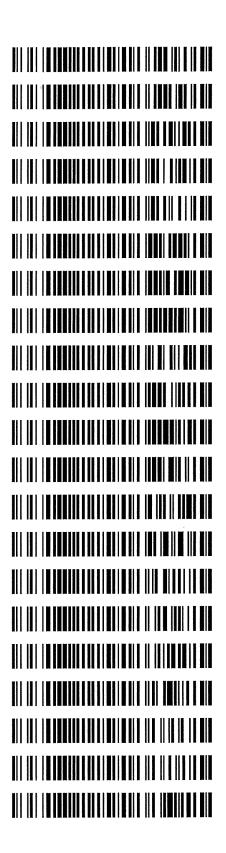
## REVIEWED By Anne Nord at 11:41 am, Feb 08, 2022

### Worklist: 5569

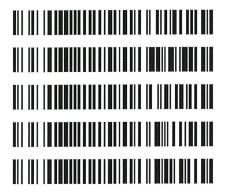
LAB CASE	ITEM	ITEM TYPE	DESCRIPTION
P2022-0034	2	вск	Alcohol Analysis
P2022-0035	1	вск	Alcohol Analysis
P2022-0040	1	вск	Alcohol Analysis
P2022-0049	1	вск	Alcohol Analysis
P2022-0050	1	вск	Alcohol Analysis
P2022-0072	1	вск	Alcohol Analysis
P2022-0073	1	вск	Alcohol Analysis
P2022-0074	1	вск	Alcohol Analysis
P2022-0090	1	вск	Alcohol Analysis
P2022-0109	1	вск	Alcohol Analysis
P2022-0110	1	вск	Alcohol Analysis
P2022-0111	1	вск	Alcohol Analysis
P2022-0123	1	вск	Alcohol Analysis
P2022-0160	1	вск	Alcohol Analysis
P2022-0164	1	вск	Alcohol Analysis
P2022-0187	1	вск	Alcohol Analysis
P2022-0188	1	вск	Alcohol Analysis
P2022-0216	1	вск	Alcohol Analysis
P2022-0221	1	вск	Alcohol Analysis
P2022-0223	1	вск	Alcohol Analysis
P2022-0239	1	вск	Alcohol Analysis





### Worklist: 5569

LAB CASE	<u>ITEM</u>	ITEM TYPE	DESCRIPTION
P2022-0241	1	вск	Alcohol Analysis
P2022-0276	1	вск	Alcohol Analysis
P2022-0283	1	вск	Alcohol Analysis
P2022-0296	1	вск	Alcohol Analysis
P2022-0302	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

**Volatiles Quality Assurance Controls** Run Date(s): 2/4/22

Calibration Date: (if different) Worklist #: 5569

	M		Lev			Lev		Contr	
	ulti-Compor		Level 2			Level 1		Control level	
Curve Fit:	Multi-Component mixture:		Jul-23			Jul-23		Expiration	
•	Exp:		1907007			1907006		Lot#	
	Oct-24		007			006		t #	
Column 1	-24		0.2170			0.0764		Target Value	
0.9	Lot#		170			764		Value	
0.99999	FN060		0.1953-0.2387			0.0688-0.0840		Acceptab	
Column2	FN06041902		-0.2387			-0.0840		Acceptable Range	
0.99996	ok	g/100cc	g/100cc	0.2144 g/100cc	0.0804 g/100cc	0.0793 g/100cc	0.0734 g/100cc	Overall Results	

**Ethanol Calibration Reference Material** 

		180723.0		120482.0	150602.5	N-Propanol:
		(+) 20%		(-) 20%	Average	Internal Standard
0.5007	0.0006 0.5007	0.5010	0.5004	0.450 - 0.550	0.500	500
#DIV/0!	0			0.360 - 0.440	0.400	400
0.299	0.0005	0.2988	0.2993	0.270 - 0.330	0.300	300
0.1991	0.0009	0.1987	0.1996	0.180 - 0.220	0.200	200
0.1001	0	0.1001	0.1001	0.090 - 0.110	0.100	100
0.0507	0.0008	0.0511	0.0503	0.045 - 0.055	0.050	50
Mean	Column 2 Precision Mean	Column 2	Column 1	Acceptable Range	Target Value	Calibrator level

Aqueous Controls

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

Revision: 4

Issue Date: 01/24/2022

BLALC Volatiles QA\_QC Data Spreadsheet-v5.xls

Page: 1 of 2

Issuing Authority: Quality Manager

## **Internal Standard Monitoring Worksheet**

Worklist #:	5569	Run Date(s):	2/4/22

Internal Standard Solution: 010522

Prep Date:01/05/22

Exp Date: 07/05/22

			·		·		<del>,                                     </del>	·				<del></del>	·	
QC2	QC2	QC2	QC2	QC2	QC2	QC1	QC1	QC1	QC1	QC1	QC1	0.080	0.080	Sample Name
				137502	143732	156536	150022	149603	147347	142817	144331	141850	141565	Column 1 Value
				146946	153433	168496	160802	160312	158051	152594	153807	151288	151016	Column 2 Value
#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	142224	148582.5	162516	155412	154957.5	152699	147705.5	149069	146569	146290.5	Average

180723.0	120482.0	150602.5
(+)20%	(-)20%	Combined Average

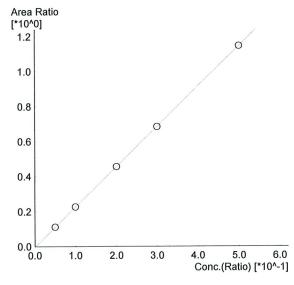


Issuing Authority: Quality Manager

Issue Date: 01/24/2022

Revision: 4

======================================	ation Table
aboratory: Pocatello nstrument Name : GC2030-HS20	
C  Data File	2 RCVALCOHOL.gcm 2 RCV2-4-22 BATCH.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



Name : ETHANOL Detector Name: FID1 Function: f(x)=2.29751\*x-0.00383595 R^2 value= 0.9999924 v

FitType: Linear ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	15657	0.0503	0.050_242022_001.gcd
2	0.100	32286	0.1001	0.100_242022_002.gcd
3	0.200	65498	0.1996	0.200_242022_003.gcd
4	0.300	98544	0.2993	0.300_242022_004.gcd
5	0.500	166061	0.5004	0.500_242022_005.gcd

Not Ready

R<sup>2</sup> value= 0

FitType: Linear ZeroThrough: Not Through

Std. Conc. Data File Name # Conc. Area

Not Ready

Name: ACETONE Detector Name: FID1 Function: f(x)=0\*x+0 R^2 value= 0
FitType: Linear
ZeroThrough: Not Through

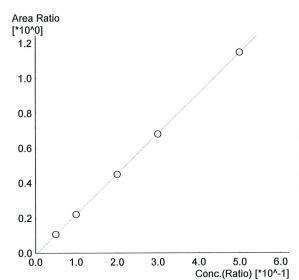
Data File Name Conc. Area Std. Conc.

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 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

Not Ready

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)=2.31068\*x-0.0107465
R^2 value= 0.9999601
FitType: Linear

FitType: Linear ZeroThrough: Not Through

#	Conc.	Area	Std. Conc.	Data File Name
1	0.050	16076		0.050_242022_001.gcd
2	0.100	33517	0.1001	0.100_242022_002.gcd
3	0.200	68770	0.1987	0.200_242022_003.gcd
4	0.300	104241	0.2988	0.300_242022_004.gcd
5	0.500	176596	0.5010	0.500_242022_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

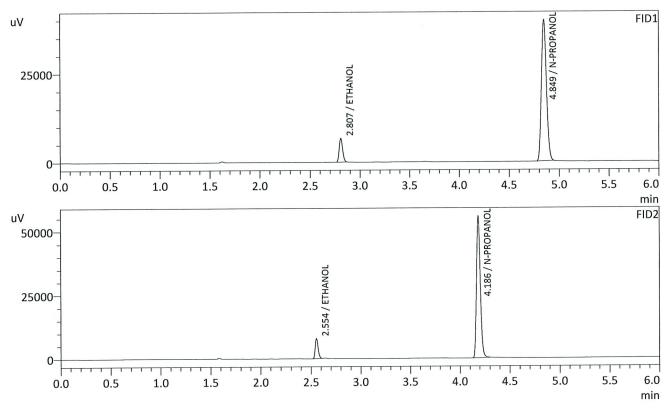
Name: ISOPROPYL ALCOHOL Not Ready Detector Name: FID2
Function: f(x)=0\*x+0
R^2 value= 0
FitType: Linear
ZeroThrough: Not Through # Conc. Std. Conc. Data File Name Area Name : DFE
Detector Name : FID2
Function : f(x)=0\*x+0 Not Ready R^2 value= 0
FitType: Linear
ZeroThrough: Not Through # Conc. Area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



: 1

Sample Name Vial # Data Filename Method Filename

Vial # : 1
Data Filename : 0.050\_242022\_001.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 2-4-22 BATCH.gcb
Date Acquired : 2/4/2022 12:18:29 PM
Date Processed : 2/7/2022 11:02:01 AM
C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



FID1Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.0503	g/100cc	15657	6687
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	139914	39619
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.0511	g/100cc	16076	7852
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	149630	55205
DFE		g/100cc		
TFE		g/100cc		

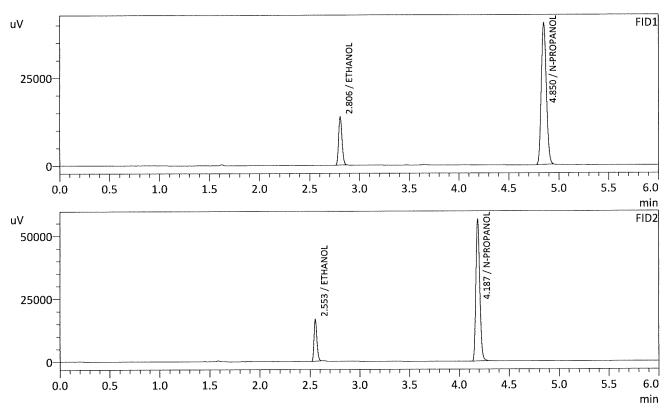


Sample Name Vial # Data Filename Method Filename Batch Filename

: 2 : 0.100\_242022\_002.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 12:28:00 PM : 2/7/2022 11:02:03 AM

Date Acquired Date Processed

C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.1001	g/100cc	32286	13687
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	142644	40285
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.1001	g/100cc	33517	16461
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	151842	56091
DFE		g/100cc		
TFE		g/100cc		

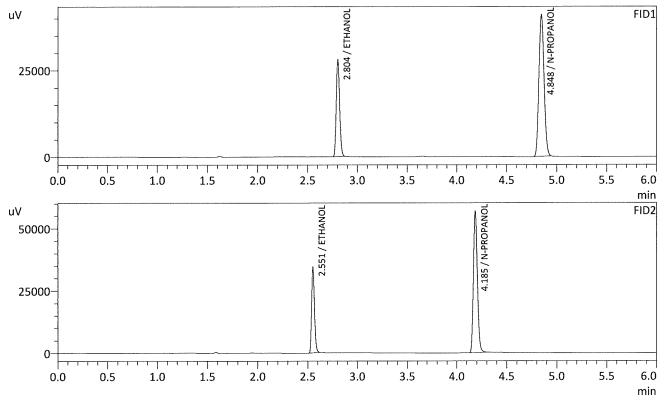


Sample Name Vial # Data Filename Method Filename Batch Filename

Date Acquired Date Processed

: 3 : 0.200\_242022\_003.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 12:37:20 PM : 2/7/2022 11:02:04 AM

C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



FID1				
Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.1996	g/100cc	65498	27838
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	144009	40840
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.1987	g/100cc	68770	34352
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	153298	56584
DFE		g/100cc		
TFE		g/100cc		

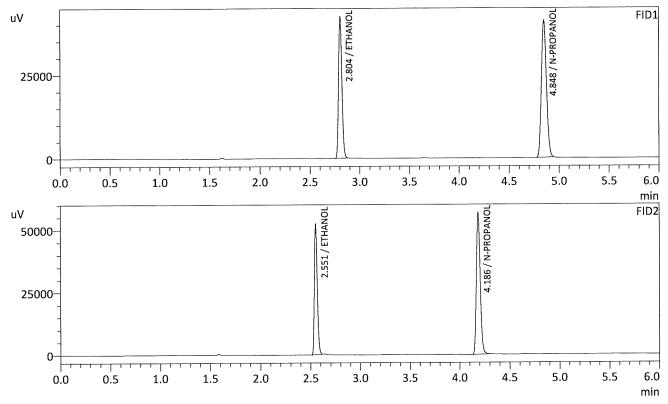


: 4

Sample Name Vial # Data Filename Method Filename

Batch Filename Date Acquired Date Processed : 0.300\_242022\_004.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 12:47:05 PM

Date Processed : 2/7/2022 11:02:05 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



FID1		· · · · · · · · · · · · · · · · · · ·		
Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.2993	g/100cc	98544	42141
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	144092	40905
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.2988	g/100cc	104241	52211
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	153333	56478
DFE		g/100cc		
TFE	~~	g/100cc		

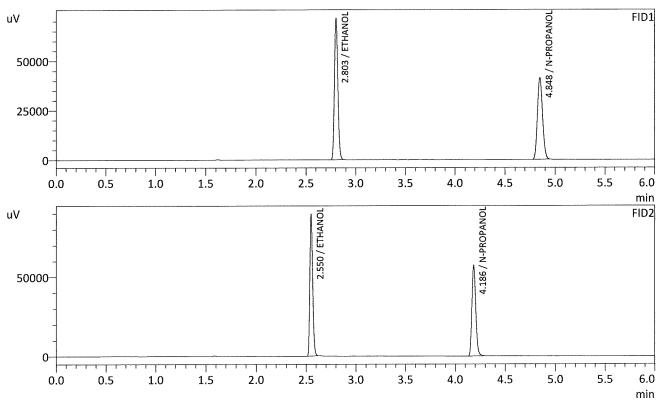


Sample Name Vial # : 0.500

: 5

Data Filename Method Filename : 0.500\_242022\_005.gcd : ALCOHOL.gcm

: 2-4-22 BATCH.gcb : 2/4/2022 12:56:37 PM : 2/7/2022 11:02:06 AM Batch Filename Date Acquired Date Processed C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.5004	g/100cc	166061	71361
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	144905	41171
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.5010	g/100cc	176596	88979
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	153973	56828
DFE		g/100cc		
TFE		g/100cc		



: INT STD BLK 1

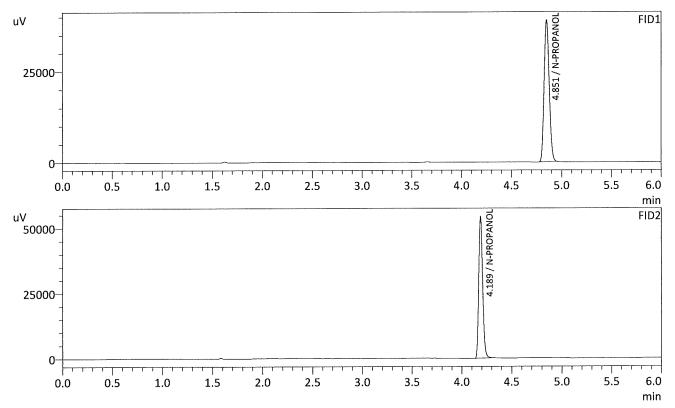
: 6

: INT STD BLK 1\_242022\_006.gcd : ALCOHOL.gcm

Sample Name Vial # Data Filename Method Filename Batch Filename

: 2-4-22 BATCH.gcb : 2/4/2022 1:05:54 PM

Date Acquired Date Processed Date Processed : 2/7/2022 11:02:08 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc	Unit	Area	Height
ivame	Conc.	Unit	Alea	neigni
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	137022	38919
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	146059	54276
DFE		g/100cc		
TFE		g/100cc		



Sample Name Vial #

: MULTI-COMP MIX

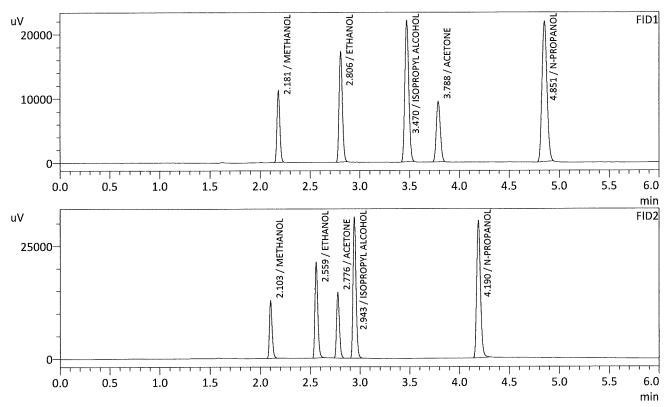
Data Filename

: MULTI-COMP MIX\_242022\_007.gcd

Method Filename Batch Filename Date Acquired

: ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 1:15:38 PM

Date Processed : 2/7/2022 11:02:09 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL	0.0000	g/100cc	22351	11120
ACETALDEHYDE		g/100cc		
ETHANOL	0.2278	g/100cc	39429	17083
ISOPROPYL ALCOHOL	0.0000	g/100cc	60741	21949
ACETONE	0.0000	g/100cc	26641	9385
N-PROPANOL	0.0000	g/100cc	75866	21807
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL	0.0000	g/100cc	23885	12697
ETHANOL	0.2299	g/100cc	42119	21053
ACETONE	0.0000	g/100cc	28934	14421
ISOPROPYL ALCOHOL	0.0000	g/100cc	65292	31199
N-PROPANOL	0.0000	g/100cc	80897	30339
DFE		g/100cc		
TFE		g/100cc		

: INT STD BLK 2

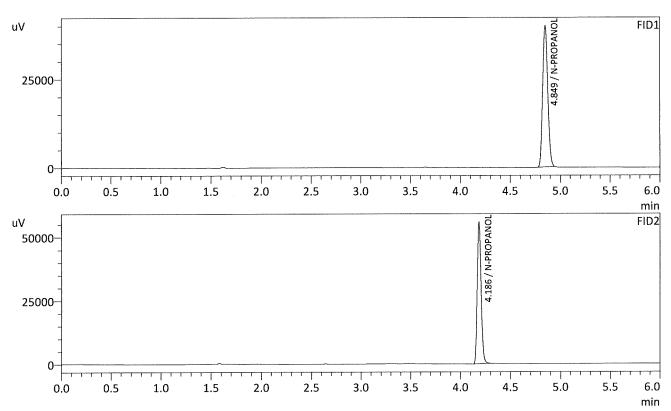
: 8

Sample Name Vial # Data Filename

: INT STD BLK 2\_242022\_008.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb

Method Filename Batch Filename

: 2/4/2022 1:25:09 PM : 2/7/2022 11:02:11 AM Date Acquired Date Processed C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL		g/100cc		
SOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	140528	39780
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc	pro his	
ETHANOL		g/100cc		**
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	149899	55306
DFE		g/100cc		
TFE		g/100cc		

### **VOLATILES BAC CASEFILE WORKSHEET**

Laboratory N	o.: QC 1 - 1		Item#		Analysis Date(s):	2/4/2022
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0732	0.0737	0.0005	0.0734	0.0000	0.0724
(g/100cc)	0.0733	0.0735	0.0002	0.0734	0.0000	0.0734
Analysis Meth	od .					
Refer to Blood	Alcohol Metho	d #1				
		i i	) <u>.</u>			
Instrument In	formation 			Instrument i	nformation is store	ed centrally.
Refer to Instrumer	nt Method: Alcoh	ol.m/.gcm, Volat	iles.m/.gcm			
Reporting of I	Results		Uncertaint	y of Measure	ment (UM%):	5.00%
Over	rall Mean (g/10	0cc)	Low	High	5% of	Mean
	0.073		0.069	0.077	0.0	04
		R	eported Resu	ılt		
			0.073			

Page: 1 of 1

Calibration and control data are stored centrally.

AC.

Revision: 1

Issue Date: 12/29/2021

Issuing Authority: Quality Manager

: QC-1-1-A

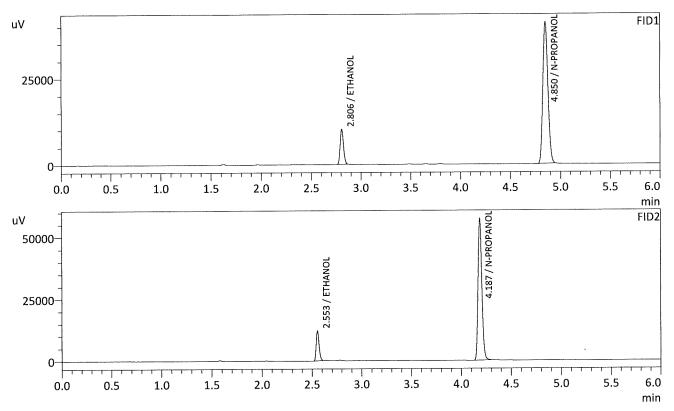
: 9

Sample Name Vial # Data Filename

Method Filename Batch Filename Date Acquired Date Processed

: QC-1-1-A\_242022\_009.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 1:34:28 PM : 2/7/2022 11:02:12 AM

C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



-IDT		1 1 1 1		11-1-1-4
Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.0732	g/100cc	23731	10112
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	144331	40897
DFE		g/100cc		
TFE		g/100cc		

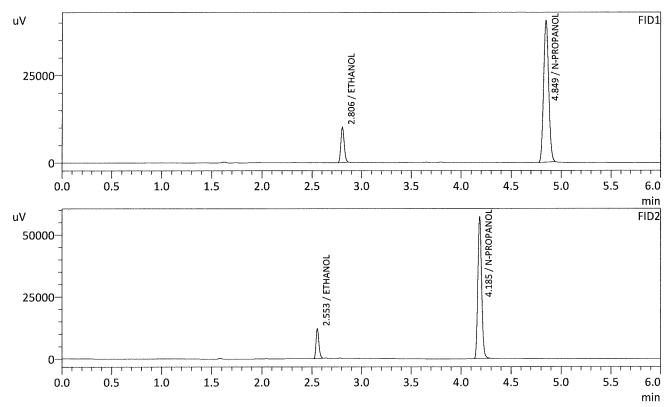
Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.0737	g/100cc	24571	11977
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	153807	57147
DFE		g/100cc		
TFE		g/100cc		

: QC-1-1-B

: 10

Sample Name Vial # Data Filename Method Filename

Vial # : 10
Data Filename : QC-1-1-B\_242022\_010.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 2-4-22 BATCH.gcb
Date Acquired : 2/4/2022 1:44:13 PM
Date Processed : 2/7/2022 11:02:13 AM
C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.0733	g/100cc	23527	9997
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	142817	40273
DFE		g/100cc	***	
TFE	No Art	g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.0735	g/100cc	24296	11903
ACETONE		g/100cc		**
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	152594	56980
DFE		g/100cc		
TFE		g/100cc		

### **VOLATILES BAC CASEFILE WORKSHEET**

Laboratory N	o.: 0.080 QA		Item #		Analysis Date(s):	2/4/2022
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0806	0.0809	0.0003	0.0807	0.0001	0.0807
(g/100cc)	0.0804	0.0809	0.0005	0.0806	- 0.0001	0.0807
Analysis Meth	ıod					
Refer to Blood	Alcohol Metho	d #1				***
Instrument In	formation			Instrument i	information is store	ed centrally.
Refer to Instrume	nt Method: Alcoh	ol.m/.gcm, Volat	iles.m/.gcm			
Reporting of I	Results		Uncertaint	y of Measure	ment (UM%):	5.00%
Ove	rall Mean (g/10	0cc)	Low	High	5% of	Mean
0.080			0.076	0.084	0.0	04
		R	eported Resu	alt 		
			0.080			

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Calibration and control data are stored centrally.

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Revision: 1

Issue Date: 12/29/2021

Issuing Authority: Quality Manager

: 0.08 QA - A

: 11

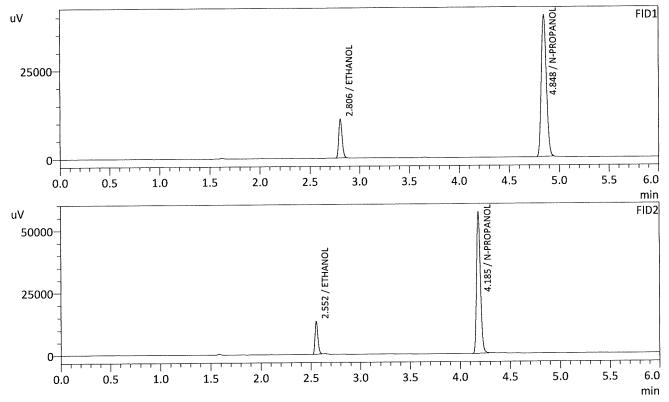
Sample Name Vial # Data Filename

: 0.08 QA - A\_242022\_011.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb

Method Filename Batch Filename Date Acquired Date Processed

: 2/4/2022 1:53:43 PM : 2/7/2022 11:02:14 AM

C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc	Unit	Area	Height
IVAILLE	COIIC.	Offic	/ Cu	110,8110
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.0806	g/100cc	25681	10898
ISOPROPYL ALCOHOL	***	g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	141565	39951
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE	***	g/100cc		
METHANOL		g/100cc		
ETHANOL	0.0809	g/100cc	26614	13070
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	151016	56609
DFE		g/100cc		
TFE		g/100cc		

Sample Name Vial #

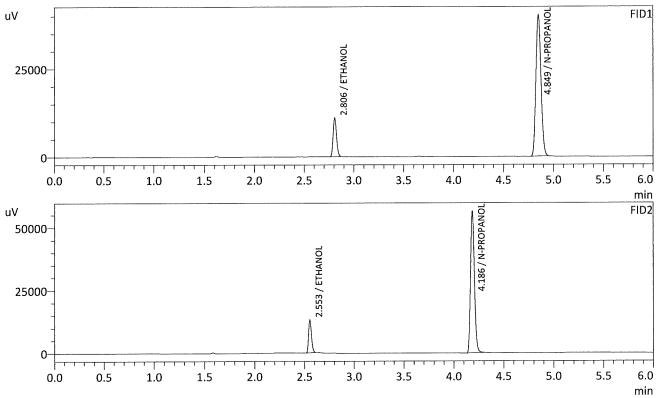
: 0.08 QA - B

Data Filename Method Filename

Batch Filename
Date Acquired
Date Processed

: 0.08 QA - B : 12 : 0.08 QA - B\_242022\_012.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 2:03:01 PM

Date Processed : 2/7/2022 11:02:16 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.0804	g/100cc	25675	10928
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	141850	40076
DFE		g/100cc		
TFE		g/100cc		   <del></del>

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.0809	g/100cc	26673	13029
ACETONE	***	g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	151288	56141
DFE		g/100cc		
TFE		g/100cc		

### **VOLATILES BAC CASEFILE WORKSHEET**

Laboratory N	o.: QC 2 - 1		Item #		Analysis Date(s):	2/4/2022
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.2149	0.2133	0.0016	0.2141	0.0006	0.2144
(g/100cc)	0.2156	0.2139	0.0017	0.2147	- 0.0006	0.2144
Analysis Metl	nod					
Refer to Blood	Alcohol Metho	d #1				
Instrument In	formation			Instrument	information is store	ed centrally.
			X231031034			-
Refer to Instrume	nt Method: Alcoh	ol.m/.gcm, Volati	iles.m/.gcm			
Reporting of 1	Results		Uncertaint	y of Measure	ment (UM%):	5.00%
Ove	rall Mean (g/10	0cc)	Low	High	5% of	Mean
	0.214			0.225	0.0	11
		R	eported Resu	ılt		
	-		0.214			

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Volatiles BAC Casefile Worksheet

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Issuing Authority: Quality Manager

Sample Name Vial #

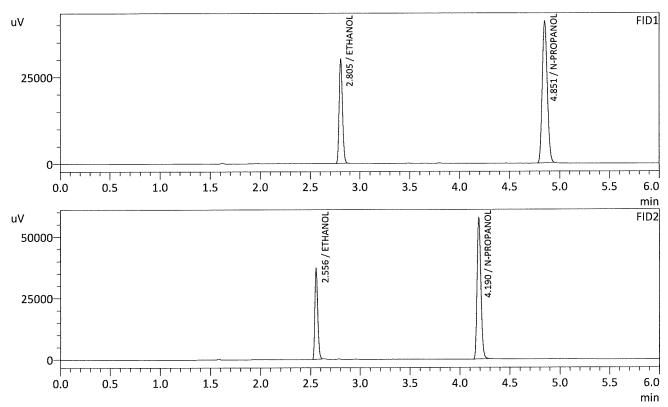
: QC-2-1-A

: 31

Data Filename Method Filename : QC-2-1-A\_242022\_031.gcd : ALCOHOL.gcm

Batch Filename Date Acquired Date Processed : 2-4-22 BATCH.gcb : 2/4/2022 5:04:04 PM : 2/7/2022 11:02:40 AM

C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm

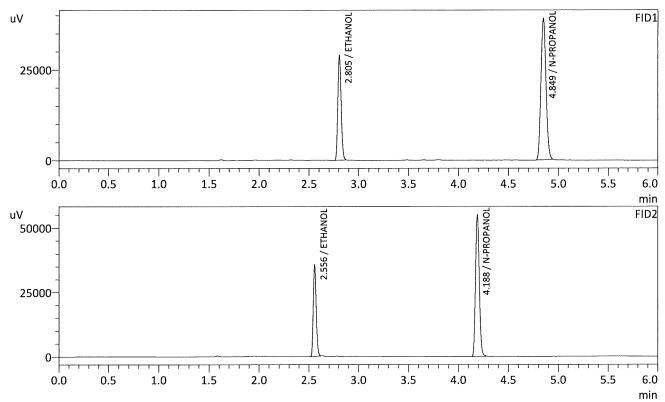


Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.2149	g/100cc	70416	29753
ISOPROPYL ALCOHOL	***	g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	143732	40866
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.2133	g/100cc	73997	36931
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	153433	57466
DFE		g/100cc		
TFE		g/100cc		

: QC-2-1-B

Sample Name Vial # Data Filename Method Filename Batch Filename : 32 : QC-2-1-B\_242022\_032.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb Date Acquired : 2/4/2022 5:13:36 PM **Date Processed** : 2/7/2022 11:02:41 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.2156	g/100cc	67612	28517
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	137502	38895
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.2139	g/100cc	71072	35461
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	146946	54963
DFE		g/100cc		
TFE		g/100cc		

### **VOLATILES BAC CASEFILE WORKSHEET**

Laboratory N	o.: QC 1 - 2		Item #		Analysis Date(s):	2/4/2022
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0791	0.0788	0.0003	0.0789	0.0007	0.0793
(g/100cc)	0.0800	0.0793	0.0007	0.0796	0.0007	0.0793
Analysis Meth	ıod	<u> </u>				
Refer to Blood	Alcohol Metho	d #1				
Instrument In	formation			Instrument i	information is stor	ed centrally.
Refer to Instrumen	nt Method: Alcoh	ol.m/.gcm, Volati	iles.m/.gcm			
Reporting of I	Reporting of Results Uncertainty of Measurement (UM%): 5.00%					5.00%
Ove						

	ed Result	
	·	
0.	079	

0.075

0.083

Calibration and control data are stored centrally.

0.079

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Revision: 1

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

0.004

: QC1-2-A

: 53

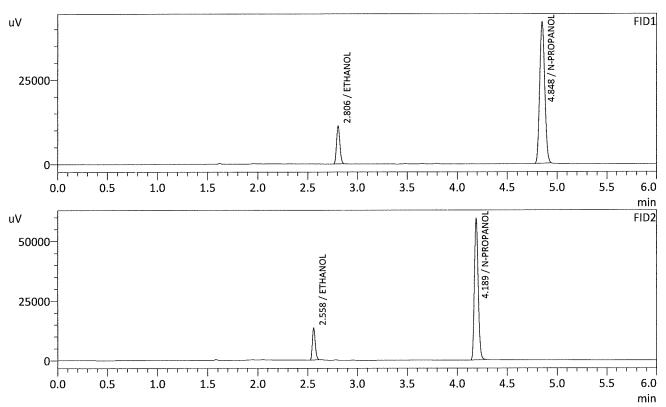
Sample Name Vial # Data Filename Method Filename

Batch Filename

: OC1-2-A\_242022\_053.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 8:33:27 PM : 2/7/2022 11:03:06 AM

Date Acquired

Date Processed C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.0791	g/100cc	26240	11167
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	147347	41810
DFE		g/100cc		
TFE		g/100cc		

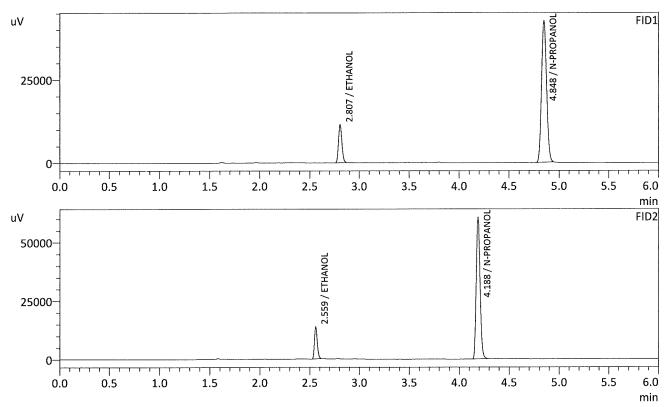
Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.0788	g/100cc	27083	13296
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	158051	59349
DFE		g/100cc		
TFE		g/100cc		

: QC1-2-B

Sample Name Vial # Data Filename Method Filename

Batch Filename Date Acquired **Date Processed**  : QC1-2-B : 54 : QC1-2-B\_242022\_054.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 8:42:44 PM

: 2/7/2022 11:03:07 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



FID1		-		
Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.0800	g/100cc	26950	11435
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	149603	42446
DFE		g/100cc		
TFE		g/100cc	***	

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc	ine sup	
METHANOL		g/100cc		
ETHANOL	0.0793	g/100cc	27665	13666
ACETONE		g/100cc	** ***	
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	160312	60440
DFE		g/100cc		
TFE		g/100cc		

### **VOLATILES BAC CASEFILE WORKSHEET**

Laboratory N	o.: QC 1 - 3		Item #		Analysis Date(s):	2/4/2022	
	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean	
Sample Results	0.0809	0.0807	0.0002	0.0808	0.0000	0.0904	
(g/100cc)	0.0805	0.0796	0.0009	0.0800	- 0.0008	0.0804	
Analysis Meth	ıod						
Refer to Blood	Alcohol Metho	d #1					
Instrument Information Instrument information is stored centrally.							
Refer to Instrume	nt Method: Alcol	nol.m/.gcm, Volati	iles.m/.gcm				
Reporting of I	Results		Uncertaint	y of Measure	ment (UM%):	5.00%	
Over	rall Mean (g/10	0cc)	Low	High	5% of	Mean	
	0.080			0.084	0.0	04	
	Re			ılt			
			0.080				

Page: 1 of 1

Calibration and control data are stored centrally.



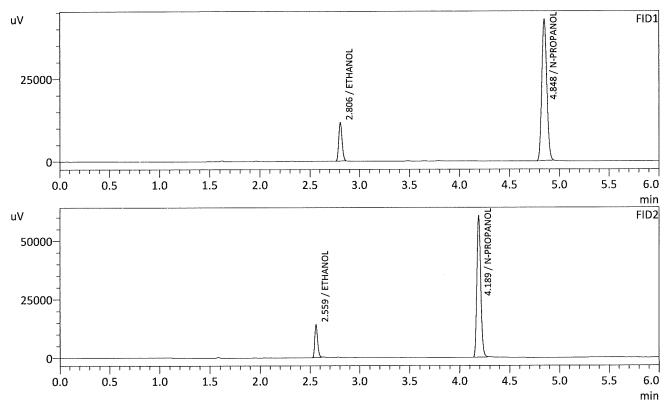
Revision: 1

Issue Date: 12/29/2021

Issuing Authority: Quality Manager

: QC1-3-A

Sample Name Vial # Data Filename Method Filename : QC1-3-A : 71 : QC1-3-A\_242022\_071.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 11:24:40 PM Batch Filename Date Acquired Date Processed : 2/7/2022 11:03:28 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc	~~	
ETHANOL	0.0809	g/100cc	27343	11626
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	150022	42650
DFE		g/100cc		
TFE		g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.0807	g/100cc	28263	14017
ACETONE		g/100cc	~-	
ISOPROPYL ALCOHOL		g/100cc	~	
N-PROPANOL	0.0000	g/100cc	160802	60466
DFE	***	g/100cc		
TFE		g/100cc		

: QC1-3-B

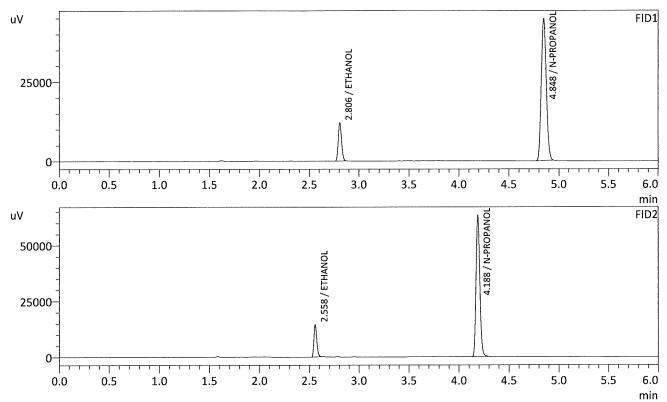
Sample Name Vial # Data Filename

Method Filename Batch Filename

: QC1-3-B : 72 : QC1-3-B\_242022\_072.gcd : ALCOHOL.gcm : 2-4-22 BATCH.gcb : 2/4/2022 11:33:58 PM

Date Acquired

Date Processed : 2/7/2022 11:03:29 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm

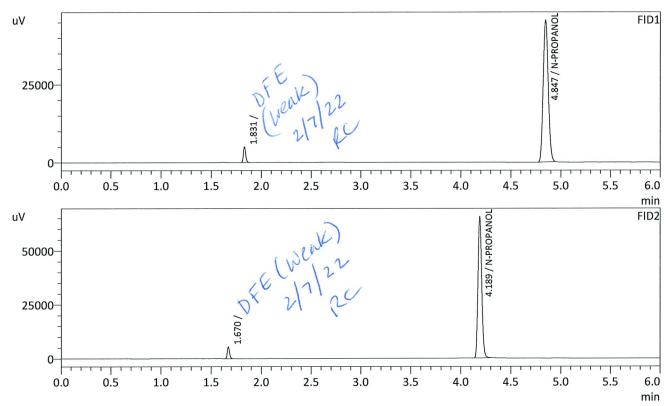


Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	0.0805	g/100cc	28381	12007
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc		
N-PROPANOL	0.0000	g/100cc	156536	44647
DFE		g/100cc		
TFE	***	g/100cc		

Name	Conc.	Unit	Area	Height
ACETALDEHYDE		g/100cc		
METHANOL		g/100cc		
ETHANOL	0.0796	g/100cc	29213	14327
ACETONE		g/100cc		
ISOPROPYL ALCOHOL		g/100cc		
N-PROPANOL	0.0000	g/100cc	168496	63257
DFE		g/100cc		
TFE		g/100cc		

: DFE : 73

Sample Name Vial # Data Filename Method Filename VIAI # : /3
Data Filename : DFE\_242022\_073.gcd
Method Filename : ALCOHOL.gcm
Batch Filename : 2-4-22 BATCH.gcb
Date Acquired : 2/4/2022 11:43:44 PM
Date Processed : 2/7/2022 11:03:30 AM
C:\LabSolutions\Data\2022\2-4-22 RC\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	158281	45546
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	171605	65398
DFE		g/100cc		
TFE		g/100cc		

: INT STD BLK 3

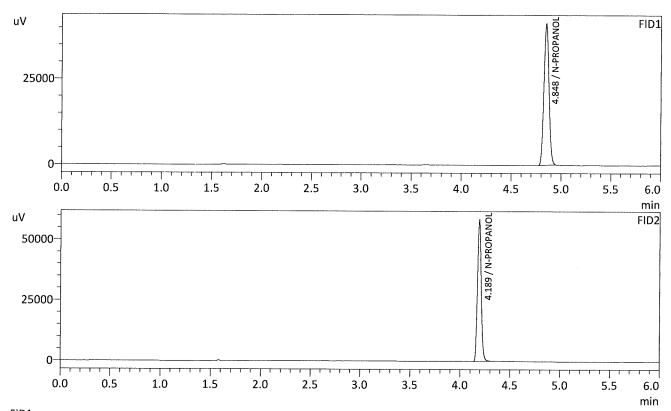
: 74

: INT STD BLK 3\_242022\_074.gcd : ALCOHOL.gcm

Sample Name Vial # Data Filename Method Filename Batch Filename

: 2-4-22 BATCH.gcb : 2/4/2022 11:53:12 PM

Date Acquired Date Processed : 2/7/2022 11:03:31 AM C:\LabSolutions\Data\2022\2-4-22 RC\ALCOHOL.gcm



Name	Conc.	Unit	Area	Height
METHANOL		g/100cc		
ACETALDEHYDE		g/100cc		
ETHANOL	***	g/100cc	***	
ISOPROPYL ALCOHOL		g/100cc		
ACETONE		g/100cc	No to	
N-PROPANOL	0.0000	g/100cc	144865	41279
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	44	
N-PROPANOL	0.0000	g/100cc	155457	58442
DFE		g/100cc		
TFE	we we	g/100cc	**	

### 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	0.050	1:Standard:(I)	ALCOHOL.gcm		1
2	0.100	1:Standard:(R)	ALCOHOL.gcm		2
3	0.200	1:Standard:(R)	ALCOHOL.gcm		3
4	0.300	1:Standard:(R)	ALCOHOL.gcm		4
5	0.500	1:Standard:(R)	ALCOHOL.gcm		5
6	INT STD BLK 1	0:Unknown	ALCOHOL.gcm		0
7	MULTI-COMP MIX	0:Unknown	ALCOHOL.gcm	MULTI-COMP MIX_1292021_001.gcd	1
8	INT STD BLK 2	0:Unknown	ALCOHOL.gcm		0
9	QC-1-1-A	0:Unknown	ALCOHOL.gcm		0
10	QC-1-1-B	0:Unknown	ALCOHOL.gcm		0
11	0.08 QA - A	0:Unknown	ALCOHOL.gcm		0
12	0.08 QA - B	0:Unknown	ALCOHOL.gcm		0
13	P2021-4200-1-A	0:Unknown	ALCOHOL.gcm		0
14	P2021-4200-1-B	0:Unknown	ALCOHOL.gcm		0
15	P2022-0034-2-A	0:Unknown	ALCOHOL.gcm		0
16	P2022-0034-2-B	0:Unknown	ALCOHOL.gcm		0
17	P2022-0035-1-A	0:Unknown	ALCOHOL.gcm		0
18	P2022-0035-1-B	0:Unknown	ALCOHOL.gcm		0
19	P2022-0040-1-A	0:Unknown	ALCOHOL.gcm		0
20	P2022-0040-1-B	0:Unknown	ALCOHOL.gcm		0
21	P2022-0049-1-A	0:Unknown	ALCOHOL.gcm		0
22	P2022-0049-1-B	0:Unknown	ALCOHOL.gcm		0
23	P2022-0050-1-A	0:Unknown	ALCOHOL.gcm		0
24	P2022-0050-1-B	0:Unknown	ALCOHOL.gcm		0
25	P2022-0072-1-A	0:Unknown	ALCOHOL.gcm		0
26	P2022-0072-1-B	0:Unknown	ALCOHOL.gcm		0
27	P2022-0073-1-A	0:Unknown	ALCOHOL.gcm		0
28	P2022-0073-1-B	0:Unknown	ALCOHOL.gcm		0
29	P2022-0074-1-A	0:Unknown	ALCOHOL.gcm		0
30	P2022-0074-1-B	0:Unknown	ALCOHOL.gcm		0
31	QC-2-1-A	0:Unknown	ALCOHOL.gcm		0
32	QC-2-1-B	0:Unknown	ALCOHOL.gcm		0
33	P2022-0090-1-A	0:Unknown	ALCOHOL.gcm		0
34	P2022-0090-1-B	0:Unknown	ALCOHOL.gcm		0
35	P2022-0109-1-A	0:Unknown	ALCOHOL.gcm		0
36	P2022-0109-1-B	0:Unknown	ALCOHOL.gcm		0
37	P2022-0110-1-A	0:Unknown	ALCOHOL.gcm		0
38	P2022-0110-1-B	0:Unknown	ALCOHOL.gcm		0
39	P2022-0111-1-A	0:Unknown	ALCOHOL.gcm		0
40	P2022-0111-1-B	0:Unknown	ALCOHOL.gcm		0
41	P2022-0123-1-A	0:Unknown	ALCOHOL.gcm		0
42	P2022-0123-1-B	0:Unknown	ALCOHOL.gcm		0
43	P2022-0160-1-A	0:Unknown	ALCOHOL.gcm		0
44	P2022-0160-1-B	0:Unknown	ALCOHOL.gcm		0
45	P2022-0164-1-A	0:Unknown	ALCOHOL.gcm		0
46	P2022-0164-1-B	0:Unknown	ALCOHOL.gcm		0
47	P2022-0187-1-A	0:Unknown	ALCOHOL.gcm		0
48	P2022-0187-1-B	0:Unknown	ALCOHOL.gcm		0
49	P2022-0188-1-A	0:Unknown	ALCOHOL.gcm		0
50	P2022-0188-1-B	0:Unknown	ALCOHOL.gcm		0
51	P2022-0216-1-A	0:Unknown	ALCOHOL.gcm		0
52	P2022-0216-1-B	0:Unknown	ALCOHOL.gcm		0

Vial#	Sample Name	Sample Type	Method File	Data File	Level#
53	QC1-2-A	0:Unknown	ALCOHOL.gcm		0
54	QC1-2-B	0:Unknown	ALCOHOL.gcm		0
55	P2022-0221-1-A	0:Unknown	ALCOHOL.gcm		0
56	P2022-0221-1-B	0:Unknown	ALCOHOL.gcm		0
57	P2022-0223-1-A	0:Unknown	ALCOHOL.gcm		0
58	P2022-0223-1-B	0:Unknown	ALCOHOL.gcm		0
59	P2022-0239-1-A	0:Unknown	ALCOHOL.gcm		0
60	P2022-0239-1-B	0:Unknown	ALCOHOL.gcm		0
61	P2022-0241-1-A	0:Unknown	ALCOHOL.gcm		0
62	P2022-0241-1-B	0:Unknown	ALCOHOL.gcm		0
63	P2022-0276-1-A	0:Unknown	ALCOHOL.gcm		0
64	P2022-0276-1-B	0:Unknown	ALCOHOL.gcm		0
65	P2022-0283-1-A	0:Unknown	ALCOHOL.gcm		0
66	P2022-0283-1-B	0:Unknown	ALCOHOL.gcm		0
67	P2022-0296-1-A	0:Unknown	ALCOHOL.gcm		0
68	P2022-0296-1-B	0:Unknown	ALCOHOL.gcm		0
69	P2022-0302-1-A	0:Unknown	ALCOHOL.gcm		0
70	P2022-0302-1-B	0:Unknown	ALCOHOL.gcm		0
71	QC1-3-A	0:Unknown	ALCOHOL.gcm		0
72	QC1-3-B	0:Unknown	ALCOHOL.gcm		0
73	DFE	0:Unknown	ALCOHOL.gcm		0
74	INT STD BLK 3	0:Unknown	ALCOHOL.gcm		0



### Request for Departure from an Analytical Method or Quality Standard

Deviation Number (assigned by QM):

Date of Request: 1/21/2022

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

Analytical Method/Quality Standard, Revision #: 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.

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

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