

REVIEWED

By Melissa (Nikka) Bradley at 1:46 pm, Jan 08, 2024

NB

Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB Liquid Processor/Dilutor Serial Number: ML600HC11378

Volatiles Quality Assurance Controls

Run Date(s): 1/5/24

Calibration Date: (if different) 1/5/24

Worklist #: 6636

| Control level | Expiration | Lot # | Target Value | Acceptable Range | Overall Results |
|---------------------------------|------------|-----------------|----------------|------------------|---|
| Level 1 | Feb-25 | 21101199 | 0.0808 | 0.0727-0.0889 | 0.0798 g/100cc 0.0815 g/100cc g/100cc |
| Level 2 | Mar-26 | 2110181 | 0.2030 | 0.1827-0.2233 | 0.2085 g/100cc 0.2073 g/100cc g/100cc |
| Multi-Component mixture: | | Exp: | Oct. 24 | Lot # | |
| Curve Fit: | | Column 1 | 0.99987 | Column2 | 0.99984 |

Ethanol Calibration Reference Material

| Calibrator level | Target Value | Acceptable Range | Column 1 | Column 2 | Precision | Mean |
|------------------|--------------|------------------|----------|----------|-----------|---------|
| 50 | 0.050 | 0.045 - 0.055 | 0.0522 | 0.0522 | 0 | 0.0522 |
| 100 | 0.100 | 0.090 - 0.110 | 0.1000 | 0.1004 | 0.0004 | 0.1002 |
| 200 | 0.200 | 0.180 - 0.220 | 0.1978 | 0.1976 | 0.0002 | 0.1977 |
| 300 | 0.300 | 0.270 - 0.330 | 0.2980 | 0.2976 | 0.0004 | 0.2978 |
| 400 | 0.400 | 0.360 - 0.440 | NA | NA | ##### | #DIV/0! |
| 500 | 0.500 | 0.450 - 0.550 | 0.5018 | 0.5020 | 0.0002 | 0.5019 |

Aqueous Controls

| Control level | Target Value | Acceptable Range | Overall Results |
|---------------|--------------|------------------|-----------------|
| 80 | 0.080 | 0.076 - 0.084 | 0.081 g/100cc |

JK

Revision: 5

Issue Date: 07/05/2022

Issuing Authority: Quality Manager

Internal Standard Monitoring Worksheet




















| | | | |
|--------------------|-------------|---------------------|---------------|
| Worklist #: | 6636 | Run Date(s): | 1/5/24 |
|--------------------|-------------|---------------------|---------------|

| | | | | |
|-----------------------------|------------|-----------|-----------|----------|
| Internal Standard Solution: | Prep Date: | 12/5/2023 | Exp Date: | 6/5/2024 |
|-----------------------------|------------|-----------|-----------|----------|

| Sample Name | Column 1 Value | Column 2 Value |
|-------------|----------------|----------------|
| 0.080 | 185620 | 200416 |
| 0.080 | 184695 | 199497 |
| QC1 | 187567 | 202689 |
| QC1 | 187612 | 202509 |
| QC1 | 223173 | 241837 |
| QC1 | 222886 | 241651 |
| QC1 | | |
| QC1 | | |
| QC2 | 211781 | 229243 |
| QC2 | 214970 | 232438 |
| QC2 | 225009 | 243589 |
| QC2 | 232618 | 252065 |
| QC2 | | |
| QC2 | | |

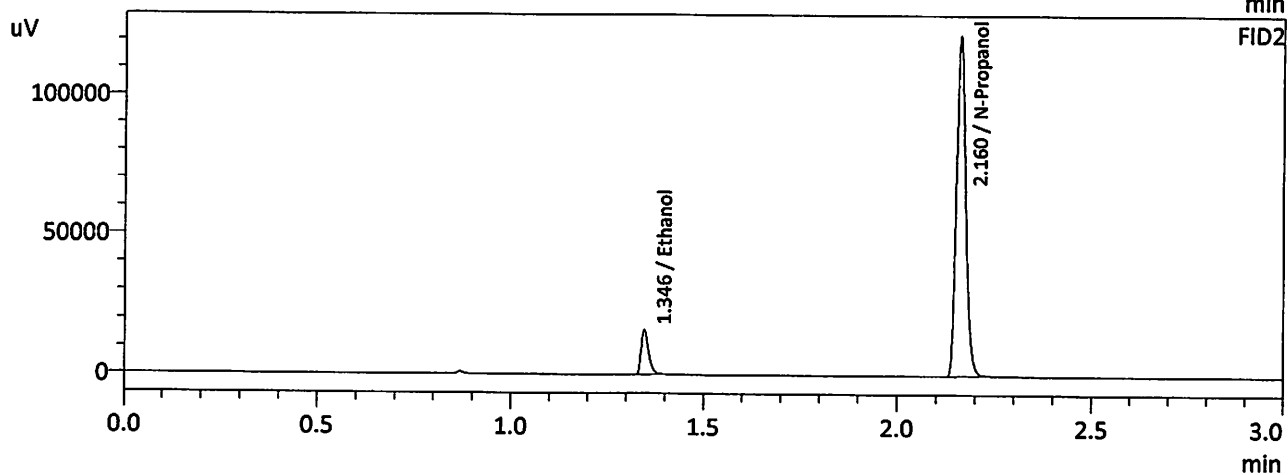
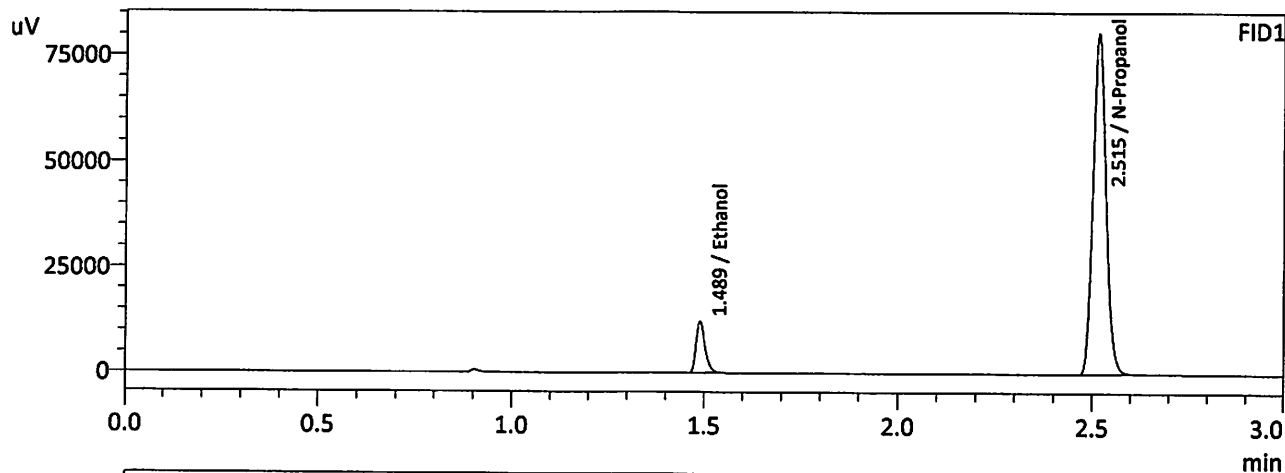
| Average | (-)20% | (+)20% |
|----------|----------|----------|
| Column 1 | 166074.5 | 249111.7 |
| Column 2 | 179674.7 | 269512.1 |

Worklist: 6636

| <u>LAB CASE</u> | <u>ITEM</u> | <u>ITEM TYPE</u> | <u>DESCRIPTION</u> | |
|-----------------|-------------|------------------|--------------------|---|
| M2023-5445 | 1 | BCK | Alcohol Analysis |  |
| M2023-5446 | 1 | BCK | Alcohol Analysis |  |
| M2023-5447 | 1 | BCK | Alcohol Analysis |  |
| M2023-5490 | 1 | BCK | Alcohol Analysis |  |
| M2023-5499 | 1 | BCK | Alcohol Analysis |  |
| M2023-5501 | 1 | BCK | Alcohol Analysis |  |
| M2023-5502 | 1 | BCK | Alcohol Analysis |  |
| M2023-5530 | 1 | BCK | Alcohol Analysis |  |
| M2023-5531 | 1 | BCK | Alcohol Analysis |  |
| M2023-5537 | 1 | BCK | Alcohol Analysis |  |
| M2023-5557 | 1 | BCK | Alcohol Analysis |  |
| M2024-0001 | 1 | BCK | Alcohol Analysis |  |
| M2024-0014 | 1 | BCK | Alcohol Analysis |  |
| M2024-0017 | 1 | BCK | Alcohol Analysis |  |
| M2024-0044 | 1 | BCK | Alcohol Analysis |  |
| M2024-0071 | 1 | BCK | Alcohol Analysis |  |
| M2024-0072 | 1 | BCK | Alcohol Analysis |  |
| M2024-0073 | 1 | BCK | Alcohol Analysis |  |
| M2024-0074 | 1 | BCK | Alcohol Analysis |  |

JK

Sample Name : 0.050
 Laboratory : Meridian
 Injection Date : 1/5/2024 11:16:20 AM
 Vial # : 1
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



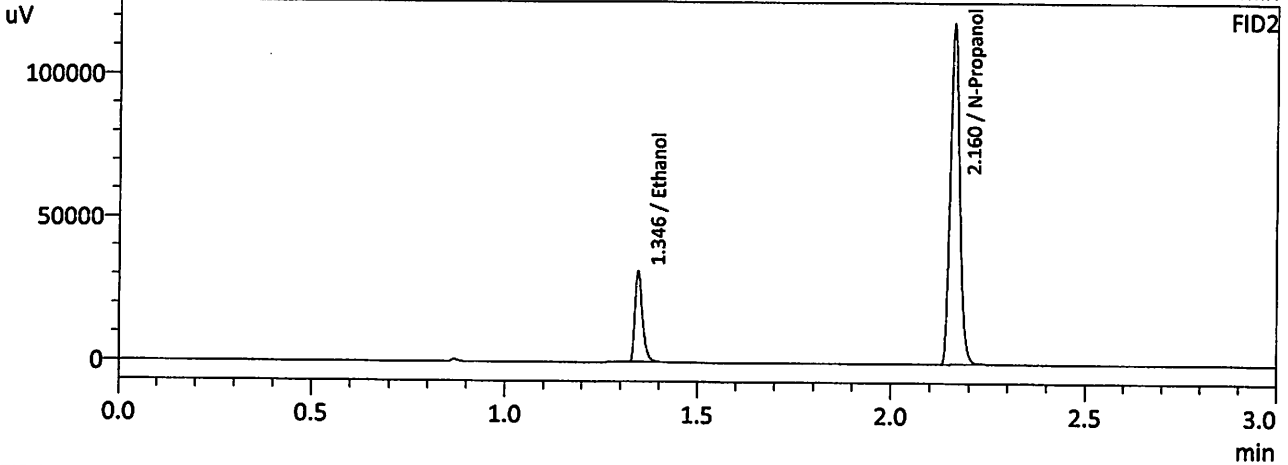
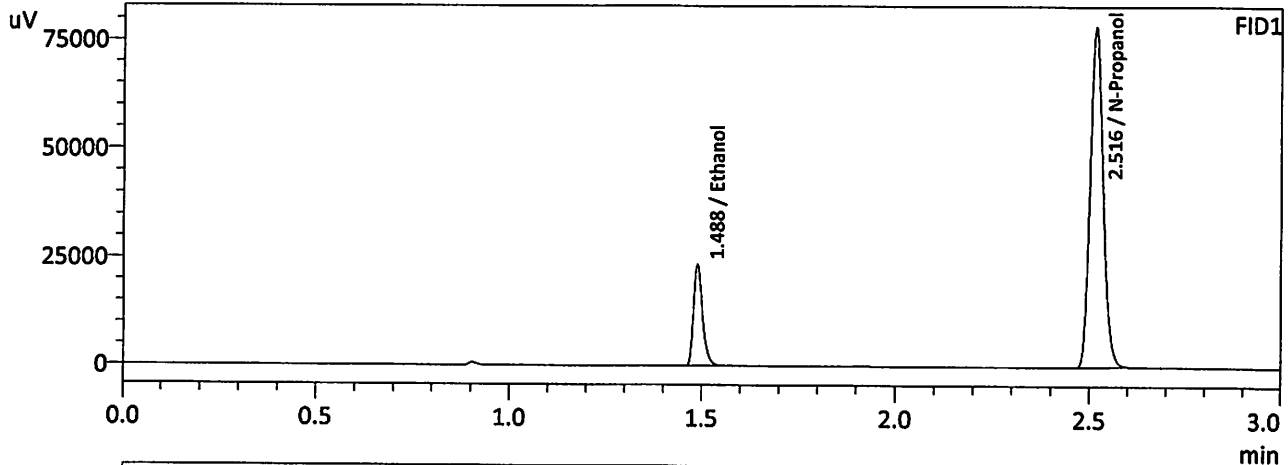
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0522 | 20225 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 188045 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0522 | 21635 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 202513 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : 0.100
 Laboratory : Meridian
 Injection Date : 1/5/2024 11:23:40 AM
 Vial # : 2
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



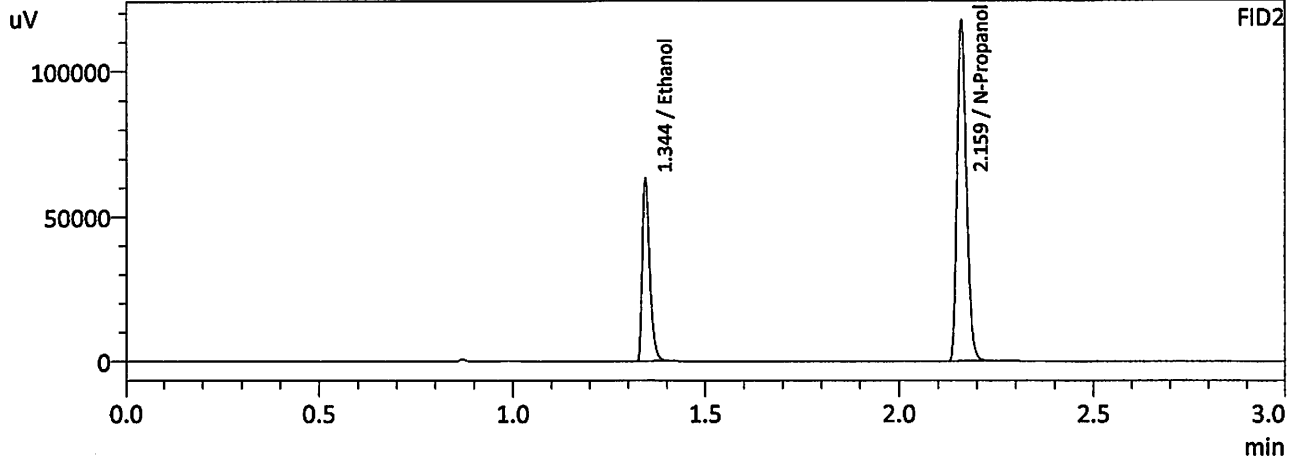
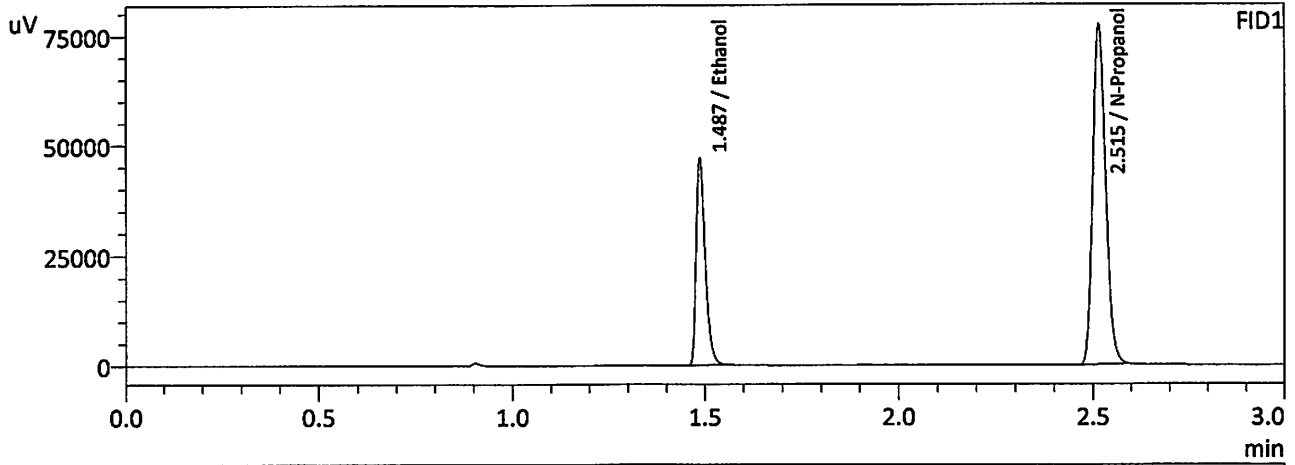
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.1000 | 38982 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 182843 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.1004 | 42155 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 196784 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : 0.200
 Laboratory : Meridian
 Injection Date : 1/5/2024 11:31:21 AM
 Vial # : 3
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



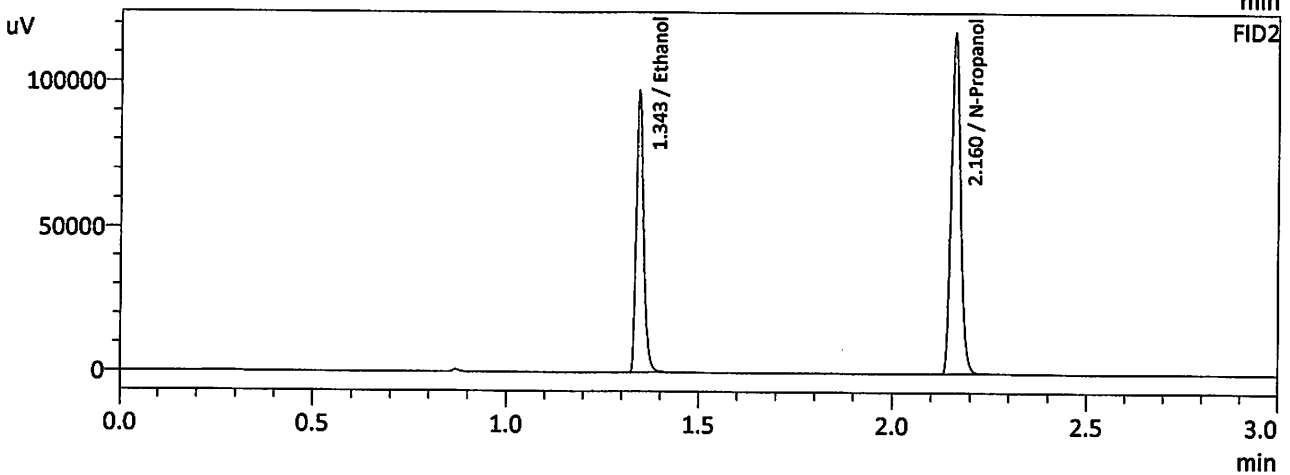
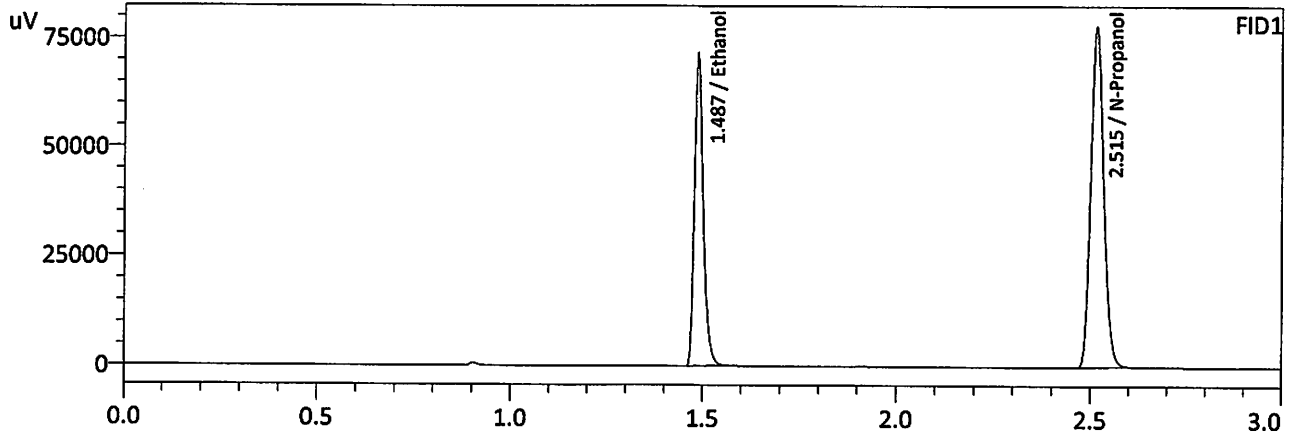
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.1978 | 77459 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 180264 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.1976 | 83576 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 194101 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : 0.300
 Laboratory : Meridian
 Injection Date : 1/5/2024 11:39:45 AM
 Vial # : 4
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



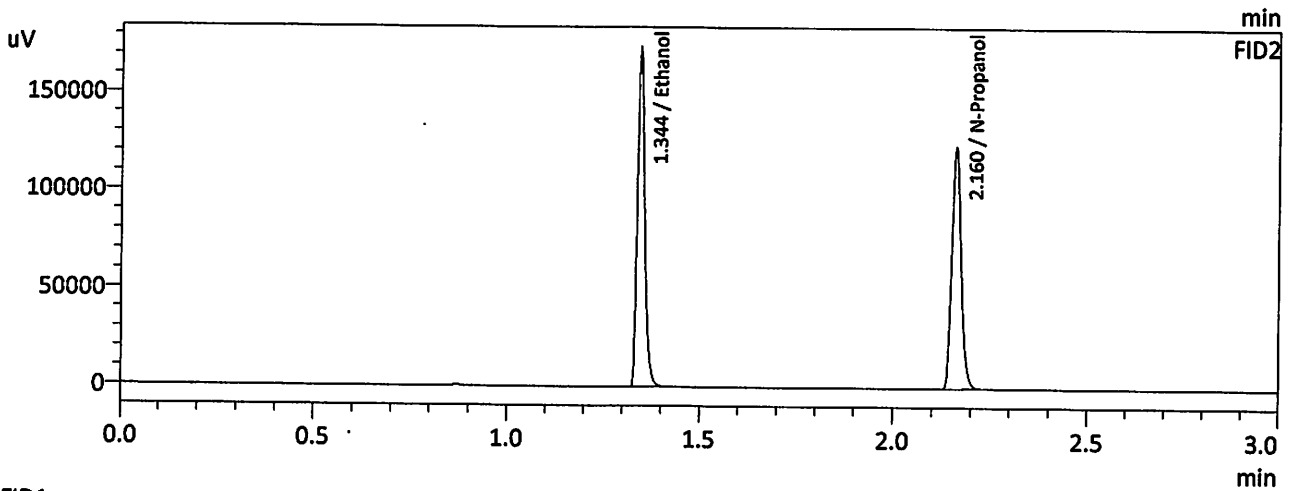
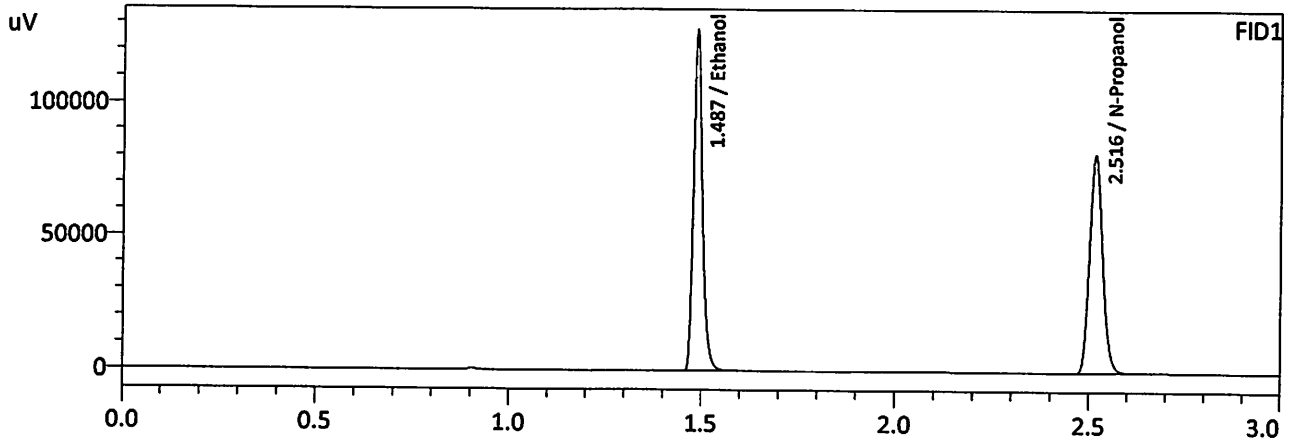
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2980 | 117783 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 180850 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2976 | 127210 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 194714 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : 0.500
 Laboratory : Meridian
 Injection Date : 1/5/2024 11:48:24 AM
 Vial # : 5
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

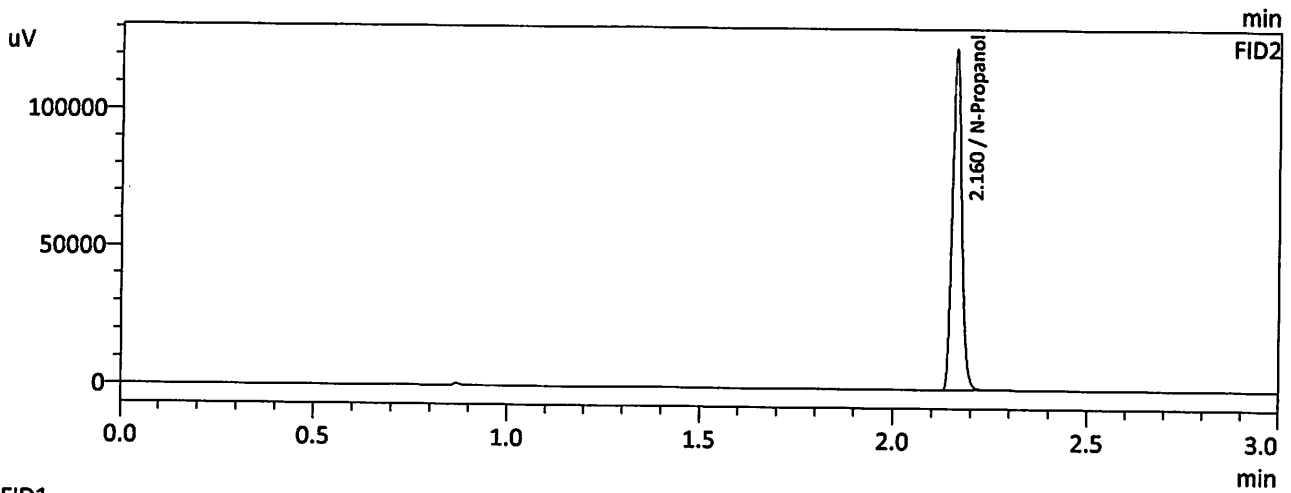
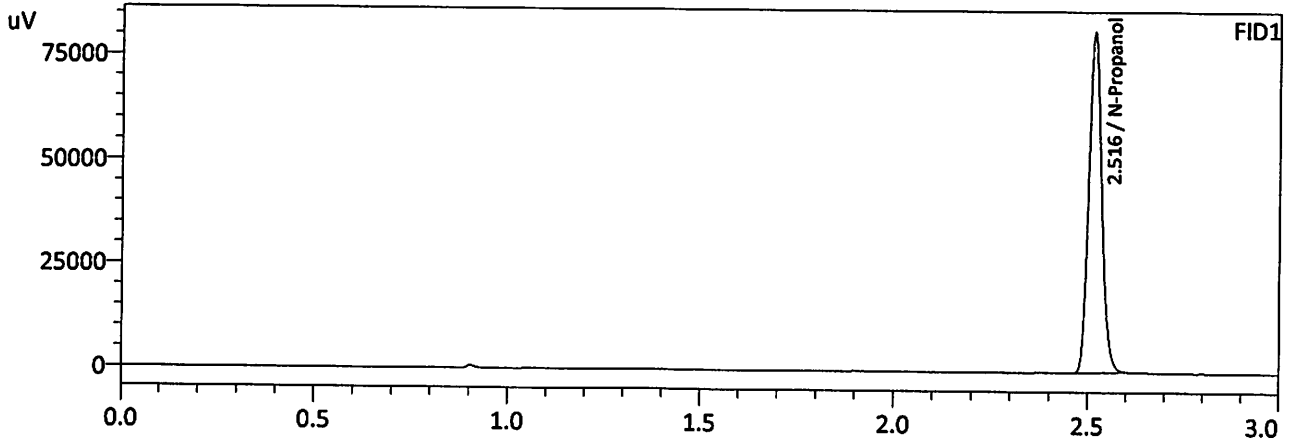
| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.5018 | 209991 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 190521 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.5020 | 227754 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 205448 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

JC

Sample Name : INT STD BLK
 Laboratory : Meridian
 Injection Date : 1/5/2024 11:56:21 AM
 Vial # : 6
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 190099 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 204861 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

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Meridian Blood Alcohol Analysis Batch Table

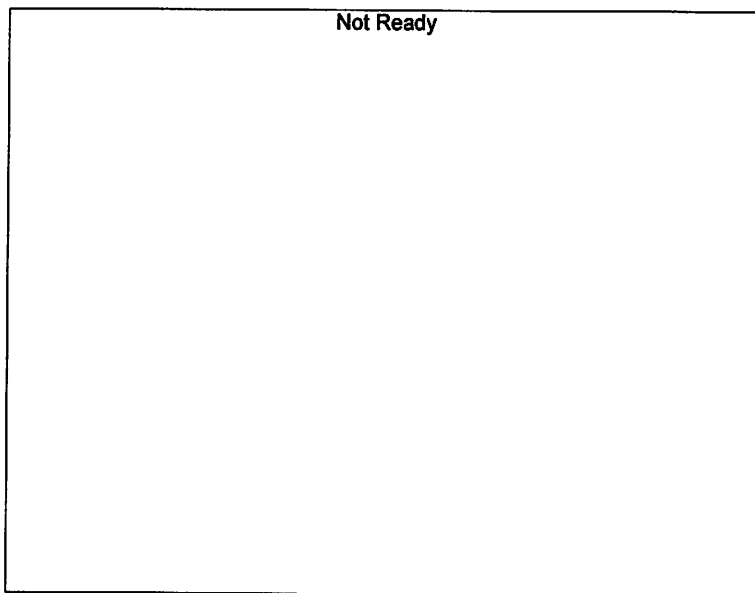
Shimadzu GC-2030 Serial #C12255750548
Shimadzu HS-20 Serial #C12595800409
Lab Solutions Database Software Ver. 6.111
Copyright (C) 2008-2020 Shimadzu Corporation

| Vial# | Sample Name | Sample Type | Level# | Method File |
|-------|-------------|-------------|--------|------------------------|
| 1 | 0.050 | 0:Unknown | 1 | ALCOHOL 240105.GCM.gcm |
| 2 | 0.100 | 0:Unknown | 2 | ALCOHOL 240105.GCM.gcm |
| 3 | 0.200 | 0:Unknown | 3 | ALCOHOL 240105.GCM.gcm |
| 4 | 0.300 | 0:Unknown | 4 | ALCOHOL 240105.GCM.gcm |
| 5 | 0.500 | 0:Unknown | 5 | ALCOHOL 240105.GCM.gcm |
| 6 | INT STD BLK | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |

Calibration Table

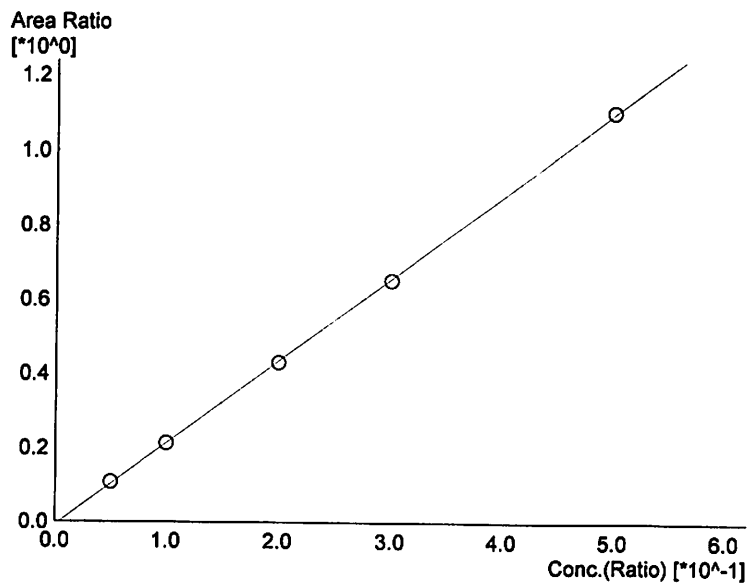
Laboratory : MERIDIAN
 Instrument Name : GC-BAC
 Instrument Serial # : C12595800409 / C12255750548

<<Data File>>
 Method File :Default Project - ALCOHOL_240105.GCM.gcm
 Batch File :Default Project - CALCURVE_240105JG.gcb
 Date Acquired :1/5/2024 11:48:24 AM
 Date Created :1/5/2024 11:42:48 AM
 Date Modified :1/5/2024 11:51:26 AM



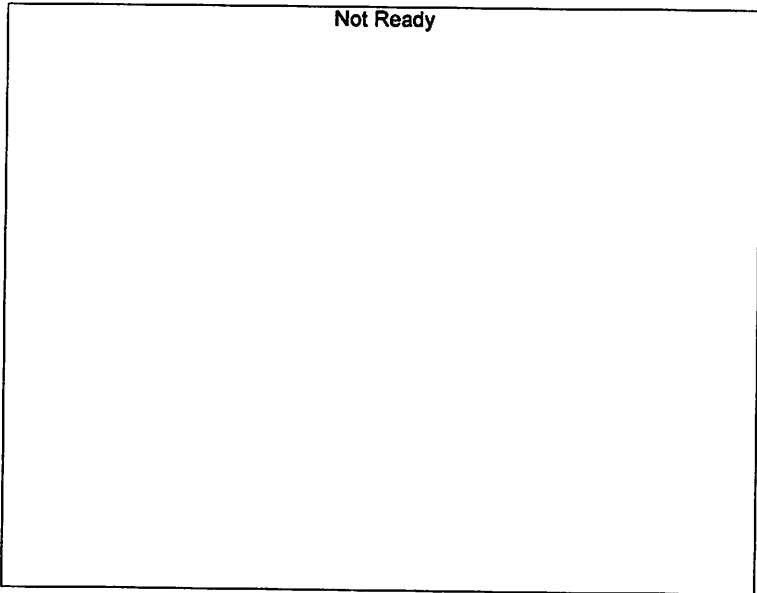
Name : Methanol
 Detector Name: FID1
 Function : $f(x)=0*x+0$
 R² value= 0
 FitType: Linear
 ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|------|------------|
|---|-------|------|------------|



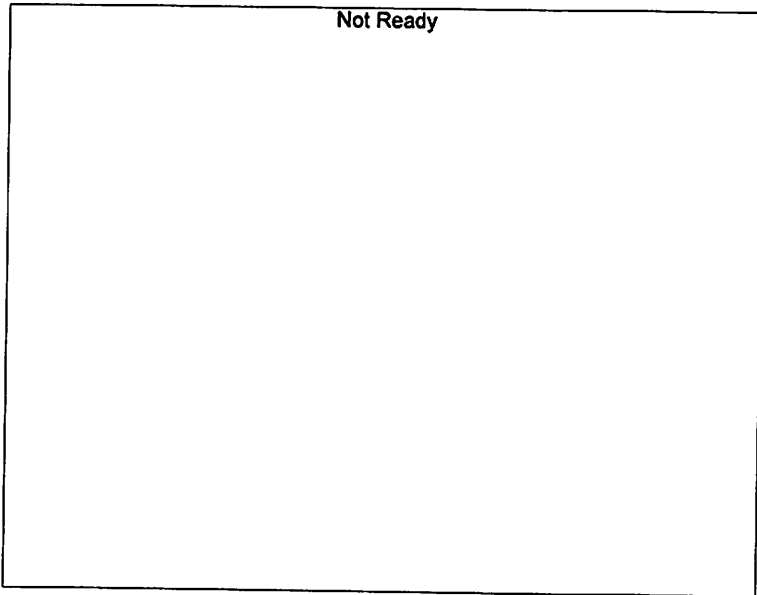
Name : Ethanol
 Detector Name: FID1
 Function : $f(x)=2.21261*x-0.00811637$
 R² value= 0.9998678
 FitType: Linear
 ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|--------|------------|
| 1 | 0.050 | 20225 | 0.0522 |
| 2 | 0.100 | 38982 | 0.1000 |
| 3 | 0.200 | 77459 | 0.1978 |
| 4 | 0.300 | 117783 | 0.2980 |
| 5 | 0.500 | 209991 | 0.5018 |



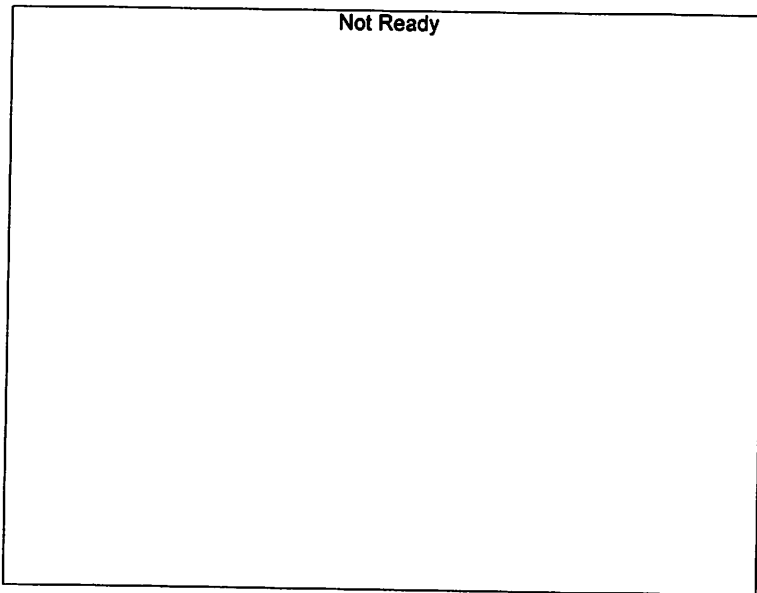
Name : Isopropyl Alcohol
Detector Name: FID1
Function : $f(x)=0*x+0$
R² value= 0
FitType: Linear
ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|------|------------|
|---|-------|------|------------|



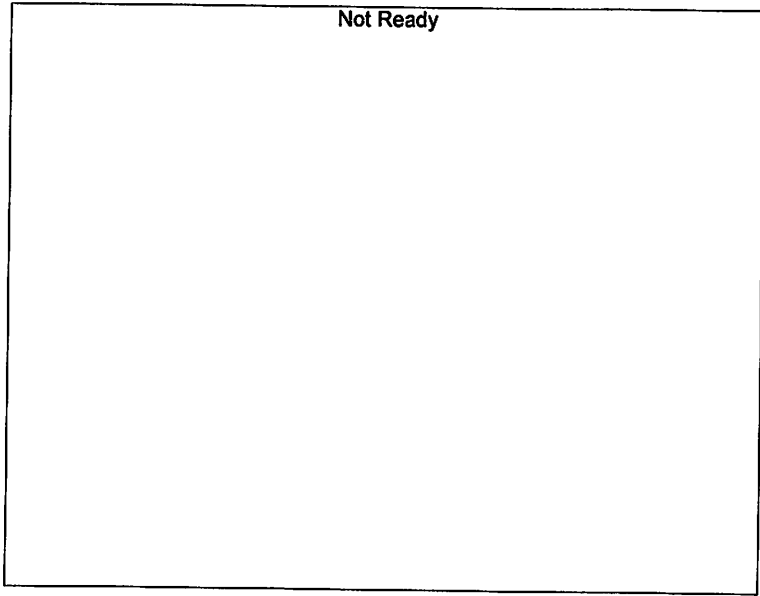
Name : Acetone
Detector Name: FID1
Function : $f(x)=0*x+0$
R² value= 0
FitType: Linear
ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|------|------------|
|---|-------|------|------------|



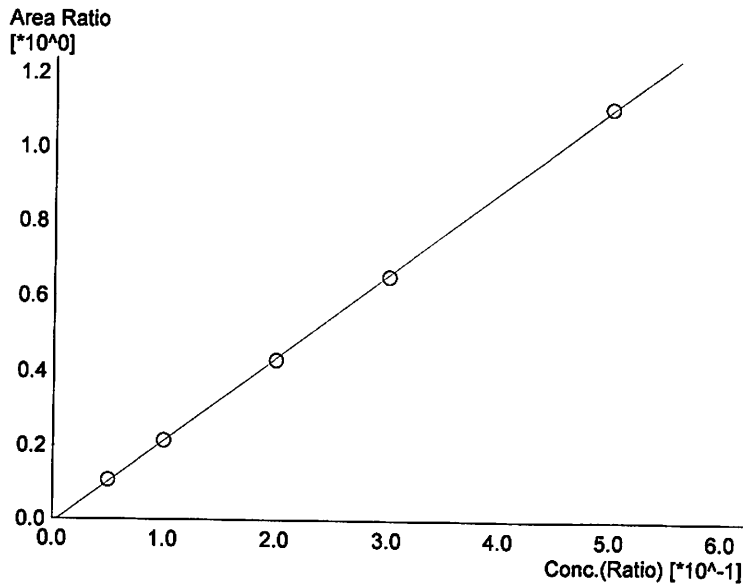
Name : Fluor. Hydrocarbon(s)
Detector Name: FID1
Function : $f(x)=0*x+0$
R² value= 0
FitType: Linear
ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|------|------------|
|---|-------|------|------------|



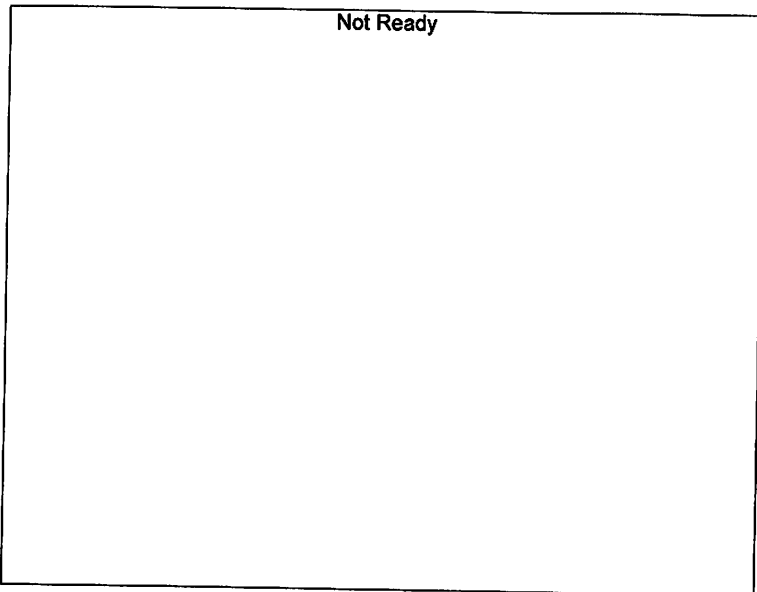
Name : Methanol
 Detector Name: FID2
 Function : $f(x)=0*x+0$
 R² value= 0
 FitType: Linear
 ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|------|------------|
|---|-------|------|------------|



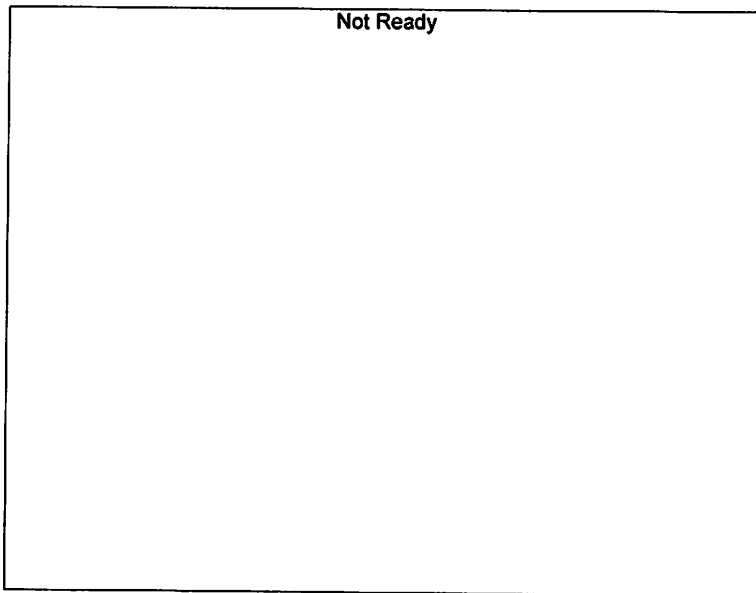
Name : Ethanol
 Detector Name: FID2
 Function : $f(x)=2.22696*x-0.00949647$
 R² value= 0.9998378
 FitType: Linear
 ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|--------|------------|
| 1 | 0.050 | 21635 | 0.0522 |
| 2 | 0.100 | 42155 | 0.1004 |
| 3 | 0.200 | 83576 | 0.1976 |
| 4 | 0.300 | 127210 | 0.2976 |
| 5 | 0.500 | 227754 | 0.5020 |



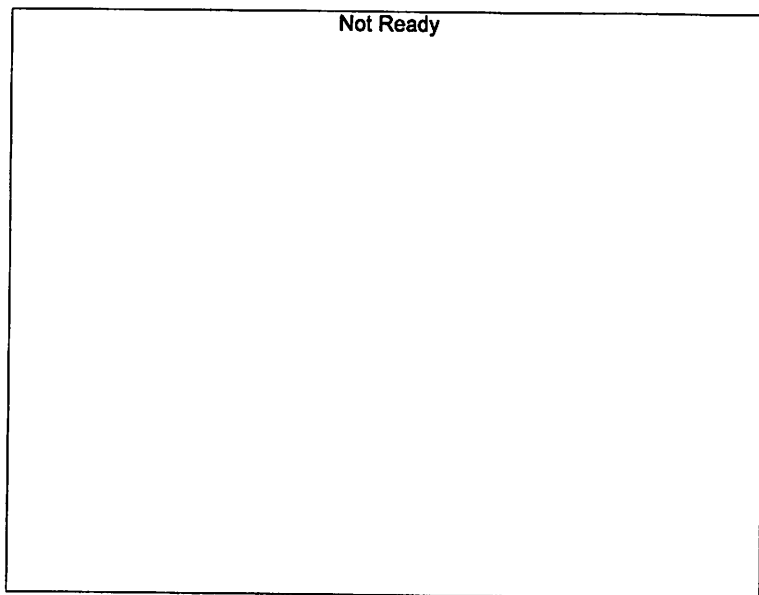
Name : Acetone
 Detector Name: FID2
 Function : $f(x)=0*x+0$
 R² value= 0
 FitType: Linear
 ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|------|------------|
|---|-------|------|------------|



Name : Isopropyl Alcohol
Detector Name: FID2
Function : $f(x)=0*x+0$
R² value= 0
FitType: Linear
ZeroThrough: Not Through

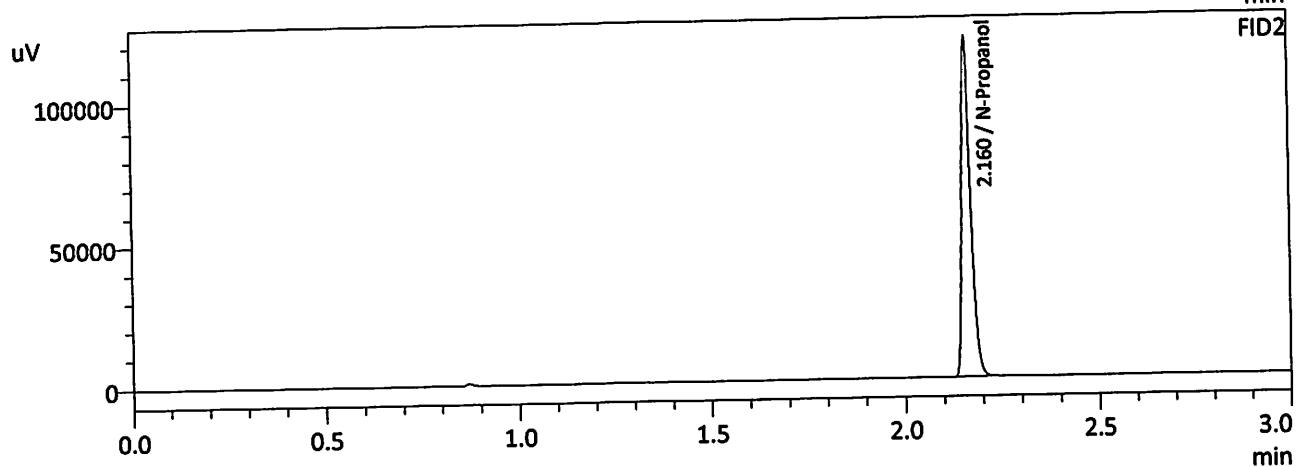
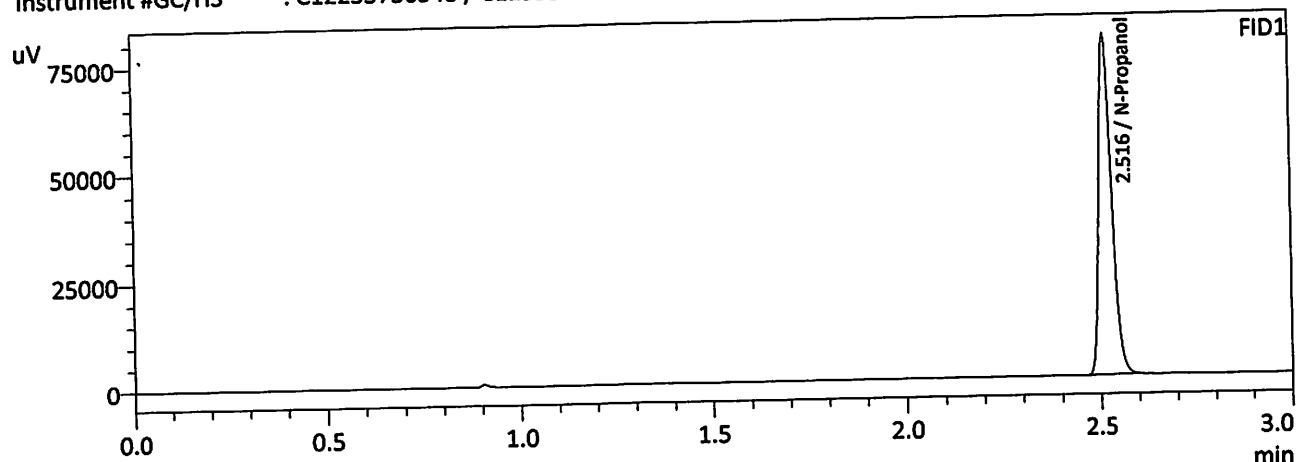
| # | Conc. | Area | Std. Conc. |
|---|-------|------|------------|
|---|-------|------|------------|



Name : Flour. Hydrocarbon(s)
Detector Name: FID2
Function : $f(x)=0*x+0$
R² value= 0
FitType: Linear
ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. |
|---|-------|------|------------|
|---|-------|------|------------|

Sample Name : ISTD BLK 1
 Laboratory : Meridian
 Injection Date : 1/5/2024 12:40:16 PM
 Vial # : 1
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



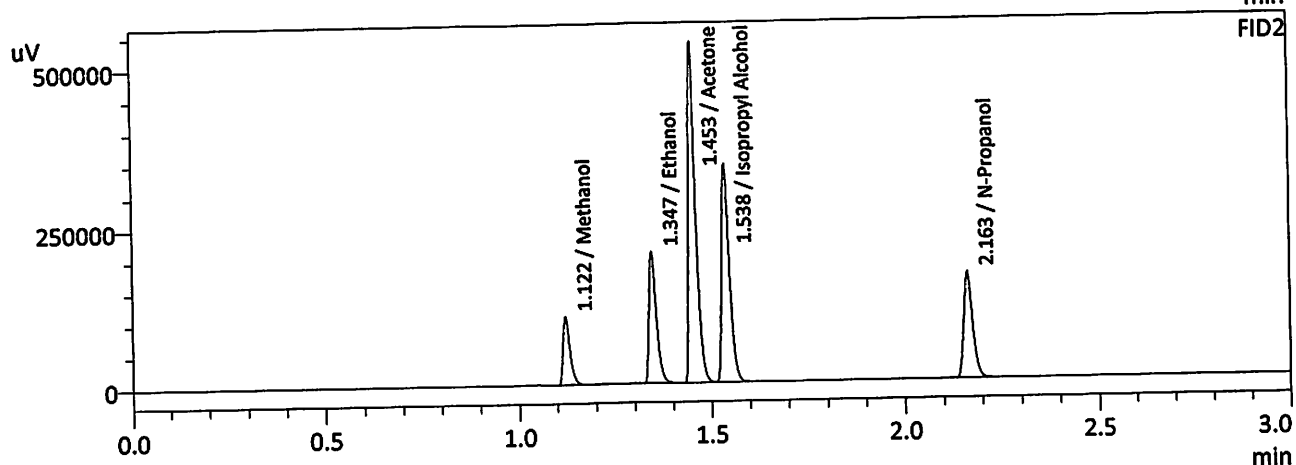
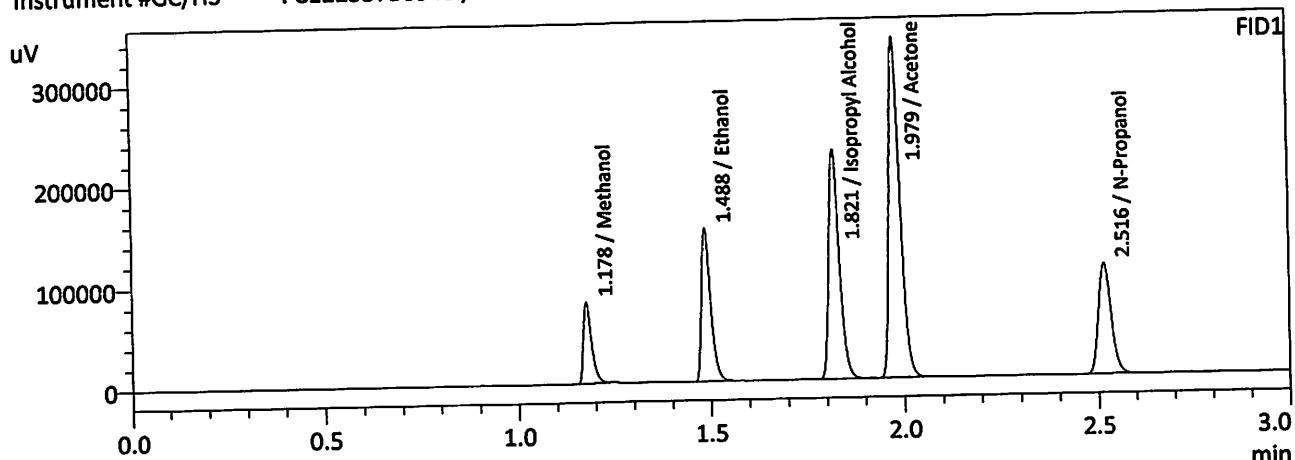
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 183516 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 197885 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : MIXED VOLATILES FN 06041902
 Laboratory : Meridian
 Injection Date : 1/5/2024 12:47:36 PM
 Vial # : 2
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | 0.0000 | 118148 | g/100cc |
| Ethanol | 0.4476 | 248601 | g/100cc |
| Isopropyl Alcohol | 0.0000 | 439245 | g/100cc |
| Acetone | 0.0000 | 657804 | g/100cc |
| N-Propanol | 0.0000 | 253040 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | 0.0000 | 133077 | g/100cc |
| Ethanol | 0.4487 | 271955 | g/100cc |
| Acetone | 0.0000 | 716452 | g/100cc |
| Isopropyl Alcohol | 0.0000 | 475274 | g/100cc |
| N-Propanol | 0.0000 | 274727 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

| Laboratory No: QC-1-1 | | | | Analysis Date(s): 1/5/2024 12:54:56 PM(-07:00) | | |
|-----------------------|-------------------|-------------------|---------------------|--|--------------------------|---------------|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean |
| Sample Results | 0.0802 | 0.0799 | 0.0003 | 0.0800 | 0.0004 | 0.0798 |
| (g/100cc) | 0.0796 | 0.0796 | 0.0000 | 0.0796 | | |

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument information is stored centrally.

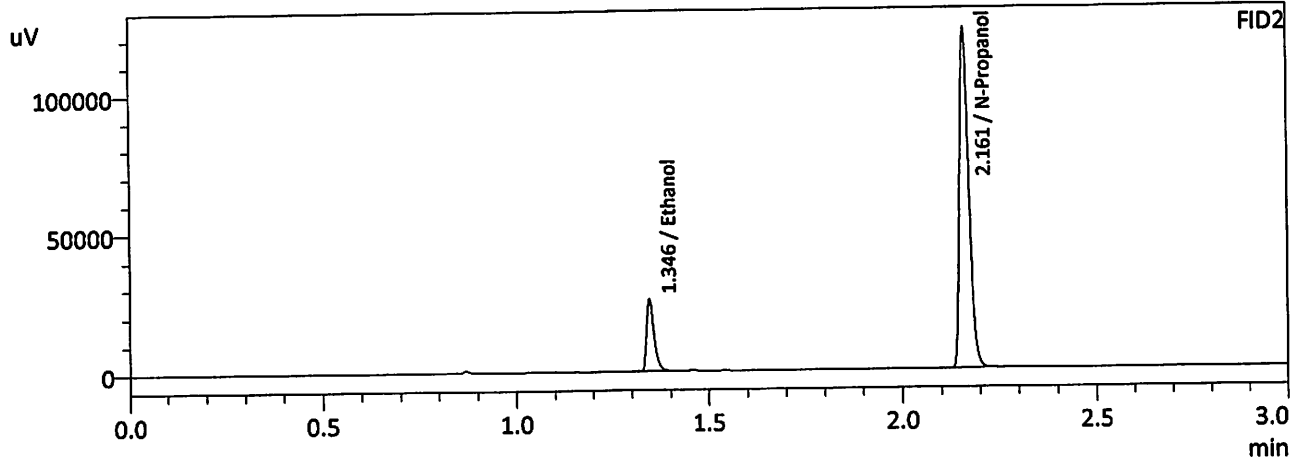
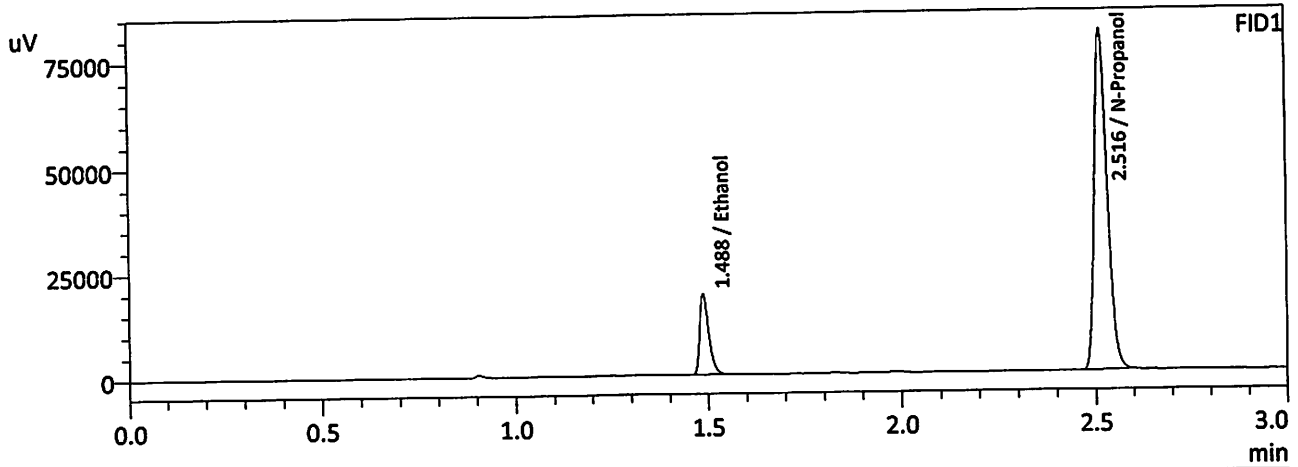
Refer To Instrument Method: ALCOHOL_240105.GCM.gcm

| Reporting of Results | Uncertainty of Measurements (UM%): | | 5.00% |
|------------------------|------------------------------------|-------|-------------|
| Overall Mean (g/100cc) | Low | High | 5 % of Mean |
| 0.079 | 0.075 | 0.083 | 0.004 |

| | Reported Results |
|--|------------------|
| | 0.079 |

Calibration and control data are stored centrally.

Sample Name : QC-1-1
 Laboratory : Meridian
 Injection Date : 1/5/2024 12:54:56 PM
 Vial # : 3
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



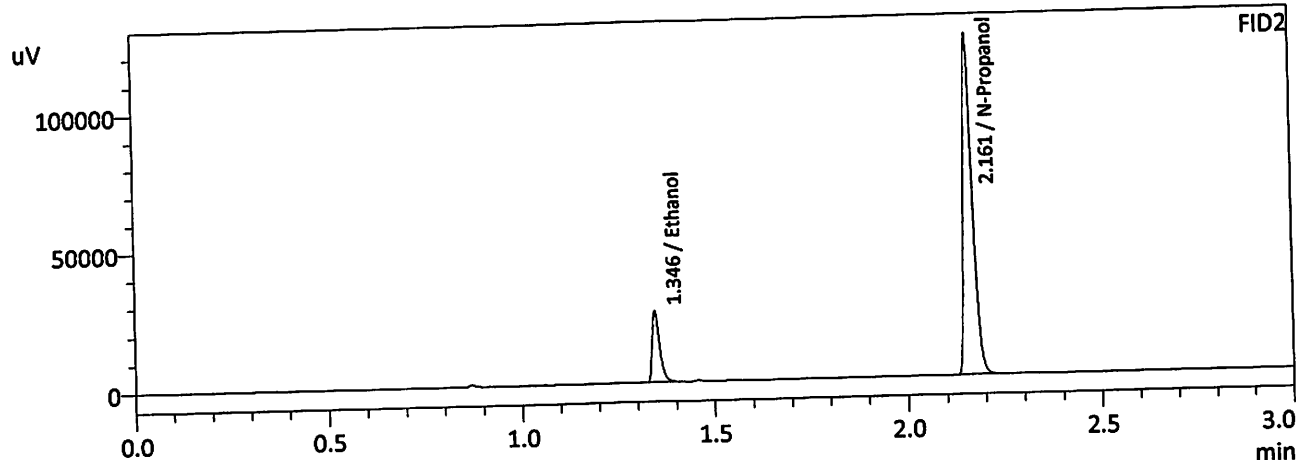
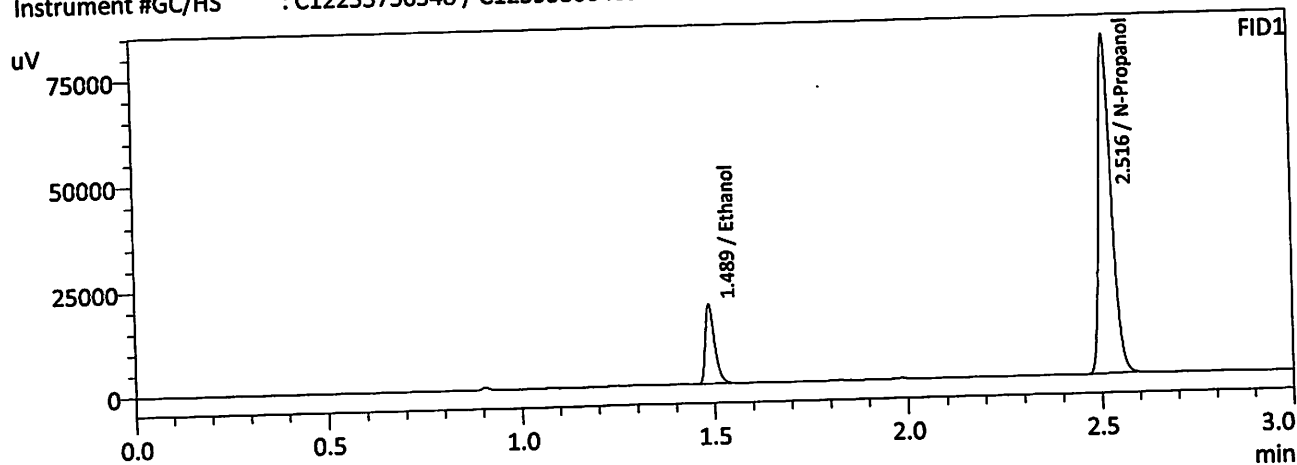
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0802 | 31774 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 187567 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0799 | 34182 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 202689 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : QC-1-1-B
 Laboratory : Meridian
 Injection Date : 1/5/2024 1:03:56 PM
 Vial # : 4
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0796 | 31540 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 187612 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0796 | 33993 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 202509 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

| Laboratory No: 0.08 QA | | | Analysis Date(s): 1/5/2024 1:11:25 PM(-07:00) | | | |
|------------------------|-------------------|-------------------|---|---------------|--------------------------|---------------|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean |
| Sample Results | 0.0811 | 0.0812 | 0.0001 | 0.0811 | 0.0001 | 0.0811 |
| (g/100cc) | 0.0812 | 0.0812 | 0.0000 | 0.0812 | | |

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument information is stored centrally.

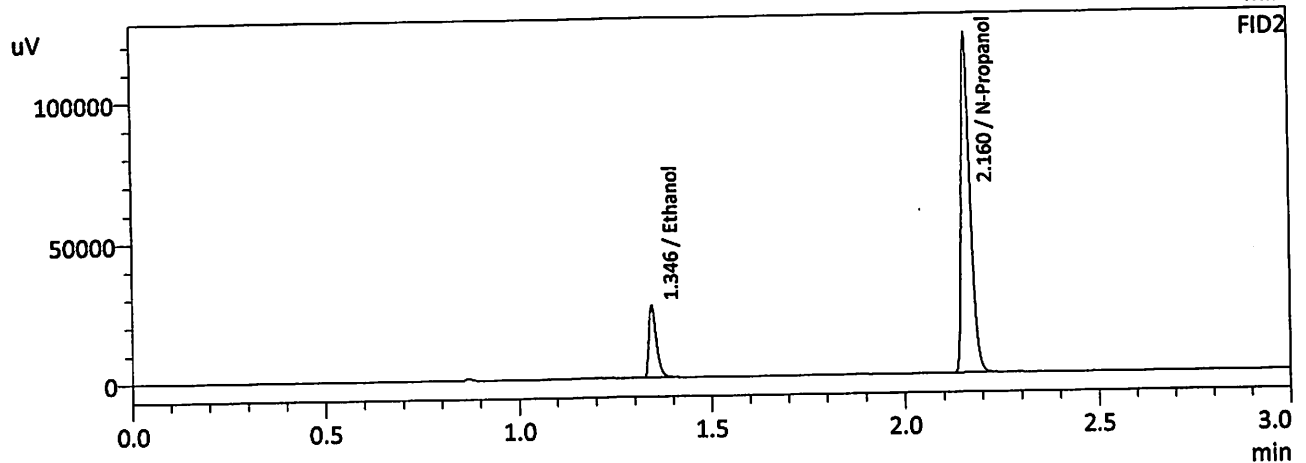
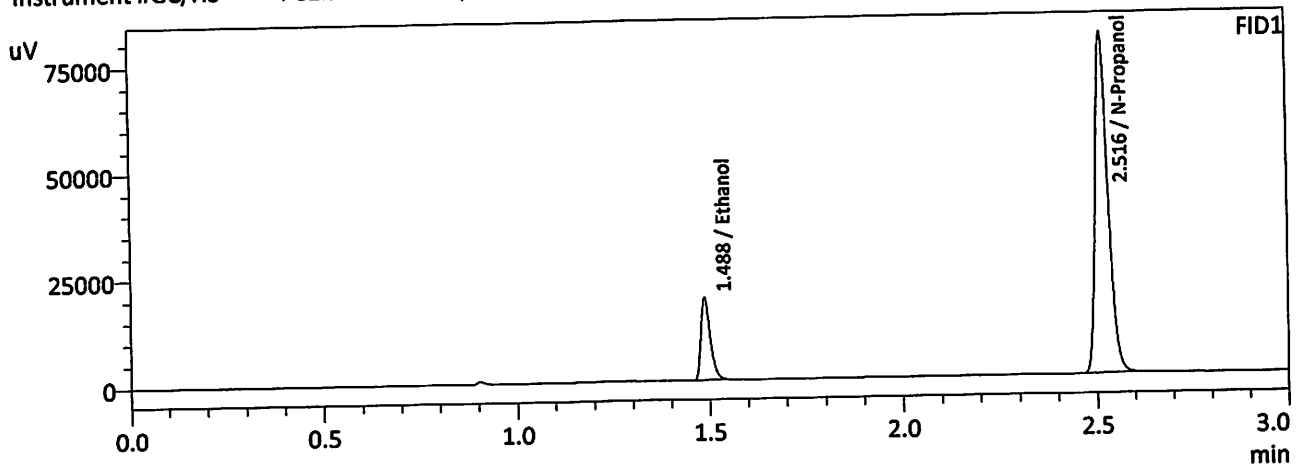
Refer To Instrument Method: ALCOHOL_240105.GCM.gcm

| Reporting of Results | Uncertainty of Measurements (UM%): | | 5.00% |
|------------------------|------------------------------------|-------|-------------|
| Overall Mean (g/100cc) | Low | High | 5 % of Mean |
| 0.081 | 0.076 | 0.086 | 0.005 |

| | Reported Results |
|--|------------------|
| | 0.081 |

Calibration and control data are stored centrally.

Sample Name : 0.08 QA
 Laboratory : Meridian
 Injection Date : 1/5/2024 1:11:25 PM
 Vial # : 5
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

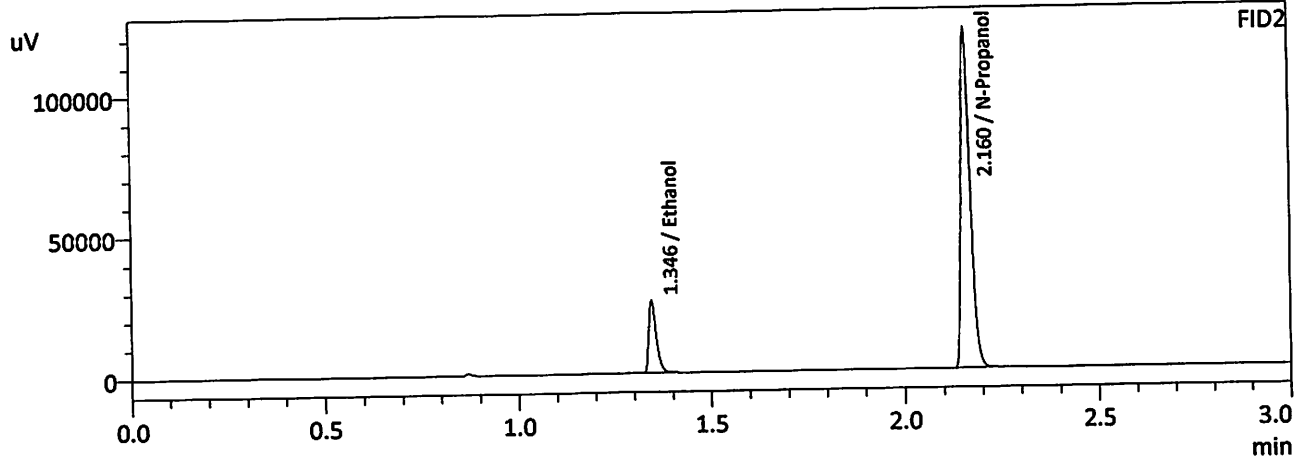
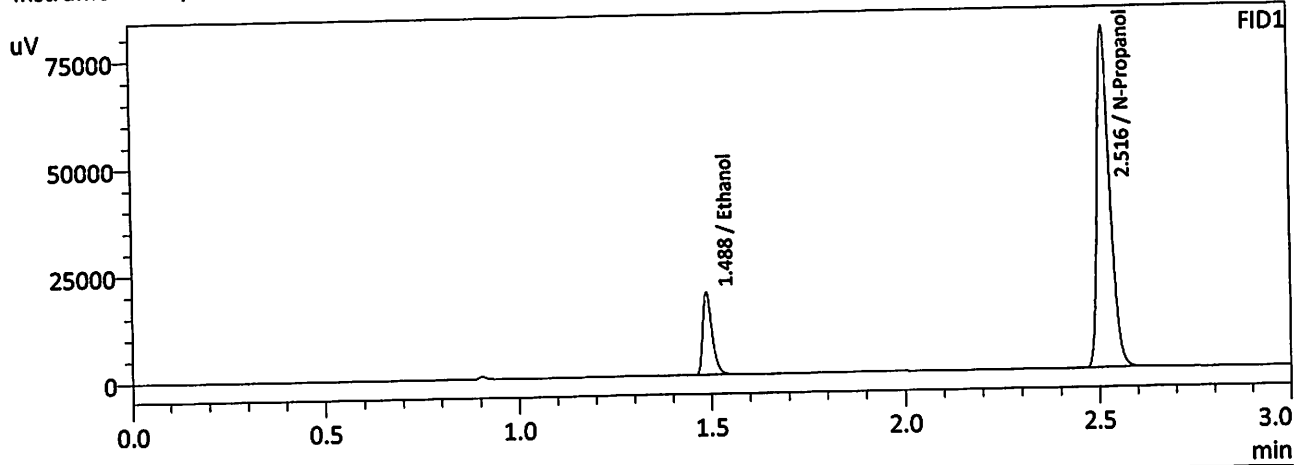
| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0811 | 31829 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 185620 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0812 | 34340 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 200416 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

JL

Sample Name : 0.08 QA-B
 Laboratory : Meridian
 Injection Date : 1/5/2024 1:19:44 PM
 Vial # : 6
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0812 | 31722 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 184695 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0812 | 34213 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 199497 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

| Laboratory No: QC-2-1 | | Analysis Date(s): 1/5/2024 3:53:40 PM(-07:00) | | | | |
|-----------------------|-------------------|---|---------------------|---------------|--------------------------|---------------|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean |
| Sample Results | 0.2084 | 0.2082 | 0.0002 | 0.2083 | 0.0005 | 0.2085 |
| (g/100cc) | 0.2089 | 0.2088 | 0.0001 | 0.2088 | | |

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_240105.GCM.gcm

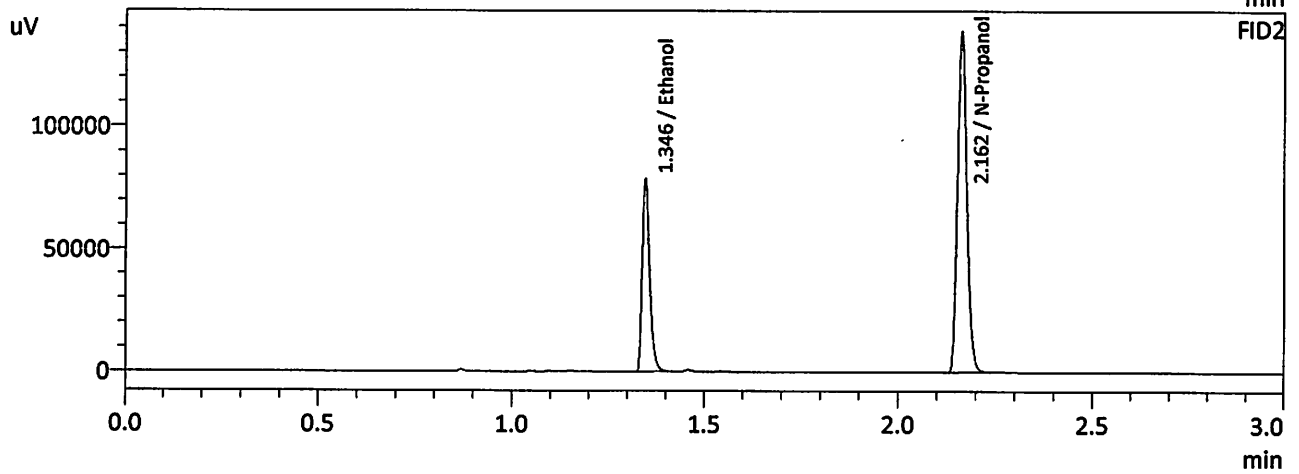
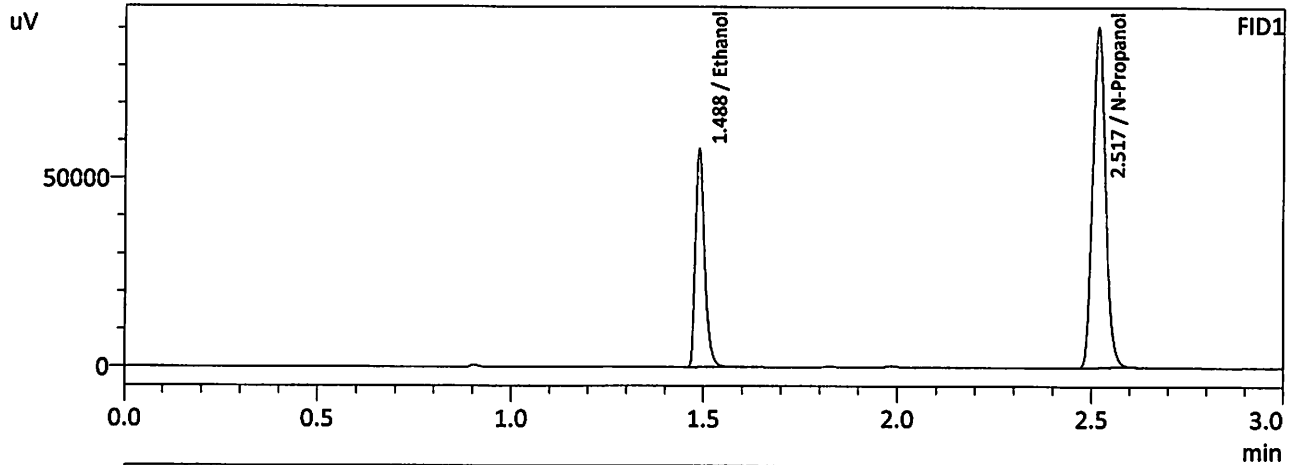
| Reporting of Results | Uncertainty of Measurements (UM%): 5.00% | | |
|------------------------|--|-------|-------------|
| Overall Mean (g/100cc) | Low | High | 5 % of Mean |
| 0.208 | 0.197 | 0.219 | 0.011 |

| Reported Results | |
|------------------|--|
| 0.208 | |

Calibration and control data are stored centrally.

JK

Sample Name : QC-2-1
 Laboratory : Meridian
 Injection Date : 1/5/2024 3:53:40 PM
 Vial # : 25
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



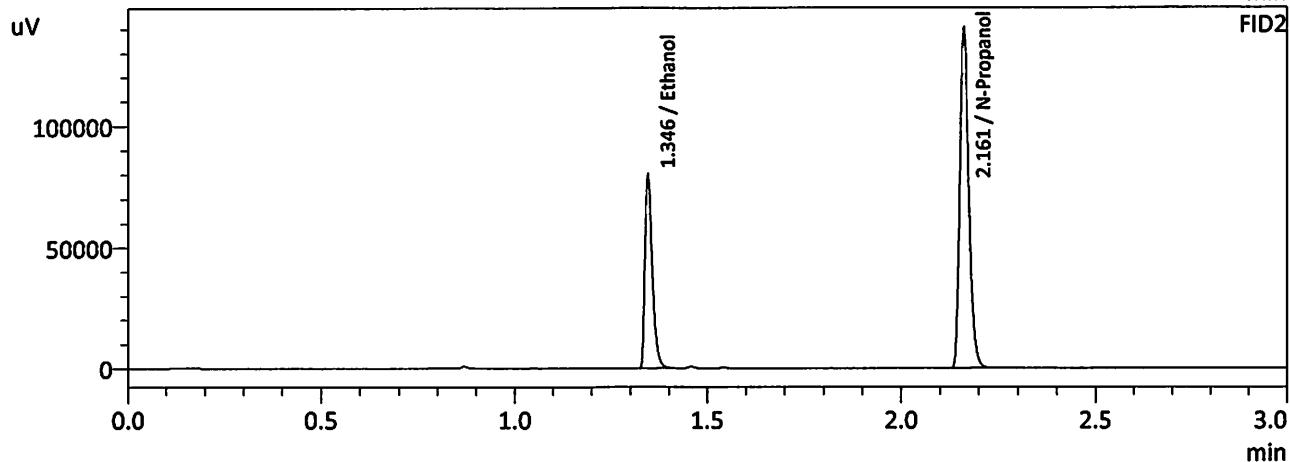
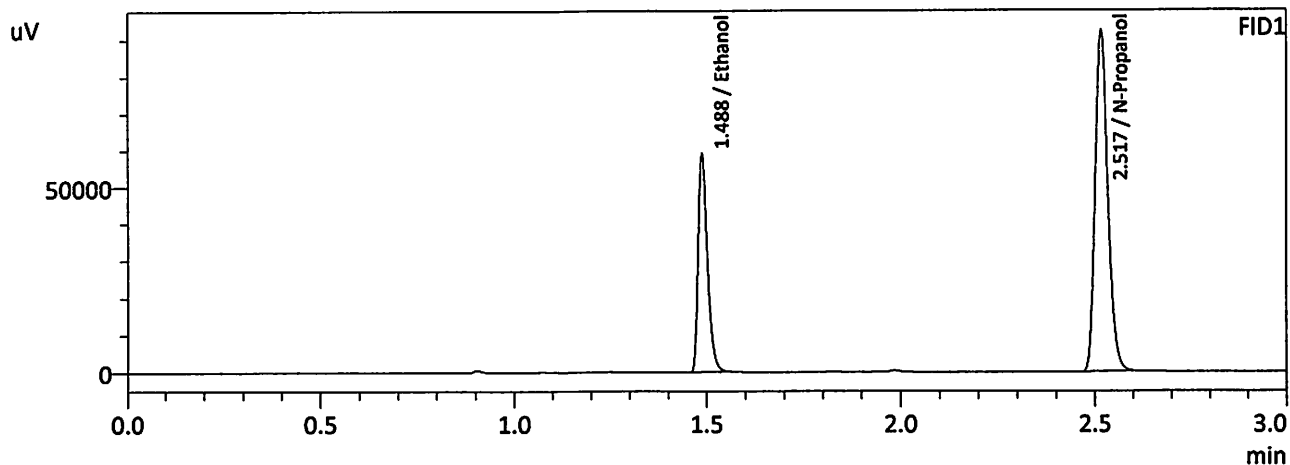
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2084 | 95962 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 211781 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2082 | 104128 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 229243 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : QC-2-1-B
 Laboratory : Meridian
 Injection Date : 1/5/2024 4:02:11 PM
 Vial # : 26
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2089 | 97638 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 214970 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2088 | 105884 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 232438 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

JC

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

| Laboratory No: QC-1-2 | | | Analysis Date(s): 1/5/2024 6:55:09 PM(-07:00) | | | |
|-----------------------|-------------------|-------------------|---|---------------|--------------------------|---------------|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean |
| Sample Results | 0.0814 | 0.0811 | 0.0003 | 0.0812 | 0.0006 | 0.0815 |
| (g/100cc) | 0.0819 | 0.0817 | 0.0002 | 0.0818 | | |

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

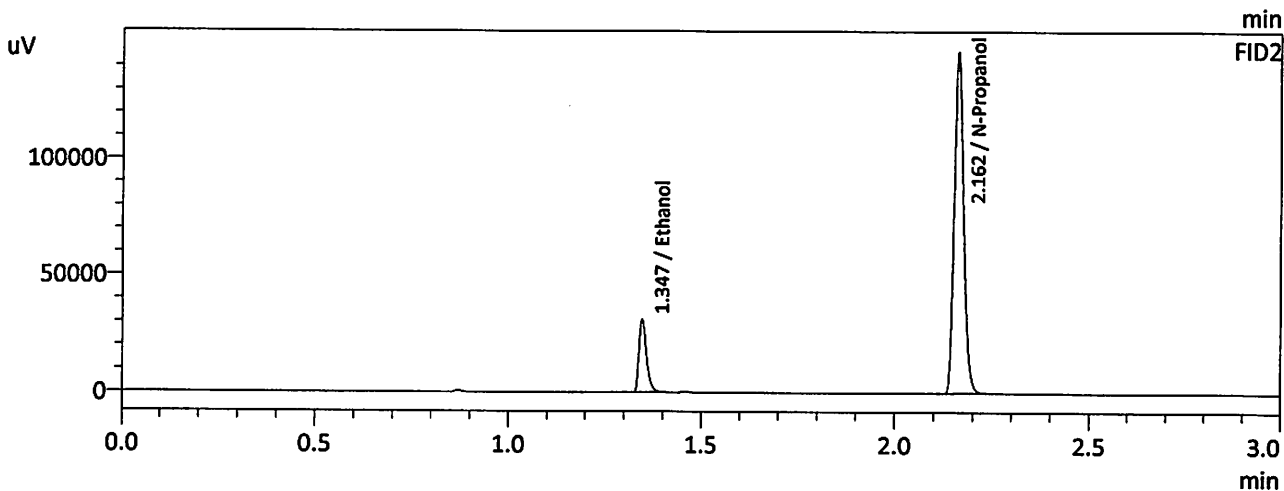
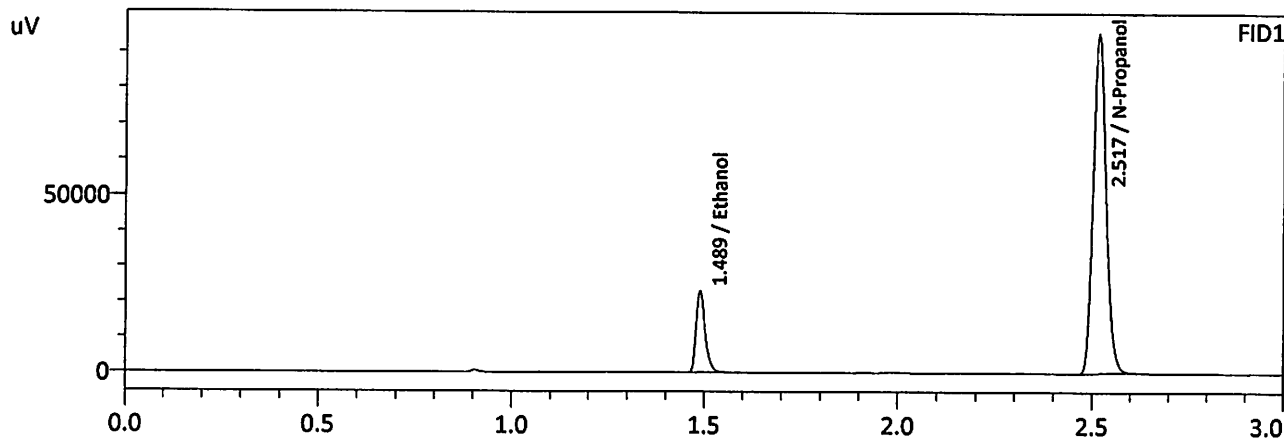
Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_240105.GCM.gcm

| | | | |
|------------------------|--|-------|-------------|
| Reporting of Results | Uncertainty of Measurements (UM%): 5.00% | | |
| Overall Mean (g/100cc) | Low | High | 5 % of Mean |
| 0.081 | 0.076 | 0.086 | 0.005 |
| | Reported Results | | |
| | 0.081 | | |

Calibration and control data are stored centrally.

Sample Name : QC-1-2
 Laboratory : Meridian
 Injection Date : 1/5/2024 6:55:09 PM
 Vial # : 47
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

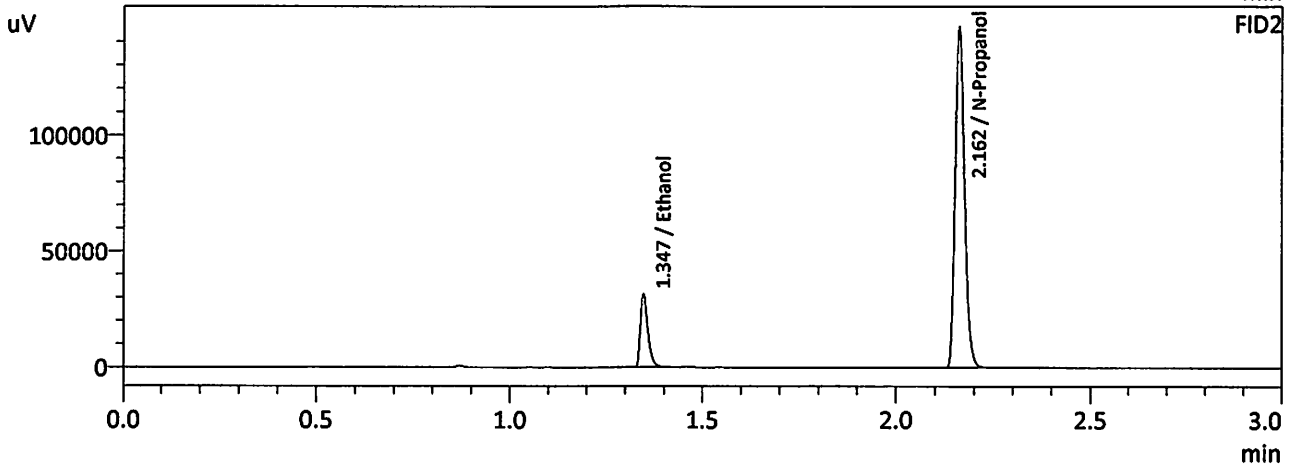
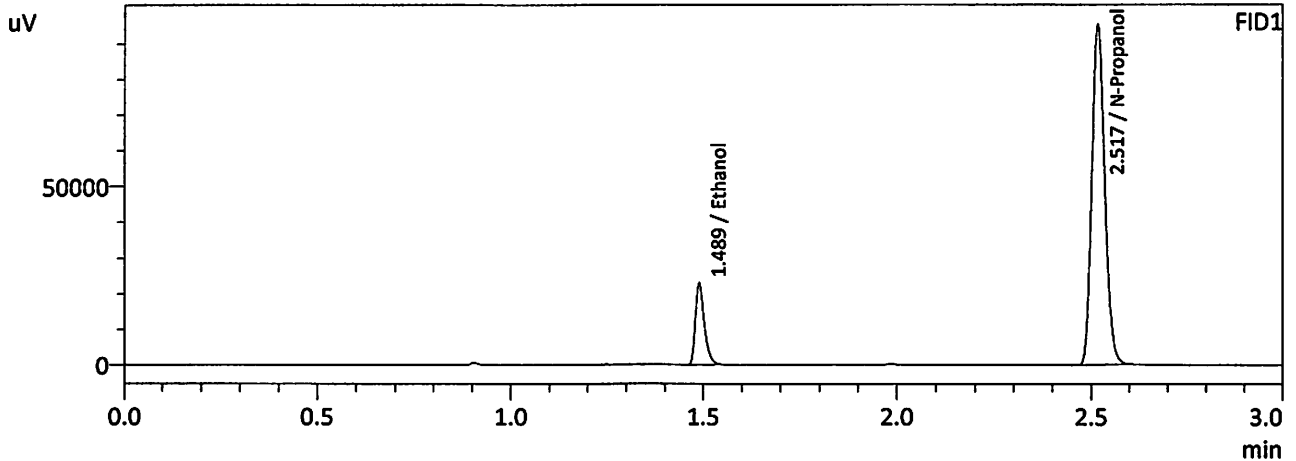
| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0814 | 38399 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 223173 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0811 | 41434 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 241837 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Handwritten signature or mark.

Sample Name : QC-1-2-B
 Laboratory : Meridian
 Injection Date : 1/5/2024 7:04:00 PM
 Vial # : 48
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0819 | 38582 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 222886 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.0817 | 41694 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 241651 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

VOLATILES DETERMINATION CASEFILE WORKSHEET

VOLATILES DETERMINATION CASEFILE WORKSHEET

| Laboratory No: QC-2-2 | | Analysis Date(s): 1/5/2024 7:11:17 PM(-07:00) | | | | |
|-----------------------|-------------------|---|---------------------|---------------|--------------------------|---------------|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean |
| Sample Results | 0.2068 | 0.2069 | 0.0001 | 0.2068 | 0.0010 | 0.2073 |
| (g/100cc) | 0.2080 | 0.2076 | 0.0004 | 0.2078 | | |

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Instrument information is stored centrally.

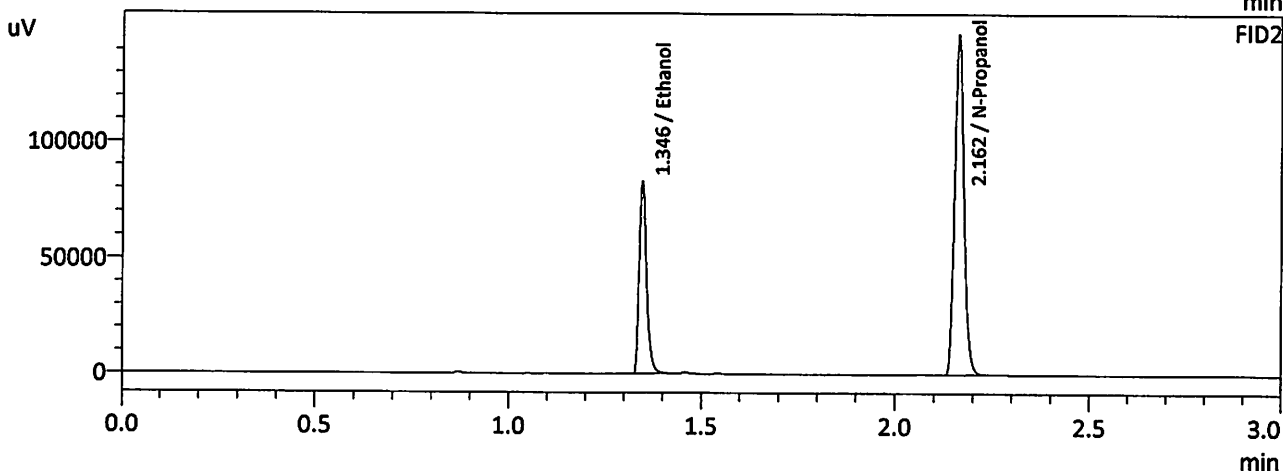
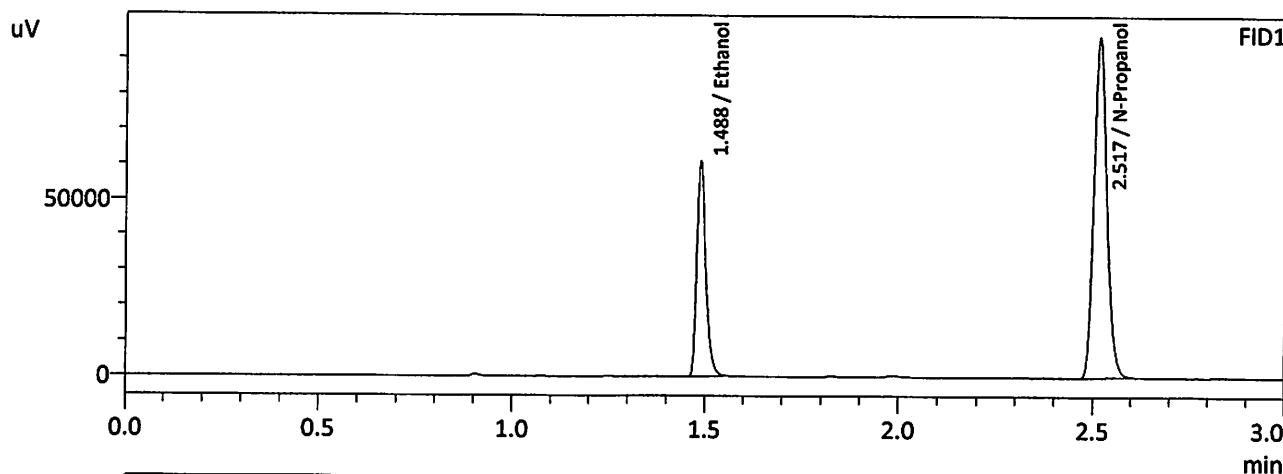
Refer To Instrument Method: ALCOHOL_240105.GCM.gcm

| | | | |
|------------------------|--|-------|-------------|
| Reporting of Results | Uncertainty of Measurements (UM%): 5.00% | | |
| Overall Mean (g/100cc) | Low | High | 5 % of Mean |
| 0.207 | 0.196 | 0.218 | 0.011 |

| | | |
|--|-------------------------|--|
| | Reported Results | |
| | 0.207 | |

Calibration and control data are stored centrally.

Sample Name : QC-2-2
 Laboratory : Meridian
 Injection Date : 1/5/2024 7:11:17 PM
 Vial # : 49
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



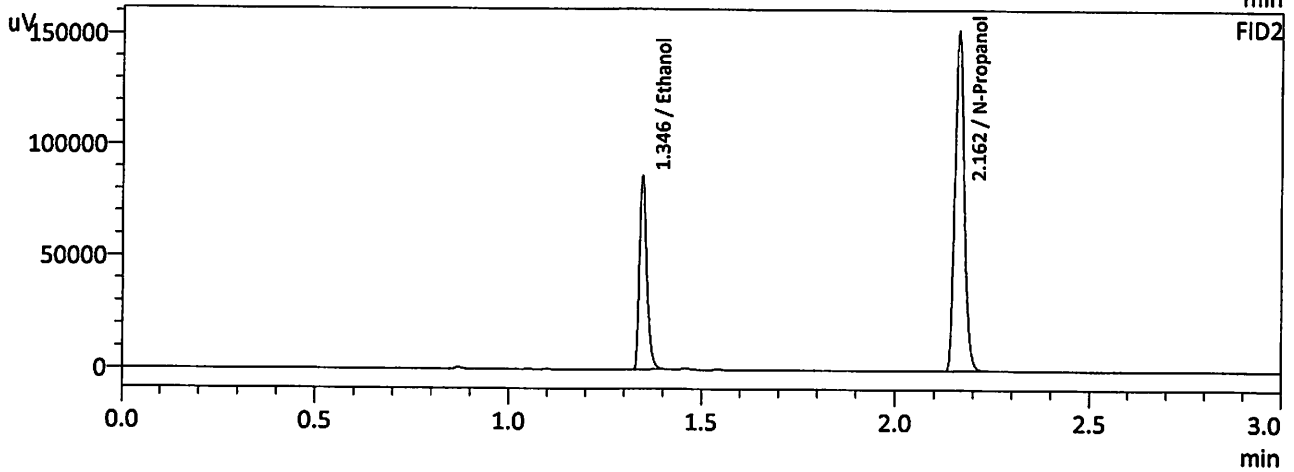
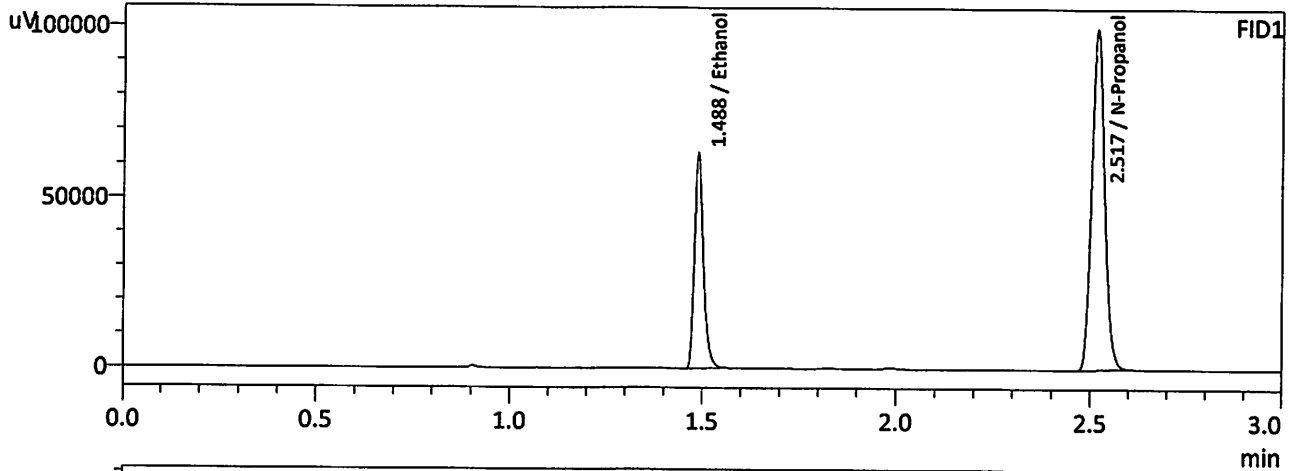
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2068 | 101138 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 225009 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2069 | 109945 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 243589 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : QC-2-2-B
 Laboratory : Meridian
 Injection Date : 1/5/2024 7:20:11 PM
 Vial # : 50
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



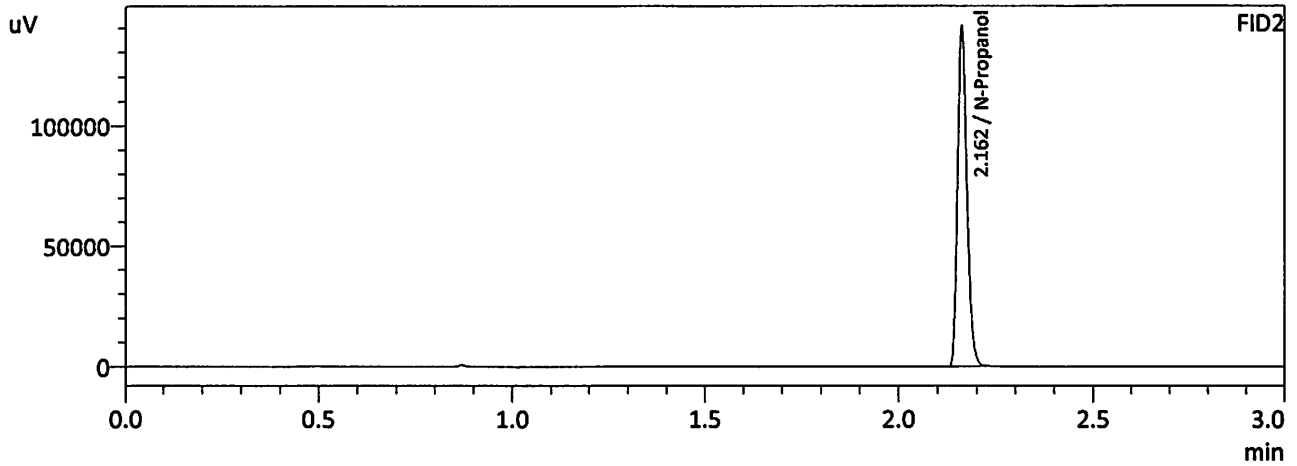
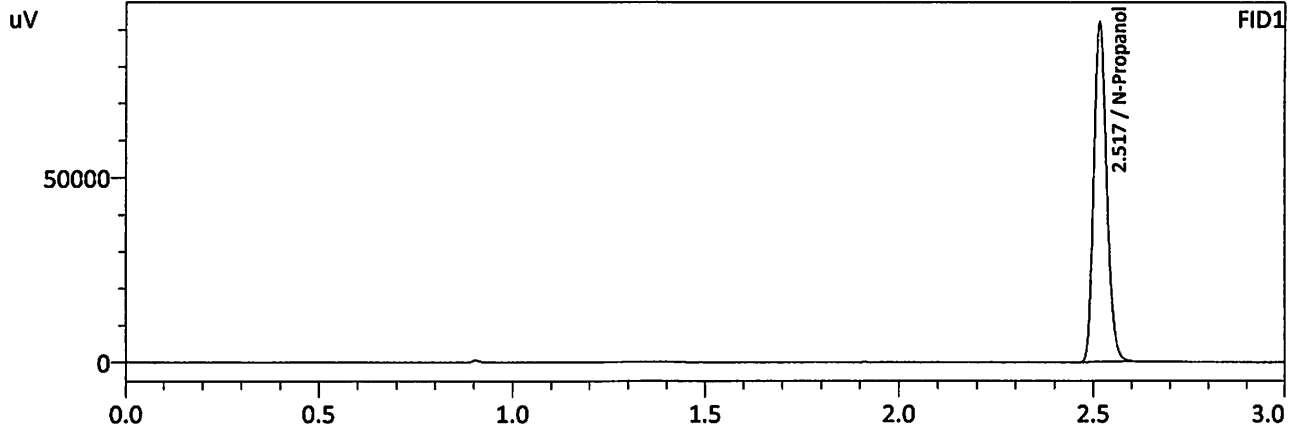
FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2080 | 105219 | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 232618 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | 0.2076 | 114189 | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 252065 | g/100cc |
| Flour. Hydrocarbon(s) | -- | -- | g/100cc |

Sample Name : ISTD BLK 2
 Laboratory : Meridian
 Injection Date : 1/5/2024 7:29:02 PM
 Vial # : 51
 Method Filename : Default Project - ALCOHOL_240105.GCM.gcm
 Instrument #GC/HS : C12255750548 / C12595800409



FID1

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 215081 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

FID2

| Name | Conc. | Area | Unit |
|-----------------------|--------|--------|---------|
| Methanol | -- | -- | g/100cc |
| Ethanol | -- | -- | g/100cc |
| Acetone | -- | -- | g/100cc |
| Isopropyl Alcohol | -- | -- | g/100cc |
| N-Propanol | 0.0000 | 232799 | g/100cc |
| Fluor. Hydrocarbon(s) | -- | -- | g/100cc |

Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548
 Shimadzu HS-20 Serial #C12595800409
 Lab Solutions Database Software Ver. 6.111
 Copyright (C) 2008-2020 Shimadzu Corporation

| Vial# | Sample Name | Sample Type | Level# | Method File |
|-------|----------------------|-------------|--------|------------------------|
| 1 | ISTD BLK 1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 2 | ED VOLATILES FN 0604 | 0:Unknown | 1 | ALCOHOL 240105.GCM.gcm |
| 3 | QC-1-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 4 | QC-1-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 5 | 0.08 QA | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 6 | 0.08 QA-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 7 | M2023-5445-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 8 | M2023-5445-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 9 | M2023-5446-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 10 | M2023-5446-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 11 | M2023-5447-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 12 | M2023-5447-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 13 | M2023-5490-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 14 | M2023-5490-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 15 | M2023-5499-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 16 | M2023-5499-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 17 | M2023-5501-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 18 | M2023-5501-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 19 | M2023-5502-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 20 | M2023-5502-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 21 | M2023-5530-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 22 | M2023-5530-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 23 | M2023-5531-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 24 | M2023-5531-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 25 | QC-2-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 26 | QC-2-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 27 | M2023-5537-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 28 | M2023-5537-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 29 | M2023-5557-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 30 | M2023-5557-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 31 | M2024-0001-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 32 | M2024-0001-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 33 | M2024-0014-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 34 | M2024-0014-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 35 | M2024-0017-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 36 | M2024-0017-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 37 | M2024-0044-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 38 | M2024-0044-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 39 | M2024-0071-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 40 | M2024-0071-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 41 | M2024-0072-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 42 | M2024-0072-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 43 | M2024-0073-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 44 | M2024-0073-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 45 | M2024-0074-1 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 46 | M2024-0074-1-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 47 | QC-1-2 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 48 | QC-1-2-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 49 | QC-2-2 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 50 | QC-2-2-B | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |
| 51 | ISTD BLK 2 | 0:Unknown | 0 | ALCOHOL 240105.GCM.gcm |