

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	325
10	326
11	327
12	328
13	330
14	337
15	338
16	340
17	342
18	343
19	Lipomed 100
20	325
21	326
22	327
23	328
24	330
25	337
26	338
27	340
28	342
29	343
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	FN02271802	4/2023
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:	0.20 g/ 210 L
Lot #:	201904D
Manufacture Date:	4/30/2019
Expiration Date	4/30/2021

Operator: _____

Date: _____

J. E. Laha
5/23/19

Alcohol Analysis QC Summary

Report Date	5/23/2019
Reviewer	TJ Graham

5/23/19
5/23/19

Run Summary Data			Ethanol			n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
5/23/2019	A	Volatiles Mix	041513 DKR	1.416	26207.83	0.0382	2.010	250653.91
5/23/2019	A	Blank	167428		0.00	0.0000	2.009	250794.81
5/23/2019	A	CER 25	FN09081706	1.414	17581.52	0.0256	2.008	254877.99
5/23/2019	A	CER 100	FN02271802	1.416	69802.53	0.1000	2.010	249349.34
5/23/2019	A	CER 200	FN06231704	1.415	143000.16	0.1994	2.010	254823.65
5/23/2019	A	CER 400	FN05131606	1.416	284751.75	0.4007	2.010	250398.71
5/23/2019	A	Blank	167428		0.00	0.0000	2.010	250928.94
5/23/2019	A	Lipomed 50	08012015-B	1.416	35006.78	0.0504	2.010	252184.58
5/23/2019	A	325	201904D	1.416	172931.08	0.2417	2.010	252840.48
5/23/2019	A	326	201904D	1.416	172377.91	0.2417	2.010	251939.22
5/23/2019	A	327	201904D	1.415	173349.11	0.2421	2.010	252950.90
5/23/2019	A	328	201904D	1.416	172726.16	0.2418	2.010	252436.50
5/23/2019	A	330	201904D	1.416	171112.42	0.2422	2.010	249608.48
5/23/2019	A	337	201904D	1.418	172417.72	0.2406	2.012	253185.88
5/23/2019	A	338	201904D	1.413	170272.43	0.2426	2.008	247964.29
5/23/2019	A	340	201904D	1.413	172961.96	0.2412	2.008	253406.50
5/23/2019	A	342	201904D	1.416	171200.08	0.2408	2.010	251180.83
5/23/2019	A	343	201904D	1.416	172170.99	0.2417	2.010	251682.27
5/23/2019	A	Lipomed 100	06072017-A_1	1.415	69747.45	0.0991	2.009	251113.23
5/23/2019	A	325	201904D	1.416	171160.45	0.2422	2.010	249688.19
5/23/2019	A	326	201904D	1.416	170468.21	0.2410	2.010	249957.23
5/23/2019	A	327	201904D	1.415	172348.16	0.2421	2.009	251489.29
5/23/2019	A	328	201904D	1.414	171628.91	0.2423	2.008	250265.03
5/23/2019	A	330	201904D	1.416	171126.98	0.2429	2.011	248937.04
5/23/2019	A	337	201904D	1.415	171747.66	0.2411	2.009	251695.83
5/23/2019	A	338	201904D	1.416	172688.26	0.2418	2.010	252330.34
5/23/2019	A	340	201904D	1.416	174829.42	0.2407	2.010	256612.73
5/23/2019	A	342	201904D	1.415	175100.28	0.2417	2.009	255972.19
5/23/2019	A	343	201904D	1.415	174343.15	0.2412	2.009	255437.50
5/23/2019	A	Lipomed 300	18052015-A/1	1.415	218325.44	0.2998	2.009	256932.40

%CV = 0.92%

ALCOHOL ANALYSIS QC SUMMARY

Report Date	5/23/2019
Reviewer	TJ Graham

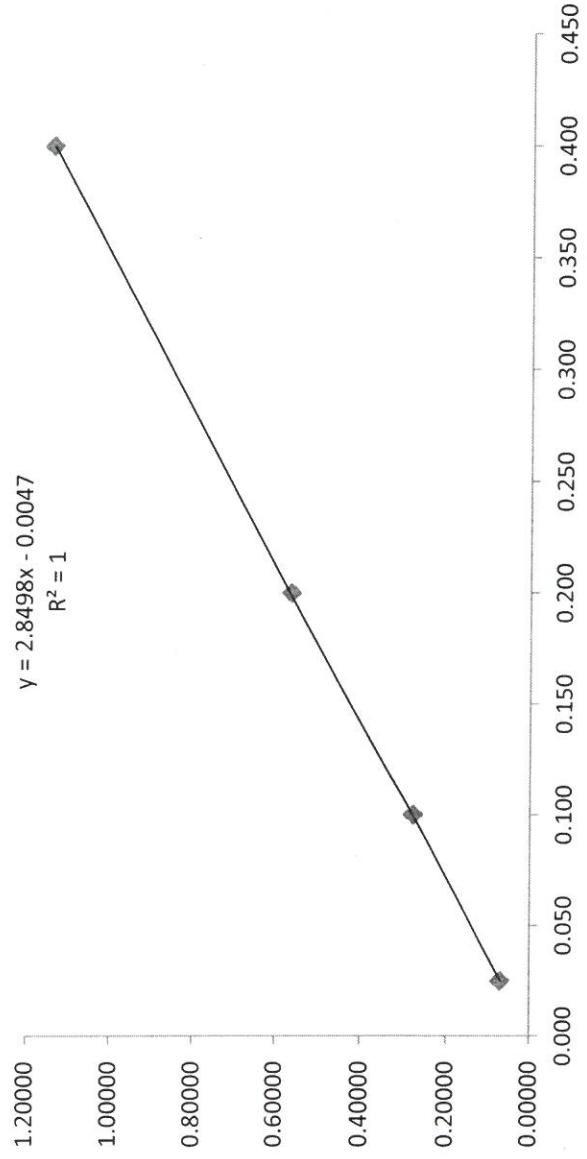
RUN SUMMARY DATA				Ethanol			n-Propanol	
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
5/23/2019	A	CER 25	FN09081706	1.414	17581.52	0.0256	2.008	254877.99
5/23/2019	A	CER 100	FN02271802	1.416	69802.53	0.1000	2.010	249349.34
5/23/2019	A	CER 200	FN06231704	1.415	143000.16	0.1994	2.010	254823.65
5/23/2019	A	CER 400	FN05131606	1.416	284751.75	0.4007	2.010	250398.71

Summary		Standard	g/dL	Ratio	Calc.	Diff
Slope	2.8498	Blank	0.000	0.00000	0.00000	0.00000
Intercept	-0.0047	CER 25	0.025	0.06898	0.02586	0.00086
Standard Error	0.003649911	CER 100	0.100	0.27994	0.09988	-0.00012
R-Squared	1.0000	CER 200	0.200	0.56117	0.19857	-0.00143
		CER 400	0.400	1.13719	0.40069	0.00069

Analytical Curve

$$y = 2.8498x - 0.0047$$

$$R^2 = 1$$



Source:	Alcohol Countermeasure Systems, Inc.
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Lot	201904D
Level	0.20 g/ 210 L
Manufacture Date	4/30/2019
Expiration Date	4/30/2021

Bottle	Result (g/100mL)
325	0.2417
	0.2422
326	0.2417
	0.2410
327	0.2421
	0.2421
328	0.2418
	0.2423
330	0.2422
	0.2429
337	0.2406
	0.2411
338	0.2426
	0.2418
340	0.2412
	0.2407
342	0.2408
	0.2417
343	0.2417
	0.2412

Mean	0.2417
Std. Dev.	0.0006
Min	0.2406
Max	0.2429

5/23/19
JD