

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	348
10	349
11	350
12	351
13	352
14	353
15	354
16	356
17	357
18	358
19	Lipomed 100
20	348
21	349
22	350
23	351
24	352
25	353
26	354
27	356
28	357
29	358
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.5 section 4	Jan-22

Reagents, Calibrators and Controls

Materials	Lot	Exp. Date
Internal Standard	012422 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:	0.08 g/ 210 L
Lot #:	202201D
Manufacture Date:	1/18/2022
Expiration Date	1/18/2024

Operator: J. J. Zde
 Date: 1/25/22

Alcohol Analysis QC Summary

1/25/22
JD

Report Date	1/25/2022
Reviewer	TJ Graham

Run Summary Data			Ethanol				n-Propanol	
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
1/25/2022	A	Volatiles Mix	052121 TG	1.420	27939.31	0.0414	2.016	248561.10
1/25/2022	A	Blank	213960		0.00	0.0000	2.016	252238.19
1/25/2022	A	CER 25	FN09081706	1.419	17411.10	0.0263	2.016	251013.31
1/25/2022	A	CER 100	FN05311902	1.420	69197.25	0.0996	2.016	247440.50
1/25/2022	A	CER 200	FN05101903	1.419	139547.93	0.1976	2.016	249143.37
1/25/2022	A	CER 400	FN10051906	1.419	282467.28	0.4006	2.016	249277.84
1/25/2022	A	Blank	213960		0.00	0.0000	2.017	251675.10
1/25/2022	A	Lipomed 50	10072019-A	1.420	34771.90	0.0504	2.017	249533.43
1/25/2022	A	348	202201D	1.419	67619.83	0.0974	2.016	248127.81
1/25/2022	A	349	202201D	1.420	68067.12	0.0968	2.016	251364.79
1/25/2022	A	350	202201D	1.420	68106.26	0.0971	2.016	250523.62
1/25/2022	A	351	202201D	1.420	67279.12	0.0969	2.017	248068.46
1/25/2022	A	352	202201D	1.420	67849.39	0.0966	2.017	251054.54
1/25/2022	A	353	202201D	1.420	67773.48	0.0970	2.017	249756.30
1/25/2022	A	354	202201D	1.419	67927.62	0.0966	2.016	251168.99
1/25/2022	A	356	202201D	1.420	67883.68	0.0967	2.017	250935.78
1/25/2022	A	357	202201D	1.420	67716.89	0.0967	2.017	250346.17
1/25/2022	A	358	202201D	1.420	68126.22	0.0968	2.017	251538.47
1/25/2022	A	Lipomed 100	14082019-A	1.420	69725.78	0.0997	2.017	249897.98
1/25/2022	A	348	202201D	1.420	67332.08	0.0971	2.017	247847.08
1/25/2022	A	349	202201D	1.419	67918.08	0.0968	2.016	250621.62
1/25/2022	A	350	202201D	1.420	67932.29	0.0966	2.017	251262.88
1/25/2022	A	351	202201D	1.420	67755.62	0.0968	2.017	250066.90
1/25/2022	A	352	202201D	1.419	67911.22	0.0967	2.016	250996.09
1/25/2022	A	353	202201D	1.420	68259.67	0.0968	2.017	251935.12
1/25/2022	A	354	202201D	1.420	67909.46	0.0968	2.017	250570.41
1/25/2022	A	356	202201D	1.420	66936.99	0.0968	2.017	247082.41
1/25/2022	A	357	202201D	1.419	70038.47	0.0964	2.016	259747.90
1/25/2022	A	358	202201D	1.420	70113.22	0.0965	2.017	259569.79
1/25/2022	A	Lipomed 300	11092018-B	1.420	215856.76	0.2999	2.017	254794.18

%CV = 1.15%

ALCOHOL ANALYSIS QC SUMMARY

Handwritten signature and date: 1/25/22

Report Date	1/25/2022
Reviewer	TJ Graham

RUN SUMMARY DATA

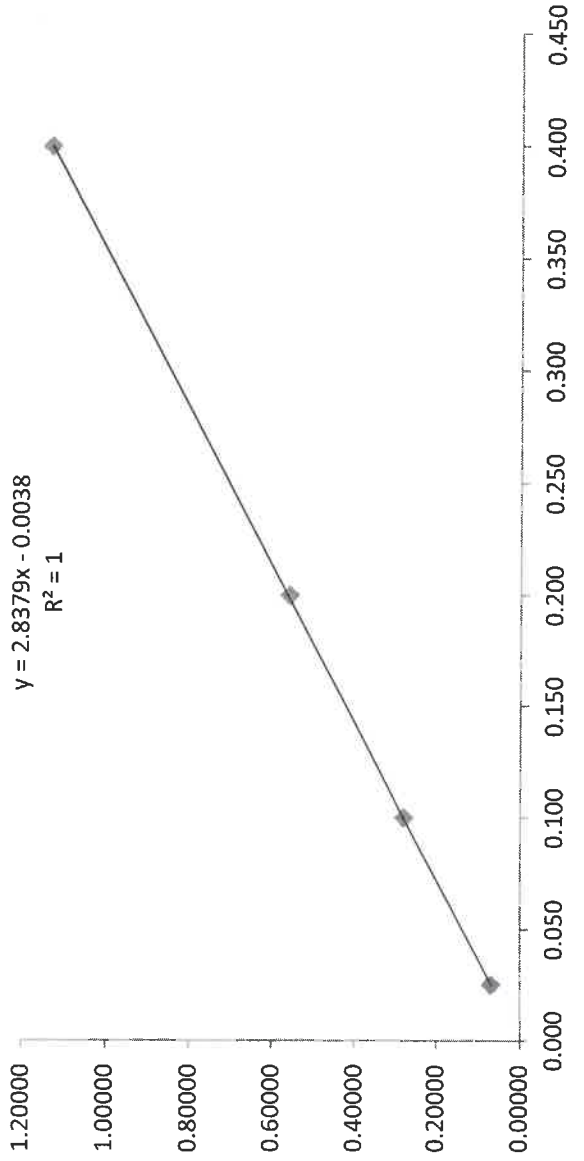
Run Date	Channel	Sample	Lot	Ethanol			n-Propanol		
				RT	Area	Conc.	RT	Area	Conc.
1/25/2022	A	CER 25	FN09081706	1.419	17411.10	0.0263	2.016	251013.31	0.0263
1/25/2022	A	CER 100	FN05311902	1.420	69197.25	0.0996	2.016	247440.50	0.0996
1/25/2022	A	CER 200	FN05101903	1.419	139547.93	0.1976	2.016	249143.37	0.1976
1/25/2022	A	CER 400	FN10051906	1.419	282467.28	0.4006	2.016	249277.84	0.4006

Summary

	Standard	g/dL	Ratio	Calc.	Diff
	Blank	0.000	0.00000	0.00000	0.00000
Slope	2.8379	0.025	0.06936	0.02578	0.00078
Intercept	-0.0038	0.100	0.27965	0.09988	-0.00012
Standard Error	0.003291078	0.200	0.56011	0.19871	-0.00129
R-Squared	1.0000	0.400	1.13314	0.40063	0.00063

Analytical Curve

$y = 2.8379x - 0.0038$
 $R^2 = 1$



Source: Alcohol Countermeasure Systems, Inc.

Lot	202201D
Level	0.08 g/ 210 L
Manufacture Date	1/18/2022
Expiration Date	1/18/2024

Bottle	Result (g/100mL)
348	0.0974
	0.0971
349	0.0968
	0.0968
350	0.0971
	0.0966
351	0.0969
	0.0968
352	0.0966
	0.0967
353	0.0970
	0.0968
354	0.0966
	0.0968
356	0.0967
	0.0968
357	0.0967
	0.0964
358	0.0968
	0.0965

Mean	0.0968
Std. Dev.	0.0002
Min	0.0964
Max	0.0974

1/25/22
JED