## Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

***Analytical Method(s): 1.0***

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

**Volatiles Quality Assurance Controls**

**Run Date(s): 7/10/18-7/11/18**

Calibration Date: 07/10/2018

| Control level | Expiration | Lot # | Target Value | Acceptable Range | Overall Results |
|---|---|---|---|---|---|
| Level 1 | Jul-18 | 1407031 | 0.0780 | 0.0702-0.0858 | 0.0775 g/100cc |
| | | | | | 0.0804 g/100cc |
| | | | | | g/100cc |
| Level 2 | Jul-18 | 1407032 | 0.2020 | 0.1818-0.2222 | 0.1978 g/100cc |
| | | | | | 0.2046 g/100cc |
| | | | | | g/100cc |
| **Multi-Component mixture:** | | **Exp date: Sept 2020** | **Lot #** | FN06041503 | OK |
| **Curve Fit:** | | | **Column 1** | 0.99999 **Column2** | 0.99997 |

**Ethanol Calibration Reference Material**

| Calibrator level | Expiration | Cerilliant Lot # | Target Value | Acceptable Range | Column 1 | Column 2 | Precision | Mean |
|---|---|---|---|---|---|---|---|---|
| 0.050 | Jul-19 | FN06231406 | 0.050 | 0.045 - 0.055 | 0.0503 | 0.0516 | 0.0013 | 0.0509 |
| 0.080 | | | 0.080 | 0.072 - 0.088 | | | 0 | #DIV/0! |
| 0.100 | Aug-21 | FN08101601 | 0.100 | 0.090 - 0.110 | 0.0998 | 0.0993 | 0.0005 | 0.0995 |
| 0.200 | Apr-21 | FN03301601 | 0.200 | 0.180 - 0.220 | 0.1991 | 0.1982 | 0.0009 | 0.1986 |
| 0.300 | Feb-21 | FN02121601 | 0.300 | 0.270 - 0.330 | 0.3011 | 0.3004 | 0.0007 | 0.3007 |
| 0.400 | | | 0.400 | 0.360 - 0.440 | | | 0 | #DIV/0! |
| 0.500 | Sep-21 | FN08031602 | 0.500 | 0.450 - 0.550 | 0.4997 | 0.5004 | 0.0007 | 0.5 |

**Aqueous Controls**

| Control level | Expiration | Cerilliant Lot # | Target Value | Acceptable Range | Overall Results |
|---|---|---|---|---|---|
| 0.080 | Nov-20 | FN10281510 | 0.08000 | 0.076 - 0.084 | 0.080 g/100cc |

~Any information on this document can be changed for laboratory use, except for the precision and mean determination fomulas.

Issued: 4/22/2015

Volatiles QA/QC data spreadsheet Rev 5

Issuing Authority: Quality Manager

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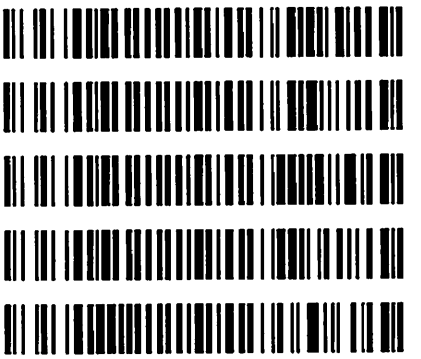
7/11/2018

**Worklist: 2557**

| LAB_CASE | ITEM | TASK_ID | DESCRIPTION |
|---|---|---|---|
| M2018-3203 | 1 | 119654 | Alcohol Analysis |
| M2018-3218 | 1 | 119692 | Alcohol Analysis |
| M2018-3239 | 1 | 119814 | Alcohol Analysis |
| M2018-3268 | 1 | 119858 | Alcohol Analysis |
| M2018-3287 | 1 | 119965 | Alcohol Analysis |
| M2018-3288 | 1 | 119969 | Alcohol Analysis |
| M2018-3294 | 1 | 119997 | Alcohol Analysis |
| M2018-3303 | 1 | 120041 | Alcohol Analysis |
| M2018-3304 | 1 | 120045 | Alcohol Analysis |
| M2018-3304 | 2 | 120049 | Alcohol Analysis |
| M2018-3307 | 2 | 120061 | Alcohol Analysis |
| M2018-3308 | 1 | 120217 | Alcohol Analysis |
| M2018-3309 | 1 | 120221 | Alcohol Analysis |
| M2018-3310 | 1 | 120223 | Alcohol Analysis |
| M2018-3329 | 1 | 120371 | Alcohol Analysis |
| M2018-3330 | 1 | 121010 | Alcohol Analysis |
| M2018-3331 | 1 | 120376 | Alcohol Analysis |
| M2018-3332 | 1 | 120383 | Alcohol Analysis |
| M2018-3333 | 1 | 120384 | Alcohol Analysis |
| M2018-3349 | 1 | 120428 | Alcohol Analysis |
| M2018-3351 | 1 | 120462 | Alcohol Analysis |
| M2018-3352 | 1 | 120464 | Alcohol Analysis |
| M2018-3353 | 1 | 120465 | Alcohol Analysis |

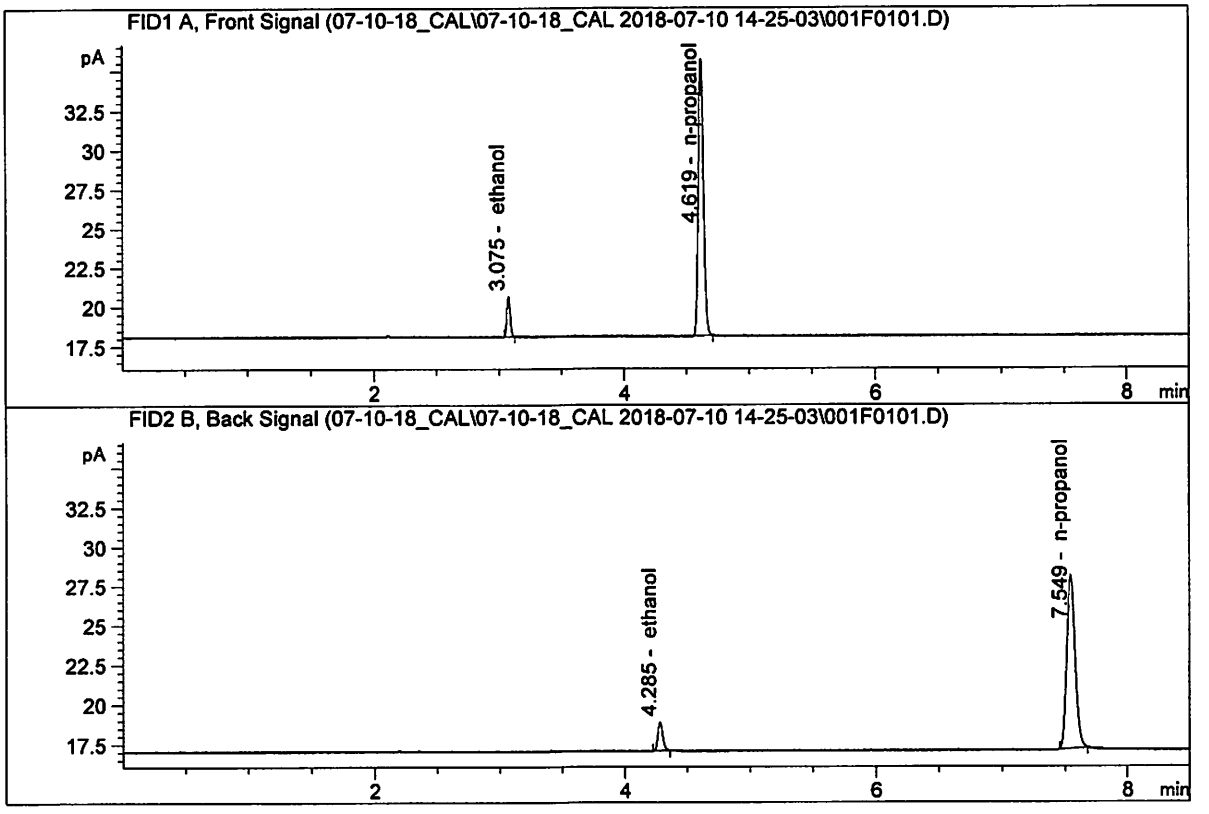
**Worklist: 2557**

| LAB_CASE | ITEM | TASK_ID | DESCRIPTION |
|---|---|---|---|
| M2018-3354 | 1 | 120466 | Alcohol Analysis |
| M2018-3358 | 1 | 120511 | Alcohol Analysis |
| M2018-3364 | 1 | 120520 | Alcohol Analysis |
| M2018-3367 | 1 | 120532 | Alcohol Analysis |
| P2018-1838 | 1 | 119828 | Alcohol Analysis |



# ISP Forensic Services Blood Alcohol Report

Sample Name : 0.050 FN06231406
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 4.67261 | 0.0503 | g/100cc |
| 2. | Ethanol | Column 2: | 4.86082 | 0.0516 | g/100cc |
| 3. | n-Propanol | Column 1: | 49.97264 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 52.24399 | 1.0000 | g/100cc |

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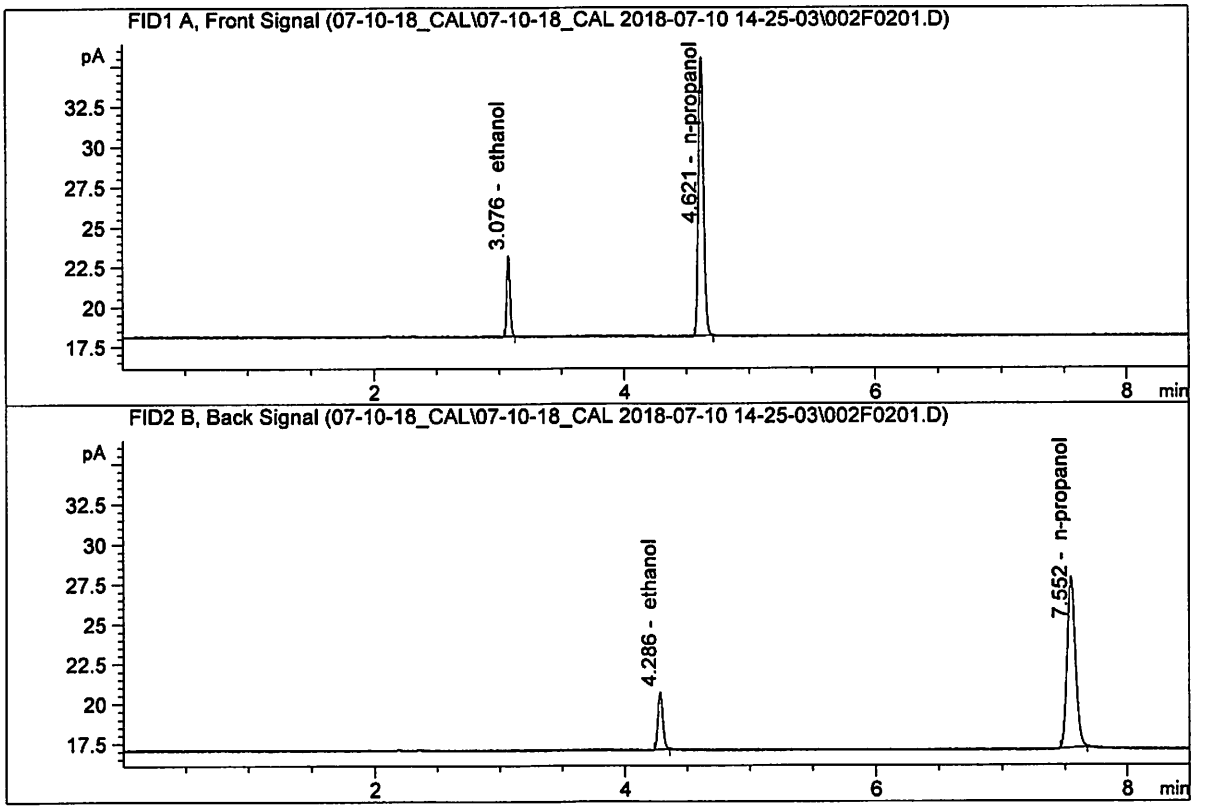
# ISP Forensic Services Blood Alcohol Report

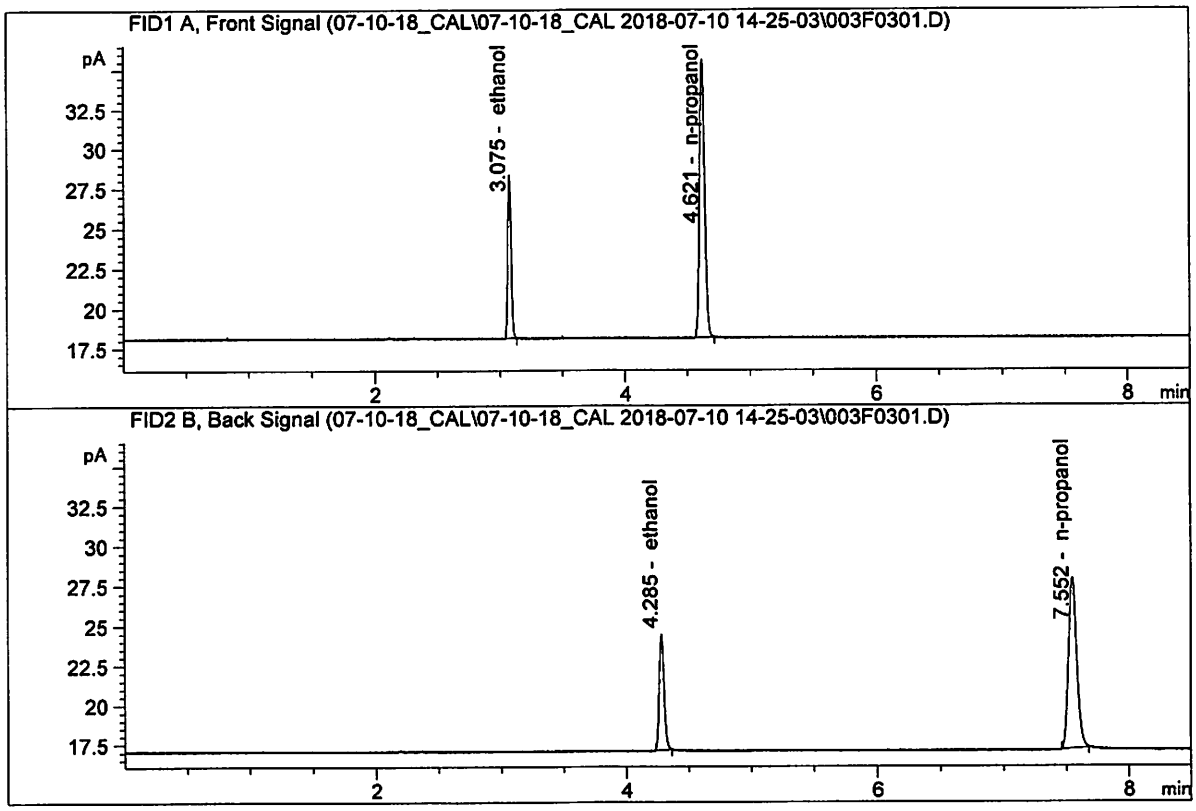
Sample Name : 0.100 FN08101601
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 9.25944 | 0.0998 | g/100cc |
| 2. | Ethanol | Column 2: | 9.55615 | 0.0993 | g/100cc |
| 3. | n-Propanol | Column 1: | 49.36300 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 51.21254 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name : 0.200 FN03301601
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 18.66077 | 0.1991 | g/100cc |
| 2. | Ethanol | Column 2: | 19.52715 | 0.1982 | g/100cc |
| 3. | n-Propanol | Column 1: | 49.57147 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 51.27028 | 1.0000 | g/100cc |

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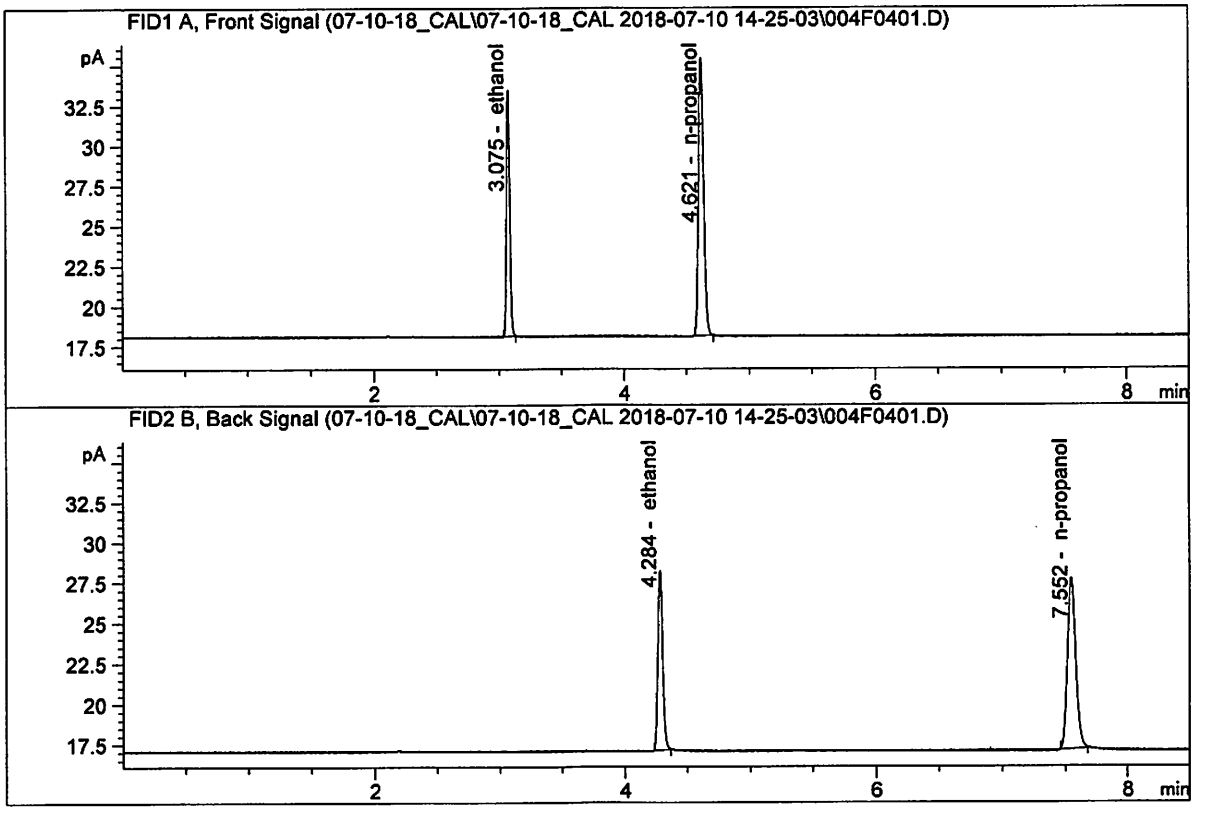
# ISP Forensic Services Blood Alcohol Report

Sample Name : 0.300 FN02121601
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 27.96343 | 0.3011 | g/100cc |
| 2. | Ethanol | Column 2: | 29.40003 | 0.3004 | g/100cc |
| 3. | n-Propanol | Column 1: | 49.03791 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 50.55639 | 1.0000 | g/100cc |

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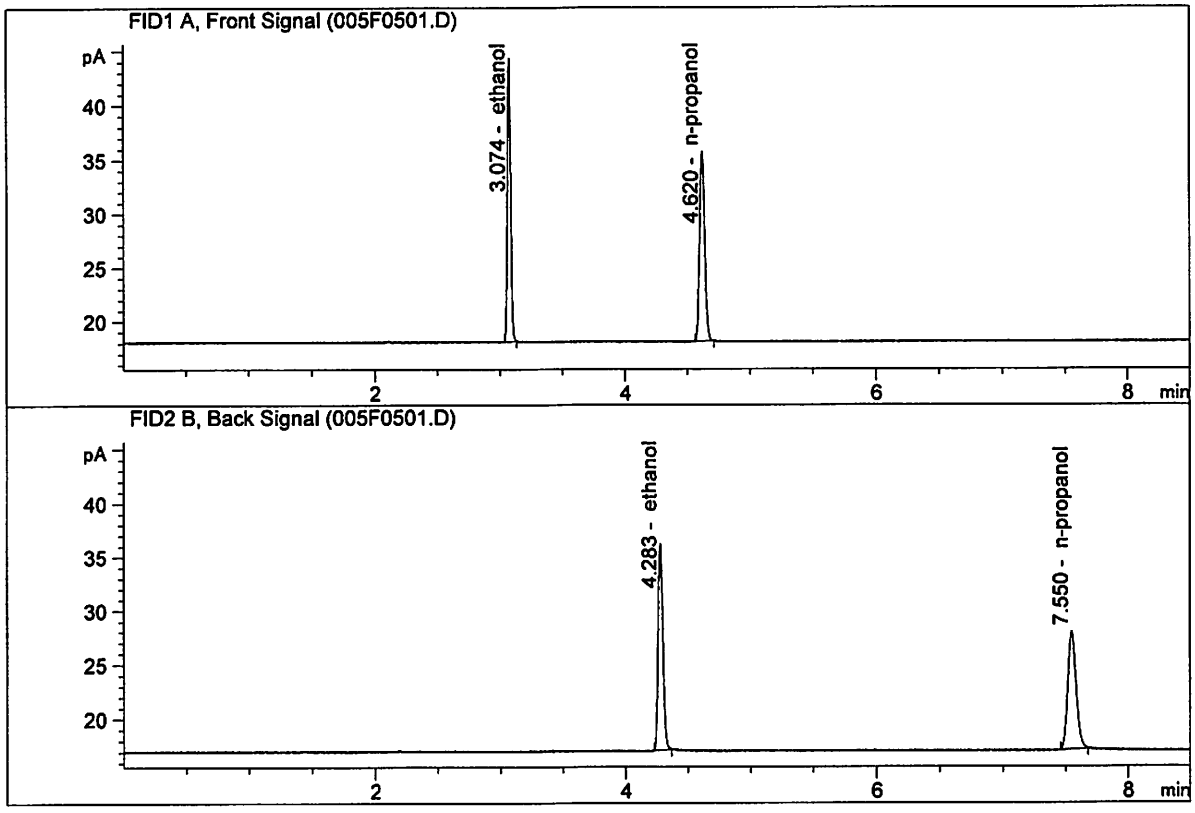
# ISP Forensic Services Blood Alcohol Report

Sample Name : 0.500 FN08031602
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 47.56594 | 0.4997 | g/100cc |
| 2. | Ethanol | Column 2: | 50.42316 | 0.5004 | g/100cc |
| 3. | n-Propanol | Column 1: | 50.19606 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 51.76154 | 1.0000 | g/100cc |

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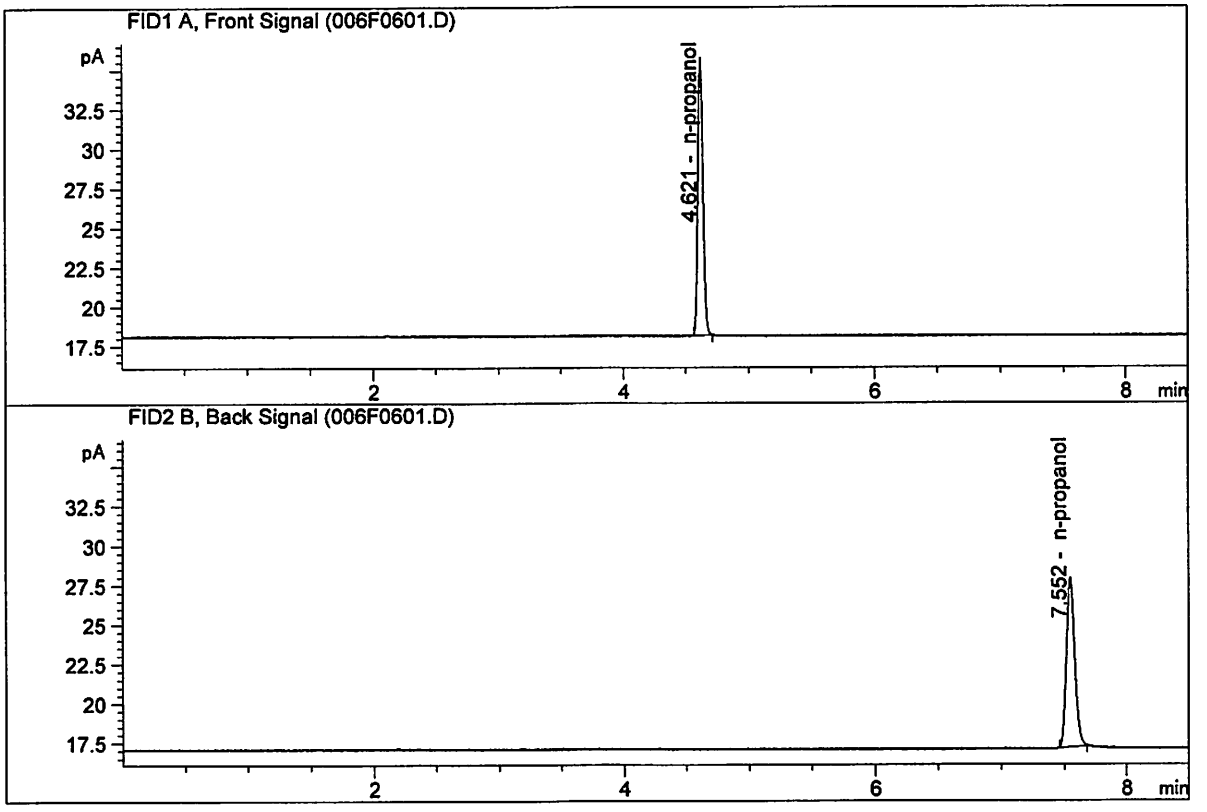
# ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STANDARD BLANK
Laboratory : Meridian
Injection Date : Jul 10, 2018
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: | 50.05969 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 51.67260 | 1.0000 | g/100cc |

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Sequence File C:\Chem32\1\Data\07-10-18_CAL\07-10-18_CAL 2018-07-10 14-25-03\07-10-18_CAL.S

## Sample Summary

Sequence table: C:\Chem32\1\Data\07-10-18_CAL\07-10-18_CAL 2018-07-10 14-25-03\07-10-18_CAL.S
Data directory path: C:\Chem32\1\Data\07-10-18_CAL\07-10-18_CAL 2018-07-10 14-25-03\
Logbook: C:\Chem32\1\Data\07-10-18_CAL\07-10-18_CAL 2018-07-10 14-25-03\07-10-18_CAL.LOG
Sequence start: 7/10/2018 2:39:41 PM
Sequence Operator: SYSTEM
Operator: SYSTEM

Method file name: C:\Chem32\1\Data\07-10-18_CAL\07-10-18_CAL 2018-07-10 14-25-03\ALCOHOL.M

| Run # | Location | Inj # | Sample Name | Sample Amt [g/100cc] | Multip.* Dilution | File name | Cal | # Cmp |
|---|---|---|---|---|---|---|---|---|
| 1 | 1 | 1 | 0.050 FN06231406 | - | 1.0000 | 001F0101.D | * | 4 |
| 2 | 2 | 1 | 0.100 FN08101601 | - | 1.0000 | 002F0201.D | * | 4 |
| 3 | 3 | 1 | 0.200 FN03301601 | - | 1.0000 | 003F0301.D | * | 4 |
| 4 | 4 | 1 | 0.300 FN02121601 | - | 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 |

Method C:\CHEM32\1\METHODS\ALCOHOL.M

## Calibration Table

### General Calibration Setting

Calib. Data Modified : Tuesday, July 10, 2018 3:30:12 PM
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 [g/100cc] | Name |
|---|---|---|
| 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

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| RT | Sig | Lvl | Amount [g/100cc] | Area | Rsp.Factor | Ref | ISTD | # | Compound |
|---|---|---|---|---|---|---|---|---|---|
| 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 | 4.67261 | 1.07006e-2 | No | No | 1 | ethanol |
| | | 2 | 1.00000e-1 | 9.25944 | 1.07998e-2 | | | | |
| | | 3 | 2.00000e-1 | 18.66077 | 1.07177e-2 | | | | |
| | | 4 | 3.00000e-1 | 27.96343 | 1.07283e-2 | | | | |
| | | 5 | 5.00000e-1 | 47.56594 | 1.05117e-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 | 4.86082 | 1.02863e-2 | No | No | 2 | ethanol |
| | | 2 | 1.00000e-1 | 9.55615 | 1.04645e-2 | | | | |
| | | 3 | 2.00000e-1 | 19.52715 | 1.02422e-2 | | | | |
| | | 4 | 3.00000e-1 | 29.40003 | 1.02041e-2 | | | | |
| | | 5 | 5.00000e-1 | 50.42316 | 9.91608e-3 | | | | |
| 4.308 | 1 | 1 | 1.00000 | 6.49940 | 1.53860e-1 | No | No | 1 | acetone |
| 4.620 | 1 | 1 | 1.00000 | 49.97264 | 2.00110e-2 | No | Yes | 1 | n-propanol |
| | | 2 | 1.00000 | 49.36300 | 2.02581e-2 | | | | |
| | | 3 | 1.00000 | 49.57147 | 2.01729e-2 | | | | |
| | | 4 | 1.00000 | 49.03791 | 2.03924e-2 | | | | |
| | | 5 | 1.00000 | 50.19606 | 1.99219e-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 | 52.24399 | 1.91410e-2 | No | Yes | 2 | n-propanol |
| | | 2 | 1.00000 | 51.21254 | 1.95265e-2 | | | | |
| | | 3 | 1.00000 | 51.27028 | 1.95045e-2 | | | | |
| | | 4 | 1.00000 | 50.55639 | 1.97799e-2 | | | | |
| | | 5 | 1.00000 | 51.76154 | 1.93194e-2 | | | | |

Peak Sum Table

***No Entries in table***

51 Warnings or Errors (10 first messages follow) :

Warning : Curve requires more calibration points., (methanol)
Warning : Curve requires more calibration points. at 2.586 min, signal 1
Warning : Curve requires more calibration points. at 2.809 min, signal 1
Warning : Curve requires more calibration points. at 2.977 min, signal 2
Warning : Curve requires more calibration points. at 3.388 min, signal 2
Warning : Curve requires more calibration points. at 3.628 min, signal 1
Warning : Curve requires more calibration points. at 4.308 min, signal 1
Warning : Curve requires more calibration points. at 4.62 min, signal 1
Warning : Curve requires more calibration points. at 4.661 min, signal 2
Warning : Curve requires more calibration points. at 4.969 min, signal 2

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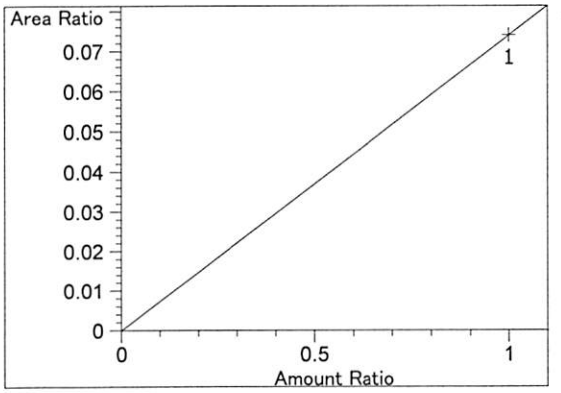
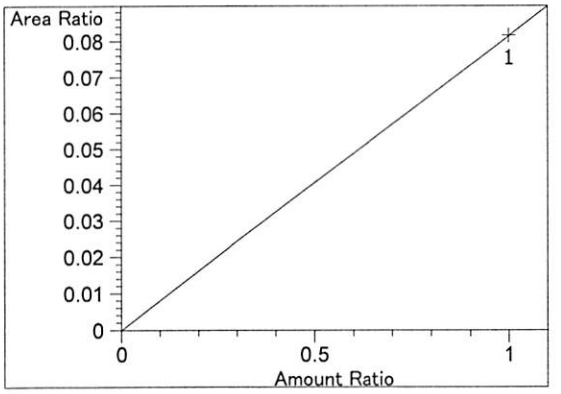
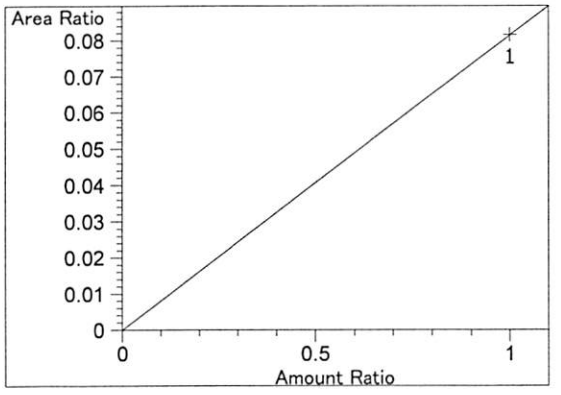
## Calibration Curves



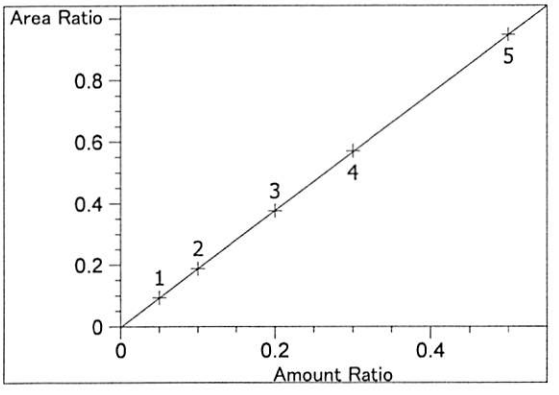

methanol at exp. RT: 2.586
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 7.39744e-2
b: 0.00000
x: Amount Ratio
y: Area Ratio




Acetaldehyde at exp. RT: 2.809
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 8.15596e-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: 8.15596e-2
b: 0.00000
x: Amount Ratio
y: Area Ratio




ethanol at exp. RT: 3.075
FID1 A, Front Signal
Correlation: 0.99999
Residual Std. Dev.: 0.00163
Formula: y = mx + b
m: 1.90047
b: -2.03530e-3
x: Amount Ratio
y: Area Ratio

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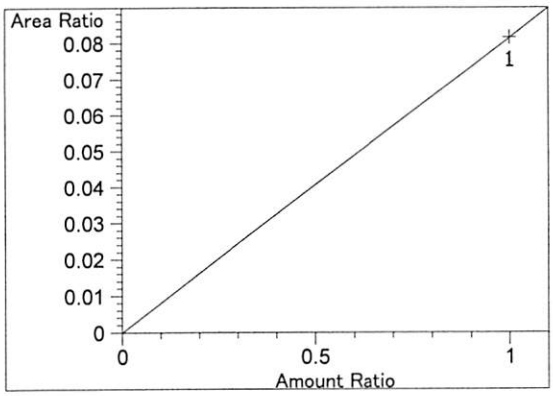
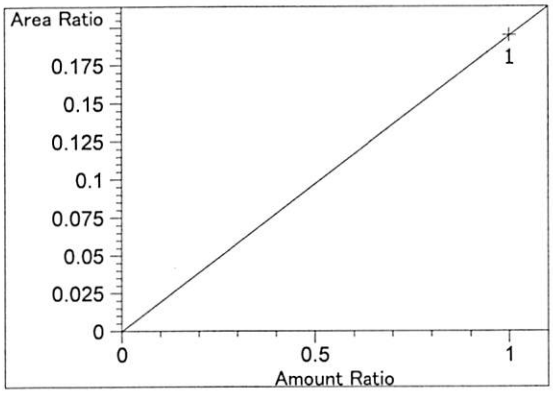
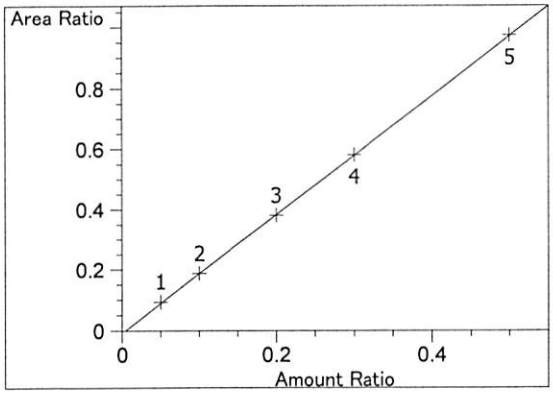


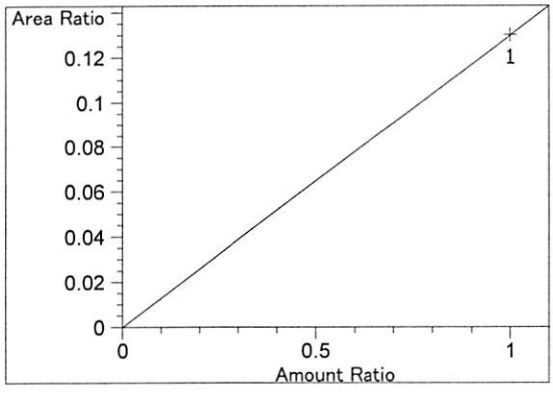

methanol at exp. RT: 3.388
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 8.15524e-2
b: 0.00000
x: Amount Ratio
y: Area Ratio



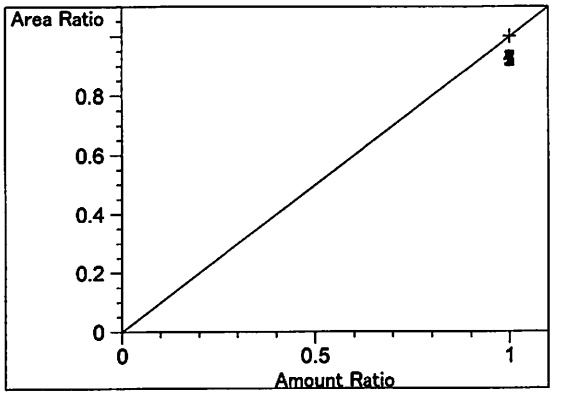

isopropyl alcohol at exp. RT: 3.628
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 1.94718e-1
b: 0.00000
x: Amount Ratio
y: Area Ratio



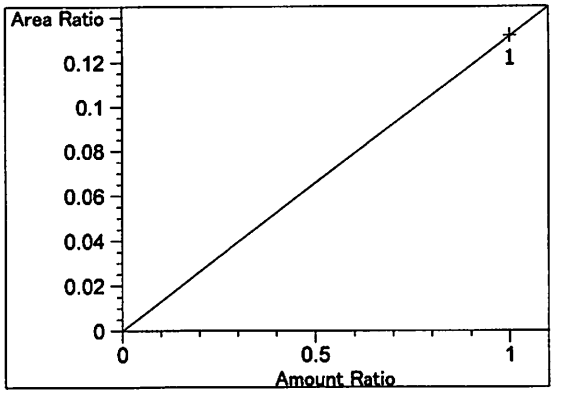

ethanol at exp. RT: 4.285
FID2 B, Back Signal
Correlation: 0.99997
Residual Std. Dev.: 0.00293
Formula: y = mx + b
m: 1.96324
b: -8.30957e-3
x: Amount Ratio
y: Area Ratio



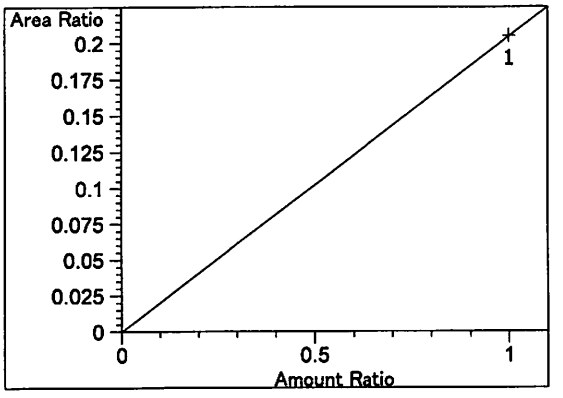

acetone at exp. RT: 4.308
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 1.30059e-1
b: 0.00000
x: Amount Ratio
y: Area Ratio



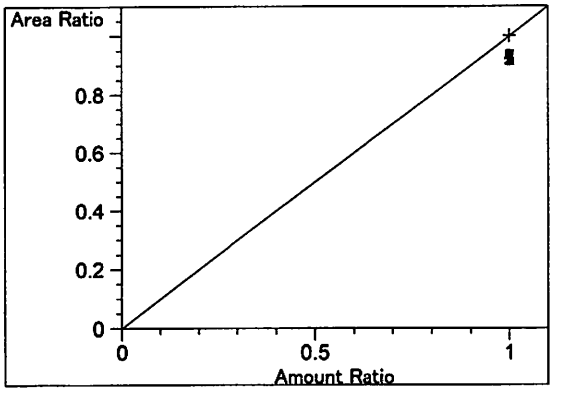

n-propanol at exp. RT: 4.620
FID1 A, Front Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 1.00000
b: 0.00000
x: Amount Ratio
y: Area Ratio




acetone at exp. RT: 4.661
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 1.31939e-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: 2.04931e-1
b: 0.00000
x: Amount Ratio
y: Area Ratio

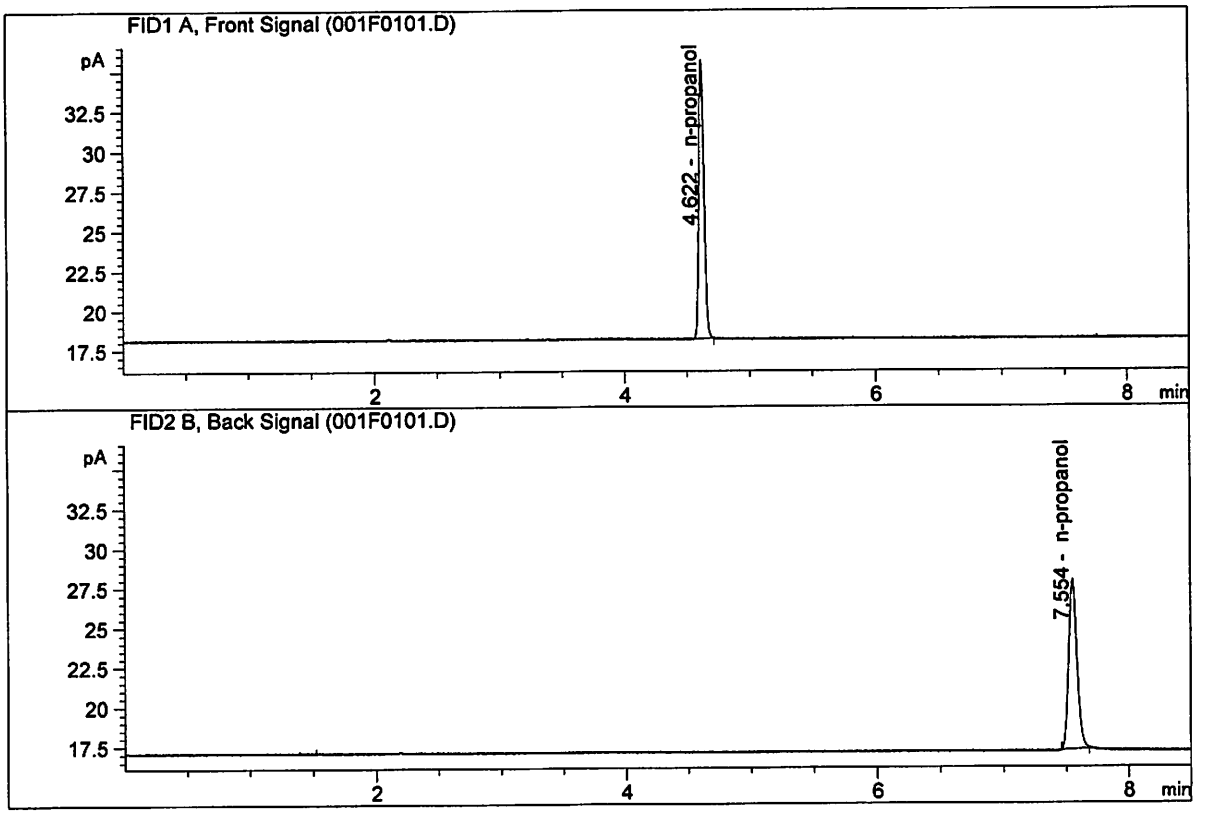



n-propanol at exp. RT: 7.550
FID2 B, Back Signal
Correlation: 1.00000
Residual Std. Dev.: 0.00000
Formula: y = mx + b
m: 1.00000
b: 0.00000
x: Amount Ratio
y: Area Ratio

==========

# ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK 1
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

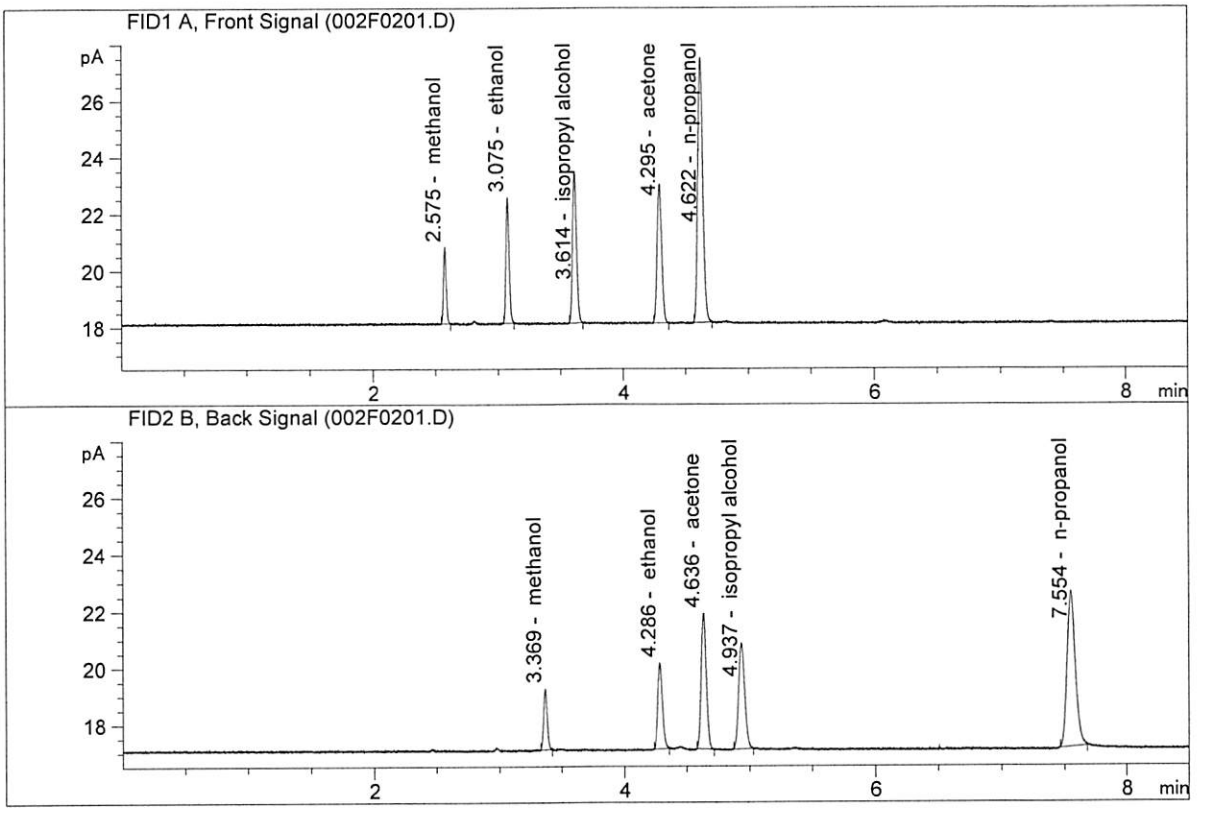



| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 0.00000 | 0.0000 | g/100cc |
| 2. | Ethanol | Column 2: | 0.00000 | 0.0000 | g/100cc |
| 3. | n-Propanol | Column 1: | 49.62585 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 51.32116 | 1.0000 | g/100cc |

JC

# ISP Forensic Services Blood Alcohol Report

Sample Name : MIX VOL FN06041503
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.87964 | 0.1581 | g/100cc |
| 2. | Ethanol | Column 2: | 8.06467 | 0.1588 | g/100cc |
| 3. | n-Propanol | Column 1: | 26.40301 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 26.56903 | 1.0000 | g/100cc |

JG

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC1-1** **Analysis Date(s): 10 Jul 2018**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0770 | 0.0774 | 0.0004 | 0.0772 | 0.0775 | |
| (g/100cc) | 0.0777 | 0.0781 | 0.0004 | 0.0779 | | |

**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** | |

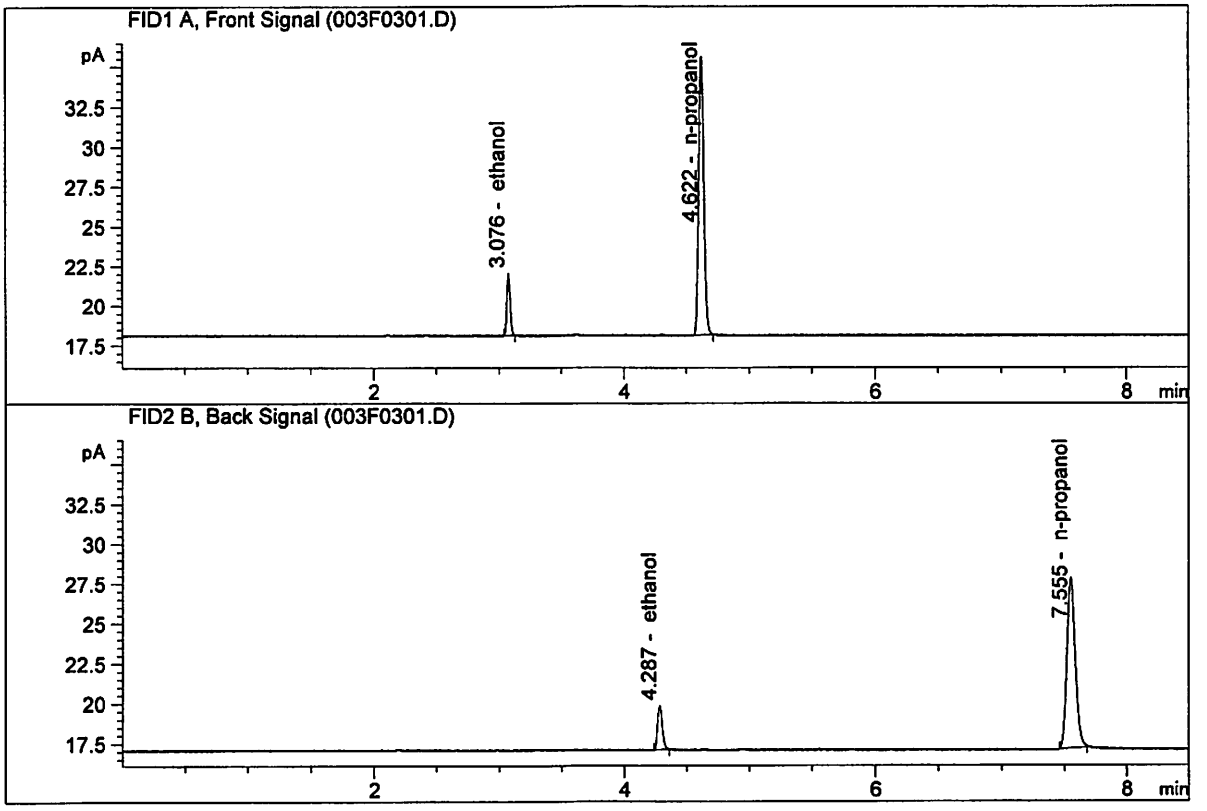
***Calibration and control data are stored centrally.***



JC

# ISP Forensic Services Blood Alcohol Report

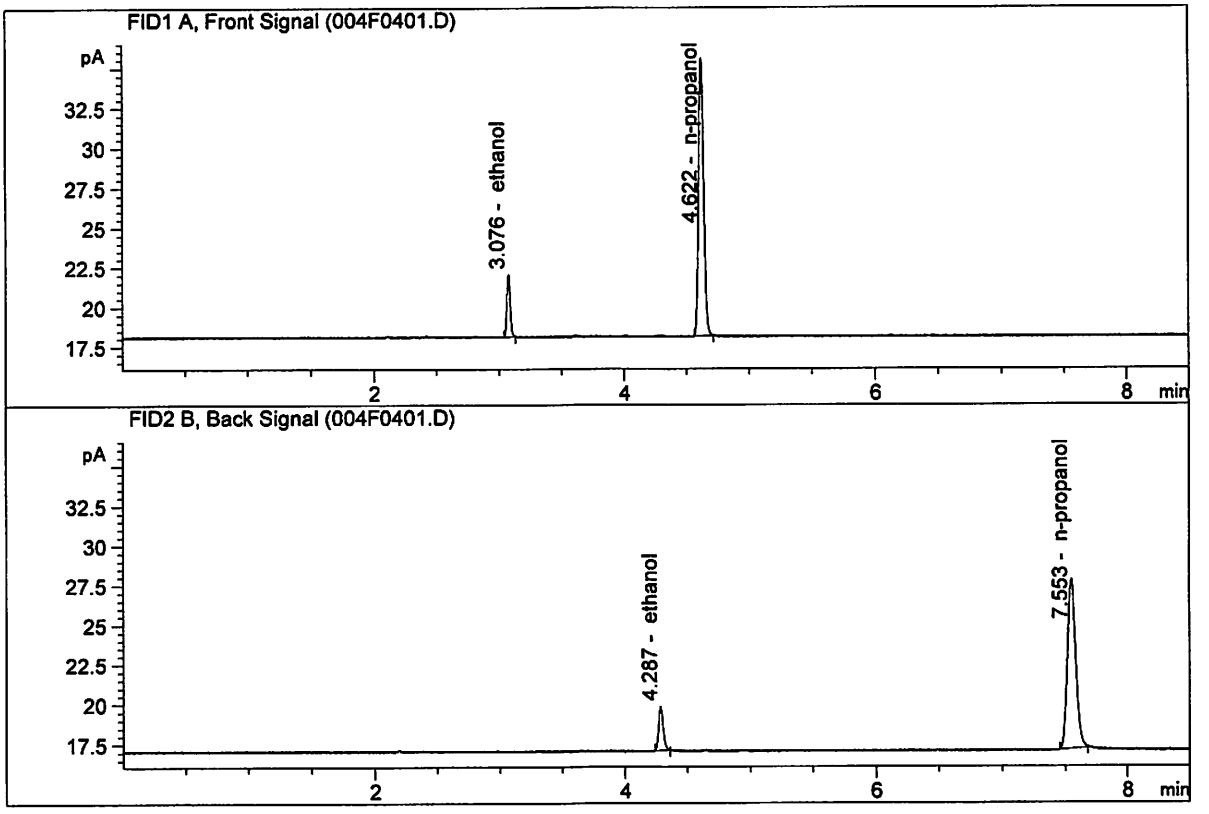
Sample Name : QC1-1-A
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.16884 | 0.0770 | g/100cc |
| 2. | Ethanol | Column 2: | 7.33748 | 0.0774 | g/100cc |
| 3. | n-Propanol | Column 1: | 49.67117 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 51.09254 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-1-B
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.21554 | 0.0777 | g/100cc |
| 2. | Ethanol | Column 2: | 7.37814 | 0.0781 | g/100cc |
| 3. | n-Propanol | Column 1: | 49.52266 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 50.88764 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: 0.08 FN10281510** **Analysis Date(s): 10 Jul 2018**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0807 | 0.0809 | 0.0002 | 0.0808 | 0.0809 | |
| (g/100cc) | 0.0803 | 0.0817 | 0.0014 | 0.0810 | | |

**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%**

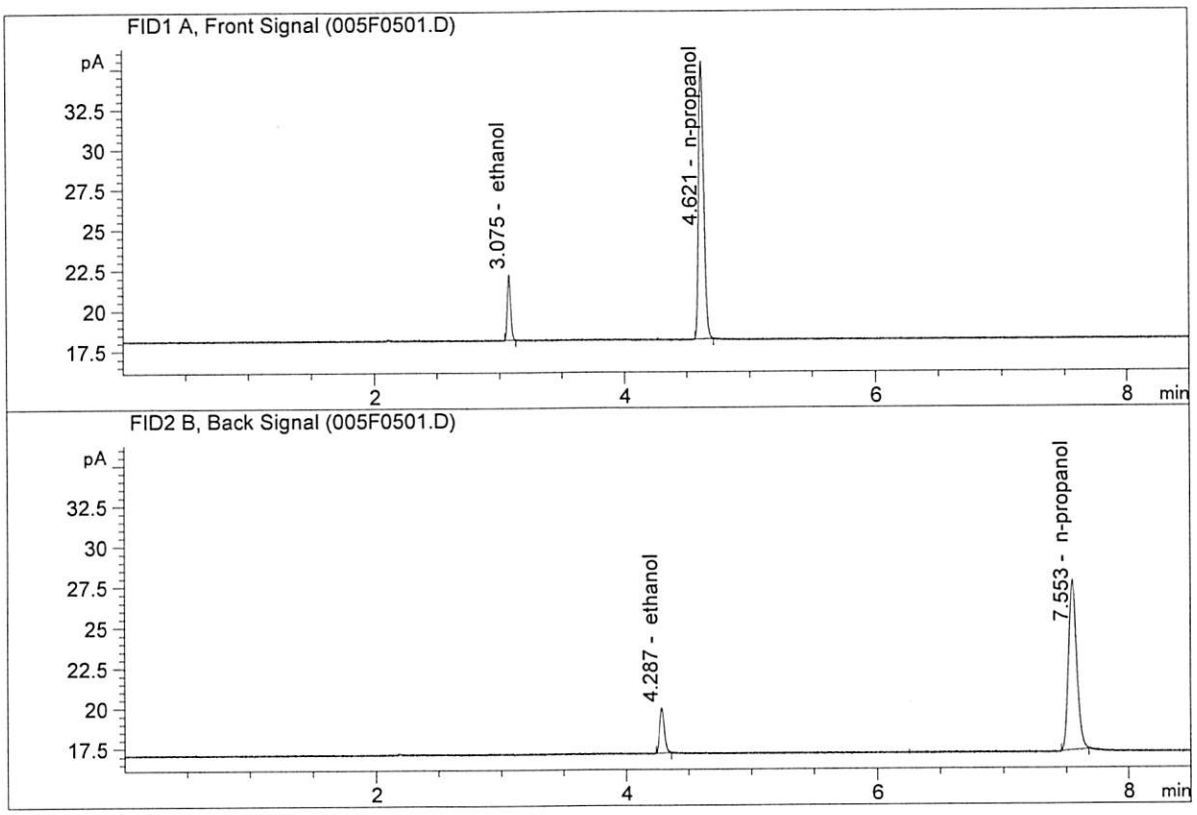
| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| **0.080** | **0.076** | **0.084** | **0.004** |

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

***Calibration and control data are stored centrally.***

# ISP Forensic Services Blood Alcohol Report

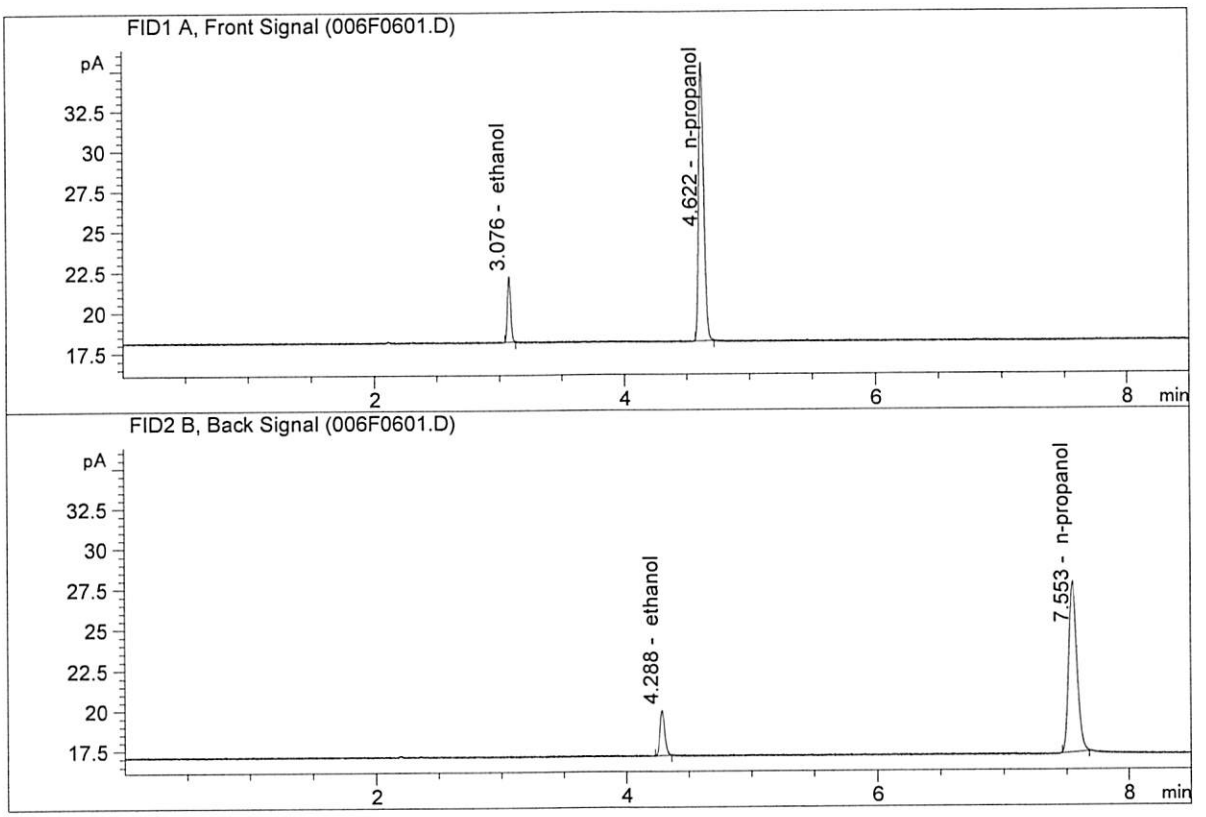
Sample Name : 0.08 FN10281510-A
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.39015 | 0.0807 | g/100cc |
| 2. | Ethanol | Column 2: | 7.55116 | 0.0809 | g/100cc |
| 3. | n-Propanol | Column 1: | 48.85632 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 50.14248 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN10281510-B
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.39206 | 0.0803 | g/100cc |
| 2. | Ethanol | Column 2: | 7.65743 | 0.0817 | g/100cc |
| 3. | n-Propanol | Column 1: | 49.09184 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 50.34402 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC2-1** **Analysis Date(s): 10 Jul 2018**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.1973 | 0.1972 | 0.0001 | 0.1972 | 0.1978 | |
| (g/100cc) | 0.1988 | 0.1979 | 0.0009 | 0.1983 | | |

**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 |
|---|---|---|---|
| **0.197** | **0.187** | **0.207** | **0.010** |

**Reported Result**

**0.197**

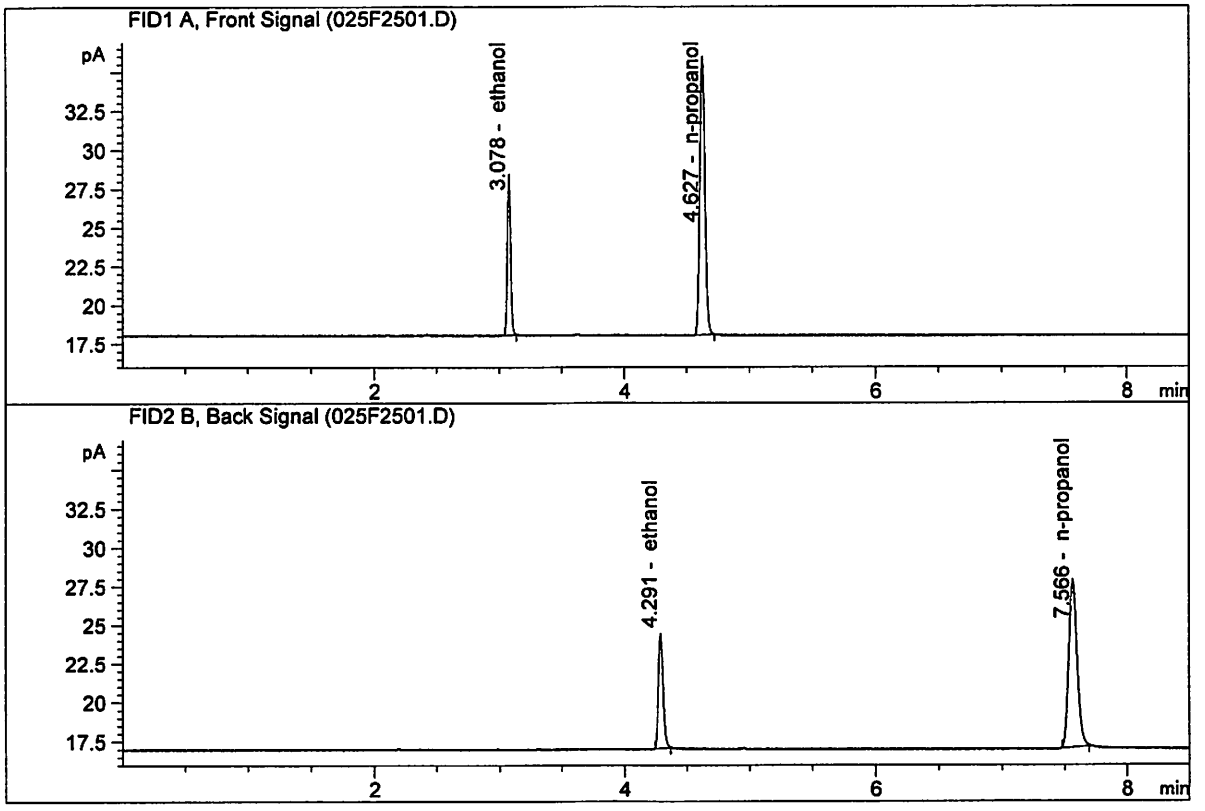
***Calibration and control data are stored centrally.***



JG

# ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-A
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

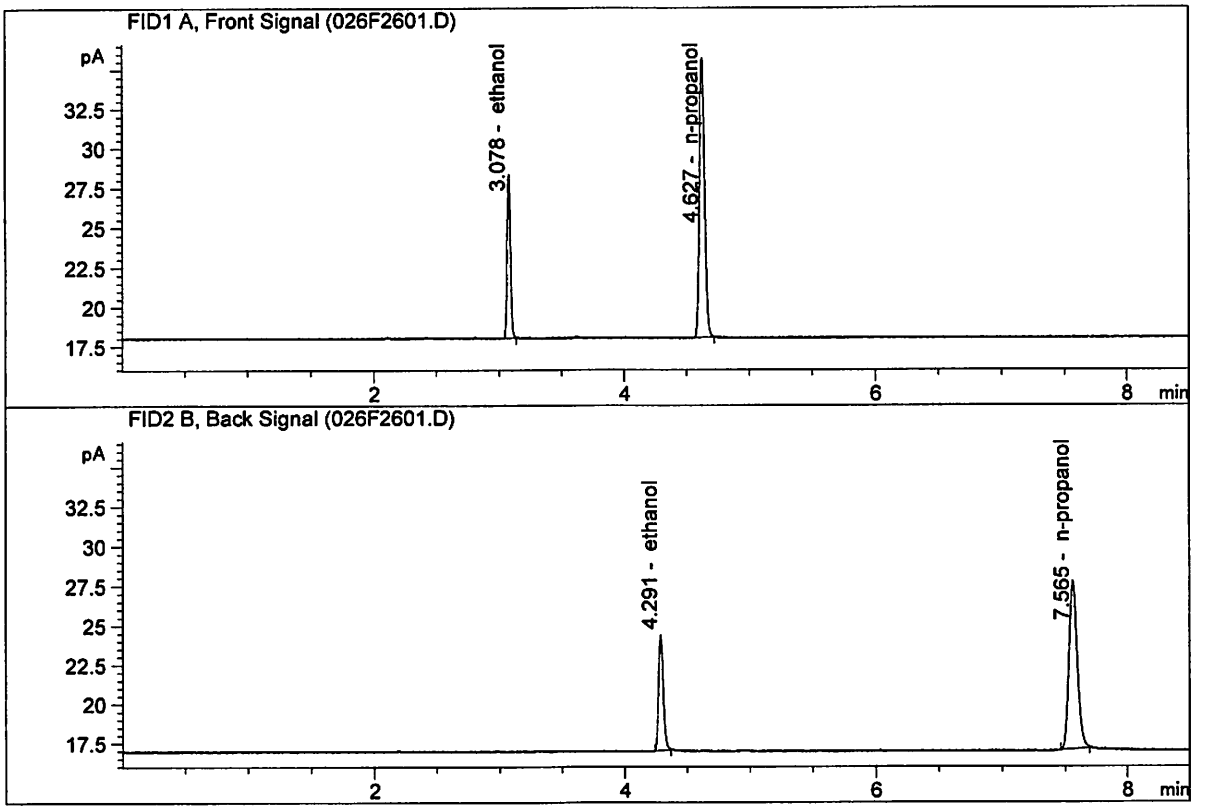



| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 19.00203 | 0.1973 | g/100cc |
| 2. | Ethanol | Column 2: | 19.77265 | 0.1972 | g/100cc |
| 3. | n-Propanol | Column 1: | 50.96251 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 52.18586 | 1.0000 | g/100cc |

JG

# ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-B
Laboratory : Meridian
Injection Date : Jul 10, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 18.88765 | 0.1988 | g/100cc |
| 2. | Ethanol | Column 2: | 19.61930 | 0.1979 | g/100cc |
| 3. | n-Propanol | Column 1: | 50.27271 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 51.59497 | 1.0000 | g/100cc |

JG

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC1-2** **Analysis Date(s): 11 Jul 2018**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0801 | 0.0806 | 0.0005 | 0.0803 | 0.0804 | |
| (g/100cc) | 0.0803 | 0.0809 | 0.0006 | 0.0806 | | |

**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** | |

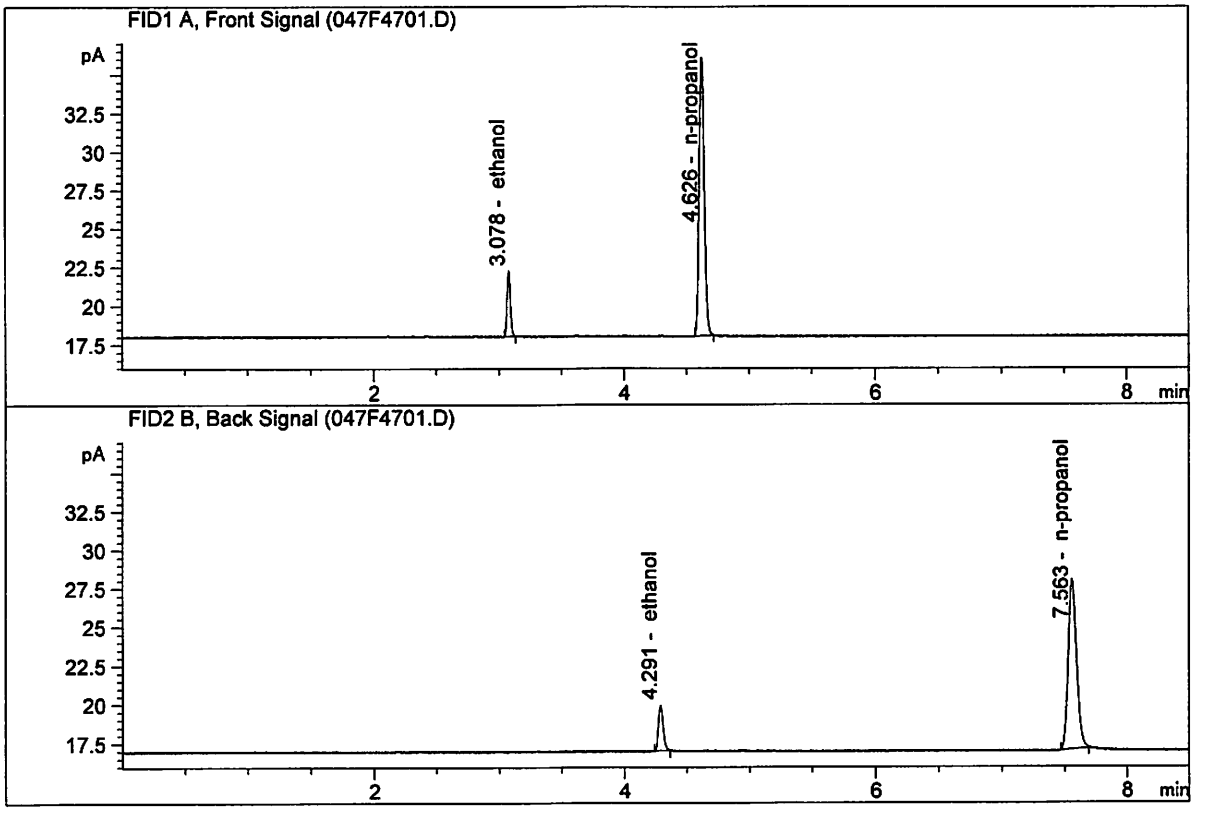
***Calibration and control data are stored centrally.***



JL

# ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-A
Laboratory : Meridian
Injection Date : Jul 11, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

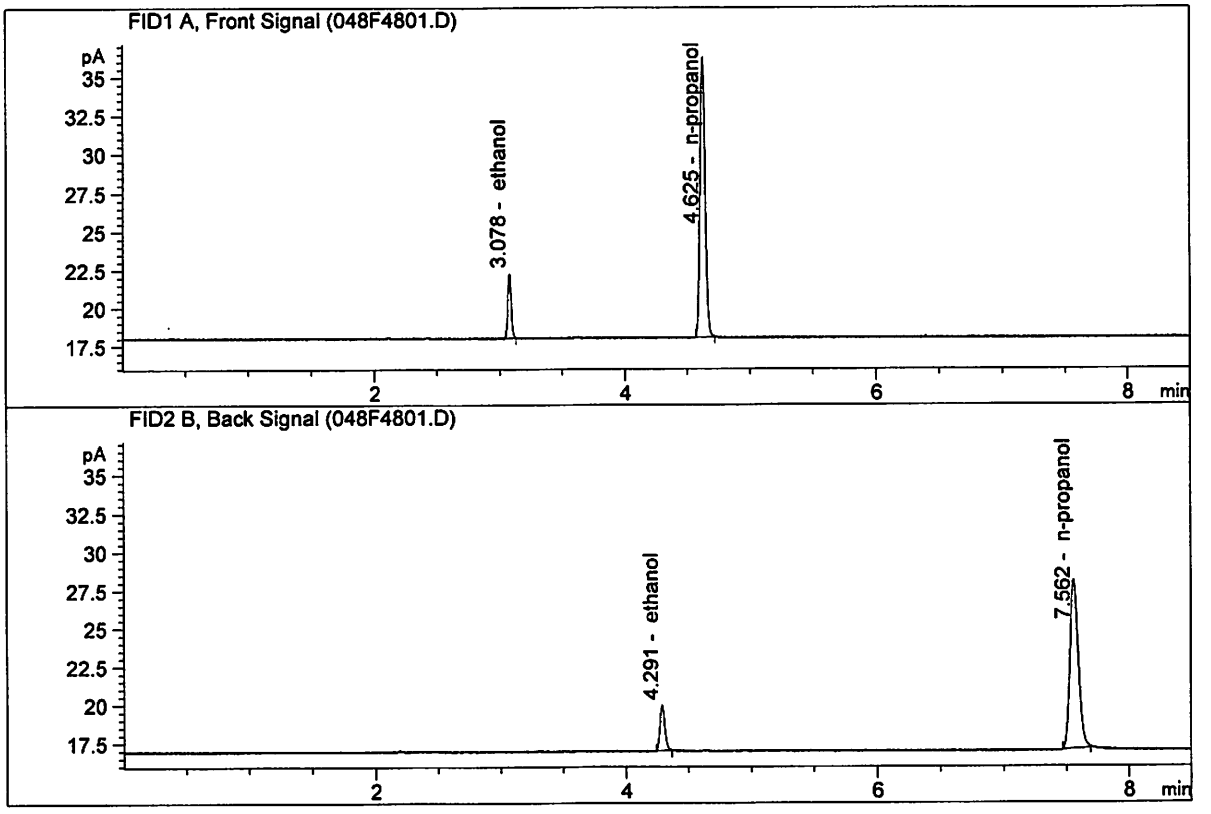



| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.70953 | 0.0801 | g/100cc |
| 2. | Ethanol | Column 2: | 7.89295 | 0.0806 | g/100cc |
| 3. | n-Propanol | Column 1: | 51.36122 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 52.61089 | 1.0000 | g/100cc |

JG

# ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-B
Laboratory : Meridian
Injection Date : Jul 11, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.77575 | 0.0803 | g/100cc |
| 2. | Ethanol | Column 2: | 7.96051 | 0.0809 | g/100cc |
| 3. | n-Propanol | Column 1: | 51.62154 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 52.90167 | 1.0000 | g/100cc |

JG

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC2-2** **Analysis Date(s): 11 Jul 2018**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.2066 | 0.2061 | 0.0005 | 0.2063 | 0.2046 | |
| (g/100cc) | 0.2030 | 0.2030 | 0.0000 | 0.2030 | | |

**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 | |

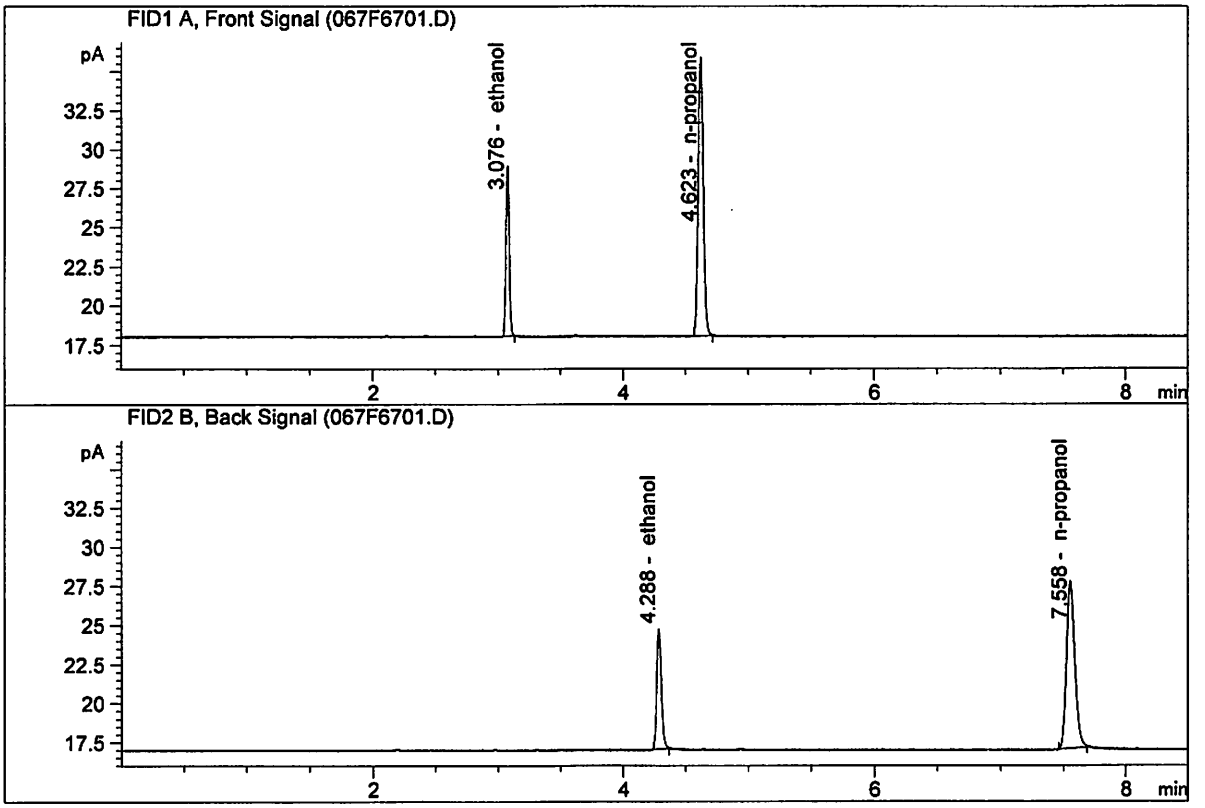
***Calibration and control data are stored centrally.***



JG

# ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-2-A
Laboratory : Meridian
Injection Date : Jul 11, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

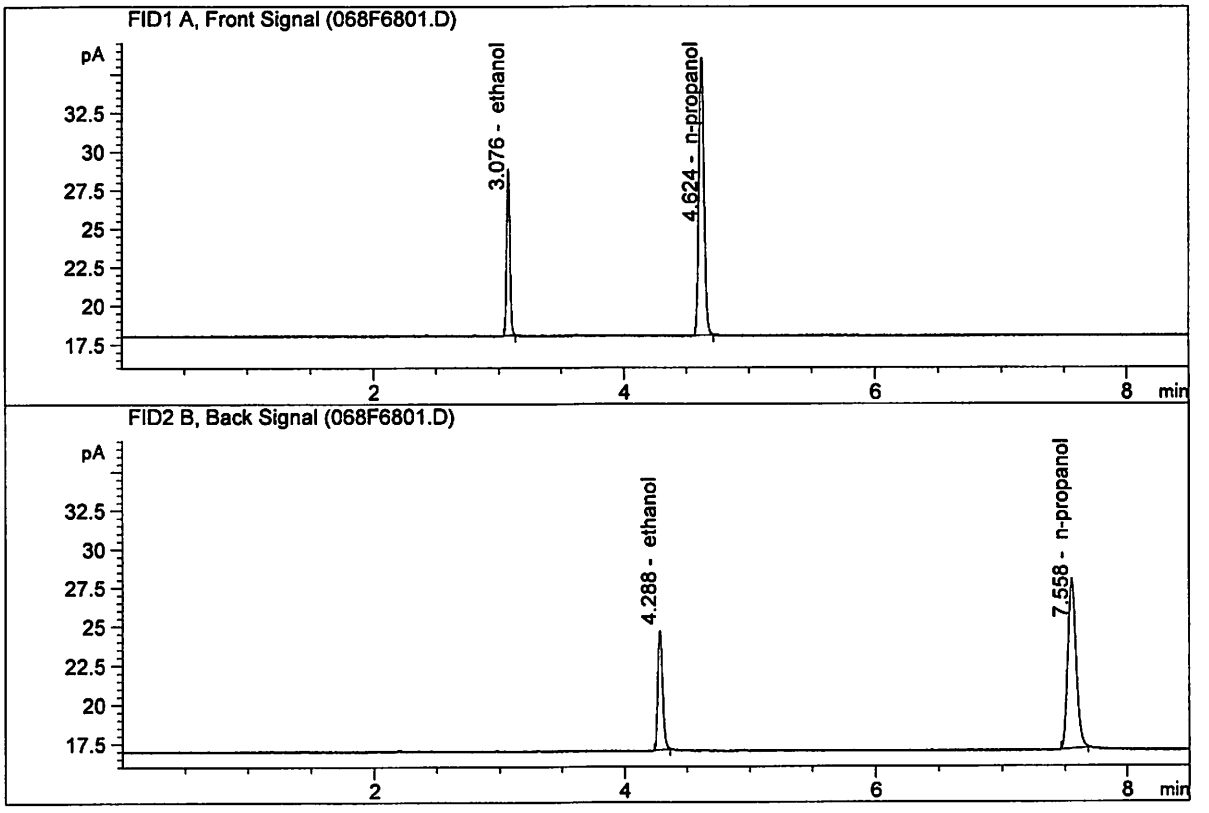



| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 19.69617 | 0.2066 | g/100cc |
| 2. | Ethanol | Column 2: | 20.41774 | 0.2061 | g/100cc |
| 3. | n-Propanol | Column 1: | 50.43140 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 51.51976 | 1.0000 | g/100cc |

JC

# ISP Forensic Services Blood Alcohol Report

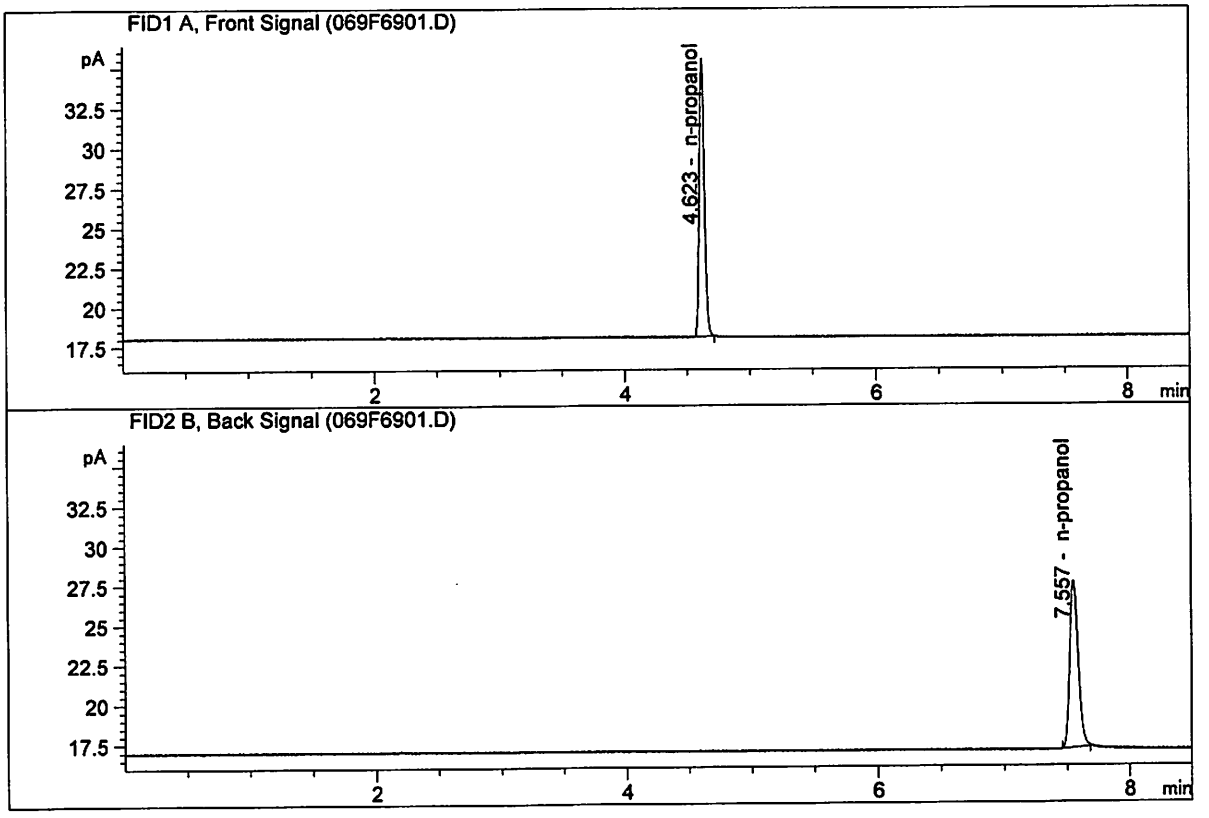
Sample Name : QC2-2-B
Laboratory : Meridian
Injection Date : Jul 11, 2018
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 19.62873 | 0.2030 | g/100cc |
| 2. | Ethanol | Column 2: | 20.34408 | 0.2030 | g/100cc |
| 3. | n-Propanol | Column 1: | 51.15518 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 52.14121 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK 1
Laboratory : Meridian
Injection Date : Jul 11, 2018
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: | 49.50184 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 50.57494 | 1.0000 | g/100cc |

JL

# Sample Summary

Sequence table: C:\Chem32\1\Data\06-27-18_SAMPLES\07-10-18_SAMPLES 2018-07-10 15-55-33\07-10-18_SAMPLES.S
Data directory path: C:\Chem32\1\Data\06-27-18_SAMPLES\07-10-18_SAMPLES 2018-07-10 15-55-33\
Logbook: C:\Chem32\1\Data\06-27-18_SAMPLES\07-10-18_SAMPLES 2018-07-10 15-55-33\07-10-18_SAMPLES.LOG
Sequence start: 7/10/2018 4:10:20 PM
Sequence Operator: SYSTEM
Operator: SYSTEM

Method file name: C:\Chem32\1\Data\06-27-18_SAMPLES\07-10-18_SAMPLES 2018-07-10 15-55-33\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 FN10281510- | - | 1.0000 | 005F0501.D | 4 |
| 6 | 6 | 1 | 0.08 FN10281510- | - | 1.0000 | 006F0601.D | 4 |
| 7 | 7 | 1 | M2018-3203-1-A | - | 1.0000 | 007F0701.D | 6 |
| 8 | 8 | 1 | M2018-3203-1-B | - | 1.0000 | 008F0801.D | 6 |
| 9 | 9 | 1 | M2018-3218-1-A | - | 1.0000 | 009F0901.D | 6 |
| 10 | 10 | 1 | M2018-3218-1-B | - | 1.0000 | 010F1001.D | 6 |
| 11 | 11 | 1 | M2018-3239-1-A | - | 1.0000 | 011F1101.D | 4 |
| 12 | 12 | 1 | M2018-3239-1-B | - | 1.0000 | 012F1201.D | 4 |
| 13 | 13 | 1 | M2018-3268-1-A | - | 1.0000 | 013F1301.D | 6 |
| 14 | 14 | 1 | M2018-3268-1-B | - | 1.0000 | 014F1401.D | 6 |
| 15 | 15 | 1 | M2018-3287-1-A | - | 1.0000 | 015F1501.D | 6 |
| 16 | 16 | 1 | M2018-3287-1-B | - | 1.0000 | 016F1601.D | 6 |
| 17 | 17 | 1 | M2018-3288-1-A | - | 1.0000 | 017F1701.D | 6 |
| 18 | 18 | 1 | M2018-3288-1-B | - | 1.0000 | 018F1801.D | 6 |
| 19 | 19 | 1 | M2018-3294-1-A | - | 1.0000 | 019F1901.D | 6 |
| 20 | 20 | 1 | M2018-3294-1-B | - | 1.0000 | 020F2001.D | 6 |
| 21 | 21 | 1 | M2018-3303-1-A | - | 1.0000 | 021F2101.D | 2 |
| 22 | 22 | 1 | M2018-3303-1-B | - | 1.0000 | 022F2201.D | 2 |
| 23 | 23 | 1 | M2018-3304-1-A | - | 1.0000 | 023F2301.D | 2 |
| 24 | 24 | 1 | M2018-3304-1-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 | M2018-3304-2-A | - | 1.0000 | 027F2701.D | 6 |
| 28 | 28 | 1 | M2018-3304-2-B | - | 1.0000 | 028F2801.D | 6 |
| 29 | 29 | 1 | M2018-3307-2-A | - | 1.0000 | 029F2901.D | 2 |
| 30 | 30 | 1 | M2018-3307-2-B | - | 1.0000 | 030F3001.D | 2 |
| 31 | 31 | 1 | M2018-3308-1-A | - | 1.0000 | 031F3101.D | 6 |
| 32 | 32 | 1 | M2018-3308-1-B | - | 1.0000 | 032F3201.D | 6 |
| 33 | 33 | 1 | M2018-3309-1-A | - | 1.0000 | 033F3301.D | 6 |
| 34 | 34 | 1 | M2018-3309-1-B | - | 1.0000 | 034F3401.D | 6 |
| 35 | 35 | 1 | M2018-3310-1-A | - | 1.0000 | 035F3501.D | 6 |
| 36 | 36 | 1 | M2018-3310-1-B | - | 1.0000 | 036F3601.D | 6 |
| 37 | 37 | 1 | M2018-3329-1-A | - | 1.0000 | 037F3701.D | 6 |
| 38 | 38 | 1 | M2018-3329-1-B | - | 1.0000 | 038F3801.D | 6 |
| 39 | 39 | 1 | M2018-3330-1-A | - | 1.0000 | 039F3901.D | 6 |
| 40 | 40 | 1 | M2018-3330-1-B | - | 1.0000 | 040F4001.D | 6 |
| 41 | 41 | 1 | M2018-3331-1-A | - | 1.0000 | 041F4101.D | 2 |
| 42 | 42 | 1 | M2018-3331-1-B | - | 1.0000 | 042F4201.D | 2 |
| 43 | 43 | 1 | M2018-3332-1-A | - | 1.0000 | 043F4301.D | 6 |

JL

| Run # | Location | Inj # | Sample Name | Sample Amt [g/100cc] | Multip.* Dilution | File name | Cal # Cmp |
|---|---|---|---|---|---|---|---|
| 44 | 44 | 1 | M2018-3332-1-B | - | 1.0000 | 044F4401.D | 6 |
| 45 | 45 | 1 | M2018-3333-1-A | - | 1.0000 | 045F4501.D | 6 |
| 46 | 46 | 1 | M2018-3333-1-B | - | 1.0000 | 046F4601.D | 6 |
| 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 | M2018-3349-1-A | - | 1.0000 | 049F4901.D | 6 |
| 50 | 50 | 1 | M2018-3349-1-B | - | 1.0000 | 050F5001.D | 6 |
| 51 | 51 | 1 | M2018-3351-1-A | - | 1.0000 | 051F5101.D | 6 |
| 52 | 52 | 1 | M2018-3351-1-B | - | 1.0000 | 052F5201.D | 6 |
| 53 | 53 | 1 | M2018-3352-1-A | - | 1.0000 | 053F5301.D | 6 |
| 54 | 54 | 1 | M2018-3352-1-B | - | 1.0000 | 054F5401.D | 6 |
| 55 | 55 | 1 | M2018-3353-1-A | - | 1.0000 | 055F5501.D | 6 |
| 56 | 56 | 1 | M2018-3353-1-B | - | 1.0000 | 056F5601.D | 6 |
| 57 | 57 | 1 | M2018-3354-1-A | - | 1.0000 | 057F5701.D | 6 |
| 58 | 58 | 1 | M2018-3354-1-B | - | 1.0000 | 058F5801.D | 6 |
| 59 | 59 | 1 | M2018-3358-1-A | - | 1.0000 | 059F5901.D | 6 |
| 60 | 60 | 1 | M2018-3358-1-B | - | 1.0000 | 060F6001.D | 6 |
| 61 | 61 | 1 | M2018-3364-1-A | - | 1.0000 | 061F6101.D | 6 |
| 62 | 62 | 1 | M2018-3364-1-B | - | 1.0000 | 062F6201.D | 6 |
| 63 | 63 | 1 | M2018-3367-1-A | - | 1.0000 | 063F6301.D | 6 |
| 64 | 64 | 1 | M2018-3367-1-B | - | 1.0000 | 064F6401.D | 6 |
| 65 | 65 | 1 | P2018-1838-1-A | - | 1.0000 | 065F6501.D | 3 |
| 66 | 66 | 1 | P2018-1838-1-B | - | 1.0000 | 066F6601.D | 3 |
| 67 | 67 | 1 | QC2-2-A | - | 1.0000 | 067F6701.D | 4 |
| 68 | 68 | 1 | QC2-2-B | - | 1.0000 | 068F6801.D | 4 |
| 69 | 69 | 1 | INTERNAL STD BLK | - | 1.0000 | 069F6901.D | 2 |

Method file name: C:\Chem32\1\Data\06-27-18_SAMPLES\07-10-18_SAMPLES 2018-07-10 15-55-33\SHUTDOWN.M

| Run # | Location | Inj # | Sample Name | Sample Amt [g/100cc] | Multip.* Dilution | File name | Cal # Cmp |
|---|---|---|---|---|---|---|---|
| 70 | 70 | 1 | EMPTY | - | 1.0000 | 070F7001.D | 0 |

JG