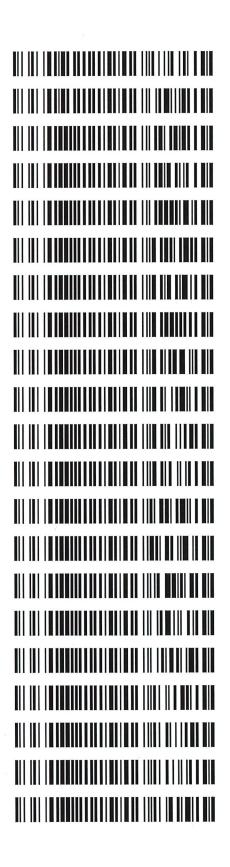
6/8/2022

REVIEWEDBy Anne Nord at 3:22 pm, Jun 10, 2022

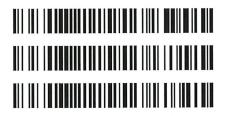
Worklist: 5972

| WOI KIISL. 33 | 12 | | |
|---------------|-------------|-----------|------------------|
| LAB CASE | <u>ITEM</u> | ITEM TYPE | DESCRIPTION |
| M2022-2030 | 1 | ВСК | Alcohol Analysis |
| M2022-2207 | 3 | вск | Alcohol Analysis |
| P2022-1521 | 1 | вск | Alcohol Analysis |
| P2022-1522 | 1 | вск | Alcohol Analysis |
| P2022-1523 | 1 | вск | Alcohol Analysis |
| P2022-1565 | 2 | вск | Alcohol Analysis |
| P2022-1568 | 1 | вск | Alcohol Analysis |
| P2022-1569 | 1 | вск | Alcohol Analysis |
| P2022-1574 | 1 | вск | Alcohol Analysis |
| P2022-1576 | 1 | BCK | Alcohol Analysis |
| P2022-1577 | 1 | вск | Alcohol Analysis |
| P2022-1578 | 1 | вск | Alcohol Analysis |
| P2022-1597 | 1 | вск | Alcohol Analysis |
| P2022-1652 | 1 | вск | Alcohol Analysis |
| P2022-1673 | 1 | вск | Alcohol Analysis |
| P2022-1689 | 1 | BCK | Alcohol Analysis |
| P2022-1691 | 1 | вск | Alcohol Analysis |
| P2022-1707 | 1 | вск | Alcohol Analysis |
| P2022-1709 | 1 | вск | Alcohol Analysis |
| P2022-1710 | 1 | вск | Alcohol Analysis |
| P2022-1712 | 1 | вск | Alcohol Analysis |



Worklist: 5972

| LAB CASE | <u>ITEM</u> | ITEM TYPE | DESCRIPTION |
|------------|-------------|-----------|------------------|
| P2022-1720 | 1 | вск | Alcohol Analysis |
| P2022-1745 | 1 | вск | Alcohol Analysis |
| P2022-1746 | 1 | BCK | Alcohol Analysis |





Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB Liquid Processor/Dilutor Serial Number:

ML600GB9897

Run Date(s): Volatiles Quality Assurance Controls

6/8/22

Calibration Date: (if different) 5/31/22 by T. Salazar

Worklist #: 597

| Control level | Expiration | Tot# | Targ | Target Value | Acceptable Range | Overall Results |
|---------------|--------------------------|---------|----------|--------------|------------------|-----------------|
| | | | | | | 0.0734 g/100cc |
| Level 1 | Jul-23 | 1907006 | 1 | 0.0764 | 0.0688-0.0840 | 0.0784 g/100cc |
| | | | | | | g/100cc |
| | | | | | | 0.2116 g/100cc |
| Level 2 | Jul-23 | 1907007 | | 0.2170 | 0.1953-0.2387 | 0.2227 g/100cc |
| | | | | | | g/100cc |
| Multi-Compo | Multi-Component mixture: | Exp: | Oct-24 | Lot # | FN06041902 | ok |
| | Curve Fit: | | Column 1 | | 0.99996 Column2 | 0.99990 |
| | | | | | | |

Ethanol Calibration Reference Material

| Trummor of | Luandi Campi actor cuco risaccina | | | | | |
|-------------------|-----------------------------------|------------------|----------|---------------------------------|-----------|---------|
| Calibrator level | Target Value | Acceptable Range | Column 1 | Column 1 Column 2 Precision | Precision | Mean |
| 50 | 0.050 | 0.045 - 0.055 | 0.0513 | 0.0521 | 8000.0 | 0.0517 |
| 100 | 0.100 | 0.090 - 0.110 | 0.0996 | 0.0995 | 1E-04 | 0.0995 |
| 200 | 0.200 | 0.180 - 0.220 | 0.1989 | 0.1983 | 0.0006 | 0.1986 |
| 300 | 0.300 | 0.270 - 0.330 | 0.2991 | 0.2984 | 0.0007 | 0.2987 |
| 400 | 0.400 | 0.360 - 0.440 | | | 0 | #DIV/0! |
| 500 | 0.500 | 0.450 - 0.550 | 0.5008 | 0.5014 | 0.0006 | 0.5011 |
| Internal Standard | Average | (-) 20% | | (+) 20% | | |
| N-Propanol: | 177089.4 | 141671.5 | | 212507.2 | | |
| | | | | | | |

Aqueous Controls

| | tadaca company | | |
|---------------|----------------|------------------|-----------------|
| Control level | Target Value | Acceptable Range | Overall Results |
| 08 | 0.080 | 0.076 - 0.084 | 0.079 g/100cc |

Revision: 4

Issue Date: 01/24/2022

Issuing Authority: Quality Manager

Internal Standard Monitoring Worksheet

| Morlist #. | 5072 | Run Date(s): | 6/8/22 |
|---|------|--------------|---|
| TOT WITH THE | | (a) and That | |
| | | | |
| THE RESIDENCE AND ASSESSED FOR THE PROPERTY ASSESSED. | | | のできた。 1900年には、1900年 |
| | | | |

| ernal Standard Solution: 052022 | Prep Date: 05/20/22 | Exp Date: 11/20/22 |
|---------------------------------|---------------------|--------------------|
|---------------------------------|---------------------|--------------------|

| Sample Name | Column 1 Value | Column 2 Value | Average |
|-------------|----------------|----------------|----------|
| 0.080 | 168596 | 180117 | 174356.5 |
| 0.080 | 168572 | 180099 | 174335.5 |
| QC1 | 168035 | 177464 | 172749.5 |
| QCI | 169166 | 180820 | 174993 |
| QCI | 171458 | 183074 | 177266 |
| QC1 | 171349 | 183152 | 177250.5 |
| QCI | | | #DIV/0! |
| QC1 | | | #DIV/0! |
| QC2 | 164941 | 175843 | 170392 |
| QC2 | 166379 | 177356 | 171867.5 |
| QC2 | 180987 | 193168 | 187077.5 |
| QC2 | 184520 | 196691 | 190605.5 |
| QC2 | | , | #DIV/0! |
| QC2 | | | #DIV/0! |

| 5.1 | Combined Average | (-)20% | (+)20% |
|-----|------------------|----------|----------|
| | 9.4 | 141671.5 | 212507.2 |

Revision: 4

Issue Date: 01/24/2022

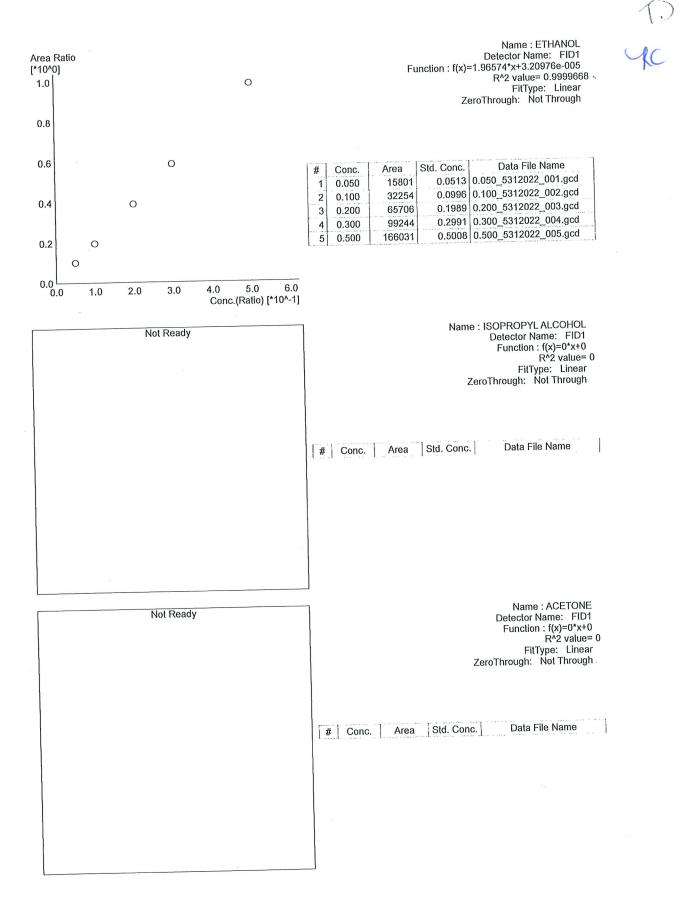
Issuing Authority: Quality Manager

BLALC Volatiles QA_QC Data Spreadsheet-v5.xls

Page: 2 of 2

| ====================================== | ation Table |
|---|---|
| ======================================= | |
| Laboratory: Pocatello Instrument Name : GC2030-HS20 | |
| < <data file="">> C:\LabSolutions\Data\2022\5-31 Method File :C:\LabSolutions\Data\2022\5-31 Batch File :C:\LabSolutions\Data\2022\5-31 Date Acquired :5/31/2022 11:27:23 AM Date Created :5/31/2022 11:23:58 AM Date Modified :6/1/2022 2:49:56 PM</data> | -22 TS\ALCOHOL.gcm -22 TS\05-31-22 TS.gcb |
| Not Ready | Name: METHANOL Detector Name: FID1 Function: f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |
| Not Ready | Name : ACETALDEHYDE Detector Name: FID1 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |

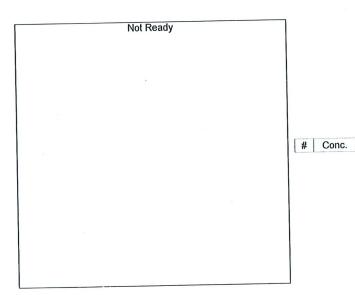






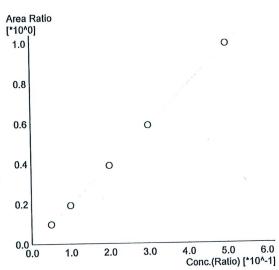
| Not Ready | Name : DFE Detector Name : FID1 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
|-----------|---|
| | # Conc. Area Std. Conc. Data File Name |
| | 7 |
| Not Ready | Name : TFE Detector Name: FID1 Function : f(x)=0*x+0 R*2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |
| Not Ready | Name : ACETALDEHYDE Detector Name: FID2 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |





Name: METHANOL
Detector Name: FID2
Function: f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

Area Std. Conc. Data File Name



Name : ETHANOL
Detector Name: FID2
Function : f(x)=1.99241*x-0.00677218
R^2 value= 0.9999061 FitType: Linear ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. | Data File Name |
|---|-------|--------|------------|-----------------------|
| 1 | 0.050 | 16087 | 0.0521 | 0.050_5312022_001.gcd |
| 2 | 0.100 | 33494 | 0.0995 | 0.100_5312022_002.gcd |
| 3 | 0.200 | 69269 | 0.1983 | 0.200_5312022_003.gcd |
| 4 | 0.300 | 105286 | | 0.300_5312022_004.gcd |
| 5 | 0.500 | 177378 | 0.5014 | 0.500_5312022_005.gcd |

Not Ready

Name : ACETONE
Detector Name: FID2
Function : f(x)=0*x+0
R*2 value= 0
FitType: Linear
ZeroThrough: Not Through

| Conc. | Area | Std. Conc. | Data File Name |
|-------|------|------------|----------------|
| | | | |

| | | , e 1 × | |
|------|---|---------|---|
| à di | 1 | | - |

| Not Ready | Name : ISOPROPYL ALCOHOL Detector Name: FID2 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
|-----------|--|
| | # Conc. Area Std. Conc. Data File Name |
| | |
| Not Ready | Name: DFE Detector Name: FID2 Function: f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |
| Not Ready | Name : TFE Detector Name: FID2 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |

Sample Name Vial # Data Filename

: 0.050

: 1

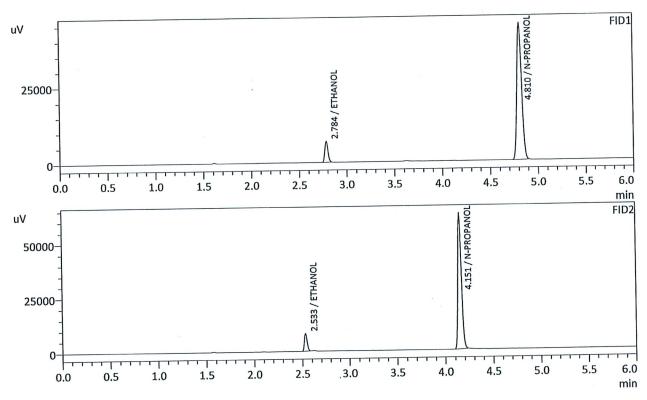
: 0.050_5312022_001.gcd : ALCOHOL.gcm

Method Filename Batch Filename

Date Acquired Date Processed

: 05-31-22 TS.gcb : 5/31/2022 10:49:17 AM : 6/1/2022 2:49:49 PM

C:\LabSolutions\Data\2022\5-31-22 TS\ALCOHOL.gcm



| ID1Name | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| FTHANOL | 0.0513 | g/100cc | 15801 | 6794 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 156560 | 44759 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| ID2 Name | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.0521 | g/100cc | 16087 | 8012 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 165535 | 62564 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

Sample Name Vial #

: 0.100

: 2

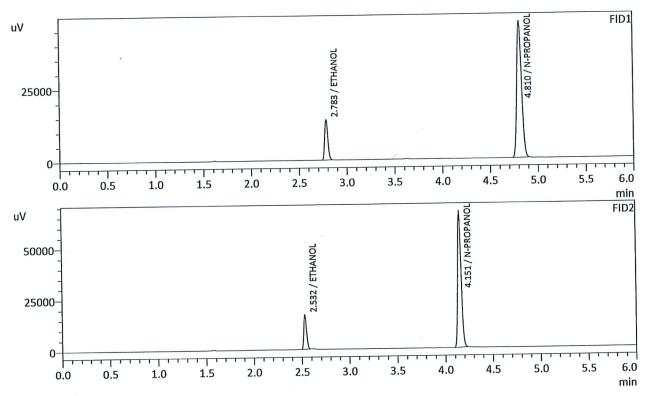
Data Filename Method Filename

: 0.100_5312022_002.gcd

Batch Filename

: ALCOHOL.gcm : 05-31-22 TS.gcb

Date Acquired : 5/31/2022 10:58:46 AM
Date Processed : 6/1/2022 2:49:51 PM
C:\LabSolutions\Data\2022\5-31-22 TS\ALCOHOL.gcm



| ID1Name | Conc. | Unit | Area | Height |
|-------------------|--------|----------|--------|--------|
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| FTHANOL | 0.0996 | g/100cc | 32254 | 13857 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 164587 | 46993 |
| DFE | | ·g/100cc | | |
| TFF | | g/100cc | ` | |

| ID2 Name | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.0995 | g/100cc | 33494 | 16862 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 174842 | 66508 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

Sample Name Vial #

: 0.200

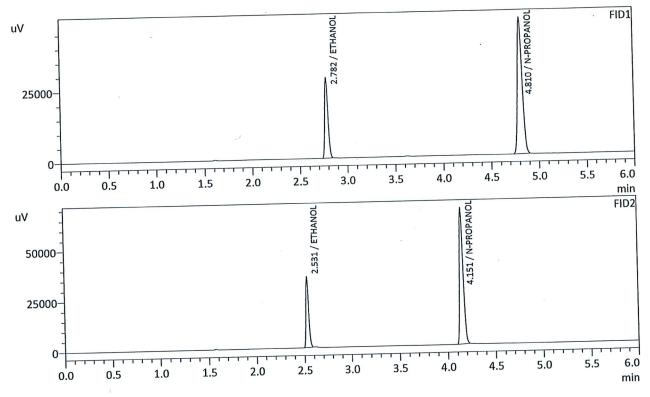
: 3

: 0.200_5312022_003.gcd

Data Filename Method Filename

: ALCOHOL.gcm : 05-31-22 TS.gcb

Batch Filename : 05-31-22 TS.gcb
Date Acquired : 5/31/2022 11:08:07 AM
Date Processed : 6/1/2022 2:49:53 PM
C:\LabSolutions\Data\2022\5-31-22 TS\ALCOHOL.gcm



| ID1 | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| Name | COIIC | | | |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.1989 | g/100cc | 65706 | 28139 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 167958 | 48109 |
| DFE DFE | | g/100cc | | |
| TEF | | g/100cc | | |

| ID2 | Conc | Unit | Area | Height |
|-------------------|---------|---------|--------|--------|
| Name | Conc. | | 7,1100 | |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| | 0.1983 | g/100cc | 69269 | 34914 |
| ETHANOL | 0.1303 | | | |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 178335 | 67689 |
| | 0.000 | g/100cc | | |
| DFE | | | | |
| TFE | | g/100cc | | |

: 0.300

: 4

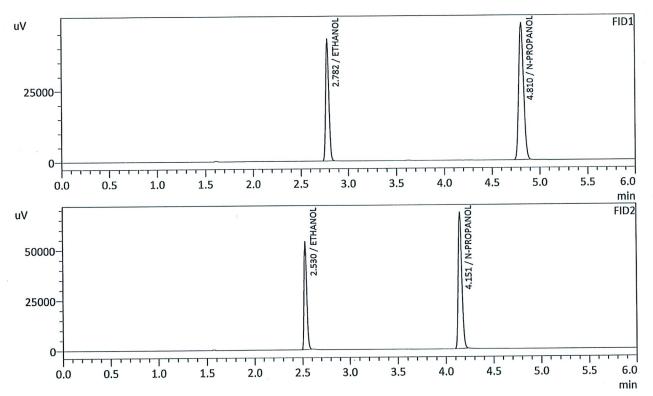
Sample Name Vial # Data Filename Method Filename

: 0.300_5312022_004.gcd

Batch Filename

: ALCOHOL.gcm : 05-31-22 TS.gcb

Date Acquired : 5/31/2022 11:17:51 AM
Date Processed : 6/1/2022 2:49:54 PM
C:\LabSolutions\Data\2022\5-31-22 TS\ALCOHOL.gcm



| FID1 Name | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.2991 | g/100cc | 99244 | 42381 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 168747 | 48199 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| Name | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | · |
| ETHANOL | 0.2984 | g/100cc | 105286 | 53016 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 179077 | 67707 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

: 0.500

:5

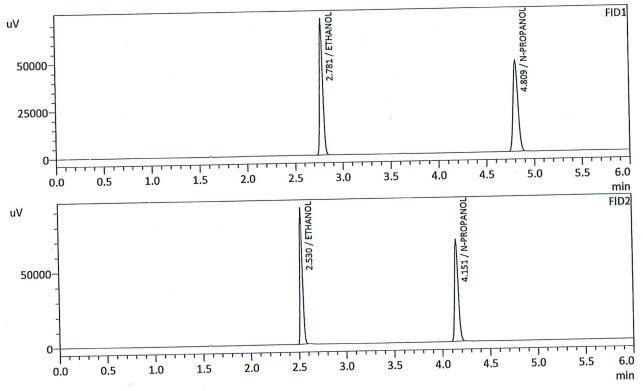
Sample Name Vial # Data Filename

: 0.500_5312022_005.gcd

Method Filename Batch Filename

: ALCOHOL.gcm : 05-31-22 TS.gcb

Date Acquired : 5/31/2022 11:27:23 AM
Date Processed : 6/1/2022 2:49:56 PM
C:\LabSolutions\Data\2022\5-31-22 TS\ALCOHOL.gcm



| ID1 | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| Name | COIIC | | | |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.5008 | g/100cc | 166031 | 71571 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 168639 | 48201 |
| DFE | | g/100cc | | |
| TFF | | g/100cc | | |

| Name | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.5014 | g/100cc | 177378 | 89361 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 178754 | 67923 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

Sample Name Vial # Data Filename

: INT STD BLK 1

: 6

: INT STD BLK 1_5312022_006.gcd

Method Filename Batch Filename

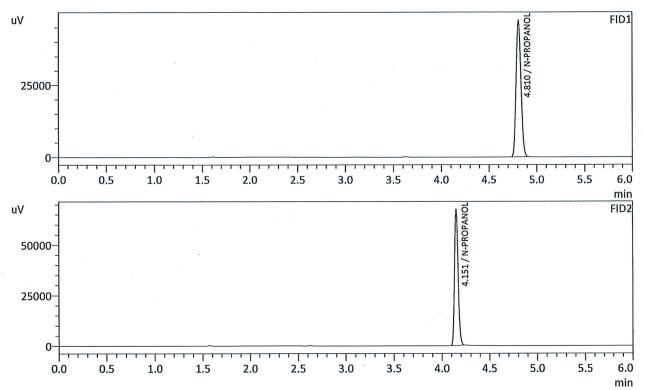
Date Acquired Date Processed

: ALCOHOL.gcm : 05-31-22 TS.gcb : 5/31/2022 11:36:40 AM

: 6/1/2022 2:49:58 PM

C:\LabSolutions\Data\2022\5-31-22 TS\ALCOHOL.gcm

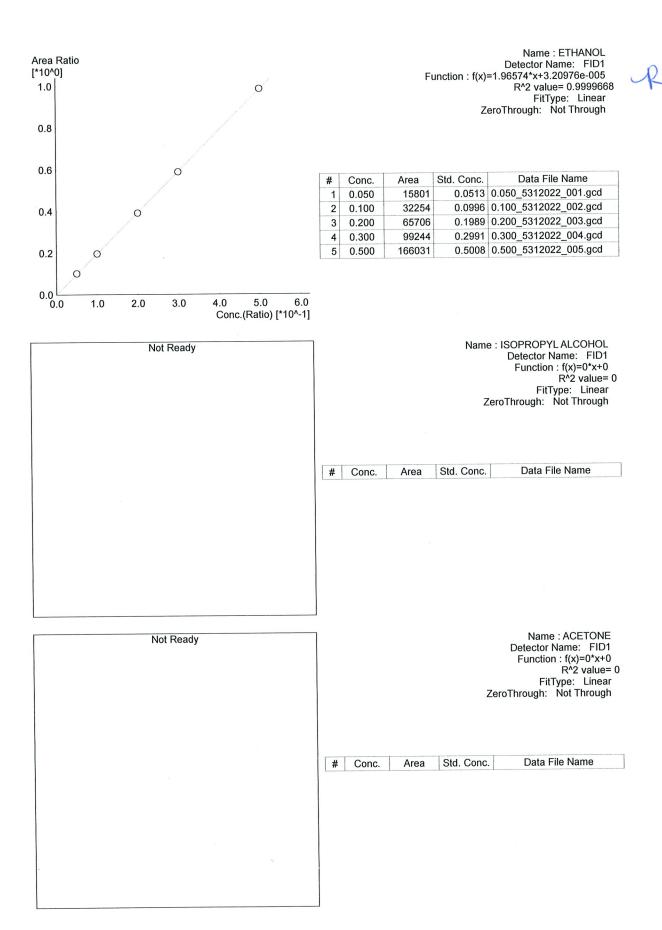




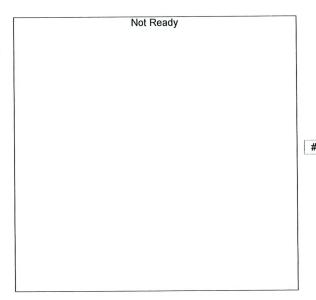
| Name | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | | g/100cc | | |
| ISOPROPYL ALCOHOL | / | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 166274 | 47455 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| Name | Conc. | Unit | Area | Height |
|-------------------|--------|---------|--------|--------|
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 177017 | 67417 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| ======== | C | Calibration Table |
|--|---|---|
| Laboratory: Pocatello Instrument Name : 0 | GC2030-HS20 | R |
| < <method file="">> Method File Date Created Date Modified</method> | :C:\LabSolutions\Data\20 :2/3/2022 1:34:42 PM :6/2/2022 10:00:49 AM | 22\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm |
| | Not Ready | Name: METHANOL Detector Name: FID1 Function: f(x)=0*x+0 R*2 value= 0 FitType: Linear ZeroThrough: Not Through # Conc. Area Std. Conc. Data File Name |
| | Not Ready | Name : ACETALDEHYDE Detector Name: FID1 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | | |

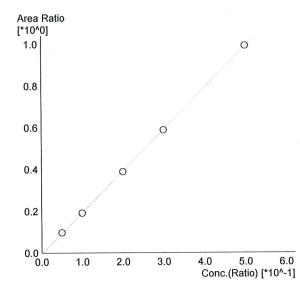


| Not Ready | Name : DFE Detector Name: FID1 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear |
|-----------|---|
| | ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |
| | |
| | |
| Not Ready | Name : TFE Detector Name : FID1 Function : f(x)=0*x+0 Row 2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | |
| | # Conc. Area Std. Conc. Data File Name |
| | |
| | |
| | |
| Not Ready | Name: ACETALDEHYDE Detector Name: FID2 Function: f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | |
| | # Conc. Area Std. Conc. Data File Name |
| | |
| | |
| | |



Name : METHANOL
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. | Data File Name |
|---|-------|------|------------|----------------|
|---|-------|------|------------|----------------|



Name : ETHANOL Detector Name: FID2 Function : f(x)=1.99241*x-0.00677218 R^2 value= 0.9999061 FitType: Linear ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. | Data File Name |
|---|-------|--------|------------|-----------------------|
| 1 | 0.050 | 16087 | 0.0521 | 0.050_5312022_001.gcd |
| 2 | 0.100 | 33494 | 0.0995 | 0.100_5312022_002.gcd |
| 3 | 0.200 | 69269 | 0.1983 | 0.200_5312022_003.gcd |
| 4 | 0.300 | 105286 | 0.2984 | 0.300_5312022_004.gcd |
| 5 | 0.500 | 177378 | 0.5014 | 0.500_5312022_005.gcd |

Not Ready

Name: ACETONE Name : ACETONE
Detector Name: FID2
Function : f(x)=0*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

| # | Conc. | Area | Std. Conc. | Data File Name |
|---|-------|------|------------|----------------|
|---|-------|------|------------|----------------|

| Not Ready | Name: ISOPROPYL ALCOHOL Detector Name: FID2 Function: f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
|-----------|--|
| | # Conc. Area Std. Conc. Data File Name |
| | |
| | |
| Not Ready | Name : DFE Detector Name: FID2 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |
| | |
| Not Ready | Name : TFE Detector Name: FID2 Function : f(x)=0*x+0 R^2 value= 0 FitType: Linear ZeroThrough: Not Through |
| | # Conc. Area Std. Conc. Data File Name |
| | |

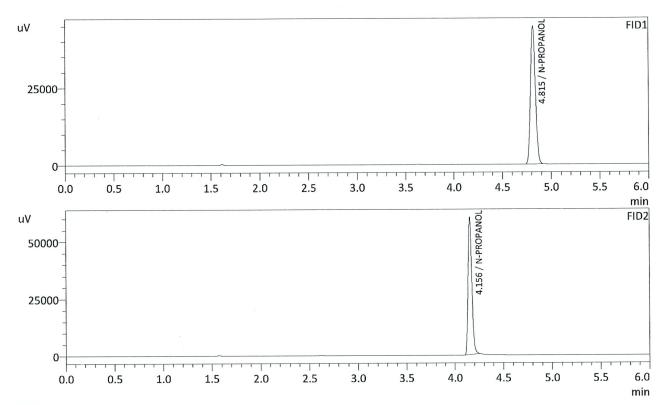
: INT STD BLK 1

: 1

Sample Name Vial # Data Filename Method Filename

Vial # : I
Data Filename : INT STD BLK 1_682022_001.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 6-8-22 batch.gcb
Date Acquired : 6/8/2022 11:11:14 AM
Date Processed : 6/8/2022 11:17:15 AM
C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm





| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 156385 | 44599 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

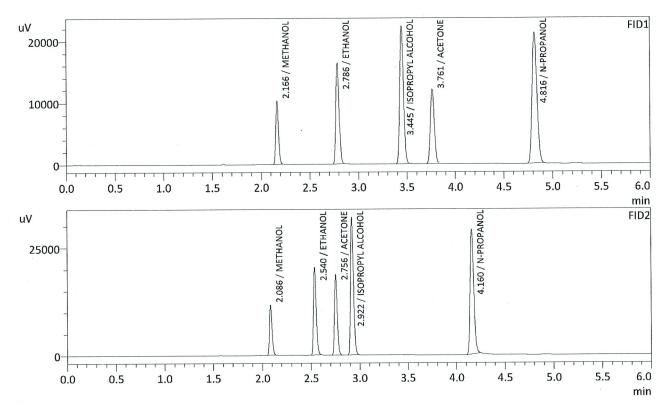
| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 162856 | 60173 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

: MULTI-COMP MIX

Sample Name Vial # Data Filename Method Filename

Vial # : 2
Data Filename : MULTI-COMP MIX_682022_002.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 6-8-22 batch.gcb
Date Acquired : 6/8/2022 11:20:44 AM
Date Processed : 6/8/2022 11:26:45 AM
C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm





| FID1 | | | | |
|-------------------|--------|---------|-------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | 0.0000 | g/100cc | 20333 | 10045 |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.2562 | g/100cc | 37118 | 16087 |
| ISOPROPYL ALCOHOL | 0.0000 | g/100cc | 61380 | 22200 |
| ACETONE | 0.0000 | g/100cc | 34025 | 11984 |
| N-PROPANOL | 0.0000 | g/100cc | 73674 | 21068 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|-------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | , |
| METHANOL | 0.0000 | g/100cc | 21557 | 11487 |
| ETHANOL | 0.2666 | g/100cc | 39774 | 20087 |
| ACETONE | 0.0000 | g/100cc | 36928 | 18636 |
| ISOPROPYL ALCOHOL | 0.0000 | g/100cc | 66140 | 31408 |
| N-PROPANOL | 0.0000 | g/100cc | 75838 | 28800 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

: INT STD BLK 2

: 3

Sample Name Vial # Data Filename Method Filename

Data Filename : INT STD BLK 2_682022_003.gcd

Method Filename : ALCOHOL.gcm

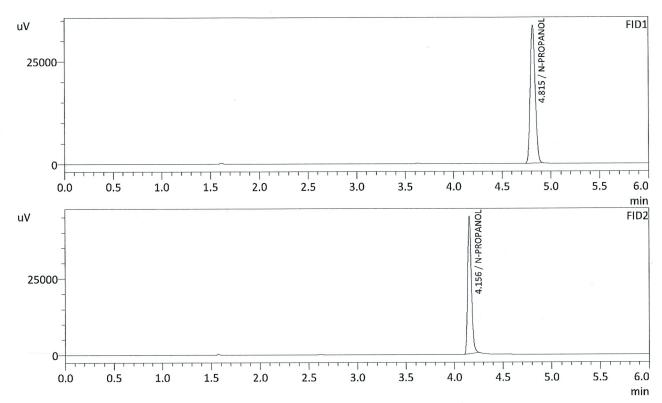
Batch Filename : 6-8-22 batch.gcb

Date Acquired : 6/8/2022 11:30:05 AM

Date Processed : 6/8/2022 11:36:07 AM

C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm





| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 117929 | 33540 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 121582 | 44856 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |



VOLATILES BAC CASEFILE WORKSHEET

| Laboratory N | o.: QC1-1 | | Item # | | Analysis Date(s): | 6/8/2022 |
|-------------------|-------------------|-------------------|------------------|---------------|--------------------------|---------------|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean |
| Sample Results | 0.0734 | 0.0739 | 0.0005 | 0.0736 | 0.0005 | 0.0734 |
| (g/100cc) | 0.0729 | 0.0734 | 0.0005 | 0.0731 | 0.0003 | 0.0734 |
| Analysis Meth | ıod | | | | | |
| Refer to Blood | Alcohol Metho | d #1 | | | | 0 |
| | | | | | | |
| Instrument In | formation | | | Instrument | information is stor | ed centrally. |
| Refer to Instrume | nt Method: Alcol | nol.m/.gcm, Volat | iles.m/.gcm | | | |
| Reporting of l | Results | | Uncertain | ty of Measure | ement (UM%): | 5.00% |
| Ove | rall Mean (g/10 | 00cc) | Low | High | 5% of | f Mean |
| 0.073 | | | 0.069 | 0.077 | 0.0 | 004 |
| | | R | Reported Res | ult | - | |
| | | | 0.073 | | | |

Calibration and control data are stored centrally.

Revision: 1

Issue Date: 12/29/2021

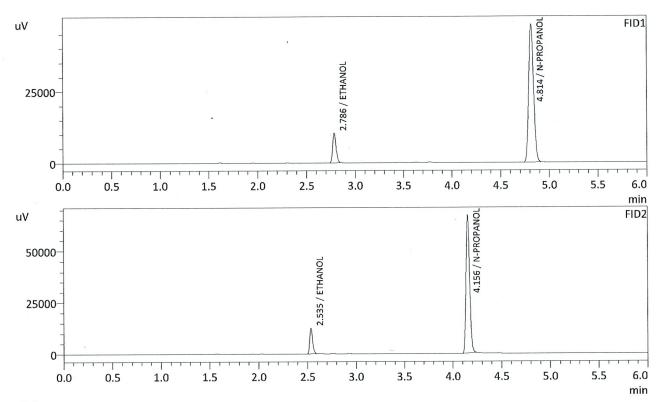
Volatiles BAC Casefile Worksheet Page: 1 of 1 Issuing Authority: Quality Manager

: QC-1-1-A

: 4

Sample Name Vial # Data Filename Method Filename

Vial # : 4
Data Filename : QC-1-1-A_682022_004.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 6-8-22 batch.gcb
Date Acquired : 6/8/2022 11:39:52 AM
Date Processed : 6/8/2022 11:45:54 AM
C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm



| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.0734 | g/100cc | 24273 | 10257 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 168035 | 48139 |
| DFE | | g/100cc | | |
| TFE | , | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.0739 | g/100cc | 24946 | 12341 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 177464 | 66860 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

: QC-1-1-B

: QC-1-1-B_682022_005.gcd : ALCOHOL.gcm

Sample Name Vial # Data Filename Method Filename

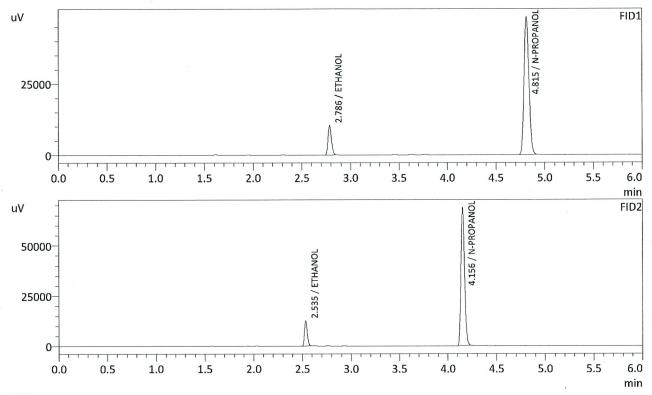
Raccorol.gcm

Batch Filename : 6-8-22 batch.gcb

Date Acquired : 6/8/2022 11:49:20 AM

Date Processed : 6/8/2022 11:55:22 AM

C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm



| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.0729 | g/100cc | 24255 | 10275 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 169166 | 48331 |
| DFE | | g/100cc | | 1 |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.0734 | g/100cc | 25223 | 12497 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 180820 | 68585 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |



VOLATILES BAC CASEFILE WORKSHEET

| Laboratory N | o.: 0.080 QA | | Item # | | Analysis Date(s): | 6/8/2022 |
|----------------------------------|-------------------|-------------------|------------------|---------------|--------------------------|---------------|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean |
| Sample Results | 0.0796 | 0.0801 | 0.0005 | 0.0798 | 0.0001 | 0.0798 |
| (g/100cc) | 0.0795 | 0.0800 | 0.0005 | 0.0797 | 0.0001 | 0.0798 |
| Analysis Method | | | | | | |
| Refer to Blood Alcohol Method #1 | | | | | | |
| | | | | | | |
| Instrument II | nformation | | | Instrument | information is stor | ed centrally. |
| Refer to Instrume | ent Method: Alcoh | nol.m/.gcm, Volat | iles.m/.gcm | | | |
| Reporting of | Results | | Uncertain | ty of Measure | ement (UM%): | 5.00% |
| Ove | erall Mean (g/10 | (0cc) | Low | High | 5% of | `Mean |
| 0.079 | | | 0.075 | 0.083 | 0.0 | 004 |
| | Reported Result | | | | | |
| | 0.079 | | | | | |

Calibration and control data are stored centrally.

Revision: 1

Issue Date: 12/29/2021

Volatiles BAC Casefile Worksheet Page: 1 of 1 Issuing Authority: Quality Manager

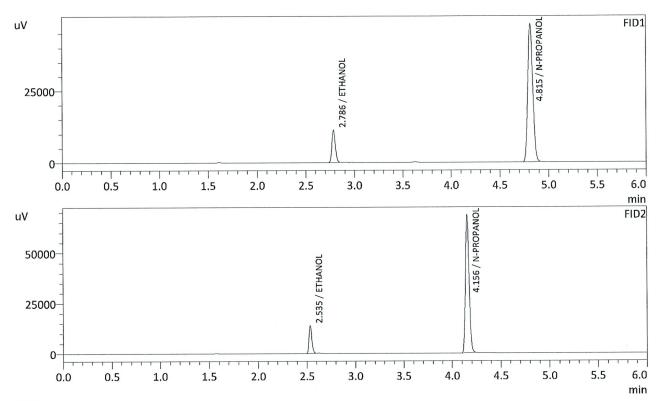
: 0.08 QA - A

: 6

Sample Name Vial # Data Filename Method Filename

Vial # : 6
Data Filename : 0.08 QA - A_682022_006.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 6-8-22 batch.gcb
Date Acquired : 6/8/2022 11:58:38 AM
Date Processed : 6/8/2022 12:04:39 PM
C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm





| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.0796 | g/100cc | 26411 | 11201 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 168596 | 48072 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.0801 | g/100cc | 27551 | 13653 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 180117 | 68324 |
| DFE ' | | g/100cc | | |
| TFE | | g/100cc | | |

: 0.08 QA - B

: 0.08 QA - B_682022_007.gcd : ALCOHOL.gcm

Sample Name Vial # Data Filename Method Filename

ALCOHOL.gcm

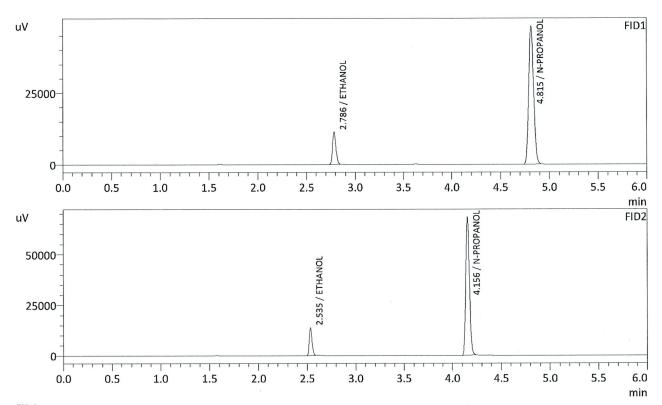
Batch Filename : 6-8-22 batch.gcb

Date Acquired : 6/8/2022 12:08:23 PM

Date Processed : 6/8/2022 12:14:23 PM

C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm





| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.0795 | g/100cc | 26377 | 11188 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 168572 | 48126 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | , | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.0800 | g/100cc | 27521 | 13608 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 180099 | 68130 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |



VOLATILES BAC CASEFILE WORKSHEET

| Laboratory N | o.: QC2-1 | | Item # | | Analysis Date(s): | 6/8/2022 |
|-------------------|-------------------|-------------------|------------------|----------------|--------------------------|-------------------|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean |
| Sample Results | 0.2110 | 0.2112 | 0.0002 | 0.2111 | 0.0011 | 0.2116 |
| (g/100cc) | 0.2121 | 0.2123 | 0.0002 | 0.2122 | 0.0011 | 0.2110 |
| Analysis Meth | ıod | | | | | |
| Refer to Blood | Alcohol Metho | d #1 | | | | |
| | | | | | | |
| | | | | | | |
| Instrument In | formation | | | Instrument | information is stor | ed centrally. |
| Refer to Instrume | nt Method: Alcol | nol.m/.gcm, Volat | iles.m/.gcm | | | |
| D (1 6) | D V | | II. a cuta in a | tr of Magazine | ement (UM%): | 5 000/ |
| Reporting of l | | | Uncertaini | | | |
| Ove | rall Mean (g/10 | 00cc) | Low | High | 5% of | [*] Mean |
| 0.211 | | | 0.200 | 0.222 | 0.0 |)11 |
| | Reported Result | | | | | |
| | 0.211 | | | | | |

Page: 1 of 1

Calibration and control data are stored centrally.

Revision: 1

Issue Date: 12/29/2021
Issuing Authority: Quality Manager

: QC-2-1-A : 26

Sample Name Vial # Data Filename Method Filename

 Vial #
 : 26

 Data Filename
 : QC-2-1-A_682022_026.gcd

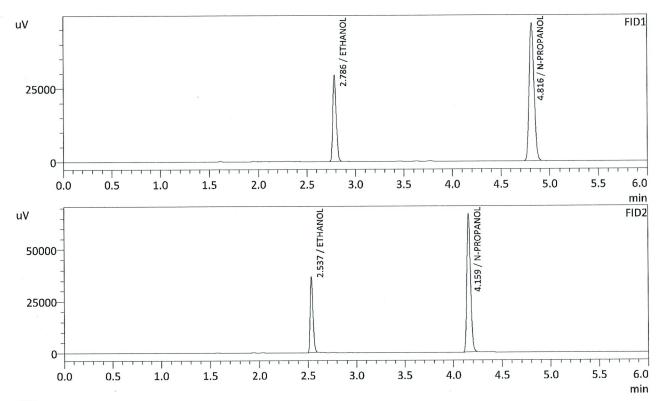
 Method Filename
 : ALCOHOL.gcm

 Batch Filename
 : 6-8-22 batch.gcb

 Date Acquired
 : 6/8/2022 3:09:13 PM

 Date Processed
 : 6/8/2022 3:15:14 PM

 C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm



| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.2110 | g/100cc | 68445 | 29132 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 164941 | 46793 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.2112 | g/100cc | 72816 | 36535 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 175843 | 66220 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

Sample Name Vial #

: QC-2-1-B

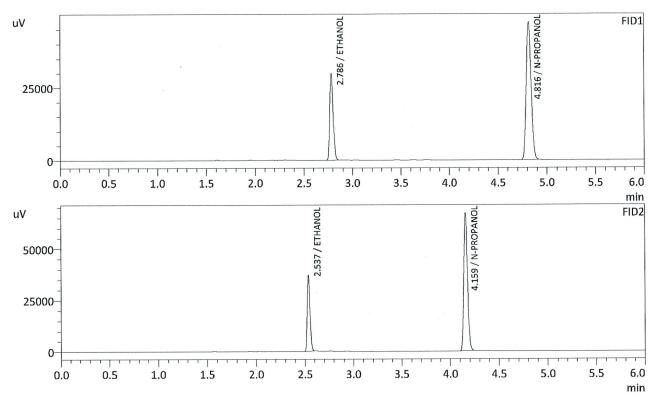
Data Filename Method Filename Batch Filename

Date Acquired

Date Processed

: QL-2-1-B : 27 : QC-2-1-B_682022_027.gcd : ALCOHOL.gcm : 6-8-22 batch.gcb : 6/8/2022 3:18:31 PM : 6/8/2022 3:24:32 PM

C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm



| FID1 | | | | |
|-------------------|--------|---------|----------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | <u> </u> | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.2121 | g/100cc | 69375 | 29484 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 166379 | 47307 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | C | 1.1-24 | Auga | Haidht |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.2123 | g/100cc | 73827 | 37043 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 177356 | 66786 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |



VOLATILES BAC CASEFILE WORKSHEET

| Laboratory N | o.: QC1-2 | | Item# | | Analysis Date(s): | 6/8/2022 | |
|-------------------|-------------------|-------------------|------------------|---------------|--------------------------|---------------|--|
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mean | |
| Sample Results | 0.0779 | 0.0787 | 0.0008 | 0.0783 | 0.0002 | 0.0784 | |
| (g/100cc) | 0.0782 | 0.0789 | 0.0007 | 0.0785 | 0.0002 | 0.0764 | |
| Analysis Method | | | | | | | |
| Refer to Blood | Alcohol Metho | d #1 | v | | | | |
| | | | | | | | |
| Instrument In | formation | | | Instrument | information is stor | ed centrally. | |
| Refer to Instrume | nt Method: Alcol | nol.m/.gcm, Volat | iles.m/.gcm | a. | | | |
| Reporting of 1 | Results ' | | Uncertain | ty of Measure | ement (UM%): | 5.00% | |
| Ove | rall Mean (g/10 | (0cc) | Low | High | 5% of | f Mean | |
| 0.078 | | | 0.074 | 0.082 | 0.0 | 004 | |
| | Reported Result | | | | | | |
| | 0.078 | | | | | | |

Calibration and control data are stored centrally.

Revision: 1

Issue Date: 12/29/2021
Issuing Authority: Quality Manager

: QC1-2-A

: 48

Sample Name Vial # Data Filename Method Filename

Vial # : 48

Data Filename : QC1-2-A_682022_048.gcd

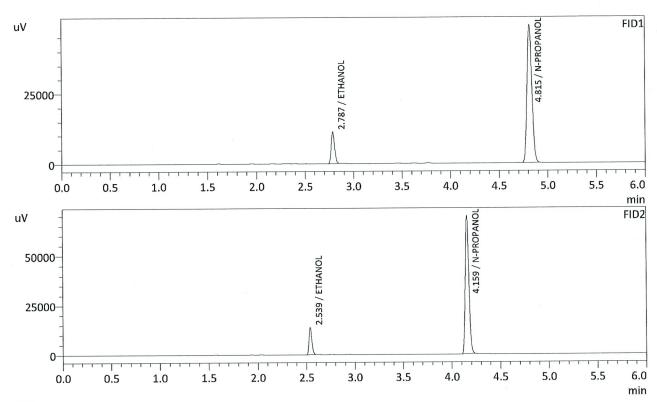
Method Filename : ALCOHOL.gcm

Batch Filename : 6-8-22 batch.gcb

Date Acquired : 6/8/2022 6:38:23 PM

Date Processed : 6/8/2022 6:44:25 PM

C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm



| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.0779 | g/100cc | 26288 | 11122 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 171458 | 48981 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.0787 | g/100cc | 27482 | 13576 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 183074 | 69313 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

Sample Name Vial #

: QC1-2-B

: 49

Data Filename Method Filename

Batch Filename

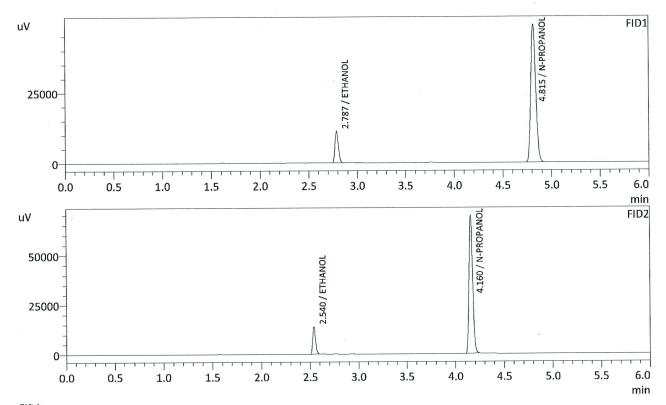
Date Acquired

: 49 : QC1-2-B_682022_049.gcd : ALCOHOL.gcm : 6-8-22 batch.gcb : 6/8/2022 6:48:08 PM : 6/8/2022 6:54:10 PM

Date Processed

C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm





| FID1 | | | | | |
|-------------------|--------|---------|--------|--------|--|
| Name | Conc. | Unit | Area | Height | |
| METHANOL | | g/100cc | | | |
| ACETALDEHYDE | | g/100cc | | | |
| ETHANOL | 0.0782 | g/100cc | 26372 | 11170 | |
| ISOPROPYL ALCOHOL | | g/100cc | | | |
| ACETONE | | g/100cc | | | |
| N-PROPANOL | 0.0000 | g/100cc | 171349 | 48863 | |
| DFE | | g/100cc | | | |
| TFE | | g/100cc | | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.0789 | g/100cc | 27587 | 13663 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 183152 | 69417 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |



VOLATILES BAC CASEFILE WORKSHEET

| T 1 4 NI | 0.02.2 | | Ti. II | | A walvaia Data(s). | 6/8/2022 |
|-------------------|-------------------|-------------------|------------------|---------------|--------------------------|---|
| Laboratory N | o.: QC2-2 | | Item # | | Analysis Date(s): | 0/8/2022 |
| | Column 1 FID A | Column 2 FID B | Column Precision | Mean Value | Sample A-B Difference | Over-all Mear |
| Sample Results | 0.2223 | 0.2225 | 0.0002 | 0.2224 | 0.0007 | 0.2227 |
| (g/100cc) | 0.2231 | 0.2232 | 0.0001 | 0.2231 | 0.0007 | 0.2221 |
| Analysis Meth | ıod | | | | | |
| Refer to Blood | Alcohol Metho | d #1 | | , | | |
| | | | | | | |
| | | | | | | , , <u>, , , , , , , , , , , , , , , , , </u> |
| Instrument In | formation | | | Instrument | information is stor | ed centrally. |
| Refer to Instrume | nt Method: Alcol | nol.m/.gcm, Volat | iles.m/.gcm | | | |
| Reporting of 1 | Results | | Uncertain | ty of Measure | ement (UM%): | 5.00% |
| Ove | rall Mean (g/10 | 00cc) | Low | High | 5% of | f Mean |
| 0.222 | | | 0.210 | 0.234 | 0.0 | 012 |
| | | R | eported Res | ult | | |
| | | | 0.222 | | | |

Page: 1 of 1

Calibration and control data are stored centrally.

Revision: 1

Issue Date: 12/29/2021 Issuing Authority: Quality Manager

: QC2-2-A : 60

Sample Name Vial # Data Filename Method Filename

 Vial #
 : 60

 Data Filename
 : QC2-2-A_682022_060.gcd

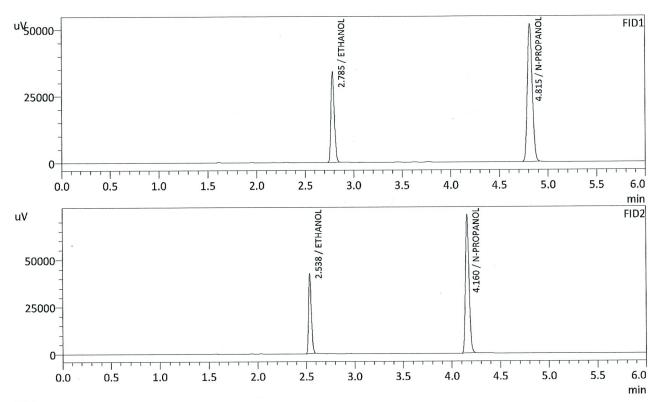
 Method Filename
 : ALCOHOL.gcm

 Batch Filename
 : 6-8-22 batch.gcb

 Date Acquired
 : 6/8/2022 8:32:35 PM

 Date Processed
 : 6/8/2022 8:38:38 PM

 C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm



| FID1 | | | | | |
|-------------------|--------|---------|--------|--------|--|
| Name | Conc. | Unit | Area | Height | |
| METHANOL | | g/100cc | | | |
| ACETALDEHYDE | | g/100cc | | | |
| ETHANOL | 0.2223 | g/100cc | 79101 | 33828 | |
| ISOPROPYL ALCOHOL | | g/100cc | | | |
| ACETONE | | g/100cc | | | |
| N-PROPANOL | 0.0000 | g/100cc | 180987 | 51588 | |
| DFE | | g/100cc | | | |
| TFE | | g/100cc | | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.2225 | g/100cc | 84362 | 42056 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 193168 | 73183 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

 Sample Name
 : QC2-2-B

 Vial #
 : 61

 Data Filename
 : QC2-2-B_682022_061.gcd

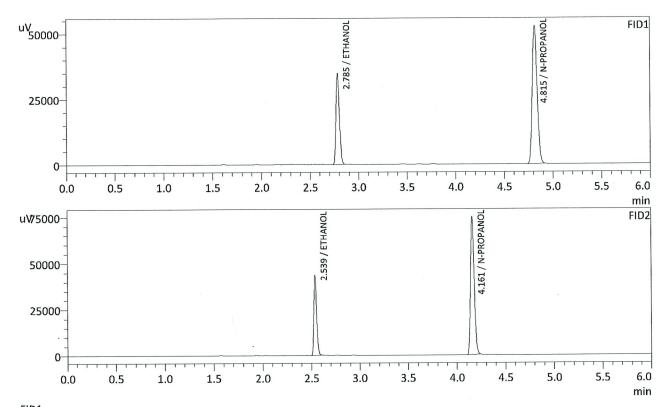
 Method Filename
 : ALCOHOL.gcm

 Batch Filename
 : 6-8-22 batch.gcb

 Date Acquired
 : 6/8/2022 8:42:22 PM

 Date Processed
 : 6/8/2022 8:48:24 PM

 C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm



| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | 0.2231 | g/100cc | 80936 | 34490 |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 184520 | 52667 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | 0.2232 | g/100cc | 86149 | 42714 |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 196691 | 74647 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

: INT STD BLK 3

: 62

Sample Name Vial # Data Filename Method Filename

 Vial #
 : 62

 Data Filename
 : INT STD BLK 3_682022_062.gcd

 Method Filename
 : ALCOHOL.gcm

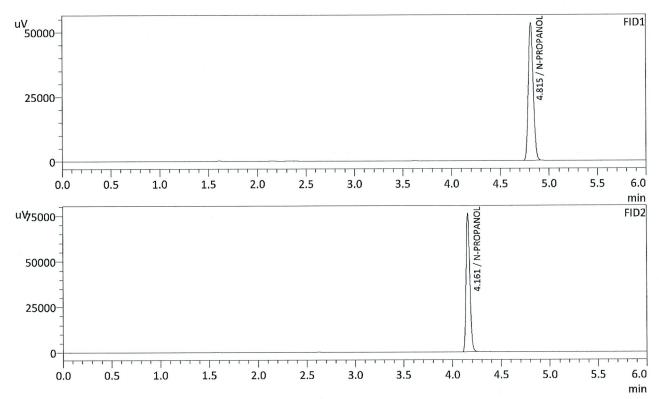
 Batch Filename
 : 6-8-22 batch.gcb

 Date Acquired
 : 6/8/2022 8:51:50 PM

 Date Processed
 : 6/8/2022 8:57:51 PM

 C:\LabSolutions\Data\2022\5-31-22 TS\6-8-22 RC\ALCOHOL.gcm





| FID1 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| METHANOL | | g/100cc | | |
| ACETALDEHYDE | | g/100cc | | |
| ETHANOL | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 186459 | 53271 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

| FID2 | | | | |
|-------------------|--------|---------|--------|--------|
| Name | Conc. | Unit | Area | Height |
| ACETALDEHYDE | | g/100cc | | |
| METHANOL | | g/100cc | | |
| ETHANOL | | g/100cc | | |
| ACETONE | | g/100cc | | |
| ISOPROPYL ALCOHOL | | g/100cc | | |
| N-PROPANOL | 0.0000 | g/100cc | 199763 | 75830 |
| DFE | | g/100cc | | |
| TFE | | g/100cc | | |

Idaho State Police Forensic Services



Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM): BLA-22-01

Date of Request:

1/21/2022

Requestor/Discipline: Melissa (Nikka) Bradley/Blood Alcohol

<u>Analytical Method/Quality Standard, Revision #:</u> AM#1 Analysis for Volatiles by Headspace GC/ 4.3.9

Temporary or Permanent Deviation: Permanent

Scope of Deviation There is a noticeable increased drift of internal standard (n-propanol signals) from the calibrators, beginning of the run and towards the end of the sample run that is consistent in multiple batches of blood alcohol runs. Because all the samples that are analyzed are being compared to calibrators that are performed at the beginning of the run, the n-propanol signal of end samples tend to be outside or close to being outside of the +/- 20% of the mean value from the calibration curve used Despite this drift the values of known control samples are within acceptable limits.

Deviation Request

4.3.9.1.1 The average values for the internal standard will be established by averaging the IS counts throughout the calibration curve samples.

Requesting that the internal standard monitoring average be changed to average the aqueous and matrix controls within the run.

4.3.9.1.1 The average values for the internal standard will be established by averaging the IS counts from the aqueous control and all matrix blood control samples.

Technical Justification for Analytical Method Deviations:

The designed purpose of the internal standard monitoring is to evaluate the quality of injection of each sample. There is a gradual increase of internal standard response from the beginning of the batch (calibrators and early samples) to the end that is inherent to the current instrument set up as shown in trends from previous batches in multiple laboratories. Attempts to pre-condition/warm up the instrument using by running a pre-batch sequence utilizing old calibrator/blank samples prior to running a new calibration curve did not appear to minimize this occurrence. Furthermore, it can be seen that the drifting trend is not due to the extraction procedure because some of the later batch samples were extracted prior to the samples that are injected during the run. It is worth noting that despite this

trend, the values of the known control samples are still within the specified acceptable range. By utilizing known control n-propanol signals throughout the batch, any potential drift will be taken into account while still being able to monitor a possible mis-injection or partial injection throughout the batch/sequence.

RC

This deviation will have an expiration date of July 1st, 2022.

Date: 01/24/2022

| Technical Review |
|--|
| Departure approved Comments: Forms will be updated to reflect the new process concurrent with the deviation. |
| Departure Not Approved Comments: |
| Approver: Date: 1/21/22 Title: Discipline Lead |
| Quality Review |
| Quality Approver: Jason Crowe Title: Quality Manager |

Region 5 Pocatello Blood Alcohol Analysis Batch Table



Shimadzu Nexis GC-2030 Serial Number: C12255850662 Shimadzu HS-20 Serial Number: C12595700014 LabSolutions Version 5.98 Copyright (C) 2008-2019 Shimadzu Corporation. All rights reserved.

| Vial# | Sample Name | Sample Type | Method File | Data File | Level# |
|----------|--|------------------------|----------------------------|--------------------------------|--------|
| 1 | INT STD BLK 1 | 0:Unknown | ALCOHOL.gcm | | 0 |
| 2 | MULTI-COMP MIX | 0:Unknown | ALCOHOL.gcm | MULTI-COMP MIX 1292021 001.gcd | 1 |
| 3 | INT STD BLK 2 | 0:Unknown | ALCOHOL.gcm | | 0 |
| 4 | QC-1-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 5 | QC-1-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 6 ' | 0.08 QA - A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 7 | 0.08 QA - B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 8 | P2022-1521-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 9 | P2022-1521-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 10 | P2022-1522-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 11 | P2022-1522-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 12 | P2022-1523-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 13 | P2022-1523-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 14 | P2022-1565-2-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 15 | P2022-1565-2-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 16 | P2022-1568-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 17 | P2022-1568-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 18 | P2022-1569-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 19 | P2022-1569-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 20 | P2022-1574-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 21 | P2022-1574-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 22 | P2022-1576-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 23 | P2022-1576-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 24 | P2022-1577-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 25 | P2022-1577-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 26 | QC-2-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 27 | QC-2-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 28 | P2022-1578-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 29 | P2022-1578-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 30 | P2022-1576-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 31 | P2022-1597-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 32 | P2022-1652-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 33 | P2022-1652-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 34 | P2022-1632-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 35 | P2022-1673-1-A | 0:Unknown | | | 0 |
| 36 | P2022-1673-1-B | 0:Unknown | ALCOHOL.gcm ALCOHOL.gcm | | 0 |
| 37 | P2022-1689-1-A | | ALCOHOL.gcm | | 0 |
| | P2022-1609-1-B | 0:Unknown 0:Unknown | | | 0 |
| 38 39 | P2022-1691-1-A | | ALCOHOL.gcm | | 0 |
| | The second secon | 0:Unknown | ALCOHOL.gcm | | 0 |
| 40 | P2022-1707-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 41 | P2022-1707-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 42 | P2022-1709-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 43 | P2022-1709-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 44 | P2022-1710-1-A | 0:Unknown | ALCOHOL.gcm | | |
| 45 | P2022-1710-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 46 | P2022-1712-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 47 | P2022-1712-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 48 | QC1-2-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 49 | QC1-2-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 50 | P2022-1720-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 51 | P2022-1720-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 52 | P2022-1745-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |

| Vial# | Sample Name | Sample Type | Method File | Data File | Level# |
|-------|--------------------|-------------|-------------|-----------|--------|
| 53 | P2022-1745-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 54 | P2022-1746-1-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 55 | P2022-1746-1-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 56 | M2022-2030-1- | 0:Unknown | ALCOHOL.gcm | | 0 |
| 57 | M2022-2030-1 - B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 58 | M2022-2207-3 - A 3 | 0:Unknown | ALCOHOL.gcm | | 0 |
| 59 | M2022-2207-3-6 | 0:Unknown | ALCOHOL.gcm | | 0 |
| 60 | QC2-2-A | 0:Unknown | ALCOHOL.gcm | | 0 |
| 61 | QC2-2-B | 0:Unknown | ALCOHOL.gcm | | 0 |
| 62 | INT STD BLK 3 | 0:Unknown | ALCOHOL.gcm | | 0 |