Air Toxics LTD.

Laboratory Services Since 1989

Electronic Comprehensive Validation Package (eCVP)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

ATL Application

INVENTORY SHEET

Work Order #: 0909125C

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Comments:

Completed by:

Kara McKiernan	Kara McKiernan / Document Control	9/22/09
(Signature)	(Print Name & Title)	(Date)

Air Toxics LTD.
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WORK ORDER #: 0909125C

Work Order Summary

CLIENT:	Mr. Taeko Minegishi Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494	**BILL TO:**	Accounts Payable Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494
PHONE:	800-825-5343	**P.O. #**	16512
FAX:	781-247-4305	**PROJECT #**	16512
DATE RECEIVED:	09/04/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/18/2009		

FRACTION #	NAME	TEST
33A	102099	ATL Application
34A	102100	ATL Application
35A	102101	ATL Application
36A	102102	ATL Application
37A	102126	ATL Application
38A	102127	ATL Application
39A	102128	ATL Application
40A	102129	ATL Application
41A	102130	ATL Application
42A	102131	ATL Application
43A	102132	ATL Application
44A	102159	ATL Application
44AA	102159 Lab Duplicate	ATL Application
45A	102160	ATL Application
46A	102161	ATL Application
46AA	102161 Lab Duplicate	ATL Application
47A	102162	ATL Application

Continued on next page

Air Toxics LTD.
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WORK ORDER #: 0909125C

Work Order Summary

CLIENT:	Mr. Taeko Minegishi Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494	**BILL TO:**	Accounts Payable Environmental Health & Engineering, Inc. 117 Fourth Avenue Needham, MA 02494
PHONE:	800-825-5343	**P.O. #**	16512
FAX:	781-247-4305	**PROJECT #**	16512
DATE RECEIVED:	09/04/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	09/18/2009		

FRACTION #	NAME	TEST
48A	102163	ATL Application
49A	102164	ATL Application
50A	Lab Blank	ATL Application
51A	LCS	ATL Application

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 09/18/09

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Aldehydes by Radiello 165
Environmental Health & Engineering, Inc.
Workorder# 0909125C

Seventeen Radiello 165 (Aldehydes) samples were received on September 04, 2009. The procedure involves reaction of aldehydes with 2, 4-DNPH to give 2, 4-dinitrohydrazons. The 2, 4-dinitrohydrazons are then extracted with acetonitrile and analyzed using reverse phase High Pressure Liquid Chromatography (HPLC) with an Ultraviolet (UV) Detector. Results are reported in uG and uG/m3.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

Results were calculated based on 25 deg C without temperature correction.

The actual exposure time was used to calculate sample concentrations and reporting limits. An exposure time of 21600 minutes was used for the QC samples.

Sampling rates were provided by the manufacturer. See the attached document for the sample results in uG/m3 and the sampling rates for each analyte.

Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.

The exposure time for all samples exceeded the method recommended exposure time of 7 days.

The end check standard on 09/06/09 was biased high for Pentanal, but there were no positively identified hits for Pentanal in any of the affected samples. Data quality is unaffected.

The concentration of Propanal was below the Reporting Limit in the initial analysis of sample 102161. %RPD method control limits are waived when analyte concentration in either the initial or the duplicate analysis is less than 5X the Reporting Limit. In addition, % RPD is not reported when one of the two replicate analyte concentrations is below the Reporting Limit.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.

N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

Table 1

Client Sample ID	Lab Sample ID	Date Collected	Date Received	Date Extracted	Sample Holding Time (Days)	Date Analyzed	Sample Extract Holding Time (Days)	Sample Condition
102099	0909125C-33A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/10/2009	4	Good
102100	0909125C-34A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/10/2009	4	Good
102101	0909125C-35A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/10/2009	4	Good
102102	0909125C-36A	NA	9/ 4/2009	9/ 6/2009	NA	9/ 6/2009	0	Good
102126	0909125C-37A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/10/2009	4	Good
102127	0909125C-38A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102128	0909125C-39A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/10/2009	4	Good
102129	0909125C-40A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102130	0909125C-41A	NA	9/ 4/2009	9/ 6/2009	NA	9/ 9/2009	3	Good
102131	0909125C-42A	NA	9/ 4/2009	9/ 6/2009	NA	9/10/2009	4	Good
102132	0909125C-43A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102159	0909125C-44A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102159 Lab Duplicate	0909125C-44AA	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102160	0909125C-45A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102161	0909125C-46A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102161 Lab Duplicate	0909125C-46AA	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102162	0909125C-47A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102163	0909125C-48A	9/ 3/2009	9/ 4/2009	9/ 6/2009	3	9/11/2009	5	Good
102164	0909125C-49A	NA	9/ 4/2009	9/ 6/2009	NA	9/ 6/2009	0	Good
Lab Blank	0909125C-50A	NA	NA	9/ 6/2009	NA	9/ 6/2009	0	Good
LCS	0909125C-51A	NA	NA	9/ 6/2009	NA	9/ 6/2009	0	Good

Sample Results and Raw Data

Air Toxics LTD.
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Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102099

Lab ID#: 0909125C-33A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	3.7
Acetaldehyde	0.50	1.3
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.43
Pentanal	0.25	0.36 M
Hexanal	0.25	0.41

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Laboratory Services Since 1989

Client Sample ID: 102099

Lab ID#: 0909125C-33A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910035**	**Date of Collection: 9/3/09**
Dil. Factor:	**1.00**	**Date of Analysis: 9/10/09 09:14 PM**
		Date of Extraction: 9/6/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	3.7
Acetaldehyde	0.50	1.3
Propanal	0.25	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.43
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	0.36 M
Isopentanal	0.25	Not Detected
Hexanal	0.25	0.41
Acrolein	0.25	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910035.d
Lab Smp Id: 0909125C-33A
Inj Date : 10-SEP-2009 21:14
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-33A;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.049	3.056	-0.007	24018519		
2 FORMALDEHYDE	4.155	4.170	-0.015	1108108	9.31231	3.72
3 ACETALDEHYDE	5.035	5.050	-0.015	301557	3.35948	1.34
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	9.182	9.196	-0.014	61042	1.08125	0.432
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.289	12.276	0.013	42986	0.90674	0.363
16 HEXANAL	14.595	14.590	0.005	43066	1.02546	0.410

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910035.d

Date : 10-SEP-2009 21:14

Client ID:

Instrument: hplcf.i

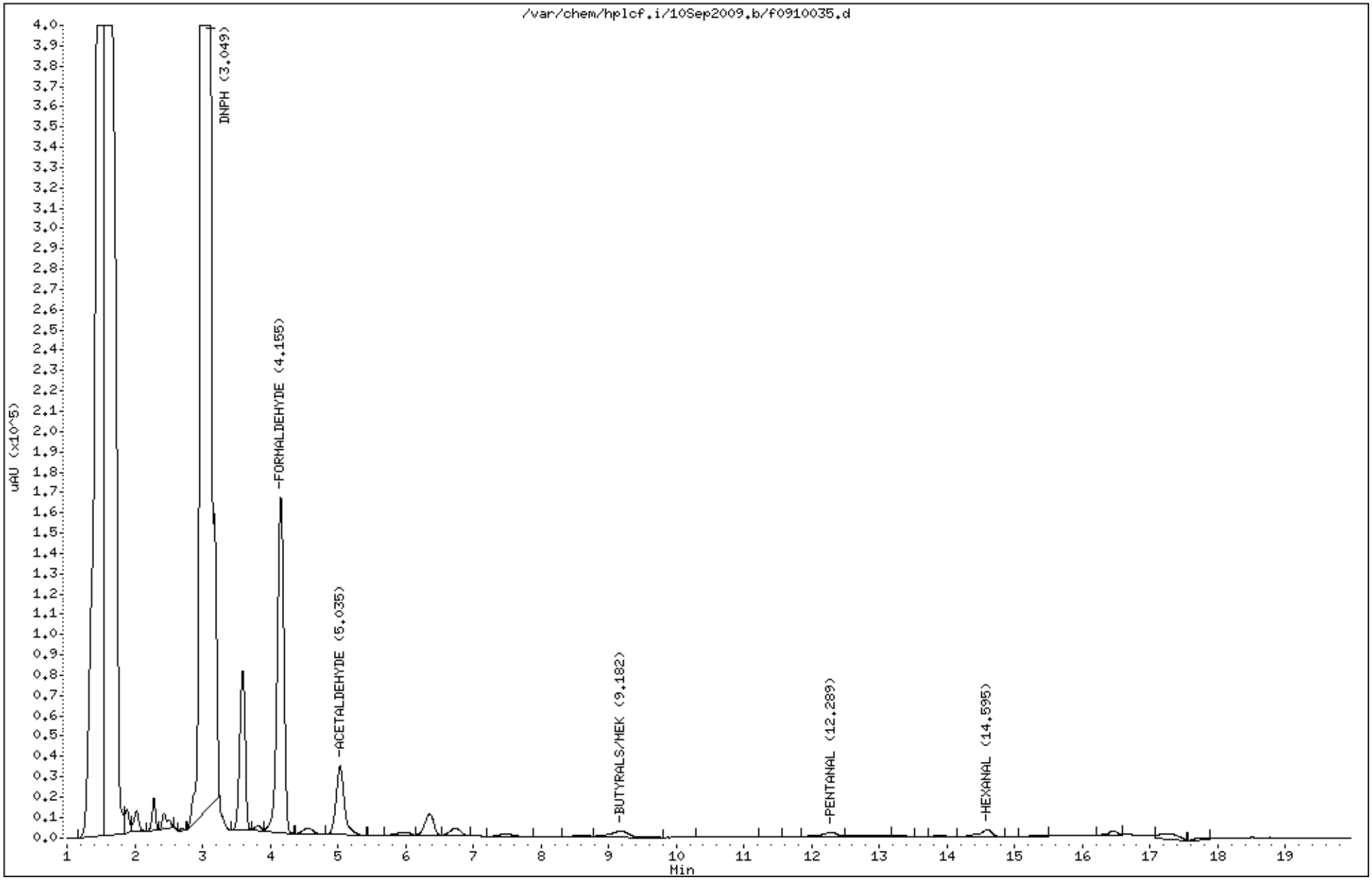
Sample Info: ;0909125C-33A;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0010

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Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102100

Lab ID#: 0909125C-34A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	95
Acetaldehyde	2.5	21
Propanal	1.2	3.5
Methyl Ethyl Ketone/Butyraldehydes	1.2	6.5
Benzaldehyde	1.2	4.9
Pentanal	1.2	17 M
Isopentanal	1.2	1.5 M
Hexanal	1.2	56
Acrolein	1.2	3.1 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102100

Lab ID#: 0909125C-34A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910038**	**Date of Collection: 9/3/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/10/09 10:17 PM**
		Date of Extraction: 9/6/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	95
Acetaldehyde	2.5	21
Propanal	1.2	3.5
Methyl Ethyl Ketone/Butyraldehydes	1.2	6.5
Benzaldehyde	1.2	4.9
Pentanal	1.2	17 M
Isopentanal	1.2	1.5 M
Hexanal	1.2	56
Acrolein	1.2	3.1 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910038.d
Lab Smp Id: 0909125C-34A
Inj Date : 10-SEP-2009 22:17
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-34A;5X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.055	3.056	-0.001	6072172		
2 FORMALDEHYDE	4.162	4.170	-0.008	5670619	47.6547	95.3
3 ACETALDEHYDE	5.035	5.050	-0.015	948280	10.5643	21.1
4 ACROLEIN	6.096	6.090	0.006	126380	1.53963	3.08
6 PROPANAL	6.742	6.756	-0.014	119829	1.74953	3.50
9 BUTYRALS/MEK	9.182	9.196	-0.014	182441	3.23163	6.46
10 BENZALDEHYDE	10.669	10.670	-0.001	98322	2.44106	4.88
11 ISO-PENTANAL	11.796	11.763	0.033	35643	0.75188	1.50(M)
12 PENTANAL	12.282	12.276	0.006	394473	8.32097	16.6(M)
16 HEXANAL	14.595	14.590	0.005	1186006	28.2403	56.5

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910038.d

Date : 10-SEP-2009 22:17

Client ID:

Instrument: hplcf.i

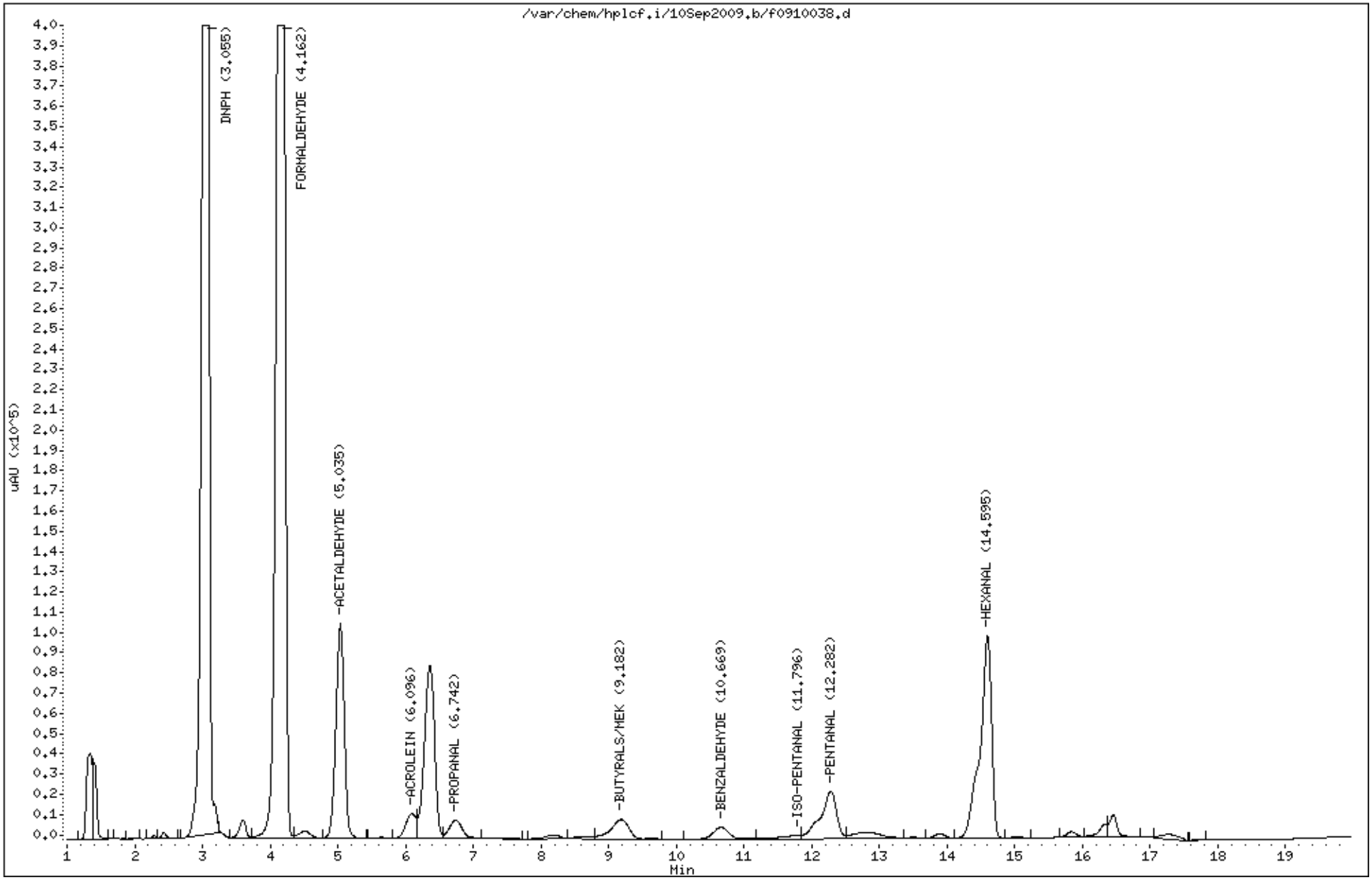
Sample Info: ;0909125C-34A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0014

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102101

Lab ID#: 0909125C-35A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	90
Acetaldehyde	2.5	20
Propanal	1.2	3.2
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.9
Benzaldehyde	1.2	4.4
Pentanal	1.2	16 M
Hexanal	1.2	53
Acrolein	1.2	2.9 M

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Client Sample ID: 102101

Lab ID#: 0909125C-35A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910039**	**Date of Collection: 9/3/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/10/09 10:38 PM**
		Date of Extraction: 9/6/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	90
Acetaldehyde	2.5	20
Propanal	1.2	3.2
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.9
Benzaldehyde	1.2	4.4
Pentanal	1.2	16 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	53
Acrolein	1.2	2.9 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910039.d
Lab Smp Id: 0909125C-35A
Inj Date : 10-SEP-2009 22:38
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-35A;5X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.060	3.056	0.004	6873446		
2 FORMALDEHYDE	4.166	4.170	-0.004	5329113	44.7847	89.6
3 ACETALDEHYDE	5.046	5.050	-0.004	874571	9.74311	19.5
4 ACROLEIN	6.106	6.090	0.016	118310	1.44132	2.88
6 PROPANAL	6.760	6.756	0.004	109429	1.59768	3.20
9 BUTYRALS/MEK	9.213	9.196	0.017	166821	2.95494	5.91
10 BENZALDEHYDE	10.686	10.670	0.016	87837	2.18075	4.36
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.300	12.276	0.024	367008	7.74162	15.5(M)
16 HEXANAL	14.600	14.590	0.010	1117416	26.6071	53.2

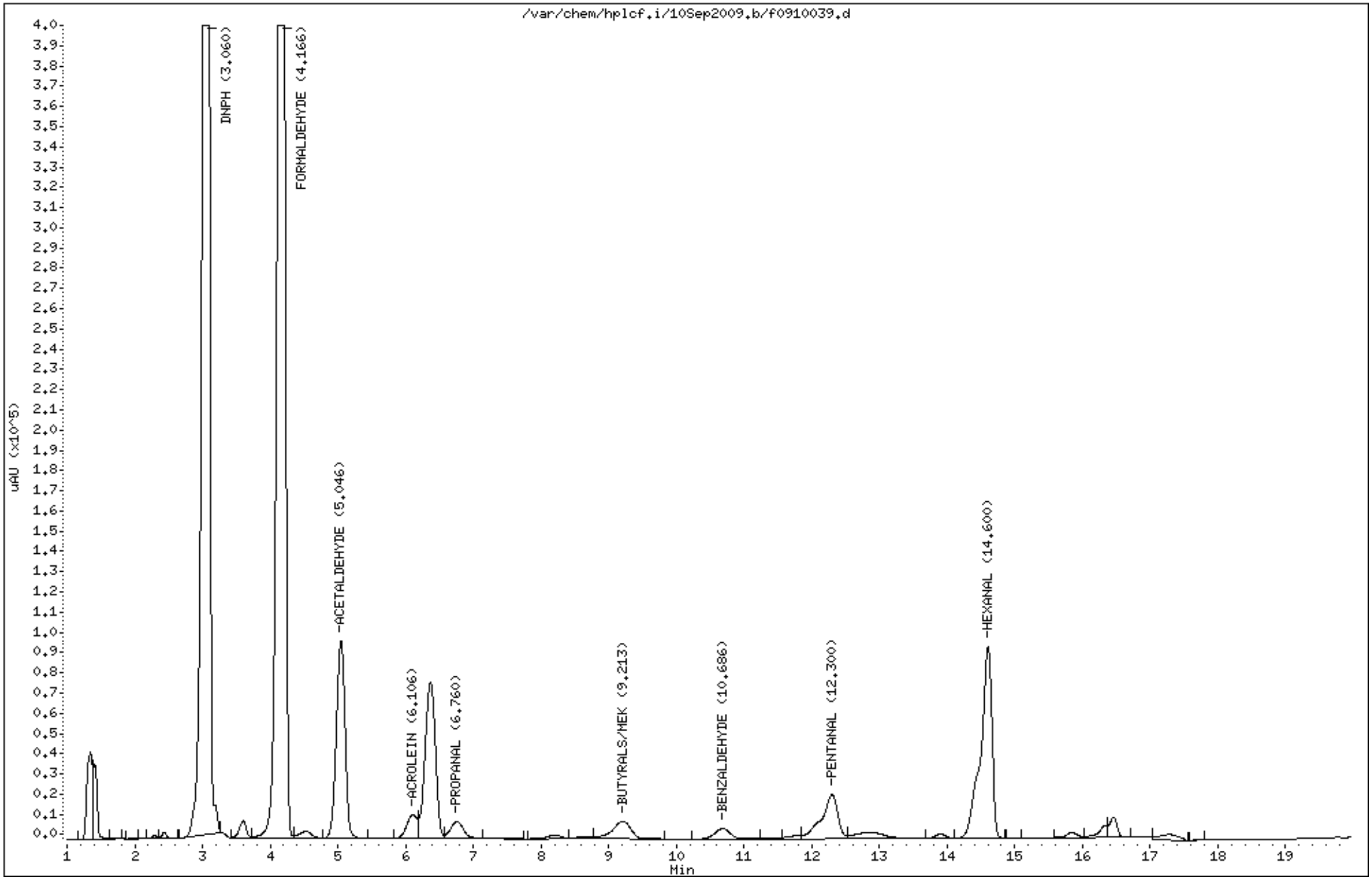
QC Flag Legend

M - Compound response manually integrated.

0018

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910039.d
Date : 10-SEP-2009 22:38
Client ID:
Sample Info: ;0909125C-35A;5X
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: CRL
Column diameter: 2.00



Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102102

Lab ID#: 0909125C-36A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102102

Lab ID#: 0909125C-36A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0906037**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/6/09 10:05 PM**
		Date of Extraction: 9/6/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	Not Detected
Acetaldehyde	0.50	Not Detected
Propanal	0.25	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	Not Detected
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	Not Detected
Isopentanal	0.25	Not Detected
Hexanal	0.25	Not Detected
Acrolein	0.25	Not Detected

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/06Sep2009.b/f0906037.d
Lab Smp Id: 0909125C-36A
Inj Date : 06-SEP-2009 22:05
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;0909125C-36A;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:37 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.053	3.058	-0.005	30642086		
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

Data File: /var/chem/hplcf.i/06Sep2009.b/f0906037.d

Date : 06-SEP-2009 22:05

Client ID:

Instrument: hplcf.i

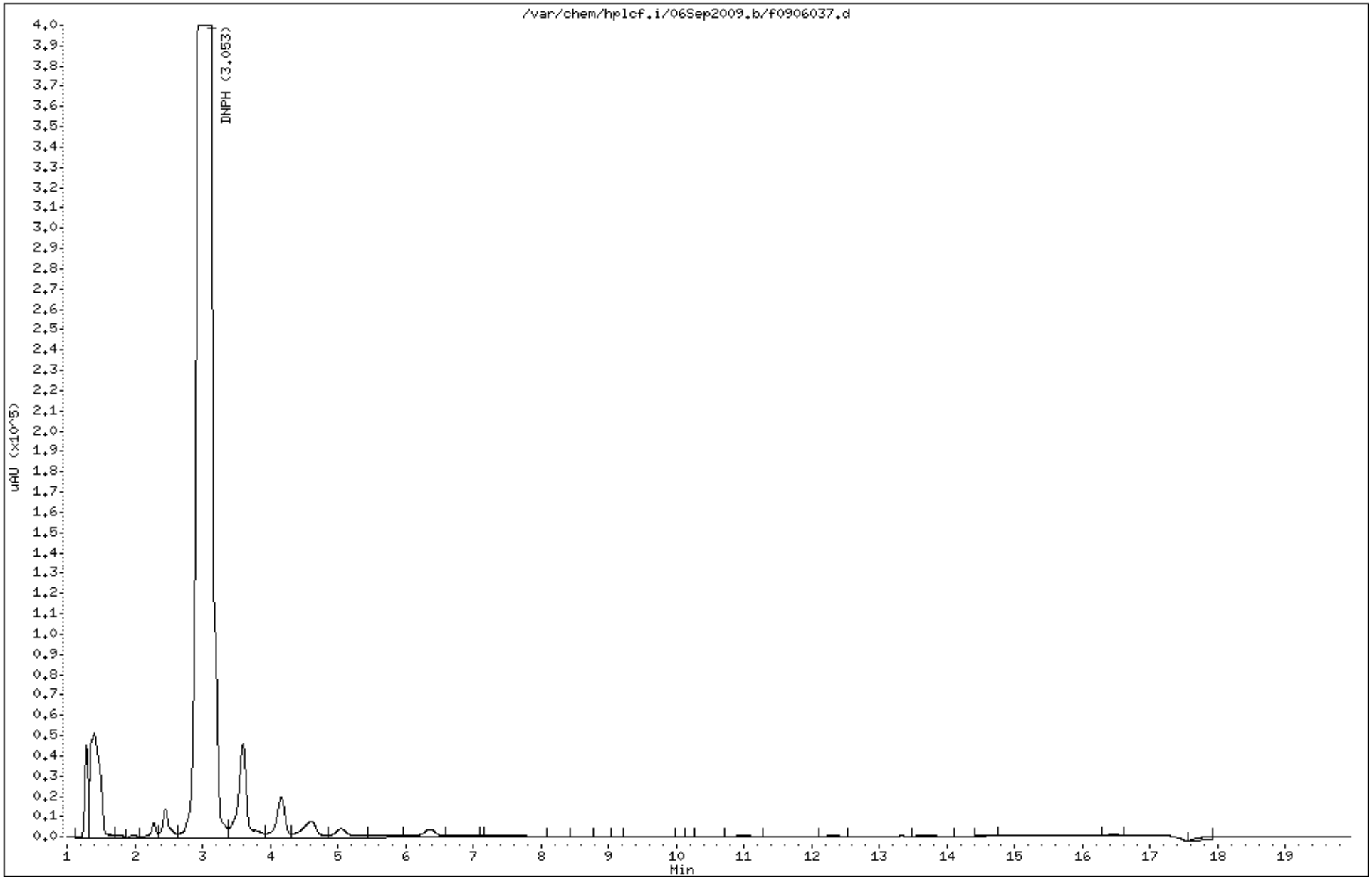
Sample Info: ;0909125C-36A;

Purge Volume: 5.0

Operator: KJJ

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0022

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102126

Lab ID#: 0909125C-37A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	100
Acetaldehyde	2.5	21
Propanal	1.2	1.9
Methyl Ethyl Ketone/Butyraldehydes	1.2	4.6
Benzaldehyde	1.2	4.0
Pentanal	1.2	8.3 M
Hexanal	1.2	27
Acrolein	1.2	2.2 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102126

Lab ID#: 0909125C-37A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910040**	**Date of Collection: 9/3/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/10/09 10:59 PM**
		Date of Extraction: 9/6/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	100
Acetaldehyde	2.5	21
Propanal	1.2	1.9
Methyl Ethyl Ketone/Butyraldehydes	1.2	4.6
Benzaldehyde	1.2	4.0
Pentanal	1.2	8.3 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	27
Acrolein	1.2	2.2 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910040.d
Lab Smp Id: 0909125C-37A
Inj Date : 10-SEP-2009 22:59
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-37A;5X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.066	3.056	0.010	5769301		
2 FORMALDEHYDE	4.172	4.170	0.002	6251552	52.5367	105
3 ACETALDEHYDE	5.052	5.050	0.002	924777	10.3024	20.6
4 ACROLEIN	6.112	6.090	0.022	91547	1.11528	2.23
6 PROPANAL	6.759	6.756	0.003	65232	0.95240	1.90
9 BUTYRALS/MEK	9.206	9.196	0.010	129296	2.29025	4.58
10 BENZALDEHYDE	10.685	10.670	0.015	79875	1.98307	3.97
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.299	12.276	0.023	196494	4.14481	8.29
16 HEXANAL	14.599	14.590	0.009	576204	13.7202	27.4

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910040.d

Page 1

Date : 10-SEP-2009 22:59

Client ID:

Instrument: hplcf.i

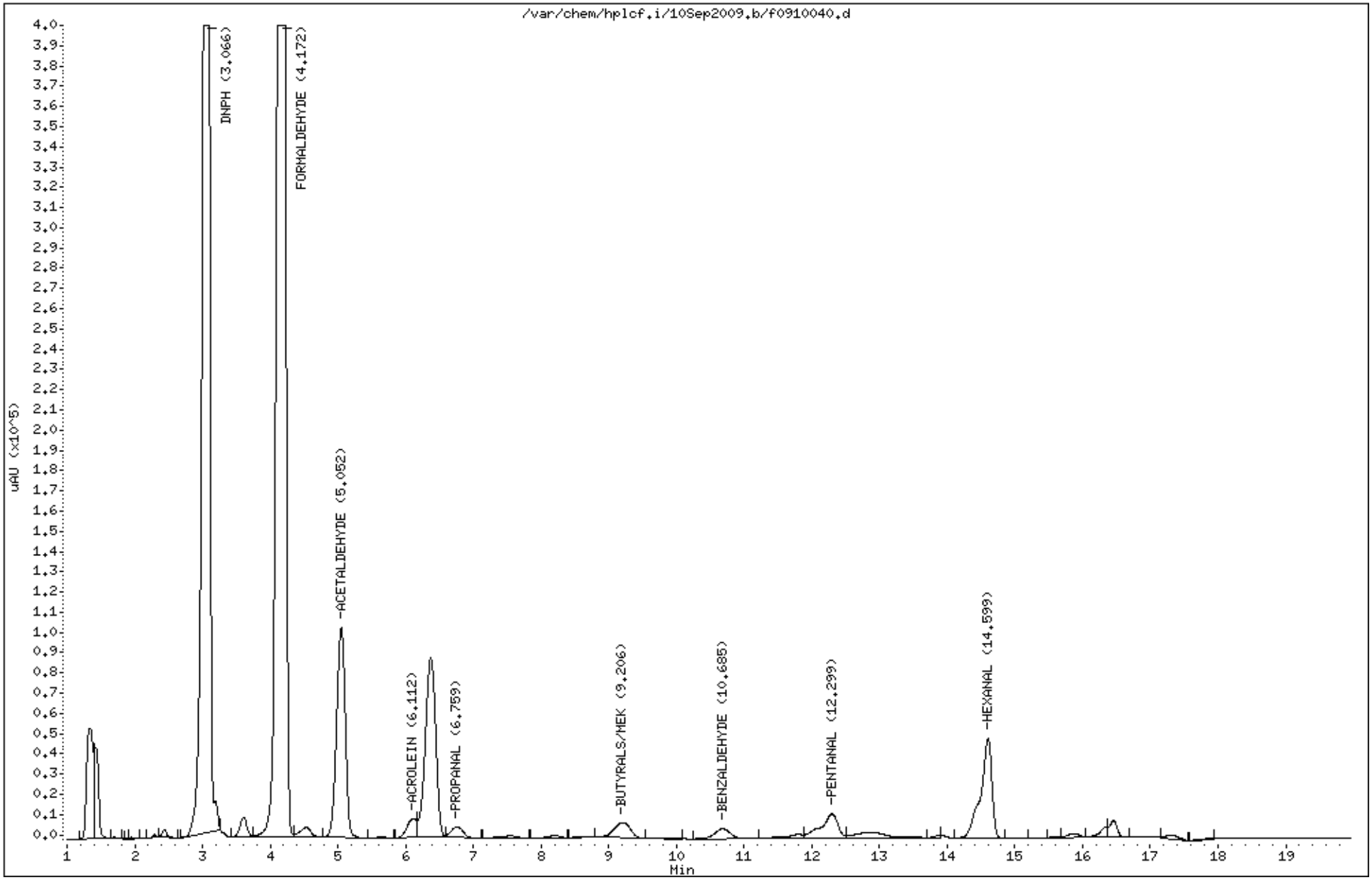
Sample Info: ;0909125C-37A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0026

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102127

Lab ID#: 0909125C-38A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	110
Acetaldehyde	2.5	22
Propanal	1.2	2.1
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.2
Benzaldehyde	1.2	4.5
Pentanal	1.2	9.7 M
Isopentanal	1.2	1.9 M
Hexanal	1.2	29
Acrolein	1.2	2.4 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102127

Lab ID#: 0909125C-38A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910048**	**Date of Collection: 9/3/09**	
Dil. Factor:	**5.00**	**Date of Analysis: 9/11/09 01:46 AM**	
		Date of Extraction: 9/6/09	

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	110
Acetaldehyde	2.5	22
Propanal	1.2	2.1
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.2
Benzaldehyde	1.2	4.5
Pentanal	1.2	9.7 M
Isopentanal	1.2	1.9 M
Hexanal	1.2	29
Acrolein	1.2	2.4 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910048.d
Lab Smp Id: 0909125C-38A
Inj Date : 11-SEP-2009 01:46
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-38A;5X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 11-Sep-2009 09:23 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.053	3.056	-0.003	4342818		
2 FORMALDEHYDE	4.160	4.170	-0.010	6602840	55.4889	111
3 ACETALDEHYDE	5.033	5.050	-0.017	986134	10.9860	22.0
4 ACROLEIN	6.093	6.090	0.003	97423	1.18687	2.37
6 PROPANAL	6.733	6.756	-0.023	73452	1.07241	2.14
9 BUTYRALS/MEK	9.166	9.196	-0.030	147917	2.62010	5.24
10 BENZALDEHYDE	10.653	10.670	-0.017	89878	2.23143	4.46
11 ISO-PENTANAL	11.773	11.763	0.010	44578	0.94035	1.88
12 PENTANAL	12.266	12.276	-0.010	229726	4.84582	9.69
16 HEXANAL	14.579	14.590	-0.011	607926	14.4755	29.0

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910048.d

Date : 11-SEP-2009 01:46

Client ID:

Instrument: hplcf.i

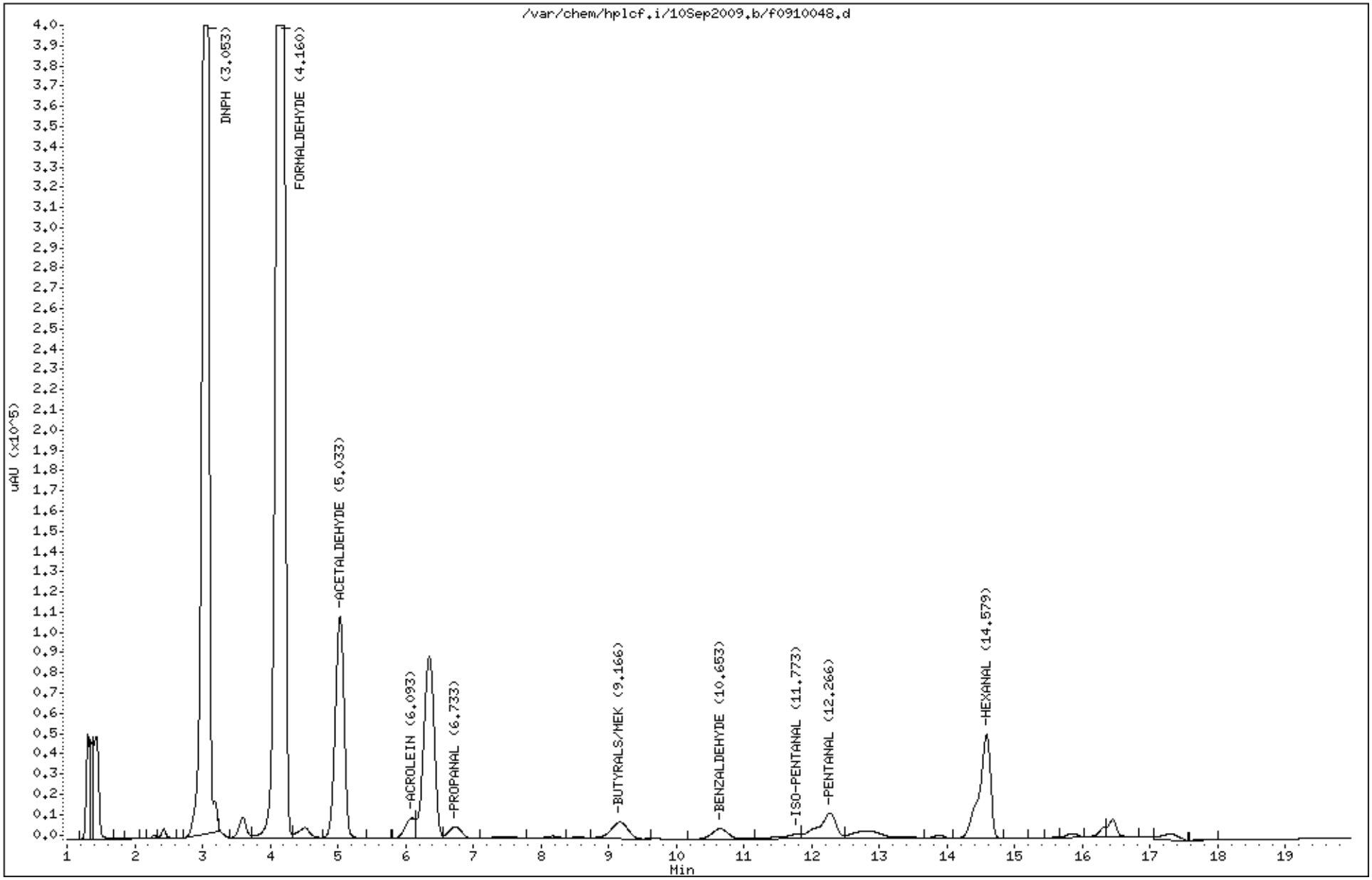
Sample Info: ;0909125C-38A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0030

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102128

Lab ID#: 0909125C-39A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	4.2
Acetaldehyde	0.50	1.5
Propanal	0.25	0.27
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.40
Pentanal	0.25	0.32 M
Hexanal	0.25	0.38

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102128

Lab ID#: 0909125C-39A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910036**	**Date of Collection: 9/3/09**
Dil. Factor:	**1.00**	**Date of Analysis: 9/10/09 09:35 PM**
		Date of Extraction: 9/6/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	1.0	4.2
Acetaldehyde	0.50	1.5
Propanal	0.25	0.27
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.40
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	0.32 M
Isopentanal	0.25	Not Detected
Hexanal	0.25	0.38
Acrolein	0.25	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910036.d
Lab Smp Id: 0909125C-39A
Inj Date : 10-SEP-2009 21:35
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-39A;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.055	3.056	-0.001	23452709		
2 FORMALDEHYDE	4.169	4.170	-0.001	1264643	10.6278	4.25
3 ACETALDEHYDE	5.049	5.050	-0.001	338316	3.76899	1.51
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	6.762	6.756	0.006	46626	0.68075	0.272
9 BUTYRALS/MEK	9.202	9.196	0.006	56198	0.99545	0.398
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.296	12.276	0.020	38192	0.80562	0.322
16 HEXANAL	14.602	14.590	0.012	39651	0.94414	0.378

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910036.d

Date : 10-SEP-2009 21:35

Client ID:

Instrument: hplcf.i

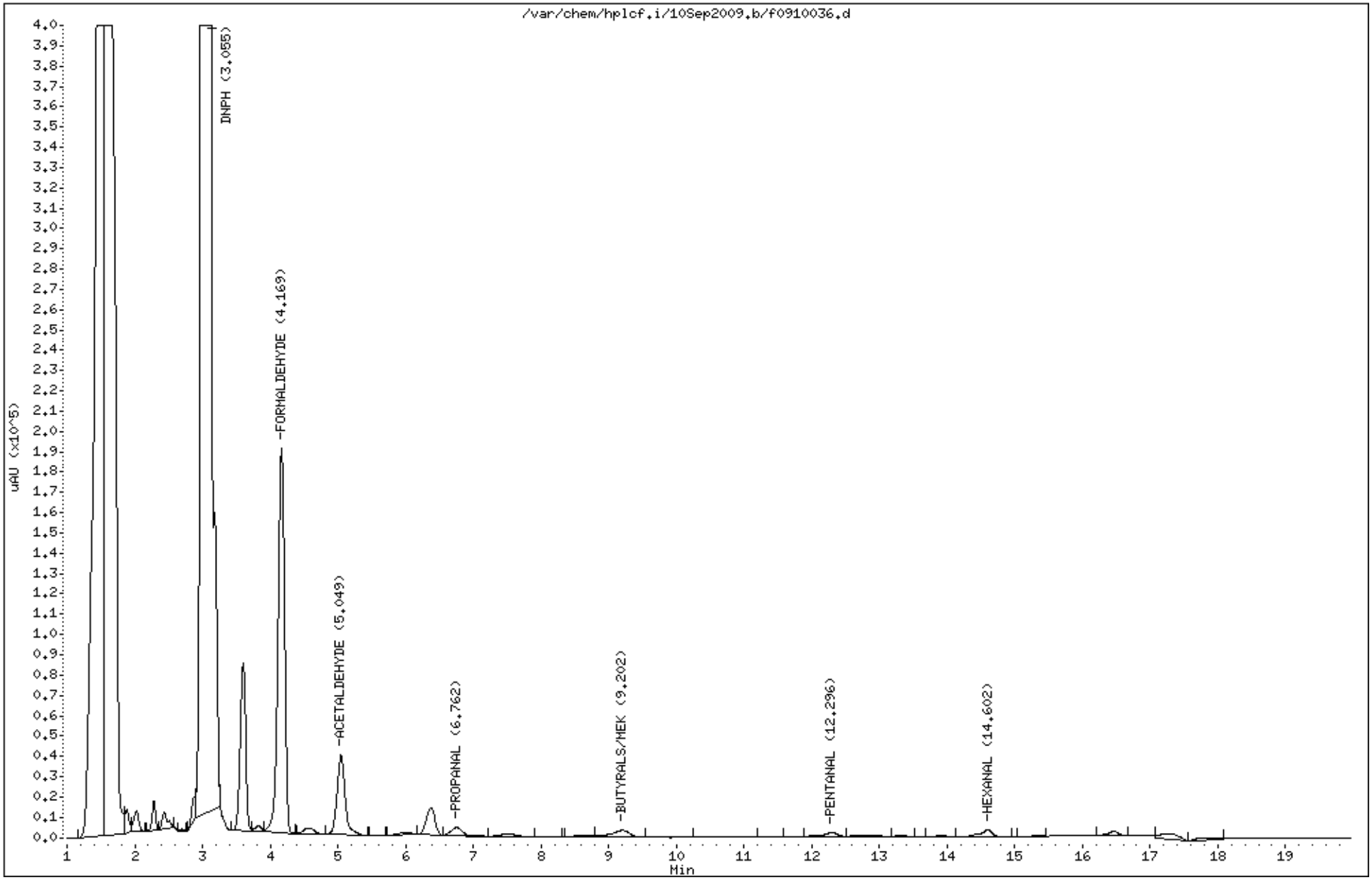
Sample Info: ;0909125C-39A;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0034

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102129

Lab ID#: 0909125C-40A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	100
Acetaldehyde	2.5	18
Propanal	1.2	1.6
Methyl Ethyl Ketone/Butyraldehydes	1.2	4.2
Benzaldehyde	1.2	3.8
Pentanal	1.2	8.1 M
Hexanal	1.2	28
Acrolein	1.2	2.2 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102129

Lab ID#: 0909125C-40A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910049**	**Date of Collection: 9/3/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/11/09 02:07 AM**
		Date of Extraction: 9/6/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	100
Acetaldehyde	2.5	18
Propanal	1.2	1.6
Methyl Ethyl Ketone/Butyraldehydes	1.2	4.2
Benzaldehyde	1.2	3.8
Pentanal	1.2	8.1 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	28
Acrolein	1.2	2.2 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910049.d
Lab Smp Id: 0909125C-40A
Inj Date : 11-SEP-2009 02:07
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-40A;5X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.053	3.056	-0.003	4855190		
2 FORMALDEHYDE	4.153	4.170	-0.017	6171048	51.8602	104
3 ACETALDEHYDE	5.026	5.050	-0.024	815905	9.08955	18.2
4 ACROLEIN	6.080	6.090	-0.010	92057	1.12149	2.24
6 PROPANAL	6.720	6.756	-0.036	55347	0.80808	1.62
9 BUTYRALS/MEK	9.146	9.196	-0.050	119929	2.12433	4.25
10 BENZALDEHYDE	10.620	10.670	-0.050	77112	1.91448	3.83
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.246	12.276	-0.030	191571	4.04097	8.08
16 HEXANAL	14.560	14.590	-0.030	598251	14.2451	28.5

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910049.d

Date : 11-SEP-2009 02:07

Client ID:

Instrument: hplcf.i

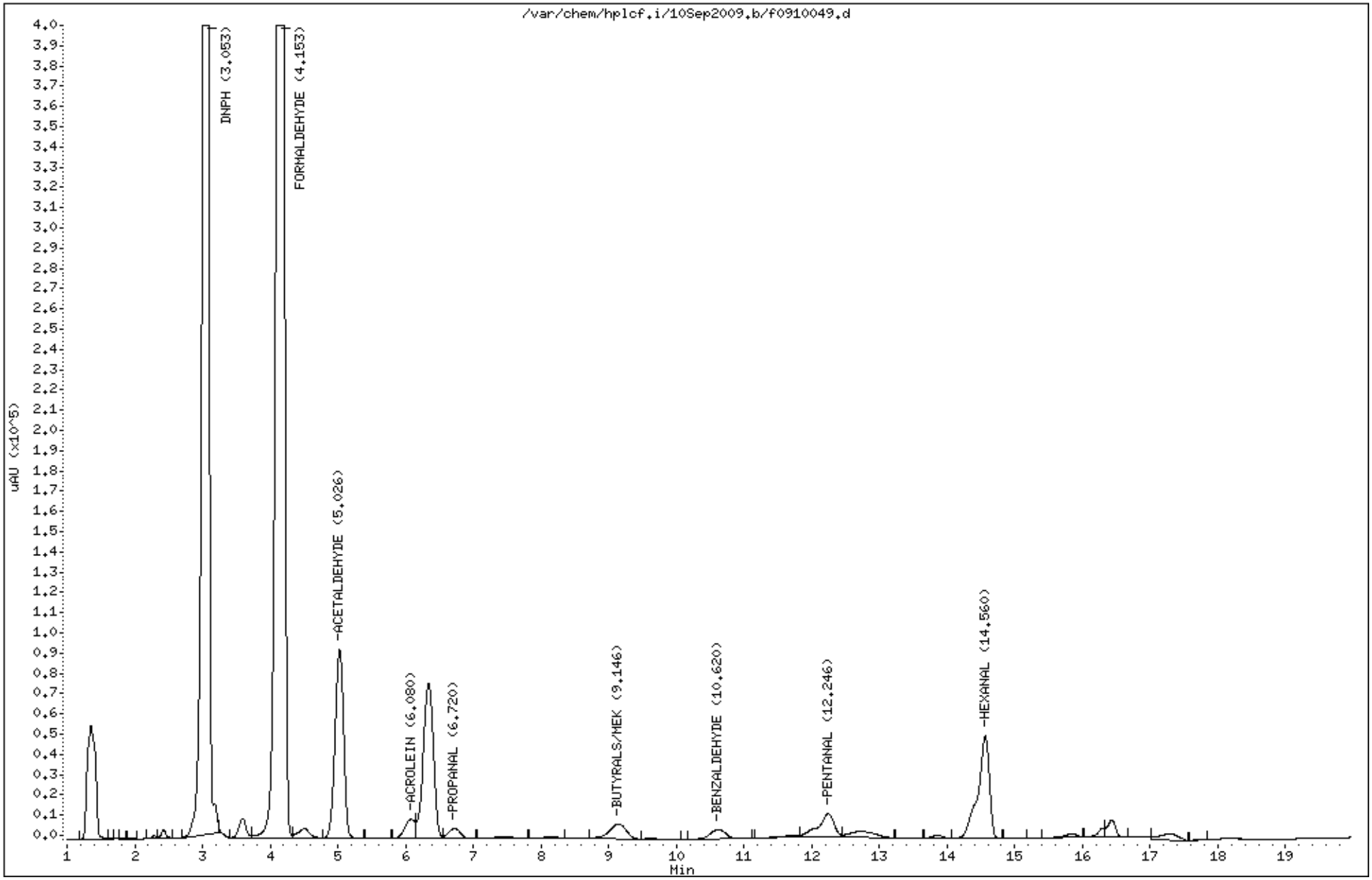
Sample Info: ;0909125C-40A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0038

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102130

Lab ID#: 0909125C-41A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	130
Acetaldehyde	2.5	26
Propanal	1.2	2.7
Methyl Ethyl Ketone/Butyraldehydes	1.2	6.4
Benzaldehyde	1.2	5.3
Pentanal	1.2	10 M
Hexanal	1.2	35
Acrolein	1.2	2.9 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102130

Lab ID#: 0909125C-41A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0909030**	**Date of Collection: NA**
Dil. Factor:	**5.00**	**Date of Analysis: 9/9/09 06:48 PM**
		Date of Extraction: 9/6/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	130
Acetaldehyde	2.5	26
Propanal	1.2	2.7
Methyl Ethyl Ketone/Butyraldehydes	1.2	6.4
Benzaldehyde	1.2	5.3
Pentanal	1.2	10 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	35
Acrolein	1.2	2.9 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/09Sep2009.b/f0909030.d
Lab Smp Id: 0909125C-41A
Inj Date : 09-SEP-2009 18:48
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-41A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/09Sep2009.b/F09D0904.m
Meth Date : 09-Sep-2009 09:07 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.063	3.135	-0.072	5077923		
2 FORMALDEHYDE	4.170	4.169	0.001	7770304	65.3000	130
3 ACETALDEHYDE	5.050	5.056	-0.006	1190615	13.2640	26.5
4 ACROLEIN	6.110	6.096	0.014	120351	1.46618	2.93
6 PROPANAL	6.757	6.762	-0.005	90998	1.32859	2.66
9 BUTYRALS/MEK	9.203	9.209	-0.006	181164	3.20901	6.42
10 BENZALDEHYDE	10.690	10.682	0.008	107034	2.65736	5.31
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.297	12.296	0.001	247651	5.22391	10.4
16 HEXANAL	14.603	14.602	0.001	728202	17.3394	34.7

Data File: /chem/hplcf.i/09Sep2009.b/f0909030.d

Date : 09-SEP-2009 18:48

Client ID:

Sample Info: :0909125C-41A:5X

Purge Volume: 5.0

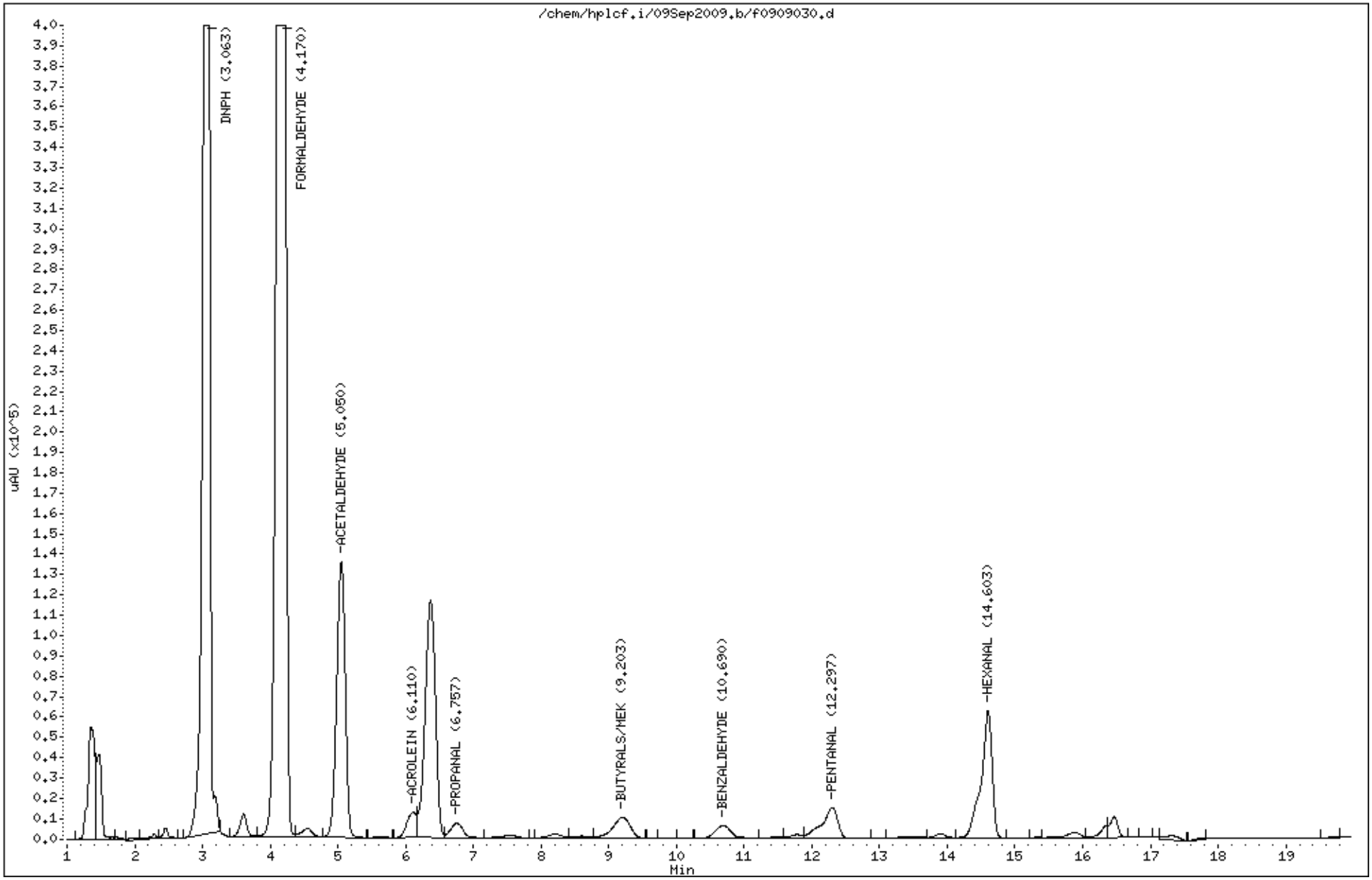
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0042



Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102131

Lab ID#: 0909125C-42A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102131

Lab ID#: 0909125C-42A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910031**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/10/09 07:51 PM**
		Date of Extraction: 9/6/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	Not Detected
Acetaldehyde	0.50	Not Detected
Propanal	0.25	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	Not Detected
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	Not Detected
Isopentanal	0.25	Not Detected
Hexanal	0.25	Not Detected
Acrolein	0.25	Not Detected

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910031.d
Lab Smp Id: 0909125C-42A
Inj Date : 10-SEP-2009 19:51
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-42A;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.057	3.056	0.001	31550621		
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910031.d

Page 1

Date : 10-SEP-2009 19:51

Client ID:

Instrument: hplcf.i

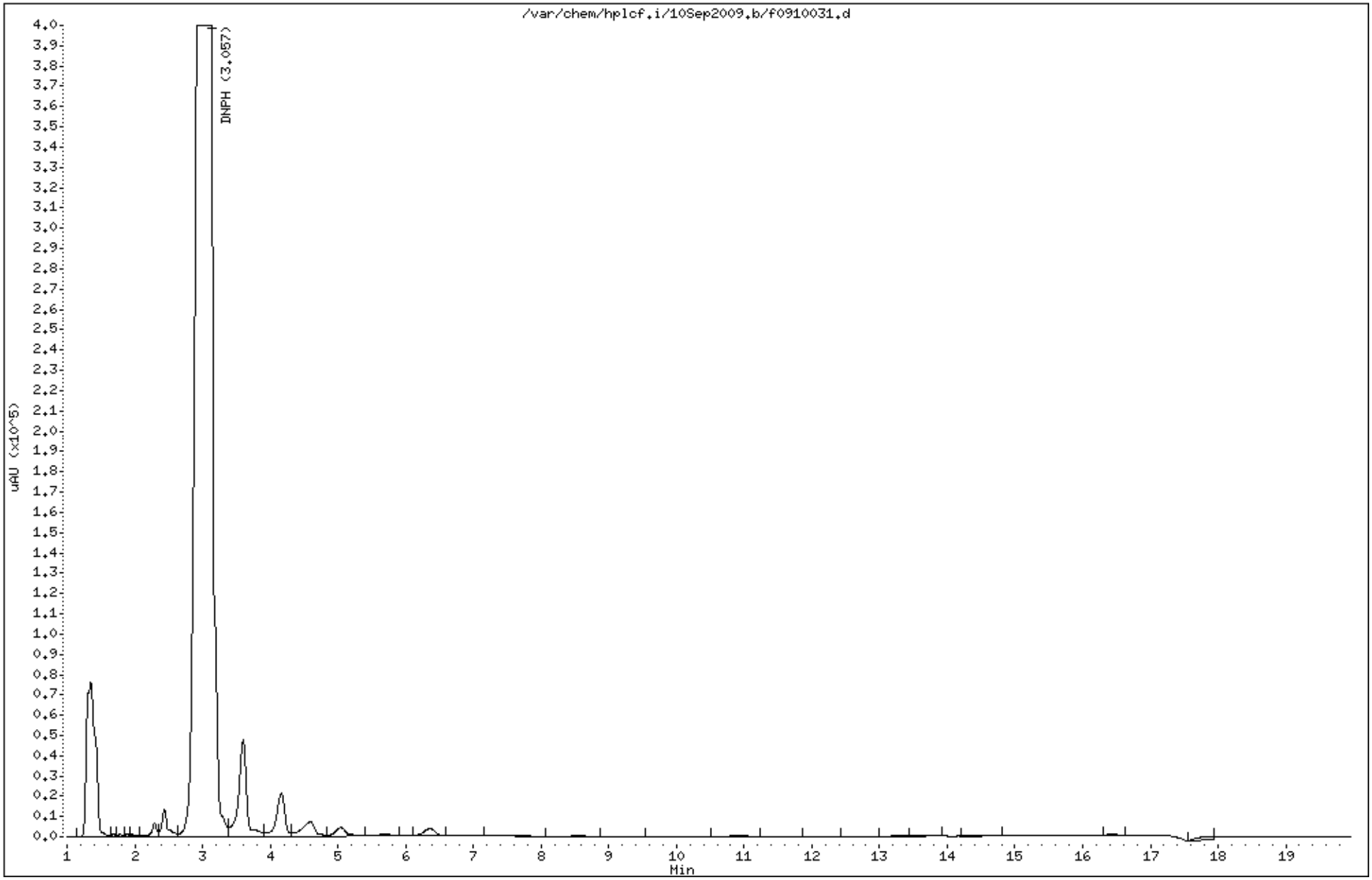
Sample Info: ;0909125C-42A;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0046

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102132

Lab ID#: 0909125C-43A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102132

Lab ID#: 0909125C-43A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910044**	**Date of Collection: 9/3/09**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/11/09 12:22 AM**	
		Date of Extraction: 9/6/09	

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	1.0	Not Detected
Acetaldehyde	0.50	Not Detected
Propanal	0.25	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	Not Detected
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	Not Detected
Isopentanal	0.25	Not Detected
Hexanal	0.25	Not Detected
Acrolein	0.25	Not Detected

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910044.d
Lab Smp Id: 0909125C-43A
Inj Date : 11-SEP-2009 00:22
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-43A;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.064	3.056	0.008	30527905		
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910044.d

Date : 11-SEP-2009 00:22

Client ID:

Instrument: hplcf.i

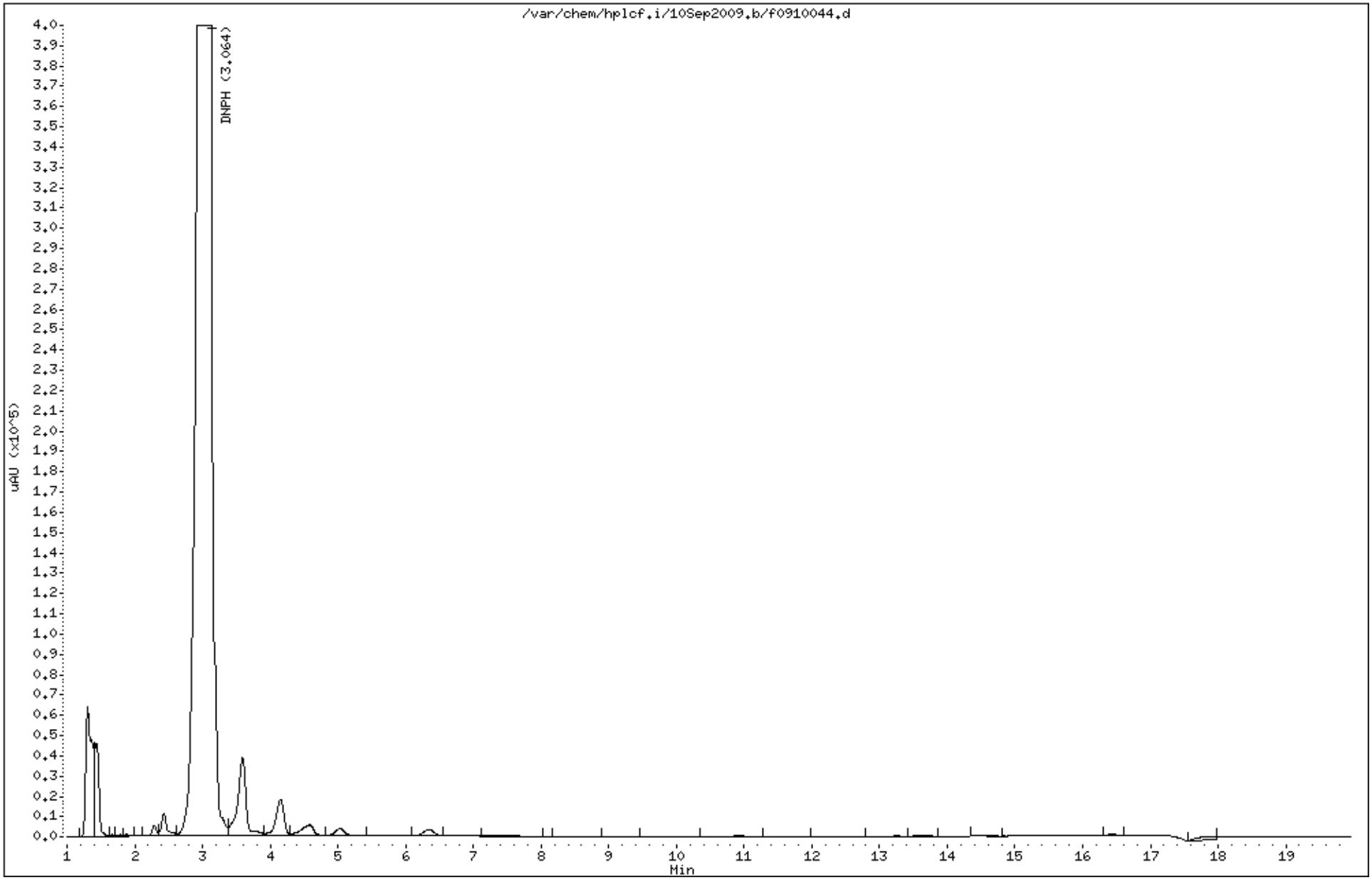
Sample Info: ;0909125C-43A;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0050

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102159

Lab ID#: 0909125C-44A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	6.0	110
Acetaldehyde	3.0	17
Propanal	1.5	2.5
Methyl Ethyl Ketone/Butyraldehydes	1.5	5.4
Benzaldehyde	1.5	4.9
Pentanal	1.5	13 M
Isopentanal	1.5	1.8 M
Hexanal	1.5	41
Acrolein	1.5	3.7 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102159

Lab ID#: 0909125C-44A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910050**	**Date of Collection: 9/3/09**	
Dil. Factor:	**6.00**	**Date of Analysis: 9/11/09 02:28 AM**	
		Date of Extraction: 9/6/09	

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	6.0	110
Acetaldehyde	3.0	17
Propanal	1.5	2.5
Methyl Ethyl Ketone/Butyraldehydes	1.5	5.4
Benzaldehyde	1.5	4.9
Pentanal	1.5	13 M
Isopentanal	1.5	1.8 M
Hexanal	1.5	41
Acrolein	1.5	3.7 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910050.d
Lab Smp Id: 0909125C-44A
Inj Date : 11-SEP-2009 02:28
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-44A;6X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 6.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.050	3.056	-0.006	4231147		
2 FORMALDEHYDE	4.156	4.170	-0.014	5496317	46.1899	111
3 ACETALDEHYDE	5.030	5.050	-0.020	629857	7.01689	16.8
4 ACROLEIN	6.076	6.090	-0.014	127639	1.55497	3.73
6 PROPANAL	6.730	6.756	-0.026	71020	1.03690	2.49
9 BUTYRALS/MEK	9.170	9.196	-0.026	127587	2.25998	5.42
10 BENZALDEHYDE	10.643	10.670	-0.027	81843	2.03193	4.88
11 ISO-PENTANAL	11.823	11.763	0.060	35466	0.74815	1.80(M)
12 PENTANAL	12.263	12.276	-0.013	265624	5.60303	13.4(M)
16 HEXANAL	14.576	14.590	-0.014	715984	17.0485	40.9

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910050.d

Page 1

Date : 11-SEP-2009 02:28

Client ID:

Instrument: hplcf.i

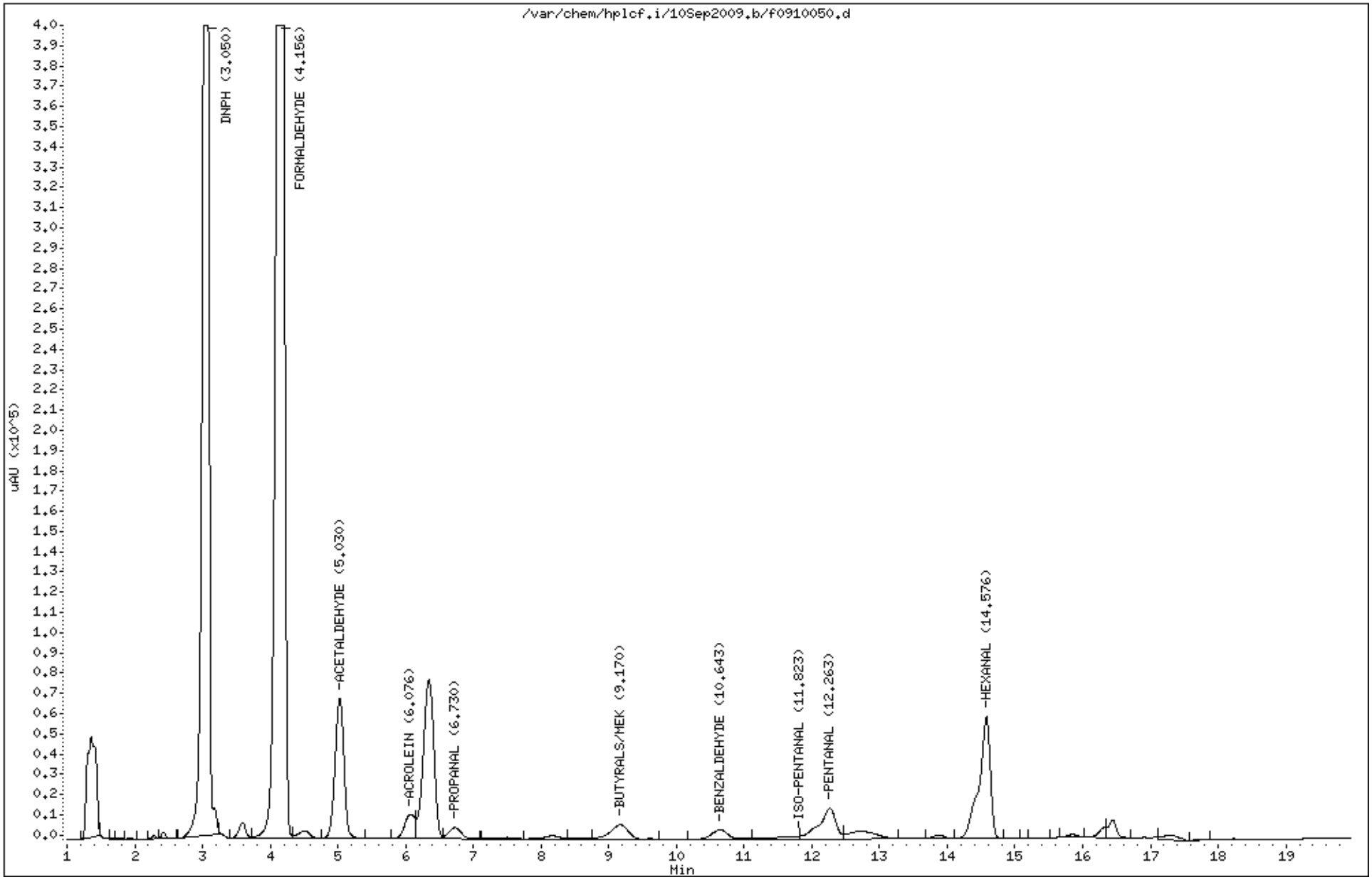
Sample Info: ;0909125C-44A;6X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0054

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102159 Lab Duplicate

Lab ID#: 0909125C-44AA

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	110
Acetaldehyde	2.5	17
Propanal	1.2	2.5
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.4
Benzaldehyde	1.2	4.9
Pentanal	1.2	13 M
Isopentanal	1.2	1.4 M
Hexanal	1.2	41
Acrolein	1.2	3.8 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102159 Lab Duplicate

Lab ID#: 0909125C-44AA

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910051**	**Date of Collection: 9/3/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/11/09 02:49 AM**
		Date of Extraction: 9/6/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	110
Acetaldehyde	2.5	17
Propanal	1.2	2.5
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.4
Benzaldehyde	1.2	4.9
Pentanal	1.2	13 M
Isopentanal	1.2	1.4 M
Hexanal	1.2	41
Acrolein	1.2	3.8 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910051.d
Lab Smp Id: 0909125C-44AA
Inj Date : 11-SEP-2009 02:49
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-44AA;5X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.054	3.056	-0.002	5085544		
2 FORMALDEHYDE	4.154	4.170	-0.016	6612219	55.5677	111
3 ACETALDEHYDE	5.034	5.050	-0.016	753324	8.39237	16.8
4 ACROLEIN	6.087	6.090	-0.003	154923	1.88736	3.77
6 PROPANAL	6.734	6.756	-0.022	84709	1.23677	2.47
9 BUTYRALS/MEK	9.194	9.196	-0.002	152621	2.70342	5.41
10 BENZALDEHYDE	10.661	10.670	-0.009	97980	2.43257	4.86
11 ISO-PENTANAL	11.820	11.763	0.057	33463	0.70589	1.41(M)
12 PENTANAL	12.274	12.276	-0.002	309693	6.53263	13.1(M)
16 HEXANAL	14.581	14.590	-0.009	858712	20.4471	40.9

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910051.d

Page 1

Date : 11-SEP-2009 02:49

Client ID:

Instrument: hplcf.i

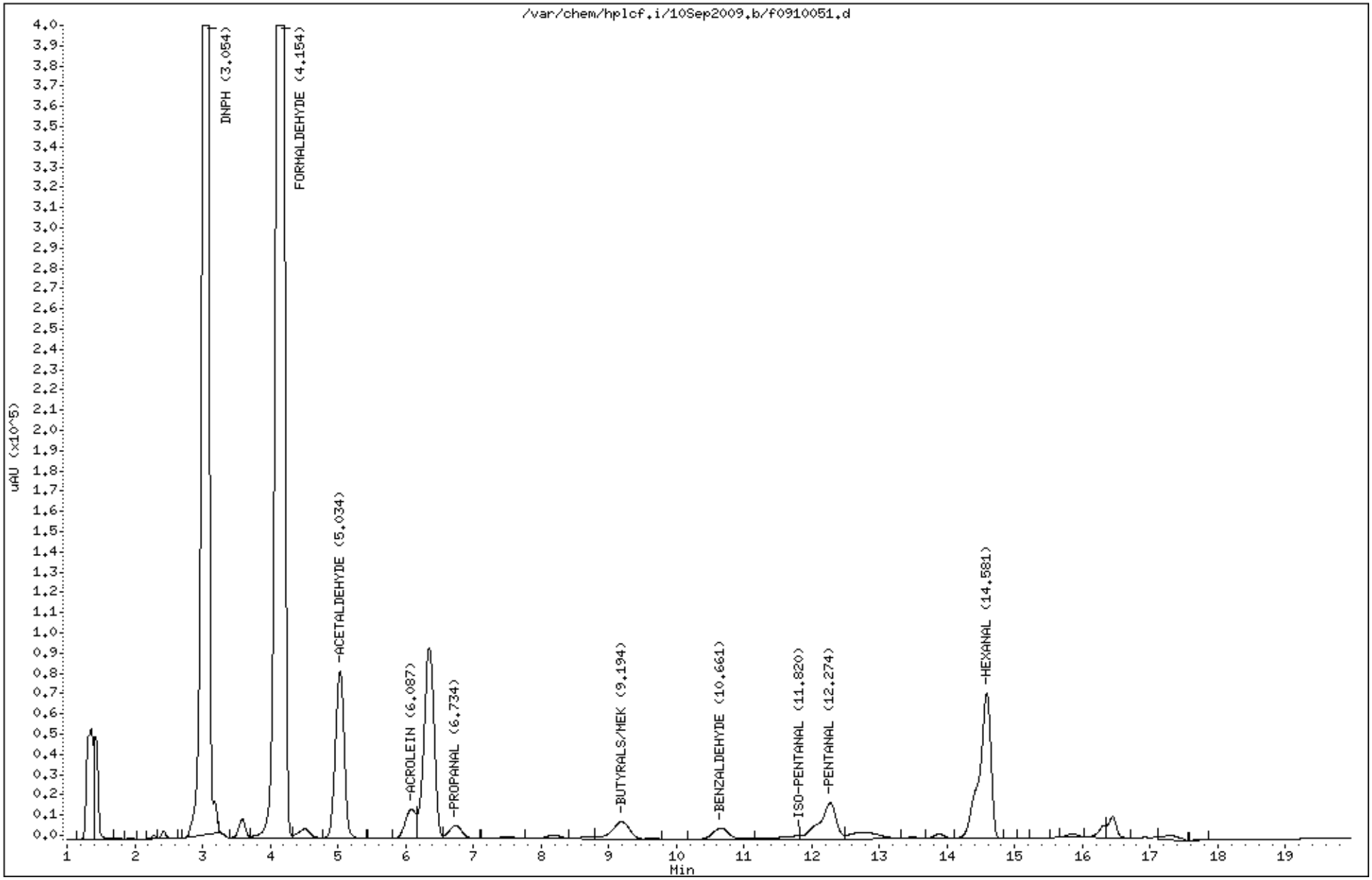
Sample Info: ;0909125C-44AA;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0058

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102160

Lab ID#: 0909125C-45A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	120
Acetaldehyde	2.5	17
Propanal	1.2	2.6
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.6
Benzaldehyde	1.2	4.9
Pentanal	1.2	14 M
Isopentanal	1.2	1.5 M
Hexanal	1.2	43
Acrolein	1.2	3.9 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102160

Lab ID#: 0909125C-45A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910052**	**Date of Collection: 9/3/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/11/09 03:10 AM**
		Date of Extraction: 9/6/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	120
Acetaldehyde	2.5	17
Propanal	1.2	2.6
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.6
Benzaldehyde	1.2	4.9
Pentanal	1.2	14 M
Isopentanal	1.2	1.5 M
Hexanal	1.2	43
Acrolein	1.2	3.9 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910052.d
Lab Smp Id: 0909125C-45A
Inj Date : 11-SEP-2009 03:10
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-45A;5X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.055	3.056	-0.001	6120334		
2 FORMALDEHYDE	4.162	4.170	-0.008	6821433	57.3259	115
3 ACETALDEHYDE	5.035	5.050	-0.015	774617	8.62958	17.2
4 ACROLEIN	6.082	6.090	-0.008	159232	1.93986	3.88
6 PROPANAL	6.736	6.756	-0.020	87869	1.28290	2.56
9 BUTYRALS/MEK	9.175	9.196	-0.021	156561	2.77321	5.55
10 BENZALDEHYDE	10.642	10.670	-0.028	99421	2.46835	4.94
11 ISO-PENTANAL	11.796	11.763	0.033	35834	0.75592	1.51(M)
12 PENTANAL	12.262	12.276	-0.014	326510	6.88736	13.8(M)
16 HEXANAL	14.575	14.590	-0.015	897472	21.3700	42.7

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910052.d

Date : 11-SEP-2009 03:10

Client ID:

Instrument: hplcf.i

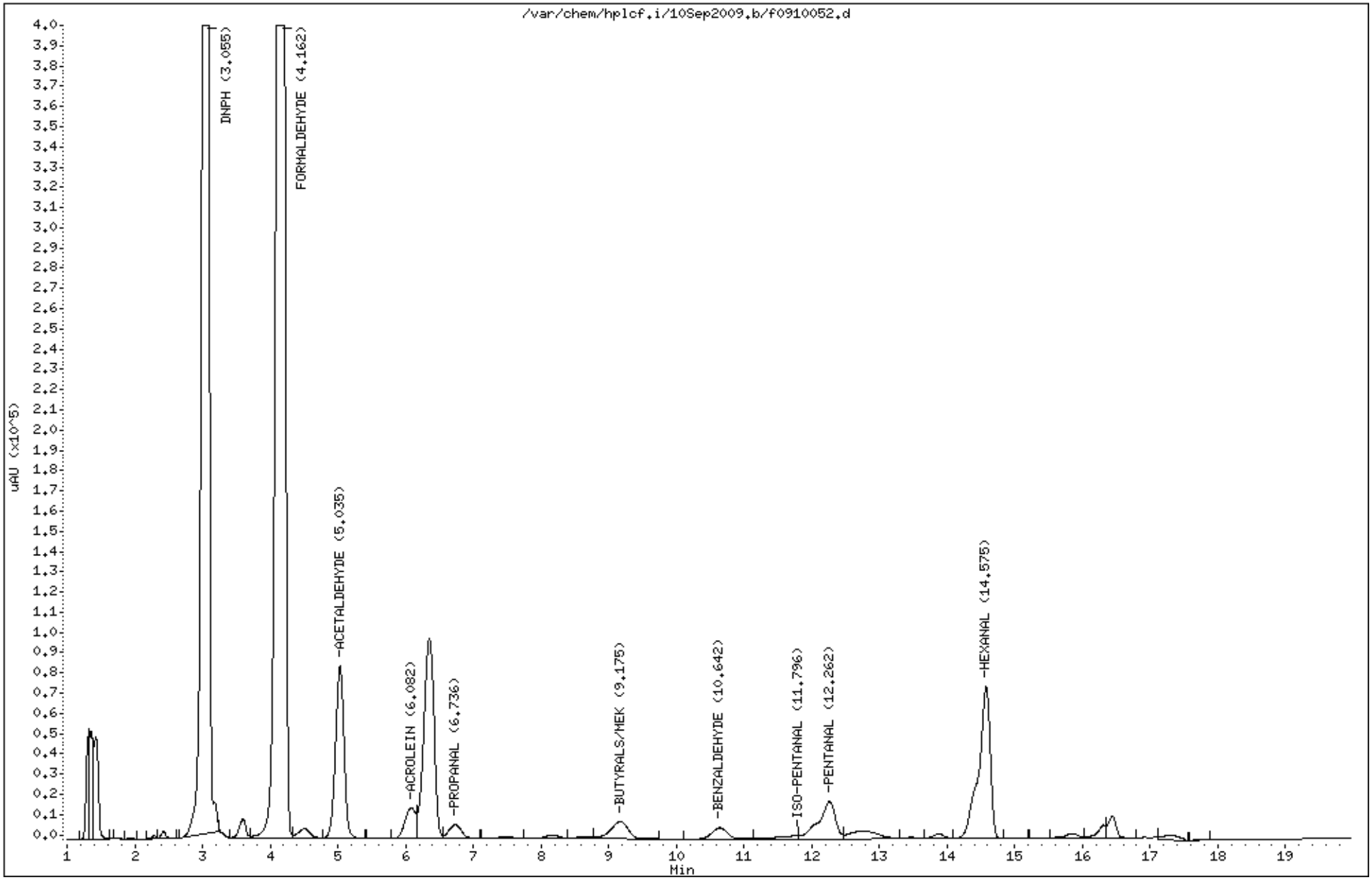
Sample Info: ;0909125C-45A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0062

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102161

Lab ID#: 0909125C-46A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	3.8
Acetaldehyde	0.50	1.2
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.42
Pentanal	0.25	0.31 M
Hexanal	0.25	0.41

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102161

Lab ID#: 0909125C-46A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910045**	**Date of Collection: 9/3/09**
Dil. Factor:	**1.00**	**Date of Analysis: 9/11/09 12:43 AM**
		Date of Extraction: 9/6/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	1.0	3.8
Acetaldehyde	0.50	1.2
Propanal	0.25	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.42
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	0.31 M
Isopentanal	0.25	Not Detected
Hexanal	0.25	0.41
Acrolein	0.25	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910045.d
Lab Smp Id: 0909125C-46A
Inj Date : 11-SEP-2009 00:43
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-46A;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.062	3.056	0.006	25435679		
2 FORMALDEHYDE	4.162	4.170	-0.008	1128762	9.48588	3.79
3 ACETALDEHYDE	5.042	5.050	-0.008	280078	3.12019	1.25
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	9.181	9.196	-0.015	59687	1.05725	0.423
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.281	12.276	0.005	36958	0.77959	0.312
16 HEXANAL	14.588	14.590	-0.002	42996	1.02379	0.410

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910045.d

Page 1

Date : 11-SEP-2009 00:43

Client ID:

Instrument: hplcf.i

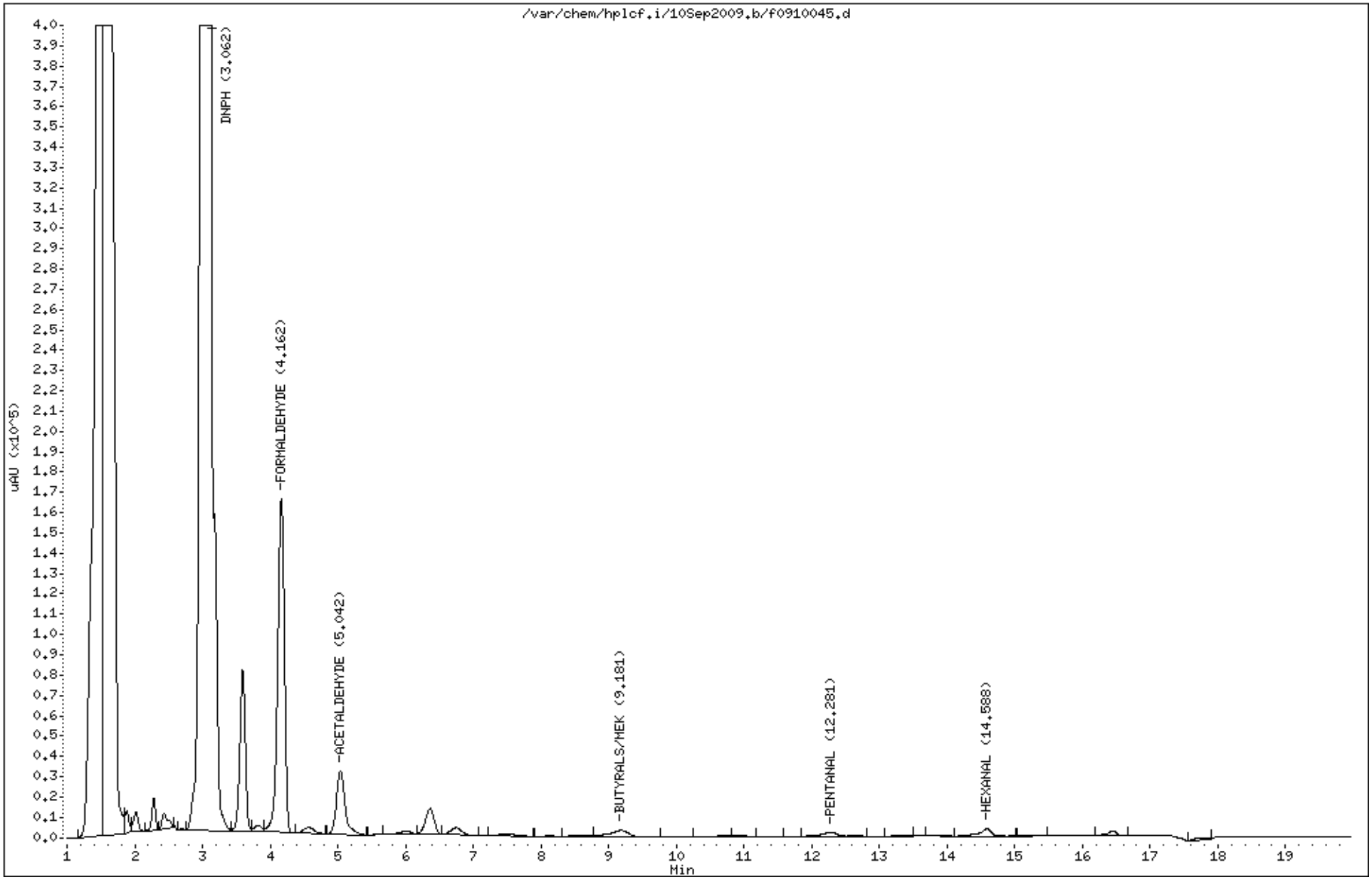
Sample Info: ;0909125C-46A;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0066

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102161 Lab Duplicate

Lab ID#: 0909125C-46AA

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	3.8
Acetaldehyde	0.50	1.3
Propanal	0.25	0.25
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.38
Pentanal	0.25	0.33 M
Hexanal	0.25	0.42

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102161 Lab Duplicate

Lab ID#: 0909125C-46AA

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910046**	**Date of Collection: 9/3/09**
Dil. Factor:	**1.00**	**Date of Analysis: 9/11/09 01:04 AM**
		Date of Extraction: 9/6/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	3.8
Acetaldehyde	0.50	1.3
Propanal	0.25	0.25
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.38
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	0.33 M
Isopentanal	0.25	Not Detected
Hexanal	0.25	0.42
Acrolein	0.25	Not Detected

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910046.d
Lab Smp Id: 0909125C-46AA
Inj Date : 11-SEP-2009 01:04
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-46AA;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.054	3.056	-0.002	25579917		
2 FORMALDEHYDE	4.161	4.170	-0.009	1135787	9.54491	3.82
3 ACETALDEHYDE	5.041	5.050	-0.009	283787	3.16151	1.26
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	6.747	6.756	-0.009	43507	0.63521	0.254
9 BUTYRALS/MEK	9.181	9.196	-0.015	54335	0.96245	0.385
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.281	12.276	0.005	39394	0.83097	0.332
16 HEXANAL	14.588	14.590	-0.002	43837	1.04382	0.418

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910046.d

Date : 11-SEP-2009 01:04

Client ID:

Instrument: hplcf.i

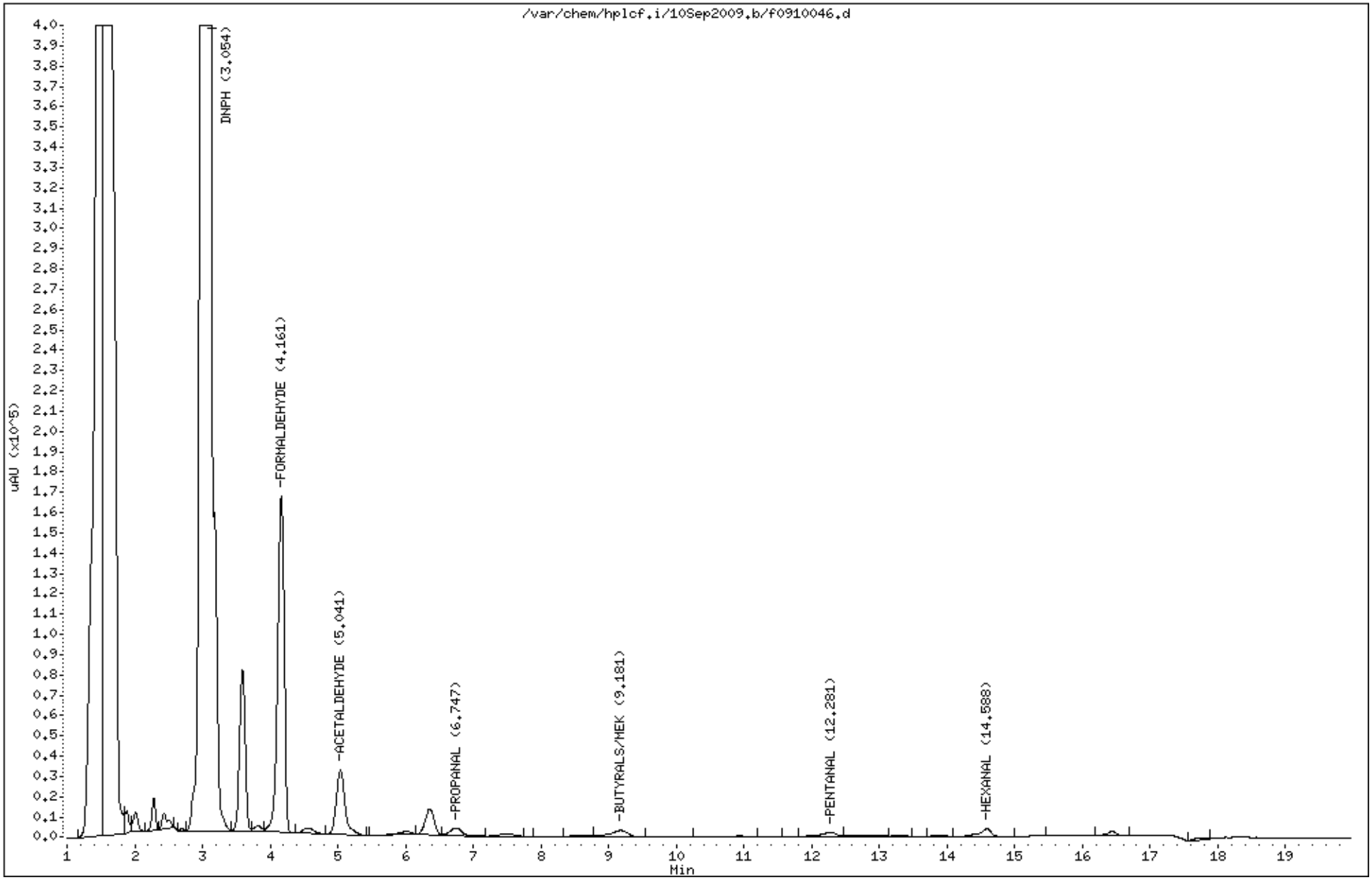
Sample Info: ;0909125C-46AA;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0070

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102162

Lab ID#: 0909125C-47A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	110
Acetaldehyde	2.5	18
Propanal	1.2	2.6
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.8
Benzaldehyde	1.2	5.0
Pentanal	1.2	14 M
Isopentanal	1.2	1.6 M
Hexanal	1.2	41
Acrolein	1.2	3.9 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102162

Lab ID#: 0909125C-47A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910053**	**Date of Collection: 9/3/09**	
Dil. Factor:	**5.00**	**Date of Analysis: 9/11/09 03:30 AM**	
		Date of Extraction: 9/6/09	

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	110
Acetaldehyde	2.5	18
Propanal	1.2	2.6
Methyl Ethyl Ketone/Butyraldehydes	1.2	5.8
Benzaldehyde	1.2	5.0
Pentanal	1.2	14 M
Isopentanal	1.2	1.6 M
Hexanal	1.2	41
Acrolein	1.2	3.9 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910053.d
Lab Smp Id: 0909125C-47A
Inj Date : 11-SEP-2009 03:30
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-47A;5X
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.058	3.056	0.002	5535994		
2 FORMALDEHYDE	4.165	4.170	-0.005	6557308	55.1062	110
3 ACETALDEHYDE	5.038	5.050	-0.012	830779	9.25525	18.5
4 ACROLEIN	6.091	6.090	0.001	161227	1.96416	3.93
6 PROPANAL	6.745	6.756	-0.011	89542	1.30733	2.61
9 BUTYRALS/MEK	9.185	9.196	-0.011	162414	2.87688	5.75
10 BENZALDEHYDE	10.658	10.670	-0.012	101164	2.51162	5.02
11 ISO-PENTANAL	11.832	11.763	0.069	38508	0.81232	1.62(M)
12 PENTANAL	12.278	12.276	0.002	320948	6.77004	13.5(M)
16 HEXANAL	14.585	14.590	-0.005	860476	20.4891	41.0

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910053.d

Page 1

Date : 11-SEP-2009 03:30

Client ID:

Instrument: hplcf.i

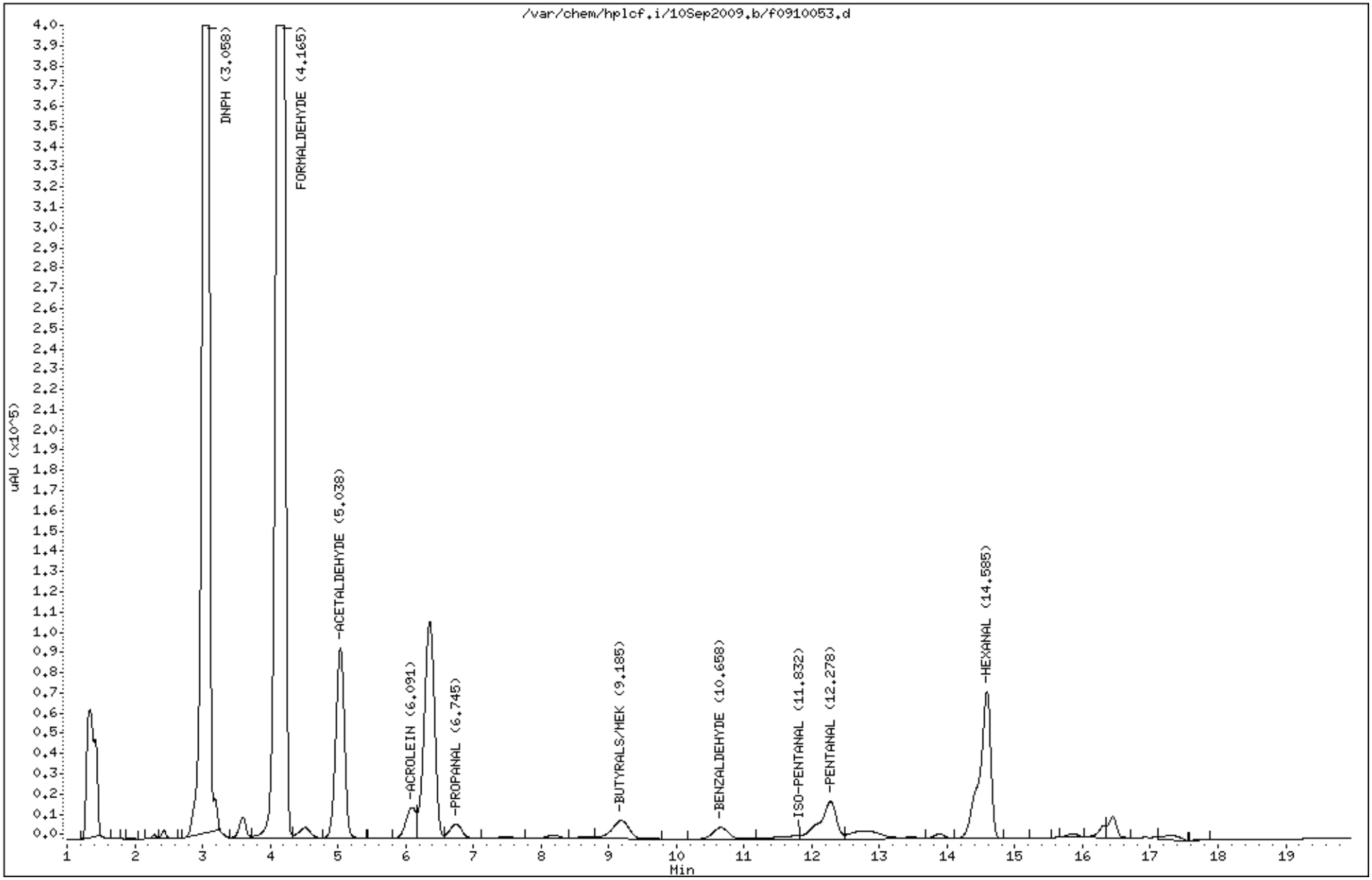
Sample Info: ;0909125C-47A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



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Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102163

Lab ID#: 0909125C-48A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	110
Acetaldehyde	2.5	19
Propanal	1.2	2.9
Methyl Ethyl Ketone/Butyraldehydes	1.2	6.0
Benzaldehyde	1.2	5.1
Pentanal	1.2	13 M
Hexanal	1.2	41
Acrolein	1.2	4.0 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102163

Lab ID#: 0909125C-48A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0910047**	**Date of Collection: 9/3/09**	
Dil. Factor:	**5.00**	**Date of Analysis: 9/11/09 01:25 AM**	
		Date of Extraction: 9/6/09	

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	110
Acetaldehyde	2.5	19
Propanal	1.2	2.9
Methyl Ethyl Ketone/Butyraldehydes	1.2	6.0
Benzaldehyde	1.2	5.1
Pentanal	1.2	13 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	41
Acrolein	1.2	4.0 M

M = Reported value may be biased due to apparent matrix interferences.

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /var/chem/hplcf.i/10Sep2009.b/f0910047.d
Lab Smp Id: 0909125C-48A
Inj Date : 11-SEP-2009 01:25
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909125C-48A;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 5.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.058	3.056	0.002	6600396		
2 FORMALDEHYDE	4.164	4.170	-0.006	6772003	56.9105	114
3 ACETALDEHYDE	5.038	5.050	-0.012	843795	9.40025	18.8
4 ACROLEIN	6.091	6.090	0.001	162208	1.97611	3.95
6 PROPANAL	6.744	6.756	-0.012	100251	1.46368	2.93
9 BUTYRALS/MEK	9.184	9.196	-0.012	168755	2.98920	5.98
10 BENZALDEHYDE	10.651	10.670	-0.019	102733	2.55058	5.10
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.271	12.276	-0.005	308372	6.50475	13.0
16 HEXANAL	14.584	14.590	-0.006	868240	20.6739	41.3

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910047.d

Date : 11-SEP-2009 01:25

Client ID:

Instrument: hplcf.i

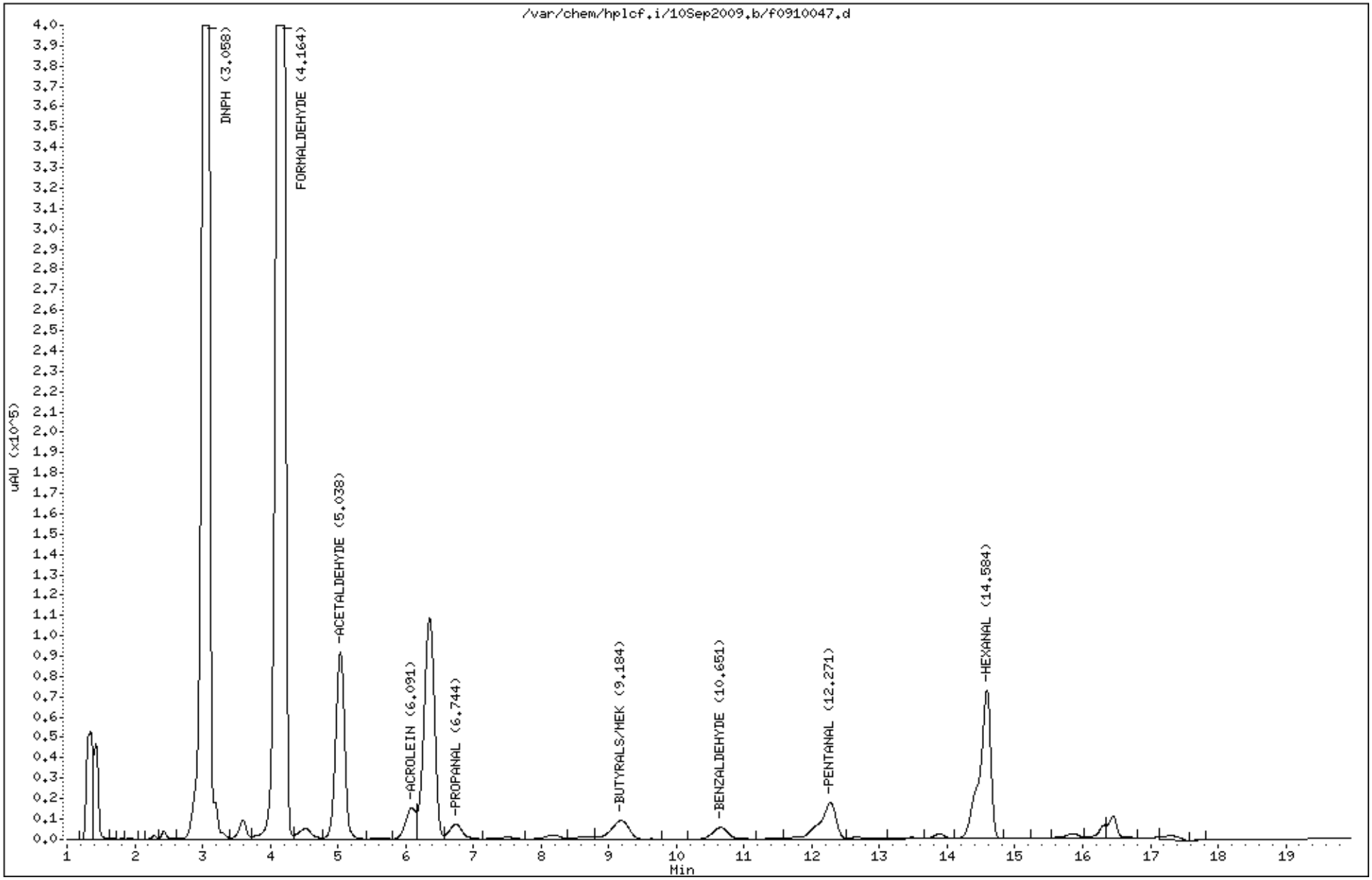
Sample Info: ;0909125C-48A;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0078

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 102164

Lab ID#: 0909125C-49A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 102164

Lab ID#: 0909125C-49A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0906040**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/6/09 11:08 PM**
		Date of Extraction: 9/6/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	Not Detected
Acetaldehyde	0.50	Not Detected
Propanal	0.25	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	Not Detected
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	Not Detected
Isopentanal	0.25	Not Detected
Hexanal	0.25	Not Detected
Acrolein	0.25	Not Detected

Container Type: Radiello 165 (Aldehydes)

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/06Sep2009.b/f0906040.d
Lab Smp Id: 0909125C-49A
Inj Date : 06-SEP-2009 23:08
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;0909125C-49A;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:37 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.059	3.058	0.001	30843321		
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

Data File: /var/chem/hplcf.i/06Sep2009.b/f0906040.d

Date : 06-SEP-2009 23:08

Client ID:

Instrument: hplcf.i

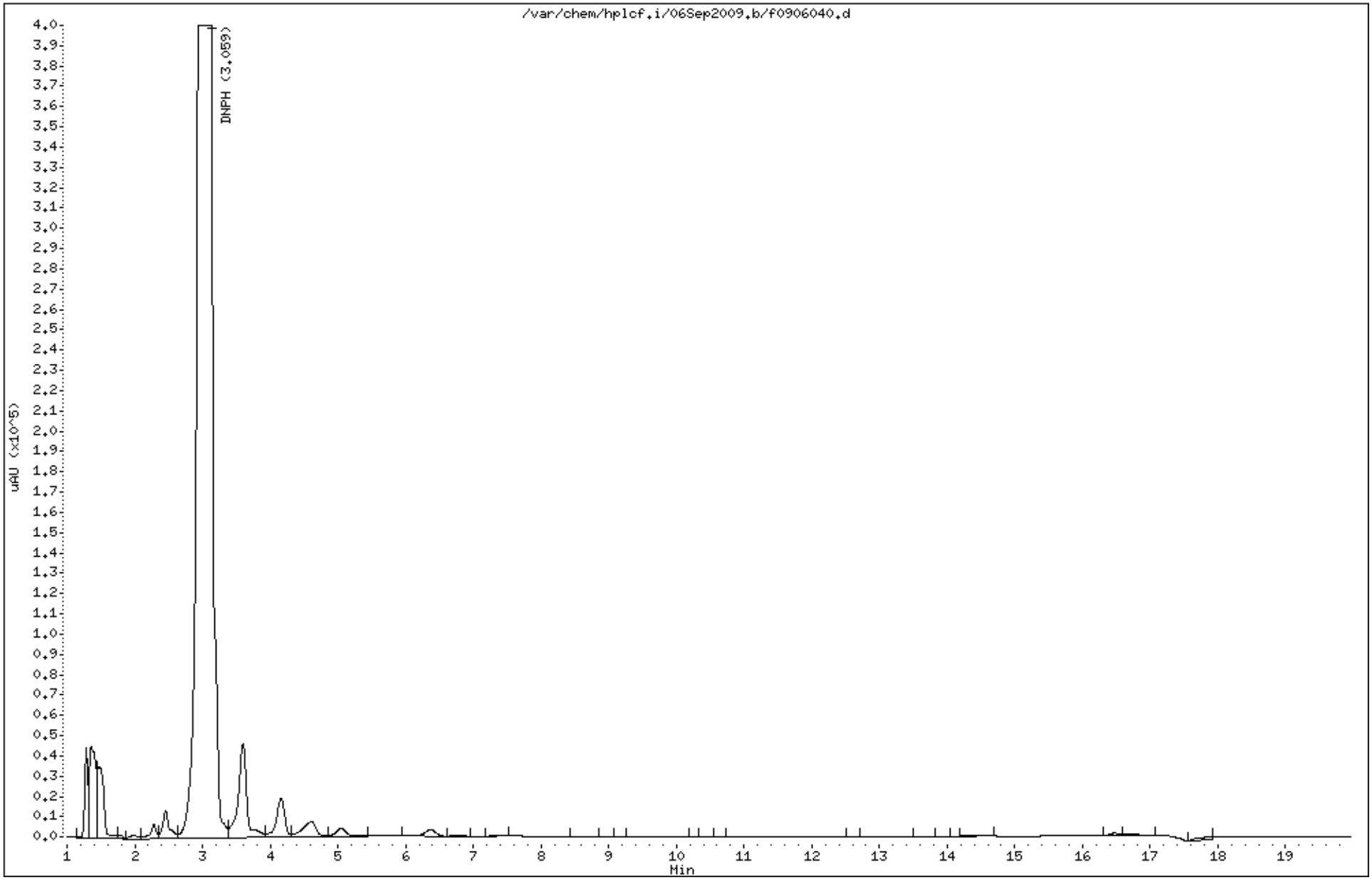
Sample Info: ;0909125C-49A;

Purge Volume: 5.0

Operator: KJJ

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



QC Results and Raw Data

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0909125C-50A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0906007**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/6/09 11:39 AM**
		Date of Extraction: 9/6/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	Not Detected
Acetaldehyde	0.50	Not Detected
Propanal	0.25	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	Not Detected
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	Not Detected
Isopentanal	0.25	Not Detected
Hexanal	0.25	Not Detected
Acrolein	0.25	Not Detected

Container Type: NA - Not Applicable

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/06Sep2009.b/f0906007.d
Lab Smp Id: 0909125C-BLK Client Smp ID: Lab Blank
Inj Date : 06-SEP-2009 11:39
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;0909125C-BLK;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:37 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

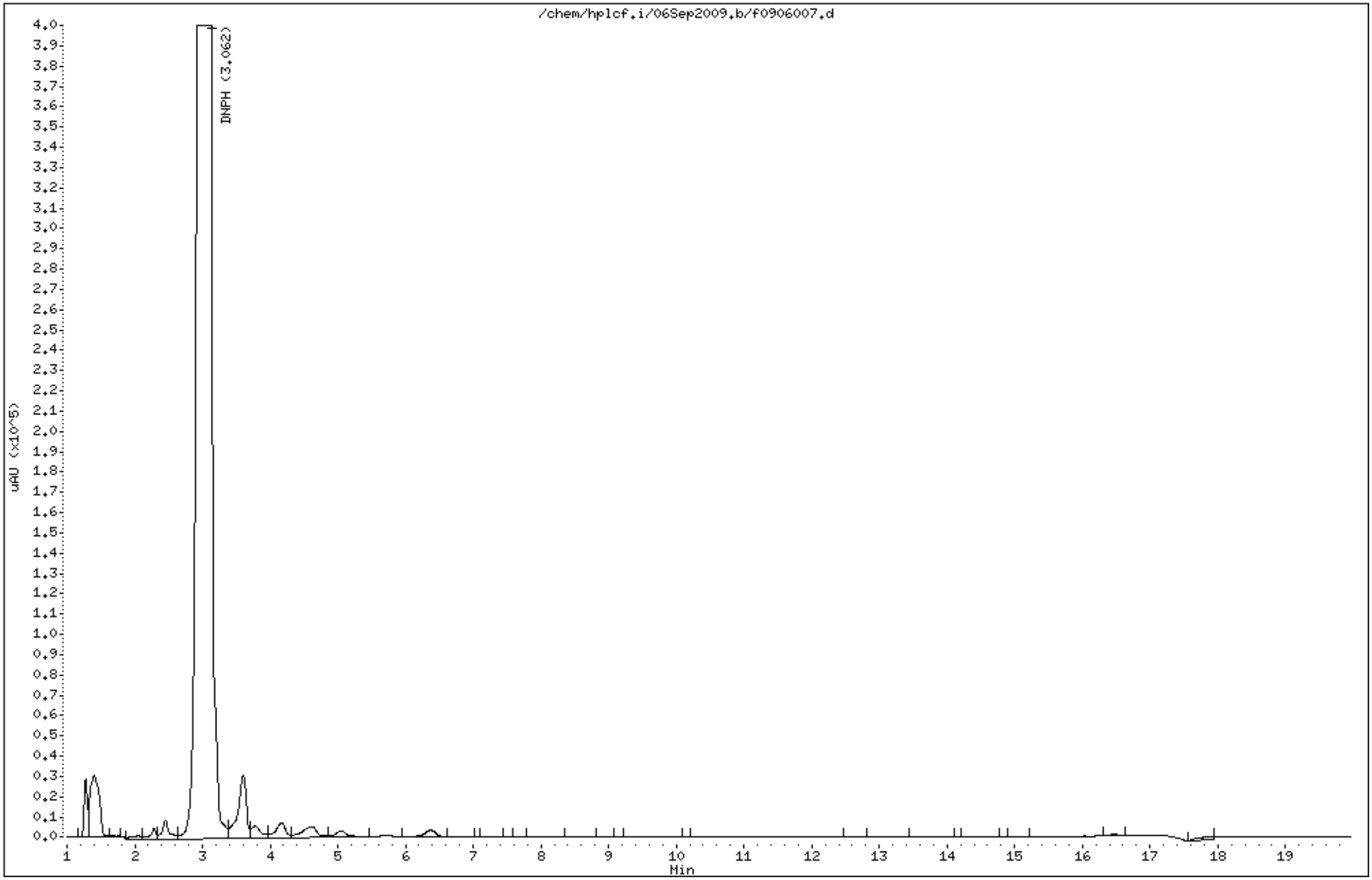
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.062	3.058	0.004	31874436		
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

9800

Data File: /chem/hplcf.i/06Sep2009.b/f0906007.d
Date : 06-SEP-2009 11:39
Client ID: Lab Blank
Sample Info: ;0909125C-BLK;
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: KJJ
Column diameter: 2.00



SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: f0910051.d & f0910050.d

Lab Sample ID: 44A & 44AA

Dilution: 5.00 & 6.00

Client Sample ID: &

Date Analyzed: 9/11/09 & 9/11/09

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-07-0	Acetaldehyde	16.8		16.8		0	
107-02-8	Acrolein	3.73		3.77		1.1	Y
100-52-7	Benzaldehyde	4.88		4.86		0.41	Y
50-00-0	Formaldehyde	111		111		0	
66-25-1	Hexanal	40.9		40.9		0	
590-86-3	Isopentanal	1.8		1.41		24	Y
9999-9999-007	Methyl Ethyl Ketone/Butyraldehydes	5.42		5.41		0.18	Y
110-62-3	Pentanal	13.4		13.1		2.3	
123-38-6	Propanal	2.49		2.47		0.81	Y

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: f0910046.d & f0910045.d

Lab Sample ID: 46A & 46AA

Dilution: 1.00 & 1.00

Client Sample ID: &

Date Analyzed: 9/11/09 & 9/11/09

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-07-0	Acetaldehyde	1.25		1.26		0.80	Y
107-02-8	Acrolein	ND	U	ND	U	0	
100-52-7	Benzaldehyde	ND	U	ND	U	0	
50-00-0	Formaldehyde	3.79		3.82		0.79	Y
66-25-1	Hexanal	0.41		0.418		1.9	Y
590-86-3	Isopentanal	ND	U	ND	U	0	
9999-9999-007	Methyl Ethyl Ketone/Butyraldehydes	0.423		0.385		9.4	Y
110-62-3	Pentanal	0.312		0.332		6.2	Y
123-38-6	Propanal	ND	U	0.254		-->200<--	Y

Note: The results appearing in the Amount columns are the raw, unrounded numbers acquired from the instrument.

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-SEP-2009 10:35
End Cal Date : 04-SEP-2009 20:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplcf.i/04Sep2009.b/F09D0904.m
Cal Date : 08-Sep-2009 12:23 lzhang
Curve Type : Average

Calibration File Names:
Level 1: /chem/hplcf.i/04Sep2009.b/f0904008.d
Level 2: /chem/hplcf.i/04Sep2009.b/f0904011.d
Level 3: /chem/hplcf.i/04Sep2009.b/f0904014.d
Level 4: /chem/hplcf.i/04Sep2009.b/f0904017.d
Level 5: /chem/hplcf.i/04Sep2009.b/f0904020.d
Level 6: /chem/hplcf.i/04Sep2009.b/f0904023.d
Level 7: /chem/hplcf.i/04Sep2009.b/f0904026.d
Level 8: /chem/hplcf.i/04Sep2009.b/f0904029.d
Level 9: /chem/hplcf.i/04Sep2009.b/f0904032.d
Level 10: /chem/hplcf.i/04Sep2009.b/f0904035.d

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	0.50000 Level 4	1.000 Level 5	4.000 Level 6	___ RRF	% RSD
	10.000 Level 7	20.000 Level 8	50.000 Level 9	75.000 Level 10				
1 DNPH	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
2 FORMALDEHYDE	120620	118907	116485	118109	115869	108348		
	121875	122148	121149	126430			118994	4.051
3 ACETALDEHYDE	+++++	91617	87619	89101	87061	85567		
	90920	91212	90381	94389			89763	3.043
4 ACROLEIN	+++++	+++++	78813	80786	79818	79086		
	83598	83987	83400	87187			82084	3.428
5 ACETONE	+++++	+++++	63208	64511	64158	63166		
	66446	66613	66038	68858			65375	2.891
6 PROPANAL	+++++	+++++	66735	67651	66843	65632		
	69623	69798	69266	72390			68492	3.087

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-SEP-2009 10:35
End Cal Date : 04-SEP-2009 20:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplcf.i/04Sep2009.b/F09D0904.m
Cal Date : 08-Sep-2009 12:23 lzhang
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	0.50000 Level 4	1.000 Level 5	4.000 Level 6	___ RRF	% RSD
	10.000 Level 7	20.000 Level 8	50.000 Level 9	75.000 Level 10				
7 CROTONAL	+++++	+++++	57432	58006	57665	56934		
	60156	60320	59880	62631			59128	3.189
8 METHACROLEIN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
9 BUTYRALS/MEK	+++++	+++++	54291	55807	54978	54249		
	57390	57734	57254	59937			56455	3.521
10 BENZALDEHYDE	+++++	+++++	39889	40120	39050	38482		
	40695	40885	40609	42496			40278	2.969
11 ISO-PENTANAL	+++++	+++++	44397	45786	46058	46103		
	48680	48930	48545	50747			47406	4.418
12 PENTANAL	+++++	+++++	46007	46754	46144	45588		
	48175	48477	47963	50151			47407	3.200
13 MIBK	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
14 O-TOLUALDEHYDE	+++++	+++++	36324	35879	35360	35079		
	37071	37063	36854	38814			36555	3.245
15 M,P-TOLUALDEHYDE	+++++	36088	33116	33086	31990	31493		
	33372	33726	33315	34704			33432	3.954
16 HEXANAL	+++++	+++++	42877	41959	40999	39943		
	42136	42315	41945	43801			41997	2.715

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-SEP-2009 10:35
End Cal Date : 04-SEP-2009 20:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /var/chem/hplcf.i/04Sep2009.b/F09D0904.m
Cal Date : 08-Sep-2009 12:23 lzhang
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	0.50000 Level 4	1.000 Level 5	4.000 Level 6	___ RRF	% RSD
	10.000 Level 7	20.000 Level 8	50.000 Level 9	75.000 Level 10				
17 2,5-Dimethylbenzaldehyde	+++++	+++++	31540	30039	29725	28765		
	30193	30315	30100	31487			30270	3.018
18 HEPTALDEHYDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

Calibration History

Method : /var/chem/hplcf.i/04Sep2009.b/F09D0904.m
Start Cal Date: 04-SEP-2009 10:35
End Cal Date : 04-SEP-2009 20:41

Initial Calibration

Injection Date	Sublist	Calibration File
Cal Level: 1 , Cal Amount: 0.05000		
04-SEP-2009 11:17	form	/chem/hplcf.i/04Sep2009.b/f0904008.d
04-SEP-2009 10:56	form	/chem/hplcf.i/04Sep2009.b/f0904007.d
04-SEP-2009 10:35	form	/chem/hplcf.i/04Sep2009.b/f0904006.d

Injection Date	Sublist	Calibration File
Cal Level: 2 , Cal Amount: 0.10000		
04-SEP-2009 12:20	foracetmp	/chem/hplcf.i/04Sep2009.b/f0904011.d
04-SEP-2009 11:59	foracetmp	/chem/hplcf.i/04Sep2009.b/f0904010.d
04-SEP-2009 11:38	foracetmp	/chem/hplcf.i/04Sep2009.b/f0904009.d

Injection Date	Sublist	Calibration File
Cal Level: 3 , Cal Amount: 0.25000		
04-SEP-2009 13:23	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904014.d
04-SEP-2009 13:02	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904013.d
04-SEP-2009 12:41	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904012.d

Injection Date	Sublist	Calibration File
Cal Level: 4 , Cal Amount: 0.50000		
04-SEP-2009 14:25	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904017.d
04-SEP-2009 14:04	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904016.d
04-SEP-2009 13:44	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904015.d

Injection Date	Sublist	Calibration File
Cal Level: 5 , Cal Amount: 1.00000		
04-SEP-2009 15:28	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904020.d
04-SEP-2009 15:07	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904019.d
04-SEP-2009 14:46	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904018.d

Injection Date	Sublist	Calibration File
Cal Level: 6 , Cal Amount: 4.00000		
04-SEP-2009 16:31	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904023.d
04-SEP-2009 16:10	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904022.d
04-SEP-2009 15:49	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904021.d

Cal Level: 7 , Cal Amount: 10.00000		
04-SEP-2009 17:33	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904026.d
04-SEP-2009 17:12	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904025.d
04-SEP-2009 16:52	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904024.d

Cal Level: 8 , Cal Amount: 20.00000		
04-SEP-2009 18:36	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904029.d
04-SEP-2009 18:15	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904028.d
04-SEP-2009 17:54	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904027.d

Cal Level: 9 , Cal Amount: 50.00000		
04-SEP-2009 19:39	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904032.d
04-SEP-2009 19:18	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904031.d
04-SEP-2009 18:57	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904030.d

Cal Level: 10, Cal Amount: 75.00000		
04-SEP-2009 20:41	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904035.d
04-SEP-2009 20:20	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904034.d
04-SEP-2009 20:00	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904033.d

Continuing Calibration
Ccal Level Mode: GLOBAL LEVEL 6

Ccal Level: 6 , Ccal Amount: 4.00		
04-SEP-2009 16:31	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904023.d

Ccal Level: 6 , Ccal Amount: 4.00		
04-SEP-2009 16:10	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904022.d

Ccal Level: 6 , Ccal Amount: 4.00		
04-SEP-2009 15:49	TO-11+Acr+17	/chem/hplcf.i/04Sep2009.b/f0904021.d

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-SEP-2009 10:35
End Cal Date : 04-SEP-2009 20:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Cal Date : 06-Sep-2009 10:12 kjohnsto
Curve Type : Average

Calibration File Names:
Level 1: /chem/hplcf.i/04Sep2009.b/f0904008.d
Level 2: /chem/hplcf.i/04Sep2009.b/f0904011.d
Level 3: /chem/hplcf.i/04Sep2009.b/f0904014.d
Level 4: /chem/hplcf.i/04Sep2009.b/f0904017.d
Level 5: /chem/hplcf.i/04Sep2009.b/f0904020.d
Level 6: /chem/hplcf.i/04Sep2009.b/f0904023.d
Level 7: /chem/hplcf.i/04Sep2009.b/f0904026.d
Level 8: /chem/hplcf.i/04Sep2009.b/f0904029.d
Level 9: /chem/hplcf.i/04Sep2009.b/f0904032.d
Level 10: /chem/hplcf.i/04Sep2009.b/f0904035.d

see history

2nd source: f0904037.d.

9/9/09

Based on 20 ul injection

Compound ug/5mL	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	0.50000 Level 4	1.000 Level 5	4.000 Level 6	RRF	% RSD
	10.000 Level 7	20.000 Level 8	50.000 Level 9	75.000 Level 10				
1 DNPH	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
2 FORMALDEHYDE	120620	118907	116485	118109	115869	108348		
	121875	122148	121149	126430			118994	4.051
3 ACETALDEHYDE	+++++	91617	87619	89101	87061	85567		
	90920	91212	90381	94389			89763	3.043
4 ACROLEIN	+++++	+++++	78813	80786	79818	79086		
	83598	83987	83400	87187			82084	3.428
5 ACETONE	+++++	+++++	63208	64511	64158	63166		
	66446	66613	66038	68858			65375	2.891
6 PROPANAL	+++++	+++++	66735	67651	66843	65632		
	69623	69798	69266	72390			68492	3.087

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-SEP-2009 10:35
End Cal Date : 04-SEP-2009 20:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Cal Date : 06-Sep-2009 10:12 kjohnsto
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	0.50000 Level 4	1.000 Level 5	4.000 Level 6	RRF	% RSD
	10.000 Level 7	20.000 Level 8	50.000 Level 9	75.000 Level 10				
7 CROTONAL	+++++	+++++	57432	58006	57665	56934		
	60156	60320	59880	62631			59128	3.189
8 METHACROLEIN	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
9 BUTYRALS/MEK	+++++	+++++	54291	55807	54978	54249		
	57390	57734	57254	59937			56455	3.521
10 BENZALDEHYDE	+++++	+++++	39889	40120	39050	38482		
	40695	40885	40609	42496			40278	2.969
11 ISO-PENTANAL	+++++	+++++	44397	45786	46058	46103		
	48680	48930	48545	50747			47406	4.418
12 PENTANAL	+++++	+++++	46007	46754	46144	45588		
	48175	48477	47963	50151			47407	3.200
13 MIBK	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++
14 O-TOLUALDEHYDE	+++++	+++++	36324	35879	35360	35079		
	37071	37063	36854	38814			36555	3.245
15 M,P-TOLUALDEHYDE *	+++++	36088	33116	33086	31990	31493		
	33372	33726	33315	34704			33432	3.954
16 HEXANAL	+++++	+++++	42877	41959	40999	39943		
	42136	42315	41945	43801			41997	2.715

* Calibration Levels: 0.20, 0.50, 1.0, 2.0, 8.0, 20, 40, 100 and 150 µg.

W 9/9/09

Air Toxics Ltd.

INITIAL CALIBRATION DATA

Start Cal Date : 04-SEP-2009 10:35
End Cal Date : 04-SEP-2009 20:41
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : Falcon
Method file : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Cal Date : 06-Sep-2009 10:12 kjohnsto
Curve Type : Average

Compound	0.05000 Level 1	0.10000 Level 2	0.25000 Level 3	0.50000 Level 4	1.000 Level 5	4.000 Level 6	___ RRF	% RSD
	10.000 Level 7	20.000 Level 8	50.000 Level 9	75.000 Level 10				
17 2,5-Dimethylbenzaldehyde	+++++	+++++	31540	30039	29725	28765		
	30193	30315	30100	31487			30270	3.018
18 HEPTALDEHYDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++	+++++	+++++			+++++	+++++

HPLC-F Run Logbook **@Air Toxics Ltd.** **Logbook Book #: 1850**

Method (Circle all that apply): TO-5 CARB 430 (TO-11A) Method 0011 Pressure: 99 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
X	f0904001	CCV 1331-138-4	1.00	CAL	9/4/09	0747	Li	
X	2	CCB				0808		
✓	3					0933		
✓	4					0954		
✓	5					1015		
✓	6	1331-139-0.05				1035		Level 1
✓	7					1056		
✓	8					1117		
✓	9	1331-139-0.10				1138		Level 2
✓	10					1159		
✓	11					1220		
✓	12	1331-139-0.25				1241		Level 3
✓	13					1302		
✓	14					1323		
✓	15	1331-138-0.50				1344		Level 4
✓	16					1404		
✓	17					1425 Li 9/15/09		
✓	18	1331-138-1.0				1446		Level 5
✓	19					1507		
✓	20					1528		
✓	21	1331-138-4.0				1549		Level 6
✓	22					1610		
✓	23					1631		
✓	24	1331-138-10.0				1652		Level 7
✓	25					1712		
✓	26					1733		
✓	27	1331-138-20.0				1754		Level 8
✓	28					1815		

Calculation Check:

File ID:_____ Compound:_____ Initials:_____

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(\quad)}{(\quad)}$ × ( ) = [redacted]

Reported Result: [redacted]

Li 9/18/09

Signed 9/14/09 Date

0097

Revised 07/08

HPLC-F Run Logbook **@Air Toxics Ltd.** **Logbook Book #: 1850**

Method (Circle all that apply): TO-5 CARB 430 TO-11A Method 0011 Pressure: 99 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f0904029	1331-138-20	1.00	CRC	91409	1836	W	Level 8
✓	30	1331-138-50				1857	ACT	Level 9
✓	31	↓				1918	↓	↓
✓	32					1939		
✓	33	1331-138-75				2000		Level 10
✓	34	↓				2020		↓
✓	35					2041		
✓	36	CCB				2102		
✓	37	1331-138-4 LCS				2123	↓	
✓	38	1331-138-4				2154	W	
✓	39	CCB				2215		
✓	40	CARB ~~MDL~~ 430 MDL BLK W 91509		ACT		2311		
✓	41	CARB 430 MDL-1				2332		
✓	42	-2				2353		
✓	43	-3			91509	0014		
✓	44	-4				0035		
✓	45	-5				0056		
✓	46	-6				0116		
✓	47	-7				0137		
✓	48	-8				0158		
✓	49	~~1331-138-4 CCV~~ W 91509 140-VAR 1X5	5.00			0219		
✓	50	1331-~~CCB~~ 138-4CCV W 91509	1.00			0240		
✓	51	CCB				0301	↓	
✓	52	0908656 - Blank				0322	W	hit Hexanal
✓	53	1 - LCS				0343		
C	54	0908655 - 01A				0404		Confirmed
C	55	-01AA				0424		↓
C	56	-02A				0445	↓	

Calculation Check:

File ID: f0904037 Compound: Formaldehyde Initials: W

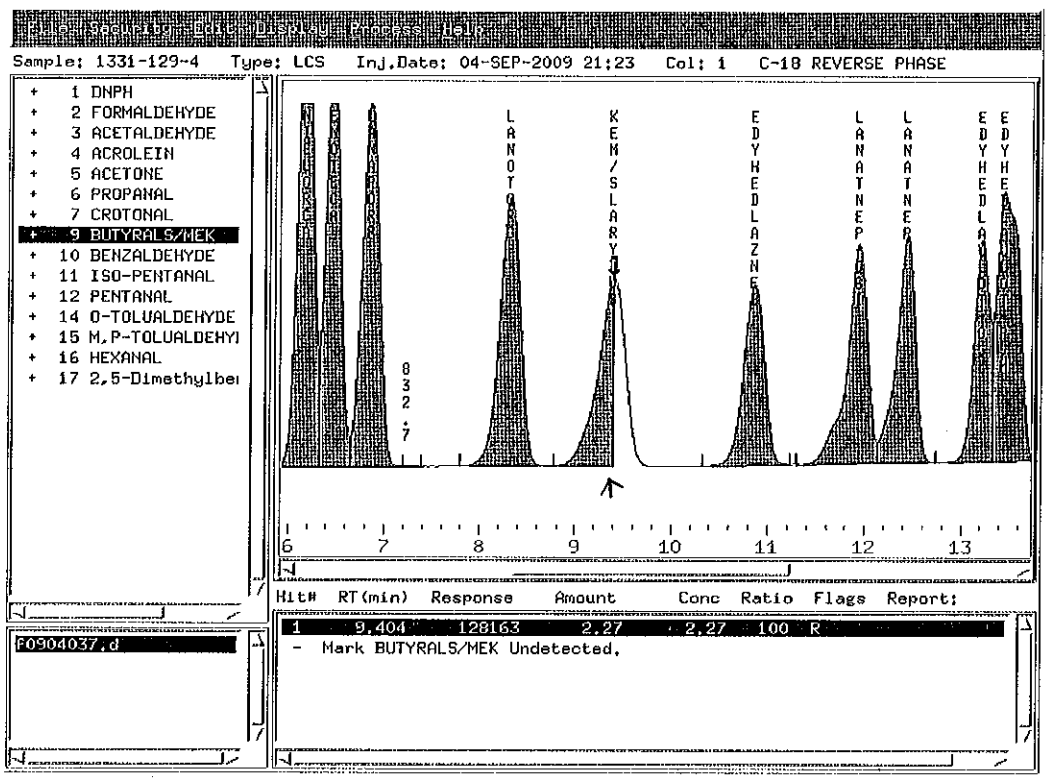
Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(466888)}{(118994)} \times (1) =$ **3.92**

Reported Result: **3.92**

Signed: [signature] Date: 91809

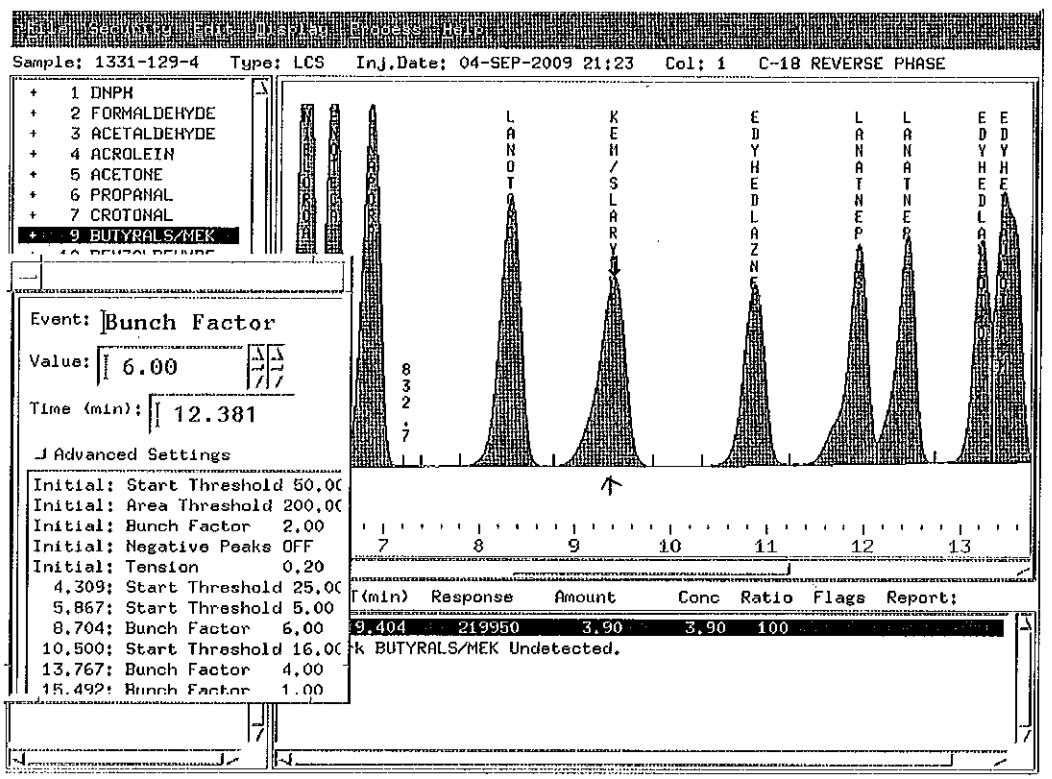
Revised 07/08

0098



Before.

ci 918109



After

Correct Baseline	
Split Peak	✓
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

9/9/09

9/8/09

Validation of the Target software for HPLC curve F09D0904.m Formaldehyde

0.05	RF	0.1	RF	0.25	RF	0.5	RF	1	RF	4	RF	10	RF	20	RF	50	RF	75	RF			
5789	115780	12047	120470	29141	116564	59165	118330	116240	116240	433842	108460.5	1218506	121850.6	2439010	121950.5	6056221	121124.4	9473948	126319.3			
6173	123460	11800	118000	29282	117128	58858	117716	115802	115802	432992	108248	1218348	121834.8	2442880	122144	6056850	121137	9476638	126355.2			
6131	122620	11825	118250	28941	115764	59141	118282	115564	115564	433341	108335.3	1219401	121940.1	2446970	122348.5	6059254	121185.1	9496133	126615.1	Ave	STD Dev	%RSD
Ave. RF	120620		118906.7		116485.3		118109.3		115868.7		108347.9		121875.2		122147.7		121148.8		126429.9	**118993.9**	4820.246	**4.051%**

0101

9/9/09

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/04Sep2009.b/f0904037.d
Lab Smp Id: 1331-129-4 Client Smp ID: LCS
Inj Date : 04-SEP-2009 21:23
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-129-4;LCS
Misc Info :
Comment :
Method : /var/chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:23 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	FINAL (ug)
1 DNPH	3.084	3.073	0.011	3257		
2 FORMALDEHYDE	4.204	4.179	0.025	466888	3.92363	3.92
3 ACETALDEHYDE	5.111	5.079	0.032	354383	3.94799	3.95
4 ACROLEIN	6.191	6.139	0.052	321066	3.91141	3.91
5 ACETONE	6.471	6.419	0.052	262525	4.01570	4.02
6 PROPANAL	6.864	6.813	0.051	269027	3.92786	3.93
7 CROTONAL	8.324	8.253	0.071	237572	4.01793	4.02
9 BUTYRALS/MEK	9.404	9.319	0.085	219949	3.89603	3.90
10 BENZALDEHYDE	10.871	10.793	0.078	160665	3.98887	3.99
11 ISO-PENTANAL	11.938	11.879	0.059	193201	4.07548	4.08
12 PENTANAL	12.444	12.393	0.051	181523	3.82902	3.83
14 O-TOLUALDEHYDE	13.218	13.179	0.039	144065	3.94102	3.94
15 M,P-TOLUALDEHYDE	13.458	13.413	0.045	263147	7.87105	7.87
16 HEXANAL	14.718	14.693	0.025	160029	3.81052	3.81
17 2,5-Dimethylbenzaldehyde	15.198	15.173	0.025	117947	3.89644	3.90

Report Date: 08-Sep-2009 16:27

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 04Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-129-4
Client Smp ID: LCS
Level: HIGH
Operator: CRL
Data Type: LC DATA
SampleType: LCS
SpikeList File: 4ug.spk
Quant Type: ESTD
Sublist File: TO-11+Acr+17.sub
Method File: /var/chem/hplcf.i/04Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.92	98.09	90-110
3 ACETALDEHYDE	4.00	3.95	98.70	90-110
4 ACROLEIN	4.00	3.91	97.79	90-110
5 ACETONE	4.00	4.02	100.39	90-110
6 PROPANAL	4.00	3.93	98.20	90-110
7 CROTONAL	4.00	4.02	100.45	90-110
9 BUTYRALS/MEK	4.00	3.90	97.40	90-110
10 BENZALDEHYDE	4.00	3.99	99.72	90-110
11 ISO-PENTANAL	4.00	4.08	101.89	90-110
12 PENTANAL	4.00	3.83	95.73	90-110
14 O-TOLUALDEHYDE	4.00	3.94	98.53	90-110
15 M,P-TOLUALDEHYDE	8.00	7.87	98.39	90-110
16 HEXANAL	4.00	3.81	95.26	90-110
17 2,5-Dimethylbenzal	4.00	3.90	97.41	90-110

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904037.d

0104

Date : 04-SEP-2009 21:23

Client ID: LCS

Instrument: hplcf.i

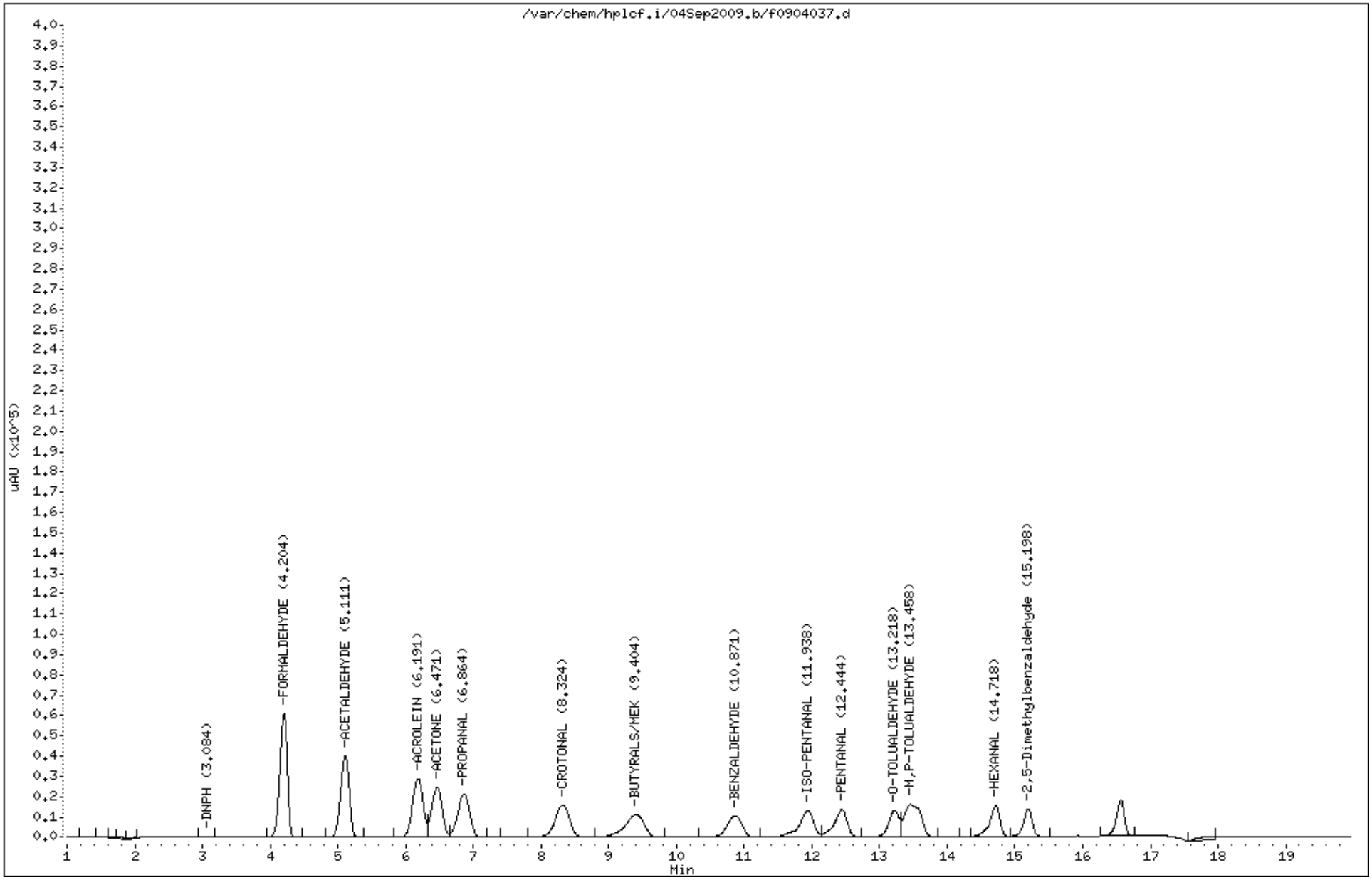
Sample Info: ;1331-129-4;LCS

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904008.d
Lab Smp Id: 1331-139-.05 Client Smp ID: L1
Inj Date : 04-SEP-2009 11:17
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.05;L1
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 11:17 Cal File: f0904008.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: form.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	4.140	4.140	0.000	6131	0.05000	0.0520

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904008.d

Date : 04-SEP-2009 11:17

Client ID: L1

Instrument: hplcf.i

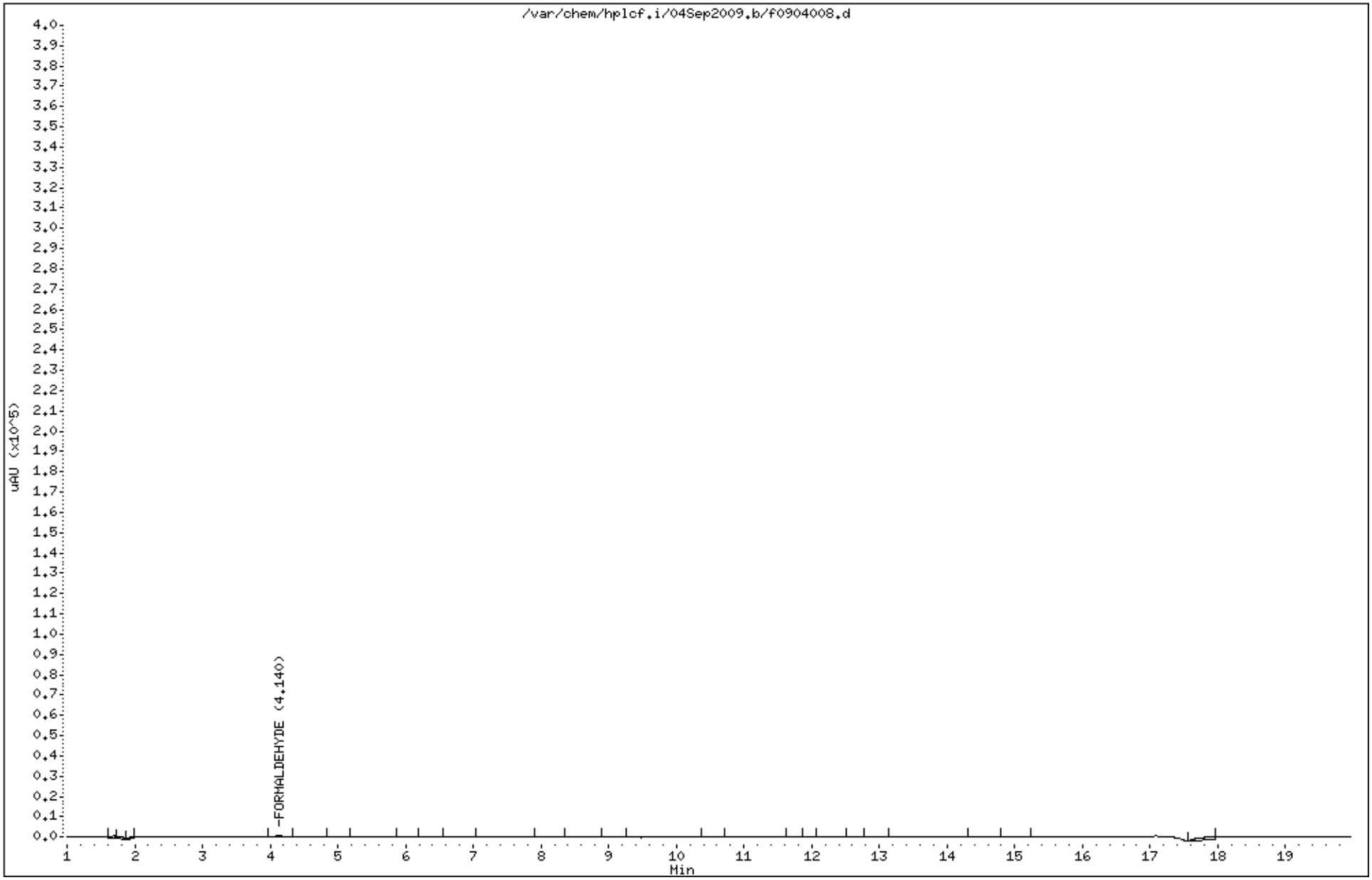
Sample Info: ;1331-139-.05;L1

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0106

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904007.d
Lab Smp Id: 1331-139-.05 Client Smp ID: L1
Inj Date : 04-SEP-2009 10:56
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.05;L1
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 11:17 Cal File: f0904008.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: form.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	4.130	4.130	0.000	6173	0.05000	0.0524

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904007.d

0108

Date : 04-SEP-2009 10:56

Client ID: L1

Instrument: hplcf.i

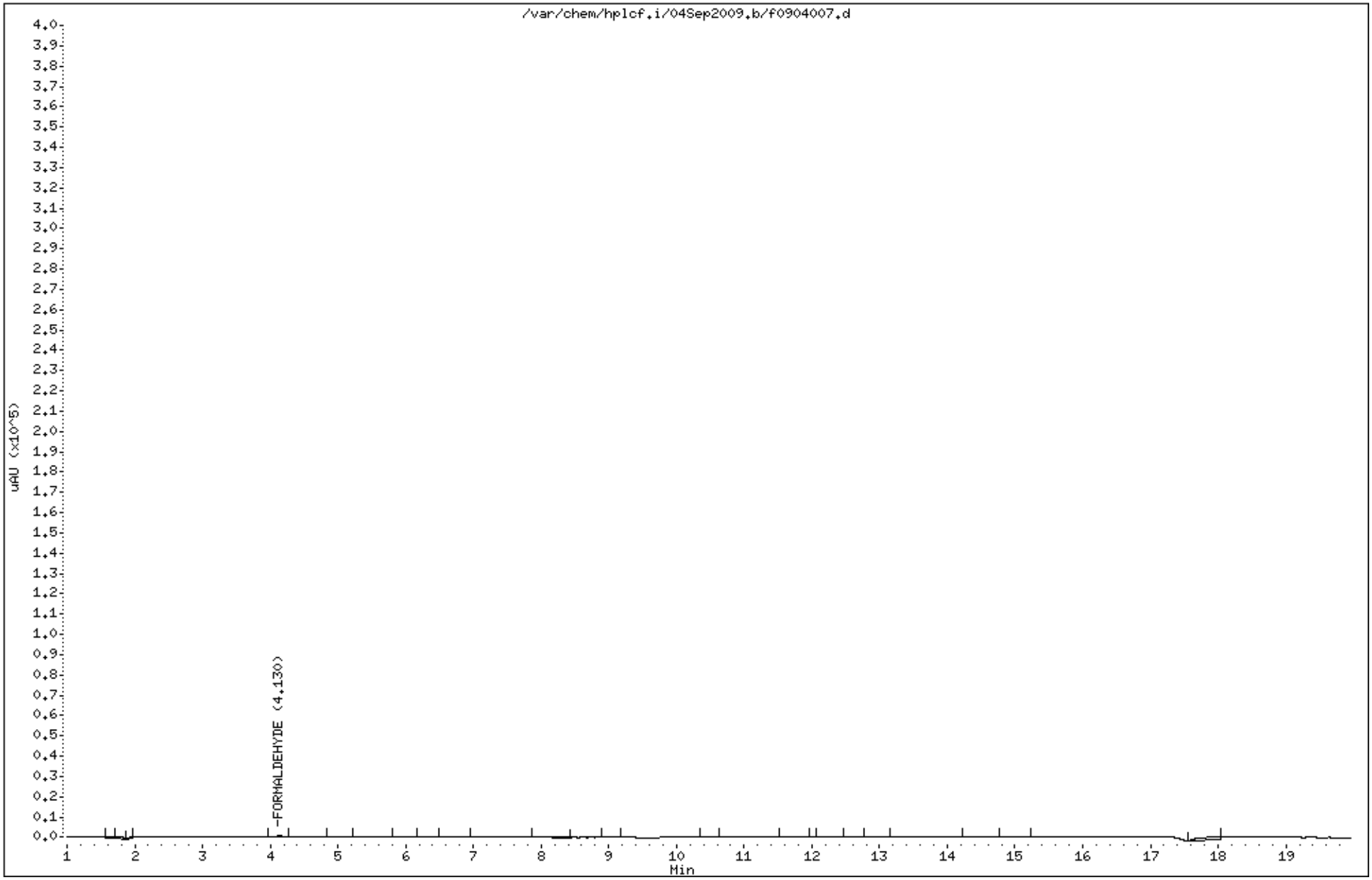
Sample Info: ;1331-139-.05;L1

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904006.d
Lab Smp Id: 1331-139-.05 Client Smp ID: L1
Inj Date : 04-SEP-2009 10:35
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.05;L1
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 11:17 Cal File: f0904008.d
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: form.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	4.131	4.131	0.000	5789	0.05000	0.0491

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904006.d

Date : 04-SEP-2009 10:35

Client ID: L1

Instrument: hplcf.i

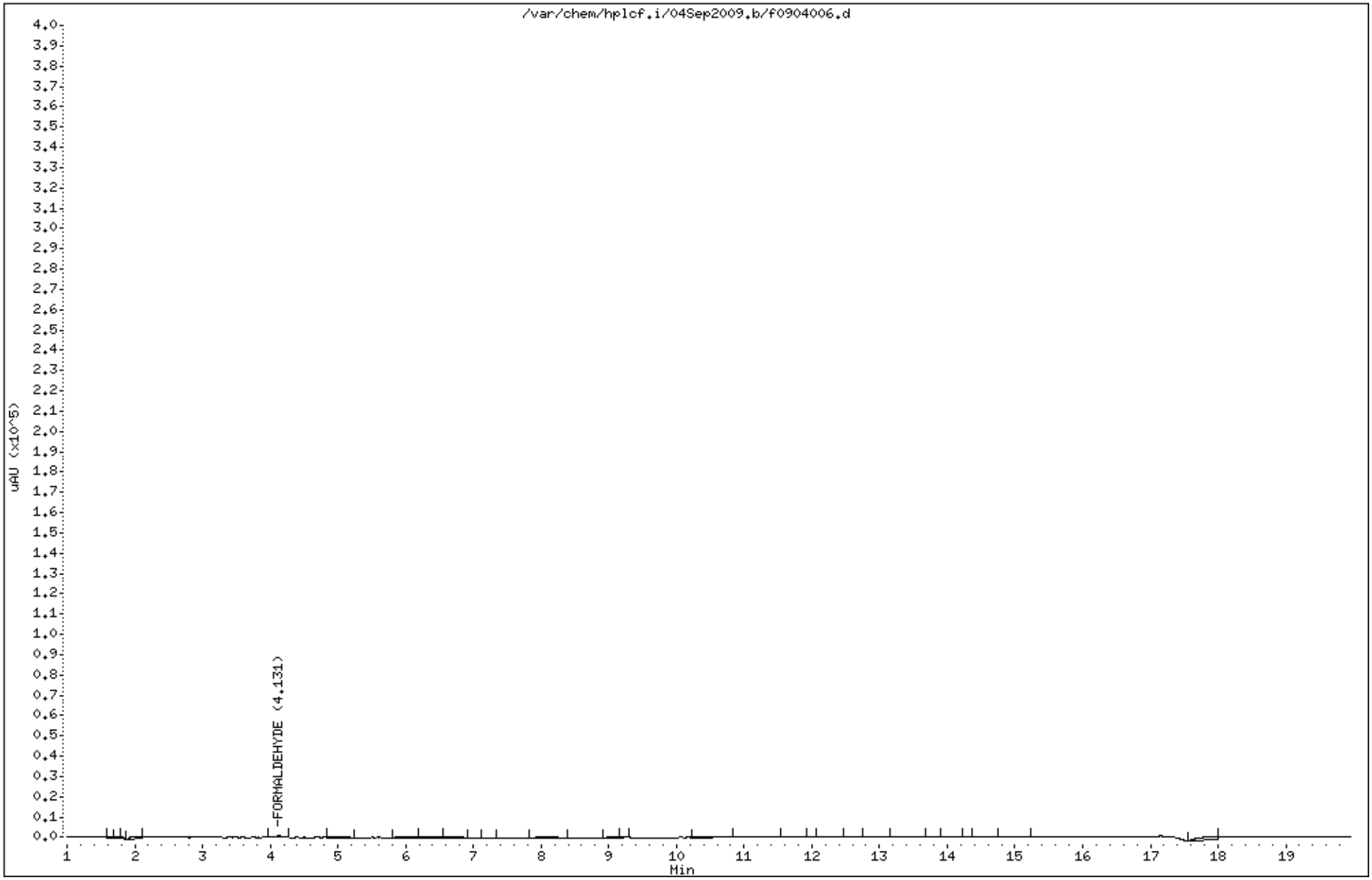
Sample Info: ;1331-139-.05;L1

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0110

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/04Sep2009.b/f0904011.d
Lab Smp Id: 1331-139-.1 Client Smp ID: L2
Inj Date : 04-SEP-2009 12:20
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.1;L2
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 12:20 Cal File: f0904011.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: foracetmp.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.045	3.045	0.000	2399	0.10000	
2 FORMALDEHYDE	4.144	4.144	0.000	11825	0.10000	0.100
3 ACETALDEHYDE	5.031	5.031	0.000	9493	0.10000	0.107
15 M,P-TOLUALDEHYDE	13.311	13.311	0.000	7250	0.20000	0.218

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904011.d

Date : 04-SEP-2009 12:20

Client ID: L2

Instrument: hplcf.i

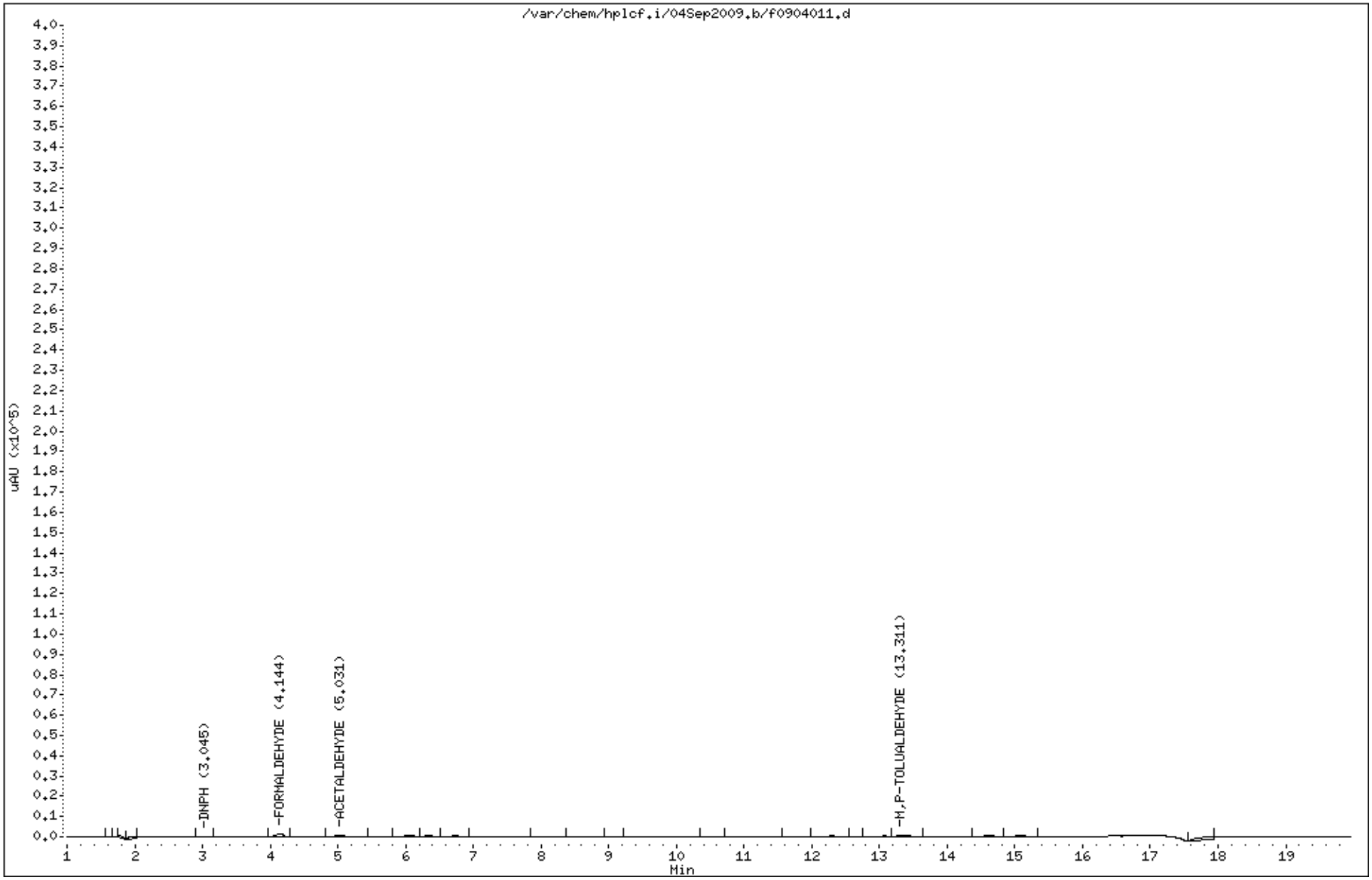
Sample Info: ;1331-139-.1;L2

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0112

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/04Sep2009.b/f0904010.d
Lab Smp Id: 1331-139-.1 Client Smp ID: L2
Inj Date : 04-SEP-2009 11:59
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.1;L2
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 12:20 Cal File: f0904011.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: foracetmp.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

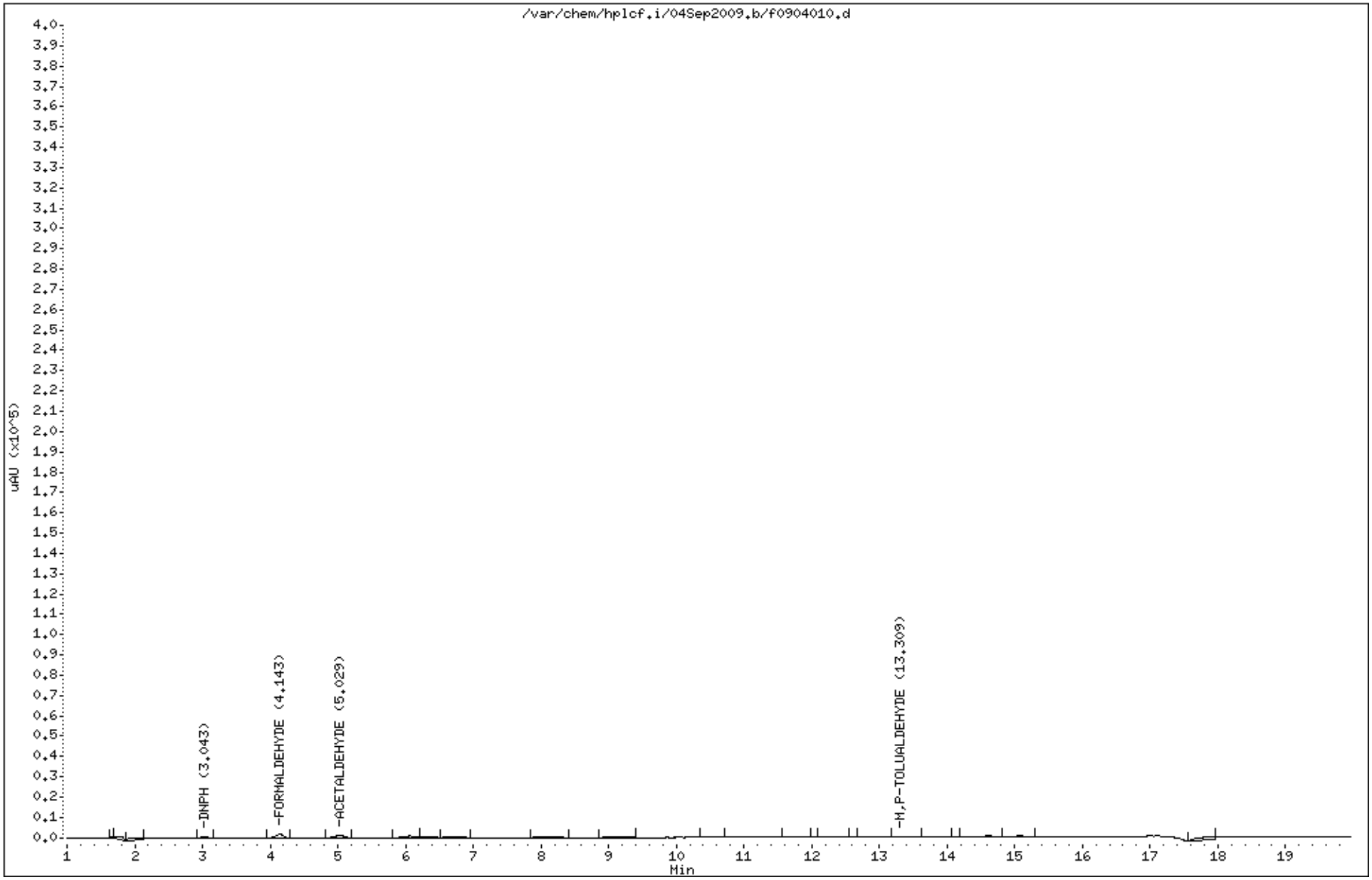
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.043	3.043	0.000	2474	0.10000	
2 FORMALDEHYDE	4.143	4.143	0.000	11800	0.10000	0.100
3 ACETALDEHYDE	5.029	5.029	0.000	8979	0.10000	0.101
15 M,P-TOLUALDEHYDE	13.309	13.309	0.000	7166	0.20000	0.215

0114

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904010.d
Date : 04-SEP-2009 11:59
Client ID: L2
Sample Info: ;1331-139-.1;L2
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: CRL
Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/04Sep2009.b/f0904009.d
Lab Smp Id: 1331-139-.1 Client Smp ID: L2
Inj Date : 04-SEP-2009 11:38
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.1;L2
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 12:20 Cal File: f0904011.d
Als bottle: 1 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: foracetmp.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

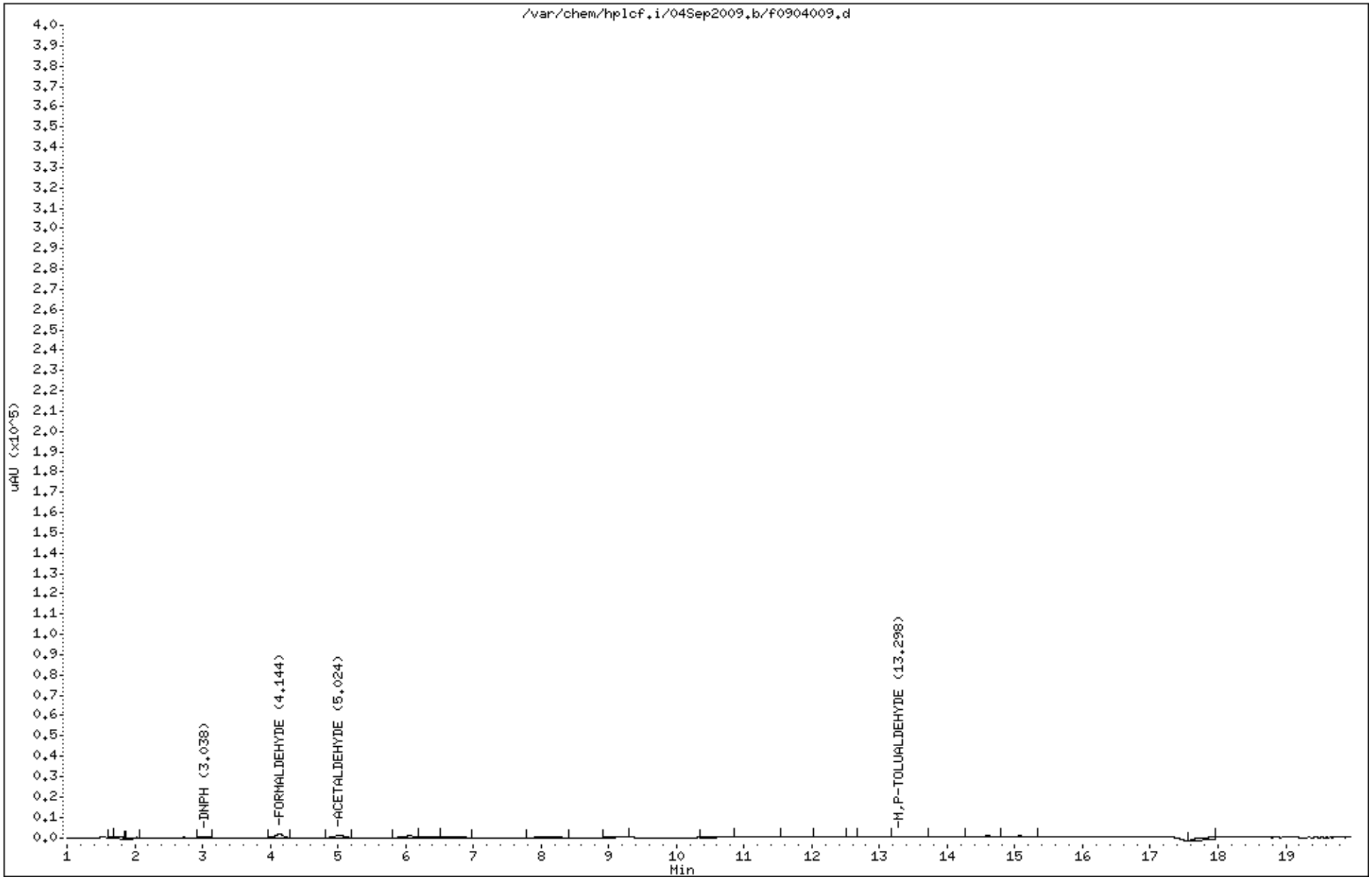
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.038	3.038	0.000	2431	0.10000	
2 FORMALDEHYDE	4.144	4.144	0.000	12047	0.10000	0.102
3 ACETALDEHYDE	5.024	5.024	0.000	9013	0.10000	0.101
15 M,P-TOLUALDEHYDE	13.298	13.298	0.000	7237	0.20000	0.217

0116

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904009.d
Date : 04-SEP-2009 11:38
Client ID: L2
Sample Info: ;1331-139-.1;L2
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: CRL
Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904014.d
Lab Smp Id: 1331-139-.25 Client Smp ID: L3
Inj Date : 04-SEP-2009 13:23
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.25;L3
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 13:23 Cal File: f0904014.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.041	3.041	0.000	5671	0.25000	
2 FORMALDEHYDE	4.148	4.148	0.000	28941	0.25000	0.246
3 ACETALDEHYDE	5.034	5.034	0.000	22085	0.25000	0.248
4 ACROLEIN	6.074	6.074	0.000	19850	0.25000	0.245
5 ACETONE	6.354	6.354	0.000	15825	0.25000	0.245
6 PROPANAL	6.754	6.754	0.000	16659	0.25000	0.246
7 CROTONAL	8.161	8.161	0.000	14189	0.25000	0.243
9 BUTYRALS/MEK	9.208	9.208	0.000	14122	0.25000	0.253
10 BENZALDEHYDE	10.681	10.681	0.000	9985	0.25000	0.250
11 ISO-PENTANAL	11.788	11.788	0.000	10786	0.25000	0.230
12 PENTANAL	12.308	12.308	0.000	11347	0.25000	0.241
14 O-TOLUALDEHYDE	13.088	13.088	0.000	9075	0.25000	0.251
15 M,P-TOLUALDEHYDE	13.334	13.334	0.000	16347	0.50000	0.491
16 HEXANAL	14.621	14.621	0.000	10596	0.25000	0.254
17 2,5-Dimethylbenzaldehyde	15.094	15.094	0.000	7873	0.25000	0.261

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904014.d

Date : 04-SEP-2009 13:23

Client ID: L3

Instrument: hplcf.i

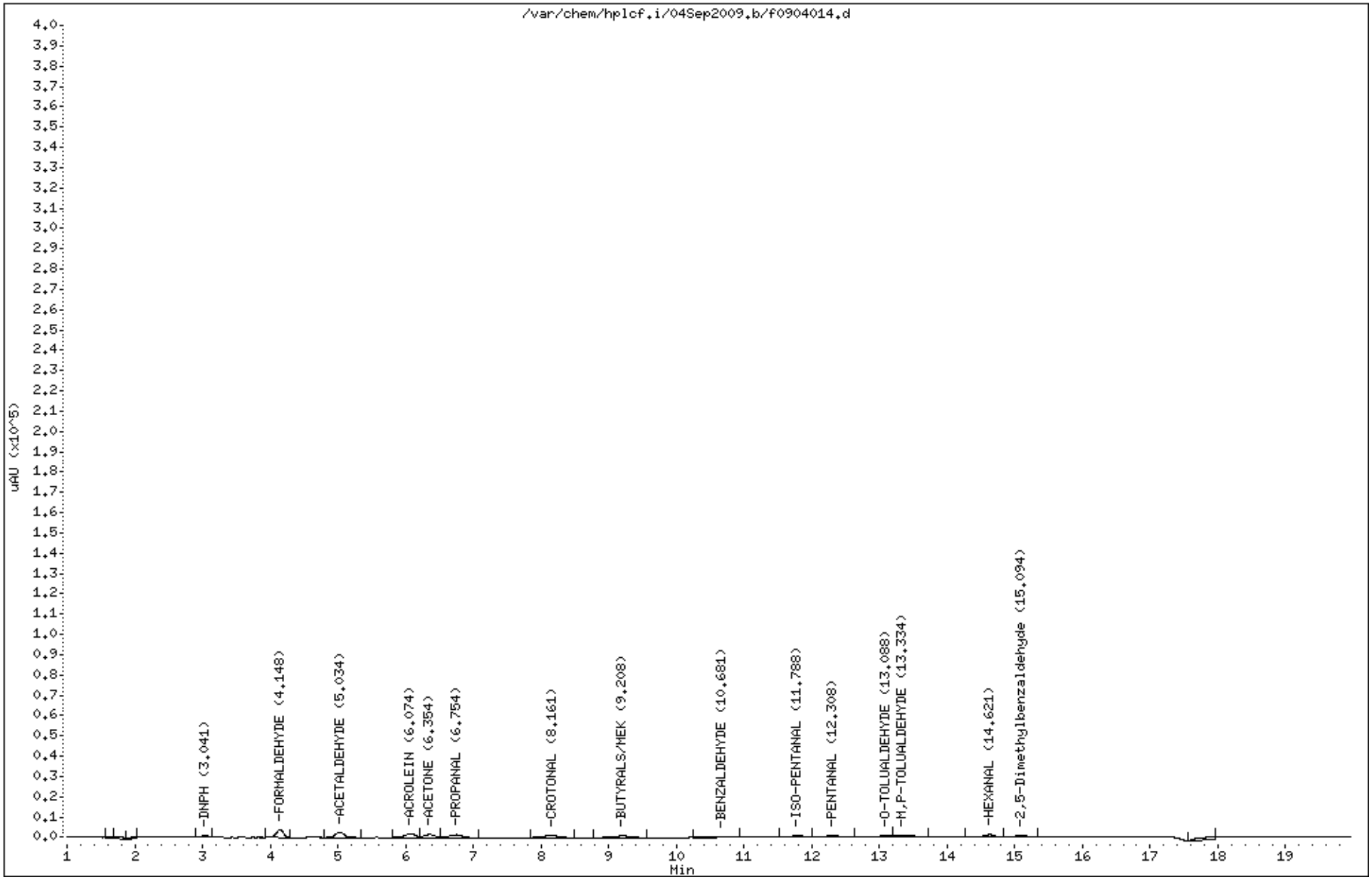
Sample Info: ;1331-139-.25;L3

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0118

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904013.d
Lab Smp Id: 1331-139-.25 Client Smp ID: L3
Inj Date : 04-SEP-2009 13:02
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.25;L3
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 13:23 Cal File: f0904014.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.044	3.044	0.000	6099	0.25000	
2 FORMALDEHYDE	4.151	4.151	0.000	29282	0.25000	0.248
3 ACETALDEHYDE	5.037	5.037	0.000	21733	0.25000	0.244
4 ACROLEIN	6.077	6.077	0.000	19582	0.25000	0.242
5 ACETONE	6.357	6.357	0.000	15875	0.25000	0.245
6 PROPANAL	6.744	6.744	0.000	16965	0.25000	0.250
7 CROTONAL	8.151	8.151	0.000	14228	0.25000	0.243
9 BUTYRALS/MEK	9.204	9.204	0.000	13392	0.25000	0.240
10 BENZALDEHYDE	10.684	10.684	0.000	9913	0.25000	0.248
11 ISO-PENTANAL	11.791	11.791	0.000	10948	0.25000	0.233
12 PENTANAL	12.304	12.304	0.000	11394	0.25000	0.242
14 O-TOLUALDEHYDE	13.084	13.084	0.000	8874	0.25000	0.245
15 M,P-TOLUALDEHYDE	13.317	13.317	0.000	16484	0.50000	0.495
16 HEXANAL	14.624	14.624	0.000	10703	0.25000	0.256
17 2,5-Dimethylbenzaldehyde	15.091	15.091	0.000	8059	0.25000	0.267

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904013.d

0120

Date : 04-SEP-2009 13:02

Client ID: L3

Instrument: hplcf.i

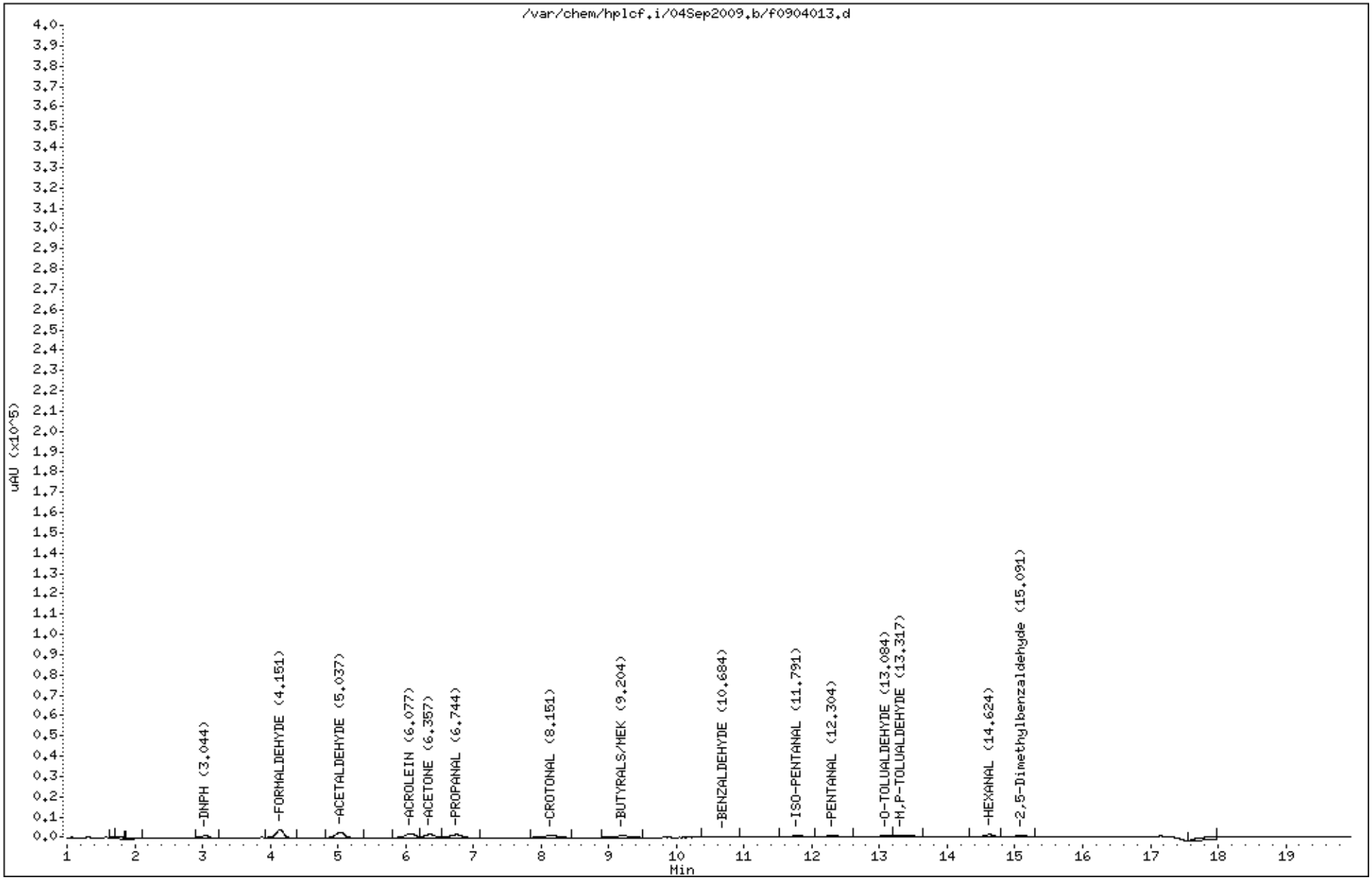
Sample Info: ;1331-139-.25;L3

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904012.d
Lab Smp Id: 1331-139-.25 Client Smp ID: L3
Inj Date : 04-SEP-2009 12:41
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-.25;L3
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 13:23 Cal File: f0904014.d
Als bottle: 1 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.040	3.040	0.000	5710	0.25000	
2 FORMALDEHYDE	4.147	4.147	0.000	29141	0.25000	0.247
3 ACETALDEHYDE	5.034	5.034	0.000	21896	0.25000	0.246
4 ACROLEIN	6.074	6.074	0.000	19678	0.25000	0.243
5 ACETONE	6.354	6.354	0.000	15706	0.25000	0.243
6 PROPANAL	6.747	6.747	0.000	16427	0.25000	0.243
7 CROTONAL	8.153	8.153	0.000	14657	0.25000	0.250
9 BUTYRALS/MEK	9.213	9.213	0.000	13204	0.25000	0.237
10 BENZALDEHYDE	10.667	10.667	0.000	10019	0.25000	0.250
11 ISO-PENTANAL	11.780	11.780	0.000	11564	0.25000	0.245
12 PENTANAL	12.300	12.300	0.000	11764	0.25000	0.249
14 O-TOLUALDEHYDE	13.080	13.080	0.000	9294	0.25000	0.256
15 M,P-TOLUALDEHYDE	13.313	13.313	0.000	16843	0.50000	0.506
16 HEXANAL	14.620	14.620	0.000	10859	0.25000	0.260
17 2,5-Dimethylbenzaldehyde	15.094	15.094	0.000	7723	0.25000	0.256

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904012.d

Date : 04-SEP-2009 12:41

Client ID: L3

Instrument: hplcf.i

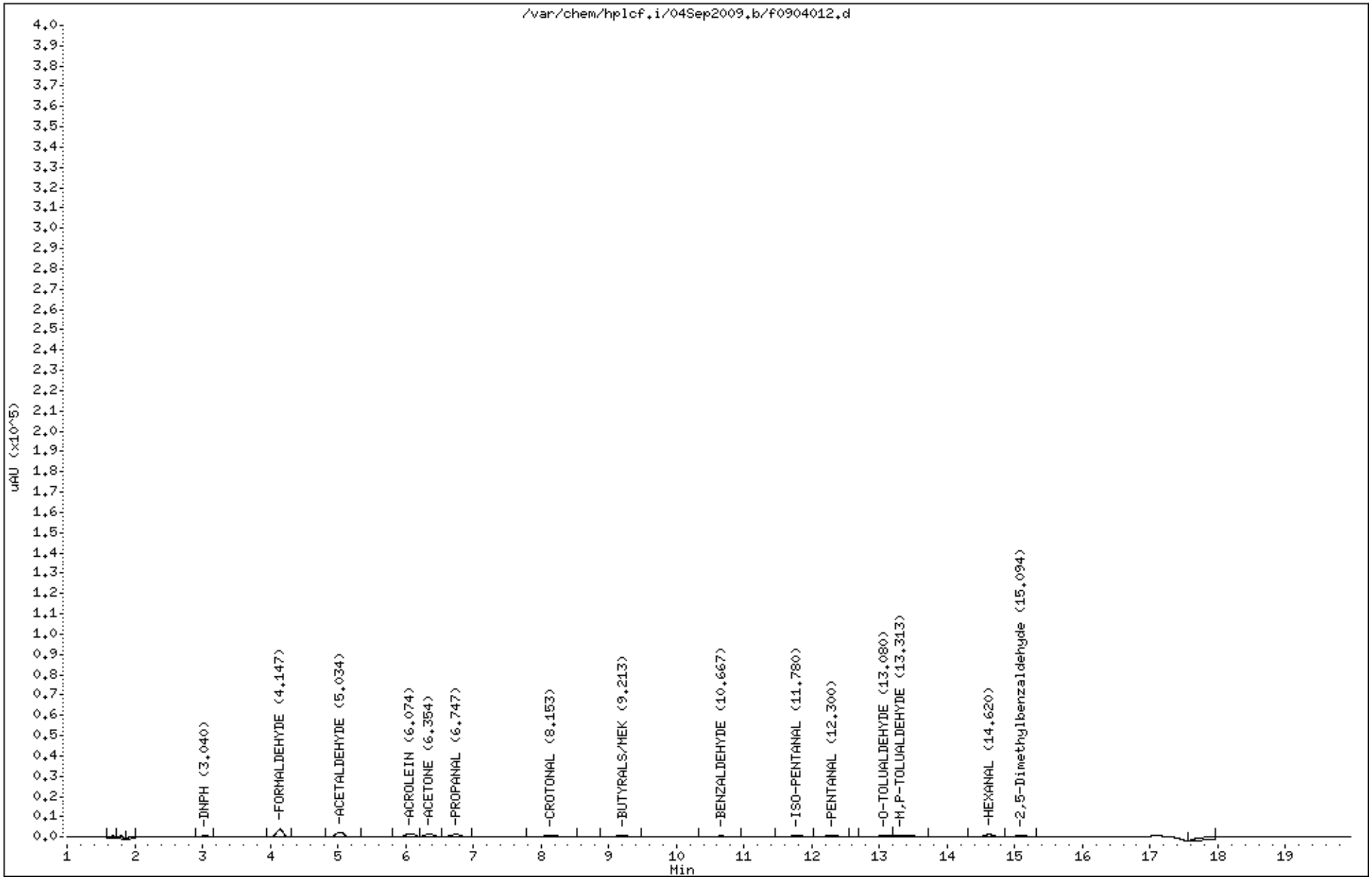
Sample Info: ;1331-139-.25;L3

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0122

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904017.d
Lab Smp Id: 1331-138-.5 Client Smp ID: L4
Inj Date : 04-SEP-2009 14:25
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-.5;L4
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 14:25 Cal File: f0904017.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

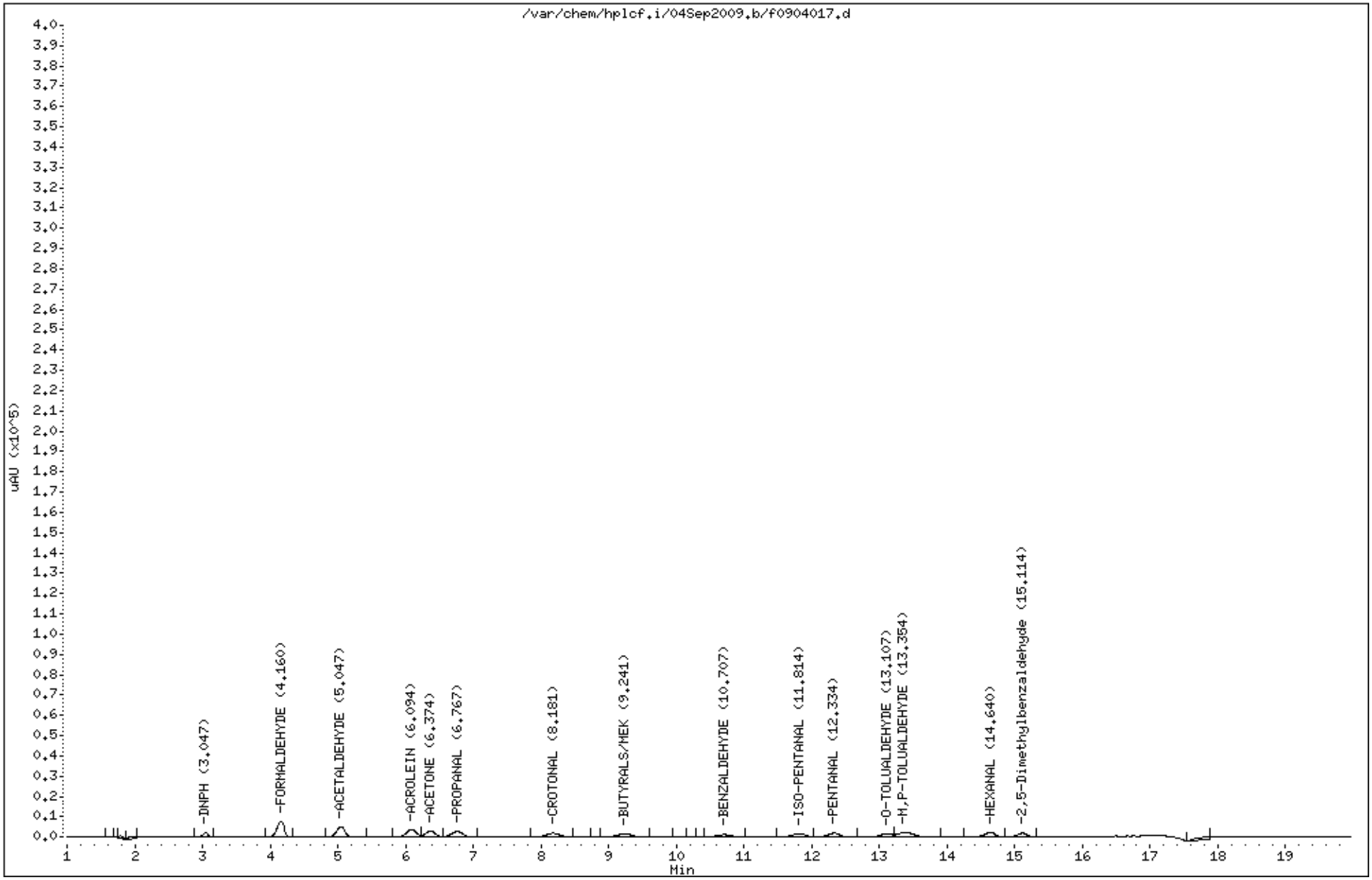
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.047	3.047	0.000	11653	0.50000	
2 FORMALDEHYDE	4.160	4.160	0.000	59141	0.50000	0.502
3 ACETALDEHYDE	5.047	5.047	0.000	44821	0.50000	0.504
4 ACROLEIN	6.094	6.094	0.000	40218	0.50000	0.496
5 ACETONE	6.374	6.374	0.000	32467	0.50000	0.502
6 PROPANAL	6.767	6.767	0.000	33816	0.50000	0.499
7 CROTONAL	8.181	8.181	0.000	28824	0.50000	0.493
9 BUTYRALS/MEK	9.241	9.241	0.000	27957	0.50000	0.501
10 BENZALDEHYDE	10.707	10.707	0.000	20050	0.50000	0.502
11 ISO-PENTANAL	11.814	11.814	0.000	22934	0.50000	0.489
12 PENTANAL	12.334	12.334	0.000	23439	0.50000	0.498
14 O-TOLUALDEHYDE	13.107	13.107	0.000	18038	0.50000	0.499
15 M,P-TOLUALDEHYDE	13.354	13.354	0.000	33232	1.00000	0.998
16 HEXANAL	14.640	14.640	0.000	21316	0.50000	0.511
17 2,5-Dimethylbenzaldehyde	15.114	15.114	0.000	15176	0.50000	0.503

0124

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904017.d
Date : 04-SEP-2009 14:25
Client ID: L4
Sample Info: ;1331-138-.5;L4
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: CRL
Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904016.d
Lab Smp Id: 1331-138-.5 Client Smp ID: L4
Inj Date : 04-SEP-2009 14:04
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-.5;L4
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 14:25 Cal File: f0904017.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.050	3.050	0.000	11894	0.50000	
2 FORMALDEHYDE	4.156	4.156	0.000	58858	0.50000	0.500
3 ACETALDEHYDE	5.043	5.043	0.000	44400	0.50000	0.499
4 ACROLEIN	6.090	6.090	0.000	40580	0.50000	0.501
5 ACETONE	6.370	6.370	0.000	32091	0.50000	0.496
6 PROPANAL	6.763	6.763	0.000	33803	0.50000	0.499
7 CROTONAL	8.170	8.170	0.000	29202	0.50000	0.500
9 BUTYRALS/MEK	9.236	9.236	0.000	27538	0.50000	0.494
10 BENZALDEHYDE	10.703	10.703	0.000	20371	0.50000	0.510
11 ISO-PENTANAL	11.810	11.810	0.000	22676	0.50000	0.484
12 PENTANAL	12.323	12.323	0.000	23152	0.50000	0.492
14 O-TOLUALDEHYDE	13.103	13.103	0.000	18154	0.50000	0.502
15 M,P-TOLUALDEHYDE	13.343	13.343	0.000	32864	1.00000	0.987
16 HEXANAL	14.636	14.636	0.000	20676	0.50000	0.496
17 2,5-Dimethylbenzaldehyde	15.110	15.110	0.000	15040	0.50000	0.499

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904016.d

Date : 04-SEP-2009 14:04

Client ID: L4

Instrument: hplcf.i

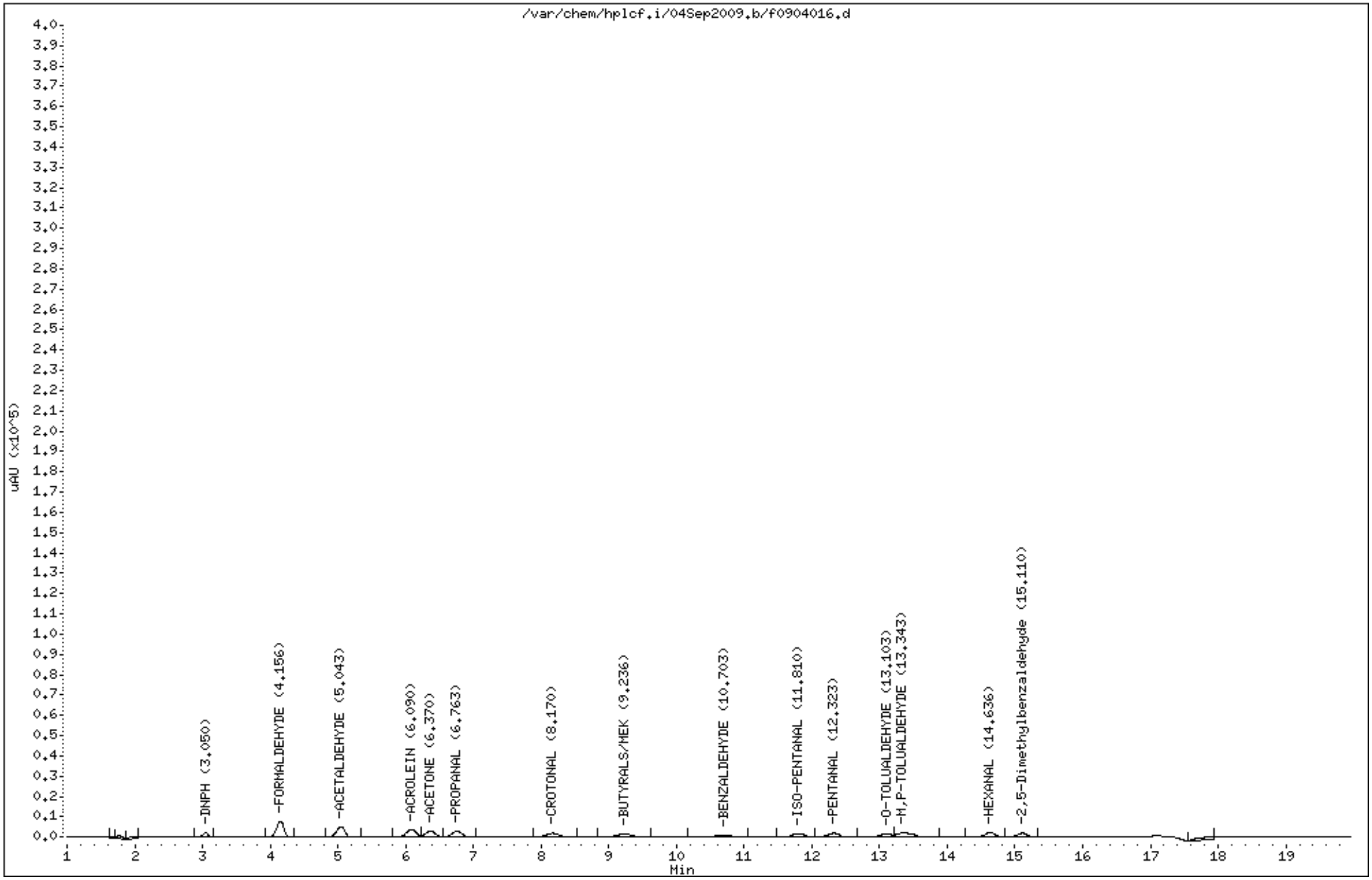
Sample Info: ;1331-138-.5;L4

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0126

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904015.d
Lab Smp Id: 1331-138-.5 Client Smp ID: L4
Inj Date : 04-SEP-2009 13:44
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-.5;L4
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 14:25 Cal File: f0904017.d
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.047	3.047	0.000	11963	0.50000	
2 FORMALDEHYDE	4.154	4.154	0.000	59165	0.50000	0.502
3 ACETALDEHYDE	5.040	5.040	0.000	44431	0.50000	0.499
4 ACROLEIN	6.080	6.080	0.000	40381	0.50000	0.498
5 ACETONE	6.361	6.361	0.000	32209	0.50000	0.498
6 PROPANAL	6.754	6.754	0.000	33858	0.50000	0.500
7 CROTONAL	8.161	8.161	0.000	28983	0.50000	0.496
9 BUTYRALS/MEK	9.220	9.220	0.000	28215	0.50000	0.506
10 BENZALDEHYDE	10.694	10.694	0.000	19759	0.50000	0.495
11 ISO-PENTANAL	11.800	11.800	0.000	23069	0.50000	0.492
12 PENTANAL	12.314	12.314	0.000	23540	0.50000	0.501
14 O-TOLUALDEHYDE	13.094	13.094	0.000	17626	0.50000	0.487
15 M,P-TOLUALDEHYDE	13.341	13.341	0.000	33162	1.00000	0.996
16 HEXANAL	14.634	14.634	0.000	20946	0.50000	0.502
17 2,5-Dimethylbenzaldehyde	15.101	15.101	0.000	14842	0.50000	0.492

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904015.d

Date : 04-SEP-2009 13:44

Client ID: L4

Instrument: hplcf.i

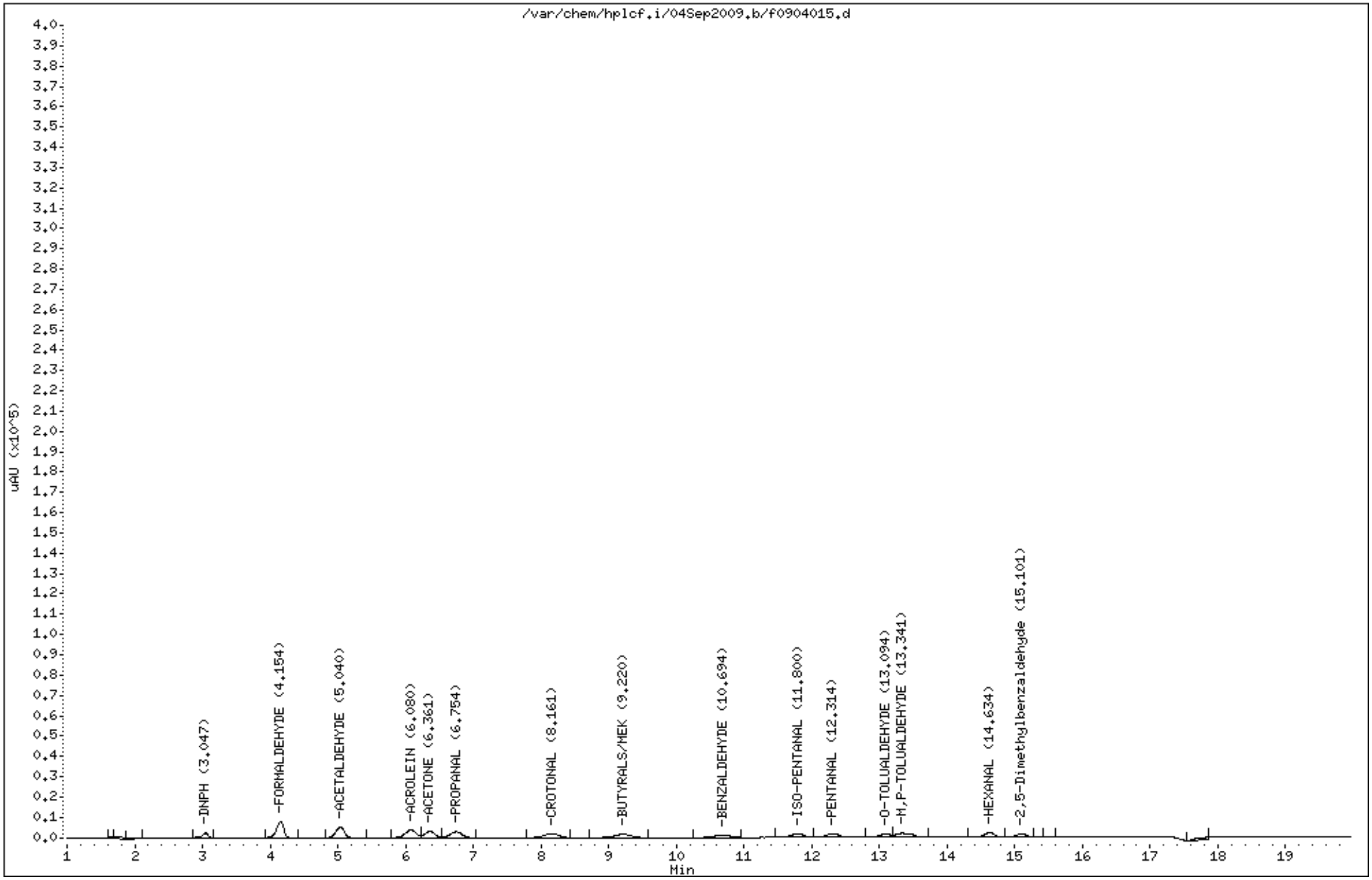
Sample Info: ;1331-138-.5;L4

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0128

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/04Sep2009.b/f0904020.d
Lab Smp Id: 1331-138-1.0 Client Smp ID: L5
Inj Date : 04-SEP-2009 15:28
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-1.0;L5
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 15:28 Cal File: f0904020.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve baesed Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.052	3.052	0.000	24017	1.00000	
2 FORMALDEHYDE	4.165	4.165	0.000	115564	1.00000	0.981
3 ACETALDEHYDE	5.052	5.052	0.000	87012	1.00000	0.978
4 ACROLEIN	6.105	6.105	0.000	79753	1.00000	0.984
5 ACETONE	6.385	6.385	0.000	64261	1.00000	0.993
6 PROPANAL	6.779	6.779	0.000	66795	1.00000	0.986
7 CROTONAL	8.198	8.198	0.000	57649	1.00000	0.987
9 BUTYRALS/MEK	9.265	9.265	0.000	54862	1.00000	0.984
10 BENZALDEHYDE	10.732	10.732	0.000	38682	1.00000	0.970
11 ISO-PENTANAL	11.838	11.838	0.000	46124	1.00000	0.987
12 PENTANAL	12.352	12.352	0.000	45929	1.00000	0.980
14 O-TOLUALDEHYDE	13.125	13.125	0.000	35014	1.00000	0.969
15 M,P-TOLUALDEHYDE	13.365	13.365	0.000	64236	2.00000	1.93
16 HEXANAL	14.652	14.652	0.000	40572	1.00000	0.973
17 2,5-Dimethylbenzaldehyde	15.125	15.125	0.000	29656	1.00000	0.985

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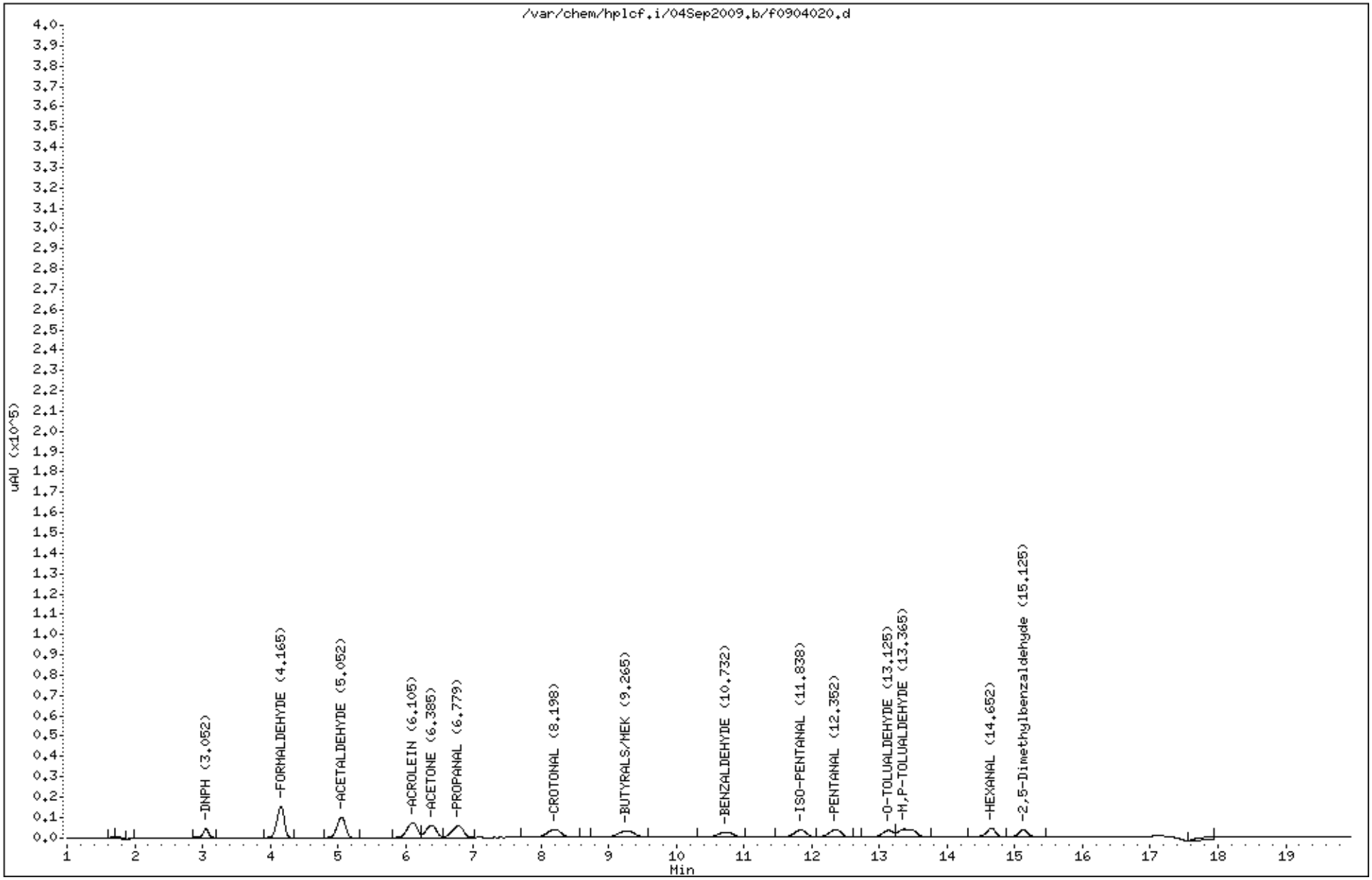
Data File: /var/chem/hplcf.i/04Sep2009.b/f0904020.d
Date : 04-SEP-2009 15:28
Client ID: L5
Sample Info: ;1331-138-1.0;L5
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: CRL
Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/04Sep2009.b/f0904019.d
Lab Smp Id: 1331-138-1.0 Client Smp ID: L5
Inj Date : 04-SEP-2009 15:07
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-1.0;L5
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 15:28 Cal File: f0904020.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve baesed Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.051	3.051	0.000	23755	1.00000	
2 FORMALDEHYDE	4.164	4.164	0.000	115802	1.00000	0.983
3 ACETALDEHYDE	5.058	5.058	0.000	86896	1.00000	0.976
4 ACROLEIN	6.104	6.104	0.000	79652	1.00000	0.983
5 ACETONE	6.384	6.384	0.000	63968	1.00000	0.989
6 PROPANAL	6.778	6.778	0.000	66934	1.00000	0.988
7 CROTONAL	8.191	8.191	0.000	57740	1.00000	0.988
9 BUTYRALS/MEK	9.258	9.258	0.000	55211	1.00000	0.990
10 BENZALDEHYDE	10.718	10.718	0.000	38910	1.00000	0.975
11 ISO-PENTANAL	11.831	11.831	0.000	45678	1.00000	0.977
12 PENTANAL	12.338	12.338	0.000	46110	1.00000	0.983
14 O-TOLUALDEHYDE	13.118	13.118	0.000	35392	1.00000	0.979
15 M,P-TOLUALDEHYDE	13.358	13.358	0.000	63782	2.00000	1.92
16 HEXANAL	14.651	14.651	0.000	41059	1.00000	0.984
17 2,5-Dimethylbenzaldehyde	15.124	15.124	0.000	29152	1.00000	0.969

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904019.d

Date : 04-SEP-2009 15:07

Client ID: L5

Instrument: hplcf.i

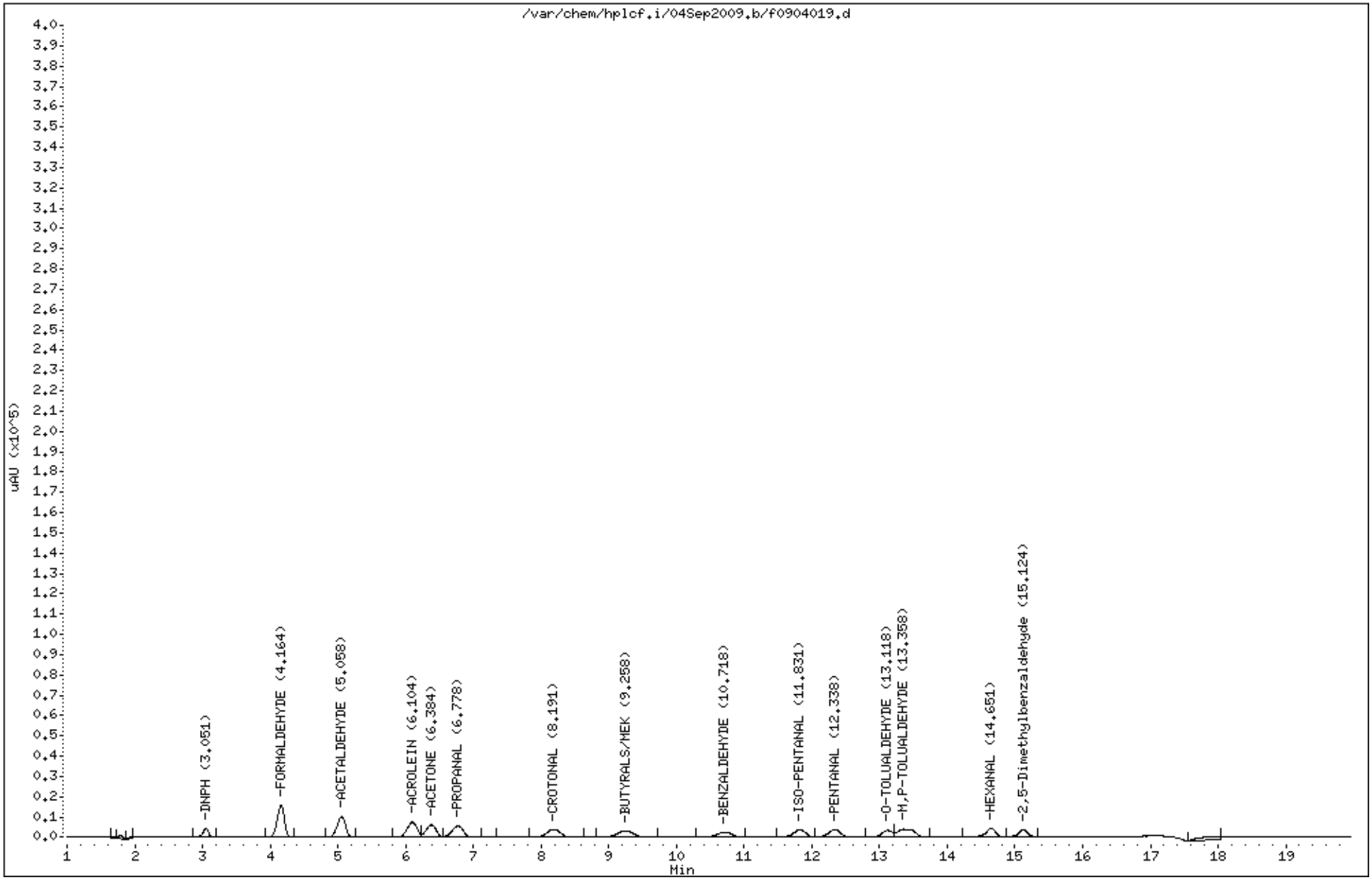
Sample Info: ;1331-138-1.0;L5

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0132

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904018.d
Lab Smp Id: 1331-138-1.0 Client Smp ID: L5
Inj Date : 04-SEP-2009 14:46
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-1.0;L5
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 15:28 Cal File: f0904020.d
Als bottle: 1 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve baesed Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.054	3.054	0.000	23445	1.00000	
2 FORMALDEHYDE	4.160	4.160	0.000	116240	1.00000	0.987
3 ACETALDEHYDE	5.054	5.054	0.000	87275	1.00000	0.980
4 ACROLEIN	6.100	6.100	0.000	80050	1.00000	0.988
5 ACETONE	6.380	6.380	0.000	64245	1.00000	0.993
6 PROPANAL	6.774	6.774	0.000	66800	1.00000	0.986
7 CROTONAL	8.187	8.187	0.000	57607	1.00000	0.986
9 BUTYRALS/MEK	9.254	9.254	0.000	54862	1.00000	0.984
10 BENZALDEHYDE	10.720	10.720	0.000	39558	1.00000	0.991
11 ISO-PENTANAL	11.827	11.827	0.000	46372	1.00000	0.990
12 PENTANAL	12.340	12.340	0.000	46392	1.00000	0.988
14 O-TOLUALDEHYDE	13.120	13.120	0.000	35674	1.00000	0.987
15 M,P-TOLUALDEHYDE	13.360	13.360	0.000	63925	2.00000	1.92
16 HEXANAL	14.647	14.647	0.000	41365	1.00000	0.991
17 2,5-Dimethylbenzaldehyde	15.120	15.120	0.000	30366	1.00000	1.01

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904018.d

Date : 04-SEP-2009 14:46

Client ID: L5

Instrument: hplcf.i

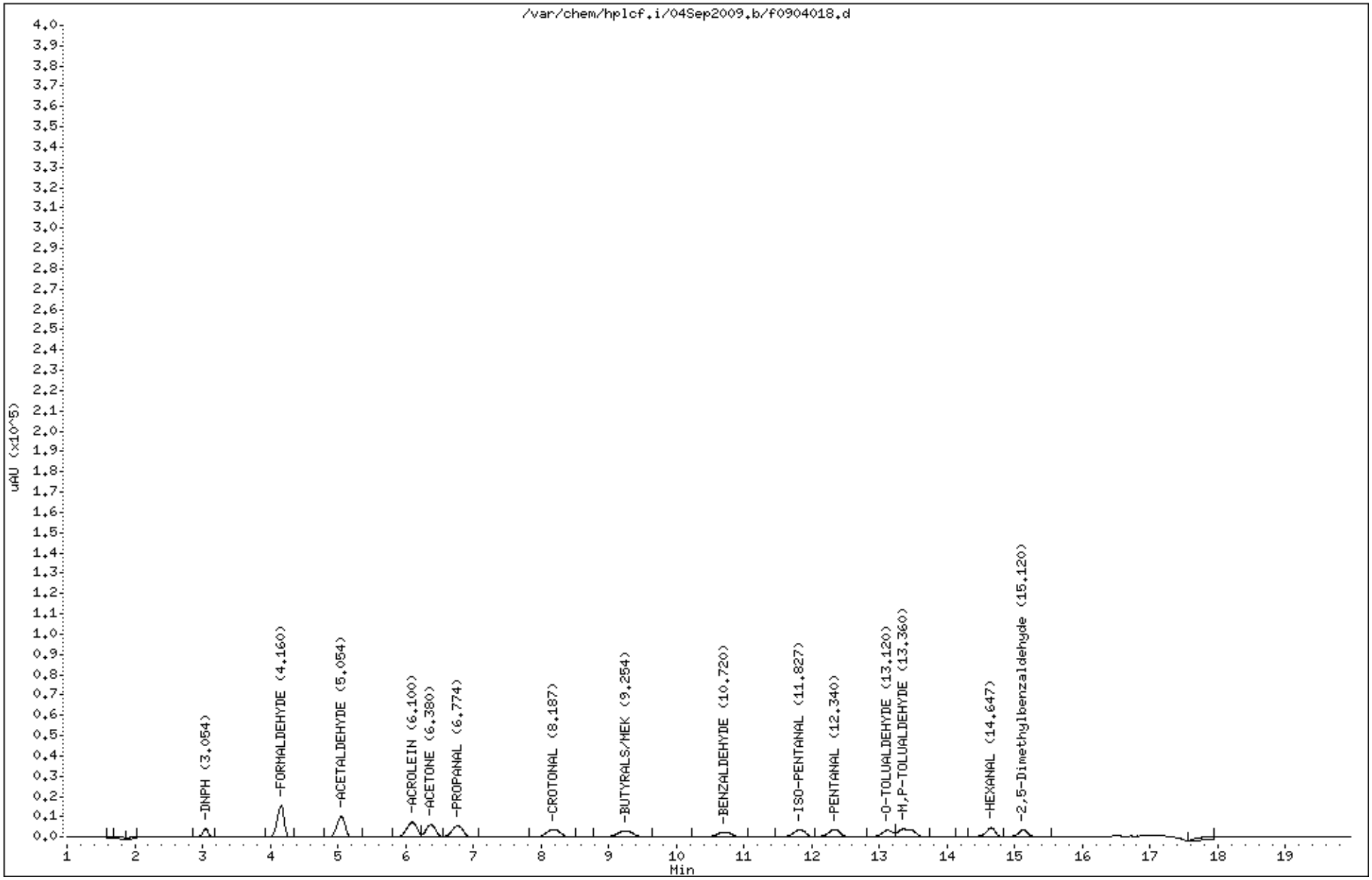
Sample Info: ;1331-138-1.0;L5

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0134

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904023.d
Lab Smp Id: 1331-138-4.0 Client Smp ID: L6
Inj Date : 04-SEP-2009 16:31
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-4.0;L6
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 16:31 Cal File: f0904023.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.137	3.137	0.000	5820	4.00000	
2 FORMALDEHYDE	4.170	4.170	0.000	433341	4.00000	3.68
3 ACETALDEHYDE	5.064	5.064	0.000	342331	4.00000	3.84
4 ACROLEIN	6.111	6.111	0.000	316371	4.00000	3.90
5 ACETONE	6.397	6.397	0.000	252661	4.00000	3.91
6 PROPANAL	6.790	6.790	0.000	262712	4.00000	3.88
7 CROTONAL	8.210	8.210	0.000	227370	4.00000	3.89
9 BUTYRALS/MEK	9.277	9.277	0.000	217173	4.00000	3.90
10 BENZALDEHYDE	10.751	10.751	0.000	154835	4.00000	3.88
11 ISO-PENTANAL	11.844	11.844	0.000	184663	4.00000	3.95
12 PENTANAL	12.357	12.357	0.000	181632	4.00000	3.87
14 O-TOLUALDEHYDE	13.137	13.137	0.000	139776	4.00000	3.87
15 M,P-TOLUALDEHYDE	13.377	13.377	0.000	251824	8.00000	7.57
16 HEXANAL	14.664	14.664	0.000	159735	4.00000	3.83
17 2,5-Dimethylbenzaldehyde	15.137	15.137	0.000	115477	4.00000	3.84

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904023.d

Date : 04-SEP-2009 16:31

Client ID: L6

Instrument: hplcf.i

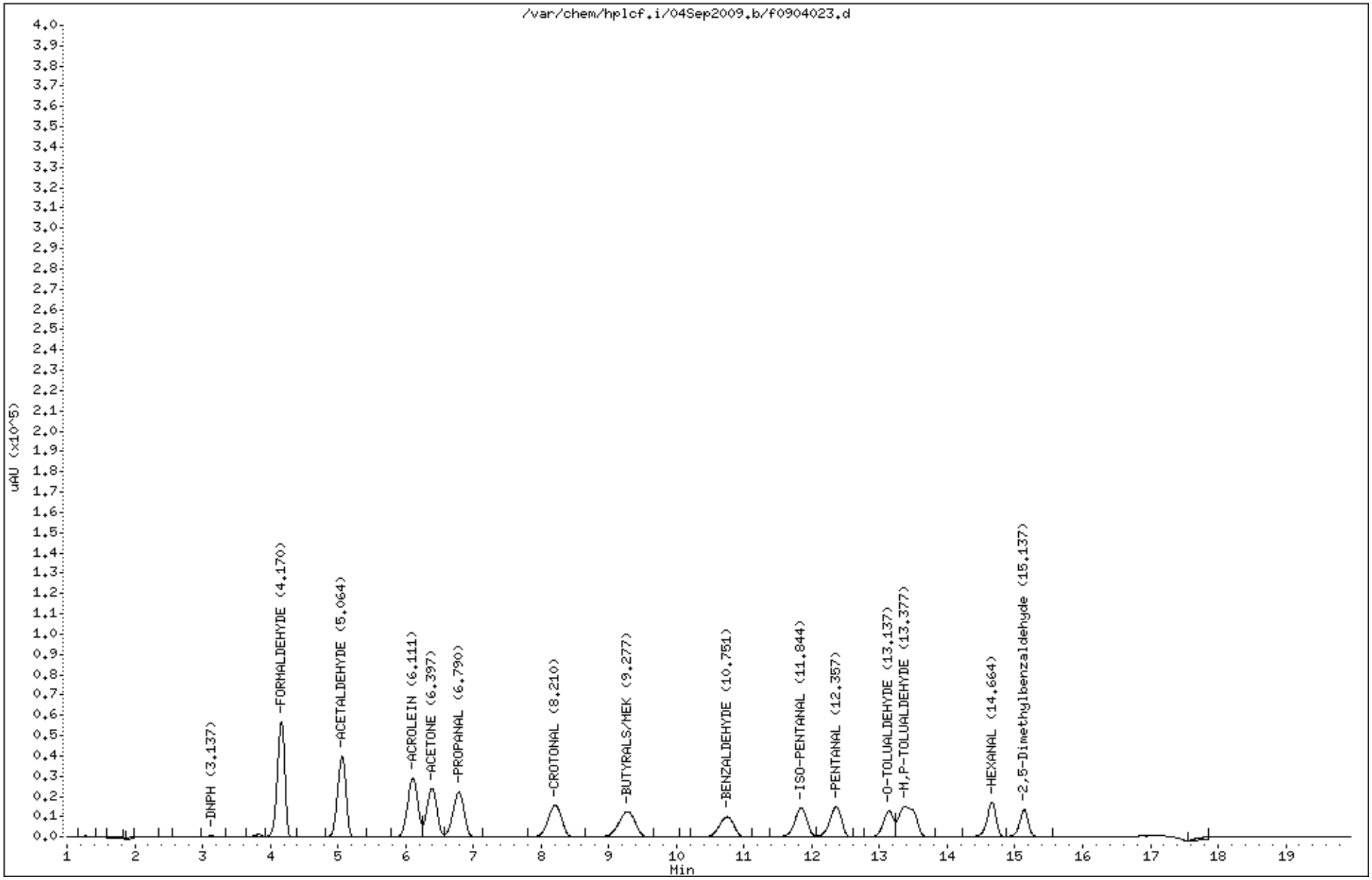
Sample Info: ;1331-138-4.0;L6

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0136

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904022.d
Lab Smp Id: 1331-138-4.0 Client Smp ID: L6
Inj Date : 04-SEP-2009 16:10
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-4.0;L6
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 16:31 Cal File: f0904023.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.133	3.133	0.000	5565	4.00000	
2 FORMALDEHYDE	4.166	4.166	0.000	432992	4.00000	3.68
3 ACETALDEHYDE	5.059	5.059	0.000	341664	4.00000	3.84
4 ACROLEIN	6.106	6.106	0.000	316055	4.00000	3.90
5 ACETONE	6.386	6.386	0.000	252320	4.00000	3.90
6 PROPANAL	6.786	6.786	0.000	262026	4.00000	3.87
7 CROTONAL	8.206	8.206	0.000	227941	4.00000	3.90
9 BUTYRALS/MEK	9.266	9.266	0.000	216553	4.00000	3.88
10 BENZALDEHYDE	10.739	10.739	0.000	152931	4.00000	3.84
11 ISO-PENTANAL	11.839	11.839	0.000	184203	4.00000	3.94
12 PENTANAL	12.353	12.353	0.000	182503	4.00000	3.89
14 O-TOLUALDEHYDE	13.133	13.133	0.000	140539	4.00000	3.89
15 M,P-TOLUALDEHYDE	13.373	13.373	0.000	251191	8.00000	7.55
16 HEXANAL	14.659	14.659	0.000	159479	4.00000	3.82
17 2,5-Dimethylbenzaldehyde	15.133	15.133	0.000	114276	4.00000	3.80

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904022.d

Page 1

Date : 04-SEP-2009 16:10

Client ID: L6

Instrument: hplcf.i

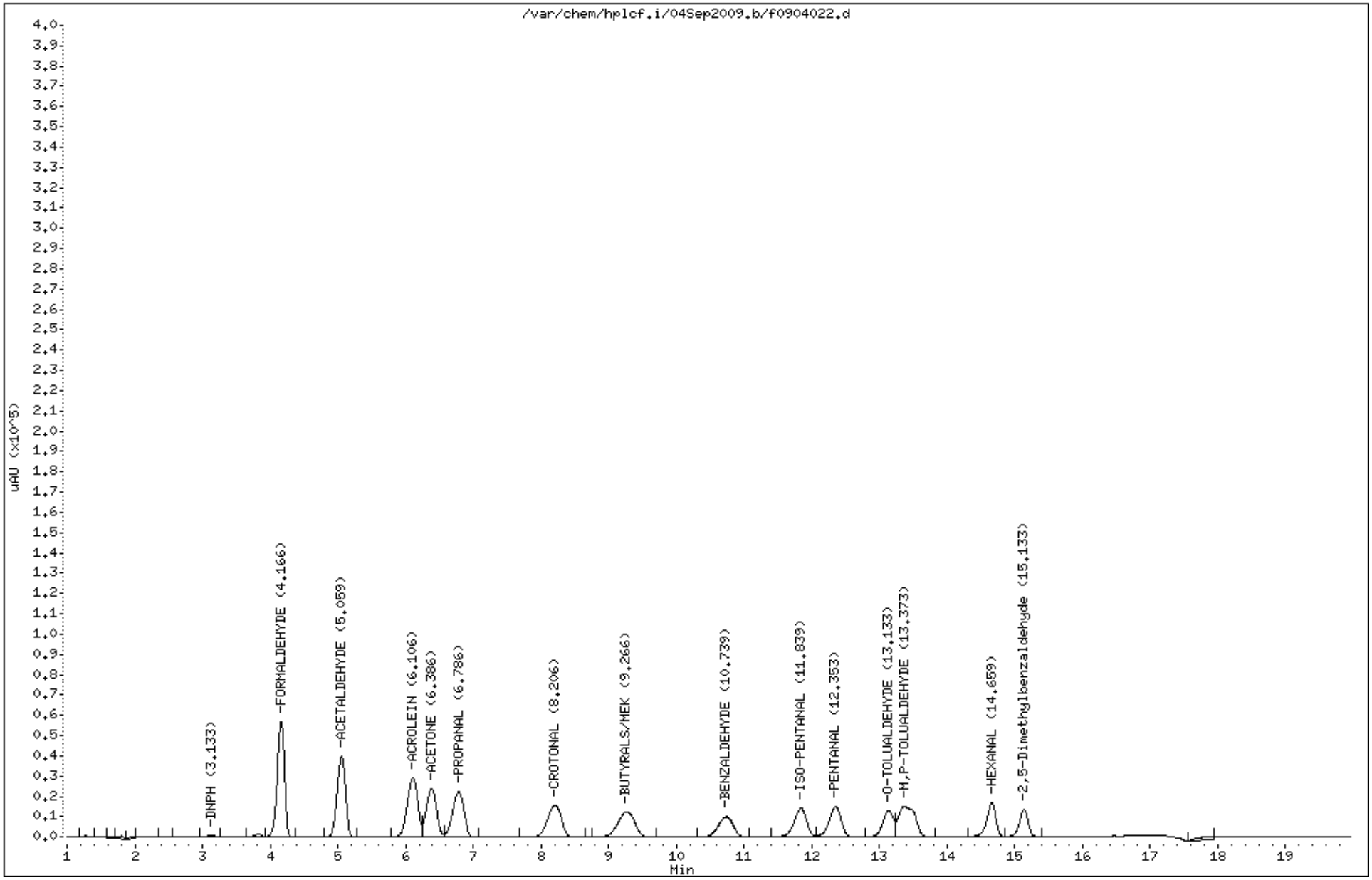
Sample Info: ;1331-138-4.0;L6

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0138

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904021.d
Lab Smp Id: 1331-138-4.0 Client Smp ID: L6
Inj Date : 04-SEP-2009 15:49
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-4.0;L6
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 16:31 Cal File: f0904023.d
Als bottle: 1 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.133	3.133	0.000	5390	4.00000	
2 FORMALDEHYDE	4.167	4.167	0.000	433842	4.00000	3.68
3 ACETALDEHYDE	5.060	5.060	0.000	342814	4.00000	3.85
4 ACROLEIN	6.106	6.106	0.000	316601	4.00000	3.91
5 ACETONE	6.386	6.386	0.000	253013	4.00000	3.91
6 PROPANAL	6.787	6.787	0.000	262851	4.00000	3.88
7 CROTONAL	8.207	8.207	0.000	227895	4.00000	3.90
9 BUTYRALS/MEK	9.267	9.267	0.000	217261	4.00000	3.90
10 BENZALDEHYDE	10.740	10.740	0.000	154020	4.00000	3.86
11 ISO-PENTANAL	11.840	11.840	0.000	184367	4.00000	3.95
12 PENTANAL	12.353	12.353	0.000	182917	4.00000	3.90
14 O-TOLUALDEHYDE	13.133	13.133	0.000	140634	4.00000	3.89
15 M,P-TOLUALDEHYDE	13.373	13.373	0.000	252806	8.00000	7.60
16 HEXANAL	14.660	14.660	0.000	160106	4.00000	3.84
17 2,5-Dimethylbenzaldehyde	15.133	15.133	0.000	115423	4.00000	3.84

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904021.d

Date : 04-SEP-2009 15:49

Client ID: L6

Instrument: hplcf.i

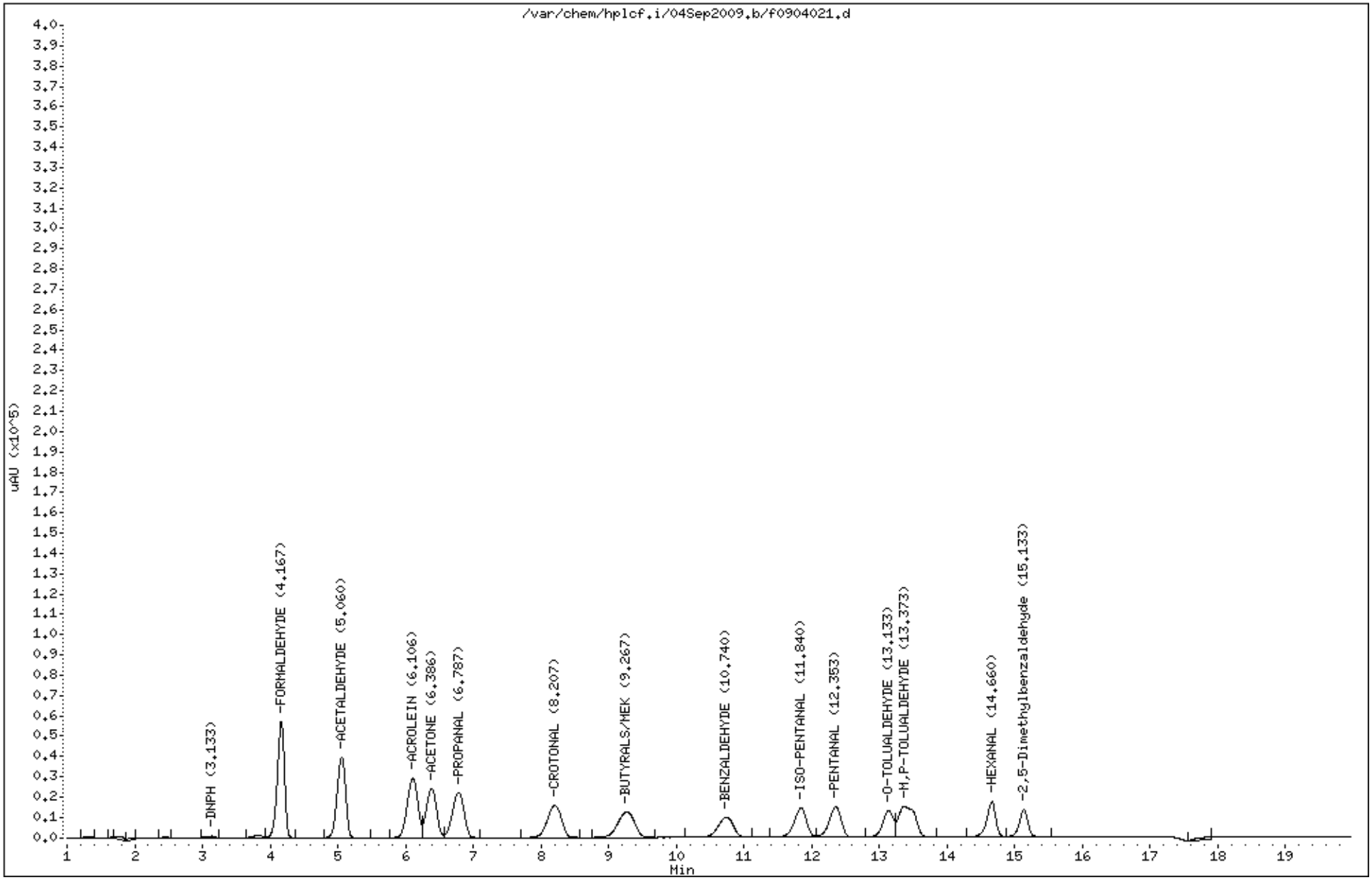
Sample Info: ;1331-138-4.0;L6

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0140

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904026.d
Lab Smp Id: 1331-138-10 Client Smp ID: L7
Inj Date : 04-SEP-2009 17:33
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-10;L7
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 17:33 Cal File: f0904026.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	4.170	4.170	0.000	1219401	10.0000	10.4
3 ACETALDEHYDE	5.063	5.063	0.000	909118	10.0000	10.2
4 ACROLEIN	6.110	6.110	0.000	836310	10.0000	10.3
5 ACETONE	6.390	6.390	0.000	664399	10.0000	10.3
6 PROPANAL	6.783	6.783	0.000	696895	10.0000	10.3
7 CROTONAL	8.210	8.210	0.000	600743	10.0000	10.3
9 BUTYRALS/MEK	9.276	9.276	0.000	574379	10.0000	10.3
10 BENZALDEHYDE	10.743	10.743	0.000	406352	10.0000	10.2
11 ISO-PENTANAL	11.843	11.843	0.000	485744	10.0000	10.4
12 PENTANAL	12.356	12.356	0.000	479537	10.0000	10.2
14 O-TOLUALDEHYDE	13.136	13.136	0.000	371557	10.0000	10.3
15 M,P-TOLUALDEHYDE	13.376	13.376	0.000	664554	20.0000	20.0
16 HEXANAL	14.656	14.656	0.000	420845	10.0000	10.1
17 2,5-Dimethylbenzaldehyde	15.130	15.130	0.000	302518	10.0000	10.0

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904026.d

Page 1

Date : 04-SEP-2009 17:33

Client ID: L7

Instrument: hplcf.i

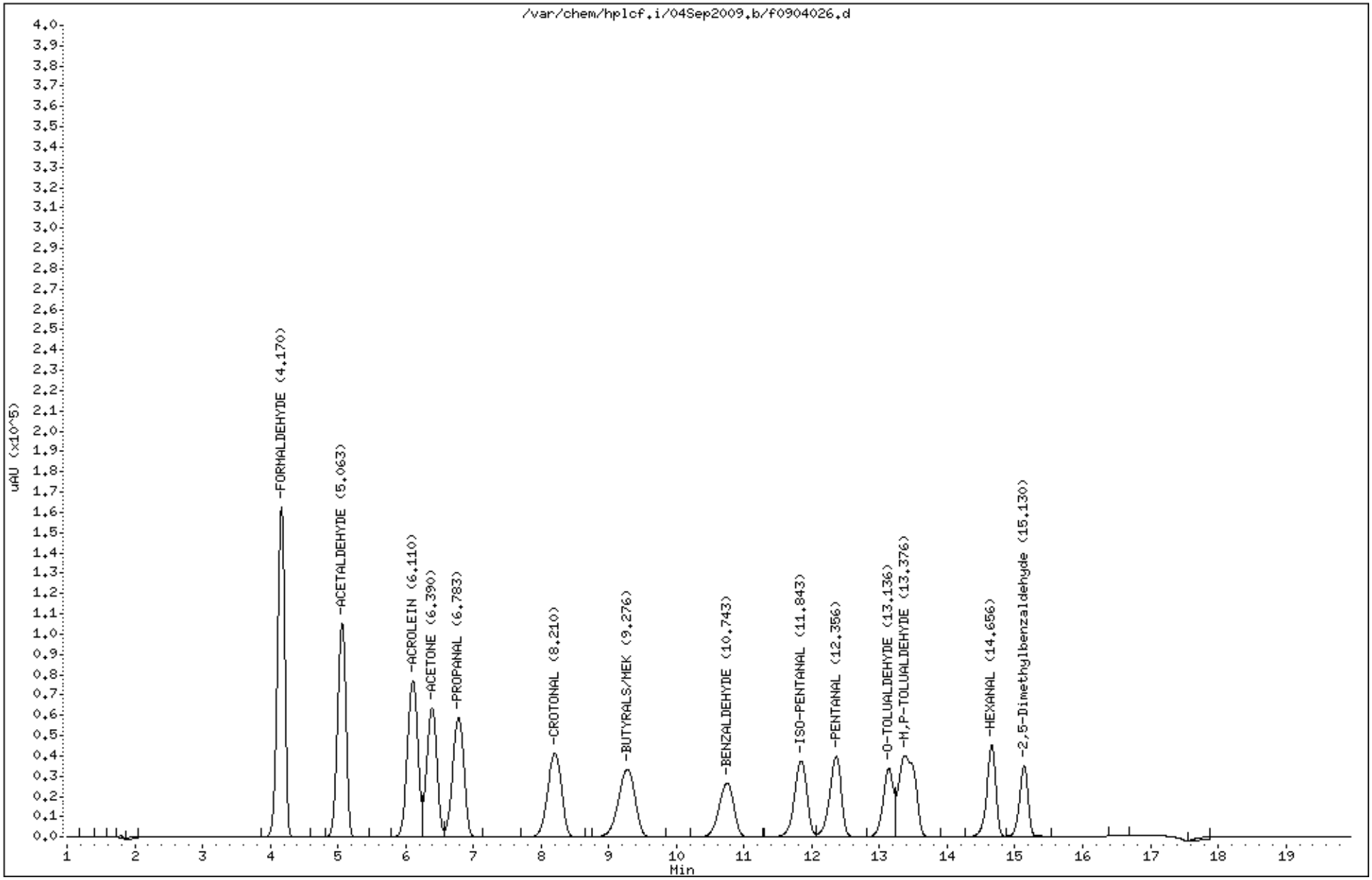
Sample Info: ;1331-138-10;L7

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0142

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904025.d
Lab Smp Id: 1331-138-10 Client Smp ID: L7
Inj Date : 04-SEP-2009 17:12
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-10;L7
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 17:33 Cal File: f0904026.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

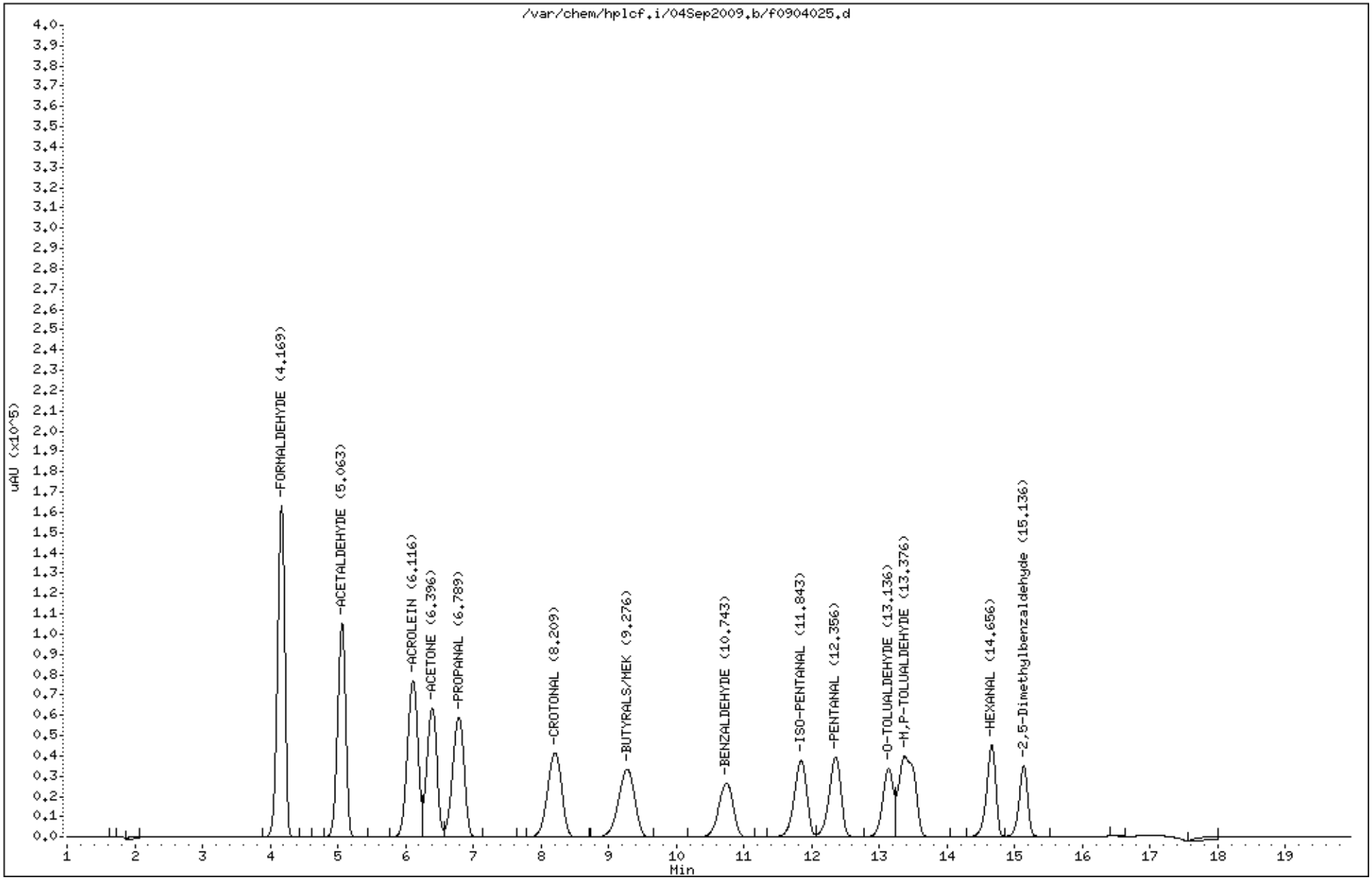
Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	4.169	4.169	0.000	1218348	10.0000	10.3
3 ACETALDEHYDE	5.063	5.063	0.000	909968	10.0000	10.2
4 ACROLEIN	6.116	6.116	0.000	834324	10.0000	10.3
5 ACETONE	6.396	6.396	0.000	666731	10.0000	10.3
6 PROPANAL	6.789	6.789	0.000	695749	10.0000	10.3
7 CROTONAL	8.209	8.209	0.000	603615	10.0000	10.3
9 BUTYRALS/MEK	9.276	9.276	0.000	573142	10.0000	10.3
10 BENZALDEHYDE	10.743	10.743	0.000	407187	10.0000	10.2
11 ISO-PENTANAL	11.843	11.843	0.000	486449	10.0000	10.4
12 PENTANAL	12.356	12.356	0.000	482099	10.0000	10.3
14 O-TOLUALDEHYDE	13.136	13.136	0.000	372708	10.0000	10.3
15 M,P-TOLUALDEHYDE	13.376	13.376	0.000	665691	20.0000	20.0
16 HEXANAL	14.656	14.656	0.000	421005	10.0000	10.1
17 2,5-Dimethylbenzaldehyde	15.136	15.136	0.000	301089	10.0000	10.0

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904025.d
Date : 04-SEP-2009 17:12
Client ID: L7
Sample Info: ;1331-138-10;L7
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: CRL
Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904024.d
Lab Smp Id: 1331-138-10 Client Smp ID: L7
Inj Date : 04-SEP-2009 16:52
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-10;L7
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 17:33 Cal File: f0904026.d
Als bottle: 1 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

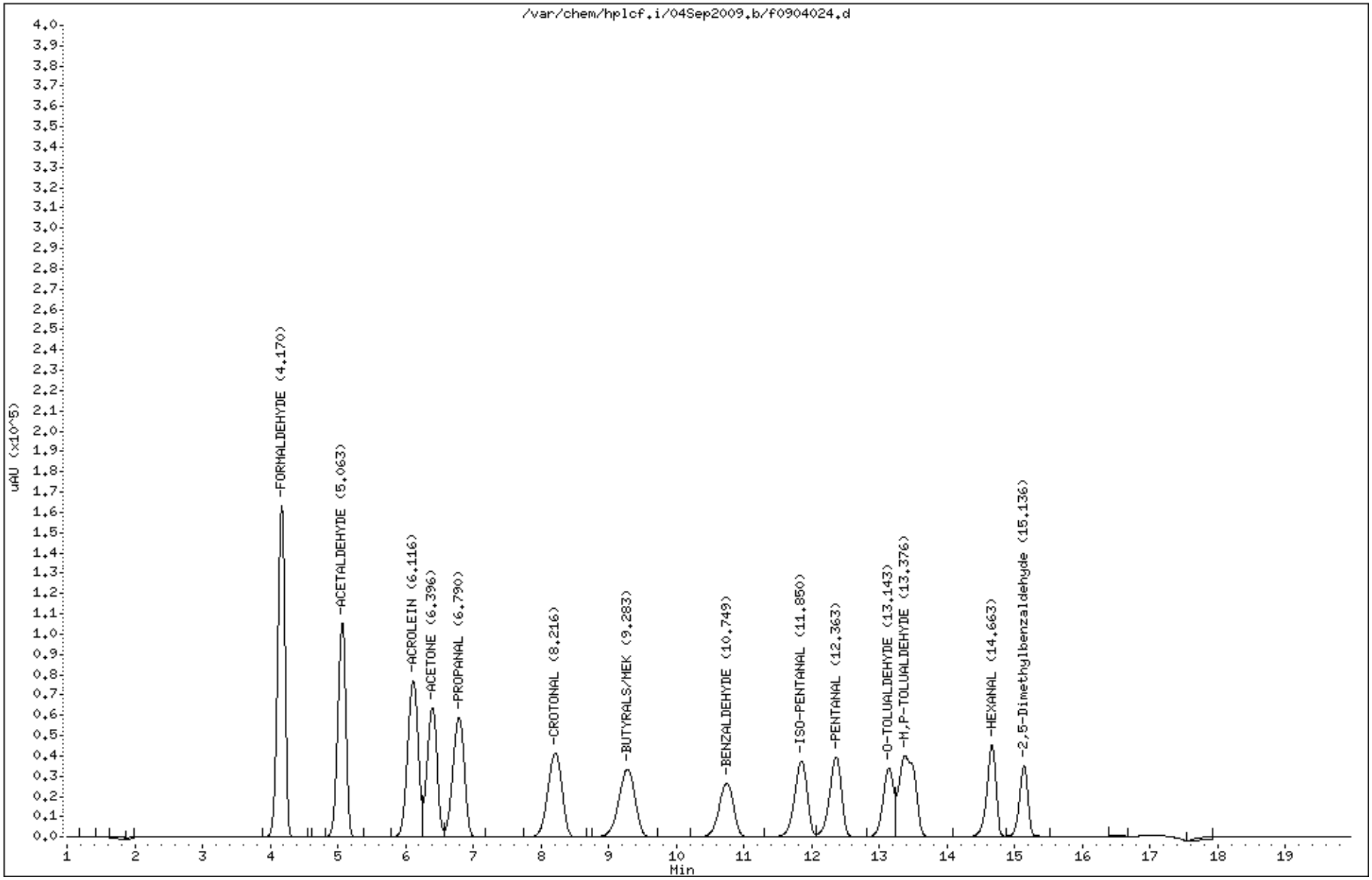
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	4.170	4.170	0.000	1218506	10.0000	10.3
3 ACETALDEHYDE	5.063	5.063	0.000	908512	10.0000	10.2
4 ACROLEIN	6.116	6.116	0.000	837317	10.0000	10.3
5 ACETONE	6.396	6.396	0.000	662237	10.0000	10.2
6 PROPANAL	6.790	6.790	0.000	696040	10.0000	10.3
7 CROTONAL	8.216	8.216	0.000	600326	10.0000	10.3
9 BUTYRALS/MEK	9.283	9.283	0.000	574176	10.0000	10.3
10 BENZALDEHYDE	10.749	10.749	0.000	407309	10.0000	10.2
11 ISO-PENTANAL	11.850	11.850	0.000	488196	10.0000	10.4
12 PENTANAL	12.363	12.363	0.000	483614	10.0000	10.3
14 O-TOLUALDEHYDE	13.143	13.143	0.000	367866	10.0000	10.2
15 M,P-TOLUALDEHYDE	13.376	13.376	0.000	672082	20.0000	20.2
16 HEXANAL	14.663	14.663	0.000	422220	10.0000	10.1
17 2,5-Dimethylbenzaldehyde	15.136	15.136	0.000	302171	10.0000	10.0

0146

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904024.d
Date : 04-SEP-2009 16:52
Client ID: L7
Sample Info: ;1331-138-10;L7
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: CRL
Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904029.d
Lab Smp Id: 1331-138-20 Client Smp ID: L8
Inj Date : 04-SEP-2009 18:36
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-20;L8
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 18:36 Cal File: f0904029.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.150	3.150	0.000	6662	20.0000	
2 FORMALDEHYDE	4.184	4.184	0.000	2446970	20.0000	20.8
3 ACETALDEHYDE	5.077	5.077	0.000	1826402	20.0000	20.5
4 ACROLEIN	6.137	6.137	0.000	1685604	20.0000	20.8
5 ACETONE	6.417	6.417	0.000	1330272	20.0000	20.6
6 PROPANAL	6.817	6.817	0.000	1399231	20.0000	20.7
7 CROTONAL	8.244	8.244	0.000	1207819	20.0000	20.7
9 BUTYRALS/MEK	9.324	9.324	0.000	1155589	20.0000	20.7
10 BENZALDEHYDE	10.790	10.790	0.000	821353	20.0000	20.6
11 ISO-PENTANAL	11.890	11.890	0.000	982517	20.0000	21.0
12 PENTANAL	12.404	12.404	0.000	970874	20.0000	20.7
14 O-TOLUALDEHYDE	13.184	13.184	0.000	743480	20.0000	20.6
15 M,P-TOLUALDEHYDE	13.424	13.424	0.000	1347756	40.0000	40.5
16 HEXANAL	14.710	14.710	0.000	847724	20.0000	20.3
17 2,5-Dimethylbenzaldehyde	15.190	15.190	0.000	606073	20.0000	20.1

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904029.d

Page 1

Date : 04-SEP-2009 18:36

Client ID: L8

Instrument: hplcf.i

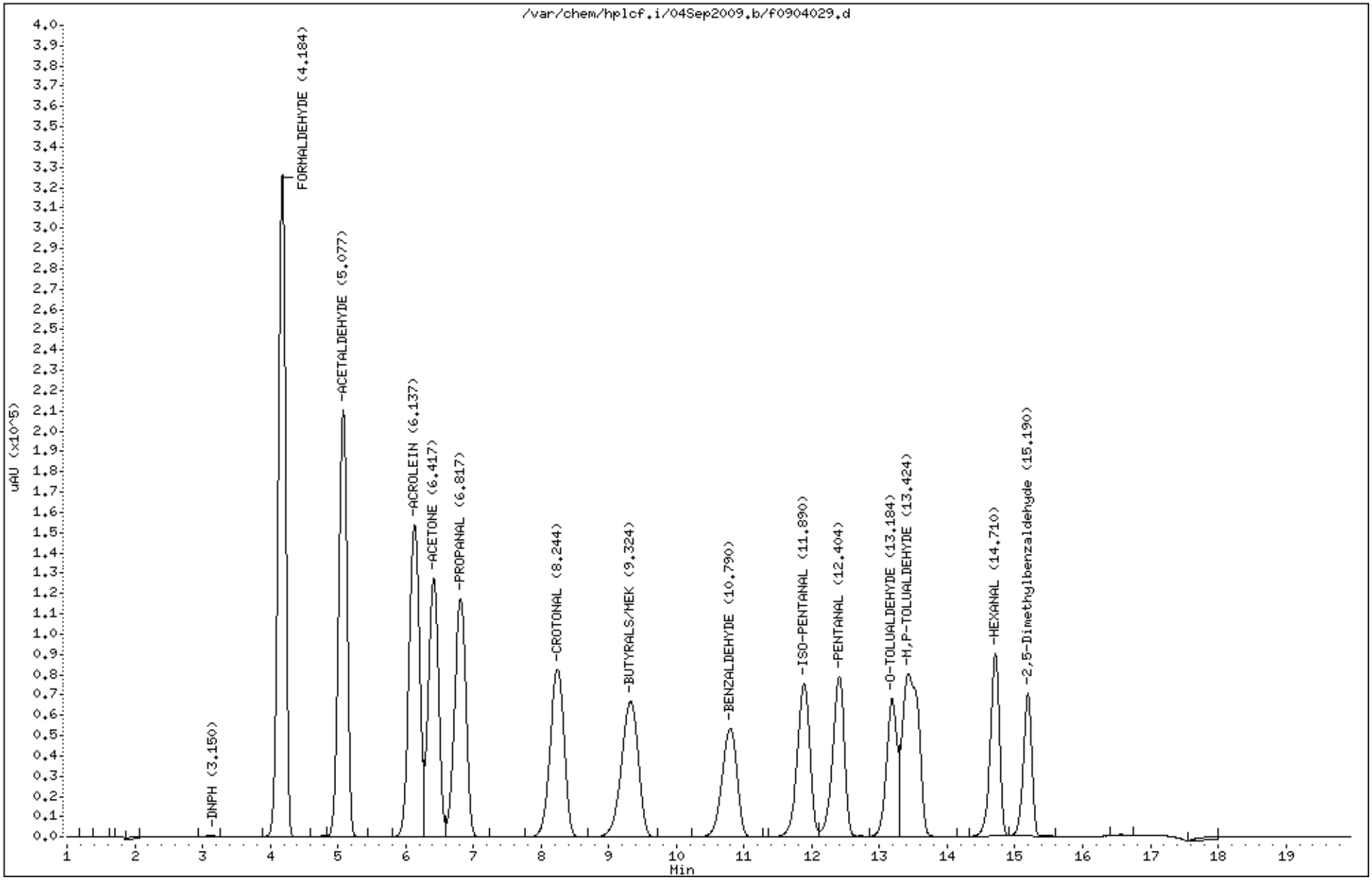
Sample Info: ;1331-138-20;L8

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0148

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904028.d
Lab Smp Id: 1331-138-20 Client Smp ID: L8
Inj Date : 04-SEP-2009 18:15
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-20;L8
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 18:36 Cal File: f0904029.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.133	3.133	0.000	6623	20.0000	
2 FORMALDEHYDE	4.167	4.167	0.000	2442880	20.0000	20.7
3 ACETALDEHYDE	5.060	5.060	0.000	1824917	20.0000	20.5
4 ACROLEIN	6.107	6.107	0.000	1678308	20.0000	20.7
5 ACETONE	6.387	6.387	0.000	1333554	20.0000	20.6
6 PROPANAL	6.787	6.787	0.000	1395018	20.0000	20.6
7 CROTONAL	8.207	8.207	0.000	1207314	20.0000	20.7
9 BUTYRALS/MEK	9.280	9.280	0.000	1155969	20.0000	20.7
10 BENZALDEHYDE	10.747	10.747	0.000	817312	20.0000	20.5
11 ISO-PENTANAL	11.840	11.840	0.000	978590	20.0000	21.0
12 PENTANAL	12.353	12.353	0.000	973220	20.0000	20.8
14 O-TOLUALDEHYDE	13.140	13.140	0.000	743236	20.0000	20.6
15 M,P-TOLUALDEHYDE	13.373	13.373	0.000	1353627	40.0000	40.7
16 HEXANAL	14.673	14.673	0.000	847036	20.0000	20.3
17 2,5-Dimethylbenzaldehyde	15.153	15.153	0.000	606394	20.0000	20.1

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904028.d

Date : 04-SEP-2009 18:15

Client ID: L8

Sample Info: ;1331-138-20;L8

Purge Volume: 5.0

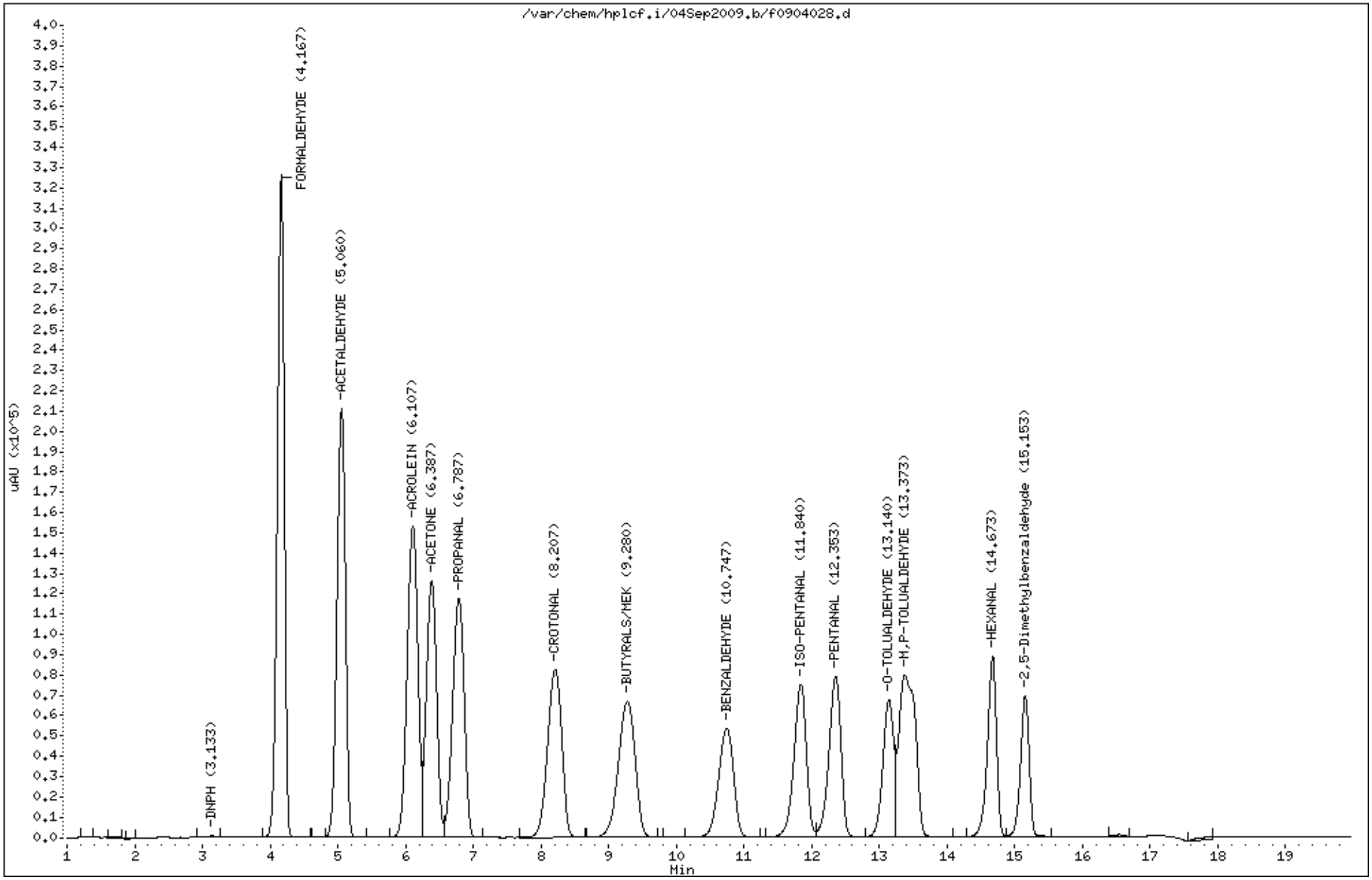
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0150



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904027.d
Lab Smp Id: 1331-138-20 Client Smp ID: L8
Inj Date : 04-SEP-2009 17:54
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-20;L8
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 19:36 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 18:36 Cal File: f0904029.d
Als bottle: 1 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.140	3.140	0.000	6677	20.0000	
2 FORMALDEHYDE	4.167	4.167	0.000	2439010	20.0000	20.7
3 ACETALDEHYDE	5.060	5.060	0.000	1821412	20.0000	20.5
4 ACROLEIN	6.114	6.114	0.000	1675301	20.0000	20.7
5 ACETONE	6.394	6.394	0.000	1332949	20.0000	20.6
6 PROPANAL	6.793	6.793	0.000	1393661	20.0000	20.6
7 CROTONAL	8.213	8.213	0.000	1204092	20.0000	20.6
9 BUTYRALS/MEK	9.287	9.287	0.000	1152464	20.0000	20.7
10 BENZALDEHYDE	10.754	10.754	0.000	814464	20.0000	20.4
11 ISO-PENTANAL	11.854	11.854	0.000	974704	20.0000	20.9
12 PENTANAL	12.367	12.367	0.000	964501	20.0000	20.6
14 O-TOLUALDEHYDE	13.147	13.147	0.000	737056	20.0000	20.4
15 M,P-TOLUALDEHYDE	13.380	13.380	0.000	1345757	40.0000	40.4
16 HEXANAL	14.667	14.667	0.000	844148	20.0000	20.2
17 2,5-Dimethylbenzaldehyde	15.140	15.140	0.000	606457	20.0000	20.2

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904027.d

Date : 04-SEP-2009 17:54

Client ID: L8

Instrument: hplcf.i

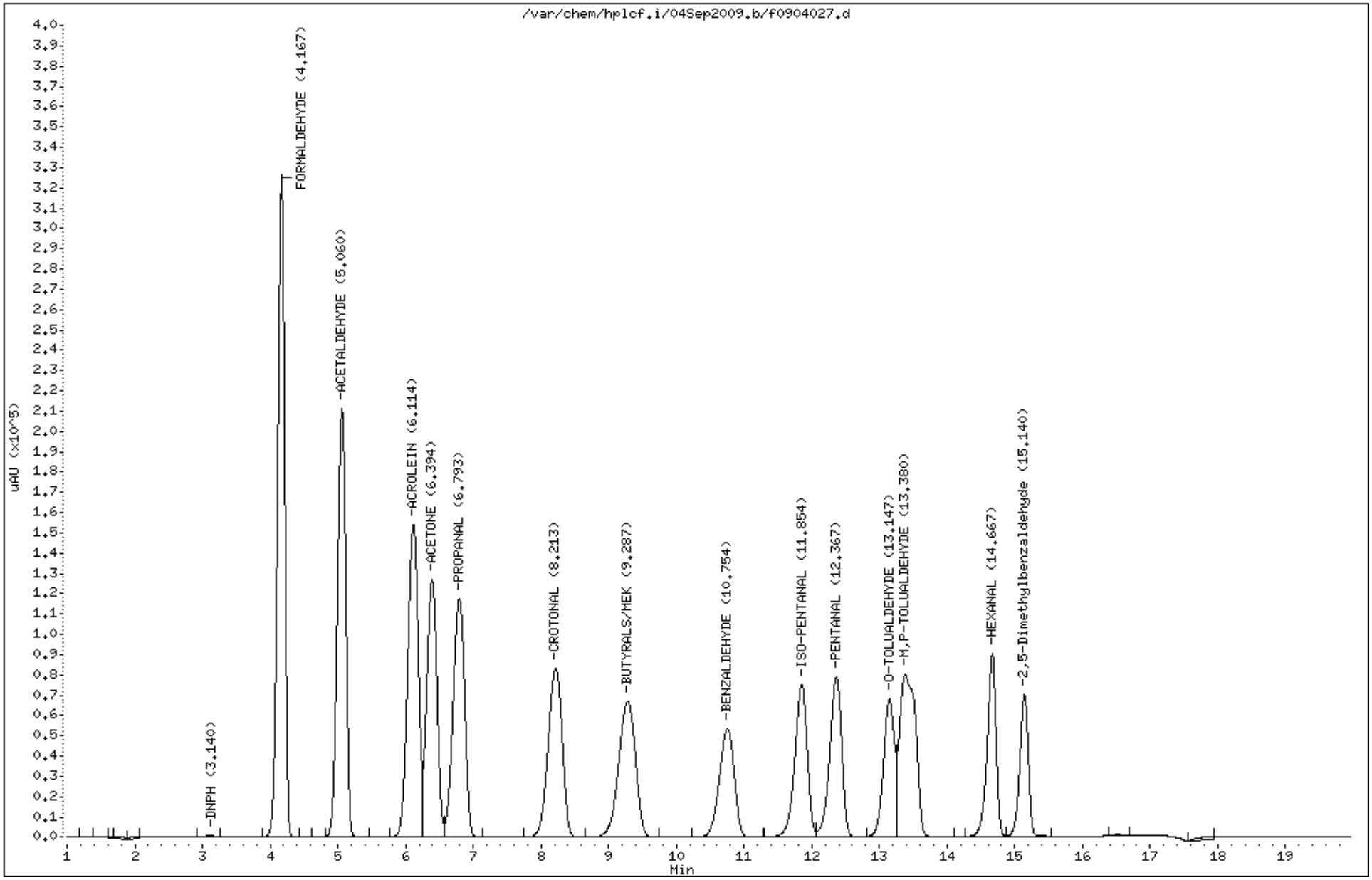
Sample Info: ;1331-138-20;L8

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0152

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/04Sep2009.b/f0904032.d
Lab Smp Id: 1331-139-50 Client Smp ID: L9
Inj Date : 04-SEP-2009 19:39
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-50;L9
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 20:43 atoyama Quant Type: ESTD
Cal Date : 04-SEP-2009 19:39 Cal File: f0904032.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.148	3.148	0.000	17339	50.0000	
2 FORMALDEHYDE	4.188	4.188	0.000	6059254	50.0000	51.3
3 ACETALDEHYDE	5.088	5.088	0.000	4521366	50.0000	50.7
4 ACROLEIN	6.148	6.148	0.000	4181999	50.0000	51.4
5 ACETONE	6.428	6.428	0.000	3286284	50.0000	50.6
6 PROPANAL	6.828	6.828	0.000	3464681	50.0000	51.0
7 CROTONAL	8.261	8.261	0.000	2994834	50.0000	51.1
9 BUTYRALS/MEK	9.335	9.335	0.000	2863615	50.0000	51.2
10 BENZALDEHYDE	10.815	10.815	0.000	2030105	50.0000	50.8
11 ISO-PENTANAL	11.895	11.895	0.000	2426665	50.0000	51.7
12 PENTANAL	12.401	12.401	0.000	2397514	50.0000	51.0
14 O-TOLUALDEHYDE	13.188	13.188	0.000	1840354	50.0000	50.8
15 M,P-TOLUALDEHYDE	13.421	13.421	0.000	3334310	100.000	100
16 HEXANAL	14.701	14.701	0.000	2105454	50.0000	50.4
17 2,5-Dimethylbenzaldehyde	15.181	15.181	0.000	1506816	50.0000	50.1

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904032.d

Date : 04-SEP-2009 19:39

Client ID: L9

Sample Info: ;1331-139-50;L9

Purge Volume: 5.0

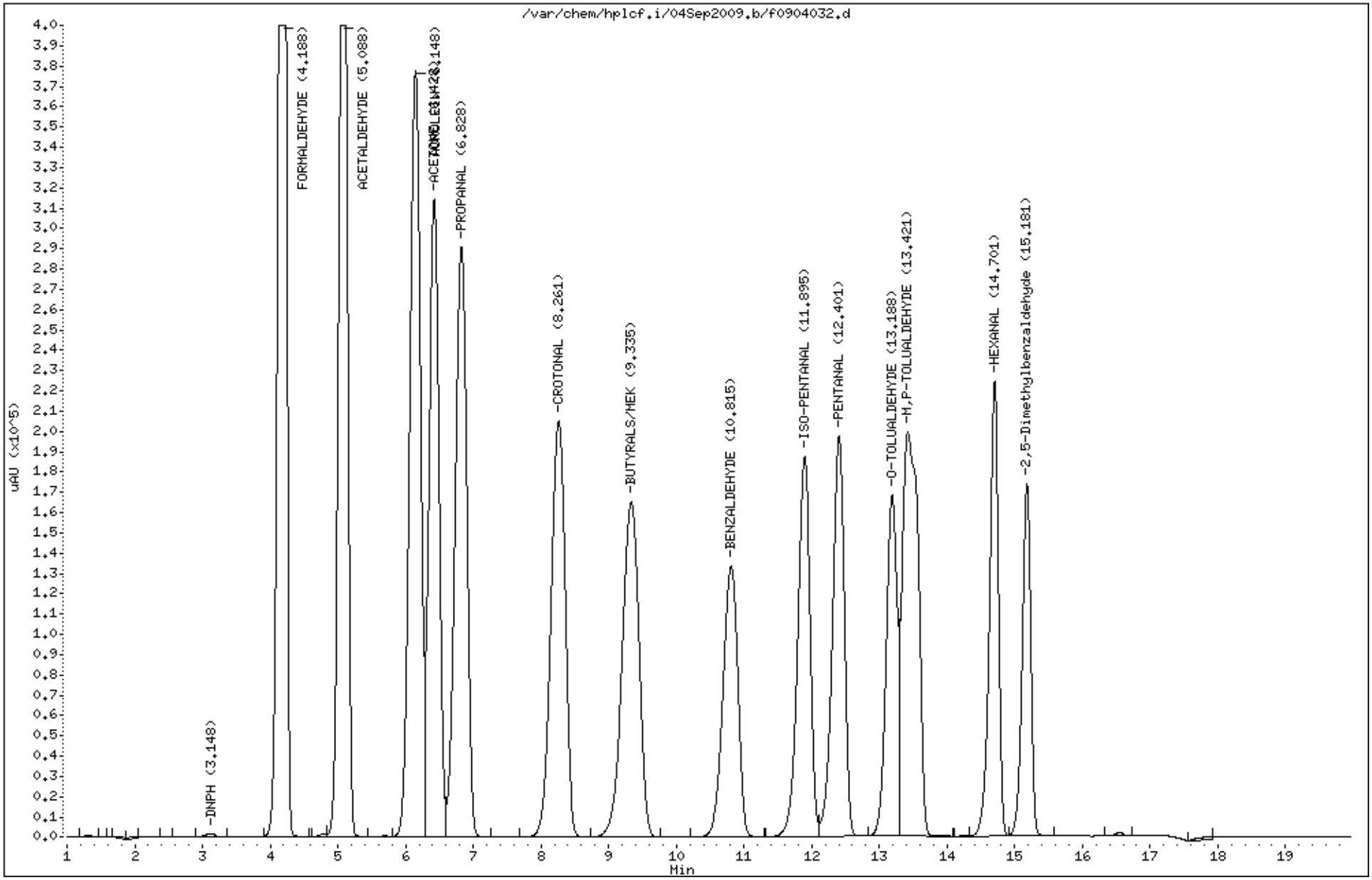
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0154



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/04Sep2009.b/f0904031.d
Lab Smp Id: 1331-139-50 Client Smp ID: L9
Inj Date : 04-SEP-2009 19:18
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-50;L9
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 20:43 atoyama Quant Type: ESTD
Cal Date : 04-SEP-2009 19:18 Cal File: f0904031.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.156	3.156	0.000	17431	50.0000	
2 FORMALDEHYDE	4.189	4.189	0.000	6056850	50.0000	51.3
3 ACETALDEHYDE	5.096	5.096	0.000	4516584	50.0000	50.7
4 ACROLEIN	6.156	6.156	0.000	4166835	50.0000	51.3
5 ACETONE	6.436	6.436	0.000	3304251	50.0000	51.0
6 PROPANAL	6.836	6.836	0.000	3458688	50.0000	51.0
7 CROTONAL	8.276	8.276	0.000	2992074	50.0000	51.1
9 BUTYRALS/MEK	9.362	9.362	0.000	2860761	50.0000	51.2
10 BENZALDEHYDE	10.829	10.829	0.000	2030562	50.0000	50.8
11 ISO-PENTANAL	11.909	11.909	0.000	2429155	50.0000	51.8
12 PENTANAL	12.422	12.422	0.000	2398540	50.0000	51.1
14 O-TOLUALDEHYDE	13.202	13.202	0.000	1844884	50.0000	51.0
15 M,P-TOLUALDEHYDE	13.436	13.436	0.000	3330807	100.000	100
16 HEXANAL	14.709	14.709	0.000	2093328	50.0000	50.2
17 2,5-Dimethylbenzaldehyde	15.189	15.189	0.000	1504321	50.0000	50.0

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904031.d

Date : 04-SEP-2009 19:18

Client ID: L9

Sample Info: ;1331-139-50;L9

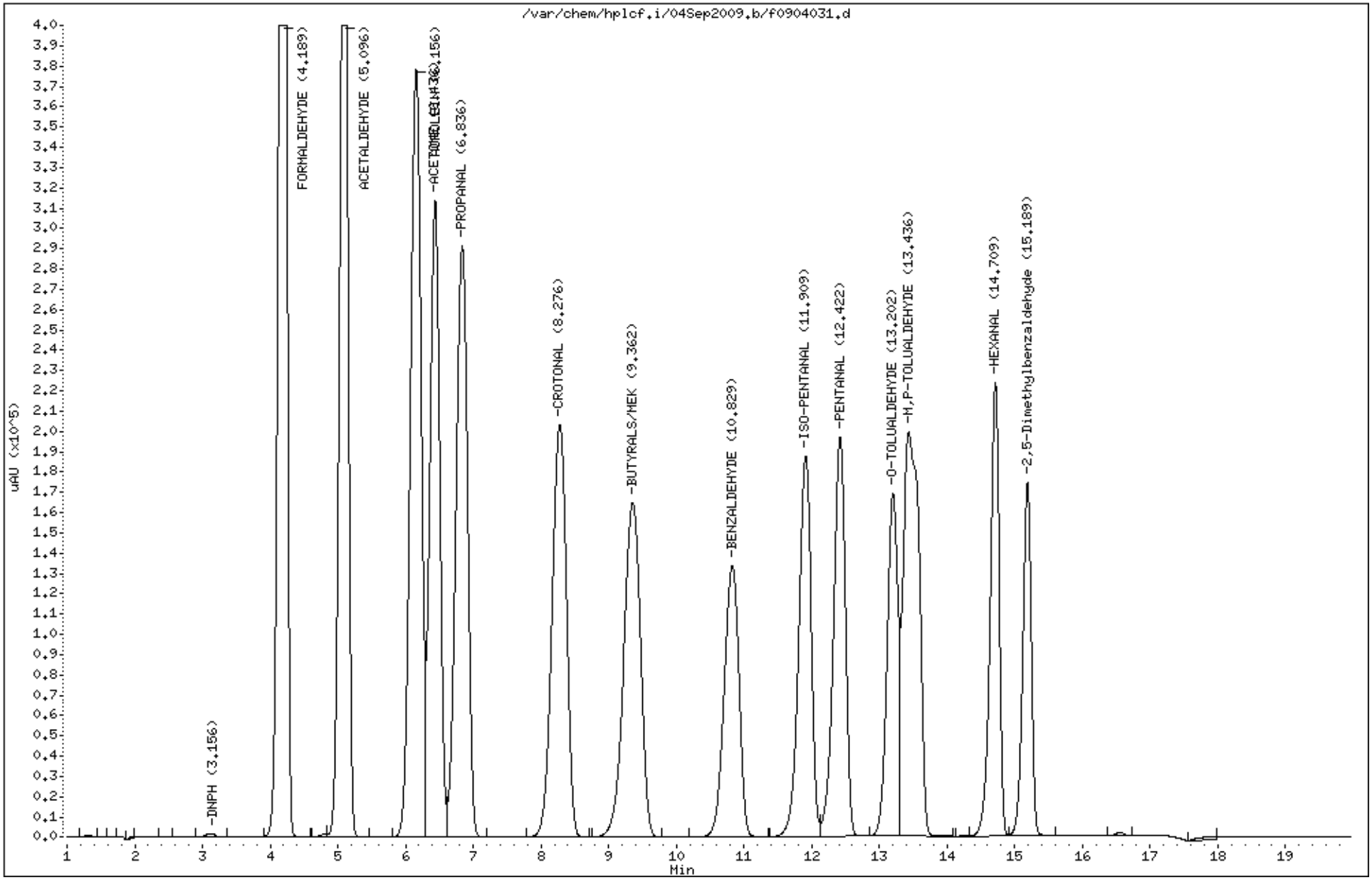
Purge Volume: 5.0

Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/04Sep2009.b/f0904030.d
Lab Smp Id: 1331-139-50 Client Smp ID: L9
Inj Date : 04-SEP-2009 18:57
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-139-50;L9
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 20:43 atoyama Quant Type: ESTD
Cal Date : 04-SEP-2009 18:57 Cal File: f0904030.d
Als bottle: 1 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.147	3.147	0.000	16555	50.0000	
2 FORMALDEHYDE	4.188	4.188	0.000	6056221	50.0000	51.4
3 ACETALDEHYDE	5.088	5.088	0.000	4519230	50.0000	50.7
4 ACROLEIN	6.147	6.147	0.000	4161181	50.0000	51.3
5 ACETONE	6.428	6.428	0.000	3315217	50.0000	51.2
6 PROPANAL	6.827	6.827	0.000	3466489	50.0000	51.1
7 CROTONAL	8.261	8.261	0.000	2995081	50.0000	51.2
9 BUTYRALS/MEK	9.341	9.341	0.000	2863748	50.0000	51.3
10 BENZALDEHYDE	10.814	10.814	0.000	2030628	50.0000	50.9
11 ISO-PENTANAL	11.901	11.901	0.000	2425966	50.0000	51.9
12 PENTANAL	12.414	12.414	0.000	2398428	50.0000	51.1
14 O-TOLUALDEHYDE	13.194	13.194	0.000	1842806	50.0000	51.0
15 M,P-TOLUALDEHYDE	13.428	13.428	0.000	3329246	100.000	100
16 HEXANAL	14.701	14.701	0.000	2092913	50.0000	50.2
17 2,5-Dimethylbenzaldehyde	15.181	15.181	0.000	1503928	50.0000	50.0

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904030.d

Date : 04-SEP-2009 18:57

Client ID: L9

Sample Info: ;1331-139-50;L9

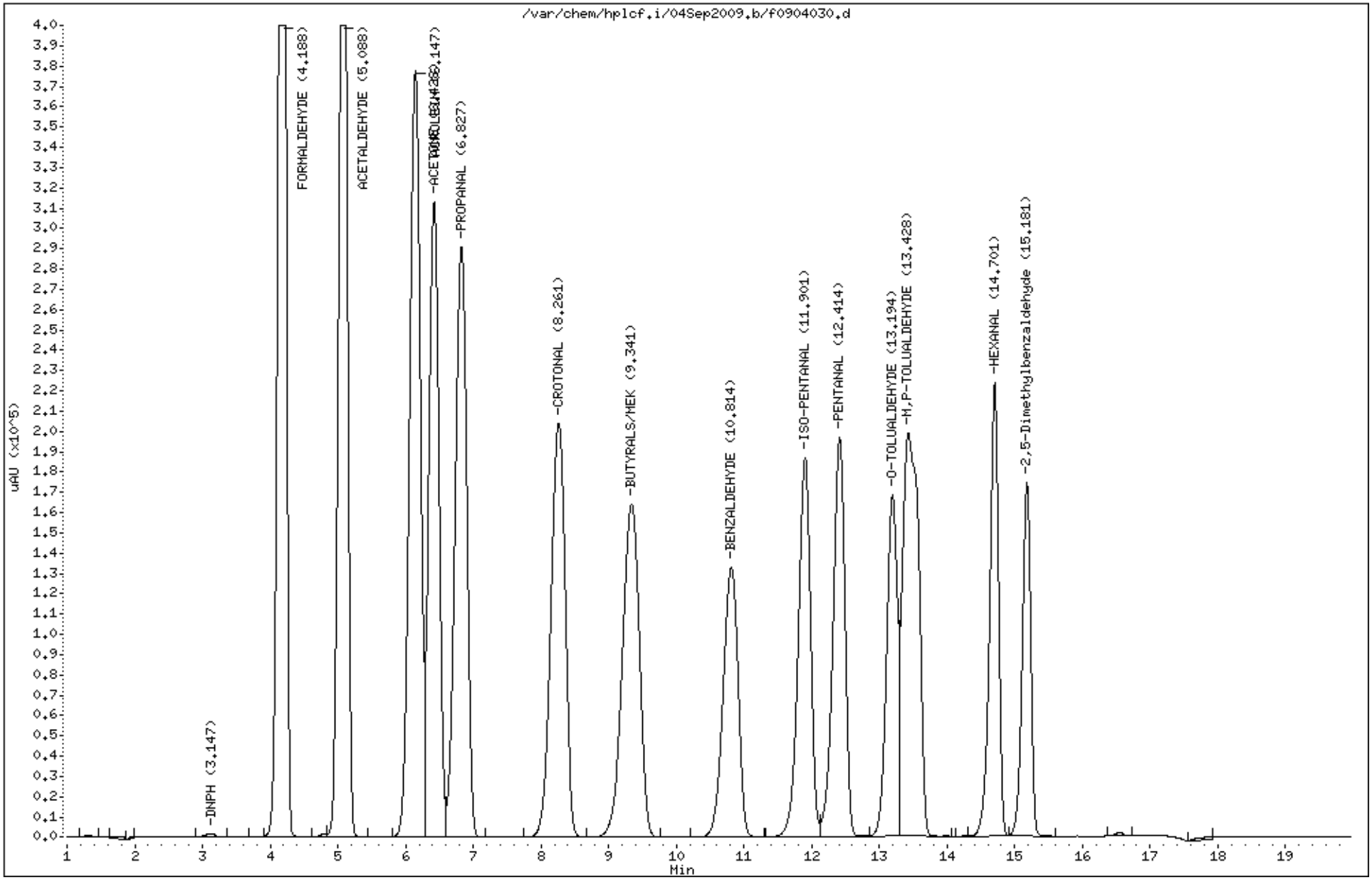
Purge Volume: 5.0

Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904035.d
Lab Smp Id: 1331-138-75 Client Smp ID: L10
Inj Date : 04-SEP-2009 20:41
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-75;L10
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 21:16 atoyama Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.073	3.073	0.000	15737	75.0000	
2 FORMALDEHYDE	4.179	4.179	0.000	9496133	75.0000	79.8(A)
3 ACETALDEHYDE	5.079	5.079	0.000	7089096	75.0000	79.0(A)
4 ACROLEIN	6.139	6.139	0.000	6566236	75.0000	80.0(A)
5 ACETONE	6.419	6.419	0.000	5150466	75.0000	78.8(A)
6 PROPANAL	6.813	6.813	0.000	5431079	75.0000	79.3(A)
7 CROTONAL	8.253	8.253	0.000	4704067	75.0000	79.6(A)
9 BUTYRALS/MEK	9.319	9.319	0.000	4502153	75.0000	79.7(A)
10 BENZALDEHYDE	10.793	10.793	0.000	3190400	75.0000	79.2(A)
11 ISO-PENTANAL	11.879	11.879	0.000	3813304	75.0000	80.4(A)
12 PENTANAL	12.393	12.393	0.000	3765273	75.0000	79.4(A)
14 O-TOLUALDEHYDE	13.179	13.179	0.000	2947757	75.0000	80.6(A)
15 M,P-TOLUALDEHYDE	13.413	13.413	0.000	5176621	150.000	155(A)
16 HEXANAL	14.693	14.693	0.000	3289320	75.0000	78.3(A)
17 2,5-Dimethylbenzaldehyde	15.173	15.173	0.000	2362423	75.0000	78.0(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904035.d

Date : 04-SEP-2009 20:41

Client ID: L10

Sample Info: ;1331-138-75;L10

Purge Volume: 5.0

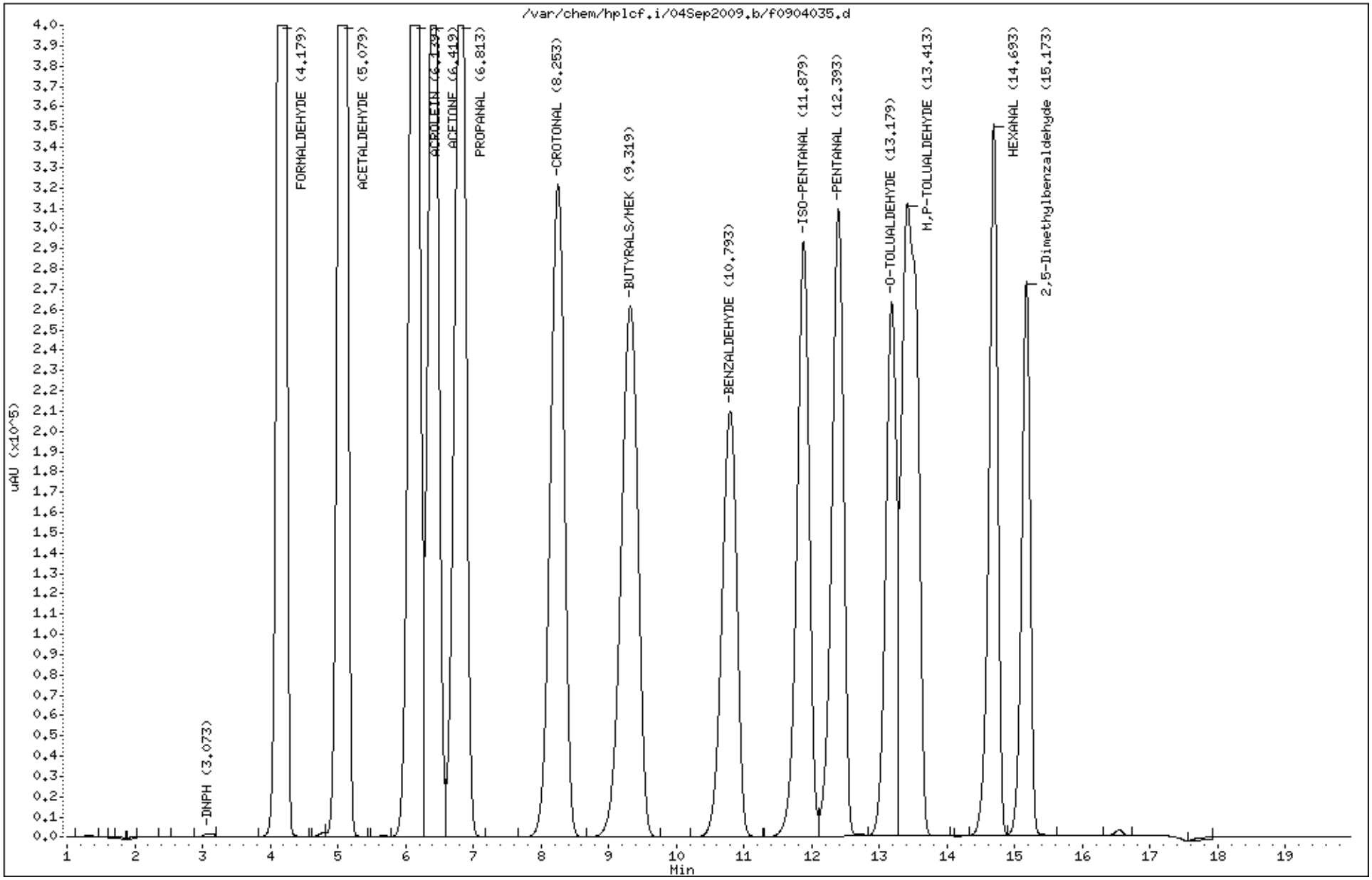
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0160



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904034.d
Lab Smp Id: 1331-138-75 Client Smp ID: L10
Inj Date : 04-SEP-2009 20:20
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-75;L10
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 21:16 atoyama Quant Type: ESTD
Cal Date : 04-SEP-2009 20:20 Cal File: f0904034.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.075	3.075	0.000	16193	75.0000	
2 FORMALDEHYDE	4.182	4.182	0.000	9476638	75.0000	79.8(A)
3 ACETALDEHYDE	5.082	5.082	0.000	7079163	75.0000	79.0(A)
4 ACROLEIN	6.142	6.142	0.000	6538263	75.0000	79.9(A)
5 ACETONE	6.422	6.422	0.000	5160018	75.0000	79.1(A)
6 PROPANAL	6.822	6.822	0.000	5432892	75.0000	79.5(A)
7 CROTONAL	8.255	8.255	0.000	4694932	75.0000	79.6(A)
9 BUTYRALS/MEK	9.328	9.328	0.000	4493441	75.0000	79.8(A)
10 BENZALDEHYDE	10.802	10.802	0.000	3186615	75.0000	79.3(A)
11 ISO-PENTANAL	11.882	11.882	0.000	3803822	75.0000	80.5(A)
12 PENTANAL	12.395	12.395	0.000	3761158	75.0000	79.5(A)
14 O-TOLUALDEHYDE	13.182	13.182	0.000	2902574	75.0000	79.7(A)
15 M,P-TOLUALDEHYDE	13.415	13.415	0.000	5214996	150.000	156(A)
16 HEXANAL	14.688	14.688	0.000	3284257	75.0000	78.4(A)
17 2,5-Dimethylbenzaldehyde	15.168	15.168	0.000	2361402	75.0000	78.1(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904034.d

Date : 04-SEP-2009 20:20

Client ID: L10

Sample Info: ;1331-138-75;L10

Purge Volume: 5.0

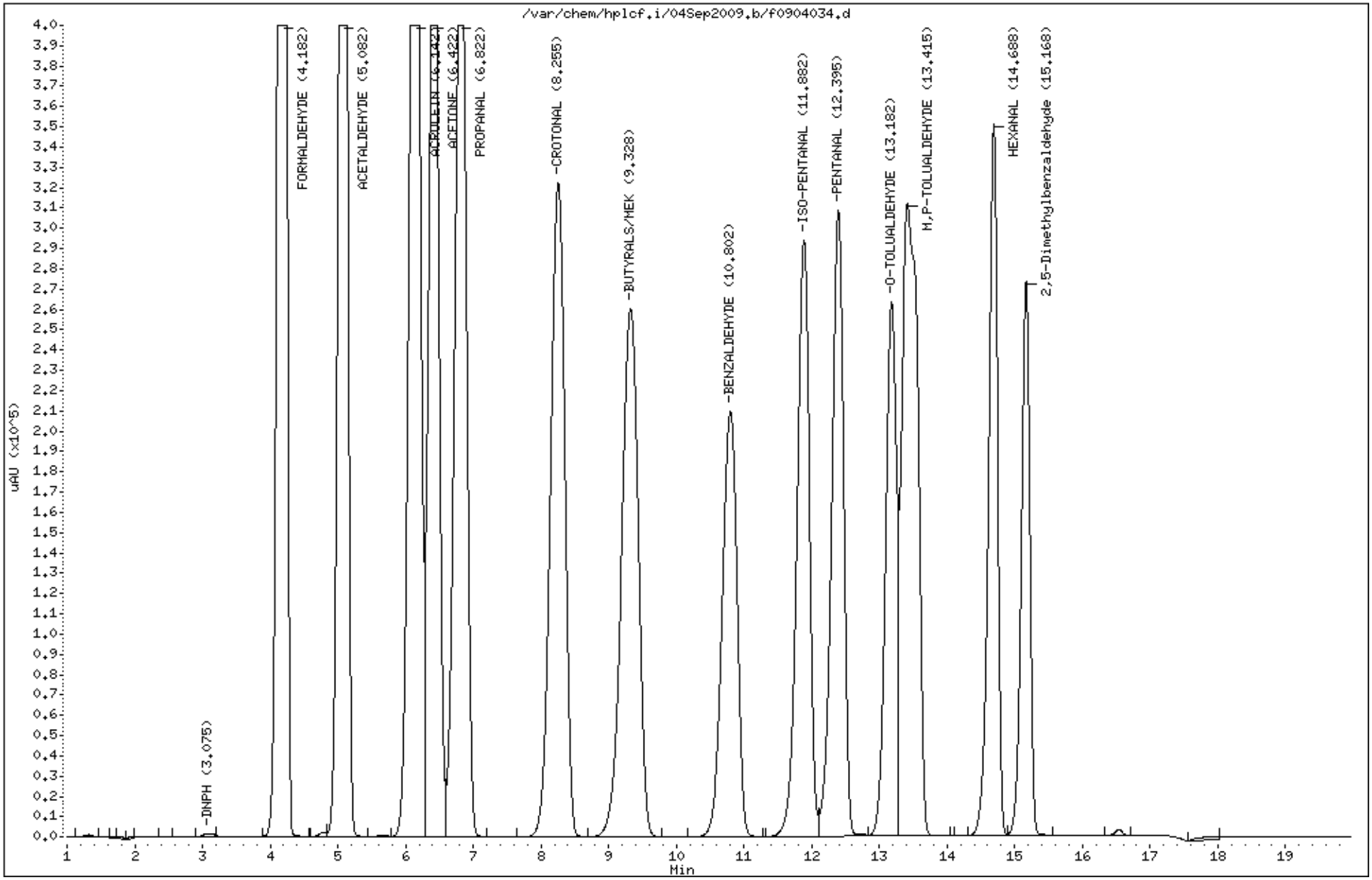
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0162



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/04Sep2009.b/f0904033.d
Lab Smp Id: 1331-138-75 Client Smp ID: L10
Inj Date : 04-SEP-2009 20:00
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-75;L10
Misc Info :
Comment :
Method : /chem/hplcf.i/04Sep2009.b/F09D0904.m
Meth Date : 04-Sep-2009 21:16 atoyama Quant Type: ESTD
Cal Date : 04-SEP-2009 20:00 Cal File: f0904033.d
Als bottle: 1 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * CpndVariable

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.081	3.081	0.000	16382	75.0000	
2 FORMALDEHYDE	4.188	4.188	0.000	9473948	75.0000	80.0(A)
3 ACETALDEHYDE	5.088	5.088	0.000	7069203	75.0000	79.1(A)
4 ACROLEIN	6.148	6.148	0.000	6512631	75.0000	79.8(A)
5 ACETONE	6.428	6.428	0.000	5182479	75.0000	79.6(A)
6 PROPANAL	6.828	6.828	0.000	5423770	75.0000	79.6(A)
7 CROTONAL	8.268	8.268	0.000	4692970	75.0000	79.8(A)
9 BUTYRALS/MEK	9.341	9.341	0.000	4490141	75.0000	80.0(A)
10 BENZALDEHYDE	10.821	10.821	0.000	3184666	75.0000	79.5(A)
11 ISO-PENTANAL	11.901	11.901	0.000	3800975	75.0000	80.7(A)
12 PENTANAL	12.408	12.408	0.000	3757480	75.0000	79.7(A)
14 O-TOLUALDEHYDE	13.194	13.194	0.000	2882801	75.0000	79.3(A)
15 M,P-TOLUALDEHYDE	13.428	13.428	0.000	5225367	150.000	157(A)
16 HEXANAL	14.701	14.701	0.000	3281755	75.0000	78.4(A)
17 2,5-Dimethylbenzaldehyde	15.181	15.181	0.000	2360829	75.0000	78.3(A)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904033.d

Date : 04-SEP-2009 20:00

Client ID: L10

Sample Info: ;1331-138-75;L10

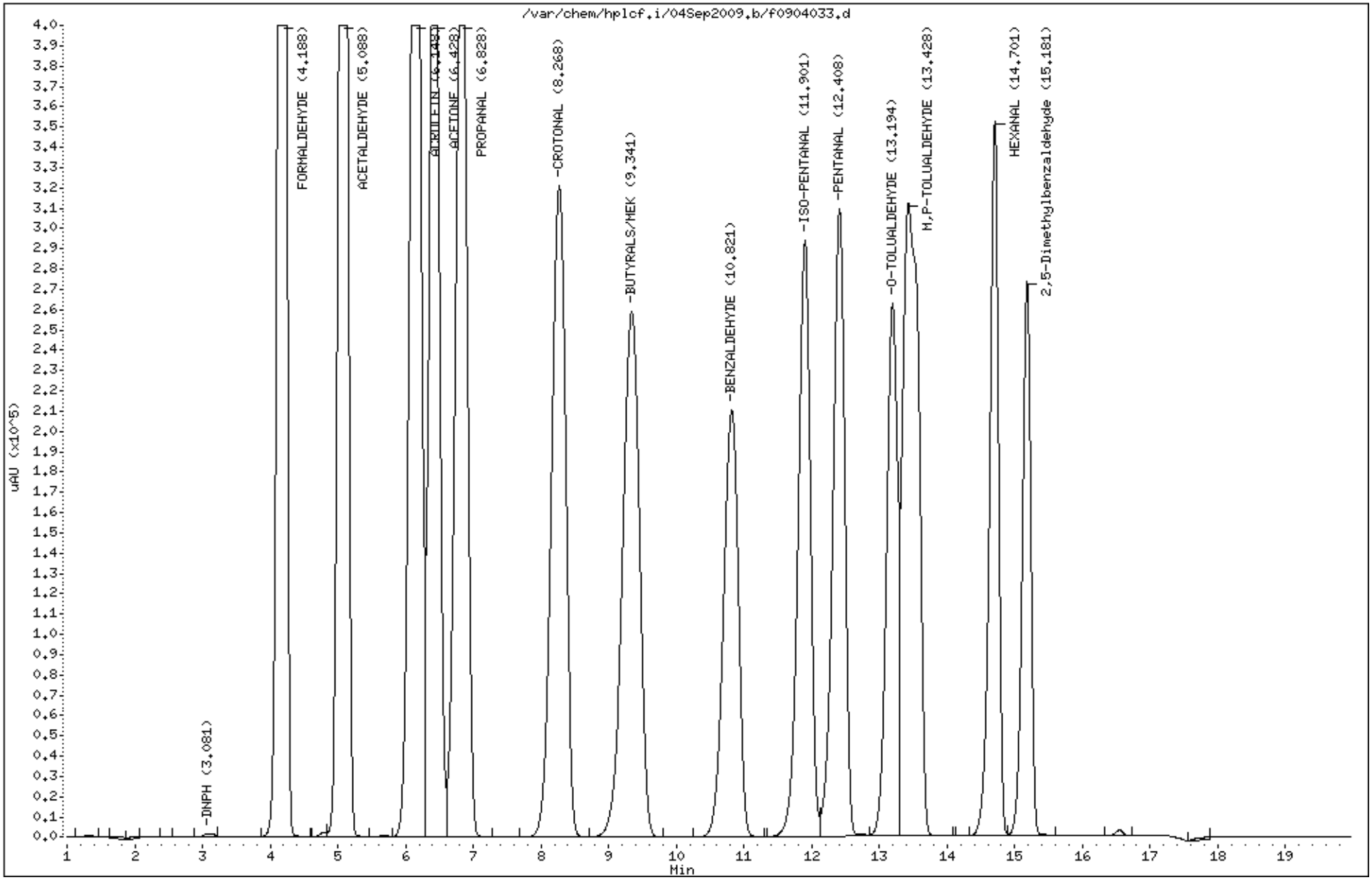
Purge Volume: 5.0

Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00



Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplcf.i Injection Date: 06-SEP-2009 08:59
Lab File ID: f0906001.d Init. Cal. Date(s): 04-SEP-2009 04-SEP-2009
Analysis Type: AIR Init. Cal. Times: 10:35 20:41
Lab Sample ID: 1331-138-4 Quant Type: ESTD
Method: /var/chem/hplcf.i/06Sep2009.b/F09D0904.m

	COMPOUND	RRF / AMOUNT	RF4	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1	DNPH	++++	25041	0.100	++++	10.00000	Averaged	<-
2	FORMALDEHYDE	118994	120082	0.010	-0.91408	10.00000	Averaged	
3	ACETALDEHYDE	89763	90036	0.010	-0.30367	10.00000	Averaged	
4	ACROLEIN	82084	83834	0.010	-2.13136	10.00000	Averaged	
5	ACETONE	65375	64867	0.010	0.77621	10.00000	Averaged	
6	PROPANAL	68492	68747	0.010	-0.37157	10.00000	Averaged	
7	CROTONAL	59128	59703	0.010	-0.97242	10.00000	Averaged	
9	BUTYRALS/MEK	56455	56906	0.010	-0.79866	10.00000	Averaged	
10	BENZALDEHYDE	40278	40224	0.010	0.13572	10.00000	Averaged	
11	ISO-PENTANAL	47406	48451	0.010	-2.20536	10.00000	Averaged	
12	PENTANAL	47407	47613	0.010	-0.43456	10.00000	Averaged	
14	O-TOLUALDEHYDE	36555	37896	0.010	-3.66717	10.00000	Averaged	
15	M,P-TOLUALDEHYDE	33432	32471	0.010	2.87571	10.00000	Averaged	
16	HEXANAL	41997	41854	0.010	0.34137	10.00000	Averaged	
17	2,5-Dimethylbenzaldehyde	30270	29939	0.010	1.09553	10.00000	Averaged	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/06Sep2009.b/f0906001.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 06-SEP-2009 08:59
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;1331-138-4;CCV
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 06-Sep-2009 10:07 kjohnsto Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

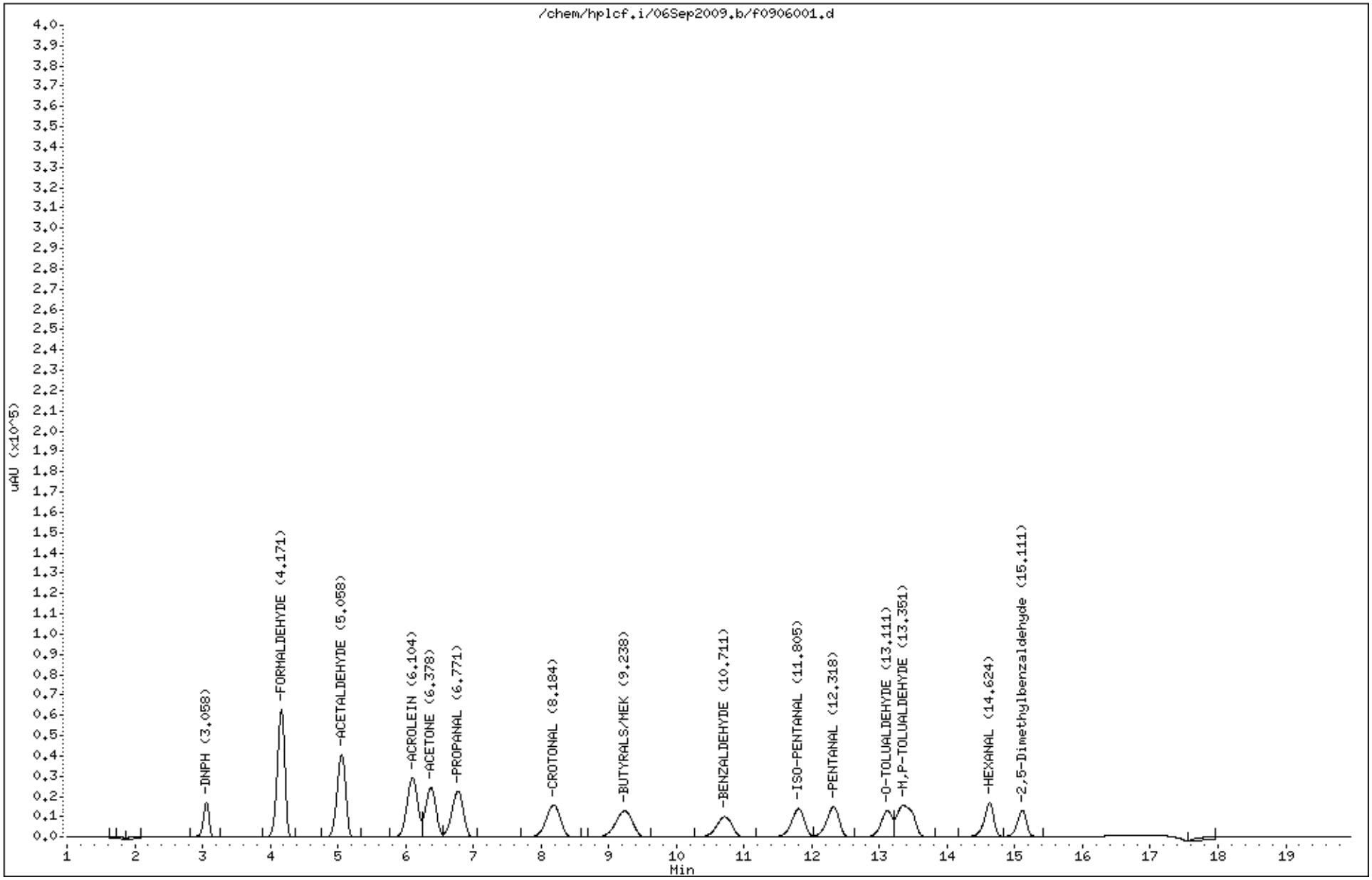
Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.058	3.058	0.000	100162	4.00000	
2 FORMALDEHYDE	4.171	4.171	0.000	480326	4.00000	4.04
3 ACETALDEHYDE	5.058	5.058	0.000	360142	4.00000	4.01
4 ACROLEIN	6.104	6.104	0.000	335336	4.00000	4.08
5 ACETONE	6.378	6.378	0.000	259469	4.00000	3.97
6 PROPANAL	6.771	6.771	0.000	274987	4.00000	4.01
7 CROTONAL	8.184	8.184	0.000	238812	4.00000	4.04
9 BUTYRALS/MEK	9.238	9.238	0.000	227623	4.00000	4.03
10 BENZALDEHYDE	10.711	10.711	0.000	160894	4.00000	3.99
11 ISO-PENTANAL	11.805	11.805	0.000	193805	4.00000	4.09
12 PENTANAL	12.318	12.318	0.000	190452	4.00000	4.02
14 O-TOLUALDEHYDE	13.111	13.111	0.000	151583	4.00000	4.15
15 M,P-TOLUALDEHYDE	13.351	13.351	0.000	259767	8.00000	7.77
16 HEXANAL	14.624	14.624	0.000	167414	4.00000	3.99
17 2,5-Dimethylbenzaldehyde	15.111	15.111	0.000	119755	4.00000	3.96

Data File: /chem/hplcf.i/06Sep2009.b/f0906001.d
Date : 06-SEP-2009 08:59
Client ID: CCV
Sample Info: ;1331-138-4;CCV
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i
Operator: KJJ
Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/06Sep2009.b/f0906002.d
Lab Smp Id: CCB Client Smp ID: LAB BLANK
Inj Date : 06-SEP-2009 09:19
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;CCB;LAB BLANK
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 06-Sep-2009 10:07 kjohnsto Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
5 ACETONE	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
7 CROTONAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
14 O-TOLUALDEHYDE	Compound Not Detected.					
15 M,P-TOLUALDEHYDE	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					
17 2,5-Dimethylbenzaldehyde	Compound Not Detected.					

Data File: /chem/hplcf.i/06Sep2009.b/f0906002.d

Date : 06-SEP-2009 09:19

Client ID: LAB BLANK

Instrument: hplcf.i

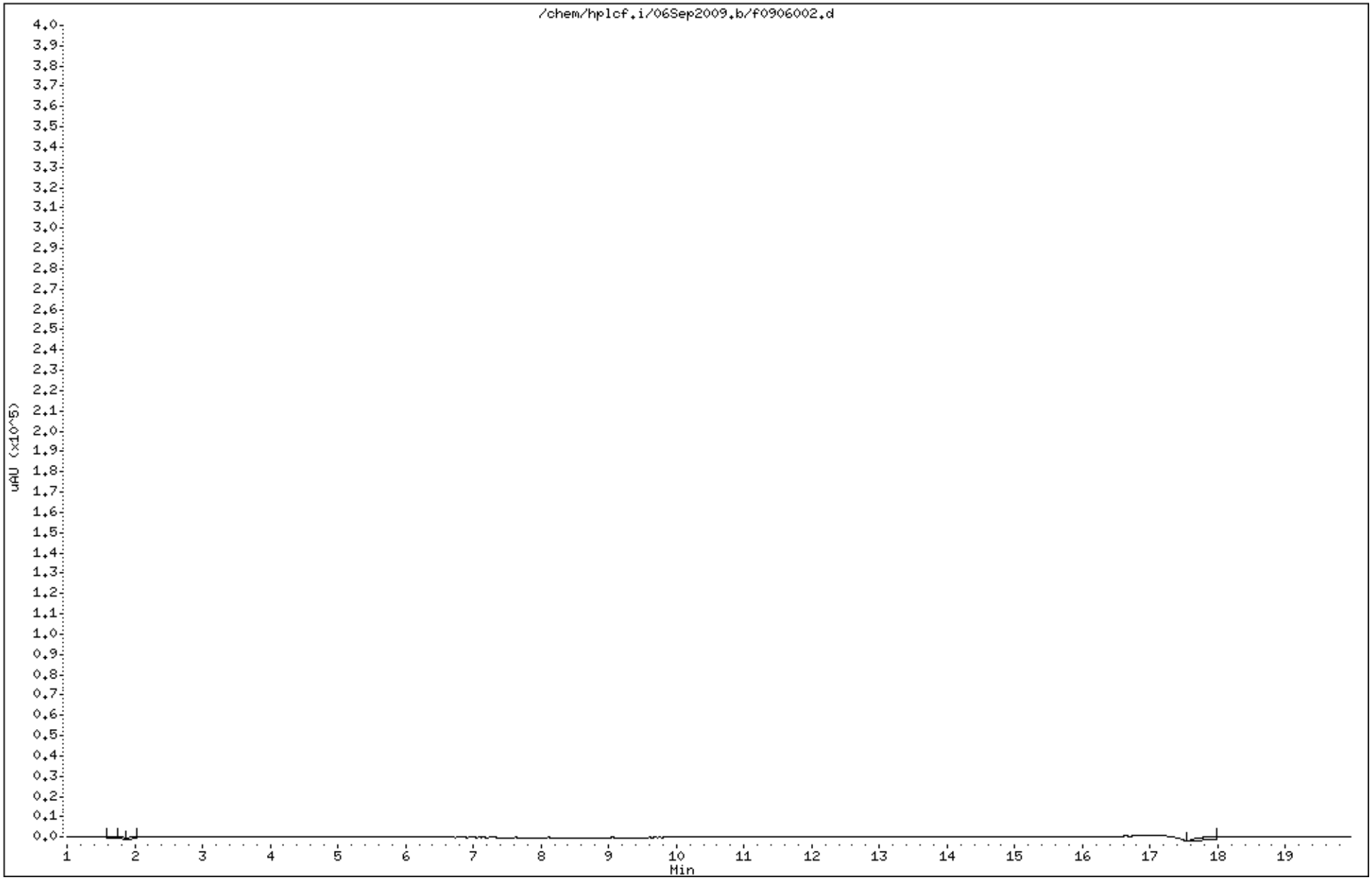
Sample Info: ;CCB;LAB BLANK

Purge Volume: 5.0

Operator: KJJ

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-138-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 06Sep2009
Client Smp ID: CCV
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: KJJ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug	Q
119-26-6	DNPH	0.00	
50-00-0	FORMALDEHYDE	4.03	
75-07-0	ACETALDEHYDE	4.01	
107-02-8	ACROLEIN	4.05	
123-38-6	PROPANAL	4.01	
9999-9999-007	BUTYRALS/MEK	4.02	
100-52-7	BENZALDEHYDE	4.00	
590-86-3	ISO-PENTANAL	4.05	
110-62-3	PENTANAL	4.00	
66-25-1	HEXANAL	3.98	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/06Sep2009.b/f0906017.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 06-SEP-2009 15:07
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;1331-138-4;CCV
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:25 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	FINAL (ug)
1 DNPH	3.062	3.058	0.004	101560		
2 FORMALDEHYDE	4.175	4.171	0.004	479685	4.03117	4.03
3 ACETALDEHYDE	5.062	5.058	0.004	359782	4.00813	4.01
4 ACROLEIN	6.109	6.104	0.005	332833	4.05476	4.05
6 PROPANAL	6.782	6.771	0.011	274620	4.00950	4.01
9 BUTYRALS/MEK	9.248	9.238	0.010	227175	4.02401	4.02
10 BENZALDEHYDE	10.729	10.711	0.018	161355	4.00600	4.00
11 ISO-PENTANAL	11.815	11.805	0.010	191968	4.04946	4.05
12 PENTANAL	12.328	12.318	0.010	189906	4.00585	4.00
16 HEXANAL	14.629	14.624	0.005	167209	3.98146	3.98

Report Date: 08-Sep-2009 12:31

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 06Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Level: LOW
Operator: KJJ
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: R4ug.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	4.03	100.78	90-110
3 ACETALDEHYDE	4.00	4.01	100.20	90-110
4 ACROLEIN	4.00	4.05	101.37	90-110
6 PROPANAL	4.00	4.01	100.24	90-110
9 BUTYRALS/MEK	4.00	4.02	100.60	90-110
10 BENZALDEHYDE	4.00	4.00	100.15	90-110
11 ISO-PENTANAL	4.00	4.05	101.24	90-110
12 PENTANAL	4.00	4.00	100.15	90-110
16 HEXANAL	4.00	3.98	99.54	90-110

Data File: /chem/hplcf.i/06Sep2009.b/f0906017.d

Date : 06-SEP-2009 15:07

Client ID: CCV

Instrument: hplcf.i

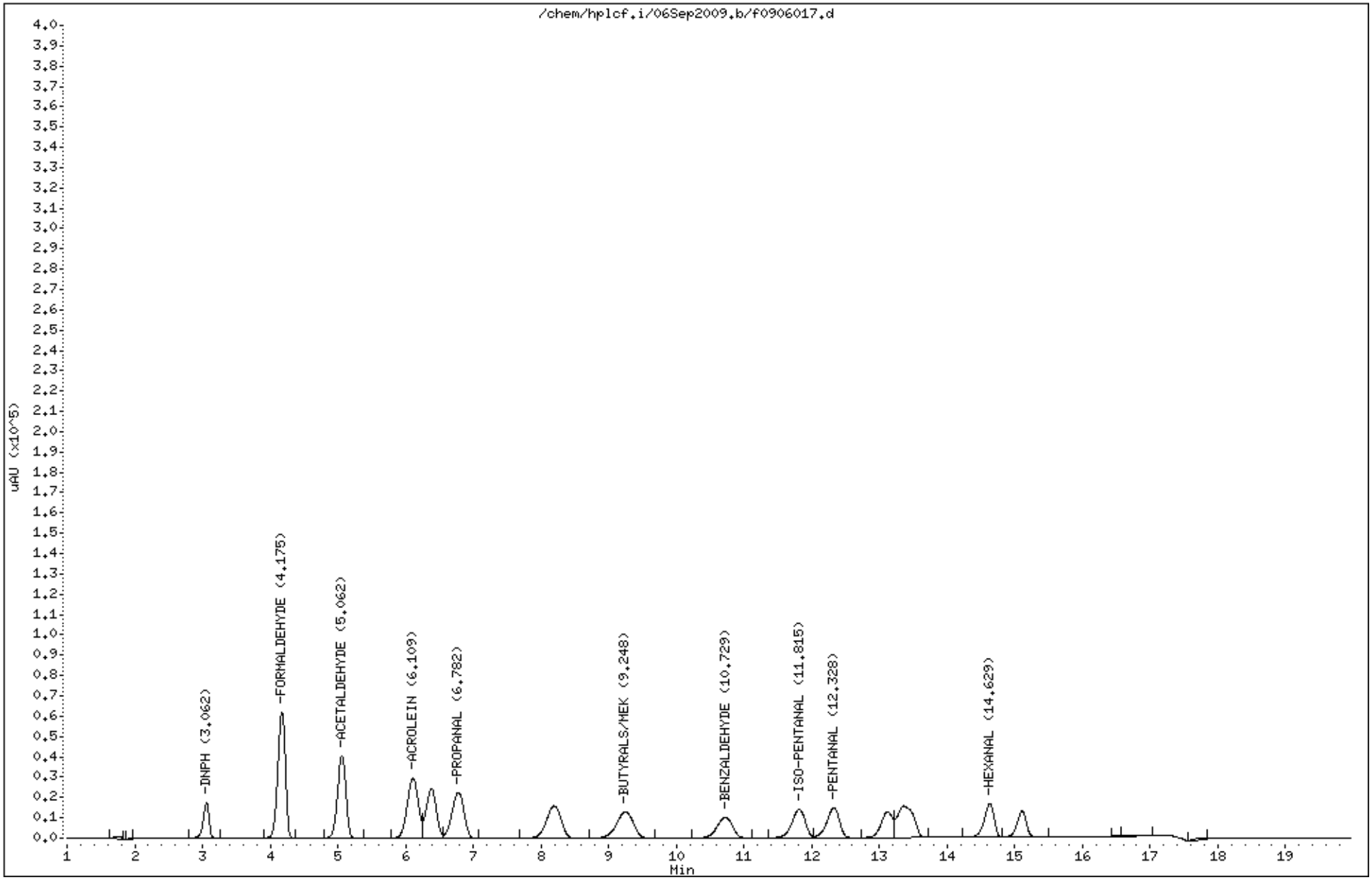
Sample Info: ;1331-138-4;CCV

Purge Volume: 5.0

Operator: KJJ

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



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Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-138-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 06Sep2009
Client Smp ID: CCV
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: KJJ

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug	Q
119-26-6	DNPH	0.00	
50-00-0	FORMALDEHYDE	4.04	
75-07-0	ACETALDEHYDE	4.01	
107-02-8	ACROLEIN	4.07	
123-38-6	PROPANAL	4.03	
9999-9999-007	BUTYRALS/MEK	4.04	
100-52-7	BENZALDEHYDE	4.02	
590-86-3	ISO-PENTANAL	4.07	
110-62-3	PENTANAL	4.02	
66-25-1	HEXANAL	4.00	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/06Sep2009.b/f0906030.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 06-SEP-2009 19:39
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;1331-138-4;CCV
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:25 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.058	3.058	0.000	100994		
2 FORMALDEHYDE	4.165	4.171	-0.006	481182	4.04375	4.04
3 ACETALDEHYDE	5.052	5.058	-0.006	360271	4.01358	4.01
4 ACROLEIN	6.098	6.104	-0.006	333778	4.06627	4.07
6 PROPANAL	6.765	6.771	-0.006	275812	4.02691	4.03
9 BUTYRALS/MEK	9.225	9.238	-0.013	228124	4.04082	4.04
10 BENZALDEHYDE	10.705	10.711	-0.006	161846	4.01819	4.02
11 ISO-PENTANAL	11.792	11.805	-0.013	192998	4.07119	4.07
12 PENTANAL	12.312	12.318	-0.006	190590	4.02028	4.02
16 HEXANAL	14.618	14.624	-0.006	167983	3.99989	4.00

Report Date: 08-Sep-2009 12:32

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 06Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Level: LOW
Operator: KJJ
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: R4ug.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	4.04	101.09	90-110
3 ACETALDEHYDE	4.00	4.01	100.34	90-110
4 ACROLEIN	4.00	4.07	101.66	90-110
6 PROPANAL	4.00	4.03	100.67	90-110
9 BUTYRALS/MEK	4.00	4.04	101.02	90-110
10 BENZALDEHYDE	4.00	4.02	100.45	90-110
11 ISO-PENTANAL	4.00	4.07	101.78	90-110
12 PENTANAL	4.00	4.02	100.51	90-110
16 HEXANAL	4.00	4.00	100.00	90-110

Data File: /var/chem/hplcf.i/06Sep2009.b/f0906030.d

Date : 06-SEP-2009 19:39

Client ID: CCV

Instrument: hplcf.i

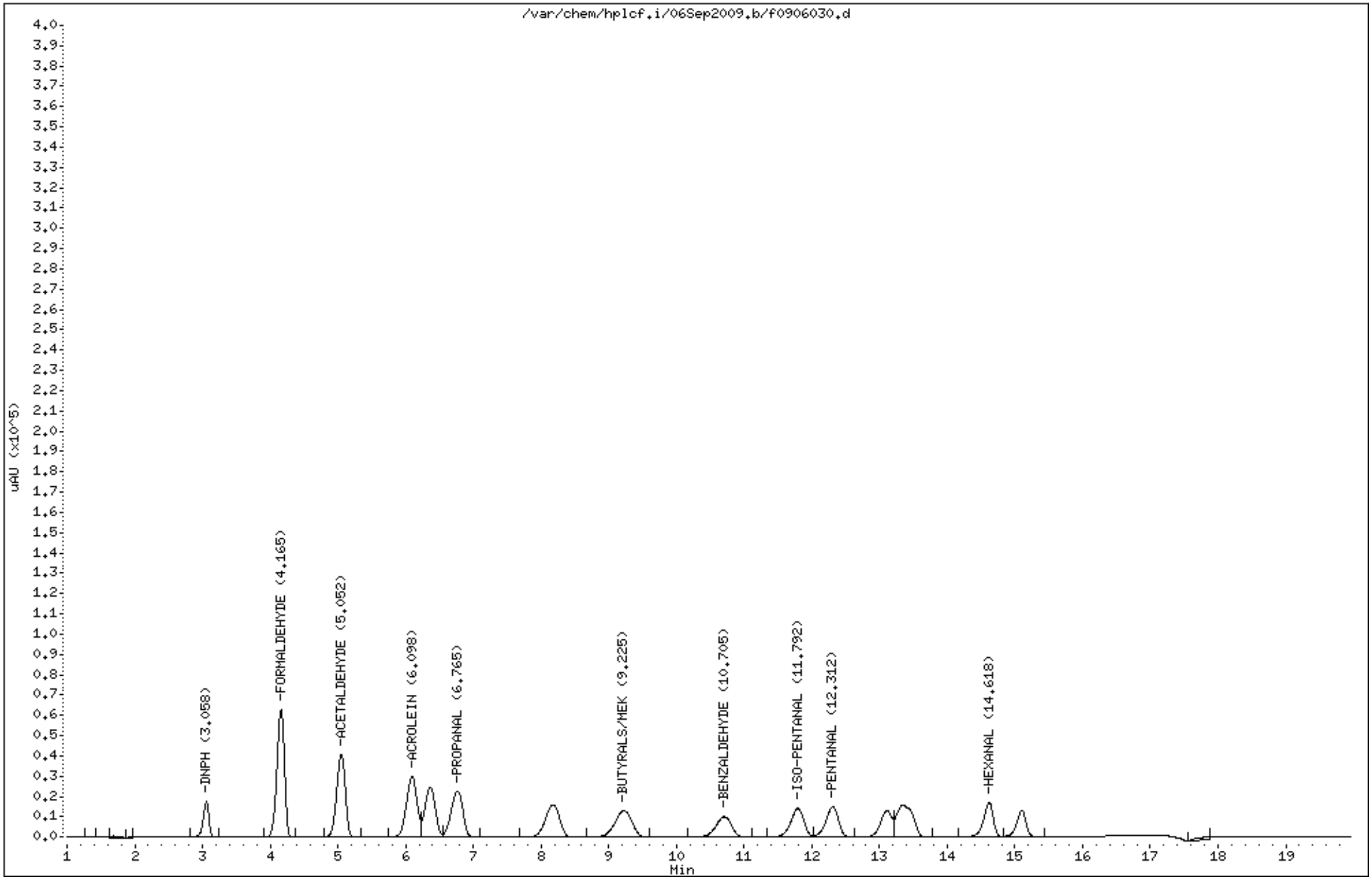
Sample Info: ;1331-138-4;CCV

Purge Volume: 5.0

Operator: KJJ

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0177

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/06Sep2009.b/f0906031.d
Lab Smp Id: CCB Client Smp ID: LAB BLANK
Inj Date : 06-SEP-2009 20:00
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;CCB;LAB BLANK
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:25 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

					CONCENTRATIONS ON-COLUMN (UG)	FINAL (ug)
Compounds	RT	EXP RT	DLT RT	RESPONSE		
1 DNPH	3.056	3.058	-0.002	1481		
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

Data File: /var/chem/hplcf.i/06Sep2009.b/f0906031.d

Date : 06-SEP-2009 20:00

Client ID: LAB BLANK

Instrument: hplcf.i

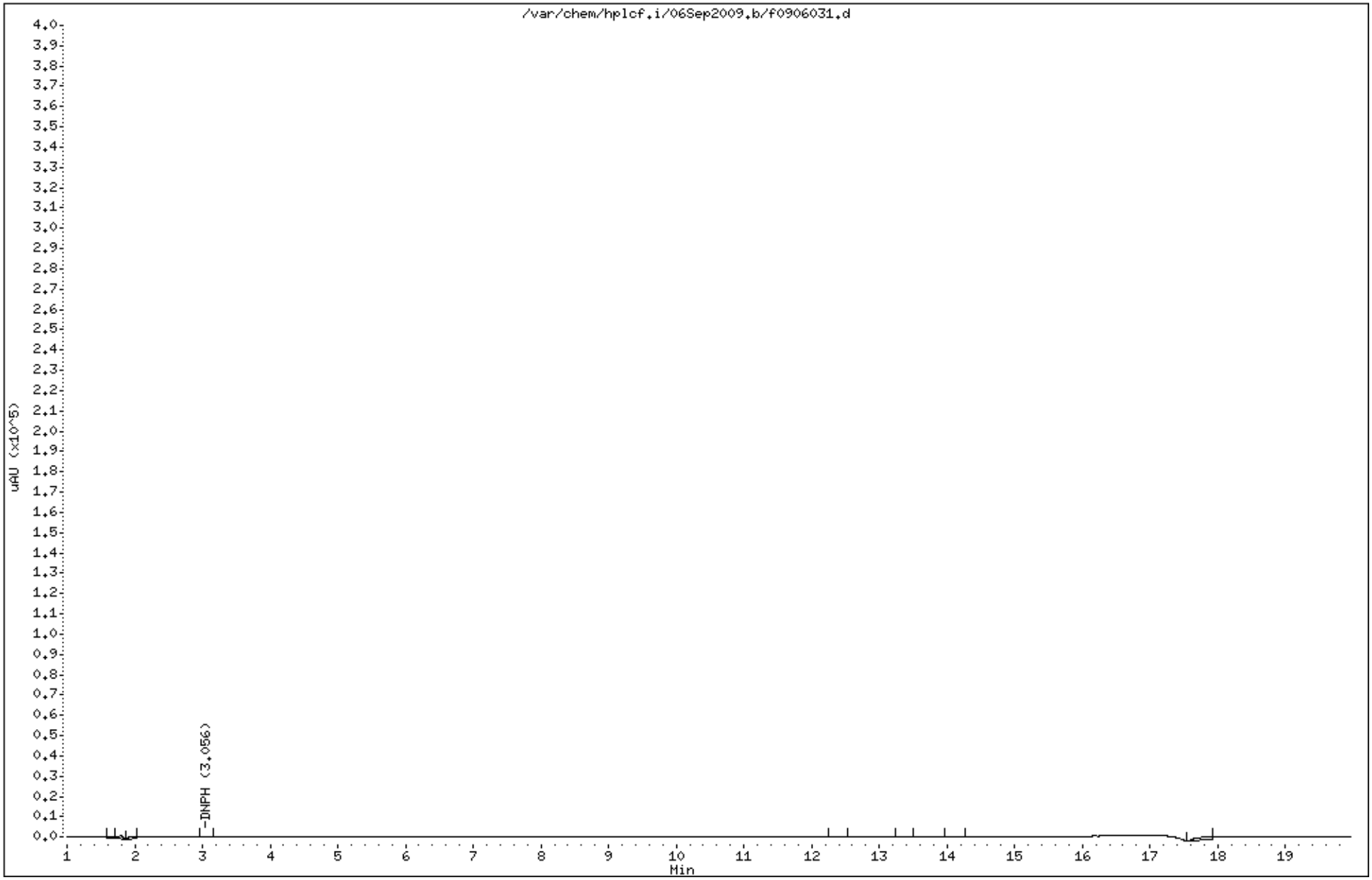
Sample Info: ;CCB;LAB BLANK

Purge Volume: 5.0

Operator: KJJ

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0179

Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Client SDG: 06Sep2009
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Sample Location:
Sample Point:
Sample Date:
Date Received:
Sample Matrix: AIR
Quant Type: ESTD
Analysis Type: OTHER
Level: LOW
Data Type: LC DATA
Operator: KJJ
Misc Info:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug	Q
119-26-6	DNPH	0.00	
50-00-0	FORMALDEHYDE	4.05	
75-07-0	ACETALDEHYDE	4.02	
107-02-8	ACROLEIN	4.10	
123-38-6	PROPANAL	4.03	
9999-9999-007	BUTYRALS/MEK	4.03	
100-52-7	BENZALDEHYDE	4.02	
590-86-3	ISO-PENTANAL	4.25	
110-62-3	PENTANAL	4.44	
66-25-1	HEXANAL	3.99	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/06Sep2009.b/f0906043.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 07-SEP-2009 00:11
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;1331-138-4;CCV
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:37 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	FINAL (ug)
1 DNPH	3.059	3.058	0.001	101167		
2 FORMALDEHYDE	4.172	4.171	0.001	481579	4.04709	4.05
3 ACETALDEHYDE	5.059	5.058	0.001	360656	4.01788	4.02
4 ACROLEIN	6.106	6.104	0.002	336331	4.09738	4.10
6 PROPANAL	6.772	6.771	0.001	275936	4.02873	4.03
9 BUTYRALS/MEK	9.232	9.238	-0.006	227553	4.03072	4.03
10 BENZALDEHYDE	10.712	10.711	0.001	162011	4.02230	4.02
11 ISO-PENTANAL	11.799	11.805	-0.006	201635	4.25341	4.25
12 PENTANAL	12.319	12.318	0.001	210537	4.44106	4.44(R)
16 HEXANAL	14.619	14.624	-0.005	167633	3.99158	3.99

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Report Date: 08-Sep-2009 12:53

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 06Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Level: LOW
Operator: KJJ
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: R4ug.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	4.05	101.18	90-110
3 ACETALDEHYDE	4.00	4.02	100.45	90-110
4 ACROLEIN	4.00	4.10	102.43	90-110
6 PROPANAL	4.00	4.03	100.72	90-110
9 BUTYRALS/MEK	4.00	4.03	100.77	90-110
10 BENZALDEHYDE	4.00	4.02	100.56	90-110
11 ISO-PENTANAL	4.00	4.25	106.34	90-110
12 PENTANAL	4.00	4.44	111.03*	90-110
16 HEXANAL	4.00	3.99	99.79	90-110

Data File: /var/chem/hplcf.i/06Sep2009.b/f0906043.d

Date : 07-SEP-2009 00:11

Client ID: CCV

Instrument: hplcf.i

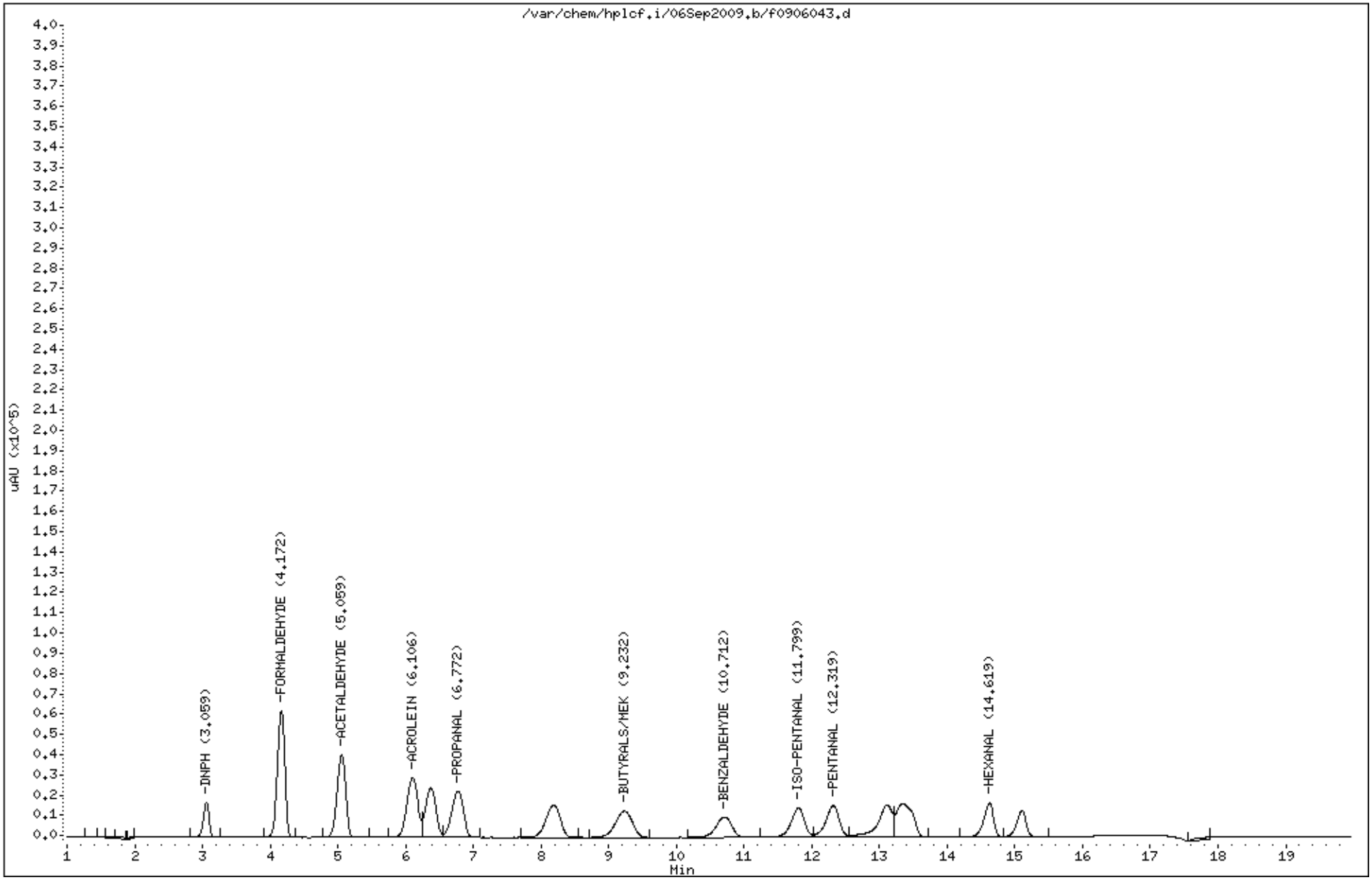
Sample Info: ;1331-138-4;CCV

Purge Volume: 5.0

Operator: KJJ

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0183

Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-138-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 09Sep2009
Client Smp ID: CCV
Sample Point:
Date Received:
Quant Type: ESTD
Level: MED
Operator: CRL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug	Q
119-26-6	DNPH	0.00	
50-00-0	FORMALDEHYDE	3.81	
75-07-0	ACETALDEHYDE	4.00	
107-02-8	ACROLEIN	4.04	
67-64-1	ACETONE	4.04	
123-38-6	PROPANAL	4.02	
123-73-9	CROTONAL	4.05	
9999-9999-007	BUTYRALS/MEK	4.02	
100-52-7	BENZALDEHYDE	4.02	
590-86-3	ISO-PENTANAL	4.10	
110-62-3	PENTANAL	4.03	
529-20-4	O-TOLUALDEHYDE	4.15	
620-23-51	M,P-TOLUALDEHYDE	7.96	
66-25-1	HEXANAL	3.98	
5779-94-2	2,5-Dimethylbenzaldehyde	3.98	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/09Sep2009.b/f0909028.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 09-SEP-2009 18:06
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/09Sep2009.b/F09D0904.m
Meth Date : 09-Sep-2009 09:07 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 5.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.145	3.135	0.010	5029		
2 FORMALDEHYDE	4.172	4.169	0.003	453242	3.80896	3.81
3 ACETALDEHYDE	5.059	5.056	0.003	358866	3.99793	4.00
4 ACROLEIN	6.105	6.096	0.009	331556	4.03921	4.04
5 ACETONE	6.378	6.369	0.009	264225	4.04170	4.04
6 PROPANAL	6.772	6.762	0.010	275048	4.01576	4.02
7 CROTONAL	8.185	8.169	0.016	239295	4.04708	4.05
9 BUTYRALS/MEK	9.232	9.209	0.023	227214	4.02472	4.02
10 BENZALDEHYDE	10.712	10.682	0.030	161979	4.02149	4.02
11 ISO-PENTANAL	11.799	11.775	0.024	194270	4.09803	4.10
12 PENTANAL	12.312	12.296	0.016	191193	4.03301	4.03
14 O-TOLUALDEHYDE	13.105	13.089	0.016	151859	4.15423	4.15
15 M,P-TOLUALDEHYDE	13.338	13.322	0.016	265966	7.95537	7.96
16 HEXANAL	14.612	14.602	0.010	167371	3.98532	3.98
17 2,5-Dimethylbenzaldehyde	15.098	15.089	0.009	120377	3.97674	3.98

Report Date: 17-Sep-2009 12:28

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 09Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Level: MED
Operator: CRL
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: 4ug.spk
Quant Type: ESTD
Sublist File: TO-11+Acr+17.sub
Method File: /chem/hplcf.i/09Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.81	95.22	90-110
3 ACETALDEHYDE	4.00	4.00	99.95	90-110
4 ACROLEIN	4.00	4.04	100.98	90-110
5 ACETONE	4.00	4.04	101.04	90-110
6 PROPANAL	4.00	4.02	100.39	90-110
7 CROTONAL	4.00	4.05	101.18	90-110
9 BUTYRALS/MEK	4.00	4.02	100.62	90-110
10 BENZALDEHYDE	4.00	4.02	100.54	90-110
11 ISO-PENTANAL	4.00	4.10	102.45	90-110
12 PENTANAL	4.00	4.03	100.83	90-110
14 O-TOLUALDEHYDE	4.00	4.15	103.86	90-110
15 M,P-TOLUALDEHYDE	8.00	7.96	99.44	90-110
16 HEXANAL	4.00	3.98	99.63	90-110
17 2,5-Dimethylbenzal	4.00	3.98	99.42	90-110

Data File: /var/chem/hplcf.i/09Sep2009.b/f0909028.d

Date : 09-SEP-2009 18:06

Client ID: CCV

Instrument: hplcf.i

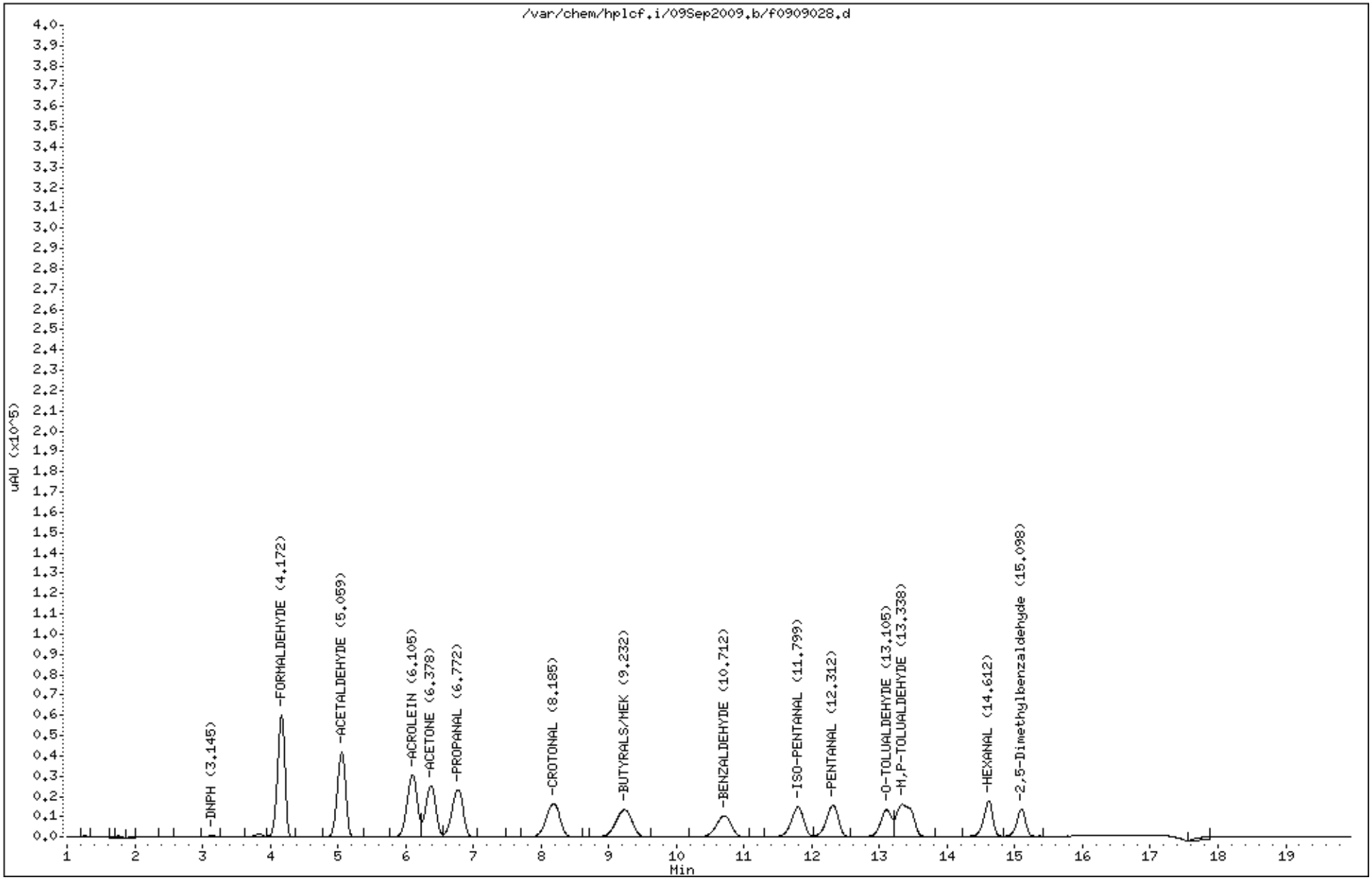
Sample Info: ;1331-138-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0187

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165
Data file : /chem/hplcf.i/09Sep2009.b/f0909029.d
Lab Smp Id: CCB Client Smp ID: Lab Blank
Inj Date : 09-SEP-2009 18:27
Operator : CRL Inst ID: hplcf.i
Smp Info : ;CCB;
Misc Info :
Comment :
Method : /chem/hplcf.i/09Sep2009.b/F09D0904.m
Meth Date : 09-Sep-2009 09:07 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 5.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

Data File: /chem/hplcf.i/09Sep2009.b/f0909029.d

Date : 09-SEP-2009 18:27

Client ID: Lab Blank

Instrument: hplcf.i

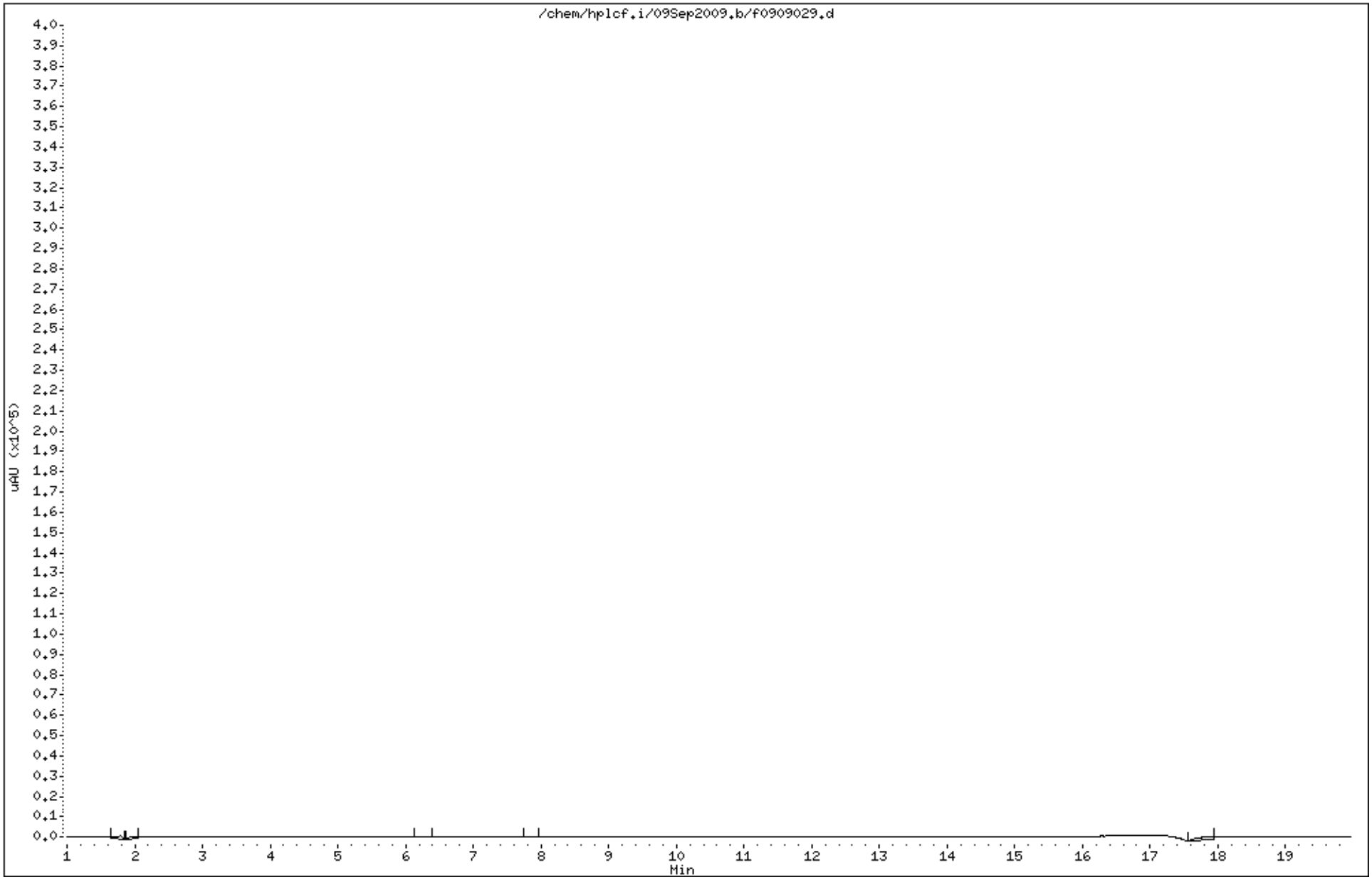
Sample Info: ;CCB;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0189

Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-138-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 09Sep2009
Client Smp ID: CCV
Sample Point:
Date Received:
Quant Type: ESTD
Level: MED
Operator: CRL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug	Q
119-26-6	DNPH	0.00	
50-00-0	FORMALDEHYDE	3.82	
75-07-0	ACETALDEHYDE	4.02	
107-02-8	ACROLEIN	4.08	
67-64-1	ACETONE	4.05	
123-38-6	PROPANAL	4.04	
123-73-9	CROTONAL	4.06	
9999-9999-007	BUTYRALS/MEK	4.06	
100-52-7	BENZALDEHYDE	4.03	
590-86-3	ISO-PENTANAL	4.10	
110-62-3	PENTANAL	4.06	
529-20-4	O-TOLUALDEHYDE	4.12	
620-23-51	M,P-TOLUALDEHYDE	7.94	
66-25-1	HEXANAL	4.02	
5779-94-2	2,5-Dimethylbenzaldehyde	4.02	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/09Sep2009.b/f0909041.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 09-SEP-2009 22:38
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/09Sep2009.b/F09D0904.m
Meth Date : 09-Sep-2009 09:07 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: TO-11+Acr+17.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 5.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.143	3.135	0.008	4905		
2 FORMALDEHYDE	4.163	4.169	-0.006	455006	3.82378	3.82
3 ACETALDEHYDE	5.043	5.056	-0.013	361356	4.02568	4.02
4 ACROLEIN	6.090	6.096	-0.006	334964	4.08072	4.08
5 ACETONE	6.356	6.369	-0.013	265043	4.05421	4.05
6 PROPANAL	6.750	6.762	-0.012	276504	4.03702	4.04
7 CROTONAL	8.156	8.169	-0.013	239953	4.05819	4.06
9 BUTYRALS/MEK	9.196	9.209	-0.013	229041	4.05708	4.06
10 BENZALDEHYDE	10.669	10.682	-0.013	162177	4.02641	4.03
11 ISO-PENTANAL	11.763	11.775	-0.012	194615	4.10531	4.10
12 PENTANAL	12.283	12.296	-0.013	192264	4.05560	4.06
14 O-TOLUALDEHYDE	13.076	13.089	-0.013	150798	4.12520	4.12
15 M,P-TOLUALDEHYDE	13.316	13.322	-0.006	265535	7.94249	7.94
16 HEXANAL	14.596	14.602	-0.006	169013	4.02443	4.02
17 2,5-Dimethylbenzaldehyde	15.076	15.089	-0.013	121658	4.01905	4.02

Report Date: 17-Sep-2009 12:29

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 09Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Level: MED
Operator: CRL
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: 4ug.spk
Quant Type: ESTD
Sublist File: TO-11+Acr+17.sub
Method File: /chem/hplcf.i/09Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.82	95.59	90-110
3 ACETALDEHYDE	4.00	4.02	100.64	90-110
4 ACROLEIN	4.00	4.08	102.02	90-110
5 ACETONE	4.00	4.05	101.36	90-110
6 PROPANAL	4.00	4.04	100.93	90-110
7 CROTONAL	4.00	4.06	101.45	90-110
9 BUTYRALS/MEK	4.00	4.06	101.43	90-110
10 BENZALDEHYDE	4.00	4.03	100.66	90-110
11 ISO-PENTANAL	4.00	4.10	102.63	90-110
12 PENTANAL	4.00	4.06	101.39	90-110
14 O-TOLUALDEHYDE	4.00	4.12	103.13	90-110
15 M,P-TOLUALDEHYDE	8.00	7.94	99.28	90-110
16 HEXANAL	4.00	4.02	100.61	90-110
17 2,5-Dimethylbenzal	4.00	4.02	100.48	90-110

Data File: /var/chem/hplcf.i/09Sep2009.b/f0909041.d

Date : 09-SEP-2009 22:38

Client ID: CCV

Instrument: hplcf.i

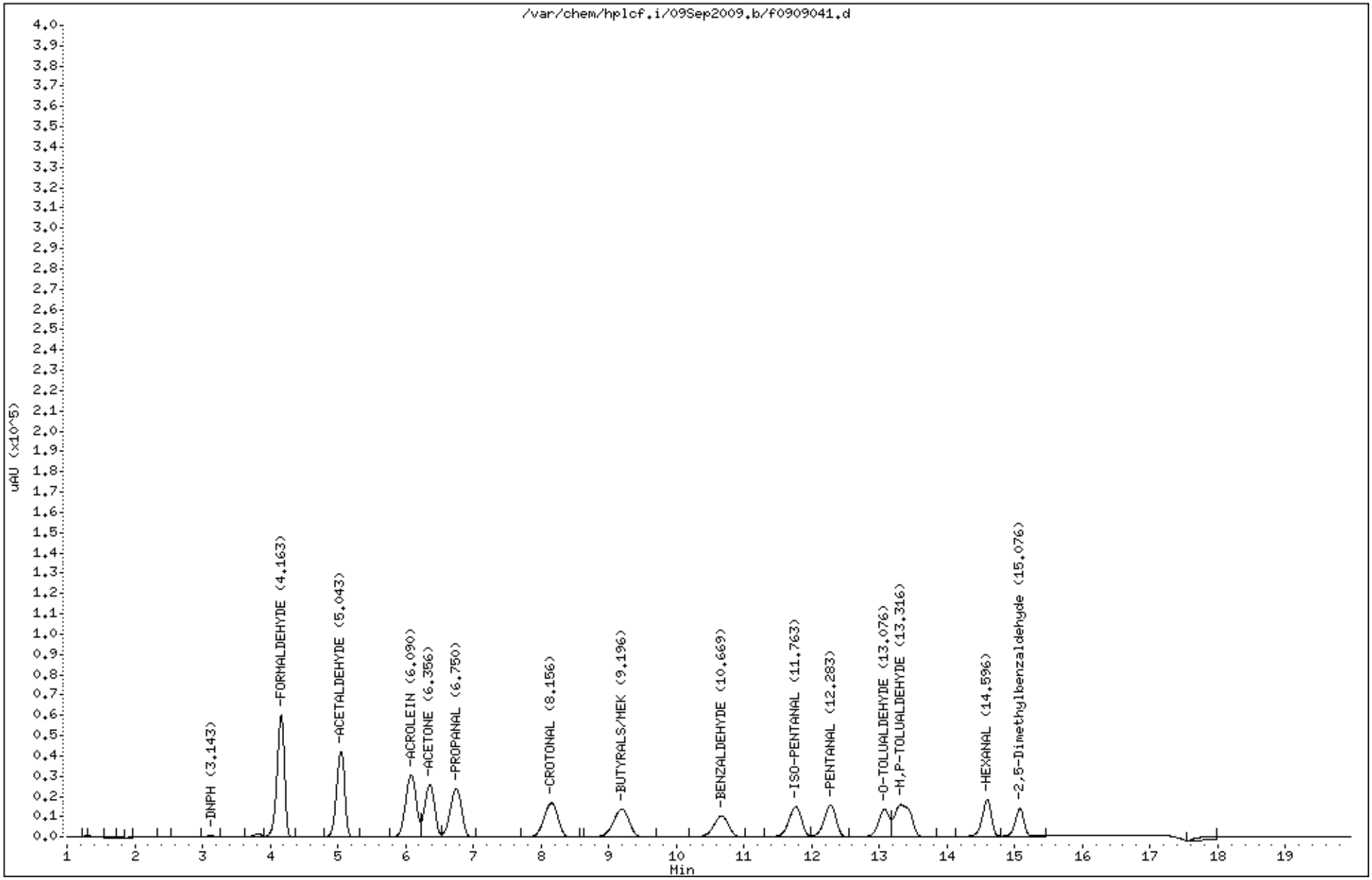
Sample Info: ;1331-138-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0193

Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-138-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 10Sep2009
Client Smp ID: CCV
Sample Point:
Date Received:
Quant Type: ESTD
Level: MED
Operator: CRL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug	Q
119-26-6	DNPH	0.00	
50-00-0	FORMALDEHYDE	3.98	
75-07-0	ACETALDEHYDE	4.00	
107-02-8	ACROLEIN	4.03	
123-38-6	PROPANAL	4.00	
9999-9999-007	BUTYRALS/MEK	4.01	
100-52-7	BENZALDEHYDE	3.97	
590-86-3	ISO-PENTANAL	4.03	
110-62-3	PENTANAL	3.98	
66-25-1	HEXANAL	3.96	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/10Sep2009.b/f0910029.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 10-SEP-2009 19:09
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-134-4;CCV
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 5.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.064	3.056	0.008	97225		
2 FORMALDEHYDE	4.170	4.170	0.000	473444	3.97872	3.98
3 ACETALDEHYDE	5.051	5.050	0.001	358712	3.99621	4.00
4 ACROLEIN	6.090	6.090	0.000	330956	4.03189	4.03
6 PROPANAL	6.757	6.756	0.001	273993	4.00035	4.00
9 BUTYRALS/MEK	9.204	9.196	0.008	226217	4.00704	4.01
10 BENZALDEHYDE	10.671	10.670	0.001	159760	3.96640	3.97
11 ISO-PENTANAL	11.771	11.763	0.008	190901	4.02696	4.03
12 PENTANAL	12.284	12.276	0.008	188832	3.98319	3.98
16 HEXANAL	14.591	14.590	0.001	166303	3.95989	3.96

Report Date: 15-Sep-2009 07:58

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 10Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Level: MED
Operator: CRL
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: R4ug.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.98	99.47	90-110
3 ACETALDEHYDE	4.00	4.00	99.91	90-110
4 ACROLEIN	4.00	4.03	100.80	90-110
6 PROPANAL	4.00	4.00	100.01	90-110
9 BUTYRALS/MEK	4.00	4.01	100.18	90-110
10 BENZALDEHYDE	4.00	3.97	99.16	90-110
11 ISO-PENTANAL	4.00	4.03	100.67	90-110
12 PENTANAL	4.00	3.98	99.58	90-110
16 HEXANAL	4.00	3.96	99.00	90-110

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910029.d

Date : 10-SEP-2009 19:09

Client ID: CCV

Instrument: hplcf.i

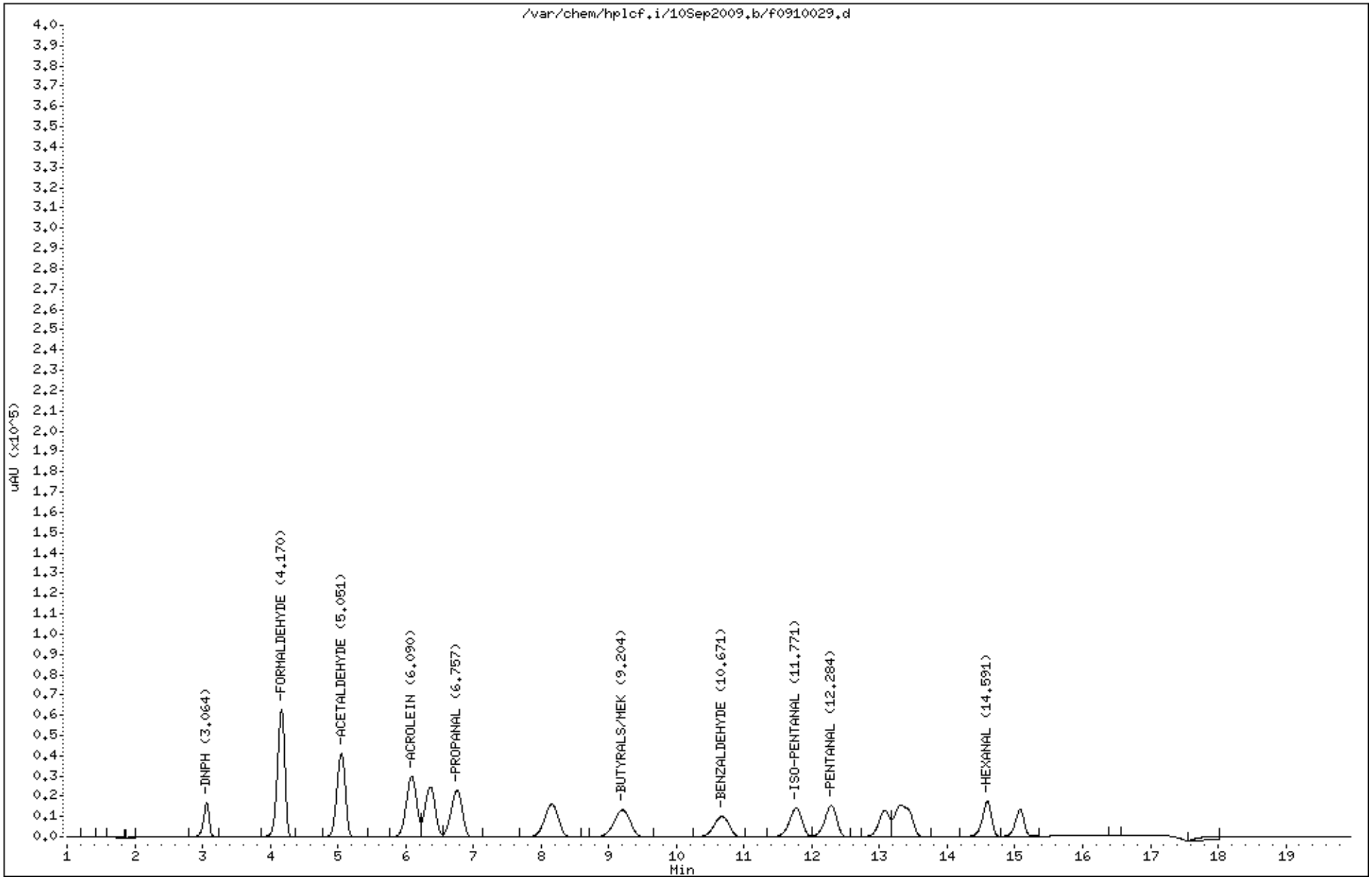
Sample Info: ;1331-134-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0197

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/10Sep2009.b/f0910030.d
Lab Smp Id: CCB Client Smp ID: Lab Blank
Inj Date : 10-SEP-2009 19:30
Operator : CRL Inst ID: hplcf.i
Smp Info : ;CCB;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 11-Sep-2009 09:11 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable

Vs	5.00000	Sample Final Volume (mL)
Vo	5.00000	Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910030.d

Date : 10-SEP-2009 19:30

Client ID: Lab Blank

Instrument: hplcf.i

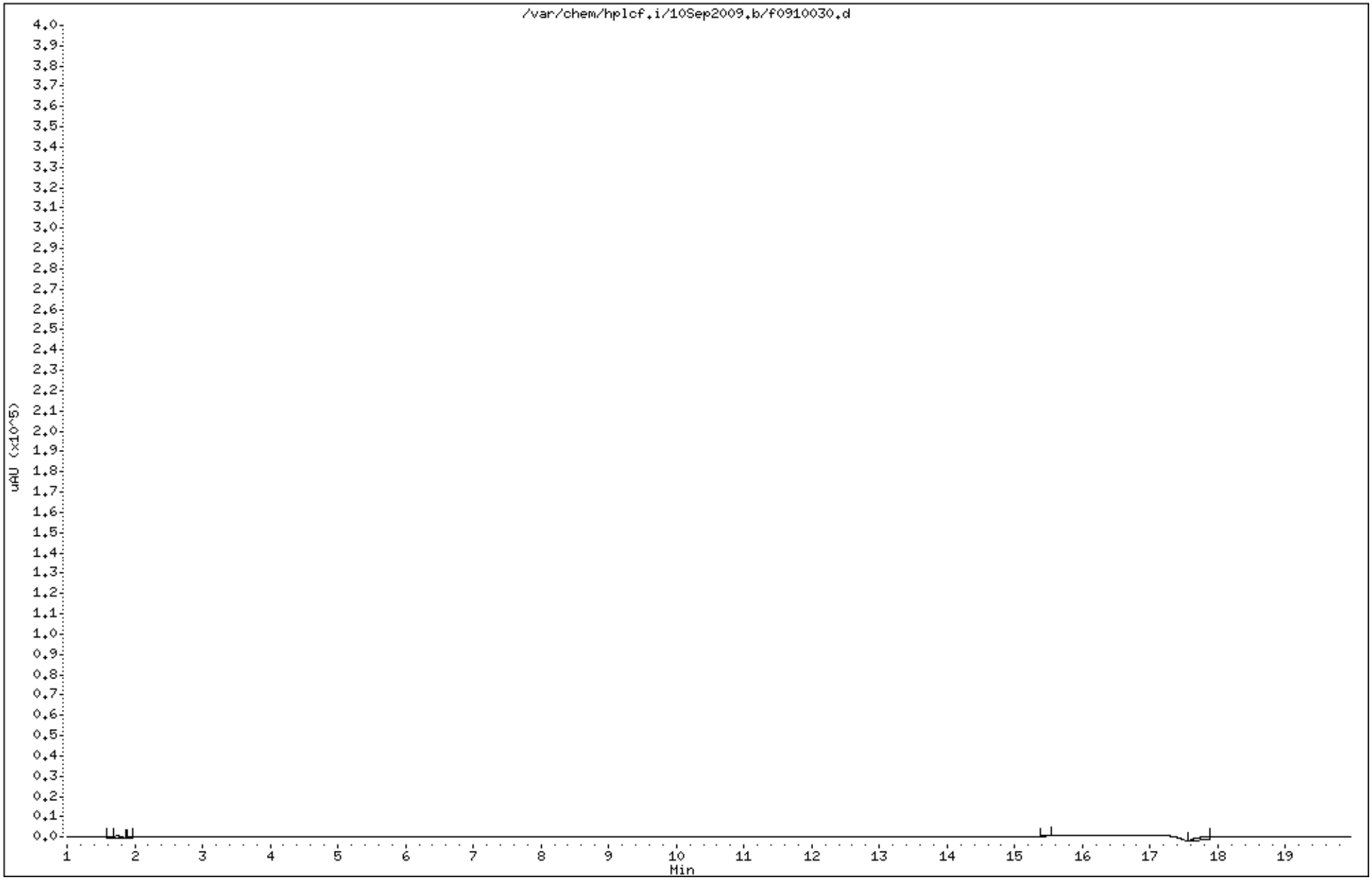
Sample Info: ;CCB;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0199

Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-138-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 10Sep2009
Client Smp ID: CCV
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: CRL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug	Q
119-26-6	DNPH	0.00	
50-00-0	FORMALDEHYDE	3.98	
75-07-0	ACETALDEHYDE	3.99	
107-02-8	ACROLEIN	4.01	
123-38-6	PROPANAL	4.00	
9999-9999-007	BUTYRALS/MEK	4.01	
100-52-7	BENZALDEHYDE	3.98	
590-86-3	ISO-PENTANAL	4.07	
110-62-3	PENTANAL	4.02	
66-25-1	HEXANAL	3.96	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/10Sep2009.b/f0910042.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 10-SEP-2009 23:41
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-138-4;CCV
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.053	3.056	-0.003	97647		
2 FORMALDEHYDE	4.160	4.170	-0.010	473467	3.97892	3.98
3 ACETALDEHYDE	5.040	5.050	-0.010	358236	3.99092	3.99
4 ACROLEIN	6.080	6.090	-0.010	329317	4.01193	4.01
6 PROPANAL	6.747	6.756	-0.009	273694	3.99599	4.00
9 BUTYRALS/MEK	9.180	9.196	-0.016	226383	4.00999	4.01
10 BENZALDEHYDE	10.646	10.670	-0.024	160208	3.97752	3.98
11 ISO-PENTANAL	11.746	11.763	-0.017	192938	4.06994	4.07
12 PENTANAL	12.267	12.276	-0.009	190460	4.01753	4.02
16 HEXANAL	14.580	14.590	-0.010	166327	3.96047	3.96

Report Date: 17-Sep-2009 10:06

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 10Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Level: LOW
Operator: CRL
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: R4ug.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.98	99.47	90-110
3 ACETALDEHYDE	4.00	3.99	99.77	90-110
4 ACROLEIN	4.00	4.01	100.30	90-110
6 PROPANAL	4.00	4.00	99.90	90-110
9 BUTYRALS/MEK	4.00	4.01	100.25	90-110
10 BENZALDEHYDE	4.00	3.98	99.44	90-110
11 ISO-PENTANAL	4.00	4.07	101.75	90-110
12 PENTANAL	4.00	4.02	100.44	90-110
16 HEXANAL	4.00	3.96	99.01	90-110

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910042.d

0203

Date : 10-SEP-2009 23:41

Client ID: CCV

Instrument: hplcf.i

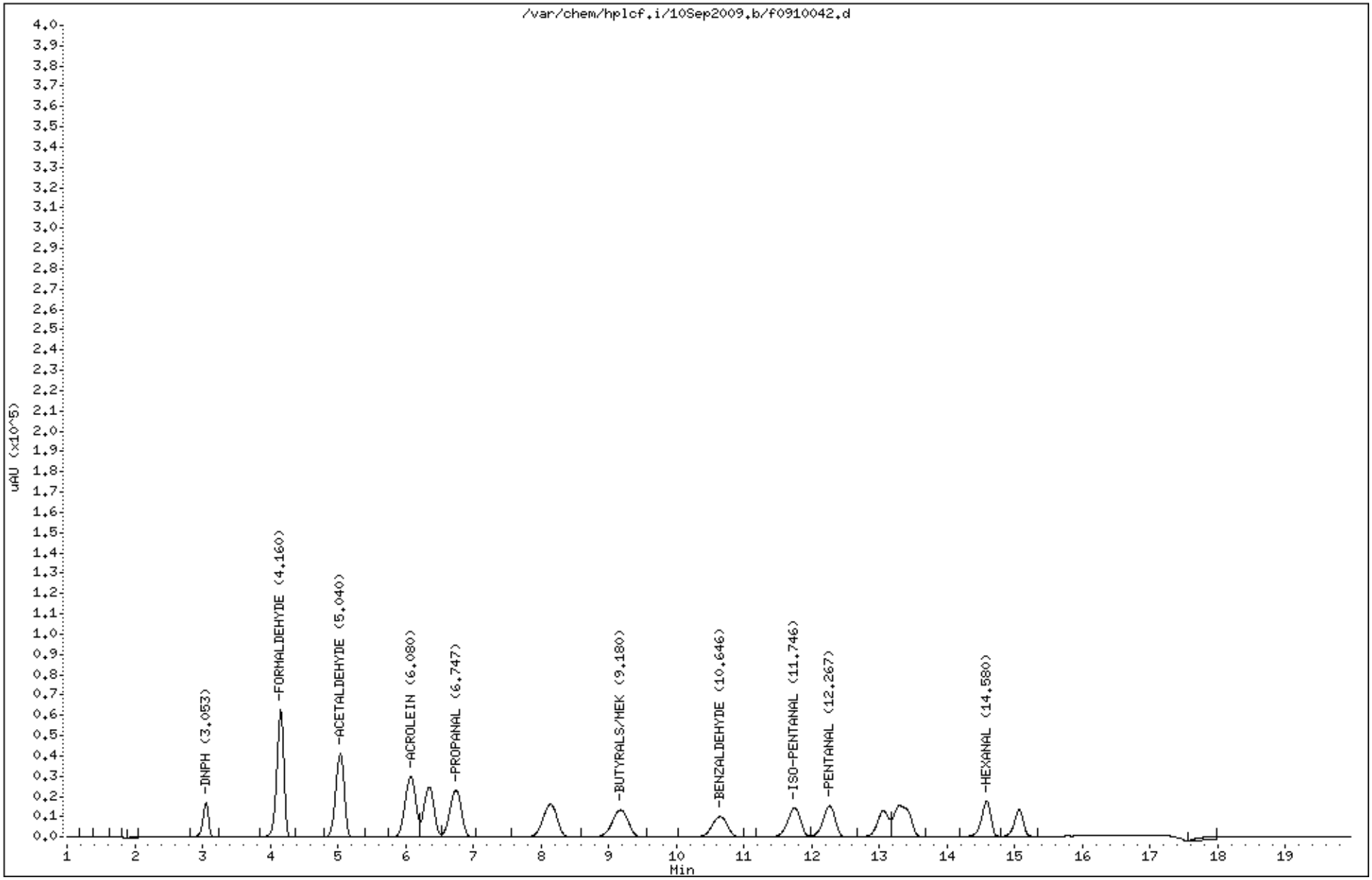
Sample Info: ;1331-138-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/10Sep2009.b/f0910043.d
Lab Smp Id: CCB Client Smp ID: Lab Blank
Inj Date : 11-SEP-2009 00:02
Operator : CRL Inst ID: hplcf.i
Smp Info : ;CCB;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 11-Sep-2009 09:23 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	Compound Not Detected.					
3 ACETALDEHYDE	Compound Not Detected.					
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	Compound Not Detected.					
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	Compound Not Detected.					
16 HEXANAL	Compound Not Detected.					

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910043.d

0205

Date : 11-SEP-2009 00:02

Client ID: Lab Blank

Instrument: hplcf.i

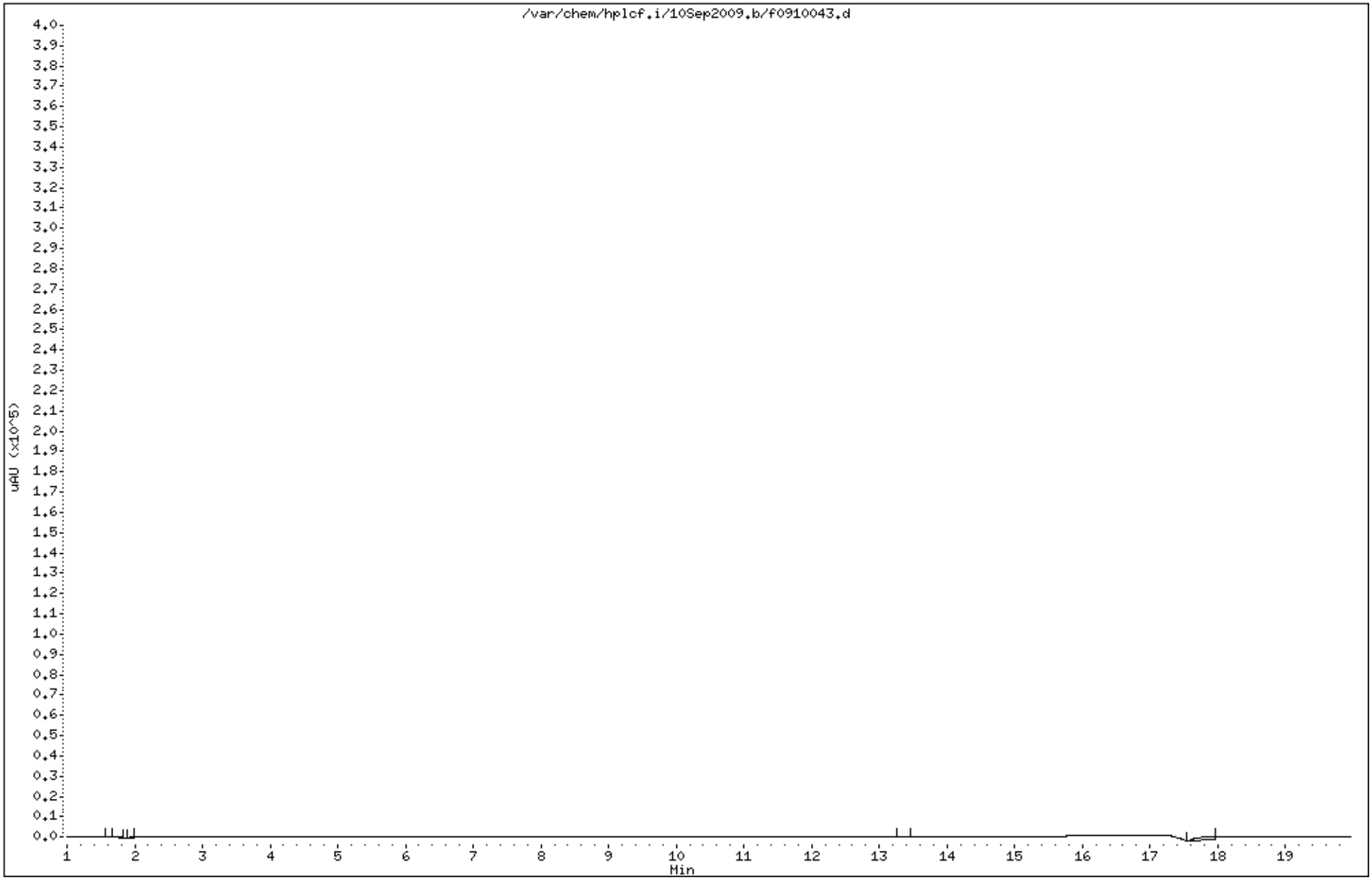
Sample Info: ;CCB;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-138-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 10Sep2009
Client Smp ID: CCV
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: CRL

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug	Q
119-26-6	DNPH	0.00	
50-00-0	FORMALDEHYDE	3.99	
75-07-0	ACETALDEHYDE	4.00	
107-02-8	ACROLEIN	4.03	
123-38-6	PROPANAL	4.00	
9999-9999-007	BUTYRALS/MEK	4.01	
100-52-7	BENZALDEHYDE	4.00	
590-86-3	ISO-PENTANAL	4.06	
110-62-3	PENTANAL	4.02	
66-25-1	HEXANAL	3.97	

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /chem/hplcf.i/10Sep2009.b/f0910056.d
Lab Smp Id: 1331-138-4 Client Smp ID: CCV
Inj Date : 11-SEP-2009 04:33
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-134-4;CCV
Misc Info :
Comment :
Method : /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Meth Date : 15-Sep-2009 07:52 cleaf Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Uf * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.054	3.056	-0.002	96999		
2 FORMALDEHYDE	4.161	4.170	-0.009	474395	3.98672	3.99
3 ACETALDEHYDE	5.041	5.050	-0.009	358842	3.99766	4.00
4 ACROLEIN	6.081	6.090	-0.009	330800	4.02999	4.03
6 PROPANAL	6.747	6.756	-0.009	274225	4.00373	4.00
9 BUTYRALS/MEK	9.187	9.196	-0.009	226534	4.01266	4.01
10 BENZALDEHYDE	10.654	10.670	-0.016	160920	3.99520	4.00
11 ISO-PENTANAL	11.754	11.763	-0.009	192689	4.06467	4.06
12 PENTANAL	12.267	12.276	-0.009	190356	4.01534	4.02
16 HEXANAL	14.581	14.590	-0.009	166832	3.97249	3.97

Report Date: 15-Sep-2009 08:00

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 10Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-138-4
Client Smp ID: CCV
Level: LOW
Operator: CRL
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: R4ug.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /var/chem/hplcf.i/10Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.99	99.67	90-110
3 ACETALDEHYDE	4.00	4.00	99.94	90-110
4 ACROLEIN	4.00	4.03	100.75	90-110
6 PROPANAL	4.00	4.00	100.09	90-110
9 BUTYRALS/MEK	4.00	4.01	100.32	90-110
10 BENZALDEHYDE	4.00	4.00	99.88	90-110
11 ISO-PENTANAL	4.00	4.06	101.62	90-110
12 PENTANAL	4.00	4.02	100.38	90-110
16 HEXANAL	4.00	3.97	99.31	90-110

Data File: /var/chem/hplcf.i/10Sep2009.b/f0910056.d

0209

Date : 11-SEP-2009 04:33

Client ID: CCV

Instrument: hplcf.i

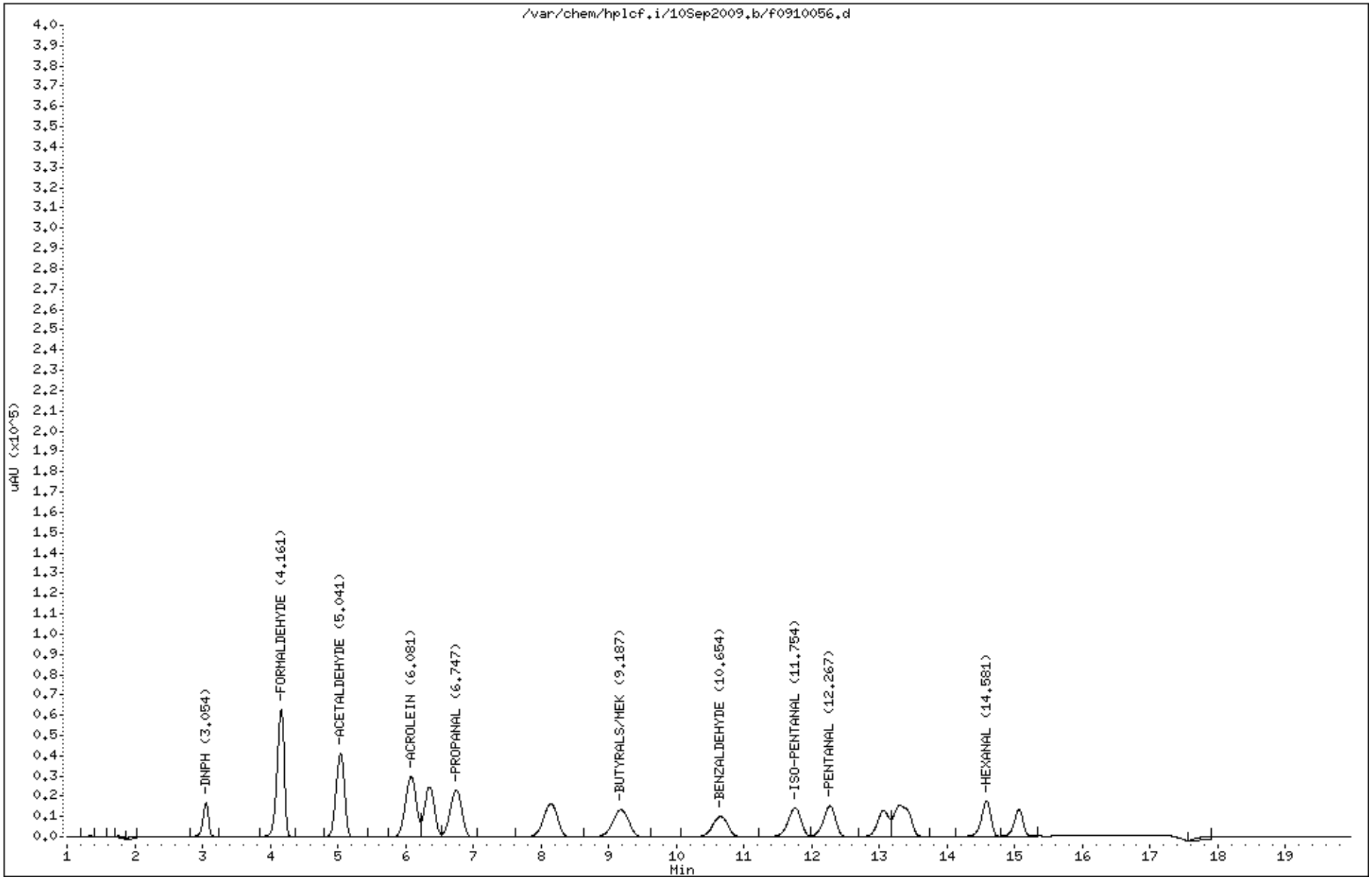
Sample Info: ;1331-134-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0909125C-51A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0906008**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/6/09 11:59 AM**
		Date of Extraction: 9/6/09

Compound	**%Recovery**
Formaldehyde	104
Acetaldehyde	104
Propanal	100
Methyl Ethyl Ketone/Butyraldehydes	100
Benzaldehyde	99
Pentanal	100
Isopentanal	102
Hexanal	96
Acrolein	97

Container Type: NA - Not Applicable

Report Date: 08-Sep-2009 12:24

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 06Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 0909125C-LCS
Client Smp ID: LCS
Level: MED
Operator: KJJ
Data Type: LC DATA
SampleType: LCS
SpikeList File: Rvarlcs.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	7.86	8.21	104.48	85-115
3 ACETALDEHYDE	3.93	4.08	103.86	85-115
4 ACROLEIN	4.75	4.60	96.92	85-115
6 PROPANAL	4.87	4.87	100.08	85-115
9 BUTYRALS/MEK	5.71	5.70	99.79	85-115
10 BENZALDEHYDE	7.41	7.35	99.16	85-115
11 ISO-PENTANAL	6.47	6.63	102.49	85-115
12 PENTANAL	6.47	6.49	100.27	85-115
16 HEXANAL	7.14	6.85	95.89	85-115

Air Toxics Ltd.

Aldehydes/Ketones To-11,TO-5,CARB430,0011, Radiello 165

Data file : /var/chem/hplcf.i/06Sep2009.b/f0906008.d
Lab Smp Id: 0909125C-LCS Client Smp ID: LCS
Inj Date : 06-SEP-2009 11:59
Operator : KJJ Inst ID: hplcf.i
Smp Info : ;0909125C-LCS;
Misc Info :
Comment :
Method : /var/chem/hplcf.i/06Sep2009.b/F09D0904.m
Meth Date : 08-Sep-2009 12:22 lzhang Quant Type: ESTD
Cal Date : 04-SEP-2009 20:41 Cal File: f0904035.d
Als bottle: 1 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: Rad165.sub
Target Version: 3.50
Processing Host: eeyore

Concentration Formula: Amt * DF * Vs/Vo * CpndVariable
Vs 2.00000 Sample Final Volume (mL)
Vo 5.00000 Curve based Volume (mL)

Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.052	3.058	-0.006	31274789		
2 FORMALDEHYDE	4.166	4.171	-0.005	2443029	20.5307	8.21
3 ACETALDEHYDE	5.052	5.058	-0.006	915942	10.2040	4.08
4 ACROLEIN	6.099	6.104	-0.005	944708	11.5090	4.60
6 PROPANAL	6.766	6.771	-0.005	834573	12.1849	4.87
9 BUTYRALS/MEK	9.226	9.238	-0.012	804234	14.2456	5.70
10 BENZALDEHYDE	10.706	10.711	-0.005	739886	18.3693	7.35
11 ISO-PENTANAL	11.799	11.805	-0.006	785855	16.5772	6.63
12 PENTANAL	12.312	12.318	-0.006	768912	16.2193	6.49
16 HEXANAL	14.619	14.624	-0.005	718866	17.1171	6.85

Data File: /chem/hplcf.i/06Sep2009.b/f0906008.d

Page 1

Date : 06-SEP-2009 11:59

Client ID: LCS

Instrument: hplcf.i

Sample Info: ;0909125C-LCS;

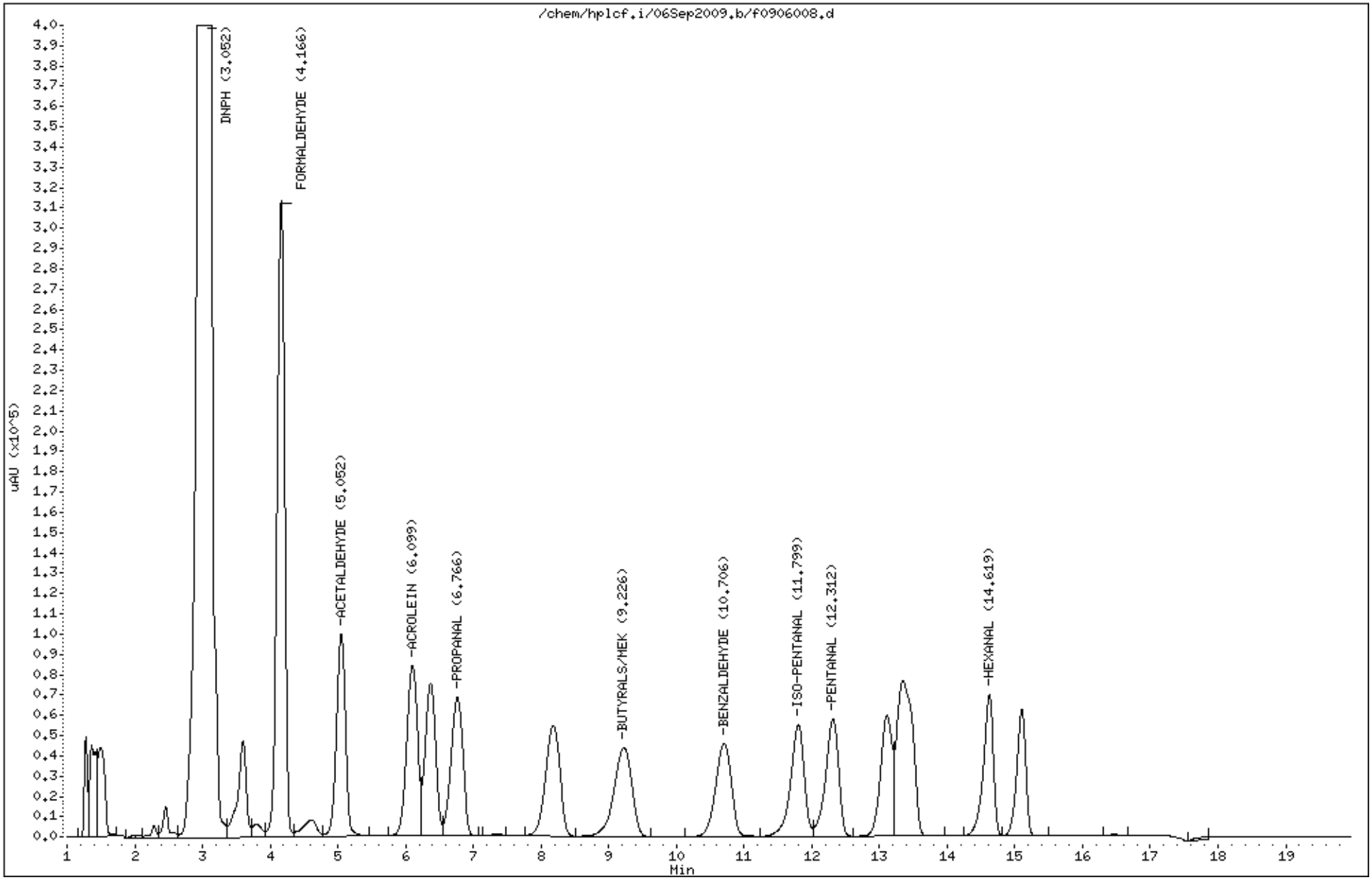
Purge Volume: 5.0

Operator: KJJ

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00

0213



TO-11 Extraction Logbook @Air Toxics Ltd. Log Book #: 1817

KJ 9/6/09

ATL Work Order # 0909125BC **Final Solvent:** ACN **Solvent Lot #:** 097929

Date Extracted 9/6/09 **Spike I.D.:** *1331-140-USC ** 1476-842-570 ug/ml **Spiked By:** KJ

Spike Witness: MLK

ATL Fraction	Clients I.D. #	Cartridge type & size	Final Volume (ml)	Spike Amount (ul)	Comments
0909125C-BLK	NA	Rad 165 lot # 09144	2.0	NA	
-LCS	↓	09069	↓	1000 / 10**	* Full list ** Formaldehyde
-33A	102099	↓	↓	NA	
-34A	100	↓	↓	↓	
-35A	101	↓	↓	↓	
-36A	102	↓	↓	↓	FB
-37A	126	↓	↓	↓	
-38A	127	↓	↓	↓	
-39A	128	↓	↓	↓	
-40A	129	↓	↓	↓	
-41A	130	↓	↓	↓	FB
-42A	131	↓	↓	↓	FB
-43A	132	↓	↓	↓	
-44A	159	↓	↓	↓	
-45A	160	↓	↓	↓	
-46A	161	↓	↓	↓	
-47A	162	↓	↓	↓	
-48A	163	↓	↓	↓	
-49A	164	↓	↓	↓	FB
					KJ 9/6/09

Comments:

Katie Johnston 9/6/09

Signed Date

0214

Revised: 12/06

HPLC-F Run Logbook **@Air Toxics Ltd.** **Logbook Book #: 1850**

Method (Circle all that apply): TO-5 CARB 430 TO-11A Method 0011 Pressure: 99 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f0906001	1331-138-4 ccv	1.00	KJ	916109	0859	W	
✓	2	CCB				0919		
✓	3	0909125A-Lab Blk				W 918109 0921015		
✓	4	A-LCS				1036		
✓	5	B-Lab Blk				1057		
✓	6	B-LCS				1118		
✓	7	C-Lab Blk				1139		
✓	8	C-LCS				1159		
✓	9	0908630B-21A		W		1220		
✓	10	0908630C-34A				1241		
✓	11	-34AA				1302		
✓	12	-40A				1323		
✓	13	-46A				1344		
✓	14	-54A				1405 ~~1506~~ W 918109		
✓	15	-59A				1426		
✓	16	~~1331~~ W 918109 CCB				1447		
✓	17	1331-138-4 ccv				1507		
✓	18	CCB				1528		
✓	19	0908630B-29A	4.00			1549		
✓	20	-30A	5.00			1610		
✓	21	-32A	4.00			1631		
✓	22	-17A	5.00			1652		
✓	23	-17AA	5.00 W 918109			1713		
✓	24	-22A	4.00			1734		
✓	25	-23A				1755		
✓	26	-26A				1815		
✓	27	-27A				1836		
✓	28	CCB	1.00	↓	↓	1857		

Calculation Check:

File ID: f0906017 Compound: Acetaldehyde Initials: W

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(359782)}{(89763)}$ × (1) = **4.01**

Reported Result: **4.01**

Signed: [signature] Date: 918109

Revised 07/08

0215

HPLC-F Run Logbook **@Air Toxics Ltd.** **Logbook Book #: 1850**

Method (Circle all that apply): TO-5 CARB 430 TO-11A Method 0011 Pressure: 99 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f0906029	CCB	1.00	W	9/6/09	1918	W	
✓	30	1331-138-4 CCV		↓		1939		
✓	31	CCB		KJ		2000		
✓	32	0909125A-06A				2021		
✓	33	A-12A				2042		
✓	34	B-18A				2103		
✓	35	B-24A				2123		
✓	36	B-30A				2144		
✓	37	C-36A				2205		
X	38	C-41A				2226		over range
X	39	C-42A				2247		
✓	40	C-49A				2308		
X	41	A-01A	5.00			2329		
X	42	A-01AA	1			2350		
✓	43	1331-138-4 CCV	1.00		9/7/09	0011		7% pentanal ↑
X	44	CCB			↓	0031		
	45	0909125A-02A	5.00					
	46	-03A						
	47	-04A						
	48	-05A						
	49	-07A						
	50	-08A						
	51	-09A						
	52	-10A						
	53	-11A						
	54	-13A						
	55	~~1331-138-4 CCV~~ -13AA W 9/8/09	~~5.00~~					
↓	56	1331-138-4 CCV ~~CCB~~ W 9/8/09	X W 9/8/09	↓		W 9/8/09	↓	

Calculation Check:

File ID: f0906043 Compound: Formaldehyde Initials: W

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = (481579) / (118994) × (1) = 4.05

Reported Result: 4.05

Signed: [signature] Date: 9/8/09

HPLC-F Run Logbook **@Air Toxics Ltd.** **Logbook Book #: 1850**

Method (Circle all that apply): TO-5 CARB 430 TO-11A Method 0011 Pressure: 112 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	F0909001	ACN WASH	1.00	CRL	9/9/09	0732	CRL / W	
✓	2					0753		
✓	3					0814		
✓	4	CCV 1331-138-4				0835		
✓	5	CCB				0856		New lot# 086064
X	6	09090086 - BLK				0916		
✓	7	-LCS				0937		
X	8	-BLK				0958		
✓	9	-BLK2				1042		Form = 1.08 ug
C	10	-BLK2				1105		C: confirmed
	11	-14A				1211		TB
✓	12	-13A				1232		TS
✓	13	-01A				1253		
✓	14	-02A				1314		
✓	15	-05A				1335		
✓	16	1331-138-4 CCV				1356		
✓	17	CCB				1416		
C	18	09086038A - 13A				1437		C = confirmed
✓	19	09090086 - 06A				1458		
✓	20	-08A				1519		
✓	21	-07A				1540		
✓	22	-03A				1601		
✓	23	-04A				1622		
	24	-09A				1643		
	25	-10A				1704		
✓	26	-11A				1724		
✓	27	-12A				1745		
✓	28	1331-138-4 CCV				1806		

Calculation Check:

File ID: F0909007 Compound: Formaldehyde Initials: W

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(\ 180833\ )}{(\ 118994\ )}$ × (1) = 15.2

Reported Result: 15.2

Signed: [signature] Date: 9/11/09

HPLC-F Run Logbook **@Air Toxics Ltd.** **Logbook Book #: 1850**

Method (Circle all that apply): TO-5 CARB 430 TO-11A Method 0011 Pressure: 112 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f09090 29	~~0~~ CCB	1.00	CRL	9/9/09	1827	CRL / ci	
✓	30	09091 25C - 41A	5.00			1848		
X	31	↓ -42A	1.00			1909		re-run
✓	32	09091 25A - 01A	5.00			1930		
✓	33	-01AA				1951		
✓	34	-02A				2012		
X	35	-03A	1.00			2033		re-run
✓	36	-04A	5.00			2053		
✓	37	-05A				2114		
✓	38	~~-06A~~ -07A CRL 9/10/09				2135		
✓	39	-08A				2156		
X	40	CCB	1.00			2217		
✓	41	CCV 1331-134-4				2238		
✓	42	CCB				2259		
✓	43	09091 25A - 09A				2320		
✓	44	-10A	5.00			2341		
✓	45	-11A			9/10/09	0001		
✓	46	-13A				0022		
✓	47	-13AA				0043		
✓	48	-14A				0104		
X	49	~~-15A~~ -15A CRL 9/10/09				0125		over diluted
✓	50	-16A				0146		
✓	51	-17A				0207		
✓	52	-19A				0228		
X	53	CCB	1.00			0249		
✓	54	CCV 1331-134-4				0309		
✓	55	CCB				~~0330~~ 0330 CRL 9/10/09		
✓	56	09091 25A - 20A	5.00			0351		

Calculation Check:

File ID: f09090 54 Compound: Acrolein Initials: ci

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(338961)}{(82084)}$ × (1) = 4.13

Reported Result: 4.13

Signed: [signature] Date: 9/11/09

HPLC-F Run Logbook **@Air Toxics Ltd.** **Logbook Book #: 1850**

Method (Circle all that apply): TO-5 CARB 430 (TO-11A) Method 0011 Pressure: _____ bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f0910027	0908630B-23A	5.00	W	9/10/09	1827	W	
✓	28	CCB	1.00			1848		
✓	29	1331-138-4 CCV				1909		
✓	30	CCB		↓		1930		
✓	31	0909125C-42A		W		1951		
✓	32	B-21A				2012		
✓	33	B-27A				2033		
✓	34	A-03A				2053		
✓	35	C-33A				2114		
✓	36	C-39A				2135		
✓	37	C-32A	5.00			2156		
✓	38	C-34A				2217		
✓	39	C-35A				2238		
✓	40	C-37A				2259		
✓	41	CCB	1.00			2320		
✓	42	1331-138-4 CCV				2341		
✓	43	CCB			9/11/09	0002		
✓	44	0909125C-43A				0022		
✓	45	-46A				0043		
✓	46	-46AA	↓			0104		
✓	47	-48A	5.00 W 9/11/09			0125		
✓	48	-38A	5.00			0146		
✓	49	-40A				0207		
✓	50	-44A	6.00			0228		
✓	51	-44AA	5.00			0249		
✓	52	-45A				0310		
✓	53	-47A				0330		
✓	54	CCB	1.00			0351	↓	

Calculation Check:

File ID: f0910029 Compound: Acetaldehyde Initials: W

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(358712)}{(89763)}$ × (1) = 4.00

Reported Result: 4.00

Signed _____ Date 9/11/09

0219

Revised 07/08

HPLC-F Run Logbook **@Air Toxics Ltd.** **Logbook Book #: 1850**

Method (Circle all that apply): TO-5 CARB 430 TO-11A Method 0011 Pressure: _____ bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	F0910055	CCB	1.00	W	9/11/09	0412	W	
✓	56	1331-138-4 ccv		↓		0433		
✓	57	CCB		KJ		0454		
✓	58	0909215-01A				0515		
✓	59	-01AA				0536		
✓	60	-02A				0557		
✓	61	0909186-01A				0618		
✓	62	-01AA				0638		
✓	63	-02A				0659		
✓	64	-03A				0720		
✓	65	-04A				0741		
✓	66	-05A				0802		
✓	67	-06A				0823		
✓	68	0909161-LabBlk		CRL		0844		
✓	69	-LCS				0905		
	70	0909186-07A						
	71	-08A						
	72	1331-138-4 ccv						
	73	CCB						

Calculation Check:

File ID: F0910056 Compound: Formaldehyde Initials: W

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(474395)}{(118994)}$ × (1) = 3.99

Reported Result: 3.99

Signed: [signature] Date: 9/11/09

Shipping/ Receiving Documents

Air Toxics LTD.
Laboratory Services Since 1989

180 Blue Ravine Road, Suite B
Folsom, CA 95630

Phone (916) 985-1000 FAX (916) 985-1020
Hours 8:00 A.M. to 6:00 P.M. Pacific

COMPANY: Environmental Health & Engineering, Inc.
ATTENTION: Mr. Taeko Minegishi
FAX #: 781-247-4305
FROM: Sample Receiving
Workorder #: 0909125C
# of pages (Including Cover): 1

9/22/2009

Thank you for selecting Air Toxics Ltd. We have received your samples and have found no discrepancies. In order to expedite analysis and reporting, please review the attached information for accuracy. Corrections can be faxed to **Ausha Scott at 916-985-1020.**
ATL will proceed with the analysis as specified on the Chain of Custody and Sample Login page.

Environmental Health & Engineering, Inc.

CHAIN OF CUSTODY FORM

DATE: 3 SEP 09

0909125

FROM: Environmental Health and Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494-2725

TO: AIR TOXICS

Please send invoices to ATTN: Accounts Payable
Please send reports to ATTN: Data Coordinator

In all correspondence regarding this matter, please refer to EH&E Project # 16512

The cost of this analysis will be covered by EH&E Purchase Order # 16512

For EH & E Data Coordinator - URGENT DATA ☐

	SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	START	OTHER:Time/Date/Vol.
33A	102099	AIR PASSIVE	ALDEHYDE ANALYSIS	8/20/09	9/3/09
34A	102100				
35A	102101				
36A	102102				Ø
37A	102126				9/3/09
38A	102127				
39A	102128				
40A	102129				
41A	102130				
42A	102131				Ø
43A	102132				Ø
44A	102159				9/3/09
45A	102160				
46A	102161				
47A	102162				
48A	102163				
49A	102164				Ø

Special instructions:

☒ Standard turn around time ☐ Rush by _____ date/time ☐ Other _____

☐ Fax results 781-247-4305

☐ **RETURN SAMPLES** ☒ Electronic transfer - dataxoordinator@ehainc.com

☒ Additional report recipient mragola@ehainc.com

CUSTODY SEAL WITNESSED BY ROMP/TEMP
Fed Ex 8704-2335 1572

Each signatory please return one copy of this form to the above address

Relinquished by: _____ of Environmental Health & Engineering, Inc. Date: 9/3/09

Received by: _____ of (company name) A+L Date: 9/4/09

Relinquished by: _____ of (company name) _____ Date: _____

Received by: _____ of (company name) _____ Date: _____

Relinquished by: _____ of (company name) _____ Date: _____

Received by: _____ of (company name) _____ Date: _____

Lab Data
Received by: _____ of Environmental Health & Engineering, Inc. Date: _____

Page 3 of 3

WHITE-EH&E FILE COPY YELLOW-LAB COPY PINK-PROJECT MANAGER COPY GOLD-DATA COORDINATOR COPY

Air Toxics LTD.
Laboratory Services Since 1989

SAMPLE RECEIPT SUMMARY

WORKORDER 0909125C

Client

Mr. Taeko Minegishi
Environmental Health &
Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Sales Rep: TL

Phone

800-825-5343

Fax

781-247-4305

Date Promised: 09/21/09
Date Completed: 9/18/09
Date Received: 9/4/09
PO#: 16512
Project#: 16512

Total $: $ 1,360.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Amount$
33A	102099	ATL Application	9/3/2009	$75.00
34A	102100	ATL Application	9/3/2009	$75.00
35A	102101	ATL Application	9/3/2009	$75.00
36A	102102	ATL Application	NA	$75.00
37A	102126	ATL Application	9/3/2009	$75.00
38A	102127	ATL Application	9/3/2009	$75.00
39A	102128	ATL Application	9/3/2009	$75.00
40A	102129	ATL Application	9/3/2009	$75.00
41A	102130	ATL Application	NA	$75.00
42A	102131	ATL Application	NA	$75.00
43A	102132	ATL Application	9/3/2009	$75.00
44A	102159	ATL Application	9/3/2009	$75.00
44AA	102159 Lab Duplicate	ATL Application	9/3/2009	$0.00
45A	102160	ATL Application	9/3/2009	$75.00
46A	102161	ATL Application	9/3/2009	$75.00
46AA	102161 Lab Duplicate	ATL Application	9/3/2009	$0.00
47A	102162	ATL Application	9/3/2009	$75.00
48A	102163	ATL Application	9/3/2009	$75.00
49A	102164	ATL Application	NA	$75.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: CPSC Indoor Air Monitoring/13297

BILL TO: Accounts Payable
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Analysis Code: HPLC

TERMS:

Reporting Method: Modified TO-11A Passive-Radiello 165 (Full list) (ug)

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

Air Toxics LTD.
Laboratory Services Since 1989

SAMPLE RECEIPT SUMMARY Continued

Client

Mr. Taeko Minegishi
Environmental Health &
Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Sales Rep: TL

Phone

800-825-5343

Fax

781-247-4305

Date Promised: 09/21/09
Date Completed: 9/18/09
Date Received: 9/4/09
PO#: 16512
Project#: 16512

Total $: $ 1,360.00
Logged By: MW

Fraction	Sample #	Analysis	Collected	Amount$
50A	Lab Blank	ATL Application	NA	$0.00
51A	LCS	ATL Application	NA	$0.00

Misc. Charges eCVP (17) @ $5.00 each. $85.00

Note: Samples received after 3 P.M. PST are considered to be received on the following work day.
Atlas Project Name/Profile#: CPSC Indoor Air Monitoring/13297

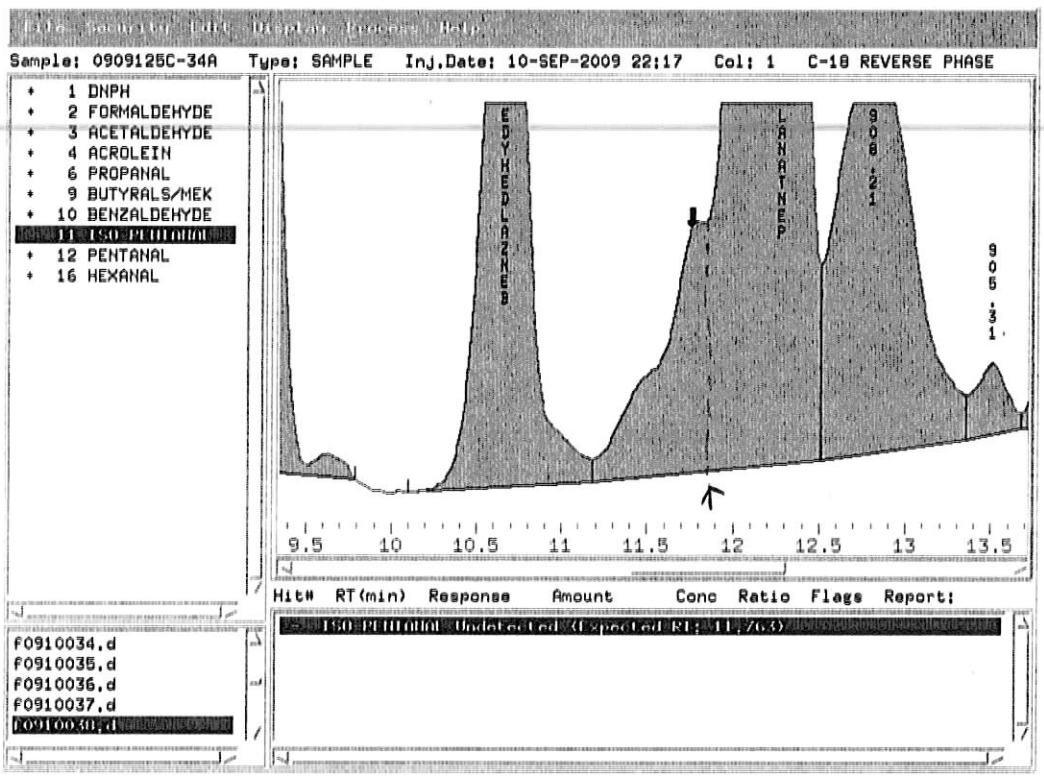
BILL TO: Accounts Payable
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Analysis Code: HPLC

TERMS:

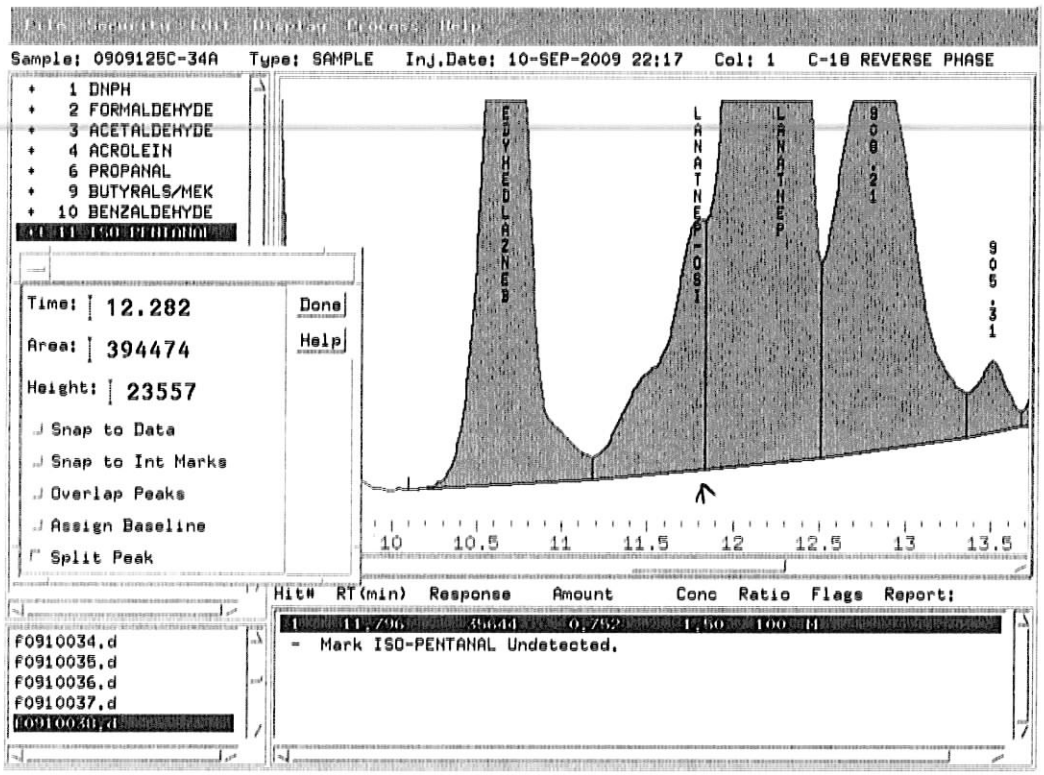
Reporting Method: Modified TO-11A Passive-Radiello 165 (Full list) (ug)

Other Records



Before.

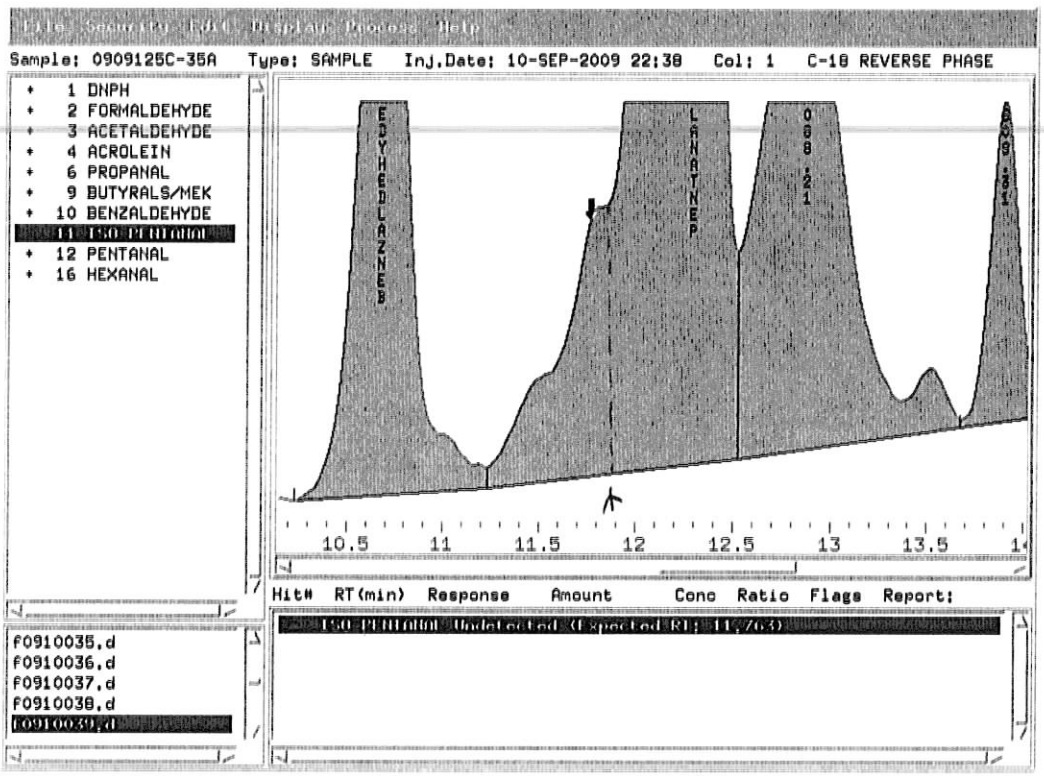
W9117109



After

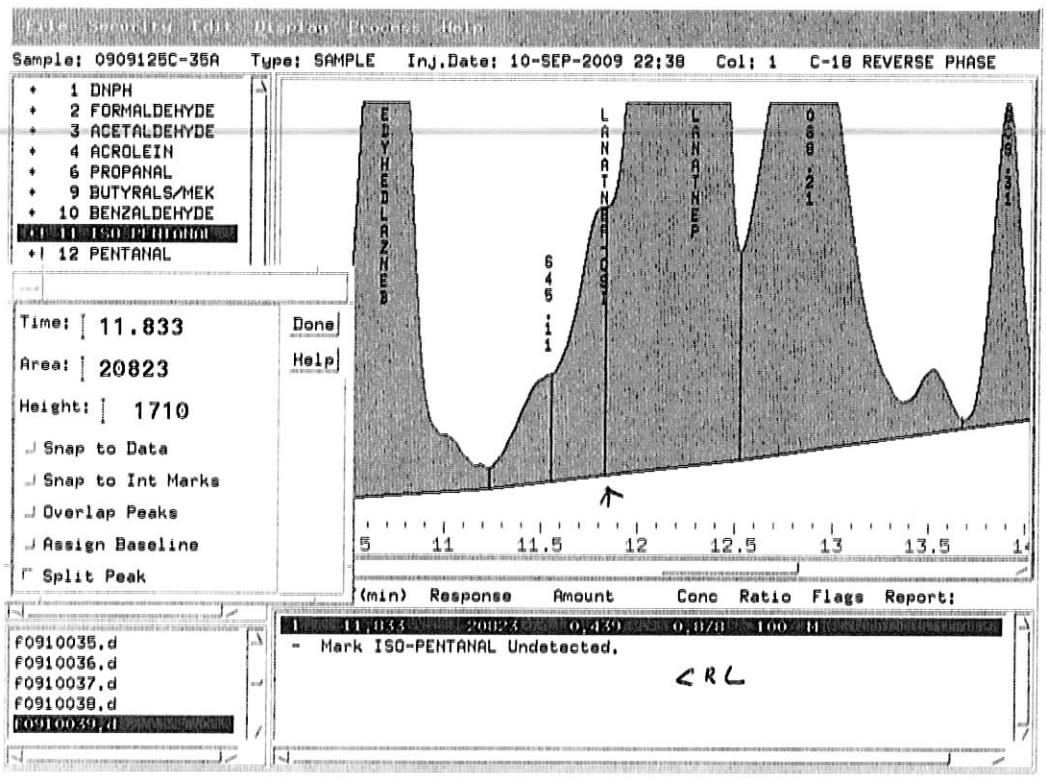
Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

W 9/17/09



Before.

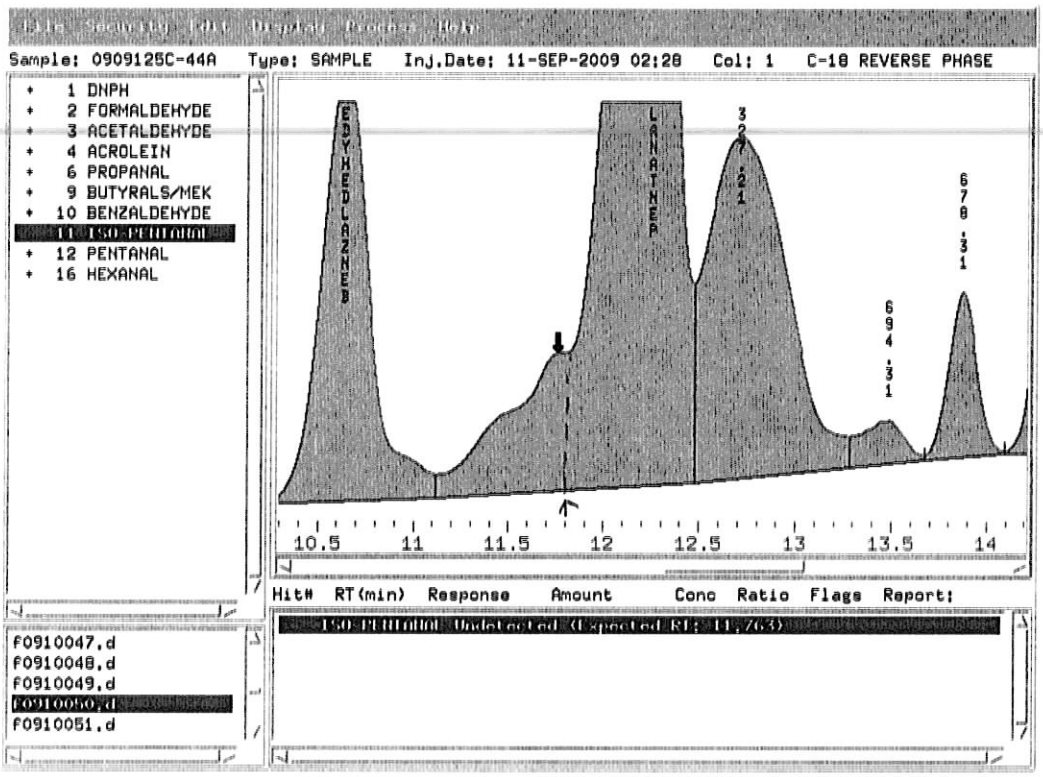
W 9/17/09



After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

W9117109



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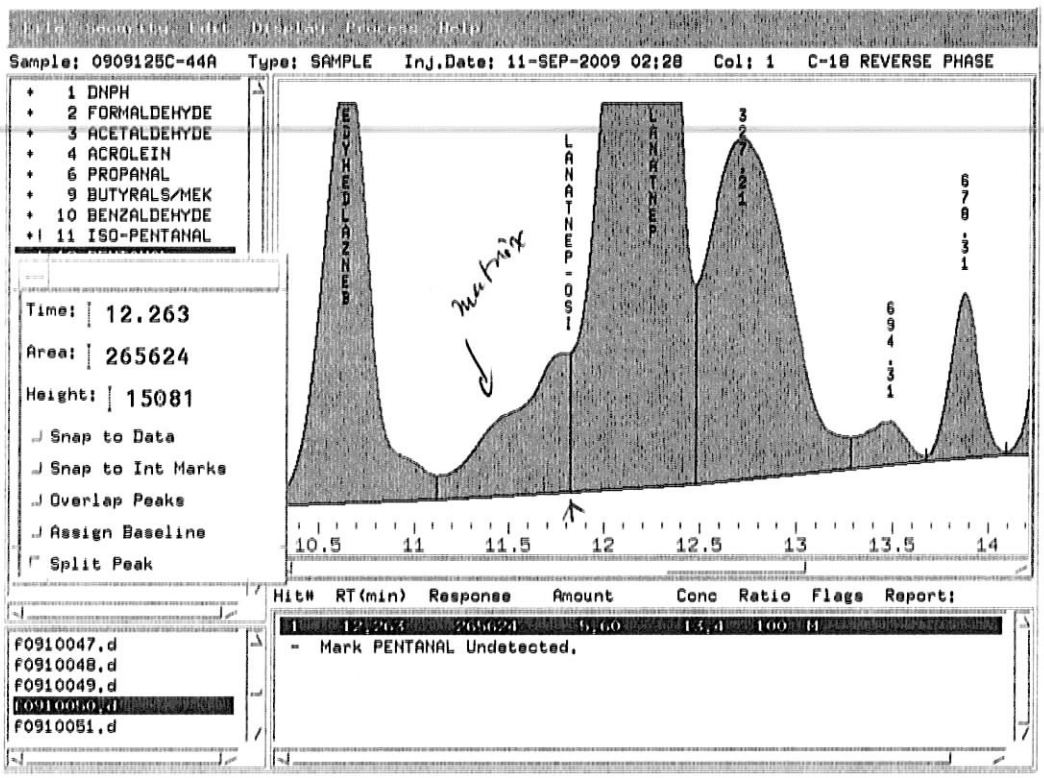
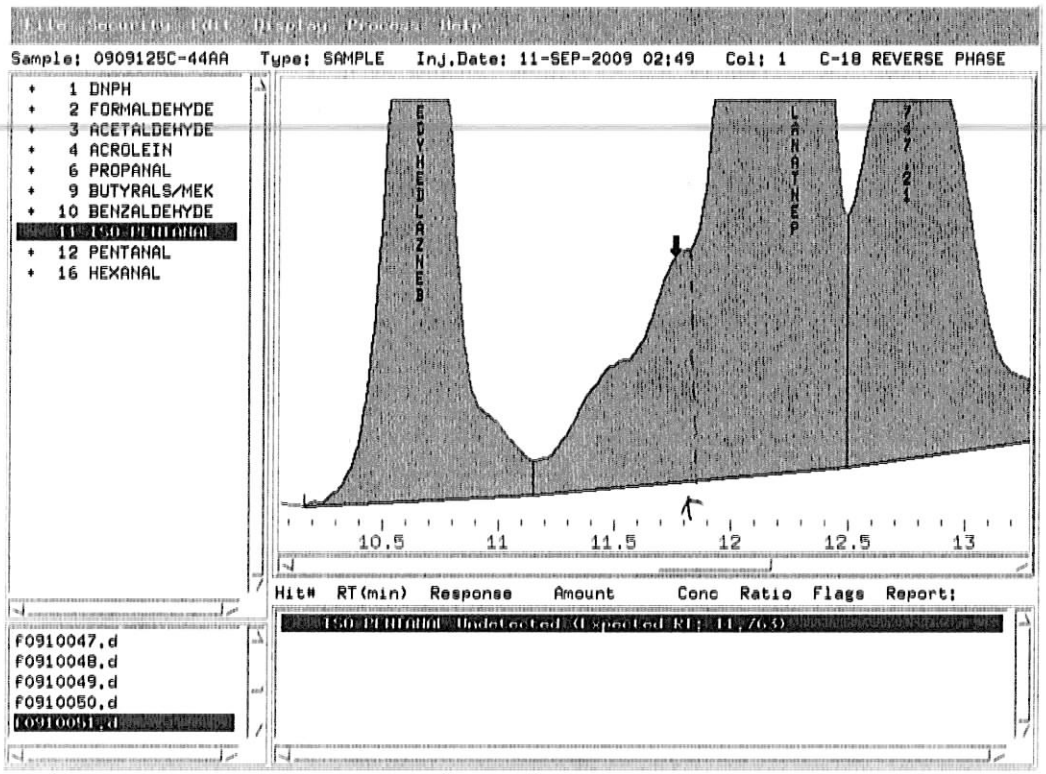
W 9/17/09



After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

9/17/09 9/17/09



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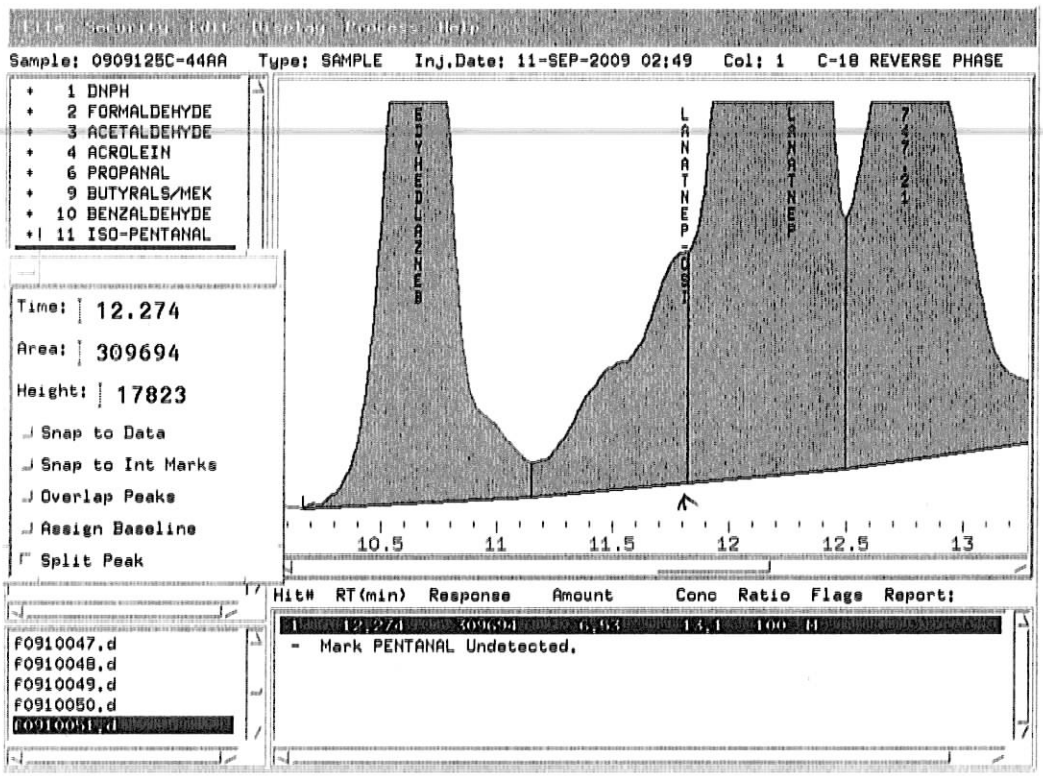
LW 9/17/09

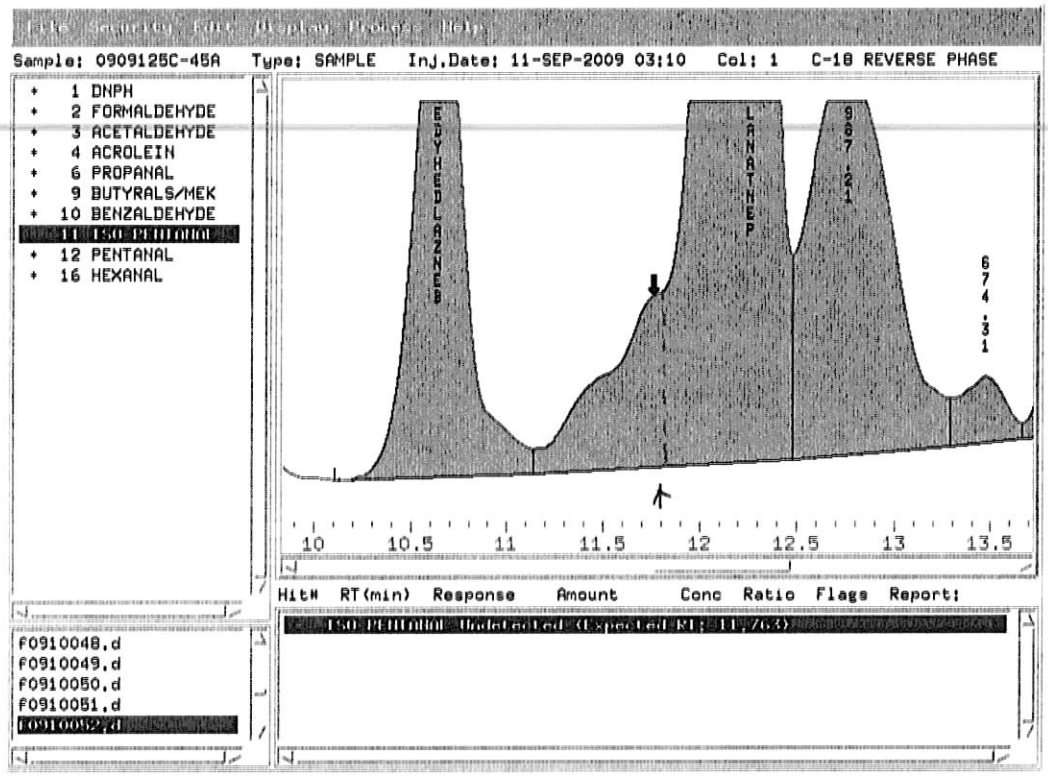


After

Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

9/17/09

W 9/17/09



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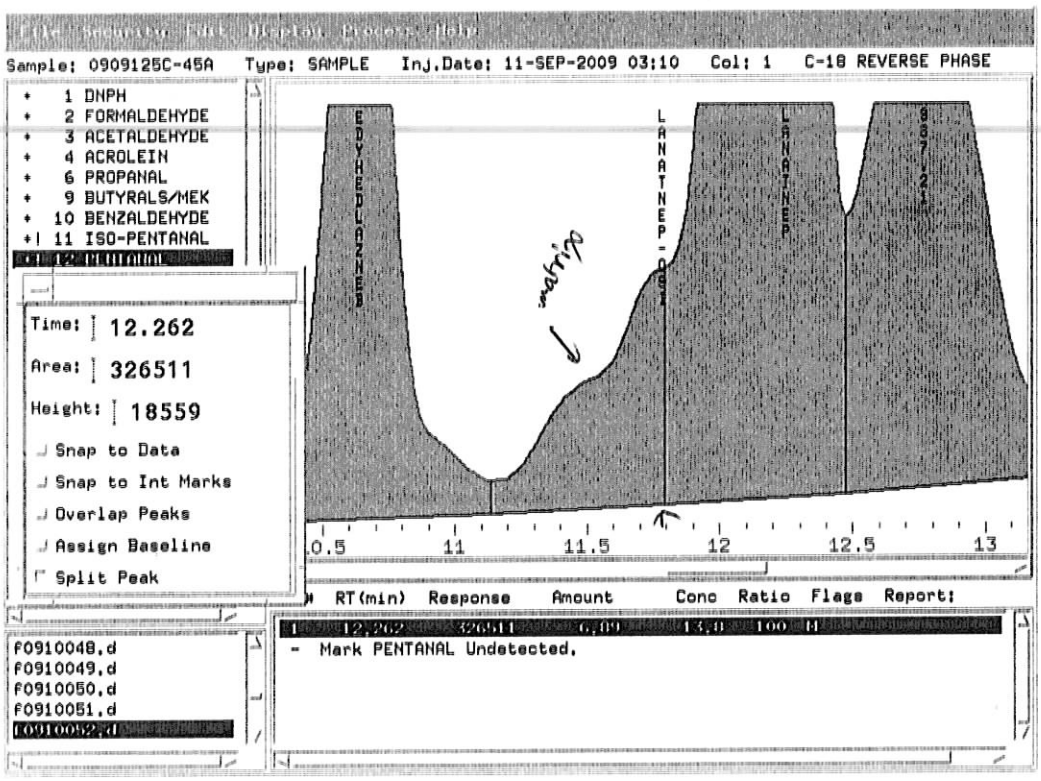
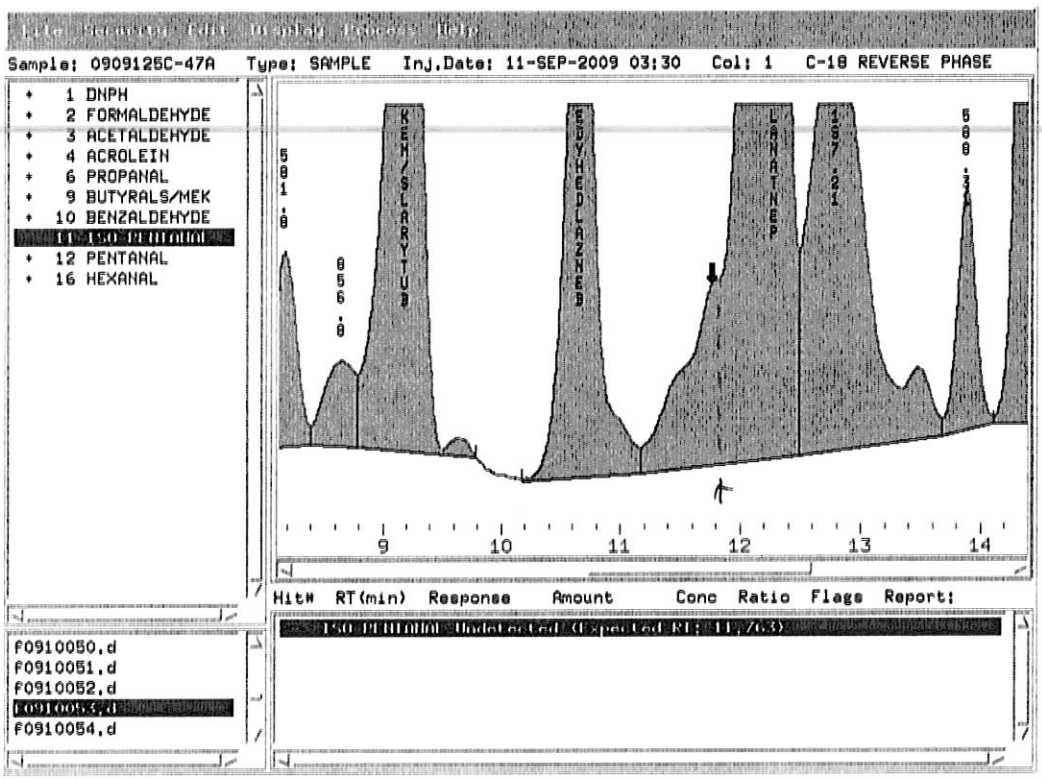
W 9/17/09



After

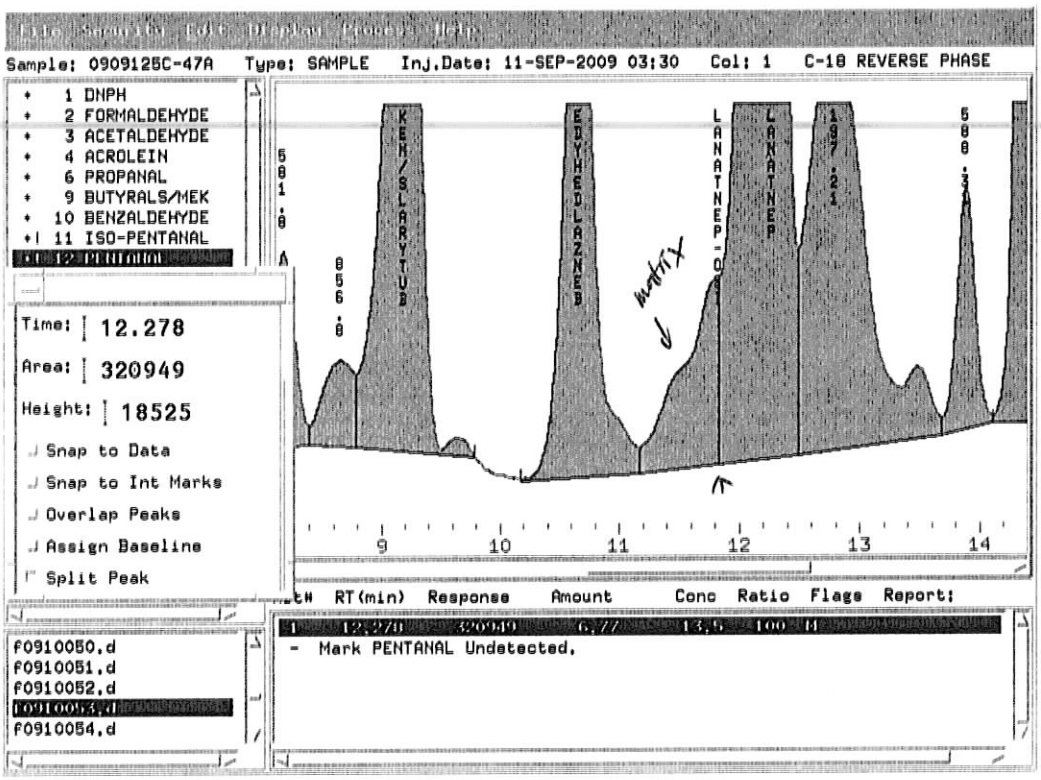
Correct Baseline	MT
Split Peak	
Merge Peak	
Zoom In	MT
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

L 9/17/09



Before.

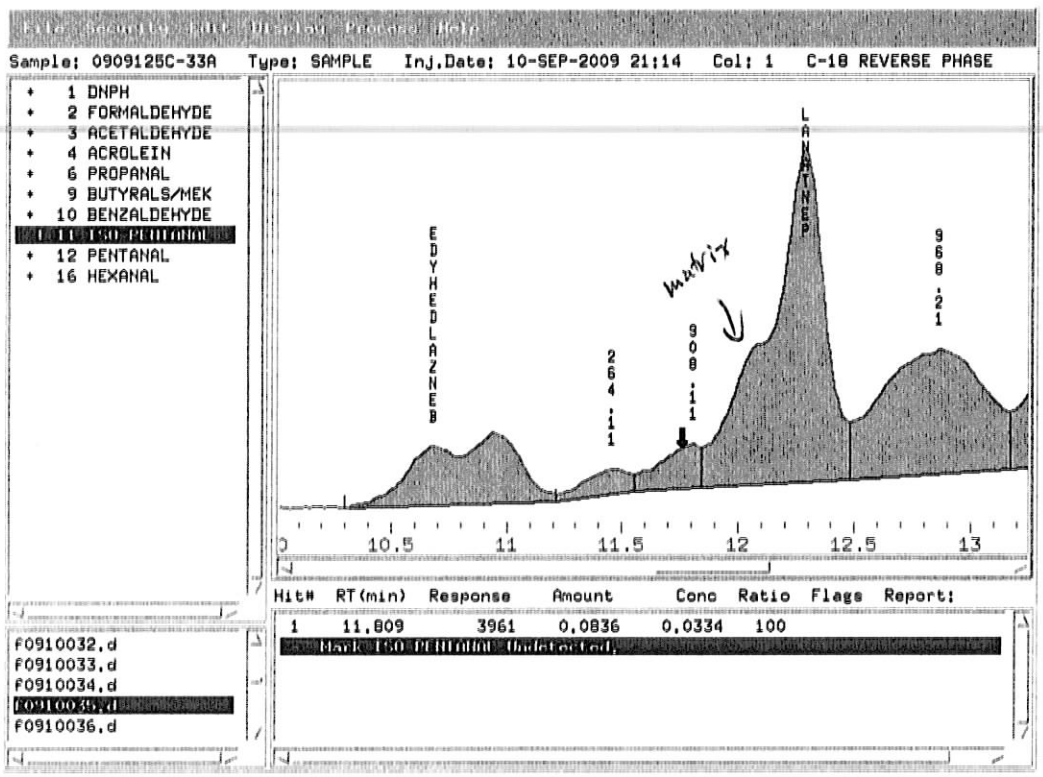
W 9/17/09



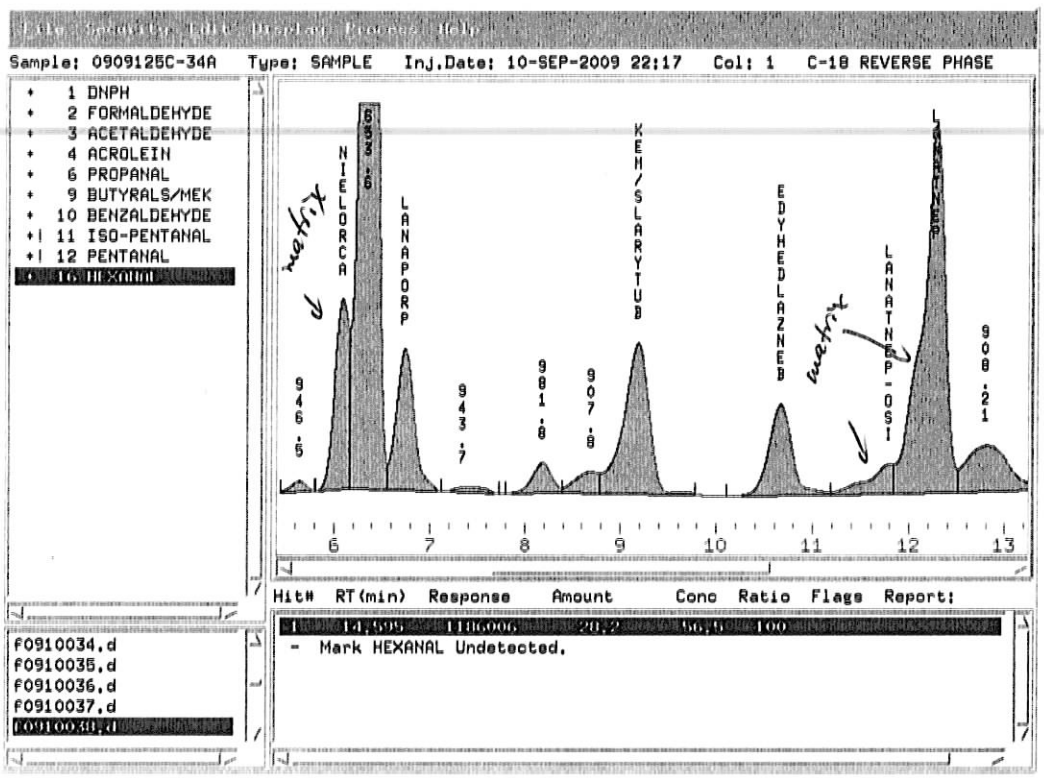
After

Correct Baseline	NT
Split Peak	✓
Merge Peak	✓
Zoom In	NT
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

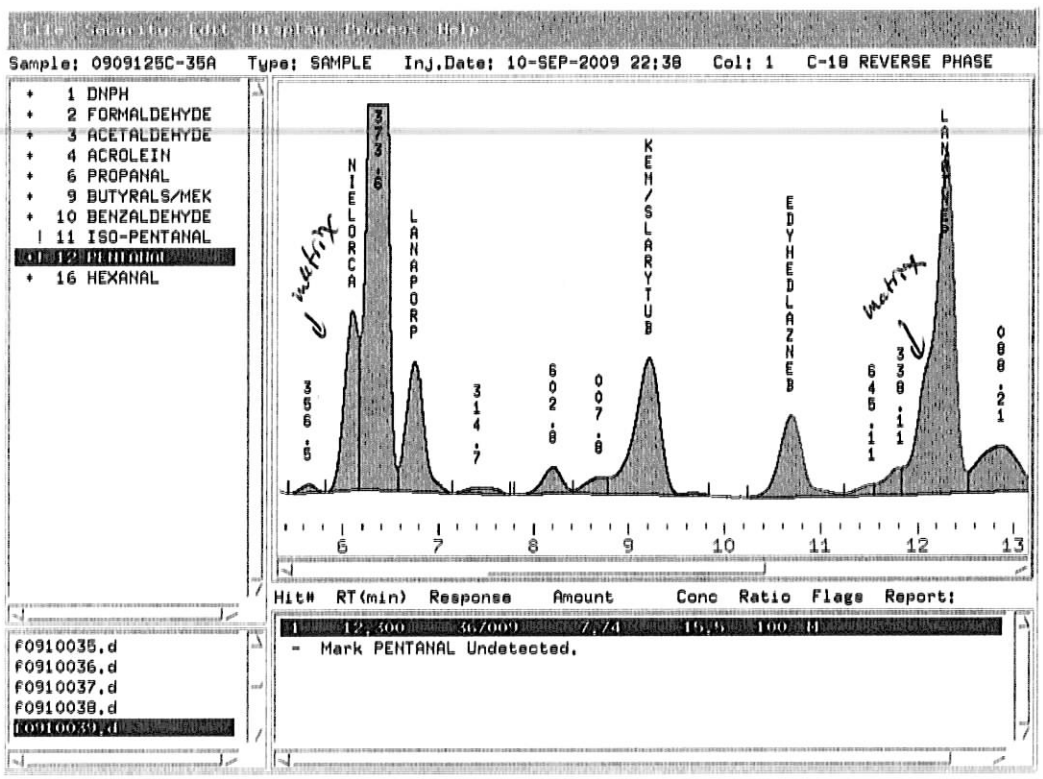
W 9/17/09

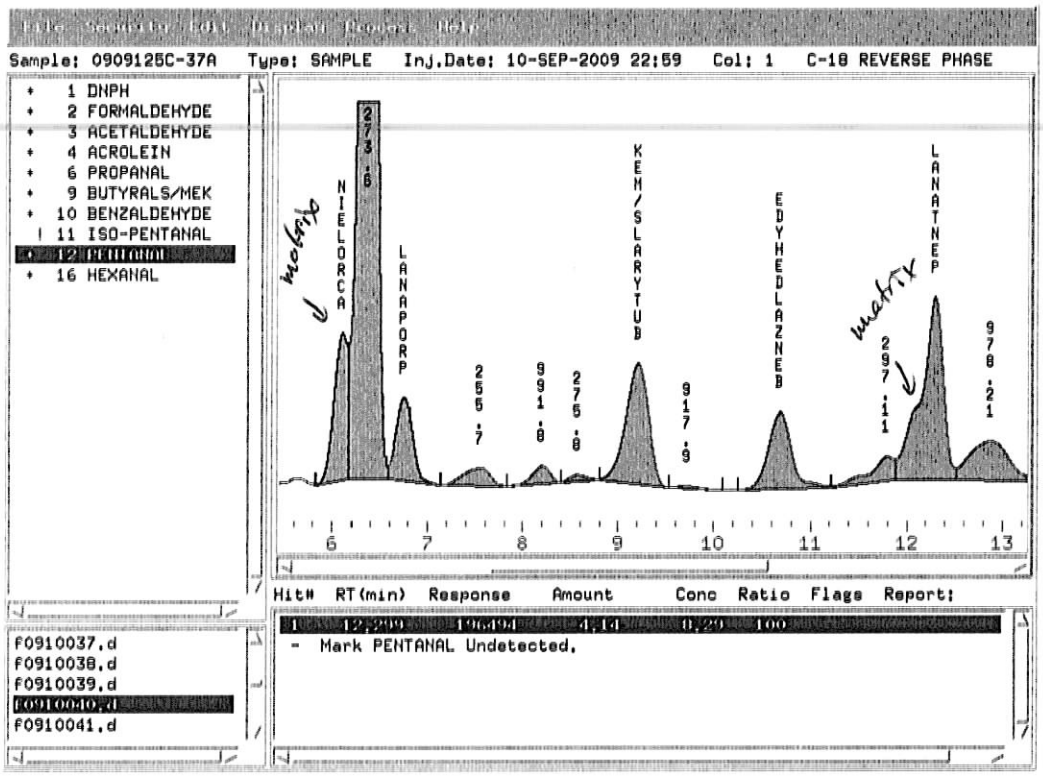

File Security Edit Display Process Help
Sample: 0909125C-33A Type: SAMPLE Inj.Date: 10-SEP-2009 21:14 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
11 ISO-PENTANAL
+ 12 PENTANAL
+ 16 HEXANAL
ETHYLENEDIAZINE
264.11
908.11
matrix
LANATINEP
968.21
10.5
11
11.5
12
12.5
13
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 11.809 3961 0.0836 0.0334 100
Mark ISO-PENTANAL Undetected.
F0910032.d
F0910033.d
F0910034.d
F0910035.d
F0910036.d

W 9/17/09


Sample: 0909125C-34A Type: SAMPLE Inj.Date: 10-SEP-2009 22:17 Col: 1 C-18 REVERSE PHASE
1 DNPH
2 FORMALDEHYDE
3 ACETALDEHYDE
4 ACROLEIN
6 PROPANAL
9 BUTYRALS/MEK
10 BENZALDEHYDE
11 ISO-PENTANAL
12 PENTANAL
Hit# RT(min) Response Amount Conc Ratio Flags Report:
- Mark HEXANAL Undetected.
f0910034.d
f0910035.d
f0910036.d
f0910037.d
matrix
matrix

W 9/17/09


Sample: 0909125C-35A Type: SAMPLE Inj.Date: 10-SEP-2009 22:38 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
| 11 ISO-PENTANAL
+ 16 HEXANAL
matrix
matrix
6 7 8 9 10 11 12 13
Hit# RT(min) Response Amount Conc Ratio Flags Report:
- Mark PENTANAL Undetected.
f0910035.d
f0910036.d
f0910037.d
f0910038.d

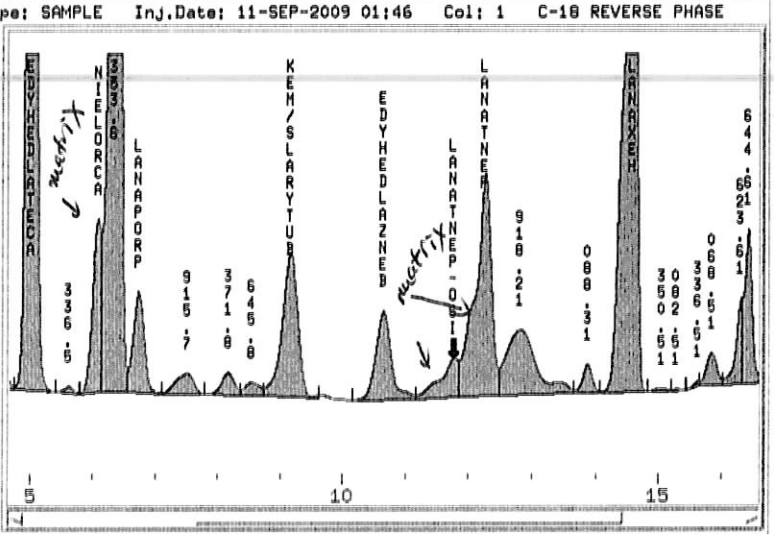

Sample: 0909125C-37A Type: SAMPLE Inj.Date: 10-SEP-2009 22:59 Col: 1 C-18 REVERSE PHASE
1 DNPH
2 FORMALDEHYDE
3 ACETALDEHYDE
4 ACROLEIN
6 PROPANAL
9 BUTYRALS/MEK
10 BENZALDEHYDE
11 ISO-PENTANAL
12 PENTANAL
16 HEXANAL
matrix
matrix
Hit# RT(min) Response Amount Conc Ratio Flags Report:
- Mark PENTANAL Undetected.
F0910037.d
F0910038.d
F0910039.d
F0910040.d
F0910041.d

W 9/17/09

File Search Edit Display Process Help

Sample: 0909125C-38A Type: SAMPLE Inj.Date: 11-SEP-2009 01:46 Col: 1 C-18 REVERSE PHASE

+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
+ 11 ISO-PENTANAL
+ 12 PENTANAL
+ 16 HEXANAL



Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	11.773	44574	0.940	1.00	100		

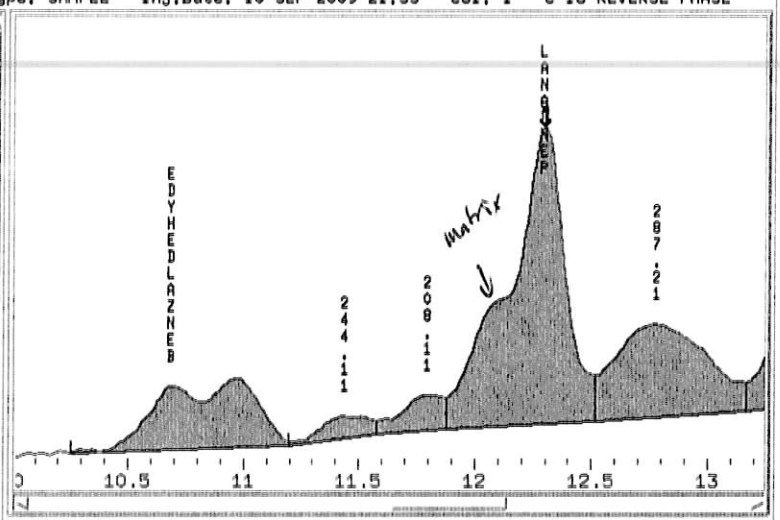
- Mark ISO-PENTANAL Undetected.

F0910045.d
F0910046.d
F0910047.d
F0910048.d
F0910049.d

9/17/09

Sample: 0909125C-39A Type: SAMPLE Inj.Date: 10-SEP-2009 21:35 Col: 1 C-18 REVERSE PHASE

+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
| 11 ISO-PENTANAL
12 PENTANAL
+ 16 HEXANAL

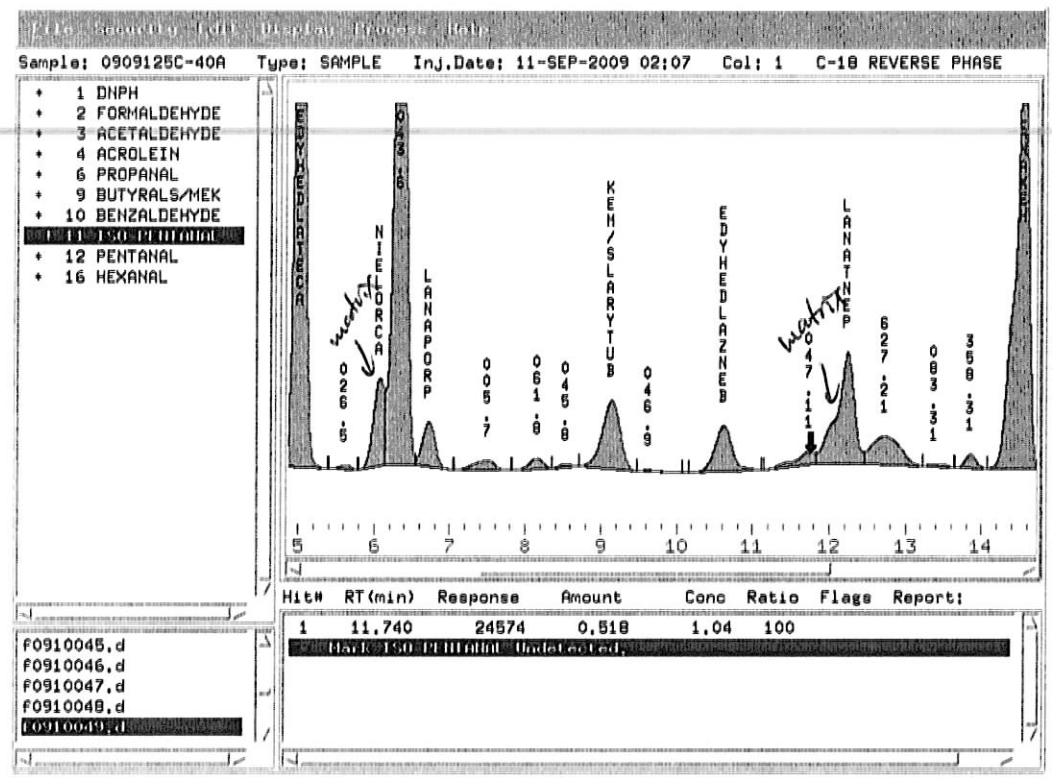


Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	12.296	3112	0.806	0.322	100		

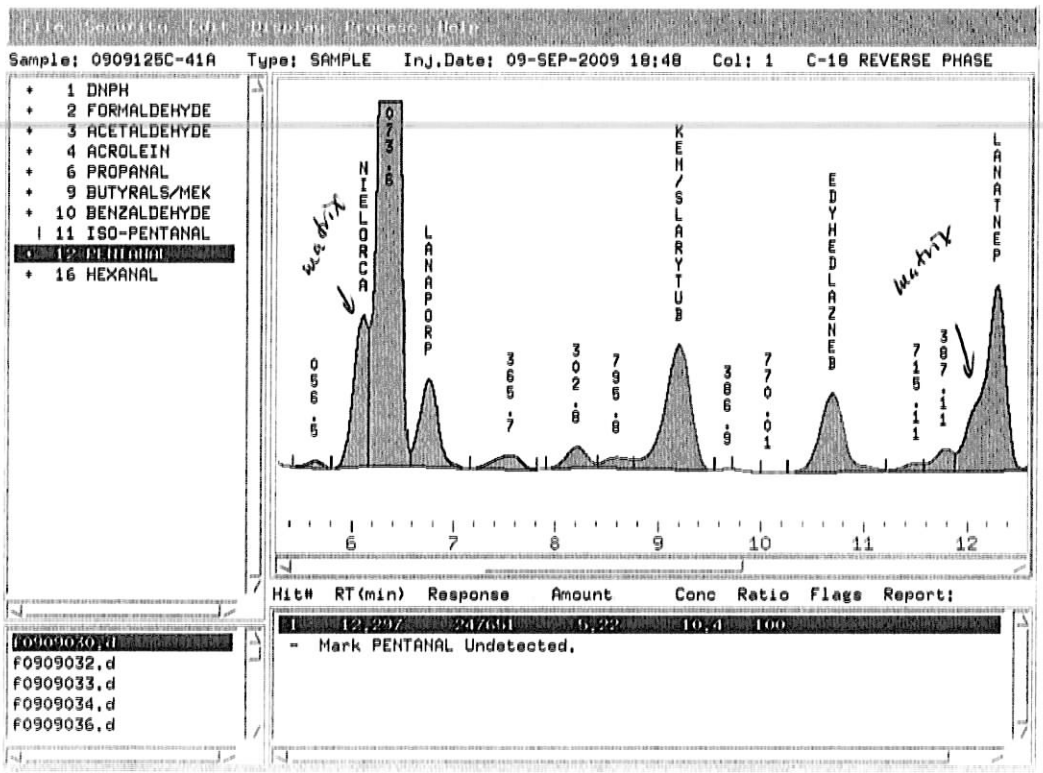
- Mark PENTANAL Undetected.

f0910032.d
f0910033.d
f0910034.d
f0910035.d
f0910036.d

9/17/09


Sample: 0909125C-40A Type: SAMPLE Inj.Date: 11-SEP-2009 02:07 Col: 1 C-18 REVERSE PHASE
1 DNPH
2 FORMALDEHYDE
3 ACETALDEHYDE
4 ACROLEIN
6 PROPANAL
9 BUTYRALS/MEK
10 BENZALDEHYDE
12 PENTANAL
16 HEXANAL
matrix
matrix
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 11.740 24574 0.518 1.04 100
f0910045.d
f0910046.d
f0910047.d
f0910048.d
f0910049.d

W 9/17/09

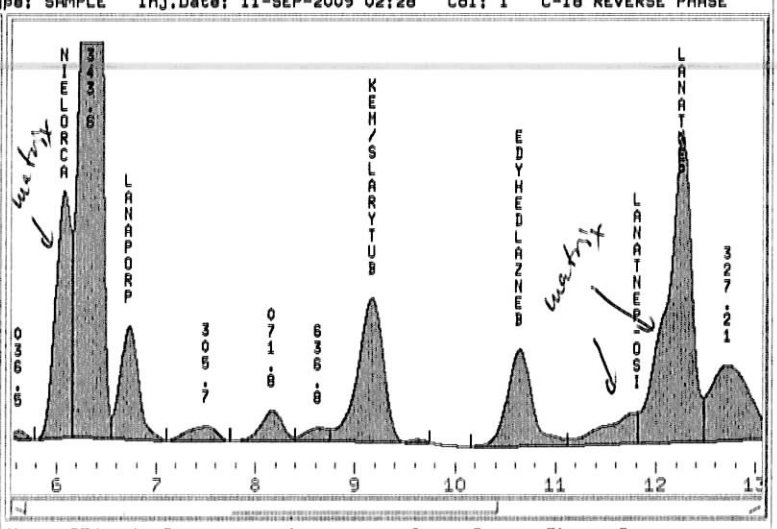

Sample: 0909125C-41A Type: SAMPLE Inj.Date: 09-SEP-2009 18:48 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
| 11 ISO-PENTANAL
+ 16 HEXANAL
matrix
matrix
6
7
8
9
10
11
12
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.297 247691 5.22 10.4 100
- Mark PENTANAL Undetected.
f0909030.d
f0909032.d
f0909033.d
f0909034.d
f0909036.d

6-9-17-09

File Spectra Edit Display Process Help

Sample: 0909125C-44A Type: SAMPLE Inj.Date: 11-SEP-2009 02:28 Col: 1 C-18 REVERSE PHASE

- + 1 DNPH
- + 2 FORMALDEHYDE
- + 3 ACETALDEHYDE
- + 4 ACROLEIN
- + 6 PROPANAL
- + 9 BUTYRALS/MEK
- + 10 BENZALDEHYDE
- +| 11 ISO-PENTANAL
- +| 12 PENTANAL
- + 16 HEXANAL

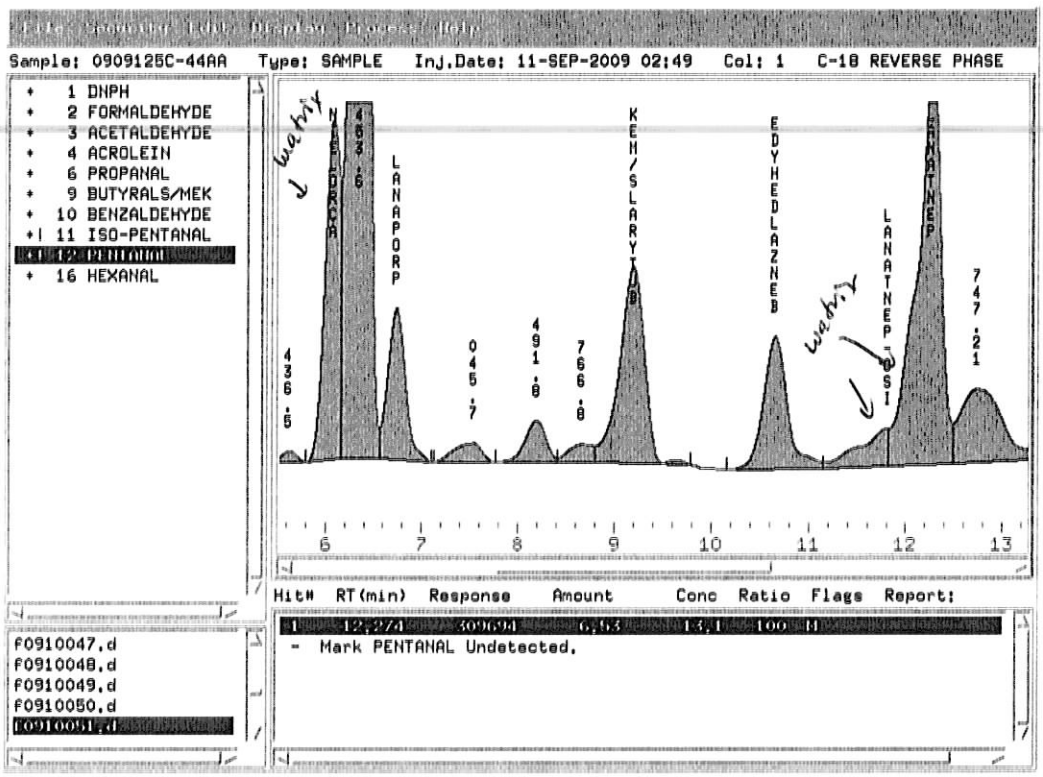


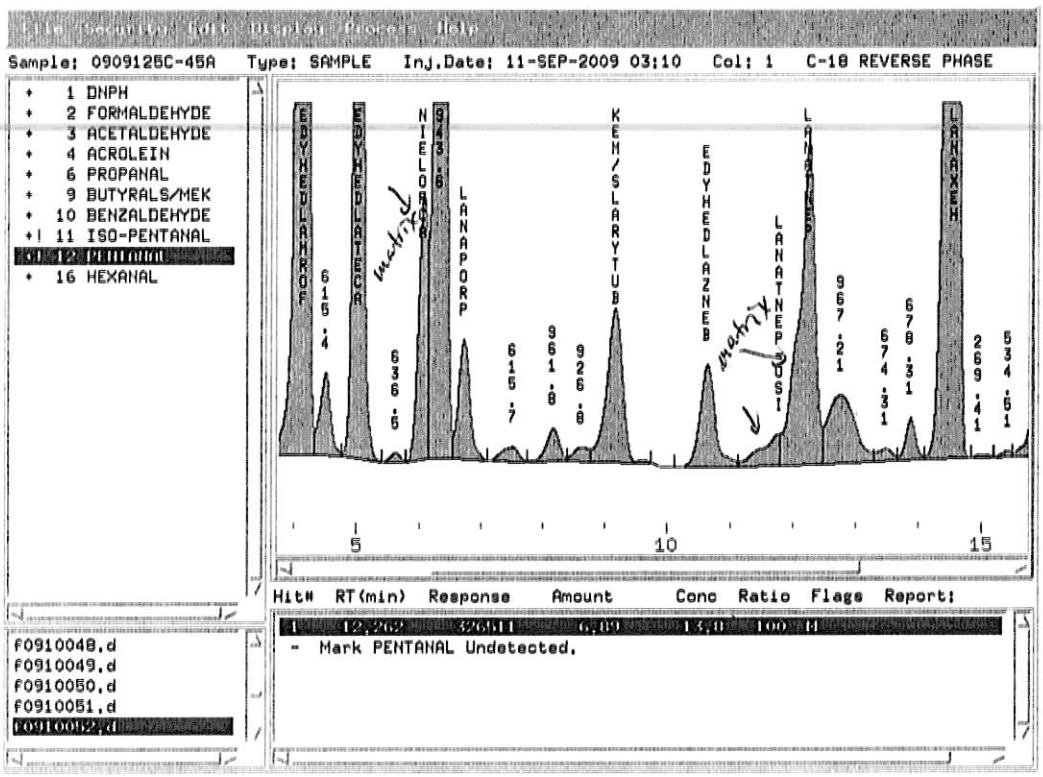
Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	12.263	265624	5.60	13.4	100	M	

- Mark PENTANAL Undetected.

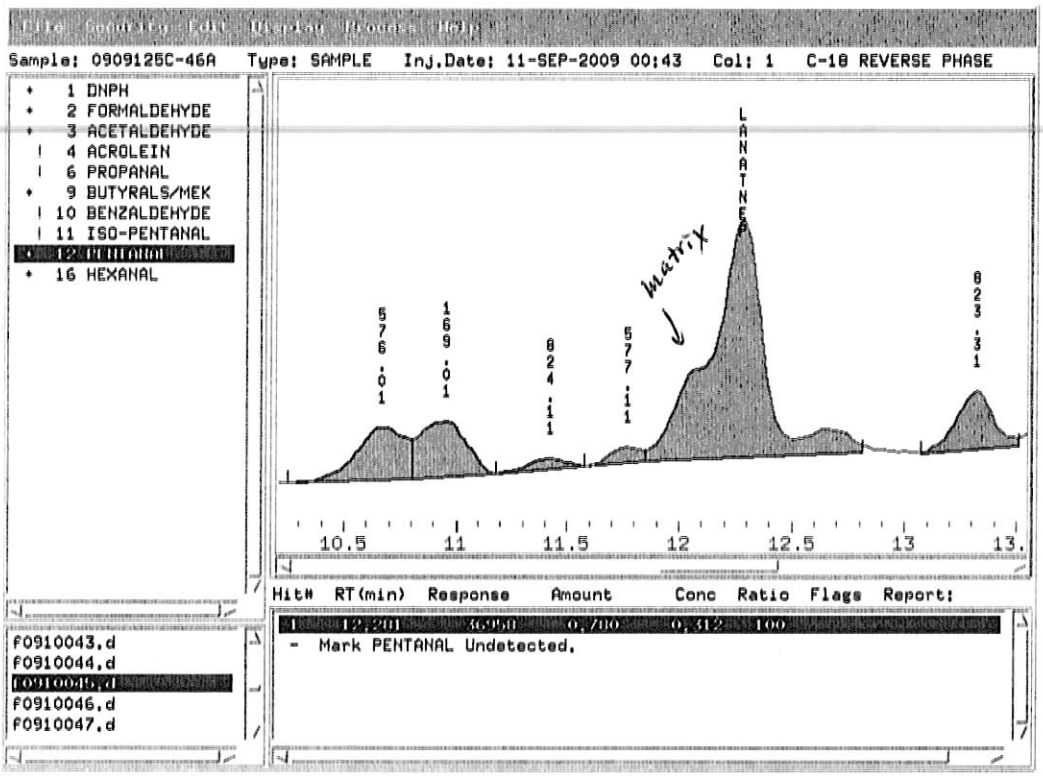
F0910047.d
F0910048.d
F0910049.d
F0910050.d
F0910051.d

LS 9/17/09

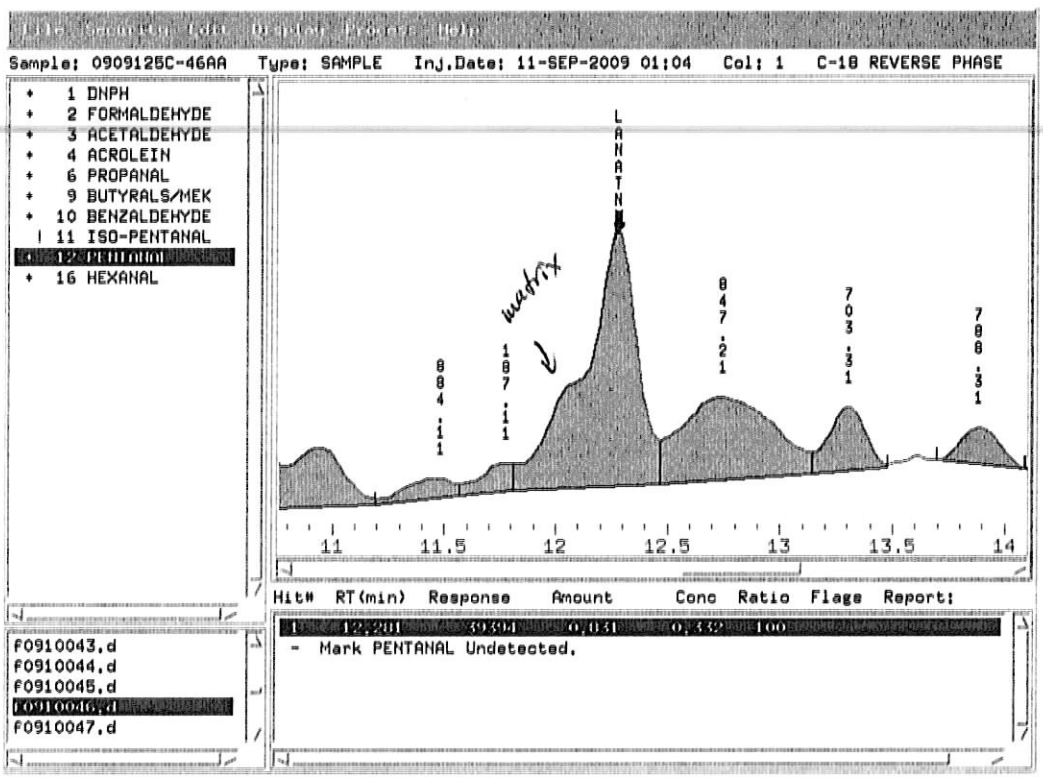

File Properties Edit Display Process Help
Sample: 0909125C-44AA Type: SAMPLE Inj.Date: 11-SEP-2009 02:49 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
+| 11 ISO-PENTANAL
12 PENTANAL
+ 16 HEXANAL
436.5
NELDRATA
463.6
LANAPORP
045.7
491.8
766.8
KEH/SLARYTAB
EDYHEDLAZNEB
LANATNEP-SI
FANATNEP
747.21
6
7
8
9
10
11
12
13
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.274 309694 6.53 13.1 100 M
- Mark PENTANAL Undetected.
f0910047.d
f0910048.d
f0910049.d
f0910050.d
f0910051.d


Sample: 0909125C-45A Type: SAMPLE Inj.Date: 11-SEP-2009 03:10 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
+| 11 ISO-PENTANAL
+ 16 HEXANAL
matrix
matrix
5
10
15
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.262 326511 6.89 13.8 100 M
- Mark PENTANAL Undetected.
f0910048.d
f0910049.d
f0910050.d
f0910051.d
f0910052.d

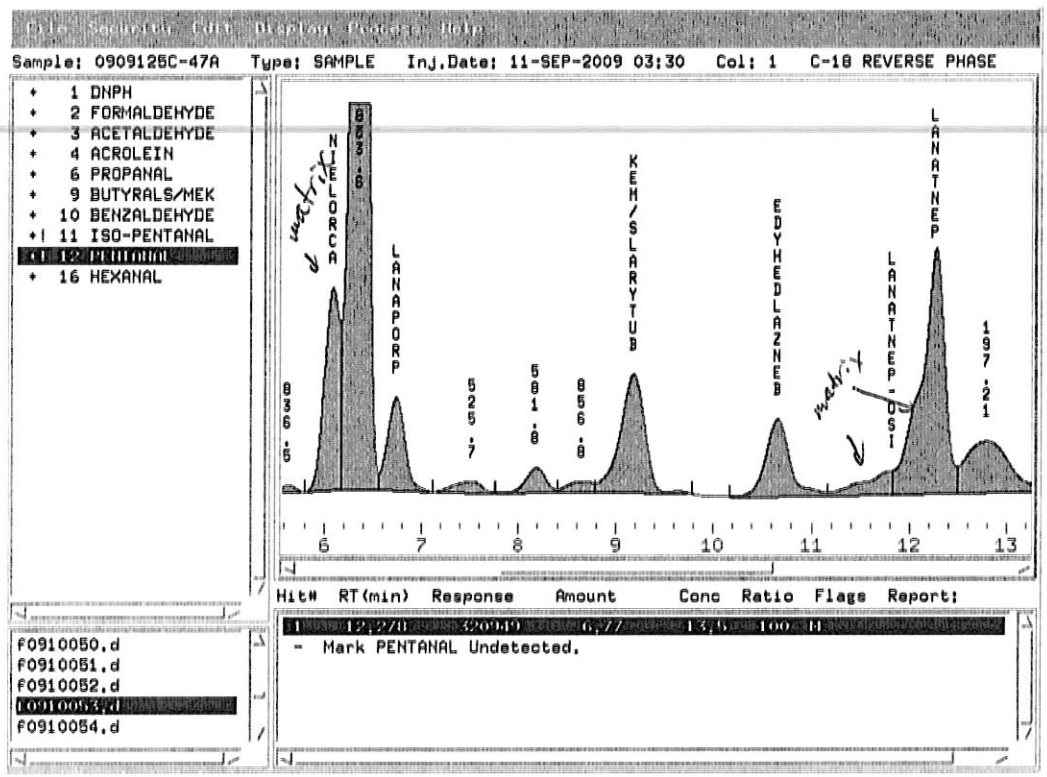
W 9/17/09


Sample: 0909125C-46A Type: SAMPLE Inj.Date: 11-SEP-2009 00:43 Col: 1 C-18 REVERSE PHASE
1 DNPH
2 FORMALDEHYDE
3 ACETALDEHYDE
4 ACROLEIN
6 PROPANAL
9 BUTYRALS/MEK
10 BENZALDEHYDE
11 ISO-PENTANAL
12 PENTANAL
16 HEXANAL
576.01
169.01
824.11
577.11
matrix
LANATNEP
823.31
10.5
11
11.5
12
12.5
13
13.
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.201 36950 0.700 0.312 100
- Mark PENTANAL Undetected.
f0910043.d
f0910044.d
f0910045.d
f0910046.d
f0910047.d

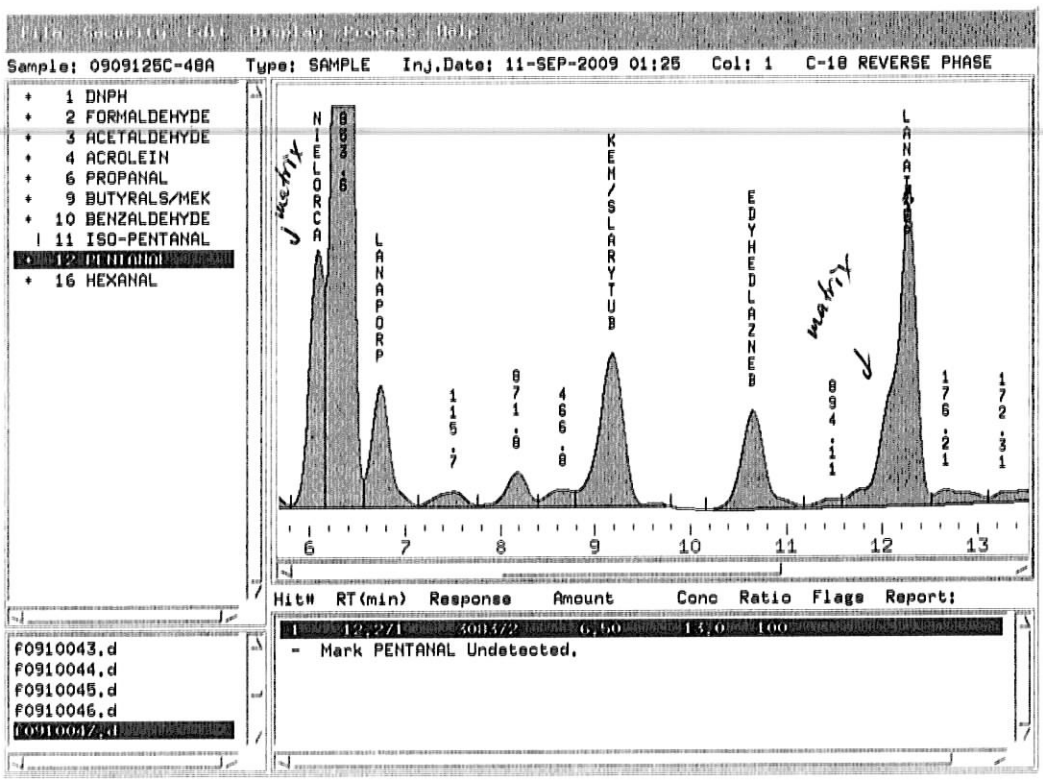
W 9/17/09


Sample: 0909125C-46AA Type: SAMPLE Inj.Date: 11-SEP-2009 01:04 Col: 1 C-18 REVERSE PHASE
1 DNPH
2 FORMALDEHYDE
3 ACETALDEHYDE
4 ACROLEIN
6 PROPANAL
9 BUTYRALS/MEK
10 BENZALDEHYDE
11 ISO-PENTANAL
12 PENTANAL
16 HEXANAL
matrix
LANATN
884.11
187.11
847.21
703.31
788.31
11
11.5
12
12.5
13
13.5
14
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.281 39394 0.031 0.33 100
- Mark PENTANAL Undetected.
f0910043.d
f0910044.d
f0910045.d
f0910046.d
f0910047.d

9/17/09


Sample: 0909125C-47A Type: SAMPLE Inj.Date: 11-SEP-2009 03:30 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
+| 11 ISO-PENTANAL
+ 16 HEXANAL
matrix
matrix
Hit# RT(min) Response Amount Conc Ratio Flags Report:
- Mark PENTANAL Undetected.
F0910050.d
F0910051.d
F0910052.d
F0910053.d
F0910054.d

W-9/17/09


Sample: 0909125C-48A Type: SAMPLE Inj.Date: 11-SEP-2009 01:25 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
| 11 ISO-PENTANAL
+ 12 PENTANAL
+ 16 HEXANAL
matrix
matrix
6 7 8 9 10 11 12 13
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.271 30137? 6.50 13.0 100
- Mark PENTANAL Undetected.
f0910043.d
f0910044.d
f0910045.d
f0910046.d
f0910047.d

W 9/17/09

WO 0909125C

Sample ID ***0909125C-33A*** Duration(min)= 20160 Dilution factor =1
File Name **f0910035.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	3.7	99	20160	0.50	0.50	1.9
75-07-0	Acetaldehyde	0.50	0.50	1.3	84	20160	0.30	0.30	0.77
123-38-6	Propanal	0.25	0.25	Not Detected	39	20160	0.32	0.32	Not Detected
123-72-8	Butanal (*)	0.25	0.25	0.43	11	20160	1.1	1.1	1.9
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	20160	0.13	0.13	Not Detected
110-62-3	Pentanal(M)	0.25	0.25	0.36	27	20160	0.46	0.46	0.66
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	20160	0.20	0.20	Not Detected
66-25-1	Hexanal	0.25	0.25	0.41	18	20160	0.69	0.69	1.1
107-02-8	Acrolein	0.25	0.25	Not Detected	33	20160	0.38	0.38	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-34A*** Duration(min)= 20160 Dilution factor =5
File Name **f0910038.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	95	99	20160	0.50	2.5	48
75-07-0	Acetaldehyde	0.50	2.5	21	84	20160	0.30	1.5	12
123-38-6	Propanal	0.25	1.2	3.5	39	20160	0.32	1.5	4.5
123-72-8	Butanal (*)	0.25	1.2	6.5	11	20160	1.1	5.4	29
100-52-7	Benzaldehyde	0.25	1.2	4.9	92	20160	0.13	0.65	2.6
110-62-3	Pentanal(M)	0.25	1.2	17	27	20160	0.46	2.2	31
590-86-3	Isopentanal(M)	0.25	1.2	1.5	61	20160	0.20	1.0	1.2
66-25-1	Hexanal	0.25	1.2	56	18	20160	0.69	3.3	154
107-02-8	Acrolein (M)	0.25	1.2	3.1	33	20160	0.38	1.8	4.7

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID *0909125C-35A* Duration(min)= 20160 Dilution factor =5
File Name f0910039.d

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	90	99	20160	0.50	2.5	45
75-07-0	Acetaldehyde	0.50	2.5	20	84	20160	0.30	1.5	12
123-38-6	Propanal	0.25	1.2	3.2	39	20160	0.32	1.5	4.1
123-72-8	Butanal (*)	0.25	1.2	5.9	11	20160	1.1	5.4	27
100-52-7	Benzaldehyde	0.25	1.2	4.4	92	20160	0.13	0.65	2.4
110-62-3	Pentanal(M)	0.25	1.2	16	27	20160	0.46	2.2	29
590-86-3	Isopentanal	0.25	1.2	Not Detected	61	20160	0.20	1.0	Not Detected
66-25-1	Hexanal	0.25	1.2	53	18	20160	0.69	3.3	146
107-02-8	Acrolein (M)	0.25	1.2	2.9	33	20160	0.38	1.8	4.4

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID *0909125C-36A* Duration(min)= 21600 Dilution factor =1
File Name f0906037.d

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	Not Detected	99	21600	0.47	0.47	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	21600	0.28	0.28	Not Detected
123-38-6	Propanal	0.25	0.25	Not Detected	39	21600	0.30	0.30	Not Detected
123-72-8	Butanal (*)	0.25	0.25	Not Detected	11	21600	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	21600	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	21600	0.43	0.43	Not Detected
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	21600	0.19	0.19	Not Detected
66-25-1	Hexanal	0.25	0.25	Not Detected	18	21600	0.64	0.64	Not Detected
107-02-8	Acrolein	0.25	0.25	Not Detected	33	21600	0.35	0.35	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.

Sample ID ***0909125C-37A*** Duration(min)= 21600 Dilution factor =5
File Name **f0910040.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	100	99	21600	0.47	2.3	47
75-07-0	Acetaldehyde	0.50	2.5	21	84	21600	0.28	1.4	12
123-38-6	Propanal	0.25	1.2	1.9	39	21600	0.30	1.4	2.3
123-72-8	Butanal (*)	0.25	1.2	4.6	11	21600	1.1	5.1	19
100-52-7	Benzaldehyde	0.25	1.2	4.0	92	21600	0.13	0.60	2.0
110-62-3	Pentanal(M)	0.25	1.2	8.3	27	21600	0.43	2.1	14
590-86-3	Isopentanal	0.25	1.2	Not Detected	61	21600	0.19	0.91	Not Detected
66-25-1	Hexanal	0.25	1.2	27	18	21600	0.64	3.1	69
107-02-8	Acrolein (M)	0.25	1.2	2.2	33	21600	0.35	1.7	3.1

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-38A*** Duration(min)= 21600 Dilution factor =5
File Name **f0910048.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	110	99	21600	0.47	2.3	51
75-07-0	Acetaldehyde	0.50	2.5	22	84	21600	0.28	1.4	12
123-38-6	Propanal	0.25	1.2	2.1	39	21600	0.30	1.4	2.5
123-72-8	Butanal (*)	0.25	1.2	5.2	11	21600	1.1	5.1	22
100-52-7	Benzaldehyde	0.25	1.2	4.5	92	21600	0.13	0.60	2.3
110-62-3	Pentanal(M)	0.25	1.2	10	27	21600	0.43	2.1	17
590-86-3	Isopentanal(M)	0.25	1.2	1.9	61	21600	0.19	0.91	1.4
66-25-1	Hexanal	0.25	1.2	29	18	21600	0.64	3.1	75
107-02-8	Acrolein (M)	0.25	1.2	2.4	33	21600	0.35	1.7	3.4

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID *0909125C-39A* Duration(min)= 21600 Dilution factor =1
File Name f0910036.d

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	4.2	99	21600	0.47	0.47	2.0
75-07-0	Acetaldehyde	0.50	0.50	1.5	84	21600	0.28	0.28	0.83
123-38-6	Propanal	0.25	0.25	0.27	39	21600	0.30	0.30	0.32
123-72-8	Butanal (*)	0.25	0.25	0.40	11	21600	1.1	1.1	1.7
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	21600	0.13	0.13	Not Detected
110-62-3	Pentanal(M)	0.25	0.25	0.32	27	21600	0.43	0.43	0.55
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	21600	0.19	0.19	Not Detected
66-25-1	Hexanal	0.25	0.25	0.38	18	21600	0.64	0.64	1.0
107-02-8	Acrolein	0.25	0.25	Not Detected	33	21600	0.35	0.35	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID *0909125C-40A* Duration(min)= 21600 Dilution factor =5
File Name f0910049.d

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	100	99	21600	0.47	2.3	47
75-07-0	Acetaldehyde	0.50	2.5	18	84	21600	0.28	1.4	10
123-38-6	Propanal	0.25	1.2	1.6	39	21600	0.30	1.4	1.9
123-72-8	Butanal (*)	0.25	1.2	4.2	11	21600	1.1	5.1	18
100-52-7	Benzaldehyde	0.25	1.2	3.8	92	21600	0.13	0.60	1.9
110-62-3	Pentanal(M)	0.25	1.2	8.1	27	21600	0.43	2.1	14
590-86-3	Isopentanal	0.25	1.2	Not Detected	61	21600	0.19	0.91	Not Detected
66-25-1	Hexanal	0.25	1.2	28	18	21600	0.64	3.1	72
107-02-8	Acrolein (M)	0.25	1.2	2.2	33	21600	0.35	1.7	3.1

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-41A*** Duration(min)= 21600 Dilution factor =5
File Name **f0909030.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	130	99	21600	0.47	2.3	61
75-07-0	Acetaldehyde	0.50	2.5	26	84	21600	0.28	1.4	14
123-38-6	Propanal	0.25	1.2	2.7	39	21600	0.30	1.4	3.2
123-72-8	Butanal (*)	0.25	1.2	6.4	11	21600	1.1	5.1	27
100-52-7	Benzaldehyde	0.25	1.2	5.3	92	21600	0.13	0.60	2.7
110-62-3	Pentanal(M)	0.25	1.2	10.0	27	21600	0.43	2.1	17
590-86-3	Isopentanal	0.25	1.2	Not Detected	61	21600	0.19	0.91	Not Detected
66-25-1	Hexanal	0.25	1.2	35	18	21600	0.64	3.1	90
107-02-8	Acrolein (M)	0.25	1.2	2.9	33	21600	0.35	1.7	4.1

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-42A*** Duration(min)= 21600 Dilution factor =1
File Name **f0910031.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	Not Detected	99	21600	0.47	0.47	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	21600	0.28	0.28	Not Detected
123-38-6	Propanal	0.25	0.25	Not Detected	39	21600	0.30	0.30	Not Detected
123-72-8	Butanal (*)	0.25	0.25	Not Detected	11	21600	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	21600	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	21600	0.43	0.43	Not Detected
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	21600	0.19	0.19	Not Detected
66-25-1	Hexanal	0.25	0.25	Not Detected	18	21600	0.64	0.64	Not Detected
107-02-8	Acrolein	0.25	0.25	Not Detected	33	21600	0.35	0.35	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.

Sample ID ***0909125C-43A*** Duration(min)= 21600 Dilution factor =1
File Name **f0910044.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	Not Detected	99	21600	0.47	0.47	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	21600	0.28	0.28	Not Detected
123-38-6	Propanal	0.25	0.25	Not Detected	39	21600	0.30	0.30	Not Detected
123-72-8	Butanal (*)	0.25	0.25	Not Detected	11	21600	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	21600	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	21600	0.43	0.43	Not Detected
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	21600	0.19	0.19	Not Detected
66-25-1	Hexanal	0.25	0.25	Not Detected	18	21600	0.64	0.64	Not Detected
107-02-8	Acrolein	0.25	0.25	Not Detected	33	21600	0.35	0.35	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.

Sample ID ***0909125C-44A*** Duration(min)= 21600 Dilution factor =5
File Name **f0910050.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	110	99	21600	0.47	2.3	51
75-07-0	Acetaldehyde	0.50	2.5	17	84	21600	0.28	1.4	9.4
123-38-6	Propanal	0.25	1.2	2.5	39	21600	0.30	1.4	3.0
123-72-8	Butanal (*)	0.25	1.2	5.4	11	21600	1.1	5.1	23
100-52-7	Benzaldehyde	0.25	1.2	4.9	92	21600	0.13	0.60	2.5
110-62-3	Pentanal(M)	0.25	1.2	13	27	21600	0.43	2.1	22
590-86-3	Isopentanal(M)	0.25	1.2	1.8	61	21600	0.19	0.91	1.4
66-25-1	Hexanal	0.25	1.2	41	18	21600	0.64	3.1	105
107-02-8	Acrolein (M)	0.25	1.2	3.7	33	21600	0.35	1.7	5.2

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-44AA*** Duration(min)= 21600 Dilution factor =5
File Name **f0910051.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	110	99	21600	0.47	2.3	51
75-07-0	Acetaldehyde	0.50	2.5	17	84	21600	0.28	1.4	9.4
123-38-6	Propanal	0.25	1.2	2.5	39	21600	0.30	1.4	3.0
123-72-8	Butanal (*)	0.25	1.2	5.4	11	21600	1.1	5.1	23
100-52-7	Benzaldehyde	0.25	1.2	4.9	92	21600	0.13	0.60	2.5
110-62-3	Pentanal(M)	0.25	1.2	13	27	21600	0.43	2.1	22
590-86-3	Isopentanal(M)	0.25	1.2	1.4	61	21600	0.19	0.91	1.1
66-25-1	Hexanal	0.25	1.2	41	18	21600	0.64	3.1	105
107-02-8	Acrolein (M)	0.25	1.2	3.8	33	21600	0.35	1.7	5.3

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-45A*** Duration(min)= 21600 Dilution factor =5
File Name **f0910052.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	120	99	21600	0.47	2.3	56
75-07-0	Acetaldehyde	0.50	2.5	17	84	21600	0.28	1.4	9.4
123-38-6	Propanal	0.25	1.2	2.6	39	21600	0.30	1.4	3.1
123-72-8	Butanal (*)	0.25	1.2	5.6	11	21600	1.1	5.1	24
100-52-7	Benzaldehyde	0.25	1.2	4.9	92	21600	0.13	0.60	2.5
110-62-3	Pentanal(M)	0.25	1.2	14	27	21600	0.43	2.1	24
590-86-3	Isopentanal(M)	0.25	1.2	1.5	61	21600	0.19	0.91	1.1
66-25-1	Hexanal	0.25	1.2	43	18	21600	0.64	3.1	111
107-02-8	Acrolein (M)	0.25	1.2	3.9	33	21600	0.35	1.7	5.5

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-46A*** Duration(min)= 21600 Dilution factor =1
File Name **f0910045.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	3.8	99	21600	0.47	0.47	1.8
75-07-0	Acetaldehyde	0.50	0.50	1.2	84	21600	0.28	0.28	0.66
123-38-6	Propanal	0.25	0.25	Not Detected	39	21600	0.30	0.30	Not Detected
123-72-8	Butanal (*)	0.25	0.25	0.42	11	21600	1.1	1.1	1.8
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	21600	0.13	0.13	Not Detected
110-62-3	Pentanal(M)	0.25	0.25	0.31	27	21600	0.43	0.43	0.53
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	21600	0.19	0.19	Not Detected
66-25-1	Hexanal	0.25	0.25	0.41	18	21600	0.64	0.64	1.1
107-02-8	Acrolein	0.25	0.25	Not Detected	33	21600	0.35	0.35	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-46AA*** Duration(min)= 21600 Dilution factor =1
File Name **f0910046.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	3.8	99	21600	0.47	0.47	1.8
75-07-0	Acetaldehyde	0.50	0.50	1.3	84	21600	0.28	0.28	0.72
123-38-6	Propanal	0.25	0.25	0.25	39	21600	0.30	0.30	0.30
123-72-8	Butanal (*)	0.25	0.25	0.38	11	21600	1.1	1.1	1.6
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	21600	0.13	0.13	Not Detected
110-62-3	Pentanal(M)	0.25	0.25	0.33	27	21600	0.43	0.43	0.57
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	21600	0.19	0.19	Not Detected
66-25-1	Hexanal	0.25	0.25	0.42	18	21600	0.64	0.64	1.1
107-02-8	Acrolein	0.25	0.25	Not Detected	33	21600	0.35	0.35	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-47A*** Duration(min)= 21600 Dilution factor =5
File Name **f0910053.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	110	99	21600	0.47	2.3	51
75-07-0	Acetaldehyde	0.50	2.5	18	84	21600	0.28	1.4	10
123-38-6	Propanal	0.25	1.2	2.6	39	21600	0.30	1.4	3.1
123-72-8	Butanal (*)	0.25	1.2	5.8	11	21600	1.1	5.1	24
100-52-7	Benzaldehyde	0.25	1.2	5.0	92	21600	0.13	0.60	2.5
110-62-3	Pentanal(M)	0.25	1.2	14	27	21600	0.43	2.1	24
590-86-3	Isopentanal(M)	0.25	1.2	1.6	61	21600	0.19	0.91	1.2
66-25-1	Hexanal	0.25	1.2	41	18	21600	0.64	3.1	105
107-02-8	Acrolein (M)	0.25	1.2	3.9	33	21600	0.35	1.7	5.5

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-48A*** Duration(min)= 21600 Dilution factor =5
File Name **f0910047.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	5.0	110	99	21600	0.47	2.3	51
75-07-0	Acetaldehyde	0.50	2.5	19	84	21600	0.28	1.4	10
123-38-6	Propanal	0.25	1.2	2.9	39	21600	0.30	1.4	3.4
123-72-8	Butanal (*)	0.25	1.2	6.0	11	21600	1.1	5.1	25
100-52-7	Benzaldehyde	0.25	1.2	5.1	92	21600	0.13	0.60	2.6
110-62-3	Pentanal(M)	0.25	1.2	13	27	21600	0.43	2.1	22
590-86-3	Isopentanal	0.25	1.2	Not Detected	61	21600	0.19	0.91	Not Detected
66-25-1	Hexanal	0.25	1.2	41	18	21600	0.64	3.1	105
107-02-8	Acrolein (M)	0.25	1.2	4.0	33	21600	0.35	1.7	5.6

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.
M Reported value may be biased due to apparent matrix interferences.

Sample ID ***0909125C-49A*** Duration(min)= 21600 Dilution factor =1
File Name **f0906040.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	Not Detected	99	21600	0.47	0.47	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	21600	0.28	0.28	Not Detected
123-38-6	Propanal	0.25	0.25	Not Detected	39	21600	0.30	0.30	Not Detected
123-72-8	Butanal (*)	0.25	0.25	Not Detected	11	21600	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	21600	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	21600	0.43	0.43	Not Detected
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	21600	0.19	0.19	Not Detected
66-25-1	Hexanal	0.25	0.25	Not Detected	18	21600	0.64	0.64	Not Detected
107-02-8	Acrolein	0.25	0.25	Not Detected	33	21600	0.35	0.35	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.

Sample ID ***0909125C-Lab Blank*** Duration(min)= 21600 Dilution factor =1
File Name **f0906007.d**

CAS #	Analyte	Detection Limit (uG)	Reporting Limit (uG)	Amount (uG)	Sampling Rate (mL/min)	Exposure Time (min)	Detection Limit (uG/M^3)	Reporting Limit (uG/M^3)	Amount (uG/M^3)
50-00-0	Formaldehyde	1.0	1.0	Not Detected	99	21600	0.47	0.47	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	21600	0.28	0.28	Not Detected
123-38-6	Propanal	0.25	0.25	Not Detected	39	21600	0.30	0.30	Not Detected
123-72-8	Butanal (*)	0.25	0.25	Not Detected	11	21600	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	21600	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	21600	0.43	0.43	Not Detected
590-86-3	Isopentanal	0.25	0.25	Not Detected	61	21600	0.19	0.19	Not Detected
66-25-1	Hexanal	0.25	0.25	Not Detected	18	21600	0.64	0.64	Not Detected
107-02-8	Acrolein	0.25	0.25	Not Detected	33	21600	0.35	0.35	Not Detected

* Butanal coelutes with Isobutanal and Methyl Ethyl Ketone. The corresponding peak is reported as Butanal.

Compound Listing

Modified TO-11A Passive-Radiello 165 (Full list) (ug)

CAS Number	Compound	Detection Limit ug	Type
50-00-0	Formaldehyde	1.0	
75-07-0	Acetaldehyde	0.50	
123-38-6	Propanal	0.25	
9999-9999-007	Methyl Ethyl Ketone/Butyraldehydes	0.25	
100-52-7	Benzaldehyde	0.25	
110-62-3	Pentanal	0.25	
590-86-3	Isopentanal	0.25	
66-25-1	Hexanal	0.25	
107-02-8	Acrolein	0.25	

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DATA REVIEW CHECKLIST

Work Order #: 0909125-C (W 9/16/09)

A_1	A_2	R	T	M	Q	
☐	☐	☑	☐	☑	☐	Analysis/Reporting vs. Project Profile/SOP requirements checked (i.e. 100% Dups, J-Flag to MDL, etc)
		☑	☐	☑	☐	The final report has the correct reporting list, special units, and header info.
		☑	☐	☑	☐	Lab Narrative is correct (proper method & description/Receiving & Analytical notes correct)
		☑	☐	NA	☐	Sample Discrepancy Report (SDR) is completed
☐	☐	☐	☐	☐	☐	Corrective Action issued - # _____
☐	☐	☑	☐	☑	☐	Unusual circumstances have been documented in the notes section below

LUMEN *validation report present and initialed* ***CIRCLE (YES / NO)***

☐	☐	☑	☐	☑	☐	Lab Blank, CCV, LCS and DUP met QC criteria
☐	☐	☑	☐	☑	☐	Hold time is met for all samples
		☑	☐	☑	☐	Appropriate data qualifier flags are applied
		☑	☐	☑	☐	Manual integrations for samples and QC are properly documented
☐	☐	☑	☐		☐	Samples analyzed within the project or method specific clock
		☑	☐			Retention times have been verified
☐	☐	☑	☐		☐	Appropriate ICAL(s) included
		☑	☐	☑	☐	At least one result per sample is verified against the target quant sheets/raw data
☐	☐	☑	☐		☐	Dilution factor correctly calculated (sample load volume, syringe and bag dilutions, can pressurization(s))
☐	☐	☑	☐			Correct amount of sample analyzed (i.e. sample not over-diluted)
		☑	☐			Spectra verified - documentation of spectral defense included (Section 5A of eCVP pkg)
		☐	☐			TICs resemble reference spectra
		☐	☐			TICs between duplicate samples are consistent
☐	☐	☑	☐	☑	☐	Checked samples for trends (i.e. Influent vs. Effluent, Field Dups, Field/Trip Blank, etc.)
☐	☐	☑	☐			Data for multiple analyses of sample(s) has been evaluated for comparability of results
		☑		☑		Special units for all samples in the final report are correctly calculated
		☑	☐	☑		Manually entered results checked (i.e. TPH/NMOC)
☐	☐	☑				Chain of Custody verified for any special comments (i.e. different compounds/RLs, action levels)
		☑				Chain of Custody scanned correctly
					☐	Verify sample id's vs. chain of custody
		☑				Date MDL(s) performed per instrument(s) 8/21/09
☐	☐	☐				Samples pressurized w/ appropriate gas (N_2 or He) ☑ Other (i.e. Tedlar bag, cartridge, sorbent)
☐	☐	☐				Final pressure consistent with canister size (6L vs. 1L) Radiello 165
☐	☐	☐				Verify receipt pressures
☐	☐	☐				Verify canister ID #'s
		☑		☑		Final invoice amount correct (adjusted for TAT, Penalties, Re-issue Charges etc.)
				☑		MDL date(s) present for all instruments utilized
		☑	☐	NA	☐	Client LUMEN report reviewed for accuracy and completeness

Notes: *(to include: noting samples with QA/QC problems, Blanks with positive hits, narratives, etc.)*

A/R: %R of contaminant in the end check on 09/06/09 (file # f0906093) is 111%. ~~[illegible]~~ The control limits are (W 9/16/09) 90-110%. The associated samples (36A, 41A, 42A and 49A) have (W 9/16/09) ~~not~~ no hits. Dup 44A (Analytical); Dup 46A (Analytical). Report in ug + ug/m3.

M/O: 46A + 46AA Propanal 5x RL

A_1/A_2 (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
A_1:	R: 9/17/09	9/18/09	
A_2:	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply. Rev. 02/20/09

Note (2): Management reviewer and reporting reviewer must be separate individuals.

Not Applicable