



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: 010830
CERTIFICATION DATE: July 9, 2014
DATE RECERTIFICATION DUE: January 5, 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.

Signature of Sarah E. Dersch
Sarah E. Dersch
Forensic Scientist

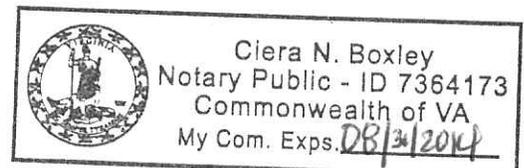
CITY OF RICHMOND
COMMONWEALTH OF VIRGINIA

The foregoing was acknowledged before me this 10th day of July, 2014 by Sarah E. Dersch

Signature of Ciera N. Boxley
Ciera N. Boxley, Notary Public

My commission expires: August 31, 2014

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**Department of Forensic Science
Breath Alcohol Section
Instrument Maintenance History
1/1/1990 To 7/10/2014**

Instrument Serial Number: 010830

As of 10-Jul-14

Maintenance Date	Certification Date	Technician Initials	Remarks
09-Jul-14	09-Jul-14	SED (24178)	CERTIFIED. REPLACED DRY GAS STANDARD.
31-Jan-14	31-Jan-14	DBH (21250)	CERTIFIED.
06-Aug-13	06-Aug-13	HMS (18910)	FIRMWARE/SOFTWARE UPGRADE, CALIBRATED AND CERTIFIED, REPLACED DRY GAS STANDARD.
20-Jun-13	20-Jun-13	DBH (21250)	MOVED INSTRUMENT TO NEW LOCATION WITHIN SAME FACILITY, CERTIFIED.
01-Mar-13	01-Mar-13	HMS (18910)	CERTIFIED
15-Nov-12	15-Nov-12	MSK (21355)	MOVED INSTRUMENT TO NEW LOCATION WITHIN SAME FACILITY, FIRMWARE/SOFTWARE UPGRADE, CALIBRATED AND CERTIFIED.
05-Sep-12	05-Sep-12	DBH (21250)	CERTIFIED.
05-Jun-12	05-Jun-12	DBH (21250)	CERTIFIED. REPLACED DRY GAS STANDARD.
03-Apr-12	19-Apr-11	DBH (21250)	SITE VISIT CONDUCTED.
19-Jan-12	19-Apr-11	SED (24178)	SITE VISIT CONDUCTED.
19-Apr-11	19-Apr-11	DBH (21250)	REPLACED DRY GAS STANDARD, CERTIFIED
28-Oct-10	28-Oct-10	DBH (21250)	REPLACED DRY GAS STANDARD, CERTIFIED
17-May-10	17-May-10	DBH (21250)	REPLACED DRY GAS STANDARD, CERTIFIED
16-Nov-09	16-Nov-09	DBH (21250)	CERTIFIED
22-May-09	22-May-09	RJP (22428)	CERTIFIED.
01-May-09	01-May-09	HMS (18910)	CALIBRATED, CERTIFIED AND ACCEPTED.

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INTOX EC/IR II Quality Assurance Worksheet

Instrument Serial Number **010830** Worksheet Start Date **7/9/2014**
 Location **Langley AFB**
 Address **65 Sweeney Blvd, Hampton, VA 23665**
 DFS Technician **Sarah Dersch** License No. **24178**

Laboratory On-Site

Site Specification: No detrimental environmental conditions exist.

Instrument Barometer (mm HG) **757** Reference Barometer (mm HG) **760**

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

Measurement Assurance Check

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.299
0.300	0.299	0.290	0.307	Sample 2	0.299
Precision		sample min	sample max	Sample 3	0.298
0.001		0.298	0.299		

Standard (sea level)	PA Target	minimum	maximum	Sample 1	0.098
0.100	0.100	0.097	0.103	Sample 2	0.098
Precision		sample min	sample max	Sample 3	0.098
0		0.098	0.098		

Dry gas standard Lot No. (with tank no.) **AG316301-09**

Replaced dry gas standard (+O-ring)

Installed at Location

Removed to DFS-Central

Supplies
 Mouthpieces **50**
 Certificates of Analysis **50**
 Operator Worksheet **1 pkt**
 Other:

Notes:

[Redacted Notes Area]

Instrument Serial Number 010830

Certification Date 7/9/2014

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	0.248
0.250	0.249	0.241	0.256	Sample 2	0.247
Precision		sample min	sample max	Sample 3	0.247
0.001		0.247	0.248		

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	0.079
0.080	0.080	0.077	0.083	Sample 2	0.079
Precision		sample min	sample max	Sample 3	0.079
0		0.079	0.079		

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

7/10/14

Issuing Analyst

[Handwritten signature]

Date

7/10/14

[Handwritten initials]

intox EC/IR-II: Certification

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Department of Forensic Science
Serial Number: 010830 Test Number: 229
Test Date: 07/09/2014 Test Time: 11:31 EDT

Technician Initials: *SED*
Dry Gas Target: 0.249
Lot Number: 0771325014-03 Exp Date: 05/01/2015
Tank Pressure: 125 psi Barometric Pressure: 757 mmHg
System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	11:31
BLK	0.000	11:32
CHK	0.248	11:33
BLK	0.000	11:35
CHK	0.247	11:35
BLK	0.000	11:37
CHK	0.247	11:38
BLK	0.000	11:39

Success

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

Certification Status: Continued

SED

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010830 Test Number: 230
Test Date: 07/09/2014 Test Time: 11:42 EDT

Technician Initials: SED

Dry Gas Target: 0.149

Lot Number: 0771315013-03 Exp Date: 05/01/2015

Tank Pressure: 580 psi Barometric Pressure: 757 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	11:42
BLK	0.000	11:43
CHK	0.148	11:44
BLK	0.000	11:45
CHK	0.148	11:46
BLK	0.000	11:48
CHK	0.148	11:48
BLK	0.000	11:50

Success

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

Certification Status: Continued

intox EC/IR-II: Certification

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Department of Forensic Science
Serial Number: 010830 Test Number: 231
Test Date: 07/09/2014 Test Time: 11:51 EDT

Technician Initials: *SED*
Dry Gas Target: 0.080
Lot Number: 07713080I2-03 Exp Date: 05/01/2015
Tank Pressure: 678 psi Barometric Pressure: 757 mmHg
System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	11:52
BLK	0.000	11:53
CHK	0.079	11:54
BLK	0.000	11:55
CHK	0.079	11:56
BLK	0.000	11:57
CHK	0.079	11:58
BLK	0.000	11:59

Success

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

Certification Status: Continued

Intox EC/IR-II: Certification



Department of Forensic Science

Serial Number: 010830 Test Number: 232
Test Date: 07/09/2014 Test Time: 12:01 EDT

Technician Initials: *SED*

Dry Gas Target: 0.020

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

Tank Pressure: 634 psi Barometric Pressure: 757 mmHg

System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	12:02
BLK	0.000	12:03
CHK	0.019	12:03
BLK	0.000	12:05
CHK	0.019	12:06
BLK	0.000	12:07
CHK	0.019	12:08
BLK	0.000	12:09

Success

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

Certification Status: Success

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Intox EC/IR-II: Accuracy Check

Department of Forensic Science

Serial Number: 010830 Test Number: 233

Test Date: 07/09/2014 Test Time: 12:15 EDT

Dry Gas Target: 0.299

Lot Number: AG334603-04 Exp Date: 12/12/2015

Tank Pressure: 325 psi Barometric Pressure: 757 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	12:16
CHK	0.299	12:17
BLK	0.000	12:19
CHK	0.299	12:20
BLK	0.000	12:21
CHK	0.298	12:22

Test Status: *Success*

Calibration CRC: DC53A73D

intox EC/IR-ii: ACCURACY Check

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Department of Forensic Science

Serial Number: 010830 Test Number: 234

Test Date: 07/09/2014 Test Time: 12:27 EDT

Dry Gas Target: 0.100

Lot Number: AG316301-09 Exp Date: 06/12/2015

Tank Pressure: 365 psi Barometric Pressure: 756 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	12:29
CHK	0.098	12:29
BLK	0.000	12:31
CHK	0.098	12:32
BLK	0.000	12:33
CHK	0.098	12:34

Test Status: *Success*

Calibration CRC: DC53A73D

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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 INSTRUMENT, TEST,	NAME OF COURT DFS
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BREATH ANALYSIS

SAMPLE EXAMINED AND TEST CONDUCTED BY DERSCH, SARAH, E		AGENCY DFS Central Lab
DFS LICENSE NUMBER 24178	LICENSE EXPIRES 10/01/2014	DATE TEST CONDUCTED 07/09/2014
TEST EQUIPMENT NUMBER 010830		

RESULTS: TIME SAMPLE TAKEN 12:43 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