

Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

Device: Hamilton MICROLAB 600A Liquid Processor/Dilutor Serial Number: ML600HC11378

Volatiles Quality Assurance Controls Run Date(s):7/10/19

Calibration Date: 7/2/19

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Jan-22	1801036	0.0812	0.0731-0.0893	0.0796 g/100cc
					0.0830 g/100cc
Level 2	Mar-22	1803028	0.2035	0.1832-0.2238	0.2030 g/100cc
					g/100cc
Multi-Component mixture:			Sep-20	Lot #	FN06041502
Curve Fit:			Column 1	1.00000	Column2
					0.999992

Ethanol Calibration Reference Material						
Calibrator level	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
50	0.050	0.045 - 0.055	0.0505	0.0524	0.0019	0.0514
100	0.100	0.090 - 0.110	0.1000	0.1002	0.0002	0.1001
200	0.200	0.180 - 0.220	0.1992	0.1972	0.002	0.1982
300	0.300	0.270 - 0.330	0.3000	0.2983	0.0017	0.2991
500	0.500	0.450 - 0.550	0.5003	0.5019	0.0016	0.5011

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

REVIEWED
By Jeremy Johnston at 3:11 pm, Jul 16, 2019

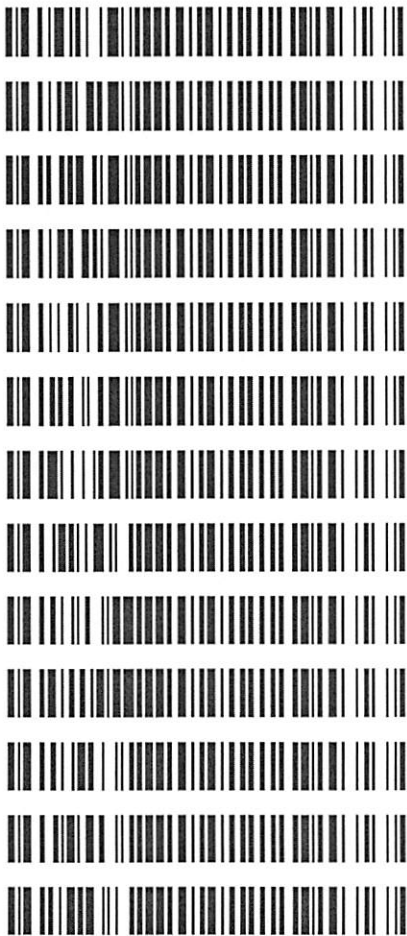
Revision: 1

Issue Date: 01/03/2019

Issuing Authority: Quality Manager

Worklist: 3546

LAB CASE	ITEM	TASK ID	DESCRIPTION
M2019-3017	1	156323	Alcohol Analysis
M2019-3022	1	156366	Alcohol Analysis
M2019-3023	1	156386	Alcohol Analysis
M2019-3051	1	156434	Alcohol Analysis
M2019-3058	1	156467	Alcohol Analysis
M2019-3069	1	156556	Alcohol Analysis
M2019-3080	1	156681	Alcohol Analysis
M2019-3081	1	156682	Alcohol Analysis
M2019-3082	1	156686	Alcohol Analysis
M2019-3083	1	156687	Alcohol Analysis
M2019-3084	1	156688	Alcohol Analysis
M2019-3109	1	156743	Alcohol Analysis
M2019-3118	1	156756	Alcohol Analysis

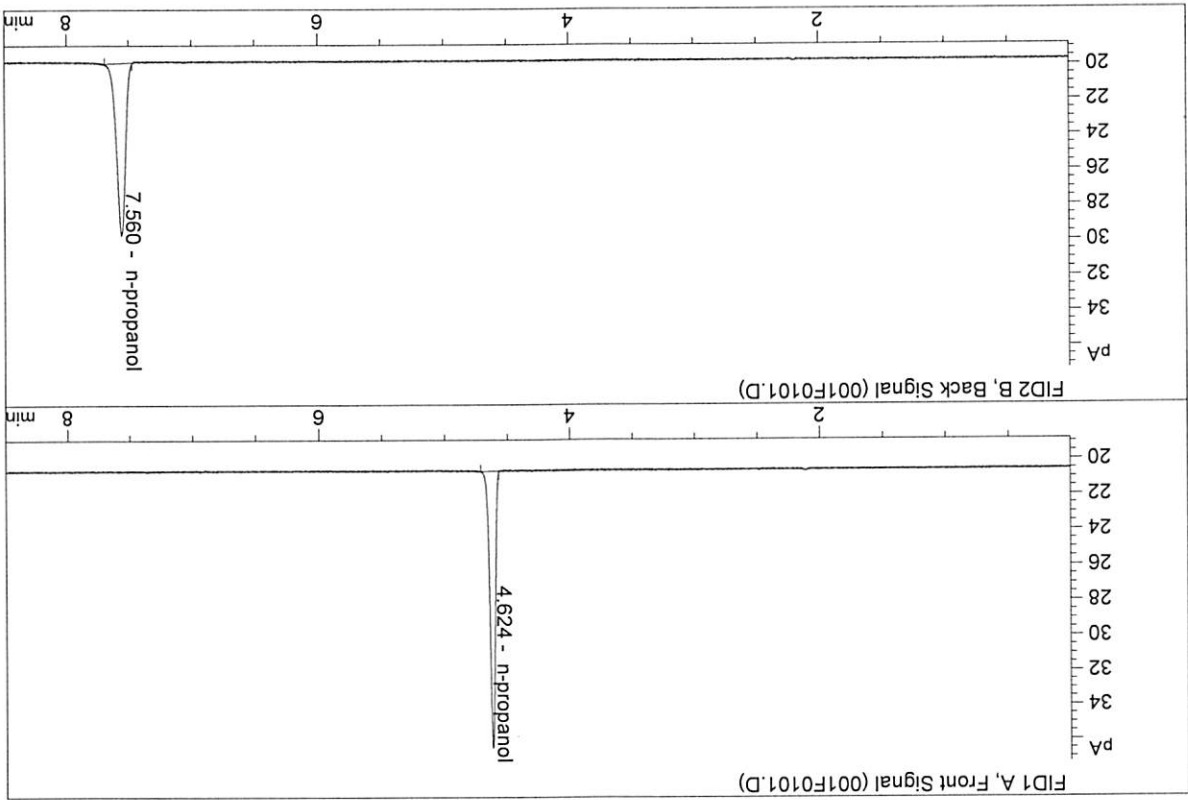


7/15/2019

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I SP Forensic Services Blood Alcohol Report

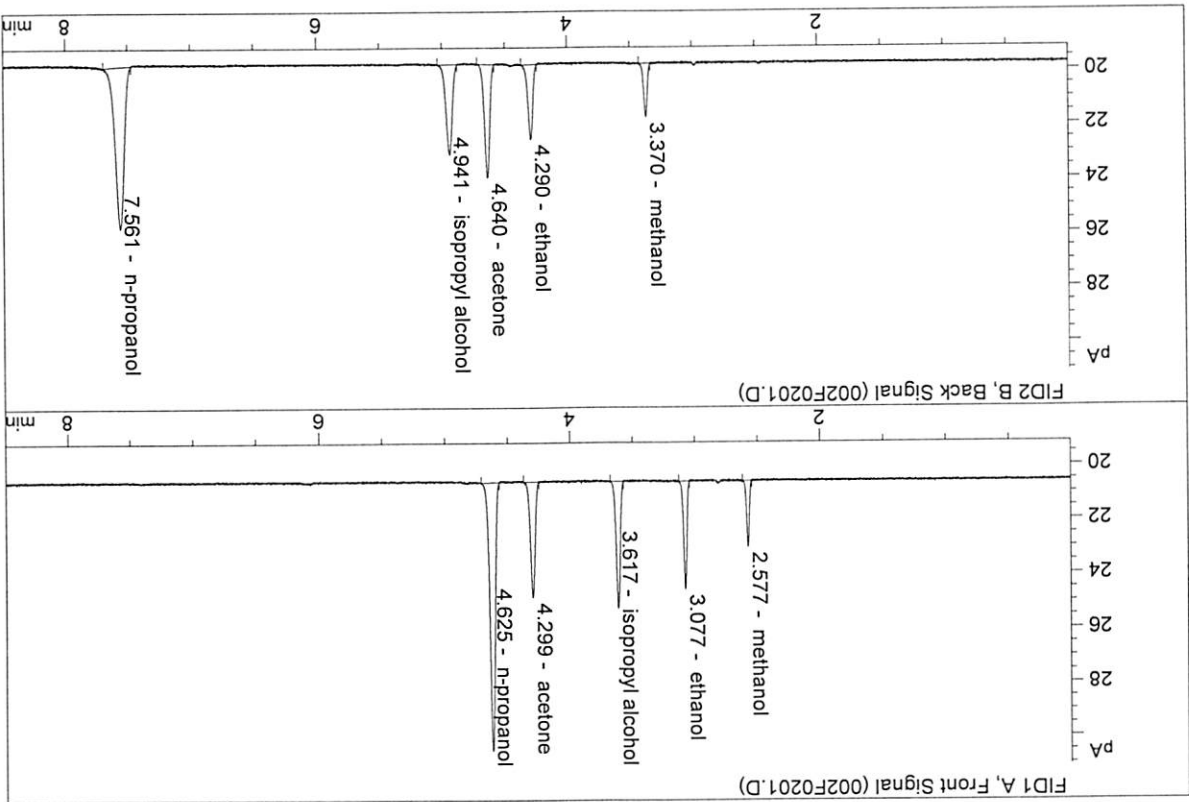
Sample Name : INTERNAL STD BLK 1
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167



#	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:	45.08342	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.08366	1.0000	g/100cc

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Sample Name : MIX VOL FN06041502
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.09078	0.1303	g/100cc
2.	Ethanol	Column 2:	7.35423	0.1319	g/100cc
3.	n-Propanol	Column 1:	28.05346	1.0000	g/100cc
4.	n-Propanol	Column 2:	28.64399	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QCI-1 Analysis Date(s): 10 Jul 2019

Sample Results	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
(g/100cc)	0.0793	0.0799	0.0006	0.0796	0.0796
Sample Results	0.0793	0.0799	0.0006	0.0796	0.0796

Analysis Method
 Refer to Blood Alcohol Method #1

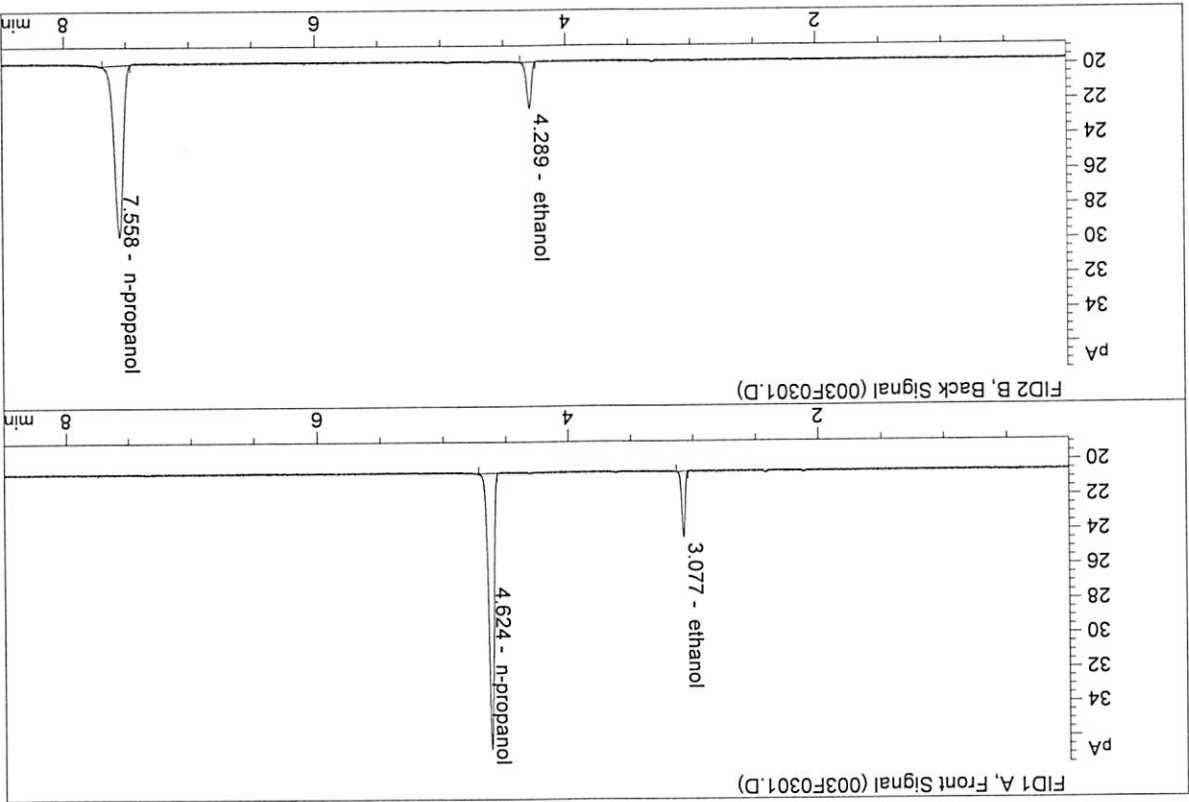
Instrument Information
 Refer to Instrument Method: Alcohol.m
 Hamilton Auto-Dilutor Serial Number: ML600HC11378
Instrument method is stored centrally.

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.

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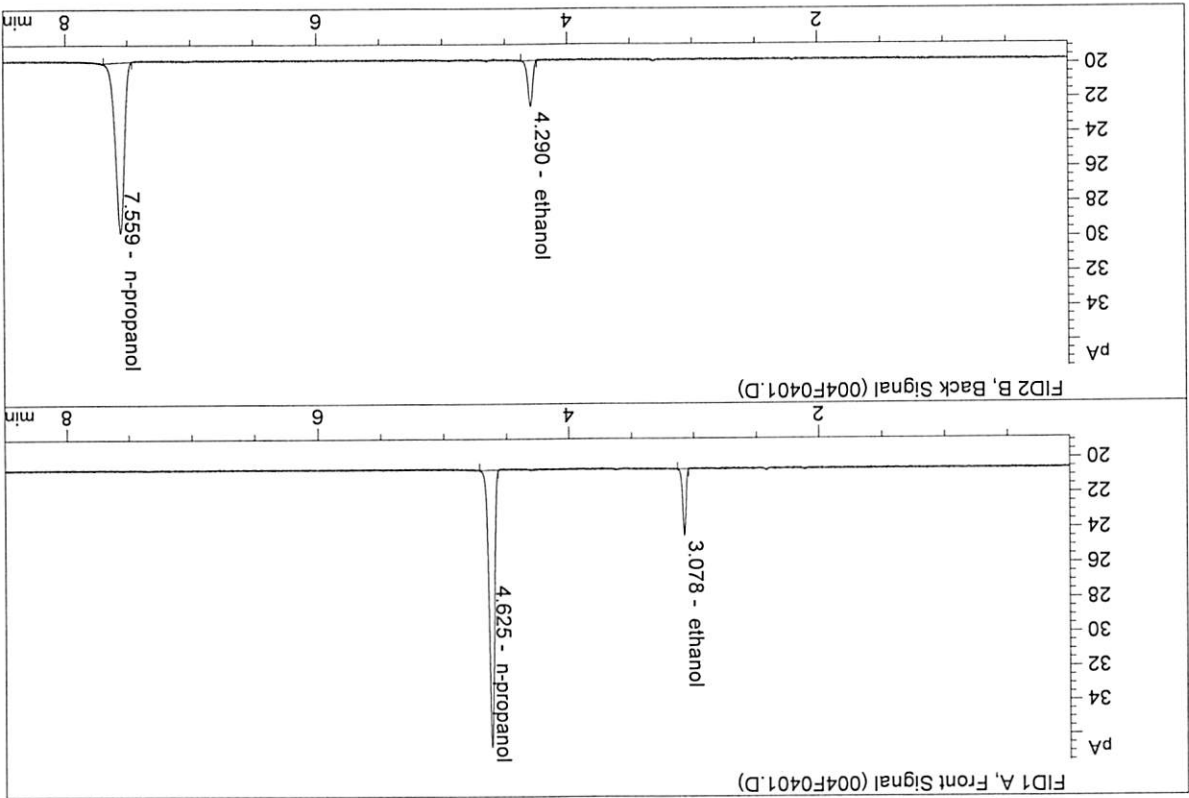
Sample Name : QCI-1-A
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	6.97854	0.0793	g/100cc
2.	Ethanol	Column 2:	7.12844	0.0799	g/100cc
3.	n-Propanol	Column 1:	45.67574	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.07642	1.0000	g/100cc

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Sample Name : QCI-1-B
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.00088	0.0793	g/100cc
2.	Ethanol	Column 2:	7.15991	0.0799	g/100cc
3.	n-Propanol	Column 1:	45.80222	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.25390	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 08 FN04171701 Analysis Date(s): 10 Jul 2019

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0802	0.0802	0.0000	0.0802	0.0805
(g/100cc)	0.0806	0.0811	0.0005	0.0808	

Analysis Method
 Refer to Blood Alcohol Method #1

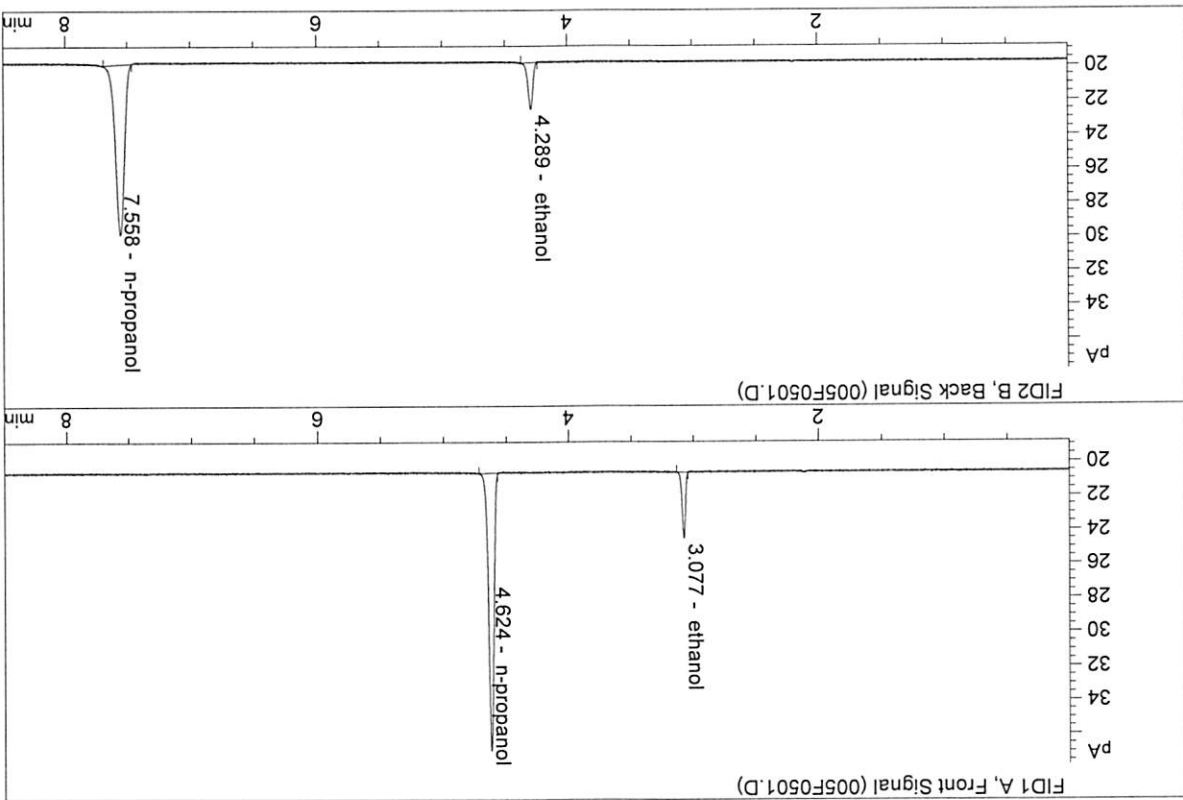
Instrument Information
 Refer to Instrument Method: Alcohol.m
 Hamilton Auto-Dilutor Serial Number: ML600HC1378
Instrument method is stored centrally.

Reporting of Results				Uncertainty of Measurement (UM%): 5.00%	
Overall Mean (g/100cc)	Low	High	5% of Mean		
0.080	0.076	0.084	0.004		
Reported Result			0.080		

Calibration and control data are stored centrally.

I SP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN04171701-A
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167

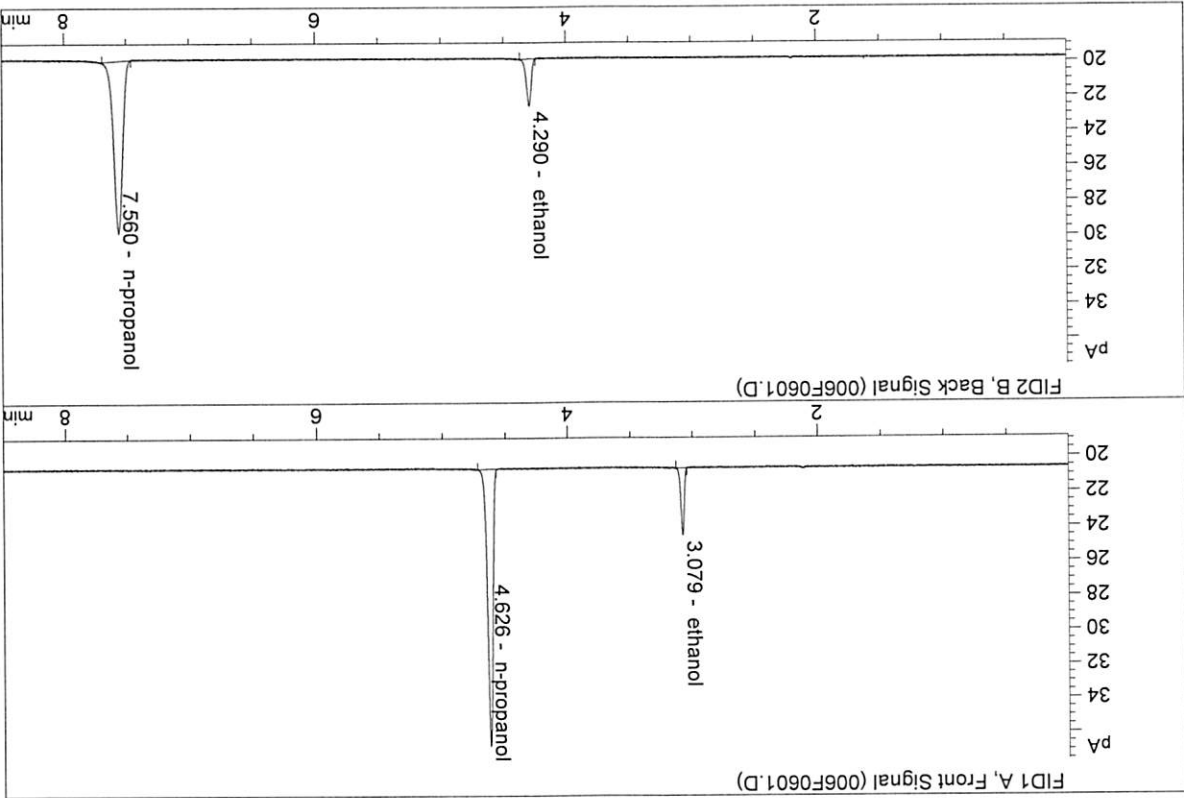


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.18593	0.0802	g/100cc
2.	Ethanol	Column 2:	7.28750	0.0802	g/100cc
3.	n-Propanol	Column 1:	46.49578	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.89118	1.0000	g/100cc

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I SP Forensic Services Blood Alcohol Report

Sample Name : 0.08 FN04171701-B
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.11454	0.0806	g/100cc
2.	Ethanol	Column 2:	7.25161	0.0811	g/100cc
3.	n-Propanol	Column 1:	45.81488	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.12738	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC2-1

Analysis Date(s): 10 Jul 2019

Sample Results	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
0.2028	0.2030	0.2030	0.0002	0.2029	0.2030
0.2035	0.2030	0.0005	0.2032		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11378

Reporting of Results

Overall Mean (g/100cc)	Low	High	5% of Mean
0.203	0.192	0.214	0.011

Uncertainty of Measurement (UM%): 5.00%

Reported Result

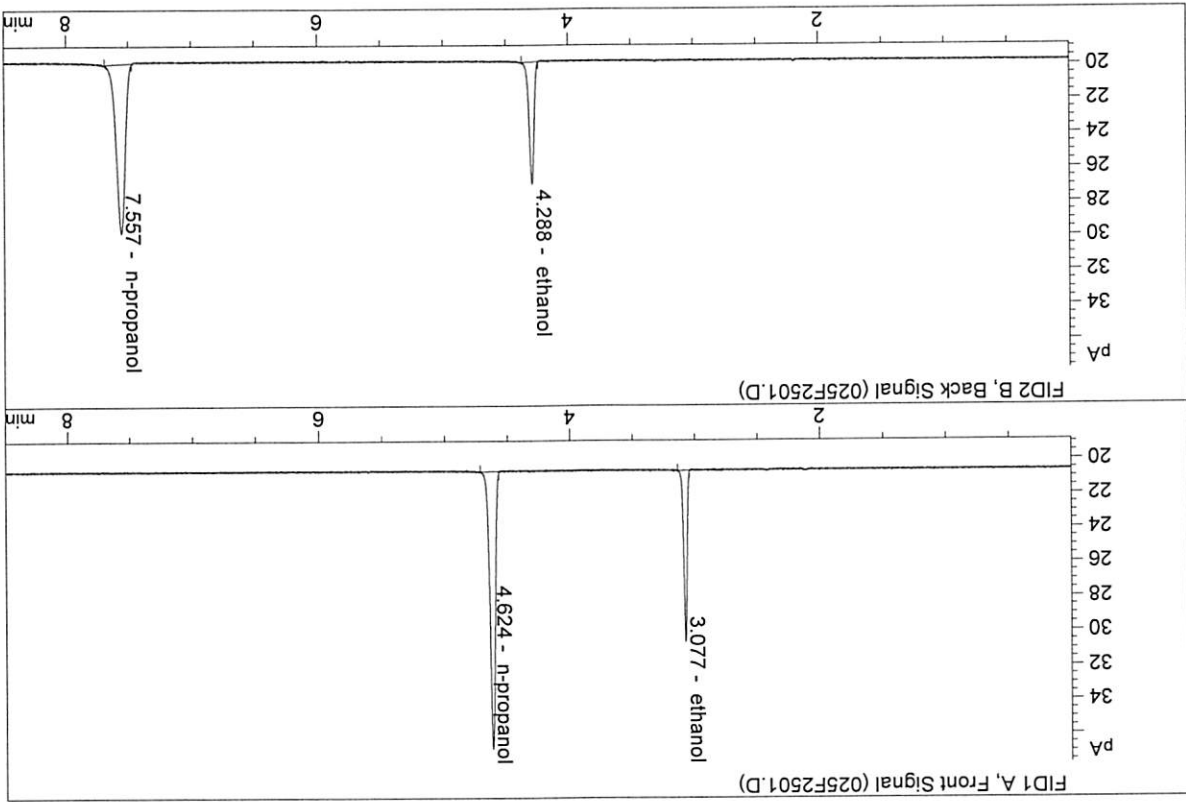
0.203

Calibration and control data are stored centrally.

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ISP Forensic Services Blood Alcohol Report

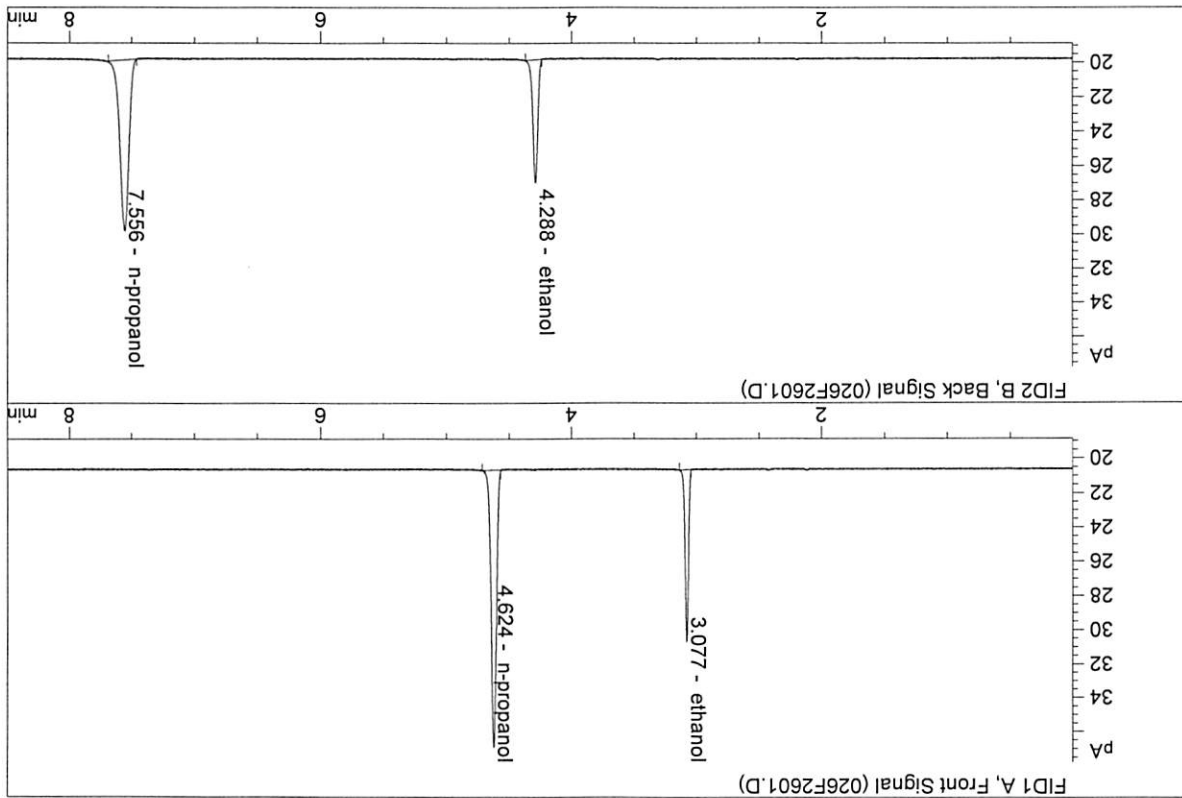
Sample Name : QC2-1-A
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.21442	0.2028	g/100cc
2.	Ethanol	Column 2:	18.94151	0.2030	g/100cc
3.	n-Propanol	Column 1:	46.10976	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.25198	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : QC2-1-B
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	18.33060	0.2035	g/100cc
2.	Ethanol	Column 2:	19.05712	0.2030	g/100cc
3.	n-Propanol	Column 1:	46.24196	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.54595	1.0000	g/100cc

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VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: QC1-2 Analysis Date(s): 10 Jul 2019

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean
Sample Results	0.0828	0.0835	0.0007	0.0831	0.0830
(g/100cc)	0.0825	0.0834	0.0009	0.0829	

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: ML600HC11378

Reporting of Results

Overall Mean (g/100cc)	Low	High	5% of Mean
0.083	0.078	0.088	0.005

Uncertainty of Measurement (UM%): 5.00%

Reported Result	0.083

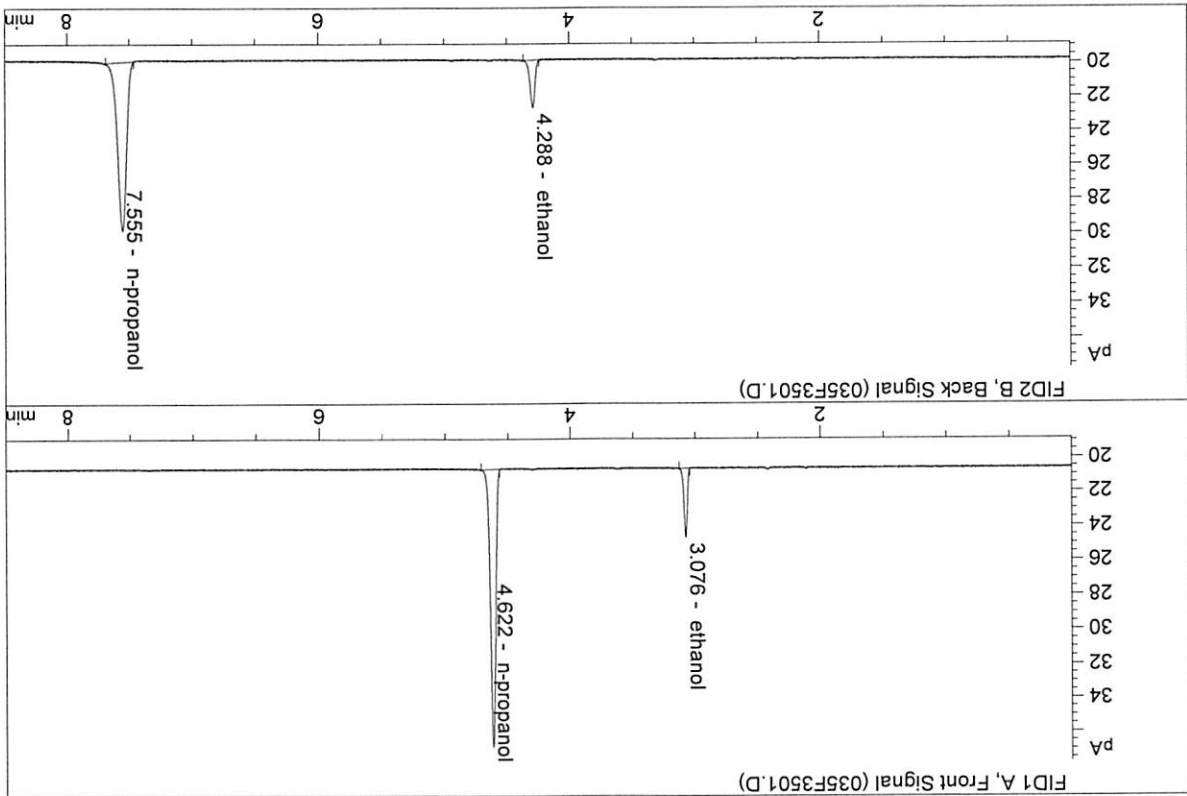
Calibration and control data are stored centrally.

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ISP Forensic Services Blood Alcohol Report

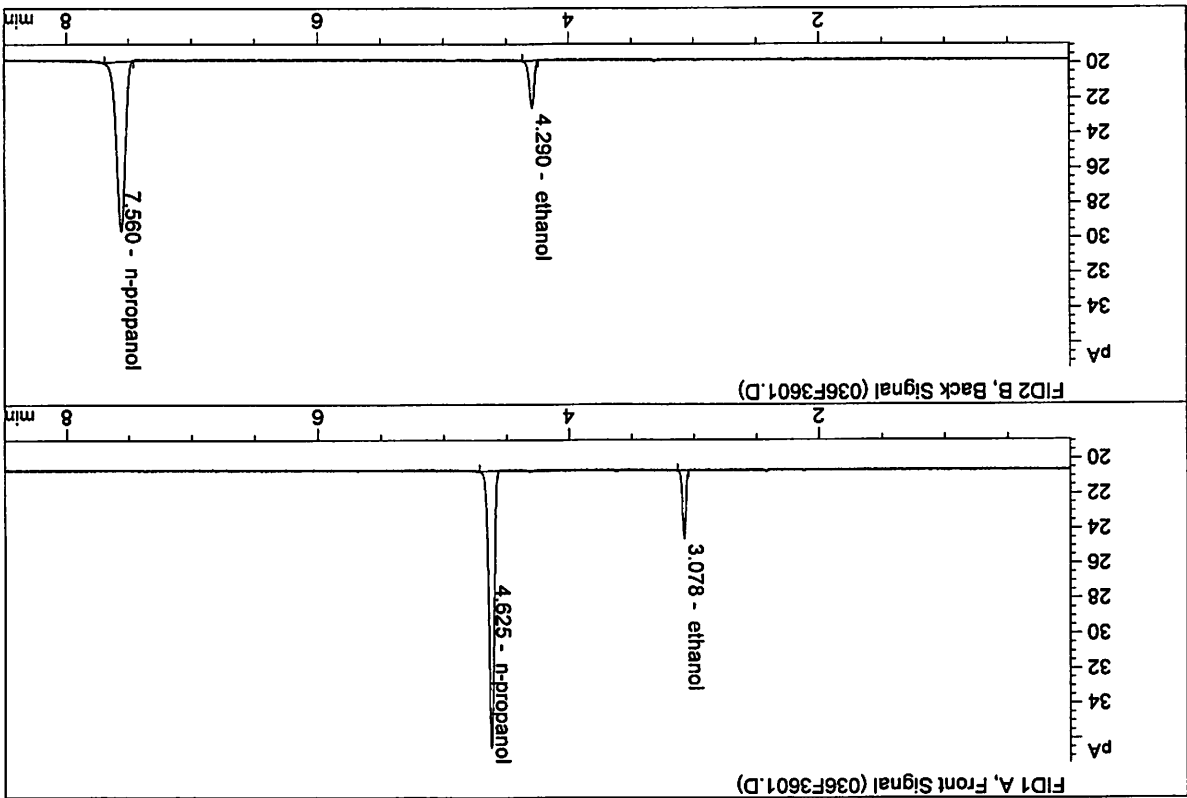
Sample Name : Q1-2-A
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.35732	0.0828	g/100cc
2.	Ethanol	Column 2:	7.52597	0.0835	g/100cc
3.	n-Propanol	Column 1:	46.09138	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.38089	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : Q1-2-B
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167

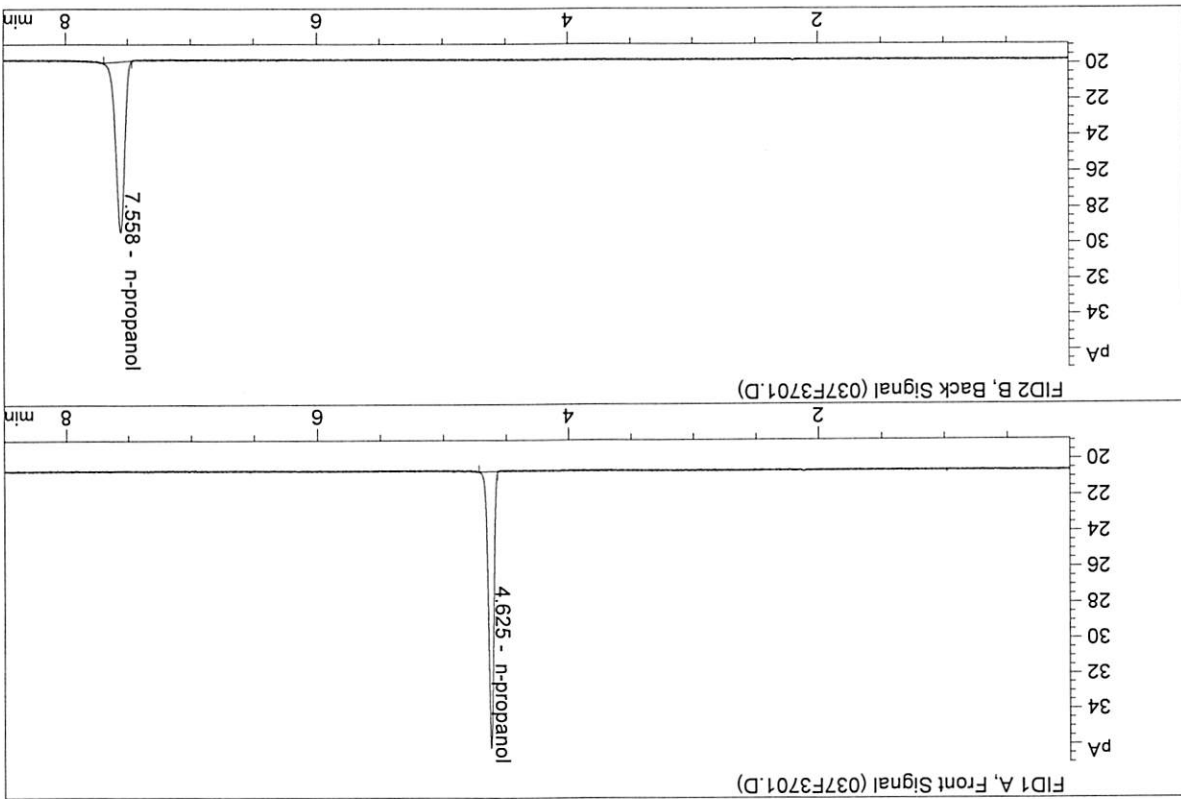


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	7.17321	0.0825	g/100cc
2.	Ethanol	Column 2:	7.33753	0.0834	g/100cc
3.	n-Propanol	Column 1:	45.09525	1.0000	g/100cc
4.	n-Propanol	Column 2:	46.25826	1.0000	g/100cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STD BLK
 Laboratory : Meridian
 Injection Date : Jul 10, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-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:	44.18994	1.0000	g/100cc
4.	n-Propanol	Column 2:	45.35266	1.0000	g/100cc

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

Sequence table: C:\chem32\1\data\07-10-19_SAMPLES\07-10-19_SAMPLES 2019-07-10 14-00-40\07-10-19_SAMPLES.S
 Data directory path: C:\chem32\1\data\07-10-19_SAMPLES\07-10-19_SAMPLES 2019-07-10 14-00-40\07-10-19_SAMPLES.LOG
 Logbook: C:\chem32\1\data\07-10-19_SAMPLES\07-10-19_SAMPLES 2019-07-10 14-00-40\07-10-19_SAMPLES.S
 Sequence start: 7/10/2019 2:15:27 PM
 Sequence Operator: SYSTEM
 Operator: SYSTEM
 Method file name: C:\chem32\1\data\07-10-19_SAMPLES\07-10-19_SAMPLES 2019-07-10 14-00-40\ALCOHOL.M

Run Location Inj #	Sample Name	Sample Amt [g/100cc]	Multip. Dilution	File name	Cal #	Cmp #
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1	INTERNAL STD BLK	1.0000	001F0101.D		2	
2	MIX VOL FN060415	1.0000	002F0201.D		10	
3	QC1-1-A	1.0000	003F0301.D		4	
4	QC1-1-B	1.0000	004F0401.D		4	
5	0.08 FN04171701	1.0000	005F0501.D		4	
6	0.08 FN04171701	1.0000	006F0601.D		4	
7	M2019-3017-1-A	1.0000	007F0701.D		4	
8	M2019-3017-1-B	1.0000	008F0801.D		4	
9	M2019-3022-1-A	1.0000	009F0901.D		4	
10	M2019-3022-1-B	1.0000	010F1001.D		4	
11	M2019-3023-1-A	1.0000	011F1101.D		2	
12	M2019-3023-1-B	1.0000	012F1201.D		2	
13	M2019-3051-1-A	1.0000	013F1301.D		4	
14	M2019-3051-1-B	1.0000	014F1401.D		4	
15	M2019-3058-1-A	1.0000	015F1501.D		2	
16	M2019-3058-1-B	1.0000	016F1601.D		2	
17	M2019-3069-1-A	1.0000	017F1701.D		4	
18	M2019-3069-1-B	1.0000	018F1801.D		4	
19	M2019-3080-1-A	1.0000	019F1901.D		4	
20	M2019-3080-1-B	1.0000	020F2001.D		4	
21	M2019-3081-1-A	1.0000	021F2101.D		2	
22	M2019-3081-1-B	1.0000	022F2201.D		2	
23	M2019-3082-1-A	1.0000	023F2301.D		4	
24	M2019-3082-1-B	1.0000	024F2401.D		4	
25	QC2-1-A	1.0000	025F2501.D		4	
26	QC2-1-B	1.0000	026F2601.D		4	
27	M2019-3083-1-A	1.0000	027F2701.D		4	
28	M2019-3083-1-B	1.0000	028F2801.D		4	
29	M2019-3084-1-A	1.0000	029F2901.D		4	
30	M2019-3084-1-B	1.0000	030F3001.D		4	
31	M2019-3109-1-A	1.0000	031F3101.D		4	
32	M2019-3109-1-B	1.0000	032F3201.D		4	
33	M2019-3118-1-A	1.0000	033F3301.D		4	
34	M2019-3118-1-B	1.0000	034F3401.D		4	
35	QC1-2-A	1.0000	035F3501.D		4	
36	QC1-2-B	1.0000	036F3601.D		4	
37	INTERNAL STD BLK	1.0000	037F3701.D		2	

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Sequence file C:\chem32\...9_SAMPLES\07-10-19_SAMPLES 2019-07-10 14-00-40\07-10-19_SAMPLES.S
 Method file name: C:\chem32\1\data\07-10-19_SAMPLES\07-10-19_SAMPLES 2019-07-10 14-00-40
 \SHUTDOWN.M

Run Location Inj	Sample Name	Sample Amt	File name	Cal #	Cmp #
38 38	1 EMPTY	-	1.0000 038F3801.D		0

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Calibration Table
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General Calibration Setting

Calib. Data Modified : Tuesday, July 02, 2019 4:08:55 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 : Yes, identified peaks are recalibrated
Correct All Ret. Times : No, only for identified peaks

Curve Type : Linear
Origin : Ignored
Weight : Equal

Recalibration Settings :
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 Amount	Name	#	[g/100cc]
1.00000	n-propanol	1	
1.00000	n-propanol	2	

Signal Details

Signal 1: FID1 A, Front Signal
Signal 2: FID2 B, Back Signal

Overview Table

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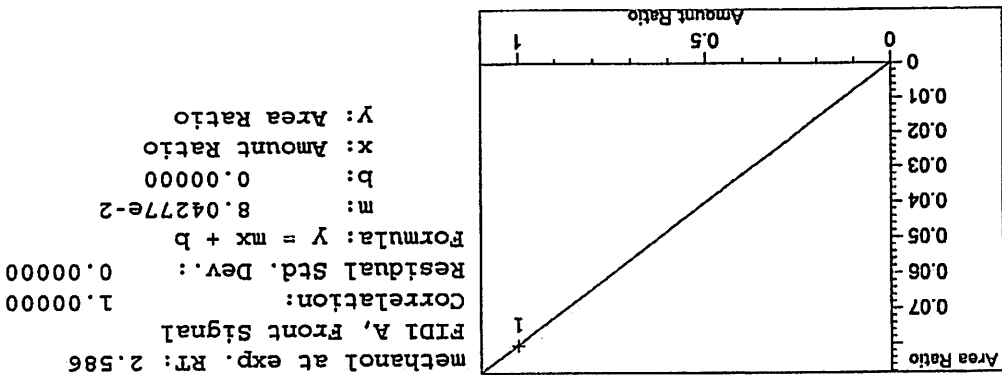
RT	Sig	Lvl	Amount	Area	Rsp. Factor	Ref	ISTD	#	Compound
2.586	1	1	1.0000	3.69669	2.70512	-1	No	No	1 methanol
2.809	1	1	1.0000	4.26100	2.34687	-1	No	No	2 Acetaldehyde
2.977	2	1	1.0000	4.26100	2.34687	-1	No	No	2 Acetaldehyde
3.075	1	1	5.0000e-2	4.42648	1.12957	-2	No	No	1 ethanol
3.388	2	1	1.0000	4.26062	2.34707	-1	No	No	2 methanol
3.628	1	1	1.0000	9.73055	1.02769	-1	No	No	1 isopropyl alcohol
4.285	2	1	5.0000e-2	4.61899	1.08249	-2	No	No	2 ethanol
4.620	1	1	1.0000	45.96296	2.17566	-2	No	Yes	1 n-propanol
4.308	1	1	1.0000	6.49940	1.53860	-1	No	No	1 acetone
4.661	2	1	1.0000	46.10006	2.16919	-2	No	No	2 acetone
4.969	2	1	1.0000	10.70642	9.34019	-2	No	No	2 isopropyl alcohol
7.550	2	1	1.0000	48.17994	2.07555	-2	No	Yes	2 n-propanol
				47.85523	2.08964	-2	No	No	
				47.86760	2.08910	-2	No	No	
				47.08141	2.12398	-2	No	No	
				47.54148	2.10343	-2	No	No	

No Entries in table

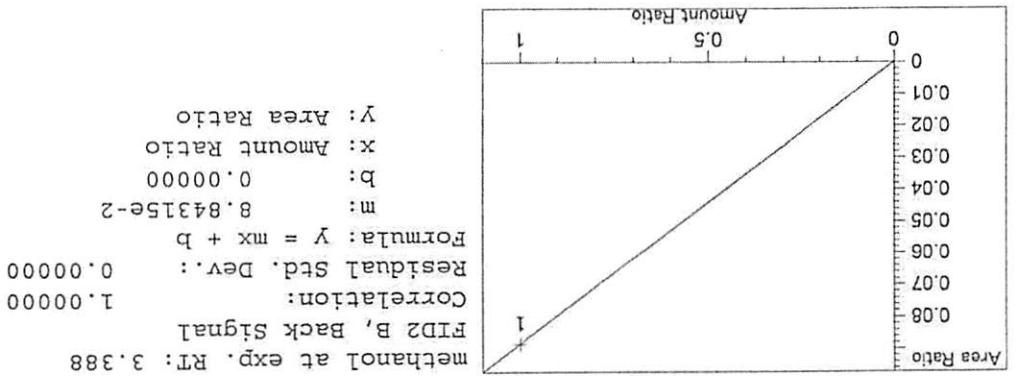
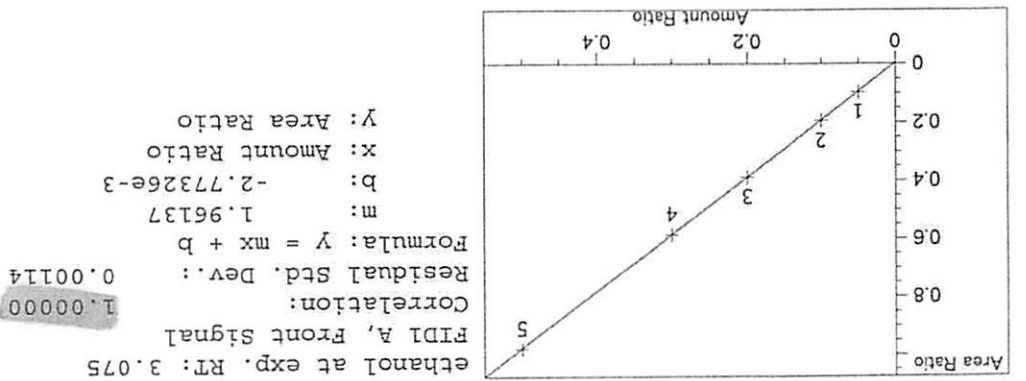
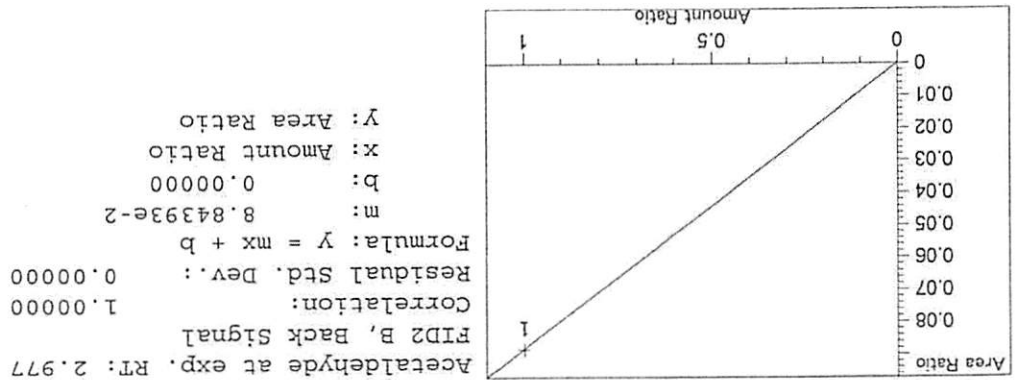
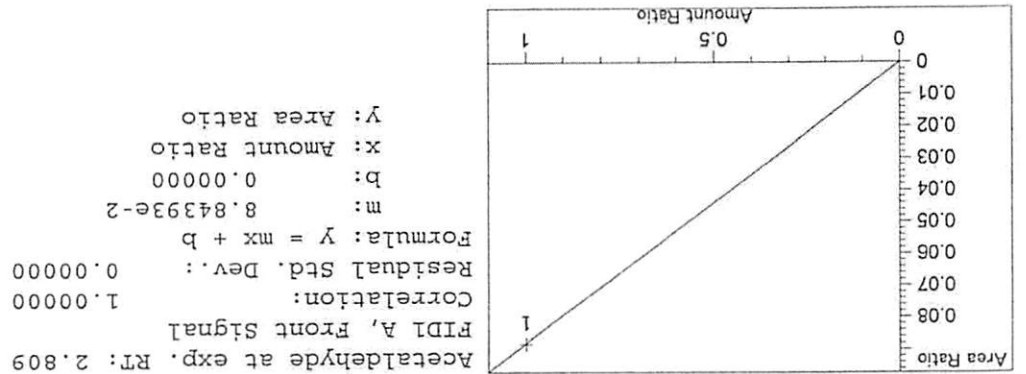
1 Warnings or Errors :

Warning : Curve requires more calibration points., (methanol)

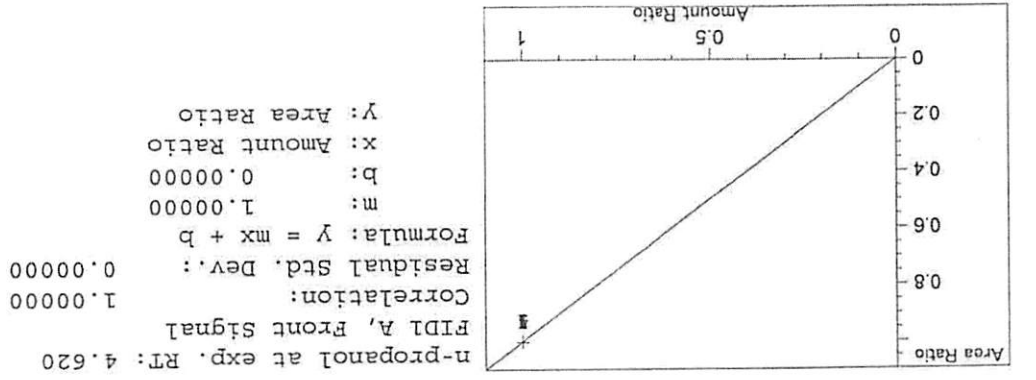
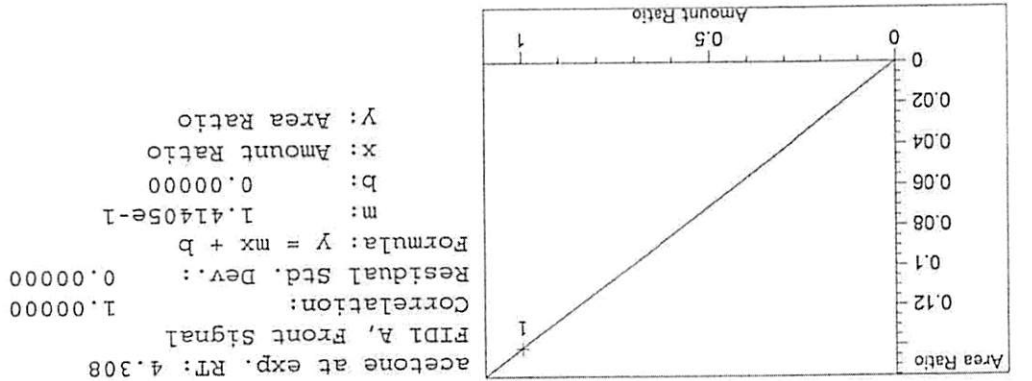
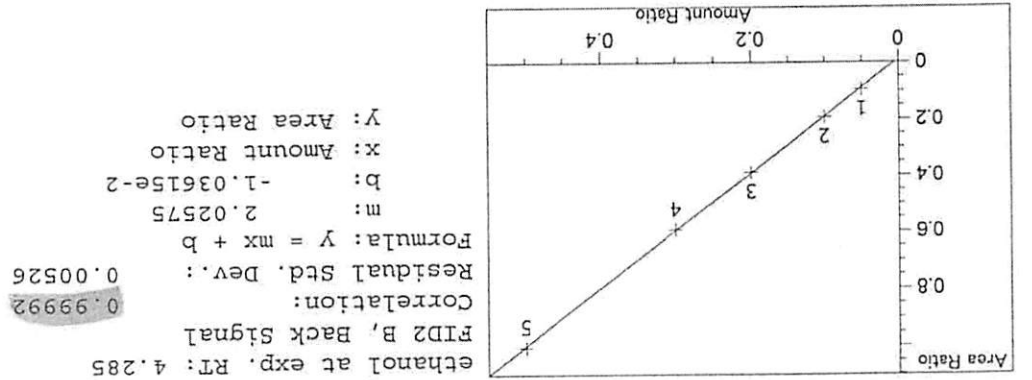
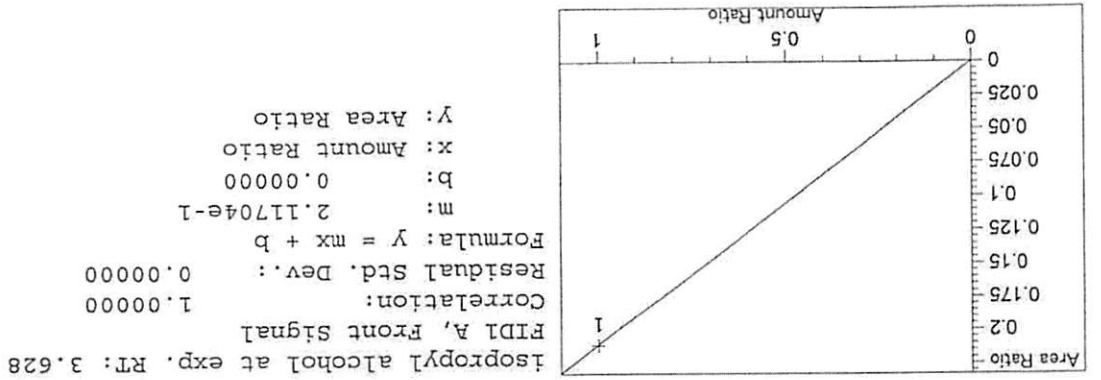
Calibration Curves



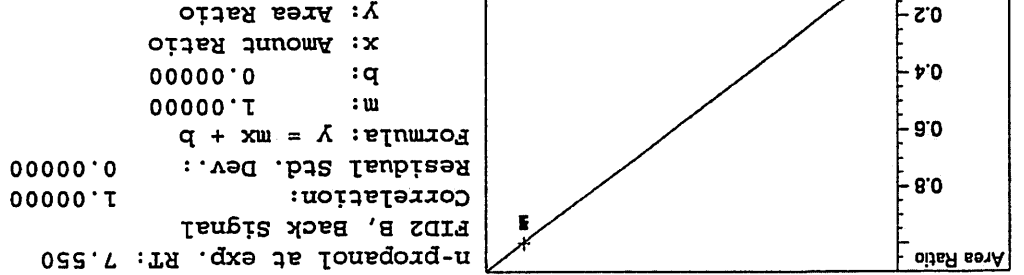
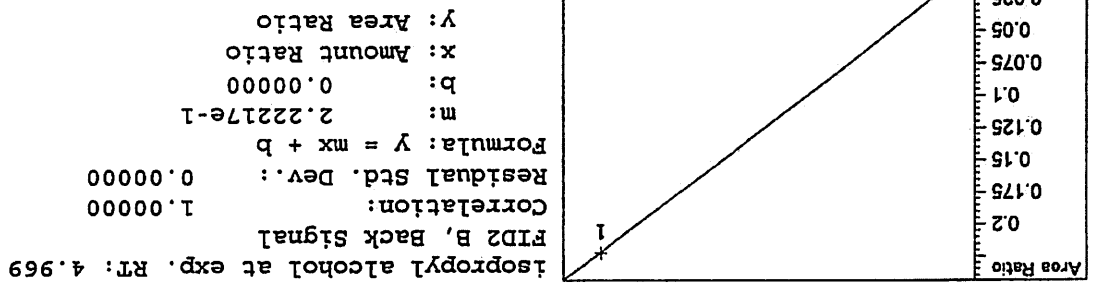
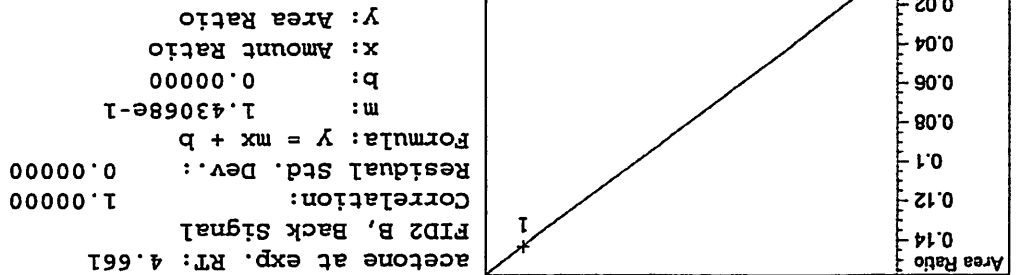
26



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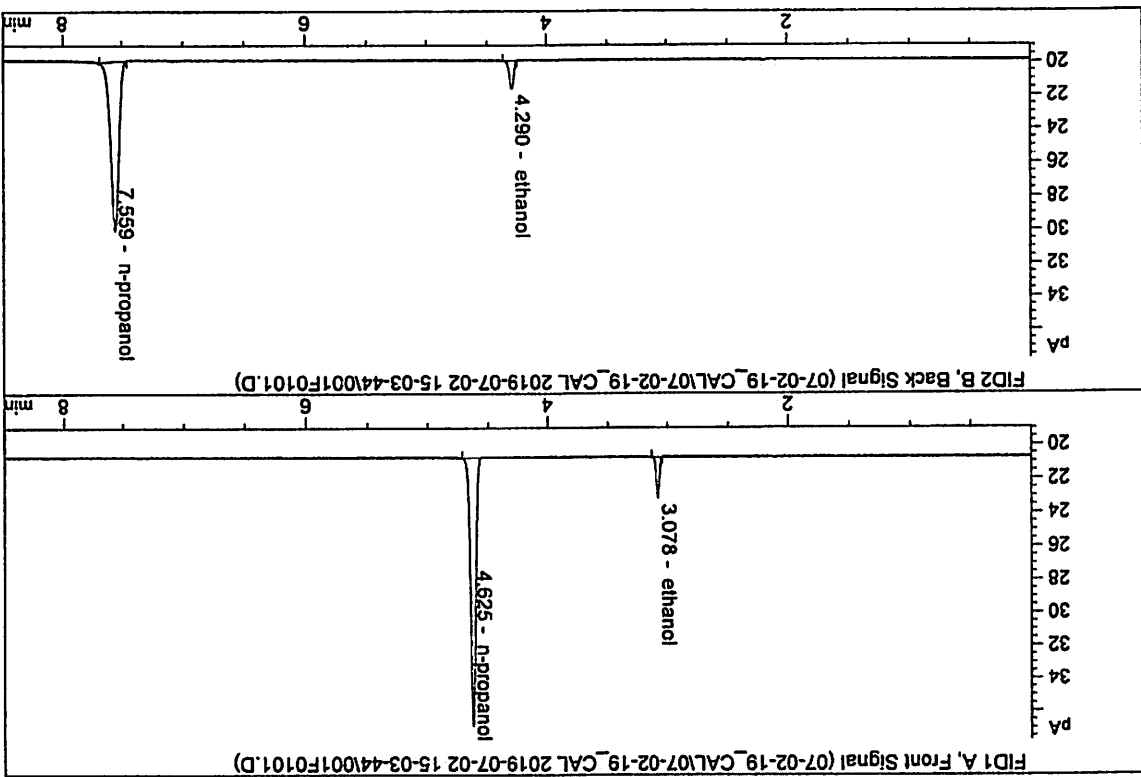


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Isp Forensic Services Blood Alcohol Report

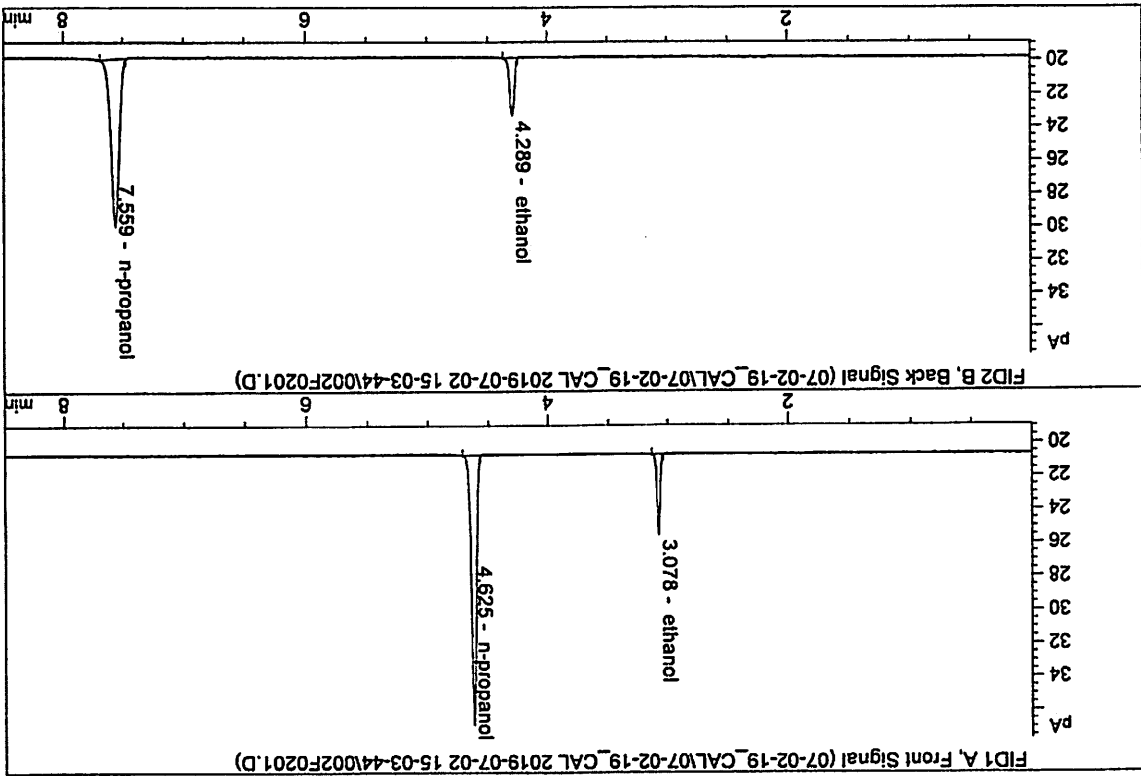
Sample Name : 0.050 FN04271601
 Laboratory : Meridian
 Injection Date : Jul 2, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	4.42648	0.0505	g/100cc
2.	Ethanol	Column 2:	4.61899	0.0524	g/100cc
3.	n-Propanol	Column 1:	45.96296	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.17994	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : 0.100 FN08101601
 Laboratory : Meridian
 Injection Date : Jul 2, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN11180014-CN11041167

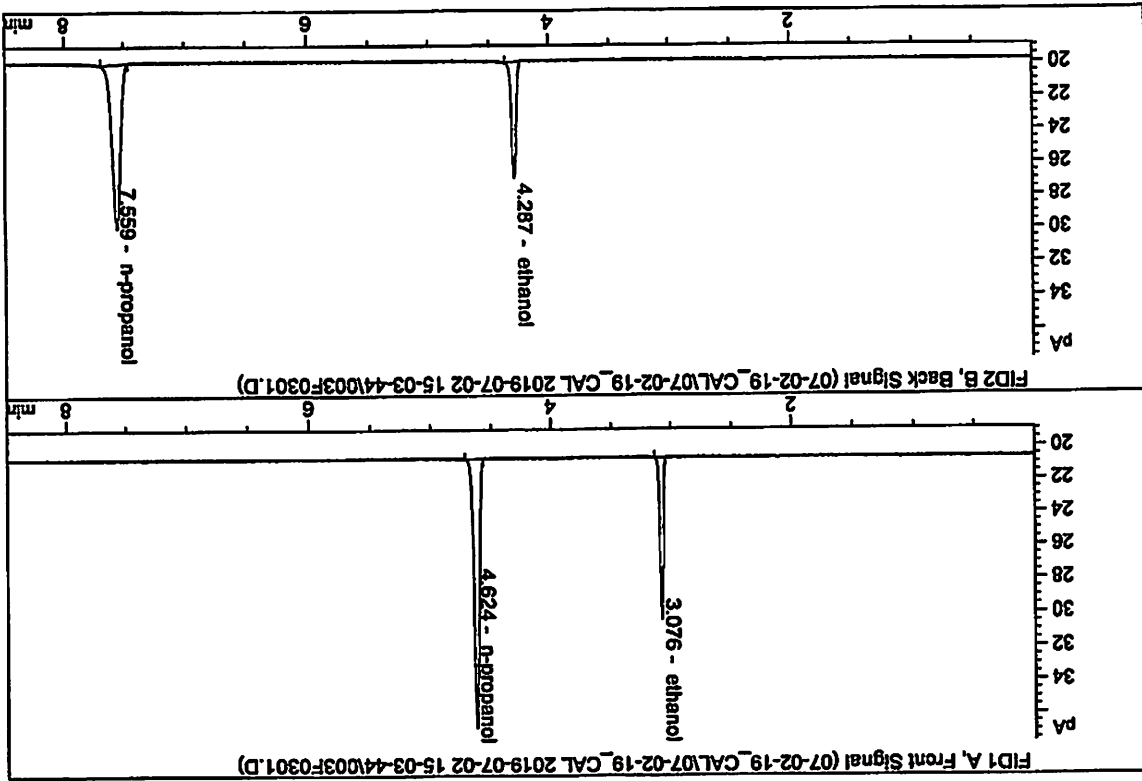


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	8.88798	0.1000	g/100cc
2.	Ethanol	Column 2:	9.21829	0.1002	g/100cc
3.	n-Propanol	Column 1:	45.94650	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.85523	1.0000	g/100cc

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I SP Forensic Services Blood Alcohol Report

Sample Name : 0.200 FN03301601
 Laboratory : Meridian
 Injection Date : Jul 2, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-CN11041167

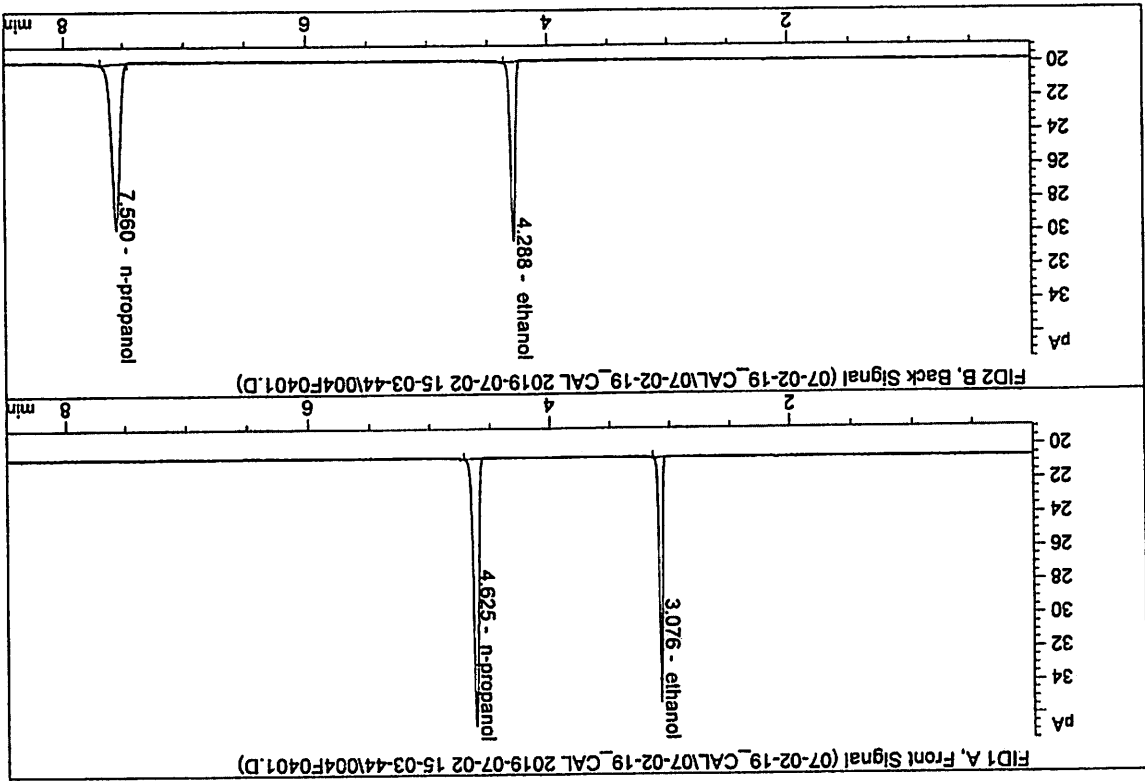


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	17.84929	0.1992	g/1.00cc
2.	Ethanol	Column 2:	18.62832	0.1972	g/1.00cc
3.	n-Propanol	Column 1:	46.01707	1.0000	g/1.00cc
4.	n-Propanol	Column 2:	47.86760	1.0000	g/1.00cc

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ISP Forensic Services Blood Alcohol Report

Sample Name : ~~XXXXXXXXXX~~ FN07311804 JS
 Laboratory : Meridian
 Injection Date : Jul 2, 2019
 Method : ALCOHOL.M
 Instrument : CN11180014-CN11041167

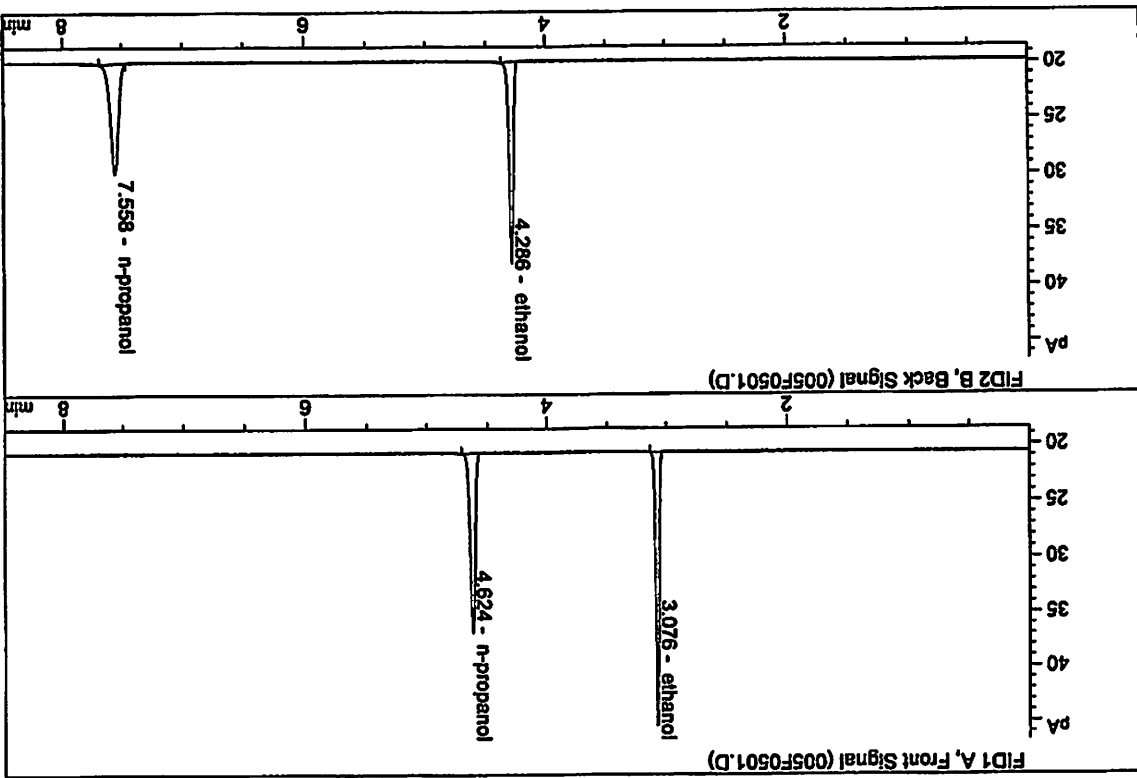


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	26.60101	0.3000	g/100cc
2.	Ethanol	Column 2:	27.95925	0.2983	g/100cc
3.	n-Propanol	Column 1:	45.42292	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.08141	1.0000	g/100cc

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I SP Forensic Services Blood Alcohol Report

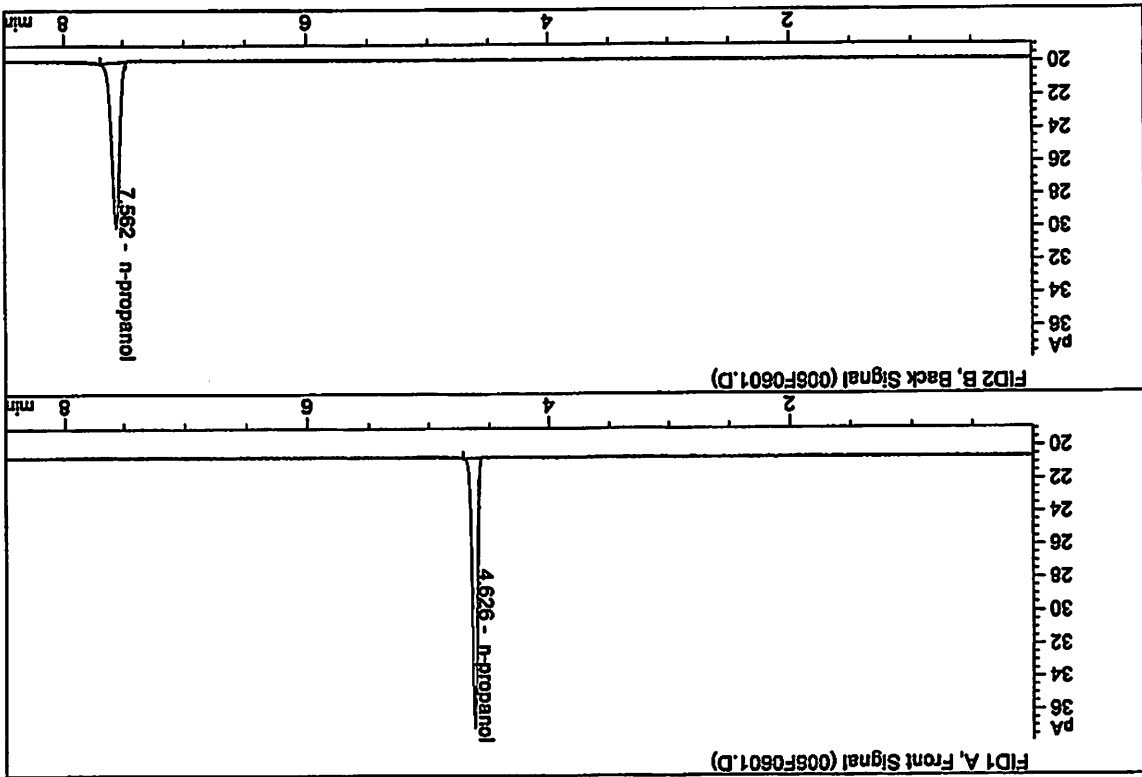
Sample Name : 0.500 FN08031602
 Laboratory : Meridian
 Injection Date : Jul 2, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN11180014-CN11041167



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	45.10629	0.5003	g/100cc
2.	Ethanol	Column 2:	47.84081	0.5019	g/100cc
3.	n-Propanol	Column 1:	46.10006	1.0000	g/100cc
4.	n-Propanol	Column 2:	47.54148	1.0000	g/100cc

ISP Forensic Services Blood Alcohol Report

Sample Name : INTERNAL STANDARD BLANK
 Laboratory : Meridian
 Injection Date : Jul 2, 2019
 Method : ALCOHOL.M
 Acq. Instrument : CN1180014-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:	46.61699	1.0000	g/100cc
4.	n-Propanol	Column 2:	48.25599	1.0000	g/100cc