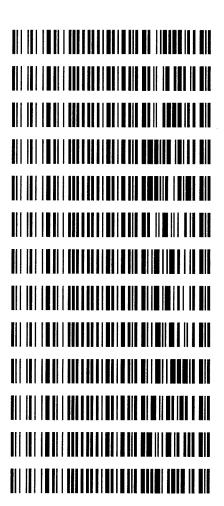
REVIEWED

By Melissa (Nikka) Bradley at 11:19 am, Nov 23, 2018

Worklist: 2794

<u>LAB CASE</u> C2018-2236	<u>ITEM</u> 1	TASK ID 131209	DESCRIPTION Alcohol Analysis
C2018-2248	1	131283	Alcohol Analysis
C2018-2249	1	131289	Alcohol Analysis
C2018-2251	1	131387	Alcohol Analysis
C2018-2256	1	131394	Alcohol Analysis
C2018-2277	1	131445	Alcohol Analysis
C2018-2289	1	131648	Alcohol Analysis
C2018-2290	1	131651	Alcohol Analysis
C2018-2297	1	131724	Alcohol Analysis
C2018-2298	1	131727	Alcohol Analysis
C2018-2311	1	131825	Alcohol Analysis
C2018-2322	1	131978	Alcohol Analysis
C2018-2331	1	132137	Alcohol Analysis

c2018-2167 was re-run with this set of cases from worklist #2758





Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB 600 Liquid Processor/Dilutor Serial Number: ML600HC11379

Volatiles Quality Assurance Controls

Run Date(s):11/19/2018

1801036 0.0812 0.0731-0.0893	0.99999	999 Column2	0.99999	Column 1		Curve Fit:	The state of the s
1801036 0.0812 0.0731-0.0893 1803028 0.2035 0.1832-0.2238	OK	FN06041502	Lot#		Sep-20	nt mixture:	Multi-Component mixture: Sep-20
1801036 0.0812 0.0731-0.0893 1803028 0.2035 0.1832-0.2238	g/100cc						
1801036 0.0812 0.0731-0.0893	g/100cc	0.1832-0.2238	035	0.2	1803028	Jan-22	Level 2
1801036 0.0812 0.0731-0.0893	0.1984 g/100cc					. // 4//	
1801036 0.0812 0.0731-0.0893	g/100cc						
Tarreliance Transfer Transfer	0.0789 g/100cc	0.0731-0.0893	812	0.0	1801036	Jan-22	Level 1
Total Transfer than Treespendie Transfer	0.0774 g/100cc						
Lot # Target Value Accentable Range	Overall Results	Acceptable Range	t Value	Target	Lot#	Expiration	Control level Expiration

Ethanol Cal	libration Refe	Ethanol Calibration Reference Material						
Calibrator level	Expiration	Cerilliant Lot#	Target Value	Acceptable Range	Column 1	Column 2	e Range Column 1 Column 2 Precision Mean	Mean
0.050	Jun-21	FN04271601	0.050	0.045 - 0.055	0.0498	0.0490	0.0008	0.0494
0.080							0	#DIV/0!
0.100	Jun-20	FN06181501	0.100	0.090 - 0.110	0.0999	0.0984	0.0015	0.0991
0.200	Apr-21	FN03301601	0.200	0.180 - 0.220	0.2004	0.1988	0.0016	0.1996
0.300	Feb-21	FN02121601	0.300	0.270 - 0.330	0.3020	0.3019	1E-04	0.3019
0.400							0	#DIV/0!
0.500	Aug-19	FN07031402	0.500	0.450 - 0.550	0.4987 0.4998		0.0011	0.4992

7	Aqueous Controls	rols				
Control level	Expiration	Expiration Cerilliant Lot #	Target Value	Acceptable Range	Overall Results	Results
0.080	May-22	FN04171701	0.08000	0.076 - 0.084	0.079	g/100cc

Issued: 4/22/2015

Volatiles QA/QC data spreadsheet Rev 5 Issuing Authority: Quality Manager



Sample Summary

Sequence table: C:\Chem32\1\TEMP\AESEQ\QS_19.11.2018_02.58.01\11-19-2018.S

Data directory path: C:\Chem32\1\Data\11-19-2018-JJ

Logbook: C:\Chem32\1\Data\11-19-2018-JJ\11-19-2018.LOG Sequence start: 11/19/2018 3:11:46 PM

Sequence Operator: SYSTEM Operator: SYSTEM

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

	n Location	Inj	Sample Name	Sample .	Amt	Multip.*	File	name	,	7. 7	11
#		#		[0/1000	a 1	D472				Cal	#
	-	~			- 		1		1	1	Cmp
-	L 1	1	water	·	,	1.0000	001F0101	D	-		
2	2 2	1	VOL MIX FN-06041	_			002F0201				0
3	3 3		ISTD BLANK	_			002F0201				10
4	4 4	1	QC-1-A	_			003F0301				2
Ę	5 5	1	QC-1-B	_			004F0401				4
6	5 6	1	0.08 FN04171701-	_			005F0501				4
7	7 7		0.08 FN04171701-	_			000F0001				4
8	8 8		C2018-2236-1-A	_			007F0701				4
9	9		C2018-2236-1-B	_			009F0901				4
10	10		C2018-2248-1-A	_			010F1001				4
11	1.1		C2018-2248-1-B	_			010F1001 011F1101				6
12	12		C2018-2249-1-A	_							6
13	13		C2018-2249-1-B				012F1201 013F1301				4
14	14		C2018-2251-1-A	_							4
15	15		C2018-2251-1-B				014F1401				4
16	16		C2018-2256-1-A	_			015F1501				4
17	17		C2018-2256-1-B				016F1601				4
18	18		C2018-2277-1-A	_			017F1701				4
19	19		C2018-2277-1-B	-			018F1801				2
20	20		C2018-2289-1-A	_			019F1901				2
21	21		C2018-2289-1-B	_			020F2001				4
22	22		C2018-2290-1-A	-			021F2101				4
	23		C2018-2290-1-B	-			022F2201				2
24	24		C2018-2297-1-A	_			023F2301.				2
	25		C2018-2297-1-B	_			024F2401.				4
26			QC-2-A	-			025F2501.				4
27			QC-2-B				026F2601.				4
28	28		C2018-2298-1-A	_			027F2701.				4
29			C2018-2298-1-B	_			028F2801.				4
	30		C2018-2311-1-A	_			029F2901.				4
31			C2018-2311-1-A	••			030F3001.				4
32				_			031F3101.				4
33			C2018-2322-1-A	_			032F3201.				4
34			C2018-2322-1-B	-			33F3301.				4
35			22018-2331-1-A	-			34F3401.				4
36			22018-2331-1-B				35F3501.				4
37			2018-2167-1-A	-			36F3601.				4
38			2018-2167-1-B	_		1.0000 0	37F3701.	D			4
39			C-1-A	-			38F3801.				4
			C-1-B	-			39F3901.				4
40 41			STD BLANK	-		1.0000 0	40F4001.	D			2
# T	# T	T M	ater			1.0000 0	41F4101.)			0

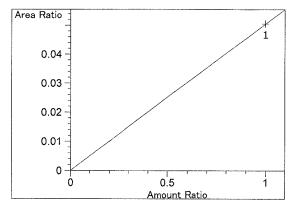
```
Calibration Table
-----
             General Calibration Setting
Calib. Data Modified :
                  Monday, November 19, 2018 2:48:55 PM
Signals calculated separately: No
Rel. Reference Window:
                  0.000 %
Abs. Reference Window:
                  0.100 min
                  0.000 %
Rel. Non-ref. Window :
Abs. Non-ref. Window :
                  0.100 min
Uncalibrated Peaks :
                  not reported
Partial Calibration : No recalibration if peaks missing
           : Linear
Curve Type
Origin
                  Forced
Weight
                  Equal
Recalibration Settings:
                  Average all calibrations
Average Response :
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
     1.00000 n-Propanol
_____
                 Signal Details
______
Signal 1: FID1 A, Front Signal
Signal 2: FID2 B, Back Signal
Overview Table
```

29

```
RT Sig Lvl Amount
                       Area Rsp.Factor Ref ISTD # Compound
             [g/100cc]
2.000 2 1
                       5.00000 2.00000e-1 No No 2 Difluoroethane
            1.00000
  2.000 1 1
              1.00000
                       5.00000 2.00000e-1 No No 1 Difluoroethane
 2.494 1 1
              1.00000
                       3.69669 2.70512e-1 No No 1 Methanol
 2.772 1 1
              1.00000
                       3.19311 3.13174e-1 No No 1 Acetaldehyde
 2.797 2 1
                       3.10575 3.21983e-1 No No 2 Acetaldehyde
              1.00000
  3.105 1 1 5.00000e-2
                      9.19494 5.43777e-3 No No 1 Ethanol
         2 1.00000e-1 17.99894 5.55588e-3
         3 2.00000e-1 35.79288 5.58770e-3
         4 3.00000e-1
                     55.85429 5.37112e-3
                     90.90498 5.50025e-3
         5 5.00000e-1
 3.211 2 1
            1.00000 4.26062 2.34707e-1 No No 2 Methanol
 3.715 1 1
              1.00000
                     9.73055 1.02769e-1 No No 1 Isopropyl alcohol
 4.176 2 1 5.00000e-2
                      8.99198 5.56051e-3 No No 2 Ethanol
         2 1.00000e-1
                      17.66781 5.66001e-3
         3 2.00000e-1 35.23597 5.67602e-3
         4 3.00000e-1 55.47562 5.40778e-3
         5 5.00000e-1
                     90.34902 5.53409e-3
 4.530 1 1
            1.00000
                      6.49940 1.53860e-1 No No 1 Acetone
 4.549 2 1
            1.00000
                      6.89301 1.45075e-1 No No 2 Acetone
 4.870 2 1
            1.00000 10.70642 9.34019e-2 No No 2 Isopropyl alcohol
 4.938 1 1
            1.00000
                     98.97179 1.01039e-2 No Yes 1 n-Propanol
         2
             1.00000
                     96.65092 1.03465e-2
            1.00000 95.83787 1.04343e-2
             1.00000
                     99.21509 1.00791e-2
         5
             1.00000
                     97.79926 1.02250e-2
 7.614 2 1
                     96.61105 1.03508e-2 No Yes 2 n-Propanol
             1.00000
         2
            1.00000 94.51627 1.05802e-2
            1.00000
                      93.31995 1.07158e-2
             1.00000
                      96.75680 1.03352e-2
             1.00000
                      95.18872 1.05054e-2
                       Peak Sum Table
***No Entries in table***
Calibration Curves
                     ______
Area Ratio
                              Difluoroethane at exp. RT: 2.000
  0.05
                              FID2 B, Back Signal
                              Correlation:
                                                  1.00000
  0.04
                              Residual Std. Dev.:
                                                 0.00000
                              Formula: y = mx
  0.03
                                   m:
                                          5.17539e-2
                                   x: Amount Ratio
  0.02
                                   y: Area Ratio
  0.01
    0
```

79

Amount Ratio



Difluoroethane at exp. RT: 2.000

FID1 A, Front Signal

Correlation: 1.00000

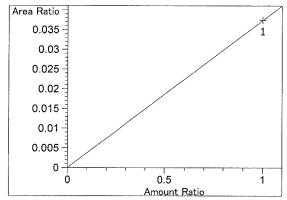
Residual Std. Dev.: 0.00000

Formula: y = mx

m: 5.05194e-2

x: Amount Ratio

y: Area Ratio



Methanol at exp. RT: 2.494

FID1 A, Front Signal

Correlation: 1.00000

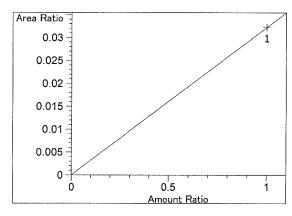
Residual Std. Dev.: 0.00000

Formula: y = mx

m: 3.73510e-2

x: Amount Ratio

y: Area Ratio



Acetaldehyde at exp. RT: 2.772

FID1 A, Front Signal

Correlation: 1.00000

Residual Std. Dev.: 0.00000

Formula: y = mx

m: 3.22628e-2

x: Amount Ratio

y: Area Ratio

Acetaldehyde at exp. RT: 2.797

FID2 B, Back Signal

Correlation: 1.00000

Residual Std. Dev.: 0.00000

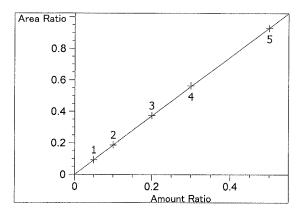
Formula: y = mx

m: 3.21469e-2

x: Amount Ratio

y: Area Ratio

H



Ethanol at exp. RT: 3.105

FID1 A, Front Signal

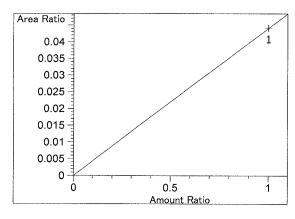
Correlation: 0.99999 Residual Std. Dev.: 0.00229

Formula: y = mx

m: 1.86396

x: Amount Ratio

y: Area Ratio



Methanol at exp. RT: 3.211

FID2 B, Back Signal

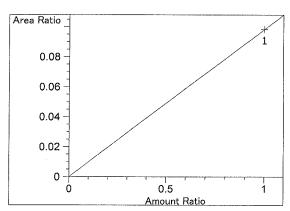
Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

m: 4.41008e-2

x: Amount Ratio

y: Area Ratio



Isopropyl alcohol at exp. RT: 3.715

FID1 A, Front Signal

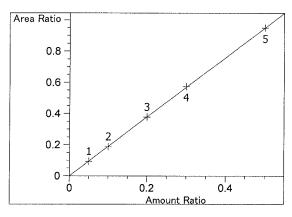
Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

9.83164e-2

x: Amount Ratio

y: Area Ratio



Ethanol at exp. RT: 4.176

FID2 B, Back Signal

Correlation: 0.99999

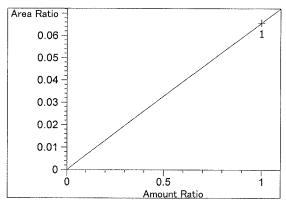
Residual Std. Dev.: 0.00277

Formula: y = mx

1.89923 \mathfrak{m} :

x: Amount Ratio

y: Area Ratio

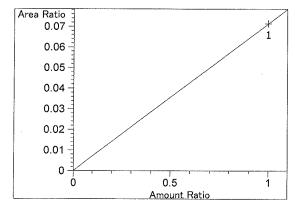


Acetone at exp. RT: 4.530 FID1 A, Front Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

m: 6.56692e-2
x: Amount Ratio
y: Area Ratio



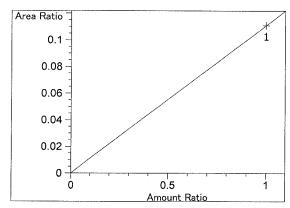
Acetone at exp. RT: 4.549 FID2 B, Back Signal

Correlation: 1.00000

Residual Std. Dev.: 0.00000

Formula: y = mx

m: 7.13480e-2
x: Amount Ratio
y: Area Ratio



Isopropyl alcohol at exp. RT: 4.870

FID2 B, Back Signal

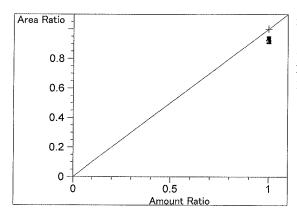
Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

m: 1.10820e-1

x: Amount Ratio

y: Area Ratio



n-Propanol at exp. RT: 4.938

FID1 A, Front Signal

Correlation: 1.00000

Residual Std. Dev.: 0.00000

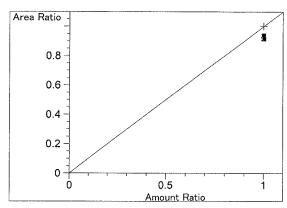
Formula: y = mx

m: 1.00000

x: Amount Ratio

y: Area Ratio

 \mathcal{H}



n-Propanol at exp. RT: 7.614

FID2 B, Back Signal

Correlation:

Residual Std. Dev.: 0.00000

1.00000

Formula: y = mx

m: 1.00000

x: Amount Ratio

y: Area Ratio

Sample Summary

Sequence table: C:\Chem32\1\TEMP\AESEQ\QS_19.11.2018 01.14.28\11-19-18cal.S

Data directory path: C:\Chem32\1\Data\11-19-18calJJ

Logbook: C:\Chem32\1\Data\11-19-18calJJ\11-19-18cal.LOG

Sequence start: 11/19/2018 1:28:09 PM

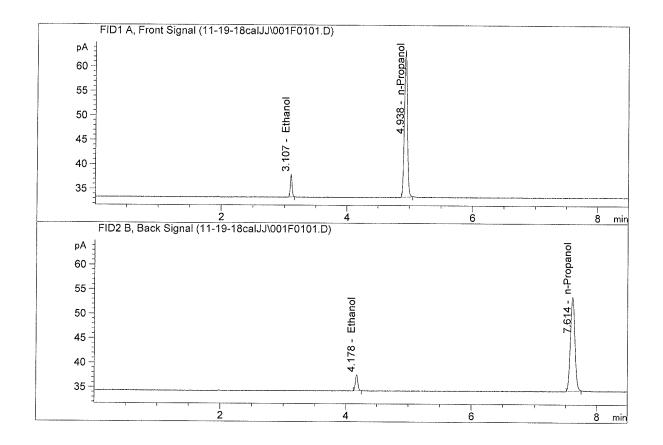
Sequence Operator: SYSTEM Operator: SYSTEM

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

Run #	Location	Inj #	Sample	Name	Sample Amt [g/100cc]	_	File name	Cal	# Cmp
1	1	1	0.05		_	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	blank		-	1.0000	006F0601.D		2

Sample Name : 0.05

Laboratory : Coeur d'Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M

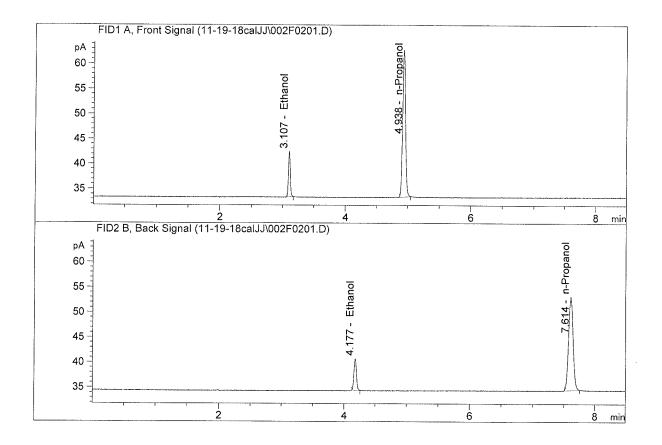


#	Compound	Column	Area	Amount	Units
2. 3.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	9.19494 8.99198 98.97179 96.61105	0.0498 0.0490 1.0000	g/100cc g/100cc g/100cc g/100cc



Sample Name : 0.100

Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M

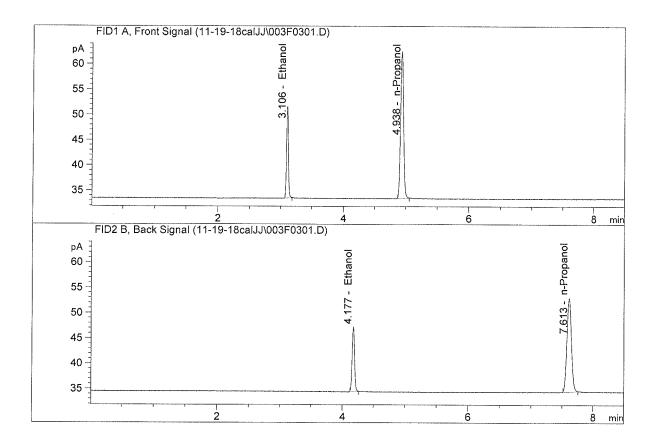


#	Compound	Column	Area	Amount	Units
2.	Ethanol Ethanol n-Propanol	Column 1: Column 2: Column 1:	17.99894 17.66781 96.65092	0.0999 0.0984 1.0000	g/100cc g/100cc g/100cc
4.	n-Propanol	Column 2:	94.51627	1.0000	g/100cc



Sample Name : 0.200

Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M

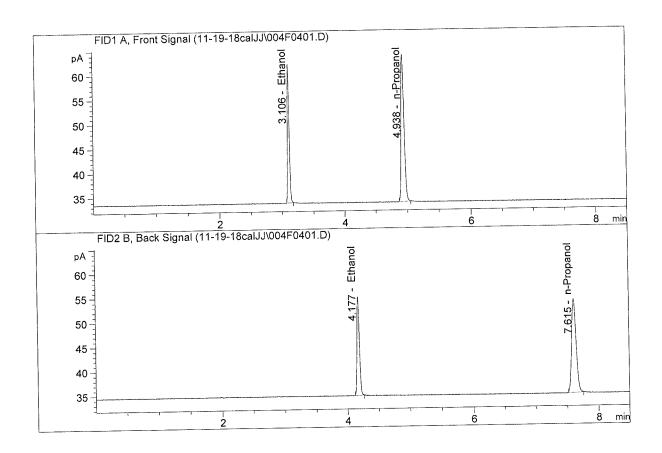


#	Compound	Column	Area	Amount	Units
2.	Ethanol	Column 1:	35.79288	0.2004	g/100cc
	Ethanol	Column 2:	35.23597	0.1988	g/100cc
	n-Propanol	Column 1:	95.83787	1.0000	g/100cc
	n-Propanol	Column 2:	93.31995	1.0000	g/100cc



Sample Name : 0.300

Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



# Com	pound	Column	Area	Amount	Units
		Column 1: Column 2: Column 1: Column 2:	55.85429 55.47562 99.21509 96.75680	0.3020 0.3019 1.0000 1.0000	g/100cc g/100cc g/100cc g/100cc

Sample Name

0.500

Laboratory : Injection Date :

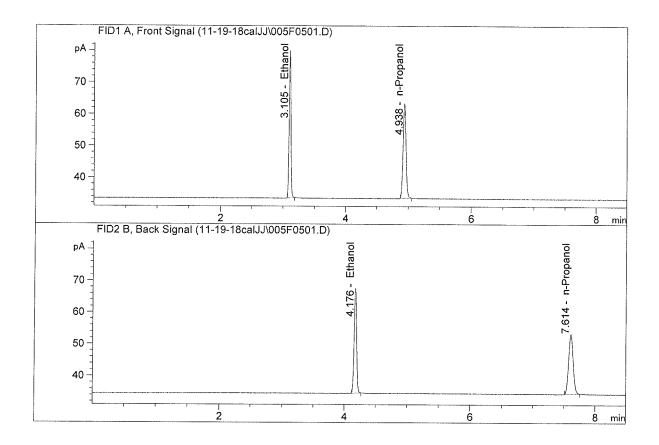
Coeur d' Alene Nov 19, 2018

Method

ALCOHOL.M

Acq. Instrument:

CN10742044-IT00725005

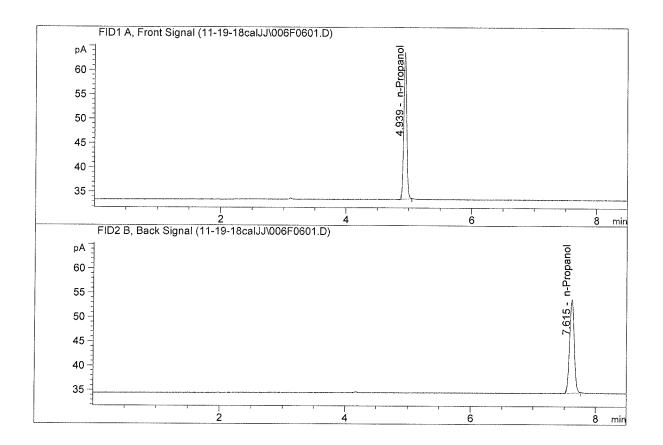


#	Compound	Column	Area	Amount	Units
2. 3.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	90.90498 90.34902 97.79926 95.18872	0.4987 0.4998 1.0000	g/100cc g/100cc g/100cc g/100cc



Sample Name : blank

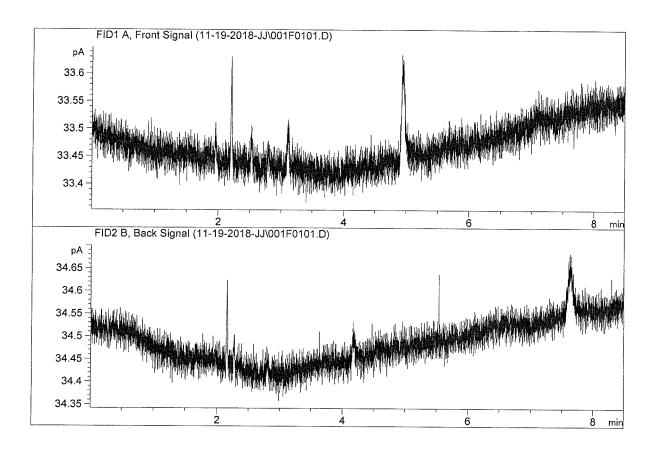
Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	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:	98.91236	1.0000	g/100cc
4.	n-Propanol	Column 2:	96.85460	1.0000	g/100cc



Sample Name : water
Laboratory : Coeur d' Alene
Injection Date : Nov 19, 2018
Method : ALCOHOL.M
Acq. Instrument: CN10742044-IT00725005

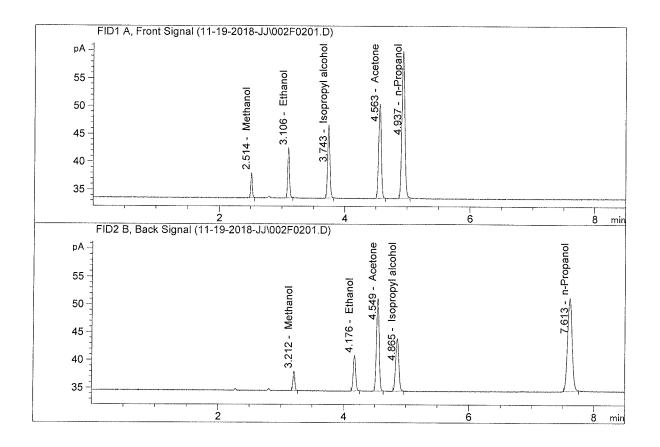


#	Compound	Column	Area	Amount	Units
2. 3.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	0.00000 0.00000 0.00000 0.00000	0.0000 0.0000 0.0000 0.0000	g/100cc g/100cc g/100cc g/100cc



Sample Name : VOL MIX FN-06041502

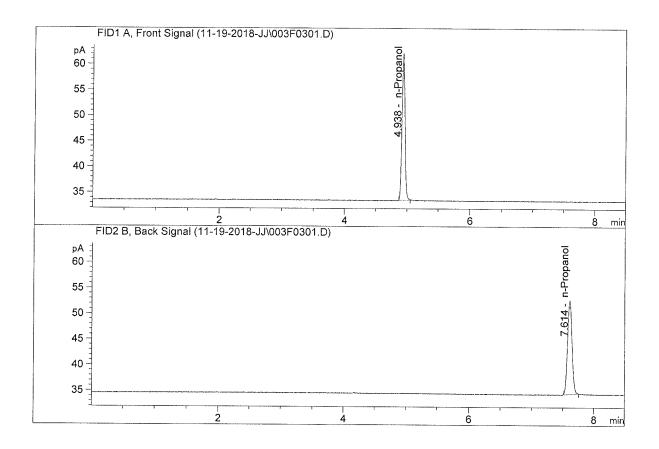
Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
	Ethanol	Column 1:	17.85704	0.1103	g/100cc
2.	Ethanol	Column 2:	17.59645	0.1096	g/100cc
3.	n-Propanol	Column 1:	86.85658	1.0000	g/100cc
4.	n-Propanol	Column 2:	84.54942	1.0000	g/100cc



Sample Name : ISTD BLANK
Laboratory : Coeur d' Alene
Injection Date : Nov 19, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
2. 3.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	0.00000 0.00000 94.21945 92.21643	0.0000 0.0000 1.0000	g/100cc g/100cc g/100cc g/100cc



VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1 Analysis Date(s): 19 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0777	0.0770	0.0007	0.0773	0.0774	
(g/100cc)	0.0780	0.0772	0.0008	0.0776	0.0774	

Analysis	Meth	od
----------	------	----

Refer to Blood Alcohol Method #1

Instrument Information

Instrument method is stored centrally.

Refer to Instrument Method: Alcohol.m

Hamilton Auto-Dilutor Serial Number: ML600HC11379

Reporting of Results	Uncertainty	Uncertainty of Measurement (UM%): 5.00%			
Overall Mean (g/100cc)	Low	High	5% of Mean		
0.077	0.073	0.081	0.004		
	Reported Resu	ult T			

Reported Result	
0.077	

Calibration and control data are stored centrally.

Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager



Sample Name :

QC-1-A

Laboratory : Injection Date :

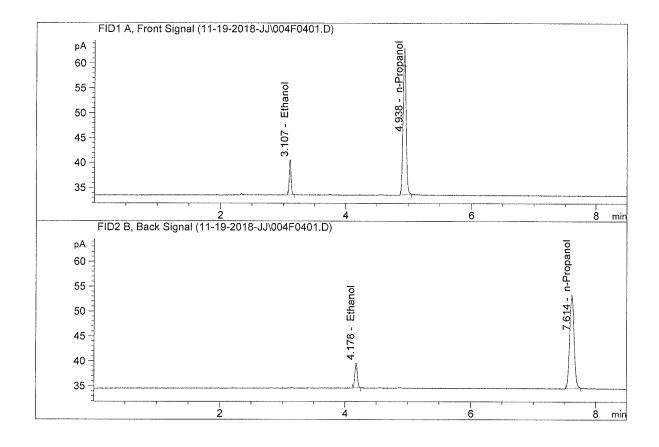
Coeur d' Alene Nov 19, 2018

Method

ALCOHOL.M

Acq. Instrument:

CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.99940	0.0777	g/100cc
2.	Ethanol	Column 2:	13.83442	0.0770	g/100cc
3.	n-Propanol	Column 1:	96.63365	1.0000	g/100cc
4.	n-Propanol	Column 2:	94.60855	1.0000	g/100cc



Sample Name :

QC-1-B

Laboratory : Injection Date :

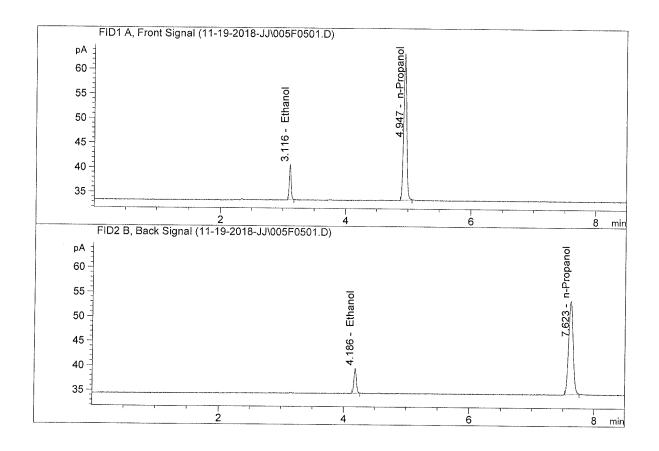
Coeur d' Alene Nov 19, 2018

Method

ALCOHOL.M

Acq. Instrument:

CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
2. 3.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	14.23115 14.00280 97.91689 95.50465	0.0780 0.0772 1.0000	g/100cc g/100cc g/100cc g/100cc



VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN04171701

Analysis Date(s): 19 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0797	0.0793	0.0004	0.0795	0.0705	
(g/100cc)	0.0797	0.0794	0.0003	0.0795	0.0795	

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: ML600HC11379

Reporting of Results	Uncertaint	Uncertainty of Measurement (UM%): 5.00%			
Overall Mean (g/100cc)	Low	High	5% of Mean		
0.079	0.075	0.083	0.004		
Reported Result					
0.079					

Calibration and control data are stored centrally.

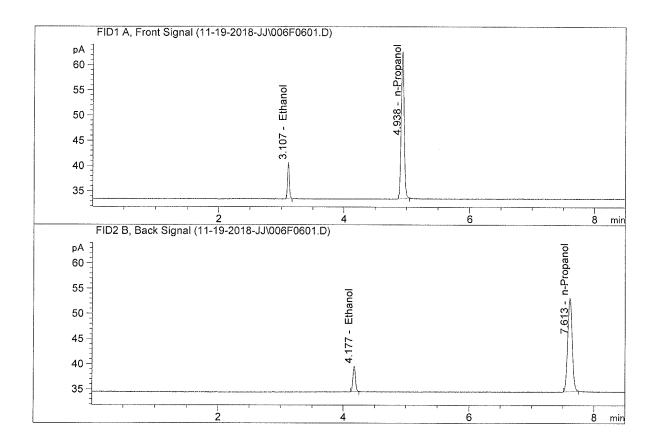
Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager



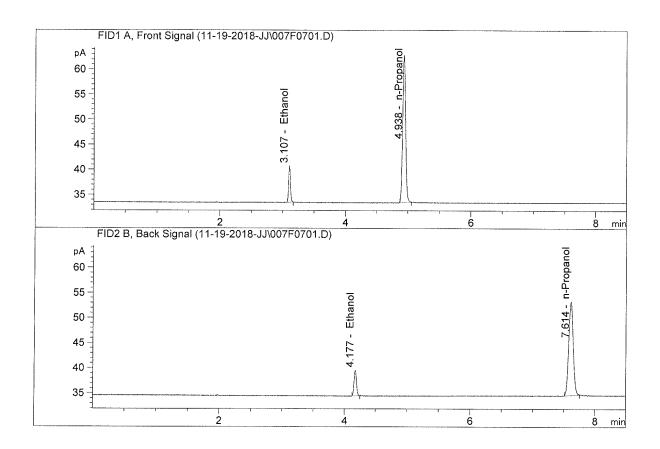
Sample Name : 0.08 FN04171701-A Laboratory : Coeur d'Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	14.24504	0.0797	g/100cc
	Ethanol	Column 2:	14.09416	0.0793	g/100cc
3.	n-Propanol	Column 1:	95.83113	1.0000	g/100cc
4.	n-Propanol	Column 2:	93.62964	1.0000	g/100cc



Sample Name : 0.08 FN04171701-B Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
2.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	14.32488 14.18538 96.42765 94.05569	0.0797 0.0794 1.0000	g/100cc g/100cc g/100cc g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-2

Analysis Date(s): 19 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	10.2
Sample Results	0.1990	0.1987	0.0003	0.1988	0.1004	
(g/100cc)	0.1982	0.1978	0.0004	0.1980	0.1984	County Co

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: ML600HC11379

Reporting of Results	Uncertainty of Measurement (UM%): 5.00%		
Overall Mean (g/100cc)	Low	High	5% of Mean
0.198	0.188	0.208	0.010
R	ult		
	0.198		

Calibration and control data are stored centrally.

Issued: 12/30/2016

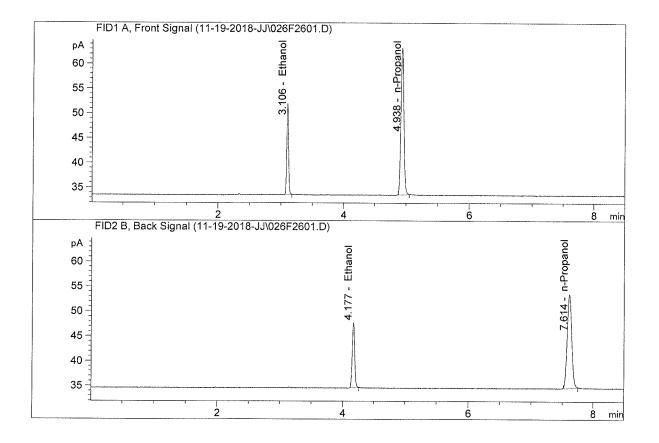
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager



Sample Name : QC-2-A

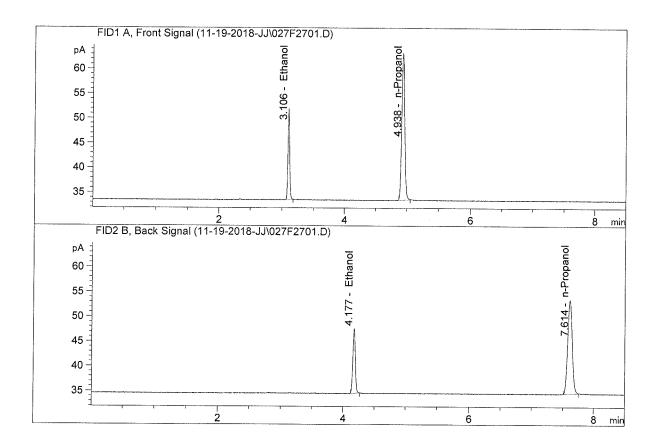
Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
	Ethanol Ethanol	Column 1: Column 2:	36.23424 35.93163	0.1990 0.1987	g/100cc g/100cc
	n-Propanol n-Propanol	Column 1: Column 2:	97.66624 95.19752	1.0000	g/100cc g/100cc

Sample Name : QC-2-B

Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
2.	Ethanol	Column 1:	36.17957	0.1982	g/100cc
	Ethanol	Column 2:	35.92391	0.1978	g/100cc
	n-Propanol	Column 1:	97.91210	1.0000	g/100cc
	n-Propanol	Column 2:	95.65005	1.0000	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 19 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0796	0.0789	0.0007	0.0792	0.0700	
(g/100cc)	0.0790	0.0783	0.0007	0.0786	0.0789	

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: ML600HC11379

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	
Re	ult			
	0.078			

Calibration and control data are stored centrally.

Issued: 12/30/2016

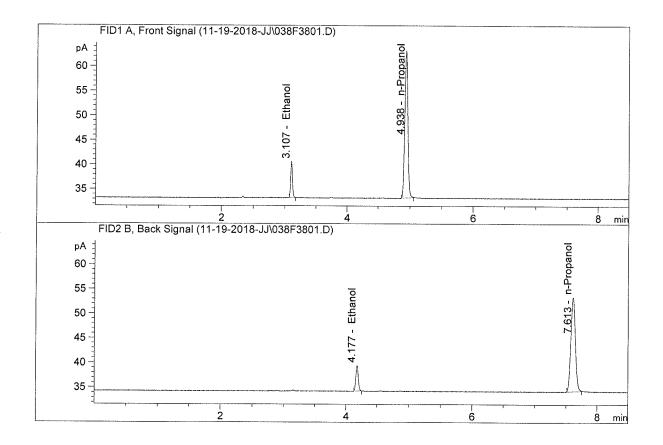
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager



Sample Name : QC-1-A

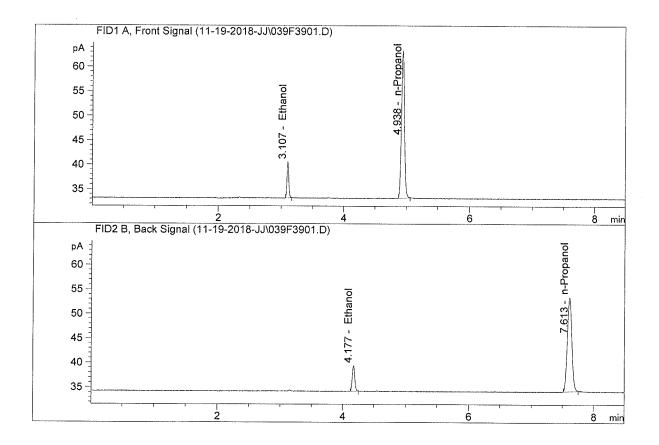
Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
	Ethanol	Column 1:	14.62992	0.0796	g/100cc
	Ethanol	Column 2:	14.42080	0.0789	g/100cc
	n-Propanol	Column 1:	98.58360	1.0000	g/100cc
	n-Propanol	Column 2:	96.29472	1.0000	g/100cc

Sample Name : QC-1-B

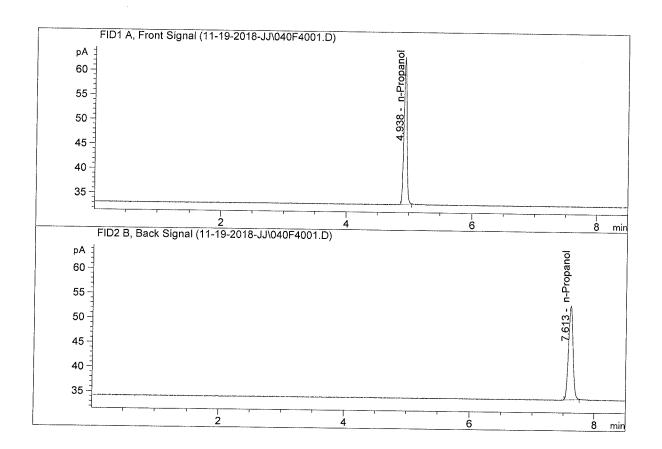
Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
2. 3.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 1:	14.57323 14.37392 99.02860 96.64127	0.0790 0.0783 1.0000	g/100cc g/100cc g/100cc g/100cc



Sample Name : ISTD BLANK
Laboratory : Coeur d' Alene
Injection Date : Nov 19, 2018
Method : ALCOHOL.M

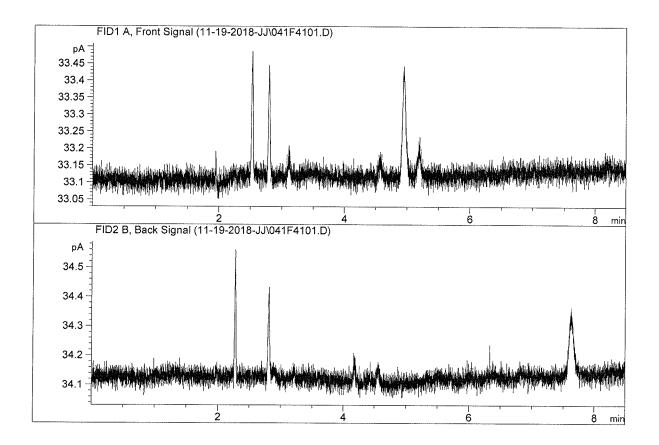


#	Compound	Column	Area	Amount	Units
2. 3.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	0.00000 0.00000 98.48891 96.67902	0.0000 0.0000 1.0000 1.0000	g/100cc g/100cc g/100cc g/100cc



Sample Name : water

Laboratory : Coeur d' Alene Injection Date : Nov 19, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
2.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	0.00000 0.00000 0.00000 0.00000	0.0000 0.0000 0.0000 0.0000	g/100cc g/100cc g/100cc g/100cc

