Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB 503A Liquid Processor/Dilutor Serial Number: MD96BC1382/MD94AM10010

Run Date(s): 9/17/15

Volatiles Quality Assurance Controls **calibration: 9/14/15**

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Dec-16	1212090	0.0773	0.0696 - 0.0850	0.0772 g/100cc
					0.0819 g/100cc
					g/100cc
Level 2	Jan-17	1212091	0.2020	0.1818 - 0.2222	0.2138 g/100cc
					0.2156 g/100cc
					g/100cc
Multi-Component mixture:		**Exp date: Jan 2016**		**Lot #**	FN012111-01 OK
Curve Fit:			**Column 1**	1.00000	**Column2** 0.99995

Ethanol Calibration Reference Material								
Calibrator level	**Expiration**	**Cerilliant Lot #**	**Target Value**	**Acceptable Range**	**Column 1**	**Column 2**	**Precision**	**Mean**
0.050	Jan-17	FN010912-01	0.050	0.045 - 0.055	0.0496	0.0467	0.0029	0.0481
0.080			0.080	0.072 - 0.088			0	#DIV/0!
0.100	May-17	FN050312-01	0.100	0.090 - 0.110	0.1004	0.0960	0.0044	0.0982
0.200			0.200	0.180 - 0.220			0	#DIV/0!
0.300	Dec-15	FN121510-01	0.300	0.270 - 0.330	0.2990	0.2960	0.003	0.2975
0.400	Jan-17	FN012712-01	0.400	0.360 - 0.440	0.4007	0.4012	0.0005	0.4009
0.500	Nov-15	FN102710-01	0.500	0.450 - 0.550	0.5000	0.5026	0.0026	0.5013

Aqueous Controls					
Control level	**Expiration**	**Cerilliant Lot #**	**Target Value**	**Acceptable Range**	**Overall Results**
0.080	Jan-17	FN011712-02	0.08000	0.076 - 0.084	0.079 g/100cc

Issued: 4/22/2015

~Any information on this document can be changed for laboratory use, except for the precision and mean determination fomulas.

Volatiles QA/QC data spreadsheet Rev 5

Issuing Authority: Quality Manager

NB

9/17/2015

Worklist: 839

LAB_CASE	ITEM	TASK_ID	DESCRIPTION
M2015-3250	1	41151	Alcohol Analysis
M2015-3267	1	41223	Alcohol Analysis
M2015-3310	1	41432	Alcohol Analysis
M2015-3311	1	41433	Alcohol Analysis
M2015-3317	1	41489	Alcohol Analysis
M2015-3324	1	41510	Alcohol Analysis
M2015-3325	1	41512	Alcohol Analysis
M2015-3325	2	41514	Alcohol Analysis
M2015-3339	2	41534	Alcohol Analysis
M2015-3340	1	41536	Alcohol Analysis
M2015-3341	1	41558	Alcohol Analysis
M2015-3351	1	41597	Alcohol Analysis
M2015-3352	1	41598	Alcohol Analysis
M2015-3359	1	41605	Alcohol Analysis
M2015-3360	1	41606	Alcohol Analysis
M2015-3361	1	41613	Alcohol Analysis
M2015-3364	1	41712	Alcohol Analysis
M2015-3364	2	41710	Alcohol Analysis
M2015-3369	1	41659	Alcohol Analysis
M2015-3370	1	41663	Alcohol Analysis
M2015-3371	1	41664	Alcohol Analysis
M2015-3373	1	41676	Alcohol Analysis
M2015-3378	1	41688	Alcohol Analysis

urine not analyzed same subject NB

NB

Worklist: 839

LAB_CASE	ITEM	TASK_ID	DESCRIPTION
P2015-2022	1	41241	Alcohol Analysis

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-1 **Analysis Date(s): 17 Sep 2015**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0792	0.0757	0.0035	0.0774	0.0772
(g/100cc)	0.0793	0.0748	0.0045	0.0770	

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: ALCOHOL.M
Hamilton Auto-Dilutor Serial Number:
MD96BC1382/MD94AM10010

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

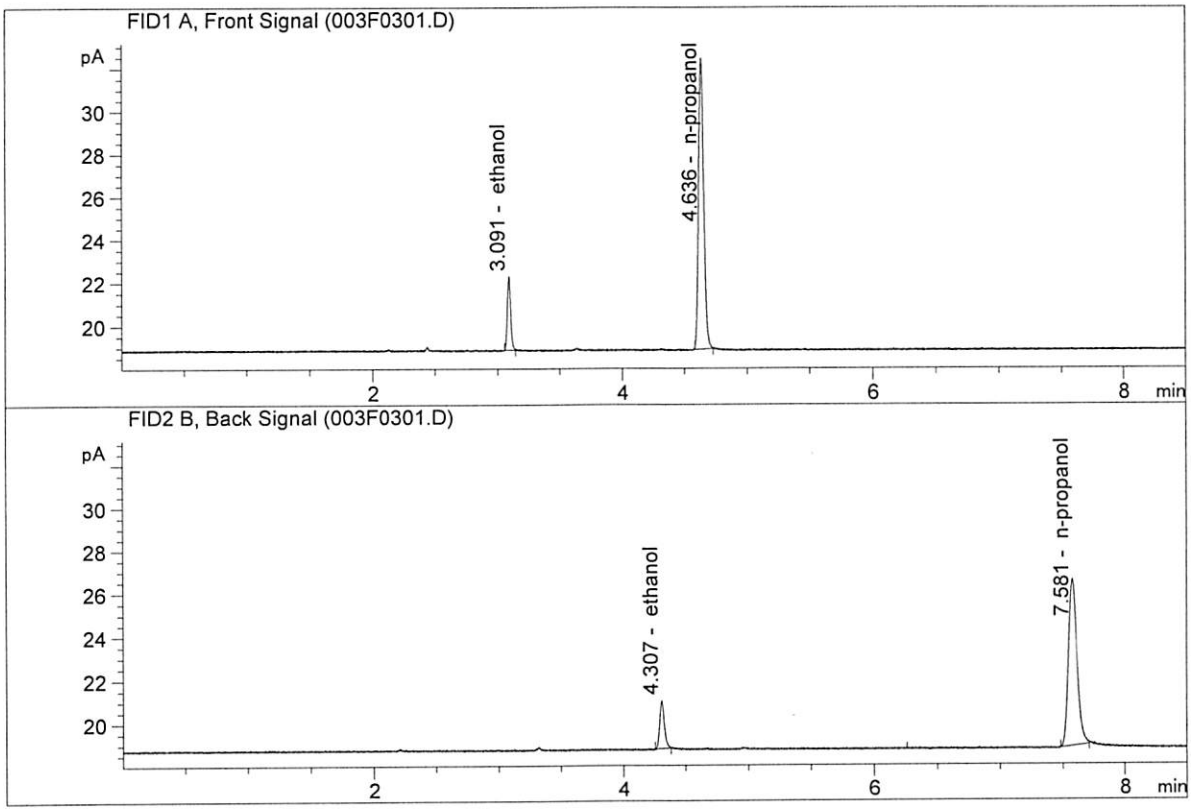
Overall Mean (g/100cc)	Low	High	5% of Mean
0.077	**0.073**	**0.081**	**0.004**

Reported Result
0.077

Calibration and control data are stored centrally. **Analyst:** NB **Page 2**

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-1-A
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

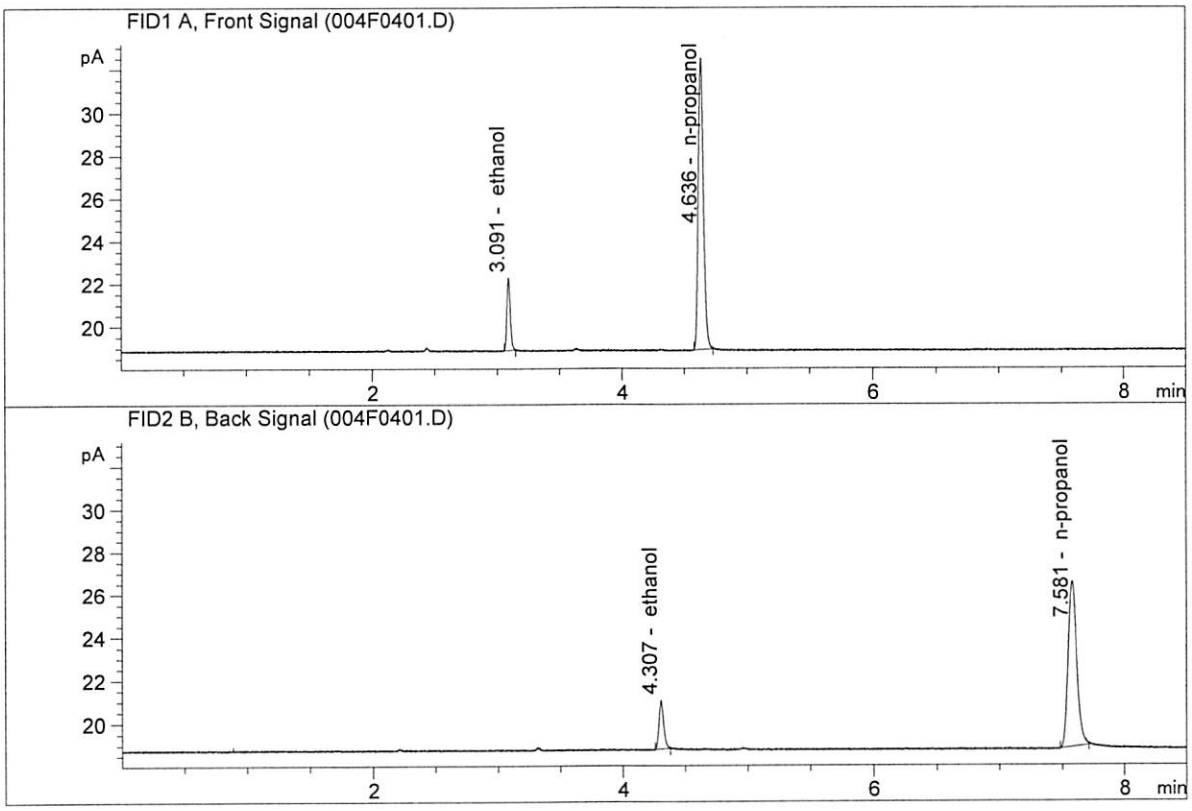


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.34900	0.0792	g/100cc
2.	Ethanol	Column 2:	6.19760	0.0757	g/100cc
3.	n-Propanol	Column 1:	39.02006	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.72849	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-1-B
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.36825	0.0793	g/100cc
2.	Ethanol	Column 2:	6.13855	0.0748	g/100cc
3.	n-Propanol	Column 1:	39.12845	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.83120	1.0000	g/100cc

NB

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-2 **Analysis Date(s): 17 Sep 2015**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0840	0.0817	0.0023	0.0828	0.0819	
(g/100cc)	0.0821	0.0798	0.0023	0.0809		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: ALCOHOL.M
Hamilton Auto-Dilutor Serial Number:
MD96BC1382/MD94AM10010

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

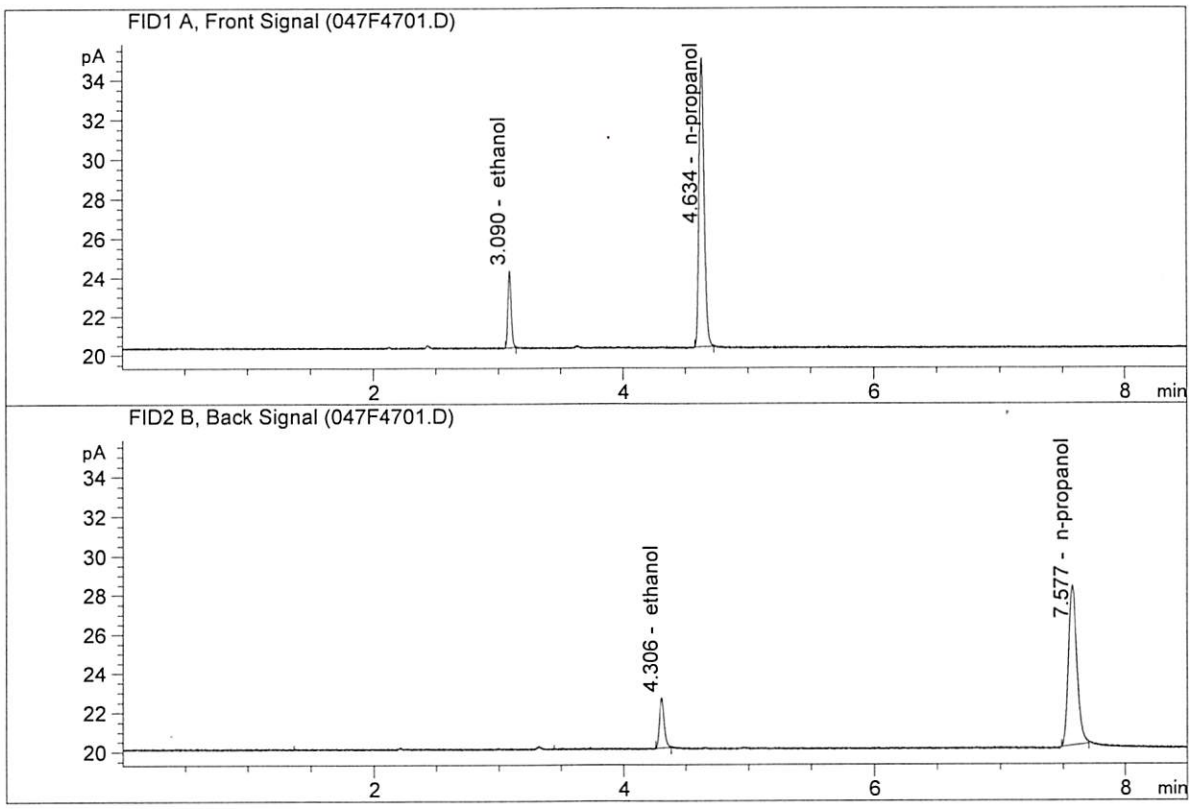
Overall Mean (g/100cc)	Low	High	5% of Mean
0.081	**0.076**	**0.086**	**0.005**

	Reported Result	
	0.081	

Calibration and control data are stored centrally. **Analyst:** NB **Page 2**

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-A
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

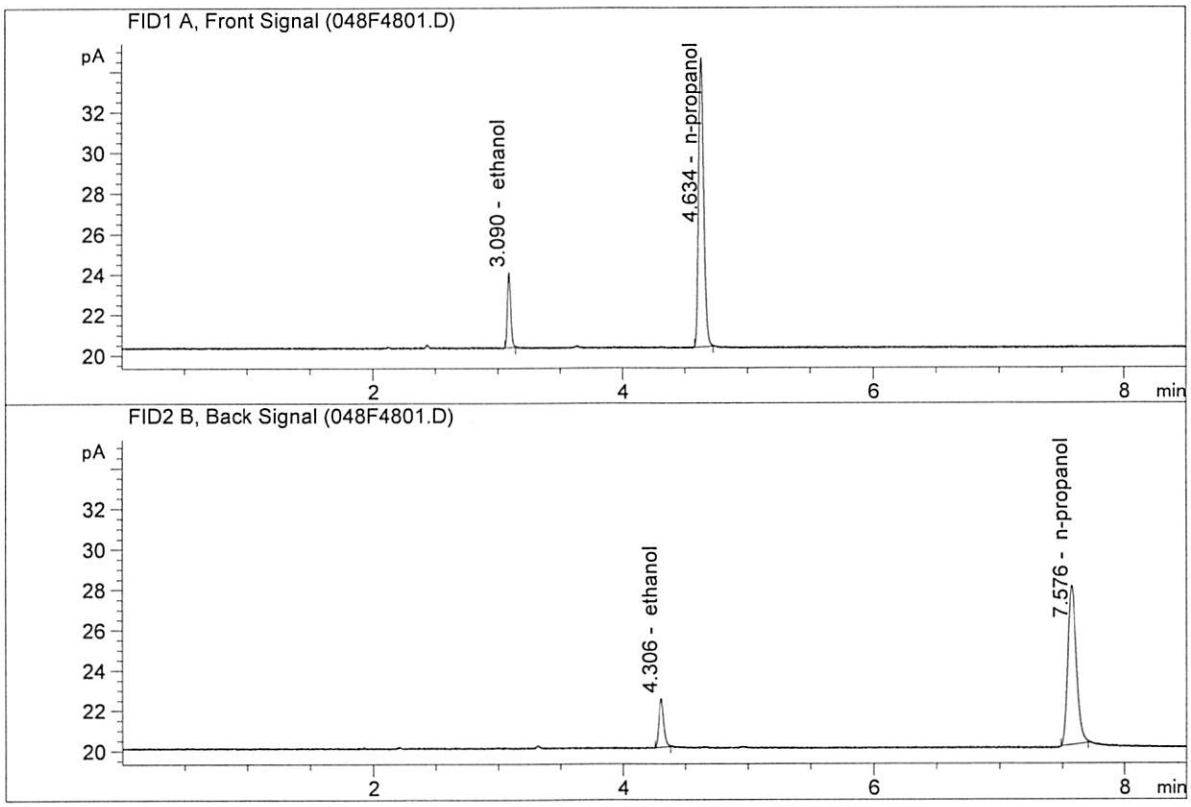


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.24092	0.0840	g/100cc
2.	Ethanol	Column 2:	7.05381	0.0817	g/100cc
3.	n-Propanol	Column 1:	41.96230	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.78856	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-B
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.87242	0.0821	g/100cc
2.	Ethanol	Column 2:	6.70102	0.0798	g/100cc
3.	n-Propanol	Column 1:	40.78318	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.70012	1.0000	g/100cc

NB

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC2-1 **Analysis Date(s): 17 Sep 2015**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.2142	0.2116	0.0026	0.2129	0.2138
(g/100cc)	0.2170	0.2127	0.0043	0.2148	

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: ALCOHOL.M
Hamilton Auto-Dilutor Serial Number:
MD96BC1382/MD94AM10010

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

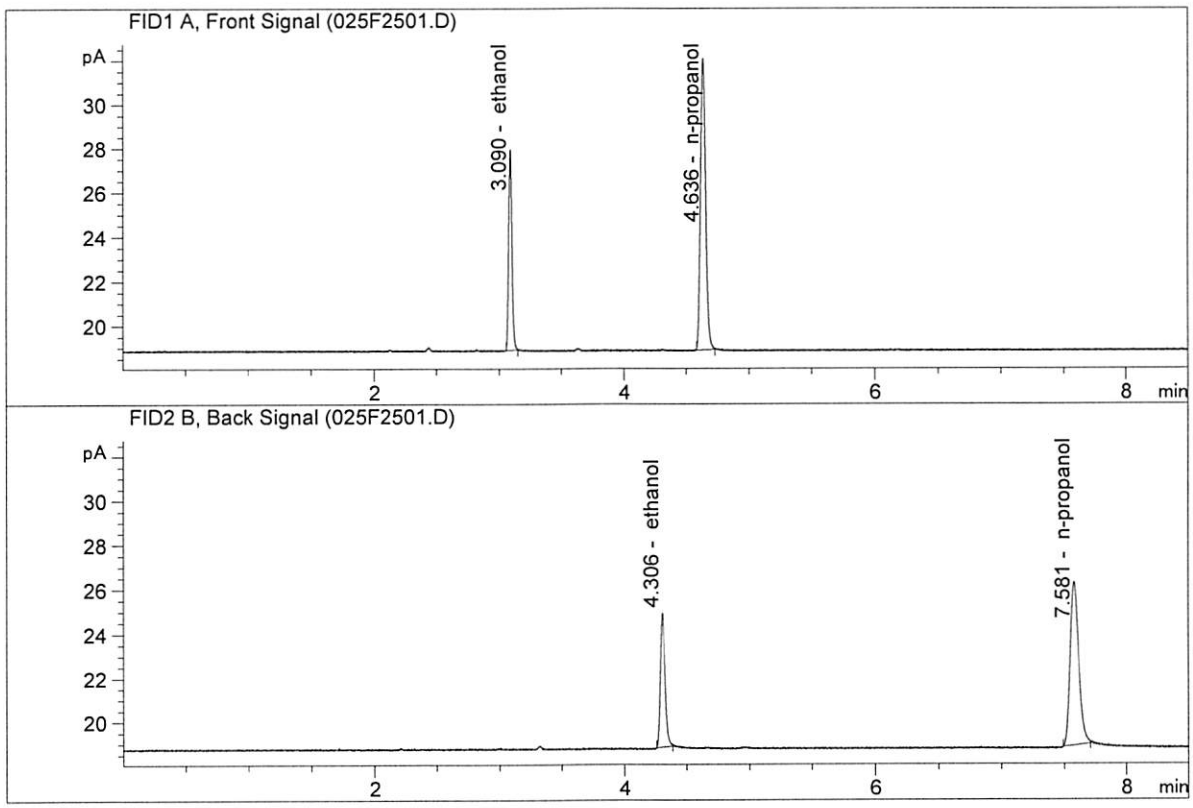
Overall Mean (g/100cc)	Low	High	5% of Mean
0.213	**0.202**	**0.224**	**0.011**

Reported Result
0.213

Calibration and control data are stored centrally. **Analyst:** NB **Page 2**

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-A
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	16.64425	0.2142	g/100cc
2.	Ethanol	Column 2:	16.54083	0.2116	g/100cc
3.	n-Propanol	Column 1:	37.84079	1.0000	g/100cc
4.	n-Propanol	Column 2:	36.03663	1.0000	g/100cc

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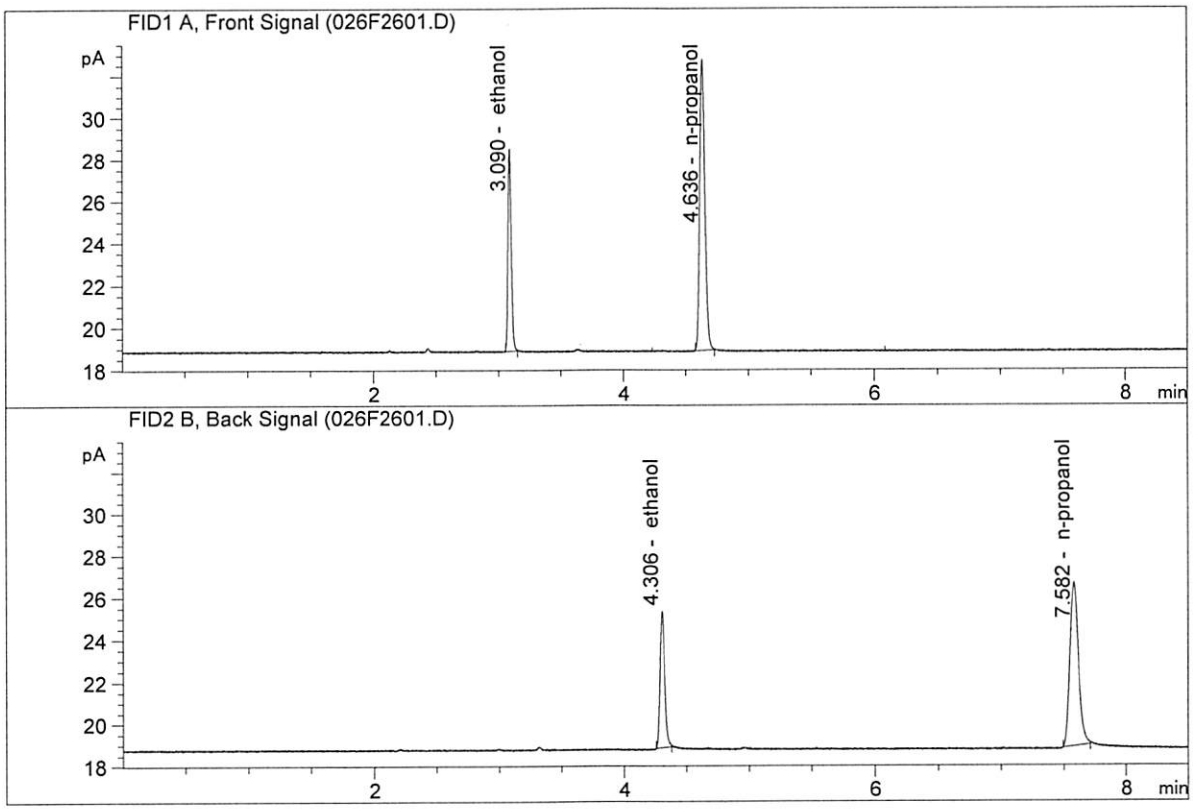
ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-B
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.67379	0.2170	g/100cc
2.	Ethanol	Column 2:	17.45749	0.2127	g/100cc
3.	n-Propanol	Column 1:	39.65959	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.83441	1.0000	g/100cc

NB

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC2-2 **Analysis Date(s): 17 Sep 2015**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.2163	0.2130	0.0033	0.2146	0.2156	
(g/100cc)	0.2189	0.2142	0.0047	0.2165		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: ALCOHOL.M
Hamilton Auto-Dilutor Serial Number:
MD96BC1382/MD94AM10010

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

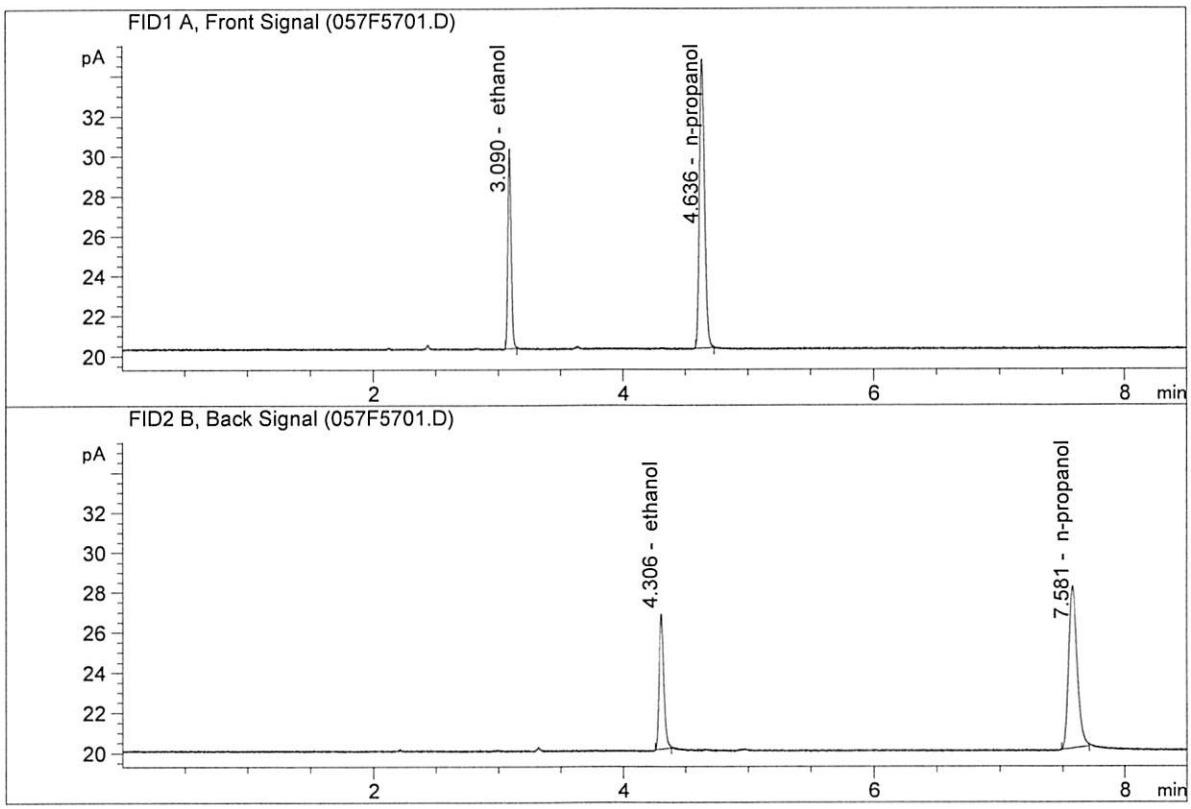
Overall Mean (g/100cc)	Low	High	5% of Mean
0.215	**0.204**	**0.226**	**0.011**

	Reported Result	
	0.215	

Calibration and control data are stored centrally. **Analyst:** NB **Page 2**

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-2-A
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

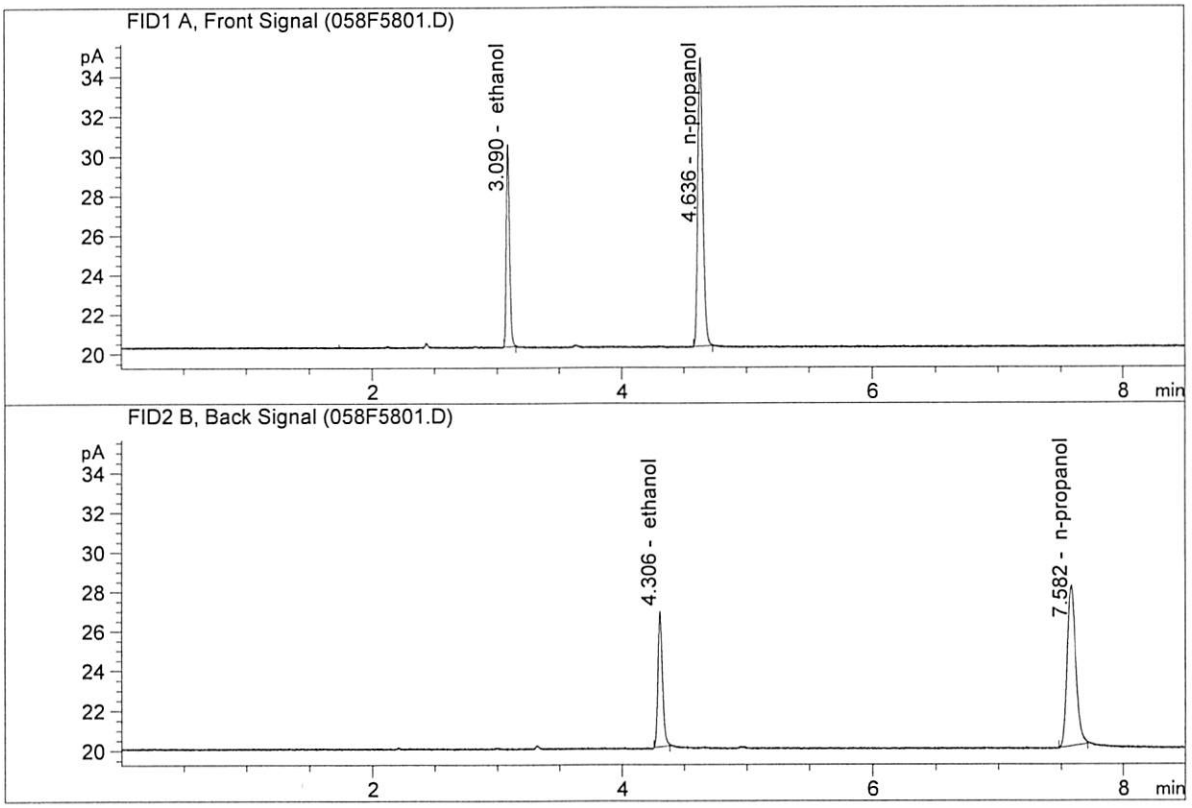


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.35432	0.2163	g/100cc
2.	Ethanol	Column 2:	18.17312	0.2130	g/100cc
3.	n-Propanol	Column 1:	41.32596	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.33171	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-2-B
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.69787	0.2189	g/100cc
2.	Ethanol	Column 2:	18.43943	0.2142	g/100cc
3.	n-Propanol	Column 1:	41.60069	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.67257	1.0000	g/100cc

NB

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN011712-02 **Analysis Date(s): 17 Sep 2015**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0816	0.0786	0.0030	0.0801	0.0796
(g/100cc)	0.0811	0.0774	0.0037	0.0792	

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: ALCOHOL.M
Hamilton Auto-Dilutor Serial Number:
MD96BC1382/MD94AM10010

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

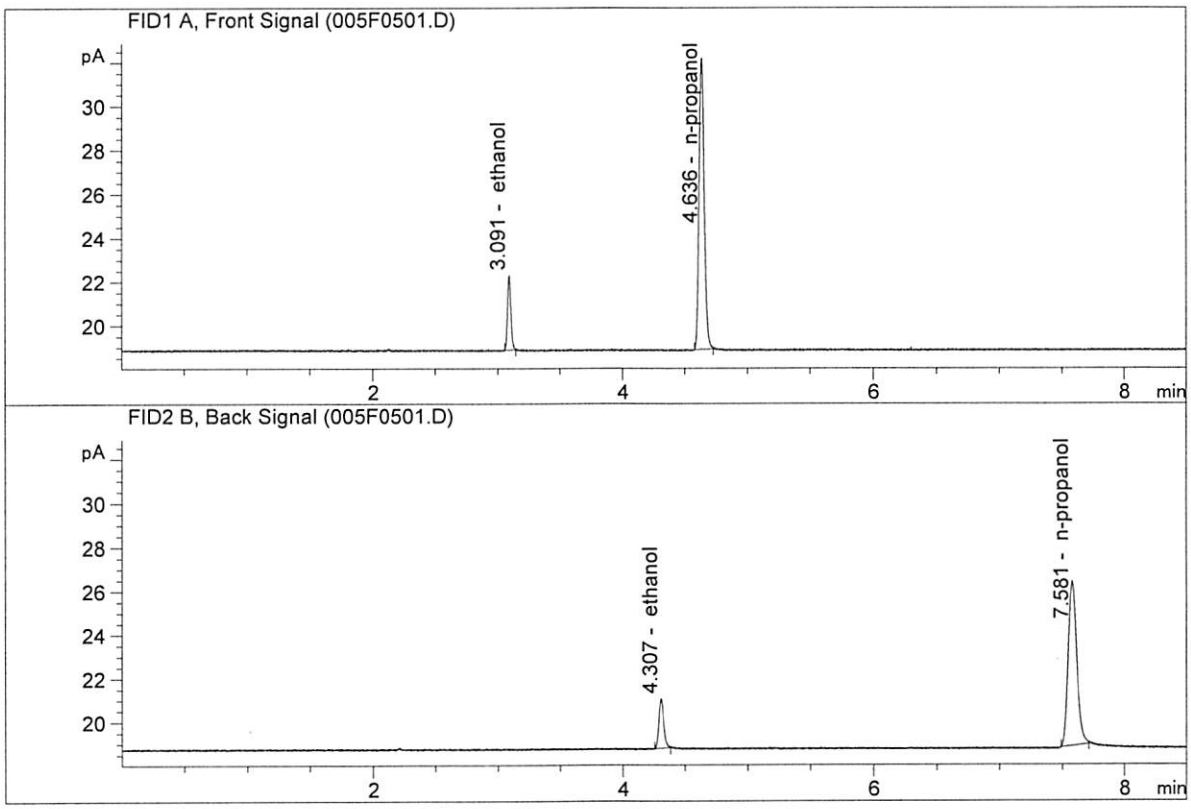
Overall Mean (g/100cc)	Low	High	5% of Mean
0.079	**0.075**	**0.083**	**0.004**

Reported Result
0.079

Calibration and control data are stored centrally. **Analyst:** NB **Page 2**

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN011712-02-A
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

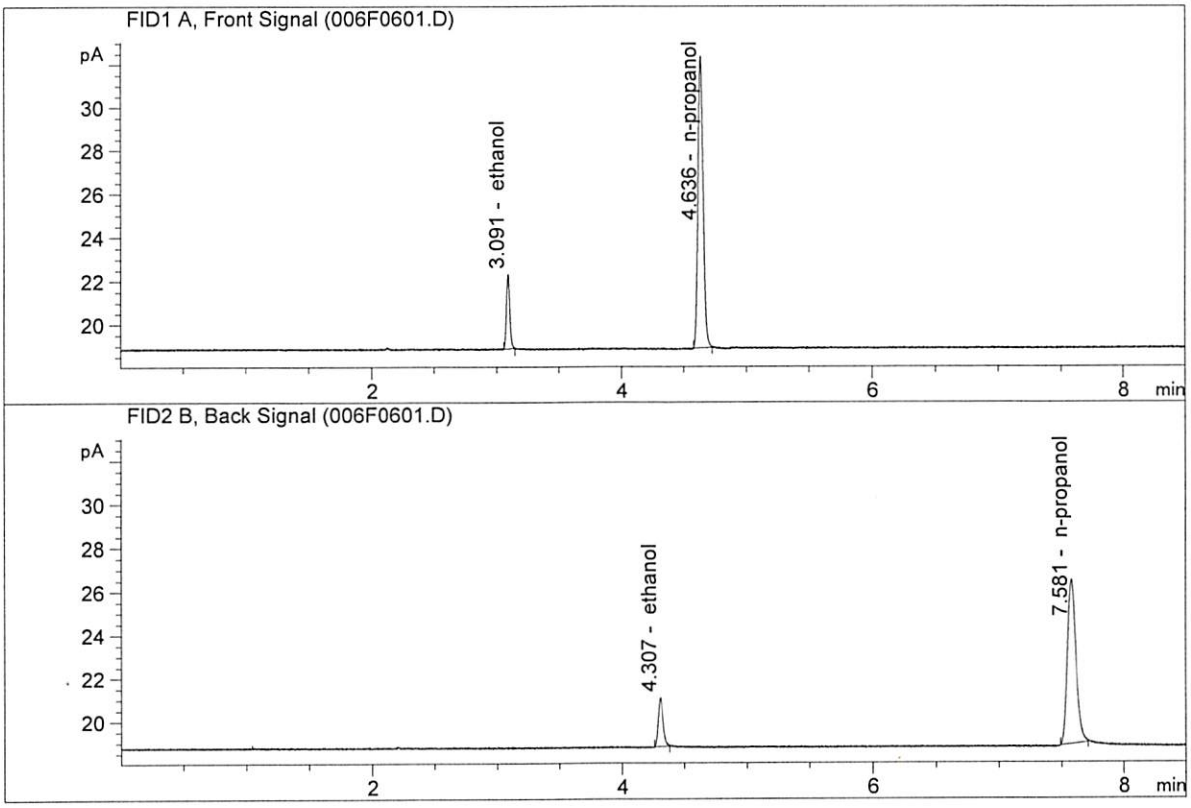


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.39885	0.0816	g/100cc
2.	Ethanol	Column 2:	6.27064	0.0786	g/100cc
3.	n-Propanol	Column 1:	38.20413	1.0000	g/100cc
4.	n-Propanol	Column 2:	36.76550	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN011712-02-B
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

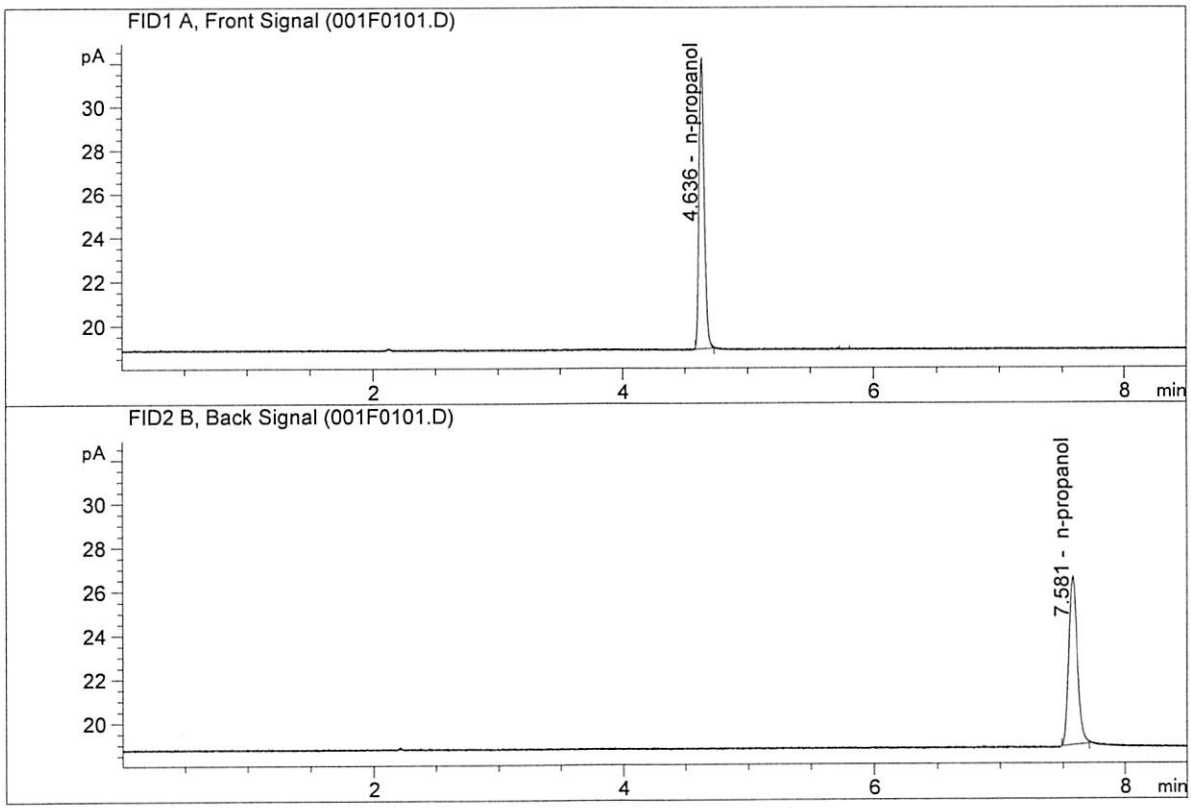


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.43895	0.0811	g/100cc
2.	Ethanol	Column 2:	6.24867	0.0774	g/100cc
3.	n-Propanol	Column 1:	38.66863	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.22189	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK 1
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

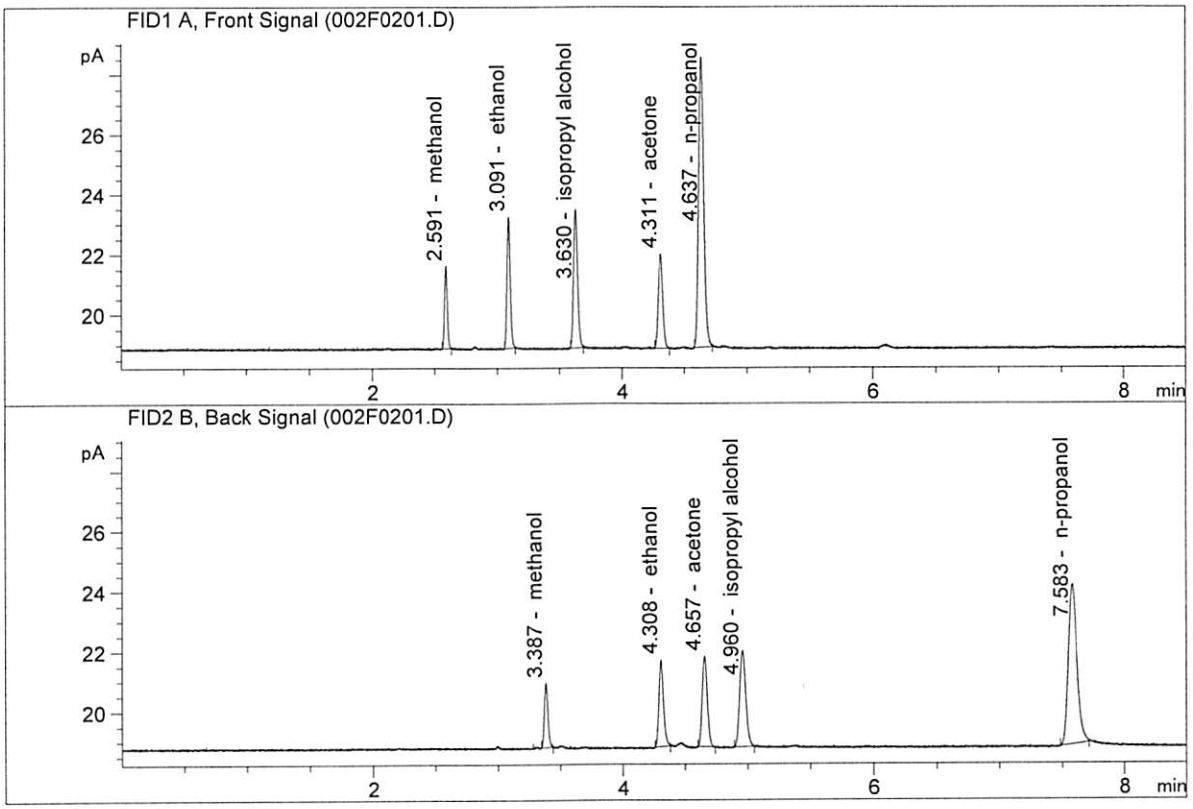


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	38.29014	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.50842	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : MIX VOL FN012111-01
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

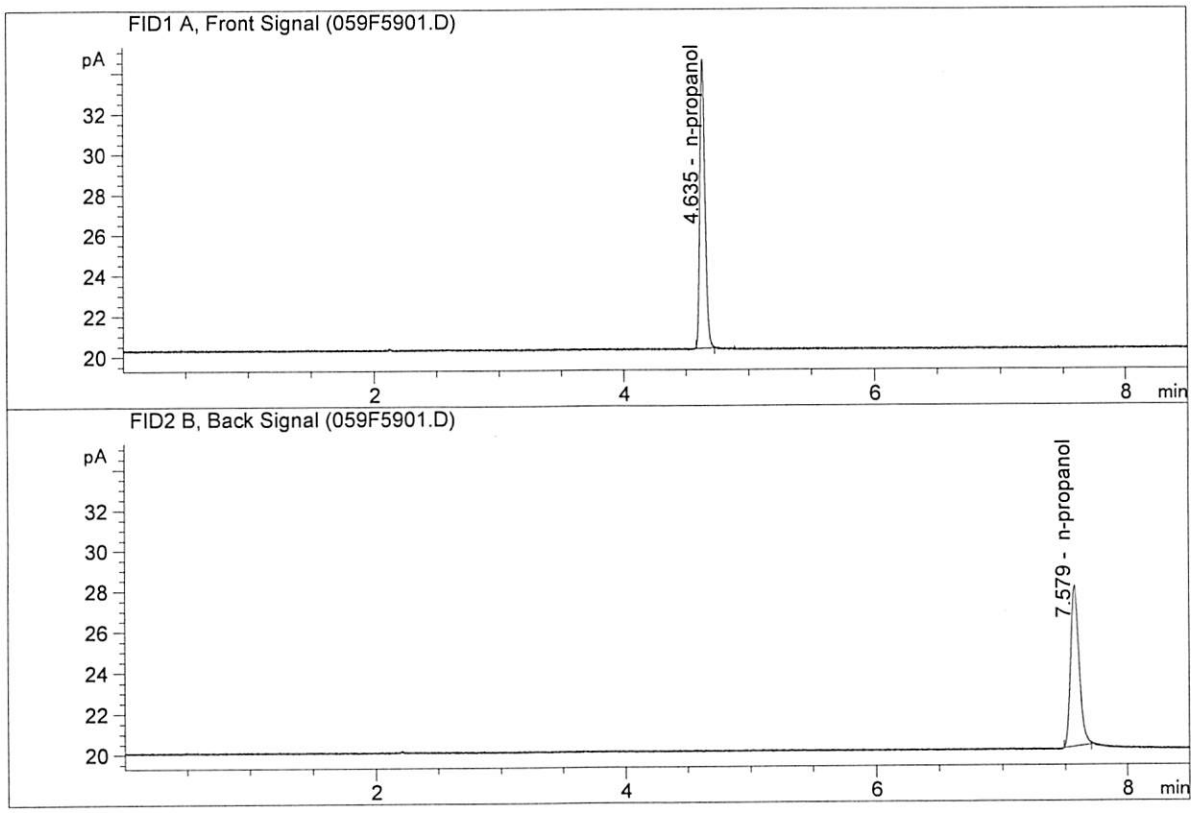


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.92549	0.1401	g/100cc
2.	Ethanol	Column 2:	7.90433	0.1387	g/100cc
3.	n-Propanol	Column 1:	27.55816	1.0000	g/100cc
4.	n-Propanol	Column 2:	26.25830	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK
Laboratory : Meridian
Injection Date : Sep 17, 2015
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	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:	40.66188	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.53494	1.0000	g/100cc

NB

Sample Summary

Sequence table: C:\Chem32\1\Data\09-17-15_SAMPLES\09-17-15_SAMPLES 2015-09-17 10-47-33\09-17-15_SAMPLES.S
Data directory path: C:\Chem32\1\Data\09-17-15_SAMPLES\09-17-15_SAMPLES 2015-09-17 10-47-33\
Logbook: C:\Chem32\1\Data\09-17-15_SAMPLES\09-17-15_SAMPLES 2015-09-17 10-47-33\09-17-15_SAMPLES.LOG
Sequence start: 9/17/2015 11:02:23 AM
Sequence Operator: SYSTEM
Operator: SYSTEM

Method file name: C:\Chem32\1\Data\09-17-15_SAMPLES\09-17-15_SAMPLES 2015-09-17 10-47-33\ALCOHOL.M

Run #	Location	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal # Cmp
1	1	1	INTERNAL STD BLK	-	1.0000	001F0101.D	2
2	2	1	MIX VOL FN012111	-	1.0000	002F0201.D	10
3	3	1	QC1-1-A	-	1.0000	003F0301.D	4
4	4	1	QC1-1-B	-	1.0000	004F0401.D	4
5	5	1	0.08 FN011712-02	-	1.0000	005F0501.D	4
6	6	1	0.08 FN011712-02	-	1.0000	006F0601.D	4
7	7	1	M2015-3250-1-A	-	1.0000	007F0701.D	4
8	8	1	M2015-3250-1-B	-	1.0000	008F0801.D	4
9	9	1	M2015-3267-1-A	-	1.0000	009F0901.D	2
10	10	1	M2015-3267-1-B	-	1.0000	010F1001.D	2
11	11	1	M2015-3310-1-A	-	1.0000	011F1101.D	4
12	12	1	M2015-3310-1-B	-	1.0000	012F1201.D	4
13	13	1	M2015-3311-1-A	-	1.0000	013F1301.D	4
14	14	1	M2015-3311-1-B	-	1.0000	014F1401.D	4
15	15	1	M2015-3317-1-A	-	1.0000	015F1501.D	4
16	16	1	M2015-3317-1-B	-	1.0000	016F1601.D	4
17	17	1	M2015-3324-1-A	-	1.0000	017F1701.D	4
18	18	1	M2015-3324-1-B	-	1.0000	018F1801.D	4
19	19	1	M2015-3325-2-A	-	1.0000	019F1901.D	2
20	20	1	M2015-3325-2-B	-	1.0000	020F2001.D	2
21	21	1	M2015-3339-2-A	-	1.0000	021F2101.D	4
22	22	1	M2015-3339-2-B	-	1.0000	022F2201.D	4
23	23	1	M2015-3340-1-A	-	1.0000	023F2301.D	4
24	24	1	M2015-3340-1-B	-	1.0000	024F2401.D	4
25	25	1	QC2-1-A	-	1.0000	025F2501.D	4
26	26	1	QC2-1-B	-	1.0000	026F2601.D	4
27	27	1	M2015-3341-1-A	-	1.0000	027F2701.D	4
28	28	1	M2015-3341-1-B	-	1.0000	028F2801.D	4
29	29	1	M2015-3351-1-A	-	1.0000	029F2901.D	4
30	30	1	M2015-3351-1-B	-	1.0000	030F3001.D	4
31	31	1	M2015-3352-1-A	-	1.0000	031F3101.D	4
32	32	1	M2015-3352-1-B	-	1.0000	032F3201.D	4
33	33	1	M2015-3359-1-A	-	1.0000	033F3301.D	4
34	34	1	M2015-3359-1-B	-	1.0000	034F3401.D	4
35	35	1	M2015-3360-1-A	-	1.0000	035F3501.D	2
36	36	1	M2015-3360-1-B	-	1.0000	036F3601.D	2
37	37	1	M2015-3361-1-A	-	1.0000	037F3701.D	4
38	38	1	M2015-3361-1-B	-	1.0000	038F3801.D	4
39	39	1	M2015-3364-1-A	-	1.0000	039F3901.D	2
40	40	1	M2015-3364-1-B	-	1.0000	040F4001.D	2
41	41	1	M2015-3364-2-A	-	1.0000	041F4101.D	2
42	42	1	M2015-3364-2-B	-	1.0000	042F4201.D	2
43	43	1	M2015-3369-1-A	-	1.0000	043F4301.D	4

NB

Sequence File C:\Chem32\...5_SAMPLES\09-17-15_SAMPLES 2015-09-17 10-47-33\09-17-15_SAMPLES.S

Run #	Location	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	Cmp
44	44	1	M2015-3369-1-B	-	1.0000	044F4401.D		4
45	45	1	M2015-3370-1-A	-	1.0000	045F4501.D		4
46	46	1	M2015-3370-1-B	-	1.0000	046F4601.D		4
47	47	1	QC1-2-A	-	1.0000	047F4701.D		4
48	48	1	QC1-2-B	-	1.0000	048F4801.D		4
49	49	1	M2015-3371-1-A	-	1.0000	049F4901.D		4
50	50	1	M2015-3371-1-B	-	1.0000	050F5001.D		4
51	51	1	M2015-3373-1-A	-	1.0000	051F5101.D		4
52	52	1	M2015-3373-1-B	-	1.0000	052F5201.D		4
53	53	1	M2015-3378-1-A	-	1.0000	053F5301.D		4
54	54	1	M2015-3378-1-B	-	1.0000	054F5401.D		4
55	55	1	P2015-2022-1-A	-	1.0000	055F5501.D		4
56	56	1	P2015-2022-1-B	-	1.0000	056F5601.D		4
57	57	1	QC2-2-A	-	1.0000	057F5701.D		4
58	58	1	QC2-2-B	-	1.0000	058F5801.D		4
59	59	1	INTERNAL STD BLK	-	1.0000	059F5901.D		2

Method file name: C:\Chem32\1\Data\09-17-15_SAMPLES\09-17-15_SAMPLES 2015-09-17 10-47-33 \SHUTDOWN.M

Run #	Location	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	Cmp
60	60	1	EMPTY	-	1.0000	060F6001.D		0

NB