**Worklist: 3552**

| LAB CASE | ITEM | TASK ID | DESCRIPTION |
|----------|------|---------|-------------|
| P2019-1913 | 1 | 155272 | Alcohol Analysis |
| P2019-1920 | 1 | 155457 | Alcohol Analysis |
| P2019-1926 | 1 | 155593 | Alcohol Analysis |
| P2019-1955 | 1 | 155791 | Alcohol Analysis |
| P2019-1962 | 1 | 155898 | Alcohol Analysis |
| P2019-1987 | 1 | 155941 | Alcohol Analysis |
| P2019-1989 | 1 | 155948 | Alcohol Analysis |
| P2019-1993 | 1 | 156088 | Alcohol Analysis |
| P2019-1994 | 1 | 156092 | Alcohol Analysis |
| P2019-2010 | 1 | 156262 | Alcohol Analysis |
| P2019-2011 | 1 | 156263 | Alcohol Analysis |
| P2019-2036 | 1 | 156444 | Alcohol Analysis |
| P2019-2037 | 1 | 156445 | Alcohol Analysis |
| P2019-2043 | 1 | 156454 | Alcohol Analysis |
| P2019-2050 | 1 | 156512 | Alcohol Analysis |
| P2019-2060 | 1 | 156717 | Alcohol Analysis |
| P2019-2061 | 1 | 156718 | Alcohol Analysis |
| P2019-2062 | 1 | 156719 | Alcohol Analysis |
| P2019-2077 | 1 | 156792 | Alcohol Analysis |
| P2019-2079 | 1 | 156797 | Alcohol Analysis |
| P2019-2080 | 1 | 156803 | Alcohol Analysis |
| P2019-2084 | 1 | 156813 | Alcohol Analysis |
| P2019-2084 | 2 | 156817 | Alcohol Analysis |
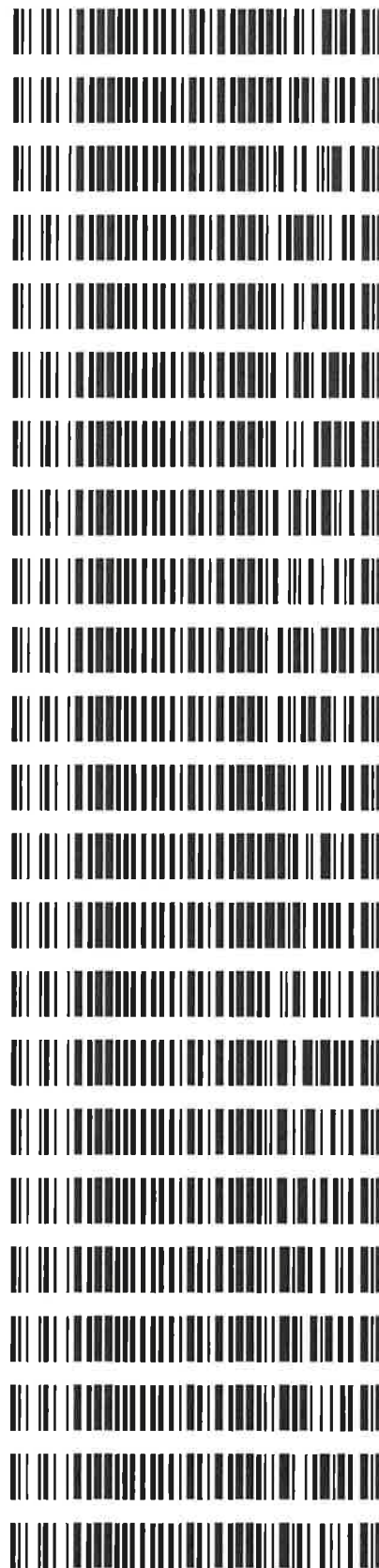
**Worklist: 3552**

LAB  CASE          ITEM          TASK ID  DESCRIPTION

# Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

*Analytical Method(s): 1.0*

*Device: Hamilton MICROLAB 503A Liquid Processor/Dilutor  Serial Number: MD96JF1032*

Run Date(s): 07/18/19

Calibration Curve Run Date: 07/17/19

## 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 | 0.0745 g/100cc 0.0780 g/100cc |
| Level 2 | Mar-22 | 1803028 | 0.2035 | 0.1832-0.2238 | 0.1955 g/100cc 0.2008 g/100cc |

| Multi-Component mixture: | | Lot # | | |
|---|---|---|---|---|
| Curve Fit: | Column 1 | 11918 | Column 1 | Column2 |
| | | | 1.00000 | 0.99989 |

## 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 | 0.0470 | 0.0033 | 0.0486 |
| 100 | 0.100 | 0.090 - 0.110 | 0.1000 | 0.0955 | 0.0045 | 0.0977 |
| 200 | 0.200 | 0.180 - 0.220 | 0.2005 | 0.1954 | 0.0051 | 0.1979 |
| 300 | 0.300 | 0.270 - 0.330 | 0.2998 | 0.2970 | 0.0028 | 0.2984 |
| 500 | 0.500 | 0.450 - 0.550 | 0.4999 | 0.5048 | 0.0049 | 0.5023 |

## Aqueous Controls

| Control level | Target Value | Acceptable Range | Overall Results |
|---|---|---|---|
| 80 | 0.080 | 0.076 - 0.084 | 0.077  g/100cc |

REVIEWED
*By Jeremy Johnston at 10:20 am, Jul 21, 2019*

```
===========================================================================
                            Calibration Table
===========================================================================
```

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

Calib. Data Modified   :      Wednesday, July 17, 2019 12:55:33 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   :       No recalibration if peaks missing

Curve Type            :       Linear
Origin                :       Forced
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
---------------------------------------------------------------------------
```

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

| RT | Sig | Lvl | Amount [g/100cc] | Area | Rsp.Factor | Ref | ISTD | # | Compound |
|----|-----|-----|------------------|------|------------|-----|------|---|----------|
| 2.311 | 2 | 1 | 1.00000 | 6.45200 | 1.54991e-1 | No | No | 2 | Fluorinated ethane |
| 2.365 | 1 | 1 | 1.00000 | 1.84105 | 5.43168e-1 | No | No | 1 | Fluorinated ethane |
| 2.685 | 1 | 1 | 1.00000 | 3.69669 | 2.70512e-1 | No | No | 1 | Methanol |
| 2.950 | 2 | 1 | 1.00000 | 11.54700 | 8.66026e-2 | No | No | 2 | Acetaldehyde |
| 2.975 | 1 | 1 | 1.00000 | 10.52400 | 9.50209e-2 | No | No | 1 | Acetaldehyde |
| 3.320 | 1 | 1 | 5.00000e-2 | 11.24552 | 4.44621e-3 | No | No | 1 | Ethanol |
|  |  | 2 | 1.00000e-1 | 23.17593 | 4.31482e-3 |  |  |  |  |
|  |  | 3 | 2.00000e-1 | 47.58701 | 4.20283e-3 |  |  |  |  |
|  |  | 4 | 3.00000e-1 | 71.13099 | 4.21757e-3 |  |  |  |  |
|  |  | 5 | 5.00000e-1 | 119.44300 | 4.18610e-3 |  |  |  |  |
| 3.372 | 2 | 1 | 1.00000 | 4.26062 | 2.34707e-1 | No | No | 2 | Methanol |
| 3.993 | 1 | 1 | 1.00000 | 9.73055 | 1.02769e-1 | No | No | 1 | Isopropyl alcohol |
| 4.317 | 2 | 1 | 5.00000e-2 | 9.89831 | 5.05137e-3 | No | No | 2 | Ethanol |
|  |  | 2 | 1.00000e-1 | 20.86200 | 4.79341e-3 |  |  |  |  |
|  |  | 3 | 2.00000e-1 | 43.60284 | 4.58686e-3 |  |  |  |  |
|  |  | 4 | 3.00000e-1 | 65.93835 | 4.54970e-3 |  |  |  |  |
|  |  | 5 | 5.00000e-1 | 112.16538 | 4.45770e-3 |  |  |  |  |
| 4.704 | 2 | 1 | 1.00000 | 6.89301 | 1.45075e-1 | No | No | 2 | Acetone |
| 4.853 | 1 | 1 | 1.00000 | 6.49940 | 1.53860e-1 | No | No | 1 | Acetone |
| 5.050 | 2 | 1 | 1.00000 | 10.70642 | 9.34019e-2 | No | No | 2 | Isopropyl alcohol |
| 5.264 | 1 | 1 | 1.00000 | 114.53136 | 8.73123e-3 | No | Yes | 1 | n-Propanol |
|  |  | 2 | 1.00000 | 118.69321 | 8.42508e-3 |  |  |  |  |
|  |  | 3 | 1.00000 | 121.52397 | 8.22883e-3 |  |  |  |  |
|  |  | 4 | 1.00000 | 121.45603 | 8.23343e-3 |  |  |  |  |
|  |  | 5 | 1.00000 | 122.33713 | 8.17413e-3 |  |  |  |  |
|  |  | 6 | 1.00000 | 111.45872 | 8.97193e-3 |  |  |  |  |
| 7.748 | 2 | 1 | 1.00000 | 107.67130 | 9.28753e-3 | No | Yes | 2 | n-Propanol |
|  |  | 2 | 1.00000 | 111.68879 | 8.95345e-3 |  |  |  |  |
|  |  | 3 | 1.00000 | 114.04659 | 8.76835e-3 |  |  |  |  |
|  |  | 4 | 1.00000 | 113.44197 | 8.81508e-3 |  |  |  |  |
|  |  | 5 | 1.00000 | 113.54844 | 8.80681e-3 |  |  |  |  |
|  |  | 6 | 1.00000 | 113.50471 | 8.81021e-3 |  |  |  |  |
| 11.631 | 2 | 1 | 1.00000 | 864.84247 | 1.15628e-3 | No | No | 2 | Toluene |
| 12.229 | 1 | 1 | 1.00000 | 918.48389 | 1.08875e-3 | No | No | 1 | Toluene |

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

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

Peak Sum Table

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

***No Entries in table***

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

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

Calibration Curves

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



Fluorinated ethane at exp. RT: 2.311
FID2 B, Back Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
      m:          5.99231e-2
      x: Amount Ratio
      y: Area Ratio

Fluorinated ethane at exp. RT: 2.365
FID1 A, Front Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
       m:      1.60746e-2
       x: Amount Ratio
       y: Area Ratio



Methanol at exp. RT: 2.685
FID1 A, Front Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
       m:      3.22767e-2
       x: Amount Ratio
       y: Area Ratio



Acetaldehyde at exp. RT: 2.950
FID2 B, Back Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
       m:      1.07243e-1
       x: Amount Ratio
       y: Area Ratio



Acetaldehyde at exp. RT: 2.975
FID1 A, Front Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
       m:      9.18875e-2
       x: Amount Ratio
       y: Area Ratio

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



Ethanol at exp. RT: 3.320
FID1 A, Front Signal
Correlation:              1.00000
Residual Std. Dev.:       0.00058
Formula: y = mx
        m:         1.95317
        x: Amount Ratio
        y: Area Ratio



Methanol at exp. RT: 3.372
FID2 B, Back Signal
Correlation:              1.00000
Residual Std. Dev.:       0.00000
Formula: y = mx
        m:         3.95707e-2
        x: Amount Ratio
        y: Area Ratio



Isopropyl alcohol at exp. RT: 3.993
FID1 A, Front Signal
Correlation:              1.00000
Residual Std. Dev.:       0.00000
Formula: y = mx
        m:         8.49597e-2
        x: Amount Ratio
        y: Area Ratio



Ethanol at exp. RT: 4.317
FID2 B, Back Signal
Correlation:              0.99989
Residual Std. Dev.:       0.00891
Formula: y = mx
        m:         1.95675
        x: Amount Ratio
        y: Area Ratio

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



Acetone at exp. RT: 4.704
FID2 B, Back Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
        m:       6.40190e-2
        x: Amount Ratio
        y: Area Ratio



Acetone at exp. RT: 4.853
FID1 A, Front Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
        m:       5.67478e-2
        x: Amount Ratio
        y: Area Ratio



Isopropyl alcohol at exp. RT: 5.050
FID2 B, Back Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
        m:       9.94361e-2
        x: Amount Ratio
        y: Area Ratio



n-Propanol at exp. RT: 5.264
FID1 A, Front Signal
Correlation:          1.00000
Residual Std. Dev.:   0.00000
Formula: y = mx
        m:       1.00000
        x: Amount Ratio
        y: Area Ratio

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



n-Propanol at exp. RT: 7.748
FID2 B, Back Signal
Correlation:            1.00000
Residual Std. Dev.:     0.00000
Formula: y = mx
        m:       1.00000
        x: Amount Ratio
        y: Area Ratio



Toluene at exp. RT: 11.631
FID2 B, Back Signal
Correlation:            1.00000
Residual Std. Dev.:     0.00000
Formula: y = mx
        m:       8.03225
        x: Amount Ratio
        y: Area Ratio



Toluene at exp. RT: 12.229
FID1 A, Front Signal
Correlation:            1.00000
Residual Std. Dev.:     0.00000
Formula: y = mx
        m:       8.01950
        x: Amount Ratio
        y: Area Ratio

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

# ISP Forensic Services Blood Alcohol Report

```
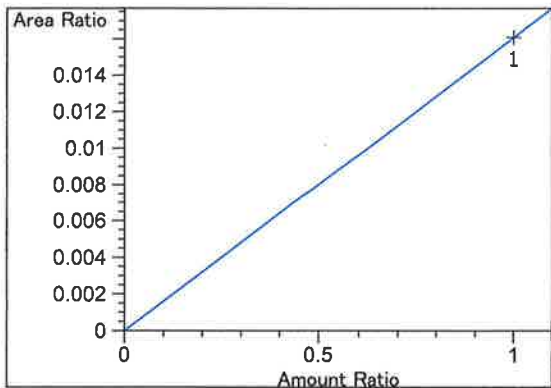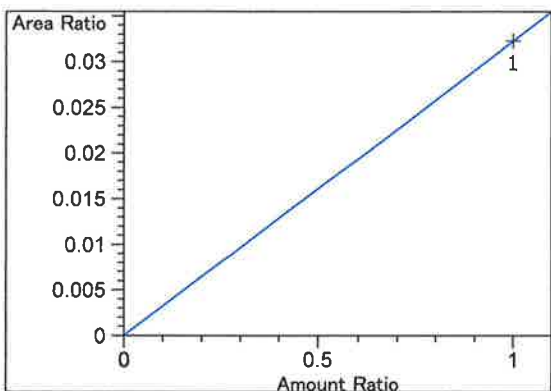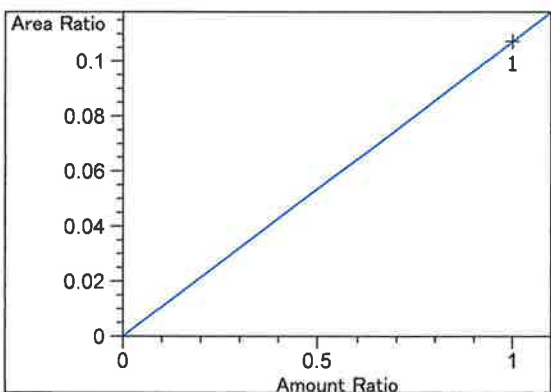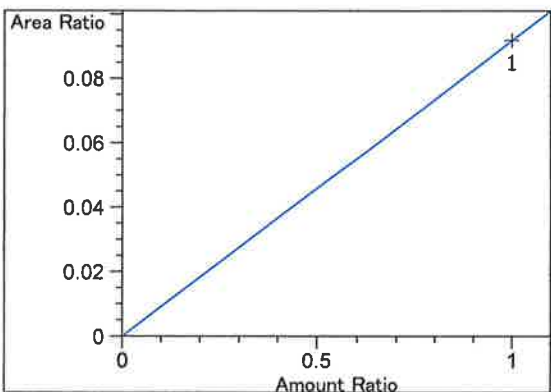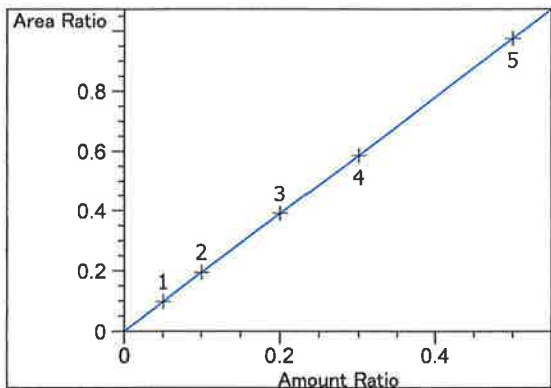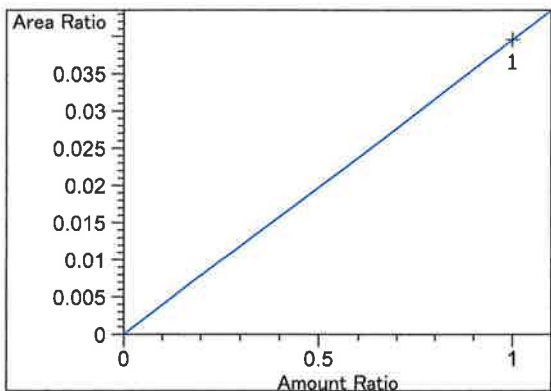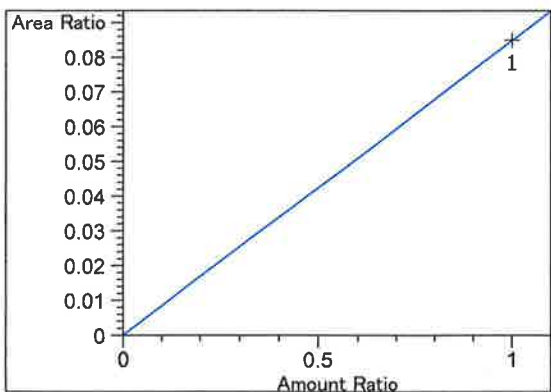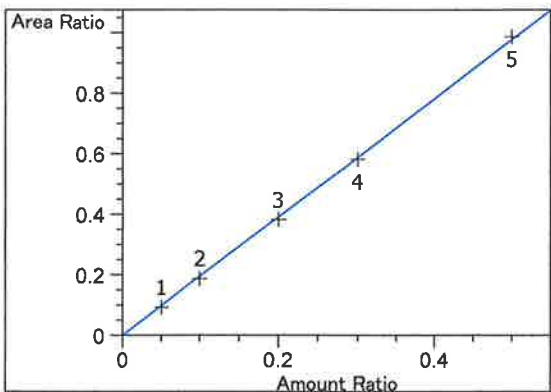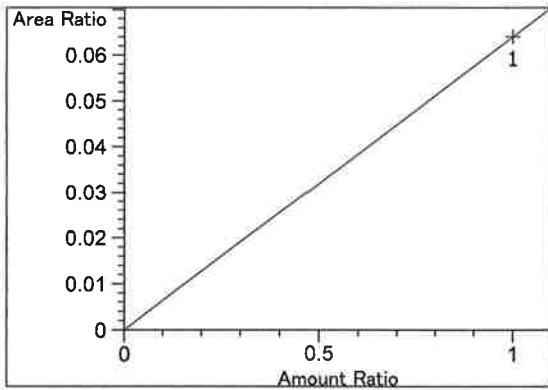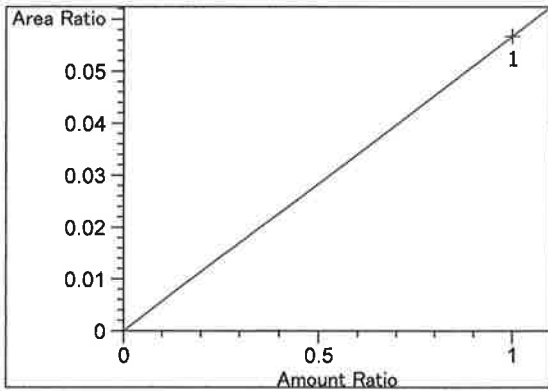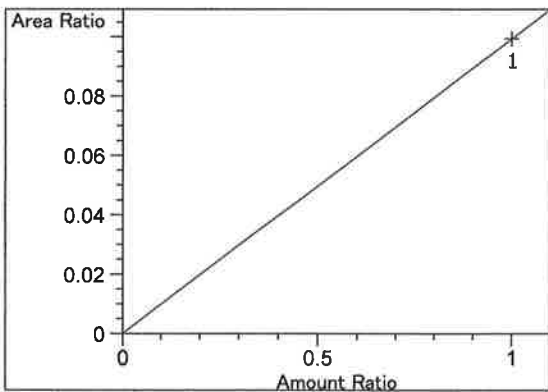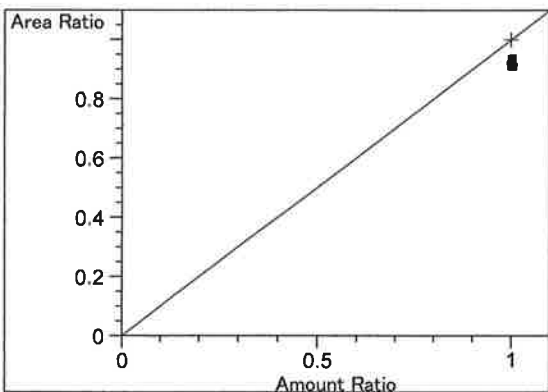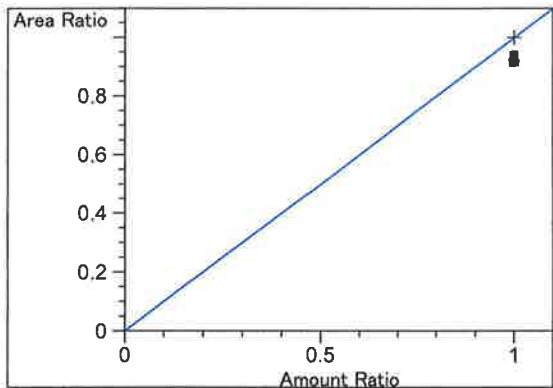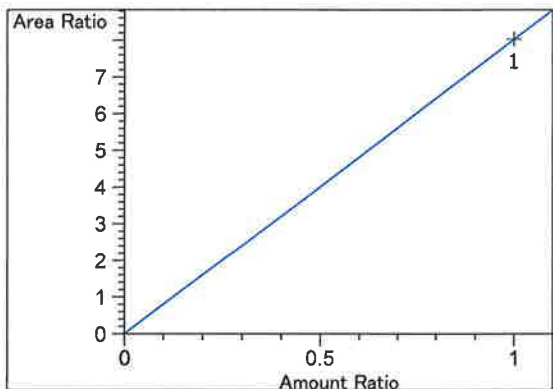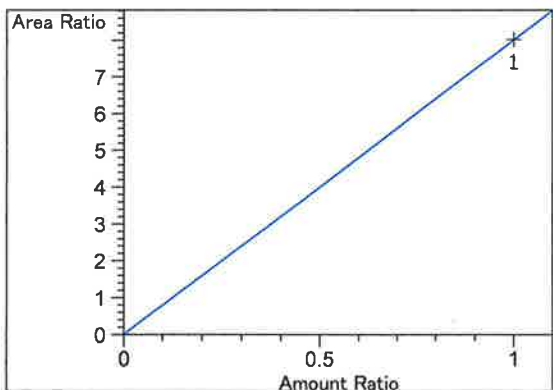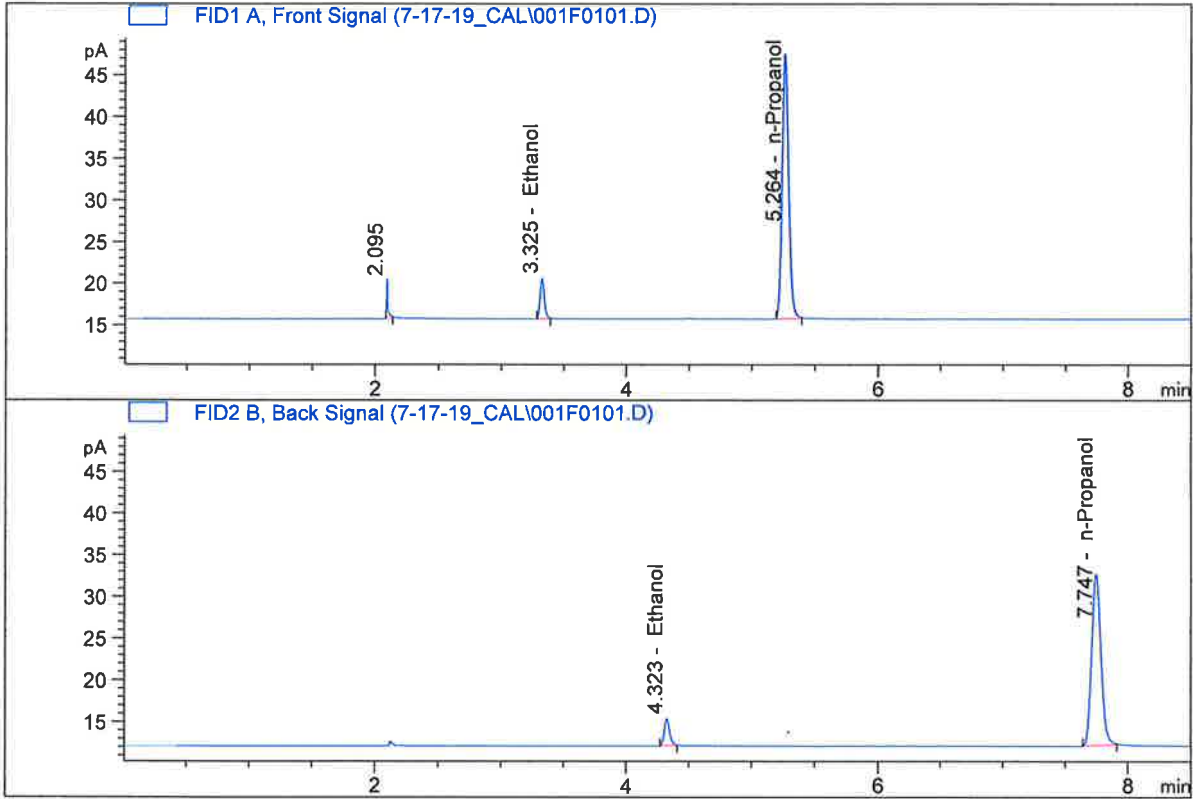Sample Name      :   0.050
Laboratory       :   Pocatello
Injection Date   :   Jul 17, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN10742043-IT00741010
```



| # | Compound | ∖ Column | Area | Amount | Units |
|---|----------|----------|------|--------|-------|
| 1. | Ethanol | Column 1: | 11.24552 | 0.0503 | g/100cc |
| 2. | Ethanol | Column 2: | 9.89831 | 0.0470 | g/100cc |
| 3. | n-Propanol | Column 1: | 114.53136 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 107.67130 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :    0.100
Laboratory       :    Pocatello
Injection Date   :    Jul 17, 2019
Method           :    ALCOHOL.M
Acq. Instrument:      CN10742043-IT00741010
```



FID1 A, Front Signal (7-17-19_CAL\002F0201.D)



FID2 B, Back Signal (7-17-19_CAL\002F0201.D)

| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 23.17593 | 0.1000 | g/100cc |
| 2. | Ethanol | Column 2: | 20.86200 | 0.0955 | g/100cc |
| 3. | n-Propanol | Column 1: | 118.69321 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 111.68879 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name       :   0.200
Laboratory        :   Pocatello
Injection Date    :   Jul 17, 2019
Method            :   ALCOHOL.M
Acq. Instrument:      CN10742043-IT00741010



FID1 A, Front Signal (7-17-19_CAL\003F0301.D)

3.322 - Ethanol
5.264 - n-Propanol

FID2 B, Back Signal (7-17-19_CAL\003F0301.D)

4.319 - Ethanol
7.748 - n-Propanol

| #  | Compound   | Column    | Area      | Amount | Units   |
|----|------------|-----------|-----------|--------|---------|
| 1. | Ethanol    | Column 1: | 47.58701  | 0.2005 | g/100cc |
| 2. | Ethanol    | Column 2: | 43.60284  | 0.1954 | g/100cc |
| 3. | n-Propanol | Column 1: | 121.52397 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 114.04659 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
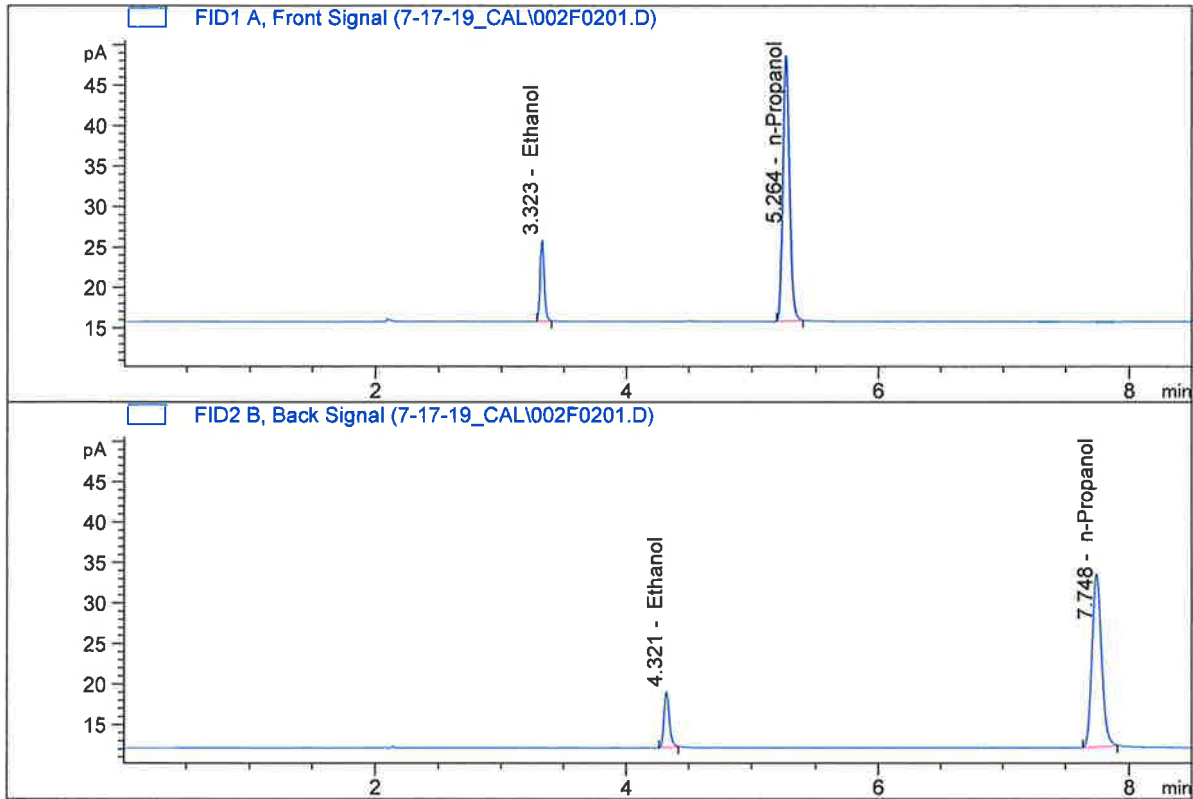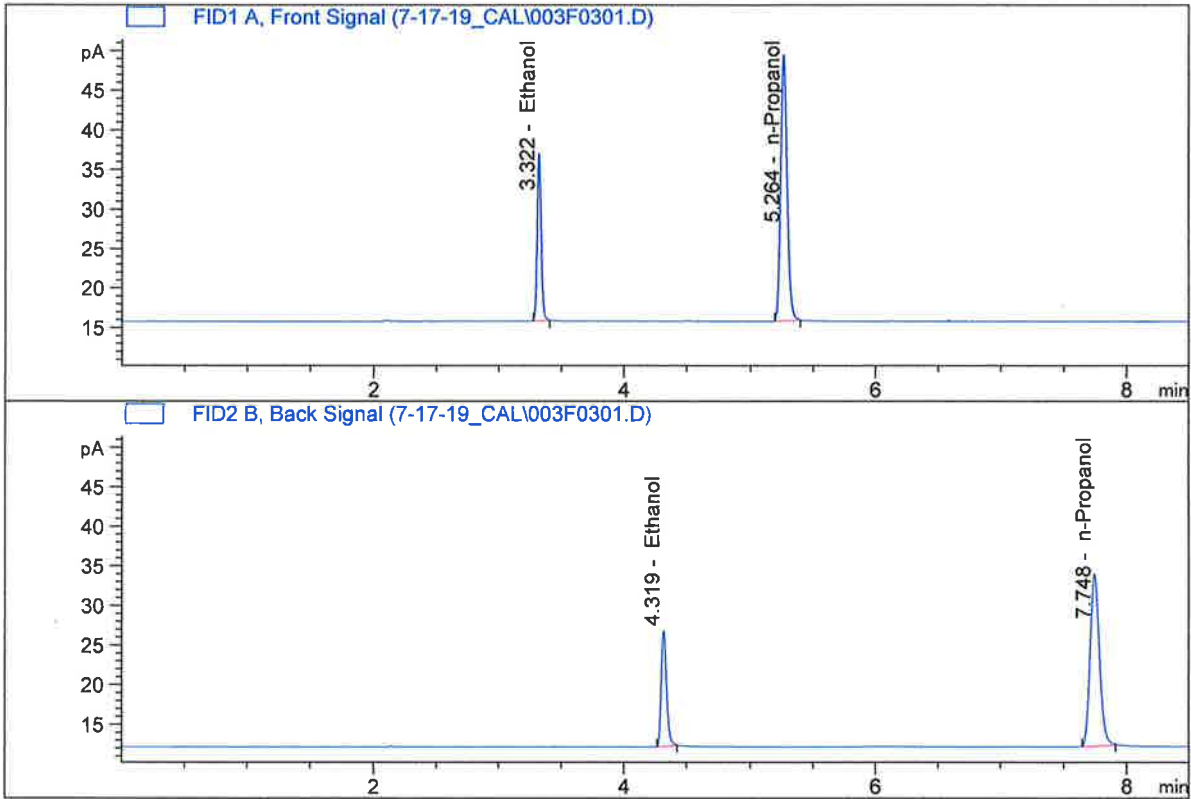Sample Name      :   0.300
Laboratory       :   Pocatello
Injection Date :   Jul 17, 2019
Method           :   ALCOHOL.M
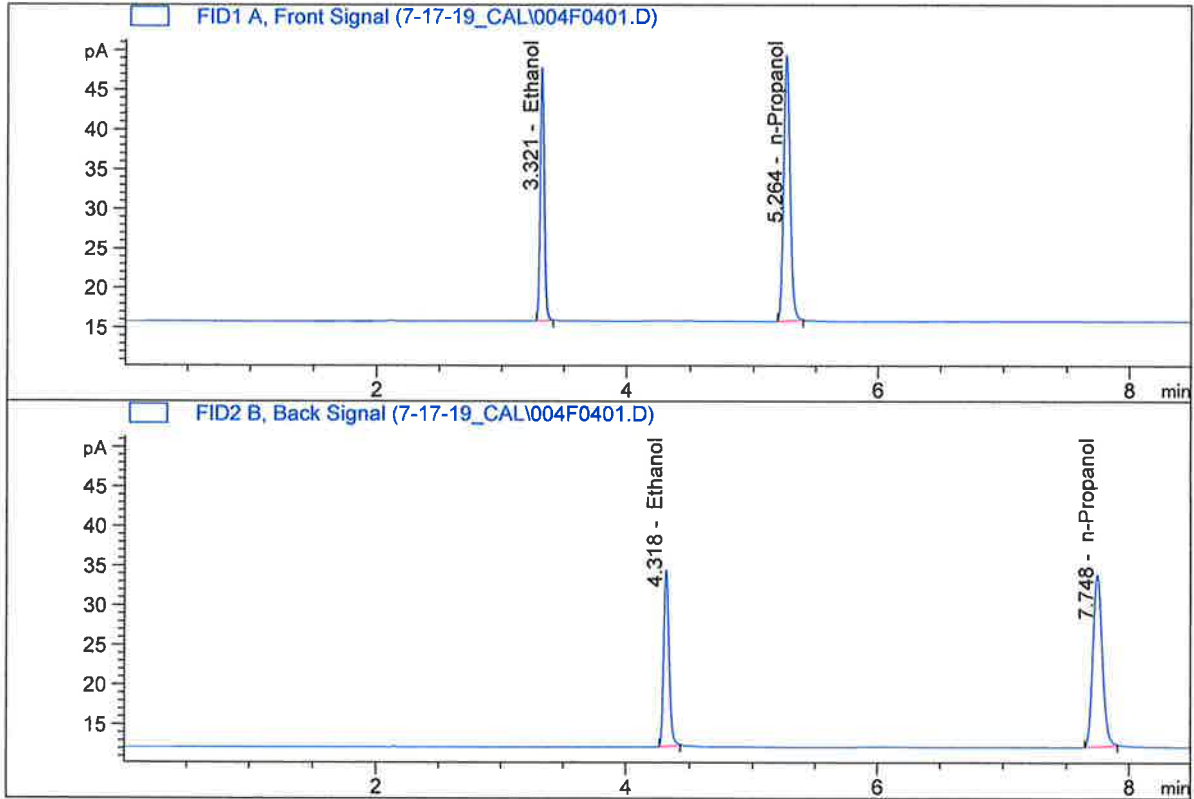Acq. Instrument:   CN10742043-IT00741010
```



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 71.13099 | 0.2998 | g/100cc |
| 2. | Ethanol | Column 2: | 65.93835 | 0.2970 | g/100cc |
| 3. | n-Propanol | Column 1: | 121.45603 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 113.44197 | 1.0000 | g/100cc |

ISP Forensic Services Blood Alcohol Report

Sample Name      :    0.500
Laboratory       :    Pocatello
Injection Date   :    Jul 17, 2019
Method           :    ALCOHOL.M
Acq. Instrument:      CN10742043-IT00741010



| #  | Compound    | Column    | Area      | Amount | Units   |
|----|-------------|-----------|-----------|--------|---------|
| 1. | Ethanol     | Column 1: | 119.44300 | 0.4999 | g/100cc |
| 2. | Ethanol     | Column 2: | 112.16538 | 0.5048 | g/100cc |
| 3. | n-Propanol  | Column 1: | 122.33713 | 1.0000 | g/100cc |
| 4. | n-Propanol  | Column 2: | 113.54844 | 1.0000 | g/100cc |

ISP Forensic Services Blood Alcohol Report

```
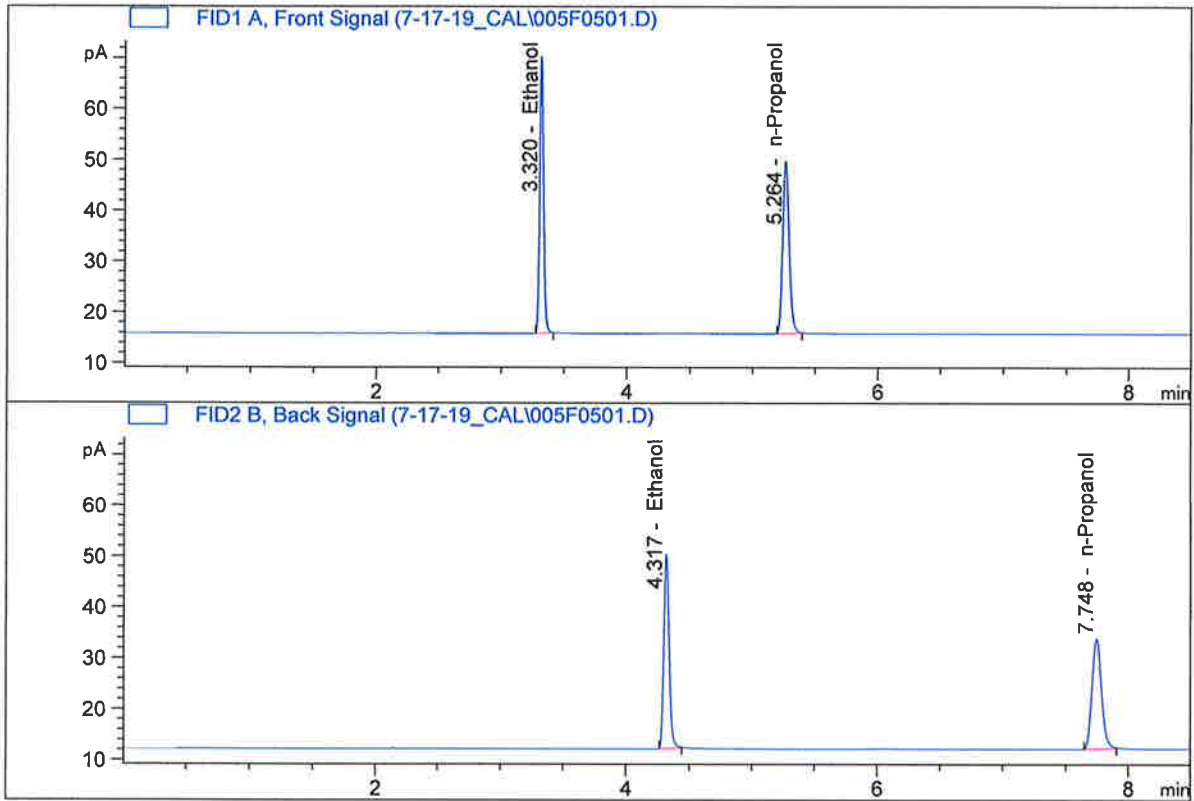Sample Name      :    ISTD BLANK-1
Laboratory       :    Pocatello
Injection Date   :    Jul 17, 2019
Method           :    ALCOHOL.M
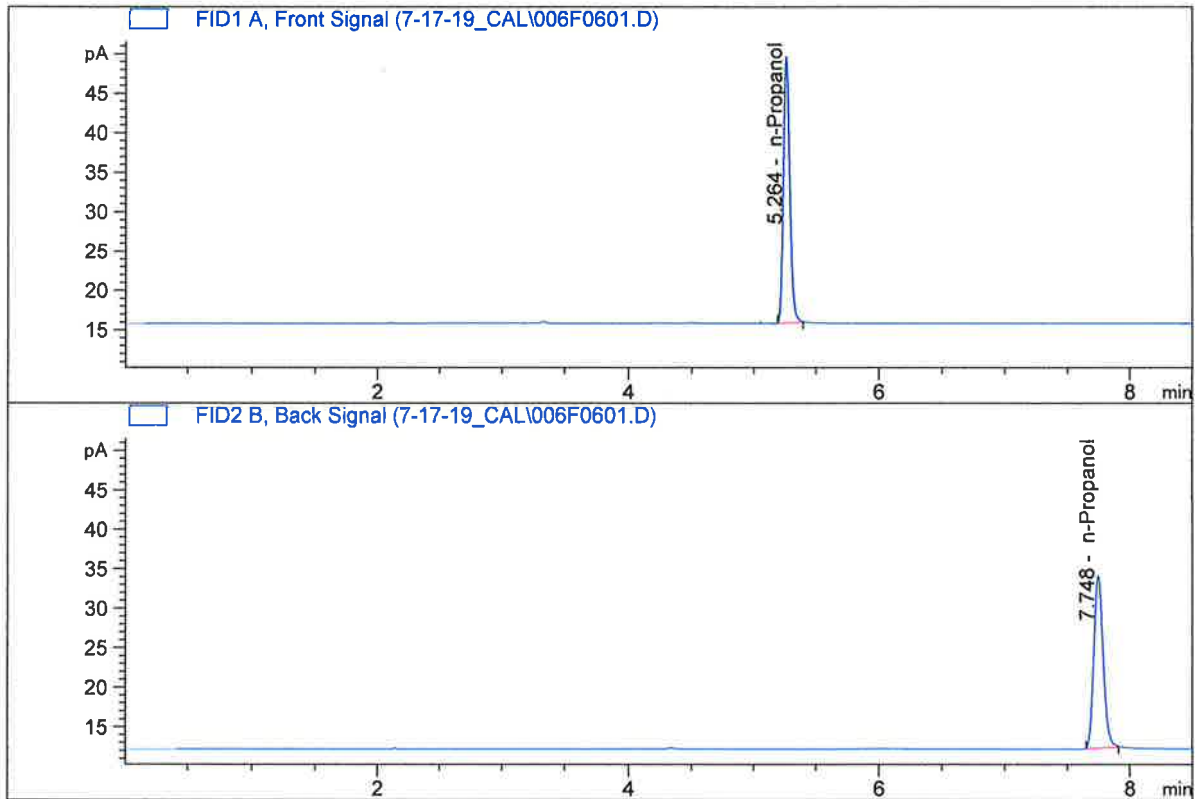Acq. Instrument:      CN10742043-IT00741010
```



| # | 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: | 121.61658 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 114.57539 | 1.0000 | g/100cc |

# S a m p l e     S u m m a r y

Sequence table:        C:\Chem32\1\TEMP\AESEQ\QS_17.07.2019_11.33.58\071719_CALS.S
Data directory path:   C:\Chem32\1\Data\7-17-19_CAL
Logbook:               C:\Chem32\1\Data\7-17-19_CAL\071719_CALS.LOG
Sequence start:        7/17/2019 11:47:42 AM
Sequence Operator:     SYSTEM
Operator:              SYSTEM

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

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

# ISP Forensic Services Blood Alcohol Report

```
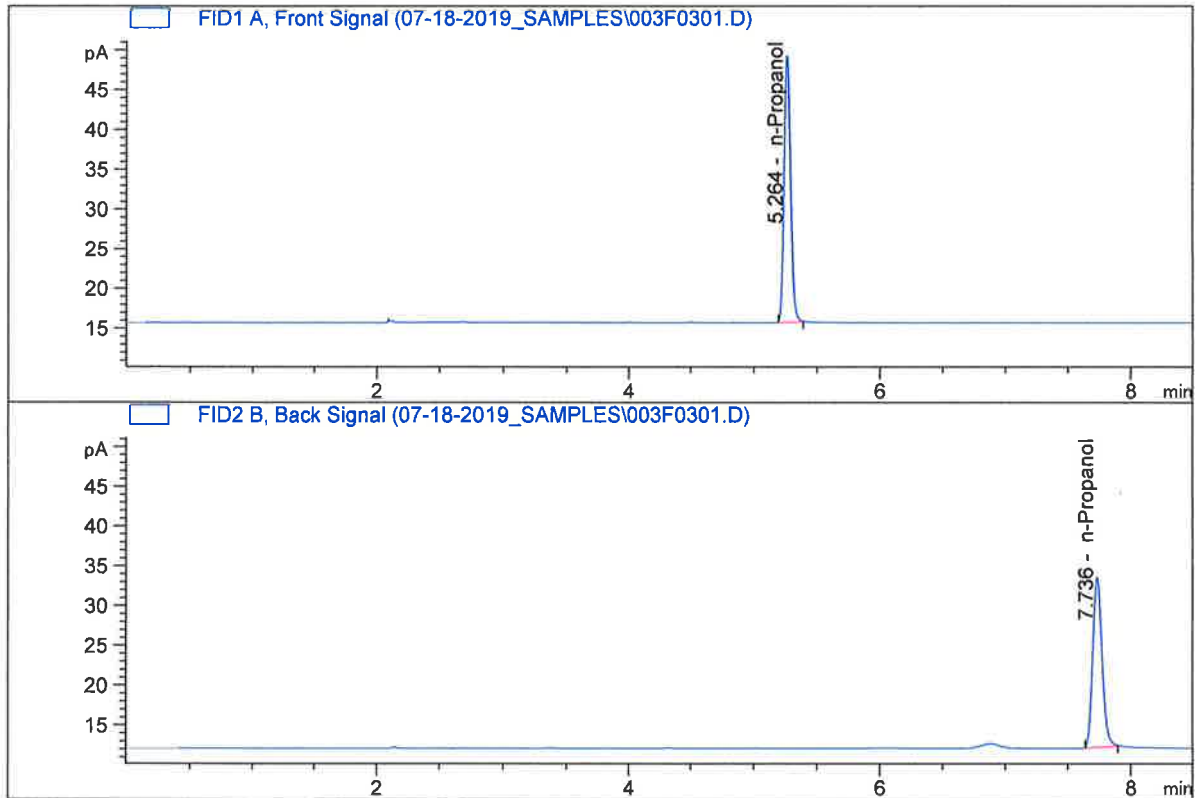Sample Name      :    INTERNAL STD
Laboratory       :    Pocatello
Injection Date   :    Jul 18, 2019
Method           :    ALCOHOL.M
Acq. Instrument:      CN10742043-IT00741010
```



| # | 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: | 120.03642 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 111.98744 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   MULTI-COMP MIX
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN10742043-IT00741010
```



FID1 A, Front Signal (07-18-2019_SAMPLES\002F0201.D)

FID2 B, Back Signal (07-18-2019_SAMPLES\002F0201.D)

| #  | Compound   | Column    | Area      | Amount | Units   |
|----|------------|-----------|-----------|--------|---------|
| 1. | Ethanol    | Column 1: | 15.54397  | 0.0692 | g/100cc |
| 2. | Ethanol    | Column 2: | 12.95491  | 0.0640 | g/100cc |
| 3. | n-Propanol | Column 1: | 114.97078 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 103.48135 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

Sample Name       :   INTERNAL STD BLK
Laboratory        :   Pocatello
Injection Date    :   Jul 18, 2019
Method            :   ALCOHOL.M
Acq. Instrument:      CN10742043-IT00741010



| # | 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: | 112.03729 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 104.73766 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC1-1**          **Analysis Date(s): 18 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| **Sample Results** | 0.0774 | 0.0715 | 0.0059 | 0.0744 | | |
| **(g/100cc)** | 0.0774 | 0.0718 | 0.0056 | 0.0746 | 0.0745 | |

## 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: MD96JF1032

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

| Overall Mean (g/100cc) | | Low | High | 5% of Mean |
|---|---|---|---|---|
| 0.074 | | 0.070 | 0.078 | 0.004 |

| | **Reported Result** | |
|---|---|---|
| | 0.074 | |

*Calibration and control data are stored centrally.*

ISP Forensic Services Blood Alcohol Report

```
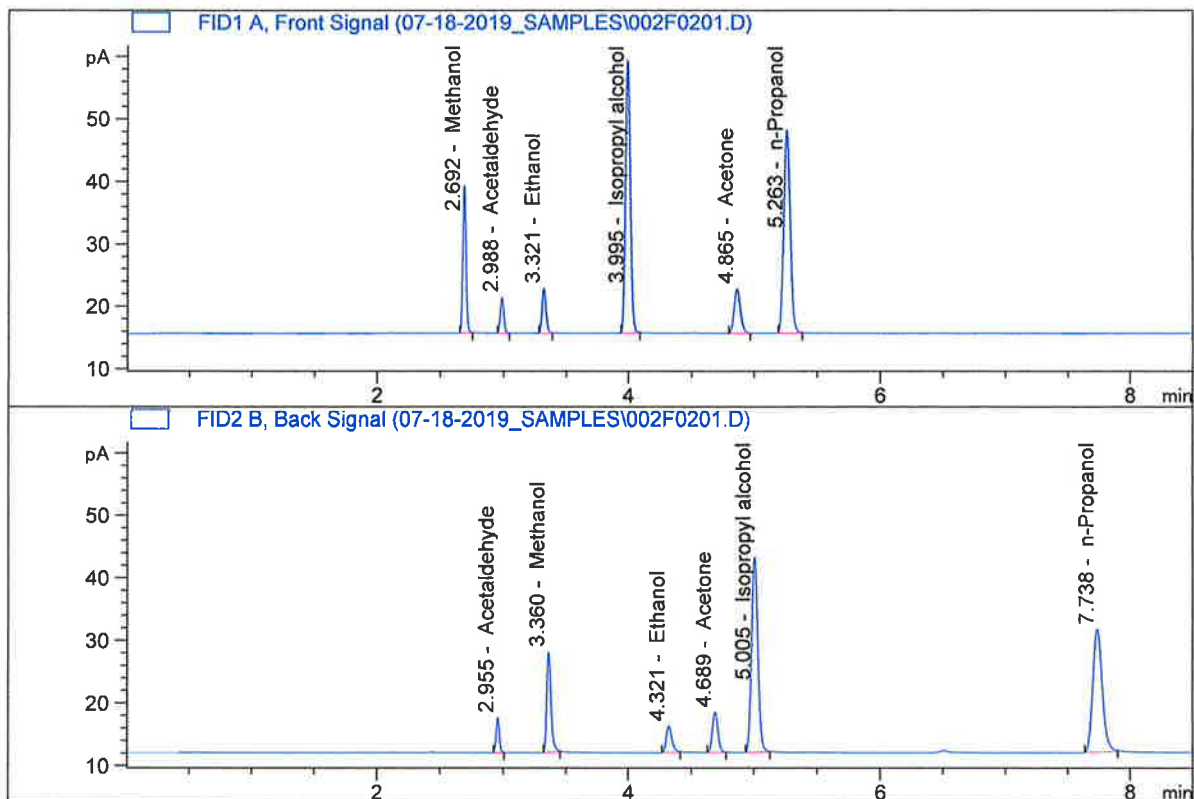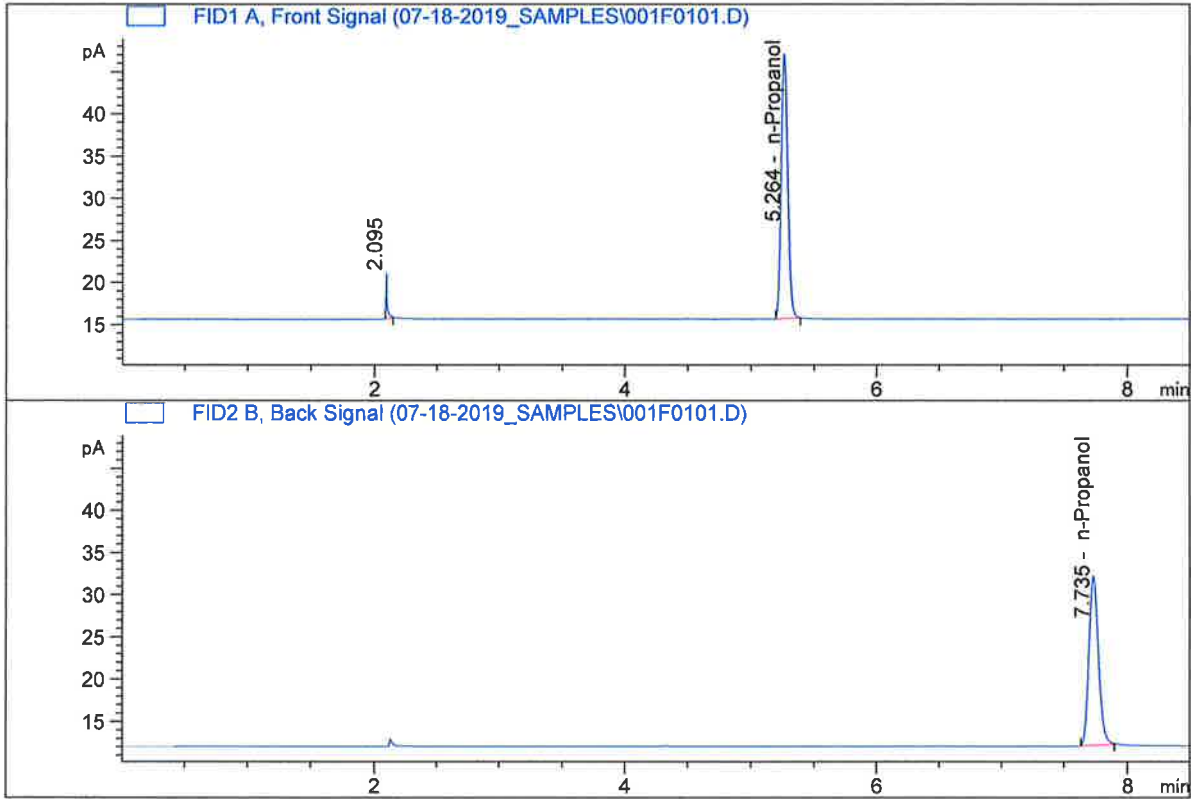Sample Name      :   QC1-1-A
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN10742043-IT00741010
```



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 18.56554 | 0.0774 | g/100cc |
| 2. | Ethanol | Column 2: | 16.03185 | 0.0715 | g/100cc |
| 3. | n-Propanol | Column 1: | 122.73705 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 114.51231 | 1.0000 | g/100cc |

ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   QC1-1-B
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
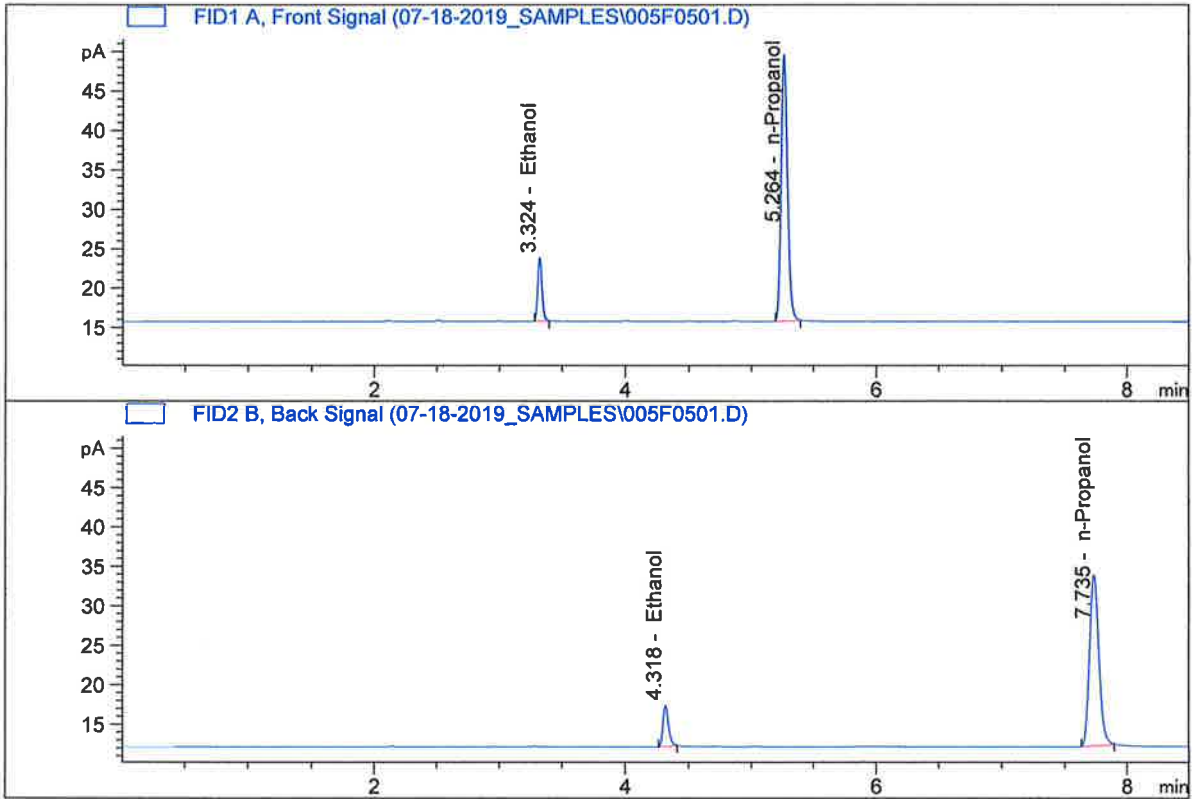Acq. Instrument:     CN10742043-IT00741010
```



FID1 A, Front Signal (07-18-2019_SAMPLES\005F0501.D)

3.324 - Ethanol
5.264 - n-Propanol

FID2 B, Back Signal (07-18-2019_SAMPLES\005F0501.D)

4.318 - Ethanol
7.735 - n-Propanol

| #  | Compound    | Column     | Area      | Amount | Units   |
|----|-------------|------------|-----------|--------|---------|
| 1. | Ethanol     | Column 1:  | 18.37598  | 0.0774 | g/100cc |
| 2. | Ethanol     | Column 2:  | 15.95253  | 0.0718 | g/100cc |
| 3. | n-Propanol  | Column 1:  | 121.55263 | 1.0000 | g/100cc |
| 4. | n-Propanol  | Column 2:  | 113.46773 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: 08 QA**         **Analysis Date(s): 18 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| **Sample Results** | 0.0809 | 0.0759 | 0.0050 | 0.0784 | | |
| **(g/100cc)** | 0.0789 | 0.0741 | 0.0048 | 0.0765 | 0.0774 | |

## 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: MD96JF1032

## 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.*

ISP Forensic Services Blood Alcohol Report

```
Sample Name      :    08 QA-A
Laboratory       :    Pocatello
Injection Date   :    Jul 18, 2019
Method           :    ALCOHOL.M
Acq. Instrument:      CN10742043-IT00741010
```



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 19.12496 | 0.0809 | g/100cc |
| 2. | Ethanol | Column 2: | 16.78258 | 0.0759 | g/100cc |
| 3. | n-Propanol | Column 1: | 121.10763 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 113.05896 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   08 QA-B
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
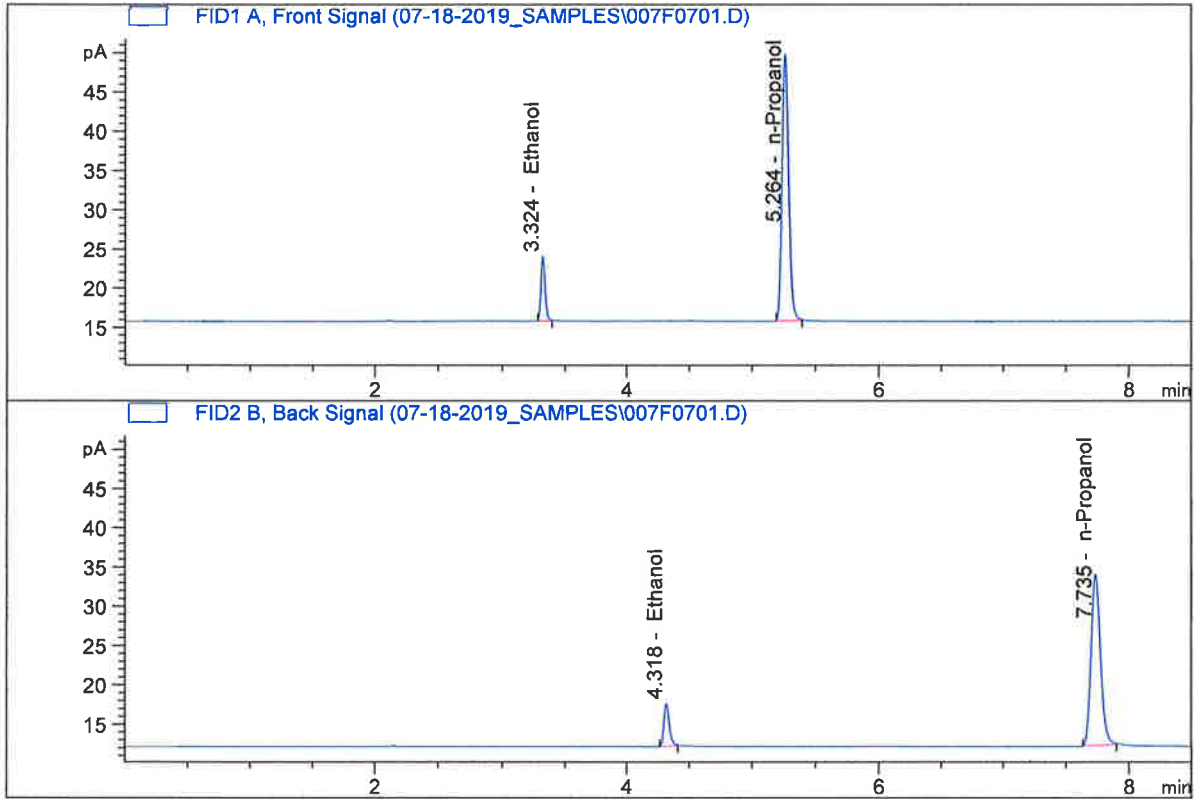Acq. Instrument:     CN10742043-IT00741010
```



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 18.88171 | 0.0789 | g/100cc |
| 2. | Ethanol | Column 2: | 16.55978 | 0.0741 | g/100cc |
| 3. | n-Propanol | Column 1: | 122.45656 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 114.25085 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC2-1**　　　　　　**Analysis Date(s): 18 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| **Sample Results** | 0.1982 | 0.1928 | 0.0054 | 0.1955 | | |
| **(g/100cc)** | 0.1986 | 0.1927 | 0.0059 | 0.1956 | 0.1955 | |

## 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: MD96JF1032

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

| Overall Mean (g/100cc) | | Low | High | 5% of Mean |
|---|---|---|---|---|
| 0.195 | | 0.185 | 0.205 | 0.010 |

| | Reported Result | |
|---|---|---|
| | 0.195 | |

*Calibration and control data are stored centrally.*

Revision: 1
Issue Date: 01/04/2019
Issuing Authority: Quality Manager

ISP Forensic Services Blood Alcohol Report

```
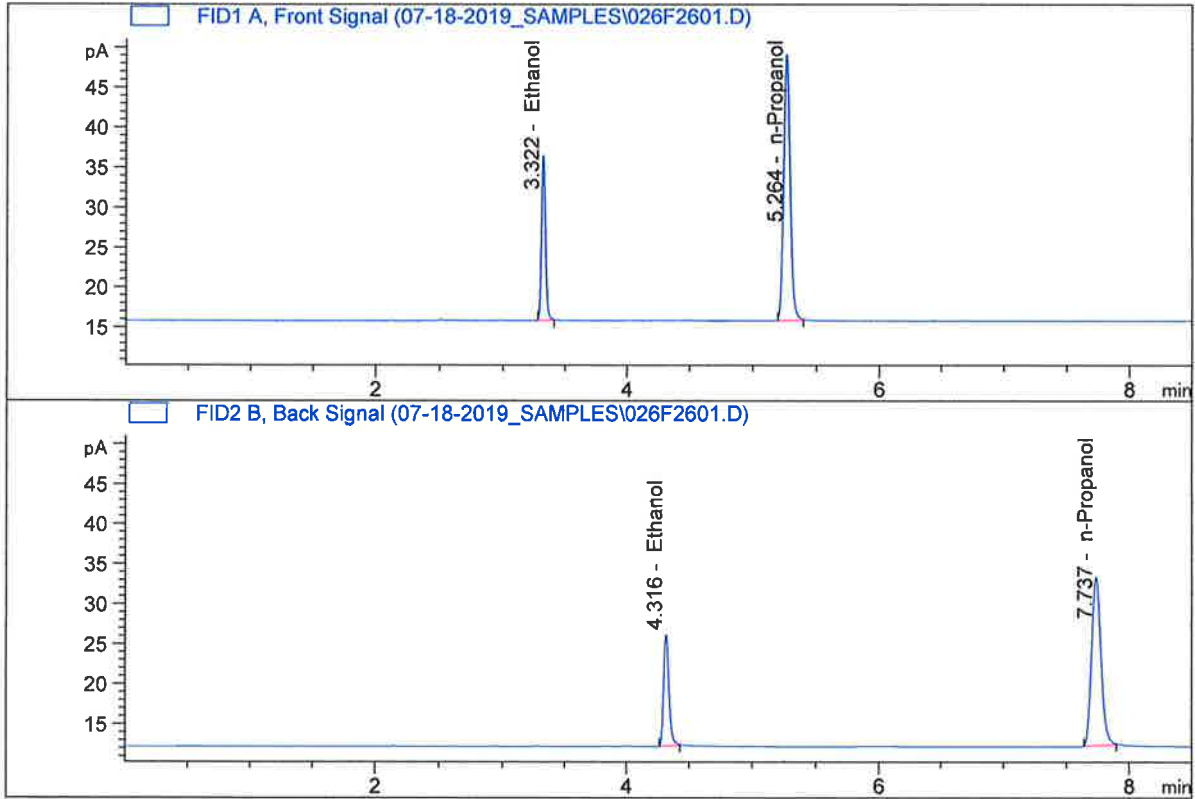Sample Name      :   QC2-1-A
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN10742043-IT00741010
```



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 46.22697 | 0.1982 | g/100cc |
| 2. | Ethanol | Column 2: | 41.82424 | 0.1928 | g/100cc |
| 3. | n-Propanol | Column 1: | 119.43518 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 110.87720 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
Sample Name      :   QC2-1-B
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
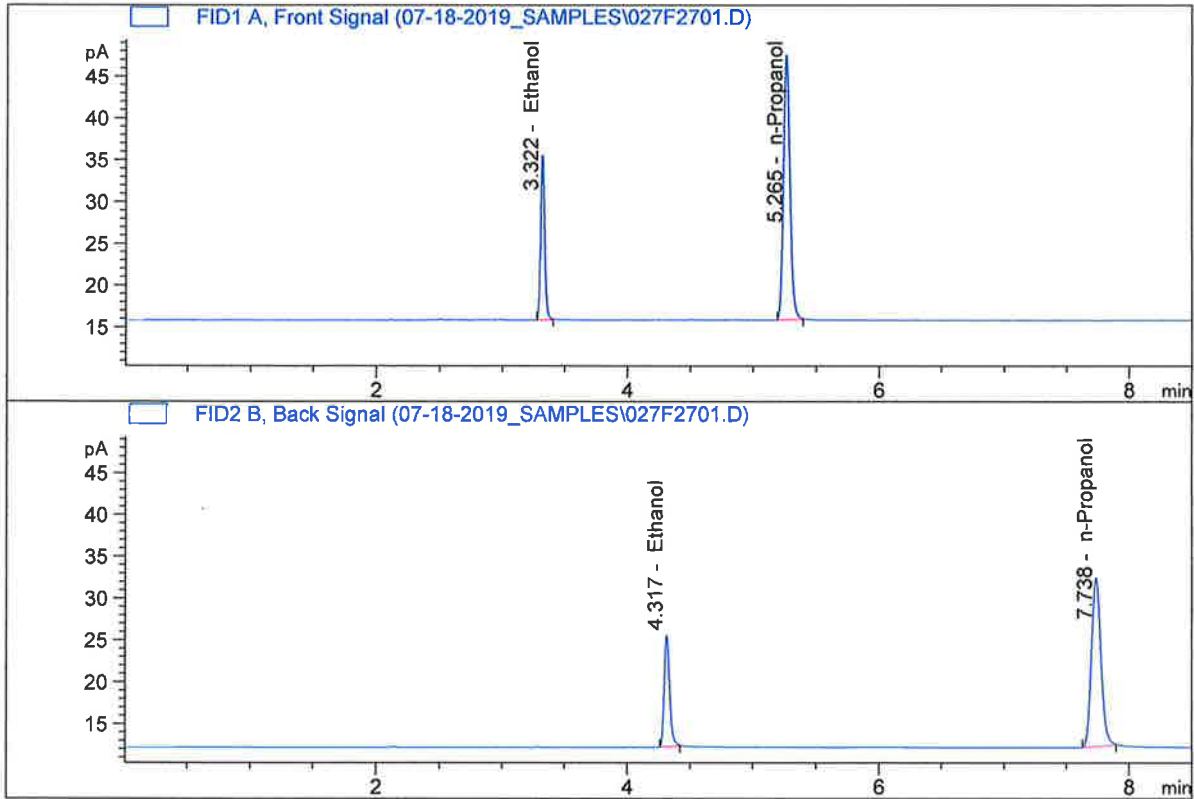Acq. Instrument:     CN10742043-IT00741010
```



FID1 A, Front Signal (07-18-2019_SAMPLES\027F2701.D)

FID2 B, Back Signal (07-18-2019_SAMPLES\027F2701.D)

| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 44.28101 | 0.1986 | g/100cc |
| 2. | Ethanol | Column 2: | 40.05123 | 0.1927 | g/100cc |
| 3. | n-Propanol | Column 1: | 114.16435 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 106.24070 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC1-2**                    **Analysis Date(s): 18 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| Sample Results | 0.0809 | 0.0751 | 0.0058 | 0.0780 | 0.0780 | |
| (g/100cc) | 0.0809 | 0.0754 | 0.0055 | 0.0781 | | |

## 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: MD96JF1032

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

| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.078 | 0.074 | 0.082 | 0.004 |

| | Reported Result | |
|---|---|---|
| | 0.078 | |

*Calibration and control data are stored centrally.*

Revision: 1
Issue Date: 01/04/2019
Issuing Authority: Quality Manager

ISP Forensic Services Blood Alcohol Report

Sample Name      :   QC1-2-A
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN10742043-IT00741010



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 16.68747 | 0.0809 | g/100cc |
| 2. | Ethanol | Column 2: | 14.52743 | 0.0751 | g/100cc |
| 3. | n-Propanol | Column 1: | 105.59503 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 98.87681 | 1.0000 | g/100cc |

# ISP Forensic Services Blood Alcohol Report

```
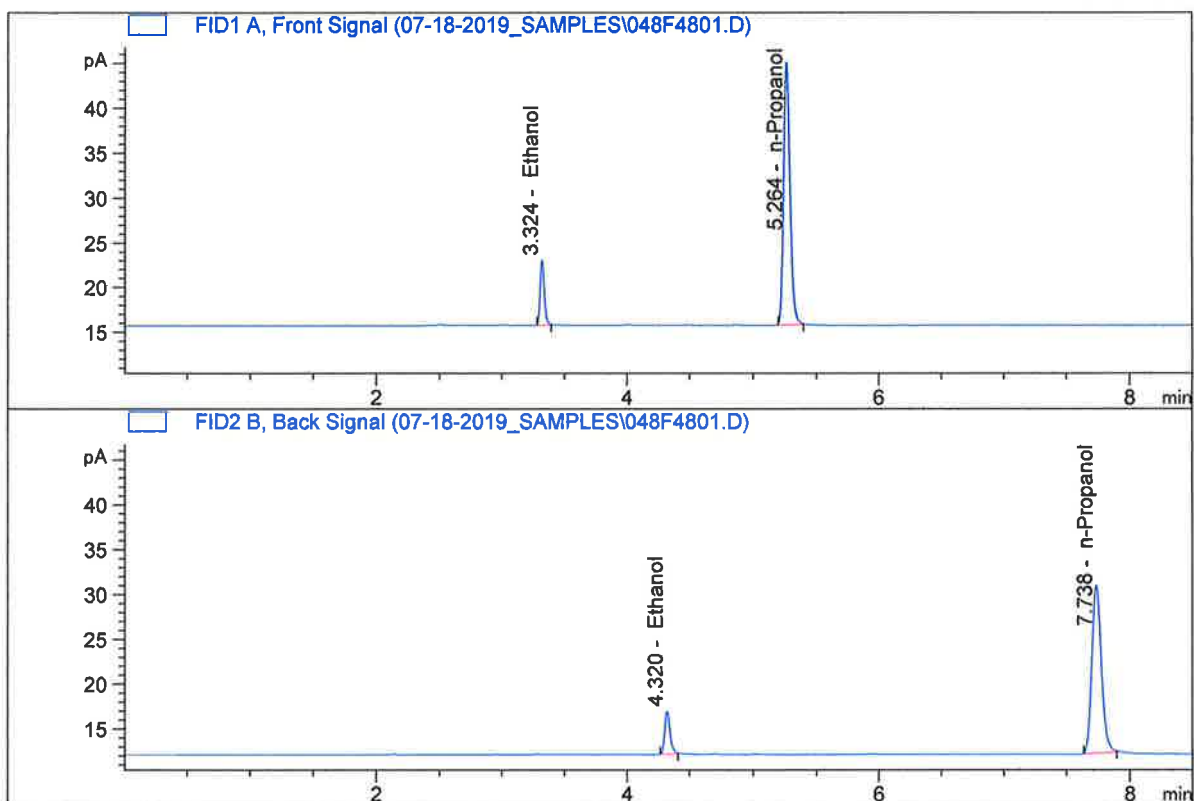Sample Name      :   QC1-2-B
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
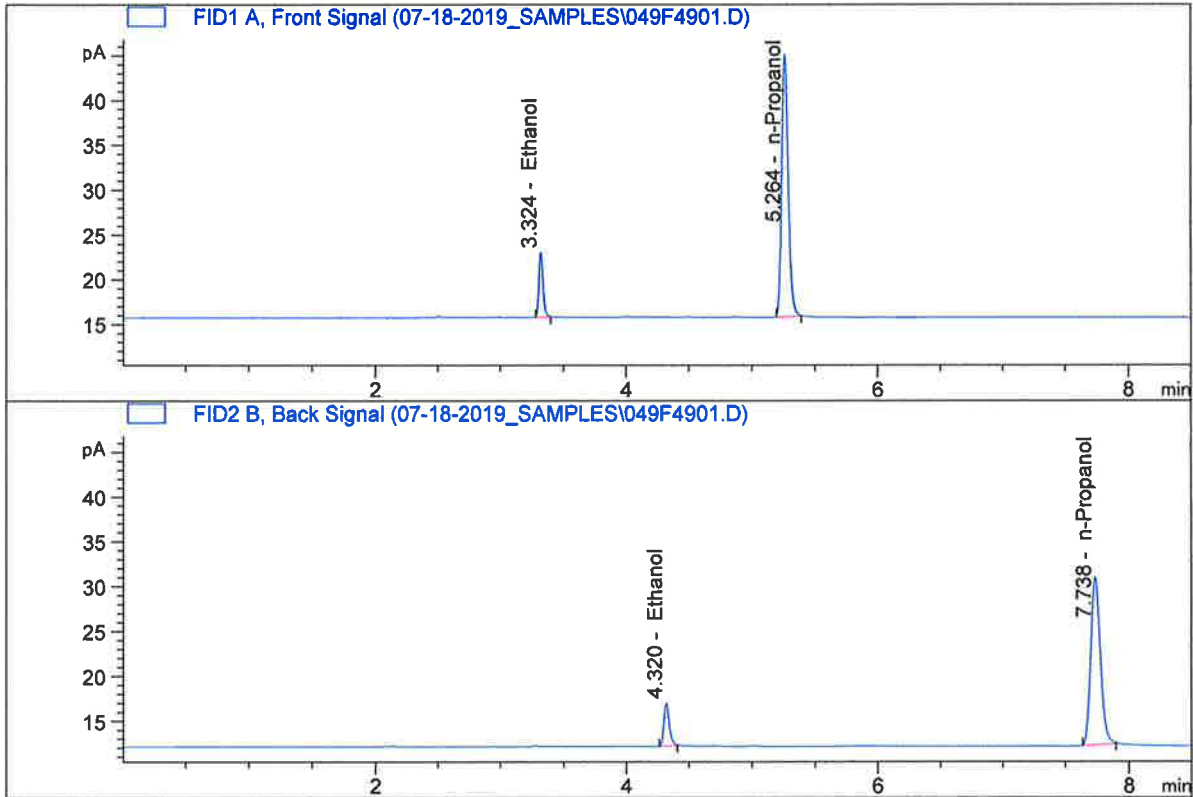Acq. Instrument:     CN10742043-IT00741010
```



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 16.66580 | 0.0809 | g/100cc |
| 2. | Ethanol | Column 2: | 14.55951 | 0.0754 | g/100cc |
| 3. | n-Propanol | Column 1: | 105.41868 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 98.73325 | 1.0000 | g/100cc |

# VOLATILES DETERMINATION CASEFILE WORKSHEET

**Laboratory No.: QC2-2**　　　　　　　**Analysis Date(s): 18 Jul 2019**

| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Over-all Mean | |
|---|---|---|---|---|---|---|
| **Sample Results** | 0.2033 | 0.1969 | 0.0064 | 0.2001 | 0.2008 | |
| **(g/100cc)** | 0.2049 | 0.1984 | 0.0065 | 0.2016 | | |

## 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: MD96JF1032

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

| Overall Mean (g/100cc) | Low | High | 5% of Mean |
|---|---|---|---|
| 0.200 | 0.190 | 0.210 | 0.010 |

| | Reported Result | |
|---|---|---|
| | 0.200 | |

*Calibration and control data are stored centrally.*

ISP Forensic Services Blood Alcohol Report

```
Sample Name       :   QC2-2-A
Laboratory        :   Pocatello
Injection Date    :   Jul 18, 2019
Method            :   ALCOHOL.M
Acq. Instrument:      CN10742043-IT00741010
```



| # | Compound | Column | Area | Amount | Units |
|---|----------|--------|------|--------|-------|
| 1. | Ethanol | Column 1: | 42.46832 | 0.2033 | g/100cc |
| 2. | Ethanol | Column 2: | 38.42679 | 0.1969 | g/100cc |
| 3. | n-Propanol | Column 1: | 106.92686 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 99.75143 | 1.0000 | g/100cc |

ISP Forensic Services Blood Alcohol Report

Sample Name      :   QC2-2-B
Laboratory       :   Pocatello
Injection Date   :   Jul 18, 2019
Method           :   ALCOHOL.M
Acq. Instrument:     CN10742043-IT00741010



| #  | Compound    | Column    | Area      | Amount | Units   |
|----|-------------|-----------|-----------|--------|---------|
| 1. | Ethanol     | Column 1: | 42.32161  | 0.2049 | g/100cc |
| 2. | Ethanol     | Column 2: | 38.28200  | 0.1984 | g/100cc |
| 3. | n-Propanol  | Column 1: | 105.74004 | 1.0000 | g/100cc |
| 4. | n-Propanol  | Column 2: | 98.60413  | 1.0000 | g/100cc |

ISP Forensic Services Blood Alcohol Report

```
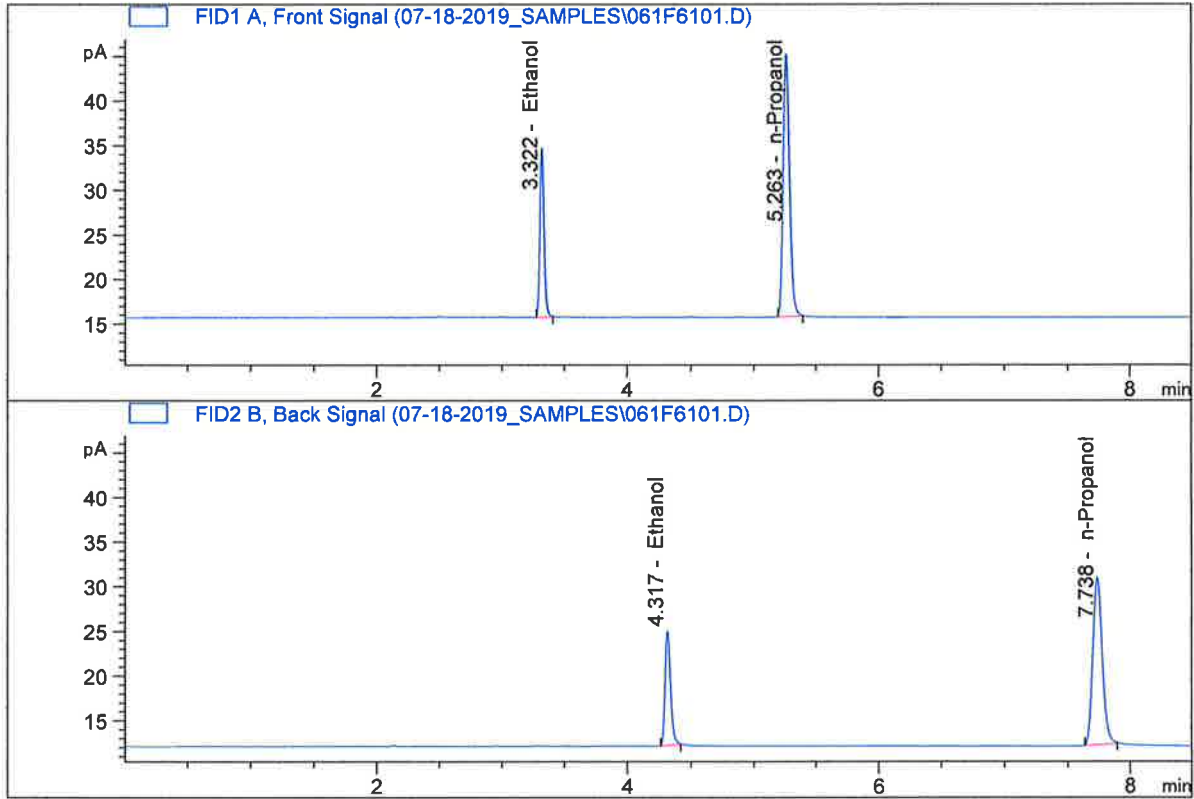Sample Name     :    INT STD BLK
Laboratory      :    Pocatello
Injection Date  :    Jul 18, 2019
Method          :    ALCOHOL.M
Acq. Instrument:     CN10742043-IT00741010
```



| # | 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: | 101.69812 | 1.0000 | g/100cc |
| 4. | n-Propanol | Column 2: | 95.55472 | 1.0000 | g/100cc |

S a m p l e    S u m m a r y

Sequence table:        C:\Chem32\1\TEMP\AESEQ\QS_18.07.2019_08.35.02\07-18-19_SAMPLES.S
Data directory path: C:\Chem32\1\Data\07-18-2019_SAMPLES
Logbook:               C:\Chem32\1\Data\07-18-2019_SAMPLES\07-18-19_SAMPLES.LOG
Sequence start:        7/18/2019 9:27:12 AM
Sequence Operator:     SYSTEM
Operator:              SYSTEM

Method file name:      C:\CHEM32\1\METHODS\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 | MULTI-COMP MIX | - | 1.0000 | 002F0201.D | | 12 |
| 3 | 3 | 1 | INTERNAL STD | - | 1.0000 | 003F0301.D | | 2 |
| 4 | 4 | 1 | QC1-1-A | - | 1.0000 | 004F0401.D | | 4 |
| 5 | 5 | 1 | QC1-1-B | - | 1.0000 | 005F0501.D | | 4 |
| 6 | 6 | 1 | 08 QA-A | - | 1.0000 | 006F0601.D | | 4 |
| 7 | 7 | 1 | 08 QA-B | - | 1.0000 | 007F0701.D | | 4 |
| 8 | 8 | 1 | P2019-1913-1-A | - | 1.0000 | 008F0801.D | | 6 |
| 9 | 9 | 1 | P2019-1913-1-B | - | 1.0000 | 009F0901.D | | 6 |
| 10 | 10 | 1 | P2019-1920-1-A | - | 1.0000 | 010F1001.D | | 6 |
| 11 | 11 | 1 | P2019-1920-1-B | - | 1.0000 | 011F1101.D | | 6 |
| 12 | 12 | 1 | P2019-1926-1-A | - | 1.0000 | 012F1201.D | | 4 |
| 13 | 13 | 1 | P2019-1926-1-B | - | 1.0000 | 013F1301.D | | 4 |
| 14 | 14 | 1 | P2019-1955-1-A | - | 1.0000 | 014F1401.D | | 6 |
| 15 | 15 | 1 | P2019-1955-1-B | - | 1.0000 | 015F1501.D | | 6 |
| 16 | 16 | 1 | P2019-1962-1-A | - | 1.0000 | 016F1601.D | | 6 |
| 17 | 17 | 1 | P2019-1962-1-B | - | 1.0000 | 017F1701.D | | 6 |
| 18 | 18 | 1 | P2019-1987-1-A | - | 1.0000 | 018F1801.D | | 6 |
| 19 | 19 | 1 | P2019-1987-1-B | - | 1.0000 | 019F1901.D | | 6 |
| 20 | 20 | 1 | P2019-1989-1-A | - | 1.0000 | 020F2001.D | | 6 |
| 21 | 21 | 1 | P2019-1989-1-B | - | 1.0000 | 021F2101.D | | 6 |
| 22 | 22 | 1 | P2019-1990-1-A | - | 1.0000 | 022F2201.D | | 4 |
| 23 | 23 | 1 | P2019-1990-1-B | - | 1.0000 | 023F2301.D | | 6 |
| 24 | 24 | 1 | P2019-1993-1-A | - | 1.0000 | 024F2401.D | | 4 |
| 25 | 25 | 1 | P2019-1993-1-B | - | 1.0000 | 025F2501.D | | 4 |
| 26 | 26 | 1 | QC2-1-A | - | 1.0000 | 026F2601.D | | 4 |
| 27 | 27 | 1 | QC2-1-B | - | 1.0000 | 027F2701.D | | 4 |
| 28 | 28 | 1 | P2019-1994-1-A | - | 1.0000 | 028F2801.D | | 6 |
| 29 | 29 | 1 | P2019-1994-1-B | - | 1.0000 | 029F2901.D | | 6 |
| 30 | 30 | 1 | P2019-2010-1-A | - | 1.0000 | 030F3001.D | | 6 |
| 31 | 31 | 1 | P2019-2010-1-B | - | 1.0000 | 031F3101.D | | 6 |
| 32 | 32 | 1 | P2019-2011-1-A | - | 1.0000 | 032F3201.D | | 6 |
| 33 | 33 | 1 | P2019-2011-1-B | - | 1.0000 | 033F3301.D | | 6 |
| 34 | 34 | 1 | P2019-2036-1-A | - | 1.0000 | 034F3401.D | | 4 |
| 35 | 35 | 1 | P2019-2036-1-B | - | 1.0000 | 035F3501.D | | 4 |
| 36 | 36 | 1 | P2019-2037-1-A | - | 1.0000 | 036F3601.D | | 6 |
| 37 | 37 | 1 | P2019-2037-1-B | - | 1.0000 | 037F3701.D | | 6 |
| 38 | 38 | 1 | P2019-2043-1-A | - | 1.0000 | 038F3801.D | | 6 |
| 39 | 39 | 1 | P2019-2043-1-B | - | 1.0000 | 039F3901.D | | 6 |
| 40 | 40 | 1 | P2019-2050-1-A | - | 1.0000 | 040F4001.D | | 6 |
| 41 | 41 | 1 | P2019-2050-1-B | - | 1.0000 | 041F4101.D | | 6 |
| 42 | 42 | 1 | P2019-2060-1-A | - | 1.0000 | 042F4201.D | | 6 |
| 43 | 43 | 1 | P2019-2060-1-B | - | 1.0000 | 043F4301.D | | 6 |
| 44 | 44 | 1 | P2019-2061-1-A | - | 1.0000 | 044F4401.D | | 6 |
| 45 | 45 | 1 | P2019-2061-1-B | - | 1.0000 | 045F4501.D | | 6 |
| 46 | 46 | 1 | P2019-2062-1-A | - | 1.0000 | 046F4601.D | | 6 |

| Run # | Location | Inj # | Sample Name | Sample Amt [g/100cc] | Multip.* Dilution | File name | Cal | # Cmp |
|---|---|---|---|---|---|---|---|---|
| 47 | 47 | 1 | P2019-2062-1-B | − | 1.0000 | 047F4701.D | | 6 |
| 48 | 48 | 1 | QC1-2-A | − | 1.0000 | 048F4801.D | | 4 |
| 49 | 49 | 1 | QC1-2-B | − | 1.0000 | 049F4901.D | | 4 |
| 50 | 50 | 1 | P2019-2077-1-A | − | 1.0000 | 050F5001.D | | 6 |
| 51 | 51 | 1 | P2019-2077-1-B | − | 1.0000 | 051F5101.D | | 6 |
| 52 | 52 | 1 | P2019-2079-1-A | − | 1.0000 | 052F5201.D | | 2 |
| 53 | 53 | 1 | P2019-2079-1-B | − | 1.0000 | 053F5301.D | | 2 |
| 54 | 54 | 1 | P2019-2080-1-A | − | 1.0000 | 054F5401.D | | 4 |
| 55 | 55 | 1 | P2019-2080-1-B | − | 1.0000 | 055F5501.D | | 4 |
| 56 | 56 | 1 | P2019-2084-1-A | − | 1.0000 | 056F5601.D | | 2 |
| 57 | 57 | 1 | P2019-2084-1-B | − | 1.0000 | 057F5701.D | | 2 |
| 58 | 58 | 1 | P2019-2084-2-A | − | 1.0000 | 058F5801.D | | 2 |
| 59 | 59 | 1 | P2019-2084-2-B | − | 1.0000 | 059F5901.D | | 2 |
| 60 | 60 | 1 | QC2-2-A | − | 1.0000 | 060F6001.D | | 4 |
| 61 | 61 | 1 | QC2-2-B | − | 1.0000 | 061F6101.D | | 4 |
| 62 | 62 | 1 | INT STD BLK | − | 1.0000 | 062F6201.D | | 2 |