

CARRYOVER REPORT

ACQUISITION INFORMATION

System Name: 2695_2	Acquired By: Tester
Processing Method: Carryover PM	Project Name: SQT_F18SM7163A
Result Set Id: 2966	Sample Kit 1 Lot Number: W04040902
Sample Set Id: 2961	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 6:16:29 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	0.001	PASS

Certification

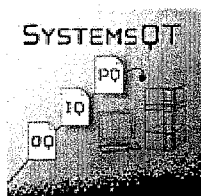
Comments

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



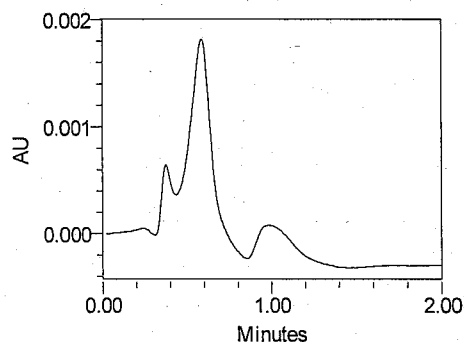
CARRYOVER REPORT

ACQUISITION INFORMATION

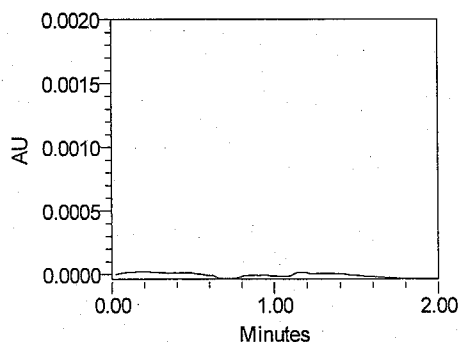
System Name: 2695_2
Project Name: SQT_F18SM7163A

Sample Set Id: 2961
Result Set Id: 2966

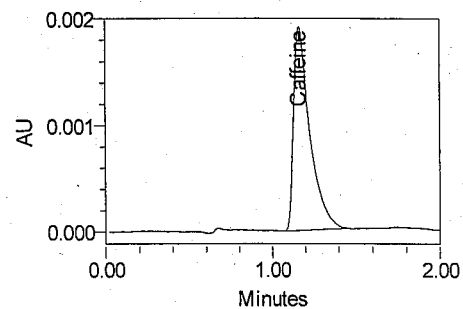
Carryover Chromatograms



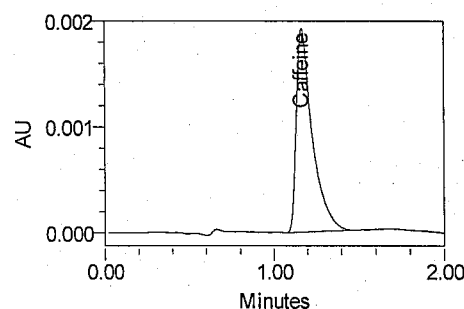
Sample PreBlank; Inj 1



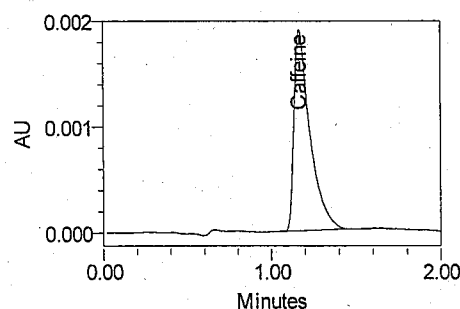
Sample PreBlank; Inj 2



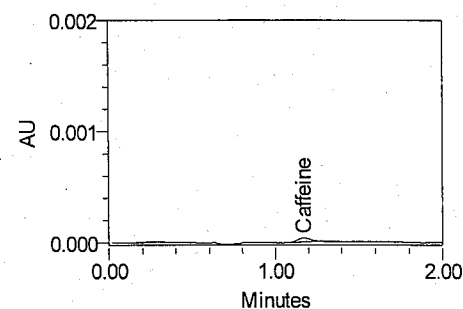
Sample Standard (0.01%);
Inj 1



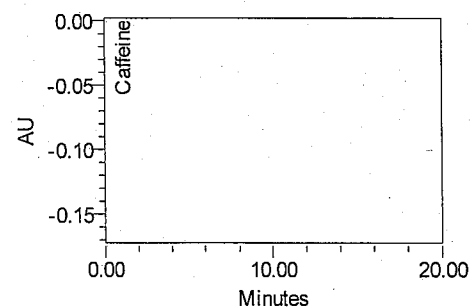
Sample Standard (0.01%);
Inj 2



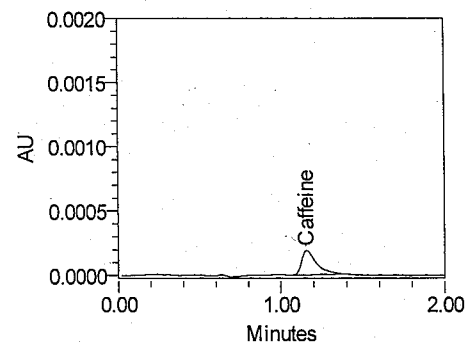
Sample Standard (0.01%);
Inj 3



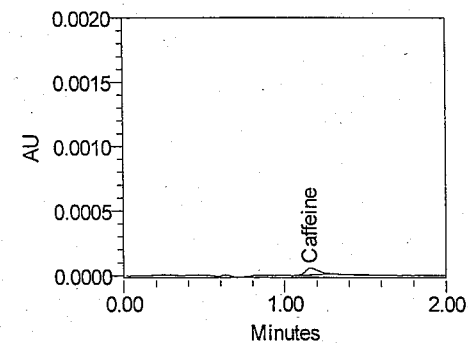
Sample (Pre)Post Blank; Inj
1



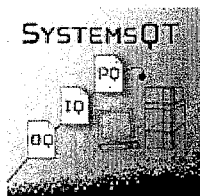
Sample Challenge (100%);
Inj 1



Sample Post Blank 1; Inj 1



Sample Post Blank 2; Inj 1

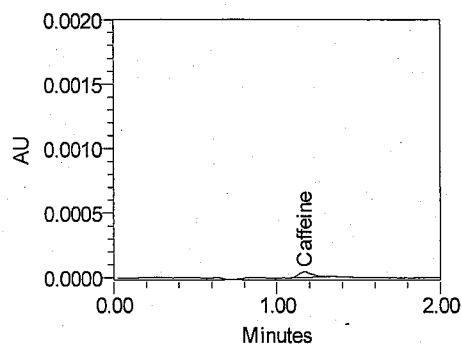


CARRYOVER REPORT

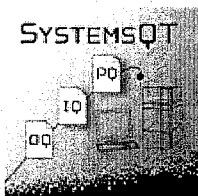
ACQUISITION INFORMATION

System Name: 2695_2
Project Name: SQT_F18SM7163A

Sample Set Id: 2961
Result Set Id: 2966



— Sample Post Blank 3; Inj 1



CARRYOVER REPORT

ACQUISITION INFORMATION

System Name: 2695_2
Project Name: SQT_F18SM7163A

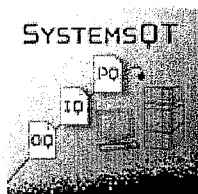
Sample Set Id: 2961
Result Set Id: 2966

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	3009
2	PreBlank	Unknown	60	Caffeine	1.300				Missing	3012
3	Standard (0.01%)	Standard	61	Caffeine	1.166	12617	1918	0.010	Found	3003
4	Standard (0.01%)	Standard	61	Caffeine	1.168	12581	1925	0.010	Found	3004
5	Standard (0.01%)	Standard	61	Caffeine	1.169	12403	1897	0.010	Found	3005
6	(Pre)Post Blank	Unknown	63	Caffeine	1.175	185	36	0.000	Found	3013
7	Challenge (100%)	Unknown	62	Caffeine	1.167	47325466	3443231	37.759	Found	3006
8	Post Blank 1	Unknown	63	Caffeine	1.158	1179	191	0.001	Found	3014
9	Post Blank 2	Unknown	63	Caffeine	1.159	302	55	0.000	Found	3015
10	Post Blank 3	Unknown	63	Caffeine	1.172	255	45	0.000	Found	3016

Carryover Summary Results

	SampleName	Peak Type	% Carryover
1	Post Blank 1	Found	0.001



CARRYOVER REPORT

ACQUISITION INFORMATION

System Name: 2695_2

Processing Method: Carryover.PM

Result Set Id: 3017

Sample Set Id: 3002

Sample Set Name: 040 Carryover SSM

Sample Set Start Date: 6/22/2018 7:03:40 PM SGT

Acquired By: Tester

Project Name: SQT_F18SM7163A

Sample Kit 1 Lot Number: W04040902

Sample Kit 1 Exp. Date: 4/30/2015 12:00:00 AM

Column Serial Number: 017139167157 42

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	$\leq$ or = 0.01%	Found	0.001	PASS

Certification

Comments

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

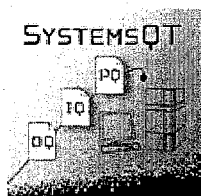
Performer

Signature Date

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

Reviewer

Signature Date



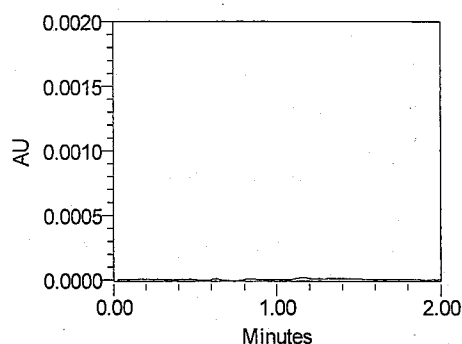
CARRYOVER REPORT

ACQUISITION INFORMATION

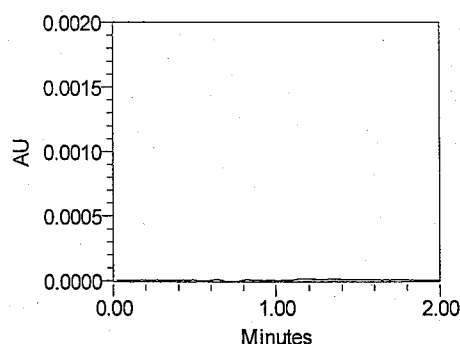
System Name: 2695_2
Project Name: SQT_F18SM7163A

Sample Set Id: 3002
Result Set Id: 3017

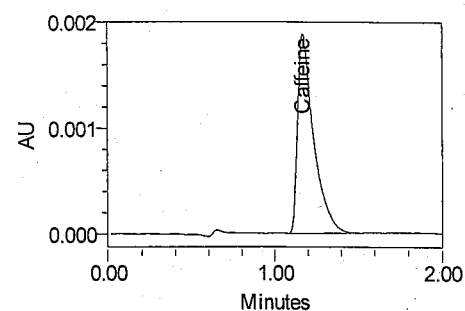
Carryover Chromatograms



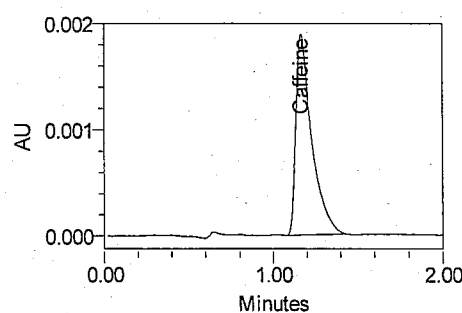
Sample PreBlank; Inj 1



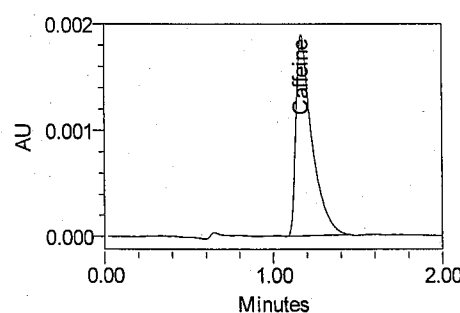
Sample PreBlank; Inj 2



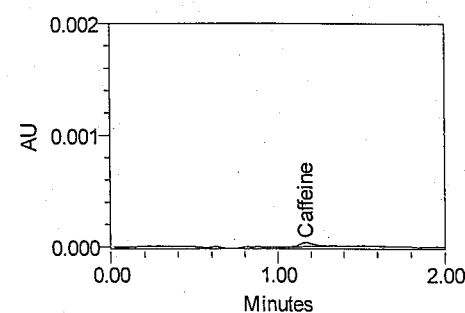
Sample Standard (0.01%);
Inj 1



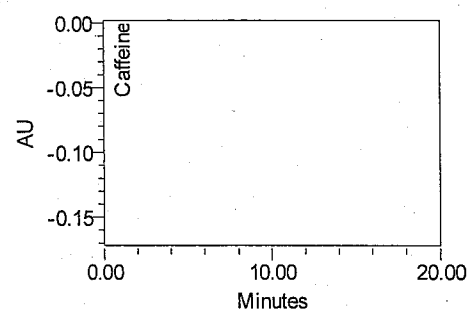
Sample Standard (0.01%);
Inj 2



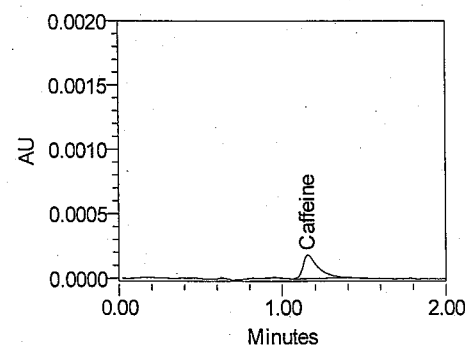
Sample Standard (0.01%);
Inj 3



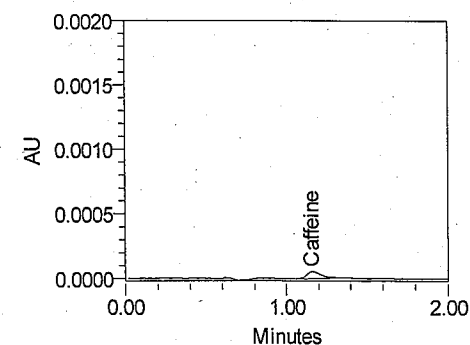
Sample (Pre)Post Blank; Inj
1



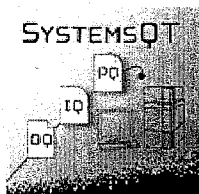
Sample Challenge (100%);
Inj 1



Sample Post Blank 1; Inj 1



Sample Post Blank 2; Inj 1

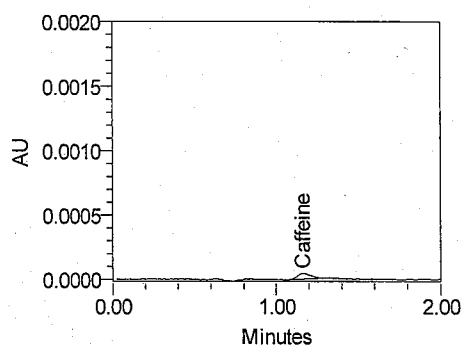


CARRYOVER REPORT

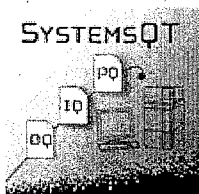
ACQUISITION INFORMATION

System Name: 2695_2
Project Name: SQT_F18SM7163A

Sample Set Id: 3002
Result Set Id: 3017



— Sample Post Blank 3; Inj 1



CARRYOVER REPORT

ACQUISITION INFORMATION

System Name: 2695_2
Project Name: SQT_F18SM7163A

Sample Set Id: 3002
Result Set Id: 3017

Chromatographic Peak Results

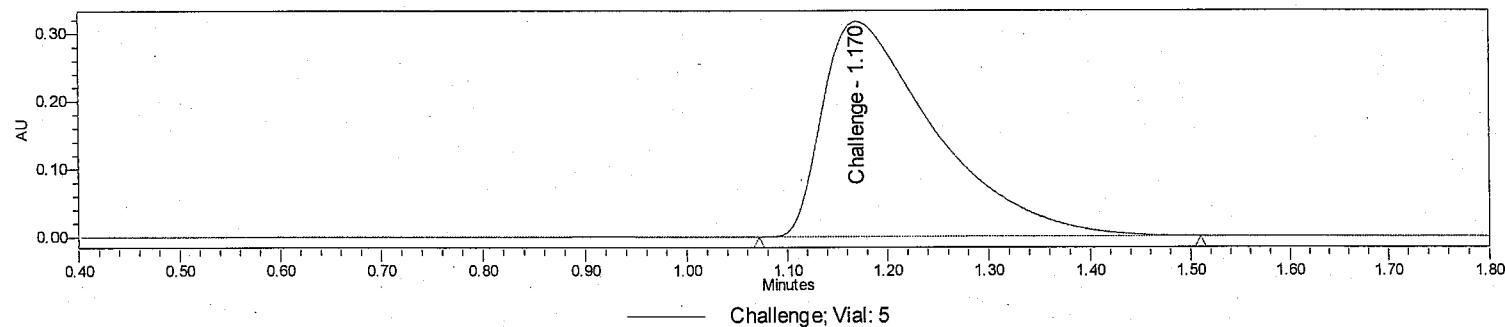
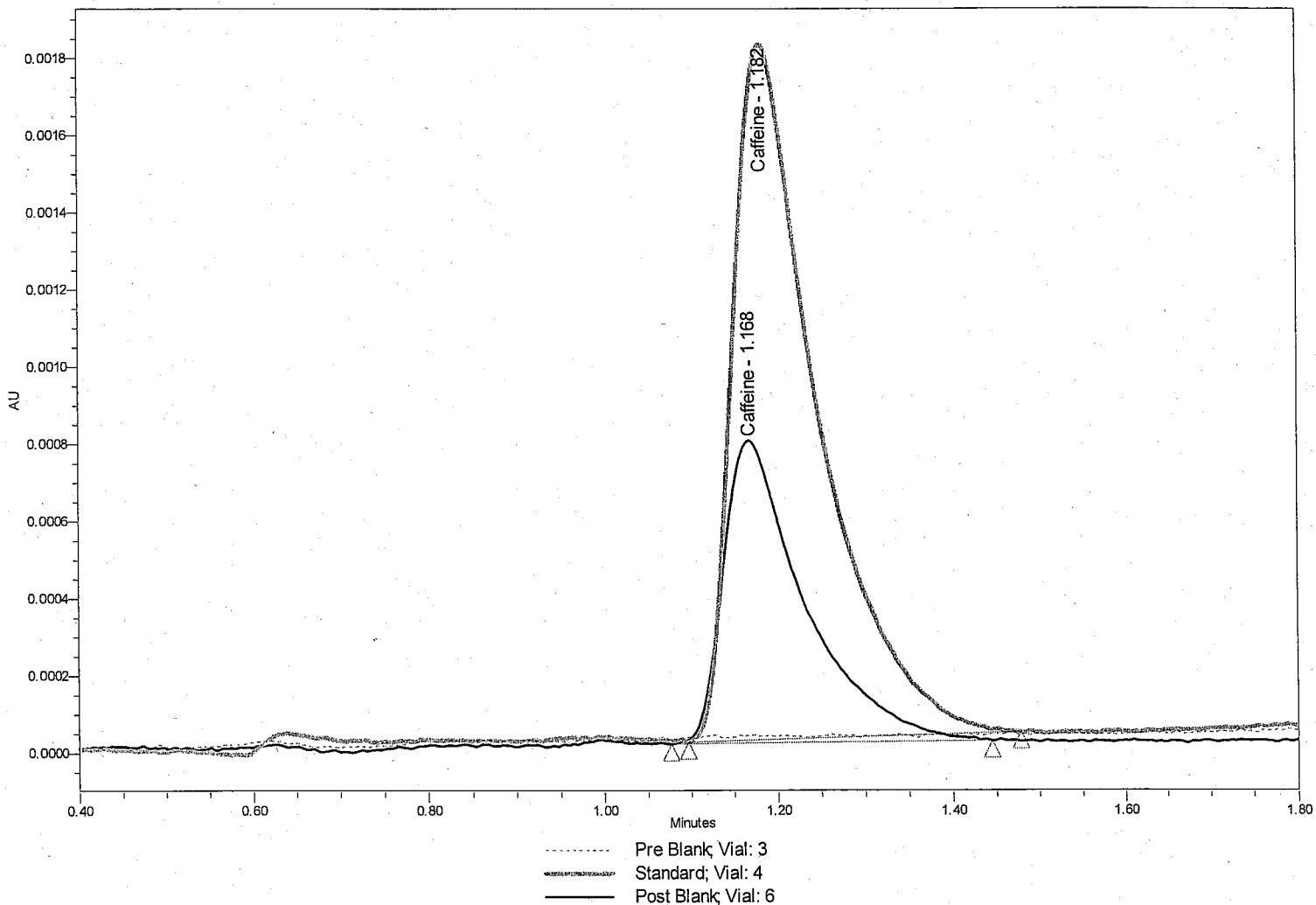
	Sample Name	Sample Type	Vial	Name	RT	Area	Height (µV)	Amount	Peak Type	Result Id
1	PreBlank	Unknown	60	Caffeine	1.300				Missing	3057
2	PreBlank	Unknown	60	Caffeine	1.300				Missing	3058
3	Standard (0.01%)	Standard	61	Caffeine	1.171	12481	1886	0.010	Found	3053
4	Standard (0.01%)	Standard	61	Caffeine	1.168	12401	1894	0.010	Found	3054
5	Standard (0.01%)	Standard	61	Caffeine	1.169	12412	1894	0.010	Found	3055
6	(Pre)Post Blank	Unknown	63	Caffeine	1.171	221	37	0.000	Found	3059
7	Challenge (100%)	Unknown	62	Caffeine	1.161	47246021	3435620	38.005	Found	3056
8	Post Blank 1	Unknown	63	Caffeine	1.156	1184	183	0.001	Found	3060
9	Post Blank 2	Unknown	63	Caffeine	1.160	357	56	0.000	Found	3061
10	Post Blank 3	Unknown	63	Caffeine	1.164	251	45	0.000	Found	3062

Carryover Summary Results

	SampleName	Peak Type	% Carryover
1	Post Blank 1	Found	0.001

Part Number: 186269505
 Tested By: SYLVESTER
 Serial Number: F18SM7163A
 UUT Firmware: 3.04

Description: 2695 Separations Module
 Test Template Revision: 1.8
 Test Station: Final-test-6
 System: 2695_2



	Date Acquired	SampleName	Area	Percent
1	6/23/2018 1:07:06 PM SGT	Pre Blank		
2	6/23/2018 1:09:48 PM SGT	Standard	12164	0.0100
3	6/23/2018 1:12:32 PM SGT	Challenge	2447460	
4	6/23/2018 1:28:27 PM SGT	Post Blank	5064	0.0042

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: F18SM7163A

UUT Firmware: 3.04

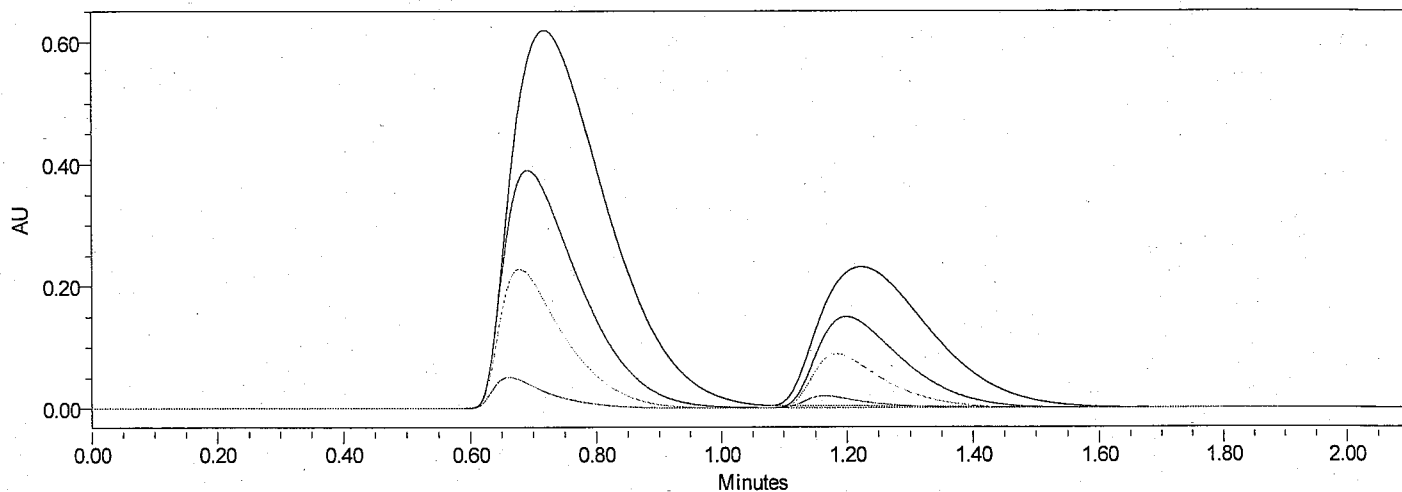
Description: 2695 Separations Module

Test Template Revision: 1.8

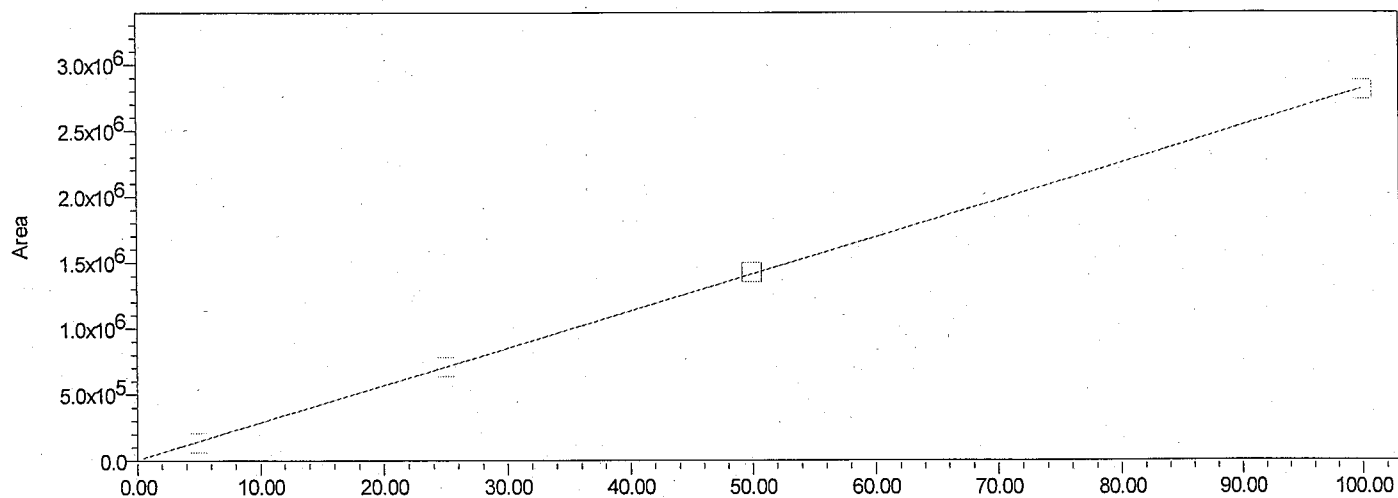
Test Station: Final-test-6

System: 2695_2

Overlaid Caffeine Peak Chromatograms



Calibration Plot



Injection Linearity and Accuracy

Fit Type Linear (1st Order)

A 6956.781096

Equation $Y = 2.80e+004 X + 6.96e+003$

B 28049.281352

X_Intercept -0.248

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: F18SM7163A
 UUT Firmware: 3.04

Description: 2695 Separations Module
 Test Template Revision: 1.8
 Test Station: Final-test-6
 System: 2695_2

Component Summary For Retention Time

	Sample	Vo	Caffeine
1	Precision AC	0.6761	1.1896
2	Precision AC	0.6781	1.1917
3	Precision AC	0.6773	1.1902
4	Precision AC	0.6771	1.1899
5	Precision AC	0.6763	1.1890
6	Precision AC	0.6760	1.1883
Std. Dev.		0.0008	0.0012

Component Summary For Area

	Sample	Caffeine
1	Precision AC	3547859
2	Precision AC	3547715
3	Precision AC	3546309
4	Precision AC	3546608
5	Precision AC	3547151
6	Precision AC	3544850
% RSD		0.031

Component Summary For Pressure_Ripple

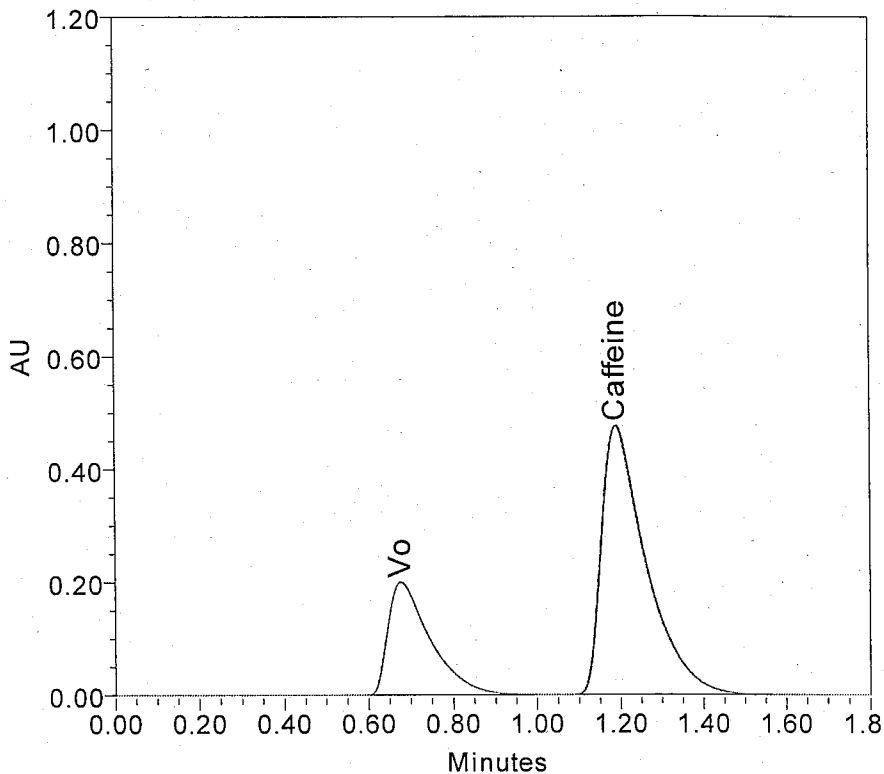
	Date Acquired	
1	6/23/2018 1:47:33 PM SGT	11.91
2	6/23/2018 1:50:15 PM SGT	9.46
3	6/23/2018 1:52:58 PM SGT	13.18
4	6/23/2018 1:55:42 PM SGT	11.90
5	6/23/2018 1:58:25 PM SGT	10.07
6	6/23/2018 2:01:07 PM SGT	9.48
Mean		11.00

Specifications:

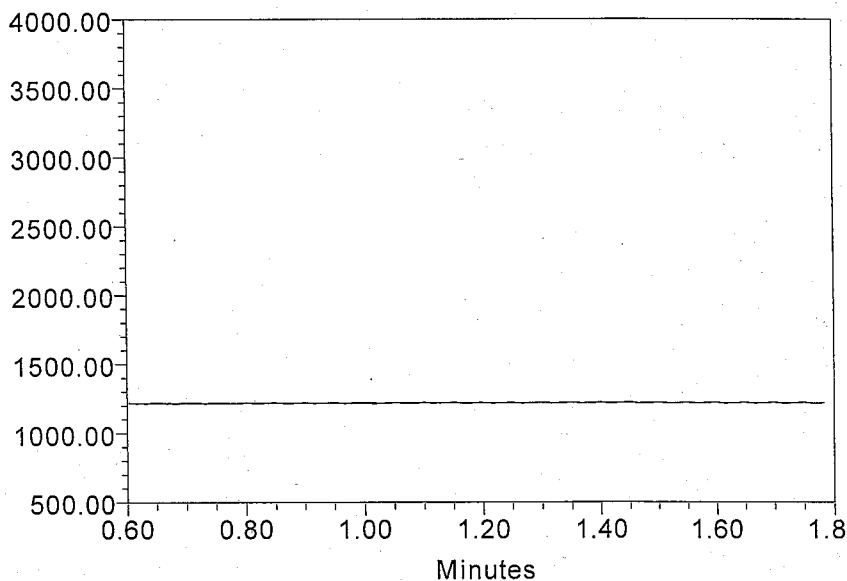
Retention Time Standard Deviation: <= 0.0090 min

Area % RSD: <= 0.500

Mean Pressure Ripple < 65 PSI



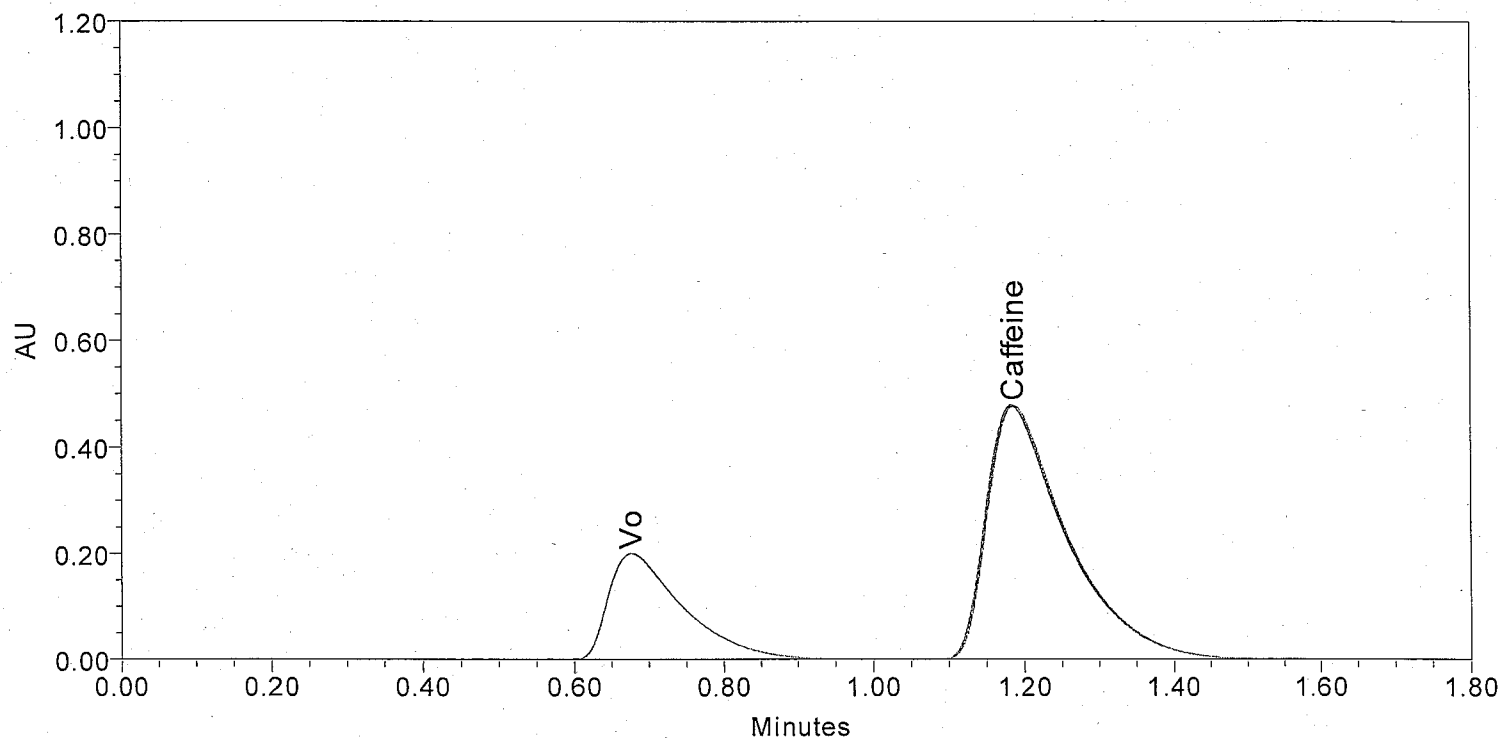
SYSTEM PRESSURE (PSI)



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Part Number: 186269505
 Tested By: SYLVESTER
 Serial Number: F18SM7163A
 UUT Firmware: 3.04

Description: 2695 Separations Module
 Test Template Revision: 1.8
 Test Station: Final-test-6
 System: 2695_2



Component Summary For Retention Time

	Sample	Date	Vo	Caffeine
1	Precision BD	6/23/2018 2:14:52 PM SGT	0.6773	1.1867
2	Precision BD	6/23/2018 2:17:34 PM SGT	0.6776	1.1844
3	Precision BD	6/23/2018 2:20:17 PM SGT	0.6772	1.1839
4	Precision BD	6/23/2018 2:22:59 PM SGT	0.6768	1.1839
5	Precision BD	6/23/2018 2:25:43 PM SGT	0.6765	1.1854
6	Precision BD	6/23/2018 2:28:25 PM SGT	0.6777	1.1876
Std. Dev.			0.0005	0.0015

Component Summary For Area

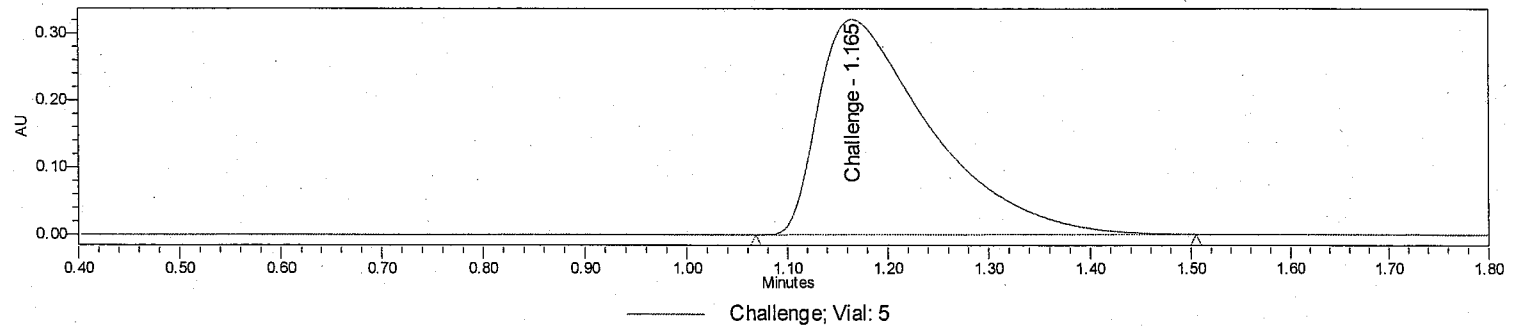
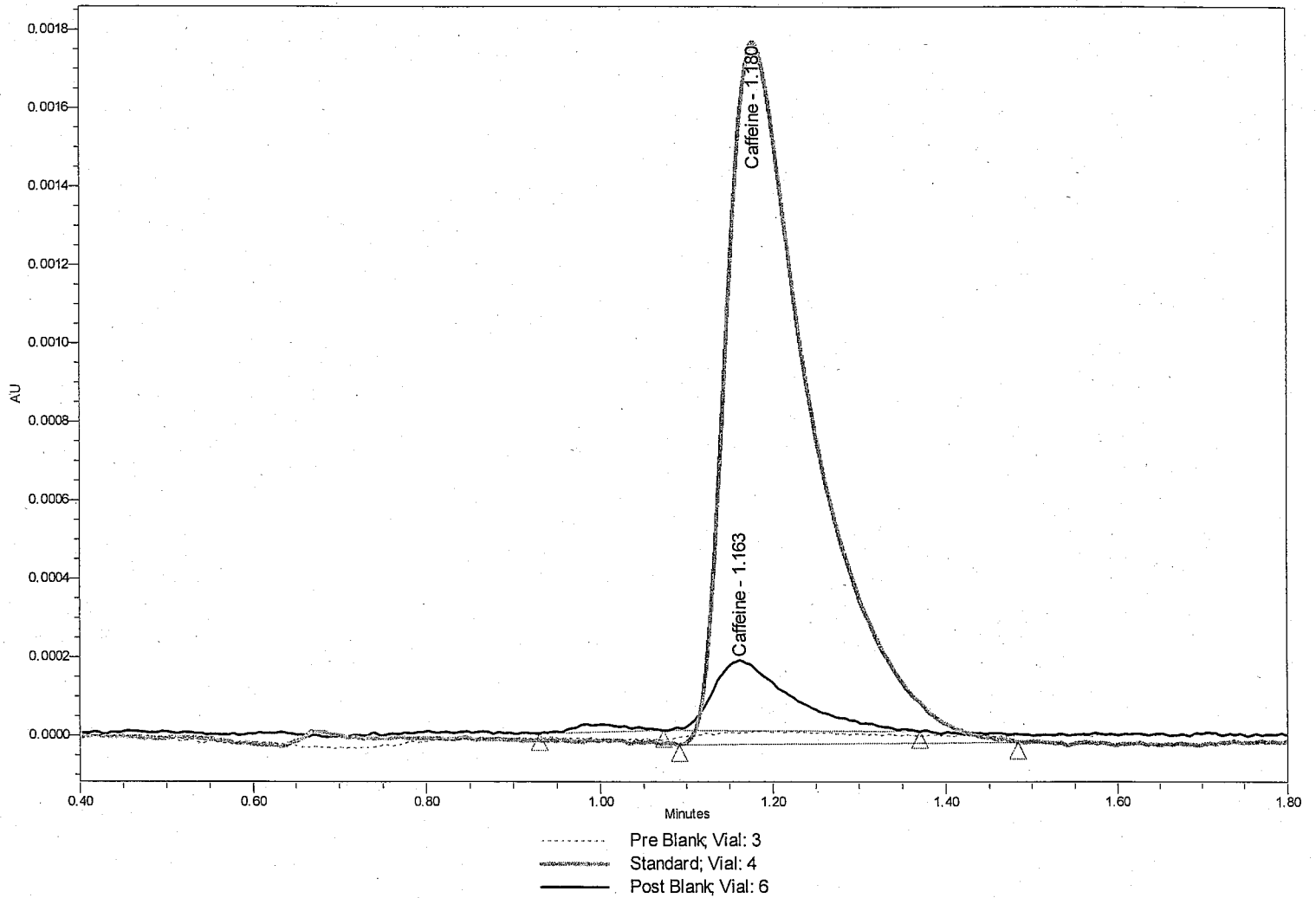
	Sample	Date	Caffeine
1	Precision BD	6/23/2018 2:14:52 PM SGT	3544559.56
2	Precision BD	6/23/2018 2:17:34 PM SGT	3549061.56
3	Precision BD	6/23/2018 2:20:17 PM SGT	3545103.69
4	Precision BD	6/23/2018 2:22:59 PM SGT	3549069.90
5	Precision BD	6/23/2018 2:25:43 PM SGT	3548366.47
6	Precision BD	6/23/2018 2:28:25 PM SGT	3546051.69
% RSD			0.058

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

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Part Number: 186269505
 Tested By: SYLVESTER
 Serial Number: F18SM7163A
 UUT Firmware: 3.04

Description: 2695 Separations Module
 Test Template Revision: 1.8
 Test Station: Final-test-6
 System: 2695_2



	Date Acquired	SampleName	Area	Percent
1	6/23/2018 2:48:41 PM SGT	Pre Blank		
2	6/23/2018 2:51:24 PM SGT	Standard	12278	0.0100
3	6/23/2018 2:54:07 PM SGT	Challenge	2475270	
4	6/23/2018 3:10:03 PM SGT	Post Blank	1140	0.0009

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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