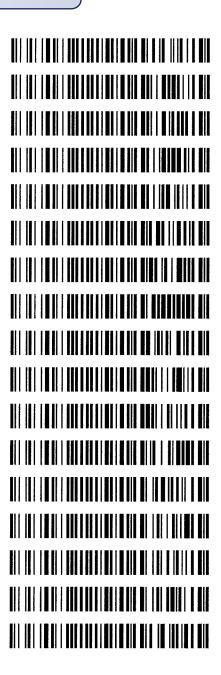
REVIEWED

By Rachel Cutler at 11:12 am, Nov 08, 2018

Worklist: 2758

<u>LAB CASE</u> C2018-2051	<u>ITEM</u> 1	TASK ID 128580	DESCRIPTION Alcohol Analysis
C2018-2059	1	128601	Alcohol Analysis
C2018-2060	1	128602	Alcohol Analysis
C2018-2077	1	128817	Alcohol Analysis
C2018-2083	1	128832	Alcohol Analysis
C2018-2090	1	128956	Alcohol Analysis
C2018-2098	1	129150	Alcohol Analysis
C2018-2116	1	129306	Alcohol Analysis
C2018-2167	1	129888	Alcohol Analysis
C2018-2172	1	129929	Alcohol Analysis
C2018-2173	1	129932	Alcohol Analysis
C2018-2182	1	130367	Alcohol Analysis
C2018-2195	1	130546	Alcohol Analysis
C2018-2203	1	130617	Alcohol Analysis
C2018-2204	1	130626	Alcohol Analysis
C2018-2205	1	130632	Alcohol Analysis
C2018-2221	1	130994	Alcohol Analysis



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):11/6/2018

0.99998	98 Column2	0.99998	Column 1		Curve Fit:	
OK	FN06041502	Lot#		Sep-20	nt mixture:	Multi-Component mixture: Sep-20
g/100cc						
g/100cc	0.1832-0.2238	035	0.2035	1803028	Jan-22	Level 2
0.1897 g/100cc						
0.0786 g/100cc						
0.0789 g/100cc	0.0731-0.0893	812	0.0812	1801036	Jan-22	Level 1
0.0756 g/100cc						
Overall Results	Acceptable Range	Target Value	Target	Lot#	Expiration	Control level Expiration
			N. C.			

Ethanol Calibration Reference Material

0.5001	0.5011 0.0019	0.5011			-			
0.4996	0.0009	0.5001	0.4992	0.450 - 0.550	0.500	FN07031402	Aug-19	0.500
#DIV/0!	0							0.400
0.2993	0.0013	0.2987	0.3000	0.270 - 0.330	0.300	FN02121601	Feb-21	0.300
0.2017	0.0023	0.2006	0.2029	0.180 - 0.220	0.200	FN03301601	Apr-21	0.200
0.0987	0.0013	0.0981	0.0994	0.090 - 0.110	0.100	FN06181501	Jun-20	0.100
#DIV/0!	0							0.080
0.0479	0.0004	0.0477	0.0481	0.045 - 0.055	0.050	FN04271601	Jun-21	0.050
Mean		Column 2	Range Column 1 Column 2 Precision	Acceptable Range	Target Value	Cerilliant Lot#	Expiration	Calibrator level Expiration

7	Aqueous Controls	rois				
Control level	Expiration	Cerilliant Lot#	Target Value	Acceptable Range	Overall Results	Results
0.080	May-22	FN04171701	0.08000	0.076 - 0.084	0.077	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_06.11.2018_03.08.26\11-6-2018.S

Data directory path: C:\Chem32\1\Data\11-6-2018-JJ

Logbook: C:\Chem32\1\Data\11-6-2018-JJ\11-6-2018.LOG

Sequence start: 11/6/2018 3:22:09 PM

Sequence Operator: SYSTEM Operator: SYSTEM

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

Run #	Location	Inj #	Sample Name	[a/100c	rol Dilution		Cal	# Cmp
1	1	1	water	-	1.0000	001F0101.D	•	O
2	2	1	VOL MIX FN-06041	_	1.0000	002F0201.D		10
3	3	1	ISTD BLANK	-		003F0301.D		2
	4	1	QC-1-A	-	1.0000	004F0401.D		4
5	5	1	QC-1-B	-	1.0000	005F0501.D		4
6	6	1	0.08 FN04171701-	-	1.0000	006F0601.D		4
7	7	1	0.08 FN04171701-		1.0000	007F0701.D		4
8	8	1	18803-1-A	-	1.0000	008F0801.D		4
9	9		18803-1-B	•••	1.0000	009F0901.D		4
10	10	1	18803-2-A	-	1.0000	010F1001.D		4
11	11	1	18803-2-B	_	1.0000	011F1101.D		4
12	12	1	18110-1-A	-	1.0000	012F1201.D		4
13	13	1	18110-1-B	-	1.0000	013F1301.D		4
14	14	1	18110-2-A	-	1.0000	014F1401.D		4
15	15	1	18110-2-B	-	1.0000	015F1501.D		4
16	16	1	C2018-2051-1-A	-	1.0000	016F1601.D		4
17	17	1	C2018-2051-1-B	-	1.0000	017F1701.D		4
18	18	1	C2018-2059-1-A	-	1.0000	018F1801.D		4
19	19	1	C2018-2059-1-B	-	1.0000	019F1901.D		4
20	20	1	C2018-2077-1-A	_	1.0000	020F2001.D		4
21	21	1	C2018-2077-1-B	-	1.0000	021F2101.D		4
22	22	1	C2018-2116-1-A	-		022F2201.D		4
23	23	1	C2018-2116-1-B	-		023F2301.D		4
24	24	1	C2018-2173-1-A			024F2401.D		4
25	25	1	C2018-2173-1-B	***	1.0000	025F2501.D		4
26	26	1	QC-2-A	-		026F2601.D		4
27	27	1	QC-2-B	-	1.0000	027F2701.D		4
28	28	1	C2018-2167-1-A	-		028F2801.D		4
29	29	1	C2018-2167-1-B		1.0000	029F2901.D		4
30	30	1	C2018-2060-1-A	-	1.0000	030F3001.D		2
31	31	1	C2018-2060-1-B	_	1.0000	031F3101.D		2
32	32	1	C2018-2090-1-A	_	1.0000	032F3201.D		4
33	33	1	C2018-2090-1-B	-	1.0000	033F3301.D		4
34	34	1	C2018-2098-1-A	-	1.0000	034F3401.D		2
35	35	1	C2018-2098-1-B	-	1.0000	035F3501.D		2
36	36	1	C2018-2172-1-A	-	1.0000	036F3601.D		2
37	37	1	C2018-2172-1-B	-	1.0000	037F3701.D		2
38	38	1	C2018-2195-1-A	-	1.0000	038F3801.D		4
39	39	1	C2018-2195-1-B	_	1.0000	039F3901.D		4
40	40	1	C2018-2203-1-A	-		040F4001.D		4
41	41	1	C2018-2203-1-B			041F4101.D		4
42	42	1	C2018-2204-1-A	-		042F4201.D		2
43	43	1	C2018-2204-1-B	-		043F4301.D		2
44	44	1	C2018-2205-1-A	-	1.0000	044F4401.D		2
45		1	C2018-2205-1-B	-		045F4501.D		2
46	46	1	C2018-2221-1-A	-	1.0000	046F4601.D		4

	Location	Inj	Sample Name			File name	Cal	#
#	t i	#	1	[g/100cc]	Dilution		(Cmp
							.	
47	47	1	C2018-2221-1-B	-	1.0000	047F4701.D		4
48	48	1	QC-1-A	-	1.0000	048F4801.D		4
49	49	1	QC-1-B	-	1.0000	049F4901.D		4
50	50	1	C2018-2182-1-A	-	1.0000	050F5001.D		2
51	51	1	C2018-2182-1-B	-	1.0000	051F5101.D		2
52	52	1	C2018-2083-1-A	-	1.0000	052F5201.D		4
53	53	1	C2018-2083-1-B		1.0000	053F5301.D		4
54	54	1	QC-1-A	-	1.0000	054F5401.D		4
55	55	1	QC-1-B	-	1.0000	055F5501.D		4
56	56	1	ISTD BLANK	-	1.0000	056F5601.D		2
57	57	1	water	-	1.0000	057F5701.D		0



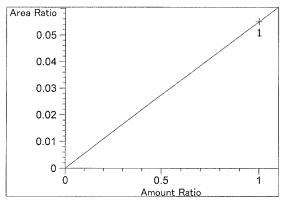
```
Calibration Table
______
General Calibration Setting
Calib. Data Modified :
                    Tuesday, November 06, 2018 2:54:31 PM
Signals calculated separately: No
Rel. Reference Window: 0.000 %
Abs. Reference Window:
                   0.100 min
Rel. Non-ref. Window : 0.000 %
Abs. Non-ref. Window : 0.100 min
Uncalibrated Peaks : not reported
Partial Calibration : No recalibration if peaks missing
Curve Type
           : Linear
Origin
               :
                    Forced
Weight
                    Equal
Recalibration Settings:
Average Response :
                   Average all calibrations
Average Retention Time: Floating Average New 75%
Calibration Report Options :
   Printout of recalibrations within a sequence:
     Calibration Table after Recalibration
     Normal Report after Recalibration
   If the sequence is done with bracketing:
     Results of first cycle (ending previous bracket)
Default Sample ISTD Information (if not set in sample table):
ISTD ISTD Amount Name
 # [g/100cc]
----
    1.00000 n-Propanol
     1.00000 n-Propanol
 2
______
Signal Details
Signal 1: FID1 A, Front Signal
Signal 2: FID2 B, Back Signal
                   Overview Table
```



```
RT Sig Lvl Amount
                      Area Rsp.Factor Ref ISTD #
            [g/100cc]
5.00000 2.00000e-1 No No 2 Difluoroethane
            1.00000
 2.000 1 1
                      5.00000 2.00000e-1 No No 1 Difluoroethane
             1.00000
 2.494 1 1
             1.00000
                      3.69669 2.70512e-1 No No 1 Methanol
 2.772 1 1
                     3.19311 3.13174e-1 No No 1 Acetaldehyde
             1.00000
 2.797 2 1
             1.00000
                    3.10575 3.21983e-1 No No 2 Acetaldehyde
 3.106 1 1 5.00000e-2
                    8.20262 6.09561e-3 No No 1 Ethanol
         2 1.00000e-1
                     17.72319 5.64233e-3
         3 2.00000e-1 35.66634 5.60753e-3
         4 3.00000e-1 53.06878 5.65304e-3
         5 5.00000e-1
                    89.25224 5.60210e-3
 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
 4.177 2 1 5.00000e-2 8.03943 6.21935e-3 No No 2 Ethanol
         2 1.00000e-1 17.14713 5.83188e-3
         3 2.00000e-1 34.52151 5.79349e-3
         4 3.00000e-1 51.70463 5.80219e-3
         5 5.00000e-1 87.61684 5.70667e-3
 4.530 1
             1.00000
                     6.49940 1.53860e-1 No No 1 Acetone
         1
             1.00000
 4.549 2 1
                     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
 4.939 1
        1
             1.00000 90.93419 1.09970e-2 No Yes 1 n-Propanol
             1.00000 94.97462 1.05291e-2
         2
         3
             1.00000 93.64862 1.06782e-2
             1.00000 94.24678 1.06104e-2
         5
             1.00000 95.25841 1.04978e-2
 7.615 2 1
             1.00000
                    87.67545 1.14057e-2 No Yes 2 n-Propanol
         2
             1.00000 90.89621 1.10016e-2
         3
            1.00000 89.49412 1.11739e-2
             1.00000
                     89.99078 1.11122e-2
         4
             1.00000
                     90.90382 1.10006e-2
                      Peak Sum Table
***No Entries in table***
  Calibration Curves
______
Area Ratio -
                             Difluoroethane at exp. RT: 2.000
                             FID2 B, Back Signal
  0.05 -
                             Correlation:
                             Residual Std. Dev.:
                                               0.00000
  0.04
                             Formula: y = mx
  0.03
                                  m:
                                        5.70285e-2
                                  x: Amount Ratio
  0.02
                                  y: Area Ratio
  0.01
               0.5
```



Amount Ratio

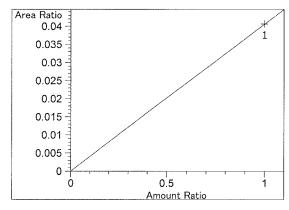


Difluoroethane at exp. RT: 2.000 FID1 A, Front Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

m: 5.49848e-2 x: Amount Ratio y: Area Ratio

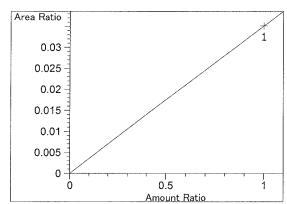


Methanol at exp. RT: 2.494 FID1 A, Front Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

m: 4.06524e-2 x: Amount Ratio y: Area Ratio



Acetaldehyde at exp. RT: 2.772

FID1 A, Front Signal

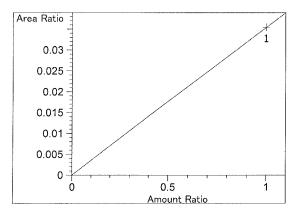
Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

3.51145e-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

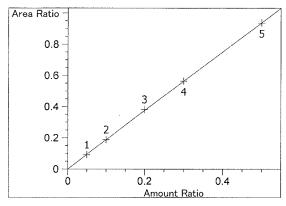
Formula: y = mx

3.54233e-2 m:

x: Amount Ratio

y: Area Ratio



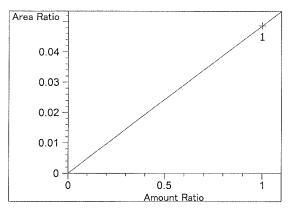


Ethanol at exp. RT: 3.106 FID1 A, Front Signal Correlation: 0.99998 4

Residual Std. Dev.: 0.00341

Formula: y = mx

m: 1.87705 x: Amount Ratio y: Area Ratio

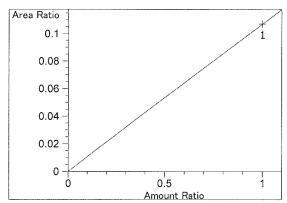


Methanol at exp. RT: 3.211 FID2 B, Back Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

m: 4.85954e-2 x: Amount Ratio y: Area Ratio



Isopropyl alcohol at exp. RT: 3.715

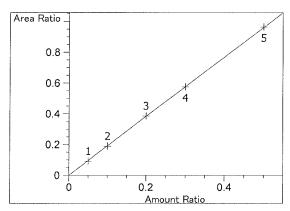
FID1 A, Front Signal

Correlation: 1.00000

Residual Std. Dev.: 0.00000

Formula: y = mx

m : 1.07007e-1 x: Amount Ratio y: Area Ratio



Ethanol at exp. RT: 4.177

FID2 B, Back Signal

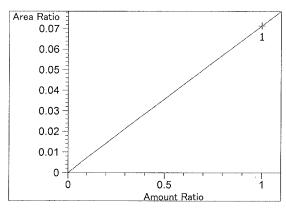
Correlation: 0.99998

Residual Std. Dev.: 0.00337

Formula: y = mx

m: 1.92327 x: Amount Ratio

y: Area Ratio

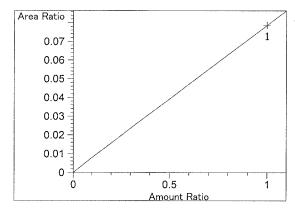


Acetone at exp. RT: 4.530 FID1 A, Front Signal Correlation: 1.00000

Residual Std. Dev.: 0.00000

Formula: y = mx

m: 7.14737e-2
x: Amount Ratio
y: Area Ratio



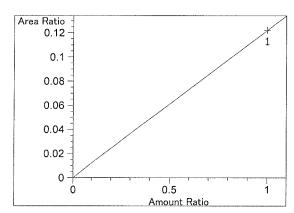
Acetone at exp. RT: 4.549

FID2 B, Back Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

m: 7.86196e-2
x: Amount Ratio
y: Area Ratio



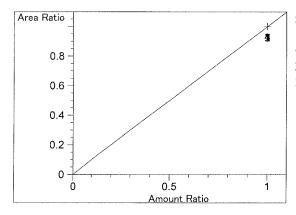
Isopropyl alcohol at exp. RT: 4.870

FID2 B, Back Signal

Correlation: 1.00000 Residual Std. Dev.: 0.00000

Formula: y = mx

m: 1.22114e-1
x: Amount Ratio
y: Area Ratio



n-Propanol at exp. RT: 4.939

FID1 A, Front Signal

Correlation: 1.00000

Residual Std. Dev.: 0.00000

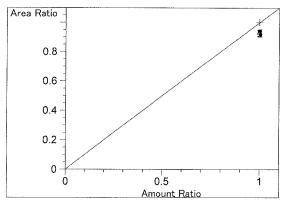
Formula: y = mx

m: 1.00000

x: Amount Ratio

y: Area Ratio

H



n-Propanol at exp. RT: 7.615

FID2 B, Back Signal

Correlation: 1.00000

Residual Std. Dev.: 0.00000

Formula: y = mx

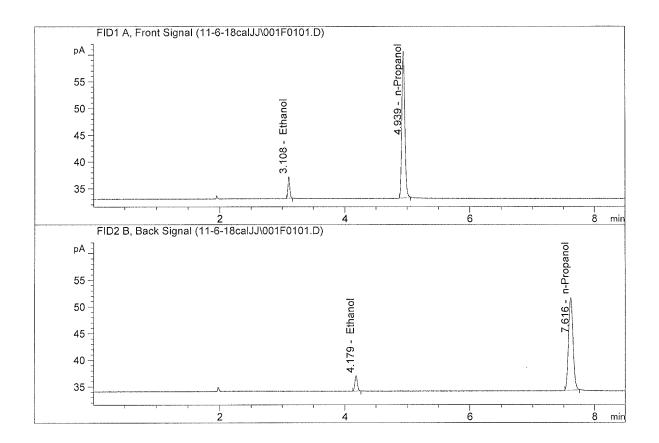
m: 1.00000

x: Amount Ratio

y: Area Ratio

Sample Name : 0.05

Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	8.20262	0.0481	g/100cc
	Ethanol	Column 2:	8.03943	0.0477	g/100cc
3.	n-Propanol	Column 1:	90.93419	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.67545	1.0000	g/100cc



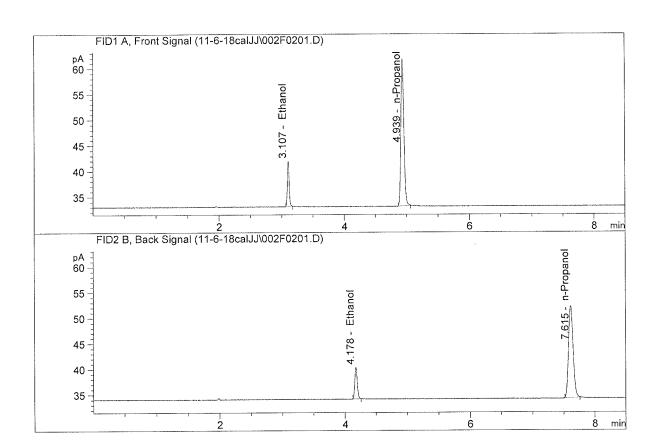
Sample Name :

Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018

0.100

Method :
Acq. Instrument:

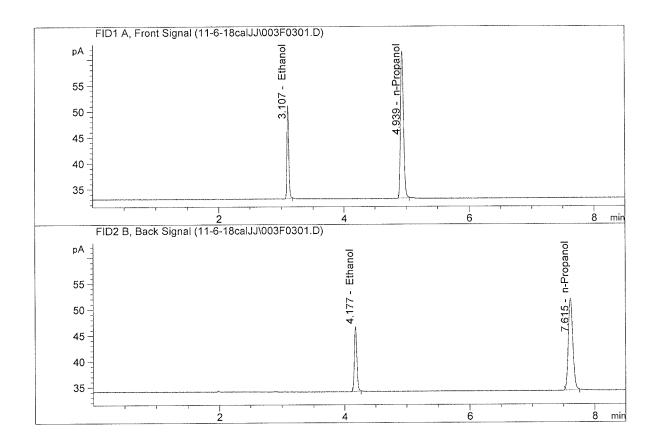
ALCOHOL.M CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
					/
1.	Ethanol	Column 1:	17.72319	0.0994	g/100cc
2.	Ethanol	Column 2:	17.14713	0.0981	g/100cc
3.	n-Propanol	Column 1:	94.97462	1.0000	g/100cc
4.	n-Propanol	Column 2:	90.89621	1.0000	g/100cc

Sample Name : 0.200

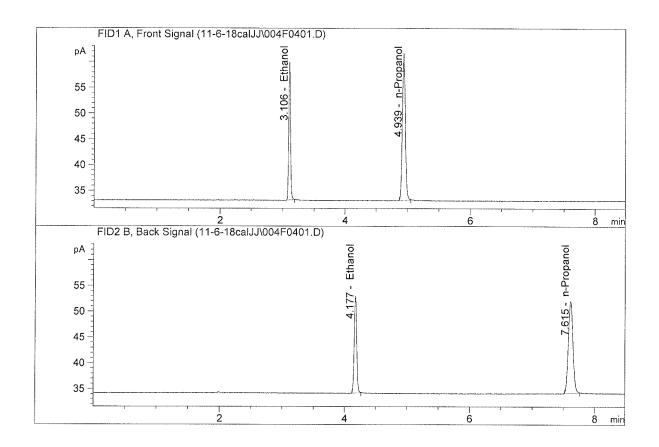
Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
					/
1.	Ethanol	Column 1:	35.66634	0.2029	g/100cc
2.	Ethanol	Column 2:	34.52151	0.2006	g/100cc
3.	n-Propanol	Column 1:	93.64862	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.49412	1.0000	g/100cc

Sample Name : 0.300

Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	53.06878	0.3000	g/100cc
2.	Ethanol	Column 2:	51.70463	0.2987	g/100cc
3.	n-Propanol	Column 1:	94.24678	1.0000	g/100cc
4.	n-Propanol	Column 2:	89.99078	1.0000	g/100cc

Sample Name

0.500

Laboratory

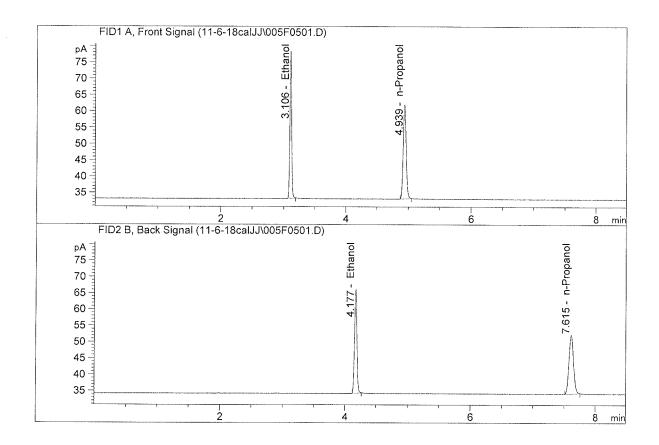
Coeur d' Alene Nov 6, 2018

Injection Date :
Method :

ALCOHOL.M

Acq. Instrument:

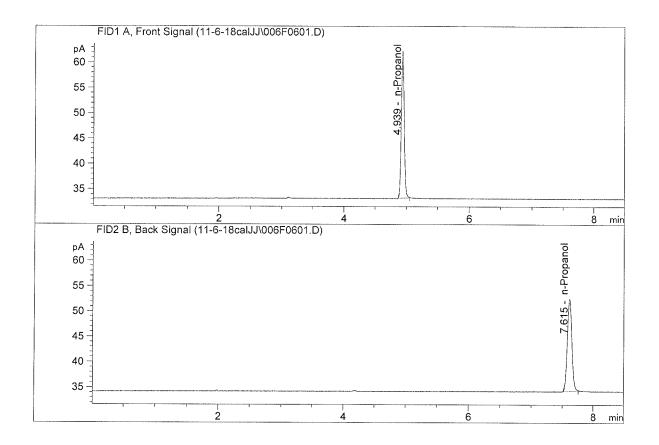
CN10742044-IT00725005



#	Compound	Column	Area	Amount	Units
2. 3.	Ethanol Ethanol n-Propanol n-Propanol	Column 1: Column 2: Column 1: Column 2:	89.25224 87.61684 95.25841 90.90382	0.4992 0.5011 1.0000 1.0000	g/100cc g/100cc g/100cc g/100cc

Sample Name : blank

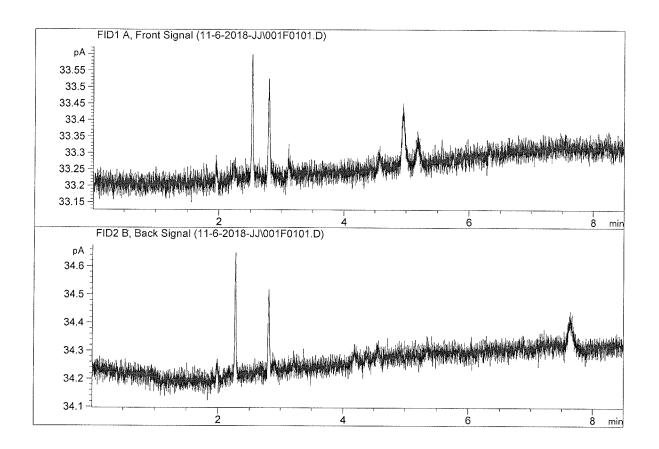
Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1	Ethanol	Column 1:	0.00000	0.0000	g/100cc
	Ethanol	Column 2:	0.00000	0.0000	•
					g/100cc
	n-Propanol	Column 1:	95.73525	1.0000	g/100cc
4.	n-Propanol	Column 2:	91.95830	1.0000	g/100cc

Sample Name : water

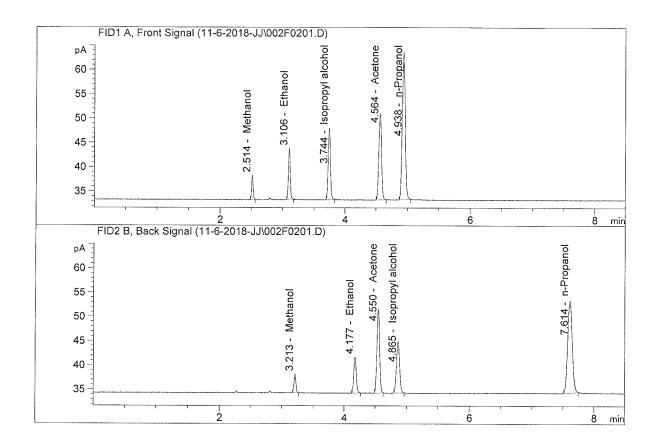
Laboratory : Coeur d' Alene
Injection Date : Nov 6, 2018
Method : ALCOHOL.M
Acq. Instrument: CN10742044-IT00725005



#	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

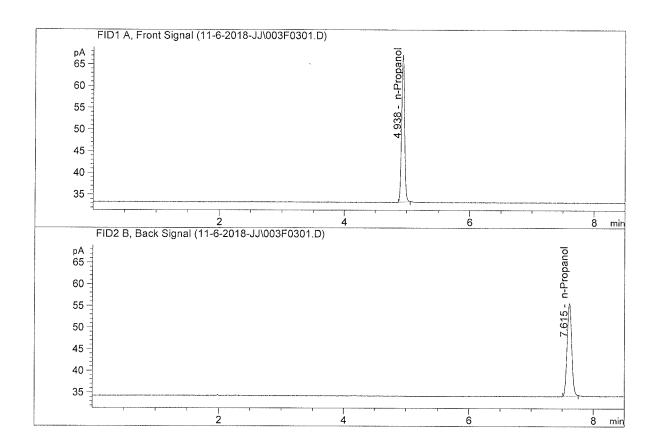
Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
					
1.	Ethanol	Column 1:	21.02606	0.1121	g/100cc
2.	Ethanol	Column 2:	20.69314	0.1121	g/100cc
3.	n-Propanol	Column 1:	99.96780	1.0000	g/100cc
4.	n-Propanol	Column 2:	96.01791	1.0000	g/100cc



Sample Name : ISTD BLANK
Laboratory : Coeur d' Alene
Injection Date : Nov 6, 2018
Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
			0 0000		/4.00
т.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	111.84824	1.0000	g/100cc
4.	n-Propanol	Column 2:	108.32774	1.0000	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 06 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0765	0.0746	0.0019	0.0755	0.0757	
(g/100cc)	0.0762	0.0752	0.0010	0.0757	0.0756	

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		
0.075	0.071	0.079	0.004		

Reported Result	
0.075	

Calibration and control data are stored centrally.

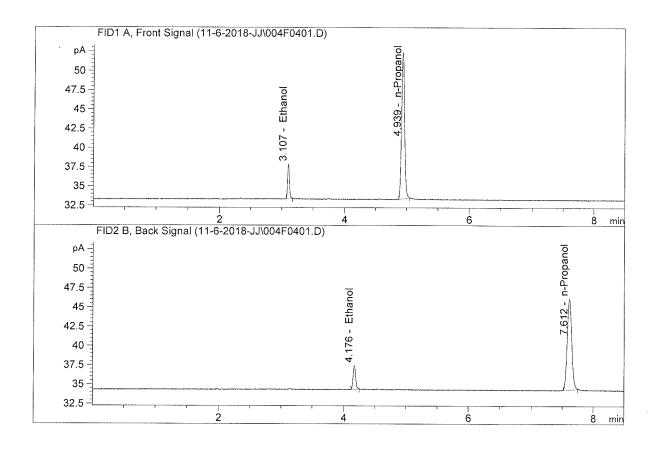
Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

Sample Name : QC-1-A

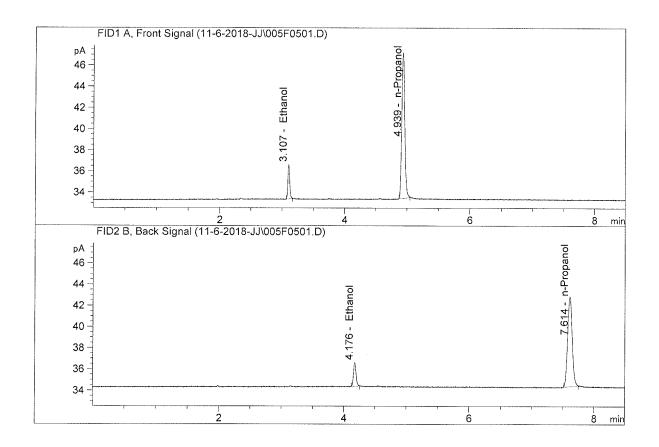
Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	9.07283	0.0765	g/100cc
2.	Ethanol	Column 2:	8.57450	0.0746	g/100cc
3.	n-Propanol	Column 1:	63.17148	1.0000	g/100cc
4.	n-Propanol	Column 2:	59.74426	1.0000	g/100cc

Sample Name : QC-1-B

Laboratory : Coeur d' Alene Injection Date : Nov 6, 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:	6.56948 6.23416 45.91785 43.08077	0.0762 0.0752 1.0000	g/100cc g/100cc g/100cc g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN04171701 Analysis Date(s): 06 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0781	0.0766	0.0015	0.0773	0.0777	
(g/100cc)	0.0789	0.0775	0.0014	0.0782	- 0.0777	

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

Calibration and control data are stored centrally.

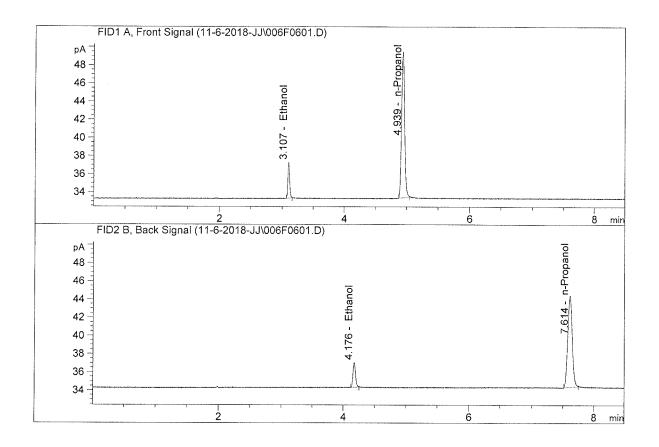
Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

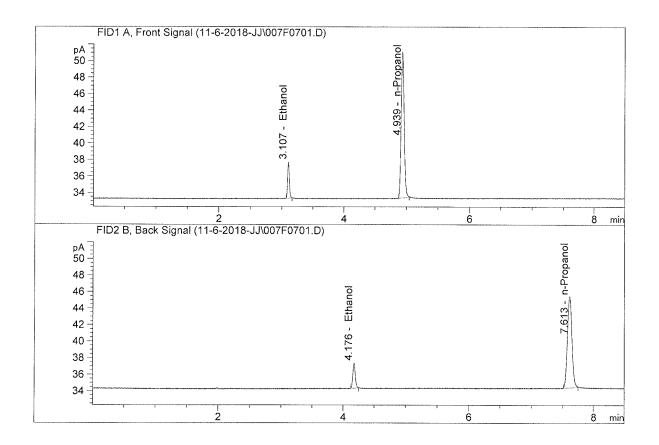
Sample Name : 0.08 FN04171701-A Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018

Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.86330	0.0781	g/100cc
2.	Ethanol	Column 2:	7.50846	0.0766	g/100cc
3.	n-Propanol	Column 1:	53.62405	1.0000	g/100cc
4.	n-Propanol	Column 2:	50.94521	1.0000	g/100cc

Sample Name : 0.08 FN04171701-B Laboratory : Coeur d' Alene Injection Date : Nov 6, 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:	8.71659 8.37449 58.82808 56.15338	0.0789 0.0775 1.0000 1.0000	g/100cc g/100cc g/100cc g/100cc



VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 06 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0801	0.0790	0.0011	0.0795	0.0700	
(g/100cc)	0.0787	0.0780	0.0007	0.0783	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				
	0.078			

Calibration and control data are stored centrally.

Issued: 12/30/2016

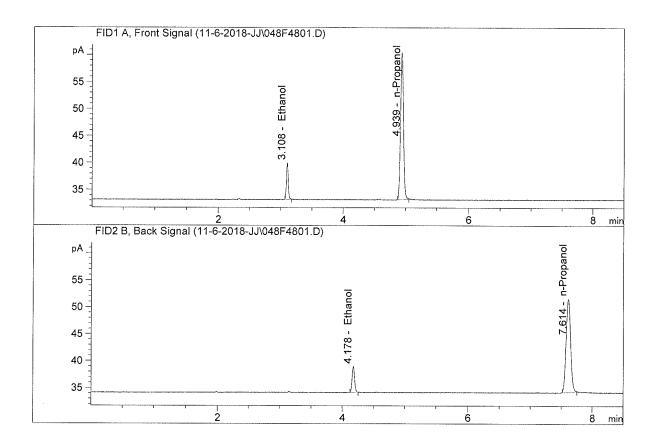
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager



Sample Name : QC-1-A

Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M

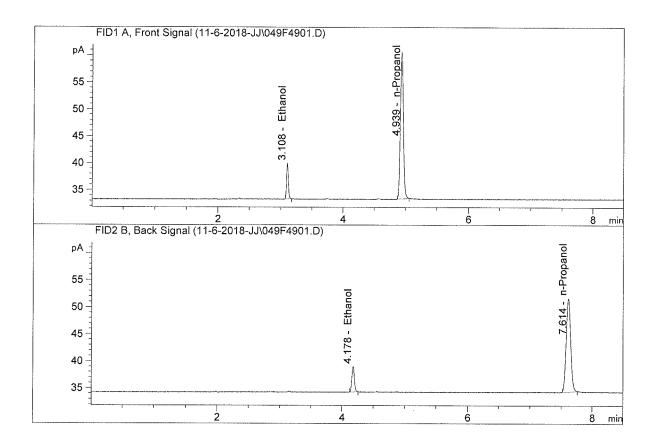


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.49275	0.0801	g/100cc
2.	Ethanol	Column 2:	13.27429	0.0790	g/100cc
3.	n-Propanol	Column 1:	89.72742	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.38314	1.0000	g/100cc



Sample Name : QC-1-B

Laboratory : Coeur d' Alene Injection Date : Nov 7, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.24620	0.0787	g/100cc
2.	Ethanol	Column 2:	13.10266	0.0780	g/100cc
3.	n-Propanol	Column 1:	89.63160	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.33528	1.0000	g/100cc



VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-2 Analysis Date(s): 06 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.1885	0.1889	0.0004	0.1887	0.1007	
(g/100cc)	0.1902	0.1913	0.0011	0.1907	0.1897	

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		
0.189	0.179	0.199	0.010		
	0.189				

Calibration and control data are stored centrally.

Issued: 12/30/2016

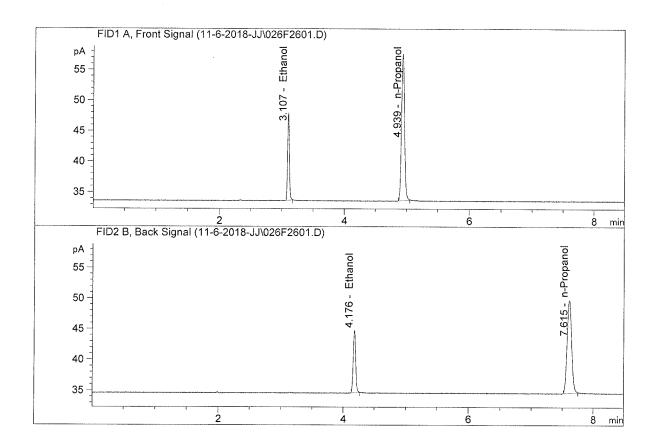
Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager



Sample Name : QC-2-A

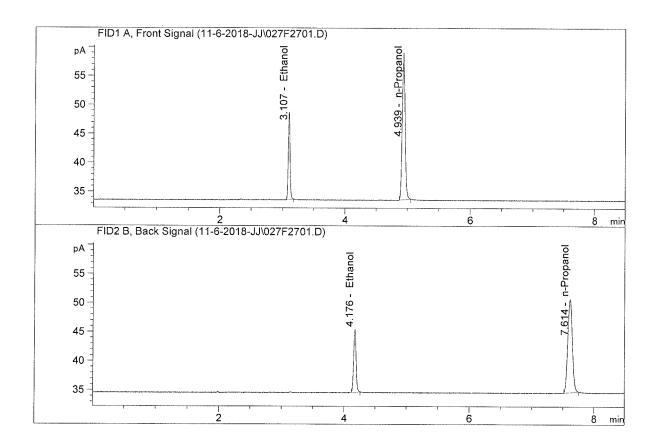
Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	27.91166	0.1885	g/100cc
2.	Ethanol	Column 2:	27.90581	0.1889	g/100cc
3.	n-Propanol	Column 1:	78.87096	1.0000	g/100cc
4.	n-Propanol	Column 2:	76.82357	1.0000	g/100cc

Sample Name : QC-2-B

Laboratory : Coeur d' Alene Injection Date : Nov 6, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	29.78315	0.1902	g/100cc
2.	Ethanol	Column 2:	29.89887	0.1913	g/100cc
3.	n-Propanol	Column 1:	83.42262	1.0000	g/100cc
4.	n-Propanol	Column 2:	81.28196	1.0000	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC-1

Analysis Date(s): 07 Nov 2018

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0794	0.0788	0.0006	0.0791	0.0506	
(g/100cc)	0.0785	0.0778	0.0007	0.0781	0.0786	

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	
	0.078			

Calibration and control data are stored centrally.

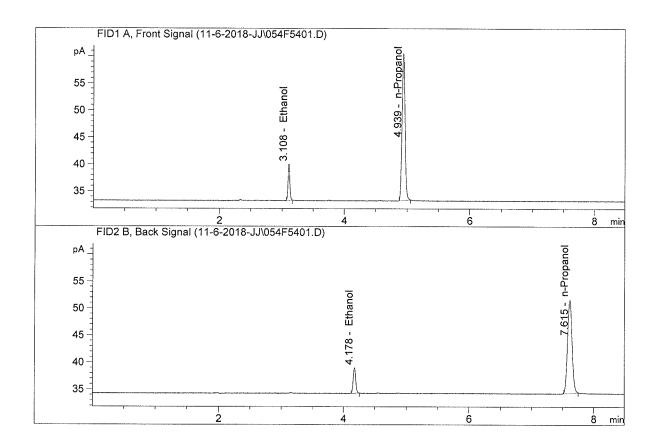
Issued: 12/30/2016

Volatiles BAC Calculation Spreadsheet Rev 4

Issuing Authority: Quality Manager

Sample Name : QC-1-A

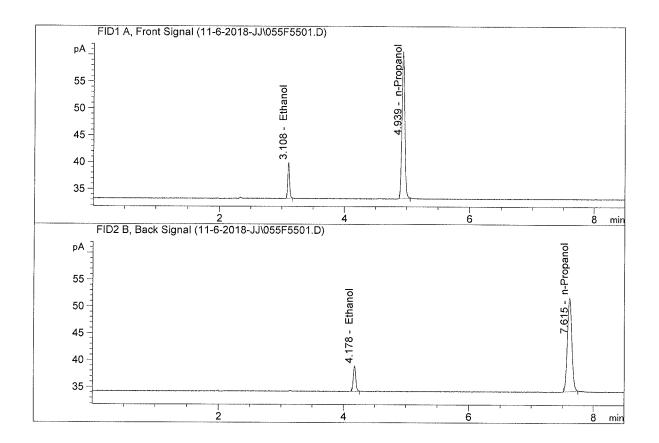
Laboratory : Coeur d' Alene Injection Date : Nov 7, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.35897	0.0794	g/100cc
2.	Ethanol	Column 2:	13.20460	0.0788	g/100cc
3.	n-Propanol	Column 1:	89.65527	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.16324	1.0000	g/100cc

Sample Name : QC-1-B

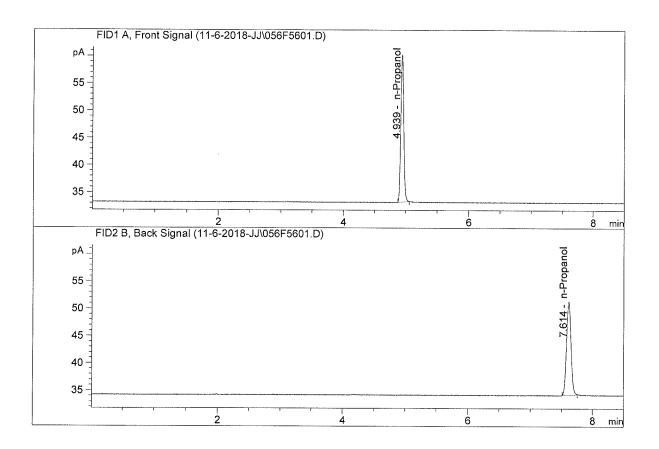
Laboratory : Coeur d' Alene Injection Date : Nov 7, 2018 Method : ALCOHOL.M



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	13.26820	0.0785	g/100cc
2.	Ethanol	Column 2:	13.08087	0.0778	g/100cc
3.	n-Propanol	Column 1:	90.10372	1.0000	g/100cc
4.	n-Propanol	Column 2:	87.46494	1.0000	g/100cc



Sample Name : ISTD BLANK
Laboratory : Coeur d' Alene
Injection Date : Nov 7, 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 88.65314 86.29763	0.0000 0.0000 1.0000	g/100cc g/100cc g/100cc g/100cc

