REPCO MARKETING INC.

3101-188 STONYBROOK DRIVE
RALEIGH, N.C. 27604
919-876-5480

CERTIFICATE OF ANALYSIS

MANUFACTURER AND SUPPLIER: RepCo Marketing, Inc.
LOT NUMBER: 13803
EXPIRATION DATE: September 3, 2015 at 11:59 p.m.

RepCo Marketing, Inc. certifies the following:

RepCo Marketing, Inc. manufactured, tested and supplied Lot Number **13803** of Alcohol Certified Solution for simulators. Random samples of said lot number were analyzed by an independent laboratory utilizing a gas chromatograph and found to contain **.0967** gms/dl +/-.003 gms/dl wt/vol ethanol (95% Confidence).

The alcohol and distilled water used in the solution were found to be free of any interferring substance.

This solution will produce a vapor alcohol value of **.080** +/-3% gms/210L Breath when heated to 34 Degrees Celsius +/-0.2 Degrees Celsius in a simulator (95% Confidence).

The date of manufacture for this lot number is **September 4, 2013** The expiration date for this lot number is **September 3, 2015** at 11:59 p.m.

This document is a true representation of the original Certificate of Analysis.

Cecil B. Garner, President
RepCo Marketing, Inc.

Form RM 02

REPCO MARKETING INC.

3101-188 STONYBROOK DRIVE
RALEIGH, N.C. 27604
919-876-5480

NIST TRACEABLE STANDARDS
WET BATH SIMULATOR SOLUTION

NIST
LOT SRN 2894
ETHANOL CONCENTRATION VALUE
(1.544% +/- 0.016% by mass)
EXPIRATION DATE 31 January 2014

CERILLIANT ANALYTICAL REFERANCE STANDARDS
LOT FN102609-03
ETHANOL- 100
ETHANOL CERTIFIED CONCENTRATION VALUE
.100.0 +/- 3.1 mg/dl (95% CONFIDENCE)
EXPIRATION DATE October 2014
TRACEABLE STANDARD- **NIST LOT SRM 2894**

DATA RESOURCES, INC.
REPCO LOT **13803 .080 +/- .003%gms/210L BREATH**
ETHANOL CERTIFIED CONCENTRATION VALUE
.0968 gms/dl +/-.0031 gms/dl (95% CONFIDENCE)
TRACEABLE STANDARD-**CERILLIANT LOT FN102609-03**

REPCO MARKETING, INC.
RepCo Lot 13803 .080 +/- .003% gms/210L BREATH
ETHANOL CERTIFIED CONCENTRATION VALUE
.0968 gms/dl +/- .0031 gms/dl (95% CONFIDENCE)
EXPIRATION DATE **September 3, 2015**
TRACEABLE STANDARD-DATA RESOURCES, INC. **REPCO LOT 13803**

And CERILLIANT **LOT FN10269-03**

THIS DOCUMENT IS A TRUE REPRESENTATION OF THE CERTIFICATES OF ANALYSIS CITED ABOVE.

Cecil B. Garner

Cecil B. Garner
President
RepCo Marketing, Inc.

Raw data from analysis: LOT #13803

Analyst:	Bottle #262	sample #1	a	0.0953	overall mean:
SL			b	0.094	0.0940
		sample #2	a	0.0959	
			b	0.0947	
	bottle #1542	sample #3	a	0.0941	
			b	0.093	
		Sample #4	a	0.0947	
			b	0.0938	
Analyst:	Bottle #152	sample #1	a	0.0979	overall mean:
JJ			b	0.0972	0.0977
		sample #2	a	0.0978	
			b	0.0974	
	bottle #432	sample #3	a	0.0979	
			b	0.0973	
		Sample #4	a	0.0982	
			b	0.0978	

average of all raw data: **0.0960625**

alcohol content conversion with 1.23: **0.0781**

with 1.21: 0.07939

Target value from provider:

0.0967	+/- 3% range	0.0996
		0.0938
0.08	+/- 3% range	0.0824
		0.0776

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: REPCO 13803 BOTTLE 154 Analysis Date(s): 18 Oct 2013

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0941	0.0930	0.0011	0.0935	0.0939	
(g/100cc)	0.0947	0.0938	0.0009	0.0942		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: BAC.M
Hamilton Auto-Dilutor Serial Number: MD96JF1032

Reporting of Results **Uncertainty of Measurement (UM%): 5.00%**

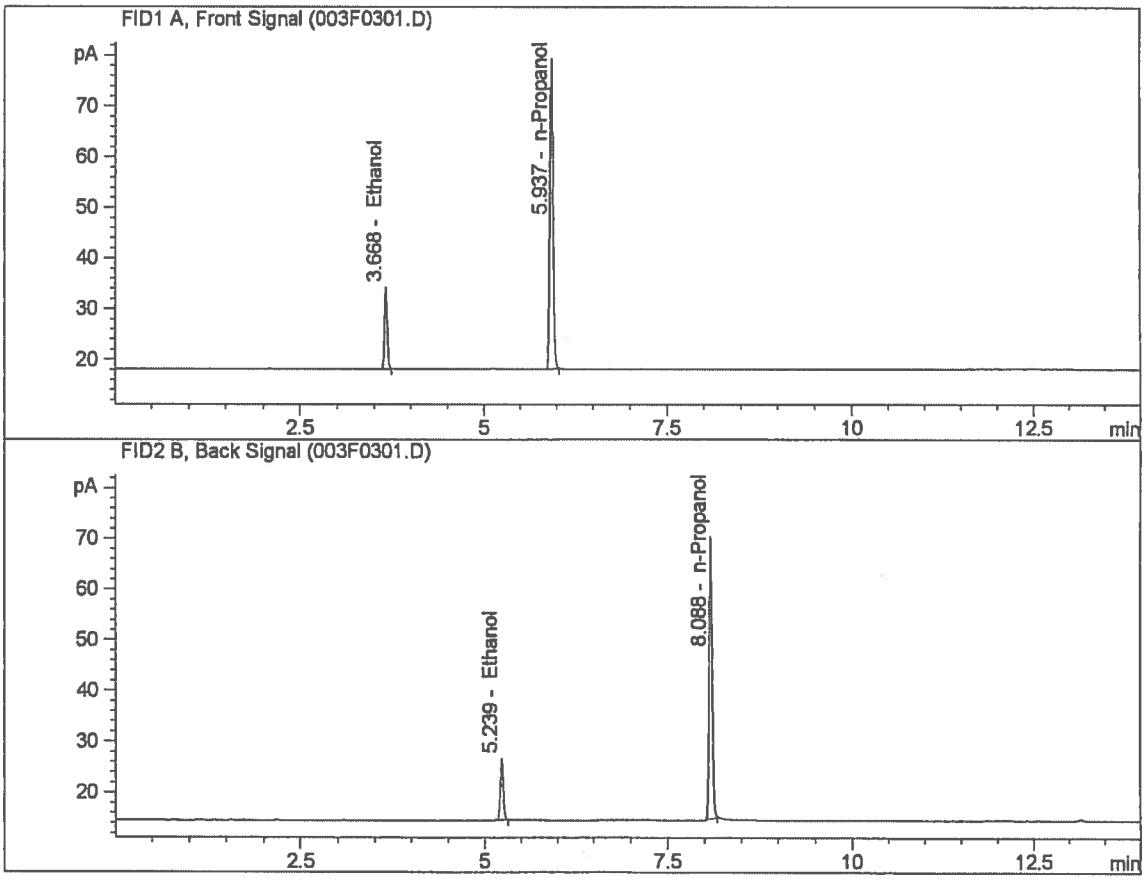
Overall Mean (g/100cc)	Low	High	5% of Mean
0.0939	**0.0893**	**0.0985**	**0.0046**

	Reported Result	
	0.093	

Calibration and control data are stored centrally. **Analyst:** _____ **Page 2**

ISP Forensic Services Blood Alcohol Report

Sample Name	:	REPCO 13803 BOTTLE 1542-A
Operator	:	District 5 Forensic Services
Injection Date	:	Oct 18, 2013
Method	:	BAC.M
Acq. Instrument	:	CN10742043

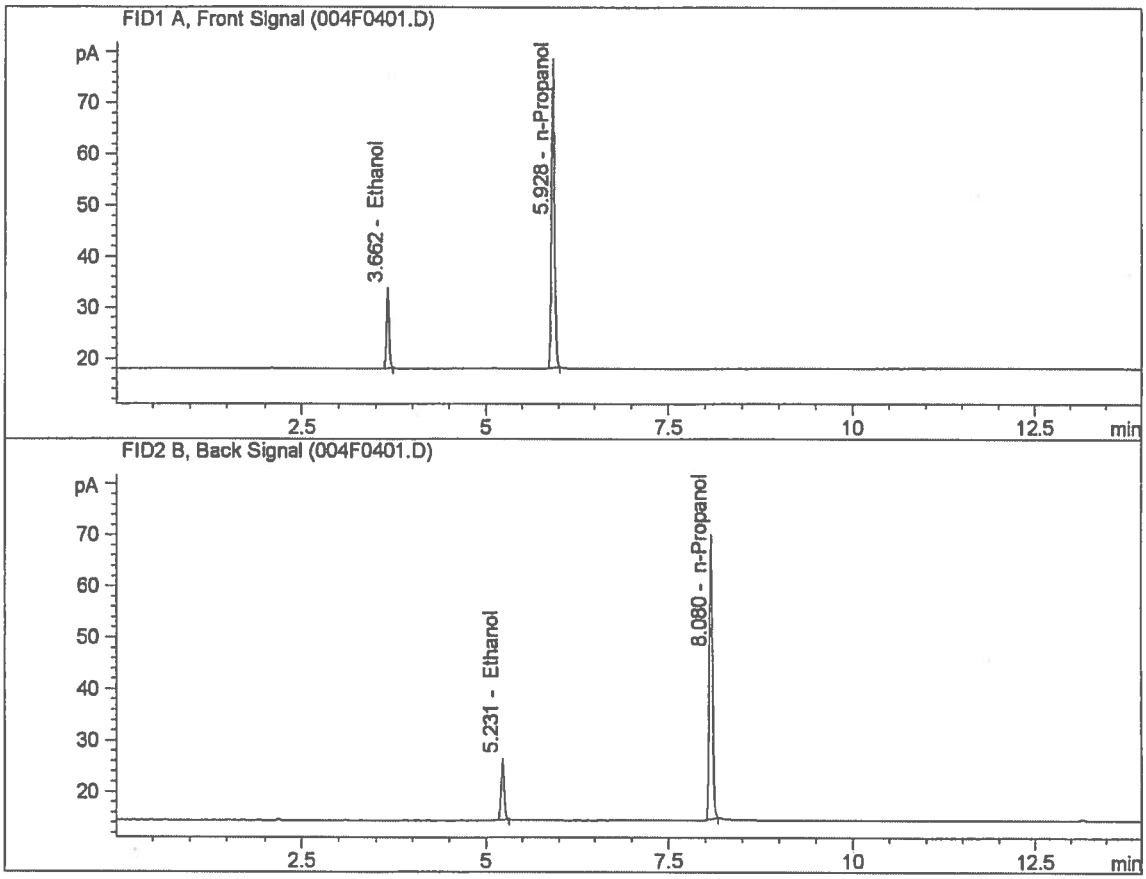


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	39.80479	0.0941	g/100cc
2.	Ethanol	Column 2:	35.04055	0.0930	g/100cc
3.	n-Propanol	Column 1:	190.81598	1.0000	g/100cc
4.	n-Propanol	Column 2:	169.88226	1.0000	g/100cc

Analyst Initials: _____

ISP Forensic Services Blood Alcohol Report

Sample Name	:	REPCO 13803 BOTTLE 1542-B
Operator	:	District 5 Forensic Services
Injection Date	:	Oct 18, 2013
Method	:	BAC.M
Acq. Instrument	:	CN10742043



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	39.63585	0.0947	g/100cc
2.	Ethanol	Column 2:	35.01467	0.0938	g/100cc
3.	n-Propanol	Column 1:	188.66333	1.0000	g/100cc
4.	n-Propanol	Column 2:	168.38370	1.0000	g/100cc

Analyst Initials: _____

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: REPCO 13803 BOTTLE 026Analysis Date(s): 18 Oct 2013

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0953	0.0940	0.0013	0.0946	0.0949	
(g/100cc)	0.0959	0.0947	0.0012	0.0953		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: BAC.M
Hamilton Auto-Dilutor Serial Number: MD96JF1032

Reporting of Results **Uncertainty of Measurement (UM%): 5.00%**

Overall Mean (g/100cc)	Low	High	5% of Mean
0.0949	0.0902	0.0996	0.0047

Reported Result

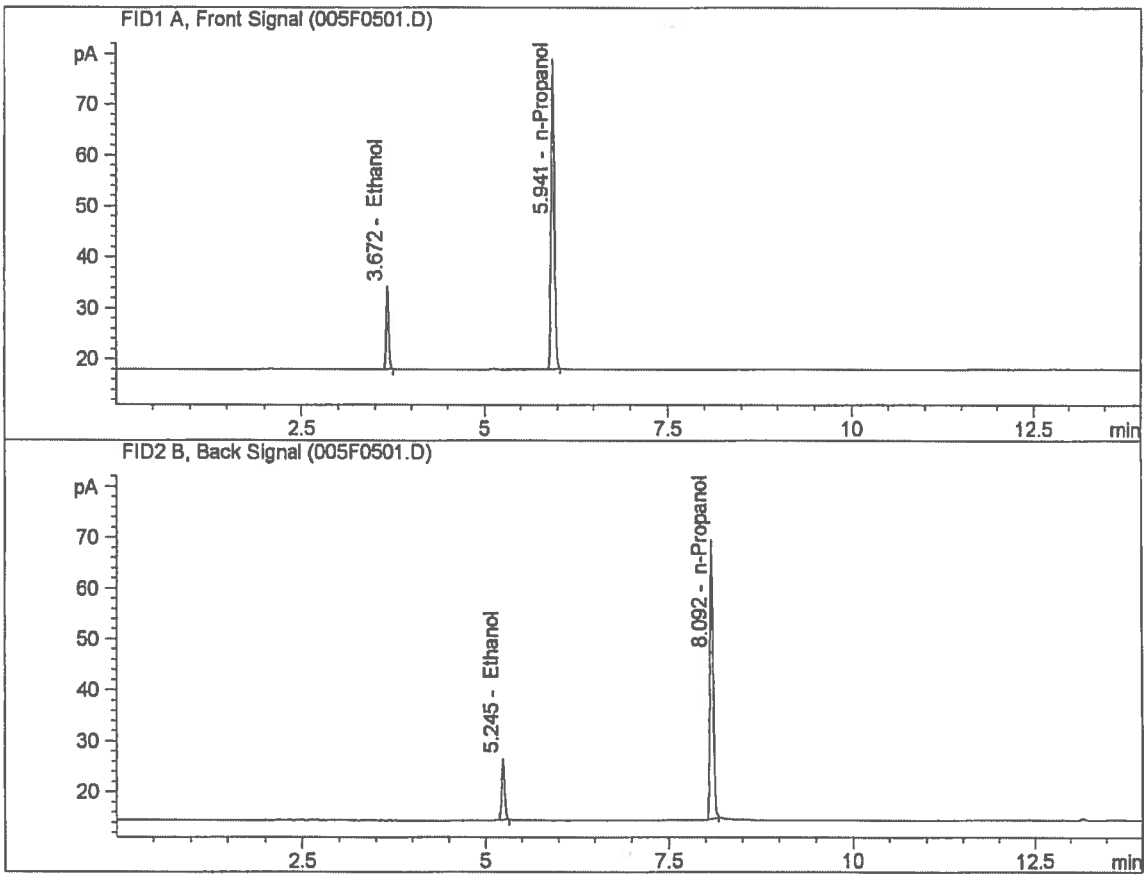
0.094

Calibration and control data are stored centrally. **Analyst:** _____

Issued: 04/15/2013
Volatiles BAC Calculation Spreadsheet Rev 2
Issuing Authority: Quality Manager

ISP Forensic Services Blood Alcohol Report

Sample Name : REPCO 13803 BOTTLE 0263-A
Operator : District 5 Forensic Services
Injection Date : Oct 18, 2013
Method : BAC.M
Acq. Instrument: CN10742043

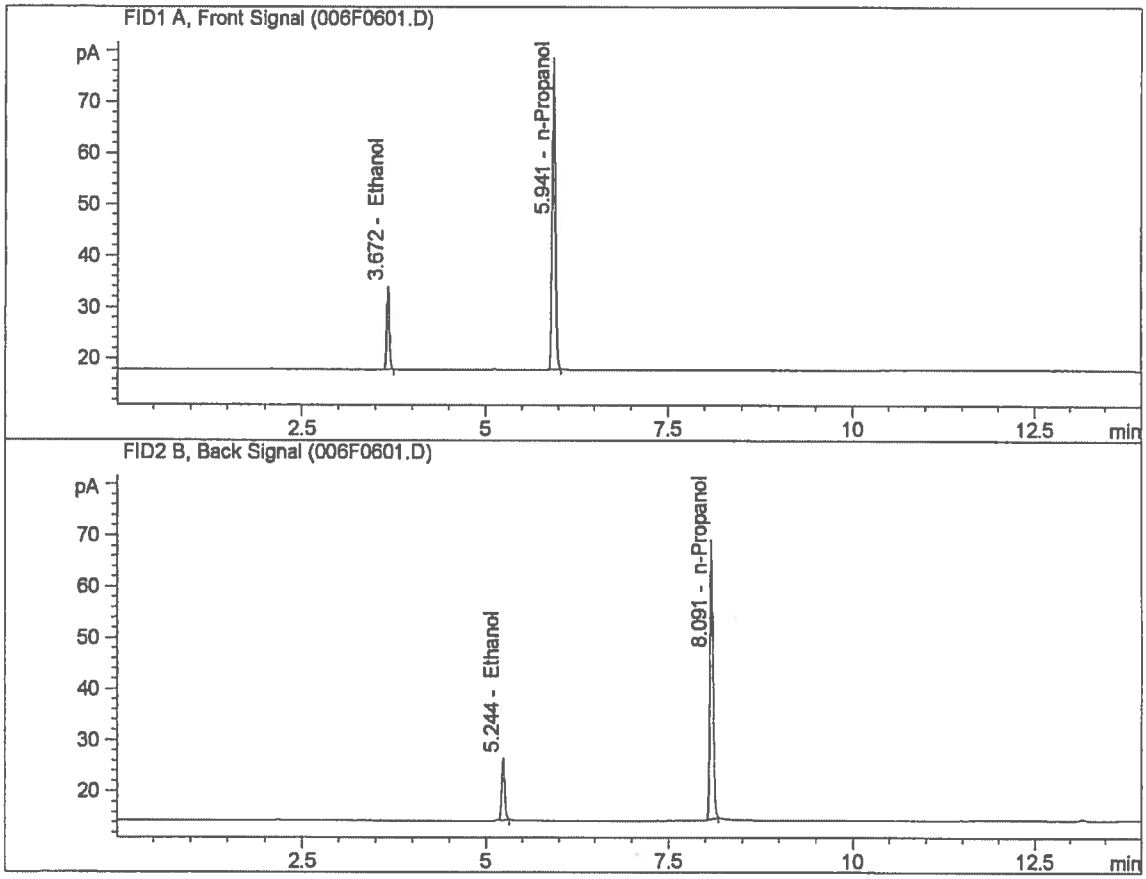


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	39.90160	0.0953	g/100cc
2.	Ethanol	Column 2:	35.17565	0.0940	g/100cc
3.	n-Propanol	Column 1:	188.84790	1.0000	g/100cc
4.	n-Propanol	Column 2:	168.60390	1.0000	g/100cc

Analyst Initials: _____

ISP Forensic Services Blood Alcohol Report

Sample Name	:	REPCO 13803 BOTTLE 0263-B
Operator	:	District 5 Forensic Services
Injection Date	:	Oct 18, 2013
Method	:	BAC.M
Acq. Instrument	:	CN10742043



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	39.78146	0.0959	g/100cc
2.	Ethanol	Column 2:	35.05190	0.0947	g/100cc
3.	n-Propanol	Column 1:	187.04665	1.0000	g/100cc
4.	n-Propanol	Column 2:	166.82214	1.0000	g/100cc

Analyst Initials: _____

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 13803-152 **Analysis Date(s): 24 Sep 2013**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0979	0.0972	0.0007	0.0975	0.0975	
(g/100cc)	0.0978	0.0974	0.0004	0.0976		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: MD-96GF641

Reporting of Results **Uncertainty of Measurement (UM%): 5.00%**

Overall Mean (g/100cc)	Low	High	5% of Mean
0.0975	**0.0927**	**0.1023**	**0.0048**

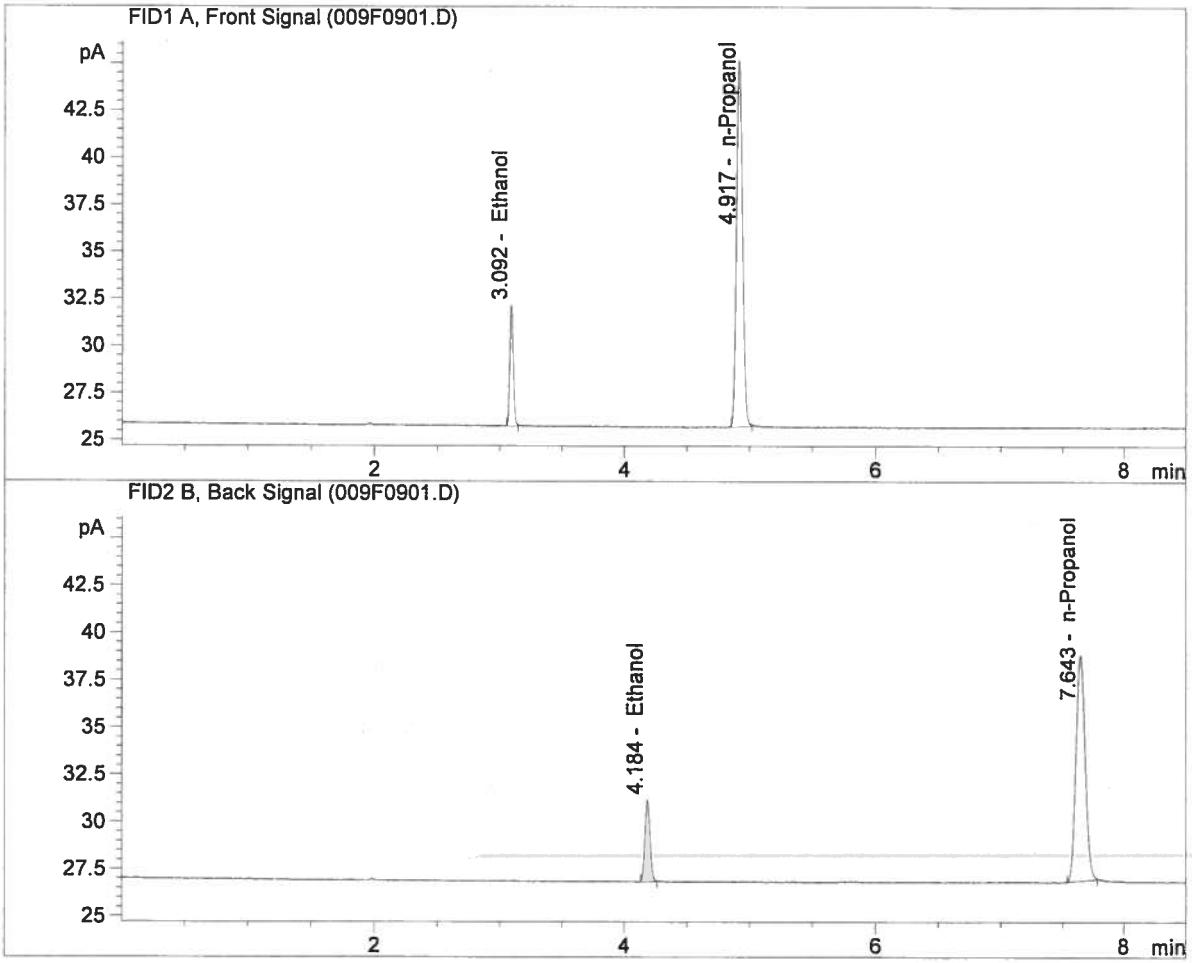
Reported Result

0.097

Calibration and control data are stored centrally. **Analyst: _____** **Page 2**

ISP Forensic Services Blood Alcohol Report

Sample Name :13803-152-A
Operator :Jeremy Johnston
Injection Date :Sep 24, 2013
Injection Time :4:12:19 PM
Method :ALCOHOL.M
Acq. Instrument:CN10742044

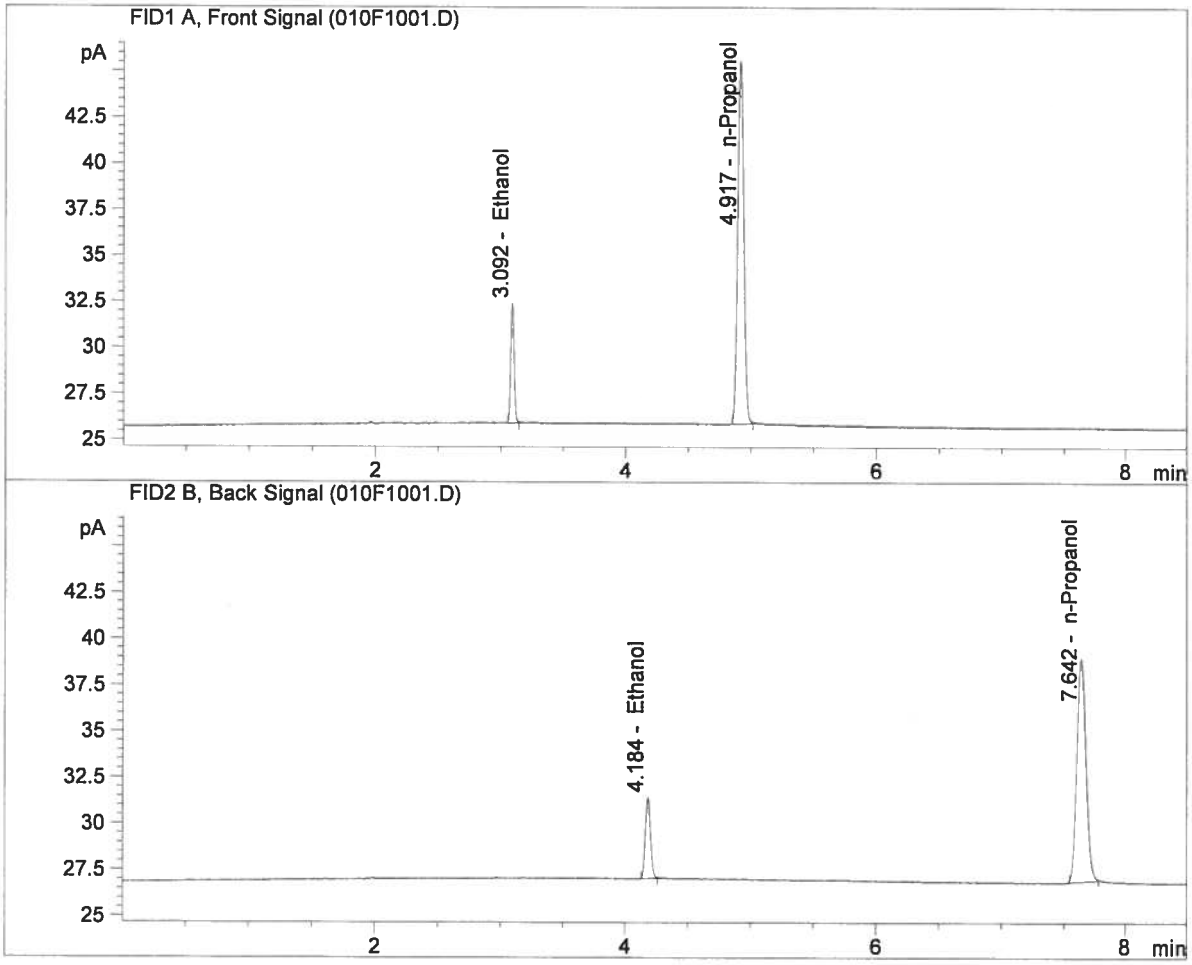


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.30860	0.0979	g/100cc
2.	Ethanol	Column 2:	11.97604	0.0972	g/100cc
3.	n-Propanol	Column 1:	63.14039	1.0000	g/100cc
4.	n-Propanol	Column 2:	60.64487	1.0000	g/100cc

Analyst Initials: _____

ISP Forensic Services Blood Alcohol Report

Sample Name :13803-152-B
Operator :Jeremy Johnston
Injection Date :Sep 24, 2013
Injection Time :4:23:09 PM
Method :ALCOHOL.M
Acq. Instrument:CN10742044



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.44797	0.0978	g/100cc
2.	Ethanol	Column 2:	12.14322	0.0974	g/100cc
3.	n-Propanol	Column 1:	63.90340	1.0000	g/100cc
4.	n-Propanol	Column 2:	61.40850	1.0000	g/100cc

Analyst Initials: _____

VOLATILES DETERMINATION CASEFILE WORKSHEET

Laboratory No.: 13803-432 **Analysis Date(s): 24 Sep 2013**

	Column 1 FID A	Column 2 FID B	Column Precision	Mean Value	Over-all Mean	
Sample Results	0.0979	0.0973	0.0006	0.0976	0.0978	
(g/100cc)	0.0982	0.0978	0.0004	0.0980		

Analysis Method

Refer to Volatiles Analytical Method 1.0

Instrument Information *Instrument method is stored centrally.*

Refer to Instrument Method: Alcohol.m
Hamilton Auto-Dilutor Serial Number: MD-96GF641

Reporting of Results **Uncertainty of Measurement (UM%): 5.00%**

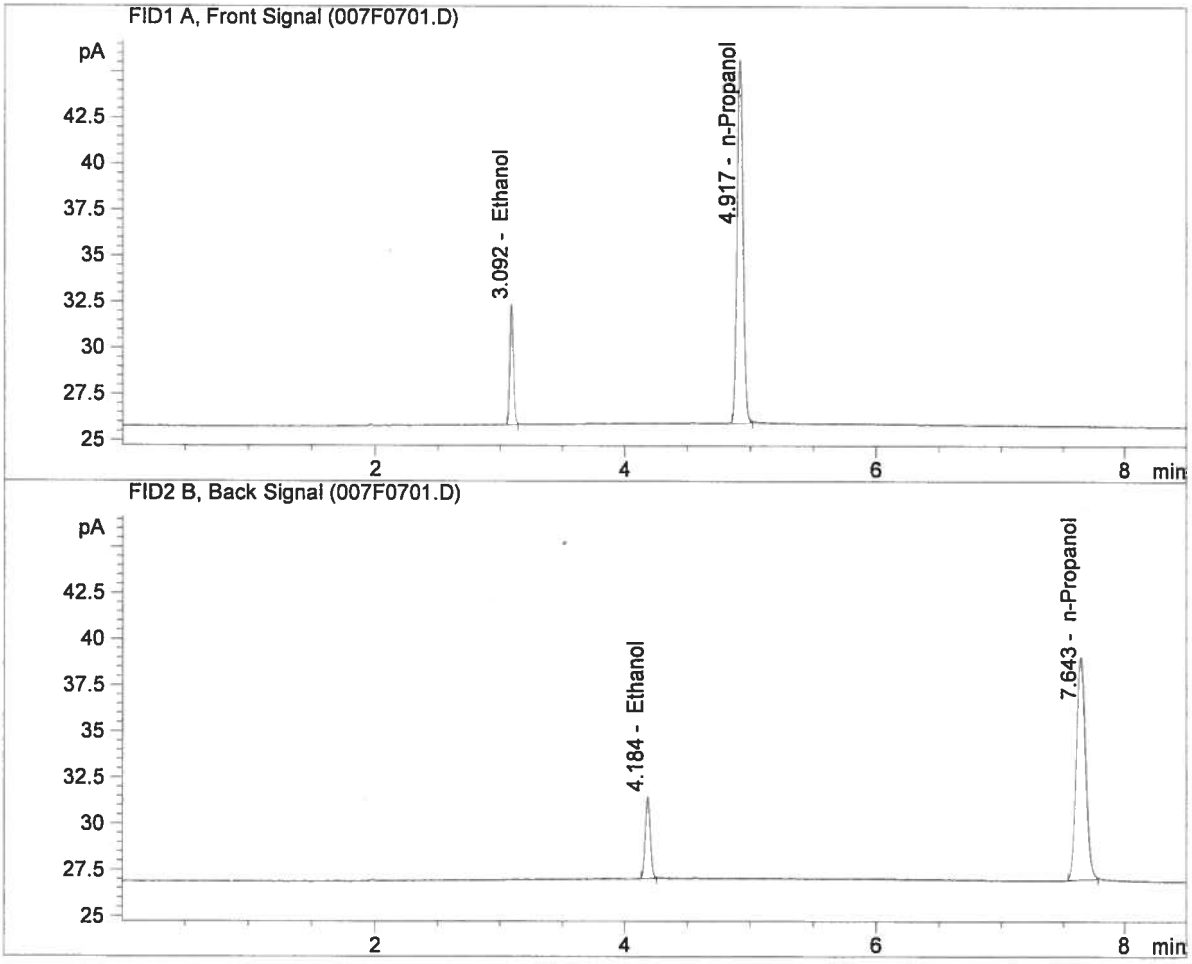
Overall Mean (g/100cc)	Low	High	5% of Mean
0.0978	**0.0930**	**0.1026**	**0.0048**

	Reported Result	
	0.097	

Calibration and control data are stored centrally. **Analyst: _____** **Page 2**

ISP Forensic Services Blood Alcohol Report

Sample Name :13803-432-A
Operator :Jeremy Johnston
Injection Date :Sep 24, 2013
Injection Time :3:50:38 PM
Method :ALCOHOL.M
Acq. Instrument:CN10742044

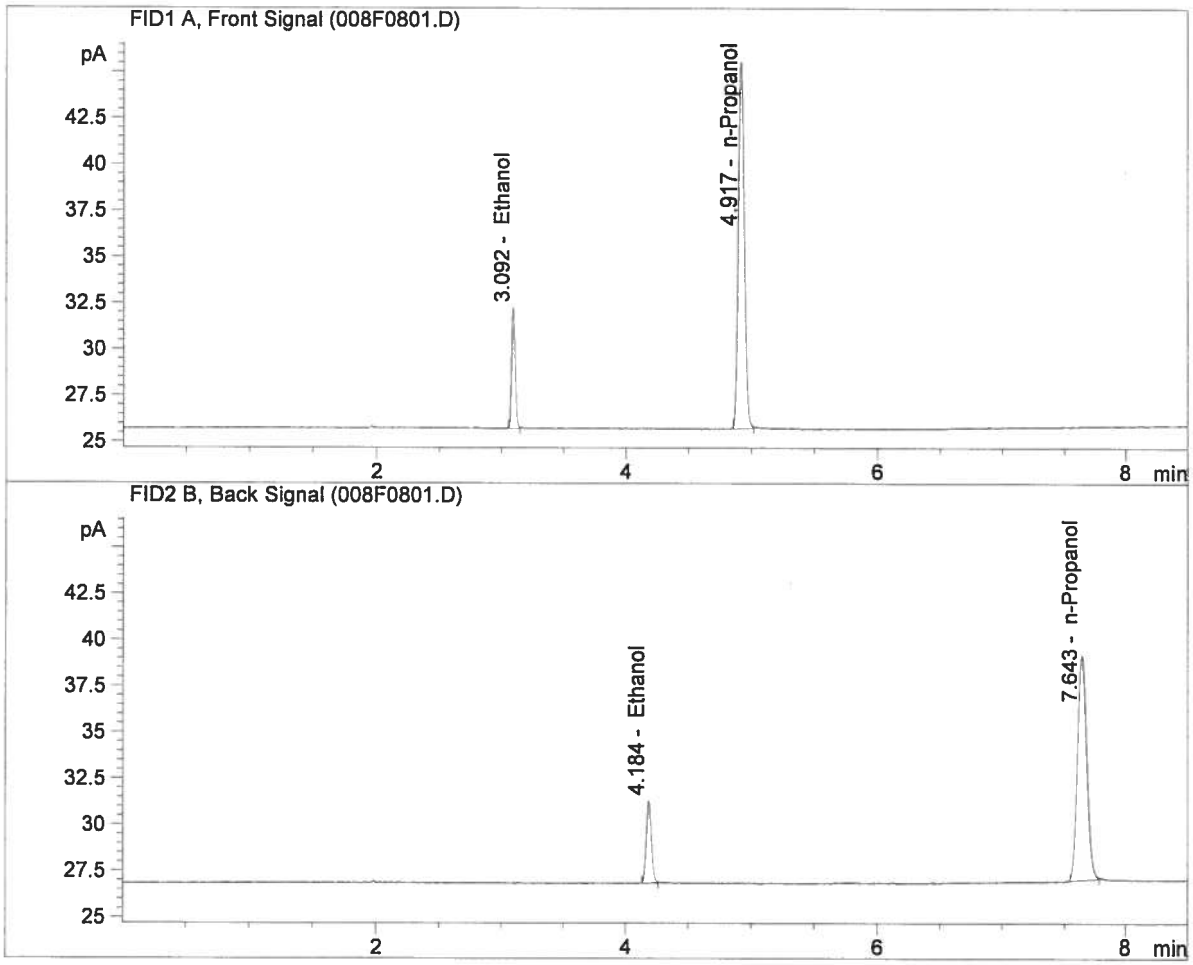


#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.48597	0.0979	g/100cc
2.	Ethanol	Column 2:	12.16427	0.0973	g/100cc
3.	n-Propanol	Column 1:	64.06788	1.0000	g/100cc
4.	n-Propanol	Column 2:	61.54097	1.0000	g/100cc

Analyst Initials: _____

ISP Forensic Services Blood Alcohol Report

Sample Name :13803-432-B
Operator :Jeremy Johnston
Injection Date :Sep 24, 2013
Injection Time :4:01:30 PM
Method :ALCOHOL.M
Acq. Instrument:CN10742044



#	Compound	Column	Area	Amount	Units
1.	Ethanol	Column 1:	12.55576	0.0982	g/100cc
2.	Ethanol	Column 2:	12.25663	0.0978	g/100cc
3.	n-Propanol	Column 1:	64.21783	1.0000	g/100cc
4.	n-Propanol	Column 2:	61.71391	1.0000	g/100cc

Analyst Initials: _____

ANALYTICAL PACKAGE

DATA RESOURCES INC

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008

PROJECT: Ethanol Assay

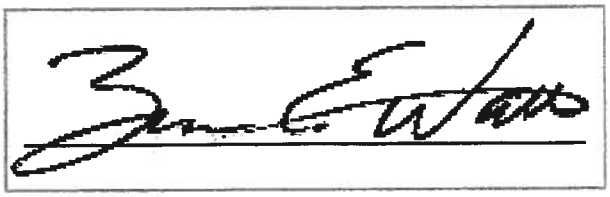
Repco Marketing
ATTN: Cecil Garner
3101-188 Stonybrook Drive
Raleigh NC 27604

CUSTOMER ID: REPCO
JOB ID: J0006
DIVISION: DRC
CREATED ON: 9/12/13
PAGE: 1

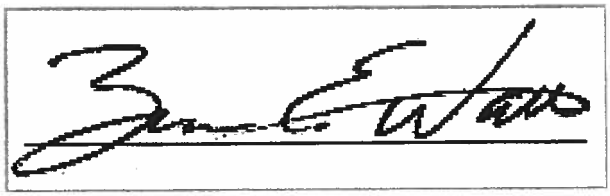
THANK YOU FOR CHOOSING DATA RESOURCES, INC. AS YOUR SOURCE FOR QUALITY LABORATORY SERVICES. DATA RESOURCES, INC. STRIVES TO PROVIDE UNPARALLELLED SERVICE AND SUPPORT REGARDING YOUR SAMPLE ANALYSIS REQUIREMENTS. DATA RESOURCES, INC. PROVIDES TECHNICAL EXPERTISE, PROJECT MANAGEMENT SKILLS, CUSTOMER SUPPORT, AND ACCURATE TEST RESULTS.

PLEASE TAKE A MOMENT TO REVIEW THE FOLLOWING ANALYTICAL PACKAGE.

ON THE FOLLOWING PAGES YOU WILL FIND GENERAL REFERENCE INFORMATION ABOUT THE DATA PRESENTED IN THIS ANALYSIS REPORT. THIS INFORMATION AND MORE CAN BE FOUND ON OUR WEBSITE AT HTTP://DATARESOURCESINC.COM



Bruce E. Watt
Customer Relations, Data Resources Inc



Bruce E Watt
Laboratory Director, Data Resources Inc - Columbia

ANALYTICAL PACKAGE

DATA RESOURCES INC

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008

PROJECT: Ethanol Assay

Repco Marketing
ATTN: Cecil Garner
3101-188 Stonybrook Drive
Raleigh NC 27604

CUSTOMER ID: REPCO
JOB ID: J0006
DIVISION: DRC
CREATED ON: 9/12/13
PAGE: 2

FOR ORGANIZATIONAL PURPOSES THE FOLLOWING ANALYTICAL PACKAGE IS DIVIDED INTO SECTIONS AS LISTED BELOW:

1. ANALYTICAL DATA -- PERFORMED BY DATA RESOURCES
2. CHAIN-OF-CUSTODY and SAMPLE RECEIPT RECORDS
3. FIELD RECORDS (if applicable) -- PERFORMED BY DATA RESOURCES
4. ANALYTICAL DATA (if applicable) -- PERFORMED BY NETWORK PARTNER(s)

ANALYTICAL PACKAGE

DATA RESOURCES INC

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008

PROJECT: Ethanol Assay

Repco Marketing
ATTN: Cecil Garner
3101-188 Stonybrook Drive
Raleigh NC 27604

CUSTOMER ID:	REPCO
JOB ID:	J0006
DIVISION:	DRC
CREATED ON:	9/12/13
PAGE:	3

JOB COMMENTS:

=> No evidence of contamination was observed during analysis

ONLINE ACCESS TO THIS INFORMATION: Go to http://DataResourcesInc.com and choose the menu option "CUSTOMER LOGIN" to enter the CDRC [Client Data Retrieval Center] and view PDF files of your invoices, analytical reports, correspondence and more...

ANALYTICAL PACKAGE

DATA RESOURCES INC

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008
SAMPLE ID: 130911X008-01
PROJECT: Ethanol Assay
SAMPLE: Bottle 1

Repco Marketing
ATTN: Cecil Garner
3101-188 Stonybrook Drive
Raleigh NC 27604

CUSTOMER ID: REPCO
JOB ID: J0006
DIVISION: DRC
CREATED ON: 9/12/13
PAGE: 4

ANALYSIS or SERVICE PERFORMED	RESULT	UNIT	RDL	MDL	METHOD QUAL	ANALYSIS D/T DF	ANALYST LOCATOR	PRIORITY
MATRIX: Liquid			**CUSTOMER SAMPLE ID:**			**LOT 13803**		
COLLECTED ON: 2013-09-05								
COLLECTED BY: REPCO								
RECEIVED AT LAB: 2013-09-06 00:00:00.000								
ETHANOL ASSAY by GC					CAL-GC	2013-09-10 00:00	bewatt	*Normal*
Ethanol Replicate 3	**97.594**	mg/dL	5	1.00000		1.0	DRC	
Ethanol Replicate 2	**95.734**	mg/dL	5	1.00000		1.0		
Ethanol Replicate 1	**96.189**	mg/dL	5	1.00000		1.0		
Ethanol Average	**96.506**	mg/dL	5	1.00000		1.0		

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ANALYTICAL PACKAGE

DATA RESOURCES INC

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008
SAMPLE ID: 130911X008-02
PROJECT: Ethanol Assay
SAMPLE: Bottle 2

Repco Marketing
ATTN: Cecil Garner
3101-188 Stonybrook Drive
Raleigh NC 27604

CUSTOMER ID: REPCO
JOB ID: J0006
DIVISION: DRC
CREATED ON: 9/12/13
PAGE: 5

ANALYSIS or SERVICE PERFORMED	RESULT	UNIT	RDL	MDL	METHOD QUAL	ANALYSIS D/T DF	ANALYST LOCATOR	PRIORITY
MATRIX: **Liquid**			**CUSTOMER SAMPLE ID:**			**LOT 13803**		
COLLECTED ON: **2013-09-05**								
COLLECTED BY: **REPCO**								
RECEIVED AT LAB: **2013-09-06 00:00:00.000**								
ETHANOL ASSAY by GC					CAL-GC	2013-09-10 00:00	bewatt	*Normal*
Ethanol Replicate 3	**96.654**	mg/dL	5	1.00000		1.0	DRC	
Ethanol Replicate 2	**96.368**	mg/dL	5	1.00000		1.0		
Ethanol Replicate 1	**95.997**	mg/dL	5	1.00000		1.0		
Ethanol Average	**96.340**	mg/dL	5	1.00000		1.0		

ONLINE ACCESS TO THIS INFORMATION: Go to http://DataResourcesInc.com and choose the menu option "CUSTOMER LOGIN" to enter the CDRC [Client Data Retrieval Center] and view PDF files of your invoices, analytical reports, correspondence and more...

ANALYTICAL PACKAGE

DATA RESOURCES INC

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008
SAMPLE ID: 130911X008-03
PROJECT: Ethanol Assay
SAMPLE: Bottle 3

Repco Marketing
ATTN: Cecil Garner
3101-188 Stonybrook Drive
Raleigh NC 27604

CUSTOMER ID: REPCO
JOB ID: J0006
DIVISION: DRC
CREATED ON: 9/12/13
PAGE: 6

ANALYSIS or SERVICE PERFORMED	RESULT	UNIT	RDL	MDL	METHOD QUAL	ANALYSIS D/T DF	ANALYST LOCATOR	PRIORITY
MATRIX: Liquid			**CUSTOMER SAMPLE ID:**			**LOT 13803**		
COLLECTED ON: 2013-09-05								
COLLECTED BY: REPCO								
RECEIVED AT LAB: 2013-09-06 00:00:00.000								
ETHANOL ASSAY by GC					CAL-GC	2013-09-10 00:00	bewatt	*Normal*
Ethanol Replicate 3	**95.828**	mg/dL	5	1.00000		1.0	DRC	
Ethanol Replicate 2	**97.678**	mg/dL	5	1.00000		1.0		
Ethanol Replicate 1	**97.930**	mg/dL	5	1.00000		1.0		
Ethanol Average	**97.145**	mg/dL	5	1.00000		1.0		

DATA RESOURCES INC

ANALYTICAL PACKAGE

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008
SAMPLE ID: 130911X008-04
PROJECT: Ethanol Assay
SAMPLE: Bottle 4

Repco Marketing
ATTN: Cecil Garner
3101-188 Stonybrook Drive
Raleigh NC 27604

CUSTOMER ID: REPCO
JOB ID: J0006
DIVISION: DRC
CREATED ON: 9/12/13

ANALYSIS or SERVICE PERFORMED	RESULT	UNIT	RDL	MDL	METHOD QUAL	ANALYSIS D/T DF	ANALYST LOCATOR	PRIORITY
MATRIX: **Liquid**			**CUSTOMER SAMPLE ID:**			**LOT 13803**		
COLLECTED ON: **2013-09-05**								
COLLECTED BY: **REPCO**								
RECEIVED AT LAB: **2013-09-06 00:00:00.000**								
ETHANOL ASSAY by GC					CAL-GC	2013-09-10 00:00	bewatt	*Normal*
Ethanol Replicate 3	**97.152**	mg/dL	5	1.00000		1.0	DRC	
Ethanol Replicate 2	**95.708**	mg/dL	5	1.00000		1.0		
Ethanol Replicate 1	**97.317**	mg/dL	5	1.00000		1.0		
Ethanol Average	**96.726**	mg/dL	5	1.00000		1.0		

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DATA RESOURCES INC

ANALYTICAL PACKAGE

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008
SAMPLE ID: 130911X008-05
PROJECT: Ethanol Assay
SAMPLE: QC @ 100

Repco Marketing
ATTN: Cecil Garner
3101-188 Stonybrook Drive
Raleigh NC 27604

CUSTOMER ID: REPCO
JOB ID: J0006
DIVISION: DRC
CREATED ON: 9/12/13
PAGE: 8

ANALYSIS or SERVICE PERFORMED	RESULT	UNIT	RDL	MDL	METHOD QUAL	ANALYSIS D/T DF	ANALYST LOCATOR	PRIORITY
MATRIX: Liquid			**CUSTOMER SAMPLE ID:**			**IN HOUSE**		
COLLECTED ON: 2013-09-05								
COLLECTED BY: IN HOUSE								
RECEIVED AT LAB: 2013-09-06 00:00:00.000								
ETHANOL ASSAY by GC					CAL-GC	2013-09-10 00:00	bewatt	*Normal*
Ethanol Replicate 3	**100.338**	mg/dL	5	1.00000		1.0	DRC	
Ethanol Replicate 2	**101.004**	mg/dL	5	1.00000		1.0		
Ethanol Replicate 1	**99.814**	mg/dL	5	1.00000		1.0		
Ethanol Average	**100.385**	mg/dL	5	1.00000		1.0		

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DATA RESOURCES INC

ANALYTICAL PACKAGE

DATA RESOURCES INC
1410 ST ANDREWS RD - STE 200
COLUMBIA SC 29210
BUS: 803-561-0331
FAX: 803-561-0536

ORDER ID: 130911X008

PROJECT: Ethanol Assay

Repco Marketing
ATTN: Cecil Garner
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Raleigh NC 27604

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REPORT FIELDS DEFINED:

ANALYSIS or SERVICE PERFORMED = The Requested analysis or service performed.
RESULT = The value or answer acquired from requested analysis or service performed.
BDL (Below Detection Limit) indicates result is below listed RDL.
ND (Not Detected) indicates result is below listed MDL.
< (Less than symbol) indicates that result is lower than value reported
> (Greater than symbol) indicates that result is higher than value reported
UNIT = Unit of measure.
dwb = Indentifies result value as Dry Weight Basis.
QUAL = Additional qualification on result [See DATA QUALIFIERS DEFINED section].
RDL = (Reportable Detection Limit) The lowest calibrated result achievable by stated analytical method.
MDL = (Method Detection Limit) The lowest result achievable by stated analytical method.
METHOD = The stated methodology employed for the analysis or service performed.
ANALYSIS D/T = The date and time when analysis or service was performed.
ANALYST LOCATOR= The analyst and location that performed the analysis or service. All work is performed by a division of Data Resources Inc. unless alternate certification number is provided in this field.
PRIORITY = The requested turn-around priority.

DATA QUALIFIERS DEFINED:

C = Analytical result has been confirmed with multiple analyses.
I = Estimated result, result is < RDL but > MDL.
JC = See Job Comments.
J1 = In replicate analyses surrogate recoveries (2 or more for acid fraction, 2 or more for base/neutral fraction, 1 or more for volatile fraction) were out of range but > 10%. The result is an estimated value.
J2 = In replicate analyses surrogate recoveries (2 or more for acid fraction, 2 or more for base/neutral fraction, 1 or more for volatile fraction) were out of range and < 10%. The result is an estimated value.
J3 = In replicate analyses internal standard area counts were out of range. The result is an estimated value.
OH = Holding Time expired prior to analysis
OH2 = Holding Time expired prior to re-analysis. Initial analysis was performed in holding but with estimated results.
M1 = The MS %R is outside acceptable control limits. However, MS/MSD RPD is in acceptable control limits.
2:1 = The BOD reported result failed to meet the Two One Rule.
SC = See Sample Comments.

2-CHLOROETHYLVINYLETHER -vs- **2-CHLOROETHYLVINYLETHER NOTED ON ANALYSIS REPORT:

Past studies show that 2-Chloroethylvinylether undergoes hydrolysis when collected in preserved (HCl to pH<2) VOC vials. SCDHEC requires a sampling protocol to involve NON-preserved VOC vials when this parameter is needed. To provide the best quality data for this parameter, DR will perform a separate analysis at an additional cost. Should you request this parameter and only provide preserved VOC vials, the analysis of this parameter will be performed and the parameter identity prefixed with ** to identify this potential issue occuring.

AROCHLOR RESULTS:

Any positive Arochlor result would require analysis for total PCB as decachlorobiphenyl by method 508A (MCL = 0.5 ug/L).

LABORATORY pH, CHLORINE, and TEMPERATURE RESULTS:

If analysis occurs in the lab in excess of 15 minutes of collection, then the result MAY NOT be used for compliance.

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Cerilliant

Certificate of Analysis

Certified Reference Standard - NIST Traceable

Ethanol-100

Ethyl Alcohol

ISO GUIDE 34
CERTIFICATE AR1353

ISO/IEC 17025
CERTIFICATE AT1352

ISO 9001:2000
CERTIFICATE 3854

Catalog Number:	E-031
Solution Lot:	FN102609-03
Expiration Date:	October 2014
Diluent:	Water
Volume per Ampoule:	1.2 mL
Storage:	Refrigerate. Do not freeze.
Intended Use:	For laboratory use only. Not suitable for human or animal consumption.

- Expiration Date has been established through real time stability studies and applies to the ampoule stored unopened at the recommended storage condition.
- Ampoules are overfilled to ensure a minimum 1.2 mL volume fill. We advise laboratories to use measured volumes of this standard solution before diluting to the desired concentration. The standard should be used immediately after opening to avoid concentration changes due to evaporation.

Component	Solution Chromatographic Purity	Certified Concentration
Ethanol	100%	100.0 ± 0.4 mg/dL

- Uncertainty of the concentration, expressed in terms of volume, is an expanded uncertainty in accordance with ISO 17025 and ISO Guide 34 at the 95% confidence interval using a coverage factor of k=2 and has been calculated by statistical analysis of our production methods applicable to ethanol reference standards and incorporates uncertainty of the purity factor, material density and mass measurement. The dispensing process is sufficiently controlled as to not be a significant contributor to uncertainty calculations and is, therefore, excluded. Solution stability is established through real time stability studies and is, therefore, excluded.
- When expressed in percentage terms, the relative standard uncertainty of the concentration is 0.175% and the relative expanded uncertainty is 0.35% at the 95% confidence interval (k=2).
- The purity factor (PF) mass balance measurement equation is used to calculate the amount of ethanol required to achieve an accurate concentration of the solution standard, accounting for both purity and residual water content.
- Purity factor has been established through independent certification of the neat analyte to ISO 172025 standards – See page 2.
- Solution purity is verified post ampouling and demonstrates no contamination or degradation has occurred.

Traceability to SI through NIST:

- This standard has been prepared and certified under the ISO Guide 34 and ISO/IEC 17025 standards and meets the requirements of a Certified Reference Material as defined by ISO.
- Gravimetrically prepared using qualified balances calibrated semi-annually by Mettler Toledo to ISO 17025 requirements and using NIST traceable weights. Qualification of each balance includes the assignment of a minimum weighing by Mettler Toledo taking into consideration the balance and installed environmental conditions to ensure each weighing complies with USP tolerances of NMT 0.1% relative uncertainty.
- Balance calibration adjustments are performed weekly utilizing the balance's internal adjustment mechanism and with NIST traceable weights.
- Balance calibration is verified prior to each use and is performed utilizing NIST traceable weights. Weigh tapes from the balance calibration are included in the production batch record for this standard. Production data package available upon request.
- Fill volume is gravimetrically verified throughout the dispensing process using qualified balances calibrated with NIST traceable weights.
- Weight sets used for all balance calibrations are calibrated externally by an ISO 17025 accredited calibration laboratory to NIST standards.
- Concentration of this standard has been analytically verified against a NIST SRM and a Control using a validated method. See page 2.

Cerilliant certifies that this standard meets the specifications stated in this certificate and warrants this product to meet the stated acceptance criteria through the expiration date. Warranty applies to ampoules stored unopened and stored under the recommended storage conditions. Warranty and expiry do not extend to solutions into which this product has been incorporated. Establishment of shelf life of all such products is the responsibility of the user.

ACLASS

Lara Sparks

Lara Sparks, Quality Assurance Director

November 5, 2009

Date

811 Paloma Drive, Suite A, Round Rock, TX 78665 800-848-7837 / 512-238-9974

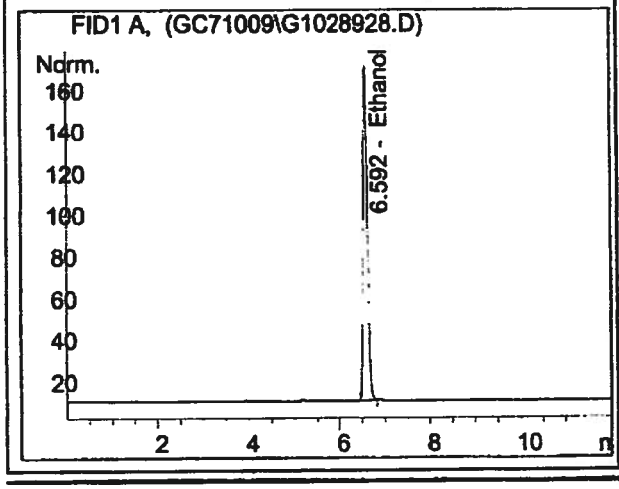
Analytical Verification of Solution Standard Concentration and Batch Homogeneity:

Solution Standard	Lot Number	Results compared to NIST SRM Lot 2894 (mg/dL)	Results compared to Control	Homogeneity (ampoule to ampoule consistency) %RSD
New Lot	FN102609-03	100.0	-0.02%	1.22%
Prior Lot	FN091009-01	100.0	-0.03%	1.14%
Acceptance Criteria		±2%	±2%	≤2%

- Concentration is calculated as the average of multiple analyses conducted using a validated Headspace GC/FID method. The validated GC/HS method has been demonstrated to adequately detect and quantitate ethanol concentrations ranging from 5 to 600 mg/dL. Relative standard uncertainty of the analysis is 1.675% and includes both uncertainty of the analytical method and uncertainty of the NIST SRM concentration.
- The Control is independently prepared from a different lot of neat ethanol to ensure no bias in the analysis and independently qualified against a NIST SRM.
- Homogeneity is ensured through rigorous production process controls statistically analyzed to evaluate risk and verified by analysis. The %RSD of samples pulled from across the lot using a stratified random sampling plan demonstrates ampoule to ampoule consistency or homogeneity of the New Lot.
- The %RSD of the Prior Lot represents system suitability on the date of analysis. Triplicate injections of the Prior Lot are bracketed at the beginning and end of the sequence: %RSD criteria ensures proper system performance throughout the sequence.
- All instruments used for certification of the neat materials and verification of the solution concentration and homogeneity are fully qualified through an Installation Qualification and an Operational Qualification which is repeated annually. System suitability is performed daily with rigorous acceptance criteria to ensure the system continues to perform within the validated parameters.

Solution Standard Assay Parameters

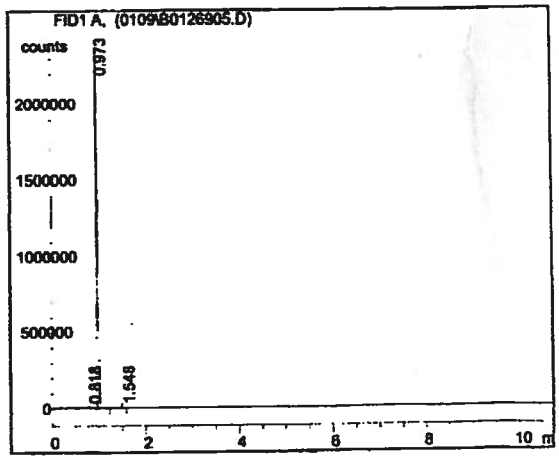
Analysis Method:	GC/FID Headspace
Column:	DB-ALC1 30 m x 0.53 mm ID, 3.0 µm film thickness
Temp Program:	40°C hold for 12 min
Injector Temp:	200°C
Detector Temp:	250°C



Neat Material Analysis

Purity by GC/FID Analysis:	100.00%
Water Content by Karl Fischer:	0.08%
Purity Factor:	99.92%

The purity factor (PF) mass balance measurement equation is used to calculate the amount of ethanol required to achieve an accurate concentration of the solution standard, accounting for both purity and residual water content.



RepCo Marketing, Inc.
3101-188 Stonybrook Drive
Raleigh, NC 27604

Packing Slip

Date	Invoice #
9/13/2013	9684

PAID

Ship To
Idaho State Police Forensics Attn: Jeremy Johnston 615 W. Wilbur Ave. Suite B Coeur D' Alene, ID 83815

P.O. No.	Ship Date	Ship Via	FOB
EVALUATI...	9/13/2013	FedEx Gro...	Raleigh

Description	Qty
.080 BAC Simulator Solution Lot# 13803- EVALUATION	2

RepCo Marketing, Inc.
3101-188 Stonybrook Drive
Raleigh, NC 27604

Invoice

Date	Invoice #
9/13/2013	9684

PAID

Bill To	Ship To
Idaho State Police Forensic/Coeur D'Alene Attn: Jeremy Johnston 615 W. Wilbur Ave. Suite B Coeur D' Alene, ID 83815	Idaho State Police Forensics Attn: Jeremy Johnston 615 W. Wilbur Ave. Suite B Coeur D' Alene, ID 83815

P.O. Number	Terms	Ship	Via	F.O.B.
EVALUATION	No Charge	9/13/2013	FedEx Gro...	Raleigh

Qty Ordered	B/O	Qty Shipped	Item Code	Description	Price Each	Amount
2			CSS-080	.080 BAC Simulator Solution Lot# 13803- EVALUATION	0.00	0.00

Total	$0.00
Payments/Credits	$0.00
Balance Due	$0.00

RepCo Marketing Inc., 3101-188 Stonybrook Dr., Raleigh, NC 27604 (919) 876-5480; Fax (919) 876-5467 Toll Free 888-828-0227