



*Paradise
FOIA*

t 540.433.6906 f 540.433.5965 • 70 North Mason Street, Suite 120, Harrisonburg, Virginia 22802 • bob@bobkeeferlaw.com

December 9, 2010

SENT VIA FACSIMILE [804-786-6139]

Alka B. Lohmann/ Breath Alcohol Section

RE: December 9, 2010/ FOIA request #1

Estimation of the Uncertainty of Measurement for Intox EC/IR II

Dear Ms. Lohmann:

Under the provisions of the Virginia Freedom of Information Act, I am writing to request the following documents:

1. The estimation of the uncertainty of measurement for Breath Alcohol certifications (calibrations) of Intox EC/IR II instruments.
2. All calculations related to the estimation of the uncertainty of measurement for breath alcohol instrument certifications.
3. The reference to the estimation of the uncertainty of measurement for breath alcohol instrument certification.
4. Data used to calculate the mean, standard deviation and coefficient of variation for each standard.
5. The standard deviation.
6. The estimated uncertainty of measurement.

I would appreciate the handling of this request as quickly as possible and I look forward to a response within 5 days, as stipulated in the Virginia Code. Thank you for your time and attention to this matter. Should there be any questions or problems, please do not hesitate to contact me. With best regards, I remain

Sincerely,

A handwritten signature in black ink that appears to read "Bob".

Robert F. Keefer



Department of Forensic Science

Breath Alcohol Section

700 N. 5th Street
Richmond, Virginia 23219
(804) 786-6971
FAX (804) 786-6139

Date: 12/22/10 FAX#: 540-433-5965
To: Robert F. Kefler
From: Debra Myers

Commonwealth v: Uncertainty of Measurement

Number of pages (including cover): _____ Original will be sent: Yes No ✓
Response needed by: _____ No response needed: _____
Please call (804) 786-6960 if you encounter problems during transmission.

Comments:

FAX Transmittal Sheet

COMMONWEALTH OF VIRGINIA

The following transmission is privileged and confidential, and is intended only for the use of the addressee. If you are not the intended recipient or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination, distribution, or reproduction of this facsimile is strictly prohibited. If you have received this in error, please call (804) 786-6971.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORENSIC SCIENCE

CENTRAL LABORATORY
A Nationally Accredited Laboratory

700 NORTH 5TH STREET
RICHMOND, VIRGINIA 23219
(804) 786-6971

December 21, 2010

Keefer Law Firm
70 North Mason Street, Suite 120
Harrisonburg, VA 22802

FACSIMILE

RE: FOIA Letter from December 9, 2010
Estimation of the Uncertainty of Measurement for Intox EC/IR II

Dear Mr.Keefer:

I am writing in response to your letter dated December 9, 2010. Enclosed please find the following documents responsive to your request:

The search and production fees for the enclosed material are as follows:

39 pages at \$0.10/page	\$1.30
Search and production time	\$8.62
Postage	
TOTAL:	\$9.92

Please remit a check in the above amount, made payable to the Treasurer of Virginia, to Donna Carter, Fiscal Director, Department of Forensic Science, 700 North Fifth Street, Richmond, Virginia, 23219. If you have any questions, please contact me at (804) 786-6971.

Sincerely,

A handwritten signature in black ink, appearing to read "Alka B. Lehmann".

Alka B. Lehmann
Program Manager, Calibration and Training

ABI/cnb

DEPARTMENT OF FORENSIC SCIENCE
UNCERTAINTY BUDGET

Method: Calibration of Intox EC/IR II (electrochemical detector)

Section:

Breath Alcohol

Analyst:

Melissa Kennedy

Laboratory: Central

Source of Uncertainty	Value (units)	Distribution	Divisor	Uncertainty	K corr
A Type A uncertainty (encompasses all variables, including personnel, gas standards, environmental, etc.)	0.02 g/210 L vapor			±0.002 at 99.7%confidence	
	0.08 g/210 L vapor			±0.002 at 99.7%confidence	
	0.15 g/210 L vapor			±0.005 at 99.7%confidence	
	0.25 g/210 L vapor			±0.006 at 99.7%confidence	
B included within Type A uncertainty					

Prepared by: Melissa Kennedy Date 3/24/09

Reviewed by:

M. J. P. Date 03/25/2009

Uncertainty Budget
Issued by Deputy Director
Issue Date: 5-September-2008

Estimation of Uncertainty of Measurement Intox EC/IR II

	0.02	0.08	0.15	0.25	Normalized BrAC
N	118	118	118	118	
Mean	0.01922	0.080154	0.148433	0.246234	
Standard Deviation	0.000523	0.000738	0.001486	0.0019674	
%CV	2.72205	0.920526	1.00104	0.7990452	
k=3	8.166165	2.761579	3.003119	2.397136	
Lower 99.7% confidence limit	0.018	0.078	0.145	0.244	
Upper 99.7% confidence limit	0.022	0.082	0.155	0.256	

Estimation of Uncertainty of Measurement for Intox ECGR !!

	4.02	0.08	0.16	0.26	Normalized BrAC
N	118	118	118	118	
Mean	0.01922	0.08054	0.16843	0.246234	
Standard Deviation	0.000523	0.000738	0.001486	0.0019874	
%CV					
k=3					
Lower 99.7% confidence limit	0.016	0.078	0.145	0.244	
Upper 99.7% confidence limit	0.022	0.082	0.155	0.256	

INTOX EC/IR II
Quality Assurance Worksheet

Instrument Serial Number

Worksheet Start Date

Location

Address

Phone:

DFS Technician

License No.

VIRGINIA

Laboratory

On-Site

DEPARTMENT

Yes No

1 Secured Environment:

Location must not be accessible to the general public.

2 Environment free from contaminants:

OF

3 Dedicated telephone line:

The phone line should be used exclusively by the instrument.

4 Adequate Ventilation:

Enough space must be provided for the instrument and the printer to allow for adequate ventilation.

5 Stable temperature controls:

The instrument should not be exposed to direct sources of temperature variation.

6 115VAC power source:

Whenever possible instrument power circuit should not be shared with refrigerators, copy machines or other high amperage devices.

7 Room Condition:

The site should be free of excessive moisture, heat and dust.

Old serial no.

New serial no.

E-Seek

Supplies

Keyboard

Mouthpieces

Printer

Certificates of Analysis

UPS

Operator Worksheet

Maintenance (if any)

Other:

INTOX EC/IR II
Quality Assurance Worksheet

Instrument Serial Number

Worksheet Start Date

Location

Address

Phone:

COPYRIGHT © 2009

Instrument Serial Number

010

Certification Date

2009-09-25

Instrument Barometer (mm HG)

999.999

Reference Barometer (mm HG)

999.999

TruCal Serial No.

0000000000

Standard (sea level) PA Target minimum maximum
0.250 0.250 0.070 1.080
Precision sample min sample max
0 0.000 0.000

Sample 1
Sample 2
Sample 3

COPYRIGHT © 2009
VIRGINIA
DEPARTMENT

Standard (sea level) PA Target minimum maximum
0.160 0.160 0.070 1.030
Precision sample min sample max
0 0.000 0.000

Sample 1
Sample 2
Sample 3

Standard (sea level) PA Target minimum maximum
0.080 0.080 -0.003 0.003
Precision sample min sample max
0 0.000 0.000

Sample 1
Sample 2
Sample 3

OF
FORENSIC SCIENCE

Standard (sea level) PA Target minimum maximum
0.020 0.020 -0.003 0.003
Precision sample min sample max
0 0.000 0.000

Sample 1
Sample 2
Sample 3

all measurements are in g/210L

Estimation of Uncertainty of Measurement is located within the Breath Alcohol Section

Calibrated

Certified

Replaced dry gas standard (+O-ring)

Dry gas standard lot No. (With tank no.)

Run a Breath Test

(instrument test)

UNCONTROLLED

COPY

DFS Technician

Date

2009-09-25

Issuing Analyst

Date

2009-09-25



Department of Forensic Science

Breath Alcohol Section

700 N. 5th Street
Richmond, Virginia 23219
(804) 786-6971
FAX (804) 786-6139

Date: 12/16/16 FAX#: 541-433-5965

To: Robert F. Reeder

From: Debra Myers

Commonwealth v: Instrument # 012543

Number of pages (including cover): 7 Original will be sent: Yes No ✓
Response needed by: _____ No response needed: _____
Please call (804) 786-6960 if you encounter problems during transmission.

Comments: _____

FAX Transmittal Sheet

COMMONWEALTH OF VIRGINIA

The following transmission is privileged and confidential, and is intended only for the use of the addressee. If you are not the intended recipient or the employee or agent responsible for delivering it to the intended recipient, you are hereby notified that any dissemination, distribution, or reproduction of this facsimile is strictly prohibited. If you have received this in error, please call (804) 786-6971.



COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORENSIC SCIENCE

CENTRAL LABORATORY
A Nationally Accredited Laboratory

700 NORTH 5TH STREET
RICHMOND, VIRGINIA 23219
(804) 786-6971

December 9, 2010

Keefer Law Firm, PLC
70 N. Mason Street, Suite 120
Harrisonburg, VA 22802
Attn: Robert F. Keefer

FACSIMILE

RE: Commonwealth v. Instrument #010534
Return Date: 12/10/2010

Enclosed please find "The most recent VA Certification printout for instrument #010543."

The search and production fees for the enclosed material are as follows:

4 pages at \$0.10/page	0.40
Search and production time	9.99
Postage	0.00
TOTAL:	10.39

Please remit a check in the above amount, made payable to the Treasurer of Virginia, to Donna Carter, Fiscal Director, Department of Forensic Science, 700 North Fifth Street, Richmond, Virginia, 23219. If you have any questions, please contact me at (804) 786-6971.

Sincerely,

A handwritten signature in black ink, appearing to read "Alka B. Lohmann".

Alka B. Lohmann
Program Manager, Calibration & Training

Enclosures

DBH

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010534 Test Number: 1152
Test Date: 09/15/2010 Test Time: 14:38 EDT

BLK

Technician Initials: DBH

Dry Gas Target: 0.239

Lot Number: AG009103-01 Exp Date: 04/01/2012

Tank Pressure: 154 psi Barometric Pressure: 727 mmHg

Test	g/210L	Time
DIAG	Pass	14:38
BLK	0.000	14:39
CHK	0.244	14:39
BLK	0.000	14:41
CHK	0.244	14:42
BLK	0.000	14:43
CHK	0.243	14:44
BLK	0.000	14:45

Success

Standard Value (at sea level): 0.250 g/210L

Certification Status: Continued

DBH
Intox EC/IR-II: Certification

NCL
Department of Forensic Science
Serial Number: 010534 Test Number: 1153
Test Date: 09/15/2010 Test Time: 14:47 EDT

Technician Initials: DBH
Dry Gas Target: 0.144
Lot Number: AQ905002-02 Exp Date: 02/19/2011
Tank Pressure: 482 psi Barometric Pressure: 727 mmHg

Test	g/210L	Time
DIAG	Pass	14:48
BLK	0.000	14:48
CHK	0.145	14:49
BLK	0.000	14:50
CHK	0.145	14:51
BLK	0.000	14:53
CHK	0.145	14:53
BLK	0.000	14:55

Success

Standard Value (at sea level): 0.150 g/210L

Certification Status: Continued

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010534 Test Number: 1154
Test Date: 09/15/2010 Test Time: 14:56 EDT

Technician Initials: DBH

Dry Gas Target: 0.077

Lot Number: AG833901-07 Exp Date: 12/04/2010
Tank Pressure: 227 psi Barometric Pressure: 727 mmHg

Test	g/210L	Time
DIAG	Pass	14:57
BLK	0.000	14:58
CHK	0.078	14:58
BLK	0.000	14:59
CHK	0.078	15:00
BLK	0.000	15:01
CHK	0.078	15:02
BLK	0.000	15:03

Success

Standard Value (at sea level): 0.080 g/210L

Certification Status: Continued

WPN

MSL

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010534 Test Number: 1155
Test Date: 09/15/2010 Test Time: 15:05 EDT

Technician Initials: DBH

Dry Gas Target: 0.019

Lot Number: AG905003-10 Exp Date: 02/19/2011
Tank Pressure: 360 psi Barometric Pressure: 727 mmHg

Test	g/210L	Time
DIAG	Pass	15:05
BLK	0.000	15:06
CHK	0.019	15:06
BLK	0.000	15:08
CHK	0.019	15:08
BLK	0.000	15:09
CHK	0.019	15:10
BLK	0.000	15:11

Success

Standard Value (at sea level): 0.020 g/210L

Certification Status: Success