



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: 010581
CERTIFICATION DATE: June 11, 2014
DATE RECERTIFICATION DUE: December 8, 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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Timmy L. Neece, Jr.
Forensic Scientist

CITY OF RICHMOND
COMMONWEALTH OF VIRGINIA

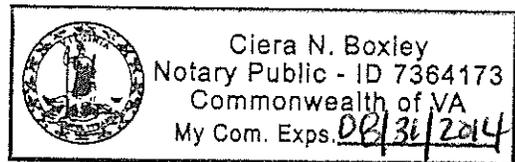
The foregoing was acknowledged before me this 13th day of June, 2014 by Timmy L. Neece, Jr.

[Handwritten signature: Ciera N. Boxley]

Ciera N. Boxley, Notary Public

My commission expires: August 31, 2014

[Handwritten initials]



**Department of Forensic Science
Breath Alcohol Section
Instrument Maintenance History
1/1/1990 To 6/11/2014**

*HMS
TLN*

Instrument Serial Number: 010581

As of 11-Jun-14

Maintenance Date	Certification Date	Technician Initials	Remarks
11-Jun-14	11-Jun-14	HMS (18910)	REPLACED AND TESTED FUEL CELL MODULE, CALIBRATED AND CERTIFIED.
12-Mar-14	12-Mar-14	MMB (26417)	CERTIFIED.
13-Nov-13	11-Oct-13	HMS (18910)	REPLACED KEYBOARD.
11-Oct-13	11-Oct-13	DBH (21250)	REPLACED KEYBOARD. FIRMWARE/SOFTWARE UPGRADE. CALIBRATED AND CERTIFIED.
06-Jun-13	06-Jun-13	HMS (18910)	CERTIFIED, REPLACED DRY GAS STANDARD.
04-Mar-13	27-Feb-13	TLN (25387)	CORRECTED DRY GAS STANDARD EXPIRATION DATE IN INSTRUMENT MEMORY.
27-Feb-13	27-Feb-13	DBH (21250)	CERTIFIED.
25-Oct-12	25-Oct-12	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE, CALIBRATED AND CERTIFIED.
04-Mar-10	04-Mar-10	HMS (18910)	CALIBRATED AND CERTIFIED.
22-Feb-10	23-Sep-09	HMS (18910)	RESET PRINTER.
20-Jan-10	23-Sep-09	HMS (18910)	REPLACED DRY GAS STANDARD.
23-Sep-09	23-Sep-09	HMS (18910)	REPLACED DRY GAS STANDARD, CERTIFIED.
09-Jul-09	21-Apr-09	HMS (18910)	REPLACED DRY GAS STANDARD.
21-Apr-09	21-Apr-09	HMS (18910)	CERTIFIED.
04-Mar-09	04-Mar-09	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE, CERTIFIED.
25-Dec-08	25-Dec-08	NMJ (22392)	CALIBRATED, CERTIFIED AND ACCEPTED.

AMS
TLN

INTOX EC/IR II Quality Assurance Worksheet

Instrument Serial Number **010581** Worksheet Start Date **6/11/2014**

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) **756** Reference Barometer (mm HG) **756**

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

Measurement Assurance Check

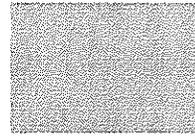
Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.302
0.300	0.298	0.289	0.306	Sample 2	0.301
Precision		sample min	sample max	Sample 3	0.300
0.002		0.300	0.302		

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

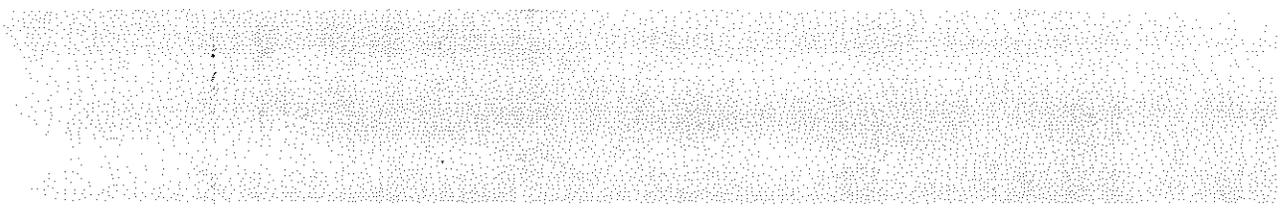
Dry gas standard Lot No. (with tank no.) **AG217702-24**

- 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

010581

Certification Date

6/11/2014

Calibrated

Certified

Measurement Assurance Check

Instrument Test

Troubleshooting/Maintenance Worksheet Completed

(Successful completion denotes satisfactory condition of the item.)

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.249
0.250	0.249	0.241	0.256	Sample 2	0.248
Precision		sample min	sample max	Sample 3	0.248
0.001		0.248	0.249		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.148
0.150	0.149	0.144	0.153	Sample 2	0.148
Precision		sample min	sample max	Sample 3	0.148
0		0.148	0.148		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.080
0.080	0.080	0.077	0.083	Sample 2	0.079
Precision		sample min	sample max	Sample 3	0.080
0.001		0.079	0.080		

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

6/11/14

Issuing Analyst

[Signature]

Date

6/11/14

MSK

HMS
TLN

Troubleshooting/Maintenance Worksheet

Location

SN 010581

DFS Central Lab 700 N 5th Street, Richmond, VA 23219

Page 1 of 1

Date	Initials	Work Performed
6-9-14	HMS	Replaced and tested fuel cell module.
6-9-14	HMS	24 hour leak check 1110 psi at 3:25 PM.
6-11-14	HMS	1120 psi at 8:27 AM
<p>HMS 6/11/14</p>		

HMS
TLN

Intox EC/IR-II: Calibration

Department of Forensic Science

Serial Number: 010581 Test Number: 1594

Test Date: 06/11/2014 Test Time: 08:34 EDT

Dry Gas Target: 0.100

Lot Number: 34413100I3-02 Exp Date: 01/01/2016

Tank Pressure: 1002 psi Barometric Pressure: 756 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	08:35
CAL	0.100	08:35

Test Status: *Success*

Calibration CRC: 294C71BB

HMS
TLV

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010581 Test Number: 1595
Test Date: 06/11/2014 Test Time: 08:39 EDT

Technician Initials: HMS

Dry Gas Target: 0.249

Lot Number: 0771325014-01 Exp Date: 05/01/2015

Tank Pressure: 909 psi Barometric Pressure: 756 mmHg
System Check: Passed

Test	g/210L	Time
DIAG	Pass	08:39
BLK	0.000	08:40
CHK	0.249	08:41
BLK	0.000	08:42
CHK	0.248	08:43
BLK	0.000	08:44
CHK	0.248	08:44
BLK	0.000	08:46

Success

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

Certification Status: Continued

HMS
TLN

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010581 Test Number: 1596
Test Date: 06/11/2014 Test Time: 08:49 EDT

Technician Initials: HMS

Dry Gas Target: 0.149

Lot Number: 29512150I2-04 Exp Date: 11/01/2014

Tank Pressure: 365 psi Barometric Pressure: 756 mmHg
System Check: Passed

Test	g/210L	Time
DIAG	Pass	08:49
BLK	0.000	08:50
CHK	0.148	08:51
BLK	0.000	08:52
CHK	0.148	08:52
BLK	0.000	08:54
CHK	0.148	08:54
BLK	0.000	08:55

Success

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

Certification Status: Continued

HMS
TLW

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010581 Test Number: 1597
Test Date: 06/11/2014 Test Time: 09:08 EDT

Technician Initials: HMS

Dry Gas Target: 0.080

Lot Number: 34413080I2-02 Exp Date: 01/01/2016

Tank Pressure: 938 psi Barometric Pressure: 756 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	09:09
BLK	0.000	09:10
CHK	0.080	09:10
BLK	0.000	09:11
CHK	0.079	09:12
BLK	0.000	09:13
CHK	0.080	09:14
BLK	0.000	09:15

Success

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

Certification Status: Continued

HMS
TLN

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010581 Test Number: 1598
Test Date: 06/11/2014 Test Time: 09:23 EDT

Technician Initials: HMS

Dry Gas Target: 0.020

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

Tank Pressure: 90 psi Barometric Pressure: 756 mmHg

System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	09:24
BLK	0.000	09:24
CHK	0.020	09:25
BLK	0.000	09:26
CHK	0.020	09:27
BLK	0.000	09:28
CHK	0.020	09:29
BLK	0.000	09:30

Success

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

Certification Status: Success

KMS
TLN

Intox EC/IR-II: Accuracy Check

Department of Forensic Science

Serial Number: 010581 Test Number: 1599
Test Date: 06/11/2014 Test Time: 09:35 EDT
Dry Gas Target: 0.298

Lot Number: AG334603-07 Exp Date: 12/12/2015
Tank Pressure: 301 psi Barometric Pressure: 756 mmHg
System Check: *Passed*

Test	g/210L	Time
BLK	0.000	09:36
CHK	0.302	09:37
BLK	0.000	09:39
CHK	0.301	09:39
BLK	0.000	09:41
CHK	0.300	09:41

Test Status: *Success*

Calibration CRC: 294C71BB

HMS
TW

Intox EC/IR-II: Accuracy Check

Department of Forensic Science

Serial Number: 010581 Test Number: 1600
Test Date: 06/11/2014 Test Time: 09:44 EDT
Dry Gas Target: 0.100

Lot Number: AG217702-24 Exp Date: 06/25/2014
Tank Pressure: 448 psi Barometric Pressure: 756 mmHg
System Check: Passed

Test	g/210L	Time
BLK	0.000	09:44
CHK	0.100	09:45
BLK	0.000	09:47
CHK	0.100	09:48
BLK	0.000	09:49
CHK	0.100	09:50

Test Status: Success

Calibration CRC: 294C71BB

AND
TKW

INSTRUMENT, TEST,

DFS

STANTON, HEATHER, M

DFS Central Lab

18910

10/01/2014

06/11/2014

010581

06/11/2014

10:23 EDT

0.00



IntoxNet MIS Report

Report Generated 11 Jun 2014 at 10:32

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Test Results

Instrument Serial Number 010581

Test # 001601 **Subject Test**

Test Location 1 Department of
Test Date 11 Jun 2014

Test Location 2 Forensic Science
Test Time 10:17
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

License Number 18910

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 11 Jun 2014 End Time 10:24

Result Time 10:23

Result Date 11 Jun 2014 Result 0.00

Data Type DIAG

Sample Value Pass

Sample Time 10:17

Data Type BLK

Sample Value 0.000

Sample Time 10:18

Data Type CHK

Sample Value 0.100

Sample Time 10:18

Data Type BLK

Sample Value 0.000

Sample Time 10:20

Data Type SUBJ

Sample Value 0.000

Sample Time 10:20

Data Type BLK

Sample Value 0.000

Sample Time 10:21

Data Type SUBJ

Sample Value 0.000

Sample Time 10:23

Data Type BLK

Sample Value 0.000

Sample Time 10:24

Standard Type Dry Gas Std

Standard Value 0.100

Standard Lot Number AG217702-24

Standard Expiration Date 06/25/2014

Tank Pressure 443

Barometric Pressure 756 mmHg

Blow Sample Number 1 Blow Duration 3.63 sec

Blow Volume 1759 cc End-of-Blow Time 10:20

Blow Sample Number 2 Blow Duration 3.52 sec

Blow Volume 1764 cc End-of-Blow Time 10:23

Tamper Evident Stamp cb963562

Test Status Code 0

Test Status Success