

==== Shimadzu LabSolutions Analysis Report =====

| | | | |
|------------------|-------------------------------------|--------------|------------------------|
| Sample Name | : HD_GL_111024_CP_2 | | |
| Sample ID | : | | |
| Data Filename | : HD_GL_111024_CP_2.lcd | | |
| Method Filename | : SFB_B_ST1_0.8 mL_45 min_Start.lcm | | |
| Batch Filename | : 20241014_DN_HD_N_800_111024.lcb | | |
| Vial # | : 1-3 | Sample Type | : Unknown |
| Injection Volume | : 10 uL | | |
| Date Acquired | : 10/12/2024 6:06:18 PM | Acquired by | : System Administrator |
| Date Processed | : 10/14/2024 2:58:07 PM | Processed by | : System Administrator |

<Method>

<<Header>>

| | |
|-------------|-------------------------|
| Generated | : 4/24/2024 3:47:23 PM |
| GeneratedBy | : System Administrator |
| Modified | : 10/13/2024 3:52:17 PM |
| ModifiedBy | : System Administrator |

<<System Controller>>

| | |
|--------------------|----------|
| Model | : SCL-40 |
| Event1 | : Off |
| Event2 | : Off |
| Sample Load Timing | : Off |

<<Data Acquisition>>

| | |
|-------------------------------|--------------|
| LC Stop Time | : 45.00 min |
| Detector A Name | : Detector A |
| Detector A Sampling Frequency | : 2 Hz |
| Detector A Start Time | : 0.00 min |
| Detector A End Time | : 45.00 min |

<<Pump>>

| | |
|--------------------------------|-------------------|
| Mode | : Isocratic flow |
| Pump A | : LC-40D |
| Pump A Flow/Pressure | : Flow |
| Pump System A Flow | : 0.8000 mL/min |
| Pump System A Flow Slope | : 20.00 min |
| Pump A PressMax | : 90 bar |
| Pump A PressMin | : 0 bar |
| Pump A Valve Model | : Switching Valve |
| Pump A Valve | : B |
| Pump A Compressibility Setting | : On |
| Pump A Mobile Phase Settings | : 0.45 /GPa |

<<Autosampler>>

| | |
|-----------------------------|-------------------------------|
| Autosampler Model | : SIL-40 |
| Enable Autosampler | : Use |
| Rinse Type | : External only |
| Specify Plate | : Off |
| Rinsing Volume | : 500 uL |
| Cut Off Loop | : Off |
| Specify Needle Stroke | : Off |
| Rinsing Speed | : 35 uL/sec |
| Sampling Speed | : 5.0 uL/sec |
| Rinse Port R0 Purge Time | : 2.0 min |
| Measuring Line Purge Time | : 5.0 min |
| Rinse Mode | : Before and after aspiration |
| Rinse Dip Time | : 0 sec |
| Measuring Line Purge Volume | : 100 uL |
| Air Gap Volume | : Off |
| Rinse Port Liquid | : R0 |

<<Sample Pretreatment>>

| | |
|------|------------|
| Mode | : Standard |
|------|------------|

<<Oven>>

| | |
|---------------------|-----------|
| Oven Model | : CTO-40C |
| Enable Oven | : Use |
| Oven Temperature | : 25 C |
| Maximum Temperature | : 105 C |

Ready Check : On
 Wait Time : 5 min
 Ready Range : 1.0 C
 Fan Speed : Auto
 Cooler Mode : Auto
 Valve 1/L : FCV-0206
 Valve 1/L Position : 1: Column1

<<Detector A>>

Model : RID-20A
 Mode : Analytical
 Polarity : +
 Use Cell Temp. : Use
 Cell Temp. : 40.0 C
 Response : 1.5 sec
 Intensity Unit : Volt
 Auxiliary Range : 1.0E-3 RIU/V
 Recorder Range : 100.00 uRIU/FS
 Synchronize with Auxiliary : Off
 Purge Time : 20 min

<<LC Time Program>>

| Time | Module | Command | Value | Comment |
|-------|----------------|---------|-------|---------|
| 0.01 | RID-20A(DET.A) | Zero | | |
| 45.00 | Controller | Stop | | |

<<Peak Integration>>

<Detector A>

Channel : Ch1
 Width : 5 sec
 Slope : 2000 uV/min
 Drift : 0 uV/min
 T.DBL : 1000 min
 Max Slices : 0
 Peak Top Detection : Normal
 RT Compensation Mode : Fine
 Min.Area/Height is made effective in Manual Integration : Off
 Min.Area/Height : 1000 counts
 Calculated by : Area
 Noise Calculation Settings : Noise Data : Current Data
 Calculation Method : ASTM
 Range : Whole Range
 Interval : 0.5 min
 Include the Peak Detected Range : Off
 Detection Limit Coefficient : 3.3
 Quantitative Limit Coefficient : 10.0
 Drift Calculation Settings : 0.000 - 15.000 min

<<Integration Time Program(Method)>>

<Detector A>

Channel : Ch1
 Time Program : None

<<Integration Time Program(Data)>>

<Detector A>

| Channel | Time Program | No. Enable | Time(min) | Command | Value |
|---------|--------------|------------|-----------|---------|--------|
| | | 1 [Yes] | 9.963 | Move BL | 10.126 |
| | | 2 [Yes] | 10.121 | Move BL | 10.126 |
| | | 3 [Yes] | 10.129 | Move BL | 10.167 |
| | | 4 [Yes] | 10.162 | Move BL | 10.045 |
| | | 5 [Yes] | 10.037 | Move BL | 10.167 |
| | | 6 [Yes] | 10.162 | Move BL | 10.329 |
| | | 7 [Yes] | 10.329 | Move BL | 10.41 |

<<Identification>>

<Detector A>

Window/Band : Window
 Window : 5.00 %
 Identification Method : Absolute
 Peak Selection : Closest Peak
 Display not identified peaks : Not display

<<Quantitative>>

<Detector A>

Quantitative Method : External Standard
 Calculated by : Area
 # of Calibration Levels : 14
 Curve Fit Type : Linear

| | |
|-----------------------------|--------------|
| Zero | : Not Forced |
| Weighting Method | : None |
| X Axis of Calib. Curve | : Conc. |
| Units | : mol/L |
| Format of Conc. | : Decimals |
| Format of Conc. Figure | : 5 |
| Group Type | : Not Used |
| Check %Dev(Standard) | : No |
| Check Accuracy[%](Standard) | : No |
| Check %Dev(Control) | : No |
| Check Accuracy[%](Control) | : No |
| Check %Dev(Additive) | : No |
| Check Accuracy[%](Additive) | : No |
| Check %Dev(Unknown) | : No |
| Check Accuracy[%](Unknown) | : No |
| Check Quantitation Limit | : No |
| Check Detect Limit | : No |

<<Compound Table>>

<Detector A>

```

ID#                : 1
Name               : Methanol
Type              : Target
Channel           : Ch1
Retention Time     : 14.400 min
Retention Index    : 0
Concentration      : [1]=3.016738          [2]=1.049395          [3]=0.4943277
                   [4]=0.2893701          [5]=0.1127578          [6]=0.06136267
                   [7]=0.01619725         [8]=3.016738          [9]=1.049395
                   [10]=0.4943277         [11]=0.2893701        [12]=0.1127578
                   [13]=0.06136267        [14]=0.01619725
Peak Selection     : Default(Closest Peak)
Calculated by     : Default(Area)
Curve Fit Type    : Default(Linear)
Zero              : Default(Not Forced)
Weight            : Default(None)
Window/Band       : Default(Window)
Spiked            : 0.000
1st Coefficient   : 4.720087e+005
Intersection      : 1.693726e+003
Correction Factor  : 1.000000
Standard concentration factor : 1.000000

```

```

ID#                : 2
Name               : Glycerin
Type              : Target
Channel           : Ch1
Retention Time     : 10.000 min
Retention Index    : 0
Concentration      : [1]=2.958375          [2]=1.078646          [3]=0.5353454
                   [4]=0.3066948          [5]=0.114594          [6]=0.05901699
                   [7]=0.0117174          [8]=2.958375          [9]=1.078646
                   [10]=0.5353454         [11]=0.3066948        [12]=0.114594
                   [13]=0.05901699        [14]=0.0117174
Peak Selection     : Default(Closest Peak)
Calculated by     : Default(Area)
Curve Fit Type    : Default(Linear)
Zero              : Default(Not Forced)
Weight            : Default(None)
Window/Band       : Default(Window)
Spiked            : 0.000
1st Coefficient   : 7.326784e+006
Intersection      : 2.573900e+005
Correction Factor  : 1.000000
Standard concentration factor : 1.000000

```

```

ID#           : 3
Name          : n-Propanol
Type         : Target
Channel      : Ch1
Retention Time: 20.000 min
Retention Index: 0
Concentration : [1]=3.02526           [2]=1.092217           [3]=0.5139845
               [4]=0.3105323         [5]=0.09785473        [6]=0.04497364
               [7]=0.01087275        [8]=3.02526           [9]=1.092217
               [10]=0.5139845         [11]=0.3105323        [12]=0.09785473
               [13]=0.04497364        [14]=0.01087275
Peak Selection : Default(Closest Peak)
Calculated by  : Default(Area)

```

Curve Fit Type : Default(Linear)
 Zero : Default(Not Forced)
 Weight : Default(None)
 Window/Band : Default(Window)
 Spiked : 0.000
 1st Coefficient : 3.955755e+006
 Intersection : -2.585461e+004
 Correction Factor : 1.000000
 Standard concentration factor : 1.000000

ID# : 4
 Name : 1,2 Propandiol
 Type : Target
 Channel : Ch1
 Retention Time : 12.400 min
 Retention Index : 0
 Concentration : [1]=2.977546 [2]=1.016412 [3]=0.5030017
 [4]=0.3027638 [5]=0.1023958 [6]=0.04970167
 [7]=0.01157971 [8]=2.977546 [9]=1.016412
 [10]=0.5030017 [11]=0.3027638 [12]=0.1023958
 [13]=0.04970167 [14]=0.01157971

Peak Selection : Default(Closest Peak)
 Calculated by : Default(Area)
 Curve Fit Type : Default(Linear)
 Zero : Default(Not Forced)
 Weight : Default(None)
 Window/Band : Default(Window)
 Spiked : 0.000
 1st Coefficient : 5.771075e+006
 Intersection : 6.007717e+004
 Correction Factor : 1.000000
 Standard concentration factor : 1.000000

ID# : 5
 Name : 1,3 Propandiol
 Type : Target
 Channel : Ch1
 Retention Time : 13.000 min
 Retention Index : 0
 Concentration : [1]=2.976375 [2]=0.9968958 [3]=0.4990984
 [4]=0.2900131 [5]=0.10734 [6]=0.04944145
 [7]=0.0100184 [8]=2.976375 [9]=0.9968958
 [10]=0.4990984 [11]=0.2900131 [12]=0.10734
 [13]=0.04944145 [14]=0.0100184

Peak Selection : Default(Closest Peak)
 Calculated by : Default(Area)
 Curve Fit Type : Default(Linear)
 Zero : Default(Not Forced)
 Weight : Default(None)
 Window/Band : Default(Window)
 Spiked : 0.000
 1st Coefficient : 5.532080e+006
 Intersection : 6.014722e+004
 Correction Factor : 1.000000
 Standard concentration factor : 1.000000

ID# : 6
 Name : iso-Propanol
 Type : Target
 Channel : Ch1
 Retention Time : 16.825 min
 Retention Index : 0
 Concentration : [1]=3.03666 [2]=1.003405 [3]=0.5418687
 [4]=0.3101858 [5]=0.1067771 [6]=0.04972951
 [7]=0.01397083 [8]=3.03666 [9]=1.003405
 [10]=0.5418687 [11]=0.3101858 [12]=0.1067771
 [13]=0.04972951 [14]=0.01397083

Peak Selection : Default(Closest Peak)
 Calculated by : Default(Area)
 Curve Fit Type : Default(Linear)
 Zero : Default(Not Forced)
 Weight : Default(None)
 Window/Band : Default(Window)
 Spiked : 0.000
 1st Coefficient : 3.797216e+006
 Intersection : -2.284739e+004
 Correction Factor : 1.000000
 Standard concentration factor : 1.000000

```

ID#           : 7
Name          : Hydroxyacetone
Type         : Target
Channel      : Ch1
Retention Time : 13.300 min
Retention Index : 0
Concentration : [1]=2.855514          [2]=0.9609004          [3]=0.4875675
               [4]=0.3072624          [5]=0.1038742          [6]=0.04860286
               [7]=0.009361501         [8]=2.855514          [9]=0.9609004
               [10]=0.4875675          [11]=0.3072624         [12]=0.1038742
               [13]=0.04860286         [14]=0.009361501
Peak Selection : Default(Closest Peak)
Calculated by  : Default(Area)
Curve Fit Type : Default(Linear)
Zero          : Default(Not Forced)
Weight        : Default(None)
Window/Band   : Default(Window)
Spiked        : 0.000
1st Coefficient : 4.865699e+006
Intersection   : 5.855022e+004
Correction Factor : 1.000000
Standard concentration factor : 1.000000

```

```

ID#                : 8
Name               : Ethylenglykol
Type              : Target
Channel           : Ch1
Retention Time     : 12.200 min
Retention Index    : 0
Concentration      : [1]=2.933794          [2]=1.030353          [3]=0.4898163
                  : [4]=0.3033639          [5]=0.09840986       [6]=0.059971
                  : [7]=0.01068632         [8]=2.933794        [9]=1.030353
                  : [10]=0.4898163         [11]=0.3033639      [12]=0.09840986
                  : [13]=0.059971          [14]=0.01068632
Peak Selection     : Default(Closest Peak)
Calculated by      : Default(Area)
Curve Fit Type     : Default(Linear)
Zero               : Default(Not Forced)
Weight             : Default(None)
Window/Band        : Default(Window)
Spiked             : 0.000
1st Coefficient    : 4.284813e+006
Intersection       : 4.449721e+003
Correction Factor   : 1.000000
Standard concentration : 1.000000

```

```

ID#           : 9
Name          : Ethanol
Type         : Target
Channel      : Ch1
Retention Time : 16.000 min
Retention Index : 0
Concentration : [1]=3.010594      [2]=1.02339      [3]=0.5257763
               [4]=0.2939754      [5]=0.0961865      [6]=0.04960971
               [7]=0.01299818      [8]=3.010594      [9]=1.02339
               [10]=0.5257763      [11]=0.2939754     [12]=0.0961865
               [13]=0.04960971     [14]=0.01299818
Peak Selection : Default(Closest Peak)
Calculated by  : Default(Area)
Curve Fit Type : Default(Linear)
Zero          : Default(Not Forced)
Weight        : Default(None)
Window/Band   : Default(Window)
Spiked        : 0.000
1st Coefficient : 2.109543e+006
Intersection   : -9.590194e+003
Correction Factor : 1.000000
Standard concentration factor : 1.000000

```

| | | | |
|-----------------|----------------|----------------|----------------|
| ID# | : 10 | | |
| Name | : Propionsäure | | |
| Type | : Target | | |
| Channel | : Ch1 | | |
| Retention Time | : 13.600 min | | |
| Retention Index | : 0 | | |
| Concentration | : [1]=2.962704 | [2]=0.9915078 | [3]=0.5019324 |
| | [4]=0.3085198 | [5]=0.1036906 | [6]=0.04835313 |
| | [7]=0.01168534 | [8]=2.962704 | [9]=0.9915078 |
| | [10]=0.5019324 | [11]=0.3085198 | [12]=0.1036906 |

[13]=0.04835313 [14]=0.01168534
 Peak Selection : Default(Closest Peak)
 Calculated by : Default(Area)
 Curve Fit Type : Default(Linear)
 Zero : Default(Not Forced)
 Weight : Default(None)
 Window/Band : Default(Window)
 Spiked : 0.000
 1st Coefficient : 4.601450e+006
 Intersection : -1.609005e+003
 Correction Factor : 1.000000
 Standard concentration factor : 1.000000

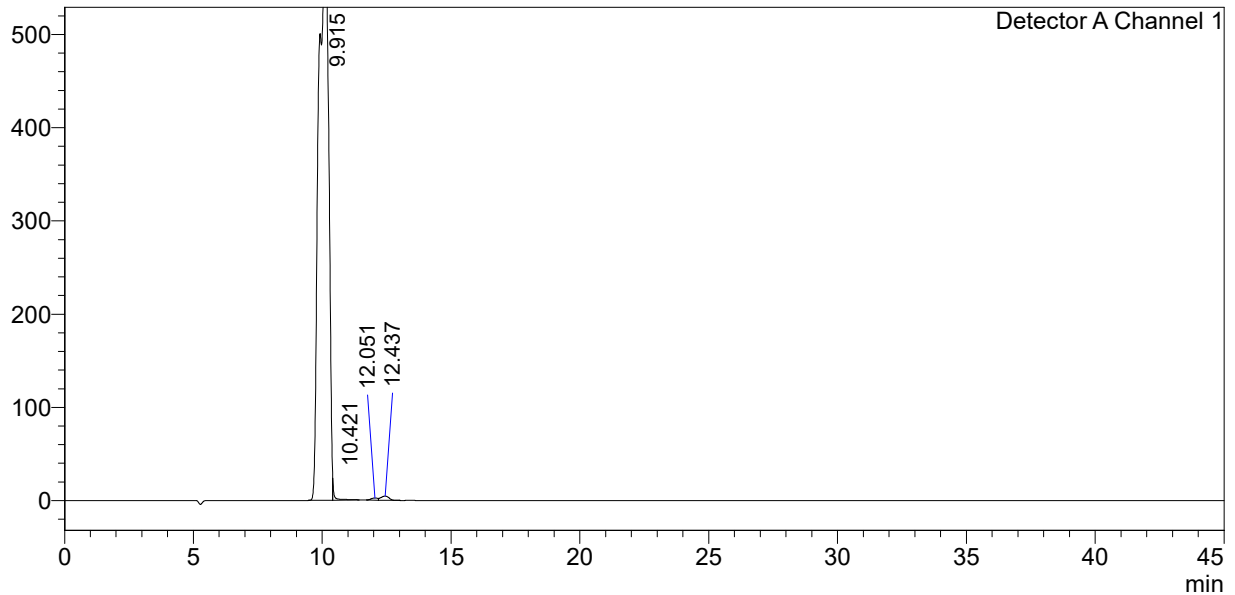
<<Column Performance>>

<Detector A>

Calculation Method : USP
 Unretained Peak Time : Time at 1st Peak
 Column Length : 150 mm
 Calculate Identified Peaks Only : Off
 Calculation of Relative Retention Time : Off

<Chromatogram>

mV



<Peak Table>

Detector A Channel 1

| Peak# | Ret. Time | Area | Height | Conc. | Unit | Mark | Name |
|-------|-----------|----------|--------|-------|-------|------|----------------|
| 1 | 9.915 | 16505912 | 500642 | 2.218 | mol/L | M | Glycerin |
| 2 | 10.421 | 76082 | 18442 | 0.000 | | V M | |
| 3 | 12.051 | 38640 | 2180 | 0.008 | mol/L | | Ethylenglykol |
| 4 | 12.437 | 96157 | 4411 | 0.006 | mol/L | V | 1,2 Propandiol |
| Total | | 16716791 | 525675 | | | | |