Brandon PD 100147

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SECTION 1

RESULTS

Packing List

From: National Patent Analytical Systems Inc.
2090 Harrington Mem. Rd., Mansfield, Ohio 44903

Cust No. VT1678J **Ord Date** 10/14/11
Sales Order No. 44868

Ship Date 10/31/11
Packing List No. 69163

Cust Purch Ord No. KIRK KIMBALL

Ship To:
Vermont Dept of Health
195 Colchester Avenue
Burlington Vt 05401

Bill To:
Vermont Dept of Health
P O Box 70
Burlington Vt 05402

25.00 **Freight**

Attn:

Ship Via FedEx

Comments Service for Instrument Serial Number 100142

Inv Part No	Quantity Ordered	This Shipment	Back Ordered	Total Ship To Date	Description	Customer Part No.	Drawing Part No. / Rev
9DMT	1.0	1		1.0	DATAMASTER DMT SERVICE RETURN		
S/N 100142						None Given	No Draw # / NONE
Serial Nos.							

opened 11/02/11

National Patent
Analytical Systems, Inc.

On this date 10/14/11, NPAS received instrument # 100142.

The instrument was sent from the Vermont Department of Health (VDH) so that NPAS could install updated software as well as inspect the instrument. At NPAS' request VDH provided copies of the Technical Support Inquiries (TSI) regarding the instrument. The calibration history of the instrument remained in the instrument so that NPAS could review its history.

NPAS examined the internal configuration of the instrument and did / did not find physical manipulation or tampering of the components located within the instrument itself.

NPAS did performance and accuracy checks on a certified 0.100 ethanol standard. NPAS found that the instrument passed / failed the performance and accuracy checks.

NPAS reviewed the instrument as to its DataMaster DMT Inspection, QA and Conformance Testing Procedure and the instrument performed / did not perform within its procedure.

NPAS examined the calibration records and did / did not observe anomalies.

NPAS testing indicates that there is no reason why this instrument would not have performed accurately and reliably in the field.

Print Name of Evaluator: Michael J. Barbely Jr.

Signature of Evaluator and Date: Michael J. Barbely Jr. 10/25/11

Print Name of Reviewer: DAVID RADOMSKI

Signature of Reviewer and Date: David Radomski 10/31/11

11/03/11

2090 Harrington Memorial Road, Mansfield, Ohio 44901 Ph 419-526-6727 Fax 419-526-9446

DataMaster DMT Serial Number 100142

Power Up	CAL Factor	In-House & 2nd Source Calibration Check			Simulator Assignment	Certification	0.01% Acet. in 0.08% EtOH	0.04% MeOH in H_2O	0.04% IPA in H_2O	0.01% Acet. in 0.04% EtOH	0.02% Acet. in 0.04% EtOH	0.04% MeOH in 0.08% EtOH	0.04% IPA in 0.08% EtOH
		NIST Temp. °C	Lot. #	Result (g/210L)									
11-03-11	0.977092	34.0	12-22-100	0.100	68224		100%	100%	100%	90%	100%	100%	100%
	11/03/11			11/03/11	11-8-11	11/03/11	11/03/11	11/07/11	11/03/11	11/03/11	11/03/11	11-8-11	11/08/11
		34.0	GUTH 11050	0.100				11-8-11			11-3-11		
				11/03/11									

Linearity Test #1	Linearity Test #2	Linearity Test #3	Linearity Test #4	Linearity Test #5	Data Download	In-House & 2nd Source Calibration Check		
						NIST Temp.°C	Lot. #	Result (g/210L)
11/04/11	11/04/11	11/07/11	11/07/11	11-8-11	11-8-11	34.0	GUTH 11050	0.100 11/08/11
		11-8-11	11-8-11			34.0	12-22-100	0.101 11-8-11

Notes: Power-up started 11/02/11

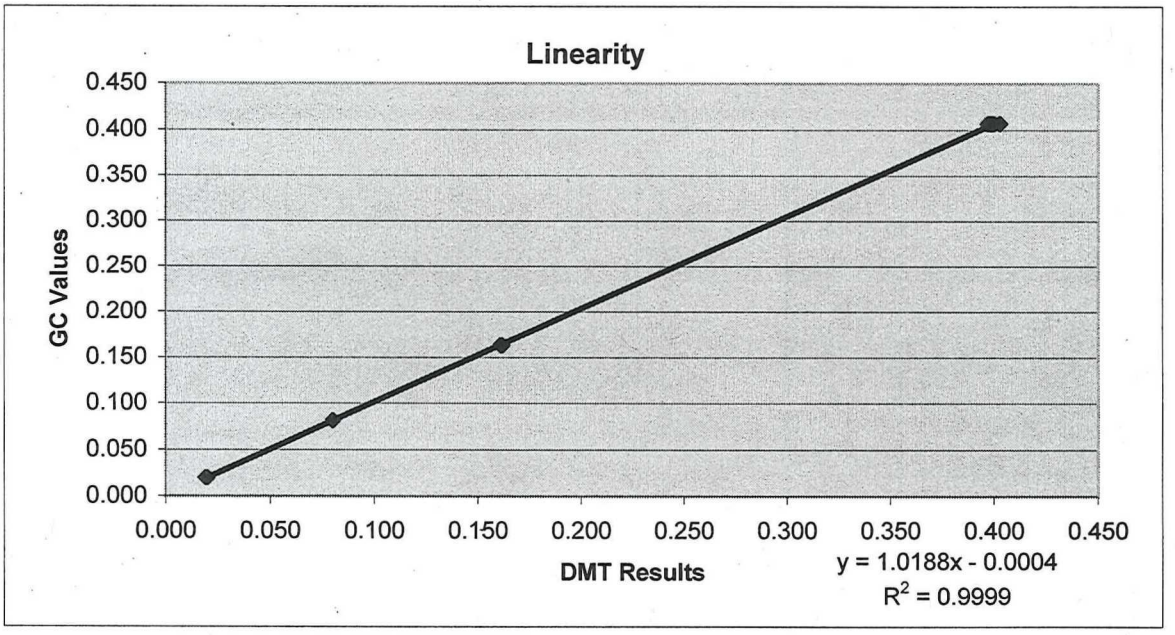
Calibration solution NIST Temp = 33.9°C 11/03/11

H_2O for calibration NIST Temp = 33.9°C 11/03/11

Analyst: 11/08/11 **Reviewer:** 11-8-11 **Reviewer:** 11/10/11

DataMaster DMT Serial Number 100142

Operator	Date	GC Value	DMT Average	Std Dev	% Recovery
SRM	11/4/2011	0.020	0.019	0.000	95
KLK	11/4/2011	0.081	0.080	0.000	98
KLK	11/4/2011	0.163	0.161	0.000	98
KLK	11/4/2011	0.407	0.398	0.000	97
SRM	11/4/2011	0.020	0.020	0.000	100
SRM	11/4/2011	0.081	0.080	0.000	98
SRM	11/4/2011	0.163	0.162	0.000	99
KLK	11/4/2011	0.407	0.397	0.000	97
SRM	11/7/2011	0.020	0.019	0.000	95
SRM	11/7/2011	0.081	0.080	0.000	98
SRM	11/7/2011	0.163	0.162	0.000	99
SRM	11/7/2011	0.407	0.403	0.000	99
SRM	11/7/2011	0.020	0.019	0.000	95
SRM	11/7/2011	0.081	0.080	0.000	98
SRM	11/7/2011	0.163	0.161	0.000	98
SRM	11/7/2011	0.407	0.400	0.000	98
KLK	11/8/2011	0.020	0.019	0.000	95
SRM	11/8/2011	0.081	0.080	0.000	98
SRM	11/8/2011	0.163	0.161	0.000	98
KLK	11/8/2011	0.407	0.399	0.000	98
			Average	0.0000	98
			Std Dev	0.0000	
			Range		95 - 100



Log On Record History

Test Date	Test Time	Name
11/02/2011	11:32:57	Kirk Kimball
11/02/2011	11:40:02	Kirk Kimball
11/02/2011	13:47:50	Kirk Kimball
11/03/2011	06:51:08	Kirk Kimball
11/03/2011	08:12:51	Kirk Kimball
11/03/2011	08:28:16	Steven Merrill
11/03/2011	09:37:56	Kirk Kimball
11/03/2011	11:13:58	Steven Merrill
11/03/2011	13:30:55	Kirk Kimball
11/04/2011	07:05:46	Kirk Kimball
11/04/2011	08:27:59	Steven Merrill
11/04/2011	13:39:27	Steven Merrill
11/04/2011	14:46:03	Steven Merrill
11/04/2011	15:24:19	Kirk Kimball
11/07/2011	08:23:22	Steven Merrill
11/07/2011	11:00:54	Steven Merrill
11/07/2011	13:11:52	Steven Merrill
11/08/2011	07:35:58	Kirk Kimball
11/08/2011	07:59:48	Kirk Kimball
11/08/2011	08:58:58	Kirk Kimball
11/08/2011	09:52:21	Steven Merrill
11/08/2011	10:32:29	Kirk Kimball
11/08/2011	15:49:12	Kirk Kimball
11/08/2011	16:08:10	Kirk Kimball
11/08/2011	16:23:08	Kirk Kimball
11/08/2011	16:25:02	Kirk Kimball

SECTION 2

POWER UP TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 100142
Location:
Calibration Date:
Certification Date:
Installation Date:
Test Date: 11/03/2011
Test Time: 08:28:29

```
VERSIONS
DMT: 1.01
PIC: 2.05
Modem: 2.2
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.0°C
Breath Tube    = 48.1°C
Digital Sim    = 0.0°C

SETTINGS
Lamp Voltage   = 1.67 V
Cooler Voltage = 1.61 V
Bias Voltage   = 80 V
Chopper Freq   = 540 Hz

PUMP INFO
Flow Rate = 5.247 L/M

DETECTOR INFO
PUMP     ON         OFF
MAX(V)    0.0008     0.0049
MIN(V)   -0.0004     0.0030

FILTER INFO
Filter 1   0.003  Zero = true
Filter 2   0.226  Zero = true
Filter 3   0.491  Zero = true

CALIBRATION CHECK
Xq  = 0.071  0.37%
```

CALIBRATION REPORT

DataMaster DMT: 100142
Calibration Date: 11/03/2011
Calibrated by: STEVEN R MERRILL
Lot: 11-37-100

```
Ca  = 0.100
CAL = 0.977092   0.800  <= CAL < 1.200
b1  = 0.000      0.000  <=  b1 < 0.004
b2  = 0.004      0.002  <=  b2 < 0.010
b3  = 0.000      0.000  <=  b3 < 0.004
Xq  = 0.071      0.050  <=  Xq < 0.200
a21 = 1.108810   1.050  <= a21 < 1.300
a31 = 0.531937   0.300  <= a31 < 0.800
```

Performed by _____ Date 11/03/2011

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/03/2011
Time: 10:06:00

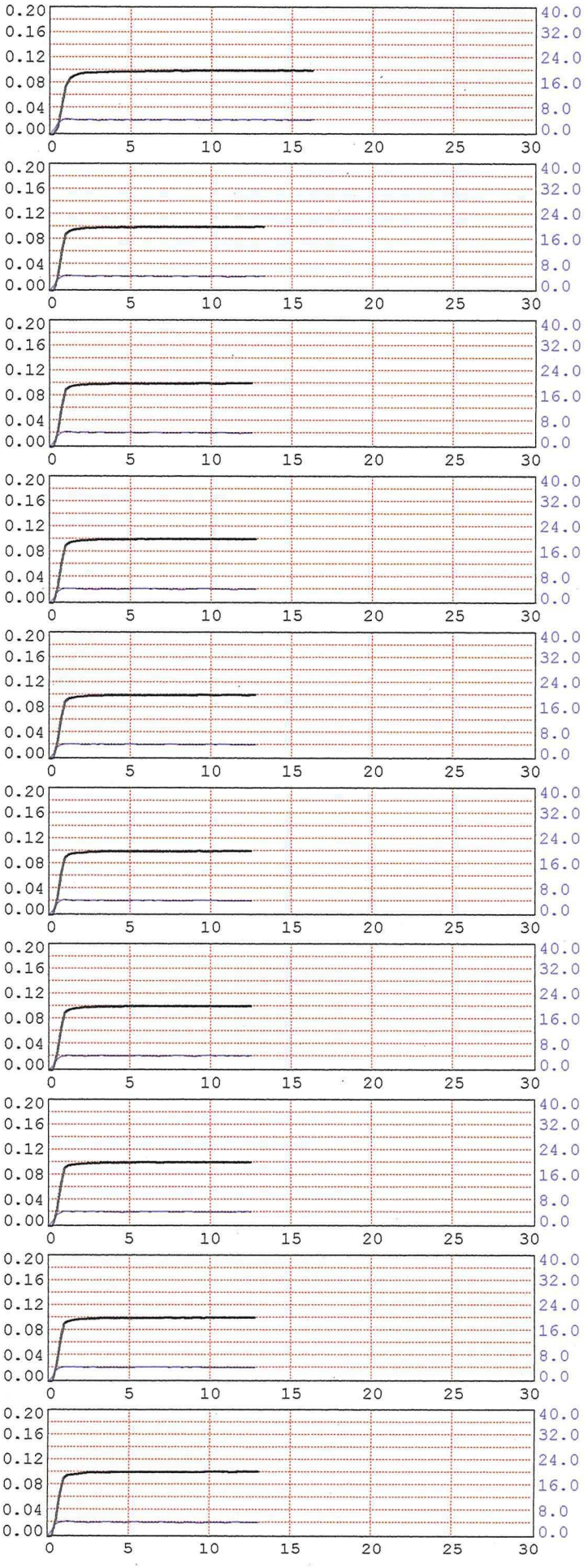
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-22-100
SOLUTION CONCENTRATION: 0.101

BLANK TEST	0.000	10:06
CALIBRATION CHECK	PASSED	10:07
SIMULATOR VAPOR 34.4°C	0.100	10:07
SIMULATOR VAPOR 34.2°C	0.100	10:08
SIMULATOR VAPOR 34.2°C	0.100	10:09
SIMULATOR VAPOR 34.2°C	0.101	10:10
SIMULATOR VAPOR 34.2°C	0.100	10:11
SIMULATOR VAPOR 34.1°C	0.100	10:12
SIMULATOR VAPOR 34.1°C	0.101	10:13
SIMULATOR VAPOR 34.2°C	0.101	10:14
SIMULATOR VAPOR 34.2°C	0.100	10:15
SIMULATOR VAPOR 34.2°C	0.101	10:16
BLANK TEST	0.000	10:17

Average = 0.100
Std Dev = 0.000

In-House Col Check 11/03/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/03/2011
Time: 10:28:11

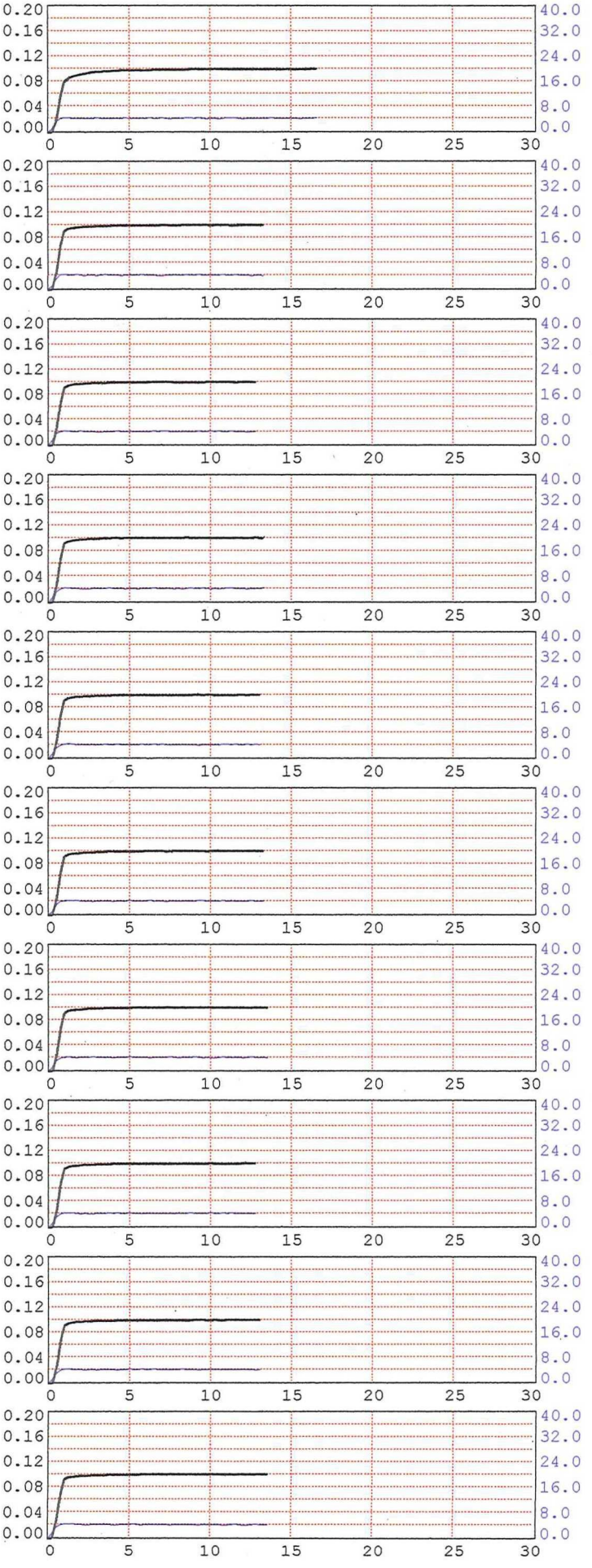
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: GUTH 11050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:29
CALIBRATION CHECK	PASSED	10:29
SIMULATOR VAPOR 34.2°C	0.100	10:29
SIMULATOR VAPOR 34.2°C	0.100	10:30
SIMULATOR VAPOR 34.2°C	0.100	10:31
SIMULATOR VAPOR 34.2°C	0.101	10:32
SIMULATOR VAPOR 34.2°C	0.100	10:33
SIMULATOR VAPOR 34.2°C	0.100	10:34
SIMULATOR VAPOR 34.1°C	0.101	10:36
SIMULATOR VAPOR 34.2°C	0.100	10:37
SIMULATOR VAPOR 34.2°C	0.100	10:38
SIMULATOR VAPOR 34.2°C	0.101	10:39
BLANK TEST	0.000	10:40

Average = 0.100
Std Dev = 0.000

2nd Source Cal Check 11/03/11



CERTIFICATION REPORT

DataMaster DMT: 100142
Calibration Date: 11/03/2011
Certification Date: 11/03/2011
Certified by: KIRK L KIMBALL

Diagnostic Results

```
VERSIONS
DMT: 1.01
PIC: 2.05
Modem: 2.2
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube    = 48.0°C
Digital Sim    = 0.0°C

SETTINGS
Lamp Voltage   = 1.67 V
Cooler Voltage = 1.61 V
Bias Voltage   = 80 V
Chopper Freq   = 539 Hz

PUMP INFO
Flow Rate = 5.288 L/M

DETECTOR INFO
PUMP     ON          OFF
MAX(V)    0.0640      0.0669
MIN(V)    0.0614      0.0652

FILTER INFO
Filter 1   0.066  Zero = true
Filter 2   0.288  Zero = true
Filter 3   0.545  Zero = true

CALIBRATION CHECK
Xq  = 0.071  0.61%
```

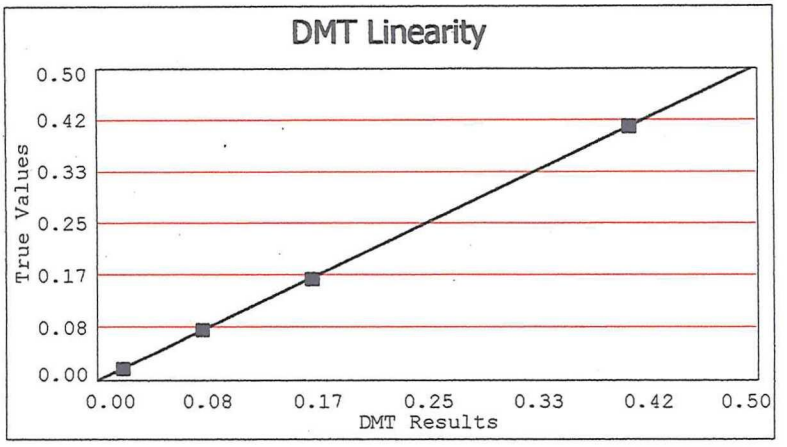
Options

```
OPTIONS
Units
   Alcohol..................... g/210L
Simulator
   Tolerance Check............. yes
   Standard Type............... wet
   Nominal..................... 0.100
   Digital Simulator........... Guth34CNP
Subject
   Ask Questions............... yes
   Number of Tests............. 2
   Alcohol Display............. yes
   Volume Display.............. yes
   Query Refusal............... yes
   Copies...................... 3
   Simulator Before............ yes
   Simulator Between........... yes
   Simulator After............. no
   Observation Time............ 0
Supervisor
   Number of Tests............. 10
Calibration
   Standard Type............... wet
   Nominal..................... 0.100
   Nominal(Dry Gas)............ 0.100
   Number of Tests............. 1
Printer
   Printer On.................. yes
Software Configuration
   Data Collection............. yes
```

Linearity Check Results

True Value	Reported Average	Std Dev
0.020 g/210L Lot # 12-23-020	0.019 g/210L	0.0000
0.082 g/210L Lot # 12-21-080	0.079 g/210L	0.0000
0.163 g/210L Lot # 12-30-160	0.162 g/210L	0.0000
0.407 g/210L Lot # 12-25-400	0.402 g/210L	0.0010

$R^2 = 1$



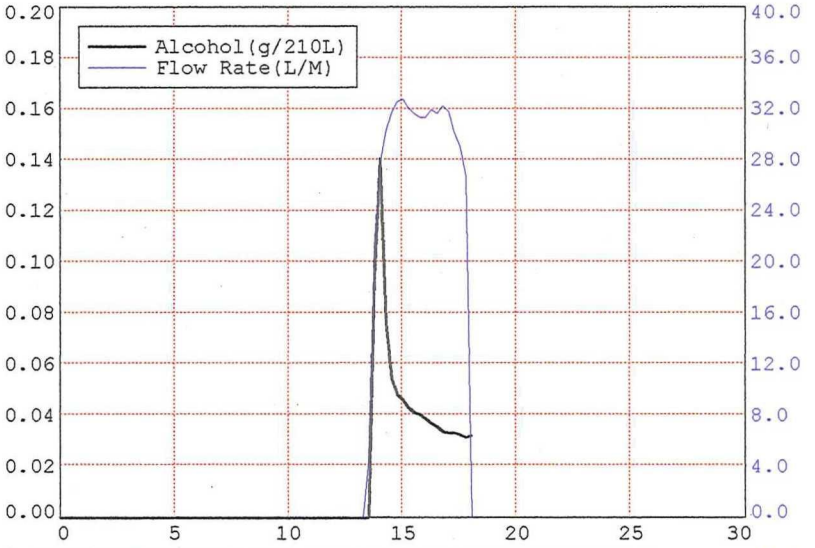
Acetone Interference Test

Lot # 12-29-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

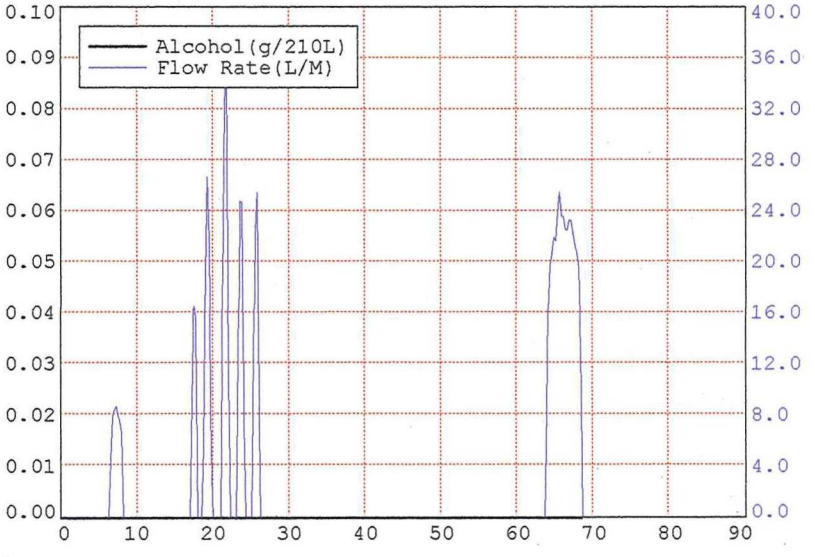


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by _____ Date 11/03/2011

Reviewed by _____ Date 11-3-11

SECTION 3

LINEARITY TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 100142
Location:
Calibration Date: 11/03/2011
Certification Date: 11/03/2011
Installation Date:
Test Date: 11/04/2011
Test Time: 07:05:47

VERSIONS
DMT: 1.01
PIC: 2.05
Modem: 2.2
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube = 48.1°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.67 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 539 Hz

PUMP INFO
Flow Rate = 5.258 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0587	0.0628
MIN(V)	0.0573	0.0612

FILTER INFO
Filter 1 0.062 Zero = true
Filter 2 0.282 Zero = true
Filter 3 0.536 Zero = true

CALIBRATION CHECK
Xq = 0.071 0.97%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/04/2011
Time: 08:30:20

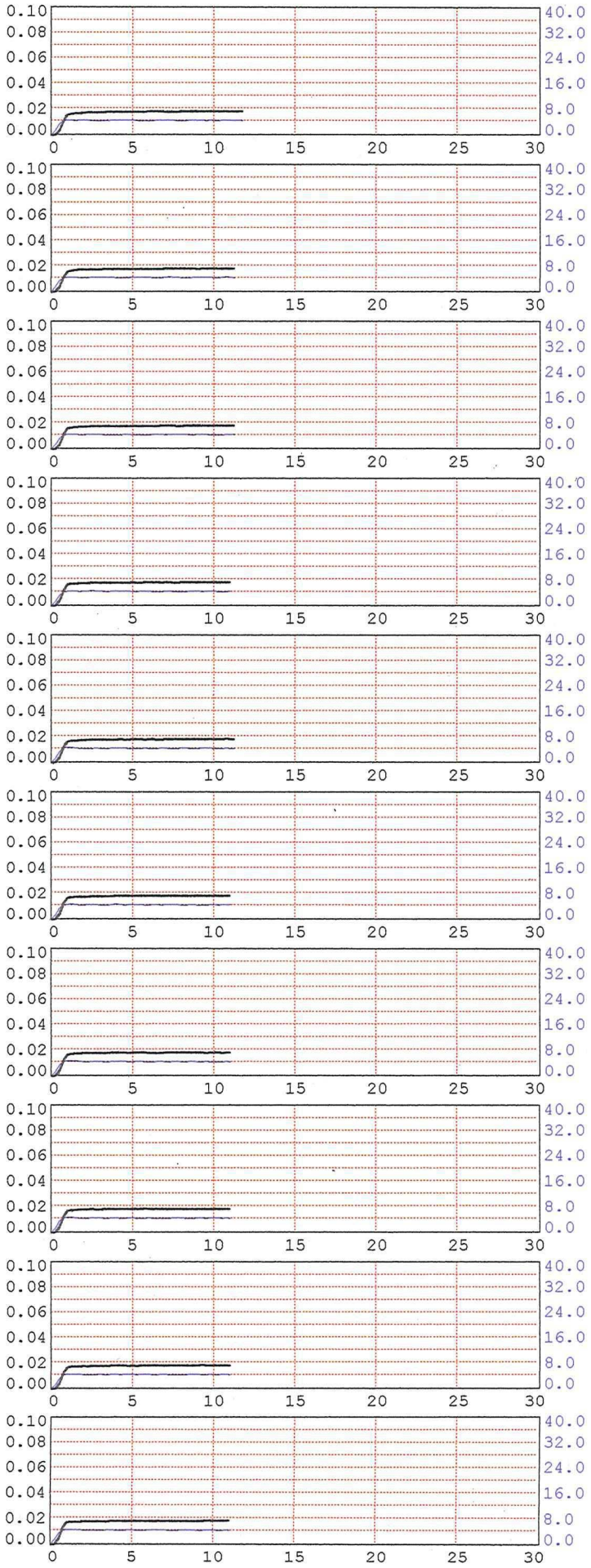
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-23-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	08:31
CALIBRATION CHECK	PASSED	08:31
SIMULATOR VAPOR 33.8°C	0.019	08:31
SIMULATOR VAPOR 33.8°C	0.019	08:32
SIMULATOR VAPOR 33.8°C	0.019	08:33
SIMULATOR VAPOR 33.9°C	0.019	08:34
SIMULATOR VAPOR 33.8°C	0.019	08:35
SIMULATOR VAPOR 33.9°C	0.019	08:36
SIMULATOR VAPOR 33.8°C	0.019	08:37
SIMULATOR VAPOR 33.8°C	0.019	08:38
SIMULATOR VAPOR 33.8°C	0.019	08:39
SIMULATOR VAPOR 33.9°C	0.019	08:40
BLANK TEST	0.000	08:41

Average = 0.019
Std Dev = 0.000

LI 11/04/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/04/2011
Time: 08:48:09

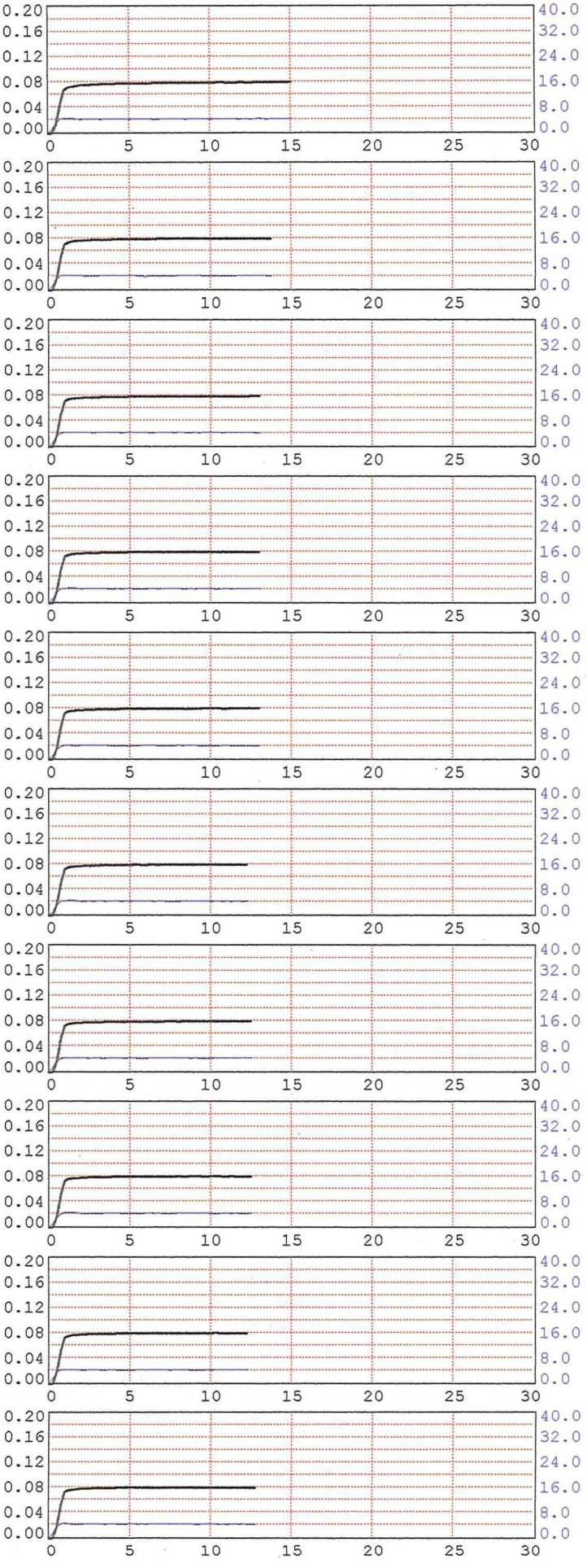
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-29-080
SOLUTION CONCENTRATION: 0.081

BLANK TEST	0.000	08:49
CALIBRATION CHECK	PASSED	08:49
SIMULATOR VAPOR 33.8°C	0.080	08:49
SIMULATOR VAPOR 33.8°C	0.080	08:50
SIMULATOR VAPOR 33.8°C	0.080	08:51
SIMULATOR VAPOR 33.9°C	0.080	08:52
SIMULATOR VAPOR 33.8°C	0.081	08:53
SIMULATOR VAPOR 33.8°C	0.080	08:54
SIMULATOR VAPOR 33.8°C	0.080	08:55
SIMULATOR VAPOR 33.9°C	0.080	08:56
SIMULATOR VAPOR 33.9°C	0.080	08:58
SIMULATOR VAPOR 33.7°C	0.080	08:59
BLANK TEST	0.000	08:59

Average = 0.080
Std Dev = 0.000

L1 11/04/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/04/2011
Time: 09:04:03

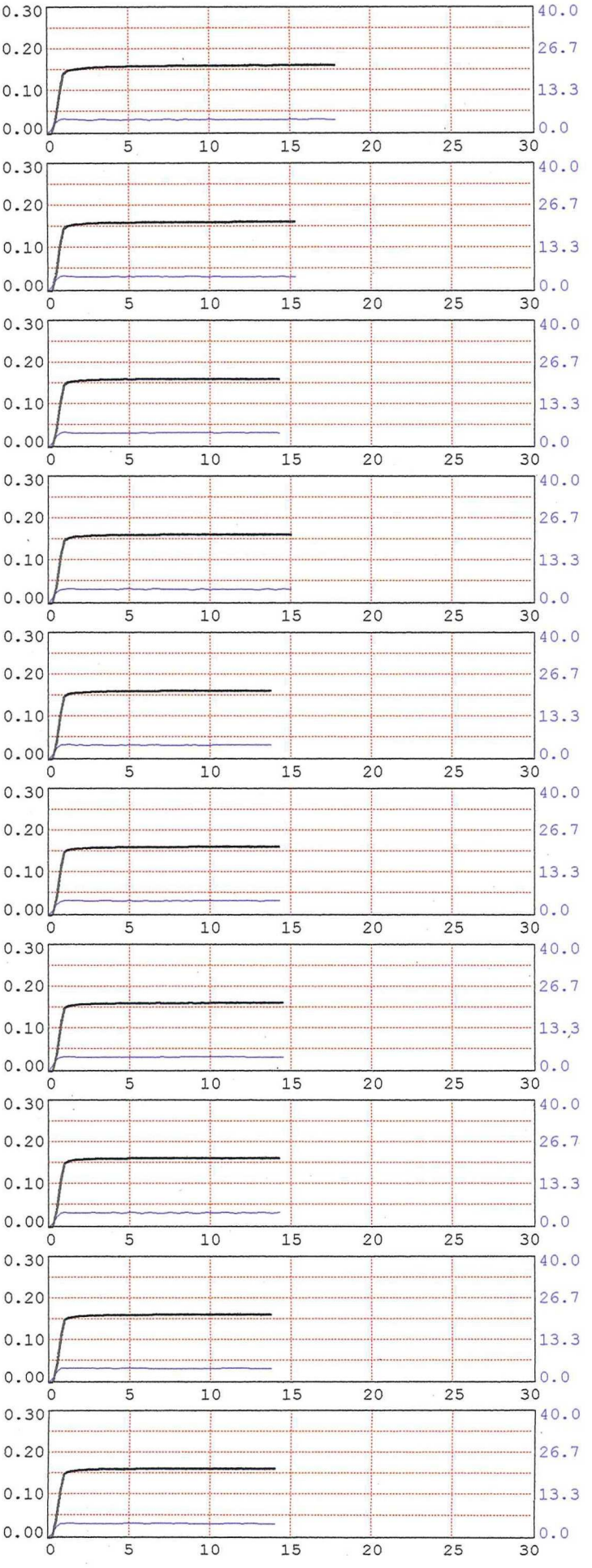
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-30-160
SOLUTION CONCENTRATION: 0.163

BLANK TEST	0.000	09:04
CALIBRATION CHECK	PASSED	09:05
SIMULATOR VAPOR 33.9°C	0.161	09:05
SIMULATOR VAPOR 33.9°C	0.161	09:06
SIMULATOR VAPOR 33.8°C	0.161	09:07
SIMULATOR VAPOR 33.8°C	0.162	09:08
SIMULATOR VAPOR 33.8°C	0.161	09:09
SIMULATOR VAPOR 33.8°C	0.161	09:10
SIMULATOR VAPOR 33.9°C	0.161	09:12
SIMULATOR VAPOR 33.8°C	0.162	09:13
SIMULATOR VAPOR 33.8°C	0.161	09:14
SIMULATOR VAPOR 33.8°C	0.162	09:15
BLANK TEST	0.000	09:16

Average = 0.161
Std Dev = 0.000

LI 11/04/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/04/2011
Time: 09:21:16

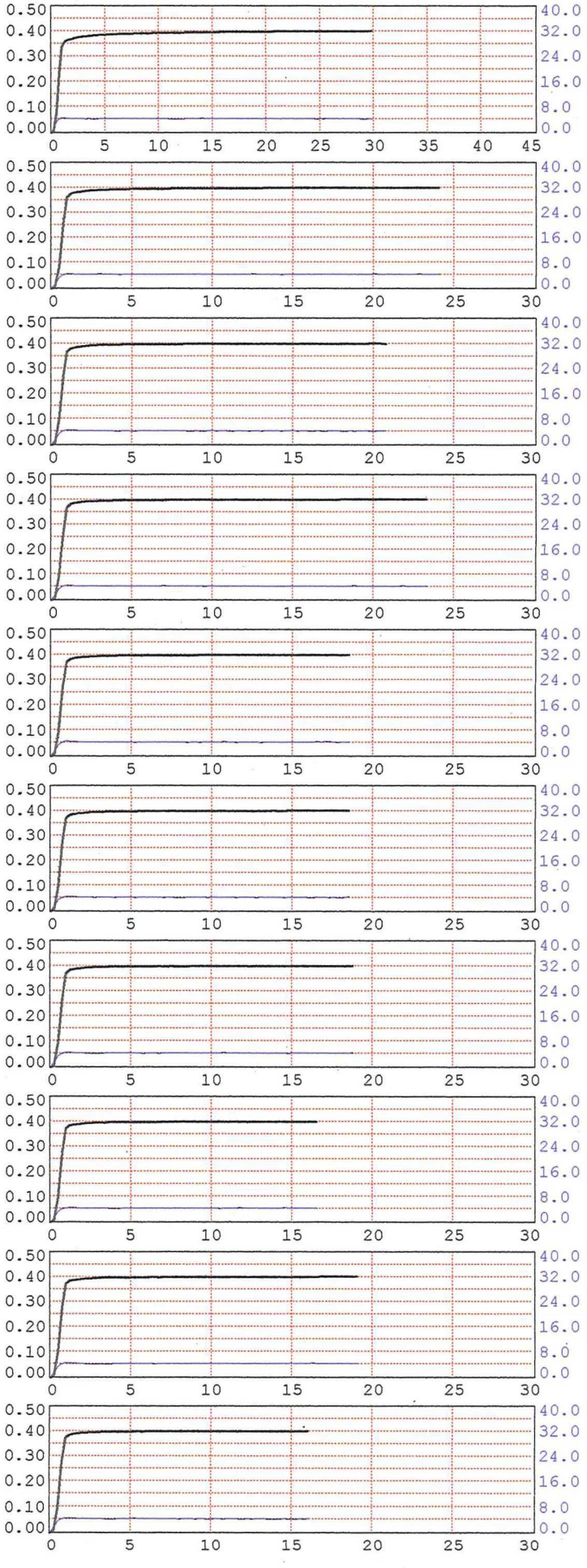
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-25-400
SOLUTION CONCENTRATION: 0.407

BLANK TEST	0.000	09:22
CALIBRATION CHECK	PASSED	09:22
SIMULATOR VAPOR 33.8°C	0.398	09:22
SIMULATOR VAPOR 33.8°C	0.398	09:24
SIMULATOR VAPOR 33.9°C	0.398	09:25
SIMULATOR VAPOR 33.8°C	0.399	09:26
SIMULATOR VAPOR 33.8°C	0.398	09:27
SIMULATOR VAPOR 33.8°C	0.399	09:29
SIMULATOR VAPOR 33.9°C	0.398	09:30
SIMULATOR VAPOR 33.9°C	0.397	09:31
SIMULATOR VAPOR 33.8°C	0.399	09:32
SIMULATOR VAPOR 33.8°C	0.398	09:33
BLANK TEST	0.000	09:34

Average = 0.398
Std Dev = 0.000

LI 11/04/11 SK



DIAGNOSTIC RESULT

DataMaster DMT: 100142
Location:
Calibration Date: 11/03/2011
Certification Date: 11/03/2011
Installation Date:
Test Date: 11/04/2011
Test Time: 13:07:28

```
VERSIONS
DMT: 1.01
PIC: 2.05
Modem: 2.2
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.2°C
Breath Tube    = 48.1°C
Digital Sim    = 33.9°C

SETTINGS
Lamp Voltage   = 1.67 V
Cooler Voltage = 1.61 V
Bias Voltage   = 80 V
Chopper Freq   = 541 Hz

PUMP INFO
Flow Rate = 5.275 L/M

DETECTOR INFO
PUMP     ON         OFF
MAX(V)    0.0559     0.0600
MIN(V)    0.0547     0.0585

FILTER INFO
Filter 1   0.060  Zero = true
Filter 2   0.279  Zero = true
Filter 3   0.545  Zero = true

CALIBRATION CHECK
Xq  = 0.072  0.97%
```

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/04/2011
Time: 13:41:00

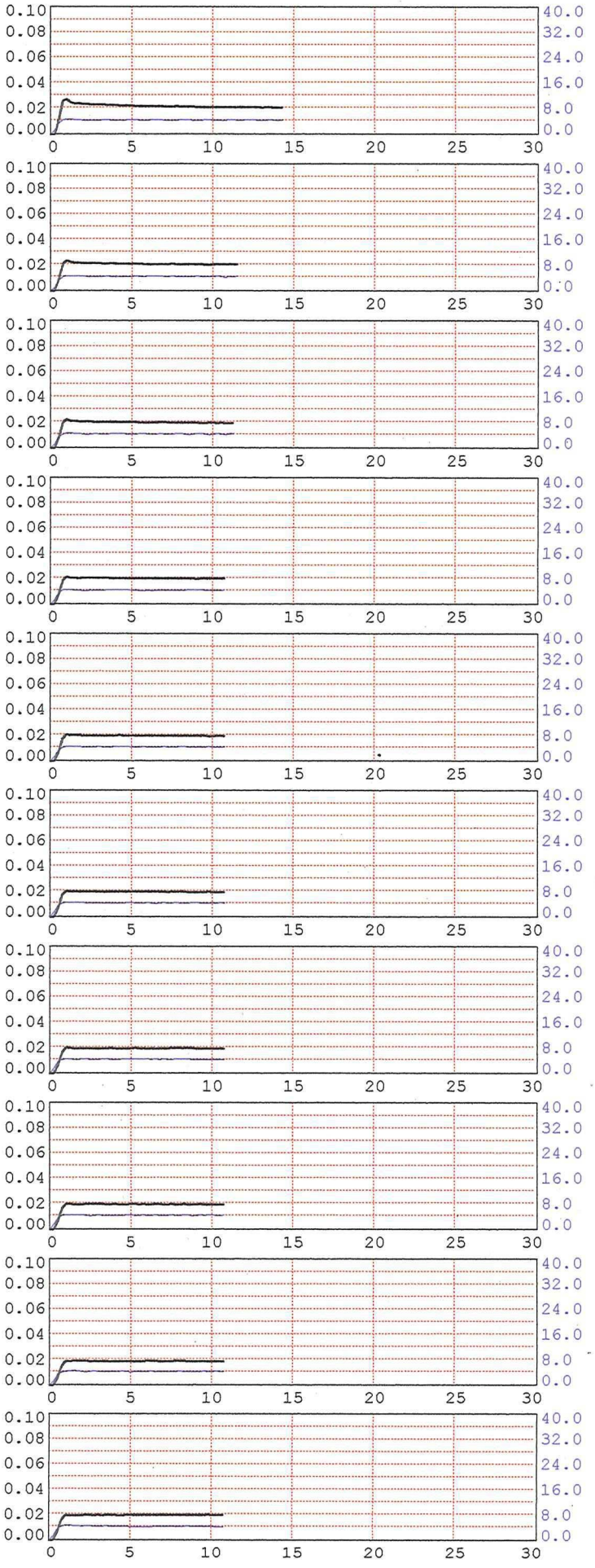
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-23-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	13:41
CALIBRATION CHECK	PASSED	13:42
SIMULATOR VAPOR 33.9°C	0.022	13:42
SIMULATOR VAPOR 33.7°C	0.022	13:43
SIMULATOR VAPOR 33.8°C	0.021	13:44
SIMULATOR VAPOR 33.8°C	0.021	13:45
SIMULATOR VAPOR 33.8°C	0.021	13:46
SIMULATOR VAPOR 33.8°C	0.020	13:47
SIMULATOR VAPOR 33.9°C	0.020	13:48
SIMULATOR VAPOR 33.8°C	0.020	13:49
SIMULATOR VAPOR 33.8°C	0.020	13:50
SIMULATOR VAPOR 33.8°C	0.021	13:51
BLANK TEST	0.000	13:52

Average = 0.020
Std Dev = 0.000

LJ 11/04/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/04/2011
Time: 13:55:58

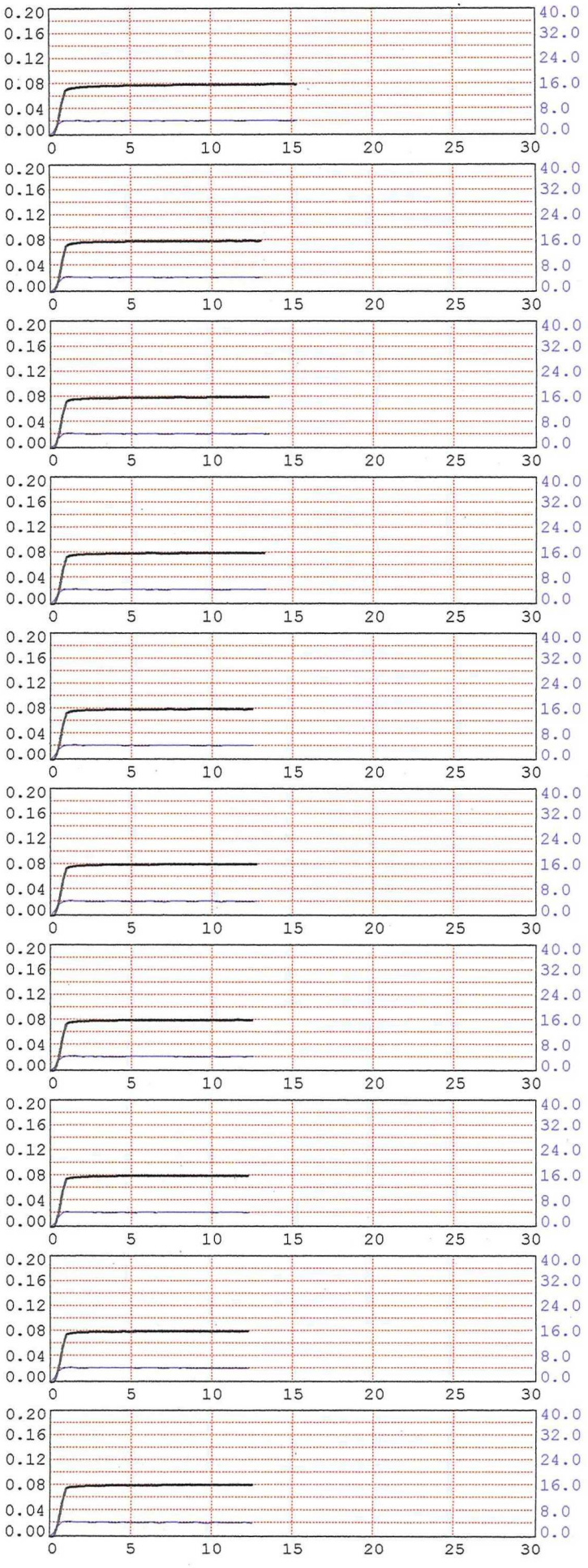
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-29-080
SOLUTION CONCENTRATION: 0.081

BLANK TEST	0.000	13:56
CALIBRATION CHECK	PASSED	13:56
SIMULATOR VAPOR 33.9°C	0.080	13:57
SIMULATOR VAPOR 33.8°C	0.080	13:58
SIMULATOR VAPOR 33.8°C	0.080	13:59
SIMULATOR VAPOR 33.9°C	0.080	14:00
SIMULATOR VAPOR 33.9°C	0.080	14:01
SIMULATOR VAPOR 33.8°C	0.081	14:02
SIMULATOR VAPOR 33.8°C	0.080	14:03
SIMULATOR VAPOR 33.8°C	0.080	14:04
SIMULATOR VAPOR 33.8°C	0.080	14:05
SIMULATOR VAPOR 33.8°C	0.081	14:06
BLANK TEST	0.000	14:07

Average = 0.080
Std Dev = 0.000

LZ 11/04/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/04/2011
Time: 14:47:16

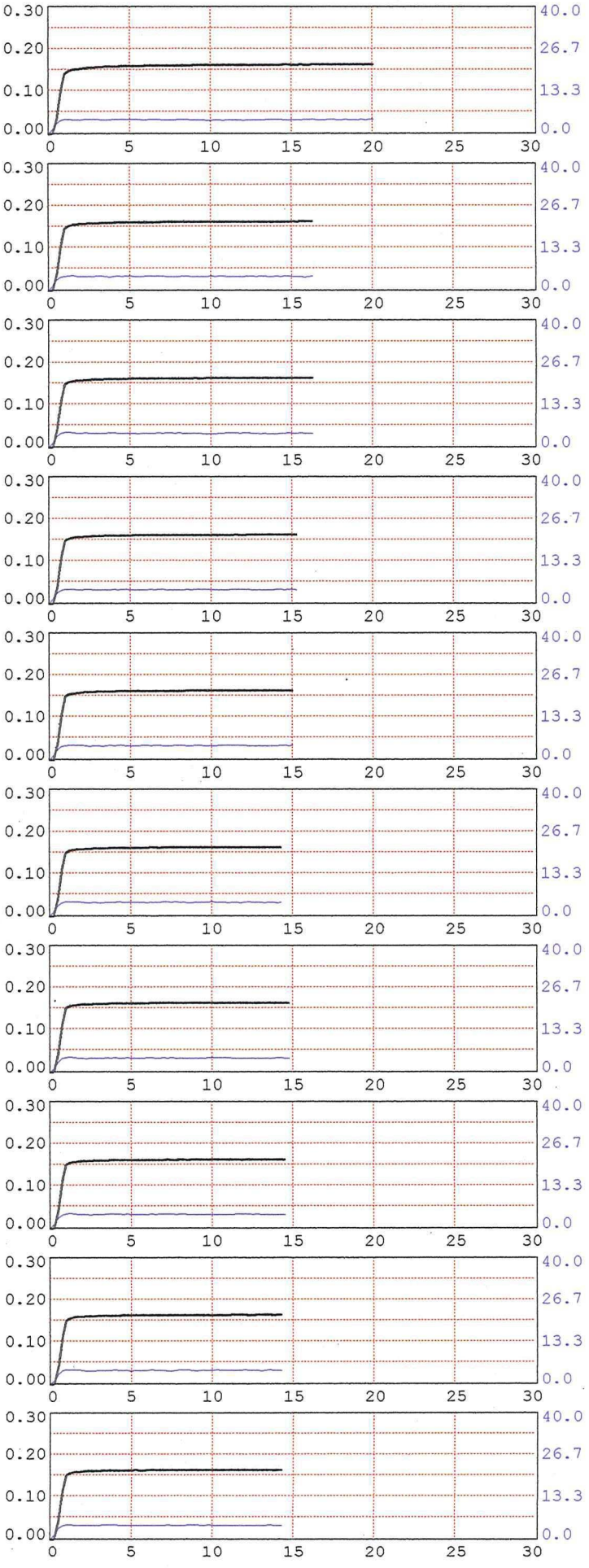
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-30-160
SOLUTION CONCENTRATION: 0.163

BLANK TEST	0.000	14:48
CALIBRATION CHECK	PASSED	14:48
SIMULATOR VAPOR 33.8°C	0.162	14:48
SIMULATOR VAPOR 33.8°C	0.162	14:49
SIMULATOR VAPOR 33.8°C	0.163	14:50
SIMULATOR VAPOR 33.9°C	0.163	14:52
SIMULATOR VAPOR 33.7°C	0.163	14:53
SIMULATOR VAPOR 33.8°C	0.163	14:54
SIMULATOR VAPOR 33.7°C	0.163	14:55
SIMULATOR VAPOR 33.9°C	0.163	14:56
SIMULATOR VAPOR 33.8°C	0.163	14:57
SIMULATOR VAPOR 33.8°C	0.163	14:58
BLANK TEST	0.000	14:59

Average = 0.162
Std Dev = 0.000

L2 11/04/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/04/2011
Time: 15:27:41

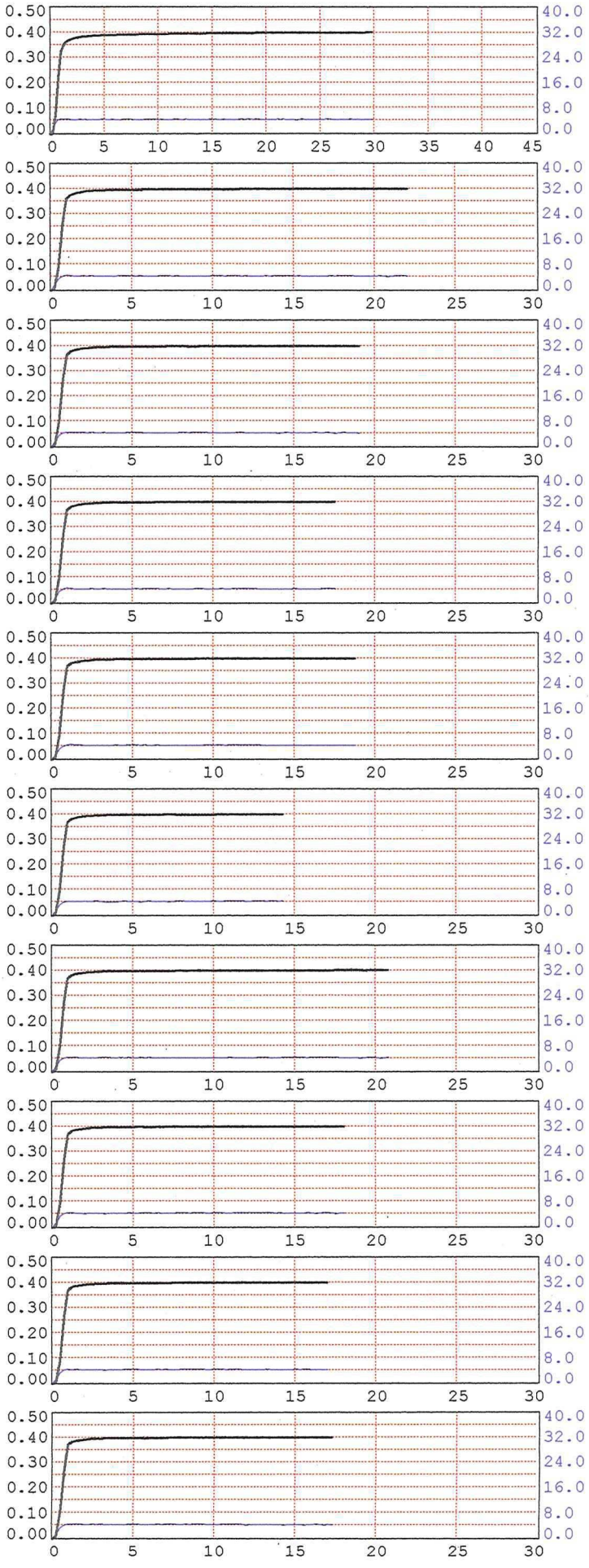
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-25-400
SOLUTION CONCENTRATION: 0.407

BLANK TEST	0.000	15:28
CALIBRATION CHECK	PASSED	15:28
SIMULATOR VAPOR 33.8°C	0.398	15:29
SIMULATOR VAPOR 33.9°C	0.398	15:30
SIMULATOR VAPOR 33.8°C	0.397	15:31
SIMULATOR VAPOR 33.8°C	0.398	15:32
SIMULATOR VAPOR 33.8°C	0.398	15:34
SIMULATOR VAPOR 33.8°C	0.397	15:35
SIMULATOR VAPOR 33.8°C	0.399	15:36
SIMULATOR VAPOR 33.8°C	0.398	15:37
SIMULATOR VAPOR 33.8°C	0.398	15:38
SIMULATOR VAPOR 33.8°C	0.398	15:39
BLANK TEST	0.000	15:40

Average = 0.397
Std Dev = 0.000

L2 11/04/11



DIAGNOSTIC RESULT

DataMaster DMT: 100142
Location:
Calibration Date: 11/03/2011
Certification Date: 11/03/2011
Installation Date:
Test Date: 11/07/2011
Test Time: 08:23:24

VERSIONS
DMT: 1.01
PIC: 2.05
Modem: 2.2
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.6°C
Breath Tube = 48.1°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.67 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 541 Hz

PUMP INFO
Flow Rate = 5.311 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0673	0.0707
MIN(V)	0.0661	0.0693

FILTER INFO
Filter 1 0.070 Zero = true
Filter 2 0.289 Zero = true
Filter 3 0.543 Zero = true

CALIBRATION CHECK
Xq = 0.071 0.73%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/07/2011
Time: 08:43:03

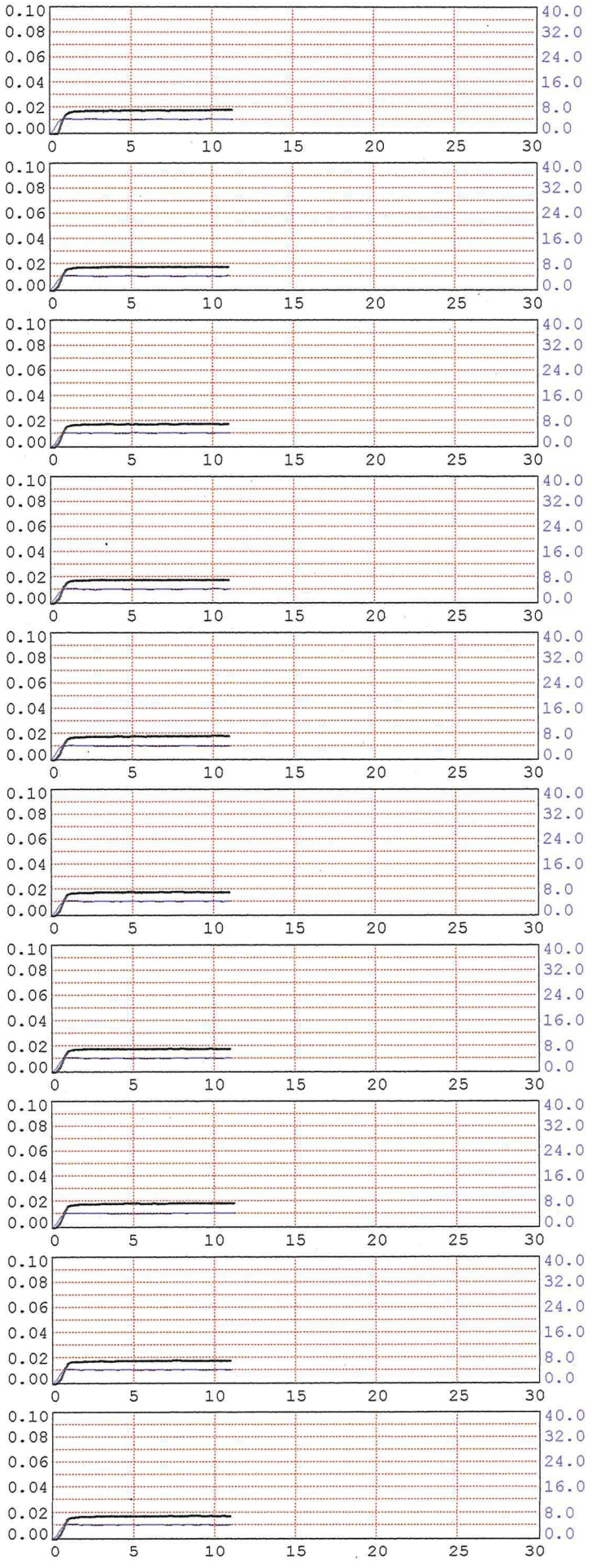
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-23-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	08:43
CALIBRATION CHECK	PASSED	08:44
SIMULATOR VAPOR 33.9°C	0.019	08:44
SIMULATOR VAPOR 33.9°C	0.019	08:45
SIMULATOR VAPOR 33.8°C	0.019	08:46
SIMULATOR VAPOR 33.9°C	0.019	08:47
SIMULATOR VAPOR 33.8°C	0.020	08:48
SIMULATOR VAPOR 33.8°C	0.019	08:49
SIMULATOR VAPOR 33.8°C	0.019	08:50
SIMULATOR VAPOR 33.8°C	0.020	08:51
SIMULATOR VAPOR 33.8°C	0.019	08:52
SIMULATOR VAPOR 33.8°C	0.019	08:53
BLANK TEST	0.000	08:54

Average = 0.019
Std Dev = 0.000

LJ 11/07/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/07/2011
Time: 11:01:57

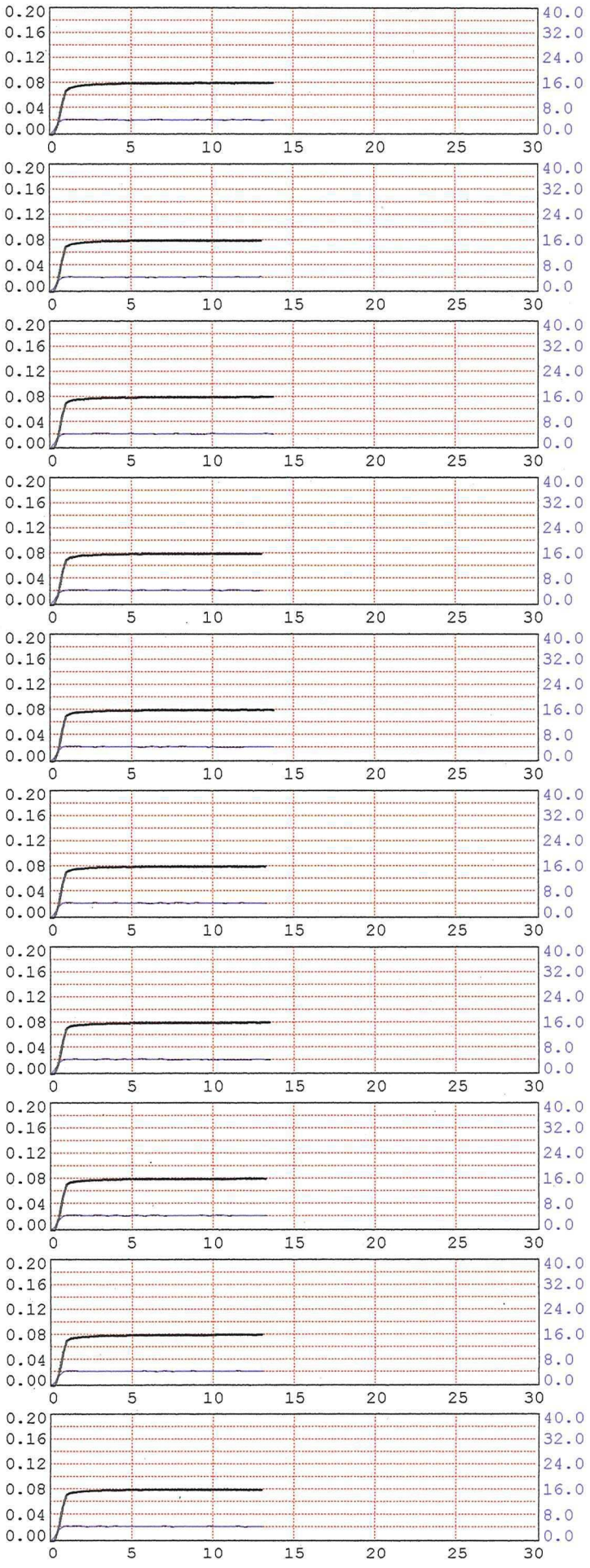
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-29-080
SOLUTION CONCENTRATION: 0.081

BLANK TEST	0.000	11:02
CALIBRATION CHECK	PASSED	11:02
SIMULATOR VAPOR 33.8°C	0.081	11:03
SIMULATOR VAPOR 33.8°C	0.080	11:04
SIMULATOR VAPOR 33.8°C	0.081	11:05
SIMULATOR VAPOR 33.8°C	0.081	11:06
SIMULATOR VAPOR 33.8°C	0.081	11:07
SIMULATOR VAPOR 33.8°C	0.081	11:08
SIMULATOR VAPOR 33.7°C	0.081	11:09
SIMULATOR VAPOR 33.8°C	0.081	11:10
SIMULATOR VAPOR 33.8°C	0.081	11:11
SIMULATOR VAPOR 33.8°C	0.081	11:12
BLANK TEST	0.000	11:13

Average = 0.080
Std Dev = 0.000

LJ 11/07/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/07/2011
Time: 11:27:35

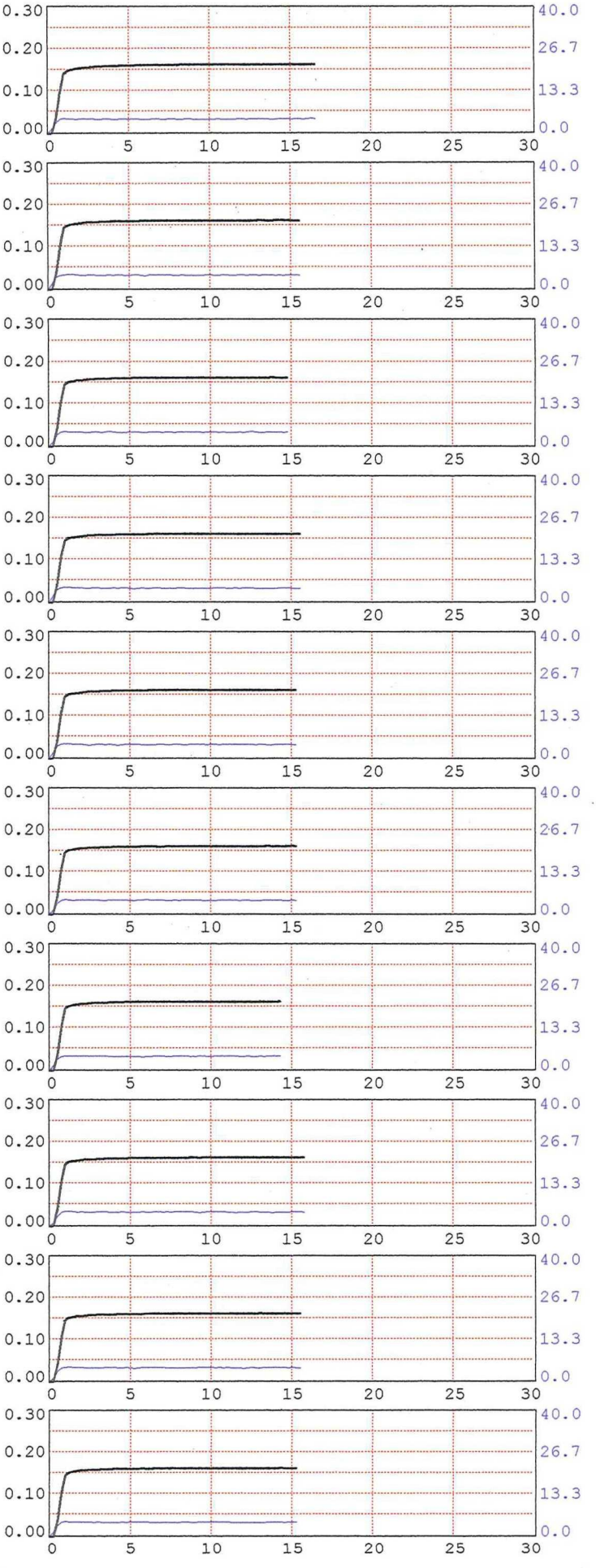
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-30-160
SOLUTION CONCENTRATION: 0.163

BLANK TEST	0.000	11:28
CALIBRATION CHECK	PASSED	11:28
SIMULATOR VAPOR 33.8°C	0.163	11:28
SIMULATOR VAPOR 33.8°C	0.162	11:30
SIMULATOR VAPOR 33.8°C	0.162	11:31
SIMULATOR VAPOR 33.8°C	0.162	11:32
SIMULATOR VAPOR 33.8°C	0.162	11:33
SIMULATOR VAPOR 33.8°C	0.162	11:34
SIMULATOR VAPOR 33.8°C	0.162	11:35
SIMULATOR VAPOR 33.8°C	0.163	11:36
SIMULATOR VAPOR 33.8°C	0.162	11:37
SIMULATOR VAPOR 33.8°C	0.162	11:38
BLANK TEST	0.000	11:39

Average = 0.162
Std Dev = 0.000

LJ 11/07/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/07/2011
Time: 11:45:41

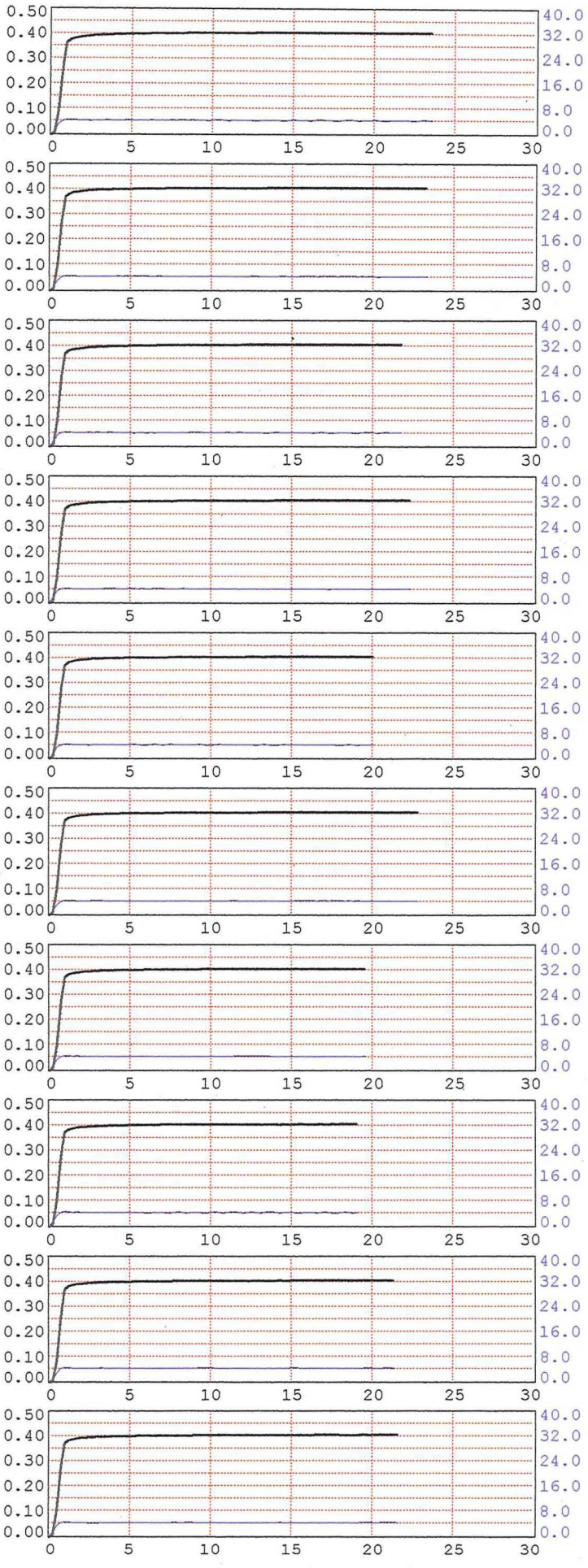
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-25-400
SOLUTION CONCENTRATION: 0.407

BLANK TEST	0.000	11:46
CALIBRATION CHECK	PASSED	11:46
SIMULATOR VAPOR 33.8°C	0.404	11:47
SIMULATOR VAPOR 33.8°C	0.404	11:48
SIMULATOR VAPOR 33.8°C	0.403	11:49
SIMULATOR VAPOR 33.7°C	0.403	11:50
SIMULATOR VAPOR 33.8°C	0.403	11:52
SIMULATOR VAPOR 33.8°C	0.404	11:53
SIMULATOR VAPOR 33.9°C	0.402	11:54
SIMULATOR VAPOR 33.8°C	0.402	11:55
SIMULATOR VAPOR 33.8°C	0.403	11:57
SIMULATOR VAPOR 33.8°C	0.403	11:58
BLANK TEST	0.000	11:59

Average = 0.403
Std Dev = 0.000

LJ 11/07/11



DIAGNOSTIC RESULT

DataMaster DMT: 100142
Location:
Calibration Date: 11/03/2011
Certification Date: 11/03/2011
Installation Date:
Test Date: 11/07/2011
Test Time: 13:11:54

VERSIONS
DMT: 1.01
PIC: 2.05
Modem: 2.2
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube = 48.1°C
Digital Sim = 33.8°C

SETTINGS
Lamp Voltage = 1.67 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 540 Hz

PUMP INFO
Flow Rate = 5.337 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0703	0.0736
MIN(V)	0.0679	0.0720

FILTER INFO
Filter 1 0.072 Zero = true
Filter 2 0.293 Zero = true
Filter 3 0.549 Zero = true

CALIBRATION CHECK
Xq = 0.071 0.36%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/07/2011
Time: 13:31:51

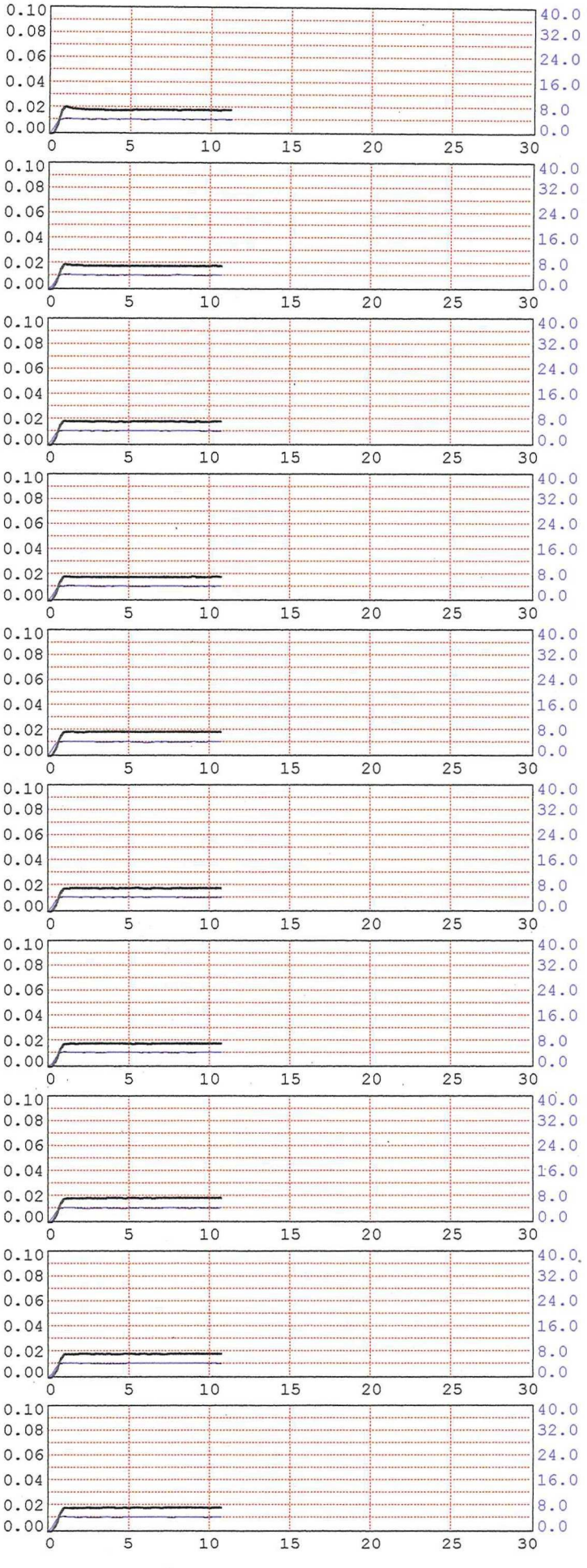
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-23-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	13:32
CALIBRATION CHECK	PASSED	13:32
SIMULATOR VAPOR 33.8°C	0.019	13:33
SIMULATOR VAPOR 33.8°C	0.019	13:34
SIMULATOR VAPOR 33.8°C	0.019	13:35
SIMULATOR VAPOR 33.8°C	0.019	13:36
SIMULATOR VAPOR 33.8°C	0.020	13:37
SIMULATOR VAPOR 33.8°C	0.019	13:38
SIMULATOR VAPOR 33.8°C	0.019	13:39
SIMULATOR VAPOR 33.8°C	0.020	13:40
SIMULATOR VAPOR 33.8°C	0.019	13:41
SIMULATOR VAPOR 33.8°C	0.019	13:42
BLANK TEST	0.000	13:43

Average = 0.019
Std Dev = 0.000

LY 11/07/11 SMM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/07/2011
Time: 13:47:17

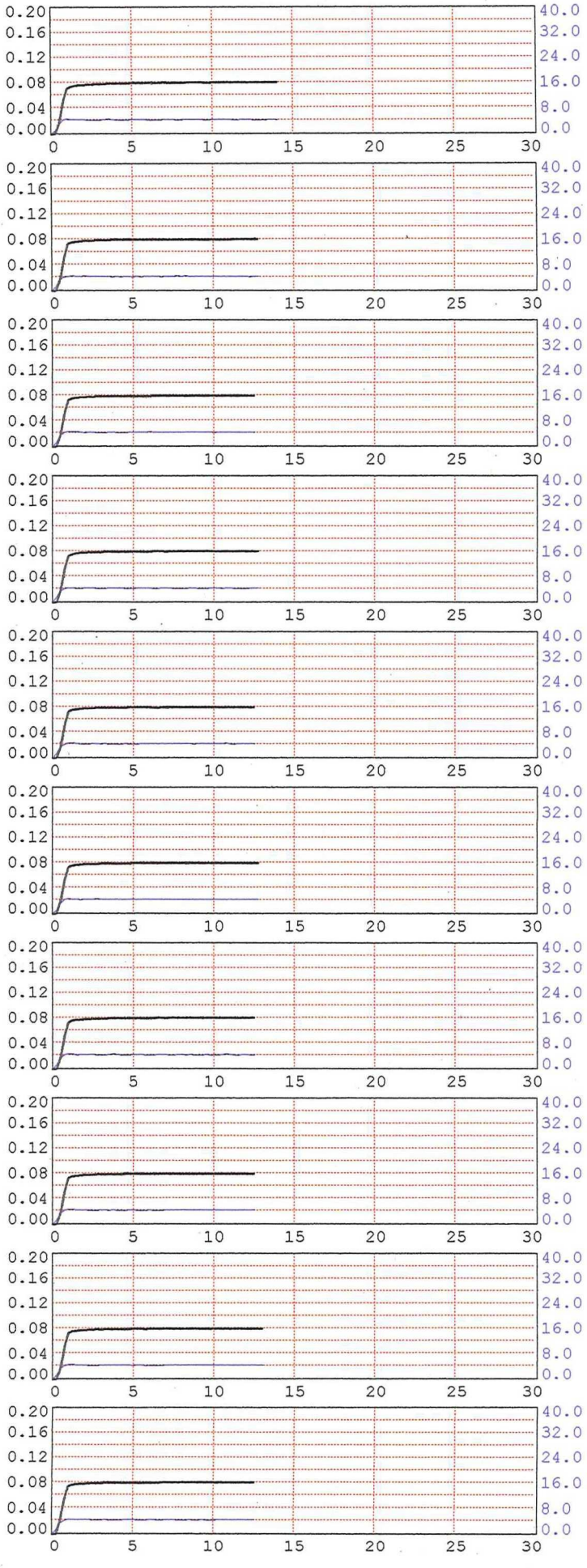
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-29-080
SOLUTION CONCENTRATION: 0.081

BLANK TEST	0.000	13:48
CALIBRATION CHECK	PASSED	13:48
SIMULATOR VAPOR 33.8°C	0.081	13:48
SIMULATOR VAPOR 33.9°C	0.081	13:49
SIMULATOR VAPOR 33.8°C	0.080	13:50
SIMULATOR VAPOR 33.8°C	0.081	13:51
SIMULATOR VAPOR 33.9°C	0.080	13:52
SIMULATOR VAPOR 33.8°C	0.080	13:53
SIMULATOR VAPOR 33.8°C	0.081	13:54
SIMULATOR VAPOR 33.8°C	0.080	13:56
SIMULATOR VAPOR 33.8°C	0.080	13:57
SIMULATOR VAPOR 33.8°C	0.081	13:58
BLANK TEST	0.000	13:59

Average = 0.080
Std Dev = 0.000

LY 11/07/11 SKM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/07/2011
Time: 14:08:59

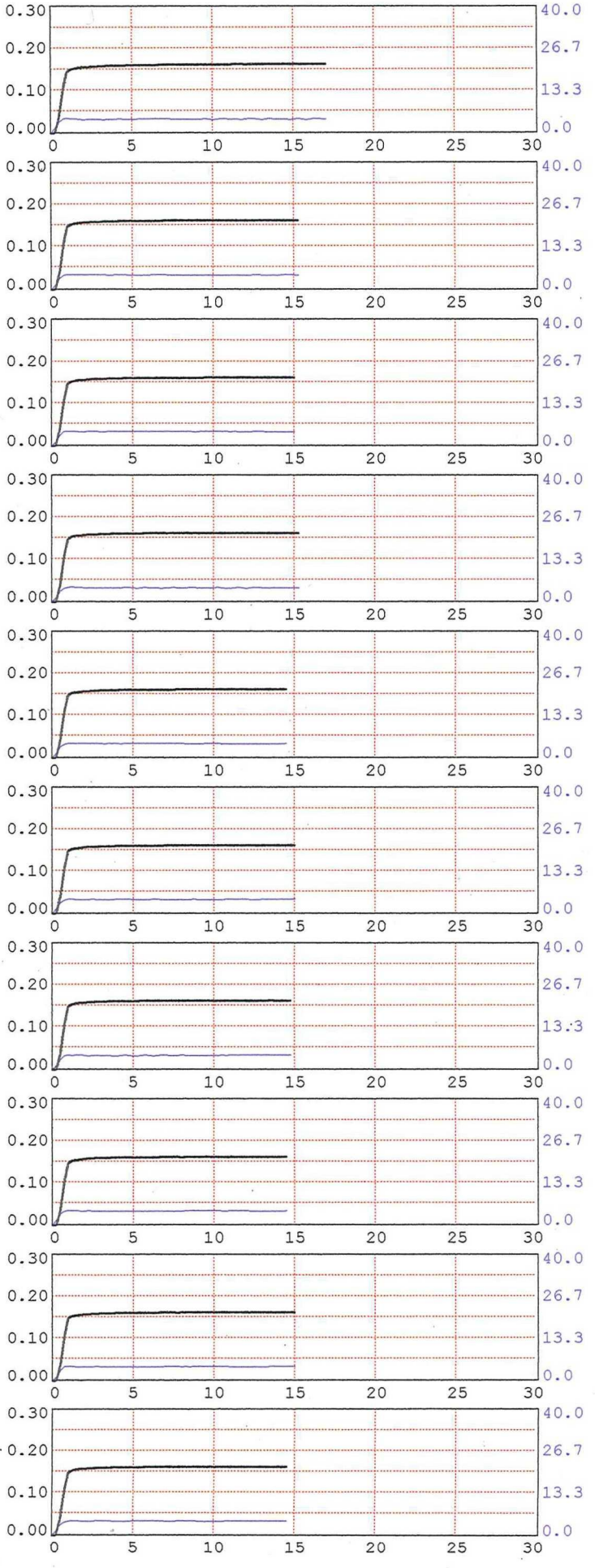
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-30-160
SOLUTION CONCENTRATION: 0.163

BLANK TEST	0.000	14:09
CALIBRATION CHECK	PASSED	14:09
SIMULATOR VAPOR 33.8°C	0.162	14:10
SIMULATOR VAPOR 33.8°C	0.162	14:11
SIMULATOR VAPOR 33.9°C	0.161	14:12
SIMULATOR VAPOR 33.8°C	0.162	14:13
SIMULATOR VAPOR 33.8°C	0.161	14:14
SIMULATOR VAPOR 33.8°C	0.162	14:15
SIMULATOR VAPOR 33.8°C	0.162	14:17
SIMULATOR VAPOR 33.7°C	0.162	14:18
SIMULATOR VAPOR 33.7°C	0.162	14:19
SIMULATOR VAPOR 33.8°C	0.162	14:20
BLANK TEST	0.000	14:21

Average = 0.161
Std Dev = 0.000

CL 11/07/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/07/2011
Time: 14:24:35

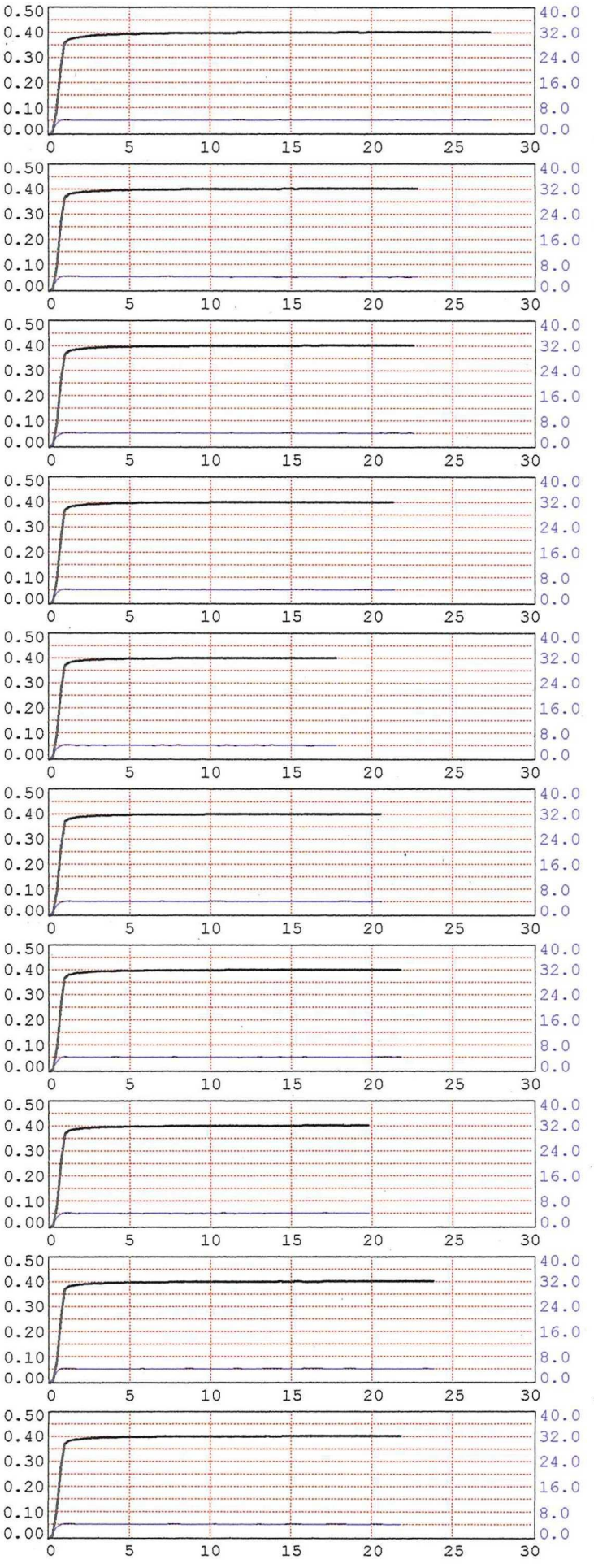
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-25-400
SOLUTION CONCENTRATION: 0.407

BLANK TEST	0.000	14:25
CALIBRATION CHECK	PASSED	14:25
SIMULATOR VAPOR 33.8°C	0.401	14:26
SIMULATOR VAPOR 33.8°C	0.401	14:27
SIMULATOR VAPOR 33.8°C	0.401	14:28
SIMULATOR VAPOR 33.8°C	0.400	14:29
SIMULATOR VAPOR 33.8°C	0.400	14:31
SIMULATOR VAPOR 33.8°C	0.400	14:32
SIMULATOR VAPOR 33.8°C	0.400	14:33
SIMULATOR VAPOR 33.8°C	0.401	14:34
SIMULATOR VAPOR 33.8°C	0.402	14:35
SIMULATOR VAPOR 33.8°C	0.401	14:37
BLANK TEST	0.000	14:38

Average = 0.400
Std Dev = 0.000

LH 11/07/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/08/2011
Time: 09:00:02

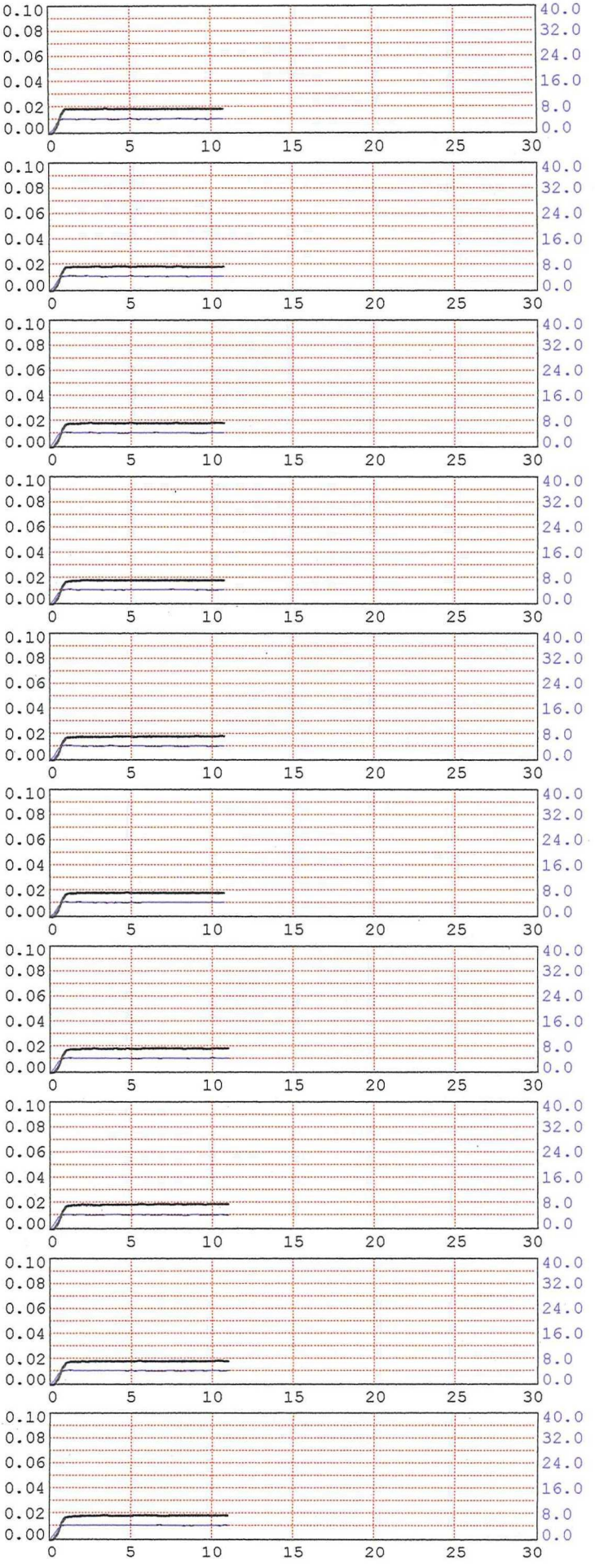
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-31-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	09:00
CALIBRATION CHECK	PASSED	09:01
SIMULATOR VAPOR 33.8°C	0.020	09:01
SIMULATOR VAPOR 33.7°C	0.020	09:02
SIMULATOR VAPOR 33.8°C	0.019	09:03
SIMULATOR VAPOR 33.8°C	0.019	09:04
SIMULATOR VAPOR 33.9°C	0.020	09:05
SIMULATOR VAPOR 33.8°C	0.019	09:06
SIMULATOR VAPOR 33.9°C	0.019	09:07
SIMULATOR VAPOR 33.8°C	0.020	09:08
SIMULATOR VAPOR 33.7°C	0.019	09:09
SIMULATOR VAPOR 33.8°C	0.019	09:10
BLANK TEST	0.000	09:11

Average = 0.019
Std Dev = 0.000

L-5
11-8-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/08/2011
Time: 09:20:41

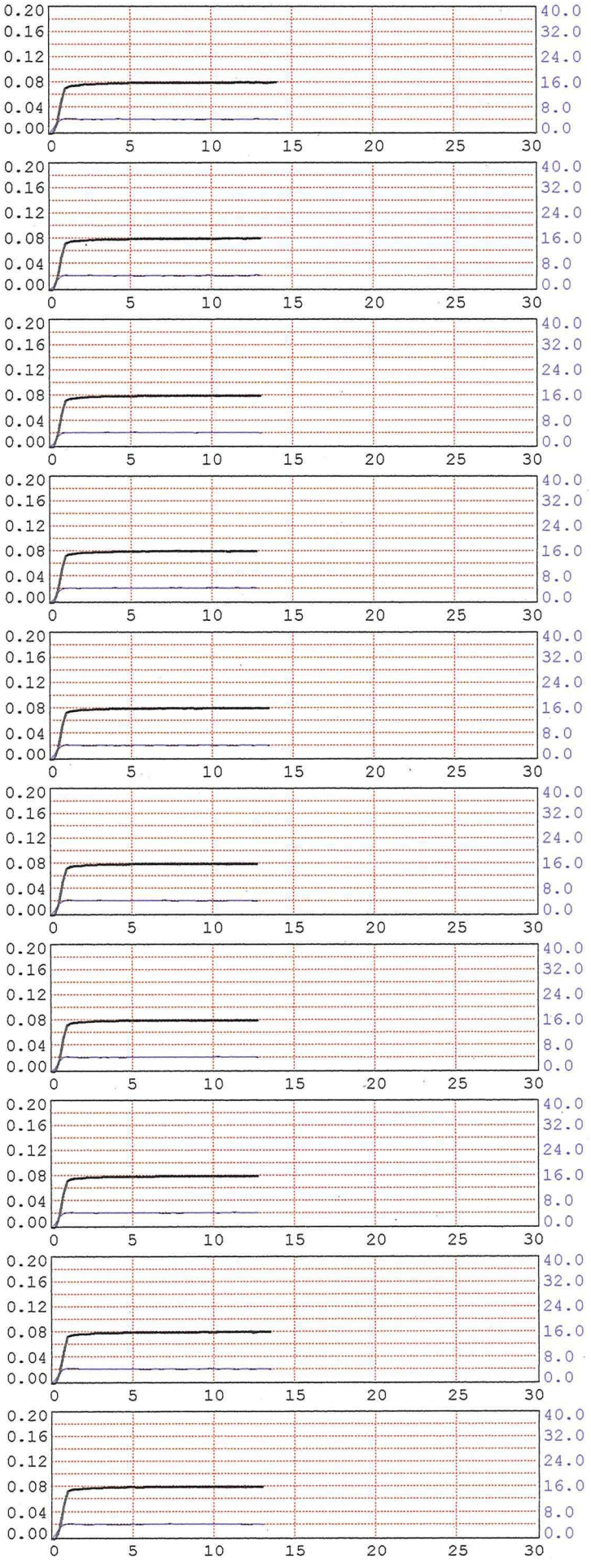
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-29-080
SOLUTION CONCENTRATION: 0.081

BLANK TEST	0.000	09:21
CALIBRATION CHECK	PASSED	09:21
SIMULATOR VAPOR 33.9°C	0.081	09:22
SIMULATOR VAPOR 33.8°C	0.081	09:23
SIMULATOR VAPOR 33.9°C	0.080	09:24
SIMULATOR VAPOR 33.8°C	0.081	09:25
SIMULATOR VAPOR 33.8°C	0.081	09:26
SIMULATOR VAPOR 33.8°C	0.080	09:27
SIMULATOR VAPOR 33.8°C	0.080	09:28
SIMULATOR VAPOR 33.8°C	0.080	09:29
SIMULATOR VAPOR 33.8°C	0.081	09:30
SIMULATOR VAPOR 33.8°C	0.080	09:31
BLANK TEST	0.000	09:32

Average = 0.080
Std Dev = 0.000

L-5
NL11c
11-8-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100142

Date: 11/08/2011
Time: 09:53:58

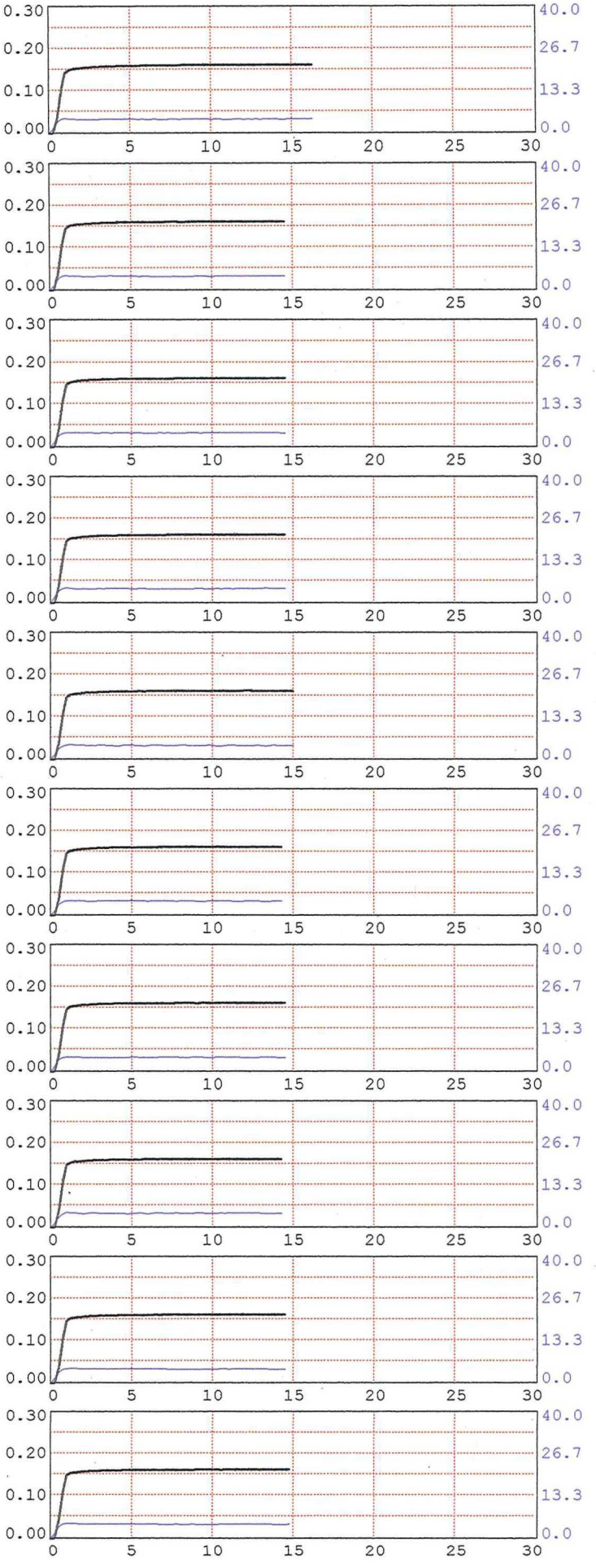
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-30-160
SOLUTION CONCENTRATION: 0.163

BLANK TEST	0.000	09:54
CALIBRATION CHECK	PASSED	09:54
SIMULATOR VAPOR 33.8°C	0.161	09:55
SIMULATOR VAPOR 33.8°C	0.162	09:56
SIMULATOR VAPOR 33.9°C	0.162	09:57
SIMULATOR VAPOR 33.8°C	0.161	09:58
SIMULATOR VAPOR 33.8°C	0.162	09:59
SIMULATOR VAPOR 33.8°C	0.162	10:00
SIMULATOR VAPOR 33.8°C	0.161	10:01
SIMULATOR VAPOR 33.8°C	0.162	10:03
SIMULATOR VAPOR 33.8°C	0.162	10:04
SIMULATOR VAPOR 33.8°C	0.161	10:05
BLANK TEST	0.000	10:06

Average = 0.161
Std Dev = 0.000

L-5
11-8-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

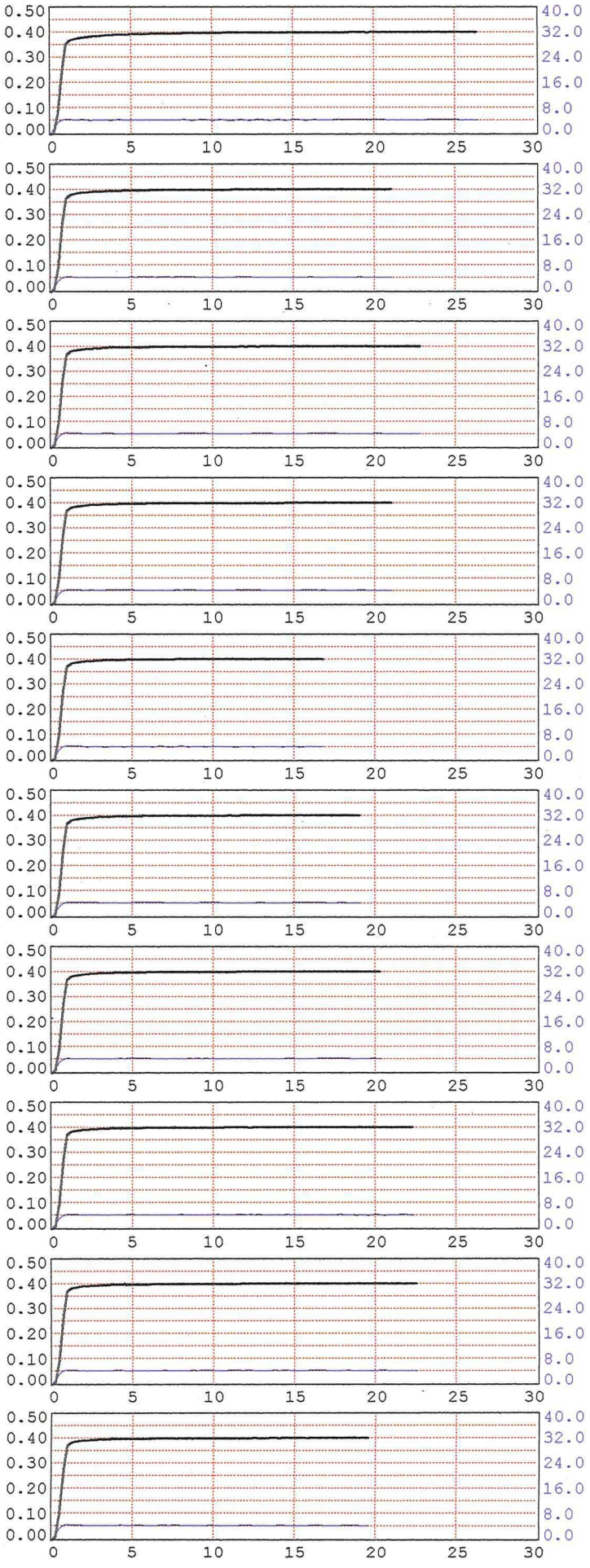
DataMater DMT: 100142

Date: 11/08/2011
Time: 10:11:10

SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-25-400
SOLUTION CONCENTRATION: 0.407

BLANK TEST	0.000	10:12
CALIBRATION CHECK	PASSED	10:12
SIMULATOR VAPOR 33.9°C	0.399	10:12
SIMULATOR VAPOR 33.8°C	0.400	10:13
SIMULATOR VAPOR 33.8°C	0.400	10:15
SIMULATOR VAPOR 33.8°C	0.400	10:16
SIMULATOR VAPOR 33.9°C	0.399	10:17
SIMULATOR VAPOR 33.8°C	0.399	10:18
SIMULATOR VAPOR 33.7°C	0.400	10:20
SIMULATOR VAPOR 33.8°C	0.400	10:21
SIMULATOR VAPOR 33.8°C	0.400	10:22
SIMULATOR VAPOR 33.8°C	0.399	10:23
BLANK TEST	0.000	10:24

Average = 0.399
Std Dev = 0.000

L-5
KLK
11-8-11