ANALYTICAL REPORT

Job Number: 550-45491-1

Job Description: 10ZZ

For:
Ecology and Environment, Inc.
Pacific Building
720 Third Avenue
Suite 1700
Seattle, WA 98104

Attention: Mr. Mark Woodke

Approved for release.
Carlene McCutcheon
Project Manager II
6/9/2015 4:05 PM

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06/09/2015

cc: Eric Nuchims

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Qualifiers

IH - HPLC/IC

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job Narrative
550-45491-1

Comments
No additional comments.

Receipt
The sample was received on 5/29/2015 9:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 16.9º C.

Industrial Hygiene
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Client Sample ID: 15053018 — Lab Sample ID: 550-45491-1

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Client Sample ID: 15053018

Lab Sample ID: 550-45491-1

Date Collected: 05/26/15 00:00
Matrix: Air
Date Received: 05/29/15 09:30
Sample Air Volume: 0 L
Sample Container: IH - PAH Kit (37-mm, PTFE+XAD-2,150 mg)

Method: 5506 (Modified) - Particulate

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<2.00		2.00	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Acenaphthylene	<2.50		2.50	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Anthracene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Benzo[a]anthracene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Benzo[b]fluoranthene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Benzo[a]pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Benzo[g,h,i]perylene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Benzo[k]fluoranthene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Chrysene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Dibenz(a,h)anthracene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Fluoranthene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Fluorene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Indeno[1,2,3-cd]pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Naphthalene	<1.00		1.00	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Phenanthrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:16	1
Pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:16	1

Method: 5506 Back - NIOSH 5506 (Modified)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<2.00		2.00	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Acenaphthylene	<2.50		2.50	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Anthracene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Benzo[a]anthracene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Benzo[b]fluoranthene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Benzo[a]pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Benzo[g,h,i]perylene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Benzo[k]fluoranthene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Chrysene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Dibenz(a,h)anthracene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Fluoranthene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Fluorene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Indeno[1,2,3-cd]pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Naphthalene	<1.00		1.00	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Phenanthrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:50	1
Pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 16:50	1

Method: 5506 Front - NIOSH 5506 (Modified)

Analyte	Result	Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<2.00		2.00	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Acenaphthylene	<2.50		2.50	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Anthracene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Benzo[a]anthracene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Benzo[b]fluoranthene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Benzo[a]pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Benzo[g,h,i]perylene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Benzo[k]fluoranthene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Chrysene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Dibenz(a,h)anthracene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Fluoranthene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 17:24	1

Client Sample Results

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Client Sample ID: 15053018

Date Collected: 05/26/15 00:00
Date Received: 05/29/15 09:30
Sample Air Volume: 0 L

Lab Sample ID: 550-45491-1

Matrix: Air
Sample Container: IH - PAH Kit (37-mm, PTFE+XAD-2,150 mg)

Method: 5506 Front - NIOSH 5506 (Modified) (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Fluorene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Indeno[1,2,3-cd]pyrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Naphthalene	<1.00		1.00		ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Phenanthrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 17:24	1
Pyrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 17:24	1

Method: 5506 Sum - NIOSH 5506 (Modified)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<2.00		2.00		ug/Sample			06/03/15 11:37	1
Acenaphthylene	<2.50		2.50		ug/Sample			06/03/15 11:37	1
Anthracene	<0.250		0.250		ug/Sample			06/03/15 11:37	1
Benzo[a]anthracene	<0.250		0.250		ug/Sample			06/03/15 11:37	1
Benzo[b]fluoranthene	<0.500		0.500		ug/Sample			06/03/15 11:37	1
Benzo[a]pyrene	<0.250		0.250		ug/Sample			06/03/15 11:37	1
Benzo[g,h,i]perylene	<0.500		0.500		ug/Sample			06/03/15 11:37	1
Benzo[k]fluoranthene	<0.250		0.250		ug/Sample			06/03/15 11:37	1
Chrysene	<0.250		0.250		ug/Sample			06/03/15 11:37	1
Dibenz(a,h)anthracene	<0.500		0.500		ug/Sample			06/03/15 11:37	1
Fluoranthene	<0.500		0.500		ug/Sample			06/03/15 11:37	1
Fluorene	<0.500		0.500		ug/Sample			06/03/15 11:37	1
Indeno[1,2,3-cd]pyrene	<0.250		0.250		ug/Sample			06/03/15 11:37	1
Naphthalene	<1.00		1.00		ug/Sample			06/03/15 11:37	1
Phenanthrene	<0.250		0.250		ug/Sample			06/03/15 11:37	1
Pyrene	<0.250		0.250		ug/Sample			06/03/15 11:37	1

Default Detection Limits

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Method: 5506 (Modified) - Particulate

Analyte	RL		Units	Method
Acenaphthene	2.00	2.00	ug/Sample	5506 (Modified)
Acenaphthylene	2.50	2.50	ug/Sample	5506 (Modified)
Anthracene	0.250	0.250	ug/Sample	5506 (Modified)
Benzo[a]anthracene	0.250	0.250	ug/Sample	5506 (Modified)
Benzo[a]pyrene	0.250	0.250	ug/Sample	5506 (Modified)
Benzo[b]fluoranthene	0.500	0.500	ug/Sample	5506 (Modified)
Benzo[g,h,i]perylene	0.500	0.500	ug/Sample	5506 (Modified)
Benzo[k]fluoranthene	0.250	0.250	ug/Sample	5506 (Modified)
Chrysene	0.250	0.250	ug/Sample	5506 (Modified)
Dibenz(a,h)anthracene	0.500	0.500	ug/Sample	5506 (Modified)
Fluoranthene	0.500	0.500	ug/Sample	5506 (Modified)
Fluorene	0.500	0.500	ug/Sample	5506 (Modified)
Indeno[1,2,3-cd]pyrene	0.250	0.250	ug/Sample	5506 (Modified)
Naphthalene	1.00	1.00	ug/Sample	5506 (Modified)
Phenanthrene	0.250	0.250	ug/Sample	5506 (Modified)
Pyrene	0.250	0.250	ug/Sample	5506 (Modified)

Method: 5506 Back - NIOSH 5506 (Modified)

Analyte	RL		Units	Method
Acenaphthene	2.00	2.00	ug/Sample	5506 Back
Acenaphthylene	2.50	2.50	ug/Sample	5506 Back
Anthracene	0.250	0.250	ug/Sample	5506 Back
Benzo[a]anthracene	0.250	0.250	ug/Sample	5506 Back
Benzo[a]pyrene	0.250	0.250	ug/Sample	5506 Back
Benzo[b]fluoranthene	0.500	0.500	ug/Sample	5506 Back
Benzo[g,h,i]perylene	0.500	0.500	ug/Sample	5506 Back
Benzo[k]fluoranthene	0.250	0.250	ug/Sample	5506 Back
Chrysene	0.250	0.250	ug/Sample	5506 Back
Dibenz(a,h)anthracene	0.500	0.500	ug/Sample	5506 Back
Fluoranthene	0.500	0.500	ug/Sample	5506 Back
Fluorene	0.500	0.500	ug/Sample	5506 Back
Indeno[1,2,3-cd]pyrene	0.250	0.250	ug/Sample	5506 Back
Naphthalene	1.00	1.00	ug/Sample	5506 Back
Phenanthrene	0.250	0.250	ug/Sample	5506 Back
Pyrene	0.250	0.250	ug/Sample	5506 Back

Method: 5506 Front - NIOSH 5506 (Modified)

Analyte	RL		Units	Method
Acenaphthene	2.00	2.00	ug/Sample	5506 Front
Acenaphthylene	2.50	2.50	ug/Sample	5506 Front
Anthracene	0.250	0.250	ug/Sample	5506 Front
Benzo[a]anthracene	0.250	0.250	ug/Sample	5506 Front
Benzo[a]pyrene	0.250	0.250	ug/Sample	5506 Front
Benzo[b]fluoranthene	0.500	0.500	ug/Sample	5506 Front
Benzo[g,h,i]perylene	0.500	0.500	ug/Sample	5506 Front
Benzo[k]fluoranthene	0.250	0.250	ug/Sample	5506 Front
Chrysene	0.250	0.250	ug/Sample	5506 Front
Dibenz(a,h)anthracene	0.500	0.500	ug/Sample	5506 Front
Fluoranthene	0.500	0.500	ug/Sample	5506 Front
Fluorene	0.500	0.500	ug/Sample	5506 Front

Default Detection Limits

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Method: 5506 Front - NIOSH 5506 (Modified) (Continued)

Analyte	RL		Units	Method
Indeno[1,2,3-cd]pyrene	0.250	0.250	ug/Sample	5506 Front
Naphthalene	1.00	1.00	ug/Sample	5506 Front
Phenanthrene	0.250	0.250	ug/Sample	5506 Front
Pyrene	0.250	0.250	ug/Sample	5506 Front

Method: 5506 Sum - NIOSH 5506 (Modified)

Analyte	RL		Units	Method
Acenaphthene	2.00	2.00	ug/Sample	5506 Sum
Acenaphthylene	2.50	2.50	ug/Sample	5506 Sum
Anthracene	0.250	0.250	ug/Sample	5506 Sum
Benzo[a]anthracene	0.250	0.250	ug/Sample	5506 Sum
Benzo[a]pyrene	0.250	0.250	ug/Sample	5506 Sum
Benzo[b]fluoranthene	0.500	0.500	ug/Sample	5506 Sum
Benzo[g,h,i]perylene	0.500	0.500	ug/Sample	5506 Sum
Benzo[k]fluoranthene	0.250	0.250	ug/Sample	5506 Sum
Chrysene	0.250	0.250	ug/Sample	5506 Sum
Dibenz(a,h)anthracene	0.500	0.500	ug/Sample	5506 Sum
Fluoranthene	0.500	0.500	ug/Sample	5506 Sum
Fluorene	0.500	0.500	ug/Sample	5506 Sum
Indeno[1,2,3-cd]pyrene	0.250	0.250	ug/Sample	5506 Sum
Naphthalene	1.00	1.00	ug/Sample	5506 Sum
Phenanthrene	0.250	0.250	ug/Sample	5506 Sum
Pyrene	0.250	0.250	ug/Sample	5506 Sum

Method: 5506 (Modified) - Particulate

Lab Sample ID: MB 550-64794/1-A
Matrix: Air
Analysis Batch: 64803

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64794

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<2.00		2.00		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Acenaphthylene	<2.50		2.50		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Anthracene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Benzo[a]anthracene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Benzo[b]fluoranthene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Benzo[a]pyrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Benzo[g,h,i]perylene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Benzo[k]fluoranthene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Chrysene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Dibenz(a,h)anthracene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Fluoranthene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Fluorene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Indeno[1,2,3-cd]pyrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Naphthalene	<1.00		1.00		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Phenanthrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 12:52	1
Pyrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 12:52	1

Method: 5506 Back - NIOSH 5506 (Modified)

Lab Sample ID: MB 550-64790/1-A
Matrix: Air
Analysis Batch: 64803

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64790

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<2.00		2.00		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Acenaphthylene	<2.50		2.50		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Anthracene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Benzo[a]anthracene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Benzo[b]fluoranthene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Benzo[a]pyrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Benzo[g,h,i]perylene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Benzo[k]fluoranthene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Chrysene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Dibenz(a,h)anthracene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Fluoranthene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Fluorene	<0.500		0.500		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Indeno[1,2,3-cd]pyrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Naphthalene	<1.00		1.00		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Phenanthrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 13:26	1
Pyrene	<0.250		0.250		ug/Sample		06/02/15 08:30	06/02/15 13:26	1

Method: 5506 Front - NIOSH 5506 (Modified)

Lab Sample ID: MB 550-64792/1-A
Matrix: Air
Analysis Batch: 64803

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 64792

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	<2.00		2.00	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Acenaphthylene	<2.50		2.50	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Anthracene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Benzo[a]anthracene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Benzo[b]fluoranthene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Benzo[a]pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Benzo[g,h,i]perylene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Benzo[k]fluoranthene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Chrysene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Dibenz(a,h)anthracene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Fluoranthene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Fluorene	<0.500		0.500	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Indeno[1,2,3-cd]pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Naphthalene	<1.00		1.00	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Phenanthrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 14:00	1
Pyrene	<0.250		0.250	ug/Sample		06/02/15 08:30	06/02/15 14:00	1

Lab Sample ID: LCS 550-64792/3-A
Matrix: Air
Analysis Batch: 64803

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 64792

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	15.0	14.74		ug/Sample		98	80 - 116
Acenaphthylene	30.0	31.02		ug/Sample		103	78 - 116
Anthracene	1.50	1.484		ug/Sample		99	82 - 105
Benzo[a]anthracene	1.50	1.400		ug/Sample		93	70 - 107
Benzo[b]fluoranthene	3.00	2.583		ug/Sample		86	61 - 98
Benzo[a]pyrene	1.50	1.244		ug/Sample		83	51 - 100
Benzo[g,h,i]perylene	3.00	2.344		ug/Sample		78	35 - 91
Benzo[k]fluoranthene	1.50	1.316		ug/Sample		88	62 - 98
Chrysene	1.50	1.396		ug/Sample		93	68 - 106
Dibenz(a,h)anthracene	3.00	2.436		ug/Sample		81	50 - 94
Fluoranthene	3.00	2.880		ug/Sample		96	78 - 107
Fluorene	3.00	3.019		ug/Sample		101	85 - 108
Indeno[1,2,3-cd]pyrene	1.50	1.172		ug/Sample		78	49 - 94
Naphthalene	15.0	15.45		ug/Sample		103	79 - 116
Phenanthrene	1.50	1.431		ug/Sample		95	80 - 104
Pyrene	1.50	1.451		ug/Sample		97	70 - 121

Lab Sample ID: LCSD 550-64792/4-A
Matrix: Air
Analysis Batch: 64803

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64792

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	15.0	16.25		ug/Sample		108	80 - 116	10	30
Acenaphthylene	30.0	32.11		ug/Sample		107	78 - 116	3	30
Anthracene	1.50	1.545		ug/Sample		103	82 - 105	4	30
Benzo[a]anthracene	1.50	1.423		ug/Sample		95	70 - 107	3	30

Method: 5506 Front - NIOSH 5506 (Modified) (Continued)

Lab Sample ID: LCSD 550-64792/4-A
Matrix: Air
Analysis Batch: 64803

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 64792

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzo[b]fluoranthene	3.00	2.664		ug/Sample		89	61 - 98	2	30
Benzo[a]pyrene	1.50	1.285		ug/Sample		86	51 - 100	4	30
Benzo[g,h,i]perylene	3.00	2.405		ug/Sample		80	35 - 91	2	30
Benzo[k]fluoranthene	1.50	1.353		ug/Sample		90	62 - 98	3	30
Chrysene	1.50	1.428		ug/Sample		95	68 - 106	3	30
Dibenz(a,h)anthracene	3.00	2.538		ug/Sample		85	50 - 94	4	30
Fluoranthene	3.00	2.945		ug/Sample		98	78 - 107	2	30
Fluorene	3.00	3.121		ug/Sample		104	85 - 108	3	30
Indeno[1,2,3-cd]pyrene	1.50	1.187		ug/Sample		79	49 - 94	4	30
Naphthalene	15.0	16.09		ug/Sample		107	79 - 116	4	30
Phenanthrene	1.50	1.486		ug/Sample		99	80 - 104	4	30
Pyrene	1.50	1.479		ug/Sample		99	70 - 121	4	30

QC Association Summary

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

IH - HPLC/IC

Prep Batch: 64790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-45491-1	15053018	Total/NA	Air	Tube prep/Back	
MB 550-64790/1-A	Method Blank	Total/NA	Air	Tube prep/Back	

Prep Batch: 64792

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-45491-1	15053018	Total/NA	Air	Tube prep/Front	
LCS 550-64792/3-A	Lab Control Sample	Total/NA	Air	Tube prep/Front	
LCSD 550-64792/4-A	Lab Control Sample Dup	Total/NA	Air	Tube prep/Front	
MB 550-64792/1-A	Method Blank	Total/NA	Air	Tube prep/Front	

Prep Batch: 64794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-45491-1	15053018	Total/NA	Air	Filter Prep	
MB 550-64794/1-A	Method Blank	Total/NA	Air	Filter Prep	

Analysis Batch: 64803

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-45491-1	15053018	Total/NA	Air	5506 (Modified)	64794
550-45491-1	15053018	Total/NA	Air	5506 Back	64790
550-45491-1	15053018	Total/NA	Air	5506 Front	64792
LCS 550-64792/3-A	Lab Control Sample	Total/NA	Air	5506 Front	64792
LCSD 550-64792/4-A	Lab Control Sample Dup	Total/NA	Air	5506 Front	64792
MB 550-64790/1-A	Method Blank	Total/NA	Air	5506 Back	64790
MB 550-64792/1-A	Method Blank	Total/NA	Air	5506 Front	64792
MB 550-64794/1-A	Method Blank	Total/NA	Air	5506 (Modified)	64794

Analysis Batch: 64943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
550-45491-1	15053018	Total/NA	Air	5506 Sum	

Lab Chronicle

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Client Sample ID: 15053018

Date Collected: 05/26/15 00:00
Date Received: 05/29/15 09:30

Lab Sample ID: 550-45491-1

Matrix: Air

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	Filter Prep			64794	06/02/15 08:30	ZN1	TAL PHX
Total/NA	Analysis	5506 (Modified)		1	64803	06/02/15 16:16	ZN1	TAL PHX
Total/NA	Prep	Tube prep/Back			64790	06/02/15 08:30	ZN1	TAL PHX
Total/NA	Analysis	5506 Back		1	64803	06/02/15 16:50	ZN1	TAL PHX
Total/NA	Prep	Tube prep/Front			64792	06/02/15 08:30	ZN1	TAL PHX
Total/NA	Analysis	5506 Front		1	64803	06/02/15 17:24	ZN1	TAL PHX
Total/NA	Analysis	5506 Sum		1	64943	06/03/15 11:37	SFM	TAL PHX

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Certification Summary

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Laboratory: TestAmerica Phoenix

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA-LAP, LLC	IHLAP		154268	07-01-15 *

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
5506 (Modified)	Filter Prep	Air	Acenaphthene
5506 (Modified)	Filter Prep	Air	Acenaphthylene
5506 (Modified)	Filter Prep	Air	Anthracene
5506 (Modified)	Filter Prep	Air	Benzo[a]anthracene
5506 (Modified)	Filter Prep	Air	Benzo[a]pyrene
5506 (Modified)	Filter Prep	Air	Benzo[b]fluoranthene
5506 (Modified)	Filter Prep	Air	Benzo[g,h,i]perylene
5506 (Modified)	Filter Prep	Air	Benzo[k]fluoranthene
5506 (Modified)	Filter Prep	Air	Chrysene
5506 (Modified)	Filter Prep	Air	Dibenz(a,h)anthracene
5506 (Modified)	Filter Prep	Air	Fluoranthene
5506 (Modified)	Filter Prep	Air	Fluorene
5506 (Modified)	Filter Prep	Air	Indeno[1,2,3-cd]pyrene
5506 (Modified)	Filter Prep	Air	Naphthalene
5506 (Modified)	Filter Prep	Air	Phenanthrene
5506 (Modified)	Filter Prep	Air	Pyrene
5506 Back	Tube prep/Back	Air	Acenaphthene
5506 Back	Tube prep/Back	Air	Acenaphthylene
5506 Back	Tube prep/Back	Air	Anthracene
5506 Back	Tube prep/Back	Air	Benzo[a]anthracene
5506 Back	Tube prep/Back	Air	Benzo[a]pyrene
5506 Back	Tube prep/Back	Air	Benzo[b]fluoranthene
5506 Back	Tube prep/Back	Air	Benzo[g,h,i]perylene
5506 Back	Tube prep/Back	Air	Benzo[k]fluoranthene
5506 Back	Tube prep/Back	Air	Chrysene
5506 Back	Tube prep/Back	Air	Dibenz(a,h)anthracene
5506 Back	Tube prep/Back	Air	Fluoranthene
5506 Back	Tube prep/Back	Air	Fluorene
5506 Back	Tube prep/Back	Air	Indeno[1,2,3-cd]pyrene
5506 Back	Tube prep/Back	Air	Naphthalene
5506 Back	Tube prep/Back	Air	Phenanthrene
5506 Back	Tube prep/Back	Air	Pyrene
5506 Front	Tube prep/Front	Air	Acenaphthene
5506 Front	Tube prep/Front	Air	Acenaphthylene
5506 Front	Tube prep/Front	Air	Anthracene
5506 Front	Tube prep/Front	Air	Benzo[a]anthracene
5506 Front	Tube prep/Front	Air	Benzo[a]pyrene
5506 Front	Tube prep/Front	Air	Benzo[b]fluoranthene
5506 Front	Tube prep/Front	Air	Benzo[g,h,i]perylene
5506 Front	Tube prep/Front	Air	Benzo[k]fluoranthene
5506 Front	Tube prep/Front	Air	Chrysene
5506 Front	Tube prep/Front	Air	Dibenz(a,h)anthracene
5506 Front	Tube prep/Front	Air	Fluoranthene
5506 Front	Tube prep/Front	Air	Fluorene
5506 Front	Tube prep/Front	Air	Indeno[1,2,3-cd]pyrene
5506 Front	Tube prep/Front	Air	Naphthalene

* Certification renewal pending - certification considered valid.

Laboratory: TestAmerica Phoenix (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
AIHA-LAP, LLC	IHLAP		154268	07-01-15 *

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
5506 Front	Tube prep/Front	Air	Phenanthrene
5506 Front	Tube prep/Front	Air	Pyrene

* Certification renewal pending - certification considered valid.

Method Summary

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Method	Method Description	Protocol	Laboratory
5506 (Modified)	Particulate	NIOSH	TAL PHX
5506 Back	NIOSH 5506 (Modified)	NIOSH	TAL PHX
5506 Front	NIOSH 5506 (Modified)	NIOSH	TAL PHX
5506 Sum	NIOSH 5506 (Modified)	NIOSH	TAL PHX

Protocol References:

NIOSH = NIOSH Manual Of Analytical Methods, National Institute For Occupational Safety And Health, 4th Edition, August 1994.

Laboratory References:

TAL PHX = TestAmerica Phoenix, 4625 East Cotton Ctr Blvd, Suite 189, Phoenix, AZ 85040, TEL (602)437-3340

Sample Summary

Client: Ecology and Environment, Inc.
Project/Site: 10ZZ

TestAmerica Job ID: 550-45491-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
550-45491-1	15053018	Air	05/26/15 00:00	05/29/15 09:30

IH - HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Instrument ID: HPLC2 Analysis Batch Number: 61918

Lab Sample ID: STD1 550-61918/2 IC Client Sample ID:

Date Analyzed: 04/24/15 10:26 Lab File ID: 0424-002.D GC Column: Supelcosil PA ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	5.02	Incomplete Integration	nelsonz	04/24/15 14:26
Anthracene	8.77	Baseline	nelsonz	04/27/15 07:53
Benzo[k]fluoranthene	15.75	Baseline	nelsonz	04/24/15 14:26
Benzo[a]pyrene	16.45	Baseline	nelsonz	04/24/15 14:26
Benzo[g,h,i]perylene	18.28	Missed Peak	nelsonz	04/24/15 14:26
Indeno[1,2,3-cd]pyrene	18.81	Missed Peak	nelsonz	04/24/15 14:26

Lab Sample ID: STD1 550-61918/2 IC Client Sample ID:

Date Analyzed: 04/24/15 10:26 Lab File ID: 0424-002.D GC Column: ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Phenanthrene	7.99	Incomplete Integration	nelsonz	04/24/15 14:26
Pyrene	10.37	Incomplete Integration	nelsonz	04/24/15 14:26
Dibenz(a,h)anthracene	17.54	Baseline	nelsonz	04/24/15 14:26
Indeno[1,2,3-cd]pyrene	18.81	Baseline	nelsonz	04/24/15 14:26

Lab Sample ID: STD2 550-61918/3 IC Client Sample ID:

Date Analyzed: 04/24/15 11:00 Lab File ID: 0424-003.D GC Column: Supelcosil PA ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	5.04	Incomplete Integration	nelsonz	04/24/15 14:28
Acenaphthylene	5.77	Incomplete Integration	nelsonz	04/24/15 14:28
Benzo[k]fluoranthene	15.70	Incomplete Integration	nelsonz	04/24/15 14:28

5506 (Modified)

IH - HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Instrument ID: HPLC2 Analysis Batch Number: 61918

Lab Sample ID: STD4 550-61918/5 IC Client Sample ID:

Date Analyzed: 04/24/15 12:07 Lab File ID: 0424-005.D GC Column: ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[b]fluoranthene	14.89	Baseline	nelsonz	04/24/15 14:34
Benzo[k]fluoranthene	15.72	Baseline	nelsonz	04/24/15 14:34
Benzo[a]pyrene	16.47	Baseline	nelsonz	04/24/15 14:34
Dibenz(a,h)anthracene	17.54	Baseline	nelsonz	04/24/15 14:34
Benzo[g,h,i]perylene	18.31	Baseline	nelsonz	04/24/15 14:34
Indeno[1,2,3-cd]pyrene	18.82	Baseline	nelsonz	04/24/15 14:34

Lab Sample ID: STD6 550-61918/7 IC Client Sample ID:

Date Analyzed: 04/24/15 13:15 Lab File ID: 0424-007.D GC Column: Supelcosil PA ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzo[k]fluoranthene	15.70	Baseline	nelsonz	04/24/15 14:36
Benzo[a]pyrene	16.45	Baseline	nelsonz	04/24/15 14:36

5506 (Modified)

IH - HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Instrument ID: HPLC2 Analysis Batch Number: 64803

Lab Sample ID: ICV 550-64803/2 Client Sample ID:

Date Analyzed: 06/02/15 08:52 Lab File ID: 0602-002.D GC Column: Supelcosil PA ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	5.08	Baseline	nelsonz	06/02/15 10:32
Acenaphthene	6.90	Baseline	nelsonz	06/02/15 10:32

5506 (Modified)

IH - HPLC/IC MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Instrument ID: HPLC2 Analysis Batch Number: 64803

Lab Sample ID: LCS 550-64792/3-A Client Sample ID:

Date Analyzed: 06/02/15 14:34 Lab File ID: 0602A008.D GC Column: Supelcosil PA ID: 4.6(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	5.09	Baseline	nelsonz	06/03/15 09:13
Acenaphthylene	5.84	Baseline	nelsonz	06/03/15 09:13
Acenaphthene	6.90	Baseline	nelsonz	06/03/15 09:13
Fluorene	7.18	Baseline	nelsonz	06/03/15 09:13

Lab Sample ID: LCS 550-64792/3-A Client Sample ID:

Date Analyzed: 06/02/15 14:34 Lab File ID: 0602A008.D GC Column: ID:

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Acenaphthene	6.93	Baseline	nelsonz	06/03/15 09:13
Fluorene	7.20	Baseline	nelsonz	06/03/15 09:13
Phenanthrene	8.03	Baseline	nelsonz	06/03/15 09:13
Anthracene	8.85	Baseline	nelsonz	06/03/15 09:13
Fluoranthene	9.74	Baseline	nelsonz	06/03/15 09:13
Pyrene	10.43	Baseline	nelsonz	06/03/15 09:13
Benzo[a]anthracene	12.61	Baseline	nelsonz	06/03/15 09:13
Chrysene	13.13	Baseline	nelsonz	06/03/15 09:13
Benzo[b]fluoranthene	14.92	Baseline	nelsonz	06/03/15 09:13
Benzo[k]fluoranthene	15.74	Baseline	nelsonz	06/03/15 09:13
Benzo[a]pyrene	16.49	Baseline	nelsonz	06/03/15 09:13
Dibenz(a,h)anthracene	17.53	Baseline	nelsonz	06/03/15 09:13
Benzo[g,h,i]perylene	18.31	Baseline	nelsonz	06/03/15 09:13
Indeno[1,2,3-cd]pyrene	18.81	Baseline	nelsonz	06/03/15 09:13

5506 Front

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
IH_PAH 1C1_00003	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C6_00003	20 uL	Acenaphthene	0.2 ug/mL
							Acenaphthylene	0.4 ug/mL
							Anthracene	0.02 ug/mL
							Benzo[a]anthracene	0.02 ug/mL
							Benzo[a]pyrene	0.02 ug/mL
							Benzo[b]fluoranthene	0.04 ug/mL
							Benzo[g,h,i]perylene	0.04 ug/mL
							Benzo[k]fluoranthene	0.02 ug/mL
							Chrysene	0.02 ug/mL
							Dibenz(a,h)anthracene	0.04 ug/mL
							Fluoranthene	0.04 ug/mL
							Fluorene	0.04 ug/mL
							Indeno[1,2,3-cd]pyrene	0.02 ug/mL
							Naphthalene	0.2 ug/mL
							Phenanthrene	0.02 ug/mL
							Pyrene	0.02 ug/mL
.IH_PAH 1C6_00003	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C0_00002	100 uL	Acenaphthene	10 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Chrysene	1 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Naphthalene	10 ug/mL
							Phenanthrene	1 ug/mL
							Pyrene	1 ug/mL
..IH_PAH 1C0_00002	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH PS_00005	100 uL	Acenaphthene	100 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene	10 ug/mL
...IH_PAH PS_00005	01/31/16		Supelco, Lot L98041		(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
IH_PAH 1C2_00003	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C6_00003	50 uL	Acenaphthene	0.5 ug/mL
							Acenaphthylene	1 ug/mL
							Anthracene	0.05 ug/mL
							Benzo[a]anthracene	0.05 ug/mL
							Benzo[a]pyrene	0.05 ug/mL
							Benzo[b]fluoranthene	0.1 ug/mL
							Benzo[g,h,i]perylene	0.1 ug/mL
							Benzo[k]fluoranthene	0.05 ug/mL
							Chrysene	0.05 ug/mL
							Dibenz(a,h)anthracene	0.1 ug/mL
							Fluoranthene	0.1 ug/mL
							Fluorene	0.1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.05 ug/mL
							Naphthalene	0.5 ug/mL
							Phenanthrene	0.05 ug/mL
							Pyrene	0.05 ug/mL
.IH_PAH 1C6_00003	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C0_00002	100 uL	Acenaphthene	10 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Chrysene	1 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Naphthalene	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene	1 ug/mL
							Pyrene	1 ug/mL
..IH_PAH 1C0_00002	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH PS_00005	100 uL	Acenaphthene	100 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
...IH_PAH PS_00005	01/31/16		Supelco, Lot L98041		(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
IH_PAH 1C3_00003	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C0_00002	10 uL	Acenaphthene	1 ug/mL
							Acenaphthylene	2 ug/mL
							Anthracene	0.1 ug/mL
							Benzo[a]anthracene	0.1 ug/mL
							Benzo[a]pyrene	0.1 ug/mL
							Benzo[b]fluoranthene	0.2 ug/mL
							Benzo[g,h,i]perylene	0.2 ug/mL
							Benzo[k]fluoranthene	0.1 ug/mL
							Chrysene	0.1 ug/mL
							Dibenz(a,h)anthracene	0.2 ug/mL
							Fluoranthene	0.2 ug/mL
							Fluorene	0.2 ug/mL
							Indeno[1,2,3-cd]pyrene	0.1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	1 ug/mL
							Phenanthrene	0.1 ug/mL
							Pyrene	0.1 ug/mL
.IH_PAH 1C0_00002	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH PS_00005	100 uL	Acenaphthene	100 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
..IH_PAH PS_00005	01/31/16		Supelco, Lot L98041		(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
IH_PAH 1C4_00003	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C0_00002	20 uL	Acenaphthene	2 ug/mL
							Acenaphthylene	4 ug/mL
							Anthracene	0.2 ug/mL
							Benzo[a]anthracene	0.2 ug/mL
							Benzo[a]pyrene	0.2 ug/mL
							Benzo[b]fluoranthene	0.4 ug/mL
							Benzo[g,h,i]perylene	0.4 ug/mL
							Benzo[k]fluoranthene	0.2 ug/mL
							Chrysene	0.2 ug/mL
							Dibenz(a,h)anthracene	0.4 ug/mL
							Fluoranthene	0.4 ug/mL
							Fluorene	0.4 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	0.2 ug/mL
							Naphthalene	2 ug/mL
							Phenanthrene	0.2 ug/mL
							Pyrene	0.2 ug/mL
.IH_PAH 1C0_00002	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH PS_00005	100 uL	Acenaphthene	100 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
..IH_PAH PS_00005	01/31/16		Supelco, Lot L98041		(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
IH_PAH 1C5_00003	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C0_00002	50 uL	Acenaphthene	5 ug/mL
							Acenaphthylene	10 ug/mL
							Anthracene	0.5 ug/mL
							Benzo[a]anthracene	0.5 ug/mL
							Benzo[a]pyrene	0.5 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	0.5 ug/mL
							Chrysene	0.5 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Fluoranthene	1 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluorene	1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.5 ug/mL
							Naphthalene	5 ug/mL
							Phenanthrene	0.5 ug/mL
							Pyrene	0.5 ug/mL
.IH_PAH 1C0_00002	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH PS_00005	100 uL	Acenaphthene	100 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
..IH_PAH PS_00005	01/31/16	Supelco, Lot L98041			(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
IH_PAH 1C6_00003	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C0_00002	100 uL	Acenaphthene	10 ug/mL
							Acenaphthylene	20 ug/mL
							Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Chrysene	1 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Naphthalene	10 ug/mL
							Phenanthrene	1 ug/mL
							Pyrene	1 ug/mL
.IH_PAH 1C0_00002	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH PS_00005	100 uL	Acenaphthene	100 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
..IH_PAH PS_00005	01/31/16	Supelco, Lot L98041			(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
IH_PAH 1C7_00009	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH 1C0_00002	200 uL	Acenaphthene	20 ug/mL
							Acenaphthylene	40 ug/mL
							Anthracene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	4 ug/mL
							Benzo[g,h,i]perylene	4 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Chrysene	2 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibenz(a,h)anthracene	4 ug/mL
							Fluoranthene	4 ug/mL
							Fluorene	4 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Naphthalene	20 ug/mL
							Phenanthrene	2 ug/mL
							Pyrene	2 ug/mL
.IH_PAH 1C0_00002	06/23/15	04/23/15	ACN, Lot 0000087764	1 mL	IH_PAH PS_00005	100 uL	Acenaphthene	100 ug/mL
							Acenaphthylene	200 ug/mL
							Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
..IH_PAH PS_00005	01/31/16	Supelco, Lot L98041			(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
IH_PAH 2C1_00008	06/23/15	05/12/15	ACN, Lot 0000087764	1 mL	IH_PAH 2C6_00001	20 uL	Acenaphthene	0.2 ug/mL
							Acenaphthylene	0.4 ug/mL
							Naphthalene	0.2 ug/mL
.IH_PAH 2C6_00001	06/23/15	12/31/14	ACN, Lot 0000087764	1 mL	IH_PAH 2C0_00001	100 uL	Acenaphthene	10 ug/mL
							Acenaphthylene	20 ug/mL
							Naphthalene	10 ug/mL
..IH_PAH 2C0_00001	06/23/15	12/31/14	ACN, Lot 0000087767	1 mL	IH_PAH SS_00010	100 uL	Acenaphthene	100 ug/mL
							Acenaphthylene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	100 ug/mL
...IH_PAH SS_00010	06/30/17		Supelco, Lot LC07969V		(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Naphthalene	1000 ug/mL
IH_PAH 2C2_00007	06/23/15	05/12/15	ACN, Lot 0000087764	1 mL	IH_PAH 2C6_00001	50 uL	Anthracene	0.05 ug/mL
							Benzo[a]anthracene	0.05 ug/mL
							Benzo[a]pyrene	0.05 ug/mL
							Benzo[b]fluoranthene	0.1 ug/mL
							Benzo[g,h,i]perylene	0.1 ug/mL
							Benzo[k]fluoranthene	0.05 ug/mL
							Chrysene	0.05 ug/mL
							Dibenz(a,h)anthracene	0.1 ug/mL
							Fluoranthene	0.1 ug/mL
							Fluorene	0.1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.05 ug/mL
							Phenanthrene	0.05 ug/mL
							Pyrene	0.05 ug/mL
.IH_PAH 2C6_00001	06/23/15	12/31/14	ACN, Lot 0000087764	1 mL	IH_PAH 2C0_00001	100 uL	Anthracene	1 ug/mL
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Chrysene	1 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Phenanthrene	1 ug/mL
							Pyrene	1 ug/mL
..IH_PAH 2C0_00001	06/23/15	12/31/14	ACN, Lot 0000087767	1 mL	IH_PAH SS_00010	100 uL	Anthracene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Chrysene	10 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Phenanthrene	10 ug/mL
							Pyrene	10 ug/mL
...IH_PAH SS_00010	06/30/17		Supelco, Lot LC07969V		(Purchased Reagent)		Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
IH_PAH SS_00009	01/30/16	Supelco, Lot LC07969V			(Purchased Reagent)		Acenaphthene	1000 ug/mL
							Acenaphthylene	2000 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	200 ug/mL
							Benzo[g,h,i]perylene	200 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	200 ug/mL
							Fluoranthene	200 ug/mL
							Fluorene	200 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL

Reagent

IH_PAH PS_00005

328026

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Certificate of Analysis

Description: EPA 610 PAH Mix, 1x1ml, 100-2000µg/ml methanol:dichloromethane (1:1)

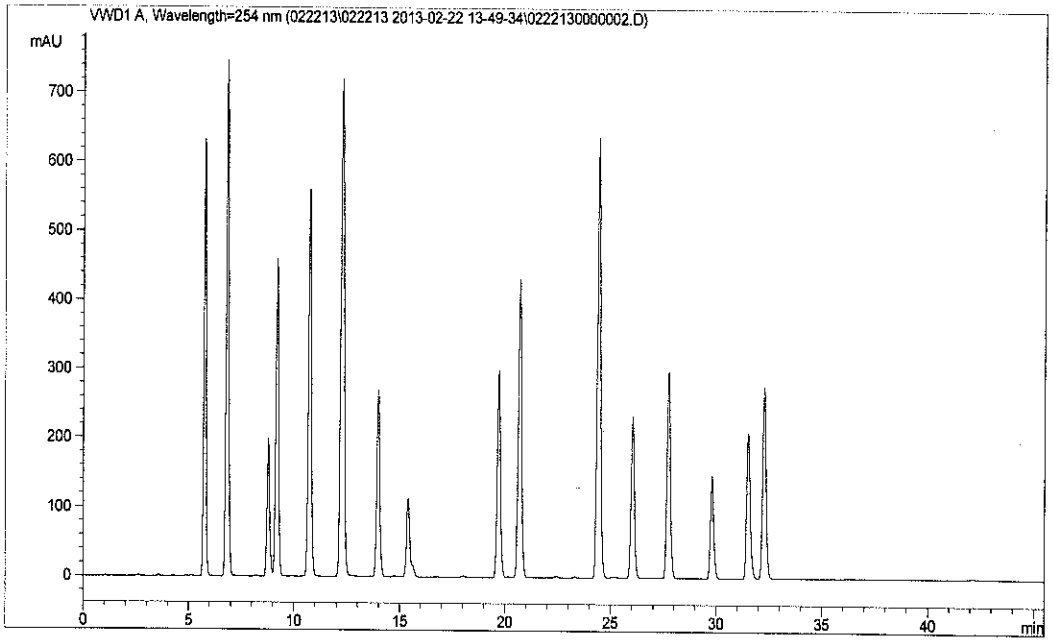
Part Number: CRM48743

Lot Number: LB98041

Expiration Date: January 2016

Storage: Refrigerate

Analytical Method Parameters:
Column: LC-PAH; 25cm x 4.6mm x 5µm
WATER/ACETONITRILE;0 min 40/60%; 5 min 0/100%;30 min 0/100%;45min
Detector: UV-254nm
Injection Volume: 10µL



Elution	Analyte	Lot Number	CAS Number	Certified Purity % (1)	Certified Gravimetric Conc. µg/ml (2)	Expanded Uncertainty µg/ml (3)	Analytical Conc. µg/ml (2)
1.	Naphthalene, CRM	LB88072	91-20-3	99.3	993	±8.74	1024
2.	Acenaphthylene, CRM	LB95041	208-96-8	99.2	1984	±22.83	2165
3.	Acenaphthene, CRM	LB88651	83-32-9	99.3	993	±10.39	1045
4.	Fluorene, CRM	LB88880	86-73-7	98.2	196.50	±2.289	212.21
5.	Phenanthrene, CRM	LB88349	85-01-8	97.6	101.78	±1.074	106.24
6.	Anthracene, CRM	LB94997	120-12-7	99.0	99.10	±0.781	107.80
7.	Fluoranthene, CRM	LB88428	206-44-0	99.5	198.90	±2.464	215.17
8.	Pyrene, CRM	LB88365	129-00-0	98.9	99.50	±1.156	102.77
9.	Benz(a)anthracene, CRM	LB94996	56-55-3	98.5	98.70	±1.153	104.46
10.	Chrysene, CRM	LB95195	218-01-9	97.4	100.13	±1.117	107.20
11.	Benzo(b)fluoranthene, CRM	LB89946	205-99-2	97.3	199.95	±2.543	214.70
12.	Benzo(k)fluoranthene, CRM	LB89276	207-08-9	99.5	99.60	±1.182	108.95
13.	Benzo(a)pyrene, CRM	LB94317	50-32-8	95.0	99.94	±1.239	105.90
14.	Dibenz(a,h)anthracene, CRM	LB95201	53-70-3	99.0	198.10	±2.470	215.90

ACLASS ACCREDITED TESTING — Cert# AT-1607
ACLASS ACCREDITED REFERENCE MATERIAL PRODUCER — Cert# AR-1606

Produced in double accredited laboratory fulfilling
ISO/IEC 17025 and
ISO Guide 34

SIGMA-ALDRICH®

Notes:

- All starting materials are Certified Reference Materials.

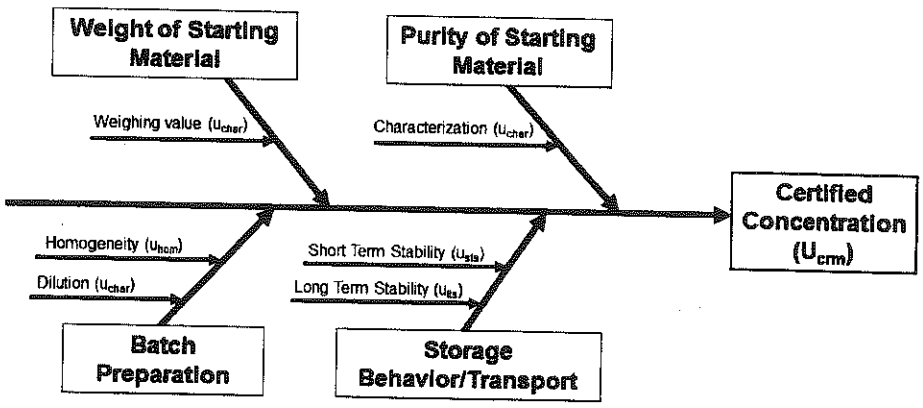
- NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml.

- Certified value is the gravimetric concentration weighed at room temperature. Uncertainty of the gravimetric concentration in this document is expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k = 2. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long-term stability and short-term stability. The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies.

- Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

- Product intended for laboratory use only. Supelco warrants that its products conform to the information contained in this publication. Purchaser must determine the suitability of the product for its particular use. Please see the latest catalog or order invoice and packing slip for additional terms and conditions of sale.

Cause-Effect Diagram for Uncertainty Contributions



$$U_{crm} = k\sqrt{u_{char}^2 + u_{hom}^2 + u_{sts}^2 + u_{lts}^2}$$

Test Date: February 25, 2013
Form: CRM48743

Duane Funk

Duane Funk
QC Manager

ACLASS ACCREDITED TESTING Cert# AT-1607

ACLASS ACCREDITED REFERENCE MATERIAL PRODUCER Cert# AR-1606

Produced in double accredited laboratory fulfilling ISO/IEC 17025 and ISO Guide 34

SIGMA-ALDRICH®

Reagent

IH_PAH SS_00009

354438

Certificate of Analysis

DESCRIPTION: SS EPA 610 PAH Mix

CATALOG NO.: 4S8743 MFG DATE: Jun-2014

LOT NO.: LC07969V EXPIRATION DATE: Jun-2017

SOLVENT: METHANOL:METHYLENE CHLORIDE (1:1)

ANALYTE (1)	CAS NUMBER	PERCENT PURITY(2)	WEIGHT(3) CONCENTRATION	ANALYTICAL(4) CONCENTRATION		STD DEV	SUPELCO LOT NO
ACENAPHTHENE, SS	83-32-9	99.9	1001	933	+/-	31.3	JS00009
ACENAPHTHYLENE, SS	208-96-8	99.2	2000	1860	+/-	63.0	LB49200
ANTHRACENE, SS	120-12-7	99.1	99.6	93.5	+/-	3.40	LB43311
BENZO (A) ANTHRACENE, SS	56-55-3	99.9	100.0	95.2	+/-	3.55	LB49199
BENZO (A) PYRENE, SS	50-32-8	99.6	100.0	103.2	+/-	3.56	LB73826
BENZO (B) FLUORANTHENE, SS	205-99-2	98.7	200.0	192.6	+/-	6.88	LB39226
BENZO (G,H,I) PERYLENE, SS	191-24-2	99.2	199.2	193.6	+/-	6.49	LB52636
BENZO (K) FLUORANTHENE, SS	207-08-9	99.9	100.4	97.4	+/-	3.38	LB50200
CHRYSENE, SS	218-01-9	99.9 (a)	100.4	95.1	+/-	3.50	LB46515
DIBENZO (A,H) ANTHRACENE, SS	53-70-3	99.8	199.6	193.7	+/-	5.47	LB53451
FLUORANTHENE, SS	206-44-0	98.3	199.2	186.4	+/-	7.35	JS00003
FLUORENE, SS	86-73-7	99.1	200.8	188.5	+/-	6.63	LB95188
INDENO (1,2,3-CD) PYRENE, SS	193-39-5	99.6	99.6	97.7	+/-	3.30	JS00150
NAPHTHALENE, SS	91-20-3	99.9	1000	930	+/-	31.8	LC06284
PHENANTHRENE, SS	85-01-8	99.0	100.4	94.7	+/-	3.74	LB46705
PYRENE, SS	129-00-0	98.8	100.4	94.4	+/-	3.70	LB39181

(1) Listed in alphabetical order.
(2) Determined by capillary GC-FID, unless otherwise noted.
a) HPLC UV-254NM
(3) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, based upon balance and Class A volumetric glassware tolerances. Weights are corrected for analytes less than 98% pure.
(4) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

These products have identical formulations but are prepared from independently sourced raw materials, and are quality controlled independently. Products denoted as Separate Source standards afford the convenience of working with Supelco as a single vendor while enabling you to meet independent calibration and quality control requirements of the US EPA

Duane Funk

Duane Funk
Quality Manager

Supelco warrants that its products conform to the information contained in this publication. Purchaser must determine the suitability of the product for its particular use. Please see the latest catalog or order invoice and packing slip for additional terms and conditions of sale.
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Bellefonte, PA 16823-0048 USA
Phone (814) 359-3441

Reagent

IH_PAH SS_00010

354439

Certificate of Analysis

DESCRIPTION: SS EPA 610 PAH Mix

CATALOG NO.: 4S8743 MFG DATE: Jun-2014

LOT NO.: LC07969V EXPIRATION DATE: Jun-2017

SOLVENT: METHANOL:METHYLENE CHLORIDE (1:1)

ANALYTE (1)	CAS NUMBER	PERCENT PURITY(2)	WEIGHT(3) CONCENTRATION	ANALYTICAL(4) CONCENTRATION		STD DEV	SUPELCO LOT NO
ACENAPHTHENE, SS	83-32-9	99.9	1001	933	+/-	31.3	JS00009
ACENAPHTHYLENE, SS	208-96-8	99.2	2000	1860	+/-	63.0	LB49200
ANTHRACENE, SS	120-12-7	99.1	99.6	93.5	+/-	3.40	LB43311
BENZO (A) ANTHRACENE, SS	56-55-3	99.9	100.0	95.2	+/-	3.55	LB49199
BENZO (A) PYRENE, SS	50-32-8	99.6	100.0	103.2	+/-	3.56	LB73826
BENZO (B) FLUORANTHENE, SS	205-99-2	98.7	200.0	192.6	+/-	6.88	LB39226
BENZO (G,H,I) PERYLENE, SS	191-24-2	99.2	199.2	193.6	+/-	6.49	LB52636
BENZO (K) FLUORANTHENE, SS	207-08-9	99.9	100.4	97.4	+/-	3.38	LB50200
CHRYSENE, SS	218-01-9	99.9 (a)	100.4	95.1	+/-	3.50	LB46515
DIBENZO (A,H) ANTHRACENE, SS	53-70-3	99.8	199.6	193.7	+/-	5.47	LB53451
FLUORANTHENE, SS	206-44-0	98.3	199.2	186.4	+/-	7.35	JS00003
FLUORENE, SS	86-73-7	99.1	200.8	188.5	+/-	6.63	LB95188
INDENO (1,2,3-CD) PYRENE, SS	193-39-5	99.6	99.6	97.7	+/-	3.30	JS00150
NAPHTHALENE, SS	91-20-3	99.9	1000	930	+/-	31.8	LC06284
PHENANTHRENE, SS	85-01-8	99.0	100.4	94.7	+/-	3.74	LB46705
PYRENE, SS	129-00-0	98.8	100.4	94.4	+/-	3.70	LB39181

(1) Listed in alphabetical order.
(2) Determined by capillary GC-FID, unless otherwise noted.
a) HPLC UV-254NM
(3) NIST traceable weights are used to verify balance calibration with the preparation of each lot. Concentration of analyte in solution is ug/ml +/- 0.5%, based upon balance and Class A volumetric glassware tolerances. Weights are corrected for analytes less than 98% pure.
(4) Determined by chromatographic analysis against an independently prepared reference lot. Mean of replicate injections.

These products have identical formulations but are prepared from independently sourced raw materials, and are quality controlled independently. Products denoted as Separate Source standards afford the convenience of working with Supelco as a single vendor while enabling you to meet independent calibration and quality control requirements of the US EPA

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Quality Manager

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Phone (814) 359-3441

Method NIOSH 5506

Polynuclear Aromatic Hydrocarbons by NIOSH Method 5506

FORM III
IH - HPLC/IC LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 0602A008.D

Lab ID: LCS 550-64792/3-A Client ID:

COMPOUND	SPIKE ADDED (ug/Sample)	LCS CONCENTRATION (ug/Sample)	LCS % REC	QC LIMITS REC	#
Acenaphthene	15.0	14.74	98	80-116	
Acenaphthylene	30.0	31.02	103	78-116	
Anthracene	1.50	1.484	99	82-105	
Benzo[a]anthracene	1.50	1.400	93	70-107	
Benzo[b]fluoranthene	3.00	2.583	86	61-98	
Benzo[a]pyrene	1.50	1.244	83	51-100	
Benzo[g,h,i]perylene	3.00	2.344	78	35-91	
Benzo[k]fluoranthene	1.50	1.316	88	62-98	
Chrysene	1.50	1.396	93	68-106	
Dibenz(a,h)anthracene	3.00	2.436	81	50-94	
Fluoranthene	3.00	2.880	96	78-107	
Fluorene	3.00	3.019	101	85-108	
Indeno[1,2,3-cd]pyrene	1.50	1.172	78	49-94	
Naphthalene	15.0	15.45	103	79-116	
Phenanthrene	1.50	1.431	95	80-104	
Pyrene	1.50	1.451	97	70-121	

Column to be used to flag recovery and RPD values

FORM III 5506 Front

FORM III
IH - HPLC/IC LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Matrix: Air Level: Low Lab File ID: 0602A009.D

Lab ID: LCSD 550-64792/4-A Client ID:

COMPOUND	SPIKE ADDED (ug/Sample)	LCSD CONCENTRATION (ug/Sample)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Acenaphthene	15.0	16.25	108	10	30	80-116	
Acenaphthylene	30.0	32.11	107	3	30	78-116	
Anthracene	1.50	1.545	103	4	30	82-105	
Benzo[a]anthracene	1.50	1.423	95	3	30	70-107	
Benzo[b]fluoranthene	3.00	2.664	89	2	30	61-98	
Benzo[a]pyrene	1.50	1.285	86	4	30	51-100	
Benzo[g,h,i]perylene	3.00	2.405	80	2	30	35-91	
Benzo[k]fluoranthene	1.50	1.353	90	3	30	62-98	
Chrysene	1.50	1.428	95	3	30	68-106	
Dibenz(a,h)anthracene	3.00	2.538	85	4	30	50-94	
Fluoranthene	3.00	2.945	98	2	30	78-107	
Fluorene	3.00	3.121	104	3	30	85-108	
Indeno[1,2,3-cd]pyrene	1.50	1.187	79	4	30	49-94	
Naphthalene	15.0	16.09	107	4	30	79-116	
Phenanthrene	1.50	1.486	99	4	30	80-104	
Pyrene	1.50	1.479	99	4	30	70-121	

Column to be used to flag recovery and RPD values

FORM III 5506 Front

FORM IV
IH - HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: MB 550-64794/1-A

Matrix: Air Date Extracted: 06/02/2015 08:30

Lab File ID:(1) 0602A005.D Lab File ID:(2)

Date Analyzed:(1) 06/02/2015 12:52 Date Analyzed:(2)

Instrument ID:(1) HPLC2 Instrument ID:(2)

GC Column:(1) Supelcosil P ID: 4.6(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
15053018	550-45491-1	06/02/2015 16:16	

FORM IV 5506 (Modified)

FORM IV
IH - HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: MB 550-64794/1-A

Matrix: Air Date Extracted: 06/02/2015 08:30

Lab File ID:(1) Lab File ID:(2) 0602A005.D

Date Analyzed:(1) Date Analyzed:(2) 06/02/2015 12:52

Instrument ID:(1) Instrument ID:(2) HPLC2

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
15053018	550-45491-1	06/02/2015 16:16	

FORM IV 5506 (Modified)

FORM IV
IH - HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: MB 550-64790/1-A

Matrix: Air Date Extracted: 06/02/2015 08:30

Lab File ID:(1) 0602A006.D Lab File ID:(2)

Date Analyzed:(1) 06/02/2015 13:26 Date Analyzed:(2)

Instrument ID:(1) HPLC2 Instrument ID:(2)

GC Column:(1) Supelcosil P ID: 4.6(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
15053018	550-45491-1	06/02/2015 16:50	

FORM IV 5506 Back

FORM IV
IH - HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: MB 550-64790/1-A

Matrix: Air Date Extracted: 06/02/2015 08:30

Lab File ID:(1) Lab File ID:(2) 0602A006.D

Date Analyzed:(1) Date Analyzed:(2) 06/02/2015 13:26

Instrument ID:(1) Instrument ID:(2) HPLC2

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
15053018	550-45491-1	06/02/2015 16:50	

FORM IV 5506 Back

FORM IV
IH - HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: MB 550-64792/1-A

Matrix: Air Date Extracted: 06/02/2015 08:30

Lab File ID:(1) 0602A007.D Lab File ID:(2)

Date Analyzed:(1) 06/02/2015 14:00 Date Analyzed:(2)

Instrument ID:(1) HPLC2 Instrument ID:(2)

GC Column:(1) Supelcosil P ID: 4.6(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 550-64792/3-A	06/02/2015 14:34	
	LCSD 550-64792/4-A	06/02/2015 15:08	
15053018	550-45491-1	06/02/2015 17:24	

FORM IV 5506 Front

FORM IV
IH - HPLC/IC METHOD BLANK SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: MB 550-64792/1-A

Matrix: Air Date Extracted: 06/02/2015 08:30

Lab File ID:(1) Lab File ID:(2) 0602A007.D

Date Analyzed:(1) Date Analyzed:(2) 06/02/2015 14:00

Instrument ID:(1) Instrument ID:(2) HPLC2

GC Column:(1) ID: GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 550-64792/3-A	06/02/2015 14:34	
	LCSD 550-64792/4-A	06/02/2015 15:08	
15053018	550-45491-1	06/02/2015 17:24	

FORM IV 5506 Front

FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: 15053018 | Lab Sample ID: 550-45491-1

Matrix: Air | Lab File ID: 0602A011.D

Analysis Method: 5506 (Modified) | Date Collected: 05/26/2015 00:00

Extraction Method: Filter Prep | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 16:16

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Supelcosil PAH ID: 4.6(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<2.00		2.00
208-96-8	Acenaphthylene	<2.50		2.50
120-12-7	Anthracene	<0.250		0.250
86-73-7	Fluorene	<0.500		0.500
91-20-3	Naphthalene	<1.00		1.00
85-01-8	Phenanthrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A011.D				
Lims ID:	550-45491-A-1-C	Lab Sample ID:	550-45491-1		
Client ID:	15053018				
Sample Type:	Client				
Inject. Date:	02-Jun-2015 16:16:16	ALS Bottle#:	9	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	550-45491-A-1-C				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:13:43	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:16:15

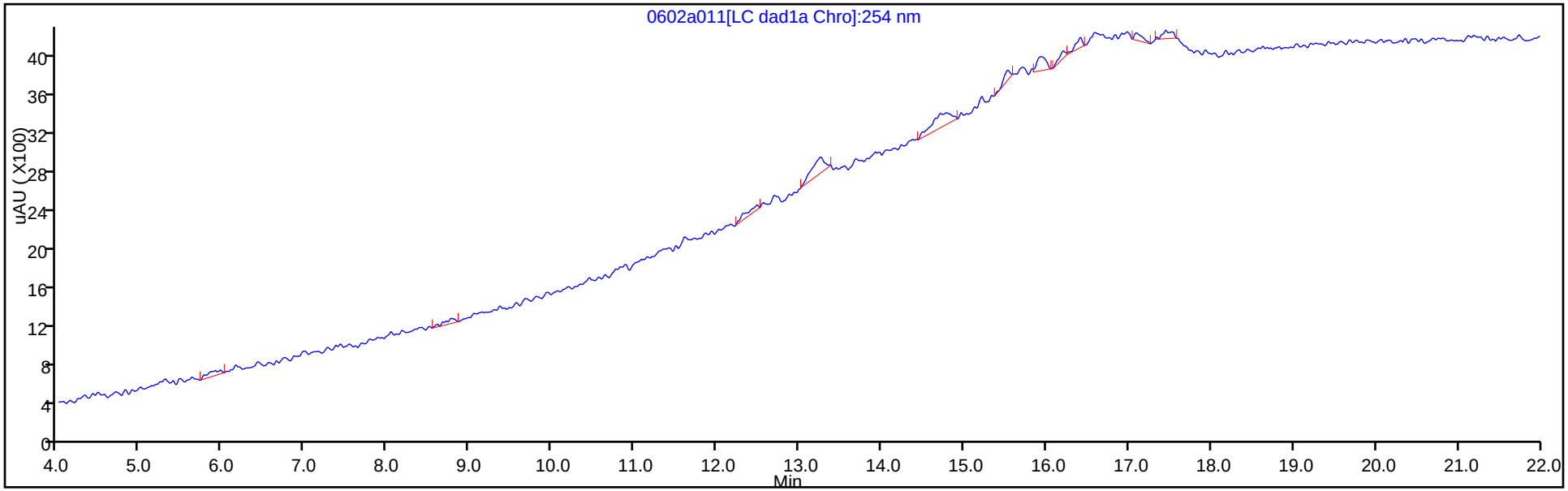
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:16:15 Chrom Revision: 2.2 14-May-2015 11:41:56

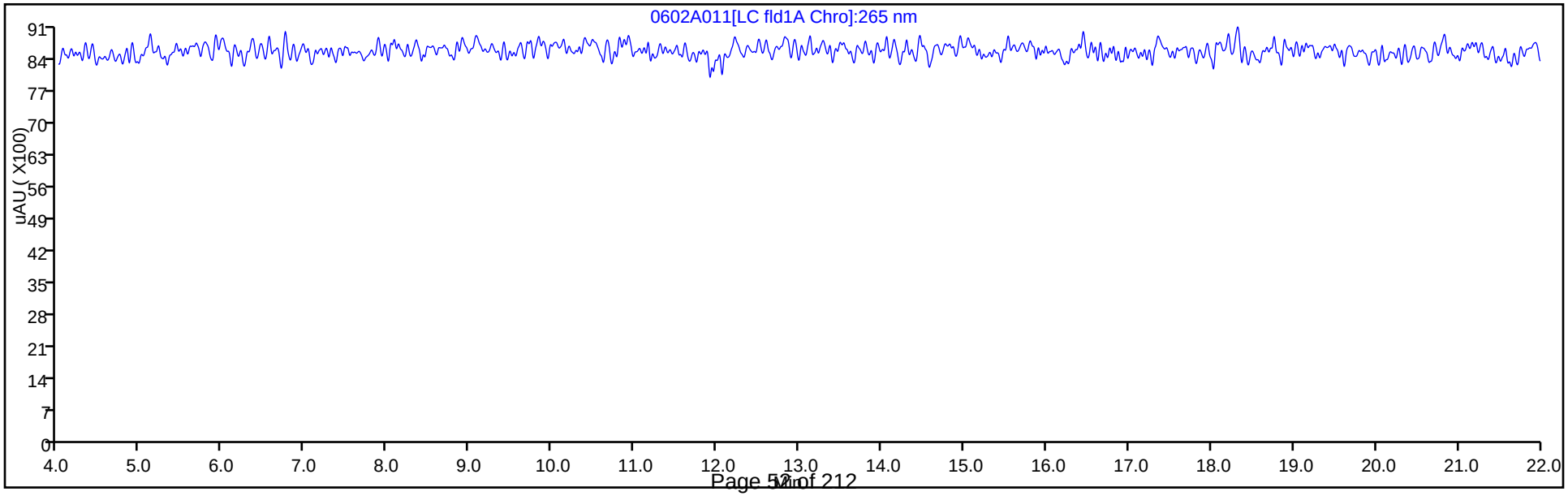
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a011.d				
Injection Date:	02-Jun-2015 16:16:16	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	550-45491-A-1-C	Lab Sample ID:	550-45491-1	Worklist Smp#:	11
Client ID:	15053018				
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: 15053018 | Lab Sample ID: 550-45491-1

Matrix: Air | Lab File ID: 0602A011.D

Analysis Method: 5506 (Modified) | Date Collected: 05/26/2015 00:00

Extraction Method: Filter Prep | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 16:16

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.250		0.250
205-99-2	Benzo[b]fluoranthene	<0.500		0.500
50-32-8	Benzo[a]pyrene	<0.250		0.250
191-24-2	Benzo[g,h,i]perylene	<0.500		0.500
207-08-9	Benzo[k]fluoranthene	<0.250		0.250
218-01-9	Chrysene	<0.250		0.250
53-70-3	Dibenz(a,h)anthracene	<0.500		0.500
206-44-0	Fluoranthene	<0.500		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	<0.250		0.250
129-00-0	Pyrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A011.D				
Lims ID:	550-45491-A-1-C	Lab Sample ID:	550-45491-1		
Client ID:	15053018				
Sample Type:	Client				
Inject. Date:	02-Jun-2015 16:16:16	ALS Bottle#:	9	Worklist Smp#:	11
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	550-45491-A-1-C				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:13:43	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:16:15

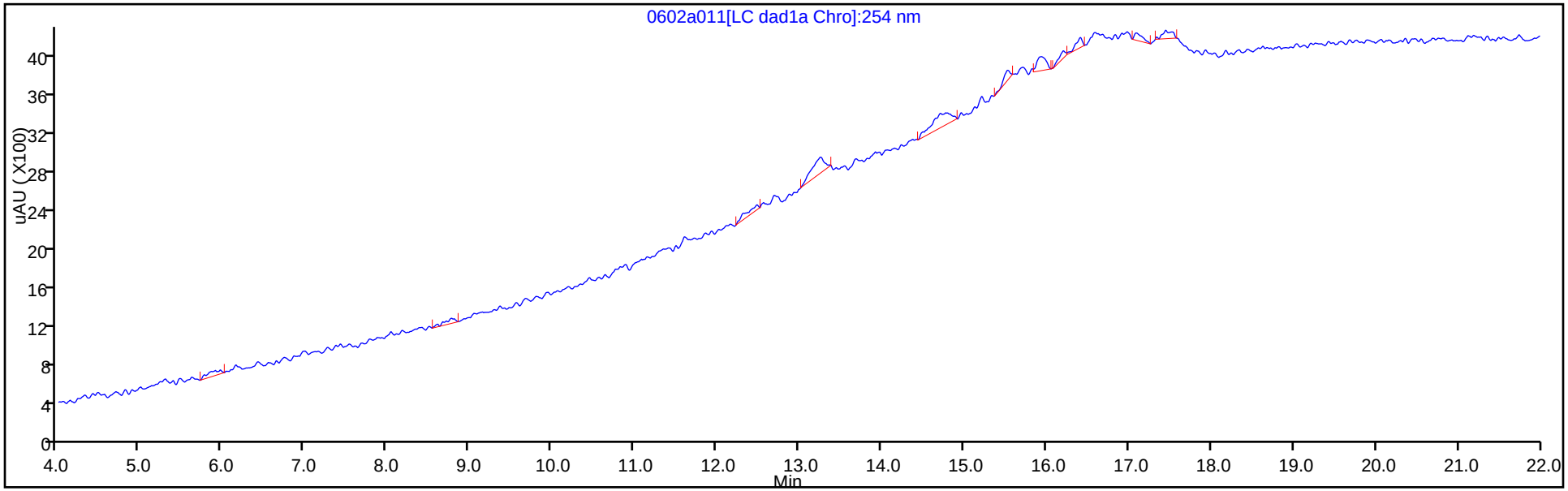
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:16:15 Chrom Revision: 2.2 14-May-2015 11:41:56

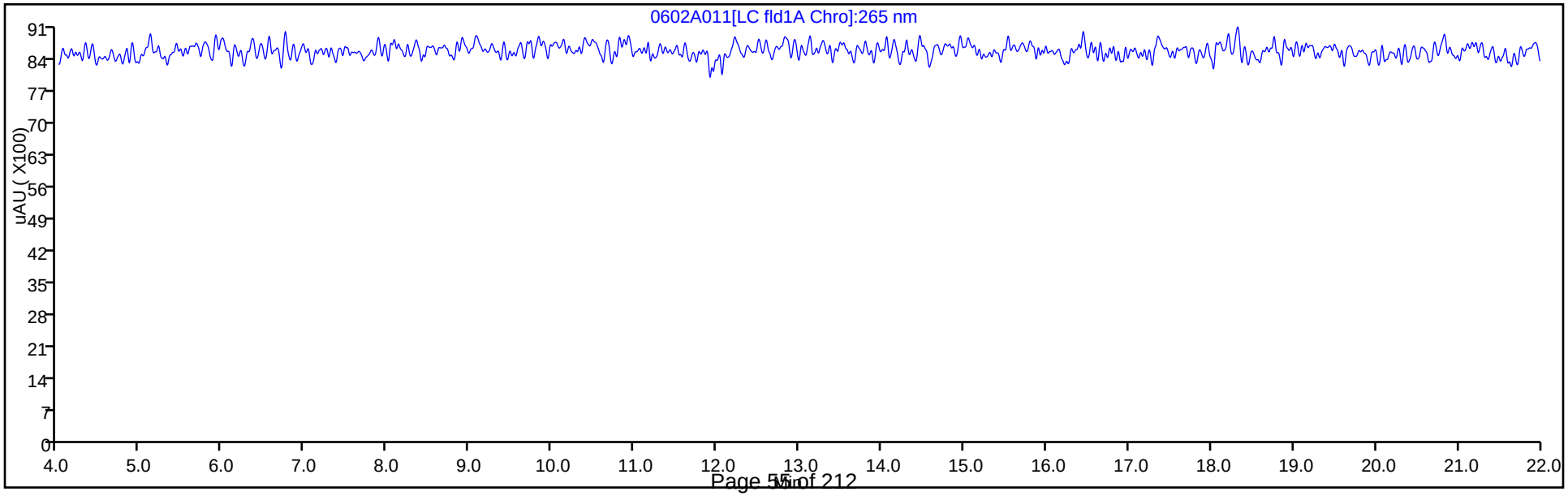
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a011.d				
Injection Date:	02-Jun-2015 16:16:16	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	550-45491-A-1-C	Lab Sample ID:	550-45491-1	Worklist Smp#:	11
Client ID:	15053018				
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: 15053018 | Lab Sample ID: 550-45491-1

Matrix: Air | Lab File ID: 0602A012.D

Analysis Method: 5506 Back | Date Collected: 05/26/2015 00:00

Extraction Method: Tube prep/Back | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 16:50

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Supelcosil PAH ID: 4.6(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<2.00		2.00
208-96-8	Acenaphthylene	<2.50		2.50
120-12-7	Anthracene	<0.250		0.250
86-73-7	Fluorene	<0.500		0.500
91-20-3	Naphthalene	<1.00		1.00
85-01-8	Phenanthrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A012.D				
Lims ID:	550-45491-A-1-A	Lab Sample ID:	550-45491-1		
Client ID:	15053018				
Sample Type:	Client				
Inject. Date:	02-Jun-2015 16:50:21	ALS Bottle#:	10	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	550-45491-A-1-A				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:16:37	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:16:37

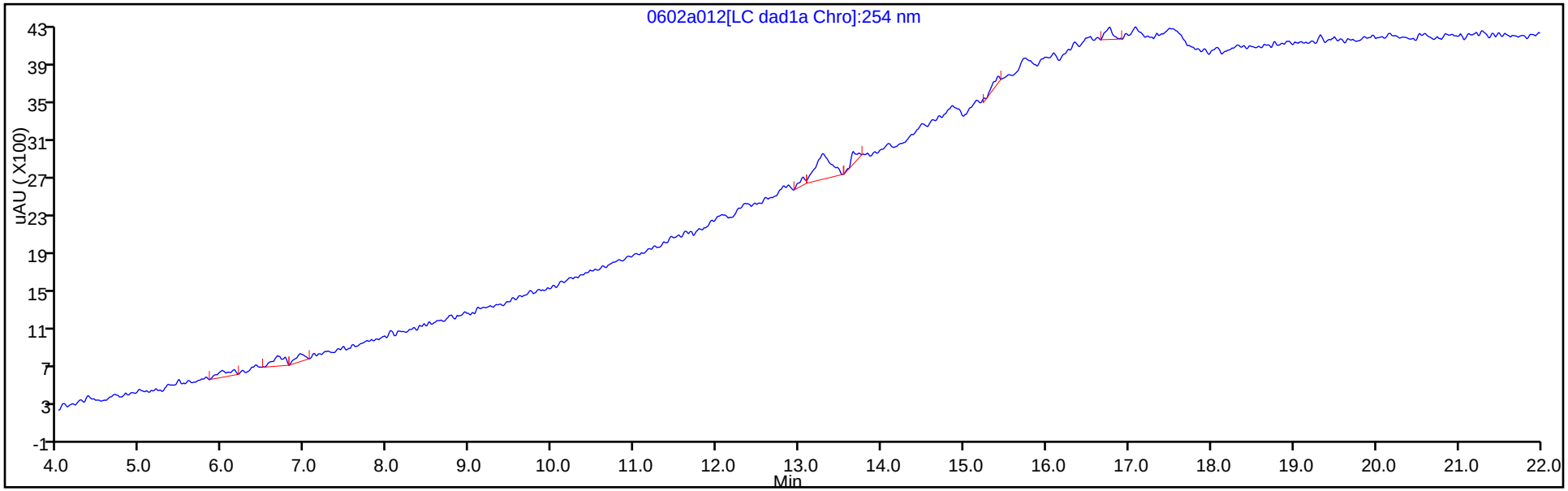
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:16:38 Chrom Revision: 2.2 14-May-2015 11:41:56

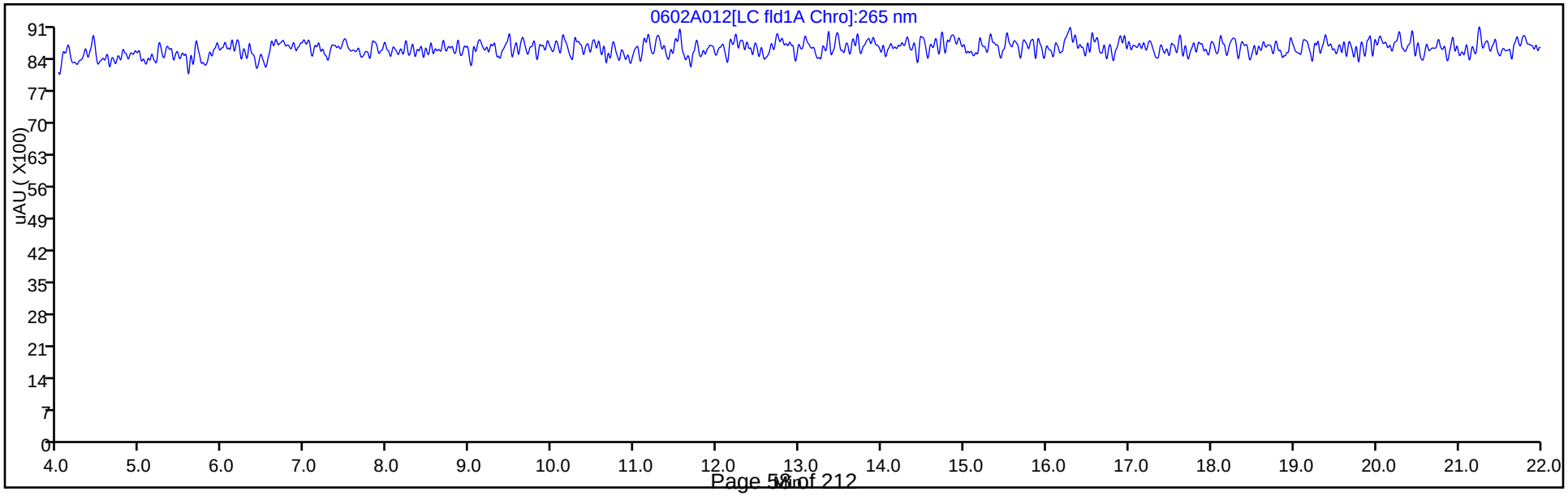
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a012.d				
Injection Date:	02-Jun-2015 16:50:21	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	550-45491-A-1-A	Lab Sample ID:	550-45491-1	Worklist Smp#:	12
Client ID:	15053018				
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: 15053018 | Lab Sample ID: 550-45491-1

Matrix: Air | Lab File ID: 0602A012.D

Analysis Method: 5506 Back | Date Collected: 05/26/2015 00:00

Extraction Method: Tube prep/Back | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 16:50

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.250		0.250
205-99-2	Benzo[b]fluoranthene	<0.500		0.500
50-32-8	Benzo[a]pyrene	<0.250		0.250
191-24-2	Benzo[g,h,i]perylene	<0.500		0.500
207-08-9	Benzo[k]fluoranthene	<0.250		0.250
218-01-9	Chrysene	<0.250		0.250
53-70-3	Dibenz(a,h)anthracene	<0.500		0.500
206-44-0	Fluoranthene	<0.500		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	<0.250		0.250
129-00-0	Pyrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A012.D				
Lims ID:	550-45491-A-1-A	Lab Sample ID:	550-45491-1		
Client ID:	15053018				
Sample Type:	Client				
Inject. Date:	02-Jun-2015 16:50:21	ALS Bottle#:	10	Worklist Smp#:	12
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	550-45491-A-1-A				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:16:37	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:16:37

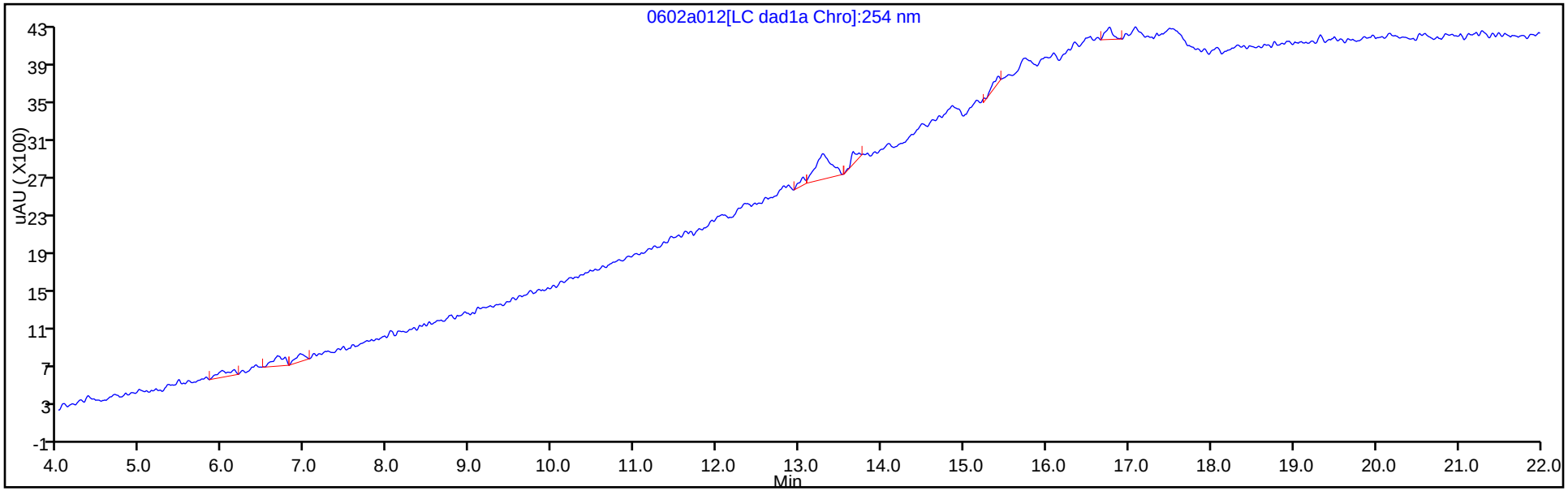
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:16:38 Chrom Revision: 2.2 14-May-2015 11:41:56

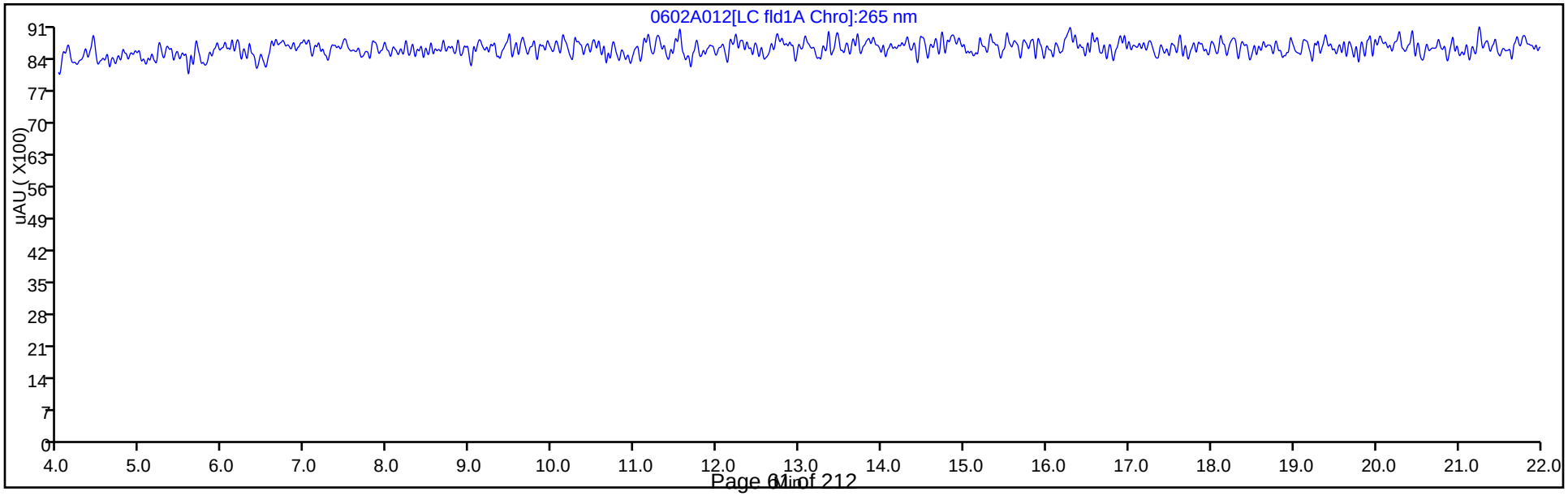
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a012.d				
Injection Date:	02-Jun-2015 16:50:21	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	550-45491-A-1-A	Lab Sample ID:	550-45491-1	Worklist Smp#:	12
Client ID:	15053018				
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: 15053018 | Lab Sample ID: 550-45491-1

Matrix: Air | Lab File ID: 0602A013.D

Analysis Method: 5506 Front | Date Collected: 05/26/2015 00:00

Extraction Method: Tube prep/Front | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 17:24

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Supelcosil PAH ID: 4.6(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<2.00		2.00
208-96-8	Acenaphthylene	<2.50		2.50
120-12-7	Anthracene	<0.250		0.250
86-73-7	Fluorene	<0.500		0.500
91-20-3	Naphthalene	<1.00		1.00
85-01-8	Phenanthrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A013.D				
Lims ID:	550-45491-A-1-B	Lab Sample ID:	550-45491-1		
Client ID:	15053018				
Sample Type:	Client				
Inject. Date:	02-Jun-2015 17:24:12	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	550-45491-A-1-B				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:16:37	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:16:48

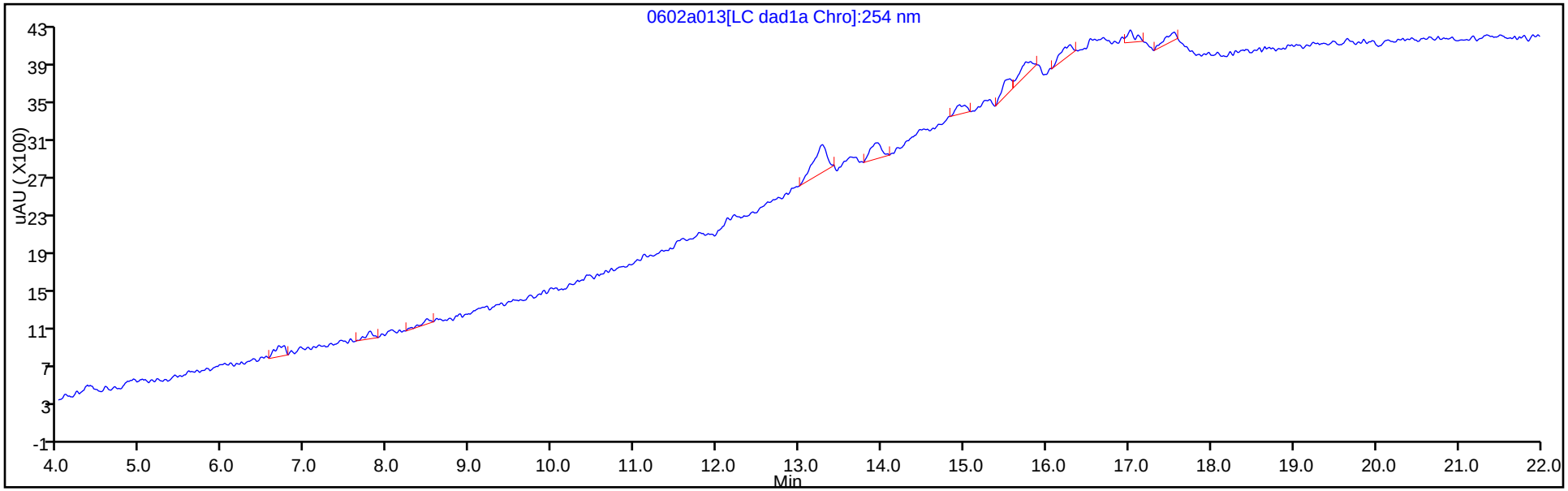
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:16:48 Chrom Revision: 2.2 14-May-2015 11:41:56

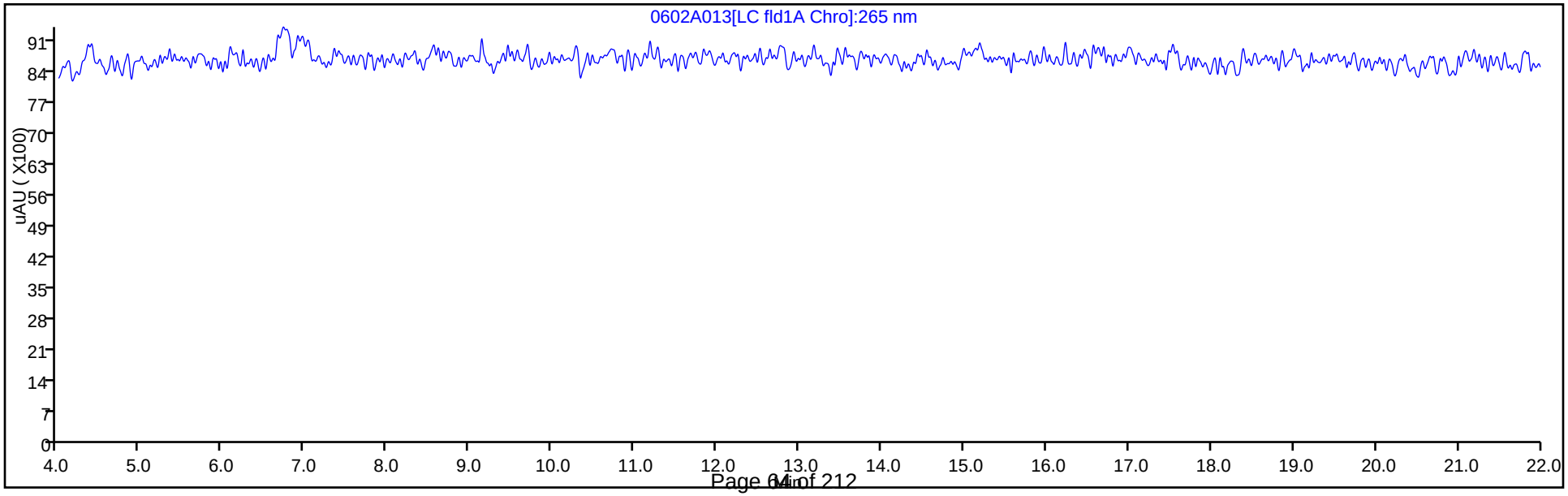
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a013.d				
Injection Date:	02-Jun-2015 17:24:12	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	550-45491-A-1-B	Lab Sample ID:	550-45491-1	Worklist Smp#:	13
Client ID:	15053018				
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: 15053018 | Lab Sample ID: 550-45491-1

Matrix: Air | Lab File ID: 0602A013.D

Analysis Method: 5506 Front | Date Collected: 05/26/2015 00:00

Extraction Method: Tube prep/Front | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 17:24

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.250		0.250
205-99-2	Benzo[b]fluoranthene	<0.500		0.500
50-32-8	Benzo[a]pyrene	<0.250		0.250
191-24-2	Benzo[g,h,i]perylene	<0.500		0.500
207-08-9	Benzo[k]fluoranthene	<0.250		0.250
218-01-9	Chrysene	<0.250		0.250
53-70-3	Dibenz(a,h)anthracene	<0.500		0.500
206-44-0	Fluoranthene	<0.500		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	<0.250		0.250
129-00-0	Pyrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A013.D				
Lims ID:	550-45491-A-1-B	Lab Sample ID:	550-45491-1		
Client ID:	15053018				
Sample Type:	Client				
Inject. Date:	02-Jun-2015 17:24:12	ALS Bottle#:	12	Worklist Smp#:	13
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	550-45491-A-1-B				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:16:37	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:16:48

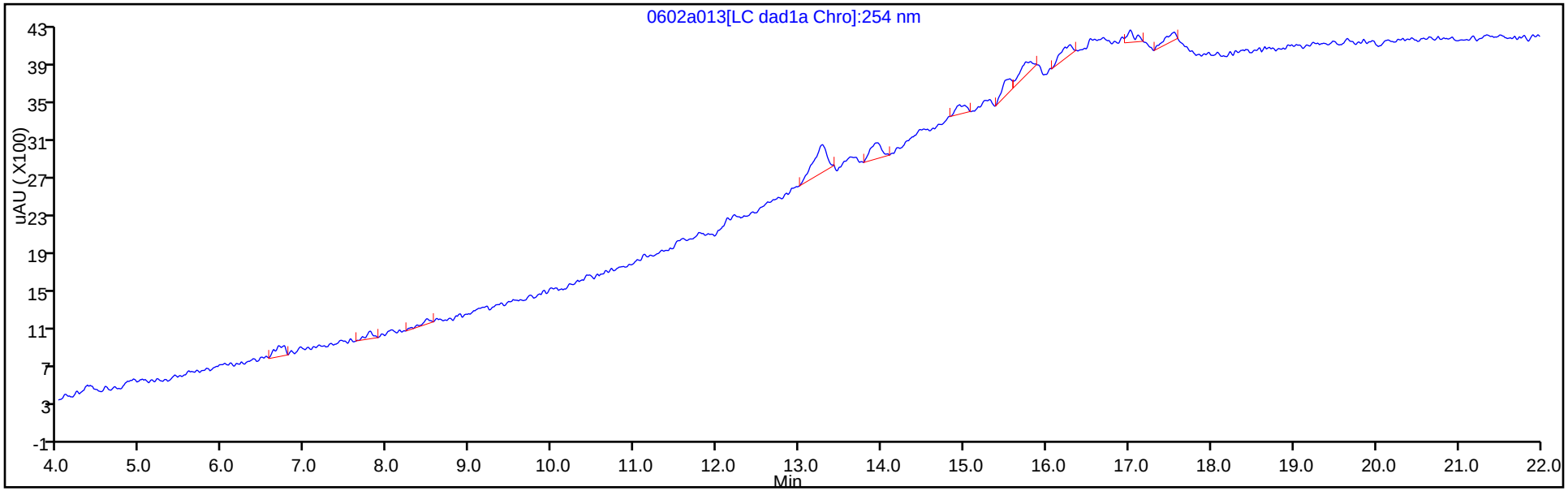
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:16:48 Chrom Revision: 2.2 14-May-2015 11:41:56

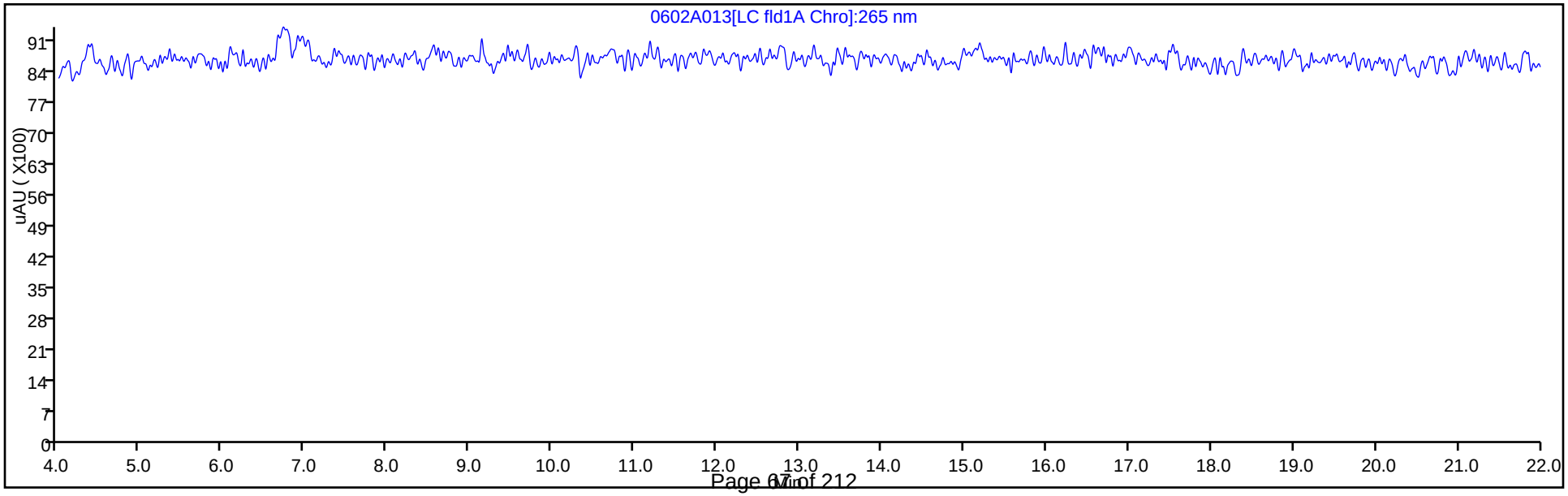
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a013.d				
Injection Date:	02-Jun-2015 17:24:12	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	550-45491-A-1-B	Lab Sample ID:	550-45491-1	Worklist Smp#:	13
Client ID:	15053018				
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	12
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID: 15053018
Lab Sample ID: 550-45491-1
Matrix: Air
Lab File ID:
Analysis Method: 5506 Sum
Date Collected: 05/26/2015 00:00
Extraction Method: Tube prep/Back
Date Extracted: 06/02/2015 08:30
Sample wt/vol: 1(Sample)
Date Analyzed: 06/03/2015 11:37
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume:
GC Column: ID:
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64943
Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<2.00		2.00
208-96-8	Acenaphthylene	<2.50		2.50
120-12-7	Anthracene	<0.250		0.250
56-55-3	Benzo[a]anthracene	<0.250		0.250
205-99-2	Benzo[b]fluoranthene	<0.500		0.500
50-32-8	Benzo[a]pyrene	<0.250		0.250
191-24-2	Benzo[g,h,i]perylene	<0.500		0.500
207-08-9	Benzo[k]fluoranthene	<0.250		0.250
218-01-9	Chrysene	<0.250		0.250
53-70-3	Dibenz(a,h)anthracene	<0.500		0.500
206-44-0	Fluoranthene	<0.500		0.500
86-73-7	Fluorene	<0.500		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	<0.250		0.250
91-20-3	Naphthalene	<1.00		1.00
85-01-8	Phenanthrene	<0.250		0.250
129-00-0	Pyrene	<0.250		0.250

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: Supelcosil ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6162

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 550-61918/2	0424-002.D
Level 2	STD2 550-61918/3	0424-003.D
Level 3	STD3 550-61918/4	0424-004.D
Level 4	STD4 550-61918/5	0424-005.D
Level 5	STD5 550-61918/6	0424-006.D
Level 6	STD6 550-61918/7	0424-007.D
Level 7	STD7 550-61918/8	0424-008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Naphthalene	5.018	5.037	5.041	5.046	5.056	5.056	5.048				4.796 - 5.296	5.043
Acenaphthylene	5.772	5.770	5.787	5.793	5.796	5.796	5.794				5.543 - 6.043	5.787
Acenaphthene	6.832	6.843	6.847	6.853	6.863	6.856	6.861				6.603 - 7.103	6.851
Fluorene	7.118	7.123	7.127	7.133	7.136	7.136	7.141				6.883 - 7.383	7.131
Phenanthrene	7.952	7.950	7.954	7.966	7.963	7.970	7.968				7.716 - 8.216	7.960
Anthracene	8.772	8.763	8.761	8.773	8.776	8.776	8.774				8.523 - 9.023	8.771
Fluoranthene	9.685	9.656	9.654	9.666	9.670	9.676	9.674				9.416 - 9.916	9.669
Pyrene	10.385	10.356	10.347	10.353	10.356	10.363	10.361				10.103 - 10.603	10.360
Benzo[a]anthracene	12.565	12.556	12.540	12.539	12.550	12.556	12.561				12.289 - 12.789	12.552
Chrysene	13.091	13.076	13.067	13.066	13.076	13.083	13.087				12.816 - 13.316	13.078
Benzo[b]fluoranthene	14.885	14.876	14.867	14.866	14.863	14.876	14.881				14.616 - 15.116	14.873
Benzo[k]fluoranthene	15.745	15.696	15.700	15.699	15.696	15.703	15.714				15.449 - 15.949	15.708
Benzo[a]pyrene	16.445	16.456	16.440	16.453	16.443	16.449	16.461				16.203 - 16.703	16.450
Dibenz(a,h)anthracene	17.505	17.530	17.514	17.513	17.503	17.509	17.507				17.263 - 17.763	17.512
Benzo[g,h,i]perylene	18.278	18.283	18.274	18.286	18.263	18.269	18.267				18.036 - 18.536	18.274
Indeno[1,2,3-cd]pyrene	18.811	18.823	18.807	18.806	18.783	18.796	18.787				18.556 - 19.056	18.802

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: Supelcosil ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6162

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 550-61918/2	0424-002.D
Level 2	STD2 550-61918/3	0424-003.D
Level 3	STD3 550-61918/4	0424-004.D
Level 4	STD4 550-61918/5	0424-005.D
Level 5	STD5 550-61918/6	0424-006.D
Level 6	STD6 550-61918/7	0424-007.D
Level 7	STD7 550-61918/8	0424-008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
Naphthalene	18365 15711	16914 15288	16420 15282	15945	Lin1	770.987206	15300.2090							1.0000		0.9900
Acenaphthylene	11780 11020	10436 10747	12023 10668	11285	Lin1	615.901787	10747.5799							0.9990		0.9900
Acenaphthene	8400.0 6260.4	6644.0 6162.9	7032.0 6103.4	6472.5	Lin1	483.702414	6113.49052							1.0000		0.9900
Fluorene	74775 73814	71960 72420	79440 72328	73650	Lin1	231.065521	72594.5144							1.0000		0.9900
Phenanthrene	223700 204546	206040 202216	220200 201618	211450	Lin1	614.449871	202198.669							1.0000		0.9900
Anthracene	460950 476764	491340 467115	511120 464694	485065	Lin1	934.287892	467766.146							1.0000		0.9900
Fluoranthene	57225 47302	46990 46393	48545 46568	48163	Lin1	356.145198	46489.4036							1.0000		0.9900
Pyrene	60550 44634	43160 44428	37730 43638	43505	Lin1	137.099951	43644.5221							0.9990		0.9900
Benzo[a]anthracene	118950 109078	108400 108174	122500 107761	109220	Lin1	318.609431	107983.652							1.0000		0.9900
Chrysene	171050 157716	154240 157626	168460 156447	160395	Lin1	311.121416	156914.251							1.0000		0.9900
Benzo[b]fluoranthene	116800 125872	125760 123368	132505 123449	123873	Lin1	97.0552820	123904.472							1.0000		0.9900
Benzo[k]fluoranthene	100050 96726	116120 92917	120940 91817	94230	Lin1	725.443585	92656.8204							0.9970		0.9900
Benzo[a]pyrene	99550 114326	116560 112417	131940 113494	113315	Lin1	69.8369819	113631.561							0.9990		0.9900
Dibenz(a,h)anthracene	87725 26688	46540 26002	37280 25461	32063	Lin1	2446.25649	24787.2357							1.0000		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: Supelcosil ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6162

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
Benzo[g,h,i]perylene	41350 40084	37720 39780	40060 40253	40443	Lin1	-24.198726	40108.5777							1.0000		0.9900
Indeno[1,2,3-cd]pyrene	116800 111990	117600 111751	118400 114111	110655	Lin1	115.753556	113008.973							1.0000		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: Supelcosil ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6162

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 550-61918/2	0424-002.D
Level 2	STD2 550-61918/3	0424-003.D
Level 3	STD3 550-61918/4	0424-004.D
Level 4	STD4 550-61918/5	0424-005.D
Level 5	STD5 550-61918/6	0424-006.D
Level 6	STD6 550-61918/7	0424-007.D
Level 7	STD7 550-61918/8	0424-008.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	Lin1	3673 152880	8457 305642	16420	31890	78553	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthylene	Lin1	4712 214937	10436 426703	24046	45140	110200	0.400 20.0	1.00 40.0	2.00	4.00	10.0
Acenaphthene	Lin1	1680 61629	3322 122068	7032	12945	31302	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluorene	Lin1	2991 144839	7196 289311	15888	29460	73814	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Phenanthrene	Lin1	4474 202216	10302 403235	22020	42290	102273	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Anthracene	Lin1	9219 467115	24567 929387	51112	97013	238382	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Fluoranthene	Lin1	2289 92786	4699 186271	9709	19265	47302	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Pyrene	Lin1	1211 44428	2158 87276	3773	8701	22317	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Benzo[a]anthracene	Lin1	2379 108174	5420 215521	12250	21844	54539	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Chrysene	Lin1	3421 157626	7712 312894	16846	32079	78858	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Benzo[b]fluoranthene	Lin1	4672 246736	12576 493794	26501	49549	125872	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Benzo[k]fluoranthene	Lin1	2001 92917	5806 183633	12094	18846	48363	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Benzo[a]pyrene	Lin1	1991 112417	5828 226987	13194	22663	57163	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Dibenz(a,h)anthracene	Lin1	3509 52003	4654 101842	7456	12825	26688	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Benzo[g,h,i]perylene	Lin1	1654 79559	3772 161013	8012	16177	40084	0.0400 2.00	0.100 4.00	0.200	0.400	1.00

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: Supelcosil ID: 4.6(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6162

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Indeno[1,2,3-cd]pyrene	Lin1	2336 111751	5880 228222	11840	22131	55995	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500

Curve Type Legend:
Lin1 = Linear 1/conc

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-002.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Apr-2015 10:26:21 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD1
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:37 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:17:47

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										M
1	254	5.018	5.046	-0.028	3673	0.2000	0.1897			M
2	265	5.065	5.069	-0.004	30054	0.2000	0.1734			
							RPD = 8.97			
13 Acenaphthylene										
1	254	5.772	5.793	-0.021	4712	0.4000	0.3811			
4 Acenaphthene										
1	254	6.832	6.853	-0.021	1680	0.2000	0.1957			
2	265	6.869	6.876	-0.007	45743	0.2000	0.1846			
							RPD = 5.80			
15 Fluorene										
1	254	7.118	7.133	-0.015	2991	0.0400	0.0380			
2	265	7.146	7.153	-0.007	107810	0.0400	0.0373			
							RPD = 1.80			
8 Phenanthrene										M
1	254	7.952	7.966	-0.014	4474	0.0200	0.0191			
2	265	7.985	7.985	0.000	14084	0.0200	0.0161			M
							RPD = 17.13			
1 Anthracene										M
1	254	8.772	8.773	-0.001	9219	0.0200	0.0177			M
2	265	8.788	8.795	-0.007	58970	0.0200	0.0186			
							RPD = 4.71			
7 Fluoranthene										
1	254	9.685	9.666	0.019	2289	0.0400	0.0416			
2	265	9.684	9.688	-0.004	53842	0.0400	0.0382			
							RPD = 8.34			
5 Pyrene										M
1	254	10.385	10.353	0.032	1211	0.0200	0.0246			
2	265	10.368	10.372	-0.004	22605	0.0200	0.0172			M
							RPD = 35.67			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.565	12.539	0.026	2379	0.0200	0.0191			
2	265	12.564	12.560	0.004	43495	0.0200	0.0185			
							RPD = 3.03			
11 Chrysene										
1	254	13.091	13.066	0.025	3421	0.0200	0.0198			
2	265	13.108	13.090	0.018	41710	0.0200	0.0176			
							RPD = 11.75			
6 Benzo[b]fluoranthene										
1	254	14.885	14.866	0.019	4672	0.0400	0.0369			
2	265	14.908	14.886	0.022	201970	0.0400	0.0368			
							RPD = 0.31			
10 Benzo[k]fluoranthene										M
1	254	15.745	15.699	0.046	2001	0.0200	0.0138			M
2	265	15.728	15.721	0.007	134570	0.0200	0.0187			
							RPD = 30.24			
14 Benzo[a]pyrene										M
1	254	16.445	16.453	-0.008	1991	0.0200	0.0169			M
2	265	16.477	16.470	0.007	108499	0.0200	0.0189			
							RPD = 11.16			
16 Dibenz(a,h)anthracene										M
1	254	17.505	17.513	-0.008	3509	0.0400	0.0429			
2	265	17.539	17.536	0.003	20821	0.0400	0.0406			M
							RPD = 5.42			
9 Benzo[g,h,i]perylene										
1	254	18.278	18.286	-0.008	1654	0.0400	0.0418			M
2	265	18.292	18.306	-0.014	36356	0.0400	0.0384			
							RPD = 8.69			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.811	18.806	0.005	2336	0.0200	0.0196			M
2	265	18.810	18.824	-0.014	22539	0.0200	0.0181			M
							RPD = 8.30			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

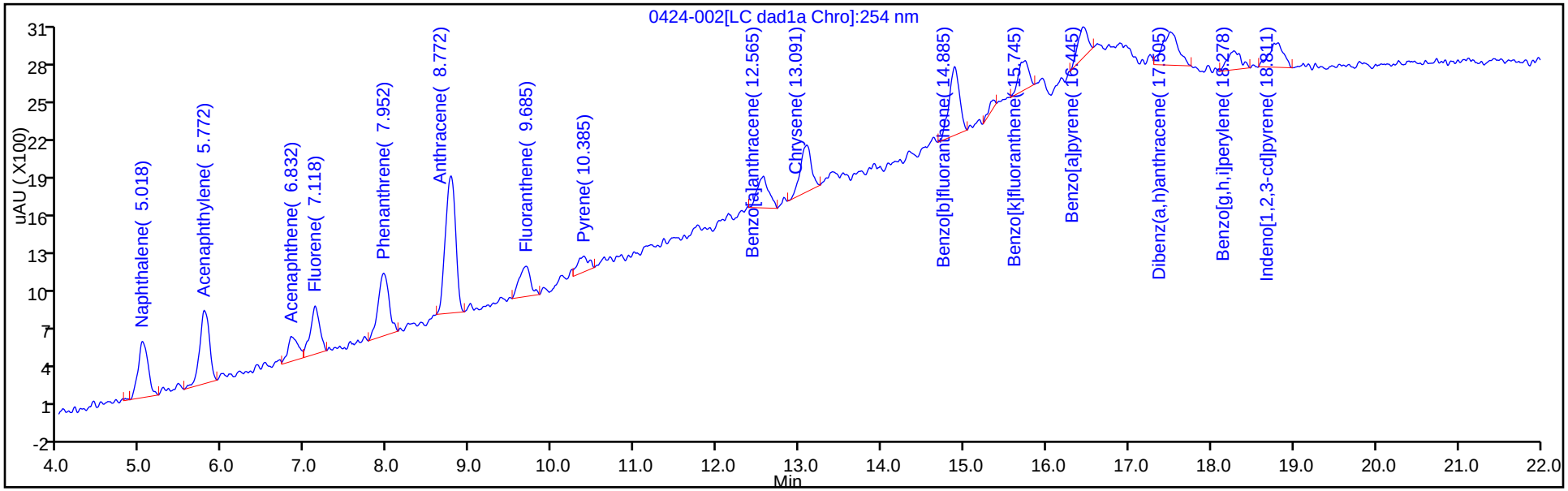
IH_PAH 1C1_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:37 Chrom Revision: 2.2 07-Apr-2015 13:11:02

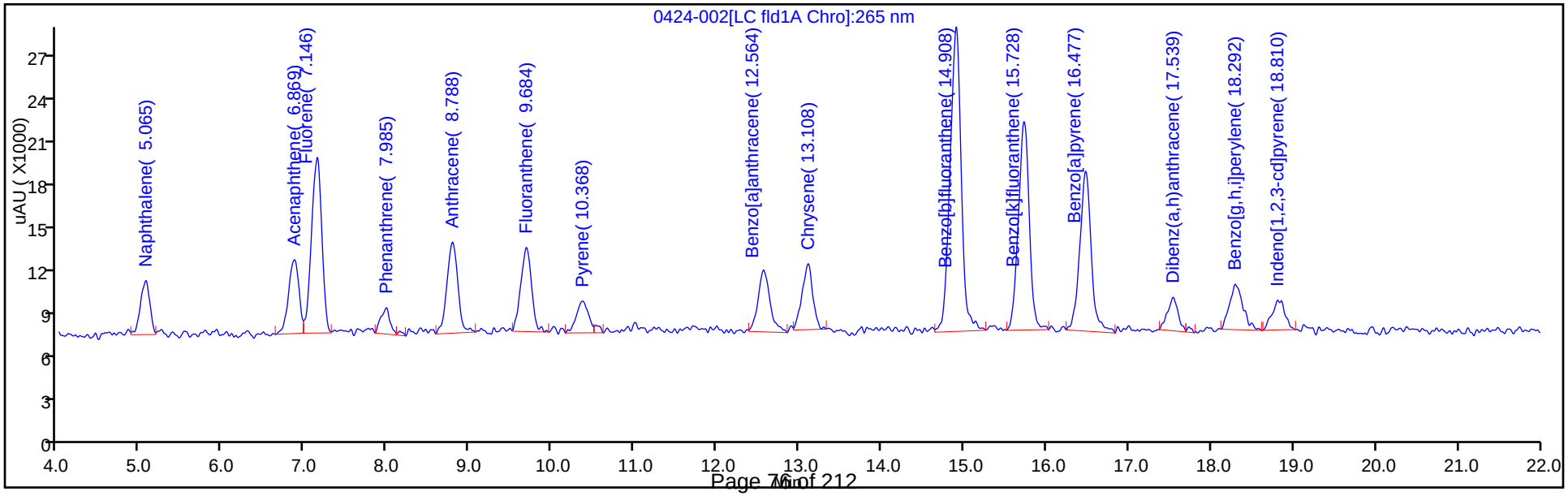
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-002.d				
Injection Date:	24-Apr-2015 10:26:21	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD1			Worklist Smp#:	2
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-003.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Apr-2015 11:00:09 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD2
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:38 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:39:37

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										M
1	254	5.037	5.046	-0.009	8457	0.5000	0.5023			M
2	265	5.054	5.069	-0.015	78037	0.5000	0.5144			
							RPD = 2.37			
13 Acenaphthylene										M
1	254	5.770	5.793	-0.023	10436	1.00	0.9137			M
4 Acenaphthene										
1	254	6.843	6.853	-0.010	3322	0.5000	0.4643			
2	265	6.865	6.876	-0.011	111827	0.5000	0.4989			
							RPD = 7.20			
15 Fluorene										
1	254	7.123	7.133	-0.010	7196	0.1000	0.0959			
2	265	7.146	7.153	-0.007	263189	0.1000	0.0979			
							RPD = 1.99			
8 Phenanthrene										
1	254	7.950	7.966	-0.016	10302	0.0500	0.0479			
2	265	7.978	7.985	-0.007	36193	0.0500	0.0513			
							RPD = 6.88			
1 Anthracene										
1	254	8.763	8.773	-0.010	24567	0.0500	0.0505			
2	265	8.784	8.795	-0.011	135387	0.0500	0.0478			
							RPD = 5.57			
7 Fluoranthene										
1	254	9.656	9.666	-0.010	4699	0.1000	0.0934			
2	265	9.680	9.688	-0.008	124882	0.1000	0.0966			
							RPD = 3.33			
5 Pyrene										
1	254	10.356	10.353	0.003	2158	0.0500	0.0463			
2	265	10.368	10.372	-0.004	52117	0.0500	0.0503			
							RPD = 8.36			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.556	12.539	0.017	5420	0.0500	0.0472			
2	265	12.568	12.560	0.008	101971	0.0500	0.0500			
							RPD = 5.72			
11 Chrysene										
1	254	13.076	13.066	0.010	7712	0.0500	0.0472			
2	265	13.097	13.090	0.007	108909	0.0500	0.0525			
							RPD = 10.80			
6 Benzo[b]fluoranthene										
1	254	14.876	14.866	0.010	12576	0.1000	0.1007			
2	265	14.897	14.886	0.011	481547	0.1000	0.0967			
							RPD = 4.09			
10 Benzo[k]fluoranthene										M
1	254	15.696	15.699	-0.003	5806	0.0500	0.0548			M
2	265	15.728	15.721	0.007	330942	0.0500	0.0488			
							RPD = 11.71			
14 Benzo[a]pyrene										
1	254	16.456	16.453	0.003	5828	0.0500	0.0507			
2	265	16.481	16.470	0.011	249392	0.0500	0.0483			
							RPD = 4.78			
16 Dibenz(a,h)anthracene										
1	254	17.530	17.513	0.017	4654	0.1000	0.0891			
2	265	17.532	17.536	-0.004	42194	0.1000	0.0910			
							RPD = 2.11			
9 Benzo[g,h,i]perylene										
1	254	18.283	18.286	-0.003	3772	0.1000	0.0946			
2	265	18.302	18.306	-0.004	87819	0.1000	0.0989			
							RPD = 4.44			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.823	18.806	0.017	5880	0.0500	0.0510			
2	265	18.835	18.824	0.011	61363	0.0500	0.0504			
							RPD = 1.18			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

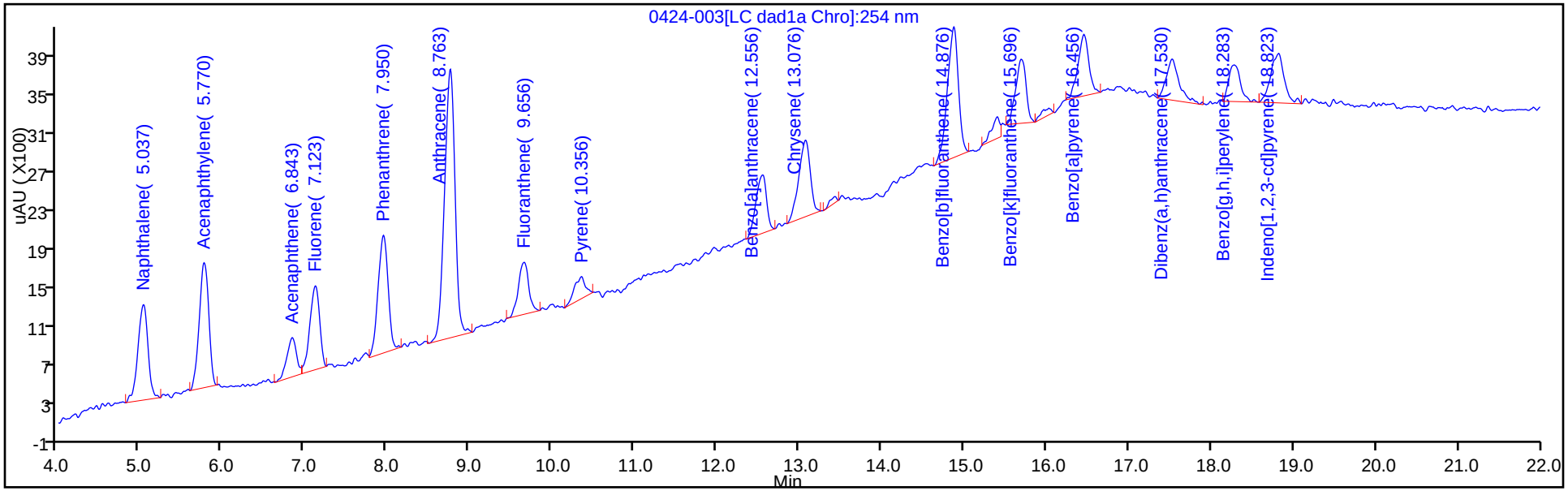
IH_PAH 1C2_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:38 Chrom Revision: 2.2 07-Apr-2015 13:11:02

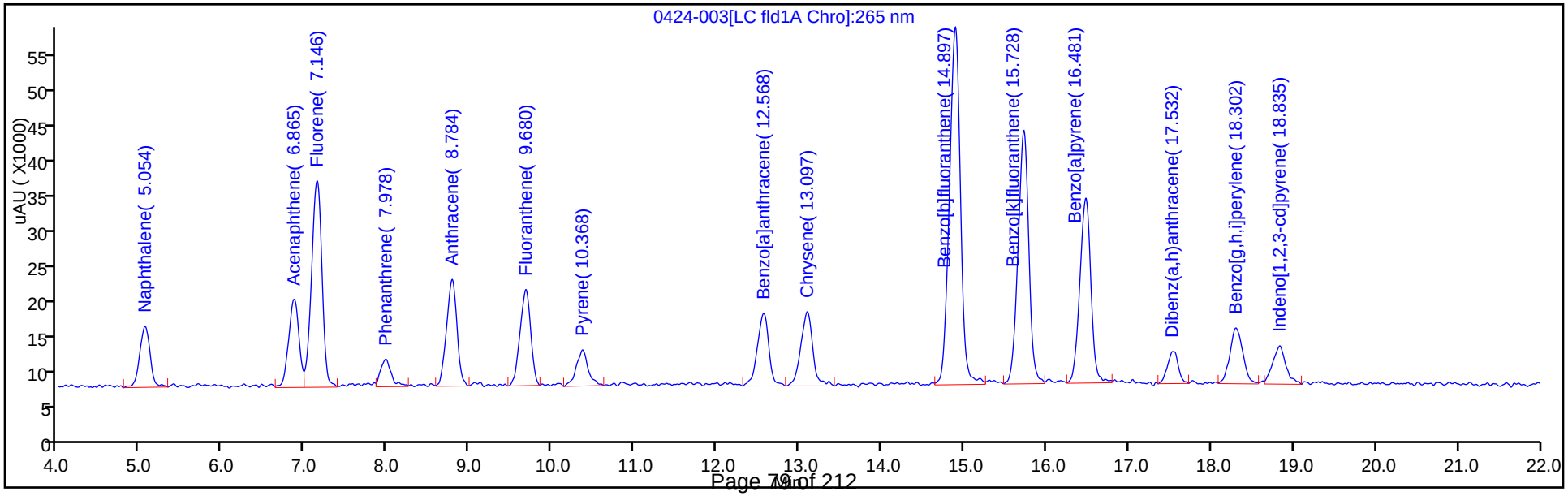
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-003.d				
Injection Date:	24-Apr-2015 11:00:09	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD2			Worklist Smp#:	3
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

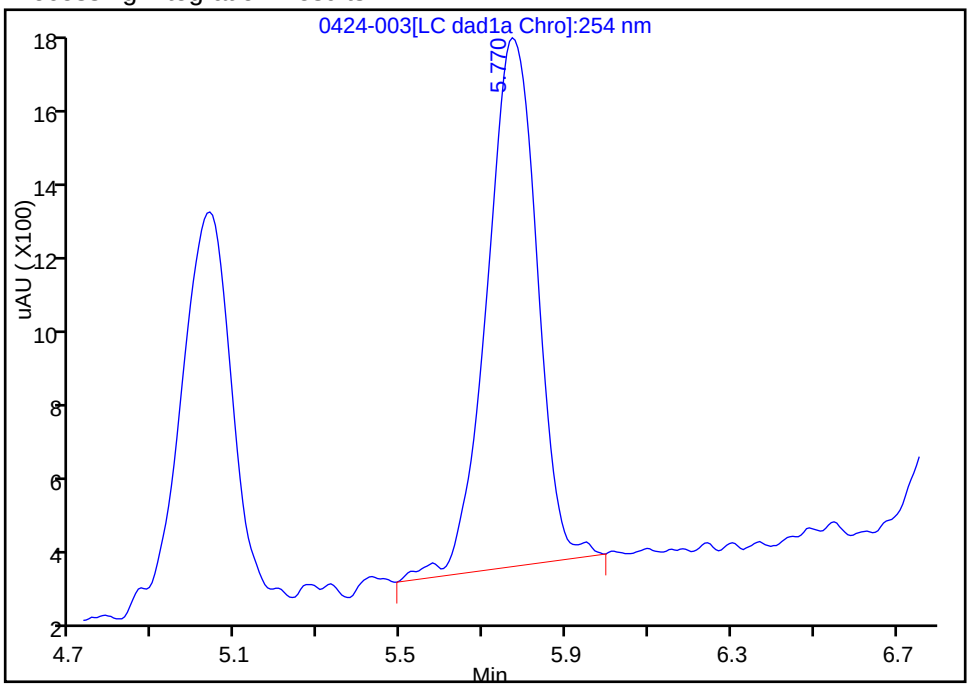
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-003.d				
Injection Date:	24-Apr-2015 11:00:09	Instrument ID:	HPLC2		
Lims ID:	STD2				
Client ID:					
Operator ID:	zn1	ALS Bottle#:	3	Worklist Smp#:	3
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		
Column:	Supelcosil LC-PAH (4.60 mm)	Detector	LC dad1a, 254 nm		

13 Acenaphthylene, CAS: 208-96-8

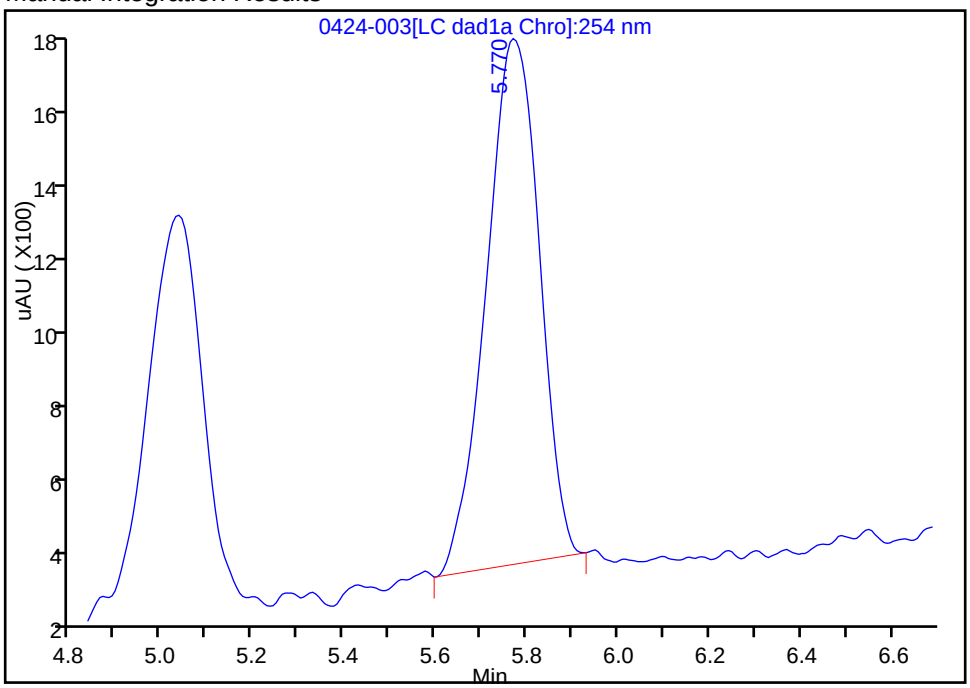
Processing Integration Results

RT: 5.77
Area: 11157
Amount: 0.967839
Amount Units: ug/ml



Manual Integration Results

RT: 5.77
Area: 10436
Amount: 0.913703
Amount Units: ug/ml



Reviewer: nelsonz, 24-Apr-2015 14:28:07
Audit Action: Manually Integrated
Audit Reason: Incomplete Integration

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-004.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Apr-2015 11:34:03 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD3
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:38 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:42:12

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.041	5.046	-0.005	16420	1.00	1.02			
2	265	5.069	5.069	0.000	158463	1.00	1.09			
							RPD = 5.99			
13 Acenaphthylene										
1	254	5.787	5.793	-0.006	24046	2.00	2.18			
4 Acenaphthene										
1	254	6.847	6.853	-0.006	7032	1.00	1.07			
2	265	6.872	6.876	-0.004	230363	1.00	1.06			
							RPD = 0.80			
15 Fluorene										
1	254	7.127	7.133	-0.006	15888	0.2000	0.2157			
2	265	7.150	7.153	-0.003	555624	0.2000	0.2118			
							RPD = 1.81			
8 Phenanthrene										
1	254	7.954	7.966	-0.012	22020	0.1000	0.1059			
2	265	7.974	7.985	-0.011	75370	0.1000	0.1138			
							RPD = 7.21			
1 Anthracene										
1	254	8.761	8.773	-0.012	51112	0.1000	0.1073			
2	265	8.788	8.795	-0.007	293570	0.1000	0.1083			
							RPD = 0.93			
7 Fluoranthene										
1	254	9.654	9.666	-0.012	9709	0.2000	0.2012			
2	265	9.680	9.688	-0.008	260657	0.2000	0.2081			
							RPD = 3.37			
5 Pyrene										
1	254	10.347	10.353	-0.006	3773	0.1000	0.0833			
2	265	10.364	10.372	-0.008	104382	0.1000	0.1091			
							RPD = 26.82			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.540	12.539	0.001	12250	0.1000	0.1105			
2	265	12.560	12.560	0.000	206778	0.1000	0.1065			
							RPD = 3.68			
11 Chrysene										
1	254	13.067	13.066	0.001	16846	0.1000	0.1054			
2	265	13.090	13.090	0.000	211648	0.1000	0.1060			
							RPD = 0.55			
6 Benzo[b]fluoranthene										
1	254	14.867	14.866	0.001	26501	0.2000	0.2131			
2	265	14.890	14.886	0.004	1037900	0.2000	0.2158			
							RPD = 1.27			
10 Benzo[k]fluoranthene										
1	254	15.700	15.699	0.001	12094	0.1000	0.1227			
2	265	15.721	15.721	0.000	706291	0.1000	0.1063			
							RPD = 14.32			
14 Benzo[a]pyrene										
1	254	16.440	16.453	-0.013	13194	0.1000	0.1155			
2	265	16.466	16.470	-0.004	532092	0.1000	0.1073			
							RPD = 7.35			
16 Dibenz(a,h)anthracene										
1	254	17.514	17.513	0.001	7456	0.2000	0.2021			
2	265	17.536	17.536	0.000	94411	0.2000	0.2140			
							RPD = 5.71			
9 Benzo[g,h,i]perylene										
1	254	18.274	18.286	-0.012	8012	0.2000	0.2004			
2	265	18.299	18.306	-0.007	182310	0.2000	0.2102			
							RPD = 4.79			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.807	18.806	0.001	11840	0.1000	0.1037			
2	265	18.828	18.824	0.004	130062	0.1000	0.1076			
							RPD = 3.66			

Reagents:

IH_PAH 1C3_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:39 Chrom Revision: 2.2 07-Apr-2015 13:11:02

TestAmerica Phoenix

Data File: \\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-004.d

Injection Date: 24-Apr-2015 11:34:03 Instrument ID: HPLC2 Operator ID: zn1

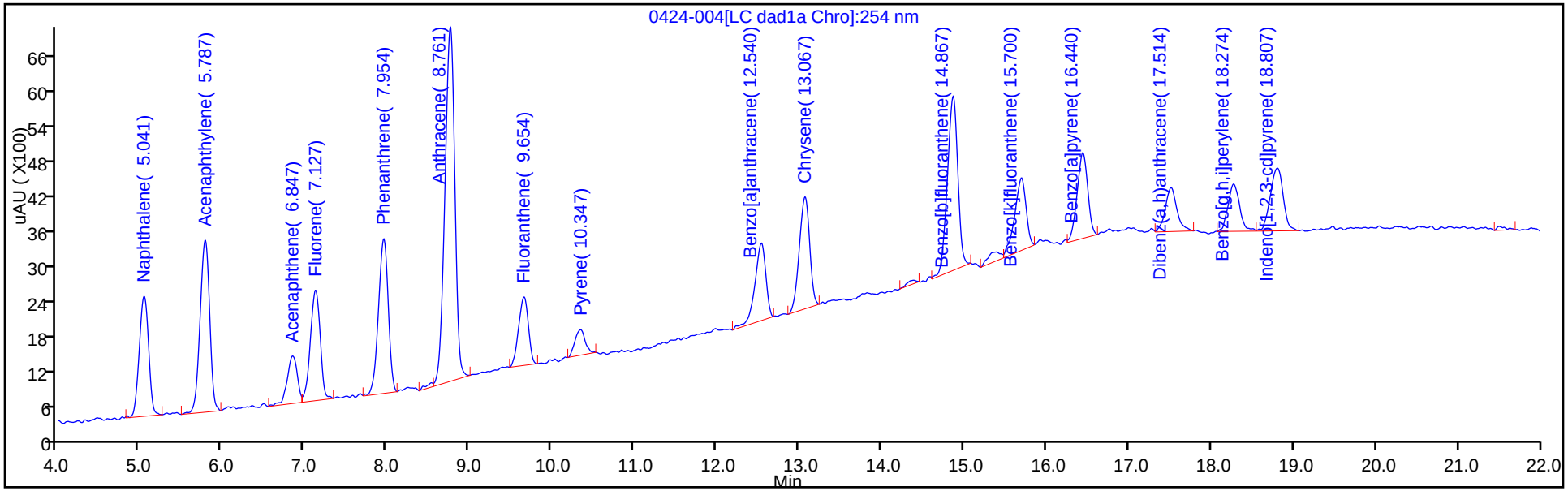
Lims ID: STD3 Worklist Smp#: 4

Client ID:

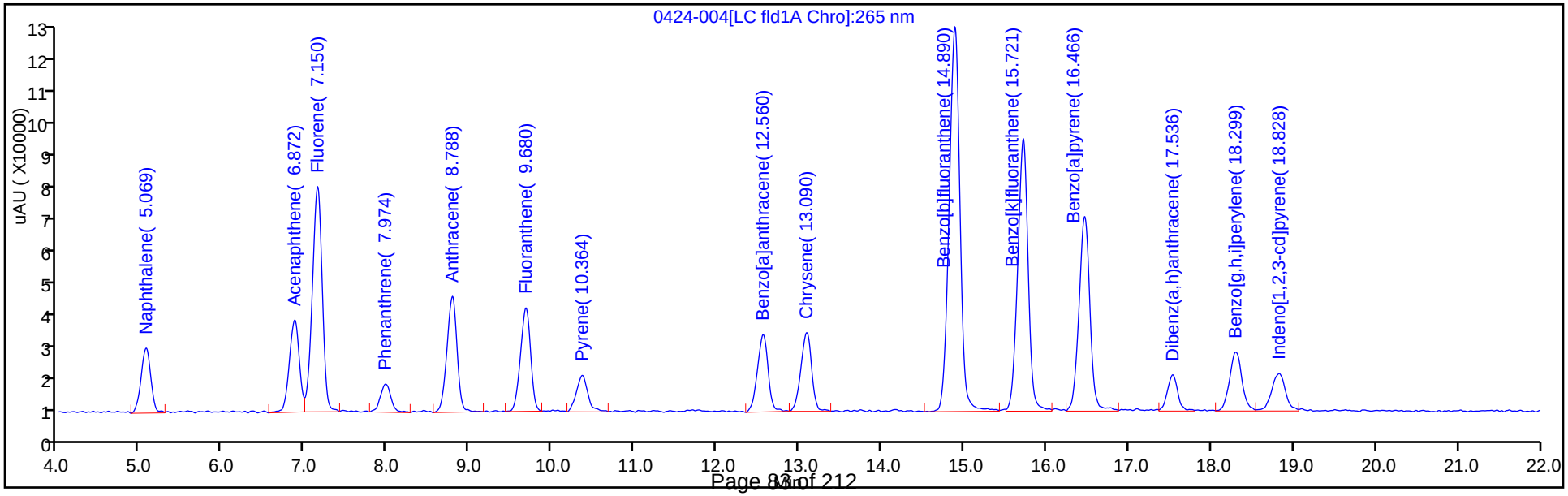
Injection Vol: 20.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: NIOSH5506 Limit Group: IH GC NIOSH 5506 IC

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-005.D
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Apr-2015 12:07:52 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD4
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:39 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:09:21

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.046	5.046	0.000	31890	2.00	2.03			
2	265	5.069	5.069	0.000	293406	2.00	2.04			
							RPD = 0.54			
13 Acenaphthylene										
1	254	5.793	5.793	0.000	45140	4.00	4.14			
4 Acenaphthene										
1	254	6.853	6.853	0.000	12945	2.00	2.04			
2	265	6.876	6.876	0.000	433292	2.00	2.03			
							RPD = 0.52			
15 Fluorene										
1	254	7.133	7.133	0.000	29460	0.4000	0.4026			
2	265	7.153	7.153	0.000	1057365	0.4000	0.4073			
							RPD = 1.15			
8 Phenanthrene										
1	254	7.966	7.966	0.000	42290	0.2000	0.2061			
2	265	7.985	7.985	0.000	133368	0.2000	0.2062			
							RPD = 0.06			
1 Anthracene										
1	254	8.773	8.773	0.000	97013	0.2000	0.2054			
2	265	8.795	8.795	0.000	546505	0.2000	0.2050			
							RPD = 0.20			
7 Fluoranthene										
1	254	9.666	9.666	0.000	19265	0.4000	0.4067			
2	265	9.688	9.688	0.000	508456	0.4000	0.4115			
							RPD = 1.18			
5 Pyrene										
1	254	10.353	10.353	0.000	8701	0.2000	0.1962			
2	265	10.372	10.372	0.000	193271	0.2000	0.2091			
							RPD = 6.34			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.539	12.539	0.000	21844	0.2000	0.1993			
2	265	12.560	12.560	0.000	384371	0.2000	0.2022			
							RPD = 1.43			
11 Chrysene										
1	254	13.066	13.066	0.000	32079	0.2000	0.2025			
2	265	13.090	13.090	0.000	396027	0.2000	0.2018			
							RPD = 0.33			
6 Benzo[b]fluoranthene										M
1	254	14.866	14.866	0.000	49549	0.4000	0.3991			
2	265	14.886	14.886	0.000	1942857	0.4000	0.4096			M
							RPD = 2.60			
10 Benzo[k]fluoranthene										M
1	254	15.699	15.699	0.000	18846	0.2000	0.1956			
2	265	15.721	15.721	0.000	1351424	0.2000	0.2052			M
							RPD = 4.79			
14 Benzo[a]pyrene										M
1	254	16.453	16.453	0.000	22663	0.2000	0.1988			
2	265	16.470	16.470	0.000	996271	0.2000	0.2042			M
							RPD = 2.66			
16 Dibenz(a,h)anthracene										M
1	254	17.513	17.513	0.000	12825	0.4000	0.4187			
2	265	17.536	17.536	0.000	176566	0.4000	0.4076			M
							RPD = 2.70			
9 Benzo[g,h,i]perylene										M
1	254	18.286	18.286	0.000	16177	0.4000	0.4039			
2	265	18.306	18.306	0.000	344271	0.4000	0.4009			M
							RPD = 0.76			
2 Indeno[1,2,3-cd]pyrene										M
1	254	18.806	18.806	0.000	22131	0.2000	0.1948			
2	265	18.824	18.824	0.000	244152	0.2000	0.2026			M
							RPD = 3.92			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

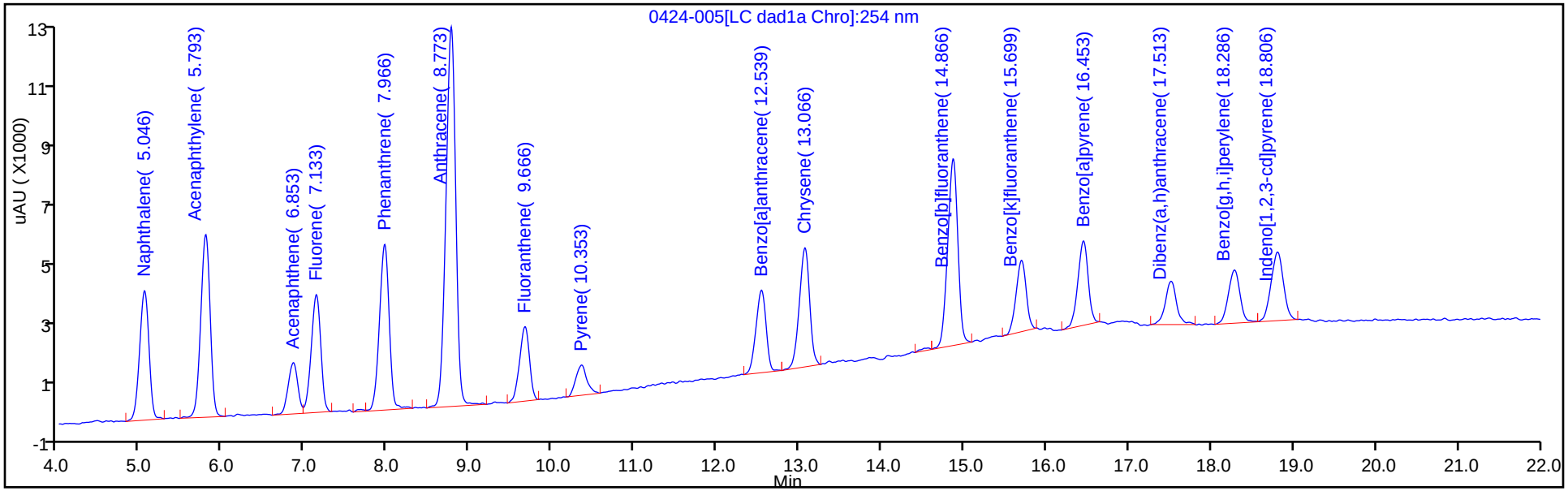
IH_PAH 1C4_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:39 Chrom Revision: 2.2 07-Apr-2015 13:11:02

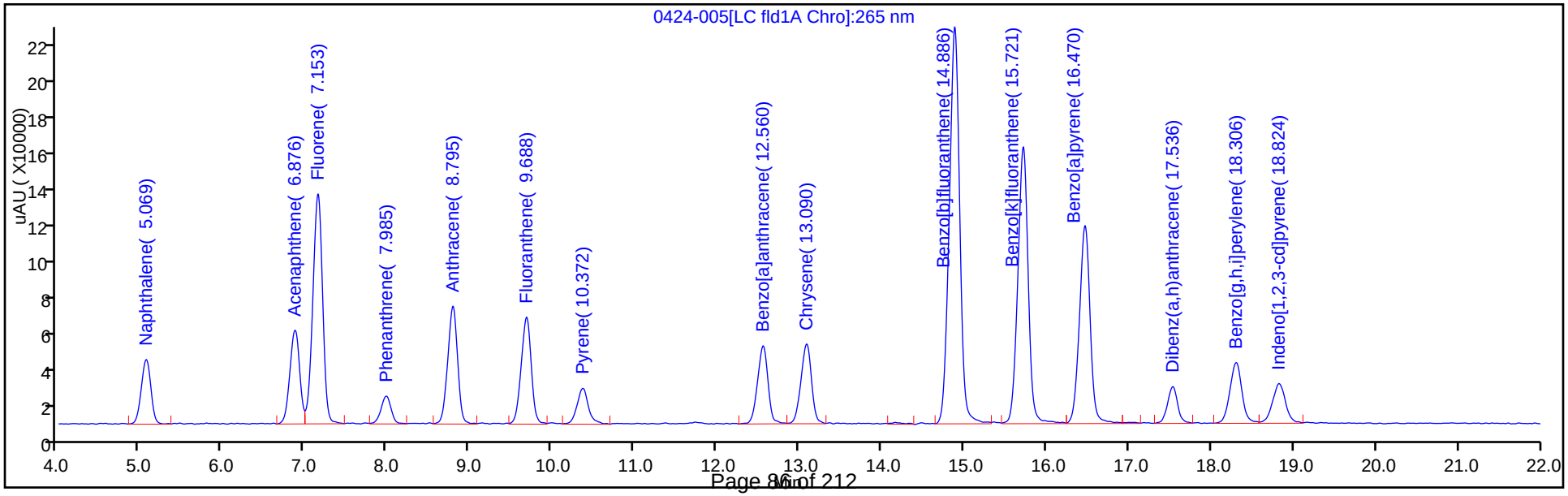
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-005.d				
Injection Date:	24-Apr-2015 12:07:52	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD4			Worklist Smp#:	5
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-006.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Apr-2015 12:41:52 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD5
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:40 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:24:54

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.056	5.046	0.010	78553	5.00	5.08			
2	265	5.076	5.069	0.007	713035	5.00	5.03			
							RPD = 1.12			
13 Acenaphthylene										
1	254	5.796	5.793	0.003	110200	10.0	10.2			
4 Acenaphthene										
1	254	6.863	6.853	0.010	31302	5.00	5.04			
2	265	6.883	6.876	0.007	1065090	5.00	5.03			
							RPD = 0.17			
15 Fluorene										
1	254	7.136	7.133	0.003	73814	1.00	1.01			
2	265	7.160	7.153	0.007	2627393	1.00	1.02			
							RPD = 0.52			
8 Phenanthrene										
1	254	7.963	7.966	-0.003	102273	0.5000	0.5028			
2	265	7.988	7.985	0.003	322662	0.5000	0.5080			
							RPD = 1.04			
1 Anthracene										
1	254	8.776	8.773	0.003	238382	0.5000	0.5076			
2	265	8.798	8.795	0.003	1336056	0.5000	0.5069			
							RPD = 0.14			
7 Fluoranthene										
1	254	9.670	9.666	0.004	47302	1.00	1.01			
2	265	9.691	9.688	0.003	1243371	1.00	1.02			
							RPD = 0.51			
5 Pyrene										
1	254	10.356	10.353	0.003	22317	0.5000	0.5082			
2	265	10.379	10.372	0.007	457048	0.5000	0.5057			
							RPD = 0.50			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.550	12.539	0.011	54539	0.5000	0.5021			
2	265	12.568	12.560	0.008	939711	0.5000	0.5015			
							RPD = 0.13			
11 Chrysene										
1	254	13.076	13.066	0.010	78858	0.5000	0.5006			
2	265	13.093	13.090	0.003	976882	0.5000	0.5037			
							RPD = 0.63			
6 Benzo[b]fluoranthene										
1	254	14.863	14.866	-0.003	125872	1.00	1.02			
2	265	14.886	14.886	0.000	4771209	1.00	1.02			
							RPD = 0.02			
10 Benzo[k]fluoranthene										
1	254	15.696	15.699	-0.003	48363	0.5000	0.5141			
2	265	15.714	15.721	-0.007	3309985	0.5000	0.5054			
							RPD = 1.72			
14 Benzo[a]pyrene										
1	254	16.443	16.453	-0.010	57163	0.5000	0.5024			
2	265	16.466	16.470	-0.004	2419958	0.5000	0.5013			
							RPD = 0.22			
16 Dibenz(a,h)anthracene										
1	254	17.503	17.513	-0.010	26688	1.00	0.9780			
2	265	17.521	17.536	-0.015	422504	1.00	0.9870			
							RPD = 0.92			
9 Benzo[g,h,i]perylene										
1	254	18.263	18.286	-0.023	40084	1.00	1.00			
2	265	18.288	18.306	-0.018	856791	1.00	1.00			
							RPD = 0.43			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.783	18.806	-0.023	55995	0.5000	0.4945			
2	265	18.806	18.824	-0.018	605120	0.5000	0.5032			
							RPD = 1.74			

Reagents:

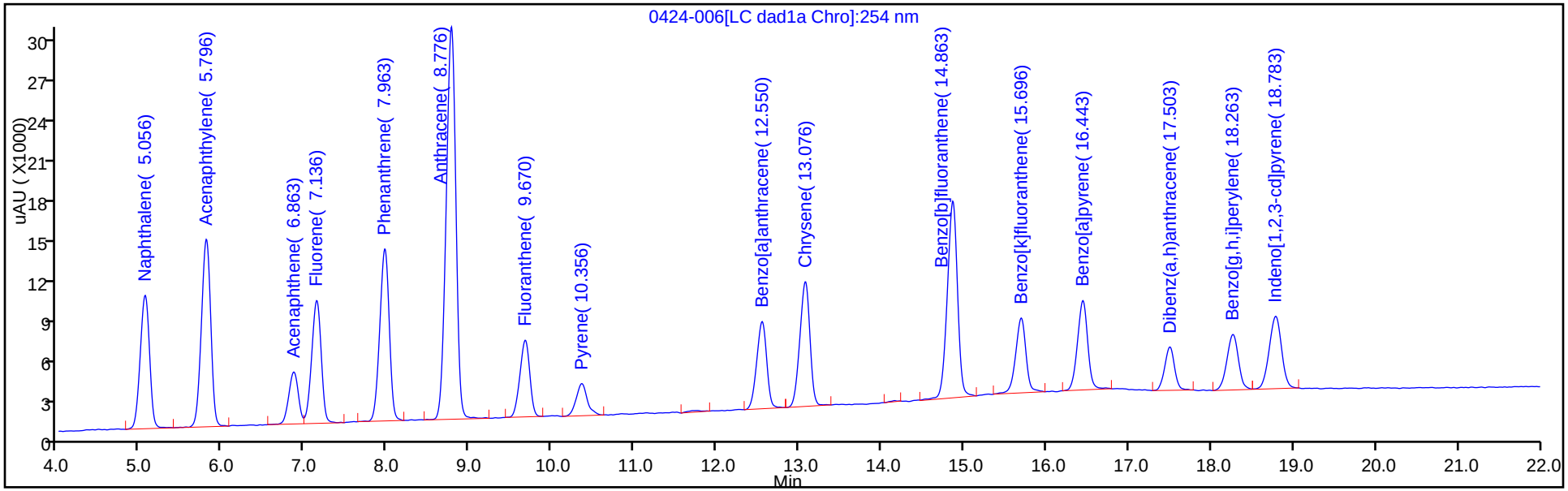
IH_PAH 1C5_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:40 Chrom Revision: 2.2 07-Apr-2015 13:11:02

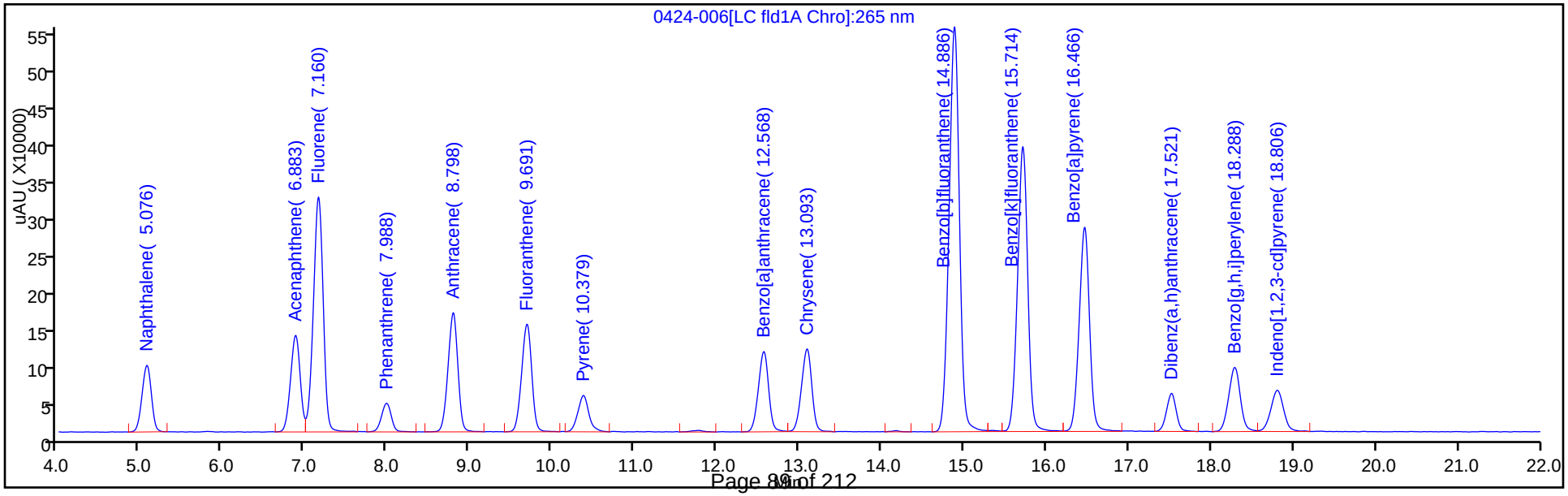
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-006.d				
Injection Date:	24-Apr-2015 12:41:52	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-007.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Apr-2015 13:15:43 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD6
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:40 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 14:36:47

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.056	5.046	0.010	152880	10.0	9.94			
2	265	5.076	5.069	0.007	1406482	10.0	9.96			
							RPD = 0.13			
13 Acenaphthylene										
1	254	5.796	5.793	0.003	214937	20.0	19.9			
4 Acenaphthene										
1	254	6.856	6.853	0.003	61629	10.0	10.0			
2	265	6.880	6.876	0.004	2115060	10.0	10.0			
							RPD = 0.24			
15 Fluorene										
1	254	7.136	7.133	0.003	144839	2.00	1.99			
2	265	7.160	7.153	0.007	5144579	2.00	2.00			
							RPD = 0.38			
8 Phenanthrene										
1	254	7.970	7.966	0.004	202216	1.00	1.00			
2	265	7.992	7.985	0.007	628045	1.00	0.99			
							RPD = 0.22			
1 Anthracene										
1	254	8.776	8.773	0.003	467115	1.00	1.00			
2	265	8.802	8.795	0.007	2639880	1.00	1.01			
							RPD = 0.89			
7 Fluoranthene										
1	254	9.676	9.666	0.010	92786	2.00	1.99			
2	265	9.698	9.688	0.010	2448208	2.00	2.00			
							RPD = 0.81			
5 Pyrene										
1	254	10.363	10.353	0.010	44428	1.00	1.01			
2	265	10.382	10.372	0.010	893539	1.00	1.00			
							RPD = 1.82			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.556	12.539	0.017	108174	1.00	1.00			
2	265	12.578	12.560	0.018	1862571	1.00	1.00			
							RPD = 0.00			
11 Chrysene										
1	254	13.083	13.066	0.017	157626	1.00	1.00			
2	265	13.104	13.090	0.014	1923682	1.00	1.00			
							RPD = 0.67			
6 Benzo[b]fluoranthene										
1	254	14.876	14.866	0.010	246736	2.00	1.99			
2	265	14.900	14.886	0.014	9424672	2.00	2.01			
							RPD = 1.07			
10 Benzo[k]fluoranthene										
1	254	15.703	15.699	0.004	92917	1.00	0.99			M
2	265	15.728	15.721	0.007	6520408	1.00	1.00			
							RPD = 0.24			
14 Benzo[a]pyrene										M
1	254	16.449	16.453	-0.004	112417	1.00	0.9887			M
2	265	16.474	16.470	0.004	4778813	1.00	0.99			
							RPD = 0.50			
16 Dibenz(a,h)anthracene										
1	254	17.509	17.513	-0.004	52003	2.00	2.00			
2	265	17.532	17.536	-0.004	850952	2.00	2.00			
							RPD = 0.14			
9 Benzo[g,h,i]perylene										
1	254	18.269	18.286	-0.017	79559	2.00	1.98			
2	265	18.295	18.306	-0.011	1694074	2.00	1.99			
							RPD = 0.29			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.796	18.806	-0.010	111751	1.00	0.9878			
2	265	18.814	18.824	-0.010	1197762	1.00	1.00			
							RPD = 0.89			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

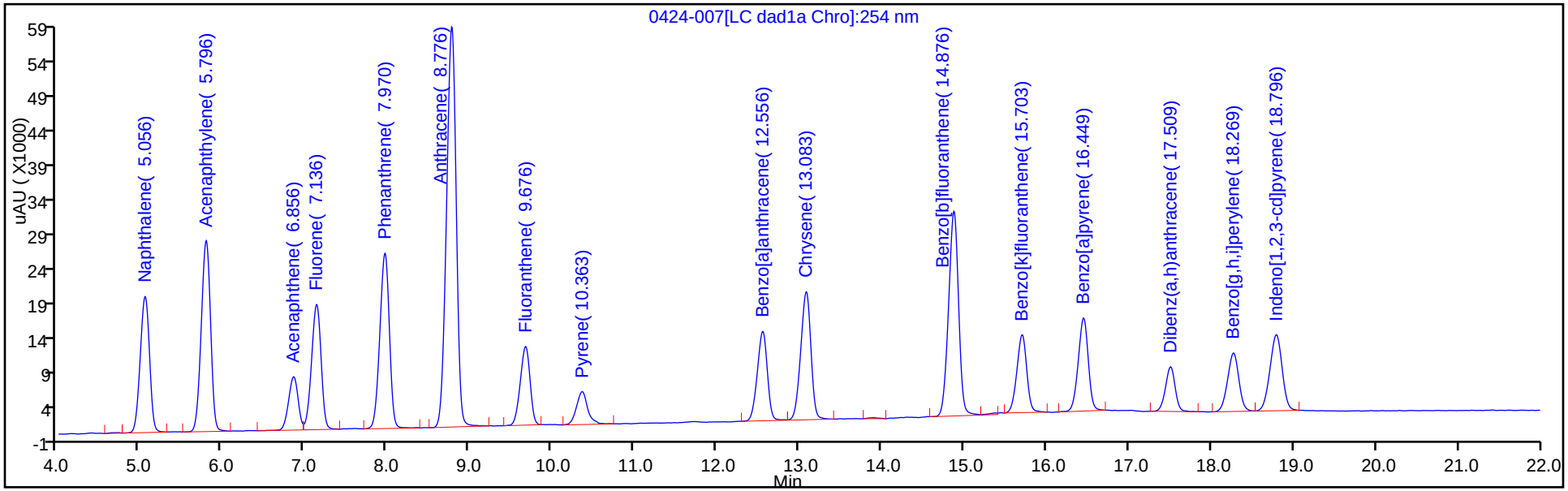
IH_PAH 1C6_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:41 Chrom Revision: 2.2 07-Apr-2015 13:11:02

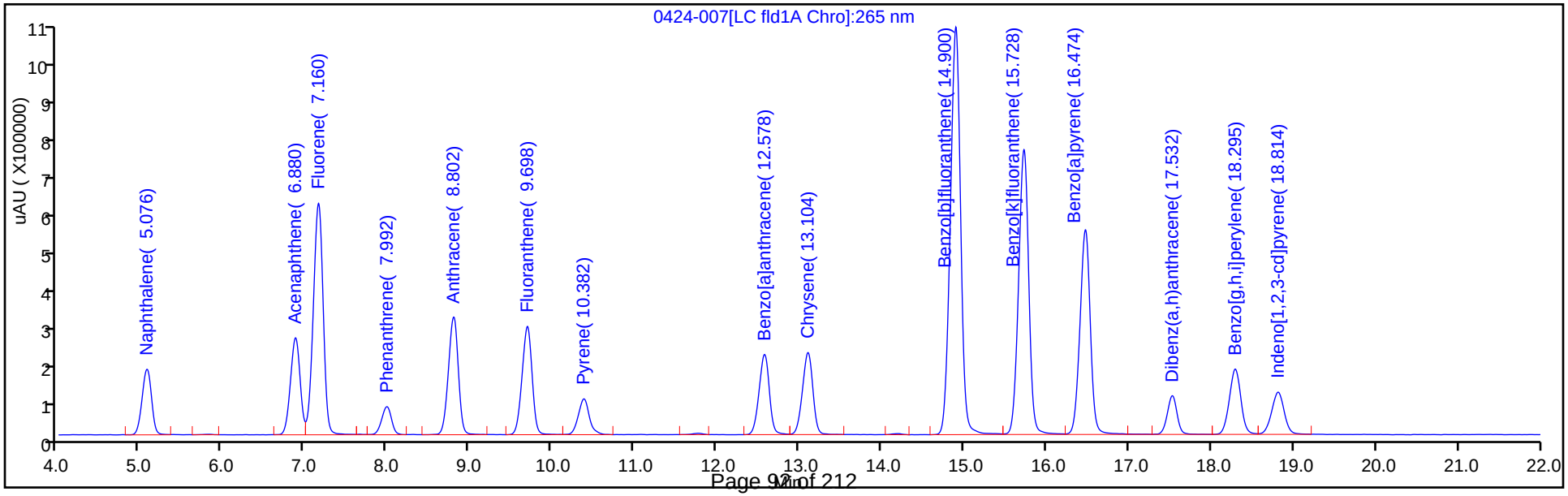
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-007.d				
Injection Date:	24-Apr-2015 13:15:43	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD6			Worklist Smp#:	7
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Apr-2015 13:49:35 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD7
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:41 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 14:37:19

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.048	5.046	0.002	305642	20.0	19.9			
2	265	5.072	5.069	0.003	2805790	20.0	19.9			
							RPD = 0.13			
13 Acenaphthylene										
1	254	5.794	5.793	0.001	426703	40.0	39.6			
4 Acenaphthene										
1	254	6.861	6.853	0.008	122068	20.0	19.9			
2	265	6.880	6.876	0.004	4184715	20.0	19.9			
							RPD = 0.10			
15 Fluorene										
1	254	7.141	7.133	0.008	289311	4.00	3.98			
2	265	7.160	7.153	0.007	10194811	4.00	3.97			
							RPD = 0.38			
8 Phenanthrene										
1	254	7.968	7.966	0.002	403235	2.00	1.99			
2	265	7.985	7.985	0.000	1245835	2.00	1.98			
							RPD = 0.58			
1 Anthracene										
1	254	8.774	8.773	0.001	929387	2.00	1.98			
2	265	8.798	8.795	0.003	5183077	2.00	1.98			
							RPD = 0.35			
7 Fluoranthene										
1	254	9.674	9.666	0.008	186271	4.00	4.00			
2	265	9.698	9.688	0.010	4837383	4.00	3.97			
							RPD = 0.83			
5 Pyrene										
1	254	10.361	10.353	0.008	87276	2.00	2.00			
2	265	10.382	10.372	0.010	1770139	2.00	1.98			
							RPD = 0.72			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.561	12.539	0.022	215521	2.00	1.99			
2	265	12.582	12.560	0.022	3706729	2.00	1.99			
							RPD = 0.02			
11 Chrysene										
1	254	13.087	13.066	0.021	312894	2.00	1.99			
2	265	13.108	13.090	0.018	3840950	2.00	1.99			
							RPD = 0.02			
6 Benzo[b]fluoranthene										
1	254	14.881	14.866	0.015	493794	4.00	3.98			
2	265	14.900	14.886	0.014	18492651	4.00	3.95			
							RPD = 0.77			
10 Benzo[k]fluoranthene										
1	254	15.714	15.699	0.015	183633	2.00	1.97			
2	265	15.732	15.721	0.011	12985998	2.00	1.99			
							RPD = 0.72			
14 Benzo[a]pyrene										
1	254	16.461	16.453	0.008	226987	2.00	2.00			
2	265	16.477	16.470	0.007	9582790	2.00	2.00			
							RPD = 0.03			
16 Dibenz(a,h)anthracene										
1	254	17.507	17.513	-0.006	101842	4.00	4.01			
2	265	17.525	17.536	-0.011	1702687	4.00	4.00			
							RPD = 0.17			
9 Benzo[g,h,i]perylene										
1	254	18.267	18.286	-0.019	161013	4.00	4.02			
2	265	18.288	18.306	-0.018	3399170	4.00	4.00			
							RPD = 0.44			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.787	18.806	-0.019	228222	2.00	2.02			
2	265	18.810	18.824	-0.014	2392572	2.00	1.99			
							RPD = 1.35			

Reagents:

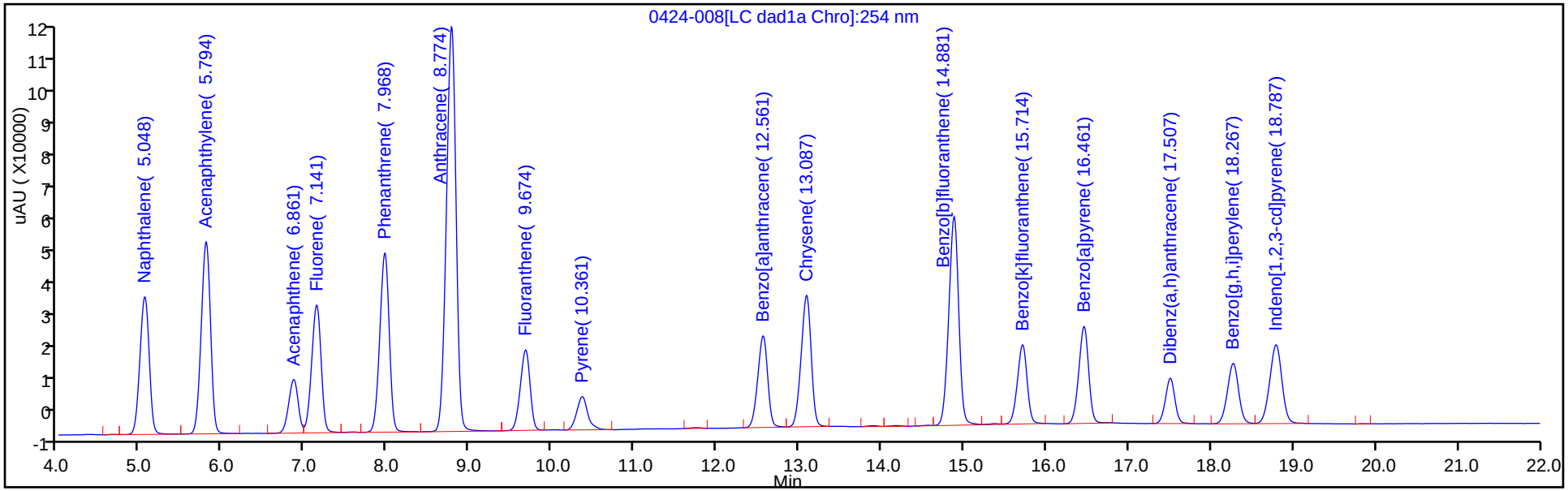
IH_PAH 1C7_00009 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:41 Chrom Revision: 2.2 07-Apr-2015 13:11:02

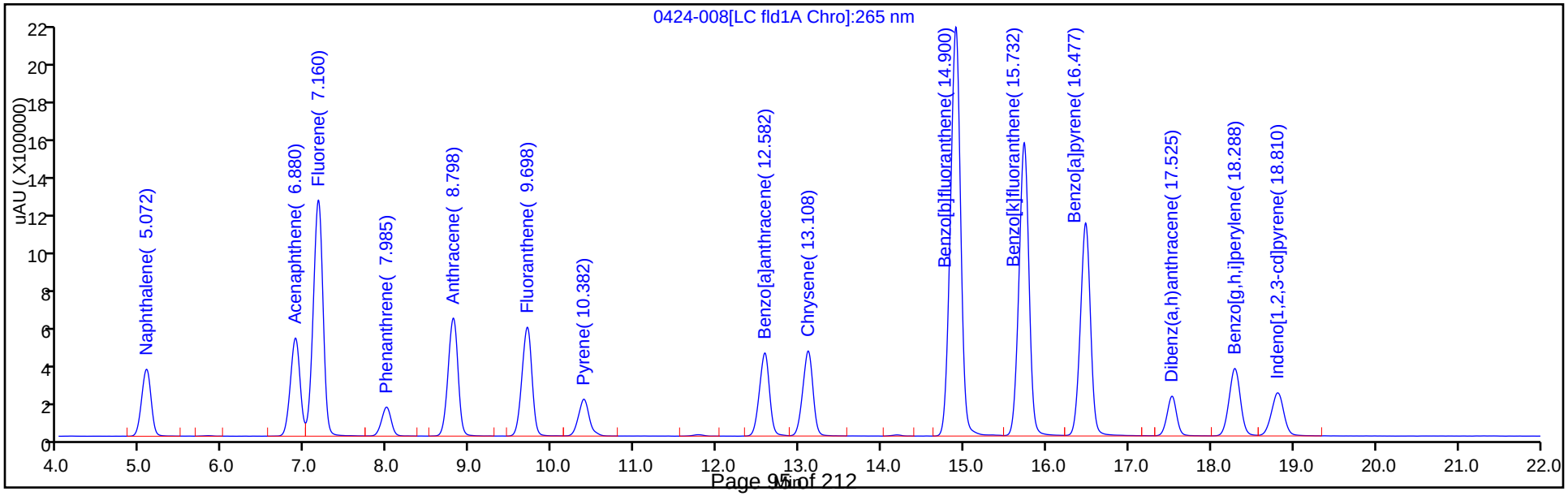
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-008.d				
Injection Date:	24-Apr-2015 13:49:35	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD7			Worklist Smp#:	8
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RETENTION TIME SUMMARY

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6163

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 550-61918/2	0424-002.D
Level 2	STD2 550-61918/3	0424-003.D
Level 3	STD3 550-61918/4	0424-004.D
Level 4	STD4 550-61918/5	0424-005.D
Level 5	STD5 550-61918/6	0424-006.D
Level 6	STD6 550-61918/7	0424-007.D
Level 7	STD7 550-61918/8	0424-008.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7				RT WINDOW	AVG RT
Naphthalene	5.065	5.054	5.069	5.069	5.076	5.076	5.072				4.819 - 5.319	5.069
Acenaphthene	6.869	6.865	6.872	6.876	6.883	6.880	6.880				6.626 - 7.126	6.875
Fluorene	7.146	7.146	7.150	7.153	7.160	7.160	7.160				6.903 - 7.403	7.154
Phenanthrene	7.985	7.978	7.974	7.985	7.988	7.992	7.985				7.735 - 8.235	7.984
Anthracene	8.788	8.784	8.788	8.795	8.798	8.802	8.798				8.545 - 9.045	8.793
Fluoranthene	9.684	9.680	9.680	9.688	9.691	9.698	9.698				9.438 - 9.938	9.688
Pyrene	10.368	10.368	10.364	10.372	10.379	10.382	10.382				10.122 - 10.622	10.374
Benzo[a]anthracene	12.564	12.568	12.560	12.560	12.568	12.578	12.582				12.310 - 12.810	12.569
Chrysene	13.108	13.097	13.090	13.090	13.093	13.104	13.108				12.840 - 13.340	13.099
Benzo[b]fluoranthene	14.908	14.897	14.890	14.886	14.886	14.900	14.900				14.636 - 15.136	14.895
Benzo[k]fluoranthene	15.728	15.728	15.721	15.721	15.714	15.728	15.732				15.471 - 15.971	15.725
Benzo[a]pyrene	16.477	16.481	16.466	16.470	16.466	16.474	16.477				16.220 - 16.720	16.473
Dibenz(a,h)anthracene	17.539	17.532	17.536	17.536	17.521	17.532	17.525				17.286 - 17.786	17.532
Benzo[g,h,i]perylene	18.292	18.302	18.299	18.306	18.288	18.295	18.288				18.056 - 18.556	18.296
Indeno[1,2,3-cd]pyrene	18.810	18.835	18.828	18.824	18.806	18.814	18.810				18.574 - 19.074	18.818

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6163

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 550-61918/2	0424-002.D
Level 2	STD2 550-61918/3	0424-003.D
Level 3	STD3 550-61918/4	0424-004.D
Level 4	STD4 550-61918/5	0424-005.D
Level 5	STD5 550-61918/6	0424-006.D
Level 6	STD6 550-61918/7	0424-007.D
Level 7	STD7 550-61918/8	0424-008.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
Naphthalene	150270 142607	156074 140648	158463 140290	146703	Lin1	5655.11470	140715.276							1.0000		0.9900
Acenaphthene	228715 213018	223654 211506	230363 209236	216646	Lin1	6915.96424	210275.924							1.0000		0.9900
Fluorene	2695250 2627393	2631890 2572290	2778120 2548703	2643413	Lin1	11965.5530	2566797.43							1.0000		0.9900
Phenanthrene	704200 645324	723860 628045	753700 622918	666840	Lin1	3999.42675	627276.747							0.9990		0.9900
Anthracene	2948500 2672112	2707740 2639880	2935700 2591539	2732525	Lin1	10420.0330	2615117.51							1.0000		0.9900
Fluoranthene	1346050 1243371	1248820 1224104	1303285 1209346	1271140	Lin1	7261.93940	1217824.99							1.0000		0.9900
Pyrene	1130250 914096	1042340 893539	1043820 885070	966355	Lin1	7347.17786	889320.609							0.9990		0.9900
Benzo[a]anthracene	2174750 1879422	2039420 1862571	2067780 1853365	1921855	Lin1	9142.83676	1855717.35							1.0000		0.9900
Chrysene	2085500 1953764	2178180 1923682	2116480 1920475	1980135	Lin1	7814.91991	1923799.37							1.0000		0.9900
Benzo[b]fluoranthene	5049250 4771209	4815470 4712336	5189500 4623163	4857143	Lin1	30086.4469	4669535.00							1.0000		0.9900
Benzo[k]fluoranthene	6728500 6619970	6618840 6520408	7062910 6492999	6757120	Lin1	12748.3088	6524645.95							1.0000		0.9900
Benzo[a]pyrene	5424950 4839916	4987840 4778813	5320920 4791395	4981355	Lin1	17921.1790	4791309.24							1.0000		0.9900
Dibenz(a,h)anthracene	520525 422504	421940 425476	472055 425672	441415	Lin1	3584.58047	424424.152							1.0000		0.9900
Benzo[g,h,i]perylene	908900 856791	878190 847037	911550 849793	860678	Lin1	3777.24704	849399.260							1.0000		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD CURVE EVALUATION

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6163

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3 LVL 7	LVL 4		B	M1	M2								
Indeno[1,2,3-cd]pyrene	1126950 1210240	1227260 1197762	1300620 1196286	1220760	Lin1	825.015281	1200980.59							1.0000		0.9900

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6163

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 550-61918/2	0424-002.D
Level 2	STD2 550-61918/3	0424-003.D
Level 3	STD3 550-61918/4	0424-004.D
Level 4	STD4 550-61918/5	0424-005.D
Level 5	STD5 550-61918/6	0424-006.D
Level 6	STD6 550-61918/7	0424-007.D
Level 7	STD7 550-61918/8	0424-008.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/ML)				
		LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3	LVL 4	LVL 5
Naphthalene	Lin1	30054 1406482	78037 2805790	158463	293406	713035	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Acenaphthene	Lin1	45743 2115060	111827 4184715	230363	433292	1065090	0.200 10.0	0.500 20.0	1.00	2.00	5.00
Fluorene	Lin1	107810 5144579	263189 10194811	555624	1057365	2627393	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Phenanthrene	Lin1	14084 628045	36193 1245835	75370	133368	322662	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Anthracene	Lin1	58970 2639880	135387 5183077	293570	546505	1336056	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Fluoranthene	Lin1	53842 2448208	124882 4837383	260657	508456	1243371	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Pyrene	Lin1	22605 893539	52117 1770139	104382	193271	457048	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Benzo[a]anthracene	Lin1	43495 1862571	101971 3706729	206778	384371	939711	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Chrysene	Lin1	41710 1923682	108909 3840950	211648	396027	976882	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Benzo[b]fluoranthene	Lin1	201970 9424672	481547 18492651	1037900	1942857	4771209	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Benzo[k]fluoranthene	Lin1	134570 6520408	330942 12985998	706291	1351424	3309985	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Benzo[a]pyrene	Lin1	108499 4778813	249392 9582790	532092	996271	2419958	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500
Dibenz(a,h)anthracene	Lin1	20821 850952	42194 1702687	94411	176566	422504	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Benzo[g,h,i]perylene	Lin1	36356 1694074	87819 3399170	182310	344271	856791	0.0400 2.00	0.100 4.00	0.200	0.400	1.00
Indeno[1,2,3-cd]pyrene	Lin1	22539 1197762	61363 2392572	130062	244152	605120	0.0200 1.00	0.0500 2.00	0.100	0.200	0.500

FORM VI
IH - HPLC/IC INITIAL CALIBRATION DATA
EXTERNAL STANDARD RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1 Analy Batch No.: 61918

SDG No.:

Instrument ID: HPLC2 GC Column: ID: Heated Purge: (Y/N) N

Calibration Start Date: 04/24/2015 10:26 Calibration End Date: 04/24/2015 13:49 Calibration ID: 6163

Curve Type Legend:
Lin1 = Linear 1/conc

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-002.D
Lims ID: STD1
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 24-Apr-2015 10:26:21 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD1
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:37 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:17:47

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										M
1	254	5.018	5.046	-0.028	3673	0.2000	0.1897			M
2	265	5.065	5.069	-0.004	30054	0.2000	0.1734			
							RPD = 8.97			
13 Acenaphthylene										
1	254	5.772	5.793	-0.021	4712	0.4000	0.3811			
4 Acenaphthene										
1	254	6.832	6.853	-0.021	1680	0.2000	0.1957			
2	265	6.869	6.876	-0.007	45743	0.2000	0.1846			
							RPD = 5.80			
15 Fluorene										
1	254	7.118	7.133	-0.015	2991	0.0400	0.0380			
2	265	7.146	7.153	-0.007	107810	0.0400	0.0373			
							RPD = 1.80			
8 Phenanthrene										M
1	254	7.952	7.966	-0.014	4474	0.0200	0.0191			
2	265	7.985	7.985	0.000	14084	0.0200	0.0161			M
							RPD = 17.13			
1 Anthracene										M
1	254	8.772	8.773	-0.001	9219	0.0200	0.0177			M
2	265	8.788	8.795	-0.007	58970	0.0200	0.0186			
							RPD = 4.71			
7 Fluoranthene										
1	254	9.685	9.666	0.019	2289	0.0400	0.0416			
2	265	9.684	9.688	-0.004	53842	0.0400	0.0382			
							RPD = 8.34			
5 Pyrene										M
1	254	10.385	10.353	0.032	1211	0.0200	0.0246			
2	265	10.368	10.372	-0.004	22605	0.0200	0.0172			M
							RPD = 35.67			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.565	12.539	0.026	2379	0.0200	0.0191			
2	265	12.564	12.560	0.004	43495	0.0200	0.0185			
							RPD = 3.03			
11 Chrysene										
1	254	13.091	13.066	0.025	3421	0.0200	0.0198			
2	265	13.108	13.090	0.018	41710	0.0200	0.0176			
							RPD = 11.75			
6 Benzo[b]fluoranthene										
1	254	14.885	14.866	0.019	4672	0.0400	0.0369			
2	265	14.908	14.886	0.022	201970	0.0400	0.0368			
							RPD = 0.31			
10 Benzo[k]fluoranthene										M
1	254	15.745	15.699	0.046	2001	0.0200	0.0138			M
2	265	15.728	15.721	0.007	134570	0.0200	0.0187			
							RPD = 30.24			
14 Benzo[a]pyrene										M
1	254	16.445	16.453	-0.008	1991	0.0200	0.0169			M
2	265	16.477	16.470	0.007	108499	0.0200	0.0189			
							RPD = 11.16			
16 Dibenz(a,h)anthracene										M
1	254	17.505	17.513	-0.008	3509	0.0400	0.0429			
2	265	17.539	17.536	0.003	20821	0.0400	0.0406			M
							RPD = 5.42			
9 Benzo[g,h,i]perylene										
1	254	18.278	18.286	-0.008	1654	0.0400	0.0418			M
2	265	18.292	18.306	-0.014	36356	0.0400	0.0384			
							RPD = 8.69			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.811	18.806	0.005	2336	0.0200	0.0196			M
2	265	18.810	18.824	-0.014	22539	0.0200	0.0181			M
							RPD = 8.30			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

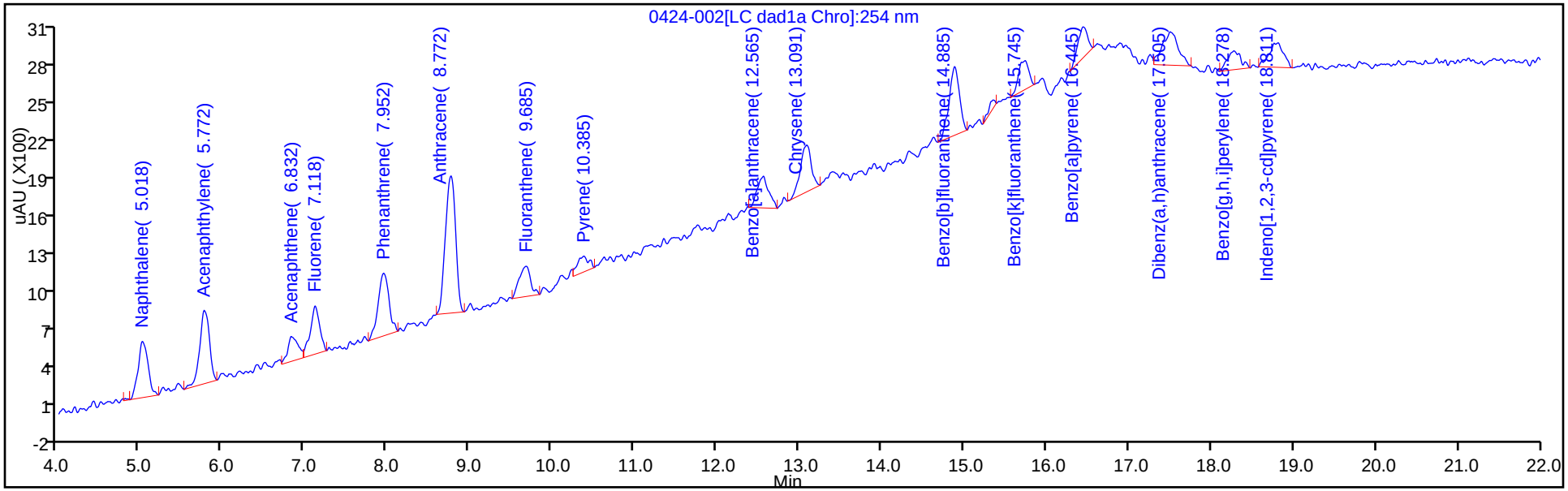
IH_PAH 1C1_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:37 Chrom Revision: 2.2 07-Apr-2015 13:11:02

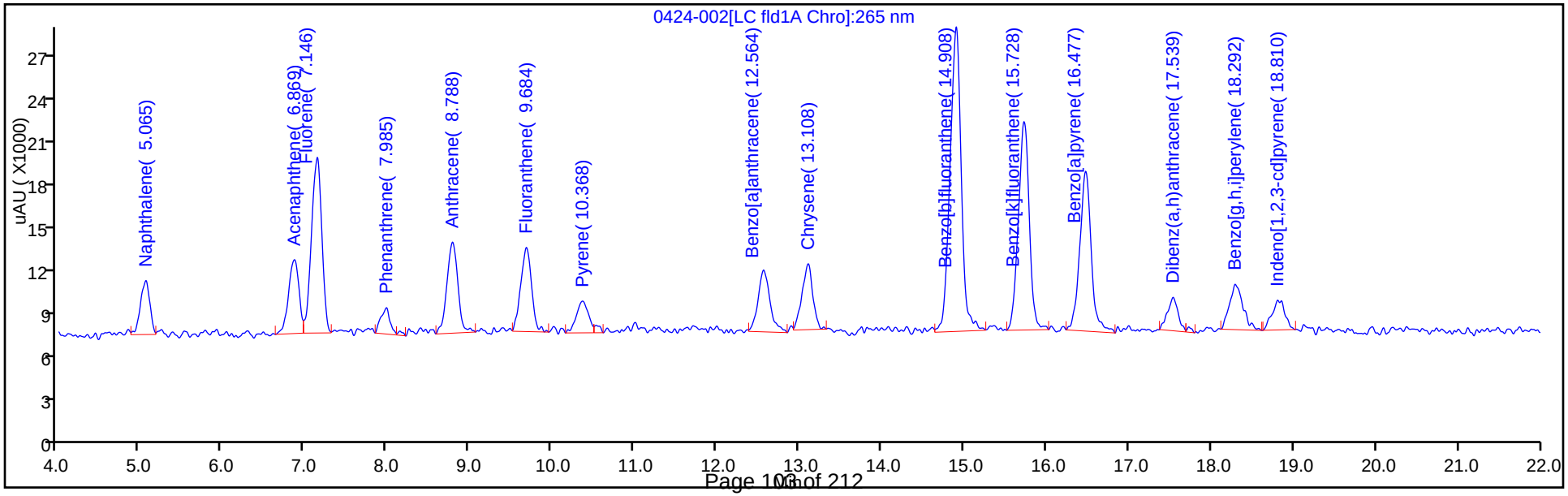
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-002.d				
Injection Date:	24-Apr-2015 10:26:21	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD1			Worklist Smp#:	2
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-003.D
Lims ID: STD2
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 24-Apr-2015 11:00:09 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD2
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:38 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:39:37

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										M
1	254	5.037	5.046	-0.009	8457	0.5000	0.5023			M
2	265	5.054	5.069	-0.015	78037	0.5000	0.5144			
							RPD = 2.37			
13 Acenaphthylene										M
1	254	5.770	5.793	-0.023	10436	1.00	0.9137			M
4 Acenaphthene										
1	254	6.843	6.853	-0.010	3322	0.5000	0.4643			
2	265	6.865	6.876	-0.011	111827	0.5000	0.4989			
							RPD = 7.20			
15 Fluorene										
1	254	7.123	7.133	-0.010	7196	0.1000	0.0959			
2	265	7.146	7.153	-0.007	263189	0.1000	0.0979			
							RPD = 1.99			
8 Phenanthrene										
1	254	7.950	7.966	-0.016	10302	0.0500	0.0479			
2	265	7.978	7.985	-0.007	36193	0.0500	0.0513			
							RPD = 6.88			
1 Anthracene										
1	254	8.763	8.773	-0.010	24567	0.0500	0.0505			
2	265	8.784	8.795	-0.011	135387	0.0500	0.0478			
							RPD = 5.57			
7 Fluoranthene										
1	254	9.656	9.666	-0.010	4699	0.1000	0.0934			
2	265	9.680	9.688	-0.008	124882	0.1000	0.0966			
							RPD = 3.33			
5 Pyrene										
1	254	10.356	10.353	0.003	2158	0.0500	0.0463			
2	265	10.368	10.372	-0.004	52117	0.0500	0.0503			
							RPD = 8.36			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.556	12.539	0.017	5420	0.0500	0.0472			
2	265	12.568	12.560	0.008	101971	0.0500	0.0500			
							RPD = 5.72			
11 Chrysene										
1	254	13.076	13.066	0.010	7712	0.0500	0.0472			
2	265	13.097	13.090	0.007	108909	0.0500	0.0525			
							RPD = 10.80			
6 Benzo[b]fluoranthene										
1	254	14.876	14.866	0.010	12576	0.1000	0.1007			
2	265	14.897	14.886	0.011	481547	0.1000	0.0967			
							RPD = 4.09			
10 Benzo[k]fluoranthene										M
1	254	15.696	15.699	-0.003	5806	0.0500	0.0548			M
2	265	15.728	15.721	0.007	330942	0.0500	0.0488			
							RPD = 11.71			
14 Benzo[a]pyrene										
1	254	16.456	16.453	0.003	5828	0.0500	0.0507			
2	265	16.481	16.470	0.011	249392	0.0500	0.0483			
							RPD = 4.78			
16 Dibenz(a,h)anthracene										
1	254	17.530	17.513	0.017	4654	0.1000	0.0891			
2	265	17.532	17.536	-0.004	42194	0.1000	0.0910			
							RPD = 2.11			
9 Benzo[g,h,i]perylene										
1	254	18.283	18.286	-0.003	3772	0.1000	0.0946			
2	265	18.302	18.306	-0.004	87819	0.1000	0.0989			
							RPD = 4.44			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.823	18.806	0.017	5880	0.0500	0.0510			
2	265	18.835	18.824	0.011	61363	0.0500	0.0504			
							RPD = 1.18			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

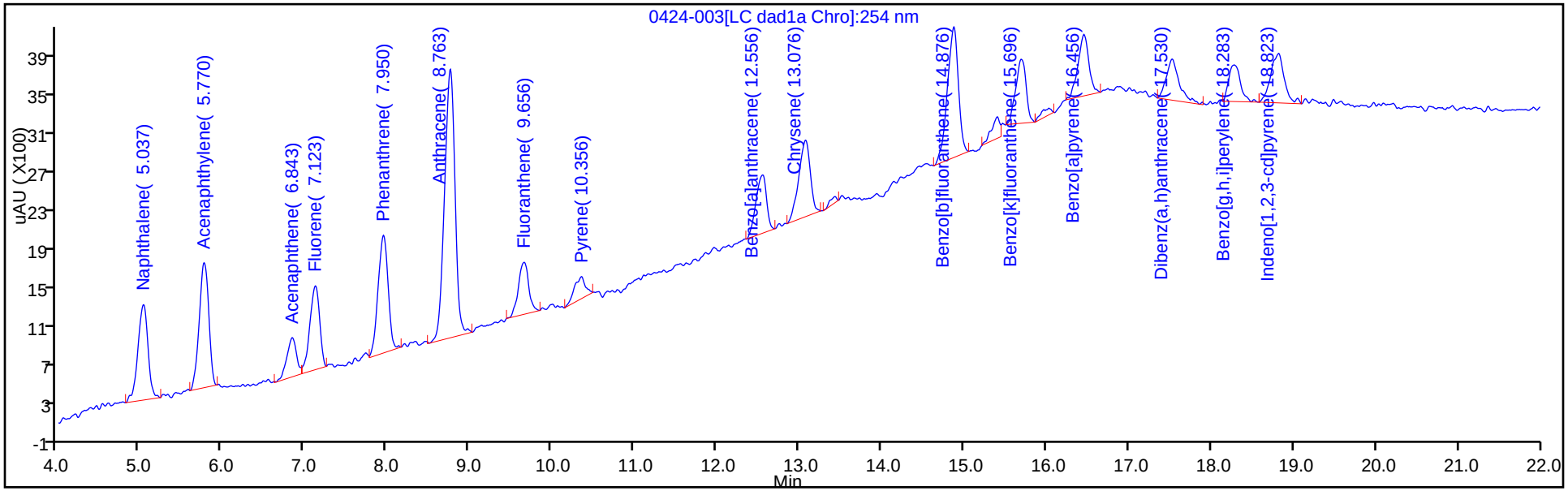
IH_PAH 1C2_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:38 Chrom Revision: 2.2 07-Apr-2015 13:11:02

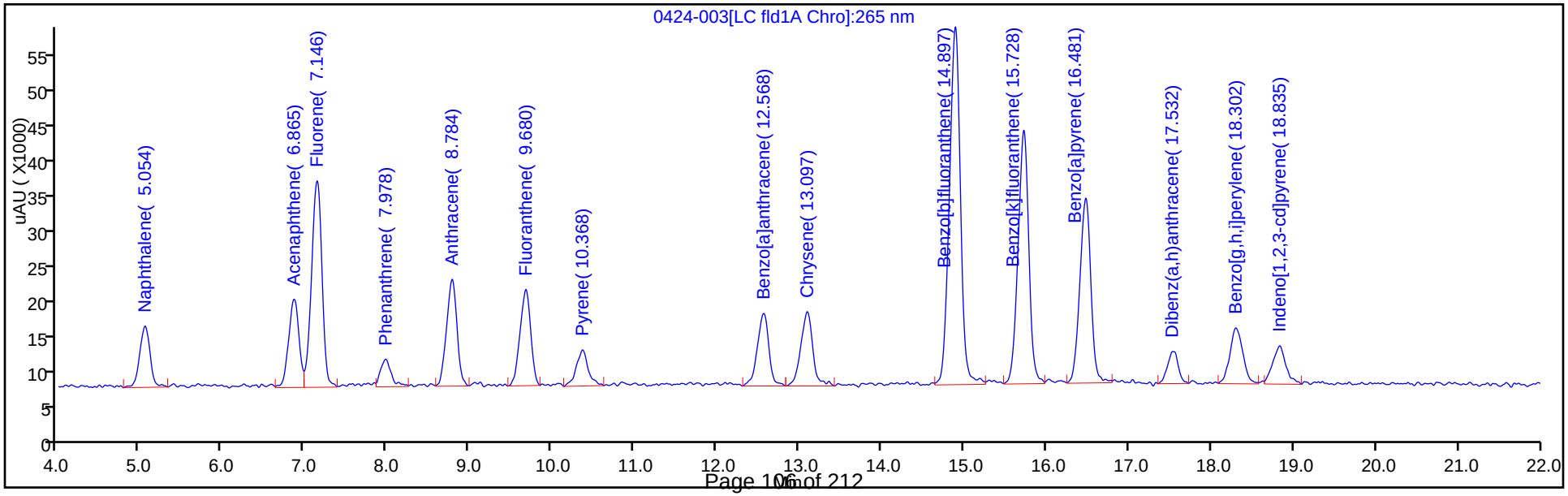
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-003.d				
Injection Date:	24-Apr-2015 11:00:09	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD2			Worklist Smp#:	3
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-004.D
Lims ID: STD3
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 24-Apr-2015 11:34:03 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD3
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:38 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:42:12

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.041	5.046	-0.005	16420	1.00	1.02			
2	265	5.069	5.069	0.000	158463	1.00	1.09			
							RPD = 5.99			
13 Acenaphthylene										
1	254	5.787	5.793	-0.006	24046	2.00	2.18			
4 Acenaphthene										
1	254	6.847	6.853	-0.006	7032	1.00	1.07			
2	265	6.872	6.876	-0.004	230363	1.00	1.06			
							RPD = 0.80			
15 Fluorene										
1	254	7.127	7.133	-0.006	15888	0.2000	0.2157			
2	265	7.150	7.153	-0.003	555624	0.2000	0.2118			
							RPD = 1.81			
8 Phenanthrene										
1	254	7.954	7.966	-0.012	22020	0.1000	0.1059			
2	265	7.974	7.985	-0.011	75370	0.1000	0.1138			
							RPD = 7.21			
1 Anthracene										
1	254	8.761	8.773	-0.012	51112	0.1000	0.1073			
2	265	8.788	8.795	-0.007	293570	0.1000	0.1083			
							RPD = 0.93			
7 Fluoranthene										
1	254	9.654	9.666	-0.012	9709	0.2000	0.2012			
2	265	9.680	9.688	-0.008	260657	0.2000	0.2081			
							RPD = 3.37			
5 Pyrene										
1	254	10.347	10.353	-0.006	3773	0.1000	0.0833			
2	265	10.364	10.372	-0.008	104382	0.1000	0.1091			
							RPD = 26.82			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.540	12.539	0.001	12250	0.1000	0.1105			
2	265	12.560	12.560	0.000	206778	0.1000	0.1065			
							RPD = 3.68			
11 Chrysene										
1	254	13.067	13.066	0.001	16846	0.1000	0.1054			
2	265	13.090	13.090	0.000	211648	0.1000	0.1060			
							RPD = 0.55			
6 Benzo[b]fluoranthene										
1	254	14.867	14.866	0.001	26501	0.2000	0.2131			
2	265	14.890	14.886	0.004	1037900	0.2000	0.2158			
							RPD = 1.27			
10 Benzo[k]fluoranthene										
1	254	15.700	15.699	0.001	12094	0.1000	0.1227			
2	265	15.721	15.721	0.000	706291	0.1000	0.1063			
							RPD = 14.32			
14 Benzo[a]pyrene										
1	254	16.440	16.453	-0.013	13194	0.1000	0.1155			
2	265	16.466	16.470	-0.004	532092	0.1000	0.1073			
							RPD = 7.35			
16 Dibenz(a,h)anthracene										
1	254	17.514	17.513	0.001	7456	0.2000	0.2021			
2	265	17.536	17.536	0.000	94411	0.2000	0.2140			
							RPD = 5.71			
9 Benzo[g,h,i]perylene										
1	254	18.274	18.286	-0.012	8012	0.2000	0.2004			
2	265	18.299	18.306	-0.007	182310	0.2000	0.2102			
							RPD = 4.79			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.807	18.806	0.001	11840	0.1000	0.1037			
2	265	18.828	18.824	0.004	130062	0.1000	0.1076			
							RPD = 3.66			

Reagents:

IH_PAH 1C3_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:39 Chrom Revision: 2.2 07-Apr-2015 13:11:02

TestAmerica Phoenix

Data File: \\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-004.d

Injection Date: 24-Apr-2015 11:34:03 Instrument ID: HPLC2 Operator ID: zn1

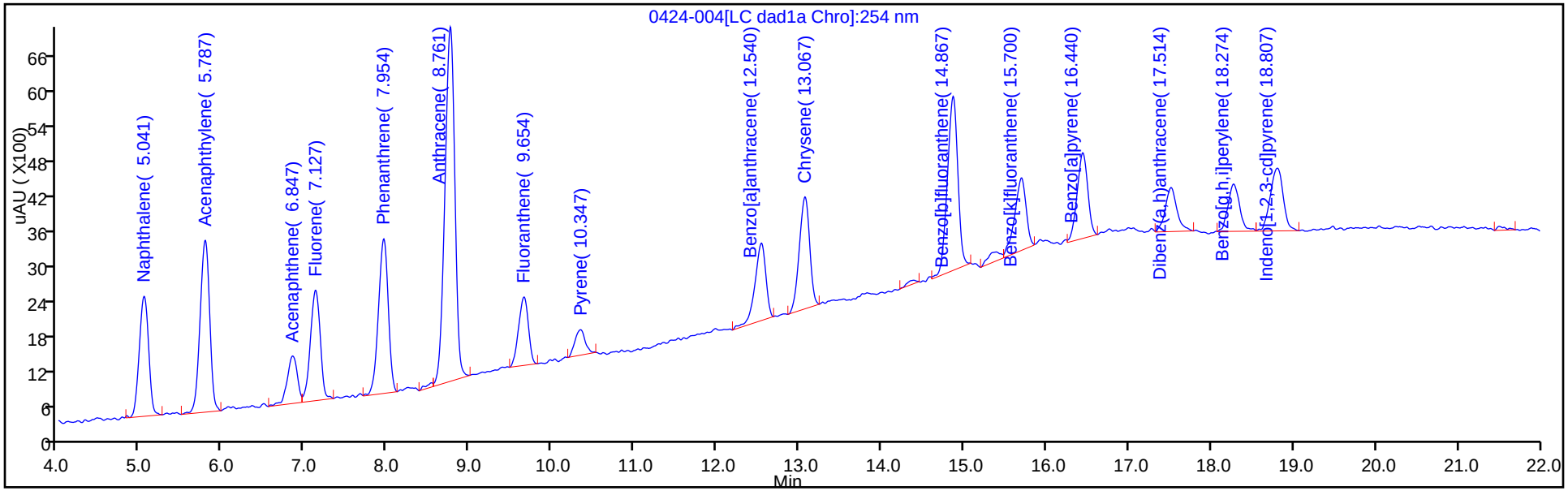
Lims ID: STD3 Worklist Smp#: 4

Client ID:

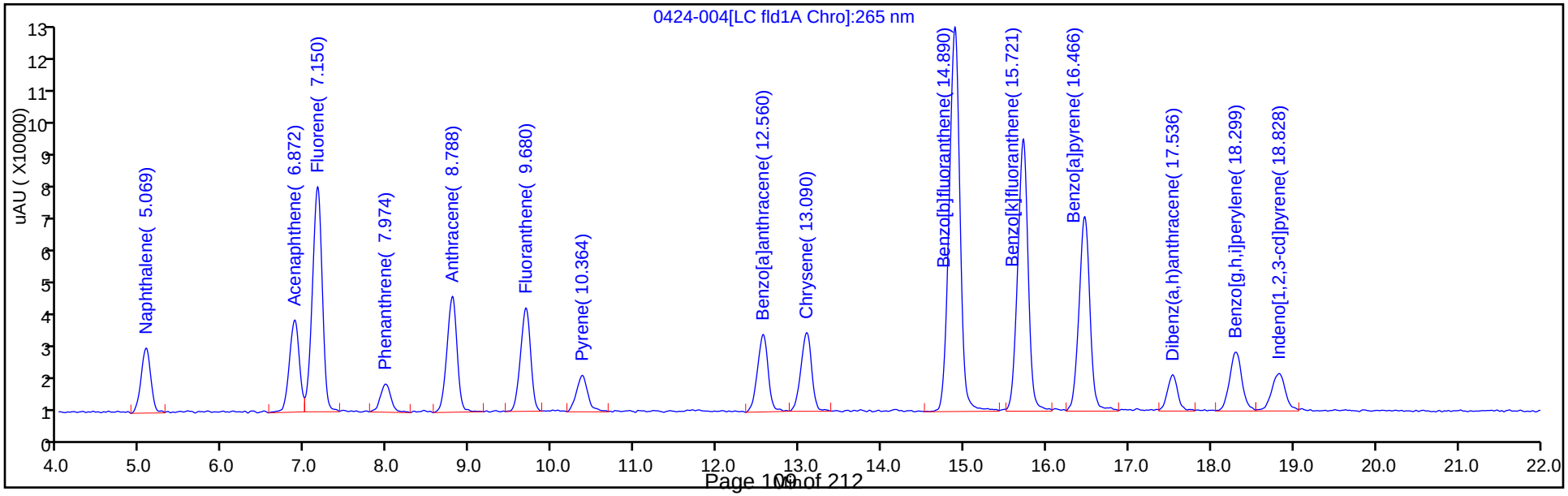
Injection Vol: 20.0 ul Dil. Factor: 1.0000 ALS Bottle#: 4

Method: NIOSH5506 Limit Group: IH GC NIOSH 5506 IC

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-005.D
Lims ID: STD4
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 24-Apr-2015 12:07:52 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD4
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:39 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:09:21

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.046	5.046	0.000	31890	2.00	2.03			
2	265	5.069	5.069	0.000	293406	2.00	2.04			
							RPD = 0.54			
13 Acenaphthylene										
1	254	5.793	5.793	0.000	45140	4.00	4.14			
4 Acenaphthene										
1	254	6.853	6.853	0.000	12945	2.00	2.04			
2	265	6.876	6.876	0.000	433292	2.00	2.03			
							RPD = 0.52			
15 Fluorene										
1	254	7.133	7.133	0.000	29460	0.4000	0.4026			
2	265	7.153	7.153	0.000	1057365	0.4000	0.4073			
							RPD = 1.15			
8 Phenanthrene										
1	254	7.966	7.966	0.000	42290	0.2000	0.2061			
2	265	7.985	7.985	0.000	133368	0.2000	0.2062			
							RPD = 0.06			
1 Anthracene										
1	254	8.773	8.773	0.000	97013	0.2000	0.2054			
2	265	8.795	8.795	0.000	546505	0.2000	0.2050			
							RPD = 0.20			
7 Fluoranthene										
1	254	9.666	9.666	0.000	19265	0.4000	0.4067			
2	265	9.688	9.688	0.000	508456	0.4000	0.4115			
							RPD = 1.18			
5 Pyrene										
1	254	10.353	10.353	0.000	8701	0.2000	0.1962			
2	265	10.372	10.372	0.000	193271	0.2000	0.2091			
							RPD = 6.34			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.539	12.539	0.000	21844	0.2000	0.1993			
2	265	12.560	12.560	0.000	384371	0.2000	0.2022			
							RPD = 1.43			
11 Chrysene										
1	254	13.066	13.066	0.000	32079	0.2000	0.2025			
2	265	13.090	13.090	0.000	396027	0.2000	0.2018			
							RPD = 0.33			
6 Benzo[b]fluoranthene										M
1	254	14.866	14.866	0.000	49549	0.4000	0.3991			
2	265	14.886	14.886	0.000	1942857	0.4000	0.4096			M
							RPD = 2.60			
10 Benzo[k]fluoranthene										M
1	254	15.699	15.699	0.000	18846	0.2000	0.1956			
2	265	15.721	15.721	0.000	1351424	0.2000	0.2052			M
							RPD = 4.79			
14 Benzo[a]pyrene										M
1	254	16.453	16.453	0.000	22663	0.2000	0.1988			
2	265	16.470	16.470	0.000	996271	0.2000	0.2042			M
							RPD = 2.66			
16 Dibenz(a,h)anthracene										M
1	254	17.513	17.513	0.000	12825	0.4000	0.4187			
2	265	17.536	17.536	0.000	176566	0.4000	0.4076			M
							RPD = 2.70			
9 Benzo[g,h,i]perylene										M
1	254	18.286	18.286	0.000	16177	0.4000	0.4039			
2	265	18.306	18.306	0.000	344271	0.4000	0.4009			M
							RPD = 0.76			
2 Indeno[1,2,3-cd]pyrene										M
1	254	18.806	18.806	0.000	22131	0.2000	0.1948			
2	265	18.824	18.824	0.000	244152	0.2000	0.2026			M
							RPD = 3.92			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

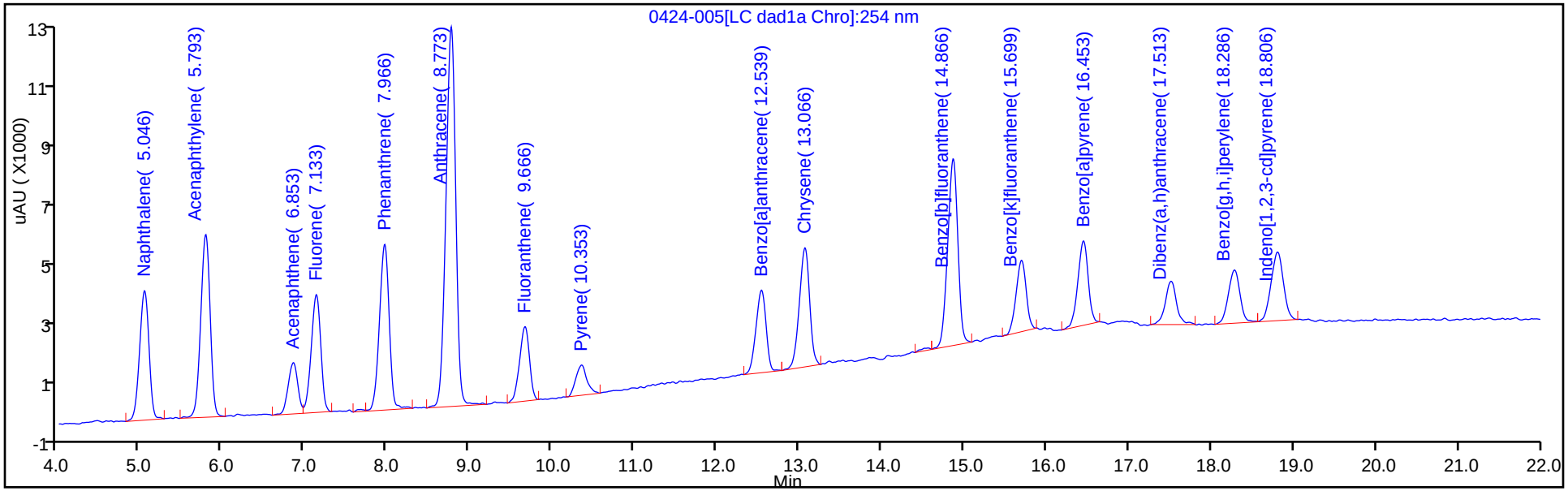
IH_PAH 1C4_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:39 Chrom Revision: 2.2 07-Apr-2015 13:11:02

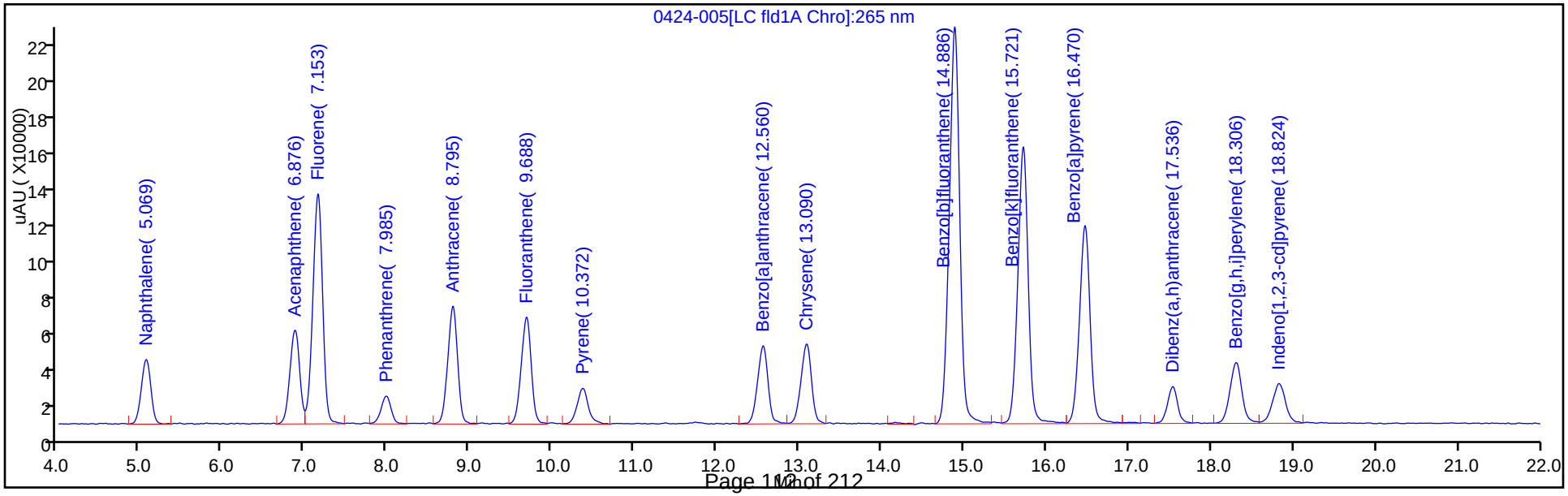
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-005.d				
Injection Date:	24-Apr-2015 12:07:52	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD4			Worklist Smp#:	5
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-006.D
Lims ID: STD5
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 24-Apr-2015 12:41:52 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD5
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:40 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 13:24:54

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.056	5.046	0.010	78553	5.00	5.08			
2	265	5.076	5.069	0.007	713035	5.00	5.03			
							RPD = 1.12			
13 Acenaphthylene										
1	254	5.796	5.793	0.003	110200	10.0	10.2			
4 Acenaphthene										
1	254	6.863	6.853	0.010	31302	5.00	5.04			
2	265	6.883	6.876	0.007	1065090	5.00	5.03			
							RPD = 0.17			
15 Fluorene										
1	254	7.136	7.133	0.003	73814	1.00	1.01			
2	265	7.160	7.153	0.007	2627393	1.00	1.02			
							RPD = 0.52			
8 Phenanthrene										
1	254	7.963	7.966	-0.003	102273	0.5000	0.5028			
2	265	7.988	7.985	0.003	322662	0.5000	0.5080			
							RPD = 1.04			
1 Anthracene										
1	254	8.776	8.773	0.003	238382	0.5000	0.5076			
2	265	8.798	8.795	0.003	1336056	0.5000	0.5069			
							RPD = 0.14			
7 Fluoranthene										
1	254	9.670	9.666	0.004	47302	1.00	1.01			
2	265	9.691	9.688	0.003	1243371	1.00	1.02			
							RPD = 0.51			
5 Pyrene										
1	254	10.356	10.353	0.003	22317	0.5000	0.5082			
2	265	10.379	10.372	0.007	457048	0.5000	0.5057			
							RPD = 0.50			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.550	12.539	0.011	54539	0.5000	0.5021			
2	265	12.568	12.560	0.008	939711	0.5000	0.5015			
							RPD = 0.13			
11 Chrysene										
1	254	13.076	13.066	0.010	78858	0.5000	0.5006			
2	265	13.093	13.090	0.003	976882	0.5000	0.5037			
							RPD = 0.63			
6 Benzo[b]fluoranthene										
1	254	14.863	14.866	-0.003	125872	1.00	1.02			
2	265	14.886	14.886	0.000	4771209	1.00	1.02			
							RPD = 0.02			
10 Benzo[k]fluoranthene										
1	254	15.696	15.699	-0.003	48363	0.5000	0.5141			
2	265	15.714	15.721	-0.007	3309985	0.5000	0.5054			
							RPD = 1.72			
14 Benzo[a]pyrene										
1	254	16.443	16.453	-0.010	57163	0.5000	0.5024			
2	265	16.466	16.470	-0.004	2419958	0.5000	0.5013			
							RPD = 0.22			
16 Dibenz(a,h)anthracene										
1	254	17.503	17.513	-0.010	26688	1.00	0.9780			
2	265	17.521	17.536	-0.015	422504	1.00	0.9870			
							RPD = 0.92			
9 Benzo[g,h,i]perylene										
1	254	18.263	18.286	-0.023	40084	1.00	1.00			
2	265	18.288	18.306	-0.018	856791	1.00	1.00			
							RPD = 0.43			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.783	18.806	-0.023	55995	0.5000	0.4945			
2	265	18.806	18.824	-0.018	605120	0.5000	0.5032			
							RPD = 1.74			

Reagents:

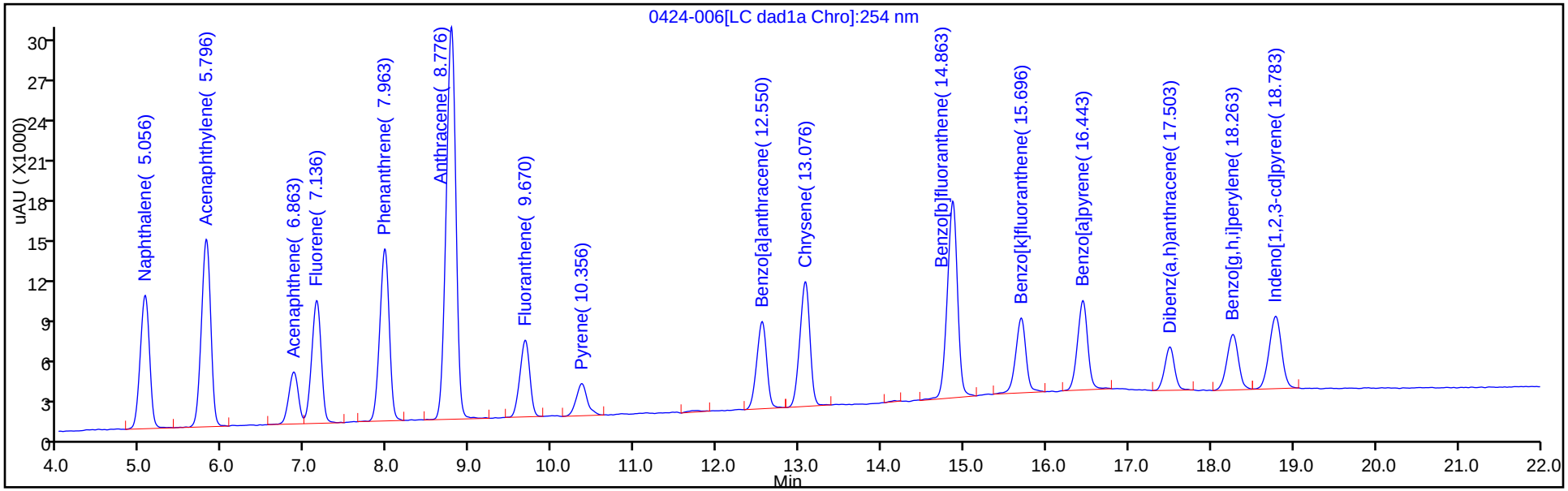
IH_PAH 1C5_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:40 Chrom Revision: 2.2 07-Apr-2015 13:11:02

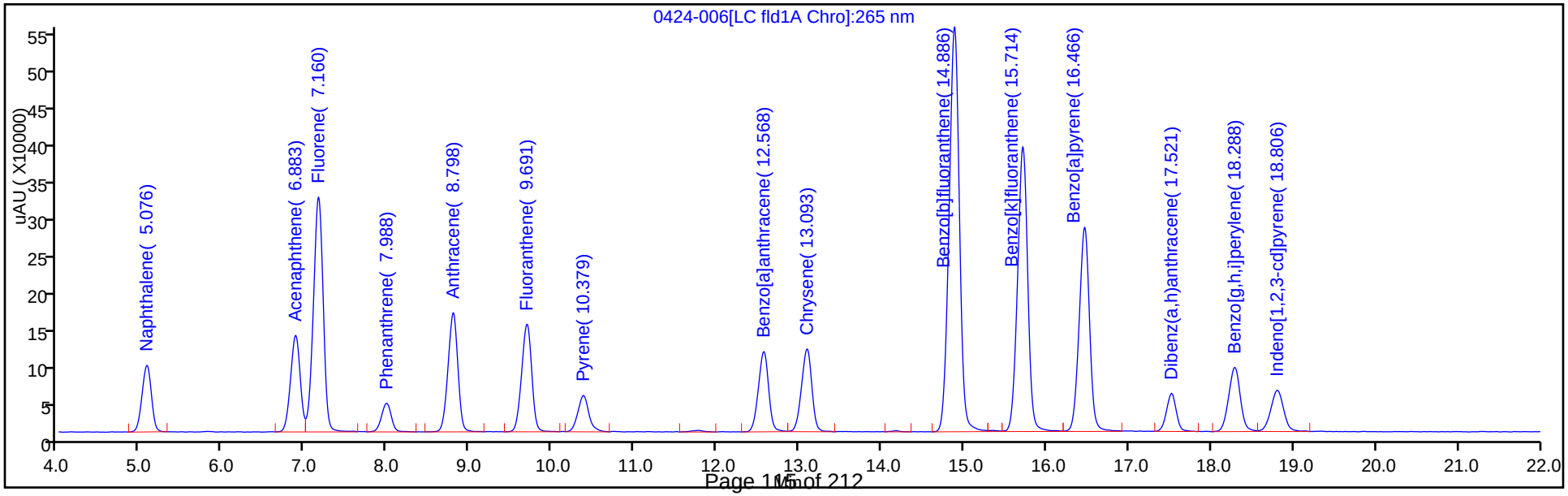
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-006.d				
Injection Date:	24-Apr-2015 12:41:52	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD5			Worklist Smp#:	6
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-007.D
Lims ID: STD6
Client ID:
Sample Type: IC Calib Level: 6
Inject. Date: 24-Apr-2015 13:15:43 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD6
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:40 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 14:36:47

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.056	5.046	0.010	152880	10.0	9.94			
2	265	5.076	5.069	0.007	1406482	10.0	9.96			
							RPD = 0.13			
13 Acenaphthylene										
1	254	5.796	5.793	0.003	214937	20.0	19.9			
4 Acenaphthene										
1	254	6.856	6.853	0.003	61629	10.0	10.0			
2	265	6.880	6.876	0.004	2115060	10.0	10.0			
							RPD = 0.24			
15 Fluorene										
1	254	7.136	7.133	0.003	144839	2.00	1.99			
2	265	7.160	7.153	0.007	5144579	2.00	2.00			
							RPD = 0.38			
8 Phenanthrene										
1	254	7.970	7.966	0.004	202216	1.00	1.00			
2	265	7.992	7.985	0.007	628045	1.00	0.99			
							RPD = 0.22			
1 Anthracene										
1	254	8.776	8.773	0.003	467115	1.00	1.00			
2	265	8.802	8.795	0.007	2639880	1.00	1.01			
							RPD = 0.89			
7 Fluoranthene										
1	254	9.676	9.666	0.010	92786	2.00	1.99			
2	265	9.698	9.688	0.010	2448208	2.00	2.00			
							RPD = 0.81			
5 Pyrene										
1	254	10.363	10.353	0.010	44428	1.00	1.01			
2	265	10.382	10.372	0.010	893539	1.00	1.00			
							RPD = 1.82			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.556	12.539	0.017	108174	1.00	1.00			
2	265	12.578	12.560	0.018	1862571	1.00	1.00			
							RPD = 0.00			
11 Chrysene										
1	254	13.083	13.066	0.017	157626	1.00	1.00			
2	265	13.104	13.090	0.014	1923682	1.00	1.00			
							RPD = 0.67			
6 Benzo[b]fluoranthene										
1	254	14.876	14.866	0.010	246736	2.00	1.99			
2	265	14.900	14.886	0.014	9424672	2.00	2.01			
							RPD = 1.07			
10 Benzo[k]fluoranthene										
1	254	15.703	15.699	0.004	92917	1.00	0.99			M
2	265	15.728	15.721	0.007	6520408	1.00	1.00			
							RPD = 0.24			
14 Benzo[a]pyrene										M
1	254	16.449	16.453	-0.004	112417	1.00	0.9887			M
2	265	16.474	16.470	0.004	4778813	1.00	0.99			
							RPD = 0.50			
16 Dibenz(a,h)anthracene										
1	254	17.509	17.513	-0.004	52003	2.00	2.00			
2	265	17.532	17.536	-0.004	850952	2.00	2.00			
							RPD = 0.14			
9 Benzo[g,h,i]perylene										
1	254	18.269	18.286	-0.017	79559	2.00	1.98			
2	265	18.295	18.306	-0.011	1694074	2.00	1.99			
							RPD = 0.29			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.796	18.806	-0.010	111751	1.00	0.9878			
2	265	18.814	18.824	-0.010	1197762	1.00	1.00			
							RPD = 0.89			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

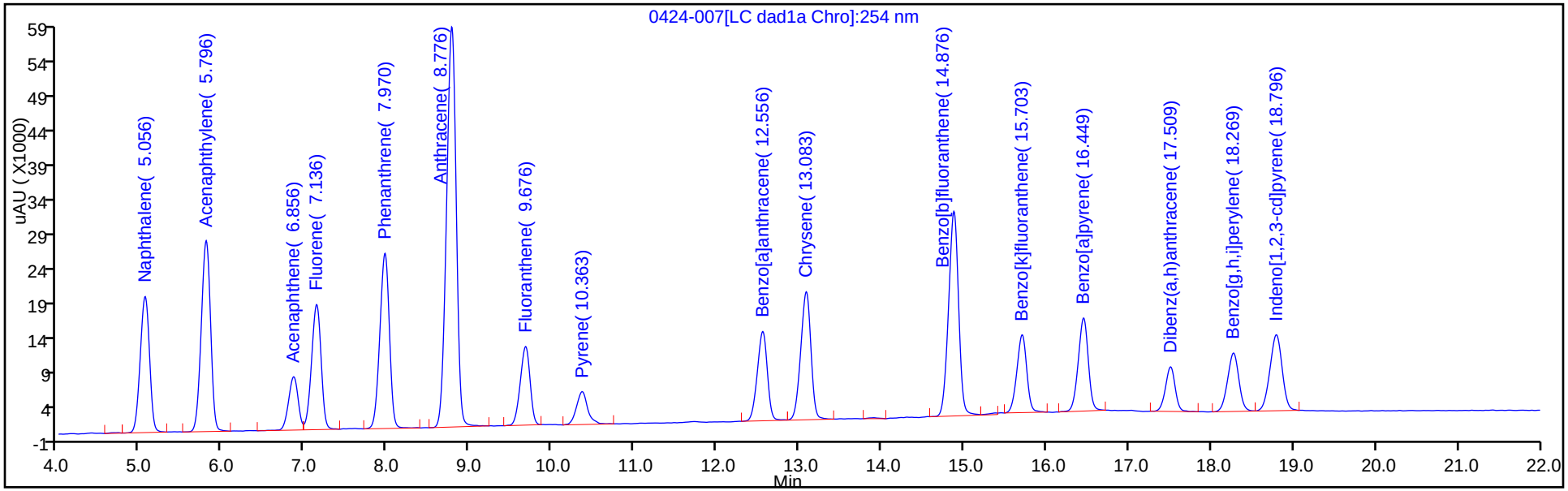
IH_PAH 1C6_00003 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:41 Chrom Revision: 2.2 07-Apr-2015 13:11:02

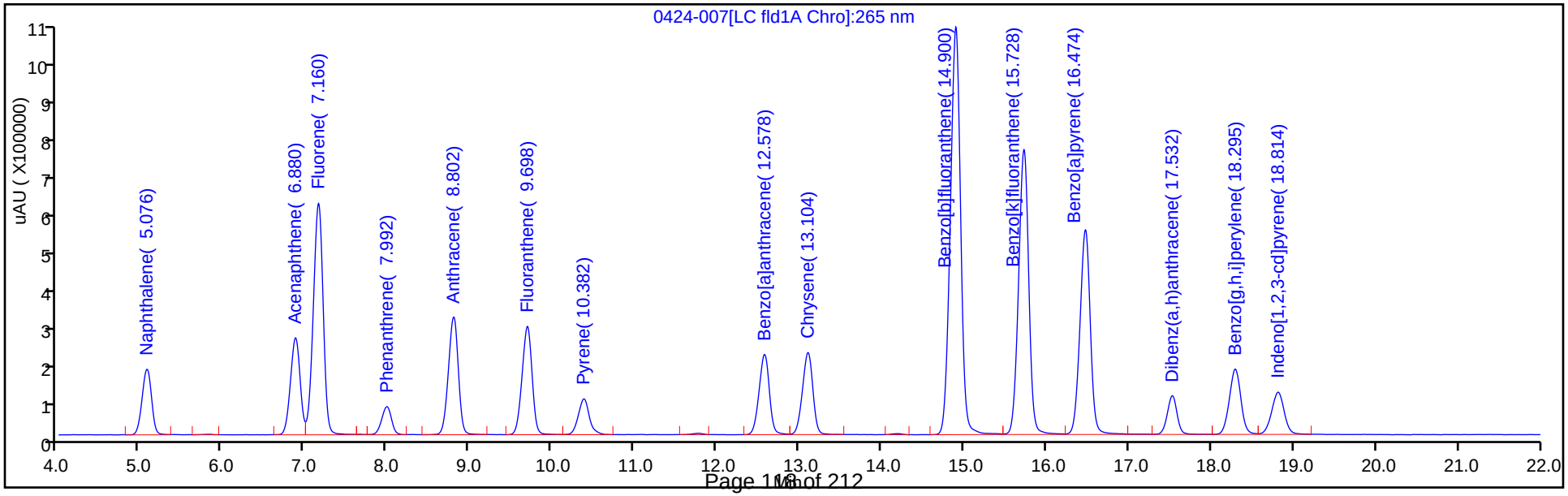
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-007.d				
Injection Date:	24-Apr-2015 13:15:43	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD6			Worklist Smp#:	7
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Lims ID: STD7
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 24-Apr-2015 13:49:35 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: STD7
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 27-Apr-2015 07:59:41 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\g8\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK053

First Level Reviewer: nelsonz Date: 24-Apr-2015 14:37:19

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.048	5.046	0.002	305642	20.0	19.9			
2	265	5.072	5.069	0.003	2805790	20.0	19.9			
							RPD = 0.13			
13 Acenaphthylene										
1	254	5.794	5.793	0.001	426703	40.0	39.6			
4 Acenaphthene										
1	254	6.861	6.853	0.008	122068	20.0	19.9			
2	265	6.880	6.876	0.004	4184715	20.0	19.9			
							RPD = 0.10			
15 Fluorene										
1	254	7.141	7.133	0.008	289311	4.00	3.98			
2	265	7.160	7.153	0.007	10194811	4.00	3.97			
							RPD = 0.38			
8 Phenanthrene										
1	254	7.968	7.966	0.002	403235	2.00	1.99			
2	265	7.985	7.985	0.000	1245835	2.00	1.98			
							RPD = 0.58			
1 Anthracene										
1	254	8.774	8.773	0.001	929387	2.00	1.98			
2	265	8.798	8.795	0.003	5183077	2.00	1.98			
							RPD = 0.35			
7 Fluoranthene										
1	254	9.674	9.666	0.008	186271	4.00	4.00			
2	265	9.698	9.688	0.010	4837383	4.00	3.97			
							RPD = 0.83			
5 Pyrene										
1	254	10.361	10.353	0.008	87276	2.00	2.00			
2	265	10.382	10.372	0.010	1770139	2.00	1.98			
							RPD = 0.72			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.561	12.539	0.022	215521	2.00	1.99			
2	265	12.582	12.560	0.022	3706729	2.00	1.99			
							RPD = 0.02			
11 Chrysene										
1	254	13.087	13.066	0.021	312894	2.00	1.99			
2	265	13.108	13.090	0.018	3840950	2.00	1.99			
							RPD = 0.02			
6 Benzo[b]fluoranthene										
1	254	14.881	14.866	0.015	493794	4.00	3.98			
2	265	14.900	14.886	0.014	18492651	4.00	3.95			
							RPD = 0.77			
10 Benzo[k]fluoranthene										
1	254	15.714	15.699	0.015	183633	2.00	1.97			
2	265	15.732	15.721	0.011	12985998	2.00	1.99			
							RPD = 0.72			
14 Benzo[a]pyrene										
1	254	16.461	16.453	0.008	226987	2.00	2.00			
2	265	16.477	16.470	0.007	9582790	2.00	2.00			
							RPD = 0.03			
16 Dibenz(a,h)anthracene										
1	254	17.507	17.513	-0.006	101842	4.00	4.01			
2	265	17.525	17.536	-0.011	1702687	4.00	4.00			
							RPD = 0.17			
9 Benzo[g,h,i]perylene										
1	254	18.267	18.286	-0.019	161013	4.00	4.02			
2	265	18.288	18.306	-0.018	3399170	4.00	4.00			
							RPD = 0.44			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.787	18.806	-0.019	228222	2.00	2.02			
2	265	18.810	18.824	-0.014	2392572	2.00	1.99			
							RPD = 1.35			

Reagents:

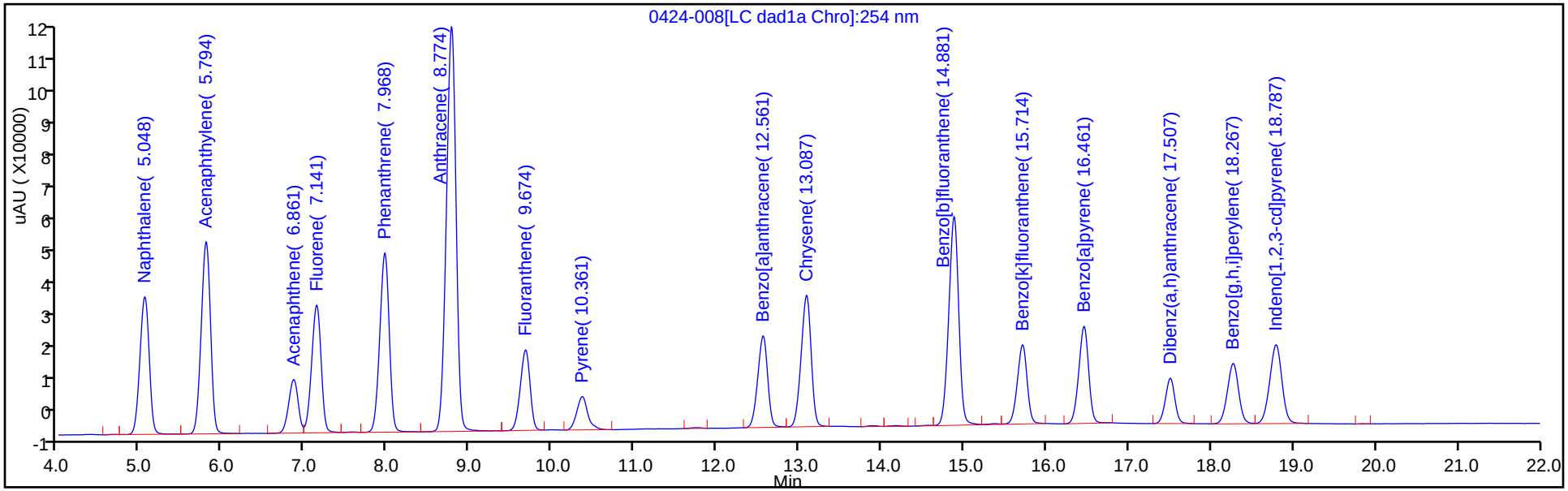
IH_PAH 1C7_00009 Amount Added: 1.00 Units: mL

Report Date: 27-Apr-2015 07:59:41 Chrom Revision: 2.2 07-Apr-2015 13:11:02

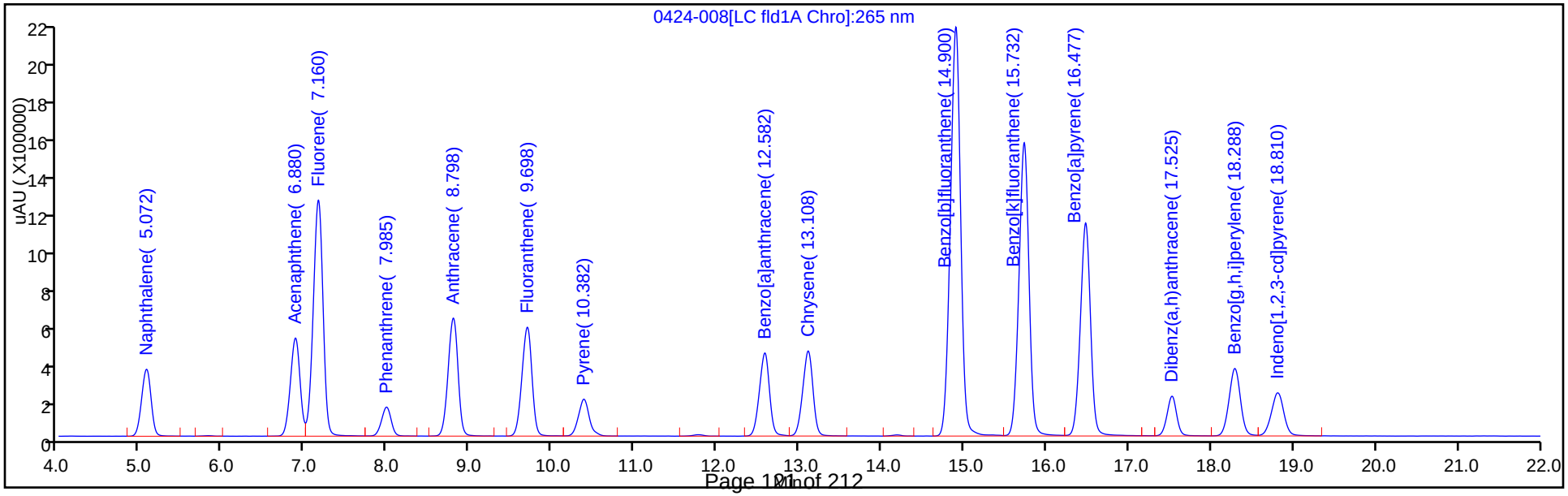
TestAmerica Phoenix

Data File:	\\chromna\g8\phoenix\chromdata\hplc2\20150424-9856.b\0424-008.d				
Injection Date:	24-Apr-2015 13:49:35	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	STD7			Worklist Smp#:	8
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
IH - HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: ICV 550-64803/2 Calibration Date: 06/02/2015 08:52

Instrument ID: HPLC2 Calib Start Date: 04/24/2015 10:26

GC Column: Supelcosil PAH ID: 4.60(mm) Calib End Date: 04/24/2015 13:49

Lab File ID: 0602-002.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Lin1		18600		<0.200	0.200	-3.6	40.0
Acenaphthylene	Lin1		13910		<0.500	0.400	15.1	40.0
Acenaphthene	Lin1		6945		<0.400	0.200	-26.0	40.0
Fluorene	Lin1		86400		<0.250	0.0400	11.1	40.0
Phenanthrene	Lin1		265800		<0.0500	0.0200	16.3	40.0
Anthracene	Lin1		569300		<0.0500	0.0200	11.7	40.0
Fluoranthene	Lin1		56100		<0.250	0.0400	1.5	40.0
Benzo[a]anthracene	Lin1		131850		<0.0500	0.0200	7.3	40.0
Chrysene	Lin1		198500		<0.0500	0.0200	16.6	40.0
Benzo[b]fluoranthene	Lin1		174525		<0.250	0.0400	38.9	40.0
Benzo[k]fluoranthene	Lin1		103350		<0.0500	0.0200	-27.6	40.0
Benzo[a]pyrene	Lin1		156300		<0.0500	0.0200	34.5	40.0
Dibenz(a,h)anthracene	Lin1		84675		<0.250	0.0400	-5.1	40.0
Benzo[g,h,i]perylene	Lin1		33725		<0.250	0.0400	-14.4	40.0
Indeno[1,2,3-cd]pyrene	Lin1		144750		<0.0500	0.0200	23.0	40.0
Pyrene	Lin1				<0.0500	0.0200	-100.0*	40.0

FORM VII 5506 (Modified)

ANALYTICAL DATA REVIEW CHECKLIST

SOP PE-IHD-008 R.3
Modified NIOSH 5506

SUM: 64943

Analysis Date: 060215	Batch/Worklist #: 64803/10355	Analyst: [illegible]

Description	Yes	No	NA[1]
1. Calibration Curve (7 levels are typical, 3 levels minimum)			
- All target compounds ($r \geq 0.995$ or $r^2 \geq 0.990$)	✓		
- Date/Batch of Initial Calibration: 042415/61918			
2. Opening ICV (Second Source Standard)			
- Reporting Level ICV (± 40% of target)	✓		
3. Continuing Calibration Verification (CCV) (Primary Standard)			
- CCV near highest standard concentration (± 20% of target)	✓		
- Every 10 field samples and at end of analysis	✓		
4. Method Blank			
- Analyze one FILTER Blank per batch	✓		
- Analyze one TUBE Blank per batch	✓		
5. LCS/LCSD prepared and analyzed with each batch (independently prepared or second source standard)			
- One pair per batch	✓		
- All recoveries are 50 – 150% and ≤ 30% RPD or historical	✓		
6. Initial Calibration Blank/Continuing Calibration Blank (ICB/CCB)			
- < RL	✓		
- Every 10 field samples, one before/following opening ICV and at end of analysis	✓		

Comments:

NCM:

Review Signatures:	Analyst: [illegible]	Date: 060315
	Reviewer: TMalone	Date: 060315

[1]) NA: Not Applicable

HPLC 2 – RUN LOGBOOK

Sequence: C:\HPCHEM\1\HPLC002\SEQUENCE\N5506\060215.S

Sequence Table:

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 1	CCB	N5506_~1	1	Sample		
2	Vial 2	ICV 582165	N5506_~1	1	Ctrl Samp		
3	Vial 3	ICV 582166	N5506_~1	1	Ctrl Samp		
4	Vial 1	CCB	N5506_~1	1	Sample		
5	Vial 4	MB 550-64794/1-A	N5506_~1	1	Sample		
6	Vial 5	MB 550-64790/1-A	N5506_~1	1	Sample		
7	Vial 6	MB 550-64792/1-A	N5506_~1	1	Sample		
8	Vial 7	LCS 550-64792/3-	N5506_~1	1	Sample		
9	Vial 8	LCSD 550-64792/4	N5506_~1	1	Sample		
10	Vial 1	CCB	N5506_~1	1	Sample		
11	Vial 9	550-45491-A-1-C	N5506_~1	1	Sample		
12	Vial 10	550-45491-A-1-A	N5506_~1	1	Sample		
13	Vial 12	550-45491-A-1-B	N5506_~1	1	Sample		
14	Vial 11	CCVIH 556709	N5506_~1	1	Ctrl Samp		
15	Vial 1	CCB	N5506_~1	1	Sample		

MW batch vials not in place, see seq below

Sequence: C:\HPCHEM\1\HPLC002\SEQUENCE\N5506\060215A.S

Sequence Table:

Method and Injection Info Part:

Line	Location	SampleName	Method	Inj	SampleType	InjVolume	DataFile
1	Vial 4	MB 550-64794/1-A	N5506_~1	1	Sample		
2	Vial 5	MB 550-64790/1-A	N5506_~1	1	Sample		
3	Vial 6	MB 550-64792/1-A	N5506_~1	1	Sample		
4	Vial 7	LCS 550-64792/3-	N5506_~1	1	Sample		
5	Vial 8	LCSD 550-64792/4	N5506_~1	1	Sample		
6	Vial 1	CCB	N5506_~1	1	Sample		
7	Vial 9	550-45491-A-1-C	N5506_~1	1	Sample		
8	Vial 10	550-45491-A-1-A	N5506_~1	1	Sample		
9	Vial 12	550-45491-A-1-B	N5506_~1	1	Sample		
10	Vial 11	CCVIH 556709	N5506_~1	1	Ctrl Samp		
11	Vial 1	CCB	N5506_~1	1	Sample		

Date Analyzed: 060215 Analyst:

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602-002.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Jun-2015 08:52:18 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV 582165
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 02-Jun-2015 10:32:19 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK048

First Level Reviewer: nelsonz Date: 02-Jun-2015 10:32:19

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										M
1	254	5.075	5.050	0.025	3720	0.2000	0.1927			M
2	265	5.094	5.072	0.022	36563	0.2000	0.2196			
							RPD = 13.05			
13 Acenaphthylene										
1	254	5.822	5.797	0.025	5564	0.4000	0.4604			
4 Acenaphthene										M
1	254	6.895	6.857	0.038	1389	0.2000	0.1481			M
2	265	6.901	6.880	0.021	53906	0.2000	0.2235			
							RPD = 40.58			
15 Fluorene										
1	254	7.162	7.144	0.018	3456	0.0400	0.0444			
2	265	7.186	7.157	0.029	134660	0.0400	0.0478			
							RPD = 7.32			
8 Phenanthrene										
1	254	7.982	7.970	0.012	5316	0.0200	0.0233			
2	265	7.999	7.988	0.011	17570	0.0200	0.0216			
							RPD = 7.21			
1 Anthracene										
1	254	8.795	8.777	0.018	11386	0.0200	0.0223			
2	265	8.816	8.802	0.014	65262	0.0200	0.0210			
							RPD = 6.34			
7 Fluoranthene										
1	254	9.695	9.677	0.018	2244	0.0400	0.0406			
2	265	9.716	9.695	0.021	59682	0.0400	0.0430			
							RPD = 5.82			
12 Benzo[a]anthracene										
1	254	12.562	12.550	0.012	2637	0.0200	0.0215			
2	265	12.571	12.575	-0.004	52019	0.0200	0.0231			
							RPD = 7.34			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
11 Chrysene										
1	254	13.095	13.077	0.018	3970	0.0200	0.0233			
2	265	13.104	13.100	0.004	52950	0.0200	0.0235			
							RPD = 0.61			
6 Benzo[b]fluoranthene										
1	254	14.869	14.883	-0.014	6981	0.0400	0.0556			
2	265	14.890	14.897	-0.007	228224	0.0400	0.0424			
							RPD = 26.79			
10 Benzo[k]fluoranthene										
1	254	15.682	15.703	-0.021	2067	0.0200	0.0145			
2	265	15.710	15.728	-0.018	163341	0.0200	0.0231			
							RPD = 45.80			
14 Benzo[a]pyrene										
1	254	16.442	16.457	-0.015	3126	0.0200	0.0269			
2	265	16.459	16.481	-0.022	120787	0.0200	0.0215			
							RPD = 22.44			
16 Dibenz(a,h)anthracene										
1	254	17.502	17.530	-0.028	3387	0.0400	0.0380			
2	265	17.532	17.546	-0.014	24019	0.0400	0.0481			
							RPD = 23.68			
9 Benzo[g,h,i]perylene										
1	254	18.275	18.310	-0.035	1349	0.0400	0.0342			
2	265	18.302	18.320	-0.018	38079	0.0400	0.0404			
							RPD = 16.47			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.775	18.823	-0.048	2895	0.0200	0.0246			
2	265	18.781	18.842	-0.061	15791	0.0200	0.0125			
							RPD = 65.48			

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

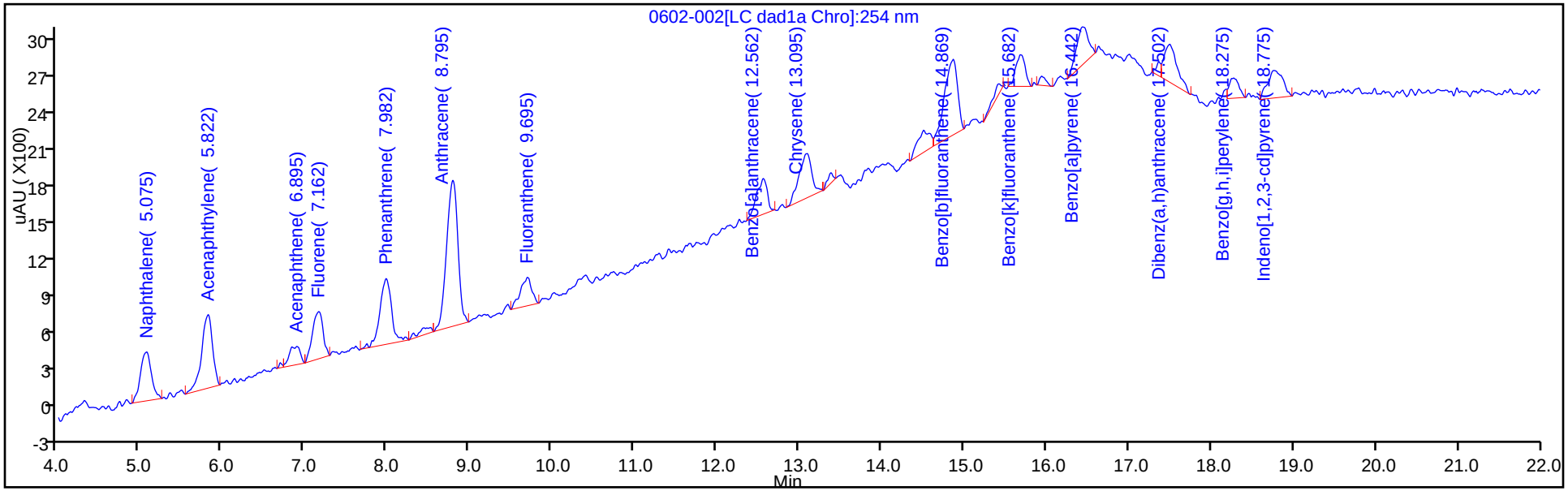
IH_PAH 2C1_00008 Amount Added: 1.00 Units: mL

Report Date: 02-Jun-2015 10:32:20 Chrom Revision: 2.2 14-May-2015 11:41:56

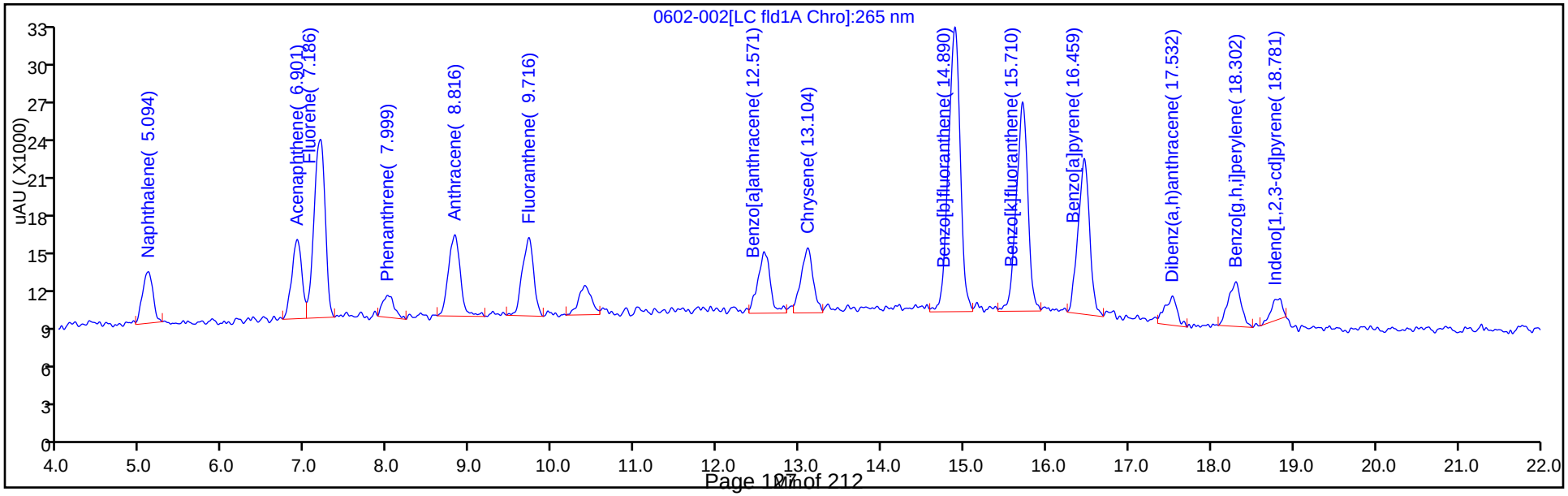
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602-002.d				
Injection Date:	02-Jun-2015 08:52:18	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	ICV			Worklist Smp#:	2
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
IH - HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: ICV 550-64803/3 Calibration Date: 06/02/2015 09:26

Instrument ID: HPLC2 Calib Start Date: 04/24/2015 10:26

GC Column: Supelcosil PAH ID: 4.60(mm) Calib End Date: 04/24/2015 13:49

Lab File ID: 0602-003.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Lin1		18876		0.567	0.500	13.3	40.0
Acenaphthylene	Lin1		13567		1.21	1.00	20.5	40.0
Acenaphthene	Lin1		8024		0.577	0.500	15.4	40.0
Fluorene	Lin1		87250		<0.250	0.100	17.0	40.0
Phenanthrene	Lin1		237620		0.0557	0.0500	11.4	40.0
Anthracene	Lin1		573520		0.0593	0.0500	18.6	40.0
Fluoranthene	Lin1		57490		<0.250	0.100	16.0	40.0
Pyrene	Lin1		54140		0.0589	0.0500	17.8	40.0
Benzo[a]anthracene	Lin1		131980		0.0582	0.0500	16.3	40.0
Chrysene	Lin1		193040		0.0595	0.0500	19.1	40.0
Benzo[b]fluoranthene	Lin1		145890		<0.250	0.100	17.0	40.0
Benzo[k]fluoranthene	Lin1		163080		0.0802	0.0500	60.3*	40.0
Benzo[a]pyrene	Lin1		212320		0.0928	0.0500	85.6*	40.0
Dibenz(a,h)anthracene	Lin1		51430		<0.250	0.100	8.8	40.0
Benzo[g,h,i]perylene	Lin1		49420		<0.250	0.100	23.8	40.0
Indeno[1,2,3-cd]pyrene	Lin1		129160		0.0561	0.0500	12.2	40.0

FORM VII 5506 (Modified)

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602-003.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Jun-2015 09:26:13 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV 582166
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 02-Jun-2015 10:32:35 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK048

First Level Reviewer: nelsonz Date: 02-Jun-2015 10:33:26

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.075	5.050	0.025	9438	0.5000	0.5665			
2	265	5.098	5.072	0.026	100286	0.5000	0.6725			
							RPD = 17.12			
13 Acenaphthylene										
1	254	5.822	5.797	0.025	13567	1.00	1.21			
4 Acenaphthene										
1	254	6.889	6.857	0.032	4012	0.5000	0.5771			
2	265	6.916	6.880	0.036	143428	0.5000	0.6492			
							RPD = 11.75			
15 Fluorene										
1	254	7.169	7.144	0.025	8725	0.1000	0.1170			
2	265	7.196	7.157	0.039	351638	0.1000	0.1323			
							RPD = 12.29			
8 Phenanthrene										
1	254	8.002	7.970	0.032	11881	0.0500	0.0557			
2	265	8.014	7.988	0.026	44764	0.0500	0.0650			
							RPD = 15.35			
1 Anthracene										
1	254	8.815	8.777	0.038	28676	0.0500	0.0593			
2	265	8.842	8.802	0.040	158288	0.0500	0.0565			
							RPD = 4.77			
7 Fluoranthene										
1	254	9.715	9.677	0.038	5749	0.1000	0.1160			
2	265	9.738	9.695	0.043	147102	0.1000	0.1148			
							RPD = 1.02			
5 Pyrene										
1	254	10.408	10.370	0.038	2707	0.0500	0.0589			
2	265	10.426	10.386	0.040	60125	0.0500	0.0593			
							RPD = 0.78			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.595	12.550	0.045	6599	0.0500	0.0582			
2	265	12.611	12.575	0.036	111027	0.0500	0.0549			
							RPD = 5.76			
11 Chrysene										
1	254	13.108	13.077	0.031	9652	0.0500	0.0595			
2	265	13.129	13.100	0.029	116537	0.0500	0.0565			
							RPD = 5.20			
6 Benzo[b]fluoranthene										
1	254	14.895	14.883	0.012	14589	0.1000	0.1170			
2	265	14.915	14.897	0.018	558879	0.1000	0.1132			
							RPD = 3.23			
10 Benzo[k]fluoranthene										
1	254	15.715	15.703	0.012	8154	0.0500	0.0802			
2	265	15.736	15.728	0.008	398990	0.0500	0.0592			
							RPD = 30.10			
14 Benzo[a]pyrene										
1	254	16.462	16.457	0.005	10616	0.0500	0.0928			
2	265	16.481	16.481	0.000	288924	0.0500	0.0566			
							RPD = 48.54			
16 Dibenz(a,h)anthracene										
1	254	17.508	17.530	-0.022	5143	0.1000	0.1088			
2	265	17.521	17.546	-0.025	52415	0.1000	0.1151			
							RPD = 5.59			
9 Benzo[g,h,i]perylene										
1	254	18.288	18.310	-0.022	4942	0.1000	0.1238			
2	265	18.292	18.320	-0.028	102590	0.1000	0.1163			
							RPD = 6.23			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.802	18.823	-0.021	6458	0.0500	0.0561			
2	265	18.788	18.842	-0.054	70950	0.0500	0.0584			
							RPD = 3.96			

Reagents:

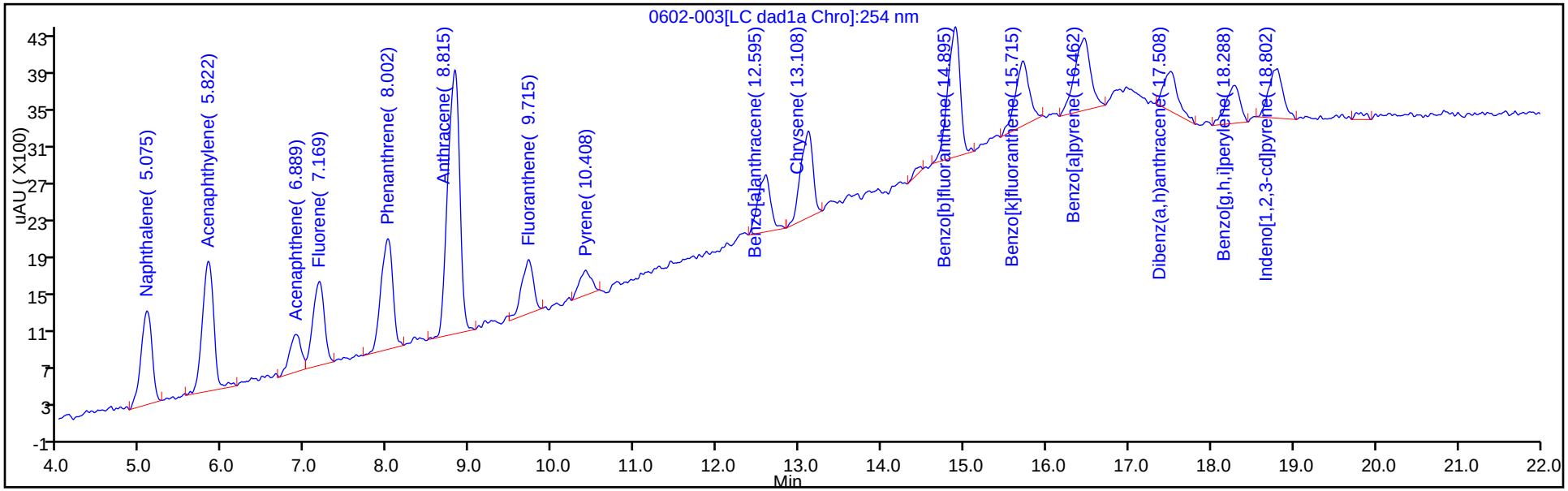
IH_PAH 2C2_00007 Amount Added: 1.00 Units: mL

Report Date: 02-Jun-2015 10:33:26 Chrom Revision: 2.2 14-May-2015 11:41:56

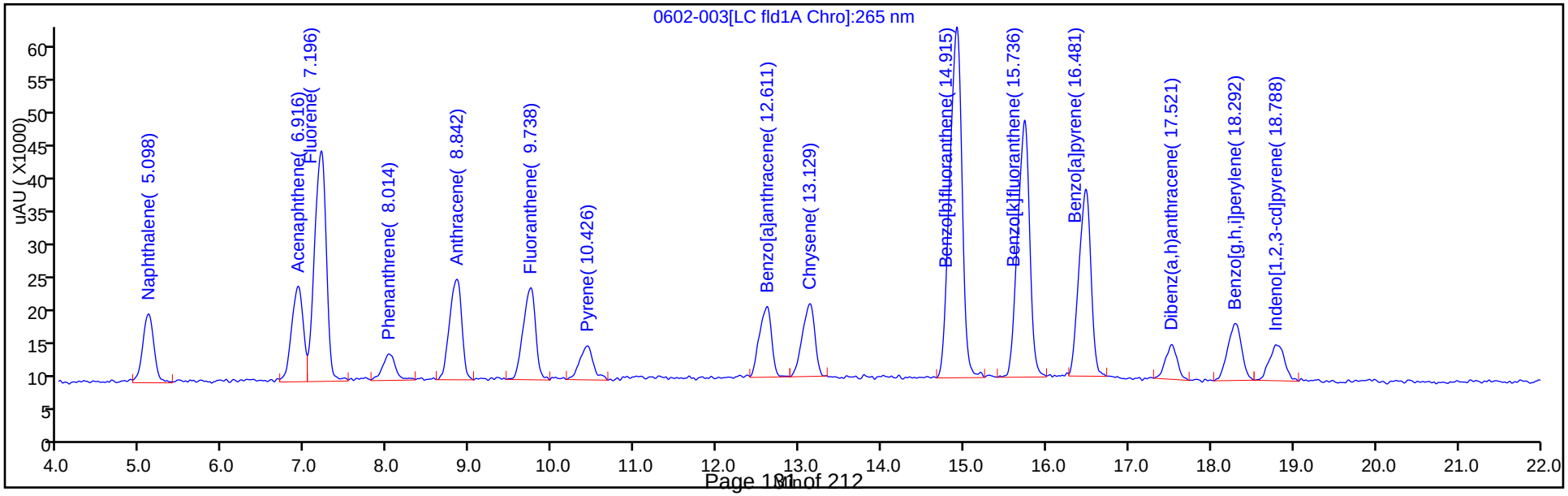
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602-003.d				
Injection Date:	02-Jun-2015 09:26:13	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	ICV			Worklist Smp#:	3
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
IH - HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: ICV 550-64803/3 Calibration Date: 06/02/2015 09:26

Instrument ID: HPLC2 Calib Start Date: 04/24/2015 10:26

GC Column: ID: Calib End Date: 04/24/2015 13:49

Lab File ID: 0602-003.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Lin1		200572		0.673	0.500	34.5	40.0
Acenaphthene	Lin1		286856		0.649	0.500	29.8	40.0
Fluorene	Lin1		3516380		<0.250	0.100	32.3	40.0
Phenanthrene	Lin1		895280		0.0650	0.0500	30.0	40.0
Anthracene	Lin1		3165760		0.0565	0.0500	13.1	40.0
Fluoranthene	Lin1		1471020		<0.250	0.100	14.8	40.0
Pyrene	Lin1		1202500		0.0594	0.0500	18.7	40.0
Benzo[a]anthracene	Lin1		2220540		0.0549	0.0500	9.8	40.0
Chrysene	Lin1		2330740		0.0565	0.0500	13.0	40.0
Benzo[b]fluoranthene	Lin1		5588790		<0.250	0.100	13.2	40.0
Benzo[k]fluoranthene	Lin1		7979800		0.0592	0.0500	18.4	40.0
Benzo[a]pyrene	Lin1		5778480		0.0566	0.0500	13.1	40.0
Dibenz(a,h)anthracene	Lin1		524150		<0.250	0.100	15.1	40.0
Benzo[g,h,i]perylene	Lin1		1025900		<0.250	0.100	16.3	40.0
Indeno[1,2,3-cd]pyrene	Lin1		1419000		0.0584	0.0500	16.8	40.0

FORM VII 5506 (Modified)

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602-003.D
Lims ID: ICV
Client ID:
Sample Type: ICV
Inject. Date: 02-Jun-2015 09:26:13 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: ICV 582166
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 02-Jun-2015 10:32:35 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK048

First Level Reviewer: nelsonz Date: 02-Jun-2015 10:33:26

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.075	5.050	0.025	9438	0.5000	0.5665			
2	265	5.098	5.072	0.026	100286	0.5000	0.6725			
							RPD = 17.12			
13 Acenaphthylene										
1	254	5.822	5.797	0.025	13567	1.00	1.21			
4 Acenaphthene										
1	254	6.889	6.857	0.032	4012	0.5000	0.5771			
2	265	6.916	6.880	0.036	143428	0.5000	0.6492			
							RPD = 11.75			
15 Fluorene										
1	254	7.169	7.144	0.025	8725	0.1000	0.1170			
2	265	7.196	7.157	0.039	351638	0.1000	0.1323			
							RPD = 12.29			
8 Phenanthrene										
1	254	8.002	7.970	0.032	11881	0.0500	0.0557			
2	265	8.014	7.988	0.026	44764	0.0500	0.0650			
							RPD = 15.35			
1 Anthracene										
1	254	8.815	8.777	0.038	28676	0.0500	0.0593			
2	265	8.842	8.802	0.040	158288	0.0500	0.0565			
							RPD = 4.77			
7 Fluoranthene										
1	254	9.715	9.677	0.038	5749	0.1000	0.1160			
2	265	9.738	9.695	0.043	147102	0.1000	0.1148			
							RPD = 1.02			
5 Pyrene										
1	254	10.408	10.370	0.038	2707	0.0500	0.0589			
2	265	10.426	10.386	0.040	60125	0.0500	0.0593			
							RPD = 0.78			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.595	12.550	0.045	6599	0.0500	0.0582			
2	265	12.611	12.575	0.036	111027	0.0500	0.0549			
							RPD = 5.76			
11 Chrysene										
1	254	13.108	13.077	0.031	9652	0.0500	0.0595			
2	265	13.129	13.100	0.029	116537	0.0500	0.0565			
							RPD = 5.20			
6 Benzo[b]fluoranthene										
1	254	14.895	14.883	0.012	14589	0.1000	0.1170			
2	265	14.915	14.897	0.018	558879	0.1000	0.1132			
							RPD = 3.23			
10 Benzo[k]fluoranthene										
1	254	15.715	15.703	0.012	8154	0.0500	0.0802			
2	265	15.736	15.728	0.008	398990	0.0500	0.0592			
							RPD = 30.10			
14 Benzo[a]pyrene										
1	254	16.462	16.457	0.005	10616	0.0500	0.0928			
2	265	16.481	16.481	0.000	288924	0.0500	0.0566			
							RPD = 48.54			
16 Dibenz(a,h)anthracene										
1	254	17.508	17.530	-0.022	5143	0.1000	0.1088			
2	265	17.521	17.546	-0.025	52415	0.1000	0.1151			
							RPD = 5.59			
9 Benzo[g,h,i]perylene										
1	254	18.288	18.310	-0.022	4942	0.1000	0.1238			
2	265	18.292	18.320	-0.028	102590	0.1000	0.1163			
							RPD = 6.23			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.802	18.823	-0.021	6458	0.0500	0.0561			
2	265	18.788	18.842	-0.054	70950	0.0500	0.0584			
							RPD = 3.96			

Reagents:

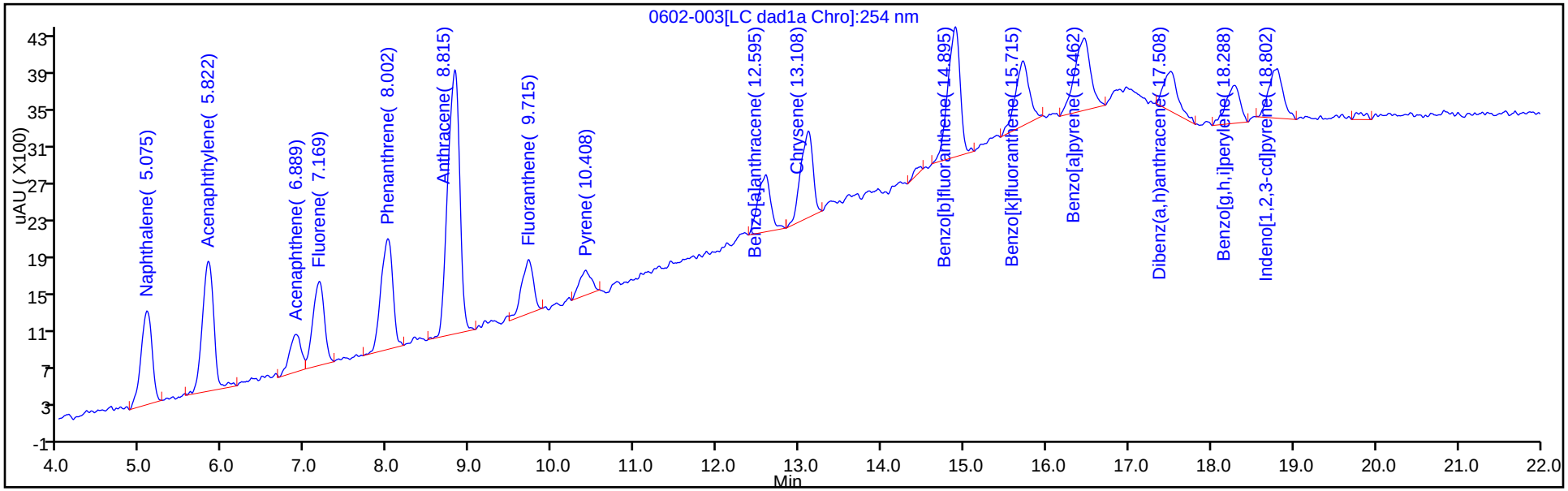
IH_PAH 2C2_00007 Amount Added: 1.00 Units: mL

Report Date: 02-Jun-2015 10:33:26 Chrom Revision: 2.2 14-May-2015 11:41:56

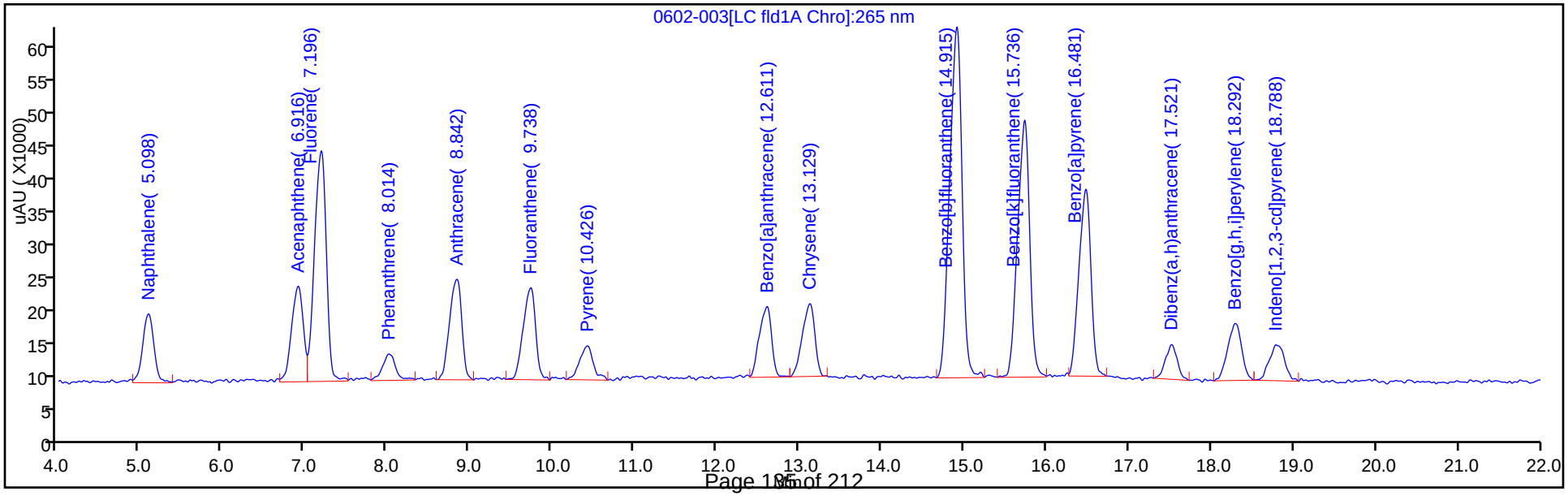
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602-003.d				
Injection Date:	02-Jun-2015 09:26:13	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	ICV			Worklist Smp#:	3
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
IH - HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: CCVIH 550-64803/14 Calibration Date: 06/02/2015 17:58

Instrument ID: HPLC2 Calib Start Date: 04/24/2015 10:26

GC Column: Supelcosil PAH ID: 4.60(mm) Calib End Date: 04/24/2015 13:49

Lab File ID: 0602A014.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Lin1		16565		21.6	20.0	8.0	20.0
Acenaphthylene	Lin1		11589		43.1	40.0	7.7	20.0
Acenaphthene	Lin1		6576		21.4	20.0	7.2	20.0
Fluorene	Lin1		77645		4.28	4.00	6.9	20.0
Phenanthrene	Lin1		214414		2.12	2.00	5.9	20.0
Anthracene	Lin1		491629		2.10	2.00	5.0	20.0
Fluoranthene	Lin1		49096		4.22	4.00	5.4	20.0
Pyrene	Lin1		45204		2.07	2.00	3.4	20.0
Benzo[a]anthracene	Lin1		114818		2.12	2.00	6.2	20.0
Chrysene	Lin1		169447		2.16	2.00	7.9	20.0
Benzo[b]fluoranthene	Lin1		130396		4.21	4.00	5.2	20.0
Benzo[k]fluoranthene	Lin1		99341		2.14	2.00	6.8	20.0
Benzo[a]pyrene	Lin1		121267		2.13	2.00	6.7	20.0
Dibenz(a,h)anthracene	Lin1		28833		4.55	4.00	13.9	20.0
Benzo[g,h,i]perylene	Lin1		46492		4.64	4.00	15.9	20.0
Indeno[1,2,3-cd]pyrene	Lin1		120812		2.14	2.00	6.9	20.0

FORM VII 5506 (Modified)

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A014.D
Lims ID: CCVIH
Client ID:
Sample Type: CCVIH
Inject. Date: 02-Jun-2015 17:58:07 ALS Bottle#: 11 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVIH 556709
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 03-Jun-2015 09:17:15 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK052

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:17:15

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.083	5.050	0.033	331303	20.0	21.6			
2	265	5.105	5.072	0.033	3419513	20.0	24.3			
							RPD = 11.59			
13 Acenaphthylene										
1	254	5.837	5.797	0.040	463554	40.0	43.1			
4 Acenaphthene										
1	254	6.903	6.857	0.046	131510	20.0	21.4			
2	265	6.923	6.880	0.043	5134853	20.0	24.4			
							RPD = 12.90			
15 Fluorene										
1	254	7.183	7.144	0.039	310578	4.00	4.28			
2	265	7.200	7.157	0.043	12411311	4.00	4.83			
							RPD = 12.20			
8 Phenanthrene										
1	254	8.010	7.970	0.040	428828	2.00	2.12			
2	265	8.032	7.988	0.044	1377533	2.00	2.19			
							RPD = 3.34			
1 Anthracene										
1	254	8.817	8.777	0.040	983258	2.00	2.10			
2	265	8.834	8.802	0.032	5483307	2.00	2.09			
							RPD = 0.35			
7 Fluoranthene										
1	254	9.710	9.677	0.033	196385	4.00	4.22			
2	265	9.731	9.695	0.036	5100967	4.00	4.18			
							RPD = 0.81			
5 Pyrene										
1	254	10.396	10.370	0.026	90408	2.00	2.07			
2	265	10.415	10.386	0.029	1805471	2.00	2.02			
							RPD = 2.27			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.576	12.550	0.026	229636	2.00	2.12			
2	265	12.593	12.575	0.018	3891147	2.00	2.09			
							RPD = 1.50			
11 Chrysene										
1	254	13.096	13.077	0.019	338894	2.00	2.16			
2	265	13.118	13.100	0.018	4205607	2.00	2.18			
							RPD = 1.12			
6 Benzo[b]fluoranthene										
1	254	14.870	14.883	-0.013	521585	4.00	4.21			
2	265	14.893	14.897	-0.004	19469914	4.00	4.16			
							RPD = 1.09			
10 Benzo[k]fluoranthene										
1	254	15.696	15.703	-0.007	198681	2.00	2.14			
2	265	15.714	15.728	-0.014	13723768	2.00	2.10			
							RPD = 1.65			
14 Benzo[a]pyrene										
1	254	16.443	16.457	-0.014	242533	2.00	2.13			
2	265	16.463	16.481	-0.018	10147178	2.00	2.11			
							RPD = 0.93			
16 Dibenz(a,h)anthracene										
1	254	17.490	17.530	-0.040	115333	4.00	4.55			
2	265	17.507	17.546	-0.039	1925463	4.00	4.53			
							RPD = 0.57			
9 Benzo[g,h,i]perylene										
1	254	18.256	18.310	-0.054	185966	4.00	4.64			
2	265	18.277	18.320	-0.043	3867371	4.00	4.55			
							RPD = 1.93			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.776	18.823	-0.047	241623	2.00	2.14			
2	265	18.796	18.842	-0.046	2565806	2.00	2.14			
							RPD = 0.06			

Reagents:

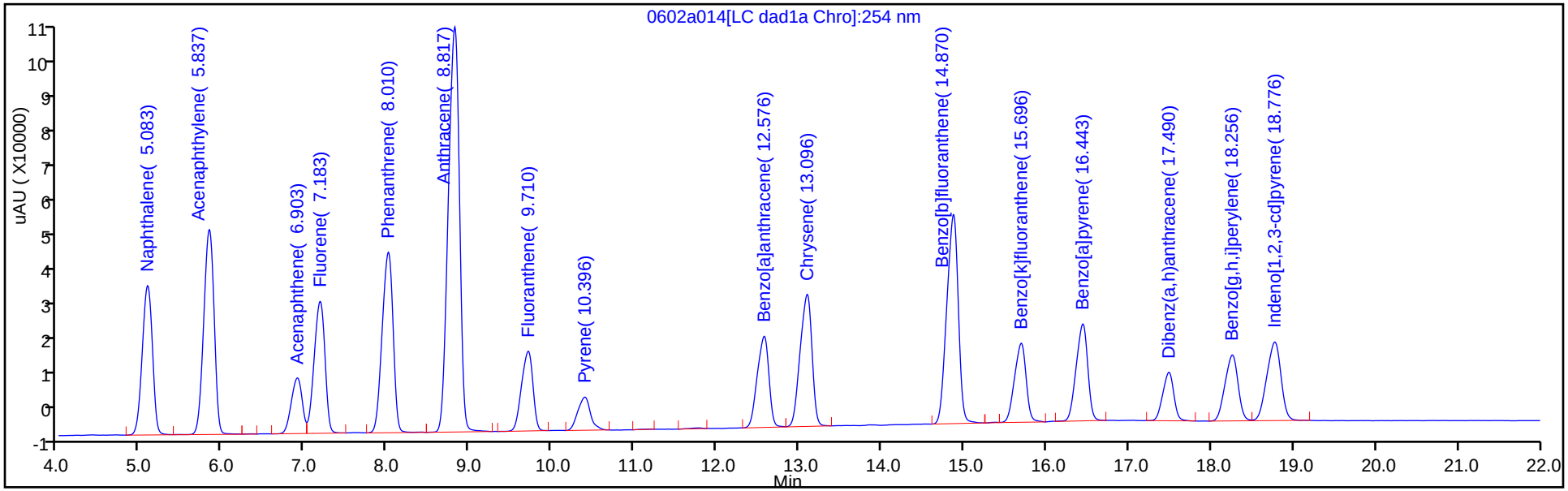
IH_PAH 1C7_00009 Amount Added: 1.00 Units: mL

Report Date: 03-Jun-2015 09:17:15 Chrom Revision: 2.2 14-May-2015 11:41:56

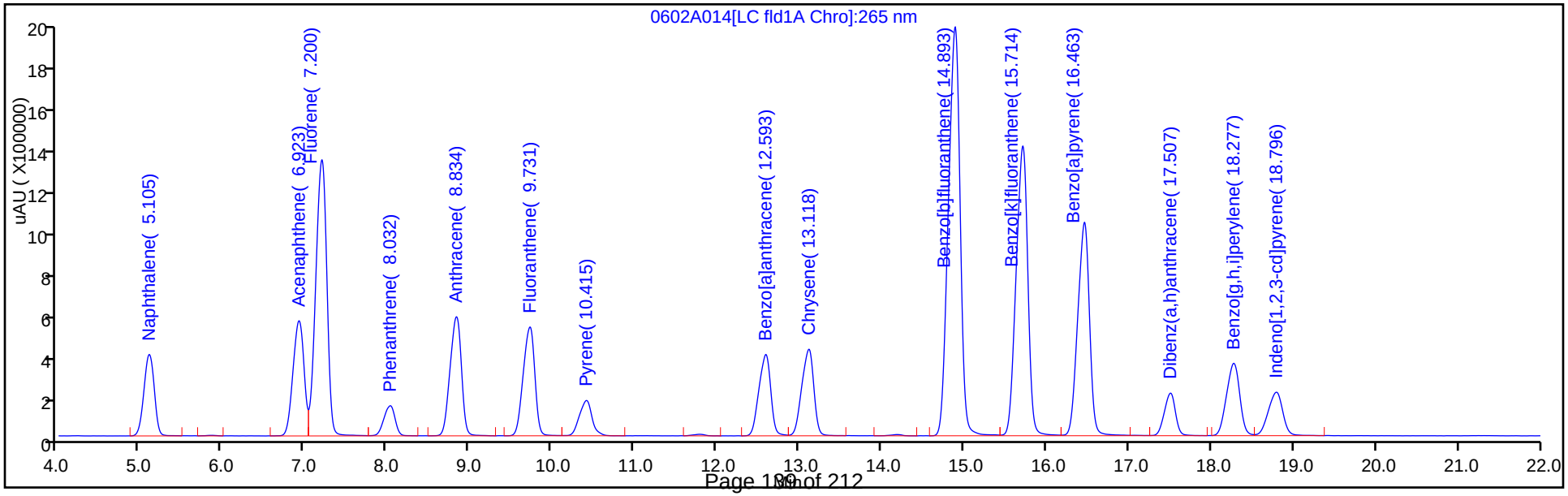
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a014.d				
Injection Date:	02-Jun-2015 17:58:07	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCVIH			Worklist Smp#:	14
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM VII
IH - HPLC/IC CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Lab Sample ID: CCVIH 550-64803/14 Calibration Date: 06/02/2015 17:58

Instrument ID: HPLC2 Calib Start Date: 04/24/2015 10:26

GC Column: ID: Calib End Date: 04/24/2015 13:49

Lab File ID: 0602A014.D Conc. Units: ug/mL

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Naphthalene	Lin1		170976		24.3	20.0	21.3*	20.0
Acenaphthene	Lin1		256743		24.4	20.0	21.9*	20.0
Fluorene	Lin1		3102828		4.83	4.00	20.8*	20.0
Phenanthrene	Lin1		688767		2.19	2.00	9.5	20.0
Anthracene	Lin1		2741654		2.09	2.00	4.6	20.0
Fluoranthene	Lin1		1275242		4.18	4.00	4.6	20.0
Pyrene	Lin1		902736		2.02	2.00	1.1	20.0
Benzo[a]anthracene	Lin1		1945574		2.09	2.00	4.6	20.0
Chrysene	Lin1		2102804		2.18	2.00	9.1	20.0
Benzo[b]fluoranthene	Lin1		4867479		4.16	4.00	4.1	20.0
Benzo[k]fluoranthene	Lin1		6861884		2.10	2.00	5.1	20.0
Benzo[a]pyrene	Lin1		5073589		2.11	2.00	5.7	20.0
Dibenz(a,h)anthracene	Lin1		481366		4.53	4.00	13.2	20.0
Benzo[g,h,i]perylene	Lin1		966843		4.55	4.00	13.7	20.0
Indeno[1,2,3-cd]pyrene	Lin1		1282903		2.14	2.00	6.8	20.0

FORM VII 5506 (Modified)

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A014.D
Lims ID: CCVIH
Client ID:
Sample Type: CCVIH
Inject. Date: 02-Jun-2015 17:58:07 ALS Bottle#: 11 Worklist Smp#: 14
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: CCVIH 556709
Operator ID: zn1 Instrument ID: HPLC2
Sublist: chrom-NIOSH5506*sub1

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 03-Jun-2015 09:17:15 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK052

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:17:15

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.083	5.050	0.033	331303	20.0	21.6			
2	265	5.105	5.072	0.033	3419513	20.0	24.3			
							RPD = 11.59			
13 Acenaphthylene										
1	254	5.837	5.797	0.040	463554	40.0	43.1			
4 Acenaphthene										
1	254	6.903	6.857	0.046	131510	20.0	21.4			
2	265	6.923	6.880	0.043	5134853	20.0	24.4			
							RPD = 12.90			
15 Fluorene										
1	254	7.183	7.144	0.039	310578	4.00	4.28			
2	265	7.200	7.157	0.043	12411311	4.00	4.83			
							RPD = 12.20			
8 Phenanthrene										
1	254	8.010	7.970	0.040	428828	2.00	2.12			
2	265	8.032	7.988	0.044	1377533	2.00	2.19			
							RPD = 3.34			
1 Anthracene										
1	254	8.817	8.777	0.040	983258	2.00	2.10			
2	265	8.834	8.802	0.032	5483307	2.00	2.09			
							RPD = 0.35			
7 Fluoranthene										
1	254	9.710	9.677	0.033	196385	4.00	4.22			
2	265	9.731	9.695	0.036	5100967	4.00	4.18			
							RPD = 0.81			
5 Pyrene										
1	254	10.396	10.370	0.026	90408	2.00	2.07			
2	265	10.415	10.386	0.029	1805471	2.00	2.02			
							RPD = 2.27			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.576	12.550	0.026	229636	2.00	2.12			
2	265	12.593	12.575	0.018	3891147	2.00	2.09			
							RPD = 1.50			
11 Chrysene										
1	254	13.096	13.077	0.019	338894	2.00	2.16			
2	265	13.118	13.100	0.018	4205607	2.00	2.18			
							RPD = 1.12			
6 Benzo[b]fluoranthene										
1	254	14.870	14.883	-0.013	521585	4.00	4.21			
2	265	14.893	14.897	-0.004	19469914	4.00	4.16			
							RPD = 1.09			
10 Benzo[k]fluoranthene										
1	254	15.696	15.703	-0.007	198681	2.00	2.14			
2	265	15.714	15.728	-0.014	13723768	2.00	2.10			
							RPD = 1.65			
14 Benzo[a]pyrene										
1	254	16.443	16.457	-0.014	242533	2.00	2.13			
2	265	16.463	16.481	-0.018	10147178	2.00	2.11			
							RPD = 0.93			
16 Dibenz(a,h)anthracene										
1	254	17.490	17.530	-0.040	115333	4.00	4.55			
2	265	17.507	17.546	-0.039	1925463	4.00	4.53			
							RPD = 0.57			
9 Benzo[g,h,i]perylene										
1	254	18.256	18.310	-0.054	185966	4.00	4.64			
2	265	18.277	18.320	-0.043	3867371	4.00	4.55			
							RPD = 1.93			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.776	18.823	-0.047	241623	2.00	2.14			
2	265	18.796	18.842	-0.046	2565806	2.00	2.14			
							RPD = 0.06			

Reagents:

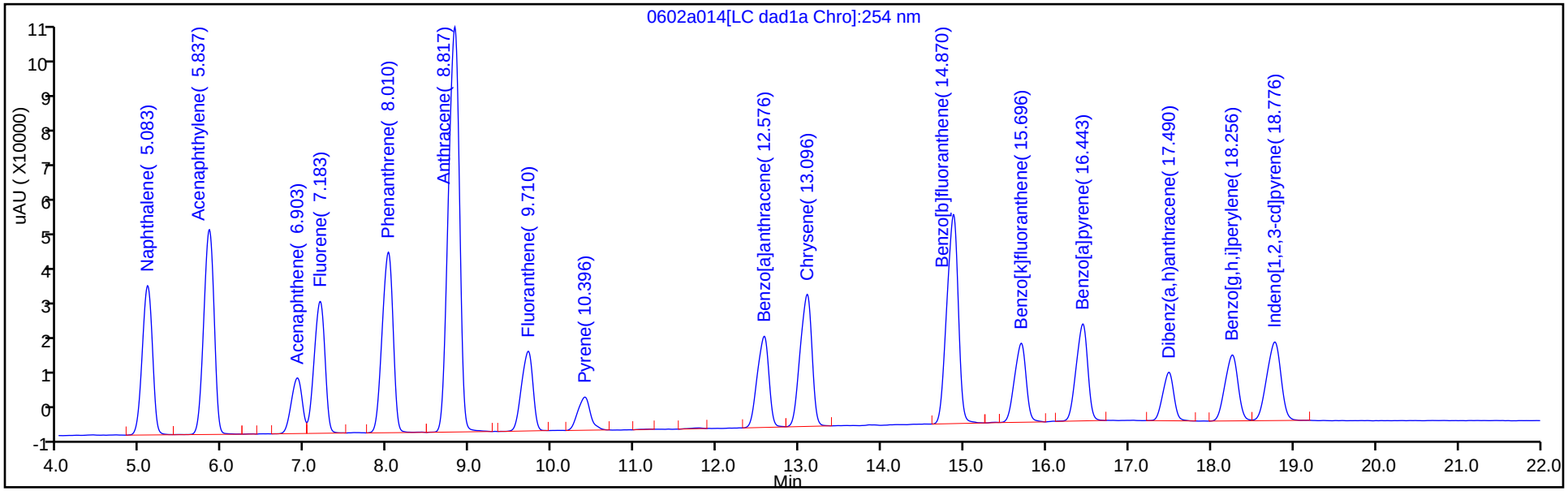
IH_PAH 1C7_00009 Amount Added: 1.00 Units: mL

Report Date: 03-Jun-2015 09:17:15 Chrom Revision: 2.2 14-May-2015 11:41:56

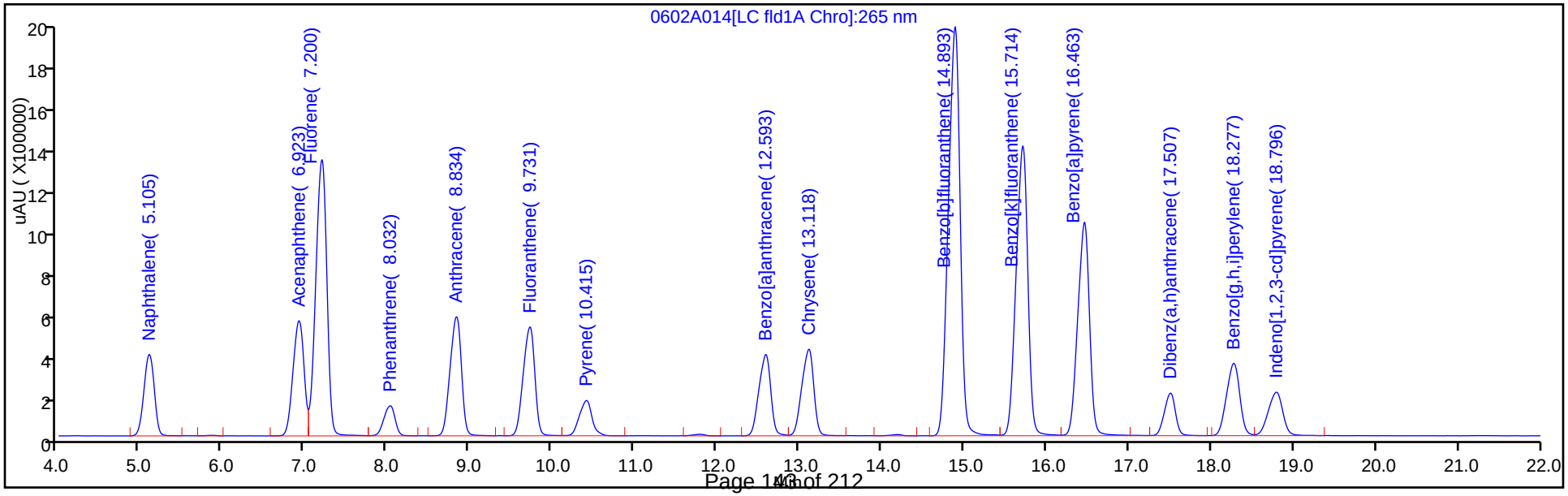
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a014.d				
Injection Date:	02-Jun-2015 17:58:07	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCVIH			Worklist Smp#:	14
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 550-64790/1-A
Matrix: Air
Lab File ID: 0602A006.D
Analysis Method: 5506 Back
Date Collected:
Extraction Method: Tube prep/Back
Date Extracted: 06/02/2015 08:30
Sample wt/vol: 1(Sample)
Date Analyzed: 06/02/2015 13:26
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 20(uL)
GC Column: Supelcosil PAH ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64803
Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<2.00		2.00
208-96-8	Acenaphthylene	<2.50		2.50
120-12-7	Anthracene	<0.250		0.250
86-73-7	Fluorene	<0.500		0.500
91-20-3	Naphthalene	<1.00		1.00
85-01-8	Phenanthrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A006.D				
Lims ID:	MB 550-64790/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Jun-2015 13:26:40	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 550-64790/1-A				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:07:51	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:09:03

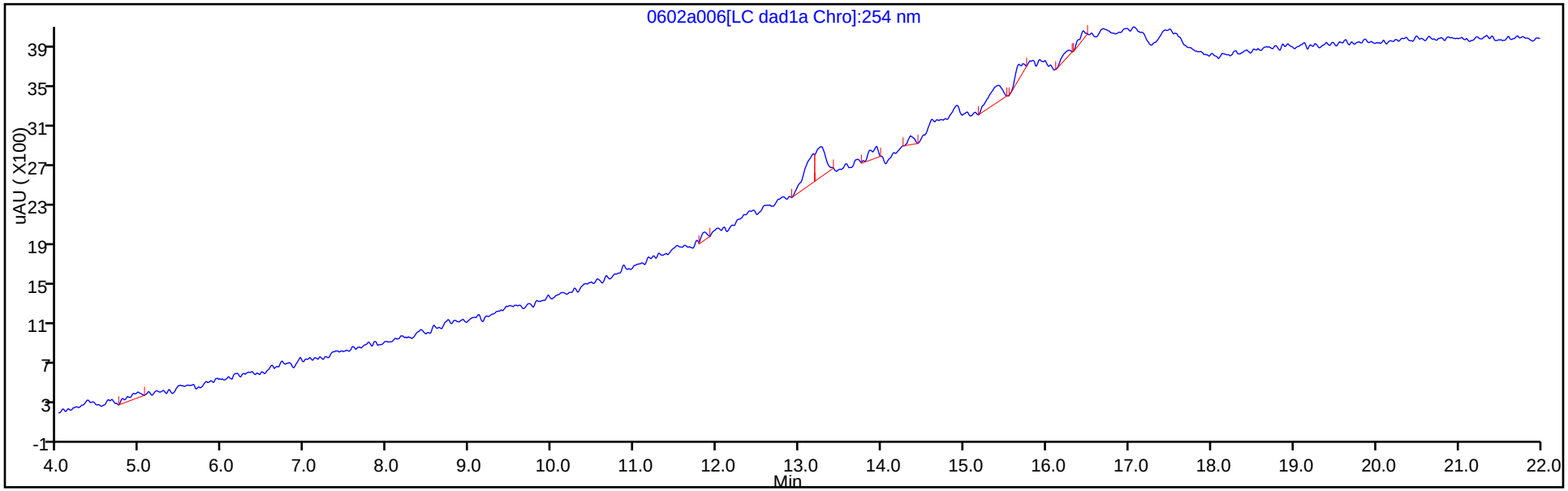
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:09:03 Chrom Revision: 2.2 14-May-2015 11:41:56

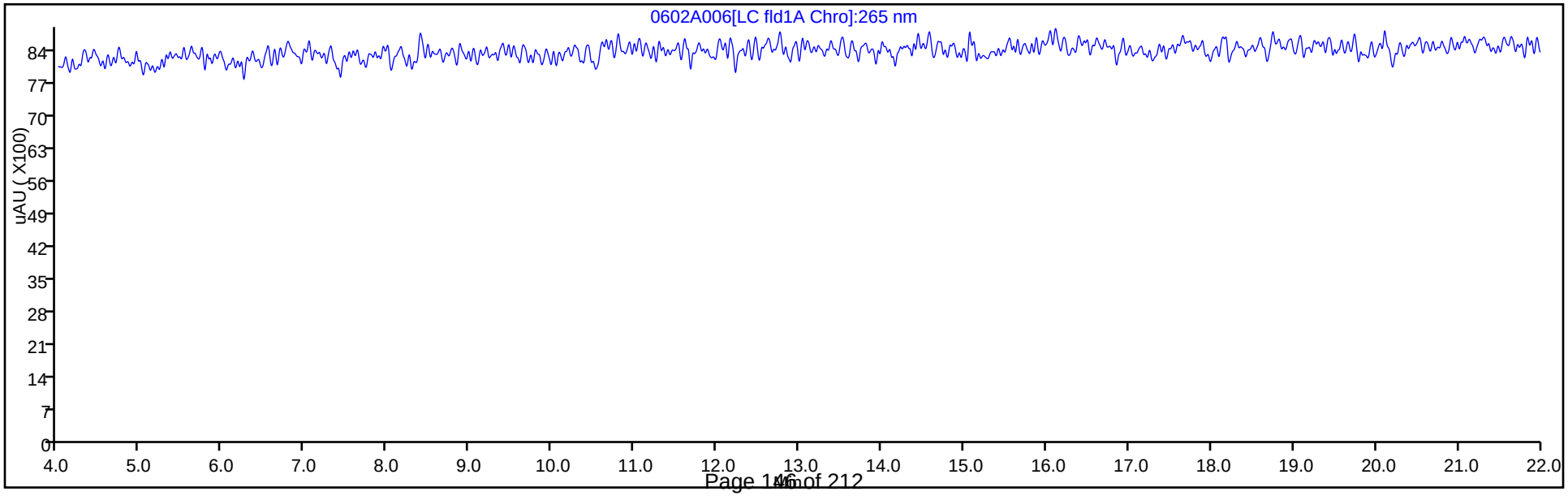
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a006.d				
Injection Date:	02-Jun-2015 13:26:40	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	MB 550-64790/1-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 550-64790/1-A

Matrix: Air | Lab File ID: 0602A006.D

Analysis Method: 5506 Back | Date Collected:

Extraction Method: Tube prep/Back | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 13:26

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.250		0.250
205-99-2	Benzo[b]fluoranthene	<0.500		0.500
50-32-8	Benzo[a]pyrene	<0.250		0.250
191-24-2	Benzo[g,h,i]perylene	<0.500		0.500
207-08-9	Benzo[k]fluoranthene	<0.250		0.250
218-01-9	Chrysene	<0.250		0.250
53-70-3	Dibenz(a,h)anthracene	<0.500		0.500
206-44-0	Fluoranthene	<0.500		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	<0.250		0.250
129-00-0	Pyrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A006.D				
Lims ID:	MB 550-64790/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Jun-2015 13:26:40	ALS Bottle#:	5	Worklist Smp#:	6
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 550-64790/1-A				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:07:51	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:09:03

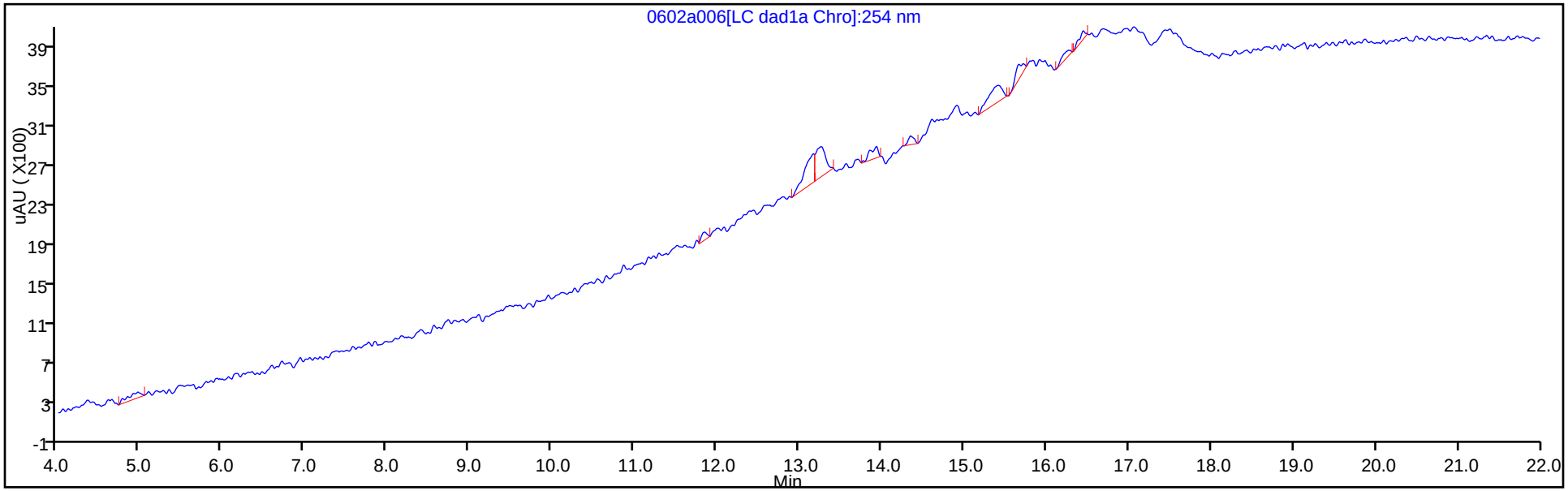
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:09:03 Chrom Revision: 2.2 14-May-2015 11:41:56

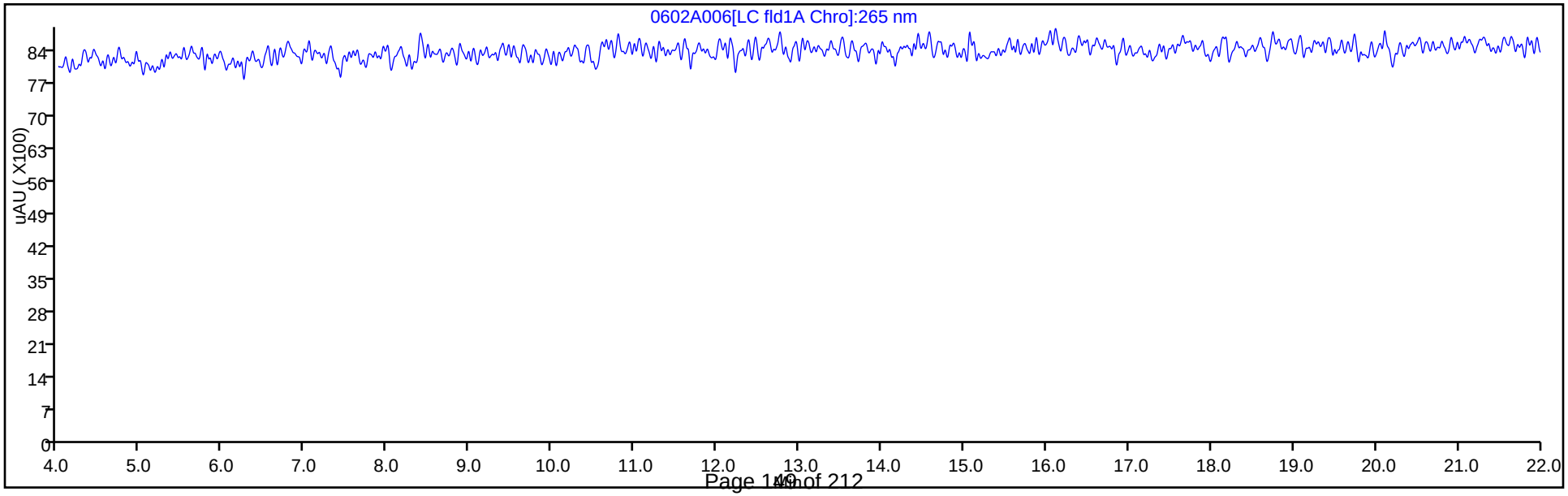
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a006.d				
Injection Date:	02-Jun-2015 13:26:40	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	MB 550-64790/1-A			Worklist Smp#:	6
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 550-64792/1-A
Matrix: Air
Lab File ID: 0602A007.D
Analysis Method: 5506 Front
Date Collected:
Extraction Method: Tube prep/Front
Date Extracted: 06/02/2015 08:30
Sample wt/vol: 1(Sample)
Date Analyzed: 06/02/2015 14:00
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 20(uL)
GC Column: Supelcosil PAH ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64803
Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<2.00		2.00
208-96-8	Acenaphthylene	<2.50		2.50
120-12-7	Anthracene	<0.250		0.250
86-73-7	Fluorene	<0.500		0.500
91-20-3	Naphthalene	<1.00		1.00
85-01-8	Phenanthrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A007.D				
Lims ID:	MB 550-64792/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Jun-2015 14:00:39	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 550-64792/1-A				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:07:51	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:09:16

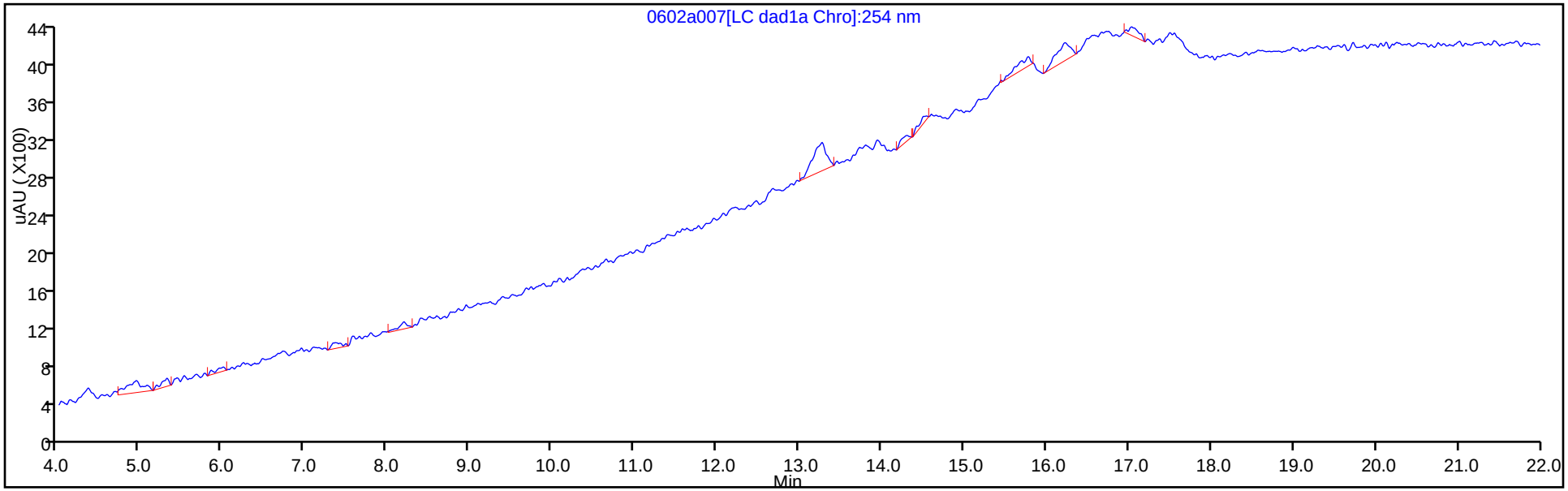
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:09:16 Chrom Revision: 2.2 14-May-2015 11:41:56

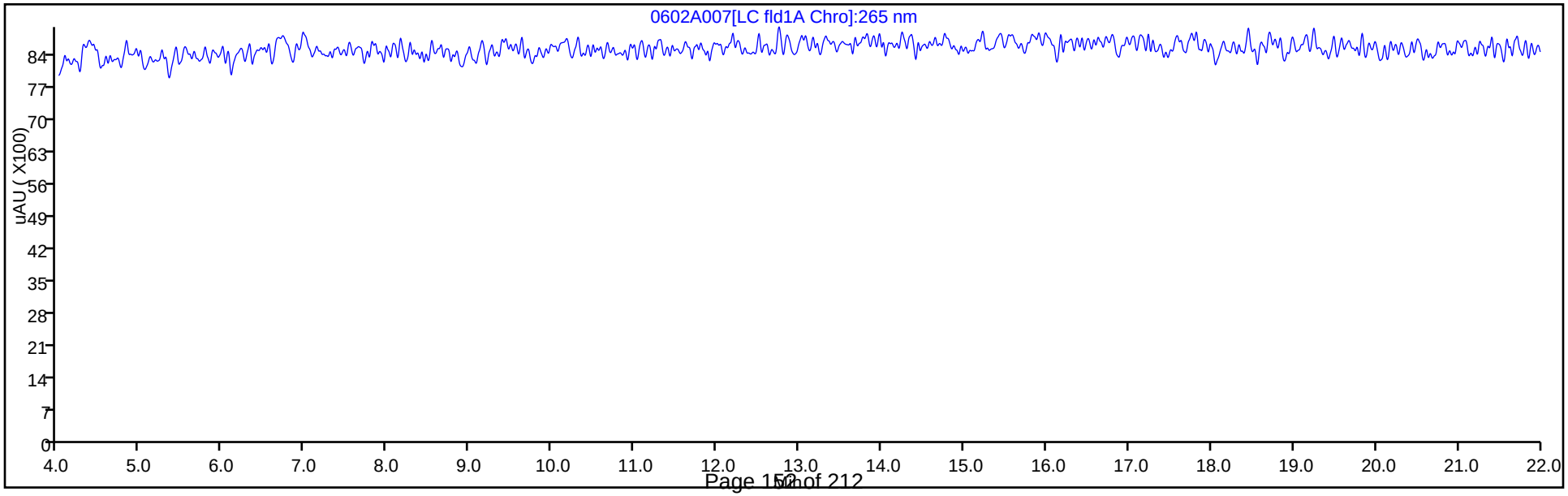
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a007.d				
Injection Date:	02-Jun-2015 14:00:39	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	MB 550-64792/1-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 550-64792/1-A
Matrix: Air
Lab File ID: 0602A007.D
Analysis Method: 5506 Front
Date Collected:
Extraction Method: Tube prep/Front
Date Extracted: 06/02/2015 08:30
Sample wt/vol: 1(Sample)
Date Analyzed: 06/02/2015 14:00
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 20(uL)
GC Column: ID:
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64803
Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.250		0.250
205-99-2	Benzo[b]fluoranthene	<0.500		0.500
50-32-8	Benzo[a]pyrene	<0.250		0.250
191-24-2	Benzo[g,h,i]perylene	<0.500		0.500
207-08-9	Benzo[k]fluoranthene	<0.250		0.250
218-01-9	Chrysene	<0.250		0.250
53-70-3	Dibenz(a,h)anthracene	<0.500		0.500
206-44-0	Fluoranthene	<0.500		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	<0.250		0.250
129-00-0	Pyrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A007.D				
Lims ID:	MB 550-64792/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Jun-2015 14:00:39	ALS Bottle#:	6	Worklist Smp#:	7
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 550-64792/1-A				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:07:51	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:09:16

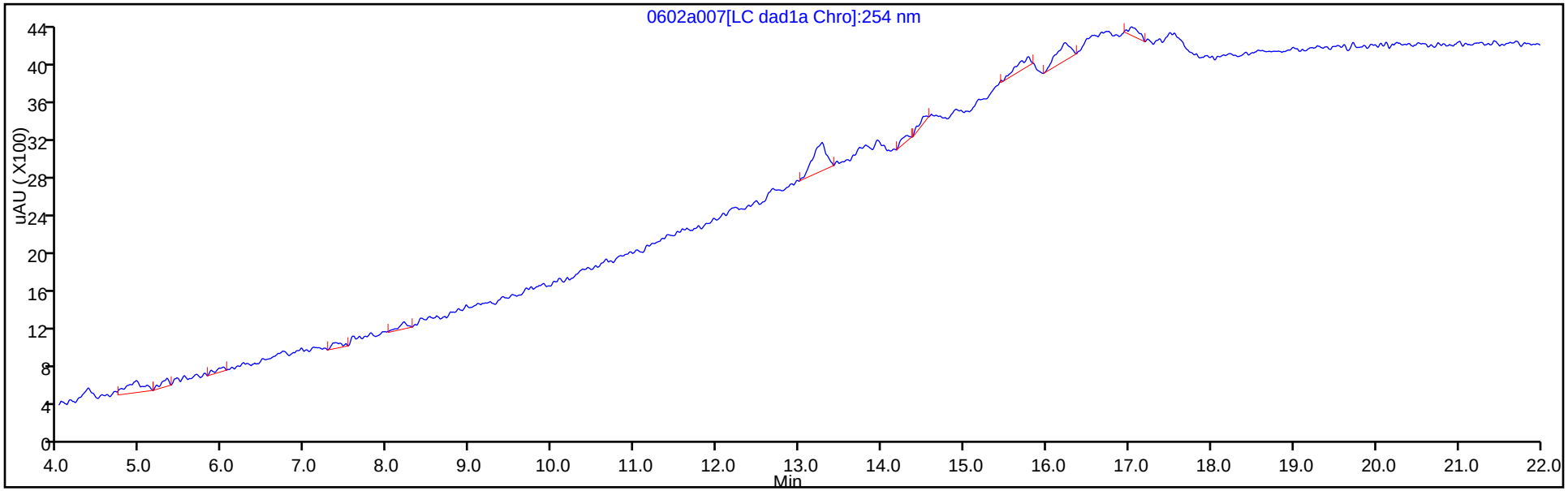
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:09:16 Chrom Revision: 2.2 14-May-2015 11:41:56

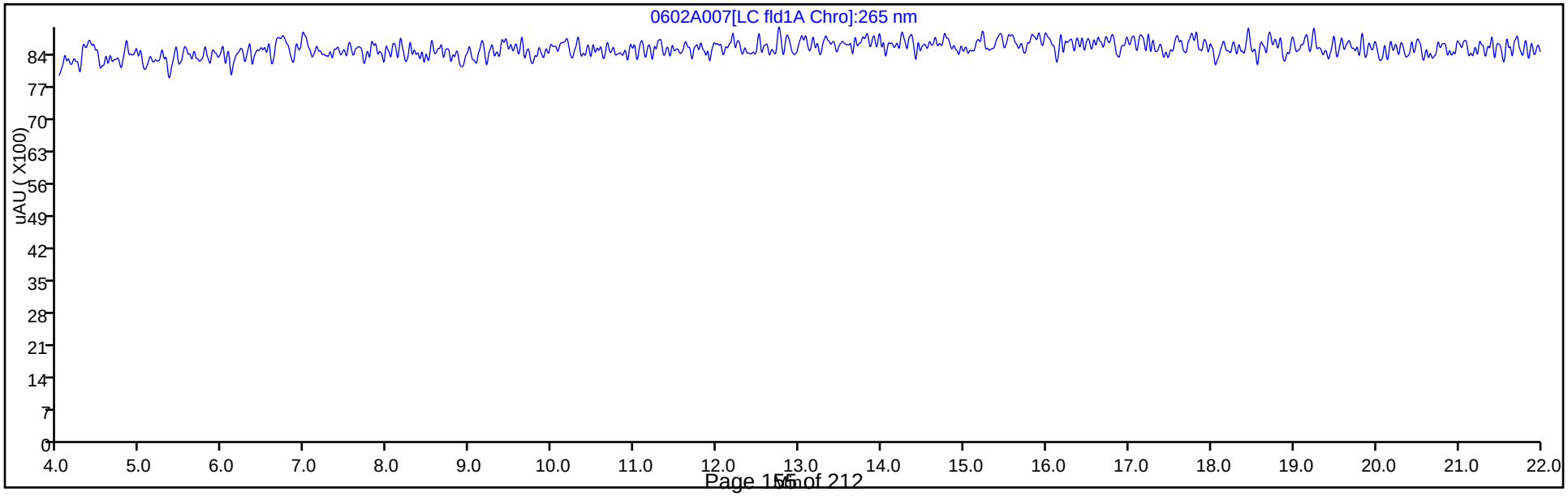
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a007.d				
Injection Date:	02-Jun-2015 14:00:39	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	MB 550-64792/1-A			Worklist Smp#:	7
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 550-64794/1-A
Matrix: Air
Lab File ID: 0602A005.D
Analysis Method: 5506 (Modified)
Date Collected:
Extraction Method: Filter Prep
Date Extracted: 06/02/2015 08:30
Sample wt/vol: 1(Sample)
Date Analyzed: 06/02/2015 12:52
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 20(uL)
GC Column: Supelcosil PAH ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64803
Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<2.00		2.00
208-96-8	Acenaphthylene	<2.50		2.50
120-12-7	Anthracene	<0.250		0.250
86-73-7	Fluorene	<0.500		0.500
91-20-3	Naphthalene	<1.00		1.00
85-01-8	Phenanthrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A005.D				
Lims ID:	MB 550-64794/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Jun-2015 12:52:48	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 550-64794/1-A				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:07:51	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:08:51

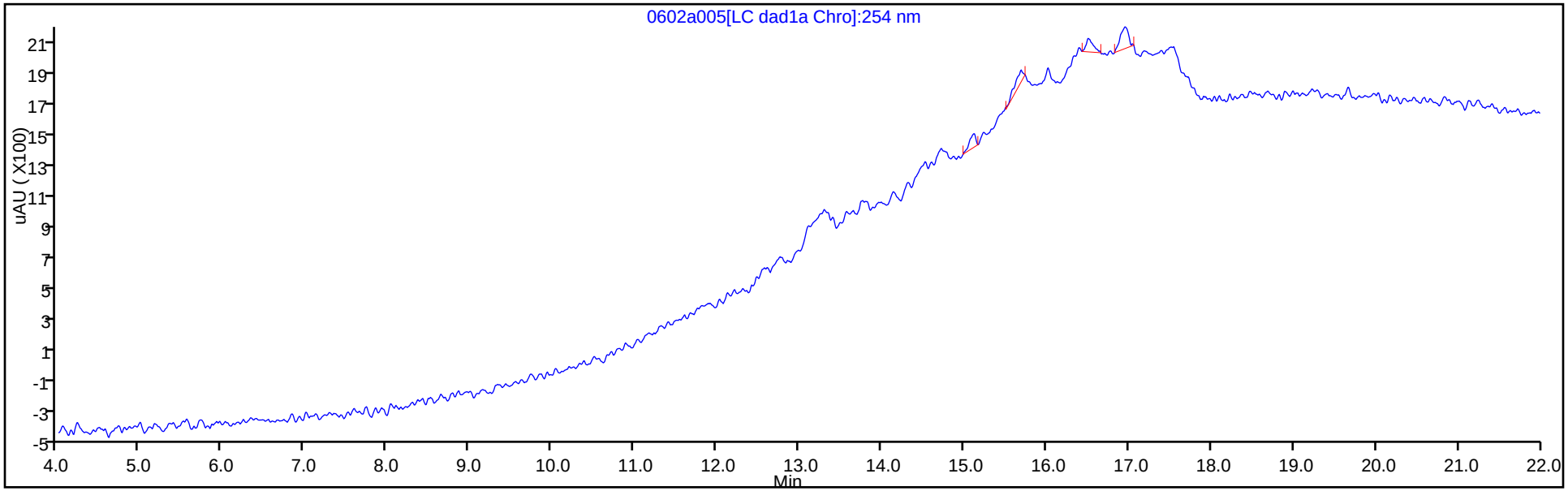
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:08:52 Chrom Revision: 2.2 14-May-2015 11:41:56

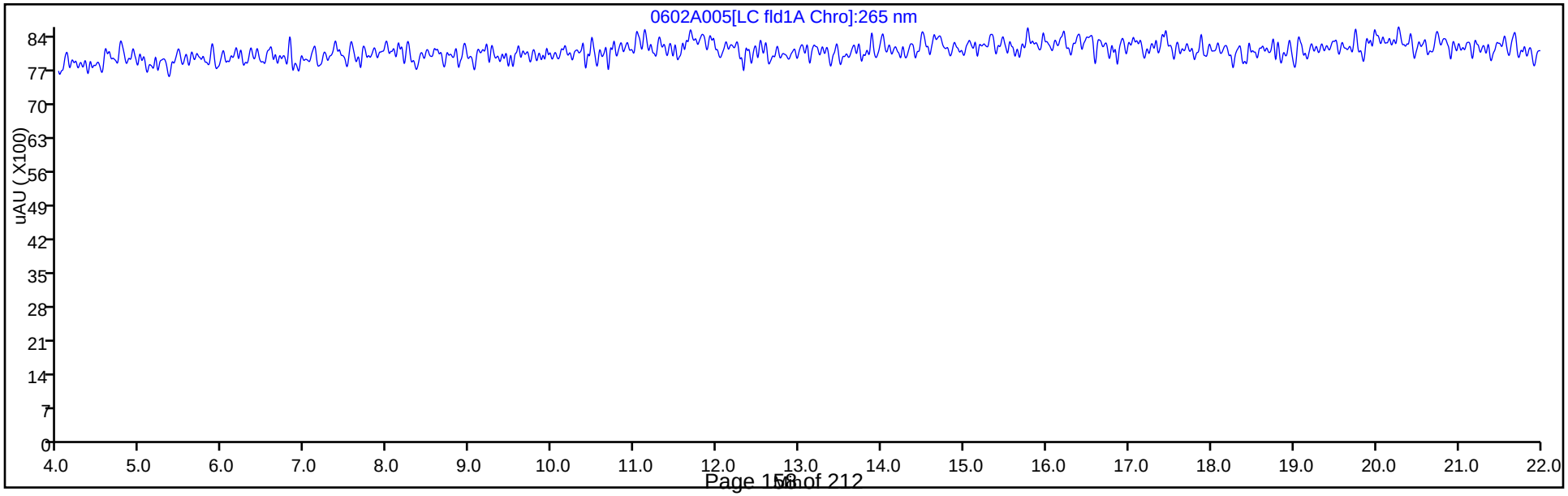
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a005.d				
Injection Date:	02-Jun-2015 12:52:48	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	MB 550-64794/1-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 550-64794/1-A

Matrix: Air | Lab File ID: 0602A005.D

Analysis Method: 5506 (Modified) | Date Collected:

Extraction Method: Filter Prep | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 12:52

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.250		0.250
205-99-2	Benzo[b]fluoranthene	<0.500		0.500
50-32-8	Benzo[a]pyrene	<0.250		0.250
191-24-2	Benzo[g,h,i]perylene	<0.500		0.500
207-08-9	Benzo[k]fluoranthene	<0.250		0.250
218-01-9	Chrysene	<0.250		0.250
53-70-3	Dibenz(a,h)anthracene	<0.500		0.500
206-44-0	Fluoranthene	<0.500		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	<0.250		0.250
129-00-0	Pyrene	<0.250		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A005.D				
Lims ID:	MB 550-64794/1-A				
Client ID:					
Sample Type:	MB				
Inject. Date:	02-Jun-2015 12:52:48	ALS Bottle#:	4	Worklist Smp#:	5
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	MB 550-64794/1-A				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:07:51	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:08:51

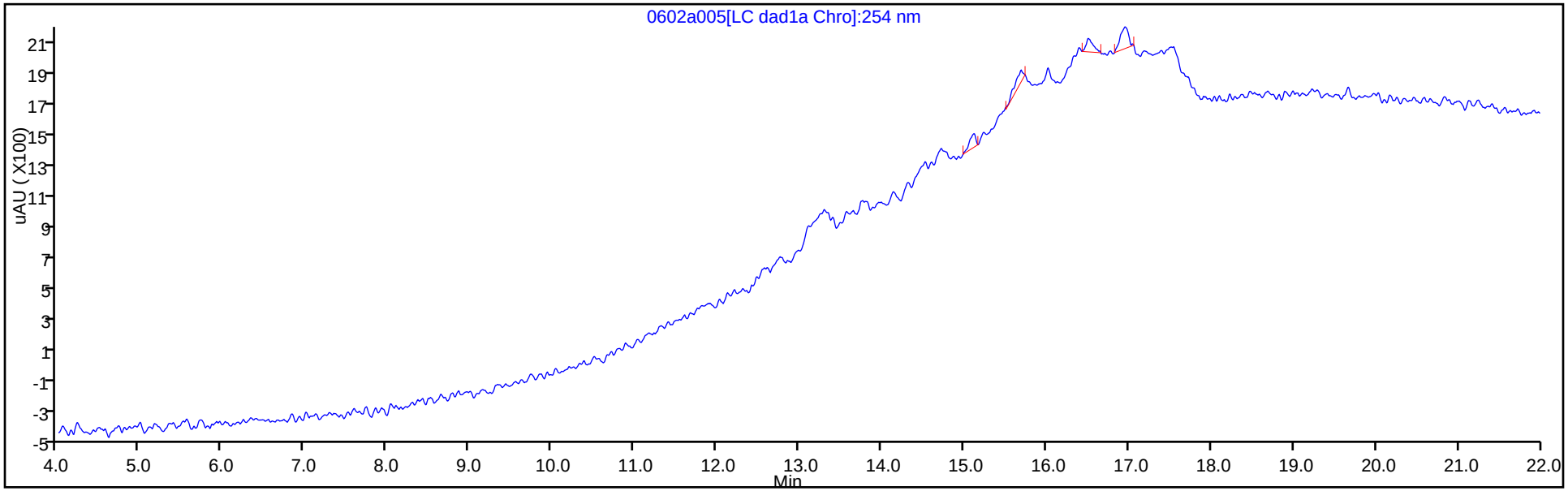
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:08:52 Chrom Revision: 2.2 14-May-2015 11:41:56

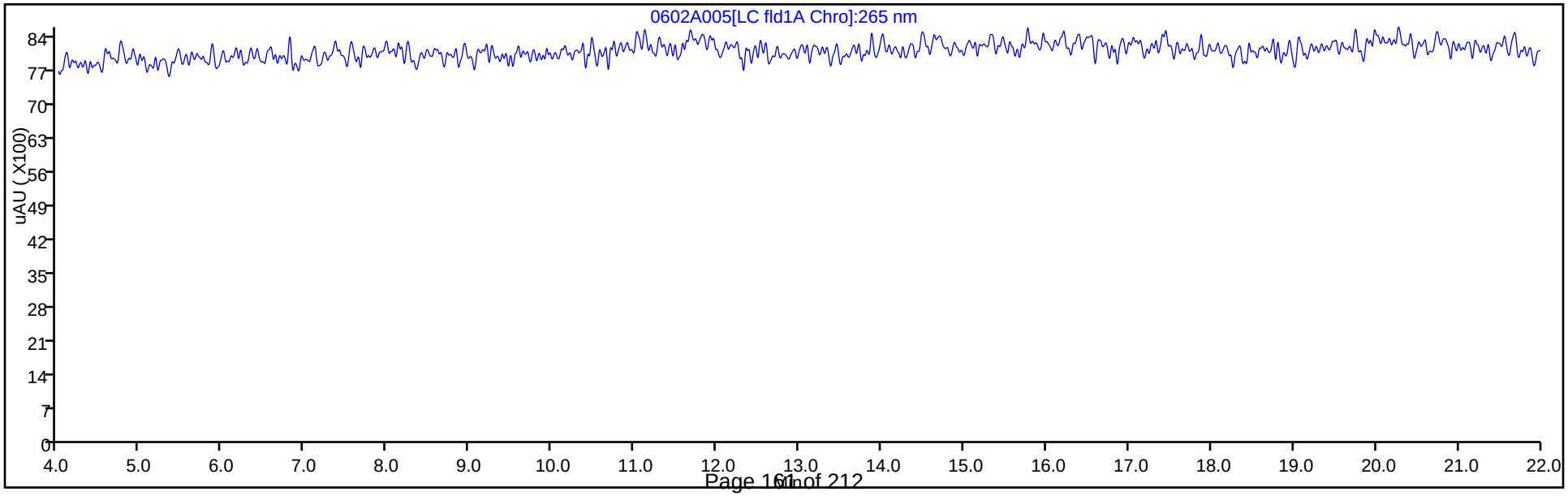
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a005.d				
Injection Date:	02-Jun-2015 12:52:48	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	MB 550-64794/1-A			Worklist Smp#:	5
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID:
Lab Sample ID: CCB 550-64803/1
Matrix: Air
Lab File ID: 0602-001.D
Analysis Method: 5506 (Modified)
Date Collected:
Extraction Method:
Date Extracted:
Sample wt/vol: 1(mL)
Date Analyzed: 06/02/2015 08:18
Con. Extract Vol.:
Dilution Factor: 1
Injection Volume: 20(uL)
GC Column: Supelcosil PAH ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64803
Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<0.400		0.400
208-96-8	Acenaphthylene	<0.500		0.500
120-12-7	Anthracene	<0.0500		0.0500
86-73-7	Fluorene	<0.250		0.250
91-20-3	Naphthalene	<0.200		0.200
85-01-8	Phenanthrene	<0.0500		0.0500

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602-001.D				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	02-Jun-2015 08:18:22	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCB				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	02-Jun-2015 10:32:35	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK048		

First Level Reviewer: nelsonz Date: 02-Jun-2015 10:32:35

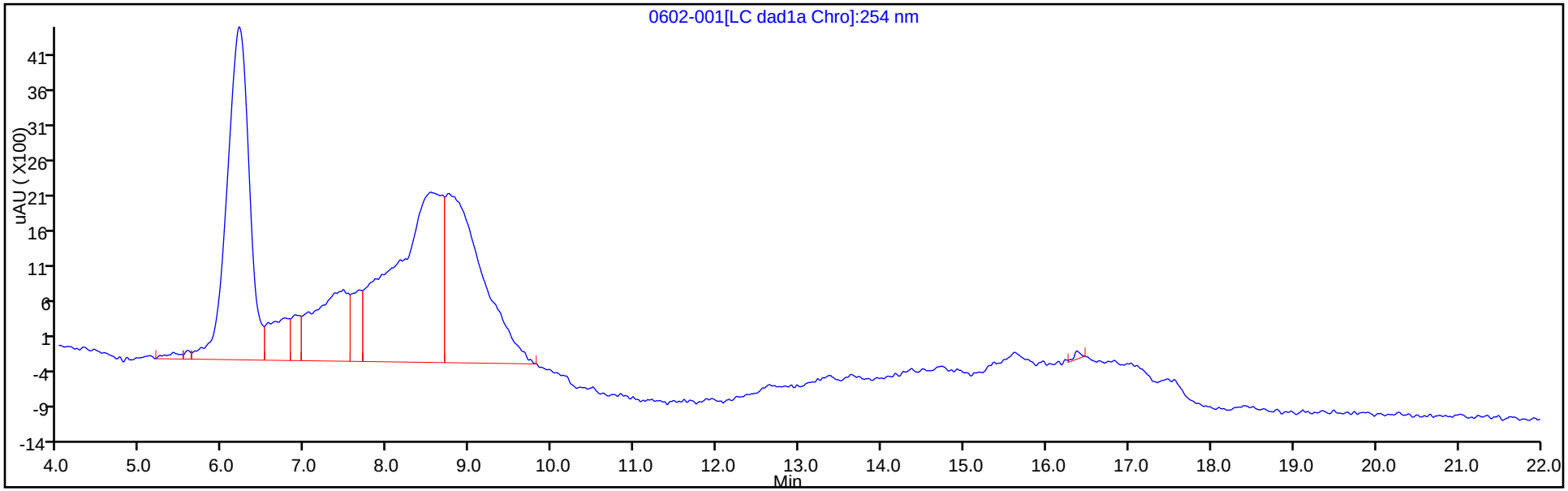
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 02-Jun-2015 10:32:35 Chrom Revision: 2.2 14-May-2015 11:41:56

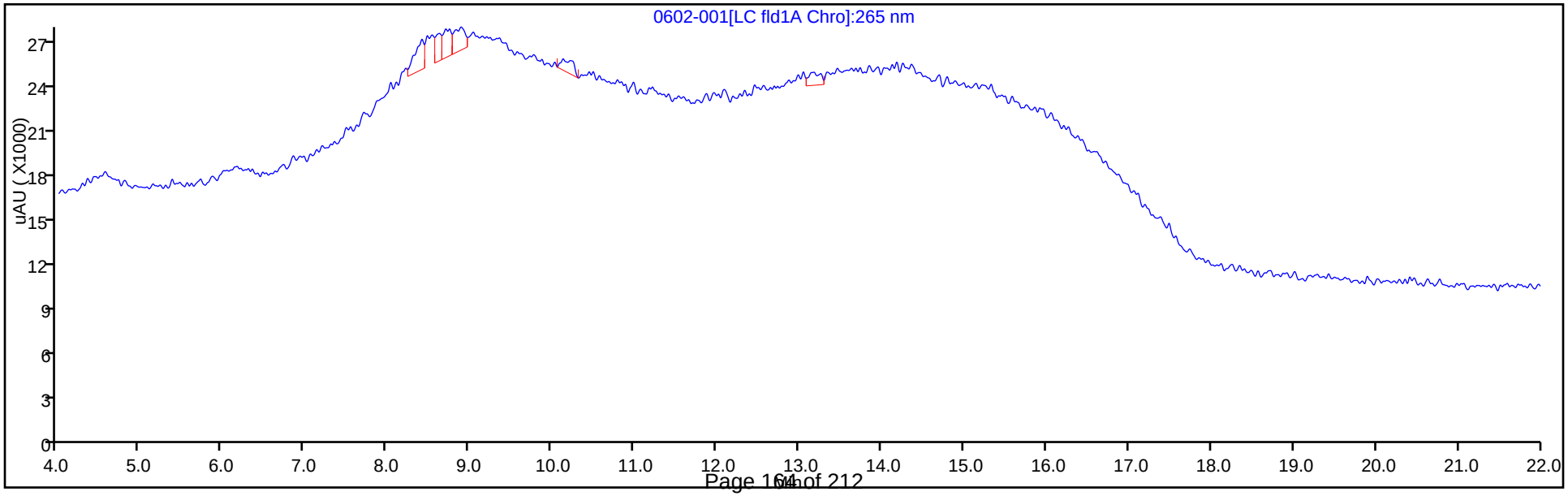
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602-001.d				
Injection Date:	02-Jun-2015 08:18:22	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCB			Worklist Smp#:	1
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: CCB 550-64803/1

Matrix: Air | Lab File ID: 0602-001.D

Analysis Method: 5506 (Modified) | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 06/02/2015 08:18

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.0500		0.0500
205-99-2	Benzo[b]fluoranthene	<0.250		0.250
50-32-8	Benzo[a]pyrene	<0.0500		0.0500
191-24-2	Benzo[g,h,i]perylene	<0.250		0.250
207-08-9	Benzo[k]fluoranthene	<0.0500		0.0500
218-01-9	Chrysene	<0.0500		0.0500
53-70-3	Dibenz(a,h)anthracene	<0.250		0.250
206-44-0	Fluoranthene	<0.250		0.250
193-39-5	Indeno[1,2,3-cd]pyrene	<0.0500		0.0500
129-00-0	Pyrene	<0.0500		0.0500

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602-001.D				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	02-Jun-2015 08:18:22	ALS Bottle#:	1	Worklist Smp#:	1
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCB				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	02-Jun-2015 10:32:35	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK048		

First Level Reviewer: nelsonz Date: 02-Jun-2015 10:32:35

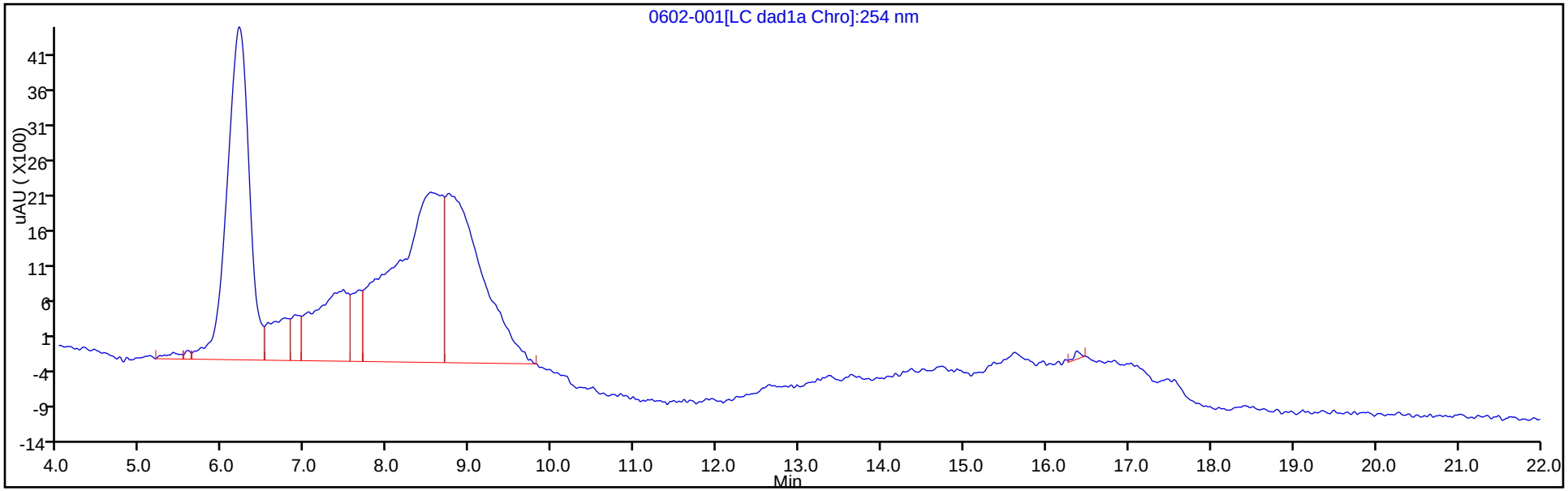
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 02-Jun-2015 10:32:35 Chrom Revision: 2.2 14-May-2015 11:41:56

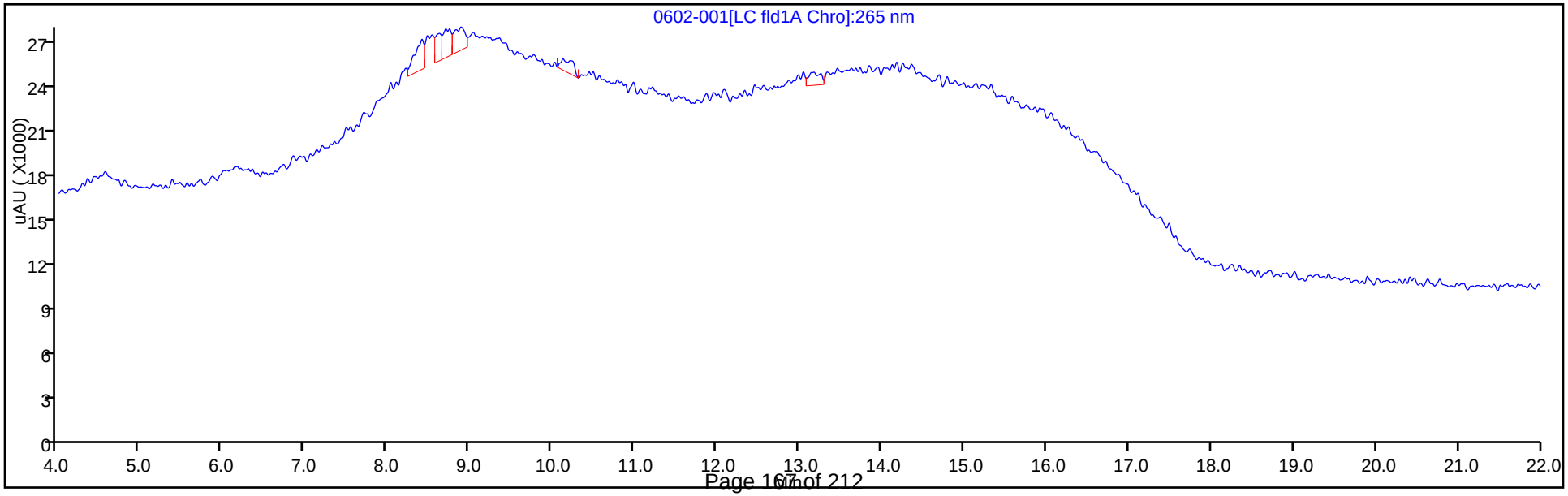
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602-001.d				
Injection Date:	02-Jun-2015 08:18:22	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCB			Worklist Smp#:	1
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID:
Lab Sample ID: CCB 550-64803/4
Matrix: Air
Lab File ID: 0602-004.D
Analysis Method: 5506 (Modified)
Date Collected:
Extraction Method:
Date Extracted:
Sample wt/vol: 1(mL)
Date Analyzed: 06/02/2015 09:59
Con. Extract Vol.:
Dilution Factor: 1
Injection Volume: 20(uL)
GC Column: Supelcosil PAH ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64803
Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<0.400		0.400
208-96-8	Acenaphthylene	<0.500		0.500
120-12-7	Anthracene	<0.0500		0.0500
86-73-7	Fluorene	<0.250		0.250
91-20-3	Naphthalene	<0.200		0.200
85-01-8	Phenanthrene	<0.0500		0.0500

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602-004.D				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	02-Jun-2015 09:59:35	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCB				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:17:15	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:51:38

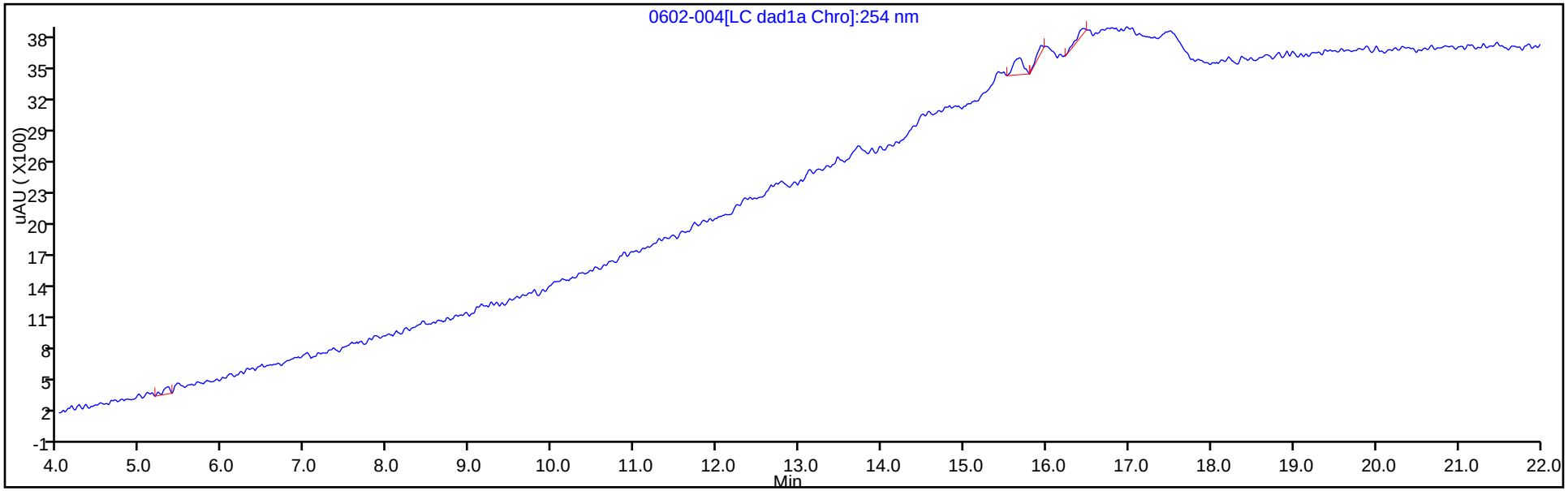
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:51:38 Chrom Revision: 2.2 14-May-2015 11:41:56

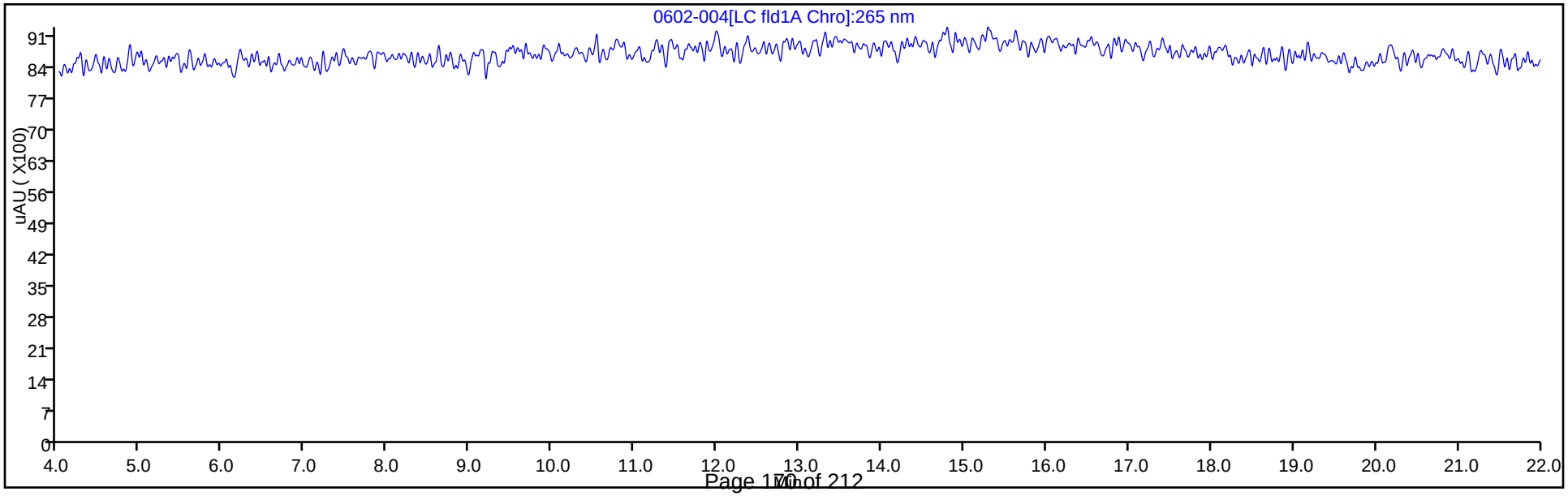
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602-004.d				
Injection Date:	02-Jun-2015 09:59:35	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCB			Worklist Smp#:	4
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: CCB 550-64803/4

Matrix: Air | Lab File ID: 0602-004.D

Analysis Method: 5506 (Modified) | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 06/02/2015 09:59

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.0500		0.0500
205-99-2	Benzo[b]fluoranthene	<0.250		0.250
50-32-8	Benzo[a]pyrene	<0.0500		0.0500
191-24-2	Benzo[g,h,i]perylene	<0.250		0.250
207-08-9	Benzo[k]fluoranthene	<0.0500		0.0500
218-01-9	Chrysene	<0.0500		0.0500
53-70-3	Dibenz(a,h)anthracene	<0.250		0.250
206-44-0	Fluoranthene	<0.250		0.250
193-39-5	Indeno[1,2,3-cd]pyrene	<0.0500		0.0500
129-00-0	Pyrene	<0.0500		0.0500

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602-004.D				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	02-Jun-2015 09:59:35	ALS Bottle#:	1	Worklist Smp#:	4
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCB				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:17:15	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:51:38

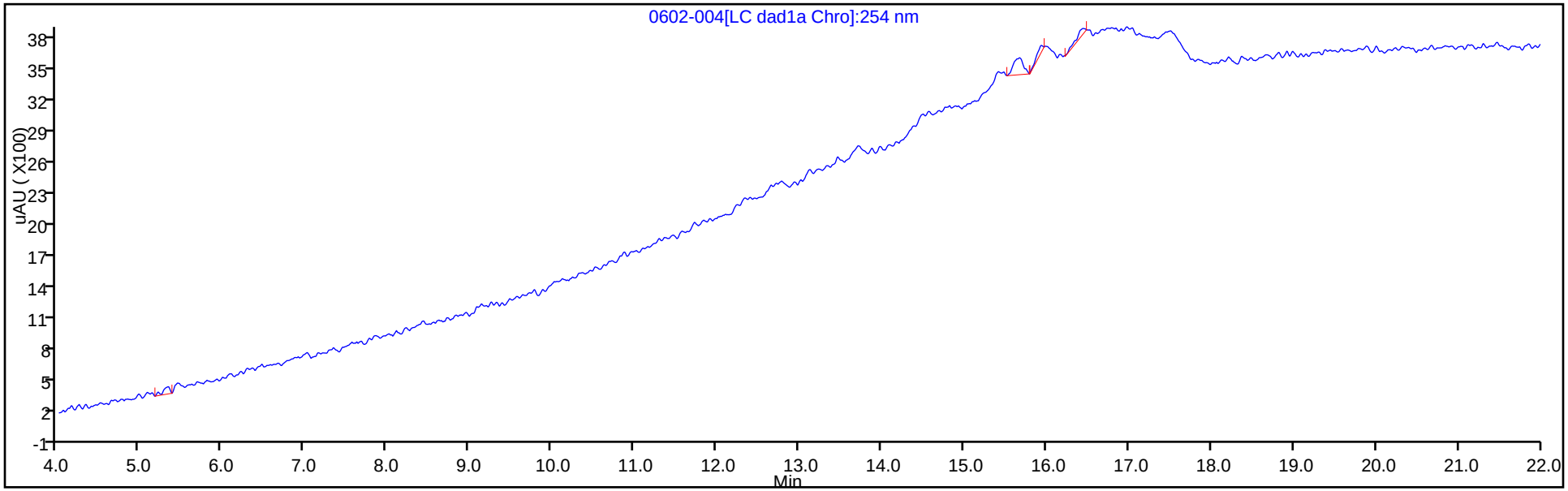
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:51:38 Chrom Revision: 2.2 14-May-2015 11:41:56

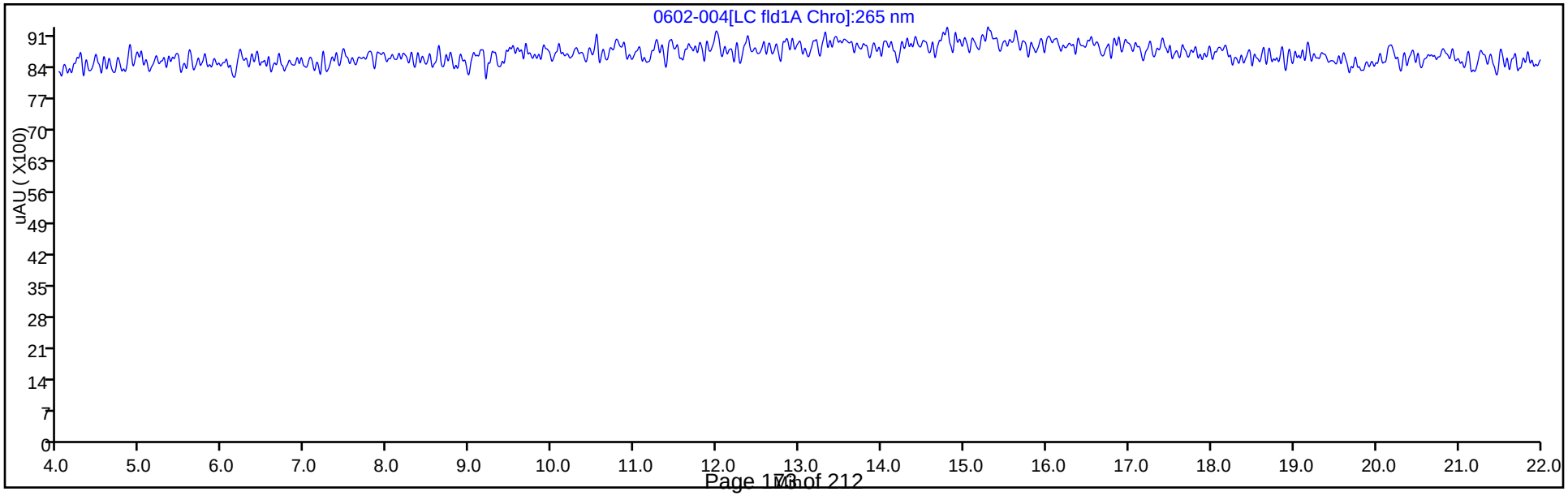
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602-004.d				
Injection Date:	02-Jun-2015 09:59:35	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCB			Worklist Smp#:	4
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Client Sample ID: Lab Sample ID: CCB 550-64803/10

Matrix: Air Lab File ID: 0602A010.D

Analysis Method: 5506 (Modified) Date Collected:

Extraction Method: Date Extracted:

Sample wt/vol: 1(mL) Date Analyzed: 06/02/2015 15:42

Con. Extract Vol.: Dilution Factor: 1

Injection Volume: 20(uL) GC Column: Supelcosil PAH ID: 4.6(mm)

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<0.400		0.400
208-96-8	Acenaphthylene	<0.500		0.500
120-12-7	Anthracene	<0.0500		0.0500
86-73-7	Fluorene	<0.250		0.250
91-20-3	Naphthalene	<0.200		0.200
85-01-8	Phenanthrene	<0.0500		0.0500

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A010.D				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	02-Jun-2015 15:42:10	ALS Bottle#:	1	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCB				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:13:43	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:14:47

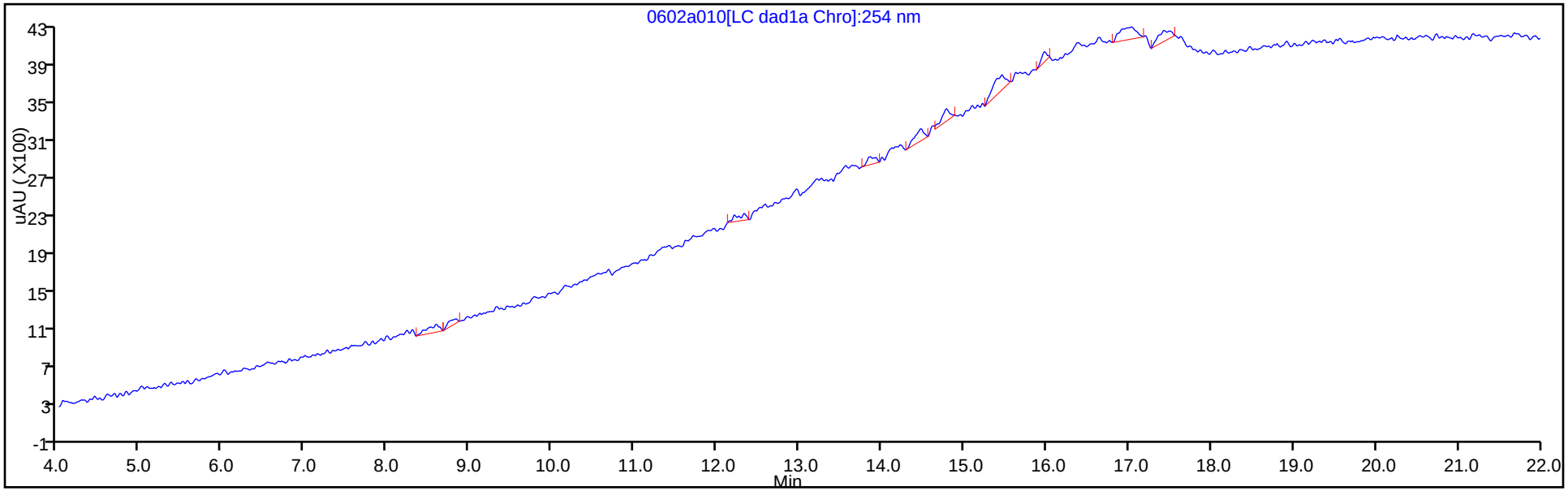
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:14:47 Chrom Revision: 2.2 14-May-2015 11:41:56

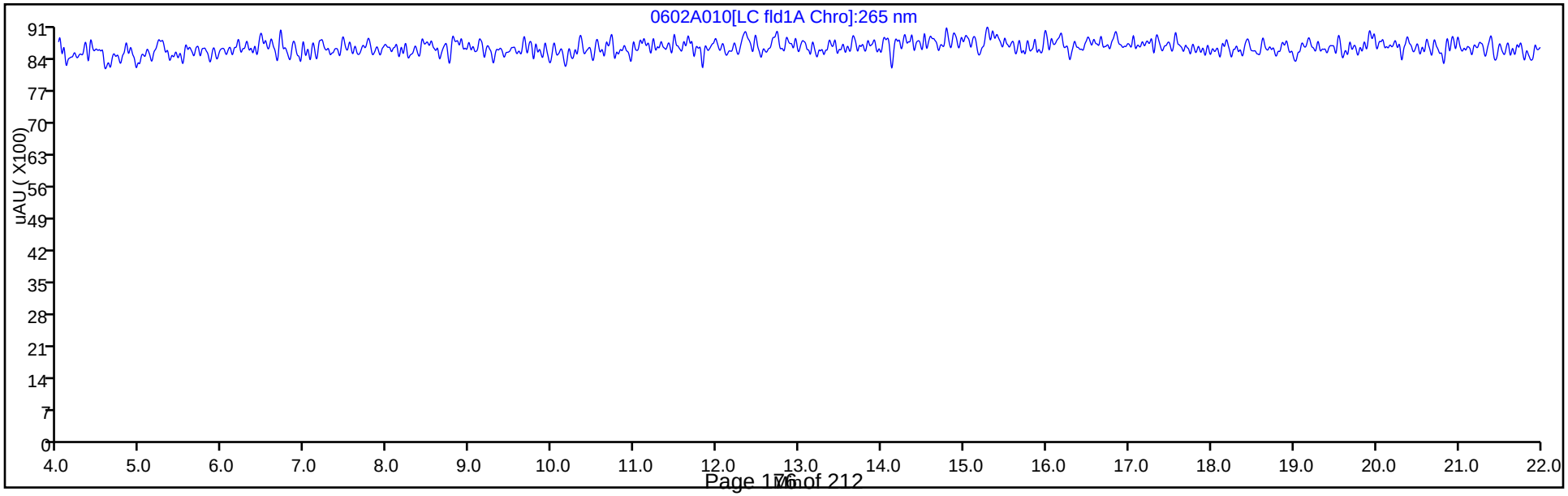
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a010.d				
Injection Date:	02-Jun-2015 15:42:10	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCB			Worklist Smp#:	10
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: CCB 550-64803/10

Matrix: Air | Lab File ID: 0602A010.D

Analysis Method: 5506 (Modified) | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 06/02/2015 15:42

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.0500		0.0500
205-99-2	Benzo[b]fluoranthene	<0.250		0.250
50-32-8	Benzo[a]pyrene	<0.0500		0.0500
191-24-2	Benzo[g,h,i]perylene	<0.250		0.250
207-08-9	Benzo[k]fluoranthene	<0.0500		0.0500
218-01-9	Chrysene	<0.0500		0.0500
53-70-3	Dibenz(a,h)anthracene	<0.250		0.250
206-44-0	Fluoranthene	<0.250		0.250
193-39-5	Indeno[1,2,3-cd]pyrene	<0.0500		0.0500
129-00-0	Pyrene	<0.0500		0.0500

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A010.D				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	02-Jun-2015 15:42:10	ALS Bottle#:	1	Worklist Smp#:	10
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCB				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:13:43	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:14:47

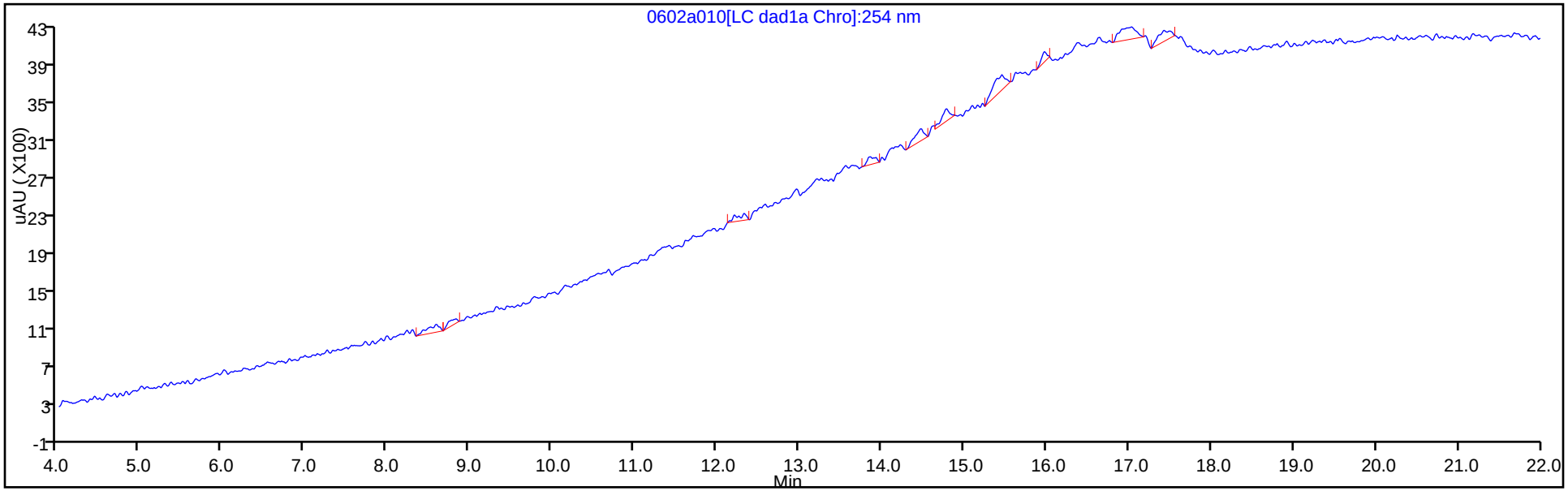
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:14:47 Chrom Revision: 2.2 14-May-2015 11:41:56

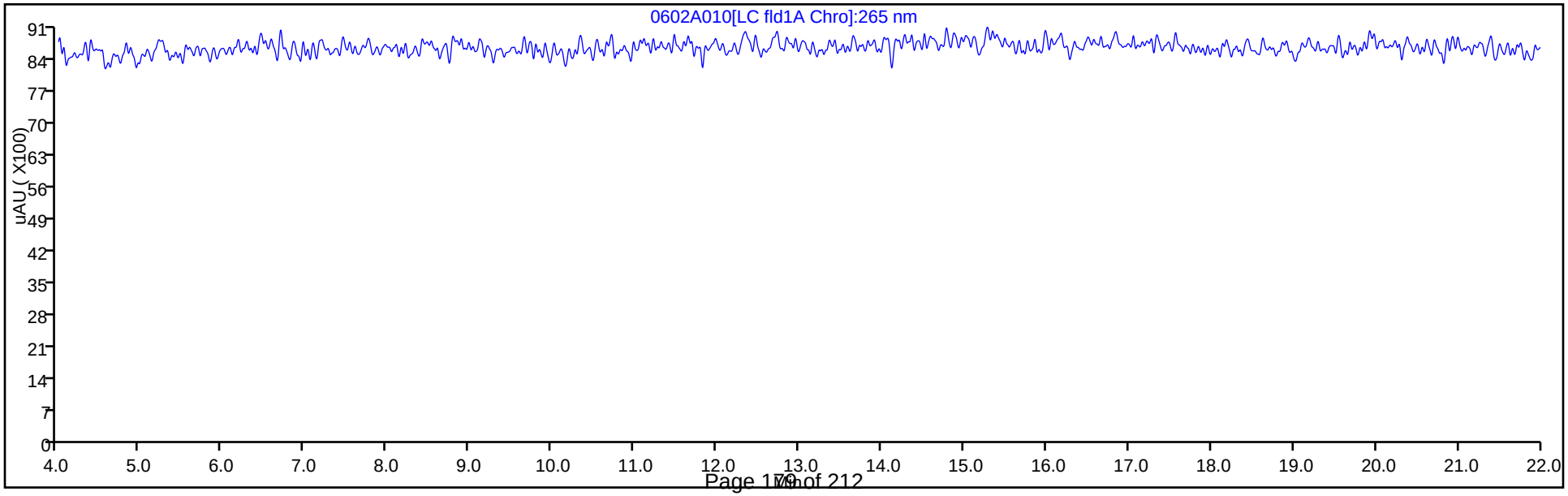
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a010.d				
Injection Date:	02-Jun-2015 15:42:10	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCB			Worklist Smp#:	10
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: CCB 550-64803/15

Matrix: Air | Lab File ID: 0602A015.D

Analysis Method: 5506 (Modified) | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 06/02/2015 18:31

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: Supelcosil PAH ID: 4.6(mm)

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	<0.400		0.400
208-96-8	Acenaphthylene	<0.500		0.500
120-12-7	Anthracene	<0.0500		0.0500
86-73-7	Fluorene	<0.250		0.250
91-20-3	Naphthalene	<0.200		0.200
85-01-8	Phenanthrene	<0.0500		0.0500

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A015.D				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	02-Jun-2015 18:31:32	ALS Bottle#:	1	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCB				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:17:15	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:17:29

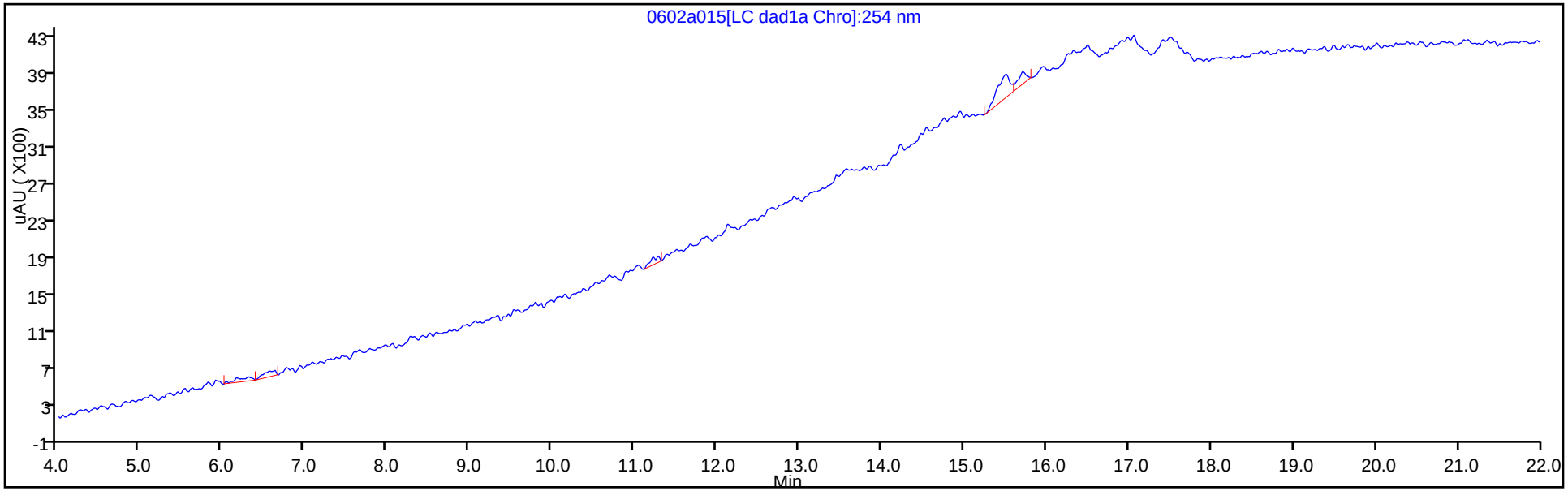
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:17:29 Chrom Revision: 2.2 14-May-2015 11:41:56

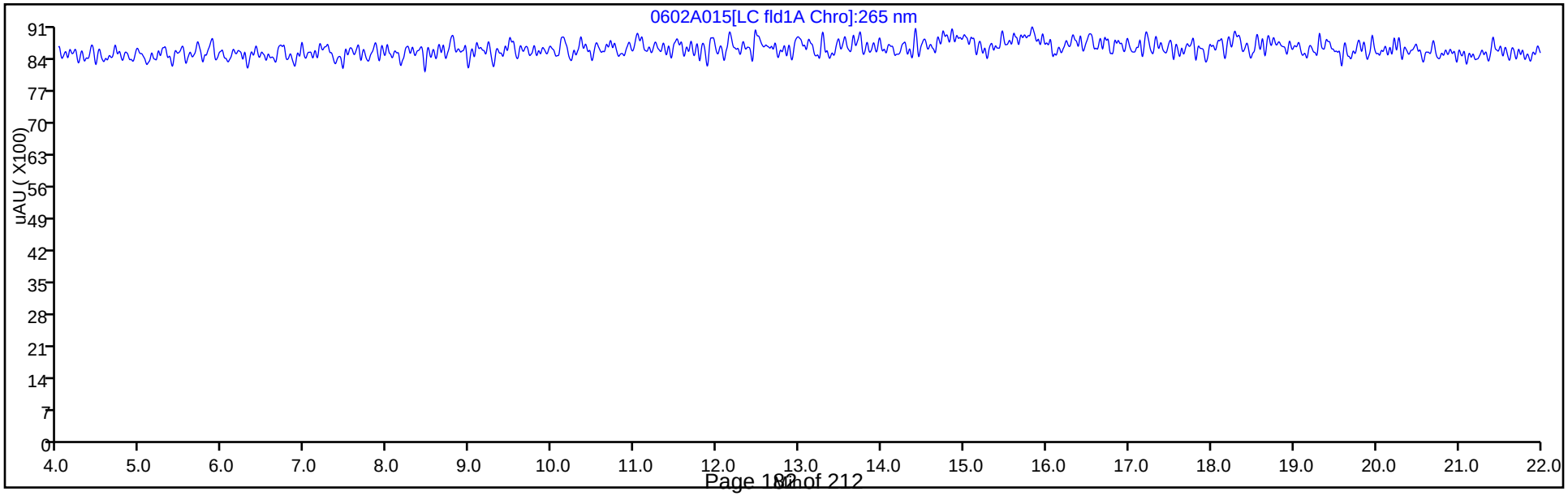
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a015.d				
Injection Date:	02-Jun-2015 18:31:32	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCB			Worklist Smp#:	15
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: CCB 550-64803/15

Matrix: Air | Lab File ID: 0602A015.D

Analysis Method: 5506 (Modified) | Date Collected:

Extraction Method: | Date Extracted:

Sample wt/vol: 1(mL) | Date Analyzed: 06/02/2015 18:31

Con. Extract Vol.: | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/mL

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	<0.0500		0.0500
205-99-2	Benzo[b]fluoranthene	<0.250		0.250
50-32-8	Benzo[a]pyrene	<0.0500		0.0500
191-24-2	Benzo[g,h,i]perylene	<0.250		0.250
207-08-9	Benzo[k]fluoranthene	<0.0500		0.0500
218-01-9	Chrysene	<0.0500		0.0500
53-70-3	Dibenz(a,h)anthracene	<0.250		0.250
206-44-0	Fluoranthene	<0.250		0.250
193-39-5	Indeno[1,2,3-cd]pyrene	<0.0500		0.0500
129-00-0	Pyrene	<0.0500		0.0500

TestAmerica Phoenix
Target Compound Quantitation Report

Data File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A015.D				
Lims ID:	CCB				
Client ID:					
Sample Type:	CCB				
Inject. Date:	02-Jun-2015 18:31:32	ALS Bottle#:	1	Worklist Smp#:	15
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Sample Info:	CCB				
Operator ID:	zn1	Instrument ID:	HPLC2		

Method:	\\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m		
Limit Group:	IH GC NIOSH 5506 IC		
Last Update:	03-Jun-2015 09:17:15	Calib Date:	24-Apr-2015 13:49:35
Integrator:	Falcon		
Quant Method:	External Standard	Quant By:	Initial Calibration
Last ICal File:	\\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D		
Process Host:	XAWRK052		

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:17:29

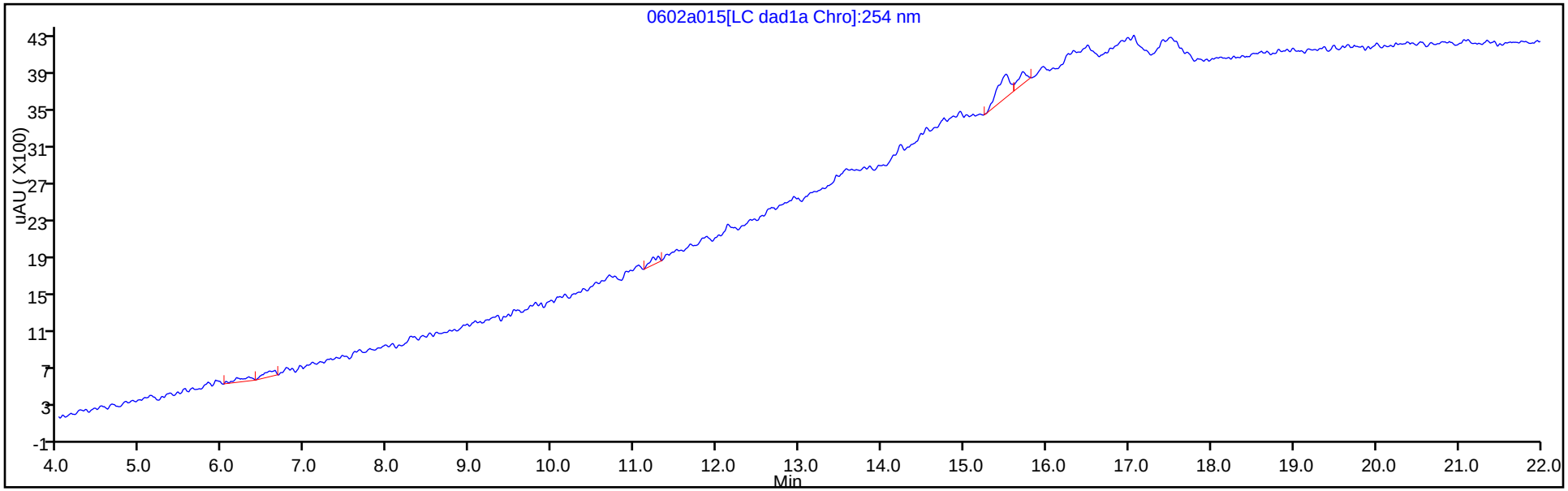
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags

Report Date: 03-Jun-2015 09:17:30 Chrom Revision: 2.2 14-May-2015 11:41:56

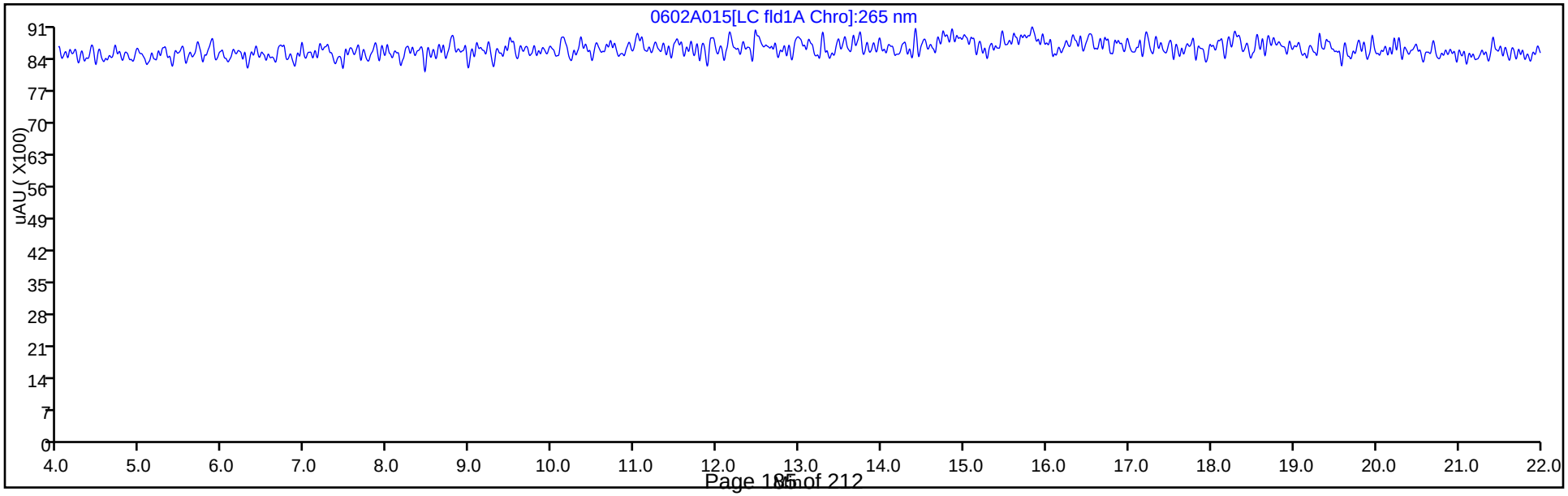
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a015.d				
Injection Date:	02-Jun-2015 18:31:32	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	CCB			Worklist Smp#:	15
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 550-64792/3-A
Matrix: Air
Lab File ID: 0602A008.D
Analysis Method: 5506 Front
Date Collected:
Extraction Method: Tube prep/Front
Date Extracted: 06/02/2015 08:30
Sample wt/vol: 1(Sample)
Date Analyzed: 06/02/2015 14:34
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 20(uL)
GC Column: Supelcosil PAH ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64803
Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	14.74		2.00
208-96-8	Acenaphthylene	31.02		2.50
120-12-7	Anthracene	1.484		0.250
86-73-7	Fluorene	3.019		0.500
91-20-3	Naphthalene	15.45		1.00
85-01-8	Phenanthrene	1.431		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A008.D
Lims ID: LCS 550-64792/3-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Jun-2015 14:34:42 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 550-64792/3-
Operator ID: zn1 Instrument ID: HPLC2

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 03-Jun-2015 09:13:43 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK052

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:13:43

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										M
1	254	5.089	5.050	0.039	48047	3.00	3.09			M
2	265	5.108	5.072	0.036	492949	3.00	3.46			
							RPD = 11.39			
13 Acenaphthylene										M
1	254	5.835	5.797	0.038	67293	6.00	6.20			M
4 Acenaphthene										M
1	254	6.902	6.857	0.045	18503	3.00	2.95			M
2	265	6.926	6.880	0.046	735100	3.00	3.46			M
							RPD = 16.08			
15 Fluorene										M
1	254	7.182	7.144	0.038	44057	0.6000	0.6037			M
2	265	7.204	7.157	0.047	1795339	0.6000	0.6948			M
							RPD = 14.03			
8 Phenanthrene										M
1	254	8.009	7.970	0.039	58487	0.3000	0.2862			
2	265	8.032	7.988	0.044	196543	0.3000	0.3070			M
							RPD = 6.99			
1 Anthracene										M
1	254	8.822	8.777	0.045	139779	0.3000	0.2968			
2	265	8.849	8.802	0.047	797456	0.3000	0.3010			M
							RPD = 1.38			
7 Fluoranthene										M
1	254	9.722	9.677	0.045	27166	0.6000	0.5767			
2	265	9.742	9.695	0.047	708776	0.6000	0.5760			M
							RPD = 0.11			
5 Pyrene										M
1	254	10.408	10.370	0.038	12528	0.3000	0.2839			
2	265	10.433	10.386	0.047	265412	0.3000	0.2902			M
							RPD = 2.19			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										M
1	254	12.588	12.550	0.038	31994	0.3000	0.2933			
2	265	12.611	12.575	0.036	528600	0.3000	0.2799			M
							RPD = 4.68			
11 Chrysene										M
1	254	13.108	13.077	0.031	46339	0.3000	0.2933			
2	265	13.133	13.100	0.033	544774	0.3000	0.2791			M
							RPD = 4.97			
6 Benzo[b]fluoranthene										M
1	254	14.895	14.883	0.012	64574	0.6000	0.5204			
2	265	14.922	14.897	0.025	2442519	0.6000	0.5166			M
							RPD = 0.72			
10 Benzo[k]fluoranthene										M
1	254	15.722	15.703	0.019	26603	0.3000	0.2793			
2	265	15.743	15.728	0.015	1730366	0.3000	0.2633			M
							RPD = 5.91			
14 Benzo[a]pyrene										M
1	254	16.462	16.457	0.005	30482	0.3000	0.2676			
2	265	16.488	16.481	0.007	1210188	0.3000	0.2488			M
							RPD = 7.28			
16 Dibenz(a,h)anthracene										M
1	254	17.508	17.530	-0.022	15479	0.6000	0.5258			
2	265	17.532	17.546	-0.014	210342	0.6000	0.4871			M
							RPD = 7.63			
9 Benzo[g,h,i]perylene										M
1	254	18.282	18.310	-0.028	18938	0.6000	0.4728			
2	265	18.306	18.320	-0.014	402030	0.6000	0.4689			M
							RPD = 0.83			
2 Indeno[1,2,3-cd]pyrene										M
1	254	18.795	18.823	-0.028	25883	0.3000	0.2280			
2	265	18.814	18.842	-0.028	282412	0.3000	0.2345			M
							RPD = 2.79			

QC Flag Legend

Review Flags

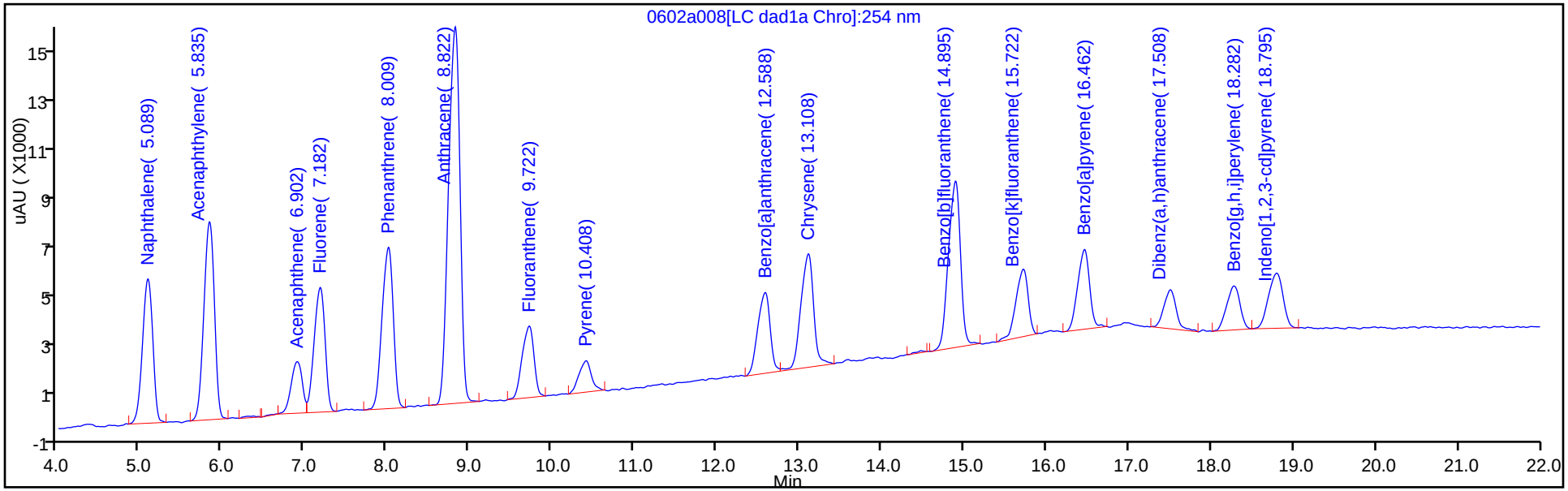
M - Manually Integrated

Report Date: 03-Jun-2015 09:13:43 Chrom Revision: 2.2 14-May-2015 11:41:56

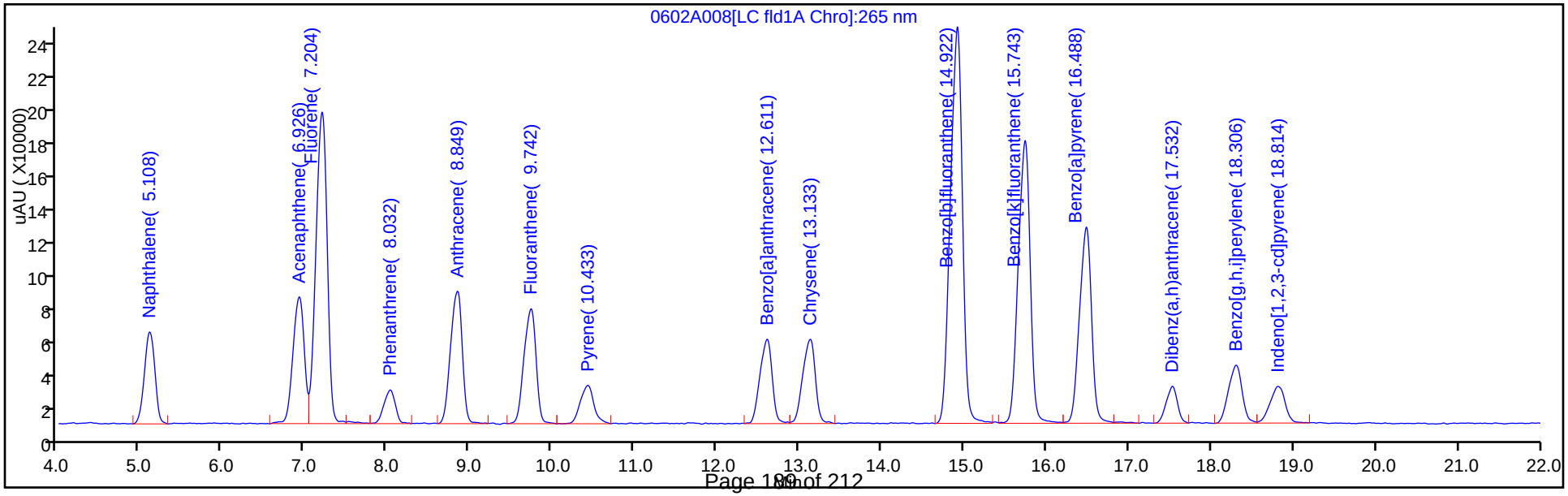
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a008.d				
Injection Date:	02-Jun-2015 14:34:42	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	LCS 550-64792/3-A			Worklist Smp#:	8
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Manual Integration/User Assign Peak Report

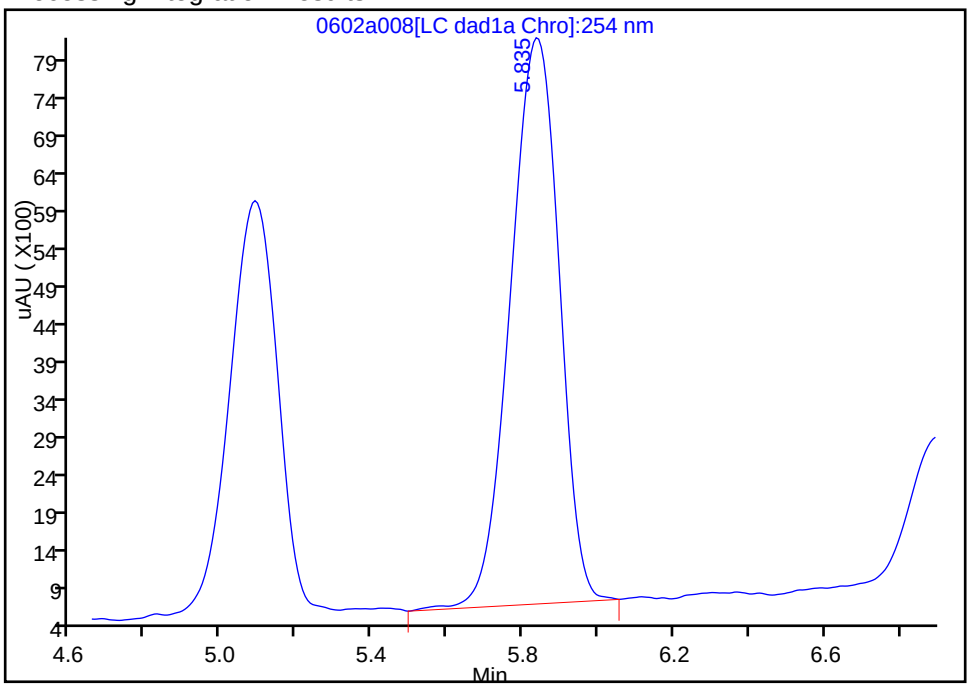
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a008.d				
Injection Date:	02-Jun-2015 14:34:42	Instrument ID:	HPLC2		
Lims ID:	LCS 550-64792/3-A				
Client ID:					
Operator ID:	zn1	ALS Bottle#:	7	Worklist Smp#:	8
Injection Vol:	20.0 ul	Dil. Factor:	1.0000		
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		
Column:	Supelcosil LC-PAH (4.60 mm)	Detector	LC dad1a, 254 nm		

13 Acenaphthylene, CAS: 208-96-8

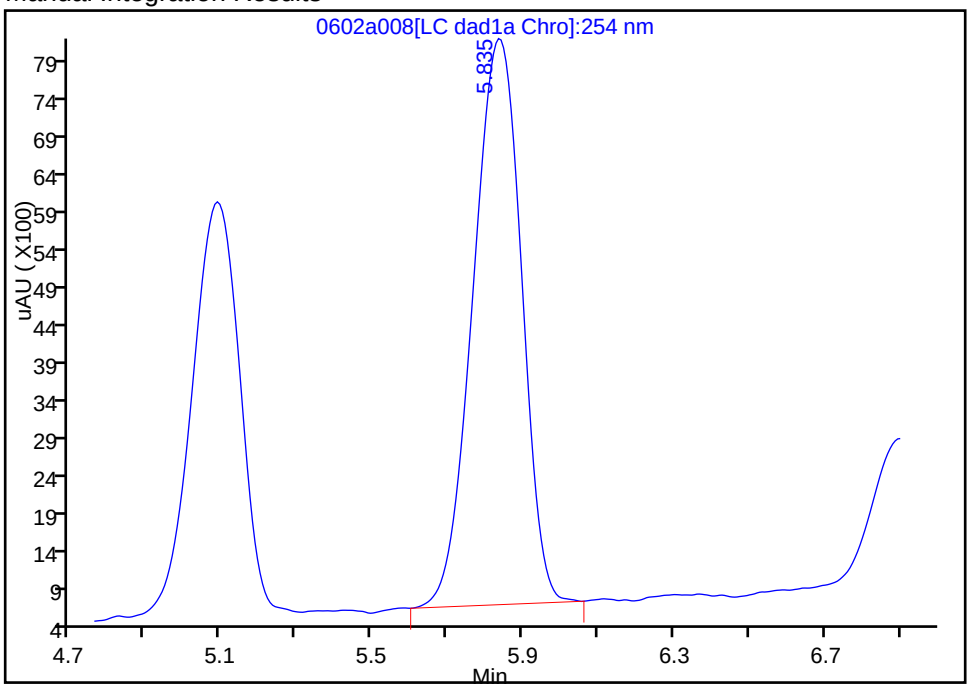
Processing Integration Results

RT: 5.84
Area: 68000
Amount: 6.269700
Amount Units: ug/ml



Manual Integration Results

RT: 5.84
Area: 67293
Amount: 6.203917
Amount Units: ug/ml



Reviewer: nelsonz, 03-Jun-2015 09:13:43
Audit Action: Manually Integrated
Audit Reason: Baseline

FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 550-64792/3-A

Matrix: Air | Lab File ID: 0602A008.D

Analysis Method: 5506 Front | Date Collected:

Extraction Method: Tube prep/Front | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 14:34

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	1.400		0.250
205-99-2	Benzo[b]fluoranthene	2.583		0.500
50-32-8	Benzo[a]pyrene	1.244		0.250
191-24-2	Benzo[g,h,i]perylene	2.344		0.500
207-08-9	Benzo[k]fluoranthene	1.316		0.250
218-01-9	Chrysene	1.396		0.250
53-70-3	Dibenz(a,h)anthracene	2.436		0.500
206-44-0	Fluoranthene	2.880		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	1.172		0.250
129-00-0	Pyrene	1.451		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A008.D
Lims ID: LCS 550-64792/3-A
Client ID:
Sample Type: LCS
Inject. Date: 02-Jun-2015 14:34:42 ALS Bottle#: 7 Worklist Smp#: 8
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCS 550-64792/3-
Operator ID: zn1 Instrument ID: HPLC2

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 03-Jun-2015 09:13:43 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK052

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:13:43

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										M
1	254	5.089	5.050	0.039	48047	3.00	3.09			M
2	265	5.108	5.072	0.036	492949	3.00	3.46			
							RPD = 11.39			
13 Acenaphthylene										M
1	254	5.835	5.797	0.038	67293	6.00	6.20			M
4 Acenaphthene										M
1	254	6.902	6.857	0.045	18503	3.00	2.95			M
2	265	6.926	6.880	0.046	735100	3.00	3.46			M
							RPD = 16.08			
15 Fluorene										M
1	254	7.182	7.144	0.038	44057	0.6000	0.6037			M
2	265	7.204	7.157	0.047	1795339	0.6000	0.6948			M
							RPD = 14.03			
8 Phenanthrene										M
1	254	8.009	7.970	0.039	58487	0.3000	0.2862			
2	265	8.032	7.988	0.044	196543	0.3000	0.3070			M
							RPD = 6.99			
1 Anthracene										M
1	254	8.822	8.777	0.045	139779	0.3000	0.2968			
2	265	8.849	8.802	0.047	797456	0.3000	0.3010			M
							RPD = 1.38			
7 Fluoranthene										M
1	254	9.722	9.677	0.045	27166	0.6000	0.5767			
2	265	9.742	9.695	0.047	708776	0.6000	0.5760			M
							RPD = 0.11			
5 Pyrene										M
1	254	10.408	10.370	0.038	12528	0.3000	0.2839			
2	265	10.433	10.386	0.047	265412	0.3000	0.2902			M
							RPD = 2.19			

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										M
1	254	12.588	12.550	0.038	31994	0.3000	0.2933			
2	265	12.611	12.575	0.036	528600	0.3000	0.2799			M
							RPD = 4.68			
11 Chrysene										M
1	254	13.108	13.077	0.031	46339	0.3000	0.2933			
2	265	13.133	13.100	0.033	544774	0.3000	0.2791			M
							RPD = 4.97			
6 Benzo[b]fluoranthene										M
1	254	14.895	14.883	0.012	64574	0.6000	0.5204			
2	265	14.922	14.897	0.025	2442519	0.6000	0.5166			M
							RPD = 0.72			
10 Benzo[k]fluoranthene										M
1	254	15.722	15.703	0.019	26603	0.3000	0.2793			
2	265	15.743	15.728	0.015	1730366	0.3000	0.2633			M
							RPD = 5.91			
14 Benzo[a]pyrene										M
1	254	16.462	16.457	0.005	30482	0.3000	0.2676			
2	265	16.488	16.481	0.007	1210188	0.3000	0.2488			M
							RPD = 7.28			
16 Dibenz(a,h)anthracene										M
1	254	17.508	17.530	-0.022	15479	0.6000	0.5258			
2	265	17.532	17.546	-0.014	210342	0.6000	0.4871			M
							RPD = 7.63			
9 Benzo[g,h,i]perylene										M
1	254	18.282	18.310	-0.028	18938	0.6000	0.4728			
2	265	18.306	18.320	-0.014	402030	0.6000	0.4689			M
							RPD = 0.83			
2 Indeno[1,2,3-cd]pyrene										M
1	254	18.795	18.823	-0.028	25883	0.3000	0.2280			
2	265	18.814	18.842	-0.028	282412	0.3000	0.2345			M
							RPD = 2.79			

QC Flag Legend

Review Flags

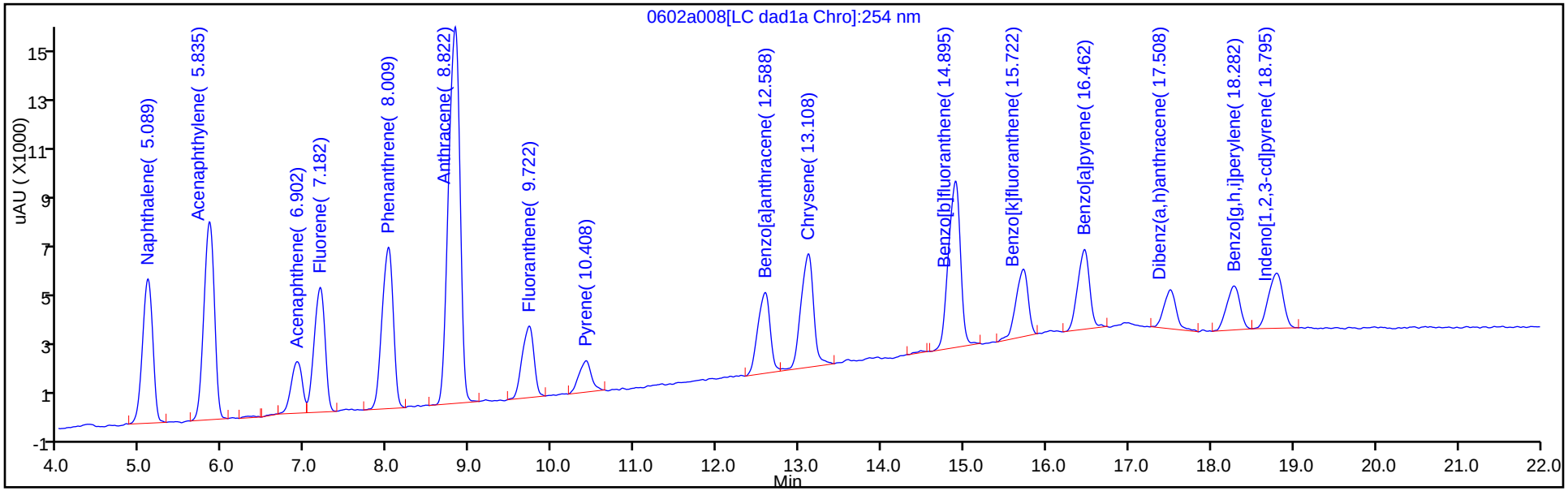
M - Manually Integrated

Report Date: 03-Jun-2015 09:13:43 Chrom Revision: 2.2 14-May-2015 11:41:56

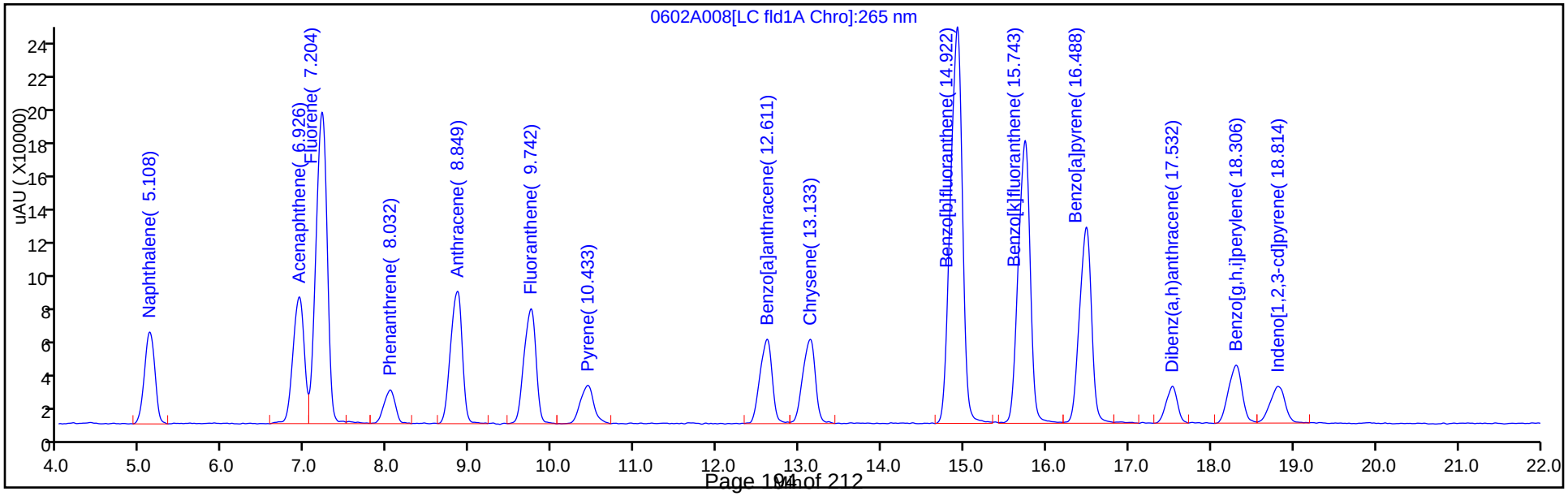
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a008.d				
Injection Date:	02-Jun-2015 14:34:42	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	LCS 550-64792/3-A			Worklist Smp#:	8
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix
Job No.: 550-45491-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 550-64792/4-A
Matrix: Air
Lab File ID: 0602A009.D
Analysis Method: 5506 Front
Date Collected:
Extraction Method: Tube prep/Front
Date Extracted: 06/02/2015 08:30
Sample wt/vol: 1(Sample)
Date Analyzed: 06/02/2015 15:08
Con. Extract Vol.: 5(mL)
Dilution Factor: 1
Injection Volume: 20(uL)
GC Column: Supelcosil PAH ID: 4.6(mm)
% Moisture:
GPC Cleanup:(Y/N) N
Analysis Batch No.: 64803
Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
83-32-9	Acenaphthene	16.25		2.00
208-96-8	Acenaphthylene	32.11		2.50
120-12-7	Anthracene	1.545		0.250
86-73-7	Fluorene	3.121		0.500
91-20-3	Naphthalene	16.09		1.00
85-01-8	Phenanthrene	1.486		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A009.D
Lims ID: LCSD 550-64792/4-A
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jun-2015 15:08:46 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 550-64792/4
Operator ID: zn1 Instrument ID: HPLC2

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 03-Jun-2015 09:13:43 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK052

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:14:35

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.083	5.050	0.033	50003	3.00	3.22			
2	265	5.108	5.072	0.036	504154	3.00	3.54			
							RPD = 9.61			
13 Acenaphthylene										
1	254	5.836	5.797	0.040	69627	6.00	6.42			
4 Acenaphthene										
1	254	6.910	6.857	0.053	20354	3.00	3.25			
2	265	6.926	6.880	0.046	730919	3.00	3.44			
							RPD = 5.76			
15 Fluorene										
1	254	7.183	7.144	0.039	45542	0.6000	0.6242			
2	265	7.207	7.157	0.050	1816788	0.6000	0.7031			
							RPD = 11.90			
8 Phenanthrene										
1	254	8.010	7.970	0.040	60724	0.3000	0.2973			
2	265	8.035	7.988	0.047	198634	0.3000	0.3103			
							RPD = 4.28			
1 Anthracene										
1	254	8.816	8.777	0.039	145459	0.3000	0.3090			
2	265	8.838	8.802	0.036	809712	0.3000	0.3056			
							RPD = 1.08			
7 Fluoranthene										
1	254	9.710	9.677	0.033	27927	0.6000	0.5931			
2	265	9.734	9.695	0.039	724477	0.6000	0.5889			
							RPD = 0.70			
5 Pyrene										
1	254	10.403	10.370	0.033	13589	0.3000	0.3082			
2	265	10.426	10.386	0.040	270348	0.3000	0.2957			
							RPD = 4.13			

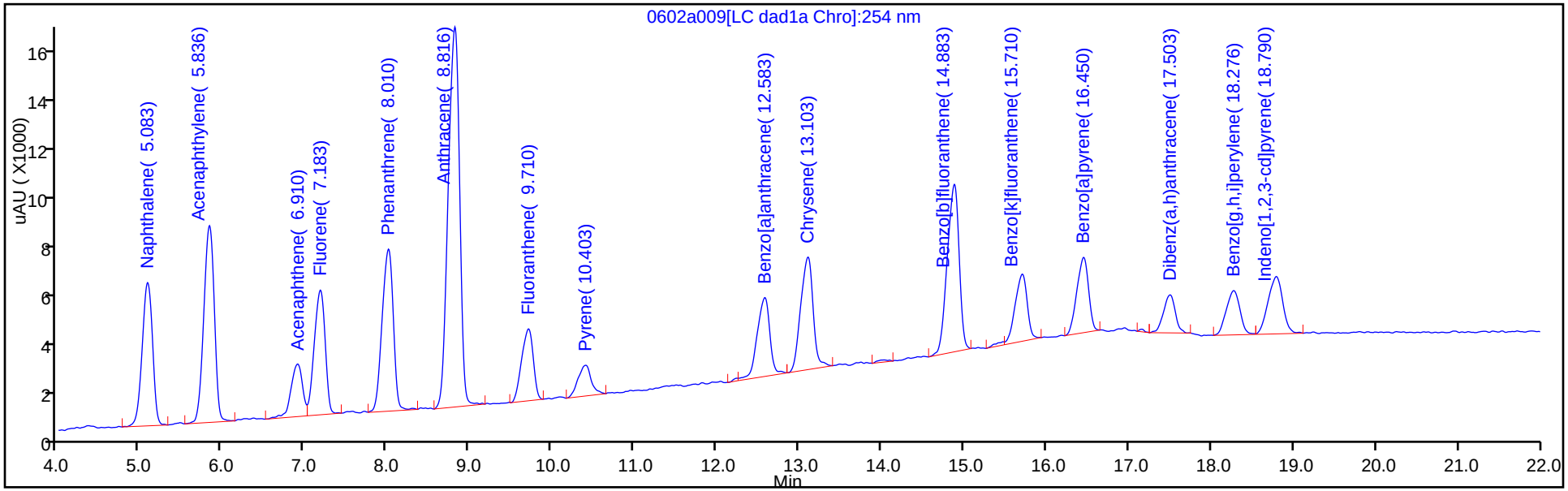
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.583	12.550	0.033	33308	0.3000	0.3055			
2	265	12.604	12.575	0.029	537113	0.3000	0.2845			
							RPD = 7.12			
11 Chrysene										
1	254	13.103	13.077	0.026	46635	0.3000	0.2952			
2	265	13.126	13.100	0.026	557185	0.3000	0.2856			
							RPD = 3.32			
6 Benzo[b]fluoranthene										
1	254	14.883	14.883	0.000	66705	0.6000	0.5376			
2	265	14.904	14.897	0.007	2517966	0.6000	0.5328			
							RPD = 0.89			
10 Benzo[k]fluoranthene										
1	254	15.710	15.703	0.007	26970	0.3000	0.2832			
2	265	15.728	15.728	0.000	1777900	0.3000	0.2705			
							RPD = 4.59			
14 Benzo[a]pyrene										
1	254	16.450	16.457	-0.007	29391	0.3000	0.2580			
2	265	16.477	16.481	-0.004	1249326	0.3000	0.2570			
							RPD = 0.40			
16 Dibenz(a,h)anthracene										
1	254	17.503	17.530	-0.027	14995	0.6000	0.5063			
2	265	17.525	17.546	-0.021	219034	0.6000	0.5076			
							RPD = 0.27			
9 Benzo[g,h,i]perylene										
1	254	18.276	18.310	-0.034	20208	0.6000	0.5044			
2	265	18.302	18.320	-0.018	412317	0.6000	0.4810			
							RPD = 4.76			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.790	18.823	-0.033	28151	0.3000	0.2481			
2	265	18.814	18.842	-0.028	285963	0.3000	0.2374			
							RPD = 4.39			

Report Date: 03-Jun-2015 09:14:35 Chrom Revision: 2.2 14-May-2015 11:41:56

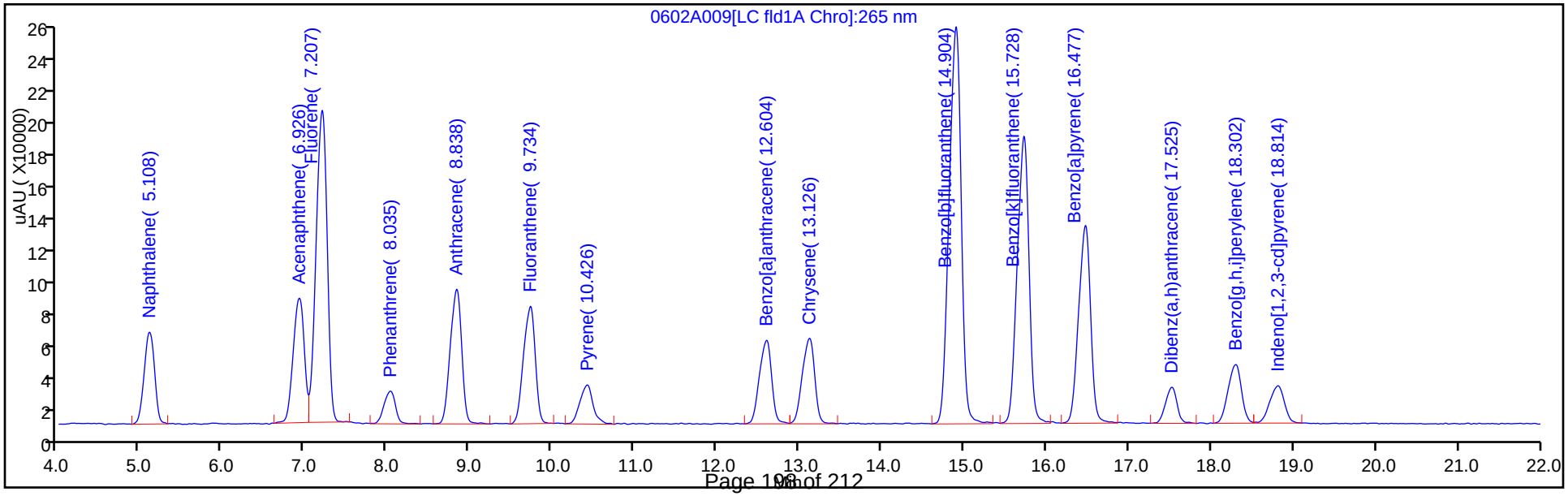
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a009.d				
Injection Date:	02-Jun-2015 15:08:46	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	LCSD 550-64792/4-A			Worklist Smp#:	9
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



FORM I
IH - HPLC/IC ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Phoenix | Job No.: 550-45491-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 550-64792/4-A

Matrix: Air | Lab File ID: 0602A009.D

Analysis Method: 5506 Front | Date Collected:

Extraction Method: Tube prep/Front | Date Extracted: 06/02/2015 08:30

Sample wt/vol: 1(Sample) | Date Analyzed: 06/02/2015 15:08

Con. Extract Vol.: 5(mL) | Dilution Factor: 1

Injection Volume: 20(uL) | GC Column: ID:

% Moisture: | GPC Cleanup:(Y/N) N

Analysis Batch No.: 64803 | Units: ug/Sample

CAS NO.	COMPOUND NAME	RESULT	Q	RL
56-55-3	Benzo[a]anthracene	1.423		0.250
205-99-2	Benzo[b]fluoranthene	2.664		0.500
50-32-8	Benzo[a]pyrene	1.285		0.250
191-24-2	Benzo[g,h,i]perylene	2.405		0.500
207-08-9	Benzo[k]fluoranthene	1.353		0.250
218-01-9	Chrysene	1.428		0.250
53-70-3	Dibenz(a,h)anthracene	2.538		0.500
206-44-0	Fluoranthene	2.945		0.500
193-39-5	Indeno[1,2,3-cd]pyrene	1.187		0.250
129-00-0	Pyrene	1.479		0.250

TestAmerica Phoenix
Target Compound Quantitation Report

Data File: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\0602A009.D
Lims ID: LCSD 550-64792/4-A
Client ID:
Sample Type: LCSD
Inject. Date: 02-Jun-2015 15:08:46 ALS Bottle#: 8 Worklist Smp#: 9
Injection Vol: 20.0 ul Dil. Factor: 1.0000
Sample Info: LCSD 550-64792/4
Operator ID: zn1 Instrument ID: HPLC2

Method: \\ChromNA\Phoenix\ChromData\HPLC2\20150602-10355.b\NIOSH5506.m
Limit Group: IH GC NIOSH 5506 IC
Last Update: 03-Jun-2015 09:13:43 Calib Date: 24-Apr-2015 13:49:35
Integrator: Falcon
Quant Method: External Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Phoenix\ChromData\HPLC2\20150424-9856.b\0424-008.D
Process Host: XAWRK052

First Level Reviewer: nelsonz Date: 03-Jun-2015 09:14:35

Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
3 Naphthalene										
1	254	5.083	5.050	0.033	50003	3.00	3.22			
2	265	5.108	5.072	0.036	504154	3.00	3.54			
							RPD = 9.61			
13 Acenaphthylene										
1	254	5.836	5.797	0.040	69627	6.00	6.42			
4 Acenaphthene										
1	254	6.910	6.857	0.053	20354	3.00	3.25			
2	265	6.926	6.880	0.046	730919	3.00	3.44			
							RPD = 5.76			
15 Fluorene										
1	254	7.183	7.144	0.039	45542	0.6000	0.6242			
2	265	7.207	7.157	0.050	1816788	0.6000	0.7031			
							RPD = 11.90			
8 Phenanthrene										
1	254	8.010	7.970	0.040	60724	0.3000	0.2973			
2	265	8.035	7.988	0.047	198634	0.3000	0.3103			
							RPD = 4.28			
1 Anthracene										
1	254	8.816	8.777	0.039	145459	0.3000	0.3090			
2	265	8.838	8.802	0.036	809712	0.3000	0.3056			
							RPD = 1.08			
7 Fluoranthene										
1	254	9.710	9.677	0.033	27927	0.6000	0.5931			
2	265	9.734	9.695	0.039	724477	0.6000	0.5889			
							RPD = 0.70			
5 Pyrene										
1	254	10.403	10.370	0.033	13589	0.3000	0.3082			
2	265	10.426	10.386	0.040	270348	0.3000	0.2957			
							RPD = 4.13			

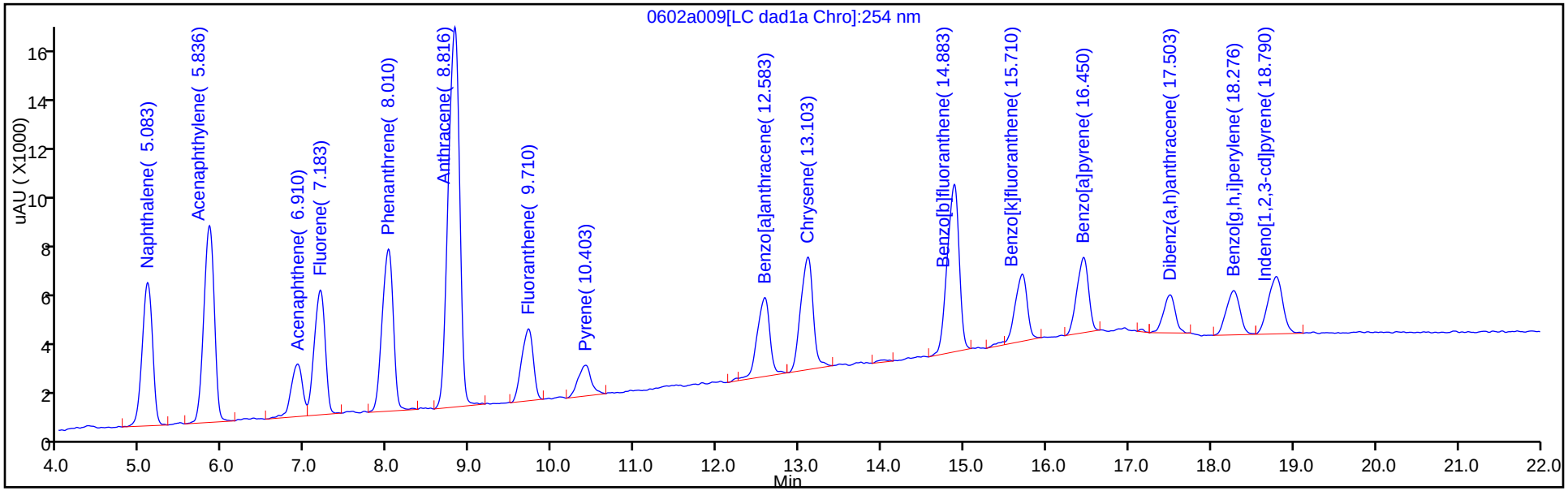
Col	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/ml	OnCol Amt ug/ml	Ratio Range	Ratio	Flags
12 Benzo[a]anthracene										
1	254	12.583	12.550	0.033	33308	0.3000	0.3055			
2	265	12.604	12.575	0.029	537113	0.3000	0.2845			
							RPD = 7.12			
11 Chrysene										
1	254	13.103	13.077	0.026	46635	0.3000	0.2952			
2	265	13.126	13.100	0.026	557185	0.3000	0.2856			
							RPD = 3.32			
6 Benzo[b]fluoranthene										
1	254	14.883	14.883	0.000	66705	0.6000	0.5376			
2	265	14.904	14.897	0.007	2517966	0.6000	0.5328			
							RPD = 0.89			
10 Benzo[k]fluoranthene										
1	254	15.710	15.703	0.007	26970	0.3000	0.2832			
2	265	15.728	15.728	0.000	1777900	0.3000	0.2705			
							RPD = 4.59			
14 Benzo[a]pyrene										
1	254	16.450	16.457	-0.007	29391	0.3000	0.2580			
2	265	16.477	16.481	-0.004	1249326	0.3000	0.2570			
							RPD = 0.40			
16 Dibenz(a,h)anthracene										
1	254	17.503	17.530	-0.027	14995	0.6000	0.5063			
2	265	17.525	17.546	-0.021	219034	0.6000	0.5076			
							RPD = 0.27			
9 Benzo[g,h,i]perylene										
1	254	18.276	18.310	-0.034	20208	0.6000	0.5044			
2	265	18.302	18.320	-0.018	412317	0.6000	0.4810			
							RPD = 4.76			
2 Indeno[1,2,3-cd]pyrene										
1	254	18.790	18.823	-0.033	28151	0.3000	0.2481			
2	265	18.814	18.842	-0.028	285963	0.3000	0.2374			
							RPD = 4.39			

Report Date: 03-Jun-2015 09:14:35 Chrom Revision: 2.2 14-May-2015 11:41:56

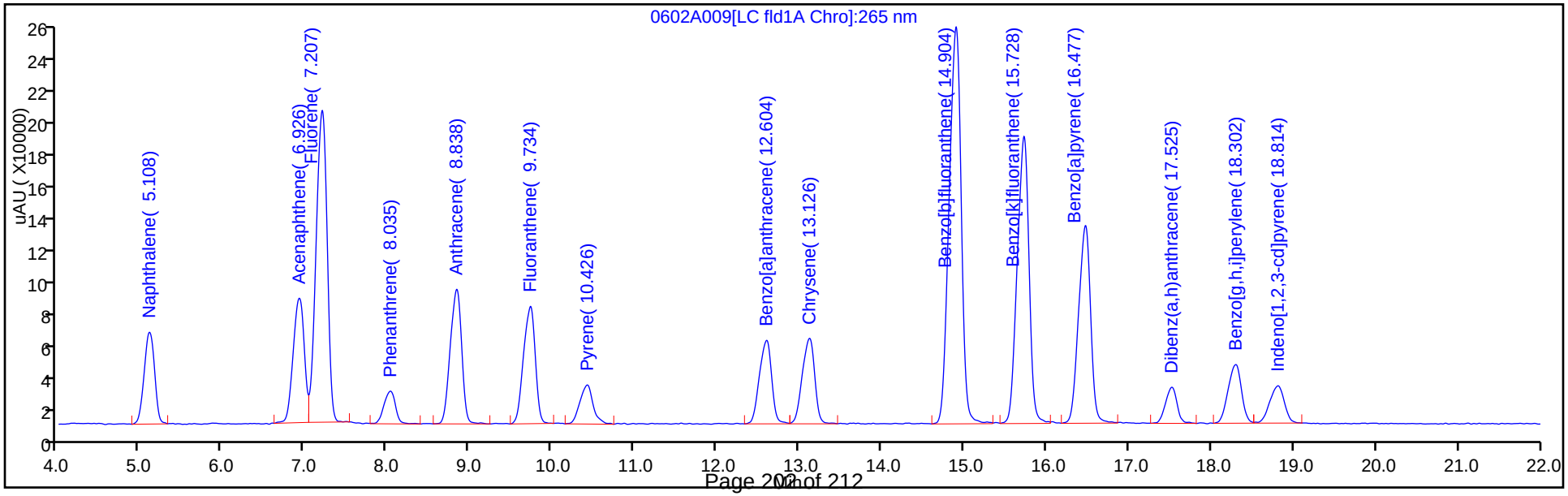
TestAmerica Phoenix

Data File:	\\chromna\phoenix\chromdata\hplc2\20150602-10355.b\0602a009.d				
Injection Date:	02-Jun-2015 15:08:46	Instrument ID:	HPLC2	Operator ID:	zn1
Lims ID:	LCSD 550-64792/4-A			Worklist Smp#:	9
Client ID:					
Injection Vol:	20.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	NIOSH5506	Limit Group:	IH GC NIOSH 5506 IC		

Column: Supelcosil LC-PAH (4.60 mm) Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



Y Scaling: Method Defined: Scale to the Nth Largest Target: 1



IH - HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Instrument ID: HPLC2 Start Date: 04/24/2015 09:52

Analysis Batch Number: 61918 End Date: 04/25/2015 01:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ICB 550-61918/1		04/24/2015 09:52	1		Supelcosil PAH 4.6(mm)
ICB 550-61918/1		04/24/2015 09:52	1		
STD1 550-61918/2 IC		04/24/2015 10:26	1	0424-002.D	Supelcosil PAH 4.6(mm)
STD1 550-61918/2 IC		04/24/2015 10:26	1	0424-002.D	
STD2 550-61918/3 IC		04/24/2015 11:00	1	0424-003.D	Supelcosil PAH 4.6(mm)
STD2 550-61918/3 IC		04/24/2015 11:00	1	0424-003.D	
STD3 550-61918/4 IC		04/24/2015 11:34	1	0424-004.D	Supelcosil PAH 4.6(mm)
STD3 550-61918/4 IC		04/24/2015 11:34	1	0424-004.D	
STD4 550-61918/5 IC		04/24/2015 12:07	1	0424-005.D	Supelcosil PAH 4.6(mm)
STD4 550-61918/5 IC		04/24/2015 12:07	1	0424-005.D	
STD5 550-61918/6 IC		04/24/2015 12:41	1	0424-006.D	Supelcosil PAH 4.6(mm)
STD5 550-61918/6 IC		04/24/2015 12:41	1	0424-006.D	
STD6 550-61918/7 IC		04/24/2015 13:15	1	0424-007.D	Supelcosil PAH 4.6(mm)
STD6 550-61918/7 IC		04/24/2015 13:15	1	0424-007.D	
STD7 550-61918/8 IC		04/24/2015 13:49	1	0424-008.D	Supelcosil PAH 4.6(mm)
STD7 550-61918/8 IC		04/24/2015 13:49	1	0424-008.D	
CCB 550-61918/9		04/24/2015 14:22	1		Supelcosil PAH 4.6(mm)
CCB 550-61918/9		04/24/2015 14:22	1		
ICV 550-61918/10		04/24/2015 14:56	1		Supelcosil PAH 4.6(mm)
ICV 550-61918/10		04/24/2015 14:56	1		
ICV 550-61918/11		04/24/2015 15:30	1		Supelcosil PAH 4.6(mm)
ICV 550-61918/11		04/24/2015 15:30	1		
CCB 550-61918/12		04/24/2015 16:03	1		Supelcosil PAH 4.6(mm)
CCB 550-61918/12		04/24/2015 16:03	1		
ZZZZZ		04/24/2015 16:37	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 16:37	1		
ZZZZZ		04/24/2015 17:11	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 17:11	1		
ZZZZZ		04/24/2015 17:45	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 17:45	1		
ZZZZZ		04/24/2015 18:19	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 18:19	1		
ZZZZZ		04/24/2015 18:53	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 18:53	1		
CCB 550-61918/18		04/24/2015 19:26	1		Supelcosil PAH 4.6(mm)
CCB 550-61918/18		04/24/2015 19:26	1		
ZZZZZ		04/24/2015 20:00	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 20:00	1		
ZZZZZ		04/24/2015 20:34	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 20:34	1		
ZZZZZ		04/24/2015 21:08	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 21:08	1		
ZZZZZ		04/24/2015 21:42	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 21:42	1		
ZZZZZ		04/24/2015 22:16	1		Supelcosil PAH 4.6(mm)

5506 (Modified)

IH - HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Instrument ID: HPLC2 Start Date: 04/24/2015 09:52

Analysis Batch Number: 61918 End Date: 04/25/2015 01:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
ZZZZZ		04/24/2015 22:16	1		
ZZZZZ		04/24/2015 22:50	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 22:50	1		
ZZZZZ		04/24/2015 23:24	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 23:24	1		
ZZZZZ		04/24/2015 23:57	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/24/2015 23:57	1		
ZZZZZ		04/25/2015 00:31	1		Supelcosil PAH 4.6(mm)
ZZZZZ		04/25/2015 00:31	1		
CCVIH 550-61918/28		04/25/2015 01:05	1		Supelcosil PAH 4.6(mm)
CCVIH 550-61918/28		04/25/2015 01:05	1		
CCB 550-61918/29		04/25/2015 01:39	1		Supelcosil PAH 4.6(mm)
CCB 550-61918/29		04/25/2015 01:39	1		

5506 (Modified)

IH - HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Instrument ID: HPLC2 Start Date: 06/02/2015 08:18

Analysis Batch Number: 64803 End Date: 06/02/2015 18:31

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
CCB 550-64803/1		06/02/2015 08:18	1	0602-001.D	Supelcosil PAH 4.6(mm)
CCB 550-64803/1		06/02/2015 08:18	1	0602-001.D	
ICV 550-64803/2		06/02/2015 08:52	1	0602-002.D	Supelcosil PAH 4.6(mm)
ICV 550-64803/2		06/02/2015 08:52	1		
ICV 550-64803/3		06/02/2015 09:26	1	0602-003.D	Supelcosil PAH 4.6(mm)
ICV 550-64803/3		06/02/2015 09:26	1	0602-003.D	
CCB 550-64803/4		06/02/2015 09:59	1	0602-004.D	Supelcosil PAH 4.6(mm)
CCB 550-64803/4		06/02/2015 09:59	1	0602-004.D	
MB 550-64794/1-A		06/02/2015 12:52	1	0602A005.D	Supelcosil PAH 4.6(mm)
MB 550-64794/1-A		06/02/2015 12:52	1	0602A005.D	
MB 550-64790/1-A		06/02/2015 13:26	1	0602A006.D	Supelcosil PAH 4.6(mm)
MB 550-64790/1-A		06/02/2015 13:26	1	0602A006.D	
MB 550-64792/1-A		06/02/2015 14:00	1	0602A007.D	Supelcosil PAH 4.6(mm)
MB 550-64792/1-A		06/02/2015 14:00	1	0602A007.D	
LCS 550-64792/3-A		06/02/2015 14:34	1	0602A008.D	Supelcosil PAH 4.6(mm)
LCS 550-64792/3-A		06/02/2015 14:34	1	0602A008.D	
LCSD 550-64792/4-A		06/02/2015 15:08	1	0602A009.D	Supelcosil PAH 4.6(mm)
LCSD 550-64792/4-A		06/02/2015 15:08	1	0602A009.D	
CCB 550-64803/10		06/02/2015 15:42	1	0602A010.D	Supelcosil PAH 4.6(mm)
CCB 550-64803/10		06/02/2015 15:42	1	0602A010.D	
550-45491-1	15053018	06/02/2015 16:16	1	0602A011.D	Supelcosil PAH 4.6(mm)
550-45491-1	15053018	06/02/2015 16:16	1	0602A011.D	
550-45491-1	15053018	06/02/2015 16:50	1	0602A012.D	Supelcosil PAH 4.6(mm)
550-45491-1	15053018	06/02/2015 16:50	1	0602A012.D	
550-45491-1	15053018	06/02/2015 17:24	1	0602A013.D	Supelcosil PAH 4.6(mm)
550-45491-1	15053018	06/02/2015 17:24	1	0602A013.D	
CCVIH 550-64803/14		06/02/2015 17:58	1	0602A014.D	Supelcosil PAH 4.6(mm)
CCVIH 550-64803/14		06/02/2015 17:58	1	0602A014.D	
CCB 550-64803/15		06/02/2015 18:31	1	0602A015.D	Supelcosil PAH 4.6(mm)
CCB 550-64803/15		06/02/2015 18:31	1	0602A015.D	

5506 Front

IH - HPLC/IC ANALYSIS RUN LOG

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Instrument ID: HPLC2 Start Date: 06/03/2015 11:37

Analysis Batch Number: 64943 End Date: 06/03/2015 11:37

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
550-45491-1	15053018	06/03/2015 11:37	1		

5506 Sum

IH - HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Batch Number: 64794 Batch Start Date: 06/02/15 08:30 Batch Analyst: Nelson, Zel

Batch Method: Filter Prep Batch End Date: 06/02/15 09:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 550-64794/1		Filter Prep, 5506 (Modified)		1 Sample	5 mL	32751			
550-45491-A-1	15053018	Filter Prep, 5506 (Modified)	T	1 Sample	5 mL	Unknown/Client			

Batch Notes	
Batch Comment	N5506
Media Lot Number	32751
Media Type	37mm PTFE Filter
Solvent	ACN
Solvent Lot #	0000087764

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

IH - HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Batch Number: 64790 Batch Start Date: 06/02/15 08:30 Batch Analyst: Nelson, Zel

Batch Method: Tube prep/Back Batch End Date: 06/02/15 09:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	AnalysisComment			
MB 550-64790/1		Tube prep/Back, 5506 Back		1 Sample	5 mL	9209			
550-45491-A-1	15053018	Tube prep/Back, 5506 Back	T	1 Sample	5 mL	7783			

Batch Notes	
Batch Comment	N5506
Media Lot Number	9209
Media Type	150mg XAD-2 Tubes
Solvent	ACN
Solvent Lot #	0000087764

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

IH - HPLC/IC BATCH WORKSHEET

Lab Name: TestAmerica Phoenix Job No.: 550-45491-1

SDG No.:

Batch Number: 64792 Batch Start Date: 06/02/15 08:30 Batch Analyst: Nelson, Zel

Batch Method: Tube prep/Front Batch End Date: 06/02/15 09:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	IH_PAH SS 00009	AnalysisComment		
MB 550-64792/1		Tube prep/Front, 5506 Front		1 Sample	5 mL		9209		
550-45491-A-1	15053018	Tube prep/Front, 5506 Front	T	1 Sample	5 mL		7783		
LCS 550-64792/3		Tube prep/Front, 5506 Front		1 Sample	5 mL	15 uL	9209		
LCSD 550-64792/4		Tube prep/Front, 5506 Front		1 Sample	5 mL	15 uL	9209		

Batch Notes	
Batch Comment	N5506
Media Lot Number	9209
Media Type	150mg XAD-2 Tubes
Solvent	ACN
Solvent Lot #	0000087764

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

USEPA
DateShipped: 5/28/2015
CarrierName: FedEx
AirbillNo:

Driver 491

CHAIN OF CUSTODY RECORD
Site #: 10ZZ
Contact Name: Eric Nuchims
Contact Phone: 206-624-9537

No: 10-052815-084254-0004
Cooler #:
Lab: Test America Phoenix
Lab Phone: 602-659-7612

Lab #	Collected	Sample Time	Sample #	Location	Sub Location	Analyses	Matrix	Numb Cont	Container	Volume	Vol Units	Total_Time	Avg_Flow	Flow_Units
-1	5/26/2015	10:13	15053018	TB02AR	Lot 7783 skc 4325800261	NIOSH 5506-PAHs/24hr TAT	Air	1	Sorbent tube	0	Liters	0	0	L/min

550-45491 Chain of Custody

Special Instructions: 24 hr TAT. Results to mwoodke@ene.com

SAMPLES TRANSFERRED FROM
CHAIN OF CUSTODY #

Items/Reason	Relinquished by (Signature and Organization)	Date/Time	Received by (Signature and Organization)	Date/Time	Sample Condition Upon Receipt
SAMPLES TO LAB	STAMP	5/28/15 @ 9:09	TA	5/29/15 9:30	16.9 Blue Ice

Login Sample Receipt Checklist

Client: Ecology and Environment, Inc.

Job Number: 550-45491-1

Login Number: 45491
List Number: 1
Creator: Shoemaker, Cory M

List Source: TestAmerica Phoenix

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	False	Check done at department level as required.