

Loadlist-Alcohol Reference Solution Verification

Location	Sample
1	Volatiles Mix
2	Blank
3	Cerilliant 25
4	Cerilliant 100
5	Cerilliant 200
6	Cerilliant 400
7	Blank
8	Lipomed 50
9	168
10	169
11	170
12	171
13	173
14	174
15	175
16	177
17	178
18	179
19	Lipomed 100
20	168
21	169
22	170
23	171
24	173
25	174
26	175
27	177
28	178
29	179
30	Lipomed 300

Instrument Parameters			
Sample Temp	60	C	
Needle Temp	70	C	
Transfer Temp	80	C	
Thermostat time	15	min	
Pressurization time	2.0	min	
Withdraw time	0.2	min	
Injection Time	0.03	min	
Cycle Time	4.5	min	
Inlet temp	90	C	
He Carrier pressure	15	psi	
Column oven temp	55	C	
Run Time	5.0	min	
FID Temp	220	C	
Hydrogen Flow	45	mL/min	
Air Flow	450	mL/min	

Procedure Used	Eff. Date
ATP-TSOP v.2 section 4	Dec-18

Reagents, Calibrators and Controls

Materials	Lot	Exp. Date
Internal Standard	052019 TG	na
Volatiles Mixture	041513 DKR	na
Water (Fisher Scientific)	167428	11/2021
Cerilliant 25	FN09081706	5/2023
Cerilliant 100	FN08101601	8/2021
Cerilliant 200	FN06231704	8/2022
Cerilliant 400	FN05131606	6/2021
Lipomed 50	08012015-B	1/2020
Lipomed 100	06072017-A_1	7/2022
Lipomed 300	18052015-A/1	5/2020

Reference Solution

Level Tested:	0.05 g/ 210 L
Lot #:	201905A
Manufacture Date:	5/14/2019
Expiration Date	5/14/2021

Operator: _____

Date: _____

J. Dole
05/23/19

Alcohol Analysis QC Summary

Report Date	5/23/2019
Reviewer	TJ Graham

Run Summary Data			Ethanol			n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
5/23/2019	A	Volatiles Mix	041513 DKR	1.414	26151.13	0.0383	2.008	250084.02
5/23/2019	A	Blank	167428		0.00	0.0000	2.008	253079.98
5/23/2019	A	CER 25	FN09081706	1.414	17361.91	0.0254	2.008	252170.37
5/23/2019	A	CER 100	FN08101601	1.414	69922.83	0.1005	2.008	250633.57
5/23/2019	A	CER 200	FN06231704	1.415	141538.27	0.2001	2.010	253921.23
5/23/2019	A	CER 400	FN05131606	1.415	286797.32	0.4007	2.009	254092.84
5/23/2019	A	Blank	167428		0.00	0.0000	2.009	252311.17
5/23/2019	A	Lipomed 50	08012015-B	1.415	34737.23	0.0505	2.009	250061.97
5/23/2019	A	168	201905A	1.415	42392.15	0.0607	2.009	252590.68
5/23/2019	A	169	201905A	1.414	42402.76	0.0603	2.008	254580.24
5/23/2019	A	170	201905A	1.415	42839.49	0.0605	2.009	256274.31
5/23/2019	A	171	201905A	1.415	42496.15	0.0604	2.009	254663.02
5/23/2019	A	173	201905A	1.414	42441.61	0.0605	2.008	253764.58
5/23/2019	A	174	201905A	1.415	42841.94	0.0605	2.009	256252.32
5/23/2019	A	175	201905A	1.416	41695.13	0.0606	2.010	248823.57
5/23/2019	A	177	201905A	1.414	42442.59	0.0605	2.008	253880.08
5/23/2019	A	178	201905A	1.415	42520.55	0.0608	2.009	253065.84
5/23/2019	A	179	201905A	1.416	42563.92	0.0603	2.010	255353.87
5/23/2019	A	Lipomed 100	06072017-A_1	1.413	70578.83	0.0992	2.007	255103.10
5/23/2019	A	168	201905A	1.414	42347.19	0.0606	2.007	252773.82
5/23/2019	A	169	201905A	1.416	43038.24	0.0607	2.010	256803.45
5/23/2019	A	170	201905A	1.415	42799.21	0.0603	2.009	257046.14
5/23/2019	A	171	201905A	1.415	42106.85	0.0605	2.009	251979.21
5/23/2019	A	173	201905A	1.415	42355.70	0.0604	2.009	253712.61
5/23/2019	A	174	201905A	1.413	42340.54	0.0600	2.007	255301.53
5/23/2019	A	175	201905A	1.414	42708.21	0.0609	2.007	253768.58
5/23/2019	A	177	201905A	1.413	42656.98	0.0604	2.007	255480.00
5/23/2019	A	178	201905A	1.413	43584.09	0.0604	2.007	261083.48
5/23/2019	A	179	201905A	1.413	43471.82	0.0601	2.007	261809.95
5/23/2019	A	Lipomed 300	18052015-A/1	1.413	220038.74	0.3004	2.007	260311.42

%CV = 1.19%

ALCOHOL ANALYSIS QC SUMMARY

Report Date	5/23/2019
Reviewer	TJ Graham

RUN SUMMARY DATA

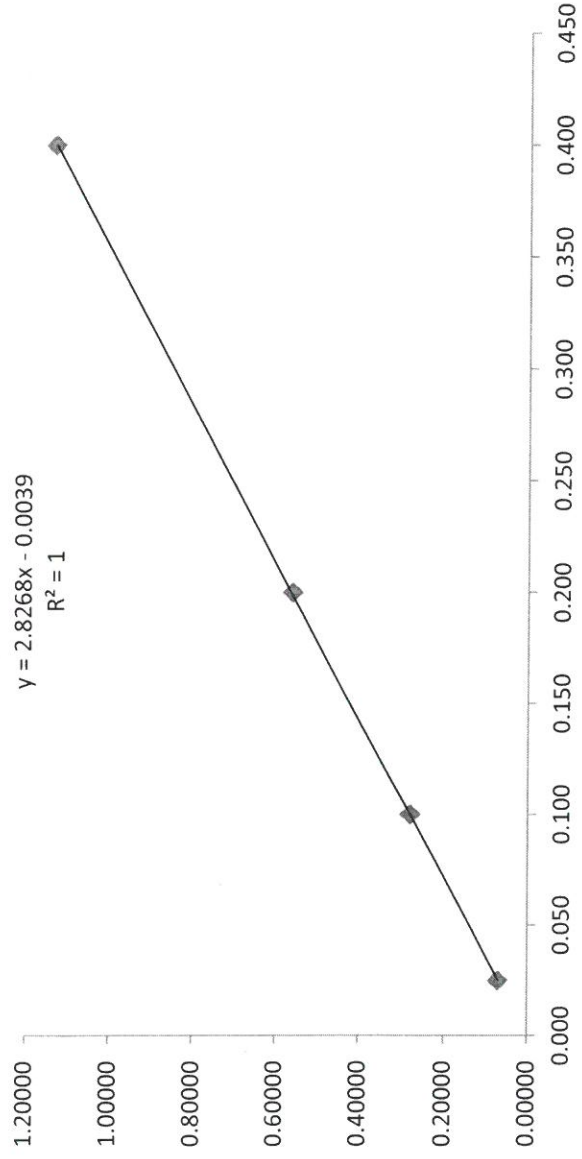
Run Date	Channel	Sample	Lot	Ethanol			n-Propanol	
				RT	Area	Conc.	RT	Area
5/23/2019	A	CER 25	FN09081706	1.414	17361.91	0.0254	2.008	252170.37
5/23/2019	A	CER 100	FN08101601	1.414	69922.83	0.1005	2.008	250633.57
5/23/2019	A	CER 200	FN06231704	1.415	141538.27	0.2001	2.010	253921.23
5/23/2019	A	CER 400	FN05131606	1.415	286797.32	0.4007	2.009	254092.84

Summary		Standard	g/dL	Ratio	Calc.	Diff
Slope		Blank	0.000	0.00000	0.00000	0.00000
	2.8268	CER 25	0.025	0.06885	0.02572	0.00072
	-0.0039	CER 100	0.100	0.27898	0.10006	0.00006
Standard Error		CER 200	0.200	0.55741	0.19856	-0.00144
R-Squared		CER 400	0.400	1.12871	0.40066	0.00066

Analytical Curve

$$y = 2.8268x - 0.0039$$

$$R^2 = 1$$



Source:	Alcohol Countermeasure Systems, Inc.
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Lot	201905A
Level	0.05 g/ 210 L
Manufacture Date	5/14/2019
Expiration Date	5/14/2021

Bottle	Result (g/100mL)
168	0.0607
	0.0606
169	0.0603
	0.0607
170	0.0605
	0.0603
171	0.0604
	0.0605
173	0.0605
	0.0604
174	0.0605
	0.0600
175	0.0606
	0.0609
177	0.0605
	0.0604
178	0.0608
	0.0604
179	0.0603
	0.0601

Mean	0.0605
Std. Dev.	0.0002
Min	0.0600
Max	0.0609

5/23/19
JO