# Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

*Device: Hamilton MICROLAB 600A Liquid Processor/Dilutor   Serial Number: ML600HC11378*

*Analytical Method(s):  1.0*

Run Date(s):7/26/19

Calibration Date: 7/19/19

## Volatiles Quality Assurance Controls

| Control level | Expiration | Lot # | Target Value | Acceptable Range | Overall Results |
|---|---|---|---|---|---|
| Level 1 | Jan-22 | 1801036 | 0.0812 | 0.0731-0.0893 | 0.0776 g/100cc / 0.0803 g/100cc |
| Level 2 | Mar-22 | 1803028 | 0.2035 | 0.1832-0.2238 | 0.2040 g/100cc / 0.2129 g/100cc |

| | Column 1 | Lot # | Column2 | Overall Results |
|---|---|---|---|---|
| Multi-Component mixture: | Sep-20 | FN0641502 | | ok |
| Curve Fit: | 1.00000 | | | 0.99997 |

## Ethanol Calibration Reference Material

| Calibrator level | Target Value | Acceptable Range | Column 1 | Column 2 | Precision | Mean |
|---|---|---|---|---|---|---|
| 50 | 0.050 | 0.045 - 0.055 | 0.0503 | 0.0516 | 0.0013 | 0.0509 |
| 100 | 0.100 | 0.090 - 0.110 | 0.0997 | 0.0996 | 0.0001 | 0.0996 |
| 200 | 0.200 | 0.180 - 0.220 | 0.2000 | 0.1991 | 0.0009 | 0.1995 |
| 300 | 0.300 | 0.270 - 0.330 | 0.2999 | 0.2984 | 0.0015 | 0.2991 |
| 500 | 0.500 | 0.450 - 0.550 | 0.5001 | 0.5012 | 0.0011 | 0.5006 |

## Aqueous Controls

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

**REVIEWED**
*By Jeremy Johnston at 3:30 pm, Jul 31, 2019*

**Worklist: 3583**

| LAB_CASE | ITEM | TASK_ID | DESCRIPTION | |
|----------|------|---------|-------------|---|
| M2019-3274 | 1 | 157722 | Alcohol Analysis | |
| M2019-3274 | 2 | 157726 | Alcohol Analysis | |
| M2019-3275 | 1 | 157731 | Alcohol Analysis | |
| M2019-3276 | 1 | 157732 | Alcohol Analysis | |
| M2019-3277 | 1 | 157736 | Alcohol Analysis | |
| M2019-3277 | 2 | 157740 | Alcohol Analysis | |
| M2019-3278 | 1 | 157744 | Alcohol Analysis | |
| M2019-3279 | 1 | 157745 | Alcohol Analysis | |
| M2019-3280 | 1 | 157749 | Alcohol Analysis | |
| M2019-3286 | 1 | 157762 | Alcohol Analysis | |
| M2019-3298 | 1 | 157901 | Alcohol Analysis | |
| M2019-3299 | 1 | 157902 | Alcohol Analysis | |
| M2019-3300 | 1 | 157903 | Alcohol Analysis | |
| M2019-3301 | 1 | 157907 | Alcohol Analysis | |
| M2019-3318 | 1 | 157952 | Alcohol Analysis | |
| M2019-3325 | 1 | 158000 | Alcohol Analysis | |
| M2019-3357 | 1 | 158146 | Alcohol Analysis | |
| M2019-3358 | 1 | 158148 | Alcohol Analysis | |
| M2019-3359 | 1 | 158149 | Alcohol Analysis | |
| M2019-3360 | 1 | 158150 | Alcohol Analysis | |
| M2019-3361 | 1 | 158151 | Alcohol Analysis | |
| M2019-3362 | 1 | 158152 | Alcohol Analysis | |
| P2019-2195 | 1 | 157589 | Alcohol Analysis | |

**Worklist: 3583**

<u>LAB CASE</u>　　　　<u>ITEM</u>　　　　<u>TASK ID</u>　<u>DESCRIPTION</u>

Method C:\CHEM32\1\METHODS\ALCOHOL.M
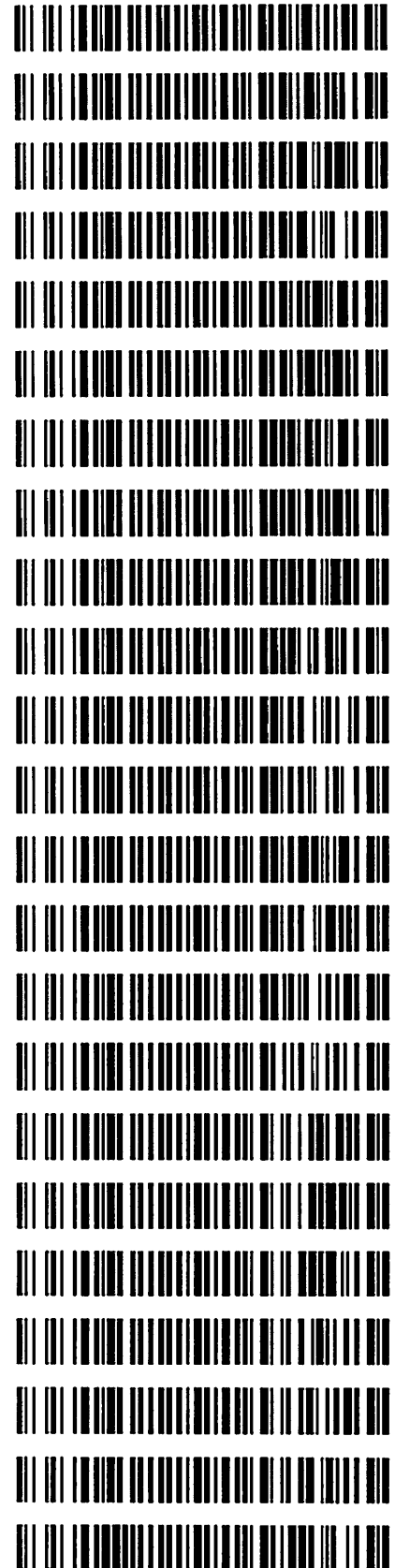
```
=====================================================================
                          Calibration Table
=====================================================================



---------------------------------------------------------------------
                    General Calibration Setting
---------------------------------------------------------------------


Calib. Data Modified  :    Friday, July 19, 2019 10:28:16 AM
Signals calculated separately :    No


Rel. Reference Window :    0.000 %
Abs. Reference Window :    0.100 min
Rel. Non-ref. Window  :    0.000 %
Abs. Non-ref. Window  :    0.100 min
Uncalibrated Peaks    :    not reported
Partial Calibration   :    Yes, identified peaks are recalibrated
Correct All Ret. Times:    No, only for identified peaks

Curve Type            :    Linear
Origin                :    Ignored
Weight                :    Equal

Recalibration Settings:
Average Response      :    Average all calibrations
Average Retention Time:    Floating Average New 75%

Calibration Report Options :
     Printout of recalibrations within a sequence:
         Calibration Table after Recalibration
         Normal Report after Recalibration
     If the sequence is done with bracketing:
         Results of first cycle (ending previous bracket)

Default Sample ISTD Information (if not set in sample table):
ISTD  ISTD Amount    Name
 #    [g/100cc]
----|-------------|----------------------------
 1       1.00000    n-propanol
 2       1.00000    n-propanol


---------------------------------------------------------------------



---------------------------------------------------------------------
                          Signal Details
---------------------------------------------------------------------


Signal 1: FID1 A, Front Signal
Signal 2: FID2 B, Back Signal


---------------------------------------------------------------------



---------------------------------------------------------------------
                          Overview Table
---------------------------------------------------------------------
```

```
   RT Sig Lvl   Amount      Area   Rsp.Factor Ref ISTD #   Compound
                [g/100cc]
-------|-|--|----------|----------|----------|---|---|-|--------------------
 2.586 1  1   1.00000    3.69669 2.70512e-1  No  No  1 methanol
 2.809 1  1   1.00000    4.26100 2.34687e-1  No  No  2 Acetaldehyde
 2.977 2  1   1.00000    4.26100 2.34687e-1  No  No  2 Acetaldehyde
 3.075 1  1 5.00000e-2   4.49290 1.11287e-2  No  No  1 ethanol
          2 1.00000e-1   9.08480 1.10074e-2
          3 2.00000e-1  18.48556 1.08193e-2
          4 3.00000e-1  27.33419 1.09753e-2
          5 5.00000e-1  46.12227 1.08408e-2
 3.388 2  1   1.00000    4.26062 2.34707e-1  No  No  2 methanol
 3.628 1  1   1.00000    9.73055 1.02769e-1  No  No  1 isopropyl alcohol
 4.285 2  1 5.00000e-2   4.67755 1.06894e-2  No  No  2 ethanol
          2 1.00000e-1   9.44829 1.05839e-2
          3 2.00000e-1  19.39910 1.03098e-2
          4 3.00000e-1  28.84432 1.04007e-2
          5 5.00000e-1  49.12614 1.01779e-2
 4.308 1  1   1.00000    6.49940 1.53860e-1  No  No  1 acetone
 4.620 1  1   1.00000   46.49081 2.15096e-2  No  Yes 1 n-propanol
          2   1.00000   47.11196 2.12260e-2
          3   1.00000   47.62738 2.09963e-2
          4   1.00000   46.92963 2.13085e-2
          5   1.00000   47.44746 2.10759e-2
 4.661 2  1   1.00000    6.89301 1.45075e-1  No  No  2 acetone
 4.969 2  1   1.00000   10.70642 9.34019e-2  No  No  2 isopropyl alcohol
 7.550 2  1   1.00000   48.88646 2.04556e-2  No  Yes 2 n-propanol
          2   1.00000   49.28146 2.02916e-2
          3   1.00000   49.61608 2.01548e-2
          4   1.00000   48.89425 2.04523e-2
          5   1.00000   49.32278 2.02746e-2
-----------------------------------------------------------------------


-----------------------------------------------------------------------
                        Peak Sum Table
-----------------------------------------------------------------------
```
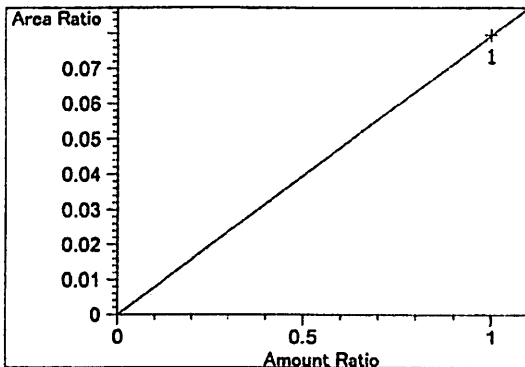
***No Entries in table***
-----------------------------------------------------------------------

1 Warnings or Errors :

Warning : Curve requires more calibration points., (methanol)

========================================================================
                        Calibration Curves
========================================================================
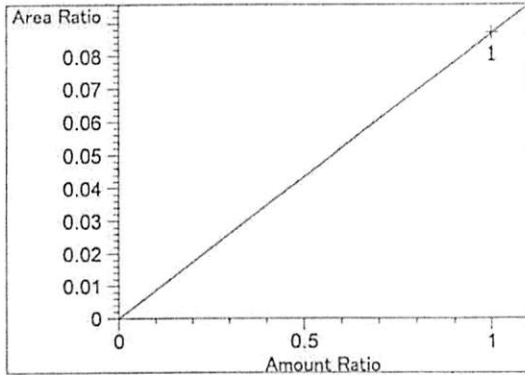


methanol at exp. RT: 2.586
FID1 A, Front Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx + b
        m:      7.95145e-2
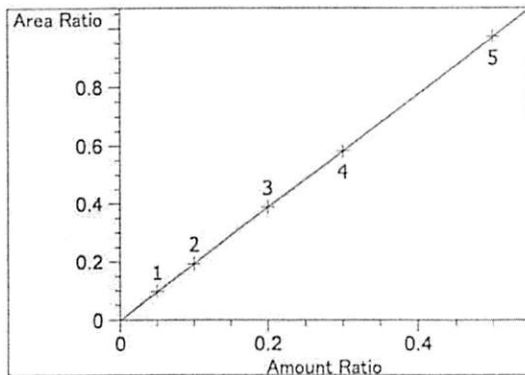        b:      0.00000
        x: Amount Ratio
        y: Area Ratio

Method C:\CHEM32\1\METHODS\ALCOHOL.M
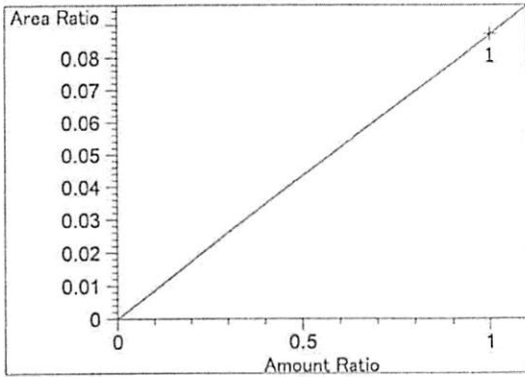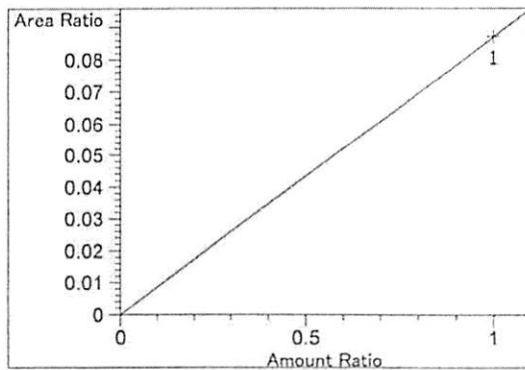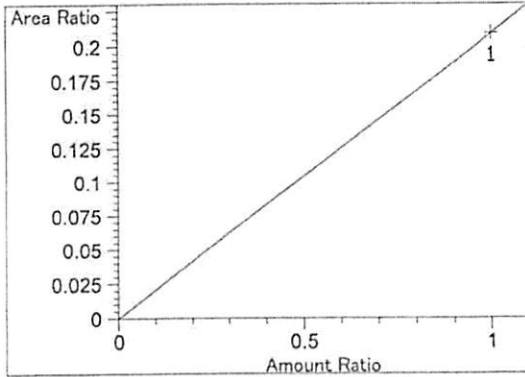
Acetaldehyde at exp. RT: 2.809
FID1 A, Front Signal
Correlation:             1.00000
Residual Std. Dev.:      0.00000
Formula: y = mx + b
        m:       8.71612e-2
        b:       0.00000
        x: Amount Ratio
        y: Area Ratio

Acetaldehyde at exp. RT: 2.977
FID2 B, Back Signal
Correlation:             1.00000
Residual Std. Dev.:      0.00000
Formula: y = mx + b
        m:       8.71612e-2
        b:       0.00000
        x: Amount Ratio
        y: Area Ratio

ethanol at exp. RT: 3.075
FID1 A, Front Signal
Correlation:             1.00000
Residual Std. Dev.:      0.00048
Formula: y = mx + b
        m:       1.94627
        b:       -1.21777e-3
        x: Amount Ratio
        y: Area Ratio
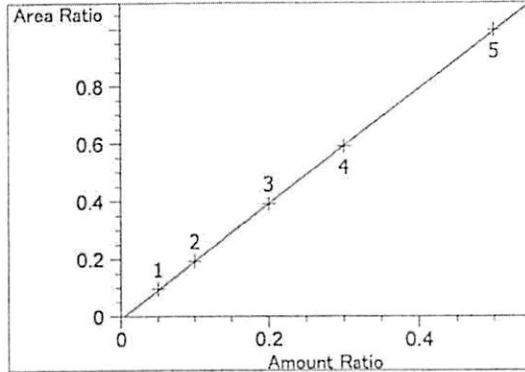
methanol at exp. RT: 3.388
FID2 B, Back Signal
Correlation:             1.00000
Residual Std. Dev.:      0.00000
Formula: y = mx + b
        m:       8.71535e-2
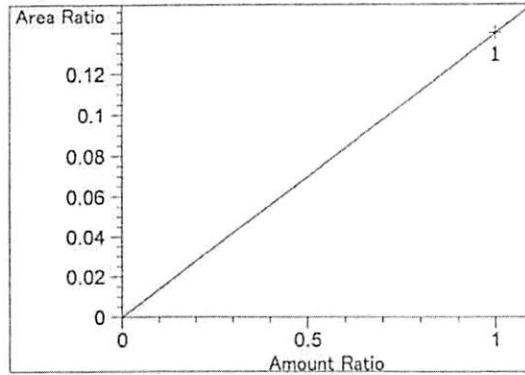        b:       0.00000
        x: Amount Ratio
        y: Area Ratio

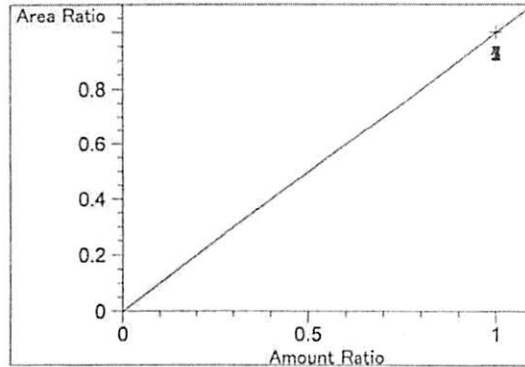isopropyl alcohol at exp. RT: 3.628
FID1 A, Front Signal
Correlation:              1.00000
Residual Std. Dev.:       0.00000
Formula: y = mx + b
         m:        2.09301e-1
         b:        0.00000
         x: Amount Ratio
         y: Area Ratio



ethanol at exp. RT: 4.285
FID2 B, Back Signal
Correlation:              0.99997
Residual Std. Dev.:       0.00318
Formula: y = mx + b
         m:        2.00268
         b:        -7.74957e-3
         x: Amount Ratio
         y: Area Ratio



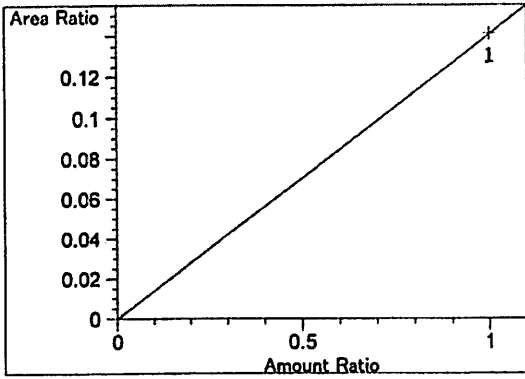acetone at exp. RT: 4.308
FID1 A, Front Signal
Correlation:              1.00000
Residual Std. Dev.:       0.00000
Formula: y = mx + b
         m:        1.39800e-1
         b:        0.00000
         x: Amount Ratio
         y: Area Ratio



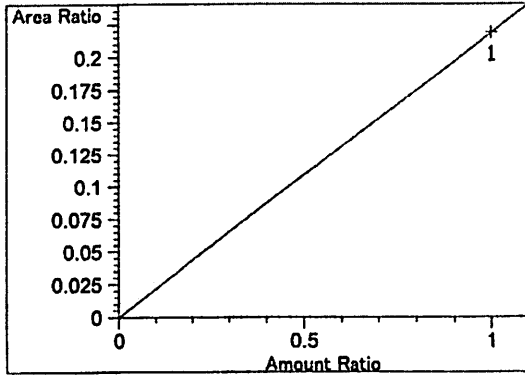n-propanol at exp. RT: 4.620
FID1 A, Front Signal
Correlation:              1.00000
Residual Std. Dev.:       0.00000
Formula: y = mx + b
         m:        1.00000
         b:        0.00000
         x: Amount Ratio
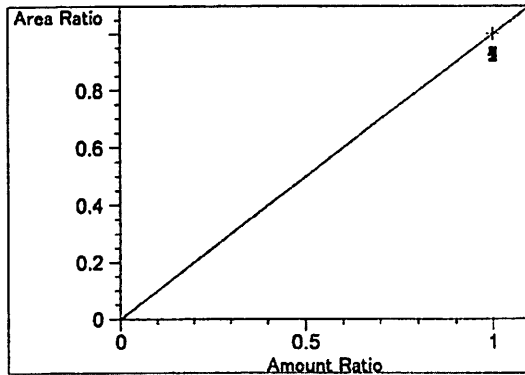         y: Area Ratio

acetone at exp. RT: 4.661
FID2 B, Back Signal
Correlation:             1.00000
Residual Std. Dev.:    0.00000
Formula: y = mx + b
        m:      1.41000e-1
        b:      0.00000
        x: Amount Ratio
        y: Area Ratio



isopropyl alcohol at exp. RT: 4.969
FID2 B, Back Signal
Correlation:             1.00000
Residual Std. Dev.:    0.00000
Formula: y = mx + b
        m:      2.19006e-1
        b:      0.00000
        x: Amount Ratio
        y: Area Ratio
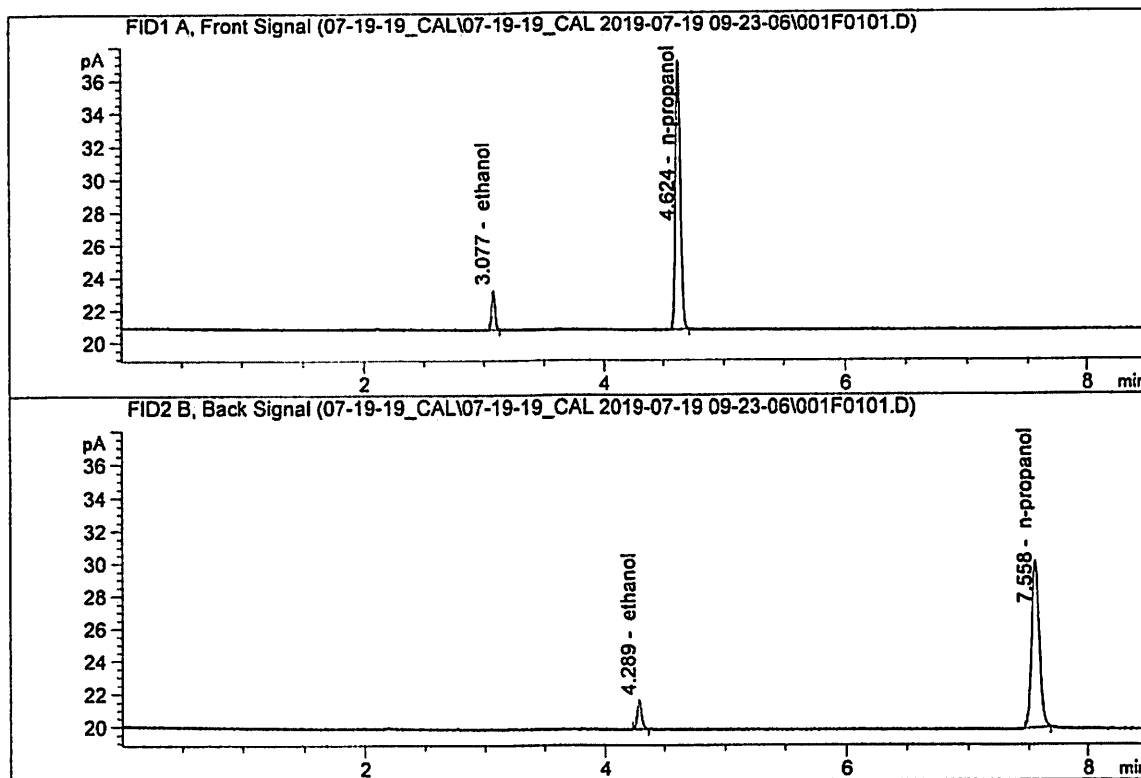


n-propanol at exp. RT: 7.550
FID2 B, Back Signal
Correlation:             1.00000
Residual Std. Dev.:    0.00000
Formula: y = mx + b
        m:      1.00000
        b:      0.00000
        x: Amount Ratio
        y: Area Ratio

=================================================================================

# ISP Forensic Services Blood Alcohol Report

Sample Name      :   0.050 FN04271601
Laboratory       :   Meridian
Injection Date   :   Jul 19, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167



FID1 A, Front Signal (07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\001F0101.D)

FID2 B, Back Signal (07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\001F0101.D)

| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 4.49290 | 0.0503 | g/100cc |
| 2. | Ethanol | Column 2: | 4.67755 | 0.0516 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.49081 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 48.88646 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name      :   0.100 FN02271802
Laboratory       :   Meridian
Injection Date   :   Jul 19, 2019
Method           :   ALCOHOL.M
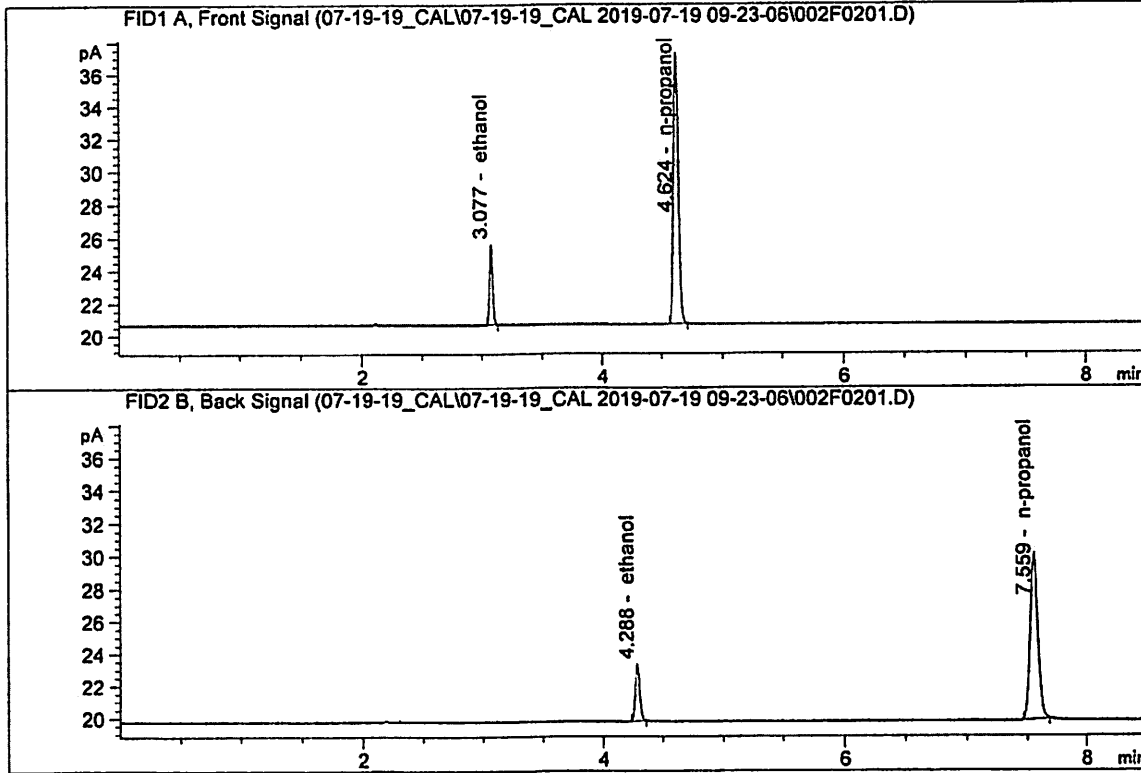Acq. Instrument:     CN11180014-CN11041167



FID1 A, Front Signal (07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\002F0201.D)

FID2 B, Back Signal (07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\002F0201.D)

| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 9.08480 | 0.0997 | g/100cc |
| 2. | Ethanol | Column 2: | 9.44829 | 0.0996 | g/100cc |
| 3. | n-Propanol | Column 1: | 47.11196 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 49.28146 | 1.0000 | g/100cc |

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# ISP Forensic Services Blood Alcohol Report

Sample Name    :   0.200 FN03301601
Laboratory     :   Meridian
Injection Date :   Jul 19, 2019
Method         :   ALCOHOL.M
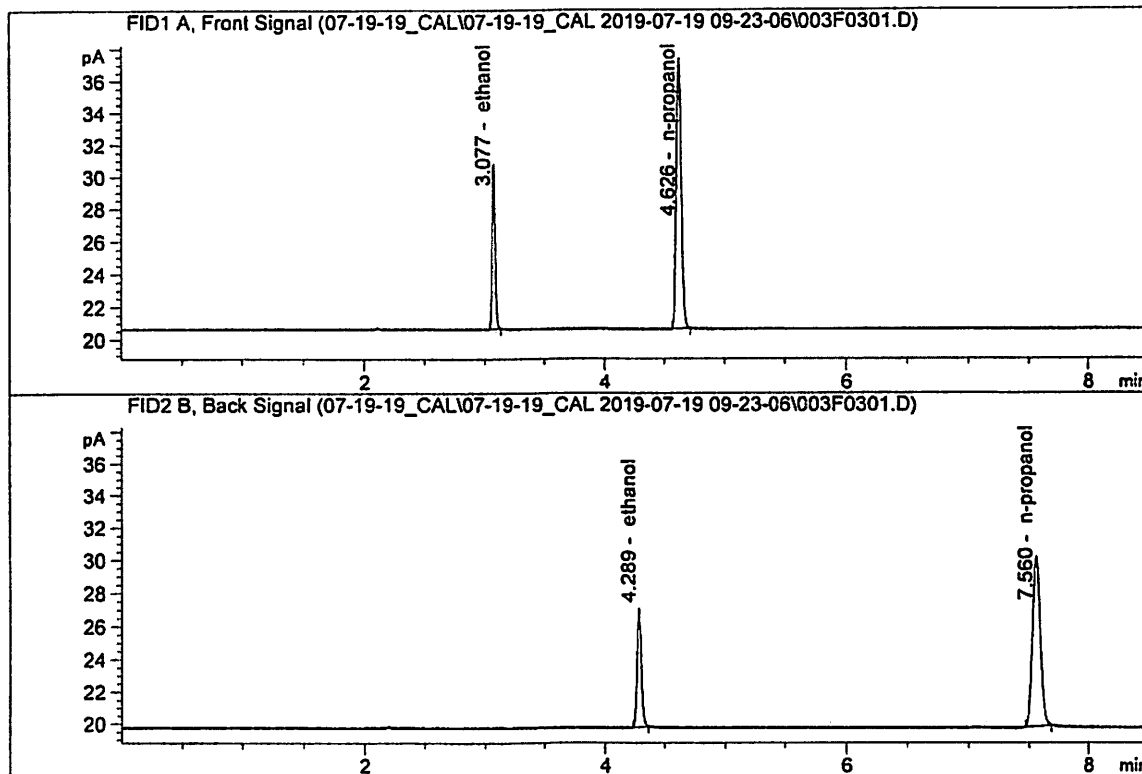Acq. Instrument:   CN11180014-CN11041167



FID1 A, Front Signal (07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\003F0301.D)

FID2 B, Back Signal (07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\003F0301.D)

| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 18.48556 | 0.2000 | g/100cc |
| 2. | Ethanol | Column 2: | 19.39910 | 0.1991 | g/100cc |
| 3. | n-Propanol | Column 1: | 47.62738 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 49.61608 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report
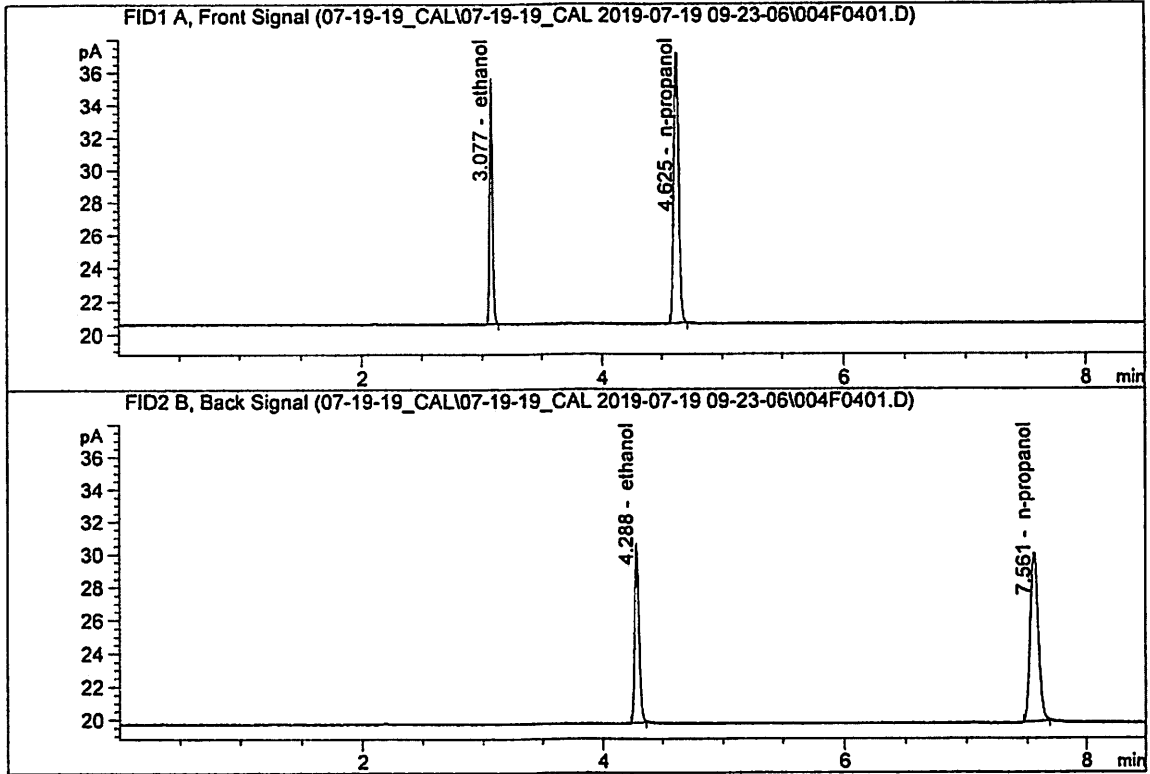
Sample Name      :   0.300 FN07311804
Laboratory       :   Meridian
Injection Date   :   Jul 19, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167



FID1 A, Front Signal (07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\004F0401.D)

FID2 B, Back Signal (07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\004F0401.D)

| #  | Compound   | Column    | Area     | Amount | Units   |
|----|------------|-----------|----------|--------|---------|
| 1. | Ethanol    | Column 1: | 27.33419 | 0.2999 | g/100cc |
| 2. | Ethanol    | Column 2: | 28.84432 | 0.2984 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.92963 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 48.89425 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name      :   0.500 FN08031602
Laboratory       :   Meridian
Injection Date   :   Jul 19, 2019
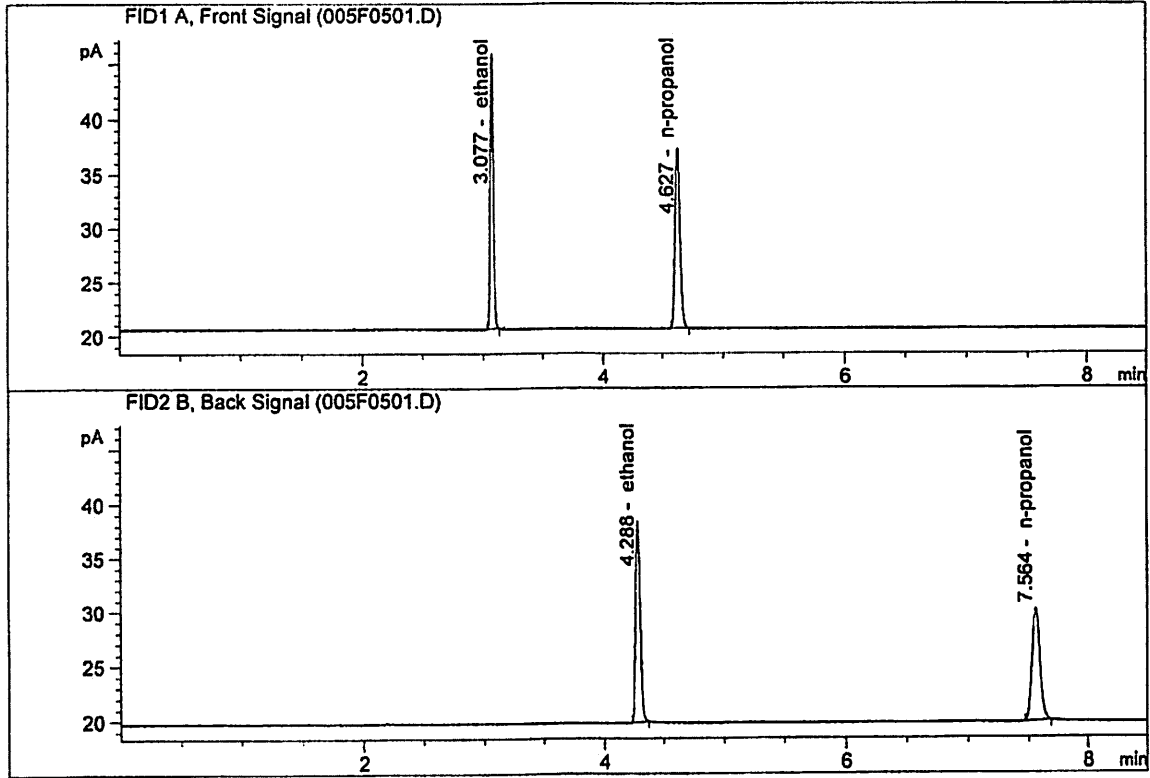Method           :   ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 46.12227 | 0.5001 | g/100cc |
| 2. | Ethanol | Column 2: | 49.12614 | 0.5012 | g/100cc |
| 3. | n-Propanol | Column 1: | 47.44746 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 49.32278 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name      :   INTERNAL STANDARD BLANK
Laboratory       :   Meridian
Injection Date   :   Jul 19, 2019
Method           :   ALCOHOL.M
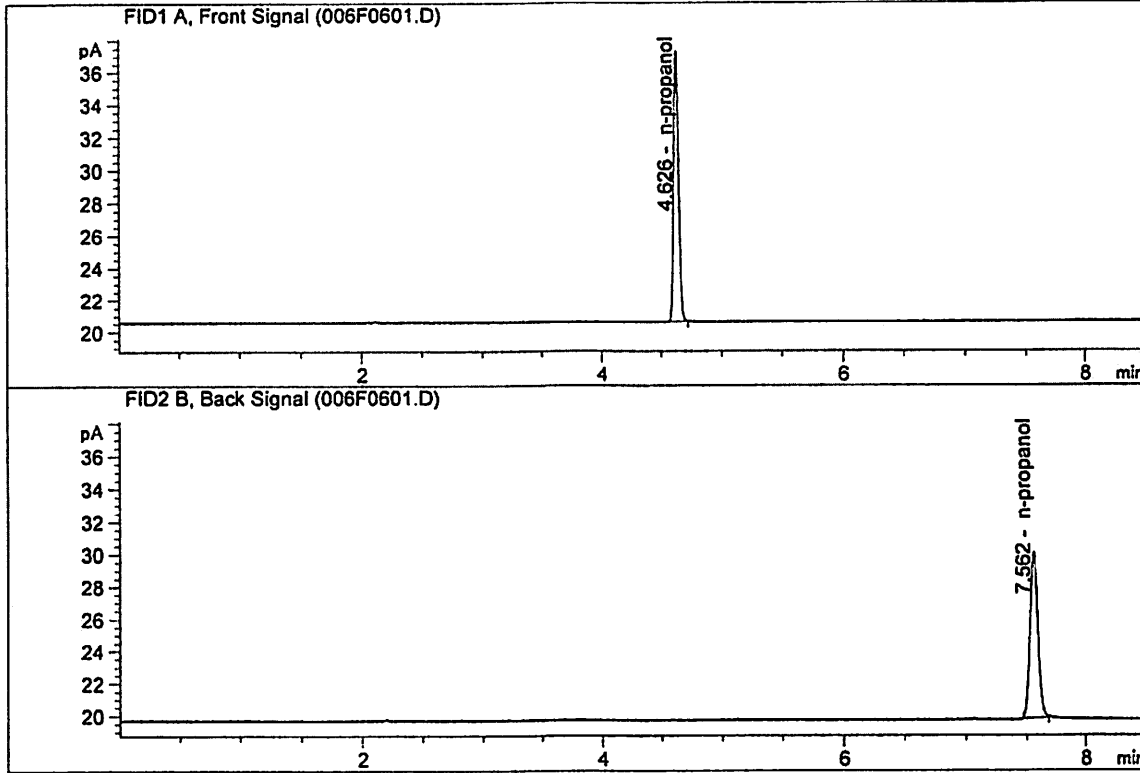Acq. Instrument:     CN11180014-CN11041167



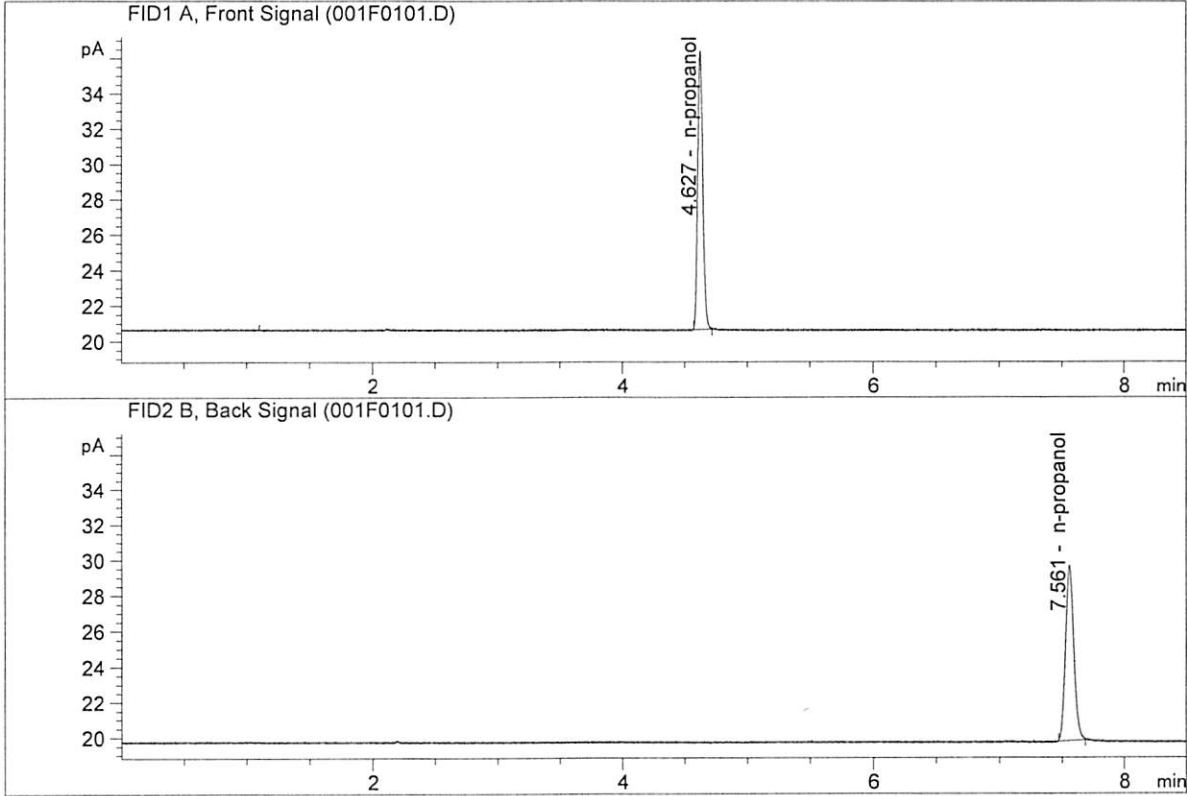| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 0.00000 | 0.0000 | g/100cc |
| 2. | Ethanol | Column 2: | 0.00000 | 0.0000 | g/100cc |
| 3. | n-Propanol | Column 1: | 47.36512 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 49.28585 | 1.0000 | g/100cc |

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## Sample   Summary

Sequence table:       C:\Chem32\1\Data\07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\07-19-19_
                      CAL.S
Data directory path:  C:\Chem32\1\Data\07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\
Logbook:              C:\Chem32\1\Data\07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\07-19-19_
                      CAL.LOG
Sequence start:       7/19/2019 9:37:44 AM
Sequence Operator:    SYSTEM
Operator:             SYSTEM

Method file name:     C:\Chem32\1\Data\07-19-19_CAL\07-19-19_CAL 2019-07-19 09-23-06\ALCOHOL.M

| Run # | Location | Inj # | Sample Name | Sample Amt [g/100cc] | Multip.* Dilution | File name | Cal | # Cmp |
|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 0.050 FN04271601 | - | 1.0000 | 001F0101.D | * | 4 |
| 2 | 2 | 1 | 0.100 FN02271802 | - | 1.0000 | 002F0201.D | * | 4 |
| 3 | 3 | 1 | 0.200 FN03301601 | - | 1.0000 | 003F0301.D | * | 4 |
| 4 | 4 | 1 | 0.300 FN07311804 | - | 1.0000 | 004F0401.D | * | 4 |
| 5 | 5 | 1 | 0.500 FN08031602 | - | 1.0000 | 005F0501.D | * | 4 |
| 6 | 6 | 1 | INTERNAL STANDAR | - | 1.0000 | 006F0601.D | | 2 |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name     :   INTERNAL STD BLK 1
Laboratory      :   Meridian
Injection Date  :   Jul 26, 2019
Method          :   ALCOHOL.M
Acq. Instrument :   CN11180014-CN11041167
```



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 0.00000 | 0.0000 | g/100cc |
| 2. | Ethanol | Column 2: | 0.00000 | 0.0000 | g/100cc |
| 3. | n-Propanol | Column 1: | 44.82574 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 47.38720 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name     :   MIX VOL FN06041502
Laboratory      :   Meridian
Injection Date  :   Jul 26, 2019
Method          :   ALCOHOL.M
Acq. Instrument :   CN11180014-CN11041167
```
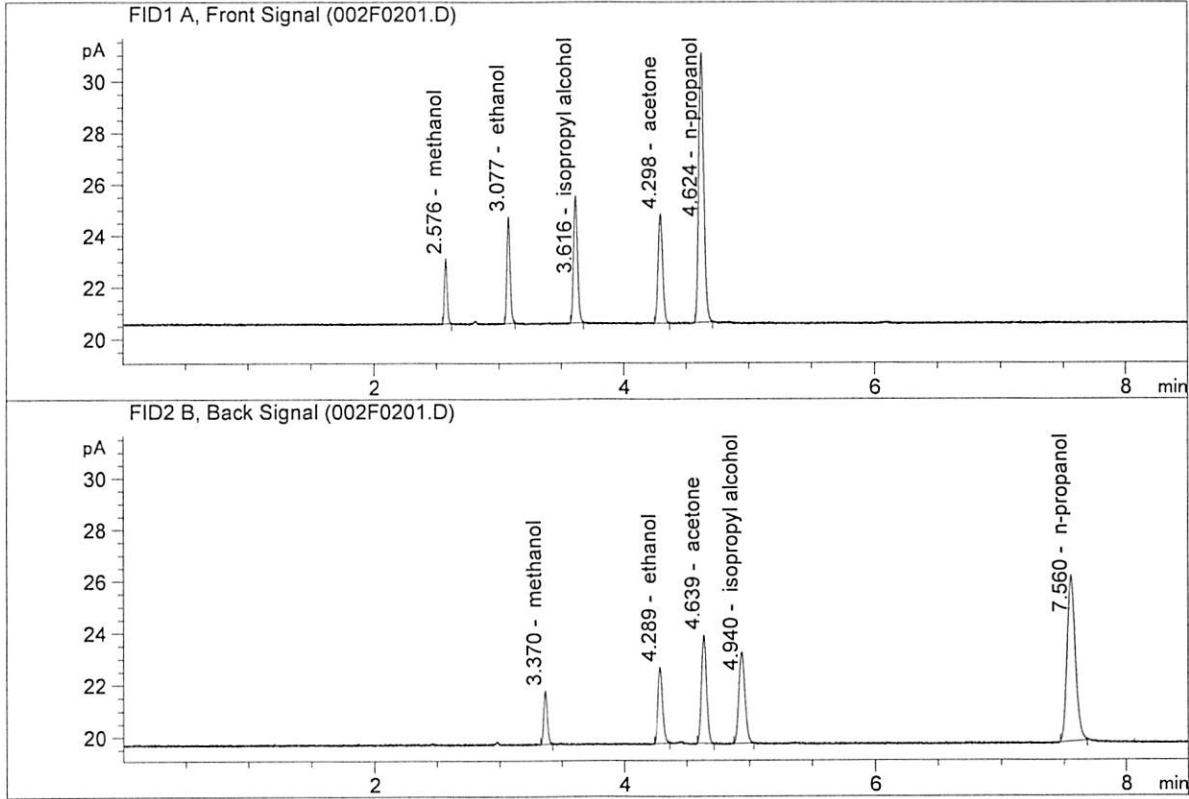


| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 7.38704 | 0.1294 | g/100cc |
| 2. | Ethanol | Column 2: | 7.72893 | 0.1302 | g/100cc |
| 3. | n-Propanol | Column 1: | 29.47377 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 30.54860 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC1-1**　　　　　**Analysis Date(s): 26 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| **Sample Results** | 0.0776 | 0.0781 | 0.0005 | 0.0778 | 0.0776 | |
| **(g/100cc)** | 0.0771 | 0.0779 | 0.0008 | 0.0775 | | |

## Analysis Method

**Refer to Blood Alcohol Method #1**

## Instrument Information　　　　　*Instrument method is stored centrally.*

Refer to Instrument Method:  Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11378

## Reporting of Results　　　　**Uncertainty of Measurement (UM%): 5.00%**

| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.077 | 0.073 | 0.081 | 0.004 |

| | Reported Result | |
|---|---|---|
| | 0.077 | |

*Calibration and control data are stored centrally.*
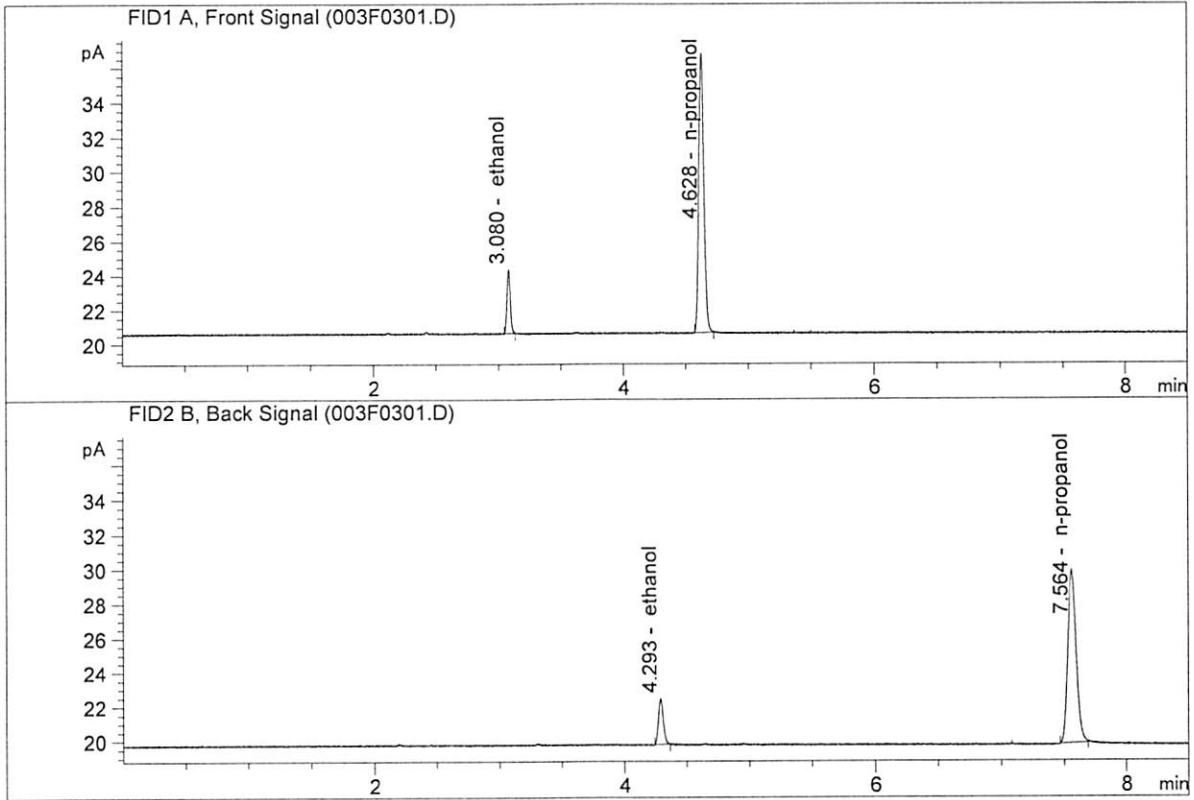
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Revision: 1
Issue Date: 01/04/2019
Issuing Authority: Quality Manager

# ISP Forensic Services Blood Alcohol Report

```
Sample Name     :   QC1-1-A
Laboratory      :   Meridian
Injection Date  :   Jul 26, 2019
Method          :   ALCOHOL.M
Acq. Instrument :   CN11180014-CN11041167
```



FID1 A, Front Signal (003F0301.D)



FID2 B, Back Signal (003F0301.D)

| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 6.90882 | 0.0776 | g/100cc |
| 2. | Ethanol | Column 2: | 7.15171 | 0.0781 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.10976 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 48.13565 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name     :   QC1-1-B
Laboratory      :   Meridian
Injection Date  :   Jul 26, 2019
Method          :   ALCOHOL.M
Acq. Instrument :   CN11180014-CN11041167
```
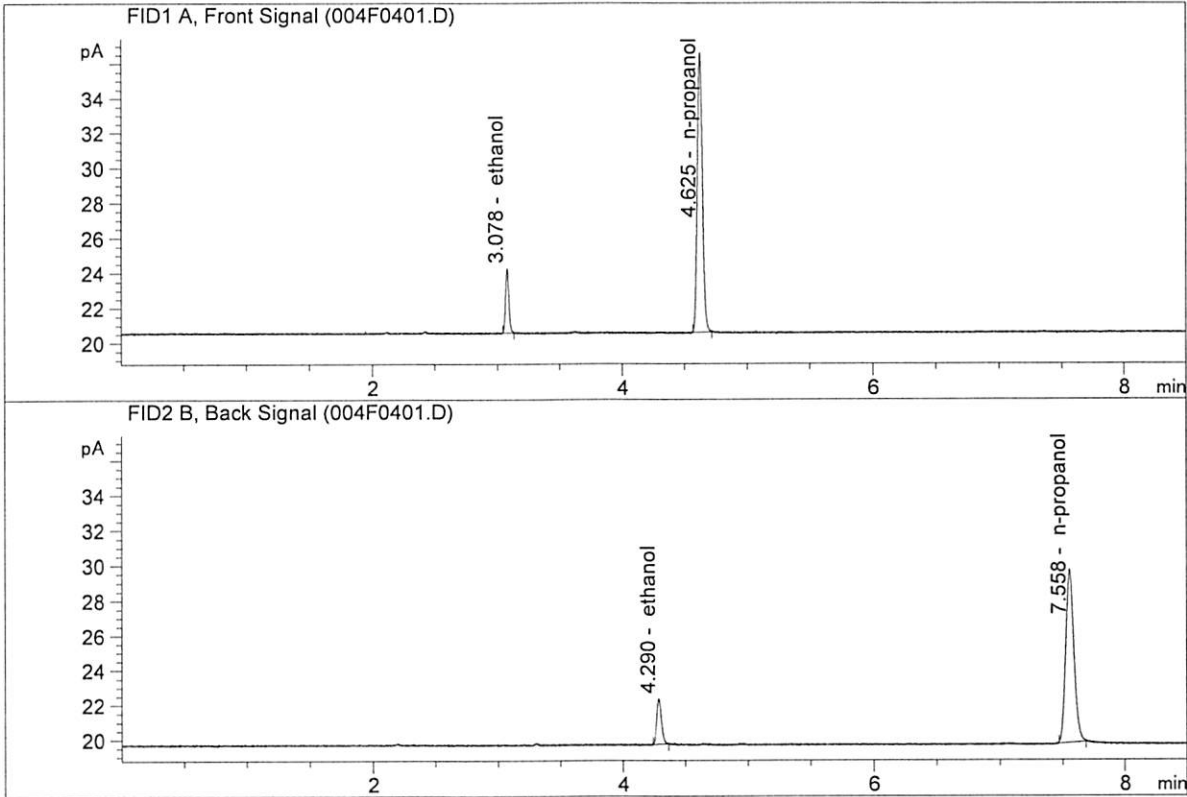


| #  | Compound   | Column    | Area     | Amount | Units    |
|----|------------|-----------|----------|--------|----------|
| 1. | Ethanol    | Column 1: | 6.79965  | 0.0771 | g/100cc  |
| 2. | Ethanol    | Column 2: | 7.05006  | 0.0779 | g/100cc  |
| 3. | n-Propanol | Column 1: | 45.70249 | 1.0000 | g/100cc  |
| 4. | n-Propanol | Column 2: | 47.55449 | 1.0000 | g/100cc  |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: 0.08 FN04171701**  **Analysis Date(s): 26 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| **Sample Results** | 0.0800 | 0.0802 | 0.0002 | 0.0801 | | |
| **(g/100cc)** | 0.0802 | 0.0806 | 0.0004 | 0.0804 | 0.0802 | |

## Analysis Method

**Refer to Blood Alcohol Method #1**

## Instrument Information

*Instrument method is stored centrally.*

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11378

## Reporting of Results

**Uncertainty of Measurement (UM%): 5.00%**

| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.080 | 0.076 | 0.084 | 0.004 |

| | Reported Result | |
|---|---|---|
| | 0.080 | |

*Calibration and control data are stored centrally.*

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   0.08 FN04171701-A
Laboratory       :   Meridian
Injection Date   :   Jul 26, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167
```



FID1 A, Front Signal (005F0501.D)

FID2 B, Back Signal (005F0501.D)
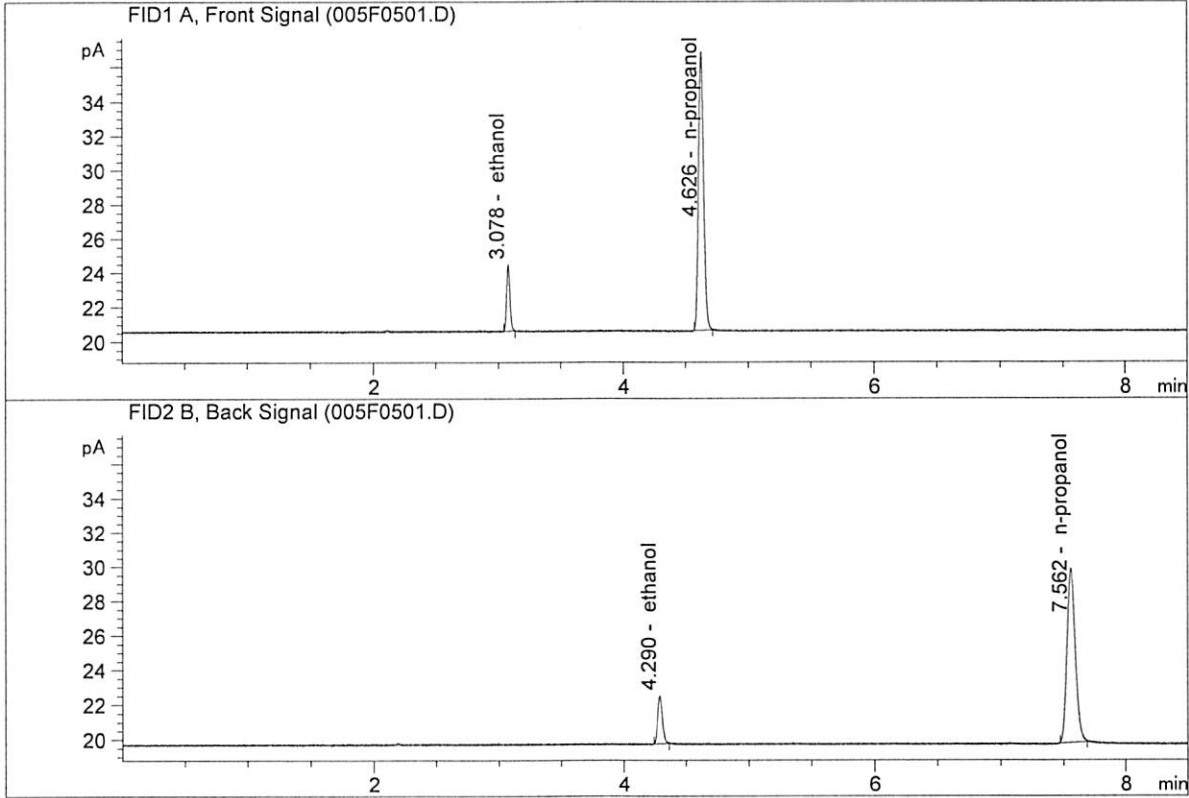
| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 7.12976 | 0.0800 | g/100cc |
| 2. | Ethanol | Column 2: | 7.37400 | 0.0802 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.17109 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 48.22483 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   0.08 FN04171701-B
Laboratory       :   Meridian
Injection Date   :   Jul 26, 2019
Method           :   ALCOHOL.M
Acq. Instrument  :   CN11180014-CN11041167
```
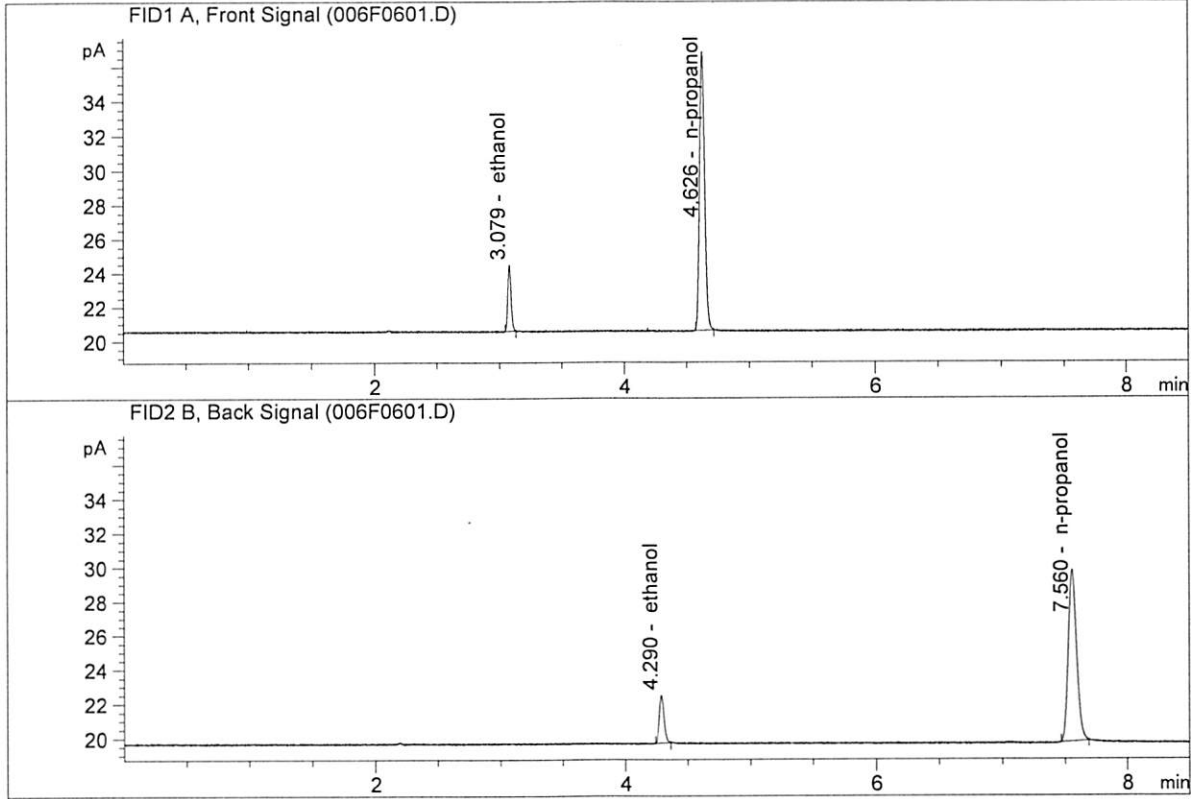


FID1 A, Front Signal (006F0601.D)

FID2 B, Back Signal (006F0601.D)

| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 7.16443 | 0.0802 | g/100cc |
| 2. | Ethanol | Column 2: | 7.42839 | 0.0806 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.27523 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 48.35865 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC2-1**                    **Analysis Date(s): 26 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.2042 | 0.2040 | 0.0002 | 0.2041 | 0.2040 | |
| (g/100cc) | 0.2043 | 0.2035 | 0.0008 | 0.2039 | | |

## Analysis Method

Refer to Blood Alcohol Method #1

## Instrument Information                    *Instrument method is stored centrally.*

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11378

## Reporting of Results                    **Uncertainty of Measurement (UM%): 5.00%**

| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.204 | 0.193 | 0.215 | 0.011 |

| | Reported Result | |
|---|---|---|
| | 0.204 | |

*Calibration and control data are stored centrally.*

J6

# ISP Forensic Services Blood Alcohol Report

Sample Name     :   QC2-1-A
Laboratory      :   Meridian
Injection Date  :   Jul 26, 2019
Method          :   ALCOHOL.M
Acq. Instrument:    CN11180014-CN11041167



FID1 A, Front Signal (025F2501.D)

FID2 B, Back Signal (025F2501.D)
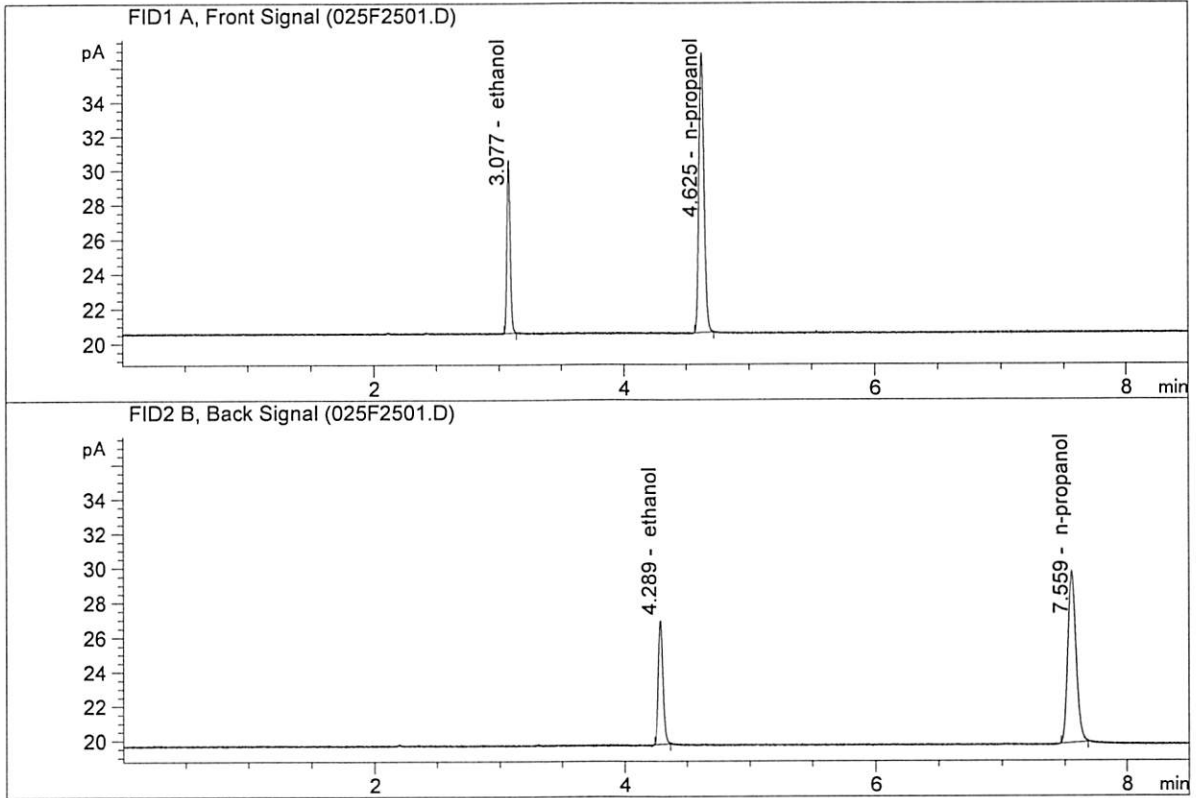
| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 18.25774 | 0.2042 | g/100cc |
| 2. | Ethanol | Column 2: | 19.12355 | 0.2040 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.08762 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 47.72242 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   QC2-1-B
Laboratory       :   Meridian
Injection Date   :   Jul 26, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167
```
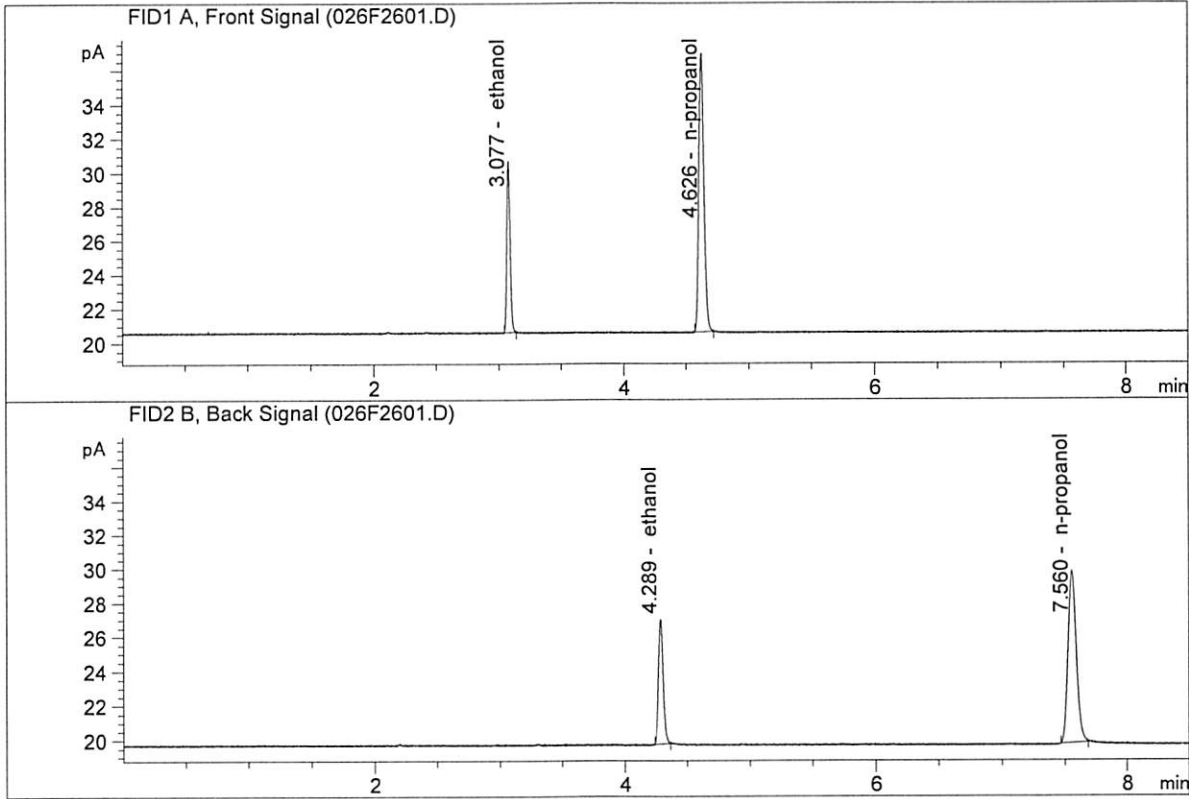


| #  | Compound   | Column    | Area     | Amount | Units   |
|----|------------|-----------|----------|--------|---------|
| 1. | Ethanol    | Column 1: | 18.42273 | 0.2043 | g/100cc |
| 2. | Ethanol    | Column 2: | 19.25272 | 0.2035 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.48304 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 48.15532 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC1-2**　　　　　　　　**Analysis Date(s): 26 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0810 | 0.0822 | 0.0012 | 0.0816 | 0.0803 | |
| (g/100cc) | 0.0784 | 0.0796 | 0.0012 | 0.0790 | | |

## Analysis Method

Refer to Blood Alcohol Method #1

## Instrument Information　　　　　　　*Instrument method is stored centrally.*

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11378

## Reporting of Results　　　**Uncertainty of Measurement (UM%): 5.00%**

| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.080 | 0.076 | 0.084 | 0.004 |

| | Reported Result | |
|---|---|---|
| | 0.080 | |

*Calibration and control data are stored centrally.*
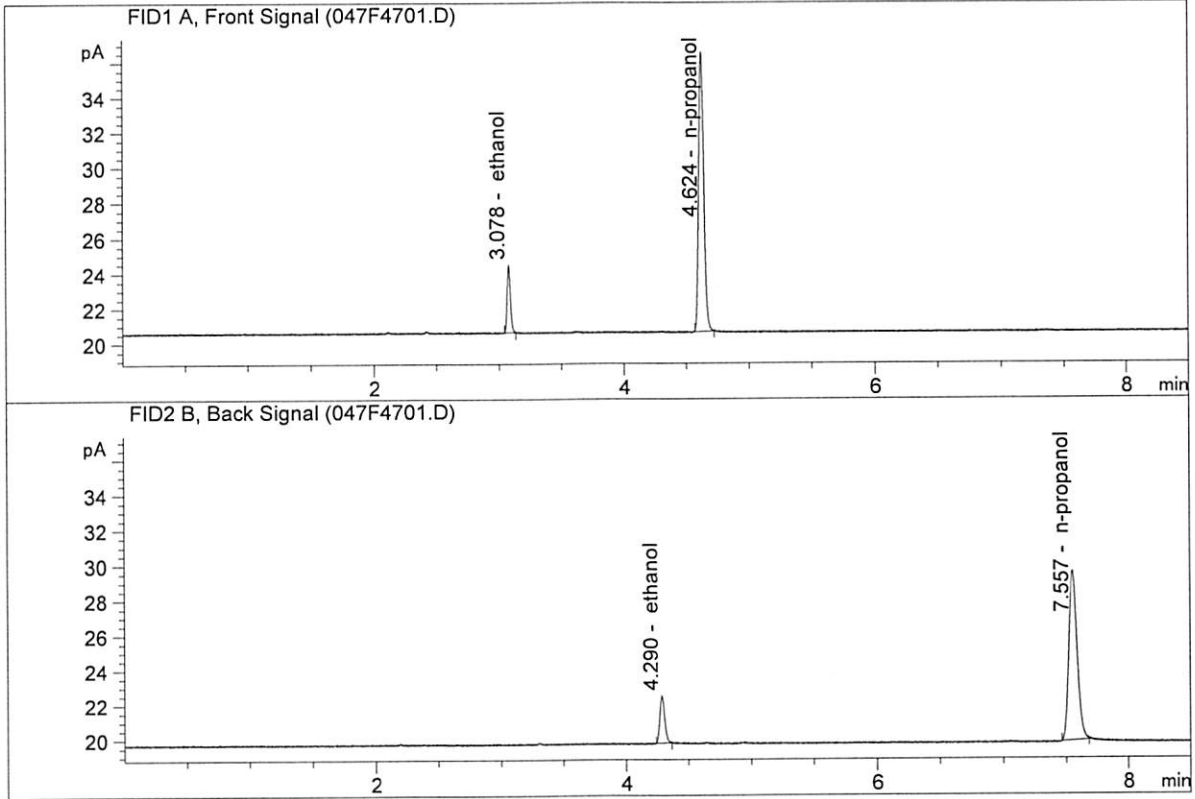
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Revision: 1
Issue Date: 01/04/2019
Issuing Authority: Quality Manager

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   QC1-2-A
Laboratory       :   Meridian
Injection Date   :   Jul 26, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167
```



| #  | Compound   | Column    | Area     | Amount | Units   |
|----|------------|-----------|----------|--------|---------|
| 1. | Ethanol    | Column 1: | 7.07525  | 0.0810 | g/100cc |
| 2. | Ethanol    | Column 2: | 7.32312  | 0.0822 | g/100cc |
| 3. | n-Propanol | Column 1: | 45.22763 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 46.68410 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   QC1-2-B
Laboratory       :   Meridian
Injection Date   :   Jul 26, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167
```
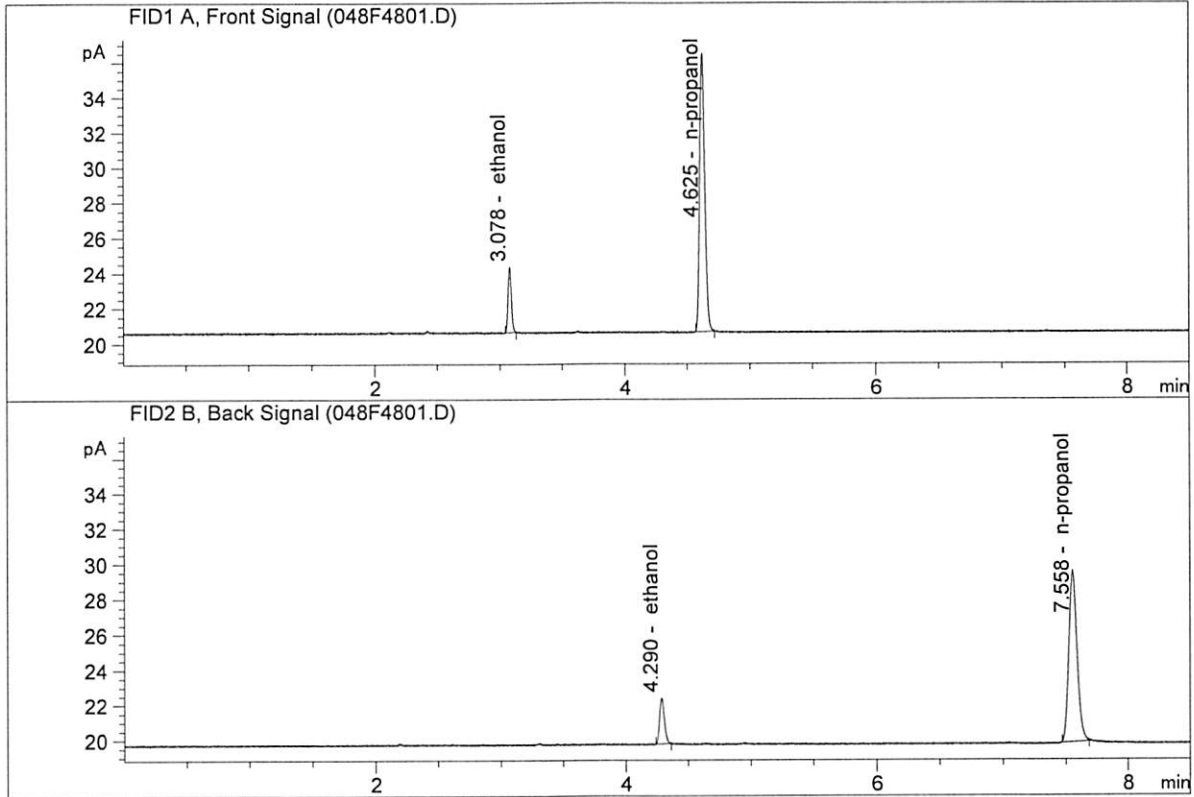


FID1 A, Front Signal (048F4801.D)

FID2 B, Back Signal (048F4801.D)

| #   | Compound   | Column    | Area     | Amount  | Units   |
|-----|------------|-----------|----------|---------|---------|
| 1.  | Ethanol    | Column 1: | 6.81810  | 0.0784  | g/100cc |
| 2.  | Ethanol    | Column 2: | 7.05934  | 0.0796  | g/100cc |
| 3.  | n-Propanol | Column 1: | 45.02399 | 1.0000  | g/100cc |
| 4.  | n-Propanol | Column 2: | 46.56091 | 1.0000  | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC2-2**

**Analysis Date(s): 26 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.2125 | 0.2124 | 0.0001 | 0.2124 | 0.2129 | |
| (g/100cc) | 0.2127 | 0.2140 | 0.0013 | 0.2133 | | |

## Analysis Method

Refer to Blood Alcohol Method #1

## Instrument Information

*Instrument method is stored centrally.*

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11378

## Reporting of Results

**Uncertainty of Measurement (UM%): 5.00%**

| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.212 | 0.201 | 0.223 | 0.011 |

| | Reported Result | |
|---|---|---|
| | 0.212 | |

*Calibration and control data are stored centrally.*

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   QC2-2-A
Laboratory       :   Meridian
Injection Date   :   Jul 26, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167
```
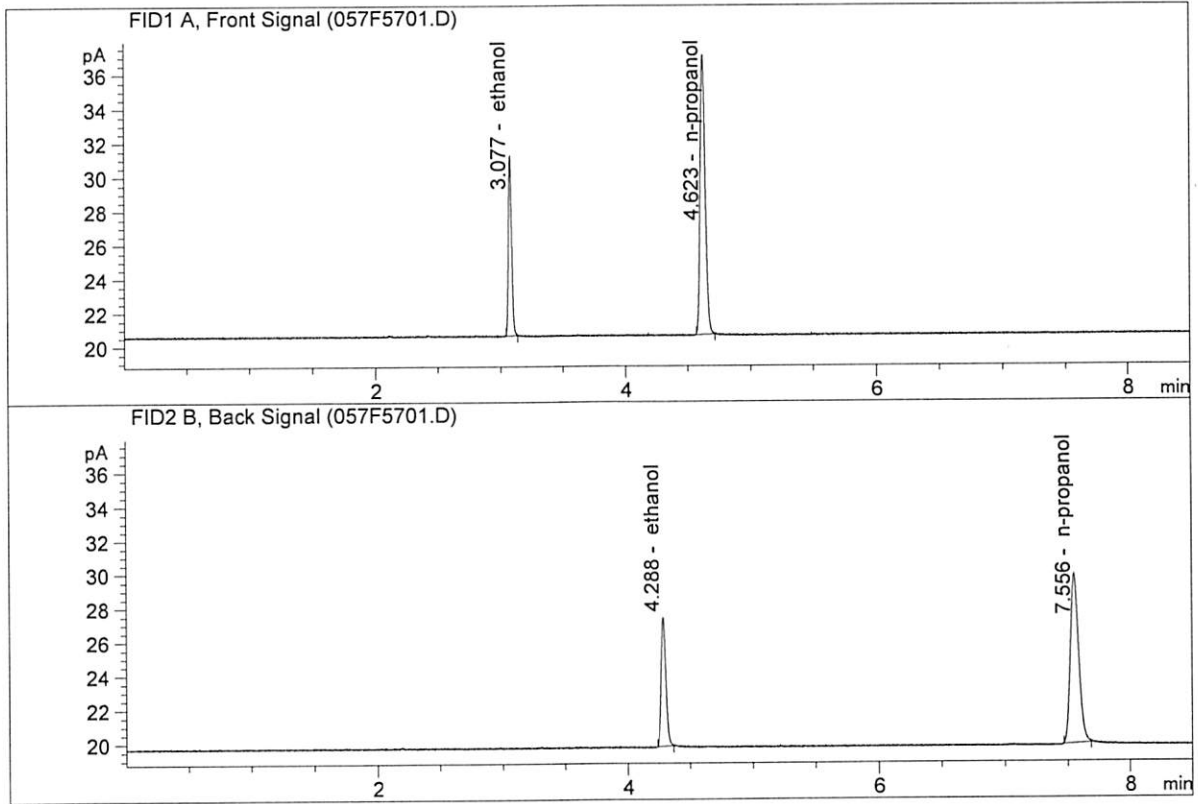


| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 19.21269 | 0.2125 | g/100cc |
| 2. | Ethanol | Column 2: | 20.12921 | 0.2124 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.59919 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 48.20350 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name     :    QC2-2-B
Laboratory      :    Meridian
Injection Date  :    Jul 26, 2019
Method          :    ALCOHOL.M
Acq. Instrument:     CN11180014-CN11041167
```
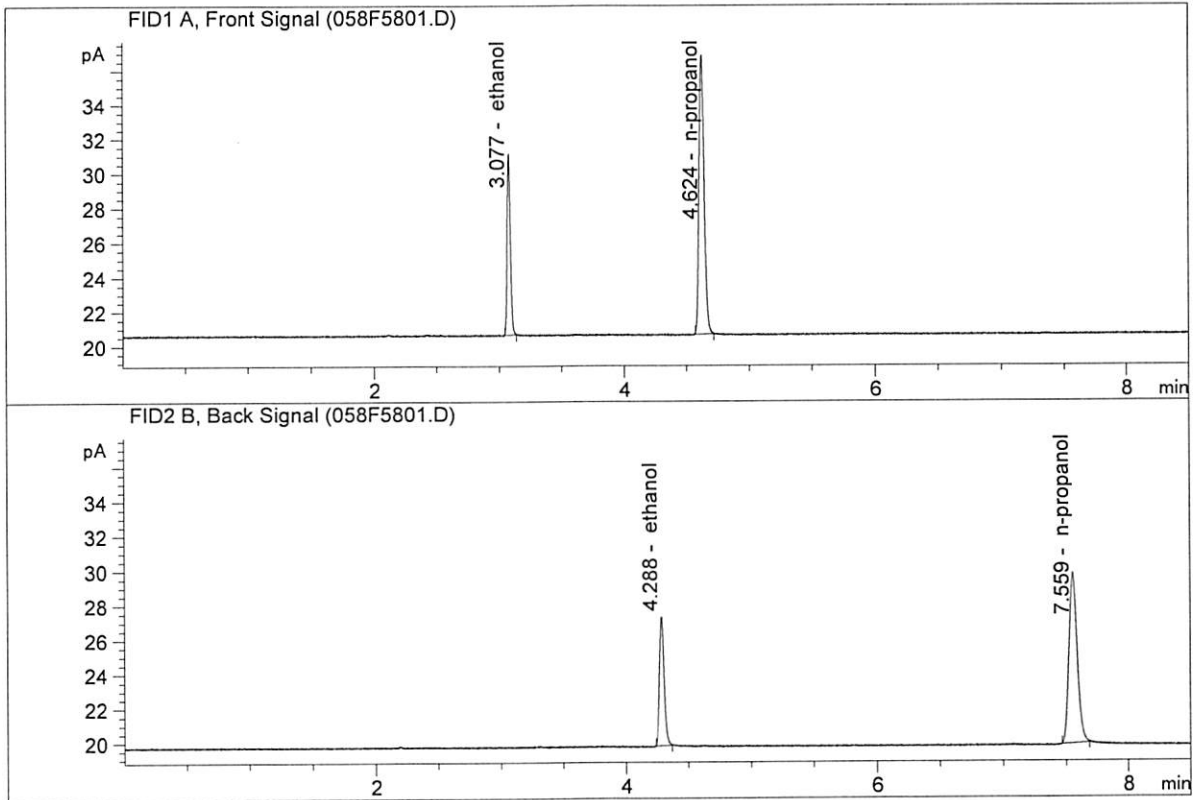


FID1 A, Front Signal (058F5801.D)



FID2 B, Back Signal (058F5801.D)

| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 18.99308 | 0.2127 | g/100cc |
| 2. | Ethanol | Column 2: | 19.98075 | 0.2140 | g/100cc |
| 3. | n-Propanol | Column 1: | 46.00881 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 47.49113 | 1.0000 | g/100cc |

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# ISP Forensic Services Blood Alcohol Report

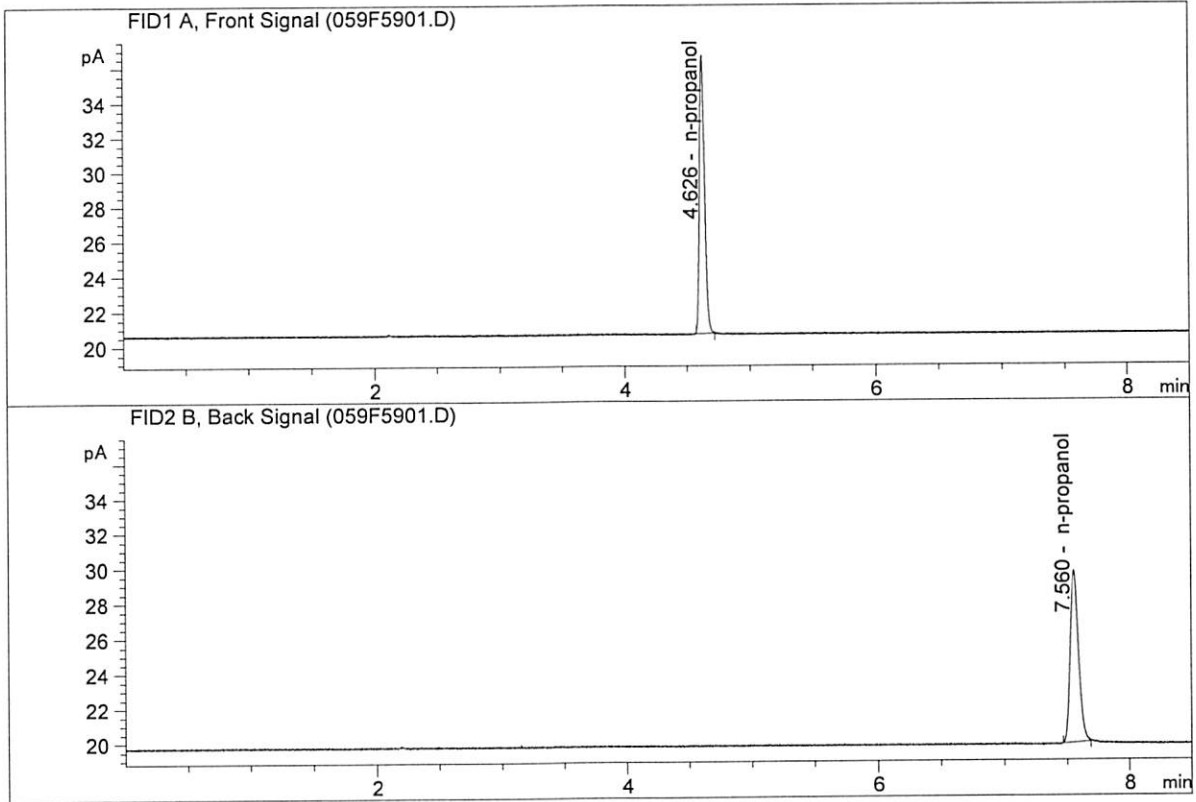Sample Name      :    INTERNAL STD BLK
Laboratory       :    Meridian
Injection Date   :    Jul 26, 2019
Method           :    ALCOHOL.M
Acq. Instrument:      CN11180014-CN11041167



| #  | Compound   | Column    | Area     | Amount | Units    |
|----|------------|-----------|----------|--------|----------|
| 1. | Ethanol    | Column 1: | 0.00000  | 0.0000 | g/100cc  |
| 2. | Ethanol    | Column 2: | 0.00000  | 0.0000 | g/100cc  |
| 3. | n-Propanol | Column 1: | 45.34575 | 1.0000 | g/100cc  |
| 4. | n-Propanol | Column 2: | 46.95059 | 1.0000 | g/100cc  |

Sample  Summary

| | |
|---|---|
| Sequence table: | C:\Chem32\1\Data\07-26-19_SAMPLES\07-26-19_SAMPLES 2019-07-26 11-30-50\07 26-19_SAMPLES.S |
| Data directory path: | C:\Chem32\1\Data\07-26-19_SAMPLES\07-26-19_SAMPLES 2019-07-26 11-30-50\ |
| Logbook: | C:\Chem32\1\Data\07-26-19_SAMPLES\07-26-19_SAMPLES 2019-07-26 11-30-50\07 26-19_SAMPLES.LOG |
| Sequence start: | 7/26/2019 11:45:48 AM |
| Sequence Operator: | SYSTEM |
| Operator: | SYSTEM |
| Method file name: | C:\Chem32\1\Data\07-26-19_SAMPLES\07-26-19_SAMPLES 2019-07-26 11-30-50 \ALCOHOL.M |

| Run # | Location | Inj # | Sample Name | Sample Amt [g/100cc] | Multip.* Dilution | File name | Cal | # Cmp |
|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | INTERNAL STD BLK | - | 1.0000 | 001F0101.D | | 2 |
| 2 | 2 | 1 | MIX VOL FN060415 | - | 1.0000 | 002F0201.D | | 10 |
| 3 | 3 | 1 | QC1-1-A | - | 1.0000 | 003F0301.D | | 4 |
| 4 | 4 | 1 | QC1-1-B | - | 1.0000 | 004F0401.D | | 4 |
| 5 | 5 | 1 | 0.08 FN04171701- | - | 1.0000 | 005F0501.D | | 4 |
| 6 | 6 | 1 | 0.08 FN04171701- | - | 1.0000 | 006F0601.D | | 4 |
| 7 | 7 | 1 | M2019-3274-1-A | - | 1.0000 | 007F0701.D | | 2 |
| 8 | 8 | 1 | M2019-3274-1-B | - | 1.0000 | 008F0801.D | | 2 |
| 9 | 9 | 1 | M2019-3274-2-A | - | 1.0000 | 009F0901.D | | 2 |
| 10 | 10 | 1 | M2019-3274-2-B | - | 1.0000 | 010F1001.D | | 2 |
| 11 | 11 | 1 | M2019-3275-1-A | - | 1.0000 | 011F1101.D | | 4 |
| 12 | 12 | 1 | M2019-3275-1-B | - | 1.0000 | 012F1201.D | | 4 |
| 13 | 13 | 1 | M2019-3276-1-A | - | 1.0000 | 013F1301.D | | 2 |
| 14 | 14 | 1 | M2019-3276-1-B | - | 1.0000 | 014F1401.D | | 2 |
| 15 | 15 | 1 | M2019-3277-1-A | - | 1.0000 | 015F1501.D | | 2 |
| 16 | 16 | 1 | M2019-3277-1-B | - | 1.0000 | 016F1601.D | | 2 |
| 17 | 17 | 1 | M2019-3277-2-A | - | 1.0000 | 017F1701.D | | 2 |
| 18 | 18 | 1 | M2019-3277-2-B | - | 1.0000 | 018F1801.D | | 2 |
| 19 | 19 | 1 | M2019-3278-1-A | - | 1.0000 | 019F1901.D | | 4 |
| 20 | 20 | 1 | M2019-3278-1-B | - | 1.0000 | 020F2001.D | | 4 |
| 21 | 21 | 1 | M2019-3279-1-A | - | 1.0000 | 021F2101.D | | 2 |
| 22 | 22 | 1 | M2019-3279-1-B | - | 1.0000 | 022F2201.D | | 2 |
| 23 | 23 | 1 | M2019-3280-1-A | - | 1.0000 | 023F2301.D | | 2 |
| 24 | 24 | 1 | M2019-3280-1-B | - | 1.0000 | 024F2401.D | | 2 |
| 25 | 25 | 1 | QC2-1-A | - | 1.0000 | 025F2501.D | | 4 |
| 26 | 26 | 1 | QC2-1-B | - | 1.0000 | 026F2601.D | | 4 |
| 27 | 27 | 1 | M2019-3286-1-A | - | 1.0000 | 027F2701.D | | 4 |
| 28 | 28 | 1 | M2019-3286-1-B | - | 1.0000 | 028F2801.D | | 4 |
| 29 | 29 | 1 | M2019-3298-1-A | - | 1.0000 | 029F2901.D | | 4 |
| 30 | 30 | 1 | M2019-3298-1-B | - | 1.0000 | 030F3001.D | | 4 |
| 31 | 31 | 1 | M2019-3299-1-A | - | 1.0000 | 031F3101.D | | 4 |
| 32 | 32 | 1 | M2019-3299-1-B | - | 1.0000 | 032F3201.D | | 4 |
| 33 | 33 | 1 | M2019-3300-1-A | - | 1.0000 | 033F3301.D | | 2 |
| 34 | 34 | 1 | M2019-3300-1-B | - | 1.0000 | 034F3401.D | | 2 |
| 35 | 35 | 1 | M2019-3301-1-A | - | 1.0000 | 035F3501.D | | 4 |
| 36 | 36 | 1 | M2019-3301-1-B | - | 1.0000 | 036F3601.D | | 4 |
| 37 | 37 | 1 | M2019-3318-1-A | - | 1.0000 | 037F3701.D | | 2 |
| 38 | 38 | 1 | M2019-3318-1-B | - | 1.0000 | 038F3801.D | | 2 |
| 39 | 39 | 1 | M2019-3325-1-A | - | 1.0000 | 039F3901.D | | 4 |
| 40 | 40 | 1 | M2019-3325-1-B | - | 1.0000 | 040F4001.D | | 4 |
| 41 | 41 | 1 | M2019-3357-1-A | - | 1.0000 | 041F4101.D | | 2 |
| 42 | 42 | 1 | M2019-3357-1-B | - | 1.0000 | 042F4201.D | | 2 |
| 43 | 43 | 1 | M2019-3358-1-A | - | 1.0000 | 043F4301.D | | 4 |

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| Run # | Location | Inj # | Sample Name | Sample Amt [g/100cc] | Multip.* Dilution | File name | Cal | # Cmp |
|---|---|---|---|---|---|---|---|---|
| 44 | 44 | 1 | M2019-3358-1-B | - | 1.0000 | 044F4401.D | | 4 |
| 45 | 45 | 1 | M2019-3359-1-A | - | 1.0000 | 045F4501.D | | 4 |
| 46 | 46 | 1 | M2019-3359-1-B | - | 1.0000 | 046F4601.D | | 4 |
| 47 | 47 | 1 | QC1-2-A | - | 1.0000 | 047F4701.D | | 4 |
| 48 | 48 | 1 | QC1-2-B | - | 1.0000 | 048F4801.D | | 4 |
| 49 | 49 | 1 | M2019-3360-1-A | - | 1.0000 | 049F4901.D | | 4 |
| 50 | 50 | 1 | M2019-3360-1-B | - | 1.0000 | 050F5001.D | | 4 |
| 51 | 51 | 1 | M2019-3361-1-A | - | 1.0000 | 051F5101.D | | 4 |
| 52 | 52 | 1 | M2019-3361-1-B | - | 1.0000 | 052F5201.D | | 4 |
| 53 | 53 | 1 | M2019-3362-1-A | - | 1.0000 | 053F5301.D | | 4 |
| 54 | 54 | 1 | M2019-3362-1-B | - | 1.0000 | 054F5401.D | | 4 |
| 55 | 55 | 1 | P2019-2195-1-A | - | 1.0000 | 055F5501.D | | 4 |
| 56 | 56 | 1 | P2019-2195-1-B | - | 1.0000 | 056F5601.D | | 4 |
| 57 | 57 | 1 | QC2-2-A | - | 1.0000 | 057F5701.D | | 4 |
| 58 | 58 | 1 | QC2-2-B | - | 1.0000 | 058F5801.D | | 4 |
| 59 | 59 | 1 | INTERNAL STD BLK | - | 1.0000 | 059F5901.D | | 2 |
| 60 | 60 | 1 | 1 | - | 1.0000 | 060F6001.D | | 4 |
| 61 | 61 | 1 | 2 | - | 1.0000 | 061F6101.D | | 4 |
| 62 | 62 | 1 | 3 | - | 1.0000 | 062F6201.D | | 4 |
| 63 | 63 | 1 | INTERNAL STD BLK | - | 1.0000 | 063F6301.D | | 2 |

Method file name:    C:\Chem32\1\Data\07-26-19_SAMPLES\07-26-19_SAMPLES 2019-07-26 11-30-50 \SHUTDOWN.M

| Run # | Location | Inj # | Sample Name | Sample Amt [g/100cc] | Multip.* Dilution | File name | Cal | # Cmp |
|---|---|---|---|---|---|---|---|---|
| 64 | 64 | 1 | EMPTY | - | 1.0000 | 064F6401.D | | 0 |

J6