100149 Barre City PD.

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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** 9/23/11
Sales Order No. 44740

Ship Date 9/30/11
Packing List No. 69007

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 100149

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 100149						None Given	No Draw # / NONE
Serial Nos.	100149						

Opened
10-5-11

National Patent
Analytical Systems, Inc.

On this date 9/23/11, NPAS received instrument # 100149.

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. 9/29/11

Print Name of Reviewer: DAVID RADOMSKI

Signature of Reviewer and Date: David Radomski 9/30/11

[illegible]
10-5-11

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

DataMaster DMT Serial Number 100149

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)									
completes 10/12/11	0.979156 10-12-11	34.0	11-39-100	0.099 10-12-11 10/13/11	G5074 10/24/11	10/13/11	100% 10-13-11	100% 10-19-11	100% 10/18/11 10-19-11	100% 10-13-11	100% 10/13/11	100% 10/14/11	100% 10-17-11
0	10/13/11	34.0	GLCTH 11050	0.100 10-12-11 10/13/11									

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)
10-13-11	10/14/11 10-14-11	10/18/11	10-18-11 10/19/11	10/19/11	10/19/11 10-19-11	34.0	GLCTH 11050	0.101 10/19/11
						34.0	12-22-100	0.100 10/19/11

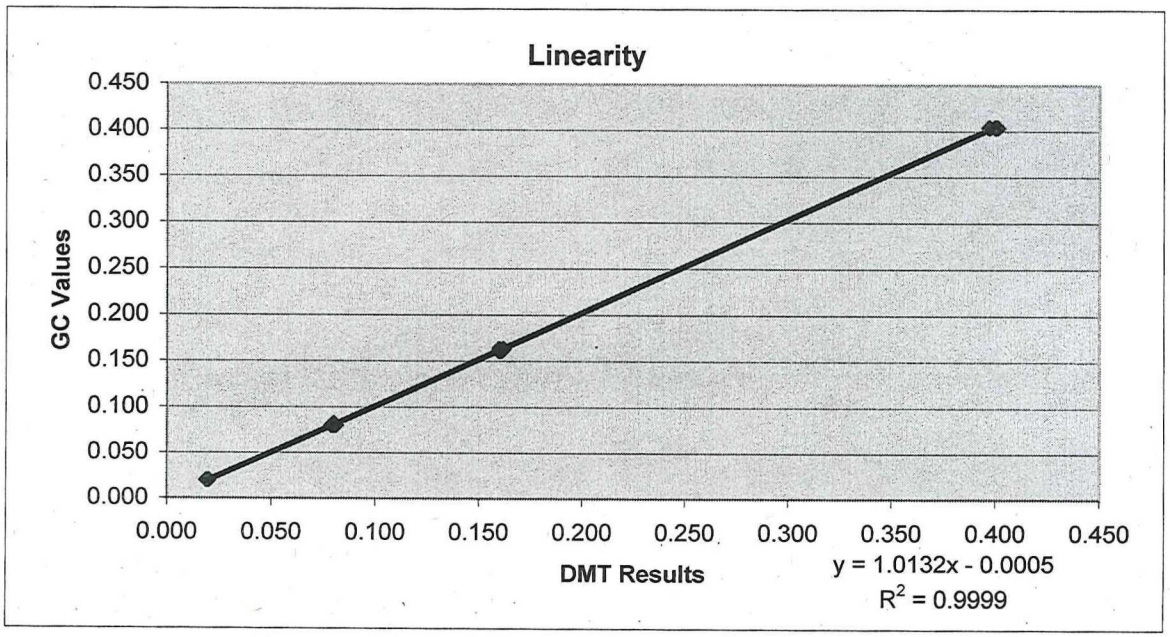
Notes: Recalibrate instrument due to poor performance on interference testing. 10/12/11
Calibration solution NIST Temp = 34.0°C 10/12/11
H_2O for calibration NIST Temp = 34.0°C 10/12/11
Voltages reset during new powerup. 10-12-11

Analyst: 10/19/11 **Reviewer:** 10/24/11 **Reviewer:** 10/24/11

Alc. 642B Rev. 0, July 2011

DataMaster DMT Serial Number 100149

Operator	Date	GC Value	DMT Average	Std Dev	% Recovery
KLK	10/13/2011	0.020	0.020	0.000	100
KLK	10/13/2011	0.080	0.079	0.000	98
KLK	10/13/2011	0.161	0.161	0.000	100
SRM	10/13/2011	0.404	0.400	0.000	99
SRM	10/14/2011	0.020	0.019	0.000	95
SRM	10/14/2011	0.080	0.080	0.000	100
SRM	10/14/2011	0.161	0.160	0.000	99
SRM	10/14/2011	0.404	0.397	0.000	98
KLK	10/18/2011	0.020	0.020	0.000	100
KLK	10/18/2011	0.080	0.080	0.000	100
KLK	10/18/2011	0.163	0.162	0.000	99
SRM	10/18/2011	0.404	0.401	0.000	99
SRM	10/18/2011	0.020	0.020	0.000	100
KLK	10/18/2011	0.080	0.081	0.000	101
KLK	10/18/2011	0.163	0.162	0.000	99
KLK	10/18/2011	0.404	0.400	0.000	99
KLK	10/19/2011	0.020	0.020	0.000	100
SRM	10/19/2011	0.082	0.080	0.000	97
SRM	10/19/2011	0.163	0.160	0.000	98
KLK	10/19/2011	0.404	0.397	0.000	98
			Average	0.0000	99
			Std Dev	0.0000	
			Range		95 - 101



Log On Record History

Test Date	Test Time	Name
10/05/2011	10:20:04	Kirk Kimball
10/06/2011	07:15:34	Steven Merrill
10/06/2011	09:28:52	Kirk Kimball
10/07/2011	11:51:00	Kirk Kimball
10/07/2011	12:44:31	Kirk Kimball
10/11/2011	07:10:34	Kirk Kimball
10/12/2011	07:51:38	Kirk Kimball
10/12/2011	11:38:46	Kirk Kimball
10/12/2011	14:44:55	Kirk Kimball
10/12/2011	15:35:00	Kirk Kimball
10/13/2011	07:06:13	Kirk Kimball
10/13/2011	09:40:41	Steven Merrill
10/13/2011	10:26:47	Kirk Kimball
10/14/2011	09:07:27	Steven Merrill
10/14/2011	10:06:33	Steven Merrill
10/14/2011	11:17:31	Steven Merrill
10/14/2011	14:18:20	Steven Merrill
10/14/2011	17:43:23	Kirk Kimball
10/17/2011	07:54:30	Kirk Kimball
10/17/2011	11:23:37	Kirk Kimball
10/18/2011	07:00:29	Kirk Kimball
10/18/2011	10:38:17	Kirk Kimball
10/18/2011	13:43:05	Steven Merrill
10/18/2011	15:00:33	Kirk Kimball
10/19/2011	07:17:49	Kirk Kimball

SECTION 2

POWER UP TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 100149
Location:
Calibration Date: 10/07/2011
Certification Date: 10/11/2011
Installation Date:
Test Date: 10/12/2011
Test Time: 14:29:31

VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.2°C
Breath Tube = 44.3°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.660 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0026	0.0016
MIN(V)	-0.0039	0.0002

FILTER INFO

Filter 1	0.001	Zero = true
Filter 2	0.287	Zero = true
Filter 3	0.529	Zero = true

CALIBRATION CHECK
Xq = 0.080 1.09%

CALIBRATION REPORT

DataMaster DMT: 100149
Calibration Date: 10/12/2011
Calibrated by: KIRK L KIMBALL
Lot: 11-37-100

```
Ca  = 0.100
CAL = 0.979156   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  = 0.080      0.050  <=  Xq < 0.200
a21 = 1.183266   1.050  <= a21 < 1.300
a31 = 0.566351   0.300  <= a31 < 0.800
```

Performed by KLK Date 10/12/2011

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/12/2011
Time: 14:58:14

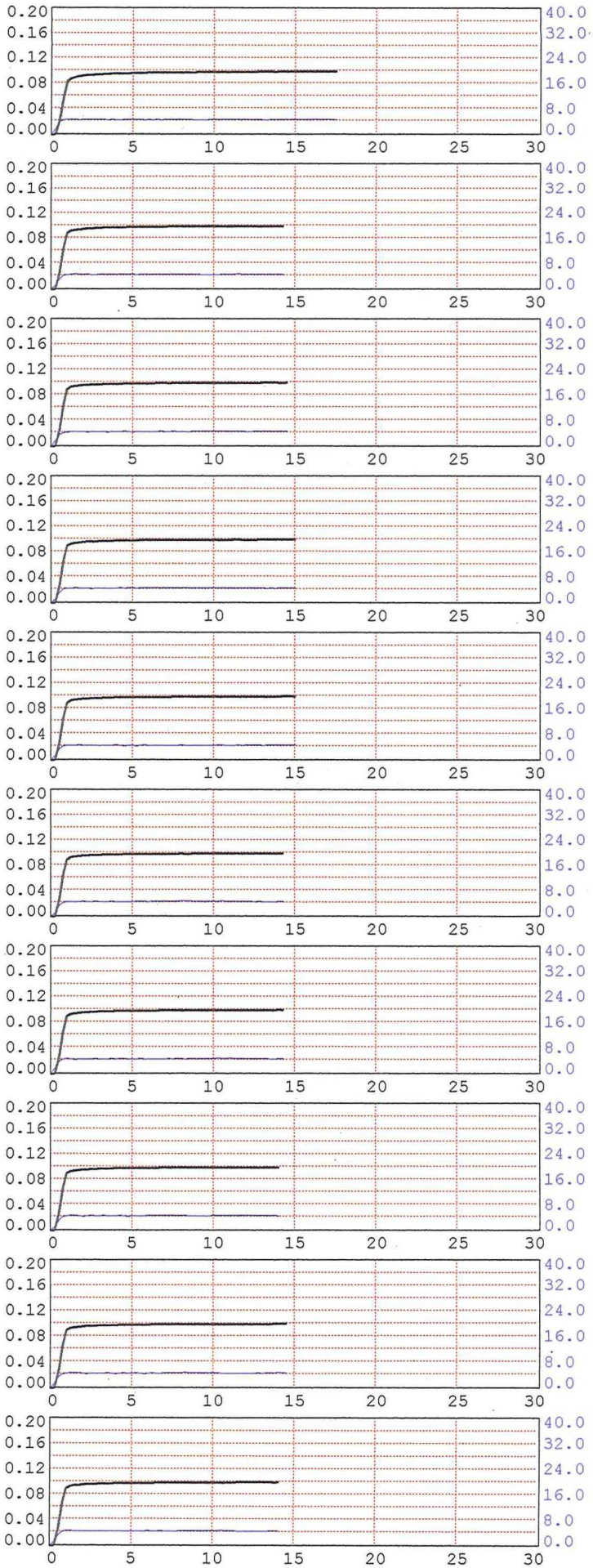
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	14:59
CALIBRATION CHECK	PASSED	14:59
SIMULATOR VAPOR 33.9°C	0.099	14:59
SIMULATOR VAPOR 34.0°C	0.099	15:00
SIMULATOR VAPOR 34.0°C	0.100	15:01
SIMULATOR VAPOR 33.9°C	0.100	15:02
SIMULATOR VAPOR 33.9°C	0.100	15:04
SIMULATOR VAPOR 33.9°C	0.099	15:05
SIMULATOR VAPOR 33.9°C	0.100	15:06
SIMULATOR VAPOR 34.0°C	0.099	15:07
SIMULATOR VAPOR 33.9°C	0.100	15:08
SIMULATOR VAPOR 33.9°C	0.100	15:09
BLANK TEST	0.000	15:10

Average = 0.099
Std Dev = 0.000

Fahouse
Calcheck
KLK
10-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/12/2011
Time: 15:36:16

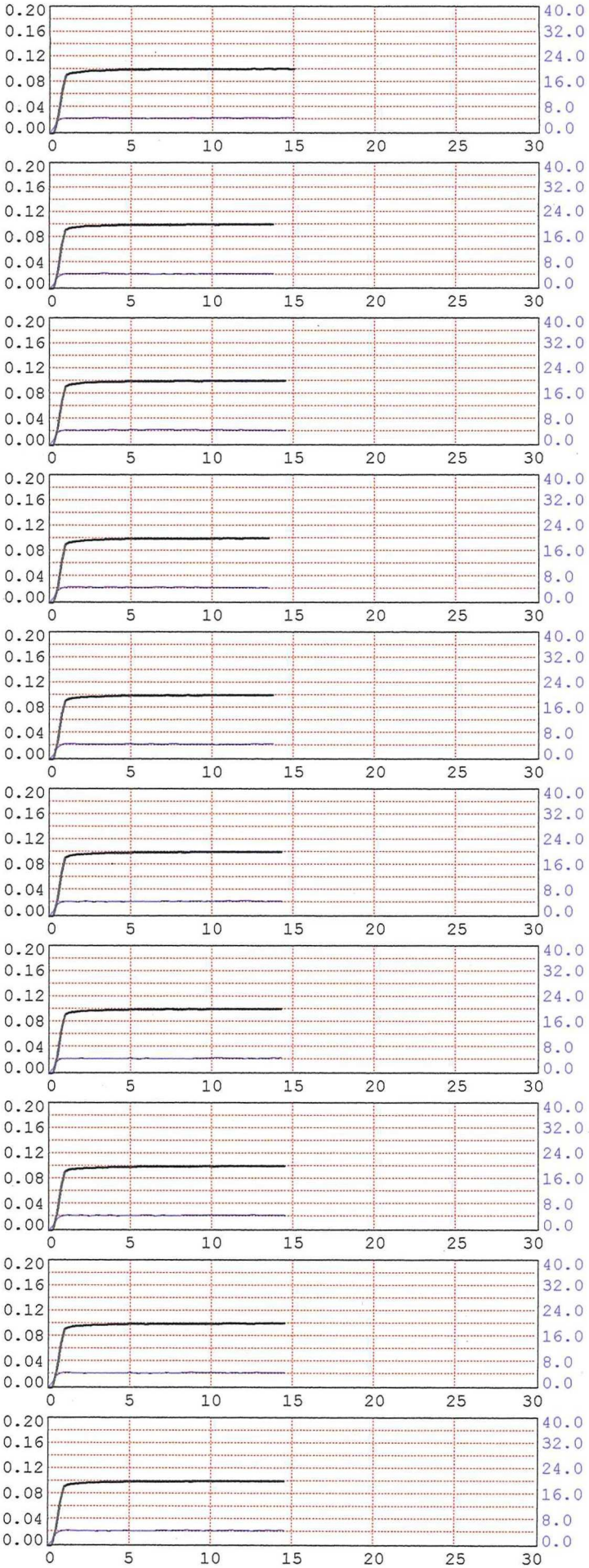
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: GUTH 11050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	15:37
CALIBRATION CHECK	PASSED	15:37
SIMULATOR VAPOR 33.9°C	0.101	15:37
SIMULATOR VAPOR 33.8°C	0.101	15:38
SIMULATOR VAPOR 33.9°C	0.101	15:39
SIMULATOR VAPOR 33.9°C	0.100	15:40
SIMULATOR VAPOR 34.0°C	0.101	15:41
SIMULATOR VAPOR 33.9°C	0.100	15:43
SIMULATOR VAPOR 33.9°C	0.101	15:44
SIMULATOR VAPOR 33.9°C	0.101	15:45
SIMULATOR VAPOR 33.9°C	0.101	15:46
SIMULATOR VAPOR 33.9°C	0.101	15:47
BLANK TEST	0.000	15:48

Average = 0.100
Std Dev = 0.000

2nd Source cal check
10-12-11



DIAGNOSTIC RESULT

DataMaster DMT: 100149
Location:
Calibration Date: 10/12/2011
Certification Date:
Installation Date:
Test Date: 10/13/2011
Test Time: 07:07:25

VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 44.5°C
Digital Sim = 33.9°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.676 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0024	0.0065
MIN(V)	0.0008	0.0051

FILTER INFO
Filter 1 0.006 Zero = true
Filter 2 0.292 Zero = true
Filter 3 0.531 Zero = true

CALIBRATION CHECK
Xq = 0.080 0.11%

CERTIFICATION REPORT

DataMaster DMT: 100149
Calibration Date: 10/12/2011
Certification Date: 10/13/2011
Certified by: KIRK L KIMBALL

Diagnostic Results

VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.2°C
Breath Tube = 43.7°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.636 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0085	0.0112
MIN(V)	0.0073	0.0100

FILTER INFO
Filter 1 0.010 Zero = true
Filter 2 0.297 Zero = true
Filter 3 0.544 Zero = true

CALIBRATION CHECK
Xq = 0.080 0.11%

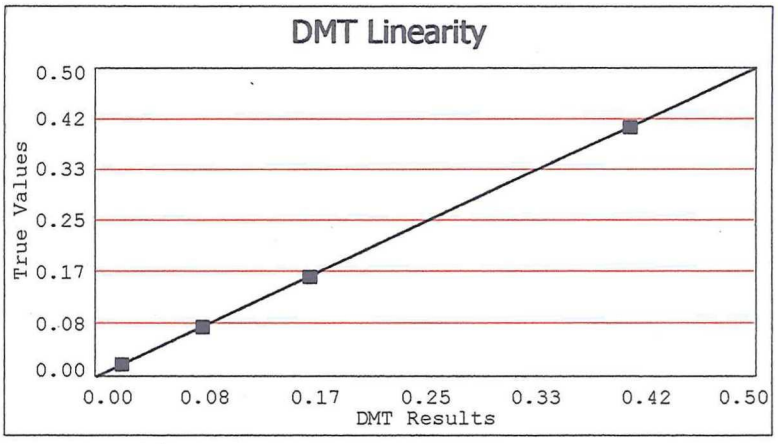
Options

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 # 12-19-020	0.020 g/210L	0.0000
0.080 g/210L Lot # 12-16-080	0.081 g/210L	0.0000
0.161 g/210L Lot # 12-12-160	0.162 g/210L	0.0000
0.404 g/210L Lot # 12-20-400	0.404 g/210L	0.0000

$R^2 = 1$



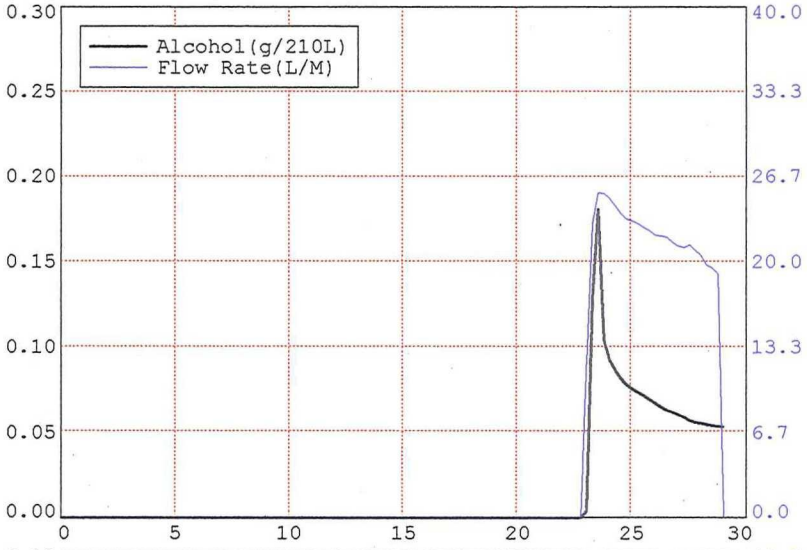
Acetone Interference Test

Lot # 12-16-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

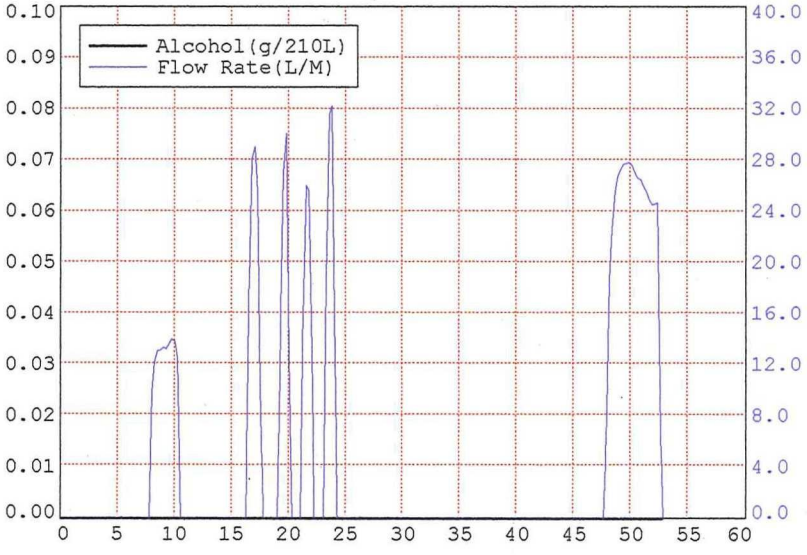


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by _____ Date 10/13/2011

Reviewed by _____ Date 10-13-11

SECTION 3

LINEARITY TESTS

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/13/2011
Time: 10:27:48

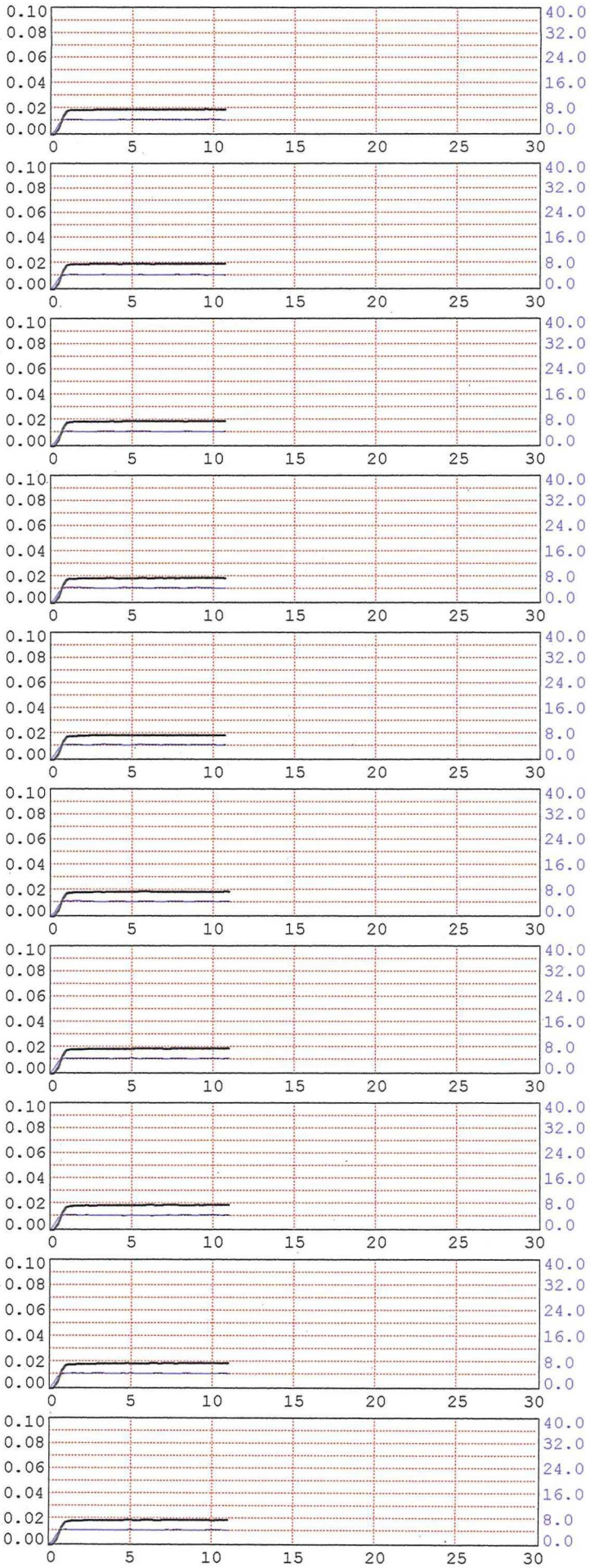
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-19-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	10:28
CALIBRATION CHECK	PASSED	10:28
SIMULATOR VAPOR 33.9°C	0.021	10:29
SIMULATOR VAPOR 33.9°C	0.021	10:30
SIMULATOR VAPOR 34.0°C	0.020	10:31
SIMULATOR VAPOR 34.0°C	0.020	10:32
SIMULATOR VAPOR 33.9°C	0.020	10:33
SIMULATOR VAPOR 33.9°C	0.020	10:34
SIMULATOR VAPOR 33.9°C	0.020	10:35
SIMULATOR VAPOR 33.9°C	0.020	10:36
SIMULATOR VAPOR 34.0°C	0.020	10:37
SIMULATOR VAPOR 33.9°C	0.020	10:38
BLANK TEST	0.000	10:39

Average = 0.020
Std Dev = 0.000

L-1
KLK
10-13-11



DIAGNOSTIC RESULT

DataMaster DMT: 100149
Location:
Calibration Date: 10/12/2011
Certification Date: 10/13/2011
Installation Date:
Test Date: 10/13/2011
Test Time: 10:42:26

VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube = 42.9°C
Digital Sim = 33.9°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.654 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0077	0.0110
MIN(V)	0.0059	0.0096

FILTER INFO

Filter 1	0.010	Zero = true
Filter 2	0.297	Zero = true
Filter 3	0.545	Zero = true

CALIBRATION CHECK
Xq = 0.080 0.54%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/13/2011
Time: 10:44:39

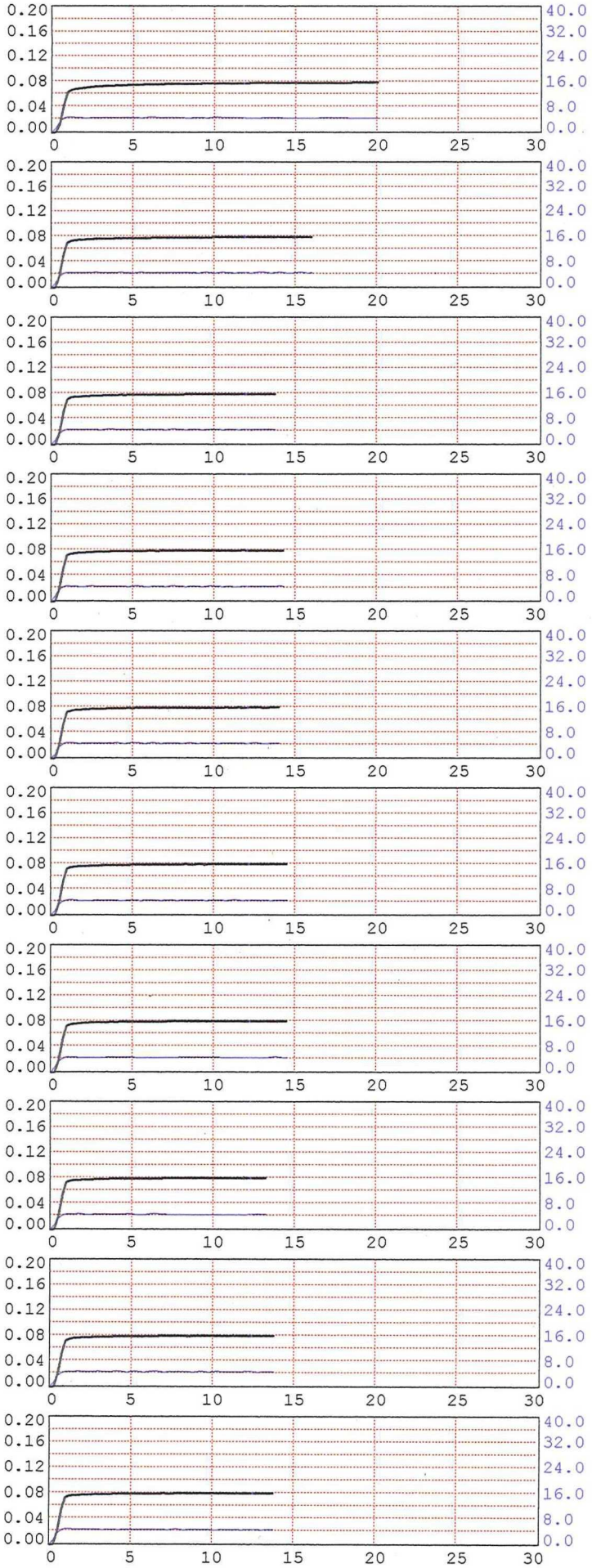
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-16-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	10:45
CALIBRATION CHECK	PASSED	10:45
SIMULATOR VAPOR 34.0°C	0.079	10:46
SIMULATOR VAPOR 34.0°C	0.080	10:47
SIMULATOR VAPOR 33.9°C	0.079	10:48
SIMULATOR VAPOR 33.9°C	0.080	10:49
SIMULATOR VAPOR 34.0°C	0.080	10:50
SIMULATOR VAPOR 34.0°C	0.080	10:51
SIMULATOR VAPOR 33.9°C	0.080	10:52
SIMULATOR VAPOR 33.9°C	0.080	10:53
SIMULATOR VAPOR 34.0°C	0.080	10:54
SIMULATOR VAPOR 34.0°C	0.080	10:55
BLANK TEST	0.000	10:56

Average = 0.079
Std Dev = 0.000

L-1
KLK
10-13-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/13/2011
Time: 11:00:51

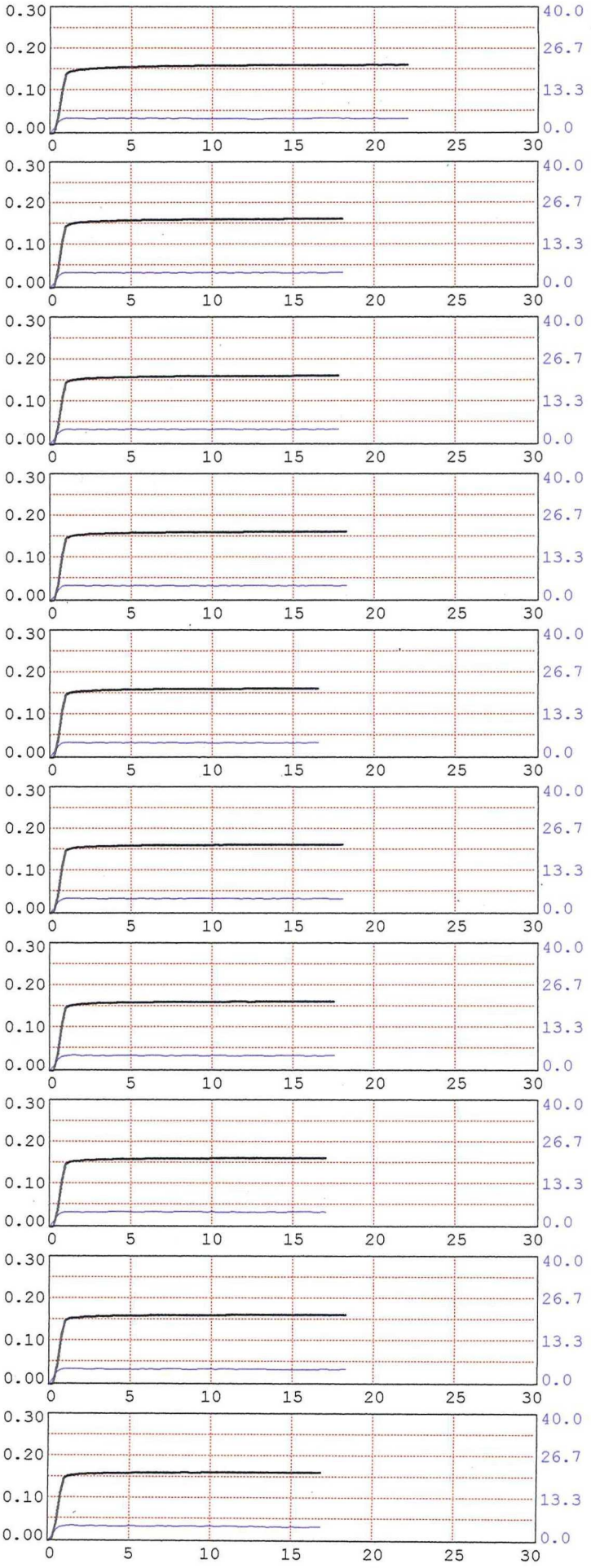
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	11:01
CALIBRATION CHECK	PASSED	11:01
SIMULATOR VAPOR 34.0°C	0.161	11:02
SIMULATOR VAPOR 34.0°C	0.161	11:03
SIMULATOR VAPOR 34.0°C	0.162	11:04
SIMULATOR VAPOR 34.0°C	0.162	11:05
SIMULATOR VAPOR 33.9°C	0.162	11:06
SIMULATOR VAPOR 34.0°C	0.162	11:08
SIMULATOR VAPOR 33.9°C	0.162	11:09
SIMULATOR VAPOR 34.0°C	0.162	11:10
SIMULATOR VAPOR 33.9°C	0.162	11:11
SIMULATOR VAPOR 34.0°C	0.162	11:12
BLANK TEST	0.000	11:13

Average = 0.161
Std Dev = 0.000

LI 10/13/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/13/2011
Time: 11:17:42

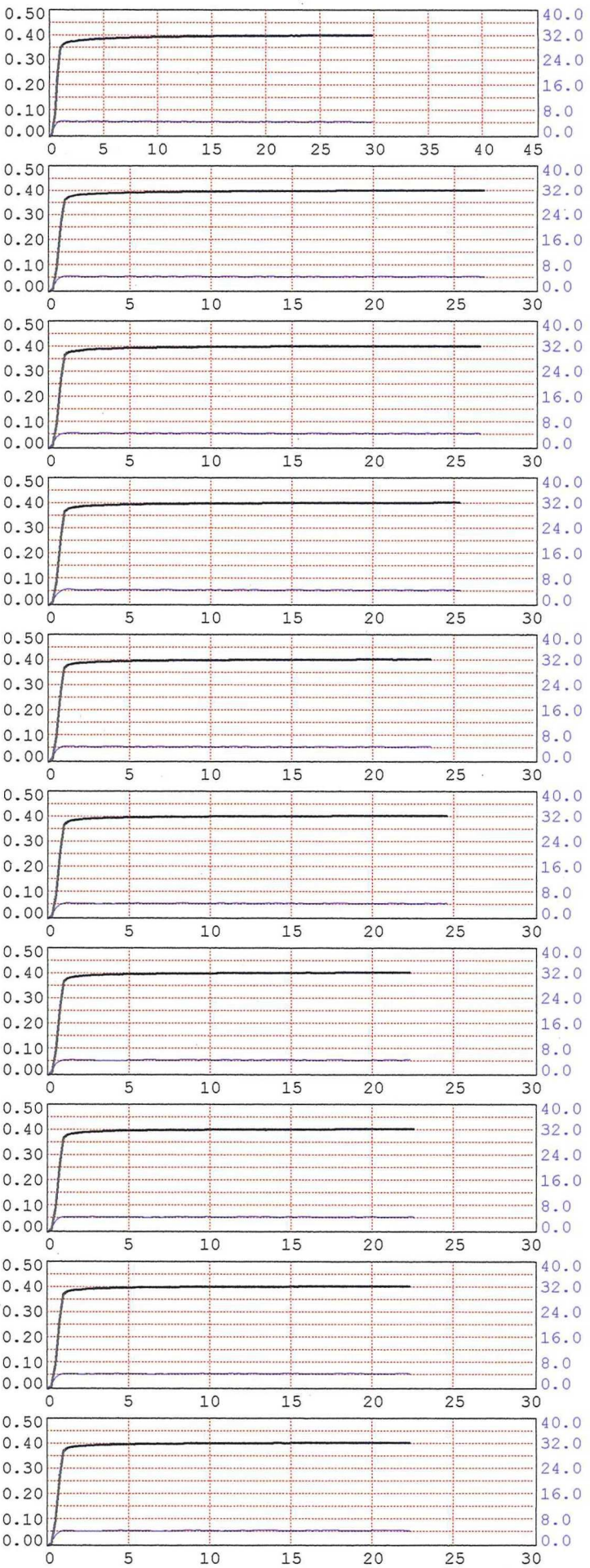
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-20-400
SOLUTION CONCENTRATION: 0.404

BLANK TEST	0.000	11:18
CALIBRATION CHECK	PASSED	11:18
SIMULATOR VAPOR 34.0°C	0.399	11:19
SIMULATOR VAPOR 34.0°C	0.400	11:20
SIMULATOR VAPOR 34.0°C	0.401	11:21
SIMULATOR VAPOR 33.9°C	0.400	11:23
SIMULATOR VAPOR 33.9°C	0.401	11:24
SIMULATOR VAPOR 34.0°C	0.402	11:25
SIMULATOR VAPOR 34.0°C	0.401	11:27
SIMULATOR VAPOR 34.0°C	0.401	11:28
SIMULATOR VAPOR 33.9°C	0.402	11:29
SIMULATOR VAPOR 33.9°C	0.402	11:30
BLANK TEST	0.000	11:31

Average = 0.400
Std Dev = 0.000

L-1
RREC
10-13-11



DIAGNOSTIC RESULT

DataMaster DMT: 100149
Location:
Calibration Date: 10/12/2011
Certification Date: 10/13/2011
Installation Date:
Test Date: 10/13/2011
Test Time: 14:01:06

VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 43.2°C
Digital Sim = 33.9°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.617 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0010	0.0059
MIN(V)	-0.0004	0.0041

FILTER INFO
Filter 1 0.005 Zero = true
Filter 2 0.293 Zero = true
Filter 3 0.531 Zero = true

CALIBRATION CHECK
Xq = 0.080 0.22%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/14/2011
Time: 09:08:01

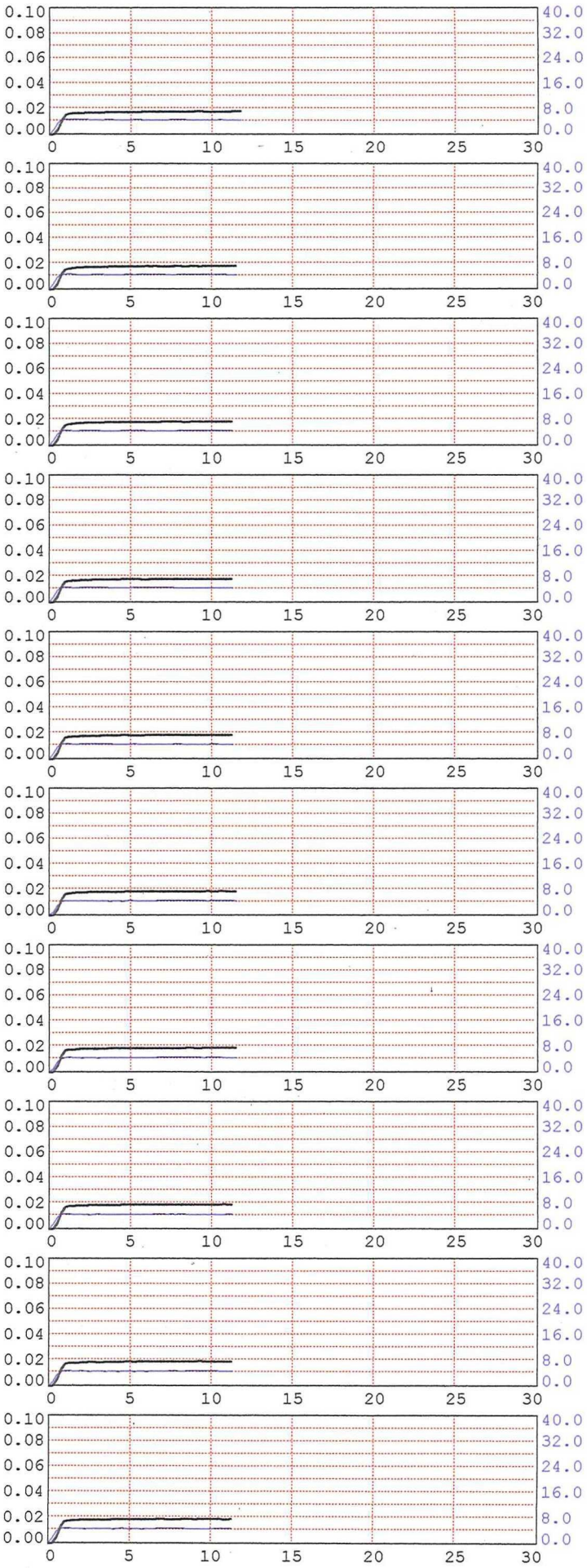
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-19-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	09:08
CALIBRATION CHECK	PASSED	09:09
SIMULATOR VAPOR 34.0°C	0.019	09:09
SIMULATOR VAPOR 34.0°C	0.019	09:10
SIMULATOR VAPOR 33.9°C	0.020	09:11
SIMULATOR VAPOR 34.0°C	0.019	09:12
SIMULATOR VAPOR 33.9°C	0.020	09:13
SIMULATOR VAPOR 33.9°C	0.020	09:14
SIMULATOR VAPOR 33.9°C	0.020	09:15
SIMULATOR VAPOR 33.9°C	0.020	09:16
SIMULATOR VAPOR 33.9°C	0.020	09:17
SIMULATOR VAPOR 34.0°C	0.020	09:18
BLANK TEST	0.000	09:19

Average = 0.019
Std Dev = 0.000

LJ 10/14/11



DIAGNOSTIC RESULT

DataMaster DMT: 100149
Location:
Calibration Date: 10/12/2011
Certification Date: 10/13/2011
Installation Date:
Test Date: 10/14/2011
Test Time: 09:22:09

VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.6°C
Breath Tube = 42.7°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 532 Hz

PUMP INFO
Flow Rate = 5.600 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0079	0.0110
MIN(V)	0.0067	0.0096

FILTER INFO
Filter 1 0.010 Zero = true
Filter 2 0.297 Zero = true
Filter 3 0.538 Zero = true

CALIBRATION CHECK
Xq = 0.080 0.43%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/14/2011
Time: 09:25:32

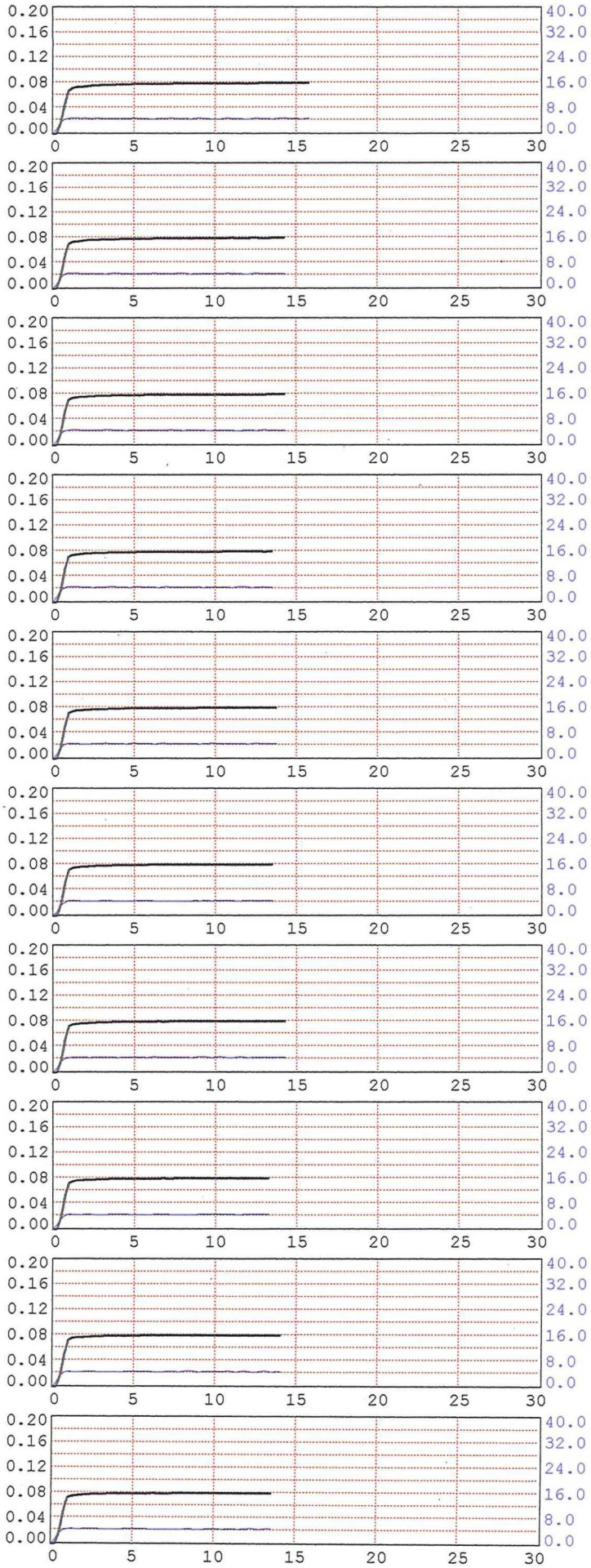
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-16-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	09:26
CALIBRATION CHECK	PASSED	09:26
SIMULATOR VAPOR 34.0°C	0.080	09:26
SIMULATOR VAPOR 33.9°C	0.080	09:27
SIMULATOR VAPOR 34.0°C	0.080	09:29
SIMULATOR VAPOR 33.9°C	0.080	09:30
SIMULATOR VAPOR 34.0°C	0.080	09:31
SIMULATOR VAPOR 34.0°C	0.081	09:32
SIMULATOR VAPOR 34.0°C	0.081	09:33
SIMULATOR VAPOR 34.0°C	0.081	09:34
SIMULATOR VAPOR 34.0°C	0.081	09:35
SIMULATOR VAPOR 34.0°C	0.081	09:36
BLANK TEST	0.000	09:37

Average = 0.080
Std Dev = 0.000

L2 10/14/11 SR



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/14/2011
Time: 10:07:34

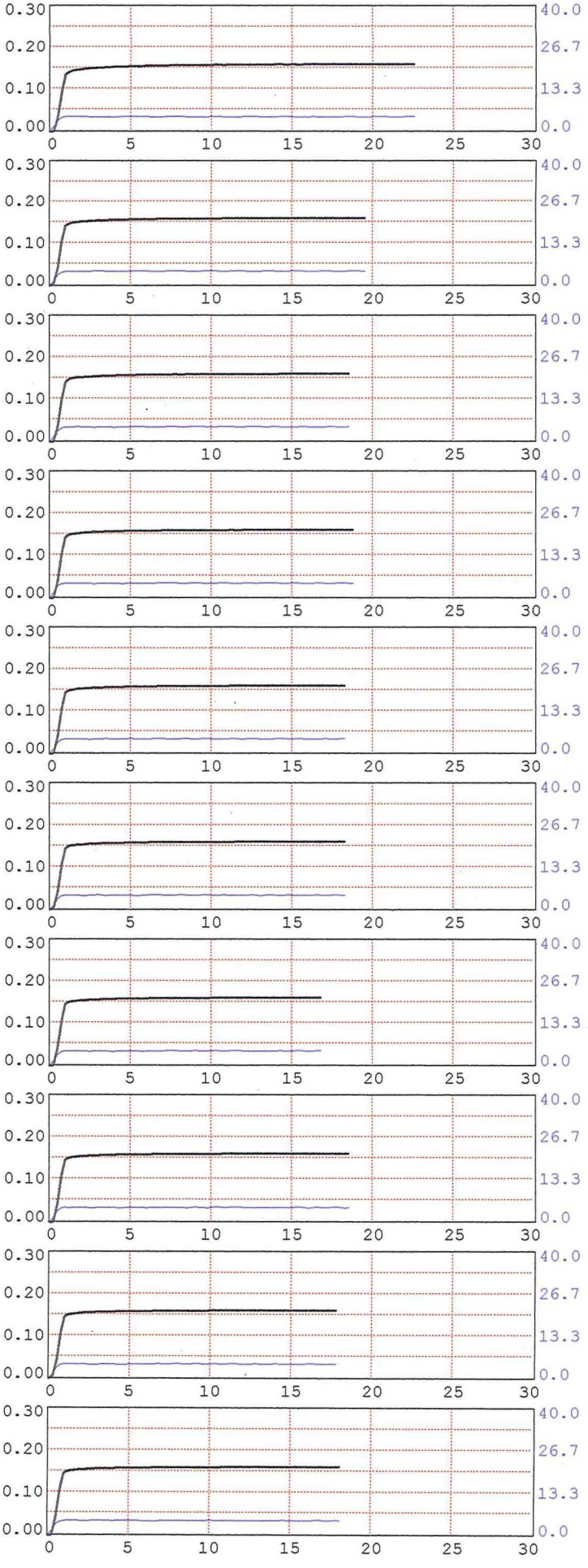
SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	10:08
CALIBRATION CHECK	PASSED	10:08
SIMULATOR VAPOR 33.9°C	0.160	10:09
SIMULATOR VAPOR 33.9°C	0.160	10:10
SIMULATOR VAPOR 33.9°C	0.160	10:11
SIMULATOR VAPOR 33.9°C	0.161	10:12
SIMULATOR VAPOR 33.9°C	0.161	10:13
SIMULATOR VAPOR 33.9°C	0.161	10:14
SIMULATOR VAPOR 34.0°C	0.161	10:16
SIMULATOR VAPOR 33.9°C	0.161	10:17
SIMULATOR VAPOR 33.9°C	0.161	10:18
SIMULATOR VAPOR 34.0°C	0.161	10:19
BLANK TEST	0.000	10:20

Average = 0.160
Std Dev = 0.000

LJ 10/14/11 SR



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/14/2011
Time: 10:23:41

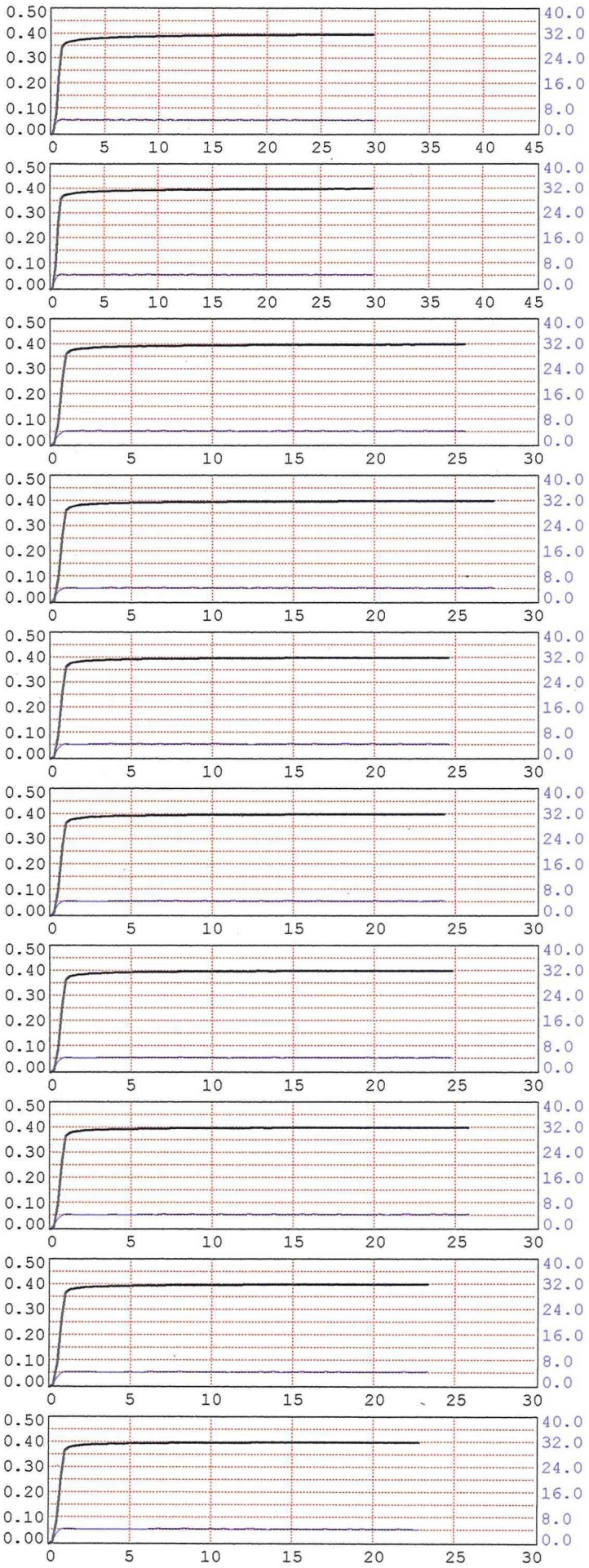
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-20-400
SOLUTION CONCENTRATION: 0.404

BLANK TEST	0.000	10:24
CALIBRATION CHECK	PASSED	10:24
SIMULATOR VAPOR 33.9°C	0.395	10:25
SIMULATOR VAPOR 33.9°C	0.397	10:26
SIMULATOR VAPOR 34.0°C	0.397	10:27
SIMULATOR VAPOR 34.0°C	0.397	10:29
SIMULATOR VAPOR 34.0°C	0.398	10:30
SIMULATOR VAPOR 33.9°C	0.398	10:31
SIMULATOR VAPOR 34.0°C	0.398	10:33
SIMULATOR VAPOR 33.9°C	0.398	10:34
SIMULATOR VAPOR 33.9°C	0.398	10:35
SIMULATOR VAPOR 33.9°C	0.398	10:36
BLANK TEST	0.000	10:37

Average = 0.397
Std Dev = 0.000

LJ 10/14/11 SRM



DIAGNOSTIC RESULT

DataMaster DMT: 100149
Location:
Calibration Date: 10/12/2011
Certification Date: 10/13/2011
Installation Date:
Test Date: 10/18/2011
Test Time: 08:21:38

VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.6°C
Breath Tube = 46.3°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 534 Hz

PUMP INFO
Flow Rate = 5.652 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0236	0.0274
MIN(V)	0.0226	0.0264

FILTER INFO
Filter 1 0.027 Zero = true
Filter 2 0.311 Zero = true
Filter 3 0.561 Zero = true

CALIBRATION CHECK
Xq = 0.080 0.22%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/18/2011
Time: 10:40:49

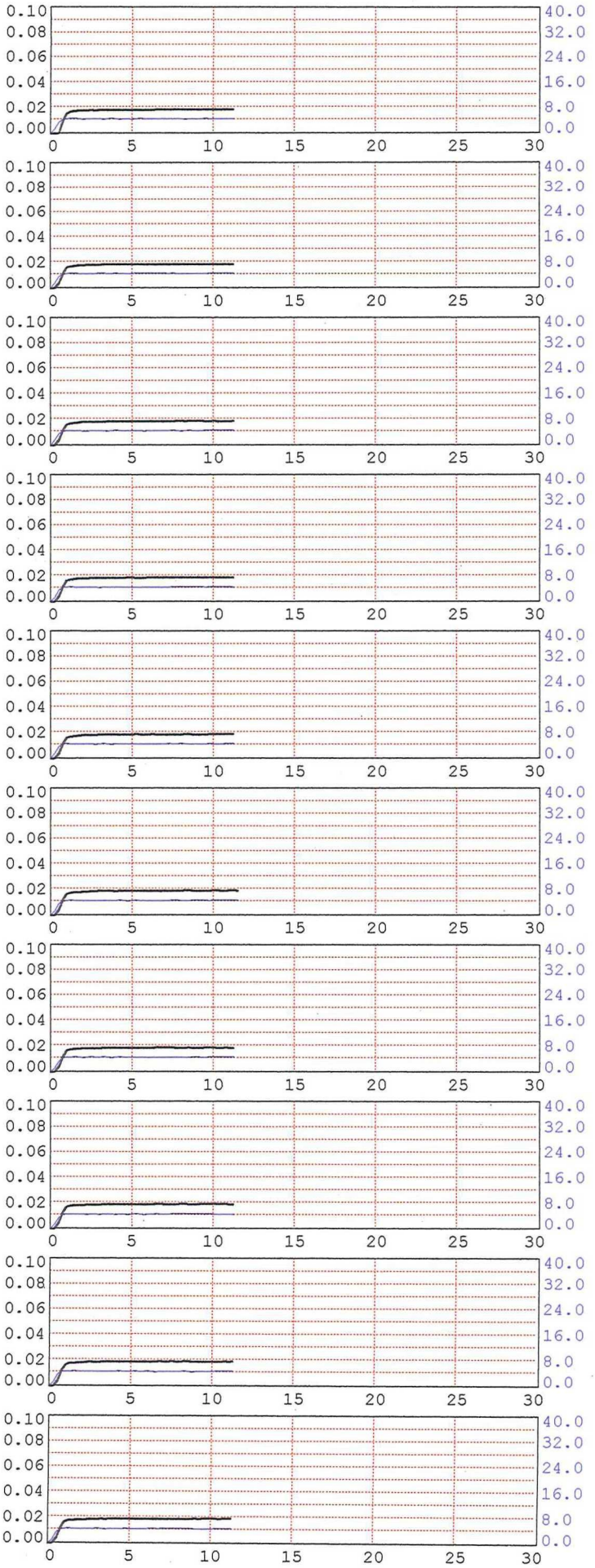
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-19-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	10:41
CALIBRATION CHECK	PASSED	10:41
SIMULATOR VAPOR 33.9°C	0.020	10:42
SIMULATOR VAPOR 33.9°C	0.020	10:43
SIMULATOR VAPOR 33.9°C	0.020	10:44
SIMULATOR VAPOR 33.9°C	0.020	10:45
SIMULATOR VAPOR 34.0°C	0.020	10:46
SIMULATOR VAPOR 33.9°C	0.020	10:47
SIMULATOR VAPOR 34.0°C	0.020	10:48
SIMULATOR VAPOR 33.9°C	0.020	10:49
SIMULATOR VAPOR 33.9°C	0.020	10:50
SIMULATOR VAPOR 33.9°C	0.020	10:51
BLANK TEST	0.000	10:52

Average = 0.020
Std Dev = 0.000

L-3
KLK
10-18-2011



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/18/2011
Time: 10:58:32

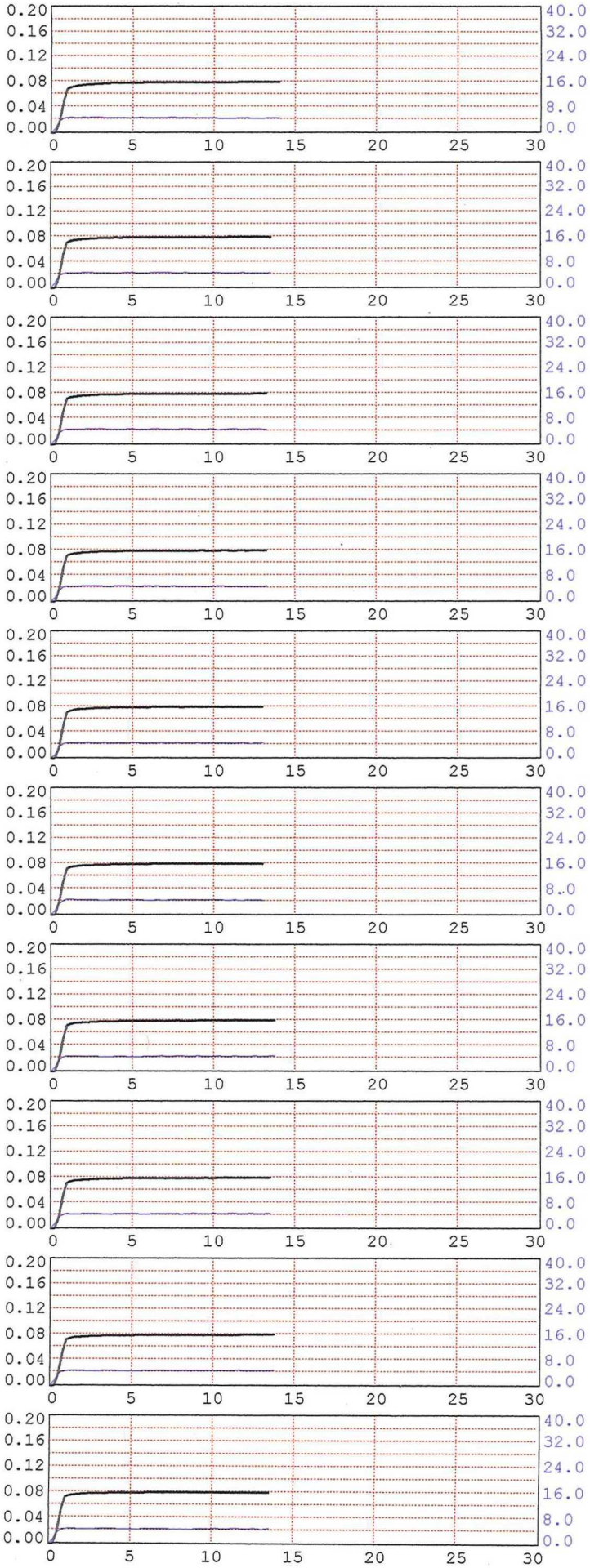
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-16-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	10:59
CALIBRATION CHECK	PASSED	10:59
SIMULATOR VAPOR 34.0°C	0.080	10:59
SIMULATOR VAPOR 33.9°C	0.080	11:00
SIMULATOR VAPOR 33.9°C	0.080	11:02
SIMULATOR VAPOR 34.0°C	0.080	11:03
SIMULATOR VAPOR 33.9°C	0.080	11:04
SIMULATOR VAPOR 34.0°C	0.080	11:05
SIMULATOR VAPOR 34.0°C	0.080	11:06
SIMULATOR VAPOR 33.9°C	0.080	11:07
SIMULATOR VAPOR 34.0°C	0.080	11:08
SIMULATOR VAPOR 34.0°C	0.080	11:09
BLANK TEST	0.000	11:10

Average = 0.080
Std Dev = 0.000

L3 10/18/11 SR



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/18/2011
Time: 11:13:54

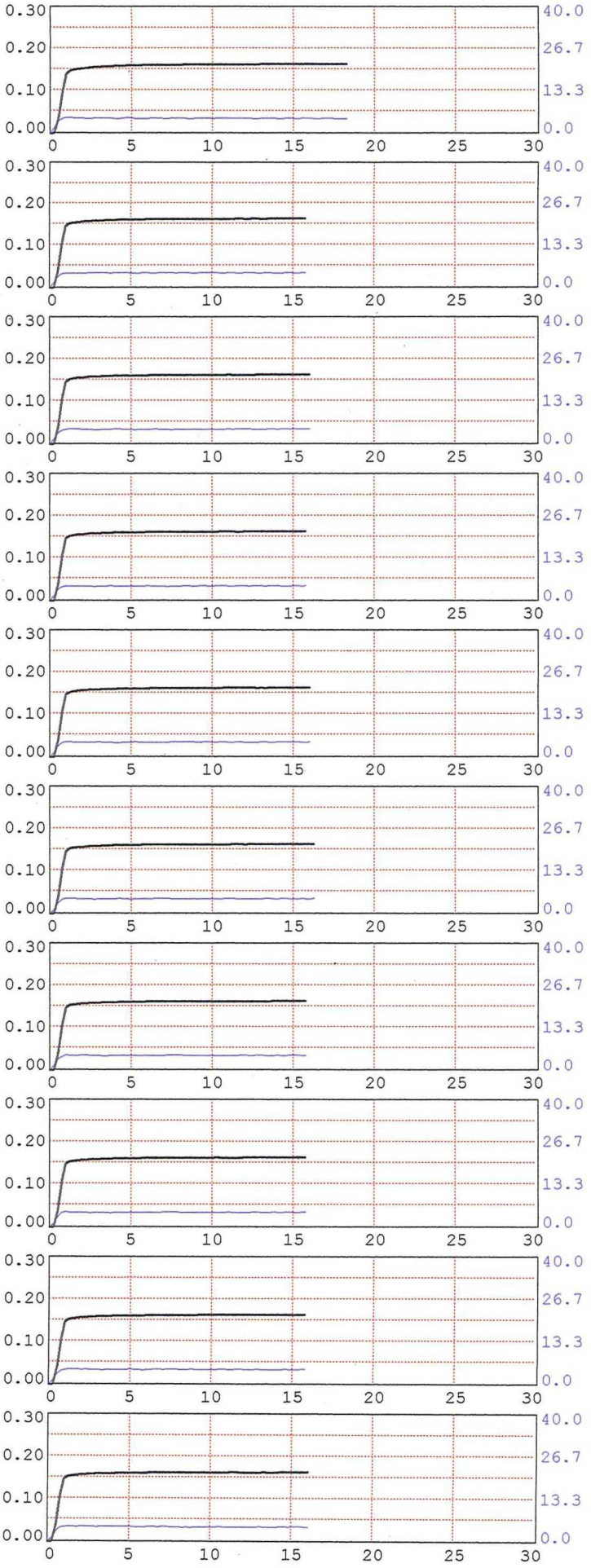
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-24-160
SOLUTION CONCENTRATION: 0.163

BLANK TEST	0.000	11:14
CALIBRATION CHECK	PASSED	11:14
SIMULATOR VAPOR 33.9°C	0.163	11:15
SIMULATOR VAPOR 34.0°C	0.163	11:16
SIMULATOR VAPOR 34.0°C	0.162	11:17
SIMULATOR VAPOR 34.0°C	0.162	11:18
SIMULATOR VAPOR 34.0°C	0.162	11:19
SIMULATOR VAPOR 34.0°C	0.162	11:20
SIMULATOR VAPOR 34.0°C	0.162	11:22
SIMULATOR VAPOR 34.0°C	0.162	11:23
SIMULATOR VAPOR 34.0°C	0.162	11:24
SIMULATOR VAPOR 34.0°C	0.162	11:25
BLANK TEST	0.000	11:26

Average = 0.162
Std Dev = 0.000

L3 10/18/11 [illegible]



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/18/2011
Time: 11:32:52

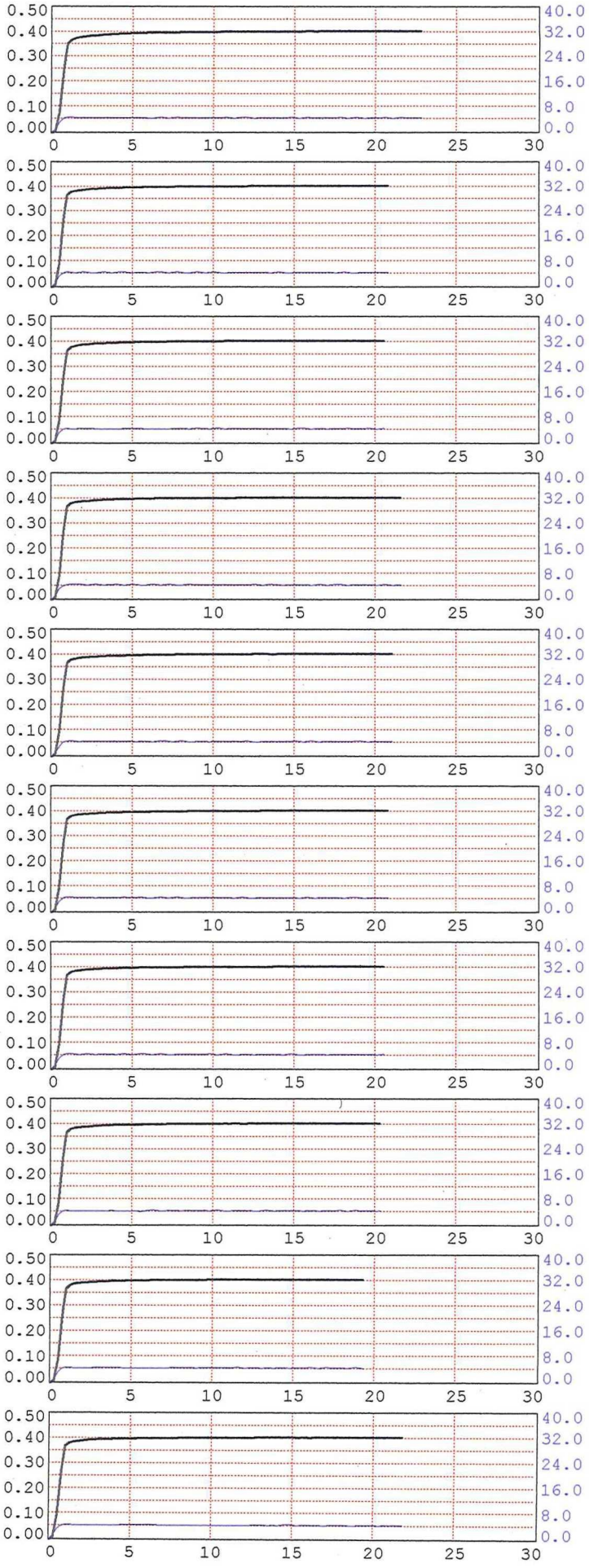
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-20-400
SOLUTION CONCENTRATION: 0.404

BLANK TEST	0.000	11:33
CALIBRATION CHECK	PASSED	11:33
SIMULATOR VAPOR 34.2°C	0.401	11:34
SIMULATOR VAPOR 34.2°C	0.401	11:35
SIMULATOR VAPOR 34.2°C	0.401	11:36
SIMULATOR VAPOR 34.4°C	0.401	11:38
SIMULATOR VAPOR 34.2°C	0.401	11:39
SIMULATOR VAPOR 34.2°C	0.400	11:40
SIMULATOR VAPOR 34.2°C	0.401	11:41
SIMULATOR VAPOR 34.2°C	0.401	11:42
SIMULATOR VAPOR 34.2°C	0.402	11:44
SIMULATOR VAPOR 34.2°C	0.401	11:45
BLANK TEST	0.000	11:46

Average = 0.401
Std Dev = 0.000

L3 10/18/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/18/2011
Time: 13:43:49

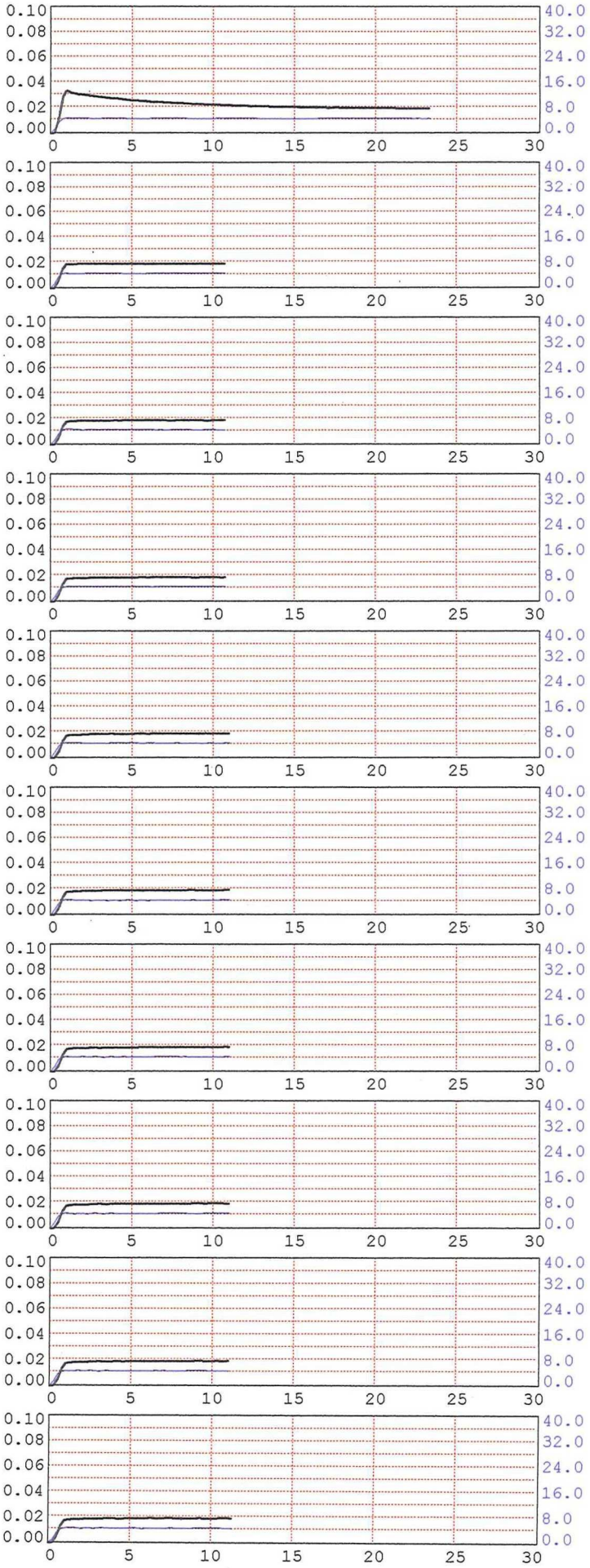
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-19-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	13:44
CALIBRATION CHECK	PASSED	13:44
SIMULATOR VAPOR 34.4°C	0.020	13:45
SIMULATOR VAPOR 34.4°C	0.020	13:46
SIMULATOR VAPOR 34.4°C	0.020	13:47
SIMULATOR VAPOR 34.4°C	0.020	13:48
SIMULATOR VAPOR 34.4°C	0.020	13:49
SIMULATOR VAPOR 34.4°C	0.020	13:50
SIMULATOR VAPOR 34.4°C	0.020	13:51
SIMULATOR VAPOR 34.4°C	0.020	13:52
SIMULATOR VAPOR 34.4°C	0.020	13:53
SIMULATOR VAPOR 34.4°C	0.020	13:54
BLANK TEST	0.000	13:55

Average = 0.020
Std Dev = 0.000

L-4
10-18-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/18/2011
Time: 15:25:51

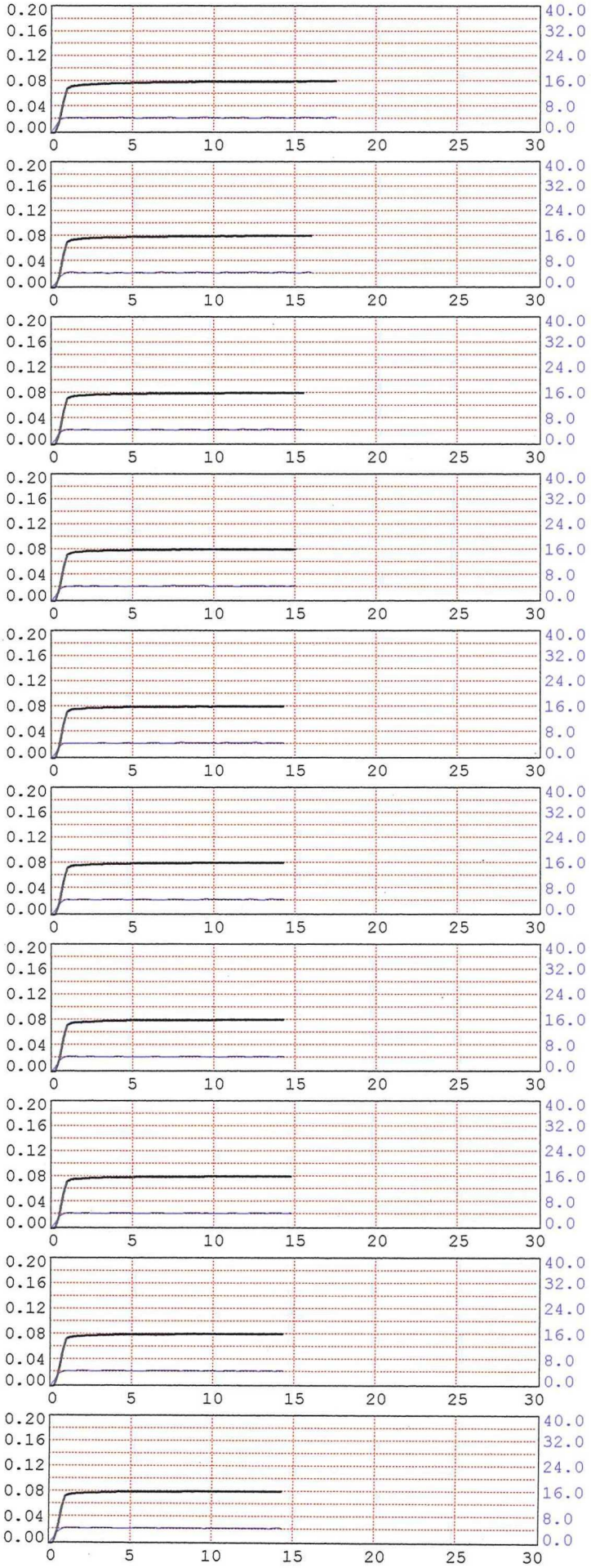
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-21-080
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	15:26
CALIBRATION CHECK	PASSED	15:26
SIMULATOR VAPOR 34.5°C	0.081	15:27
SIMULATOR VAPOR 34.4°C	0.081	15:28
SIMULATOR VAPOR 34.5°C	0.081	15:29
SIMULATOR VAPOR 34.4°C	0.082	15:30
SIMULATOR VAPOR 34.4°C	0.081	15:31
SIMULATOR VAPOR 34.5°C	0.081	15:32
SIMULATOR VAPOR 34.5°C	0.081	15:33
SIMULATOR VAPOR 34.4°C	0.081	15:34
SIMULATOR VAPOR 34.5°C	0.081	15:36
SIMULATOR VAPOR 34.4°C	0.081	15:37
BLANK TEST	0.000	15:37

Average = 0.081
Std Dev = 0.000

L-4
KLK
10-18-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/18/2011
Time: 15:42:32

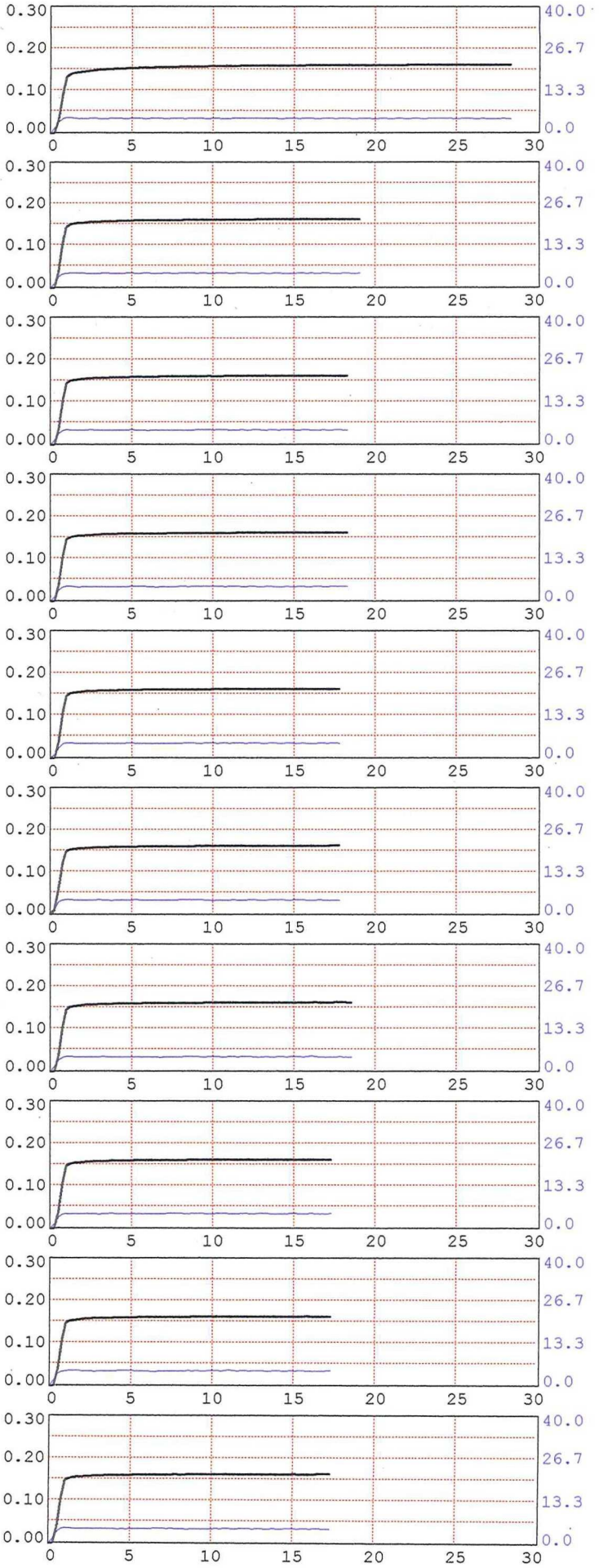
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-24-160
SOLUTION CONCENTRATION: 0.163

BLANK TEST	0.000	15:43
CALIBRATION CHECK	PASSED	15:43
SIMULATOR VAPOR 34.4°C	0.162	15:44
SIMULATOR VAPOR 34.4°C	0.162	15:45
SIMULATOR VAPOR 34.4°C	0.162	15:46
SIMULATOR VAPOR 34.5°C	0.162	15:47
SIMULATOR VAPOR 34.4°C	0.162	15:48
SIMULATOR VAPOR 34.4°C	0.162	15:49
SIMULATOR VAPOR 34.5°C	0.162	15:51
SIMULATOR VAPOR 34.4°C	0.162	15:52
SIMULATOR VAPOR 34.4°C	0.162	15:53
SIMULATOR VAPOR 34.4°C	0.162	15:54
BLANK TEST	0.000	15:55

Average = 0.162
Std Dev = 0.000

L-4
KLK
10-18-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/18/2011
Time: 16:01:39

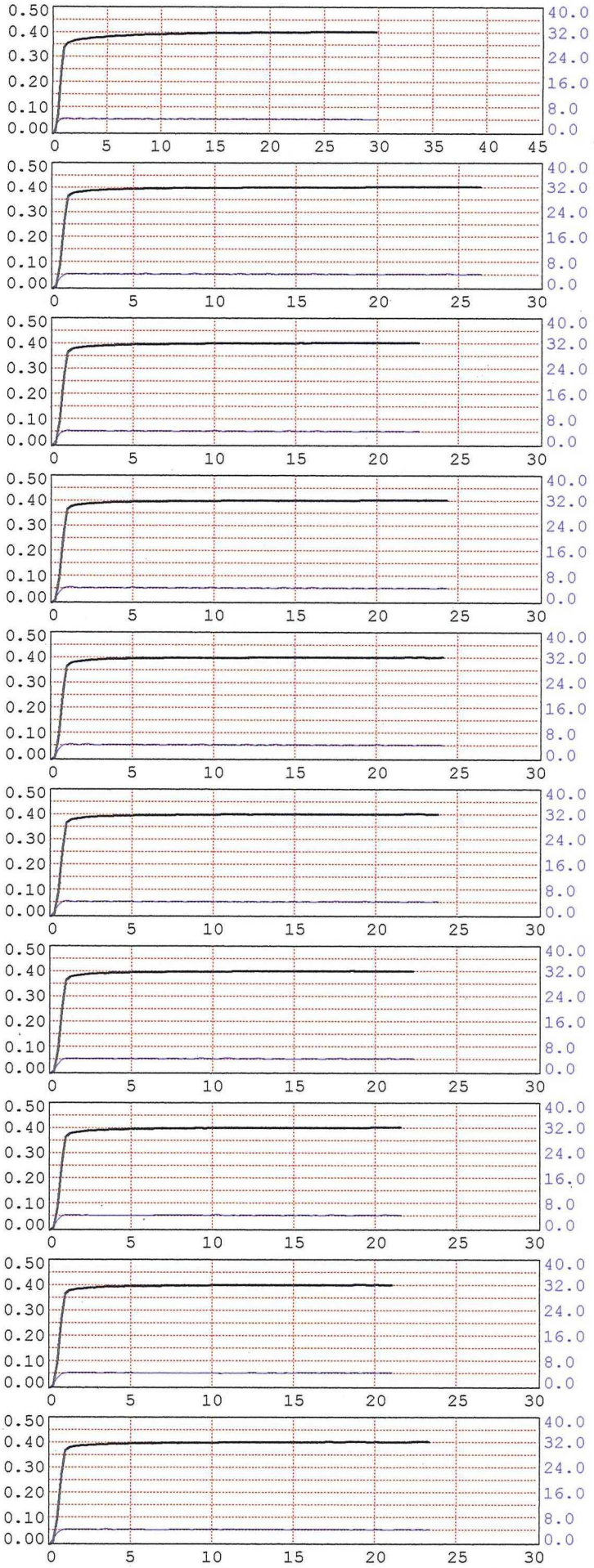
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-20-400
SOLUTION CONCENTRATION: 0.404

BLANK TEST	0.000	16:02
CALIBRATION CHECK	PASSED	16:02
SIMULATOR VAPOR 34.4°C	0.401	16:03
SIMULATOR VAPOR 34.4°C	0.401	16:04
SIMULATOR VAPOR 34.4°C	0.401	16:05
SIMULATOR VAPOR 34.4°C	0.401	16:07
SIMULATOR VAPOR 34.4°C	0.401	16:08
SIMULATOR VAPOR 34.4°C	0.401	16:09
SIMULATOR VAPOR 34.4°C	0.400	16:10
SIMULATOR VAPOR 34.4°C	0.400	16:12
SIMULATOR VAPOR 34.4°C	0.400	16:13
SIMULATOR VAPOR 34.4°C	0.401	16:14
BLANK TEST	0.000	16:15

Average = 0.400
Std Dev = 0.000

L-4
KLK
10-18-11



DIAGNOSTIC RESULT

DataMaster DMT: 100149
Location:
Calibration Date: 10/12/2011
Certification Date: 10/13/2011
Installation Date:
Test Date: 10/19/2011
Test Time: 07:17:51

VERSIONS
DMT: 1.00
PIC: 2.06
Modem: 2.1
Questions: 2.0

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 45.8°C
Digital Sim = 34.4°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.61 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.673 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0287	0.0315
MIN(V)	0.0272	0.0305

FILTER INFO
Filter 1 0.031 Zero = true
Filter 2 0.315 Zero = true
Filter 3 0.561 Zero = true

CALIBRATION CHECK
Xq = 0.080 0.22%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/19/2011
Time: 07:27:00

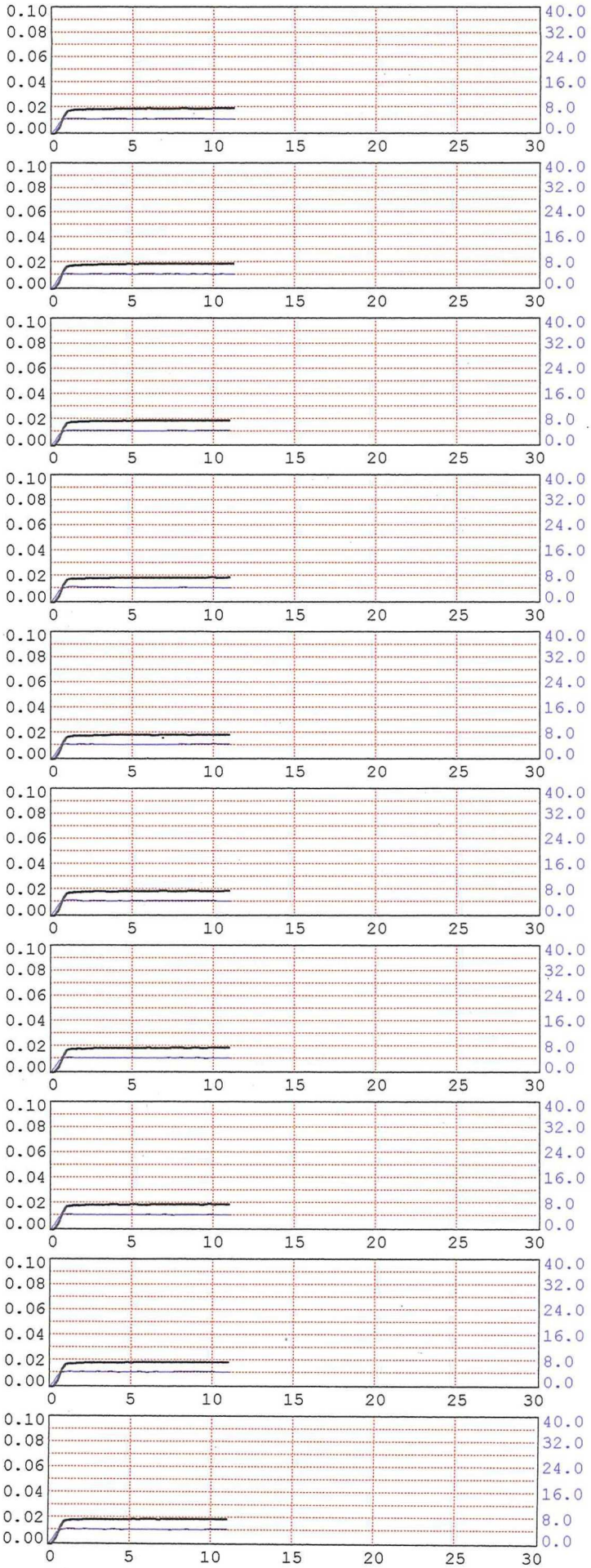
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-19-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	07:27
CALIBRATION CHECK	PASSED	07:28
SIMULATOR VAPOR 34.4°C	0.021	07:28
SIMULATOR VAPOR 34.4°C	0.020	07:29
SIMULATOR VAPOR 34.4°C	0.020	07:30
SIMULATOR VAPOR 34.2°C	0.020	07:31
SIMULATOR VAPOR 34.4°C	0.020	07:32
SIMULATOR VAPOR 34.4°C	0.020	07:33
SIMULATOR VAPOR 34.4°C	0.020	07:34
SIMULATOR VAPOR 34.4°C	0.020	07:35
SIMULATOR VAPOR 34.4°C	0.020	07:36
SIMULATOR VAPOR 34.2°C	0.020	07:37
BLANK TEST	0.000	07:38

Average = 0.020
Std Dev = 0.000

LS 10/19/11 SL



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/19/2011
Time: 07:41:34

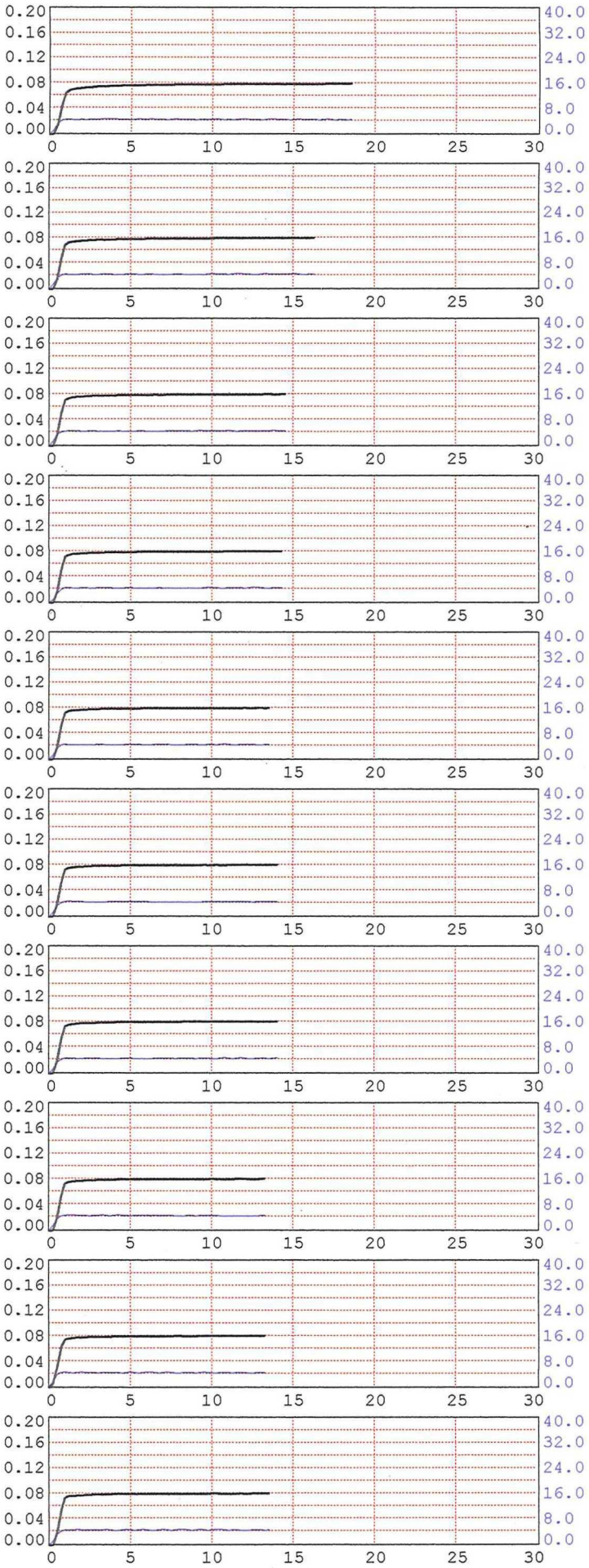
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-21-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST	0.000	07:42
CALIBRATION CHECK	PASSED	07:42
SIMULATOR VAPOR 34.4°C	0.080	07:42
SIMULATOR VAPOR 34.4°C	0.080	07:44
SIMULATOR VAPOR 34.4°C	0.081	07:45
SIMULATOR VAPOR 34.4°C	0.081	07:46
SIMULATOR VAPOR 34.4°C	0.080	07:47
SIMULATOR VAPOR 34.4°C	0.081	07:48
SIMULATOR VAPOR 34.2°C	0.081	07:49
SIMULATOR VAPOR 34.4°C	0.081	07:50
SIMULATOR VAPOR 34.4°C	0.081	07:51
SIMULATOR VAPOR 34.2°C	0.081	07:52
BLANK TEST	0.000	07:53

Average = 0.080
Std Dev = 0.000

LS 10/19/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100149

Date: 10/19/2011
Time: 07:56:20

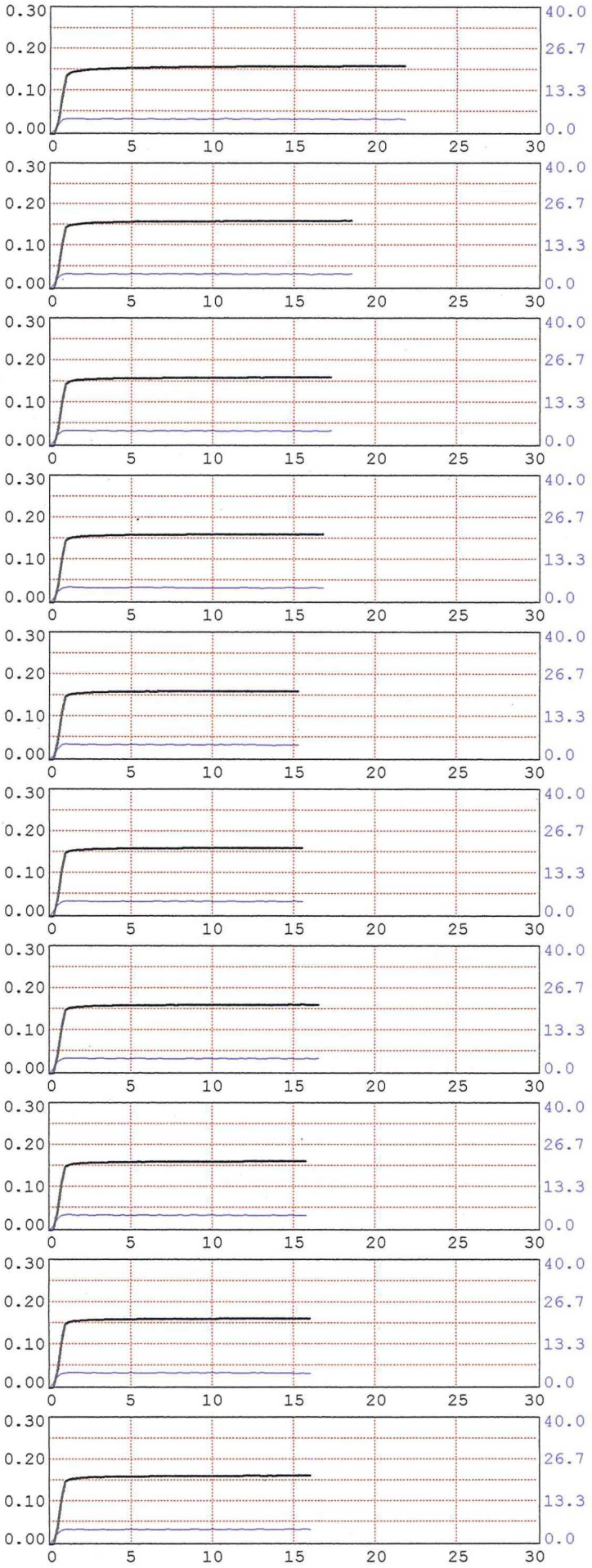
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-24-160
SOLUTION CONCENTRATION: 0.163

BLANK TEST	0.000	07:57
CALIBRATION CHECK	PASSED	07:57
SIMULATOR VAPOR 34.2°C	0.159	07:57
SIMULATOR VAPOR 34.4°C	0.160	07:58
SIMULATOR VAPOR 34.4°C	0.160	08:00
SIMULATOR VAPOR 34.4°C	0.161	08:01
SIMULATOR VAPOR 34.2°C	0.161	08:02
SIMULATOR VAPOR 34.4°C	0.161	08:03
SIMULATOR VAPOR 34.4°C	0.161	08:04
SIMULATOR VAPOR 34.4°C	0.161	08:05
SIMULATOR VAPOR 34.4°C	0.161	08:06
SIMULATOR VAPOR 34.4°C	0.161	08:08
BLANK TEST	0.000	08:08

Average = 0.160
Std Dev = 0.000

LS 10/19/11 SRM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

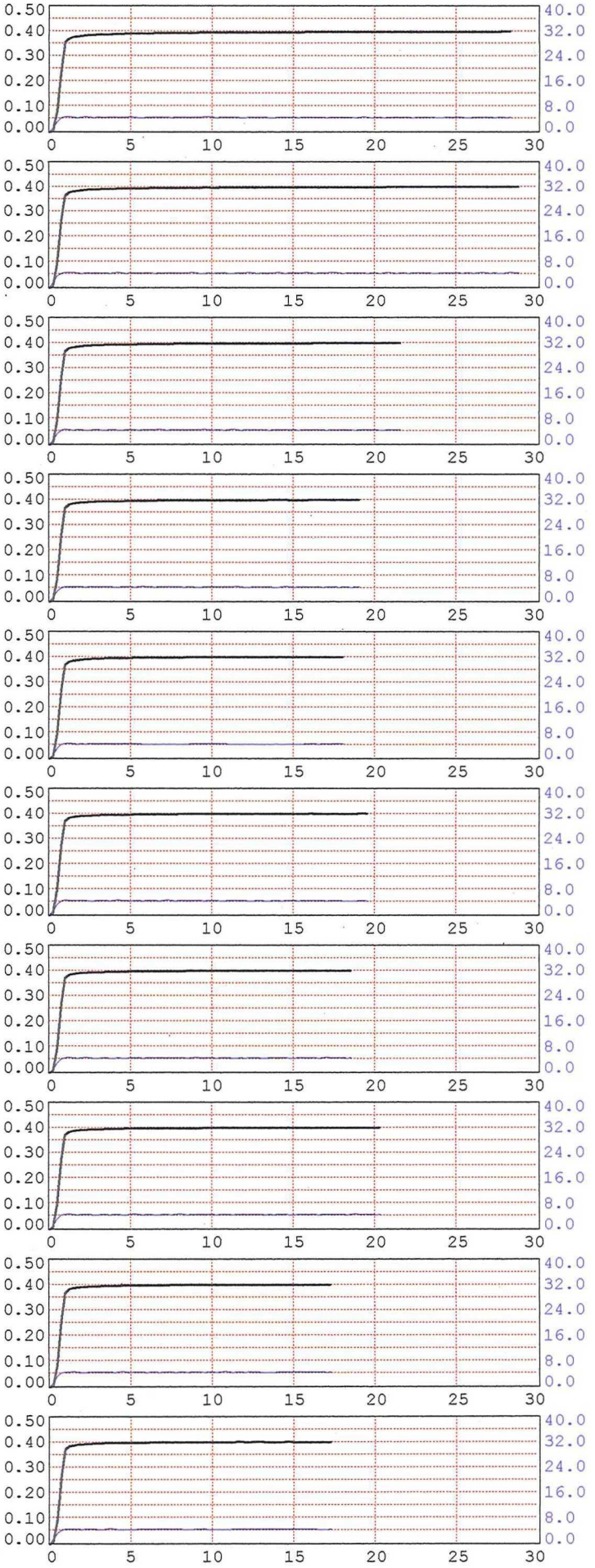
DataMater DMT: 100149

Date: 10/19/2011
Time: 08:12:31

SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-20-400
SOLUTION CONCENTRATION: 0.404

BLANK TEST	0.000	08:13
CALIBRATION CHECK	PASSED	08:13
SIMULATOR VAPOR 34.4°C	0.396	08:14
SIMULATOR VAPOR 34.4°C	0.397	08:15
SIMULATOR VAPOR 34.4°C	0.396	08:16
SIMULATOR VAPOR 34.4°C	0.396	08:17
SIMULATOR VAPOR 34.4°C	0.397	08:19
SIMULATOR VAPOR 34.4°C	0.398	08:20
SIMULATOR VAPOR 34.4°C	0.398	08:21
SIMULATOR VAPOR 34.4°C	0.398	08:22
SIMULATOR VAPOR 34.4°C	0.398	08:23
SIMULATOR VAPOR 34.4°C	0.398	08:24
BLANK TEST	0.000	08:25

Average = 0.397
Std Dev = 0.000

LS 10/19/11 SA