



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: 010598

CERTIFICATION DATE: January 30, 2014

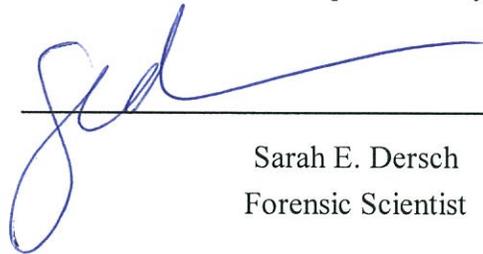
DATE RECERTIFICATION DUE: July 29, 2014

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.



Sarah E. Dersch
Forensic Scientist

CITY OF RICHMOND
COMMONWEALTH OF VIRGINIA

The foregoing was acknowledged before me this 6th day of February, 2014 by Sarah E. Dersch

Ciera N. Boxley

Ciera N. Boxley, Notary Public

My commission expires: August 31, 2014

msk



Jed

**Department of Forensic Science
Breath Alcohol Section
Instrument Maintenance History
1/1/1990 To 2/3/2014**

Instrument Serial Number: 010598 **As of 03-Feb-14**

Maintenance Date	Certification Date	Technician Initials	Remarks
30-Jan-14	30-Jan-14	SED (24178)	CERTIFIED. REPLACED DRY GAS STANDARD. REPLACED KEYBOARD.
14-Aug-13	14-Aug-13	DBH (21250)	FIRMWARE/SOFTWARE UPGRADE. CALIBRATED AND CERTIFIED.
26-Feb-13	26-Feb-13	TLN (25387)	CERTIFIED. REPLACED DRY GAS STANDARD.
06-Sep-12	06-Sep-12	HMS (18910)	CERTIFIED
21-Mar-12	21-Mar-12	HMS (18910)	CERTIFIED, REPLACED DRY GAS STANDARD.
19-Oct-11	19-Oct-11	HMS (18910)	CERTIFIED
01-Jul-11	01-Jul-11	HMS (18910)	MOVED INSTRUMENT TO NEW LOCATION, REPLACED DRY GAS STANDARD, CERTIFIED
03-May-11	03-May-11	HMS (18910)	CERTIFIED
23-Nov-10	23-Nov-10	HMS (18910)	REPLACED DRY GAS STANDARD, CERTIFIED
16-Jul-10	16-Jul-10	HMS (18910)	REPLACED DRY GAS STANDARD, CALIBRATED AND CERTIFIED.
15-Jun-10	15-Jun-10	HMS (18910)	REPLACED DRY GAS STANDARD, CALIBRATED AND CERTIFIED.
29-Dec-09	29-Dec-09	HMS (18910)	CERTIFIED
13-Jul-09	13-Jul-09	HMS (18910)	CERTIFIED.
11-Mar-09	11-Mar-09	HMS (18910)	CERTIFIED.
05-Mar-09	05-Mar-09	NMJ (22392)	FIRMWARE/SOFTWARE UPGRADE, CERTIFIED.
17-Dec-08	17-Dec-08	NMJ (22392)	CALIBRATED, CERTIFIED AND ACCEPTED.

SLD

INTOX EC/IR II Quality Assurance Worksheet

Instrument Serial Number: 010598 Worksheet Start Date: 1/30/2014
 Location: Clarke Co SO
 Address: 102 N Church St, Berryville VA 22611
 DFS Technician: Sarah Dersch License No.: 24178

Laboratory On-Site

Site Specification: No detrimental environmental conditions exist.

Instrument Barometer (mm HG): 752 Reference Barometer (mm HG): 757

Reference Barometer(RB)Serial #: 009111 RB Calibration Due: 5/23/2014

Measurement Assurance Check

Standard (sea level)	PA Target	minimum	maximum	Sample 1	Sample 2	Sample 3
0.300	0.297	0.288	0.305	0.299	0.299	0.299
Precision		sample min	sample max			
0		0.299	0.299			

Standard (sea level)	PA Target	minimum	maximum	Sample 1	Sample 2	Sample 3
0.100	0.099	0.096	0.102	0.100	0.099	0.100
Precision		sample min	sample max			
0.001		0.099	0.100			

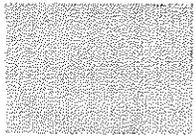
Dry gas standard Lot No. (with tank no.): AG226201-23

Replaced dry gas standard (+O-ring)

Installed at Location

Removed to DFS-Central

Supplies
 Mouthpieces
 Certificates of Analysis
 Operator Worksheet
 Other:



Notes:

Replaced keyboard.

Instrument Serial Number

010598

Certification Date

1/30/2014

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	0.247	0.239	0.254	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	0.148	0.143	0.152	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	0.079	0.076	0.082	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

ged

Date

2/3/14

Issuing Analyst

ged

Date

2/3/14

msk

Intox EC/IR-II: Certification

sed

Department of Forensic Science

Serial Number: *010598* Test Number: *461*
Test Date: *01/30/2014* Test Time: *08:57 EST*

Technician Initials: *SED*

Dry Gas Target: *0.247*

Lot Number: *0651225015-02* Exp Date: *04/01/2014*

Tank Pressure: *350 psi* Barometric Pressure: *752 mmHg*
System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	08:58
BLK	0.000	08:59
CHK	0.248	08:59
BLK	0.000	09:01
CHK	0.247	09:02
BLK	0.000	09:03
CHK	0.247	09:04
BLK	0.000	09:06

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: 010598 Test Number: 462
Test Date: 01/30/2014 Test Time: 09:07 EST

Technician Initials: *SED*

Dry Gas Target: 0.148

Lot Number: 06512150I4-04 Exp Date: 04/01/2014

Tank Pressure: 776 psi Barometric Pressure: 752 mmHg
System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	09:07
BLK	0.000	09:08
CHK	0.148	09:09
BLK	0.000	09:10
CHK	0.148	09:11
BLK	0.000	09:13
CHK	0.148	09:14
BLK	0.000	09:15

Success

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

Certification Status: Continued

Intox EC/IR-II: Certification

sd

Department of Forensic Science
Serial Number: 010598 Test Number: 463
Test Date: 01/30/2014 Test Time: 09:17 EST

Technician Initials: *SED*
Dry Gas Target: 0.079
Lot Number: 06512080I2-01 Exp Date: 04/01/2014
Tank Pressure: 924 psi Barometric Pressure: 752 mmHg
System Check: *Passed*

Test	g/210L	Time
DIAG	Pass	09:18
BLK	0.000	09:18
CHK	0.079	09:19
BLK	0.000	09:20
CHK	0.079	09:21
BLK	0.000	09:22
CHK	0.079	09:23
BLK	0.000	09:25

Success

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

Certification Status: Continued

sed

Intox EC/IR-II: Certification

Department of Forensic Science

Serial Number: 010598 Test Number: 464
Test Date: 01/30/2014 Test Time: 09:26 EST

Technician Initials: SED

Dry Gas Target: 0.020

Lot Number: 0651202011-07 Exp Date: 04/01/2014

Tank Pressure: 66 psi Barometric Pressure: 752 mmHg

System Check: Passed

Test	g/210L	Time
DIAG	Pass	09:26
BLK	0.000	09:27
CHK	0.019	09:28
BLK	0.000	09:29
CHK	0.019	09:30
BLK	0.000	09:31
CHK	0.019	09:32
BLK	0.000	09:33

Success

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

Certification Status: Success

red

Intox EC/IR-II: Accuracy Check

Department of Forensic Science

Serial Number: 010598 Test Number: 465

Test Date: 01/30/2014 Test Time: 09:38 EST

Dry Gas Target: 0.297

Lot Number: AG321804-04 Exp Date: 08/06/2015

Tank Pressure: 389 psi Barometric Pressure: 752 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	09:38
CHK	0.299	09:39
BLK	0.000	09:41
CHK	0.299	09:42
BLK	0.000	09:44
CHK	0.299	09:45

Test Status: *Success*

Calibration CRC: 35E7226B

Sid

Intox EC/IR-II: Accuracy Check

Department of Forensic Science

Serial Number: 010598 Test Number: 466

Test Date: 01/30/2014 Test Time: 09:49 EST

Dry Gas Target: 0.099

Lot Number: AG226201-23 Exp Date: 09/18/2014

Tank Pressure: 340 psi Barometric Pressure: 752 mmHg

System Check: *Passed*

Test	g/210L	Time
BLK	0.000	09:50
CHK	0.100	09:51
BLK	0.000	09:52
CHK	0.099	09:53
BLK	0.000	09:54
CHK	0.100	09:55

Test Status: *Success*

Calibration CRC: 35E7226B

del



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, <i>P</i> <i>sed</i> <i>1/30/14</i>	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 01/30/2014
TEST EQUIPMENT NUMBER 010598		

RESULTS: TIME SAMPLE TAKEN 10:03 EST

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

*"P" key stuck. Replaced keyboard.
Reran instrument test.
2/3/14 sed*

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

FOR COURT

Sid



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 01/30/2014
TEST EQUIPMENT NUMBER 010598		

RESULTS: TIME SAMPLE TAKEN 10:20 EST

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

FOR COURT