

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	2228
10	2230
11	2231
12	2224
13	2223
14	2221
15	2222
16	2229
17	2232
18	2227
19	Lipomed 100
20	2228
21	2230
22	2231
23	2224
24	2223
25	2221
26	2222
27	2229
28	2232
29	2227
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		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:	0.200 g/210L
Lot #:	202005A
Manufacture Date:	5/12/2020
Expiration Date	5/12/2022

Operator: BSK

Date: 5/21/2020

Alcohol Analysis QC Summary

Report Date	5/21/2020
Reviewer	Brett Kirkland

BSK

Run Summary Data			Ethanol				n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area	
5/21/2020	A	Volatiles Mix	041513 DKR	1.393	20655.53	0.0384	1.987	210363.00	
5/21/2020	A	Blank	167428		0.00	0.0000	1.987	263628.61	
5/21/2020	A	CER 25	FN09081706	1.394	16880.95	0.0256	1.987	262497.71	
5/21/2020	A	CER 100	FN02271802	1.393	68408.47	0.0993	1.987	264949.88	
5/21/2020	A	CER 200	FN06231704	1.393	137064.01	0.1987	1.988	263452.67	
5/21/2020	A	CER 400	FN05131606	1.393	276543.96	0.4002	1.987	264815.75	
5/21/2020	A	Blank	167428		0.00	0.0000	1.988	263886.57	
5/21/2020	A	Lipomed 50	10072019-A	1.394	33836.09	0.0505	1.988	260784.23	
5/21/2020	A*	2228	202005A	1.393	165320.47	0.2420	1.987	262099.47	
5/21/2020	A	2230	202005A	1.393	165586.22	0.2411	1.988	263506.78	
5/21/2020	A	2231	202005A	1.394	165648.97	0.2419	1.988	262752.98	
5/21/2020	A	2224	202005A	1.393	165390.78	0.2429	1.988	261314.87	
5/21/2020	A	2223	202005A	1.393	166815.53	0.2419	1.987	264651.90	
5/21/2020	A	2221	202005A	1.393	165659.77	0.2417	1.987	263066.47	
5/21/2020	A	2222	202005A	1.393	165734.91	0.2415	1.987	263303.97	
5/21/2020	A	2229	202005A	1.393	165246.54	0.2415	1.987	262535.29	
5/21/2020	A	2232	202005A	1.393	165606.63	0.2419	1.987	262692.93	
5/21/2020	A	2227	202005A	1.393	165824.05	0.2417	1.988	263292.11	
5/21/2020	A	Lipomed 100	14082019-A	1.393	68839.76	0.0998	1.987	265912.96	
5/21/2020	A	2228	202005A	1.393	165195.87	0.2410	1.988	263026.18	
5/21/2020	A	2230	202005A	1.391	167577.04	0.2424	1.986	265329.11	
5/21/2020	A	2231	202005A	1.393	164076.69	0.2436	1.988	258486.60	
5/21/2020	A	2224	202005A	1.393	167837.24	0.2424	1.988	265704.18	
5/21/2020	A	2223	202005A	1.393	166224.51	0.2437	1.988	261709.67	
5/21/2020	A	2221	202005A	1.393	166394.71	0.2423	1.987	263497.17	
5/21/2020	A	2222	202005A	1.393	168986.30	0.2418	1.987	268212.97	
5/21/2020	A	2229	202005A	1.393	166585.52	0.2431	1.987	262953.03	
5/21/2020	A	2232	202005A	1.392	166582.41	0.2422	1.987	263915.54	
5/21/2020	A	2227	202005A	1.393	168620.90	0.2425	1.987	266783.64	
5/21/2020	A	Lipomed 300	11092018-B	1.393	209063.71	0.3002	1.987	267028.42	

%CV = 3.79%

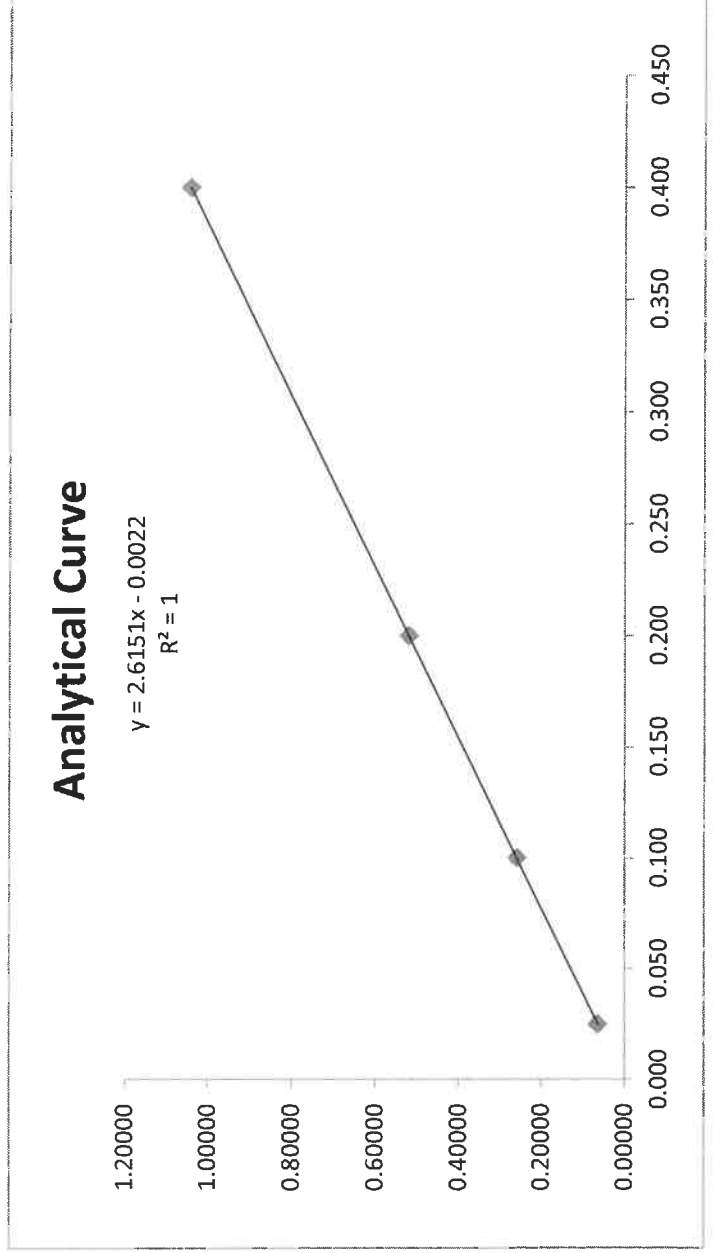
ALCOHOL ANALYSIS QC SUMMARY

Report Date	5/21/2020
Reviewer	Brett Kirkland

BK

RUN SUMMARY DATA				Ethanol			n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area	
5/21/2020	A	CER 25	FN09081706	1.394	16880.95	0.0256	1.987	262497.71	
5/21/2020	A	CER 100	FN02271802	1.393	68408.47	0.0993	1.987	264949.88	
5/21/2020	A	CER 200	FN06231704	1.393	137064.01	0.1987	1.988	263452.67	
5/21/2020	A	CER 400	FN05131606	1.393	276543.96	0.4002	1.987	264815.75	

Summary	Standard	g/dL	Ratio	Calc.	Diff
	Blank	0.000	0.00000	0.00000	0.00000
Slope	2.6151	0.025	0.06431	0.02544	0.00044
Intercept	-0.0022	0.100	0.25819	0.09958	-0.00042
Standard Error	0.001232322	0.200	0.52026	0.19980	-0.00020
R-Squared	1.0000	0.400	1.04429	0.40018	0.00018



Source: Alcohol Countermeasure Systems, Inc.

Lot	202005A
Level	0.200 g/210L
Manufacture Date	5/12/2020
Expiration Date	5/12/2022

BK

Bottle	Result (g/100mL)
2228	0.2420
	0.2410
2230	0.2411
	0.2424
2231	0.2419
	0.2436
2224	0.2429
	0.2424
2223	0.2419
	0.2437
2221	0.2417
	0.2423
2222	0.2415
	0.2418
2229	0.2415
	0.2431
2232	0.2419
	0.2422
2227	0.2417
	0.2425

Mean	0.2422
Std. Dev.	0.0007
Min	0.2410
Max	0.2437