104909

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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** 11/14/11
Sales Order No. 44974

Ship Date 11/16/11
Packing List No. 69247

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

Freight 25.00

Attn:

Ship Via FedEx

Comments Service for Instrument Serial Number 104909

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 104909						None Given	No Draw # / NONE
Serial Nos.	104909						

11-18-11

National Patent
Analytical Systems, Inc.

On this date 11/14/11, NPAS received instrument # 104909.

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. 11/15/11

Print Name of Reviewer: DAVID RADOMSKI

Signature of Reviewer and Date: David Radomski 11/16/11

opened 11-15-11 MJB

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

DataMaster DMT Serial Number 104909

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 12/07/11 SRM KRK	0.988416 12/07/11 SRM KRK	34.1	SRM ~~12-40-400~~ 12-39-100	0.099 12/07/11 SRM KRK	G7445	12/08/11 SRM KRK	100% 12-7-11 KRK SRM 12/08/11	100% 12/13/11 SRM KRK	100% 12/13/11 SRM KRK	100% KRK 12-9-11 SRM	100% 12/09/11 SRM KRK	100% KRK 12-12-11 SRM	100% 12-12-11 KRK SRM
		34.1	Guth 11050	0.098 12/07/11 SRM KRK									

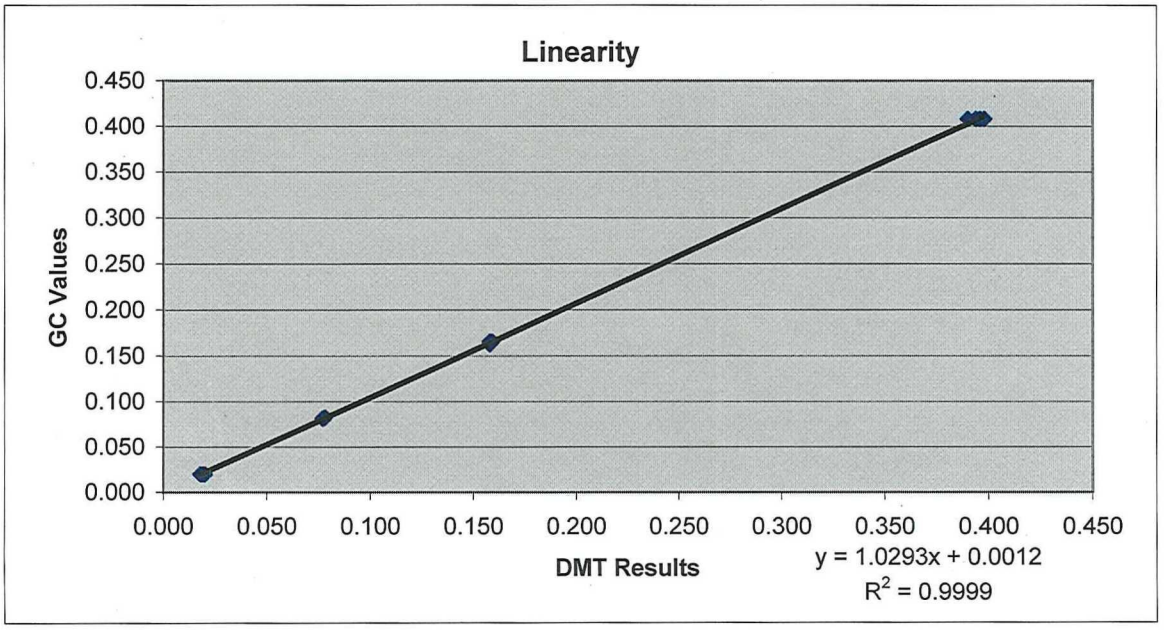
Linearity Test #1	Linearity Test #2	Linearity Test #3	Linearity Test #4	Linearity Test #5	Data Download	In-House & 2nd Source Calibration Check		
						NIST Temp.°C	Lot. #	Result (g/210L)
12/08/11 SRM KRK	12-9-11 KRK SRM	12-12-11 KRK SRM	12/12/11 SRM KRK	12/13/11 SRM KRK	12/13/11 SRM KRK	34.1	Guth 11050	0.097 12/13/11 SRM KRK
						34.1	12-39-100	0.097 12/13/11 SRM KRK

Notes: Instrument used for supervisory training 11/21 and 12/01 KRK
Powerup started 12/6/11 KRK SRM 12/07/11
H_2O for calibration NIST Temp: 34.0°C 12/07/11 SRM KRK
Calibration solution NIST Temp: 34.1°C 12/07/11 SRM KRK

Analyst: [signature] 12/16/11 **Reviewer:** [signature] 12/16/11 **Reviewer:** [signature] 12-19-11

DataMaster DMT Serial Number 104909

Operator	Date	GC Value	DMT Average	Std Dev	% Recovery
SRM	12/8/2011	0.020	0.019	0.000	95
SRM	12/8/2011	0.081	0.077	0.000	95
SRM	12/8/2011	0.162	0.158	0.000	97
SRM	12/8/2011	0.408	0.398	0.001	97
KLK	12/9/2011	0.020	0.018	0.000	90
KLK	12/9/2011	0.081	0.077	0.000	95
KLK	12/9/2011	0.162	0.158	0.000	97
KLK	12/9/2011	0.408	0.398	0.000	97
SRM	12/12/2011	0.020	0.018	0.000	90
KLK	12/12/2011	0.082	0.078	0.000	95
SRM	12/12/2011	0.165	0.159	0.000	96
KLK	12/12/2011	0.408	0.396	0.000	97
KLK	12/12/2011	0.020	0.018	0.000	90
KLK	12/12/2011	0.082	0.078	0.000	95
SRM	12/12/2011	0.165	0.158	0.000	95
KLK	12/12/2011	0.408	0.394	0.000	96
SRM	12/13/2011	0.020	0.020	0.000	100
SRM	12/13/2011	0.082	0.078	0.000	95
SRM	12/13/2011	0.165	0.158	0.000	95
SRM	12/13/2011	0.408	0.390	0.001	95
			Average	0.0001	95
			Std Dev	0.0003	
			Range		90 - 100



SECTION 2

POWER UP TESTS

CALIBRATION REPORT

DataMaster DMT: 104909
Calibration Date: 12/07/2011
Calibrated by: STEVEN R MERRILL
Lot: 12-33-100

Ca = 0.100				
CAL = 0.988416	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 = 0.082	0.050	<=	Xq	< 0.200
a21 = 1.203636	1.050	<=	a21	< 1.300
a31 = 0.496766	0.300	<=	a31	< 0.800

Performed by _____ Date 12/07/2011

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/07/2011
Time: 10:50:21

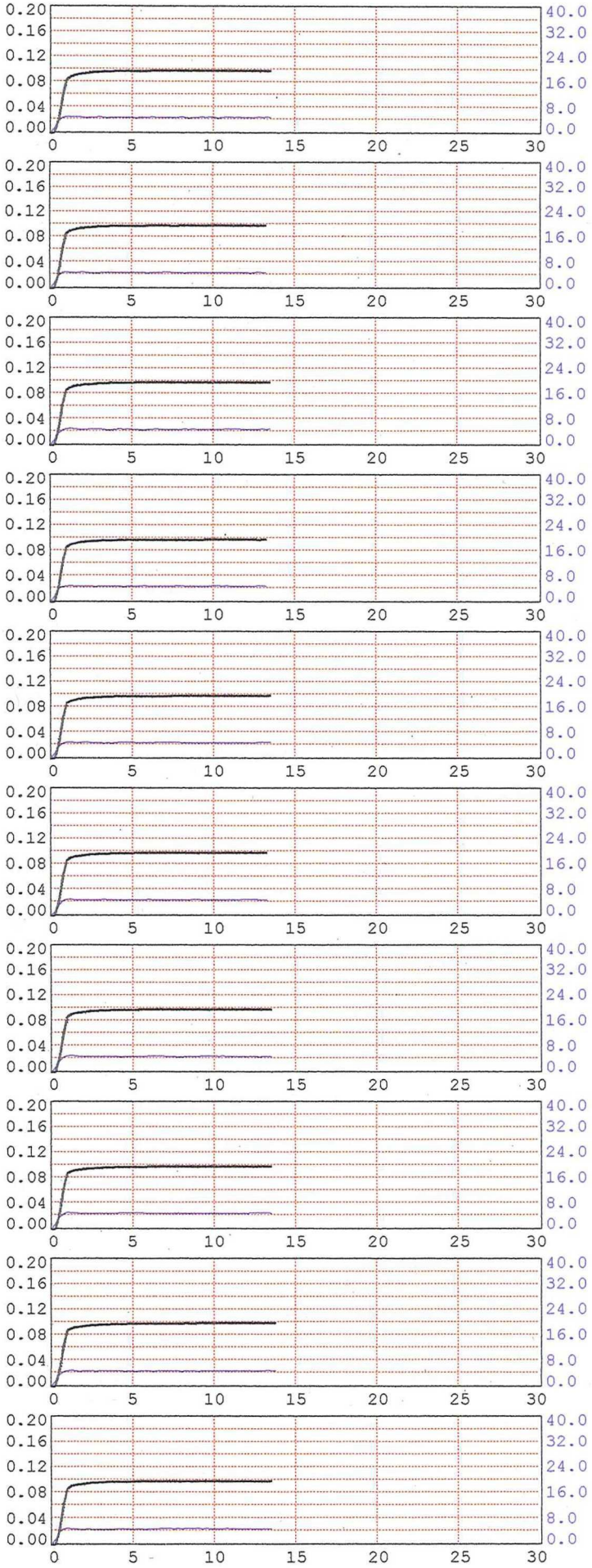
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: GUTH 11050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:51
CALIBRATION CHECK	PASSED	10:51
SIMULATOR VAPOR 34.0°C	0.098	10:51
SIMULATOR VAPOR 34.0°C	0.098	10:52
SIMULATOR VAPOR 34.0°C	0.098	10:53
SIMULATOR VAPOR 34.0°C	0.098	10:54
SIMULATOR VAPOR 34.0°C	0.098	10:56
SIMULATOR VAPOR 34.0°C	0.098	10:57
SIMULATOR VAPOR 34.1°C	0.098	10:58
SIMULATOR VAPOR 34.0°C	0.098	10:59
SIMULATOR VAPOR 34.0°C	0.099	11:00
SIMULATOR VAPOR 34.0°C	0.098	11:01
BLANK TEST	0.000	11:02

Average = 0.098
Std Dev = 0.000

2nd Source Cal Check 12/07/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/07/2011
Time: 11:13:32

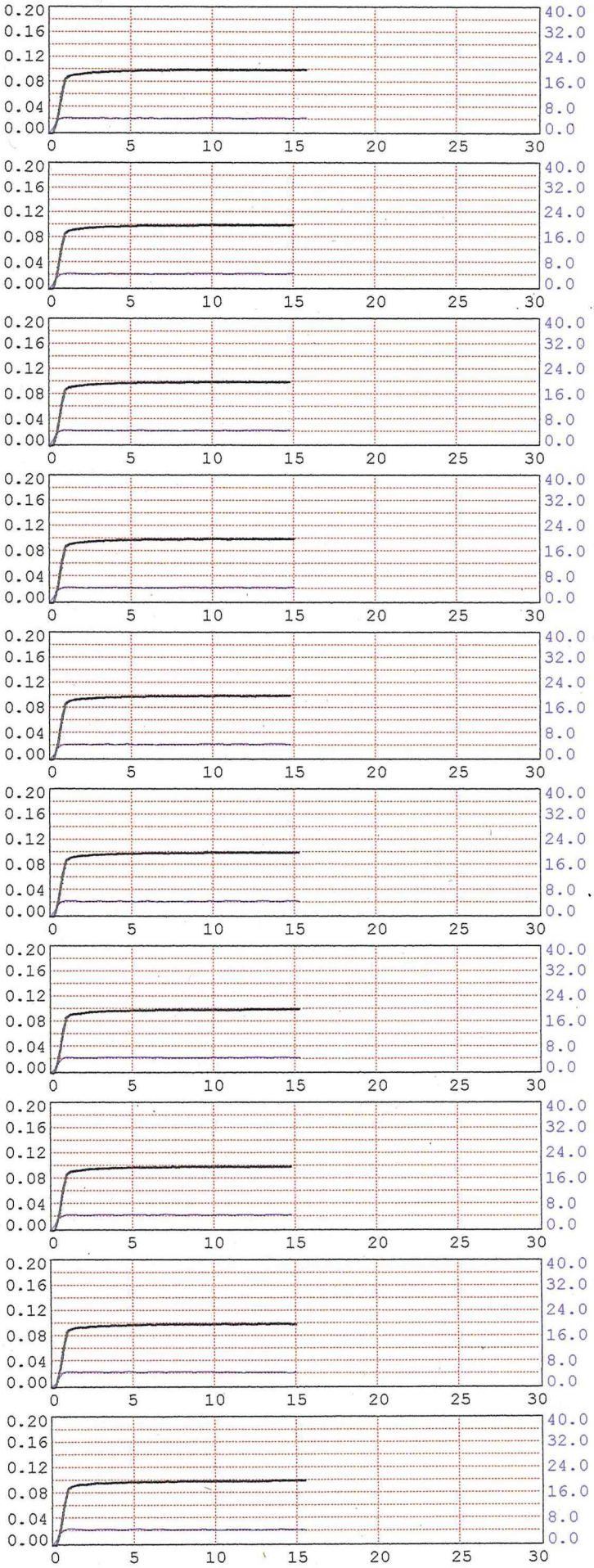
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-39-100
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	11:14
CALIBRATION CHECK	PASSED	11:14
SIMULATOR VAPOR 34.1°C	0.100	11:14
SIMULATOR VAPOR 34.1°C	0.099	11:16
SIMULATOR VAPOR 34.0°C	0.099	11:17
SIMULATOR VAPOR 34.0°C	0.100	11:18
SIMULATOR VAPOR 34.0°C	0.100	11:19
SIMULATOR VAPOR 34.1°C	0.100	11:20
SIMULATOR VAPOR 34.1°C	0.099	11:21
SIMULATOR VAPOR 34.0°C	0.099	11:22
SIMULATOR VAPOR 34.0°C	0.099	11:23
SIMULATOR VAPOR 34.1°C	0.099	11:24
BLANK TEST	0.000	11:25

Average = 0.099
Std Dev = 0.000

In-House Cal Check 12/07/11 [illegible]



CERTIFICATION REPORT

DataMaster DMT: 104909
Calibration Date: 12/07/2011
Certification Date: 12/08/2011
Certified by: STEVEN R MERRILL

Diagnostic Results

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

TEMPERATURES

Sample Chamber = 49.2°C
Breath Tube    = 46.5°C
Digital Sim    = 0.0°C

SETTINGS
Lamp Voltage   = 1.78 V
Cooler Voltage = 1.72 V
Bias Voltage   = 81 V
Chopper Freq   = 532 Hz

PUMP INFO
Flow Rate = 5.952 L/M

DETECTOR INFO
PUMP    ON        OFF
MAX(V)  -0.0441   -0.0404
MIN(V)  -0.0447   -0.0421

FILTER INFO
Filter 1  -0.041  Zero = true
Filter 2   0.661  Zero = true
Filter 3   0.287  Zero = true

CALIBRATION CHECK
Xq  = 0.083  0.85%
```

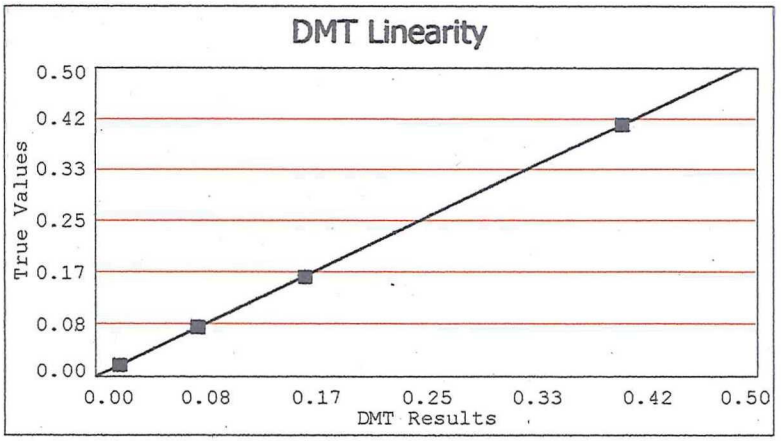
Options

```
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 # 12-35-020	0.018 g/210L	0.0000
0.081 g/210L Lot # 12-37-080	0.077 g/210L	0.0000
0.162 g/210L Lot # 12-36-160	0.158 g/210L	0.0000
0.408 g/210L Lot # 12-40-400	0.397 g/210L	0.0000

$R^2 = 1$



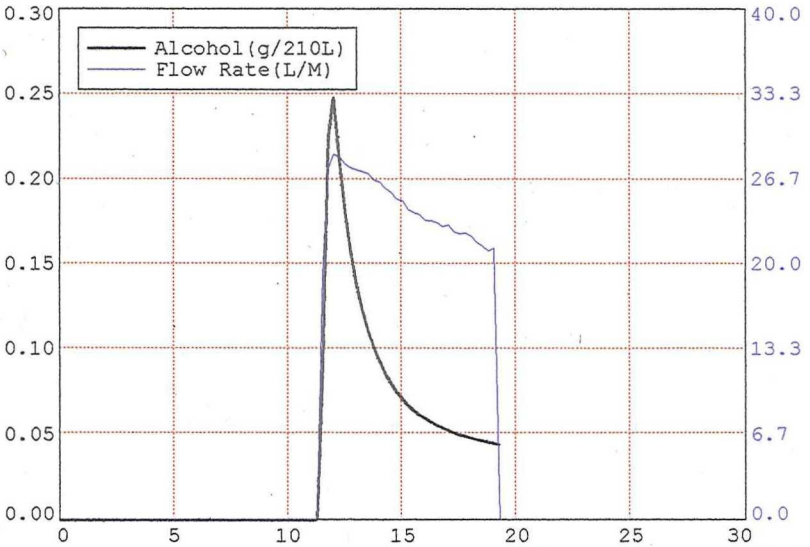
Acetone Interference Test

Lot # 12-37-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

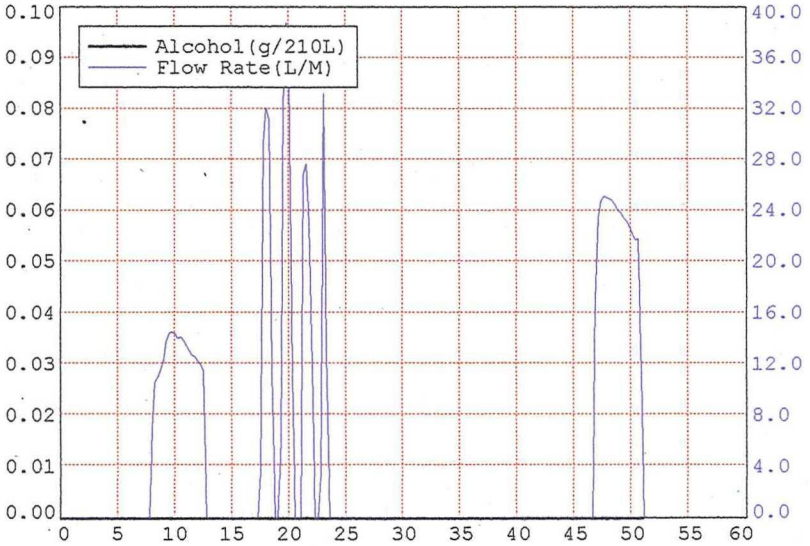


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by _____ Date 12/08/2011

Reviewed by _____ Date 12-8-11

SECTION 3

LINEARITY TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 104909
Location:
Calibration Date: 12/07/2011
Certification Date:
Installation Date:
Test Date: 12/07/2011
Test Time: 13:28:57

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

TEMPERATURES

Sample Chamber = 49.2°C
Breath Tube = 46.3°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.72 V
Bias Voltage = 81 V
Chopper Freq = 534 Hz

PUMP INFO
Flow Rate = 5.908 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0120	-0.0098
MIN(V)	-0.0134	-0.0110

FILTER INFO

Filter 1	-0.011	Zero = true
Filter 2	0.686	Zero = true
Filter 3	0.326	Zero = true

CALIBRATION CHECK
Xq = 0.083 0.74%

DIAGNOSTIC RESULT

DataMaster DMT: 104909
Location:
Calibration Date: 12/07/2011
Certification Date:
Installation Date:
Test Date: 12/08/2011
Test Time: 08:55:54

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

TEMPERATURES

Sample Chamber = 49.0°C
Breath Tube = 46.4°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.72 V
Bias Voltage = 81 V
Chopper Freq = 529 Hz

PUMP INFO
Flow Rate = 5.937 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0474	-0.0443
MIN(V)	-0.0490	-0.0455

FILTER INFO

Filter 1	-0.045	Zero = true
Filter 2	0.658	Zero = true
Filter 3	0.282	Zero = true

CALIBRATION CHECK
Xq = 0.083 0.42%

DIAGNOSTIC RESULT

DataMaster DMT: 104909
Location:
Calibration Date: 12/07/2011
Certification Date: 12/08/2011
Installation Date:
Test Date: 12/08/2011
Test Time: 13:08:04

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 47.1°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.72 V
Bias Voltage = 81 V
Chopper Freq = 534 Hz

PUMP INFO
Flow Rate = 5.939 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0346	-0.0313
MIN(V)	-0.0362	-0.0325

FILTER INFO

Filter 1	-0.032	Zero = true
Filter 2	0.668	Zero = true
Filter 3	0.301	Zero = true

CALIBRATION CHECK
Xq = 0.083 0.42%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/08/2011
Time: 13:10:25

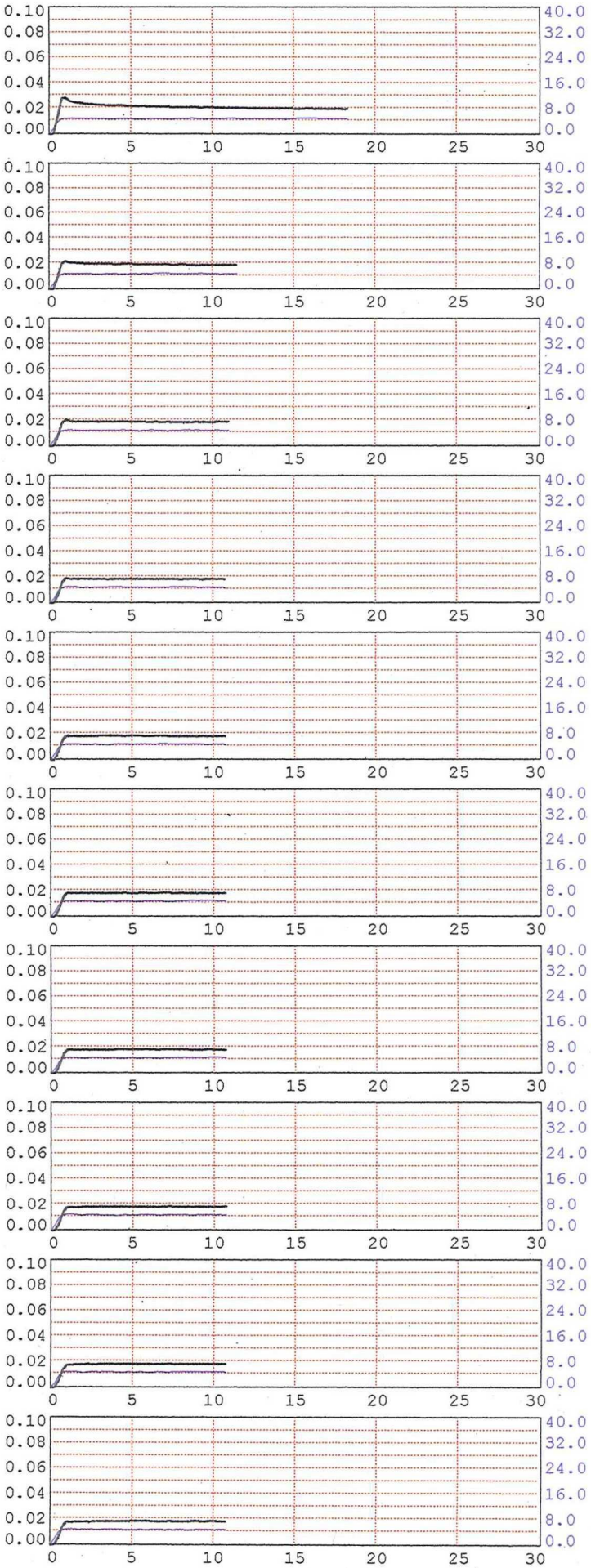
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-35-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	13:11
CALIBRATION CHECK	PASSED	13:11
SIMULATOR VAPOR 34.0°C	0.021	13:11
SIMULATOR VAPOR 34.1°C	0.020	13:12
SIMULATOR VAPOR 34.0°C	0.020	13:13
SIMULATOR VAPOR 34.0°C	0.019	13:14
SIMULATOR VAPOR 34.0°C	0.019	13:15
SIMULATOR VAPOR 34.0°C	0.019	13:16
SIMULATOR VAPOR 34.0°C	0.019	13:17
SIMULATOR VAPOR 34.1°C	0.019	13:19
SIMULATOR VAPOR 34.0°C	0.019	13:20
SIMULATOR VAPOR 34.0°C	0.019	13:21
BLANK TEST	0.000	13:21

Average = 0.019
Std Dev = 0.000

L1 12/08/11 SR



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/08/2011
Time: 13:26:29

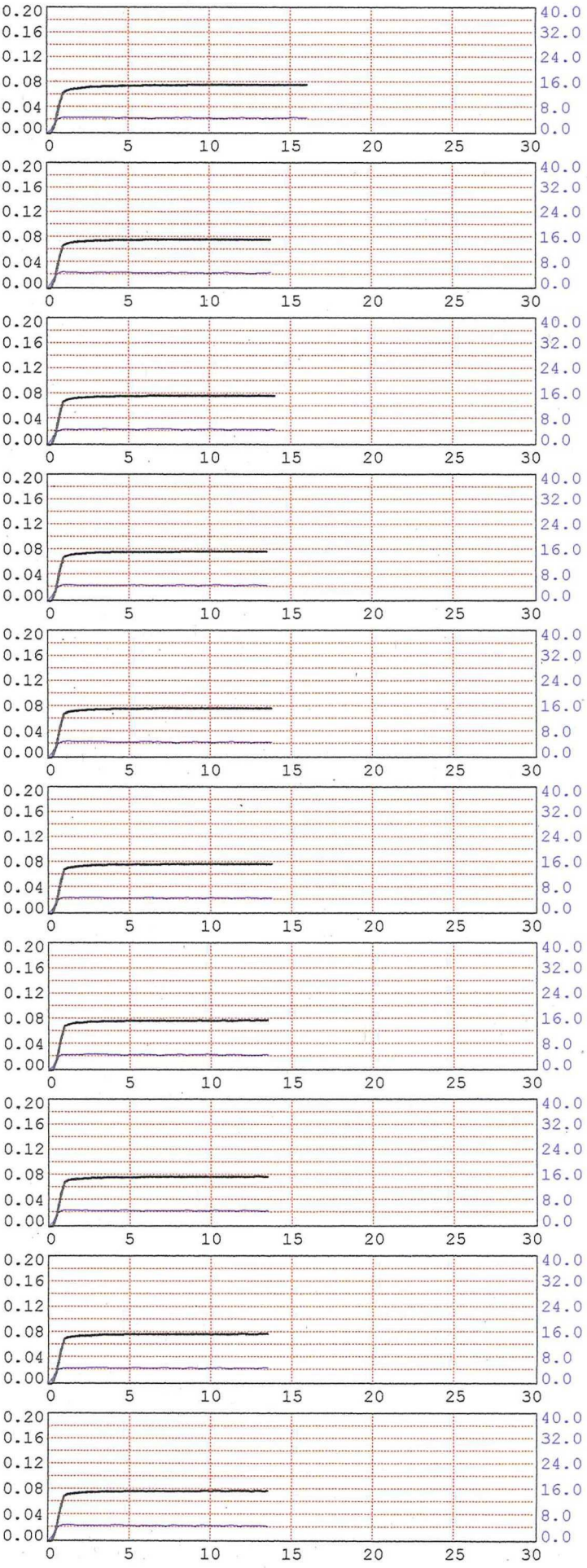
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-37-080
SOLUTION CONCENTRATION: 0.081

BLANK TEST	0.000	13:27
CALIBRATION CHECK	PASSED	13:27
SIMULATOR VAPOR 34.1°C	0.077	13:27
SIMULATOR VAPOR 34.1°C	0.077	13:28
SIMULATOR VAPOR 34.0°C	0.078	13:30
SIMULATOR VAPOR 34.0°C	0.078	13:31
SIMULATOR VAPOR 34.0°C	0.078	13:32
SIMULATOR VAPOR 34.0°C	0.078	13:33
SIMULATOR VAPOR 34.1°C	0.078	13:34
SIMULATOR VAPOR 34.0°C	0.078	13:35
SIMULATOR VAPOR 34.0°C	0.078	13:36
SIMULATOR VAPOR 34.0°C	0.078	13:37
BLANK TEST	0.000	13:38

Average = 0.077
Std Dev = 0.000

L1 12/08/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/08/2011
Time: 13:41:51

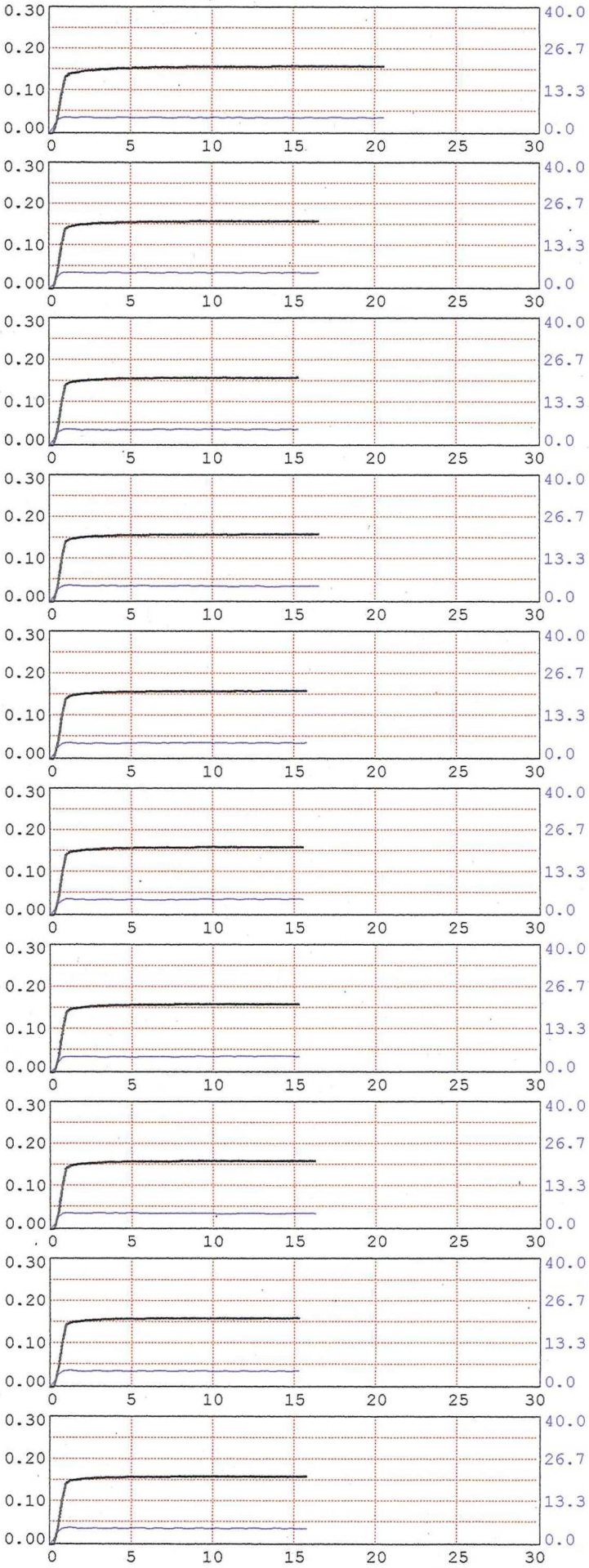
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-36-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST	0.000	13:42
CALIBRATION CHECK	PASSED	13:42
SIMULATOR VAPOR 34.0°C	0.158	13:43
SIMULATOR VAPOR 34.0°C	0.158	13:44
SIMULATOR VAPOR 34.0°C	0.158	13:45
SIMULATOR VAPOR 34.0°C	0.159	13:46
SIMULATOR VAPOR 34.0°C	0.159	13:47
SIMULATOR VAPOR 34.1°C	0.159	13:48
SIMULATOR VAPOR 34.0°C	0.159	13:50
SIMULATOR VAPOR 34.0°C	0.159	13:51
SIMULATOR VAPOR 34.0°C	0.159	13:52
SIMULATOR VAPOR 34.1°C	0.159	13:53
BLANK TEST	0.000	13:54

Average = 0.158
Std Dev = 0.000

Li 12/08/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/08/2011
Time: 14:01:44

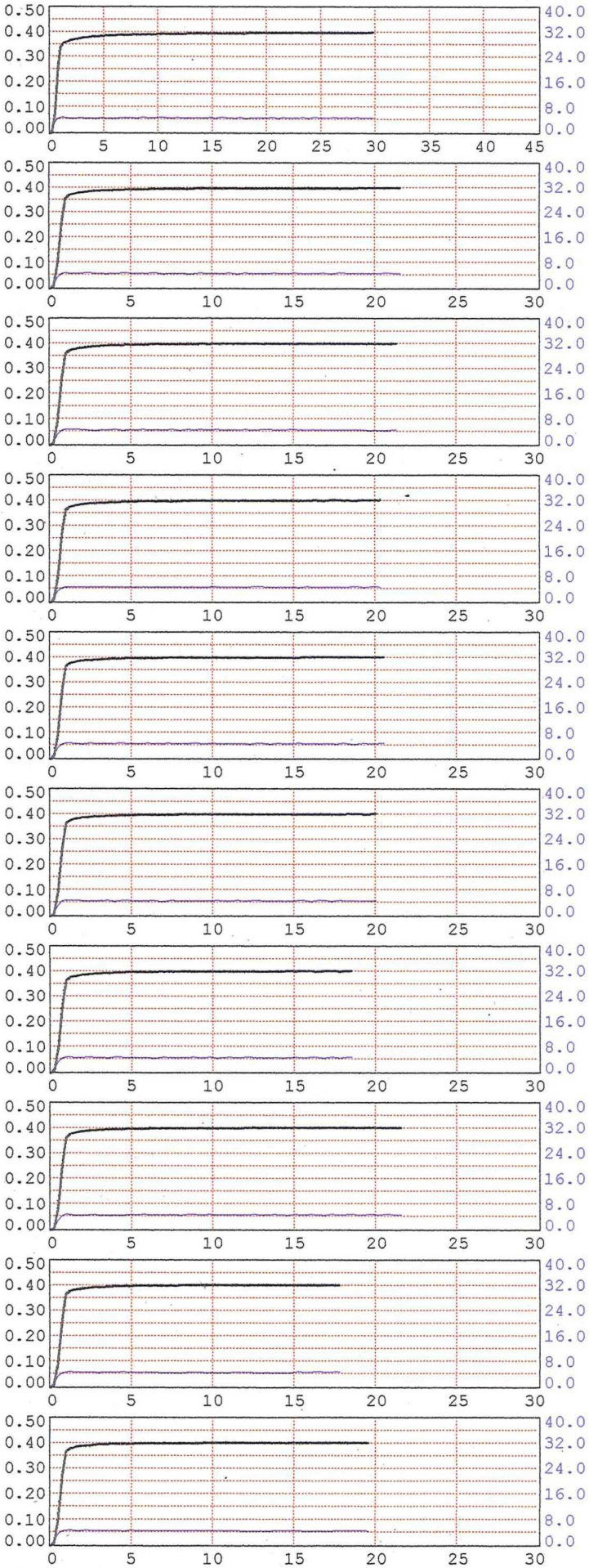
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-40-400
SOLUTION CONCENTRATION: 0.408

BLANK TEST	0.000	14:02
CALIBRATION CHECK	PASSED	14:02
SIMULATOR VAPOR 34.0°C	0.396	14:03
SIMULATOR VAPOR 34.1°C	0.397	14:04
SIMULATOR VAPOR 34.0°C	0.398	14:05
SIMULATOR VAPOR 34.1°C	0.399	14:07
SIMULATOR VAPOR 34.0°C	0.399	14:08
SIMULATOR VAPOR 34.0°C	0.398	14:09
SIMULATOR VAPOR 34.0°C	0.399	14:10
SIMULATOR VAPOR 34.0°C	0.400	14:11
SIMULATOR VAPOR 34.1°C	0.400	14:13
SIMULATOR VAPOR 34.1°C	0.400	14:14
BLANK TEST	0.000	14:15

Average = 0.398
Std Dev = 0.001

L1 12/08/11



DIAGNOSTIC RESULT

DataMaster DMT: 104909
Location:
Calibration Date: 12/07/2011
Certification Date: 12/08/2011
Installation Date:
Test Date: 12/08/2011
Test Time: 14:45:32

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

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube = 46.8°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.72 V
Bias Voltage = 81 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.987 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0152	-0.0132
MIN(V)	-0.0169	-0.0150

FILTER INFO

Filter 1	-0.015	Zero = true
Filter 2	0.681	Zero = true
Filter 3	0.327	Zero = true

CALIBRATION CHECK
Xq = 0.083 0.21%

DIAGNOSTIC RESULT

DataMaster DMT: 104909
Location:
Calibration Date: 12/07/2011
Certification Date: 12/08/2011
Installation Date:
Test Date: 12/09/2011
Test Time: 07:31:17

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

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube = 45.4°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.72 V
Bias Voltage = 81 V
Chopper Freq = 530 Hz

PUMP INFO
Flow Rate = 6.052 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0585	-0.0551
MIN(V)	-0.0602	-0.0565

FILTER INFO

Filter 1	-0.055	Zero = true
Filter 2	0.649	Zero = true
Filter 3	0.270	Zero = true

CALIBRATION CHECK
Xq = 0.083 0.42%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/09/2011
Time: 07:34:04

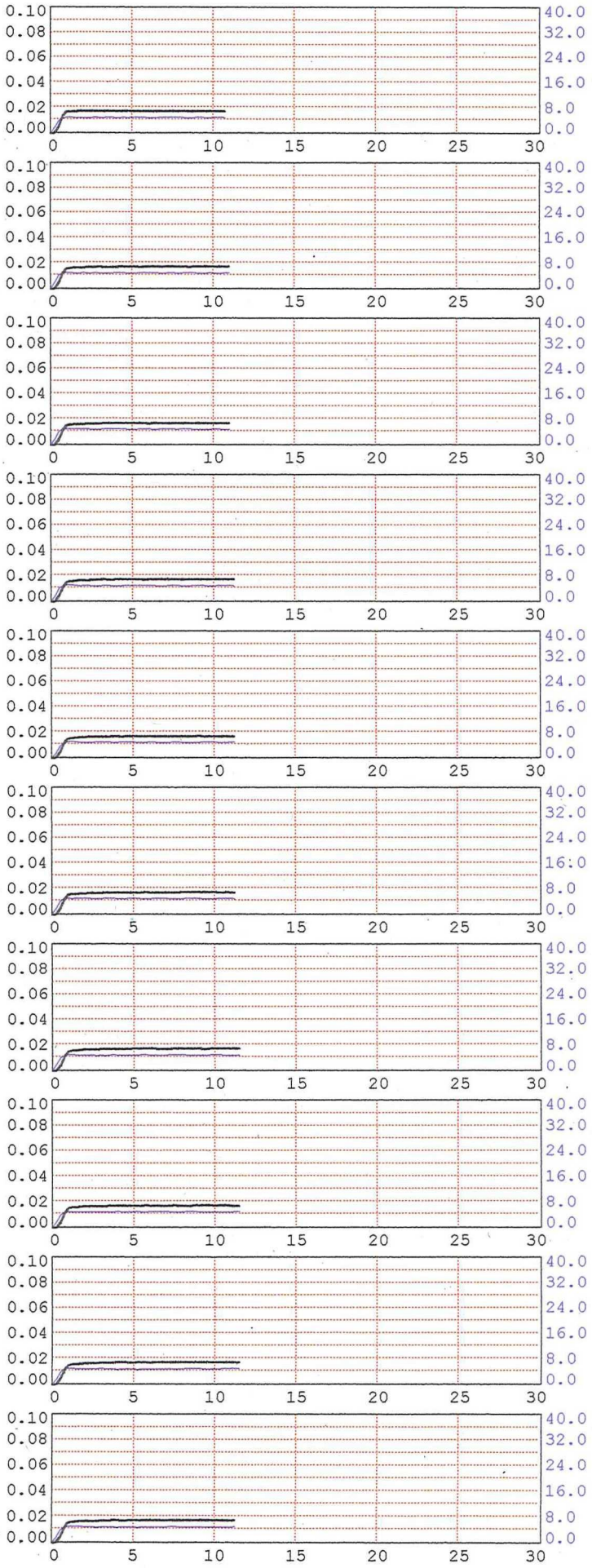
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-35-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	07:34
CALIBRATION CHECK	PASSED	07:35
SIMULATOR VAPOR 34.4°C	0.019	07:35
SIMULATOR VAPOR 34.5°C	0.018	07:36
SIMULATOR VAPOR 34.5°C	0.018	07:37
SIMULATOR VAPOR 34.4°C	0.018	07:38
SIMULATOR VAPOR 34.4°C	0.018	07:39
SIMULATOR VAPOR 34.4°C	0.018	07:40
SIMULATOR VAPOR 34.5°C	0.018	07:41
SIMULATOR VAPOR 34.5°C	0.018	07:42
SIMULATOR VAPOR 34.5°C	0.018	07:43
SIMULATOR VAPOR 34.4°C	0.018	07:44
BLANK TEST	0.000	07:45

Average = 0.018
Std Dev = 0.000

KLK
L-2
12-9-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/09/2011
Time: 07:48:38

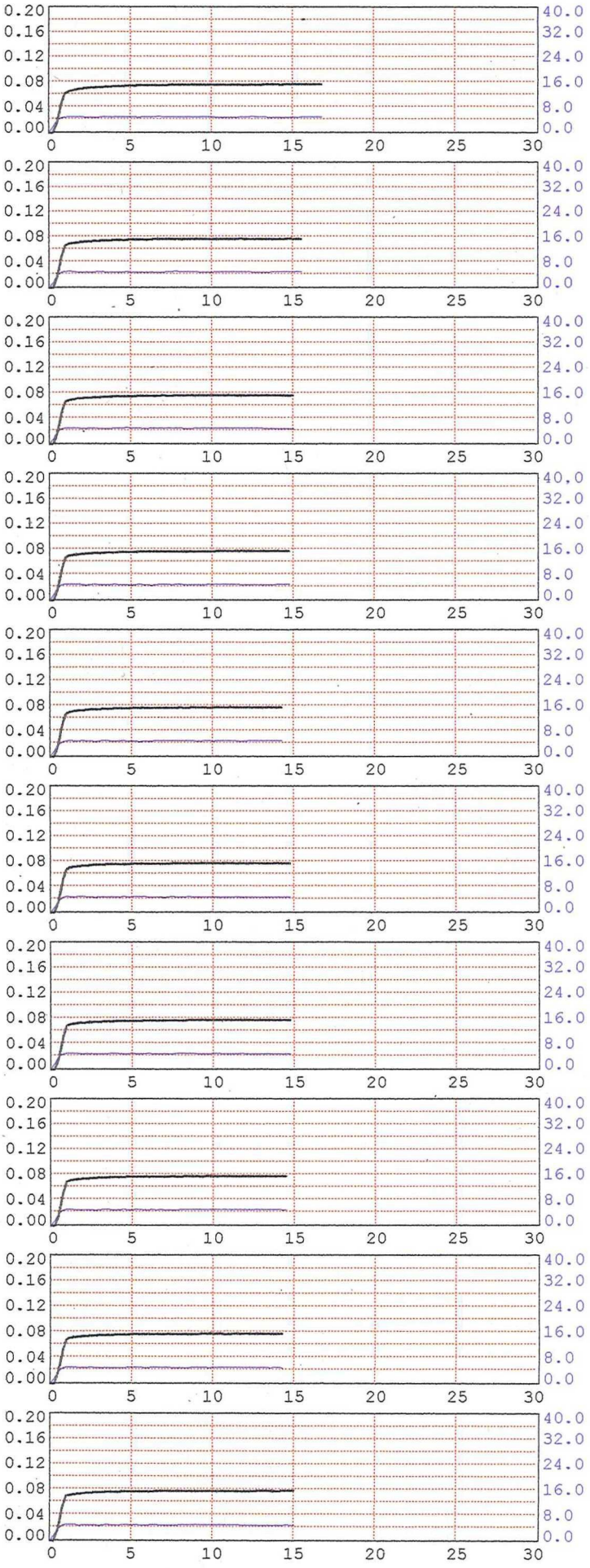
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-37-080
SOLUTION CONCENTRATION: 0.081

BLANK TEST	0.000	07:49
CALIBRATION CHECK	PASSED	07:49
SIMULATOR VAPOR 34.1°C	0.077	07:50
SIMULATOR VAPOR 34.0°C	0.077	07:51
SIMULATOR VAPOR 34.1°C	0.077	07:52
SIMULATOR VAPOR 34.0°C	0.078	07:53
SIMULATOR VAPOR 34.1°C	0.078	07:54
SIMULATOR VAPOR 34.0°C	0.078	07:55
SIMULATOR VAPOR 34.0°C	0.078	07:56
SIMULATOR VAPOR 34.1°C	0.078	07:57
SIMULATOR VAPOR 34.0°C	0.078	07:58
SIMULATOR VAPOR 34.1°C	0.078	07:59
BLANK TEST	0.000	08:00

Average = 0.077
Std Dev = 0.000

L-2
KLK
12-9-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/09/2011
Time: 08:06:08

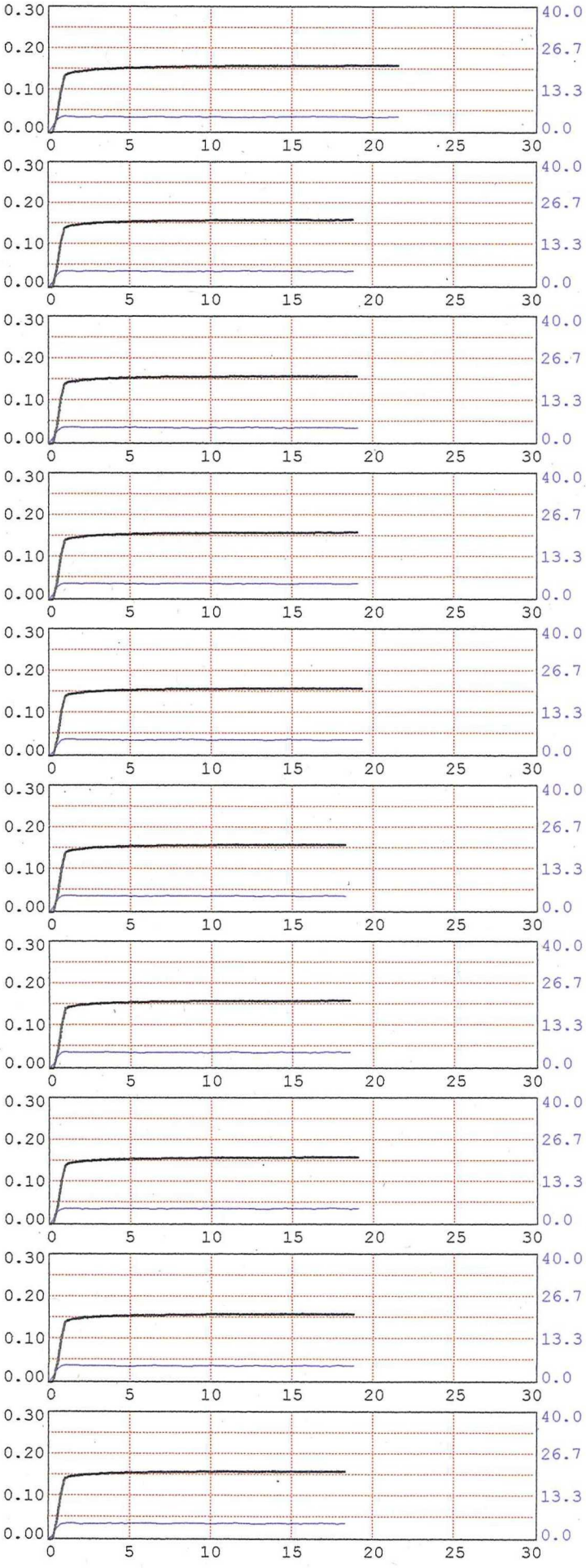
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-36-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST	0.000	08:07
CALIBRATION CHECK	PASSED	08:07
SIMULATOR VAPOR 34.2°C	0.159	08:07
SIMULATOR VAPOR 34.4°C	0.159	08:08
SIMULATOR VAPOR 34.1°C	0.159	08:09
SIMULATOR VAPOR 34.2°C	0.159	08:11
SIMULATOR VAPOR 34.2°C	0.158	08:12
SIMULATOR VAPOR 34.2°C	0.158	08:13
SIMULATOR VAPOR 34.2°C	0.159	08:14
SIMULATOR VAPOR 34.2°C	0.159	08:15
SIMULATOR VAPOR 34.2°C	0.158	08:17
SIMULATOR VAPOR 34.2°C	0.158	08:18
BLANK TEST	0.000	08:19

Average = 0.158
Std Dev = 0.000

L-2
KKimball
12-9-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/09/2011
Time: 08:24:42

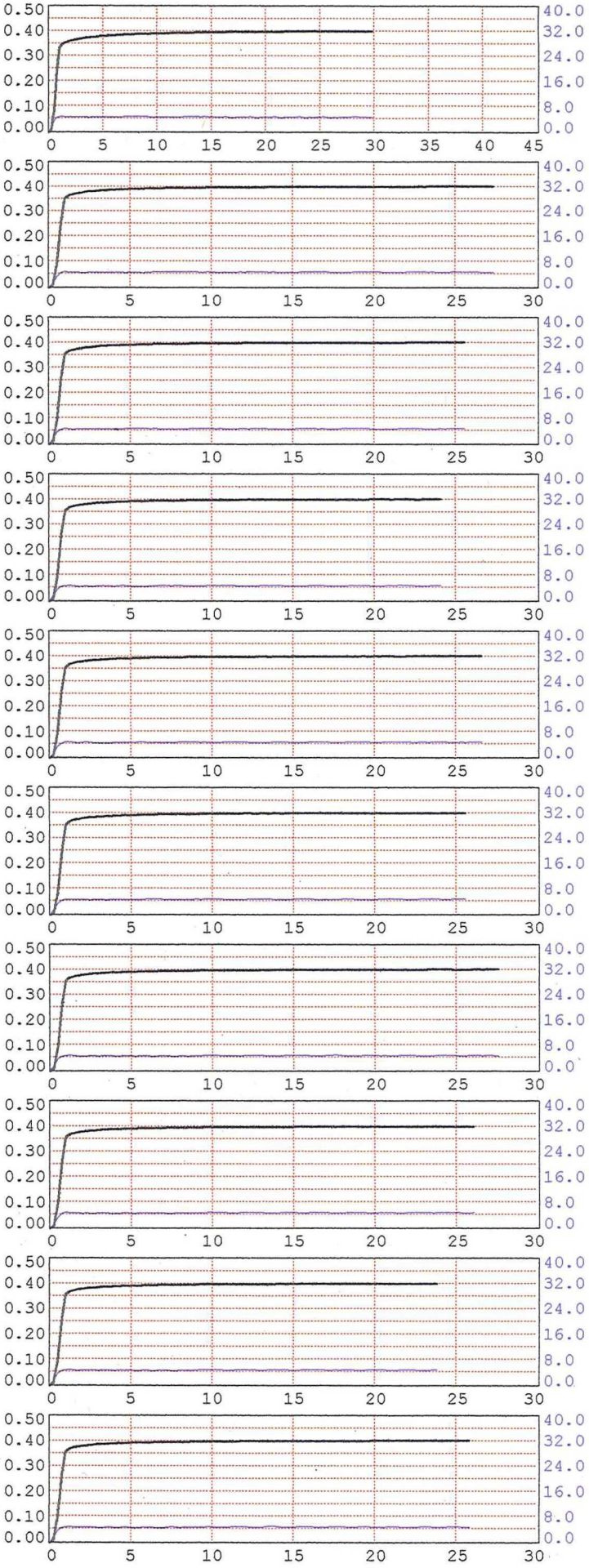
SUPERVISOR NAME:
KIRK L KIMVBALL

SOLUTION LOT #: 12-40-400
SOLUTION CONCENTRATION: 0.408

BLANK TEST	0.000	08:25
CALIBRATION CHECK	PASSED	08:25
SIMULATOR VAPOR 33.9°C	0.397	08:26
SIMULATOR VAPOR 33.8°C	0.399	08:27
SIMULATOR VAPOR 33.8°C	0.399	08:28
SIMULATOR VAPOR 33.8°C	0.399	08:30
SIMULATOR VAPOR 33.8°C	0.399	08:31
SIMULATOR VAPOR 33.7°C	0.399	08:32
SIMULATOR VAPOR 33.7°C	0.399	08:34
SIMULATOR VAPOR 33.8°C	0.399	08:35
SIMULATOR VAPOR 33.7°C	0.398	08:36
SIMULATOR VAPOR 33.8°C	0.400	08:38
BLANK TEST	0.000	08:38

Average = 0.398
Std Dev = 0.000

L-2
12-9-11



DIAGNOSTIC RESULT

DataMaster DMT: 104909
Location:
Calibration Date: 12/07/2011
Certification Date: 12/08/2011
Installation Date:
Test Date: 12/12/2011
Test Time: 09:55:30

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

TEMPERATURES

Sample Chamber = 49.5°C
Breath Tube = 45.7°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.72 V
Bias Voltage = 81 V
Chopper Freq = 532 Hz

PUMP INFO
Flow Rate = 6.138 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0783	-0.0740
MIN(V)	-0.0791	-0.0752

FILTER INFO

Filter 1	-0.074	Zero = true
Filter 2	0.633	Zero = true
Filter 3	0.251	Zero = true

CALIBRATION CHECK
Xq = 0.083 0.74%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/12/2011
Time: 10:08:53

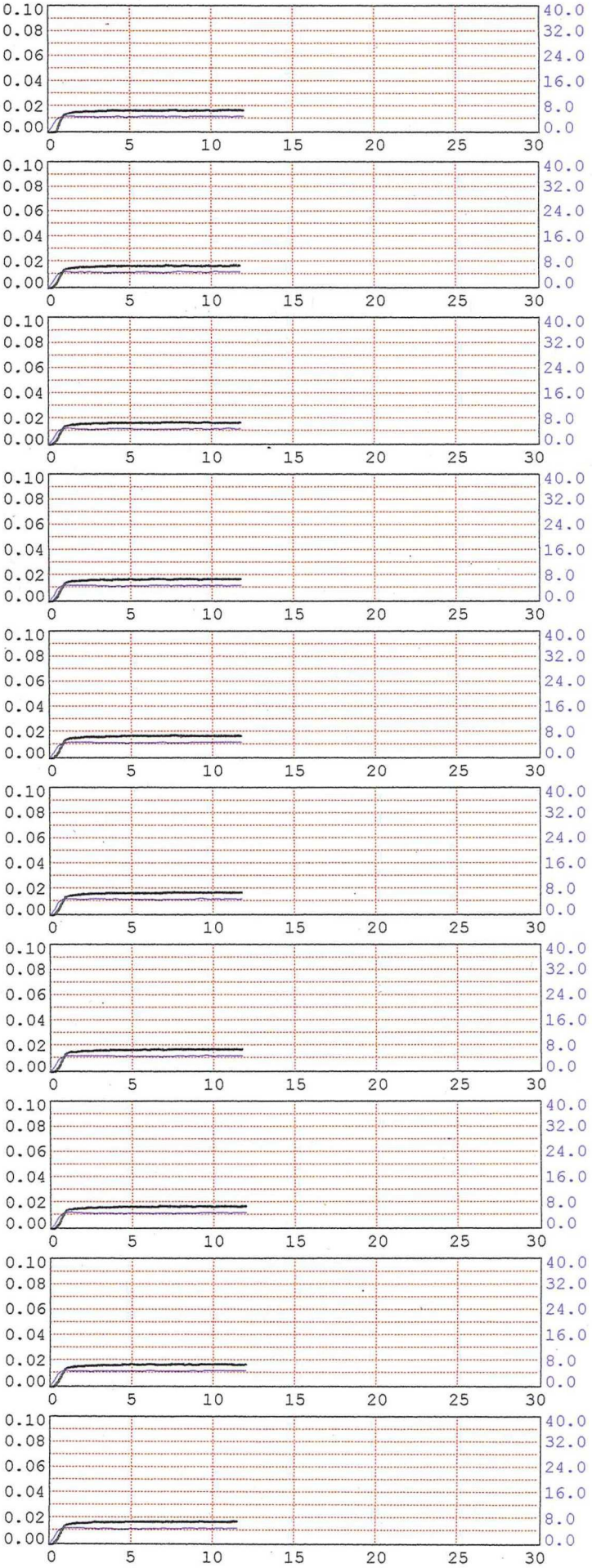
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-35-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	10:09
CALIBRATION CHECK	PASSED	10:09
SIMULATOR VAPOR 34.1°C	0.018	10:10
SIMULATOR VAPOR 34.0°C	0.018	10:11
SIMULATOR VAPOR 34.0°C	0.018	10:12
SIMULATOR VAPOR 34.1°C	0.019	10:13
SIMULATOR VAPOR 34.1°C	0.018	10:14
SIMULATOR VAPOR 34.1°C	0.018	10:15
SIMULATOR VAPOR 34.1°C	0.018	10:16
SIMULATOR VAPOR 34.0°C	0.018	10:17
SIMULATOR VAPOR 34.0°C	0.018	10:18
SIMULATOR VAPOR 34.0°C	0.018	10:19
BLANK TEST	0.000	10:20

Average = 0.018
Std Dev = 0.000

L-3
[illegible]
12-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/12/2011
Time: 10:46:10

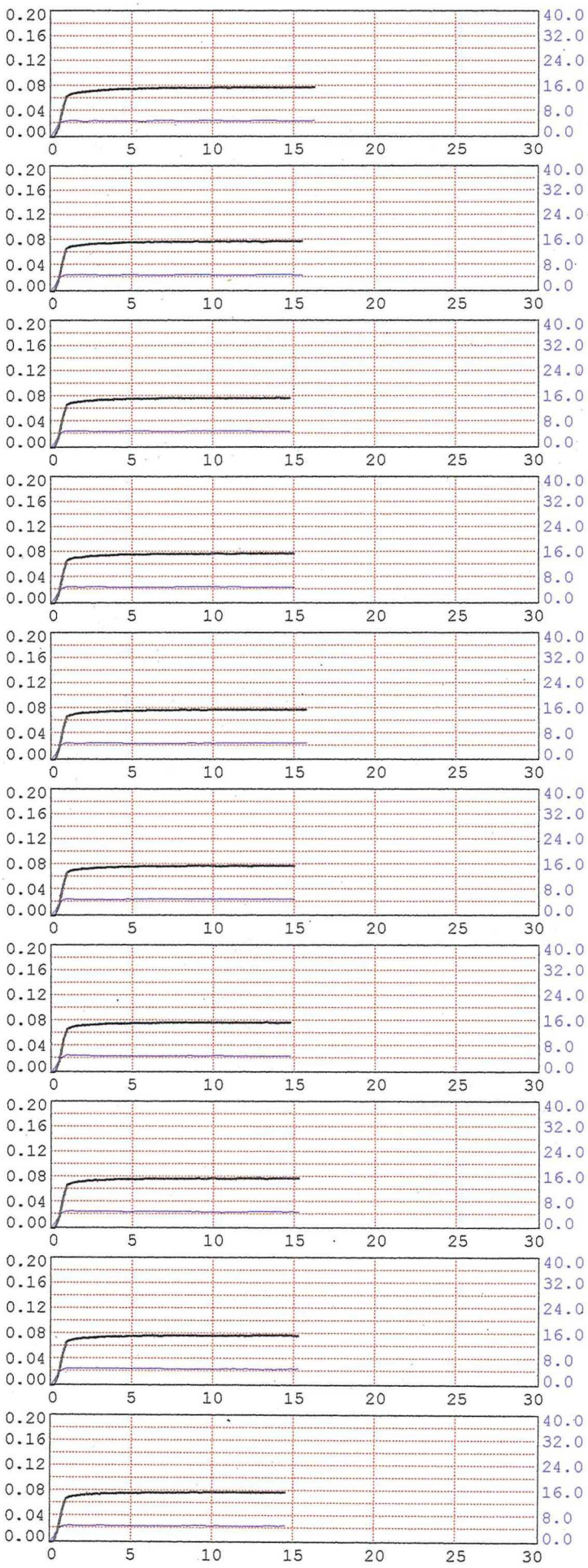
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-41-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST	0.000	10:47
CALIBRATION CHECK	PASSED	10:47
SIMULATOR VAPOR 34.0°C	0.079	10:47
SIMULATOR VAPOR 34.0°C	0.079	10:48
SIMULATOR VAPOR 34.0°C	0.078	10:49
SIMULATOR VAPOR 34.1°C	0.079	10:50
SIMULATOR VAPOR 34.0°C	0.079	10:51
SIMULATOR VAPOR 34.0°C	0.079	10:53
SIMULATOR VAPOR 34.0°C	0.078	10:54
SIMULATOR VAPOR 34.1°C	0.079	10:55
SIMULATOR VAPOR 34.0°C	0.079	10:56
SIMULATOR VAPOR 34.1°C	0.079	10:57
BLANK TEST	0.000	10:58

Average = 0.078
Std Dev = 0.000

L-3
KLK
12-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/12/2011
Time: 11:01:20

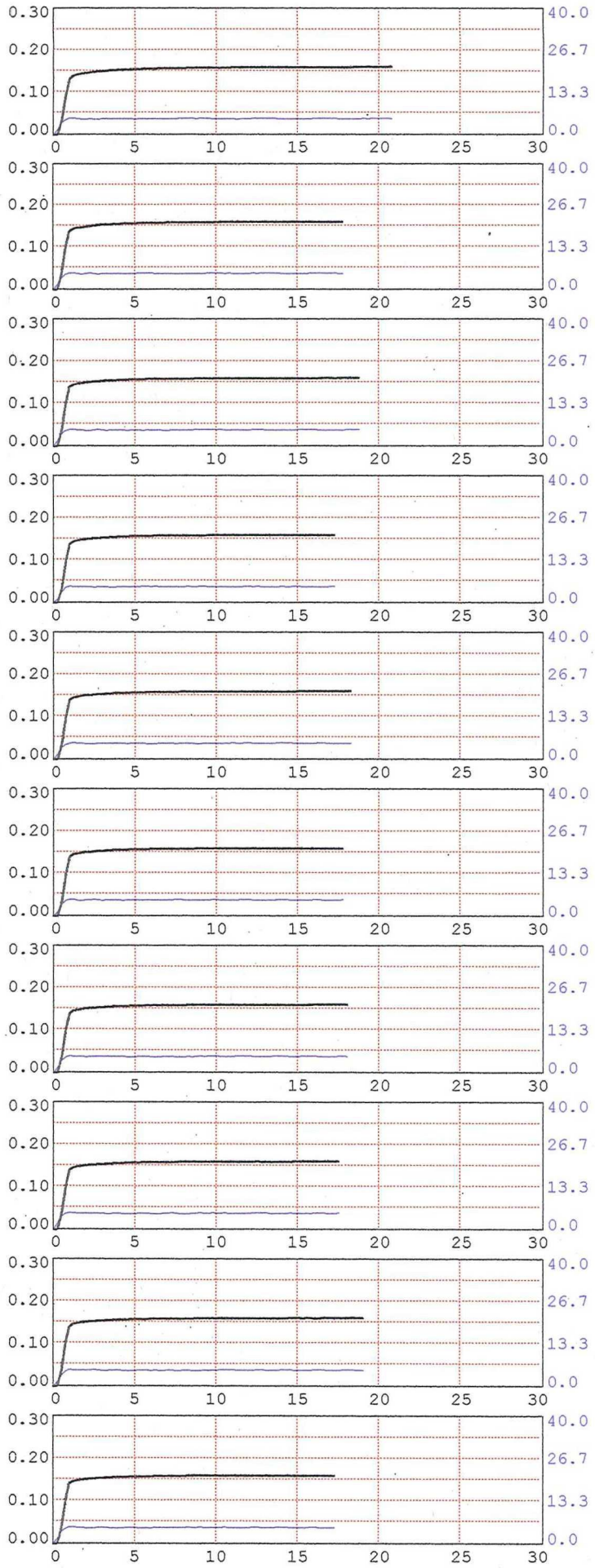
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-42-160
SOLUTION CONCENTRATION: 0.165

BLANK TEST	0.000	11:02
CALIBRATION CHECK	PASSED	11:02
SIMULATOR VAPOR 34.0°C	0.160	11:02
SIMULATOR VAPOR 34.1°C	0.159	11:03
SIMULATOR VAPOR 34.1°C	0.160	11:05
SIMULATOR VAPOR 34.0°C	0.159	11:06
SIMULATOR VAPOR 34.0°C	0.160	11:07
SIMULATOR VAPOR 34.0°C	0.160	11:08
SIMULATOR VAPOR 34.0°C	0.160	11:09
SIMULATOR VAPOR 34.1°C	0.160	11:10
SIMULATOR VAPOR 34.0°C	0.160	11:12
SIMULATOR VAPOR 34.0°C	0.160	11:13
BLANK TEST	0.000	11:14

Average = 0.159
Std Dev = 0.000

L-3
12-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/12/2011
Time: 11:18:47

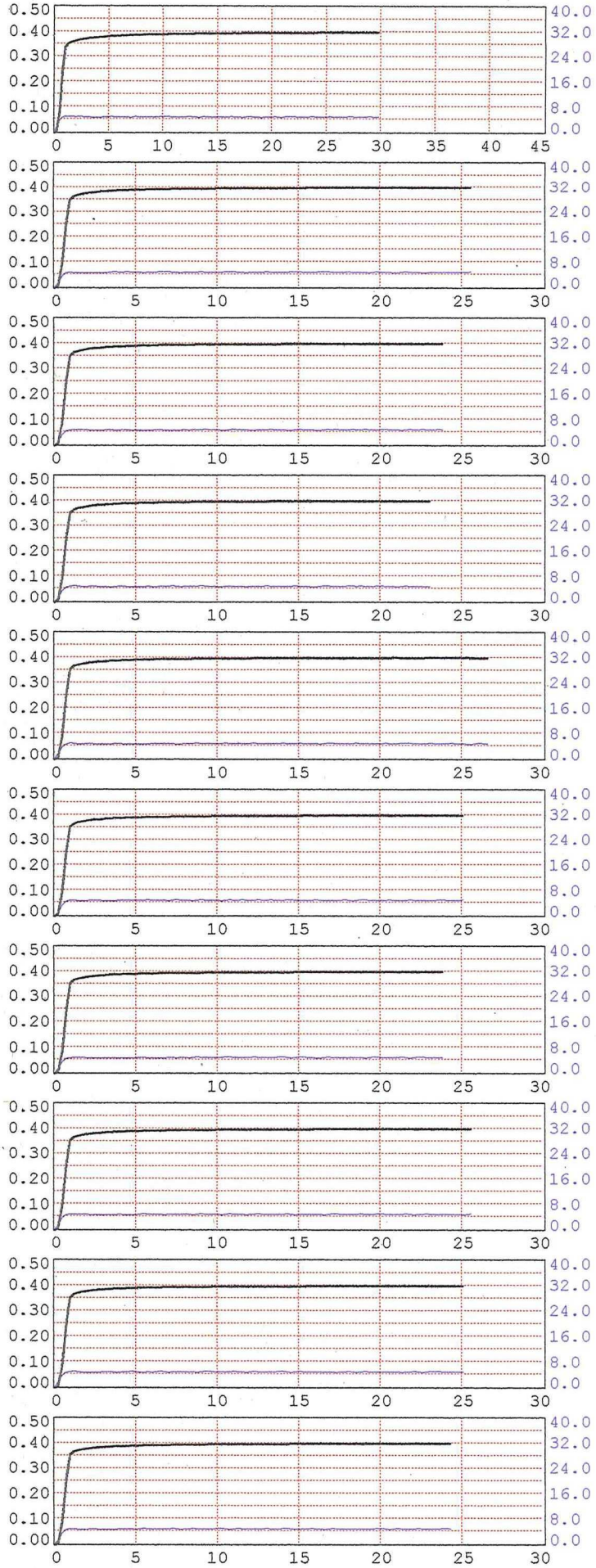
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-40-400
SOLUTION CONCENTRATION: 0.408

BLANK TEST	0.000	11:19
CALIBRATION CHECK	PASSED	11:19
SIMULATOR VAPOR 34.0°C	0.395	11:20
SIMULATOR VAPOR 34.0°C	0.396	11:21
SIMULATOR VAPOR 34.1°C	0.396	11:22
SIMULATOR VAPOR 34.0°C	0.396	11:24
SIMULATOR VAPOR 34.1°C	0.397	11:25
SIMULATOR VAPOR 33.9°C	0.396	11:26
SIMULATOR VAPOR 34.1°C	0.396	11:28
SIMULATOR VAPOR 34.0°C	0.396	11:29
SIMULATOR VAPOR 34.0°C	0.396	11:30
SIMULATOR VAPOR 34.0°C	0.396	11:32
BLANK TEST	0.000	11:32

Average = 0.396
Std Dev = 0.000

L-3
KLK
12-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/12/2011
Time: 13:30:27

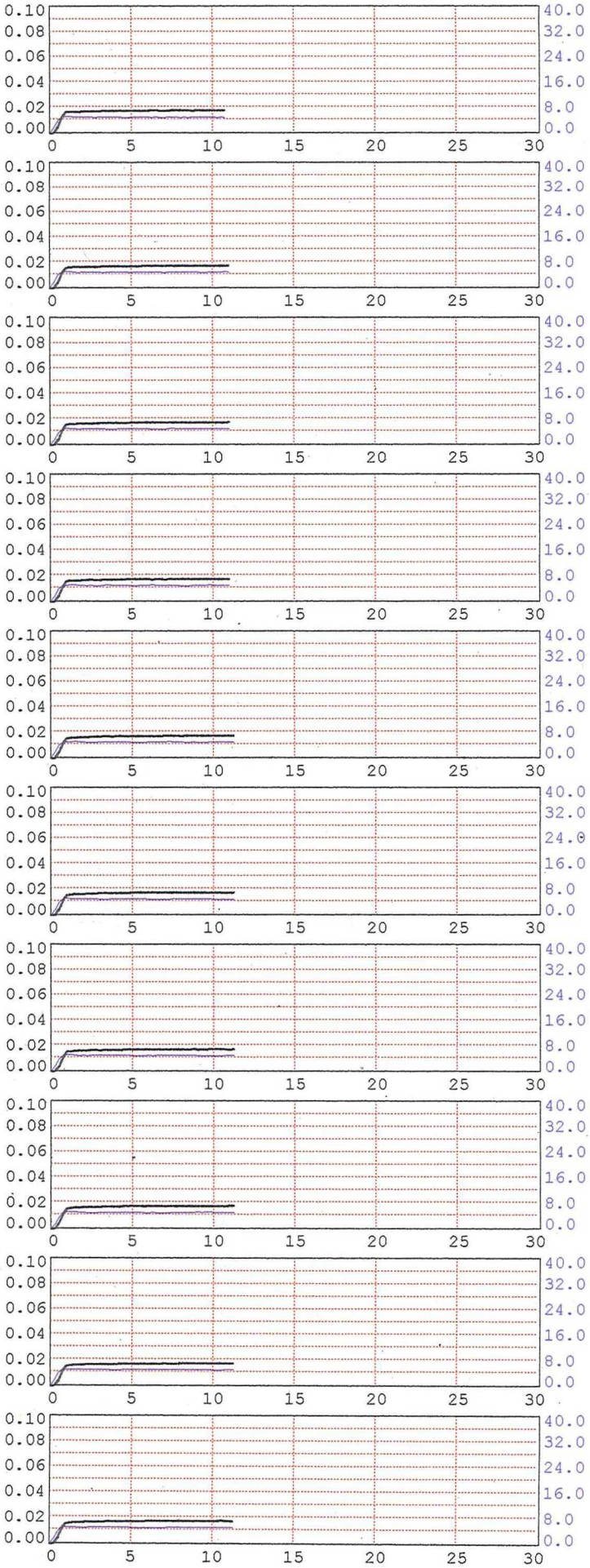
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-35-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	13:31
CALIBRATION CHECK	PASSED	13:31
SIMULATOR VAPOR 34.1°C	0.019	13:31
SIMULATOR VAPOR 34.0°C	0.018	13:32
SIMULATOR VAPOR 34.0°C	0.018	13:33
SIMULATOR VAPOR 34.0°C	0.018	13:34
SIMULATOR VAPOR 34.0°C	0.018	13:35
SIMULATOR VAPOR 34.1°C	0.018	13:36
SIMULATOR VAPOR 34.0°C	0.018	13:37
SIMULATOR VAPOR 34.0°C	0.018	13:38
SIMULATOR VAPOR 34.1°C	0.018	13:39
SIMULATOR VAPOR 34.1°C	0.018	13:41
BLANK TEST	0.000	13:41

Average = 0.018
Std Dev = 0.000

L-4
[illegible]
12-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/12/2011
Time: 15:04:51

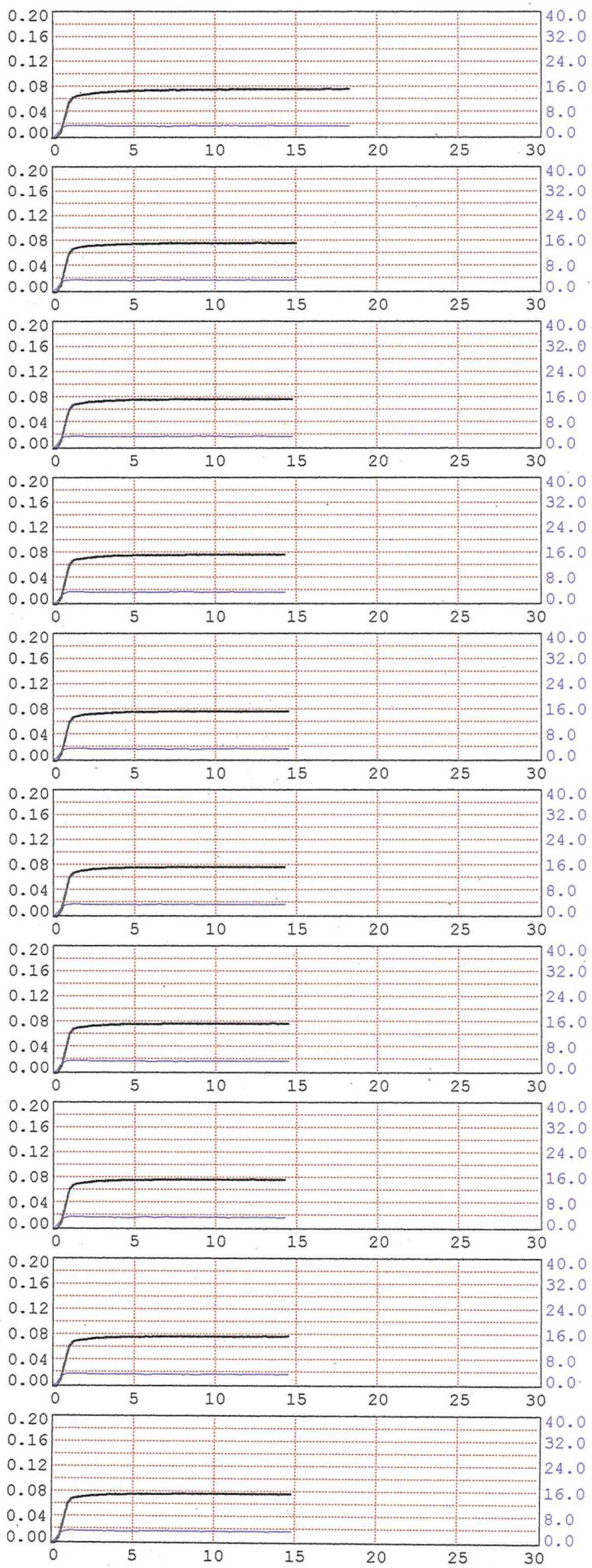
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-41-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST	0.000	15:05
CALIBRATION CHECK	PASSED	15:05
SIMULATOR VAPOR 34.0°C	0.078	15:06
SIMULATOR VAPOR 34.1°C	0.078	15:07
SIMULATOR VAPOR 34.0°C	0.079	15:08
SIMULATOR VAPOR 34.0°C	0.078	15:09
SIMULATOR VAPOR 34.0°C	0.078	15:10
SIMULATOR VAPOR 34.0°C	0.078	15:11
SIMULATOR VAPOR 34.1°C	0.078	15:12
SIMULATOR VAPOR 34.0°C	0.078	15:13
SIMULATOR VAPOR 34.0°C	0.078	15:15
SIMULATOR VAPOR 34.0°C	0.078	15:16
BLANK TEST	0.000	15:16

Average = 0.078
Std Dev = 0.000

L-4
KLK
12-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/12/2011
Time: 15:39:30

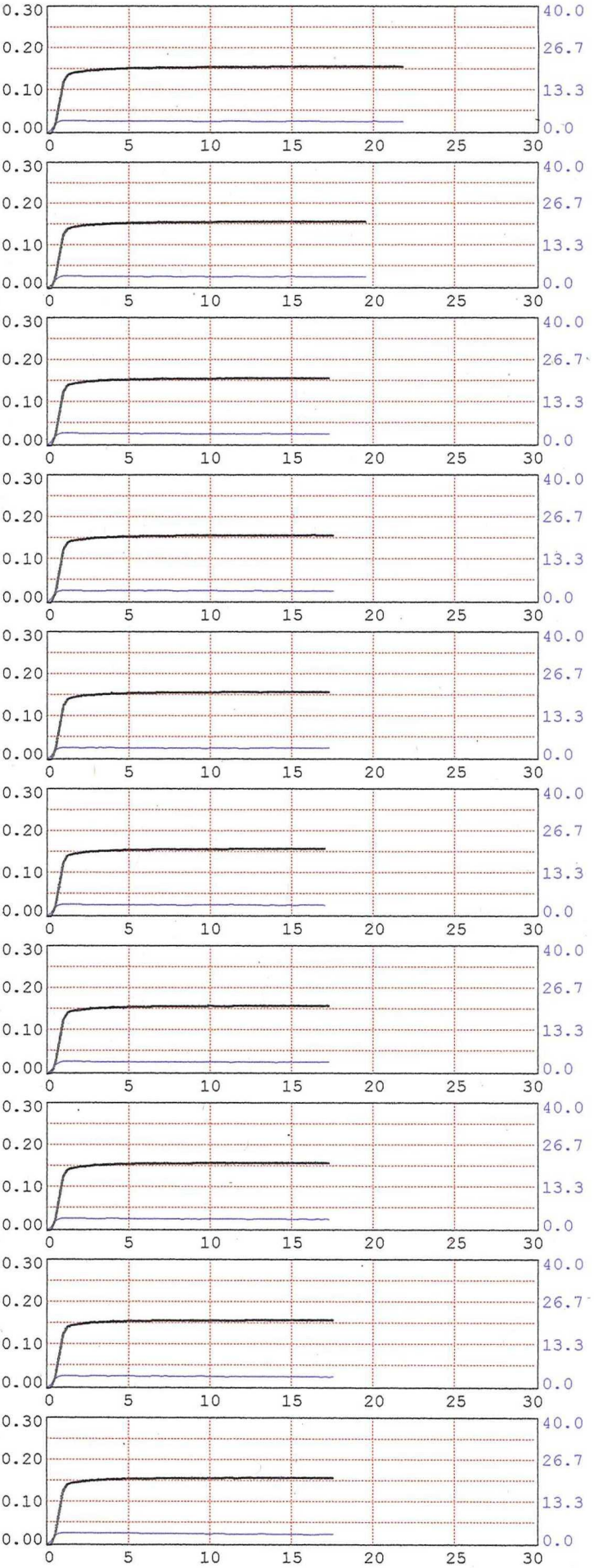
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-42-160
SOLUTION CONCENTRATION: 0.165

BLANK TEST	0.000	15:40
CALIBRATION CHECK	PASSED	15:40
SIMULATOR VAPOR 34.1°C	0.158	15:40
SIMULATOR VAPOR 34.0°C	0.158	15:42
SIMULATOR VAPOR 34.1°C	0.157	15:43
SIMULATOR VAPOR 34.1°C	0.158	15:44
SIMULATOR VAPOR 34.1°C	0.158	15:45
SIMULATOR VAPOR 34.0°C	0.158	15:46
SIMULATOR VAPOR 34.1°C	0.158	15:47
SIMULATOR VAPOR 34.0°C	0.159	15:49
SIMULATOR VAPOR 34.0°C	0.158	15:50
SIMULATOR VAPOR 34.0°C	0.159	15:51
BLANK TEST	0.000	15:52

Average = 0.158
Std Dev = 0.000

RRR
L-4
12-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/12/2011
Time: 16:06:44

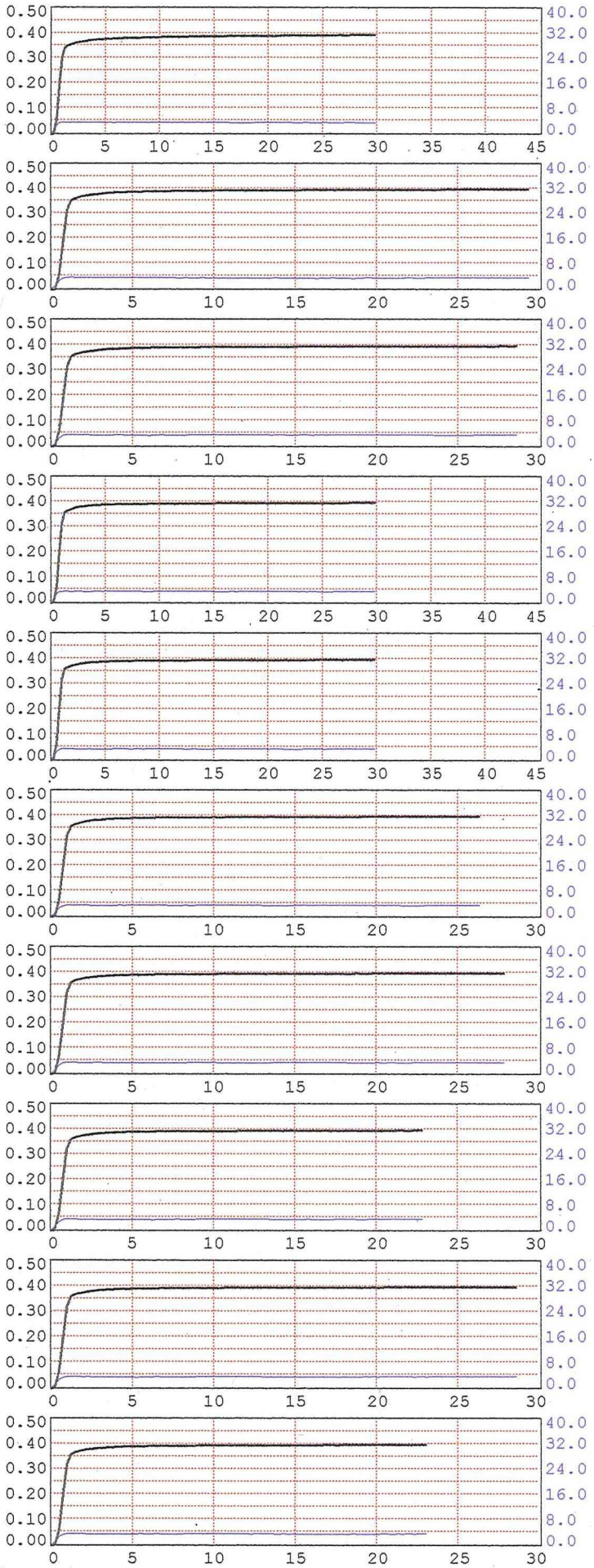
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-40-400
SOLUTION CONCENTRATION: 0.408

BLANK TEST	0.000	16:07
CALIBRATION CHECK	PASSED	16:07
SIMULATOR VAPOR 34.0°C	0.393	16:08
SIMULATOR VAPOR 34.0°C	0.394	16:09
SIMULATOR VAPOR 34.0°C	0.394	16:11
SIMULATOR VAPOR 34.1°C	0.394	16:12
SIMULATOR VAPOR 34.0°C	0.395	16:13
SIMULATOR VAPOR 34.1°C	0.395	16:15
SIMULATOR VAPOR 34.0°C	0.396	16:16
SIMULATOR VAPOR 34.0°C	0.394	16:17
SIMULATOR VAPOR 34.0°C	0.395	16:19
SIMULATOR VAPOR 34.0°C	0.395	16:20
BLANK TEST	0.000	16:21

Average = 0.394
Std Dev = 0.000

L4 12/12/11 [illegible]



DIAGNOSTIC RESULT

DataMaster DMT: 104909
Location:
Calibration Date: 12/07/2011
Certification Date: 12/08/2011
Installation Date:
Test Date: 12/13/2011
Test Time: 07:27:19

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 44.9°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.72 V
Bias Voltage = 81 V
Chopper Freq = 530 Hz

PUMP INFO
Flow Rate = 6.074 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0803	-0.0764
MIN(V)	-0.0821	-0.0783

FILTER INFO
Filter 1 -0.078 Zero = true
Filter 2 0.628 Zero = true
Filter 3 0.243 Zero = true

CALIBRATION CHECK
Xq = 0.082 0.11%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/13/2011
Time: 07:33:22

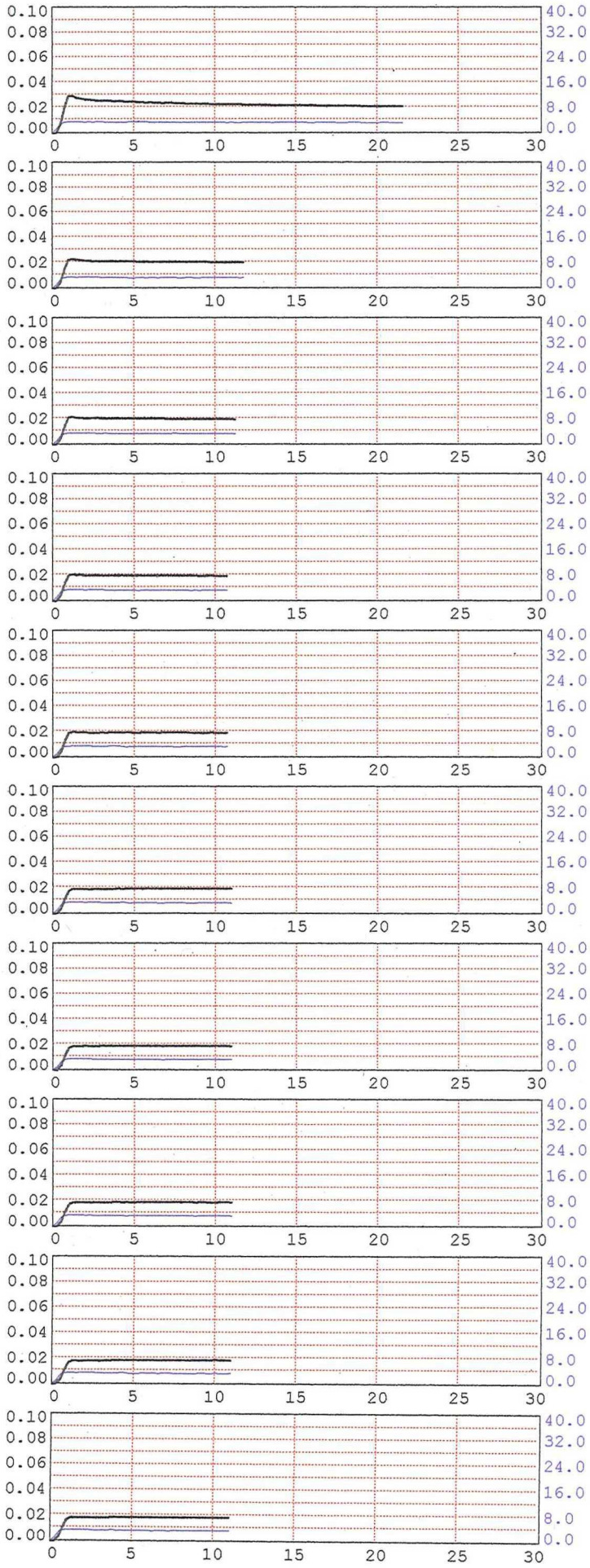
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-35-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	07:34
CALIBRATION CHECK	PASSED	07:34
SIMULATOR VAPOR 34.0°C	0.023	07:34
SIMULATOR VAPOR 34.1°C	0.021	07:35
SIMULATOR VAPOR 34.1°C	0.021	07:36
SIMULATOR VAPOR 34.0°C	0.021	07:37
SIMULATOR VAPOR 34.1°C	0.020	07:38
SIMULATOR VAPOR 34.0°C	0.020	07:39
SIMULATOR VAPOR 34.1°C	0.020	07:41
SIMULATOR VAPOR 34.0°C	0.020	07:42
SIMULATOR VAPOR 34.1°C	0.020	07:43
SIMULATOR VAPOR 34.1°C	0.020	07:44
BLANK TEST	0.000	07:44

Average = 0.020
Std Dev = 0.000

LS 12/13/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/13/2011
Time: 09:28:18

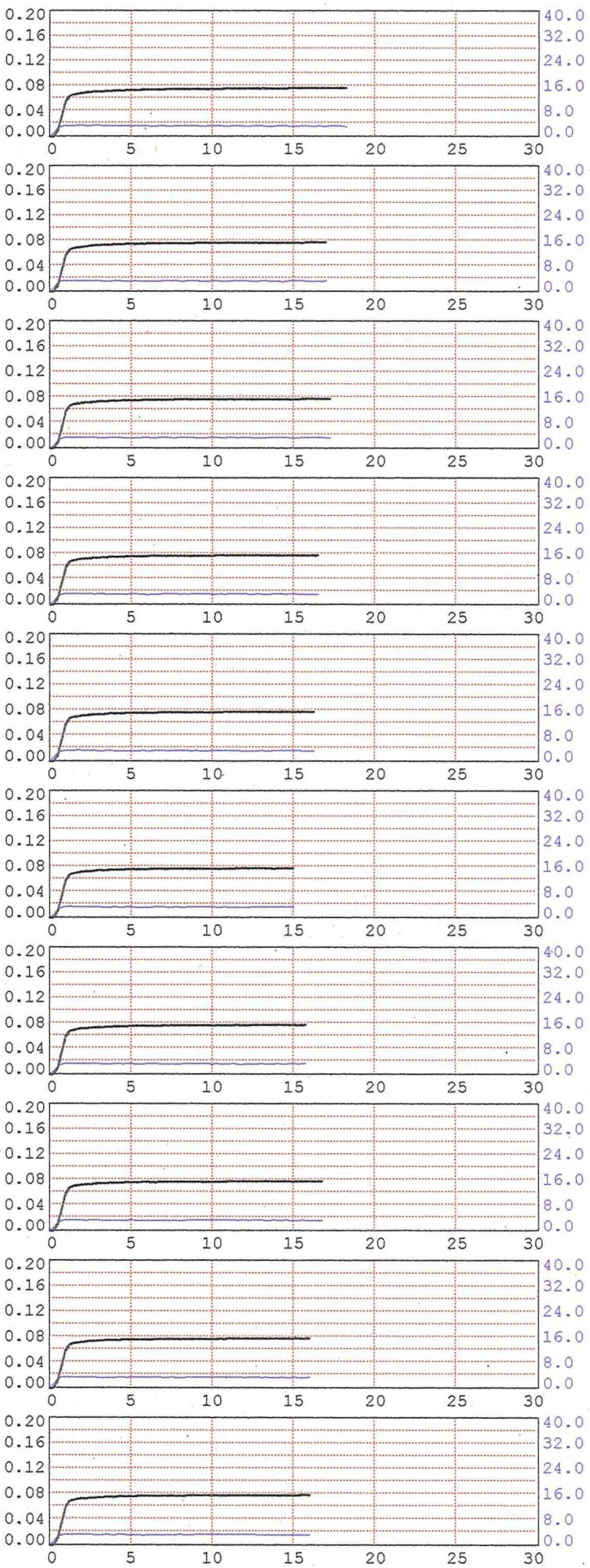
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-41-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST	0.000	09:29
CALIBRATION CHECK	PASSED	09:29
SIMULATOR VAPOR 34.0°C	0.078	09:29
SIMULATOR VAPOR 34.1°C	0.078	09:30
SIMULATOR VAPOR 34.1°C	0.078	09:31
SIMULATOR VAPOR 34.0°C	0.079	09:33
SIMULATOR VAPOR 34.1°C	0.078	09:34
SIMULATOR VAPOR 34.1°C	0.078	09:35
SIMULATOR VAPOR 34.0°C	0.078	09:36
SIMULATOR VAPOR 34.0°C	0.078	09:37
SIMULATOR VAPOR 34.0°C	0.078	09:38
SIMULATOR VAPOR 34.1°C	0.079	09:39
BLANK TEST	0.000	09:40

Average = 0.078
Std Dev = 0.000

LS 12/13/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104909

Date: 12/13/2011
Time: 11:07:07

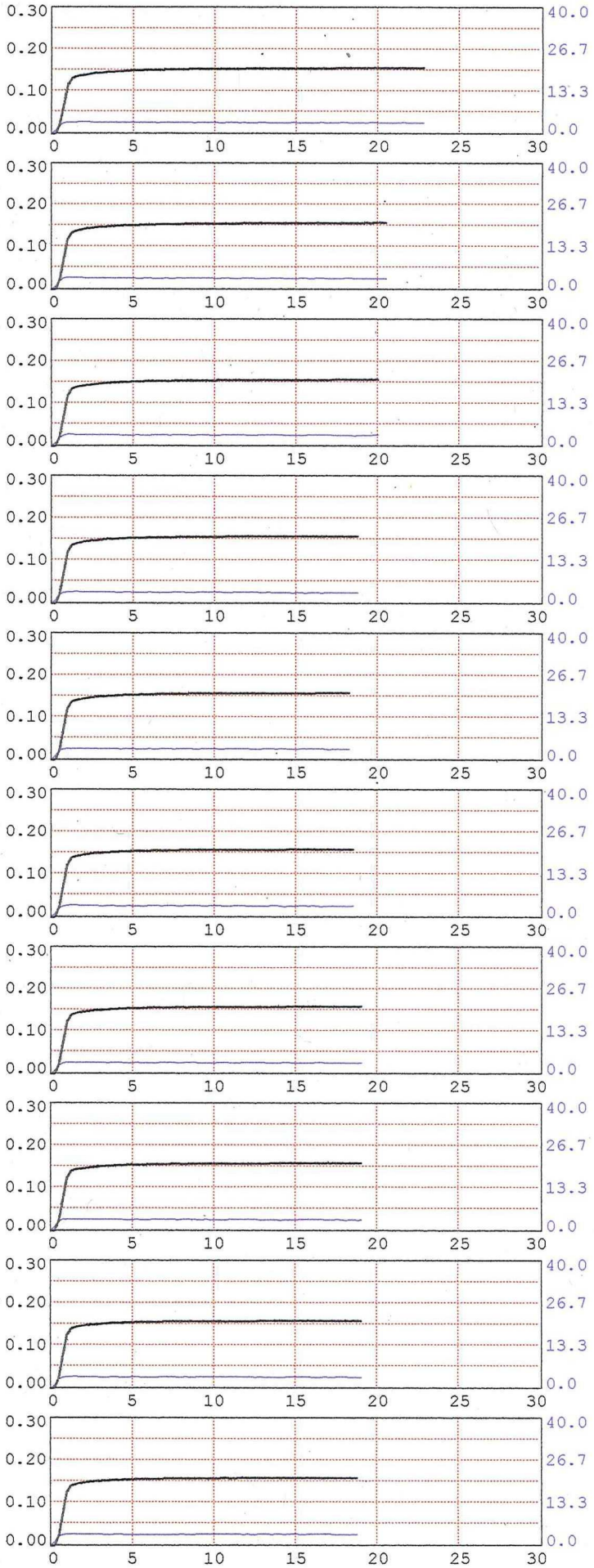
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-42-160
SOLUTION CONCENTRATION: 0.165

BLANK TEST	0.000	11:08
CALIBRATION CHECK	PASSED	11:08
SIMULATOR VAPOR 34.0°C	0.157	11:08
SIMULATOR VAPOR 34.0°C	0.157	11:09
SIMULATOR VAPOR 34.0°C	0.157	11:11
SIMULATOR VAPOR 34.1°C	0.158	11:12
SIMULATOR VAPOR 34.0°C	0.158	11:13
SIMULATOR VAPOR 34.1°C	0.158	11:14
SIMULATOR VAPOR 34.1°C	0.159	11:15
SIMULATOR VAPOR 34.0°C	0.159	11:16
SIMULATOR VAPOR 34.0°C	0.159	11:18
SIMULATOR VAPOR 34.1°C	0.159	11:19
BLANK TEST	0.000	11:20

Average = 0.158
Std Dev = 0.000

LS 12/13/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

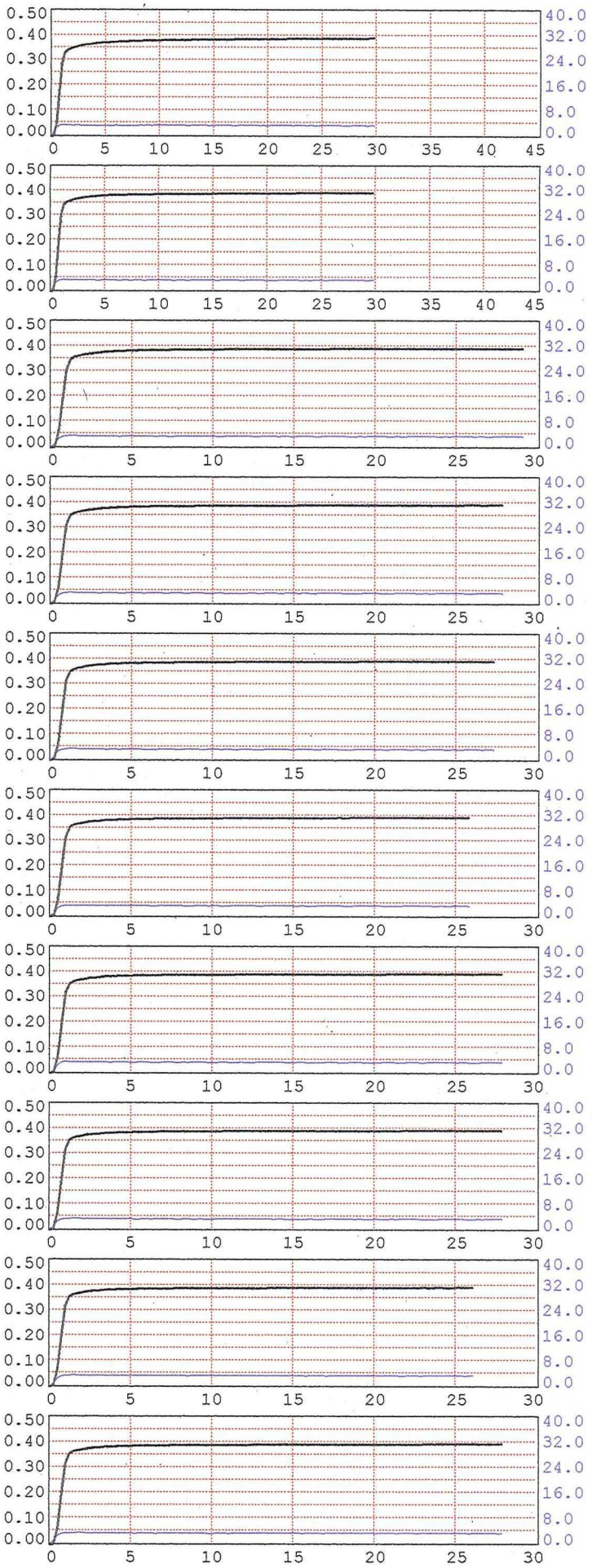
DataMater DMT: 104909

Date: 12/13/2011
Time: 11:28:35

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-40-400
SOLUTION CONCENTRATION: 0.408

BLANK TEST	0.000	11:29
CALIBRATION CHECK	PASSED	11:29
SIMULATOR VAPOR 34.1°C	0.388	11:30
SIMULATOR VAPOR 34.0°C	0.389	11:31
SIMULATOR VAPOR 34.1°C	0.390	11:33
SIMULATOR VAPOR 34.0°C	0.390	11:34
SIMULATOR VAPOR 34.1°C	0.392	11:35
SIMULATOR VAPOR 34.0°C	0.392	11:37
SIMULATOR VAPOR 34.1°C	0.391	11:38
SIMULATOR VAPOR 34.0°C	0.391	11:39
SIMULATOR VAPOR 34.1°C	0.390	11:41
SIMULATOR VAPOR 34.0°C	0.391	11:42
BLANK TEST	0.000	11:43

Average = 0.390
Std Dev = 0.001

L5 12/13/11 [illegible]