*Idaho State Police Forensic Services*

# CERTIFICATE OF ANALYSIS/APPROVAL

The Idaho State Police Forensic Services (ISPFS) hereby certifies and approves Alcohol Simulator Solution **Lot Number 14170** (a product manufactured by GUTH Laboratories, Inc.) to be used to conduct performance verification checks within the State of Idaho in accordance with the analytical methods, policies and/or procedures promulgated by the Department governing breath alcohol examinations. ISPFS also approves of the manufacturer of this solution (GUTH Laboratories, Inc.) to provide Alcohol Simulator Solution **Lot Number 14170** in the State of Idaho. This lot has a target value of 0.080 with a range of 0.072 to 0.088 grams of ethyl alcohol/210 liters of vapor.

The expiration date for this lot number is on July 14th, 2016 at 11:59 PM.

5-21-2015
Date

Volatiles Analysis Discipline Leader

STATE OF IDAHO )
) ss.
County of Kootenai)

On this 21 day of May, in the year 2015 before me, Lynn A. Higdem, a notary public, Jeremy Johnston personally appeared, known to me to be the person whose name is subscribed to the within instrument as a Forensic Scientist for the Idaho State Police Forensic Services, and acknowledged to me that he executed the same as such Scientist.

Lynn A. Higdem Notary Public

My Commission Expires: 9/8/2016

LYNN A. HIGDEM NOTARY PUBLIC STATE OF IDAHO

# Raw data from analysis: LOT #14170

| | | | | | |
|---|---|---|---|---|---|
| Analyst: | Bottle #1580 | sample #1 | a | 0.0966 | overall mean: |
| HC | | | b | 0.0966 | 0.0958 |
| | | sample #2 | a | 0.0974 | |
| | | | b | 0.0971 | |
| NB | bottle #1716 | sample #3 | a | 0.0958 | |
| | | | b | 0.0926 | |
| | | Sample #4 | a | 0.0964 | |
| | | | b | 0.0937 | |
| Analyst: | Bottle #1707 | sample #1 | a | 0.0968 | overall mean: |
| RC | | | b | 0.0944 | 0.0963 |
| | | sample #2 | a | 0.0972 | |
| | | | b | 0.0951 | |
| | bottle #838 | sample #3 | a | 0.0969 | |
| | | | b | 0.0947 | |
| | | Sample #4 | a | 0.0987 | |
| | | | b | 0.0966 | |

**average of all raw data:** **0.0960375**

alcohol content conversion with 1.23: **0.07808**

with 1.21: 0.07937

**Target value from provider:**

0.0973 +/- 3% range 0.10022

0.09438

0.08 +/- 3% range 0.0824

0.0776

GUTH LABORATORIES, INC.
590 NORTH 67th STREET • HARRISBURG, PA 17111-4511 • TELEPHONE: 717-564-5470

# CERTIFICATE OF ANALYSIS

Certified Alcohol Reference Solution for Simulator

Random Samples of Lot Number **14170** of Alcohol Reference Solution for Simulator were analyzed by gas chromatography on **July 15, 2014,** using a Perkin Elmer Gas Chromatograph Autosystem XL S/N: 610N9030209, and found to contain **0.0973%** (w/vol) ethyl alcohol. The expiration date for this lot number is **July 14, 2016** at 11:59 PM.

When used in a calibrated Simulator, operating at 34°C +/- .2°C, this solution will give a breath alcohol analysis instrument reading of **0.080 g/210L +/- 3%.**

The alcohol and water used in this solution were free of test interfering substances.

Ted L. Pauley, President
GUTH LABORATORIES, INC.

*NIST Traceability:*
*Testing was conducted using Cerilliant Reference Standard lot number FN021111-03 whose values are traceable to NIST.*
*All balances are calibrated annually by an outside agency using NIST traceable weights. Calibration verification is done prior to each use utilizing NIST traceable weights.*

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: GUTH 08 #14170 BOT1707 Analysis Date(s): 11 May 2015**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0968 | 0.0944 | 0.0024 | 0.0956 | 0.0958 | |
| (g/100cc) | 0.0972 | 0.0951 | 0.0021 | 0.0961 | | |

**Analysis Method**

**Refer to Volatiles Analytical Method 1.0**

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

Refer to Instrument Method: ALCOHOL.M Hamilton
Auto-Dilutor Serial Number: MD-96JF1032

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

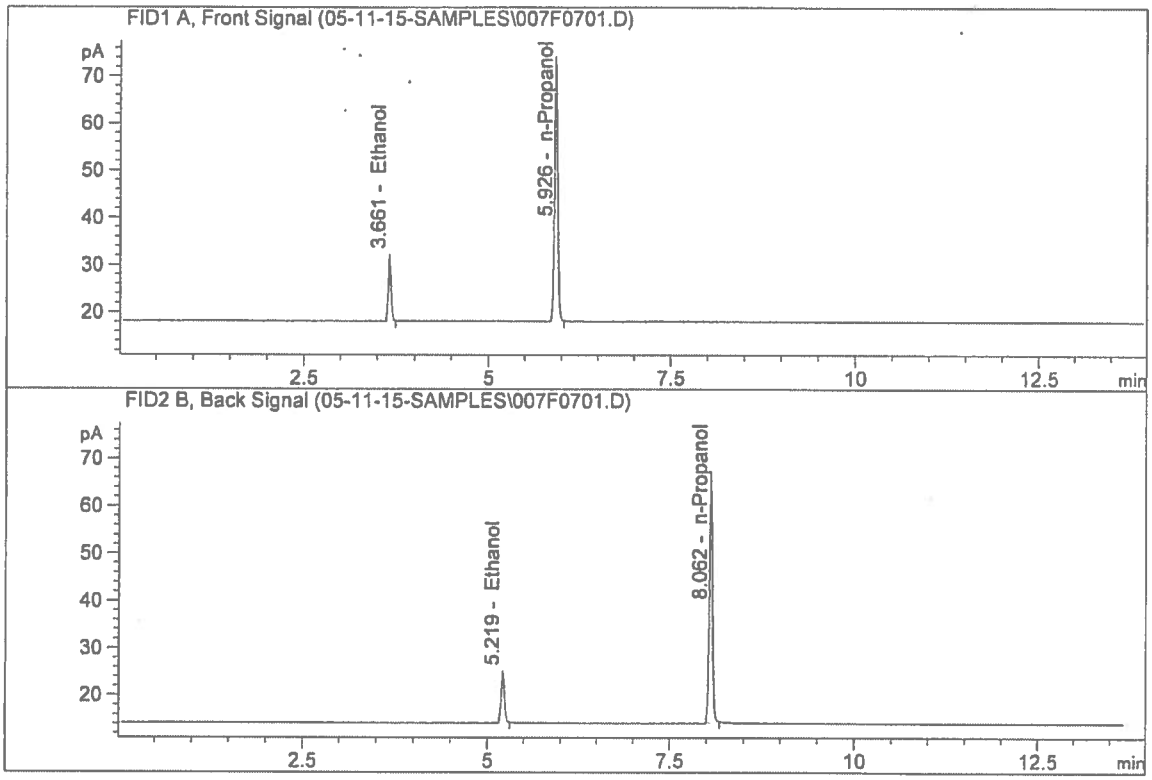
| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| **0.095** | **0.090** | **0.100** | **0.005** |

| | Reported Result | |
|---|---|---|
| | 0.0958 ÷ 1.23 = | 0.0778 g/210 L = 0.0779/210 L |

***Calibration and control data are stored centrally.*** **Analyst:** VRC **Page 2**

# ISP Forensic Services Blood Alcohol Report

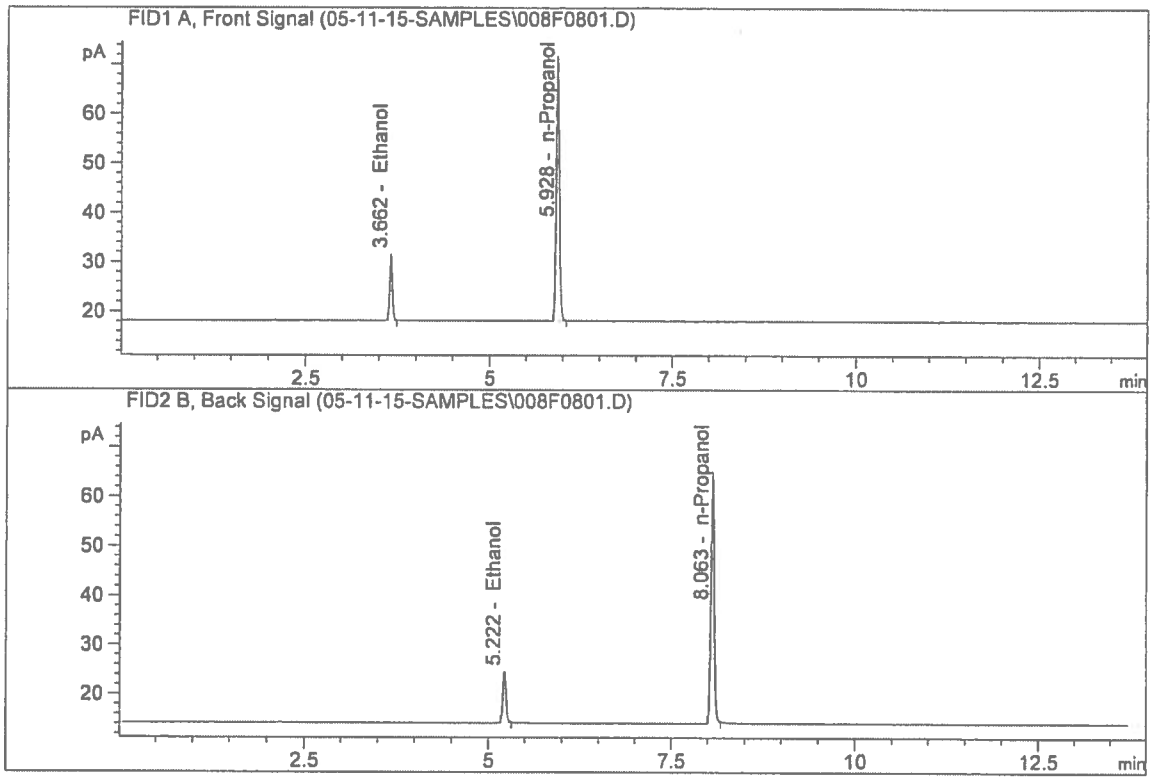
Sample Name : GUTH 08 #14170 BOT1707-A
Laboratory : Pocatello
Injection Date : May 11, 2015
Method : ALCOHOL.M
Acq. Instrument: CN10742043-IT00741010




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 34.81021 | 0.0968 | g/100cc |
| 2. | Ethanol | Column 2: | 31.94938 | 0.0944 | g/100cc |
| 3. | n-Propanol | Column 1: | 175.64751 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 164.11339 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name : GUTH 08 #14170 BOT1707-B
Laboratory : Pocatello
Injection Date : May 11, 2015
Method : ALCOHOL.M
Acq. Instrument: CN10742043-IT00741010




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 33.23716 | 0.0972 | g/100cc |
| 2. | Ethanol | Column 2: | 30.61035 | 0.0951 | g/100cc |
| 3. | n-Propanol | Column 1: | 167.07005 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 155.92270 | 1.0000 | g/100cc |

KC

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: GUTH 08 #14170 BOT1680 Analysis Date(s): 11 May 2015**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0969 | 0.0947 | 0.0022 | 0.0958 | 0.0967 | |
| (g/100cc) | 0.0987 | 0.0966 | 0.0021 | 0.0976 | | |

**Analysis Method**

**Refer to Volatiles Analytical Method 1.0**

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

Refer to Instrument Method: ALCOHOL.M Hamilton
Auto-Dilutor Serial Number: MD-96JF1032

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

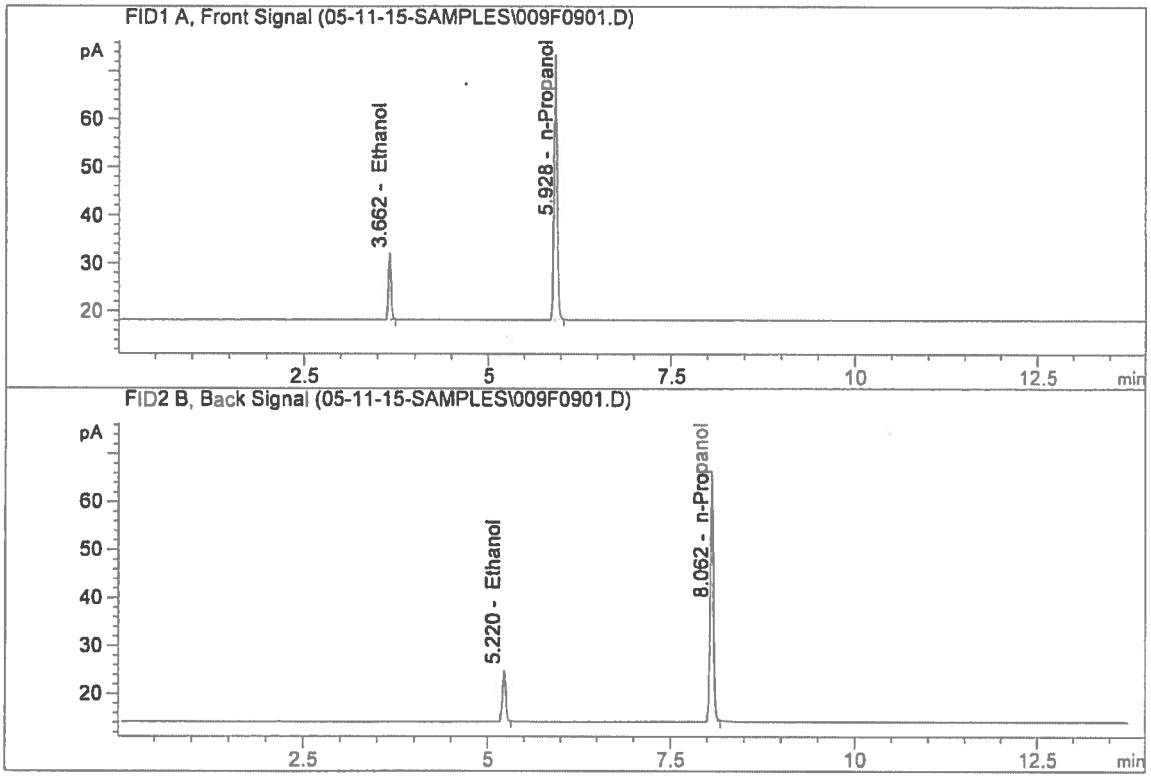
| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| **0.096** | **0.091** | **0.101** | **0.005** |

| | Reported Result | |
|---|---|---|
| | 0.0967 × 1.23 = | 0.0786 g/210L = (0.079) g/210L |

***Calibration and control data are stored centrally.*** **Analyst:** MC **Page 2**

# ISP Forensic Services Blood Alcohol Report

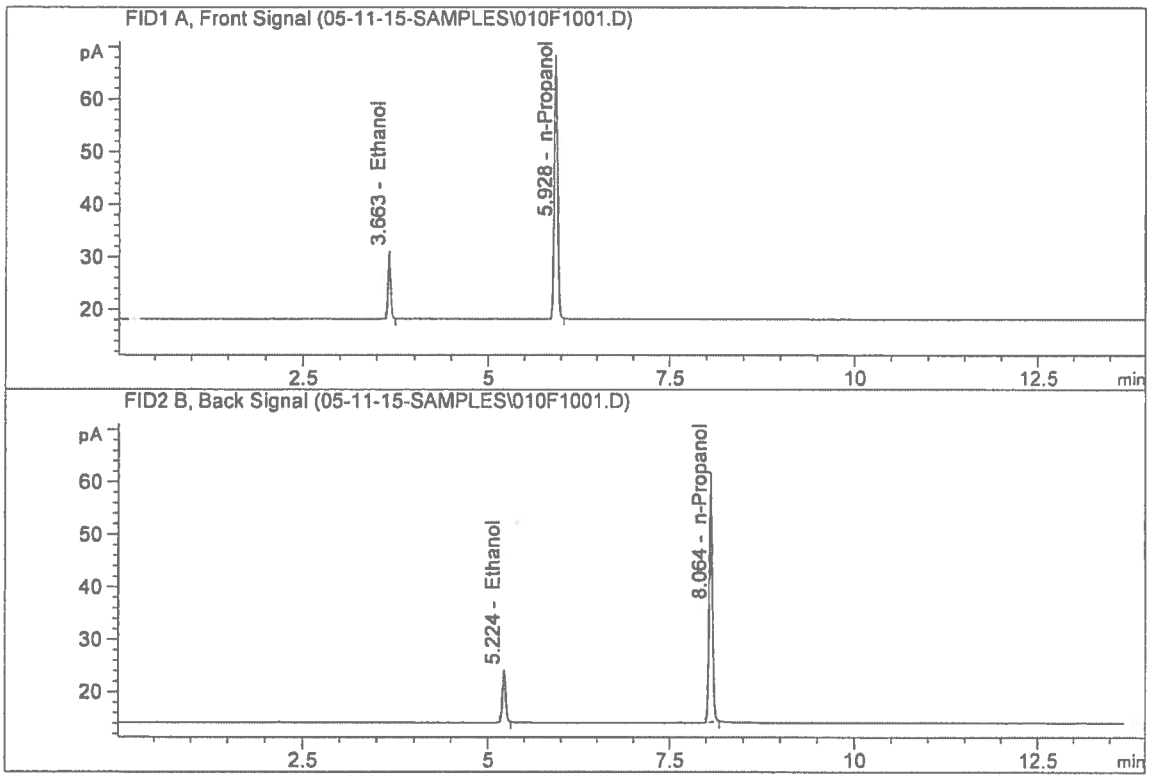
Sample Name : GUTH 08 #14170 BOT1680-A
Laboratory : Pocatello
Injection Date : May 11, 2015
Method : ALCOHOL.M
Acq. Instrument: CN10742043-IT00741010




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 34.16374 | 0.0969 | g/100cc |
| 2. | Ethanol | Column 2: | 31.39123 | 0.0947 | g/100cc |
| 3. | n-Propanol | Column 1: | 172.15285 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 160.68802 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name : GUTH 08 #14170 BOT1680-B
Laboratory : Pocatello
Injection Date : May 11, 2015
Method : ALCOHOL.M
Acq. Instrument: CN10742043-IT00741010




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 31.61148 | 0.0987 | g/100cc |
| 2. | Ethanol | Column 2: | 29.10056 | 0.0966 | g/100cc |
| 3. | n-Propanol | Column 1: | 156.37949 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 146.01775 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: Guth 0.08** Lot 14170 **Analysis Date(s): 18 Mar 2015** Bottle # 1580

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0966 | 0.0966 | 0.0000 | 0.0966 | 0.0969 | |
| (g/100cc) | 0.0974 | 0.0971 | 0.0003 | 0.0972 | | |

**Analysis Method**

**Refer to Volatiles Analytical Method 1.0**

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

Refer to Instrument Method: ALCOHOL.M Hamilton
Auto-Dilutor Serial Number: MD96BC1382/MD94AM10010

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

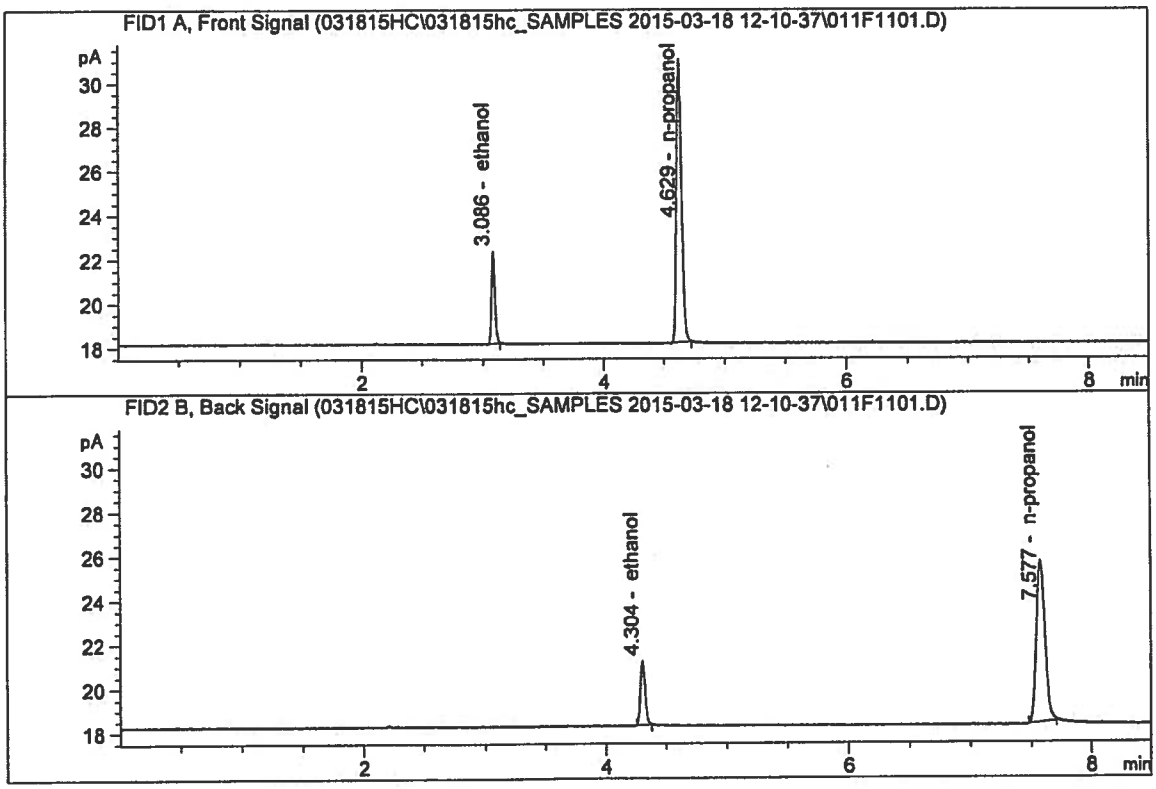
| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.096 | 0.091 | 0.101 | 0.005 |

| | Reported Result | |
|---|---|---|
| | 0.096 ÷ 1.23 | 0.0788 NB |

***Calibration and control data are stored centrally.*** **Analyst:** HK **Page 2**

# ISP Forensic Services Blood Alcohol Report

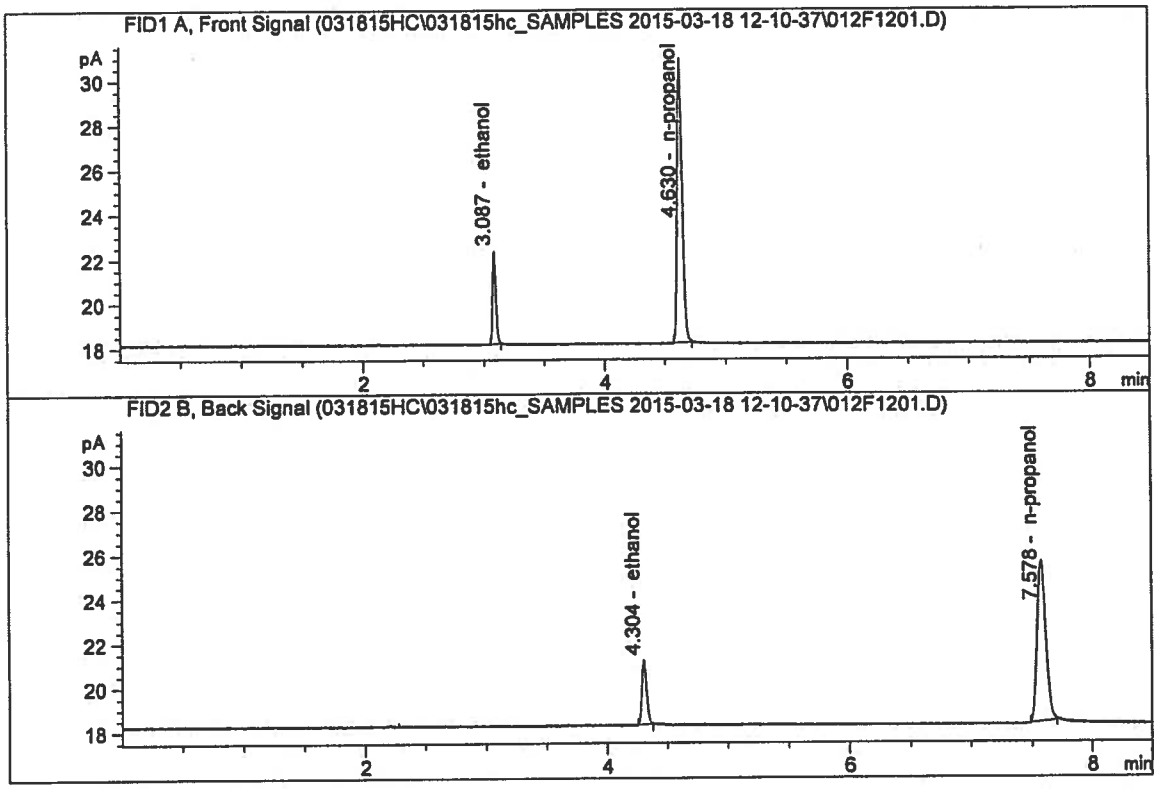
Sample Name : Guth 0.08-A
Laboratory : Meridian
Injection Date : Mar 18, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.80864 | 0.0966 | g/100cc |
| 2. | Ethanol | Column 2: | 7.94553 | 0.0966 | g/100cc |
| 3. | n-Propanol | Column 1: | 37.09375 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 35.99135 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name : Guth 0.08-B
Laboratory : Meridian
Injection Date : Mar 18, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.79100 | 0.0974 | g/100cc |
| 2. | Ethanol | Column 2: | 7.90300 | 0.0971 | g/100cc |
| 3. | n-Propanol | Column 1: | 36.69212 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 35.62868 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: Guth 0.08 lot14070** **Analysis Date(s): 24 Mar 2015** Bottle # 1716

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0958 | 0.0926 | 0.0032 | 0.0942 | 0.0946 | |
| (g/100cc) | 0.0964 | 0.0937 | 0.0027 | 0.0950 | | |

**Analysis Method**

**Refer to Volatiles Analytical Method 1.0**

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

Refer to Instrument Method: ALCOHOL.M Hamilton
Auto-Dilutor Serial Number: MD96BC1382/MD94AM10010

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

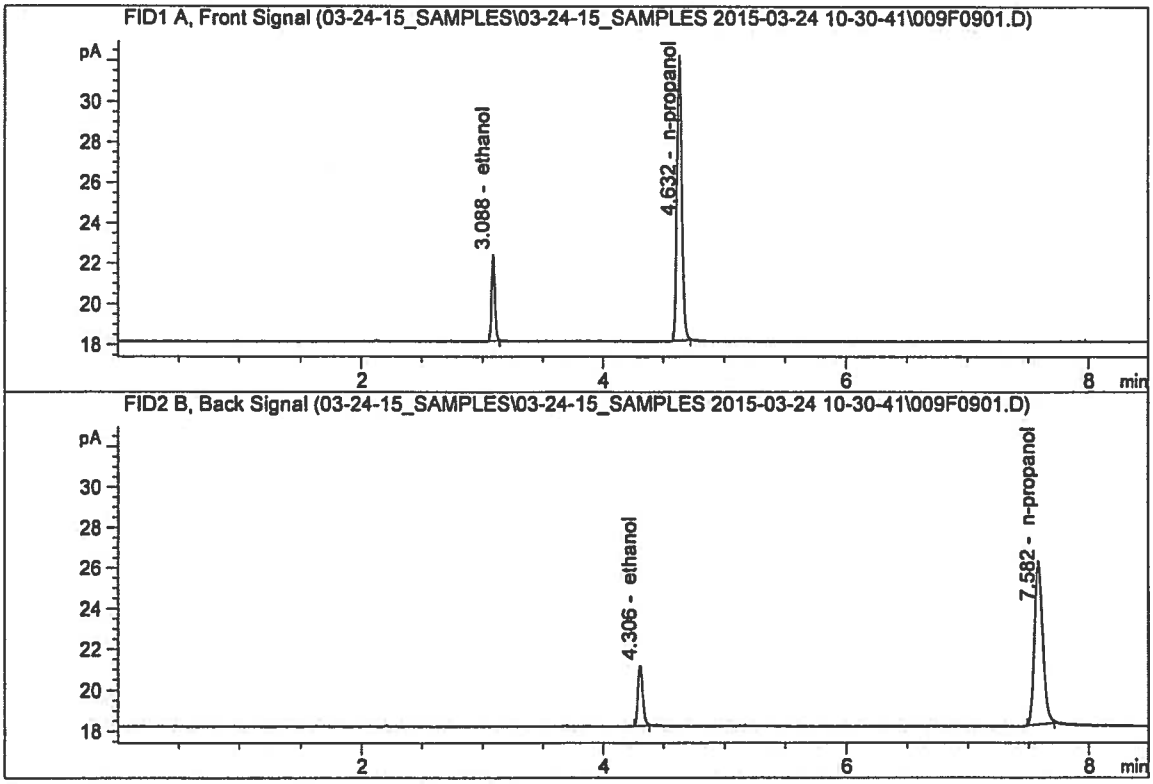
| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.094 | 0.089 | 0.099 | 0.005 |

| | Reported Result | |
|---|---|---|
| | 0.094 ÷1.23 | 0.0769 |

***Calibration and control data are stored centrally.*** **Analyst:** NB **Page 2**

# ISP Forensic Services Blood Alcohol Report

| | | |
|---|---|---|
| Sample Name | : | Guth 0.08 lot14170-A |
| Laboratory | : | Meridian |
| Injection Date | : | Mar 24, 2015 |
| Method | : | ALCOHOL.M |
| Acq. Instrument | : | CN11180014-CN11041167 |

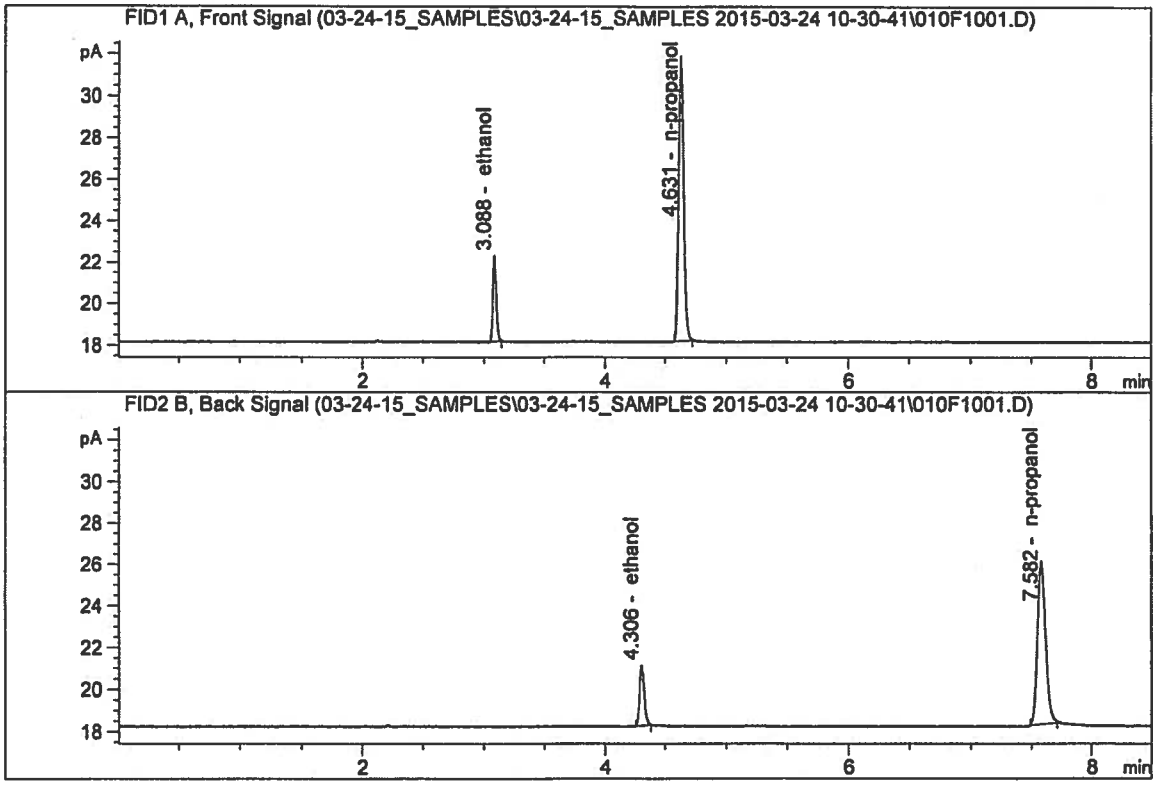



| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.87078 | 0.0958 | g/100cc |
| 2. | Ethanol | Column 2: | 7.93947 | 0.0926 | g/100cc |
| 3. | n-Propanol | Column 1: | 40.24749 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 39.26147 | 1.0000 | g/100cc |

NB

# ISP Forensic Services Blood Alcohol Report

Sample Name : Guth 0.08 lot14170-B
Laboratory : Meridian
Injection Date : Mar 24, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167




| # | Compound | Column | Area | Amount | Units |
|---|---|---|---|---|---|
| 1. | Ethanol | Column 1: | 7.74026 | 0.0964 | g/100cc |
| 2. | Ethanol | Column 2: | 7.82838 | 0.0937 | g/100cc |
| 3. | n-Propanol | Column 1: | 39.34647 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 38.26591 | 1.0000 | g/100cc |