

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	Cerilliant 50
8	1633
9	1636
10	1638
11	1634
12	1637
13	1640
14	1626
15	1628
16	1632
17	1627
18	Cerilliant 100
19	1633
20	1636
21	1638
22	1634
23	1637
24	1640
25	1626
26	1628
27	1632
28	1627
29	Cerilliant 300
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	

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	0.1	min	✓
Injection Time	0.03	min	✓
Cycle Time	4.5	min	✓
inlet temp	90	C	✓
Carrier pressure	15	psi	✓
Column oven temp	55	C	✓
Run Time	5.0	min	✓
FID Temp	200	C	✓
Hydrogen Flow	45	mL/min	✓
Air Flow	450	mL/min	✓
Nitrogen Flow	15	mL/min	✓

Helium  
10/17/16  
BK

Reagents, Calibrators and Controls

Materials	Lot	Exp. Date
Internal Standard	03032014bhk	na
Volatiles Mixture	041513dkr	na
Cerilliant 025	FN032210-01	04/2015
Cerilliant 100	FN050312-01	05/2017
Cerilliant 200	FN032712-01	03/2017
Cerilliant 400	FN012712-01	01/2017
Cerilliant 50	FN010912-01	01/2017
Cerilliant 100*	FN050312-01	05/2017
Cerilliant 300	FN09061305	10/2018

\*separate ampule

Reference Solution

Level Tested:	0.20g/210L
Lot #:	201408B
Manufacture Date:	8/12/2014
Expiration Date	8/12/2016

Operator: BK

Date: 9/3/14

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Lot #:	201408B
Manufacture Date:	8/12/2014
Expiration Date	8/12/2016

Operator: BK

Date: 9/3/14

Alcohol Analysis QC Summary

Report Date	9/3/2014
Reviewer	Brett Kirkland

*BK*

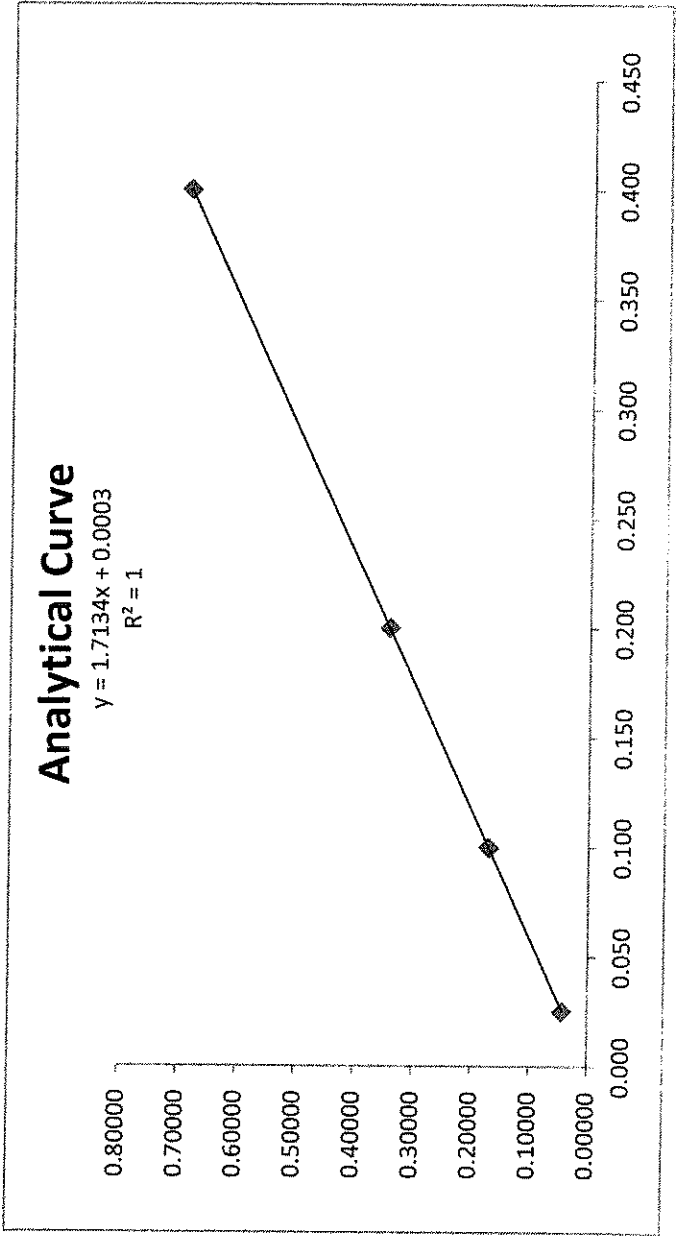
Run Summary Data			Ethanol				n-Propanol				
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area	Conc.	RT	Area
9/3/2014	A	Vols Mix	041513dkr	1.394	16289.25	0.046	1.995	238481.71	0.000	1.998	229663.57
9/3/2014	A	Blank		0.000	0.00		2.021	227901.93	0.027	1.998	229269.5
9/3/2014	A	CER 025	FN032210-01	1.423	9909.16	0.108	1.995	22826.38	0.217	1.995	228172.14
9/3/2014	A	CER 100	FN050312-01	1.397	39260.16	0.241	1.998	228969.87	0.400	1.998	230360.14
9/3/2014	A	CER 200	FN032712-01	1.393	78811.07	0.242	1.998	231170.69	0.241	1.998	227926.76
9/3/2014	A	CER 400	FN012712-01	1.394	156474.15	0.242	1.998	229764.59	0.241	1.998	233497.97
9/3/2014	A	Cerilliant 50	FN010112-01	1.397	19790.87	0.241	1.998	228693.37	0.242	1.995	225438.49
9/3/2014	A	1633	201408B	1.397	95284.66	0.241	1.998	232694.79	0.242	1.998	223948.49
9/3/2014	A	1636	201408B	1.397	96213.39	0.241	1.998	227897.29	0.241	1.998	227938.03
9/3/2014	A	1638	201408B	1.394	96112.18	0.241	1.998	230180.17	0.241	1.997	233416.66
9/3/2014	A	1634	201408B	1.397	94196.30	0.241	1.999	231728.30	0.241	1.999	229951.24
9/3/2014	A	1637	201408B	1.397	95198.61	0.241	1.998	234719.86	0.242	1.996	234701.89
9/3/2014	A	1640	201408B	1.397	96349.77	0.241	1.999	231282.26	0.242	1.999	231282.26
9/3/2014	A	1626	201408B	1.397	94647.22	0.241	2.021	229638.02	0.241	2.021	229638.02
9/3/2014	A	1628	201408B	1.394	93718.91	0.241	2.021	231555.48	0.242	2.021	231555.48
9/3/2014	A	1632	201408B	1.397	96029.24	0.241	1.998	229651.66	0.241	1.998	229651.66
9/3/2014	A	1627	201408B	1.397	92831.86	0.241	1.998	229651.66	0.241	1.998	229651.66
9/3/2014	A	Cerilliant 100	FN050312-01	1.394	39105.12	0.100	1.995	227897.29	0.100	1.995	227897.29
9/3/2014	A	1633	201408B	1.397	95250.22	0.244	1.998	227938.03	0.244	1.998	227938.03
9/3/2014	A	1636	201408B	1.396	95295.92	0.241	1.997	230180.17	0.241	1.997	230180.17
9/3/2014	A	1638	201408B	1.394	96489.97	0.241	1.996	233416.66	0.241	1.996	233416.66
9/3/2014	A	1634	201408B	1.398	96297.57	0.241	1.999	231728.30	0.241	1.999	231728.30
9/3/2014	A	1637	201408B	1.394	95716.48	0.243	1.995	229951.24	0.243	1.995	229951.24
9/3/2014	A	1640	201408B	1.397	96612.11	0.240	1.998	234719.86	0.240	1.998	234719.86
9/3/2014	A	1626	201408B	1.394	96936.12	0.241	1.996	234701.89	0.241	1.996	234701.89
9/3/2014	A	1628	201408B	1.398	95780.56	0.242	1.999	231282.26	0.242	1.999	231282.26
9/3/2014	A	1632	201408B	1.422	95103.73	0.242	2.021	229638.02	0.242	2.021	229638.02
9/3/2014	A	1627	201408B	1.422	96552.66	0.243	2.021	231555.48	0.243	2.021	231555.48
9/3/2014	A	Cerilliant 300	N09061305	1.397	118835.85	0.302	1.998	229651.69	0.302	1.998	229651.69

ALCOHOL ANALYSIS QC SUMMARY

Report Date	9/3/2014
Reviewer	Brett Kirkland <i>BK</i>

RUN SUMMARY DATA				Ethanol			n-Propanol		
Run Date	Channel	Sample	Lot	RT	Area	Conc.	RT	Area	
9/3/2014	A	CER 025	FN032210-01	1.423	9909.16	0.027	2.021	227901.9	
9/3/2014	A	CER 100	FN050312-01	1.397	39260.16	0.108	1.998	229269.5	
9/3/2014	A	CER 200	FN032712-01	1.393	78811.07	0.217	1.995	229826.4	
9/3/2014	A	CER 400	FN012712-01	1.394	156474.2	0.400	1.995	228172.1	

Summary	Standard	E/dL	Ratio	Calc.	Diff
	Blank	0.000	0.00000	0.00000	0.00000
Slope	1.7134	0.025	0.04348	0.02520	0.00020
Intercept	0.0003	0.100	0.17124	0.09977	-0.00023
Standard Error	0.000384385	0.200	0.34292	0.19996	-0.00004
R-Squared	1.0000	0.400	0.68577	0.40006	0.00006



Source: Alcohol Countermeasure Systems, Inc.

Lot	201408B
Level	0.20 g/210L
Manufacture Date	8/12/2014
Expiration Date	8/12/2016

BK

Bottle	Result (g/100mL)
1633	0.241
	0.244
1636	0.242
	0.241
1638	0.242
	0.241
1634	0.241
	0.242
1637	0.242
	0.243
1640	0.241
	0.240
1626	0.241
	0.241
1628	0.242
	0.242
1632	0.241
	0.242
1627	0.242
	0.243

Mean	0.2417
Std. Dev.	0.000923381
Min	0.240
Max	0.244