



# 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: 010655

CERTIFICATION DATE: July 22, 2014

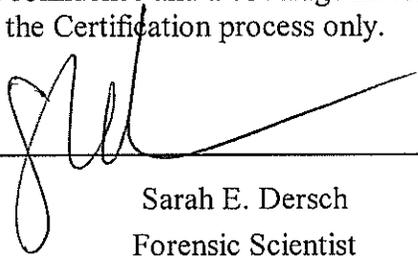
DATE RECERTIFICATION DUE: January 18, 2015

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.

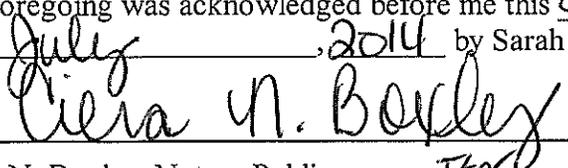


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Sarah E. Dersch  
Forensic Scientist

CITY OF RICHMOND  
COMMONWEALTH OF VIRGINIA

The foregoing was acknowledged before me this 23<sup>rd</sup> day of July, 2014 by Sarah E. Dersch



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Ciera N. Boxley, Notary Public TLN

My commission expires: August 31, 2014

	Ciera N. Boxley
	Notary Public - ID 7364173
	Commonwealth of VA
	My Com. Exps. <u>08/31/2014</u>

*Jed*

**Department of Forensic Science  
Breath Alcohol Section  
Instrument Maintenance History  
1/1/1990 To 7/22/2014**

**Instrument Serial Number: 010655**

**As of 22-Jul-14**

<b>Maintenance Date</b>	<b>Certification Date</b>	<b>Technician Initials</b>	<b>Remarks</b>
22-Jul-14	22-Jul-14	SED (24178)	CERTIFIED. REPLACED DRY GAS STANDARD.
01-Apr-14	04-Feb-14	DBH (21250)	MOVED INSTRUMENT TO DIFFERENT LOCATION WITHIN SAME FACILITY.
04-Feb-14	04-Feb-14	DBH (21250)	CERTIFIED. REPLACED DRY GAS STANDARD.
22-Aug-13	22-Aug-13	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE. CALIBRATED AND CERTIFIED. REPLACED DRY GAS STANDARD.
05-Mar-13	05-Mar-13	SED (24178)	MOVED INSTRUMENT TO NEW LOCATION WITHIN SAME FACILITY. CERTIFIED. REPLACED DRY GAS STANDARD.
18-Sep-12	18-Sep-12	DBH (21250)	CERTIFIED, REPLACED DRY GAS STANDARD.
10-Apr-12	10-Apr-12	HMS (18910)	CERTIFIED, REPLACED DRY GAS STANDARD.
01-Nov-11	01-Nov-11	TLN (25387)	CERTIFIED
24-May-11	24-May-11	DBH (21250)	REPLACED DRY GAS STANDARD, CERTIFIED
08-Dec-10	08-Dec-10	DBH (21250)	CERTIFIED
23-Jun-10	23-Jun-10	DBH (21250)	CERTIFIED
05-Jan-10	05-Jan-10	DBH (21250)	REPLACED DRY GAS STANDARD, CERTIFIED
28-Jul-09	28-Jul-09	DBH (21250)	CERTIFIED.
17-Mar-09	17-Mar-09	DBH (21250)	CERTIFIED.
12-Mar-09	12-Mar-09	NMJ (22392)	FIRMWARE/SOFTWARE UPGRADE, CERTIFIED.
12-Mar-09	12-Mar-09	NMJ (22392)	CALIBRATED, CERTIFIED AND ACCEPTED.

nd

# INTOX EC/IR II Quality Assurance Worksheet

Instrument Serial Number **010655** Worksheet Start Date **7/22/2014**

Location **Ft AP Hill**

Address **14115 Montague Rd, Ft AP Hill, VA 22427**

DFS Technician **Sarah Dersch** License No. **24178**

Laboratory  On-Site

Site Specification: No detrimental environmental conditions exist.

Instrument Barometer (mm HG) **759** Reference Barometer (mm HG) **760**

Reference Barometer(RB)Serial # **009111** RB Calibration Due **5/19/2015**

### Measurement Assurance Check

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.301
0.300	0.300	0.291	0.309	<b>Sample 2</b>	0.301
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.301
0		0.301	0.301		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.100
0.100	0.100	0.097	0.103	<b>Sample 2</b>	0.100
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.100
0		0.100	0.100		

Dry gas standard Lot No. (with tank no.) **AG320502-11**

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

010655

Certification Date

7/22/2014

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	0.250	0.242	0.257	<b>Sample 2</b>	0.251
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.250
0.001		0.250	0.251		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.150
0.150	0.150	0.145	0.154	<b>Sample 2</b>	0.150
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.150
0		0.150	0.150		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.080
0.080	0.080	0.077	0.083	<b>Sample 2</b>	0.080
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.080
0		0.080	0.080		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.019
0.020	0.020	0.017	0.023	<b>Sample 2</b>	0.019
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.019
0		0.019	0.019		

All measurements are in g/210L

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

DFS Technician

*[Handwritten Signature]*

Date

7/22/14

Issuing Analyst

*[Handwritten Signature]*

Date

7/22/14

TLN

82d

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

*Department of Forensic Science*

Serial Number: 010655      Test Number: 181  
Test Date: 07/22/2014      Test Time: 10:52 EDT

Technician Initials: *SED*

Dry Gas Target: 0.250

Lot Number: 1611425014-04      Exp Date: 07/05/2016

Tank Pressure: 884 psi      Barometric Pressure: 759 mmHg

System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	10:52
BLK	0.000	10:53
CHK	0.251	10:54
BLK	0.000	10:55
CHK	0.251	10:56
BLK	0.000	10:57
CHK	0.250	10:58
BLK	0.000	11:00

**Success**

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

Certification Status: Continued

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

*SED*

*Department of Forensic Science*  
Serial Number: 010655      Test Number: 182  
Test Date: 07/22/2014      Test Time: 11:02 EDT

Technician Initials: *SED*  
Dry Gas Target: 0.150  
Lot Number: 0771315013-03      Exp Date: 05/01/2015  
Tank Pressure: 541 psi      Barometric Pressure: 759 mmHg  
System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	11:02
BLK	0.000	11:03
CHK	0.150	11:04
BLK	0.000	11:05
CHK	0.150	11:06
BLK	0.000	11:07
CHK	0.150	11:08
BLK	0.000	11:09

**Success**

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

Certification Status: Continued

sd

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

*Department of Forensic Science*

Serial Number: 010655      Test Number: 183  
Test Date: 07/22/2014      Test Time: 11:11 EDT

Technician Initials: SED

Dry Gas Target: 0.080

Lot Number: 07713080I2-03      Exp Date: 05/01/2015

Tank Pressure: 634 psi      Barometric Pressure: 759 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	11:12
BLK	0.000	11:12
CHK	0.080	11:13
BLK	0.000	11:14
CHK	0.080	11:15
BLK	0.000	11:16
CHK	0.080	11:17
BLK	0.000	11:18

**Success**

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

Certification Status: Continued

fid

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

*Department of Forensic Science*

Serial Number: 010655      Test Number: 184  
Test Date: 07/22/2014      Test Time: 11:20 EDT

Technician Initials: *SED*

Dry Gas Target: 0.020

Lot Number: 3441302011-01      Exp Date: 01/01/2016

Tank Pressure: 605 psi      Barometric Pressure: 759 mmHg

System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	11:21
BLK	0.000	11:21
CHK	0.019	11:22
BLK	0.000	11:23
CHK	0.019	11:24
BLK	0.000	11:25
CHK	0.019	11:26
BLK	0.000	11:27

**Success**

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

Certification Status: Success

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

*mf*

*Department of Forensic Science*

Serial Number: 010655      Test Number: 185  
Test Date: 07/22/2014      Test Time: 11:30 EDT  
Dry Gas Target: 0.300

Lot Number: AG334603-03      Exp Date: 12/12/2015

Tank Pressure: 169 psi      Barometric Pressure: 759 mmHg  
System Check: *Passed*

Test	g/210L	Time
BLK	0.000	11:31
CHK	0.301	11:32
BLK	0.000	11:34
CHK	0.301	11:34
BLK	0.000	11:36
CHK	0.301	11:37

Test Status: *Success*

Calibration CRC: C100879B

82d

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

*Department of Forensic Science*

Serial Number: 010655      Test Number: 186  
Test Date: 07/22/2014      Test Time: 11:40 EDT  
Dry Gas Target: 0.100

Lot Number: AG320502-11      Exp Date: 07/24/2015  
Tank Pressure: 129 psi      Barometric Pressure: 759 mmHg  
System Check: *Passed*

Test	g/210L	Time
BLK	0.000	11:41
CHK	0.100	11:41
BLK	0.000	11:43
CHK	0.100	11:44
BLK	0.000	11:45
CHK	0.100	11:46

Test Status: *Success*

Calibration CRC: C100879B

Jed



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>DERSCH, SARAH, E</b>		AGENCY <b>DFS Central Lab</b>
DFS LICENSE NUMBER <b>24178</b>	LICENSE EXPIRES <b>10/01/2014</b>	DATE TEST CONDUCTED <b>07/22/2014</b>
TEST EQUIPMENT NUMBER <b>010655</b>		

**11:54 EDT**

RESULTS: TIME SAMPLE TAKEN \_\_\_\_\_  
**0.00**

SAMPLE'S ALCOHOL CONTENT \_\_\_\_\_ 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
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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

*SK*



# IntoxNet MIS Report

Report Generated 22 Jul 2014 at 12:02

## Test Results

**Instrument Serial Number 010655**

**Test # 000187**      **Subject Test**

**Test Location 1** Department of  
Test Date 22 Jul 2014

**Test Location 2** Forensic Science  
Test Time 11:48  
Remote/Local Local

**Test Location 3**  
System Check Passed

**Operator's Last Name** DERSCH  
Agency DFS Central Lab

**Operator's First Name** SARAH

**Operator's Middle Initial** E

**Card Serial Number** 124178

**License Number** 24178

**Effective Date** 10/01/2012

**Expiration Date** 10/01/2014

**Subject's Last Name** INSTRUMENT

**Subject's First Name** TEST

**Subject's Middle Initial**

**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** 22 Jul 2014      **End Time** 11:56

**Result Time** 11:54

**Result Date** 22 Jul 2014      **Result** 0.00

**Data Type** DIAG

**Sample Value** Pass

**Sample Time** 11:48

**Data Type** BLK

**Sample Value** 0.000

**Sample Time** 11:49

**Data Type** CHK

**Sample Value** 0.100

**Sample Time** 11:50

**Data Type** BLK

**Sample Value** 0.000

**Sample Time** 11:51

**Data Type** SUBJ

**Sample Value** 0.000

**Sample Time** 11:52

**Data Type** BLK

**Sample Value** 0.000

**Sample Time** 11:53

**Data Type** SUBJ

**Sample Value** 0.000

**Sample Time** 11:54

**Data Type** BLK

**Sample Value** 0.000

**Sample Time** 11:55

**Standard Type** Dry Gas Std

**Standard Value** 0.100

**Standard Lot Number** AG320502-11

**Standard Expiration Date** 07/24/2015

**Tank Pressure** 129

**Barometric Pressure** 759 mmHg

**Blow Sample Number** 1      **Blow Duration** 3.50 sec

**Blow Volume** 1825 cc      **End-of-Blow Time** 11:52

**Blow Sample Number** 2      **Blow Duration** 3.84 sec

**Blow Volume** 2282 cc      **End-of-Blow Time** 11:54

**Tamper Evident Stamp** 130bc100

**Test Status Code** 0

**Test Status** Success