Atmospheric Analysis & Consulting, Inc.

Client	: SWAPE
Client Project Name	: Bridgeton Sanitary Landfill Air Quality Assessment
Client Project No.	: NA
AAC Project No.	: 130589
Reporting Date	: 05/20/2013

On May 16, 2013, Atmospheric Analysis & Consulting, Inc. received four (4) 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
U-1 W8 DNPH	130589-63015
U-2 W6 DNPH	130589-63016
D-1 W4 DNPH	130589-63017
D-2 K DNPH	130589-63018

TO-11A - HPLC/UV analysis - A 10µL 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.

No 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 48 pages.

ACCREDITED IN ACCORDANCE WITH nelac Certificate #E87837

1534 Eastman Ave., Ste. A • Ventura, • CA 93003 www.aaclab.com • (805) 650-1642 • FAX (805) 650-1644

AAC#130589

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: May 14

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: John Blank

Sampler Signature: John Blank

REQUESTED TESTS / ANALYSES

LAB ID	SAMPLE ID NUMBER	Type	Date	Time	VOCS - EPA TO-15	Reduced Sulfur Compounds - ASTM D5504	Carbonyls - EPA TO-11A	Carboxlylic 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
63015	U-1 W8 DNPH	Tube	5/14	4 Hr			X											Tube # 4363701177
63016	U-2 W6 DNPH	Tube	5/14	4 Hr			X											Tube # 4440601275
63017	D-1 W4 DNPH	Tube	5/14	4 Hr			X											Tube # 4363701296
63018	D-2 K DNPH	Tube	5/14	4 Hr			X											Tube # 4440601269

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: John Blank	Date: May	12 Noon	Received By:	Date:	Time:
Relinquished By:	Date: 5/15/13	Time: 1:00 pm	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date: 5/16/13	Time: 0745

RECEIVED @ 10.0°C

AIR SAMPLING PUMP CALIBRATION LOG

Bridgeton Sanitary Landfill Air Quality Assessment

COMPLETED BY: May 14TH, 2013 **PERSONNEL:** John Blank

DATE: May 14TH, 2013

PAGE: 1 of 1

CALIBRATION INSTRUMENT : ***Bios Defender 510 -M, serial Number 131756***

INITIAL PUMP SETUP (PRE-SAMPLING FLOW CHECK)

Sample ID	Analyte	SKC Tube ID	Air Pump Serial No.	START		END		Total Volume per Tube
				Flow Rate (L/min)	Start Time Military	Flow Rate (L/min)	End Time Military	
e.g. acetaldehyde	e.g. acetaldehyde	e.g. 226-120	e.g. 123456					
U-1 W8	Aldehydes	226-120	67992	0.996	10:53:00	0.983	14:53:00	237.48 Liters
U-2 W6	Aldehydes	226-120	59912	0.999	11:09:00	0.988	15:09:00	238.44 Liters
D-1 W4	Aldehydes	226-120	67385	1.015	10:13:00	1.001	14:13:00	241.92 Liters
D-2 K	Aldehydes	226-120	71526	0.999	10:36:00	0.987	14:36:00	238.32 Liters

NOTES / LOCATION REFERENCES

TUBES:

ANALYTE	SKC TUBE ID	ANALYTE	SKC TUBE ID
Aldehydes	226-120	Hydrogen Chloride	226-10-03
Amines	226-10	Hydrogen Cyanide	226-28
Ammonia	226-29	Mercury (elemental)	226-17-1A
Carboxylic Acids	226-55	Sulfur Dioxide	226-80

AIR SAMPLING PUMP CALIBRATION LOG

Bridgeton Sanitary Landfill Air Quality Assessment

COMPLETED BY: May 1st, 2013 **PERSONNEL:** John Blank

DATE: May 1st, 2013

PAGE: 1 of 1

CALIBRATION INSTRUMENT : ***Bios***

INITIAL PUMP SETUP (PRE-SAMPLING FLOW CHECK)

Sample ID	Analyte	SKC Tube ID	Air Pump Serial No.	START		END	
				Flow Rate (L/min)	Start Time Military	Flow Rate (L/min)	End Time Military
e.g. acetaldehyde	e.g. acetaldehyde	e.g. 226-120	e.g. 123456				
U-1 W8	**Aldehydes**	***226-120***	67992	0.996	10:53	0.983	14:53
U-2 W6	**Aldehydes**	***226-120***	59912	0.999	11:09	0.988	15:09
D-1 W4	**Aldehydes**	***226-120***	67385	1.015	10:13	1.001	14:13
D-2 K	**Aldehydes**	***226-120***	71526	0.999	10:36	0.987	14:36

NOTES / LOCATION REFERENCES

TUBES:

ANALYTE	SKC TUBE ID	ANALYTE	SKC TUBE ID
Aldehydes	226-120	Hydrogen Chloride	226-10-03
Amines	226-10	Hydrogen Cyanide	226-28
Ammonia	226-29	Mercury (elemental)	226-17-1A
Carboxylic Acids	226-55	Sulfur Dioxide	226-80

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. : 130589
Analyst : HP/EG
Units : ug/sample

Sampling Date (s) : 05/14/2013
Receiving Date : 05/16/2013
Analysis Date : 05/17/2013
Reporting Date : 05/20/2013

Client ID	AAC Sample ID	Formaldehyde	Acetaldehyde	Acrolein	Acetone	Propionaldehyde	Crotonaldehyde	Methacrolein	MEK & Butyraldehyde	Benzaldehyde	Valeraldehyde	m-Tolualdehyde	Hexaldehyde
U-1 W8 DNPH	130589-63015	0.916	0.501	<SRL	1.80	<SRL	2.75	0.114	0.446	0.091	0.173	0.417	<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
U-2 W6 DNPH	130589-63016	0.480	0.252	<SRL	1.52	<SRL	1.27	0.096	0.420	0.131	<SRL	0.335	<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
D-1 W4 DNPH	130589-63017	0.586	0.333	<SRL	1.46	<SRL	0.695	0.084	0.553	<SRL	0.151	0.379	0.204
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 K DNPH	130589-63018	1.17	0.907	<SRL	4.11	0.141	2.30	0.271	1.43	0.376	0.190	0.333	<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)

Marcus Hueppe
Laboratory Director

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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. : 130589
Analyst : HP/EG
Units : ug/m^3

Sampling Date (s) : 05/14/2013
Receiving Date : 05/16/2013
Analysis Date : 05/17/2013
Reporting Date : 05/20/2013

Client ID	AAC Sample ID	Formaldehyde	Acetaldehyde	Acrolein	Acetone	Propionaldehyde	Crotonaldehyde	Methacrolein	MEK & Butyraldehyde	Benzaldehyde	Valeraldehyde	m-Tolualdehyde	Hexaldehyde
U-1 W8 DNPH	130589-63015	3.86	2.11	<SRL	7.60	<SRL	11.6	0.481	1.88	0.384	0.728	1.75	<SRL
SRL		0.316	0.316	0.316	0.316	0.316	0.316	0.316	0.316	0.316	0.316	0.316	0.316
U-2 W6 DNPH	130589-63016	2.01	1.06	<SRL	6.37	<SRL	5.34	0.403	1.76	0.547	<SRL	1.41	<SRL
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 W4 DNPH	130589-63017	2.42	1.38	<SRL	6.05	<SRL	2.87	0.347	2.29	<SRL	0.623	1.57	0.844
SRL		0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310	0.310
D-2 K DNPH	130589-63018	4.90	3.80	<SRL	17.2	0.592	9.66	1.14	5.98	1.58	0.798	1.40	<SRL
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

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

Marcus Hueppe
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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. : 130589
Analyst : HP/EG
Units : ppbv

Sampling Date (s) : 05/14/2013
Receiving Date : 05/16/2013
Analysis Date : 05/17/2013
Reporting Date : 05/20/2013

Client ID	AAC Sample ID	Formaldehyde	Acetaldehyde	Acrolein	Acetone	Propionaldehyde	Crotonaldehyde	Methacrolein	MEK & Butyraldehyde	Benzaldehyde	Valeraldehyde	m-Tolualdehyde	Hexaldehyde
U-1 W8 DNPH	130589-63015	3.14	1.17	<SRL	3.20	<SRL	4.04	0.168	0.636	0.088	0.207	0.357	<SRL
SRL		0.257	0.175	0.138	0.133	0.133	0.110	0.110	0.107	0.073	0.090	0.064	0.077
U-2 W6 DNPH	130589-63016	1.64	0.587	<SRL	2.68	<SRL	1.86	0.140	0.597	0.126	<SRL	0.286	<SRL
SRL		0.256	0.175	0.137	0.132	0.132	0.110	0.110	0.107	0.072	0.089	0.064	0.077
D-1 W4 DNPH	130589-63017	1.97	0.763	<SRL	2.55	<SRL	1.00	0.121	0.775	<SRL	0.177	0.319	0.206
SRL		0.252	0.172	0.135	0.131	0.131	0.108	0.108	0.105	0.071	0.088	0.063	0.076
D-2 K DNPH	130589-63018	3.99	2.11	<SRL	7.26	0.249	3.37	0.397	2.03	0.364	0.227	0.284	<SRL
SRL		0.256	0.175	0.137	0.132	0.132	0.110	0.110	0.107	0.073	0.089	0.064	0.077

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

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QA/QC Summary

Atmospheric Analysis & Consulting, Inc.

Quality Control/Quality Assurance Report

TO-11A

HPLC Calibration Verification of the 01/16/2013 Calibration

Analysis Date : 05/17/2013
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	2.59	2.59	2.59	2.56	2.58	2.49	2.55	5.10	2.50	2.55	2.53	2.55
Accuracy (%)*	104	104	104	102	103	99.6	102	102	100	102	101	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	2.55	2.56	2.59	2.55	2.55	2.55	2.56	5.13	2.51	2.55	2.55	2.56
Accuracy (%)*	102	102	104	102	102	102	102	103	100	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	2.49	2.51	2.53	2.52	2.50	2.49	2.51	4.99	2.46	2.49	2.49	2.49
Accuracy (%)*	99.6	100	101	101	100	99.6	100	99.8	98.4	99.6	99.6	99.6

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	2.67	2.55	2.57	2.55	2.54	2.48	2.53	5.09	2.46	2.56	2.53	2.57
Accuracy (%)*	107	102	103	102	102	99.2	101	102	98.4	102	101	103

*Must be 100 ± 10%

Marcus Hueppe
Laboratory Director

Quality Control/Quality Assurance Report

TO-11A

Laboratory Control Spike Analysis

Analysis Date : 05/17/2013 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)	0.326	0.361	0.368	0.370	0.371	0.365	0.408	0.683	0.360	0.372	0.361	0.368
Spike Recovery (%)*	86.0	95.4	97.2	97.6	97.8	96.4	108	90.2	95.1	98.1	95.3	97.0

*Must be 100 ± 15%

Marcus Hueppe
Laboratory Director

Quality Control/Quality Assurance Report

TO-11A

Matrix Spike Analysis

Analysis Date : 05/17/2013 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)*
Sample ID	130589-63015											
Sample Concentration (ug/mL)	0.153	0.083	0.003	0.301	0.011	0.458	0.019	0.074	0.015	0.029	0.069	0.005
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)	1.60	1.49	1.41	1.76	1.42	1.84	1.56	2.75	1.39	1.44	1.49	1.41
Duplicate Spiked Sample Concentration (ug/mL)	1.60	1.49	1.42	1.75	1.43	1.85	1.54	2.79	1.40	1.46	1.50	1.41
Spike Recovery (%)*	116	113	113	117	113	111	123	107	110	113	114	112
Dulicate Spike Recovery (%)*	116	113	113	116	114	111	122	109	111	114	114	112
RPD**	0.0	0.0	0.7	0.6	0.7	0.5	1.3	1.4	0.7	1.4	0.7	0.0

*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 : 05/17/2013
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)*	*Methacrolein (ug/mL)*	*MEK & Butyraldehyde (ug/mL)*	*Benzaldehyde (ug/mL)*	*Valeraldehyde (ug/mL)*	*m-Tolualdehyde (ug/mL)*	*Hexaldehyde (ug/mL)*
Sample ID	130589-63015											
Sample Concentration (ug/mL)	0.305	0.167	<RL	0.601	<RL	0.917	0.038	0.149	0.030	0.058	0.139	<RL
Duplicate Sample Concentration (ug/mL)	0.304	0.170	<RL	0.602	<RL	0.911	0.035	0.151	0.030	0.056	0.142	<RL
RPD**	0.6	1.9	NA	0.1	NA	0.7	7.3	1.3	1.7	2.8	2.5	NA
Sample ID	130589-63017											
Sample Concentration (ug/mL)	0.195	0.111	<RL	0.488	<RL	0.232	0.028	0.184	<RL	0.050	0.126	0.068
Duplicate Sample Concentration (ug/mL)	0.192	0.110	<RL	0.483	<RL	0.227	0.027	0.186	<RL	0.049	0.120	0.071
RPD**	1.8	0.7	NA	1.1	NA	2.3	3.6	0.8	NA	2.2	5.1	3.9

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

Marcus Hueppe
Laboratory Director

Quality Control/Quality Assurance Report

TO-11A

System and Method Blank Analysis

Analysis Date : 05/17/2013
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)*	*Methacrolein (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	<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

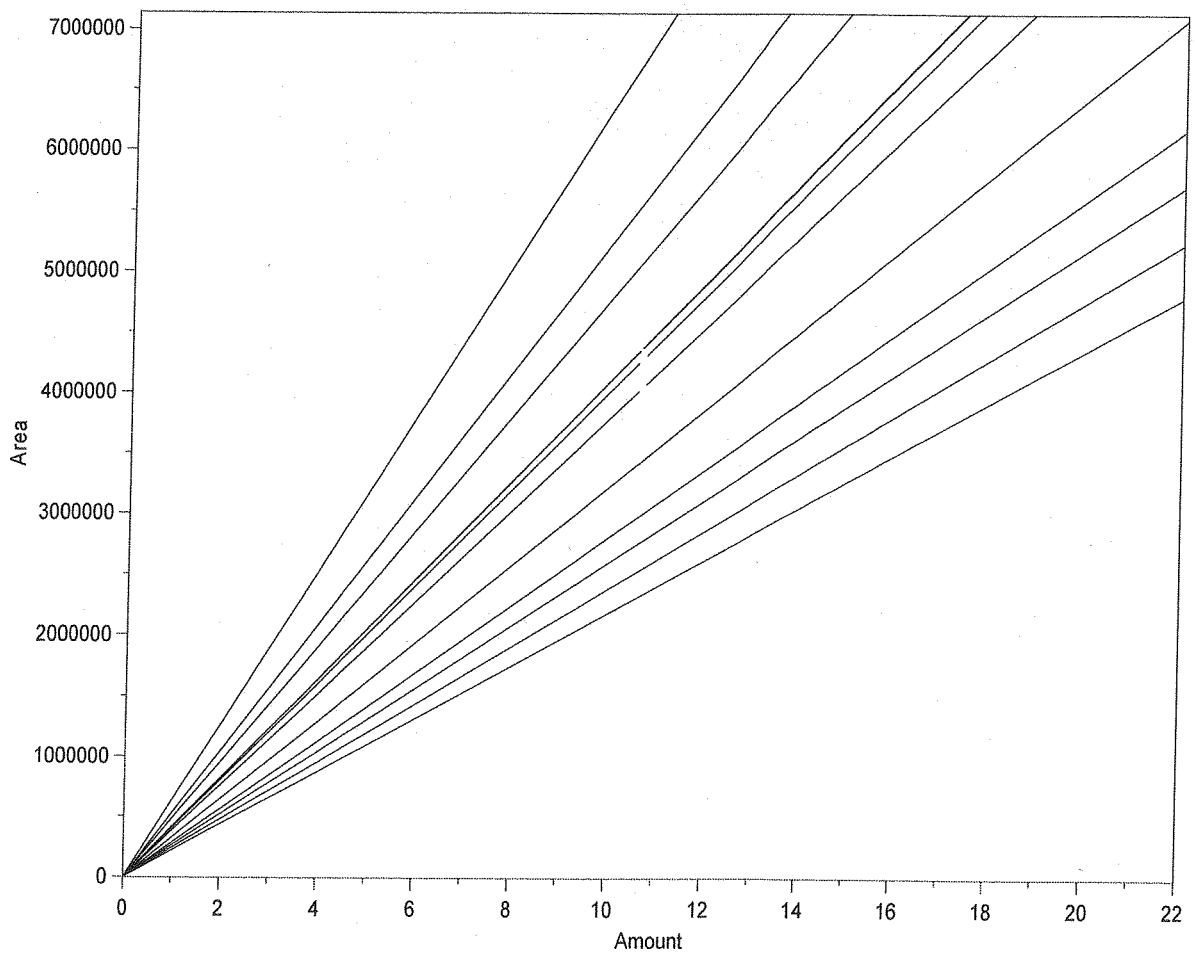
File Name: C:\CP Methods & Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Version: 13

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

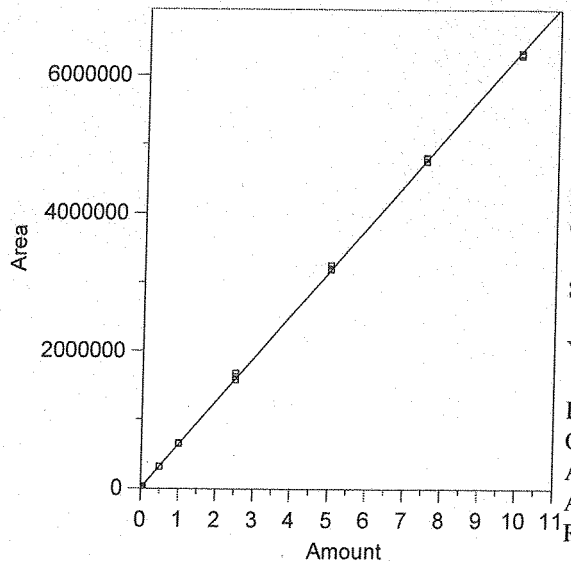
Method of calculating data point averages: Equal weight for all updates
No calibration update report

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

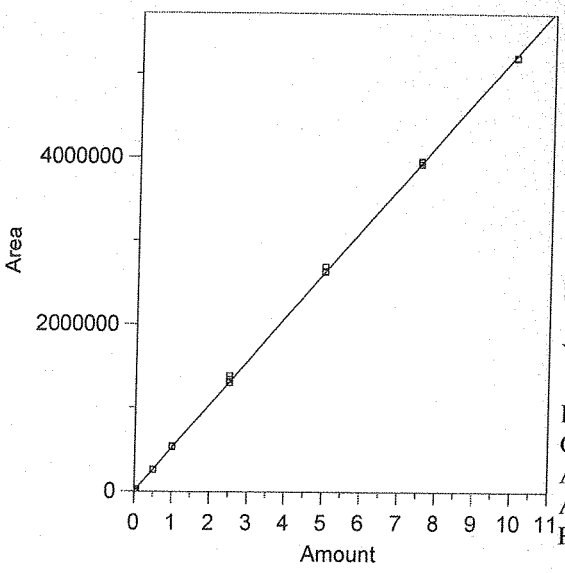
$Y = 635498.8 X + 0$

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\011613.0033.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

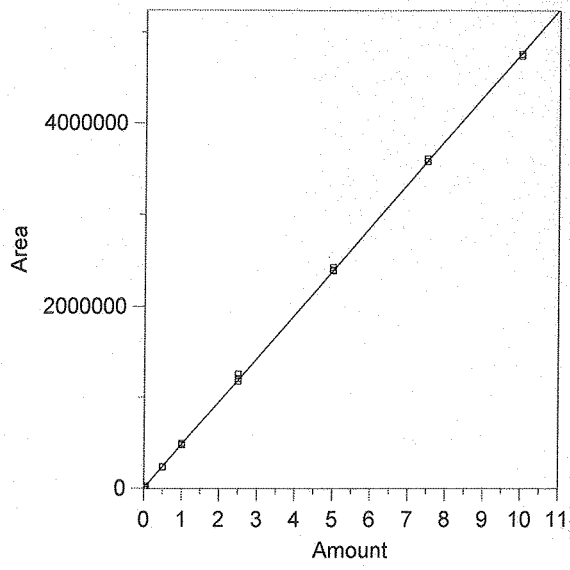
$Y = 523848.9 X + 0$

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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	26300.05	526001	0.411	C:\CP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	27932.75	558655	6.644	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	258633.5	517267	-1.256	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	540890.6	540890.6	3.253	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	530744.3	530744.3	1.316	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	538459.7	538459.7	2.789	C:\CP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1295813	518325.2	-1.054	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1335265	534106	1.958	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1382832	553132.8	5.590	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2624115	524823	0.186	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2633835	526767	0.557	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2686124	537224.8	2.553	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3950260	526701.3	0.545	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3923232	523097.6	-0.143	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3961766	528235.4	0.837	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	5206756	520675.6	-0.606	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	5208438	520843.8	-0.574	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	5196004	519600.4	-0.811	C:\CP 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

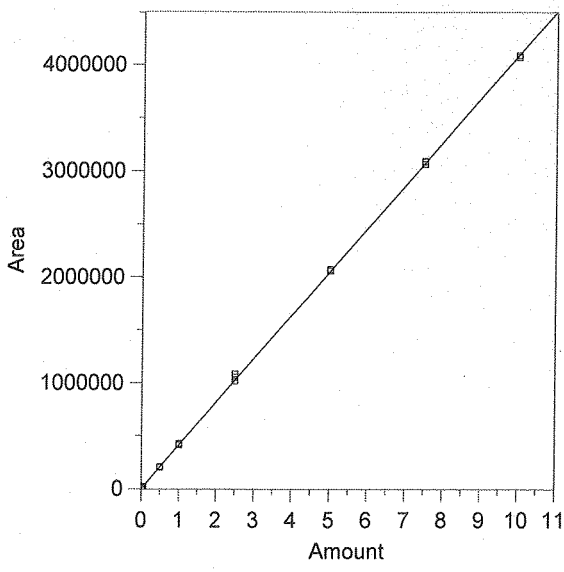
Single peak quantification by area

$Y = 477513.6 X + 0$

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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	24849.35	496987	4.078	C:\CP Data\#1 HPLC #1\2013\011613\011613.0009.BND	1/17/2013 9:16:54 AM
9	0.05	24508.45	490169	2.650	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	235366	470732	-1.420	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	492637.6	492637.6	3.167	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	473624.6	473624.6	-0.814	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	486674.4	486674.4	1.918	C:\CP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1178759	471503.6	-1.259	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1212454	484981.6	1.564	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1260575	504230	5.595	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2391359	478271.8	0.159	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2397531	479506.2	0.417	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2423446	484689.2	1.503	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3608190	481092	0.749	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3578272	477102.9	-0.086	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3607869	481049.2	0.740	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	4739617	473961.7	-0.744	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	4740989	474098.9	-0.715	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	4763349	476334.9	-0.247	C:\CP 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

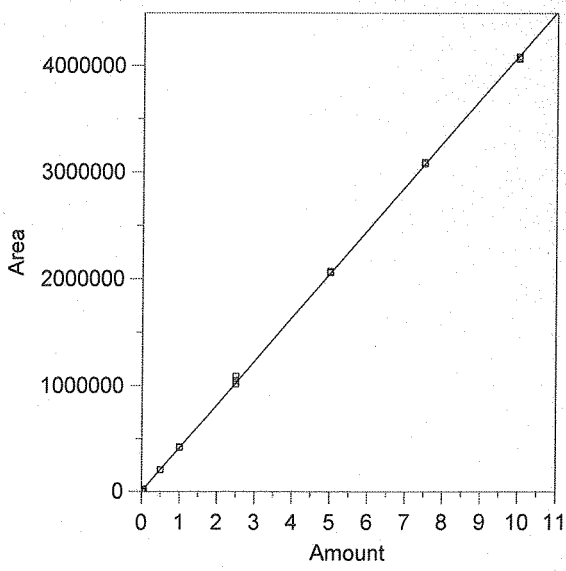
Y = 41)240.1 X + 0

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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	20778.5	415570	1.299	C:\CP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	22119.85	442397	7.839	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	423714.7	423714.7	3.285	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	413611.8	413611.8	0.822	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	424962.7	424962.7	3.589	C:\CP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1017069	406827.6	-0.832	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1052471	420988.4	2.620	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1082277	432910.8	5.526	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2059978	411995.6	0.428	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2061998	412399.6	0.526	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2074281	414856.2	1.125	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3090544	412072.5	0.447	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3065231	408697.5	-0.376	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3096511	412868.1	0.641	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	4075368	407536.8	-0.659	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	4095606	409560.6	-0.166	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	4076624	407662.4	-0.628	C:\CP 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

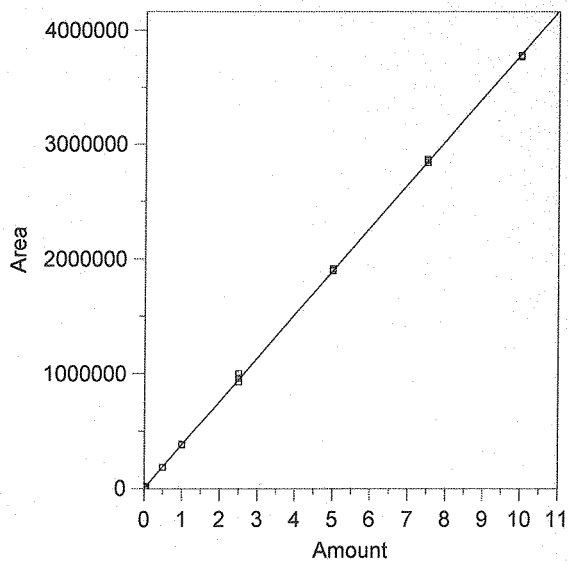
$Y = 409729.4 X + 0$

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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0006.BND	1/17/2013 9:15:29 AM
6	0.025	10655.2	426208	4.022	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	422491.5	422491.5	3.115	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	414054.3	414054.3	1.056	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	418737.7	418737.7	2.199	C:\CP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	2.5	1013506	405402.4	-1.056	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1049219	419687.6	2.430	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1088355	435342	6.251	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2055268	411053.6	0.323	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2059857	411971.4	0.547	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2067409	413481.8	0.916	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3090514	412068.5	0.571	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3078345	410446	0.175	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3088245	411766	0.497	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	4063636	406363.6	-0.821	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	4072347	407234.7	-0.609	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	4086977	408697.7	-0.252	C:\CP 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

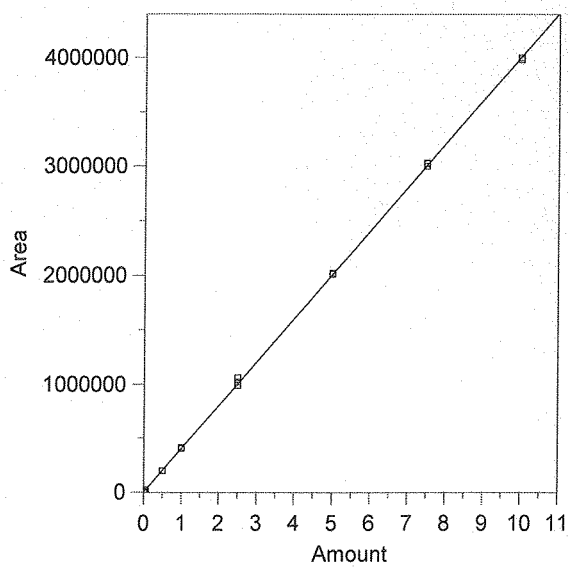
$Y = 379197.3 X + 0$

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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0007.BND	1/17/2013 9:16:11 AM
7	0.05	18280.8	365616	-3.582	C:\CP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	19753.15	395063	4.184	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	0.5	184884.5	369769	-2.486	C:\CP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	0.5	185209	370418	-2.315	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	385583	385583	1.684	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	378746.3	378746.3	-0.119	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	383412.3	383412.3	1.112	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	1894920	378984	-0.056	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	1912362	382472.4	0.864	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	1900975	380195	0.263	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	2868305	382440.7	0.855	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	2837994	378399.2	-0.210	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	2857948	381059.7	0.491	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	3777541	377754.1	-0.381	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	3769081	376908.1	-0.604	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	3783434	378343.4	-0.225	C:\CP 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

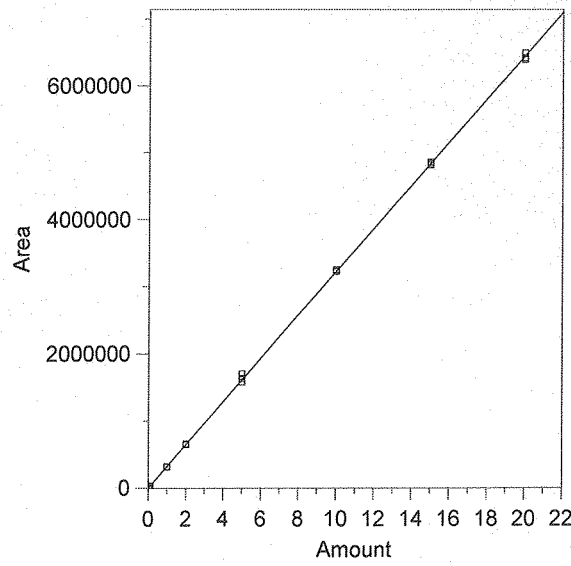
Single peak quantification by area

$Y = 401227.3 X + 0$

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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	2026.085	405217	0.994	C:\CP Data\#1 HPLC #1\2013\011613\011613.0003.BND	1/17/2013 12:01:00 PM
3	0.005	2064.975	412995	2.933	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	410566.2	410566.2	2.328	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	403644.6	403644.6	0.602	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	411295.8	411295.8	2.509	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	2.5	1020493	408197.2	1.737	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	1060355	424142	5.711	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	2012112	402422.4	0.298	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	2012416	402483.2	0.313	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	2019797	403959.4	0.681	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	3032186	404291.5	0.764	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	3000600	400080	-0.286	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	3026002	403466.9	0.558	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	4001513	400151.3	-0.268	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	3982305	398230.5	-0.747	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	3999860	399986	-0.309	C:\CP 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

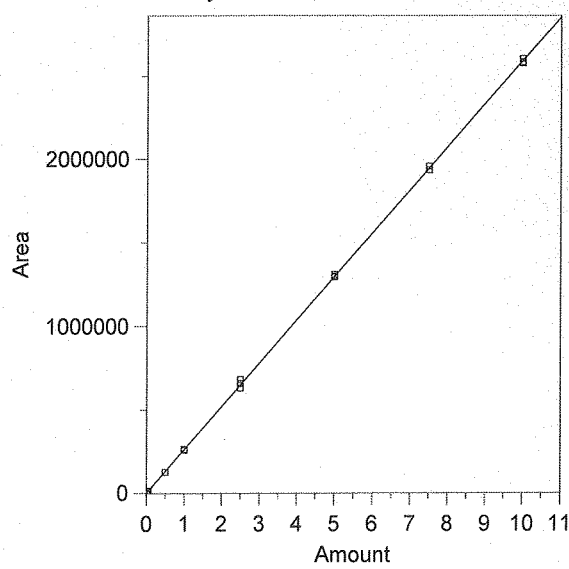
Single peak quantification by area

$Y = 322232.7 X + 0$

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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.01	3391.47	339147	5.249	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0010.BND	1/17/2013 9:17:32 AM
10	1	317772.7	317772.7	-1.384	C:\CP Data\#1 HPLC #1\2013\011613\011613.0011.BND	1/17/2013 9:17:53 AM
11	1	319288.8	319288.8	-0.914	C:\CP Data\#1 HPLC #1\2013\011613\011613.0012.BND	1/17/2013 9:18:18 AM
12	1	317344.1	317344.1	-1.517	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	2	659698.4	329849.2	2.364	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	2	648058.6	324029.3	0.558	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	2	660032.3	330016.2	2.415	C:\CP Data\#1 HPLC #1\2013\011613\011613.0016.BND	1/17/2013 9:19:35 AM
16	5	1578239	315647.8	-2.044	C:\CP Data\#1 HPLC #1\2013\011613\011613.0017.BND	1/17/2013 9:19:53 AM
17	5	1635369	327073.8	1.502	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	5	1699770	339954	5.500	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	10	3225144	322514.4	0.087	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	10	3232554	323255.4	0.317	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	10	3248338	324833.8	0.807	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	15	4858471	323898.1	0.517	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	15	4813685	320912.3	-0.410	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	15	4835401	322360.1	0.040	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	20	6411478	320573.9	-0.515	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	20	6386688	319334.4	-0.899	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	20	6488133	324406.7	0.675	C:\CP Data\#1 HPLC #1\2013\011613\011613.0028.BND	1/17/2013 9:25:02 AM

9 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

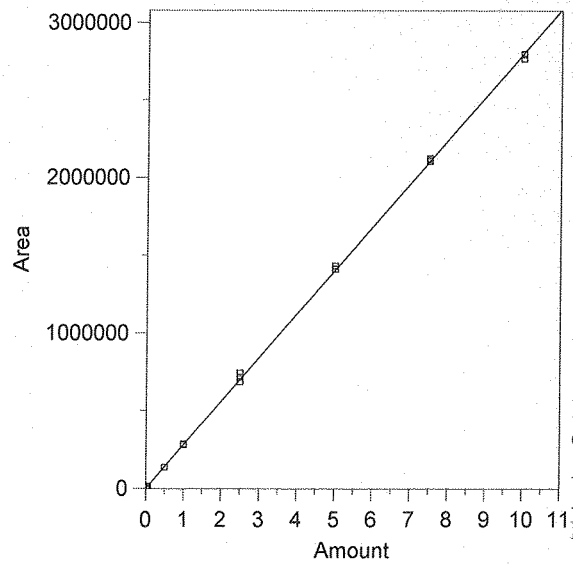
Single peak quantification by area

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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0002.BND	1/17/2013 12:07:44 PM
2	0.005	1262	252400	-2.748	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	262209.1	262209.1	1.031	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	257536.3	257536.3	-0.769	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	260766	260766	0.475	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	1294694	258938.8	-0.229	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	1299522	259904.4	0.143	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	1309382	261876.4	0.903	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	1958642	261152.3	0.624	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	1935214	258028.5	-0.579	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	1957459	260994.5	0.563	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	2584429	258442.9	-0.420	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	2577391	257739.1	-0.691	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	2605401	260540.1	0.388	C:\CP 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

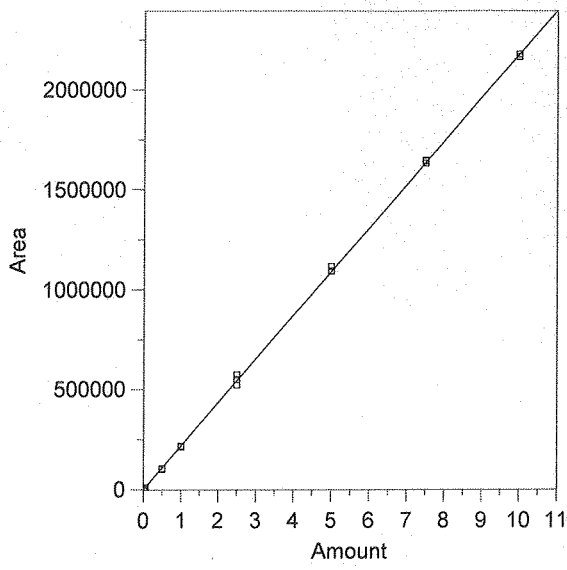
Single peak quantification by area

$Y = 280512 X + 0$

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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0008.BND	1/17/2013 9:16:31 AM
8	0.05	15079.2	301584	7.512	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0013.BND	1/17/2013 9:18:37 AM
13	1	286190.2	286190.2	2.024	C:\CP Data\#1 HPLC #1\2013\011613\011613.0014.BND	1/17/2013 9:18:57 AM
14	1	281834.7	281834.7	0.472	C:\CP Data\#1 HPLC #1\2013\011613\011613.0015.BND	1/17/2013 9:19:16 AM
15	1	286224.8	286224.8	2.037	C:\CP 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	C:\CP 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	C:\CP Data\#1 HPLC #1\2013\011613\011613.0018.BND	1/17/2013 9:20:27 AM
18	2.5	742902.5	297161	5.935	C:\CP Data\#1 HPLC #1\2013\011613\011613.0019.BND	1/17/2013 9:20:50 AM
19	5	1409340	281868	0.483	C:\CP Data\#1 HPLC #1\2013\011613\011613.0020.BND	1/17/2013 9:21:10 AM
20	5	1412526	282505.2	0.711	C:\CP Data\#1 HPLC #1\2013\011613\011613.0021.BND	1/17/2013 9:21:33 AM
21	5	1432906	286581.2	2.164	C:\CP Data\#1 HPLC #1\2013\011613\011613.0033.BND	1/17/2013 9:22:52 AM
22	7.5	2123480	283130.7	0.934	C:\CP Data\#1 HPLC #1\2013\011613\011613.0023.BND	1/17/2013 9:23:16 AM
23	7.5	2104405	280587.3	0.027	C:\CP Data\#1 HPLC #1\2013\011613\011613.0024.BND	1/17/2013 9:23:45 AM
24	7.5	2115076	282010.1	0.534	C:\CP Data\#1 HPLC #1\2013\011613\011613.0025.BND	1/17/2013 9:24:04 AM
25	10	2797888	279788.8	-0.258	C:\CP Data\#1 HPLC #1\2013\011613\011613.0026.BND	1/17/2013 9:24:23 AM
26	10	2792255	279225.5	-0.459	C:\CP Data\#1 HPLC #1\2013\011613\011613.0027.BND	1/17/2013 9:24:44 AM
27	10	2767273	276727.3	-1.349	C:\CP 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 a arm limit: 0
Low alarm limit: 0
Component constant: 0

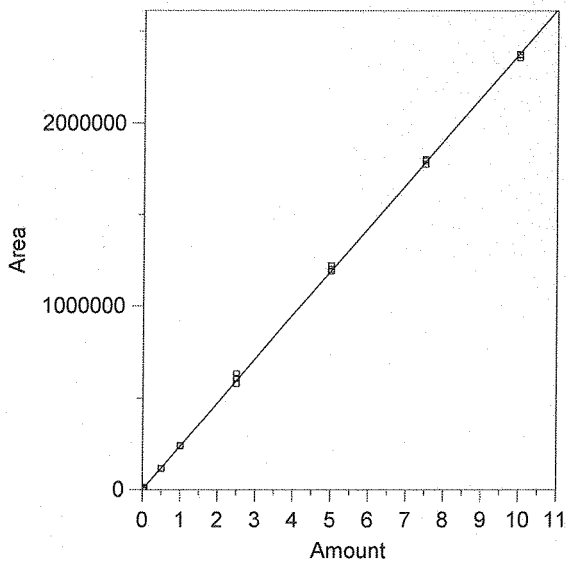
Single peak quantification by area

$Y = 217944 X + 0$

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\011613.0033.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

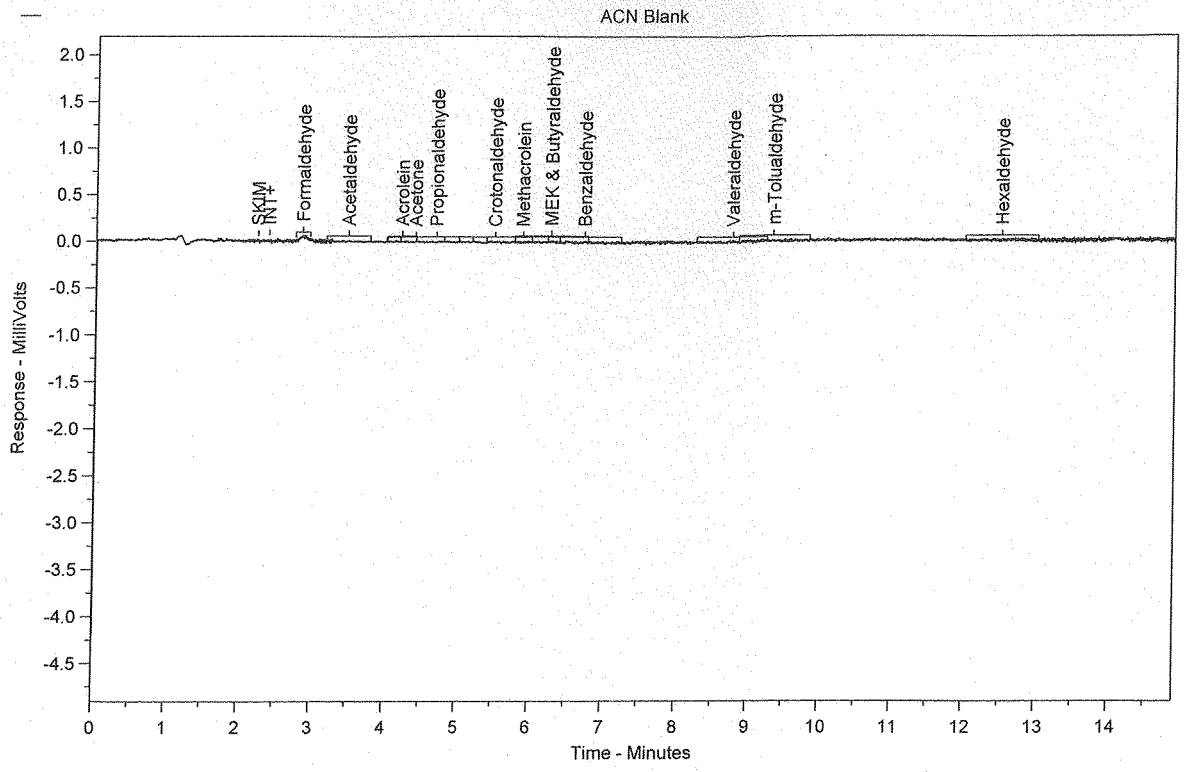
Single peak quantification by area

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\011613.0033.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



Sample Name = **ACN Blank** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0001.RAW**
Date Taken (end) = 5/17/2013 11:02:53 AM

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

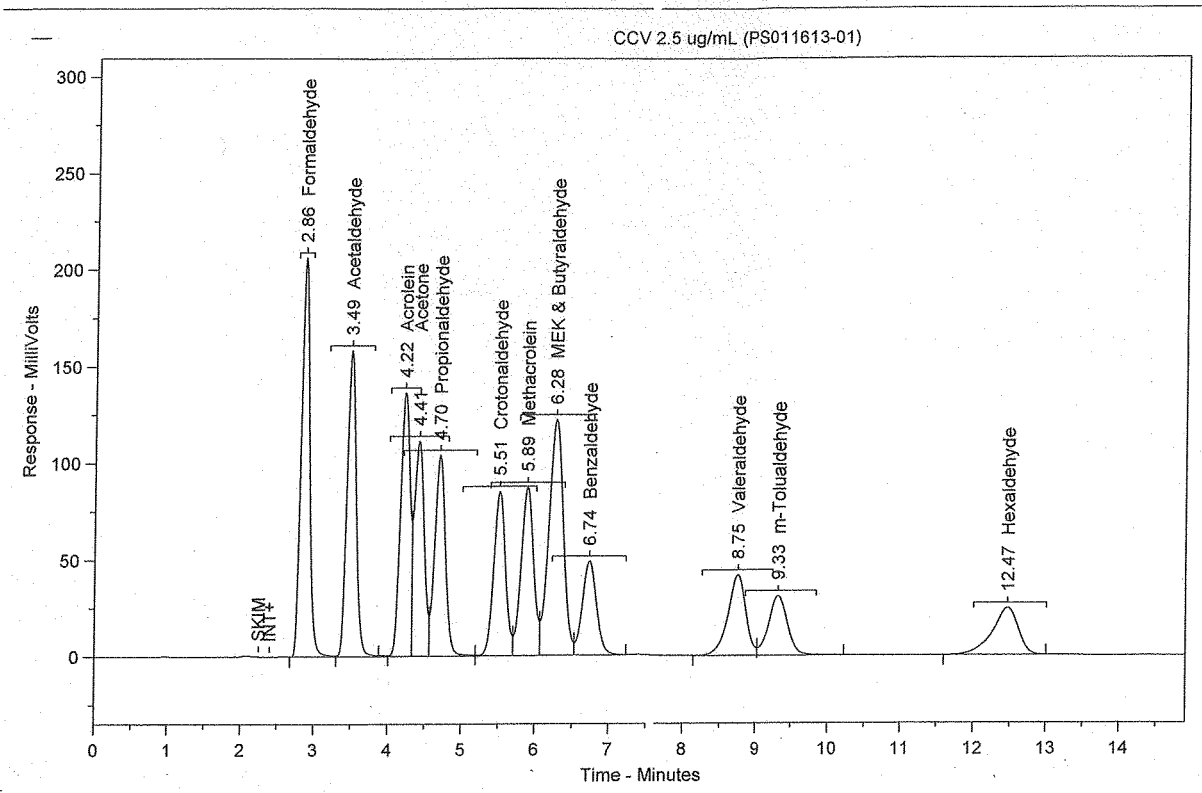
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 1
Injection Volume = 10 Dilution Factor = 1

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

Total Area = 0 Total Height = 0 Total Amount = 0

HP
05/17/13



Sample Name = **CCV 2.5 ug/mL (PS011613-01)** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0002.RAW**
Date Taken (end) = 5/17/2013 11:19:29 AM

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

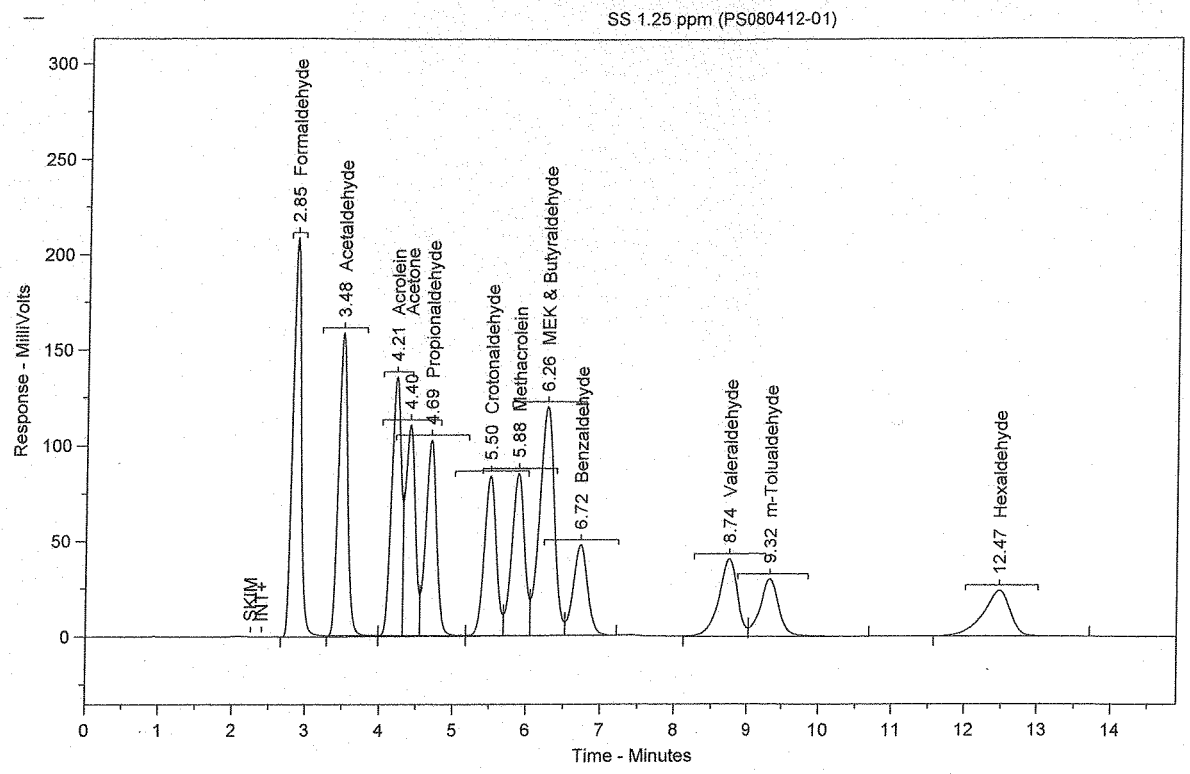
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 2
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	2.5937	7.819	1648275	13.210	SBB	0.12
2	3.49	Acetaldehyde	2.5866	7.798	1354969	10.859	TBV	0.13
3	4.22	Acrolein	2.5874	7.800	1235539	9.902	TVV	0.17
4	4.41	Acetone	2.5561	7.706	1048621	8.404	TVV	0.16
5	4.70	Propionaldehyde	2.5774	7.770	1056051	8.464	TVV	0.16
6	5.51	Crotonaldehyde	2.4942	7.519	945810	7.580	TVV	0.17
7	5.89	Methacrolein	2.5493	7.685	1022854	8.198	TVV	0.17
8	6.28	MEK & Butyraldehyde	5.1027	15.383	1644256	13.178	TVV	0.20
9	6.74	Benzaldehyde	2.4986	7.533	648479	5.197	TVB	0.20
10	8.75	Valeraldehyde	2.5458	7.675	714127	5.723	BV	0.26
11	9.33	m-Tolualdehyde	2.5266	7.617	550658	4.413	VB	0.27
12	12.47	Hexaldehyde	2.5528	7.696	607656	4.870	BB	0.36

Total Area = 1.24773E+07 Total Height = 1153865 Total Amount = 33.1713

HP
05/17/13



Sample Name = **SS 1.25 ppm (PS080412-01)** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0003.RAW**
Date Taken (end) = 5/17/2013 11:36:04 AM

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

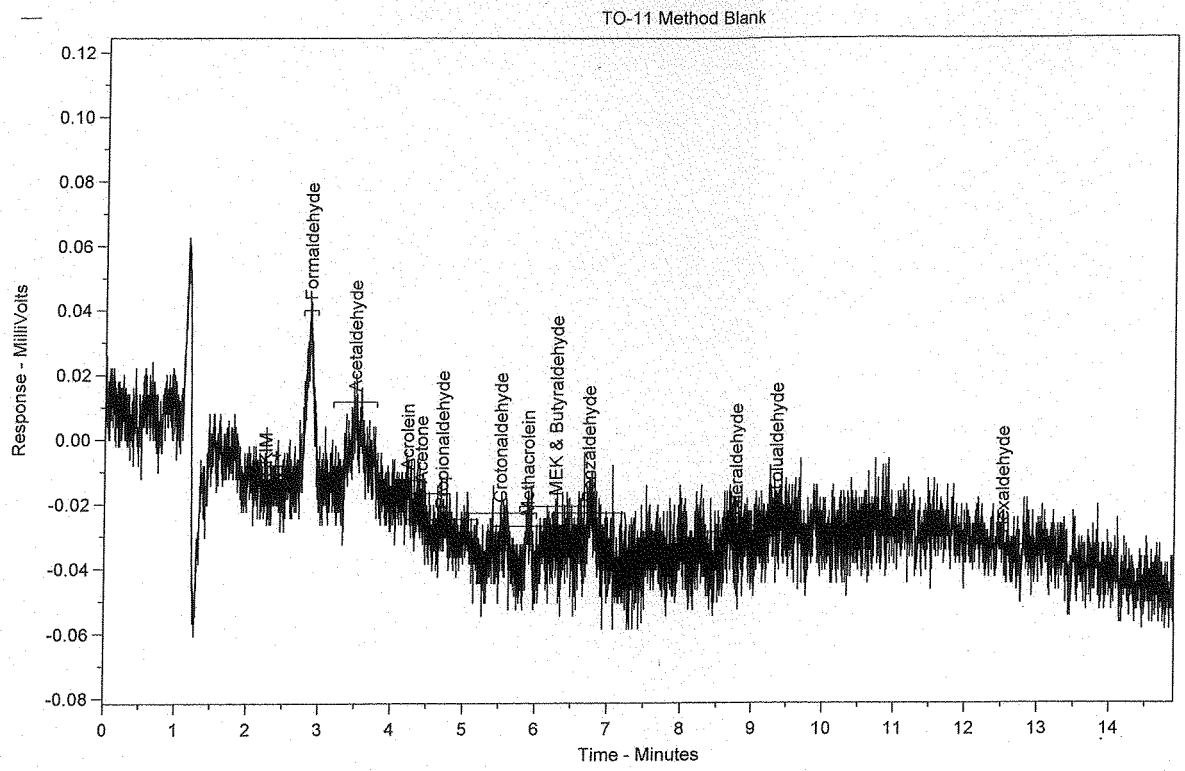
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 3
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	2.6719	8.074	1697991	13.627	SBB	0.12
2	3.48	Acetaldehyde	2.5534	7.716	1337592	10.735	TBV	0.13
3	4.21	Acrolein	2.5671	7.758	1225846	9.838	TVV	0.17
4	4.40	Acetone	2.5479	7.700	1045233	8.388	TVV	0.16
5	4.69	Propionaldehyde	2.5416	7.681	1041359	8.357	TVV	0.16
6	5.50	Crotonaldehyde	2.4808	7.497	940726	7.550	TVV	0.17
7	5.88	Methacrolein	2.5284	7.641	1014482	8.142	TVV	0.17
8	6.26	MEK & Butyraldehyde	5.0902	15.383	1640230	13.163	TVV	0.20
9	6.72	Benzaldehyde	2.4563	7.423	637498	5.116	TVB	0.21
10	8.74	Valeraldehyde	2.5564	7.725	717098	5.755	BV	0.26
11	9.32	m-Tolualdehyde	2.5260	7.634	550528	4.418	VB	0.28
12	12.47	Hexaldehyde	2.5707	7.769	611918	4.911	BB	0.38

Total Area = 1.24605E+07 Total Height = 1143439 Total Amount = 33.09076

HP
05/17/13



Sample Name = **TO-11 Method Blank** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0004.RAW**
Date Taken (end) = 5/17/2013 11:52:40 AM

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

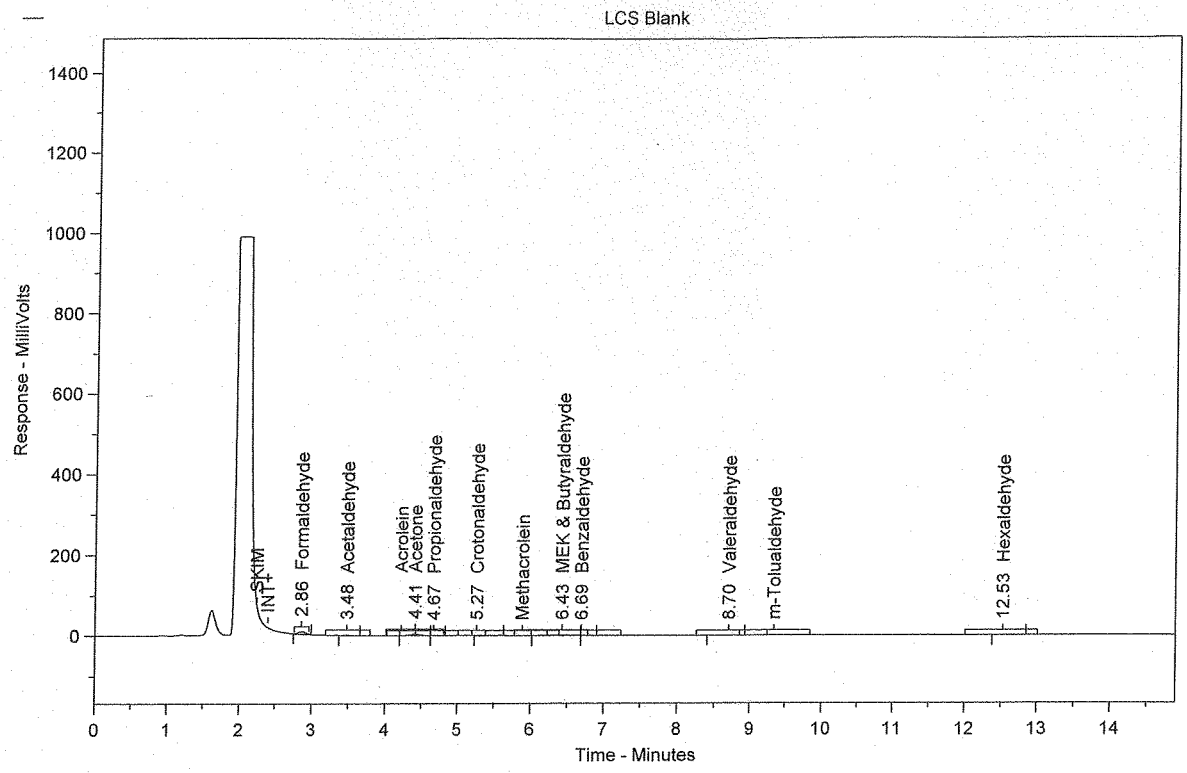
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 4
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

HP
05/17/13



Sample Name = **LCS Blank** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0005.RAW**
Date Taken (end) = 5/17/2013 12:09:15 PM

Method File Name = C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0005.BND
Method Description=TO-11A Carbonyls

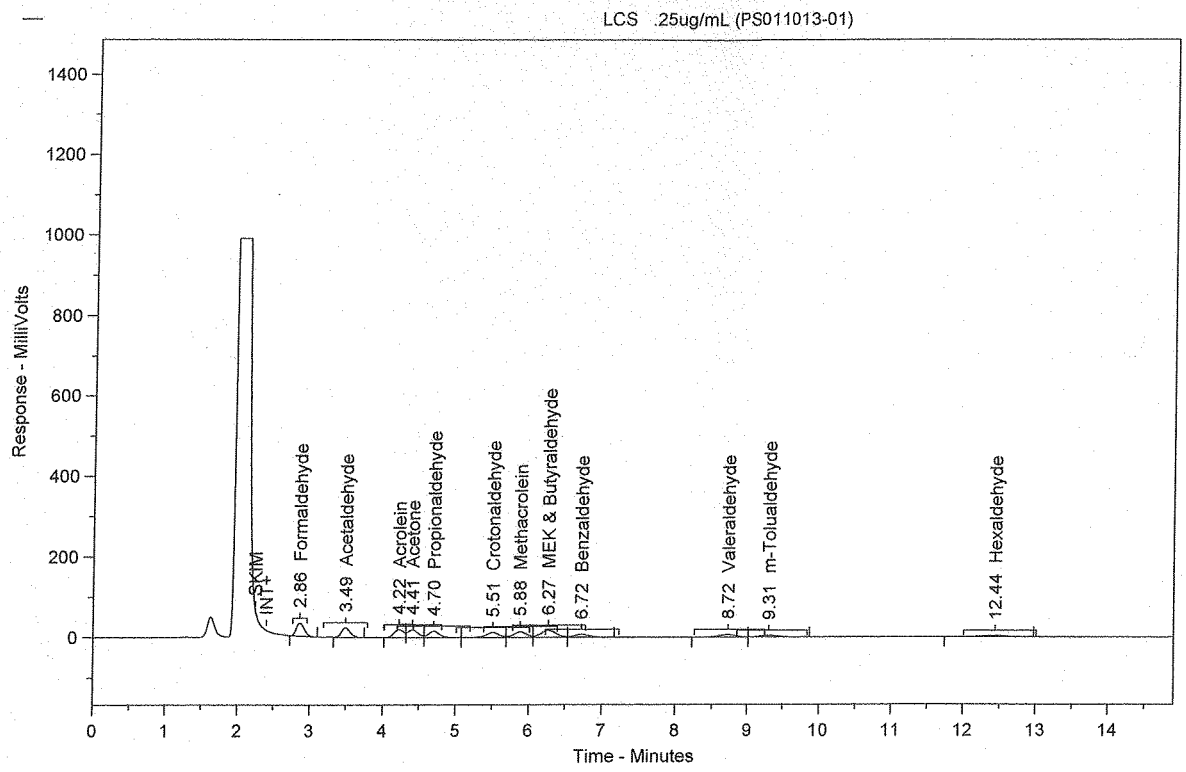
Calibration File Name = C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0005.BND
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 5
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	0.0584	23.464	37108	34.959	BB	0.13
2	3.48	Acetaldehyde	0.0130	5.242	6834	6.438	BB	0.16
3	4.41	Acetone	0.0703	28.265	28856	27.185	BV	0.15
4	4.67	Propionaldehyde	0.0039	1.568	1599	1.507	VB	0.14
5	5.27	Crotonaldehyde	0.0049	1.974	1863	1.755	BB	0.23
6	6.43	MEK & Butyraldehyde	0.0671	26.946	21608	20.357	BV	0.26
7	6.69	Benzaldehyde	0.0071	2.854	1843	1.737	VB	0.14
8	8.70	Valeraldehyde	0.0164	6.598	4606	4.339	BB	0.26
9	12.53	Hexaldehyde	0.0077	3.088	1829	1.724	BB	0.31

Total Area = 106145.4 Total Height = 11263.92 Total Amount = 0.2488545

HP
05/17/13



Sample Name = **LCS 1.25ug/mL (PS011013-01)** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0006.RAW**
Date Taken (end) = 5/17/2013 12:25:50 PM

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

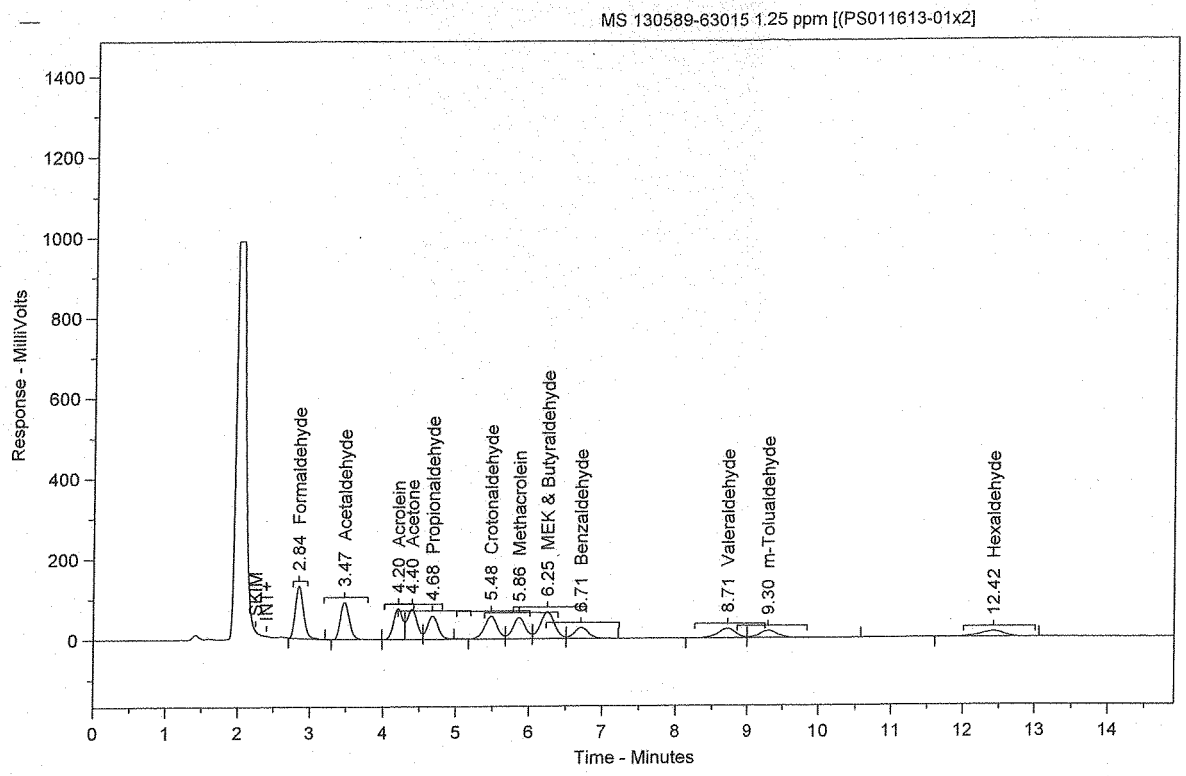
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 6
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.86	Formaldehyde	0.3840	7.741	244057	13.066	BB	0.13
2	3.49	Acetaldehyde	0.3743	7.544	196068	10.496	BB	0.13
3	4.22	Acrolein	0.3680	7.418	175744	9.408	BV	0.17
4	4.41	Acetone	0.4399	8.866	180459	9.661	VV	0.17
5	4.70	Propionaldehyde	0.3744	7.547	153417	8.213	VV	0.16
6	5.51	Crotonaldehyde	0.3702	7.461	140369	7.515	VV	0.18
7	5.88	Methacrolein	0.4084	8.231	163847	8.772	VV	0.17
8	6.27	MEK & Butyraldehyde	0.7504	15.126	241807	12.945	VV	0.20
9	6.72	Benzaldehyde	0.3675	7.408	95390	5.107	VB	0.21
10	8.72	Valeraldehyde	0.3879	7.819	108809	5.825	BV	0.27
11	9.31	m-Tolualdehyde	0.3608	7.273	78638	4.210	VB	0.28
12	12.44	Hexaldehyde	0.3753	7.565	89340	4.783	BB	0.38

Total Area = 1867947 Total Height = 171520.1 Total Amount = 4.961217

HP
05/17/13



Sample Name = **MS 130589-63015 1.25 ppm [(PS011613-01x2]** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0007.RAW**
Date Taken (end) = 5/17/2013 12:42:26 PM

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

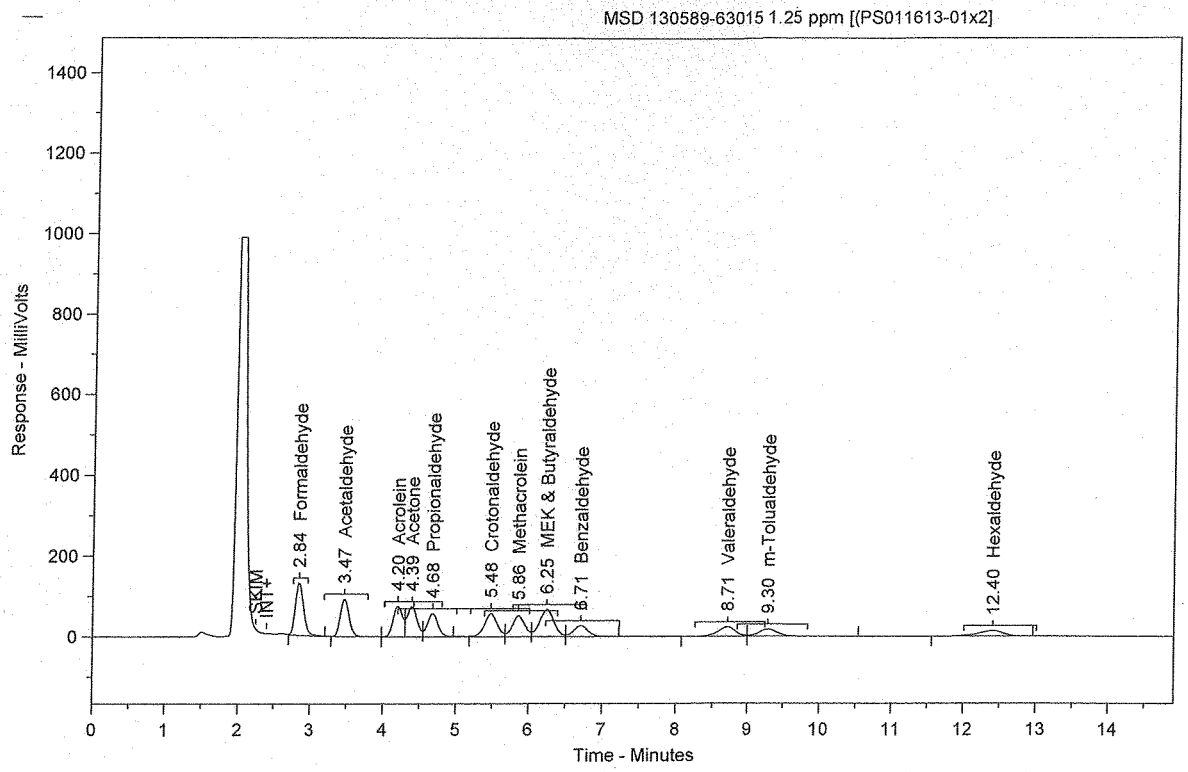
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 7
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	1.6006	8.181	1017164	13.726	BB	0.12
2	3.47	Acetaldehyde	1.4869	7.600	778890	10.510	BB	0.13
3	4.20	Acrolein	1.4123	7.219	674402	9.100	BV	0.17
4	4.40	Acetone	1.7592	8.992	721700	9.739	VV	0.15
5	4.68	Propionaldehyde	1.4228	7.273	582982	7.867	VV	0.16
6	5.48	Crotonaldehyde	1.8374	9.392	696754	9.402	VV	0.19
7	5.86	Methacrolein	1.5617	7.983	626610	8.456	VV	0.17
8	6.25	MEK & Butyraldehyde	2.7517	14.065	886676	11.965	VV	0.20
9	6.71	Benzaldehyde	1.3932	7.121	361576	4.879	VB	0.20
10	8.71	Valeraldehyde	1.4388	7.354	403606	5.446	BV	0.26
11	9.30	m-Tolualdehyde	1.4868	7.600	324043	4.373	VB	0.28
12	12.42	Hexaldehyde	1.4125	7.220	336239	4.537	BB	0.36

Total Area = 7410643 Total Height = 684111.1 Total Amount = 19.56402

HP
05/17/13



Sample Name = **MSD 130589-63015 1.25 ppm [(PS011613-01x2]** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0008.RAW**
Date Taken (end) = 5/17/2013 12:59:01 PM

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

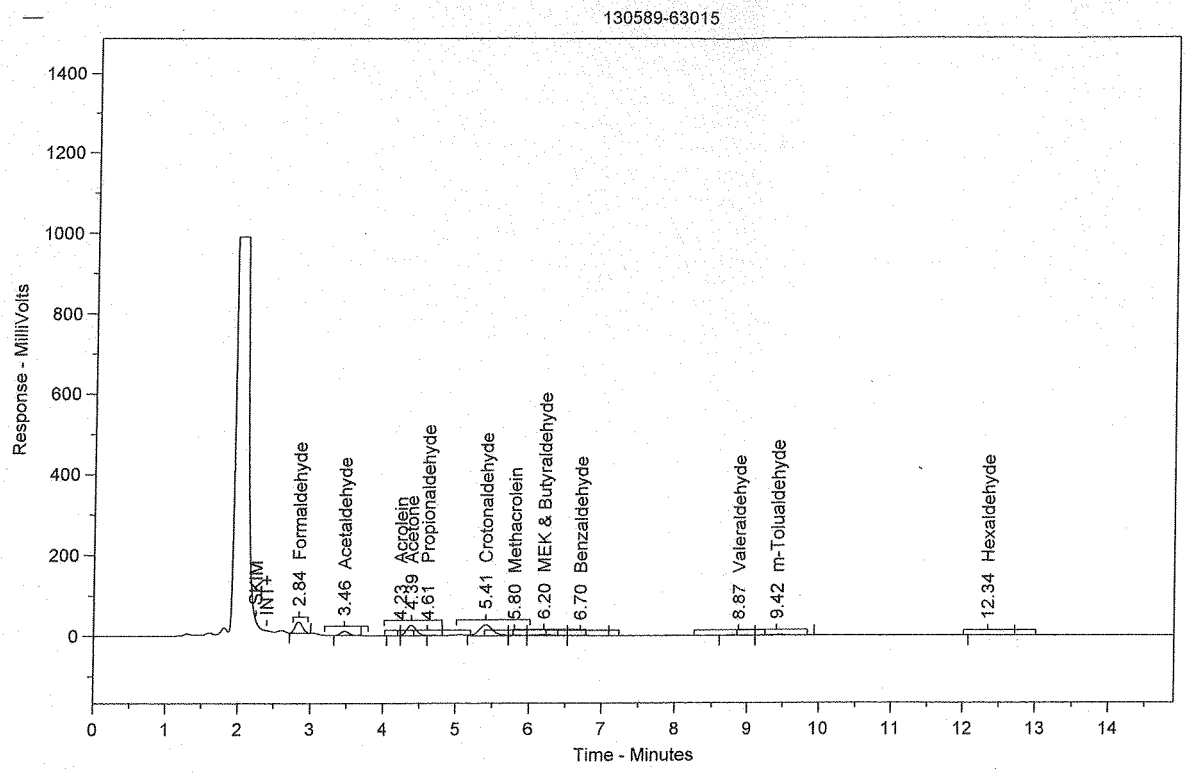
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

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	1.5965	8.134	1014589	13.657	BB	0.12
2	3.47	Acetaldehyde	1.4869	7.575	778927	10.485	BB	0.13
3	4.20	Acrolein	1.4240	7.255	679986	9.153	BV	0.17
4	4.39	Acetone	1.7546	8.939	719798	9.689	VV	0.16
5	4.68	Propionaldehyde	1.4260	7.265	584263	7.865	VV	0.16
6	5.48	Crotonaldehyde	1.8469	9.409	700337	9.427	VV	0.19
7	5.86	Methacrolein	1.5424	7.858	618857	8.330	VV	0.17
8	6.25	MEK & Butyraldehyde	2.7872	14.199	898117	12.090	VV	0.20
9	6.71	Benzaldehyde	1.3967	7.115	362484	4.879	VB	0.21
10	8.71	Valeraldehyde	1.4563	7.419	408521	5.499	BV	0.26
11	9.30	m-Tolualdehyde	1.4970	7.626	326259	4.392	VB	0.28
12	12.40	Hexaldehyde	1.4145	7.206	336700	4.532	BB	0.36

Total Area = 7428838 Total Height = 683141.1 Total Amount = 19.62897

HP
05/17/13



Sample Name = **130589-63015** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0009.RAW**
Date Taken (end) = 5/17/2013 1:15:40 PM

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

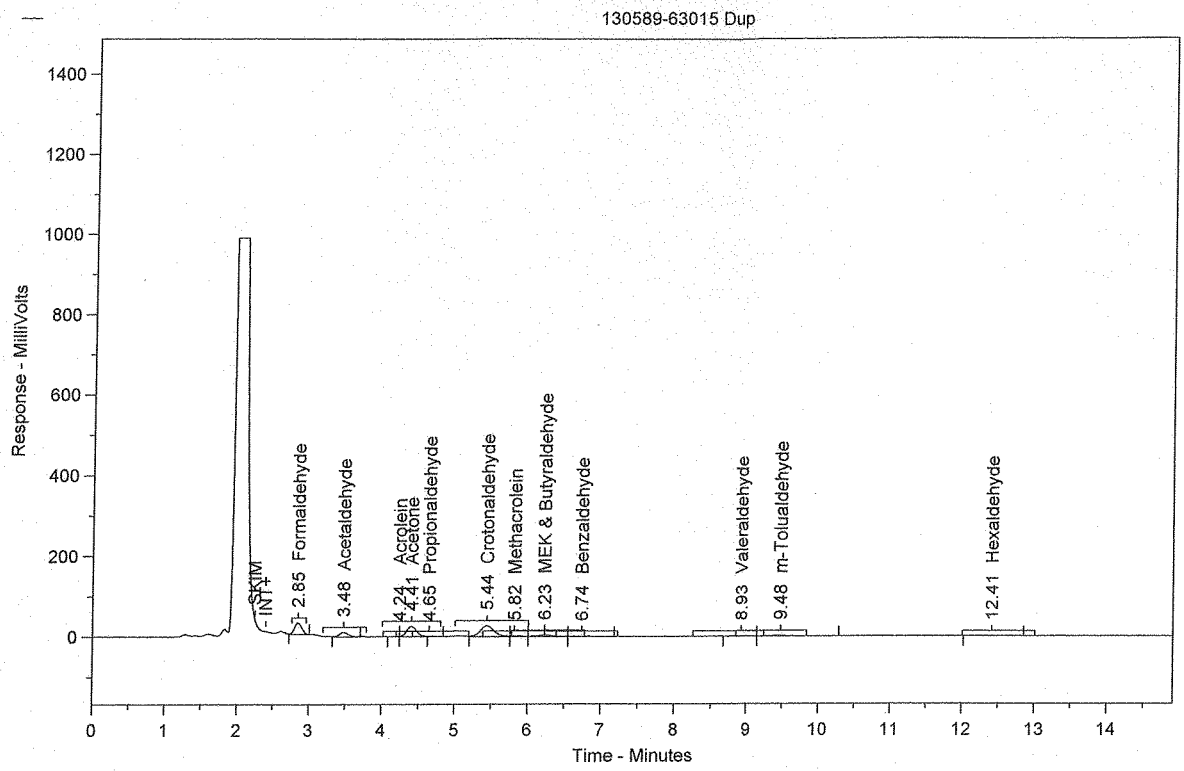
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 9
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	0.3054	12.507	194073	19.260	BB	0.11
2	3.46	Acetaldehyde	0.1669	6.835	87428	8.677	BB	0.13
3	4.23	Acrolein	0.0067	0.274	3194	0.317	BV	0.03
4	4.39	Acetone	0.6013	24.628	246697	24.483	SBB	0.14
5	4.61	Propionaldehyde	0.0218	0.894	8939	0.887	TBB	0.12
6	5.41	Crotonaldehyde	0.9166	37.541	347588	34.496	BV	0.19
7	5.80	Methacrolein	0.0381	1.559	15278	1.516	VV	0.17
8	6.20	MEK & Butyraldehyde	0.1486	6.088	47898	4.754	VV	0.21
9	6.70	Benzaldehyde	0.0304	1.244	7882	0.782	VB	0.31
10	8.87	Valeraldehyde	0.0576	2.360	16165	1.604	BV	0.24
11	9.42	m-Tolualdehyde	0.1389	5.689	30277	3.005	VB	0.30
12	12.34	Hexaldehyde	0.0093	0.380	2211	0.219	BB	0.45

Total Area = 1007630 Total Height = 100383.5 Total Amount = 2.441706

HP
05/17/13



Sample Name = **130589-63015 Dup** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0010.RAW**
Date Taken (end) = 5/17/2013 1:32:16 PM

Method File Name = C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0010.BND
Method Description=TO-11A Carbonyls

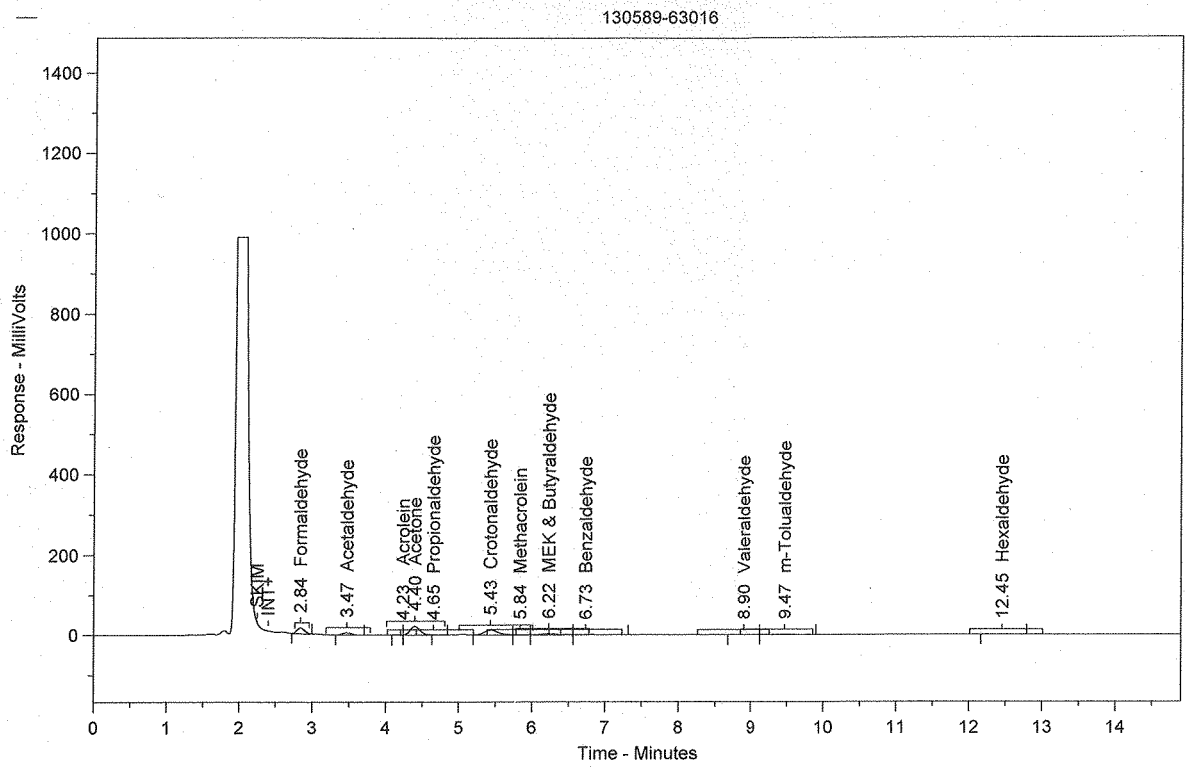
Calibration File Name = C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0010.BND
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 10
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.85	Formaldehyde	0.3037	11.446	193001	19.187	BB	0.12
2	3.48	Acetaldehyde	0.1701	6.969	89088	8.857	BB	0.13
3	4.24	Acrolein	0.0051	0.210	2444	0.243	BV	0.03
4	4.41	Acetone	0.6018	24.661	246870	24.543	SBB	0.14
5	4.65	Propionaldehyde	0.0216	0.885	8844	0.879	TBB	0.12
6	5.44	Crotonaldehyde	0.9106	37.316	345290	34.327	BV	0.19
7	5.82	Methacrolein	0.0354	1.449	14189	1.411	VV	0.15
8	6.23	MEK & Butyraldehyde	0.1505	6.168	48500	4.822	VV	0.22
9	6.74	Benzaldehyde	0.0299	1.224	7755	0.771	VB	0.33
10	8.93	Valeraldehyde	0.0560	2.295	15709	1.562	BV	0.23
11	9.48	m-Tolualdehyde	0.1424	5.837	31042	3.086	VB	0.30
12	12.41	Hexaldehyde	0.0132	0.540	3140	0.312	BB	0.53

Total Area = 1005871 Total Height = 99607.15 Total Amount = 2.440196

HP
07/17/13



Sample Name = **130589-63016** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0011.RAW**
Date Taken (end) = 5/17/2013 1:48:51 PM

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

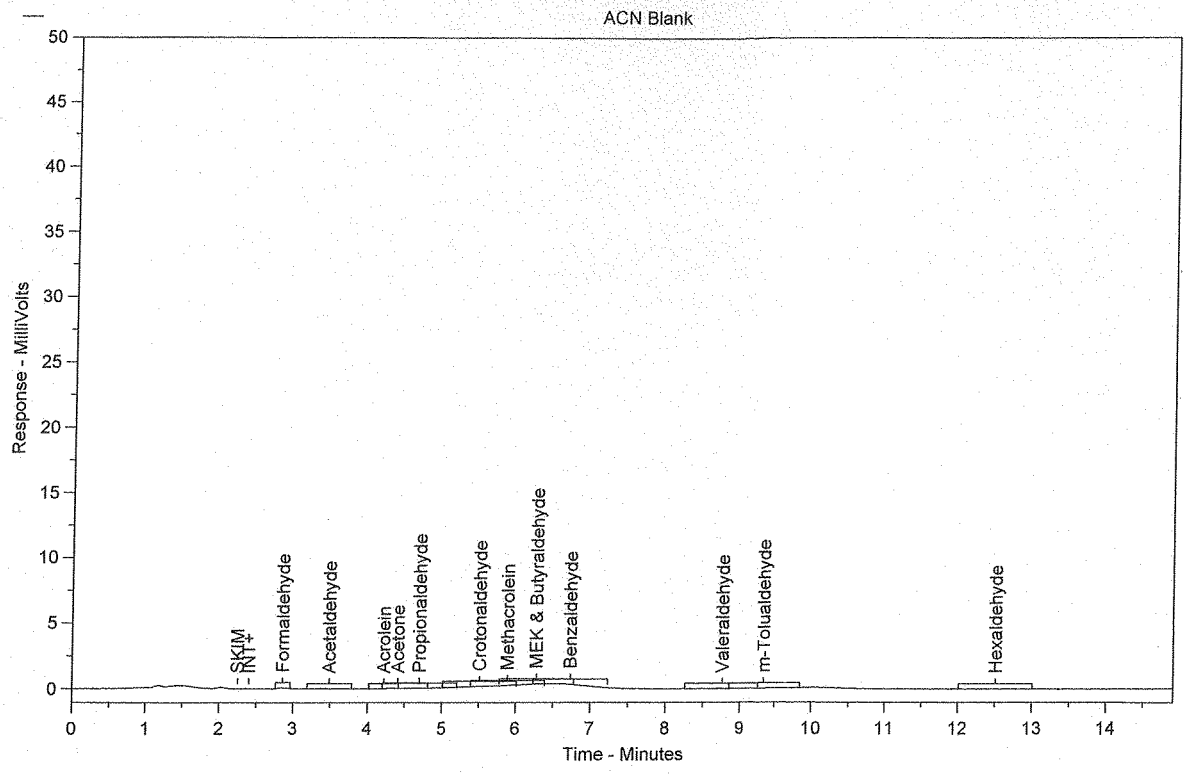
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 11
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	0.1601	10.285	101733	16.268	BB	0.12
2	3.47	Acetaldehyde	0.0840	5.396	43999	7.036	BB	0.13
3	4.23	Acrolein	0.0028	0.182	1356	0.217	BV	0.02
4	4.40	Acetone	0.5066	32.546	207815	33.231	SBB	0.14
5	4.65	Propionaldehyde	0.0157	1.011	6449	1.031	TBB	0.11
6	5.43	Crotonaldehyde	0.4243	27.262	160902	25.729	BV	0.19
7	5.84	Methacrolein	0.0320	2.054	12828	2.051	VV	0.17
8	6.22	MEK & Butyraldehyde	0.1400	8.993	45105	7.213	VV	0.20
9	6.73	Benzaldehyde	0.0435	2.795	11292	1.806	VB	0.36
10	8.90	Valeraldehyde	0.0245	1.574	6870	1.099	BV	0.25
11	9.47	m-Tolualdehyde	0.1118	7.180	24356	3.895	VB	0.29
12	12.45	Hexaldehyde	0.0112	0.719	2665	0.426	BB	0.43

Total Area = 625370.9 Total Height = 60415.83 Total Amount = 1.556449

HP
05/17/13



Sample Name = **ACN Blank** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0012.RAW**
Date Taken (end) = 5/17/2013 2:05:27 PM

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

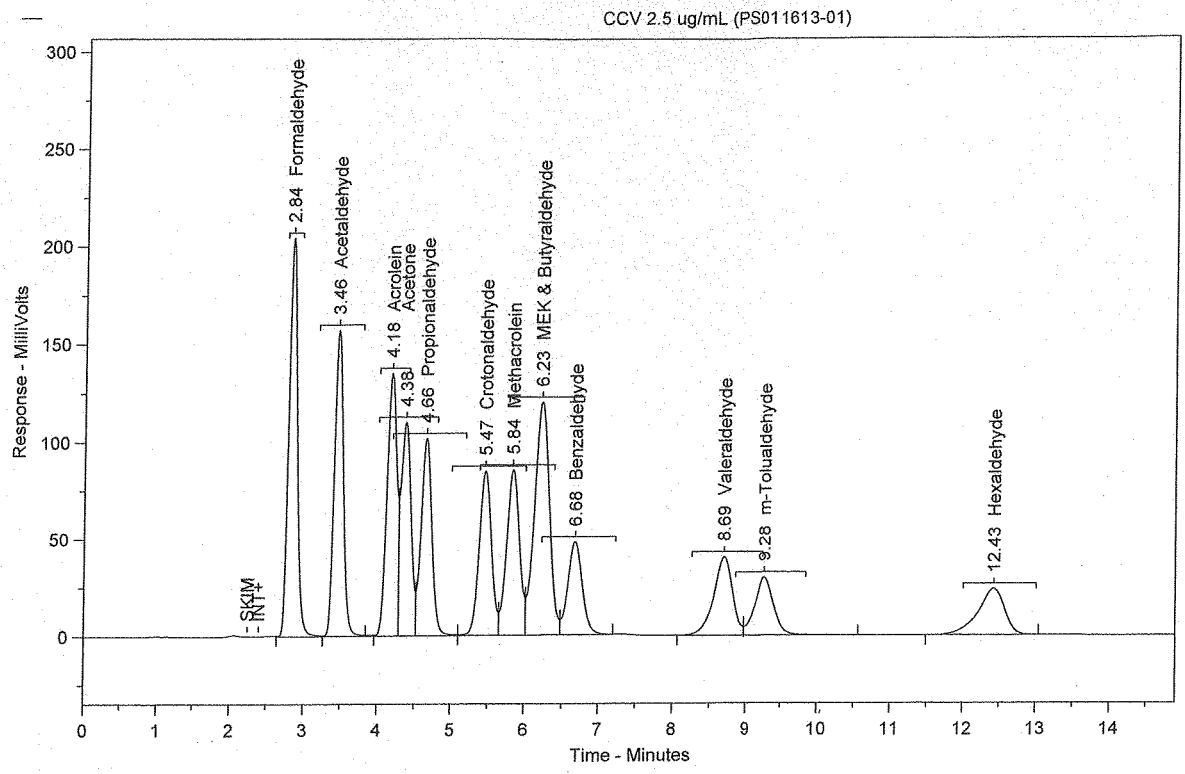
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 12
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

HP
05/17/13



Sample Name = **CCV 2.5 ug/mL (PS011613-01)** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0013.RAW**
Date Taken (end) = 5/17/2013 2:22:02 PM

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

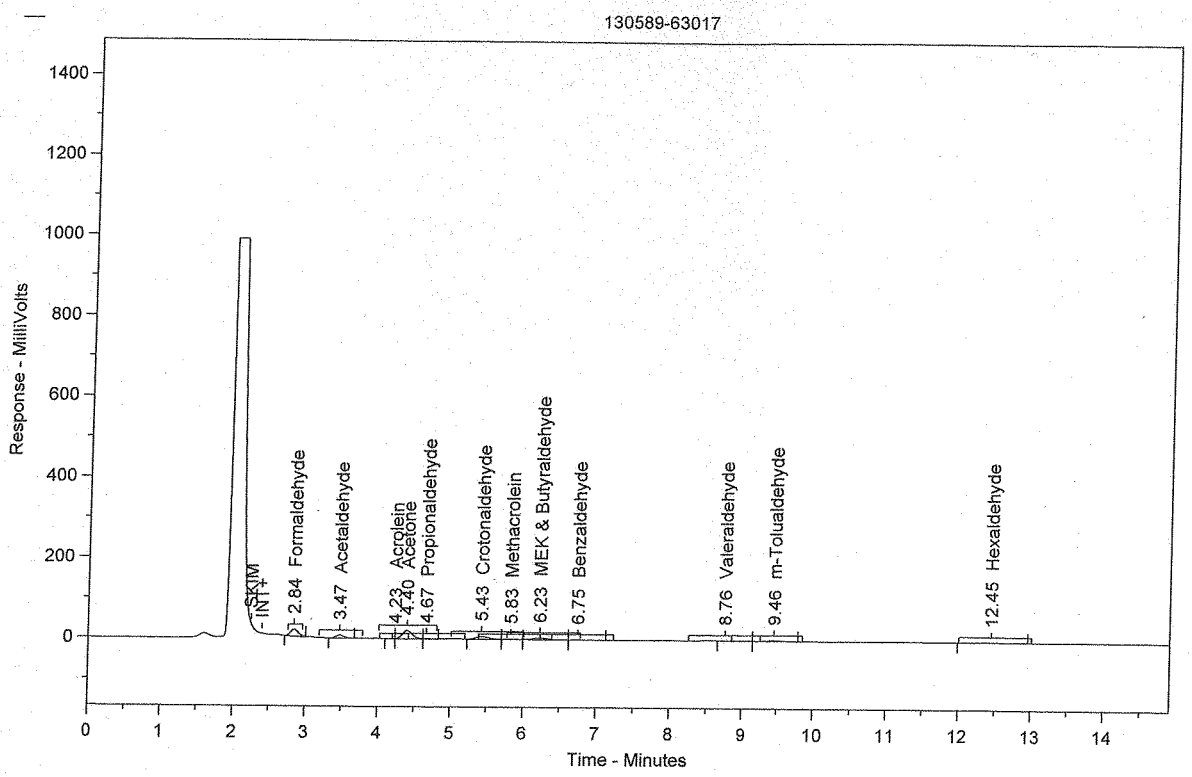
Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 13
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	2.5474	7.671	1618843	12.984	SBB	0.12
2	3.46	Acetaldehyde	2.5635	7.720	1342899	10.771	TBV	0.13
3	4.18	Acrolein	2.5866	7.789	1235152	9.907	TVV	0.17
4	4.38	Acetone	2.5508	7.682	1046447	8.393	TVV	0.16
5	4.66	Propionaldehyde	2.5507	7.681	1045109	8.383	TVV	0.16
6	5.47	Crotonaldehyde	2.5520	7.685	967697	7.762	TVV	0.18
7	5.84	Methacrolein	2.5607	7.711	1027414	8.241	TVV	0.17
8	6.23	MEK & Butyraldehyde	5.1316	15.454	1653583	13.263	TVV	0.20
9	6.68	Benzaldehyde	2.5125	7.566	652074	5.230	TVB	0.21
10	8.69	Valeraldehyde	2.5483	7.674	714819	5.733	BV	0.26
11	9.28	m-Tolualdehyde	2.5467	7.669	555045	4.452	VB	0.28
12	12.43	Hexaldehyde	2.5560	7.697	608433	4.880	BB	0.37

Total Area = 1.246752E+07 Total Height = 1137961 Total Amount = 33.20687

HP
05/17/13



Sample Name = **130589-63017**

Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0014.RAW**
Date Taken (end) = 5/17/2013 2:38:38 PM

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

Calibration File Name = C:\Chromeperfect 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 = 14
Dilution Factor = 1

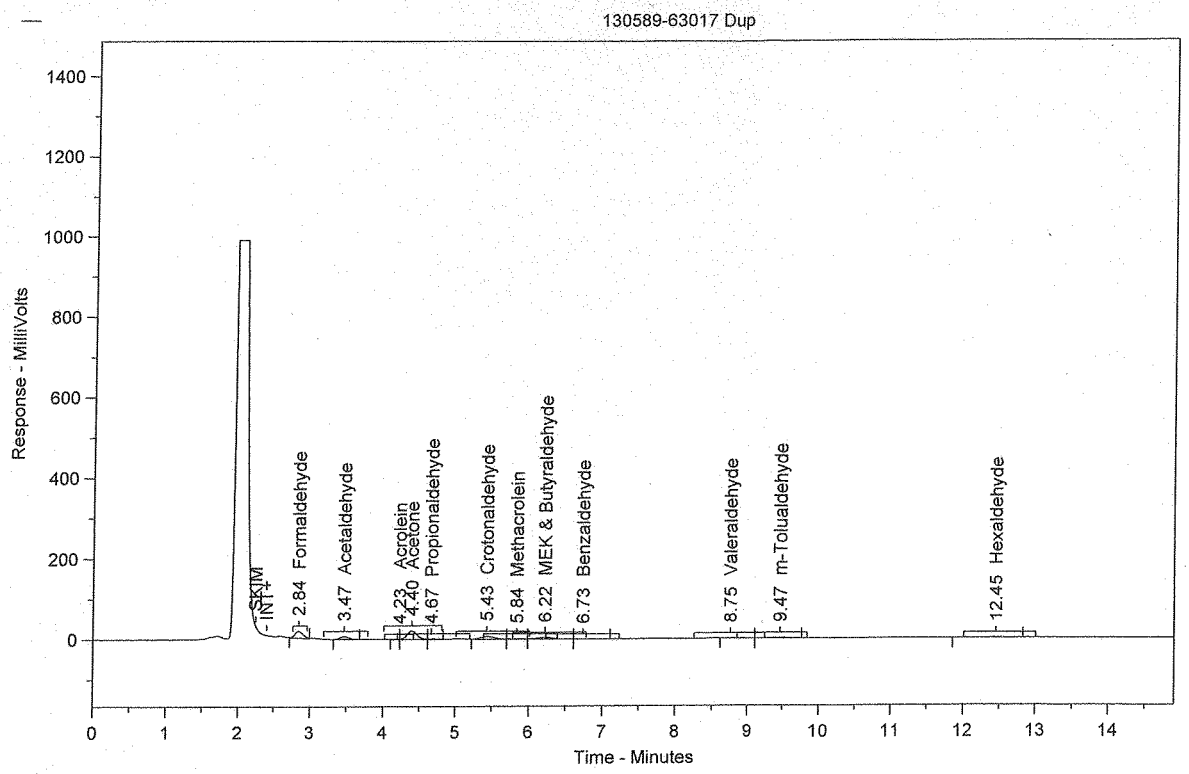
Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	0.1952	12.774	124035	20.190	BB	0.12
2	3.47	Acetaldehyde	0.1109	7.260	58110	9.459	BB	0.13
3	4.23	Acrolein	0.0042	0.276	2015	0.328	BV	0.04
4	4.40	Acetone	0.4879	31.932	200151	32.579	VV	0.14
5	4.67	Propionaldehyde	0.0205	1.340	8391	1.366	VB	0.13
6	5.43	Crotonaldehyde	0.2317	15.164	87857	14.301	BV	0.19
7	5.83	Methacrolein	0.0280	1.834	11241	1.830	VV	0.15
8	6.23	MEK & Butyraldehyde	0.1844	12.066	59404	9.669	VV	0.20
9	6.75	Benzaldehyde	0.0205	1.340	5314	0.865	VB	0.27
10	8.76	Valeraldehyde	0.0502	3.287	14087	2.293	BV	0.30
11	9.46	m-Tolualdehyde	0.1264	8.270	27537	4.482	VB	0.26
12	12.45	Hexaldehyde	0.0681	4.456	16206	2.638	BB	0.41

Total Area = 614349.7

Total Height = 61538.61

Total Amount = 1.527883

MP
05/17/13



Sample Name = **130589-63017 Dup** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0015.RAW**
Date Taken (end) = 5/17/2013 2:55:13 PM

Method File Name = C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0015.BND
Method Description=TO-11A Carbonyls

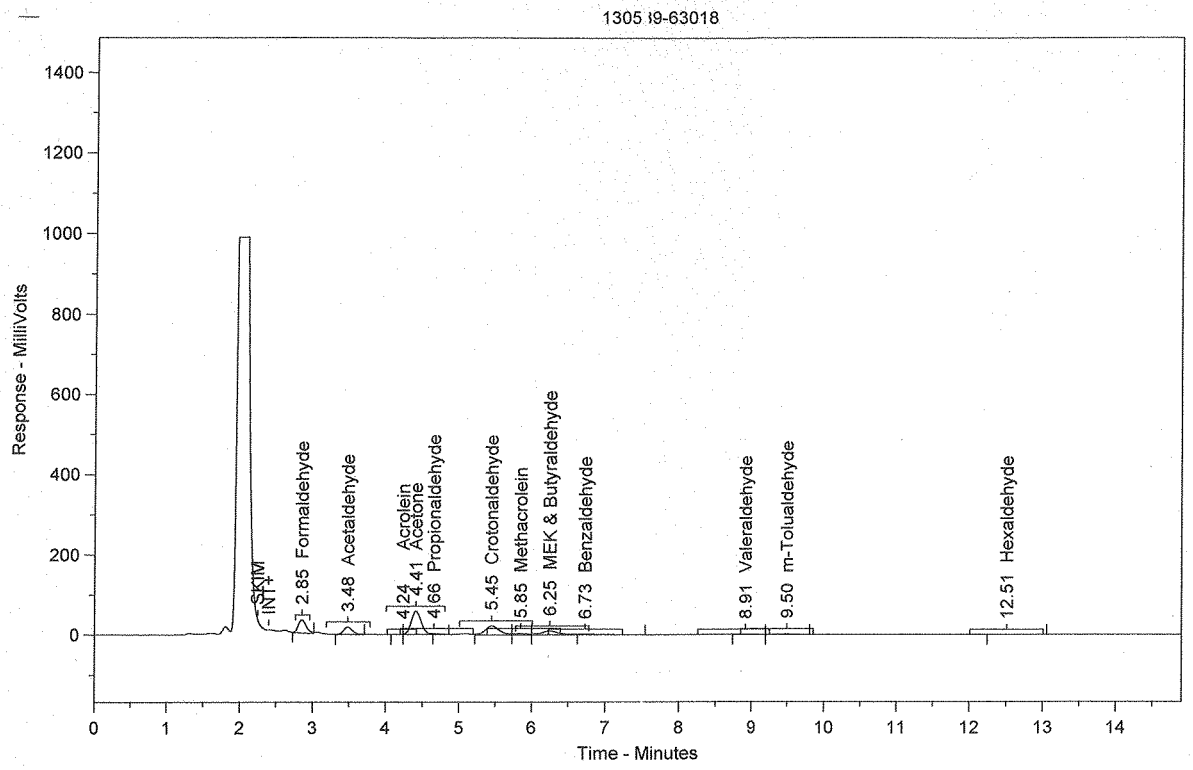
Calibration File Name = C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0015.BND
Concentration Units = ug/ml

Run Time = 14.89889 Vial Number = 15
Injection Volume = 10 Dilution Factor = 1

Peak #	Ret. Time	Name	Amount	Amt %	Area	Area %	Type	Width
1	2.84	Formaldehyde	0.1917	12.723	121821	20.112	BB	0.12
2	3.47	Acetaldehyde	0.1101	7.310	57699	9.526	BB	0.13
3	4.23	Acrolein	0.0031	0.208	1498	0.247	BV	0.04
4	4.40	Acetone	0.4828	32.044	198063	32.700	VV	0.14
5	4.67	Propionaldehyde	0.0195	1.294	7987	1.319	VB	0.13
6	5.43	Crotonaldehyde	0.2265	15.031	85878	14.178	BV	0.19
7	5.84	Methacrolein	0.0270	1.795	10852	1.792	VV	0.15
8	6.22	MEK & Butyraldehyde	0.1859	12.339	59909	9.891	VV	0.20
9	6.73	Benzaldehyde	0.0200	1.326	5185	0.856	VB	0.27
10	8.75	Valeraldehyde	0.0491	3.260	13778	2.275	BV	0.33
11	9.47	m-Tolualdehyde	0.1201	7.972	26179	4.322	VB	0.26
12	12.45	Hexaldehyde	0.0708	4.697	16847	2.781	BB	0.38

Total Area = 605696.9 Total Height = 60704.32 Total Amount = 1.506696

HP
05/17/13



Sample Name = **130589-63018** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0016.RAW**
Date Taken (end) = 5/17/2013 3:11:48 PM

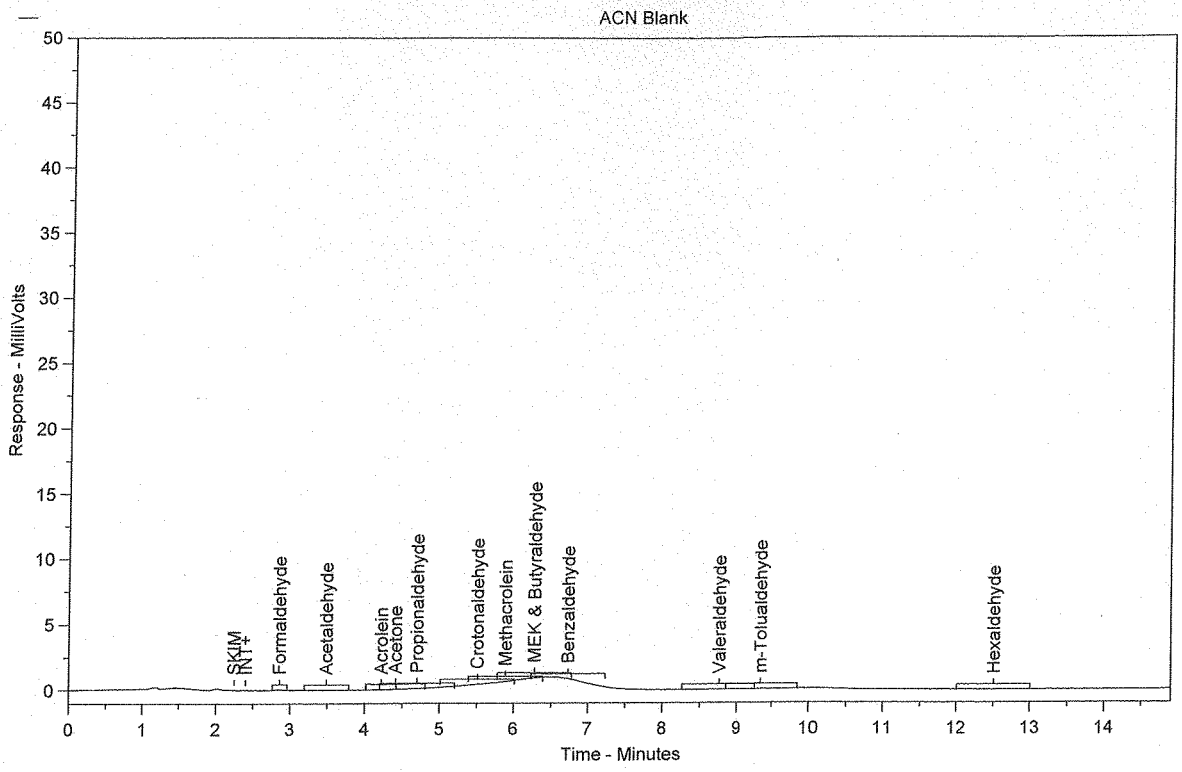
Method File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.MET
Method Description=TO-11A Carbonyls

Calibration File Name = C:\Chromeperfect 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	2.85	Formaldehyde	0.3896	10.333	247572	15.969	BB	0.11
2	3.48	Acetaldehyde	0.3022	8.014	158282	10.210	BB	0.13
3	4.24	Acrolein	0.0063	0.166	2994	0.193	BV	0.03
4	4.41	Acetone	1.3697	36.329	561898	36.244	SBB	0.15
5	4.66	Propionaldehyde	0.0470	1.246	19252	1.242	TBB	0.11
6	5.45	Crotonaldehyde	0.7672	20.350	290934	18.766	BV	0.19
7	5.85	Methacrolein	0.0904	2.398	36276	2.340	VV	0.15
8	6.25	MEK & Butyraldehyde	0.4754	12.610	153194	9.881	SBB	0.20
9	6.73	Benzaldehyde	0.1254	3.325	32534	2.099	TBB	0.33
10	8.91	Valeraldehyde	0.0634	1.681	17781	1.147	BV	0.32
11	9.50	m-Tolualdehyde	0.1110	2.944	24188	1.560	VB	0.26
12	12.51	Hexaldehyde	0.0228	0.604	5421	0.350	BB	0.54

Total Area = 1550326 Total Height = 151094.2 Total Amount = 3.770226



Sample Name = **ACN Blank** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0017.RAW**
Date Taken (end) = 5/17/2013 3:28:23 PM

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

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

Total Area = 0 Total Height = 0 Total Amount = 0

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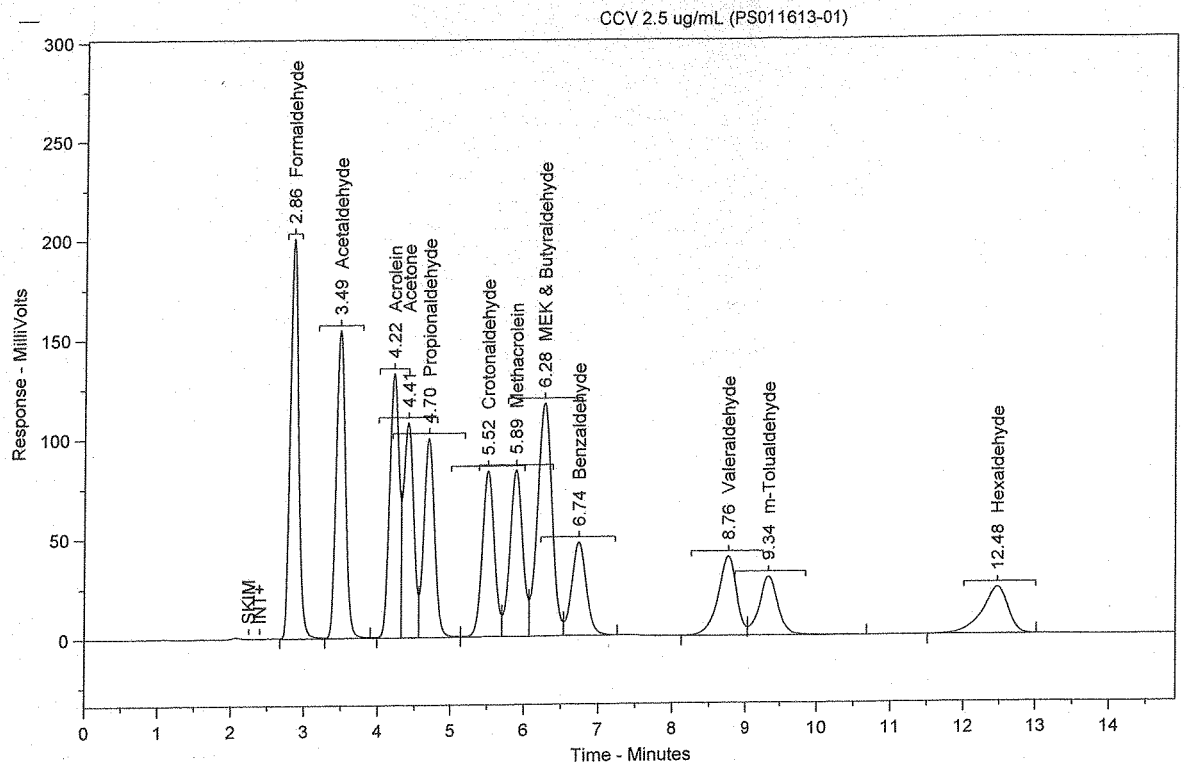

Sample Name = **CCV 2.5 ug/mL (PS011613-01)** Instrument = HPLC #1

Raw File Name = **C:\Chromeperfect 2\Data\HPLC #1\2013\051713\051713.0018.RAW**
Date Taken (end) = 5/17/2013 3:44:58 PM

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

Calibration File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\011613 TO-11A.CAL
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	2.4928	7.680	1584179	12.993	SBB	0.12
2	3.49	Acetaldehyde	2.5107	7.735	1315221	10.787	TBV	0.13
3	4.22	Acrolein	2.5311	7.798	1208646	9.913	TVV	0.17
4	4.41	Acetone	2.5207	7.766	1034108	8.481	TVV	0.16
5	4.70	Propionaldehyde	2.4973	7.694	1023202	8.392	TVV	0.16
6	5.52	Crotonaldehyde	2.4889	7.668	943776	7.740	TVV	0.18
7	5.89	Methacrolein	2.5079	7.726	1006218	8.252	TVV	0.17
8	6.28	MEK & Butyraldehyde	4.9917	15.379	1608474	13.192	TVV	0.20
9	6.74	Benzaldehyde	2.4564	7.568	637520	5.229	TVB	0.21
10	8.76	Valeraldehyde	2.4855	7.658	697212	5.718	BV	0.26
11	9.34	m-Tolualdehyde	2.4851	7.656	541612	4.442	VB	0.28
12	12.48	Hexaldehyde	2.4902	7.672	592763	4.862	BB	0.37

Total Area = 1.219293E+07 Total Height = 1117080 Total Amount = 32.45822

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File Name = C:\Chromeperfect 2\Methods and Sequences\#1 HPLC #1\2013\051713 (TO-11).SEQ
File Date = 5/17/2013 9:55:06 AM
Analyst=

Entry #	Raw File Name	Method File Name	Sample Name	Vial #	DF
1	051713.0001.raw	011613 TO-11A.MET	ACN Blank	1	1
2	051713.0002.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS011613-01)	2	1
3	051713.0003.raw	011613 TO-11A.MET	SS 1.25 ppm (PS080412-01)	3	1
4	051713.0004.raw	011613 TO-11A.MET	TO-11 Method Blank	4	1
5	051713.0005.raw	011613 TO-11A.MET	LCS Blank	5	1
6	051713.0006.raw	011613 TO-11A.MET	LCS 1.25ug/mL (PS011013-01)	6	1
7	051713.0007.raw	011613 TO-11A.MET	MS 130589-63015 1.25 ppm [(PS011613-01x2]	7	1
8	051713.0008.raw	011613 TO-11A.MET	MSD 130589-63015 1.25 ppm [(PS011613-01x2]	8	1
9	051713.0009.raw	011613 TO-11A.MET	130589-63015	9	1
10	051713.0010.raw	011613 TO-11A.MET	130589-63015 Dup	10	1
11	051713.0011.raw	011613 TO-11A.MET	130589-63016	11	1
12	051713.0012.raw	011613 TO-11A.MET	ACN Blank	12	1
13	051713.0013.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS011613-01)	13	1
14	051713.0014.raw	011613 TO-11A.MET	130589-63017	14	1
15	051713.0015.raw	011613 TO-11A.MET	130589-63017 Dup	15	1
16	051713.0016.raw	011613 TO-11A.MET	130589-63018	16	1
17	051713.0017.raw	011613 TO-11A.MET	ACN Blank	17	1
18	051713.0018.raw	011613 TO-11A.MET	CCV 2.5 ug/mL (PS011613-01)	18	1