

Cambridge Scientific Products

199 Dexter Avenue
Watertown, MA 02472

Estimate

Date	Quotation #
2/3/2016	9768

Name / Address
PMC-Group 1288 Route 73, Suite 401 Mount Laurel, NJ, 08054

Ship To
PMC-Group 1288 Route 73, Suite 401 Mount Laurel, NJ 08054 Sherry Chakrabarti 8565331873 sherry@pmc-group.com

P.O. No.	Terms	Rep
	Net 30 Days	BMH

Description	Qty	Rate	Total
Agilent/HP 1100 Series HPLC Includes: • G1322 Degasser • G1312A Binary Pump • Manual Injector • G1316A Column Compartment • G1315A Diode Array Detector • Windows 7 Computer Loaded with ChemStation • Monitor – Mouse – Keyboard • Cables and Manuals	1	17,200.00	17,200.00
Shipping & Handling - To Be Determined		0.00	0.00

6 Month Warranty Parts and Labor	Subtotal	\$17,200.00
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Quotes Expire 30 Days from above date. Equipment is Quoted Subject to Prior Sale and Availability. A 20% Restocking Fee will be charged if order is cancelled by buyer for reason other than equipment functionality.	Sales Tax (0.0%)	\$0.00
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Total	\$17,200.00
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Phone #	Fax #
617-354-8900	617-924-3018

Web Site
www.cambridgescientific.com

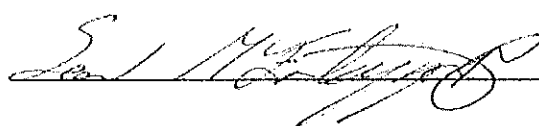
CAMBRIDGE SCIENTIFIC PRODUCTS

Planned Maintenance Checklist

Agilent 1100/1200 Pump w/61322A DEGASSER (S/N: 0P05030573)

System ID: 61311A Serial Number: DE1115544
 Date: DEC 15th 2015
 Customer: LACTIVE NATURALS
 Address: _____

- Check that each waste tray and interface is properly mounted.
- Check for proper mounting and functionality of all leak sensors.
- Wash deposits from each leak sensor.
- Clean or replace solvent inlet filters
- Remove and disassemble pump heads
- Remove and clean plungers
- Remove old seal, clean piston chambers and replace seals
- If applicable, remove and replace wash seals and gaskets N/A
- Replace PTFE frit, gold seal, and plastic cap in the purge valve.
- Replace the sieve, gold seal, and plastic cap in the outlet ball valve (binary pump)
- Perform wear-in procedure for standard seals **ONLY**
- Replace Active Inlet Valve (AIV) cartridges.
- Open purge valve. Prime applicable channel with isopropanol (IPA) for 10 minutes.
For a Binary pump, prime Channel A. For a Quaternary pump, prime Channel D.
- Close purge valve and perform integral pressure test. Result: Pass Fail
- Perform integral leak test Result: Pass Fail N/A

Completed by:  Date: DEC 15th 2015

Reviewed by: _____ Date: _____
 Comments: _____

CAMBRIDGE SCIENTIFIC PRODUCTS

Planned Maintenance Checklist

Agilent 1100/1200 Column Compartment

System ID: G1316A Serial Number: DE91613377

Date: DEC 15th 2015

Customer: ACTIVE NATURALS

Address: _____

Purge Column Compartment with Isopropanol (propan-2-ol) for 5 minutes.

Perform integral pressure test as per the pump user manual. Pass Fail

o If test fails, replace column-switching valve rotor seal, if applicable and re-run test. N/A Pass Fail

Perform thermostat function test as per the user manual. During the cooling phase the Peltier elements should cool at a rate > 2°C/min. During the heating phase, the temperature change should be > 3°C/min.

Pass Fail

Purge LC system with HPLC grade ^{*}water for 10 minutes.

* 50/50 (WATER/METHANOL)

Completed by: [Signature] Date: DEC 15th 2015

Reviewed by: _____ Date: _____

Comments: _____

CAMBRIDGE SCIENTIFIC PRODUCTS

Planned Maintenance Checklist

Agilent 1100/1200 Diode Array and Multiple Wavelength Detectors

System ID: G1315A Serial Number: u572101172
 Date: DEC 15th 2015
 Customer: ACTIVE NATURALS
 Address: _____

- Check that each waste tray and interface is properly mounted.
- Check for proper mounting and functionality of all leak sensors.
- Wash deposits from each leak sensor.
- Inspect flow cell for leaks
- Clean or replace flow cells as needed
- Replace Lamp N/A
- Perform Holmium Oxide Test

Wavelength	Found
361.0 nm	361.4
453.7 nm	453.6
536.7 nm	536.9

} PASS

- Perform intensity test. Result: Pass Fail
- Perform dark current test Result: Pass Fail
- Perform filter test RESULT: PASS FAIL

Completed by: [Signature] Date: DEC 15th 2015
 Reviewed by: _____ Date: _____
 Comments: _____

CAMBRIDGE SCIENTIFIC PRODUCTS

Planned Maintenance Checklist

Agilent 1100/1200 Autosampler

System ID: G1313A Serial Number: DE33224182
 Date: DEC 15th 2015
 Customer: ACTIVE NATURALS
 Address: _____

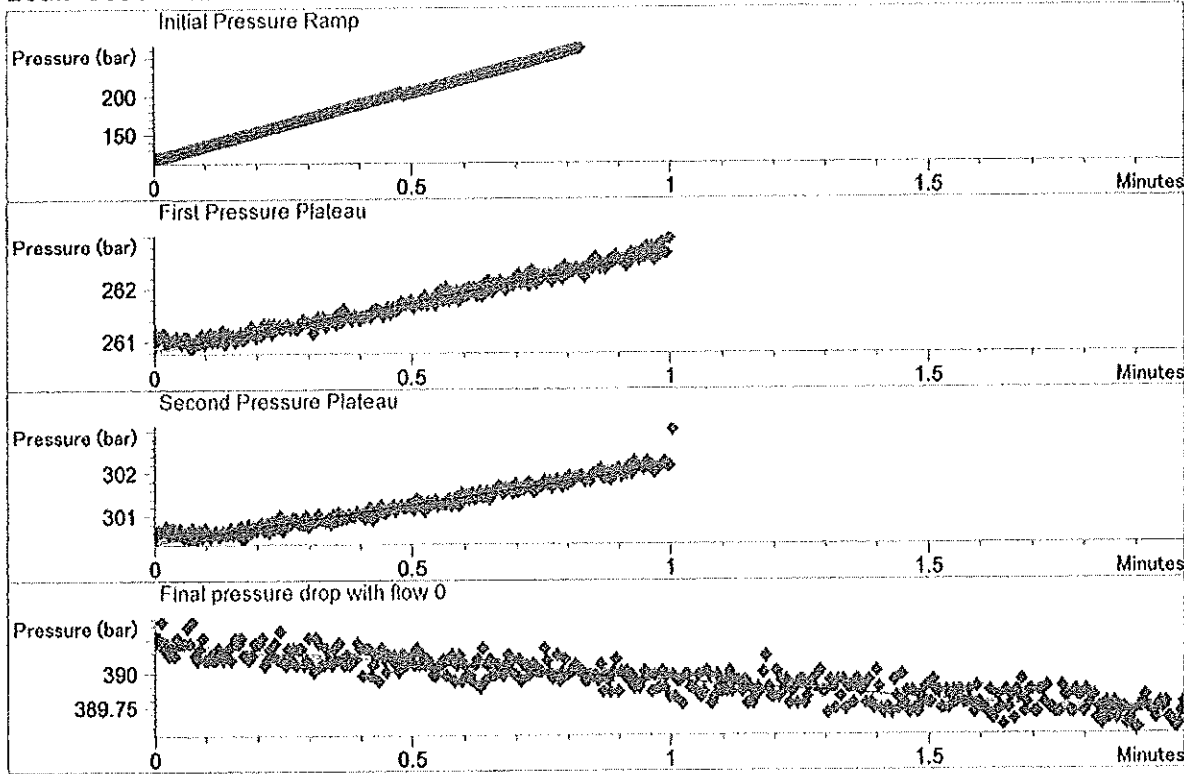
- Check that each waste tray and interface is properly mounted and clean the solvent waste path.
- Check for proper mounting and functionality of all leak sensors.
- Wash deposits from each leak sensor.
- Replace rotor seal.
- Check Stator.
- Replace metering unit seal.
- Clean piston.
- Replace needle and needle seat.
- Check finger caps.
- Check that the Chiller unit drain tube is positioned correctly (if applicable). N/A
- Purge Autosampler with IPA for 5 minutes.
- Cap outlet of Autosampler with blank nut.
- Perform the integral pressure test. Result: Pass Fail
- Perform the integral leak test. Result: Pass Fail N/A

Completed by: *[Signature]* Date: DEC 15th 2015

Reviewed by: _____ Date: _____
 Comments: _____

Instrument: G1311A
 Serial Number: DE11115544
 Operator:
 Date: 12/15/2015
 Time: 12:23:29 PM
 File: C:\CHEM32\1\DIAGNOSE\CSP\LEAK_DE11115544_DEC_15_2015.DGR

Leak Test Charts



Leak Test Results

	Specification	Measured	Result
Pressure for the first plateau	> 100 bar	261 bar	Passed
Slope of the first plateau	> 0 bar/min	1.85 bar/min	Passed
Pressure for the second plateau	> 140 bar	300 bar	Passed
Slope of the second plateau	> 0 bar/min	1.78 bar/min	Passed
Pressure value	> 385 bar	390 bar	Passed
Final pressure drop with flow 0	< 2 bar/min	0.3 bar/min	Passed

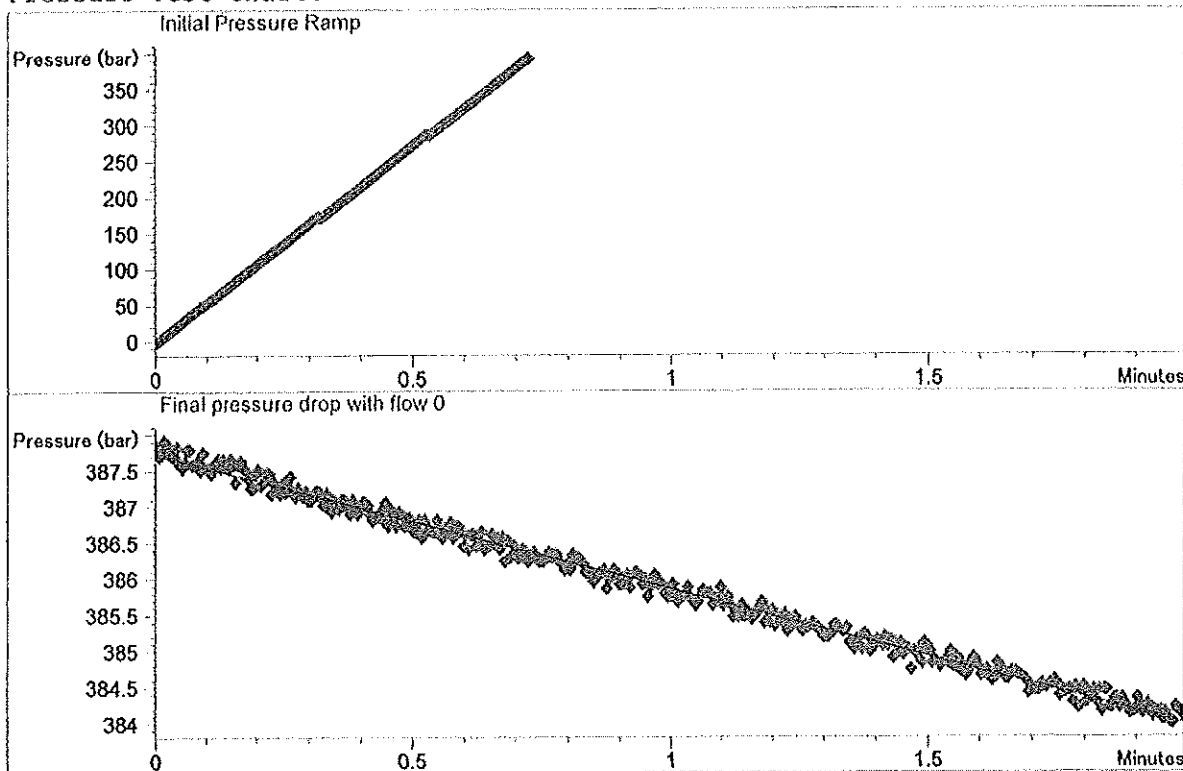
PERFORMED BY: SEAN McENTAGART

DATE: DEC 15th 2015

SIGNATURE: *Sean McEntagart*

Instrument: G1311A
 Serial Number: DE11115544
 Operator:
 Date: 12/15/2015
 Time: 12:43:22 PM
 File: C:\CHEM32\1\DIAGNOSE\CSP\PRESSURE_DE11115544_DEC_15_2015.DGR

Pressure Test Charts



Pressure Test Results

	Specification	Measured	Result
Slope of initial pressure ramp	> 300 bar/min	544 bar/min	Passed
Pressure value	> 385 bar	388 bar	Passed
Final pressure drop with flow 0	< 2 bar/min	1.9 bar/min	Passed

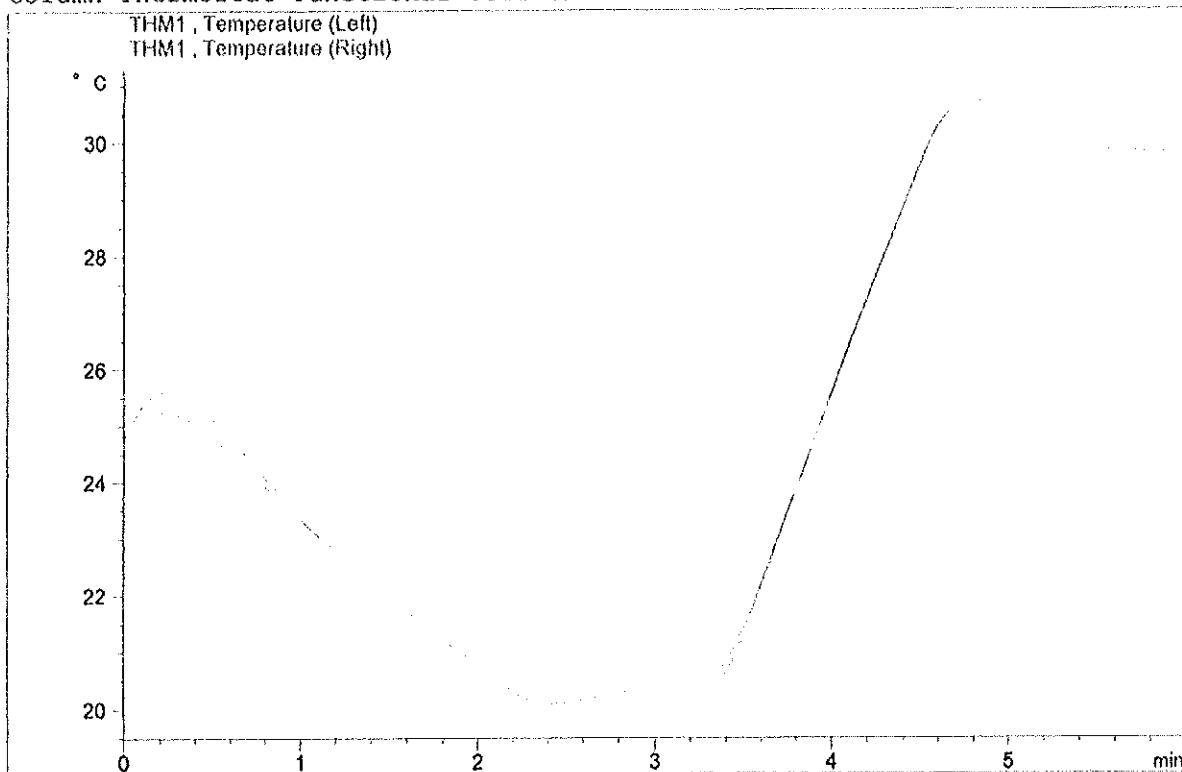
PERFORMED BY: SEAN MCENTAGGART

DATE: DEC 15th 2015

SIGNATURE: *[Handwritten Signature]*

Instrument: G1316A
 Serial Number: DE91613377
 Operator:
 Date: 12/9/2015
 Time: 2:54:22 PM
 File: C:\CHEM32\1\DIAGNOSE\CSP\COLUMN_DE91613377_DEC_09_2015.DGR

Column Thermostat Functional Test Chart



Column Thermostat Functional Test Results

	Specification	Measured	Result
Cooling rate for left peltier element	>= 2 °C/min	2.8 °C/min	Passed
Heating rate for left peltier element	>= 3 °C/min	8.3 °C/min	Passed
Cooling rate for right peltier element	>= 2 °C/min	3.4 °C/min	Passed
Heating rate for right peltier element	>= 3 °C/min	8.5 °C/min	Passed

PERFORMED BY: SEAN M'ENTAGART

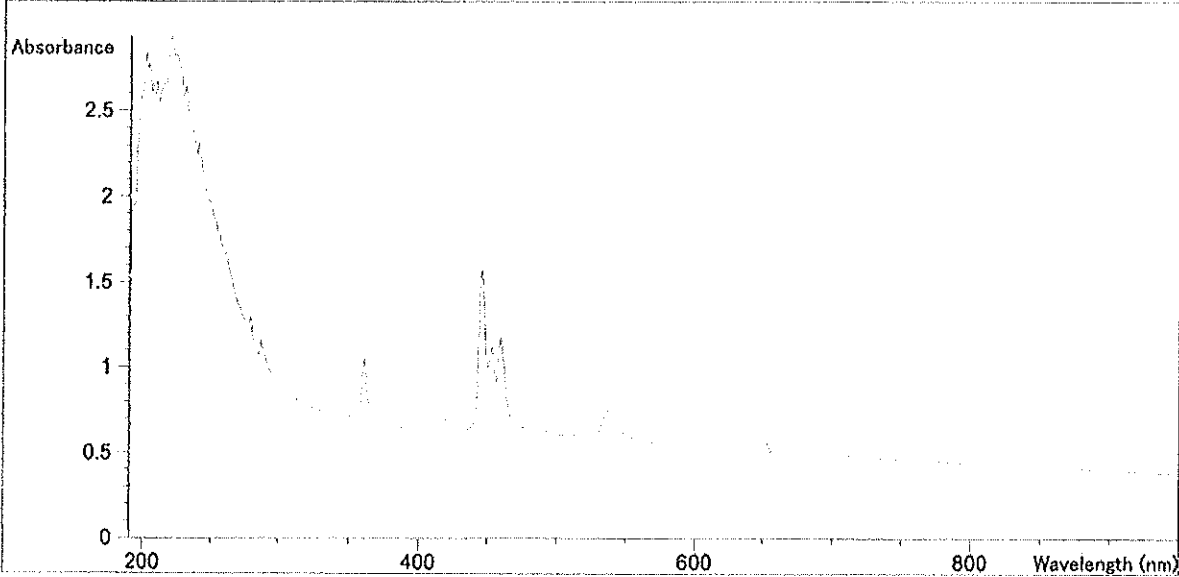
DATE: DEC 15th 2015

SIGNATURE: *[Handwritten Signature]*

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Instrument: G1315A
 Serial Number: US72101172
 Operator:
 Date: 12/9/2015
 Time: 3:00:36 PM
 File: C:\CHEM32\1\DIAGNOSE\CSP\DAD_HOLMIUM_US72100977_DEC_09_2015.DGR

Holmium Filter Spectrum



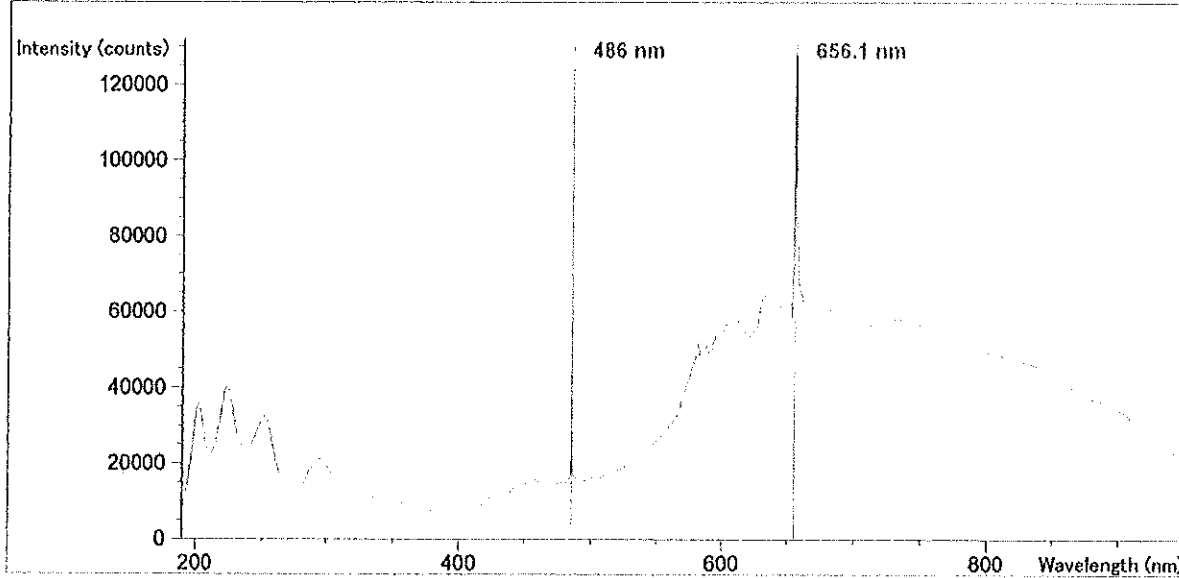
Holmium Filter Test Results

	Specification	Measured	Result
Wavelength 1: 361.0 nm	360..362 nm	361.4 nm	Passed
Wavelength 2: 453.7 nm	452.7..454.7 nm	453.6 nm	Passed
Wavelength 3: 536.7 nm	535.7..537.7 nm	536.9 nm	Passed

PERFORMED BY: SGAN MCENTAGART
 DATE: DEC 15th 2015
 SIGNATURE: *[Handwritten Signature]*

Instrument: G1315A
 Serial Number: US72101172
 Operator:
 Date: 12/9/2015
 Time: 3:06:00 PM
 File: C:\CHEM32\1\DIAGNOSE\CSP\DAD_INTENSITY_US72100977_DEC_09_2015.DGR

Intensity Plot



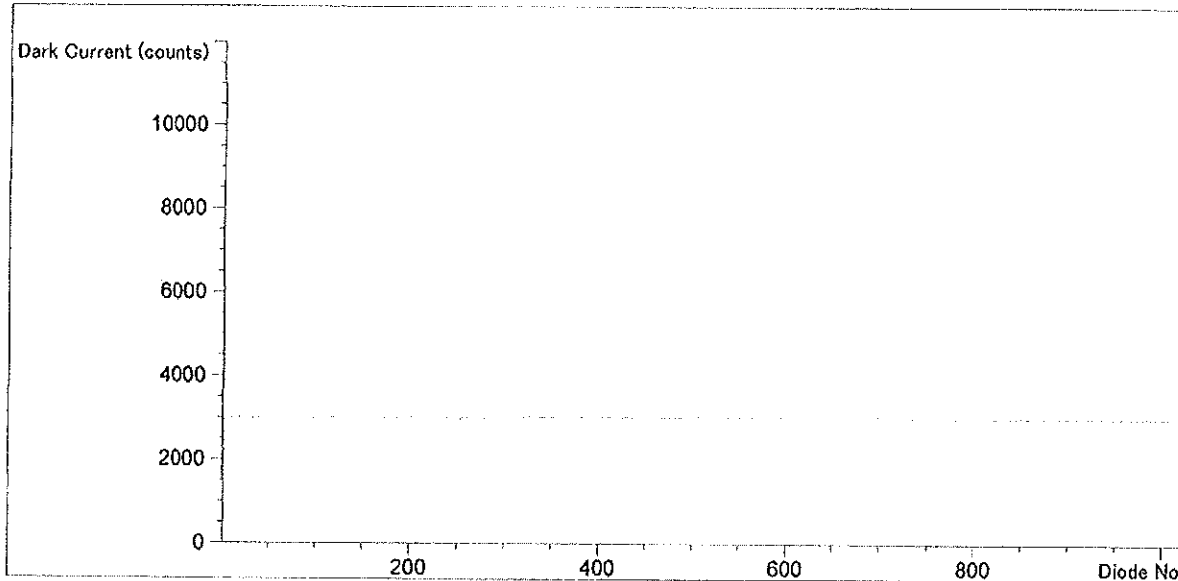
Intensity Test Results

	Specification	Measured	Result
Accumulated UV lamp on time		12685.32 h	
Lowest intensity in range 190nm - 220nm:	> 2000 cts	8078 cts	Passed
Lowest intensity in range 221nm - 350nm:	> 5000 cts	10615 cts	Passed
Lowest intensity in range 351nm - 500nm:	> 2000 cts	6854 cts	Passed
Lowest intensity in range 501nm - 950nm:	> 2000 cts	16027 cts	Passed
Highest intensity in range 190nm - 350nm:	< 450000 cts	40336 cts	Passed
Highest intensity in range 700nm - 950nm:	< 300000 cts	57997 cts	Passed
Highest intensity for the D2 alpha line:	< 1200000 cts	132355 cts	Passed

PERFORMED BY: SEAN MCENTAGART
 DATE: DEC 15th 2015
 SIGNATURE: *[Signature]*

Instrument: G1315A
 Serial Number: US72101172
 Operator:
 Date: 12/9/2015
 Time: 3:07:34 PM
 File: C:\CHEM32\1\DIAGNOSE\CSP\DAD_DARK_US72100977_DEC_09_2015.DGR

Dark Current Plot



Dark Current Test Results

	Specification	Measured	Result
Dark current maximum value	<= 12000 cts	3060 cts	Passed
Dark current minimum value	> 0 cts	2932 cts	Passed

PERFORMED BY: SEAN MCENTAGART


DATE: DEC 15th 2015

SIGNATURE: *[Handwritten Signature]*

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Instrument: G1315A
 Serial Number: US72101172
 Operator:
 Date: 12/9/2015
 Time: 3:27:10 PM
 File: C:\CHEM32\1\DIAGNOSE\CSP\DAD_FILTER_US72100977_DEC_09_2015.DGR

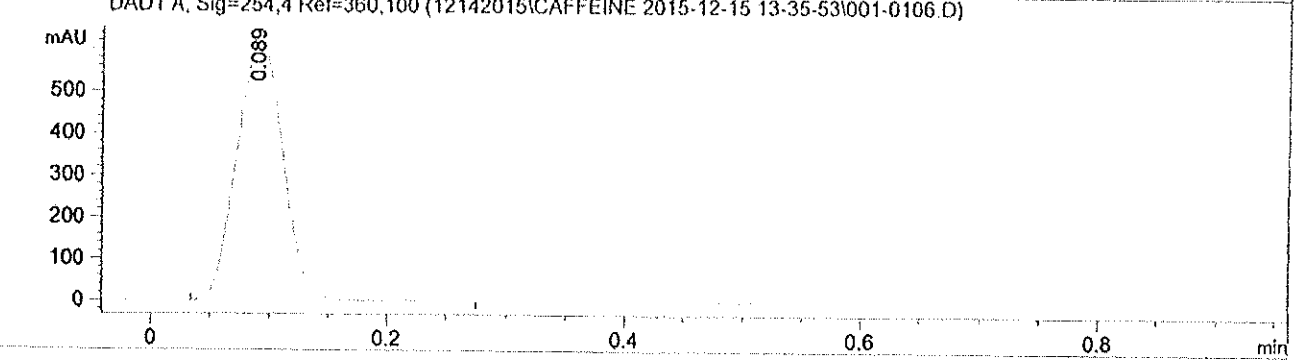
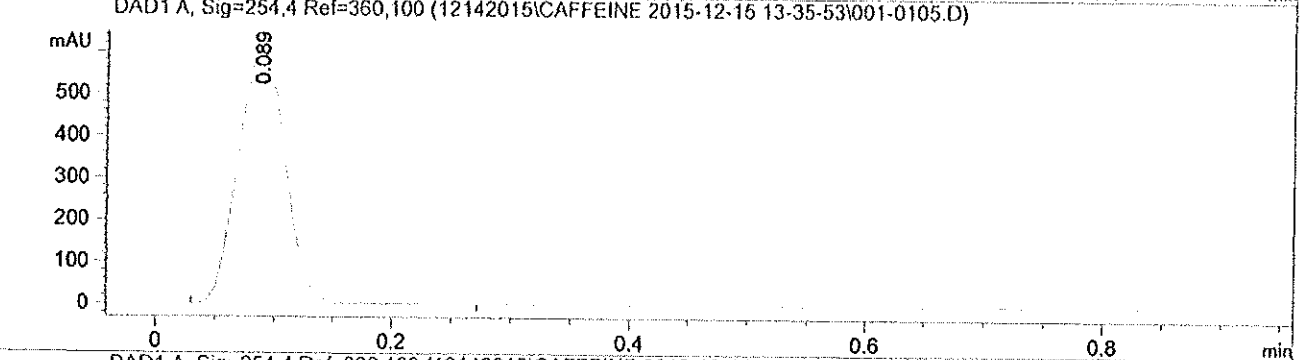
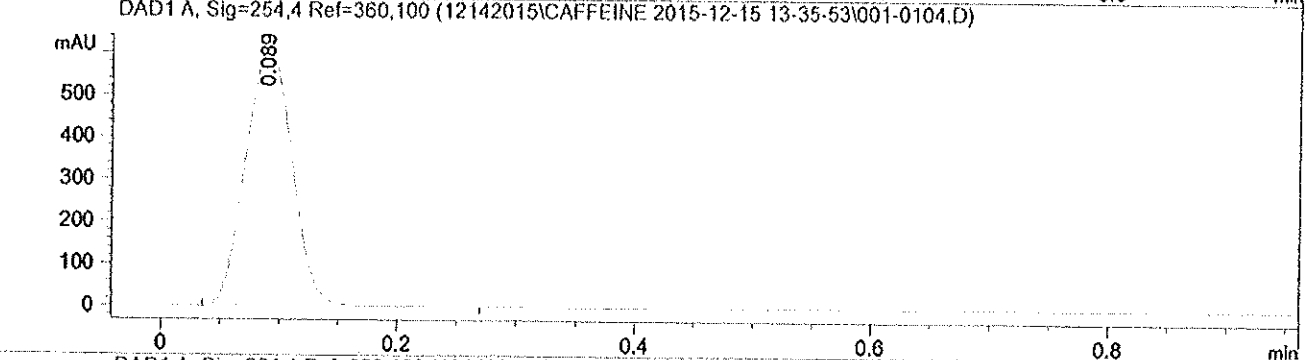
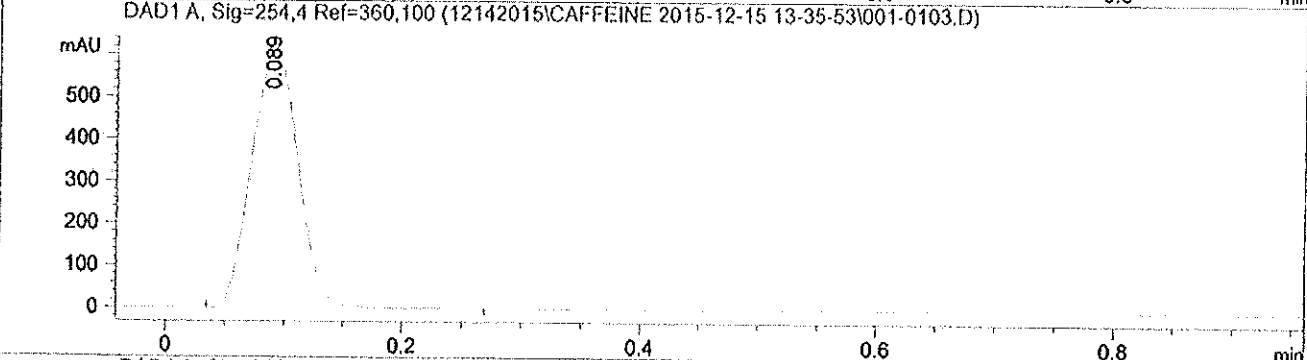
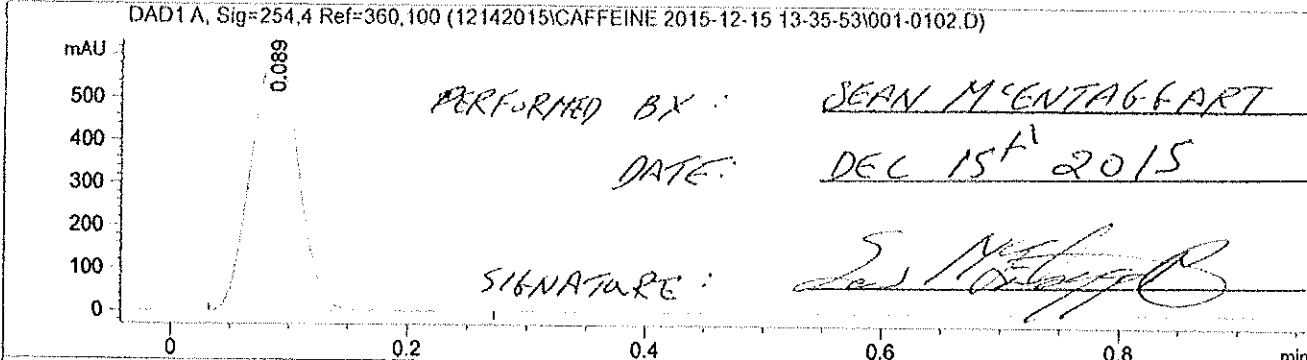
	Result	Status
DAD Filter Test		
Date: 12/9/2015; Time: 3:27:10 PM		
Expected total time: approx. 45s.		
Test Procedure:		
1. Measuring and evaluating filter test result	0.10	done

PERFORMED BY: SEAN MCENTAGART
 DATE: DEC 15th 2015
 SIGNATURE: 

INJECTION PRECISION FOR 61313A

SIN: DE33224182

Current Chromatogram(s)



Sample Name: Caffeine

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INJECTION PRECISION FOR 6-1313A S/N: DE33224182

Integration Results

Signal 1: DAD1 A, Sig=254,4 Ref=360,100 (12142015\CAFFEINE 2015-12-15 13-35-53\001-0102.D)

Peak #	Time [min]	Type	Area [mAU*s]	Height [mAU]	Width [min]	Start [min]	End [min]
1	0.089	BB	1670.39905	614.42865	0.0437	0.033	0.273

Signal 2: DAD1 A, Sig=254,4 Ref=360,100 (12142015\CAFFEINE 2015-12-15 13-35-53\001-0103.D)

Peak #	Time [min]	Type	Area [mAU*s]	Height [mAU]	Width [min]	Start [min]	End [min]
1	0.089	BB	1664.49695	613.64282	0.0436	0.035	0.269

$\bar{X}_5 = 1673.34790$
 $\%RSD = 0.46\%$

Signal 3: DAD1 A, Sig=254,4 Ref=360,100 (12142015\CAFFEINE 2015-12-15 13-35-53\001-0104.D)

Peak #	Time [min]	Type	Area [mAU*s]	Height [mAU]	Width [min]	Start [min]	End [min]
1	0.089	BB	1668.89087	615.77161	0.0436	0.036	0.269

Signal 4: DAD1 A, Sig=254,4 Ref=360,100 (12142015\CAFFEINE 2015-12-15 13-35-53\001-0105.D)

Peak #	Time [min]	Type	Area [mAU*s]	Height [mAU]	Width [min]	Start [min]	End [min]
1	0.089	BB	1682.57312	621.05109	0.0436	0.031	0.271

Signal 5: DAD1 A, Sig=254,4 Ref=360,100 (12142015\CAFFEINE 2015-12-15 13-35-53\001-0106.D)

Peak #	Time [min]	Type	Area [mAU*s]	Height [mAU]	Width [min]	Start [min]	End [min]
1	0.089	BB	1680.37952	619.68915	0.0436	0.035	0.275

PERFORMED BY: SEAN MCENTAGGART

DATE: DEC 15th 2015

SIGNATURE: 