100145
Bridgeton PD
Essex County

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SECTION 1

RESULTS

National Patent
Analytical Systems, Inc.

On this date 6/24/11, NPAS received instrument # 100145.

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. 8/3/11

Print Name of Reviewer: DAVID RADOMSKI

Signature of Reviewer and Date: David Radomski 8/3/11

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

Packing List

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

Cust No. VT1678J Ord Date 6/24/11
Sales Order No. 44311

Ship Date 8/4/11
Packing List No. 68659

Cust Purch Ord No. KURT KIMBLE

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 100145

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	None Given	No Draw # / NONE / No Date
Serial Nos.							

Opened 08/26/11 SHm

Log On Record History

Test Date	Test Time	Name
08/26/2011	15:23:51	Steven Merrill
08/26/2011	16:00:19	Steven Merrill
08/30/2011	08:49:58	Steven Merrill
08/30/2011	08:52:35	Steven Merrill
08/30/2011	13:20:52	Steven Merrill
08/30/2011	13:54:13	Steven Merrill
08/31/2011	08:26:19	Steven Merrill
08/31/2011	09:41:59	Steven Merrill
08/31/2011	11:50:03	Steven Merrill
08/31/2011	13:10:25	Steven Merrill
09/01/2011	08:04:59	Steven Merrill
09/01/2011	09:36:18	Steven Merrill
09/01/2011	10:58:33	Steven Merrill
09/06/2011	09:21:04	Steven Merrill
09/06/2011	11:04:38	Steven Merrill
09/06/2011	13:55:35	Steven Merrill
09/06/2011	15:33:49	Steven Merrill

DataMaster DMT Serial Number 100145

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)									
Completed 08/30/11 Sm KKK	0.976470 08/30/11 Sm KKK	34.0	11-39-100	0.097 08/30/11 Sm KKK	G7449 KKK 9-9-11	08/30/11 Sm KKK	100% 08/31/11 Sm KKK	08/31/11 Sm 100% KKK	08/31/11 Sm 100% KKK	~~100%~~ Sm 90% 09/01/11 Sm KKK	100% 09/01/11 Sm KKK	100% 09/06/11 Sm KKK	100% 09/01/11 Sm KKK
		34.0	Guth 11050	0.098 08/30/11 Sm KKK									

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)
08/31/11 Sm KKK	08/31/11 Sm KKK	09/01/11 Sm KKK	09/01/11 Sm KKK	09/06/11 Sm KKK	KKK 9-6-11 Sm	34.1	11-39-100	0.098 09/06/11 Sm KKK
						34.1	Guth 11050	0.098 09/06/11 Sm KKK

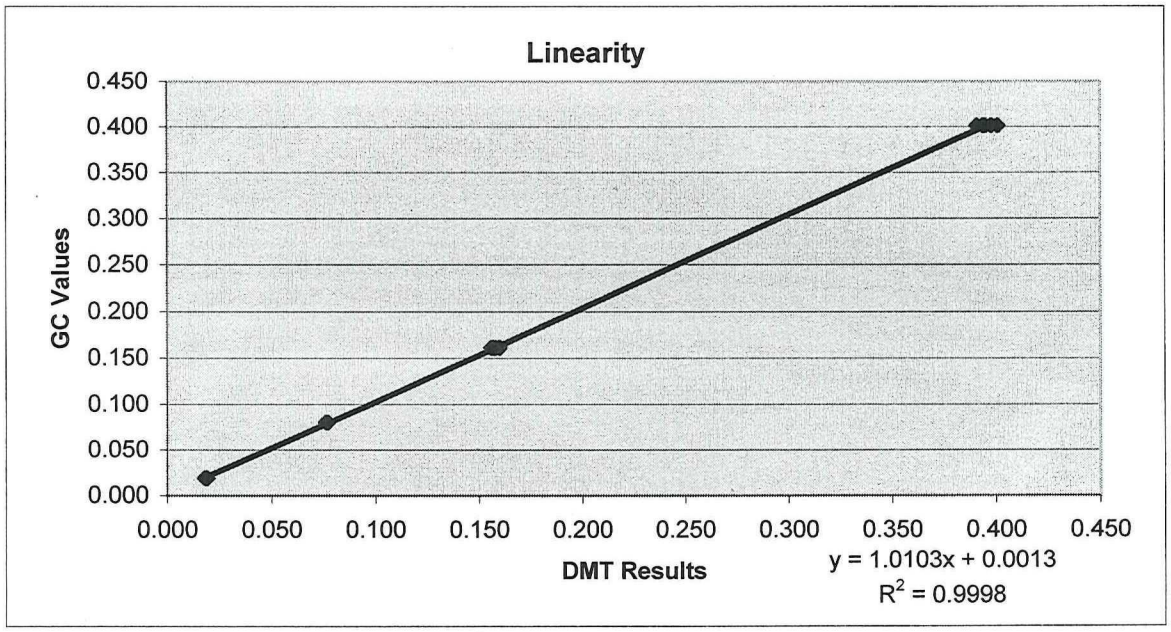
Notes: Started Power-Up 08/26/11 Sm KKK 8-30-11
H_2O for calibration temp (NIST) = 34.0°C 08/30/11 Sm KKK
Calibration solution temp (NIST) = 33.9°C 08/30/11 Sm KKK

Analyst: 09/06/11 **Reviewer:** 9-7-11 **Reviewer:** 9/8/11

DataMaster DMT Serial Number 100145

Operator	Date	GC Value	DMT Average	Std Dev	% Recovery
SRM	8/31/2011	0.019	0.019	0.000	100
SRM	8/31/2011	0.080	0.077	0.000	96
SRM	8/31/2011	0.161	0.160	0.000	99
SRM	8/31/2011	0.401	0.395	0.000	98
SRM	8/31/2011	0.019	0.019	0.000	100
SRM	8/31/2011	0.080	0.077	0.000	96
SRM	8/31/2011	0.161	0.160	0.000	99
SRM	8/31/2011	0.401	0.394	0.000	98
SRM	9/1/2011	0.019	0.019	0.000	100
SRM	9/1/2011	0.080	0.076	0.000	95
SRM	9/1/2011	0.161	0.158	0.000	98
SRM	9/1/2011	0.401	0.391	0.000	97
SRM	9/1/2011	0.019	0.019	0.000	100
SRM	9/1/2011	0.080	0.076	0.000	95
SRM	9/1/2011	0.161	0.157	0.000	97
SRM	9/1/2011	0.401	0.401	0.000	100
SRM	9/6/2011	0.019	0.018	0.000	94
SRM	9/6/2011	0.080	0.076	0.000	95
SRM	9/6/2011	0.161	0.156	0.000	96
SRM	9/6/2011	0.401	0.398	0.000	99
			Average	0.0000	98
			Std Dev	0.0000	
			Range	0.000 0.000	95 - 100

AHC 9-7-11



SECTION 2

POWER UP TESTS

CALIBRATION REPORT

DataMaster DMT: 100145
Calibration Date: 08/30/2011
Calibrated by: STEVEN R MERRILL
Lot: 11-37-100

```
Ca  = 0.100
CAL = 0.976470   0.800  <= CAL < 1.200
b1  = 0.000      0.000  <=  b1 < 0.004
b2  = 0.003      0.002  <=  b2 < 0.010
b3  = 0.000      0.000  <=  b3 < 0.004
Xq  = 0.124      0.050  <=  Xq < 0.200
a21 = 1.134325   1.050  <= a21 < 1.300
a31 = 0.424413   0.300  <= a31 < 0.800
```

Performed by _____ Date 08/30/2011

CERTIFICATION REPORT

DataMaster DMT: 100145
Calibration Date: 08/30/2011
Certification Date: 08/30/2011
Certified by: STEVEN R MERRILL

Diagnostic Results

```
VERSIONS
DMT: 1.00
PIC: 2.05
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube    = 46.8°C
Digital Sim    = 0.0°C

SETTINGS
Lamp Voltage   = 1.63 V
Cooler Voltage = 1.53 V
Bias Voltage   = 80 V
Chopper Freq   = 530 Hz

PUMP INFO
Flow Rate = 5.660 L/M

DETECTOR INFO
PUMP     ON        OFF
MAX(V)   0.0358    0.0380
MIN(V)   0.0339    0.0368

FILTER INFO
Filter 1   0.037  Zero = true
Filter 2   0.622  Zero = true
Filter 3   1.501  Zero = true

CALIBRATION CHECK
Xq  = 0.124  0.07%
```

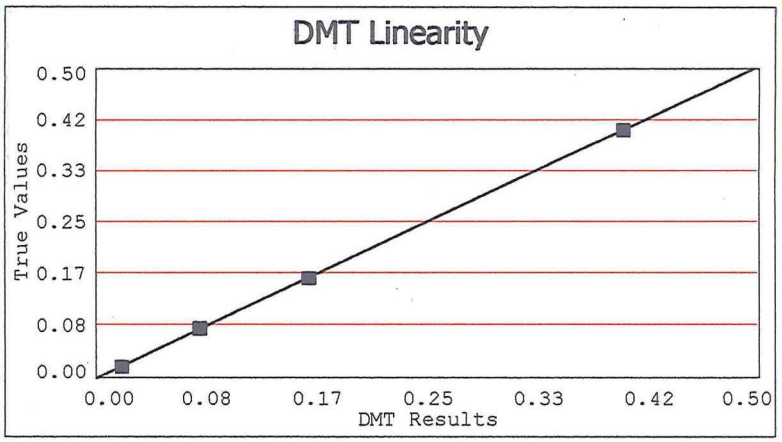
Options

```
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
0.019 g/210L Lot # 12-07-020	0.019 g/210L	0.0000
0.080 g/210L Lot # 12-10-080	0.078 g/210L	0.0000
0.161 g/210L Lot # 12-03-160	0.160 g/210L	0.0000
0.401 g/210L Lot # 12-08-400	0.397 g/210L	0.0000

$R^2 = 1$



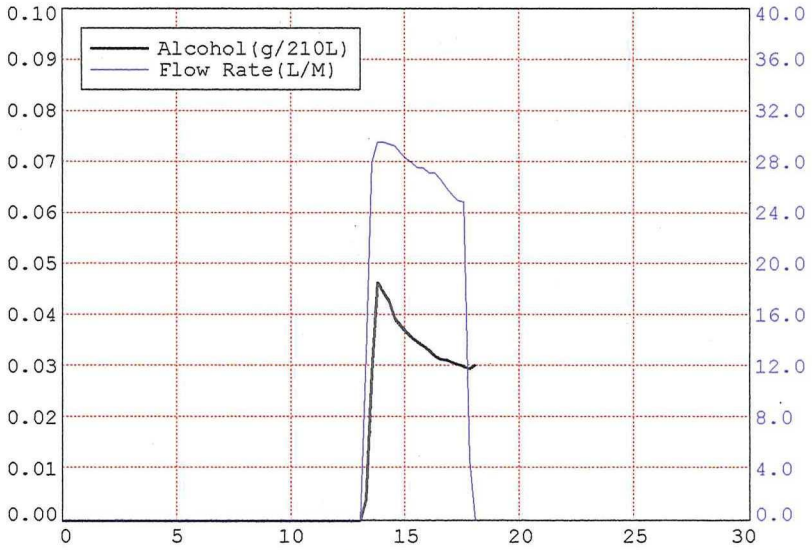
Acetone Interference Test

Lot # 12-09-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

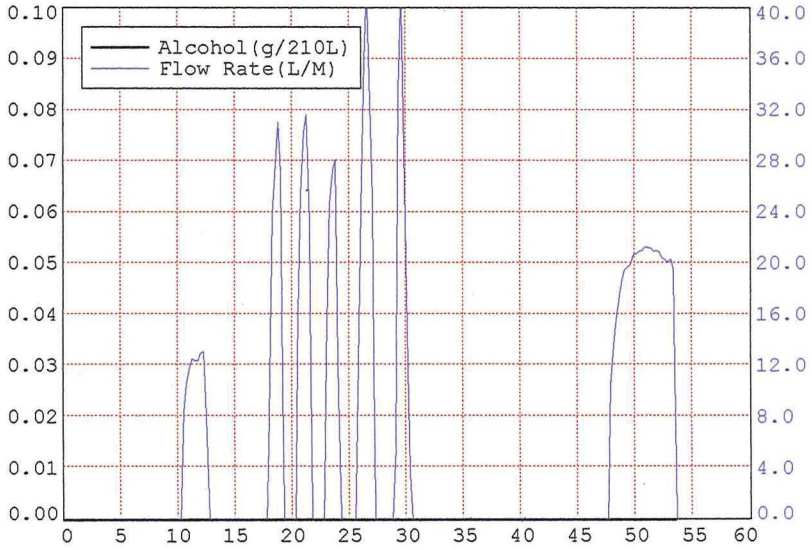


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by _____ Date 08/30/2011

Reviewed by _____ Date 8-30-11

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/30/2011
Time: 14:06:22

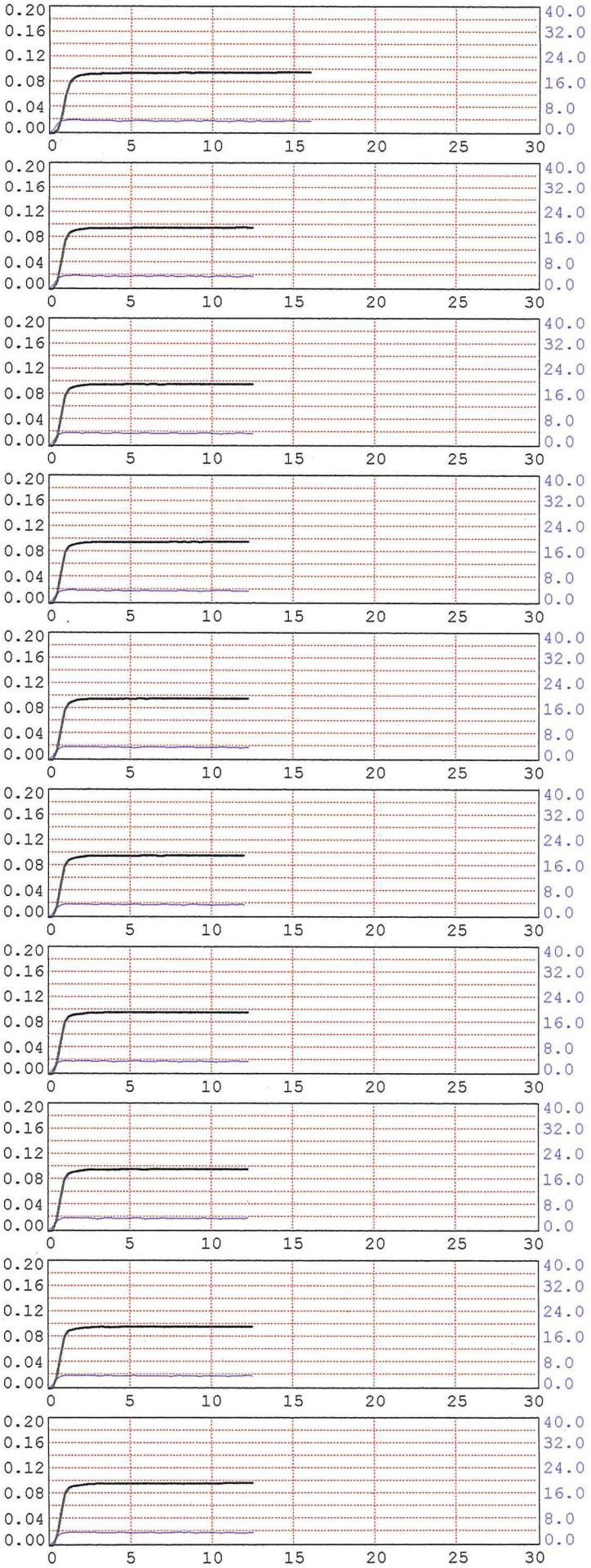
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 11-39-100
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	14:07
CALIBRATION CHECK	PASSED	14:07
SIMULATOR VAPOR 33.9°C	0.097	14:07
SIMULATOR VAPOR 33.8°C	0.097	14:08
SIMULATOR VAPOR 33.7°C	0.098	14:09
SIMULATOR VAPOR 33.9°C	0.098	14:10
SIMULATOR VAPOR 33.8°C	0.098	14:11
SIMULATOR VAPOR 33.8°C	0.098	14:13
SIMULATOR VAPOR 33.8°C	0.098	14:14
SIMULATOR VAPOR 33.8°C	0.098	14:15
SIMULATOR VAPOR 33.8°C	0.098	14:16
SIMULATOR VAPOR 33.8°C	0.098	14:17
BLANK TEST	0.000	14:18

Average = 0.097
Std Dev = 0.000

In-House Cal Check. 08/30/11 sh



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/30/2011
Time: 14:22:47

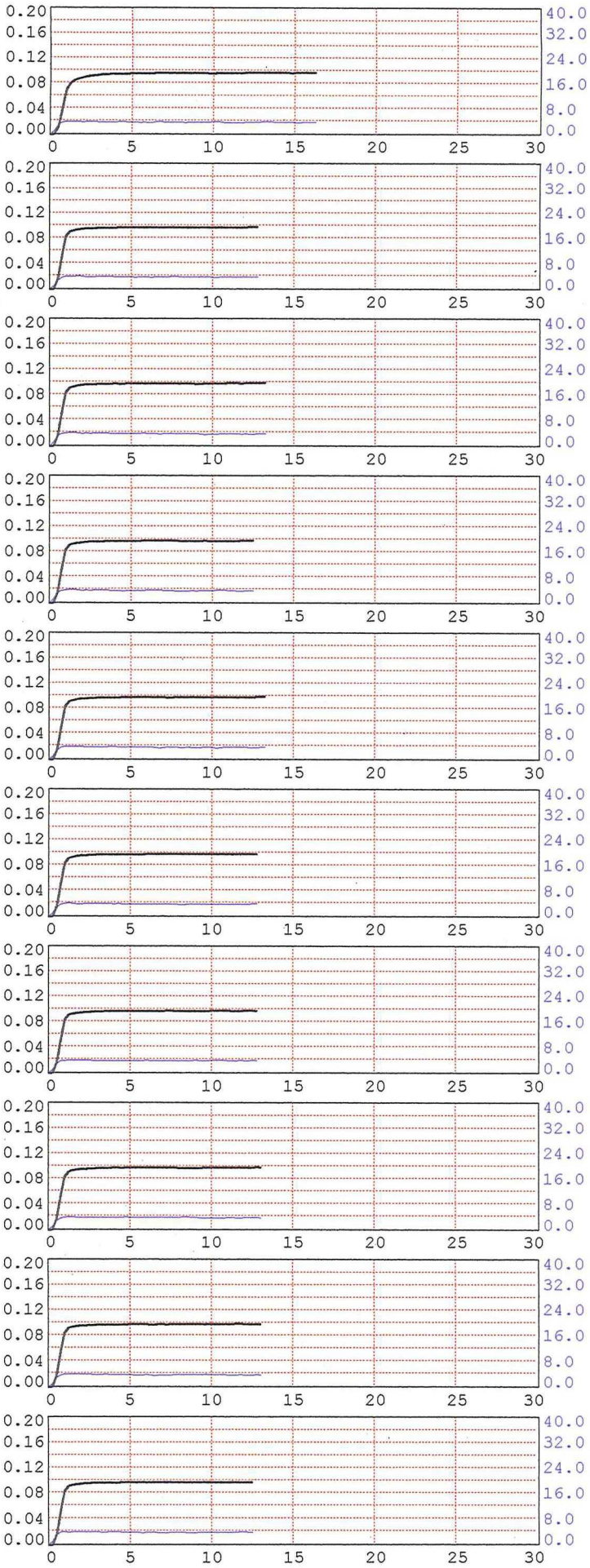
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: GUTH 11050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	14:23
CALIBRATION CHECK	PASSED	14:23
SIMULATOR VAPOR 33.9°C	0.098	14:24
SIMULATOR VAPOR 33.9°C	0.099	14:25
SIMULATOR VAPOR 33.9°C	0.099	14:26
SIMULATOR VAPOR 33.9°C	0.099	14:27
SIMULATOR VAPOR 33.9°C	0.100	14:28
SIMULATOR VAPOR 33.8°C	0.099	14:29
SIMULATOR VAPOR 33.9°C	0.098	14:30
SIMULATOR VAPOR 33.9°C	0.099	14:31
SIMULATOR VAPOR 33.9°C	0.099	14:32
SIMULATOR VAPOR 34.0°C	0.098	14:33
BLANK TEST	0.000	14:34

Average = 0.098
Std Dev = 0.000

2nd Source Cal Check. 08/30/11 SRM



SECTION 3

LINEARITY TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 100145
Location:
Calibration Date: 08/30/2011
Certification Date: 08/30/2011
Installation Date:
Test Date: 08/31/2011
Test Time: 09:42:01

VERSIONS
DMT: 1.00
PIC: 2.05
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.0°C
Breath Tube = 47.9°C
Digital Sim = 34.4°C

SETTINGS
Lamp Voltage = 1.63 V
Cooler Voltage = 1.52 V
Bias Voltage = 80 V
Chopper Freq = 530 Hz

PUMP INFO
Flow Rate = 5.667 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0268	0.0313
MIN(V)	0.0252	0.0295

FILTER INFO
Filter 1 0.029 Zero = true
Filter 2 0.615 Zero = true
Filter 3 1.494 Zero = true

CALIBRATION CHECK
Xq = 0.124 0.07%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/31/2011
Time: 09:44:22

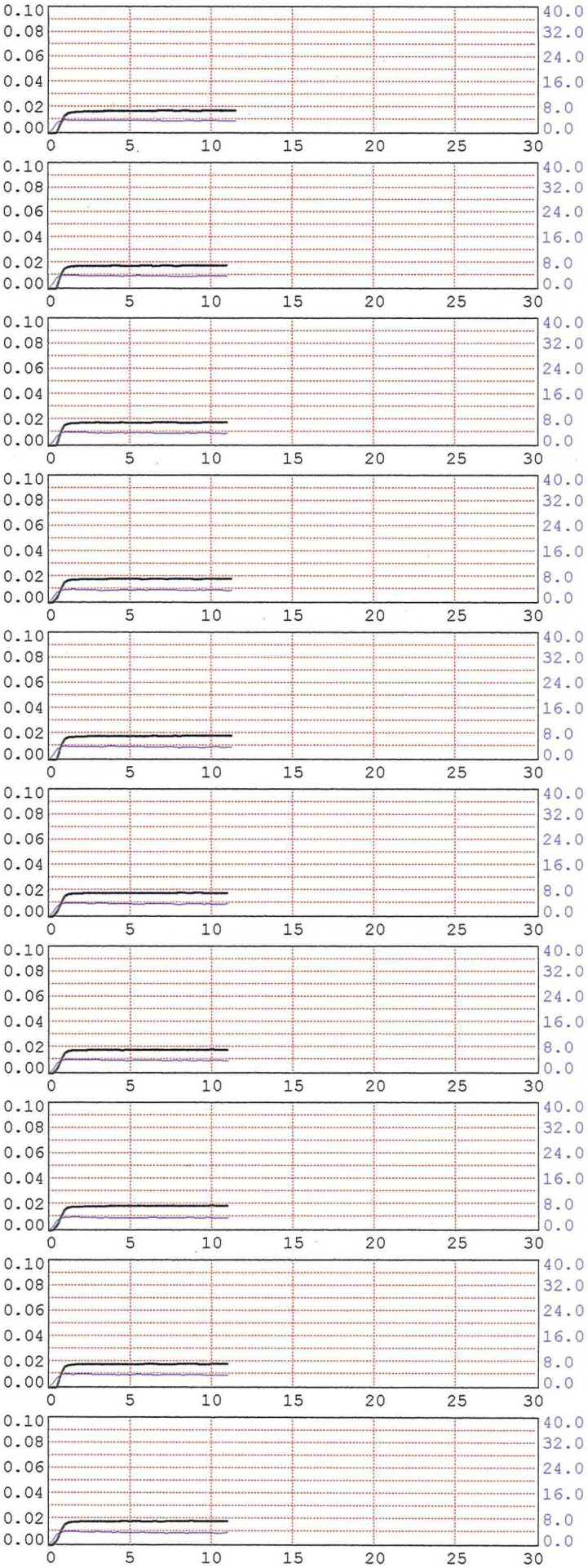
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-07-020
SOLUTION CONCENTRATION: 0.019

BLANK TEST	0.000	09:45
CALIBRATION CHECK	PASSED	09:45
SIMULATOR VAPOR 34.2°C	0.018	09:45
SIMULATOR VAPOR 34.4°C	0.019	09:46
SIMULATOR VAPOR 34.4°C	0.019	09:47
SIMULATOR VAPOR 34.4°C	0.019	09:48
SIMULATOR VAPOR 34.4°C	0.020	09:49
SIMULATOR VAPOR 34.4°C	0.019	09:50
SIMULATOR VAPOR 34.1°C	0.019	09:51
SIMULATOR VAPOR 34.2°C	0.020	09:52
SIMULATOR VAPOR 34.4°C	0.019	09:53
SIMULATOR VAPOR 34.2°C	0.020	09:54
BLANK TEST	0.000	09:55

Average = 0.019
Std Dev = 0.000

L1 08/31/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/31/2011
Time: 09:58:16

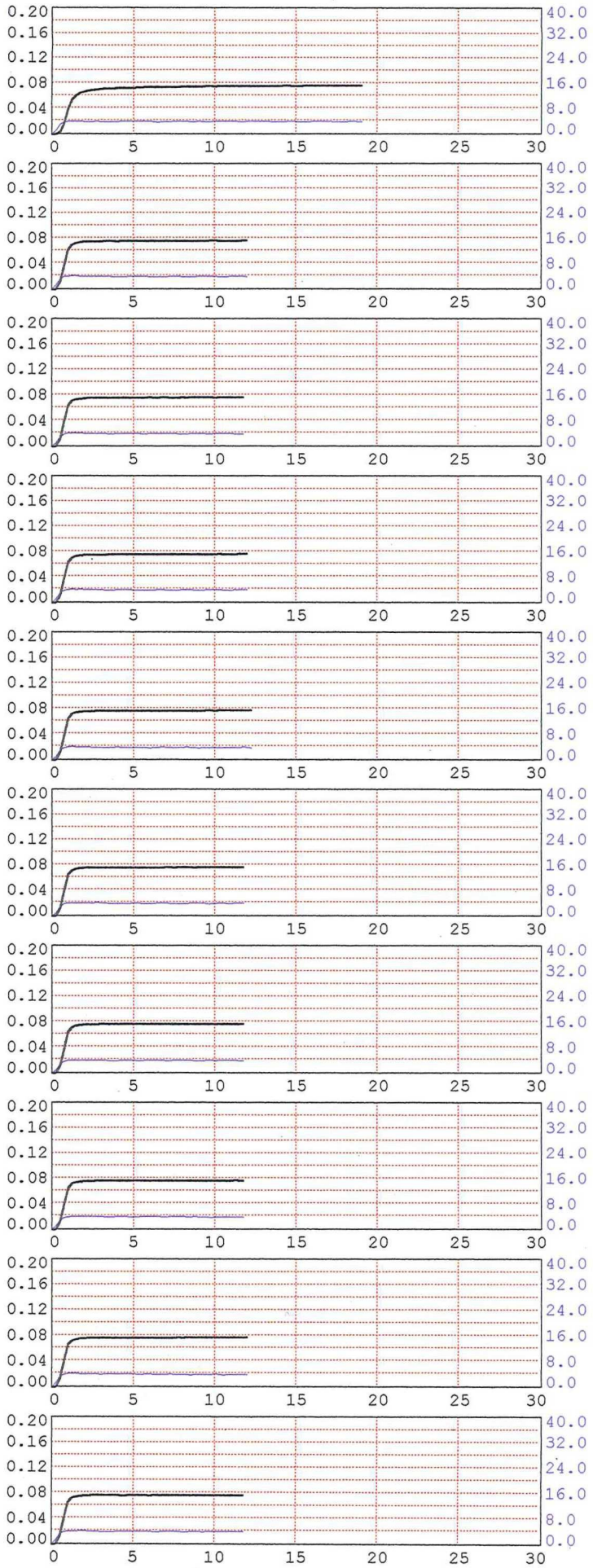
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-10-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	09:59
CALIBRATION CHECK	PASSED	09:59
SIMULATOR VAPOR 34.4°C	0.078	09:59
SIMULATOR VAPOR 34.2°C	0.077	10:00
SIMULATOR VAPOR 34.4°C	0.078	10:01
SIMULATOR VAPOR 34.2°C	0.077	10:02
SIMULATOR VAPOR 34.4°C	0.078	10:03
SIMULATOR VAPOR 34.2°C	0.077	10:04
SIMULATOR VAPOR 34.4°C	0.078	10:06
SIMULATOR VAPOR 34.4°C	0.078	10:07
SIMULATOR VAPOR 34.2°C	0.078	10:08
SIMULATOR VAPOR 34.4°C	0.078	10:09
BLANK TEST	0.000	10:10

Average = 0.077
Std Dev = 0.000

LI 08/31/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/31/2011
Time: 10:14:30

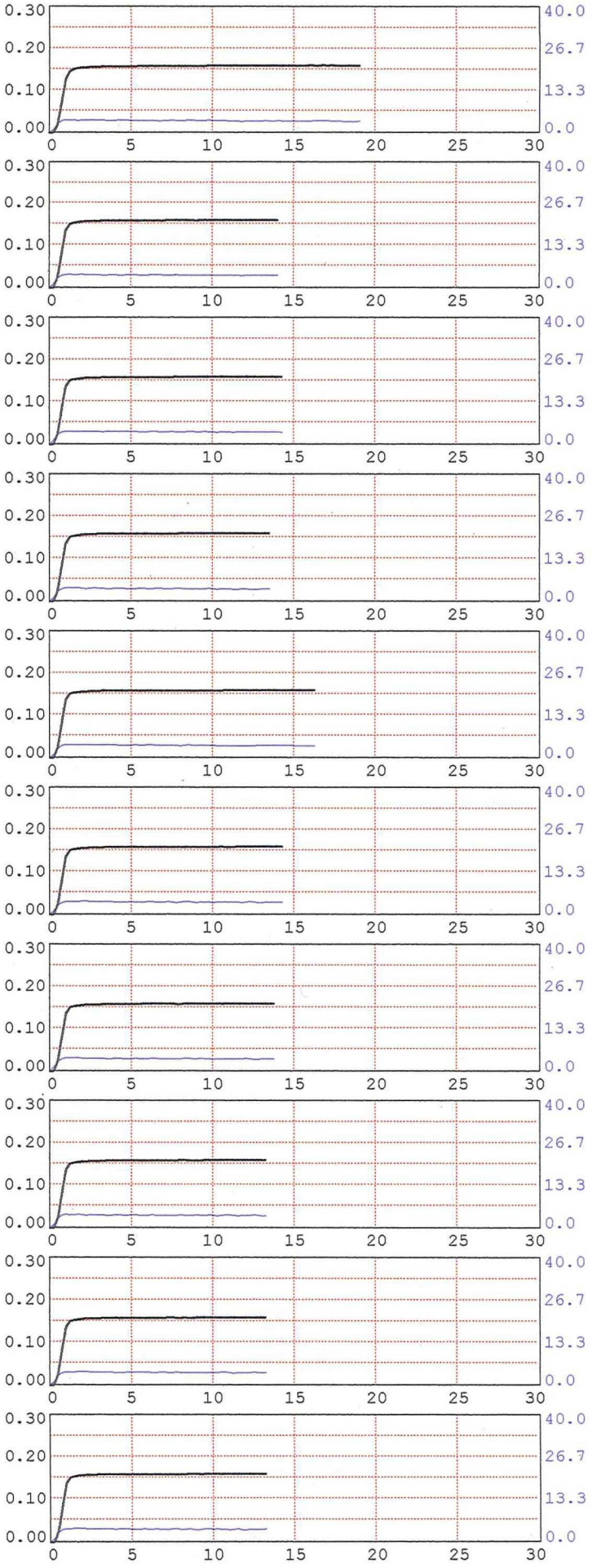
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-03-160
SOLUTION CONCENTRATION: 0.161

BLANK TEST	0.000	10:15
CALIBRATION CHECK	PASSED	10:15
SIMULATOR VAPOR 34.2°C	0.161	10:15
SIMULATOR VAPOR 34.4°C	0.160	10:17
SIMULATOR VAPOR 34.2°C	0.160	10:18
SIMULATOR VAPOR 34.4°C	0.160	10:19
SIMULATOR VAPOR 34.4°C	0.160	10:20
SIMULATOR VAPOR 34.4°C	0.160	10:21
SIMULATOR VAPOR 34.2°C	0.160	10:22
SIMULATOR VAPOR 34.2°C	0.160	10:23
SIMULATOR VAPOR 34.4°C	0.160	10:24
SIMULATOR VAPOR 34.2°C	0.160	10:25
BLANK TEST	0.000	10:26

Average = 0.160
Std Dev = 0.000

L1 08/31/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/31/2011
Time: 10:29:07

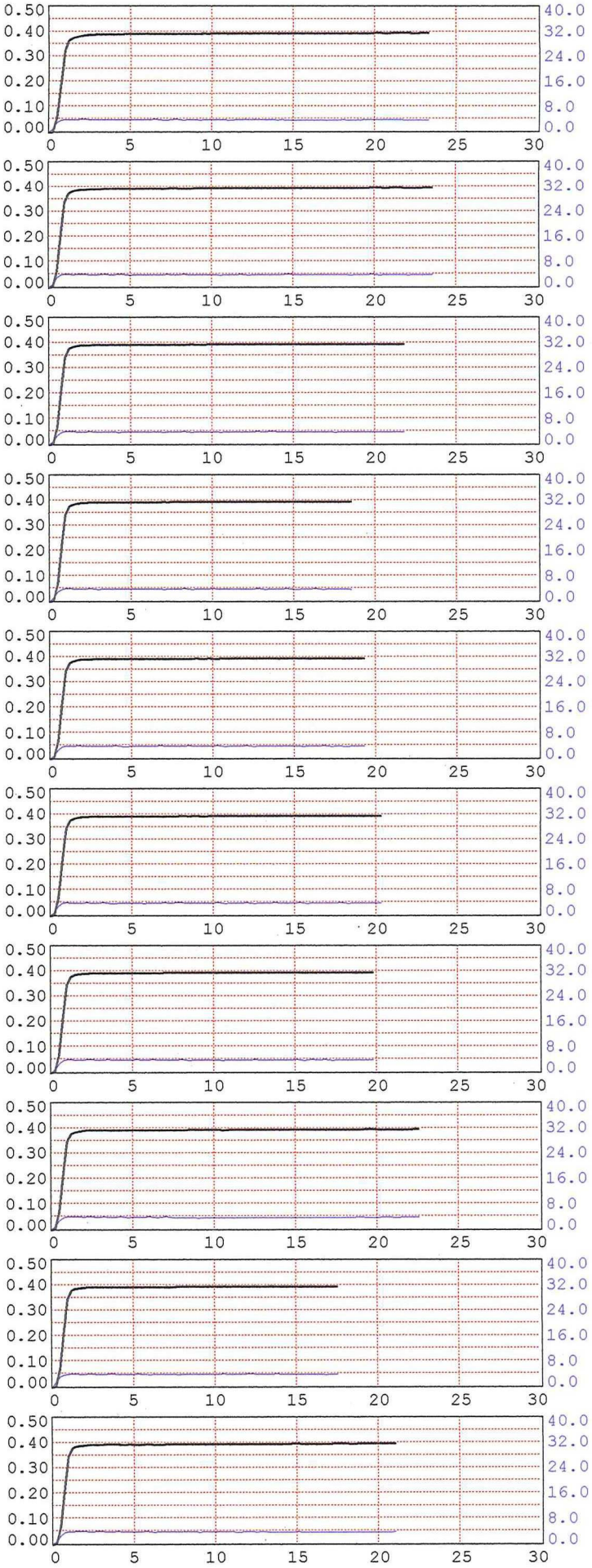
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-08-400
SOLUTION CONCENTRATION: 0.401

BLANK TEST	0.000	10:30
CALIBRATION CHECK	PASSED	10:30
SIMULATOR VAPOR 34.2°C	0.396	10:30
SIMULATOR VAPOR 34.4°C	0.395	10:31
SIMULATOR VAPOR 34.2°C	0.395	10:33
SIMULATOR VAPOR 34.2°C	0.396	10:34
SIMULATOR VAPOR 34.2°C	0.395	10:35
SIMULATOR VAPOR 34.2°C	0.395	10:36
SIMULATOR VAPOR 34.4°C	0.395	10:38
SIMULATOR VAPOR 34.4°C	0.395	10:39
SIMULATOR VAPOR 34.4°C	0.395	10:40
SIMULATOR VAPOR 34.4°C	0.396	10:41
BLANK TEST	0.000	10:42

Average = 0.395
Std Dev = 0.000

L1 08/31/11 SRM



DIAGNOSTIC RESULT

DataMaster DMT: 100145
Location:
Calibration Date: 08/30/2011
Certification Date: 08/30/2011
Installation Date:
Test Date: 08/31/2011
Test Time: 13:10:26

VERSIONS
DMT: 1.00
PIC: 2.05
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 48.1°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.63 V
Cooler Voltage = 1.53 V
Bias Voltage = 80 V
Chopper Freq = 530 Hz

PUMP INFO
Flow Rate = 5.620 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0266	0.0307
MIN(V)	0.0252	0.0293

FILTER INFO
Filter 1 0.029 Zero = true
Filter 2 0.616 Zero = true
Filter 3 1.490 Zero = true

CALIBRATION CHECK
Xq = 0.124 0.07%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/31/2011
Time: 13:19:01

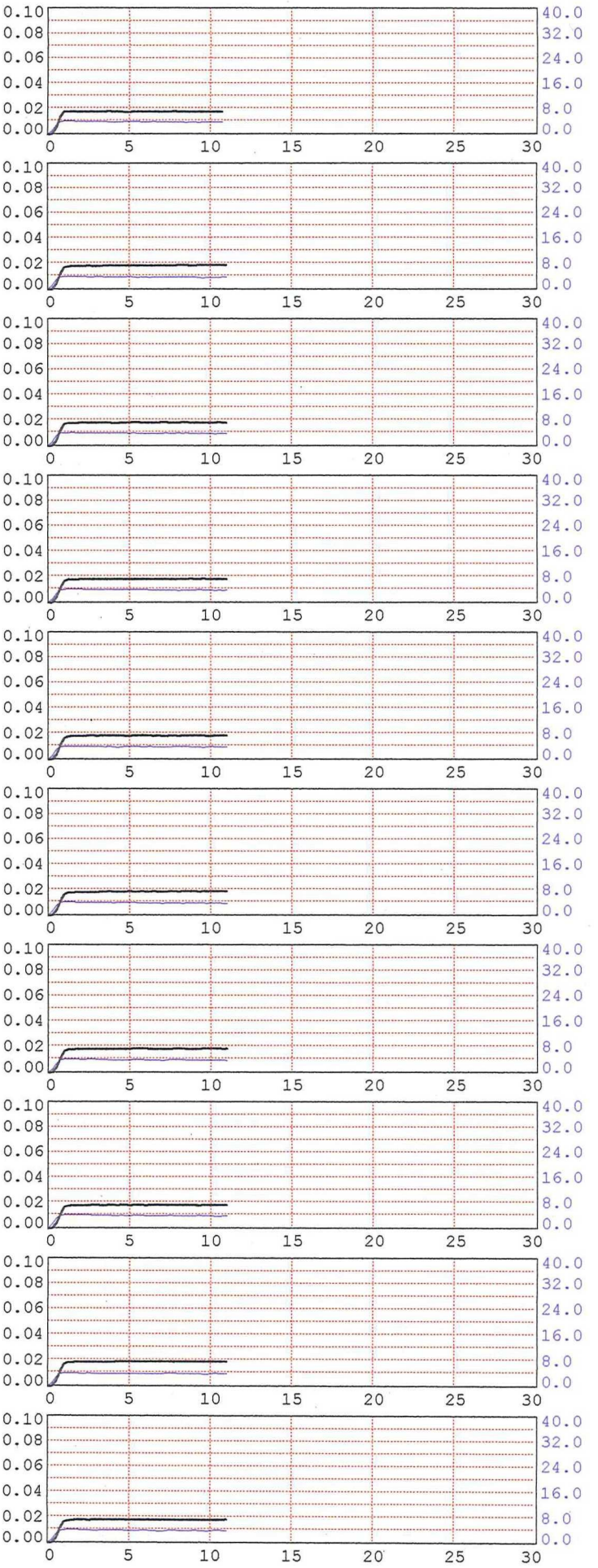
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-07-020
SOLUTION CONCENTRATION: 0.019

BLANK TEST	0.000	13:19
CALIBRATION CHECK	PASSED	13:20
SIMULATOR VAPOR 34.2°C	0.019	13:20
SIMULATOR VAPOR 34.2°C	0.020	13:21
SIMULATOR VAPOR 34.2°C	0.019	13:22
SIMULATOR VAPOR 34.4°C	0.019	13:23
SIMULATOR VAPOR 34.4°C	0.019	13:24
SIMULATOR VAPOR 34.2°C	0.020	13:25
SIMULATOR VAPOR 34.4°C	0.019	13:26
SIMULATOR VAPOR 34.4°C	0.019	13:27
SIMULATOR VAPOR 34.4°C	0.020	13:28
SIMULATOR VAPOR 34.2°C	0.019	13:29
BLANK TEST	0.000	13:30

Average = 0.019
Std Dev = 0.000

LJ 08/31/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/31/2011
Time: 13:32:39

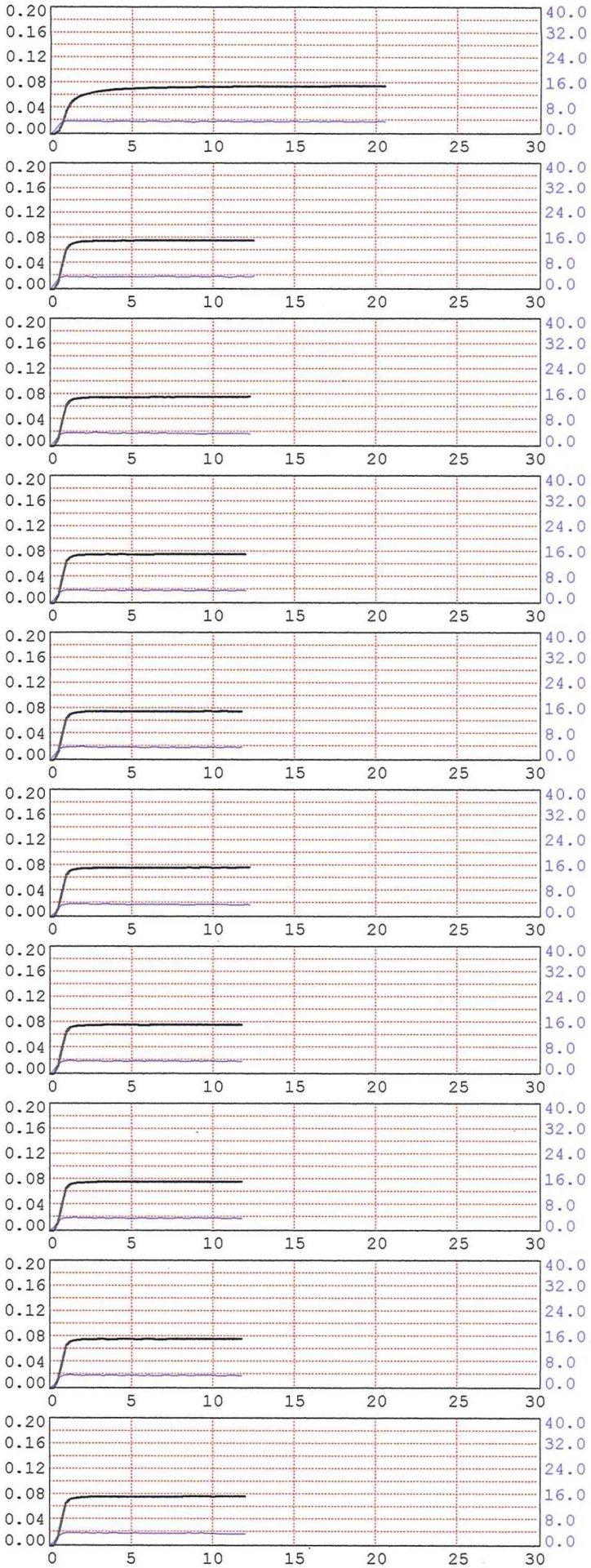
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-10-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	13:33
CALIBRATION CHECK	PASSED	13:33
SIMULATOR VAPOR 34.4°C	0.077	13:34
SIMULATOR VAPOR 34.2°C	0.078	13:35
SIMULATOR VAPOR 34.4°C	0.078	13:36
SIMULATOR VAPOR 34.4°C	0.077	13:37
SIMULATOR VAPOR 34.4°C	0.077	13:38
SIMULATOR VAPOR 34.4°C	0.078	13:39
SIMULATOR VAPOR 34.2°C	0.078	13:40
SIMULATOR VAPOR 34.2°C	0.077	13:41
SIMULATOR VAPOR 34.2°C	0.077	13:42
SIMULATOR VAPOR 34.2°C	0.078	13:43
BLANK TEST	0.000	13:44

Average = 0.077
Std Dev = 0.000

L2 08/31/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/31/2011
Time: 13:47:19

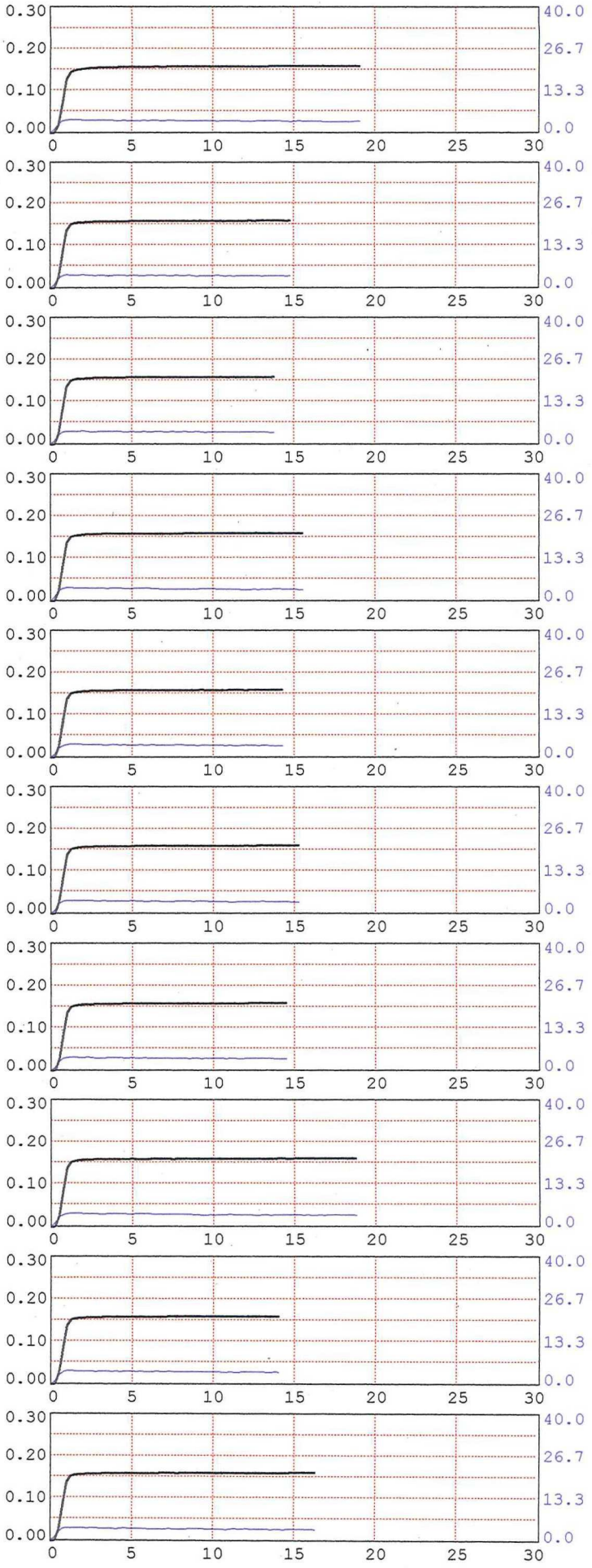
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-03-160
SOLUTION CONCENTRATION: 0.161

BLANK TEST	0.000	13:48
CALIBRATION CHECK	PASSED	13:48
SIMULATOR VAPOR 34.2°C	0.160	13:48
SIMULATOR VAPOR 34.2°C	0.160	13:49
SIMULATOR VAPOR 34.2°C	0.159	13:50
SIMULATOR VAPOR 34.2°C	0.161	13:52
SIMULATOR VAPOR 34.2°C	0.160	13:53
SIMULATOR VAPOR 34.1°C	0.161	13:54
SIMULATOR VAPOR 34.4°C	0.160	13:55
SIMULATOR VAPOR 34.2°C	0.161	13:56
SIMULATOR VAPOR 34.4°C	0.160	13:58
SIMULATOR VAPOR 34.2°C	0.161	13:59
BLANK TEST	0.000	14:00

Average = 0.160
Std Dev = 0.000

LD 08/31/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 08/31/2011
Time: 14:03:46

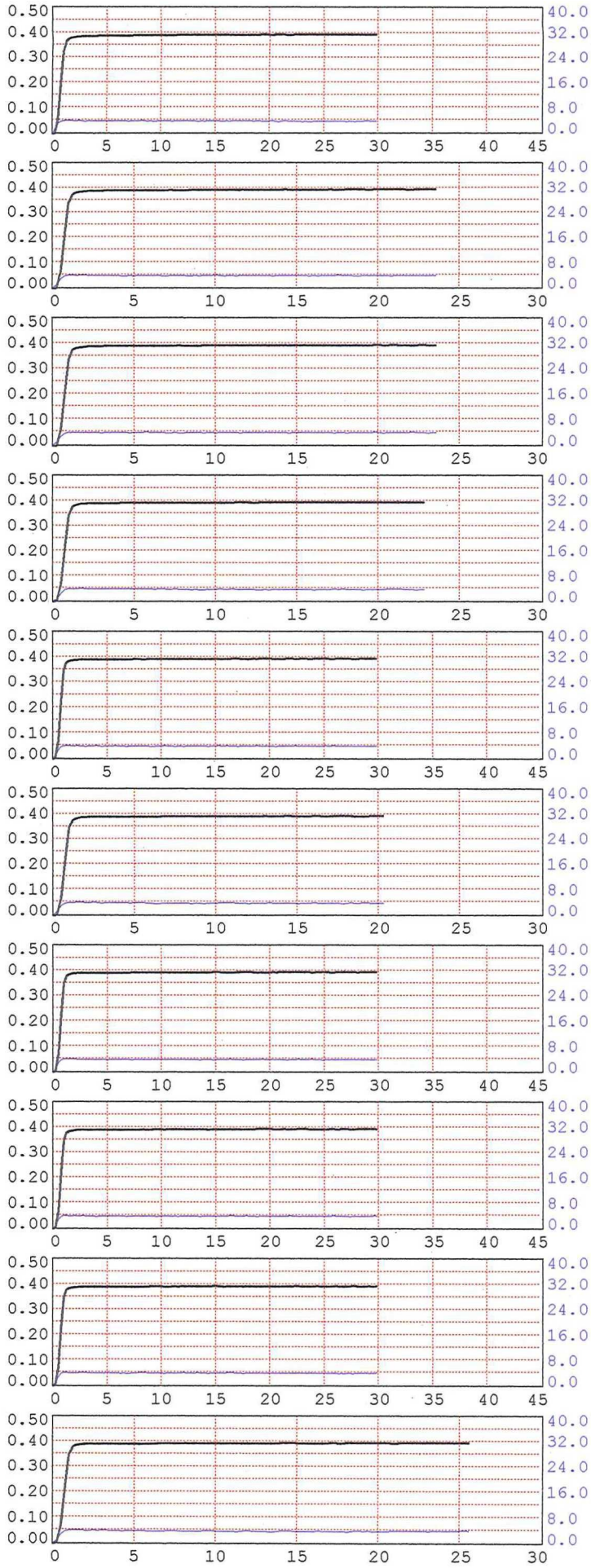
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-08-400
SOLUTION CONCENTRATION: 0.401

BLANK TEST	0.000	14:04
CALIBRATION CHECK	PASSED	14:04
SIMULATOR VAPOR 34.2°C	0.394	14:05
SIMULATOR VAPOR 34.2°C	0.395	14:06
SIMULATOR VAPOR 34.2°C	0.394	14:08
SIMULATOR VAPOR 34.2°C	0.395	14:09
SIMULATOR VAPOR 34.2°C	0.394	14:10
SIMULATOR VAPOR 34.4°C	0.394	14:11
SIMULATOR VAPOR 34.4°C	0.395	14:13
SIMULATOR VAPOR 34.2°C	0.394	14:14
SIMULATOR VAPOR 34.4°C	0.395	14:16
SIMULATOR VAPOR 34.2°C	0.394	14:17
BLANK TEST	0.000	14:18

Average = 0.394
Std Dev = 0.000

L2 08/31/11 SM



DIAGNOSTIC RESULT

DataMaster DMT: 100145
Location:
Calibration Date: 08/30/2011
Certification Date: 08/30/2011
Installation Date:
Test Date: 09/01/2011
Test Time: 08:06:55

VERSIONS
DMT: 1.00
PIC: 2.05
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.4°C
Breath Tube = 47.4°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.63 V
Cooler Voltage = 1.53 V
Bias Voltage = 80 V
Chopper Freq = 528 Hz

PUMP INFO
Flow Rate = 5.768 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0130	0.0177
MIN(V)	0.0114	0.0163

FILTER INFO

Filter 1	0.016	Zero = true
Filter 2	0.604	Zero = true
Filter 3	1.471	Zero = true

CALIBRATION CHECK
Xq = 0.125 0.57%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/01/2011
Time: 08:12:38

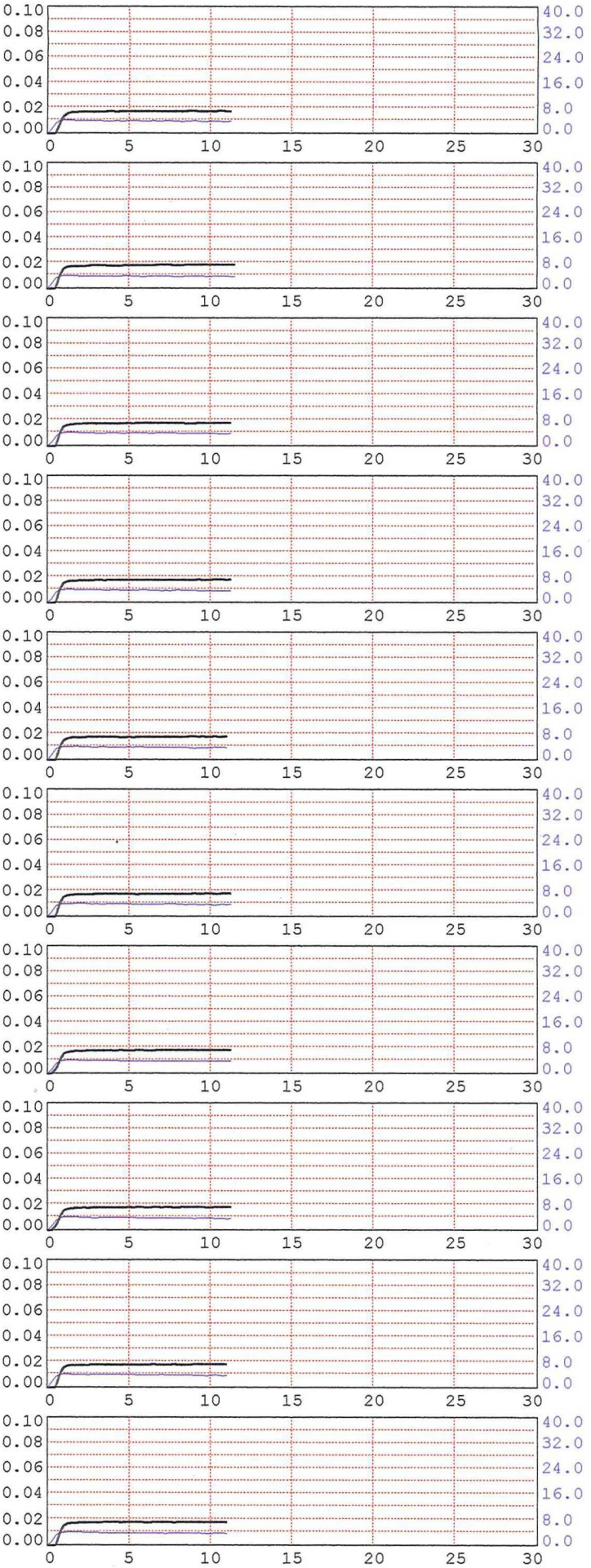
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-07-020
SOLUTION CONCENTRATION: 0.019

BLANK TEST	0.000	08:13
CALIBRATION CHECK	PASSED	08:13
SIMULATOR VAPOR 34.4°C	0.019	08:13
SIMULATOR VAPOR 34.4°C	0.020	08:14
SIMULATOR VAPOR 34.2°C	0.019	08:16
SIMULATOR VAPOR 34.2°C	0.019	08:17
SIMULATOR VAPOR 34.4°C	0.019	08:18
SIMULATOR VAPOR 34.2°C	0.019	08:19
SIMULATOR VAPOR 34.4°C	0.019	08:20
SIMULATOR VAPOR 34.2°C	0.019	08:21
SIMULATOR VAPOR 34.4°C	0.019	08:22
SIMULATOR VAPOR 34.4°C	0.020	08:23
BLANK TEST	0.000	08:24

Average = 0.019
Std Dev = 0.000

L3 09/01/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/01/2011
Time: 08:27:47

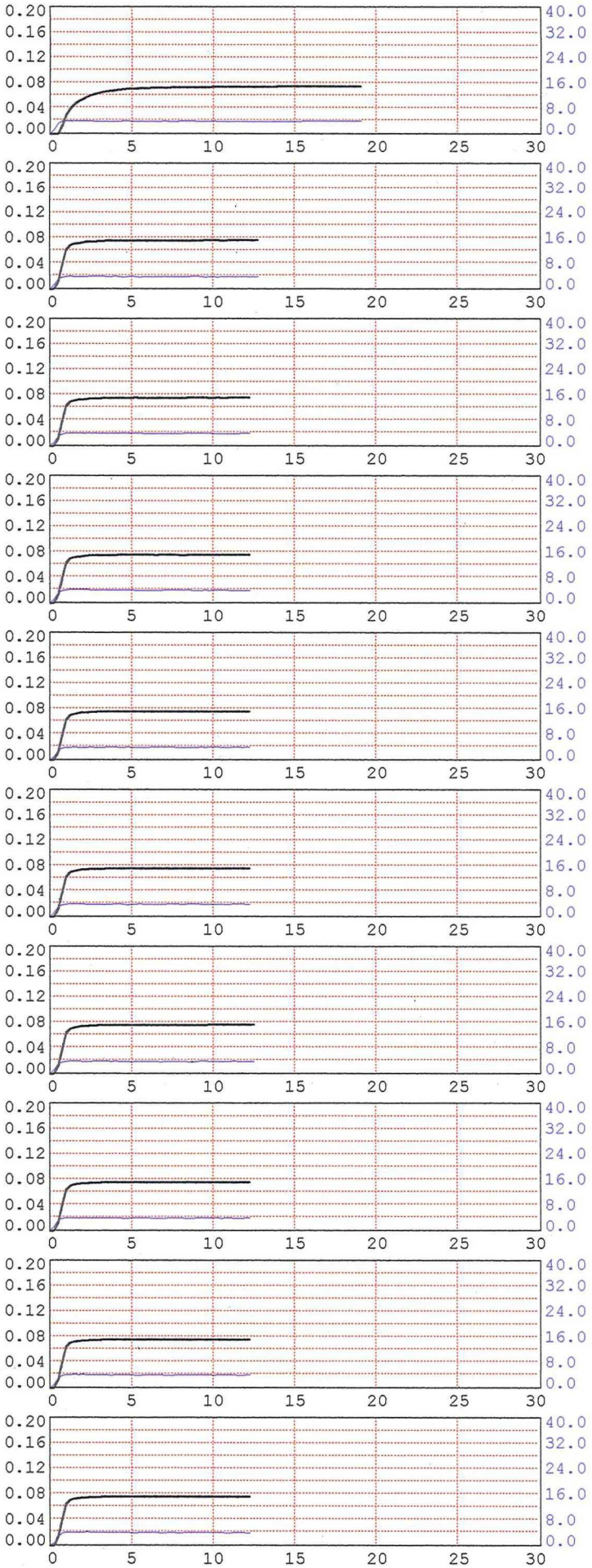
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-11-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	08:28
CALIBRATION CHECK	PASSED	08:28
SIMULATOR VAPOR 34.2°C	0.076	08:29
SIMULATOR VAPOR 34.2°C	0.077	08:30
SIMULATOR VAPOR 34.4°C	0.076	08:31
SIMULATOR VAPOR 34.4°C	0.077	08:32
SIMULATOR VAPOR 34.4°C	0.077	08:33
SIMULATOR VAPOR 34.4°C	0.077	08:34
SIMULATOR VAPOR 34.4°C	0.077	08:35
SIMULATOR VAPOR 34.2°C	0.077	08:36
SIMULATOR VAPOR 34.2°C	0.077	08:37
SIMULATOR VAPOR 34.4°C	0.077	08:38
BLANK TEST	0.000	08:39

Average = 0.076
Std Dev = 0.000

L3 09/01/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/01/2011
Time: 08:51:34

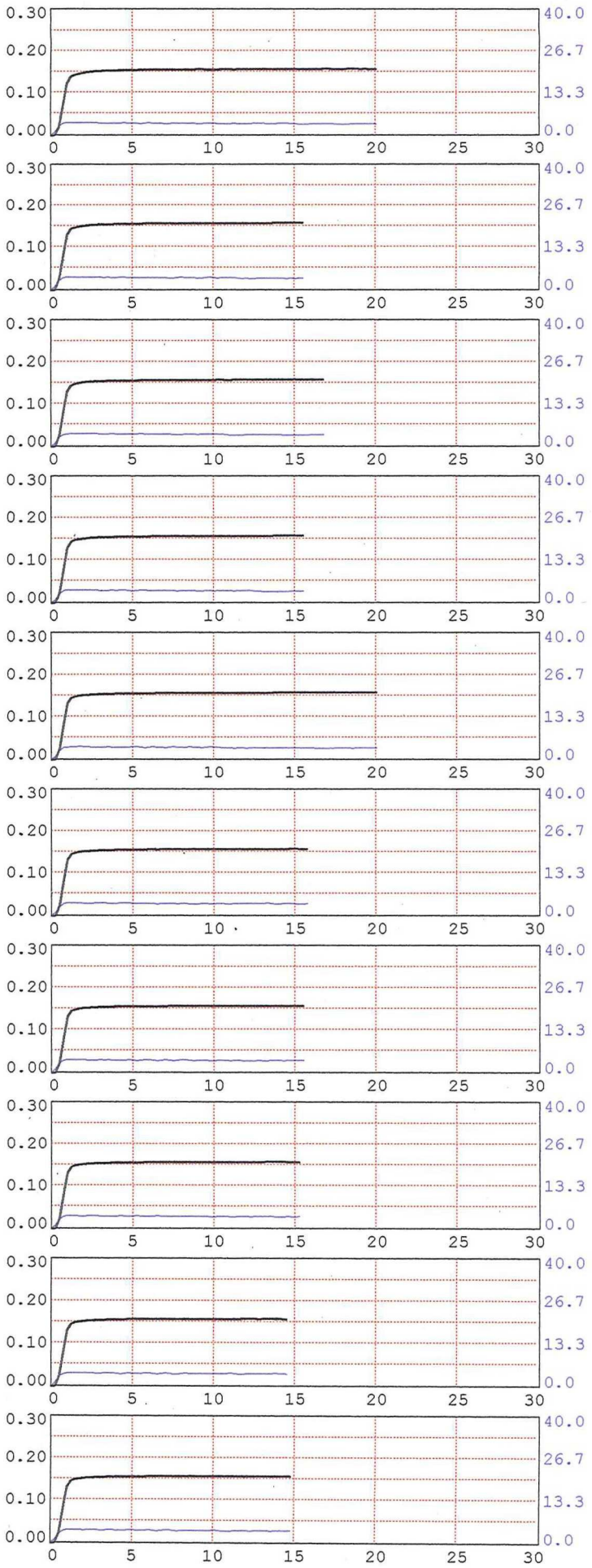
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-03-160
SOLUTION CONCENTRATION: 0.161

BLANK TEST	0.000	08:52
CALIBRATION CHECK	PASSED	08:52
SIMULATOR VAPOR 34.4°C	0.159	08:53
SIMULATOR VAPOR 34.2°C	0.159	08:54
SIMULATOR VAPOR 34.1°C	0.159	08:55
SIMULATOR VAPOR 34.2°C	0.159	08:56
SIMULATOR VAPOR 34.4°C	0.159	08:57
SIMULATOR VAPOR 34.2°C	0.159	08:58
SIMULATOR VAPOR 34.4°C	0.158	08:59
SIMULATOR VAPOR 34.4°C	0.159	09:01
SIMULATOR VAPOR 34.2°C	0.158	09:02
SIMULATOR VAPOR 34.4°C	0.158	09:03
BLANK TEST	0.000	09:04

Average = 0.158
Std Dev = 0.000

L3 09/01/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/01/2011
Time: 09:08:01

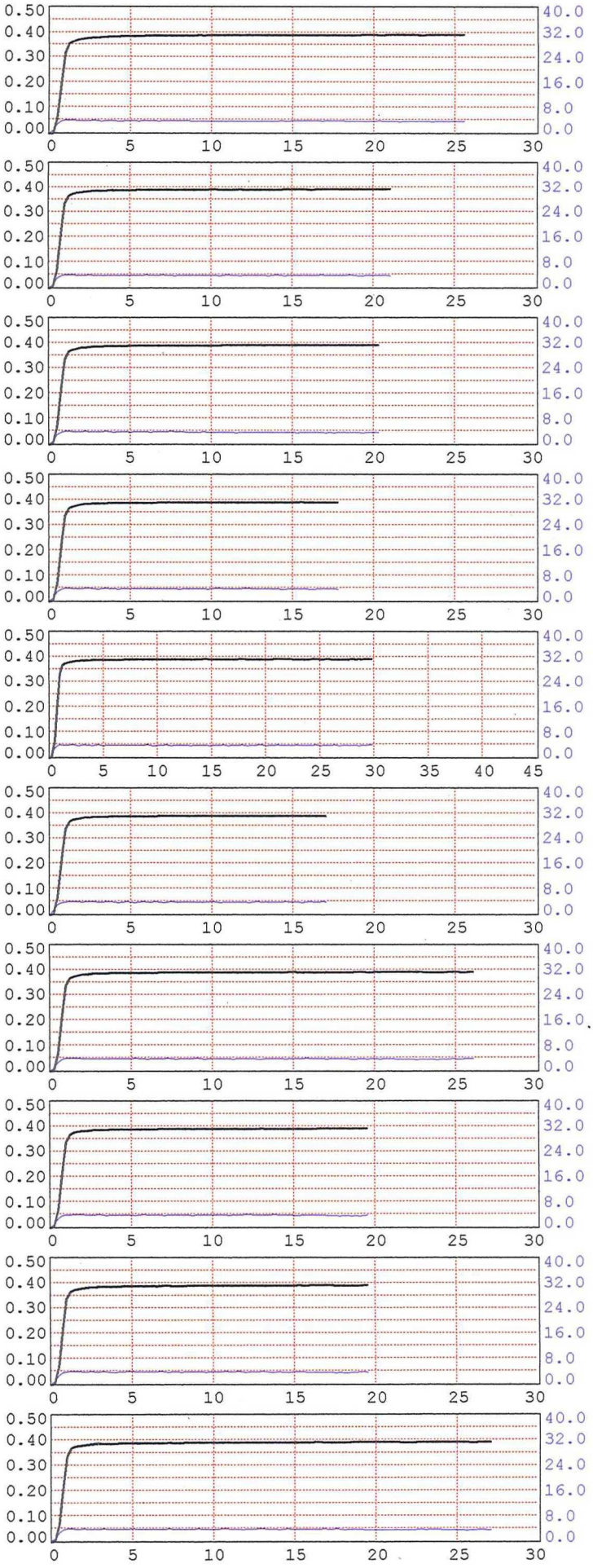
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-08-400
SOLUTION CONCENTRATION: 0.401

BLANK TEST	0.000	09:08
CALIBRATION CHECK	PASSED	09:09
SIMULATOR VAPOR 34.2°C	0.391	09:09
SIMULATOR VAPOR 34.2°C	0.392	09:10
SIMULATOR VAPOR 34.2°C	0.393	09:12
SIMULATOR VAPOR 34.4°C	0.392	09:13
SIMULATOR VAPOR 34.4°C	0.392	09:14
SIMULATOR VAPOR 34.4°C	0.391	09:15
SIMULATOR VAPOR 34.4°C	0.392	09:17
SIMULATOR VAPOR 34.2°C	0.392	09:18
SIMULATOR VAPOR 34.4°C	0.392	09:19
SIMULATOR VAPOR 34.4°C	0.392	09:20
BLANK TEST	0.000	09:21

Average = 0.391
Std Dev = 0.000

L3 09/01/11 SRM



DIAGNOSTIC RESULT

DataMaster DMT: 100145
Location:
Calibration Date: 08/30/2011
Certification Date: 08/30/2011
Installation Date:
Test Date: 09/01/2011
Test Time: 10:59:19

VERSIONS
DMT: 1.00
PIC: 2.05
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 46.4°C
Digital Sim = 34.2°C

SETTINGS
Lamp Voltage = 1.63 V
Cooler Voltage = 1.52 V
Bias Voltage = 80 V
Chopper Freq = 529 Hz

PUMP INFO
Flow Rate = 5.810 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0246	0.0283
MIN(V)	0.0226	0.0268

FILTER INFO

Filter 1	0.027	Zero = true
Filter 2	0.614	Zero = true
Filter 3	1.484	Zero = true

CALIBRATION CHECK
Xq = 0.124 0.00%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/01/2011
Time: 11:01:42

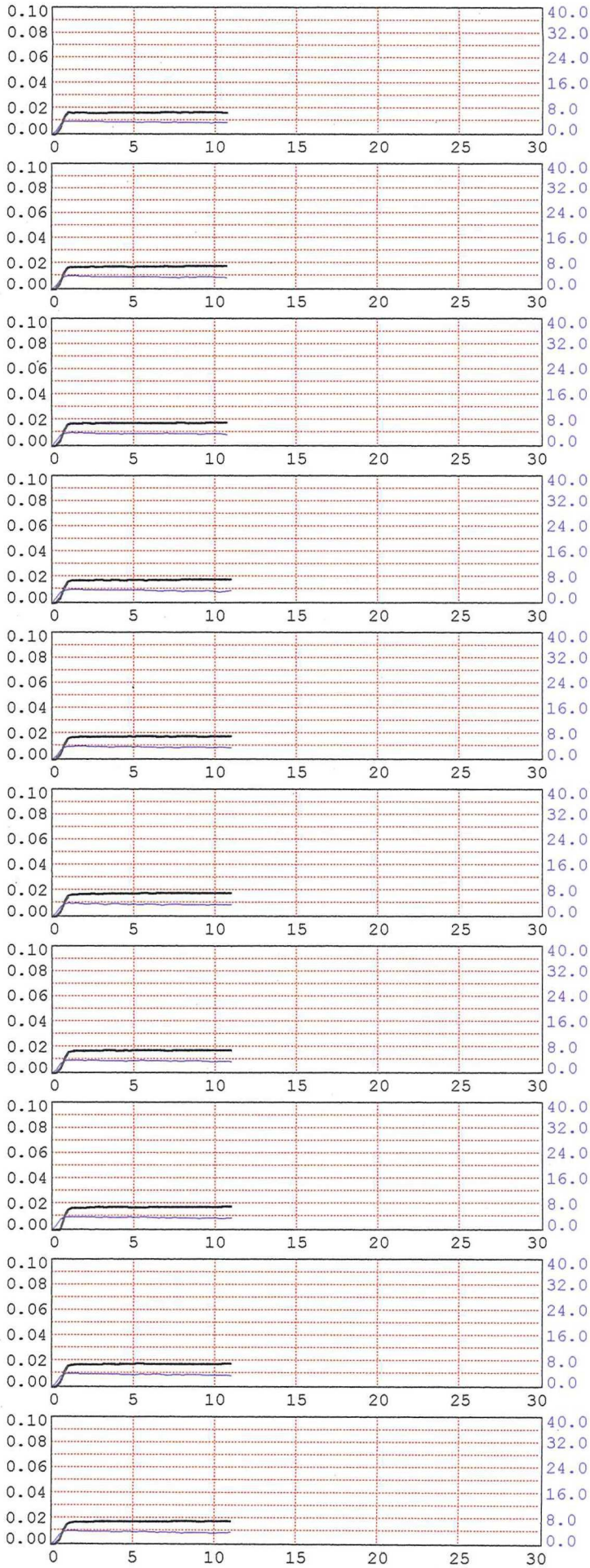
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-07-020
SOLUTION CONCENTRATION: 0.019

BLANK TEST	0.000	11:02
CALIBRATION CHECK	PASSED	11:02
SIMULATOR VAPOR 34.2°C	0.019	11:02
SIMULATOR VAPOR 34.4°C	0.020	11:04
SIMULATOR VAPOR 34.1°C	0.019	11:05
SIMULATOR VAPOR 34.2°C	0.020	11:06
SIMULATOR VAPOR 34.2°C	0.020	11:07
SIMULATOR VAPOR 34.2°C	0.020	11:08
SIMULATOR VAPOR 34.4°C	0.019	11:09
SIMULATOR VAPOR 34.2°C	0.019	11:10
SIMULATOR VAPOR 34.2°C	0.019	11:11
SIMULATOR VAPOR 34.4°C	0.020	11:12
BLANK TEST	0.000	11:13

Average = 0.019
Std Dev = 0.000

L4 09/01/11 SR



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/01/2011
Time: 11:19:43

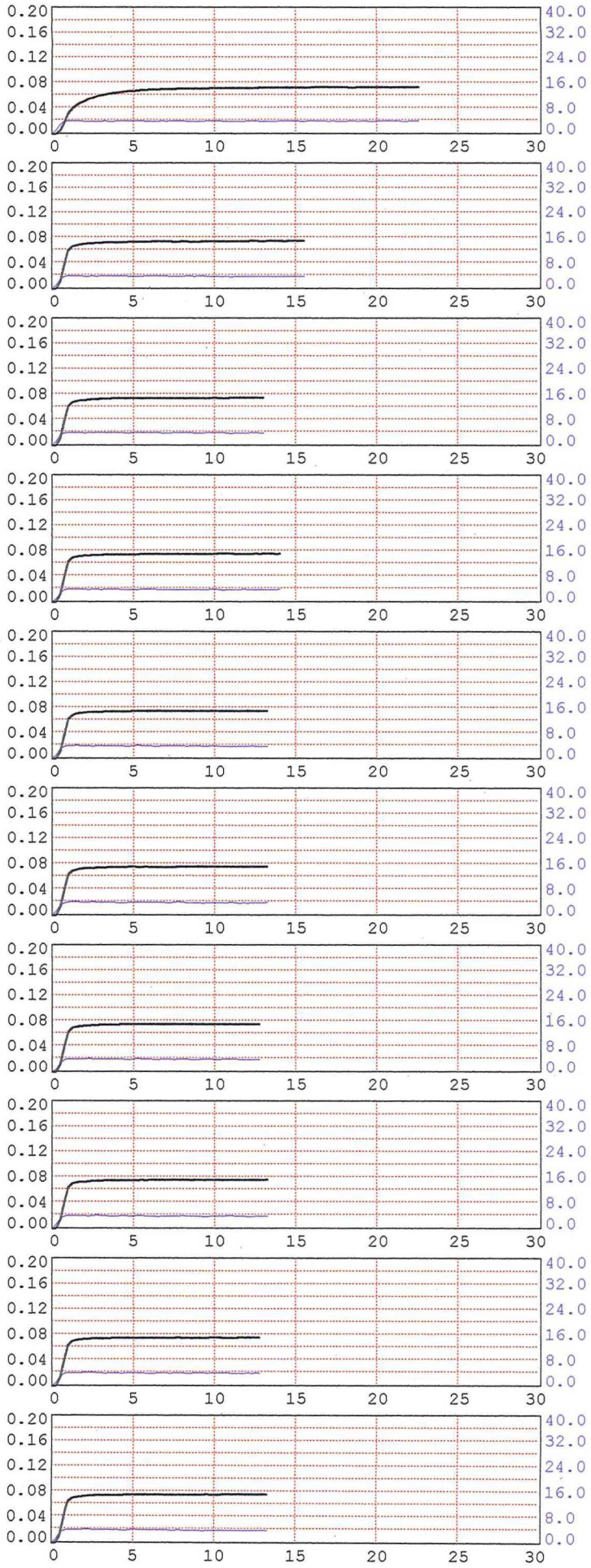
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-11-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	11:20
CALIBRATION CHECK	PASSED	11:20
SIMULATOR VAPOR 34.4°C	0.075	11:21
SIMULATOR VAPOR 34.4°C	0.076	11:22
SIMULATOR VAPOR 34.2°C	0.076	11:23
SIMULATOR VAPOR 34.2°C	0.077	11:24
SIMULATOR VAPOR 34.4°C	0.077	11:25
SIMULATOR VAPOR 34.2°C	0.077	11:26
SIMULATOR VAPOR 34.4°C	0.077	11:27
SIMULATOR VAPOR 34.4°C	0.077	11:28
SIMULATOR VAPOR 34.4°C	0.077	11:29
SIMULATOR VAPOR 34.2°C	0.077	11:30
BLANK TEST	0.000	11:31

Average = 0.076
Std Dev = 0.000

L4 09/01/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/01/2011
Time: 11:35:33

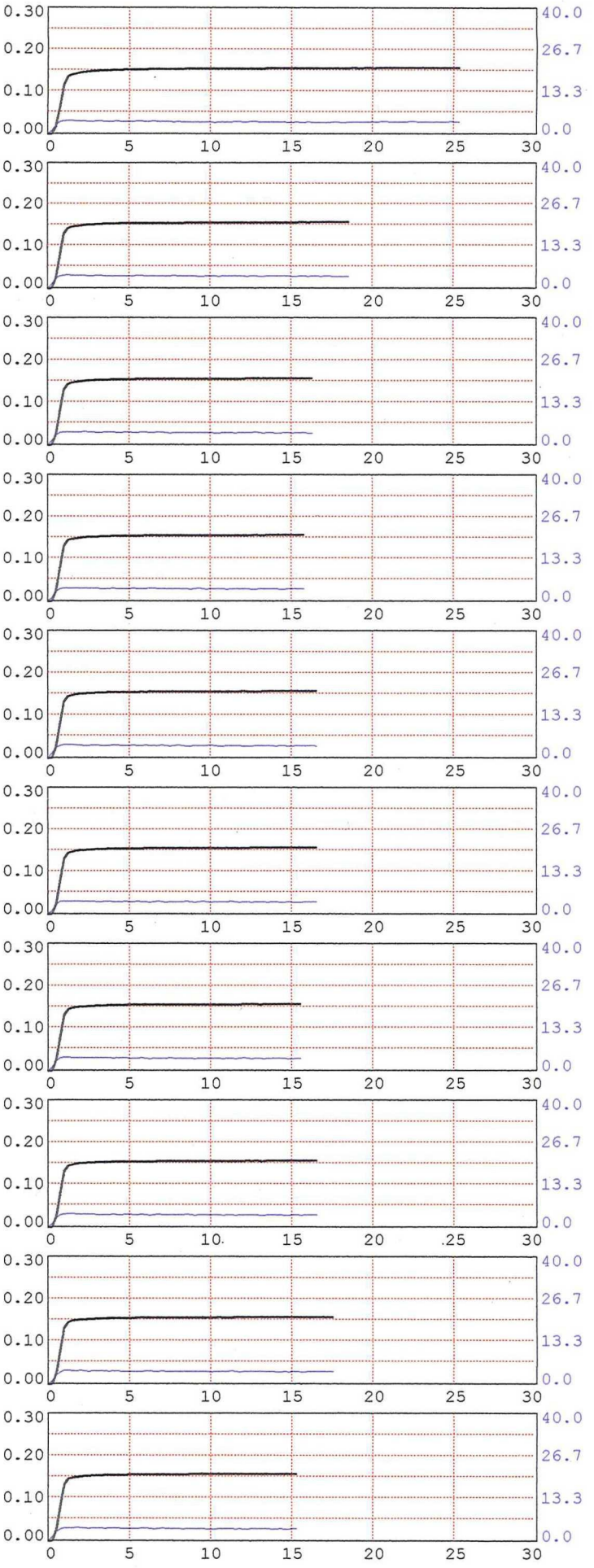
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-03-160
SOLUTION CONCENTRATION: 0.161

BLANK TEST	0.000	11:36
CALIBRATION CHECK	PASSED	11:36
SIMULATOR VAPOR 34.4°C	0.158	11:37
SIMULATOR VAPOR 34.4°C	0.158	11:38
SIMULATOR VAPOR 34.2°C	0.157	11:39
SIMULATOR VAPOR 34.1°C	0.158	11:40
SIMULATOR VAPOR 34.2°C	0.158	11:41
SIMULATOR VAPOR 34.4°C	0.158	11:42
SIMULATOR VAPOR 34.4°C	0.157	11:43
SIMULATOR VAPOR 34.4°C	0.158	11:45
SIMULATOR VAPOR 34.4°C	0.158	11:46
SIMULATOR VAPOR 34.4°C	0.158	11:47
BLANK TEST	0.000	11:48

Average = 0.157
Std Dev = 0.000

LH 09/01/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/01/2011
Time: 11:50:30

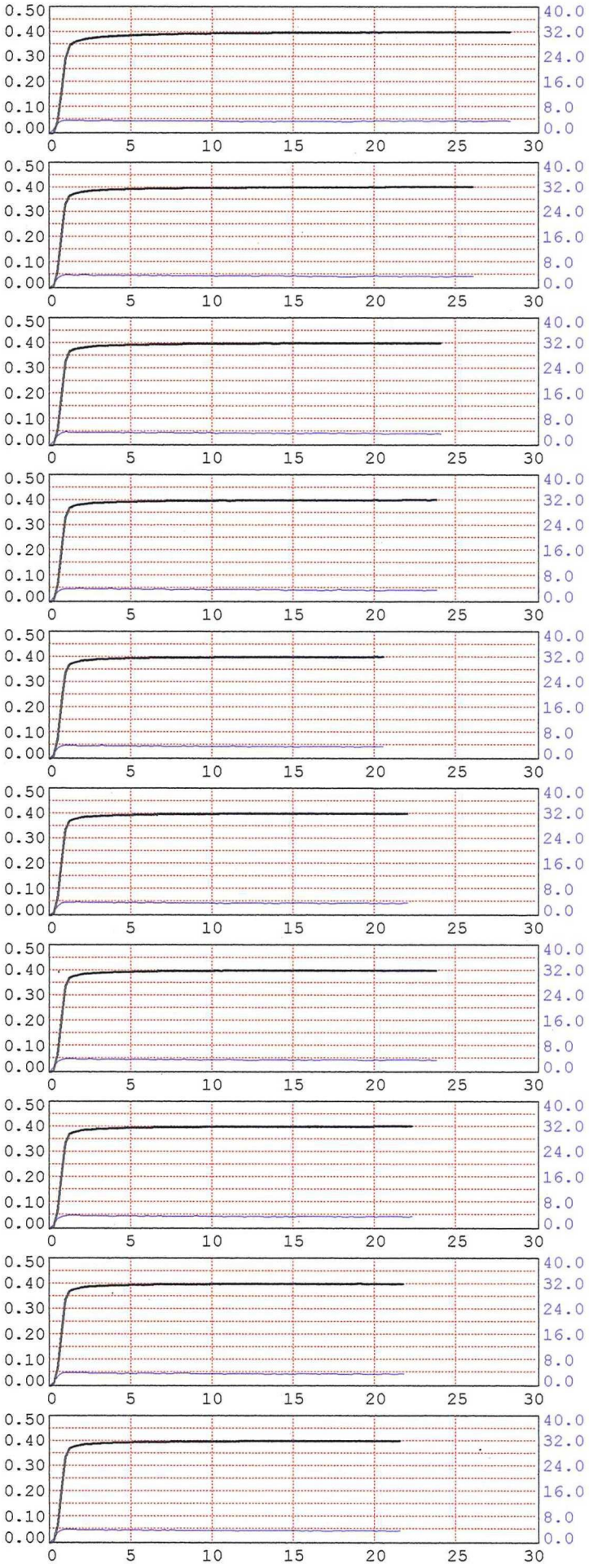
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-08-400
SOLUTION CONCENTRATION: 0.401

BLANK TEST	0.000	11:51
CALIBRATION CHECK	PASSED	11:51
SIMULATOR VAPOR 34.2°C	0.400	11:52
SIMULATOR VAPOR 34.2°C	0.401	11:53
SIMULATOR VAPOR 34.4°C	0.401	11:54
SIMULATOR VAPOR 34.2°C	0.402	11:56
SIMULATOR VAPOR 34.2°C	0.401	11:57
SIMULATOR VAPOR 34.2°C	0.401	11:58
SIMULATOR VAPOR 34.2°C	0.401	11:59
SIMULATOR VAPOR 34.4°C	0.402	12:01
SIMULATOR VAPOR 34.4°C	0.401	12:02
SIMULATOR VAPOR 34.2°C	0.401	12:03
BLANK TEST	0.000	12:04

Average = 0.401
Std Dev = 0.000

L4 09/01/11 SRM



DIAGNOSTIC RESULT

DataMaster DMT: 100145
Location:
Calibration Date: 08/30/2011
Certification Date: 08/30/2011
Installation Date:
Test Date: 09/06/2011
Test Time: 09:21:10

VERSIONS
DMT: 1.00
PIC: 2.05
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 47.2°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.63 V
Cooler Voltage = 1.52 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.576 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0120	0.0173
MIN(V)	0.0098	0.0159

FILTER INFO

Filter 1	0.016	Zero = true
Filter 2	0.603	Zero = true
Filter 3	1.470	Zero = true

CALIBRATION CHECK
Xq = 0.124 0.36%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/06/2011
Time: 09:24:40

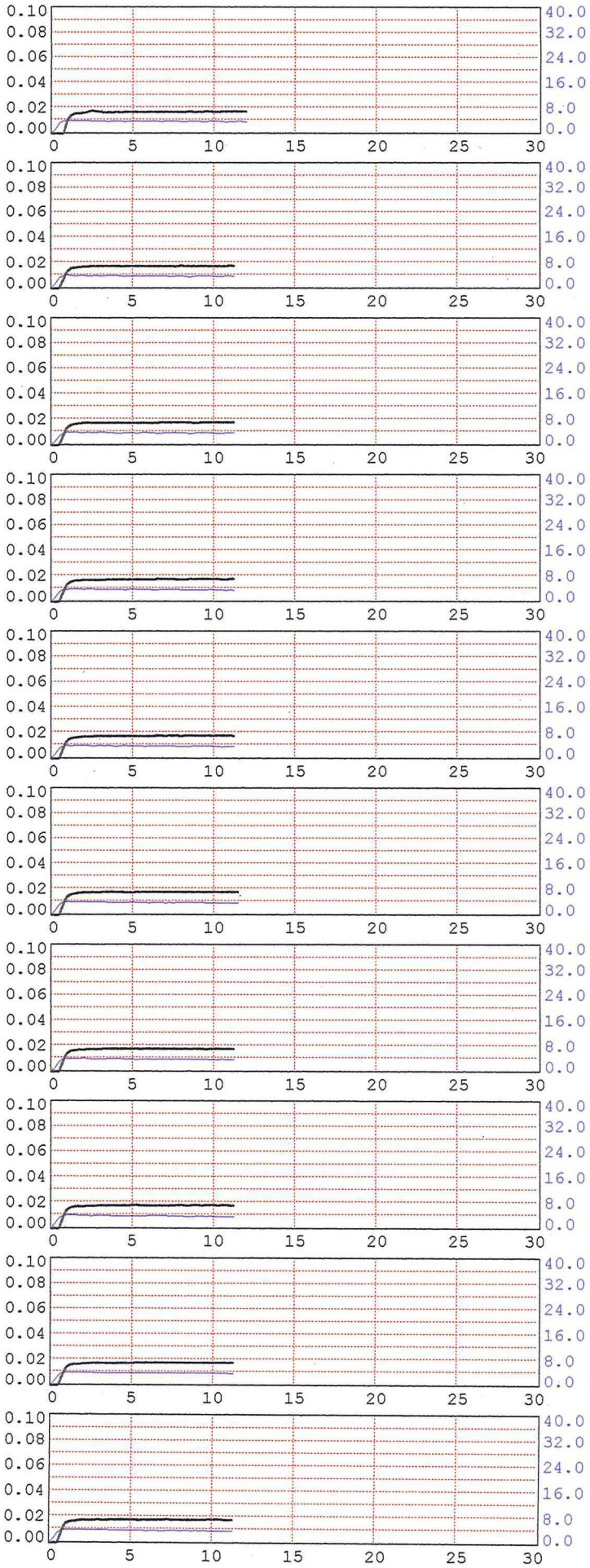
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-07-020
SOLUTION CONCENTRATION: 0.019

BLANK TEST	0.000	09:25
CALIBRATION CHECK	PASSED	09:25
SIMULATOR VAPOR 33.8°C	0.018	09:25
SIMULATOR VAPOR 33.8°C	0.019	09:27
SIMULATOR VAPOR 33.9°C	0.019	09:28
SIMULATOR VAPOR 33.8°C	0.019	09:29
SIMULATOR VAPOR 33.8°C	0.019	09:30
SIMULATOR VAPOR 33.8°C	0.019	09:31
SIMULATOR VAPOR 33.8°C	0.019	09:32
SIMULATOR VAPOR 33.9°C	0.019	09:33
SIMULATOR VAPOR 33.8°C	0.019	09:34
SIMULATOR VAPOR 33.9°C	0.019	09:35
BLANK TEST	0.000	09:36

Average = 0.018
Std Dev = 0.000

LS 09/06/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/06/2011
Time: 09:53:34

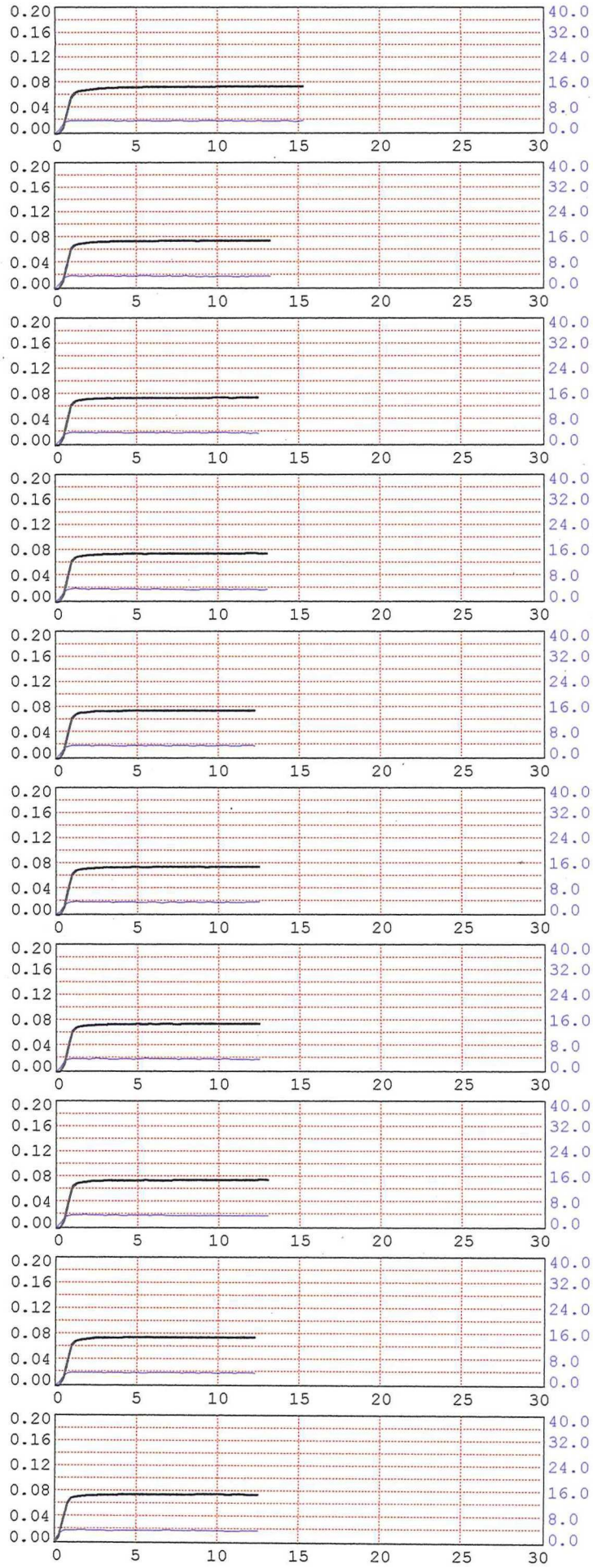
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-11-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	09:54
CALIBRATION CHECK	PASSED	09:54
SIMULATOR VAPOR 33.9°C	0.075	09:54
SIMULATOR VAPOR 33.9°C	0.076	09:55
SIMULATOR VAPOR 33.8°C	0.076	09:57
SIMULATOR VAPOR 33.8°C	0.077	09:58
SIMULATOR VAPOR 33.8°C	0.076	09:59
SIMULATOR VAPOR 33.8°C	0.076	10:00
SIMULATOR VAPOR 33.9°C	0.076	10:01
SIMULATOR VAPOR 33.8°C	0.077	10:02
SIMULATOR VAPOR 33.8°C	0.076	10:03
SIMULATOR VAPOR 33.8°C	0.076	10:04
BLANK TEST	0.000	10:05

Average = 0.076
Std Dev = 0.000

LS 09/06/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100145

Date: 09/06/2011
Time: 10:09:32

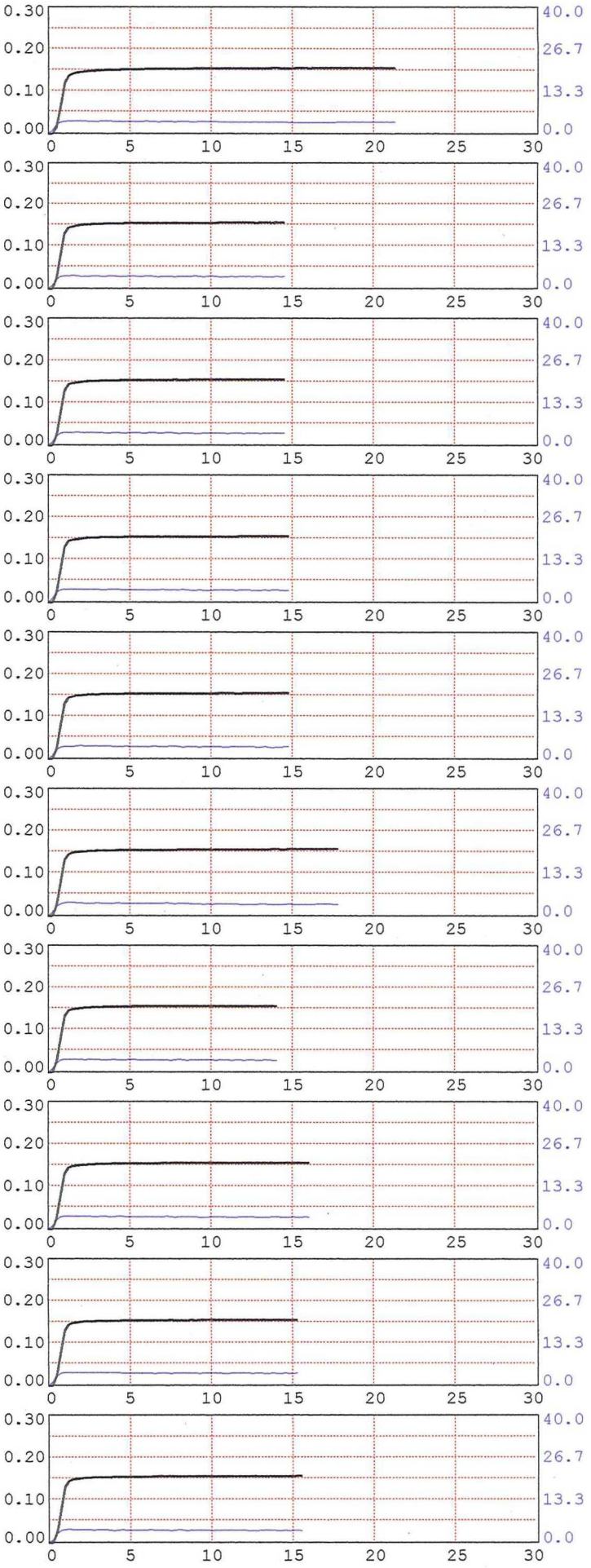
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-03-160
SOLUTION CONCENTRATION: 0.161

BLANK TEST	0.000	10:10
CALIBRATION CHECK	PASSED	10:10
SIMULATOR VAPOR 33.9°C	0.157	10:10
SIMULATOR VAPOR 33.9°C	0.156	10:12
SIMULATOR VAPOR 33.7°C	0.156	10:13
SIMULATOR VAPOR 33.8°C	0.156	10:14
SIMULATOR VAPOR 33.8°C	0.156	10:15
SIMULATOR VAPOR 33.8°C	0.158	10:16
SIMULATOR VAPOR 33.9°C	0.157	10:17
SIMULATOR VAPOR 33.8°C	0.157	10:18
SIMULATOR VAPOR 33.8°C	0.157	10:20
SIMULATOR VAPOR 33.8°C	0.157	10:21
BLANK TEST	0.000	10:21

Average = 0.156
Std Dev = 0.000

LS 09/06/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

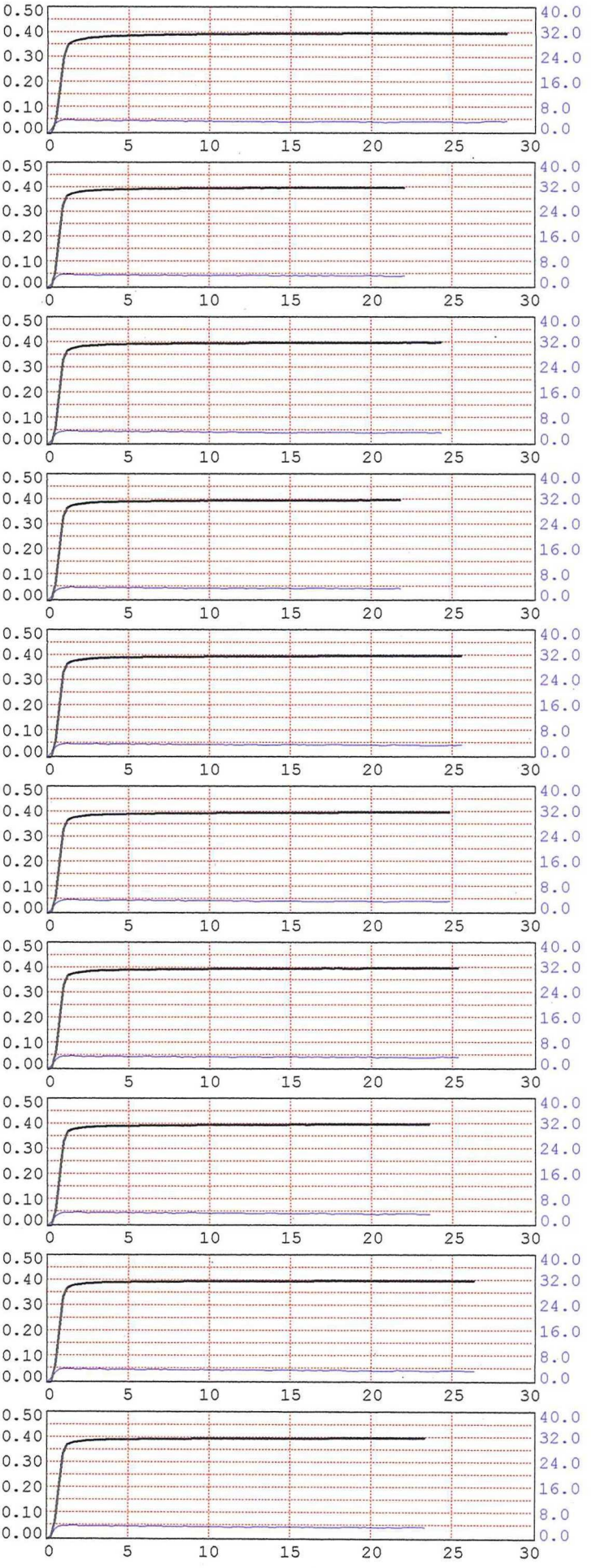
DataMater DMT: 100145

Date: 09/06/2011
Time: 10:25:43

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-08-400
SOLUTION CONCENTRATION: 0.401

BLANK TEST	0.000	10:26
CALIBRATION CHECK	PASSED	10:26
SIMULATOR VAPOR 33.8°C	0.398	10:27
SIMULATOR VAPOR 33.9°C	0.398	10:28
SIMULATOR VAPOR 33.8°C	0.398	10:29
SIMULATOR VAPOR 33.9°C	0.398	10:31
SIMULATOR VAPOR 33.8°C	0.398	10:32
SIMULATOR VAPOR 33.8°C	0.398	10:33
SIMULATOR VAPOR 33.9°C	0.398	10:35
SIMULATOR VAPOR 33.8°C	0.398	10:36
SIMULATOR VAPOR 33.8°C	0.399	10:37
SIMULATOR VAPOR 33.8°C	0.398	10:39
BLANK TEST	0.000	10:39

Average = 0.398
Std Dev = 0.000

LS 09/06/11 SM