For the benefit of VaporFi, Inc.

Sample
RM061614VG

Analytical Report
(0614-129)

GC/FID Analysis (RM01 & RM02)

Diethylene glycol
Vegetable glycerin Purity

HPLC/UV Analysis (FP02)

Acetaldehyde, Crotonaldehyde, Diacetyl, Formaldehyde

Enthalpy Analytical, Inc.

Phone: (919) 850 - 4392 / Fax: (919) 850 - 9012 / www.enthalpy.com

800 -1 Capitola Drive Durham, NC 27713-4385

I certify that to the best of my knowledge all analytical data presented in this report:

- Have been checked for completeness
- Are accurate, error-free, and legible
- Have been conducted in accordance with approved protocol, and that all deviations and analytical problems are summarized in the appropriate narrative(s)

This analytical report was prepared in Portable Document Format (.PDF) and contains 73 pages.

Emil W. Stewart

QA Review Performed by - Emil W. Stewart

Report Issued: 06/26/2014

Summary of Results

Company	For the benefit of VaporFi, Inc.	Job #	0614-129
Analyst	KLM	Sample(s) Received	06/17/2014
Parameters	GC/FID Analysis		

Enthalpy Code	Client's Sample ID	Batch / Lot / Notes	Purity (Area %)
0614-129-01	RM061614VG	na	99.96

Report for: For the benefit of VaporFi, Inc.

Project Code: 0614-129
Project Start Date: 06/17/2014
Analysis Method: GC/FID

Lowest Standard Value, ug/mL	2.23	10	22.3
Minimum Detection Limit, ug/mL	0.223	10	2.23

Enthalpy Code	Client Code / Notes	Diethylene glycol Dil (ug/mL)	Dilution Factor	Diethylene glycol (ug/mL)
0614-129-01 6-18-14 DEG	RM061614VG	ND	10	ND

ND: Not Detected; analytes not detected above the MDL

Compound / Sample ID	MS Sample (mg)	Spiked (mg)	Native (mg)	Recovery %
Diethylene glycol				
0614-129-01MS 6-18-14 DEG	116	111	0.00	104%

Report for: For the benefit of VaporFi, Inc.

Project Code: 0614-129
Project Start Date: 06/17/2014
Analysis Method: HPLC/UV

Lowest Standard Value, ug/mL	1.60	0.0690	0.391	0.229
Minimum Detection Limit, ug/mL	0.0557	0.0411	0.0645	0.0476

Enthalpy Code	Client Code / Notes	Concentrations Blank Adjusted, ug/mL			
		Acetaldehyde	Crotonaldehyde	Diacetyl	Formaldehyde
0614-129-01-1	RM061614VG	ND	ND	ND	ND

Diacetyl is also known as 2,3-Butanedione

ND: Not Detected; analytes not detected above the MDL

Compound / Sample ID	MS Catch (ug)	Spike Amnt (ug)	Native Amnt (ug)	Recovery %
Acetaldehyde				
0614-129-01-1-MS-1	3.20	3.32	0.00	96.5%
0614-129-01-1-MSD-1	3.21	3.32	0.00	96.7%
Crotonaldehyde				
0614-129-01-1-MS-1	2.95	3.34	0.00	88.3%
0614-129-01-1-MSD-1	2.95	3.34	0.00	88.3%
Diacetyl				
0614-129-01-1-MS-1	4.29	3.80	0.00	113%
0614-129-01-1-MSD-1	4.33	3.80	0.00	114%
Formaldehyde				
0614-129-01-1-MS-1	3.28	3.22	0.00	102%
0614-129-01-1-MSD-1	3.28	3.22	0.00	102%

Narrative Summary

Enthalpy Analytical Narrative Summary

Company	For the benefit of VaporFi, Inc.
Analyst	KLM
Parameters	GC/FID Analysis-Purity

	Eliquid samples
Job #	0614-129
# Samples	1 sample

Custody	Summer Mims received the sample on 6/17/14 after being relinquished by For the benefit of VaporFi, Inc. The sample was received at ambient temperature in good condition. Prior to, during, and after analysis, the samples were kept under lock with access only to authorized personnel by Enthalpy Analytical, Inc.
Analysis	The sample was analyzed for impurities using the general analytical procedures for GC/FID analyses. A 0.5mL aliquot was removed from the sample and brought to 5 mL with 2-propanol. The Agilent Technologies Model 6890, Gas Chromatograph ("Veronica") was equipped with a Flame Ionization Detector (FID) and the appropriate column.
Calibration	There is no calibration curve associated with performing purity analyses based on area counts.
QC Notes	Solvent peaks were not included in the total.
Reporting Notes	The results presented in this report are representative of the samples as provided to the laboratory.

Enthalpy Analytical Narrative Summary

Company	For the benefit of VaporFi, Inc.
Analyst	KLM
Parameters	GC/FID Analysis

	Eliquid samples
Job #	0614-129
# Samples	1

Custody	Summer Mims received the sample on 6/17/14 after being relinquished by for the benefit of VaporFi, Inc. The sample was received at ambient temperature in good condition. Prior to, during, and after analysis, the samples were kept under lock with access only to authorized personnel by Enthalpy Analytical, Inc.
Analysis	The sample was analyzed for diethylene glycol (DEG) using the analytical procedures for GC/FID analyses. The Agilent Technologies Model 6890N ("Veronica") , was equipped with a Flame Ionization Detector and an appropriate column.
Calibration	The calibration curve is located in the DEG Calibration Curve Chromatograms section of this report.
QC Notes	DEG was not detected above the detection limit in the sample or the blank. A matrix spike was prepared in using an aliquot of the sample. The recovery value was 104%.
Reporting Notes	The results presented in this report are representative of the sample as provided to the laboratory.

Enthalpy Analytical Narrative Summary

Company	For the benefit of VaporFi, Inc.
Analyst	WJG
Parameters	HPLC/UV Analysis

	Eliquid samples
Job #	0614-129
# Samples	1

Custody	Summer Mims received the sample on 6/17/14 after being relinquished by For the benefit of VaporFi, Inc. The sample was received at ambient temperature in good condition. Prior to, during, and after analysis, the samples were kept under lock with access only to authorized personnel by Enthalpy Analytical, Inc.
Analysis	The samples were analyzed for acetaldehyde, crotonaldehyde, diacetyl, and formaldehyde following the analytical procedures for HPLC/UV analyses. The Agilent Model 1100, High Performance Liquid Chromatograph "Selma" was equipped with an Ultraviolet (UV) Detector operating at 365 nm and an appropriate column.
Calibration	The calibration curve is located in the Carbonyls Calibration Curve Chromatograms section of this report.
QC Notes	Acetaldehyde, crotonaldehyde, and diacetyl were not detected in the method blank at levels above the minimum detection limit (MDL). Formaldehyde was detected below the LOQ. Formaldehyde results have been blank-corrected. Matrix spikes were performed in duplicate (MS and MSD) on an aliquot of the sample. The recovery values were between 85 and 115%.
Reporting Notes	The results presented in this report are representative of the sample as provided to the laboratory.

General Reporting Notes

The following are general reporting notes that are applicable to all Enthalpy Analytical, Inc. data reports, unless specifically noted otherwise.

- Any analysis which refers to the method as ***"Type"*** represents a planned deviation from the reference method. For instance a Hydrogen Sulfide assay from a Tedlar bag would be labeled as "EPA Method 16-Type" because Tedlar bags are not mentioned as one of the collection options in EPA Method 16.
- The acronym ***MDL*** represents the Minimum Detection Limit. Below this value the laboratory cannot determine the presence of the analyte of interest reliably.
- The acronym ***LOQ*** represents the Limit of Quantification. Below this value the laboratory cannot quantitate the analyte of interest within the criteria of the method.
- The acronym ***ND*** following a value indicates a non-detect or analytical result below the MDL.
- The letter ***J*** in the Qualifier or Flag column in the results indicates that the value is between the MDL and the LOQ. The laboratory can positively identify the analyte of interest as present, but the value should be considered an estimate.
- The letter ***E*** in the Qualifier or Flag column indicates an analytical result exceeding 100% of the highest calibration point. The associated value should be considered as an estimate.
- The acronym ***DF*** represents Dilution Factor. This number represents dilution of the sample during the preparation and/or analysis process. The analytical result taken from a laboratory instrument is multiplied by the DF to determine the final undiluted sample results.
- The addition of ***MS*** to the Sample ID represents a Matrix Spike. An aliquot of an actual sample is spiked with a known amount of analyte so that a percent recovery value can be determined. The MS analysis indicates what effect the sample matrix may have on the target analyte, i.e. whether or not anything in the sample matrix interferes with the analysis of the analyte(s).
- The addition of ***MSD*** to the Sample ID represents a Matrix Spike Duplicate. Prepared in the same manner as a MS, the use of duplicate matrix spikes allows further confirmation of laboratory quality by showing the consistency of results gained by performing the same steps multiple times.
- The addition of ***LD*** to the Sample ID represents a Laboratory Duplicate. The analyst prepares an additional aliquot of sample for testing and the results of the duplicate analysis are compared to the initial result. The result should have a difference value of within 10% of the initial result (if the results of the original analysis are greater than the LOQ).
- The addition of ***AD*** to the Sample ID represents an Alternate Dilution. The analyst prepares an additional aliquot at a different dilution factor (usually double the initial factor). This analysis helps confirm that no additional compound is present and coeluting or sharing absorbance with the analyte of interest, as they would have a different response/absorbance than the analyte of interest.

General Reporting Notes

(continued)

- The Sample ID ***LCS*** represents a Laboratory Control Sample. Clean matrix, similar to the client sample matrix, prepared and analyzed by the laboratory using the same reagents, spiking standards and procedures used for the client samples. The LCS is used to assess the control of the laboratory's analytical system. Whenever spikes are prepared for our client projects, two spikes are retained as LCSs. The LCSs are labeled with the associated project number and kept in-house at the appropriate temperature conditions. When the project samples are received for analysis, the LCSs are analyzed to confirm that the analyte could be recovered from the media, separate from the samples which were used on the project and which may have been affected by source matrix, sample collection and/or sample transport.
- **Significant Figures**: Where the reported value is much greater than unity (1.00) in the units expressed, the number is rounded to a whole number of units, rather than to 3 significant figures. For example, a value of 10,456.45 ug catch is rounded to 10,456 ug. There are five significant digits displayed, but no confidence should be placed on more than two significant digits.
- **Manual Integration**: The data system used for processing will flag manually integrated peaks with an "M". There are several reasons a peak may be manually integrated. These reasons will be identified by the following two letter designations on sample chromatograms, if provided in the report. The peak was ***not integrated*** by the software **"NI"**, the peak was ***integrated incorrectly*** by the software **"II"** or the ***wrong peak*** was integrated by the software **"WP"**. These codes will accompany the analyst's manual integration stamp placed next to the compound name on the chromatogram.

Sample Custody Record

Chain of Custody Record

ENTHALPY analytical, inc.

Page1 of 1

Special Handling:
Standard Turn Around Time (10 business days)
xRush Turn Around Time -- Date Needed 6/23/14
- All TATs Subject to Approval by Enthalpy Analytical, Inc.
- All Bag/Can Samples Disposed of 1 Month from Receipt.
- All Other Samples Disposed of 4 Months from Receipt.

Client Name: For the benefit of VaporFi, Inc.
Project Manager:
Report To: [redacted]

Project Number:
Site Name:
Location:

PO#:
Telephone#: [redacted]
Email: [redacted]

For spiked or duplicate samples: please provide sample volumes for recovery calculations.
For Particulates: please provide tare weights and/or condensed water volumes.

Special Instructions:

A=Air 1=H2SO4 2=NaOH 3=_____ 4=_____
X=XAD C=Charcoal SG=Silica Gel
G=Grab C=Composite Q=Quality Control

Sample ID	Date	Time	Sample Volume	Type	Matrix	Sample Containers: # of VOA Vials	# of Glass	# of Plastic	# of Bags	# of Canisters	# of Tubes	# Other	Analyses: RM01	RM02	FP02	Notes:
RM061614VG	6/16/14		80mls				2						x	x	x	

Relinquished By:	Date:	Received By:	Date:	Time:	Sample Condition Upon Receipt:
Jason Dolan	6/16/14		6-17-14	9:20	☐ Iced X Ambient ☐ °C 24.0
					☐ Iced ☐ Ambient ☐ °C
		Emil Stewart	6/17/14	0925	☐ Iced ☐ Ambient ☐ °C

Ray Gunn 2DM 6-17-14

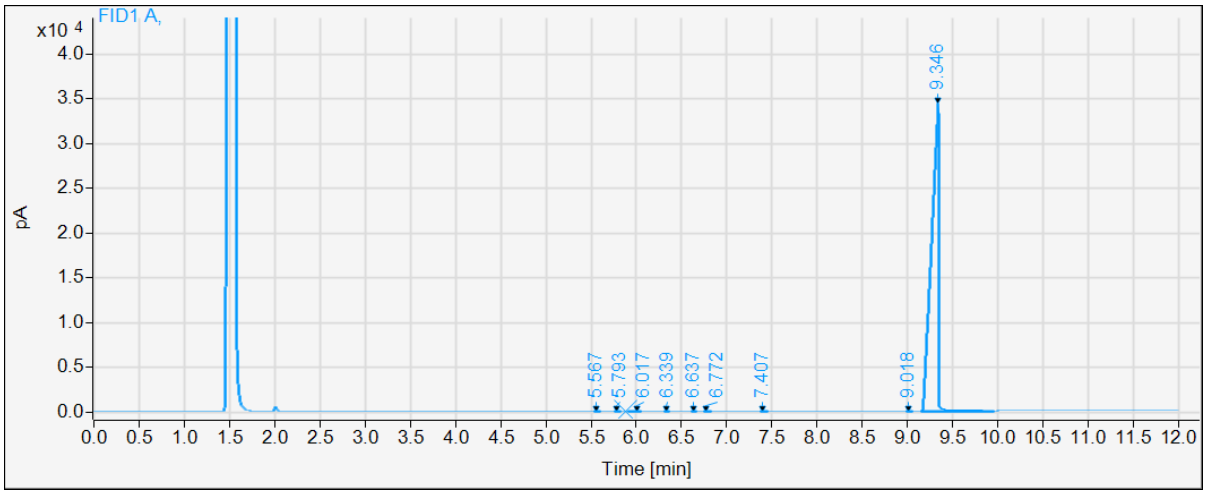
800-1 Capitola Drive • Durham, NC 27713 • (919) 850-4392 • FAX (919) 850-9012 • www.enthalpy.com

Sample Chromatograms

Sequence Summary Report

Agilent Technologies

Data file:	C:\CHEM32\1\DATA\GC146P119B\040F0201.D
Sample name:	0614-129-01 5-21-14 Imp
Description:	
Instrument:	Veronica
Injection date:	6/20/2014 3:34:12 PM
Acq. method:	ELIQUID.M
Analysis method:	GC146P119.M
Last changed:	6/23/2014 12:33:59 PM
Sample type:	Sample
Location:	Vial 40
Injection:	1 of 1
Injection volume:	1.000
Acq. operator:	Kristen McKinley
Sequence_Name	GC146P119B



Name	RT	Area	Height	Percent_Area
	5.567	1	1	0.00
	5.793	0	0	0.00
	6.017	3	1	0.00
	6.339	0	0	0.00
	6.637	1	1	0.00
	6.772	12	8	0.01
	7.407	5	3	0.00
	9.018	43	24	0.02
Glycerin	9.346	181110	34413	99.96
	Sum	181175	34450	100

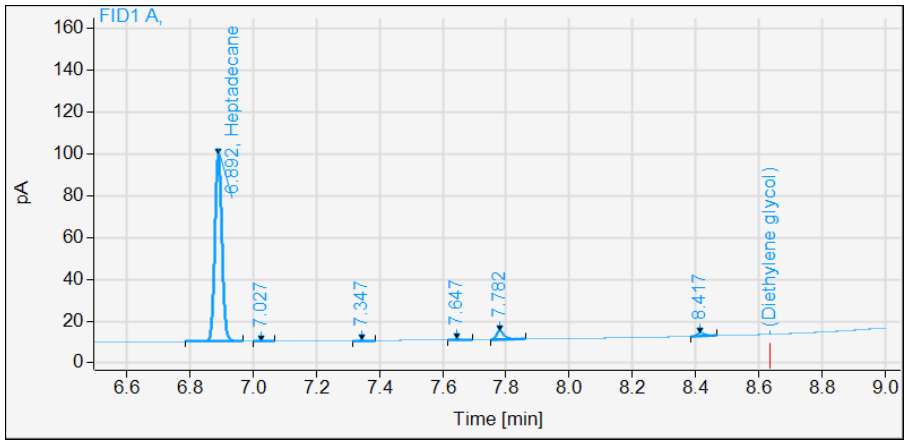
Sample Chromatograms

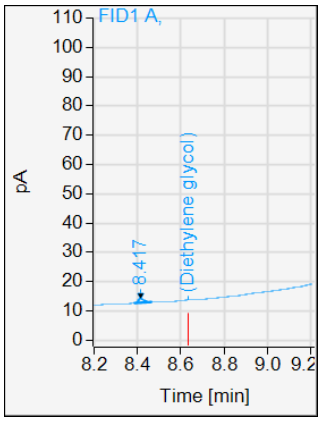
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\CHEM32\1\DATA\GC146P118\037F0701.D
Sample name:	0614-129-01 6-18-14 DEG
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 6:26:06 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/23/2014 12:40:22 PM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Sample
Location:	Vial 37
Injection volume:	1.000
Injection:	1 of 1
File_Version	6





Signal: FID1 A,

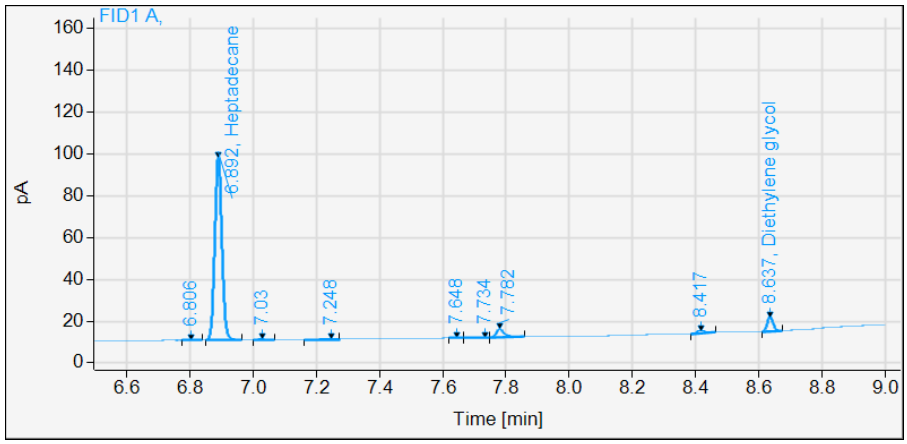
Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	138.9	10	47.97	479.70	ug/ml
Diethylene glycol		8.64		10	0.00	0.00	ug/ml

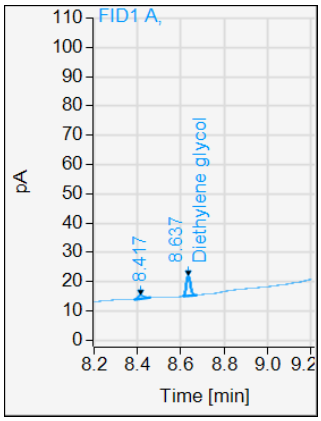
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\CHEM32\1\DATA\GC146P118\038F0801.D
Sample name:	0614-129-01MS 6-18-14 DEG
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 6:43:48 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/23/2014 12:40:22 PM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Sample
Location:	Vial 38
Injection volume:	1.000
Injection:	1 of 1
File_Version	6





Signal: FID1 A,

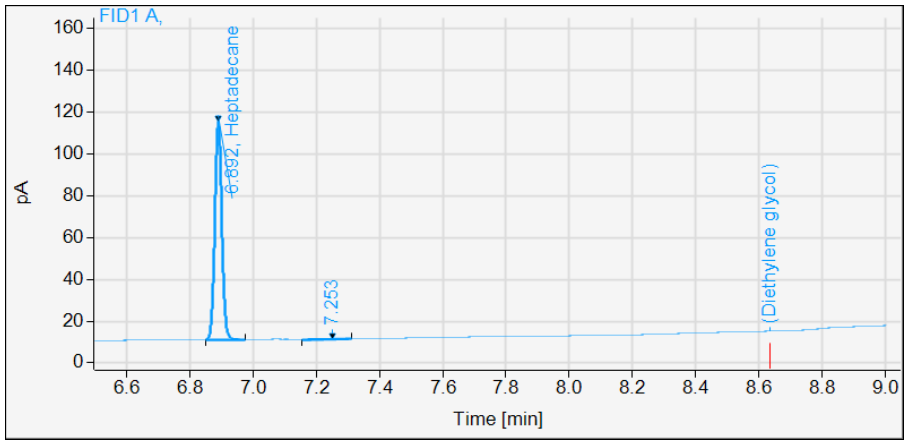
Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	136.4	10	47.97	479.70	ug/ml
Diethylene glycol	BB	8.64	9.1	10	11.63	116.29	ug/ml

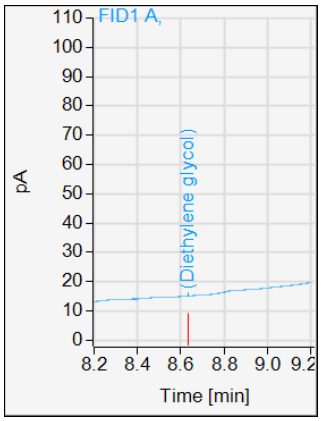
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\CHEM32\1\DATA\GC146P118\039F0901.D
Sample name:	0614-129 BLK01 6-18-14 DEG
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 7:01:22 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/23/2014 12:40:22 PM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Sample
Location:	Vial 39
Injection volume:	1.000
Injection:	1 of 1
File_Version	6





Signal: FID1 A,

Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	161.9	1	47.97	47.97	ug/ml
Diethylene glycol		8.64		1	0.00	0.00	ug/ml

Calibration Curve Chromatograms

Sequence Summary Report

Sequence_AcquiredBy	Kristen McKinley
Sequence_AcquiredDate	6/18/2014 4:40:59 PM
Sequence_Name	GC146P118
Sequence_LastModifiedBy	Kristen McKinley
Sequence_Ver	1

Compound: Diethylene glycol

Signal: FID1A

Exp. RT: 8.636

Corr. Coeff.: 0.999951

Residual:

RF RSD%:

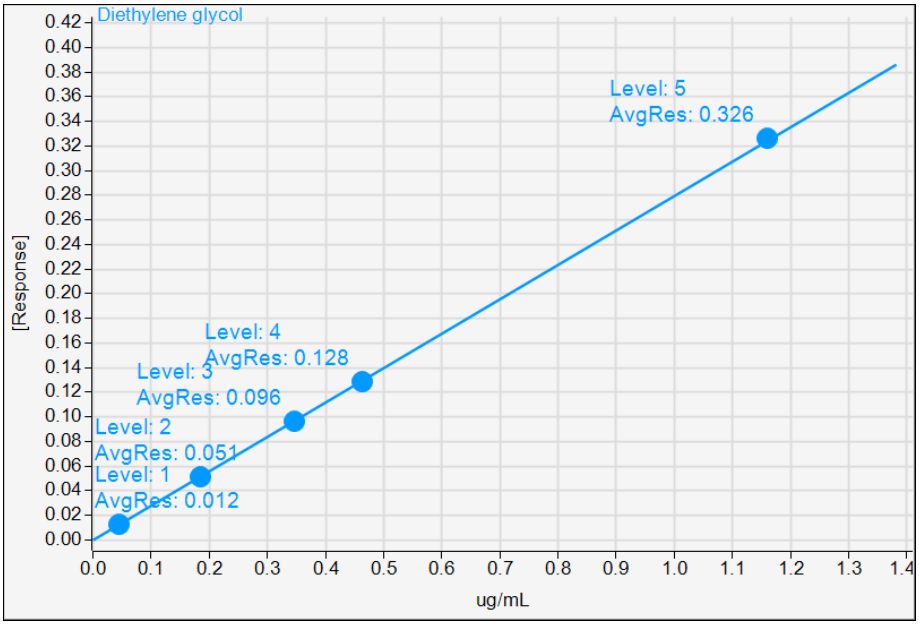
Formula: y = ax + b

a: 0.27955

b: -0.00077

c: 0.00000

d: 0.00000



CalibrationLevel 1

Name	RT [min]	Area	Height	RF	Amount [ug/mL]
Heptadecane	6.892	160.002	102.1329	1.00000	47.97
Diethylene glycol	8.636	1.9885	1.6008	3.79864	2.265

CalibrationLevel 2

Name	RT [min]	Area	Height	RF	Amount [ug/mL]
Heptadecane	6.892	157.3076	99.9032	1.00000	47.97
Diethylene glycol	8.637	8.003	6.0306	3.63125	8.862

CalibrationLevel 3

Name	RT [min]	Area	Height	RF	Amount [ug/mL]
Heptadecane	6.893	157.11	101.4334	1.00000	47.97
Diethylene glycol	8.637	15.046	11.4777	3.60589	16.565

Sequence Summary Report

Sequence Summary Report

CalibrationLevel 4

Name	RT [min]	Area	Height	RF	Amount [ug/mL]
Heptadecane	6.892	160.9712	103.6414	1.00000	47.97
Diethylene glycol	8.637	20.5564	15.6032	3.59870	22.045

CalibrationLevel 5

Name	RT [min]	Area	Height	RF	Amount [ug/mL]
Heptadecane	6.892	169.0567	109.9396	1.00000	47.97
Diethylene glycol	8.636	55.0887	42.2777	3.58559	56.048

Compound Comparison

C1: Diethylene glycol C2: Heptadecane

Sample	Area C1	Area C2	Area Ratio	Amount C1	Amount C2	Amt Ratio
TSC04-175-4 Cal STD#1	1.99	160.002	0.01	2.265	47.97	0.0472
TSC04-175-5 Cal STD#2	8.00	157.308	0.05	8.862	47.97	0.1847
TSC04-175-6 Cal STD#3	15.05	157.110	0.10	16.565	47.97	0.3453
TSC04-175-7 Cal STD#4	20.56	160.971	0.13	22.045	47.97	0.4596
TSC04-175-8 Cal STD#5	55.09	169.057	0.33	56.048	47.97	1.1684
TSC04-175-2 SS	25.21	157.397	0.16	27.617	47.97	0.5757

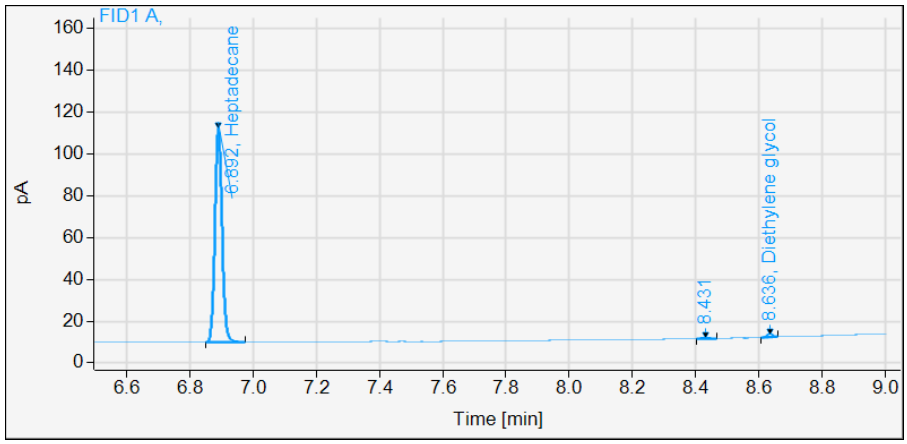
Sequence Summary Report

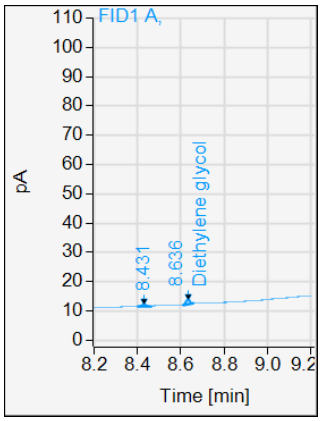
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\GC\2014\VERONICA\Q2\GC146P118\031F0101.D
Sample name:	TSC04-175-4 Cal STD#1
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 4:40:59 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/19/2014 11:50:12 AM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Calibration
Location:	Vial 31
Injection volume:	1.000
Injection:	1 of 1
File_Version	2





Signal: FID1 A,

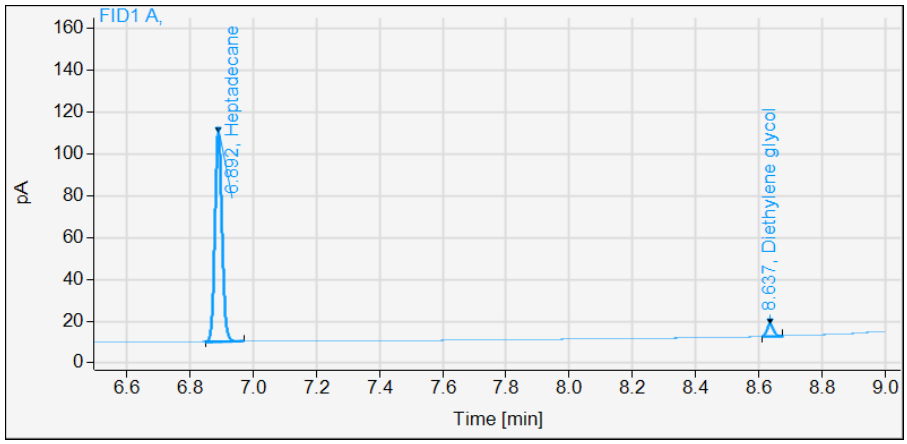
Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	160.0	1	47.97	47.97	ug/ml
Diethylene glycol	MM	8.64	2.0	1	2.26	2.26	ug/ml

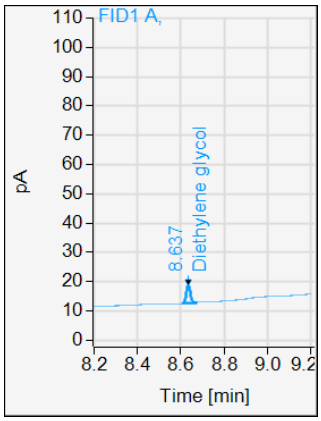
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\GC\2014\VERONICA\Q2\GC146P118\032F0201.D
Sample name:	TSC04-175-5 Cal STD#2
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 4:58:31 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/19/2014 11:50:12 AM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Calibration
Location:	Vial 32
Injection volume:	1.000
Injection:	1 of 1
File_Version	2





Signal: FID1 A,

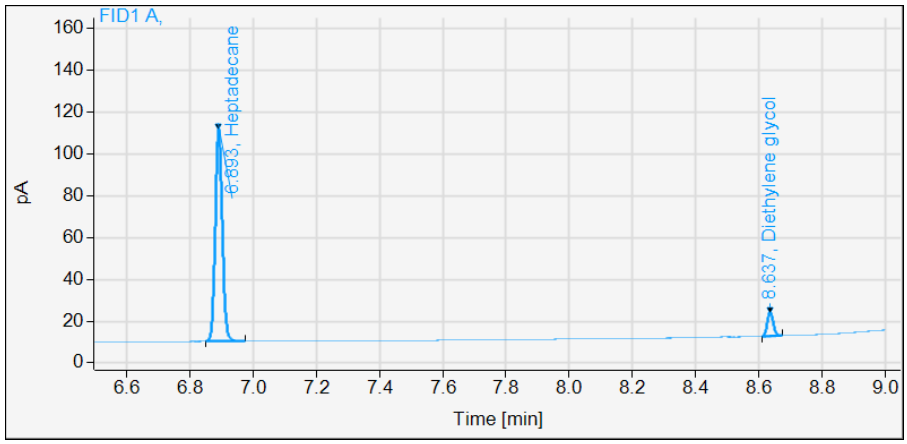
Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	157.3	1	47.97	47.97	ug/ml
Diethylene glycol	BB	8.64	8.0	1	8.86	8.86	ug/ml

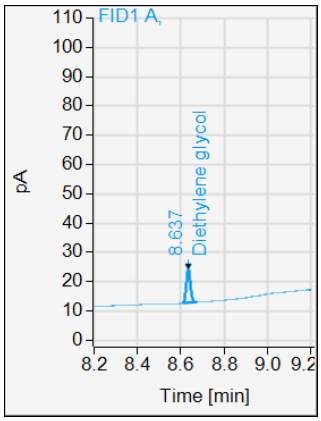
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\GC\2014\VERONICA\Q2\GC146P118\033F0301.D
Sample name:	TSC04-175-6 Cal STD#3
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 5:15:58 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/19/2014 11:50:12 AM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Calibration
Location:	Vial 33
Injection volume:	1.000
Injection:	1 of 1
File_Version	2





Signal: FID1 A,

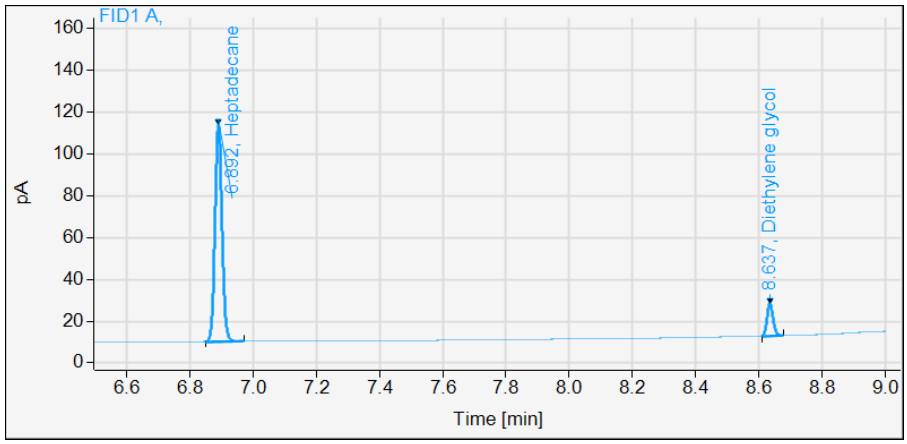
Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	157.1	1	47.97	47.97	ug/ml
Diethylene glycol	BB	8.64	15.0	1	16.57	16.57	ug/ml

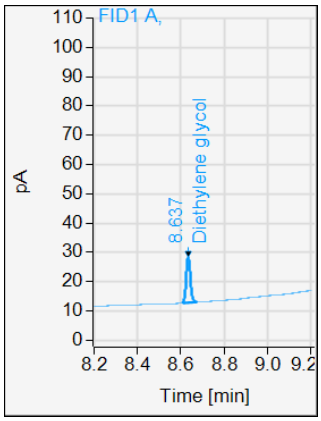
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\GC\2014\VERONICA\Q2\GC146P118\034F0401.D
Sample name:	TSC04-175-7 Cal STD#4
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 5:33:30 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/19/2014 11:50:12 AM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Calibration
Location:	Vial 34
Injection volume:	1.000
Injection:	1 of 1
File_Version	2





Signal: FID1 A,

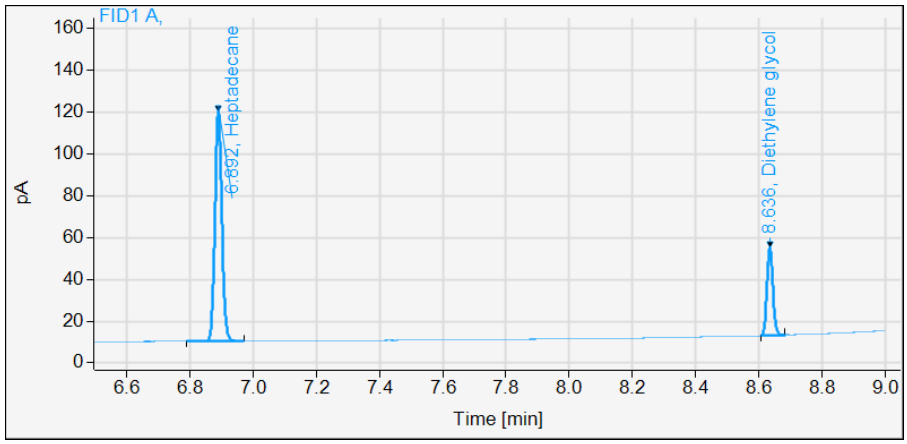
Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	161.0	1	47.97	47.97	ug/ml
Diethylene glycol	BB	8.64	20.6	1	22.05	22.05	ug/ml

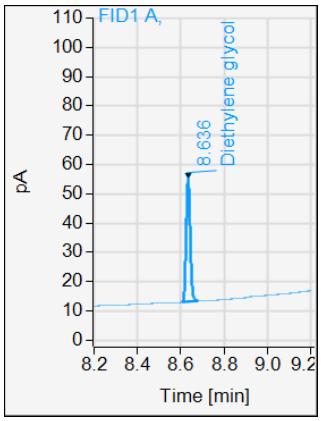
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\GC\2014\VERONICA\Q2\GC146P118\035F0501.D
Sample name:	TSC04-175-8 Cal STD#5
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 5:51:06 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/19/2014 11:50:12 AM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Calibration
Location:	Vial 35
Injection volume:	1.000
Injection:	1 of 1
File_Version	2





Signal: FID1 A,

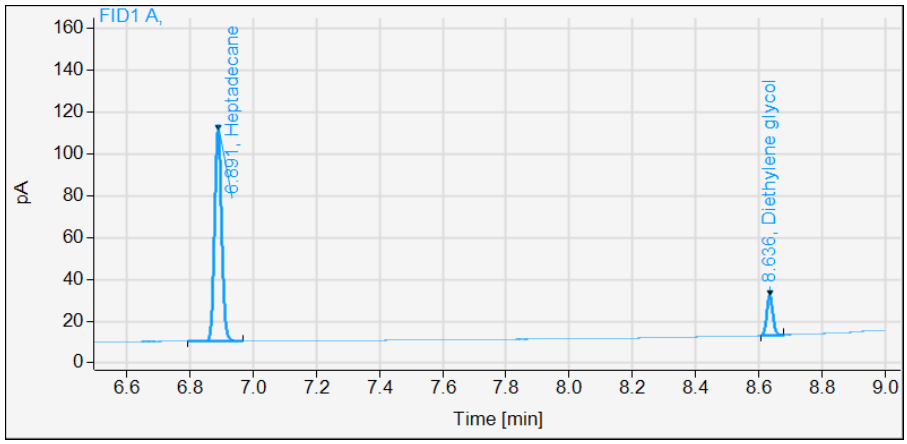
Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	169.1	1	47.97	47.97	ug/ml
Diethylene glycol	BB	8.64	55.1	1	56.05	56.05	ug/ml

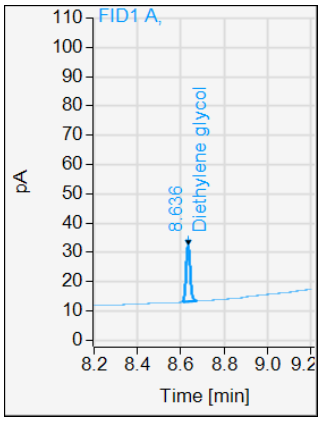
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\GC\2014\VERONICA\Q2\GC146P118\036F0601.D
Sample name:	TSC04-175-2 SS
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 6:08:36 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/19/2014 11:50:12 AM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Sample
Location:	Vial 36
Injection volume:	1.000
Injection:	1 of 1
File_Version	2





Signal: FID1 A,

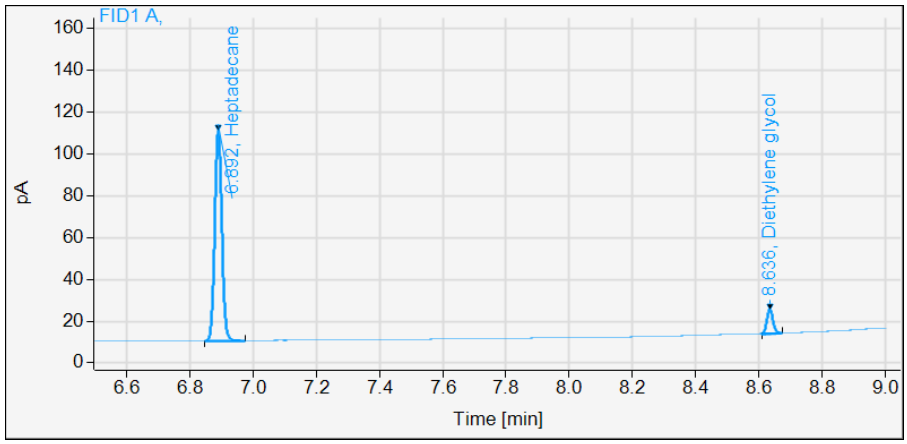
Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	157.4	1	47.97	47.97	ug/ml
Diethylene glycol	BB	8.64	25.2	1	27.62	27.62	ug/ml

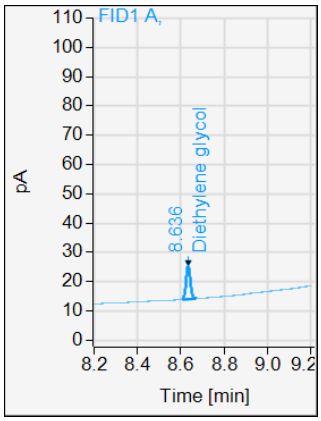
Chromatogram Report

Enthalpy Analytical, Inc.

Data file:	C:\CHEM32\1\DATA\GC146P118\033F1001.D
Sample name:	TSC04-175-6 Cal STD#3
File_Location	\GC\2014\Veronica\Quarter 2
Injection date:	6/18/2014 7:18:59 PM
Acq. method:	GLYCOLS.M
Analysis method:	GC146P118.M
Last changed:	6/23/2014 12:40:22 PM
Instrument:	Veronica
Sequence_Name	GC146P118
Acq. operator:	Kristen McKinley

Sample type:	Calibration
Location:	Vial 33
Injection volume:	1.000
Injection:	1 of 1
File_Version	6





Signal: FID1 A,

Name	Peak Type	RT [min]	Area	Dil	ug/mL	Sample_Amount	Units
Heptadecane	BB	6.89	156.5	1	47.97	47.97	ug/ml
Diethylene glycol	BB	8.64	15.3	1	16.92	16.92	ug/ml

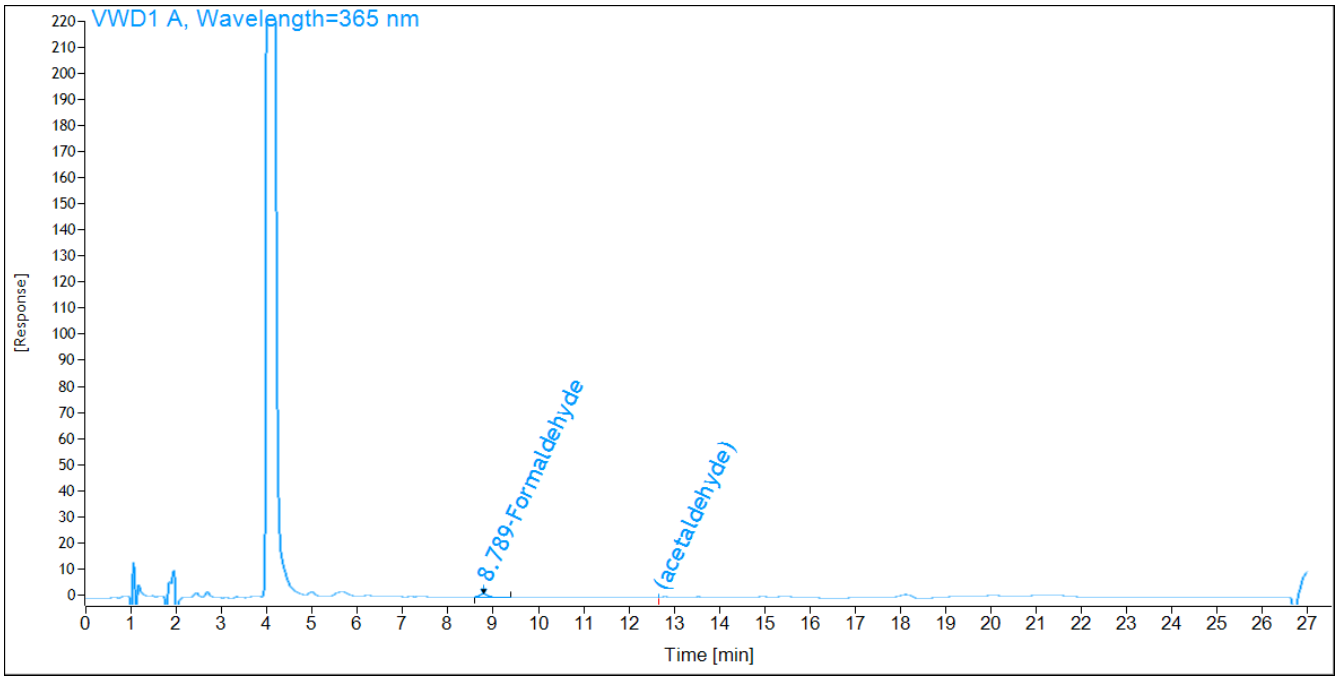
Sample Chromatograms

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\021-0401.D
Sample name: 0614-129-01-1
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 2:04:59 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument: Selma
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 21
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



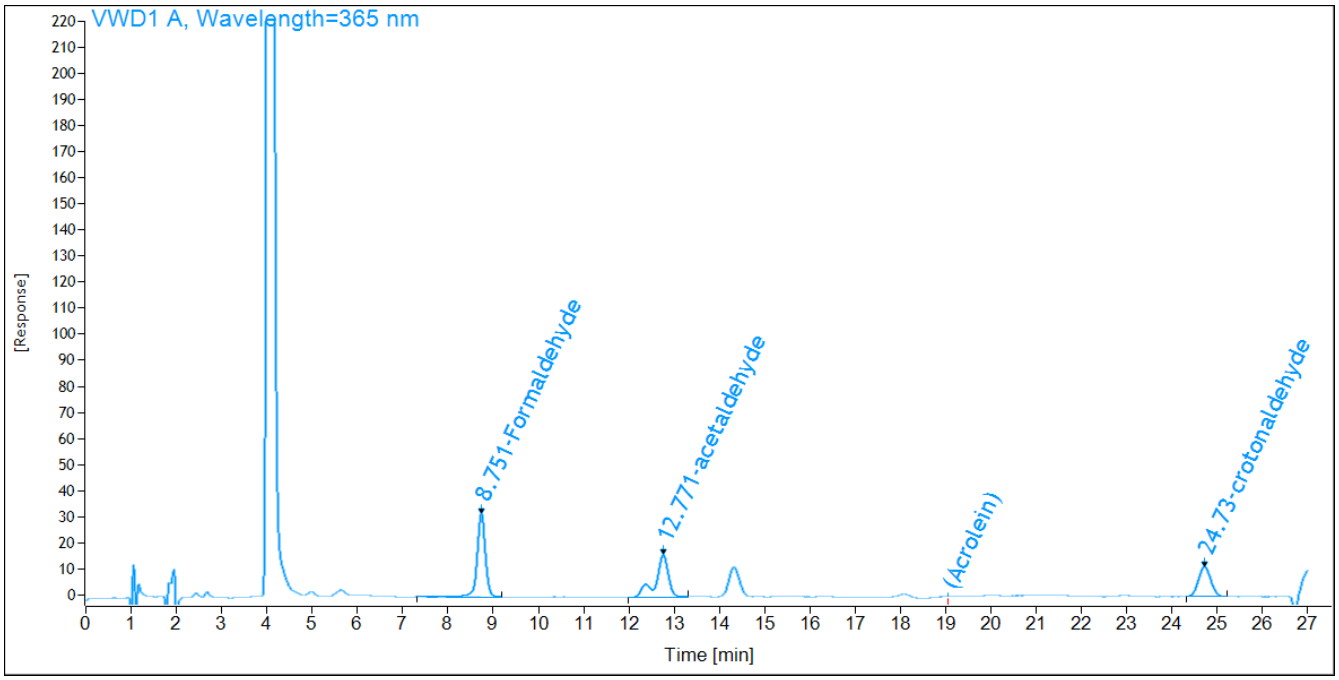
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.79	19.5231	11.5	0.15	1.675	ug/mL
acetaldehyde				11.5	0.00	0.000	ug/mL
Acrolein				11.5	0.00	0.000	ug/mL
crotonaldehyde				11.5	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\022-0501.D
Sample name: 0614-129-01-1-MS-1
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 2:36:21 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument: Selma
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 22
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



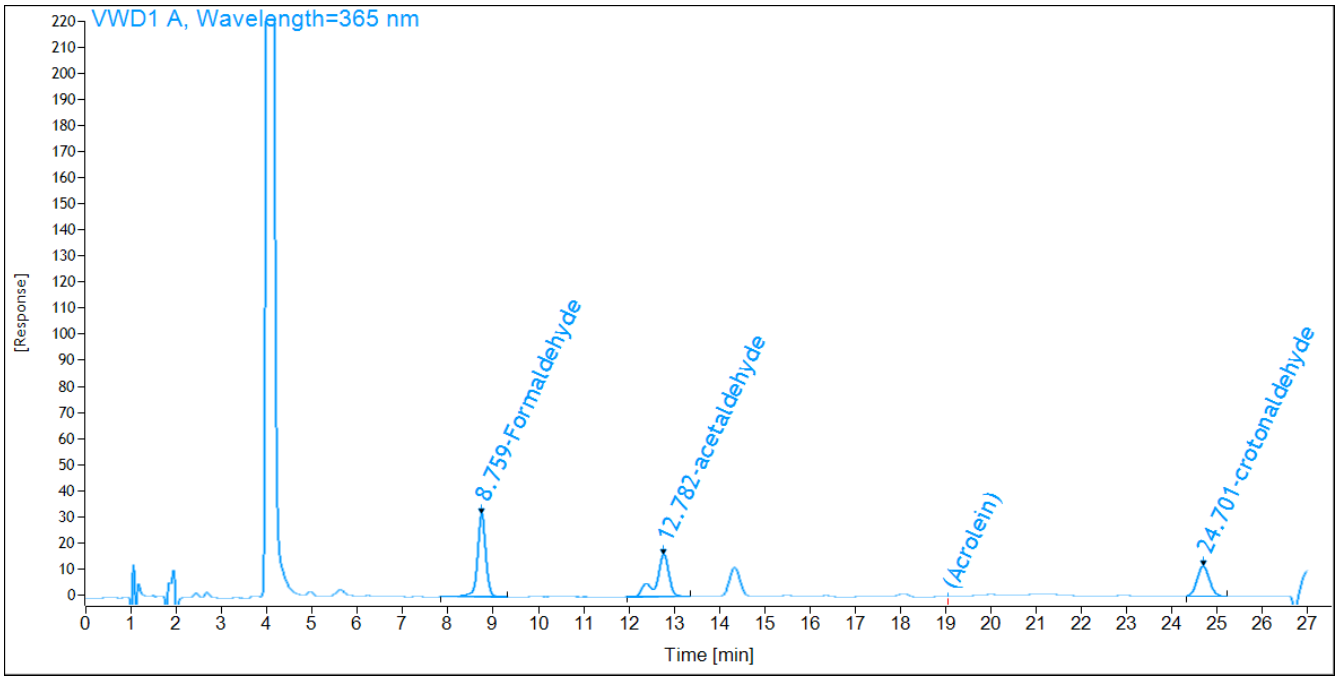
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.75	404.3571	1	2.73	2.730	ug/mL
acetaldehyde	MM	12.77	323.2908	1	2.67	2.668	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.73	219.8177	1	2.46	2.458	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\023-0601.D
Sample name: 0614-129-01-1-MSD-1
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 3:07:49 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument: Selma
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 23
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



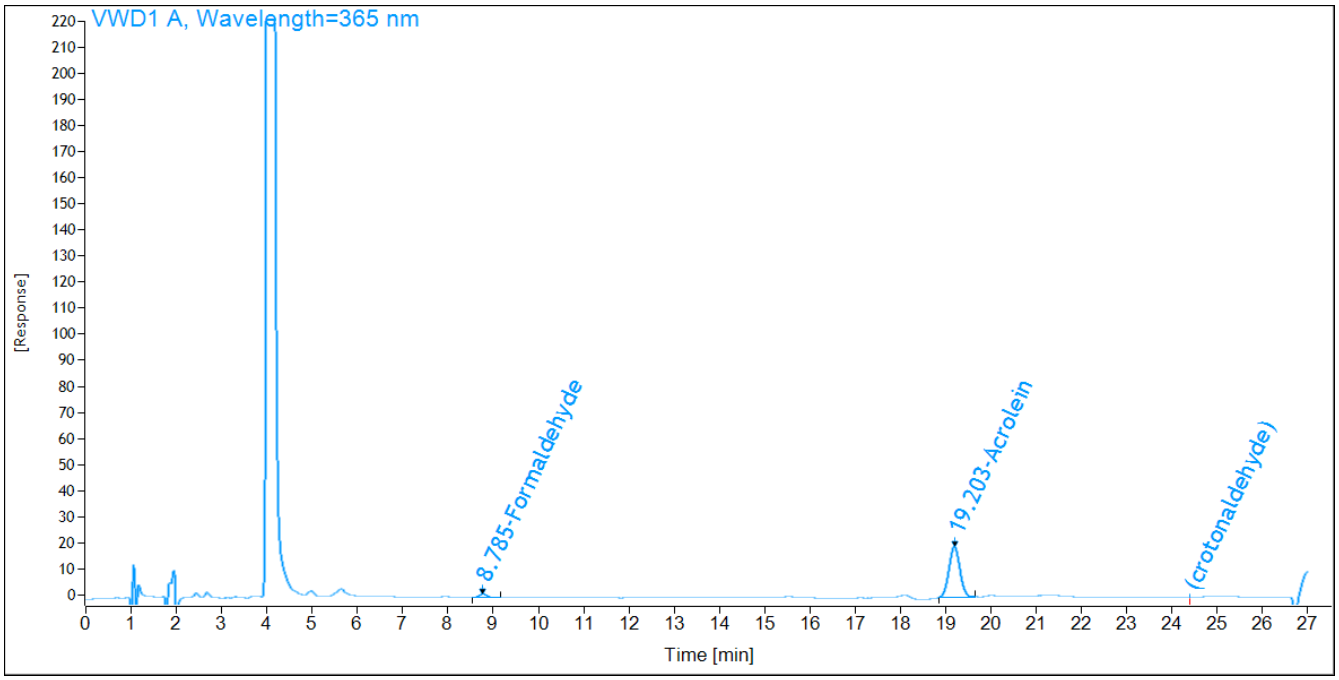
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.76	404.5736	1	2.73	2.732	ug/mL
acetaldehyde	MM	12.78	323.8145	1	2.67	2.672	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.70	219.6688	1	2.46	2.457	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\024-0701.D
Sample name: 0614-129-01-1-MS-2
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 3:39:15 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument: Selma
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 24
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



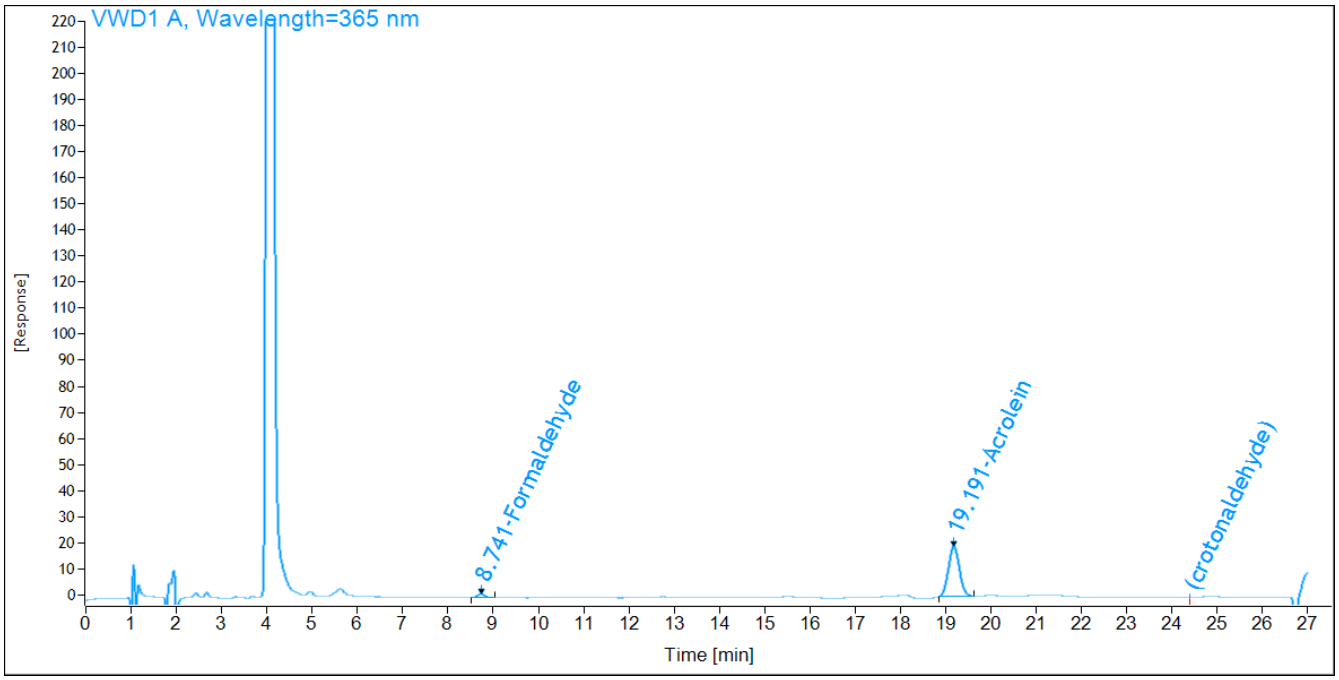
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.78	15.5088	1	0.12	0.119	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acrolein	MM	19.20	325.7867	1	3.00	3.004	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\025-0801.D
Sample name: 0614-129-01-1-MSD-2
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 4:10:37 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument: Selma
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 25
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



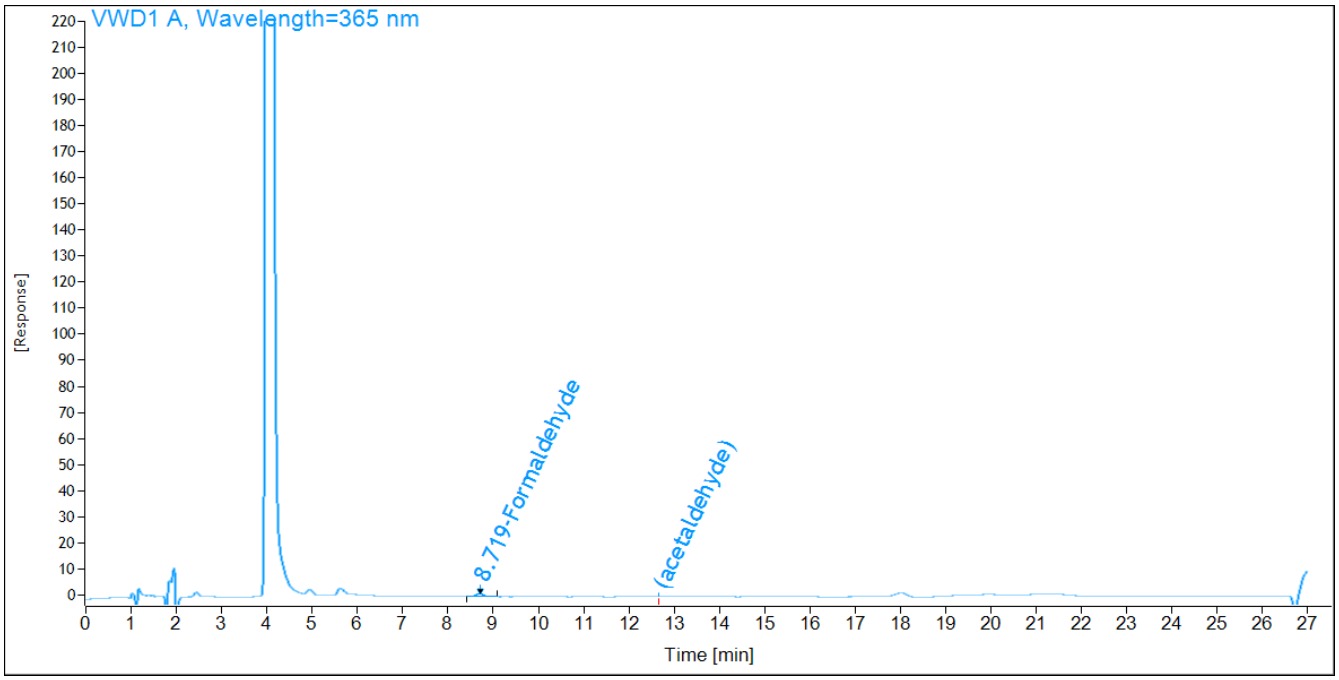
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.74	13.9585	1	0.11	0.108	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acrolein	MM	19.19	321.2101	1	2.96	2.959	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\026-0901.D
Sample name: DNPH Blank
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 4:42:02 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument:
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 26
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



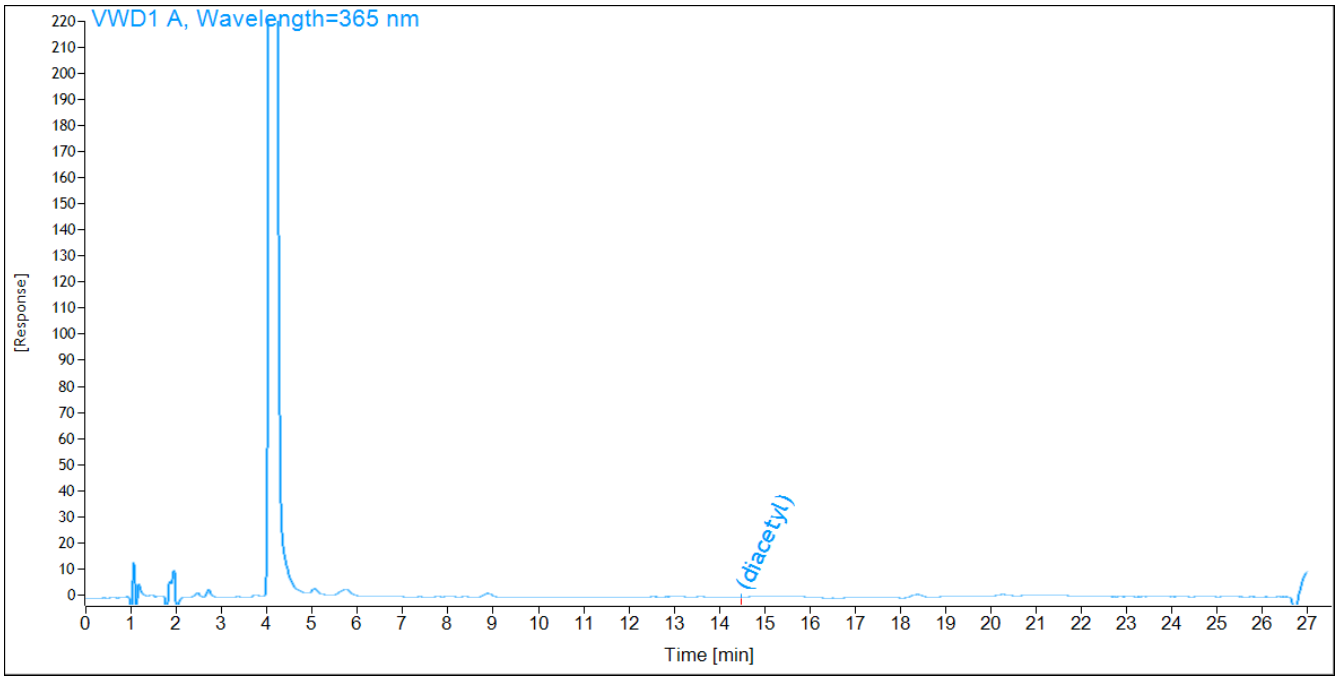
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.72	14.6874	1	0.11	0.113	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\021-1001.D
Sample name: ~~0614-129-1~~ 0614-129-01-1
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 11:00:28 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 21
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



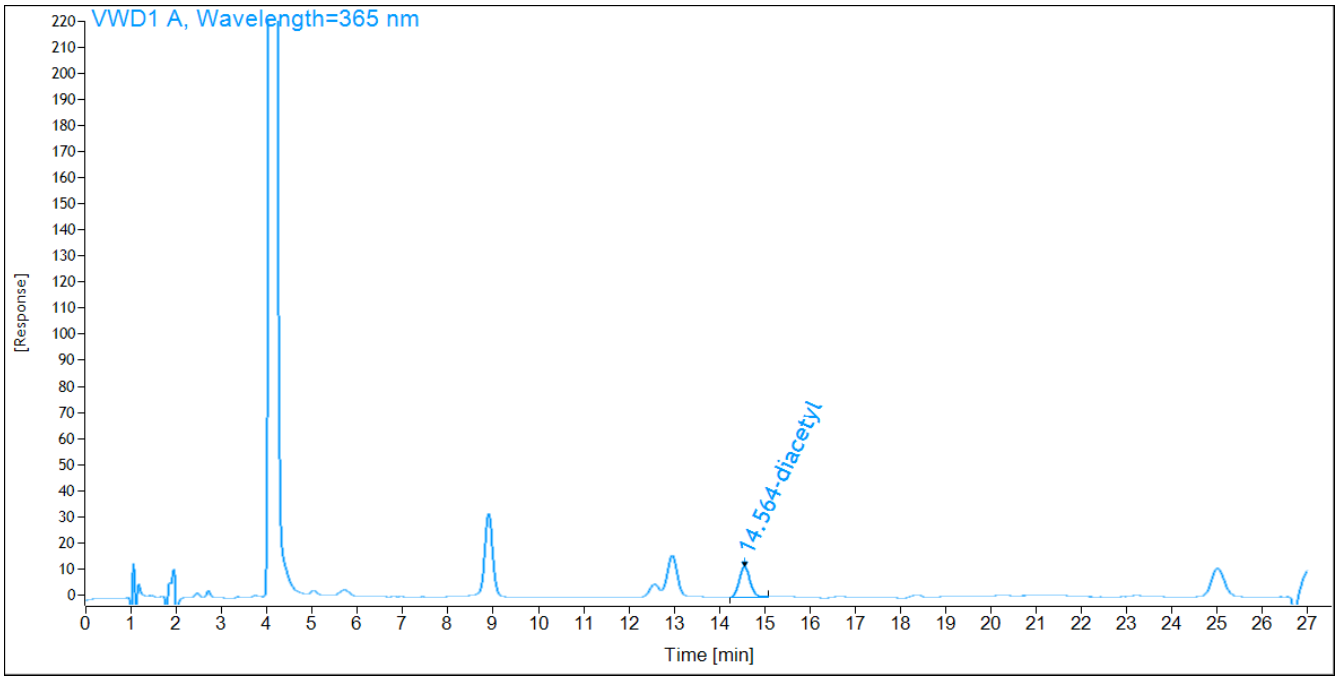
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl				11.5	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\022-1101.D
Sample name: ~~0614-129-1-MS-1~~ 0614-129-01-1-MS-1
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 11:31:50 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 22
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



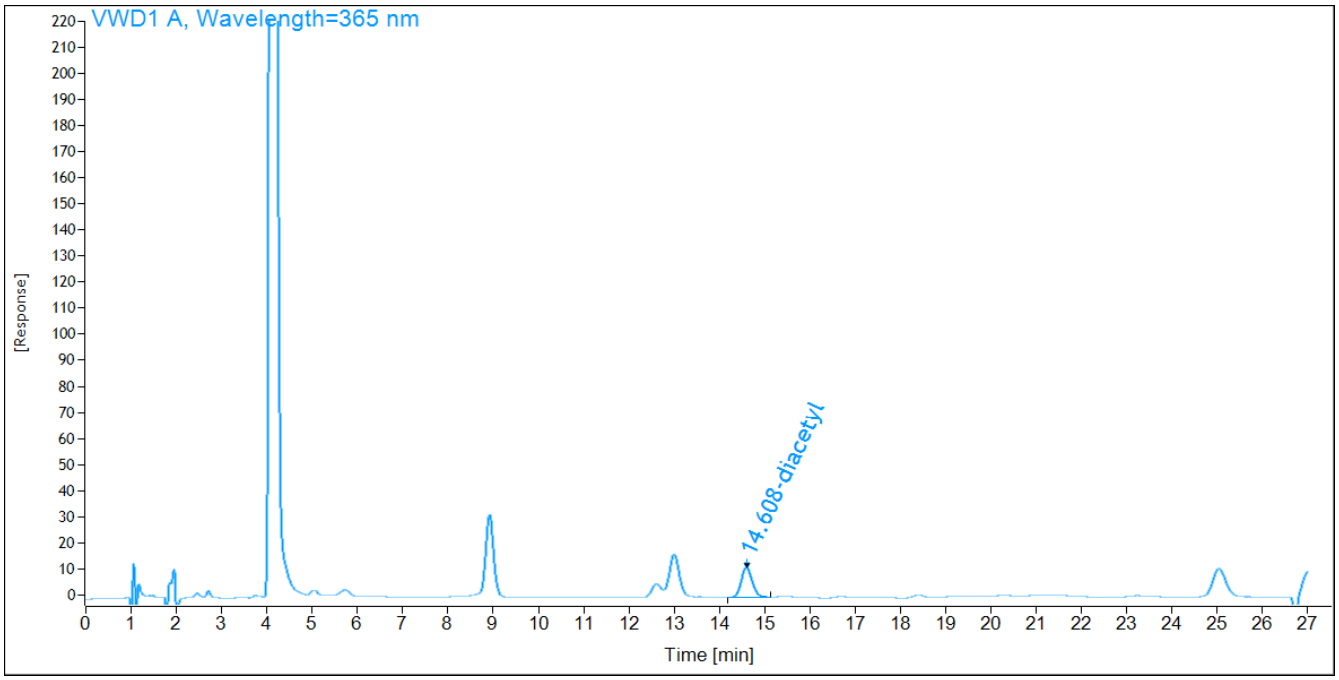
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	BB	14.56	196.0190	1	3.58	3.579	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\023-1201.D
Sample name: ~~0614-129-1-MSD-1~~ 0614-129-01-1-MSD-1
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/25/2014 12:03:18 AM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Sample
Location: Vial 23
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	MF	14.61	197.7684	1	3.61	3.612	ug/mL

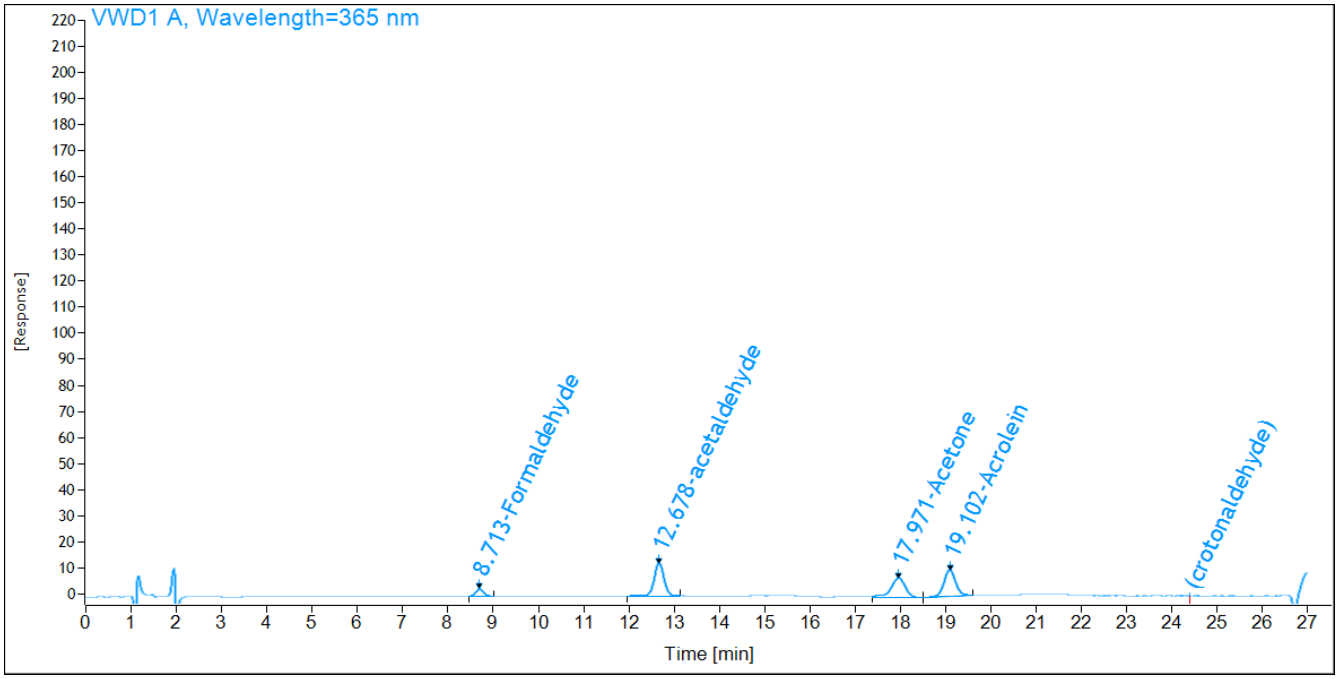
Calibration Curve Chromatograms

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\002-0301.D
Sample name: HPLC74PG132 #2
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 10:23:22 AM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 2
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



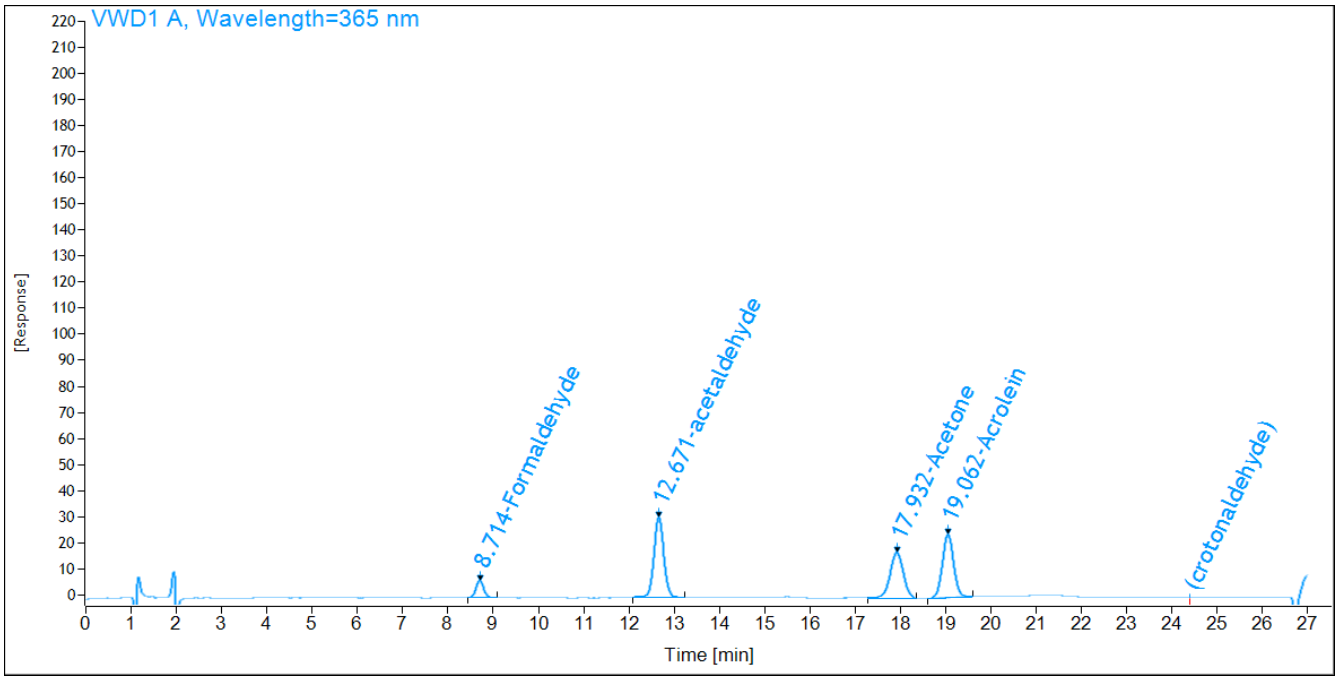
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.71	34.9384	1	0.25	0.249	ug/mL
acetaldehyde	BB	12.68	199.0981	1	1.61	1.610	ug/mL
Acetone	BV	17.97	160.9626	1	1.63	1.632	ug/mL
Acrolein	VB	19.10	184.7332	1	1.62	1.617	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\003-0401.D
Sample name: HPLC74PG132 #3
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 10:54:56 AM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 3
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



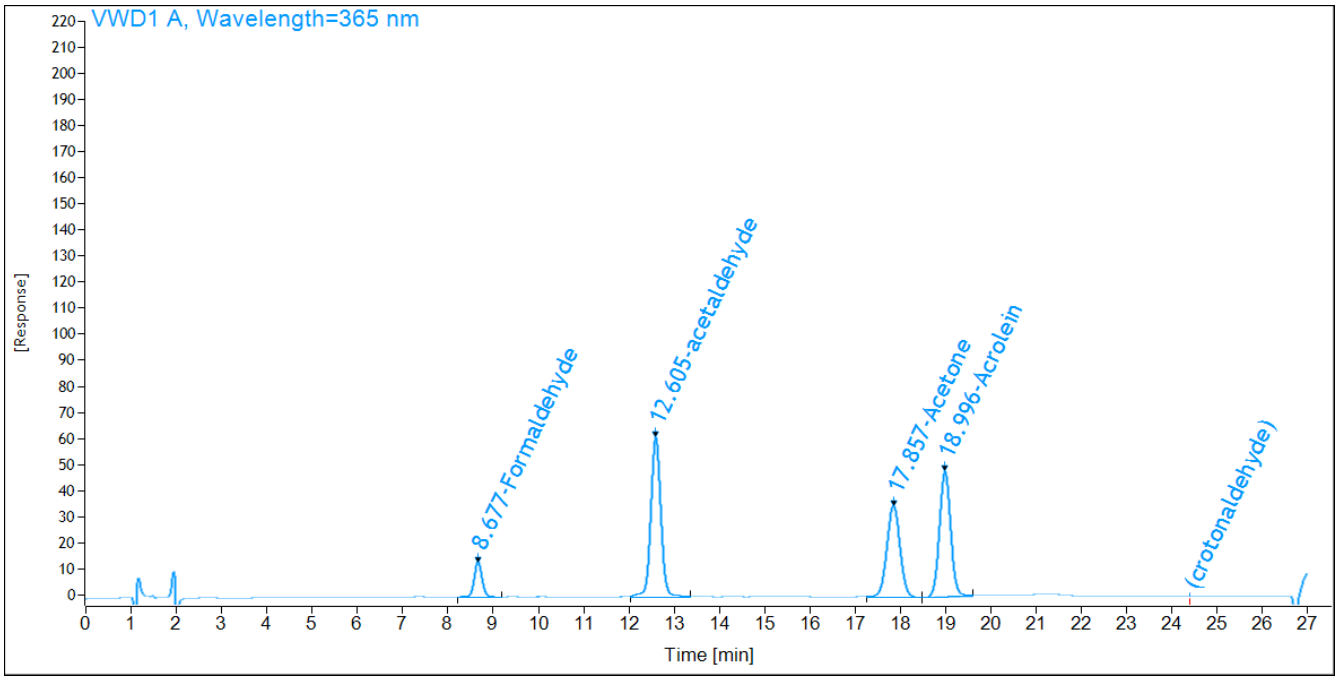
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.71	80.7603	1	0.56	0.557	ug/mL
acetaldehyde	BB	12.67	475.6296	1	3.97	3.966	ug/mL
Acetone	MM	17.93	358.9777	1	3.89	3.894	ug/mL
Acrolein	BB	19.06	422.3789	1	3.95	3.953	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\004-0501.D
Sample name: HPLC74PG132 #4
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 11:26:27 AM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 4
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



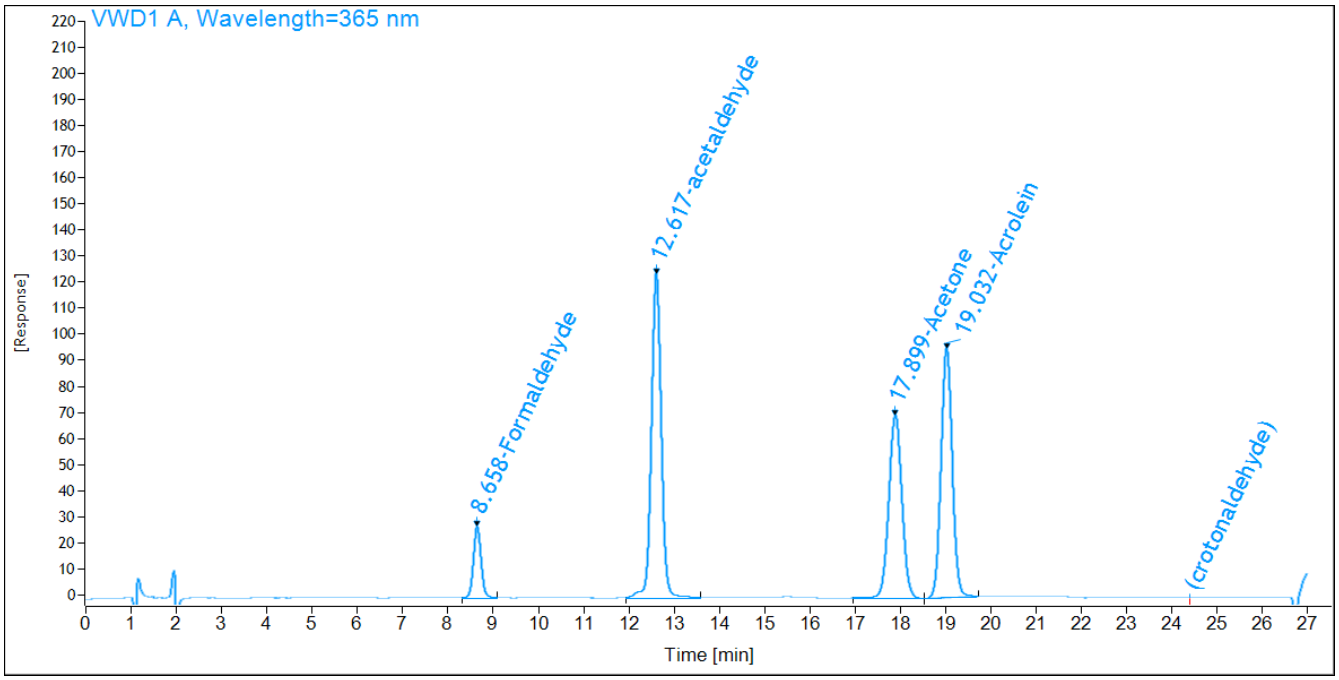
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.68	164.2520	1	1.12	1.118	ug/mL
acetaldehyde	BB	12.60	950.9119	1	8.02	8.015	ug/mL
Acetone	BV	17.86	721.4064	1	8.04	8.035	ug/mL
Acrolein	VB	19.00	832.8152	1	7.99	7.989	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\005-0601.D
Sample name: HPLC74PG132 #5
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 11:57:54 AM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 5
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



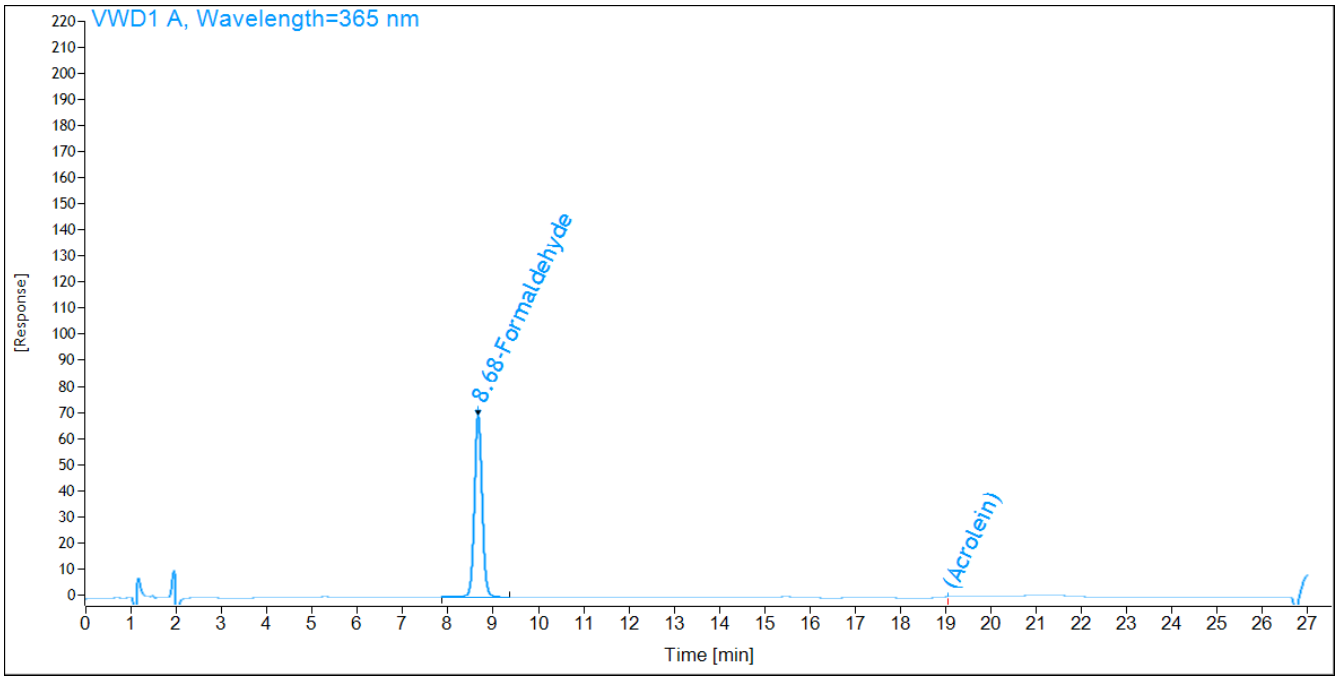
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.66	324.1510	1	2.19	2.192	ug/mL
acetaldehyde	BB	12.62	1889.1857	1	16.01	16.009	ug/mL
Acetone	BV	17.90	1422.1600	1	16.04	16.042	ug/mL
Acrolein	VB	19.03	1651.5762	1	16.04	16.040	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\006-0701.D
Sample name: HPLC74PG132 #6
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 12:29:20 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 6
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



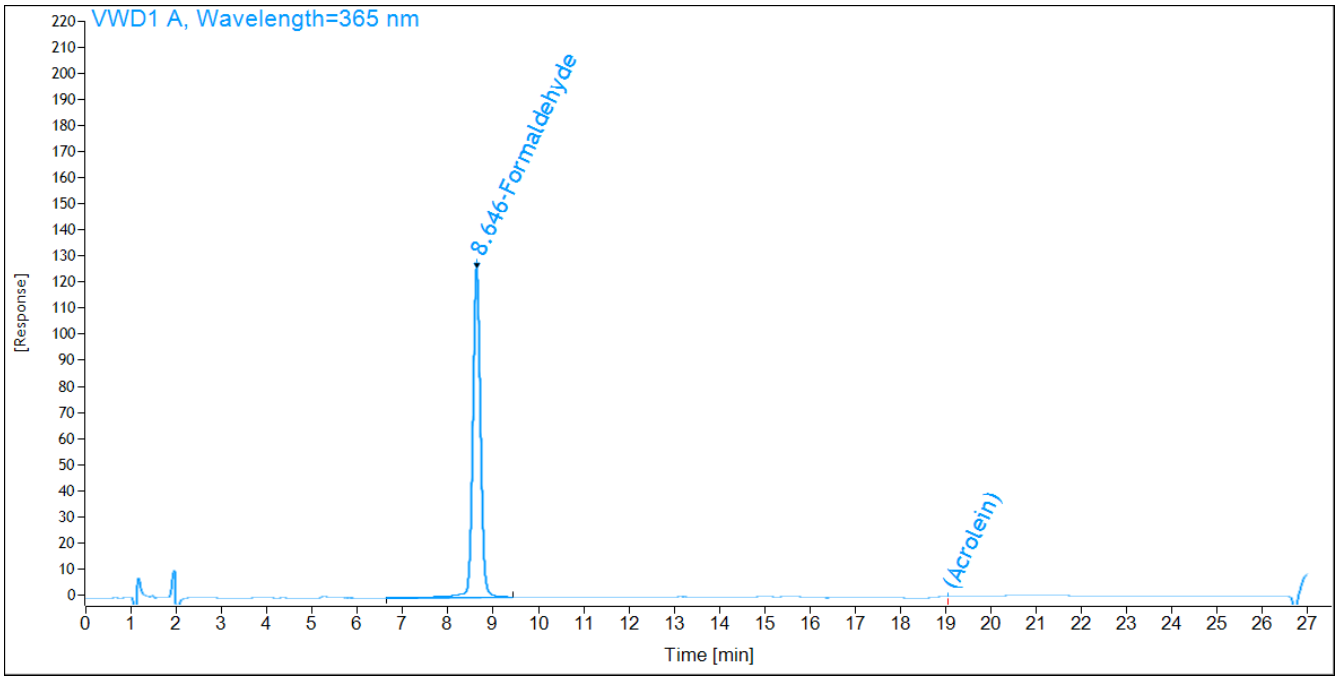
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.68	835.5799	1	5.63	5.626	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\007-0801.D
Sample name: HPLC74PG132 #7
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 1:00:48 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument:
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 7
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



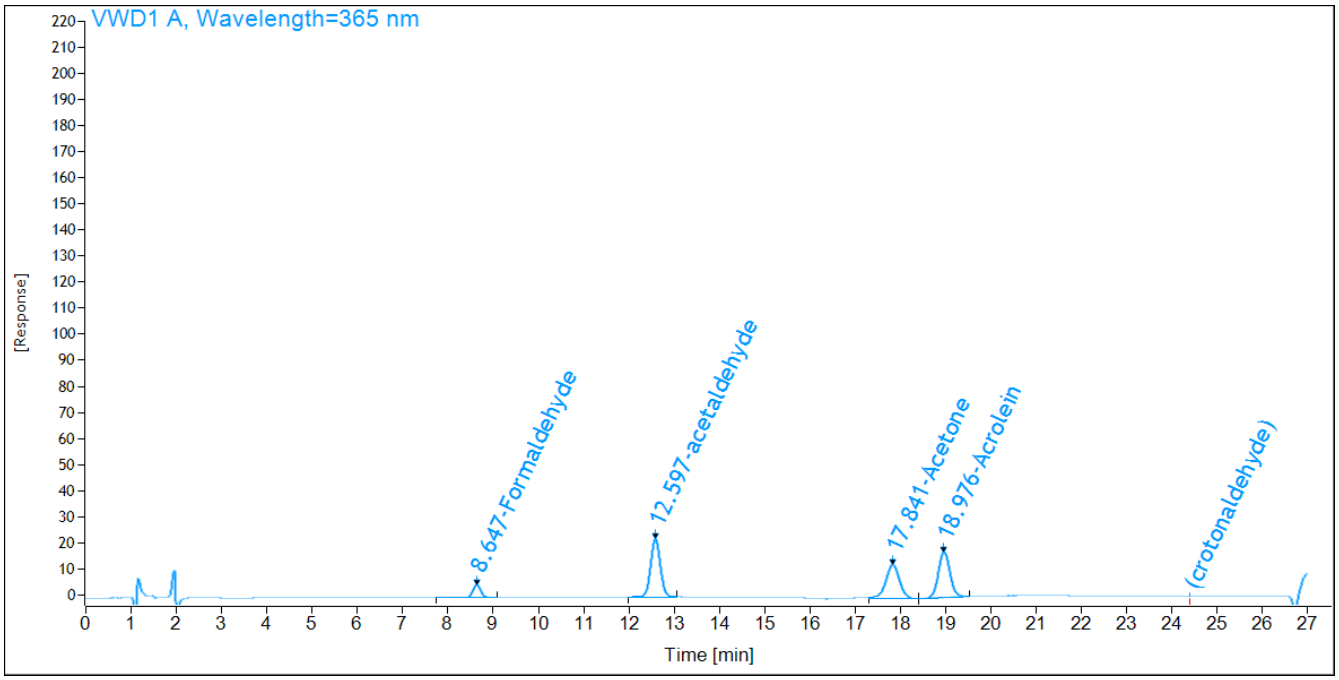
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.65	1516.9514	1	10.20	10.202	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\008-0901.D
Sample name: HPLC74PG132 #SS
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 1:32:16 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Control
Location: Vial 8
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



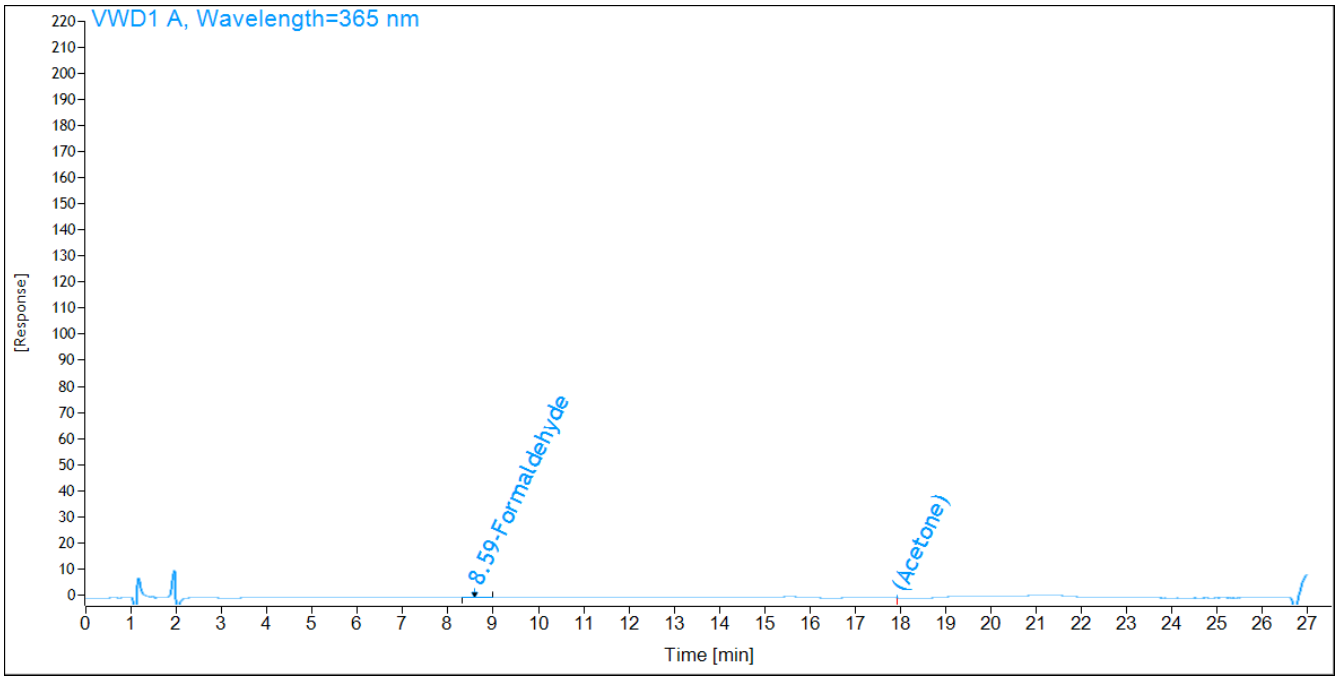
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.65	60.9195	1	0.42	0.424	ug/mL
acetaldehyde	BB	12.60	342.3796	1	2.83	2.830	ug/mL
Acetone	BV	17.84	276.6303	1	2.95	2.953	ug/mL
Acrolein	VB	18.98	315.5076	1	2.90	2.903	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\009-1001.D
Sample name: HPLC74PG132 #RB
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 2:03:45 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Control
Location: Vial 9
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



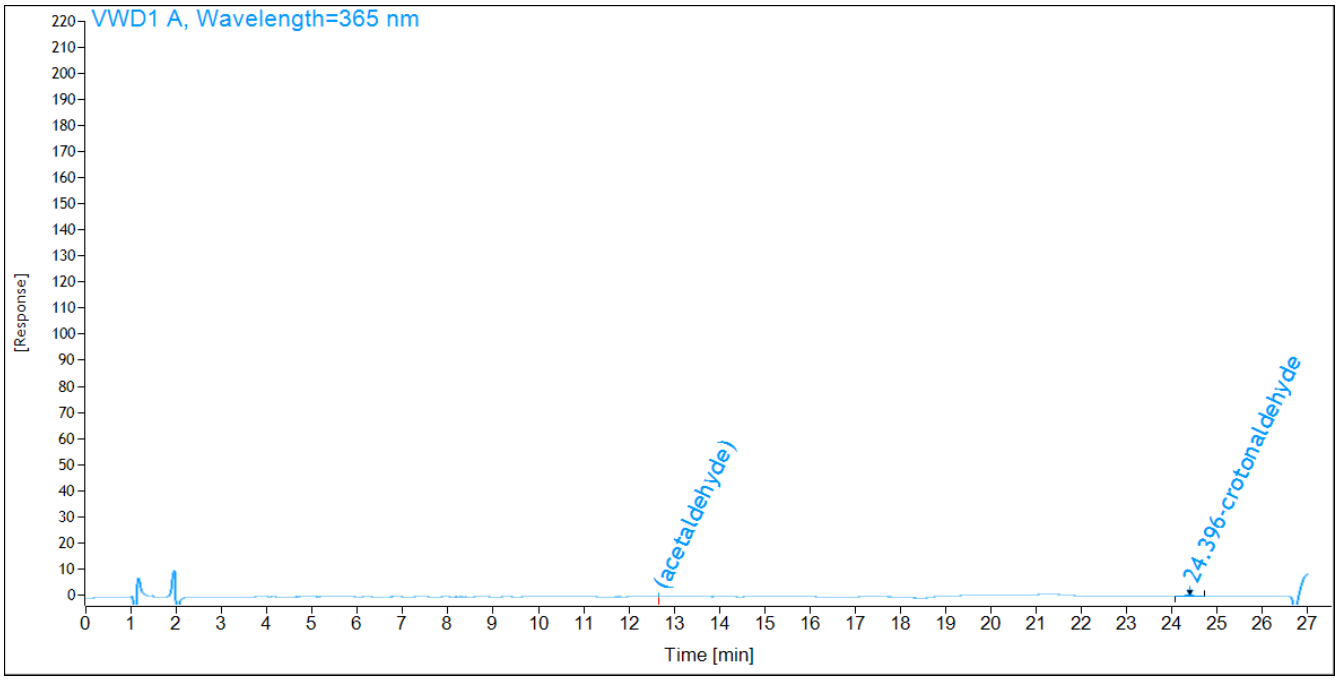
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.59	2.5968	1	0.03	0.032	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\011-1101.D
Sample name: HPLC75PG111 #1
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 2:35:13 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 11
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



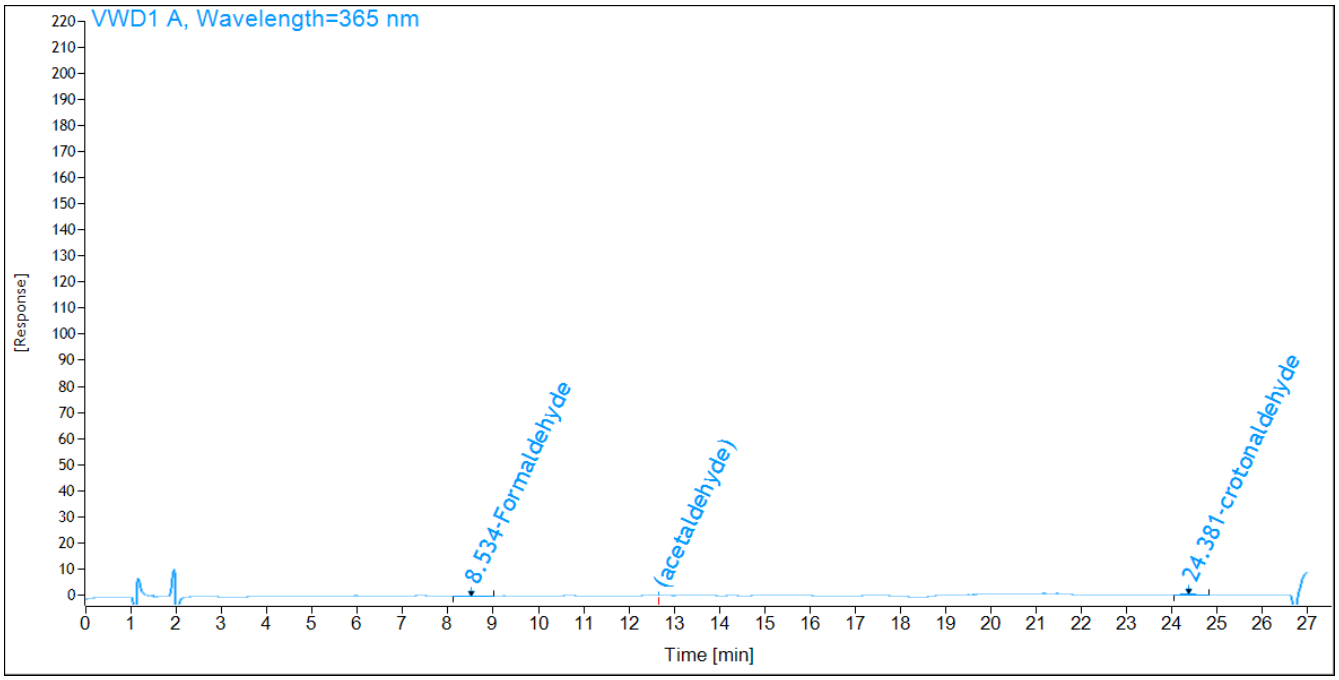
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	MM	24.40	8.1060	1	0.07	0.074	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\012-1201.D
Sample name: HPLC75PG111 #2
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 3:06:36 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 12
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



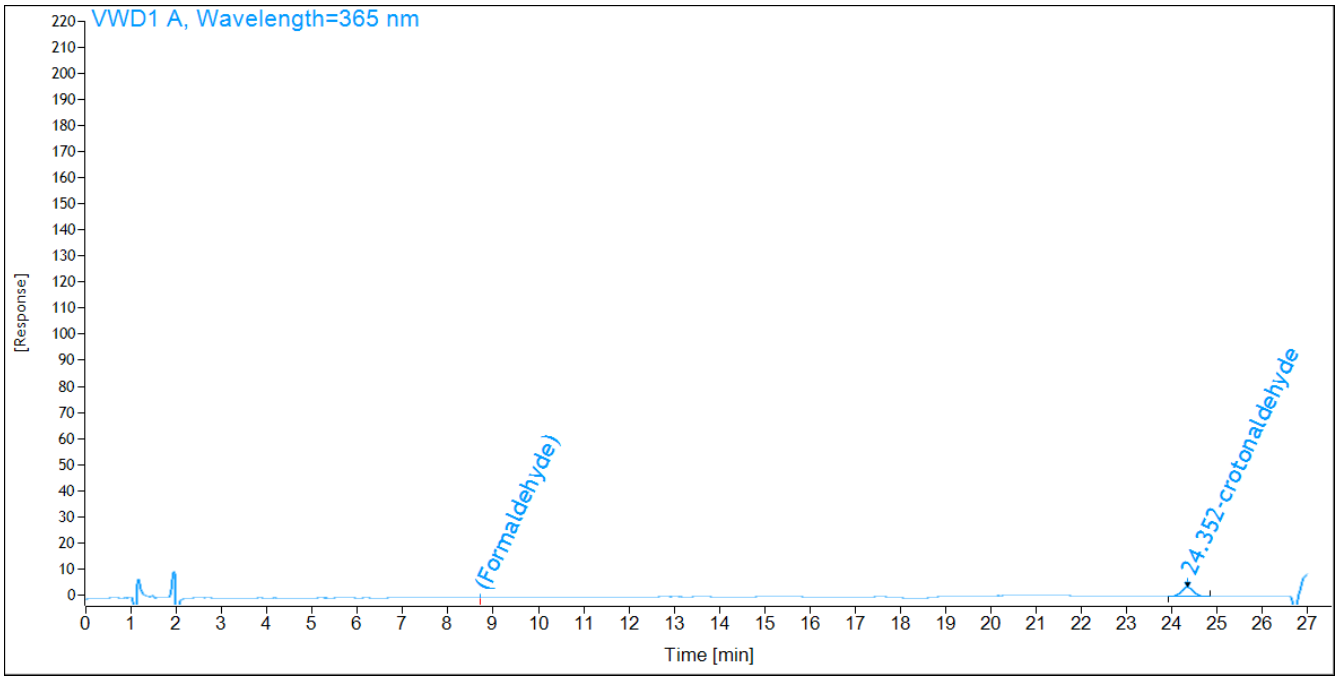
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BV	8.53	4.3282	1	0.04	0.044	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.38	12.6287	1	0.13	0.125	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\013-1301.D
Sample name: HPLC75PG111 #3
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 3:38:04 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument:
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 13
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



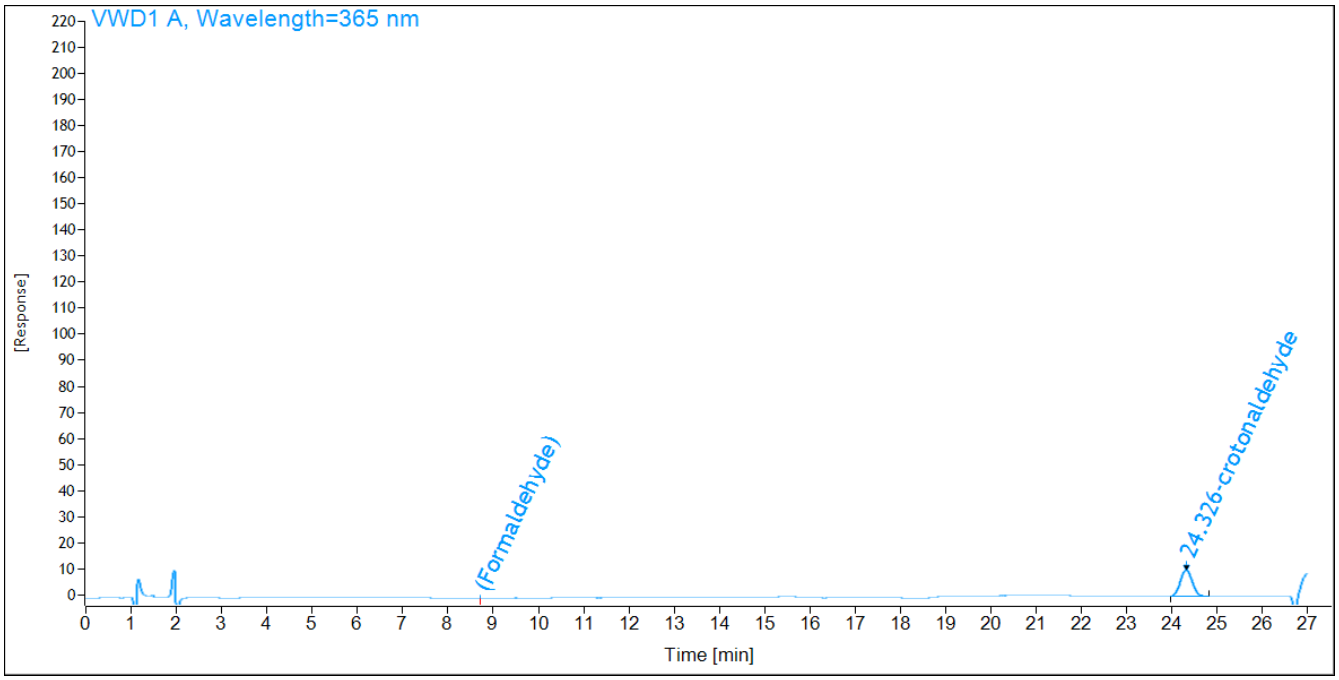
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.35	67.7572	1	0.75	0.746	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\014-1401.D
Sample name: HPLC75PG111 #4
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 4:09:31 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 14
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



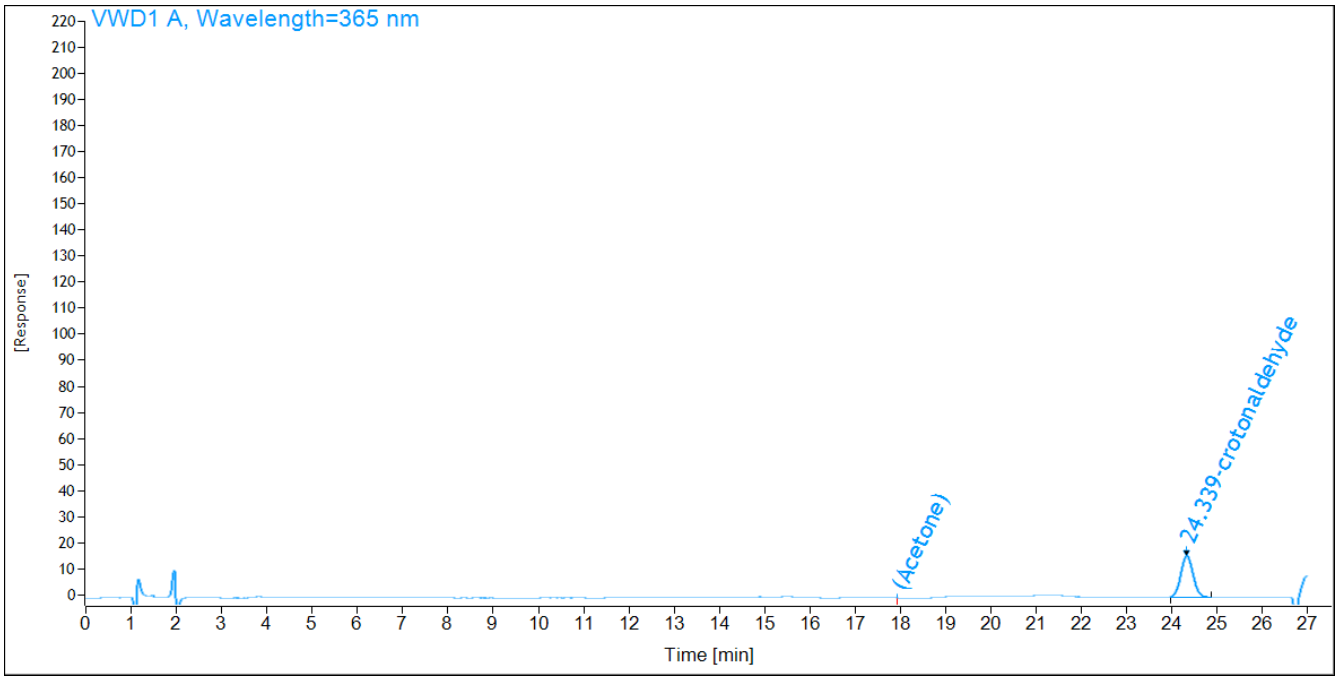
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.33	188.0900	1	2.10	2.101	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\015-1501.D
Sample name: HPLC75PG111 #5
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 4:40:57 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 15
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



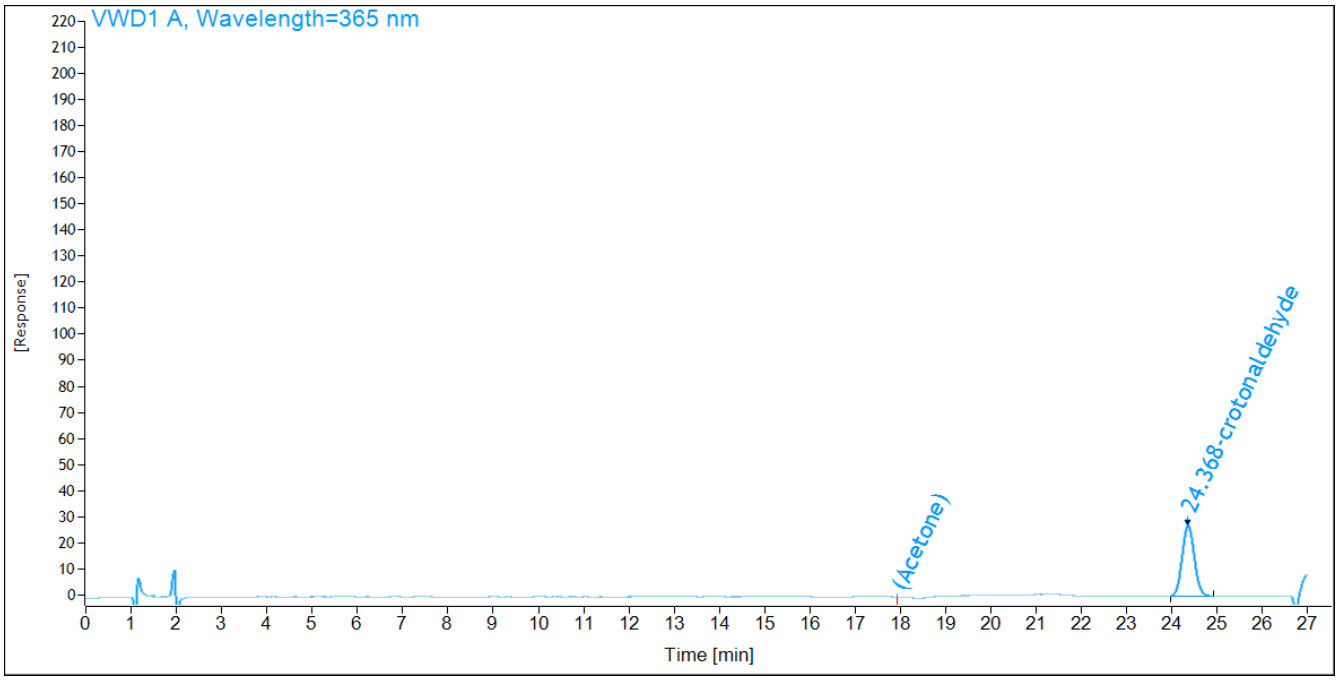
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.34	300.9091	1	3.37	3.372	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\016-1601.D
Sample name: HPLC75PG111 #6
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 5:12:24 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument:
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 16
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



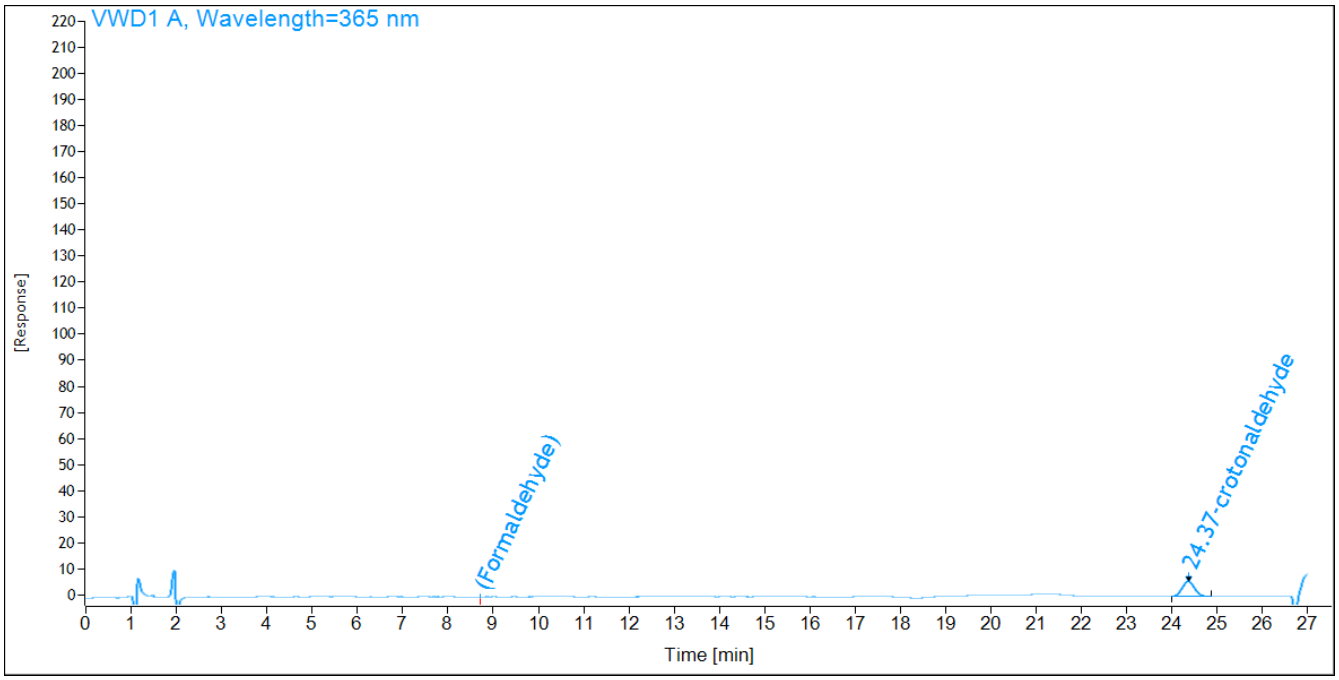
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.37	509.4789	1	5.72	5.720	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\017-1701.D
Sample name: HPLC75PG111 #SS
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 5:43:55 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument:
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Control
Location: Vial 17
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



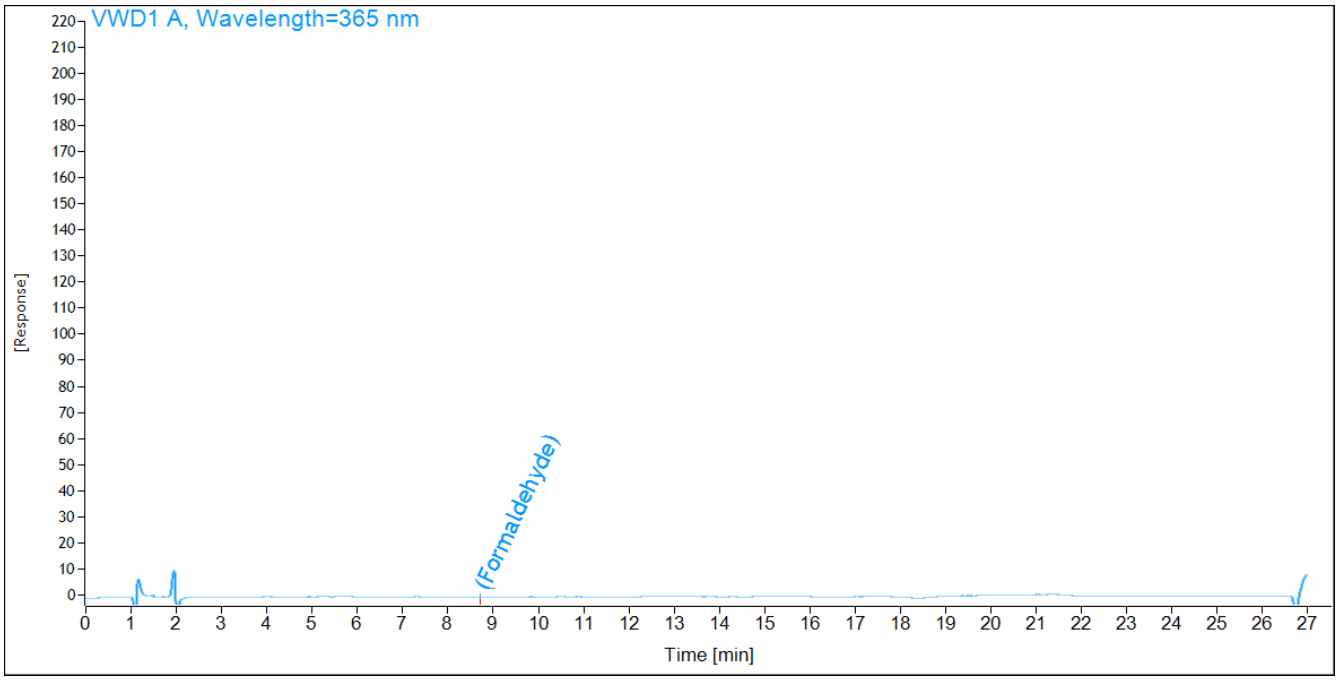
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.37	104.8998	1	1.16	1.164	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG111 2014-06-18 09-17-59\018-1801.D
Sample name: HPLC75PG111 #RB
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/18/2014 6:15:23 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:36:21 AM
Instrument: Selma
Sequence_Name HPLC75PG111 2014-06-18 09-17-59
Acq. operator: Wendy Gardow

Sample type: Control
Location: Vial 18
Injection volume: 5.000
Injection: 1 of 1
File_Version 5



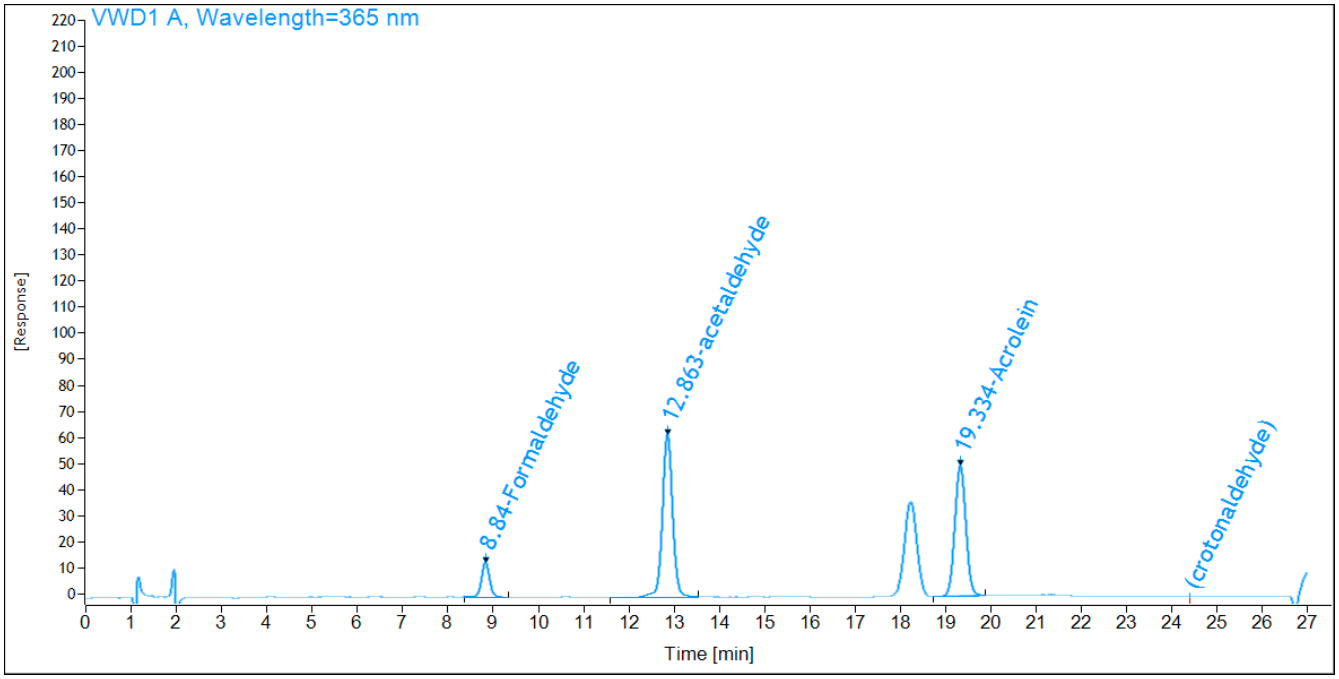
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acetone				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\004-0201.D
Sample name: HPLC74PG132 #4
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 1:02:05 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument: Selma
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 4
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



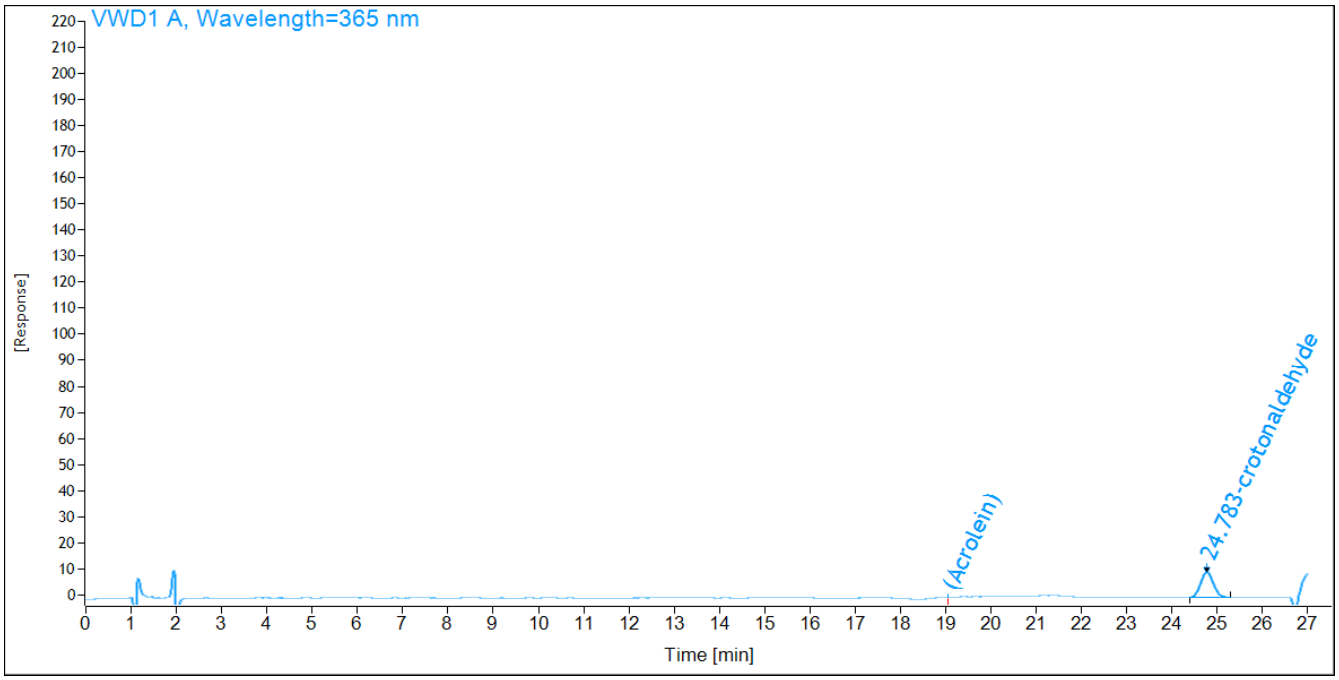
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.84	167.2730	1	1.14	1.138	ug/mL
acetaldehyde	BB	12.86	976.4464	1	8.23	8.233	ug/mL
Acrolein	VB	19.33	850.5354	1	8.16	8.164	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\014-0301.D
Sample name: HPLC75PG111 #4
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 1:33:30 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument: Selma
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 14
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



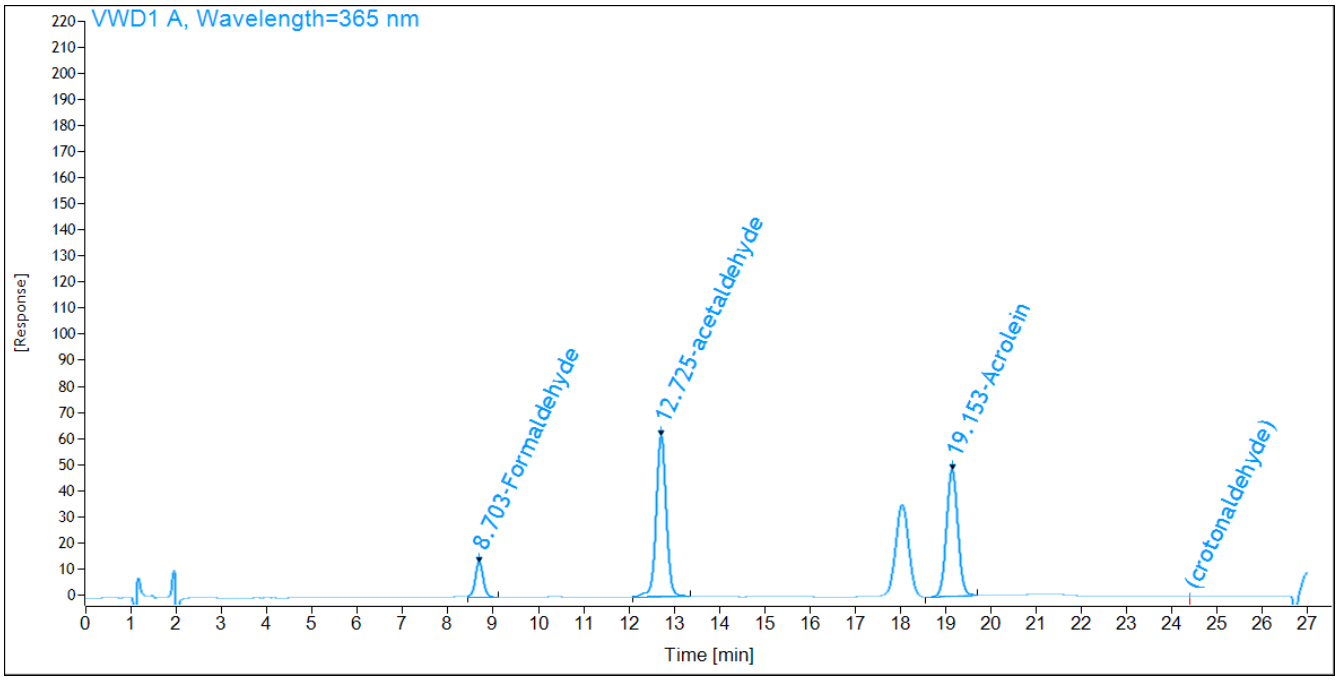
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.78	189.3786	1	2.12	2.116	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\004-1001.D
Sample name: HPLC74PG132 #4
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 5:13:29 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument:
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 4
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



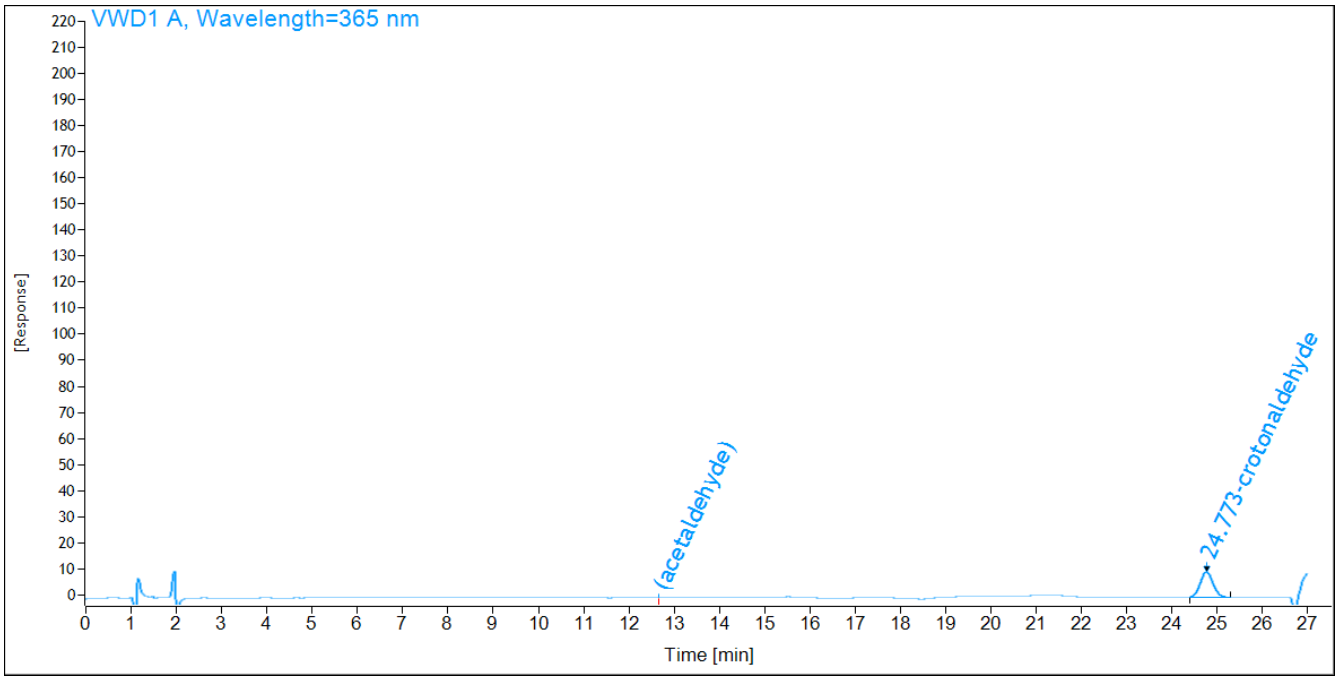
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde	BB	8.70	164.4350	1	1.12	1.119	ug/mL
acetaldehyde	BB	12.72	958.1895	1	8.08	8.077	ug/mL
Acrolein	VB	19.15	849.6913	1	8.16	8.155	ug/mL
crotonaldehyde				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG112 2014-06-23 12-28-54\014-1101.D
Sample name: HPLC75PG111 #4
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/23/2014 5:44:55 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG111.M
Last changed: 6/24/2014 9:39:28 AM
Instrument:
Sequence_Name HPLC75PG112 2014-06-23 12-28-54
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 14
Injection volume: 5.000
Injection: 1 of 1
File_Version 4



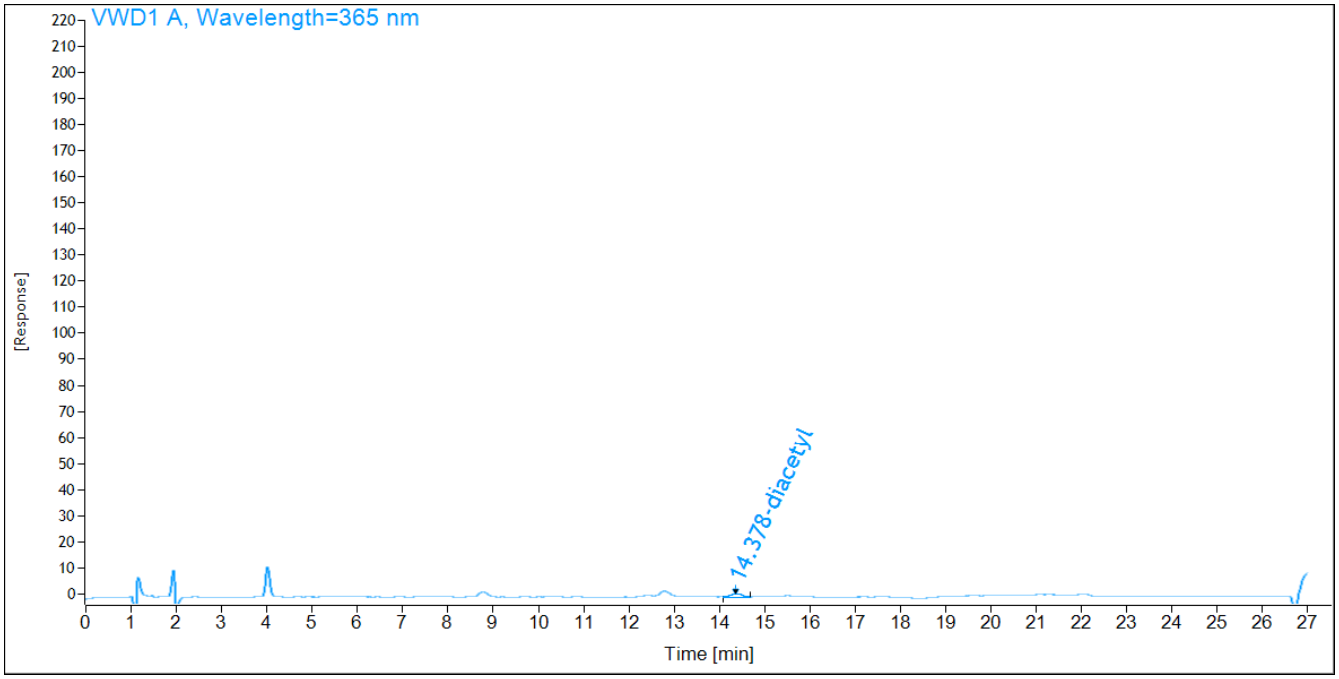
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
Formaldehyde				1	0.00	0.000	ug/mL
acetaldehyde				1	0.00	0.000	ug/mL
Acrolein				1	0.00	0.000	ug/mL
crotonaldehyde	BB	24.77	191.3038	1	2.14	2.137	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\091-0201.D
Sample name: Groucho036 #1
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 6:48:56 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 91
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



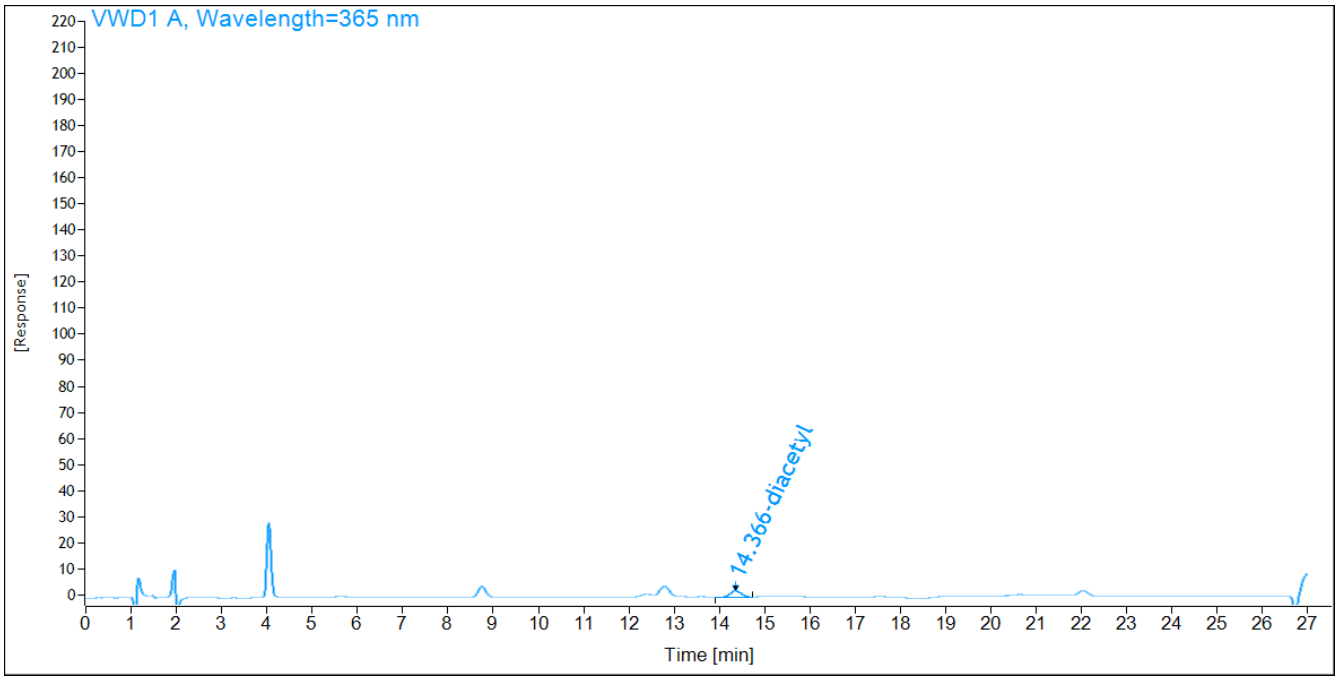
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	BV	14.38	26.9579	1	0.41	0.413	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\092-0301.D
Sample name: Groucho036 #2
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 7:20:30 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 92
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



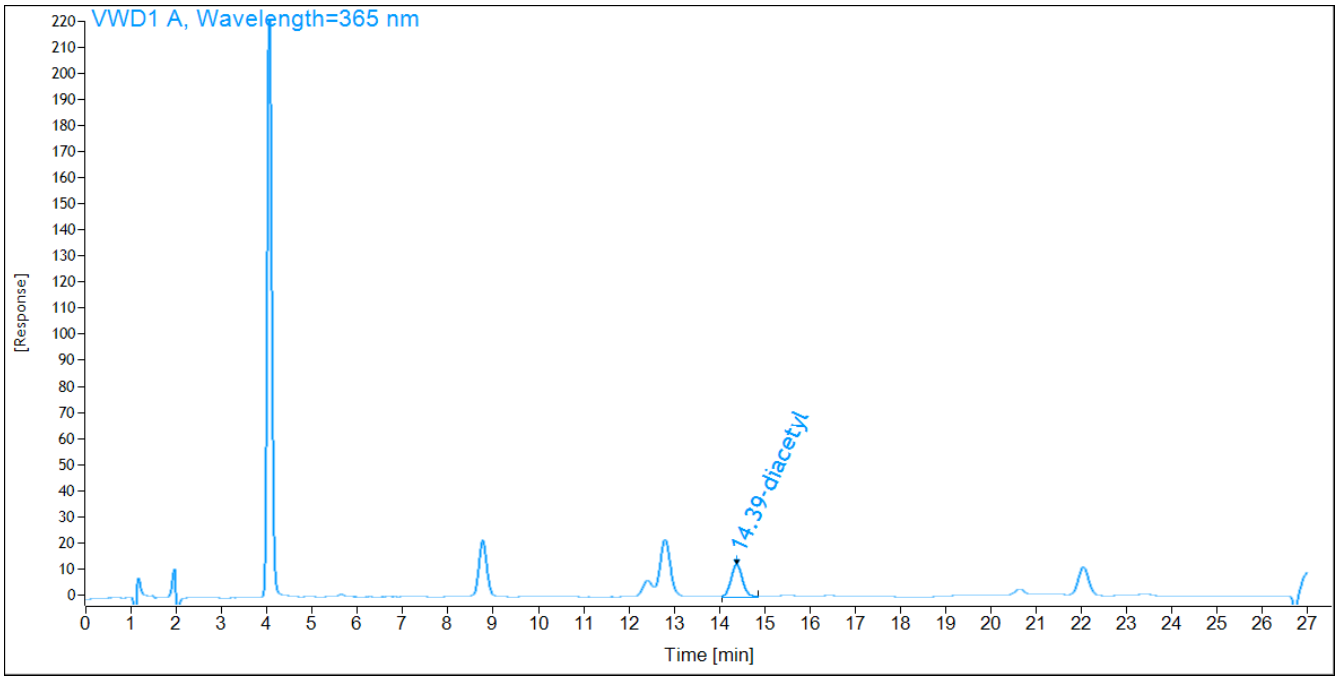
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	BV	14.37	44.1749	1	0.74	0.736	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\093-0401.D
Sample name: Groucho036 #3
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 7:51:53 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 93
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



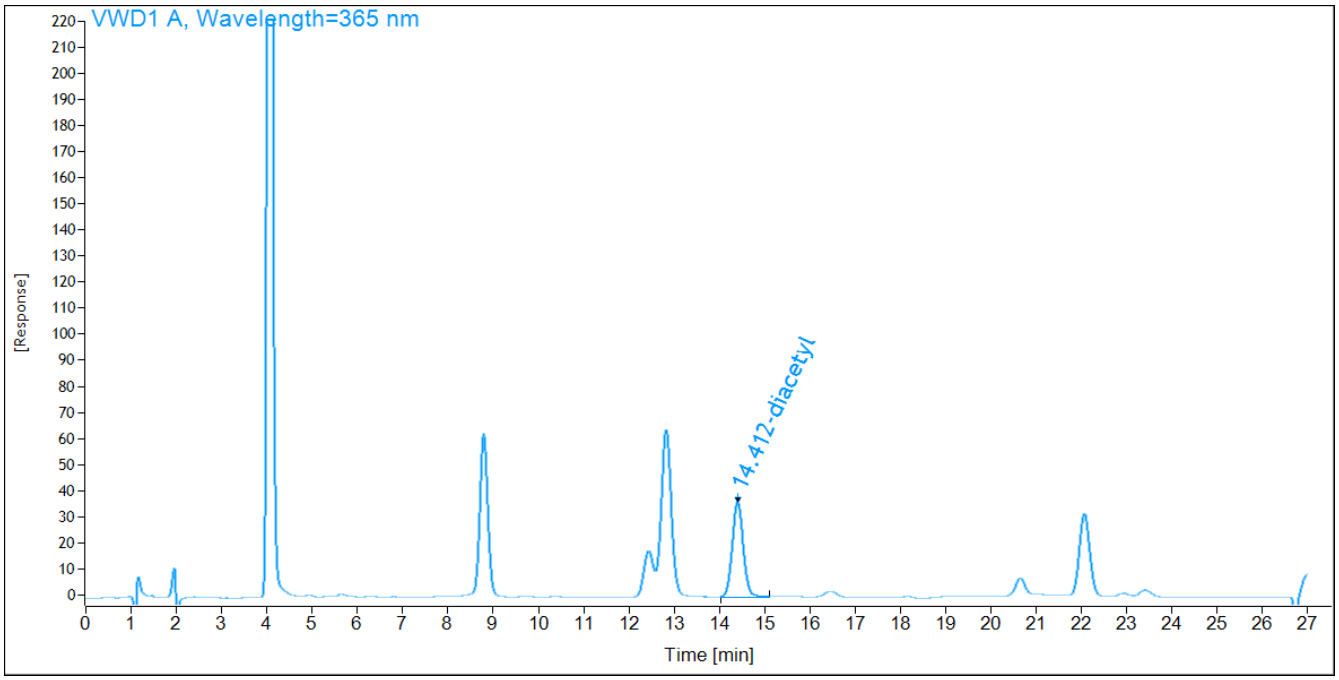
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	BB	14.39	227.9703	1	4.18	4.177	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\094-0501.D
Sample name: Groucho036 #4
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 8:23:24 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 94
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



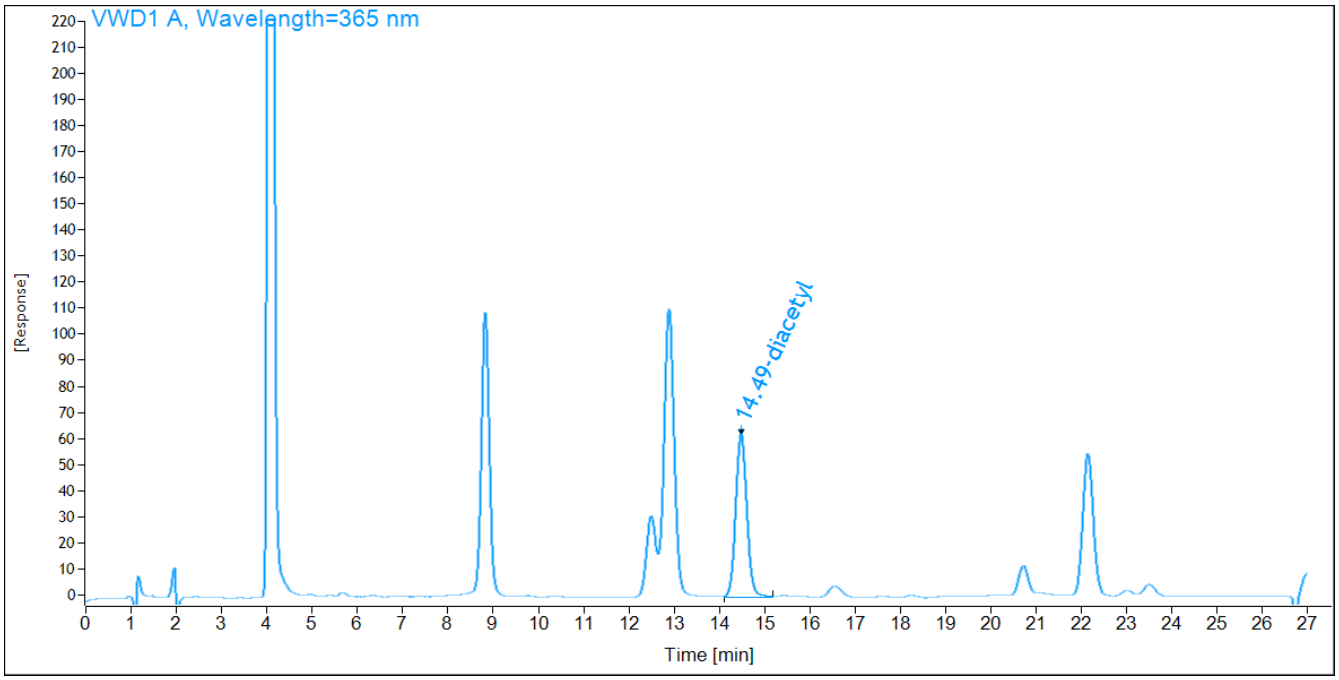
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	BB	14.41	621.8857	1	11.55	11.554	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\095-0601.D
Sample name: Groucho036 #5
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 8:54:43 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 95
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



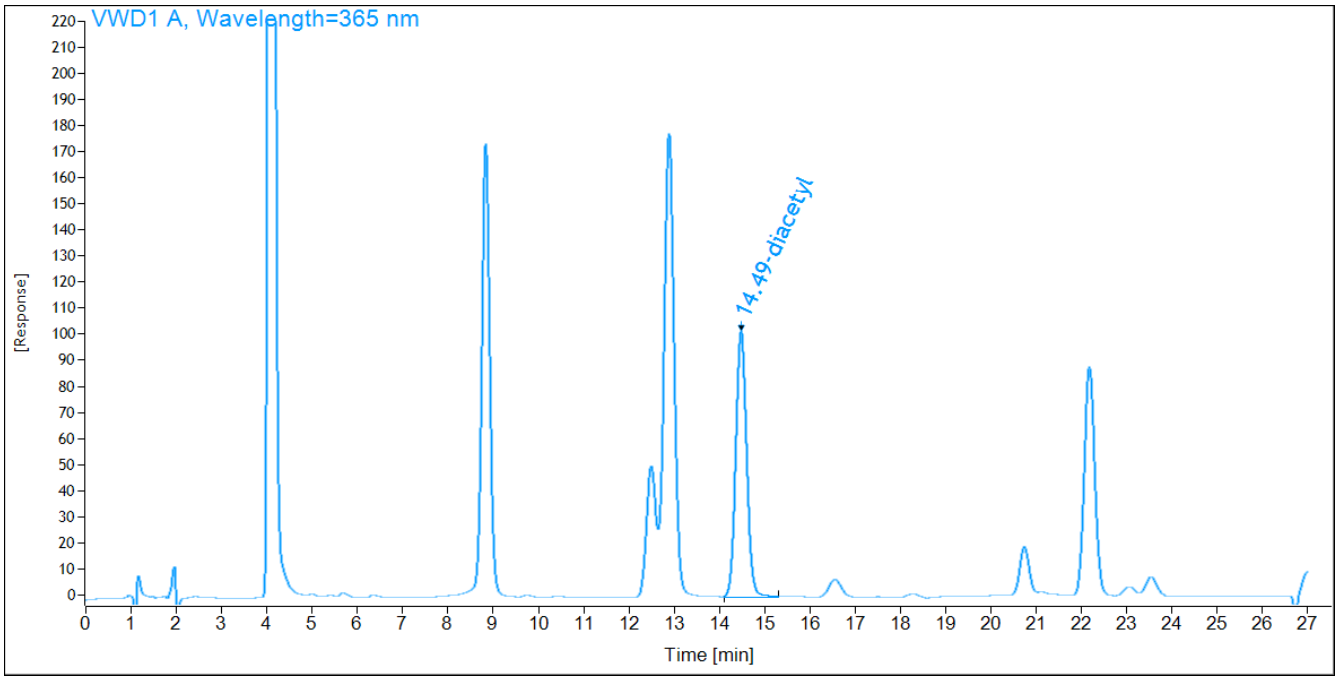
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	BB	14.49	1072.7483	1	20.00	19.996	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\096-0701.D
Sample name: Groucho036 #6
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 9:26:07 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 96
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



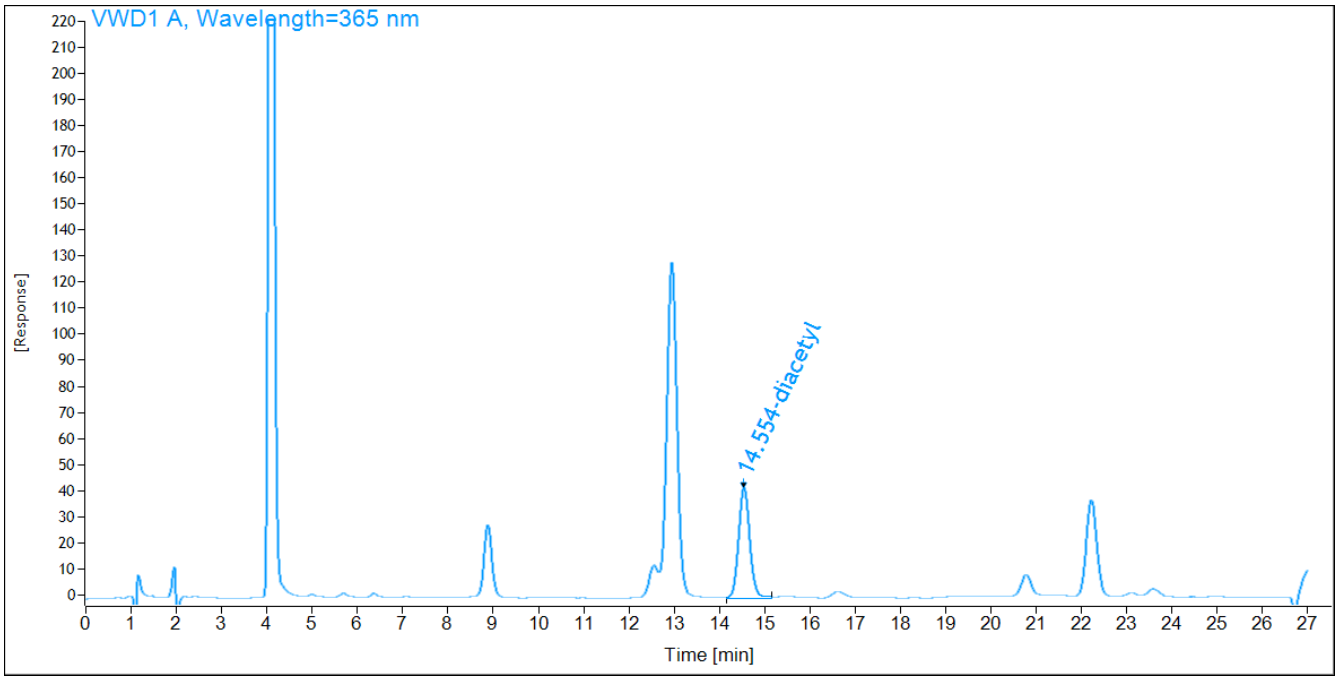
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	BV	14.49	1714.3359	1	32.01	32.011	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\097-0801.D
Sample name: Groucho036 #SS
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 9:57:35 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Control
Location: Vial 97
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



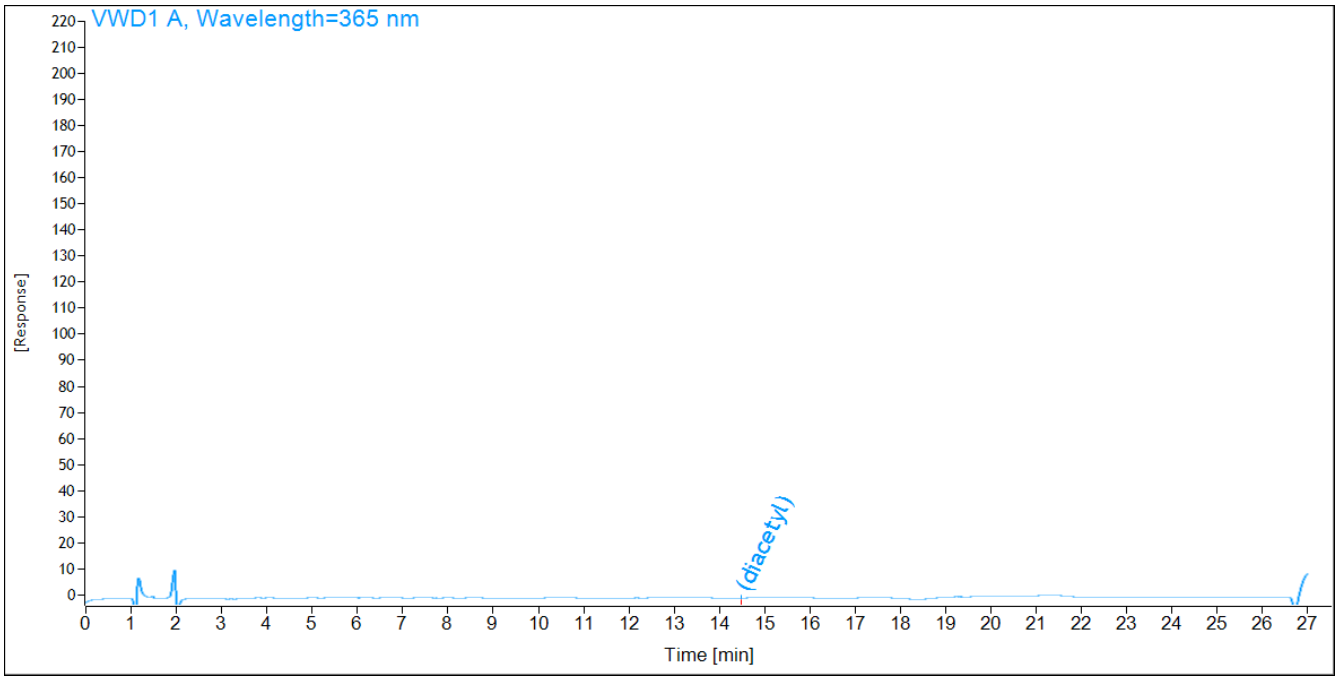
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	BB	14.55	731.1560	1	13.60	13.600	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\098-0901.D
Sample name: Groucho036 #RB
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/24/2014 10:28:54 PM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Control
Location: Vial 98
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



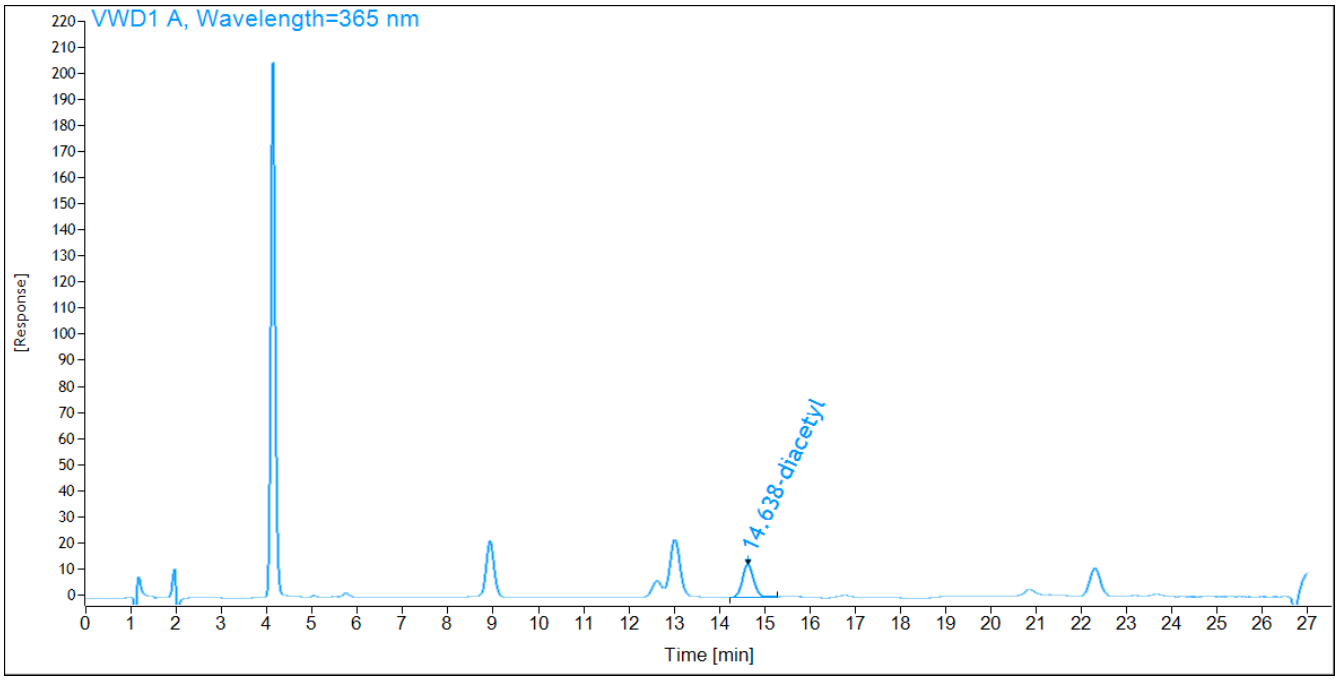
Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl				1	0.00	0.000	ug/mL

Chromatogram Report

Enthalpy Analytical, Inc.

Data file: C:\CHEM32\1\DATA\HPLC75PG113 2014-06-24 18-15-46\093-2001.D
Sample name: Groucho036 #3
File_Location \HPLC\2014\Selma\Quarter 2
Injection date: 6/25/2014 4:14:53 AM
Acq. method: ELIQUID_BC_EXT.M
Analysis method: HPLC75PG113.M
Last changed: 6/25/2014 11:15:20 AM
Instrument: Selma
Sequence_Name HPLC75PG113 2014-06-24 18-15-46
Acq. operator: Wendy Gardow

Sample type: Calibration
Location: Vial 93
Injection volume: 5.000
Injection: 1 of 1
File_Version 2



Name	Peak_Type	RT [min]	Area	Dil	ug/ml	Sample_Amount	Units
diacetyl	VV	14.64	233.9281	1	4.29	4.289	ug/mL

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