Quantitative Analysis for Ethanol & Qualitative Analysis for Other Volatiles

Analytical Method(s): 1.0

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

Volatiles Quality Assurance Controls **Run Date(s): 4/18/24**

Calibration Date: *(if different)* **4/11/24**

Worklist #: 6779

Control level	Expiration	Lot #	Target Value	Acceptable Range	Overall Results
Level 1	Feb-25	2101199	0.0808	0.0727-0.0889	0.0777 g/100cc
					g/100cc
					g/100cc
Level 2	Mar-26	2110181	0.2030	0.1827-0.2233	0.2018 g/100cc
					g/100cc
					g/100cc

Multi-Component mixture:	Exp:	Oct. 24	Lot #	FN06041902	
Curve Fit:		**Column 1**	0.99964	**Column2**	0.99959

Ethanol Calibration Reference Material

Calibrator level	Target Value	Acceptable Range	Column 1	Column 2	Precision	Mean
50	0.050	0.045 - 0.055	0.0537	0.0537	0	0.0537
100	0.100	0.090 - 0.110	0.1002	0.1005	0.0003	0.1003
200	0.200	0.180 - 0.220	0.1951	0.1946	0.0005	0.1948
300	0.300	0.270 - 0.330	0.2984	0.2983	1E-04	0.2983
400	0.400	0.360 - 0.440	N/A	N/A	########	#DIV/0!
500	0.500	0.450 - 0.550	0.5024	0.5026	0.0002	0.5025

Aqueous Controls

Control level	Target Value	Acceptable Range	Overall Results
80	0.080	0.076 - 0.084	0.082 g/100cc

REVIEWED
By Jeremy Johnston at 1:41 pm, Apr 18, 2024

Revision: 5
Issue Date: 07/05/2022
Issuing Authority: Quality Manager

Internal Standard Monitoring Worksheet

Worklist #: 6779 **Run Date(s):** 4/18/24

Internal Standard Solution:	Prep Date: 3/13/2024	Exp Date: 9/13/2024

Sample Name	Column 1 Value	Column 2 Value
0.080	185109	198192
0.080	184601	197930
QC1	188512	202405
QC1	184960	198217
QC1		
QC1		
QC1		
QC1		
QC2	189416	203014
QC2	199285	214510
QC2		
QC2		
QC2		
QC2		

	Average	(-)20%	(+)20%
Column 1	188647.2	150917.7	226376.6
Column 2	202378.0	161902.4	242853.6

JL

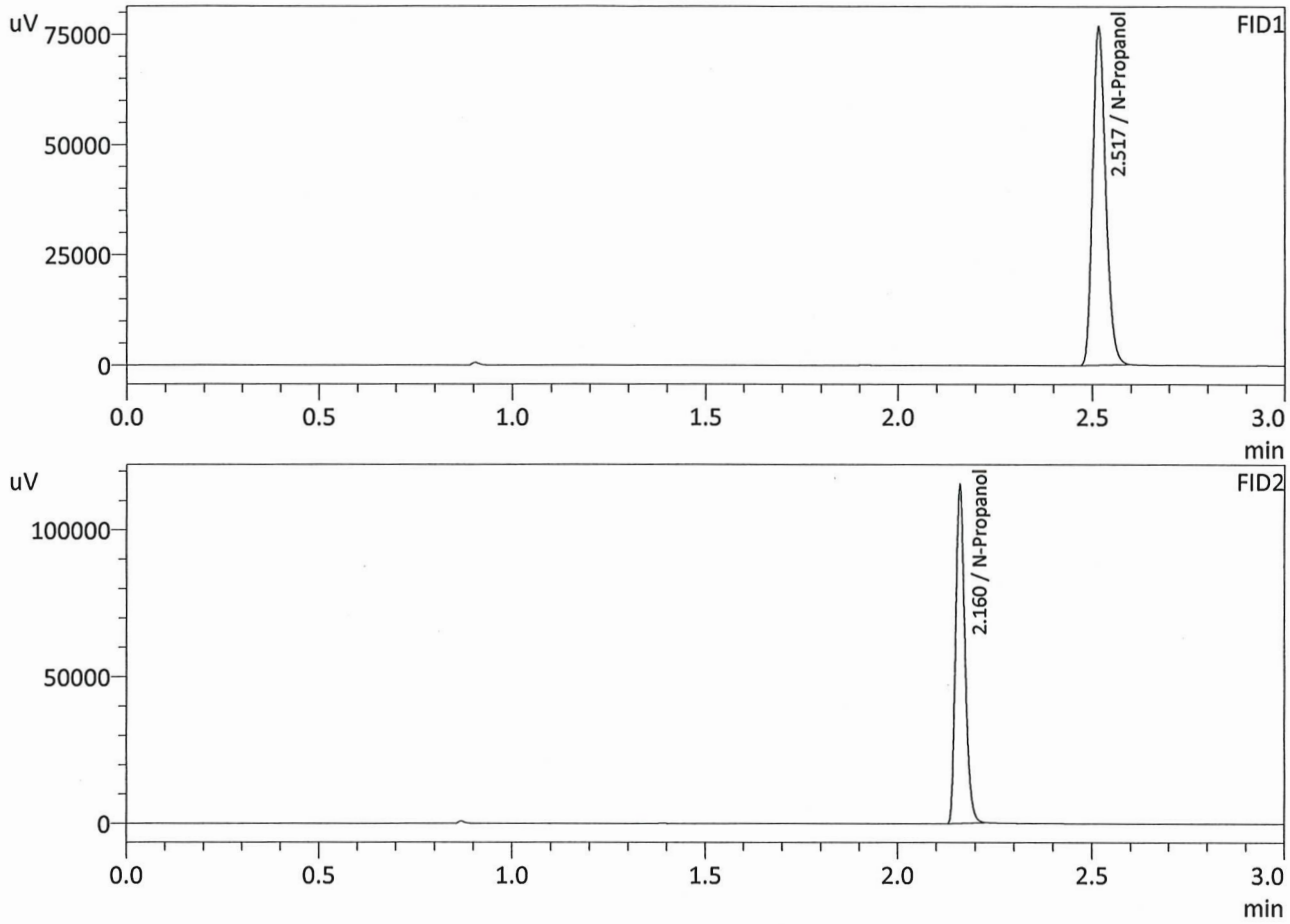
4/18/2024

Worklist: 6779

LAB_CASE	ITEM	ITEM_TYPE	DESCRIPTION
M2024-1450	1	BCK	Alcohol Analysis

JL

Sample Name : ISTD BLK 1
Laboratory : Meridian
Injection Date : 4/18/2024 9:51:45 AM
Vial # : 1
Method Filename : Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

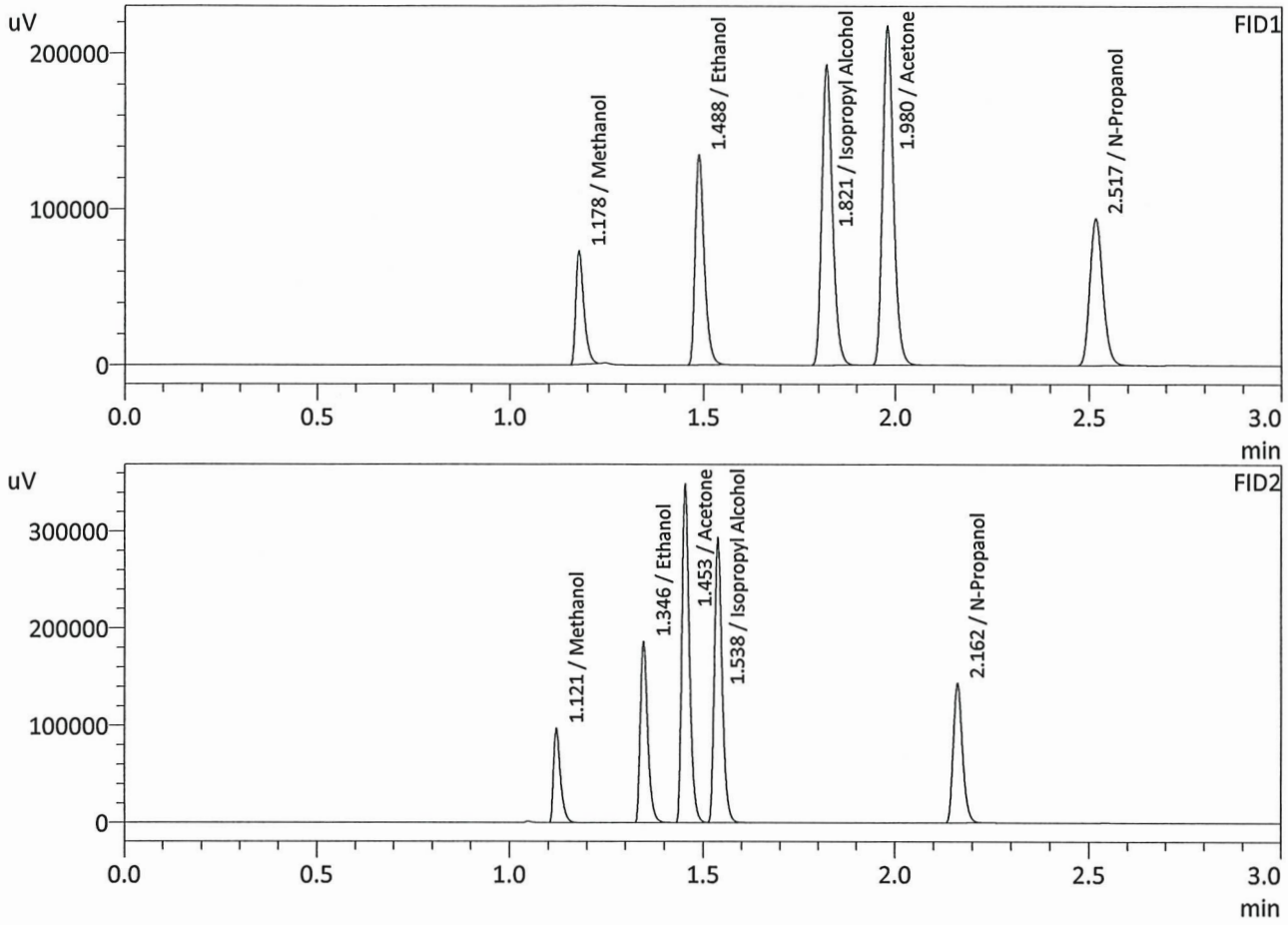
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	179004	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	191568	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

JG

Sample Name	: MIXED VOLATILES FN 06041902
Laboratory	: Meridian
Injection Date	: 4/18/2024 9:59:04 AM
Vial #	: 2
Method Filename	: Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS	: C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	0.0000	105636	g/100cc
Ethanol	0.4673	221837	g/100cc
Isopropyl Alcohol	0.0000	374423	g/100cc
Acetone	0.0000	426562	g/100cc
N-Propanol	0.0000	218784	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	0.0000	119671	g/100cc
Ethanol	0.4708	244082	g/100cc
Acetone	0.0000	468462	g/100cc
Isopropyl Alcohol	0.0000	406710	g/100cc
N-Propanol	0.0000	236923	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC-1-1 **Analysis Date(s): 4/18/2024 10:06:46 AM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0772	0.0775	0.0003	0.0773	0.0009	0.0777
(g/100cc)	0.0780	0.0784	0.0004	0.0782		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_240411JG.gcm

Reporting of Results	Uncertainty of Measurements (UM%):	5.00%

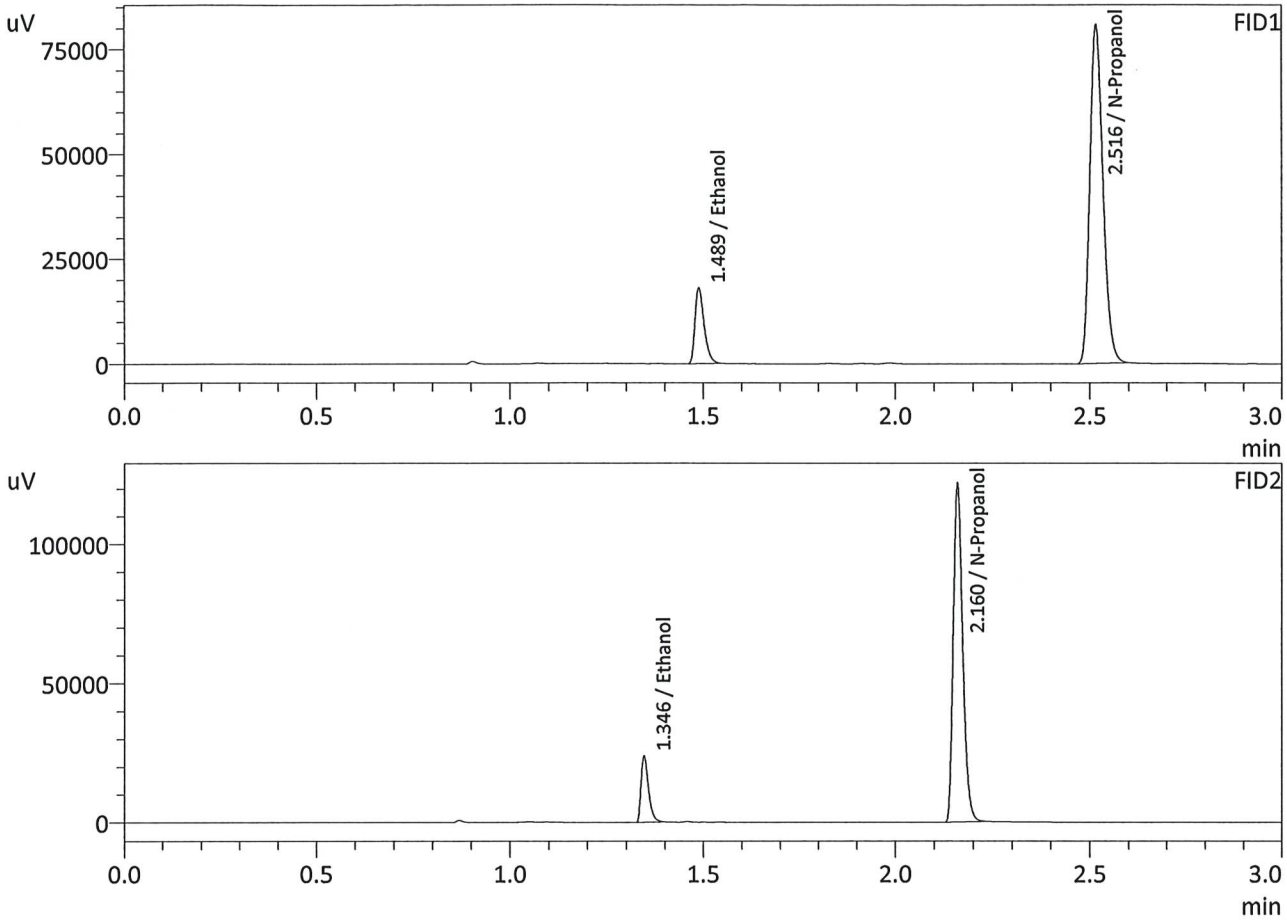
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.077	0.073	0.081	0.004

Reported Results
0.077

Calibration and control data are stored centrally.

JG

Sample Name : QC-1-1
Laboratory : Meridian
Injection Date : 4/18/2024 10:06:46 AM
Vial # : 3
Method Filename : Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

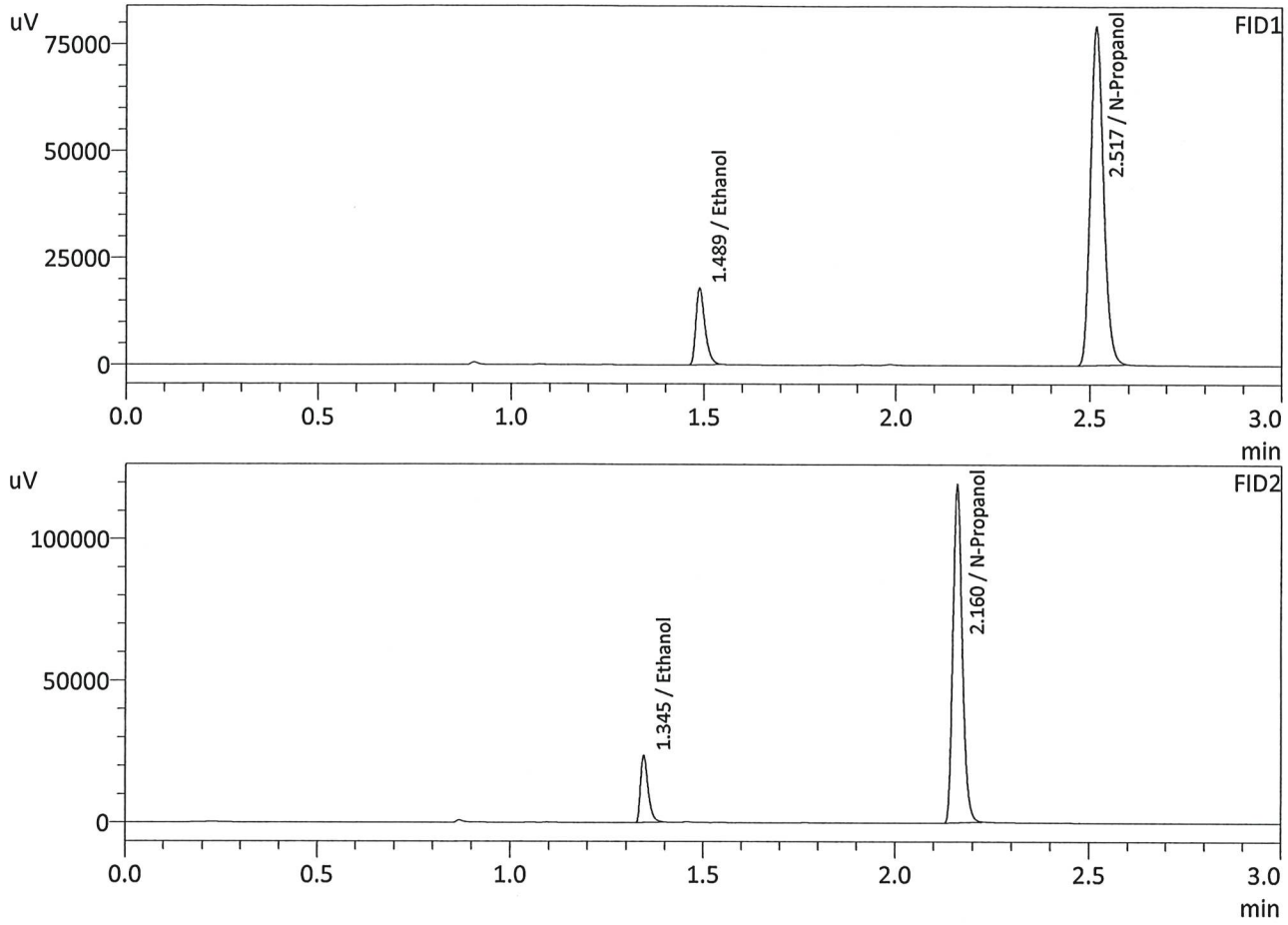
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0772	29815	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	188512	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0775	32065	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	202405	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

JL

Sample Name : QC-1-1-B
Laboratory : Meridian
Injection Date : 4/18/2024 10:15:12 AM
Vial # : 4
Method Filename : Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0780	29581	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	184960	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0784	31787	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	198217	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

JL

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: 0.08 QA **Analysis Date(s): 4/18/2024 10:22:57 AM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.0800	0.0802	0.0002	0.0801	0.0039	0.0820
(g/100cc)	0.0840	0.0841	0.0001	0.0840		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_240411JG.gcm

Reporting of Results	Uncertainty of Measurements (UM%):	5.00%

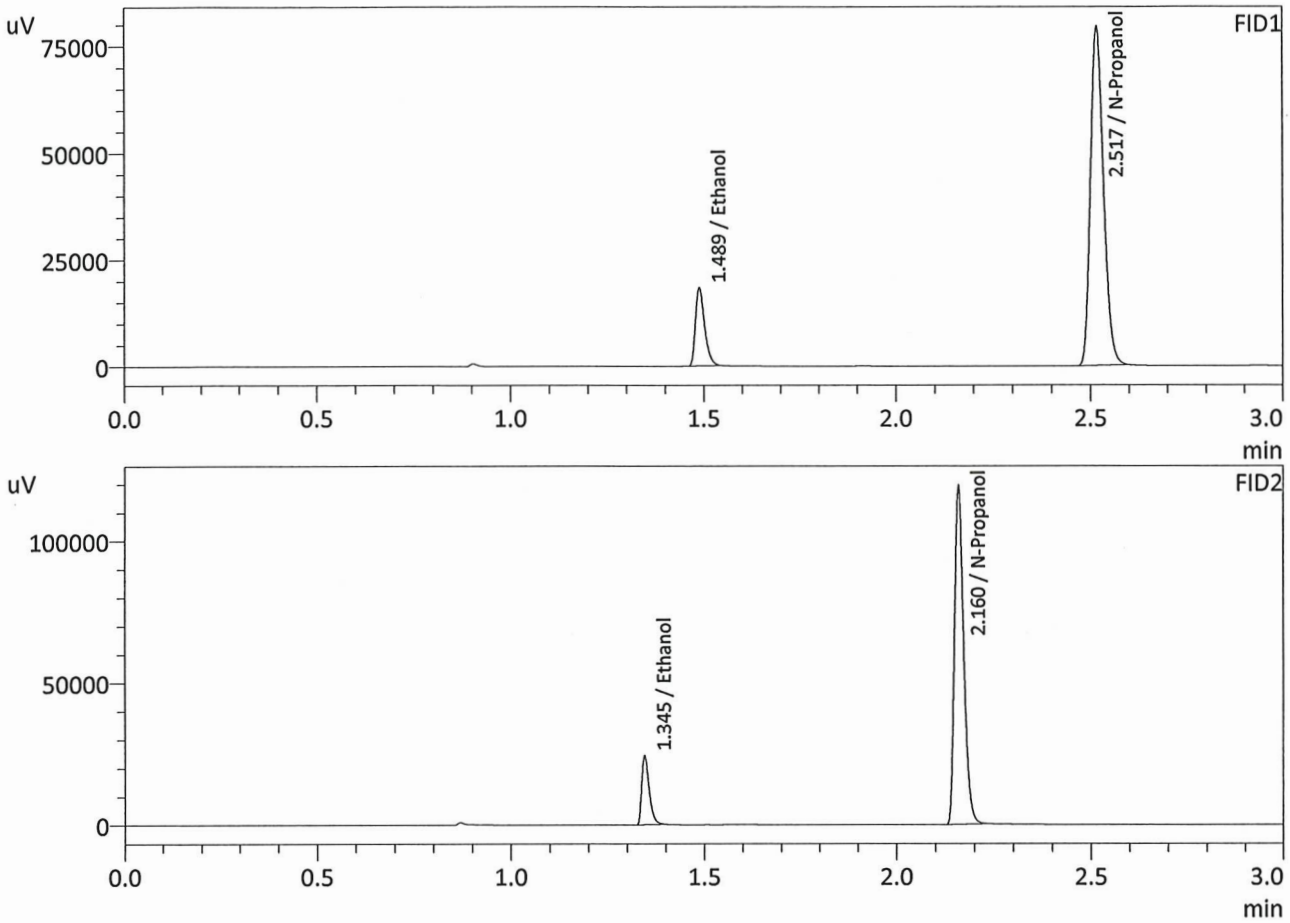
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.082	0.077	0.087	0.005

Reported Results
0.082

Calibration and control data are stored centrally.

JL

Sample Name : 0.08 QA
Laboratory : Meridian
Injection Date : 4/18/2024 10:22:57 AM
Vial # : 5
Method Filename : Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

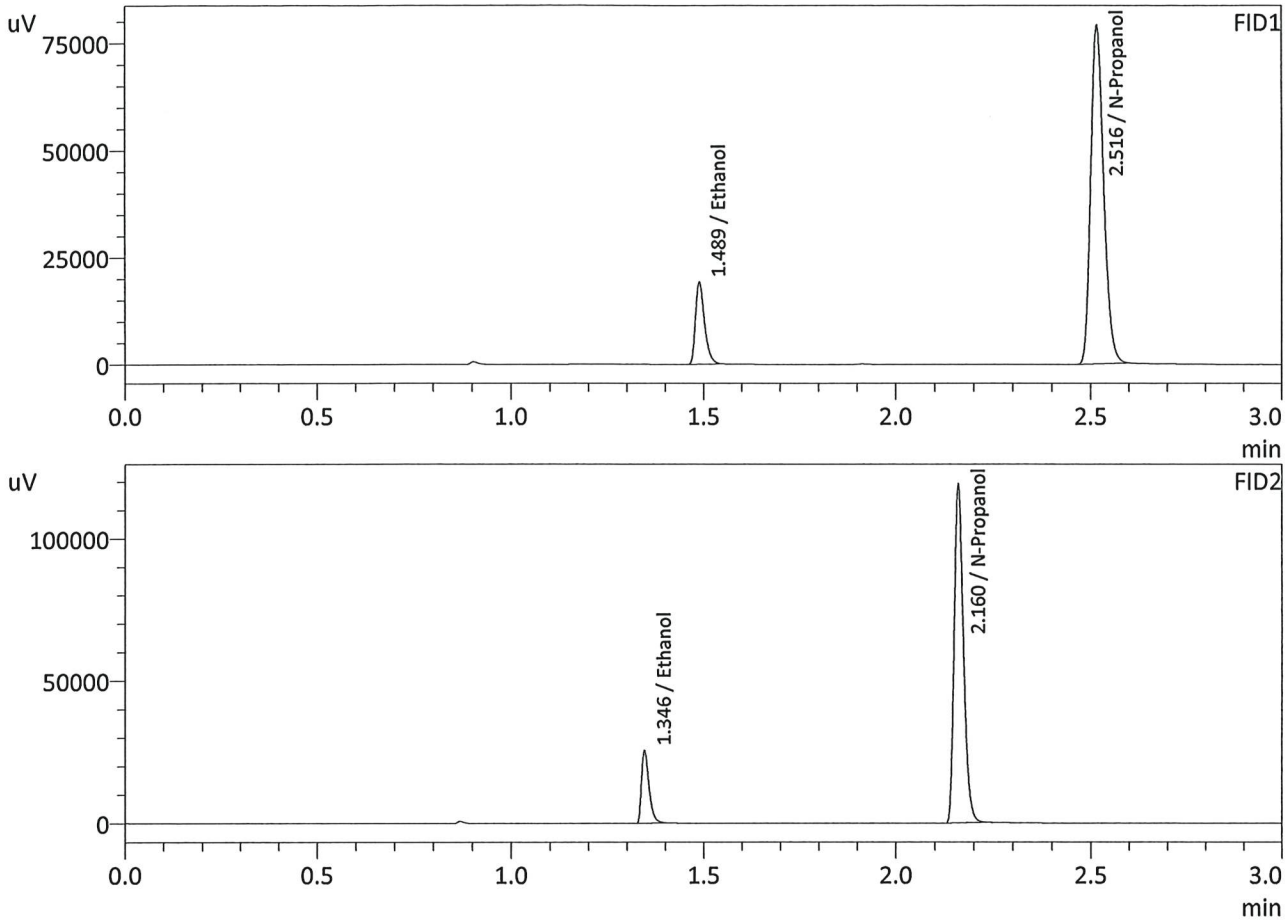
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0800	30416	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	185109	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0802	32580	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	198192	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

JG

Sample Name : 0.08 QA-B
Laboratory : Meridian
Injection Date : 4/18/2024 10:31:40 AM
Vial # : 6
Method Filename : Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0840	31950	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	184601	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.0841	34251	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	197930	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

JL

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No: QC-2-1 **Analysis Date(s): 4/18/2024 10:56:27 AM(-06:00)**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Sample A-B Difference	Over-all Mean
Sample Results	0.1963	0.1969	0.0006	0.1966	0.0105	0.2018
(g/100cc)	0.2068	0.2075	0.0007	0.2071		

Analysis Method

Refer to Blood Alcohol Method #1

Instrument Information — Instrument information is stored centrally.

Refer To Instrument Method: ALCOHOL_240411JG.gcm

Reporting of Results	Uncertainty of Measurements (UM%):	5.00%

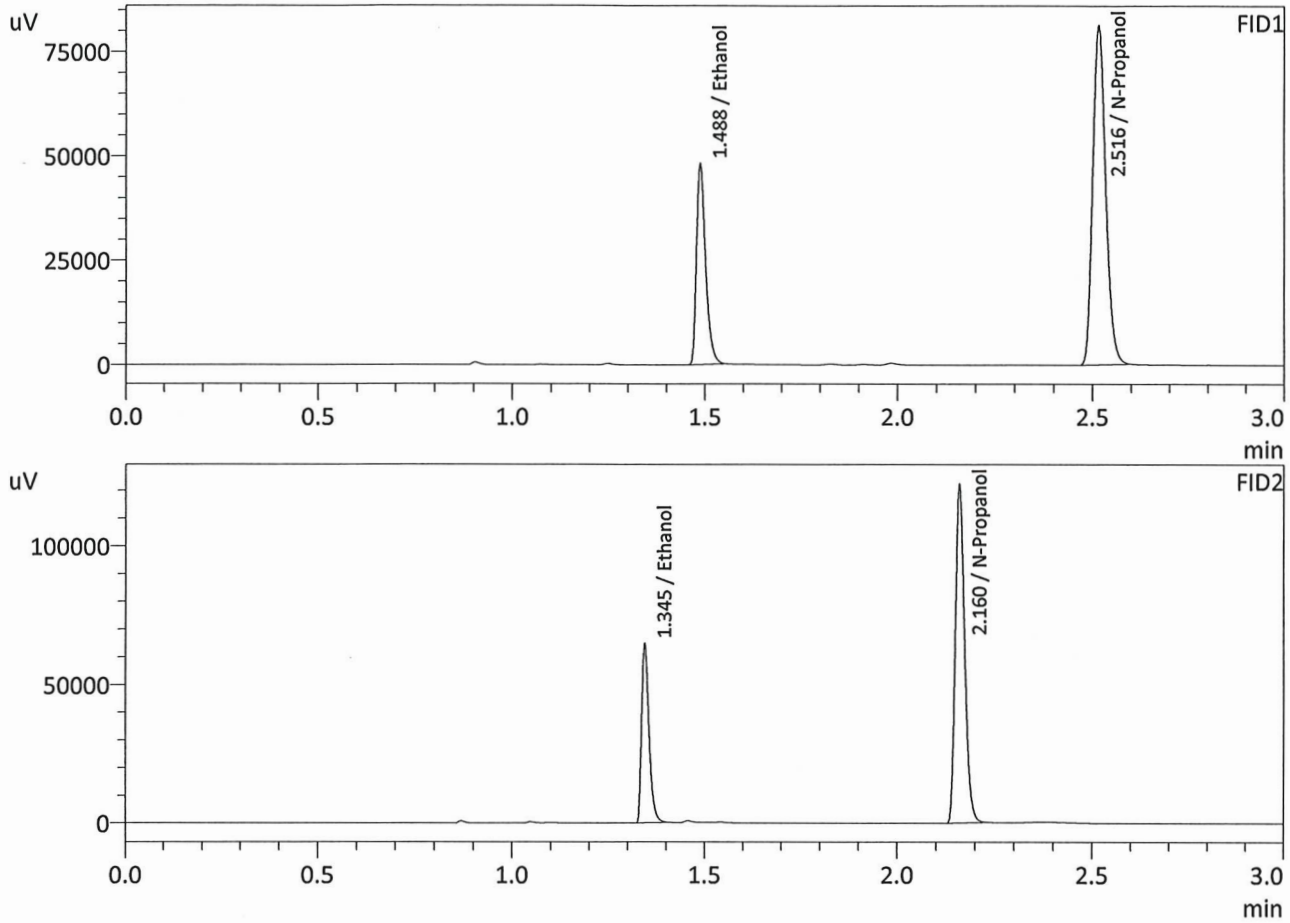
Overall Mean (g/100cc)	Low	High	5 % of Mean
0.201	0.190	0.212	0.011

Reported Results
0.201

Calibration and control data are stored centrally.

JG

Sample Name : QC-2-1
Laboratory : Meridian
Injection Date : 4/18/2024 10:56:27 AM
Vial # : 9
Method Filename : Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

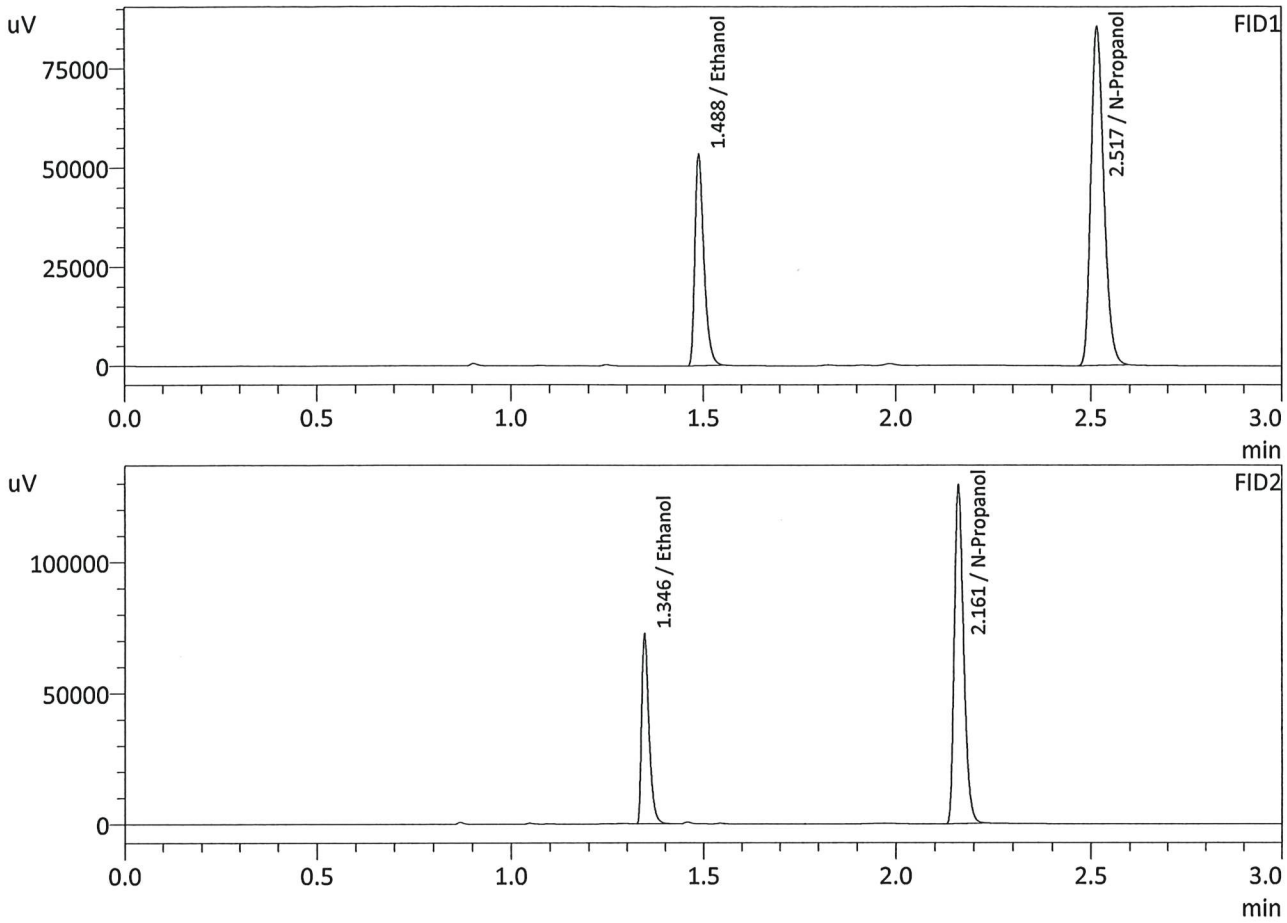
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.1963	79442	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	189416	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.1969	85879	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	203014	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

JG

Sample Name : QC-2-1-B
Laboratory : Meridian
Injection Date : 4/18/2024 11:03:50 AM
Vial # : 10
Method Filename : Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

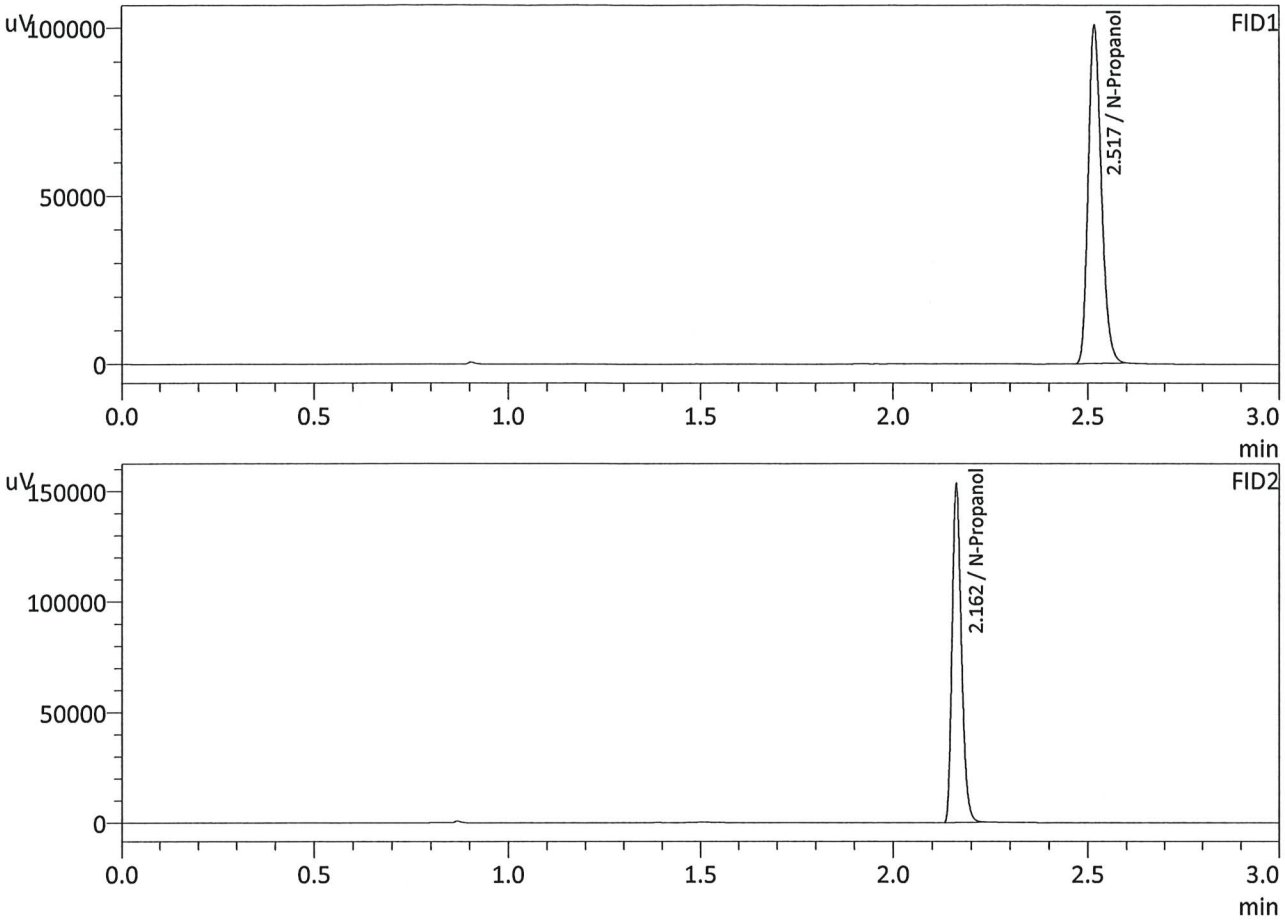
Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2068	88178	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	199285	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	0.2075	95796	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	214510	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

JC

Sample Name : ISTD BLK 2
Laboratory : Meridian
Injection Date : 4/18/2024 11:11:40 AM
Vial # : 11
Method Filename : Default Project - ALCOHOL_240411JG.gcm
Instrument #GC/HS : C12255750548 / C12595800409



FID1

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
Acetone	--	--	g/100cc
N-Propanol	0.0000	235261	g/100cc
Fluor. Hydrocarbon(s)	--	--	g/100cc

FID2

Name	Conc.	Area	Unit
Methanol	--	--	g/100cc
Ethanol	--	--	g/100cc
Acetone	--	--	g/100cc
Isopropyl Alcohol	--	--	g/100cc
N-Propanol	0.0000	253588	g/100cc
Flour. Hydrocarbon(s)	--	--	g/100cc

JG

Meridian Blood Alcohol Analysis Batch Table

Shimadzu GC-2030 Serial #C12255750548
Shimadzu HS-20 Serial #C12595800409
Lab Solutions Database Software Ver. 6.111

Vial#	Sample Name	Sample Type	Level#	Method File
1	ISTD BLK 1	0:Unknown	0	ALCOHOL 240411JG.gcm
2	ED VOLATILES FN 0604	0:Unknown	1	ALCOHOL 240411JG.gcm
3	QC-1-1	0:Unknown	0	ALCOHOL 240411JG.gcm
4	QC-1-1-B	0:Unknown	0	ALCOHOL 240411JG.gcm
5	0.08 QA	0:Unknown	0	ALCOHOL 240411JG.gcm
6	0.08 QA-B	0:Unknown	0	ALCOHOL 240411JG.gcm
7	M2024-1450-1	0:Unknown	0	ALCOHOL 240411JG.gcm
8	M2024-1450-1-B	0:Unknown	0	ALCOHOL 240411JG.gcm
9	QC-2-1	0:Unknown	0	ALCOHOL 240411JG.gcm
10	QC-2-1-B	0:Unknown	0	ALCOHOL 240411JG.gcm
11	ISTD BLK 2	0:Unknown	0	ALCOHOL 240411JG.gcm

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