

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	2214
10	2198
11	2197
12	2200
13	2199
14	2215
15	2210
16	2211
17	2213
18	2212
19	Lipomed 100
20	2214
21	2198
22	2197
23	2200
24	2199
25	2215
26	2210
27	2211
28	2213
29	2212
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	Apr-20

Reagents, Calibrators and Controls

Materials	Lot	Exp. Date
Internal Standard	051920bhk	na
Volatiles Mixture	041513 DKR	na
Water (Fisher Scientific)	167428	11/2021
Cerilliant 25	FN09081706	5/2023
Cerilliant 100	FN02271802	4/2023
Cerilliant 200	FN06231704	8/2022
Cerilliant 400	FN05131606	6/2021
Lipomed 50	10072019-A	7/2024
Lipomed 100	14082019-A	8/2024
Lipomed 300	11092018-B	9/2023

Reference Solution

Level Tested:	0.080 g/210L
Lot #:	202007A
Manufacture Date:	7/21/2020
Expiration Date	7/21/2022

Operator: BK

Date: 9/1/2020

Report Date 9/1/2020

Reviewer Brett Kirkland *RSK*

Run Summary Data		Ethanol				n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
5/21/2020	A	Volatiles Mix	041513 DKR	1.386	23912.73	0.0371	1.981	244652.09
5/21/2020	A	Blank	167428		0.00	0.0000	1.984	230887.55
5/21/2020	A	CER 25	FN09081706	1.391	16089.83	0.0254	1.986	243090.30
5/21/2020	A	CER 100	FN02271802	1.390	62167.41	0.0994	1.985	235281.04
5/21/2020	A	CER 200	FN06231704	1.388	128036.79	0.2002	1.983	239657.94
5/21/2020	A	CER 400	FN05131606	1.391	229555.18	0.4008	1.986	211830.88
5/21/2020	A	Blank	167428		0.00	0.0000	1.983	236252.43
5/21/2020	A	Lipomed 50	10072019-A	1.390	31345.00	0.0506	1.984	237325.88
5/21/2020	A	2214	202007A	1.390	60752.99	0.0967	1.984	235990.83
5/21/2020	A	2198	202007A	1.390	61298.68	0.0971	1.985	237164.61
5/21/2020	A	2197	202007A	1.390	61105.32	0.0966	1.984	237653.86
5/21/2020	A	2200	202007A	1.389	60031.79	0.0967	1.984	233159.18
5/21/2020	A	2199	202007A	1.390	59924.41	0.0973	1.984	231488.98
5/21/2020	A	2215	202007A	1.390	60129.97	0.0965	1.984	234050.05
5/21/2020	A	2210	202007A	1.389	59601.87	0.0969	1.984	231215.48
5/21/2020	A	2211	202007A	1.390	60182.44	0.0969	1.984	233384.09
5/21/2020	A	2213	202007A	1.390	60088.08	0.0963	1.984	234380.23
5/21/2020	A	2212	202007A	1.378	59765.07	0.0969	1.973	231714.01
5/21/2020	A	Lipomed 100	14082019-A	1.390	56991.75	0.0992	1.985	215716.93
5/21/2020	A	2214	202007A	1.389	60350.52	0.0969	1.984	233944.05
5/21/2020	A	2198	202007A	1.389	60156.89	0.0969	1.984	233246.49
5/21/2020	A	2197	202007A	1.389	59622.98	0.0965	1.984	232147.83
5/21/2020	A	2200	202007A	1.389	60632.69	0.0963	1.984	236574.82
5/21/2020	A	2199	202007A	1.390	59940.18	0.0968	1.984	232757.74
5/21/2020	A	2215	202007A	1.389	59757.32	0.0967	1.984	232239.94
5/21/2020	A	2210	202007A	1.390	59404.19	0.0968	1.985	230539.24
5/21/2020	A	2211	202007A	1.389	60030.92	0.0967	1.984	233218.88
5/21/2020	A	2213	202007A	1.390	60089.92	0.0963	1.984	234445.63
5/21/2020	A	2212	202007A	1.390	60964.71	0.0966	1.984	237174.85
5/21/2020	A	Lipomed 300	11092018-B	1.389	188813.03	0.2959	1.984	236434.82

%CV = 2.72%

ALCOHOL ANALYSIS QC SUMMARY

Report Date	9/1/2020
Reviewer	Brett Kirkland

*BK*

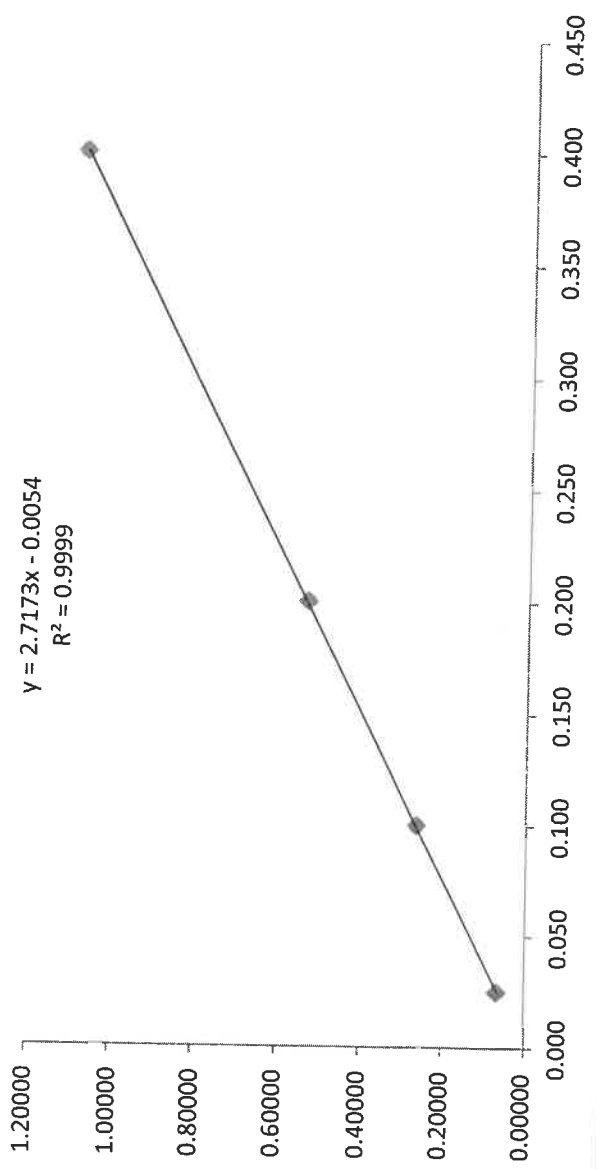
RUN SUMMARY DATA

Run Date	Channel	Sample	Lot	Ethanol			n-Propanol		
				RT	Area	Conc.	RT	Area	
5/21/2020	A	CER 25	FN09081706	1.391	16089.83	0.0254	1.986	243090.30	
5/21/2020	A	CER 100	FN02271802	1.390	62167.41	0.0994	1.985	235281.04	
5/21/2020	A	CER 200	FN06231704	1.388	128036.79	0.2002	1.983	239657.94	
5/21/2020	A	CER 400	FN05131606	1.391	229555.18	0.4008	1.986	211830.88	

Summary

	Standard	g/dL	Ratio	Calc.	Diff
Slope	Blank	0.000	0.00000	0.00000	0.00000
Intercept	CER 25	0.025	0.06619	0.026355	0.00135
Standard Error	CER 100	0.100	0.26423	0.09924	-0.00076
R-Squared	CER 200	0.200	0.53425	0.19861	-0.00139
	CER 400	0.400	1.08367	0.40080	0.00080

Analytical Curve



**Source:** Alcohol Countermeasure Systems, Inc.

Lot	202007A
Level	0.080 g/210L
Manufacture Date	7/21/2020
Expiration Date	7/21/2022

Bottle	Result (g/100mL)
2214	0.0967
	0.0969
2198	0.0971
	0.0969
2197	0.0966
	0.0965
2200	0.0967
	0.0963
2199	0.0973
	0.0968
2215	0.0965
	0.0967
2210	0.0969
	0.0968
2211	0.0969
	0.0967
2213	0.0963
	0.0963
2212	0.0969
	0.0966

Mean	0.0967
Std. Dev.	0.0003
Min	0.0963
Max	0.0973