



# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF FORENSIC SCIENCE

CENTRAL LABORATORY  
A Nationally Accredited Laboratory

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

### CERTIFICATE OF INSTRUMENT ACCURACY

INSTRUMENT: Intox EC/IR II

SERIAL NUMBER: 010661

CERTIFICATION DATE: March 14, 2014

DATE RECERTIFICATION DUE: September 10, 2014

The above listed instrument was found to meet all requirements for accuracy and performance established by the Department of Forensic Science as required by §9.1-1101 (B)(3). Measurement traceability is established through the use of reference materials supplied by an ISO/IEC 17025:2005 accredited calibration laboratory.

#### Estimation of Uncertainty of Measurement:

0.020 ± 0.004 g/210 L	0.150 ± 0.007 g/210 L
0.080 ± 0.004 g/210 L	0.250 ± 0.007 g/210 L

The Uncertainty of Measurement is reported at the 99.73% level of confidence and a coverage factor of k=3. The estimation of the Uncertainty of Measurement is calculated for the Certification process only.

Michelle M. Billeter  
Forensic Scientist

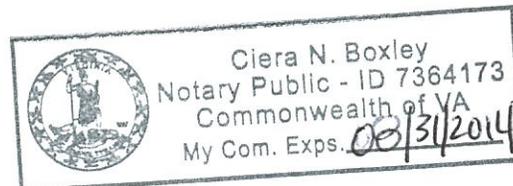
CITY OF RICHMOND  
COMMONWEALTH OF VIRGINIA

The foregoing was acknowledged before me this 18<sup>th</sup> day of March, 2014 by Michelle M. Billeter

Ciera N. Boxley  
Ciera N. Boxley, Notary Public

My commission expires: August 31, 2014

TLW



Department of Forensic Science  
Breath Alcohol Section  
Instrument Maintenance History  
1/1/1990 To 3/17/2014

DBH  
mmb

Instrument Serial Number: 010661

As of 17-Mar-14

Maintenance Date	Certification Date	Technician Initials	Remarks
14-Mar-14	14-Mar-14	DBH (21250)	CERTIFIED. REPLACED DRY GAS STANDARD.
24-Sep-13	24-Sep-13	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE. CALIBRATED AND CERTIFIED. REPLACED DRY GAS STANDARD.
24-Apr-13	24-Apr-13	DBH (21250)	CERTIFIED. REPLACED DRY GAS STANDARD.
16-Nov-12	16-Nov-12	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE, CALIBRATED AND CERTIFIED.
21-Aug-12	21-Aug-12	DBH (21250)	CERTIFIED
03-Apr-09	03-Apr-09	DBH (21250)	CERTIFIED.
18-Mar-09	18-Mar-09	RJP (22428)	FIRMWARE/SOFTWARE UPGRADE. CERTIFIED.
12-Feb-09	12-Feb-09	MSK (21355)	CALIBRATED, CERTIFIED AND ACCEPTED.

D.H.  
mmB

# INTOX EC/IR II Quality Assurance Worksheet

Instrument Serial Number: 010661      Worksheet Start Date: 3/14/2014

Location: Norfolk Naval Shipyard

Address: Building 1618 Norfolk Naval Shipyard VA 23709

DFS Technician: Donald Hall      License No.: 21250

Laboratory       On-Site

Site Specification: No detrimental environmental conditions exist.

Instrument Barometer (mm HG): 766      Reference Barometer (mm HG): 767

Reference Barometer(RB)Serial #: 009109      RB Calibration Due: 8/1/2014

### Measurement Assurance Check

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.308
0.300	0.302	0.292	0.311	<b>Sample 2</b>	0.308
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.308
0		0.308	0.308		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.103
0.100	0.101	0.097	0.104	<b>Sample 2</b>	0.102
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.103
0.001		0.102	0.103		

Dry gas standard Lot No. (with tank no.) AG226201-29

- Replaced dry gas standard (+O-ring)
- Installed at Location
- Removed to DFS-Central

Supplies  
Mouthpieces  
Certificates of Analysis  
Operator Worksheet  
Other:



Notes:

[Redacted area]

Instrument Serial Number 010661

Certification Date 3/14/2014

Calibrated

Certified

Measurement Assurance Check

Instrument Test

Troubleshooting/Maintenance Worksheet Completed

(Successful completion denotes satisfactory condition of the item.)

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.251
0.250	0.252	0.244	0.259	<b>Sample 2</b>	0.252
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.251
0.001		0.251	0.252		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.151
0.150	0.151	0.146	0.155	<b>Sample 2</b>	0.151
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.151
0		0.151	0.151		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.081
0.080	0.081	0.078	0.084	<b>Sample 2</b>	0.082
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.082
0.001		0.081	0.082		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.020
0.020	0.020	0.017	0.023	<b>Sample 2</b>	0.020
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.020
0		0.020	0.020		

All measurements are in g/210L

Estimation of Uncertainty of Measurement and traceability records are located within the Breath Alcohol Section

DFS Technician Donald B Hall Date 3/17/14

Issuing Analyst Michelle Ballinger Date 3/18/14

TLN

**Intox EC/IR-II: Certification**

DBH

MMS

Department of Forensic Science  
Serial Number: 010661      Test Number: 150  
Test Date: 03/14/2014      Test Time: 14:17 EDT

Technician Initials: DBH  
Dry Gas Target: 0.252  
Lot Number: 2961225012-09      Exp Date: 11/01/2014  
Tank Pressure: 321 psi      Barometric Pressure: 766 mmHg  
System Check: Passed

Test	g/210L	Time
DIAG	Pass	14:17
BLK	0.000	14:18
CHK	0.251	14:19
BLK	0.000	14:20
CHK	0.252	14:21
BLK	0.000	14:23
CHK	0.251	14:24
BLK	0.000	14:26

**Success**

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

Certification Status: Continued

**Intox EC/IR-II: Certification**

DBH  
MMB

*Department of Forensic Science*  
Serial Number: 010661      Test Number: 151  
Test Date: 03/14/2014      Test Time: 14:28 EDT

Technician Initials: DBH  
Dry Gas Target: 0.151  
Lot Number: 29512150I2-04      Exp Date: 11/01/2014  
Tank Pressure: 845 psi      Barometric Pressure: 766 mmHg  
System Check: Passed

Test	g/210L	Time
DIAG	Pass	14:28
BLK	0.000	14:29
CHK	0.151	14:30
BLK	0.000	14:31
CHK	0.151	14:32
BLK	0.000	14:34
CHK	0.151	14:35
BLK	0.000	14:37

**Success**

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

Certification Status: Continued

**Intox EC/IR-II: Certification**

DBH  
mmB

*Department of Forensic Science*  
Serial Number: 010661      Test Number: 152  
Test Date: 03/14/2014      Test Time: 14:39 EDT

Technician Initials: DBH  
Dry Gas Target: 0.081  
Lot Number: 07713080I2-01      Exp Date: 05/01/2015  
Tank Pressure: 350 psi      Barometric Pressure: 765 mmHg  
System Check: Passed

Test	g/210L	Time
DIAG	Pass	14:39
BLK	0.000	14:40
CHK	0.081	14:41
BLK	0.000	14:43
CHK	0.082	14:43
BLK	0.000	14:45
CHK	0.082	14:46
BLK	0.000	14:47

**Success**

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

Certification Status: Continued

**Intox EC/IR-II: Certification**

DBH  
mmB

*Department of Forensic Science*

Serial Number: 010661      Test Number: 153

Test Date: 03/14/2014      Test Time: 14:49 EDT

Technician Initials: DBH

Dry Gas Target: 0.020

Lot Number: 0771302011-02      Exp Date: 05/01/2015

Tank Pressure: 389 psi      Barometric Pressure: 765 mmHg

System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	14:50
BLK	0.000	14:50
CHK	0.020	14:51
BLK	0.000	14:52
CHK	0.020	14:53
BLK	0.000	14:54
CHK	0.020	14:55
BLK	0.000	14:56

**Success**

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

Certification Status: Success

DBH  
MMB

**Intox EC/IR-II: Accuracy Check**

*Department of Forensic Science*

Serial Number: 010661      Test Number: 154

Test Date: 03/14/2014      Test Time: 14:59 EDT

Dry Gas Target: 0.302

Lot Number: AG322702-06      Exp Date: 08/15/2015

Tank Pressure: 267 psi      Barometric Pressure: 765 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	15:00
CHK	0.308	15:00
BLK	0.000	15:02
CHK	0.308	15:03
BLK	0.000	15:05
CHK	0.308	15:06

Test Status: *Success*

Calibration CRC: FF9AA030

**Intox EC/IR-II: Accuracy Check**

DBH  
mmB

*Department of Forensic Science*

Serial Number: 010661      Test Number: 155

Test Date: 03/14/2014      Test Time: 15:08 EDT

Dry Gas Target: 0.101

Lot Number: AG226201-29      Exp Date: 09/18/2014

Tank Pressure: 325 psi      Barometric Pressure: 765 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	15:09
CHK	0.103	15:10
BLK	0.000	15:12
CHK	0.102	15:13
BLK	0.000	15:14
CHK	0.103	15:15

Test Status: *Success*

Calibration CRC: FF9AA030

DBH  
mmB



COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF FORENSIC SCIENCE

CERTIFICATE OF BLOOD ALCOHOL ANALYSIS  
AS DETERMINED BY A CHEMICAL TEST OF THE ACCUSED'S BREATH

NAME OF ACCUSED <b>INSTRUMENT, TEST,</b>	NAME OF COURT <b>DFS</b>
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**BREATH ANALYSIS**

SAMPLE EXAMINED AND TEST CONDUCTED BY <b>HALL, DONALD, B</b>		AGENCY <b>DFS Central Lab</b>
DFS LICENSE NUMBER <b>21250</b>	LICENSE EXPIRES <b>10/01/2014</b>	DATE TEST CONDUCTED <b>03/14/2014</b>
TEST EQUIPMENT NUMBER <b>010661</b>		

RESULTS: TIME SAMPLE TAKEN 15:24 EDT

SAMPLE'S ALCOHOL CONTENT 0.00 GRAMS PER 210 LITERS OF BREATH

**ATTEST:**

I CERTIFY THAT THE ABOVE IS AN ACCURATE RECORD OF THE TEST CONDUCTED; THAT THE TEST WAS CONDUCTED WITH THE TYPE OF EQUIPMENT AND IN ACCORDANCE WITH THE METHODS APPROVED BY THE DEPARTMENT OF FORENSIC SCIENCE; THAT THE TEST WAS CONDUCTED IN ACCORDANCE WITH THE DEPARTMENT'S SPECIFICATIONS; THAT PRIOR TO ADMINISTRATION OF THE TEST THE ACCUSED WAS ADVISED OF HIS RIGHT TO OBSERVE THE PROCESS AND SEE THE BLOOD ALCOHOL READING ON THE EQUIPMENT USED TO PERFORM THE BREATH TEST, AND THAT I POSSESS A VALID LICENSE TO CONDUCT SUCH TEST, GIVEN UNDER MY HAND THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 20\_\_\_\_\_.

BREATH TEST OPERATOR
----------------------

I HAVE RECEIVED A COPY OF THIS CERTIFICATE OF ANALYSIS \_\_\_\_\_ SUBJECT'S SIGNATURE

SUBJECT REFUSED TO SIGN FOR COPY OF CERTIFICATE OF ANALYSIS \_\_\_\_\_ OPERATOR'S SIGNATURE



*AMS JBH*  
*MMB*

Test Results

**Instrument Serial Number 010661**

**Test # 000156**      Subject Test

Test Location 1    Department of  
Test Date    14 Mar 2014

Test Location 2    Forensic Science  
Test Time    15:18  
Remote/Local    Local

Test Location 3  
System Check    Passed

Operator's Last Name    HALL  
Agency    DFS Central Lab  
Card Serial Number    121250

Operator's First Name    DONALD

License Number    21250

Operator's Middle Initial    B

Subject's Last Name    INSTRUMENT

Effective Date    10/01/2012

Expiration Date    10/01/2014

Subject's Middle Initial

Subject's First Name    TEST

Subject's Date of Birth    00/00/0000

Subject's Sex    Male

Driver's License Number

Driver's License Expiration    00/00/0000

Driver's License State

Court Name    DFS

End Date    14 Mar 2014      End Time    15:25

Result Time    15:24

Result Date    14 Mar 2014

Result    0.00

Data Type    DIAG

Sample Value    Pass

Sample Time    15:18

Data Type    BLK

Sample Value    0.000

Sample Time    15:19

Data Type    CHK

Sample Value    0.102

Sample Time    15:19

Data Type    BLK

Sample Value    0.000

Sample Time    15:21

Data Type    SUBJ

Sample Value    0.000

Sample Time    15:22

Data Type    BLK

Sample Value    0.000

Sample Time    15:23

Data Type    SUBJ

Sample Value    0.000

Sample Time    15:24

Data Type    BLK

Sample Value    0.000

Sample Time    15:25

Standard Type    Dry Gas Std

Standard Value    0.101

Standard Lot Number    AG226201-29

Standard Expiration Date    09/18/2014

Tank Pressure    321

Barometric Pressure    765 mmHg

Blow Sample Number    1      Blow Duration    3.51 sec

Blow Volume    1991 cc      End-of-Blow Time    15:22

Blow Sample Number    2      Blow Duration    3.40 sec

Blow Volume    1941 cc      End-of-Blow Time    15:24

Tamper Evident Stamp    bfe5a19

Test Status Code    0

Test Status    Success