

CARRYOVER REPORT

ACQUISITION INFORMATION

System Name: 2695_3	Acquired By: Tester
Processing Method: Carryover PM	Project Name: SQT_F18SM7164A
Result Set Id: 3036	Sample Kit 1 Lot Number: W04040902
Sample Set Id: 3019	Sample Kit 1 Exp. Date: 4/30/2015 12:00:00 AM
Sample Set Name: 040 Carryover SSM	Column Serial Number: 017139167157 42
Sample Set Start Date: 6/22/2018 7:03:25 PM SGT	

TEST DESCRIPTION

The Carryover test starts with two pre blank (mobile phase) injections to demonstrate that the system is free of unexplained or "ghost" peaks. This is followed by three injections of a 0.01% carryover standard (0.4 ug/mL caffeine). A challenge solution containing 4 mg/mL of caffeine is injected, followed by three blank injections. The caffeine peak in the three post blank injections is quantitated (if detected) against a 0.01% carryover standard.

The test passes if the % carryover is $\leq 0.01\%$ or the peak is missing.

Carryover Results

	SampleName	Carryover Specification	Peak Type	% Carryover	Carryover Pass/Fail
1	Post Blank 1	$\leq 0.01\%$	Found	0.002	PASS

Certification

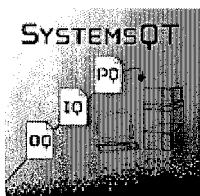
Comments _____

The undersigned performer attests that the values recorded and calculated above are accurate and complete.

Performer _____ Date _____
Signature

The undersigned reviewer accepts that the values recorded and calculated above are accurate and complete.

Reviewer _____ Date _____
Signature



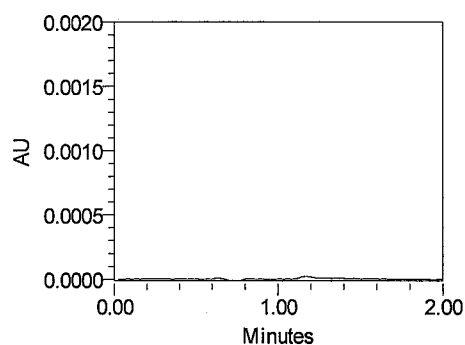
CARRYOVER REPORT

ACQUISITION INFORMATION

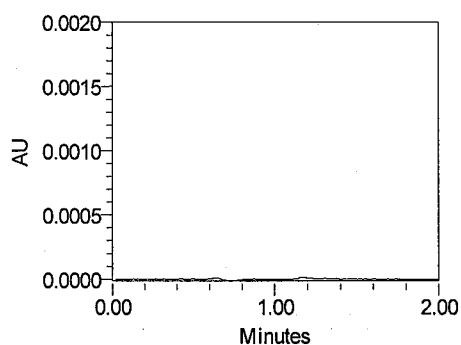
System Name: 2695_3
Project Name: SQT_F18SM7164A

Sample Set Id: 3019
Result Set Id: 3036

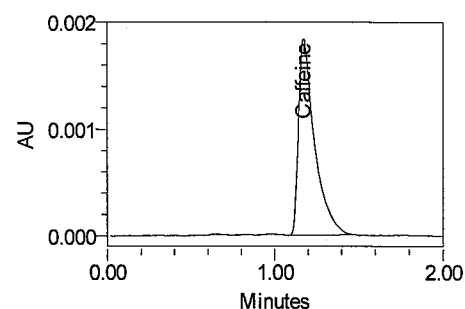
Carryover Chromatograms



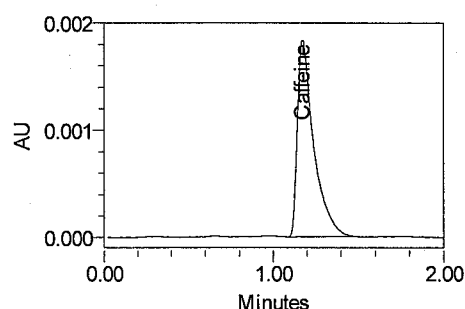
Sample PreBlank; Inj 1



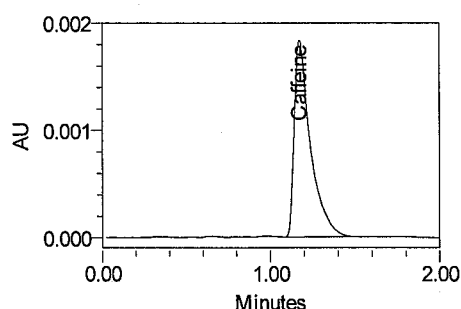
Sample PreBlank; Inj 2



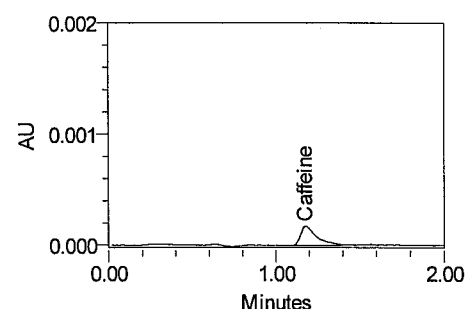
Sample Standard (0.01%);
Inj 1



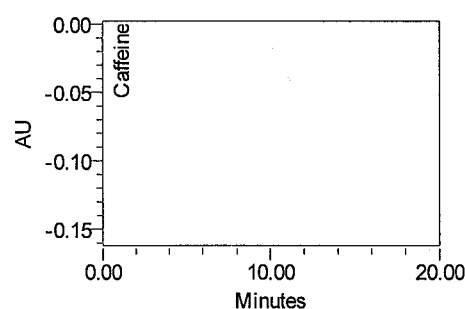
Sample Standard (0.01%);
Inj 2



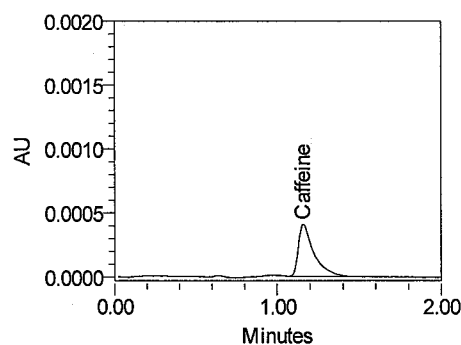
Sample Standard (0.01%);
Inj 3



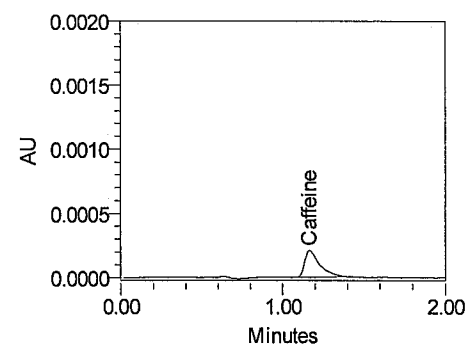
Sample (Pre)Post Blank; Inj
1



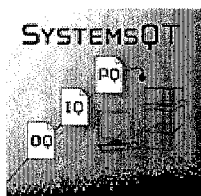
Sample Challenge (100%);
Inj 1



Sample Post Blank 1; Inj 1



Sample Post Blank 2; Inj 1

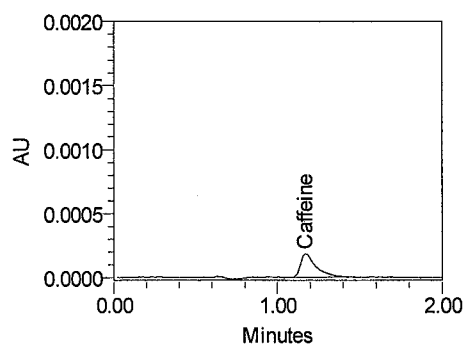


CARRYOVER REPORT

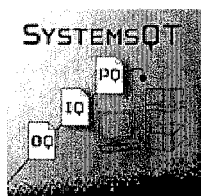
ACQUISITION INFORMATION

System Name: 2695_3
Project Name: SQT_F18SM7164A

Sample Set Id: 3019
Result Set Id: 3036



Sample Post Blank 3; Inj 1



CARRYOVER REPORT

ACQUISITION INFORMATION

System Name: 2695_3
Project Name: SQT_F18SM7164A

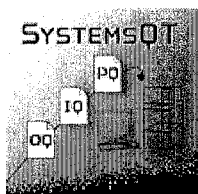
Sample Set Id: 3019
Result Set Id: 3036

Chromatographic Peak Results

	Sample Name	Sample Type	Vial	Name	RT	Area	Height (µV)	Amount	Peak Type	Result Id
1	PreBlank	Unknown	60	Caffeine	1.300				Missing	3076
2	PreBlank	Unknown	60	Caffeine	1.300				Missing	3077
3	Standard (0.01%)	Standard	61	Caffeine	1.175	12290	1841	0.010	Found	3072
4	Standard (0.01%)	Standard	61	Caffeine	1.175	12263	1840	0.010	Found	3073
5	Standard (0.01%)	Standard	61	Caffeine	1.174	12265	1832	0.010	Found	3074
6	(Pre)Post Blank	Unknown	63	Caffeine	1.178	1173	177	0.001	Found	3078
7	Challenge (100%)	Unknown	62	Caffeine	1.182	45825758	3237607	37.339	Found	3075
8	Post Blank 1	Unknown	63	Caffeine	1.159	2638	407	0.002	Found	3079
9	Post Blank 2	Unknown	63	Caffeine	1.167	1333	208	0.001	Found	3080
10	Post Blank 3	Unknown	63	Caffeine	1.173	1228	185	0.001	Found	3081

Carryover Summary Results

	SampleName	Peak Type	% Carryover
1	Post Blank 1	Found	0.002



CARRYOVER REPORT

ACQUISITION INFORMATION

System Name: 2695_3	Acquired By: Tester
Processing Method: Carryover PM	Project Name: SQT_F18SM7164A
Result Set Id: 2985	Sample Kit 1 Lot Number: W04040902
Sample Set Id: 2980	Sample Kit 1 Exp. Date: 4/30/2015 12:00:00 AM
Sample Set Name: 040 Carryover SSM	Column Serial Number: 017139167157 42
Sample Set Start Date: 6/22/2018 6:16:13 PM SGT	

TEST DESCRIPTION

The Carryover test starts with two pre blank (mobile phase) injections to demonstrate that the system is free of unexplained or "ghost" peaks. This is followed by three injections of a 0.01% carryover standard (0.4 ug/mL caffeine). A challenge solution containing 4 mg/mL of caffeine is injected, followed by three blank injections. The caffeine peak in the three post blank injections is quantitated (if detected) against a 0.01% carryover standard.

The test passes if the % carryover is $\leq 0.01\%$ or the peak is missing.

Carryover Results

	SampleName	Carryover Specification	Peak Type	% Carryover	Carryover Pass/Fail
1	Post Blank 1	$\leq 0.01\%$	Found	0.002	PASS

Certification

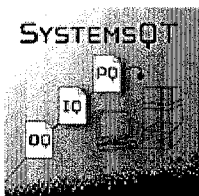
Comments

The undersigned performer attests that the values recorded and calculated above are accurate and complete.

Performer _____ Date _____
Signature

The undersigned reviewer accepts that the values recorded and calculated above are accurate and complete.

Reviewer _____ Date _____
Signature



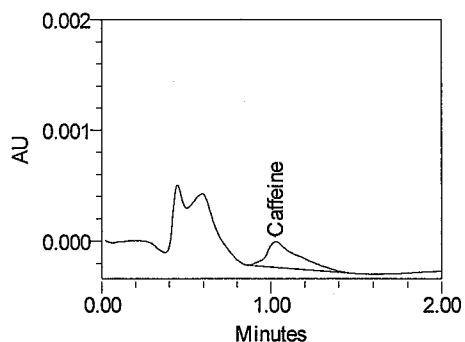
CARRYOVER REPORT

ACQUISITION INFORMATION

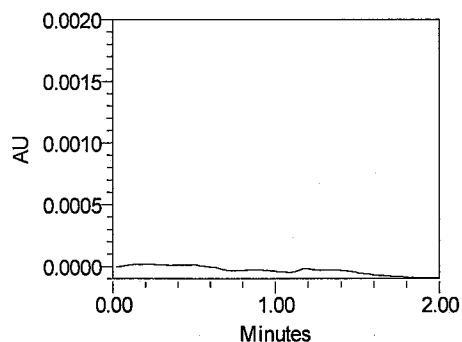
System Name: 2695_3
Project Name: SQT_F18SM7164A

Sample Set Id: 2980
Result Set Id: 2985

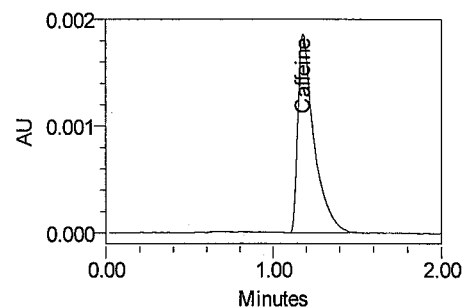
Carryover Chromatograms



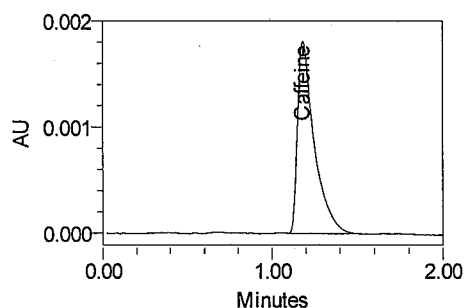
Sample PreBlank; Inj 1



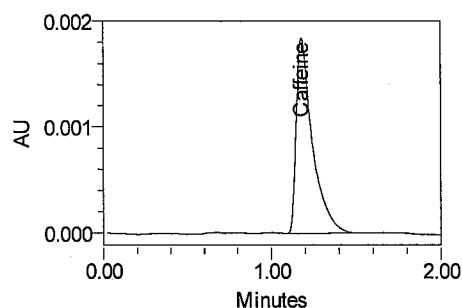
Sample PreBlank; Inj 2



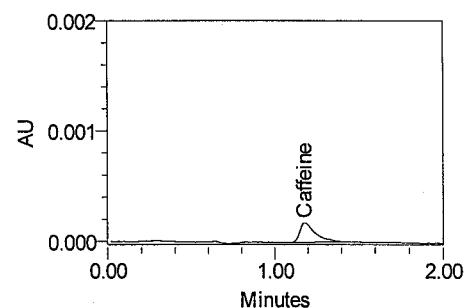
Sample Standard (0.01%);
Inj 1



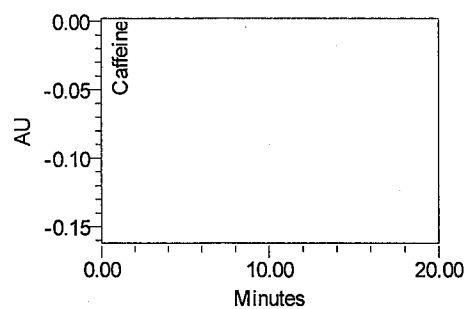
Sample Standard (0.01%);
Inj 2



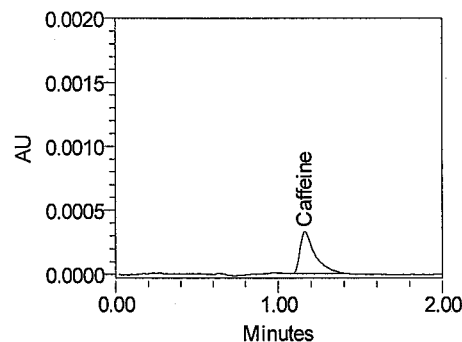
Sample Standard (0.01%);
Inj 3



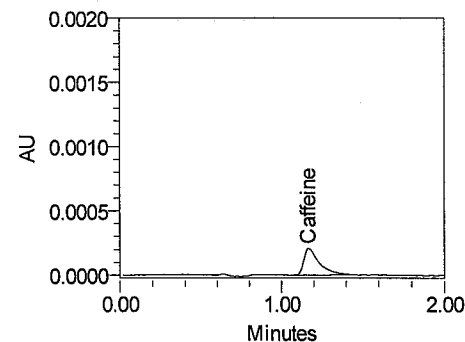
Sample (Pre)Post Blank; Inj
1



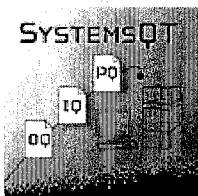
Sample Challenge (100%);
Inj 1



Sample Post Blank 1; Inj 1



Sample Post Blank 2; Inj 1

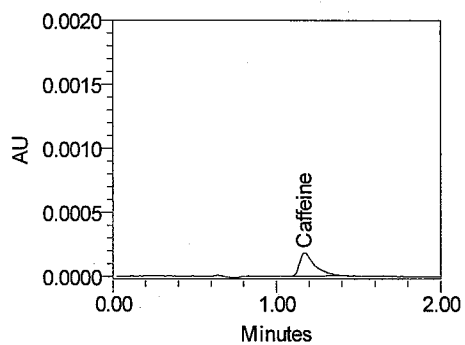


CARRYOVER REPORT

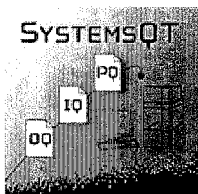
ACQUISITION INFORMATION

System Name: 2695_3
Project Name: SQT_F18SM7164A

Sample Set Id: 2980
Result Set Id: 2985



— Sample Post Blank 3; Inj 1



CARRYOVER REPORT

ACQUISITION INFORMATION

System Name: 2695_3
Project Name: SQT_F18SM7164A

Sample Set Id: 2980
Result Set Id: 2985

Chromatographic Peak Results

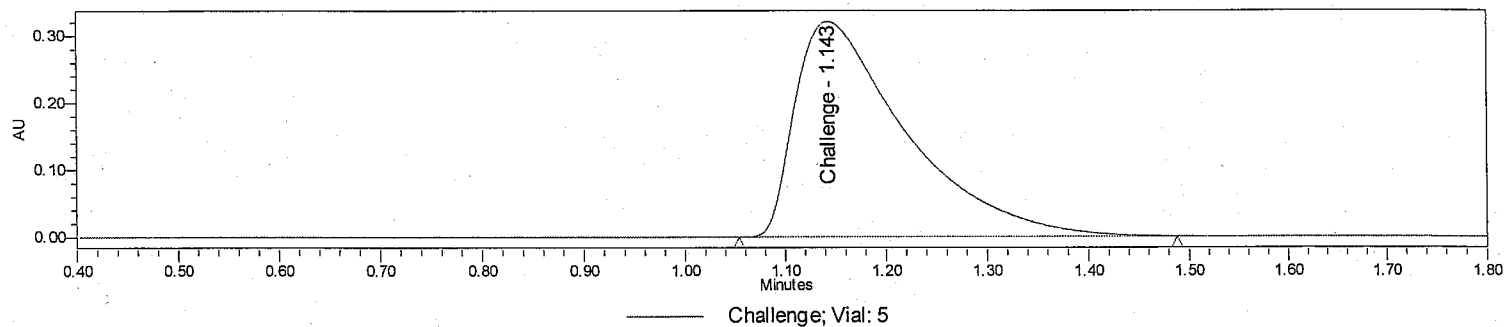
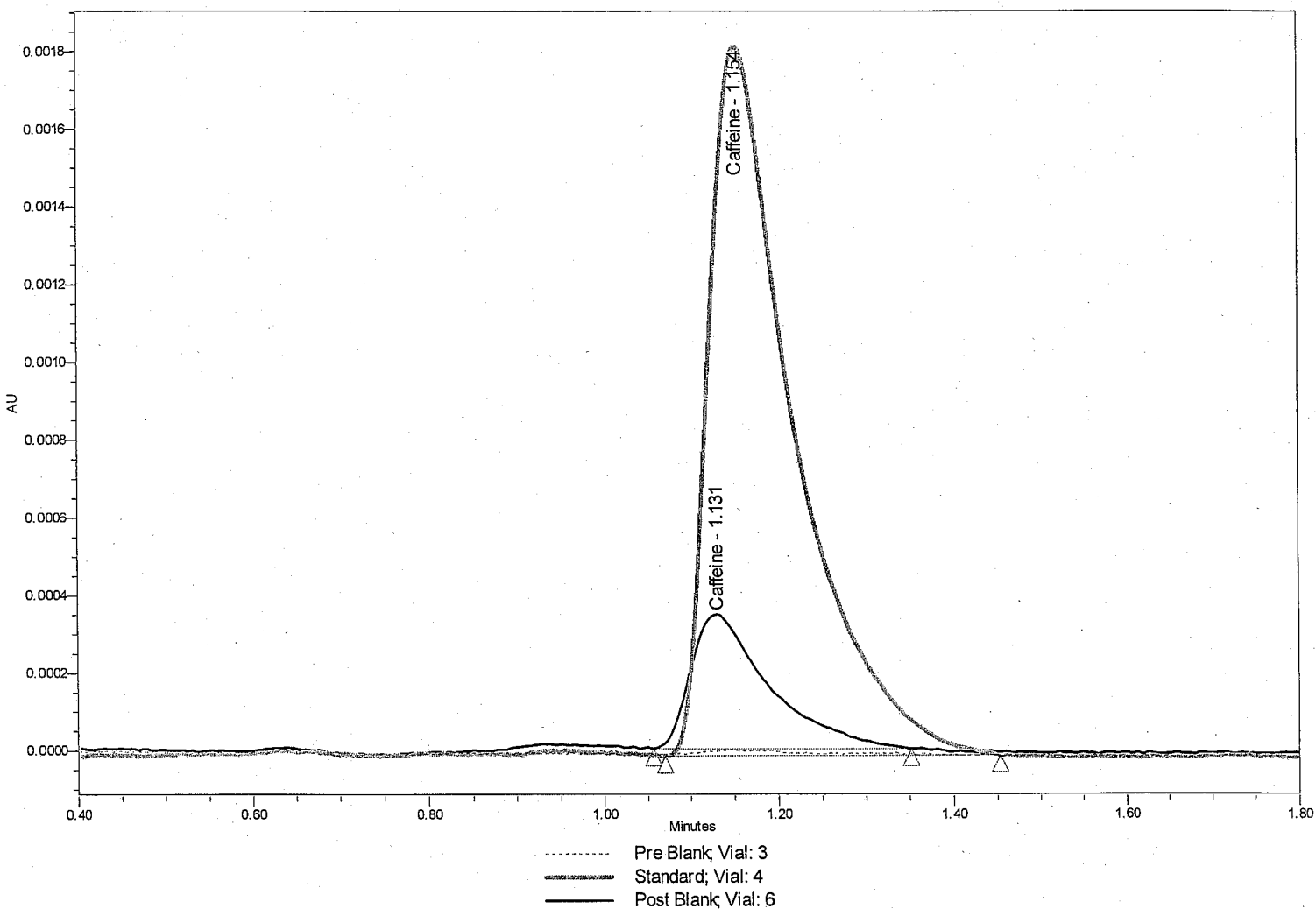
	Sample Name	Sample Type	Vial	Name	RT	Area	Height (μ V)	Amount	Peak Type	Result Id
1	PreBlank	Unknown	60	Caffeine	1.030	3064	232	0.002	Found	3027
2	PreBlank	Unknown	60	Caffeine	1.300				Missing	3028
3	Standard (0.01%)	Standard	61	Caffeine	1.182	12458	1865	0.010	Found	3022
4	Standard (0.01%)	Standard	61	Caffeine	1.184	12284	1811	0.010	Found	3023
5	Standard (0.01%)	Standard	61	Caffeine	1.180	12363	1849	0.010	Found	3024
6	(Pre)Post Blank	Unknown	63	Caffeine	1.181	1117	177	0.001	Found	3032
7	Challenge (100%)	Unknown	62	Caffeine	1.175	45595769	3235811	36.865	Found	3025
8	Post Blank 1	Unknown	63	Caffeine	1.163	2080	326	0.002	Found	3033
9	Post Blank 2	Unknown	63	Caffeine	1.169	1375	208	0.001	Found	3034
10	Post Blank 3	Unknown	63	Caffeine	1.174	1188	184	0.001	Found	3035

Carryover Summary Results

	SampleName	Peak Type	% Carryover
1	Post Blank 1	Found	0.002

Part Number: 186269505
 Tested By: SYLVESTER
 Serial Number: F18SM7164A
 UUT Firmware: 3.04

Description: 2695 Separations Module
 Test Template Revision: 1.8
 Test Station: Final-test-6
 System: 2695_3



	Date Acquired	SampleName	Area	Percent
1	6/23/2018 1:06:59 PM SGT	Pre Blank		
2	6/23/2018 1:09:40 PM SGT	Standard	12294	0.0100
3	6/23/2018 1:12:24 PM SGT	Challenge	2441308	
4	6/23/2018 1:28:23 PM SGT	Post Blank	2149	0.0017

Carryover Test:

PreBlank injection (to establish system cleanliness)
 Standard (0.4 PPM) Caffeine injection
 Challenge injection (10,000 X Standard = 4,000 PPM)
 PostBlank injection
 $\text{Carryover (\%)} = \frac{\text{Carryover Area}}{\text{Standard Area}} \times 0.010$

Specification: Post Blank Percent < 0.002
 (or Blank peak(s) missing/blank)

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Part Number: 186269505

Tested By: SYLVESTER

Serial Number: F18SM7164A

UUT Firmware: 3.04

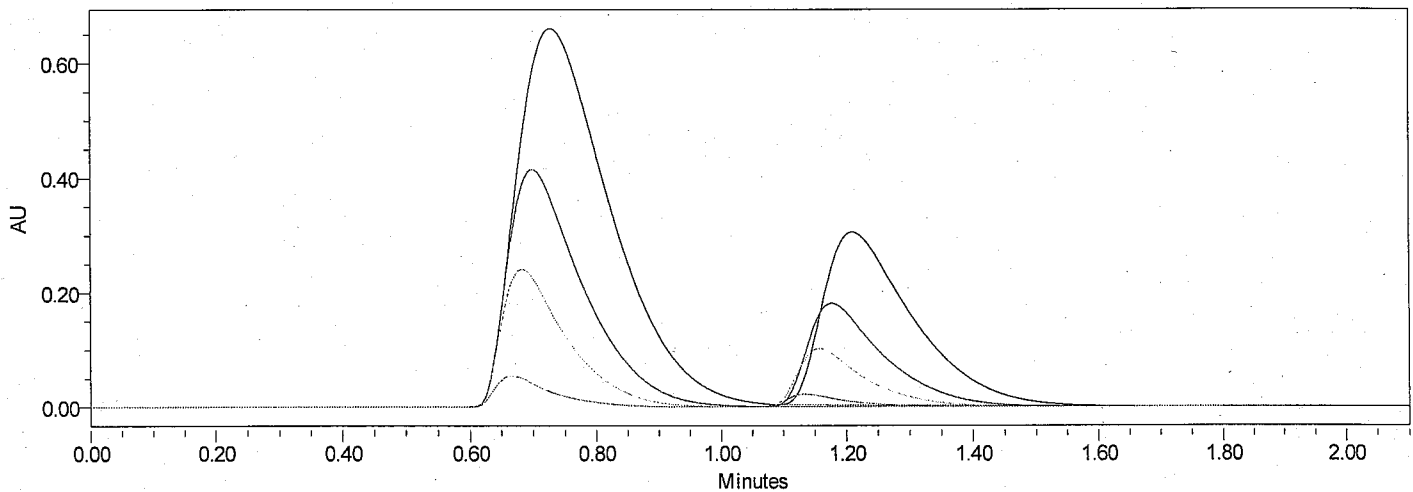
Description: 2695 Separations Module

Test Template Revision: 1.8

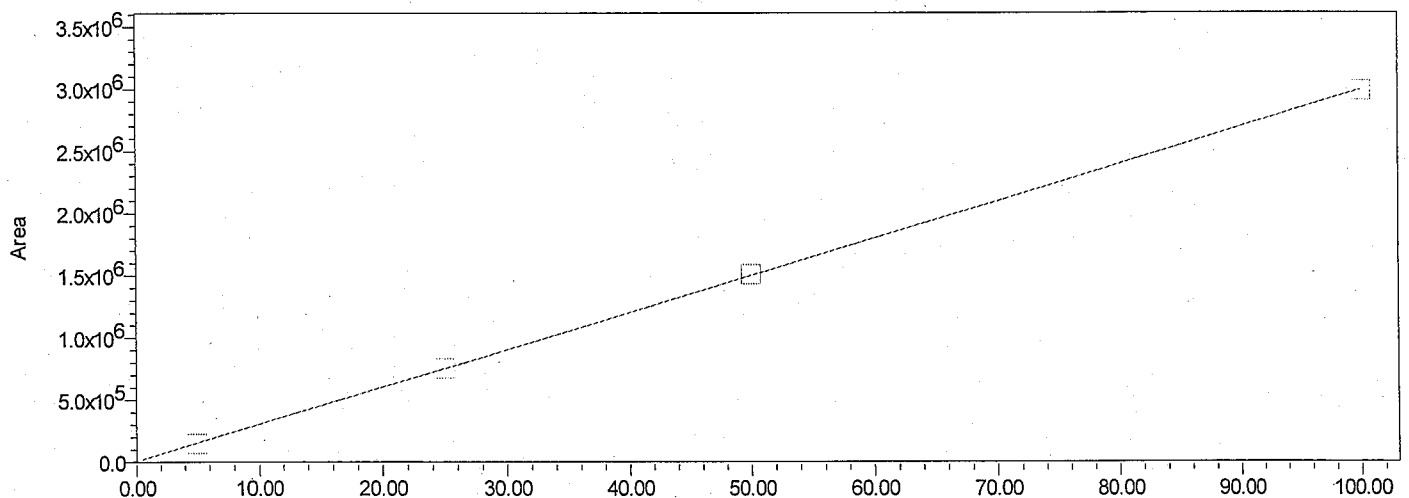
Test Station: Final-test-6

System: 2695_3

Overlaid Caffeine Peak Chromatograms



Calibration Plot



Injection Linearity and Accuracy

Fit Type Linear (1st Order)

A 6904.643496

Equation $Y = 2.98e+004 X + 6.90e+003$

B 29839.665044

X_Intercept -0.231

R² 0.9999

$$1-(A/B) = X \text{ Intercept (ul)}$$

Specs: R² >= 0.999, |X-Intercept| <= 1.0 ul

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Part Number: 186269505

Tested By: SYLVESTER

Serial Number: F18SM7164A

UUT Firmware: 3.04

Description: 2695 Separations Module

Test Template Revision: 1.8

Test Station: Final-test-6

System: 2695_3

Component Summary For Retention Time

	Sample	Vo	Caffeine
1	Precision AC	0.6788	1.1589
2	Precision AC	0.6802	1.1608
3	Precision AC	0.6782	1.1590
4	Precision AC	0.6798	1.1612
5	Precision AC	0.6789	1.1602
6	Precision AC	0.6806	1.1620
Std. Dev.		0.0009	0.0012

Component Summary For Area

	Sample	Caffeine
1	Precision AC	3561103
2	Precision AC	3560684
3	Precision AC	3560489
4	Precision AC	3561182
5	Precision AC	3560865
6	Precision AC	3563912
% RSD		0.036

Component Summary For Pressure_Ripple

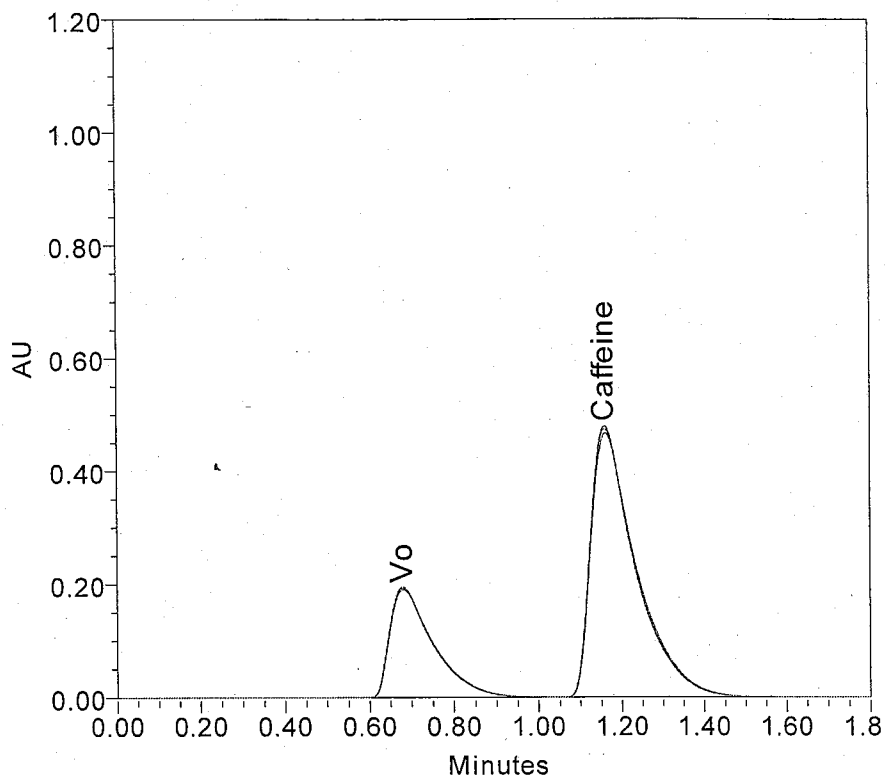
	Date Acquired	
1	6/23/2018 1:47:19 PM SGT	15.25
2	6/23/2018 1:50:01 PM SGT	15.89
3	6/23/2018 1:52:44 PM SGT	11.60
4	6/23/2018 1:55:26 PM SGT	13.94
5	6/23/2018 1:58:06 PM SGT	16.34
6	6/23/2018 2:00:48 PM SGT	13.38
Mean		14.40

Specifications:

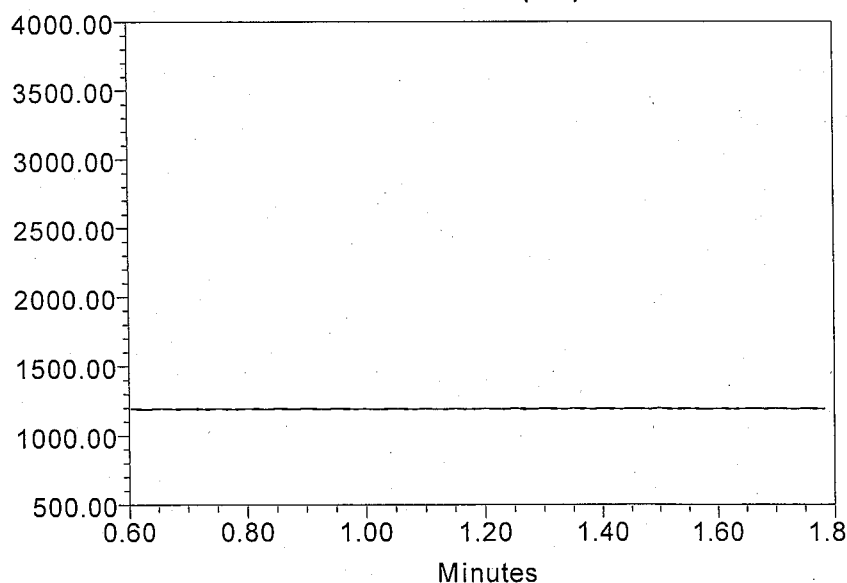
Retention Time Standard Deviation: ≤ 0.0090 min

Area % RSD: ≤ 0.500

Mean Pressure Ripple < 65 PSI



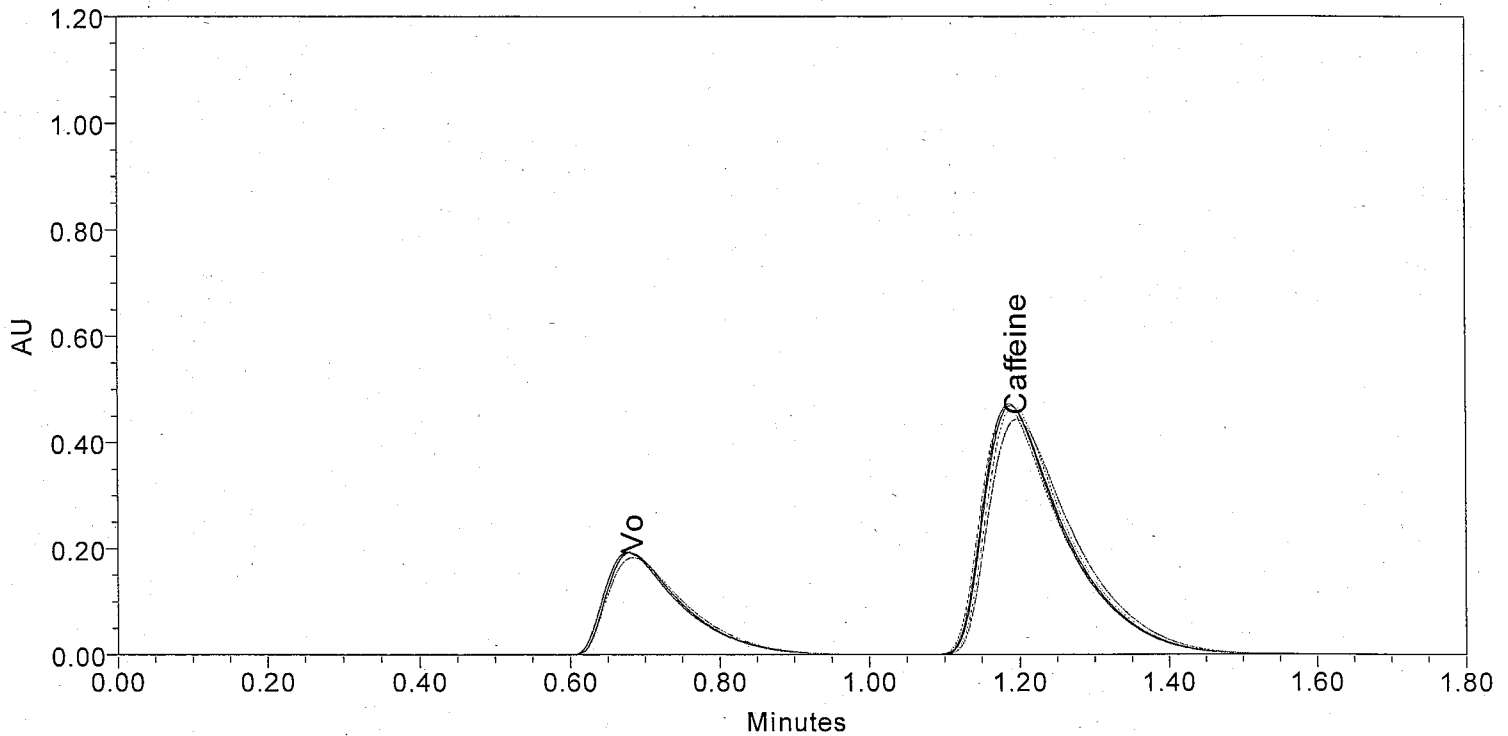
SYSTEM PRESSURE (PSI)



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Part Number: 186269505
 Tested By: SYLVESTER
 Serial Number: F18SM7164A
 UUT Firmware: 3.04

Description: 2695 Separations Module
 Test Template Revision: 1.8
 Test Station: Final-test-6
 System: 2695_3



Component Summary For Retention Time

	Sample	Date	Vo	Caffeine
1	Precision BD	6/23/2018 2:14:28 PM SGT	0.6847	1.1977
2	Precision BD	6/23/2018 2:17:08 PM SGT	0.6821	1.1935
3	Precision BD	6/23/2018 2:19:50 PM SGT	0.6777	1.1872
4	Precision BD	6/23/2018 2:22:30 PM SGT	0.6808	1.1892
5	Precision BD	6/23/2018 2:25:13 PM SGT	0.6772	1.1851
6	Precision BD	6/23/2018 2:27:56 PM SGT	0.6814	1.1890
Std. Dev.			0.0028	0.0046

Component Summary For Area

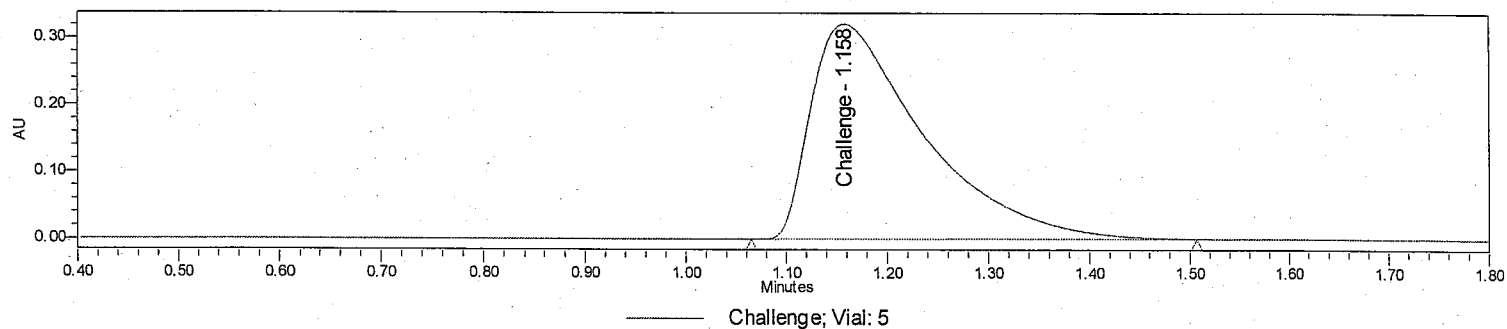
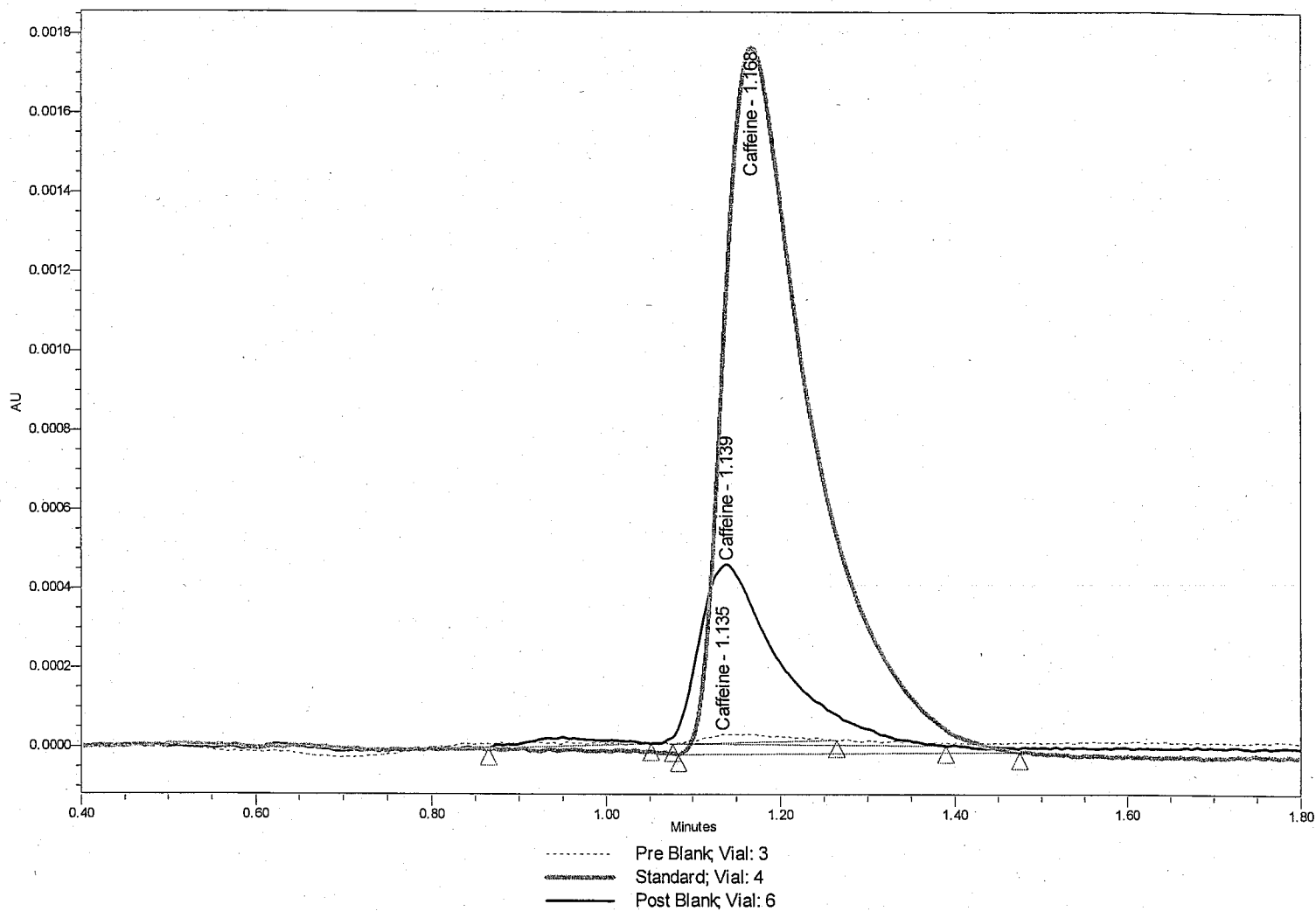
	Sample	Date	Caffeine
1	Precision BD	6/23/2018 2:14:28 PM SGT	3556770.17
2	Precision BD	6/23/2018 2:17:08 PM SGT	3563842.73
3	Precision BD	6/23/2018 2:19:50 PM SGT	3558104.88
4	Precision BD	6/23/2018 2:22:30 PM SGT	3561293.41
5	Precision BD	6/23/2018 2:25:13 PM SGT	3560309.01
6	Precision BD	6/23/2018 2:27:56 PM SGT	3562400.06
% RSD			0.074

Specifications:
 Retention Time Standard Deviation: <= 0.0090 minutes
 Area % RSD: <= 0.500

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Part Number: 186269505
 Tested By: SYLVESTER
 Serial Number: F18SM7164A
 UUT Firmware: 3.04

Description: 2695 Separations Module
 Test Template Revision: 1.8
 Test Station: Final-test-6
 System: 2695_3



	Date Acquired	SampleName	Area	Percent
1	6/23/2018 2:47:51 PM SGT	Pre Blank	133	0.0001
2	6/23/2018 2:50:32 PM SGT	Standard	12489	0.0100
3	6/23/2018 2:53:13 PM SGT	Challenge	2481189	
4	6/23/2018 3:09:08 PM SGT	Post Blank	2905	0.0023

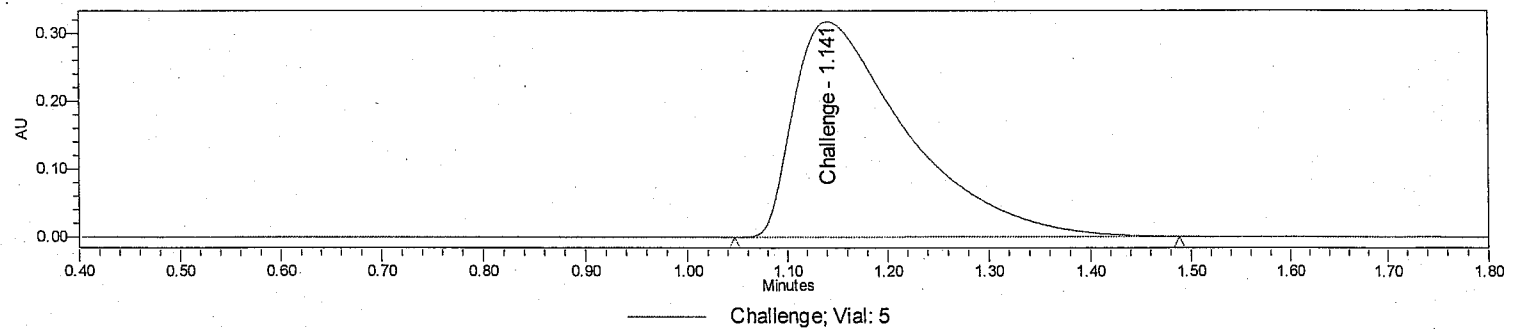
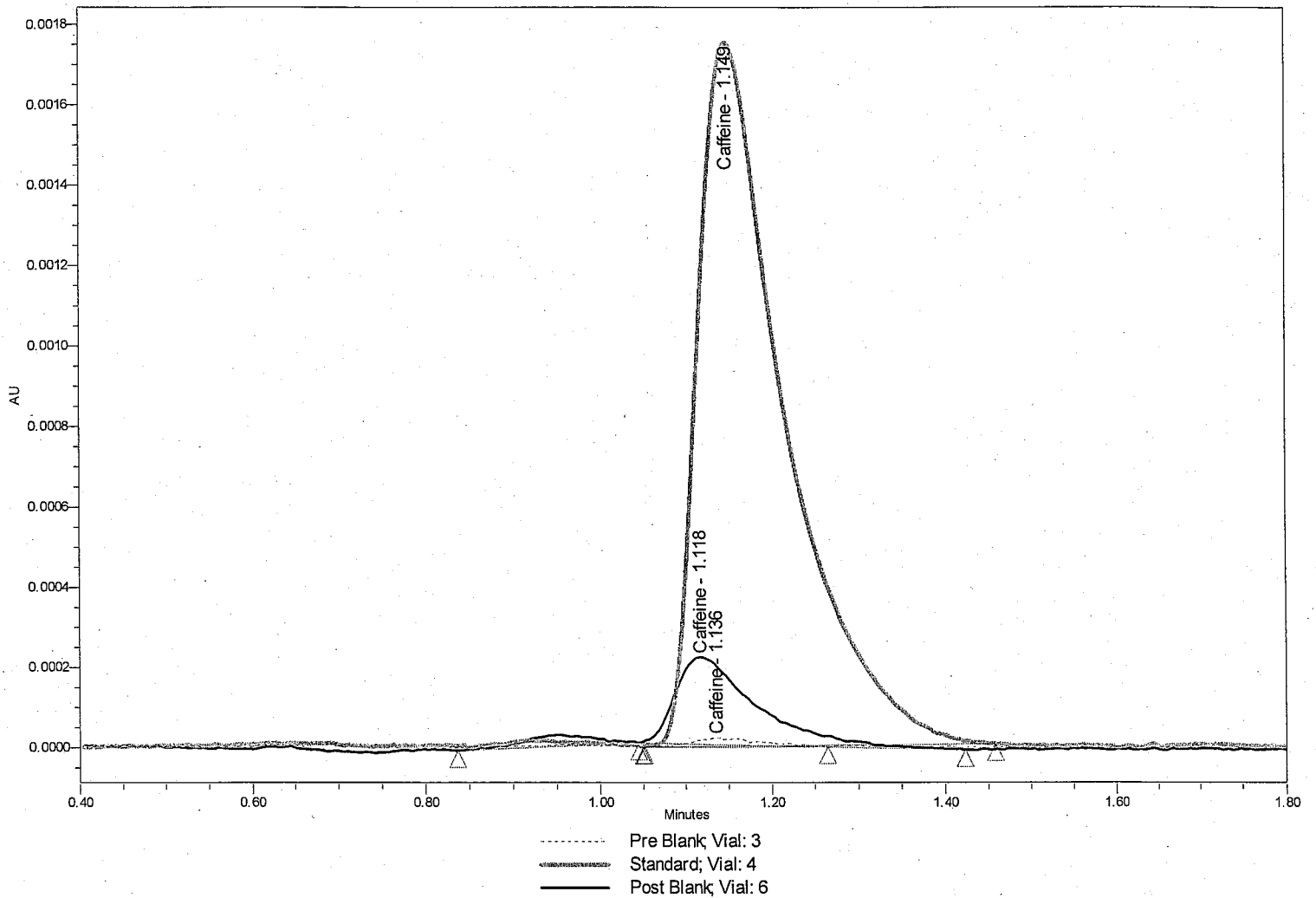
Carryover Test:
 PreBlank injection (to establish system cleanliness)
 Standard (0.4 PPM) Caffeine injection
 Challenge injection (10,000 X Standard = 4,000 PPM)
 PostBlank injection
 $\text{Carryover (\%)} = \frac{\text{Carryover Area}}{\text{Standard Area}} \times 0.010$

Specification: Post Blank Percent < 0.002
 (or Blank peak(s) missing/blank)

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Part Number: 186269505
 Tested By: SYLVESTER
 Serial Number: F18SM7164A
 UUT Firmware: 3.04

Description: 2695 Separations Module
 Test Template Revision: 1.8
 Test Station: Final-test-6
 System: 2695_3



	Date Acquired	SampleName	Area	Percent
1	6/23/2018 4:44:32 PM SGT	Pre Blank	132	0.0001
2	6/23/2018 4:47:15 PM SGT	Standard	12250	0.0100
3	6/23/2018 4:49:58 PM SGT	Challenge	2479156	
4	6/23/2018 5:05:53 PM SGT	Post Blank	1418	0.0012

Carryover Test:

PreBlank injection (to establish system cleanliness)

Standard (0.4 PPM) Caffeine injection

Challenge injection (10,000 X Standard = 4,000 PPM)

PostBlank injection

Carryover (%) = Carryover Area/Standard Area * 0.010

Specification: Post Blank Percent < 0.002

(or Blank peak(s) missing/blank)

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