Air Toxics LTD.

Laboratory Services Since 1989

Electronic Comprehensive Validation Package (eCVP)

AN ENVIRONMENTAL ANALYTICAL LABORATORY

COMPREHENSIVE VALIDATION PACKAGE

Modified TO-11A

INVENTORY SHEET

Work Order #: 0909546C

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Comments:

Completed by:

Kara McKiernan	Kara McKiernan / Document Control	10/21/09
(Signature)	(Print Name & Title)	(Date)

Air Toxics LTD.
Laboratory Services Since 1989

WORK ORDER #: 0909546C

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:	09/25/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/19/2009		

FRACTION #	NAME	TEST
32A	106741	Modified TO-11A
33A	106742	Modified TO-11A
34A	106743	Modified TO-11A
35A	106744	Modified TO-11A
36A	106768	Modified TO-11A
37A	106769	Modified TO-11A
38A	106770	Modified TO-11A
39A	106771	Modified TO-11A
40A	106772	Modified TO-11A
41A	106773	Modified TO-11A
42A	106797	Modified TO-11A
43A	106798	Modified TO-11A
43AA	106798 Lab Duplicate	Modified TO-11A
44A	106799	Modified TO-11A
45A	106800	Modified TO-11A
46A	106801	Modified TO-11A
47A	106802	Modified TO-11A

Continued on next page

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WORK ORDER #: 0909546C

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:	09/25/2009	**CONTACT:**	Ausha Scott
DATE COMPLETED:	10/19/2009		

FRACTION #	NAME	TEST
48A	Lab Blank	Modified TO-11A
49A	LCS	Modified TO-11A

CERTIFIED BY: Linda L. Freeman

Laboratory Director

DATE: 10/19/09

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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# 0909546C

Sixteen Radiello 165 (Aldehydes) samples were received on September 25, 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.

Requirement	***TO-11A***	***ATL Modifications***
ACN Purity Check	Contribution of analytes from ACN determined as described Sections 9.1.1 and 9.1.2 of Compendium TO-11A.	Total contribution of analytes from ACN and cartridge combined is determined.
Initial Calibration Curve (ICAL)	Multi-point using linear regression performed every 6 months; r^2 > 0.999	Multi-point using average Response Factor; % RSD </= 10 %. Re-calibration if daily cal. fails, major maintenance, or column change. Linear regression is performed when requested.
Blank Subtraction	Average blank concentrations calculated. Blank value subtracted from sample result.	One Lab Blank is analyzed per batch; no blank subtraction performed on samples.

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 detection of Isopentanal appears to be masked by an interfering peak in sample 106769. Therefore, Isopentanal could not be quantified or reported.

The detection of Acrolein appears to be masked by an interfering peak in samples 106742 and 106743. Therefore, Acrolein could not be quantified or reported.

Definition of Data Qualifying Flags

Seven 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.

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
106741	0909546C-32A	9/22/2009	9/25/2009	9/25/2009	3	9/28/2009	3	Good
106742	0909546C-33A	9/22/2009	9/25/2009	9/25/2009	3	9/26/2009	1	Good
106743	0909546C-34A	9/22/2009	9/25/2009	9/25/2009	3	9/26/2009	1	Good
106744	0909546C-35A	NA	9/25/2009	9/25/2009	NA	9/25/2009	0	Good
106768	0909546C-36A	9/22/2009	9/25/2009	9/25/2009	3	9/26/2009	1	Good
106769	0909546C-37A	9/22/2009	9/25/2009	9/25/2009	3	9/26/2009	1	Good
106770	0909546C-38A	9/22/2009	9/25/2009	9/25/2009	3	9/28/2009	3	Good
106771	0909546C-39A	9/22/2009	9/25/2009	9/25/2009	3	9/26/2009	1	Good
106772	0909546C-40A	9/22/2009	9/25/2009	9/25/2009	3	9/26/2009	1	Good
106773	0909546C-41A	NA	9/25/2009	9/25/2009	NA	9/25/2009	0	Good
106797	0909546C-42A	9/23/2009	9/25/2009	9/25/2009	2	9/26/2009	1	Good
106798	0909546C-43A	9/23/2009	9/25/2009	9/25/2009	2	9/26/2009	1	Good
106798 Lab Duplicate	0909546C-43AA	9/23/2009	9/25/2009	9/25/2009	2	9/26/2009	1	Good
106799	0909546C-44A	9/23/2009	9/25/2009	9/25/2009	2	9/28/2009	3	Good
106800	0909546C-45A	9/23/2009	9/25/2009	9/25/2009	2	9/26/2009	1	Good
106801	0909546C-46A	9/23/2009	9/25/2009	9/25/2009	2	9/26/2009	1	Good
106802	0909546C-47A	NA	9/25/2009	9/25/2009	NA	9/25/2009	0	Good
Lab Blank	0909546C-48A	NA	NA	9/25/2009	NA	9/25/2009	0	Good
LCS	0909546C-49A	NA	NA	9/25/2009	NA	9/25/2009	0	Good

Sample Results and Raw Data

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Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 106741

Lab ID#: 0909546C-32A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	4.3
Acetaldehyde	0.50	1.7
Propanal	0.25	0.42 M
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.41
Pentanal	0.25	0.26 M
Hexanal	0.25	0.39
Acrolein	0.25	0.34 M

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Client Sample ID: 106741

Lab ID#: 0909546C-32A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0928010**	**Date of Collection: 9/22/09**
Dil. Factor:	**1.00**	**Date of Analysis: 9/28/09 12:00 PM**
		Date of Extraction: 9/25/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	1.0	4.3
Acetaldehyde	0.50	1.7
Propanal	0.25	0.42 M
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.41
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	0.26 M
Isopentanal	0.25	Not Detected
Hexanal	0.25	0.39
Acrolein	0.25	0.34 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/28Sep2009.b/f0928010.d
Lab Smp Id: 0909546C-32A
Inj Date : 28-SEP-2009 12:00
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-32A;
Misc Info :
Comment :
Method : /chem/hplcf.i/28Sep2009.b/F09D0904.m
Meth Date : 28-Sep-2009 09:47 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	3.073	-0.011	28707133		
2 FORMALDEHYDE	4.169	4.143	0.026	1284715	10.7965	4.32
3 ACETALDEHYDE	5.042	5.003	0.039	373489	4.16083	1.66
4 ACROLEIN	5.856	6.009	-0.153	68904	0.83943	0.336
6 PROPANAL	6.729	6.656	0.073	72463	1.05797	0.423
9 BUTYRALS/MEK	9.156	9.023	0.133	57674	1.02159	0.409
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.262	12.129	0.133	31265	0.65951	0.264(M)
16 HEXANAL	14.549	14.463	0.086	41025	0.97686	0.391

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/28Sep2009.b/f0928010.d

Date : 28-SEP-2009 12:00

Client ID:

Instrument: hplcf.i

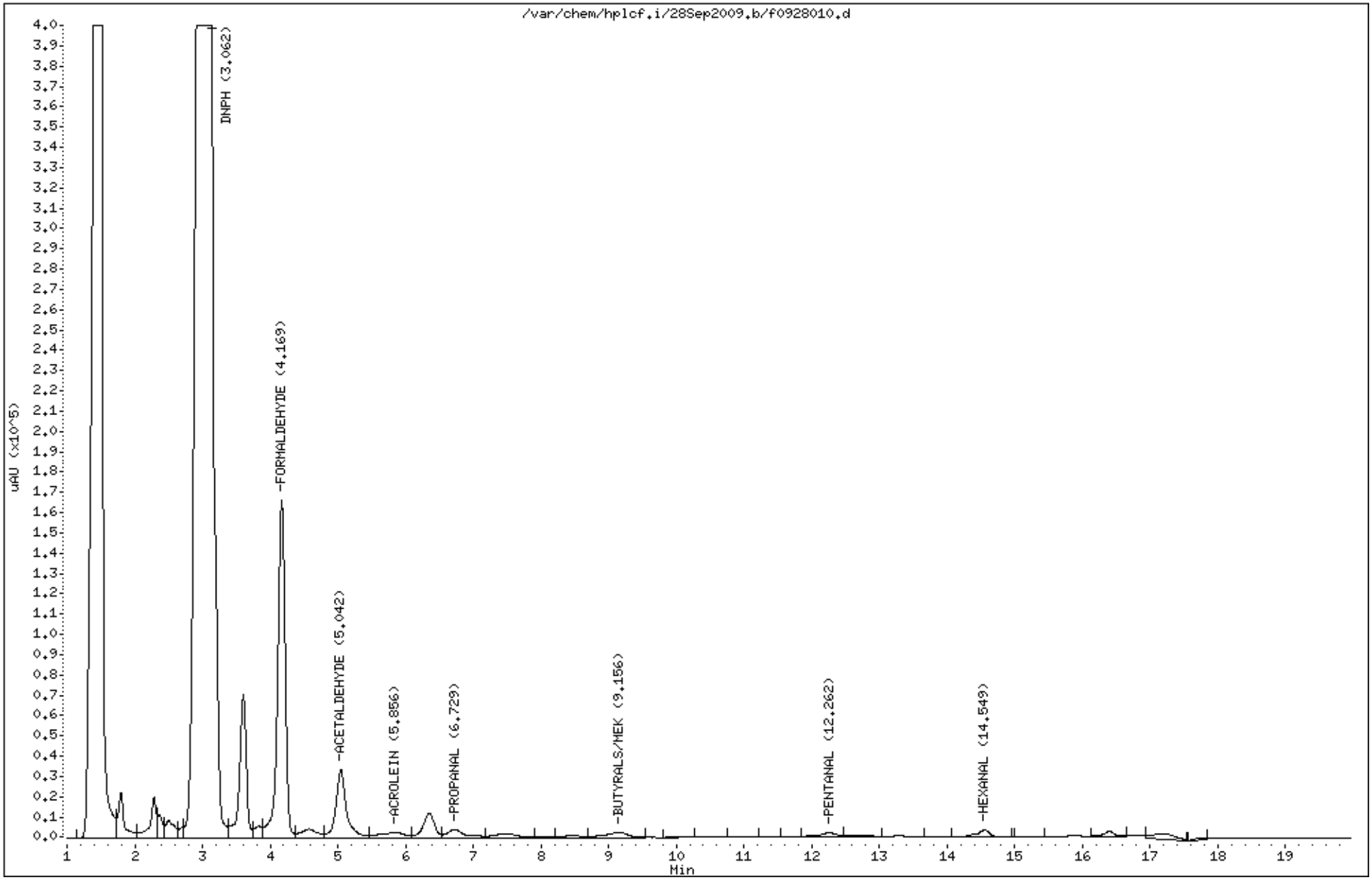
Sample Info: ;0909546C-32A;

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: 106742

Lab ID#: 0909546C-33A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	64
Acetaldehyde	2.5	18
Propanal	1.2	2.5
Methyl Ethyl Ketone/Butyraldehydes	1.2	4.3
Benzaldehyde	1.2	3.8
Pentanal	1.2	13 M
Hexanal	1.2	38

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Client Sample ID: 106742

Lab ID#: 0909546C-33A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925069**	**Date of Collection: 9/22/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/26/09 10:06 AM**
		Date of Extraction: 9/25/09

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	64
Acetaldehyde	2.5	18
Propanal	1.2	2.5
Methyl Ethyl Ketone/Butyraldehydes	1.2	4.3
Benzaldehyde	1.2	3.8
Pentanal	1.2	13 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	38
Acrolein	1.2	Not Detected 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/25Sep2009.b/f0925069.d
Lab Smp Id: 0909546C-33A Client Smp ID: 5X
Inj Date : 26-SEP-2009 10:06
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-33A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.067	3.054	0.013	6384332		
2 FORMALDEHYDE	4.174	4.147	0.027	3796000	31.9008	63.8
3 ACETALDEHYDE	5.041	5.013	0.028	825996	9.20196	18.4
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	6.734	6.673	0.061	84764	1.23757	2.48
9 BUTYRALS/MEK	9.161	9.053	0.108	120889	2.14134	4.28
10 BENZALDEHYDE	10.641	10.527	0.114	75603	1.87701	3.75
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.248	12.147	0.101	307933	6.49549	13.0
16 HEXANAL	14.547	14.480	0.067	792657	18.8742	37.7

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925069.d

Date : 26-SEP-2009 10:06

Client ID: 5X

Instrument: hplcf.i

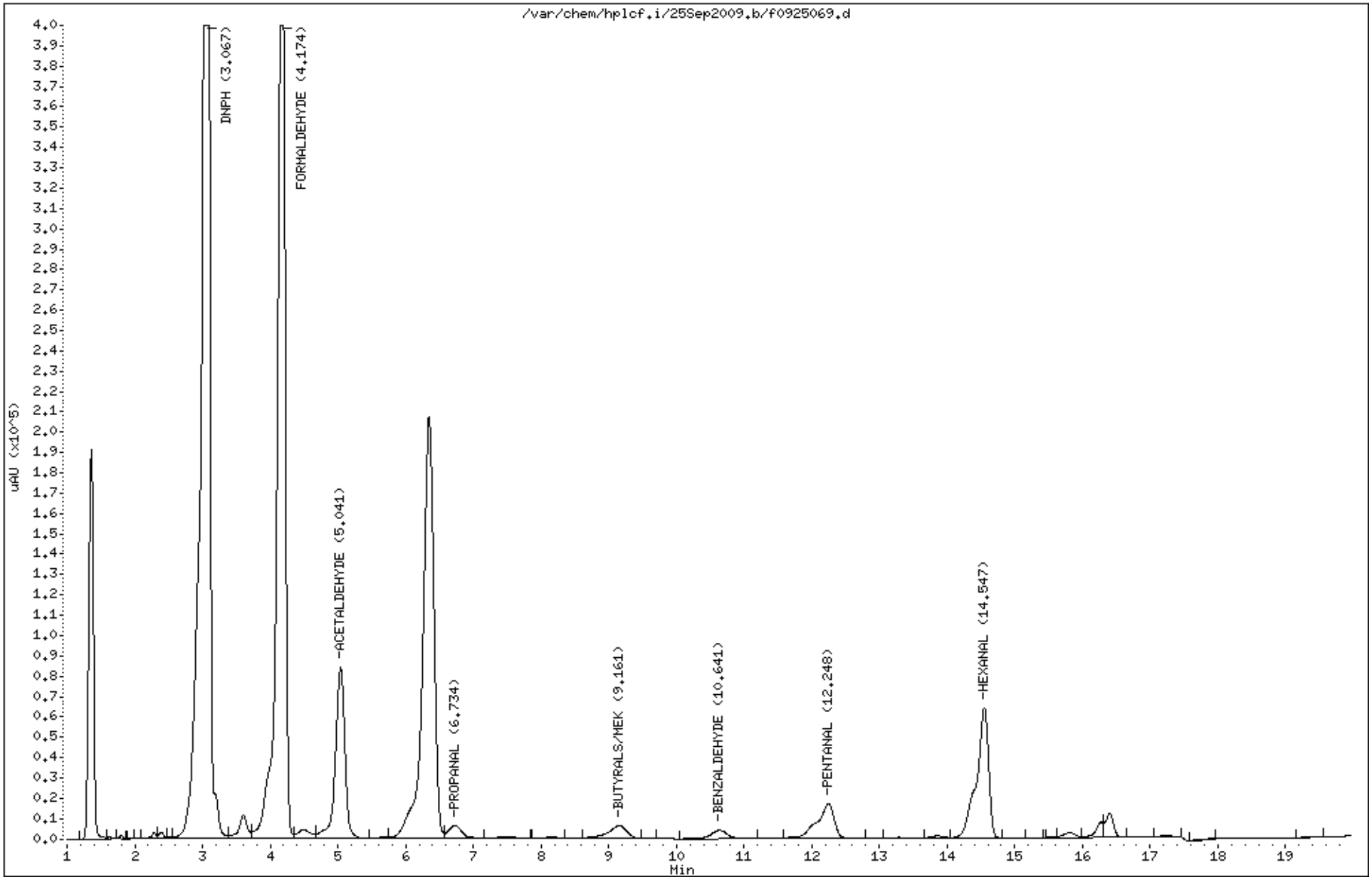
Sample Info: ;0909546C-33A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0014

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Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 106743

Lab ID#: 0909546C-34A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	64
Acetaldehyde	2.5	20
Propanal	1.2	2.6
Methyl Ethyl Ketone/Butyraldehydes	1.2	4.8
Benzaldehyde	1.2	3.2
Pentanal	1.2	16 M
Hexanal	1.2	41

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Client Sample ID: 106743

Lab ID#: 0909546C-34A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925070**	**Date of Collection: 9/22/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/26/09 10:27 AM**
		Date of Extraction: 9/25/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	64
Acetaldehyde	2.5	20
Propanal	1.2	2.6
Methyl Ethyl Ketone/Butyraldehydes	1.2	4.8
Benzaldehyde	1.2	3.2
Pentanal	1.2	16 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	41
Acrolein	1.2	Not Detected 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/25Sep2009.b/f0925070.d
Lab Smp Id: 0909546C-34A Client Smp ID: 5X
Inj Date : 26-SEP-2009 10:27
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-34A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.062	3.054	0.008	6684330		
2 FORMALDEHYDE	4.176	4.147	0.029	3811766	32.0333	64.1
3 ACETALDEHYDE	5.042	5.013	0.029	891253	9.92896	19.8
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	6.729	6.673	0.056	89922	1.31288	2.62
9 BUTYRALS/MEK	9.156	9.053	0.103	134202	2.37716	4.75
10 BENZALDEHYDE	10.636	10.527	0.109	65377	1.62313	3.25
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.242	12.147	0.095	374015	7.88942	15.8
16 HEXANAL	14.542	14.480	0.062	856028	20.3831	40.8

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925070.d

Date : 26-SEP-2009 10:27

Client ID: 5X

Sample Info: ;0909546C-34A;5X

Purge Volume: 5.0

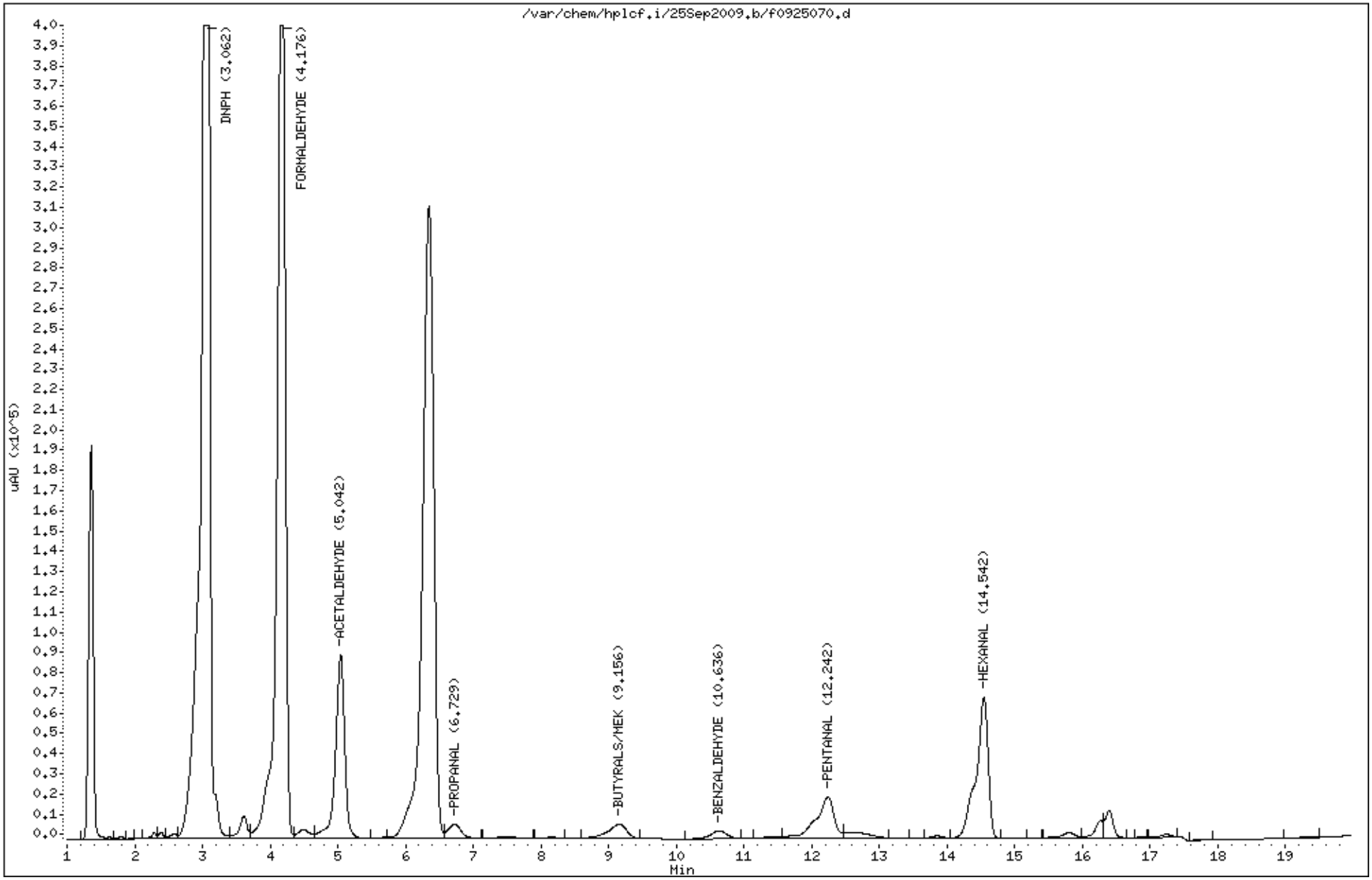
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0018



Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 106744

Lab ID#: 0909546C-35A

No Detections Were Found.

Air Toxics LTD.
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Client Sample ID: 106744

Lab ID#: 0909546C-35A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925020**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/09 05:03 PM**
		Date of Extraction: 9/25/09

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/25Sep2009.b/f0925020.d
Lab Smp Id: 0909546C-35A
Inj Date : 25-SEP-2009 17:03
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-35A;
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.066	3.054	0.012	37381268		
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/25Sep2009.b/f0925020.d

Date : 25-SEP-2009 17:03

Client ID:

Instrument: hplcf.i

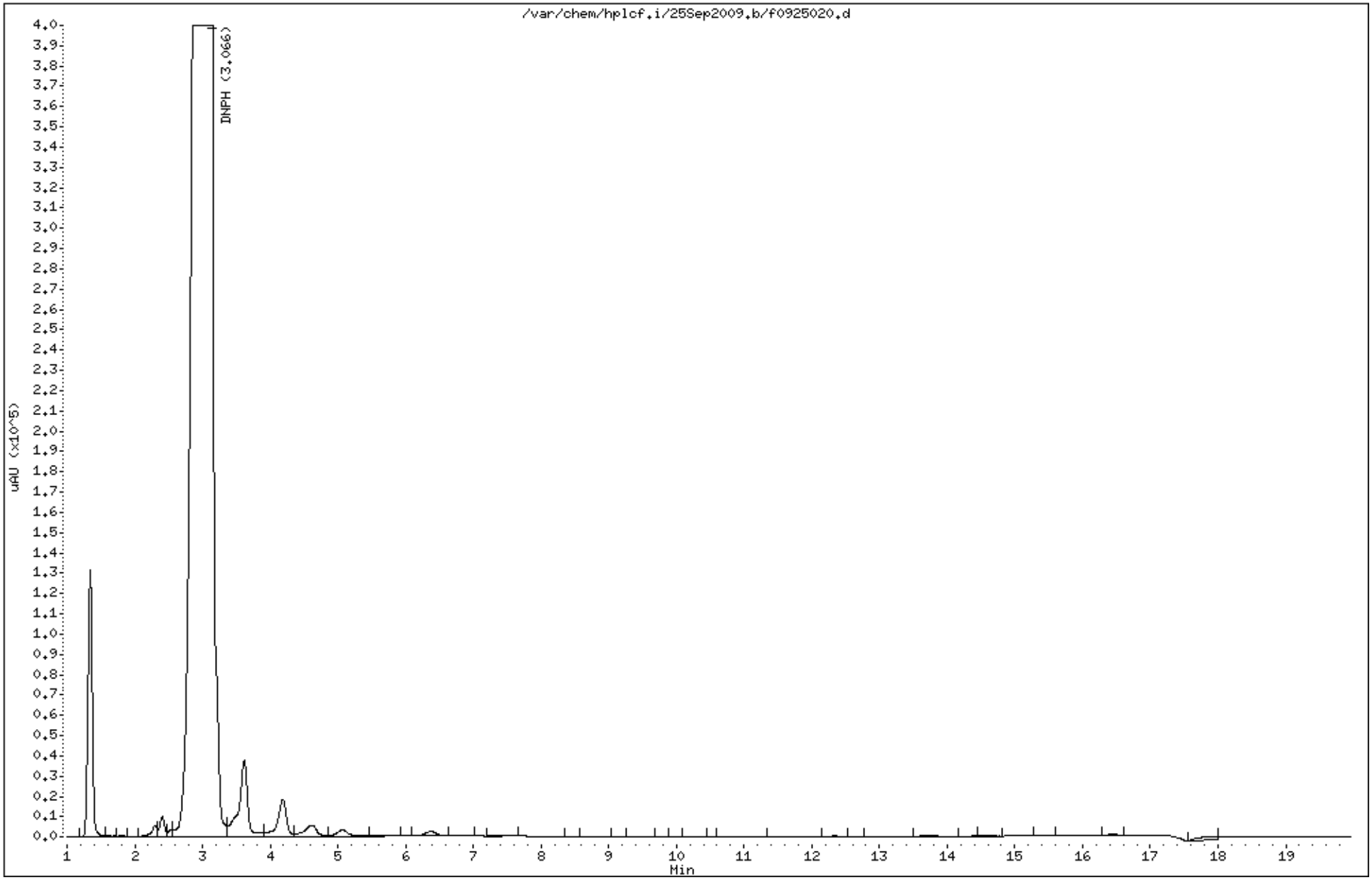
Sample Info: ;0909546C-35A;

Purge Volume: 5.0

Operator: CRL

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: 106768

Lab ID#: 0909546C-36A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	76
Acetaldehyde	2.5	28
Propanal	1.2	5.8
Methyl Ethyl Ketone/Butyraldehydes	1.2	14
Benzaldehyde	1.2	4.5
Pentanal	1.2	23 M
Hexanal	1.2	88
Acrolein	1.2	4.4 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106768

Lab ID#: 0909546C-36A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925071**	**Date of Collection:**	**9/22/09**
Dil. Factor:	**5.00**	**Date of Analysis:**	**9/26/09 10:48 AM**
		Date of Extraction:	**9/25/09**

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	76
Acetaldehyde	2.5	28
Propanal	1.2	5.8
Methyl Ethyl Ketone/Butyraldehydes	1.2	14
Benzaldehyde	1.2	4.5
Pentanal	1.2	23 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	88
Acrolein	1.2	4.4 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/25Sep2009.b/f0925071.d
Lab Smp Id: 0909546C-36A Client Smp ID: 5X
Inj Date : 26-SEP-2009 10:48
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-36A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.065	3.054	0.011	6018392		
2 FORMALDEHYDE	4.172	4.147	0.025	4505980	37.8673	75.7
3 ACETALDEHYDE	5.038	5.013	0.025	1269141	14.1388	28.3
4 ACROLEIN	6.138	6.027	0.111	180445	2.19828	4.40(M)
6 PROPANAL	6.725	6.673	0.052	200141	2.92209	5.84
9 BUTYRALS/MEK	9.138	9.053	0.085	397424	7.03968	14.1
10 BENZALDEHYDE	10.632	10.527	0.105	91019	2.25975	4.52
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.238	12.147	0.091	548522	11.5704	23.1(M)
16 HEXANAL	14.545	14.480	0.065	1844053	43.9093	87.8

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925071.d

Date : 26-SEP-2009 10:48

Client ID: 5X

Instrument: hplcf.i

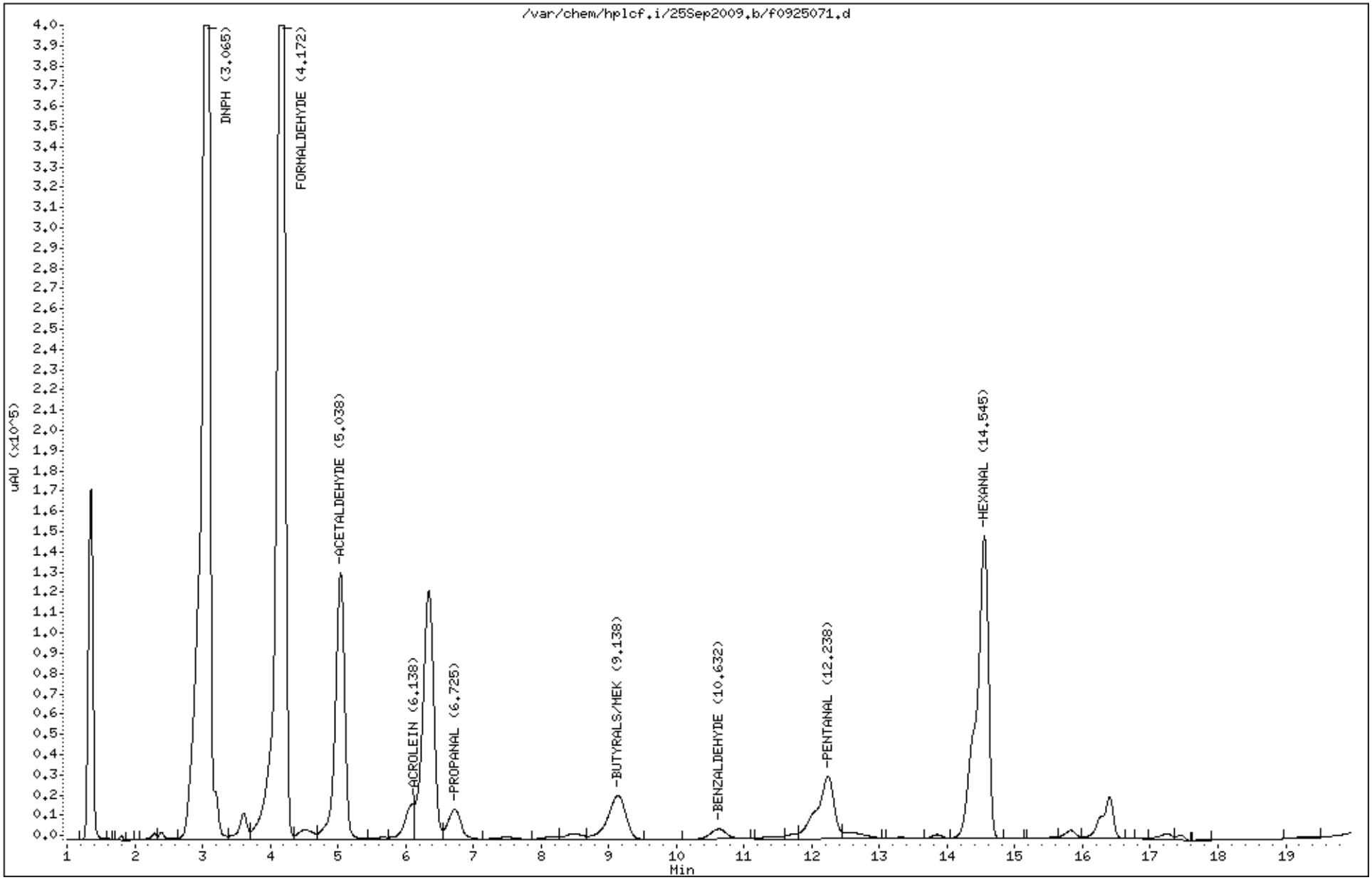
Sample Info: ;0909546C-36A;5X

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: 106769

Lab ID#: 0909546C-37A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	69
Acetaldehyde	2.5	23
Propanal	1.2	5.0
Methyl Ethyl Ketone/Butyraldehydes	1.2	12
Benzaldehyde	1.2	4.8
Pentanal	1.2	24 M
Hexanal	1.2	82
Acrolein	1.2	3.6 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106769

Lab ID#: 0909546C-37A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925072**	**Date of Collection:**	**9/22/09**
Dil. Factor:	**5.00**	**Date of Analysis:**	**9/26/09 11:09 AM**
		Date of Extraction:	**9/25/09**

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	69
Acetaldehyde	2.5	23
Propanal	1.2	5.0
Methyl Ethyl Ketone/Butyraldehydes	1.2	12
Benzaldehyde	1.2	4.8
Pentanal	1.2	24 M
Isopentanal	1.2	Not Detected M
Hexanal	1.2	82
Acrolein	1.2	3.6 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/25Sep2009.b/f0925072.d
Lab Smp Id: 0909546C-37A Client Smp ID: 5X
Inj Date : 26-SEP-2009 11:09
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-37A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.054	0.009	5685636		
2 FORMALDEHYDE	4.177	4.147	0.030	4080295	34.2899	68.6
3 ACETALDEHYDE	5.043	5.013	0.030	1049931	11.6967	23.4
4 ACROLEIN	6.104	6.027	0.077	146587	1.78581	3.57
6 PROPANAL	6.730	6.673	0.057	171893	2.50967	5.02
9 BUTYRALS/MEK	9.150	9.053	0.097	349688	6.19412	12.4
10 BENZALDEHYDE	10.643	10.527	0.116	96094	2.38575	4.77
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.250	12.147	0.103	573828	12.1042	24.2
16 HEXANAL	14.550	14.480	0.070	1731149	41.2209	82.4

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925072.d

Page 1

Date : 26-SEP-2009 11:09

Client ID: 5X

Instrument: hplcf.i

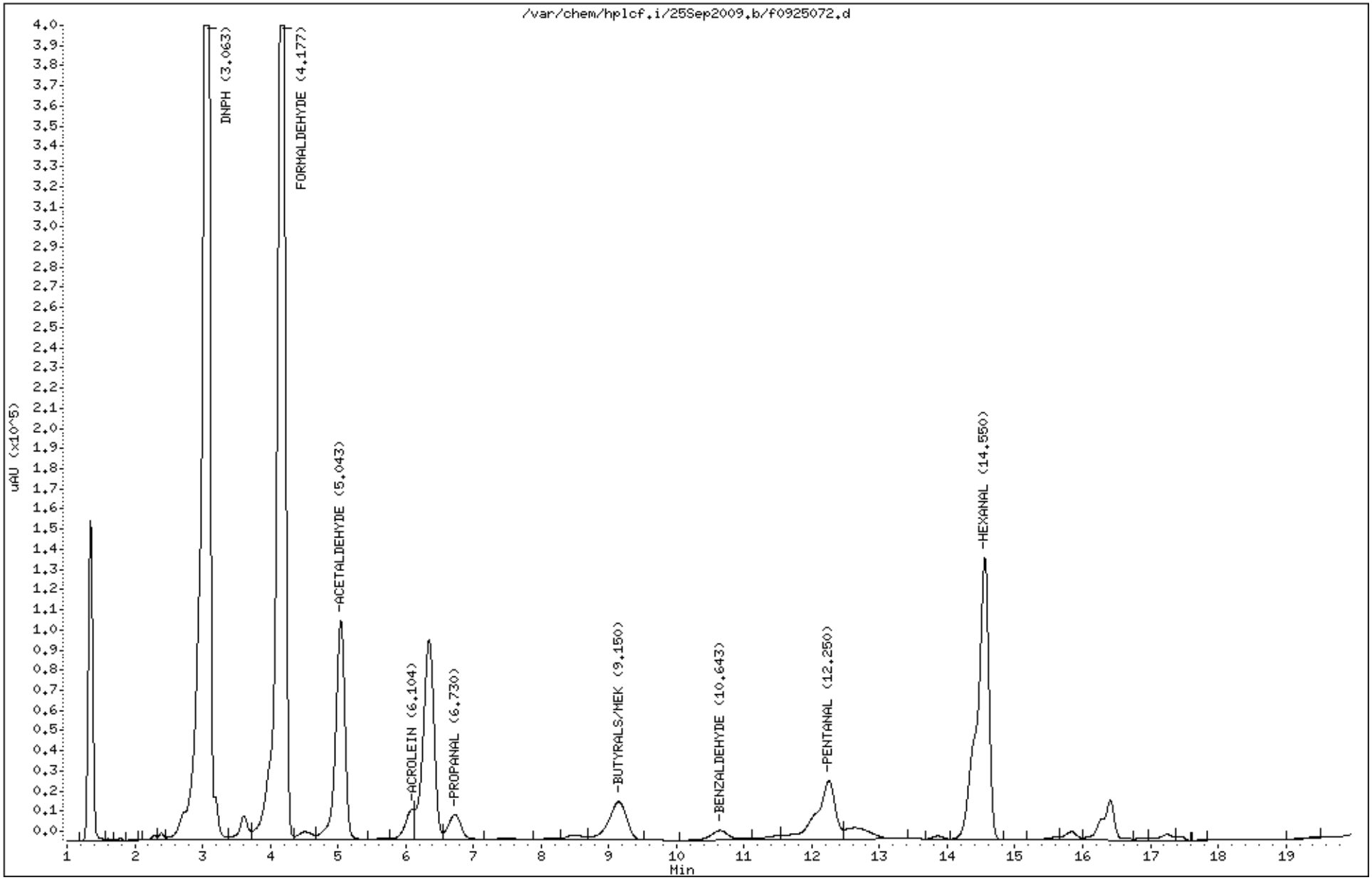
Sample Info: ;0909546C-37A;5X

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: 106770

Lab ID#: 0909546C-38A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	4.1
Acetaldehyde	0.50	1.4
Propanal	0.25	0.26
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.42
Pentanal	0.25	0.32 M
Hexanal	0.25	0.45

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106770

Lab ID#: 0909546C-38A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0928011**	**Date of Collection: 9/22/09**	
Dil. Factor:	**1.00**	**Date of Analysis: 9/28/09 12:21 PM**	
		Date of Extraction: 9/25/09	

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	1.0	4.1
Acetaldehyde	0.50	1.4
Propanal	0.25	0.26
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.42
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	0.32 M
Isopentanal	0.25	Not Detected
Hexanal	0.25	0.45
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 : /chem/hplcf.i/28Sep2009.b/f0928011.d
Lab Smp Id: 0909546C-38A
Inj Date : 28-SEP-2009 12:21
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-38A;
Misc Info :
Comment :
Method : /chem/hplcf.i/28Sep2009.b/F09D0904.m
Meth Date : 28-Sep-2009 09:47 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	3.063	3.073	-0.010	28966180		
2 FORMALDEHYDE	4.170	4.143	0.027	1222445	10.2732	4.11
3 ACETALDEHYDE	5.050	5.003	0.047	302714	3.37237	1.35
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	6.730	6.656	0.074	45388	0.66267	0.265
9 BUTYRALS/MEK	9.156	9.023	0.133	58634	1.03860	0.415
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.250	12.129	0.121	37651	0.79420	0.318
16 HEXANAL	14.550	14.463	0.087	47569	1.13268	0.453

Data File: /var/chem/hplcf.i/28Sep2009.b/f0928011.d

Date : 28-SEP-2009 12:21

Client ID:

Instrument: hplcf.i

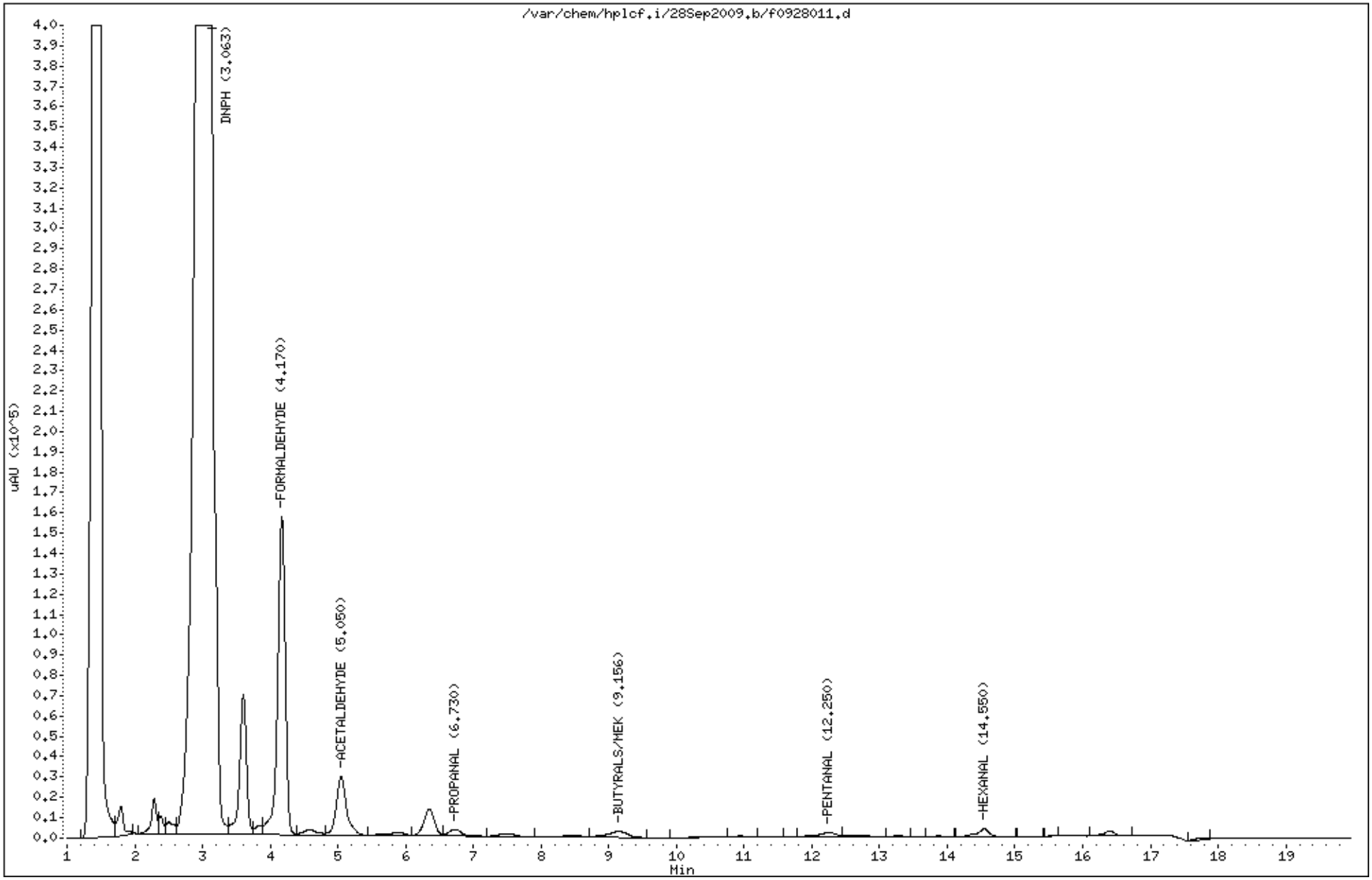
Sample Info: ;0909546C-38A;

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: 106771

Lab ID#: 0909546C-39A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	56
Acetaldehyde	2.5	23
Propanal	1.2	5.1
Methyl Ethyl Ketone/Butyraldehydes	1.2	13
Benzaldehyde	1.2	4.5
Pentanal	1.2	20 M
Hexanal	1.2	79
Acrolein	1.2	3.4 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106771

Lab ID#: 0909546C-39A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925074**	**Date of Collection: 9/22/09**	
Dil. Factor:	**5.00**	**Date of Analysis: 9/26/09 11:51 AM**	
		Date of Extraction: 9/25/09	

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	56
Acetaldehyde	2.5	23
Propanal	1.2	5.1
Methyl Ethyl Ketone/Butyraldehydes	1.2	13
Benzaldehyde	1.2	4.5
Pentanal	1.2	20 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	79
Acrolein	1.2	3.4 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/25Sep2009.b/f0925074.d
Lab Smp Id: 0909546C-39A Client Smp ID: 5X
Inj Date : 26-SEP-2009 11:51
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-39A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.054	0.012	6023308		
2 FORMALDEHYDE	4.173	4.147	0.026	3302299	27.7518	55.5
3 ACETALDEHYDE	5.046	5.013	0.033	1052036	11.7202	23.4
4 ACROLEIN	6.146	6.027	0.119	139978	1.70529	3.41(M)
6 PROPANAL	6.739	6.673	0.066	173903	2.53902	5.08
9 BUTYRALS/MEK	9.159	9.053	0.106	357965	6.34073	12.7
10 BENZALDEHYDE	10.653	10.527	0.126	91162	2.26330	4.53
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.253	12.147	0.106	482286	10.1733	20.3
16 HEXANAL	14.553	14.480	0.073	1659242	39.5087	79.0

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925074.d

Date : 26-SEP-2009 11:51

Client ID: 5X

Instrument: hplcf.i

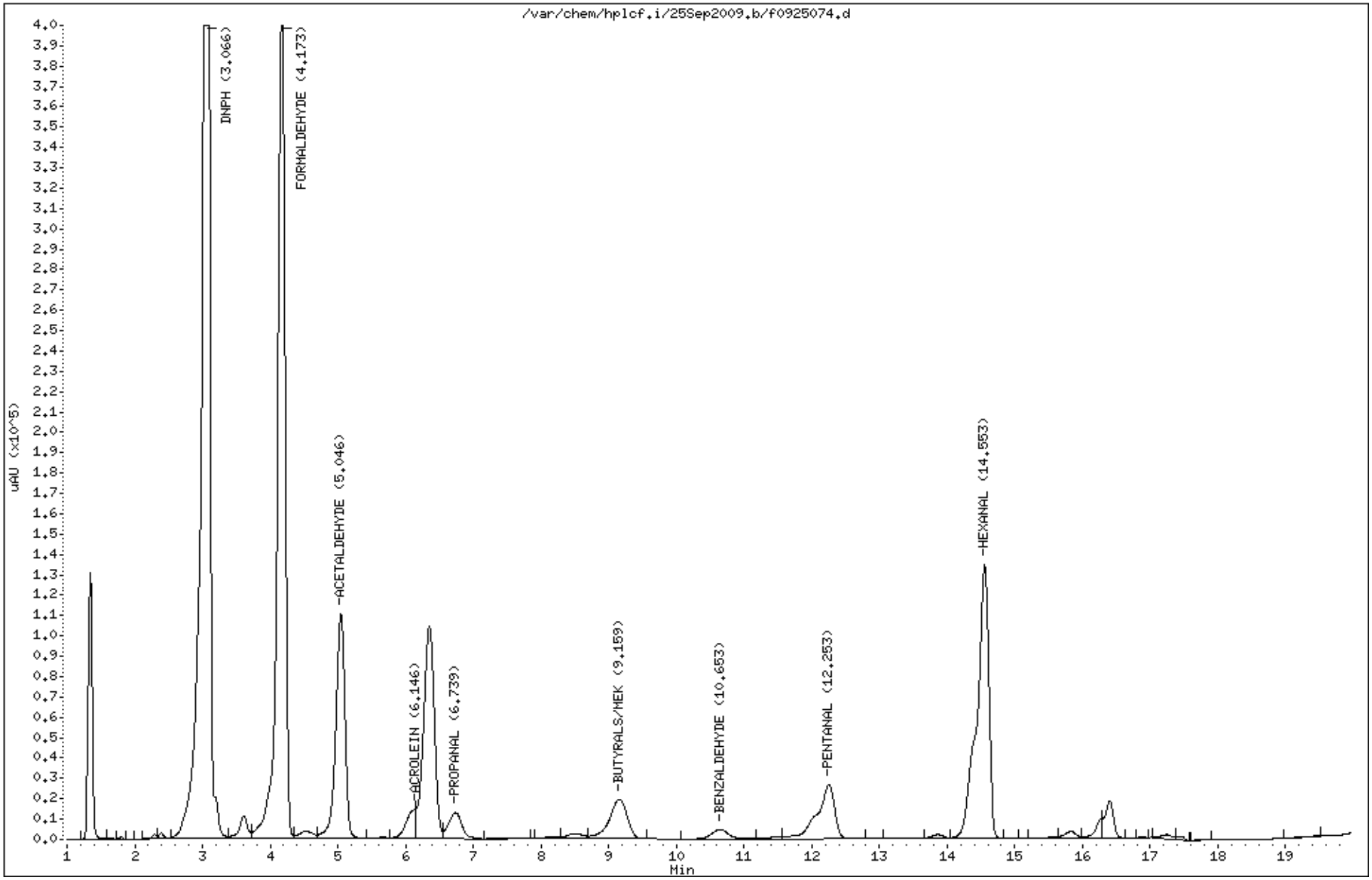
Sample Info: ;0909546C-39A;5X

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: 106772

Lab ID#: 0909546C-40A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	67
Acetaldehyde	2.5	23
Propanal	1.2	5.0
Methyl Ethyl Ketone/Butyraldehydes	1.2	12
Benzaldehyde	1.2	3.8
Pentanal	1.2	23 M
Hexanal	1.2	83
Acrolein	1.2	3.5 M

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106772

Lab ID#: 0909546C-40A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925075**	**Date of Collection:**	**9/22/09**
Dil. Factor:	**5.00**	**Date of Analysis:**	**9/26/09 12:12 PM**
		Date of Extraction:	**9/25/09**

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	67
Acetaldehyde	2.5	23
Propanal	1.2	5.0
Methyl Ethyl Ketone/Butyraldehydes	1.2	12
Benzaldehyde	1.2	3.8
Pentanal	1.2	23 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	83
Acrolein	1.2	3.5 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/25Sep2009.b/f0925075.d
Lab Smp Id: 0909546C-40A Client Smp ID: 5X
Inj Date : 26-SEP-2009 12:12
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-40A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.064	3.054	0.010	5442375		
2 FORMALDEHYDE	4.171	4.147	0.024	3964812	33.3194	66.6
3 ACETALDEHYDE	5.038	5.013	0.025	1045419	11.6464	23.3
4 ACROLEIN	6.131	6.027	0.104	145490	1.77245	3.54(M)
6 PROPANAL	6.724	6.673	0.051	170326	2.48679	4.97
9 BUTYRALS/MEK	9.144	9.053	0.091	342922	6.07427	12.1
10 BENZALDEHYDE	10.638	10.527	0.111	77364	1.92073	3.84
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.244	12.147	0.097	546638	11.5307	23.1
16 HEXANAL	14.544	14.480	0.064	1742030	41.4800	83.0

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925075.d

Date : 26-SEP-2009 12:12

Client ID: 5X

Instrument: hplcf.i

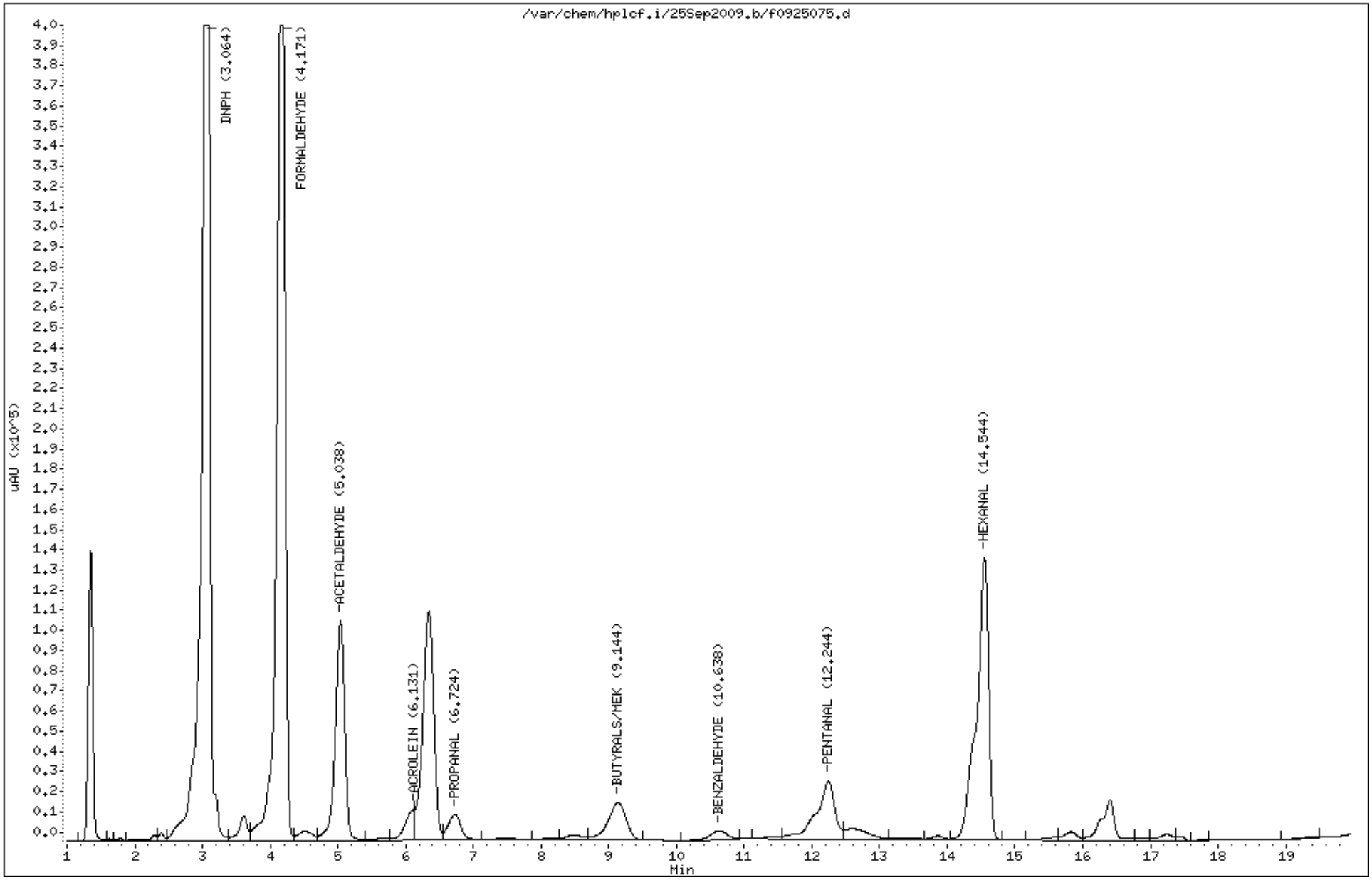
Sample Info: ;0909546C-40A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0042

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 106773

Lab ID#: 0909546C-41A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106773

Lab ID#: 0909546C-41A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925021**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/09 05:24 PM**
		Date of Extraction: 9/25/09

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/25Sep2009.b/f0925021.d
Lab Smp Id: 0909546C-41A
Inj Date : 25-SEP-2009 17:24
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-41A;
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.068	3.054	0.014	37144809		
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/25Sep2009.b/f0925021.d

Date : 25-SEP-2009 17:24

Client ID:

Instrument: hplcf.i

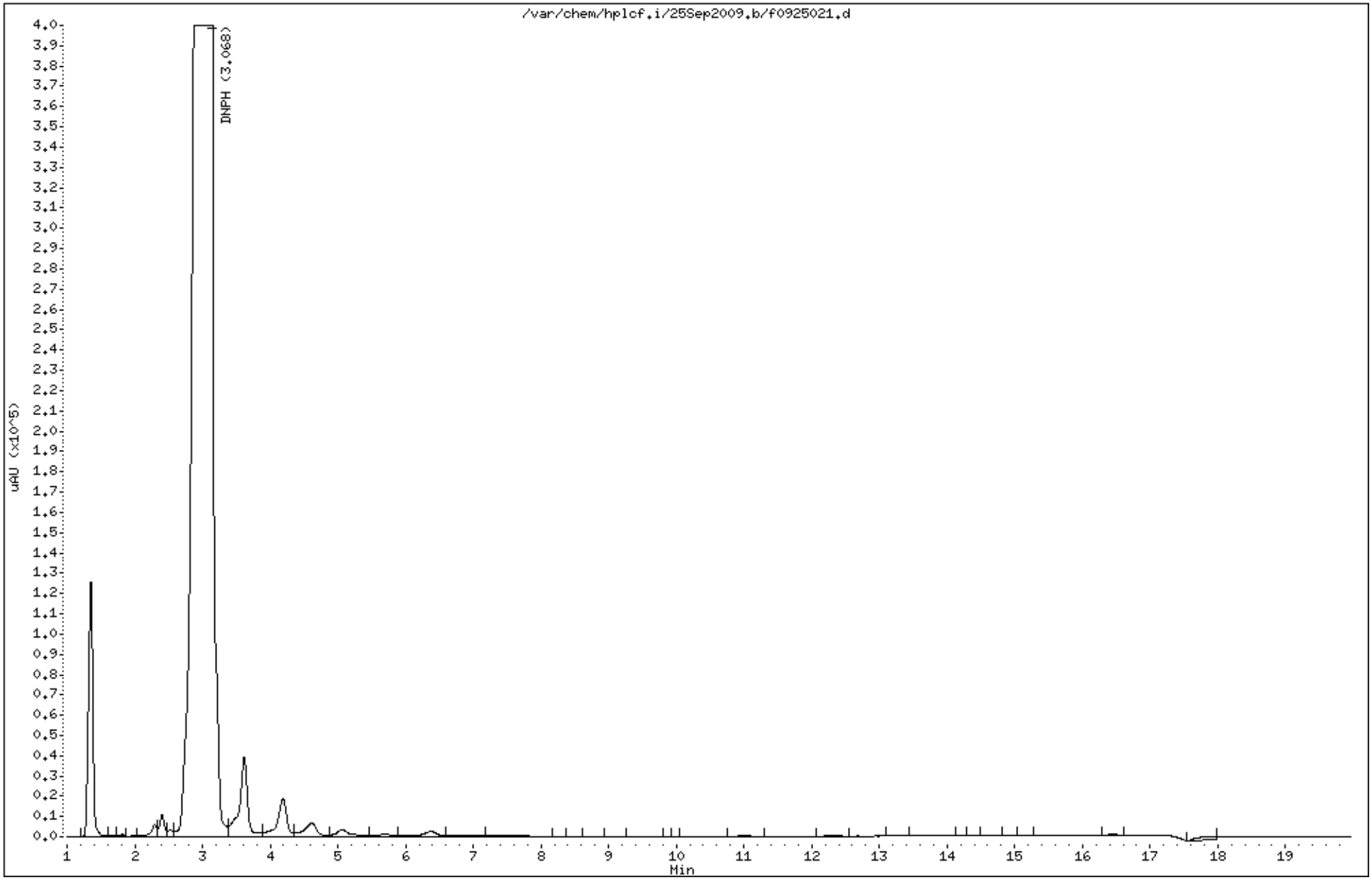
Sample Info: ;0909546C-41A;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 106797

Lab ID#: 0909546C-42A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	130
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.6
Benzaldehyde	1.2	2.4
Pentanal	1.2	9.0 M
Isopentanal	1.2	1.6 M
Hexanal	1.2	55
Acrolein	1.2	1.9

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106797

Lab ID#: 0909546C-42A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925076**	**Date of Collection:**	**9/23/09**
Dil. Factor:	**5.00**	**Date of Analysis:**	**9/26/09 12:33 PM**
		Date of Extraction:	**9/25/09**

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	130
Acetaldehyde	2.5	Not Detected
Propanal	1.2	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.6
Benzaldehyde	1.2	2.4
Pentanal	1.2	9.0 M
Isopentanal	1.2	1.6 M
Hexanal	1.2	55
Acrolein	1.2	1.9

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/25Sep2009.b/f0925076.d
Lab Smp Id: 0909546C-42A Client Smp ID: 5X
Inj Date : 26-SEP-2009 12:33
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-42A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.067	3.054	0.013	3821424		
2 FORMALDEHYDE	4.173	4.147	0.026	7855999	66.0202	132
3 ACETALDEHYDE	5.040	5.013	0.027	92229	1.02747	2.05
4 ACROLEIN	6.087	6.027	0.060	79820	0.97241	1.94
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	9.133	9.053	0.080	45417	0.80448	1.61
10 BENZALDEHYDE	10.640	10.527	0.113	48995	1.21641	2.43
11 ISO-PENTANAL	11.733	11.627	0.106	36915	0.77870	1.56
12 PENTANAL	12.247	12.147	0.100	213730	4.50839	9.02
16 HEXANAL	14.540	14.480	0.060	1146062	27.2892	54.6

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925076.d

Date : 26-SEP-2009 12:33

Client ID: 5X

Instrument: hplcf.i

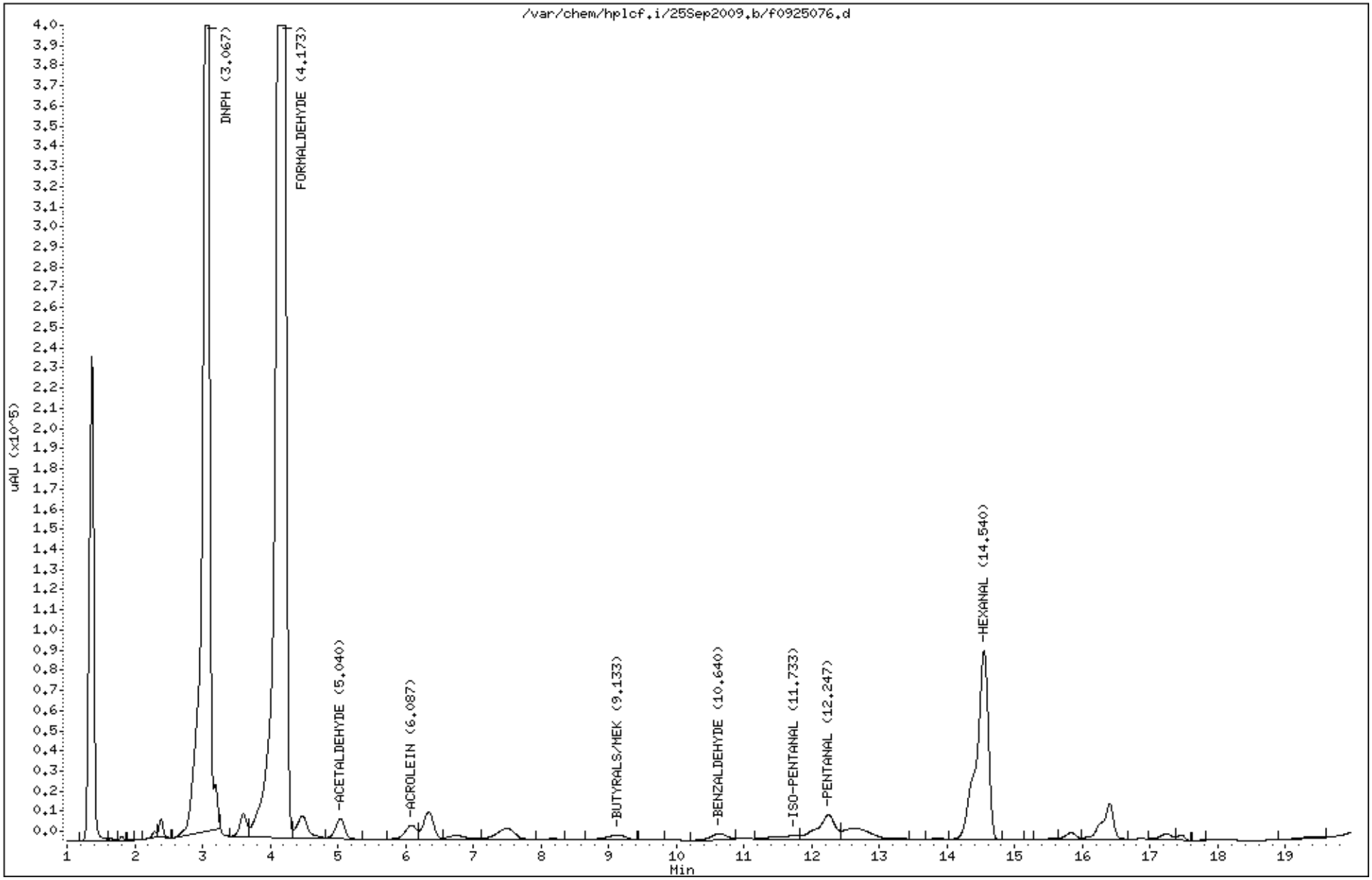
Sample Info: ;0909546C-42A;5X

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: 106798

Lab ID#: 0909546C-43A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	140
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.6
Benzaldehyde	1.2	3.0
Pentanal	1.2	11 M
Isopentanal	1.2	1.4 M
Hexanal	1.2	57
Acrolein	1.2	2.0

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106798

Lab ID#: 0909546C-43A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925077**	**Date of Collection:**	**9/23/09**
Dil. Factor:	**5.00**	**Date of Analysis:**	**9/26/09 12:54 PM**
		Date of Extraction:	**9/25/09**

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	140
Acetaldehyde	2.5	Not Detected
Propanal	1.2	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.6
Benzaldehyde	1.2	3.0
Pentanal	1.2	11 M
Isopentanal	1.2	1.4 M
Hexanal	1.2	57
Acrolein	1.2	2.0

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/25Sep2009.b/f0925077.d
Lab Smp Id: 0909546C-43A Client Smp ID: 5X
Inj Date : 26-SEP-2009 12:54
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-43A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.065	3.054	0.011	3962683		
2 FORMALDEHYDE	4.172	4.147	0.025	8185082	68.7857	138
3 ACETALDEHYDE	5.038	5.013	0.025	98638	1.09887	2.20
4 ACROLEIN	6.085	6.027	0.058	81833	0.99694	1.99
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	9.138	9.053	0.085	44399	0.78645	1.57(M)
10 BENZALDEHYDE	10.638	10.527	0.111	60355	1.49845	3.00
11 ISO-PENTANAL	11.732	11.627	0.105	32636	0.68844	1.38(M)
12 PENTANAL	12.245	12.147	0.098	253154	5.33999	10.7
16 HEXANAL	14.545	14.480	0.065	1197801	28.5212	57.0

QC Flag Legend

M - Compound response manually integrated.

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925077.d

Page 1

Date : 26-SEP-2009 12:54

Client ID: 5X

Instrument: hplcf.i

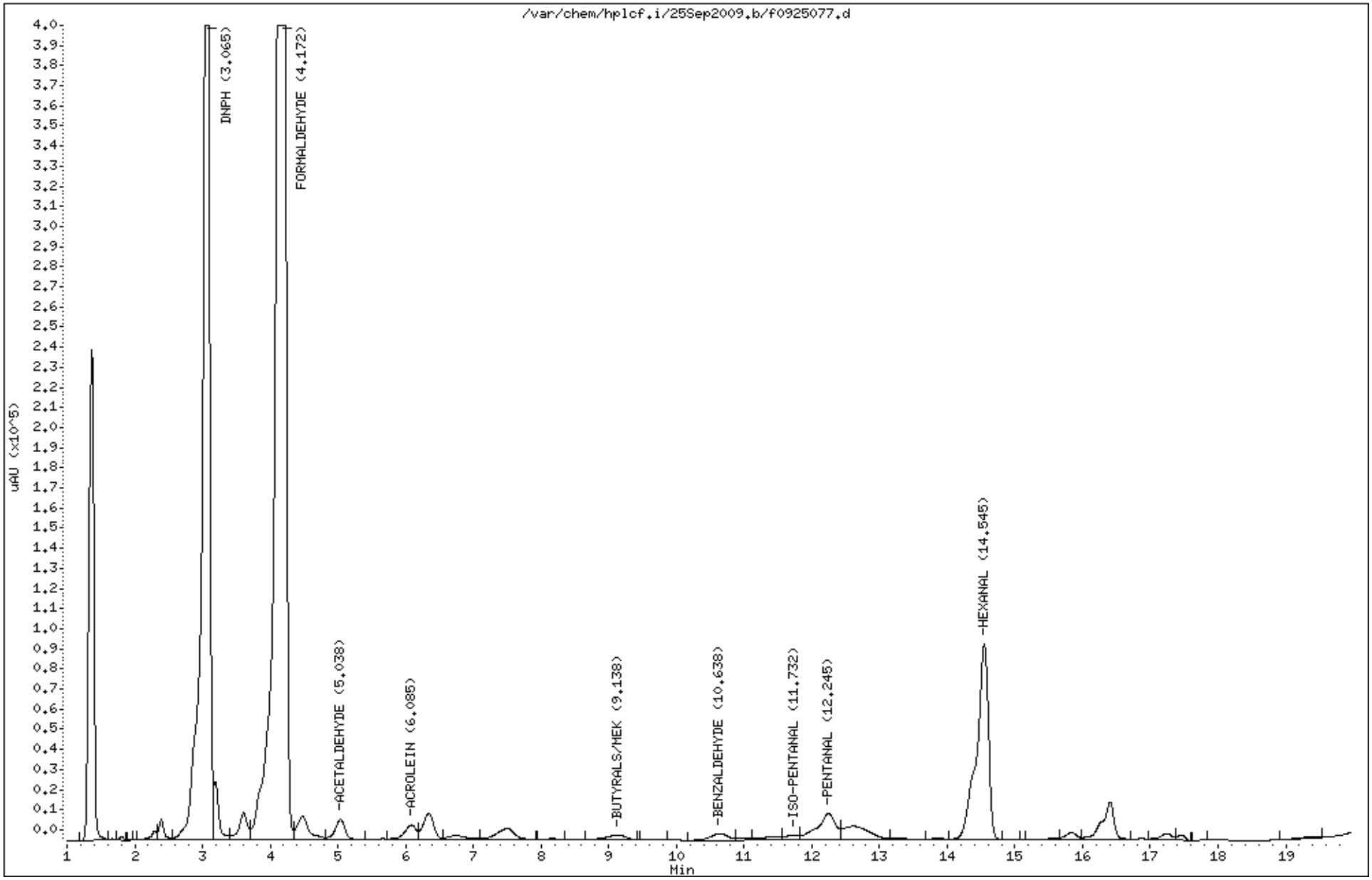
Sample Info: ;0909546C-43A;5X

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: 106798 Lab Duplicate

Lab ID#: 0909546C-43AA

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	140
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.6
Benzaldehyde	1.2	2.5
Pentanal	1.2	9.7 M
Isopentanal	1.2	1.7 M
Hexanal	1.2	57
Acrolein	1.2	1.9

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106798 Lab Duplicate

Lab ID#: 0909546C-43AA

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925078**	**Date of Collection: 9/23/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/26/09 01:14 PM**
		Date of Extraction: 9/25/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	140
Acetaldehyde	2.5	Not Detected
Propanal	1.2	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.6
Benzaldehyde	1.2	2.5
Pentanal	1.2	9.7 M
Isopentanal	1.2	1.7 M
Hexanal	1.2	57
Acrolein	1.2	1.9

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/25Sep2009.b/f0925078.d
Lab Smp Id: 0909546C-43AA Client Smp ID: 5X
Inj Date : 26-SEP-2009 13:14
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C43AA;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.054	0.012	3933580		
2 FORMALDEHYDE	4.173	4.147	0.026	8149760	68.4889	137
3 ACETALDEHYDE	5.040	5.013	0.027	89222	0.99397	1.99
4 ACROLEIN	6.086	6.027	0.059	79684	0.97076	1.94
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	9.140	9.053	0.087	44666	0.79118	1.58
10 BENZALDEHYDE	10.640	10.527	0.113	51028	1.26688	2.53
11 ISO-PENTANAL	11.726	11.627	0.099	40013	0.84405	1.69
12 PENTANAL	12.246	12.147	0.099	229748	4.84627	9.69
16 HEXANAL	14.546	14.480	0.066	1196849	28.4985	57.0

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925078.d

Date : 26-SEP-2009 13:14

Client ID: 5X

Instrument: hplcf.i

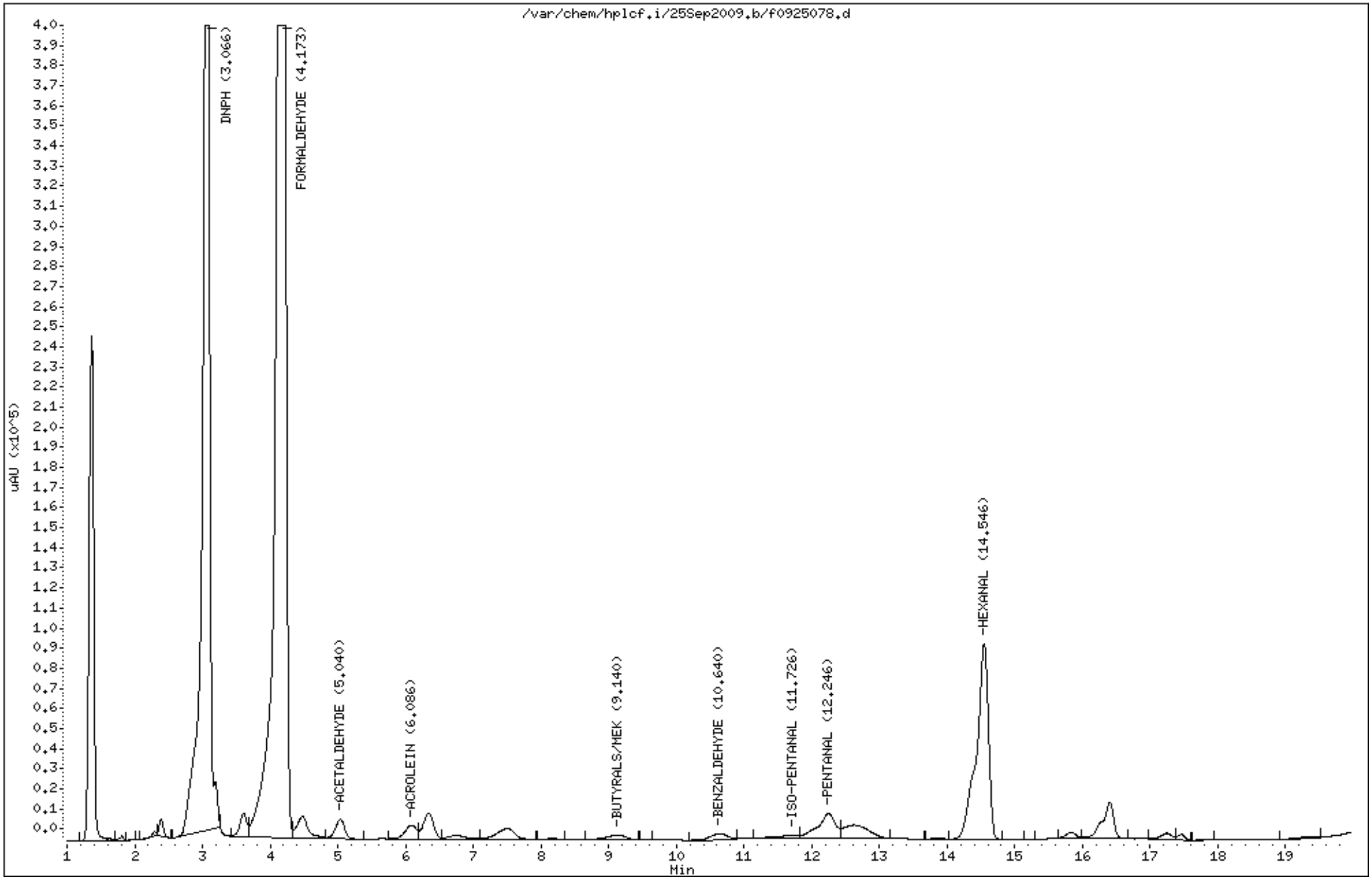
Sample Info: ;0909546C43AA;5X

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: 106799

Lab ID#: 0909546C-44A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	1.0	3.5
Acetaldehyde	0.50	1.5
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.40
Pentanal	0.25	0.29 M
Hexanal	0.25	0.45

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106799

Lab ID#: 0909546C-44A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0928012**	**Date of Collection: 9/23/09**
Dil. Factor:	**1.00**	**Date of Analysis: 9/28/09 12:42 PM**
		Date of Extraction: 9/25/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	1.0	3.5
Acetaldehyde	0.50	1.5
Propanal	0.25	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	0.25	0.40
Benzaldehyde	0.25	Not Detected
Pentanal	0.25	0.29 M
Isopentanal	0.25	Not Detected
Hexanal	0.25	0.45
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/28Sep2009.b/f0928012.d
Lab Smp Id: 0909546C-44A
Inj Date : 28-SEP-2009 12:42
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-44A;
Misc Info :
Comment :
Method : /chem/hplcf.i/28Sep2009.b/F09D0904.m
Meth Date : 28-Sep-2009 09:47 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	3.060	3.073	-0.013	26227414		
2 FORMALDEHYDE	4.173	4.143	0.030	1029699	8.65338	3.46
3 ACETALDEHYDE	5.046	5.003	0.043	346110	3.85583	1.54
4 ACROLEIN	Compound Not Detected.					
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	9.153	9.023	0.130	56512	1.00102	0.400
10 BENZALDEHYDE	Compound Not Detected.					
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.253	12.129	0.124	34702	0.73201	0.293
16 HEXANAL	14.553	14.463	0.090	47440	1.12963	0.452

Data File: /var/chem/hplcf.i/28Sep2009.b/f0928012.d

Date : 28-SEP-2009 12:42

Client ID:

Instrument: hplcf.i

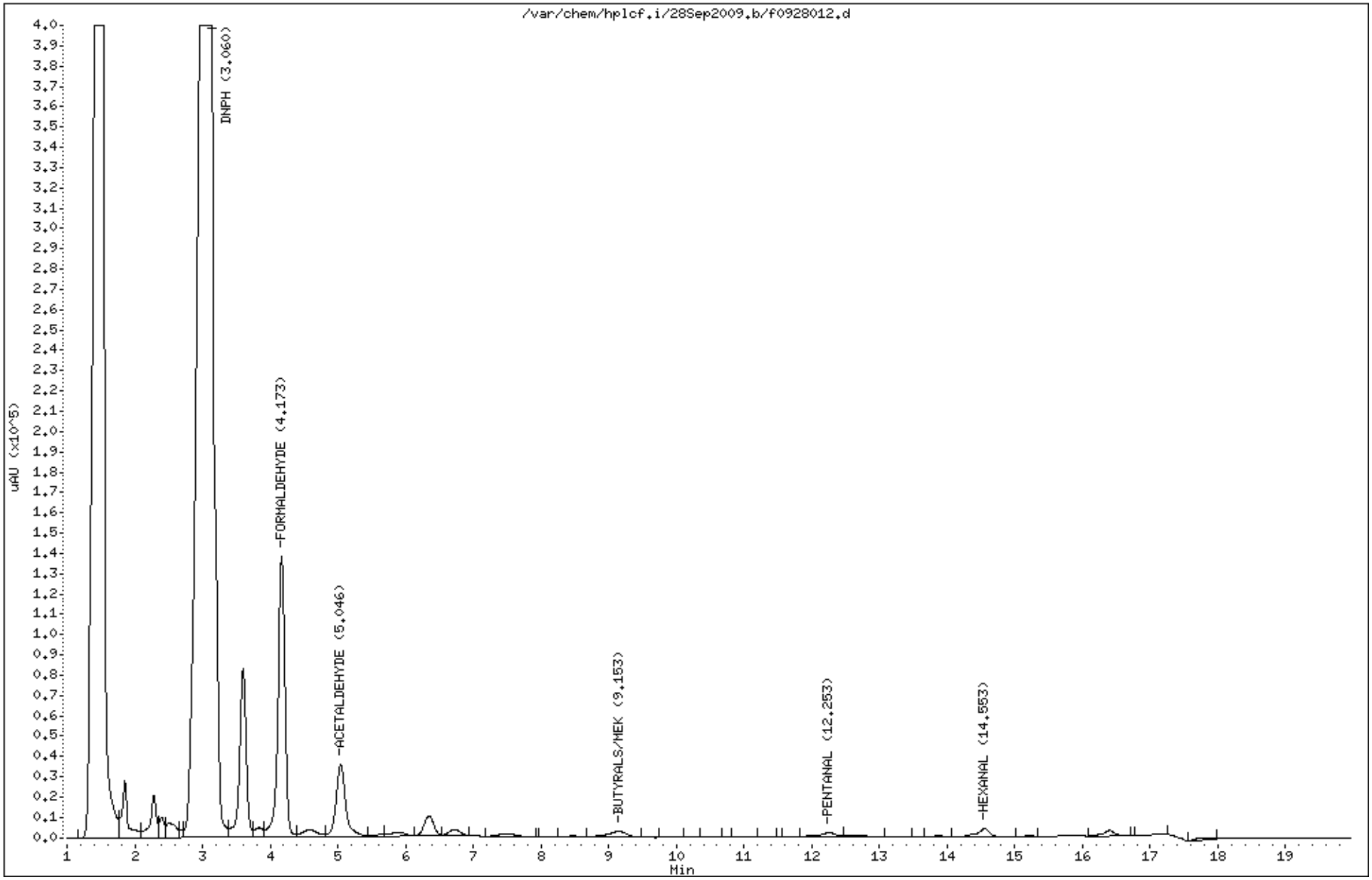
Sample Info: ;0909546C-44A;

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: 106800

Lab ID#: 0909546C-45A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	130
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.3
Benzaldehyde	1.2	3.3
Pentanal	1.2	7.7 M
Hexanal	1.2	57
Acrolein	1.2	2.2

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106800

Lab ID#: 0909546C-45A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925083**	**Date of Collection:**	**9/23/09**
Dil. Factor:	**5.00**	**Date of Analysis:**	**9/26/09 02:59 PM**
		Date of Extraction:	**9/25/09**

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	130
Acetaldehyde	2.5	Not Detected
Propanal	1.2	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.3
Benzaldehyde	1.2	3.3
Pentanal	1.2	7.7 M
Isopentanal	1.2	Not Detected
Hexanal	1.2	57
Acrolein	1.2	2.2

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/25Sep2009.b/f0925083.d
Lab Smp Id: 0909546C-45A Client Smp ID: 5X
Inj Date : 26-SEP-2009 14:59
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-45A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.065	3.054	0.011	4008666		
2 FORMALDEHYDE	4.172	4.147	0.025	7922342	66.5777	133
3 ACETALDEHYDE	5.038	5.013	0.025	92175	1.02687	2.05
4 ACROLEIN	6.085	6.027	0.058	89453	1.08977	2.18
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	9.145	9.053	0.092	36195	0.64113	1.28
10 BENZALDEHYDE	10.632	10.527	0.105	65862	1.63517	3.27
11 ISO-PENTANAL	Compound Not Detected.					
12 PENTANAL	12.238	12.147	0.091	182337	3.84619	7.69
16 HEXANAL	14.545	14.480	0.065	1196647	28.4937	57.0

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925083.d

Page 1

Date : 26-SEP-2009 14:59

Client ID: 5X

Instrument: hplcf.i

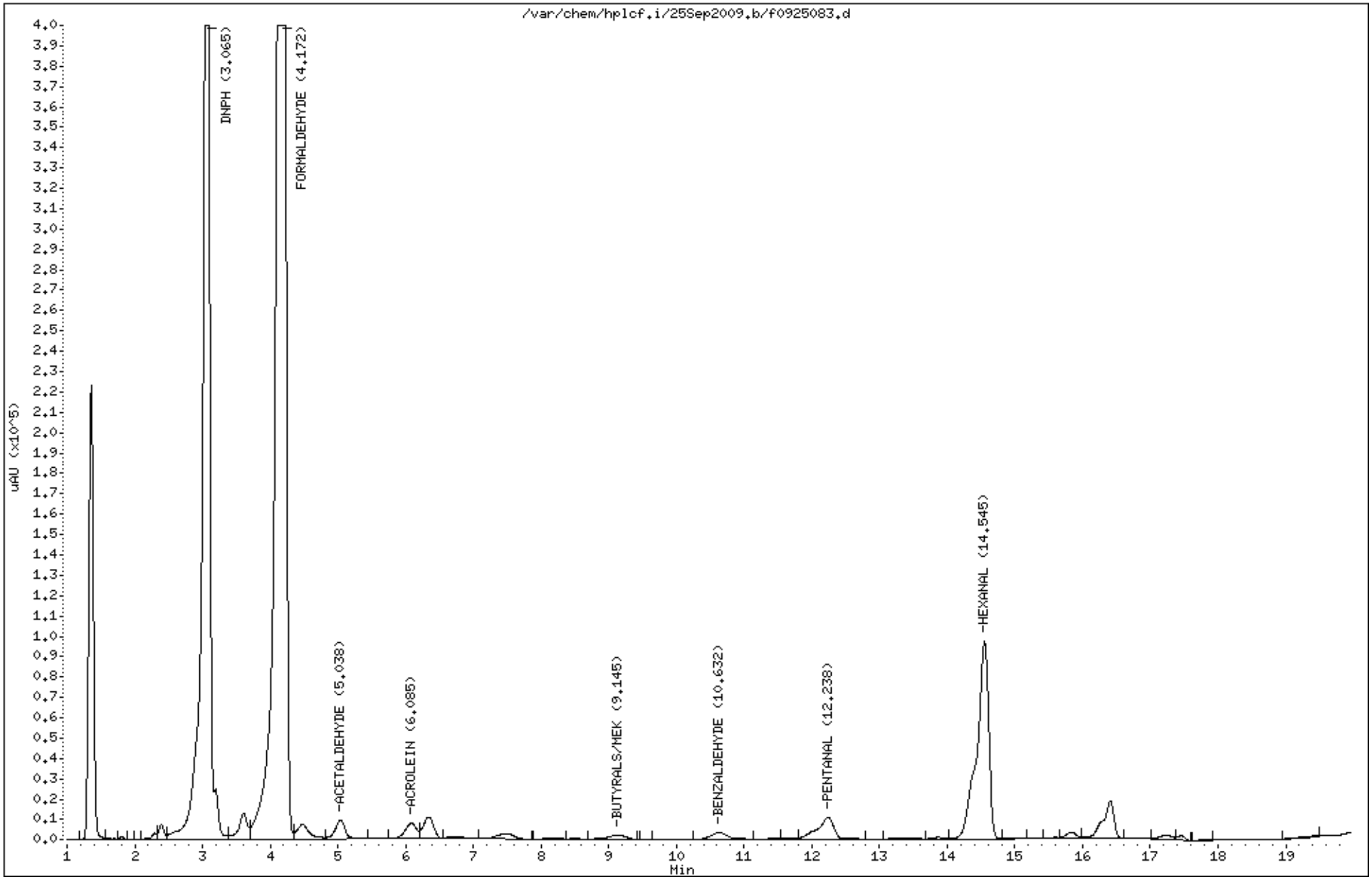
Sample Info: ;0909546C-45A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0060

Air Toxics LTD.
Laboratory Services Since 1989

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 106801

Lab ID#: 0909546C-46A

Compound	Rpt. Limit (ug)	Amount (ug)
Formaldehyde	5.0	120
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.5
Benzaldehyde	1.2	2.0
Pentanal	1.2	8.0 M
Isopentanal	1.2	1.5 M
Hexanal	1.2	47
Acrolein	1.2	1.6

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106801

Lab ID#: 0909546C-46A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925084**	**Date of Collection: 9/23/09**
Dil. Factor:	**5.00**	**Date of Analysis: 9/26/09 03:20 PM**
		Date of Extraction: 9/25/09

Compound	**Rpt. Limit (ug)**	**Amount (ug)**
Formaldehyde	5.0	120
Acetaldehyde	2.5	Not Detected
Propanal	1.2	Not Detected
Methyl Ethyl Ketone/Butyraldehydes	1.2	1.5
Benzaldehyde	1.2	2.0
Pentanal	1.2	8.0 M
Isopentanal	1.2	1.5 M
Hexanal	1.2	47
Acrolein	1.2	1.6

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/25Sep2009.b/f0925084.d
Lab Smp Id: 0909546C-46A Client Smp ID: 5X
Inj Date : 26-SEP-2009 15:20
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-46A;5X
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.065	3.054	0.011	3906614		
2 FORMALDEHYDE	4.179	4.147	0.032	7170592	60.2601	120
3 ACETALDEHYDE	5.045	5.013	0.032	74581	0.83087	1.66
4 ACROLEIN	6.099	6.027	0.072	66485	0.80996	1.62
6 PROPANAL	Compound Not Detected.					
9 BUTYRALS/MEK	9.152	9.053	0.099	41223	0.73019	1.46
10 BENZALDEHYDE	10.665	10.527	0.138	41050	1.01916	2.04
11 ISO-PENTANAL	11.759	11.627	0.132	35400	0.74674	1.49
12 PENTANAL	12.272	12.147	0.125	189486	3.99699	7.99
16 HEXANAL	14.565	14.480	0.085	990237	23.5788	47.2

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925084.d

Date : 26-SEP-2009 15:20

Client ID: 5X

Instrument: hplcf.i

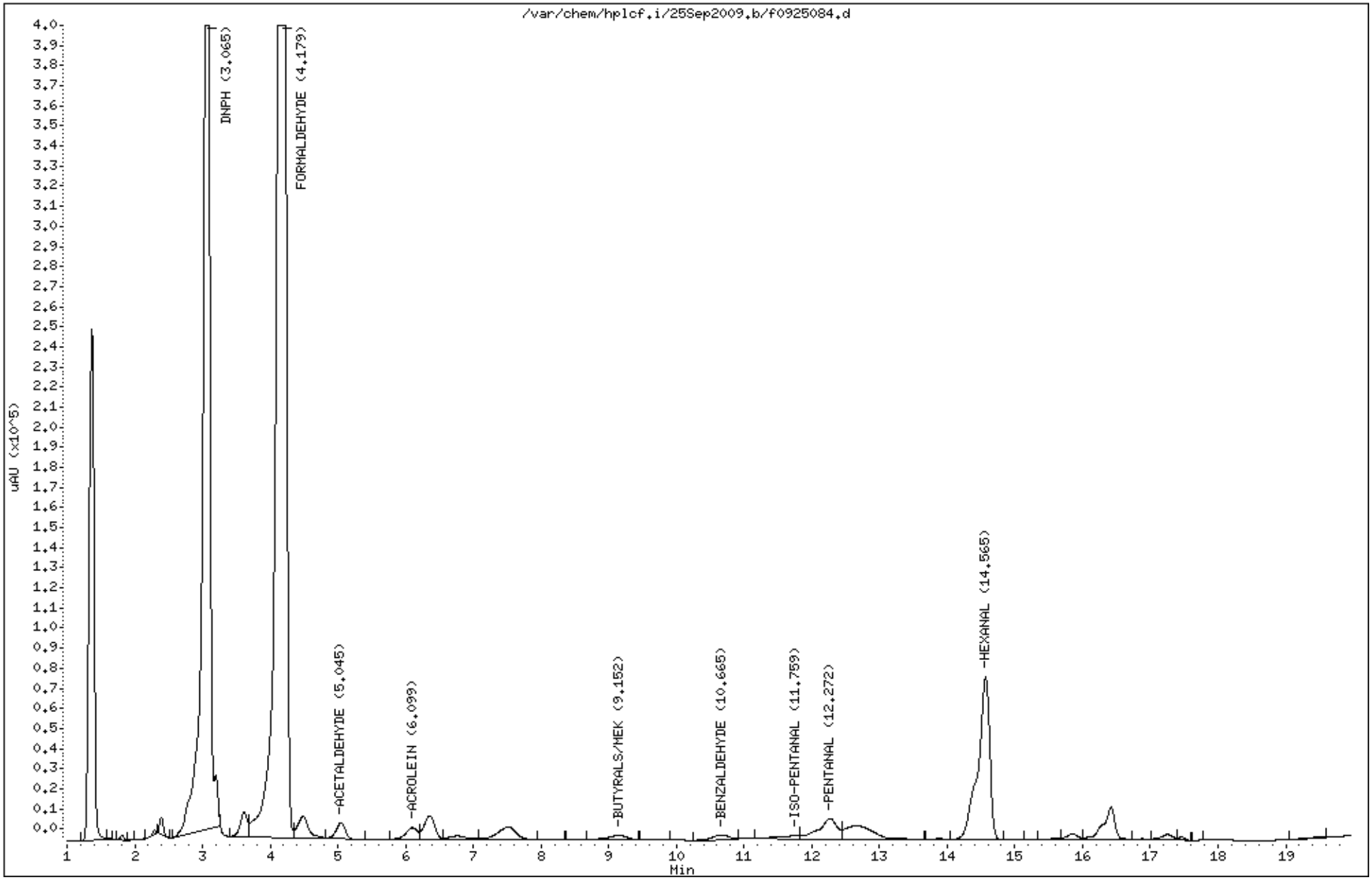
Sample Info: ;0909546C-46A;5X

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0070

Summary of Detected Compounds
RADIELLO ANALYSIS BY HPLC/UV

Client Sample ID: 106802

Lab ID#: 0909546C-47A

No Detections Were Found.

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: 106802

Lab ID#: 0909546C-47A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925022**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/09 05:45 PM**
		Date of Extraction: 9/25/09

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/25Sep2009.b/f0925022.d
Lab Smp Id: 0909546C-47A
Inj Date : 25-SEP-2009 17:45
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909546C-47A;
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.070	3.054	0.016	36806119		
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/25Sep2009.b/f0925022.d

Date : 25-SEP-2009 17:45

Client ID:

Instrument: hplcf.i

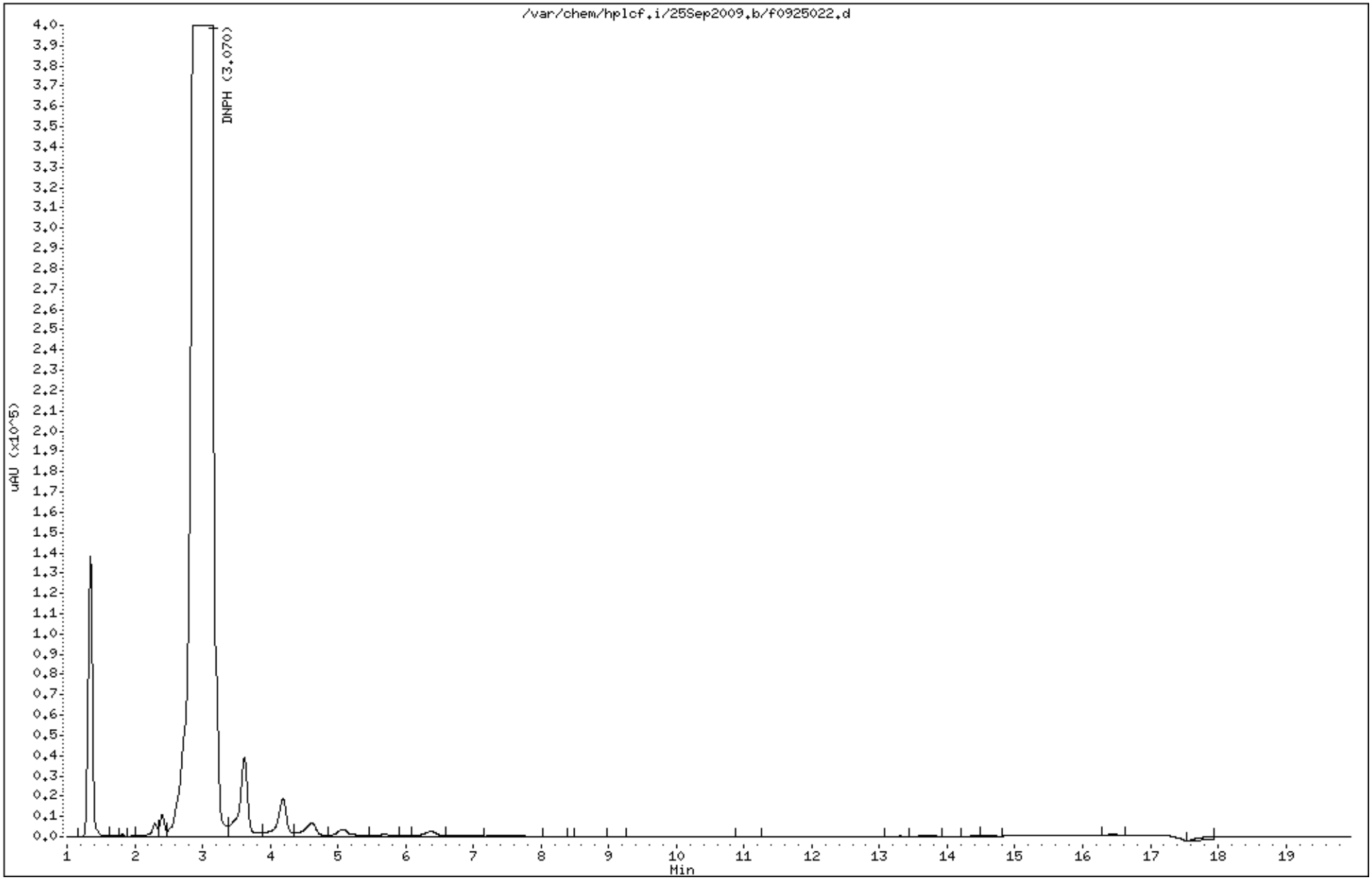
Sample Info: ;0909546C-47A;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0074

QC Results and Raw Data

Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: Lab Blank

Lab ID#: 0909546C-48A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925009**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/09 12:59 PM**
		Date of Extraction: 9/25/09

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/25Sep2009.b/f0925009.d
Lab Smp Id: 0909546C-BLK Client Smp ID: LAB BLANK
Inj Date : 25-SEP-2009 12:59
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909564C-BLK;
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.066	3.054	0.012	37629532		
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/25Sep2009.b/f0925009.d

Date : 25-SEP-2009 12:59

Client ID: LAB BLANK

Instrument: hplcf.i

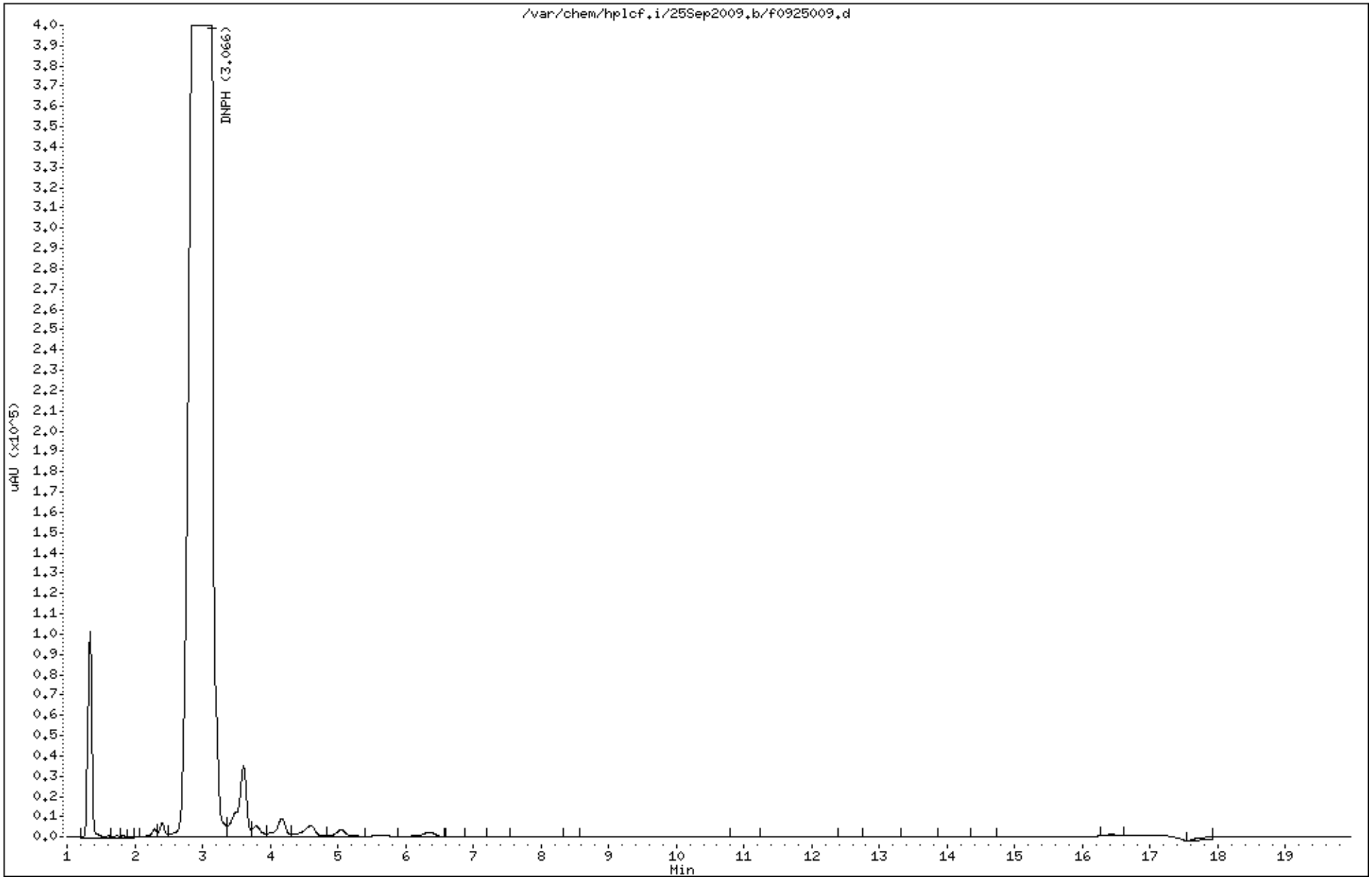
Sample Info: ;0909564C-BLK;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



SAMPLE RESULTS/SAMPLE RESULTS DUPLICATE

Lab Name: Air Toxics Ltd.

Lab File ID: f0925078.d & f0925077.d

Lab Sample ID: 43A & 43AA

Dilution: 5.00 & 5.00

Client Sample ID: 5X & 5X

Date Analyzed: 9/26/09 & 9/26/09

CAS Number	Compound	Original Amount	Original Flags	Duplicate Amount	Duplicate Flags	RPD	Result Less Than 5X RL
75-07-0	Acetaldehyde	ND		ND		0	
107-02-8	Acrolein	1.99		1.94		2.5	Y
100-52-7	Benzaldehyde	3		2.53		17	Y
50-00-0	Formaldehyde	138		137		0.73	
66-25-1	Hexanal	57		57		0	
590-86-3	Isopentanal	1.38		1.69		20	Y
9999-9999-007	Methyl Ethyl Ketone/Butyraldehydes	1.57		1.58		0.63	Y
110-62-3	Pentanal	10.7		9.69		9.9	
123-38-6	Propanal	ND	U	ND	U	0	

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

0088

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

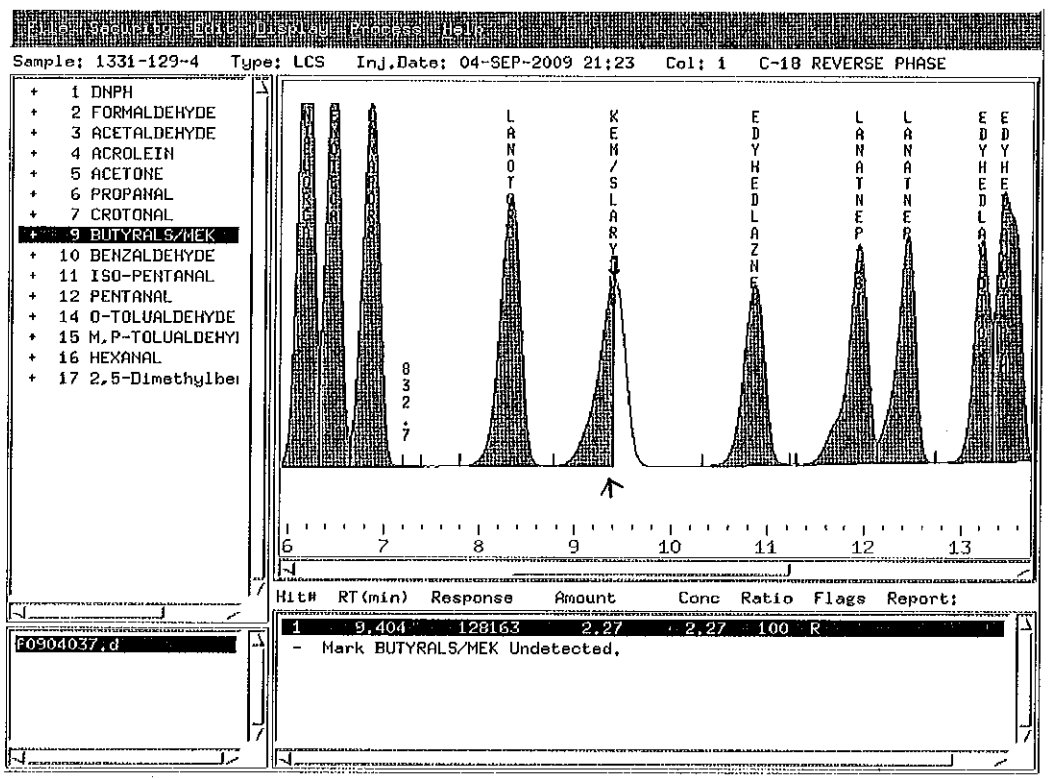
Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(466888)}{(118994)}$ × (1) = **3.92**

Reported Result: **3.92**

Signed: [signature] Date: 91809

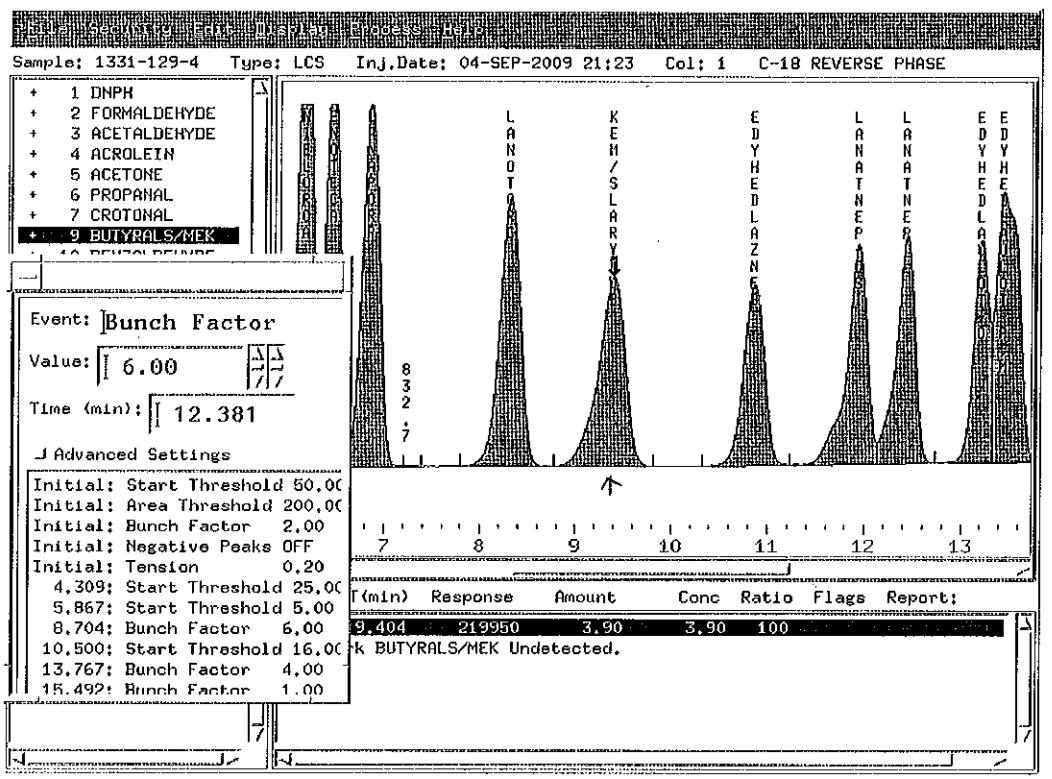
Revised 07/08

0089



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%**

ci 9/9/09

0092

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)	CONCENTRATIONS 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

Date : 04-SEP-2009 21:23

Client ID: LCS

Instrument: hplcf.i

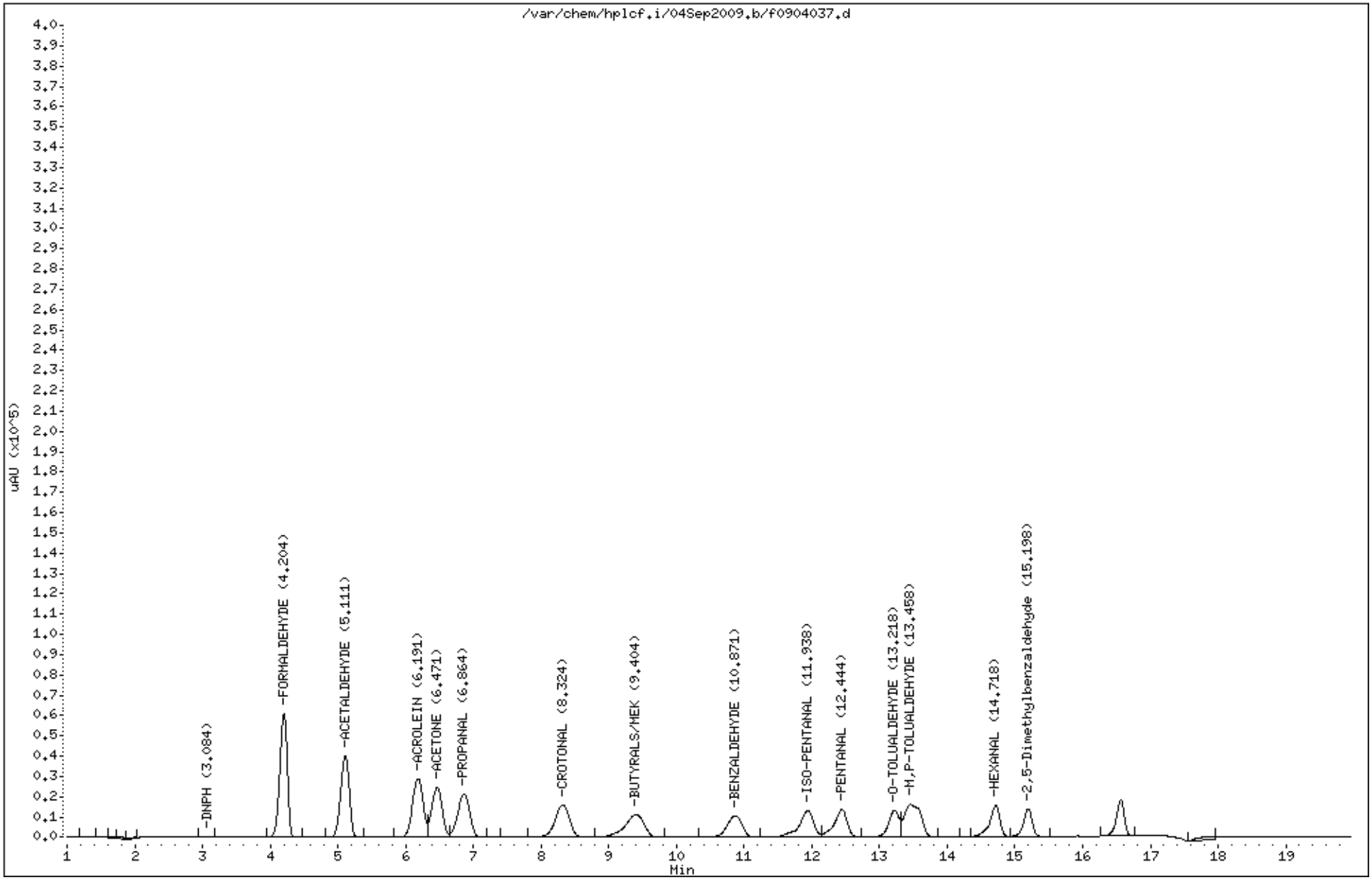
Sample Info: ;1331-129-4;LCS

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0095

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

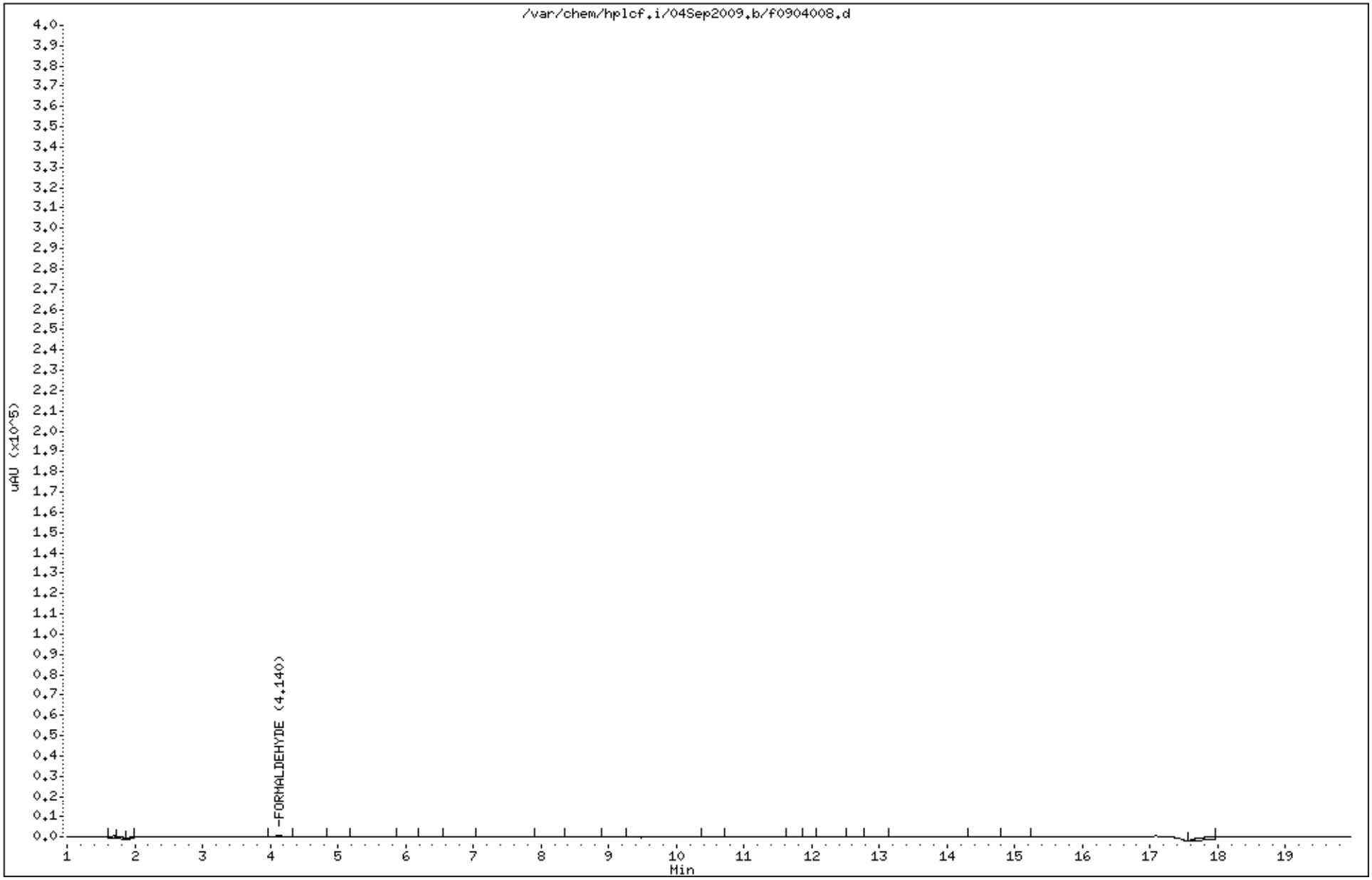
Sample Info: ;1331-139-.05;L1

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0097

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

Date : 04-SEP-2009 10:56

Client ID: L1

Instrument: hplcf.i

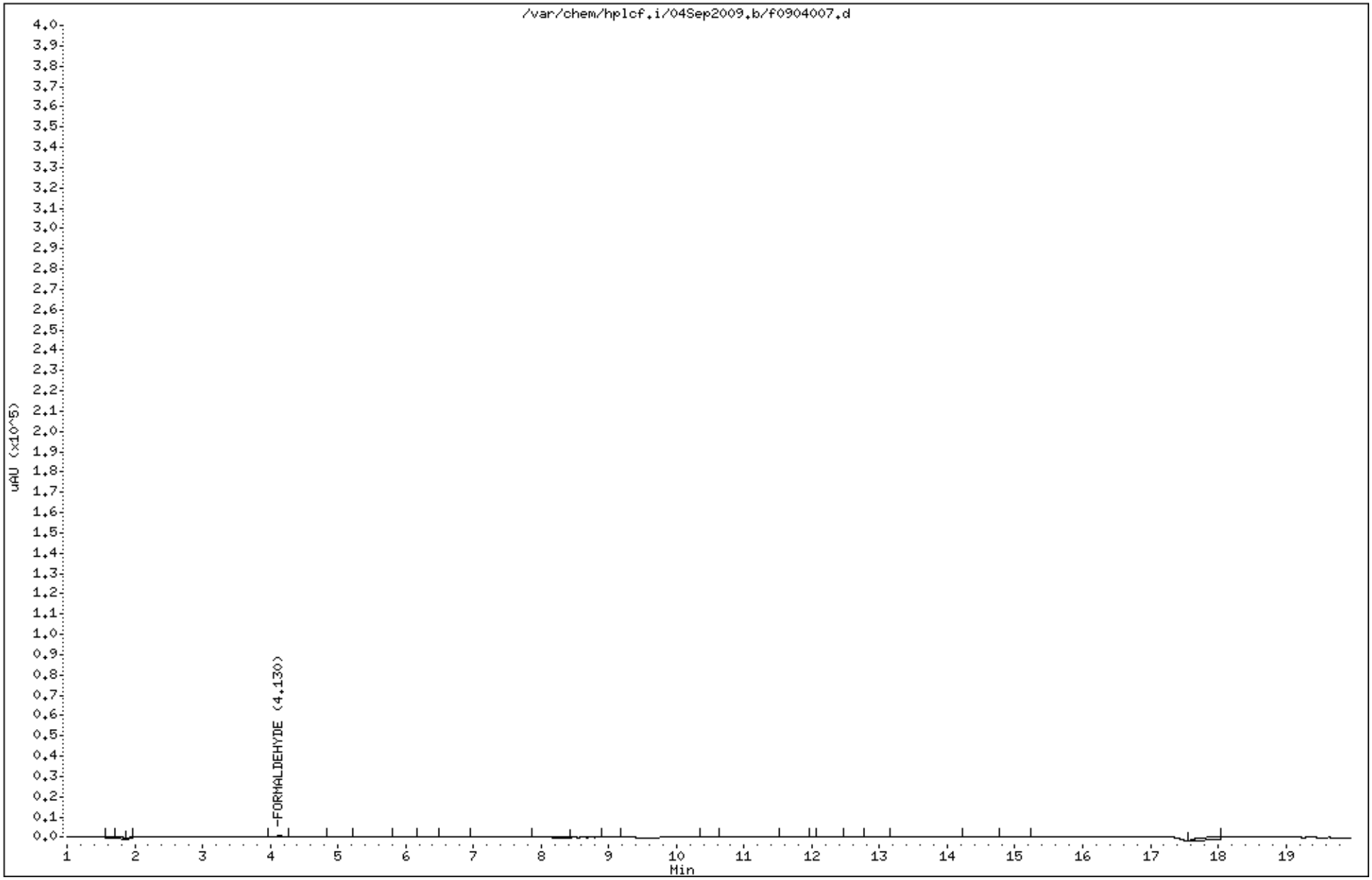
Sample Info: ;1331-139-.05;L1

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0099

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

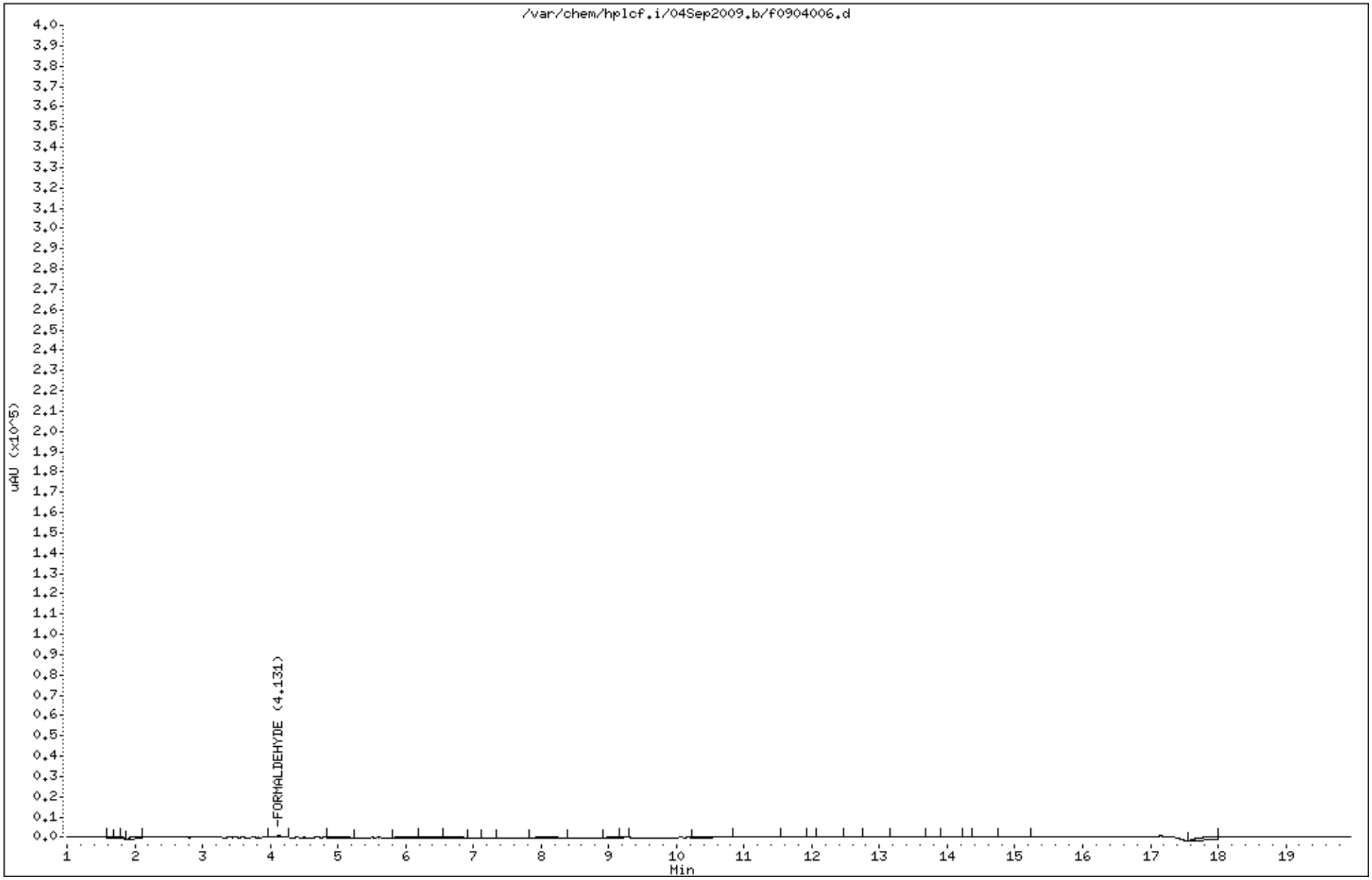
Sample Info: ;1331-139-.05;L1

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0101

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

0103

Date : 04-SEP-2009 12:20

Client ID: L2

Instrument: hplcf.i

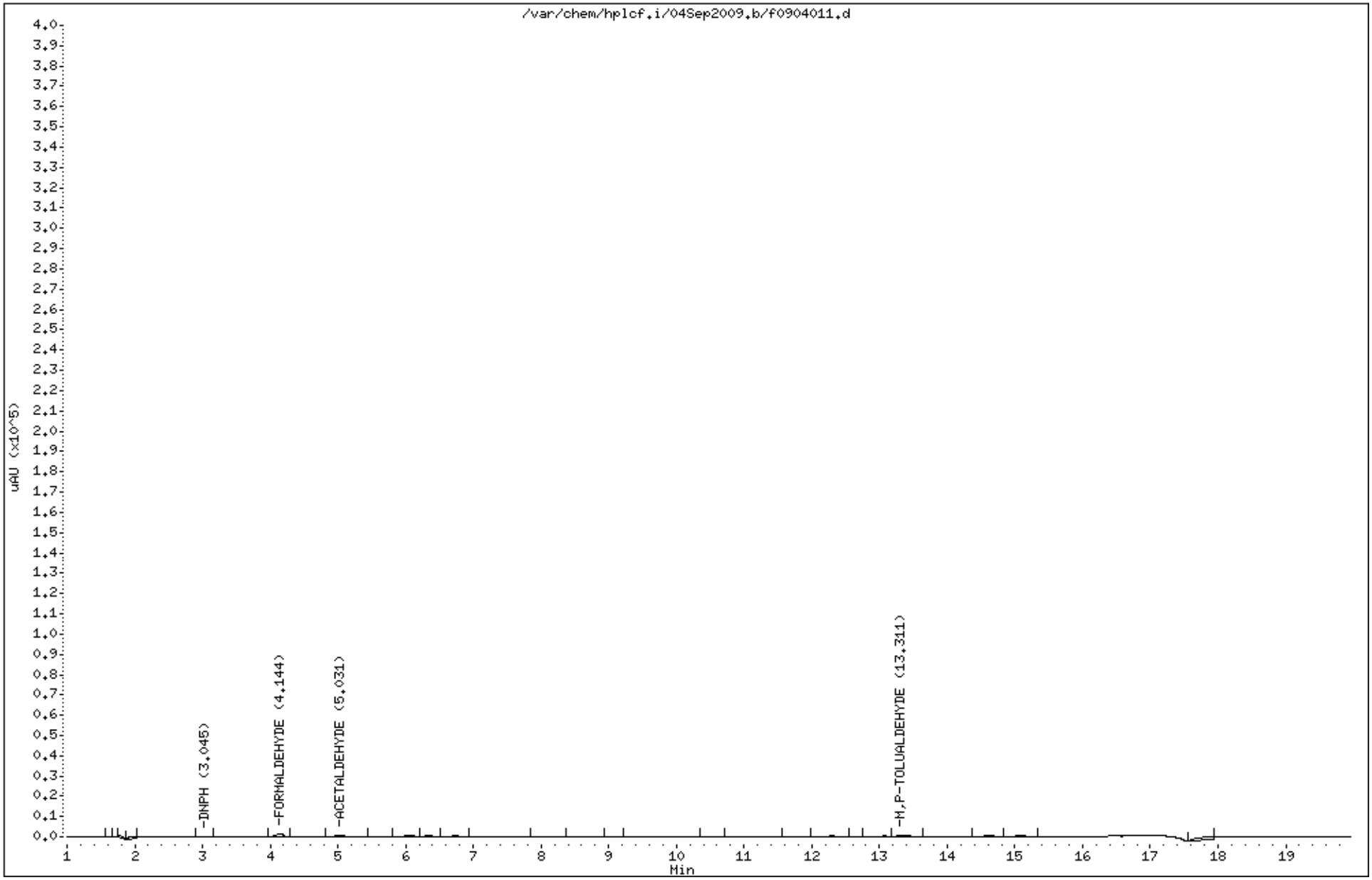
Sample Info: ;1331-139-.1;L2

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



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

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904010.d

Date : 04-SEP-2009 11:59

Client ID: L2

Instrument: hplcf.i

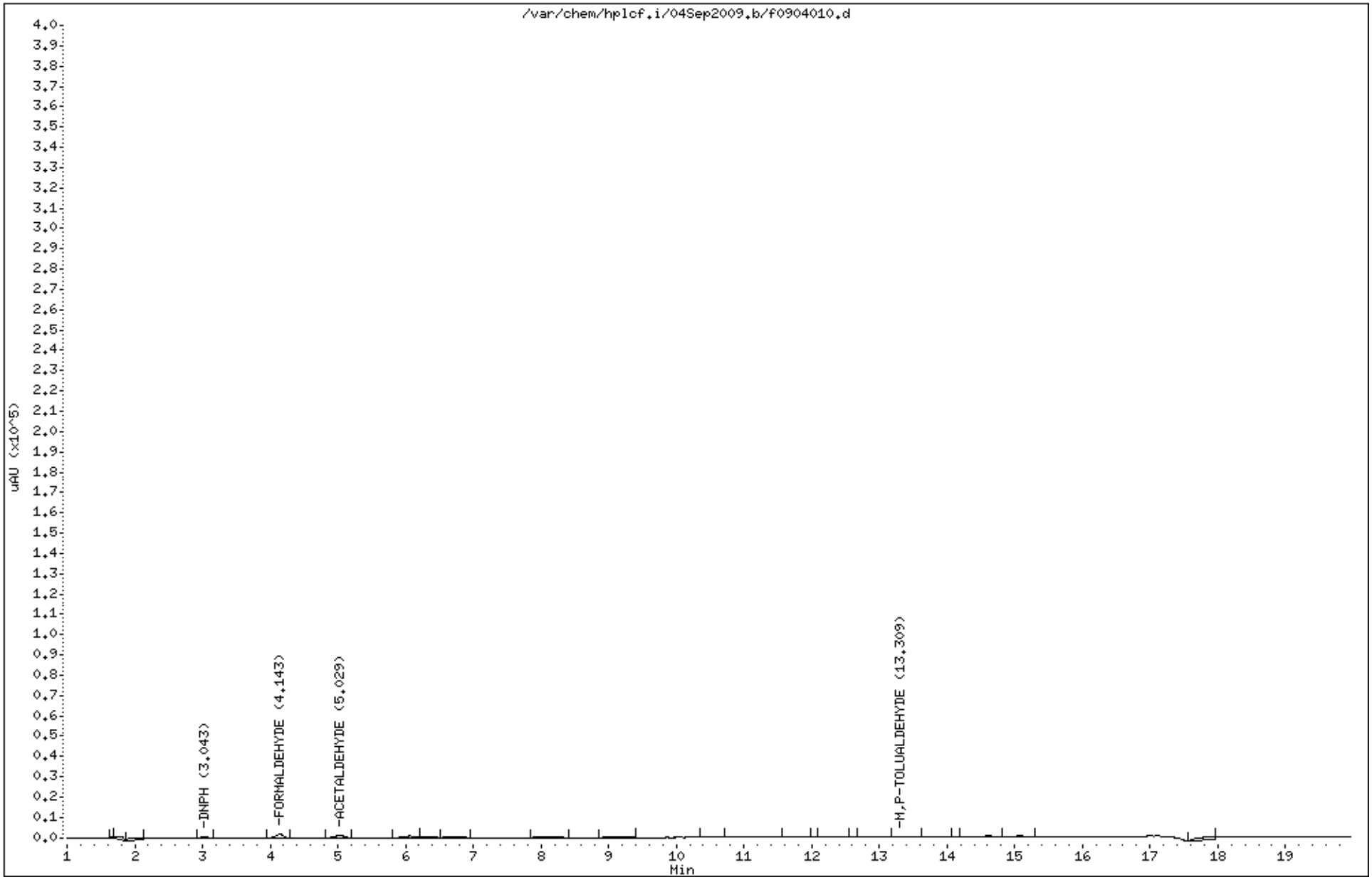
Sample Info: ;1331-139-.1;L2

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0105

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

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904009.d

Date : 04-SEP-2009 11:38

Client ID: L2

Instrument: hplcf.i

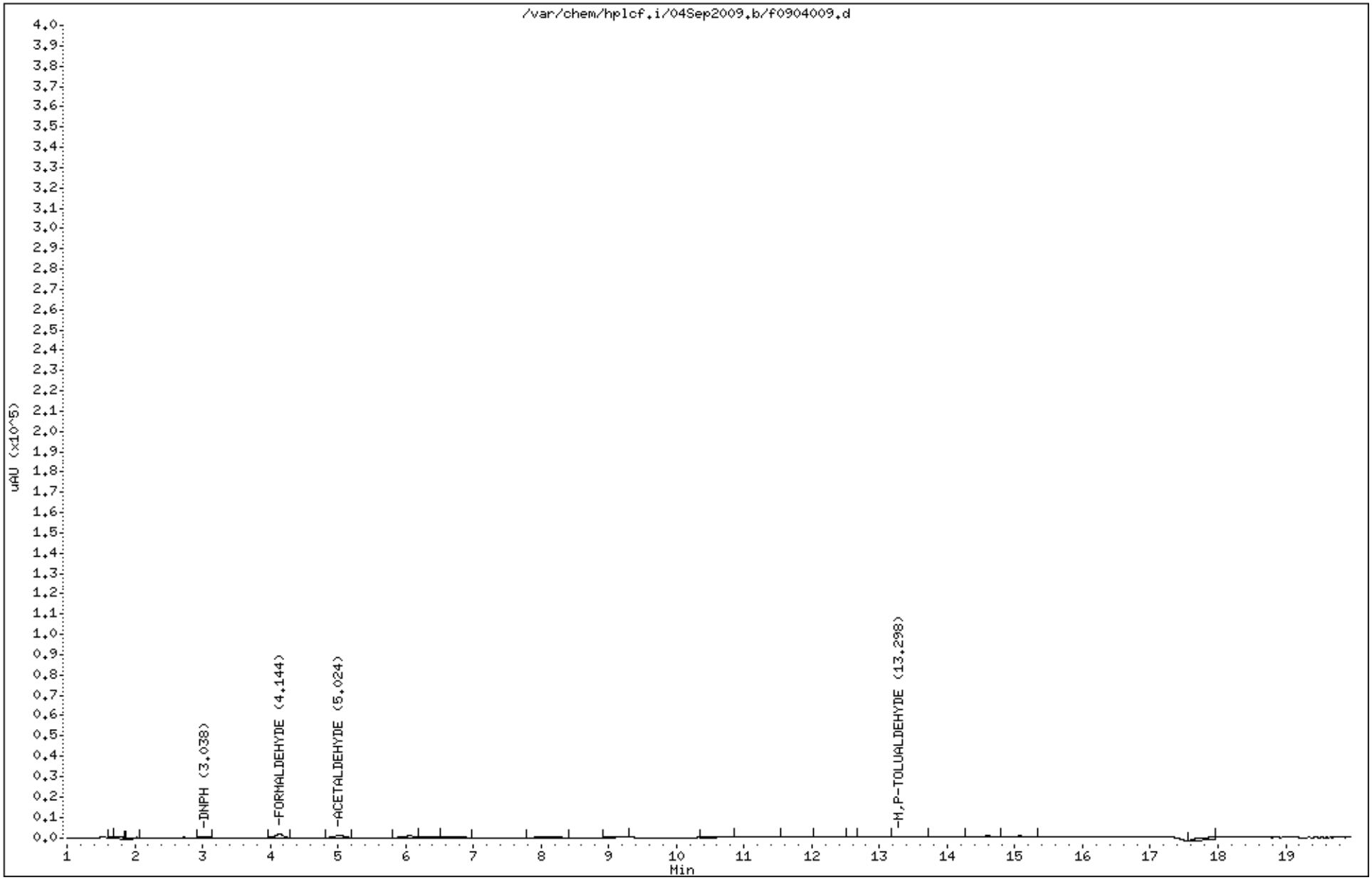
Sample Info: ;1331-139-.1;L2

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0107

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

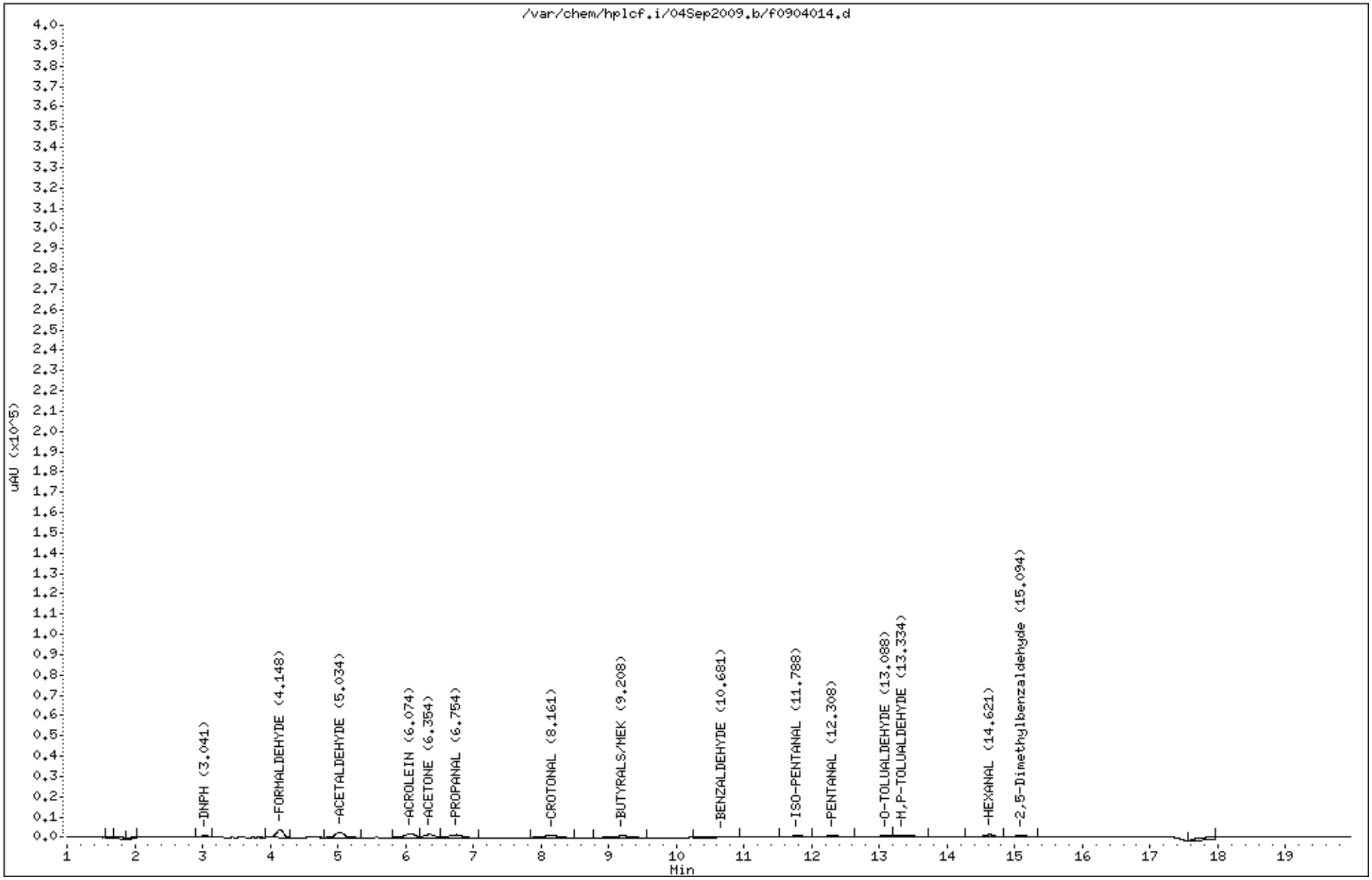
Cpnd Variable Local Compound Variable

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

0109

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904014.d
Date : 04-SEP-2009 13:23
Client ID: L3
Sample Info: ;1331-139-.25;L3
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/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

Date : 04-SEP-2009 13:02

Client ID: L3

Instrument: hplcf.i

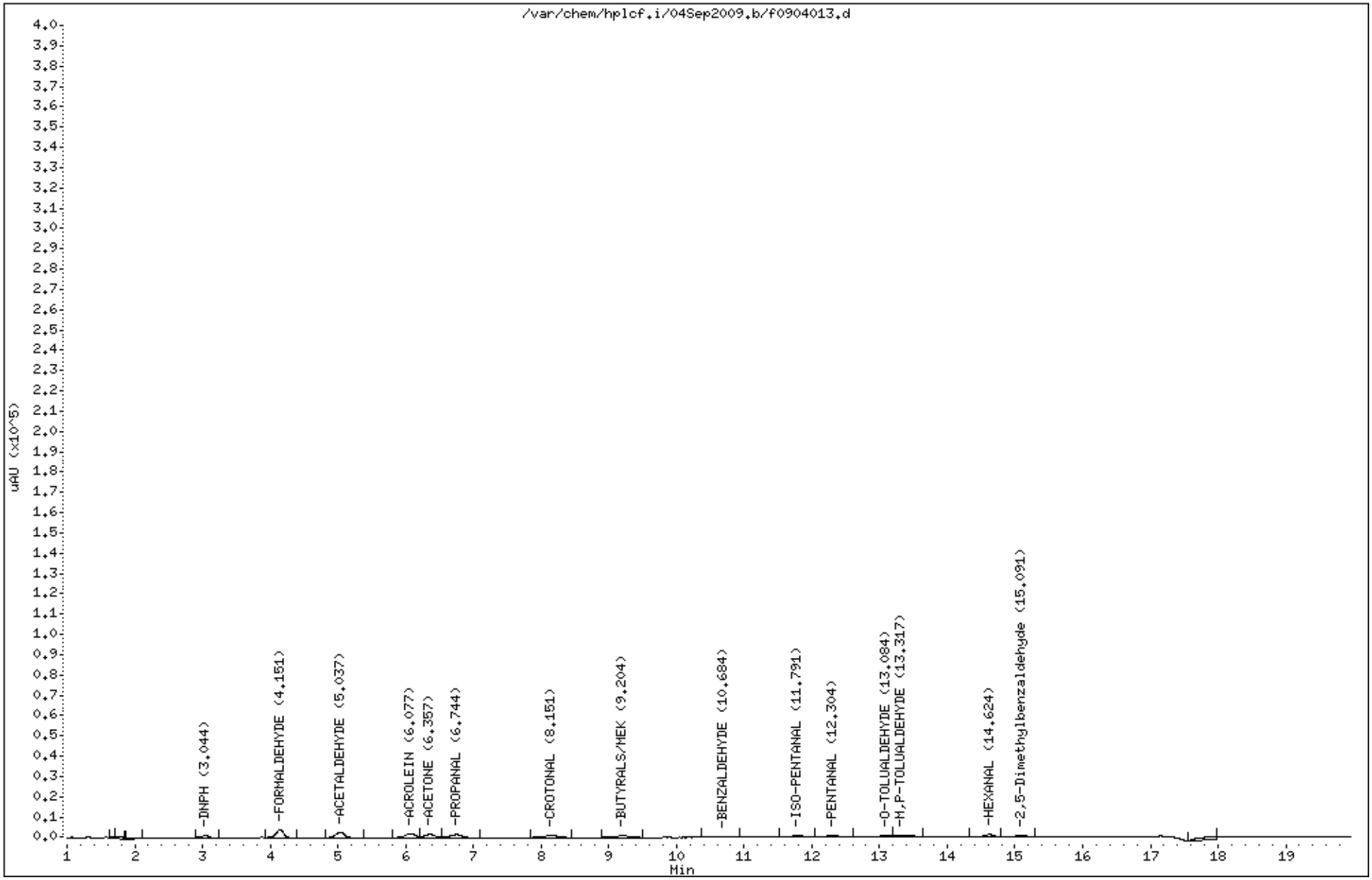
Sample Info: ;1331-139-.25;L3

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0111

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

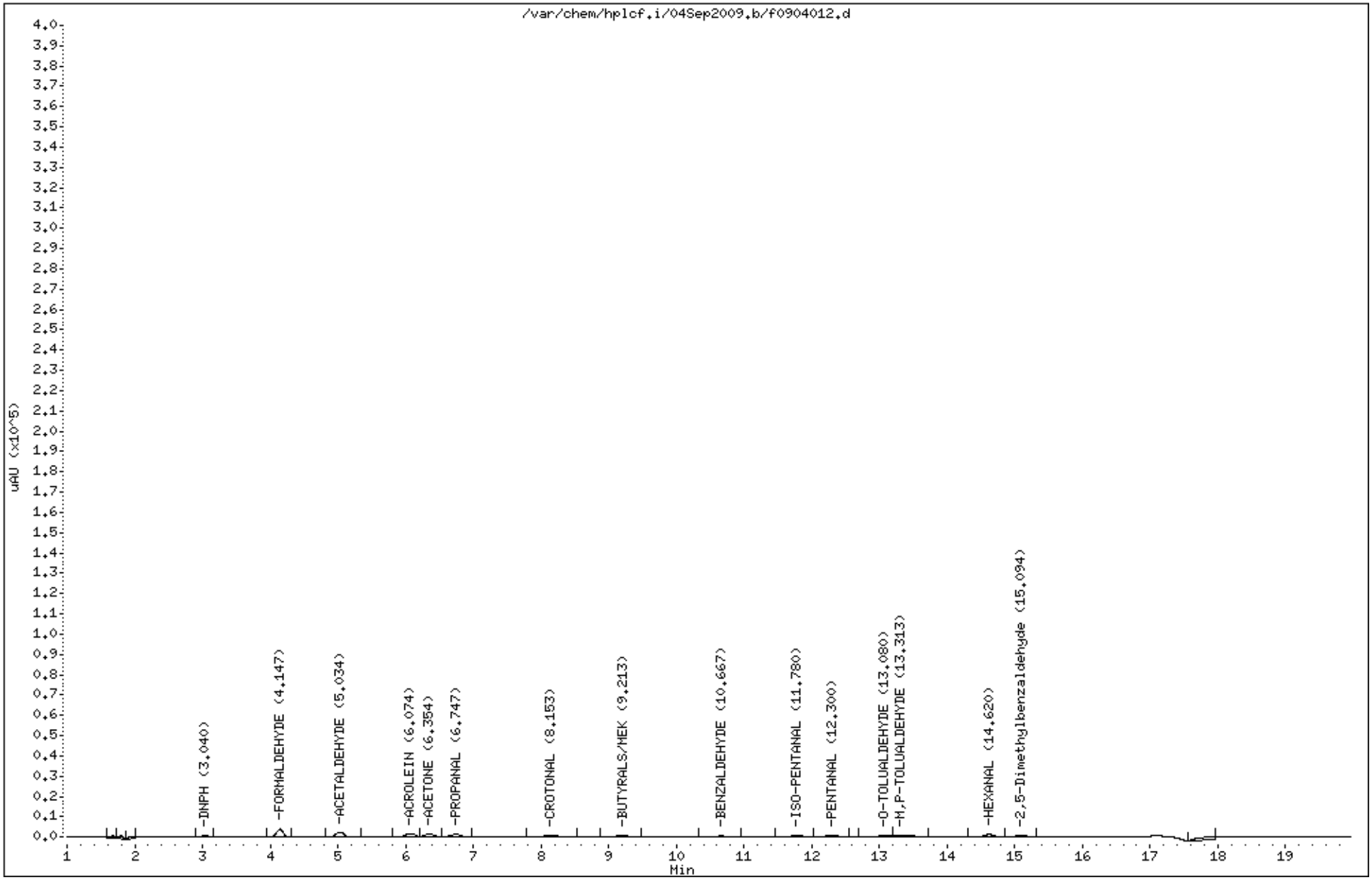
Sample Info: ;1331-139-.25;L3

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0113

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

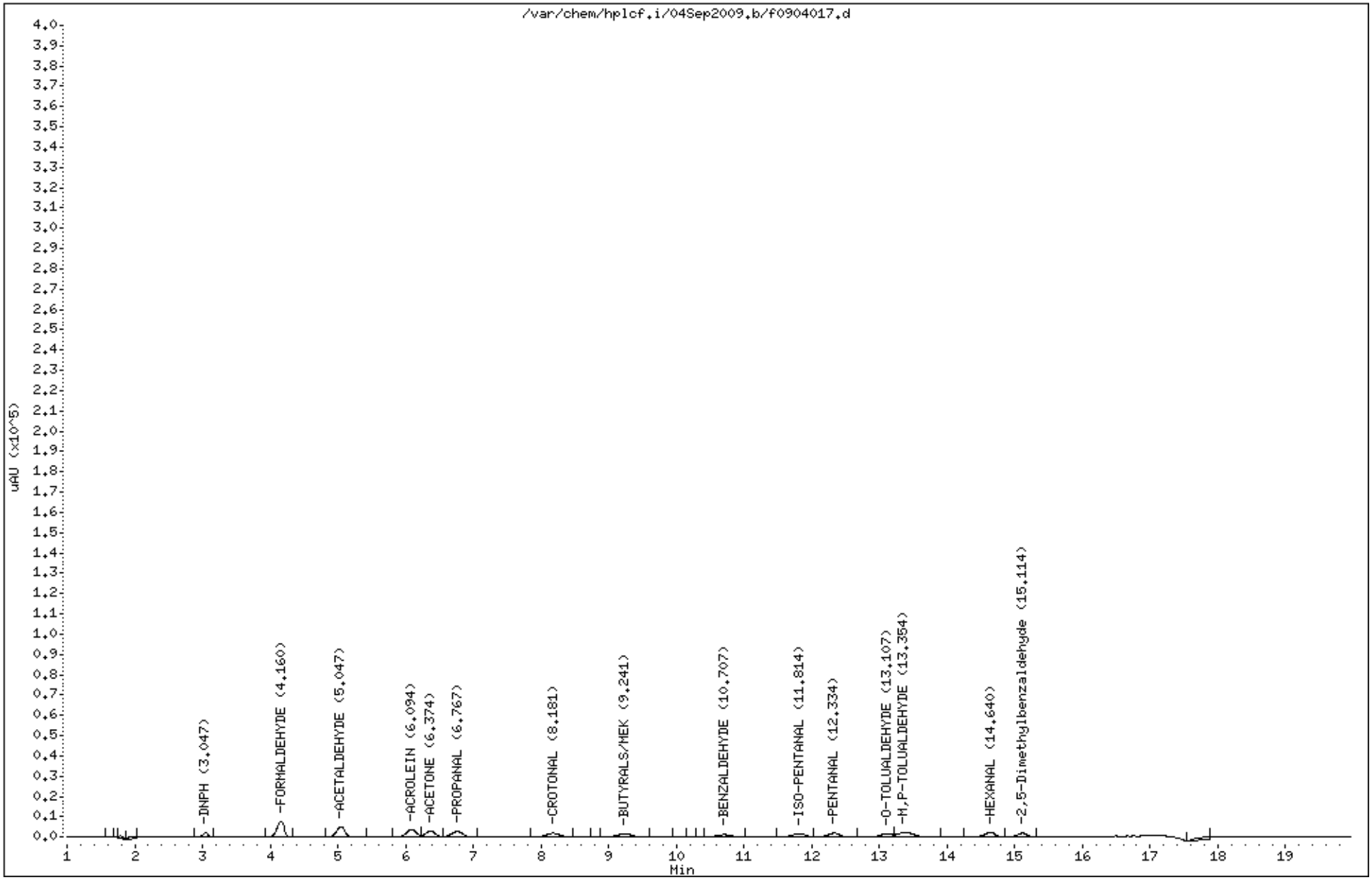
Concentration Formula: Amt * DF * CpndVariable

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

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

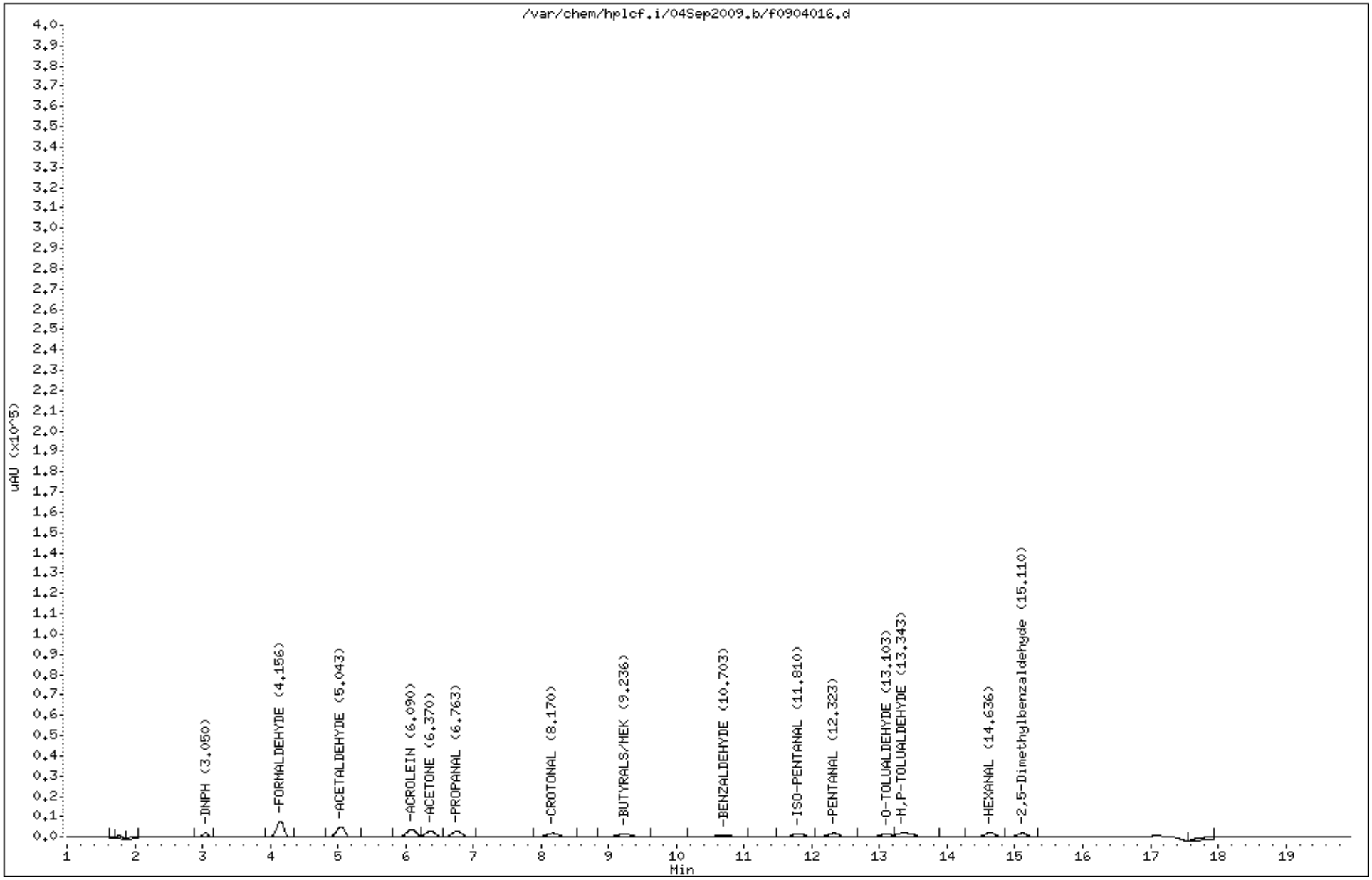
Sample Info: ;1331-138-.5;L4

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0117

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

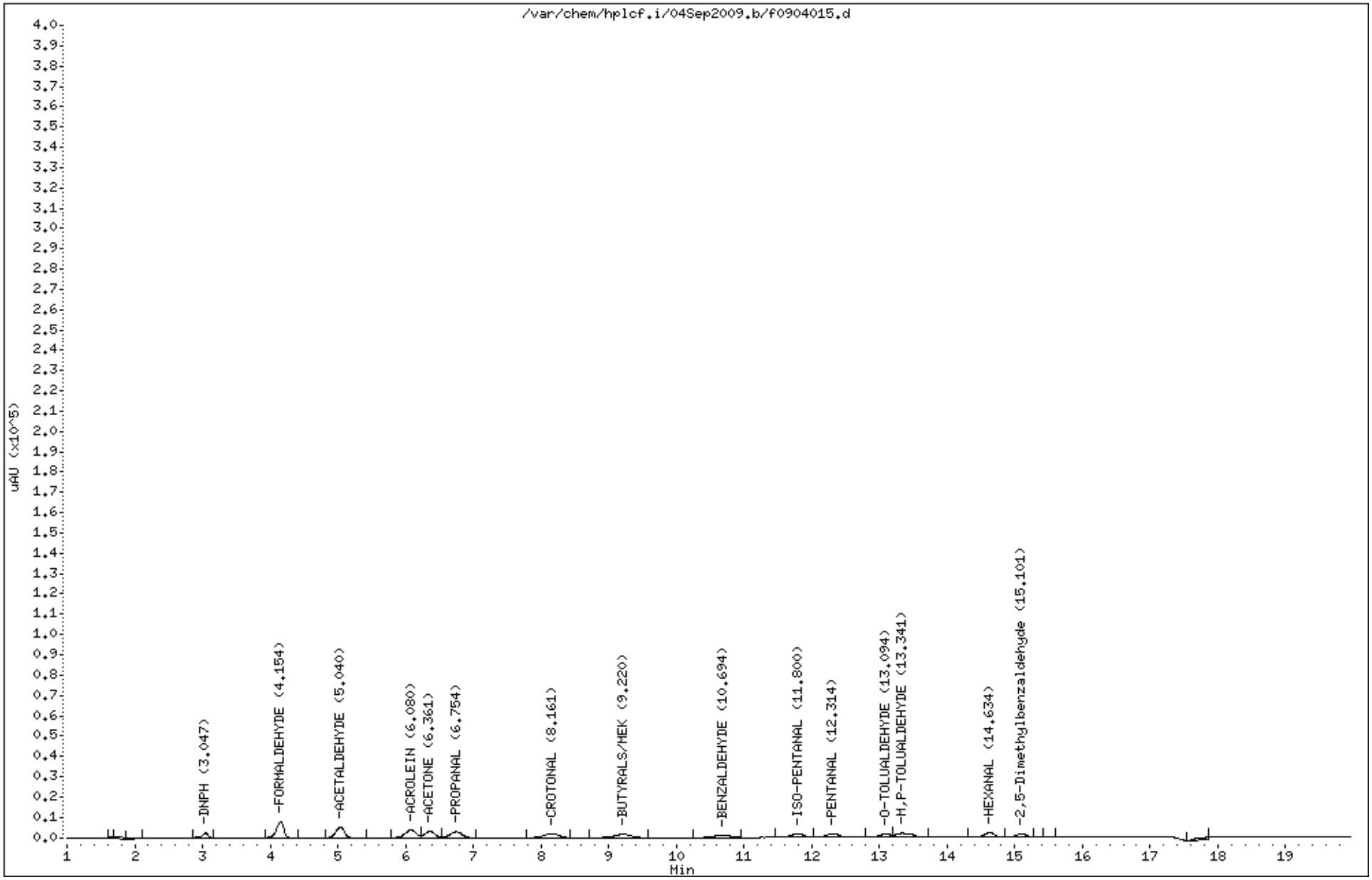
Concentration Formula: Amt * DF * CpndVariable

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
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/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

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904020.d

Date : 04-SEP-2009 15:28

Client ID: L5

Instrument: hplcf.i

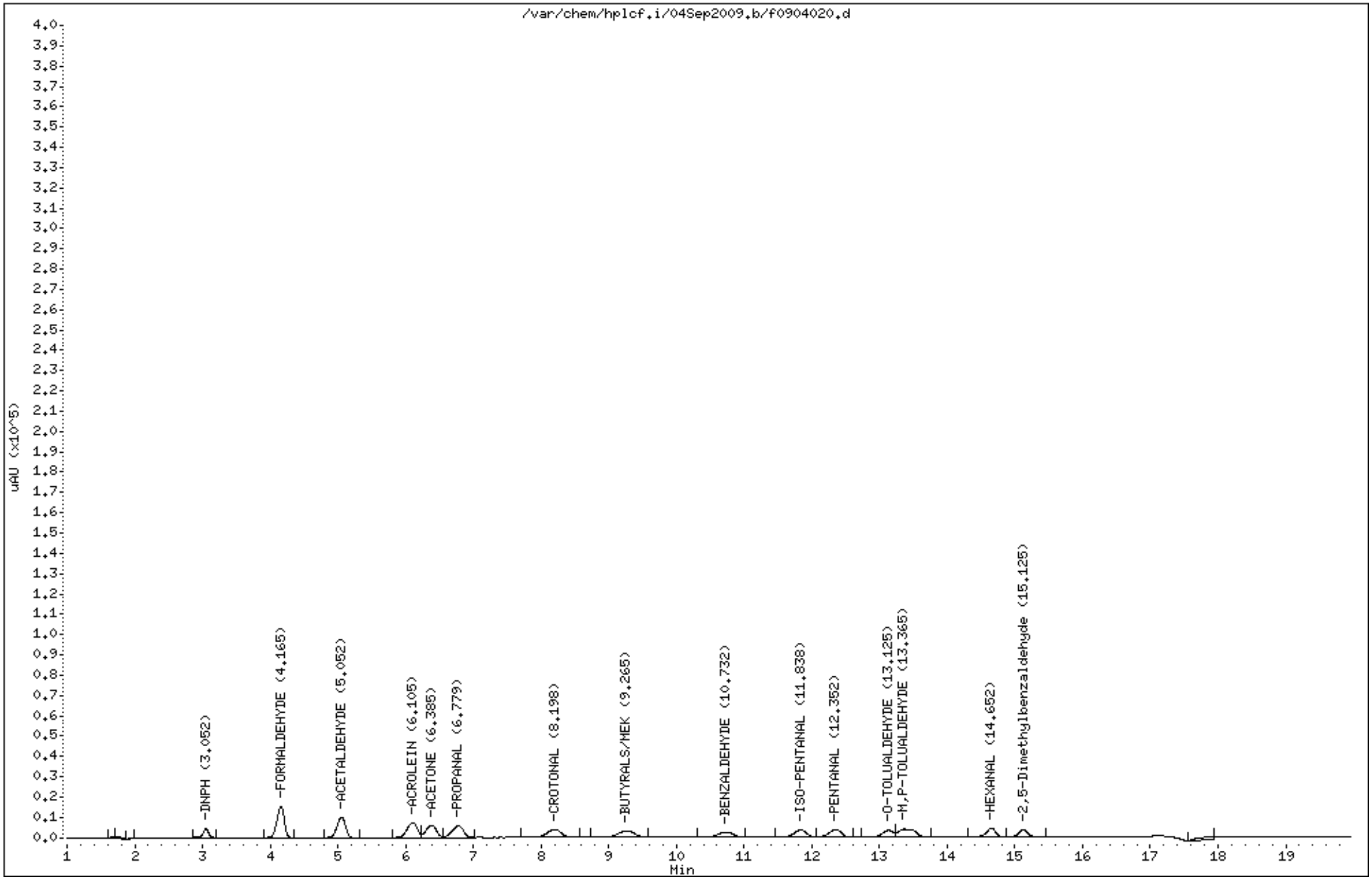
Sample Info: ;1331-138-1.0;L5

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0121

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

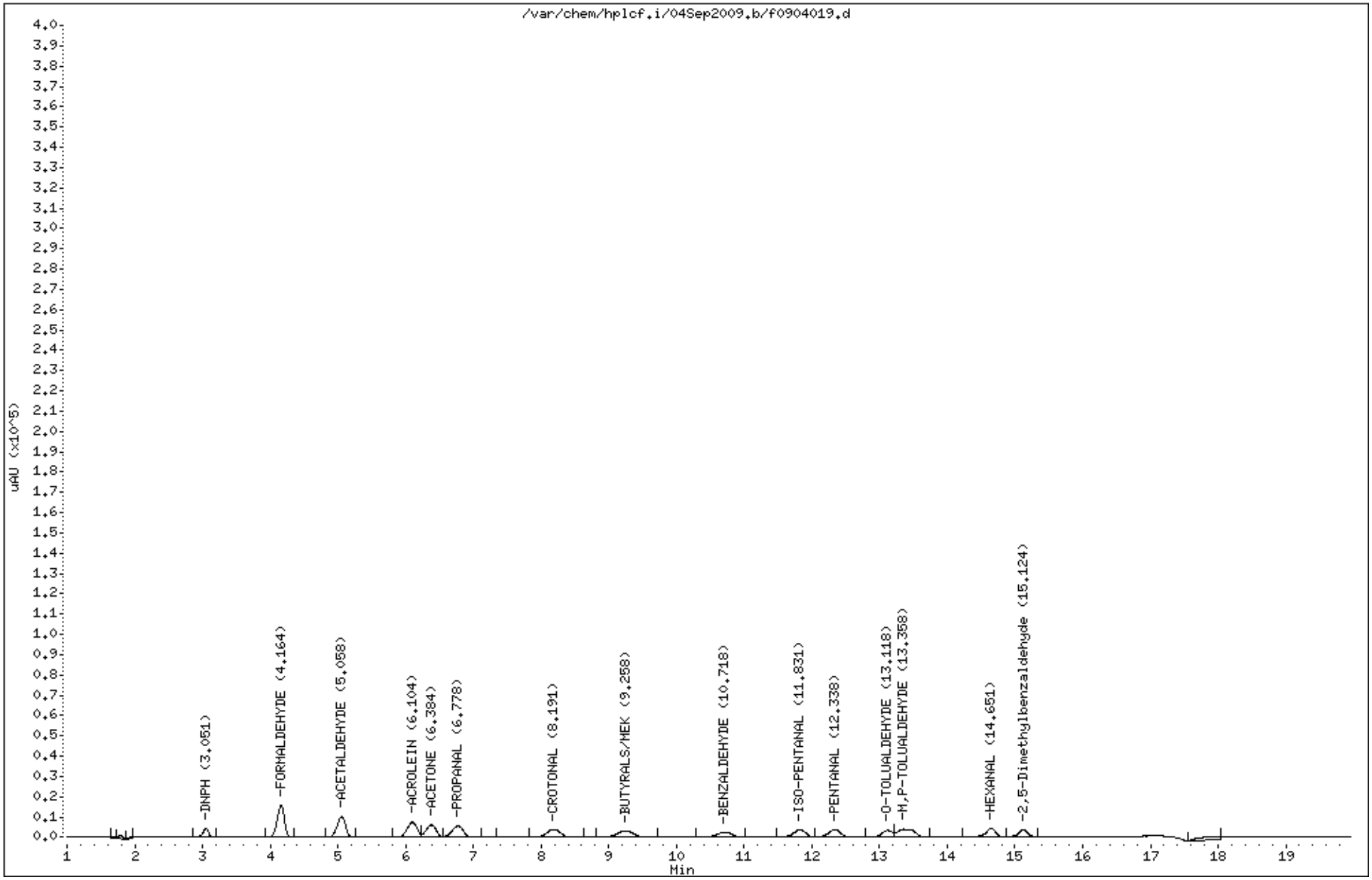
Sample Info: ;1331-138-1.0;L5

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0123

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

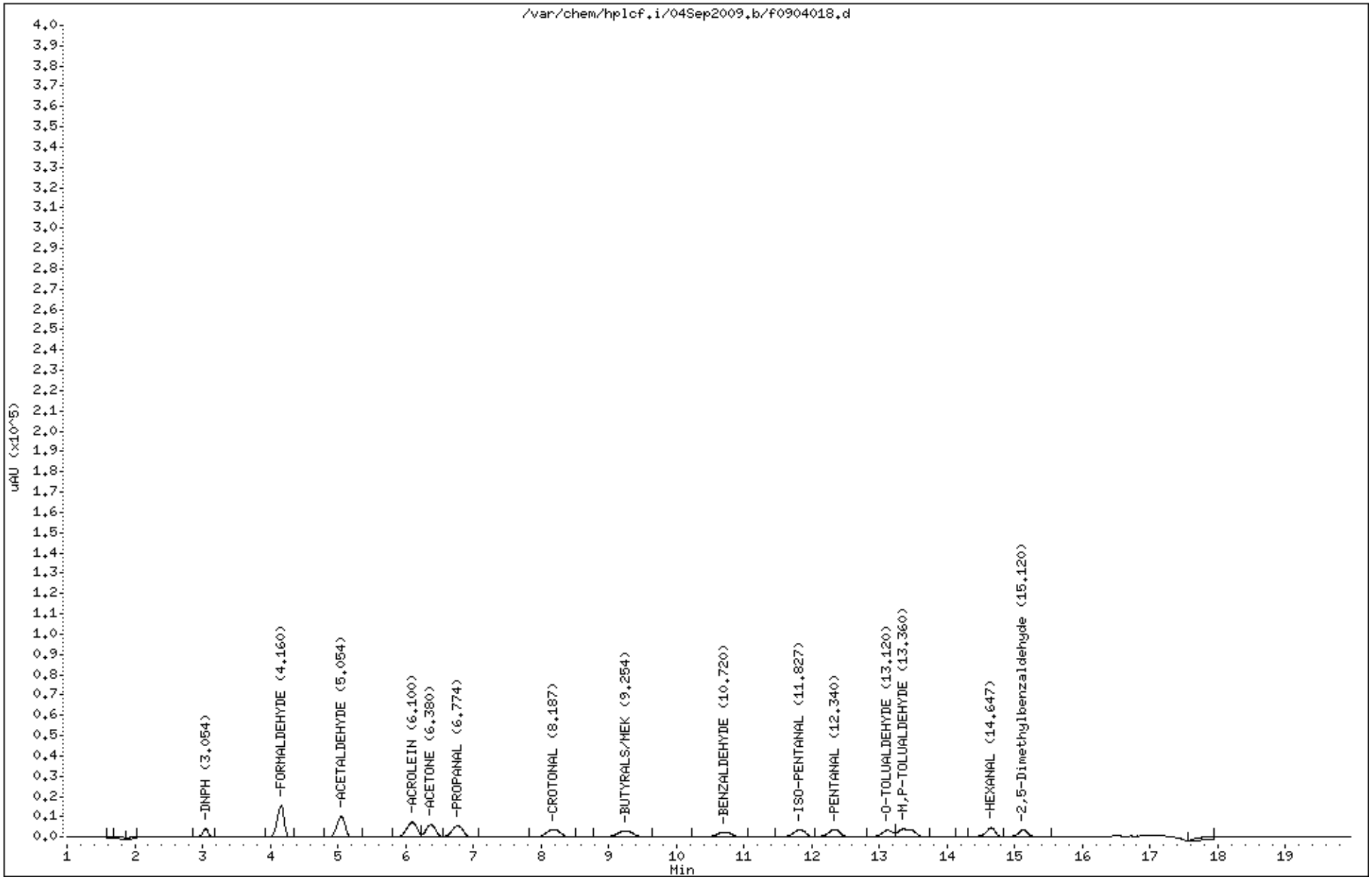
Sample Info: ;1331-138-1.0;L5

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0125

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

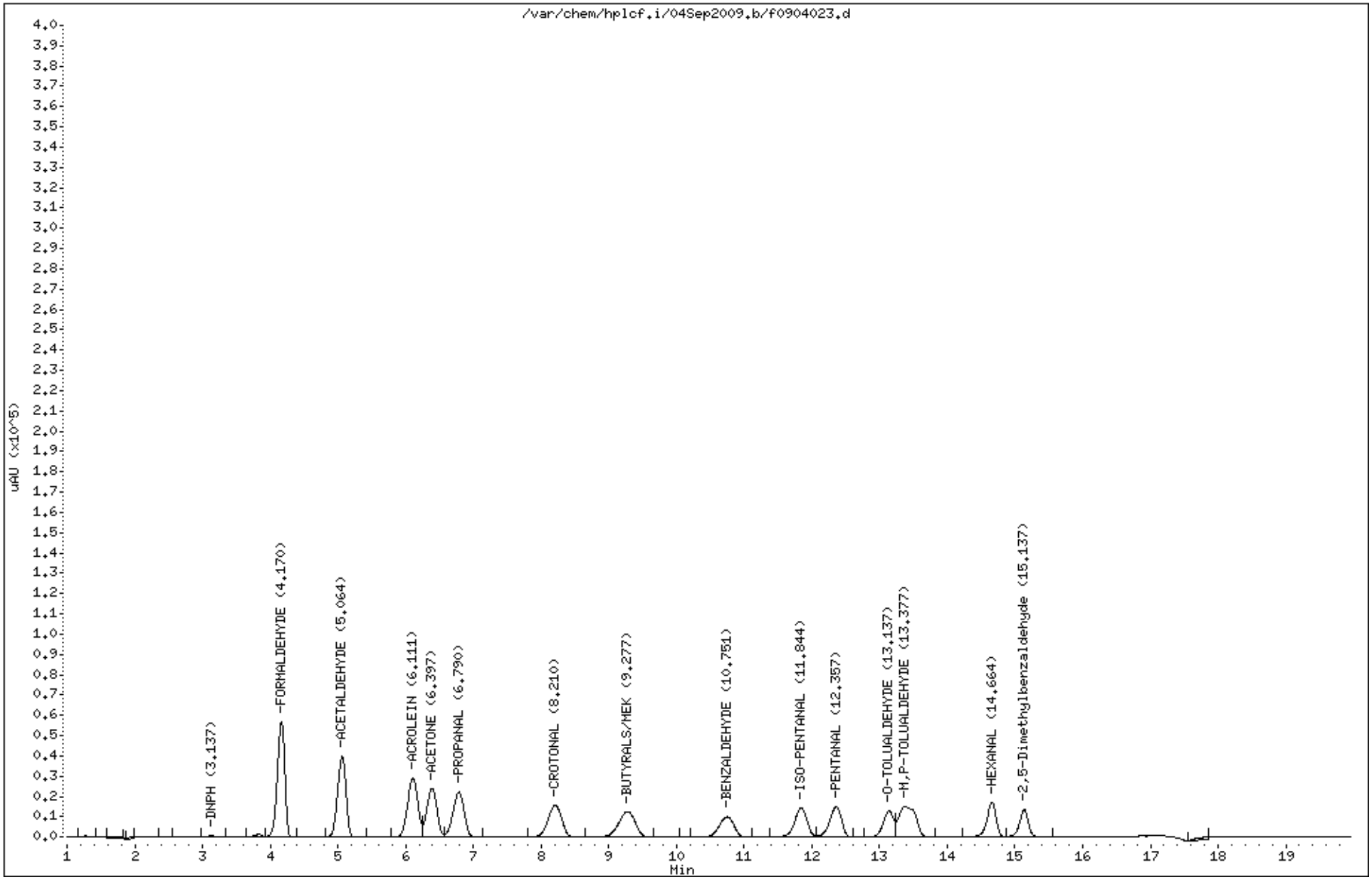
Sample Info: ;1331-138-4.0;L6

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0127

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

Date : 04-SEP-2009 16:10

Client ID: L6

Instrument: hplcf.i

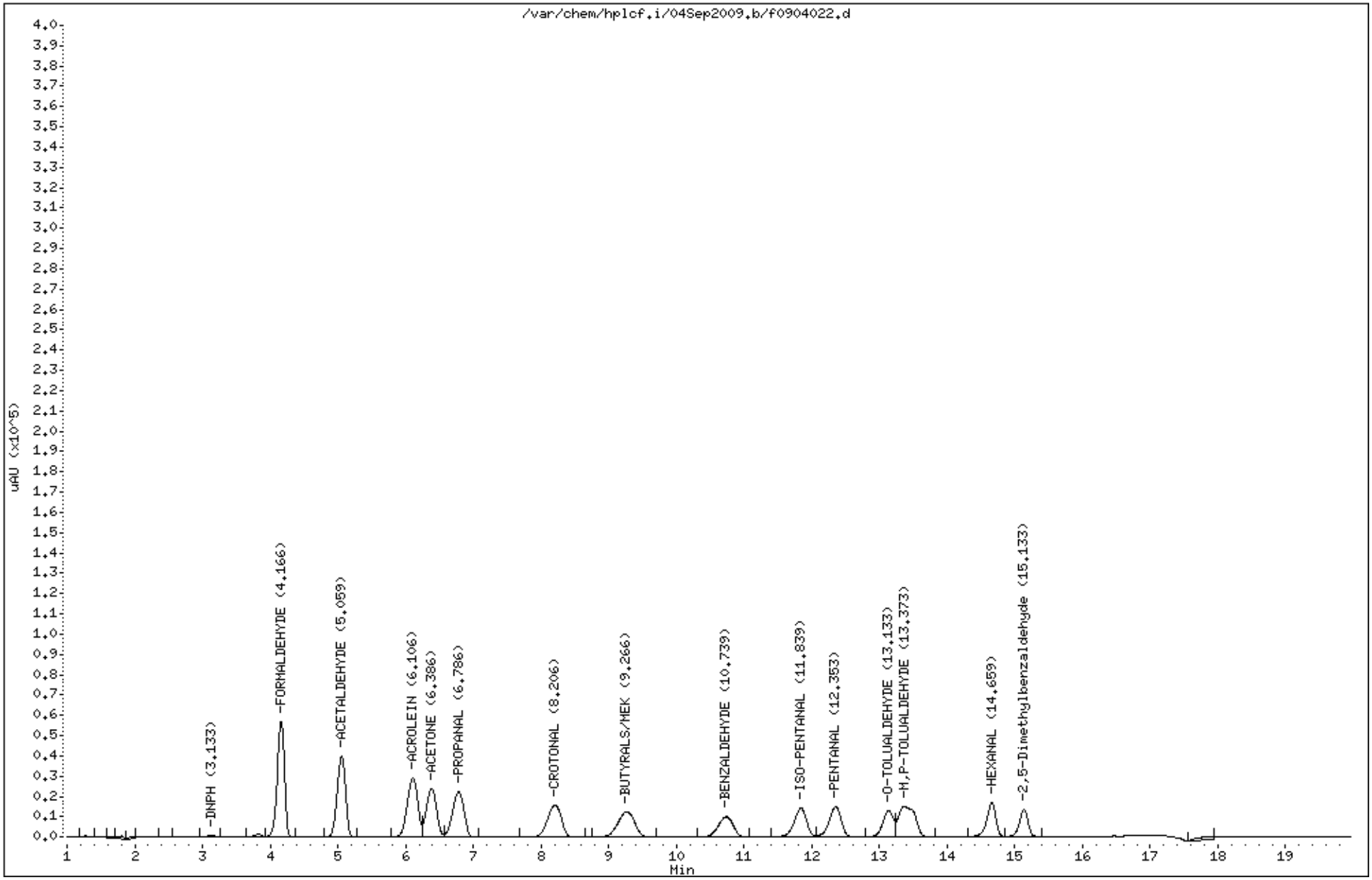
Sample Info: ;1331-138-4.0;L6

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0129

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

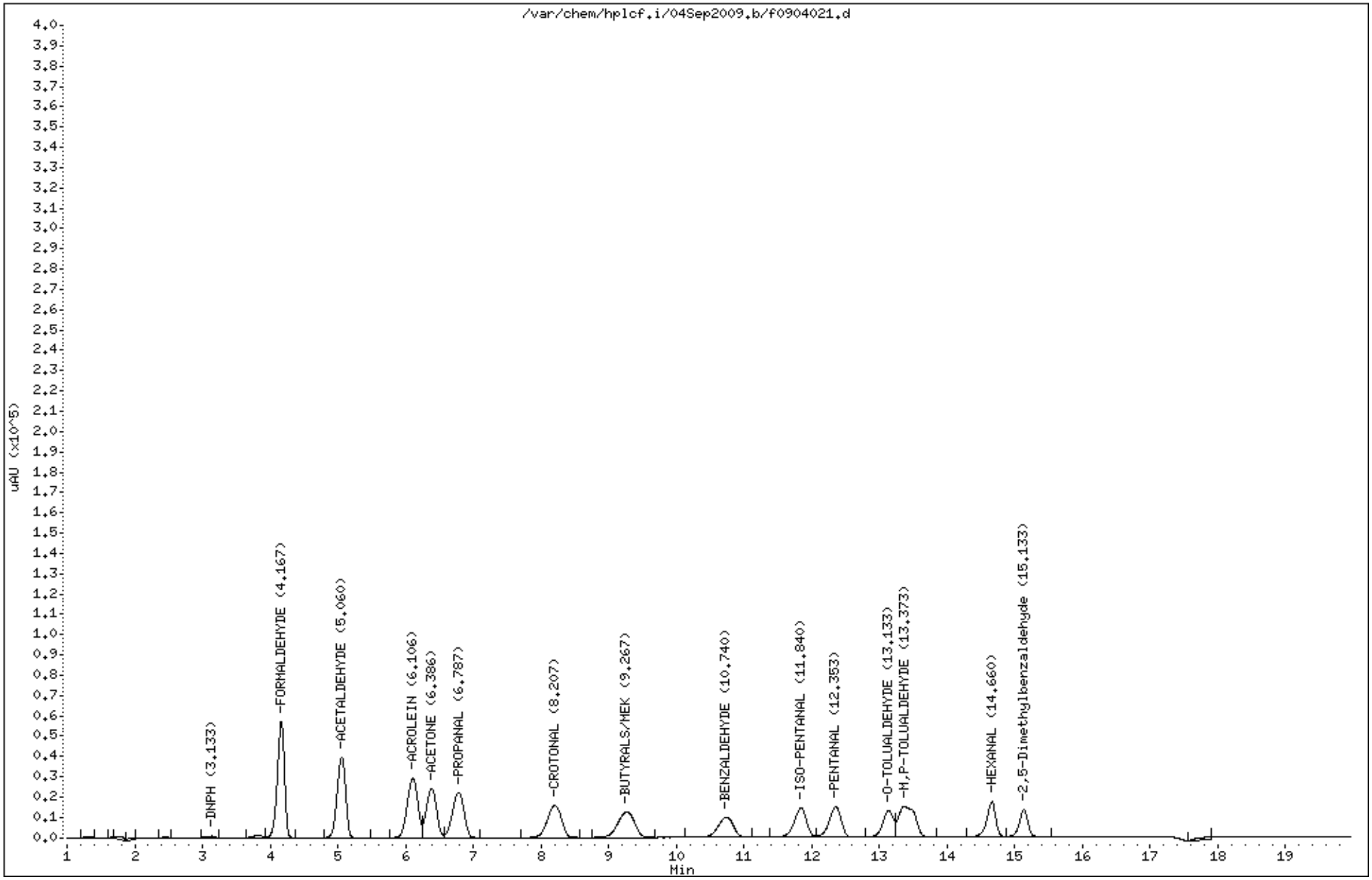
Sample Info: ;1331-138-4.0;L6

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0131

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

Date : 04-SEP-2009 17:33

Client ID: L7

Instrument: hplcf.i

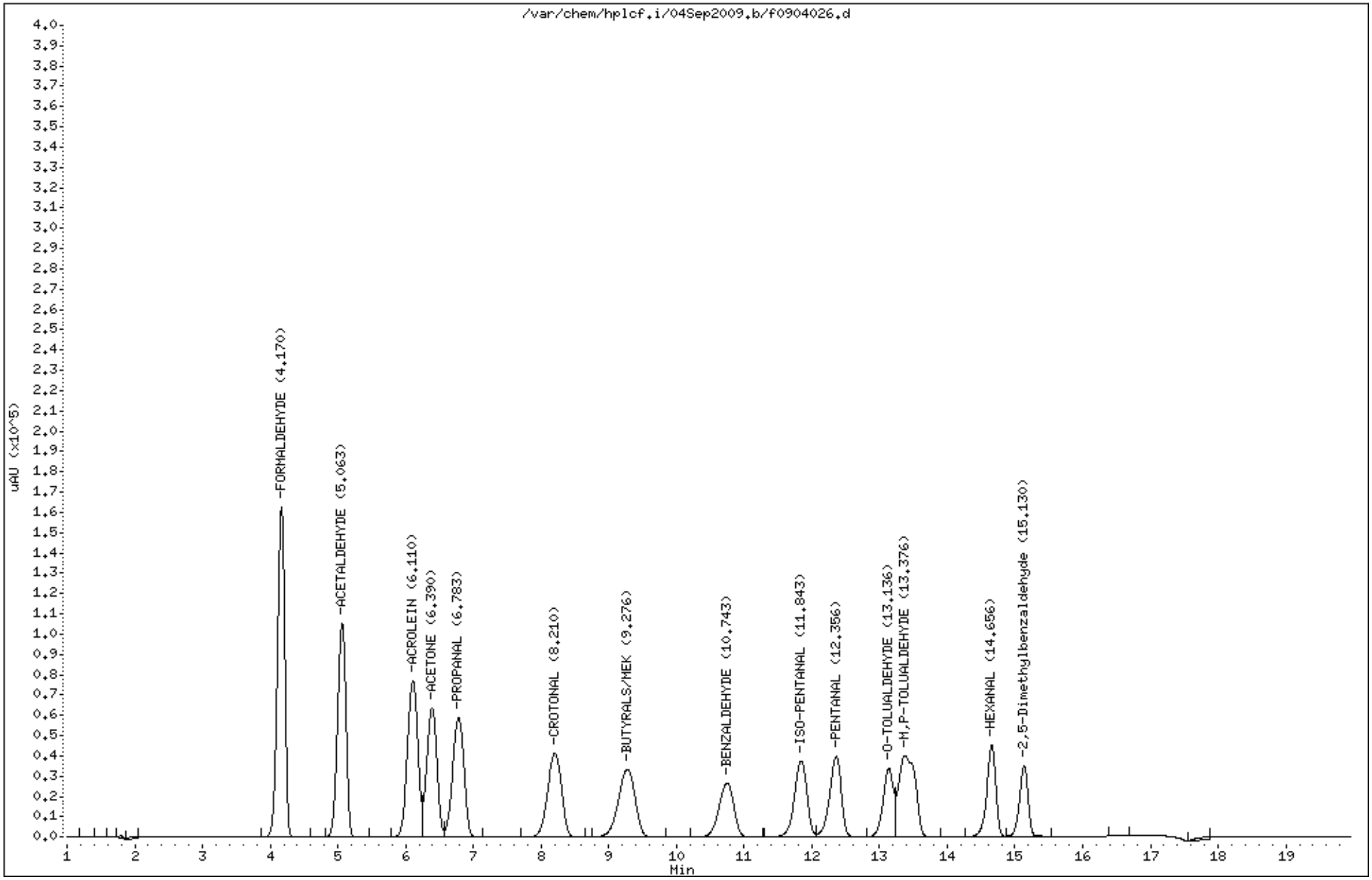
Sample Info: ;1331-138-10;L7

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0133

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

Instrument: hplcf.i

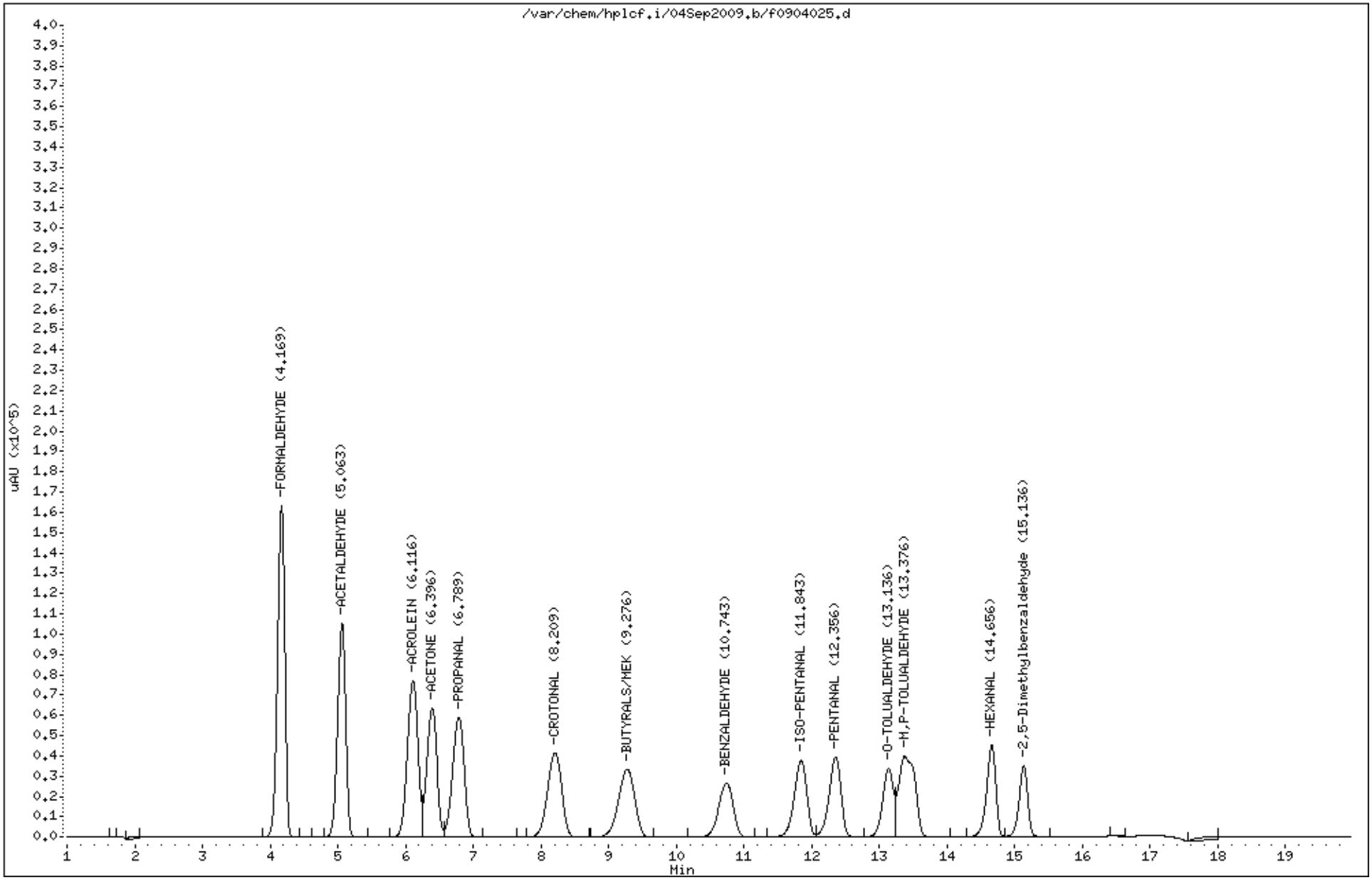
Sample Info: ;1331-138-10;L7

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0135

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

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904024.d

Date : 04-SEP-2009 16:52

Client ID: L7

Instrument: hplcf.i

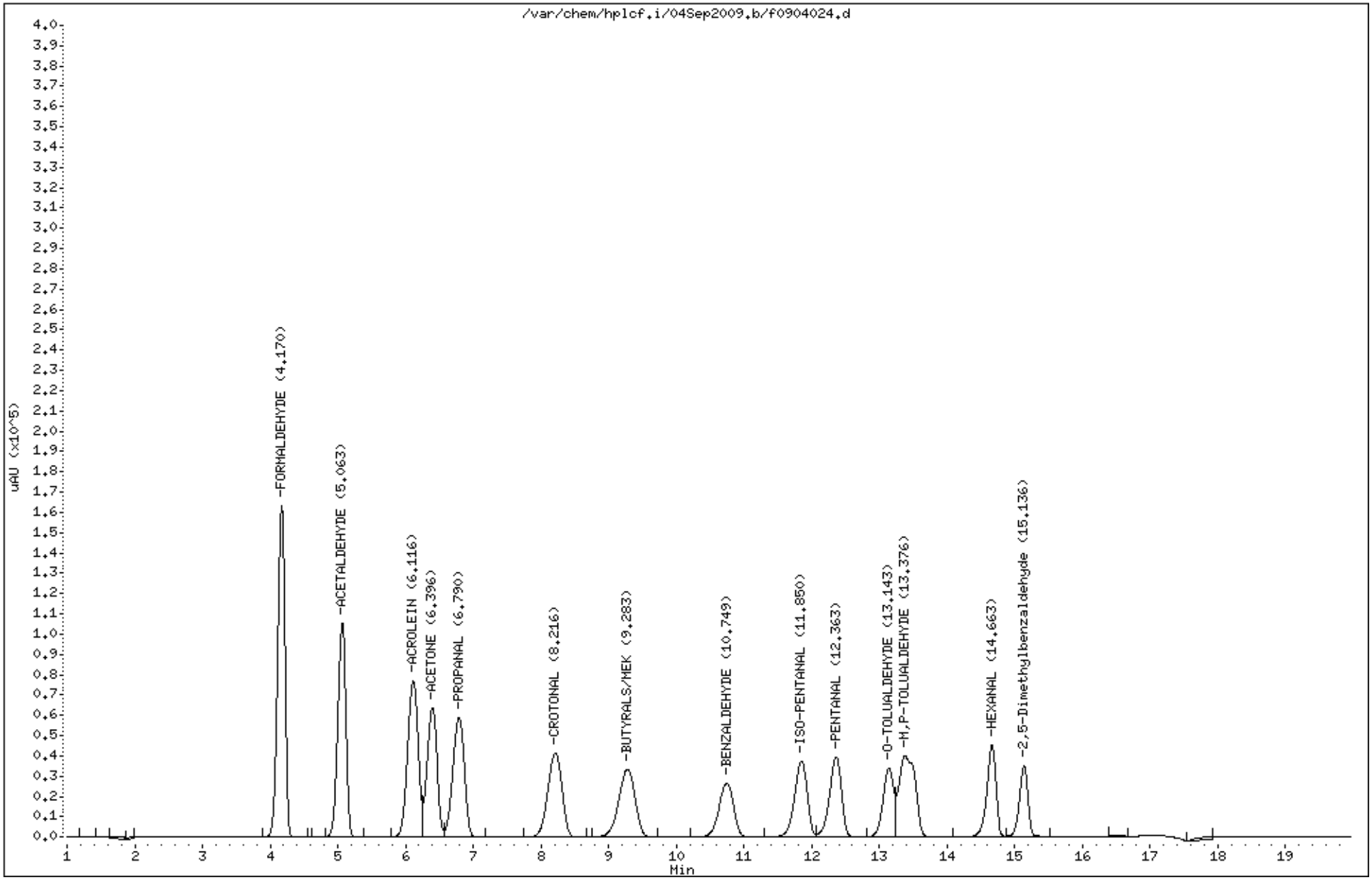
Sample Info: ;1331-138-10;L7

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0137

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

Date : 04-SEP-2009 18:36

Client ID: L8

Instrument: hplcf.i

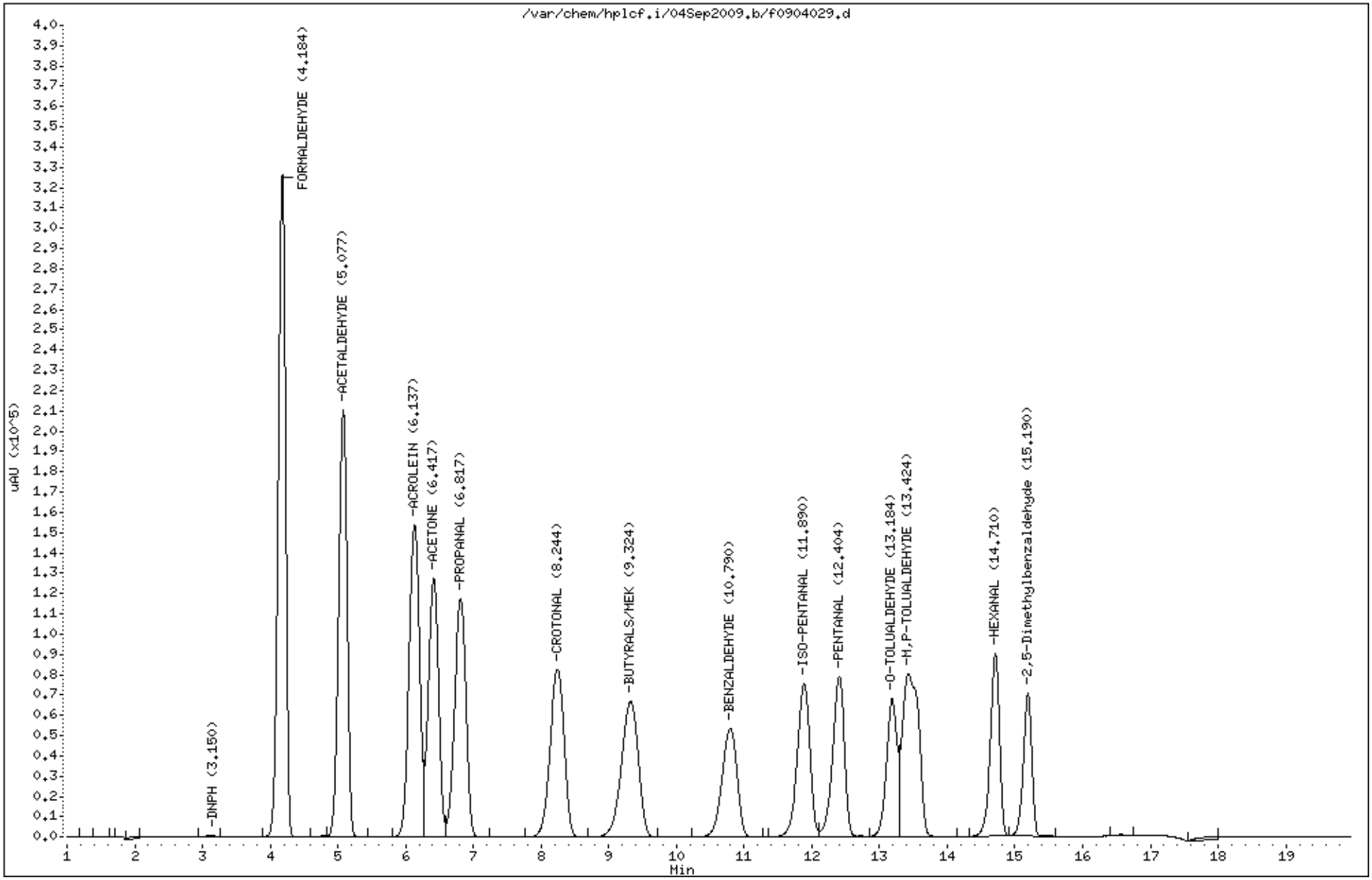
Sample Info: ;1331-138-20;L8

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0139

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

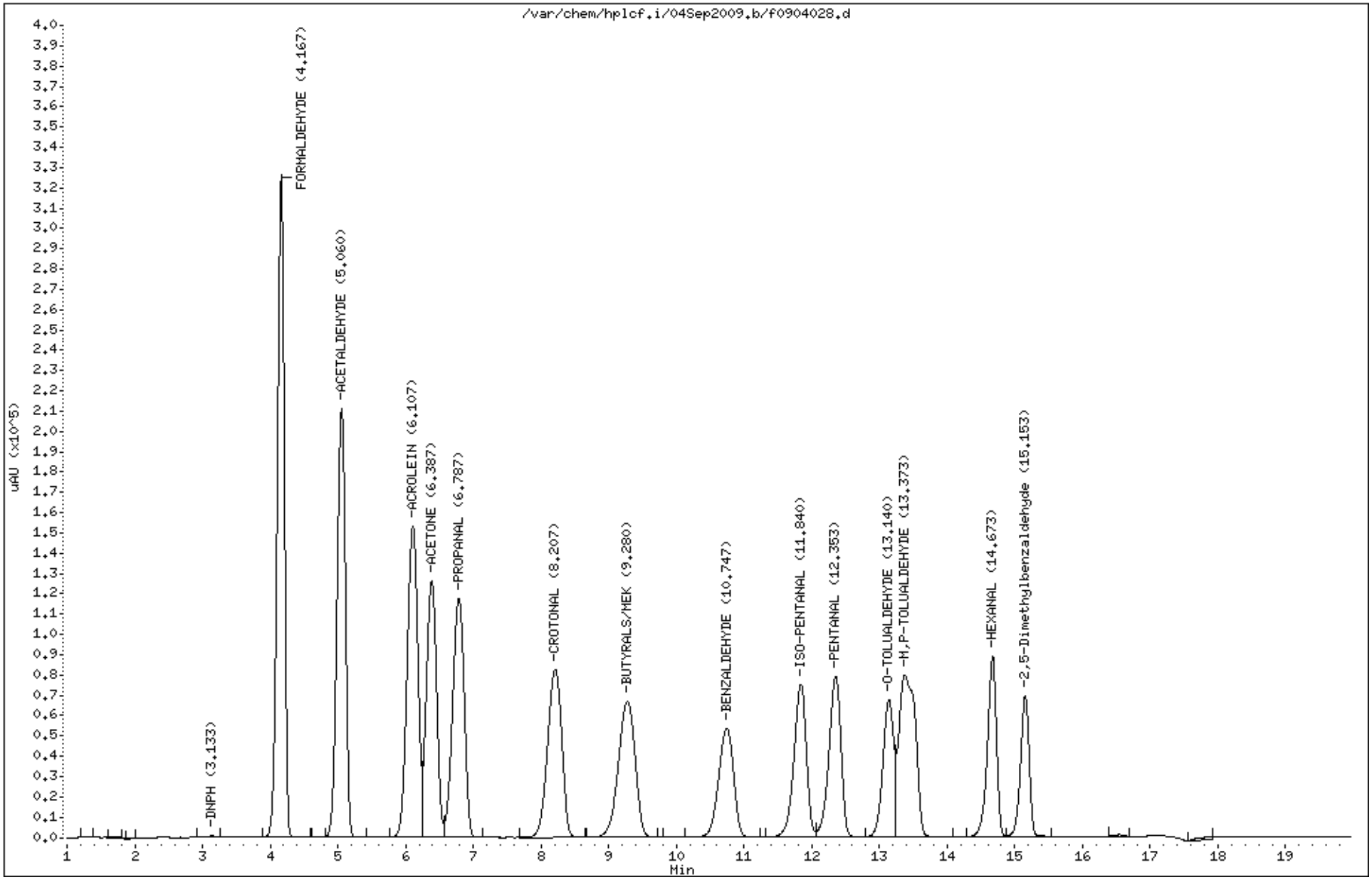
Cpnd Variable Local Compound Variable

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

0141

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



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

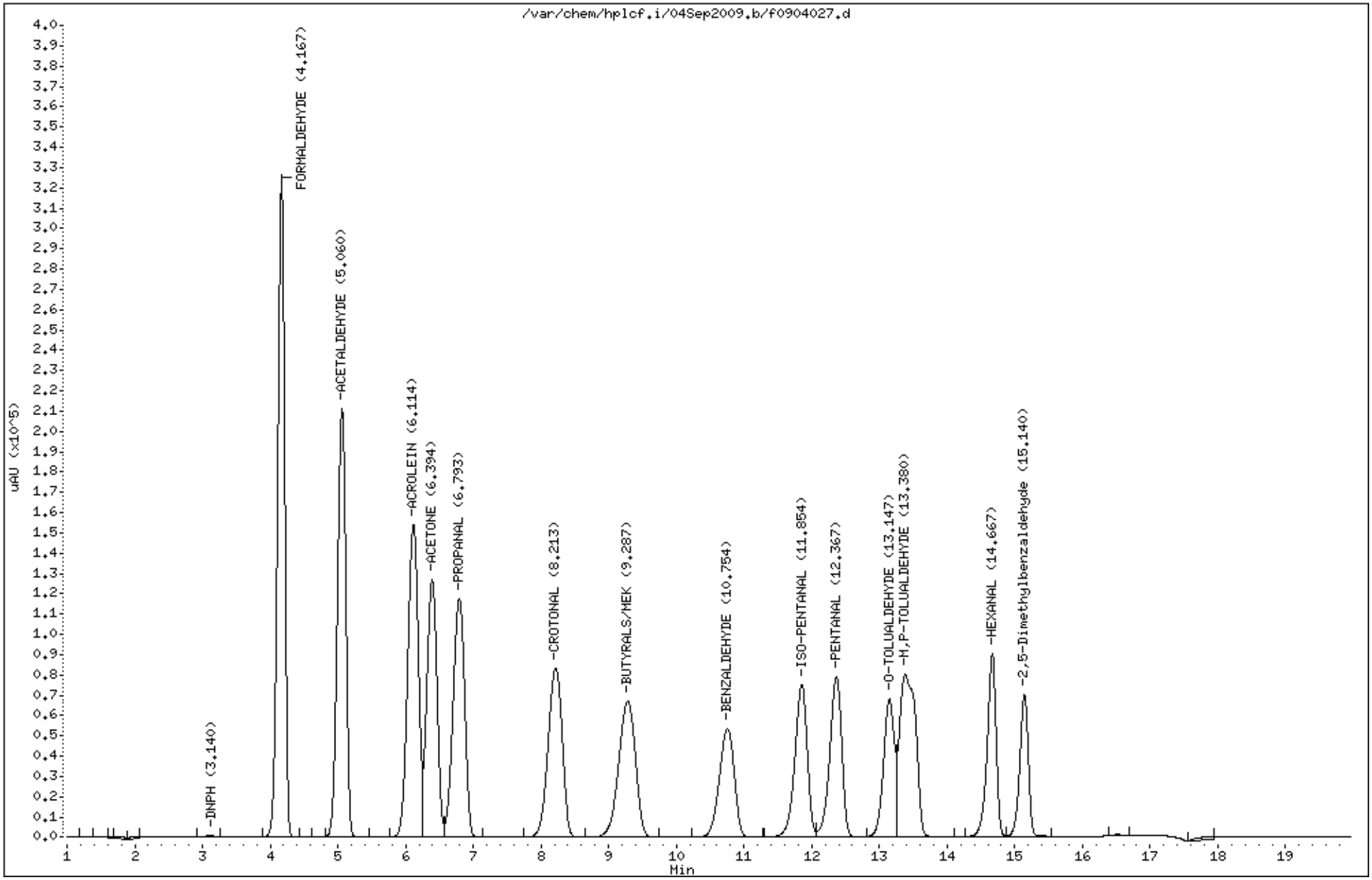
Cpnd Variable Local Compound Variable

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

0143

Data File: /var/chem/hplcf.i/04Sep2009.b/f0904027.d
Date : 04-SEP-2009 17:54
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



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

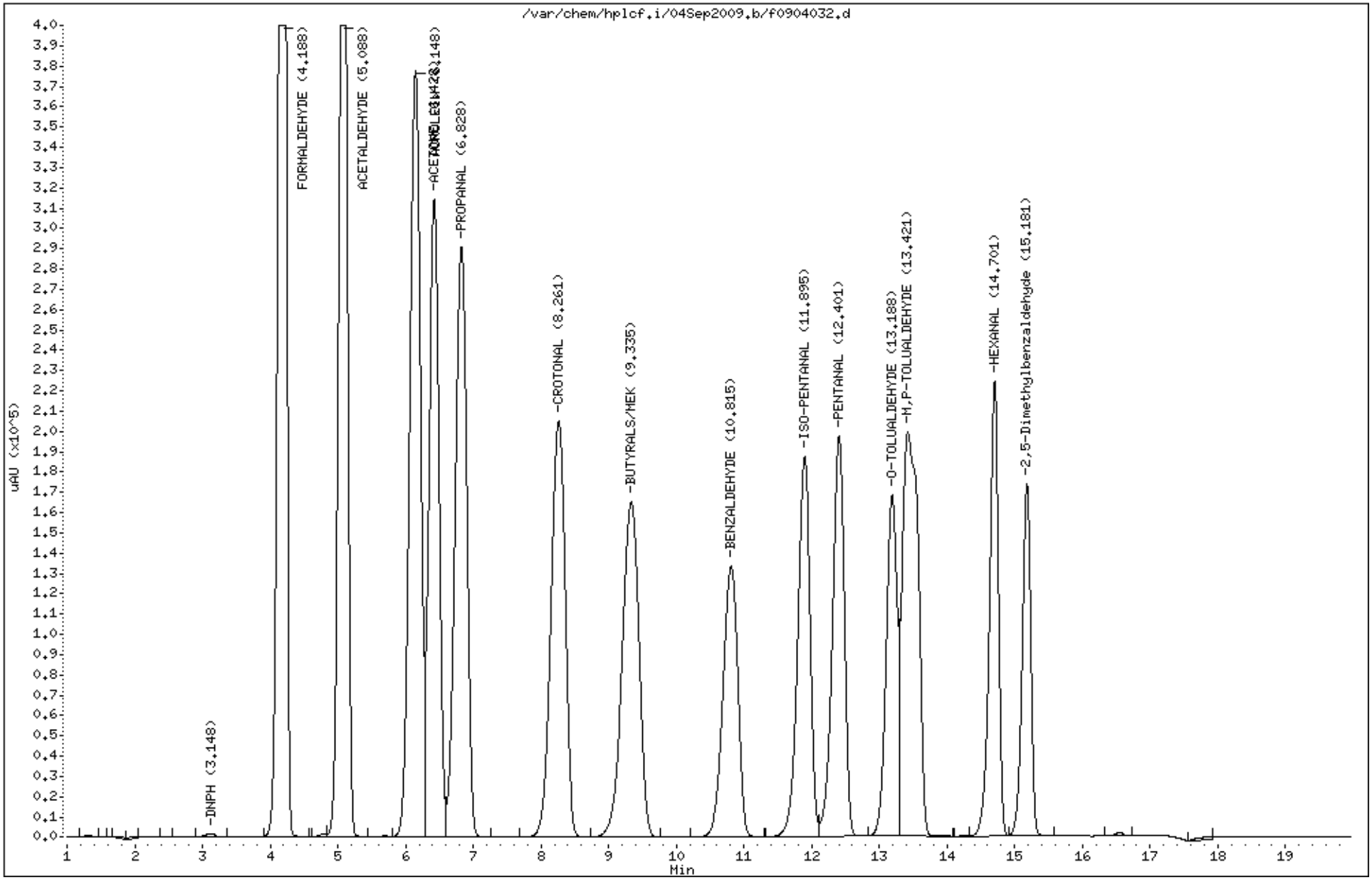
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0145



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

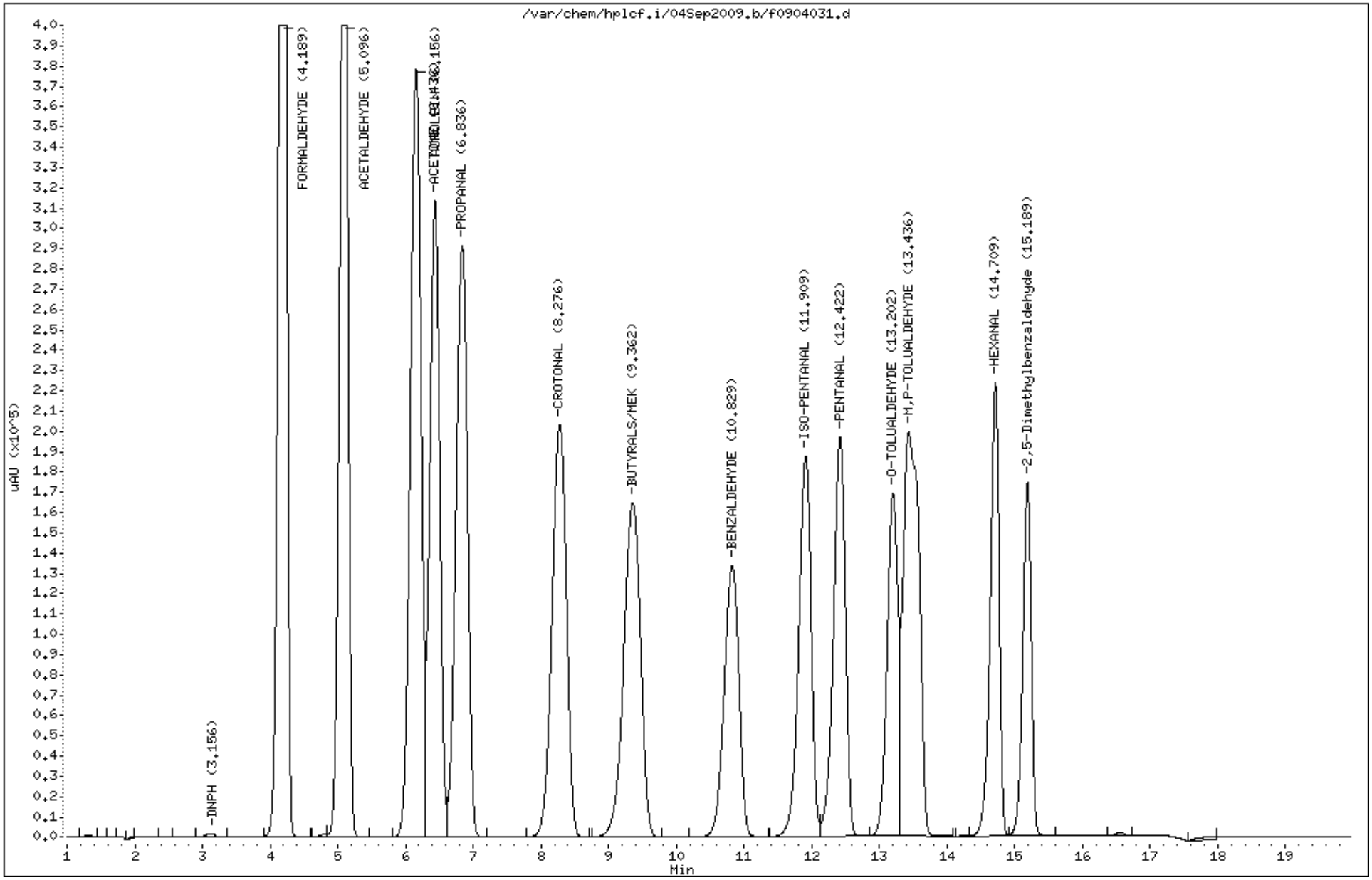
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0147



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

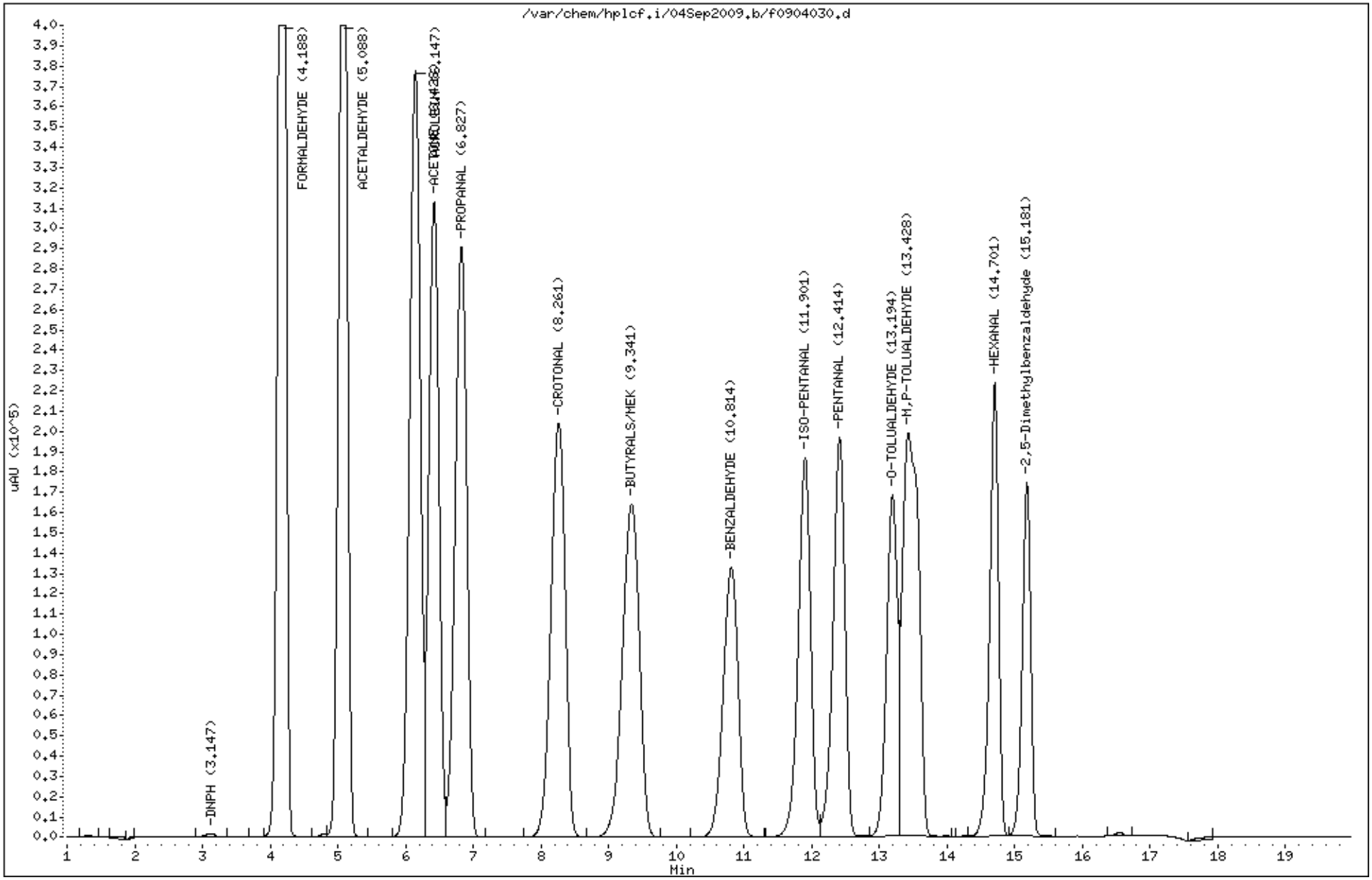
Purge Volume: 5.0

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

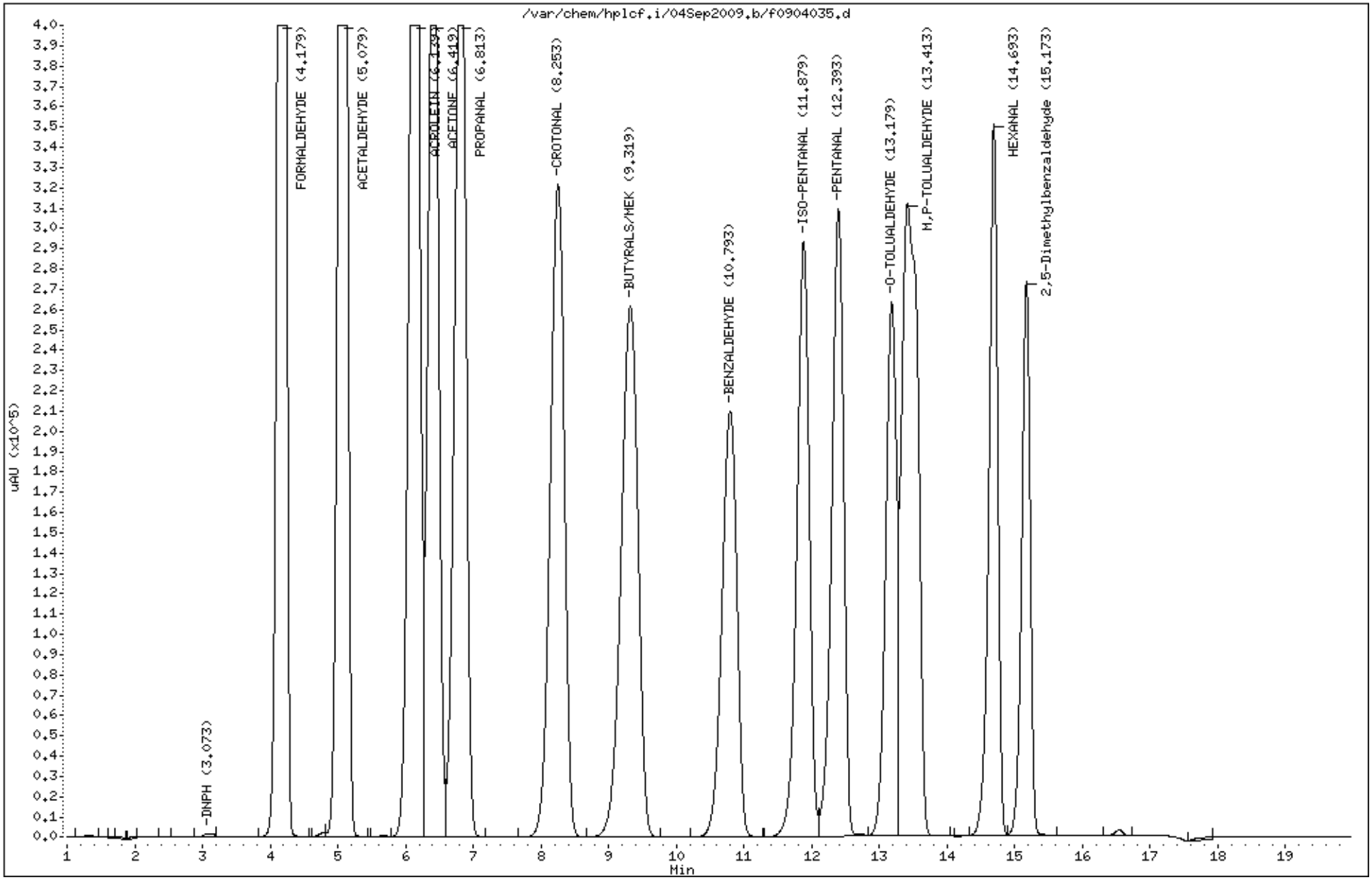
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0151



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

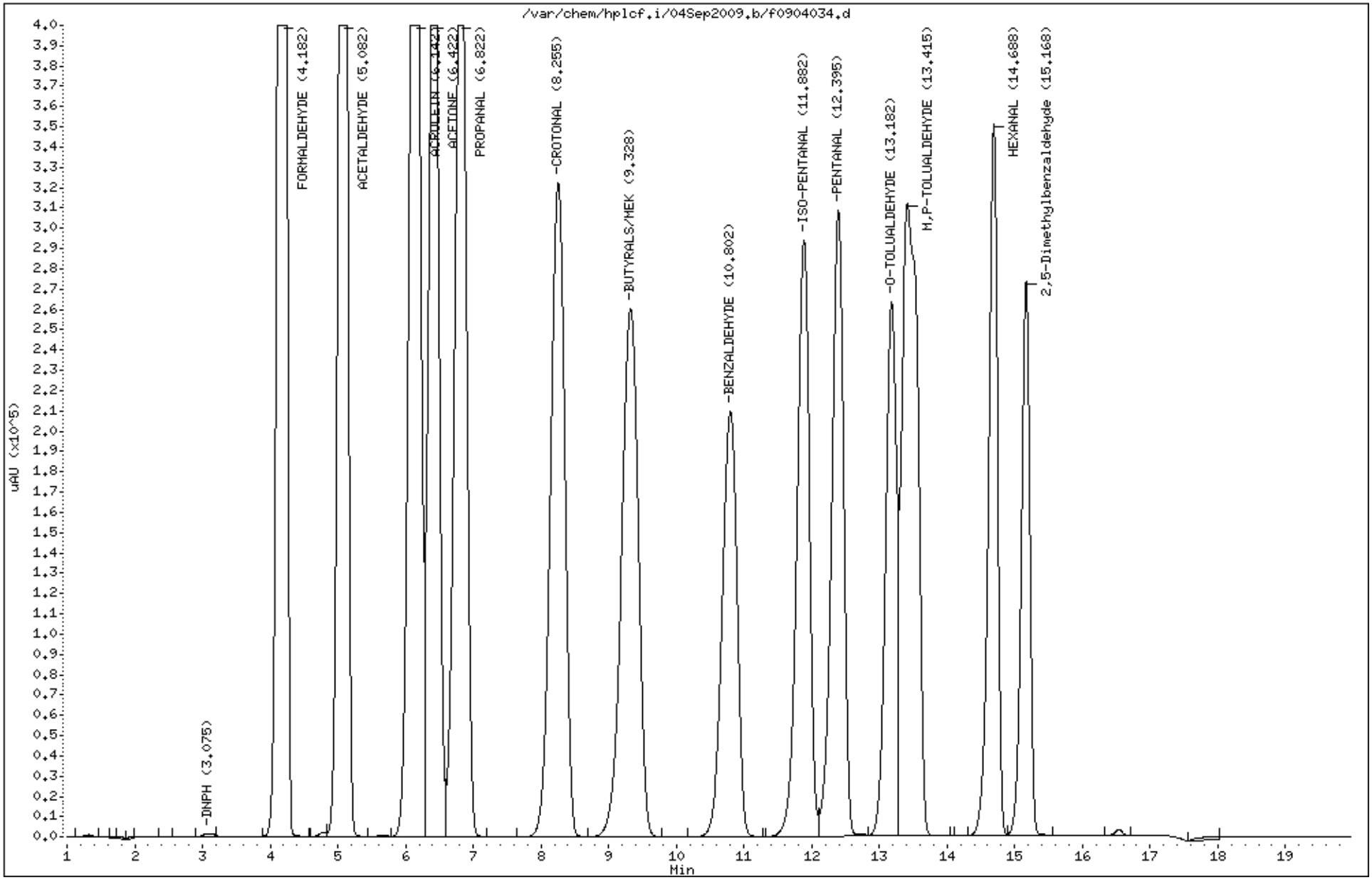
Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00

0153



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

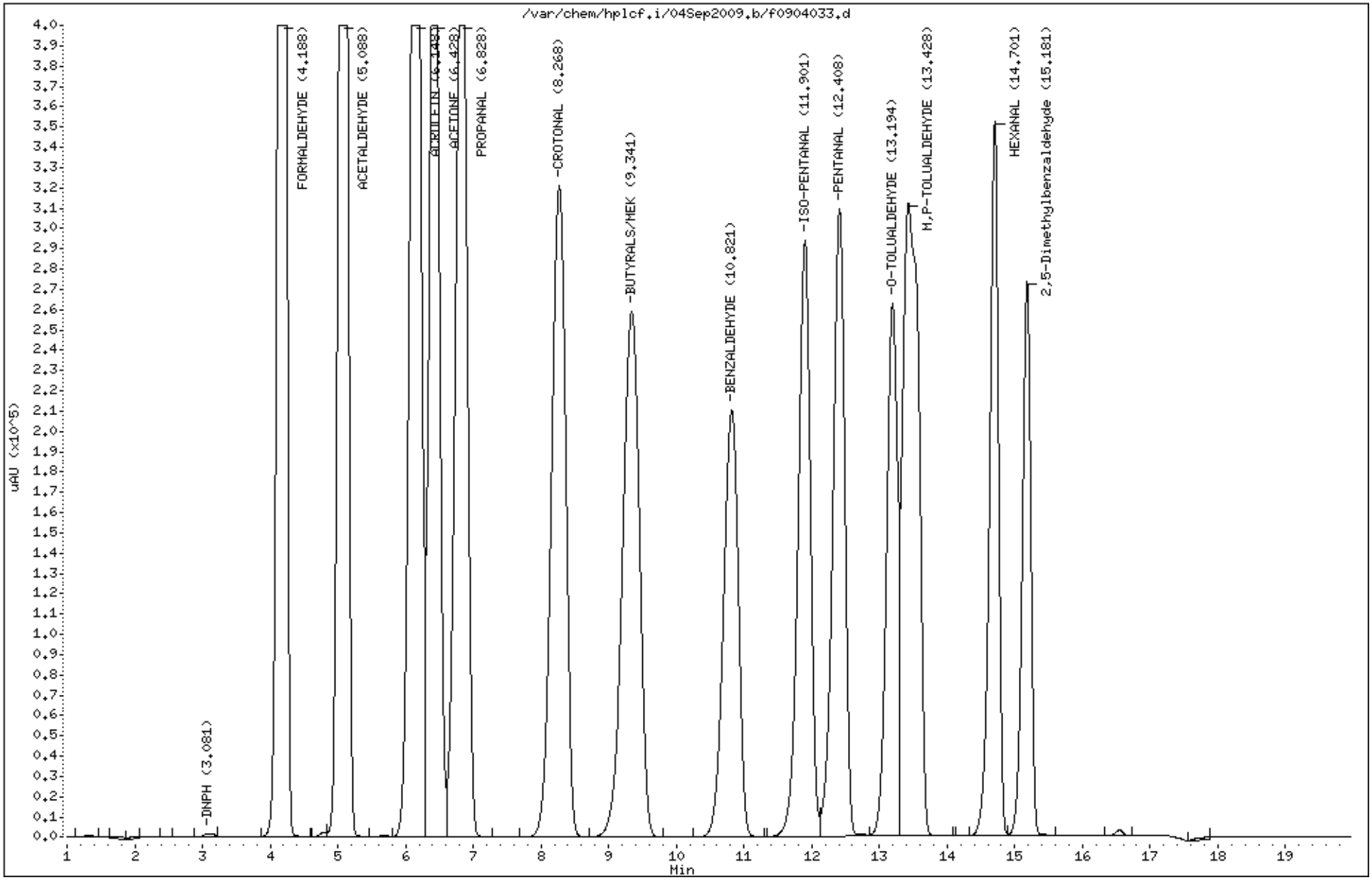
Purge Volume: 5.0

Column phase: C-18 REVERSE PHASE

Instrument: hplcf.i

Operator: CRL

Column diameter: 2.00



Report Date: 25-Sep-2009 08:31

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplcf.i Injection Date: 25-SEP-2009 07:55
Lab File ID: f0925002.d Init. Cal. Date(s): 04-SEP-2009 04-SEP-2009
Analysis Type: AIR Init. Cal. Times: 10:35 20:41
Lab Sample ID: 1331-143-4 Quant Type: ESTD
Method: /chem/hplcf.i/25Sep2009.b/F09D0904.m

COMPOUND	RRF / AMOUNT	RF4	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 DNPH	++++	506	0.100	++++	10.00000	Averaged	<-
2 FORMALDEHYDE	118994	118102	0.010	0.74978	10.00000	Averaged	
3 ACETALDEHYDE	89763	88410	0.010	1.50732	10.00000	Averaged	
4 ACROLEIN	82084	83126	0.010	-1.26884	10.00000	Averaged	
6 PROPANAL	68492	65166	0.010	4.85719	10.00000	Averaged	
9 BUTYRALS/MEK	56455	55890	0.010	1.00145	10.00000	Averaged	
10 BENZALDEHYDE	40278	39550	0.010	1.80957	10.00000	Averaged	
11 ISO-PENTANAL	47406	48002	0.010	-1.25716	10.00000	Averaged	
12 PENTANAL	47407	47182	0.010	0.47543	10.00000	Averaged	
16 HEXANAL	41997	41118	0.010	2.09150	10.00000	Averaged	

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925002.d
Lab Smp Id: 1331-143-4 Client Smp ID: CCV
Inj Date : 25-SEP-2009 07:55
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-143-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:29 cleaf 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: 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	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	3.054	3.054	0.000	2026	4.00000	
2 FORMALDEHYDE	4.147	4.147	0.000	472407	4.00000	3.97
3 ACETALDEHYDE	5.013	5.013	0.000	353640	4.00000	3.94
4 ACROLEIN	6.027	6.027	0.000	332504	4.00000	4.05
6 PROPANAL	6.673	6.673	0.000	260662	4.00000	3.80
9 BUTYRALS/MEK	9.053	9.053	0.000	223558	4.00000	3.96
10 BENZALDEHYDE	10.527	10.527	0.000	158198	4.00000	3.93
11 ISO-PENTANAL	11.627	11.627	0.000	192007	4.00000	4.05
12 PENTANAL	12.147	12.147	0.000	188727	4.00000	3.98
16 HEXANAL	14.480	14.480	0.000	164474	4.00000	3.92

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925002.d

Date : 25-SEP-2009 07:55

Client ID: CCV

Instrument: hplcf.i

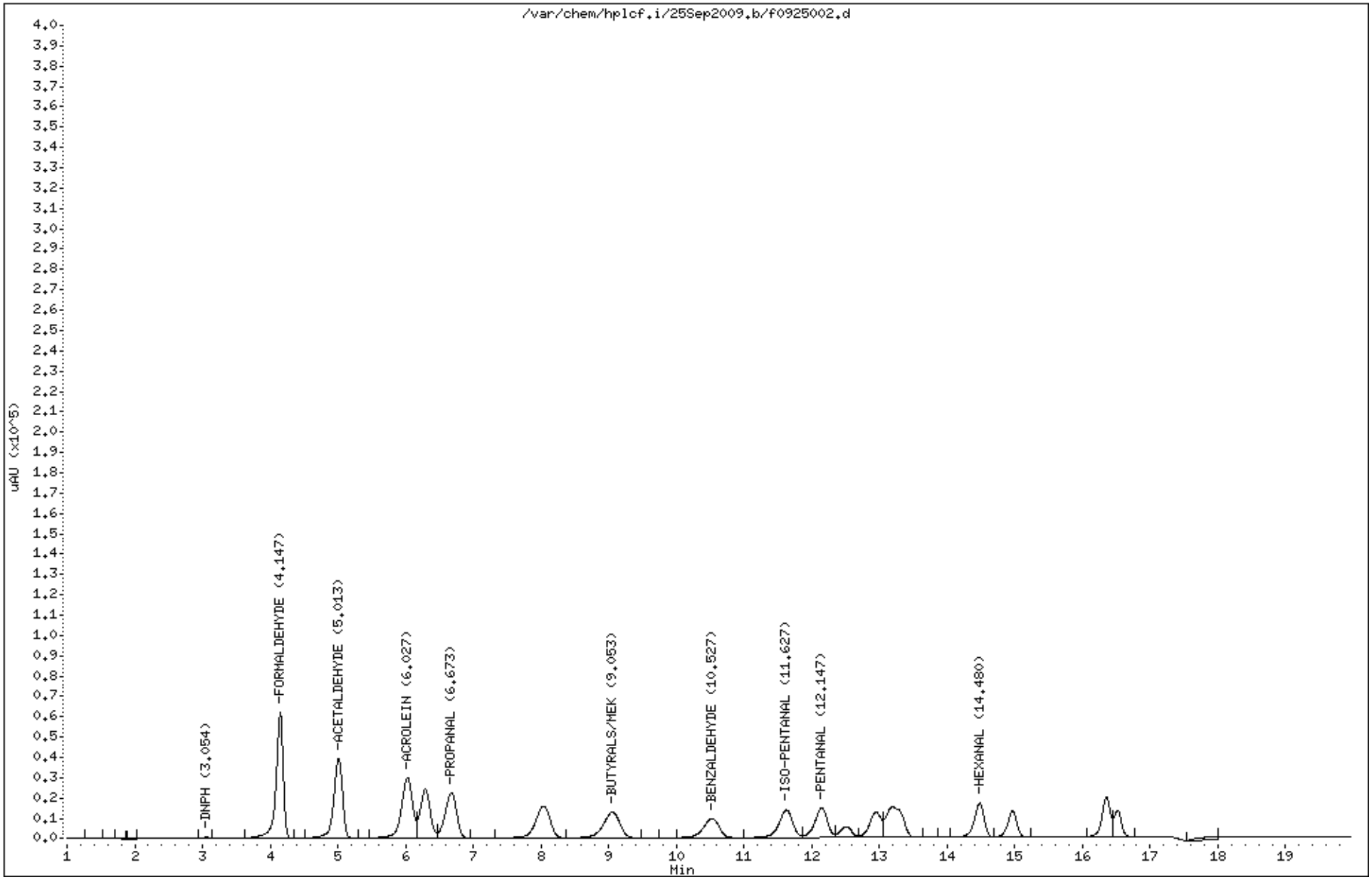
Sample Info: ;1331-143-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



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Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925003.d
Lab Smp Id: CCB Client Smp ID: LAB BLANK
Inj Date : 25-SEP-2009 08:16
Operator : CRL Inst ID: hplcf.i
Smp Info : ;CCB;LAB BLANK
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.062	3.054	0.008	8639		
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/25Sep2009.b/f0925003.d

Date : 25-SEP-2009 08:16

Client ID: LAB BLANK

Instrument: hplcf.i

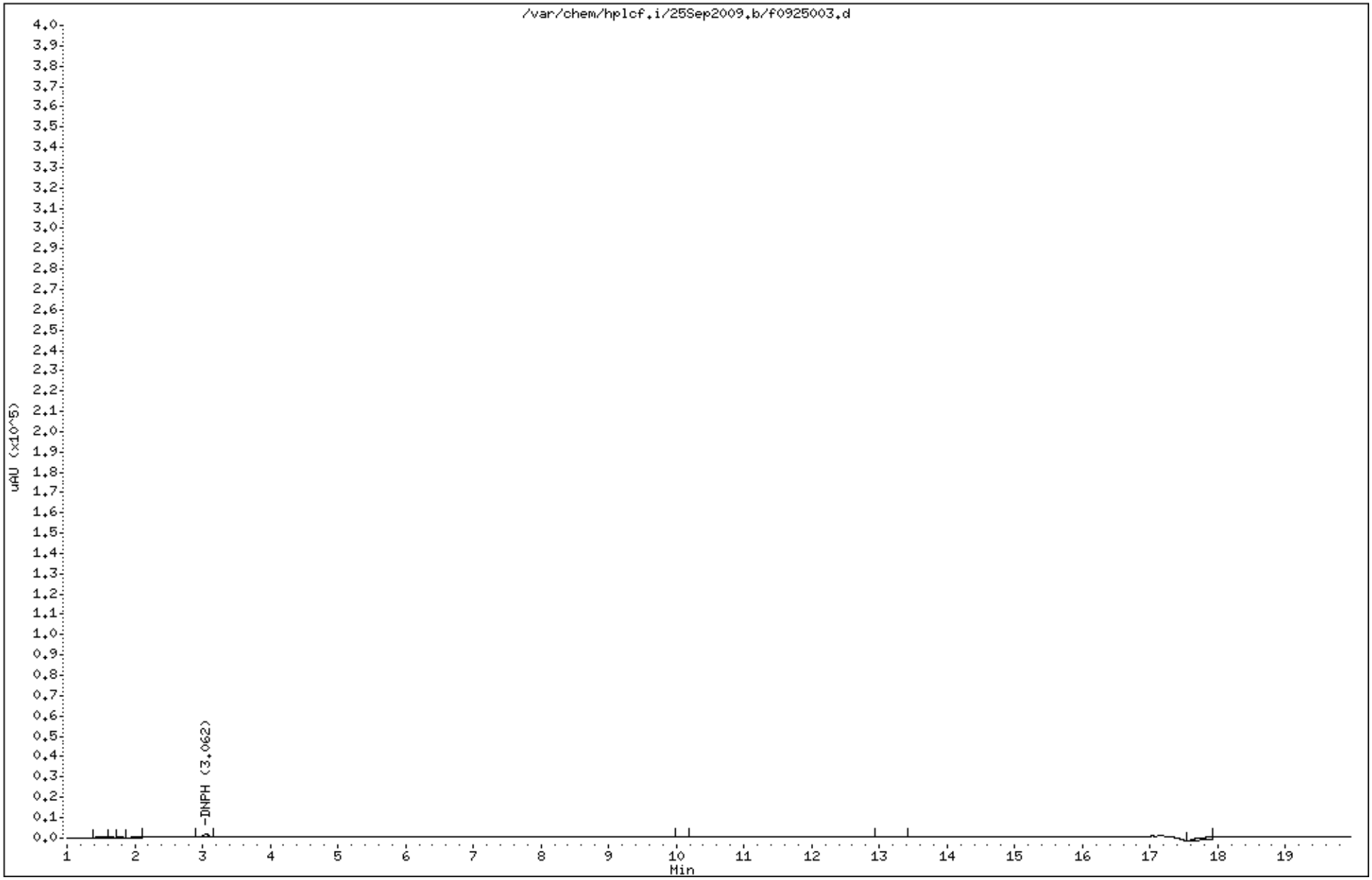
Sample Info: ;CCB;LAB BLANK

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



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Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-143-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 25Sep2009
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	3.97	
75-07-0	ACETALDEHYDE	3.95	
107-02-8	ACROLEIN	4.04	
123-38-6	PROPANAL	3.81	
9999-9999-007	BUTYRALS/MEK	3.94	
100-52-7	BENZALDEHYDE	3.93	
590-86-3	ISO-PENTANAL	4.05	
110-62-3	PENTANAL	3.99	
66-25-1	HEXANAL	3.91	

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925014.d
Lab Smp Id: 1331-143-4 Client Smp ID: CCV
Inj Date : 25-SEP-2009 14:58
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-143-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.051	3.054	-0.003	6782		
2 FORMALDEHYDE	4.191	4.147	0.044	472257	3.96875	3.97
3 ACETALDEHYDE	5.072	5.013	0.059	354228	3.94626	3.95
4 ACROLEIN	6.112	6.027	0.085	331655	4.04042	4.04
6 PROPANAL	6.771	6.673	0.098	260711	3.80643	3.81
9 BUTYRALS/MEK	9.232	9.053	0.179	222254	3.93685	3.94
10 BENZALDEHYDE	10.711	10.527	0.184	158485	3.93475	3.93
11 ISO-PENTANAL	11.791	11.627	0.164	191848	4.04694	4.05
12 PENTANAL	12.305	12.147	0.158	189019	3.98714	3.99
16 HEXANAL	14.605	14.480	0.125	164269	3.91146	3.91

Report Date: 28-Sep-2009 07:09

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 25Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-143-4
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: /chem/hplcf.i/25Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.97	99.22	90-110
3 ACETALDEHYDE	4.00	3.95	98.66	90-110
4 ACROLEIN	4.00	4.04	101.01	90-110
6 PROPANAL	4.00	3.81	95.16	90-110
9 BUTYRALS/MEK	4.00	3.94	98.42	90-110
10 BENZALDEHYDE	4.00	3.93	98.37	90-110
11 ISO-PENTANAL	4.00	4.05	101.17	90-110
12 PENTANAL	4.00	3.99	99.68	90-110
16 HEXANAL	4.00	3.91	97.79	90-110

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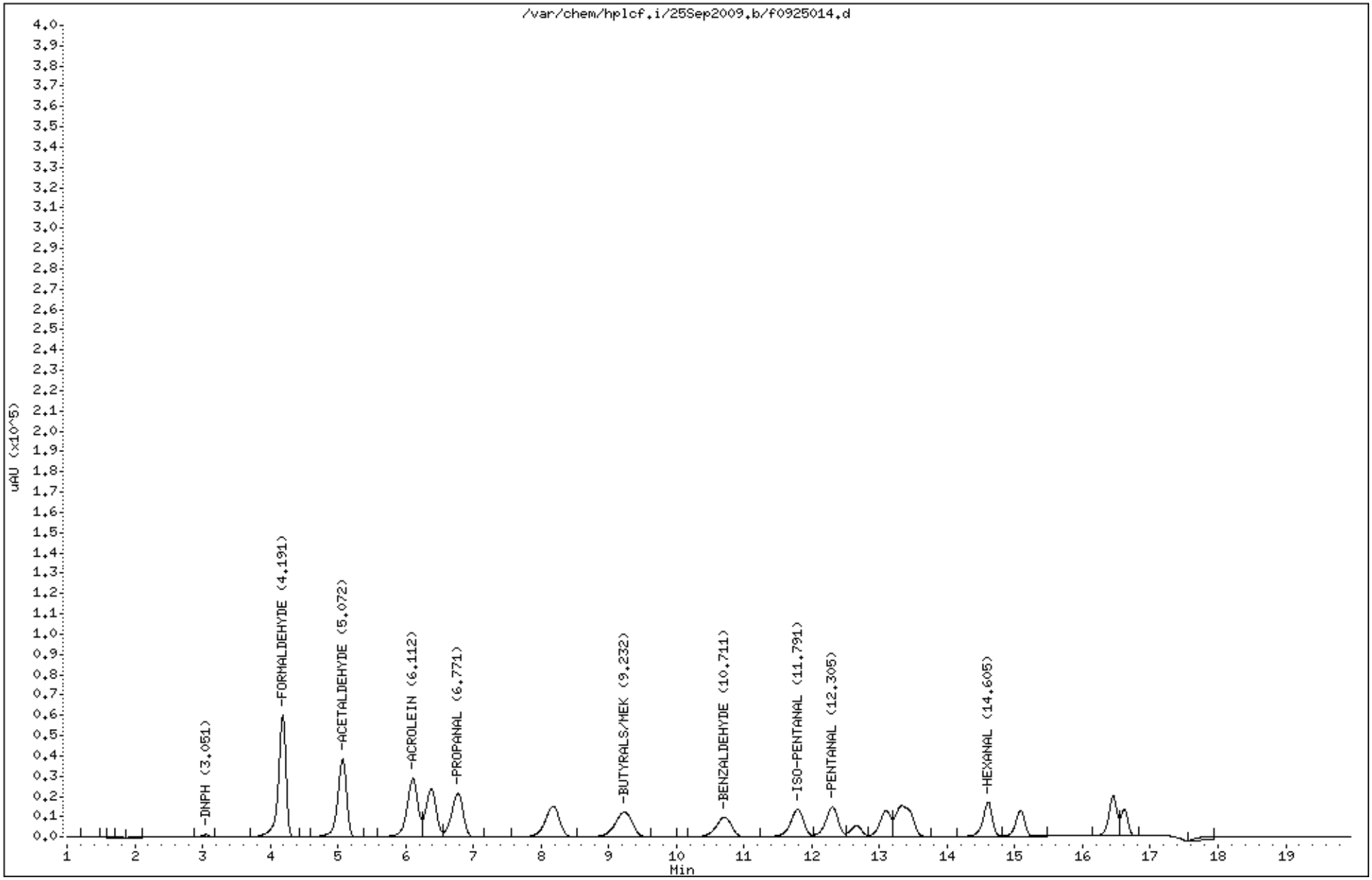
Data File: /var/chem/hplcf.i/25Sep2009.b/f0925014.d
Date : 25-SEP-2009 14:58
Client ID: CCV
Sample Info: ;1331-143-4;CCV
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

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/25Sep2009.b/f0925015.d
Lab Smp Id: CCB Client Smp ID: LAB BLANK
Inj Date : 25-SEP-2009 15:18
Operator : CRL Inst ID: hplcf.i
Smp Info : ;CCB;LAB BLANK
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.074	3.054	0.020	9893		
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/25Sep2009.b/f0925015.d

Date : 25-SEP-2009 15:18

Client ID: LAB BLANK

Instrument: hplcf.i

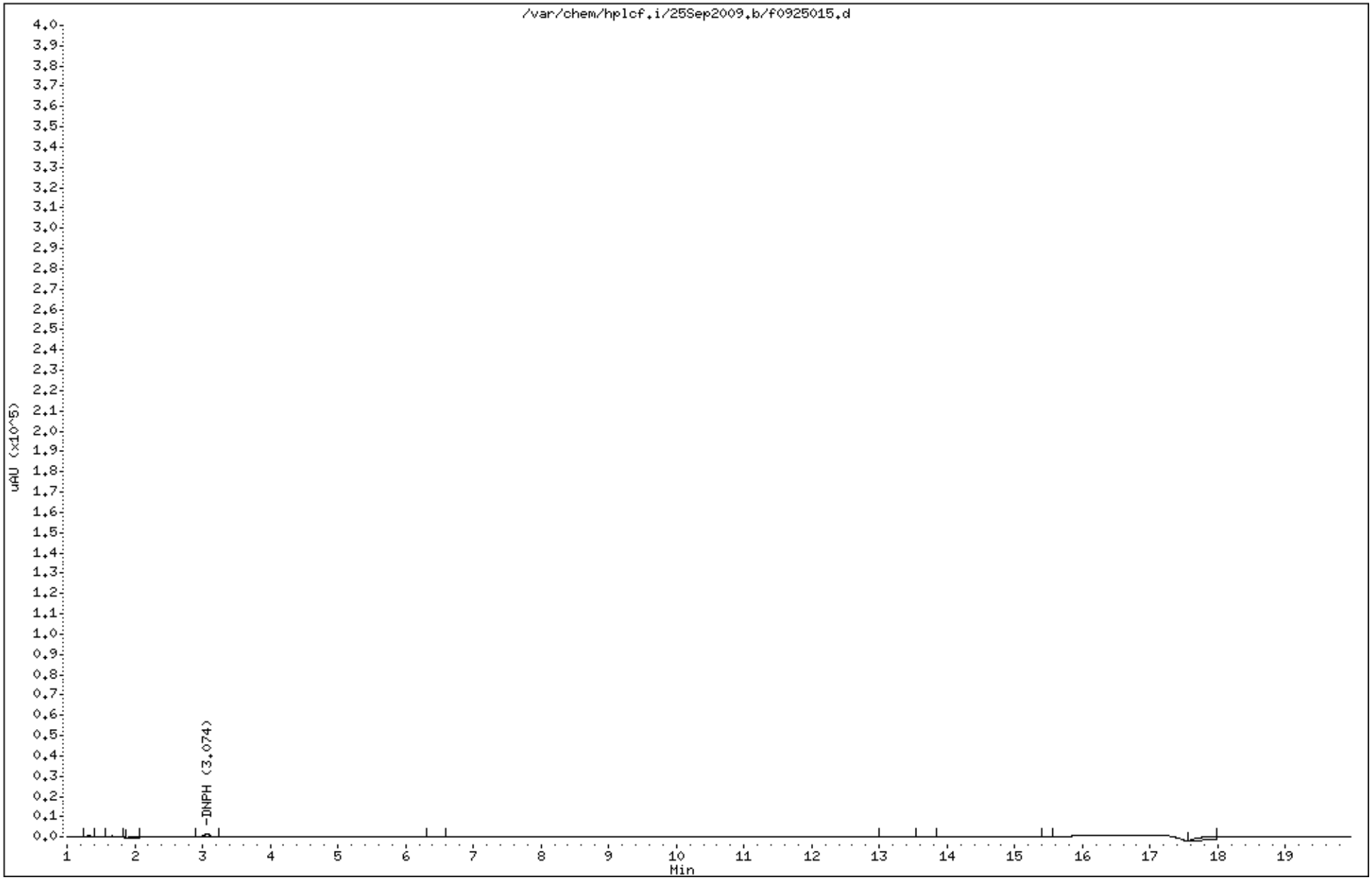
Sample Info: ;CCB;LAB BLANK

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: 1331-143-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 25Sep2009
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	3.95	
75-07-0	ACETALDEHYDE	3.93	
107-02-8	ACROLEIN	4.09	
123-38-6	PROPANAL	3.78	
9999-9999-007	BUTYRALS/MEK	3.92	
100-52-7	BENZALDEHYDE	3.86	
590-86-3	ISO-PENTANAL	3.96	
110-62-3	PENTANAL	3.94	
66-25-1	HEXANAL	3.90	

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925025.d
Lab Smp Id: 1331-143-4 Client Smp ID: CCV
Inj Date : 25-SEP-2009 18:47
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-143-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.049	3.054	-0.005	3989		
2 FORMALDEHYDE	4.189	4.147	0.042	469693	3.94720	3.95
3 ACETALDEHYDE	5.069	5.013	0.056	353175	3.93454	3.93
4 ACROLEIN	6.109	6.027	0.082	335655	4.08914	4.09
6 PROPANAL	6.776	6.673	0.103	259216	3.78460	3.78
9 BUTYRALS/MEK	9.229	9.053	0.176	221343	3.92072	3.92
10 BENZALDEHYDE	10.709	10.527	0.182	155469	3.85989	3.86
11 ISO-PENTANAL	11.789	11.627	0.162	187696	3.95936	3.96
12 PENTANAL	12.302	12.147	0.155	186938	3.94325	3.94
16 HEXANAL	14.602	14.480	0.122	163591	3.89533	3.90

Report Date: 28-Sep-2009 07:09

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 25Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-143-4
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: /chem/hplcf.i/25Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.95	98.68	90-110
3 ACETALDEHYDE	4.00	3.93	98.36	90-110
4 ACROLEIN	4.00	4.09	102.23	90-110
6 PROPANAL	4.00	3.78	94.62	90-110
9 BUTYRALS/MEK	4.00	3.92	98.02	90-110
10 BENZALDEHYDE	4.00	3.86	96.50	90-110
11 ISO-PENTANAL	4.00	3.96	98.98	90-110
12 PENTANAL	4.00	3.94	98.58	90-110
16 HEXANAL	4.00	3.90	97.38	90-110

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925025.d

Date : 25-SEP-2009 18:47

Client ID: CCV

Instrument: hplcf.i

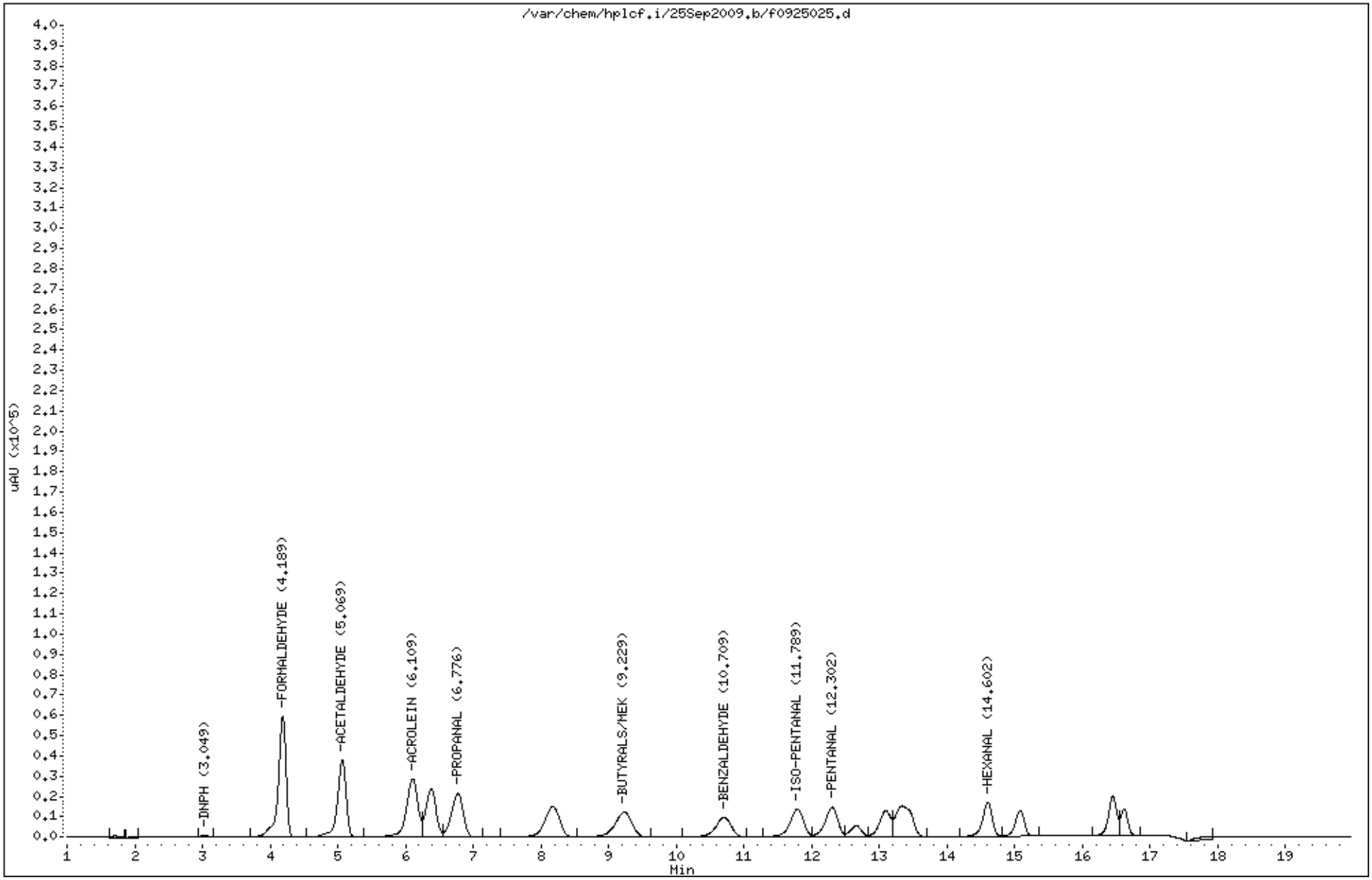
Sample Info: ;1331-143-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



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Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-143-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 25Sep2009
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	3.96	
75-07-0	ACETALDEHYDE	3.94	
107-02-8	ACROLEIN	4.10	
123-38-6	PROPANAL	3.81	
9999-9999-007	BUTYRALS/MEK	3.95	
100-52-7	BENZALDEHYDE	3.91	
590-86-3	ISO-PENTANAL	3.96	
110-62-3	PENTANAL	3.94	
66-25-1	HEXANAL	3.91	

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925066.d
Lab Smp Id: 1331-143-4 Client Smp ID: CCV
Inj Date : 26-SEP-2009 09:04
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-143-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.067	3.054	0.013	2177		
2 FORMALDEHYDE	4.173	4.147	0.026	471191	3.95979	3.96
3 ACETALDEHYDE	5.053	5.013	0.040	353831	3.94184	3.94
4 ACROLEIN	6.087	6.027	0.060	336683	4.10167	4.10
6 PROPANAL	6.740	6.673	0.067	261136	3.81264	3.81
9 BUTYRALS/MEK	9.174	9.053	0.121	223140	3.95254	3.95
10 BENZALDEHYDE	10.653	10.527	0.126	157403	3.90790	3.91
11 ISO-PENTANAL	11.740	11.627	0.113	187592	3.95715	3.96
12 PENTANAL	12.260	12.147	0.113	186803	3.94040	3.94
16 HEXANAL	14.560	14.480	0.080	164082	3.90702	3.91

Report Date: 28-Sep-2009 07:10

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 25Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-143-4
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: /chem/hplcf.i/25Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.96	98.99	90-110
3 ACETALDEHYDE	4.00	3.94	98.55	90-110
4 ACROLEIN	4.00	4.10	102.54	90-110
6 PROPANAL	4.00	3.81	95.32	90-110
9 BUTYRALS/MEK	4.00	3.95	98.81	90-110
10 BENZALDEHYDE	4.00	3.91	97.70	90-110
11 ISO-PENTANAL	4.00	3.96	98.93	90-110
12 PENTANAL	4.00	3.94	98.51	90-110
16 HEXANAL	4.00	3.91	97.68	90-110

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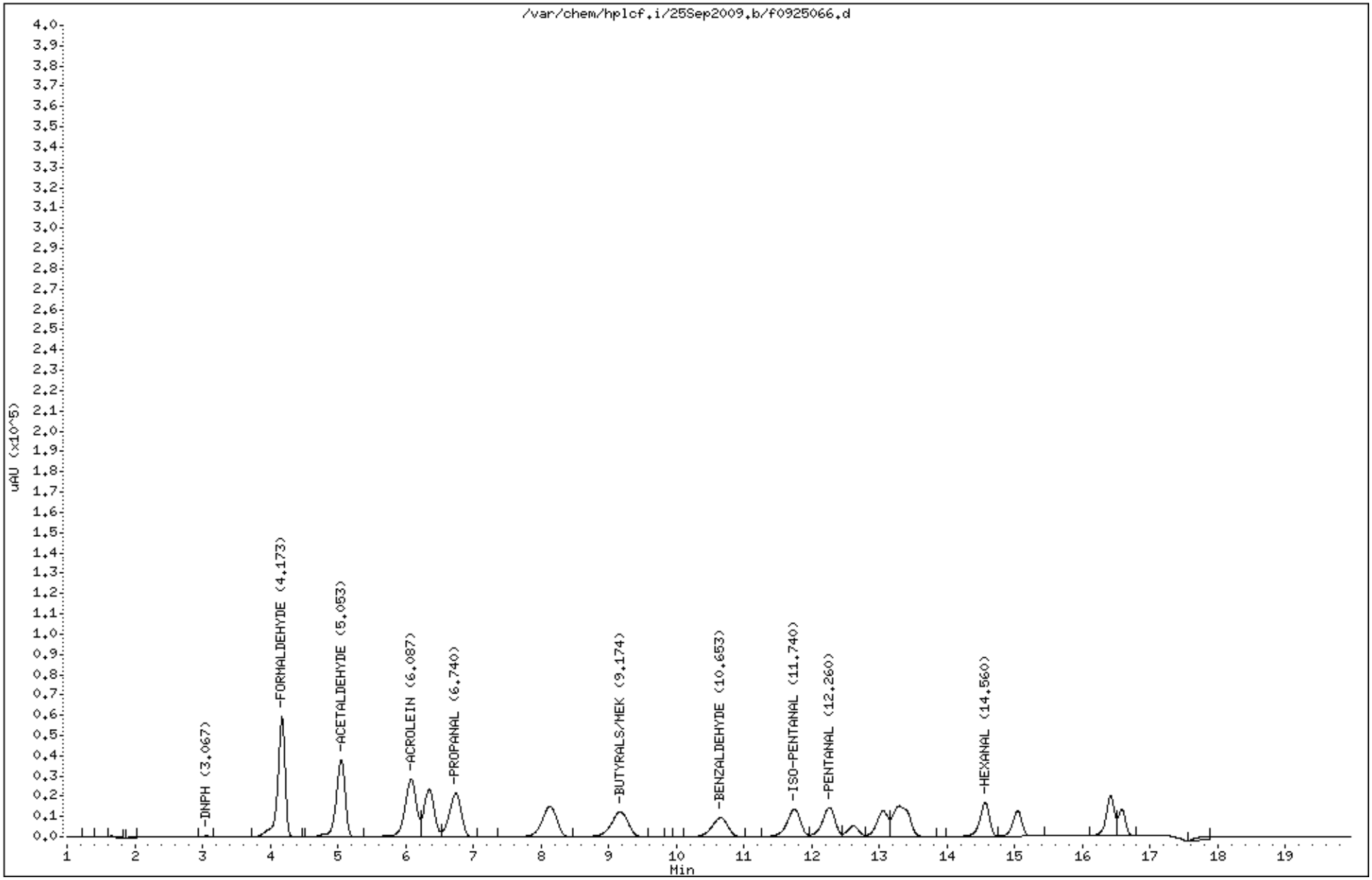
Data File: /var/chem/hplcf.i/25Sep2009.b/f0925066.d
Date : 26-SEP-2009 09:04
Client ID: CCV
Sample Info: ;1331-143-4;CCV
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

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/25Sep2009.b/f0925067.d
Lab Smp Id: CCB Client Smp ID: LAB BLANK
Inj Date : 26-SEP-2009 09:25
Operator : CRL Inst ID: hplcf.i
Smp Info : ;CCB;LAB BLANK
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.068	3.054	0.014	10331		
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/25Sep2009.b/f0925067.d

Date : 26-SEP-2009 09:25

Client ID: LAB BLANK

Instrument: hplcf.i

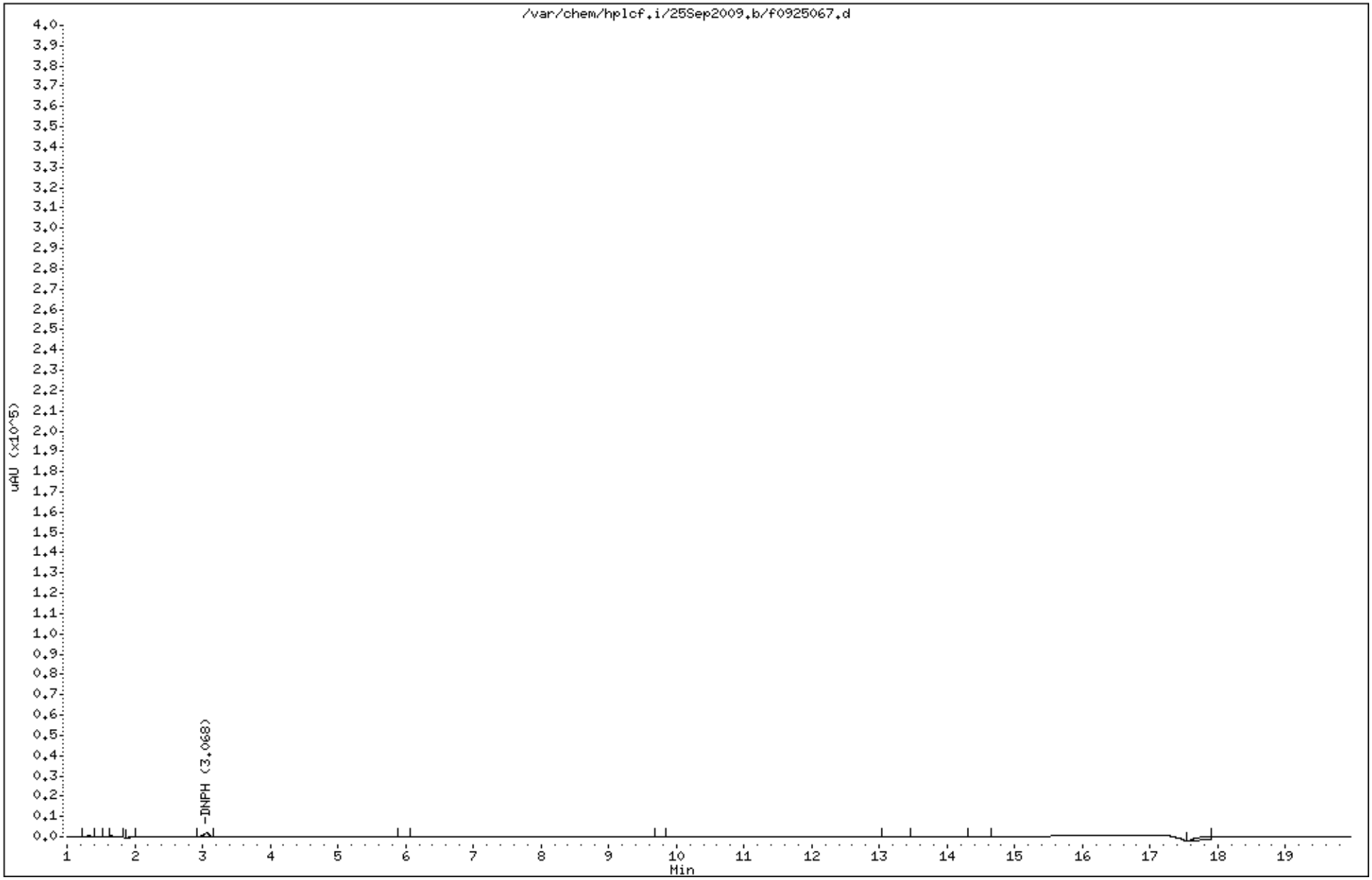
Sample Info: ;CCB;LAB BLANK

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0176

Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-143-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 25Sep2009
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	3.97	
75-07-0	ACETALDEHYDE	3.92	
107-02-8	ACROLEIN	4.13	
123-38-6	PROPANAL	3.77	
9999-9999-007	BUTYRALS/MEK	3.92	
100-52-7	BENZALDEHYDE	3.85	
590-86-3	ISO-PENTANAL	3.97	
110-62-3	PENTANAL	3.91	
66-25-1	HEXANAL	3.90	

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925080.d
Lab Smp Id: 1331-143-4 Client Smp ID: CCV
Inj Date : 26-SEP-2009 13:56
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-143-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.068	3.054	0.014	2396		
2 FORMALDEHYDE	4.175	4.147	0.028	472073	3.96721	3.97
3 ACETALDEHYDE	5.048	5.013	0.035	351928	3.92064	3.92
4 ACROLEIN	6.075	6.027	0.048	338862	4.12822	4.13
6 PROPANAL	6.735	6.673	0.062	258335	3.77175	3.77
9 BUTYRALS/MEK	9.162	9.053	0.109	221174	3.91772	3.92
10 BENZALDEHYDE	10.635	10.527	0.108	155270	3.85494	3.85
11 ISO-PENTANAL	11.722	11.627	0.095	188019	3.96617	3.97
12 PENTANAL	12.242	12.147	0.095	185508	3.91309	3.91
16 HEXANAL	14.548	14.480	0.068	163826	3.90093	3.90

Report Date: 28-Sep-2009 07:11

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 25Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-143-4
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: /chem/hplcf.i/25Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.97	99.18	90-110
3 ACETALDEHYDE	4.00	3.92	98.02	90-110
4 ACROLEIN	4.00	4.13	103.21	90-110
6 PROPANAL	4.00	3.77	94.29	90-110
9 BUTYRALS/MEK	4.00	3.92	97.94	90-110
10 BENZALDEHYDE	4.00	3.85	96.37	90-110
11 ISO-PENTANAL	4.00	3.97	99.15	90-110
12 PENTANAL	4.00	3.91	97.83	90-110
16 HEXANAL	4.00	3.90	97.52	90-110

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925080.d

Date : 26-SEP-2009 13:56

Client ID: CCV

Instrument: hplcf.i

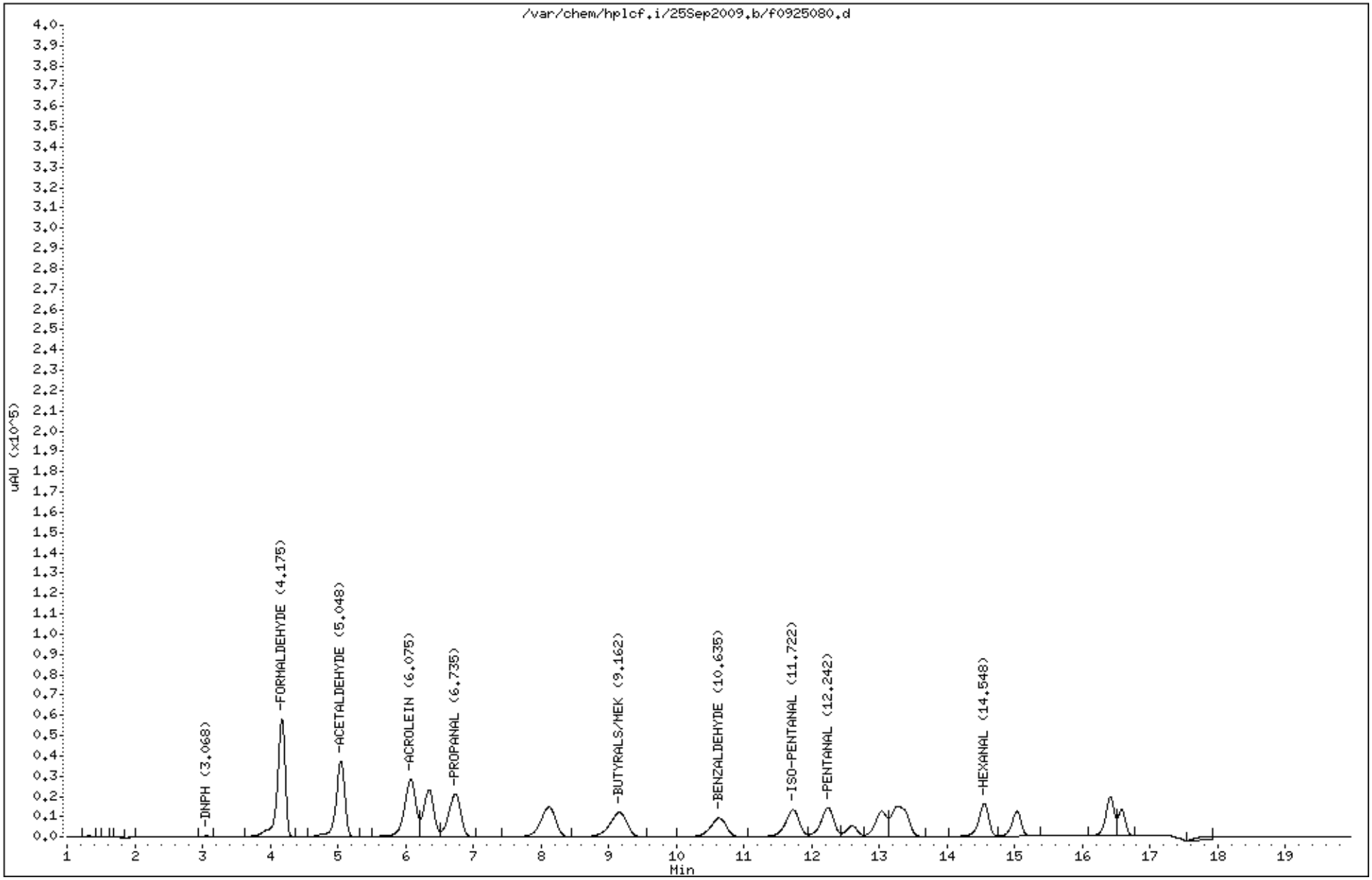
Sample Info: ;1331-143-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0180

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925081.d
Lab Smp Id: CCB Client Smp ID: LAB BLANK
Inj Date : 26-SEP-2009 14:17
Operator : CRL Inst ID: hplcf.i
Smp Info : ;CCB;LAB BLANK
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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)

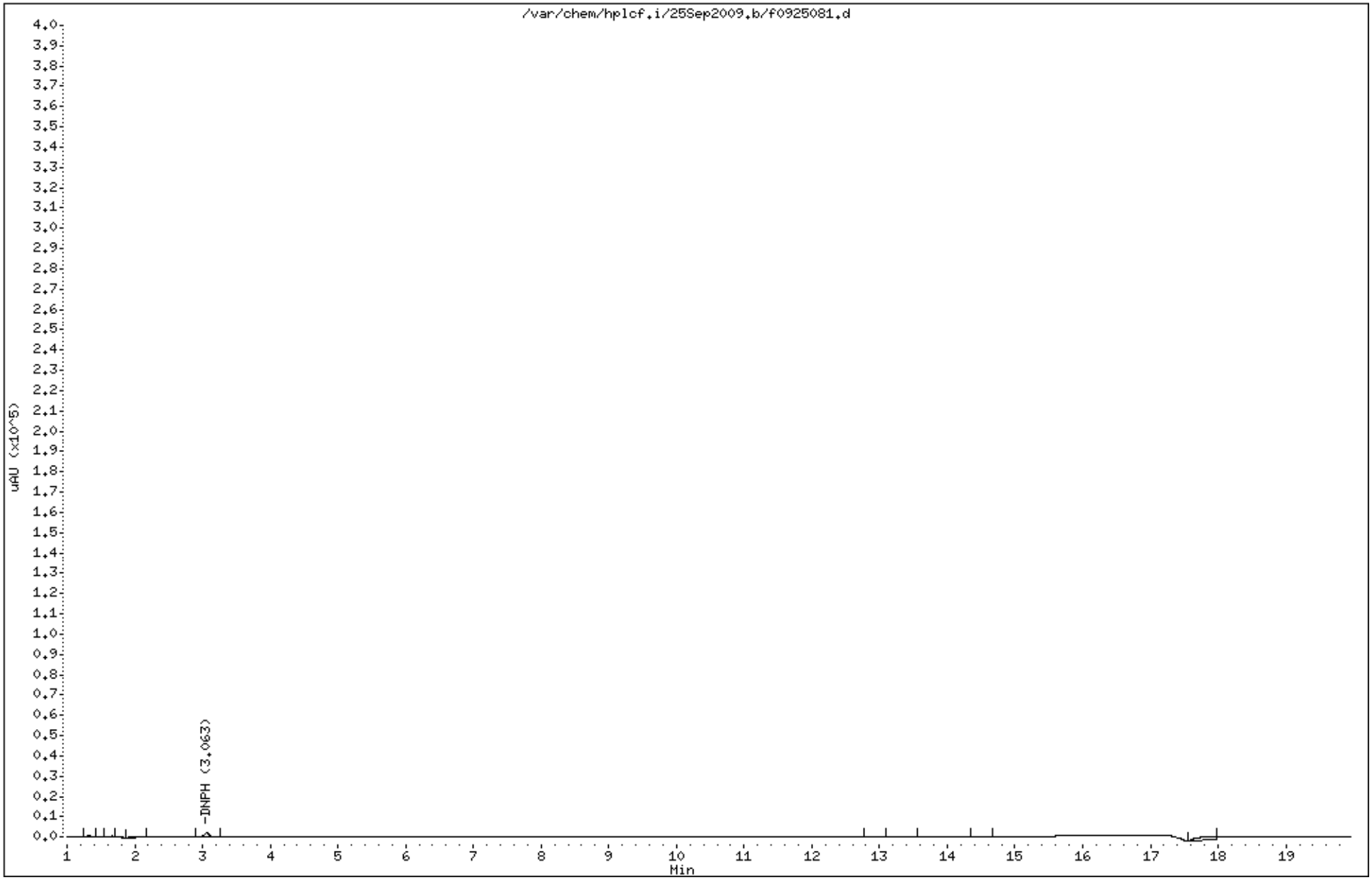
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (UG)	CONCENTRATIONS FINAL (ug)
1 DNPH	3.063	3.054	0.009	11164		
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.					

0182

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925081.d
Date : 26-SEP-2009 14:17
Client ID: LAB BLANK
Sample Info: ;CCB;LAB BLANK
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

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



Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-143-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 25Sep2009
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	3.97	
75-07-0	ACETALDEHYDE	3.95	
107-02-8	ACROLEIN	4.16	
123-38-6	PROPANAL	3.75	
9999-9999-007	BUTYRALS/MEK	3.88	
100-52-7	BENZALDEHYDE	3.90	
590-86-3	ISO-PENTANAL	4.06	
110-62-3	PENTANAL	3.97	
66-25-1	HEXANAL	3.89	

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925094.d
Lab Smp Id: 1331-143-4 Client Smp ID: CCV
Inj Date : 26-SEP-2009 18:49
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-143-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 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	3.071	3.054	0.017	2442		
2 FORMALDEHYDE	4.178	4.147	0.031	472358	3.96960	3.97
3 ACETALDEHYDE	5.051	5.013	0.038	354576	3.95013	3.95
4 ACROLEIN	6.078	6.027	0.051	341522	4.16062	4.16
6 PROPANAL	6.738	6.673	0.065	257066	3.75322	3.75
9 BUTYRALS/MEK	9.165	9.053	0.112	219366	3.88571	3.88
10 BENZALDEHYDE	10.638	10.527	0.111	157094	3.90022	3.90
11 ISO-PENTANAL	11.731	11.627	0.104	192300	4.05648	4.06
12 PENTANAL	12.245	12.147	0.098	188424	3.97459	3.97
16 HEXANAL	14.558	14.480	0.078	163528	3.89383	3.89

Report Date: 28-Sep-2009 07:11

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 25Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-143-4
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: /chem/hplcf.i/25Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.97	99.24	90-110
3 ACETALDEHYDE	4.00	3.95	98.75	90-110
4 ACROLEIN	4.00	4.16	104.02	90-110
6 PROPANAL	4.00	3.75	93.83	90-110
9 BUTYRALS/MEK	4.00	3.88	97.14	90-110
10 BENZALDEHYDE	4.00	3.90	97.51	90-110
11 ISO-PENTANAL	4.00	4.06	101.41	90-110
12 PENTANAL	4.00	3.97	99.36	90-110
16 HEXANAL	4.00	3.89	97.35	90-110

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925094.d

Date : 26-SEP-2009 18:49

Client ID: CCV

Instrument: hplcf.i

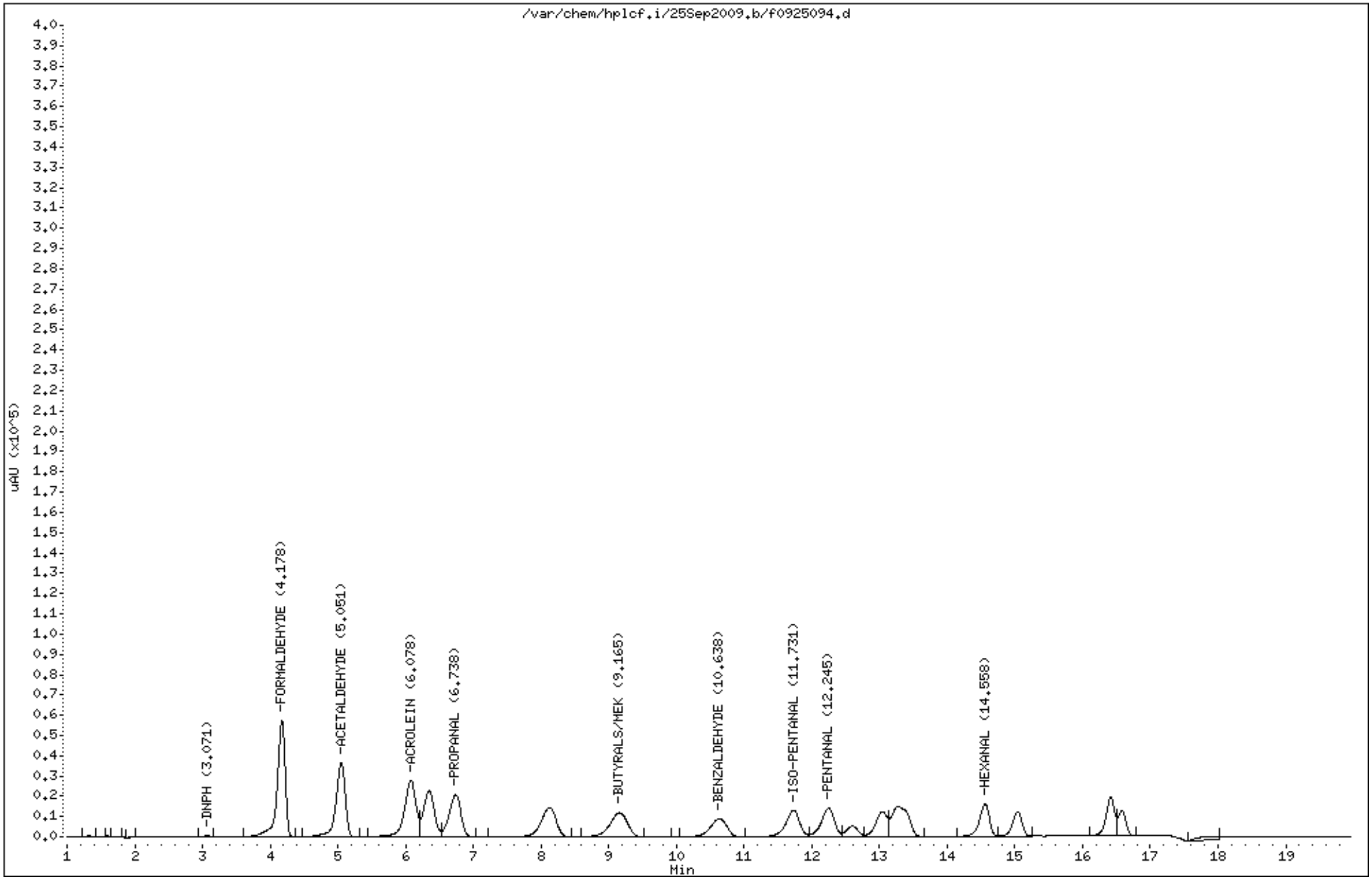
Sample Info: ;1331-143-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0186

Report Date: 28-Sep-2009 09:47

Air Toxics Ltd.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: hplcf.i Injection Date: 28-SEP-2009 07:39
Lab File ID: f0928002.d Init. Cal. Date(s): 04-SEP-2009 04-SEP-2009
Analysis Type: AIR Init. Cal. Times: 10:35 20:41
Lab Sample ID: 1331-143-4 Quant Type: ESTD
Method: /chem/hplcf.i/28Sep2009.b/F09D0904.m

COMPOUND	RRF / AMOUNT	RF4	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
2 FORMALDEHYDE	118994	117719	0.010	1.07110	10.00000	Averaged
3 ACETALDEHYDE	89763	88009	0.010	1.95394	10.00000	Averaged
4 ACROLEIN	82084	82442	0.010	-0.43567	10.00000	Averaged
6 PROPANAL	68492	63795	0.010	6.85880	10.00000	Averaged
9 BUTYRALS/MEK	56455	58334	0.010	-3.32811	10.00000	Averaged
10 BENZALDEHYDE	40278	41893	0.010	-4.00820	10.00000	Averaged
11 ISO-PENTANAL	47406	48639	0.010	-2.60141	10.00000	Averaged
12 PENTANAL	47407	47360	0.010	0.09954	10.00000	Averaged
16 HEXANAL	41997	40802	0.010	2.84441	10.00000	Averaged

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/28Sep2009.b/f0928002.d
Lab Smp Id: 1331-143-4 Client Smp ID: CCV
Inj Date : 28-SEP-2009 07:39
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-143-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/28Sep2009.b/F09D0904.m
Meth Date : 28-Sep-2009 09:47 cleaf 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: 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	AMOUNTS CAL-AMT (UG)	AMOUNTS ON-COL (UG)
1 DNPH	Compound Not Detected.					
2 FORMALDEHYDE	4.143	4.143	0.000	470877	4.00000	3.96
3 ACETALDEHYDE	5.003	5.003	0.000	352036	4.00000	3.92
4 ACROLEIN	6.009	6.009	0.000	329768	4.00000	4.02
6 PROPANAL	6.656	6.656	0.000	255178	4.00000	3.72
9 BUTYRALS/MEK	9.023	9.023	0.000	233335	4.00000	4.13
10 BENZALDEHYDE	10.496	10.496	0.000	167571	4.00000	4.16
11 ISO-PENTANAL	11.602	11.602	0.000	194555	4.00000	4.10
12 PENTANAL	12.129	12.129	0.000	189440	4.00000	4.00
16 HEXANAL	14.463	14.463	0.000	163209	4.00000	3.89

Data File: /var/chem/hplcf.i/28Sep2009.b/f0928002.d

Date : 28-SEP-2009 07:39

Client ID: CCV

Instrument: hplcf.i

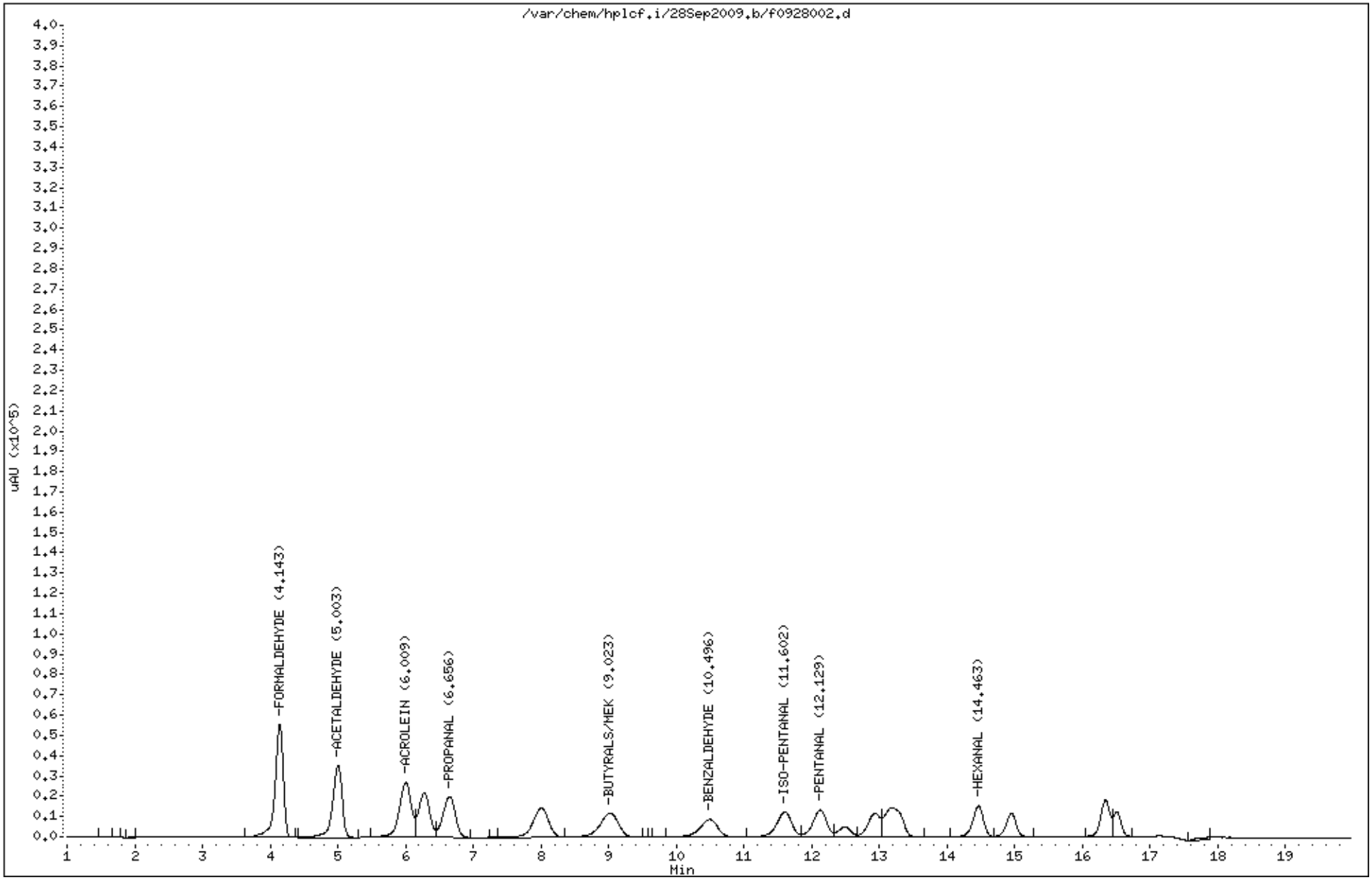
Sample Info: ;1331-143-4;CCV

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0189

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/28Sep2009.b/f0928003.d
Lab Smp Id: CCB Client Smp ID: LAB BLANK
Inj Date : 28-SEP-2009 07:59
Operator : CRL Inst ID: hplcf.i
Smp Info : ;CCB;LAB BLANK
Misc Info :
Comment :
Method : /chem/hplcf.i/28Sep2009.b/F09D0904.m
Meth Date : 28-Sep-2009 09:43 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: /var/chem/hplcf.i/28Sep2009.b/f0928003.d

Date : 28-SEP-2009 07:59

Client ID: LAB BLANK

Instrument: hplcf.i

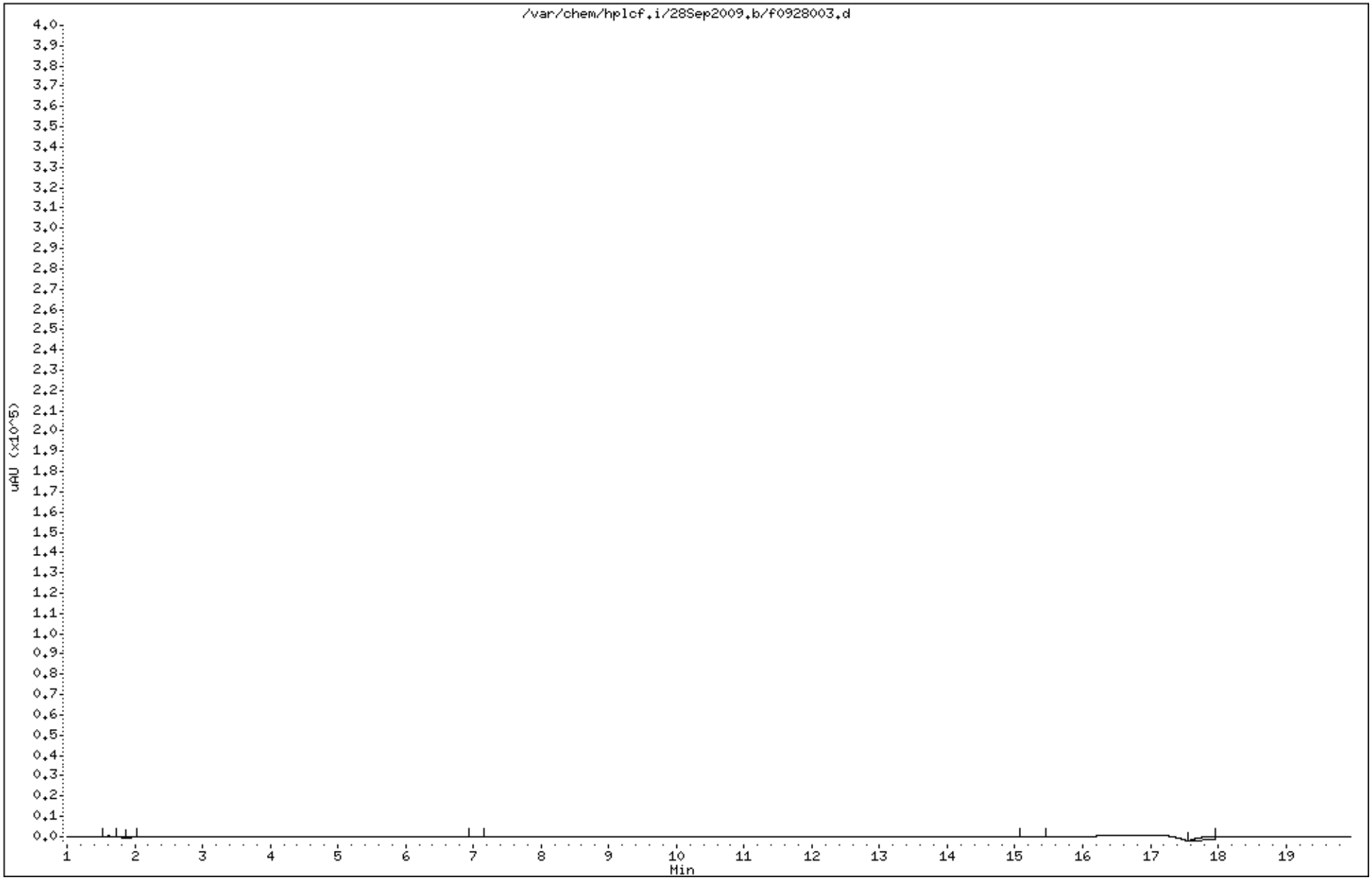
Sample Info: ;CCB;LAB BLANK

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0191

Air Toxics Ltd.

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 1331-143-4
Sample Location:
Sample Date:
Sample Matrix: AIR
Analysis Type: OTHER
Data Type: LC DATA
Misc Info:

Client SDG: 28Sep2009
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
50-00-0	FORMALDEHYDE	3.94	
75-07-0	ACETALDEHYDE	3.88	
107-02-8	ACROLEIN	4.05	
123-38-6	PROPANAL	3.77	
9999-9999-007	BUTYRALS/MEK	3.92	
100-52-7	BENZALDEHYDE	3.85	
590-86-3	ISO-PENTANAL	3.97	
110-62-3	PENTANAL	3.94	
66-25-1	HEXANAL	3.90	

Air Toxics Ltd.

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

Data file : /var/chem/hplcf.i/28Sep2009.b/f0928015.d
Lab Smp Id: 1331-143-4 Client Smp ID: CCV
Inj Date : 28-SEP-2009 13:45
Operator : CRL Inst ID: hplcf.i
Smp Info : ;1331-143-4;CCV
Misc Info :
Comment :
Method : /chem/hplcf.i/28Sep2009.b/F09D0904.m
Meth Date : 28-Sep-2009 09:47 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	Compound Not Detected.					
2 FORMALDEHYDE	4.172	4.143	0.029	469380	3.94457	3.94
3 ACETALDEHYDE	5.045	5.003	0.042	348708	3.88477	3.88(M)
4 ACROLEIN	6.072	6.009	0.063	332702	4.05317	4.05
6 PROPANAL	6.731	6.656	0.075	258080	3.76801	3.77
9 BUTYRALS/MEK	9.158	9.023	0.135	221303	3.92000	3.92
10 BENZALDEHYDE	10.638	10.496	0.142	155167	3.85237	3.85
11 ISO-PENTANAL	11.725	11.602	0.123	188422	3.97466	3.97
12 PENTANAL	12.238	12.129	0.109	186781	3.93993	3.94
16 HEXANAL	14.552	14.463	0.089	163912	3.90296	3.90

QC Flag Legend

M - Compound response manually integrated.

Report Date: 15-Oct-2009 17:11

Air Toxics Ltd.

RECOVERY REPORT

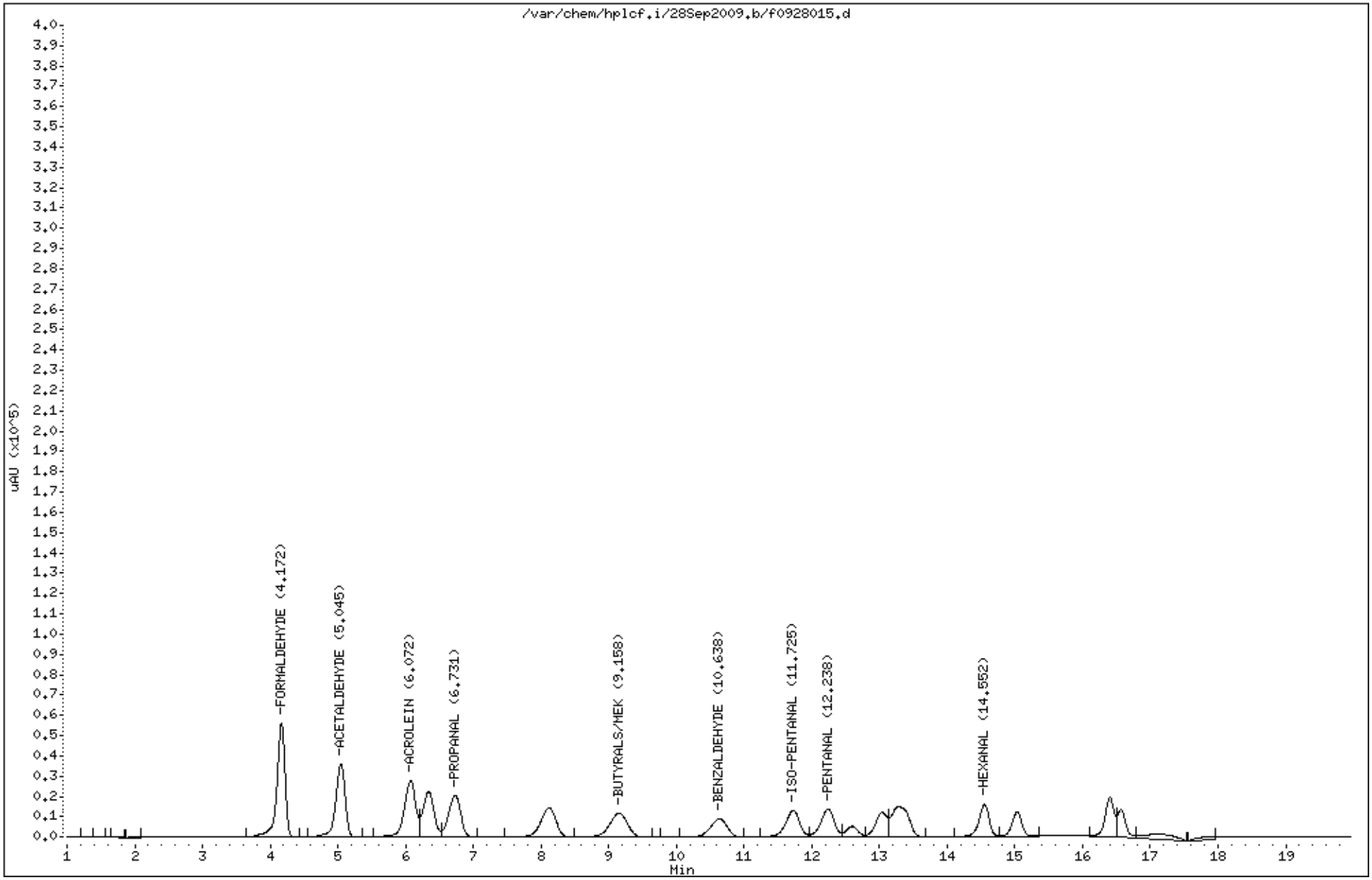
Client Name:
Client SDG: 28Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 1331-143-4
Client Smp ID: CCV
Level: MED
Operator: CRL
Data Type: LC DATA
SampleType: METHSPIKE
SpikeList File: R4ug.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /chem/hplcf.i/28Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	4.00	3.94	98.61	90-110
3 ACETALDEHYDE	4.00	3.88	97.12	90-110
4 ACROLEIN	4.00	4.05	101.33	90-110
6 PROPANAL	4.00	3.77	94.20	90-110
9 BUTYRALS/MEK	4.00	3.92	98.00	90-110
10 BENZALDEHYDE	4.00	3.85	96.31	90-110
11 ISO-PENTANAL	4.00	3.97	99.37	90-110
12 PENTANAL	4.00	3.94	98.50	90-110
16 HEXANAL	4.00	3.90	97.57	90-110

0195

Data File: /var/chem/hplcf.i/28Sep2009.b/f0928015.d
Date : 28-SEP-2009 13:45
Client ID: CCV
Sample Info: ;1331-143-4;CCV
Purge Volume: 5.0
Column phase: C-18 REVERSE PHASE

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



Air Toxics LTD.
Laboratory Services Since 1989

Client Sample ID: LCS

Lab ID#: 0909546C-49A

RADIELLO ANALYSIS BY HPLC/UV

File Name:	**f0925010**	**Date of Collection: NA**
Dil. Factor:	**1.00**	**Date of Analysis: 9/25/09 01:20 PM**
		Date of Extraction: 9/25/09

Compound	**%Recovery**
Formaldehyde	108
Acetaldehyde	104
Propanal	97
Methyl Ethyl Ketone/Butyraldehydes	97
Benzaldehyde	98
Pentanal	99
Isopentanal	101
Hexanal	95
Acrolein	98

Container Type: NA - Not Applicable

Report Date: 25-Sep-2009 14:41

Air Toxics Ltd.

RECOVERY REPORT

Client Name:
Client SDG: 25Sep2009
Sample Matrix: LIQUID
Fraction: OTHER
Lab Smp Id: 0909546C-LCS
Client Smp ID: LCS
Level: MED
Operator: CRL
Data Type: LC DATA
SampleType: LCS
SpikeList File: Rvarlcs.spk
Quant Type: ESTD
Sublist File: Rad165.sub
Method File: /chem/hplcf.i/25Sep2009.b/F09D0904.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug	CONC RECOVERED ug	% RECOVERED	LIMITS
2 FORMALDEHYDE	7.86	8.50	108.19	85-115
3 ACETALDEHYDE	3.93	4.07	103.55	85-115
4 ACROLEIN	4.75	4.67	98.41	85-115
6 PROPANAL	4.87	4.74	97.29	85-115
9 BUTYRALS/MEK	5.71	5.54	97.01	85-115
10 BENZALDEHYDE	7.41	7.23	97.54	85-115
11 ISO-PENTANAL	6.47	6.56	101.34	85-115
12 PENTANAL	6.47	6.40	98.85	85-115
16 HEXANAL	7.14	6.76	94.68	85-115

Air Toxics Ltd.

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

Data file : /chem/hplcf.i/25Sep2009.b/f0925010.d
Lab Smp Id: 0909546C-LCS Client Smp ID: LCS
Inj Date : 25-SEP-2009 13:20
Operator : CRL Inst ID: hplcf.i
Smp Info : ;0909564C-LCS;
Misc Info :
Comment :
Method : /chem/hplcf.i/25Sep2009.b/F09D0904.m
Meth Date : 25-Sep-2009 08:31 cleaf 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	3.058	3.054	0.004	34639622		
2 FORMALDEHYDE	4.178	4.147	0.031	2529640	21.2586	8.50
3 ACETALDEHYDE	5.051	5.013	0.038	913253	10.1741	4.07
4 ACROLEIN	6.091	6.027	0.064	959262	11.6863	4.67
6 PROPANAL	6.752	6.673	0.079	811303	11.8452	4.74
9 BUTYRALS/MEK	9.198	9.053	0.145	781830	13.8488	5.54
10 BENZALDEHYDE	10.678	10.527	0.151	727764	18.0684	7.23
11 ISO-PENTANAL	11.765	11.627	0.138	777028	16.3910	6.56
12 PENTANAL	12.278	12.147	0.131	758012	15.9894	6.40
16 HEXANAL	14.585	14.480	0.105	709760	16.9003	6.76

Data File: /var/chem/hplcf.i/25Sep2009.b/f0925010.d

Page 1

Date : 25-SEP-2009 13:20

Client ID: LCS

Instrument: hplcf.i

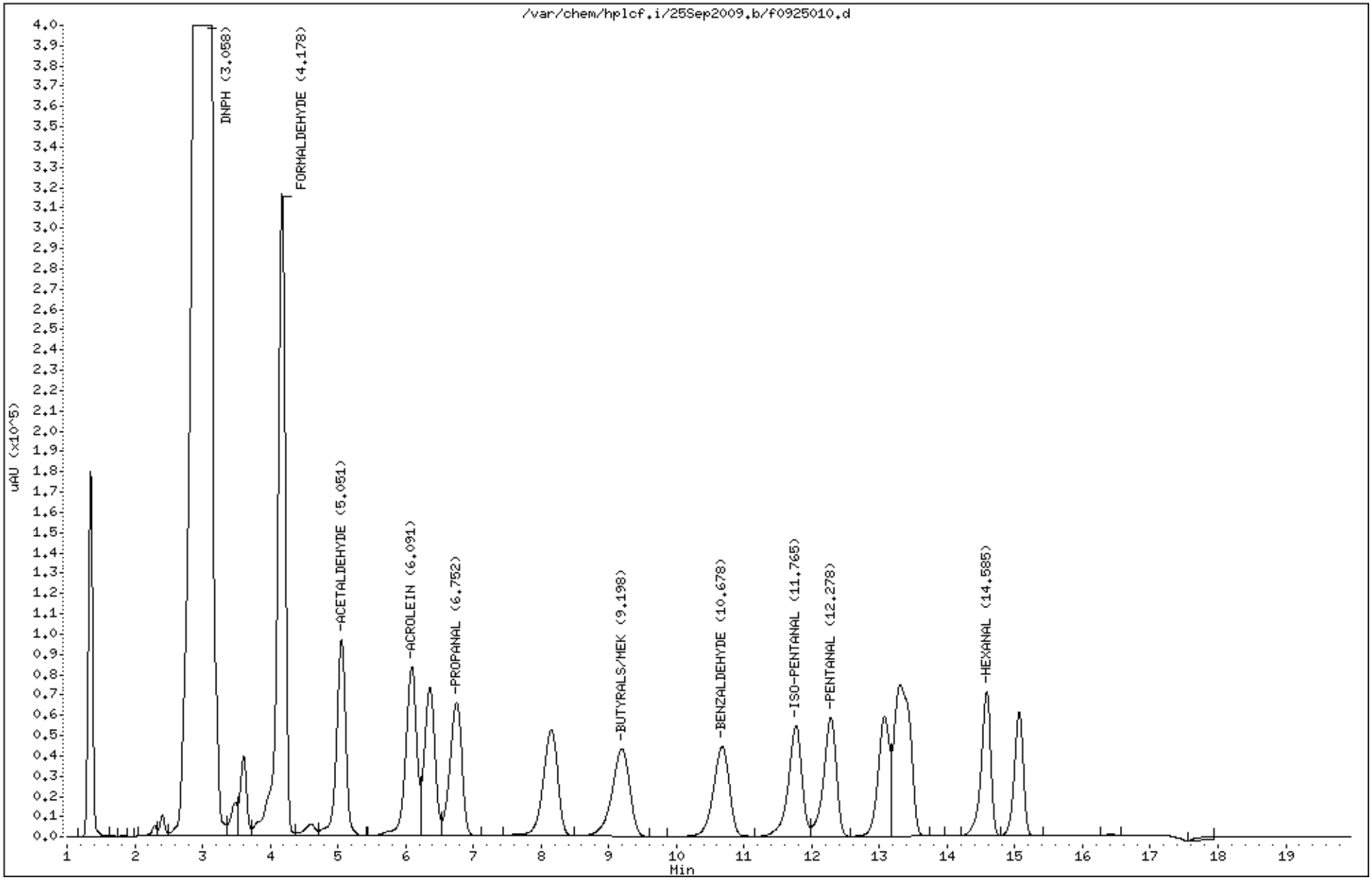
Sample Info: ;0909564C-LCS;

Purge Volume: 5.0

Operator: CRL

Column phase: C-18 REVERSE PHASE

Column diameter: 2.00



0199

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

ATL Work Order # ~~09095640~~ 0909546C CRL 9/25/09 **Final Solvent:** ACN **Solvent Lot #:** 086064

Date Extracted 9/25/09 **Spike I.D.:** *1331-140-var / *1636-8412-500 **Spiked By:** CRL

Spike Witness: MJS

ATL Fraction	Clients I.D. #	Cartridge type & size	Final Volume (ml)	Spike Amount (ul)	Comments
CRL 9/25/09 0909546C ~~0909546C~~ -BLK	N/A	RAP 165 lot#09144	2.0	N/A	
-LCS		lot#09069		*1000/10**	**full list * = formaldehyde
-32A	106741	lot# N/A		NA	
-33A	742				
-34A	743				
-35A	744				
-36A	768				
-37A	769				
-38A	770				
-39A	771				
-40A	772				
-41A	773				
-42A	797				
-43A	798				
-44A	799				
-45A	800				
-46A	801				
-47A	802				

CRL 9/28/09

Comments:

CRL 9/28/09

Casey Leaf 9/28/09

Signed Date

0200

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: 94 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f0925001	CCB	1.00	CRL	9/25/09	0734	CRL / W	
✓	2	CCV 1331-143-4				0755		
✓	3	CCB				0816		
C	4	0909449-06A				0837		C=confirmed
✓	5	0909546A-Blk				1135		
✓	6	↓ -LCS				1156		
✓	7	0909546B-Blk				1217		
✓	8	↓ -LCS				1238		
✓	9	0909546C-Blk				1259		
✓	10	↓ -LCS				1320		
✓	11	0909546D-Blk				1340		
✓	12	↓ -LCS				1401		
✓	13	0909546A-05A				1437		
✓	14	CCV 1331-143-4				1458		
✓	15	CCB				1518		
✓	16	0909546A-11A				1539		
✓	17	↓ -17A				1600		
✓	18	0909546B-23A				1621		
✓	19	↓ -29A				1642		
✓	20	0909546C-35A				1703		
✓	21	-41A				1724		
✓	22	↓ -47A				1745		
✓	23	0909546D -53A				~~1806~~ 1806		
✓	24	CCB ~~-59A~~				1826		
✓	25	CCV 1331-143-4 CRL 9/28/09				1847		
✓	26	CCB				1908		
✓	27	0909546D-59A				1929		
✓	28	↓ -60A				1950		

Calculation Check:

File ID: f0925004 Compound: formaldehyde Initials: CRL

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(6620)}{(118994)}$ × (10/5) = 0.111

Reported Result: 0.111

Casey Leaf 9/28/09

Signed Date

0201

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

Method (Circle all that apply): TO-5 CARB 430 (TO-11A) Method 0011 Pressure: 94 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f0925029	0909546D-61A	1.00	CRL	9/25/09	2011	CRL / L	
✓	30	0909546A-01A	5.00	KJJ		2032		
✓	31	-01¾A				2053		
✓	32	-02A				2114		
X	33	-03A				2134		over diluted
✓	34	-04A				2155		
✓	35	-06A				2216		
✓	36	-07A				2237		
X	37	-08A				2258		over diluted
X	38	CCB	1.00			2319		
✓	39	CCV 1331-143-4				2340		
✓	40	CCB			9/26/09	0001		
✓	41	0909546A-09A	5.00			0022		
✓	42	-10A				0042		
✓	43	-12A				0103		
✓	44	-13A				0124		
X	45	-14A				0145		over diluted
✓	46	-15A				0206		
✓	47	-15AA				0227		
✓	48	0909546B-16A	5.00			0248		
O	49	-18A				0309		O = overrange
O	50	-19A				0330		
X	51	CCB	1.00			0350		
✓	52	CCV 1331-143-4				0411		
✓	53	CCB				0432		
X	54	0909546B-20A	5.00			0453		over diluted
O	55	-21A				0514		
O	56	-22A				0535		

Calculation Check:

File ID: f0925035 Compound: Acetaldehyde Initials: CRL

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(314067)}{(89763)}$ × (2.0) = 7.04

Reported Result: 7.04

Signed: [signature] Date: 10/15/09

0202

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: 94 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f0925057	0909546B-24A	~~1.00~~ 5.00	KJJ	9/26/09	0556	CRL / [illegible]	
✓	58	-25A				0617		
X ✓	59	-26A				0638		over diluted
✓	60	-27A				0659		
✓	61	-28A				0719		
✓	62	-30A				0740		
✓	63	-31A				0801		
✓	64	-31AA				0822		
X ✓	65	CCB (ACN wash)	1.00			0843		
✓	66	CCV 1331-143-4				0904		
✓	67	CCB				0925		
X ✓	68	0909546C-32A	5.00			0946		over diluted
✓	69	-33A				1006		
✓	70	-34A				1027		
✓	71	-36A				1048		
✓	72	-37A				1109		
X	73	-38A				1130		over diluted
✓	74	-39A				1151		
✓	75	-40A				1212		
✓	76	-42A				1233		
✓	77	-43A				1254		
✓	78	-43AA				1314		
X	79	CCB (ACN wash)	1.00			1335		
✓	80	CCV 1331-143-4				1356		
✓	81	CCB				1417		
X	82	0909546C-44A	5.00			1438		over diluted
✓	83	-45A				1459		
✓	84	-46A				1520		

Calculation Check:

File ID: f0925076 Compound: Acrolein Initials: CRL

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(\cancel{78}\ 79820)}{(82084)}$ × (2.0) = **1.94**

Reported Result: **1.94**

Page 62 Signed 10/15/09 Date

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: 94 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	f0925085	0909546D-48A	5.00	KJJ	9/26/09	1541	CRL / [illegible]	
✓	86	-49A				1602		
X	87	-50A				1622		over diluted
✓	88	-51A				1643		
✓	89	-52A				1704		
✓	90	-54A				1725		
✓	91	-55A				1746		
✓	92	-56AA				1807		
X	93	CCB	1.00			1828		
✓	94	CCV 1331-143-4				1849		
✓	95	CCB				1910		
X	96	0909546D -56A	5.00			1930		over diluted
✓	97	-57A				1951		
✓	98	-58A				2012		
✓	99	-58AA				2033		
X	100	CCB	1.00			2054		
✓	f0925101 ~~1881~~ CRL 9/28/09	CCV 1331-143-4				2115		

CRL 9/28/09

Calculation Check:

File ID: f0925085 Compound: Hexanal Initials: CRL

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}}$ × DF = $\frac{(302867)}{(41997)}$ × (2.0) = 14.4

Reported Result: 14.4

Signed 10/15/09 Date

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

Method (Circle all that apply): TO-5 CARB 430 (TO-11A) Method 0011 Pressure: 95 bar

Use	File #	Sample Name/Client	DF	Loaded by Init.	Date	Time	Reviewed by Init.	Comments
✓	F0928001	CCB (ACN WASH)	1.00	CRL	9/28/09	0718	CRL / [illegible]	
✓	2	CCV 1331-143-4				0739		
✓	3	CCB				0759		
✓	4	09095546A-03A				0955		
✓	5	-08A				1016		
✓	6	-14A				1037		
✓	7	09095546B-20A				1057		
X	8	1331-148-4				1118		Acetophenone + Isophorone wrong lot 1st source
✓	9	09095546B-26A				1139		
✓	10	09095546C-32A				1200		
✓	11	-38A				1221		
✓	12	-44A				1242		
✓	13	09095546D-50A				1303		
✓	14	ACN WASH				1324		
✓	15	1331-143-4 CCV				1345		
✓	16	CCB				1405		
✓	17	09095546D-56A				1426		
✓	18	09095546B-18A	6.00			1447		
✓	19	09095546B-19A				1508		
✓	20	-21A				1529		
✓	21	-22A				1550		
✓	22	~~CCB~~ ACN WASH	1.00			1611		
✓	23	CCV 1331-143-4				1632		
								CRL 9/29/09

Calculation Check:

File ID: F0928002 Compound: Formaldehyde Initials: ACT

Sample Amt = $\frac{\text{Area Counts Sample}}{\text{RF}} \times \text{DF} = \frac{(470877)}{(118994)} \times (1.00) =$ 3.96

Reported Result: 3.96

Signed: [signature] Date: 10/15/09

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 #: 0909546C
# of pages (Including Cover): 1

10/21/2009

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: 9/24/09

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

0909546

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. STOP
3A	106741	32A AIR PASSIVE	ALDEHYDE ANALYSIS	9/8/09	9/22/09
4A	106742	33A			
5A	106743	34A			
6A	106744	35A			
7A	106768	36A		9/8/09	9/22/09
8A	106769	37A			
9A	106770	38A			
10A	106771	39A			
11A	106772	40A			
12A	106773	41A			
13A	106797	42A		9/9/09	9/23/09
14A	106798	43A			
15A	106799	44A			
16A	106800	45A			
17A	106801	46A			
18A	106802	47A			

Special instructions:

9/25/09

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

☐ Fax results 781-247-4305

☐ **RETURN SAMPLES** ☒ Electronic transfer - datacoordinator@ehesinc.com

☒ Additional report recipient mfragale@ehesinc.com

CUSTODY SEAL INTACT? Y N NONE TEMP 4.2°C

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

Relinquished by: [signature] of Environmental Health & Engineering, Inc. Date: 9/24/09

Received by: [signature] of (company name) AH Date: 9/25/09

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 4

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 0909546C

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: 10/09/09
Date Completed: 10/19/09
Date Received: 9/25/09
PO#: 16512
Project#: 16512

Total $: $ 1,280.00
Logged By: MG

Fraction	Sample #	Analysis	Collected	Amount$
32A	106741	Modified TO-11A	9/22/2009	$75.00
33A	106742	Modified TO-11A	9/22/2009	$75.00
34A	106743	Modified TO-11A	9/22/2009	$75.00
35A	106744	Modified TO-11A	NA	$75.00
36A	106768	Modified TO-11A	9/22/2009	$75.00
37A	106769	Modified TO-11A	9/22/2009	$75.00
38A	106770	Modified TO-11A	9/22/2009	$75.00
39A	106771	Modified TO-11A	9/22/2009	$75.00
40A	106772	Modified TO-11A	9/22/2009	$75.00
41A	106773	Modified TO-11A	NA	$75.00
42A	106797	Modified TO-11A	9/23/2009	$75.00
43A	106798	Modified TO-11A	9/23/2009	$75.00
43AA	106798 Lab Duplicate	Modified TO-11A	9/23/2009	$0.00
44A	106799	Modified TO-11A	9/23/2009	$75.00
45A	106800	Modified TO-11A	9/23/2009	$75.00
46A	106801	Modified TO-11A	9/23/2009	$75.00
47A	106802	Modified TO-11A	NA	$75.00
48A	Lab Blank	Modified TO-11A	NA	$0.00
49A	LCS	Modified TO-11A	NA	$0.00

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

Phone

Fax

Date Promised:
Date Completed:
Date Received:
PO#:
Project#:

Sales Rep:

Total $: $ 1,280.00
Logged By: MG

Fraction	Sample #	Analysis	Collected	Amount$
Misc. Charges eCVP (16) @ $5.00 each.				$80.00

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

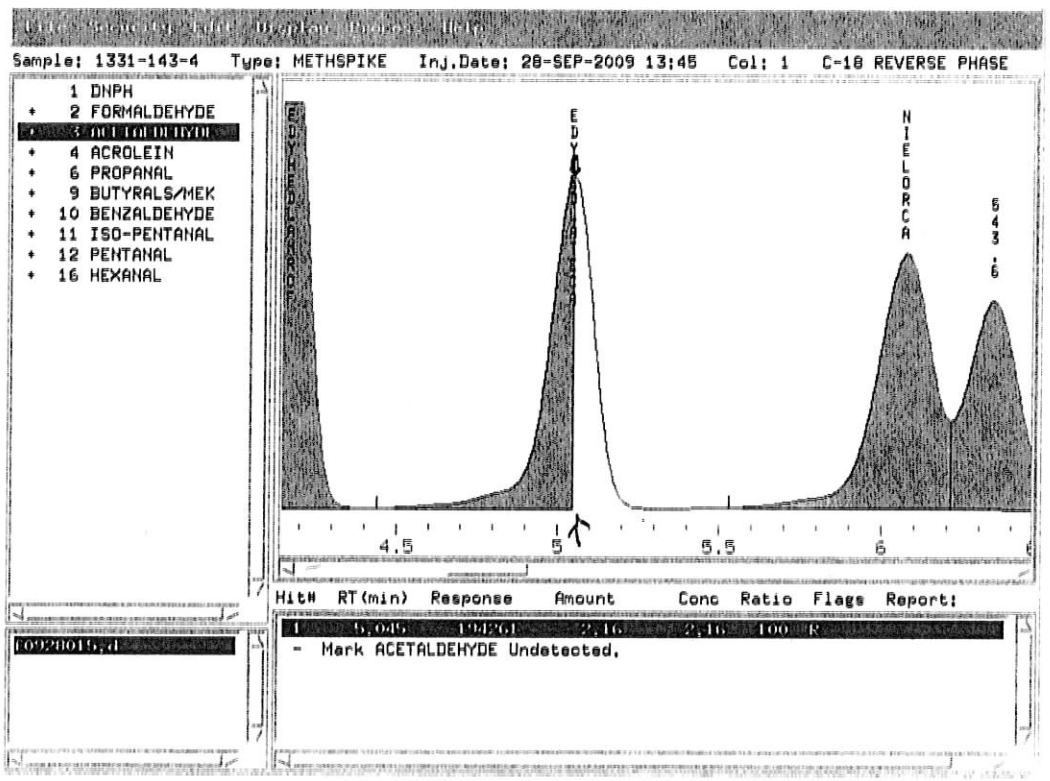
BILL TO: Accounts Payable
Environmental Health & Engineering, Inc.
117 Fourth Avenue
Needham, MA 02494

Analysis Code: HPLC

TERMS:

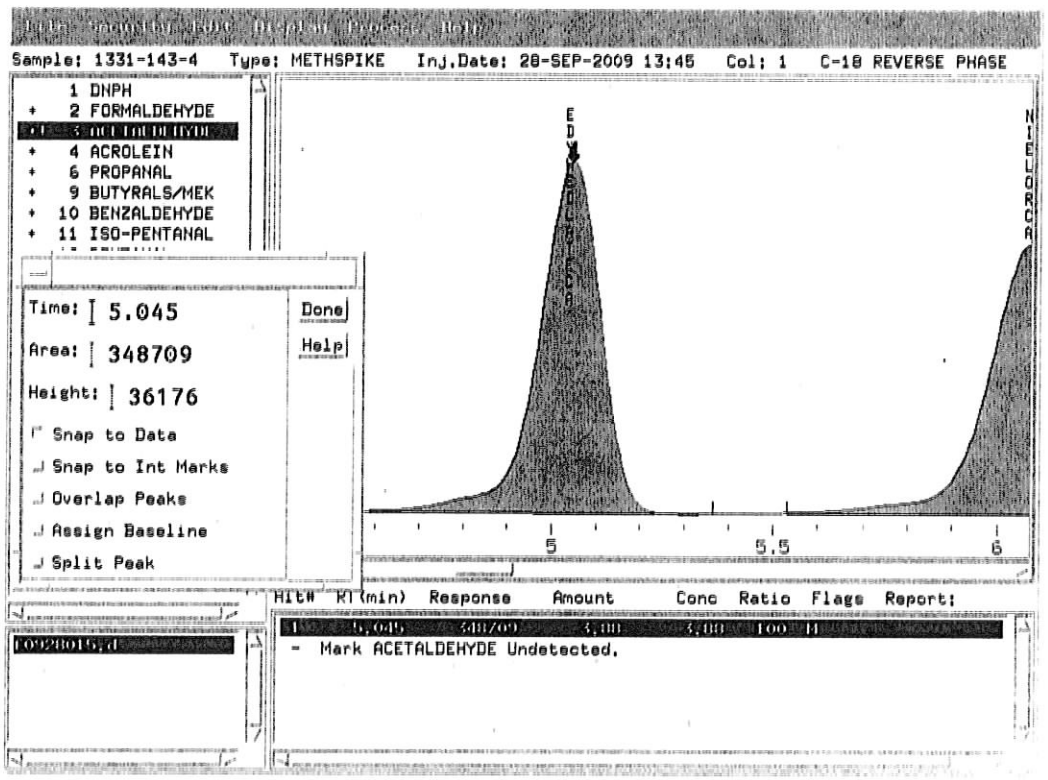
Reporting Method: Modified TO-11A Passive-Radiello 165 (Full list) (ug)

Other Records



Before

W: 10/15/09

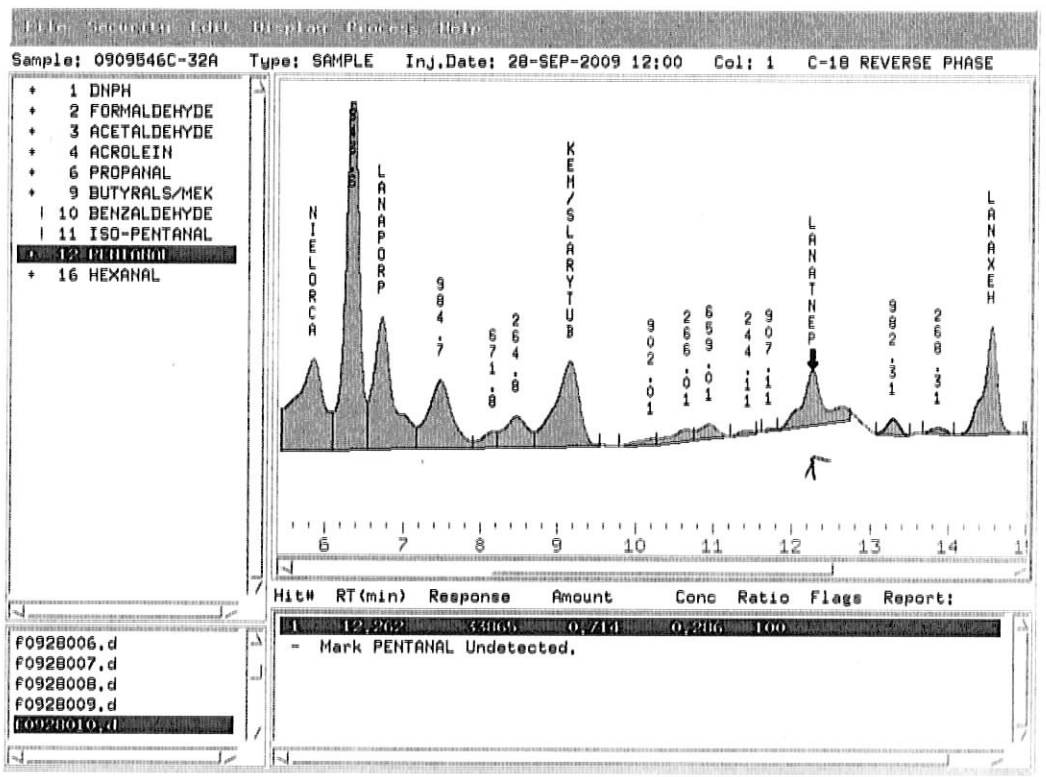


After

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

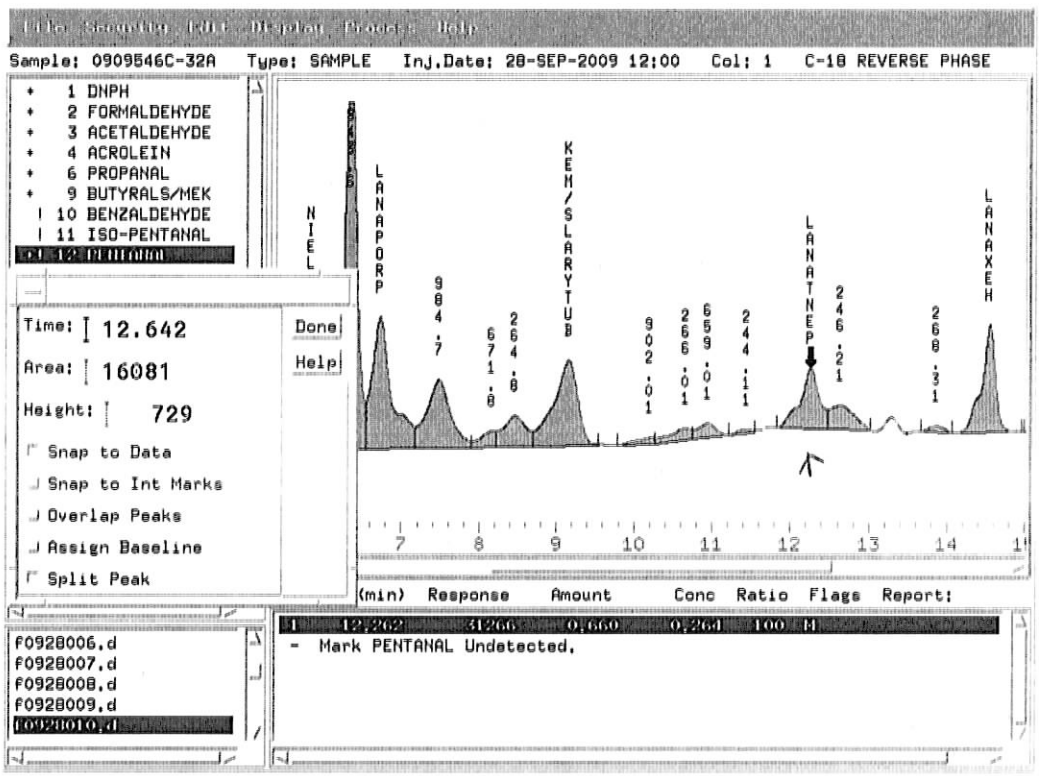
SJ
10/15/09

10/15/09



before

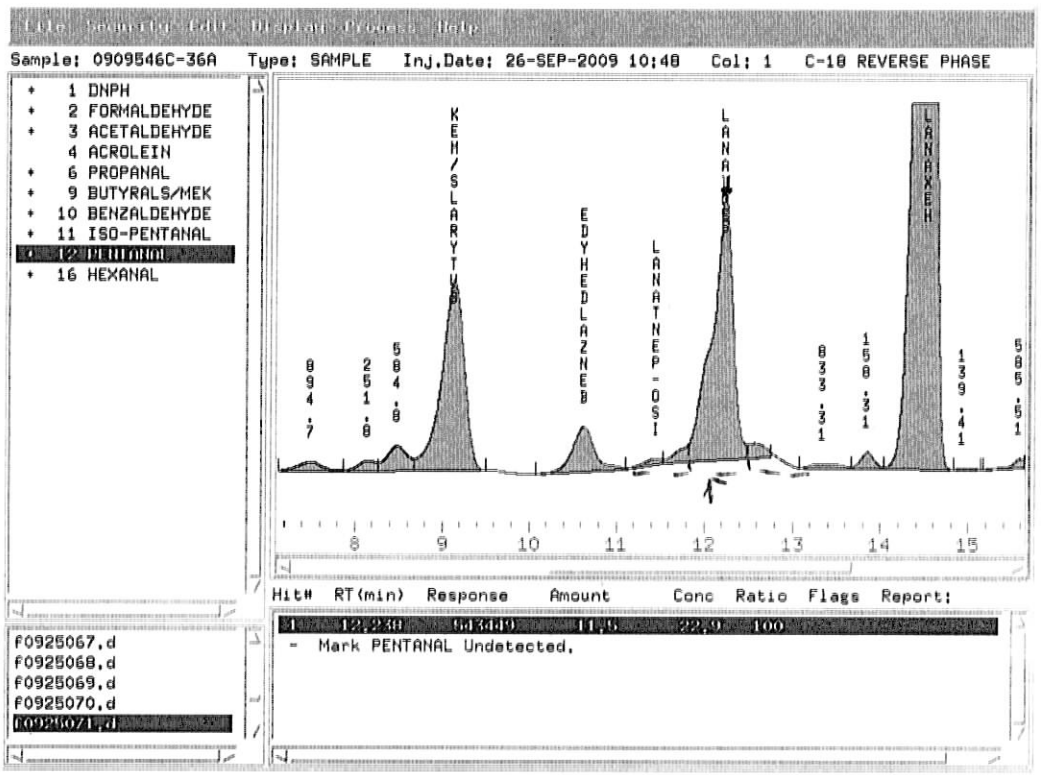
10/15/09



After

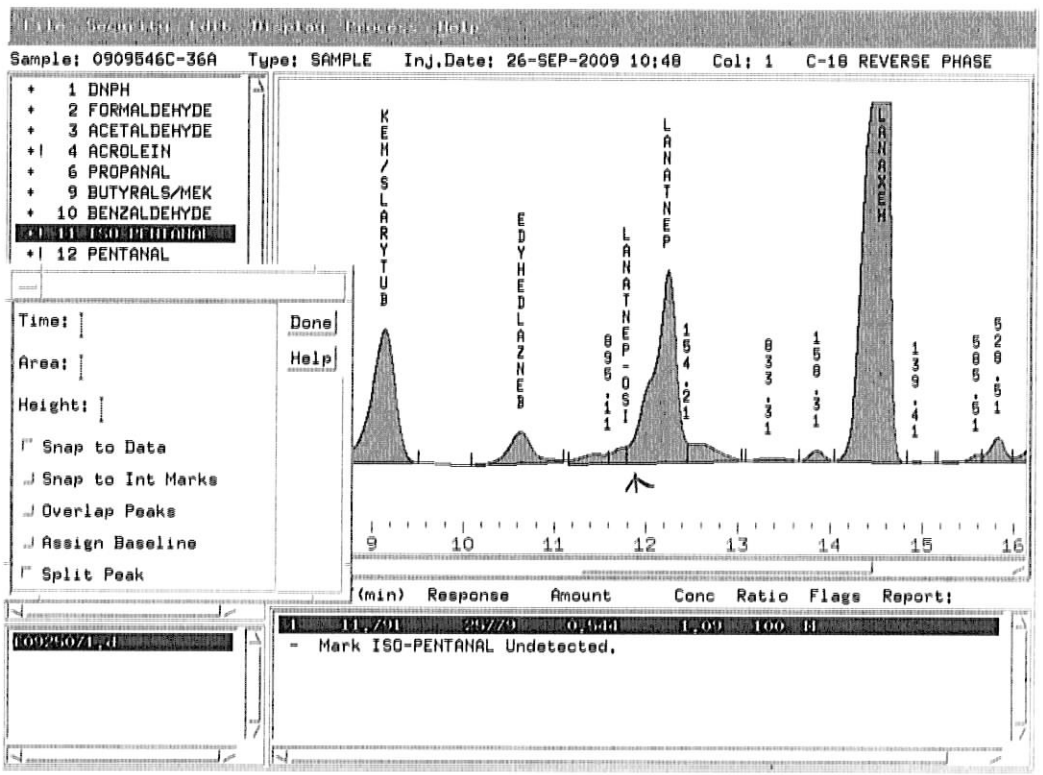
Correct Baseline	✓
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

L10115109



Before

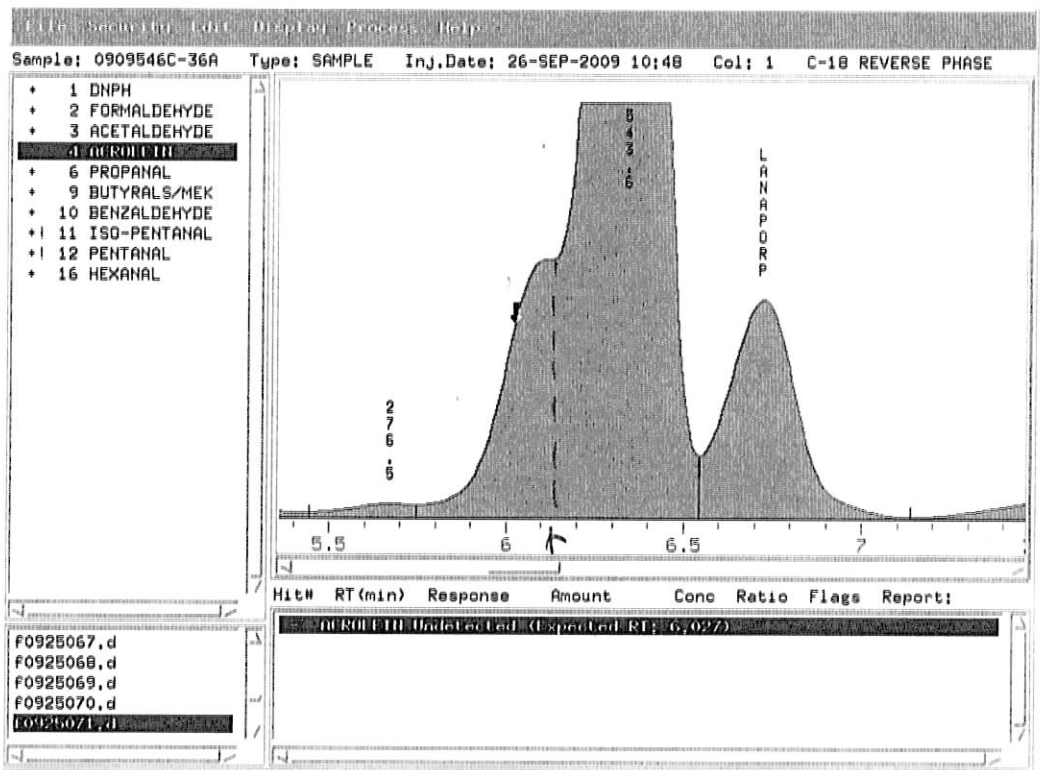
W 10/15/09



After

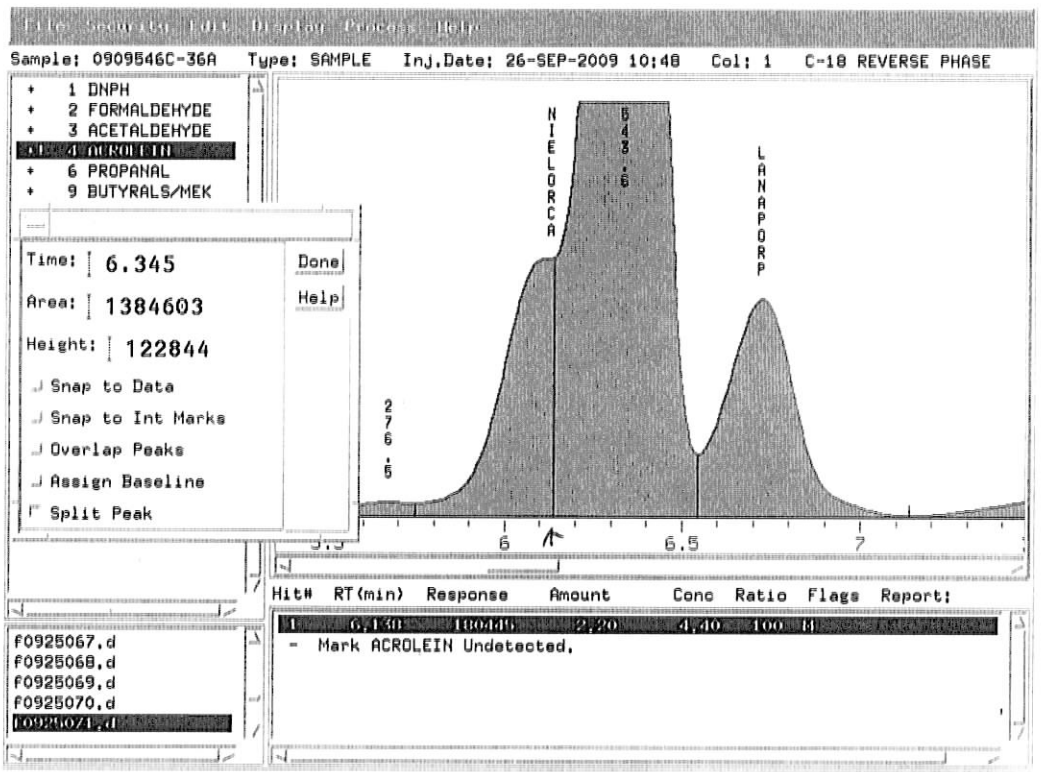
Correct Baseline	✓
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	✓

W 10/15/09



Before.

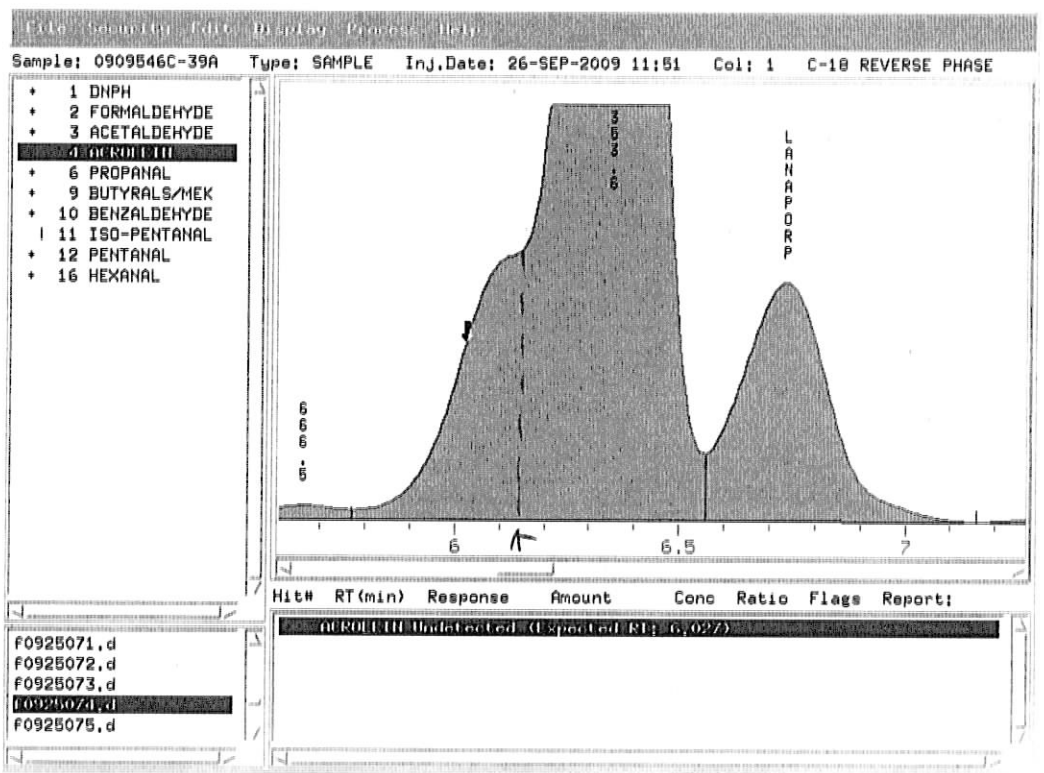
W10115109



After

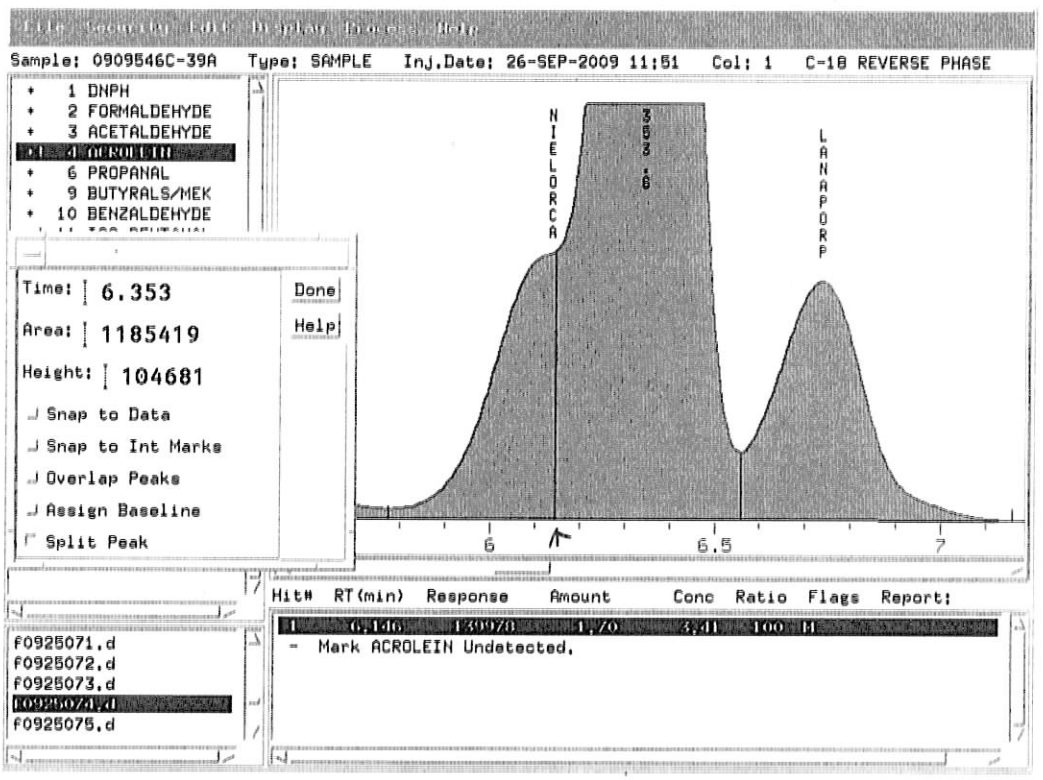
Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

W 10/15/09



Before.

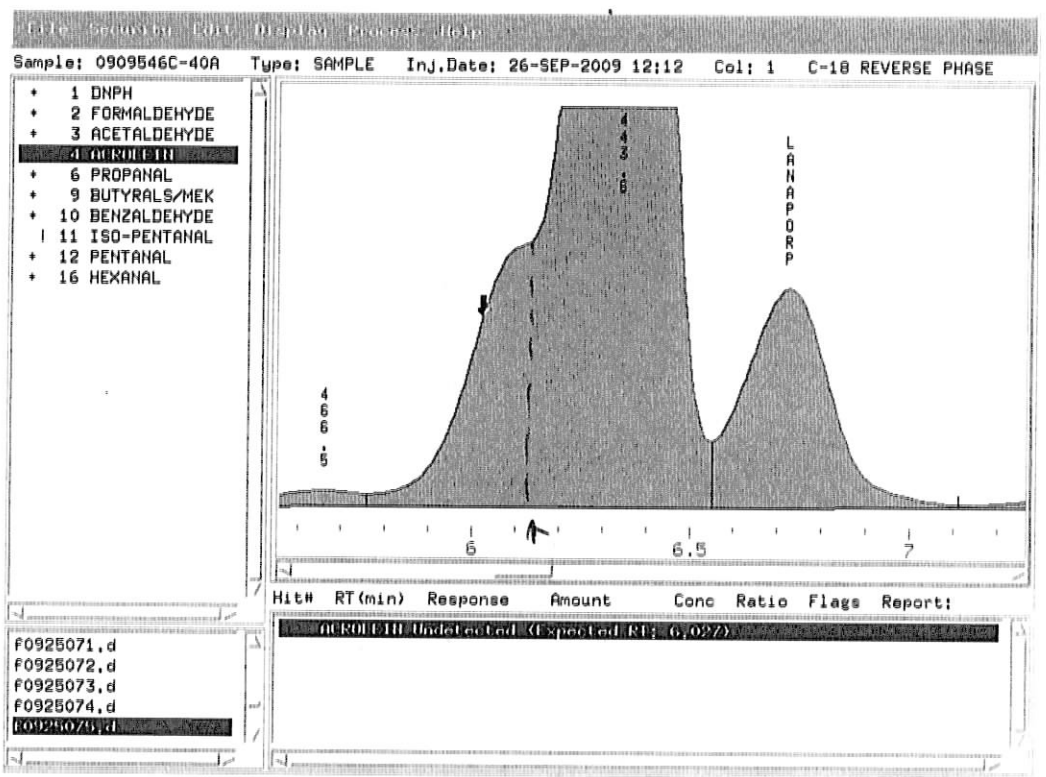
10/15/09



After

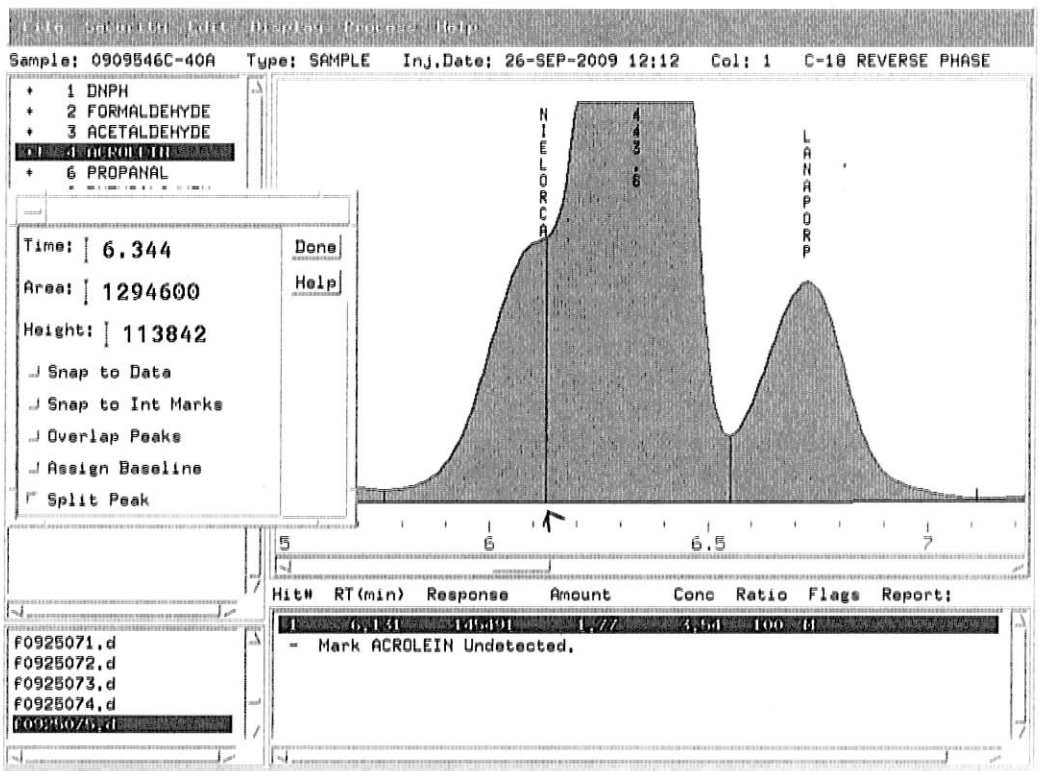
Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

W 10/15/09



Before.

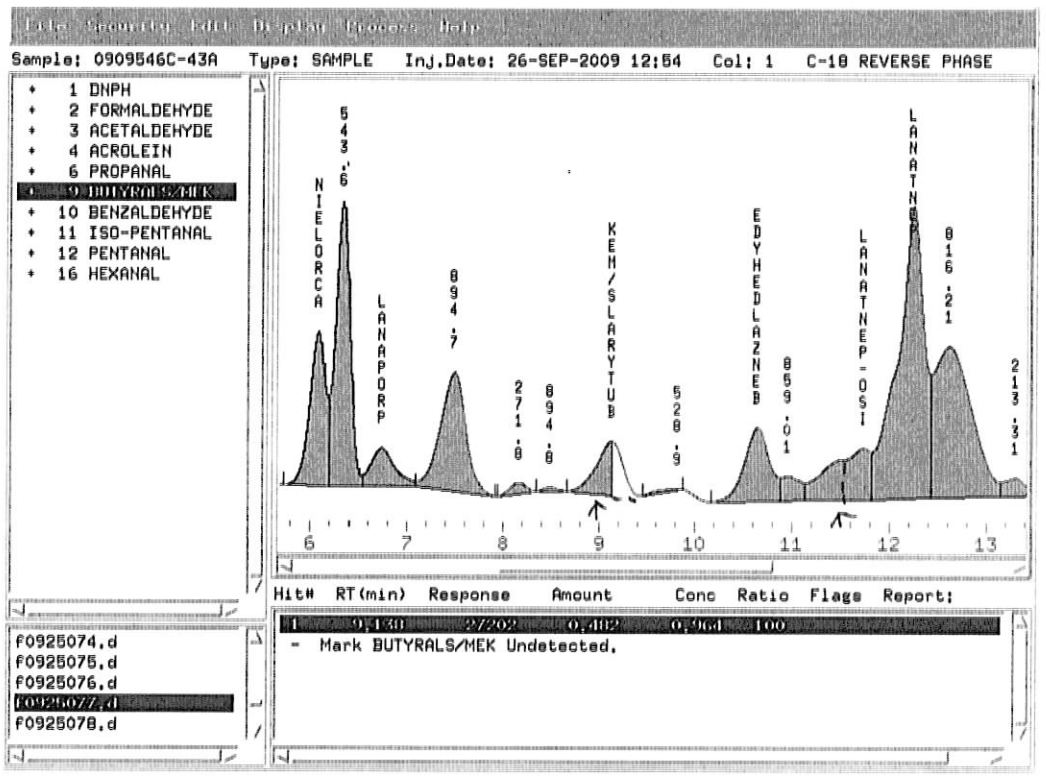
W10115109



After

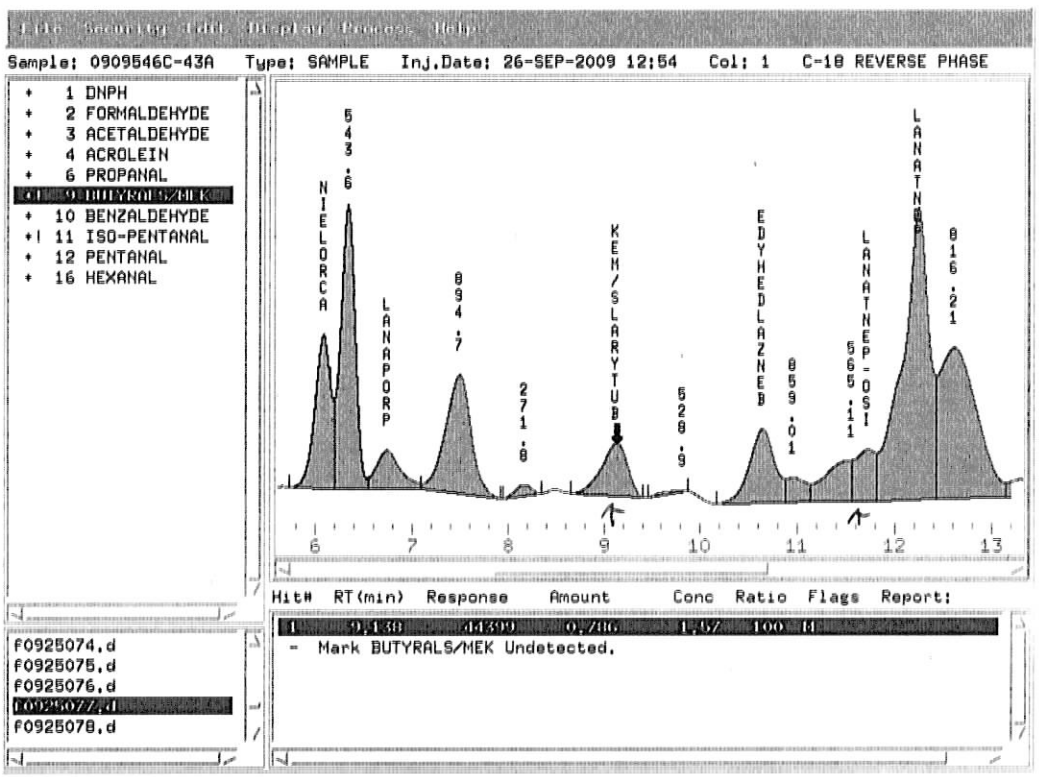
Correct Baseline	✓
Split Peak	
Merge Peak	
Zoom In	✓
Change Parameter	
System Peak Subtraction	
Peak Misidentified	
Corrected Peak Integration	

W10115109



Before.

W 10/15/09



85 10/15/09

After

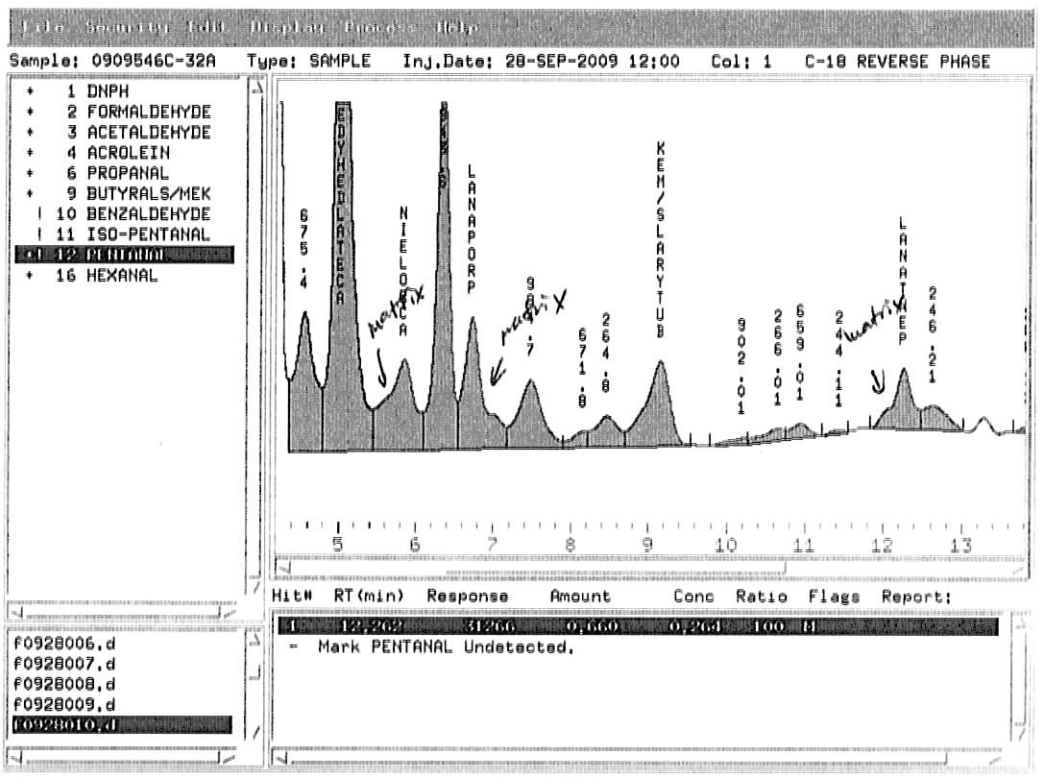
Correct Baseline	
Split Peak	
Merge Peak	
Zoom In	
Change Parameter	
System Peak Subtraction	
Peak Misidentified	✓
Corrected Peak Integration	✓

10/15/09

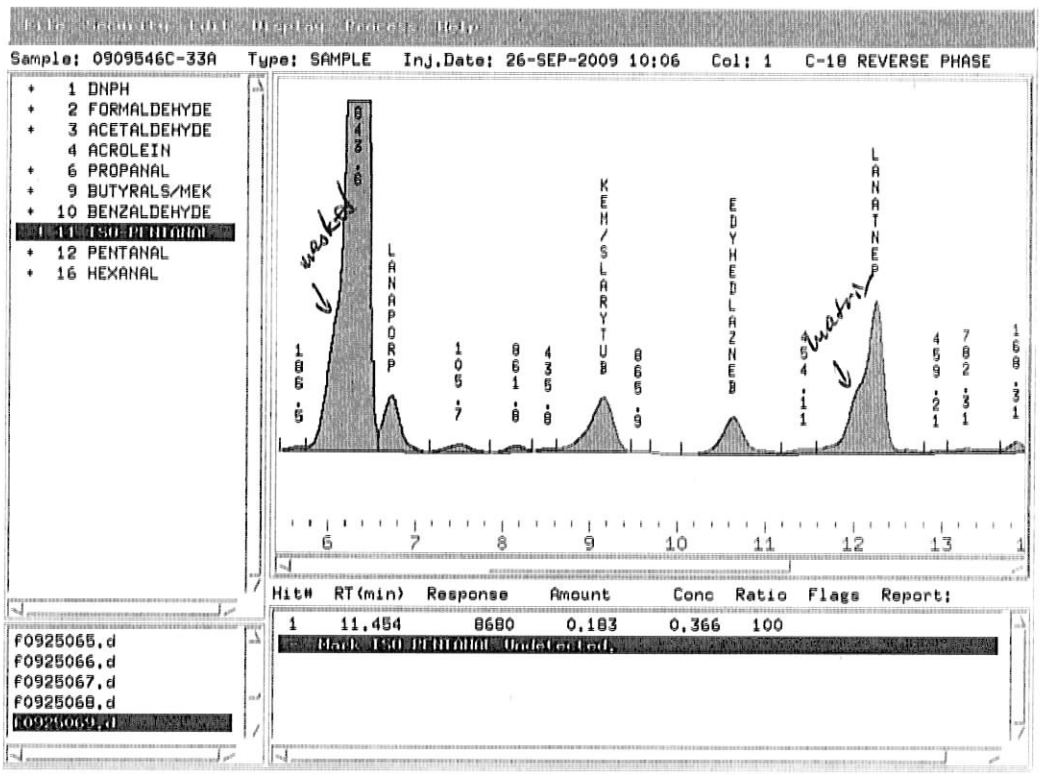
After

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

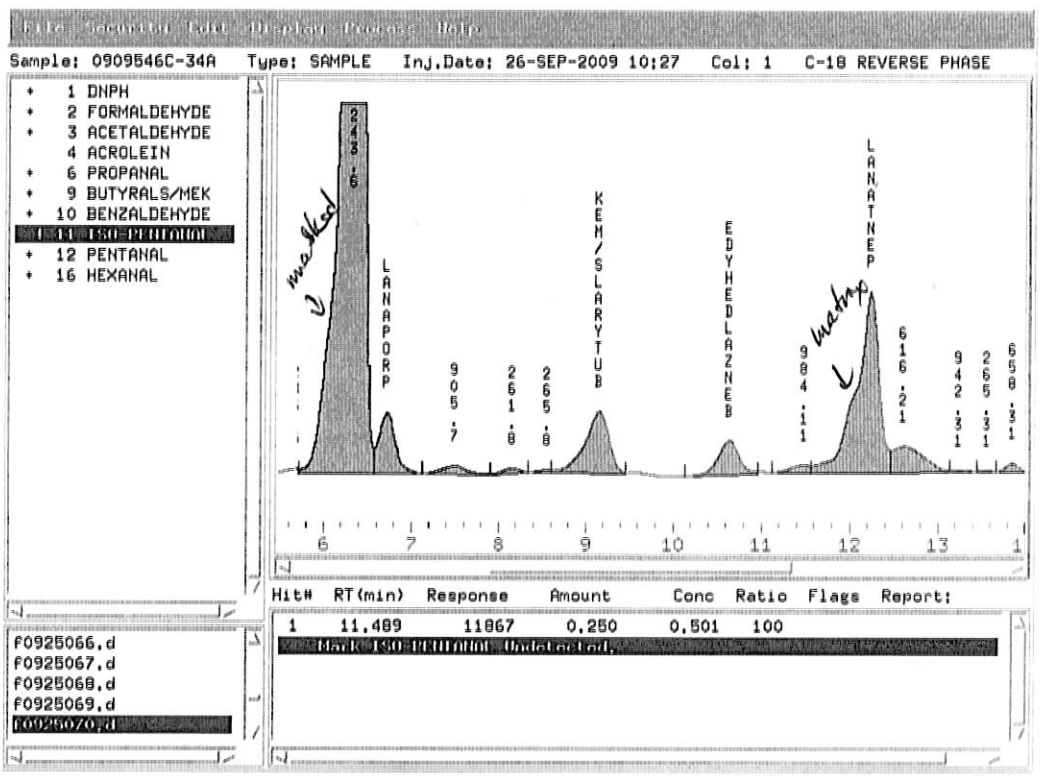
10/15/09


File Security Edit Display Process Help
Sample: 0909546C-32A Type: SAMPLE Inj.Date: 28-SEP-2009 12:00 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
675.4
ETHYLACETA
NIELOPECA
LANAPORP
671.8
264.8
KEM/SLARYTUB
902.01
266.01
659.01
244.11
LANAIMEP
246.21
matrix
matrix
matrix
5 6 7 8 9 10 11 12 13
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.262 31266 0.660 0.264 100 M
- Mark PENTANAL Undetected.
f0928006.d
f0928007.d
f0928008.d
f0928009.d
f0928010.d

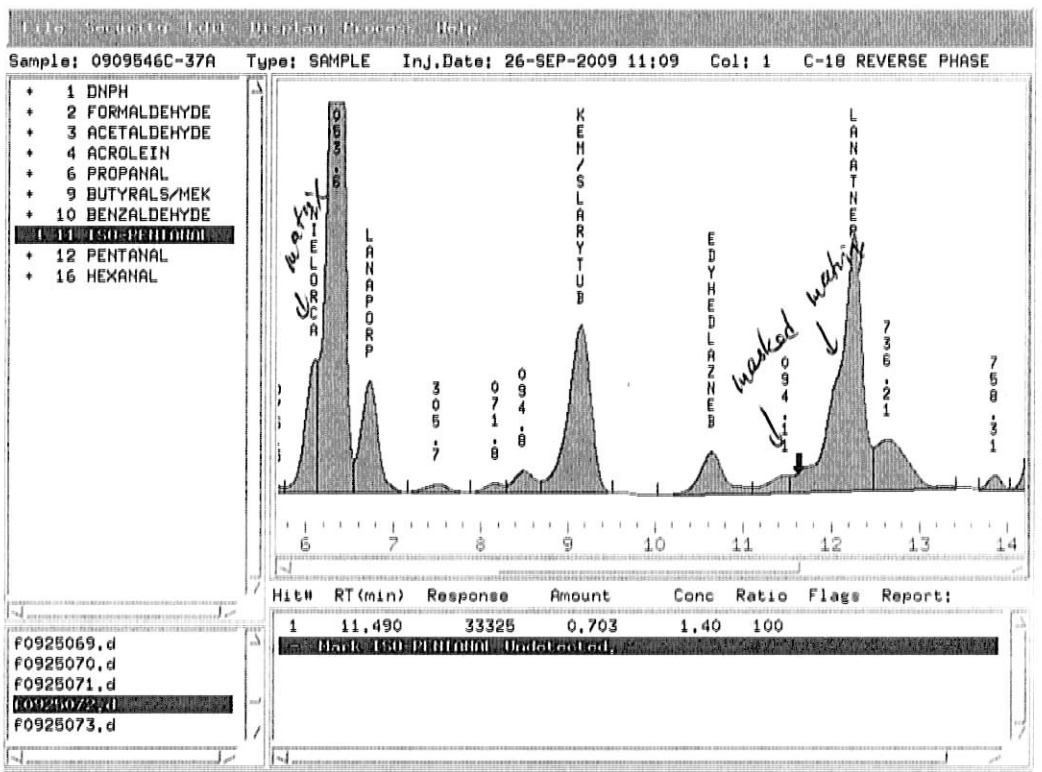
Li 10/15/09


Sample: 0909546C-33A Type: SAMPLE Inj.Date: 26-SEP-2009 10:06 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
masks
LANAPORP
KEM/SLARYTUB
EDYHEDLA2NEB
LANATNEB
matrix
5 7 8 9 10 11 12 13
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 11.454 8680 0.183 0.366 100
Mark ISO PENTANAL Undetected.
f0925065.d
f0925066.d
f0925067.d
f0925068.d
f0925069.d

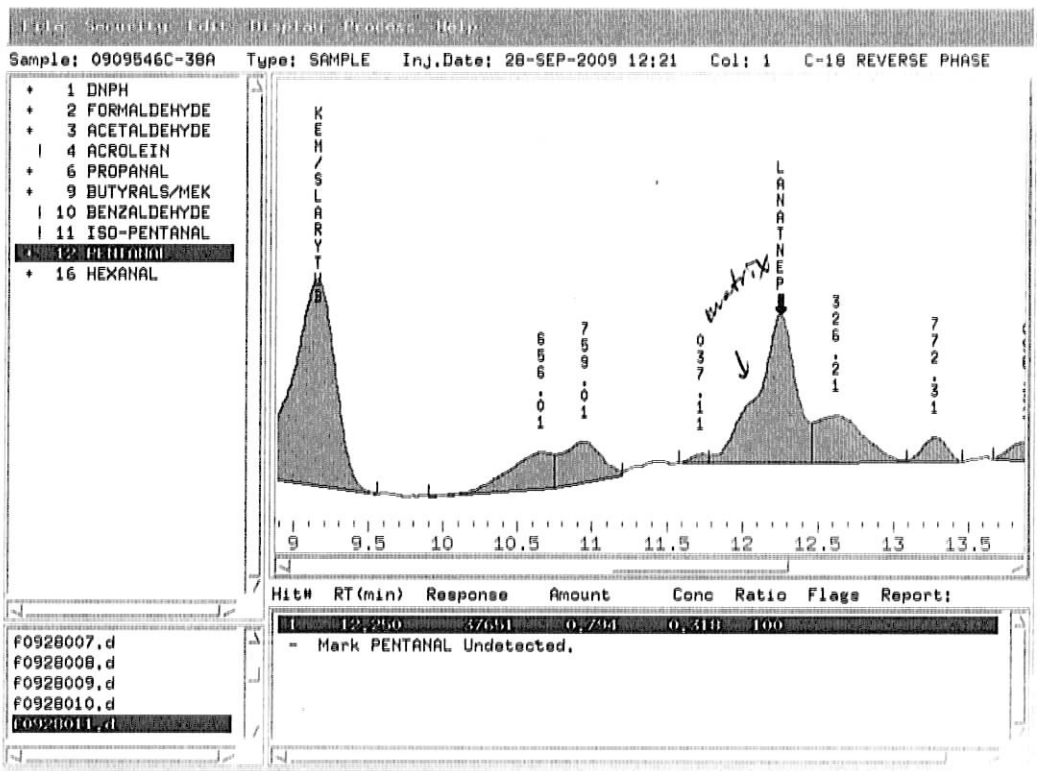
W10115109


Sample: 0909546C-34A Type: SAMPLE Inj.Date: 26-SEP-2009 10:27 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
LANAPORP
KEM/SLARYTUB
EDYHEDLAZNEB
LANATNEP
6 7 8 9 10 11 12 13
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 11.489 11867 0.250 0.501 100
f0925066.d
f0925067.d
f0925068.d
f0925069.d
f0925070.d

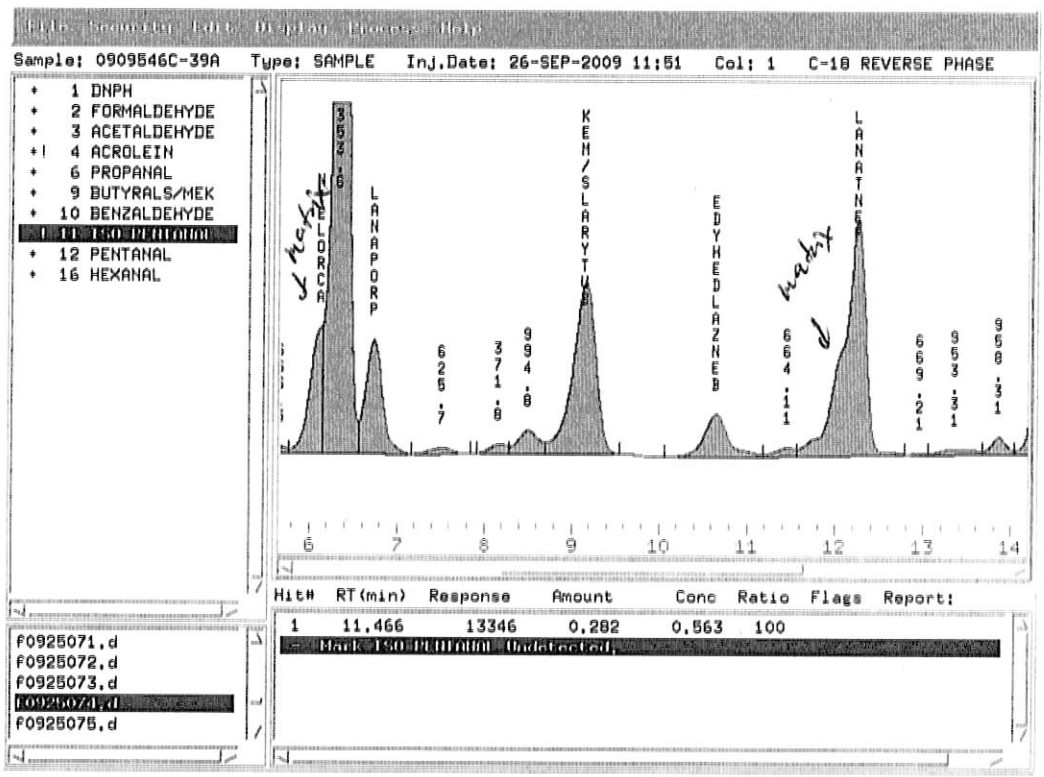
10/15/09


Sample: 0909546C-37A Type: SAMPLE Inj.Date: 26-SEP-2009 11:09 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
methyl
masked methyl
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 11.490 33325 0.703 1.40 100
Mark ISO-PENTANAL Undetected.
F0925069.d
F0925070.d
F0925071.d
F0925072.d
F0925073.d

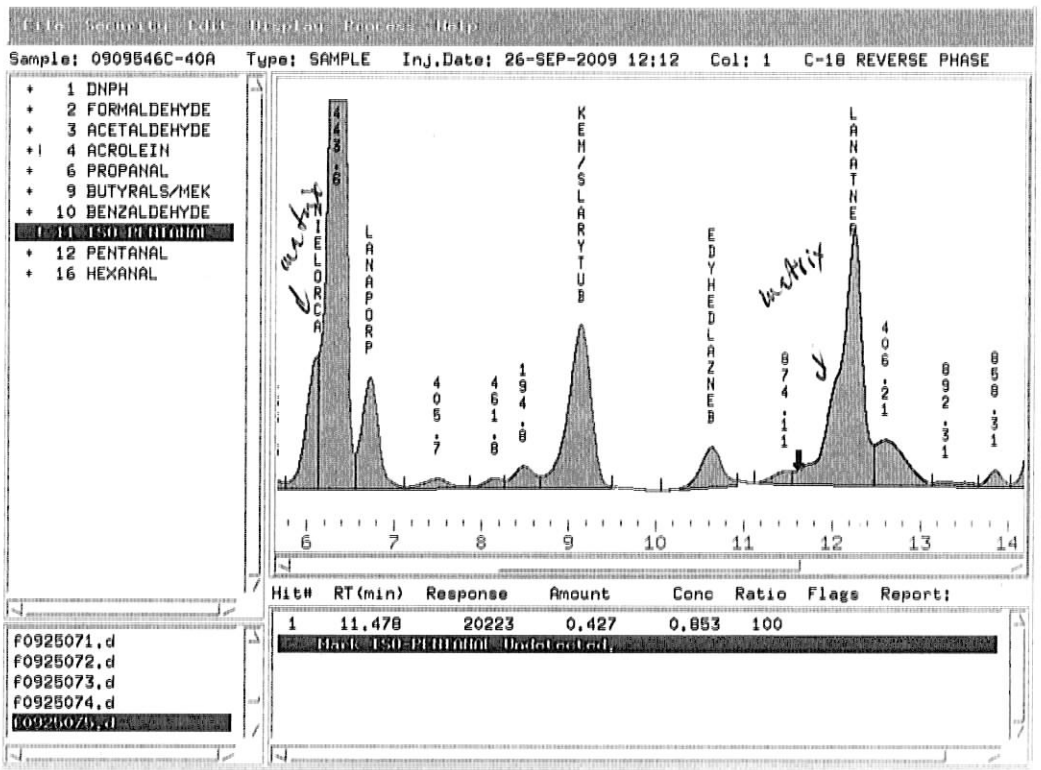
hi 10/15/09

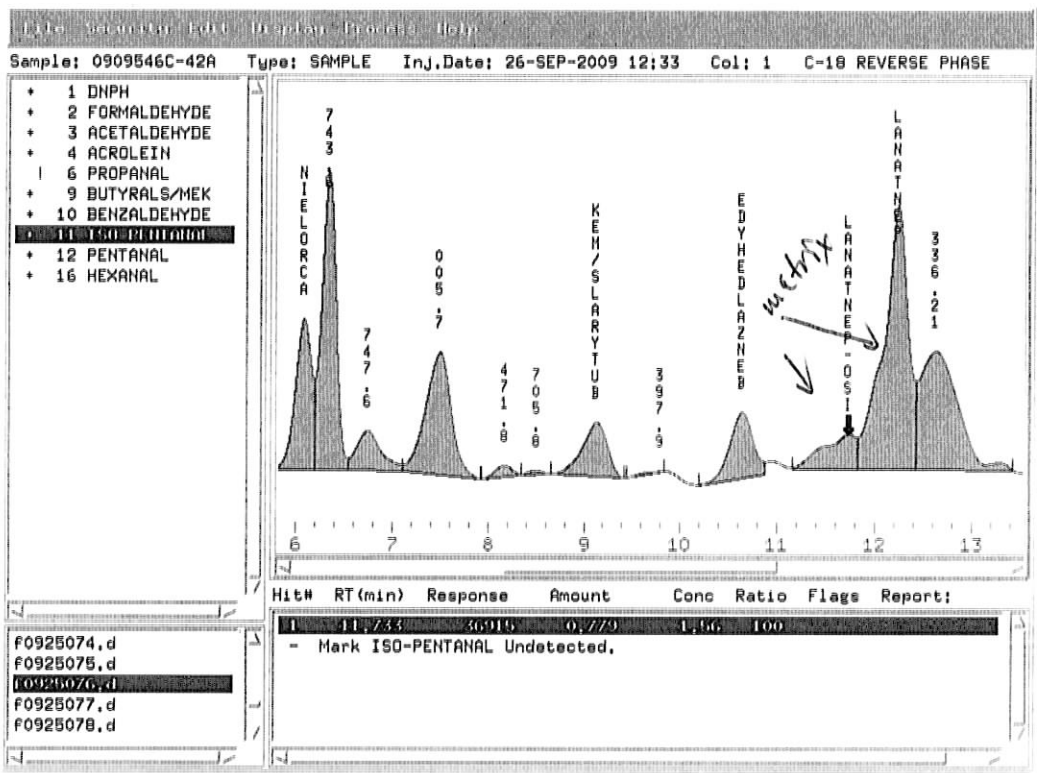

File Security Edit Display Process Help
Sample: 0909546C-38A Type: SAMPLE Inj.Date: 28-SEP-2009 12:21 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
| 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
| 10 BENZALDEHYDE
| 11 ISO-PENTANAL
12 PENTANAL
+ 16 HEXANAL
KETONE/SLARYTUB
LANATNEP
matrix
9 9.5 10 10.5 11 11.5 12 12.5 13 13.5
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.250 3765 0.794 0.318 100
- Mark PENTANAL Undetected.
F0928007.d
F0928008.d
F0928009.d
F0928010.d
F0928011.d

Li 10/15/09


Sample: 0909546C-39A Type: SAMPLE Inj.Date: 26-SEP-2009 11:51 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+! 4 ACROLEIN
+ 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
+ 11 150 PERCENT
+ 12 PENTANAL
+ 16 HEXANAL
matrix
matrix
6 7 8 9 10 11 12 13 14
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 11.466 13346 0.282 0.563 100
Mark 150 PERCENT Undetected
F0925071.d
F0925072.d
F0925073.d
F0925074.d
F0925075.d

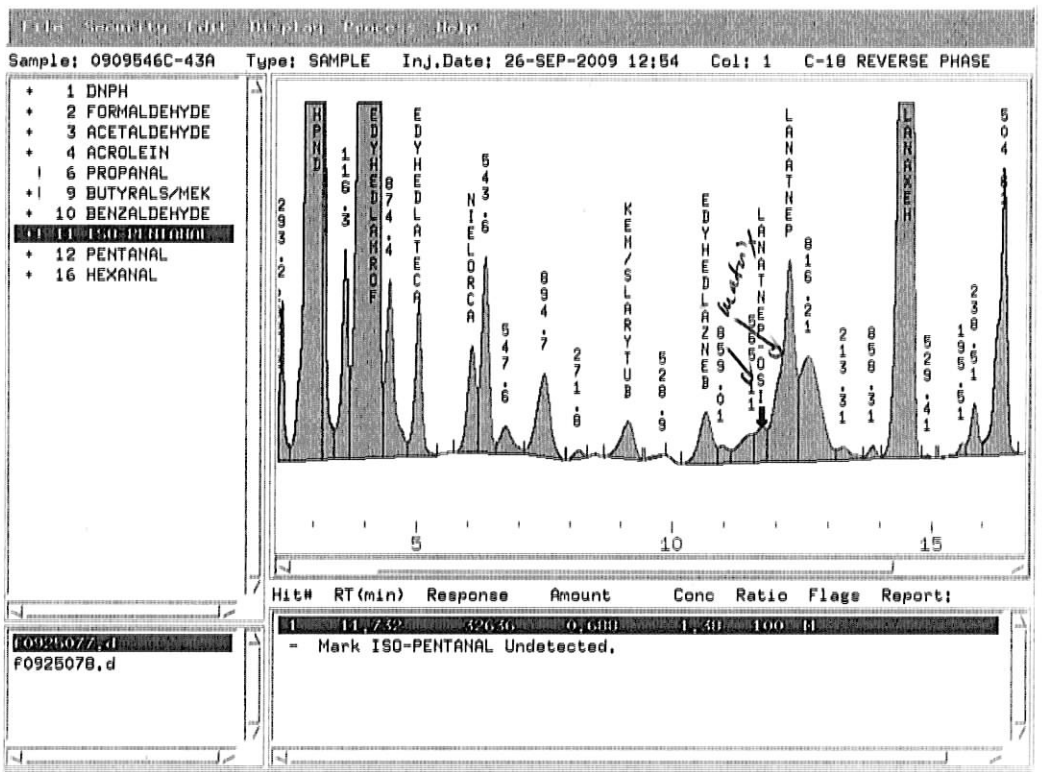
10/15/09


Sample: 0909546C-40A Type: SAMPLE Inj.Date: 26-SEP-2009 12:12 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
443.6
LANAPORP
405.7
461.8
194.8
KEM/SLARYTUB
EDYHEDLAZNEB
874.11
LANATNEB
406.21
892.31
858.31
6
7
8
9
10
11
12
13
14
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 11.478 20223 0.427 0.853 100
f0925071.d
f0925072.d
f0925073.d
f0925074.d



matrix

LS 11/15/09

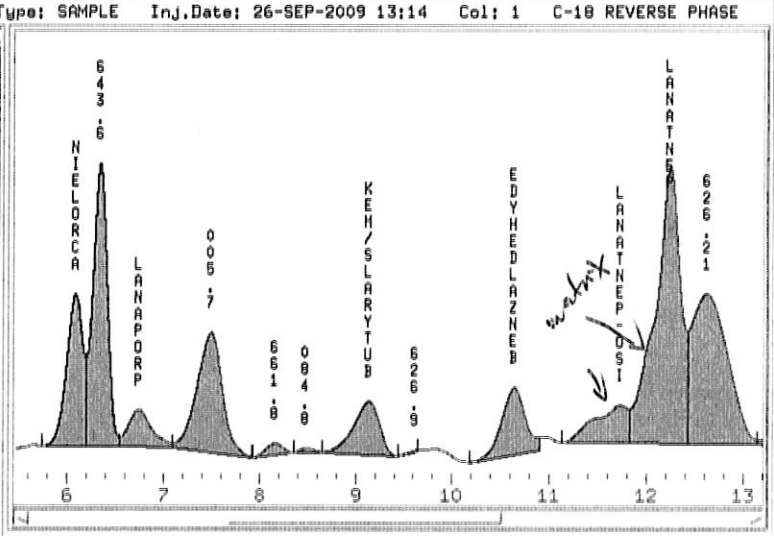

Sample: 0909546C-43A Type: SAMPLE Inj.Date: 26-SEP-2009 12:54 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
11 ISO-PENTANAL
+ 12 PENTANAL
+ 16 HEXANAL
5
10
15
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 11.732 32636 0.680 1.31 100 M
- Mark ISO-PENTANAL Undetected.
F0925078.d

10/15/09

File Security Edit Display Process Help

Sample: 0909546C-43AA Type: SAMPLE Inj.Date: 26-SEP-2009 13:14 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

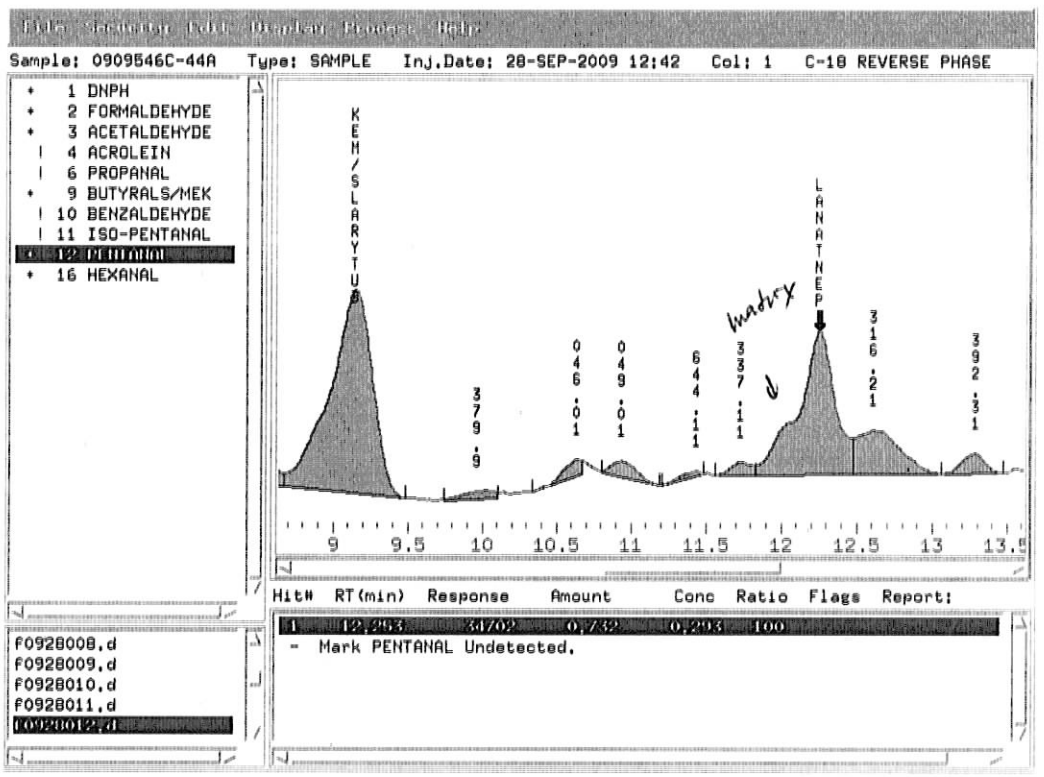


Hit#	RT(min)	Response	Amount	Conc	Ratio	Flags	Report:
1	11.726	40013	0.844	1.69	100		

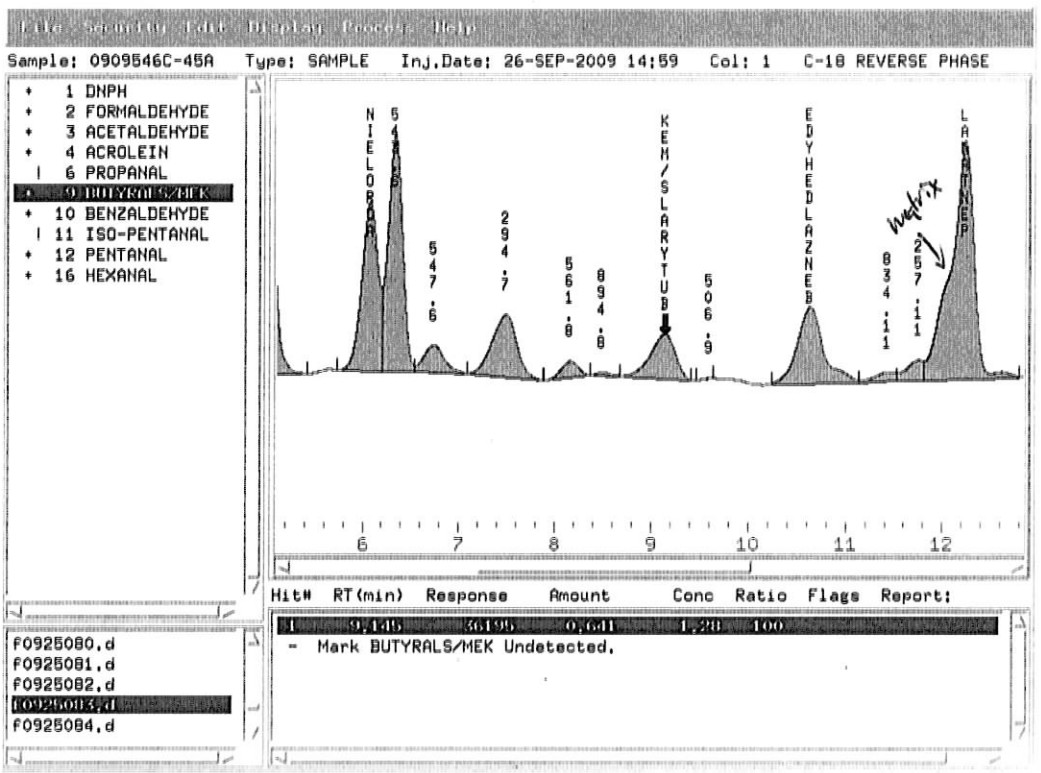
- Mark ISO-PENTANAL Undetected.

F0925075.d
F0925076.d
F0925077.d
F0925078.d
F0925079.d

W10115(09


Sample: 0909546C-44A Type: SAMPLE Inj.Date: 28-SEP-2009 12:42 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
KEM/SLARYTUB
LANATNEP
matrix
9 9.5 10 10.5 11 11.5 12 12.5 13
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 12.253 3702 0.732 0.203 100
- Mark PENTANAL Undetected.
F0928008.d
F0928009.d
F0928010.d
F0928011.d
F0928012.d

Li 11/01/15/09

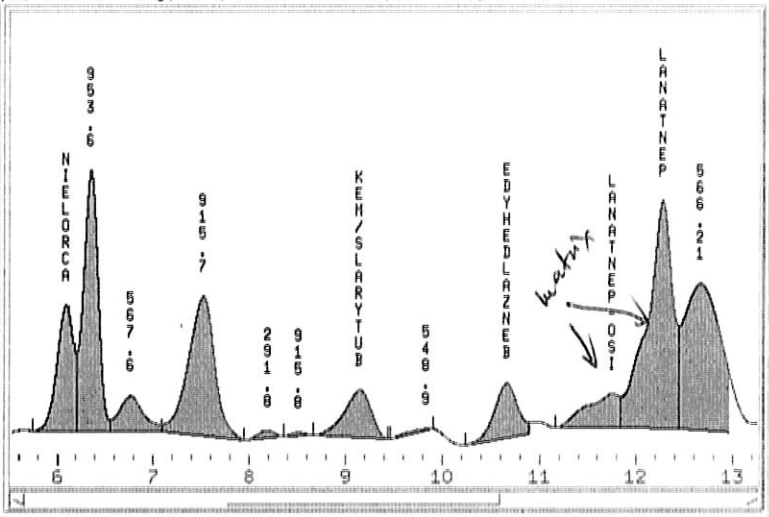

File Security Edit Display Process Help
Sample: 0909546C-45A Type: SAMPLE Inj.Date: 26-SEP-2009 14:59 Col: 1 C-18 REVERSE PHASE
+ 1 DNPH
+ 2 FORMALDEHYDE
+ 3 ACETALDEHYDE
+ 4 ACROLEIN
| 6 PROPANAL
+ 9 BUTYRALS/MEK
+ 10 BENZALDEHYDE
| 11 ISO-PENTANAL
+ 12 PENTANAL
+ 16 HEXANAL
matrix
6 7 8 9 10 11 12
Hit# RT(min) Response Amount Conc Ratio Flags Report:
1 9.145 36195 0.641 1.28 100
- Mark BUTYRALS/MEK Undetected.
F0925080.d
F0925081.d
F0925082.d
F0925083.d
F0925084.d

W10115109

File Security Edit Display Process Help

Sample: 0909546C-46A Type: SAMPLE Inj.Date: 26-SEP-2009 15:20 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	11.769	35400	0.747		1.49	100	

- Mark ISO-PENTANAL Undetected.

F0925080.d
F0925081.d
F0925082.d
F0925083.d
F0925084.d

10/15/09

WO 0909546C

Sample ID	Duration	Duration in min.
32A	14days	20160
33A	14days	20160
34A	14days	20160
35A		
36A	14days	20160
37A	14days	20160
38A	14days	20160
39A	14days	20160
40A	14days	20160
41A		
42A	14days	20160
43A	14days	20160
43AA	14days	20160
44A	14days	20160
45A	14days	20160
46A	14days	20160
47A		

WO 0909546C

Sample ID *0909546C-32A* Duration(min)= 20160 Dilution factor =1
File Name f0928010.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	4.3	99	20160	0.50	0.50	2.2
75-07-0	Acetaldehyde	0.50	0.50	1.7	84	20160	0.30	0.30	1.0
123-38-6	Propanal[M]	0.25	0.25	0.42	39	20160	0.32	0.32	0.53
123-72-8	Butanal [*]	0.25	0.25	0.41	11	20160	1.1	1.1	1.8
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	0.26	27	20160	0.46	0.46	0.48
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	0.39	18	20160	0.69	0.69	1.1
107-02-8	Acrolein [M]	0.25	0.25	0.34	33	20160	0.38	0.38	0.51

* 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 *0909546C-33A* Duration(min)= 20160 Dilution factor =5
File Name f0925069.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	64	99	20160	0.50	2.5	32
75-07-0	Acetaldehyde	0.50	2.5	18	84	20160	0.30	1.5	11
123-38-6	Propanal	0.25	1.2	2.5	39	20160	0.32	1.5	3.2
123-72-8	Butanal [*]	0.25	1.2	4.3	11	20160	1.1	5.4	19
100-52-7	Benzaldehyde	0.25	1.2	3.8	92	20160	0.13	0.65	2.0
110-62-3	Pentanal[M]	0.25	1.2	13	27	20160	0.46	2.2	24
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	38	18	20160	0.69	3.3	105
107-02-8	Acrolein [M]	0.25	1.2	Not Detected	33	20160	0.38	1.8	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 *0909546C-34A* Duration(min)= 20160 Dilution factor =5
File Name f0925070.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	64	99	20160	0.50	2.5	32
75-07-0	Acetaldehyde	0.50	2.5	20	84	20160	0.30	1.5	12
123-38-6	Propanal	0.25	1.2	2.6	39	20160	0.32	1.5	3.3
123-72-8	Butanal (*)	0.25	1.2	4.8	11	20160	1.1	5.4	22
100-52-7	Benzaldehyde	0.25	1.2	3.2	92	20160	0.13	0.65	1.7
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	41	18	20160	0.69	3.3	113
107-02-8	Acrolein (M)	0.25	1.2	Not Detected	33	20160	0.38	1.8	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 *0909546C-35A* Duration(min)= 20160 Dilution factor =1
File Name f0925020.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	20160	0.50	0.50	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	20160	0.30	0.30	Not Detected
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	Not Detected	11	20160	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	20160	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	20160	0.46	0.46	Not Detected
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	Not Detected	18	20160	0.69	0.69	Not Detected
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.

Sample ID *0909546C-36A* Duration(min)= 20160 Dilution factor =5
File Name f0925071.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	76	99	20160	0.50	2.5	38
75-07-0	Acetaldehyde	0.50	2.5	28	84	20160	0.30	1.5	17
123-38-6	Propanal	0.25	1.2	5.8	39	20160	0.32	1.5	7.4
123-72-8	Butanal (*)	0.25	1.2	14	11	20160	1.1	5.4	63
100-52-7	Benzaldehyde	0.25	1.2	4.5	92	20160	0.13	0.65	2.4
110-62-3	Pentanal(M)	0.25	1.2	23	27	20160	0.46	2.2	42
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	88	18	20160	0.69	3.3	243
107-02-8	Acrolein (M)	0.25	1.2	4.4	33	20160	0.38	1.8	6.6

* 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 *0909546C-37A* Duration(min)= 20160 Dilution factor =5
File Name f0925072.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	69	99	20160	0.50	2.5	35
75-07-0	Acetaldehyde	0.50	2.5	23	84	20160	0.30	1.5	14
123-38-6	Propanal	0.25	1.2	5	39	20160	0.32	1.5	6.4
123-72-8	Butanal (*)	0.25	1.2	12	11	20160	1.1	5.4	54
100-52-7	Benzaldehyde	0.25	1.2	4.8	92	20160	0.13	0.65	2.6
110-62-3	Pentanal(M)	0.25	1.2	24	27	20160	0.46	2.2	44
590-86-3	Isopentanal(M)	0.25	1.2	Not Detected	61	20160	0.20	1.0	Not Detected
66-25-1	Hexanal	0.25	1.2	82	18	20160	0.69	3.3	226
107-02-8	Acrolein (M)	0.25	1.2	3.6	33	20160	0.38	1.8	5.4

* 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 ***0909546C-38A*** Duration(min)= 20160 Dilution factor =1
File Name **f0928011.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	4.1	99	20160	0.50	0.50	2.1
75-07-0	Acetaldehyde	0.50	0.50	1.4	84	20160	0.30	0.30	0.83
123-38-6	Propanal	0.25	0.25	0.26	39	20160	0.32	0.32	0.33
123-72-8	Butanal (*)	0.25	0.25	0.42	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	0.32	27	20160	0.46	0.46	0.59
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	0.45	18	20160	0.69	0.69	1.2
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 ***0909546C-39A*** Duration(min)= 20160 Dilution factor =5
File Name **f0925074.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	56	99	20160	0.50	2.5	28
75-07-0	Acetaldehyde	0.50	2.5	23	84	20160	0.30	1.5	14
123-38-6	Propanal	0.25	1.2	5.1	39	20160	0.32	1.5	6.5
123-72-8	Butanal (*)	0.25	1.2	13	11	20160	1.1	5.4	59
100-52-7	Benzaldehyde	0.25	1.2	4.5	92	20160	0.13	0.65	2.4
110-62-3	Pentanal(M)	0.25	1.2	20	27	20160	0.46	2.2	37
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	79	18	20160	0.69	3.3	218
107-02-8	Acrolein (M)	0.25	1.2	3.4	33	20160	0.38	1.8	5.1

* 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 ***0909546C-40A*** Duration(min)= 20160 Dilution factor =5
File Name **f0925075.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	67	99	20160	0.50	2.5	34
75-07-0	Acetaldehyde	0.50	2.5	23	84	20160	0.30	1.5	14
123-38-6	Propanal	0.25	1.2	5.0	39	20160	0.32	1.5	6.4
123-72-8	Butanal (*)	0.25	1.2	12	11	20160	1.1	5.4	54
100-52-7	Benzaldehyde	0.25	1.2	3.8	92	20160	0.13	0.65	2.0
110-62-3	Pentanal(M)	0.25	1.2	23	27	20160	0.46	2.2	42
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	83	18	20160	0.69	3.3	229
107-02-8	Acrolein (M)	0.25	1.2	3.5	33	20160	0.38	1.8	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 ***0909546C-41A*** Duration(min)= 20160 Dilution factor =1
File Name **f0925021.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	20160	0.50	0.50	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	20160	0.30	0.30	Not Detected
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	Not Detected	11	20160	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	20160	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	20160	0.46	0.46	Not Detected
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	Not Detected	18	20160	0.69	0.69	Not Detected
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.

Sample ID ***0909546C-42A*** Duration(min)= 20160 Dilution factor =5
File Name **f0925076.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	20160	0.50	2.5	65
75-07-0	Acetaldehyde	0.50	2.5	Not Detected	84	20160	0.30	1.5	Not Detected
123-38-6	Propanal	0.25	1.2	Not Detected	39	20160	0.32	1.5	Not Detected
123-72-8	Butanal (*)	0.25	1.2	1.6	11	20160	1.1	5.4	7.2
100-52-7	Benzaldehyde	0.25	1.2	2.4	92	20160	0.13	0.65	1.3
110-62-3	Pentanal(M)	0.25	1.2	9.0	27	20160	0.46	2.2	17
590-86-3	Isopentanal(M)	0.25	1.2	1.6	61	20160	0.20	1.0	1.3
66-25-1	Hexanal	0.25	1.2	55	18	20160	0.69	3.3	152
107-02-8	Acrolein	0.25	1.2	1.9	33	20160	0.38	1.8	2.9

* 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 ***0909546C-43A*** Duration(min)= 20160 Dilution factor =5
File Name **f0925077.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	140	99	20160	0.50	2.5	70
75-07-0	Acetaldehyde	0.50	2.5	Not Detected	84	20160	0.30	1.5	Not Detected
123-38-6	Propanal	0.25	1.2	Not Detected	39	20160	0.32	1.5	Not Detected
123-72-8	Butanal (*)	0.25	1.2	1.6	11	20160	1.1	5.4	7.2
100-52-7	Benzaldehyde	0.25	1.2	3.0	92	20160	0.13	0.65	1.6
110-62-3	Pentanal(M)	0.25	1.2	11.0	27	20160	0.46	2.2	20
590-86-3	Isopentanal(M)	0.25	1.2	1.4	61	20160	0.20	1.0	1.1
66-25-1	Hexanal	0.25	1.2	57	18	20160	0.69	3.3	157
107-02-8	Acrolein	0.25	1.2	2.0	33	20160	0.38	1.8	3.0

* 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 ***0909546C-43AA*** Duration(min)= 20160 Dilution factor =5
File Name **f0925078.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	140	99	20160	0.50	2.5	70
75-07-0	Acetaldehyde	0.50	2.5	Not Detected	84	20160	0.30	1.5	Not Detected
123-38-6	Propanal	0.25	1.2	Not Detected	39	20160	0.32	1.5	Not Detected
123-72-8	Butanal (*)	0.25	1.2	1.6	11	20160	1.1	5.4	7.2
100-52-7	Benzaldehyde	0.25	1.2	2.5	92	20160	0.13	0.65	1.3
110-62-3	Pentanal(M)	0.25	1.2	9.7	27	20160	0.46	2.2	18
590-86-3	Isopentanal(M)	0.25	1.2	1.7	61	20160	0.20	1.0	1.4
66-25-1	Hexanal	0.25	1.2	57	18	20160	0.69	3.3	157
107-02-8	Acrolein	0.25	1.2	1.9	33	20160	0.38	1.8	2.9

* 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 ***0909546C-44A*** Duration(min)= 20160 Dilution factor =1
File Name **f0928012.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	3.5	99	20160	0.50	0.50	1.8
75-07-0	Acetaldehyde	0.50	0.50	1.5	84	20160	0.30	0.30	0.89
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	0.40	11	20160	1.1	1.1	1.8
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	0.29	27	20160	0.46	0.46	0.53
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	0.45	18	20160	0.69	0.69	1.2
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 ***0909546C-45A*** Duration(min)= 20160 Dilution factor =5
File Name **f0925083.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	20160	0.50	2.5	65
75-07-0	Acetaldehyde	0.50	2.5	Not Detected	84	20160	0.30	1.5	Not Detected
123-38-6	Propanal	0.25	1.2	Not Detected	39	20160	0.32	1.5	Not Detected
123-72-8	Butanal (*)	0.25	1.2	1.3	11	20160	1.1	5.4	5.9
100-52-7	Benzaldehyde	0.25	1.2	3.3	92	20160	0.13	0.65	1.8
110-62-3	Pentanal(M)	0.25	1.2	7.7	27	20160	0.46	2.2	14
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	57	18	20160	0.69	3.3	157
107-02-8	Acrolein	0.25	1.2	2.2	33	20160	0.38	1.8	3.3

* 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 ***0909546C-46A*** Duration(min)= 20160 Dilution factor =5
File Name **f0925084.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	20160	0.50	2.5	60
75-07-0	Acetaldehyde	0.50	2.5	Not Detected	84	20160	0.30	1.5	Not Detected
123-38-6	Propanal	0.25	1.2	Not Detected	39	20160	0.32	1.5	Not Detected
123-72-8	Butanal (*)	0.25	1.2	1.5	11	20160	1.1	5.4	6.8
100-52-7	Benzaldehyde	0.25	1.2	2.0	92	20160	0.13	0.65	1.1
110-62-3	Pentanal(M)	0.25	1.2	8.0	27	20160	0.46	2.2	15
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	47	18	20160	0.69	3.3	130
107-02-8	Acrolein	0.25	1.2	1.6	33	20160	0.38	1.8	2.4

* 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 ***0909546C-47A*** Duration(min)= 20160 Dilution factor =1
File Name **f0925022.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	20160	0.50	0.50	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	20160	0.30	0.30	Not Detected
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	Not Detected	11	20160	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	20160	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	20160	0.46	0.46	Not Detected
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	Not Detected	18	20160	0.69	0.69	Not Detected
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.

Sample ID ***0909546C-Lab Blank*** Duration(min)= 20160 Dilution factor =1
File Name **f0925009.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	20160	0.50	0.50	Not Detected
75-07-0	Acetaldehyde	0.50	0.50	Not Detected	84	20160	0.30	0.30	Not Detected
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	Not Detected	11	20160	1.1	1.1	Not Detected
100-52-7	Benzaldehyde	0.25	0.25	Not Detected	92	20160	0.13	0.13	Not Detected
110-62-3	Pentanal	0.25	0.25	Not Detected	27	20160	0.46	0.46	Not Detected
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	Not Detected	18	20160	0.69	0.69	Not Detected
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.

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 #: 0909546C

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)
		☑	☐	☑	☐	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) 8/24/09
☐	☐	☑				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
		☑	☐	☑	☐	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: Dup 43A (Analytical)
Detection of 2so-Pentanal in 37A was masked.
Detection of Acrolein in 33A and 34A was masked.
Report in ug + ug/m3

M/Q:

A_1/A_2 (Analytical Review/Date)	R/T (Reporting Review/Date)	M (Management Review/Date)	Q (QA Review/Date)
A_1:	R: 10/19/09	10/19/09	
A_2:	T:		

Note (1): Please check all the appropriate boxes. Indicate "NA" for any statement that does not apply. Rev. 02/12/09

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

Not Applicable