

Atmospheric Analysis & Consulting, Inc.

Client : SWAPE
Client Project Name : Bridgeton Sanitary Landfill Air Quality Assessment
Client Project No. : NA
AAC Project No. : 130650
Reporting Date : 06/04/2013

On May 30, 2013, Atmospheric Analysis & Consulting, Inc. received seven (7) DNPH impregnated silica gel cartridges for Carbonyls analysis by EPA Method TO-11A. Upon receipt the samples were assigned unique Laboratory ID numbers as follows:

Client ID	AAC Sample ID
BZ-1-DNPH	130650-63201
BZ-2-DNPH	130650-63210
U-1-DNPH	130650-63219
U-2-DNPH	130650-63228
D-1-DNPH	130650-63237
D-2-DNPH	130650-63246
Trip Blank-DNPH	130650-63254

TO-11A - HPLC/UV analysis - A 10 μ L aliquot of the extract was analyzed by HPLC/UV following the analytical protocols of EPA Method TO-11A as specified in the SOW. Holding times for preparation and analysis were complied with.

All samples were blank corrected using the Trip Blank value for all the analytes. The Trip Blank value was calculated using a sample volume of 250 Liters.

No other problems were encountered during the receipt, preparation, and/or analysis of these samples. The test results included in this report meet all requirements of the NELAC Standards and/or AAC SOP# TO.11.09.

I certify that this data is technically accurate, complete and in compliance with the terms and conditions of the contract. The Laboratory Director or his designee, as verified by the following signature, has authorized release of the data contained in this hardcopy data package.

If you have any questions or require further explanation of data results, please contact the undersigned.

Marcus Hueppe
Laboratory Director

This report consists of 74 pages.



132050
AC# 132467

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name:

SOIL / WATER AIR PROTECTION ENTERPRISE

Telephone No. / Fax No.:
(310) 434-0110 / (310) 434-0011

Project Manager:

PAUL ROSENFELD, PH.D.

Address:

1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401

Project Name and Location:

BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By:

Paul Rosenfeld

Sample Signature:

Paul Rosenfeld

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCs - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxylic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation	Special Instructions / Conditions of Receipt
63200	BE-1-Caulster	CAN	5/29/13	12:09	X	X								X				
63201	-DNPH	TUBE		11:57		X												
63202	-Acids			12:08			X											
63203	-HCL			11:59				X										
63204	-AMMONIA			12:02					X									
63205	-SO2			12:05						X								
63206	-HCN			12:01							X							
63207	-AMINES			12:04								X						
63208	-MERCURY			12:07											X			

Requested Turnaround Time:

Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements:

Provide Level IV QC Package for all Analyses.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Paul Rosenfeld	5/29/13	10:30			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

SOIL / WATER / AIR PROTECTION ENTERPRISE

Date: 5/29/13 Page 1 of 1

APC # 130650

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name:

SOIL / WATER AIR PROTECTION ENTERPRISE

Project Manager:

PAUL ROSENFELD, PH.D.

Address:

1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401

Project Name and Location:

BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By:

Paul Rosenfeld

Signature:

Paul Rosenfeld

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxylic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation
63209	BZ-2-CANISTER	Can	5/29/13	16:23	X	X											
63210	-DNRH	Tube		16:16			X							X			
63211	-ACIDS			16:19			X										
63212	-HCL			16:19				X									
63213	-AMMONIA			16:21					X								
63214	-SO2			16:22						X							
63215	-HEN			16:17							X						
63216	-AMINES			16:18								X					
63217	-MERCURY			16:21									X				

Requested Turnaround Time:

Standard turn-around for all analyses / If possible deliver report within 2 weeks.

QC Requirements:

Provide Level IV QC Package for all Analyses.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Paul Rosenfeld	5/29/13	18:30			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

SOIL / WATER / AIR PROTECTION ENTERPRISE

Received By: [Signature] Date: 5/30/13 Time: 14:15

Special Instructions / Conditions of Receipt

Date: 5/29/13 Page 1 of 1

AAE#130650

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name:

SOIL / WATER AIR PROTECTION ENTERPRISE

Telephone No. / Fax No.:
(310) 434-0110 / (310) 434-0011

Project Manager:

PAUL ROSENFELD, PH.D.

Address:

1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401

Project Name and Location:

BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By:

Paul Rosenfeld

Sample Signature

Paul Rosenfeld

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxylic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation
63218	U-1 - Davis	Canister	5/29/13	12:46	X	X								X			
63219	-DNPH	Tube	5/29/13	12:43		X											
63220	-Ac105		5/29/13	12:47			X										
63221	-HCL		5/29/13	12:49			X										
63222	-Ammonia		5/29/13	12:50				X									
63223	-SO2		5/29/13	12:46					X								
63224	-HCN		5/29/13	12:51						X							
63225	-Amines		5/29/13	12:45							X						
63226	-Mercury		5/29/13	12:48								X					

Requested Turnaround Time:

Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements:

Provide Level IV QC Package for all Analyses.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Paul Rosenfeld	5/29/13	18:30			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

SOIL / WATER / AIR PROTECTION ENTERPRISE

Special Instructions / Conditions of Receipt

SAMPLES RECEIVED 5/30/13

Page # 130650

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name:

SOIL / WATER AIR PROTECTION ENTERPRISE

Telephone No. / Fax No.:
(310) 434-0110 / (310) 434-0011

Date: 5/28/13 Page 1 of 1

Project Manager:

PAUL ROSENFELD, PH.D.

Address:

1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401

Project Name and Location:

BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By:

Paul Rosenfeld

Sample Signature:

Paul Rosenfeld

1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401					Special Instructions / Conditions of Receipt																						
Project Name and Location:																											
BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT																											
Sampled By: <i>Paul Rosenfeld</i>		Sample Signature: <i>Paul Rosenfeld</i>																									
LAB ID	SAMPLE ID NUMBER	Type	Date	Time																							
63227	0-2-CHLORIDE	can	5/21/13	16:46	X																						
63228	- DNH	Tube		16:43	X																						
63229	- ACIDS			16:41		X																					
63230	- HCL			16:40			X																				
63231	- AMMONIA			16:44				X																			
63232	- SO2			16:45					X																		
63233	- HCN			16:42						X																	
63234	- AMINES			16:42							X																
63235	- MERCURY			16:39								X															

Requested Turnaround Time:

Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements:
Provide Level IV QC Package for all Analyses.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Paul Rosenfeld	5/28/13	18:30			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

SOIL / WATER / AIR PROTECTION ENTERPRISE

AAE #130650

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name:

SOIL / WATER AIR PROTECTION ENTERPRISE

Telephone No. / Fax No.:
(310) 434-0110 / (310) 434-0011

Date: 5/29/13 Page 1 of 1

Project Manager:

PAUL ROSENFELD, PH.D.

Address:

1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401

Project Name and Location:

BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By:

Paul Rosenfeld

Signature:

LAB ID SAMPLE ID NUMBER Type Date Time

63234 D-1 - CANISTER CAN 5/29/13 13:28

63237 - DNPH N/A 13:24

63238 - AC105 13:24

63239 - HCL 13:23

63240 - AMMONIA 13:18

63241 - SO2 13:20

63242 - HCN 13:22

63243 - AMINES 13:25

63244 - MERCURY 13:21

VOCS - EPA TO-15	X
Reduced Sulfur Compounds - ASTM D5504	X
Aldehydes - EPA TO-11A	X
Carboxylic Acids - Tube GC-MS	X
HCL - NIOSH 7903	X
Ammonia - OSHA ID-188	X
SO2 - OSHA ID-200	X
HCN - NIOSH 6010	X
Amines - NIOSH 2010M	X
Fixed Gases - EPA 3C	X
PAHs / Dioxins EPA TO-13A / 9A	X
Mercury - NIOSH 6009	X
Odor Evaluation	

Special Instructions / Conditions of Receipt

Requested Turnaround Time:

Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements:
Provide Level IV QC Package for all Analyses.

Relinquished By: K. Hesse Date: 5/29/13 Time: 18:30

Relinquished By: K. Hesse Date: 5/29/13 Time: 18:30

Relinquished By: K. Hesse Date: 5/29/13 Time: 18:30

Relinquished By: K. Hesse Date: 5/29/13 Time: 18:30

Received By: Date: 5/30/13 Time: 14:15

Received By: Date: 5/30/13 Time: 14:15

Received By: Date: 5/30/13 Time: 14:15

Received By: Date: 5/30/13 Time: 14:15

SOIL / WATER / AIR PROTECTION ENTERPRISE

7AC#130650

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name: SOIL / WATER AIR PROTECTION ENTERPRISE				Telephone No. / Fax No.: (310) 434-0110 / (310) 434-0011				Date: 5/29/13		Page: 1 of 1													
Project Manager: PAUL ROSENFELD, PH.D.				REQUESTED TESTS / ANALYSES																			
Address: 1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401																							
Project Name and Location: BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT																							
Sampled By: <i>Paul Rosenfeld</i>				Special Instructions / Conditions of Receipt																			
LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxylic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation						
63245	D-2 - CANISTER	Can	5/29/13	17:20	X									X									
63246	- DNPH	ROB		17:20		X																	
63247	- AC105			17:21			X																
63248	- HCL			17:24				X															
63249	- AMMONIA			17:25					X														
63250	- SO2			17:22						X													
63251	- HCN			17:26							X												
63252	- AMINES			17:29								X											
63253	- MERCURY	Y		17:23											X								
Requested Turnaround Time: Standard turn-around for all analyses. If possible deliver report within 2 weeks.				QC Requirements: Provide Level IV QC Package for all Analyses.																			
Relinquished By: <i>Kob Hesse</i>				Date: 5/29/13				Time: 18:30				Received By:				Date:				Time:			
Relinquished By:				Date:				Time:				Received By:				Date:				Time:			
Relinquished By:				Date:				Time:				Received By:				Date:				Time:			
Relinquished By:				Date:				Time:				Received By:				Date:				Time:			
SOIL / WATER / AIR PROTECTION ENTERPRISE												<i>7/27/13</i>				5/30/13				14:15			

AA-C # 130650

CHAIN OF CUSTODY RECORD / ANALYTICAL REQUEST FORM

Bridgeton Sanitary Landfill Air Quality Assessment

Client Name:

SOIL / WATER AIR PROTECTION ENTERPRISE

Telephone No. / Fax No.:
(310) 434-0110 / (310) 434-0011

Project Manager:

PAUL ROSENFELD, PH.D.

Address:

1640 FIFTH STREET, SUITE 204, SANTA MONICA, CA 90401

Project Name and Location:

BRIDGETON SANITARY LANDFILL AIR QUALITY ASSESSMENT

Sampled By:

Paul Rosenfeld

Sampler Signature

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Aldehydes - EPA TO-11A	Carboxylic Acids - Tube GC-MS	HCL - NIOSH 7903	Ammonia - OSHA ID-188	SO2 - OSHA ID-200	HCN - NIOSH 6010	Amines - NIOSH 2010M	Fixed Gases - EPA 3C	PAHs / Dioxins EPA TO-13A / 9A	Mercury - NIOSH 6009	Odor Evaluation
603254	TRP BLANK - DNPH		5/29/12	15:00			X										
603255	-ACIDS			15:30			X										
603256	-HCL							X									
603257	-AMMONIA								X								
603258	-SO2									X							
603259	-HCN										X						
603260	-AMINES											X					
603261	-Mercury												X				

Requested Turnaround Time:

Standard turn-around for all analyses. If possible deliver report within 2 weeks.

QC Requirements:

Provide Level IV QC Package for all Analyses.

Relinquished By:	Date:	Time:	Received By:	Date:	Time:
ROB Hesse	5/29/12	18:30			
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

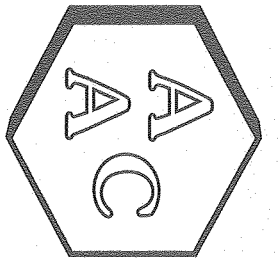
SOIL / WATER / AIR PROTECTION ENTERPRISE

Special Instructions / Conditions of Receipt

Date: 5/29/12 Page 1 of 1

Sample Name	Date	Parameter	Tube	Description	Location	Volume (liters)
D-1-DNPH Total	5/29/2013	Aldehydes	226-120	Off-site Ambient	Downwind, Virbac Front Lawn, North Corner	397
D-2-DNPH	5/29/2013	Aldehydes	226-120	Off-site Ambient	Downwind, Northwest Auto Body, NW Corner	161
U-1-DNPH	5/29/2013	Aldehydes	226-120	Off-site Ambient	Upwind, FR Service Co., Front Lawn NW Corner	278
U-2-DNPH	5/29/2013	Aldehydes	226-120	Off-site Ambient	Upwind, FR Service Co., Front Lawn NW Corner	238
BZ-1-DNPH	5/29/2013	Aldehydes	226-120	ONSITE Ambient	North of Flares, West of Parking Lot, Downwind	259
BZ-2-DNPH	5/29/2013	Aldehydes	226-120	ONSITE Ambient	Adjacent to Flares, Downwind of RCP Removal	249
D-1-Ammonia	5/29/2013	Ammonia	226-29	Off-site Ambient	Downwind, Virbac Front Lawn, North Corner	28.2
D-2-Ammonia	5/29/2013	Ammonia	226-29	Off-site Ambient	Downwind, Northwest Auto Body, NW Corner	23.3
U-1-Ammonia	5/29/2013	Ammonia	226-29	Off-site Ambient	Upwind, FR Service Co., Front Lawn NW Corner	29.2
U-2-Ammonia	5/29/2013	Ammonia	226-29	Off-site Ambient	Upwind, FR Service Co., Front Lawn NW Corner	24.1
BZ-1-Ammonia	5/29/2013	Ammonia	226-29	ONSITE Ambient	North of Flares, West of Parking Lot, Downwind	25.5
BZ-2-Ammonia	5/29/2013	Ammonia	226-29	ONSITE Ambient	Adjacent to Flares, Downwind of RCP Removal	23.7
D-1-HCL	5/29/2013	Hydrogen Chloride	226-10-03	Off-site Ambient	Downwind, Virbac Front Lawn, North Corner	100
D-2-HCL	5/29/2013	Hydrogen Chloride	226-10-03	Off-site Ambient	Downwind, Northwest Auto Body, NW Corner	78.8
U-1-HCL	5/29/2013	Hydrogen Chloride	226-10-03	Off-site Ambient	Upwind, FR Service Co., Front Lawn NW Corner	103
U-2-HCL	5/29/2013	Hydrogen Chloride	226-10-03	Off-site Ambient	Upwind, FR Service Co., Front Lawn NW Corner	81.8
BZ-1-HCL	5/29/2013	Hydrogen Chloride	226-10-03	ONSITE Ambient	North of Flares, West of Parking Lot, Downwind	96.7
BZ-2-HCL	5/29/2013	Hydrogen Chloride	226-10-03	ONSITE Ambient	Adjacent to Flares, Downwind of RCP Removal	91.4
D-1-SO2	5/29/2013	Sulfur Dioxide	226-80	Off-site Ambient	Downwind, Virbac Front Lawn, North Corner	15.3
D-2-SO2	5/29/2013	Sulfur Dioxide	226-80	Off-site Ambient	Downwind, Northwest Auto Body, NW Corner	11.9
U-1-SO2	5/29/2013	Sulfur Dioxide	226-80	Off-site Ambient	Upwind, FR Service Co., Front Lawn NW Corner	14.9
U-2-SO2	5/29/2013	Sulfur Dioxide	226-80	Off-site Ambient	Upwind, FR Service Co., Front Lawn NW Corner	12.6
BZ-1-SO2	5/29/2013	Sulfur Dioxide	226-80	ONSITE Ambient	North of Flares, West of Parking Lot, Downwind	13.2
BZ-2-SO2	5/29/2013	Sulfur Dioxide	226-80	ONSITE Ambient	Adjacent to Flares, Downwind of RCP Removal	13.0

Results



Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT Analysis of Carbonyls by EPA Method TO-11A

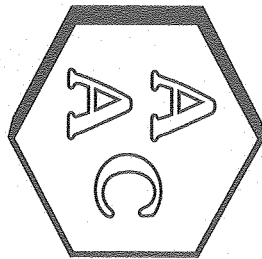
Client : SWAPE
Client Project Name : Bridgetown Sanitary Landfill Air Quality Assessment
AAC Project No. : 130650
Analyst : HP/EG
Units : ppbv

Sampling Date (s) : 05/29/2013
Receiving Date : 05/30/2013
Analysis Date : 05/31/2013
Reporting Date : 06/04/2013

Client ID	AAC Sample ID	Formaldehyde	Acetaldehyde	Acrolein	Acetone	Propionaldehyde	Crotonaldehyde	Methacrolein	MEK & Butyraldehyde	Benzaldehyde	Valeraldehyde	m-Tolualdehyde	Hexaldehyde
BZ-1-DNPH	130650-63201	4.27	1.34	<SRL	<SRL	0.345	0.924	0.110	0.459	0.697	0.749	<SRL	0.288
SRL		0.236	0.161	0.126	0.122	0.122	0.101	0.101	0.098	0.067	0.082	0.059	0.071
BZ-2-DNPH	130650-63210	4.47	2.95	<SRL	4.83	0.654	1.54	0.692	3.23	1.23	1.15	<SRL	0.728
SRL		0.245	0.167	0.131	0.127	0.127	0.105	0.105	0.102	0.069	0.086	0.061	0.074
U-1-DNPH	130650-63219	3.30	0.616	<SRL	<SRL	0.124	1.42	<SRL	<SRL	<SRL	0.274	<SRL	0.068
SRL		0.220	0.150	0.118	0.114	0.114	0.094	0.094	0.091	0.062	0.077	0.055	0.066
U-2-DNPH	130650-63228	2.96	0.715	<SRL	<SRL	<SRL	2.14	0.221	<SRL	<SRL	0.350	0.088	0.096
SRL		0.257	0.175	0.137	0.133	0.133	0.110	0.110	0.107	0.073	0.089	0.064	0.077
D-1-DNPH	130650-63237	2.12	0.506	<SRL	<SRL	0.092	0.426	0.079	0.137	0.179	<SRL	0.163	0.046
SRL		0.154	0.105	0.082	0.080	0.080	0.066	0.066	0.064	0.044	0.054	0.038	0.046
D-2-DNPH	130650-63246	4.59	1.16	<SRL	2.14	0.227	1.13	0.575	1.48	0.511	0.387	<SRL	<SRL
SRL		0.379	0.259	0.203	0.196	0.196	0.163	0.163	0.158	0.107	0.132	0.095	0.114
Trip Blank DNPH	130650-63254	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL
SRL		0.244	0.167	0.131	0.126	0.126	0.105	0.105	0.102	0.069	0.085	0.061	0.073

<SRL> compound was analyzed for but not detected at or above the SRL (Sample Reporting Limit)
The Blank DNPH data was calculated using a sample volume of 250.0 Liters
All sample values were blank corrected using the Trip Blank value for all analytes


Marcus Hueppe
Laboratory Director



Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT Analysis of Carbonyls by EPA Method TO-11A

Client : SWAPE
Client Project Name : Bridgetown Sanitary Landfill Air Quality Assessment
AAC Project No. : 130650
Analyst : HP/EG
Units : ug/m³

Sampling Date (s) : 05/29/2013
Receiving Date : 05/30/2013
Analysis Date : 05/31/2013
Reporting Date : 06/04/2013

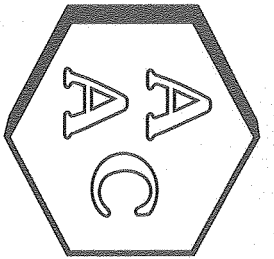
Client ID	AAC Sample ID	Formaldehyde	Acetaldehyde	Acrolein	Acetone	Propionaldehyde	Crotonaldehyde	Methacrolein	MEK & Butyraldehyde	Benzaldehyde	Valeraldehyde	m-Tolaldehyde	Hexaldehyde
BZ-1-DNPH	130650-63201	5.24	2.41	<SRL	<SRL	0.820	2.65	0.315	1.35	3.02	2.64	<SRL	1.18
SRL		0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290	0.290
BZ-2-DNPH	130650-63210	5.49	5.32	<SRL	11.5	1.55	4.40	1.98	9.53	5.35	4.04	<SRL	2.98
SRL		0.301	0.301	0.301	0.301	0.301	0.301	0.301	0.301	0.301	0.301	0.301	0.301
U-1-DNPH	130650-63219	4.06	1.11	<SRL	<SRL	0.294	4.08	<SRL	<SRL	<SRL	0.967	<SRL	0.279
SRL		0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270	0.270
U-2-DNPH	130650-63228	3.63	1.29	<SRL	<SRL	<SRL	6.12	0.270	0.270	0.270	1.23	0.434	0.392
SRL		0.315	0.315	0.315	0.315	0.315	0.315	0.315	0.315	0.315	0.315	0.315	0.315
D-1-DNPH	130650-63237	2.61	0.911	<SRL	<SRL	0.218	1.22	0.225	0.404	0.775	<SRL	0.799	0.189
SRL		0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189	0.189
D-2-DNPH	130650-63246	5.64	2.09	<SRL	5.09	0.539	3.25	1.65	4.36	2.22	1.36	<SRL	<SRL
SRL		0.466	0.466	0.466	0.466	0.466	0.466	0.466	0.466	0.466	0.466	0.466	0.466
Trip Blank DNPH	130650-63254	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL	<SRL
SRL		0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300	0.300

<SRL-compound was analyzed for but not detected at or above the SRL (Sample Reporting Limit)

The Blank DNPH data was calculated using a sample volume of 250.0 Liters

All sample values were blank corrected using the Trip Blank value for all analytes

Marcus Hueppe
Laboratory Director



Atmospheric Analysis & Consulting, Inc.

LABORATORY ANALYSIS REPORT Analysis of Carbonyls by EPA Method TO-11A

Client : SWAPE
Client Project Name : Bridgetown Sanitary Landfill Air Quality Assessment
AAC Project No. : 130650
Analyst : HP/EG
Units : ug/sample

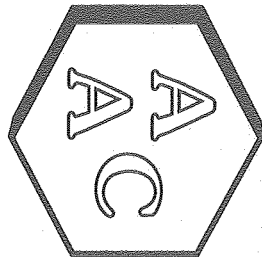
Sampling Date (s) : 05/29/2013
Receiving Date : 05/30/2013
Analysis Date : 05/31/2013
Reporting Date : 06/04/2013

Client ID	AAC Sample ID	Formaldehyde	Acetaldehyde	Acrolein	Acetone	Propionaldehyde	Crotonaldehyde	Methacrolein	MEK & Butyraldehyde	Benzaldehyde	Valeraldehyde	m-Tolualdehyde	Hexaldehyde
BZ-1-DNPH	130650-63201	1.36	0.663	<SRL	0.873	0.220	0.686	0.112	0.534	0.783	0.684	<SRL	0.305
SRL		0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
BZ-2-DNPH	130650-63210	1.37	1.36	<SRL	3.84	0.395	1.10	0.524	2.56	1.33	1.01	<SRL	0.743
SRL		0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
U-1-DNPH	130650-63219	1.13	0.348	<SRL	0.306	0.089	1.14	0.087	0.149	<SRL	0.269	<SRL	0.078
SRL		0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
U-2-DNPH	130650-63228	0.870	0.346	<SRL	0.606	0.075	1.46	0.181	0.215	<SRL	0.293	0.103	0.093
SRL		0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
D-1-DNPH	130650-63237	1.04	0.401	<SRL	0.524	0.094	0.485	0.120	0.344	0.308	<SRL	0.317	0.075
SRL		0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
D-2-DNPH	130650-63246	0.914	0.376	<SRL	1.81	0.094	0.523	0.296	0.884	0.357	0.219	<SRL	<SRL
SRL		0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075
Trip Blank DNPH	130650-63254	<SRL	<SRL	<SRL	0.987	<SRL	<SRL	<SRL	0.183	<SRL	<SRL	<SRL	<SRL
SRL		0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075

<SRL-compound was analyzed for but not detected at or above the SRL (Sample Reporting Limit)
The Blank DNPH data was calculated using a sample volume of 1.0 Liters

Marcus Hueppe
Laboratory Director

QA/QC Summary



Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

10-11A

HPLC Calibration Verification of the 01/16/2013 Calibration

Analysis Date : 05/31/2013
Analyst : HP/EG

Instrument ID : HPLC 01

Opening CCV

Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.58	2.58	2.61	2.55	2.59	2.57	2.57	5.12	2.60	2.58	2.58	2.56
Accuracy (%)	103	103	104	102	104	103	103	102	104	103	103	102

Closing CCV

Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.66	2.68	2.71	2.65	2.68	2.68	2.68	5.35	2.73	2.68	2.70	2.65
Accuracy (%)	106	107	108	106	107	107	107	107	109	107	108	106

Continuing CCV

Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.69	2.69	2.74	2.70	2.68	2.68	2.70	5.39	2.65	2.68	2.68	2.65
Accuracy (%)	108	108	110	108	107	107	108	108	106	107	107	106

Continuing CCV

Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.53	2.53	2.57	2.52	2.51	2.51	2.54	5.05	2.51	2.53	2.55	2.54
Accuracy (%)	101	101	103	101	100	100	102	101	100	101	102	102

Continuing CCV

Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.53	2.54	2.59	2.53	2.54	2.54	2.55	5.08	2.52	2.54	2.56	2.55
Accuracy (%)	101	102	104	101	102	102	102	102	101	102	102	102

Closing CCV

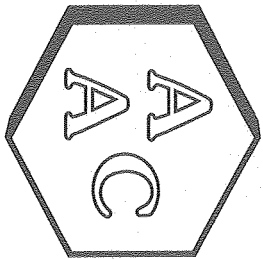
Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.64	2.66	2.71	2.65	2.66	2.69	2.69	5.34	2.65	2.69	2.71	2.68
Accuracy (%)	106	106	108	106	106	108	108	107	106	108	108	107

Second Source

Standard Concentration (ug/mL)	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
2.50	2.62	2.64	2.67	2.62	2.63	2.61	2.63	5.23	2.57	2.63	2.60	2.63
Accuracy (%)	105	106	107	105	105	104	105	105	103	105	104	105

*Must be 100 ± 10%

Marcus Hueppe
Laboratory Director



Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report TO-11A Laboratory Control Spike Analysis

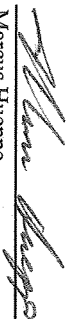
Analysis Date : 05/31/2013

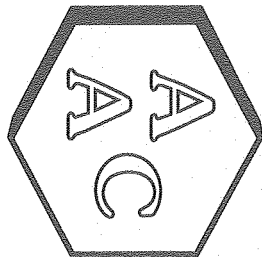
Analyst : HP/EG

Instrument ID : HPLC 01

Analytes	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methacrolein (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
Laboratory Control Spike 1												
Sample Concentration (ug/mL)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Spike Concentration (ug/mL)	0.379	0.379	0.379	0.379	0.379	0.379	0.379	0.758	0.379	0.379	0.379	0.379
Spiked Sample Concentration (ug/mL)	0.360	0.371	0.386	0.367	0.383	0.363	0.424	0.709	0.377	0.379	0.375	0.383
Spike Recovery (%)*	95.0	98.0	102	97.0	101	95.9	112	93.6	99.5	100	98.9	101
Laboratory Control Spike 2												
Sample Concentration (ug/mL)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Spike Concentration (ug/mL)	0.379	0.379	0.379	0.379	0.379	0.379	0.379	0.758	0.379	0.379	0.379	0.379
Spiked Sample Concentration (ug/mL)	0.359	0.361	0.376	0.366	0.372	0.353	0.416	0.673	0.365	0.368	0.362	0.370
Spike Recovery (%)*	94.7	95.3	99.3	96.6	98.3	93.3	110	88.8	96.4	97.1	95.5	97.8

*Must be 100 ± 15%


Marcus Hueppe
Laboratory Director



Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

TO-11A

Matrix Spike Analysis

Analysis Date

: 05/31/2013

Analyst

: HPEG

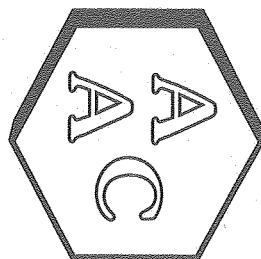
Instrument ID : HPLC 01

Analytes	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methylcroton (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m-Tolualdehyde (ug/mL)	Heptaldehyde (ug/mL)
Sample ID 130645-63188												
Sample Concentration (ug/mL)	1.05	0.767	0.026	0.797	0.185	0.145	0.070	0.212	0.222	0.141	0.009	0.064
Spike Concentration (ug/mL)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	2.50	1.25	1.25	1.25	1.25
Spiked Sample Concentration (ug/mL)	2.16	1.80	1.35	1.79	1.42	1.42	1.52	2.57	1.44	1.41	1.32	1.36
Duplicate Spiked Sample Concentration (ug/mL)	2.13	1.78	1.34	1.76	1.41	1.40	1.51	2.52	1.43	1.41	1.32	1.34
Spike Recovery (%)*	88.6	82.7	106	79.4	98.8	102	116	94.3	97.5	102	105	104
Duplicate Spike Recovery (%)*	86.2	81.1	105	77.0	98.0	100	115	92.3	96.7	102	105	102
RPD**	1.4	1.1	0.7	1.7	0.7	1.4	0.7	2.0	0.7	0.0	0.0	1.5
Sample ID 130657-63289												
Sample Concentration (ug/mL)	0.007	0.020	0.000	0.185	0.005	0.006	0.004	0.031	0.000	0.007	0.003	0.004
Spike Concentration (ug/mL)	1.25	1.25	1.25	1.25	1.25	1.25	1.25	2.50	1.25	1.25	1.25	1.25
Spiked Sample Concentration (ug/mL)	1.32	1.30	1.32	1.47	1.30	1.31	1.43	2.47	1.29	1.30	1.33	1.30
Duplicate Spiked Sample Concentration (ug/mL)	1.38	1.36	1.38	1.53	1.36	1.37	1.50	2.59	1.35	1.37	1.38	1.36
Spike Recovery (%)*	105	102	106	103	104	104	114	97.5	103	103	106	104
Duplicate Spike Recovery (%)*	110	107	110	108	108	109	120	102	108	109	110	108
RPD**	4.4	4.5	4.4	4.0	4.5	4.5	4.8	4.7	4.5	5.2	3.7	4.5

*Must be 100± 25%

** Must be ≤ 25%

Marcus Hueppe
Laboratory Director



Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

TO-11A
Duplicate Analysis

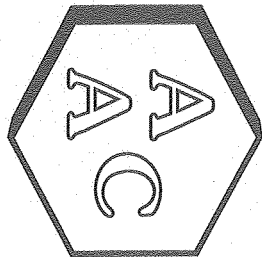
Analysis Date : 05/31/2013
Analyst : HP/EG

Instrument ID : HPLC 01

Analyte	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acetone (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methylcrotonaldehyde (ug/mL)	MIBK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	2-Nonenal (ug/mL)	Furaldehyde (ug/mL)
Sample ID	130645-63188											
Sample Concentration (ug/mL)	2.11	1.53	0.052	1.59	0.369	0.290	0.140	0.425	0.444	0.282	<RL	0.128
Duplicate Sample Concentration (ug/mL)	2.11	1.54	0.053	1.61	0.382	0.249	0.151	0.463	0.490	0.273	<RL	0.130
RPD**	0.4	0.1	0.8	1.0	3.3	14.9	8.0	8.6	9.9	3.0	NA	1.5
Sample ID	130650-63254											
Sample Concentration (ug/mL)	<RL	<RL	ND	0.329	<RL	ND	<RL	0.061	ND	ND	ND	ND
Duplicate Sample Concentration (ug/mL)	<RL	<RL	ND	0.332	<RL	ND	<RL	0.061	ND	ND	ND	ND
RPD**	NA	NA	NA	1.0	NA	NA	NA	0.2	NA	NA	NA	NA
Sample ID	130657-63281											
Sample Concentration (ug/mL)	0.071	0.064	<RL	0.249	<RL	0.110	<RL	0.048	ND	<RL	<RL	<RL
Duplicate Sample Concentration (ug/mL)	0.070	0.064	<RL	0.248	<RL	0.108	<RL	0.052	ND	<RL	<RL	<RL
RPD**	1.7	0.6	NA	0.5	NA	1.8	NA	8.6	NA	NA	NA	NA
Sample ID	130657-63289											
Sample Concentration (ug/mL)	<RL	0.041	ND	0.371	<RL	<RL	<RL	0.063	ND	<RL	<RL	<RL
Duplicate Sample Concentration (ug/mL)	<RL	0.041	ND	0.370	<RL	<RL	<RL	0.072	ND	<RL	<RL	<RL
RPD**	NA	0.2	NA	0.2	NA	NA	NA	13.4	NA	NA	NA	NA
Sample ID	130657-63292											
Sample Concentration (ug/mL)	0.066	0.072	<RL	0.447	<RL	0.132	<RL	0.114	<RL	<RL	<RL	<RL
Duplicate Sample Concentration (ug/mL)	0.065	0.072	<RL	0.446	<RL	0.127	<RL	0.124	<RL	<RL	<RL	<RL
RPD**	1.5	0.7	NA	0.2	NA	3.9	NA	7.7	NA	NA	NA	NA

** Must be $\leq 20\%$
<RL=less than the Reporting Limit
ND = Not Detected
NA=Not Applicable

Marcus Hueppe
Laboratory Director



Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report TO-11A System and Method Blank Analysis

Analysis Date : 05/31/2013
Analyst : HP/EG

Instrument ID : HPLC 01

Analyte	Formaldehyde (ug/mL)	Acetaldehyde (ug/mL)	Acrolein (ug/mL)	Acetone (ug/mL)	Propionaldehyde (ug/mL)	Crotonaldehyde (ug/mL)	Methylcrotonaldehyde (ug/mL)	MEK & Butyraldehyde (ug/mL)	Benzaldehyde (ug/mL)	Valeraldehyde (ug/mL)	m- Tolualdehyde (ug/mL)	Hexaldehyde (ug/mL)
Opening Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Method Blank 1	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Continuing Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Continuing Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Continuing Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Method Blank 2	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Continuing Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Closing Acetonitrile Blank	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL	<RL
Reporting Limit	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025

RL = Reporting Limit
<RL = less than the Reporting Limit


Marcus Hueppe
Laboratory Director

Calibration Summary

File Name: C:\CP Methods & Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Version: 13

Creator: EG/HP
Description: EPA TO-11

External standard calibration

No injection volume correction

No sample weight correction

Area reject threshold: 1000

Reference peak area reject threshold: 1000

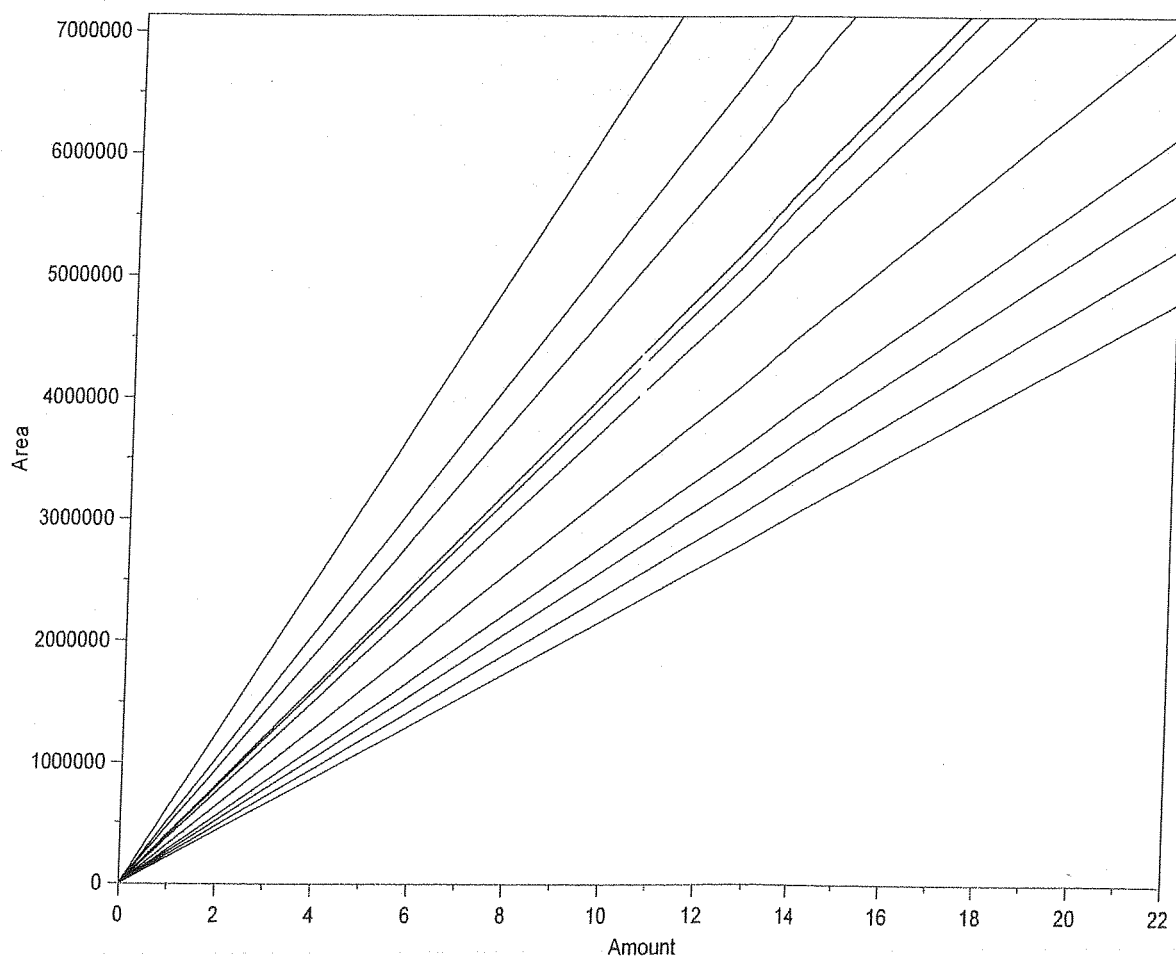
Amount units: ug/ml

No default component

Method of calculating data point averages: Equal weight for all updates

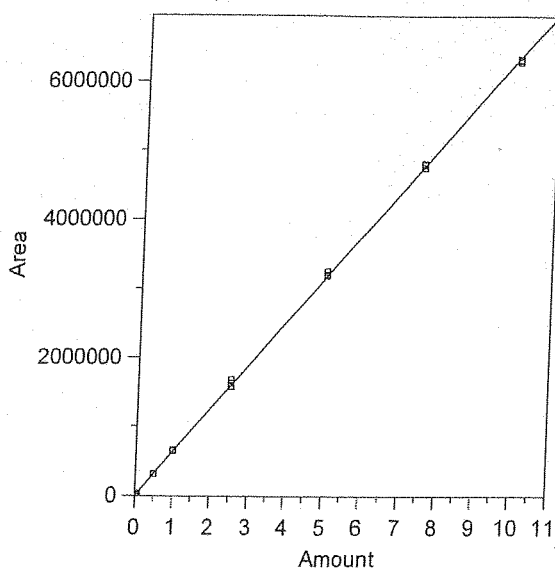
No calibration update report

All levels are normal data points.



1 Formaldehyde
Expected retention time: 2.668 minutes
Search window: 0.1 minutes
No retention time reference component
Group number: 0
High alarm limit: 0

1 Formaldehyde



Expected retention time: 2.668 minutes
 Search window: 0.1 minutes
 No retention time reference component
 Group number: 0

High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0

Single peak quantification by area

$$Y = 635498.8 X + 0$$

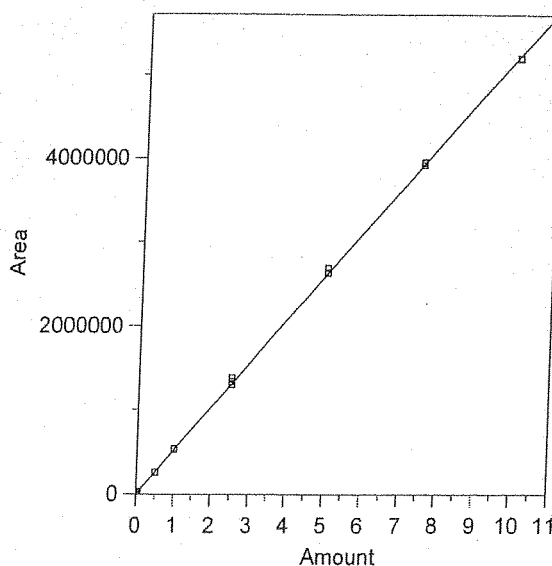
Linear fit with equal weighting, forced to origin

Coefficient of determination: 0.9998119
 Average error: 2.277%
 Average CF: 646538.3
 RSD: 2.426%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	3319.347	663869.4	4.464	C:\CP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	3370.723	674144.6	6.081	C:\CP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	3248.552	649710.4	2.236	C:\CP Data\#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	16006.42	640256.8	0.749	C:\CP Data\#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	16354.98	654199.2	2.943	C:\CP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	16366.92	654676.8	3.018	C:\CP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	32105.94	642118.8	1.042	C:\CP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	33903.62	678072.4	6.699	C:\CP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	33799.1	675982	6.370	C:\CP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	315170.2	630340.4	-0.812	C:\CP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	313531.4	627062.8	-1.327	C:\CP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	311779	623558	-1.879	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	657848.8	657848.8	3.517	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	645232.1	645232.1	1.532	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	655379.7	655379.7	3.128	C:\CP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1573829	629531.6	-0.939	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1620797	648318.8	2.017	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1673874	669549.6	5.358	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	3188477	637695.4	0.346	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	3204251	640850.2	0.842	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	3251028	650205.6	2.314	C:\CP Data\#1 HPLC #1\2013\011613\011613.0022.BND	1/17/2013 9:22:52 AM
22	7.5	4808576	641143.4	0.888	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	4753309	633774.6	-0.271	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	4797090	639612	0.647	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	6314019	631401.9	-0.645	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	6326623	632662.3	-0.446	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	6293350	629335	-0.970	C:\CP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

2

Acetaldehyde



Expected retention time: 3.257 minutes
 Search window: 0.3 minutes
 No retention time reference component
 Group number: 0

High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0

Single peak quantification by area

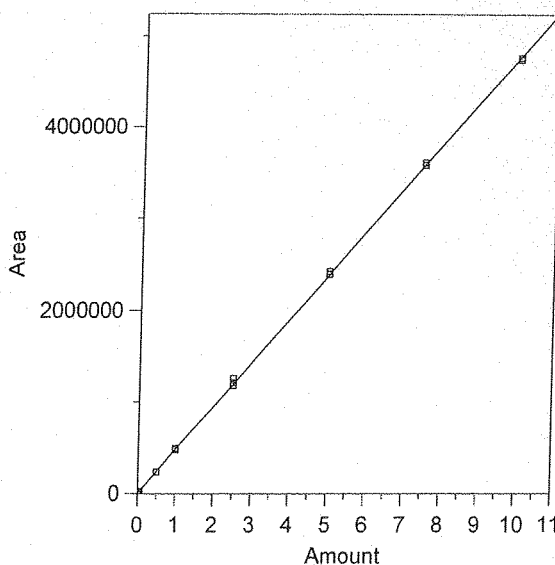
$$Y = 523848.9 X + 0$$

Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.9998139
 Average error: 2.531%
 Average CF: 534292.2
 RSD: 2.711%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	2745.296	549059.2	4.813	CACP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	2776.359	555271.8	5.998	CACP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	2703.649	540729.8	3.222	CACP Data\#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	13497.82	539912.8	3.067	CACP Data\#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	13515.47	540618.8	3.201	CACP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	14104.01	564160.4	7.695	CACP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	26300.05	526001	0.411	CACP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	27932.75	558655	6.644	CACP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	27879.66	557593.2	6.442	CACP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	259874.6	519749.2	-0.783	CACP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	258633.5	517267	-1.256	CACP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	256621.7	513243.4	-2.025	CACP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	540890.6	540890.6	3.253	CACP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	530744.3	530744.3	1.316	CACP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	538459.7	538459.7	2.789	CACP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1295813	518325.2	-1.054	CACP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1335265	534106	1.958	CACP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1382832	553132.8	5.590	CACP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2624115	524823	0.186	CACP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2633835	526767	0.557	CACP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2686124	537224.8	2.553	CACP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3950260	526701.3	0.545	CACP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3923232	523097.6	-0.143	CACP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3961766	528235.4	0.837	CACP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	5206756	520675.6	-0.606	CACP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	5208438	520843.8	-0.574	CACP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	5196004	519600.4	-0.811	CACP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

3

Acrolein



Expected retention time: 3.943 minutes
 Search window: 0.2 minutes
 No retention time reference component
 Group number: 0

High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0

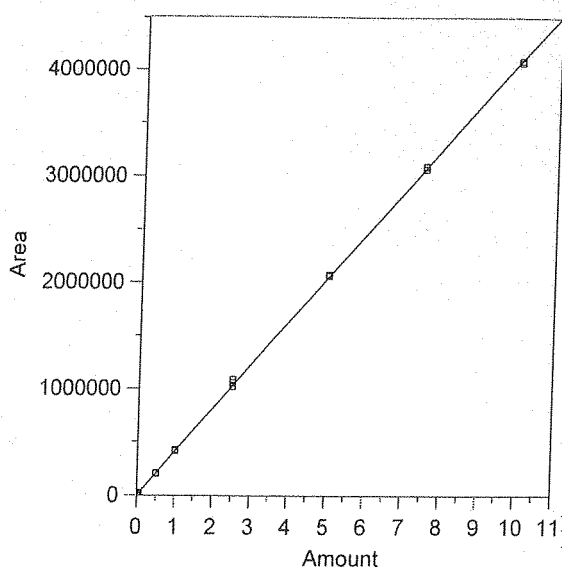
Single peak quantification by area

$$Y = 477513.6 X + 0$$

Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.9998558
 Average error: 1.593%
 Average CF: 479383.3
 RSD: 2.006%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	2415.335	483067	1.163	CACP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	2359.939	471987.8	-1.157	CACP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	2341.276	468255.2	-1.939	CACP Data\#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	12230.26	489210.4	2.450	CACP Data\#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	11731.43	469257.2	-1.729	CACP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	12013.16	480526.4	0.631	CACP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	23533.81	470676.2	-1.432	CACP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	24849.35	496987	4.078	CACP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	24508.45	490169	2.650	CACP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	234643.4	469286.8	-1.723	CACP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	235366	470732	-1.420	CACP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	231717.2	463434.4	-2.948	CACP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	492637.6	492637.6	3.167	CACP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	473624.6	473624.6	-0.814	CACP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	486674.4	486674.4	1.918	CACP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1178759	471503.6	-1.259	CACP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1212454	484981.6	1.564	CACP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1260575	504230	5.595	CACP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2391359	478271.8	0.159	CACP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2397531	479506.2	0.417	CACP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2423446	484689.2	1.503	CACP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3608190	481092	0.749	CACP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3578272	477102.9	-0.086	CACP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3607869	481049.2	0.740	CACP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	4739617	473961.7	-0.744	CACP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	4740989	474098.9	-0.715	CACP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	4763349	476334.9	-0.247	CACP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

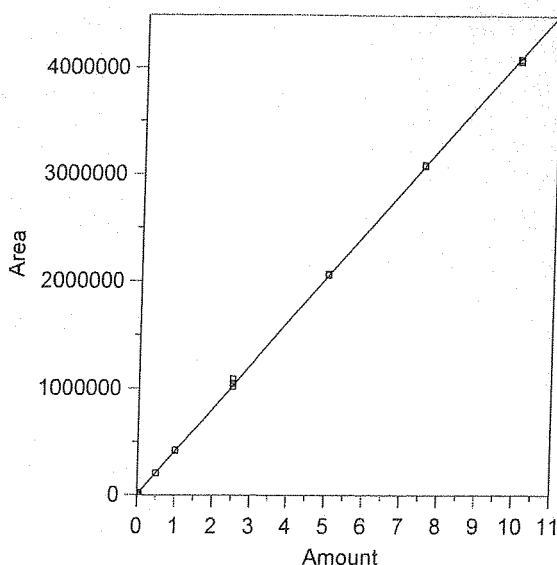
4 Acetone



Expected retention time: 4.132 minutes
 Search window: 0.4 minutes
 No retention time reference component
 Group number: 0
 High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0
 Single peak quantification by area
 $Y = 413240.1 X + 0$
 Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.999868
 Average error: 2.733%
 Average CF: 420186.8
 RSD: 2.868%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	2183.345	436669	6.442	CACP Data#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	2162.857	432571.4	5.443	CACP Data#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	2166.039	433207.8	5.599	CACP Data#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	10593.84	423753.6	3.294	CACP Data#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	11158.68	446347.2	8.801	CACP Data#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	10863.23	434529.2	5.921	CACP Data#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	20778.5	415570	1.299	CACP Data#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	22119.85	442397	7.839	CACP Data#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	21561.34	431226.8	5.116	CACP Data#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	206884.7	413769.4	0.860	CACP Data#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	202801.7	405603.4	-1.130	CACP Data#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	204367.4	408734.8	-0.367	CACP Data#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	423714.7	423714.7	3.285	CACP Data#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	413611.8	413611.8	0.822	CACP Data#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	424962.7	424962.7	3.589	CACP Data#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1017069	406827.6	-0.832	CACP Data#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1052471	420988.4	2.620	CACP Data#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1082277	432910.8	5.526	CACP Data#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2059978	411995.6	0.428	CACP Data#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2061998	412399.6	0.526	CACP Data#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2074281	414856.2	1.125	CACP Data#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:22:52 AM
22	7.5	3090544	412072.5	0.447	CACP Data#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3065231	408697.5	-0.376	CACP Data#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3096511	412868.1	0.641	CACP Data#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	4075368	407536.8	-0.659	CACP Data#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	4095606	409560.6	-0.166	CACP Data#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	4076624	407662.4	-0.628	CACP Data#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

5 Propionaldehyde



Expected retention time: 4.392 minutes
 Search window: 0.5 minutes
 No retention time reference component
 Group number: 0

High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0

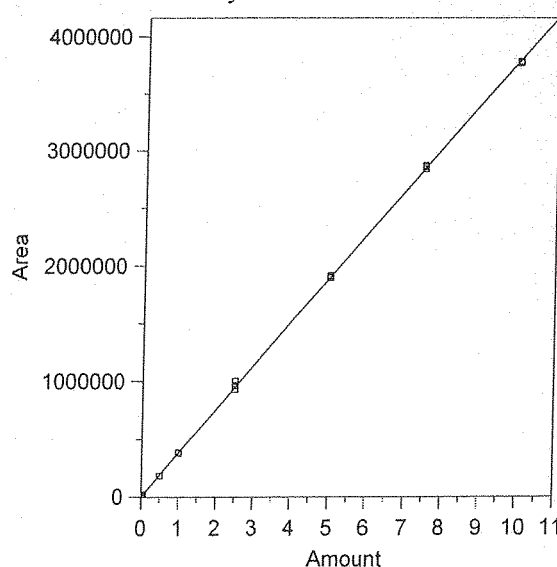
Single peak quantification by area

$$Y = 409729.4 X + 0$$

Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.9998541
 Average error: 2.076%
 Average CF: 414811.5
 RSD: 2.614%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	1972.789	394557.8	-3.703	CACP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	1996.396	399279.2	-2.551	CACP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	2036.421	407284.2	-0.597	CACP Data\#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	10616.59	424663.6	3.645	CACP Data\#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	10751.91	430076.4	4.966	CACP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	10655.2	426208	4.022	CACP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	20828.86	416577.2	1.671	CACP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	22022.53	440450.6	7.498	CACP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	21487.62	429752.4	4.887	CACP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	203755.9	407511.8	-0.541	CACP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	204614.9	409229.8	-0.122	CACP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	202760.2	405520.4	-1.027	CACP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	422491.5	422491.5	3.115	CACP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	414054.3	414054.3	1.056	CACP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	418737.7	418737.7	2.199	CACP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1013506	405402.4	-1.056	CACP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1049219	419687.6	2.430	CACP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1088355	435342	6.251	CACP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2055268	411053.6	0.323	CACP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2059857	411971.4	0.547	CACP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2067409	413481.8	0.916	CACP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3090514	412068.5	0.571	CACP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3078345	410446	0.175	CACP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3088245	411766	0.497	CACP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	4063636	406363.6	-0.821	CACP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	4072347	407234.7	-0.609	CACP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	4086977	408697.7	-0.252	CACP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

6 Crotonaldehyde

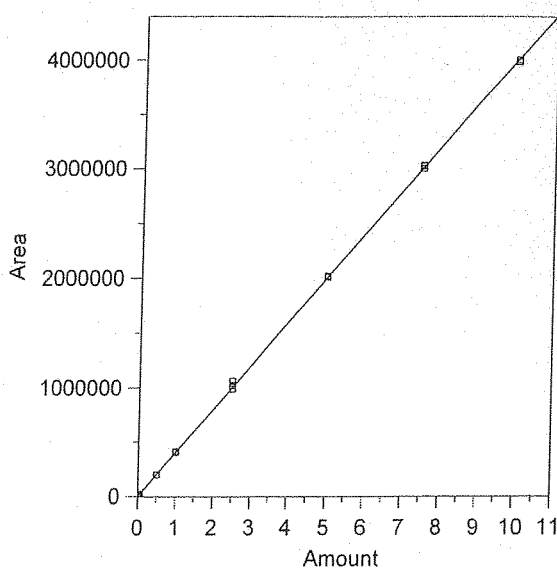


Expected retention time: 5.161 minutes
 Search window: 0.5 minutes
 No retention time reference component
 Group number: 0
 High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0
 Single peak quantification by area
 $Y = 379197.3 X + 0$
 Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.9998879
 Average error: 2.055%
 Average CF: 377240.3
 RSD: 2.954%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	1763.188	352637.6	-7.004	CACP Data#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	1769.861	353972.2	-6.652	CACP Data#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	1774.771	354954.2	-6.393	CACP Data#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	9632.542	385301.7	1.610	CACP Data#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	9590.598	383623.9	1.167	CACP Data#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	9482.347	379293.9	0.025	CACP Data#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	18280.8	365616	-3.582	CACP Data#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	19753.15	395063	4.184	CACP Data#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	19265.63	385312.6	1.613	CACP Data#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	184891.2	369782.4	-2.483	CACP Data#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	184884.5	369769	-2.486	CACP Data#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	185209	370418	-2.315	CACP Data#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	385583	385583	1.684	CACP Data#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	378746.3	378746.3	-0.119	CACP Data#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	383412.3	383412.3	1.112	CACP Data#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	927177.1	370870.8	-2.196	CACP Data#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	962027.6	384811.1	1.480	CACP Data#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	999406.8	399762.7	5.423	CACP Data#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	1894920	378984	-0.056	CACP Data#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	1912362	382472.4	0.864	CACP Data#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	1900975	380195	0.263	CACP Data#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:22:52 AM
22	7.5	2868305	382440.7	0.855	CACP Data#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	2837994	378399.2	-0.210	CACP Data#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	2857948	381059.7	0.491	CACP Data#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	3777541	377754.1	-0.381	CACP Data#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	3769081	376908.1	-0.604	CACP Data#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	3783434	378343.4	-0.225	CACP Data#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

7

Methacrolein

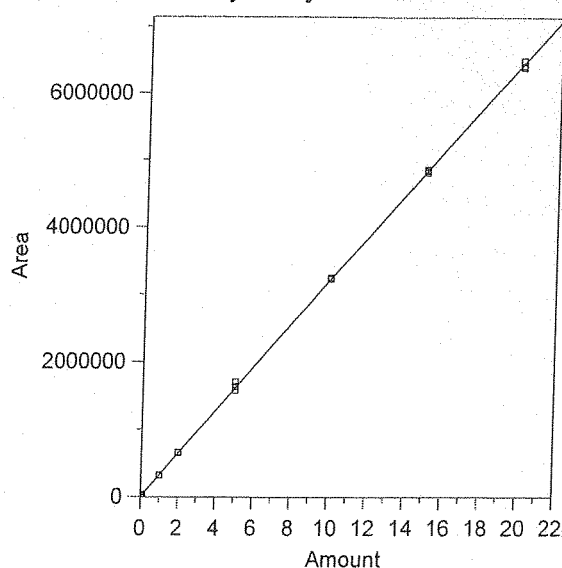


Expected retention time: 5.502 minutes
Search window: 0.5 minutes
No retention time reference component
Group number: 0
High alarm limit: 0
Low alarm limit: 0
Component constant: 0
Single peak quantification by area
 $Y = 401227.3 X + 0$
Linear fit with equal weighting, forced to origin
Coefficient of determination: 0.9998807
Average error: 1.583%
Average CF: 405093.2
RSD: 1.942%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	1996.921	399384.2	-0.459	CACP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	2026.085	405217	0.994	CACP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	2064.975	412995	2.933	CACP Data\#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	10232.26	409290.4	2.010	CACP Data\#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	10312.39	412495.6	2.808	CACP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	10222.34	408893.6	1.911	CACP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	19918.92	398378.4	-0.710	CACP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	21271.74	425434.8	6.033	CACP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	20500.99	410019.8	2.191	CACP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	197838.8	395677.6	-1.383	CACP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	197555.6	395111.2	-1.524	CACP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	198160.6	396321.2	-1.223	CACP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	410566.2	410566.2	2.328	CACP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	403644.6	403644.6	0.602	CACP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	411295.8	411295.8	2.509	CACP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	988448.4	395379.3	-1.458	CACP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1020493	408197.2	1.737	CACP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1060355	424142	5.711	CACP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2012112	402422.4	0.298	CACP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2012416	402483.2	0.313	CACP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2019797	403959.4	0.681	CACP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3032186	404291.5	0.764	CACP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3000600	400080	-0.286	CACP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3026002	403466.9	0.558	CACP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	4001513	400151.3	-0.268	CACP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	3982305	398230.5	-0.747	CACP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	3999860	399986	-0.309	CACP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

8

MEK & Butyraldehyde

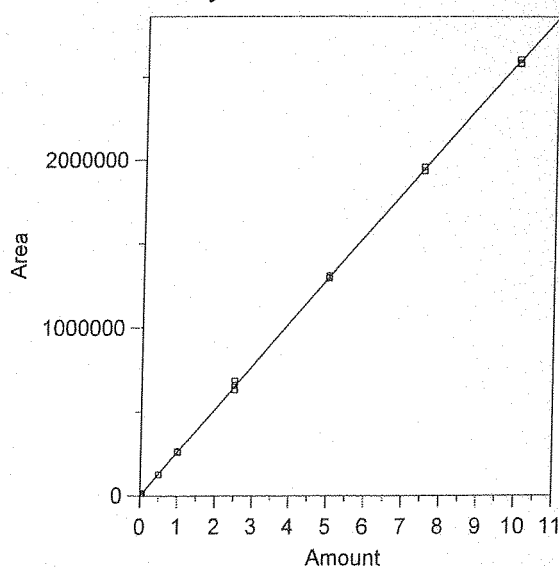


Expected retention time: 5.872 minutes
 Search window: 0.5 minutes
 No retention time reference component
 Group number: 0
 High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0
 Single peak quantification by area
 Y = 322232.7 X + 0
 Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.999867
 Average error: 2.084%
 Average CF: 327115.7
 RSD: 2.391%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.01	3351.753	335175.3	4.017	CACP Data#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.01	3391.47	339147	5.249	CACP Data#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.01	3384.082	338408.2	5.020	CACP Data#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.05	16525.07	330501.4	2.566	CACP Data#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.05	16528.89	330577.8	2.590	CACP Data#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.05	16684.14	333682.8	3.553	CACP Data#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.1	32230.04	322300.4	0.021	CACP Data#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.1	34515.54	345155.4	7.114	CACP Data#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.1	33411.08	334110.8	3.686	CACP Data#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	1	317772.7	317772.7	-1.384	CACP Data#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	1	319288.8	319288.8	-0.914	CACP Data#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	1	317344.1	317344.1	-1.517	CACP Data#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	2	659698.4	329849.2	2.364	CACP Data#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	2	648058.6	324029.3	0.558	CACP Data#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	2	660032.3	330016.2	2.415	CACP Data#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	5	1578239	315647.8	-2.044	CACP Data#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	5	1635369	327073.8	1.502	CACP Data#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	5	1699770	339954	5.500	CACP Data#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	10	3225144	322514.4	0.087	CACP Data#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	10	3232554	323255.4	0.317	CACP Data#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	10	3248338	324833.8	0.807	CACP Data#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:22:52 AM
22	15	4858471	323898.1	0.517	CACP Data#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:16 AM
23	15	4813685	320912.3	-0.410	CACP Data#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	15	4835401	322360.1	0.040	CACP Data#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	20	6411478	320573.9	-0.515	CACP Data#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	20	6386688	319334.4	-0.899	CACP Data#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	20	6488133	324406.7	0.675	CACP Data#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

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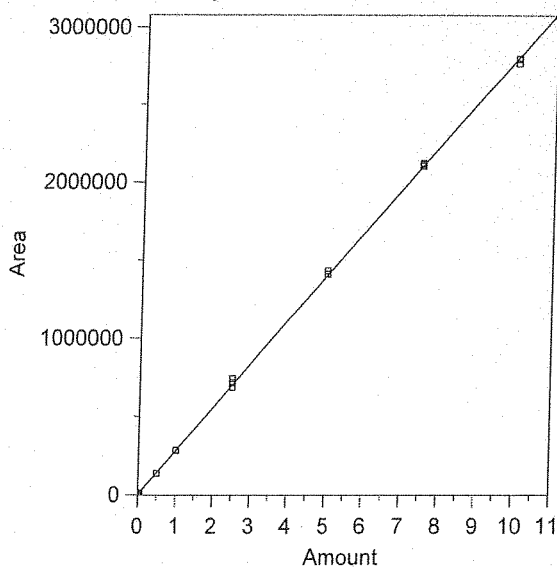
Benzaldehyde



Expected retention time: 6.315 minutes
 Search window: 0.5 minutes
 No retention time reference component
 Group number: 0
 High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0
 Single peak quantification by area
 $Y = 259532.3 X + 0$
 Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.9998788
 Average error: 1.745%
 Average CF: 259316.8
 RSD: 2.653%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	1297.518	259503.6	-0.011	CACP Data#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	1262	252400	-2.748	CACP Data#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	1295.839	259167.8	-0.140	CACP Data#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	6666.208	266648.3	2.742	CACP Data#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	7034.047	281361.9	8.411	CACP Data#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	6534.359	261374.4	0.710	CACP Data#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	12466.06	249321.2	-3.934	CACP Data#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	13008.72	260174.4	0.247	CACP Data#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	12791.38	255827.6	-1.427	CACP Data#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	124939.2	249878.4	-3.720	CACP Data#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	125454.3	250908.6	-3.323	CACP Data#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	125079.6	250159.2	-3.612	CACP Data#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	262209.1	262209.1	1.031	CACP Data#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	257536.3	257536.3	-0.769	CACP Data#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	260766	260766	0.475	CACP Data#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	628872.8	251549.1	-3.076	CACP Data#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	656123.5	262449.4	1.124	CACP Data#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	681751.6	272700.7	5.074	CACP Data#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	1294694	258938.8	-0.229	CACP Data#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	1299522	259904.4	0.143	CACP Data#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	1309382	261876.4	0.903	CACP Data#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	1958642	261152.3	0.624	CACP Data#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	1935214	258028.5	-0.579	CACP Data#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	1957459	260994.5	0.563	CACP Data#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	2584429	258442.9	-0.420	CACP Data#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	2577391	257739.1	-0.691	CACP Data#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	2605401	260540.1	0.388	CACP Data#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

10 Valeraldehyde



Expected retention time: 8.218 minutes
 Search window: 0.5 minutes
 No retention time reference component
 Group number: 0

High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0

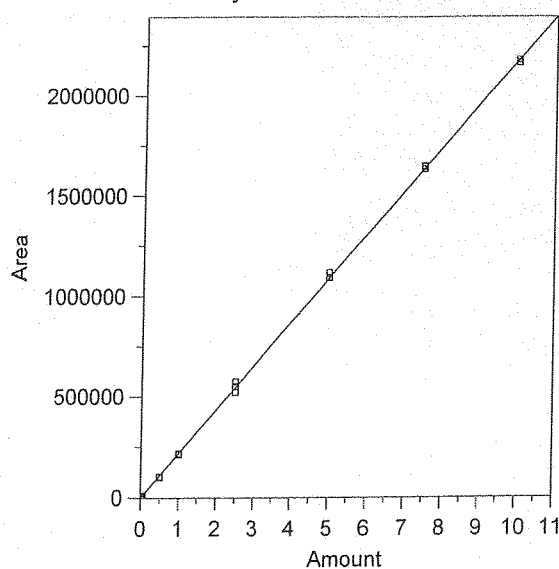
Single peak quantification by area

$$Y = 280512 X + 0$$

Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.9997866
 Average error: 2.469%
 Average CF: 283524.1
 RSD: 3.137%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	1445.899	289179.8	3.090	CACP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	1390.823	278164.6	-0.837	CACP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	1340.829	268165.8	-4.401	CACP Data\#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	7353.619	294144.8	4.860	CACP Data\#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	7425.595	297023.8	5.886	CACP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	7536.798	301471.9	7.472	CACP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	14114.53	282290.6	0.634	CACP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	15079.2	301584	7.512	CACP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	14163.98	283279.6	0.987	CACP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	135255.9	270511.8	-3.565	CACP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	136645.9	273291.8	-2.574	CACP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	135763.1	271526.2	-3.203	CACP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	286190.2	286190.2	2.024	CACP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	281834.7	281834.7	0.472	CACP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	286224.8	286224.8	2.037	CACP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	685932.9	274373.2	-2.188	CACP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	715768.4	286307.3	2.066	CACP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	742902.5	297161	5.935	CACP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	1409340	281868	0.483	CACP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	1412526	282505.2	0.711	CACP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	1432906	286581.2	2.164	CACP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:22:52 AM
22	7.5	2123480	283130.7	0.934	CACP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	2104405	280587.3	0.027	CACP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	2115076	282010.1	0.534	CACP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	2797888	279788.8	-0.258	CACP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	2792255	279225.5	-0.459	CACP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	2767273	276727.3	-1.349	CACP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

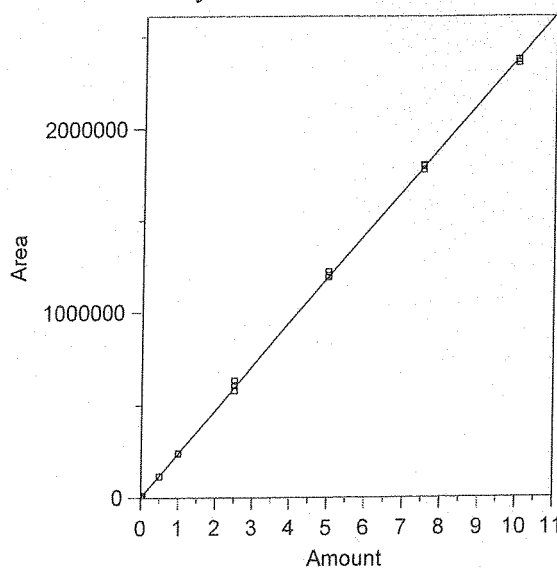
11 m-Tolualdehyde



Expected retention time: 8.714 minutes
 Search window: 0.5 minutes
 No retention time reference component
 Group number: 0
 High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0
 Single peak quantification by area
 $Y = 217944 X + 0$
 Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.999814
 Average error: 2.420%
 Average CF: 216368.5
 RSD: 3.395%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	1084.321	216864.2	-0.495	C:\CP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	1047.397	209479.4	-3.884	C:\CP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	1050.553	210110.6	-3.594	C:\CP Data\#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	5352.188	214087.5	-1.769	C:\CP Data\#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	5534.859	221394.4	1.583	C:\CP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	5846.229	233849.2	7.298	C:\CP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	10182.27	203645.4	-6.561	C:\CP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	10890.73	217814.6	-0.059	C:\CP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	11251.93	225038.6	3.255	C:\CP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	101870.9	203741.8	-6.516	C:\CP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	104487.3	208974.6	-4.115	C:\CP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	101281.7	202563.4	-7.057	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	218741.4	218741.4	0.366	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	214107.1	214107.1	-1.761	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	216178.3	216178.3	-0.810	C:\CP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	521558	208623.2	-4.277	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	549983.1	219993.3	0.940	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	574107.8	229643.1	5.368	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	1091337	218267.4	0.148	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	1093125	218625	0.312	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	1115959	223191.8	2.408	C:\CP Data\#1 HPLC #1\2013\011613\011613.0022.BND	1/17/2013 9:22:52 AM
22	7.5	1646059	219474.5	0.702	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	1632394	217652.5	-0.134	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	1643241	219098.8	0.530	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	2178426	217842.6	-0.047	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	2164076	216407.6	-0.705	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	2165400	216540	-0.644	C:\CP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

12 Hexaldehyde



Expected retention time: 11.69 minutes
 Search window: 0.5 minutes
 No retention time reference component
 Group number: 0

High alarm limit: 0
 Low alarm limit: 0
 Component constant: 0

Single peak quantification by area

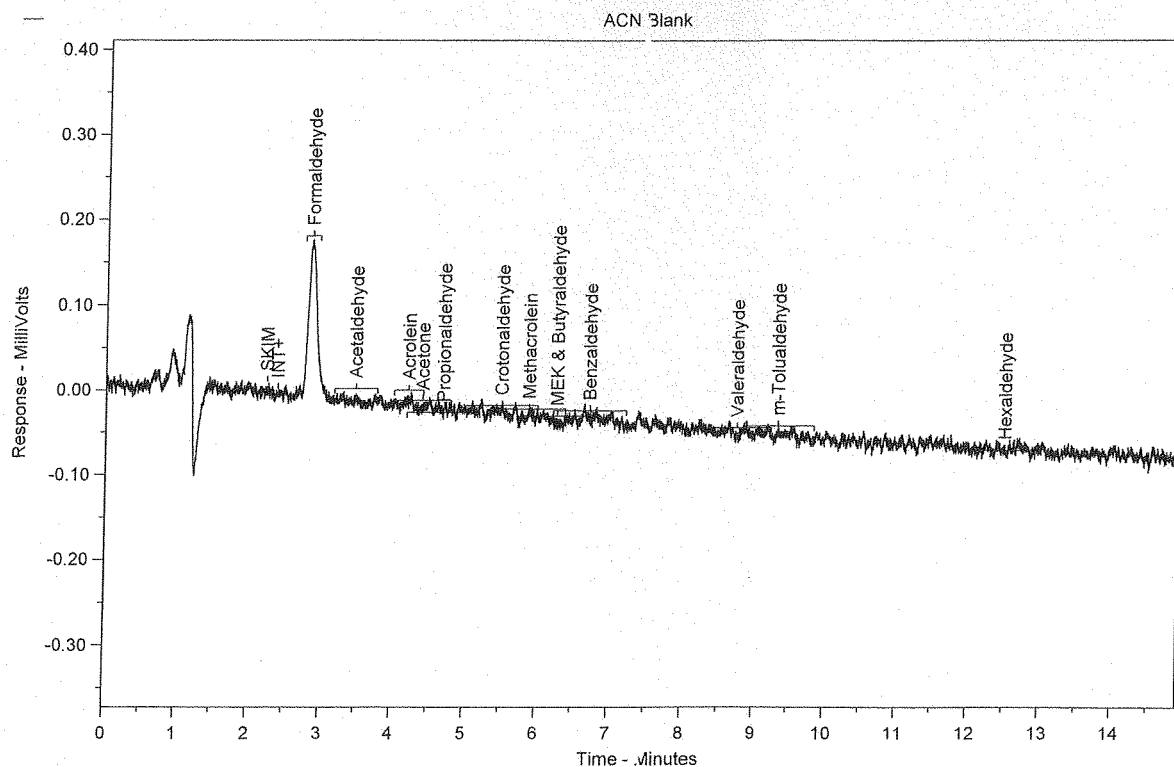
$$Y = 238038.2 X + 0$$

Linear fit with equal weighting, forced to origin
 Coefficient of determination: 0.9997897
 Average error: 2.235%
 Average CF: 239924.7
 RSD: 2.911%

Level	Amount	Response	Cal Factor	Error, %	Source	Date and time
1	0.005	1179.385	235877	-0.908	C:\CP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	1141.726	228345.2	-4.072	C:\CP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	1198.028	239605.6	0.658	C:\CP Data\#1 HPLC #1\2013\011613\011613.0004.BND	1/17/2013 12:01:16 PM
4	0.025	5798.175	231927	-2.567	C:\CP Data\#1 HPLC #1\2013\011613\011613.0005.BND	1/17/2013 9:14:58 AM
5	0.025	6347.2	253888	6.659	C:\CP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	6114.321	244572.8	2.745	C:\CP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	12059.8	241196	1.327	C:\CP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	12746.25	254925	7.094	C:\CP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	12547.26	250945.2	5.422	C:\CP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	0.5	116351.3	232702.6	-2.241	C:\CP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	116956.5	233913	-1.733	C:\CP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	115390.1	230780.2	-3.049	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	242438.8	242438.8	1.849	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	239854.8	239854.8	0.763	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	241212.3	241212.3	1.333	C:\CP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	579103.3	231641.3	-2.687	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	607368.1	242947.3	2.062	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	632353.5	252941.4	6.261	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	1190551	238110.2	0.030	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	1200522	240104.4	0.868	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	1219377	243875.4	2.452	C:\CP Data\#1 HPLC #1\2013\011613\011613.0022.BND	1/17/2013 9:22:52 AM
22	7.5	1800685	240091.3	0.863	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	1775360	236714.7	-0.556	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	1793857	239180.9	0.480	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	2371220	237122	-0.385	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	2356180	235618	-1.017	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	2374361	237436.1	-0.253	C:\CP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

Raw Data

Chrom Perfect Chromatogram Report



Sample Name = ACN Blank

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0001.RAW

Date Taken (end) = 5/31/2013 8:26:41 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

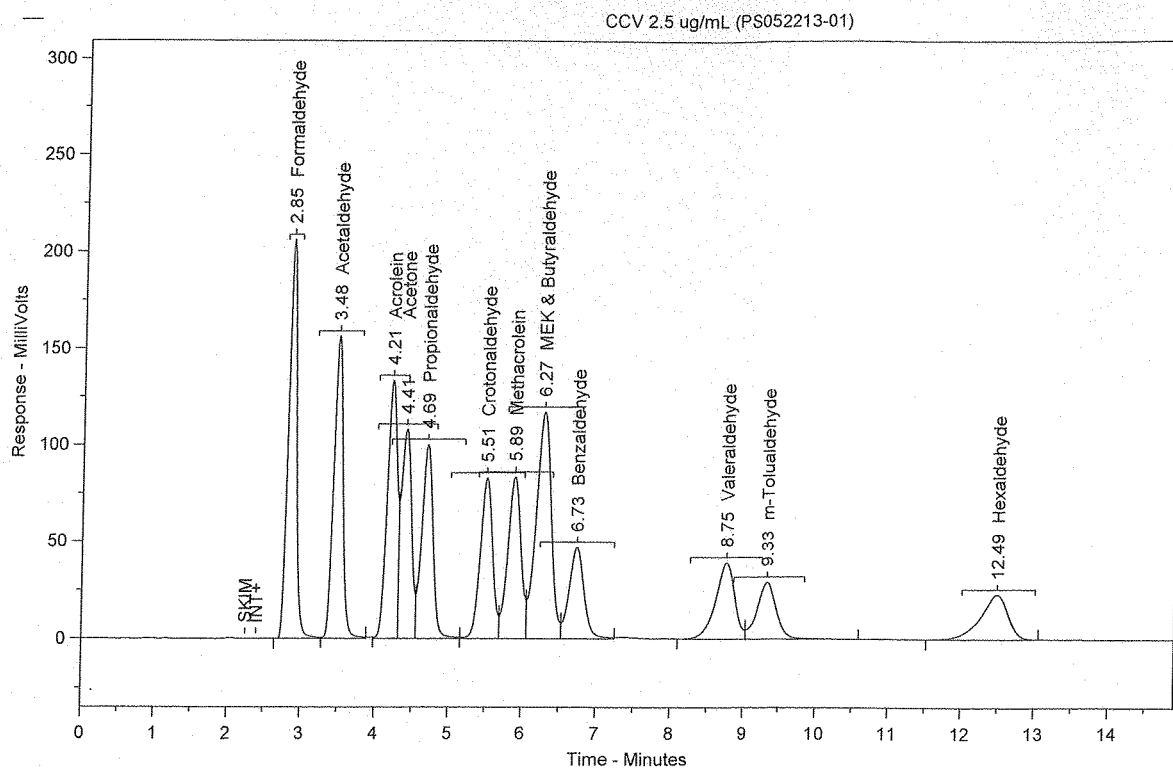
Vial Number = 1

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
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Total Height = 0								
Total Amount = 0								

Chrom Perfect Chromatogram Report



Sample Name = CCV 2.5 ug/mL (PS052213-01)

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0002.RAW

Date Taken (end) = 5/31/2013 8:43:16 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 2

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	2.5793	7.701	1639165	13.039	SBB	0.12
2	3.48	Acetaldehyde	2.5833	7.713	1353244	10.765	TBB	0.13
3	4.21	Acrolein	2.6122	7.799	1247361	9.922	BV	0.18
4	4.41	Acetone	2.5471	7.605	1044939	8.312	VV	0.16
5	4.69	Propionaldehyde	2.5859	7.721	1059539	8.428	VV	0.16
6	5.51	Crotonaldehyde	2.5713	7.677	975042	7.756	VV	0.18
7	5.89	Methacrolein	2.5673	7.665	1030070	8.194	VV	0.17
8	6.27	MEK & Butyraldehyde	5.1223	15.293	1650557	13.130	VV	0.21
9	6.73	Benzaldehyde	2.5973	7.755	674077	5.362	VB	0.21
10	8.75	Valeraldehyde	2.5804	7.704	723836	5.758	BV	0.27
11	9.33	m-Tolualdehyde	2.5825	7.711	562840	4.477	VV	0.28
12	12.49	Hexaldehyde	2.5642	7.656	610377	4.855	VB	0.39

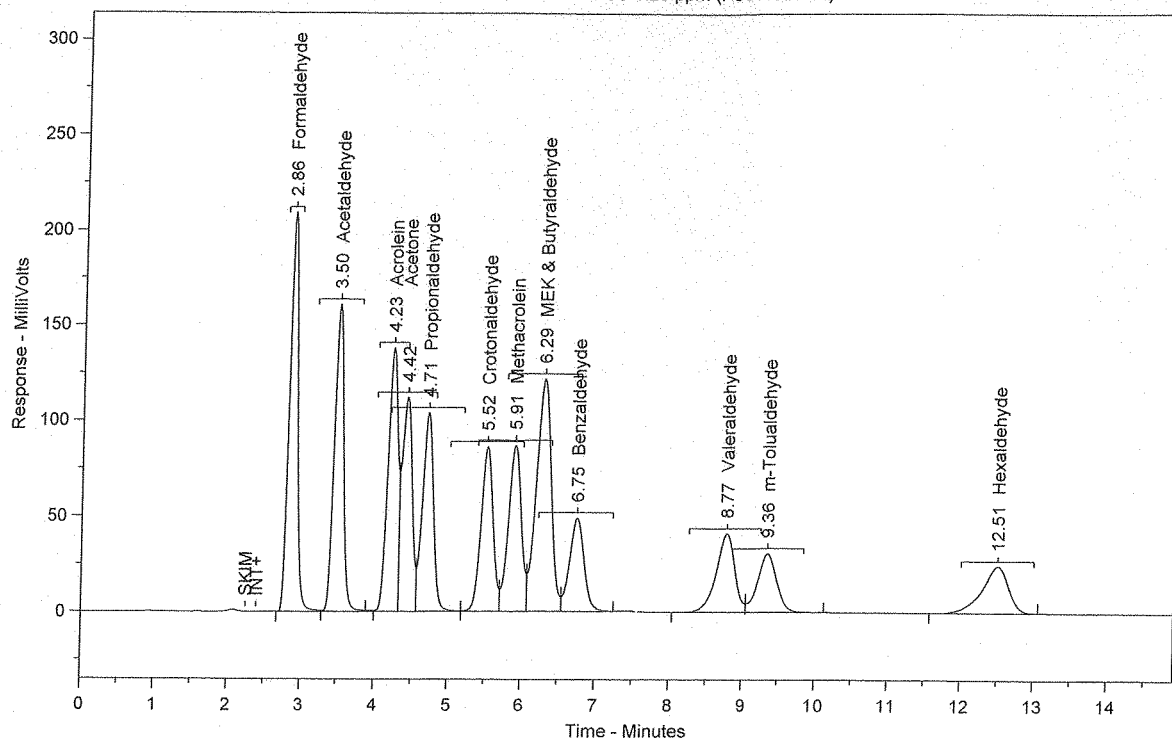
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Total Height = 1127889

Total Amount = 33.49316

Chrom Perfect Chromatogram Report

SS 1.25 ppm (PS011613-01)



Sample Name = SS 1.25 ppm (PS011613-01)

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0003.RAW

Date Taken (end) = 5/31/2013 8:59:52 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 3

Injection Volume = 10

Dilution Factor = 1

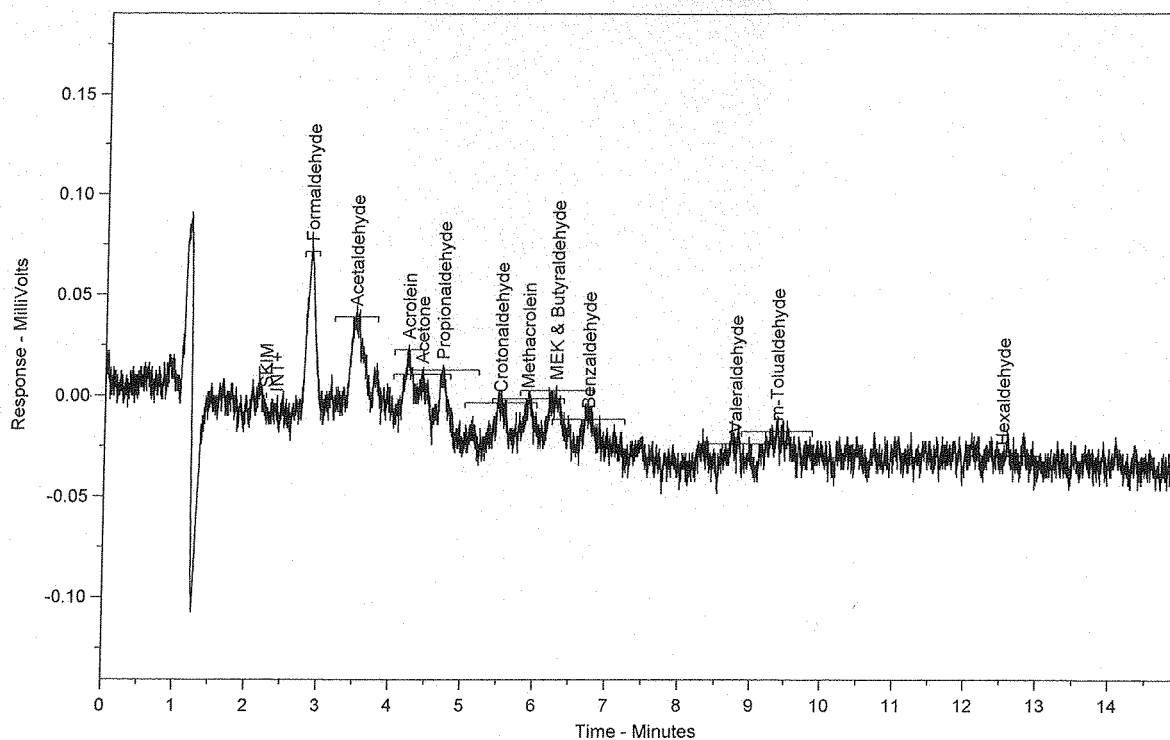
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	2.6217	7.696	1666071	13.018	SBB	0.12
2	3.50	Acetaldehyde	2.6411	7.753	1383537	10.810	TBV	0.13
3	4.23	Acrolein	2.6673	7.830	1273658	9.952	TVV	0.18
4	4.42	Acetone	2.6175	7.684	1073789	8.390	TVV	0.16
5	4.71	Propionaldehyde	2.6300	7.720	1077588	8.420	TVV	0.16
6	5.52	Crotonaldehyde	2.6070	7.653	988559	7.724	TVV	0.18
7	5.91	Methacrolein	2.6280	7.715	1054426	8.239	TVV	0.17
8	6.29	MEK & Butyraldehyde	5.2281	15.347	1684679	13.163	TVV	0.21
9	6.75	Benzaldehyde	2.5661	7.533	665990	5.204	TVB	0.21
10	8.77	Valeraldehyde	2.6250	7.706	736351	5.754	BV	0.27
11	9.36	m-Tolualdehyde	2.6021	7.638	567111	4.431	VB	0.28
12	12.51	Hexaldehyde	2.6317	7.725	626442	4.895	BB	0.38

Total Area = 1.27982E+07

Total Height = 1161762

Total Amount = 34.06556

TO-11 Method Blank



Sample Name = TO-11 Method Blank | HP 06/03/13

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0004.RAW

Date Taken (end) = 5/31/2013 9:16:27 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

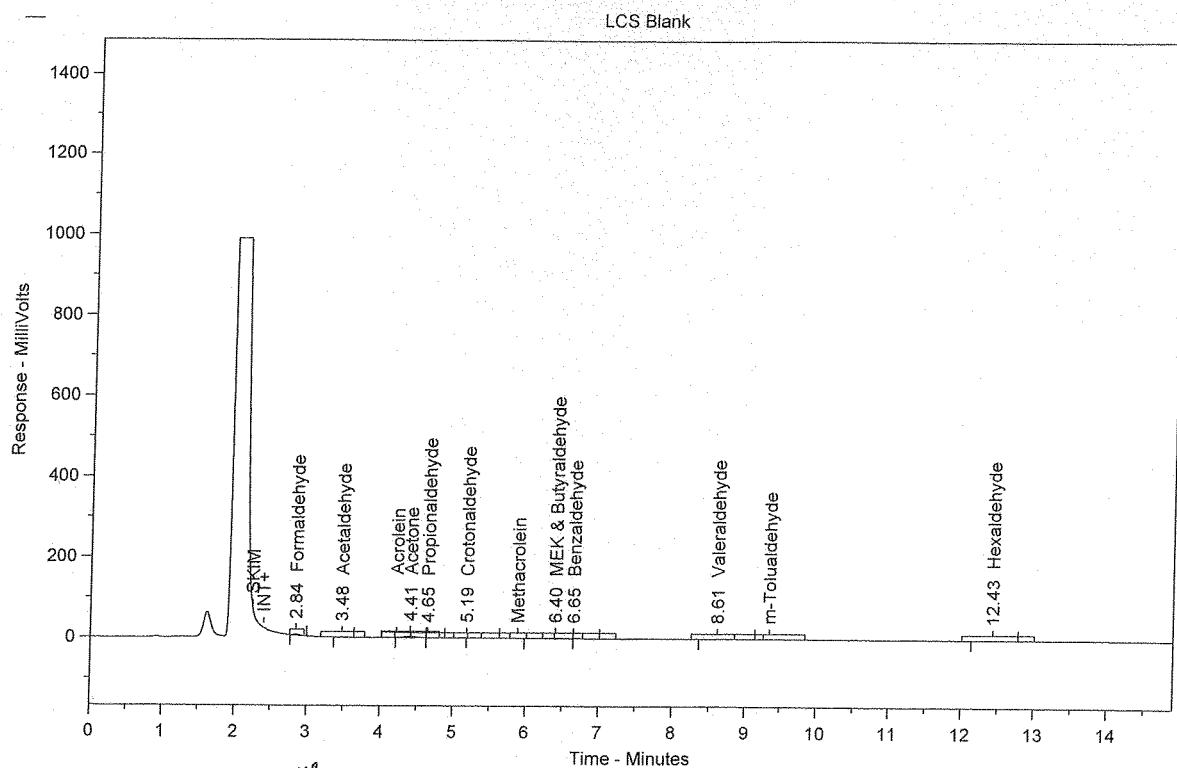
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Vial Number = 4

Dilution Factor = 1

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Total Amount = 0								

Chrom Perfect Chromatogram Report

Sample Name = LCS Blank *HP 06/03/13*

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0005.RAW

Date Taken (end) = 5/31/2013 9:33:03 AM

Method File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0005.BND

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0005.BND

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 5

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	0.0240	9.251	15234	15.074	BB	0.15
2	3.48	Acetaldehyde	0.0129	4.964	6738	6.668	BB	0.15
3	4.41	Acetone	0.0927	35.758	38015	37.616	BV	0.15
4	4.65	Propionaldehyde	0.0132	5.112	5428	5.371	VB	0.14
5	5.19	Crotonaldehyde	0.0088	3.413	3354	3.319	BB	0.27
6	6.40	MEK & Butyraldehyde	0.0670	25.848	21584	21.357	BV	0.25
7	6.65	Benzaldehyde	0.0108	4.171	2805	2.776	VB	0.17
8	8.61	Valeraldehyde	0.0193	7.430	5401	5.344	BB	0.32
9	12.43	Hexaldehyde	0.0105	4.053	2500	2.474	BB	0.48

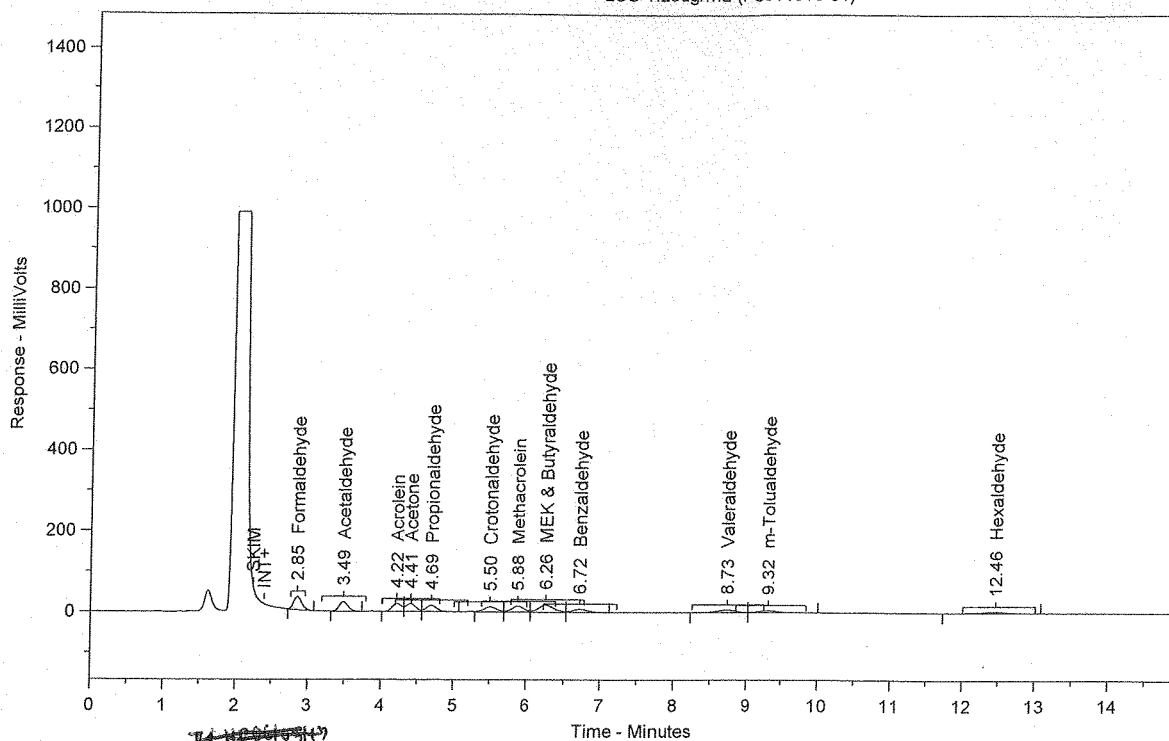
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Total Amount = 0.2591433

Chrom Perfect Chromatogram Report

LCS 1.25ug/mL (PS011013-01)

Sample Name = LCS 1.25ug/mL (PS011013-01) | HP
06/03/13 Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0006.RAW

Date Taken (end) = 5/31/2013 9:49:38 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 6

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.3840	7.476	244017	12.648	BB	0.13
2	3.49	Acetaldehyde	0.3840	7.477	201172	10.427	BB	0.13
3	4.22	Acrolein	0.3857	7.510	184179	9.547	BV	0.17
4	4.41	Acetone	0.4600	8.957	188709	9.781	VV	0.17
5	4.69	Propionaldehyde	0.3962	7.715	162341	8.415	VB	0.16
6	5.50	Crotonaldehyde	0.3719	7.242	141029	7.310	BV	0.17
7	5.88	Methacrolein	0.4237	8.250	170002	8.812	VV	0.17
8	6.26	MEK & Butyraldehyde	0.7761	15.112	250100	12.964	VV	0.20
9	6.72	Benzaldehyde	0.3878	7.551	100656	5.217	VB	0.21
10	8.73	Valeraldehyde	0.3987	7.764	111850	5.798	BV	0.26
11	9.32	m-Tolualdehyde	0.3746	7.293	81638	4.232	VB	0.27
12	12.46	Hexaldehyde	0.3930	7.653	93560	4.850	BB	0.37

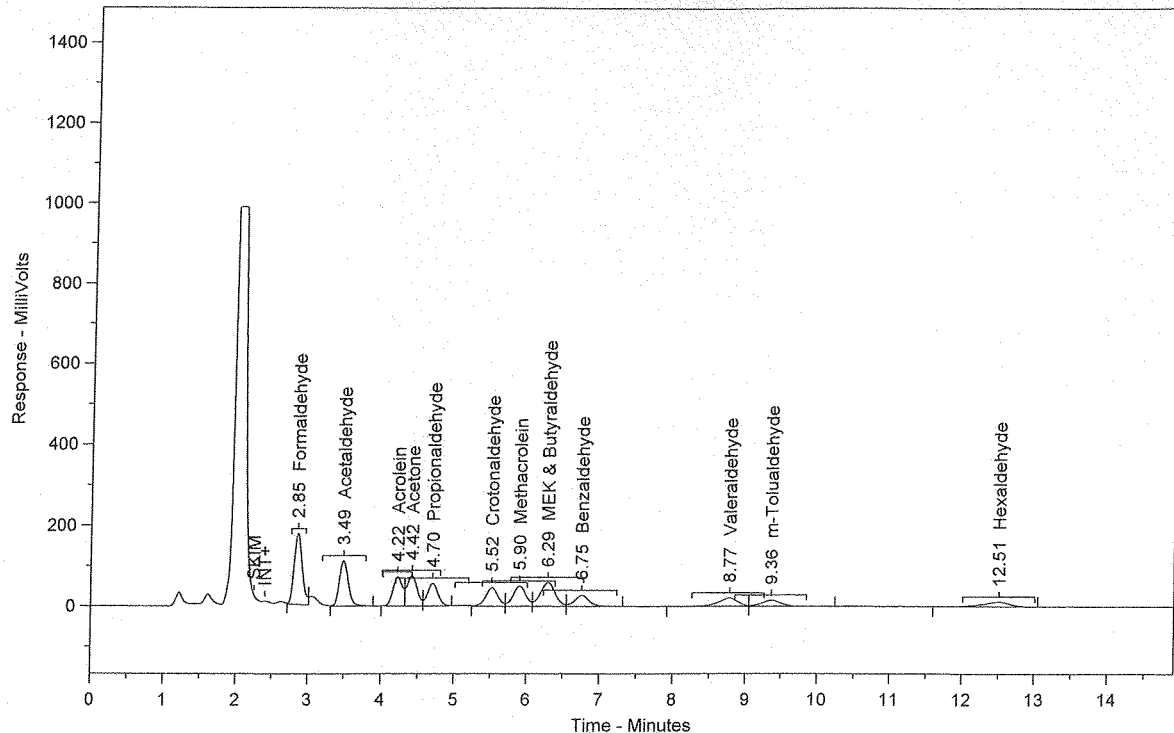
Total Area = 1929251

Total Height = 176656.2

Total Amount = 5.13588

Chrom Perfect Chromatogram Report

MS 130645-63188 1.25 ppm [(PS052213-01x2)]

Sample Name = MS 130645-63188 1.25 ppm [(PS052213-01x2)] HP
05/31/13 Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0007.RAW

Date Taken (end) = 5/31/2013 10:06:13 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET
Method Description=TO-11A CarbonylsCalibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/mlRun Time = 14.89889
Injection Volume = 10Vial Number = 7
Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	2.1560	11.024	1370124	17.952	BB	0.12
2	3.49	Acetaldehyde	1.8005	9.206	943164	12.358	BB	0.13
3	4.22	Acrolein	1.3519	6.913	645571	8.459	BV	0.17
4	4.42	Acetone	1.7885	9.145	733702	9.613	VV	0.15
5	4.70	Propionaldehyde	1.4222	7.273	582736	7.635	VB	0.16
6	5.52	Crotonaldehyde	1.4217	7.270	539112	7.064	BV	0.18
7	5.90	Methacrolein	1.5228	7.786	610972	8.005	VV	0.17
8	6.29	MEK & Butyraldehyde	2.5654	13.118	826663	10.831	VV	0.21
9	6.75	Benzaldehyde	1.4385	7.356	373331	4.892	VB	0.21
10	8.77	Valeraldehyde	1.4117	7.219	396011	5.189	BV	0.28
11	9.36	m-Tolualdehyde	1.3211	6.756	287934	3.773	VB	0.29
12	12.51	Hexaldehyde	1.3561	6.934	322797	4.229	BB	0.40

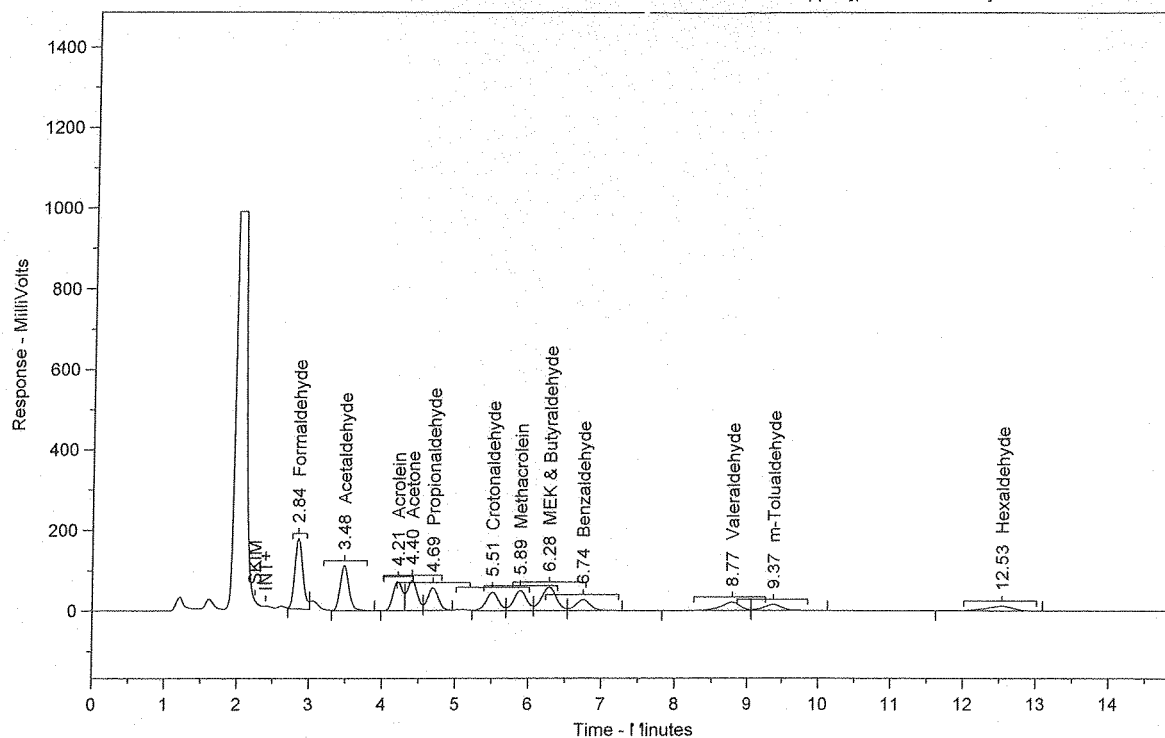
Total Area = 7632118

Total Height = 716946.7

Total Amount = 19.55642

Chrom Perfect Chromatogram Report

MSD 130645-63188 1.25 ppm [(PS052213-01x2)]



Sample Name = MSD 130645-63188 1.25 ppm [(PS052213-01x2)] *HP 06/03/13* Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0008.RAW

Date Taken (end) = 5/31/2013 10:22:49 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 8

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	2.1270	10.992	1351725	17.908	BB	0.12
2	3.48	Acetaldehyde	1.7820	9.209	933506	12.367	BB	0.13
3	4.21	Acrolein	1.3390	6.920	639375	8.471	BV	0.17
4	4.40	Acetone	1.7624	9.108	723005	9.579	VV	0.15
5	4.69	Propionaldehyde	1.4138	7.306	579275	7.674	VB	0.16
6	5.51	Crotonaldehyde	1.4024	7.248	531804	7.045	BV	0.18
7	5.89	Methacrolein	1.5076	7.791	604879	8.014	VV	0.17
8	6.28	MEK & Butyraldehyde	2.5243	13.045	813413	10.776	VV	0.21
9	6.74	Benzaldehyde	1.4280	7.380	370608	4.910	VB	0.21
10	8.77	Valeraldehyde	1.4071	7.272	394715	5.229	BV	0.28
11	9.37	m-Tolualdehyde	1.3158	6.800	286772	3.799	VB	0.29
12	12.53	Hexaldehyde	1.3407	6.928	319126	4.228	BB	0.40

Total Area = 7548202

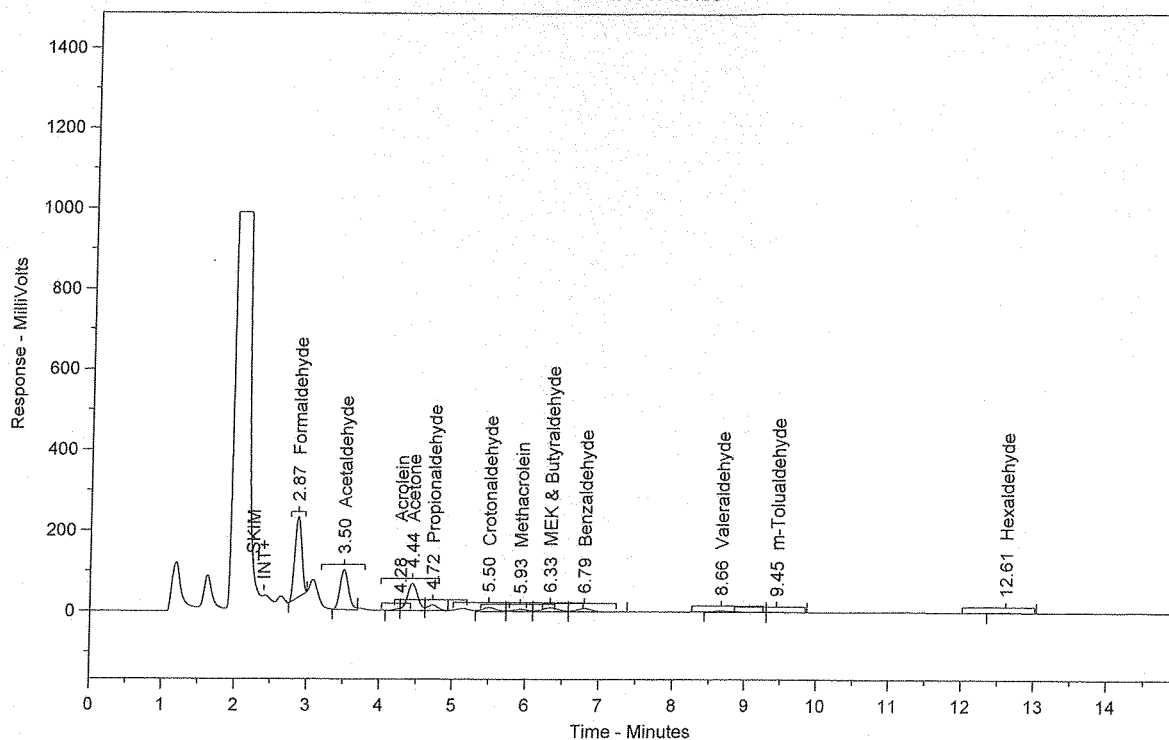
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Total Amount = 19.35009

HP
05/31/13

Chrom Perfect Chromatogram Report

130645-63188



Sample Name = 130645-63188

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0009.RAW

Date Taken (end) = 5/31/2013 10:39:27 AM

Method File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0009.BND

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0009.BND

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 9

Injection Volume = 10

Dilution Factor = 1

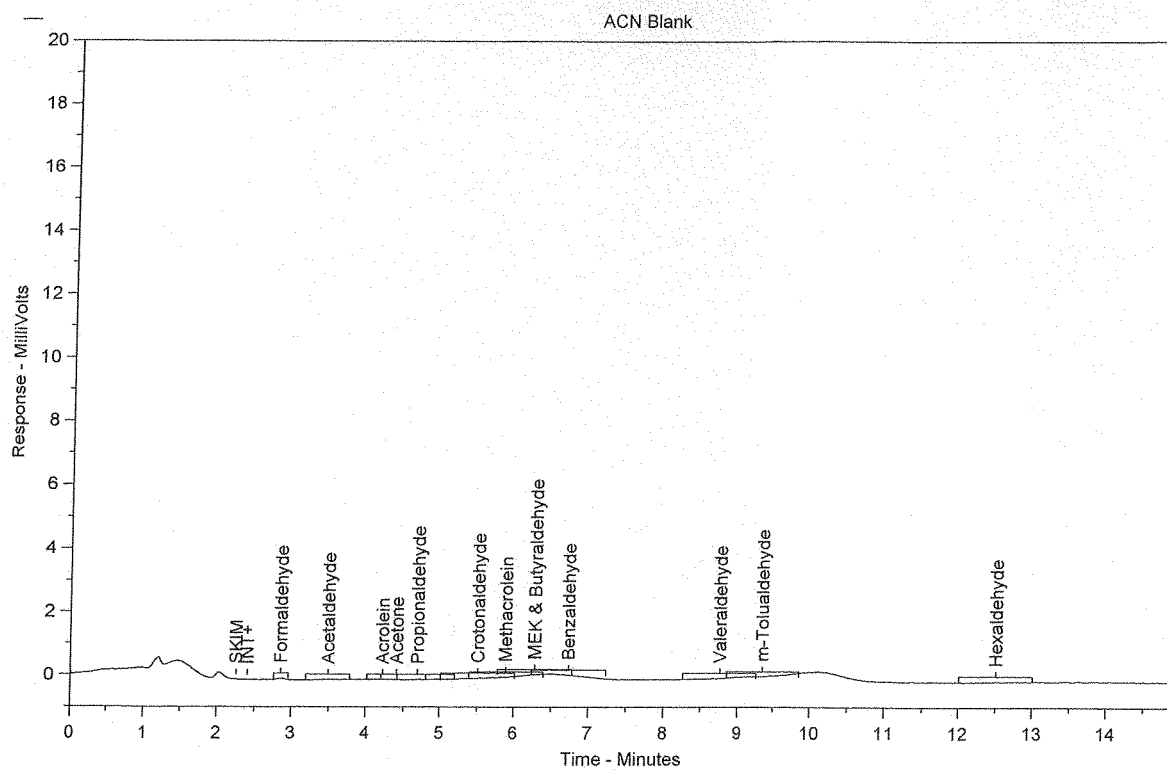
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.87	Formaldehyde	2.1052	28.526	1337850	38.194	BB	0.11
2	3.50	Acetaldehyde	1.5332	20.775	803156	22.929	BB	0.13
3	4.28	Acrolein	0.0524	0.710	25011	0.714	BV	0.08
4	4.44	Acetone	1.5949	21.611	654302	18.680	VV	0.14
5	4.72	Propionaldehyde	0.3690	5.000	151187	4.316	VB	0.18
6	5.50	Crotonaldehyde	0.2896	3.923	109798	3.135	BV	0.19
7	5.93	Methacrolein	0.1396	1.892	56015	1.599	VV	0.17
8	6.33	MEK & Butyraldehyde	0.4248	5.756	136891	3.908	VV	0.21
9	6.79	Benzaldehyde	0.4435	6.010	115105	3.286	VB	0.22
10	8.66	Valeraldehyde	0.2818	3.818	79049	2.257	BV	0.46
11	9.45	m-Tolualdehyde	0.0180	0.243	3913	0.112	VB	0.32
12	12.61	Hexaldehyde	0.1281	1.735	30485	0.870	BB	0.42

Total Area = 3502762

Total Height = 419366.2

Total Amount = 7.379991

Chrom Perfect Chromatogram Report



Sample Name = ACN Blank

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0012.RAW

Date Taken (end) = 5/31/2013 11:29:14 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Injection Volume = 10

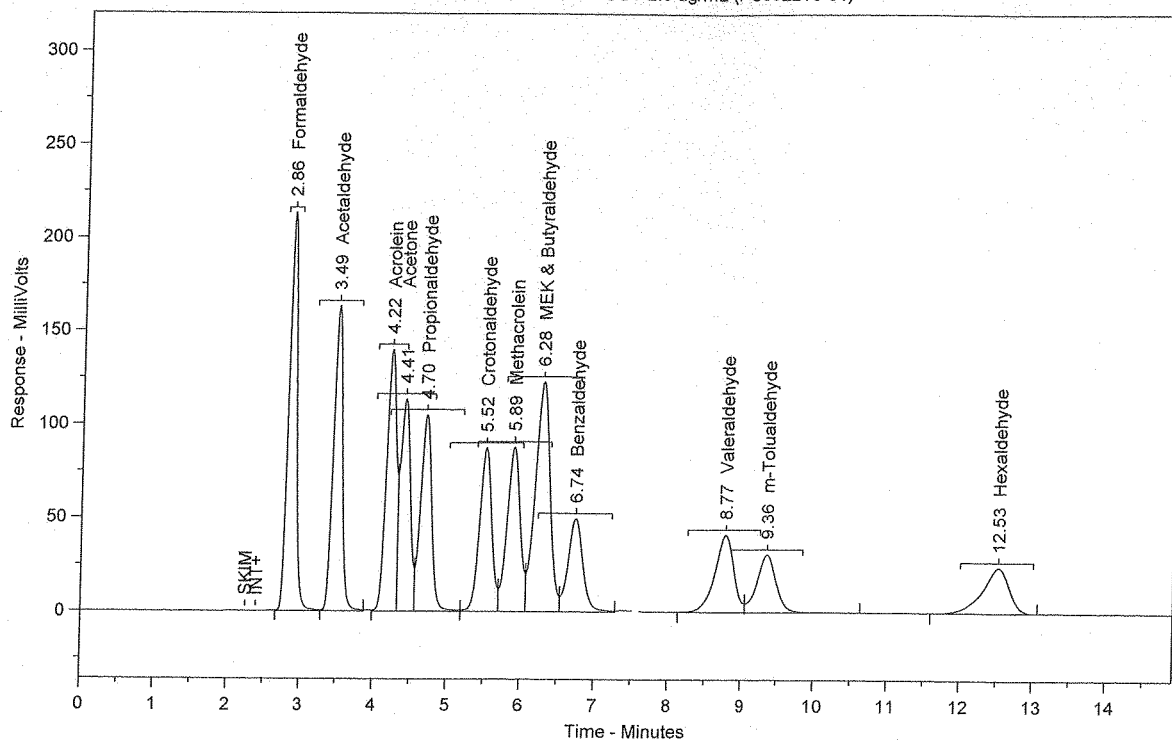
Vial Number = 12

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
Total Area = 0								
			Total Height = 0		Total Amount = 0			

Chrom Perfect Chromatogram Report

CCV 2.5 ug/mL (PS052213-01)



Sample Name = CCV 2.5 ug/mL (PS052213-01)

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0013.RAW

Date Taken (end) = 5/31/2013 11:45:49 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 13

Injection Volume = 10

Dilution Factor = 1

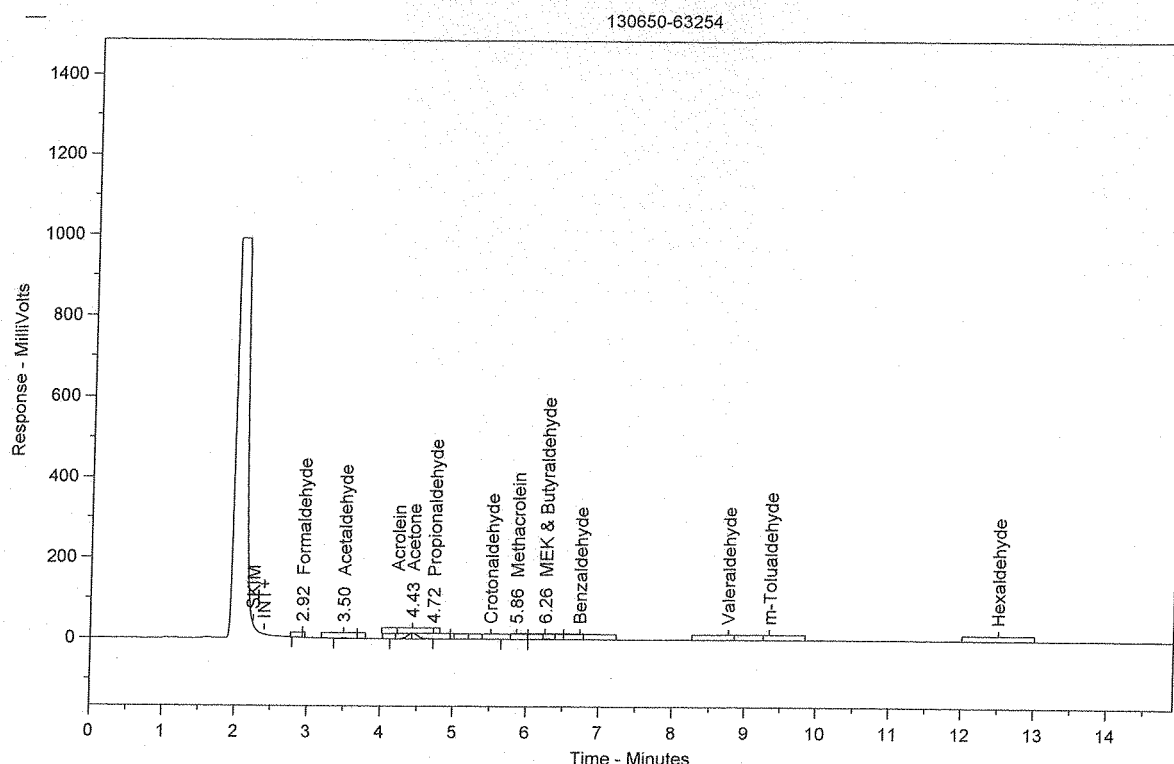
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	2.6624	7.637	1691928	12.940	SBB	0.12
2	3.49	Acetaldehyde	2.6849	7.701	1406465	10.757	TBB	0.13
3	4.22	Acrolein	2.7097	7.772	1293911	9.896	BV	0.18
4	4.41	Acetone	2.6483	7.596	1086443	8.309	VV	0.16
5	4.70	Propionaldehyde	2.6847	7.701	1100020	8.413	VV	0.16
6	5.52	Crotonaldehyde	2.6781	7.682	1015528	7.767	VV	0.18
7	5.89	Methacrolein	2.6843	7.700	1077027	8.237	VV	0.17
8	6.28	MEK & Butyraldehyde	5.3490	15.343	1723617	13.182	VV	0.21
9	6.74	Benzaldehyde	2.7323	7.837	709108	5.423	VB	0.21
10	8.77	Valeraldehyde	2.6838	7.698	752849	5.758	BV	0.27
11	9.36	m-Tolualdehyde	2.6962	7.734	587624	4.494	VV	0.28
12	12.53	Hexaldehyde	2.6499	7.601	630784	4.824	VB	0.38

Total Area = 1.307531E+07

Total Height = 1180425

Total Amount = 34.86362

Chrom Perfect Chromatogram Report



Sample Name = 130650-63254

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0014.RAW

Date Taken (end) = 5/31/2013 12:06:10 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 14

Injection Volume = 10

Dilution Factor = 1

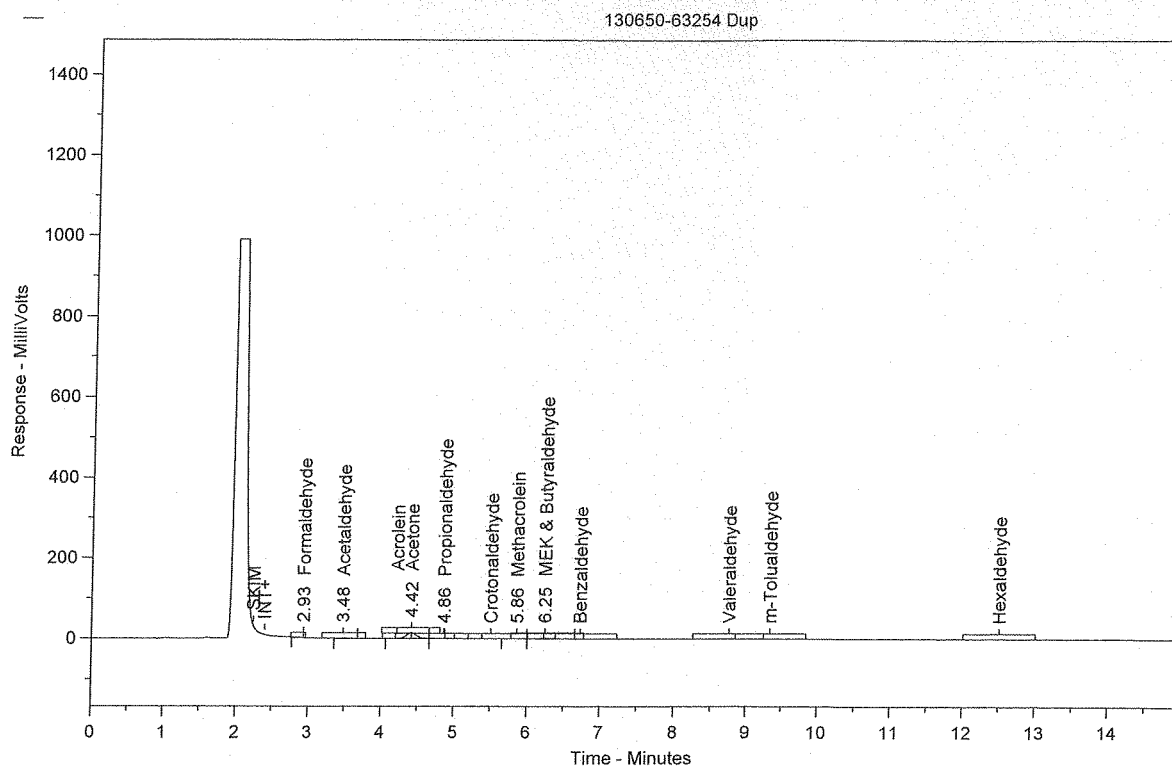
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.92	Formaldehyde	0.0018	0.430	1142	0.681	BB N	0.14
2	3.50	Acetaldehyde	0.0131	3.125	6837	4.076	BB	0.14
3	4.43	Acetone	0.3290	78.792	134983	80.475	SBB	0.15
4	4.72	Propionaldehyde	0.0025	0.599	1025	0.611	TBB	0.08
5	5.86	Methacrolein	0.0101	2.419	4053	2.417	BV	0.18
6	6.26	MEK & Butyraldehyde	0.0611	14.634	19692	11.740	VB	0.19

Total Area = 167733

Total Height = 16842.59

Total Amount = 0.4175991

Chrom Perfect Chromatogram Report



Sample Name = 130650-63254 Dup

Instrument = HPLC #1

Raw File Name = C:\Chromperfect 2\Data\HPLC #1\2013\053113\053113.0015.RAW

Date Taken (end) = 5/31/2013 12:22:45 PM

Method File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 15

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.93	Formaldehyde	0.0019	0.461	1234	0.729	BB N	0.16
2	3.48	Acetaldehyde	0.0132	3.134	6914	4.085	BB	0.14
3	4.42	Acetone	0.3323	78.917	136341	80.556	BV	0.15
4	4.86	Propionaldehyde	0.0032	0.770	1329	0.785	VB N	0.13
5	5.86	Methacrolein	0.0094	2.242	3788	2.238	BV	0.17
6	6.25	MEK & Butyraldehyde	0.0610	14.476	19645	11.607	VB	0.20

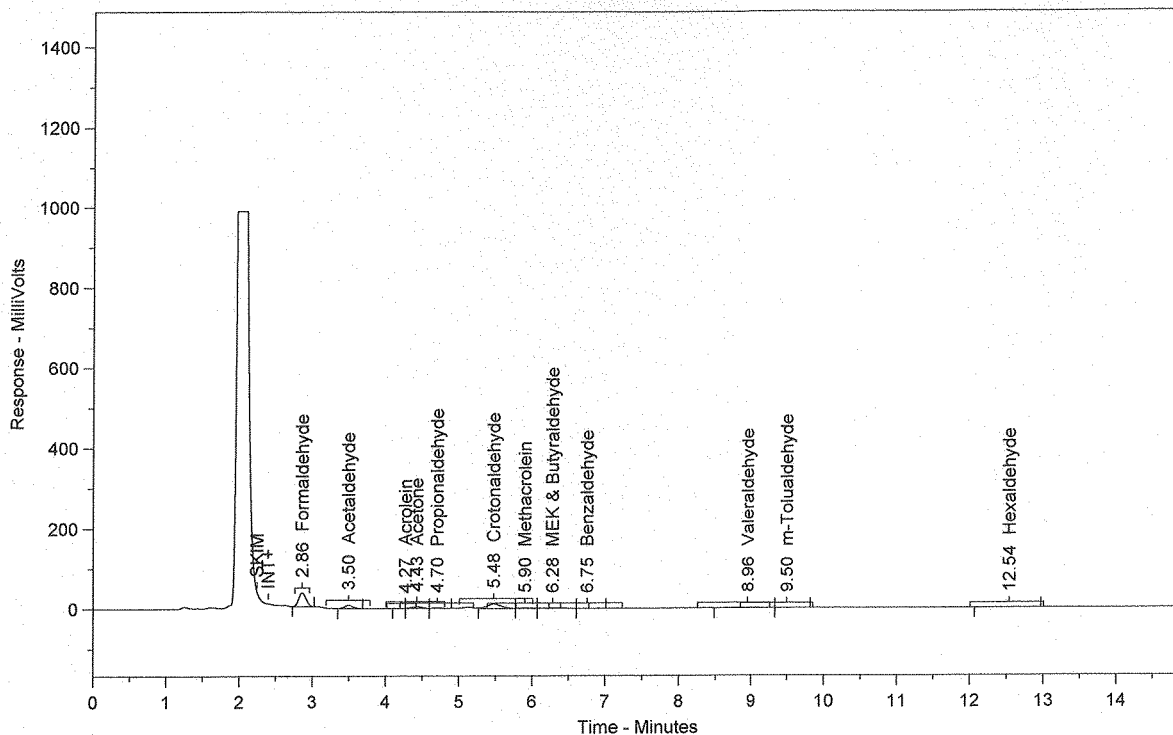
Total Area = 169250.2

Total Height = 16799.99

Total Amount = 0.4211323

Chrom Perfect Chromatogram Report

130650-63219



Sample Name = 130650-63219

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0016.RAW

Date Taken (end) = 5/31/2013 12:39:20 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 16

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	0.3777	30.524	240043	42.280	BB	0.11
2	3.50	Acetaldehyde	0.1160	9.374	60766	10.703	BB	0.12
3	4.27	Acrolein	0.0046	0.370	2185	0.385	BV	0.06
4	4.43	Acetone	0.1020	8.240	41831	7.368	VV	0.14
5	4.70	Propionaldehyde	0.0297	2.397	12156	2.141	VB	0.16
6	5.48	Crotonaldehyde	0.3784	30.580	143492	25.274	BV	0.19
7	5.90	Methacrolein	0.0291	2.349	11664	2.054	VV	0.17
8	6.28	MEK & Butyraldehyde	0.0495	3.999	15945	2.809	VV	0.28
9	6.75	Benzaldehyde	0.0175	1.414	4542	0.800	VB	0.26
10	8.96	Valeraldehyde	0.0896	7.240	25131	4.426	BV	0.35
11	9.50	m-Tolualdehyde	0.0176	1.422	3834	0.675	VB	0.34
12	12.54	Hexaldehyde	0.0259	2.090	6157	1.084	BB	0.42

Total Area = 567746.1

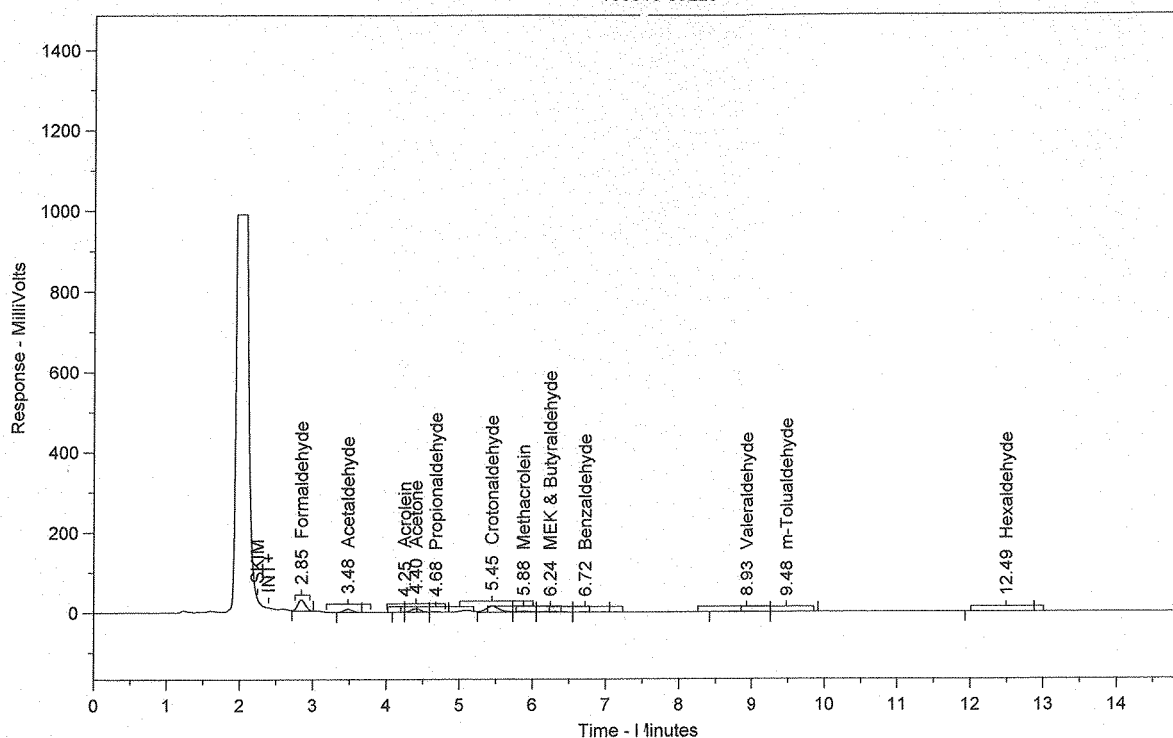
Total Height = 62520.87

Total Amount = 1.237446

HP
05/31/13

Chrom Perfect Chromatogram Report

130650-63228



Sample Name = 130650-63228

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0017.RAW

Date Taken (end) = 5/31/2013 12:55:56 PM

Method File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0017.BND

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0017.BND

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 17

Injection Volume = 10

Dilution Factor = 1

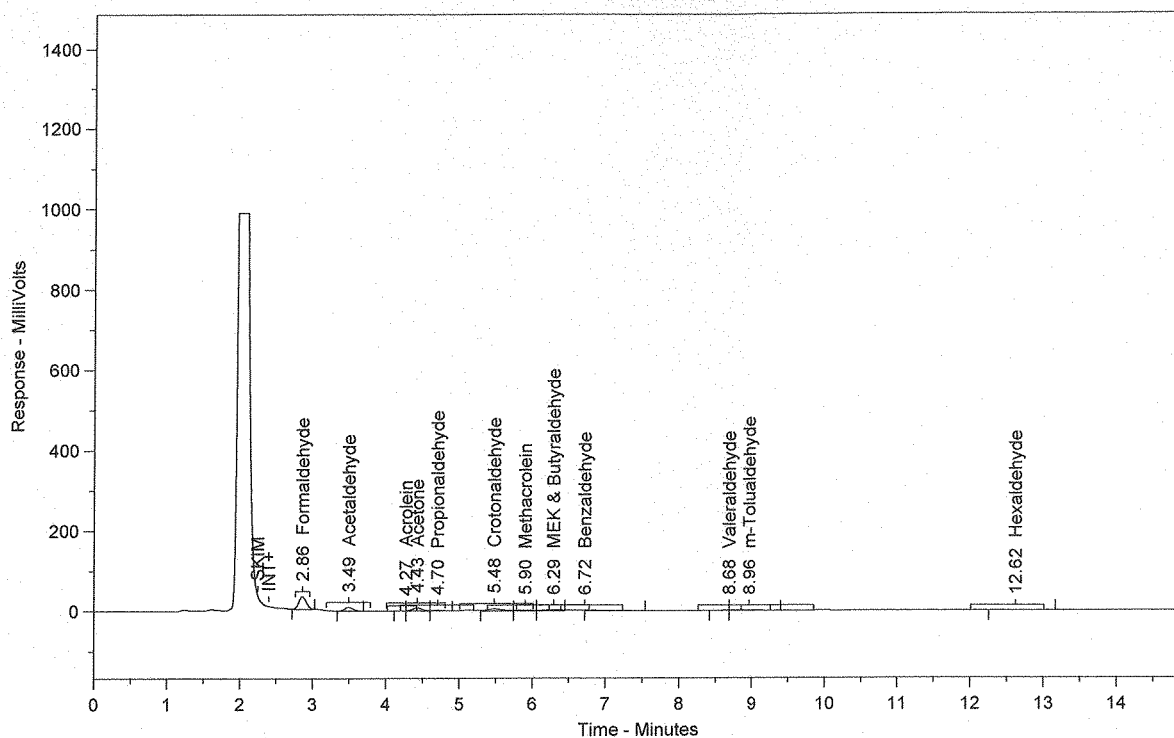
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.2901	20.100	184346	29.699	BB	0.11
2	3.48	Acetaldehyde	0.1153	7.986	60378	9.727	BB	0.12
3	4.25	Acrolein	0.0062	0.431	2969	0.478	BV	0.05
4	4.40	Acetone	0.2019	13.991	82836	13.345	VV	0.14
5	4.68	Propionaldehyde	0.0250	1.730	10227	1.648	VB	0.17
6	5.45	Crotonaldehyde	0.4856	33.646	184133	29.665	BV	0.18
7	5.88	Methacrolein	0.0603	4.175	24177	3.895	VV	0.17
8	6.24	MEK & Butyraldehyde	0.0716	4.965	23088	3.720	VV	0.23
9	6.72	Benzaldehyde	0.0240	1.661	6220	1.002	VB	0.29
10	8.93	Valeraldehyde	0.0978	6.775	27429	4.419	BV	0.34
11	9.48	m-Tolualdehyde	0.0344	2.384	7498	1.208	VB	0.31
12	12.49	Hexaldehyde	0.0311	2.156	7407	1.193	BB	0.41

Total Area = 620708.8

Total Height = 64146.91

Total Amount = 1.443201

130650-63237



Sample Name = 130650-63237

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0018.RAW

Date Taken (end) = 5/31/2013 1:12:31 PM

Method File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0018.BND

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0018.BND

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 18

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	0.3467	27.526	220300	39.909	BB	0.11
2	3.49	Acetaldehyde	0.1337	10.614	70023	12.685	BB	0.12
3	4.27	Acrolein	0.0036	0.288	1731	0.314	BV	0.05
4	4.43	Acetone	0.1748	13.880	71712	12.991	VV	0.14
5	4.70	Propionaldehyde	0.0313	2.489	12844	2.327	VB	0.17
6	5.48	Crotonaldehyde	0.1616	12.828	61261	11.098	BV	0.18
7	5.90	Methacrolein	0.0399	3.171	16022	2.902	VV	0.16
8	6.29	MEK & Butyraldehyde	0.1146	9.097	36916	6.688	VB	0.24
9	6.72	Benzaldehyde	0.1026	8.145	26624	4.823	BB	0.40
10	8.68	Valeraldehyde	0.0199	1.576	5569	1.009	BV	0.14
11	8.96	m-Tolualdehyde	0.1058	8.402	23061	4.178	VB	0.45
12	12.62	Hexaldehyde	0.0250	1.985	5951	1.078	BB	0.62

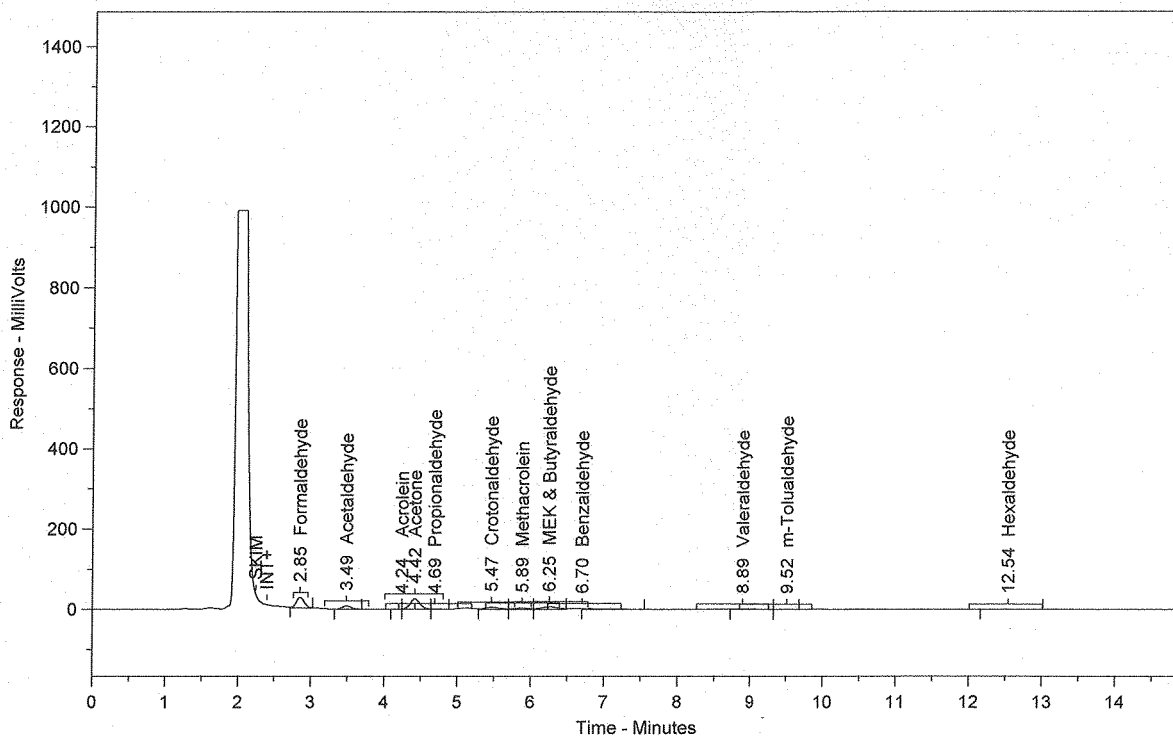
Total Area = 552012.4

Total Height = 59950.66

Total Amount = 1.259399

Chrom Perfect Chromatogram Report

130650-63246



Sample Name = 130650-63246

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0019.RAW

Date Taken (end) = 5/31/2013 1:29:09 PM

Method File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0019.BND

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0019.BND

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 19

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.3046	16.230	193583	24.674	BB	0.12
2	3.49	Acetaldehyde	0.1252	6.670	65574	8.358	BB	0.13
3	4.24	Acrolein	0.0050	0.265	2371	0.302	BV	0.04
4	4.42	Acetone	0.6022	32.086	247047	31.489	VV	0.14
5	4.69	Propionaldehyde	0.0314	1.675	12884	1.642	VB	0.14
6	5.47	Crotonaldehyde	0.1742	9.280	66047	8.418	BV	0.18
7	5.89	Methacrolein	0.0986	5.254	39564	5.043	VV	0.17
8	6.25	MEK & Butyraldehyde	0.2948	15.705	94981	12.106	VB	0.19
9	6.70	Benzaldehyde	0.1190	6.339	30876	3.935	BB	0.38
10	8.89	Valeraldehyde	0.0731	3.894	20503	2.613	BV	0.35
11	9.52	m-Tolualdehyde	0.0244	1.300	5318	0.678	VB	0.27
12	12.54	Hexaldehyde	0.0244	.301	5812	0.741	BB	0.59

Total Area = 784560.4

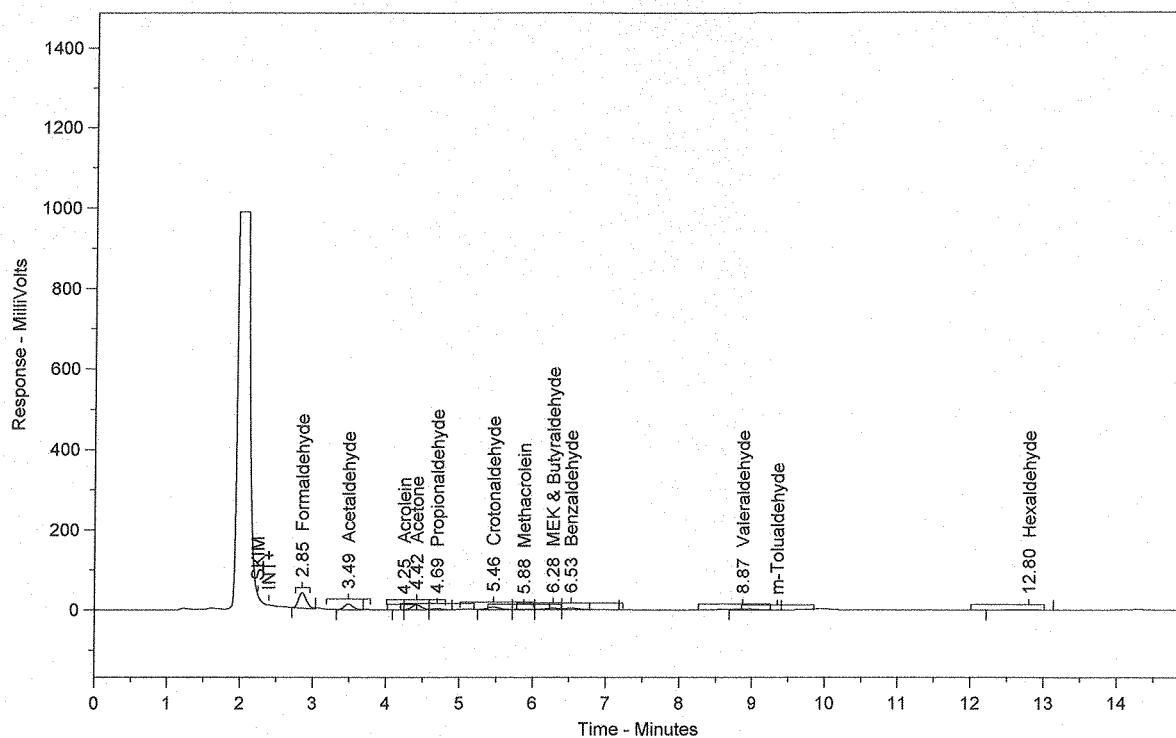
Total Height = 78234.02

Total Amount = 1.876825

Date : 5/31/13

Chrom Perfect Chromatogram Report

130650-63201



Sample Name = 130650-63201

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0020.RAW

Date Taken (end) = 5/31/2013 1:45:46 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 20

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.4541	21.846	288554	33.137	BB	0.11
2	3.49	Acetaldehyde	0.2211	10.636	115805	13.299	BB	0.13
3	4.25	Acrolein	0.0042	0.202	2008	0.231	BV	0.05
4	4.42	Acetone	0.2910	14.002	119395	13.711	VV	0.14
5	4.69	Propionaldehyde	0.0733	3.529	30052	3.451	VB	0.17
6	5.46	Crotonaldehyde	0.2288	11.010	86774	9.965	BV	0.19
7	5.88	Methacrolein	0.0373	1.793	14956	1.717	VV	0.15
8	6.28	MEK & Butyraldehyde	0.1780	8.564	57357	6.587	VV	0.23
9	6.53	Benzaldehyde	0.2610	12.556	67734	7.778	VB	0.24
10	8.87	Valeraldehyde	0.2279	10.962	63916	7.340	BB	0.39
11	12.80	Hexaldehyde	0.1018	4.899	24240	2.784	BB	0.45

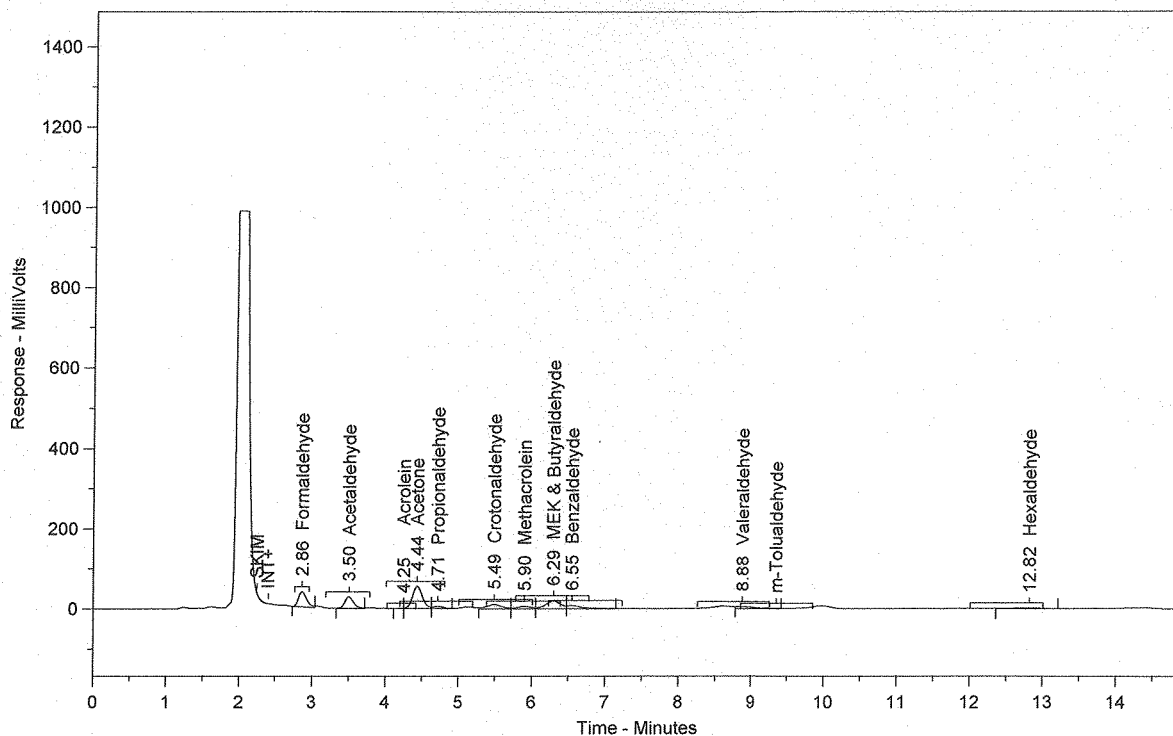
Total Area = 870789.9

Total Height = 88030.42

Total Amount = 2.078491

Chrom Perfect Chromatogram Report

130650-63210



Sample Name = 130650-63210

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0021.RAW

Date Taken (end) = 5/31/2013 2:02:21 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 21

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	0.4576	9.637	290784	15.617	BB	0.12
2	3.50	Acetaldehyde	0.4544	9.571	238061	12.785	BB	0.13
3	4.25	Acrolein	0.0058	0.121	2749	0.148	BV	0.04
4	4.44	Acetone	1.2803	26.963	525211	28.207	VV	0.14
5	4.71	Propionaldehyde	0.1315	2.770	53888	2.894	VB	0.16
6	5.49	Crotonaldehyde	0.3652	7.691	138471	7.437	BV	0.18
7	5.90	Methacrolein	0.1747	3.679	70079	3.764	VV	0.16
8	6.29	MEK & Butyraldehyde	0.8520	17.944	274540	14.744	VV	0.20
9	6.55	Benzaldehyde	0.4439	9.349	115202	6.187	VB	0.18
10	8.88	Valeraldehyde	0.3353	7.062	94062	5.052	BB	0.30
11	12.82	Hexaldehyde	0.2476	5.214	58936	3.165	BB	0.42

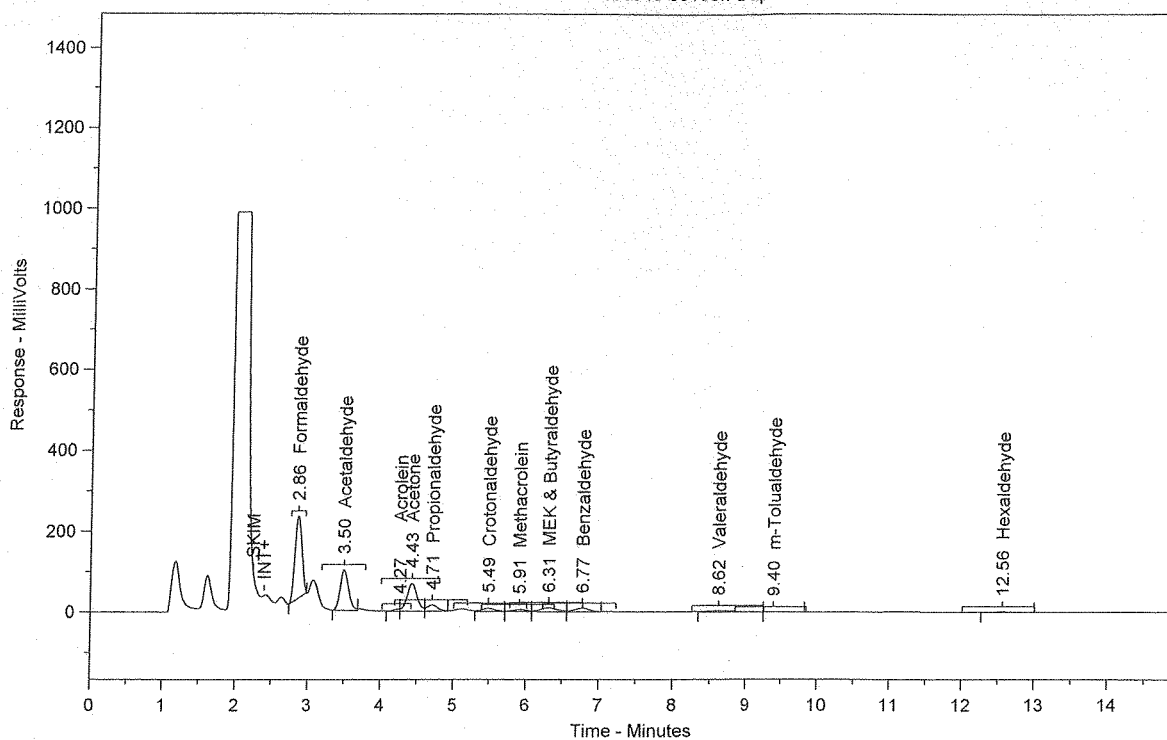
Total Area = 1861982

Total Height = 176721

Total Amount = 4.748161

Chrom Perfect Chromatogram Report

130645-63188rr Dup



Sample Name = 130645-63188rr Dup

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0022.RAW

Date Taken (end) = 5/31/2013 2:18:56 PM

Method File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0022.BND

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0022.BND

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 22

Injection Volume = 10

Dilution Factor = 1

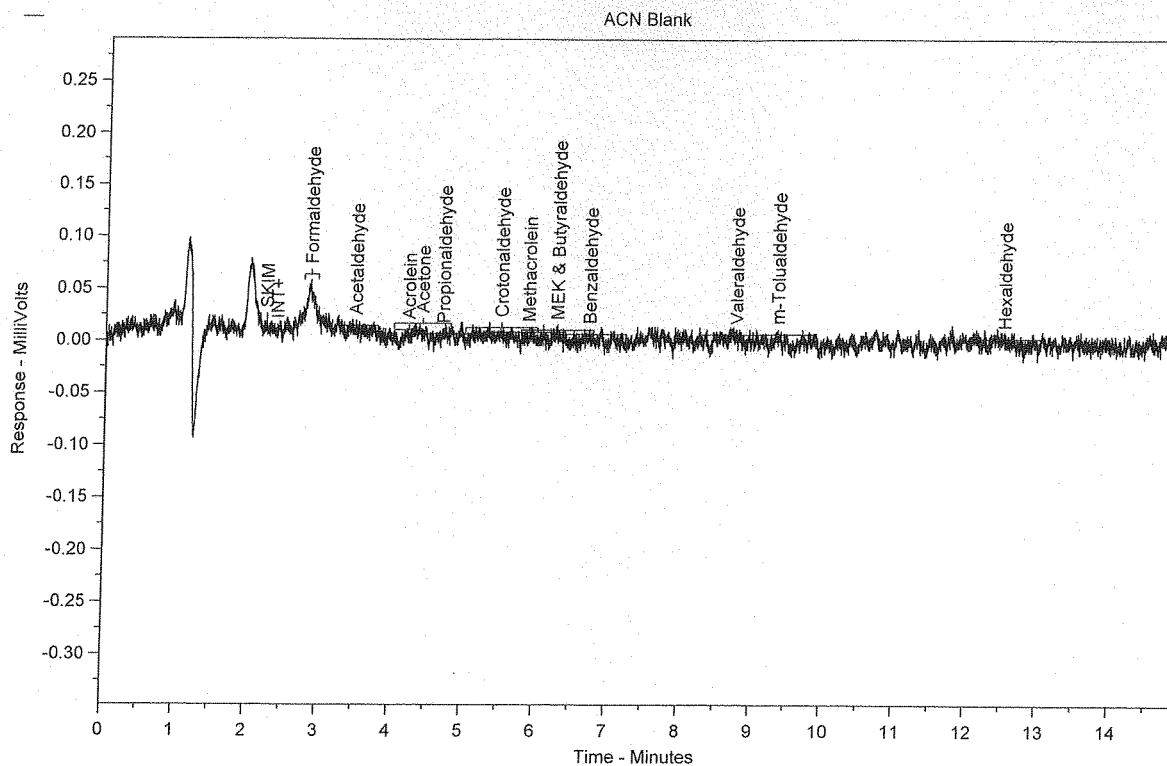
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	2.1128	28.311	1342675	38.023	BB	0.11
2	3.50	Acetaldehyde	1.5355	20.576	804390	22.779	BB	0.12
3	4.27	Acrolein	0.0528	0.707	25210	0.714	BV	0.08
4	4.43	Acetone	1.6105	21.581	660697	18.710	VV	0.14
5	4.71	Propionaldehyde	0.3815	5.112	156323	4.427	VB	0.17
6	5.49	Crotonaldehyde	0.2494	3.341	94553	2.678	BV	0.18
7	5.91	Methacrolein	0.1513	2.028	60719	1.719	VV	0.17
8	6.31	MEK & Butyraldehyde	0.4629	6.204	149177	4.224	VV	0.21
9	6.77	Benzaldehyde	0.4895	6.560	127053	3.598	VB	0.21
10	8.62	Valeraldehyde	0.2734	3.663	76685	2.172	BV	0.45
11	9.40	m-Tolualdehyde	0.0130	0.174	2830	0.080	VB	0.32
12	12.56	Hexaldehyde	0.1300	1.742	30937	0.876	BB	0.40

Total Area = 3531250

Total Height = 426954.8

Total Amount = 7.462668

Chrom Perfect Chromatogram Report



Sample Name = ACN Blank

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0023.RAW

Date Taken (end) = 5/31/2013 4:04:42 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 23

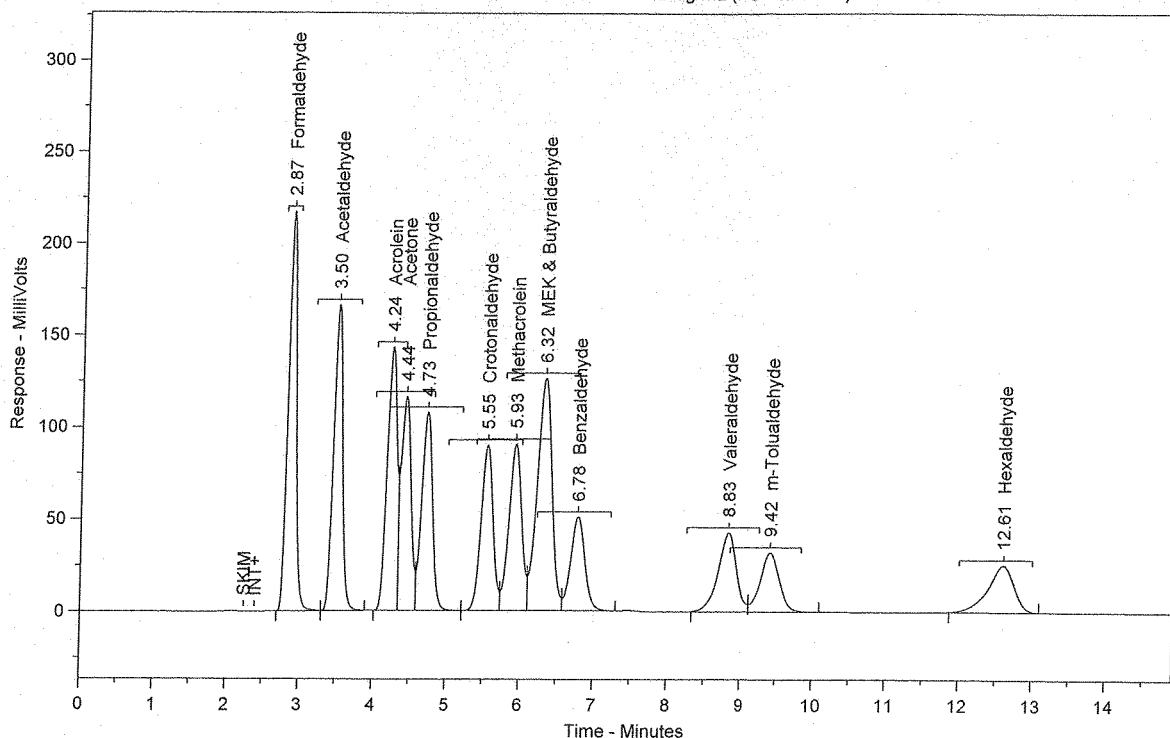
Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
Total Area = 0								
			Total Height = 0		Total Amount = 0			

Chrom Perfect Chromatogram Report

CCV 2.5 ug/mL (PS052213-01)



Sample Name = CCV 2.5 ug/mL (PS052213-01)

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0024.RAW

Date Taken (end) = 5/31/2013 4:21:18 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 24

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.87	Formaldehyde	2.6906	7.707	1709876	13.035	SBB	0.12
3	3.50	Acetaldehyde	2.6899	7.705	1409119	10.742	TVB	0.13
4	4.24	Acrolein	2.7350	7.834	1305984	9.956	BV	0.18
5	4.44	Acetone	2.6982	7.728	1106893	8.438	VV	0.16
6	4.73	Propionaldehyde	2.6765	7.666	1096636	8.360	VV	0.16
7	5.55	Crotonaldehyde	2.6795	7.675	1016067	7.746	VV	0.18
8	5.93	Methacrolein	2.7040	7.745	1084927	8.271	VV	0.17
9	6.32	MEK & Butyraldehyde	5.3860	15.427	1735537	13.230	VV	0.21
10	6.78	Benzaldehyde	2.6540	7.602	688788	5.251	VB	0.21
11	8.83	Valeraldehyde	2.6757	7.664	750572	5.722	BV	0.26
12	9.42	m-Tolualdehyde	2.6761	7.665	583245	4.446	VB	0.28
13	12.61	Hexaldehyde	2.6469	7.582	630071	4.803	BB	0.37

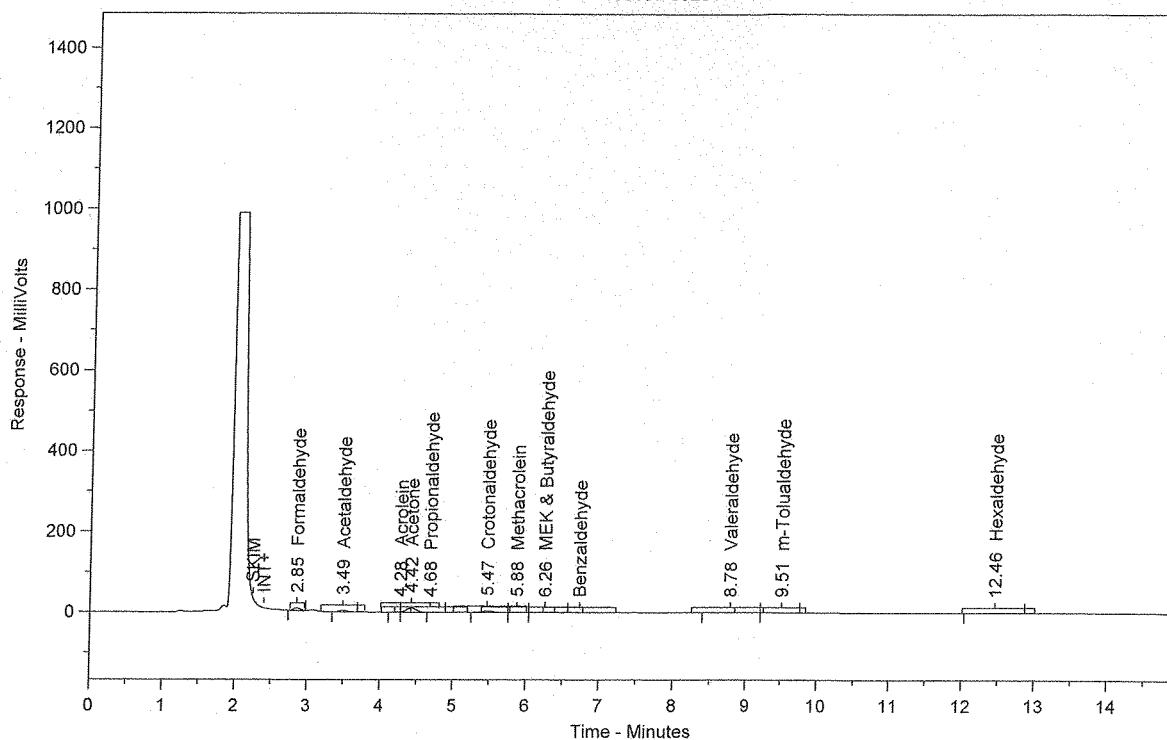
Total Area = 1.311772E+07

Total Height = 1207332

Total Amount = 34.91241

Chrom Perfect Chromatogram Report

130657-63281



Sample Name = 130657-63281

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0025.RAW

Date Taken (end) = 5/31/2013 4:37:52 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 25

Injection Volume = 10

Dilution Factor = 1

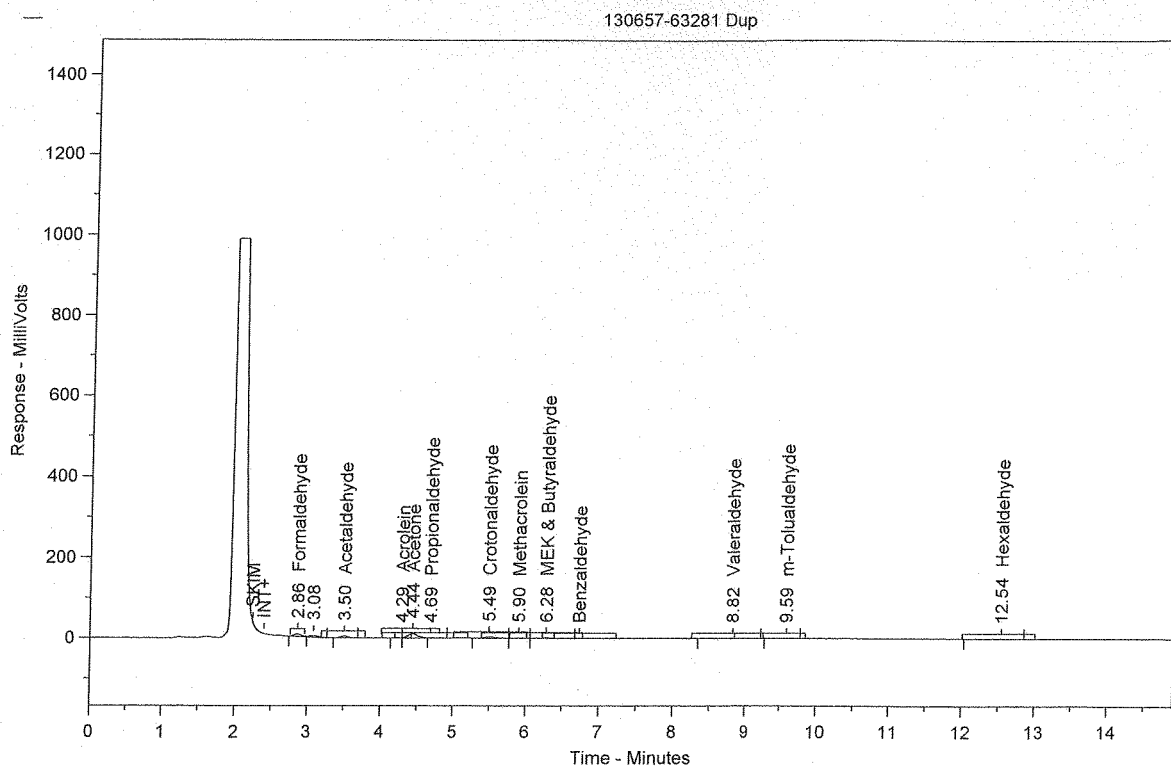
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.0709	11.590	45063	17.354	BB	0.11
2	3.49	Acetaldehyde	0.0641	10.479	33585	12.934	BB	0.13
3	4.28	Acrolein	0.0024	0.390	1140	0.439	BV	0.02
4	4.42	Acetone	0.2487	40.644	102014	39.286	SBB	0.14
5	4.68	Propionaldehyde	0.0121	1.983	4971	1.914	TBB	0.13
6	5.47	Crotonaldehyde	0.1100	17.975	41703	16.060	BV	0.18
7	5.88	Methacrolein	0.0114	1.857	4559	1.756	VV	0.17
8	6.26	MEK & Butyraldehyde	0.0477	7.799	15376	5.921	VB	0.21
9	8.78	Valeraldehyde	0.0204	3.336	5725	2.205	BV	0.46
10	9.51	m-Tolualdehyde	0.0108	1.765	2353	0.906	VB	0.30
11	12.46	Hexaldehyde	0.0134	2.183	3179	1.224	BB	0.42

Total Area = 259667.5

Total Height = 28098.57

Total Amount = 0.611827

Chrom Perfect Chromatogram Report



Sample Name = 130657-63281 Dup

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0026.RAW

Date Taken (end) = 5/31/2013 4:54:27 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 26

Injection Volume = 10

Dilution Factor = 1

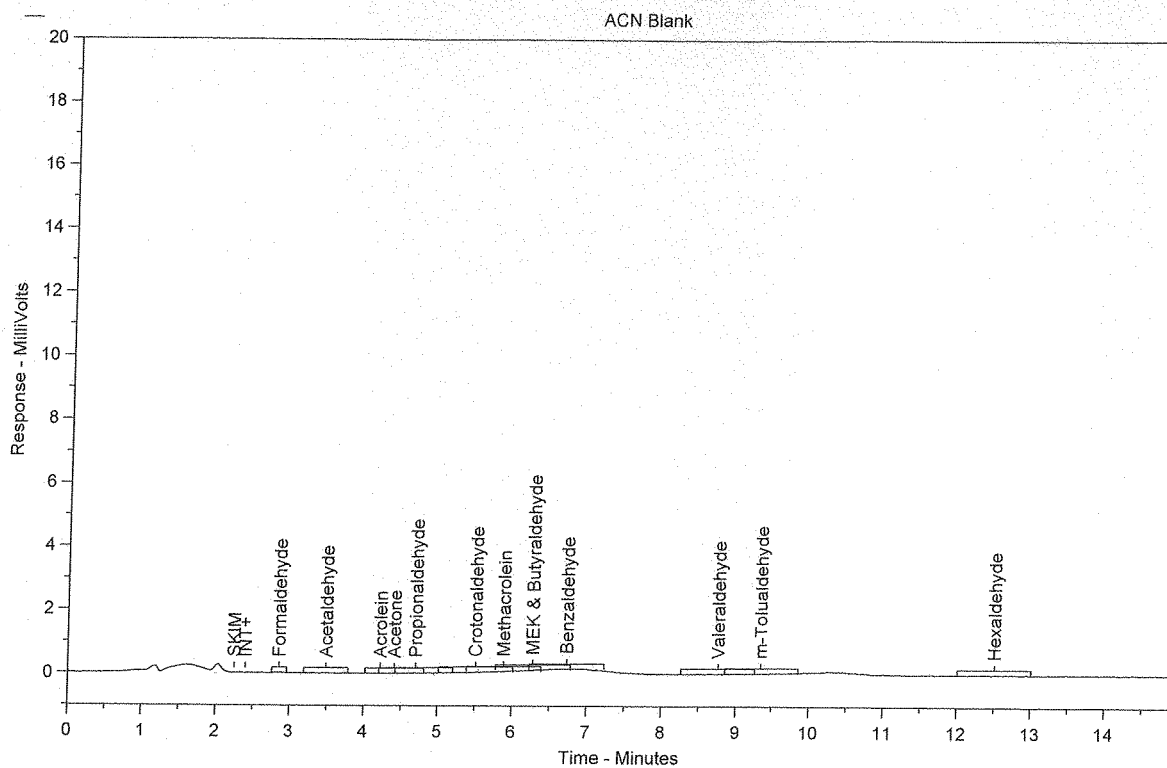
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	0.0697	11.488	44311	15.465	SBB	0.11
2	3.08		0.0000	0.000	28652	10.000	TBB	0.17
3	3.50	Acetaldehyde	0.0637	10.493	33362	11.644	BB	0.13
4	4.29	Acrolein	0.0022	0.359	1042	0.364	BV	0.02
5	4.44	Acetone	0.2475	40.776	101527	35.435	SBB	0.14
6	4.69	Propionaldehyde	0.0128	2.109	5244	1.830	TBB	0.14
7	5.49	Crotonaldehyde	0.1080	17.801	40969	14.299	BV	0.19
8	5.90	Methacrolein	0.0116	1.907	4645	1.621	VV	0.17
9	6.28	MEK & Butyraldehyde	0.0520	8.573	16767	5.852	VB	0.22
10	8.82	Valeraldehyde	0.0183	3.008	5122	1.788	BB	0.46
11	9.59	m-Tolualdehyde	0.0079	1.300	1720	0.600	BB	0.27
12	12.54	Hexaldehyde	0.0133	2.183	3154	1.101	BB	0.40

Total Area = 286514.5

Total Height = 31364.92

Total Amount = 0.6069272

Chrom Perfect Chromatogram Report



Sample Name = ACN Blank

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0034.RAW

Date Taken (end) = 5/31/2013 7:07:10 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

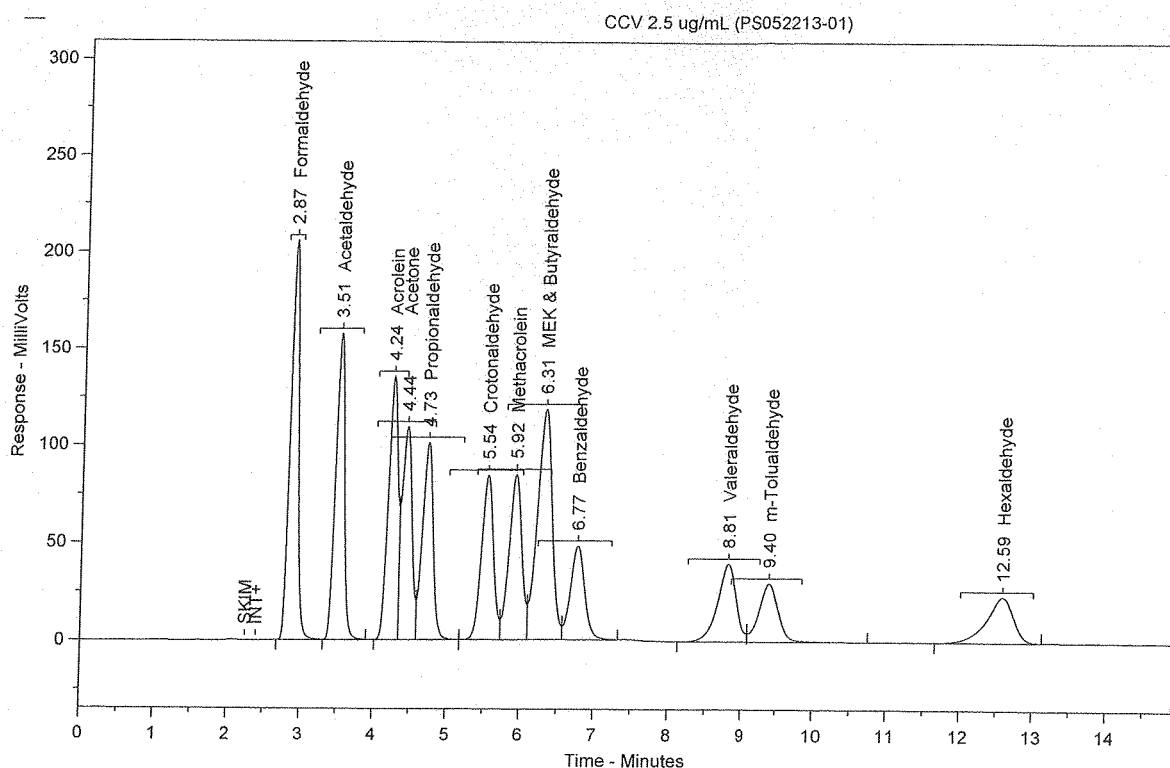
Vial Number = 34

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
Total Area = 0								
Total Height = 0								
Total Amount = 0								

Chrom Perfect Chromatogram Report



Sample Name = CCV 2.5 ug/mL (PS052213-01)

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0035.RAW

Date Taken (end) = 5/31/2013 7:23:45 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 35

Injection Volume = 10

Dilution Factor = 1

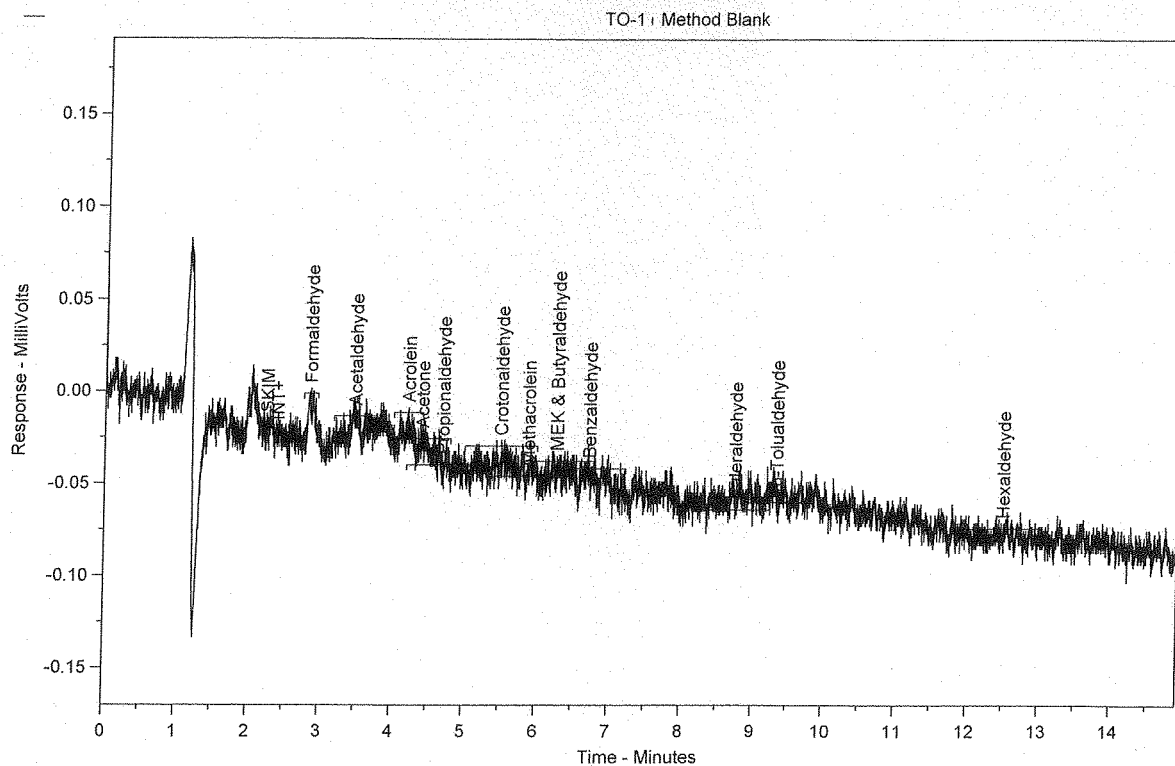
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.87	Formaldehyde	2.5274	7.684	1606166	13.012	SBB	0.12
2	3.51	Acetaldehyde	2.5314	7.696	1326097	10.743	TBV	0.13
3	4.24	Acrolein	2.5687	7.809	1226579	9.937	TVV	0.17
4	4.44	Acetone	2.5230	7.670	1035031	8.385	TVV	0.16
5	4.73	Propionaldehyde	2.5114	7.635	1029008	8.337	TVV	0.16
6	5.54	Crotonaldehyde	2.5148	7.645	953596	7.726	TVV	0.17
7	5.92	Methacrolein	2.5399	7.722	1019070	8.256	TVV	0.17
8	6.31	MEK & Butyraldehyde	5.0466	15.342	1626194	13.175	TVV	0.20
9	6.77	Benzaldehyde	2.5086	7.626	651069	5.275	TVB	0.21
10	8.81	Valeraldehyde	2.5306	7.693	709870	5.751	BV	0.26
11	9.40	m-Tolualdehyde	2.5483	7.747	555391	4.500	VB	0.28
12	12.59	Hexaldehyde	2.5427	7.730	605265	4.904	BB	0.38

Total Area = 1.234334E+07

Total Height = 1136770

Total Amount = 32.89354

Chrom Perfect Chromatogram Report



Sample Name = TO-11 Method Blank *2 HP 06/03/13*

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0036.RAW

Date Taken (end) = 5/31/2013 7:40:20 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 36

Injection Volume = 10

Dilution Factor = 1

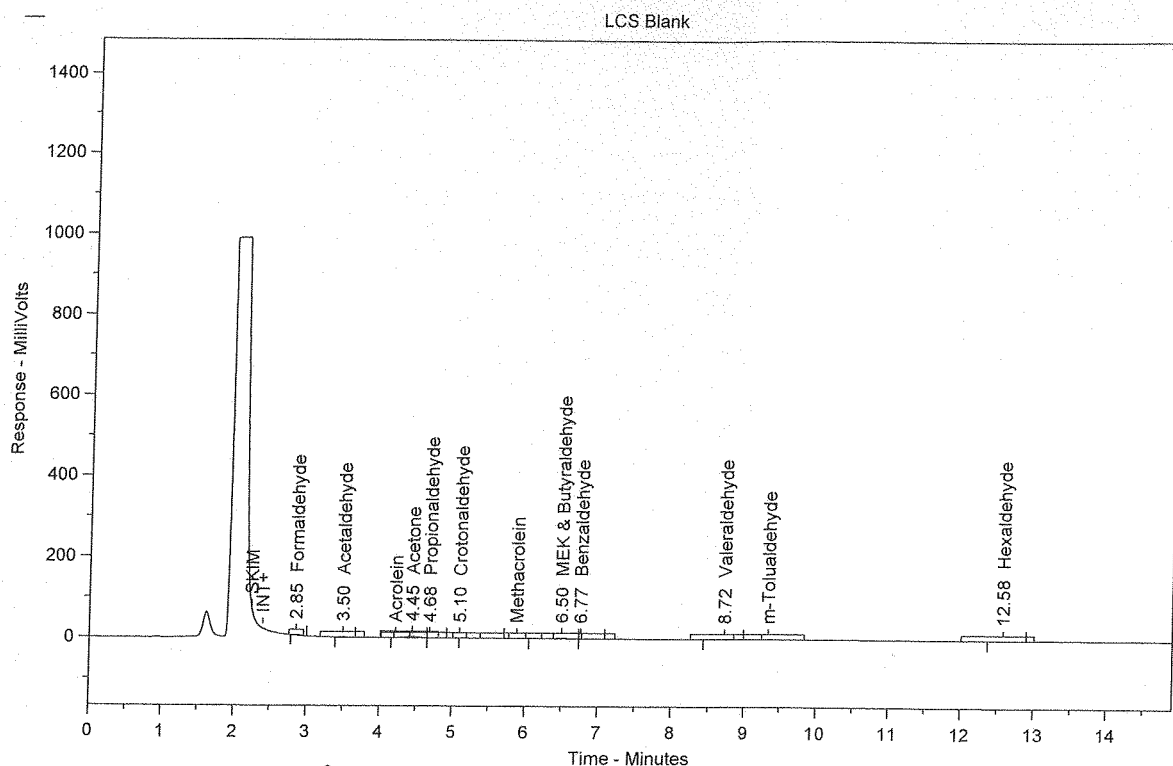
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
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Total Area = 0

Total Height = 0

Total Amount = 0

Chrom Perfect Chromatogram Report



Sample Name = LCS Blank *2 HP 06/03/13*

Instrument = HPLC #1

Raw File Name = C:\Chromperfect 2\Data\HPLC #1\2013\053113\053113.0037.RAW

Date Taken (end) = 5/31/2013 7:56:55 PM

Method File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 37

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.0155	6.922	9863	11.526	BB	0.14
2	3.50	Acetaldehyde	0.0122	5.420	6366	7.439	BB	0.18
3	4.45	Acetone	0.0760	33.891	31173	36.429	BV	0.15
4	4.68	Propionaldehyde	0.0092	4.113	3778	4.415	VB	0.16
5	5.10	Crotonaldehyde	0.0097	4.341	3691	4.313	BB	0.39
6	6.50	MEK & Butyraldehyde	0.0665	29.654	21425	25.037	BV	0.25
7	6.77	Benzaldehyde	0.0100	4.479	2607	3.046	VB	0.16
8	8.72	Valeraldehyde	0.0166	7.391	4648	5.432	BB	0.26
9	12.58	Hexaldehyde	0.0085	3.789	2022	2.363	BB	0.40

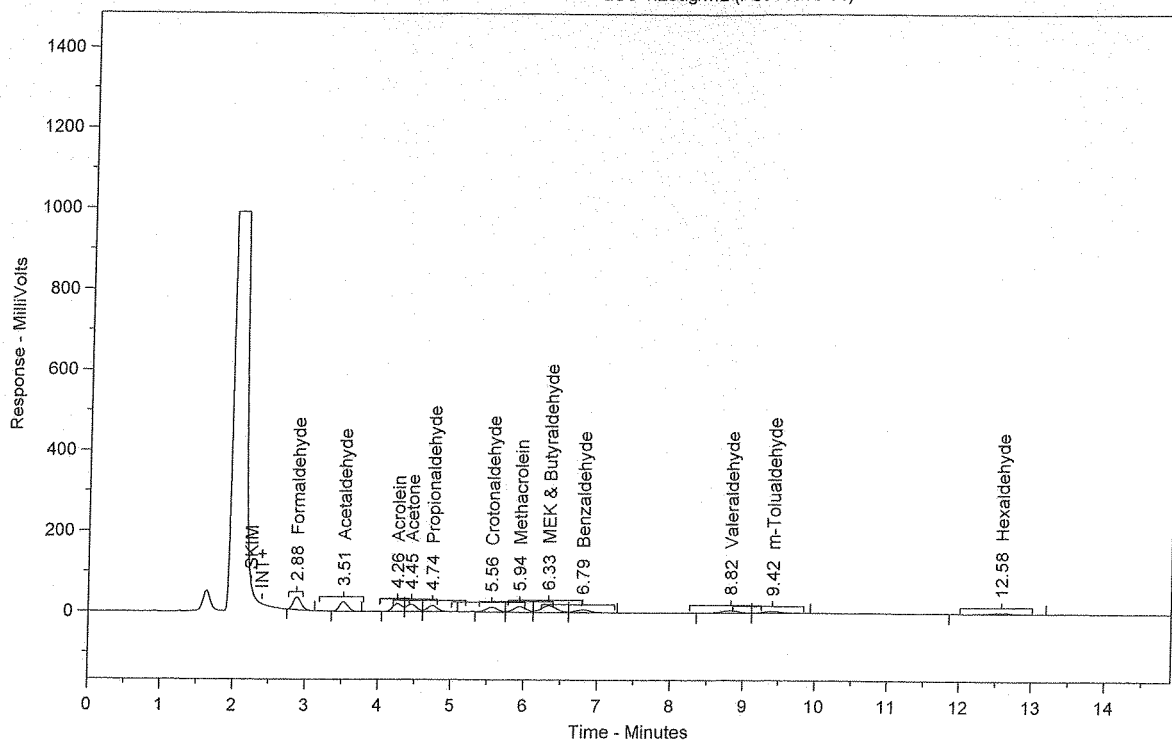
Total Area = 85573.36

Total Height = 7683.19

Total Amount = 0.2242134

Chrom Perfect Chromatogram Report

LCS 1.25ug/mL (PS011013-01)



Sample Name = LCS 1.25ug/mL (PS011013-01) 2 HP 06/03/13

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0038.RAW

Date Taken (end) = 5/31/2013 8:13:29 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 38

Injection Volume = 10

Dilution Factor = 1

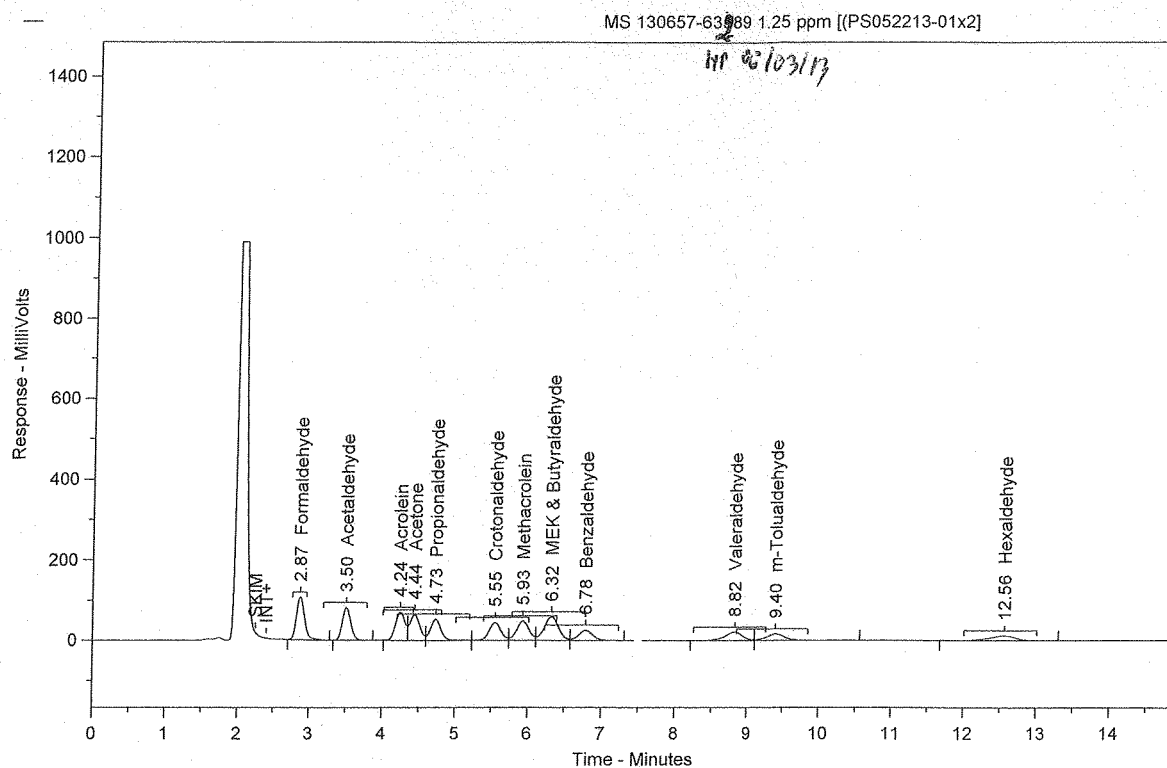
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.88	Formaldehyde	0.3743	7.536	237836	12.734	BB	0.13
2	3.51	Acetaldehyde	0.3732	7.514	195479	10.466	BB	0.13
3	4.26	Acrolein	0.3761	7.574	179612	9.617	BV	0.17
4	4.45	Acetone	0.4420	8.901	181337	9.709	VV	0.17
5	4.74	Propionaldehyde	0.3815	7.683	156322	8.370	VB	0.16
6	5.56	Crotonaldehyde	0.3630	7.309	137644	7.370	BV	0.17
7	5.94	Methacrolein	0.4161	8.378	166941	8.938	VV	0.17
8	6.33	MEK & Butyraldehyde	0.7392	14.886	238206	12.754	VV	0.20
9	6.79	Benzaldehyde	0.3753	7.557	97405	5.215	VB	0.21
10	8.82	Valeraldehyde	0.3845	7.743	107865	5.775	BV	0.27
11	9.42	m-Tolualdehyde	0.3619	7.287	78871	4.223	VB	0.28
12	12.58	Hexaldehyde	0.3789	7.631	90204	4.830	BB	0.38

Total Area = 1867722

Total Height = 171376.4

Total Amount = 4.966076

Chrom Perfect Chromatogram Report



Sample Name = MS 130657-63589 1.25 ppm [(PS052213-01x2)]
Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0039.RAW

Date Taken (end) = 5/31/2013 8:30:08 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 39

Injection Volume = 10

Dilution Factor = 1

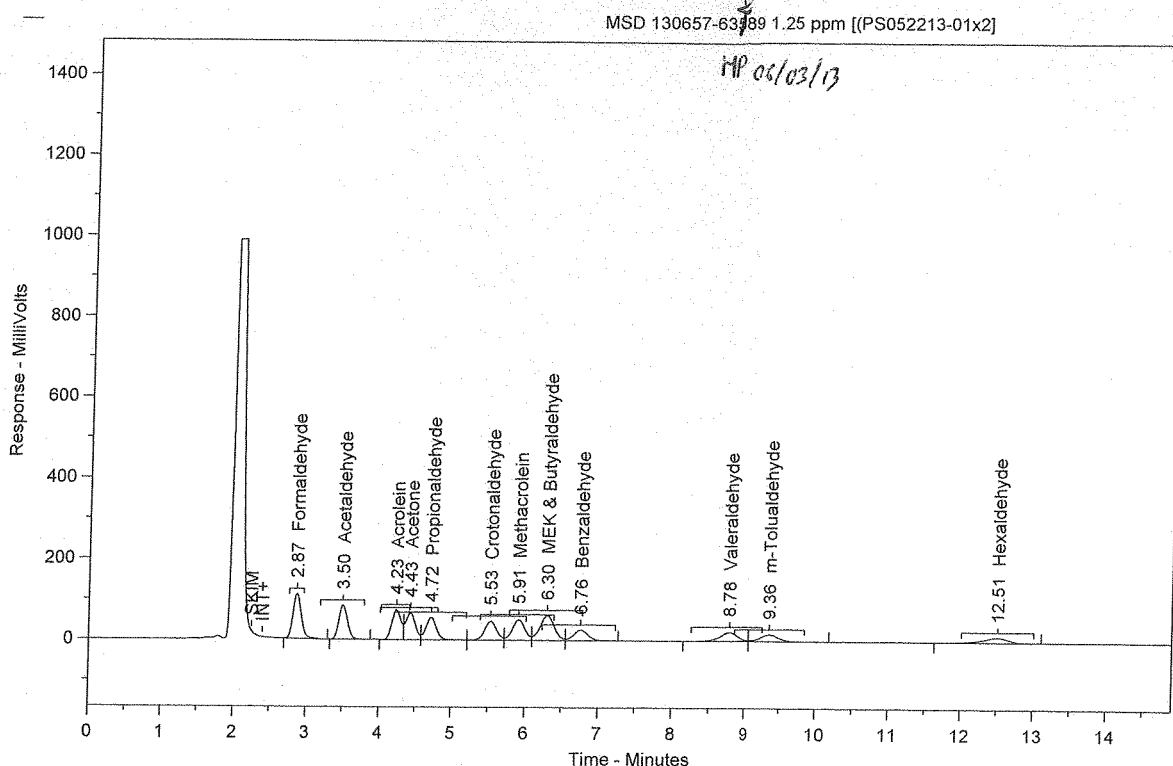
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.87	Formaldehyde	1.3222	7.715	840227	13.026	BB	0.12
2	3.50	Acetaldehyde	1.2977	7.573	679812	10.539	BB	0.13
3	4.24	Acrolein	1.3168	7.684	628775	9.748	BV	0.17
4	4.44	Acetone	1.4738	8.600	604614	9.374	VV	0.16
5	4.73	Propionaldehyde	1.2998	7.585	532566	8.257	VV	0.16
6	5.55	Crotonaldehyde	1.3090	7.638	496352	7.695	VV	0.17
7	5.93	Methacrolein	1.4308	8.349	574080	8.900	VV	0.17
8	6.32	MEK & Butyraldehyde	2.4667	14.394	794861	12.323	VV	0.20
9	6.78	Benzaldehyde	1.2876	7.514	334177	5.181	VB	0.20
10	8.82	Valeraldehyde	1.3031	7.604	365527	5.667	BV	0.26
11	9.40	m-Tolualdehyde	1.3310	7.767	290087	4.497	VB	0.27
12	12.56	Hexaldehyde	1.2985	7.577	309081	4.792	BB	0.37

Total Area = 6450159

Total Height = 598305.4

Total Amount = 17.13689

Chrom Perfect Chromatogram Report



Sample Name = MSD 130657-63589 1.25 ppm [(PS052213-01x2)] HP 06/03/13 Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0040.RAW

Date Taken (end) = 5/31/2013 8:46:44 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET
Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889

Injection Volume = 10

Vial Number = 40

Dilution Factor = 1

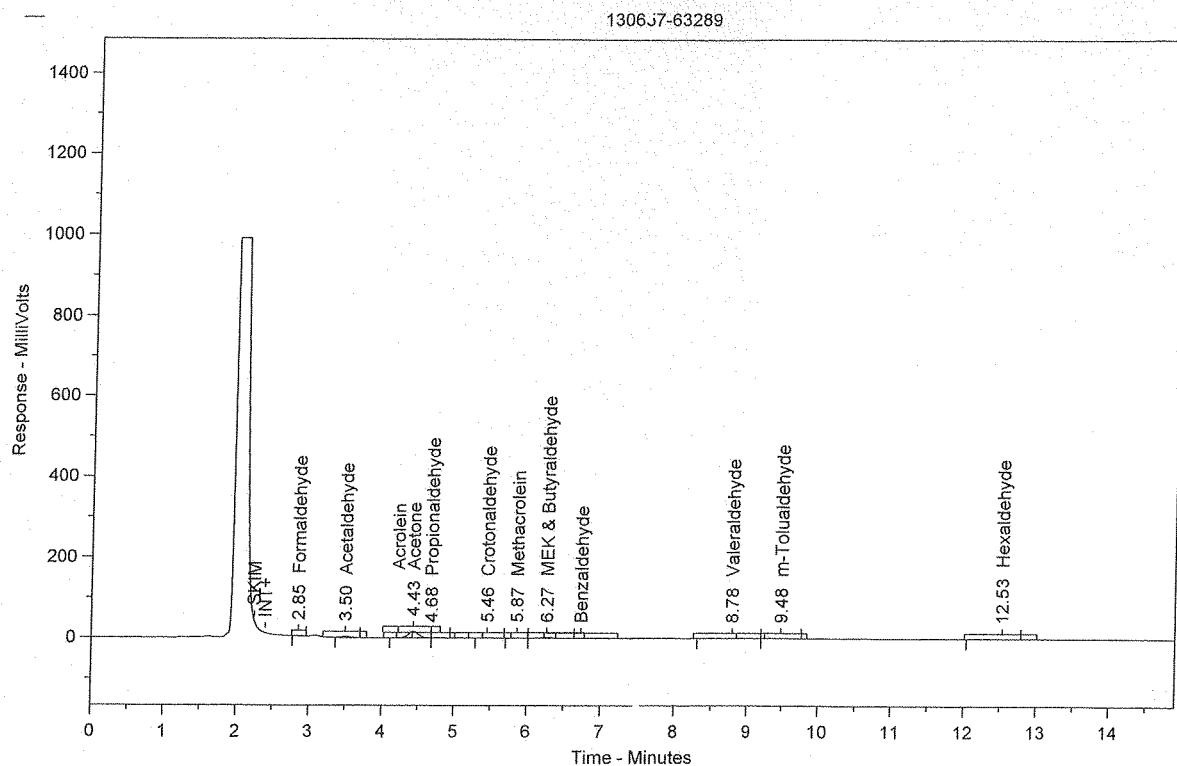
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.87	Formaldehyde	1.3786	7.694	876100	12.992	BB	0.12
2	3.50	Acetaldehyde	1.3562	7.569	710464	10.536	BB	0.13
3	4.23	Acrolein	1.3817	7.711	659787	9.785	BV	0.17
4	4.43	Acetone	1.5295	8.536	627460	9.305	VV	0.15
5	4.72	Propionaldehyde	1.3568	7.573	555941	8.245	VV	0.16
6	5.53	Crotonaldehyde	1.3717	7.656	520150	7.714	VV	0.17
7	5.91	Methacrolein	1.4951	8.344	599890	8.896	VV	0.17
8	6.30	MEK & Butyraldehyde	2.5933	14.473	835658	12.393	VV	0.20
9	6.76	Benzaldehyde	1.3496	7.532	350269	5.194	VB	0.20
10	8.78	Valeraldehyde	1.3660	7.624	383172	5.682	BV	0.26
11	9.36	m-Tolualdehyde	1.3818	7.712	301165	4.466	VB	0.27
12	12.51	Hexaldehyde	1.3573	7.575	323099	4.792	BB	0.38

Total Area = 6743155

Total Height = 626401.8

Total Amount = 17.91786

Chrom Perfect Chromatogram Report



Sample Name = 130657-63289

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0041.RAW

Date Taken (end) = 5/31/2013 9:03:19 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 41

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.0133	2.442	8455	3.825	BB	0.14
2	3.50	Acetaldehyde	0.0409	7.514	21449	9.704	BB	0.13
3	4.43	Acetone	0.3705	67.984	151984	68.761	BV	0.15
4	4.68	Propionaldehyde	0.0105	1.929	4307	1.949	VV	0.10
5	5.46	Crotonaldehyde	0.0120	2.211	4569	2.067	VB	0.20
6	5.87	Methacrolein	0.0077	1.405	3072	1.390	BV	0.16
7	6.27	MEK & Butyraldehyde	0.0628	11.527	20242	9.158	VB	0.20
8	8.78	Valeraldehyde	0.0138	2.538	3879	1.755	BV	0.42
9	9.48	m-Tolualdehyde	0.0052	0.947	1124	0.509	VB	0.43
10	12.53	Hexaldehyde	0.0082	1.504	1951	0.883	BB	0.41

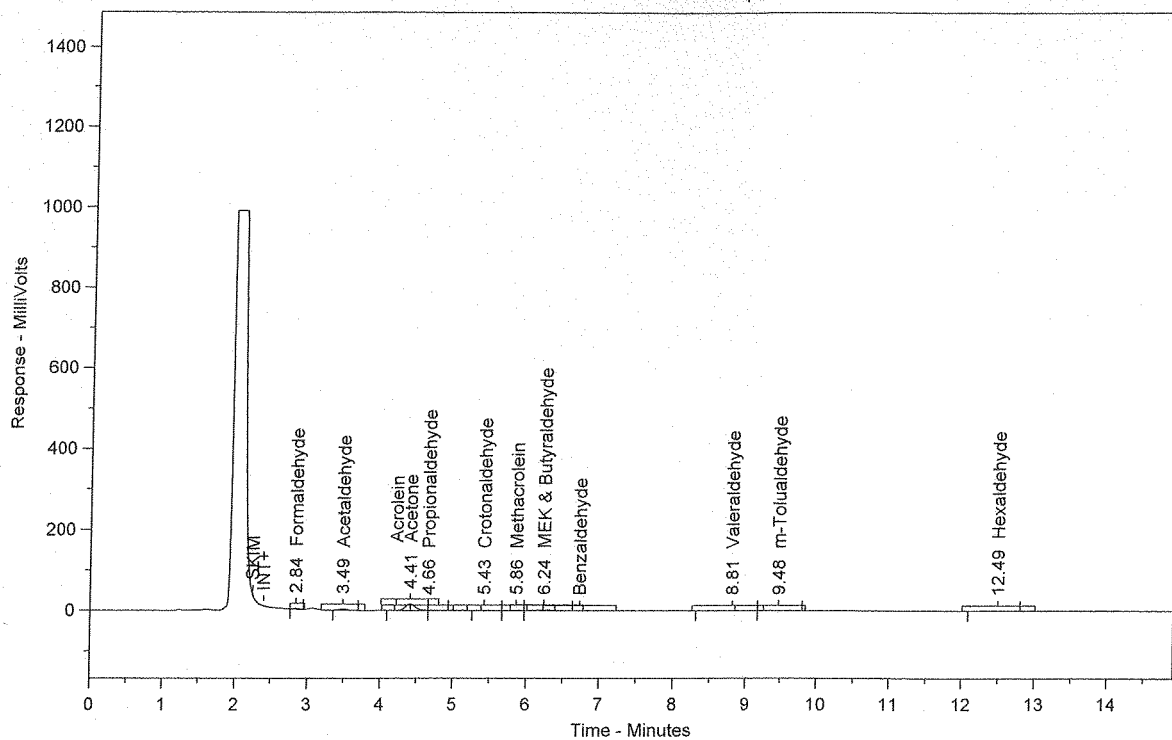
Total Area = 221032

Total Height = 23061.79

Total Amount = 0.544943

Chrom Perfect Chromatogram Report

130657-63289 Dup



Sample Name = 130657-63289 Dup

Instrument = HPLC #1

Raw File Name = C:\Chromperfect 2\Data\HPLC #1\2013\053113\053113.0042.RAW

Date Taken (end) = 5/31/2013 9:19:54 PM

Method File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 42

Injection Volume = 10

Dilution Factor = 1

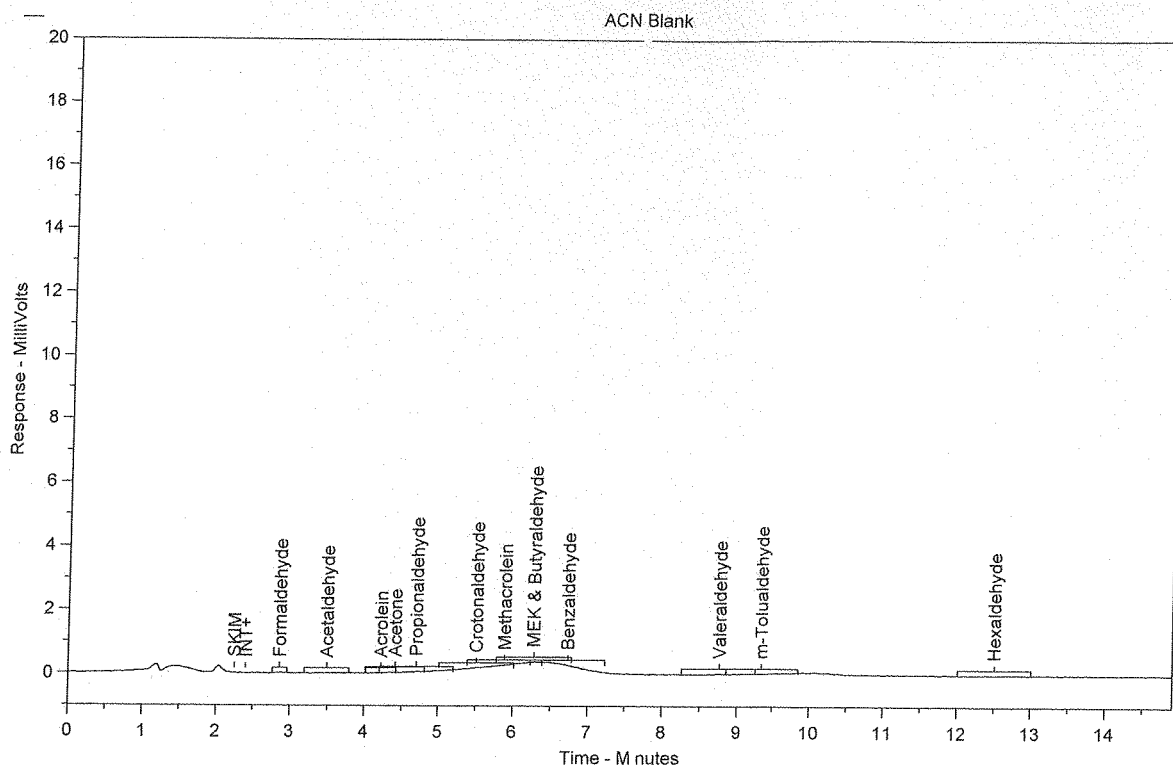
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	0.0134	2.408	8512	3.788	BB	0.14
2	3.49	Acetaldehyde	0.0410	7.375	21488	9.563	BB	0.13
3	4.41	Acetone	0.3696	66.446	151618	67.473	BV	0.14
4	4.66	Propionaldehyde	0.0107	1.924	4385	1.952	VV	0.10
5	5.43	Crotonaldehyde	0.0115	2.061	4348	1.935	VB	0.20
6	5.86	Methacrolein	0.0078	1.393	3110	1.384	BV	0.18
7	6.24	MEK & Butyraldehyde	0.0762	13.694	24544	10.923	VB	0.22
8	8.81	Valeraldehyde	0.0136	2.449	3821	1.700	BV	0.42
9	9.48	m-Tolualdehyde	0.0048	0.862	1046	0.465	VB	0.46
10	12.49	Hexaldehyde	0.0077	1.388	1837	0.818	BB	0.46

Total Area = 224707.5

Total Height = 23262.9

Total Amount = 0.556219

Chrom Perfect Chromatogram Report



Sample Name = ACN Blank

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0045.RAW

Date Taken (end) = 5/31/2013 10:09:38 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

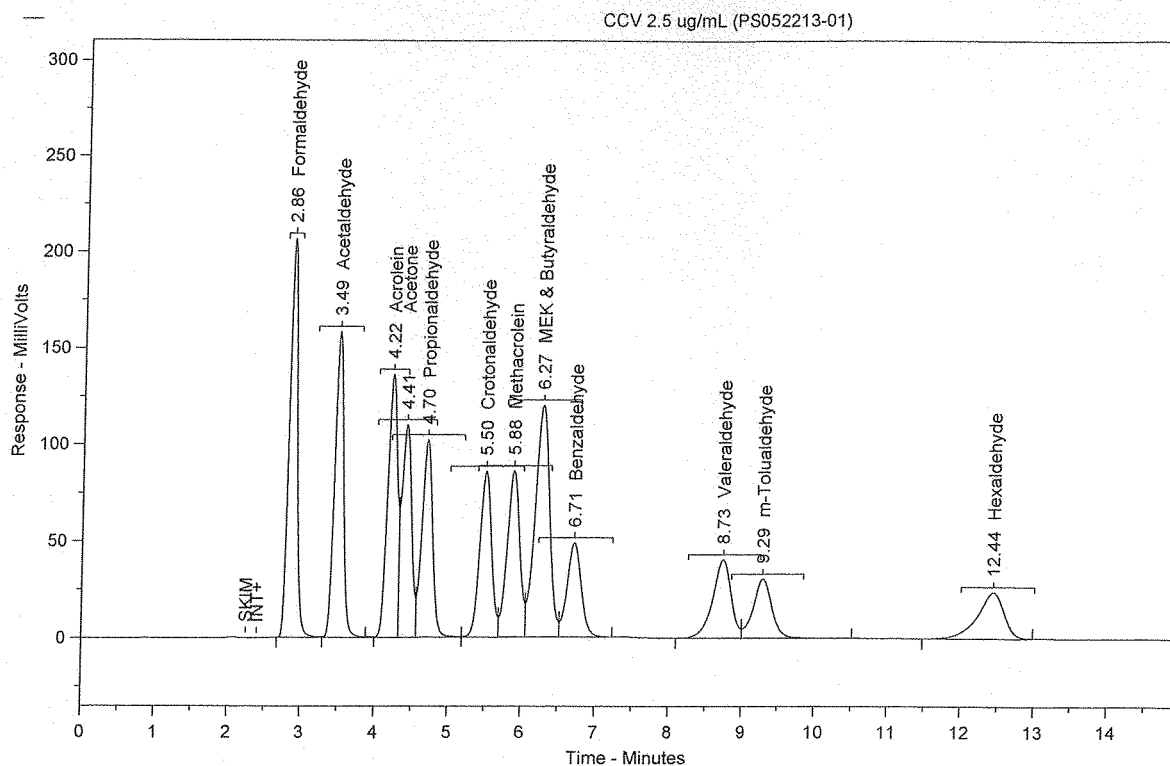
Vial Number = 45

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
Total Area = 0								
Total Height = 0								
Total Amount = 0								

Chrom Perfect Chromatogram Report



Sample Name = CCV 2.5 ug/mL (PS052213-01)

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0046.RAW

Date Taken (end) = 5/31/2013 10:26:12 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 46

Injection Volume = 10

Dilution Factor = 1

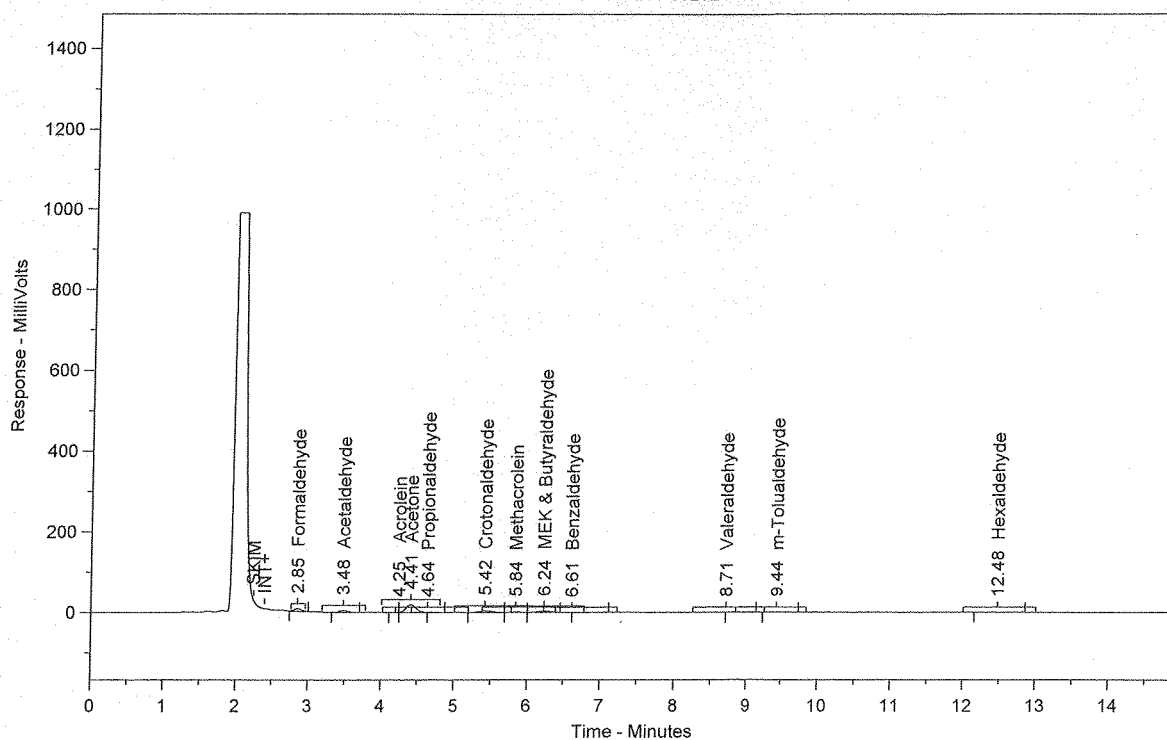
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	2.5325	7.658	1609372	12.969	SBB	0.12
2	3.49	Acetaldehyde	2.5443	7.694	1332807	10.740	TBV	0.13
3	4.22	Acrolein	2.5887	7.828	1236148	9.961	TVV	0.17
4	4.41	Acetone	2.5285	7.646	1037280	8.359	TWV	0.16
5	4.70	Propionaldehyde	2.5367	7.671	1039356	8.375	TVV	0.16
6	5.50	Crotonaldehyde	2.5432	7.691	964366	7.771	TWV	0.17
7	5.88	Methacrolein	2.5525	7.719	1024131	8.253	TWV	0.17
8	6.27	MEK & Butyraldehyde	5.0772	15.354	1636033	13.183	TVV	0.20
9	6.71	Benzaldehyde	2.5154	7.607	652833	5.261	TVB	0.21
10	8.73	Valeraldehyde	2.5416	7.686	712949	5.745	BV	0.26
11	9.29	m-Tolualdehyde	2.5585	7.737	557605	4.493	VB	0.27
12	12.44	Hexaldehyde	2.5493	7.709	606842	4.890	BB	0.37

Total Area = 1.240972E+07

Total Height = 1148502

Total Amount = 33.06829

130657-63292



Sample Name = 130657-63292

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0047.RAW

Date Taken (end) = 5/31/2013 10:42:47 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 47

Injection Volume = 10

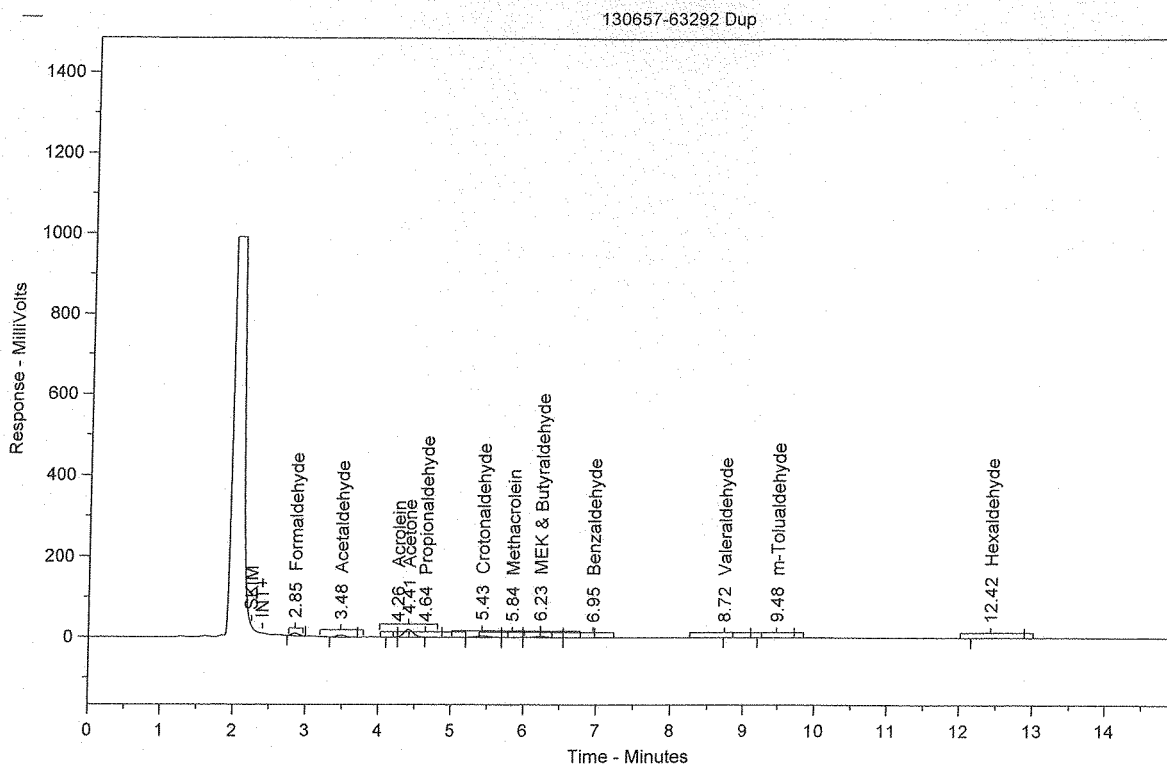
Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.0663	7.309	42130	11.233	BB	0.12
2	3.48	Acetaldehyde	0.0723	7.968	37861	10.095	BB	0.13
3	4.25	Acrolein	0.0022	0.246	1067	0.284	BV	0.02
4	4.41	Acetone	0.4473	49.315	183502	48.925	SBB	0.14
5	4.64	Propionaldehyde	0.0152	1.675	6224	1.659	TBB	0.12
6	5.42	Crotonaldehyde	0.1324	14.595	50197	13.384	BV	0.19
7	5.84	Methacrolein	0.0197	2.177	7923	2.112	VV	0.15
8	6.24	MEK & Butyraldehyde	0.1144	12.608	36850	9.825	VB	0.18
9	6.61	Benzaldehyde	0.0064	0.701	1651	0.440	BB	0.24
10	8.71	Valeraldehyde	0.0119	1.311	3335	0.889	BB	0.19
11	9.44	m-Tolualdehyde	0.0098	1.076	2127	0.567	BB	0.24
12	12.48	Hexaldehyde	0.0092	1.019	2200	0.586	BB	0.51

Total Area = 375066.6

Total Height = 39507.2

Total Amount = 0.9070309



Sample Name = 130657-63292 Dup

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0048.RAW

Date Taken (end) = 5/31/2013 10:59:21 PM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 48

Injection Volume = 10

Dilution Factor = 1

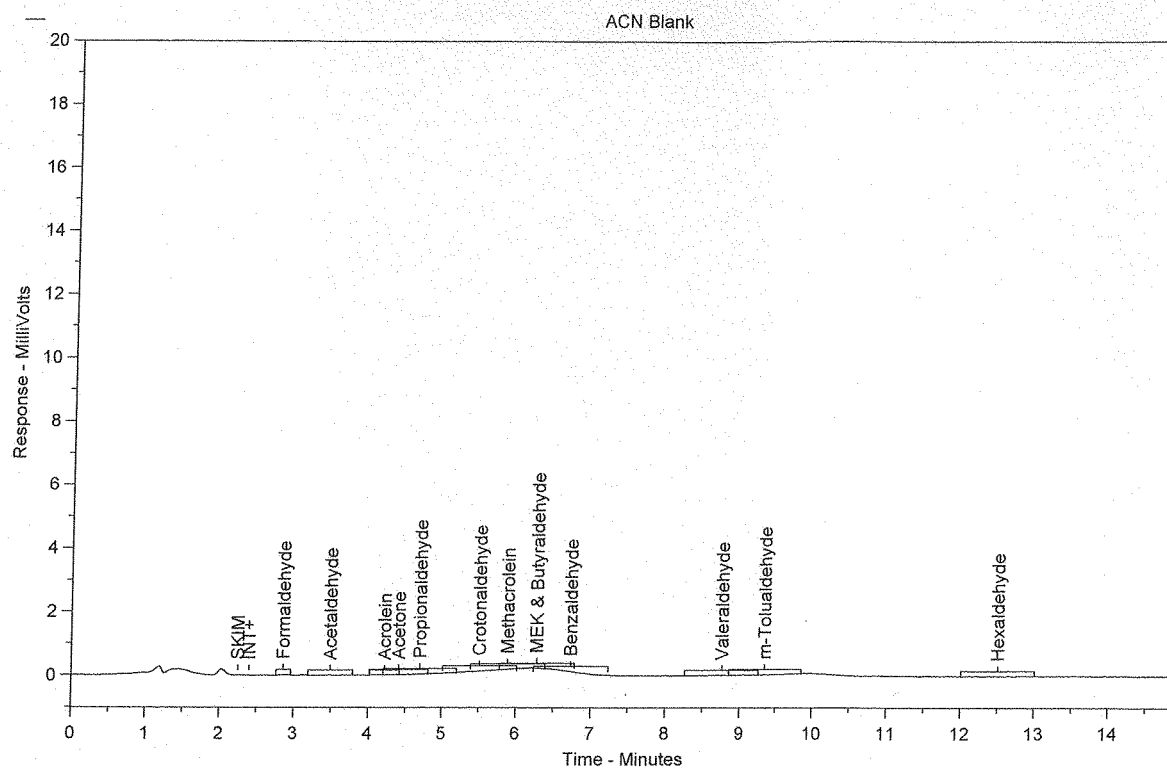
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.0653	7.199	41528	11.086	BB	0.12
2	3.48	Acetaldehyde	0.0718	7.915	37635	10.047	BB	0.13
3	4.26	Acrolein	0.0032	0.355	1539	0.411	BV	0.02
4	4.41	Acetone	0.4462	49.154	183044	48.864	SBB	0.14
5	4.64	Propionaldehyde	0.0149	1.640	6101	1.629	TBB	0.12
6	5.43	Crotonaldehyde	0.1273	14.024	48272	12.886	BV	0.19
7	5.84	Methacrolein	0.0189	2.081	7580	2.023	VV	0.14
8	6.23	MEK & Butyraldehyde	0.1235	13.602	39787	10.621	VV	0.20
9	6.95	Benzaldehyde	0.0064	0.705	1661	0.443	VB N	0.30
10	8.72	Valeraldehyde	0.0111	1.226	3123	0.834	BB	0.19
11	9.48	m-Tolualdehyde	0.0099	1.092	2160	0.576	BB	0.25
12	12.42	Hexaldehyde	0.0091	1.006	2174	0.580	BB	0.53

Total Area = 374602.3

Total Height = 39553.58

Total Amount = 0.9077272

Chrom Perfect Chromatogram Report



Sample Name = ACN Blank

Instrument = HPLC #1

Raw File Name = C:\Chromep perfect 2\Data\HPLC #1\2013\053113\053113.0053.RAW

Date Taken (end) = 6/1/2013 12:22:20 AM

Method File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromep perfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 53

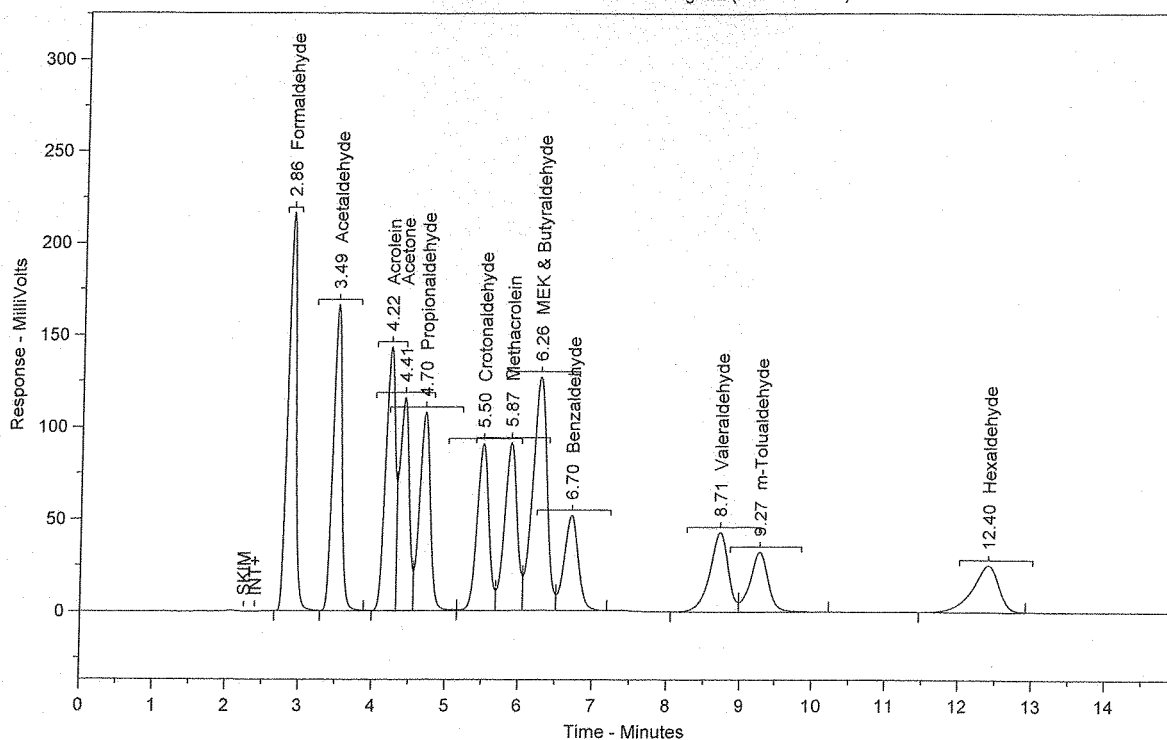
Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
Total Area = 0								
			Total Height = 0			Total Amount = 0		

Chrom Perfect Chromatogram Report

CCV 2.5 ug/mL (PS052213-01)



Sample Name = CCV 2.5 ug/mL (PS052213-01)

Instrument = HPLC #1

Raw File Name = C:\Chromperfect 2\Data\HPLC #1\2013\053113\053113.0054.RAW

Date Taken (end) = 6/1/2013 12:38:55 AM

Method File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET

Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL

Concentration Units = ug/ml

Run Time = 14.89889

Vial Number = 54

Injection Volume = 10

Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	2.6432	7.604	1679737	12.891	SBB	0.12
2	3.49	Acetaldehyde	2.6626	7.660	1394795	10.704	TBV	0.13
3	4.22	Acrolein	2.7086	7.792	1293375	9.926	TVV	0.16
4	4.41	Acetone	2.6473	7.616	1086016	8.335	TVV	0.16
5	4.70	Propionaldehyde	2.6552	7.638	1087897	8.349	TVV	0.16
6	5.50	Crotonaldehyde	2.6851	7.724	1018168	7.814	TVV	0.17
7	5.87	Methacrolein	2.6852	7.725	1077382	8.268	TVV	0.17
8	6.26	MEK & Butyraldehyde	5.3445	15.375	1722159	13.217	TVV	0.20
9	6.70	Benzaldehyde	2.6464	7.613	686818	5.271	TVB	0.20
10	8.71	Valeraldehyde	2.6901	7.739	754605	5.791	BV	0.26
11	9.27	m-Tolualdehyde	2.7141	7.808	591526	4.540	VV	0.27
12	12.40	Hexaldehyde	2.6784	7.705	637552	4.893	VB	0.37

Total Area = 1.303003E+07

Total Height = 1209766

Total Amount = 34.76044

File Name = C:\Chromperfect 2\Methods and Sequences\#1 HPLC #1\2013\053113 (TO-11).SEQ

File Date = 6/3/2013 11:45:02 AM

Analyst=

Entry #	Raw File Name	Method File Name	Sample Name	Vial #	DF
1	053113.0001.raw	011613 TO-11A.MET	ACN Blank	1	1
2	053113.0002.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS052213-01)	2	1
3	053113.0003.raw	011613 TO-11A.MET	SS 1.25 ppm (PS011613-01)	3	1
4	053113.0004.raw	011613 TO-11A.MET	TO-11 Method Blank 1	4	1
5	053113.0005.raw	011613 TO-11A.MET	LCS Blank 1	5	1
6	053113.0006.raw	011613 TO-11A.MET	LCS 1.25ug/mL (PS011013-01) 1	6	1
7	053113.0007.raw	011613 TO-11A.MET	MS 130645-63188 1.25 ppm [(PS052213-01x2) 1	7	1
8	053113.0008.raw	011613 TO-11A.MET	MSD 130645-63188 1.25 ppm [(PS052213-01x2) 1	8	1
9	053113.0009.raw	011613 TO-11A.MET	130645-63188	9	1
10	053113.0010.raw	011613 TO-11A.MET	130645-63188 Dup	10	1
11	053113.0011.raw	011613 TO-11A.MET	130646-63189	11	1
12	053113.0012.raw	011613 TO-11A.MET	ACN Blank	12	1
13	053113.0013.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS052213-01)	13	1
14	053113.0014.raw	011613 TO-11A.MET	130650-63254	14	1
15	053113.0015.raw	011613 TO-11A.MET	130650-63254 Dup	15	1
16	053113.0016.raw	011613 TO-11A.MET	130650-63219	16	1
17	053113.0017.raw	011613 TO-11A.MET	130650-63228	17	1
18	053113.0018.raw	011613 TO-11A.MET	130650-63237	18	1
19	053113.0019.raw	011613 TO-11A.MET	130650-63246	19	1
20	053113.0020.raw	011613 TO-11A.MET	130650-63201	20	1
21	053113.0021.raw	011613 TO-11A.MET	130650-63210	21	1
22	053113.0022.raw	011613 TO-11A.MET	130645-63188rr Dup	22	1
23	053113.0023.raw	011613 TO-11A.MET	ACN Blank	23	1
24	053113.0024.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS052213-01)	24	1
25	053113.0025.raw	011613 TO-11A.MET	130657-63281	25	1
26	053113.0026.raw	011613 TO-11A.MET	130657-63281 Dup	26	1
27	053113.0027.raw	011613 TO-11A.MET	130657-63282	27	1
28	053113.0028.raw	011613 TO-11A.MET	130657-63283	28	1
29	053113.0029.raw	011613 TO-11A.MET	130657-63284	29	1
30	053113.0030.raw	011613 TO-11A.MET	130657-63285	30	1
31	053113.0031.raw	011613 TO-11A.MET	130657-63286	31	1
32	053113.0032.raw	011613 TO-11A.MET	130657-63287	32	1
33	053113.0033.raw	011613 TO-11A.MET	130657-63288	33	1
34	053113.0034.raw	011613 TO-11A.MET	ACN Blank	34	1
35	053113.0035.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS052213-01)	35	1
36	053113.0036.raw	011613 TO-11A.MET	TO-11 Method Blank 2	36	1
37	053113.0037.raw	011613 TO-11A.MET	LCS Blank 2	37	1
38	053113.0038.raw	011613 TO-11A.MET	LCS 1.25ug/mL (PS011013-01) 2	38	1
39	053113.0039.raw	011613 TO-11A.MET	MS 130657-63289 1.25 ppm [(PS052213-01x2) 2	39	1
40	053113.0040.raw	011613 TO-11A.MET	MSD 130657-63289 1.25 ppm [(PS052213-01x2) 2	40	1
41	053113.0041.raw	011613 TO-11A.MET	130657-63289	41	1
42	053113.0042.raw	011613 TO-11A.MET	130657-63289 Dup	42	1
43	053113.0043.raw	011613 TO-11A.MET	130657-63290	43	1
44	053113.0044.raw	011613 TO-11A.MET	130657-63291	44	1
45	053113.0045.raw	011613 TO-11A.MET	ACN Blank	45	1
46	053113.0046.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS052213-01)	46	1
47	053113.0047.raw	011613 TO-11A.MET	130657-63292	47	1
48	053113.0048.raw	011613 TO-11A.MET	130657-63292 Dup	48	1
49	053113.0049.raw	011613 TO-11A.MET	130657-63293	49	1
50	053113.0050.raw	011613 TO-11A.MET	130657-63294	50	1
51	053113.0051.raw	011613 TO-11A.MET	130657-63295	51	1
52	053113.0052.raw	011613 TO-11A.MET	130657-63296	52	1
53	053113.0053.raw	011613 TO-11A.MET	ACN Blank	53	1
54	053113.0054.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS052213-01)	54	1