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	Cerilliant 50
9	247
10	248
11	250
12	251
13	253
14	259
15	261
16	262
17	272
18	278
19	Sigma-Aldrich 100
20	247
21	248
22	250
23	251
24	253
25	259
26	261
27	262
28	272
29	278
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	May-17

Reagents, Calibrators and Controls

Materials	Lot	Exp. Date
Internal Standard	080117 TG	na
Volatiles Mixture	041513 DKR	na
Water (Fisher Scientific)	167428	11/2021
Cerilliant 25	FN06221502	8/2020
Cerilliant 100	FN06181501	6/2020
Cerilliant 200	FN03301601	4/2021
Cerilliant 400	FN11191402	2/2020
Cerilliant 50	FN04271601	6/2021
Sigma-Aldrich 100 (33961)	SZBE029XV	1/29/2019
Cerilliant 300	FN02121601	2/2021

Reference Solution

Level Tested:	0.20 g/210 L
Lot #:	201707C
Manufacture Date:	7/24/2017
Expiration Date	7/24/2019

Operator: JJ Dahmm

Date: 8/2/17

Alcohol Analysis QC Summary

Report Date	8/2/2017
Reviewer	TJ Graham

TJ 8/2/17

Run Summary Data				Ethanol			n-Propanol	
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area
8/2/2017	A	Vols Mix	041513 DKR	1.414	23458.45	0.0385	2.007	211628.53
8/2/2017	A	Blank	167428		0.00	0.0000	2.007	209219.35
8/2/2017	A	CER 025	FN06221502	1.413	15285.41	0.0250	2.007	214396.11
8/2/2017	A	CER 100	FN06181501	1.413	60444.90	0.0998	2.007	211264.66
8/2/2017	A	CER 200	FN03301601	1.413	119907.29	0.2015	2.007	206626.23
8/2/2017	A	CER 400	FN11191402	1.412	244226.23	0.3996	2.006	211728.26
8/2/2017	A	Blank	167428		0.00	0.0000	2.006	211037.51
8/2/2017	A	Cerilliant 50	FN04271601	1.413	30884.45	0.0506	2.006	212267.93
8/2/2017	A	247	201707C	1.413	146137.32	0.2428	2.007	208558.49
8/2/2017	A	248	201707C	1.413	148454.40	0.2410	2.007	213484.04
8/2/2017	A	250	201707C	1.413	149682.63	0.2408	2.007	215469.11
8/2/2017	A	251	201707C	1.412	148274.52	0.2417	2.006	212583.80
8/2/2017	A	253	201707C	1.413	148188.47	0.2430	2.007	211360.73
8/2/2017	A	259	201707C	1.412	146693.23	0.2426	2.006	209531.44
8/2/2017	A	261	201707C	1.413	148122.75	0.2429	2.007	211345.97
8/2/2017	A	262	201707C	1.412	148722.76	0.2412	2.006	213698.32
8/2/2017	A	272	201707C	1.413	148304.24	0.2409	2.007	213377.35
8/2/2017	A	278	201707C	1.413	148200.56	0.2427	2.007	211604.99
8/2/2017	A	Sigma-Aldrich 100	SZBE029XV	1.413	59208.86	0.0963	2.006	213509.19
8/2/2017	A	247	201707C	1.412	147280.44	0.2404	2.007	212297.62
8/2/2017	A	248	201707C	1.412	147344.92	0.2419	2.006	211115.99
8/2/2017	A	250	201707C	1.412	149285.64	0.2402	2.006	215352.12
8/2/2017	A	251	201707C	1.412	147242.97	0.2423	2.006	210598.95
8/2/2017	A	253	201707C	1.413	147306.29	0.2426	2.007	210427.68
8/2/2017	A	259	201707C	1.413	149262.02	0.2412	2.007	214491.86
8/2/2017	A	261	201707C	1.412	148333.09	0.2421	2.006	212326.54
8/2/2017	A	262	201707C	1.412	148417.48	0.2412	2.006	213291.66
8/2/2017	A	272	201707C	1.413	150721.36	0.2408	2.007	216927.40
8/2/2017	A	278	201707C	1.413	148969.36	0.2420	2.007	213339.14
8/2/2017	A	Cerilliant 300	FN02121601	1.413	189388.30	0.3011	2.007	217949.51
							%CV =	1.13%

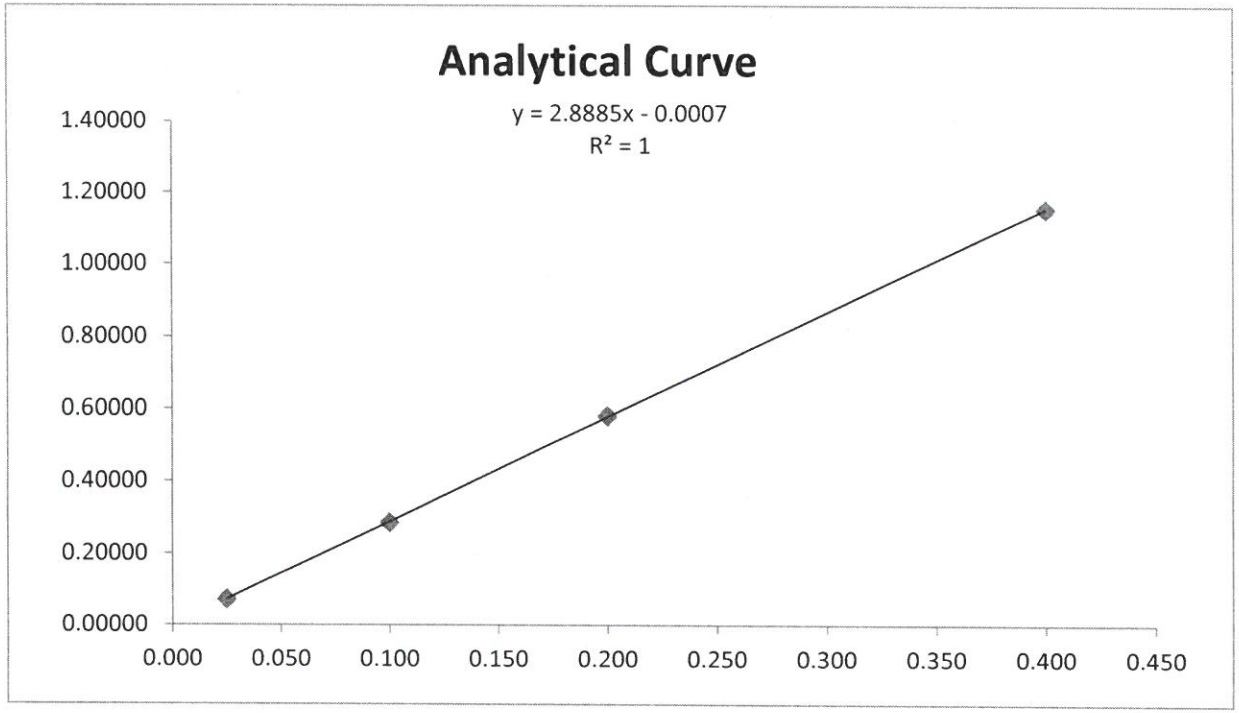
ALCOHOL ANALYSIS QC SUMMARY

Report Date	8/2/2017
Reviewer	TJ Graham

TJG 8/2/17

RUN SUMMARY DATA				**Ethanol**			**n-Propanol**	
Run Date	**Channel**	**Sample**	**Lot**	**RT**	**Area**	**Conc.**	**RT**	**Area**
8/2/2017	A	CER 025	FN06221502	1.413	15285.41	0.0250	2.007	214396.11
8/2/2017	A	CER 100	FN06181501	1.413	60444.90	0.0998	2.007	211264.66
8/2/2017	A	CER 200	FN03301601	1.413	119907.29	0.2015	2.007	206626.23
8/2/2017	A	CER 400	FN11191402	1.412	244226.23	0.3996	2.006	211728.26

Summary		**Standard**	**g/dL**	**Ratio**	**Calc.**	**Diff**
		Blank	0.000	0.00000	0.00000	0.00000
Slope	2.8885	CER 025	0.025	0.07130	0.02494	-0.00006
Intercept	-0.0007	CER 100	0.100	0.28611	0.09931	-0.00069
Standard Error	0.002883251	CER 200	0.200	0.58031	0.20116	0.00116
R-Squared	1.0000	CER 400	0.400	1.15349	0.39960	-0.00040



Source:	Alcohol Countermeasure Systems, Inc.

Lot	201707C
Level	0.20 g/210 L
Manufacture Date	7/24/2017
Expiration Date	7/24/2019

JD
8/2/17

Bottle	Result (g/100mL)
247	0.2428
	0.2404
248	0.2410
	0.2419
250	0.2408
	0.2402
251	0.2417
	0.2423
253	0.2430
	0.2426
259	0.2426
	0.2412
261	0.2429
	0.2421
262	0.2412
	0.2412
272	0.2409
	0.2408
278	0.2427
	0.2420

Mean	0.2417
Std. Dev.	0.0009
Min	0.2402
Max	0.2430