

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	2209
10	2210
11	2211
12	2213
13	2214
14	2221
15	2222
16	2224
17	2225
18	2226
19	Lipomed 100
20	2209
21	2210
22	2211
23	2213
24	2214
25	2221
26	2222
27	2224
28	2225
29	2226
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.4 section 4	Jan-21

Reagents, Calibrators and Controls

Materials	Lot	Exp. Date
Internal Standard	121521 TG	na
Volatiles Mixture	052121 TG	na
Water (Fisher Scientific)	213960	06/2026
Cerilliant 25	FN09081706	5/2023
Cerilliant 100	FN05311902	10/2024
Cerilliant 200	FN05101903	09/2024
Cerilliant 400	FN10051906	12/2024
Lipomed 50	10072019-A	07/2024
Lipomed 100	14082019-A	08/2024
Lipomed 300	11092018-B	09/2023

Reference Solution

Level Tested:	0.05 g/ 210 L
Lot #:	202112A
Manufacture Date:	12/7/2021
Expiration Date	12/7/2023

Operator: J. Z. Zaba  
 Date: 12/16/21

Alcohol Analysis QC Summary

<b>Report Date</b>	12/16/2021
<b>Reviewer</b>	TJ Graham

12/17/21  
JD

Run Summary Data			Ethanol			n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
12/16/2021	A	Volatiles Mix	052121 TG	1.420	28350.99	0.0393	2.016	259376.02
12/16/2021	A	Blank	213960		0.00	0.0000	2.016	256983.38
12/16/2021	A	CER 25	FN09081706	1.420	17139.41	0.0253	2.016	254121.98
12/16/2021	A	CER 100	FN05311902	1.420	70039.26	0.0975	2.016	256867.21
12/16/2021	A	CER 200	FN05101903	1.420	139699.97	0.1946	2.017	254543.33
12/16/2021	A	CER 400	FN10051906	1.419	283113.56	0.4005	2.016	255474.75
12/16/2021	A	Blank	213960		0.00	0.0000	2.017	256151.64
12/16/2021	A	Lipomed 50	10072019-A	1.420	34709.95	0.0505	2.016	254785.87
12/16/2021	A	2209	202112A	1.420	42563.28	0.0601	2.016	261507.48
12/16/2021	A	2210	202112A	1.421	42525.99	0.0604	2.017	259897.93
12/16/2021	A	2211	202112A	1.420	42007.44	0.0605	2.016	256372.60
12/16/2021	A	2213	202112A	1.420	42075.55	0.0606	2.016	256364.17
12/16/2021	A	2214	202112A	1.420	42162.95	0.0605	2.016	257393.92
12/16/2021	A	2221	202112A	1.420	41934.67	0.0606	2.016	255573.64
12/16/2021	A	2222	202112A	1.420	41815.08	0.0609	2.016	253505.25
12/16/2021	A	2224	202112A	1.420	41736.29	0.0605	2.016	254506.56
12/16/2021	A	2225	202112A	1.420	41698.51	0.0607	2.017	253688.78
12/16/2021	A	2226	202112A	1.420	41897.47	0.0606	2.016	255355.23
12/16/2021	A	Lipomed 100	14082019-A	1.420	69816.78	0.0990	2.016	257844.22
12/16/2021	A	2209	202112A	1.420	42016.40	0.0603	2.016	257387.59
12/16/2021	A	2210	202112A	1.420	42494.47	0.0604	2.016	259833.84
12/16/2021	A	2211	202112A	1.420	42264.62	0.0607	2.016	257151.00
12/16/2021	A	2213	202112A	1.420	42210.29	0.0604	2.016	257923.72
12/16/2021	A	2214	202112A	1.420	42068.87	0.0605	2.016	256594.82
12/16/2021	A	2221	202112A	1.420	42066.72	0.0601	2.017	258185.80
12/16/2021	A	2222	202112A	1.420	41966.54	0.0603	2.016	256832.84
12/16/2021	A	2224	202112A	1.420	41907.27	0.0605	2.016	255783.63
12/16/2021	A	2225	202112A	1.418	42809.59	0.0602	2.014	262654.91
12/16/2021	A	2226	202112A	1.418	42777.11	0.0604	2.014	261540.28
12/16/2021	A	Lipomed 300	11092018-B	1.418	215281.00	0.2982	2.015	261267.76

%CV = 0.95%

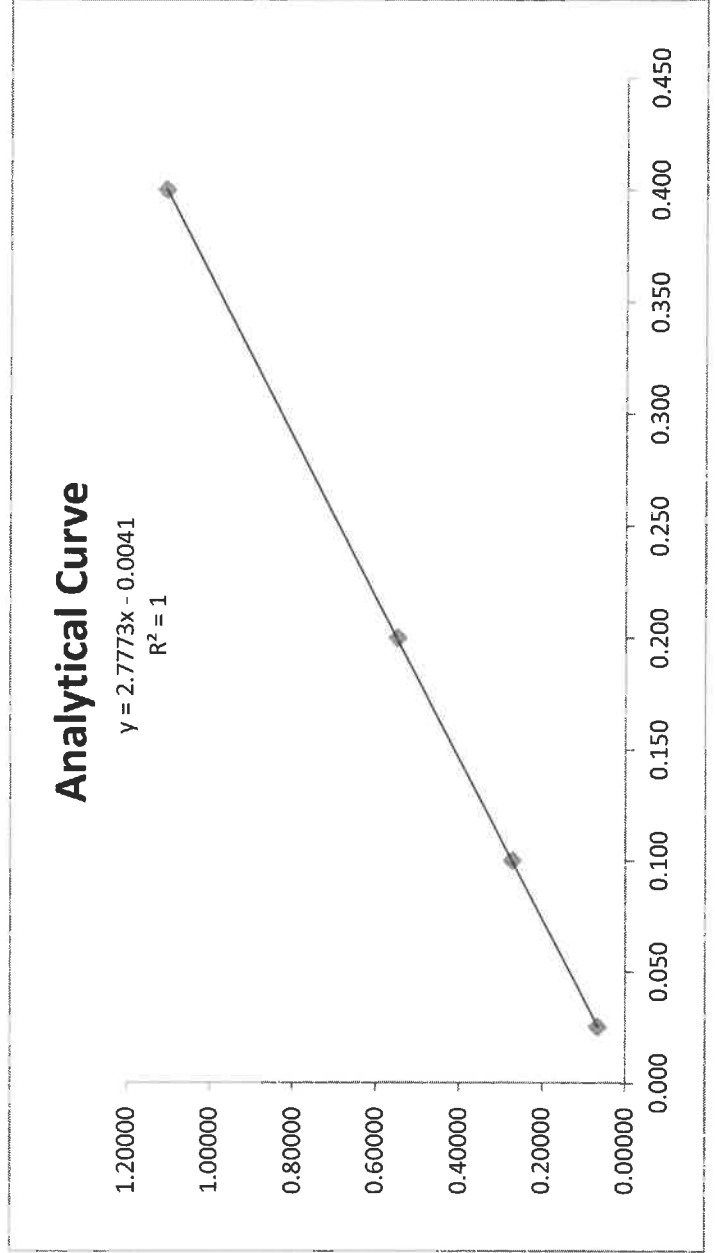
ALCOHOL ANALYSIS QC SUMMARY

Report Date	12/16/2021
Reviewer	TJ Graham

*12/17/21*  
*TJ*

RUN SUMMARY DATA				Ethanol			n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area	
12/16/2021	A	CER 25	FN09081706	1.420	17139.41	0.0253	2.016	254121.98	
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12/16/2021	A	CER 200	FN05101903	1.420	139699.97	0.1946	2.017	254543.33	
12/16/2021	A	CER 400	FN10051906	1.419	283113.56	0.4005	2.016	255474.75	

Summary	Standard	g/dL	Ratio	Calc.	Diff
	Blank	0.000	0.00000	0.00000	0.00000
Slope	2.7773	0.025	0.06745	0.02576	0.00076
Intercept	-0.0041	0.100	0.27267	0.09965	-0.00035
Standard Error	0.002615338	0.200	0.54883	0.19909	-0.00091
R-Squared	1.0000	0.400	1.10819	0.40049	0.00049



Source: Alcohol Countermeasure Systems, Inc.

Lot	202112A
Level	0.05 g/ 210 L
Manufacture Date	12/7/2021
Expiration Date	12/7/2023

Bottle	Result (g/100mL)
2209	0.0601
	0.0603
2210	0.0604
	0.0604
2211	0.0605
	0.0607
2213	0.0606
	0.0604
2214	0.0605
	0.0605
2221	0.0606
	0.0601
2222	0.0609
	0.0603
2224	0.0605
	0.0605
2225	0.0607
	0.0602
2226	0.0606
	0.0604

Mean	0.0605
Std. Dev.	0.0002
Min	0.0601
Max	0.0609

12/17/21  
JE