb | PCB5-61Q | KWG1006746-3

Instrument: GC22.i

Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



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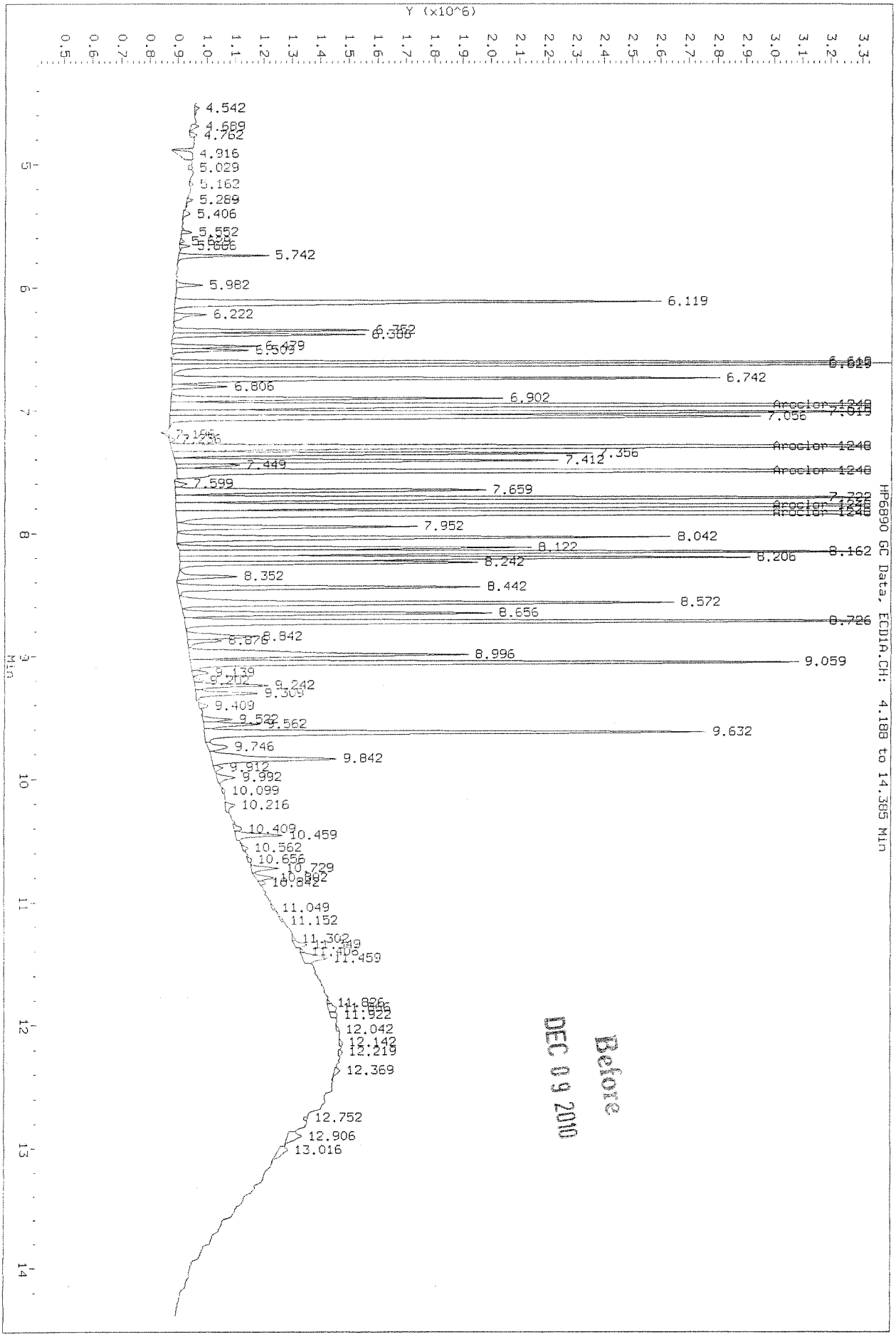
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F030.D
Injection Date: 09-DEC-2010 07:59
Instrument: GC22.1
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.188 to 14.385 Min
Min
4.542
4.762
4.916
5.029
5.406
5.742
5.982
6.119
6.222
6.742
6.806
6.902
7.056
7.412
7.449
7.599
7.659
7.952
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9.242
9.409
9.562
9.632
9.746
9.842
9.992
10.099
10.216
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10.459
10.562
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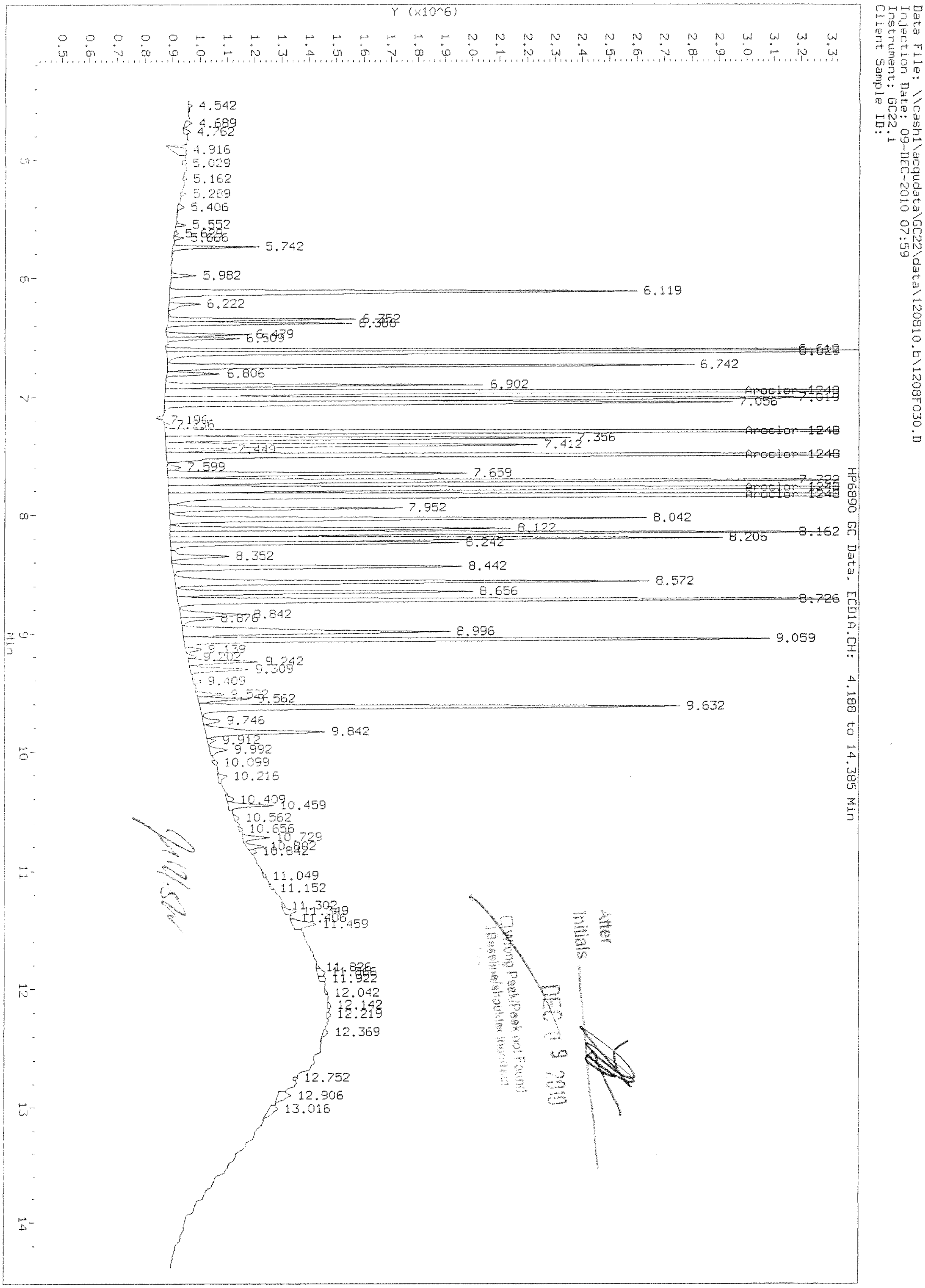
12.906
13.016
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F030.D
Injection Date: 09-DEC-2010 07:59
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 4.188 to 14.385 Min
Y (x10^6)
Min
4.542
5.742
5.982
6.119
6.222
6.742
6.806
6.902
7.056
Aroclor 1248
7.412
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10.216
11.049
11.152
12.042
12.369
12.752
12.906
13.016
After
Initials
DEC 09 2010
Wrong Peak/Peak not Found
Baseline/shoulder incorrect

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F031.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F031.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F031.D
Inj Date : 09-DEC-2010 08:24
Sample Info: 1248 @ 200ppb | PCB5-61R | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	6.965	7.931	11864446	40471439	181	182	80.00- 120.00	100.00
	7.302	8.185	12923384	28601092	179	188	87.95- 131.93	108.93
	7.505	8.598	10700521	52943623	190	180	73.37- 110.05	90.19
	7.789	8.665	15188854	48581627	190	187	104.62- 156.93	128.02
	7.852	8.885	17146389	50913355	184	182	118.69- 178.04	144.52
			Average of Peak Amounts =		185	184		

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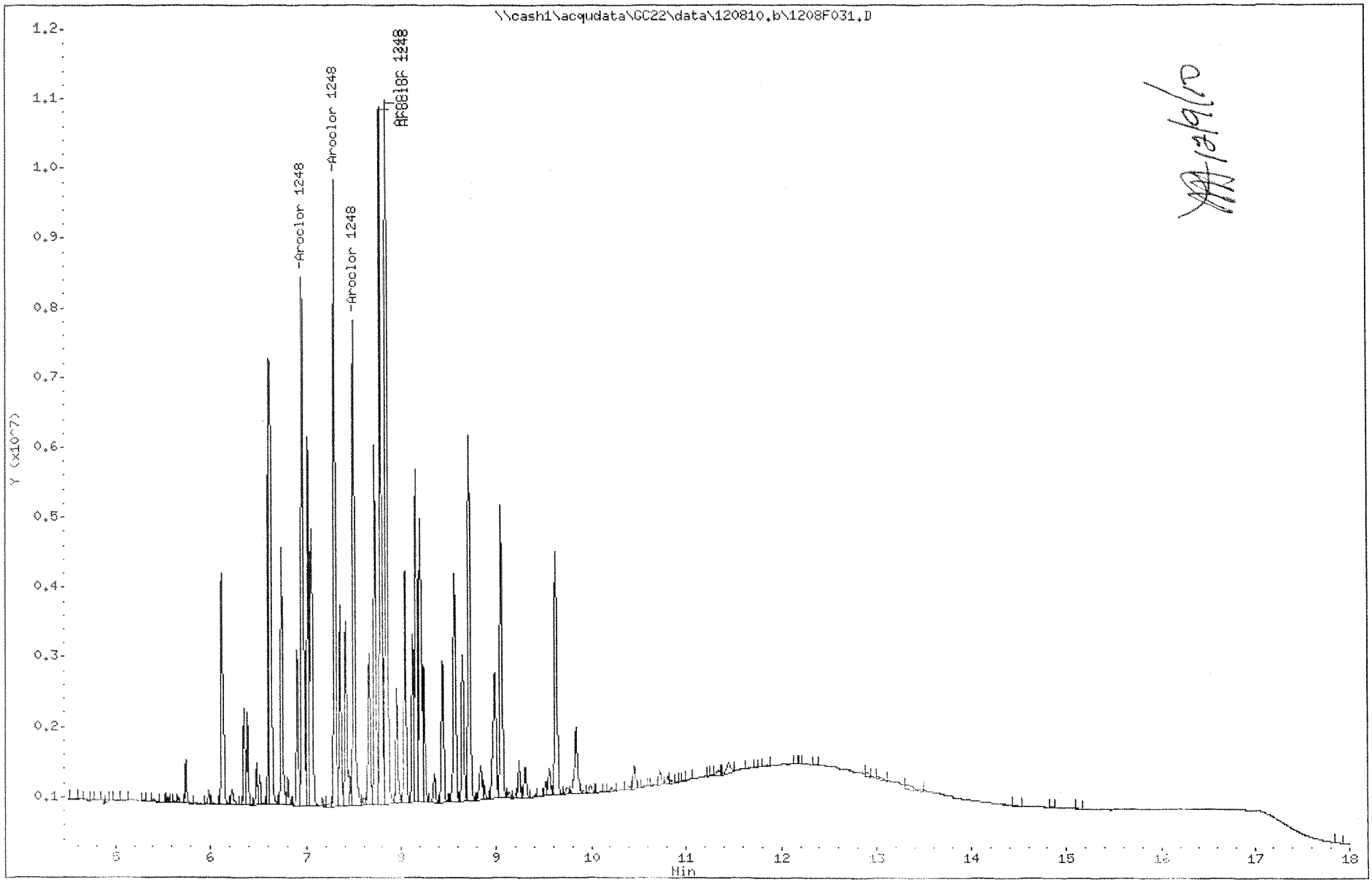
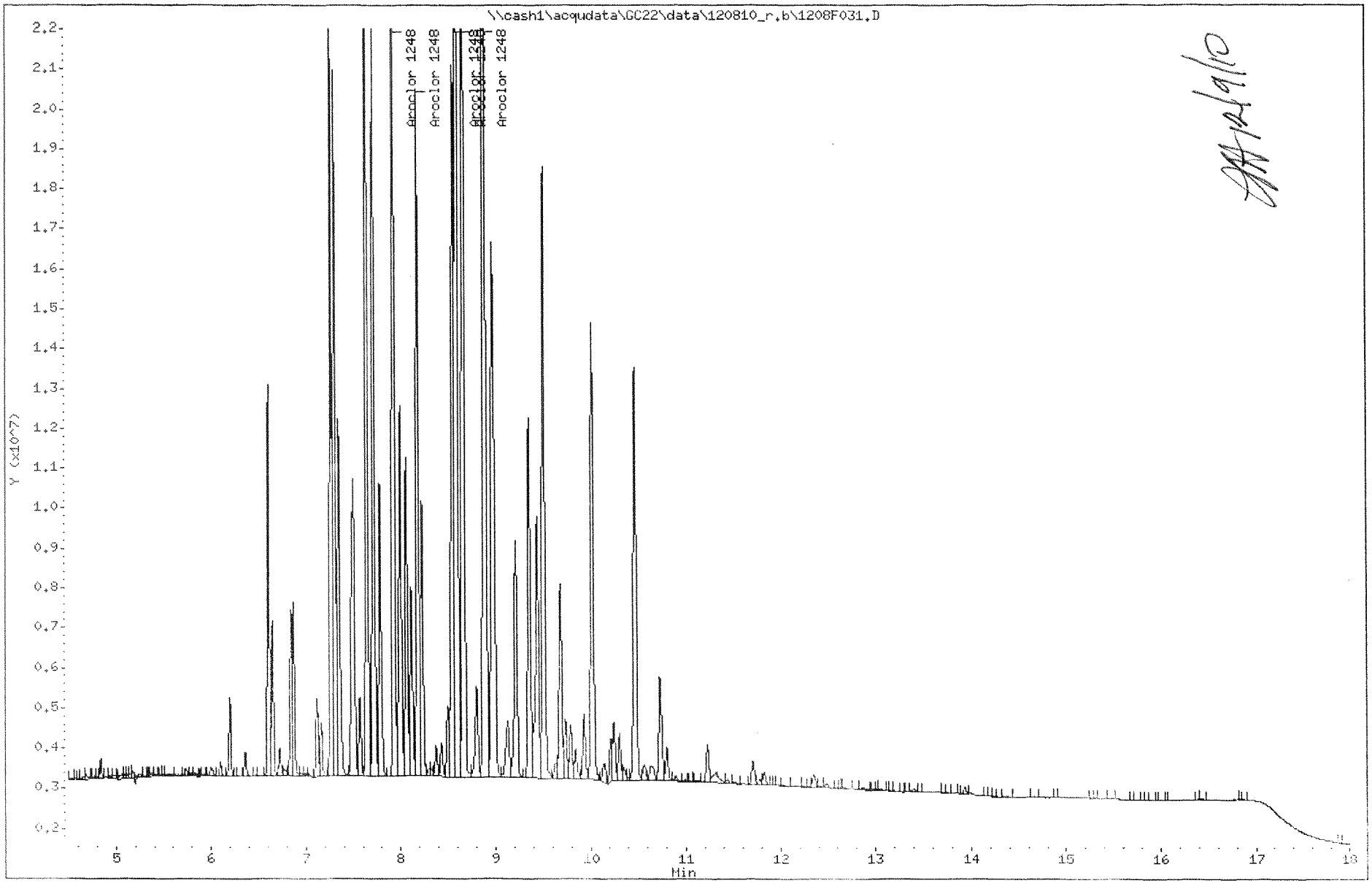
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F031.D
Date : 09-DEC-2010 08:24
Client ID:
Sample Info: 1248 @ 200ppb | PCB5-61R | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F031.D
Date : 09-DEC-2010 08:24
Client ID:
Sample Info: 1248 @ 200ppb | PCB5-61R | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F032.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F032.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F032.D
Inj Date : 09-DEC-2010 08:48
Sample Info: 1248 @ 500ppb | PCB5-61S | KWG1006746-3
Misc Info :
Cal Date : 09-DEC-2010 11:18
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	6.964	7.933	29031226	98062024	453	442	80.00- 120.00	100.00(M)
	7.304	8.183	31916909	71889616	467	472	87.95- 131.93	109.94(M)
	7.504	8.597	26624661	126257309	486	428	73.37- 110.05	91.71(M)
	7.787	8.667	37965409	119667606	474	461	104.62- 156.93	130.77(M)
	7.851	8.887	43072729	124722695	474	446	118.69- 178.04	148.37(M)
			Average of Peak Amounts =		471	450		

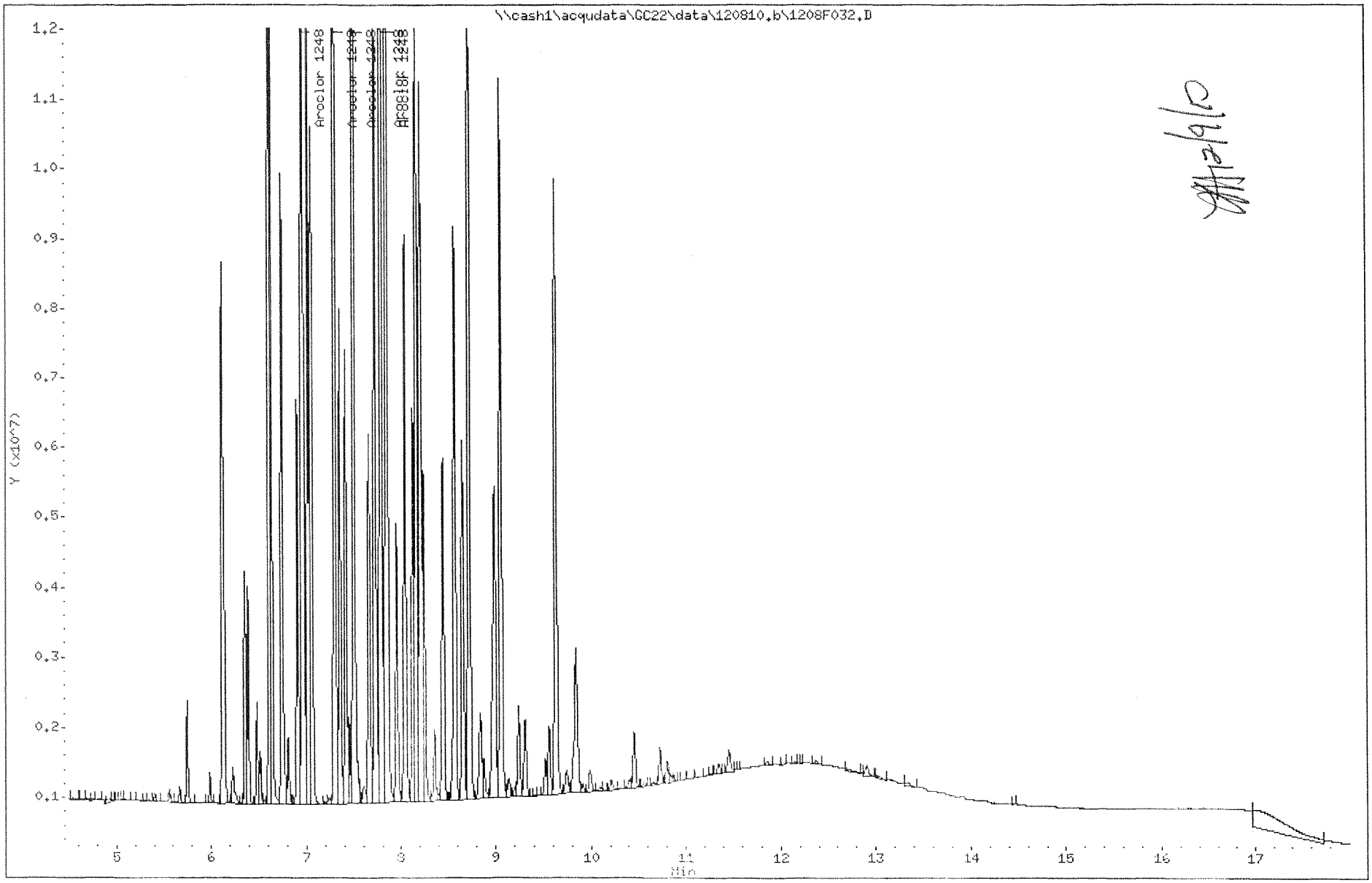
QC Flag Legend

M - Compound response manually integrated.

12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F032.D
Date : 09-DEC-2010 08:48
Client ID:
Sample Info: 1248 @ 500ppb | PCB5-61S | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32

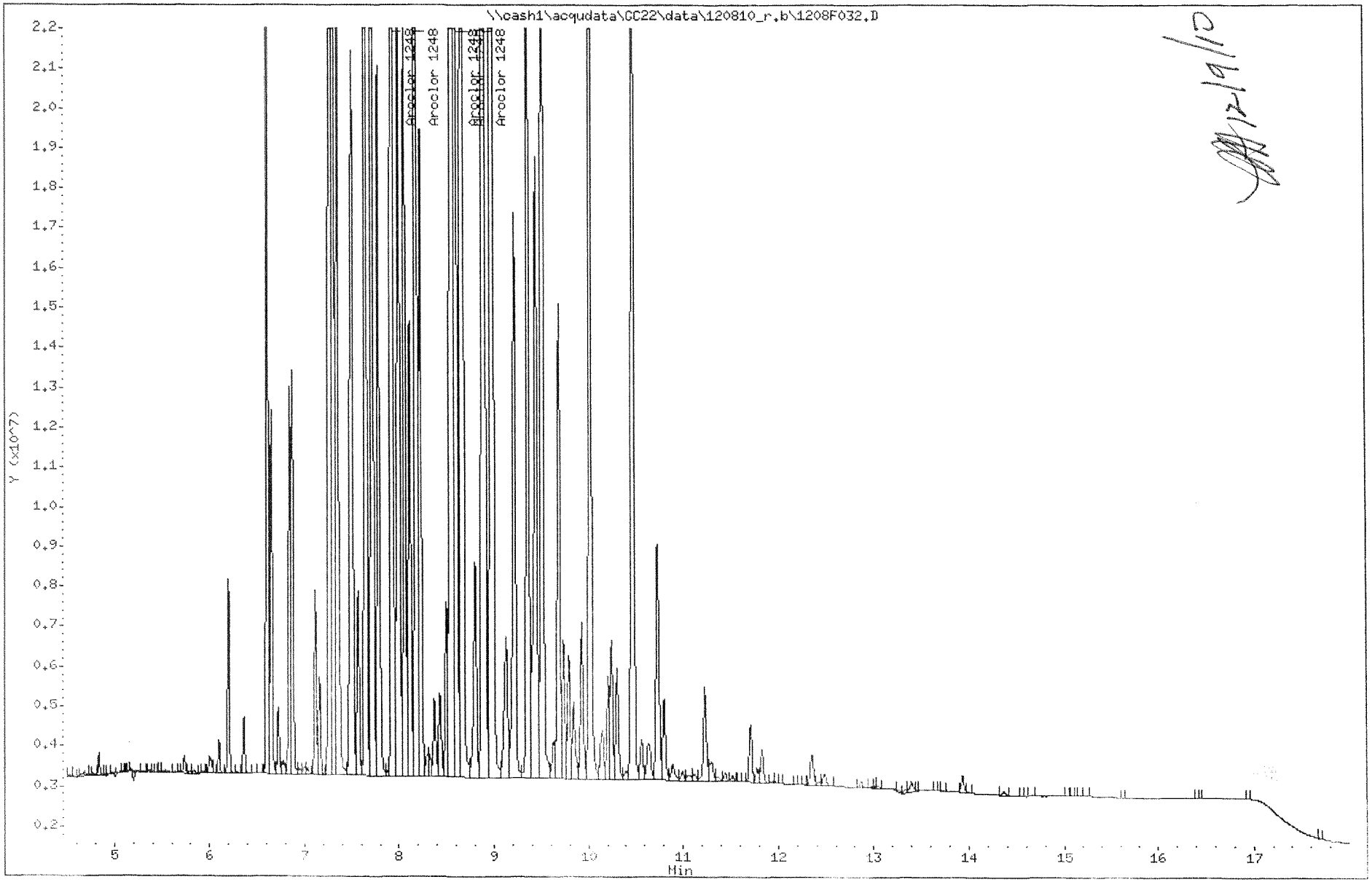


12-9-10

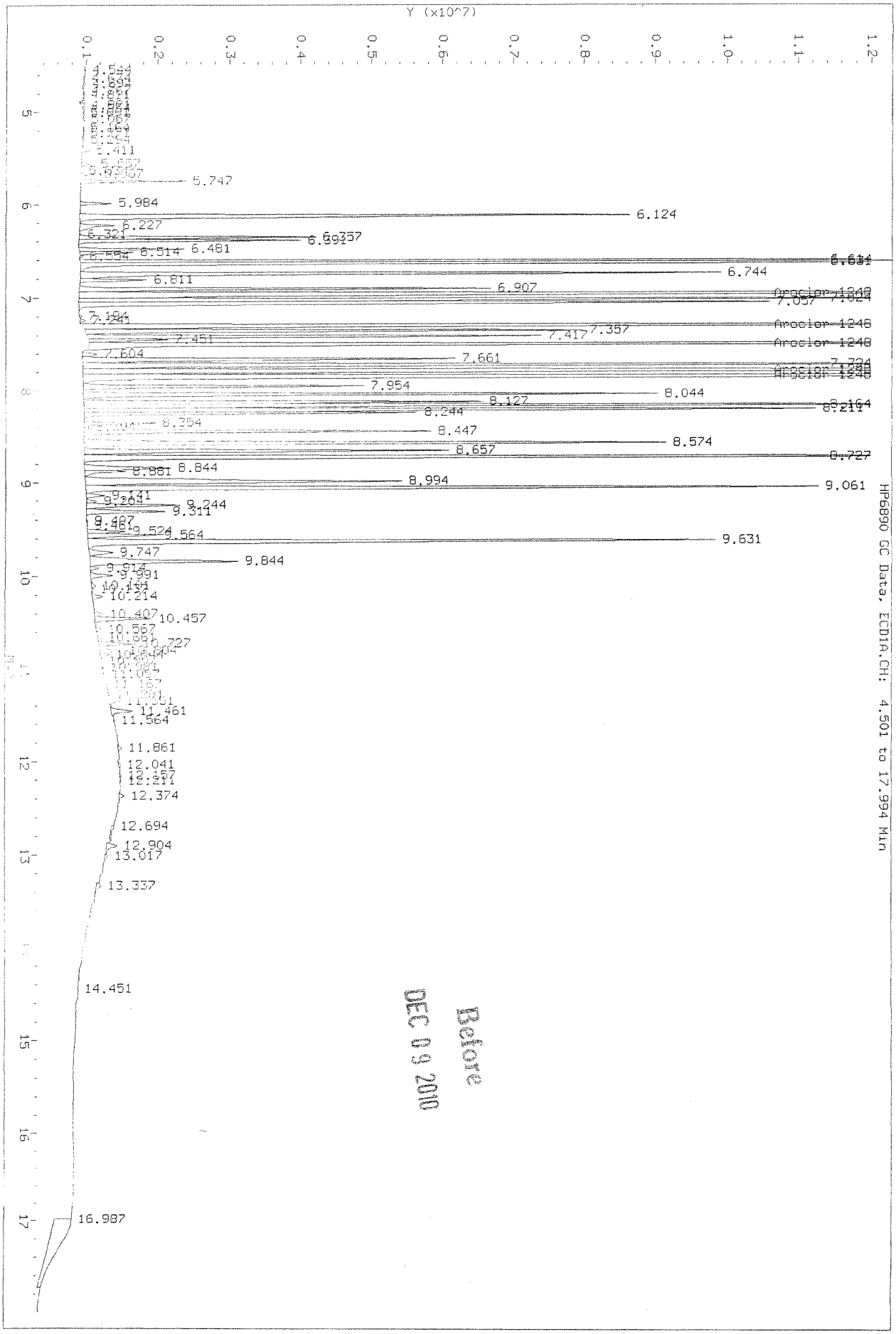
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F032.D
Date : 09-DEC-2010 08:48
Client ID:
Sample Info: 1248 @ 500ppb | PCB5-61S | KWG1006746-3

Instrument: GC22.i
Operator: LHarris
Column diameter: 0.32

Column phase: DB-XLB

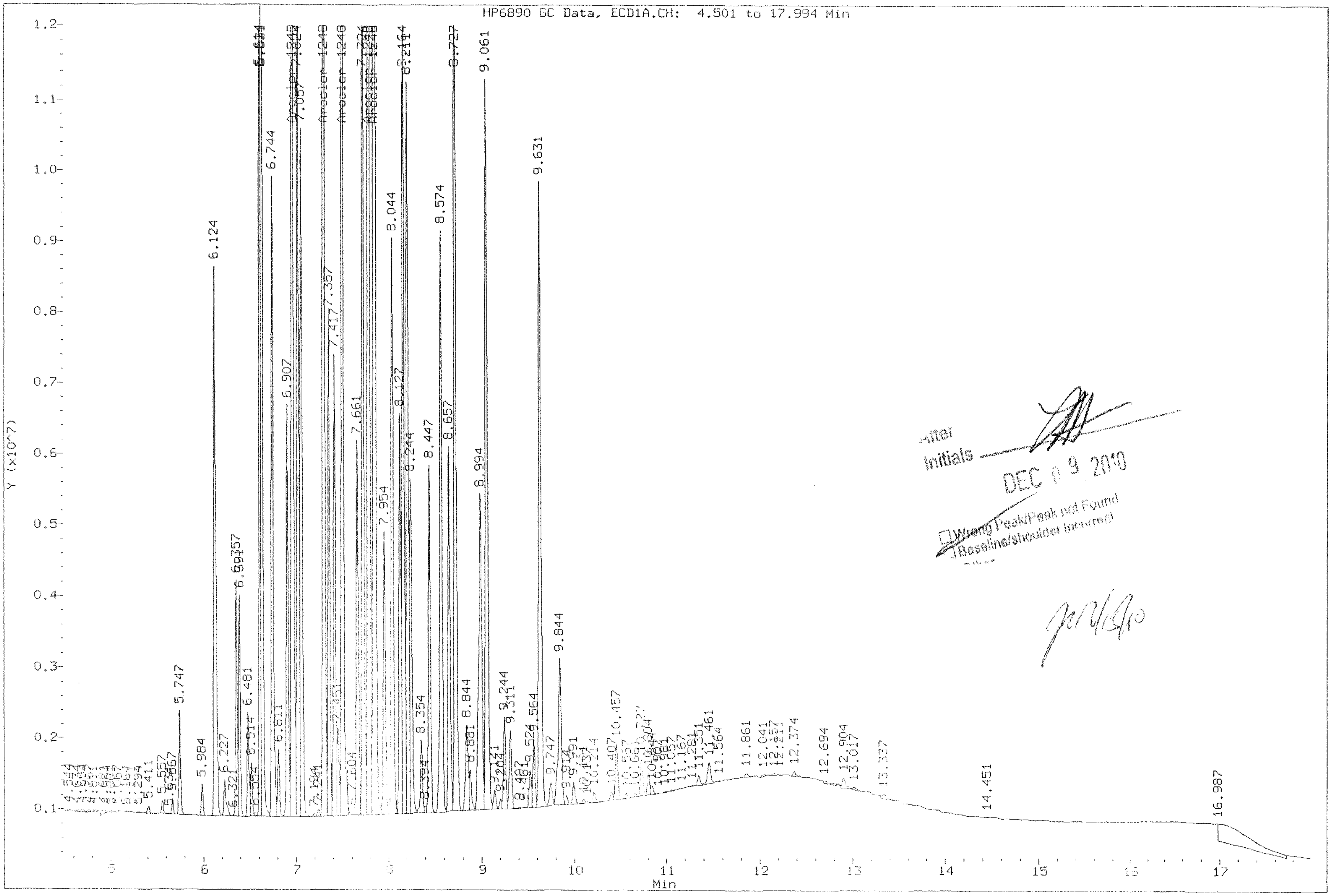


12-19-10



Before
DEC 9 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F032.D
Injection Date: 09-DEC-2010 08:48
Instrument: GC22.i
Client Sample ID:



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F033.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

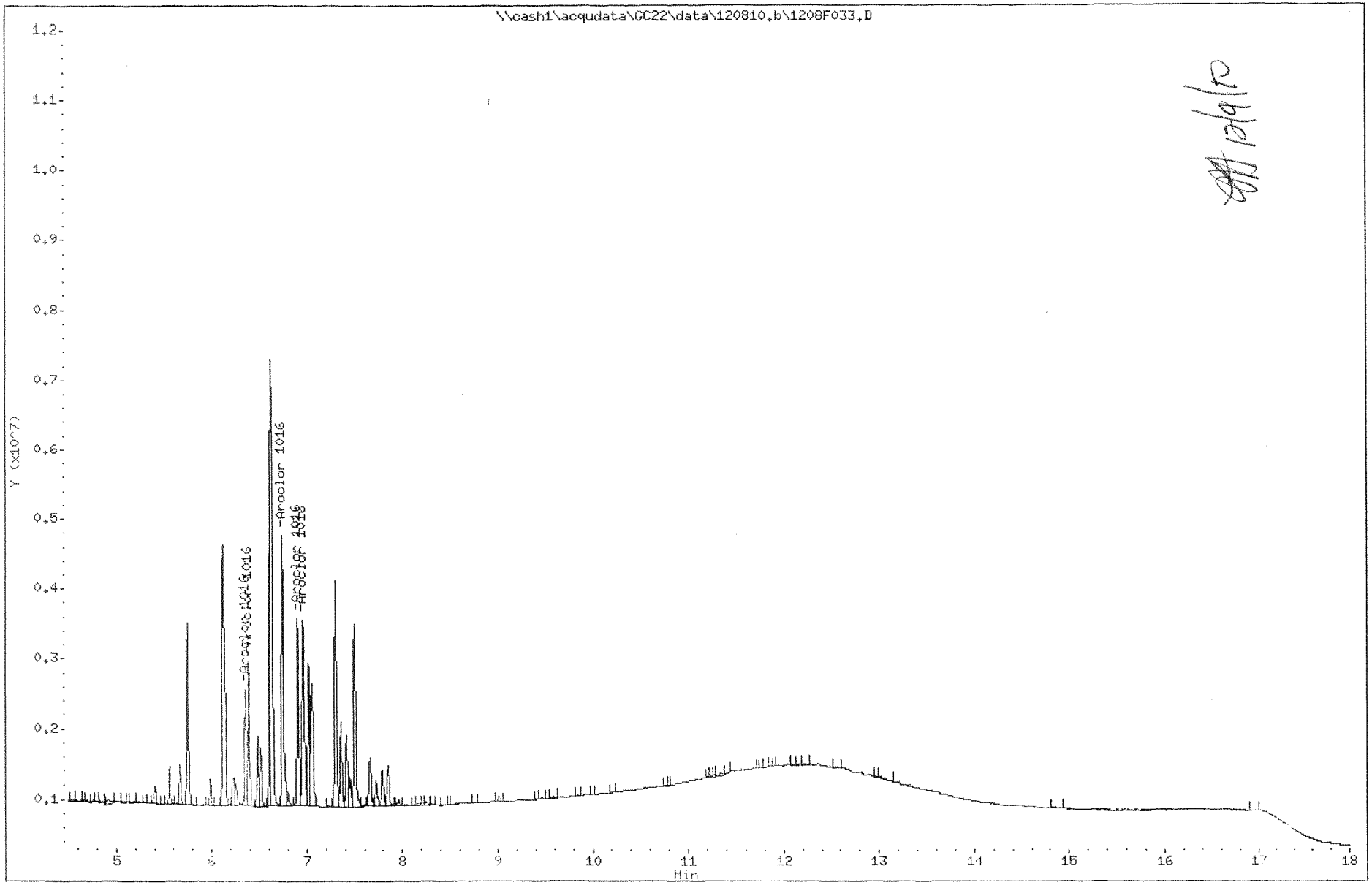
Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F033.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F033.D
Inj Date : 09-DEC-2010 09:12
Sample Info: 1016 @ 100ppb | PCB5-62F | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1016.sub
Sub List #2 : AR1016.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1016	6.355	6.607	1983238	15032425	87.2	86.0	80.00- 120.00	100.00
	6.392	7.308	2713579	28809042	87.6	82.1	100.61- 150.92	136.83
	6.745	7.508	5738307	15894581	85.6	91.0	227.73- 341.59	289.34
	6.908	7.648	3616706	12134493	87.6	83.6	147.14- 220.70	182.36
	6.965	7.721	4338466	14212772	85.8	83.9	168.99- 253.49	218.76
			Average of Peak Amounts =		86.8	85.3		

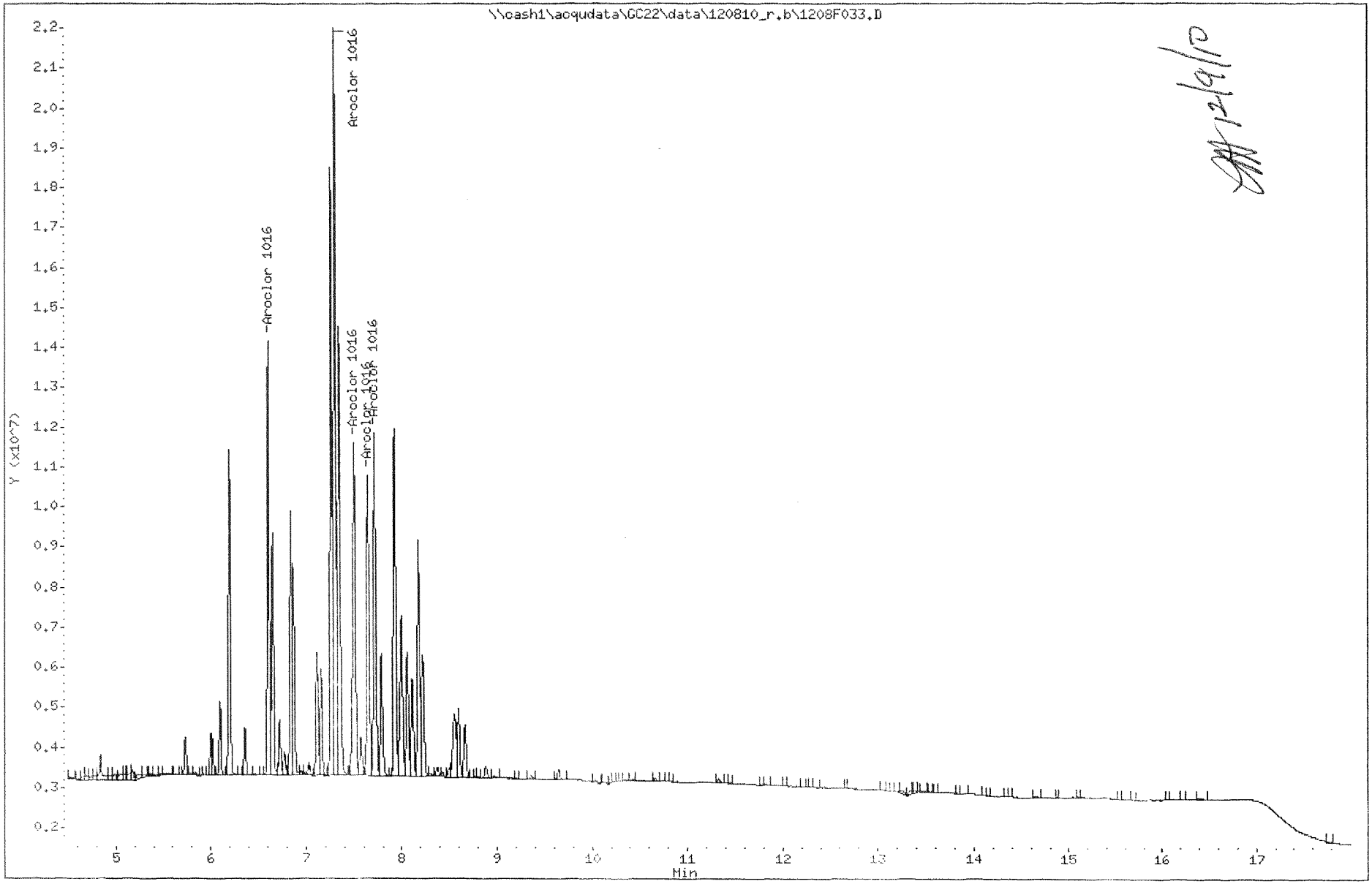
12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F033.D
Date : 09-DEC-2010 09:12
Client ID:
Instrument: GC22.i
Sample Info: 1016 @ 100ppb | PCB5-62F | KWG1006746-4
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



861

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F033.D
Date : 09-DEC-2010 09:12
Client ID:
Instrument: GC22.i
Sample Info: 1016 @ 100ppb | PCB5-62F | KWG1006746-4
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F034.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F034.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F034.D
Inj Date : 09-DEC-2010 09:37
Sample Info: 1221 @ 100ppb | PCB5-67H | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1221.SUB
Sub List #2 : AR1221.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1221	4.916	5.198	1157363	3727859	96.8	110	80.00- 120.00	100.00(M)
	5.236	5.632	366076	1192468	92.2	99.8	24.79- 37.19	31.63(M)
	5.556	5.732	1893316	2202763	97.8	103	145.66- 218.48	163.59(M)
	5.666	6.098	1212835	4349629	100	100	91.03- 136.55	104.79(M)
			Average of Peak Amounts =		96.7	103		

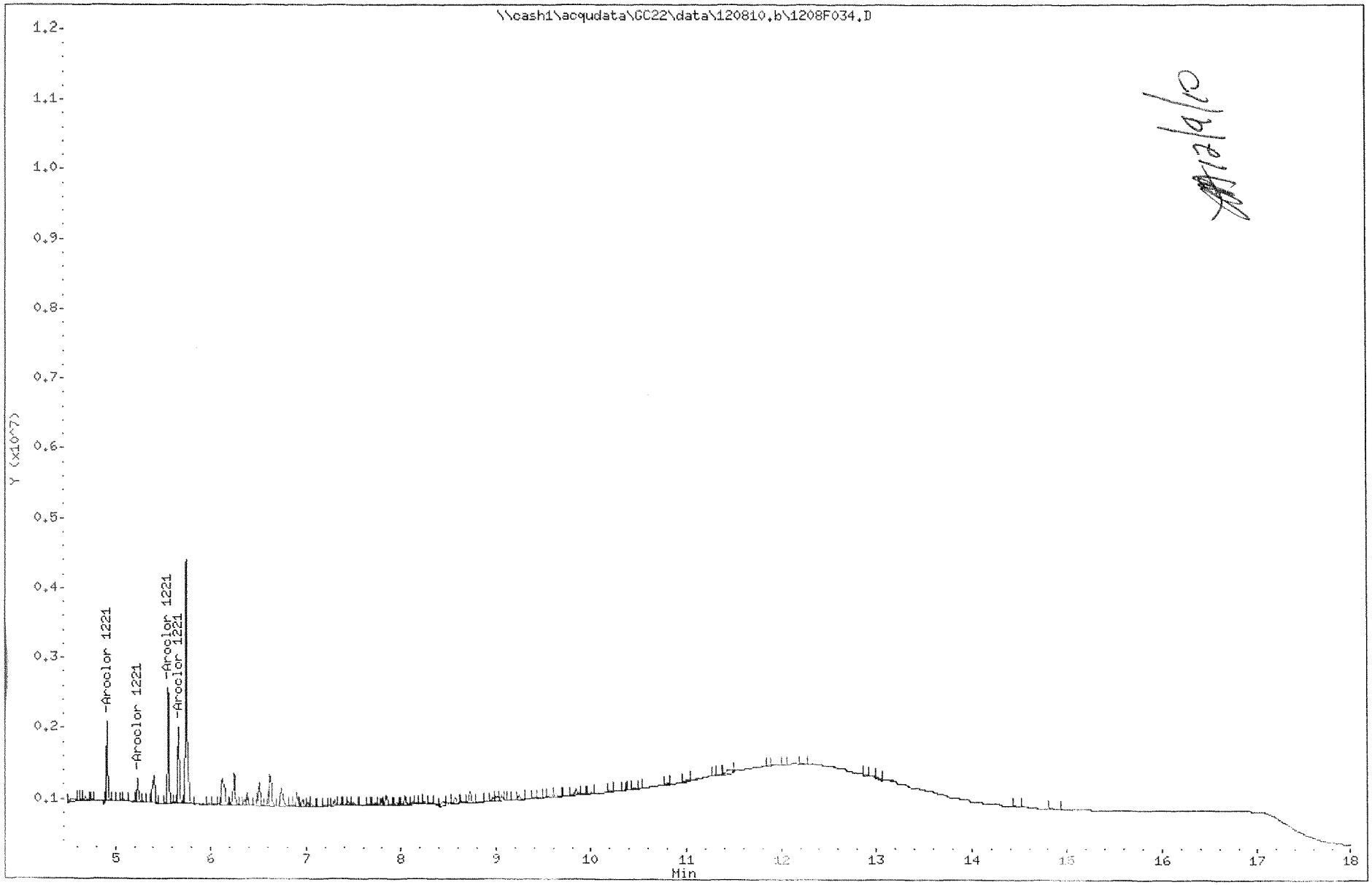
QC Flag Legend

M - Compound response manually integrated.

12/9/10

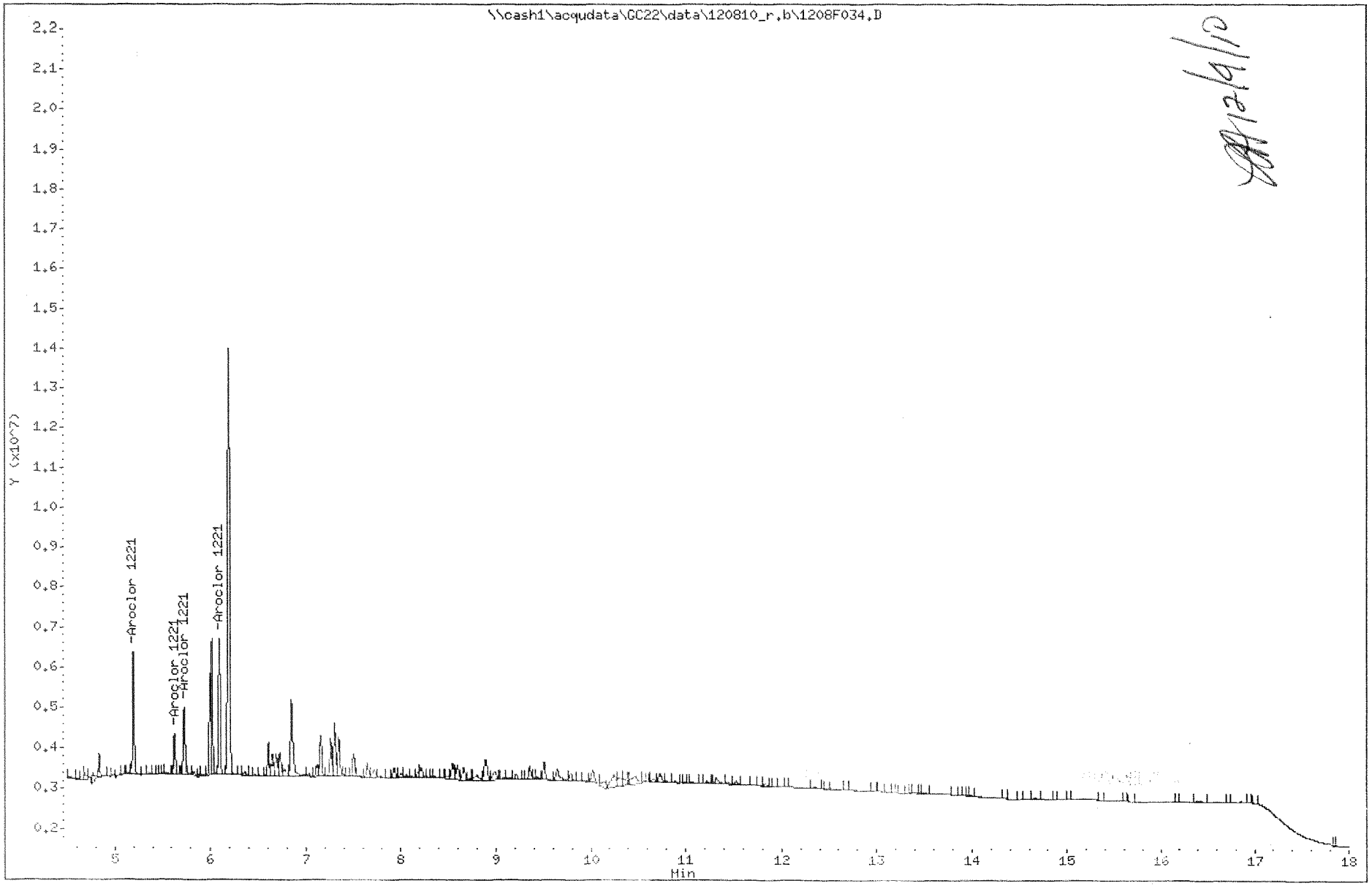
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F034.D
Date : 09-DEC-2010 09:37
Client ID:
Sample Info: 1221 @ 100ppb | PCB5-67H | KWG1006746-4

Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32

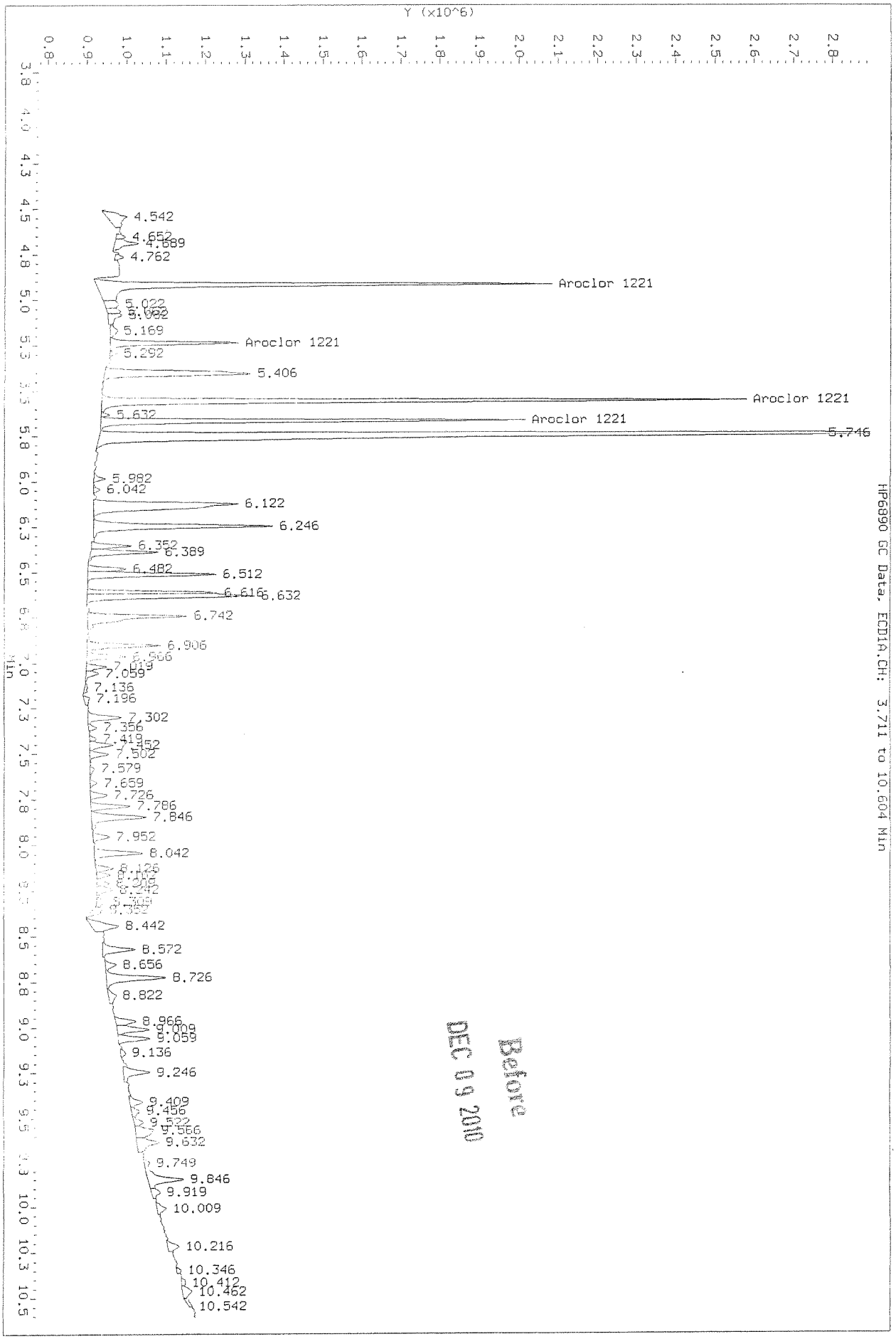


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F034.D
Date : 09-DEC-2010 09:37
Client ID:
Sample Info: 1221 @ 100ppb | PCB5-67H | KWG1006746-4

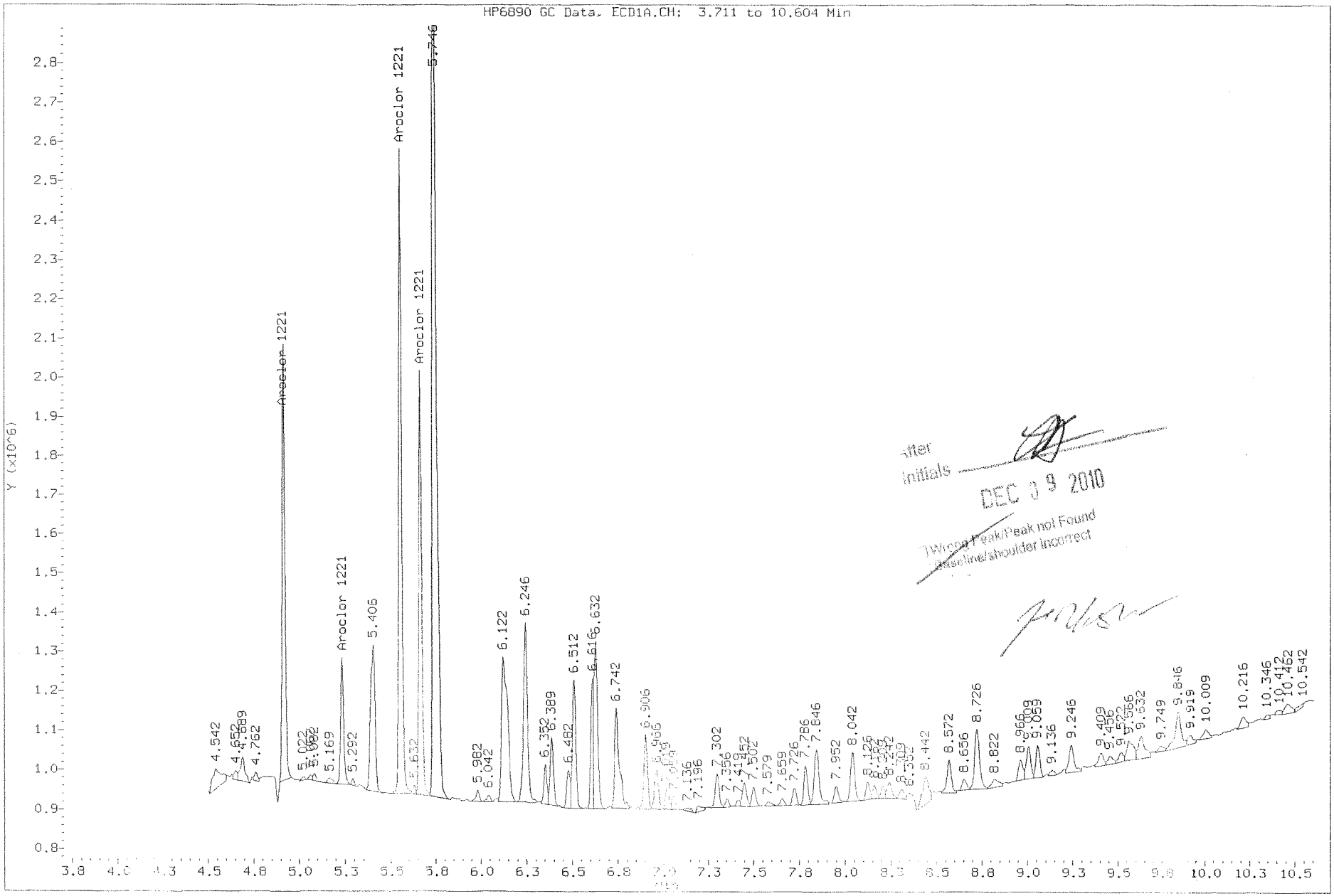
Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



12/14/10


Data File: \\cashl\acqudata\GC22\data\120810.b\120BF034.D
Injection Date: 09-DEC-2010 09:37
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 3.711 to 10.604 Min
Y (x10^6)
Min
4.542
4.652
4.689
4.762
Aroclor 1221
5.022
5.082
5.169
Aroclor 1221
5.292
5.406
Aroclor 1221
5.632
Aroclor 1221
5.746
5.982
6.042
6.122
6.246
6.352
6.389
6.482
6.512
6.616
6.632
6.742
6.906
7.059
7.136
7.196
7.302
7.356
7.419
7.452
7.502
7.579
7.659
7.726
7.786
7.846
7.952
8.042
8.442
8.572
8.656
8.726
8.822
8.966
9.009
9.059
9.136
9.246
9.409
9.456
9.522
9.566
9.632
9.749
9.846
9.919
10.009
10.216
10.346
10.412
10.462
10.542
Before
DEC 9 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F034.D
Injection Date: 09-DEC-2010 09:37
Instrument: GC22.i
Client Sample ID:



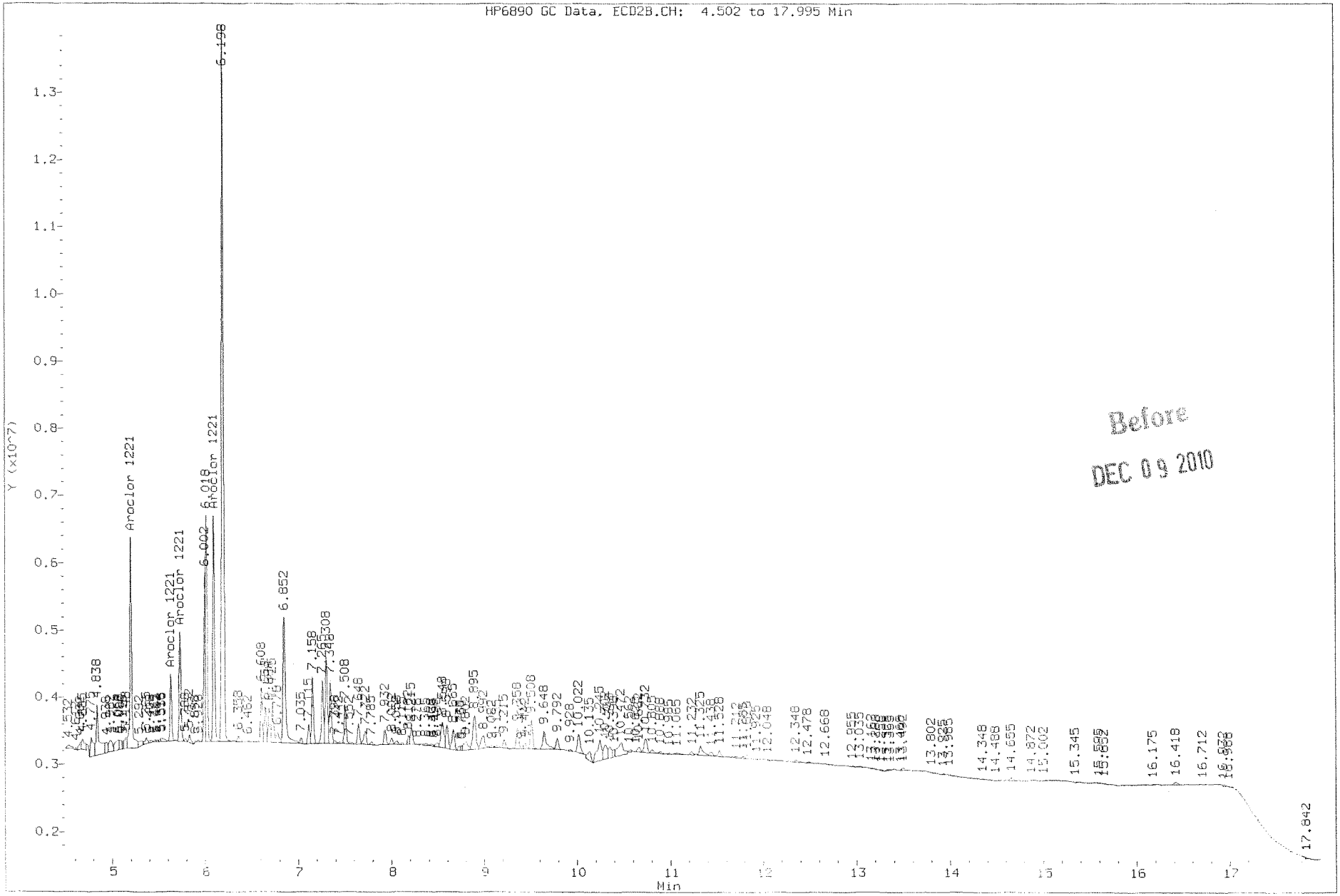
Initials

DEC 3 9 2010

Wrong Peak/Peak not Found
Baseline/shoulder Incorrect

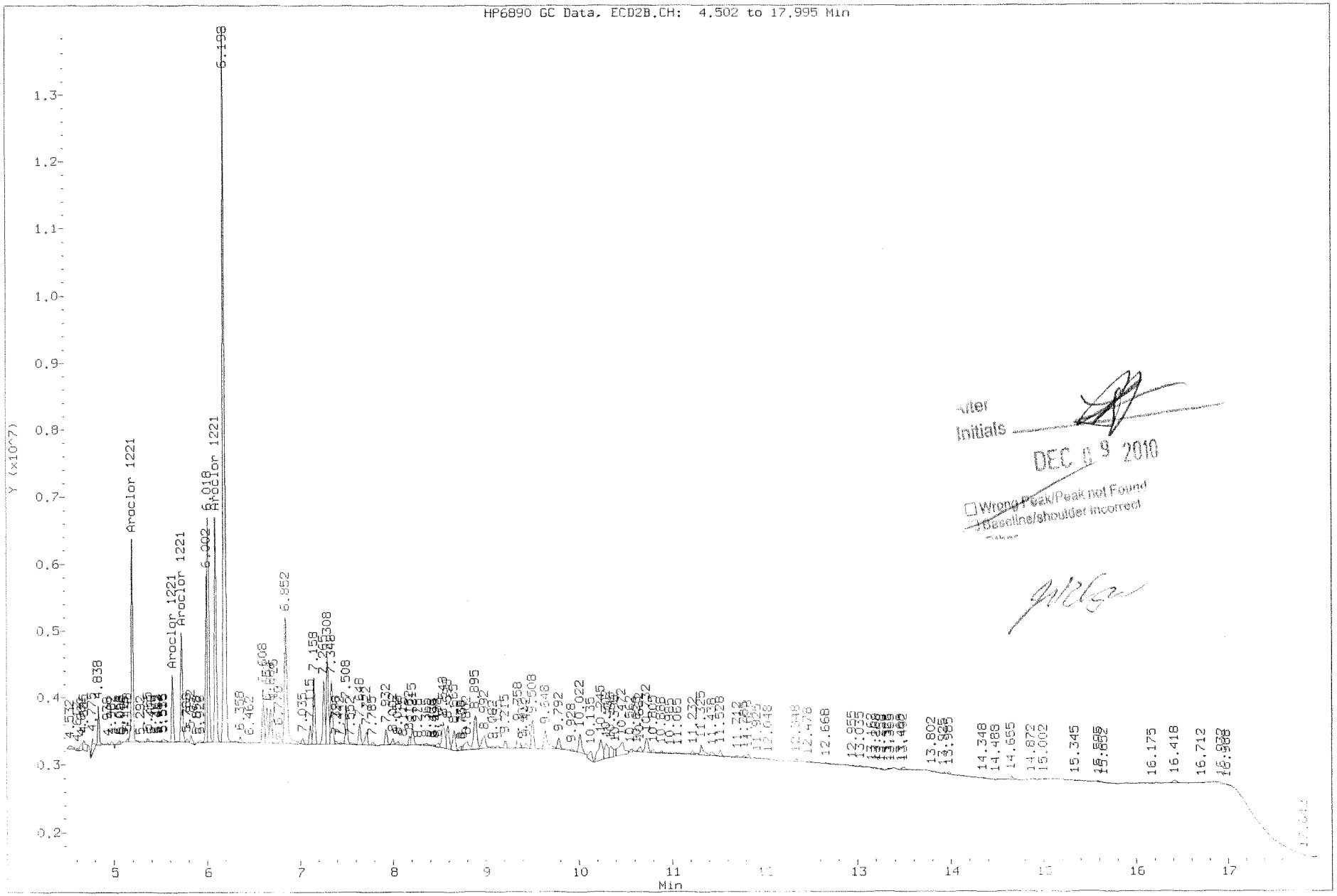
867

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F034.D
Injection Date: 09-DEC-2010 09:37
Instrument: GC22.i
Client Sample ID:



Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F034.D
Injection Date: 09-DEC-2010 09:37
Instrument: GC22.i
Client Sample ID:



Initials

DEC 09 2010

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F035.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F035.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F035.D
Inj Date : 09-DEC-2010 10:01
Sample Info: 1232 @ 100ppb | PCB5-67I | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

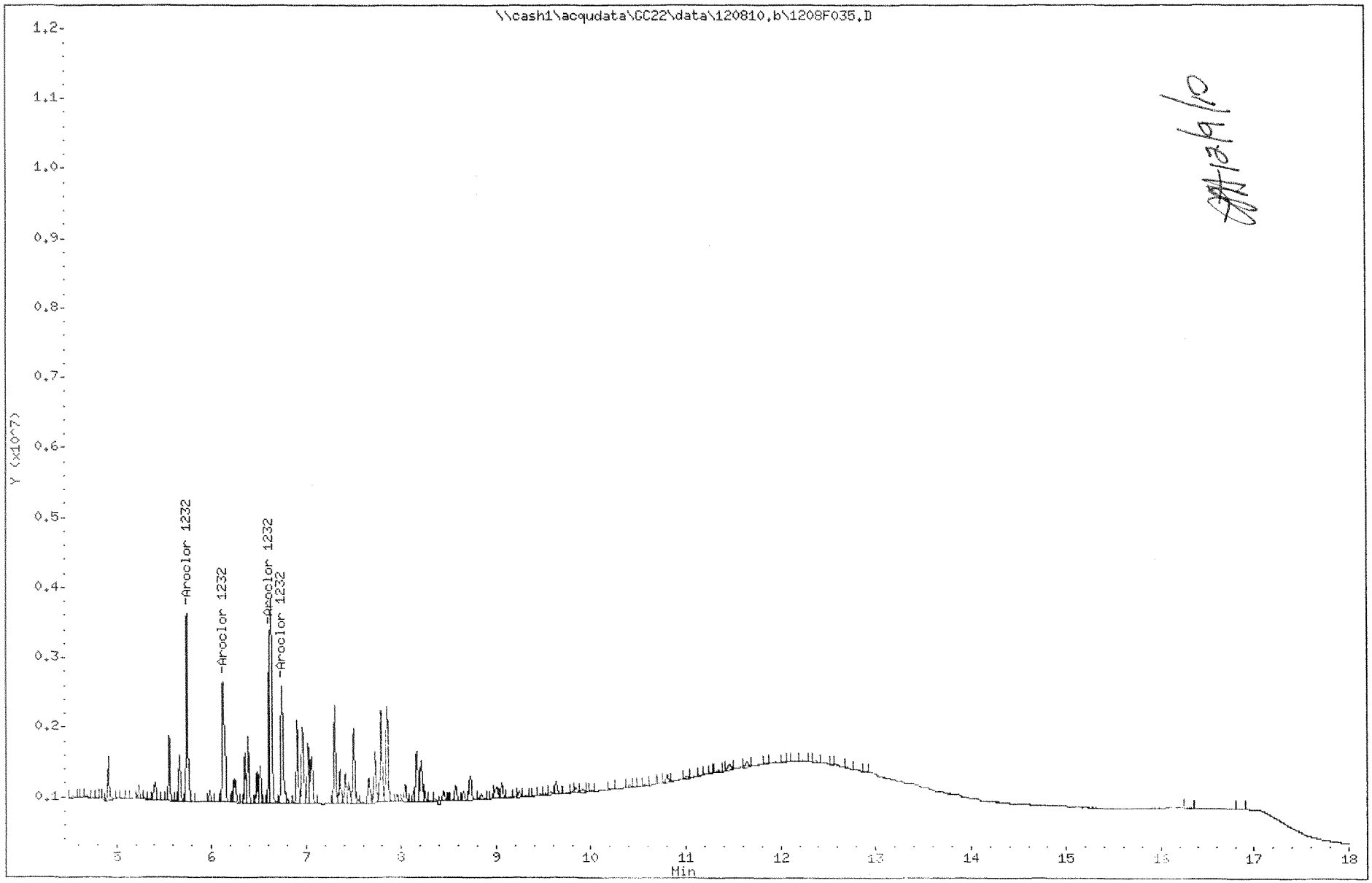
Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1232.SUB
Sub List #2 : AR1232.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1232	5.746	6.199	3468086	11954801	83.4	83.9	80.00- 120.00	100.00
	6.123	6.609	3205666	7103739	86.6	91.0	68.05- 102.08	92.43
	6.616	7.265	2394988	11072174	77.1	90.1	62.16- 93.24	69.06
	6.746	7.505	2614742	7105210	87.4	104	57.67- 86.50	75.39
			Average of Peak Amounts =		83.6	92.2		

12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F035.D
Date : 09-DEC-2010 10:01
Client ID:
Sample Info: 1232 @ 100ppb | PCB5-67I | KWG1006746-4

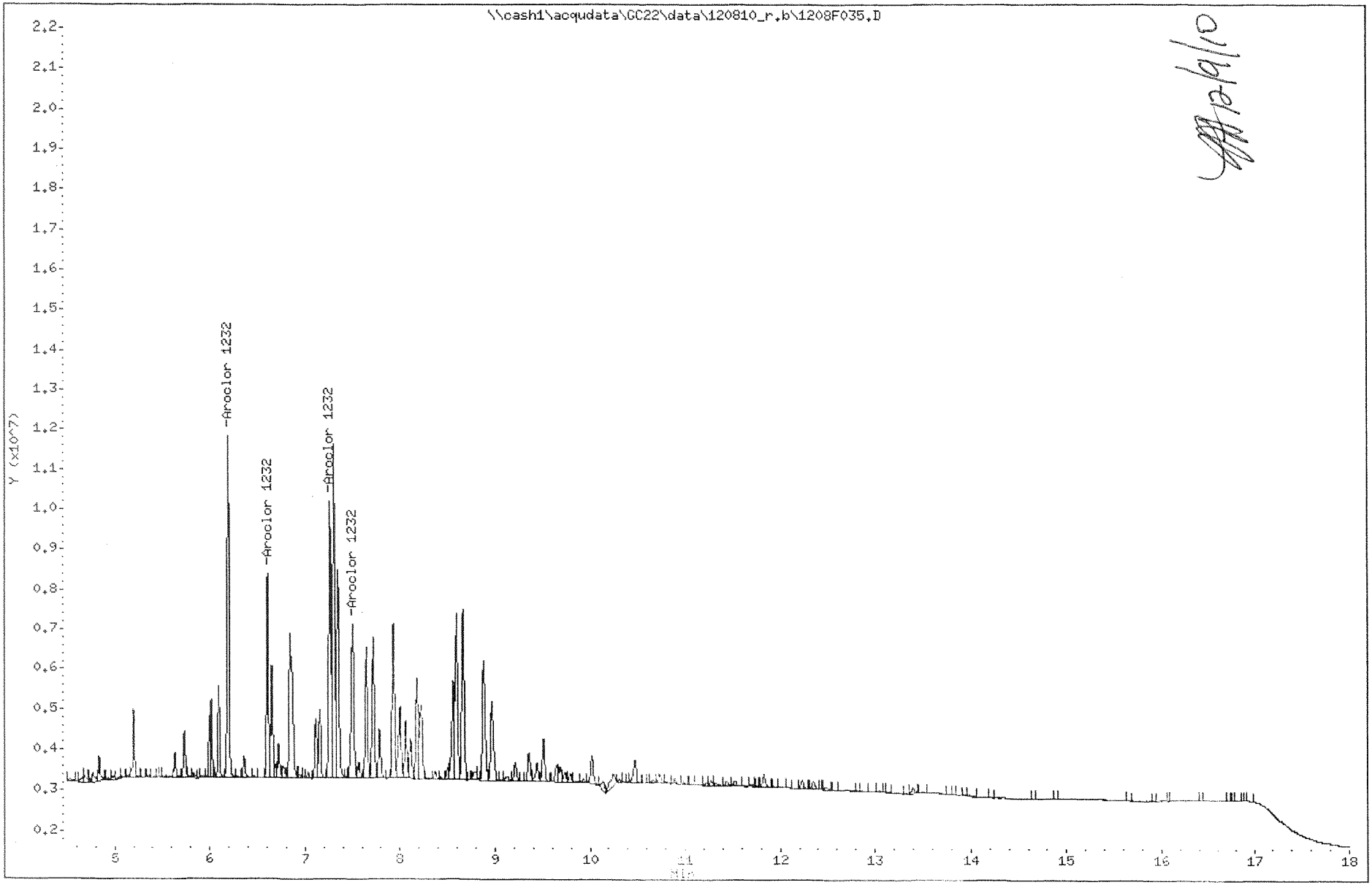
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



871

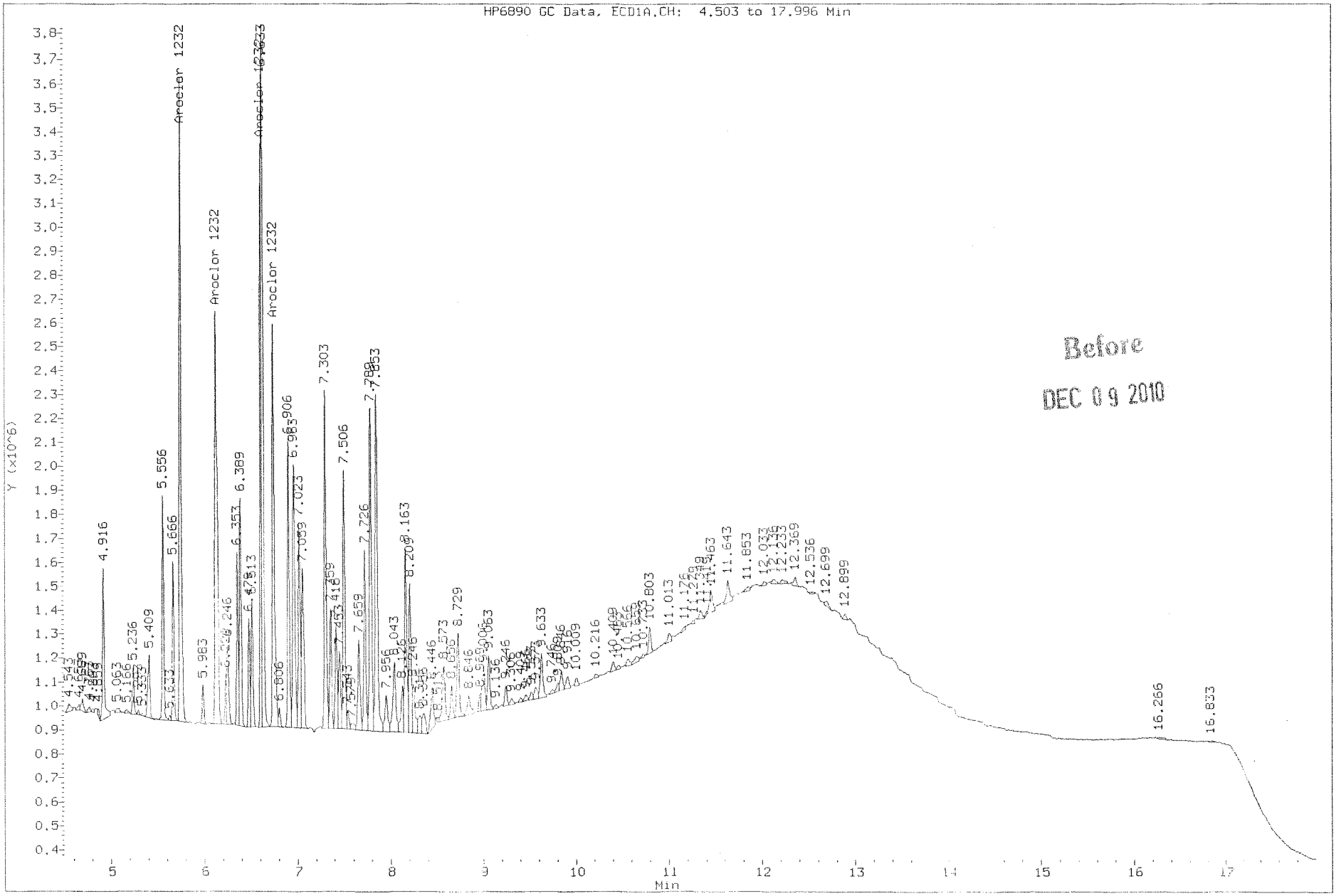
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F035.D
Date : 09-DEC-2010 10:01
Client ID:
Sample Info: 1232 @ 100ppb | PCB5-67I | KWG1006746-4

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



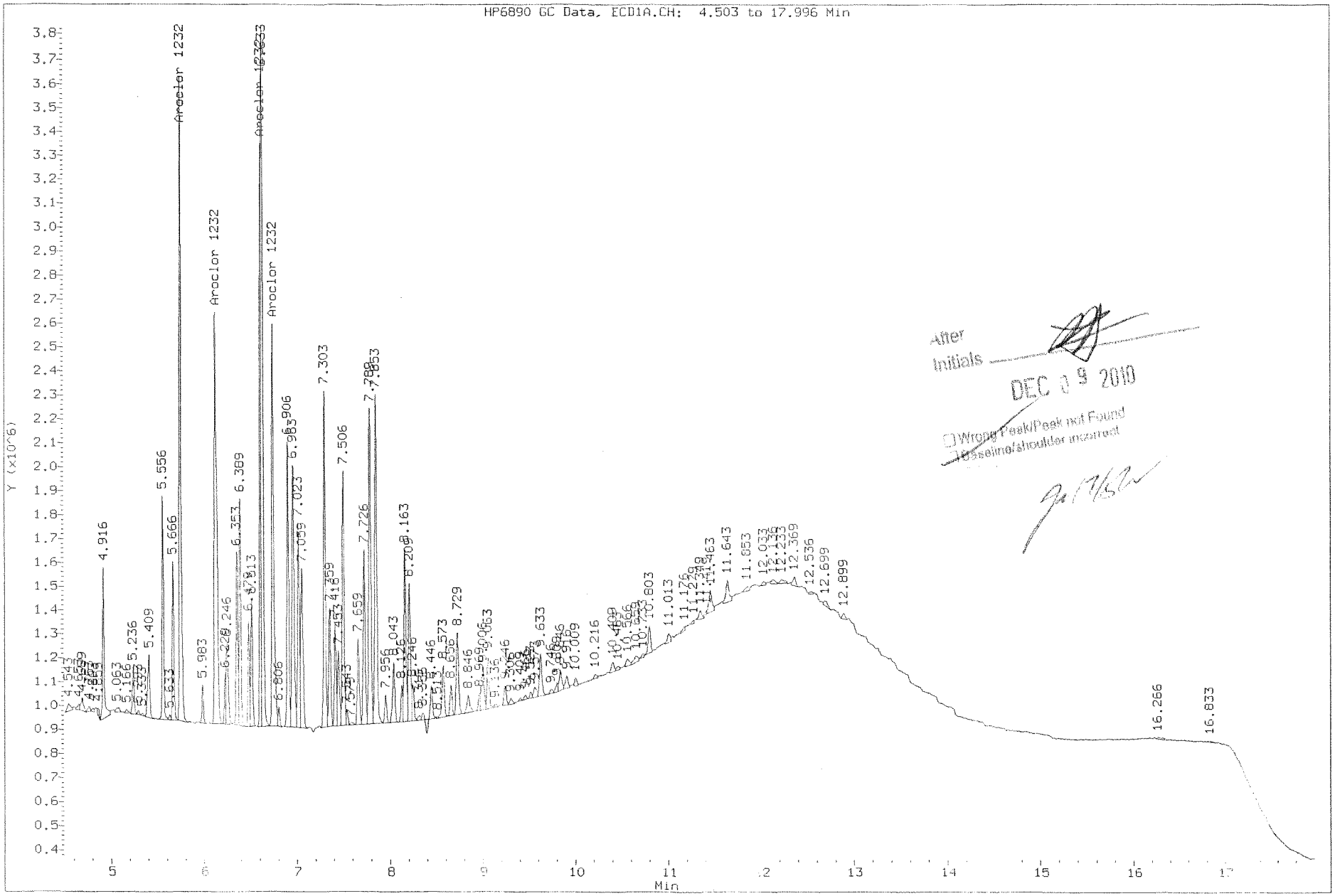
12-9-10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F035.D
Injection Date: 09-DEC-2010 10:01
Instrument: GC22.i
Client Sample ID:

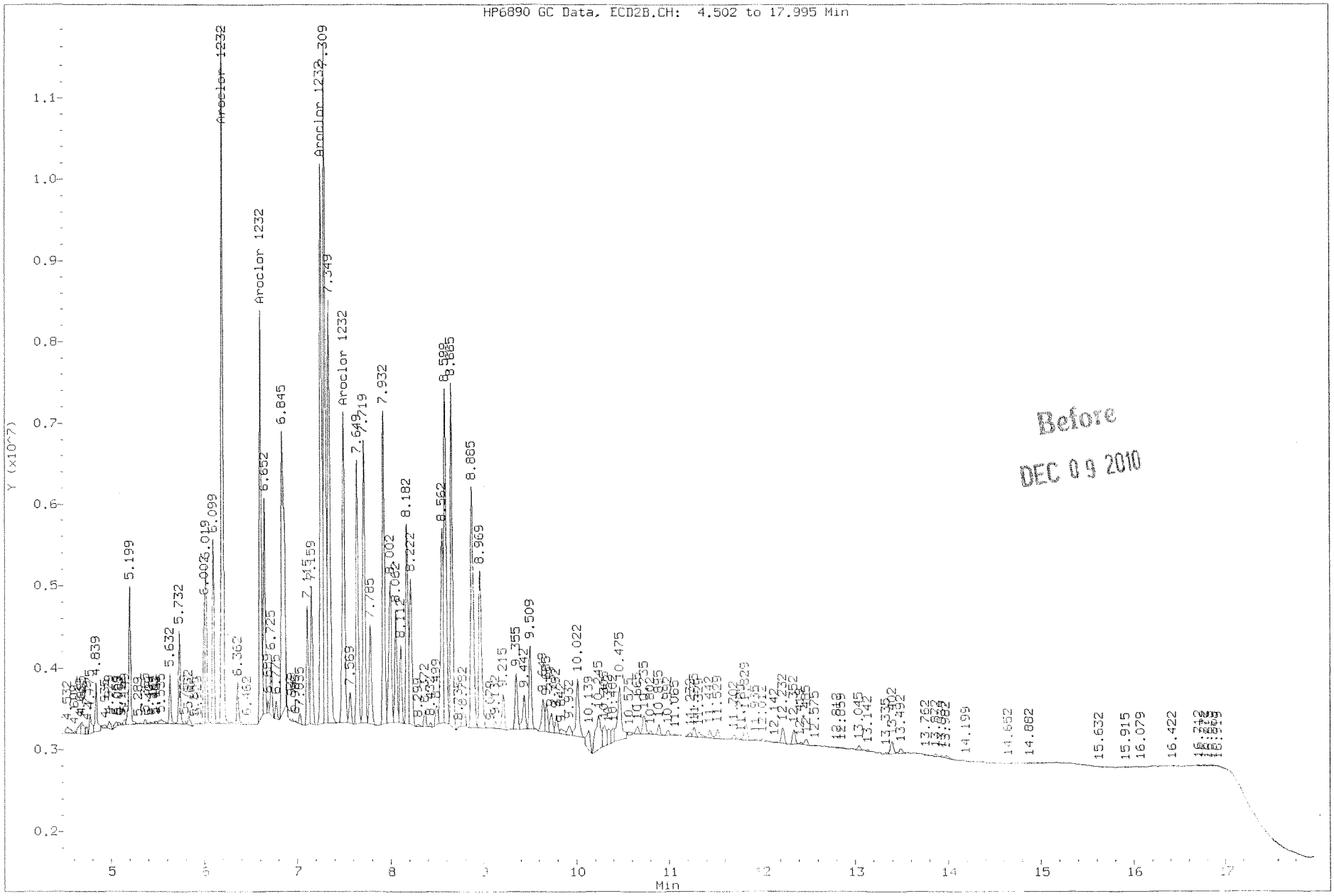


Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F035.D
Injection Date: 09-DEC-2010 10:01
Instrument: GC22.i
Client Sample ID:

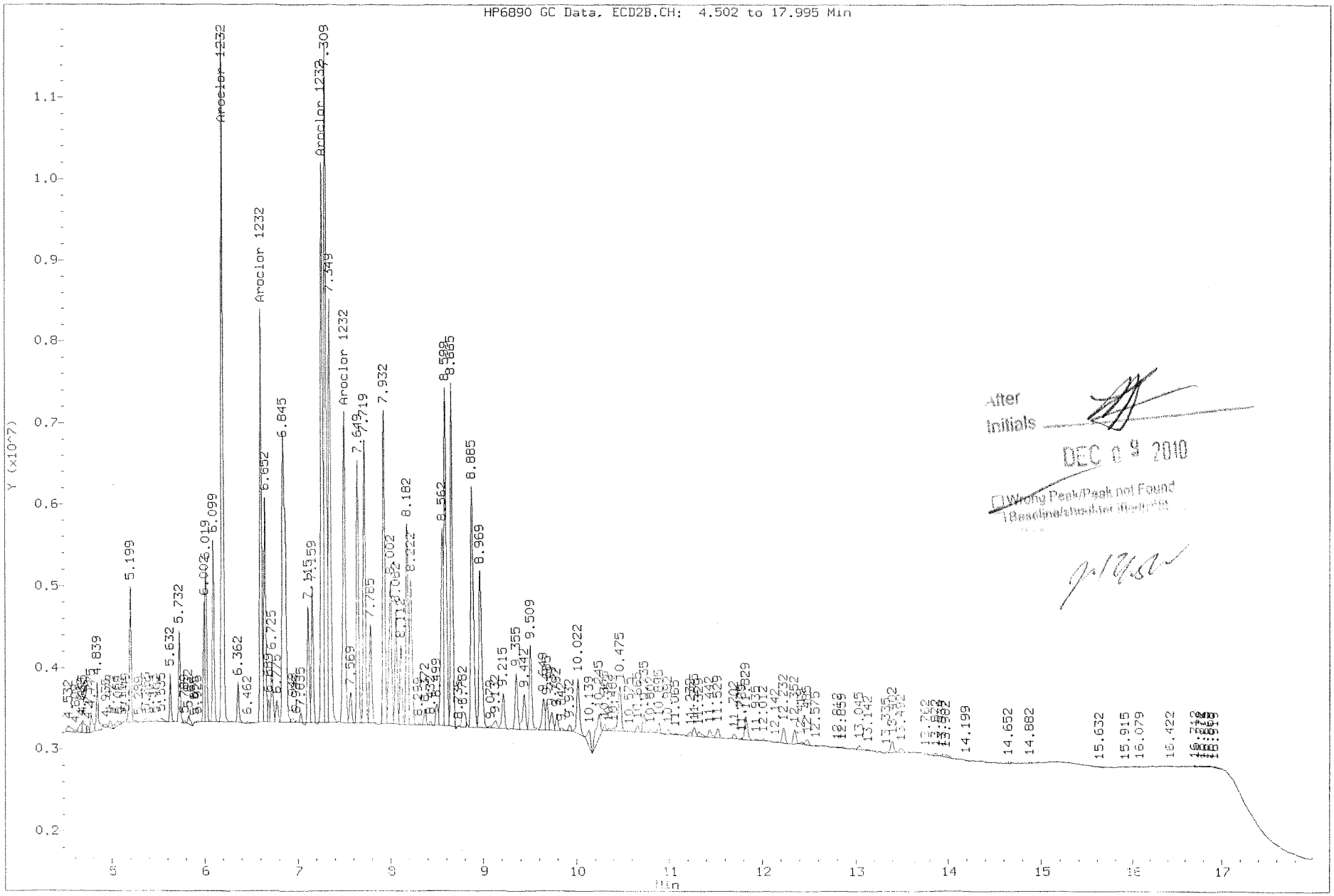


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F035.D
Injection Date: 09-DEC-2010 10:01
Instrument: GC22.i
Client Sample ID:



Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F035.D
Injection Date: 09-DEC-2010 10:01
Instrument: GC22.i
Client Sample ID:



After Initials

DEC 09 2010

☐ Wrong Peak/Peak not Found
☐ Baseline/Integration Problem

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F036.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F036.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F036.D
Inj Date : 09-DEC-2010 10:26
Sample Info: 1242 @ 100ppb | PCB5-67J | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1242.SUB
Sub List #2 : AR1242.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1242	6.389	6.605	2176425	12213734	88.4	86.6	80.00- 120.00	100.00(M)
	6.629	6.842	7563644	8170633	90.6	93.1	313.59- 470.38	347.53(M)
	6.743	7.349	4641942	15575992	89.0	91.8	177.49- 266.23	213.28(M)
	6.963	7.505	3716918	12616042	99.9	99.6	130.78- 196.17	170.78(M)
	7.023	7.649	2472264	10365651	94.6	95.0	87.16- 130.73	113.59(M)
			Average of Peak Amounts =		92.5	93.2		

QC Flag Legend

M - Compound response manually integrated.

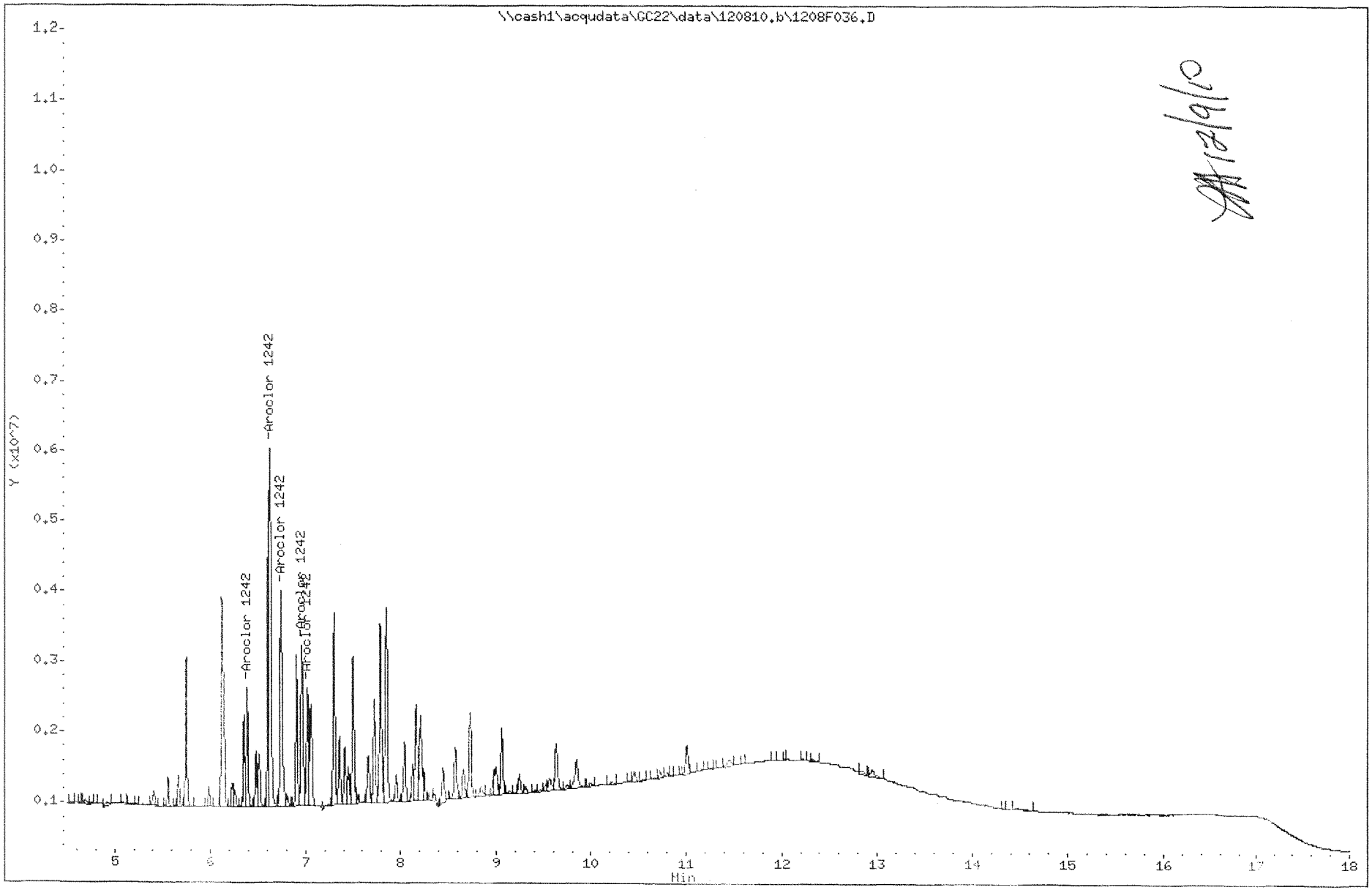
12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F036.D
Date : 09-DEC-2010 10:26
Client ID:
Sample Info: 1242 @ 100ppb | PCB5-67J | KWG1006746-4

Instrument: GC22.i

Operator: LHarris
Column diameter: 0.32

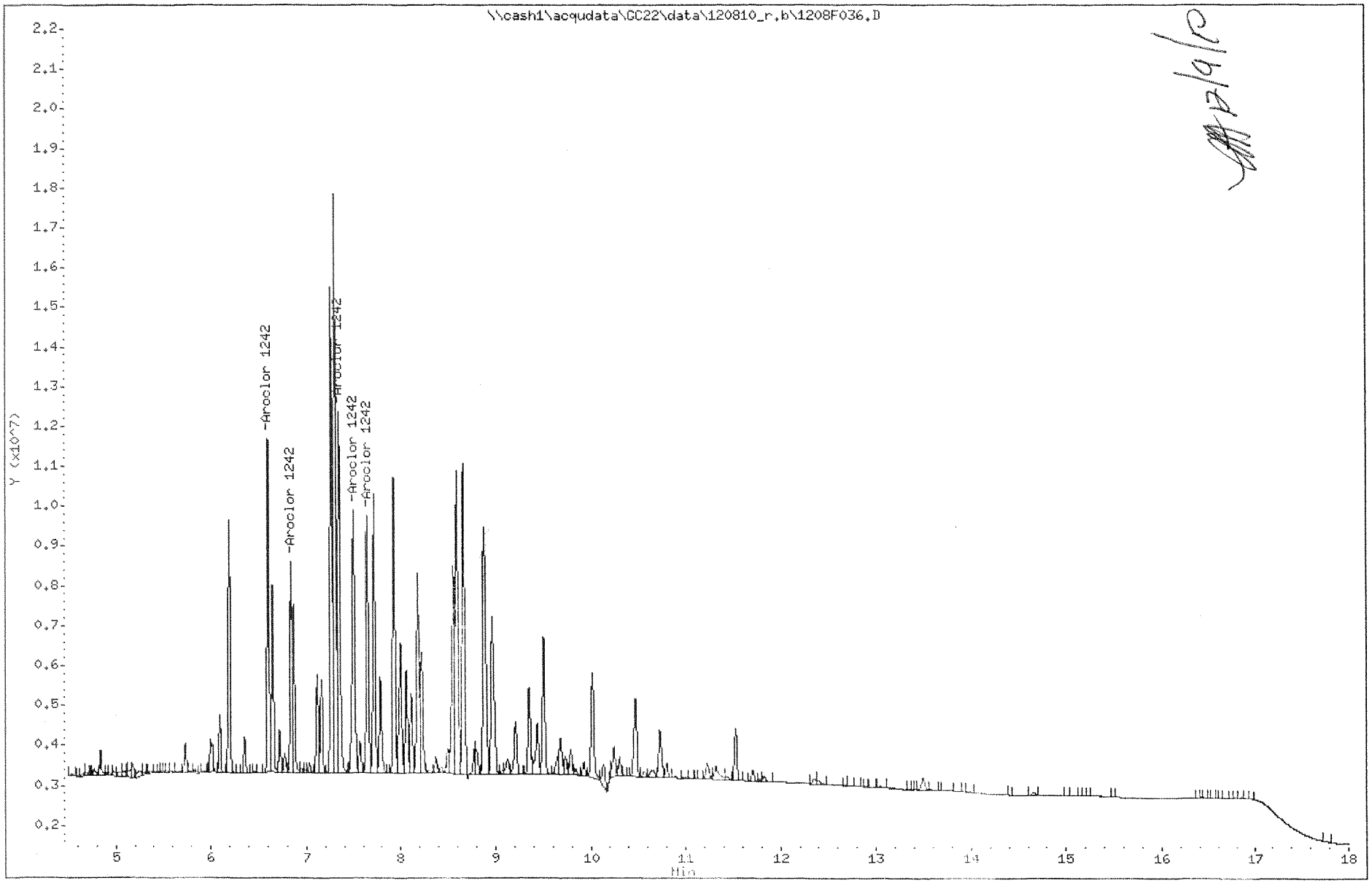
Column phase: DB-35MS



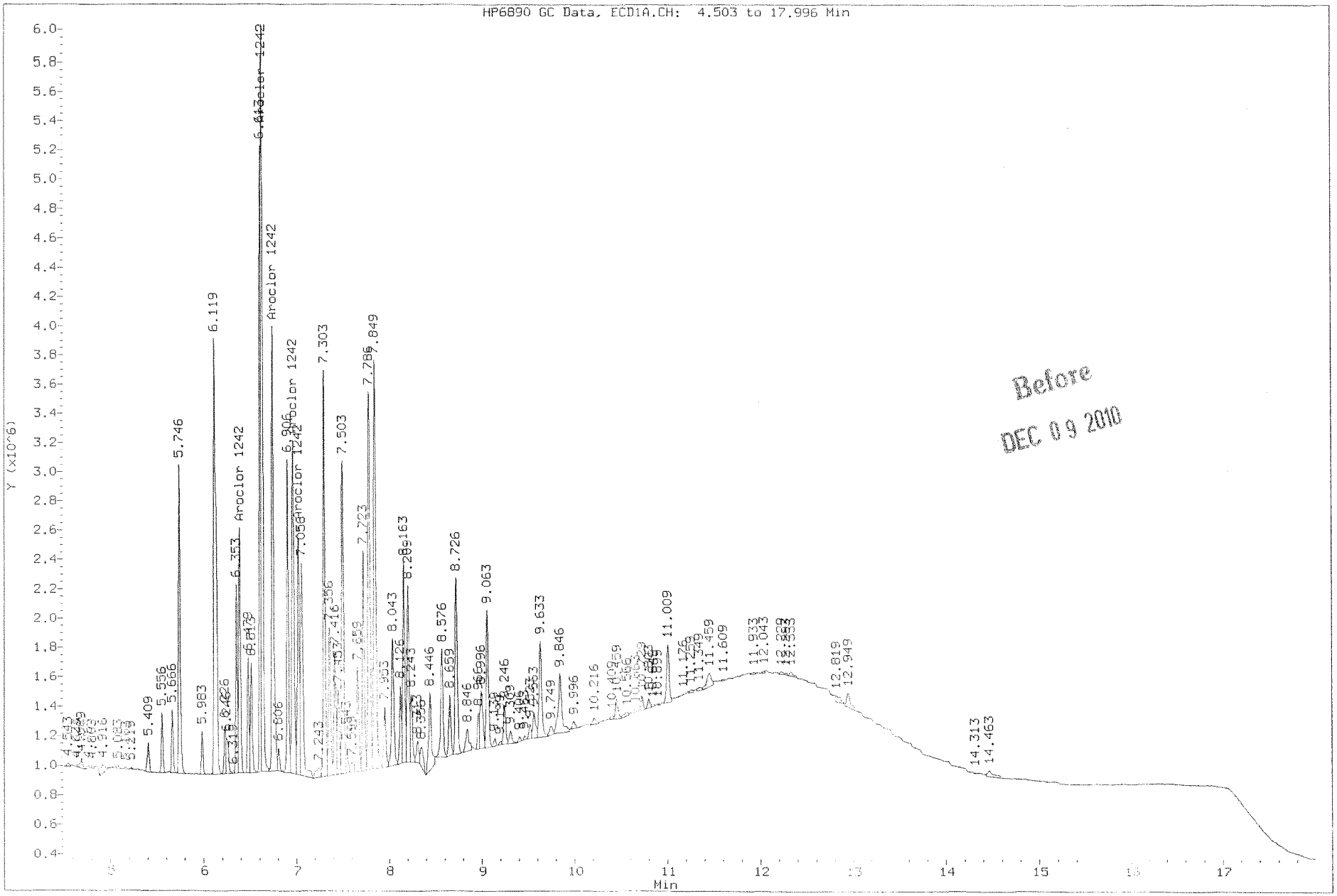
878

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F036.D
Date : 09-DEC-2010 10:26
Client ID:
Sample Info: 1242 @ 100ppb | PCB5-67J | KWG1006746-4

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32

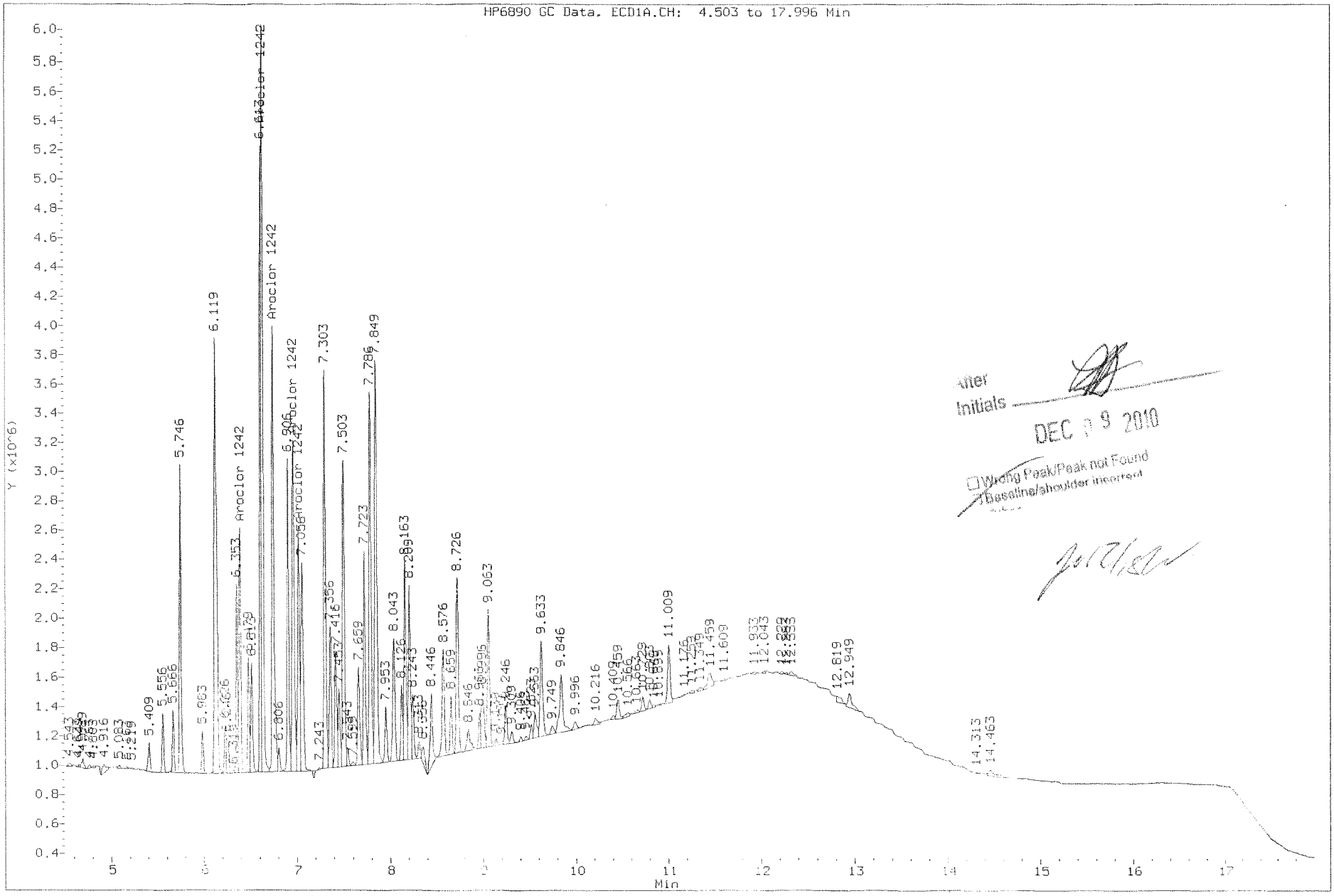


Data File: \\cash1\acqudata\GC22\data\120810.b\1208F036.D
Injection Date: 09-DEC-2010 10:26
Instrument: GC22.i
Client Sample ID:



Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F036.D
Injection Date: 09-DEC-2010 10:26
Instrument: GC22.i
Client Sample ID:



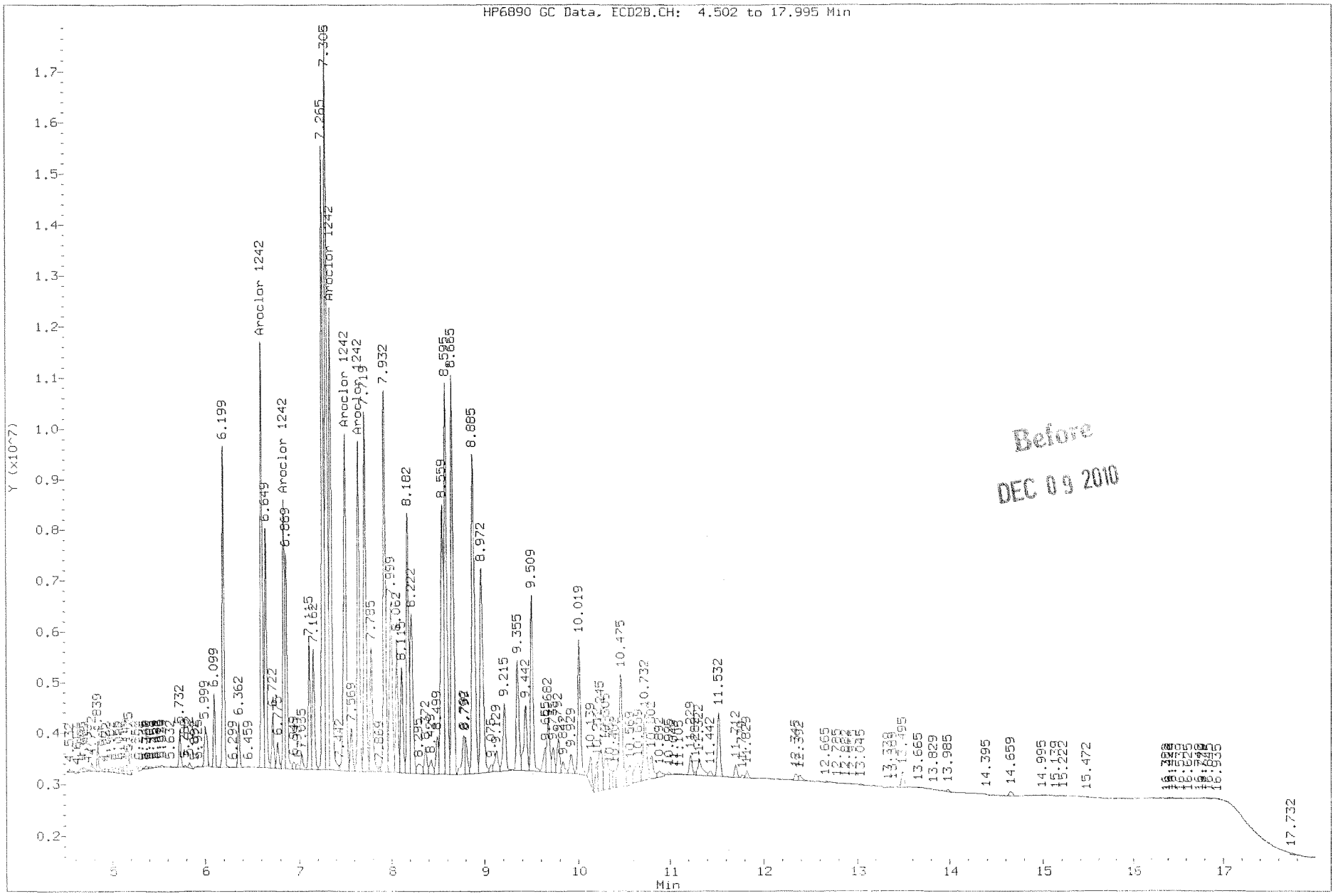
After Initials

DEC 09 2010

☐ Wrong Peak/Peak not Found
☐ Baseline/shoulder incorrect

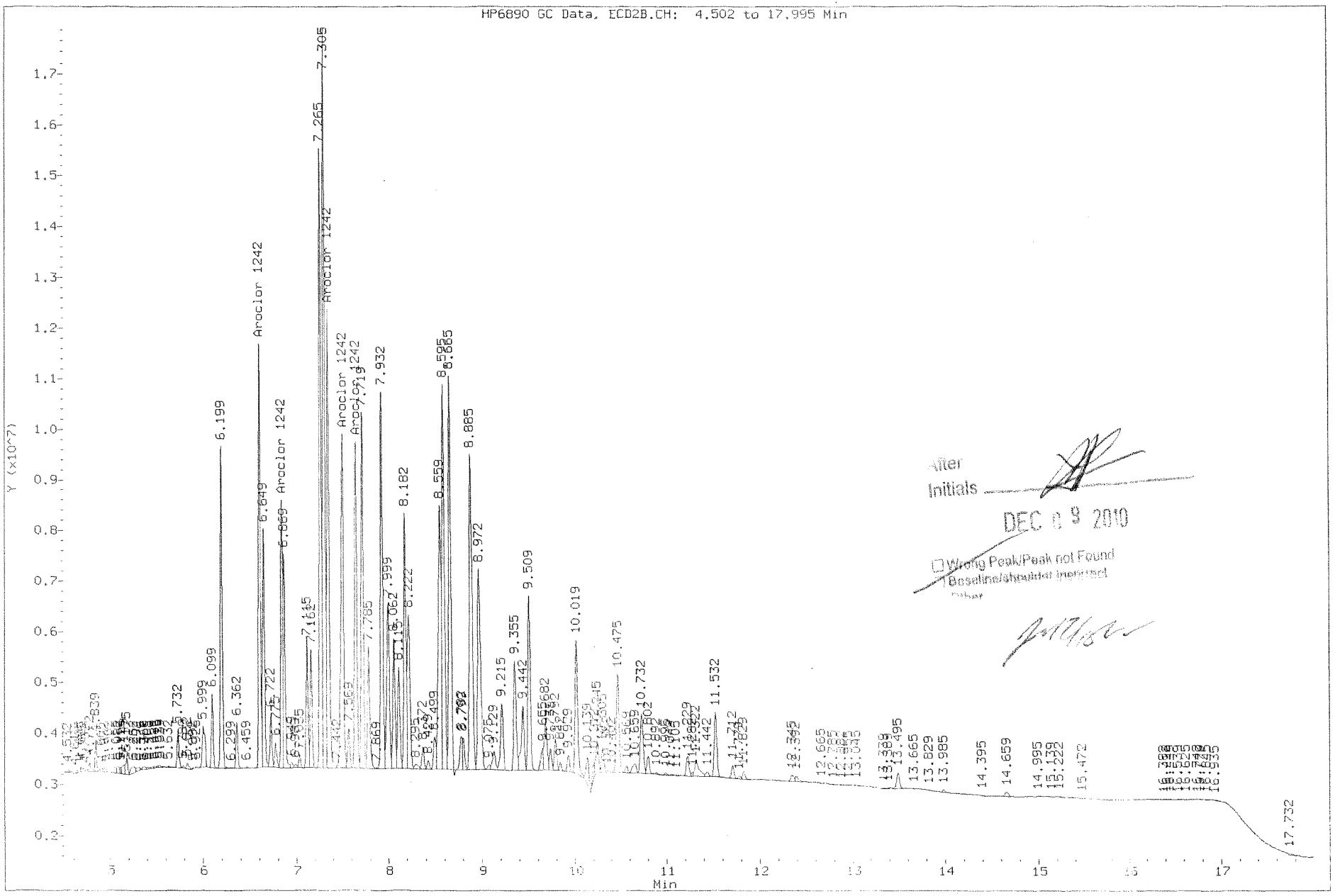
881

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F036.D
Injection Date: 09-DEC-2010 10:26
Instrument: GC22.i
Client Sample ID:



Before
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F036.D
Injection Date: 09-DEC-2010 10:26
Instrument: GC22.i
Client Sample ID:



After
Initials
DEC 29 2010
☐ Wrong Peak/Peak not Found
Baseline/shoulder integrated

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F037.D
Report Date: 09-Dec-2010 14:36

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F037.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F037.D
Inj Date : 09-DEC-2010 10:50
Sample Info: 1248 @ 100ppb | PCB5-67K | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1248.SUB
Sub List #2 : AR1248.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1248	6.964	7.930	5885554	20582663	91.8	92.7	80.00- 120.00	100.00(M)
	7.304	8.183	6333205	13524824	92.6	88.8	87.95- 131.93	107.61(M)
	7.504	8.597	4977195	24502515	90.8	83.2	73.37- 110.05	84.57(M)
	7.787	8.667	7058166	22630407	88.2	87.1	104.62- 156.93	119.92(M)
	7.851	8.887	8009825	24341815	88.2	87.1	118.69- 178.04	136.09(M)
			Average of Peak Amounts =		90.3	87.8		

QC Flag Legend

M - Compound response manually integrated.

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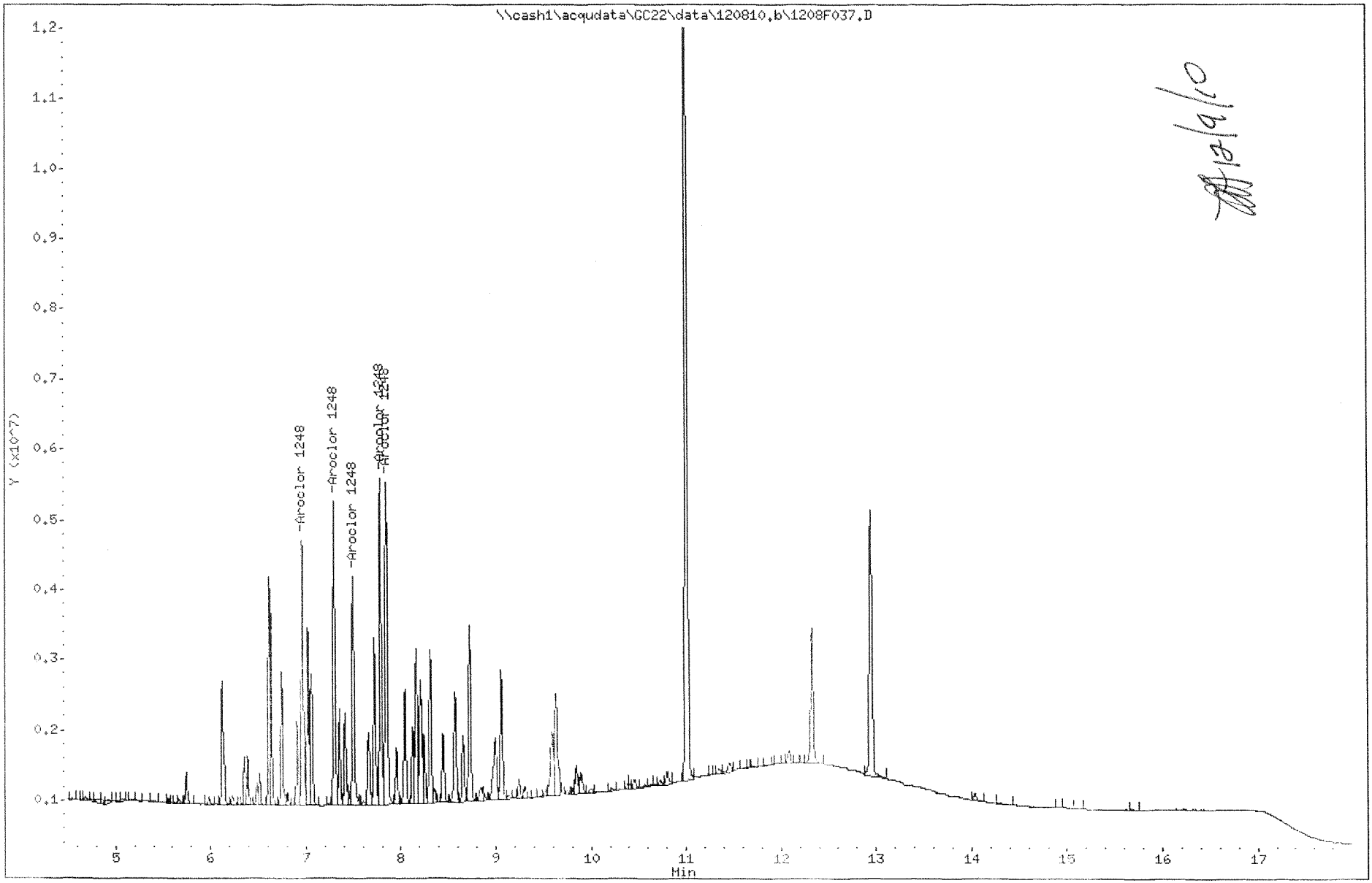
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F037.D
Date : 09-DEC-2010 10:50
Client ID:
Sample Info: 1248 @ 100ppb | PCB5-67K | KWG1006746-4

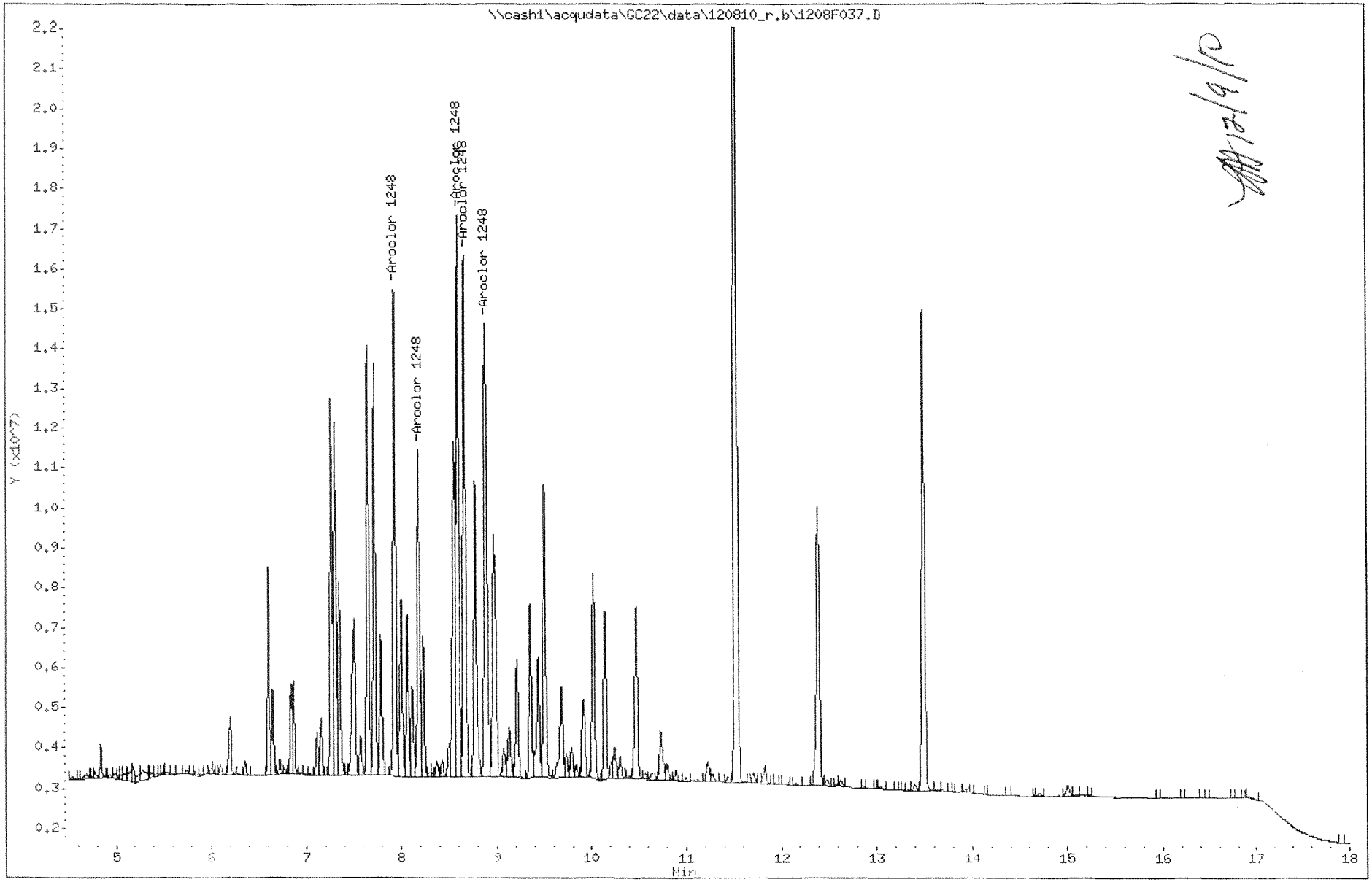
Instrument: GC22.i
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



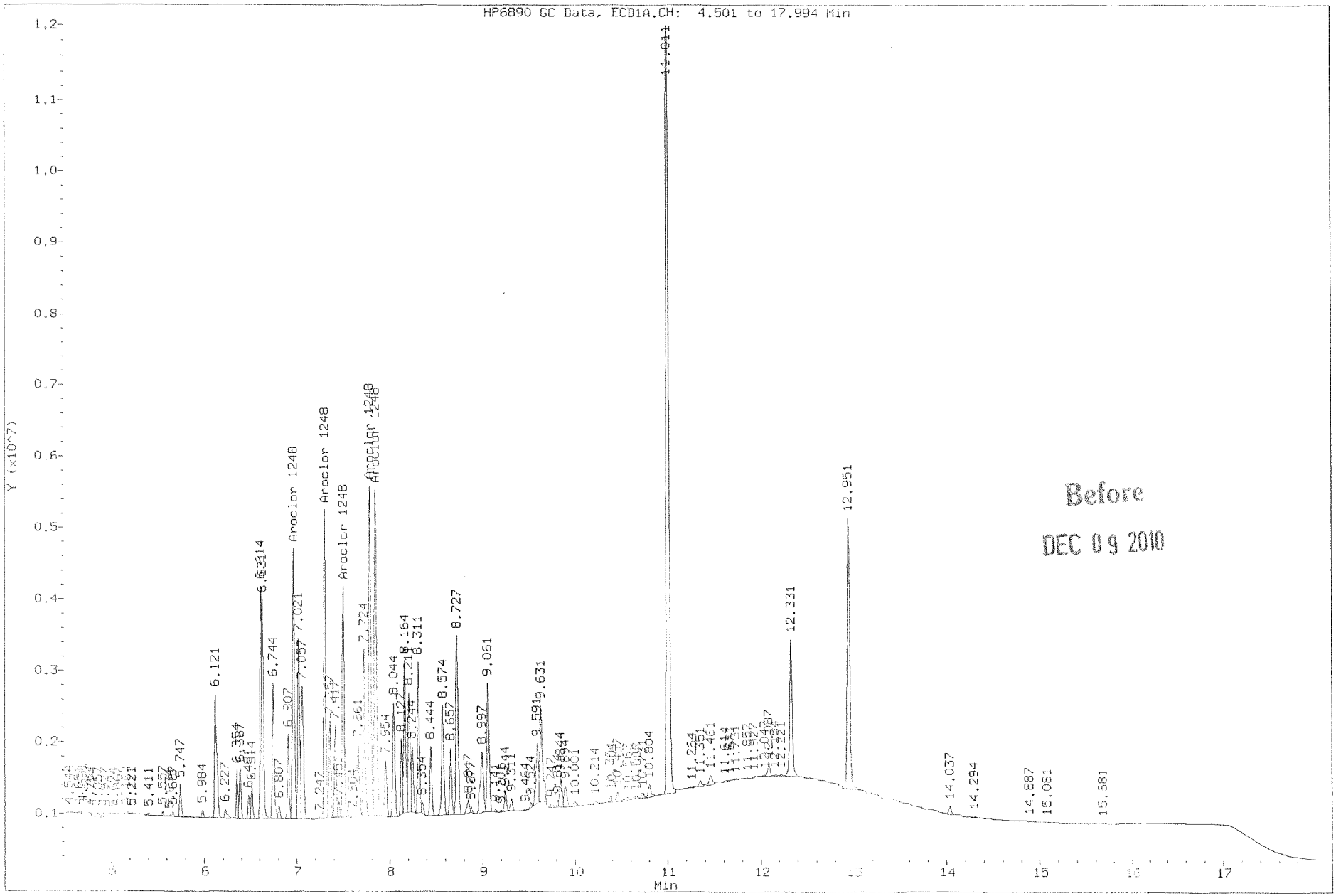
885

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F037.D
Date : 09-DEC-2010 10:50
Client ID:
Sample Info: 1248 @ 100ppb | PCB5-67K | KWG1006746-4

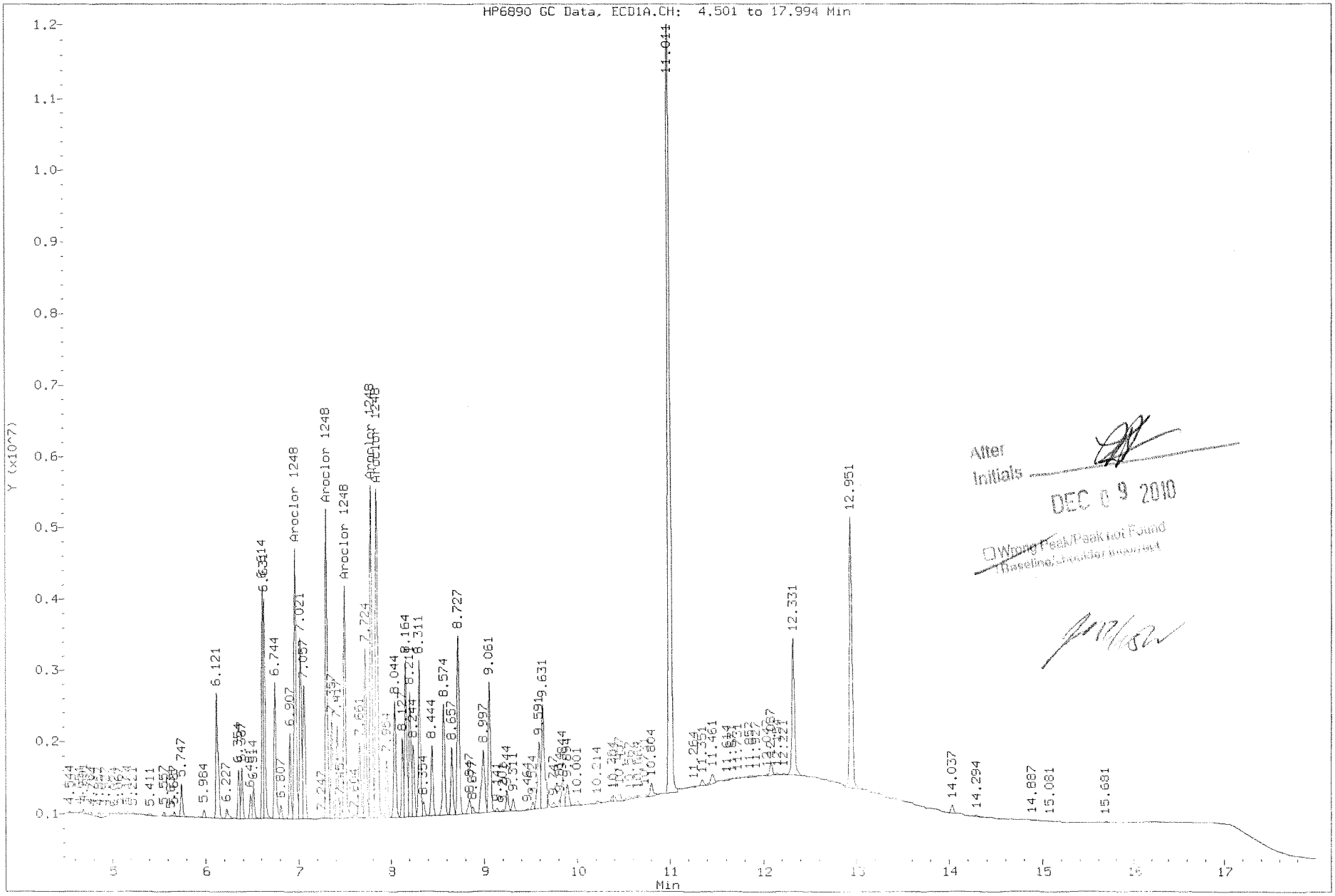
Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F037.D
Injection Date: 09-DEC-2010 10:50
Instrument: GC22.i
Client Sample ID:



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F037.D
Injection Date: 09-DEC-2010 10:50
Instrument: GC22.i
Client Sample ID:



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F038.D
Report Date: 09-Dec-2010 14:37

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F038.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F038.D
Inj Date : 09-DEC-2010 11:15
Sample Info: 1254 @ 100ppb | PCB5-67L | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1254.SUB
Sub List #2 : AR1254.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1254	8.042	8.545	9891199	28040328	96.7	96.0	80.00- 120.00	100.00
	8.572	8.898	8087400	43517141	101	95.1	65.38- 98.07	81.76
	8.725	9.511	16301983	46200538	97.5	98.6	136.14- 204.20	164.81
	9.062	9.791	11219198	17439406	99.6	94.9	93.98- 140.97	113.43
	9.245	10.021	7448138	36461318	97.6	95.5	63.43- 95.15	75.30
			Average of Peak Amounts =		98.5	96.0		

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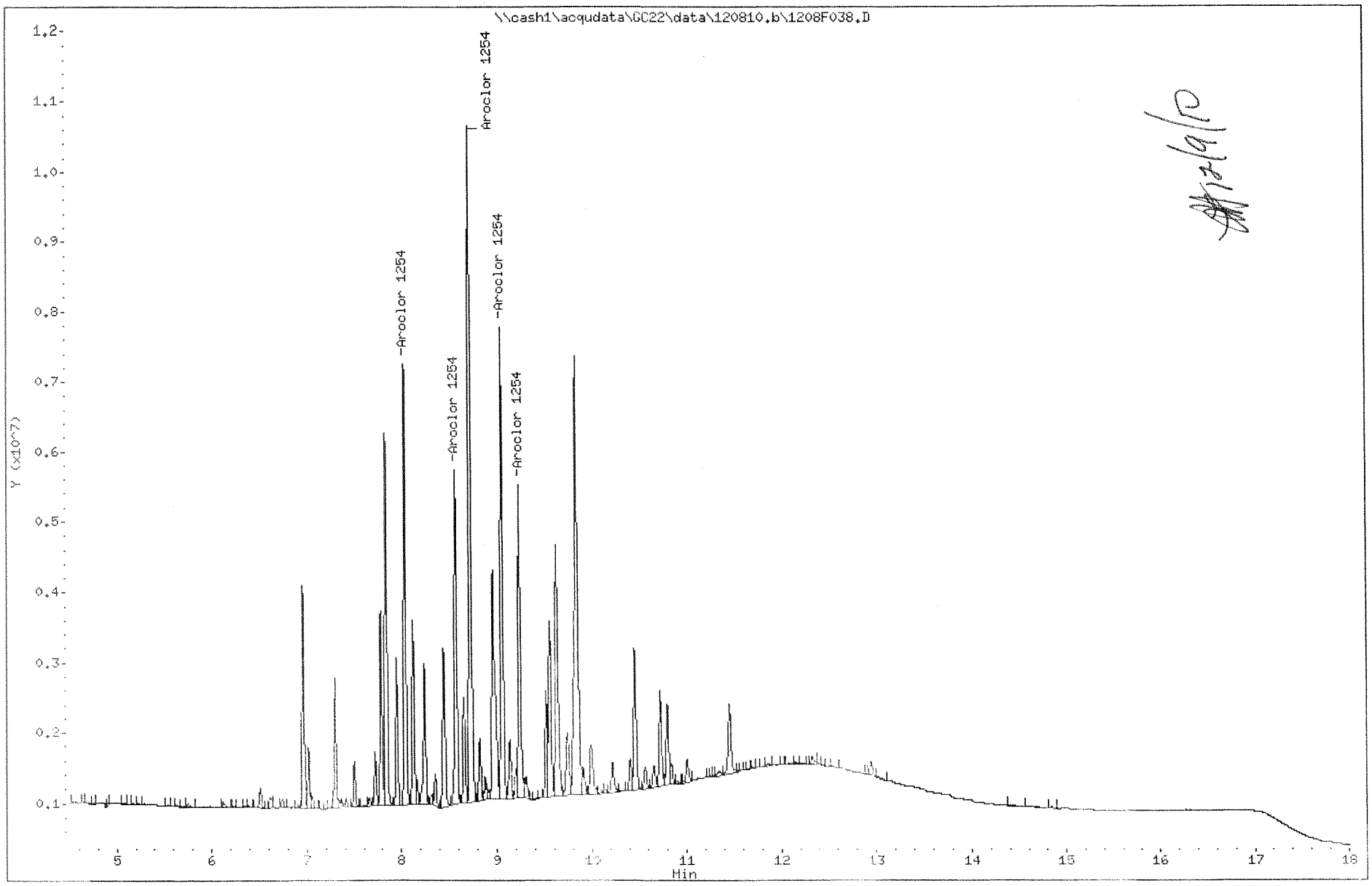
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F038.D
Date : 09-DEC-2010 11:15
Client ID:
Sample Info: 1254 @ 100ppb | PCB5-67L | KWG1006746-4

Instrument: GC22.i

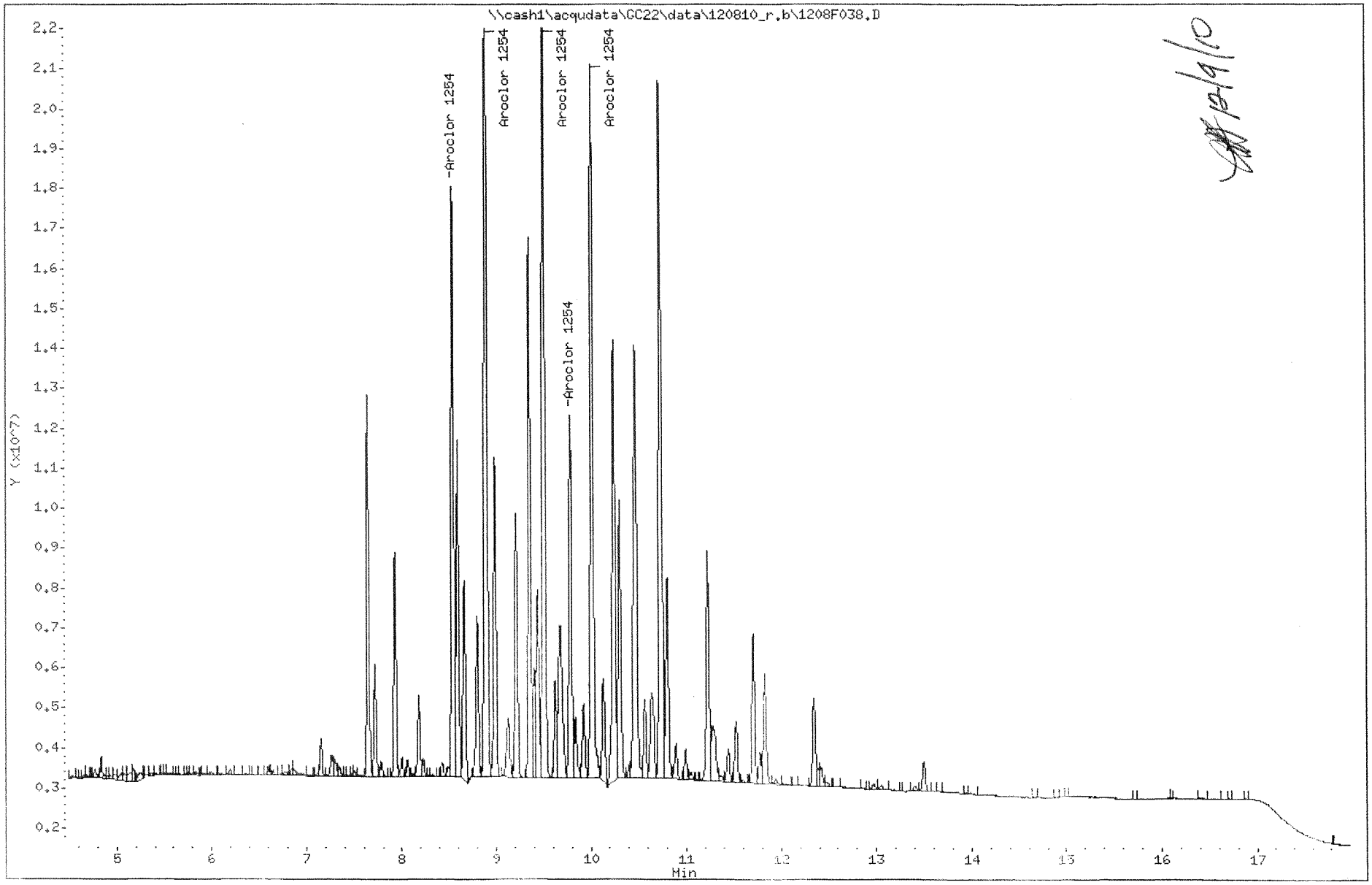
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



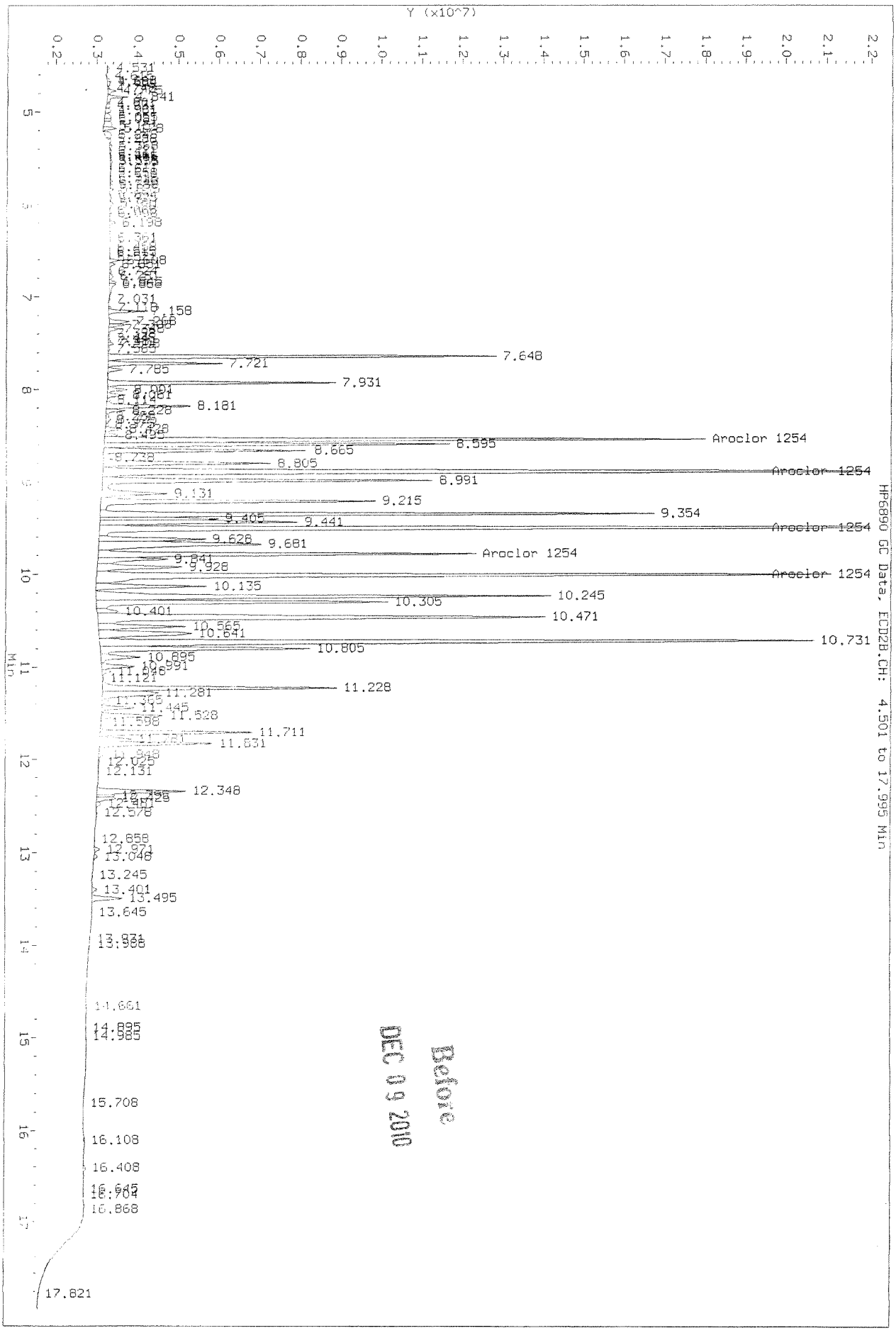
890

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F038.D
Date : 09-DEC-2010 11:15
Client ID:
Sample Info: 1254 @ 100ppb | PCB5-67L | KWG1006746-4

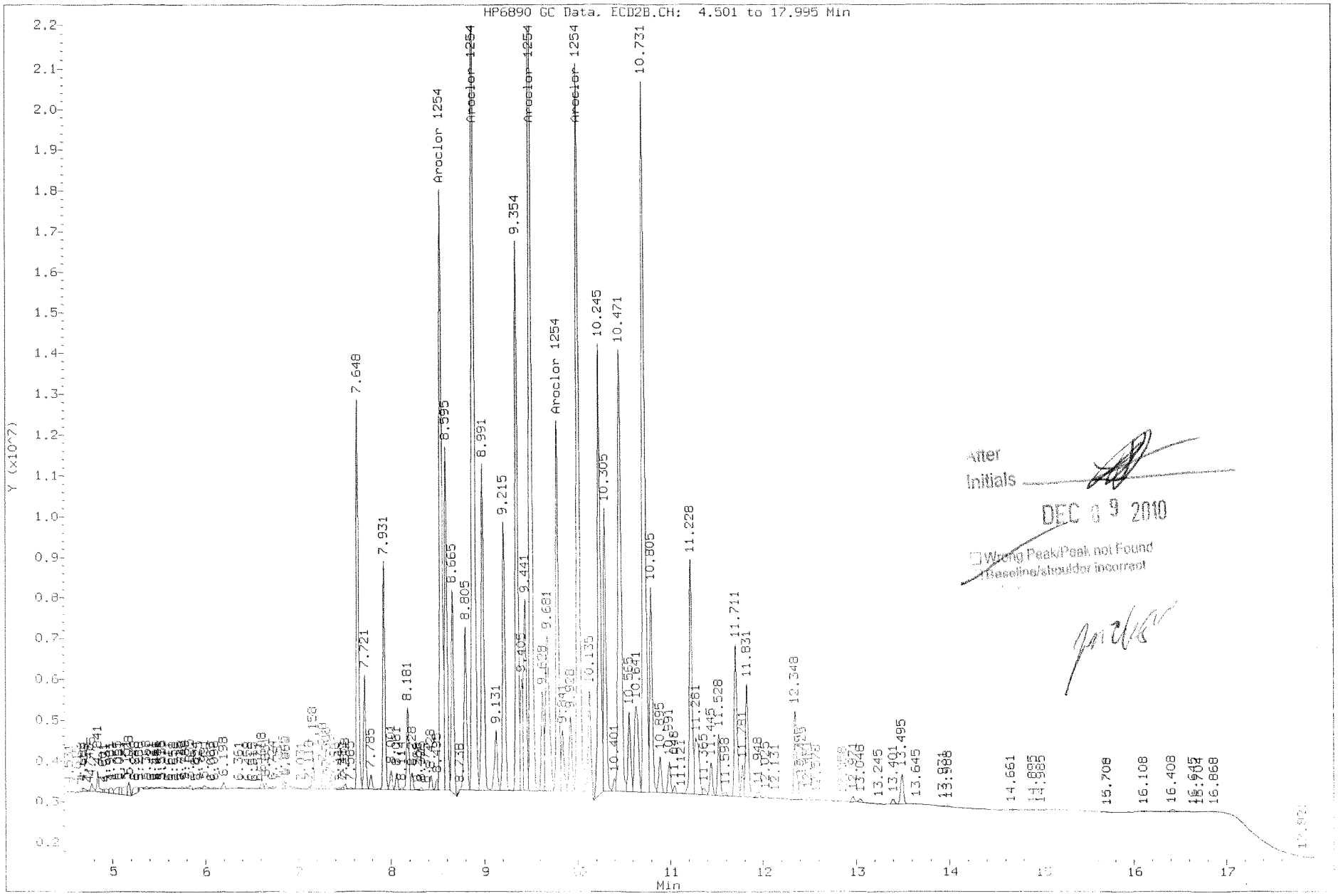
Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



12/9/10


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F038.D
Injection Date: 09-DEC-2010 11:15
Instrument: GC22.I
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.501 to 17.995 Min
Y (x10^7)
Min
7.648
7.721
7.785
7.931
8.181
8.595
Aroclor 1254
8.665
8.805
8.991
9.215
9.354
9.441
9.681
9.928
10.135
10.245
10.305
10.401
10.471
10.565
10.641
10.731
10.805
10.895
11.121
11.228
11.281
11.445
11.528
11.598
11.631
11.711
12.025
12.131
12.348
12.578
12.858
13.048
13.245
13.401
13.495
13.645
14.661
14.895
14.985
15.708
16.108
16.408
16.868
17.821
DEC 09 2010
Received

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F038.D
Injection Date: 09-DEC-2010 11:15
Instrument: GC22.i
Client Sample ID:



After Initials

DEC 09 2010

☐ Wrong Peak/Peak not Found
Baseline/shoulder incorrect

893

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F039.D
Report Date: 09-Dec-2010 14:37

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F039.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F039.D
Inj Date : 09-DEC-2010 11:39
Sample Info: 1260 @ 100ppb | PCB5-67M | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1260.sub
Sub List #2 : AR1260.sub
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

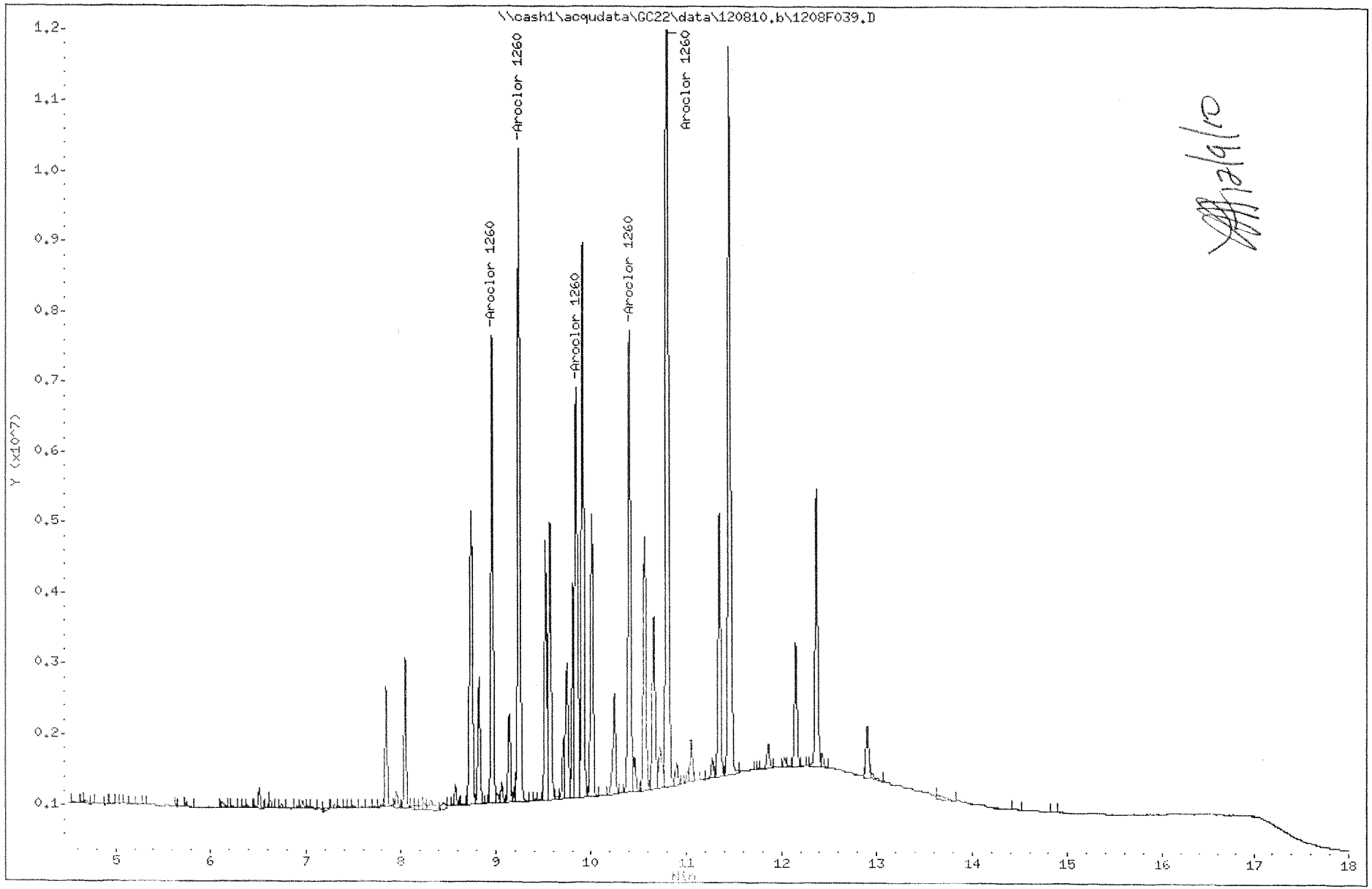
Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1260	8.962	10.245	11053533	42273173	93.8	89.9	80.00- 120.00	100.00
	9.246	10.735	16029913	47394038	94.4	84.5	120.11- 180.17	145.02
	9.846	10.895	11978786	35473088	80.5	111	105.95- 158.92	108.37
	10.406	11.275	12189397	32551360	111	105	77.23- 115.84	110.28
	10.802	11.832	31142360	79500507	111	106	210.81- 316.22	281.74
			Average of Peak Amounts =		98.1	99.3		

12/9/10

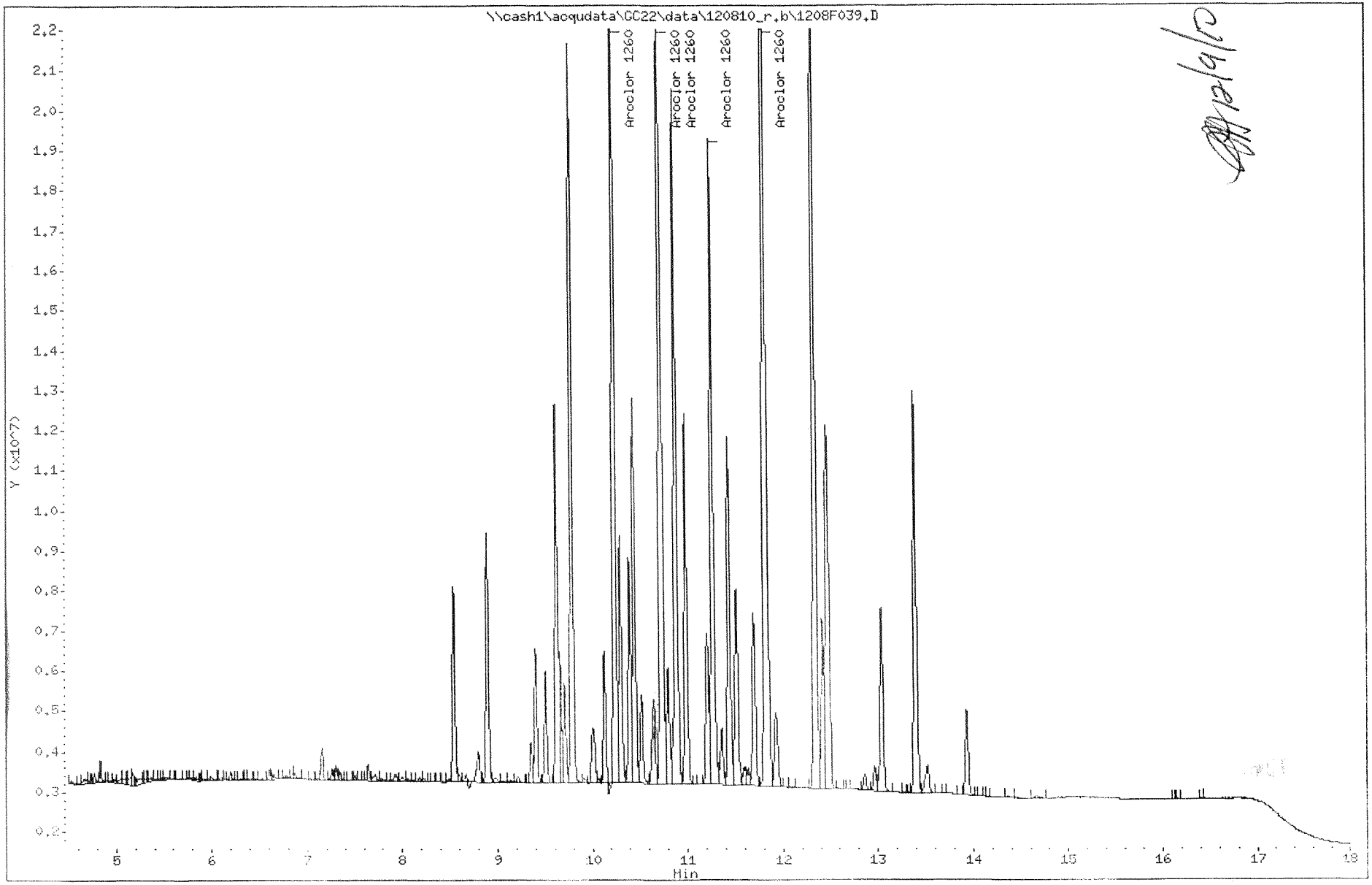
Data File: \\cash1\acqudata\GC22\data\120810.b\1208F039.D
Date : 09-DEC-2010 11:39
Client ID:
Sample Info: 1260 @ 100ppb | PCB5-67M | KWG1006746-4

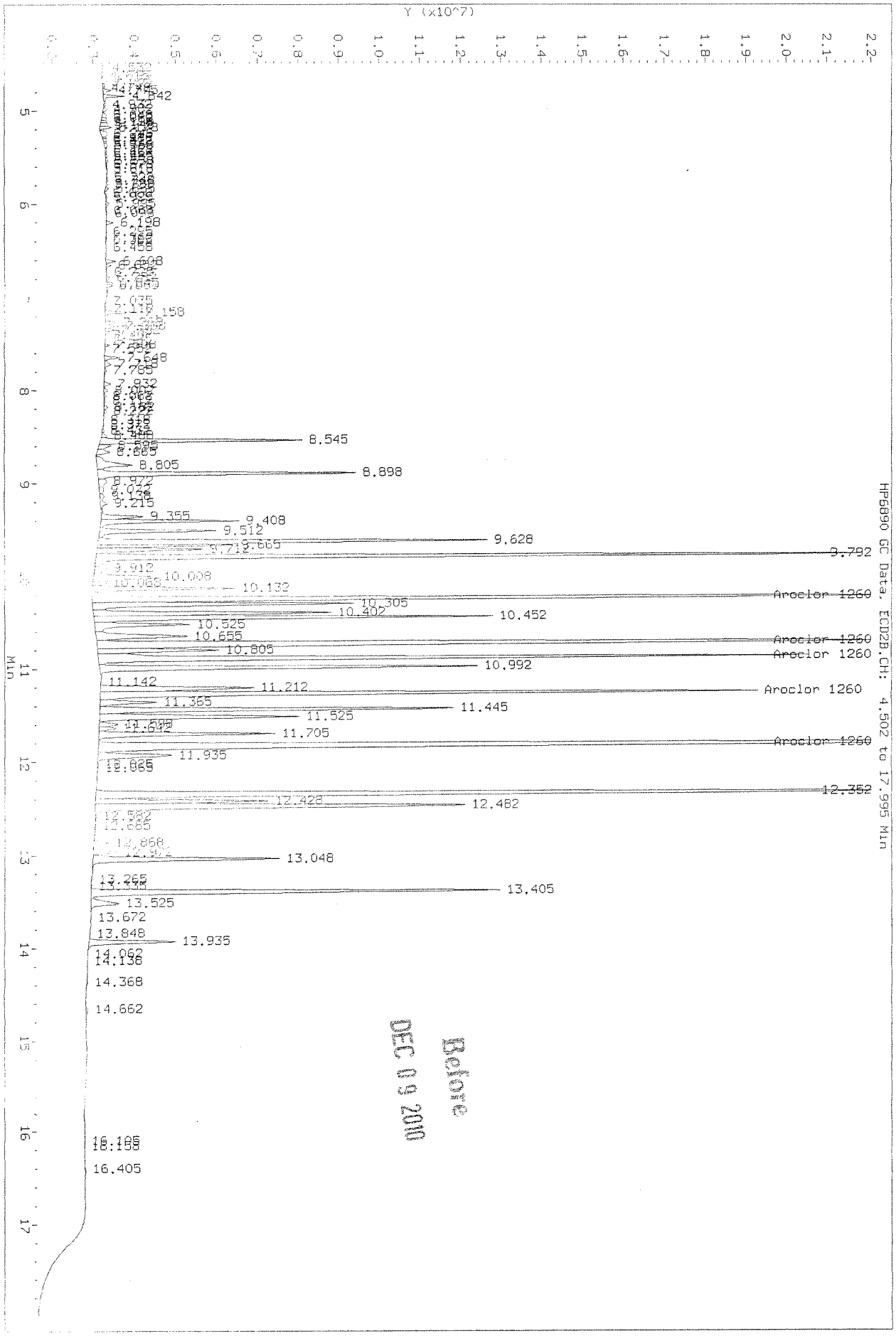
Instrument: GC22.i

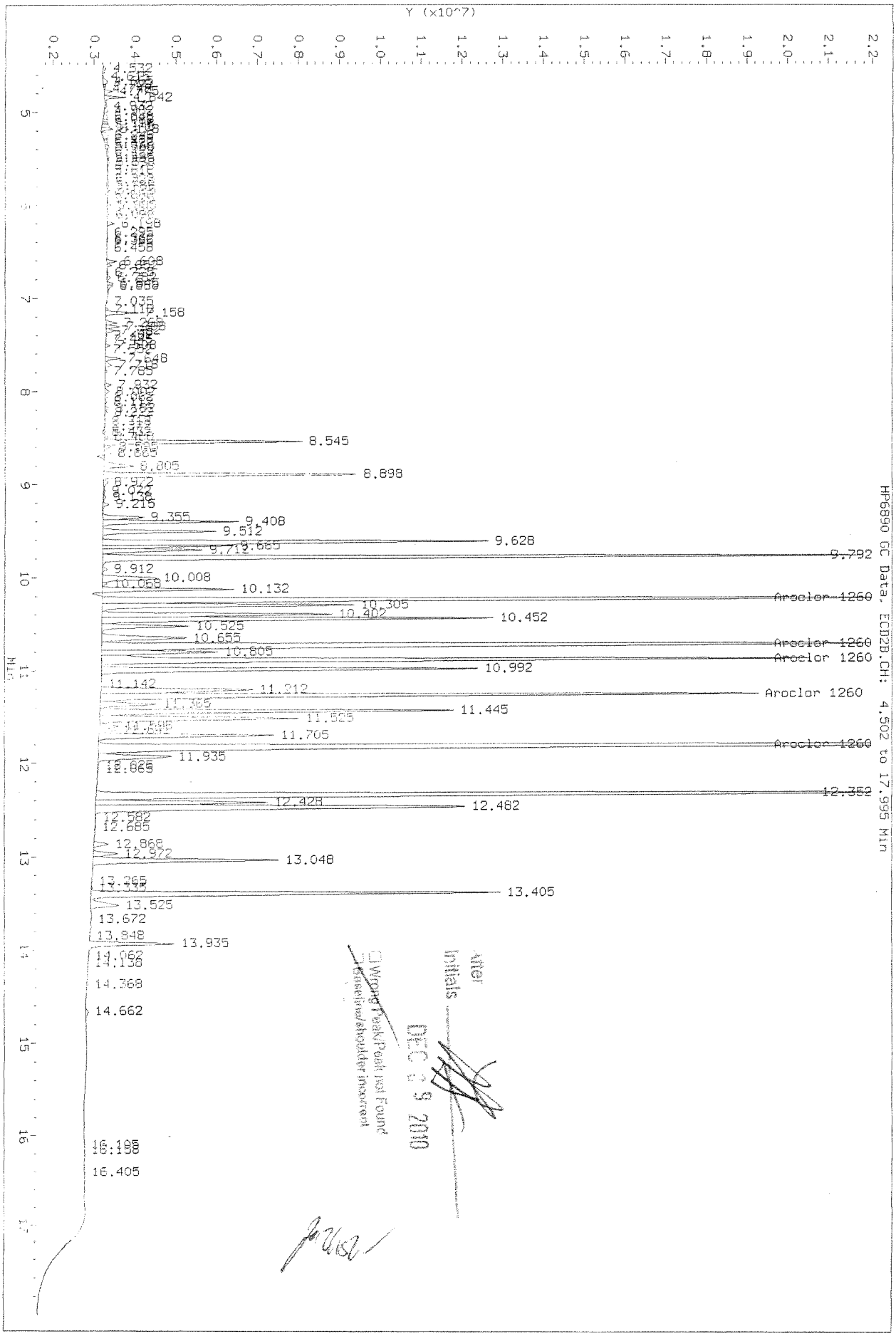
Operator: LHarris
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F039.D
Date : 09-DEC-2010 11:39
Client ID:
Instrument: GC22.i
Sample Info: 1260 @ 100ppb | PCB5-67M | KWG1006746-4
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32




Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F039.D
Injection Date: 09-DEC-2010 11:39
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
HP5890 GC Data, ECD2B.CH; 4.502 to 17.995 Min
Min
8.545
8.805
8.898
9.628
9.792
Aroclor 1260
10.452
Aroclor 1260
Aroclor 1260
10.992
Aroclor 1260
11.212
11.445
11.525
11.705
Aroclor 1260
11.935
12.352
12.428
12.482
13.048
13.405
13.525
13.672
13.848
13.935
14.368
14.662
16.405
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F039.D
Injection Date: 09-DEC-2010 11:39
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.502 to 17.995 Min
Y (x10^7)
Min
8.545
8.898
9.628
9.792
10.008
10.132
Aroclor 1260
10.452
10.992
Aroclor 1260
11.212
Aroclor 1260
11.445
11.705
Aroclor 1260
12.352
12.428
12.482
13.048
13.405
13.935
14.662
16.405
Wrong Peak/Peak not Found
Baseline/shoulder incorrect
Initials
DEC 13 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F040.D
Report Date: 09-Dec-2010 14:37

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F040.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F040.D
Inj Date : 09-DEC-2010 12:04
Sample Info: 1262 @ 100ppb | PCB5-67N | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1262.SUB
Sub List #2 : AR1262.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1262	9.913	10.893	18731656	46774497	101	95.7	80.00- 120.00	100.00
	10.407	11.276	14666566	34090568	101	97.7	62.50- 93.75	78.30
	10.803	11.829	32164729	80065011	101	96.1	146.21- 219.31	171.71
	11.350	12.356	13538918	54527328	102	96.7	58.45- 87.67	72.28
	11.463	12.486	22931510	38248994	97.6	97.5	102.10- 153.15	122.42
			Average of Peak Amounts =		100	96.7		

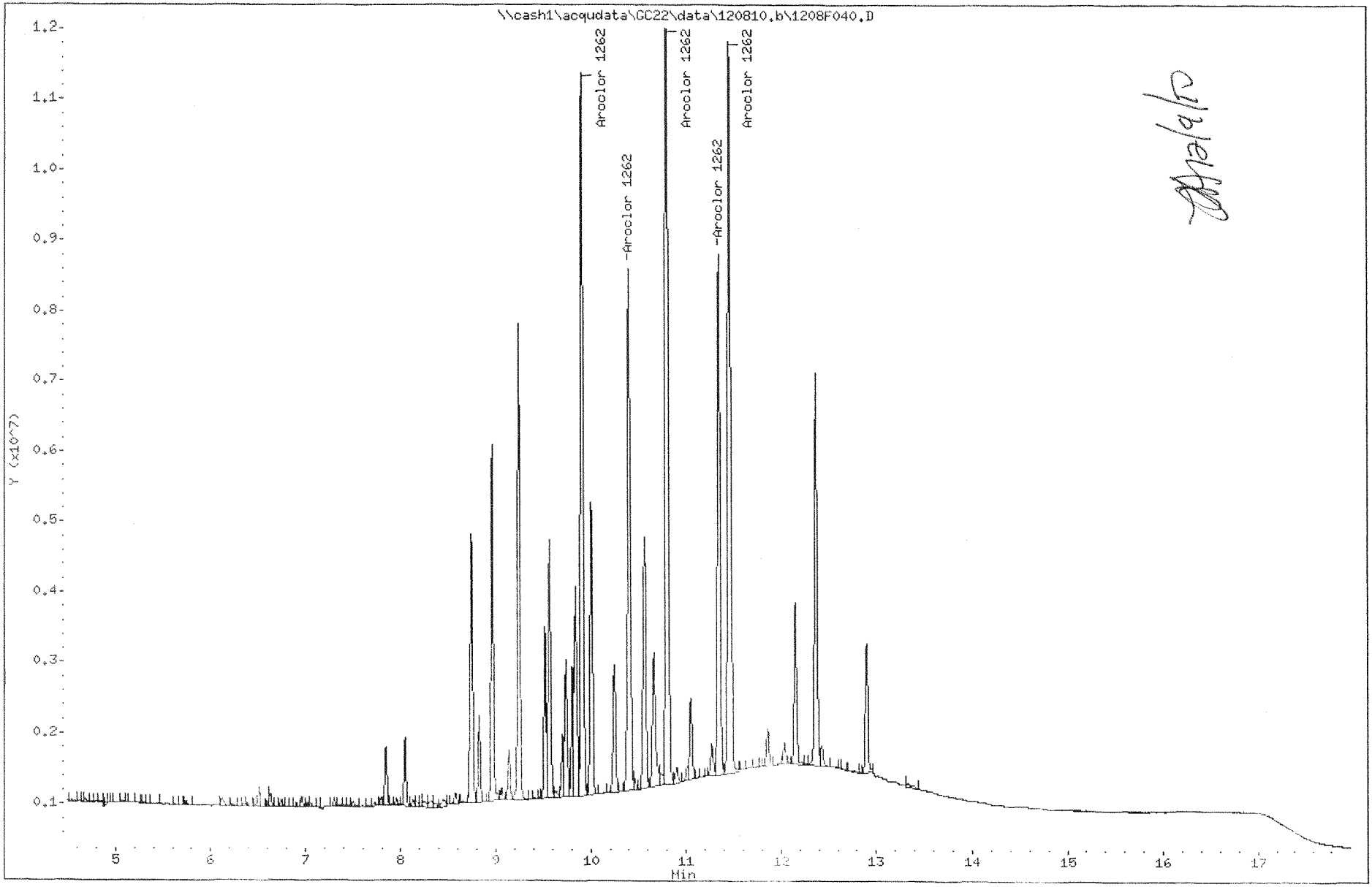
12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F040.D
Date : 09-DEC-2010 12:04
Client ID:
Sample Info: 1262 @ 100ppb | PCB5-67N | KWG1006746-4

Instrument: GC22.i

Operator: LHarris
Column diameter: 0.32

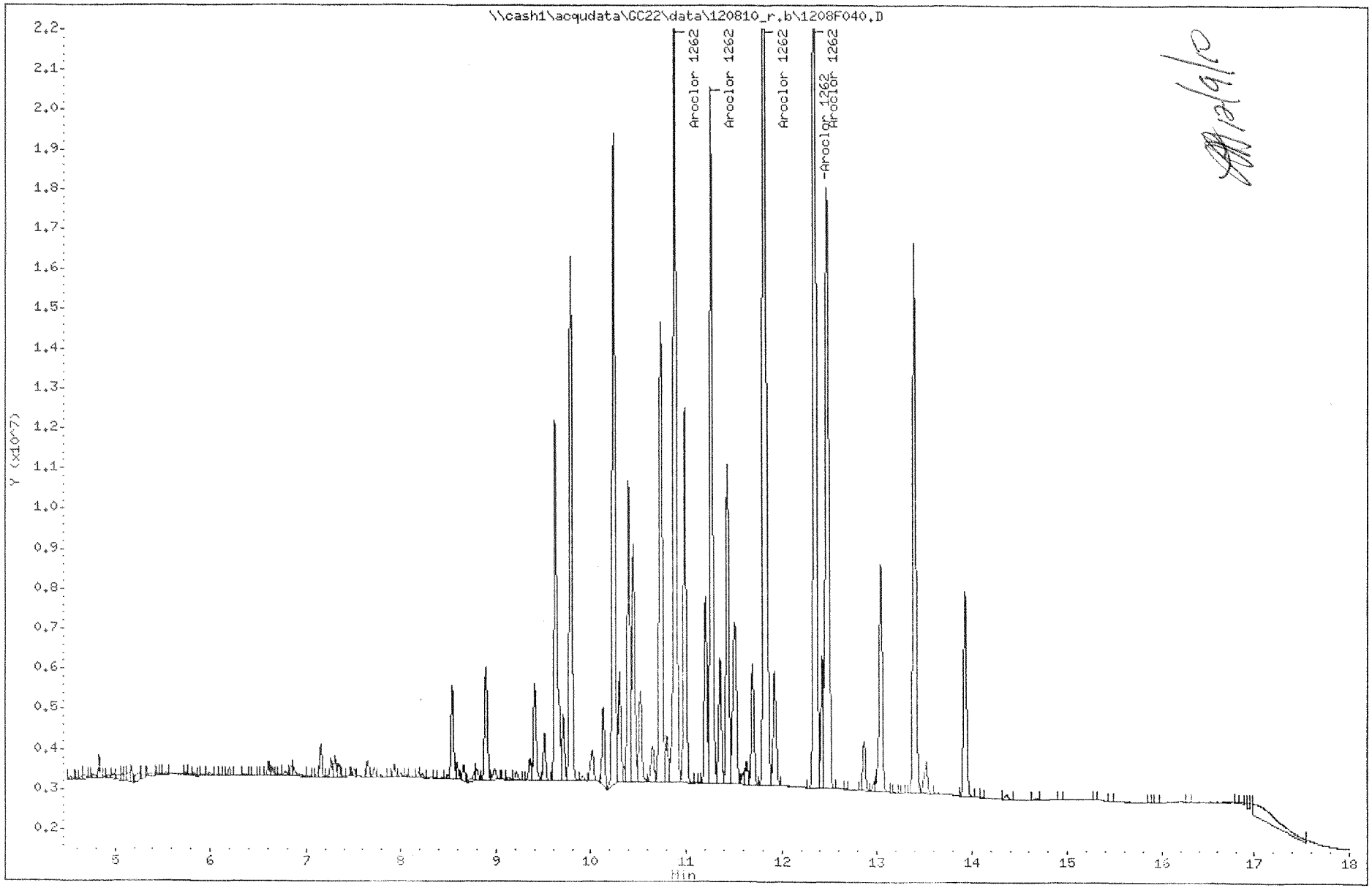
Column phase: DB-35MS

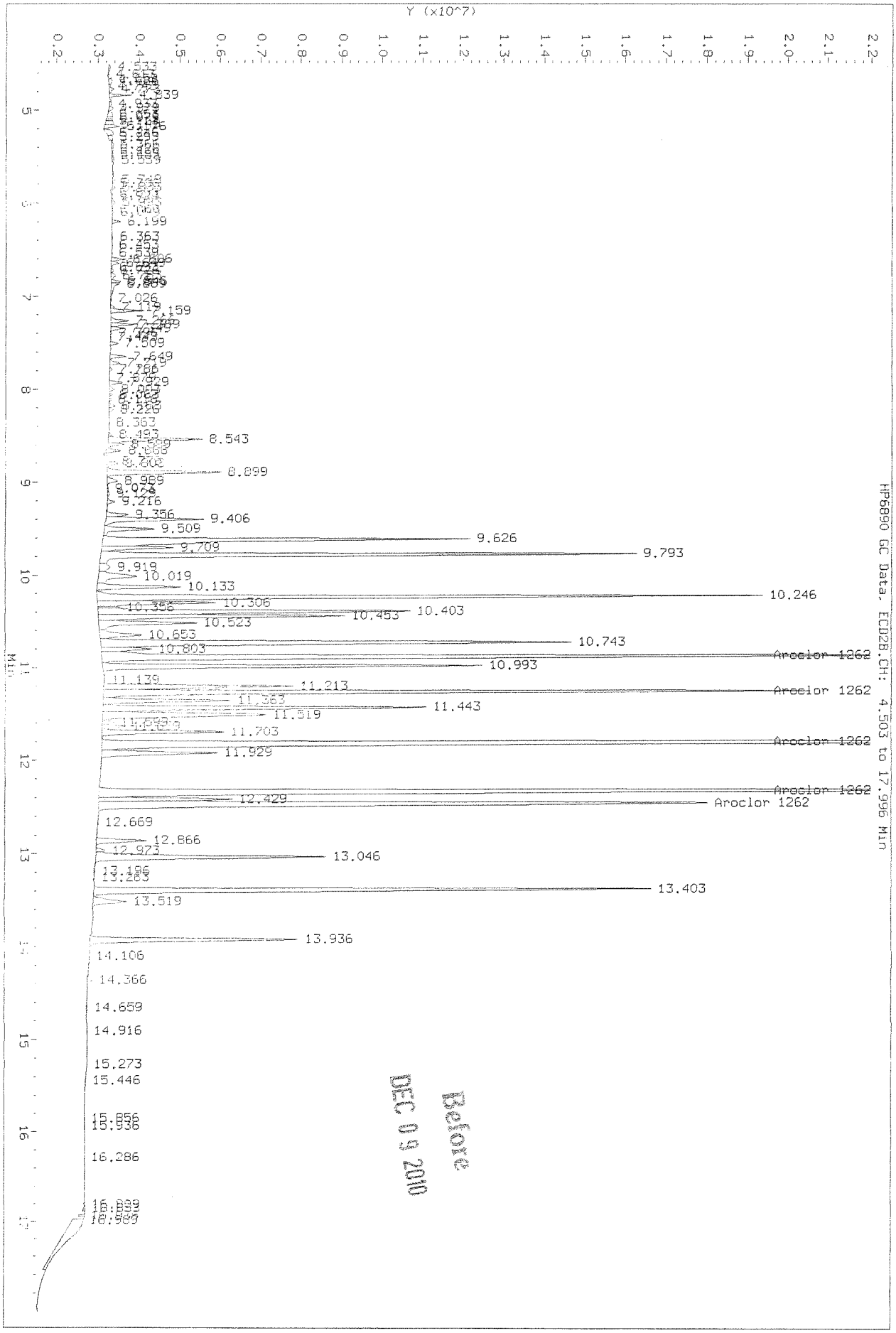


900

Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F040.D
Date : 09-DEC-2010 12:04
Client ID:
Sample Info: 1262 @ 100ppb | PCB5-67N | KWG1006746-4

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32




Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F040.D
Injection Date: 09-DEC-2010 12:04
Instrument: GC22.1
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.503 to 17.996 Min
Y (x10^7)
Min
8.543
8.899
9.406
9.626
9.793
10.246
10.403
10.743
Aroclor 1262
10.993
11.213
Aroclor 1262
11.443
11.703
Aroclor 1262
11.929
Aroclor 1262
12.429
Aroclor 1262
12.669
12.866
13.046
13.403
13.519
13.936
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14.659
14.916
15.273
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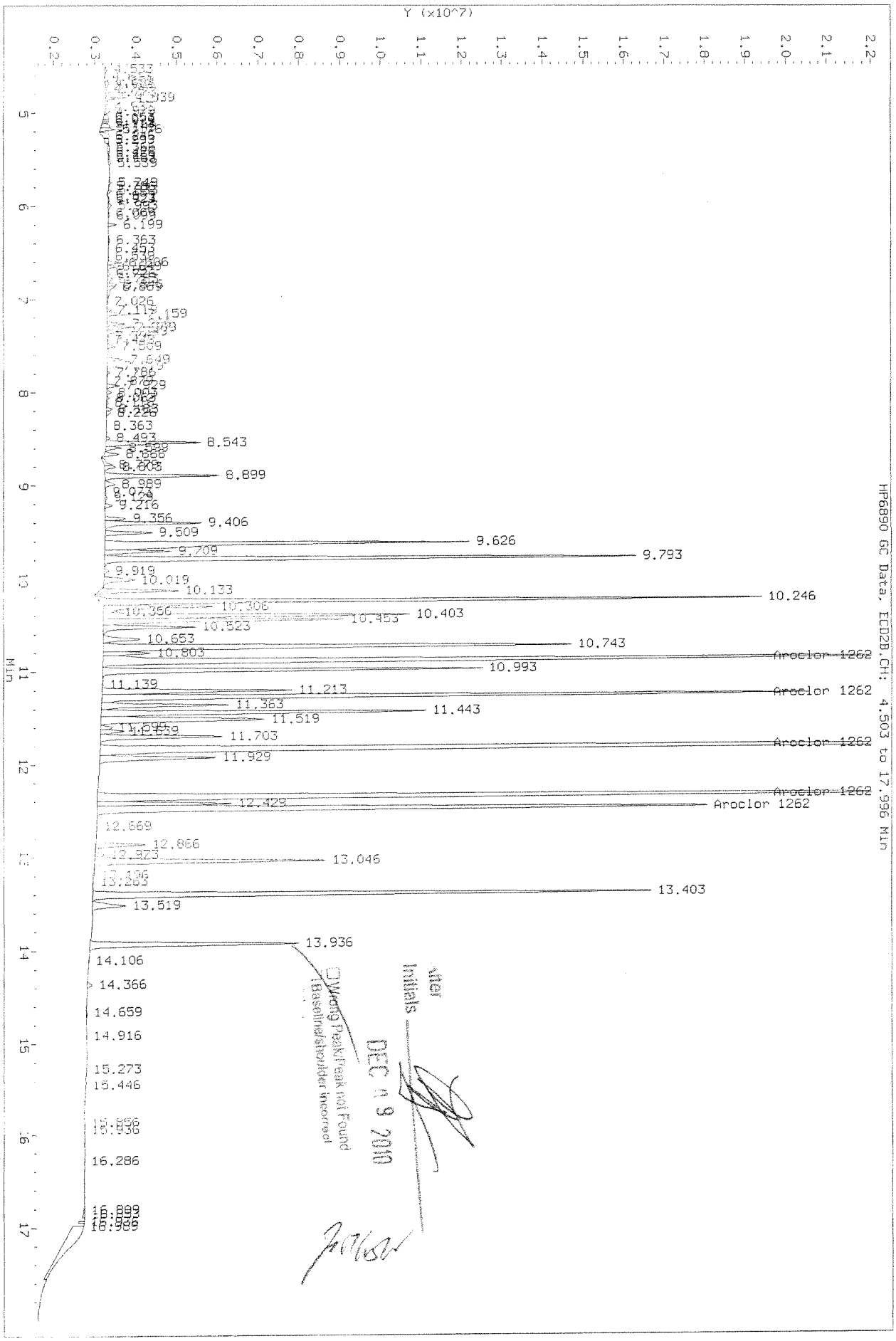
15.856
15.936
16.286
Before
DEC 09 2010


Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208f040.D
Injection Date: 09-DEC-2010 12:04
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD2B.CH: 4.503 to 17.996 Min
Y (x10^7)
Min
8.543
8.899
9.406
9.626
9.793
10.246
10.403
10.743
10.993
11.213
11.443
11.703
11.929
12.429
13.046
13.403
13.519
13.936
14.106
14.366
14.659
14.916
15.273
15.446
16.286
Aroclor 1262
Aroclor 1262
Aroclor 1262
Aroclor 1262
Aroclor 1262
Wrong Peak/Peak not Found
Baseline/Shoulder Incorrect
MGP
Initials
DEC 09 2010

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F041.D
Report Date: 09-Dec-2010 14:37

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\120810.b\1208F041.D
Sample #2 : \\cash1\acqudata\GC22\data\120810_r.b\1208F041.D
Inj Date : 09-DEC-2010 12:28
Sample Info: 1268 @ 100ppb | PCB5-67O | KWG1006746-4
Misc Info :
Cal Date : 09-DEC-2010 12:17
Operator : LHarris
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\120810.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\120810_r.b\120810ul_r.m
Sub List #1 : AR1268.SUB
Sub List #2 : AR1268.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Aroclor 1268	11.458	12.490	31322478	91631241	81.6	83.0	80.00- 120.00	100.00(M)
	11.861	12.867	27847174	80646223	92.5	91.6	64.38- 96.57	88.90(M)
	12.038	13.017	6764986	22054081	91.0	95.7	14.70- 22.05	21.60(M)
	12.374	13.400	10861159	31762000	92.0	91.9	25.86- 38.79	35.55(M)
	12.904	13.937	79239716	230291780	100	96.7	170.49- 255.74	252.98(M)
			Average of Peak Amounts =		91.4	91.8		

QC Flag Legend

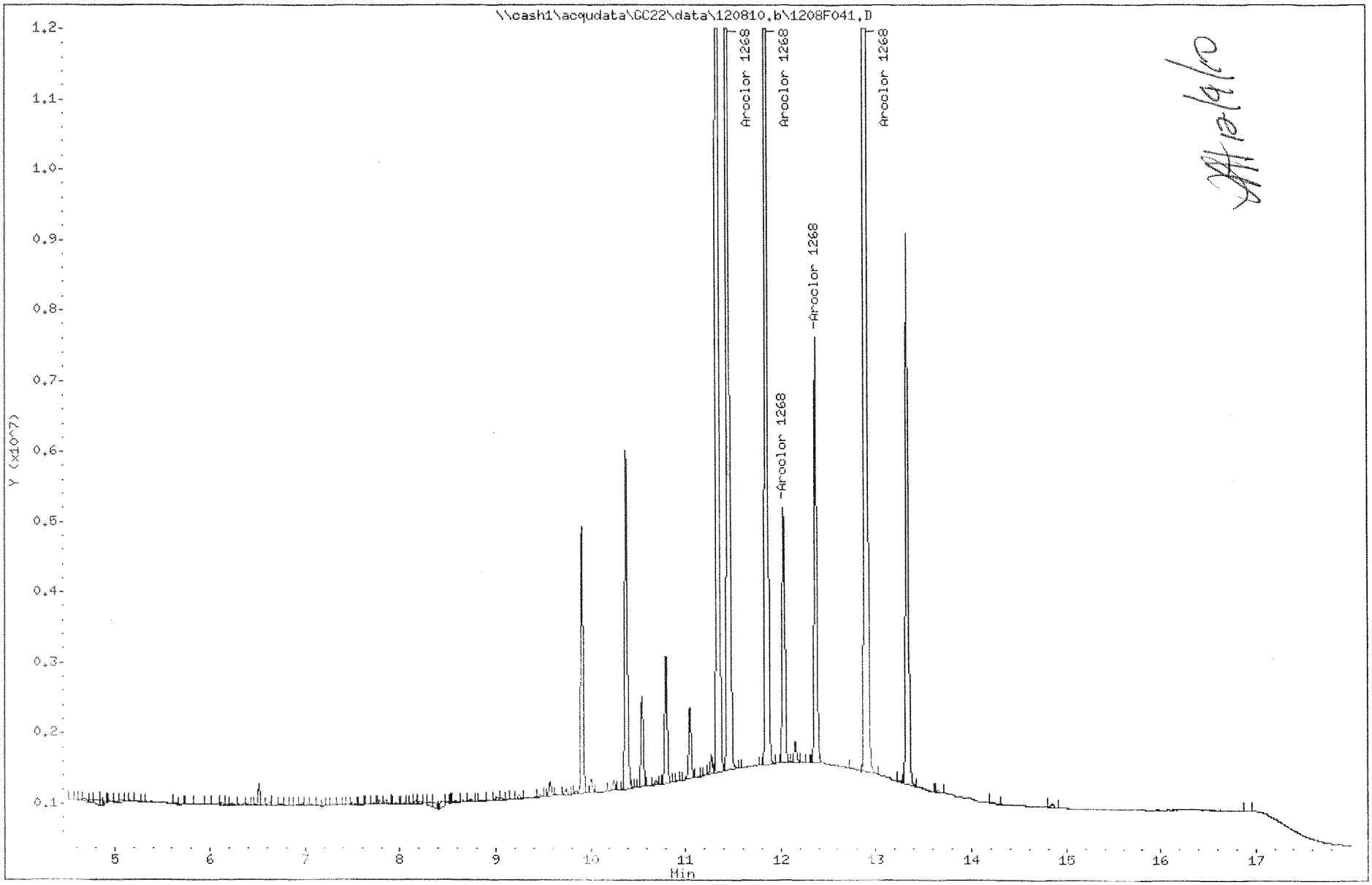
M - Compound response manually integrated.

12/9/10

Data File: \\cash1\acqudata\GC22\data\120810.b\1208F041.D
Date : 09-DEC-2010 12:28
Client ID:
Sample Info: 1268 @ 100ppb | PCB5-670 | KWG1006746-4

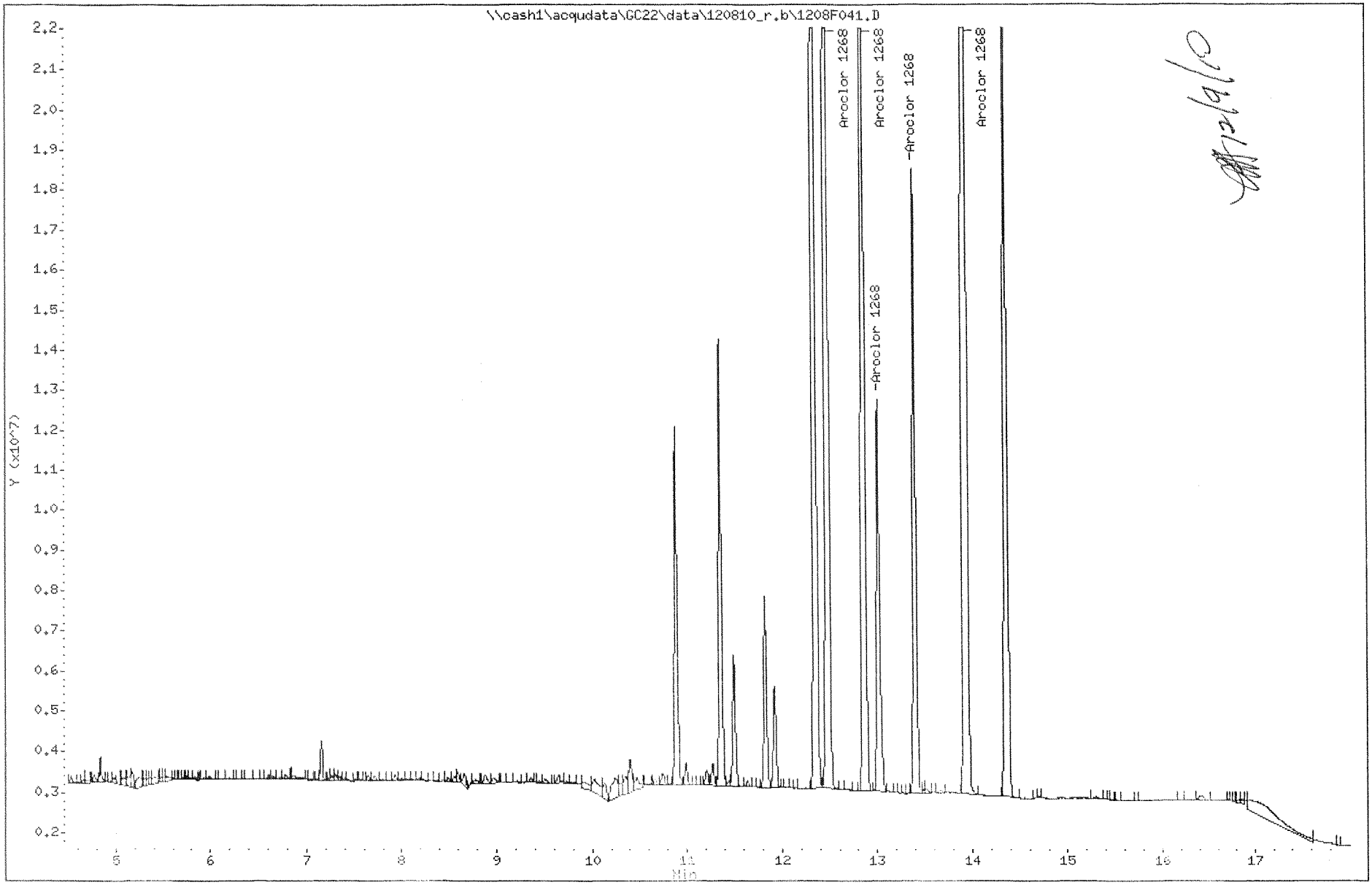
Instrument: GC22.i
Operator: LHarris
Column diameter: 0.32

Column phase: DB-35MS

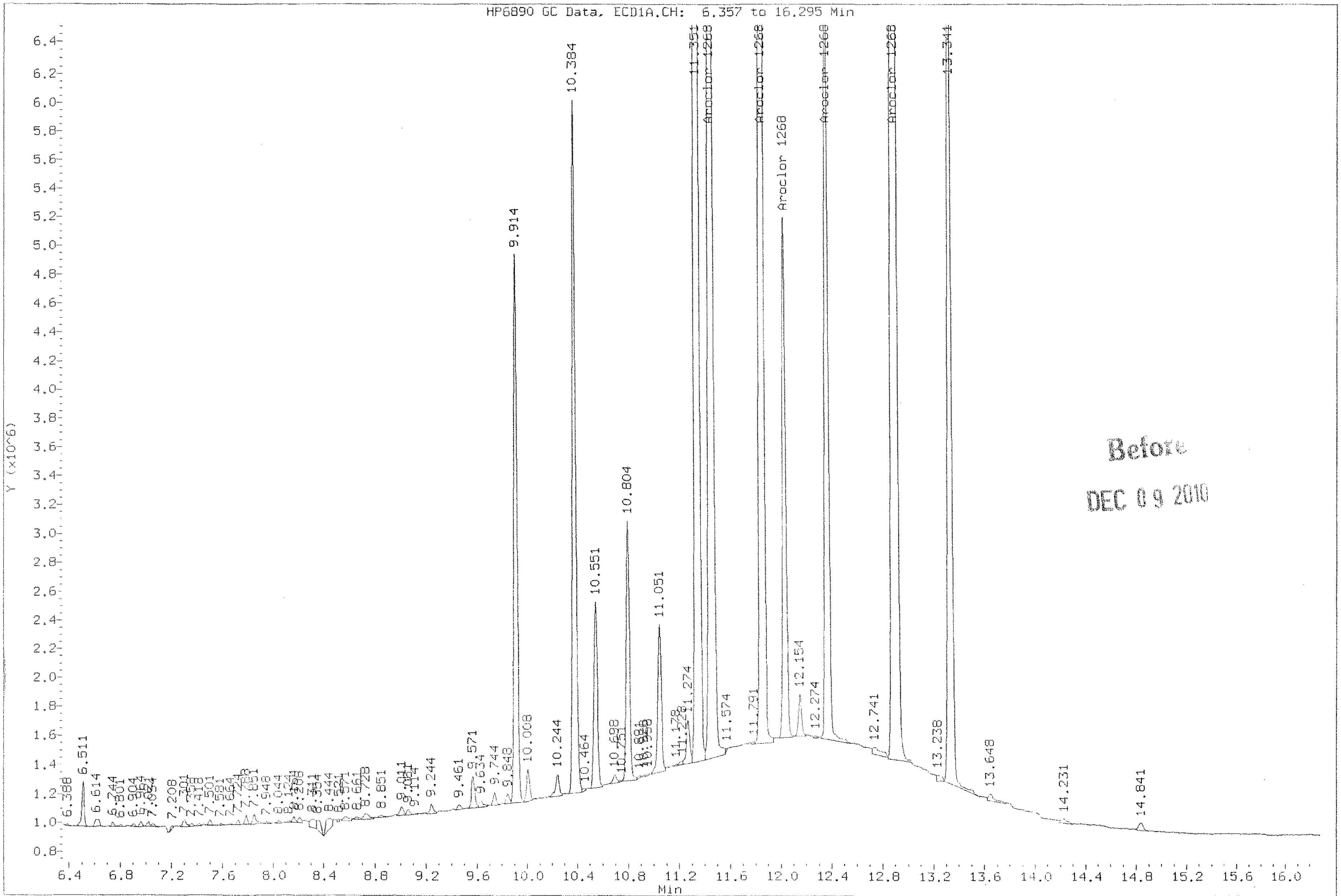


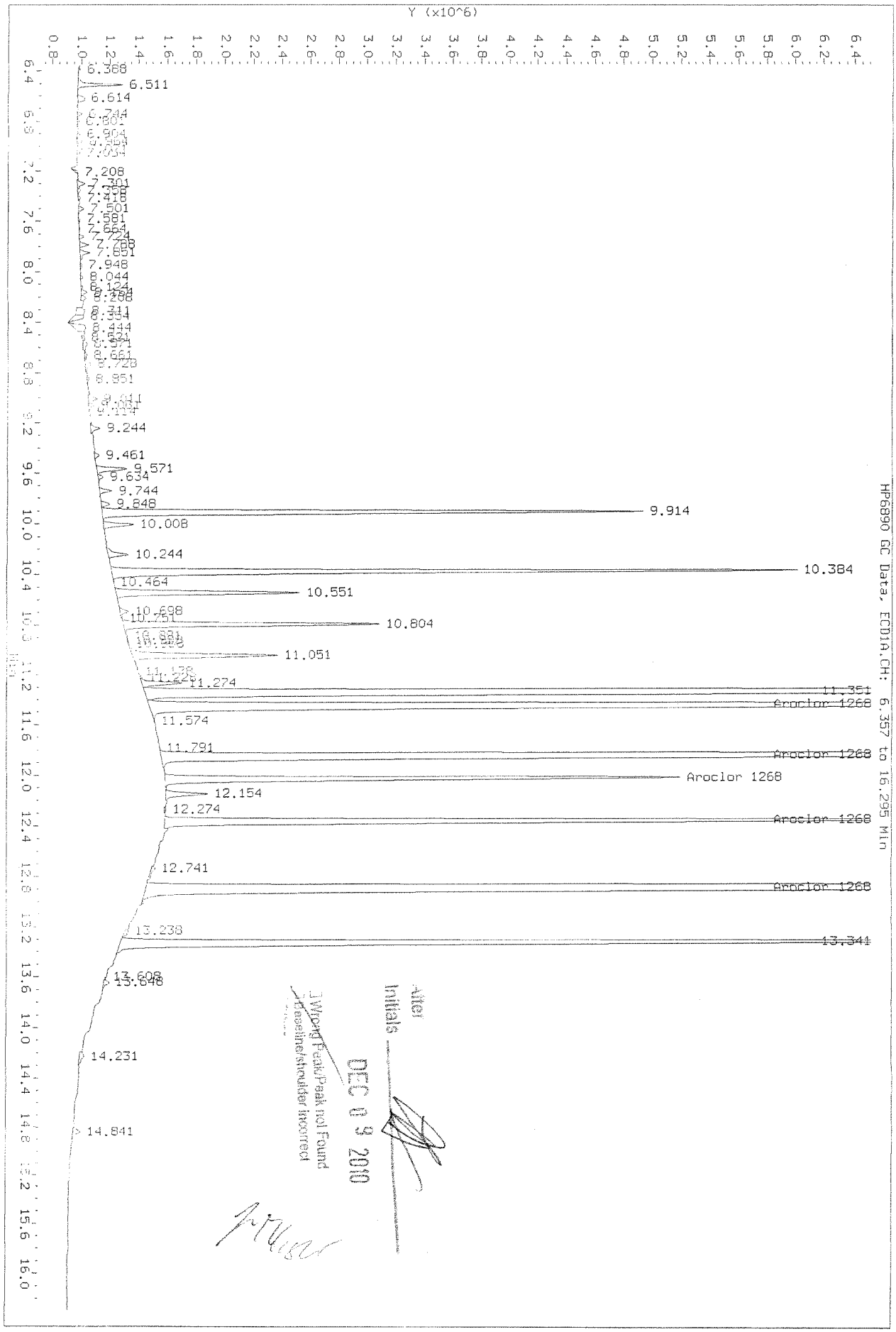
Data File: \\cash1\acqudata\GC22\data\120810_r.b\1208F041.D
Date : 09-DEC-2010 12:28
Client ID:
Sample Info: 1268 @ 100ppb | PCB5-670 | KWG1006746-4

Instrument: GC22.i
Operator: LHarris
Column phase: DB-XLB
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\120810.b\1208F041.D
Injection Date: 09-DEC-2010 12:28
Instrument: GC22.i
Client Sample ID:

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Injection Date: 09-DEC-2010 12:28
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 6.357 to 16.295 Min
6.368
6.511
6.614
7.208
7.501
7.581
7.948
8.044
8.851
9.244
9.461
9.571
9.634
9.744
9.848
9.914
10.008
10.244
10.384
10.464
10.551
10.698
10.804
11.051
11.274
11.351
Aroclor 1268
11.574
11.791
Aroclor 1268
Aroclor 1268
12.154
12.274
Aroclor 1268
12.741
Aroclor 1268
13.238
13.341
13.606
13.648
14.231
14.841
Initials
1 Wrong Peak/Peak not Found
2 Baseline/shoulder incorrect
DEC 13 2010

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/07/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F006.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	9.8	2120000	2080000	-2	NA	± 20 %	AverageRF
Aroclor 1016	100	93	NA	NA	NA	-7	± 20 %	NA
Aroclor 1016 {1}	100	91	22800	20700	-9	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	92	31000	28500	-8	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	91	67000	61300	-9	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	94	41300	38900	-6	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	94	50500	47700	-6	NA	± 100 %	AverageRF
Aroclor 1260	100	93	NA	NA	NA	-7	± 20 %	NA
Aroclor 1260 {1}	100	91	118000	107000	-9	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	90	170000	154000	-10	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	94	149000	140000	-6	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	93	109000	102000	-7	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	95	280000	265000	-5	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/07/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F006.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	9.6	7040000	6760000	-4	NA	± 20 %	AverageRF
Aroclor 1016	100	96	NA	NA	NA	-4	± 20 %	NA
Aroclor 1016 {1}	100	95	175000	165000	-5	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	92	351000	322000	-8	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	100	175000	178000	2	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	97	145000	140000	-3	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	94	169000	158000	-6	NA	± 100 %	AverageRF
Aroclor 1260	100	95	NA	NA	NA	-5	± 20 %	NA
Aroclor 1260 {1}	100	96	470000	449000	-4	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	97	561000	543000	-3	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	99	319000	317000	-1	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	89	311000	276000	-11	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	95	749000	715000	-5	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F006.D
Lab ID: KWG1101323-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 02/07/2011 20:13
Date Quantitated: 02/10/2011 16:39
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F006.D
Lab ID: KWG1101323-1
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 02/07/2011 20:13
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLE
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	02/10/2011

Analysis Lot:	KWG1101323	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:		**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F006.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F006.D			**Vial:**	96
Acqu Date:	02/07/2011 20:13	**Quant Date:**	02/10/2011 16:39	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-1				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	5.28	5.83	18474652	63533618	9.74	10.06			NA
				%Recovery =	NA	NA	**Limits =**	21-114	
Decachlorobiphenyl	13.33	14.35	20752526m	67573460	9.79	9.60			NA
				%Recovery =	NA	NA	**Limits =**	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	92.61	95.65			
Aroclor 1016 {1}	6.35	6.60	2069637m	16539080	90.97	94.66			
Aroclor 1016 {2}	6.38	7.30	2847471m	32216831	91.98	91.80			
Aroclor 1016 {3}	6.74	7.50	6129136m	17754299	91.48	101.68			
Aroclor 1016 {4}	6.90	7.64	3891293m	14013184	94.30	96.55			
Aroclor 1016 {5}	6.96	7.71	4766954m	15846758	94.34	93.56			
Aroclor 1260			0	0	92.76	95.14			
Aroclor 1260 {1}	8.96	10.23	10737819m	44921328m	91.15	95.54			
Aroclor 1260 {2}	9.24	10.72	15365384m	54284975m	90.46	96.75			
Aroclor 1260 {3}	9.84	10.88	14020056m	31712132m	94.21	99.45			
Aroclor 1260 {4}	10.40	11.26	10208641m	27552395m	93.31	88.61			
Aroclor 1260 {5}	10.80	11.82	26485905m	71461575m	94.70	95.38			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F006.D
Report Date: 10-Feb-2011 16:39

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F006.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F006.D
Inj Date : 07-FEB-2011 20:13
Sample Info: 1660 @ 100ppb | PCB5-68I
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.277	5.834	18474652	63533618	9.74	10.1		100.00
Aroclor 1016	6.347	6.598	2069637	16539080	91.0	94.7	80.00- 120.00	100.00(M)
	6.384	7.298	2847471	32216831	92.0	91.8	103.28- 154.92	137.58(M)
	6.737	7.498	6129136	17754299	91.5	102	231.04- 346.55	296.15(M)
	6.901	7.638	3891293	14013184	94.3	96.6	146.37- 219.55	188.02(M)
	6.957	7.711	4766954	15846758	94.3	93.6	176.02- 264.04	230.33(M)
			Average of Peak Amounts =		92.6	95.7		
Aroclor 1260	8.957	10.234	10737819	44921328	91.1	95.5	80.00- 120.00	100.00(M)
	9.237	10.724	15365384	54284975	90.4	96.7	113.06- 169.59	143.10(M)
	9.837	10.884	14020056	31712132	94.2	99.4	101.19- 151.78	130.57(M)
	10.401	11.264	10208641	27552395	93.3	88.6	75.73- 113.59	95.07(M)
	10.797	11.821	26485905	71461575	94.7	95.4	199.54- 299.31	246.66(M)
			Average of Peak Amounts =		92.7	95.1		
Decachlorobiphenyl	13.331	14.354	20752526	67573460	9.79	9.60		100.00(M)

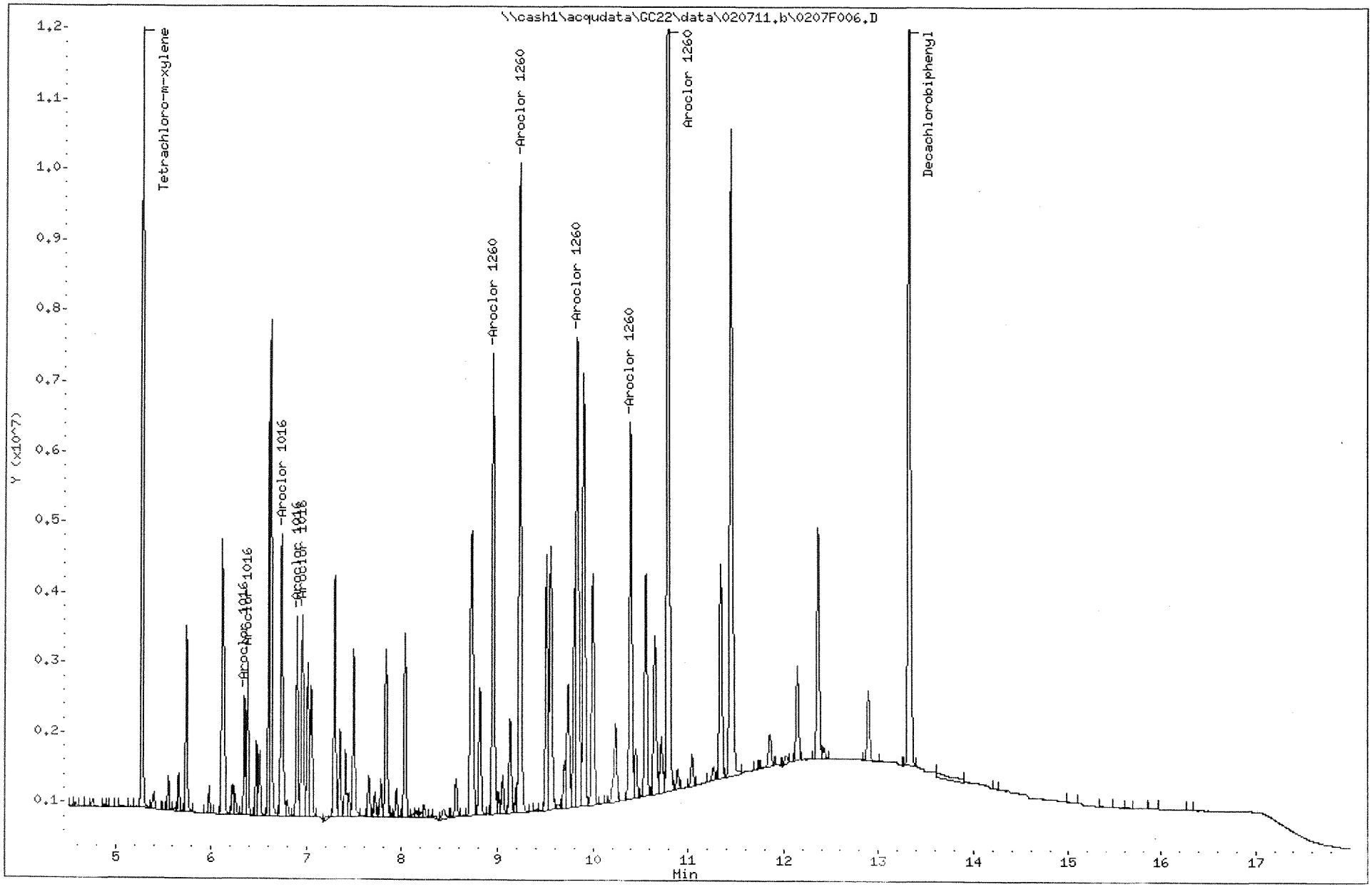
QC Flag Legend

M - Compound response manually integrated.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F006.D
Date : 07-FEB-2011 20:13
Client ID:
Sample Info: 1660 @ 100ppb | PCB5-68I

Instrument: GC22.i

Operator: JHSmith
Column phase: DB-35MS
Column diameter: 0.32

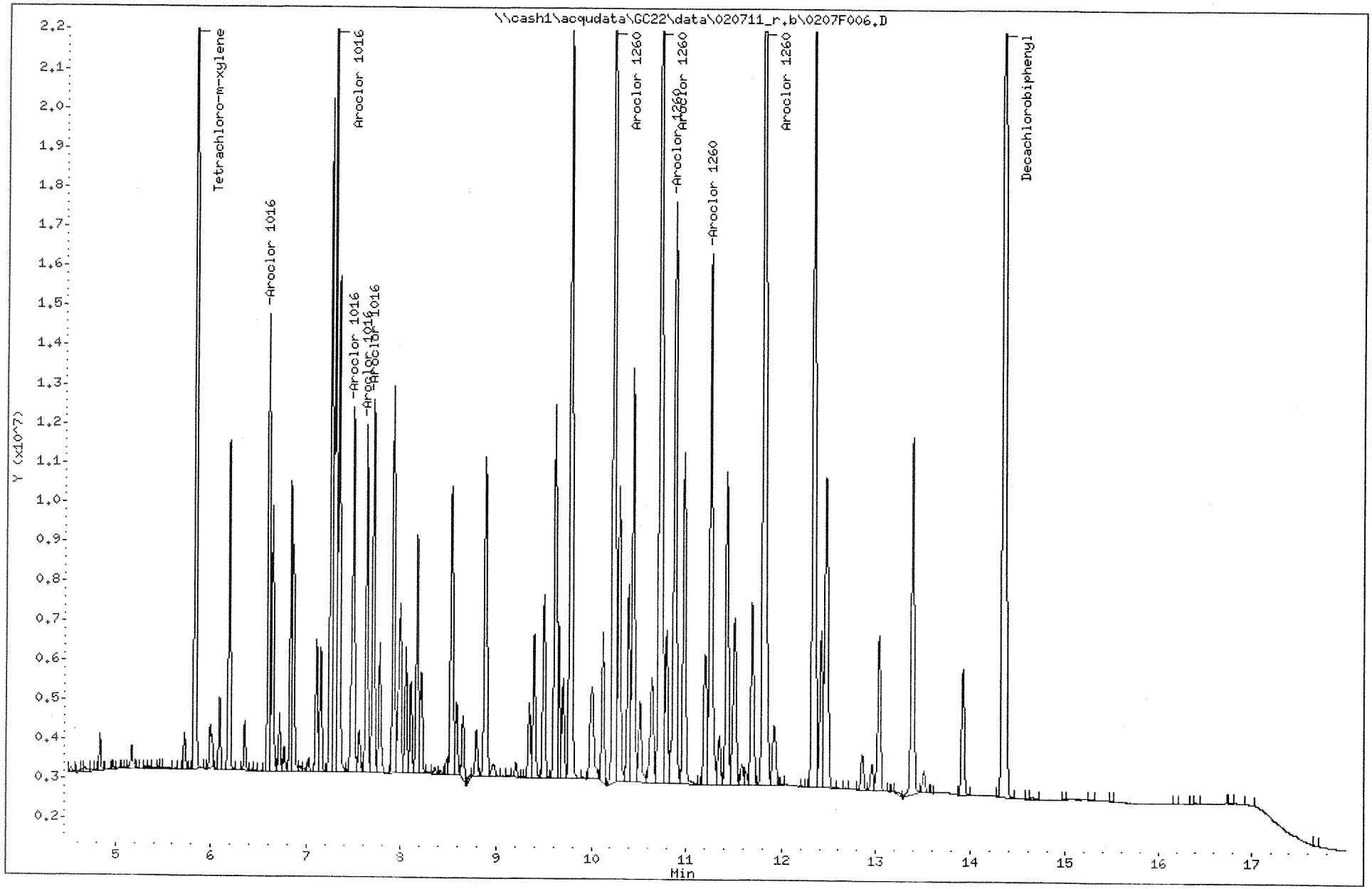


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F006.D
Date : 07-FEB-2011 20:13
Client ID:
Sample Info: 1660 @ 100ppb | PCB5-68I

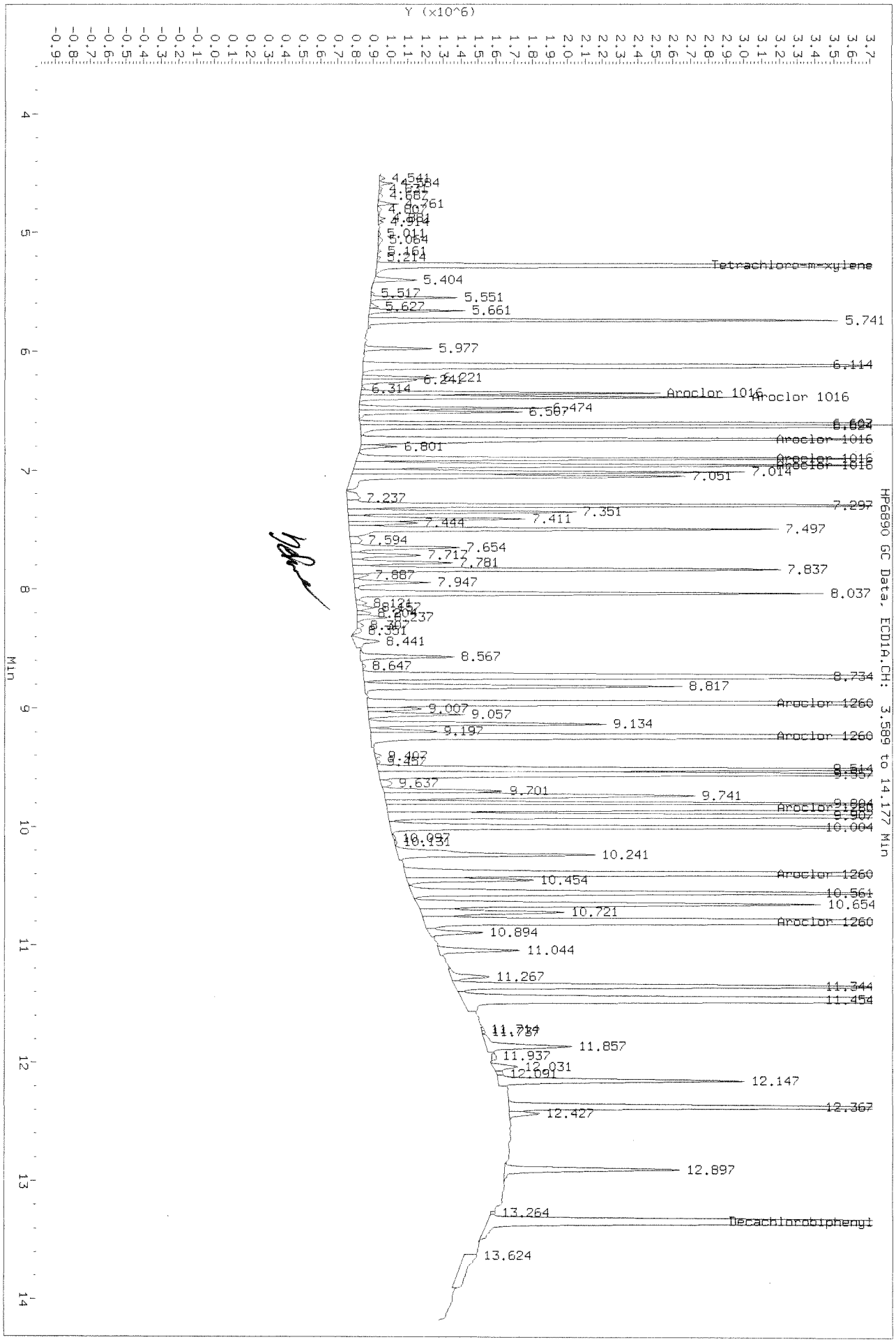
Instrument: GC22.i

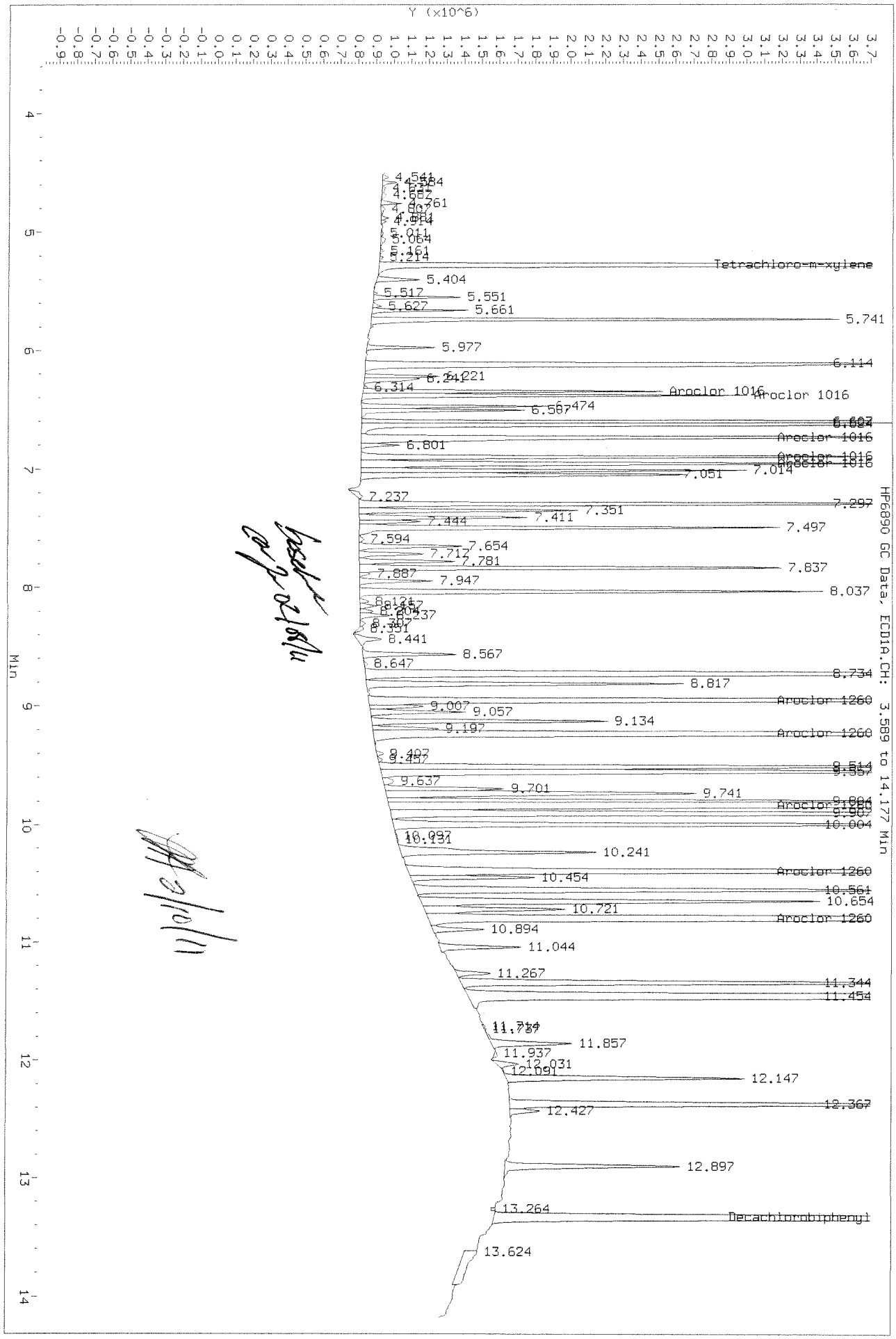
Operator: JMSmith
Column diameter: 0.32

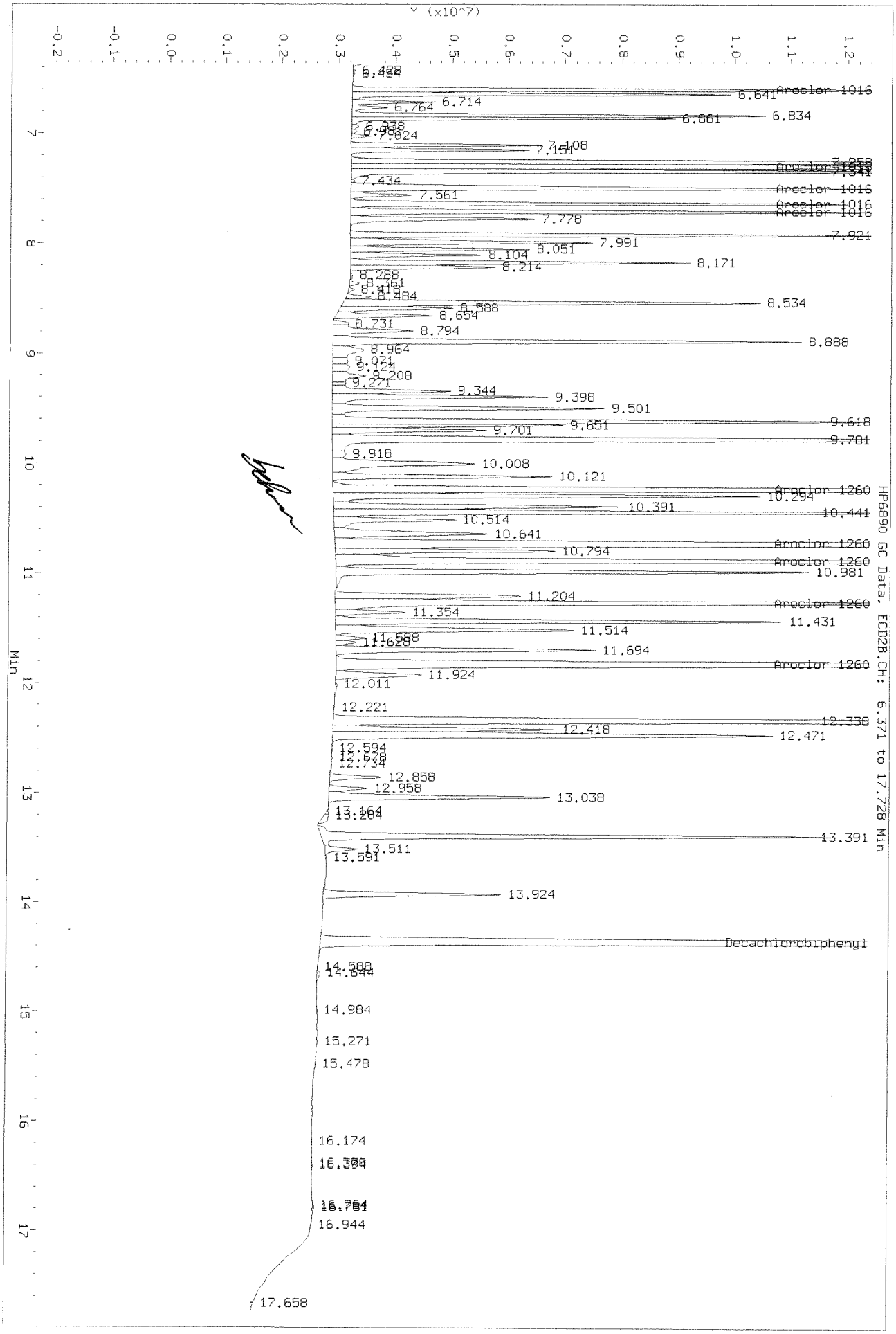
Column phase: DB-XLB



916


Data File: \\cash1\acqudata\GC22\data\020711.b\0207F006.D
Injection Date: 07-FEB-2011 20:13
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD1A.CH: 3.589 to 14.177 Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1260
Aroclor 1260
Aroclor 1260
Aroclor 1260
Decachlorobiphenyl


Data File: \\cash1\acqudata\GC22\data\020711.b\0207F006.D
Injection Date: 07-FEB-2011 20:13
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD1A.CH: 3.589 to 14.177 Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl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Injection Date: 07-FEB-2011 20:13
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
Min
HP6890 GC Data, ECD2B.CH: 6.371 to 17.728 Min
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
6.641
6.714
6.764
6.834
6.861
7.154
7.434
7.561
7.778
7.921
7.991
8.051
8.104
8.171
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9.271
9.344
9.398
9.501
9.618
9.651
9.701
9.781
9.918
10.008
10.121
10.294
10.391
10.441
10.514
10.641
10.794
10.981
11.204
11.354
11.431
11.514
11.694
11.924
12.011
12.221
12.338
12.418
12.471
12.858
12.958
13.038
13.391
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14.588
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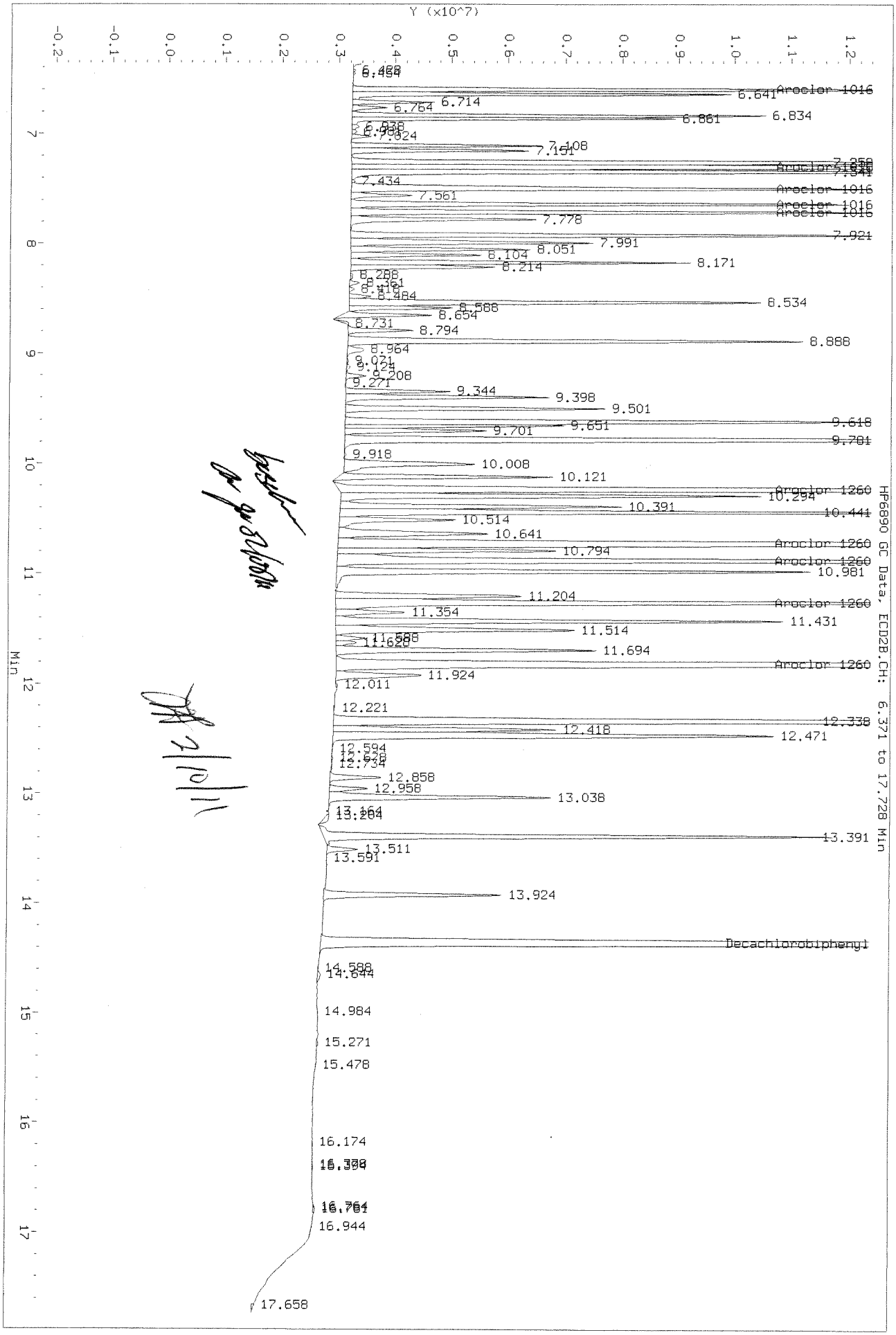
17.658


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F006.D
Injection Date: 07-FEB-2011 20:13
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
HP6890 GC Data, ECD2B.CH: 6.321 to 17.728 Min
Min
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
6.641
6.714
6.764
6.834
6.861
7.108
7.151
7.434
7.561
7.778
7.921
7.991
8.051
8.104
8.171
8.214
8.534
8.588
8.654
8.731
8.794
8.888
8.964
9.208
9.271
9.344
9.398
9.501
9.618
9.651
9.701
9.781
9.918
10.008
10.121
10.294
10.391
10.441
10.514
10.641
10.794
10.981
11.204
11.354
11.431
11.514
11.694
11.924
12.011
12.221
12.338
12.418
12.471
12.858
12.958
13.038
13.391
13.511
13.591
13.924
14.588
14.644
14.984
15.271
15.478
16.174
16.944
17.658

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/08/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F020.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	10	2120000	2120000	0	NA	± 20 %	AverageRF
Aroclor 1016	100	95	NA	NA	NA	-5	± 20 %	NA
Aroclor 1016 {1}	100	93	22800	21200	-7	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	94	31000	29000	-6	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	95	67000	63500	-5	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	98	41300	40600	-2	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	96	50500	48700	-4	NA	± 100 %	AverageRF
Aroclor 1260	100	95	NA	NA	NA	-5	± 20 %	NA
Aroclor 1260 {1}	100	94	118000	110000	-6	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	93	170000	158000	-7	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	95	149000	141000	-5	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	96	109000	105000	-4	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	98	280000	274000	-2	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/08/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F020.D

Column ID: DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	9.7	7040000	6830000	-3	NA	± 20 %	AverageRF
Aroclor 1016	100	98	NA	NA	NA	-2	± 20 %	NA
Aroclor 1016 {1}	100	96	175000	168000	-4	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	94	351000	331000	-6	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	100	175000	181000	4	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	98	145000	142000	-2	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	96	169000	163000	-4	NA	± 100 %	AverageRF
Aroclor 1260	100	93	NA	NA	NA	-7	± 20 %	NA
Aroclor 1260 {1}	100	97	470000	455000	-3	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	98	561000	552000	-2	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	99	319000	316000	-1	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	78	311000	244000	-22	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	94	749000	706000	-6	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F020.D
Lab ID: KWG1101323-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 02/08/2011 01:55
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review: 2/10/11

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F020.D
Lab ID: KWG1101323-3
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 02/08/2011 01:55
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLE
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	02/10/2011

Analysis Lot:	KWG1101323	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:		**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F020.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F020.D			**Vial:**	96
Acqu Date:	02/08/2011 01:55	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-3				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	5.28	5.84	18918352	65325001	9.97	10.35			NA
				%Recovery =	NA	NA	**Limits =**	21-114	
Decachlorobiphenyl	13.33	14.35	21204585m	68288840	10.01	9.70			NA
				%Recovery =	NA	NA	**Limits =**	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	95.27	97.59			
Aroclor 1016 {1}	6.35	6.60	2116276m	16831530	93.02	96.34			
Aroclor 1016 {2}	6.39	7.30	2902780m	33073671	93.77	94.24			
Aroclor 1016 {3}	6.74	7.50	6345696m	18087774	94.71	103.59			
Aroclor 1016 {4}	6.90	7.64	4064189m	14160509	98.49	97.57			
Aroclor 1016 {5}	6.96	7.71	4868884m	16296766	96.36	96.22			
Aroclor 1260			0	0	94.97	93.37			
Aroclor 1260 {1}	8.96	10.24	11028731	45470995m	93.62	96.71			
Aroclor 1260 {2}	9.24	10.73	15791811	55186057m	92.97	98.35			
Aroclor 1260 {3}	9.84	10.88	14067725	31649904m	94.53	99.25			
Aroclor 1260 {4}	10.40	11.27	10479857	24355642m	95.79	78.33			
Aroclor 1260 {5}	10.80	11.82	27401615	70605719m	97.97	94.23			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F020.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F020.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F020.D
Inj Date : 08-FEB-2011 01:55
Sample Info: 1660 @ 100ppb | PCB5-68I
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.278	5.835	18918352	65325001	9.97	10.3		100.00
Aroclor 1016	6.348	6.598	2116276	16831530	93.0	96.3	80.00- 120.00	100.00(M)
	6.385	7.298	2902780	33073671	93.8	94.2	103.28- 154.92	137.16(M)
	6.738	7.498	6345696	18087774	94.7	104	231.04- 346.55	299.85(M)
	6.901	7.638	4064189	14160509	98.5	97.6	146.37- 219.55	192.04(M)
	6.958	7.712	4868884	16296766	96.4	96.2	176.02- 264.04	230.07(M)
			Average of Peak Amounts =		95.3	97.7		
Aroclor 1260	8.958	10.235	11028731	45470995	93.6	96.7	80.00- 120.00	100.00
	9.238	10.725	15791811	55186057	93.0	98.4	113.06- 169.59	143.19
	9.838	10.882	14067725	31649904	94.5	99.2	101.19- 151.78	127.56
	10.401	11.265	10479857	24355642	95.8	78.3	75.73- 113.59	95.02
	10.798	11.818	27401615	70605719	98.0	94.2	199.54- 299.31	248.46
			Average of Peak Amounts =		95.0	93.4		
Decachlorobiphenyl	13.331	14.352	21204585	68288840	10.0	9.70		100.00(M)

QC Flag Legend

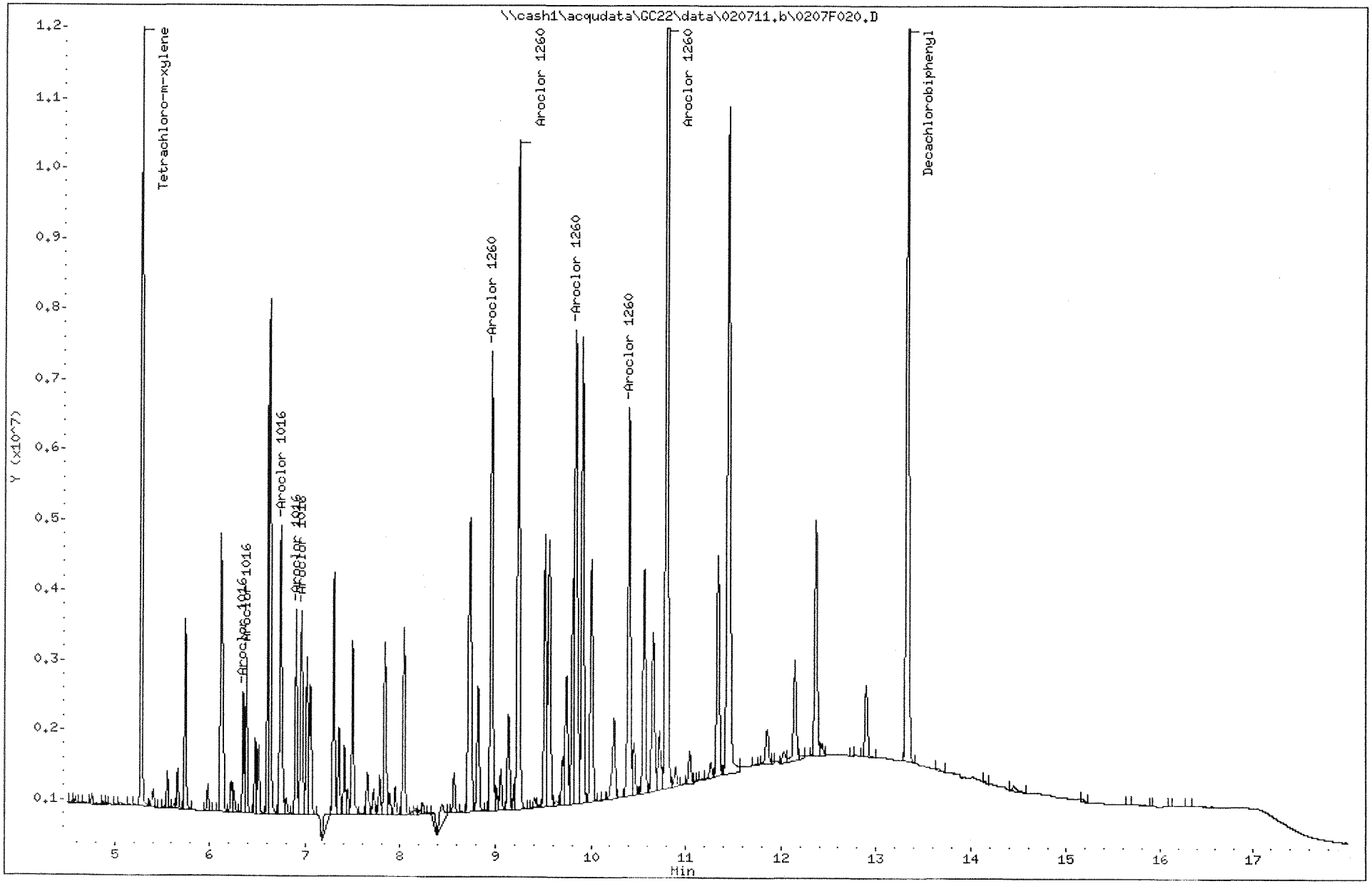
M - Compound response manually integrated.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F020.D
Date : 08-FEB-2011 01:55
Client ID:
Sample Info: 1660 @ 100ppb | PCB5-68I

Instrument: GC22.i

Operator: JMSmith
Column diameter: 0.32

Column phase: DB-35MS

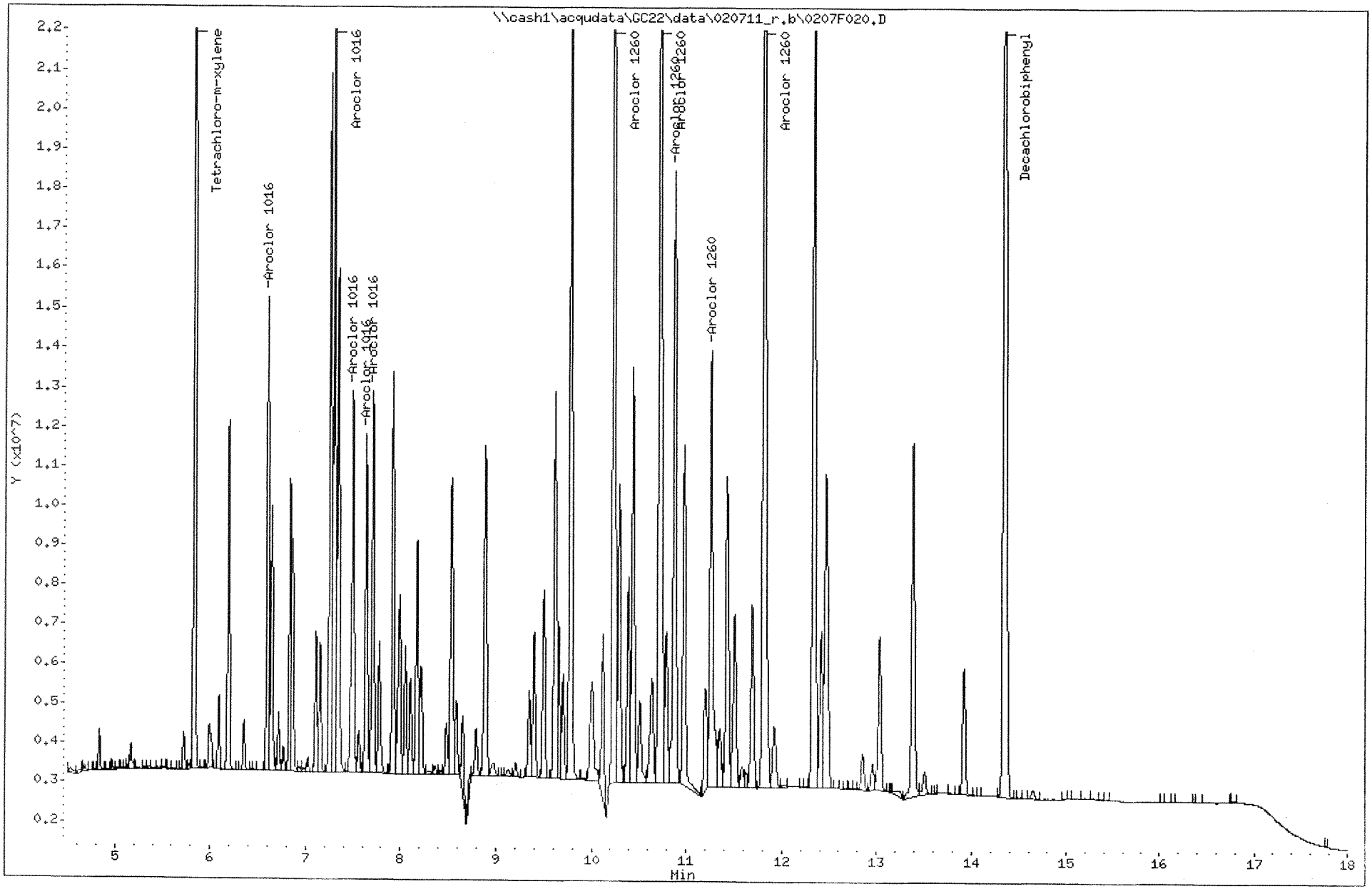


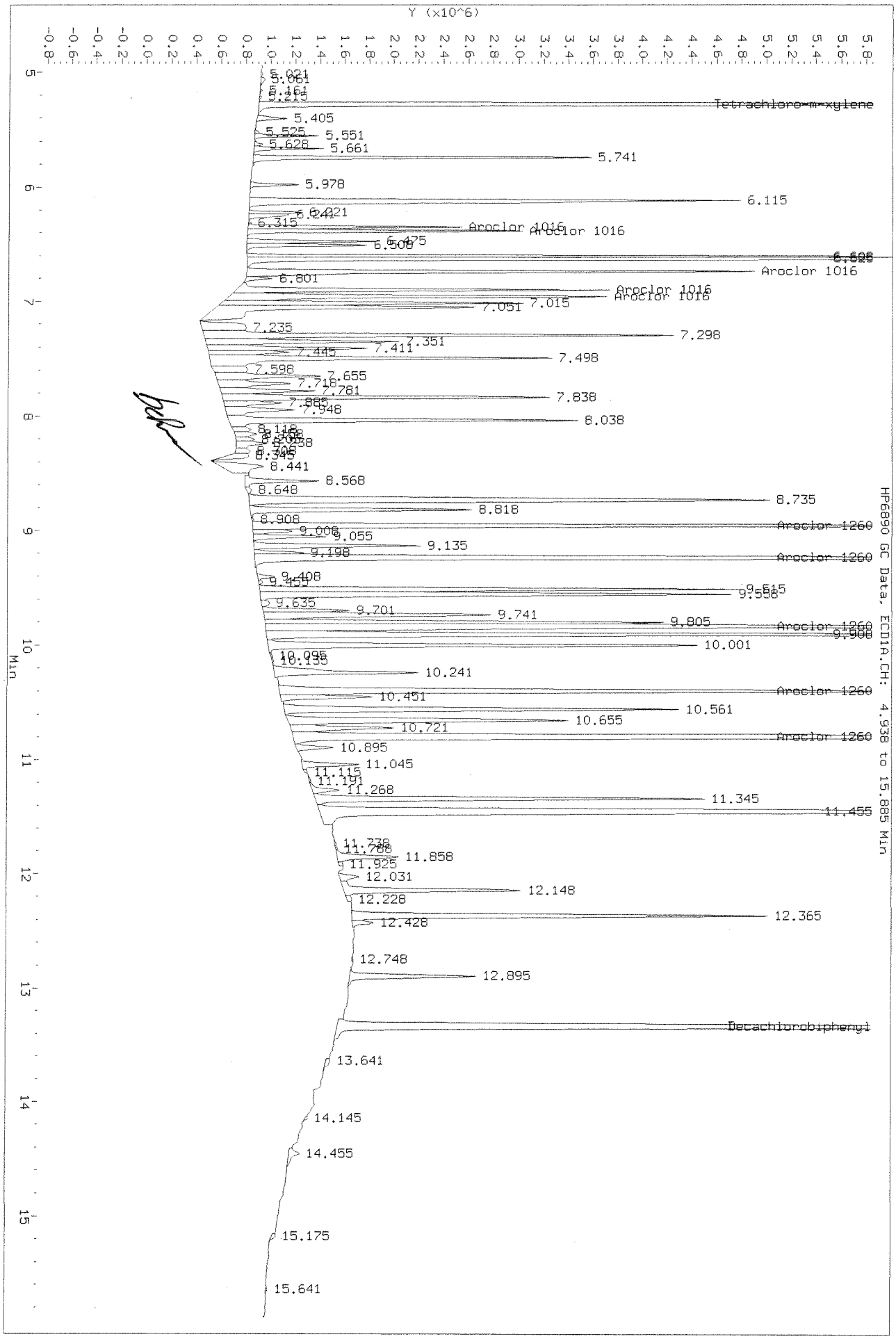
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F020.D
Date : 08-FEB-2011 01:55
Client ID:
Sample Info: 1660 @ 100ppb | PCB5-68I

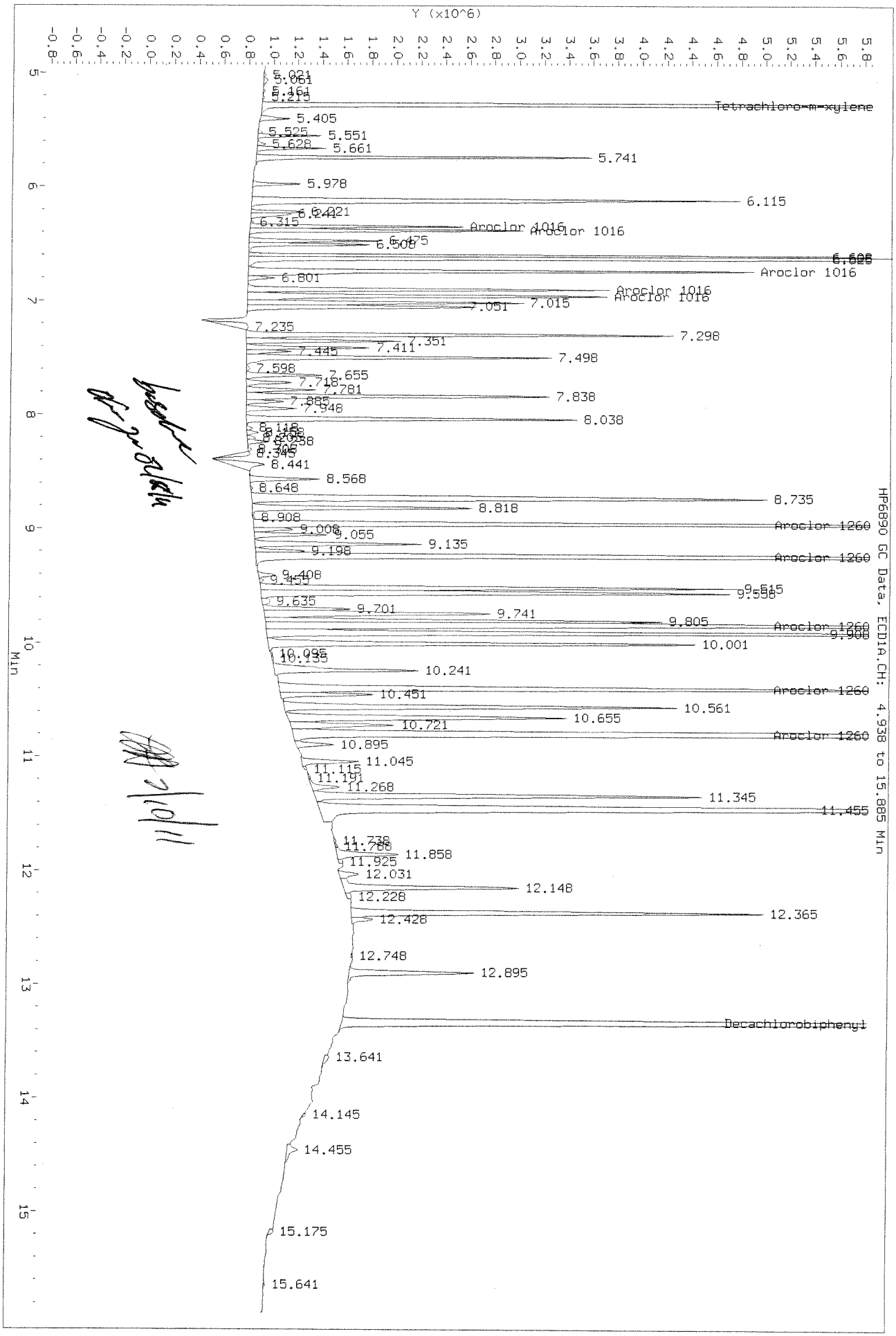
Instrument: GC22.i

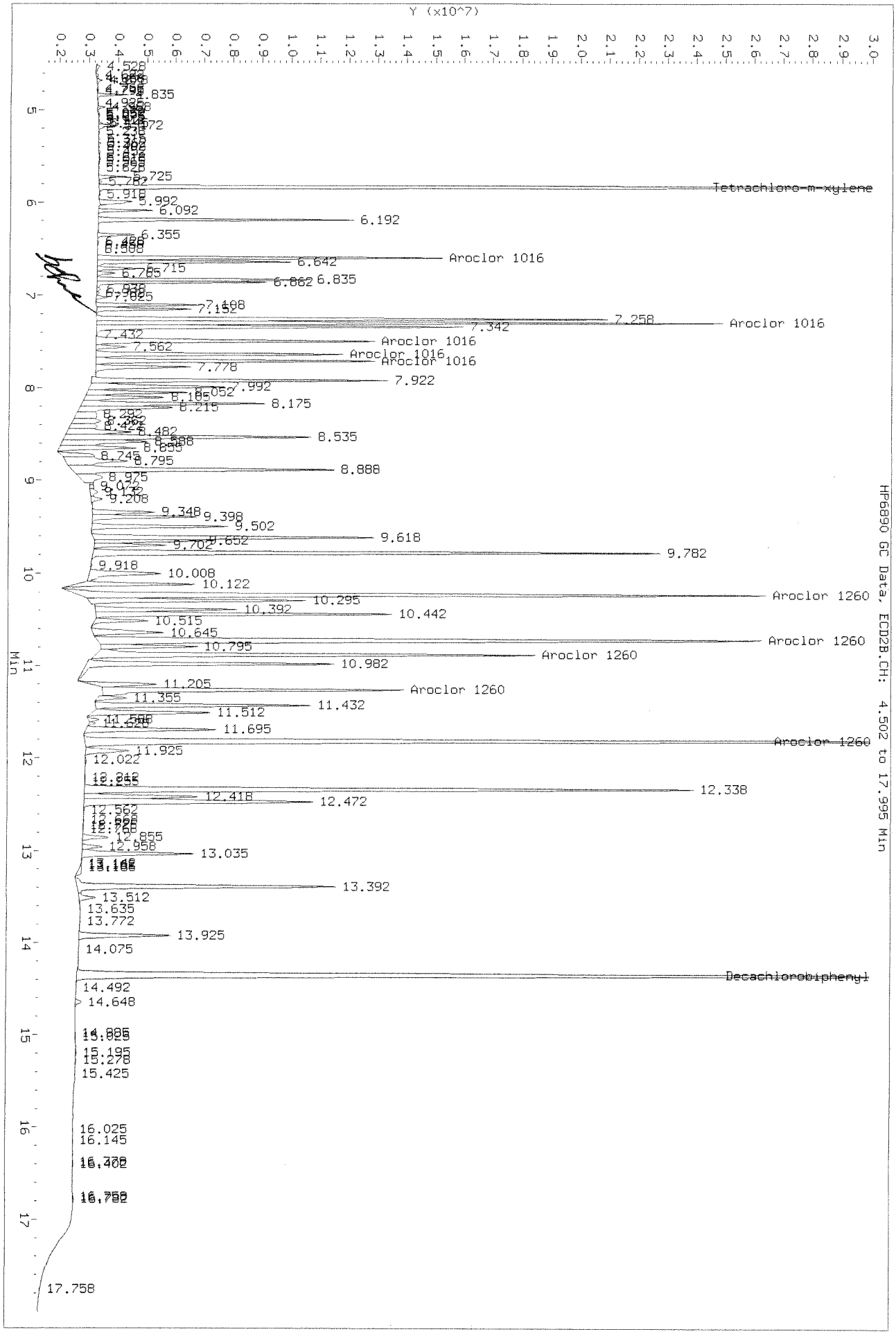
Operator: JMSmith
Column diameter: 0.32

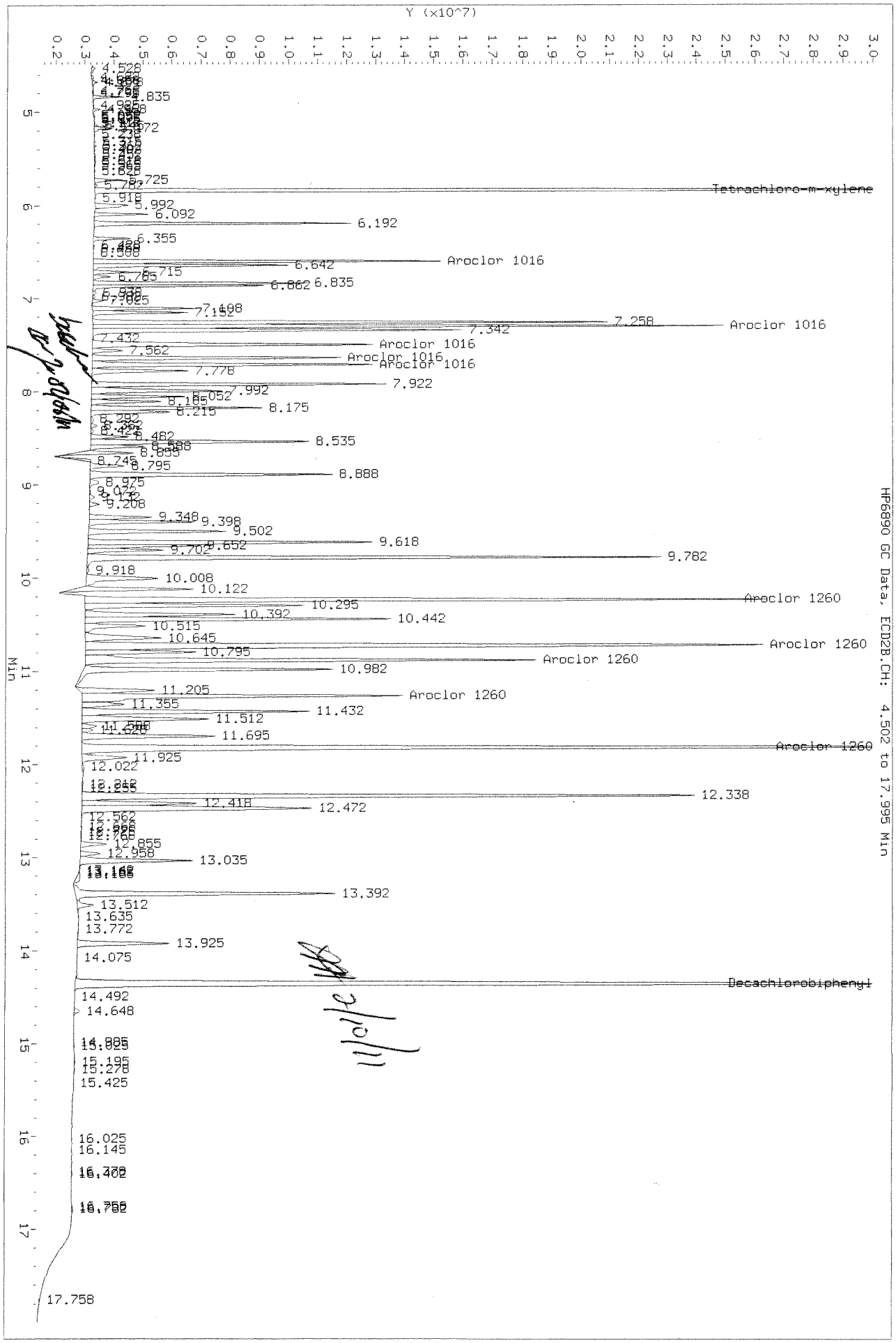
Column phase: DB-XLB




Data File: \\cash1\acqudata\GC22\data\020711.b\0207F020.D
Injection Date: 08-FEB-2011 01:55
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
HP6890 GC Data, ECD1A.CH: 4.938 to 15.885 Min
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl


Data File: \\cash1\acqudata\GC22\data\020711.b\0207F020.D
Injection Date: 08-FEB-2011 01:55
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD1A.CH: 4.938 to 15.885 Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl


Y (x10^7)
Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1260
Decachlorobiphenyl
HP6890 GC Data, ECD2B.CH: 4.502 to 17.995 Min
Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F020.D
Injection Date: 08-FEB-2011 01:55
Instrument: GC22.1
Client Sample ID:


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F020.D
Injection Date: 08-FEB-2011 01:55
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
Min
HP6890 GC Data, ECD2B.CH; 4.502 to 17.995 Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1260
Aroclor 1260
Aroclor 1260
Aroclor 1260
Decachlorobiphenyl
4.528
6.725
6.092
6.192
6.355
6.642
6.862
6.835
7.258
7.342
7.432
7.562
7.778
7.922
8.175
8.535
8.795
8.888
9.348
9.398
9.502
9.618
9.782
9.918
10.008
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10.295
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10.442
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10.645
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11.205
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11.432
11.512
11.695
11.925
12.022
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12.855
12.958
13.035
13.392
13.512
13.635
13.772
13.925
14.075
14.492
14.648
15.195
15.278
15.425
16.025
16.145
17.758

Client: Exponent
Project: Heglar Kronquist/0907194.000.0901

Service Request: K1100692
Date Analyzed: 02/08/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type: External Standard
Analysis Method: 8082A

Calibration Date: 12/08/2010
Calibration ID: CAL10114
Analysis Lot: KWG1101323
Units: ng/mL

File ID: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F034.D

Column ID: DB-35MS

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	10	2120000	2190000	3	NA	± 20 %	AverageRF
Aroclor 1016	100	96	NA	NA	NA	-4	± 20 %	NA
Aroclor 1016 {1}	100	98	22800	22300	-2	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	93	31000	28800	-7	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	96	67000	64300	-4	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	99	41300	40700	-1	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	97	50500	49000	-3	NA	± 100 %	AverageRF
Aroclor 1260	100	96	NA	NA	NA	-4	± 20 %	NA
Aroclor 1260 {1}	100	95	118000	112000	-5	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	93	170000	159000	-7	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	95	149000	142000	-5	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	97	109000	106000	-3	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	100	280000	280000	0	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Client:	Exponent	**Service Request:**	K1100692
Project:	Heglar Kronquist/0907194.000.0901	**Date Analyzed:**	02/08/2011

Continuing Calibration Verification Summary
Polychlorinated Biphenyls (PCBs)

Calibration Type:	External Standard	**Calibration Date:**	12/08/2010
Analysis Method:	8082A	**Calibration ID:**	CAL10114
		Analysis Lot:	KWG1101323
		Units:	ng/mL
File ID:	\\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F034.D	**Column ID:**	DB-XLB

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Decachlorobiphenyl	10	9.9	7040000	6960000	-1	NA	± 20 %	AverageRF
Aroclor 1016	100	100	NA	NA	NA	0	± 20 %	NA
Aroclor 1016 {1}	100	99	175000	174000	-1	NA	± 100 %	AverageRF
Aroclor 1016 {2}	100	99	351000	346000	-1	NA	± 100 %	AverageRF
Aroclor 1016 {3}	100	110	175000	183000	5	NA	± 100 %	AverageRF
Aroclor 1016 {4}	100	99	145000	144000	-1	NA	± 100 %	AverageRF
Aroclor 1016 {5}	100	100	169000	169000	0	NA	± 100 %	AverageRF
Aroclor 1260	100	91	NA	NA	NA	-9	± 20 %	NA
Aroclor 1260 {1}	100	98	470000	460000	-2	NA	± 100 %	AverageRF
Aroclor 1260 {2}	100	98	561000	551000	-2	NA	± 100 %	AverageRF
Aroclor 1260 {3}	100	97	319000	310000	-3	NA	± 100 %	AverageRF
Aroclor 1260 {4}	100	66	311000	206000	-34	NA	± 100 %	AverageRF
Aroclor 1260 {5}	100	95	749000	709000	-5	NA	± 100 %	AverageRF

Results flagged with an asterisk (*) indicate values outside control criteria.

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F034.D
Lab ID: KWG1101323-5
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 02/08/2011 07:38
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F034.D
Lab ID: KWG1101323-5
RunType: CCV
Matrix: NOT APPLICABLE

Date Acquired: 02/08/2011 07:38
Date Quantitated: 02/10/2011 16:41
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review: 2/10/11

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLE
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	02/10/2011

Analysis Lot:	KWG1101323	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:		**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F034.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F034.D			**Vial:**	96
Acqu Date:	02/08/2011 07:38	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	CCV			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-5				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	5.28	5.83	19195421	65606576	10.12	10.39			NA
				%Recovery =	NA	NA	Limits =	21-114	
Decachlorobiphenyl	13.33	14.35	21920772	69619805	10.35	9.89			NA
				%Recovery =	NA	NA	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	96.50	100.30			
Aroclor 1016 {1}	6.35	6.60	2227182m	17352506m	97.89	99.32			
Aroclor 1016 {2}	6.38	7.30	2875200m	34572152m	92.87	98.51			
Aroclor 1016 {3}	6.74	7.50	6431968m	18342000m	96.00	105.04			
Aroclor 1016 {4}	6.90	7.64	4074797m	14384507m	98.75	99.11			
Aroclor 1016 {5}	6.96	7.71	4900484m	16856715m	96.98	99.53			
Aroclor 1260			0	0	96.24	90.84			
Aroclor 1260 {1}	8.96	10.24	11222917m	46016027m	95.27	97.87			
Aroclor 1260 {2}	9.24	10.73	15860917m	55136677m	93.38	98.26			
Aroclor 1260 {3}	9.84	10.88	14195087m	30981751m	95.38	97.15			
Aroclor 1260 {4}	10.40	11.27	10623605m	20608437m	97.10	66.28			
Aroclor 1260 {5}	10.80	11.82	27992881m	70922125m	100.09	94.66			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F034.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F034.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F034.D
Inj Date : 08-FEB-2011 07:38
Sample Info: 1660 @ 100ppb | PCB5-68I
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : AR1660.SUB
Sub List #2 : AR1660.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio
Tetrachloro-m-xylene	5.277	5.834	19195421	65606576	10.1	10.4		100.00
Aroclor 1016	6.347	6.601	2227182	17352506	97.9	99.3	80.00- 120.00	100.00(M)
	6.384	7.301	2875200	34572152	92.9	98.5	103.28- 154.92	129.10(M)
	6.740	7.497	6431968	18342000	96.0	105	231.04- 346.55	288.79(M)
	6.900	7.641	4074797	14384507	98.7	99.1	146.37- 219.55	182.96(M)
	6.960	7.711	4900484	16856715	97.0	99.5	176.02- 264.04	220.03(M)
			Average of Peak Amounts =		96.5	100		
Aroclor 1260	8.957	10.237	11222917	46016027	95.3	97.9	80.00- 120.00	100.00(M)
	9.240	10.727	15860917	55136677	93.4	98.3	113.06- 169.59	141.33(M)
	9.837	10.884	14195087	30981751	95.4	97.2	101.19- 151.78	126.48(M)
	10.400	11.267	10623605	20608437	97.1	66.3	75.73- 113.59	94.66(M)
	10.797	11.821	27992881	70922125	100	94.6	199.54- 299.31	249.43(M)
			Average of Peak Amounts =		96.2	90.9		
Decachlorobiphenyl	13.330	14.354	21920772	69619805	10.3	9.89		100.00

QC Flag Legend

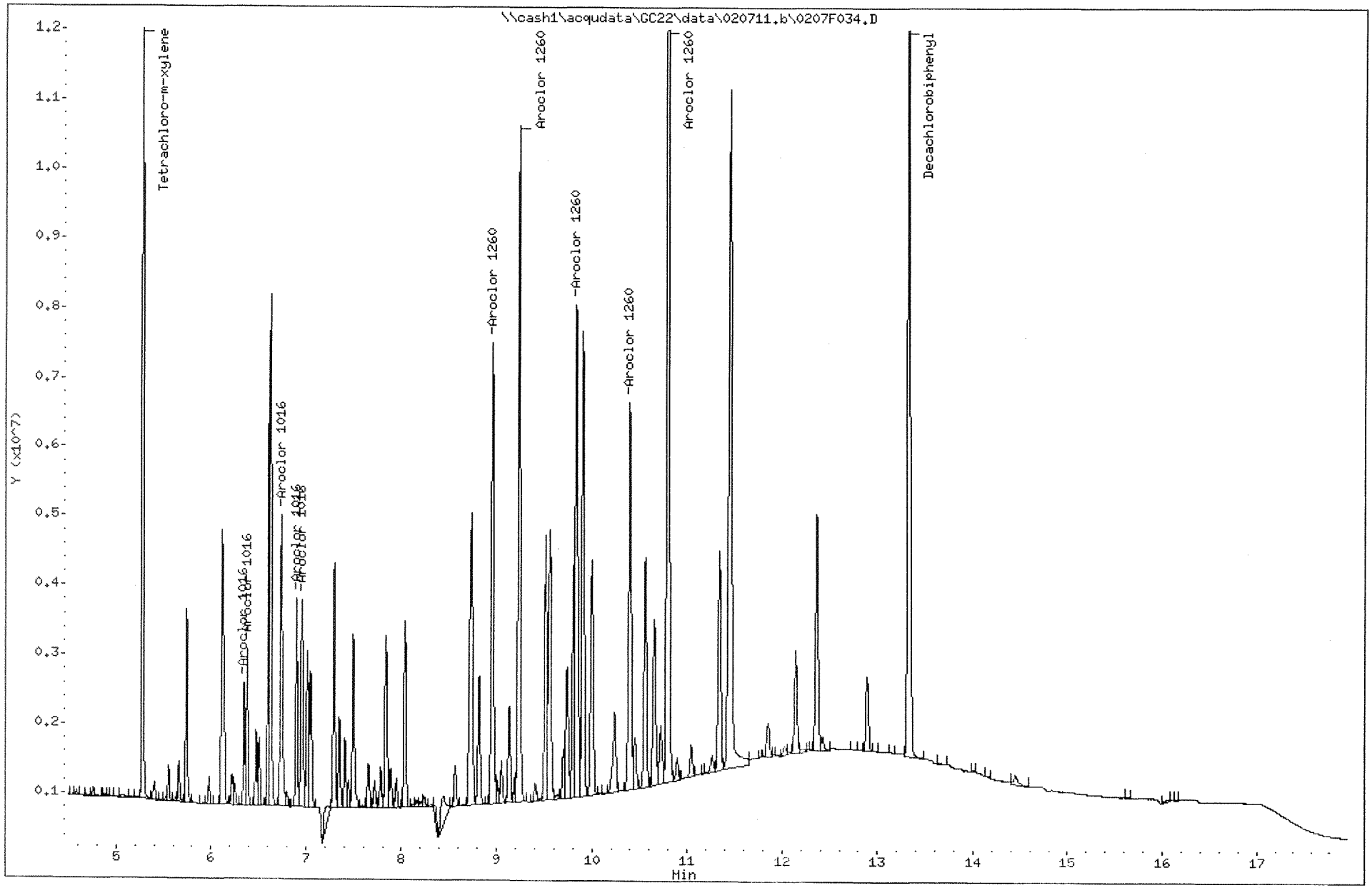
M - Compound response manually integrated.

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F034.D
Date : 08-FEB-2011 07:38
Client ID:
Sample Info: 1660 @ 100ppb | PCB5-68I

Instrument: GC22.i

Operator: JMSmith
Column diameter: 0.32

Column phase: DB-35MS

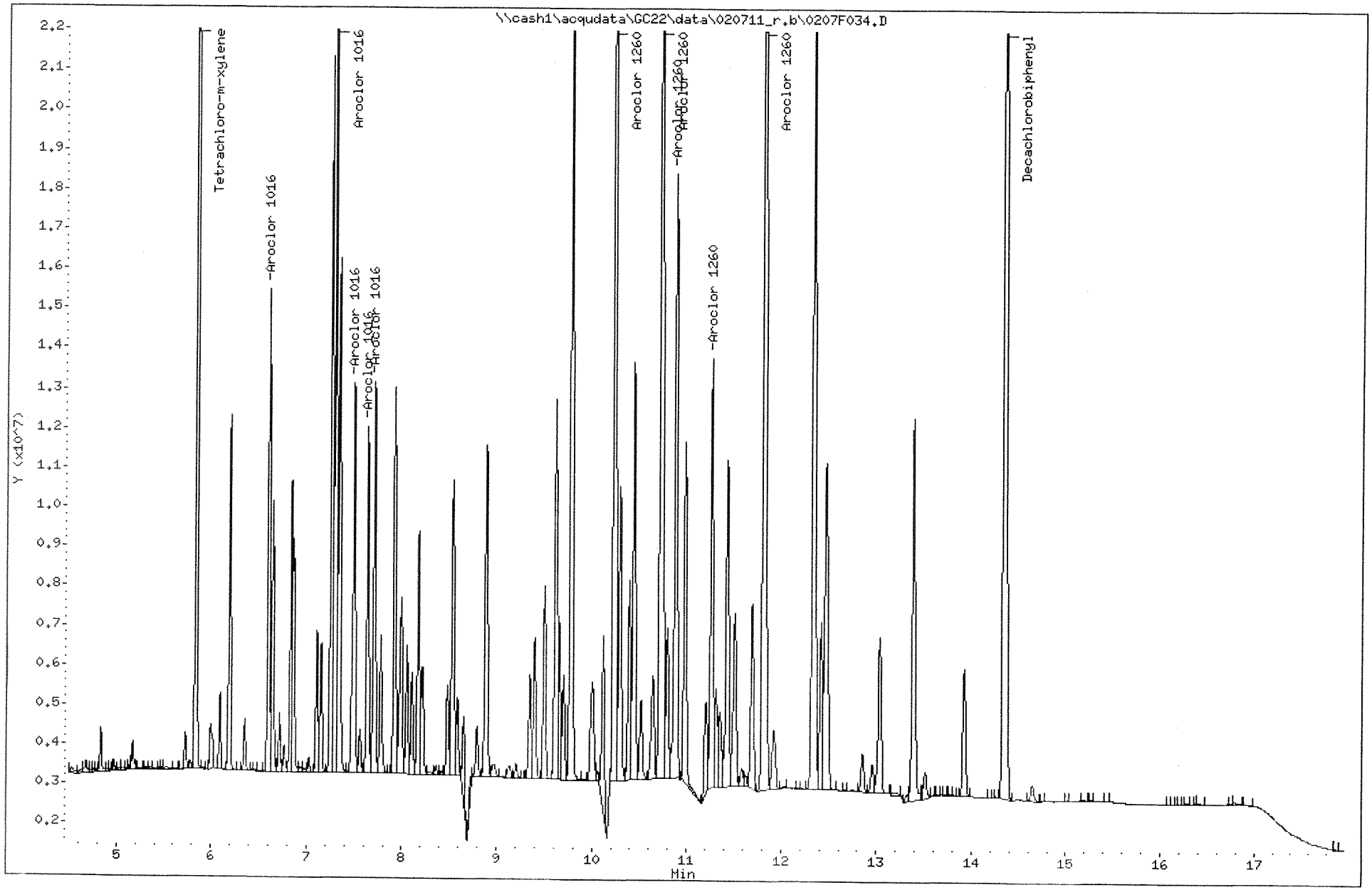


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F034.D
Date : 08-FEB-2011 07:38
Client ID:
Sample Info: 1660 @ 100ppb | PCB5-68I

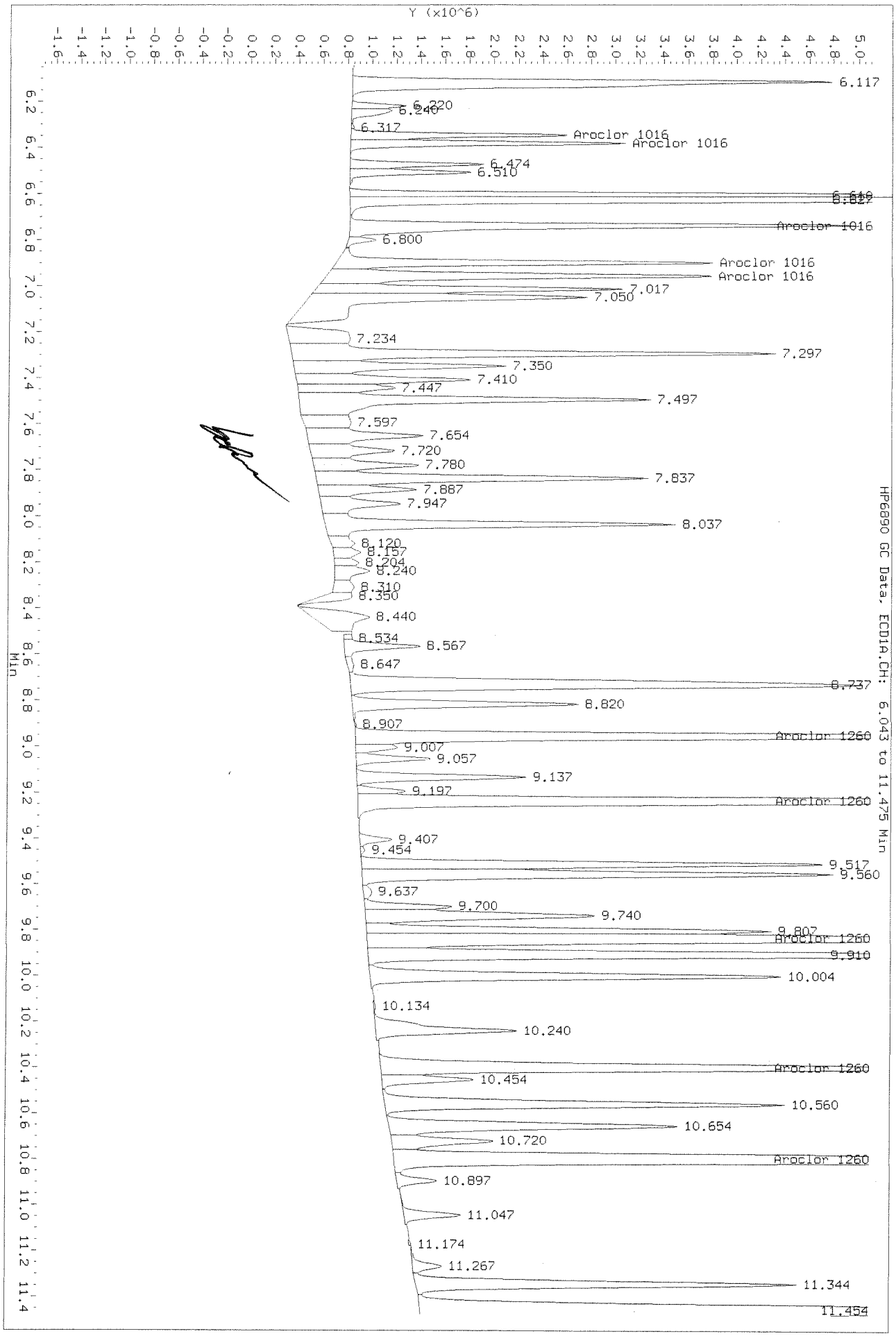
Instrument: GC22.i

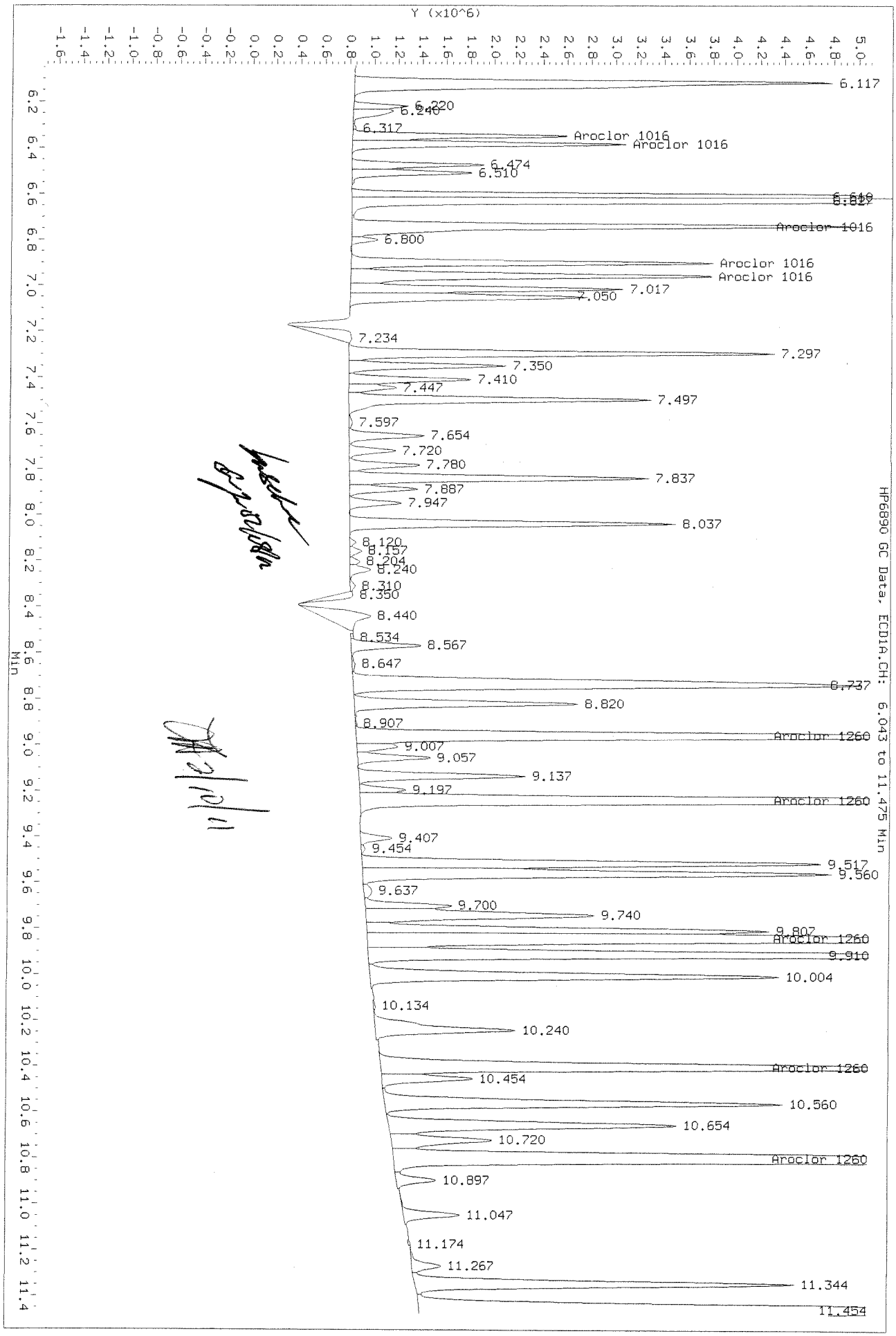
Operator: JMSmith
Column diameter: 0.32

Column phase: DB-XLB



940


Data File: \\cash1\acqudata\GC22\data\020711.b\0207F034.D
Injection Date: 08-FEB-2011 07:38
Instrument: GC22.i
Client Sample ID:
HP6890 GC Data, ECD1A.CH: 6.043 to 11.475 Min
Y (x10^6)
Min
6.117
6.220
6.240
6.317
Aroclor 1016
Aroclor 1016
6.474
6.510
6.619
6.827
Aroclor 1016
6.800
Aroclor 1016
Aroclor 1016
7.017
7.050
7.234
7.297
7.350
7.410
7.447
7.497
7.597
7.654
7.720
7.780
7.837
7.887
7.947
8.037
8.120
8.157
8.204
8.240
8.310
8.350
8.440
8.534
8.567
8.647
8.737
8.820
8.907
Aroclor 1260
9.007
9.057
9.137
9.197
Aroclor 1260
9.407
9.454
9.517
9.560
9.637
9.700
9.740
9.807
Aroclor 1260
9.910
10.004
10.134
10.240
Aroclor 1260
10.454
10.560
10.654
10.720
Aroclor 1260
10.897
11.047
11.174
11.267
11.344
11.454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Injection Date: 08-FEB-2011 07:38
Instrument: GC22.i
Client Sample ID:
Y (x10^6)
Min
HP6890 GC Data, ECD1A.CH: 6.043 to 11.475 Min
6.117
6.220
6.246
6.317
Aroclor 1016
Aroclor 1016
6.474
6.510
6.619
6.827
Aroclor 1016
6.800
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10.454
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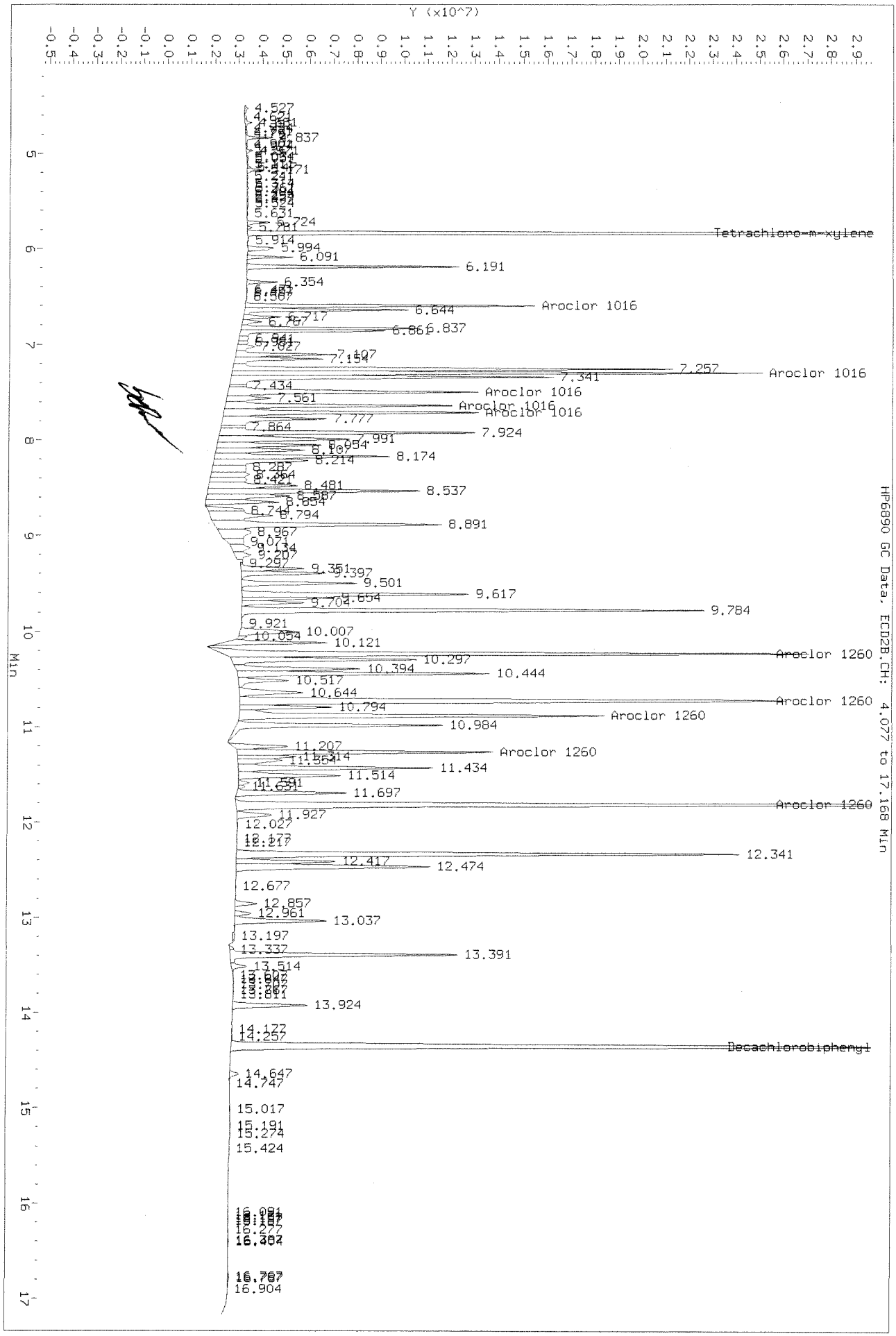
Aroclor 1260
10.897
11.047
11.174
11.267
11.344
11.454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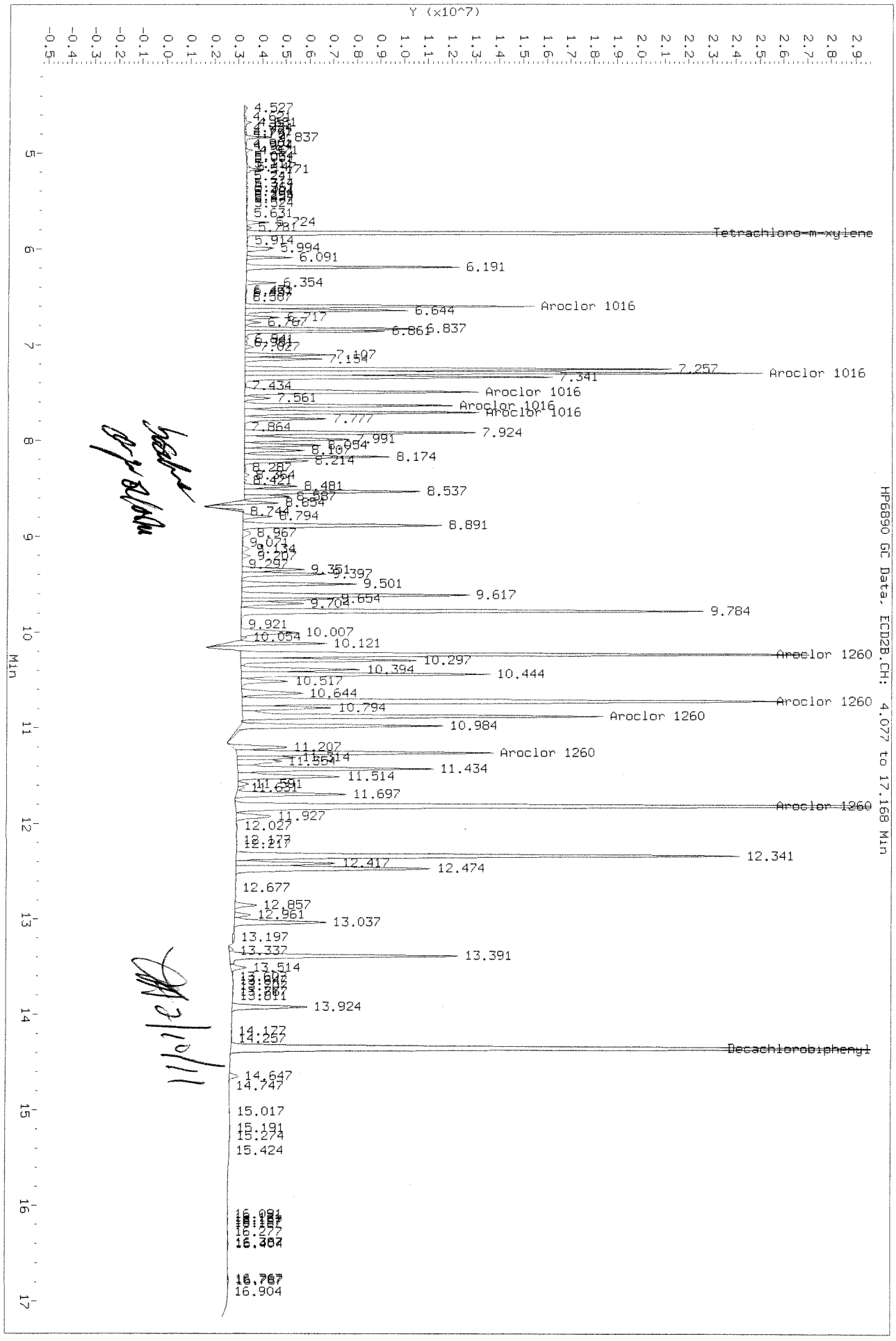
Injection Date: 08-FEB-2011 07:38
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
Min
HP6890 GC Data, ECD2B.CH: 4.077 to 17.168 Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1260
Aroclor 1260
Aroclor 1260
Aroclor 1260
Decachlorobiphenyl


Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207f034.D
Injection Date: 08-FEB-2011 07:38
Instrument: GC22.i
Client Sample ID:
Y (x10^7)
Min
HP6890 GC Data, ECD2B.CH; 4.077 to 17.168 Min
Tetrachloro-m-xylene
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1016
Aroclor 1260
Aroclor 1260
Aroclor 1260
Aroclor 1260
Aroclor 1260
Decachlorobiphenyl

Organic Analysis:
Polychlorinated Biphenyls (PCBs)

Validation Package

Sample Prep and Screen Data

Preparation Information

Group ID:	KWG1101180	**Prep Method:**	EPA 3535A	**Prep Date:**	02/01/11 00:00
Department:	Semivoa GC				

Lab Code	Client ID	Product	Matrix	Amt. Ext.	Final Vol.	Solids
K1100692-001	MW-3	8082 PCB_LL	WATER	1020mL	2mL	
K1100692-002	MW-7	8082 PCB_LL	WATER	1020mL	2mL	
K1100692-003	EB-012511	8082 PCB_LL	WATER	1000mL	2mL	
K1100761-001	TOF	8082 PCB_ULL	WATER	1020mL	2mL	
K1100765-001	AIN-B1-SW-110126	8082 PCB_ULL	WATER	1040mL	2mL	
K1100765-002	AIN-B51-SW-110126	8082 PCB_ULL	WATER	1010mL	2mL	
K1100765-004	AIN-B2-SW-110126	8082 PCB_ULL	WATER	1020mL	2mL	
K1100795-001	BLD#120-MW2	8082 PCB_ULL	WATER	1000mL	2mL	
K1100795-002	BLD#120-MW3	8082 PCB_ULL	WATER	1000mL	2mL	
K1100795-003	BLD#120-MW2-B	8082 PCB_ULL	WATER	1000mL	2mL	
K1100806-001	MISY-2011-M-001-Rinseate	8082 PCB_ULL	WATER	1020mL	2mL	
K1100806-002	MISTY-2011-M-002-Rinsate	8082 PCB_ULL	WATER	1020mL	2mL	
K1100806-003	MISY-2011-R-004	8082 PCB_ULL	WATER	1000mL	2mL	
K1100806-004	MISY-2011-Equipment-Blanl	8082 PCB_ULL	WATER	1040mL	2mL	
K1100806-005	MISY-2011-Blank-Rinseate	8082 PCB_ULL	WATER	1020mL	2mL	
KWG1101180-1	Matrix Spike	8082 PCB_ULL	WATER	1020mL	2mL	
KWG1101180-2	Duplicate Matrix Spike	8082 PCB_ULL	WATER	1020mL	2mL	
KWG1101180-3	Lab Control Sample	8082 PCB_ULL	WATER	1000mL	2mL	
KWG1101180-4	Duplicate Lab Control Sampl	8082 PCB_ULL	WATER	1000mL	2mL	
KWG1101180-7	Method Blank	8082 PCB_ULL	WATER	1040mL	2mL	

Lab Code	Parent Lab Code	Comments
KWG1101180-1	K1100806-002	KQ1100885-01
KWG1101180-2	K1100806-002	KQ1100885-02
KWG1101180-3		KQ1100885-03
KWG1101180-4		KQ1100885-04
KWG1101180-7		KQ1100885-07

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1100692-001	997126					CPorter
K1100692-002	997127					CPorter
K1100692-003	997128					CPorter
K1100761-001	997132					CPorter
K1100765-001	997133					CPorter
K1100765-002	997134					CPorter

Comments:

Started By: B. Rice Assisted By: _____ Training: Yes / No

Completed By: B. Rice Assisted By: _____ Yes / No

Reviewed By: _____ Date: 02/08/11 Storage: _____

Chain of Custody

Relinquished By: B. Rice Date: 2/7/11

Received By: _____ Date: 02/07/11

Extracts Examined: Yes / No

Group ID:	KWG1101180	**Prep Method:**	EPA 3535A	**Prep Date:**	02/01/11 00:00
Department:	Semivoa GC				

Lab Code	Prep Event ID	Surrogate Solution ID	Amount Added	Spike Solution ID	Amount Added	Witness
K1100765-004	997135					CPorter
K1100795-001	997136					CPorter
K1100795-002	997137					CPorter
K1100795-003	997138					CPorter
K1100806-001	997139					CPorter
K1100806-002	997140					CPorter
K1100806-003	997141					CPorter
K1100806-004	997142					CPorter
K1100806-005	997143					CPorter
KWG1101180-1	997144					CPorter
KWG1101180-2	997145					CPorter
KWG1101180-3	997146					CPorter
KWG1101180-4	997147					CPorter
KWG1101180-7	997150					CPorter

Comments:

Started By: B. Rice Assisted By: Training Yes No

Completed By: B. Rice Assisted By: Yes No

Reviewed By: Date: 02/08/11 Storage:

Chain of Custody

Relinquished By: B. Rice Date: 2/7/11

Received By: Date: 02/07/11 Extracts Examined Yes No

Columbia Analytical Services™ **Preparation Information Benchsheet**

Prep Run: 128092 **Prep Workflow**: OrgExtSPEaq (7) **Status**: Prepped **Prep Date**: 02/01/2011 00:00
Team: Semivoa GC **Prep Method**: EPA 3535A **Current Step**: Final Volume **Due Date**: 02/07/2011
Analyst: B. Rice **Rush/NPDES**: N/A

Lab Code	Client ID	Bottle #	Initial Amt	pH Initial	pH Adj 1	Final Volume	TestNo List	Comments
K1100692-001	MW-3	.04	1020 mL	6	2.5	2 mL	PCB_LL	
K1100692-002	MW-7	.04	1020 mL	7	2.5	2 mL	PCB_LL	
K1100692-003	EB-012511	.04	1000 mL	4.5	2.5	2 mL	PCB_LL	
K1100761-001	TOF	.01	1020 mL	7	2.5	2 mL	PCB_ULL	
K1100765-001	AIN-B1-SW-110126	.01	1040 mL	7	2.5	2 mL	PCB_ULL	
K1100765-002	AIN-B51-SW-110126	.01	1010 mL	7	2.5	2 mL	PCB_ULL	
K1100765-004	AIN-B2-SW-110126	.01	1020 mL	7	2.5	2 mL	PCB_ULL	
K1100795-001	BLD#120-MW2	.01	1000 mL	7	2.5	2 mL	PCB_ULL	
K1100795-002	BLD#120-MW3	.01	1000 mL	7	2.5	2 mL	PCB_ULL	
K1100795-003	BLD#120-MW2-B	.01	1000 mL	7	2.5	2 mL	PCB_ULL	
K1100806-001	MISY-2011-M-001-Rinseate	.01	1020 mL	7	2.5	2 mL	PCB_ULL	
K1100806-002	MISTY-2011-M-002-Rinsate	.01	1020 mL	6	2.5	2 mL	PCB_ULL	
K1100806-003	MISY-2011-R-004	.01	1000 mL	7	2.5	2 mL	PCB_ULL	
K1100806-004	MISY-2011-Equipment-Blank-Rinseate	.01	1040 mL	6	2.5	2 mL	PCB_ULL	
K1100806-005	MISY-2011-Blank-Rinseate	.01	1020 mL	6	2.5	2 mL	PCB_ULL	
K1100739-001	W11A200-03	.01	1020 mL	5	2.5	2 mL	PEST_OC_ULL	
K1100739-002	W11A200-04	.01	1000 mL	5	2.5	2 mL	PEST_OC_ULL	
K1100739-003	W11A200-10	.01	1000 mL	5	2.5	2 mL	PEST_OC_ULL	
K1100806-002: KQ1100885-01	Matrix Spike 82	.01	1020 mL	6	2.5	2 mL	PCB_ULL	
K1100806-002: KQ1100885-02	Duplicate Matrix Spike 82	.01	1020 mL	6	2.5	2 mL	PCB_ULL	
KQ1100885-03	Lab Control Sample 81		1000 mL	4.5	2.5	2 mL	PCB_LL, PCB_ULL, PEST_OC_ULL	
KQ1100885-04	Duplicate Lab Control Sample 81		1000 mL	4.5	2.5	2 mL	PCB_LL, PCB_ULL, PEST_OC_ULL	
KQ1100885-05	Lab Control Sample 82		1000 mL	4.5	2.5	2 mL	PCB_LL, PCB_ULL, PEST_OC_ULL	

KQ1100885-06	Duplicate Lab Control Sample 82		1000 mL	4.5	2.5	2 mL	PCB_LL, PCB_ULL, PEST_OC_ULL	
KQ1100885-07	Method Blank		1040 mL	4.5	2.5	2 mL	PCB_LL, PCB_ULL, PEST_OC_ULL	

25 Total Samples consisting of 18 Client Samples, 2 Client QC Samples, 5 Batch QC Samples associated with the current Prep Run.

Spiking Solutions **Witness**: CPorter

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Extraction	01-FEB-11 00:00	01-FEB-11 00:00	B. Rice		N	
Acid Clean	07-FEB-11 00:00	07-FEB-11 00:00	B. Rice		N	
Final Volume	07-FEB-11 00:00	07-FEB-11 00:00	B. Rice		N	

Comments

Review

Reviewed by: JV Date: 02/08/11

Chain of Custody

Relinquished By: _____ Date: 2/7/11

Received By: _____ Date: 02/07/11

Extracts/Digestions Examined: Yes No

Columbia Analytical Services Preparation Information Benchsheet

Prep Run: 128092
Team: Semivoa GC
Analyst: B. Rice
Prep Workflow: OrgExtSPEaq (7)
Prep Method: EPA 3535A
Rush/NPDES: N/A
Status: Draft
Current Step: Extraction
Prep Date: 02/01/2011 00:00
Due Date: 02/01/2011

BM 2/4/11 TE

Lab Code	Client ID	Bottle #	✓	Initial Amount	pH Initial	pH Adj 1	Inter. Volume	Final Volume	Surr Amt	Spike Amt	TestNo List
K1100692-001	MW-3	.04	✓	1020	6	2.8	NA	~~1mL~~ 2mL	50 µL	NA	PCB_LL
K1100692-002	MW-7	.04	✓	1020	7						PCB_LL
K1100692-003	EB-012511	.04	✓	1000	4.5						PCB_LL
K1100761-001	TOF	.01	✓	1020	7						PCB_ULL
K1100765-001	AIN-B1-SW-110126	.01	✓	1040	7						PCB_ULL
K1100765-002	AIN-B51-SW-110126	.01	✓	1010	7						PCB_ULL
K1100765-004	AIN-B2-SW-110126	.01	✓	1020	7						PCB_ULL
K1100795-001	BLD#120-MW2	.01	✓	1000	7						PCB_ULL
K1100795-002	BLD#120-MW3	.01	✓	1000	7						PCB_ULL
K1100795-003	BLD#120-MW2-B	.01	✓	1000	7						PCB_ULL
K1100806-001	MISY-2011-M-001-Rinseate	.01	✓	1020	7						PCB_ULL
K1100806-002	MISTY-2011-M-002-Rinsate	.01	✓	1020	6						PCB_ULL
K1100806-003	MISY-2011-R-004	.01	✓	1000	7						PCB_ULL
K1100806-004	MISY-2011-Equipment-Blank-Rinseate	.01	✓	1040	6						PCB_ULL
K1100806-005	MISY-2011-Blank-Rinseate	.01	✓	1020	6						PCB_ULL
K1100739-001	W11A200-03	.01	✓	1020	5						PEST_OC_ULL
K1100739-002	W11A200-04	.01	✓	1000	5						PEST_OC_ULL
K1100739-003	W11A200-10	.01	✓	1000	5						PEST_OC_ULL
K1100806-002: KQ1100885-01	Matrix Spike 82	.01	✓	1020	6					A	PCB_ULL
K1100806-002: KQ1100885-02	Duplicate Matrix Spike 82	.01	✓	1020	6					A	PCB_ULL
KQ1100885-03	Lab Control Sample 81			1000	4.5					B	PCB_LL, PCB_ULL, PEST_OC_ULL
KQ1100885-04	Duplicate Lab Control Sample 81			1000	4.5					B	PCB_LL, PCB_ULL, PEST_OC_ULL
KQ1100885-05	Lab Control Sample 82			1000	4.5					A	PCB_LL, PCB_ULL, PEST_OC_ULL
KQ1100885-06	Duplicate Lab Control Sample 82			1000	4.5					A	PCB_LL,

				BM TE 2/7/11							PCB_ULL, PEST_OC_ULL
KQ1100885-07	Method Blank			1040 1000	4.5	2.5	ng	1 mL	50 mL	ng	PCB_LL, PCB_ULL, PEST_OC_ULL

25 Total Samples consisting of 18 Client Samples, 2 Client QC Samples, 5 Batch QC Samples associated with the current Prep Run.

Spiking Solutions **Witness:** 2-1-11

surrogate: PCB5-67E, 0.2ng/mL, 5/1/11, 50mL

spike: (A) PCB-67C, 1ppm, 5/1/11, 200mL (B) GCPSG-77J 0.1ppm, 2/2/11, 100mL

Preparation Steps

Step	Started	Finished	By	Assisted By	Training?	Comments
Extraction	2/1/11	2/1/11	B. Rice			
~~Acid Clean~~	2/7/11	2/7/11	B.R.e			
Final Volume	2/7/11	2/7/11	B. Re			

Comments

MB blank was split into 2 1mL aliquots, acid clean was performed on PCB aliquot.

Additional Prep Information For Pest/PCB Water by 3535

Service Request # 00692, 00761, 00765, 00795 00806, 00739 Work Group # Pest: 00885-3, 00885-4, 00885-7

PCB: 00885-1, 00885-2 00885-5, 00885-6, 00885-7

Solvents/Reagents used:

Methanol Lot#: J26E16 Sulfuric Acid Lot#: 49253

Acetone Lot #: 58147 Hexane Lot #: 58246

H_2O Phobic DVB cartridge Lot #: J35109

Extraction Program # 8081.6 Initial Purge Prog # 8081.4
Between Sample Purge Program# 8081.8

Start (Time/Date/Initial): 14:00/2/1/11/BC

Stop (Time/Date/Initial): 16:00/2/1/11/BC

Dry Disk Lot #: B024000547 17

Cleanups:

Sulfuric Acid Clean-up (3665): ✓ (PCB aliquots only) Lot #: 49253

Carbon Clean-up : - ☐ all samples ☐ some samples: - Lot #: _____

Florisil Clean-up : - ☐ all samples ☐ some samples: - Lot#: _____

Pest Vial: yellow Vial Storage: _____

PCB Vial: green Vial Storage: _____

Comments/Observations: _____

Bench Sheet Review Check List
☐ Hold Times Met (if no, Reason: _____)
☐ Prep date, dept, method, product code correct in stealth
☐ Spike Information correct
☐ Weights/Volumes and units correct on raw and final bench sheets
☐ Sample IDs have been checked—Bottle numbers appended if required
☐ Names present for: Started by, Completed by, relinquished by, and witnessed by.
☐ Training has been circled
☐ Extract Storage recorded
☐ Additional Prep Sheet completely filled out (NA or line out Blanks)
☐ All clean-ups have been noted on additional prep sheet
☐ Signed service request with Form V, if applicable, has been attached

Sequence Name: C:\GC22\SEQUENCE\020711.S
Comment: Ultra Low Level PCB Aroclors by EPA 8082
Operator: JMSmith
Data Path: C:\GC22\DATA\020711\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

ICAL 10114

Run #C35217
Aroclors lot KWG1101323

Line	Type	Vial	DataFile	Method	Sample Name
1	SOLN	90	0207F001	PCB_UL	C6
2	SOLN	90	0207F002	PCB_UL	C6
3	SOLN	90	0207F003	PCB_UL	C6
4	SOLN	90	0207F004	PCB_UL	C6
5	SOLN	90	0207F005	PCB_UL	C6
6	CCV	96	0207F006	PCB_UL	1660 @ 100ppb | PCB5-68I
7	IB	86	0207F007	PCB_UL	IB
8	LCS	1	0207F008	PCB_UL	KQ1100885-05LCS
9	DLCS	2	0207F009	PCB_UL	KQ1100885-06DLCS
10	MB	3	0207F010	PCB_UL	KQ1100885-07MB
11	SMPL	4	0207F011	PCB_UL	K1100692-001
12	SMPL	5	0207F012	PCB_UL	K1100692-002
13	SMPL	6	0207F013	PCB_UL	K1100692-003
14	SMPL	7	0207F014	PCB_UL	K1100761-001
15	SMPL	8	0207F015	PCB_UL	K1100765-001
16	SMPL	9	0207F016	PCB_UL	K1100765-002
17	SMPL	10	0207F017	PCB_UL	K1100765-004
18	IB	90	0207F018	PCB_UL	C6
19	IB	90	0207F019	PCB_UL	C6
20	CCV	96	0207F020	PCB_UL	1660 @ 100ppb | PCB5-68I
21	IB	86	0207F021	PCB_UL	IB
22	SMPL	11	0207F022	PCB_UL	K1100795-001 - need 5x
23	SMPL	12	0207F023	PCB_UL	K1100795-002
24	SMPL	13	0207F024	PCB_UL	K1100795-003 - need 5x
25	SMPL	14	0207F025	PCB_UL	K1100806-001
26	SMPL	15	0207F026	PCB_UL	K1100806-002
27	MS	16	0207F027	PCB_UL	K1100806-002MS
28	DMS	17	0207F028	PCB_UL	K1100806-002DMS
29	SMPL	18	0207F029	PCB_UL	K1100806-003
30	SMPL	19	0207F030	PCB_UL	K1100806-004
31	SMPL	20	0207F031	PCB_UL	K1100806-005
32	IB	90	0207F032	PCB_UL	C6
33	IB	90	0207F033	PCB_UL	C6
34	CCV	96	0207F034	PCB_UL	1660 @ 100ppb | PCB5-68I
35	IB	86	0207F035	PCB_UL	IB

Exception Report

Batch Exceptions

Batch ID: KWG1101323

Data Path: \\CASH1\ACQUDATA\GC22\DATA\020711 R.B\

File ID	Laboratory ID	Client ID	Btl ID	Type	Matrix	Date Acquired	Pass	Fail	ReAnalyze?
0207F006.D	KWG1101323-1	Continuing Calibration Verific		CCV	Not appli	02-07-2011 20:13	x		
0207F006.D	KWG1101323-1	Continuing Calibration Verific		CCV	Not appli	02-07-2011 20:13	x		
0207F007.D	KWG1101323-2	Instrument Blank		IB	Not appli	02-07-2011 20:37	x		
0207F007.D	KWG1101323-2	Instrument Blank		IB	Not appli	02-07-2011 20:37	x		
0207F008.D	KWG1101180-3	Lab Control Sample		LCS	Water	02-07-2011 21:02	x		
0207F008.D	KWG1101180-3	Lab Control Sample		LCS	Water	02-07-2011 21:02	x		
0207F009.D	KWG1101180-4	Duplicate Lab Control Sample		DLCS	Water	02-07-2011 21:26	x		
0207F009.D	KWG1101180-4	Duplicate Lab Control Sample		DLCS	Water	02-07-2011 21:26	x		
0207F010.D	KWG1101180-7	Method Blank		MB	Water	02-07-2011 21:51	x		
0207F010.D	KWG1101180-7	Method Blank		MB	Water	02-07-2011 21:51	x		
0207F011.D	K1100692-001	MW-3		SMPL	Water	02-07-2011 22:15	x		
0207F011.D	K1100692-001	MW-3		SMPL	Water	02-07-2011 22:15	x		
0207F012.D	K1100692-002	MW-7		SMPL	Water	02-07-2011 22:39	x		
0207F012.D	K1100692-002	MW-7		SMPL	Water	02-07-2011 22:39	x		
0207F013.D	K1100692-003	EB-012511		SMPL	Water	02-07-2011 23:04	x		
0207F013.D	K1100692-003	EB-012511		SMPL	Water	02-07-2011 23:04	x		
0207F014.D	K1100761-001	TOF		SMPL	Water	02-07-2011 23:28		x	
0207F014.D	K1100761-001	TOF		SMPL	Water	02-07-2011 23:28		x	
0207F015.D	K1100765-001	AIN-B1-SW-110126		SMPL	Water	02-07-2011 23:53	x		
0207F015.D	K1100765-001	AIN-B1-SW-110126		SMPL	Water	02-07-2011 23:53	x		
0207F016.D	K1100765-002	AIN-B51-SW-110126		SMPL	Water	02-08-2011 00:17	x		
0207F016.D	K1100765-002	AIN-B51-SW-110126		SMPL	Water	02-08-2011 00:17	x		
0207F017.D	K1100765-004	AIN-B2-SW-110126		SMPL	Water	02-08-2011 00:42	x		
0207F017.D	K1100765-004	AIN-B2-SW-110126		SMPL	Water	02-08-2011 00:42	x		
0207F020.D	KWG1101323-3	Continuing Calibration Verific		CCV	Not appli	02-08-2011 01:55	x		
0207F020.D	KWG1101323-3	Continuing Calibration Verific		CCV	Not appli	02-08-2011 01:55	x		
0207F021.D	KWG1101323-4	Instrument Blank		IB	Not appli	02-08-2011 02:19	x		
0207F021.D	KWG1101323-4	Instrument Blank		IB	Not appli	02-08-2011 02:19	x		
0207F023.D	K1100795-002	BLD#120-MW3		SMPL	Water	02-08-2011 03:08	x		
0207F023.D	K1100795-002	BLD#120-MW3		SMPL	Water	02-08-2011 03:08	x		
0207F025.D	K1100806-001	MISY-2011-M-001-Rinseate		SMPL	Water	02-08-2011 03:57	x		
0207F025.D	K1100806-001	MISY-2011-M-001-Rinseate		SMPL	Water	02-08-2011 03:57	x		
0207F026.D	K1100806-002	MISTY-2011-M-002-Rinsate		SMPL	Water	02-08-2011 04:22	x		
0207F026.D	K1100806-002	MISTY-2011-M-002-Rinsate		SMPL	Water	02-08-2011 04:22	x		
0207F027.D	KWG1101180-1	Matrix Spike		MS	Water	02-08-2011 04:46	x		
0207F027.D	KWG1101180-1	Matrix Spike		MS	Water	02-08-2011 04:46	x		
0207F028.D	KWG1101180-2	Duplicate Matrix Spike		DMS	Water	02-08-2011 05:11	x		

Reviews

Level 1: _____ Date: February 10, 2011

Level 2: _____ Date: 2/14/11

Exception Report

Batch Exceptions

Batch ID: KWG1101323

Data Path: \\CASH1\ACQUDATA\GC22\DATA\020711 R.B\

File ID	Laboratory ID	Client ID	Btl ID	Type	Matrix	Date Acquired	Pass	Fail	ReAnalyze?
0207F028.D	KWG1101180-2	Duplicate Matrix Spike		DMS	Water	02-08-2011 05:11	x		
0207F029.D	K1100806-003	MISY-2011-R-004		SMPL	Water	02-08-2011 05:35	x		
0207F029.D	K1100806-003	MISY-2011-R-004		SMPL	Water	02-08-2011 05:35	x		
0207F030.D	K1100806-004	MISY-2011-Equipment-Blan		SMPL	Water	02-08-2011 06:00	x		
0207F030.D	K1100806-004	MISY-2011-Equipment-Blan		SMPL	Water	02-08-2011 06:00	x		
0207F031.D	K1100806-005	MISY-2011-Blank-Rinseate		SMPL	Water	02-08-2011 06:24	x		
0207F031.D	K1100806-005	MISY-2011-Blank-Rinseate		SMPL	Water	02-08-2011 06:24	x		
0207F034.D	KWG1101323-5	Continuing Calibration Verific		CCV	Not appli	02-08-2011 07:38	x		
0207F034.D	KWG1101323-5	Continuing Calibration Verific		CCV	Not appli	02-08-2011 07:38	x		
0207F035.D	KWG1101323-6	Instrument Blank		IB	Not appli	02-08-2011 08:02	x		
0207F035.D	KWG1101323-6	Instrument Blank		IB	Not appli	02-08-2011 08:02	x		

Reviews

Level 1: _____ Date: February 10, 2011

Level 2: _____ Date: 2/11/11

Surrogate Recovery Summary

Group Type: Analysis
Group Dept: Semivoa GC
Group Name: KWG1101323

DataFile	LabID	ClientID	Decachlorobiphenyl
0207F008.D	KWG1101180-3	Lab Control Sample	83
0207F009.D	KWG1101180-4	Duplicate Lab Control San	79
0207F010.D	KWG1101180-7	Method Blank	79
0207F011.D	K1100692-001	MW-3	88
0207F012.D	K1100692-002	MW-7	85
0207F013.D	K1100692-003	EB-012511	70
0207F014.D	K1100761-001	TOF	79
0207F015.D	K1100765-001	AIN-B1-SW-110126	75
0207F016.D	K1100765-002	AIN-B51-SW-110126	71
0207F017.D	K1100765-004	AIN-B2-SW-110126	78
0207F023.D	K1100795-002	BLD#120-MW3	86
0207F025.D	K1100806-001	MISY-2011-M-001-Rinsea	85
0207F026.D	K1100806-002	MISTY-2011-M-002-Rins	85
0207F027.D	KWG1101180-1	Matrix Spike	85
0207F028.D	KWG1101180-2	Duplicate Matrix Spike	81
0207F029.D	K1100806-003	MISY-2011-R-004	83
0207F030.D	K1100806-004	MISY-2011-Equipment-Bl	82
0207F031.D	K1100806-005	MISY-2011-Blank-Rinsea	86

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F007.D
Lab ID: KWG1101323-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 02/07/2011 20:37
Date Quantitated: 02/10/2011 16:39
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review: WJ Linn

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F007.D
Lab ID: KWG1101323-2
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 02/07/2011 20:37
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLE
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	02/10/2011

Analysis Lot:	KWG1101323	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:		**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F007.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F007.D			**Vial:**	86
Acqu Date:	02/07/2011 20:37	**Quant Date:**	02/10/2011 16:39	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-2				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d	0.0000				NA
			%Recovery =		NA	NA	Limits =	21-114	
Decachlorobiphenyl	0.00		0	0d	0.0000				NA
			%Recovery =		NA	NA	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000			
Aroclor 1016 {1}			0	0d	0.0000	0.0000			
Aroclor 1016 {2}			0	0d	0.0000	0.0000			
Aroclor 1016 {3}			0	0d	0.0000	0.0000			
Aroclor 1016 {4}			0	0d	0.0000	0.0000			
Aroclor 1016 {5}			0	0d	0.0000	0.0000			
Aroclor 1221			0	0	0.0000	0.0000			
Aroclor 1221 {1}			0d	0d	0.0000	0.0000			
Aroclor 1221 {2}			0d	0d	0.0000	0.0000			
Aroclor 1221 {3}			0d	0d	0.0000	0.0000			
Aroclor 1221 {4}			0d	0d	0.0000	0.0000			
Aroclor 1232			0	0	0.0000	0.0000			
Aroclor 1232 {1}			0	0d	0.0000	0.0000			
Aroclor 1232 {2}			0	0d	0.0000	0.0000			
Aroclor 1232 {3}			0	0d	0.0000	0.0000			
Aroclor 1232 {4}			0	0d	0.0000	0.0000			
Aroclor 1242			0	0	0.0000	0.0000			
Aroclor 1242 {1}			0	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F007.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F007.D			**Vial:**	86
Acqu Date:	02/07/2011 20:37	**Quant Date:**	02/10/2011 16:39	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-2				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {2}			0	0d	0.0000	0.0000			
Aroclor 1242 {3}			0	0d	0.0000	0.0000			
Aroclor 1242 {4}			0	0d	0.0000	0.0000			
Aroclor 1242 {5}			0	0d	0.0000	0.0000			
Aroclor 1248			0	0	0.0000	0.0000			
Aroclor 1248 {1}			0	0d	0.0000	0.0000			
Aroclor 1248 {2}			0	0d	0.0000	0.0000			
Aroclor 1248 {3}			0	0d	0.0000	0.0000			
Aroclor 1248 {4}			0	0d	0.0000	0.0000			
Aroclor 1248 {5}			0	0d	0.0000	0.0000			
Aroclor 1254			0	0	0.0000	0.0000			
Aroclor 1254 {1}			0	0d	0.0000	0.0000			
Aroclor 1254 {2}			0	0d	0.0000	0.0000			
Aroclor 1254 {3}			0	0d	0.0000	0.0000			
Aroclor 1254 {4}			0	0d	0.0000	0.0000			
Aroclor 1254 {5}			0	0d	0.0000	0.0000			
Aroclor 1260			0	0	0.0000	0.0000			
Aroclor 1260 {1}			0d	0d	0.0000	0.0000			
Aroclor 1260 {2}			0d	0d	0.0000	0.0000			
Aroclor 1260 {3}			0d	0d	0.0000	0.0000			
Aroclor 1260 {4}			0d	0d	0.0000	0.0000			
Aroclor 1260 {5}			0d	0d	0.0000	0.0000			
Aroclor 1262			0	0	0.0000	0.0000			
Aroclor 1262 {1}			0d	0d	0.0000	0.0000			
Aroclor 1262 {2}			0d	0d	0.0000	0.0000			
Aroclor 1262 {3}			0d	0d	0.0000	0.0000			
Aroclor 1262 {4}			0d	0d	0.0000	0.0000			
Aroclor 1262 {5}			0d	0d	0.0000	0.0000			
Aroclor 1268			0	0	0.0000	0.0000			
Aroclor 1268 {1}			0d	0d	0.0000	0.0000			
Aroclor 1268 {2}			0d	0d	0.0000	0.0000			
Aroclor 1268 {3}			0d	0d	0.0000	0.0000			
Aroclor 1268 {4}			0d	0d	0.0000	0.0000			
Aroclor 1268 {5}			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F007.D
Report Date: 10-Feb-2011 16:39

Columbia Analytical Services

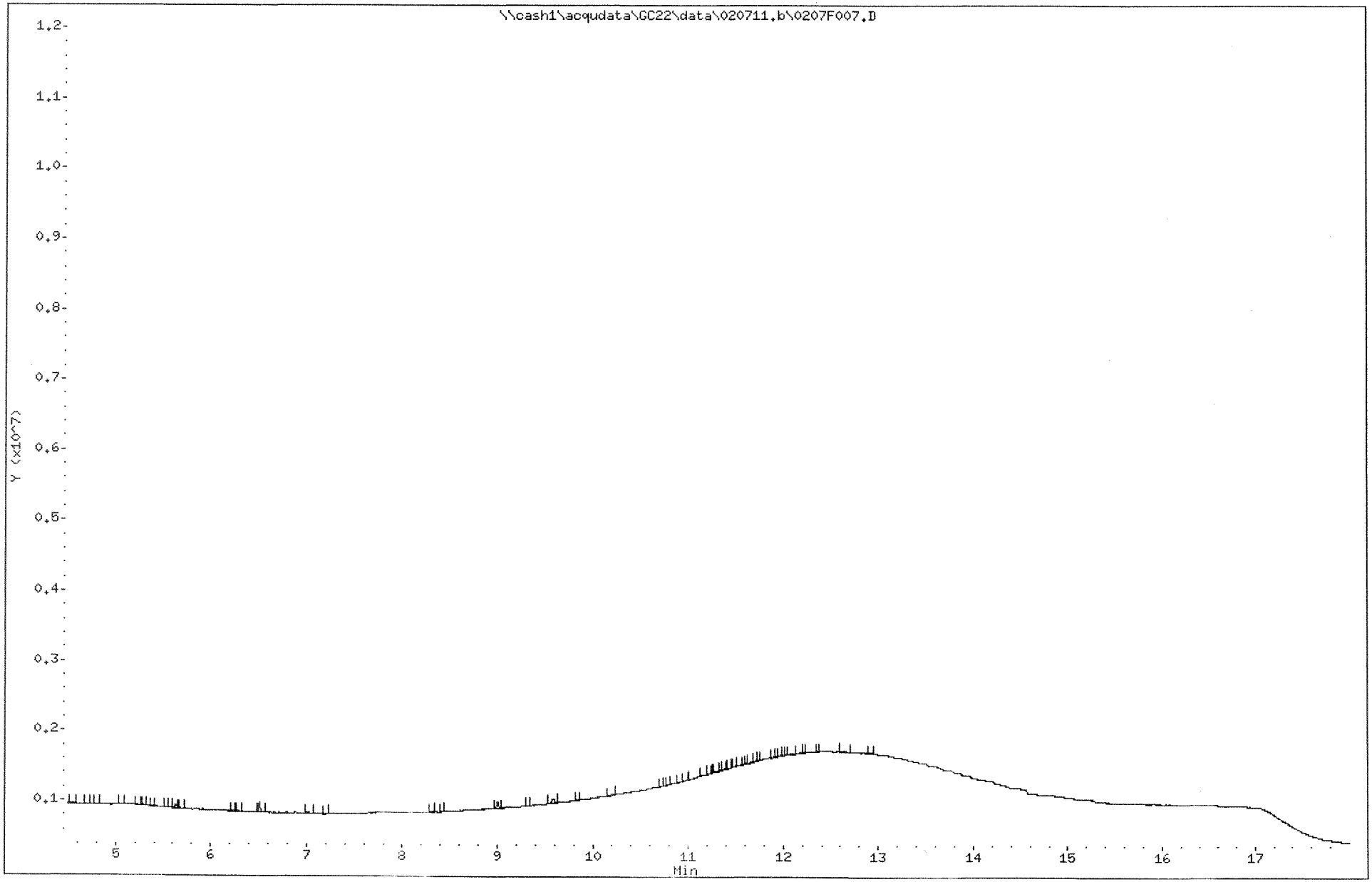
Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F007.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F007.D
Inj Date : 07-FEB-2011 20:37
Sample Info: IB
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F007.D
Date : 07-FEB-2011 20:37
Client ID:
Sample Info: IB

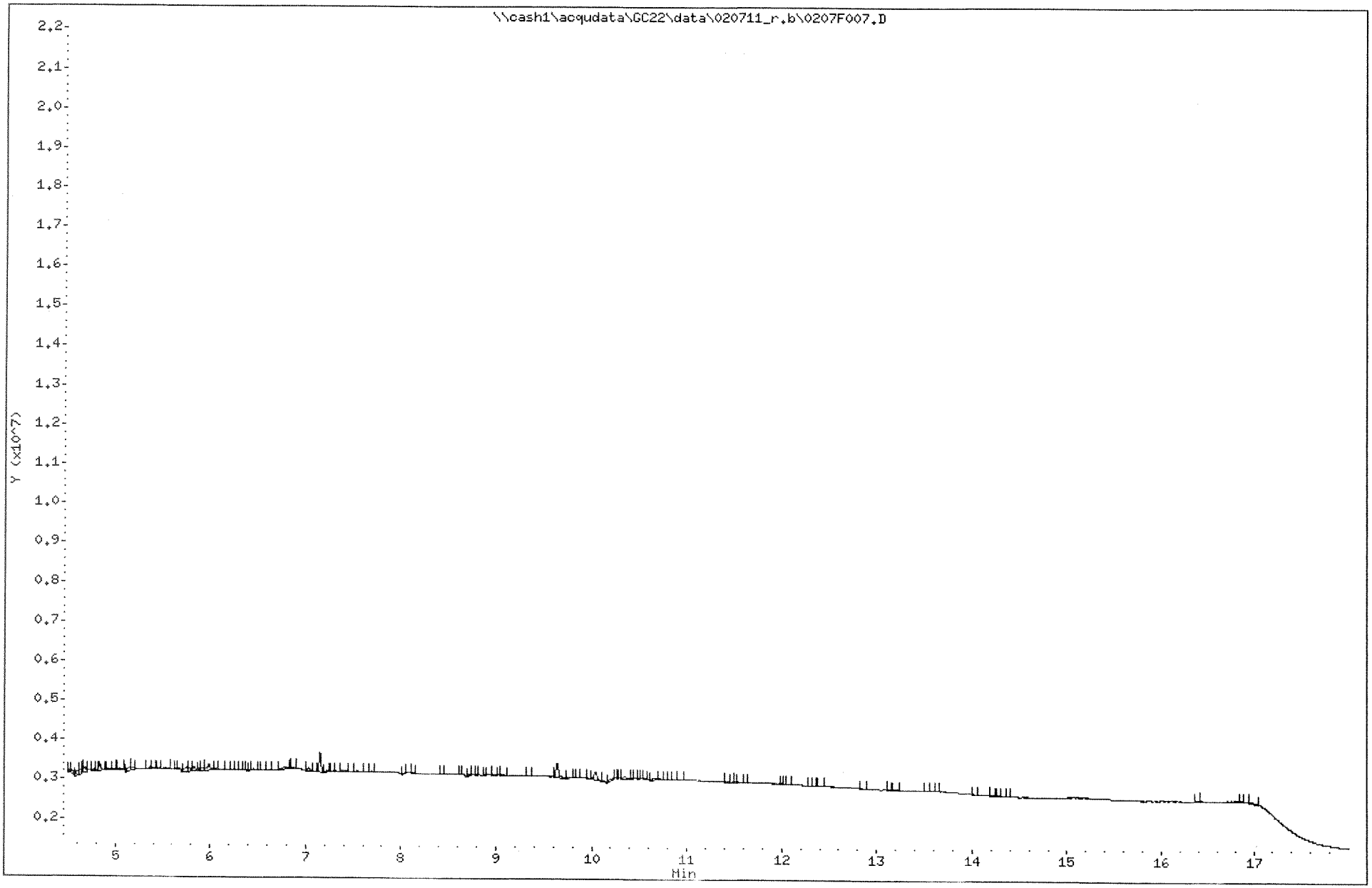
Instrument: GC22.i
Operator: JMSmith
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F007.D
Date : 07-FEB-2011 20:37
Client ID:
Sample Info: IB

Instrument: GC22.i

Operator: JMSmith
Column phase: DB-XLB
Column diameter: 0.32



Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F021.D
Lab ID: KWG1101323-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 02/08/2011 02:19
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F021.D
Lab ID: KWG1101323-4
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 02/08/2011 02:19
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review: 2/10/11

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLE
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	02/10/2011

Analysis Lot:	KWG1101323	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:		**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F021.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F021.D			**Vial:**	86
Acqu Date:	02/08/2011 02:19	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-4				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	21-114	
Decachlorobiphenyl	0.00		0d	0d		0.0000			NA
			%Recovery =		NA	NA	Limits =	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000			
Aroclor 1016 {1}			0d	0d	0.0000	0.0000			
Aroclor 1016 {2}			0d	0d	0.0000	0.0000			
Aroclor 1016 {3}			0d	0d	0.0000	0.0000			
Aroclor 1016 {4}			0d	0d	0.0000	0.0000			
Aroclor 1016 {5}			0d	0d	0.0000	0.0000			
Aroclor 1221			0	0	0.0000	0.0000			
Aroclor 1221 {1}			0d	0d	0.0000	0.0000			
Aroclor 1221 {2}			0d	0d	0.0000	0.0000			
Aroclor 1221 {3}			0d	0d	0.0000	0.0000			
Aroclor 1221 {4}			0d	0d	0.0000	0.0000			
Aroclor 1232			0	0	0.0000	0.0000			
Aroclor 1232 {1}			0d	0d	0.0000	0.0000			
Aroclor 1232 {2}			0d	0d	0.0000	0.0000			
Aroclor 1232 {3}			0d	0d	0.0000	0.0000			
Aroclor 1232 {4}			0d	0d	0.0000	0.0000			
Aroclor 1242			0	0	0.0000	0.0000			
Aroclor 1242 {1}			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F021.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F021.D			**Vial:**	86
Acqu Date:	02/08/2011 02:19	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-4				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {2}			0d	0d	0.0000	0.0000			
Aroclor 1242 {3}			0d	0d	0.0000	0.0000			
Aroclor 1242 {4}			0d	0d	0.0000	0.0000			
Aroclor 1242 {5}			0d	0d	0.0000	0.0000			
Aroclor 1248			0	0	0.0000	0.0000			
Aroclor 1248 {1}			0d	0d	0.0000	0.0000			
Aroclor 1248 {2}			0d	0d	0.0000	0.0000			
Aroclor 1248 {3}			0d	0d	0.0000	0.0000			
Aroclor 1248 {4}			0d	0d	0.0000	0.0000			
Aroclor 1248 {5}			0d	0d	0.0000	0.0000			
Aroclor 1254			0	0	0.0000	0.0000			
Aroclor 1254 {1}			0d	0d	0.0000	0.0000			
Aroclor 1254 {2}			0d	0d	0.0000	0.0000			
Aroclor 1254 {3}			0d	0d	0.0000	0.0000			
Aroclor 1254 {4}			0d	0d	0.0000	0.0000			
Aroclor 1254 {5}			0d	0d	0.0000	0.0000			
Aroclor 1260			0	0	0.0000	0.0000			
Aroclor 1260 {1}			0d	0d	0.0000	0.0000			
Aroclor 1260 {2}			0d	0d	0.0000	0.0000			
Aroclor 1260 {3}			0d	0d	0.0000	0.0000			
Aroclor 1260 {4}			0d	0d	0.0000	0.0000			
Aroclor 1260 {5}			0d	0d	0.0000	0.0000			
Aroclor 1262			0	0	0.0000	0.0000			
Aroclor 1262 {1}			0d	0d	0.0000	0.0000			
Aroclor 1262 {2}			0d	0d	0.0000	0.0000			
Aroclor 1262 {3}			0d	0d	0.0000	0.0000			
Aroclor 1262 {4}			0d	0d	0.0000	0.0000			
Aroclor 1262 {5}			0d	0d	0.0000	0.0000			
Aroclor 1268			0	0	0.0000	0.0000			
Aroclor 1268 {1}			0d	0d	0.0000	0.0000			
Aroclor 1268 {2}			0d	0d	0.0000	0.0000			
Aroclor 1268 {3}			0d	0d	0.0000	0.0000			
Aroclor 1268 {4}			0d	0d	0.0000	0.0000			
Aroclor 1268 {5}			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F021.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F021.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F021.D
Inj Date : 08-FEB-2011 02:19
Sample Info: IB
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

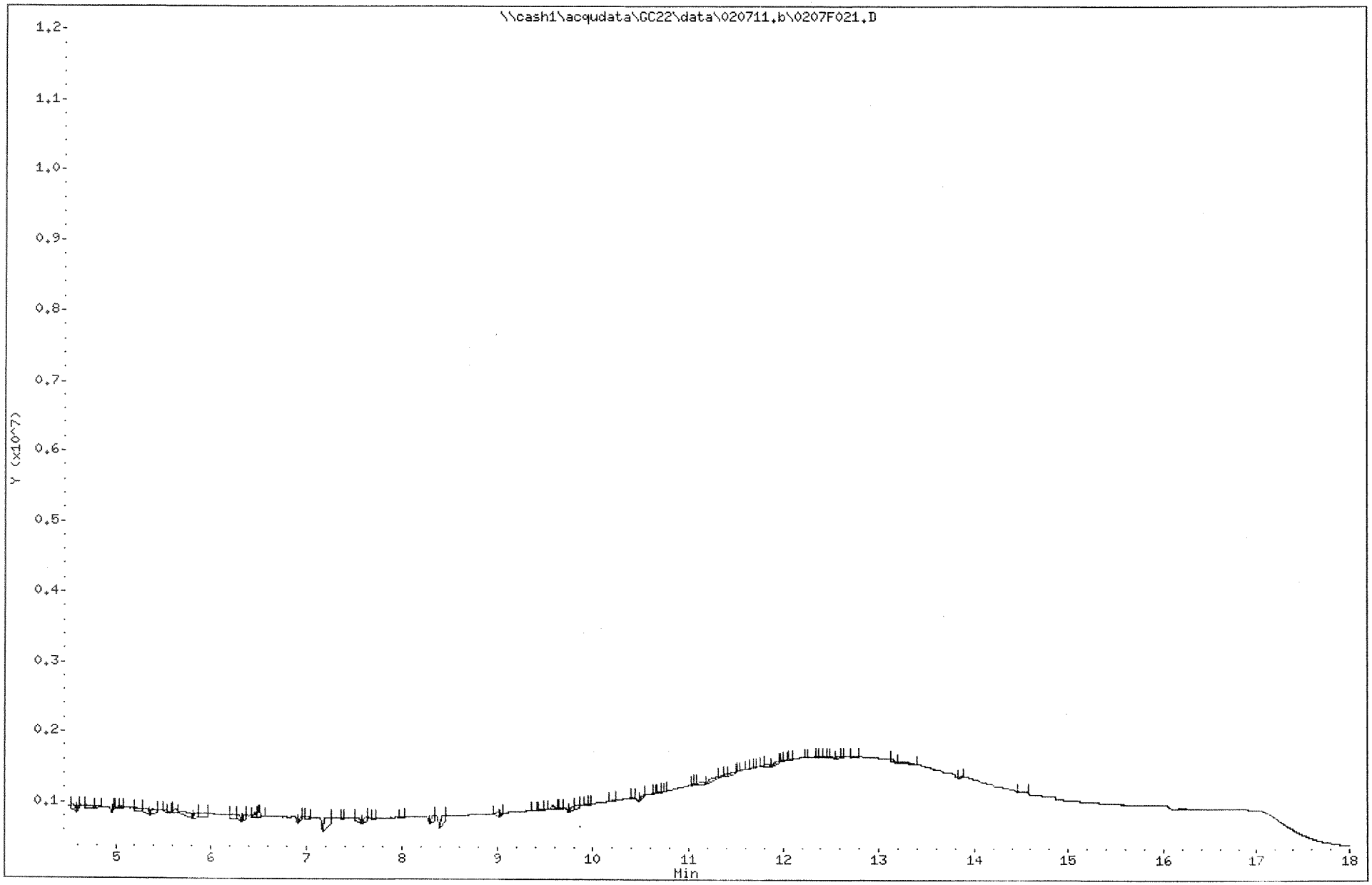
Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F021.D
Date : 08-FEB-2011 02:19
Client ID:
Sample Info: IB

Instrument: GC22.i

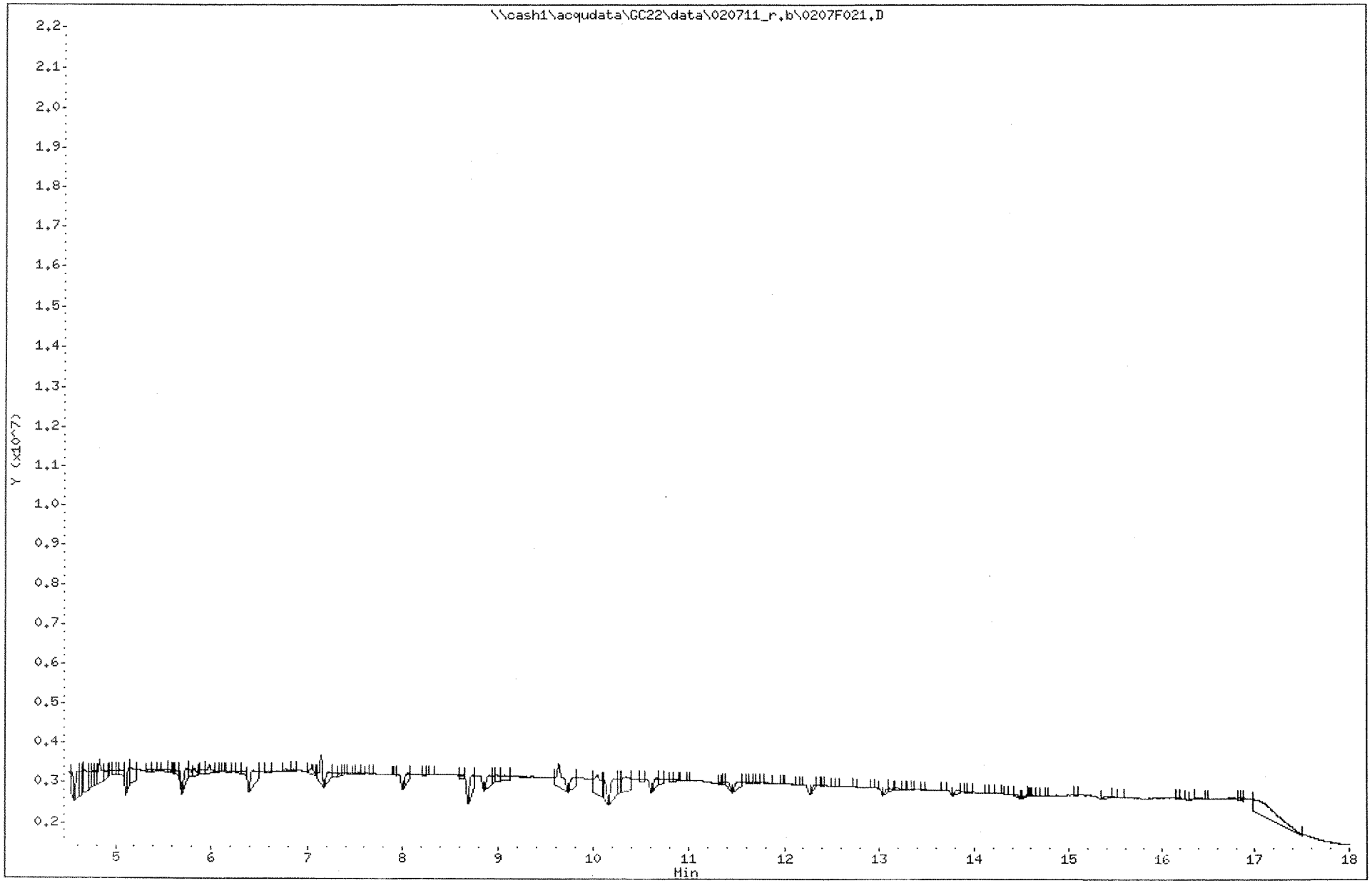
Operator: JHSmith
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F021.D
Date : 08-FEB-2011 02:19
Client ID:
Sample Info: IB

Instrument: GC22.i

Operator: JMSmith
Column phase: DB-XLB
Column diameter: 0.32



Exception Report

Data File: \\CASH1\ACQUDATA\GC22\DATA\020711.B\0207F035.D
Lab ID: KWG1101323-6
RunType: IB
Matrix: NOT APPLICABLE

Date Acquired: 02/08/2011 08:02
Date Quantitated: 02/10/2011 16:40
Batch ID: KWG1101323
Analysis Method: 8082A
MethodJoinID: MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Exception Report

Data File:	\\CASH1\ACQUDATA\GC22\DATA\020711_R.B\0207F035.D	**Date Acquired:**	02/08/2011 08:02
Lab ID:	KWG1101323-6	**Date Quantitated:**	02/10/2011 16:41
RunType:	IB	**Batch ID:**	KWG1101323
Matrix:	NOT APPLICABLE	**Analysis Method:**	8082A
		MethodJoinID:	MJ702

Sample Exceptions

Exception Categories	Result	Low Limit	High Limit	Pass	Fail
ICAL Analyte Recovery	NA	NA	NA	x	
Second Source ICAL Verification	NA	NA	NA	x	
Analyte Co-elution	NA	NA	NA	x	
Below Lowest ICAL Level	NA	NA	NA	x	
Above Highest ICAL Level	NA	NA	NA	x	
Enviroquant/Stealth Calibration Check	NA	NA	NA	x	

Primary Review: 2/10/11

Secondary Review:

Quantitation Report

Bottle ID:		**Tier:**		**Matrix:**	NOT APPLICABLE
Prod Code:	8082 PCB	**Collect Date:**		**Receive Date:**	02/10/2011

Analysis Lot:	KWG1101323	**Prep Lot:**		**Report Group:**	
Analysis Method:	8082A	**Prep Method:**			
Prep Ref:		**Prep Date:**			

Quant Method:	\\CASH1\ACQUDATA\GC22\DATA\020711.B\120810UL_F.M	**Calibration ID:**	CAL10114
Title:			
MB Ref:		**Method ID:**	MJ702
		Quant based on Method	

Data File #1:	J:\GC22\DATA\020711.B\0207F035.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F035.D			**Vial:**	86
Acqu Date:	02/08/2011 08:02	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-6				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Surrogate Compounds

Parameter Name	RT #1	RT #2	Resp #1	Respe #2	ng/mL #1	ng/mL #2			Rpt
Tetrachloro-m-xylene	0.00		0d	0d	0.0000				NA
			%Recovery =		NA	NA	**Limits =**	21-114	
Decachlorobiphenyl	0.00		0d	0d	0.0000				NA
			%Recovery =		NA	NA	**Limits =**	36-113	

Target Compounds

Final Conc. Units: ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1016			0	0	0.0000	0.0000			
Aroclor 1016 {1}			0d	0d	0.0000	0.0000			
Aroclor 1016 {2}			0d	0d	0.0000	0.0000			
Aroclor 1016 {3}			0d	0d	0.0000	0.0000			
Aroclor 1016 {4}			0d	0d	0.0000	0.0000			
Aroclor 1016 {5}			0d	0d	0.0000	0.0000			
Aroclor 1221			0	0	0.0000	0.0000			
Aroclor 1221 {1}			0d	0d	0.0000	0.0000			
Aroclor 1221 {2}			0d	0d	0.0000	0.0000			
Aroclor 1221 {3}			0d	0d	0.0000	0.0000			
Aroclor 1221 {4}			0d	0d	0.0000	0.0000			
Aroclor 1232			0	0	0.0000	0.0000			
Aroclor 1232 {1}			0d	0d	0.0000	0.0000			
Aroclor 1232 {2}			0d	0d	0.0000	0.0000			
Aroclor 1232 {3}			0d	0d	0.0000	0.0000			
Aroclor 1232 {4}			0d	0d	0.0000	0.0000			
Aroclor 1242			0	0	0.0000	0.0000			
Aroclor 1242 {1}			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File #1:	J:\GC22\DATA\020711.B\0207F035.D			**Instrument:**	GC22.i
Data File #2:	\\cash1\acqudata\GC22\data\020711_r.b\0207F035.D			**Vial:**	86
Acqu Date:	02/08/2011 08:02	**Quant Date:**	02/10/2011 16:40	**Dilution:**	1.0
Run Type:	IB			**Soln Conc. Units:**	ng/mL
Lab ID:	KWG1101323-6				
Signal #1:	DB-35MS	**Signal #2:**	DB-XLB		

Target Compounds **Final Conc. Units:** ug/L

Parameter Name	RT #1	RT #2	Resp #1	Resp #2	ng/mL #1	ng/mL #2	ug/L #1	ug/L #2	Rpt
Aroclor 1242 {2}			0d	0d	0.0000	0.0000			
Aroclor 1242 {3}			0d	0d	0.0000	0.0000			
Aroclor 1242 {4}			0d	0d	0.0000	0.0000			
Aroclor 1242 {5}			0d	0d	0.0000	0.0000			
Aroclor 1248			0	0	0.0000	0.0000			
Aroclor 1248 {1}			0d	0d	0.0000	0.0000			
Aroclor 1248 {2}			0d	0d	0.0000	0.0000			
Aroclor 1248 {3}			0d	0d	0.0000	0.0000			
Aroclor 1248 {4}			0d	0d	0.0000	0.0000			
Aroclor 1248 {5}			0d	0d	0.0000	0.0000			
Aroclor 1254			0	0	0.0000	0.0000			
Aroclor 1254 {1}			0d	0d	0.0000	0.0000			
Aroclor 1254 {2}			0d	0d	0.0000	0.0000			
Aroclor 1254 {3}			0d	0d	0.0000	0.0000			
Aroclor 1254 {4}			0d	0d	0.0000	0.0000			
Aroclor 1254 {5}			0d	0d	0.0000	0.0000			
Aroclor 1260			0	0	0.0000	0.0000			
Aroclor 1260 {1}			0d	0d	0.0000	0.0000			
Aroclor 1260 {2}			0d	0d	0.0000	0.0000			
Aroclor 1260 {3}			0d	0d	0.0000	0.0000			
Aroclor 1260 {4}			0d	0d	0.0000	0.0000			
Aroclor 1260 {5}			0d	0d	0.0000	0.0000			
Aroclor 1262			0	0	0.0000	0.0000			
Aroclor 1262 {1}			0d	0d	0.0000	0.0000			
Aroclor 1262 {2}			0d	0d	0.0000	0.0000			
Aroclor 1262 {3}			0d	0d	0.0000	0.0000			
Aroclor 1262 {4}			0d	0d	0.0000	0.0000			
Aroclor 1262 {5}			0d	0d	0.0000	0.0000			
Aroclor 1268			0	0	0.0000	0.0000			
Aroclor 1268 {1}			0d	0d	0.0000	0.0000			
Aroclor 1268 {2}			0d	0d	0.0000	0.0000			
Aroclor 1268 {3}			0d	0d	0.0000	0.0000			
Aroclor 1268 {4}			0d	0d	0.0000	0.0000			
Aroclor 1268 {5}			0d	0d	0.0000	0.0000			

U: Undetected at or above MDL
J: Analyte detected above MDL, but below MRL
B: Hit above MRL also found in Method Blank
E: Analyte concentration above high point of ICAL
N: Presumptive evidence of compound

D: Result from dilution
m: Manual integration performed
d: Compound manually deleted
NR: Analyte not reported from this analysis

*: Result fails acceptance criteria
#: Acceptance criteria not applicable
?: Insufficient information to determine acceptance
e: Result >= MRL, but MRL less than low point of ICAL
c: check for co-elution

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F035.D
Report Date: 10-Feb-2011 16:40

Columbia Analytical Services

Sample #1 : \\cash1\acqudata\GC22\data\020711.b\0207F035.D
Sample #2 : \\cash1\acqudata\GC22\data\020711_r.b\0207F035.D
Inj Date : 08-FEB-2011 08:02
Sample Info: IB
Misc Info :
Cal Date : 08-FEB-2011 15:32
Operator : JMSmith
Inst ID : GC22.i
Dil Factor : 1.000000

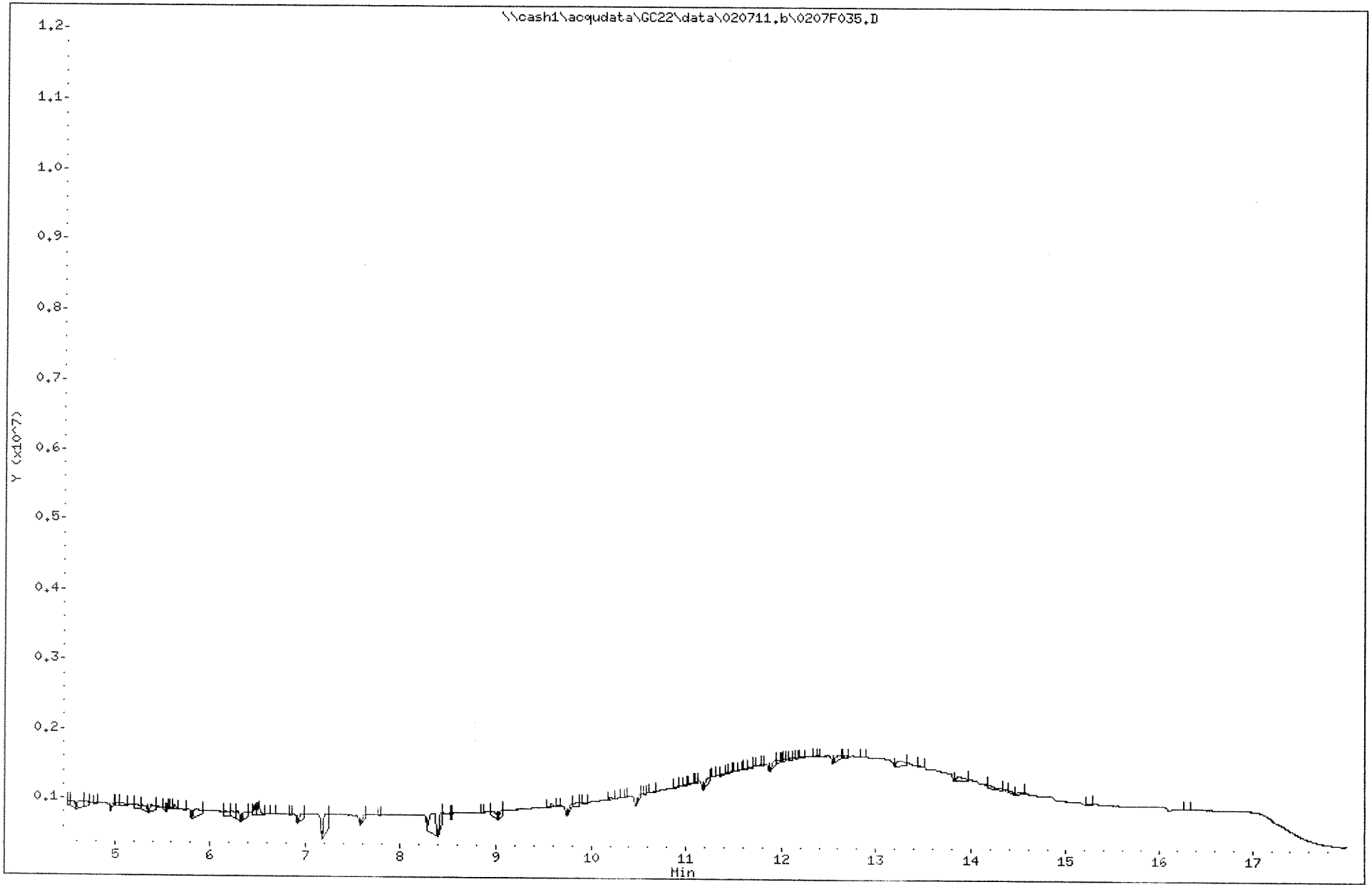
Method #1 : \\cash1\acqudata\GC22\data\020711.b\120810ul_f.m
Method #2 : \\cash1\acqudata\GC22\data\020711_r.b\120810ul_r.m
Sub List #1 : ALL.SUB
Sub List #2 : ALL.SUB
Col #1 Phase : DB-35MS
Col #2 Phase : DB-XLB

Compound	RT#1	RT#2	Resp#1	Resp#2	Conc#1	Conc#2	Target Range	Ratio

Data File: \\cash1\acqudata\GC22\data\020711.b\0207F035.D
Date : 08-FEB-2011 08:02
Client ID:
Sample Info: IB

Instrument: GC22.i

Operator: JMSmith
Column phase: DB-35MS
Column diameter: 0.32



Data File: \\cash1\acqudata\GC22\data\020711_r.b\0207F035.D
Date : 08-FEB-2011 08:02
Client ID:
Sample Info: IB

Instrument: GC22.i
Operator: JMSmith
Column phase: DB-XLB
Column diameter: 0.32