



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: 010469
CERTIFICATION DATE: May 13, 2014
DATE RECERTIFICATION DUE: November 9, 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.

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Sarah E. Dersch
Forensic Scientist

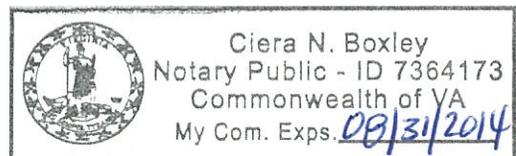
CITY OF RICHMOND
COMMONWEALTH OF VIRGINIA

The foregoing was acknowledged before me this 19th day of May, 2014 by Sarah E. Dersch

[Handwritten signature: Ciera N. Boxley]
Ciera N. Boxley, Notary Public

My commission expires: August 31, 2014

MMB



**Department of Forensic Science  
Breath Alcohol Section  
Instrument Maintenance History  
1/1/1990 To 5/13/2014**

*HMS  
Sed*

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**Instrument Serial Number: 010469** **As of 13-May-14**

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Maintenance Date	Certification Date	Technician Initials	Remarks
13-May-14	13-May-14	HMS (18910)	CERTIFIED
22-Nov-13	22-Nov-13	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE. CALIBRATED AND CERTIFIED. REPLACED DRY GAS STANDARD.
04-Jun-13	04-Jun-13	DBH (21250)	CALIBRATED AND CERTIFIED. REPLACED DRY GAS STANDARD.
20-Dec-12	20-Dec-12	DBH (21250)	CALIBRATED AND CERTIFIED. REPLACED DRY GAS STANDARD.
10-Oct-12	10-Oct-12	DBH (21250)	CERTIFIED.
04-Oct-12	04-Oct-12	DBH (21250)	REPLACED AND TESTED FUEL CELL MODULE. CALIBRATED AND CERTIFIED.
11-Apr-12	11-Apr-12	DBH (21250)	CERTIFIED. REPLACED DRY GAS STANDARD.
26-Oct-11	26-Oct-11	DBH (21250)	REPLACED DRY GAS STANDARD, CERTIFIED
22-Aug-11	31-May-11	DBH (21250)	REPLACED DRY GAS STANDARD
01-Jun-11	31-May-11	RJP (22428)	CORRECTED DRY GAS STANDARD LOT NUMBER IN INSTRUMENT MEMORY.
31-May-11	31-May-11	RJP (22428)	CALIBRATED AND CERTIFIED.
21-Apr-10	21-Apr-10	RJP (22428)	REPLACED TANK TOP LID. CALIBRATED AND CERTIFIED.
14-Apr-10	14-Apr-10	RJP (22428)	REPLACED MECHANICAL SAMPLE ASSEMBLY SPRING COIL. TESTED SET SOLENOID. CALIBRATED AND CERTIFIED.
08-Jul-09	08-Jul-09	RJP (22428)	UPDATED TIME. CERTIFIED.
30-Apr-09	23-Mar-09	DBH (21250)	REPLACED DRY GAS STANDARD
23-Mar-09	23-Mar-09	RJP (22428)	FIRMWARE/SOFTWARE UPGRADE. CERTIFIED.
07-Jan-09	16-Oct-08	NMJ (22392)	REPLACED DRY GAS STANDARD
16-Oct-08	16-Oct-08	RJP (22428)	CERTIFIED.
30-Sep-08	30-Sep-08	NMJ (22392)	CALIBRATED, CERTIFIED AND ACCEPTED.

HMS  
Jed

# INTOX EC/IR II Quality Assurance Worksheet

Instrument Serial Number **010469** Worksheet Start Date **5/13/2014**

Location **DFS-Central**

Address **[Redacted]**

DFS Technician **Heather Stanton** License No. **18910**

Laboratory  On-Site

Site Specification: No detrimental environmental conditions exist.

Instrument Barometer (mm HG) **758** Reference Barometer (mm HG) **759**

Reference Barometer(RB)Serial # **009113** RB Calibration Due **4/28/2015**

### Measurement Assurance Check

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.305
0.300	0.299	0.290	0.307	<b>Sample 2</b>	0.305
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.305
0		0.305	0.305		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.101
0.100	0.100	0.097	0.103	<b>Sample 2</b>	0.101
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.101
0		0.101	0.101		

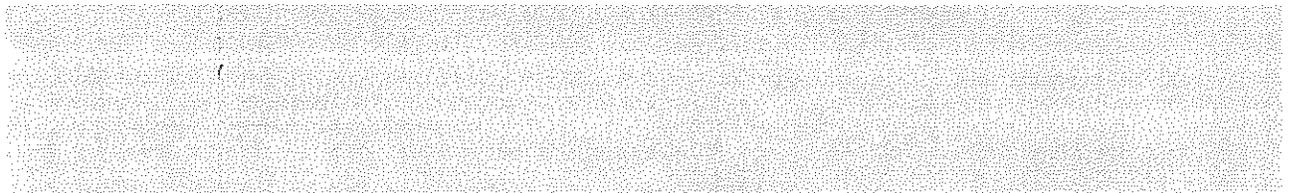
Dry gas standard Lot No. (with tank no.) **AG217702-18**

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

- Supplies
- Mouthpieces
- Certificates of Analysis
- Operator Worksheet
- Other:



Notes:



Instrument Serial Number

010469

Certification Date

5/13/2014

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>	0.255
0.250	0.249	0.241	0.256	<b>Sample 2</b>	0.254
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.254
0.001		0.254	0.255		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.152
0.150	0.150	0.145	0.154	<b>Sample 2</b>	0.152
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.152
0		0.152	0.152		

<b>Standard (sea level)</b>	<b>PA Target</b>	<b>minimum</b>	<b>maximum</b>	<b>Sample 1</b>	0.081
0.080	0.080	0.077	0.083	<b>Sample 2</b>	0.081
<b>Precision</b>		<b>sample min</b>	<b>sample max</b>	<b>Sample 3</b>	0.081
0		0.081	0.081		

<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

*Heath W. Stach*

Date

*5/13/14*

Issuing Analyst

*[Signature]*

Date

*5/19/14*

*MMB*

HMS  
Sud

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

*Department of Forensic Science*

Serial Number: 010469      Test Number: 2399  
Test Date: 05/13/2014      Test Time: 13:54 EDT

Technician Initials: HMS

Dry Gas Target: 0.249

Lot Number: 07713250I4-02      Exp Date: 05/01/2015

Tank Pressure: 188 psi      Barometric Pressure: 758 mmHg

System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	13:54
BLK	0.000	13:55
CHK	0.255	13:56
BLK	0.000	13:57
CHK	0.254	13:58
BLK	0.000	14:00
CHK	0.254	14:01
BLK	0.000	14:03

**Success**

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

Certification Status: Continued

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

*Department of Forensic Science*

Serial Number: 010469      Test Number: 2400  
Test Date: 05/13/2014      Test Time: 14:06 EDT

Technician Initials: HMS

Dry Gas Target: 0.150

Lot Number: 0771315013-01      Exp Date: 05/01/2015

Tank Pressure: 713 psi      Barometric Pressure: 758 mmHg  
System Check: Passed

Test	g/210L	Time
DIAG	Pass	14:06
BLK	0.000	14:07
CHK	0.152	14:08
BLK	0.000	14:09
CHK	0.152	14:10
BLK	0.000	14:11
CHK	0.152	14:12
BLK	0.000	14:13

**Success**

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

Certification Status: Continued

HMS  
Sed

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

*Department of Forensic Science*

Serial Number: 010469      Test Number: 2401  
Test Date: 05/13/2014      Test Time: 14:15 EDT

Technician Initials: HMS

Dry Gas Target: 0.080

Lot Number: 0771308012-02      Exp Date: 05/01/2015

Tank Pressure: 875 psi      Barometric Pressure: 758 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	14:16
BLK	0.000	14:17
CHK	0.081	14:18
BLK	0.000	14:19
CHK	0.081	14:20
BLK	0.000	14:21
CHK	0.081	14:22
BLK	0.000	14:23

**Success**

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

Certification Status: Continued

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Sed

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010469      Test Number: 2402  
Test Date: 05/13/2014      Test Time: 14:25 EDT

Technician Initials: HMS

Dry Gas Target: 0.020

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

Tank Pressure: 291 psi      Barometric Pressure: 758 mmHg  
System Check: Passed

Test	g/210L	Time
DIAG	Pass	14:25
BLK	0.000	14:26
CHK	0.020	14:26
BLK	0.000	14:28
CHK	0.020	14:28
BLK	0.000	14:30
CHK	0.020	14:30
BLK	0.000	14:32

Success

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

Certification Status: Success

Handwritten initials/signature in the top right corner.

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

*Department of Forensic Science*

Serial Number: 010469    Test Number: 2403  
Test Date: 05/13/2014    Test Time: 14:35 EDT  
Dry Gas Target: 0.299  
Lot Number: AG334603-01    Exp Date: 12/12/2015  
Tank Pressure: 227 psi    Barometric Pressure: 758 mmHg  
System Check: *Passed*

Test	g/210L	Time
BLK	0.000	14:35
CHK	0.305	14:36
BLK	0.000	14:38
CHK	0.305	14:39
BLK	0.000	14:41
CHK	0.305	14:41

Test Status: *Success*

Calibration CRC: B8F2C78C

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Intox EC/IR-II: Accuracy Check

Department of Forensic Science

Serial Number: 010469 Test Number: 2404

Test Date: 05/13/2014 Test Time: 14:49 EDT

Dry Gas Target: 0.100

Lot Number: AG217702-18 Exp Date: 06/25/2014

Tank Pressure: 276 psi Barometric Pressure: 758 mmHg

System Check: Passed

Test	g/210L	Time
BLK	0.000	14:49
CHK	0.101	14:50
BLK	0.000	14:52
CHK	0.101	14:52
BLK	0.000	14:54
CHK	0.101	14:55

Test Status: Success

Calibration CRC: B8F2C78C

AMS  
Fred

INSTRUMENT, TEST,

DFS

STANTON, HEATHER, M

DFS Central Lab

18910

10/01/2014

05/13/2014

010469

05/13/2014

15:02 EDT

0.00



**IntoxNet MIS Report**  
Report Generated 13 May 2014 at 15:09

*AMS*  
*sd*

Test Results

**Instrument Serial Number 010469**

**Test # 002405**      Subject Test

Test Location 1    Department of  
Test Date    13 May 2014

Test Location 2    Forensic Science  
Test Time    14:56  
Remote/Local    Local

Test Location 3  
System Check    Passed

Operator's Last Name    STANTON  
Agency    DFS Central Lab

Operator's First Name    HEATHER

Operator's Middle Initial    M

Card Serial Number    118910

Effective Date    10/01/2012

License Number    18910

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    13 May 2014      End Time    15:03

Result Time    15:02

Result Date    13 May 2014      Result    0.00

Data Type    DIAG

Sample Value    Pass

Sample Time    14:56

Data Type    BLK

Sample Value    0.000

Sample Time    14:57

Data Type    CHK

Sample Value    0.101

Sample Time    14:58

Data Type    BLK

Sample Value    0.000

Sample Time    14:59

Data Type    SUBJ

Sample Value    0.000

Sample Time    15:00

Data Type    BLK

Sample Value    0.000

Sample Time    15:01

Data Type    SUBJ

Sample Value    0.000

Sample Time    15:02

Data Type    BLK

Sample Value    0.000

Sample Time    15:03

Standard Type    Dry Gas Std

Standard Value    0.100

Standard Lot Number    AG217702-18

Standard Expiration Date    06/25/2014

Tank Pressure    272

Barometric Pressure    758 mmHg

Blow Sample Number    1      Blow Duration    3.36 sec

Blow Volume    1798 cc      End-of-Blow Time    15:00

Blow Sample Number    2      Blow Duration    3.41 sec

Blow Volume    1784 cc      End-of-Blow Time    15:02

Tamper Evident Stamp    b85b7960

Test Status Code    0

Test Status    Success