

Loadlist-Alcohol Reference Solution Verification

Location	Sample
1	Volatiles Mix
2	Blank
3	Cerilliant 025
4	Cerilliant 100
5	Cerilliant 200
6	Cerilliant 400
7	Blank
8	Cerilliant 50
9	2212
10	2213
11	2215
12	2216
13	2217
14	2227
15	2228
16	2229
17	2230
18	2231
19	Fluka 100
20	2212
21	2213
22	2215
23	2216
24	2217
25	2227
26	2228
27	2229
28	2230
29	2231
30	Cerilliant 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-SOP section 2.14	Dec-16

Reagents, Calibrators and Controls

Materials	Lot	Exp. Date
Internal Standard	030117 TG	na
Volatiles Mixture	041513 DKR	na
Cerilliant 025	FN06221502	8/2020
Cerilliant 100	FN06181501	6/2020
Cerilliant 200	FN07201502	10/2020
Cerilliant 400	FN11191402	2/2020
Cerilliant 50	FN06231406	7/2019
Fluka 100 (33961)	SZBE029XV	1/29/2019
Cerilliant 300	FN02121601	2/2021

Reference Solution

Level Tested:	0.20 g/210L
Lot #:	201702B
Manufacture Date:	2/23/2017
Expiration Date	2/23/2019

Operator: JJ Graham
Date: 3/3/17

Alcohol Analysis QC Summary

Report Date	3/3/2017
Reviewer	TJ Graham

Run Summary Data			Ethanol			n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
3/3/2017	A	Vols Mix	041513 DKR	1.412	23571.81	0.0382	2.005	204524.57
3/3/2017	A	Blank			0.00	0.0000	2.006	206403.16
3/3/2017	A	CER 025	FN062221502	1.412	15439.10	0.0249	2.006	205336.31
3/3/2017	A	CER 100	FN06181501	1.412	61689.27	0.0999	2.006	205116.65
3/3/2017	A	CER 200	FN07201502	1.411	122718.61	0.2002	2.005	204171.94
3/3/2017	A	CER 400	FN11191402	1.412	241801.98	0.4000	2.006	201016.81
3/3/2017	A	Blank			0.00	0.0000	2.006	201684.49
3/3/2017	A	Cerilliant 50	FN06231406	1.413	30447.52	0.0504	2.006	201103.33
3/3/2017	A	2212	201702B	1.412	148702.23	0.2436	2.006	203045.73
3/3/2017	A	2213	201702B	1.412	146390.91	0.2427	2.006	200575.93
3/3/2017	A	2215	201702B	1.411	148061.89	0.2427	2.005	202886.73
3/3/2017	A	2216	201702B	1.411	148001.31	0.2418	2.005	203549.14
3/3/2017	A	2217	201702B	1.412	148345.32	0.2416	2.006	204216.29
3/3/2017	A	2227	201702B	1.412	148447.85	0.2419	2.006	204072.57
3/3/2017	A	2228	201702B	1.412	148721.03	0.2418	2.006	204561.42
3/3/2017	A	2229	201702B	1.412	150512.91	0.2415	2.006	207266.22
3/3/2017	A	2230	201702B	1.412	148469.02	0.2423	2.006	203748.77
3/3/2017	A	2231	201702B	1.412	148490.83	0.2426	2.006	203576.06
3/3/2017	A	Fluka 100	SZBE029XV	1.412	60042.21	0.0964	2.006	207179.28
3/3/2017	A	2212	201702B	1.412	148927.16	0.2417	2.006	204917.28
3/3/2017	A	2213	201702B	1.411	149228.07	0.2425	2.006	204621.52
3/3/2017	A	2215	201702B	1.412	147082.99	0.2409	2.006	203090.45
3/3/2017	A	2216	201702B	1.412	146819.77	0.2425	2.006	201347.29
3/3/2017	A	2217	201702B	1.411	146429.83	0.2431	2.005	200317.25
3/3/2017	A	2227	201702B	1.411	147769.06	0.2417	2.005	203301.10
3/3/2017	A	2228	201702B	1.412	147866.76	0.2427	2.006	202655.23
3/3/2017	A	2229	201702B	1.412	149189.56	0.2420	2.006	204986.01
3/3/2017	A	2230	201702B	1.412	148527.69	0.2426	2.006	203612.29
3/3/2017	A	2231	201702B	1.412	150616.07	0.2432	2.006	206000.14
3/3/2017	A	Cerilliant 300	FN02121601	1.412	184899.21	0.2989	2.006	205744.31

%CV = 0.91%

3/3/17
JD

ALCOHOL ANALYSIS QC SUMMARY

Report Date	3/3/2017
Reviewer	TJ Graham

3/3/17
JG

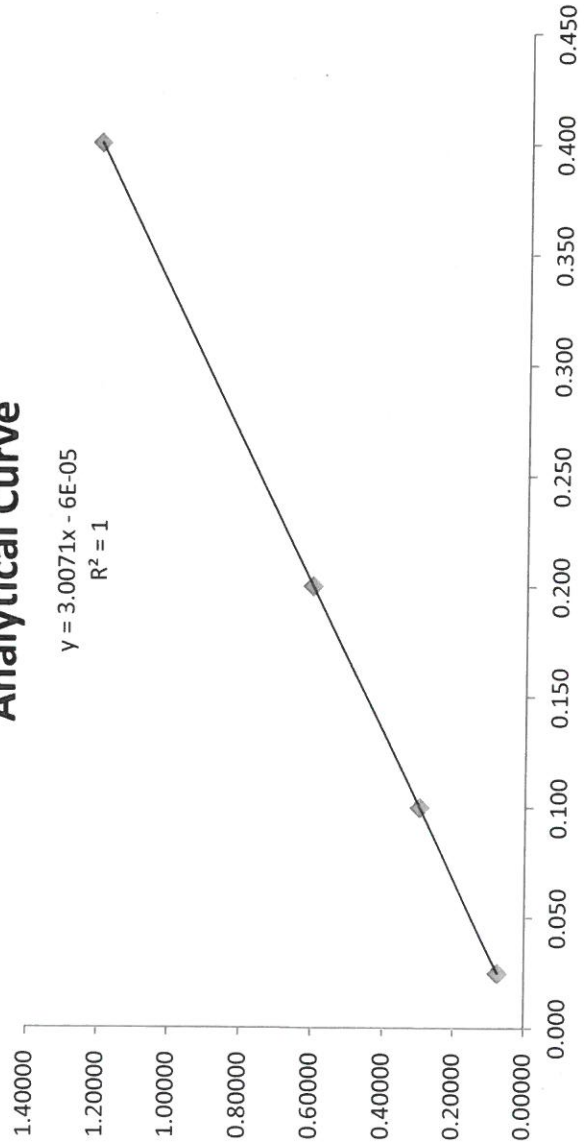
RUN SUMMARY DATA				Ethanol			n-Propanol	
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
3/3/2017	A	CER 025	FN06221502	1.412	15439.10	0.0249	2.006	205336.31
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3/3/2017	A	CER 400	FN11191402	1.412	241801.98	0.4000	2.006	201016.81

Summary		Standard	g/dL	Ratio	Calc.	Diff
Slope		Blank	0.000	0.00000	0.00000	0.00000
Intercept	3.0071	CER 025	0.025	0.07519	0.02503	0.00003
	-0.0001	CER 100	0.100	0.30075	0.10004	0.00004
Standard Error	0.000246459	CER 200	0.200	0.60106	0.19990	-0.00010
R-Squared	1.0000	CER 400	0.400	1.20289	0.40004	0.00004

Analytical Curve

$$y = 3.0071x - 6E-05$$

$$R^2 = 1$$



Source:	Alcohol Countermeasure Systems, Inc.
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Lot	201702B
Level	0.20 g/210L
Manufacture Date	2/23/2017
Expiration Date	2/23/2019

3/3/17
JF

Bottle	Result (g/100mL)
2212	0.2436
	0.2417
2213	0.2427
	0.2425
2215	0.2427
	0.2409
2216	0.2418
	0.2425
2217	0.2416
	0.2431
2227	0.2419
	0.2417
2228	0.2418
	0.2427
2229	0.2415
	0.2420
2230	0.2423
	0.2426
2231	0.2426
	0.2432

Mean	0.2423
Std. Dev.	0.0007
Min	0.2409
Max	0.2436