

UNICORN 7.3.0

1 (12)

User: AM/c304117 4/4/2024 7:26:07 AM -04:00

Method: v002 Scouting Method LA1031 CEX

## Text instructions

### Main method:

0.00 Base: CV, Vc=73.796 {l}, LA1031\_CEX\_26pt1cm\_H\_X\_60cm\_D

0.00 Phase: Method Settings

0.00 Base: SameAsMain

0.00 Phase: User Defined

0.00 Base: SameAsMain

0.00 Set mark: (Result\_Name)#Result\_Name

0.00 Block: Start\_Conditions

0.00 Base: SameAsMain

0.00 Air\_Alarm: Disabled, Disabled

Comment: Disabling Flow warning prevents "no flow" error when method is run.

0.00 Flow warning: Disabled

Comment: Reduce flow deviation if method will require flowrate less than 10 L/hr

0.00 FlowDeviation\_FIT\_PA: 20.0 {l/hour}, -20.0 {l/hour}, 300.0 {sec}, Enabled

0.00 FlowDeviation\_FIT\_PB: 20.0 {l/hour}, -20.0 {l/hour}, 300.0 {sec}, Enabled

0.00 PIT\_PB: 3.00 {bar}, 0.00 {bar}, 2.70 {bar}, 0.00 {bar}, 0.00 {bar}, Enabled

0.00 PIT\_PA: 5.00 {bar}, 0.00 {bar}, 3.50 {bar}, 0.00 {bar}, 0.00 {bar}, Enabled

Comment: For valley or peak cut, see method notes for guidance to set the UV\_MinPeak

0.00 UV\_MinPeak: 0.0000 {AU}, 0.0000 {AU}, 0.0000 {AU}

0.00 Wavelength: 280 {nm}, 0 {nm}, 0 {nm}

0.00 End\_Block

Comment: THROUGHOUT: Purge volume = 7L, 10L, and 15L for 3/8", 1/2", and 3/4" skid respectively

Comment: THROUGHOUT: Manflow = 60% for 3/4" skid. Manflow = 100% for 3/8" and 1/2" skid

0.00 Block: (Startup\_Blocks)#Startup\_Blocks

0.00 Base: SameAsMain

0.00 Block: Prepare\_Purge\_Col\_Bypass

0.00 Base: Time, ColumnSameAsMain

0.00 Message: Prepare to purge column bypass line. Ensure column is bypassed. , Screen, No sound

0.00 Pause: Infinite {min}

0.01 End\_Block

0.00 Block: Purge\_Inlet\_5\_Col\_Bypass

0.00 Base: Volume, ColumnSameAsMain

0.00 Air\_Alarm: Disabled, Disabled

0.00 Inlet: Closed, Inlet5

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```
0.00 BubbleTrap: Bypass
0.00 Filter: Bypass
0.00 Column: UpFlow
0.00 Outlet: Waste
0.00 ManFlow: 60.0 {%}
0.00 Set mark: Purge column bypass line with resin storage
solution.
Comment: Regardless of skid size, keep purge volume 10 L upflow and
10 L downflow
10.00 Column: DownFlow
20.00 End_Block
0.00 Block: Place_Column_Inline
0.00 Base: Time, ColumnSameAsMain
0.00 Message: Close valves to column bypass loop and open column
valves (column inline)., Screen, No sound
0.00 Pause: Infinite {min}
0.01 End_Block
0.00 Block: Purge_Inlet_Sample
0.00 Base: Volume, ColumnSameAsMain
0.00 Air_Alarm: Disabled, Disabled
0.00 Inlet: Sample, Closed
0.00 BubbleTrap: Bypass
0.00 Filter: Bypass
0.00 Column: Bypass_Both
0.00 Outlet: Waste
0.00 ManFlow: 60.0 {%}
0.00 Set mark: Purge Inlet Sample: QD00305
15.00 End_Block
0.00 Block: Connect_Equil_to_Inlet_1
0.00 Base: Time, ColumnSameAsMain
0.00 Message: Connect QD00305 to Inlet 1 and open clamps., Screen,
No sound
0.00 Pause: Infinite {min}
0.01 End_Block
0.00 Block: Purge_Inlet_4
0.00 Base: Volume, ColumnSameAsMain
0.00 Air_Alarm: Disabled, Disabled
0.00 Inlet: Closed, Inlet4
0.00 BubbleTrap: Bypass
0.00 Filter: Bypass
0.00 Column: Bypass_Both
0.00 Outlet: Waste
0.00 ManFlow: 60.0 {%}
0.00 Set mark: Purge Inlet 4: QD00007
```

15.00 End\_Block

**0.00 Block: Purge\_Inlet\_7**

0.00 Base: Volume, ColumnSameAsMain

0.00 Air\_Alarm: Disabled, Disabled

0.00 Inlet: Closed, Inlet7

0.00 BubbleTrap: Bypass

0.00 Filter: Bypass

0.00 Column: Bypass\_Both

0.00 Outlet: Waste

0.00 ManFlow: 60.0 {%}

0.00 Set mark: Purge Inlet 7: QD00346

15.00 End\_Block

0.00 End\_Block

**0.00 Block: (Prepare\_Purge\_Skid\_Filter)#Prepare\_Purge\_Skid\_Filter**

0.00 Base: Time, ColumnSameAsMain

0.00 Message: Prepare to purge the skid filter., Screen, No sound

0.00 Pause: Infinite {min}

0.01 End\_Block

**0.00 Block: (Purge\_Skid\_Filter\_Inlet\_1)#Purge\_Skid\_Filter\_Inlet\_1**

0.00 Base: Volume, ColumnSameAsMain

0.00 Air\_Alarm: Disabled, Disabled

0.00 Inlet: Inlet1, Closed

0.00 BubbleTrap: Inline

0.00 Filter: Inline

0.00 Column: Bypass\_Both

0.00 Outlet: Waste

0.00 ManFlow: 60.0 {%}

0.00 Set mark: Filter Wetting and Purge of Inlet 1 QD00305

Comment: Regardless of skid size, keep purge volume 20 L

20.00 End\_Block

**0.00 Block: (Flush\_Outlet\_Mainstreams\_Equil)**

**#Flush\_Outlet\_Mainstreams\_Equil**

0.00 Base: Volume, ColumnSameAsMain

0.00 Air\_Alarm: Disabled, Disabled

0.00 Inlet: Inlet1, Closed

0.00 BubbleTrap: Inline

0.00 Filter: Inline

0.00 Column: Bypass\_Both

0.00 ManFlow: 60.0 {%}

0.00 Fractions: 3, 5.0 {1}, Outlet1

Comment: Update end block volume to number of MS times 5L for each outlet

15.00 End\_Block

**0.00 Block: (Pause\_attach\_outlet\_containers)****#Pause\_attach\_outlet\_containers**

0.00 Base: Time, ColumnSameAsMain

0.00 Message: Attach Outlets to effluent containers per ticket instructions., Screen, No sound

0.00 Pause: Infinite {min}

0.01 End\_Block

**0.00 Block: (Pre-Use\_Sanitization)#Pre-Use\_Sanitization**

0.00 Base: SameAsMain

**0.00 Block: Pre\_Use\_Column\_Sanitization**

0.00 Base: SameAsMain

0.00 Air\_Alarm: Disabled, Enabled

0.00 FIT\_PB\_Totalizer\_Reset

0.00 Inlet: Closed, Inlet4

0.00 BubbleTrap: Inline

0.00 Filter: Inline

0.00 Column: DownFlow

0.00 Outlet: Waste

0.00 Flow: (200)#Pre-Use\_Sani\_Flowrate {cm/h}

0.00 Set mark: Pre-Use Column Sanitization Start

2.00 Snapshot: Pre-Use Column Sanitization End

2.00 End\_Block

**0.00 Block: Pause\_Complete\_Sanitization**

0.00 Base: Time, ColumnSameAsMain

0.00 Pause: 30.00 {min}

0.01 End\_Block

0.00 End\_Block

**0.00 Block: Purge\_B\_Pump**

0.00 Base: Time, ColumnSameAsMain

0.00 Air\_Alarm: Disabled, Disabled

0.00 Inlet: Closed, Inlet7

Comment: Change inlet to match first inlet used from B pump

0.00 BubbleTrap: Bypass

0.00 Filter: Bypass

0.00 Column: Bypass\_Both

0.00 Outlet: Waste

0.00 ManFlow: 60.0 {%}

0.00 Set mark: Purge Inlet 7: QD00346

2.00 End\_Block

**0.00 Block: Purge\_A\_Pump**

0.00 Base: Time, ColumnSameAsMain

0.00 Air\_Alarm: Disabled, Disabled

0.00 Inlet: Inlet1, Closed

Comment: Change inlet to match first inlet used from A pump

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0.00 BubbleTrap: Inline  
0.00 Filter: Inline  
0.00 Column: Bypass\_Both  
0.00 Outlet: Waste  
0.00 ManFlow: 60.0 {%}  
0.00 Set mark: Purge Inlet sample: QD00305  
2.00 End\_Block

**0.00 Block: Equilibration**

0.00 Base: SameAsMain  
0.00 Air\_Alarm: Disabled, Enabled  
0.00 FIT\_PA\_Totalizer\_Reset  
0.00 FIT\_PB\_Totalizer\_Reset  
0.00 FIT\_PA+PB\_Totalizer\_Reset  
0.00 Inlet: Inlet1, Inlet7  
0.00 BubbleTrap: Inline  
0.00 Filter: Inline  
0.00 Column: DownFlow  
0.00 Outlet: Waste  
0.00 GradMode: FlowGradient  
0.00 Gradient: 10.0 {%B}, 0.00 {base}  
0.00 Flow: (200)#Equil\_Flowrate {cm/h}  
0.00 Set mark: Column Equil Start  
3.00 Snapshot: Equil End  
3.00 End\_Block

**0.00 Block: UV\_Auto\_Zero**

0.00 Base: Time, ColumnSameAsMain  
0.00 AT\_PF\_AZ  
0.10 End\_Block

**0.00 Block: (Connect\_Charge\_to\_Inlet\_Sample)****#Connect\_Charge\_to\_Inlet\_Sample**

0.00 Base: Time, ColumnSameAsMain  
0.00 Message: Connect Charge to Inlet Sample and open clamps.,  
Screen, No sound  
0.00 Pause: Infinite {min}  
0.01 End\_Block

**0.00 Block: Charge**

0.00 Base: Volume, ColumnSameAsMain  
0.00 Snapshot: Charge Begin  
0.00 Air\_Alarm: Disabled, Enabled  
0.00 FIT\_PA\_Totalizer\_Reset  
0.00 Inlet: Sample, Closed  
0.00 BubbleTrap: Inline  
0.00 Filter: Inline  
0.00 Column: DownFlow

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0.00 Outlet: Waste  
0.00 Flow: (200)#Charge\_Flowrate {cm/h}  
0.00 Set mark: Column Charge Start  
(800.00)#Set\_Charge\_Volume Snapshot: Charge End  
800.00 End\_Block

**0.00 Block: Post\_Charge\_Wash**

0.00 Base: SameAsMain  
0.00 Air\_Alarm: Disabled, Enabled  
0.00 FIT\_PA\_Totalizer\_Reset  
0.00 FIT\_PB\_Totalizer\_Reset  
0.00 FIT\_PA+PB\_Totalizer\_Reset  
0.00 Inlet: Inlet1, Inlet7  
0.00 BubbleTrap: Inline  
0.00 Filter: Inline  
0.00 Column: DownFlow  
0.00 Outlet: Waste  
0.00 GradMode: FlowGradient  
0.00 Gradient: 10.0 {%B}, 0.00 {base}  
0.00 Flow: (200)#Post\_Charge\_Wash\_Flowrate {cm/h}  
0.00 Set mark: Post\_Charge\_Wash  
2.00 Snapshot: Post Charge Wash End  
2.00 Watch off: AT\_PF\_UV\_1  
2.00 End\_Block

**0.00 Block: (Elution)#Elution**

0.00 Base: SameAsMain  
0.00 Air\_Alarm: Disabled, Enabled  
0.00 FIT\_PA\_Totalizer\_Reset  
0.00 FIT\_PB\_Totalizer\_Reset  
0.00 FIT\_PA+PB\_Totalizer\_Reset  
0.00 Inlet: Inlet1, Inlet7  
0.00 BubbleTrap: Inline  
0.00 Filter: Inline  
0.00 Column: DownFlow  
0.00 Outlet: Waste  
0.00 Flow: (200)#Elution\_Flowrate {cm/h}  
Comment: FS will go to Outlet Waste  
0.00 Gradient: 90.0 {%B}, 10.00 {base}  
0.00 GradMode: FlowGradient  
0.00 Set mark: Elution - FS  
0.00 Snapshot: Start FS

**0.00 Watch: PIT\_PA., Greater than, 3.00 {bar}, Elution\_Message**

0.00 Base: SameAsMain  
0.00 Message: Pause during elution may trigger UV and impact  
mainstream collection, Screen, No sound

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```
0.00 End_Block
0.00 Watch: PIT_PB., Greater than, 2.50 {bar}, Elution_Message_PB
0.00 Base: SameAsMain
0.00 Message: Pause during elution may trigger UV and impact
mainstream collection, Screen, No sound
0.00 End_Block
0.00 Watch: PIT_PB., Greater than, 2.70 {bar}, Slow_Flow
0.00 Base: SameAsMain
0.00 Flow: (150)#Reduced_Elution_Flow {cm/h}
0.00 End_Block
Comment: LHM4350 Compensation Factor w/2mm Path = 4.92
0.00 Block: Watch_UV
0.00 Base: SameAsMain
0.00 Watch: AT_PF_UV_1, Greater than, 0.2033 {AU}, Collect_Peak
0.00 Base: SameAsMain
0.00 Outlet: (Outlet1)#MS_Outlet
0.00 Set mark: Elution - MS
0.00 Snapshot: Start MS Collection
0.00 Watch: AT_PF_UV_1, Greater than, 1.5000 {AU},
watch_Less_Than
0.00 Base: SameAsMain
0.00 Watch: AT_PF_UV_1, Less than, 0.8130 {AU}, End block
0.00 End_Block
0.00 End_Block
0.00 End_Block
10.00 Gradient: 90.0 {%B}, 0.00 {base}
10.00 GradMode: FlowGradient
12.00 Snapshot: Elution End
12.00 Watch off: AT_PF_UV_1
12.00 End_Block
0.00 Block: (Elution_Full_Backside)#Elution_Full_Backside
0.00 Base: SameAsMain
0.00 Air_Alarm: Disabled, Enabled
0.00 FIT_PA_Totalizer_Reset
0.00 FIT_PB_Totalizer_Reset
0.00 FIT_PA+PB_Totalizer_Reset
0.00 Inlet: Inlet1, Inlet7
0.00 BubbleTrap: Inline
0.00 Filter: Inline
0.00 Column: DownFlow
0.00 Outlet: Waste
0.00 Flow: (200)#Elution_Flowrate {cm/h}
Comment: FS will go to Outlet Waste
0.00 GradMode: FlowGradient
```

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```
0.00 Gradient: 90.0 {%B}, 10.00 {base}
0.00 Set mark: Elution - FS
0.00 Snapshot: Start FS
0.00 Watch: PIT_PA., Greater than, 3.00 {bar}, Elution_Message
0.00 Base: SameAsMain
0.00 Message: Pause during elution may trigger UV and impact
mainstream collection, Screen, No sound
0.00 End_Block
0.00 Watch: PIT_PB., Greater than, 2.50 {bar}, Elution_Message_PB
0.00 Base: SameAsMain
0.00 Message: Pause during elution may trigger UV and impact
mainstream collection, Screen, No sound
0.00 End_Block
Comment: LHM4350 Compensation Factor w/2mm Path = 4.92
0.00 Watch: PIT_PB., Greater than, 2.70 {bar}, Slow_Flow
0.00 Base: SameAsMain
0.00 Flow: (150)#Reduced_Elution_Flow {cm/h}
0.00 End_Block
0.00 Block: Watch_UV_1
0.00 Base: SameAsMain
0.00 Watch: AT_PF_UV_1, Greater than, 0.2033 {AU}, Collect_Peak_1
0.00 Base: SameAsMain
0.00 Outlet: (Outlet1)#MS_Outlet
0.00 Set mark: Elution - MS
0.00 Snapshot: Start MS Collection
0.00 Watch: AT_PF_UV_1, Greater than, 1.5000 {AU},
watch_Less_Than_1
0.00 Base: SameAsMain
0.00 Watch: AT_PF_UV_1, Less than, 0.8130 {AU}, stop_Collect
0.00 Base: SameAsMain
0.00 Outlet: Waste
0.00 Set mark: Elution - BS
0.00 Snapshot: Mainstream Collection End -Start BS
Comment: BS will go to Outlet Waste
0.00 End_Block
0.00 End_Block
0.00 End_Block
10.00 Gradient: 90.0 {%B}, 0.00 {base}
10.00 GradMode: FlowGradient
12.00 Snapshot: Elution End
12.00 Watch off: AT_PF_UV_1
12.00 End_Block
0.00 Block: Post_Use_Sanitization
```



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0.00 Base: SameAsMain

**0.00 Block: Post\_Use\_Column\_Sanitization**

0.00 Base: SameAsMain

Comment: Turn off the pressure watches from Elution:

0.00 Watch off: PIT\_PA.

0.00 Watch off: PIT\_PB.

0.00 Watch off: AT\_PF\_UV\_1

0.00 New chromatogram: PostUseColSanitz

0.00 Snapshot: Mainstream End, Begin Post Use Column Sanitization

0.00 FIT\_PB\_Totalizer\_Reset

0.00 Inlet: Closed, Inlet4

0.00 BubbleTrap: Inline

0.00 Filter: Inline

0.00 Column: UpFlow

0.00 Outlet: Waste

0.00 Flow: (200)#Post\_Use\_Sani\_Flowrate {cm/h}

0.00 Injection\_Mark

0.00 Set mark: Post Use Column Sanitization Start

2.00 FlowDeviation\_FIT\_PA: 20.0 {l/hour}, -20.0 {l/hour}, 300.0 {sec}, Disabled

2.00 FlowDeviation\_FIT\_PB: 20.0 {l/hour}, -20.0 {l/hour}, 300.0 {sec}, Disabled

2.00 Snapshot: End Post Use Column Sanitization

2.00 End\_Block

**0.00 Block: Pause\_Complete\_Sanitization\_**

0.00 Base: Time, ColumnSameAsMain

0.00 Pause: 30.00 {min}

0.01 End\_Block

0.00 End\_Block

**0.00 Block: (Column\_Storage)#Column\_Storage**

0.00 Base: SameAsMain

0.00 FlowDeviation\_FIT\_PA: 20.0 {l/hour}, -20.0 {l/hour}, 300.0 {sec}, Enabled

0.00 FlowDeviation\_FIT\_PB: 20.0 {l/hour}, -20.0 {l/hour}, 300.0 {sec}, Enabled

0.00 Air\_Alarm: Disabled, Enabled

0.00 FIT\_PB\_Totalizer\_Reset

0.00 Inlet: Closed, Inlet5

0.00 BubbleTrap: Inline

0.00 Filter: Inline

0.00 Column: UpFlow

0.00 Outlet: Waste

0.00 Flow: (200)#Storage\_Flowrate {cm/h}

0.00 Set mark: Column Storage

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2.00 Snapshot: Column\_Storage

2.00 End\_Block

**0.00 Block: (Blank)#Blank**

0.00 Base: SameAsMain

0.00 End\_Block

**0.00 Block: Return\_to\_Default**

0.00 Base: Time, Any

0.00 ManFlow: 0.0 {%}

0.05 Filter: Bypass

0.10 Column: Bypass\_Both

0.15 BubbleTrap: Inline

0.15 Inlet: Closed, Closed

0.50 Outlet: Closed

0.50 End\_Block

**0.00 Block: End\_of\_Run\_Delay**

0.00 Base: Time, Any

0.10 End\_Block

**Scouting**

Run	Included	Startup_Blocks	Prepare_Purge_Skid_Filter	Purge_Skid_Filter_Inlet_1
1	Yes	Startup_Blocks	Prepare_Purge_Skid_Filter	Purge_Skid_Filter_Inlet_1
2	Yes	Blank	Blank	Blank
3	Yes	Blank	Blank	Blank

Run	Included	Flush_Outlet_Mainstreams_Equilibrium	Pause_attach_outlet_containers	Pre-Use_Sanitization
1	Yes	Flush_Outlet_Mainstreams_Equilibrium	Pause_attach_outlet_containers	Pre-Use_Sanitization
2	Yes	Blank	Blank	Blank
3	Yes	Blank	Blank	Blank

Run	Included	Pre-Use_Sani_Flowrate	Equil_Flowrate	Connect_Charge_to_Inlet_Sample
1	Yes	200	200	Connect_Charge_to_Inlet_Sample
2	Yes	200	200	Blank
3	Yes	200	200	Connect_Charge_to_Inlet_Sample

Run	Included	Charge_Flowrate	Set_Charge_Volume	Post_Charge_Wash_Flowrate
1	Yes	200	800.00	200
2	Yes	200	800.00	200

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Run	Included	Charge_Flowrate	Set_Charge_Volume	Post_Charge_Wash_Flowrate
3	Yes	200	800.00	200
Run	Included	Elution	Elution_Flowrate	Reduced_Elution_Flow
1	Yes	Blank	200	150
2	Yes	Elution	200	150
3	Yes	Elution	200	150
Run	Included	MS_Outlet	Elution_Full_Backside	Post_Use_Sani_Flowrate
1	Yes	Outlet1	Elution_Full_Backside	200
2	Yes	Outlet2	Blank	200
3	Yes	Outlet3	Blank	200
Run	Included	Column_Storage	Storage_Flowrate	Blank
1	Yes	Blank	200	Blank
2	Yes	Blank	200	Blank
3	Yes	Column_Storage	200	Blank

## Method information

### Signatures

Date:4/4/2024 7:25:37 AM -04:00

Description:This method is signed for LA1031 CEX on 4Apr2024

User name:c304117

Full name:Helen Corbat

Job title:Engineer - BRD Technical Operations

Lock status:The item is locked

### Questions

No. 1: Is QD00305 connected to Inlet Sample?

Question type: Mandatory

Answer type: Multiple choice

No. 2: Is QD00007 connected to Inlet 4?

Question type: Mandatory

Answer type: Textual input

No. 3: Is QD00008 connected to Inlet 5?

Question type: Mandatory

Answer type: Multiple choice

No. 4: Is QD00346 connected to Inlet 7?

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Question type: Mandatory