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): 3/2/16

Volatiles Quality Assurance Controls **calibration: 2/25/16**

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
					0.0797 g/100cc
					g/100cc
Level 2	Jan-17	1212091	0.2020	0.1818 - 0.2222	0.2105 g/100cc
					g/100cc
					g/100cc
Multi-Component mixture:		**Exp date: Oct 2019**	**Lot #**	FN09231404	OK
Curve Fit:			**Column 1**	1.00000	**Column2** 0.99990

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	0.0495	0.0465	0.003	0.048
0.080			0.080	0.072 - 0.088			0	#DIV/0!
0.100	Mar-19	FN02021403	0.100	0.090 - 0.110	0.0996	0.0937	0.0059	0.0966
0.200			0.200	0.180 - 0.220			0	#DIV/0!
0.300	Jun-20	FN06051501	0.300	0.270 - 0.330	0.2987	0.2948	0.0039	0.2967
0.400	Jan-17	FN012712-01	0.400	0.360 - 0.440	0.4003	0.4000	0.0003	0.4001
0.500	Aug-19	FN07031402	0.500	0.450 - 0.550	0.5007	0.5047	0.004	0.5027

Aqueous Controls					
Control level	**Expiration**	**Cerilliant Lot #**	**Target Value**	**Acceptable Range**	**Overall Results**
0.080	Oct-18	FN09051304	0.08000	0.076 - 0.084	0.078 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

Worklist: 1031

LAB CASE	ITEM	TASK ID	DESCRIPTION
M2016-0642	3	51263	Alcohol Analysis
M2016-0776	1	51607	Alcohol Analysis
M2016-0787	1	51637	Alcohol Analysis
M2016-0793	1	51692	Alcohol Analysis
M2016-0795	1	51694	Alcohol Analysis
M2016-0796	1	51695	Alcohol Analysis
M2016-0800	1	51738	Alcohol Analysis
M2016-0801	1	51739	Alcohol Analysis
M2016-0802	1	51740	Alcohol Analysis
M2016-0803	1	51741	Alcohol Analysis
M2016-0817	1	51839	Alcohol Analysis
M2016-0818	1	51844	Alcohol Analysis
M2016-0819	1	51847	Alcohol Analysis
M2016-0837	1	51875	Alcohol Analysis
M2016-0838	1	51876	Alcohol Analysis
M2016-0851	1	51892	Alcohol Analysis

NB

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-1 **Analysis Date(s): 02 Mar 2016**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0794	0.0753	0.0041	0.0773	0.0772
(g/100cc)	0.0792	0.0750	0.0042	0.0771	

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%**

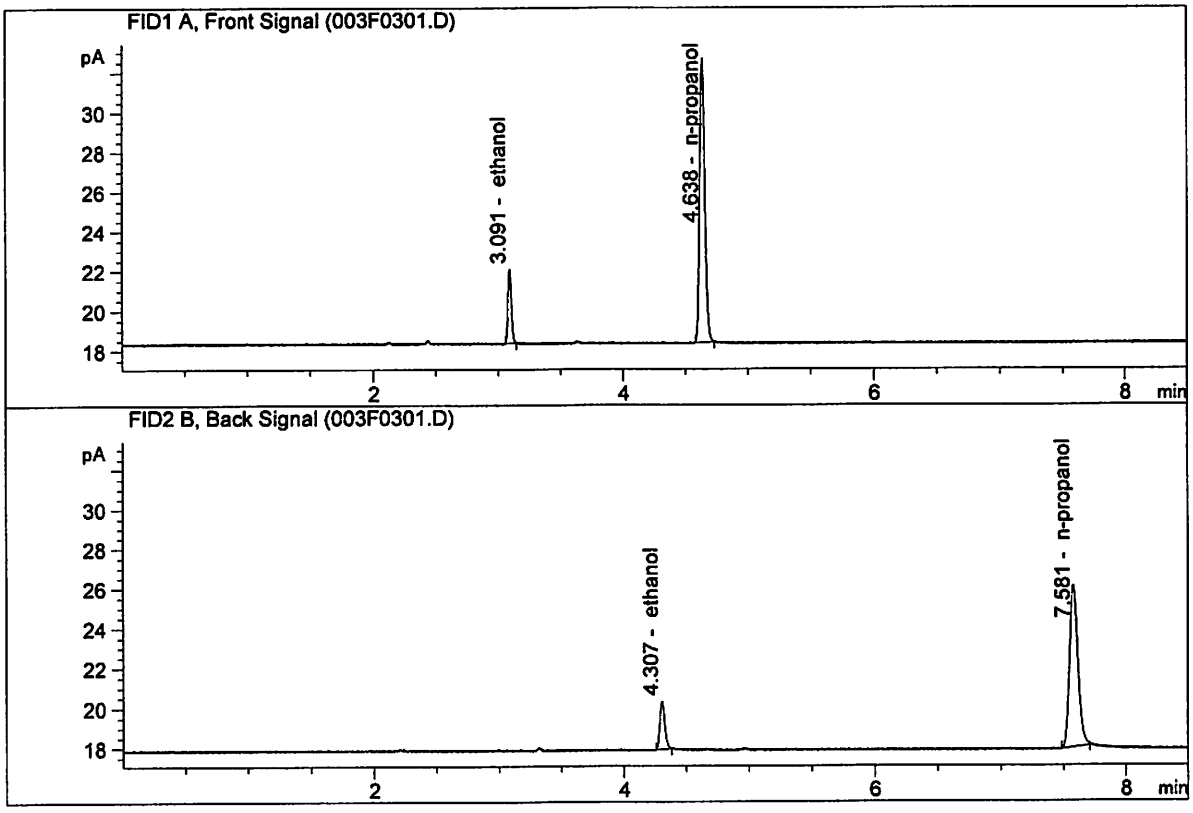
Overall Mean (g/100cc)	Low	High	5% of Mean
0.077	0.073	0.081	0.004

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 : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

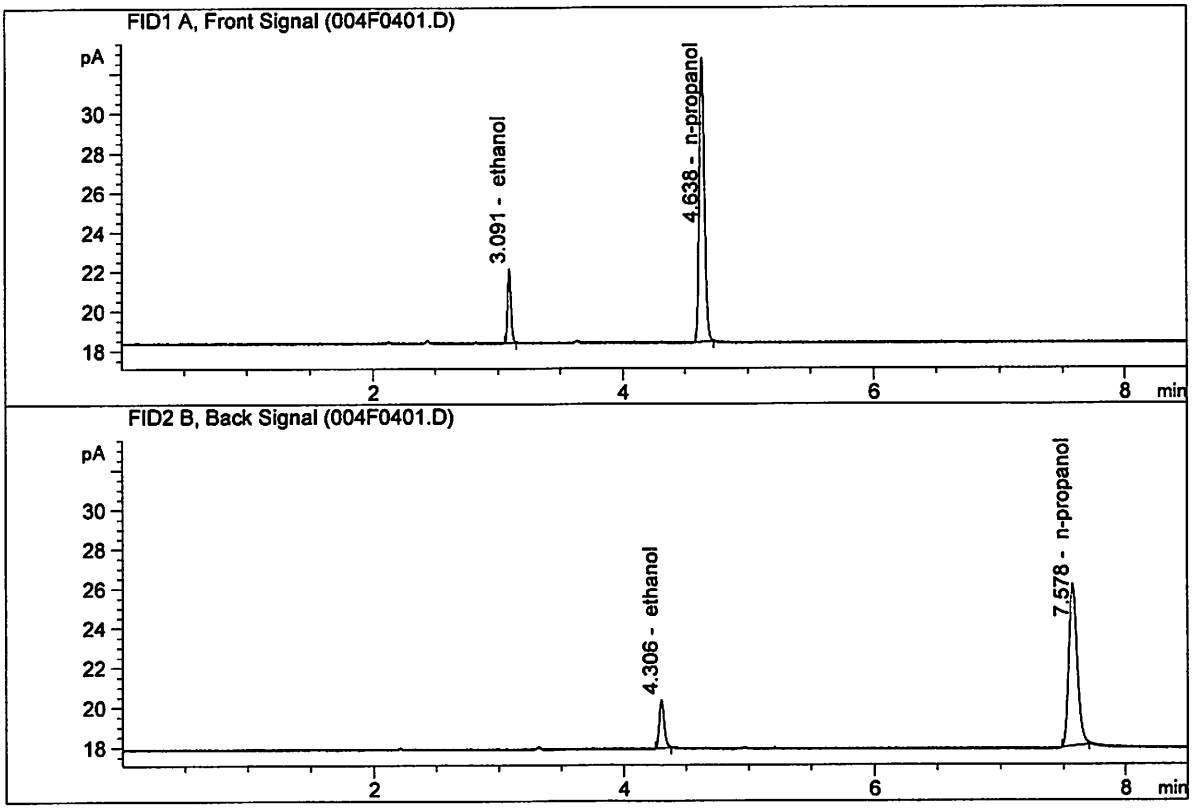


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.92008	0.0794	g/100cc
2.	Ethanol	Column 2:	6.62586	0.0753	g/100cc
3.	n-Propanol	Column 1:	40.96096	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.31449	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-1-B
Laboratory : Meridian
Injection Date : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.92518	0.0792	g/100cc
2.	Ethanol	Column 2:	6.58633	0.0750	g/100cc
3.	n-Propanol	Column 1:	41.11494	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.23887	1.0000	g/100cc

NB

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-2 **Analysis Date(s): 02 Mar 2016**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0815	0.0780	0.0035	0.0797	0.0796
(g/100cc)	0.0810	0.0781	0.0029	0.0795	

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%**

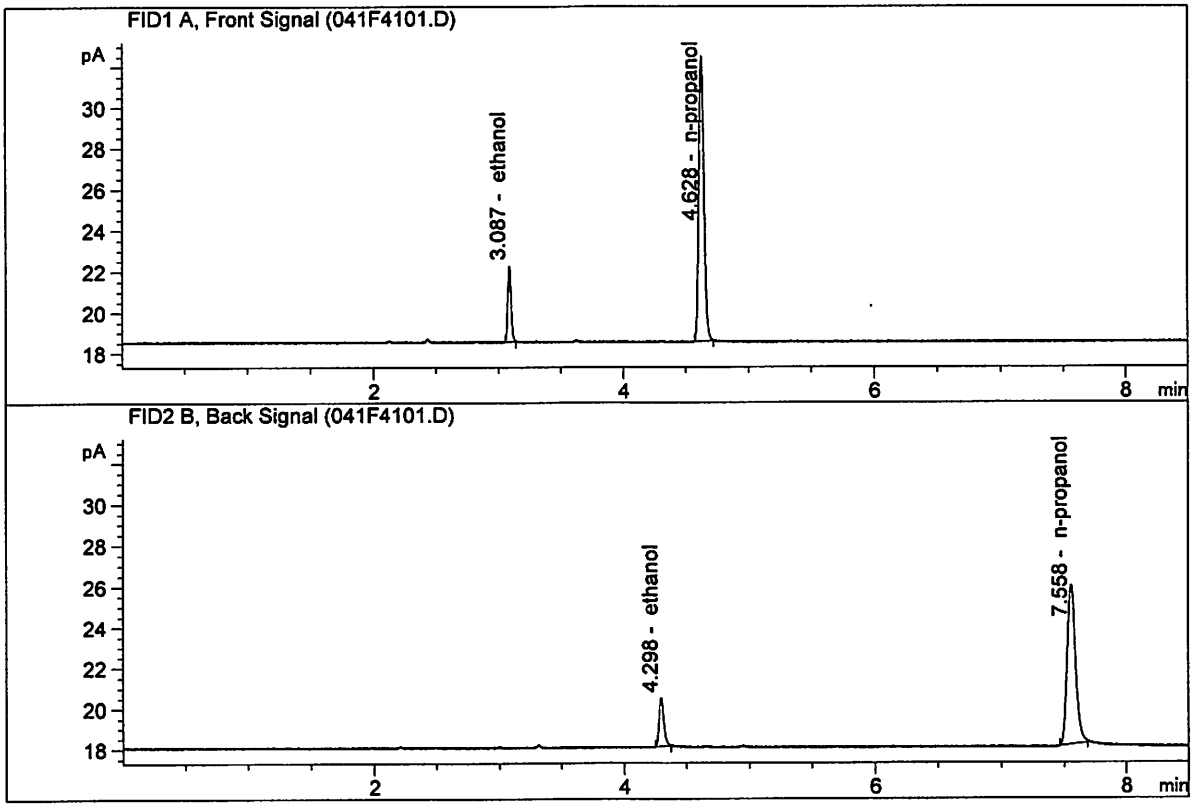
Overall Mean (g/100cc)	Low	High	5% of Mean
0.079	0.075	0.083	0.004

Reported Result
0.079

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

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-A
Laboratory : Meridian
Injection Date : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

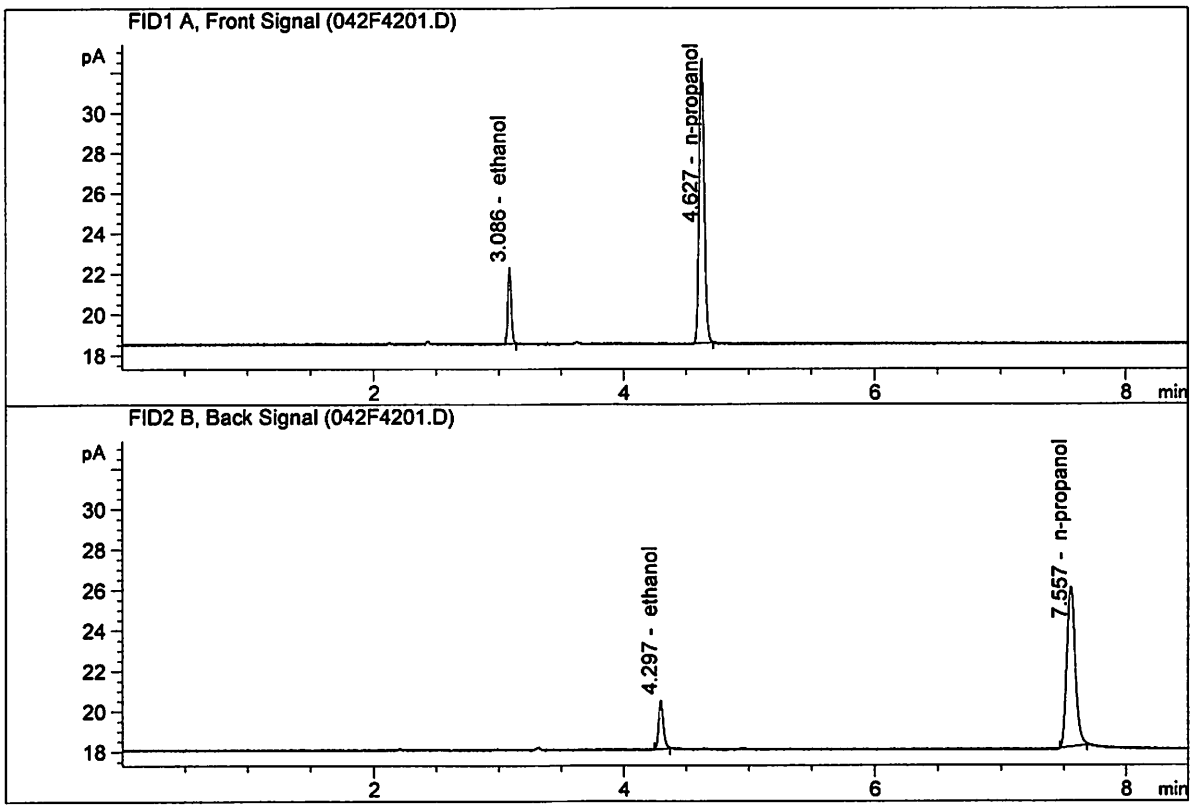


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.89170	0.0815	g/100cc
2.	Ethanol	Column 2:	6.59330	0.0780	g/100cc
3.	n-Propanol	Column 1:	39.75647	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.75291	1.0000	g/100cc

MB

ISP Forensic Services Blood Alcohol Report

Sample Name : QC1-2-B
Laboratory : Meridian
Injection Date : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.91300	0.0810	g/100cc
2.	Ethanol	Column 2:	6.66840	0.0781	g/100cc
3.	n-Propanol	Column 1:	40.13171	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.14096	1.0000	g/100cc

NB

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC2-1 **Analysis Date(s): 02 Mar 2016**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.2117	0.2093	0.0024	0.2105	0.2105
(g/100cc)	0.2120	0.2090	0.0030	0.2105	

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%**

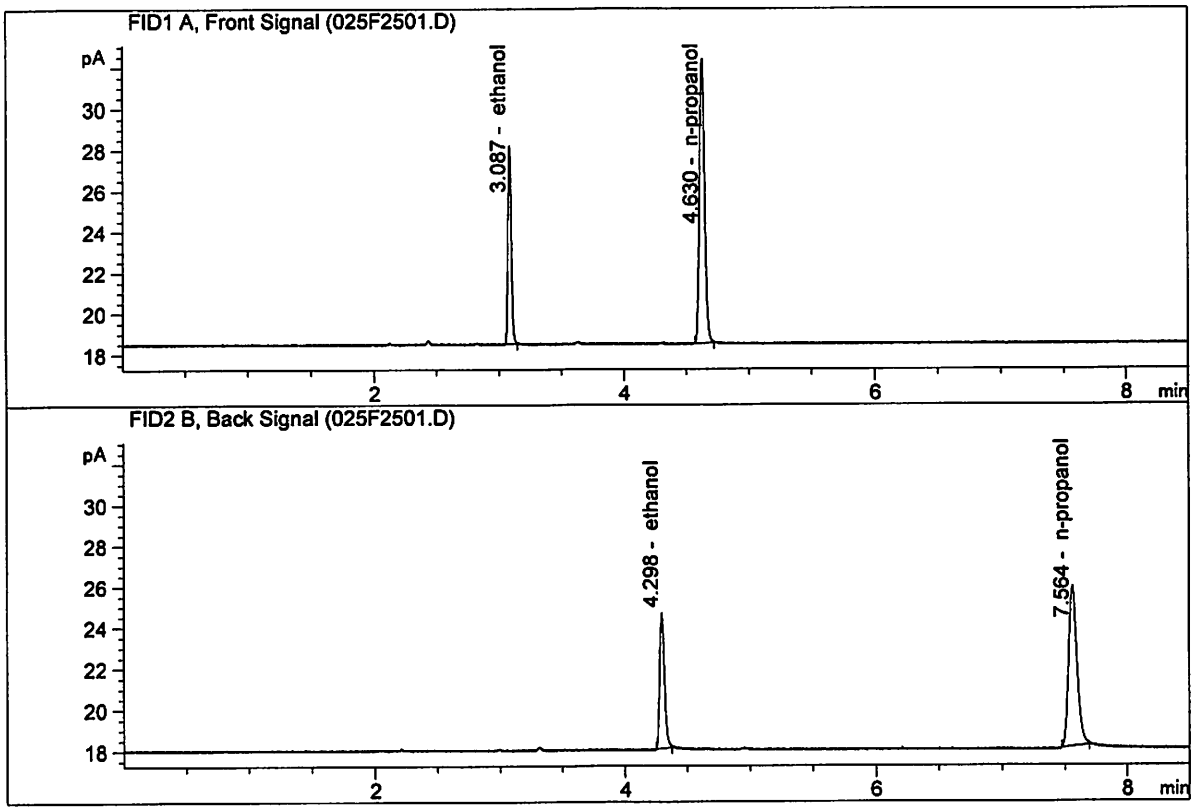
Overall Mean (g/100cc)	Low	High	5% of Mean
0.210	0.199	0.221	0.011

Reported Result
0.210

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 : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

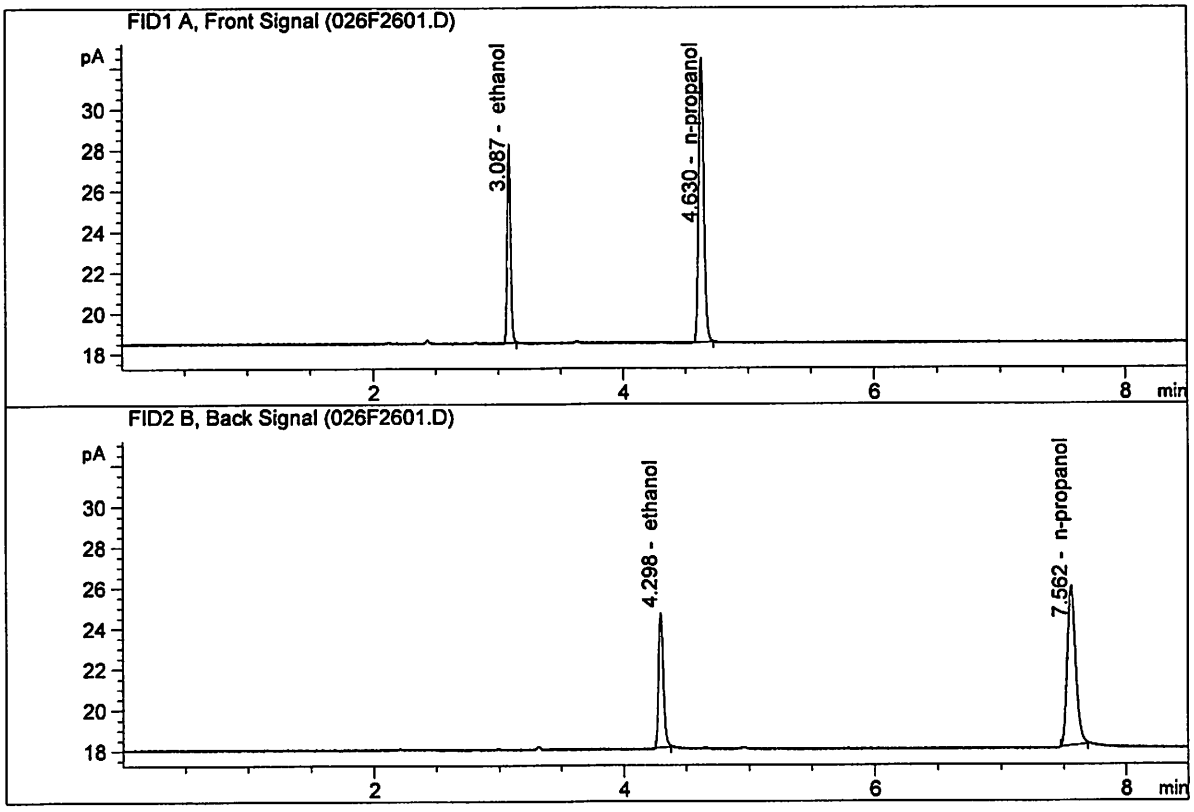


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.81970	0.2117	g/100cc
2.	Ethanol	Column 2:	17.63909	0.2093	g/100cc
3.	n-Propanol	Column 1:	39.58019	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.63304	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-B
Laboratory : Meridian
Injection Date : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.93855	0.2120	g/100cc
2.	Ethanol	Column 2:	17.66834	0.2090	g/100cc
3.	n-Propanol	Column 1:	39.79585	1.0000	g/100cc
4.	n-Propanol	Column 2:	37.75435	1.0000	g/100cc

NB

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 0.08 FN09051304 **Analysis Date(s): 02 Mar 2016**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0806	0.0770	0.0036	0.0788	0.0786
(g/100cc)	0.0805	0.0764	0.0041	0.0784	

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%**

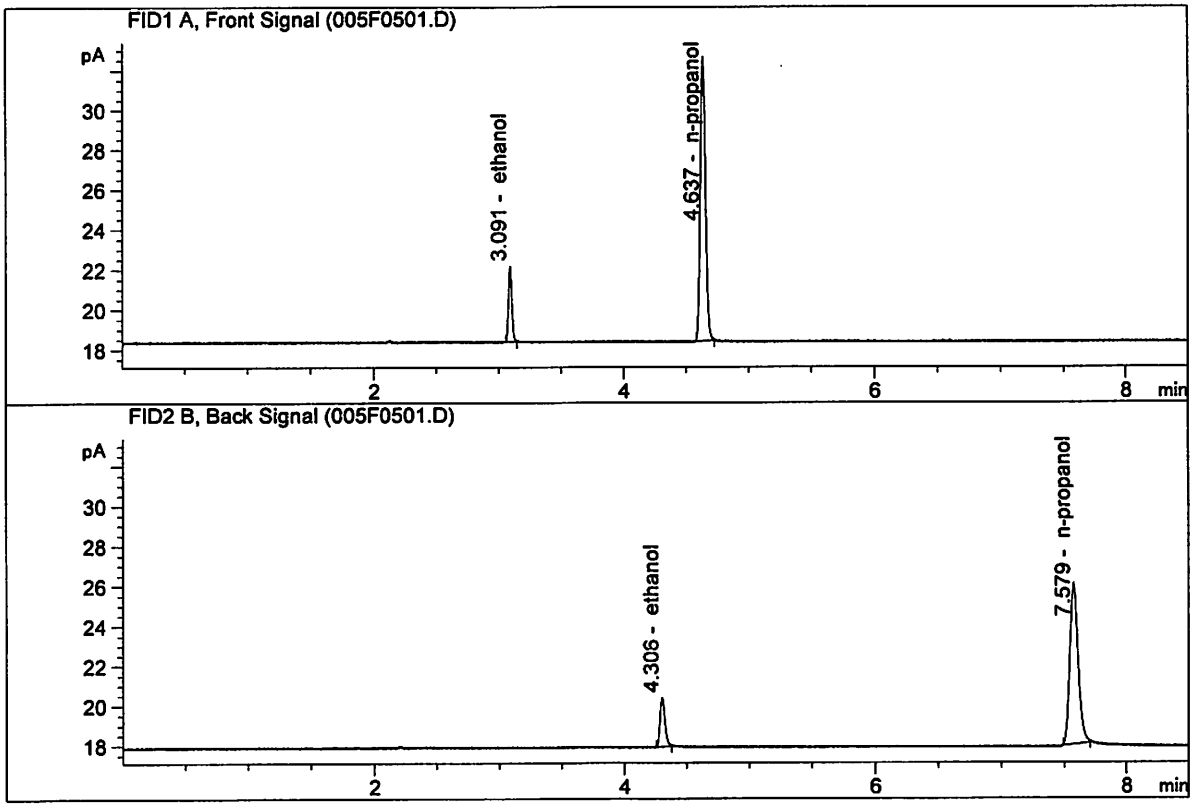
Overall Mean (g/100cc)	Low	High	5% of Mean
0.078	0.074	0.082	0.004

Reported Result
0.078

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

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN09051304-A
Laboratory : Meridian
Injection Date : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

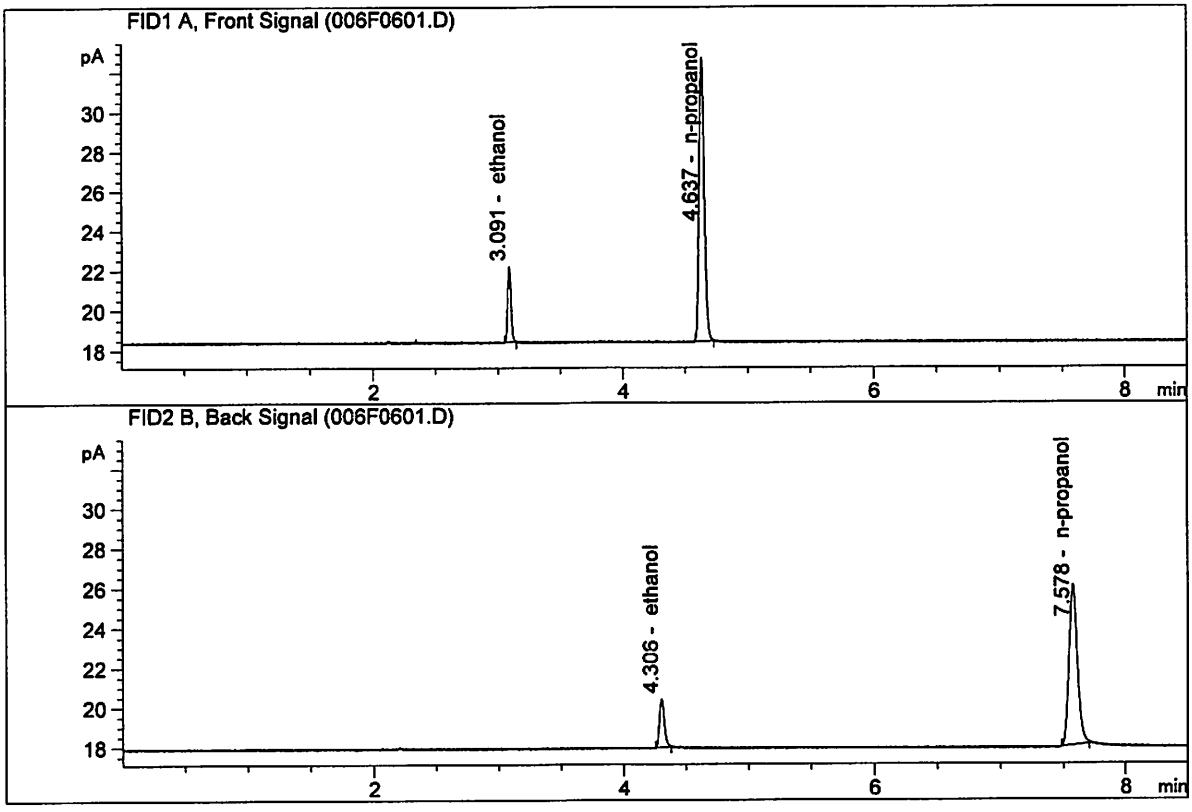


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.99003	0.0806	g/100cc
2.	Ethanol	Column 2:	6.69944	0.0770	g/100cc
3.	n-Propanol	Column 1:	40.79817	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.87090	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN09051304-B
Laboratory : Meridian
Injection Date : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

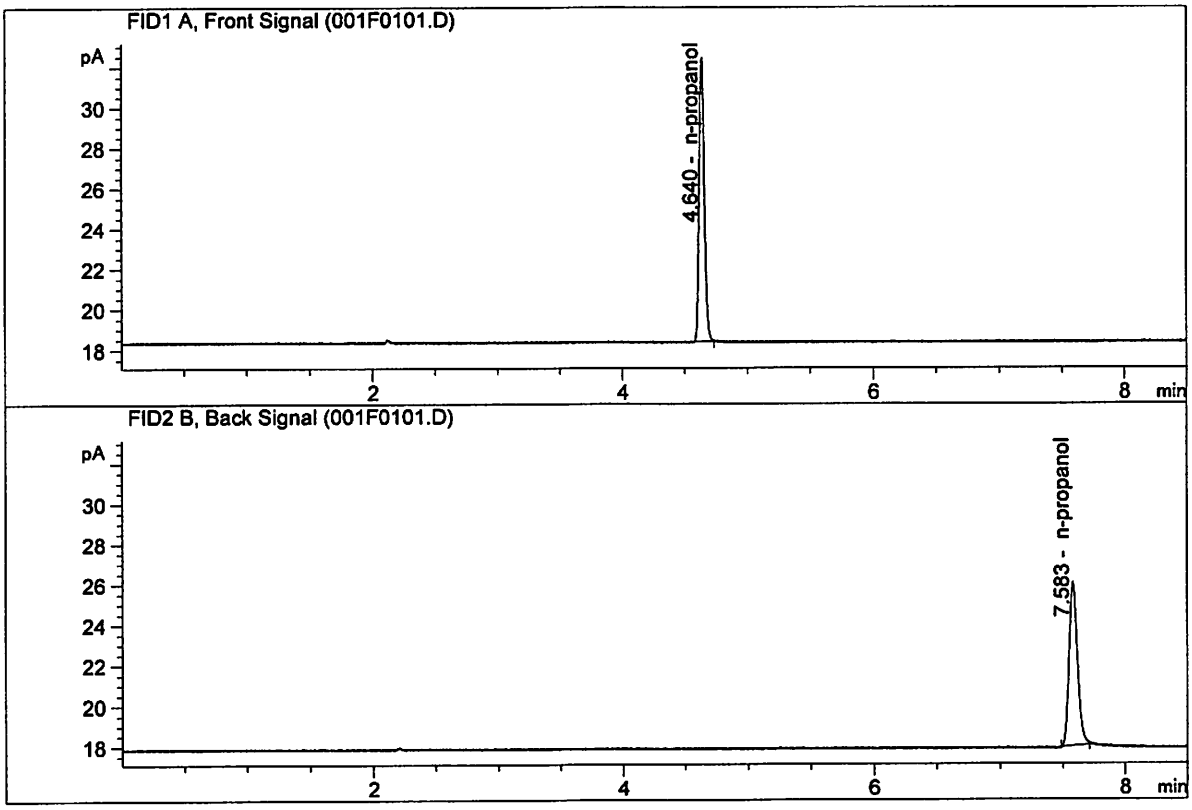


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.01683	0.0805	g/100cc
2.	Ethanol	Column 2:	6.69791	0.0764	g/100cc
3.	n-Propanol	Column 1:	40.98818	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.14029	1.0000	g/100cc

MB

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK 1
Laboratory : Meridian
Injection Date : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

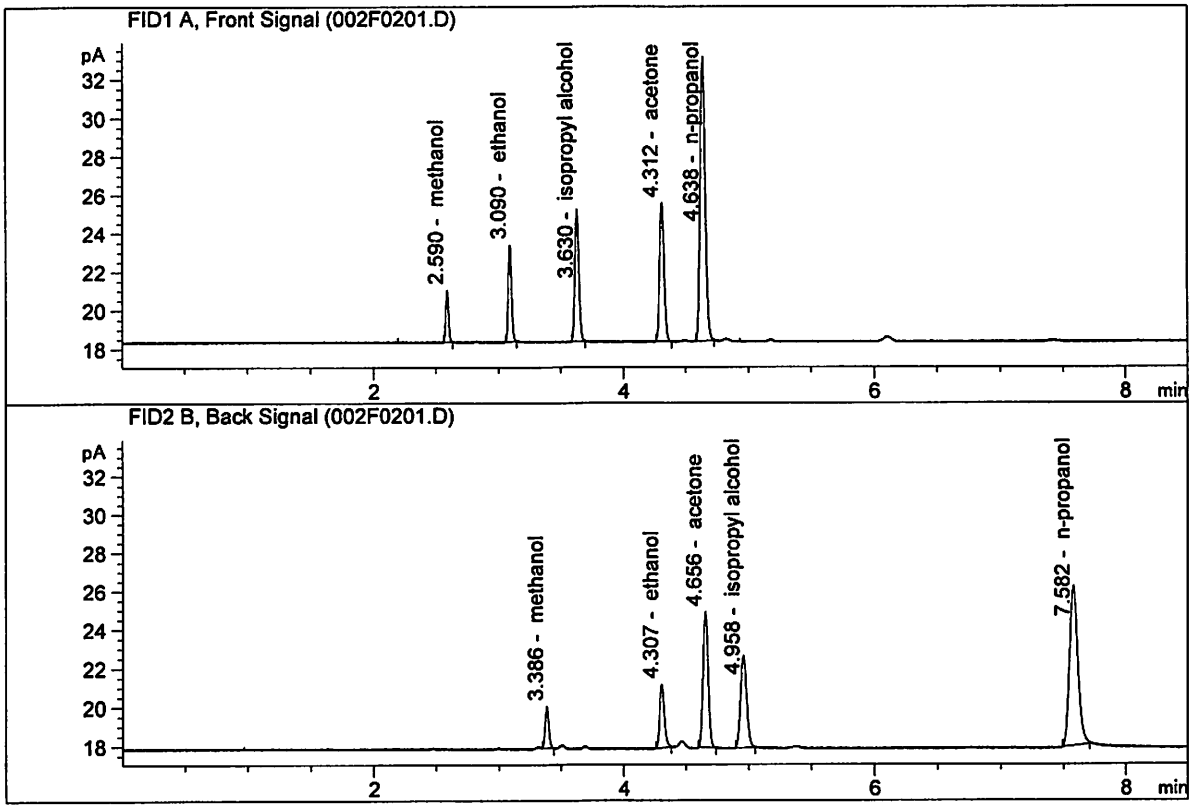


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	0.00000	0.0000	g/100cc
2.	Ethanol	Column 2:	0.00000	0.0000	g/100cc
3.	n-Propanol	Column 1:	40.24620	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.19680	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : MIX VOL FN09231404
Laboratory : Meridian
Injection Date : Mar 2, 2016
Method : ALCOHOL.M
Acq. Instrument: CN11180014-CN11041167

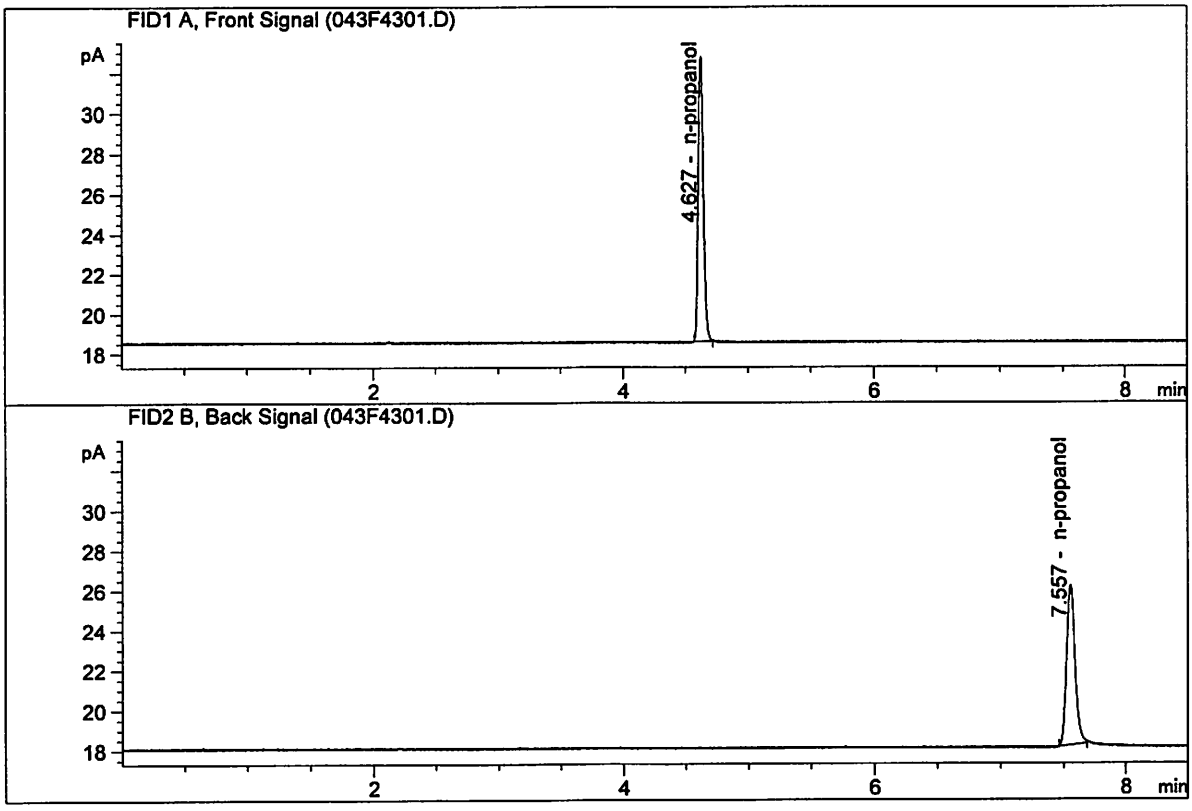


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	9.01709	0.1021	g/100cc
2.	Ethanol	Column 2:	8.78748	0.0987	g/100cc
3.	n-Propanol	Column 1:	41.53211	1.0000	g/100cc
4.	n-Propanol	Column 2:	39.75863	1.0000	g/100cc

NB

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK
Laboratory : Meridian
Injection Date : Mar 2, 2016
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:	40.55885	1.0000	g/100cc
4.	n-Propanol	Column 2:	38.67120	1.0000	g/100cc

NB

S a m p l e S u m m a r y

Sequence table: C:\Chem32\1\Data\03-02-16_SAMPLES\03-02-16_SAMPLES 2016-03-02 10-40-02\03-02-16_SAMPLES.S
Data directory path: C:\Chem32\1\Data\03-02-16_SAMPLES\03-02-16_SAMPLES 2016-03-02 10-40-02\
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Sequence start: 3/2/2016 10:54:48 AM
Sequence Operator: SYSTEM
Operator: SYSTEM

Method file name: C:\Chem32\1\Data\03-02-16_SAMPLES\03-02-16_SAMPLES 2016-03-02 10-40-02\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 FN092314	-	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 FN09051304-	-	1.0000	005F0501.D		4
6	6	1	0.08 FN09051304-	-	1.0000	006F0601.D		4
7	7	1	M2016-0642-3-A	-	1.0000	007F0701.D		4
8	8	1	M2016-0642-3-B	-	1.0000	008F0801.D		4
9	9	1	M2016-0776-1-A	-	1.0000	009F0901.D		4
10	10	1	M2016-0776-1-B	-	1.0000	010F1001.D		4
11	11	1	M2016-0787-1-A	-	1.0000	011F1101.D		4
12	12	1	M2016-0787-1-B	-	1.0000	012F1201.D		4
13	13	1	M2016-0793-1-A	-	1.0000	013F1301.D		2
14	14	1	M2016-0793-1-B	-	1.0000	014F1401.D		2
15	15	1	M2016-0795-1-A	-	1.0000	015F1501.D		4
16	16	1	M2016-0795-1-B	-	1.0000	016F1601.D		4
17	17	1	M2016-0796-1-A	-	1.0000	017F1701.D		2
18	18	1	M2016-0796-1-B	-	1.0000	018F1801.D		2
19	19	1	M2016-0800-1-A	-	1.0000	019F1901.D		4
20	20	1	M2016-0800-1-B	-	1.0000	020F2001.D		4
21	21	1	M2016-0801-1-A	-	1.0000	021F2101.D		4
22	22	1	M2016-0801-1-B	-	1.0000	022F2201.D		4
23	23	1	M2016-0802-1-A	-	1.0000	023F2301.D		4
24	24	1	M2016-0802-1-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	M2016-0803-1-A	-	1.0000	027F2701.D		4
28	28	1	M2016-0803-1-B	-	1.0000	028F2801.D		4
29	29	1	M2016-0817-1-A	-	1.0000	029F2901.D		4
30	30	1	M2016-0817-1-B	-	1.0000	030F3001.D		4
31	31	1	M2016-0818-1-A	-	1.0000	031F3101.D		4
32	32	1	M2016-0818-1-B	-	1.0000	032F3201.D		4
33	33	1	M2016-0819-1-A	-	1.0000	033F3301.D		4
34	34	1	M2016-0819-1-B	-	1.0000	034F3401.D		4
35	35	1	M2016-0837-1-A	-	1.0000	035F3501.D		4
36	36	1	M2016-0837-1-B	-	1.0000	036F3601.D		4
37	37	1	M2016-0838-1-A	-	1.0000	037F3701.D		4
38	38	1	M2016-0838-1-B	-	1.0000	038F3801.D		4
39	39	1	M2016-0851-1-A	-	1.0000	039F3901.D		4
40	40	1	M2016-0851-1-B	-	1.0000	040F4001.D		4
41	41	1	QC1-2-A	-	1.0000	041F4101.D		4
42	42	1	QC1-2-B	-	1.0000	042F4201.D		4
43	43	1	INTERNAL STD BLK	-	1.0000	043F4301.D		2

NB

Method file name: C:\Chem32\1\Data\03-02-16_SAMPLES\03-02-16_SAMPLES 2016-03-02 10-40-02 \SHUTDOWN.M

Run #	Location	Inj #	Sample Name	Sample Amt [g/100cc]	Multip.* Dilution	File name	Cal #	Cmp
44	44	1	EMPTY	-	1.0000	044F4401.D		0

NB