Montpelier PD 100136

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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. 44739

Ship Date 9/30/11
Packing List No. 69003

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 100136

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 100136						None Given	No Draw # / NONE
Serial Nos.	100136						

Opened
10-19-11
KEK

National Patent
Analytical Systems, Inc.

On this date 9/23/11, NPAS received instrument # 100136.

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. 9/23/11

Print Name of Reviewer: DAVID RADOMSKI

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

10-19-11

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

DataMaster DMT Serial Number 100136

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)									
KLC 11-14-11 SKM	0.969486 11-14-11 KLC SKM	34.2	GUTH 11050	0.099 11-14-11 KLC SKM	67451 KLC 12-5-11	11/14/11 SKM KLC 11-15-11	80% 11-15-11 KLC SKM	100% 11-15-11 KLC SKM	100% KLC 11-16-11 SKM	90% KLC 11-15-11 SKM	100% KLC 11-15-11 SKM	100% 11/16/11 SKM KLC	100% KLC 11-16-11 SKM
		34.2	12-22-100	0.099 KLC 11-14-11 SKM									

Linearity Test #1	Linearity Test #2	Linearity Test #3	Linearity Test #4	Linearity Test #5	Data Download	In-House & 2nd Source Calibration Check		
						NIST Temp.°C	Lot. #	Result (g/210L)
11-15-11 KLC SKM	11-15-11 KLC SKM	11-16-11 KLC SKM	11-16-11 KLC SKM	11/17/11 SKM KLC 11-18-11	11-18-11 KLC SKM	34.1	12-32-100	0.100 KLC 11-18-11 SKM
						34.1	GUTH 11050	0.099 11-18-11 KLC SKM

Notes: See TSI 10/26/11

Ran diagnostics and the cal check was >4%. Did a "Test Calibration" to see if the cal check would fall within the limits of 0%-4%. Ran diagnostic after "Test Calibration" and ~~Scott~~ SKM cal check is <4%. No more work is needed, so predeployment testing will be restarted. SKM 11/10/11 KLC 11-14-11

Calibration Solution NIST Temp = 34.0 °C KLC 11-14-11 SKM

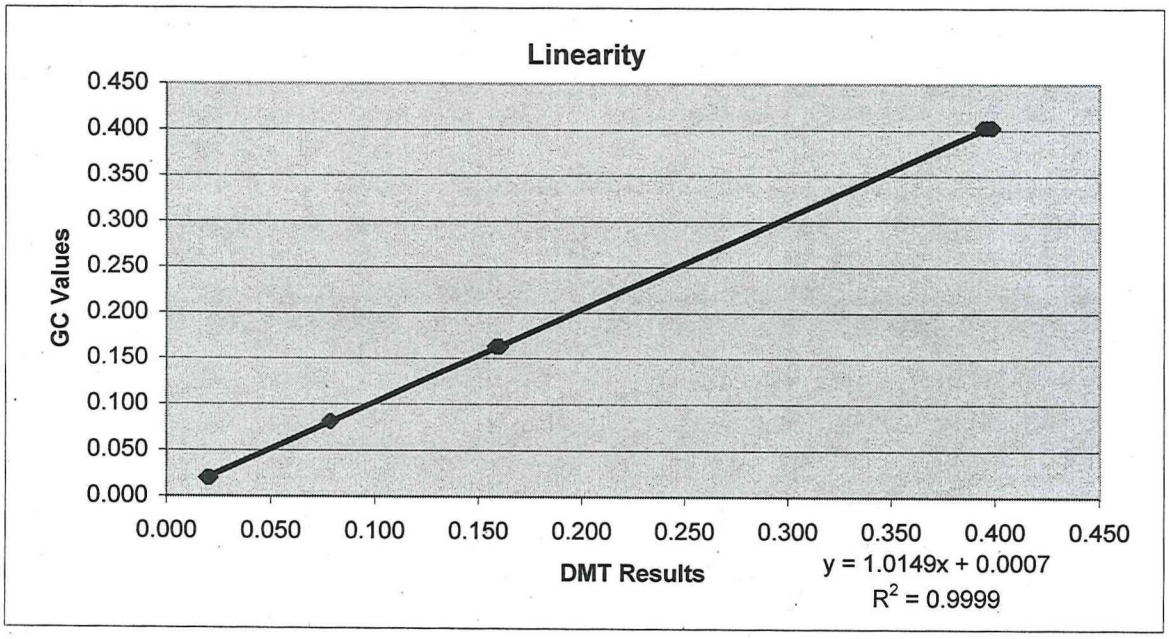
H_2O Solution for Cal. NIST Temp = 34.0 °C KLC 11-14-11 SKM

Analyst: 11/21/11 **Reviewer:** KLC 11/23/11 **Reviewer:** AB 12/2/11

Alc. 642B Rev. 0, July 2011

DataMaster DMT Serial Number 100136

Operator	Date	GC Value	DMT Average	Std Dev	% Recovery
KLK	11/15/2011	0.020	0.019	0.000	95
KLK	11/15/2011	0.081	0.079	0.000	97
KLK	11/15/2011	0.163	0.159	0.000	97
KLK	11/15/2011	0.403	0.396	0.000	98
KLK	11/15/2011	0.020	0.020	0.000	100
KLK	11/15/2011	0.081	0.079	0.000	97
KLK	11/15/2011	0.163	0.161	0.000	98
KLK	11/15/2011	0.403	0.399	0.000	99
KLK	11/16/2011	0.020	0.019	0.000	95
KLK	11/16/2011	0.081	0.079	0.000	97
KLK	11/16/2011	0.163	0.160	0.000	98
KLK	11/16/2011	0.403	0.398	0.000	98
KLK	11/16/2011	0.020	0.021	0.000	105
KLK	11/16/2011	0.081	0.079	0.000	97
KLK	11/16/2011	0.163	0.160	0.000	98
KLK	11/16/2011	0.403	0.396	0.000	98
SRM	11/17/2011	0.020	0.019	0.000	95
SRM	11/17/2011	0.081	0.078	0.000	96
SRM	11/17/2011	0.163	0.158	0.000	96
SRM	11/17/2011	0.403	0.394	0.001	97
			Average	0.0001	98
			Std Dev	0.0002	
			Range		95 - 105



Log On Record History

Test Date	Test Time	Name
10/19/2011	14:12:44	Kirk Kimball
10/19/2011	14:18:23	Kirk Kimball
10/20/2011	07:24:53	Kirk Kimball
10/20/2011	09:08:26	Kirk Kimball
10/20/2011	12:03:45	Kirk Kimball
10/20/2011	12:59:11	Kirk Kimball
10/21/2011	10:29:08	Steven Merrill
10/25/2011	08:51:06	Steven Merrill
10/25/2011	11:31:19	Steven Merrill
10/25/2011	13:11:03	Steven Merrill
10/25/2011	16:09:42	Steven Merrill
10/26/2011	08:05:35	Steven Merrill
11/01/2011	09:40:34	Kirk Kimball
11/01/2011	10:04:25	Kirk Kimball
11/03/2011	11:44:39	Kirk Kimball
11/03/2011	13:24:42	Kirk Kimball
11/03/2011	13:41:30	Steven Harnois
11/03/2011	14:11:57	Steven Harnois
11/04/2011	07:40:27	Steven Harnois
11/04/2011	08:53:49	Steven Harnois
11/08/2011	08:45:53	Steven Harnois
11/08/2011	11:59:23	Kirk Kimball
11/08/2011	16:30:15	Steven Harnois
11/09/2011	09:54:16	Steven Merrill
11/09/2011	10:11:00	Steven Merrill
11/10/2011	07:21:02	Kirk Kimball
11/10/2011	09:07:08	Steven Merrill
11/14/2011	08:56:22	Steven Merrill
11/14/2011	10:34:59	Kirk Kimball
11/15/2011	07:44:31	Kirk Kimball
11/15/2011	08:23:49	Kirk Kimball
11/15/2011	08:49:58	Kirk Kimball
11/15/2011	10:45:23	Kirk Kimball
11/15/2011	11:54:58	Kirk Kimball
11/15/2011	13:51:37	Kirk Kimball
11/15/2011	15:05:20	Kirk Kimball
11/16/2011	07:10:51	Kirk Kimball
11/16/2011	09:14:56	Kirk Kimball
11/16/2011	10:10:39	Kirk Kimball
11/16/2011	11:30:19	Kirk Kimball
11/16/2011	12:27:06	Steven Merrill
11/16/2011	13:05:34	Kirk Kimball
11/17/2011	08:29:51	Steven Merrill
11/17/2011	09:57:56	Steven Merrill
11/17/2011	10:30:08	Steven Merrill
11/17/2011	11:06:01	Steven Merrill
11/18/2011	07:21:29	Kirk Kimball
11/18/2011	09:27:07	Kirk Kimball
11/18/2011	10:34:31	Kirk Kimball

SECTION 2

POWER UP TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 100136
Location:
Calibration Date: 11/10/2011
Certification Date:
Installation Date:
Test Date: 11/14/2011
Test Time: 08:56:24

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 47.5°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.895 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0073	-0.0033
MIN(V)	-0.0089	-0.0051

FILTER INFO

Filter 1	-0.004	Zero = true
Filter 2	0.430	Zero = true
Filter 3	1.321	Zero = true

CALIBRATION CHECK
Xq = 0.081 1.06%

CALIBRATION REPORT

DataMaster DMT: 100136
Calibration Date: 11/14/2011
Calibrated by: KIRK L KIMBALL
Lot: 12-33-100

```
Ca  = 0.100
CAL = 0.969486   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  = 0.083      0.050  <=  Xq < 0.200
a21 = 1.175132   1.050  <= a21 < 1.300
a31 = 0.434535   0.300  <= a31 < 0.800
```

Performed by KLK Date 11/14/2011

DIAGNOSTIC RESULT

DataMaster DMT: 100136
Location:
Calibration Date: 11/14/2011
Certification Date:
Installation Date:
Test Date: 11/14/2011
Test Time: 10:41:59

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

TEMPERATURES

Sample Chamber = 49.0°C
Breath Tube = 45.5°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 532 Hz

PUMP INFO
Flow Rate = 6.060 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0020	0.0059
MIN(V)	0.0008	0.0047

FILTER INFO
Filter 1 0.005 Zero = true
Filter 2 0.441 Zero = true
Filter 3 1.332 Zero = true

CALIBRATION CHECK
Xq = 0.082 0.53%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/14/2011
Time: 10:44:40

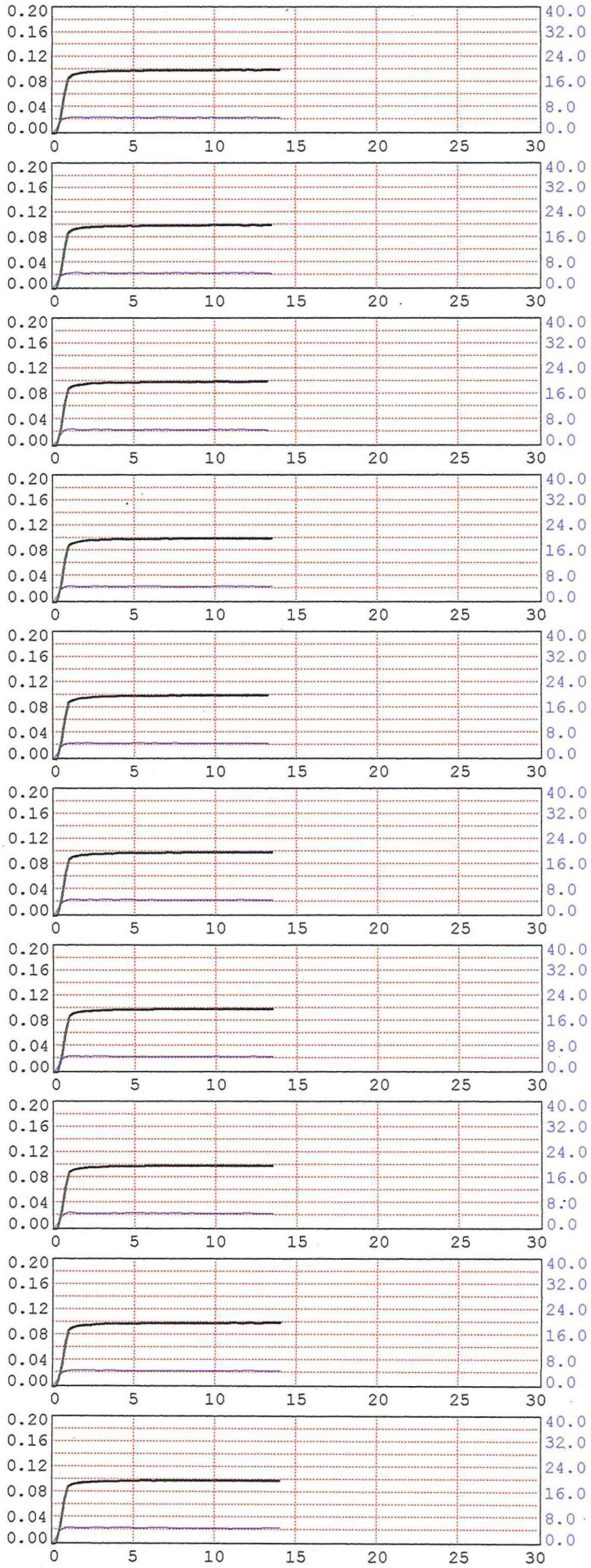
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: GUTH 11050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:45
CALIBRATION CHECK	PASSED	10:45
SIMULATOR VAPOR 34.1°C	0.099	10:46
SIMULATOR VAPOR 34.2°C	0.100	10:47
SIMULATOR VAPOR 34.1°C	0.100	10:48
SIMULATOR VAPOR 34.2°C	0.100	10:49
SIMULATOR VAPOR 34.1°C	0.100	10:50
SIMULATOR VAPOR 34.1°C	0.099	10:51
SIMULATOR VAPOR 34.2°C	0.099	10:52
SIMULATOR VAPOR 34.2°C	0.099	10:53
SIMULATOR VAPOR 34.1°C	0.099	10:54
SIMULATOR VAPOR 34.2°C	0.099	10:55
BLANK TEST	0.000	10:56

Average = 0.099
Std Dev = 0.000

2nd Source Cal Check KLK 11-14-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/14/2011
Time: 11:21:56

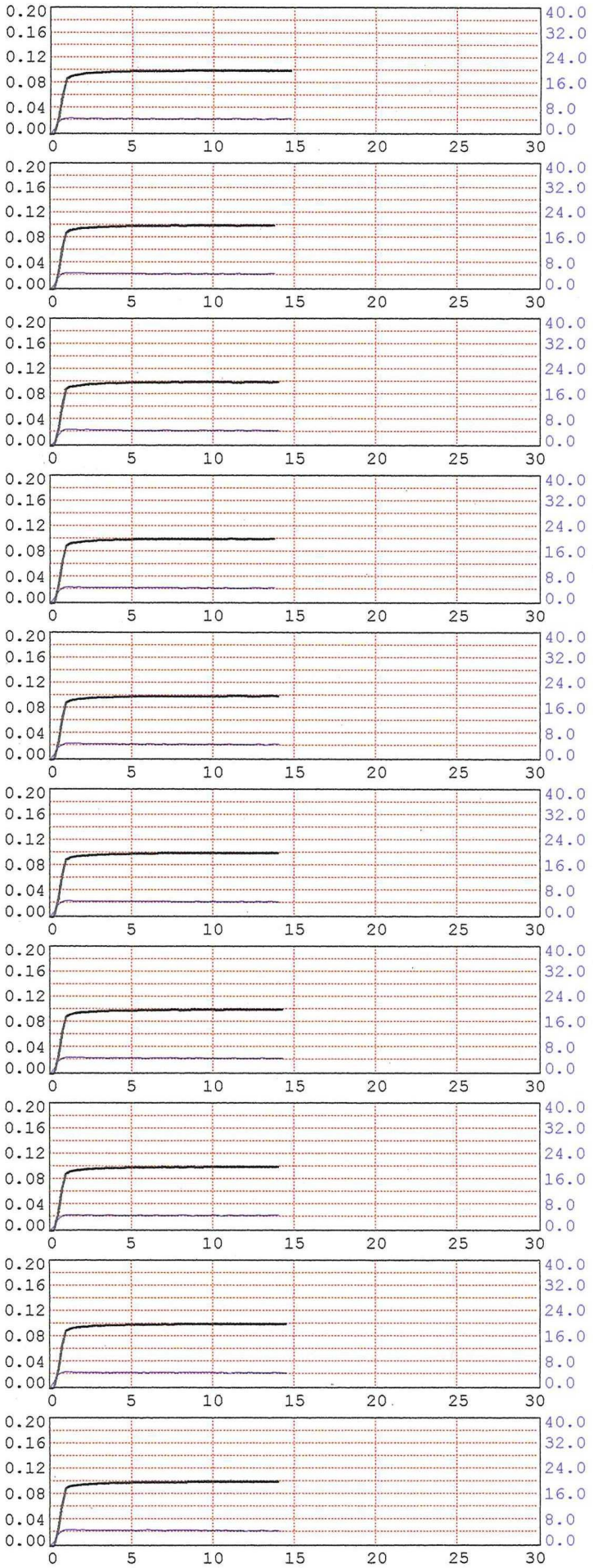
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	11:22
CALIBRATION CHECK	PASSED	11:22
SIMULATOR VAPOR 34.1°C	0.100	11:23
SIMULATOR VAPOR 34.1°C	0.099	11:24
SIMULATOR VAPOR 34.1°C	0.100	11:25
SIMULATOR VAPOR 34.1°C	0.100	11:26
SIMULATOR VAPOR 34.2°C	0.099	11:27
SIMULATOR VAPOR 34.1°C	0.100	11:28
SIMULATOR VAPOR 34.0°C	0.100	11:29
SIMULATOR VAPOR 34.1°C	0.100	11:30
SIMULATOR VAPOR 34.1°C	0.100	11:32
SIMULATOR VAPOR 34.1°C	0.100	11:33
BLANK TEST	0.000	11:33

Average = 0.099
Std Dev = 0.000

In house Cal check IC
11-14-11



CERTIFICATION REPORT

DataMaster DMT: 100136
Calibration Date: 11/14/2011
Certification Date: 11/14/2011
Certified by: KIRK L KIMBALL

Diagnostic Results

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube    = 48.1°C
Digital Sim    = 0.0°C

SETTINGS
Lamp Voltage   = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage   = 80 V
Chopper Freq   = 532 Hz

PUMP INFO
Flow Rate = 5.940 L/M

DETECTOR INFO
PUMP     ON        OFF
MAX(V)   0.0108    0.0138
MIN(V)   0.0087    0.0126

FILTER INFO
Filter 1   0.014  Zero = true
Filter 2   0.448  Zero = true
Filter 3   1.344  Zero = true

CALIBRATION CHECK
Xq  = 0.082  0.42%
```

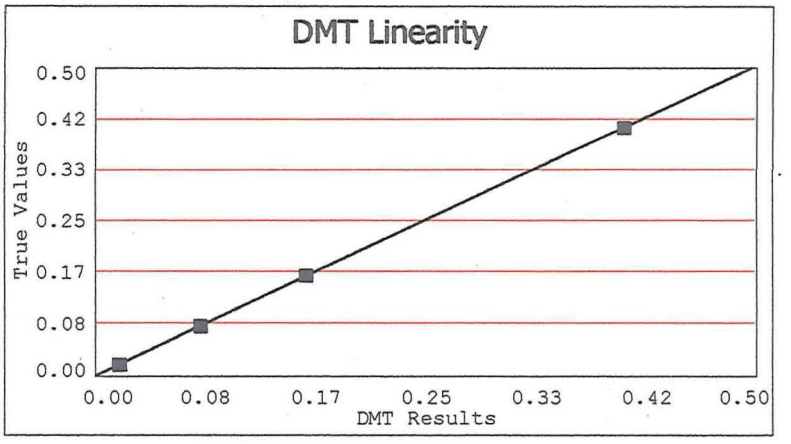
Options

```
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	0.018 g/210L	0.0000
Lot # 12-31-020		
0.081 g/210L	0.079 g/210L	0.0000
Lot # 12-29-080		
0.163 g/210L	0.159 g/210L	0.0000
Lot # 12-30-160		
0.403 g/210L	0.399 g/210L	0.0000
Lot # 12-34-400		

$R^2 = 1$



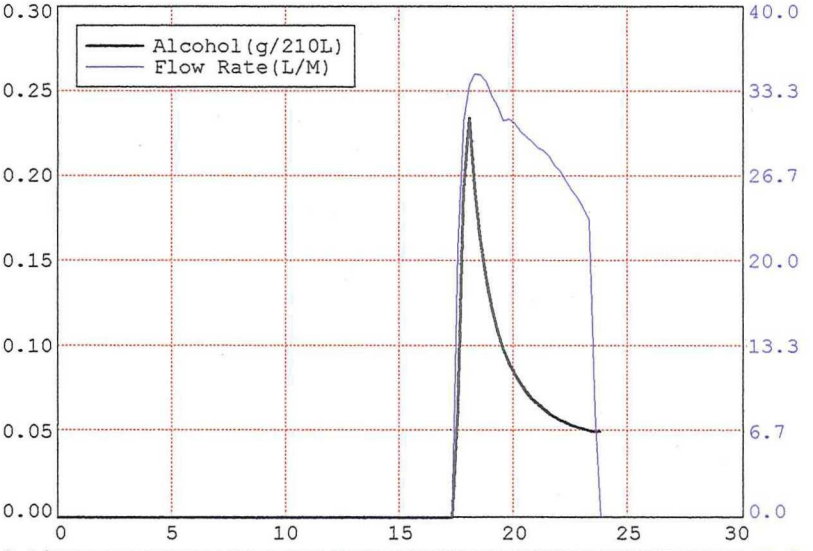
Acetone Interference Test

Lot # 12-29-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

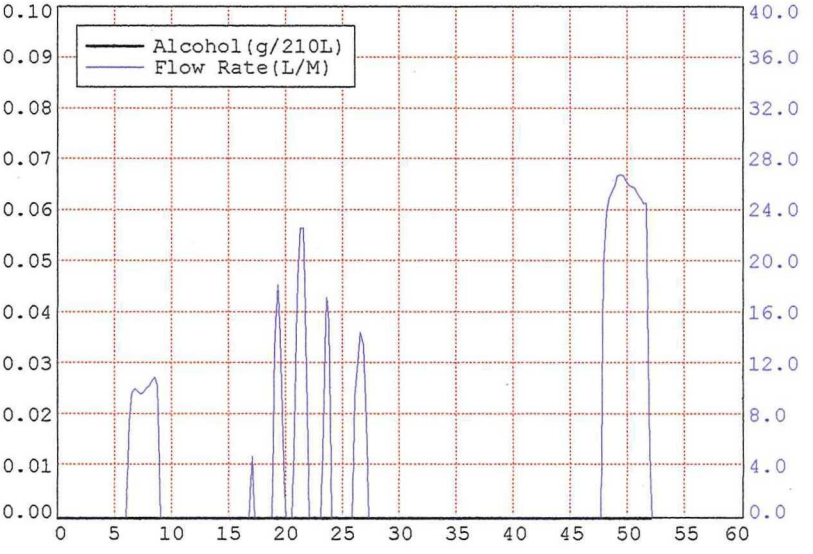


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by _____ Date 11/14/2011

Reviewed by _____ Date 11-15-11

SECTION 3

LINEARITY TESTS

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/15/2011
Time: 08:50:59

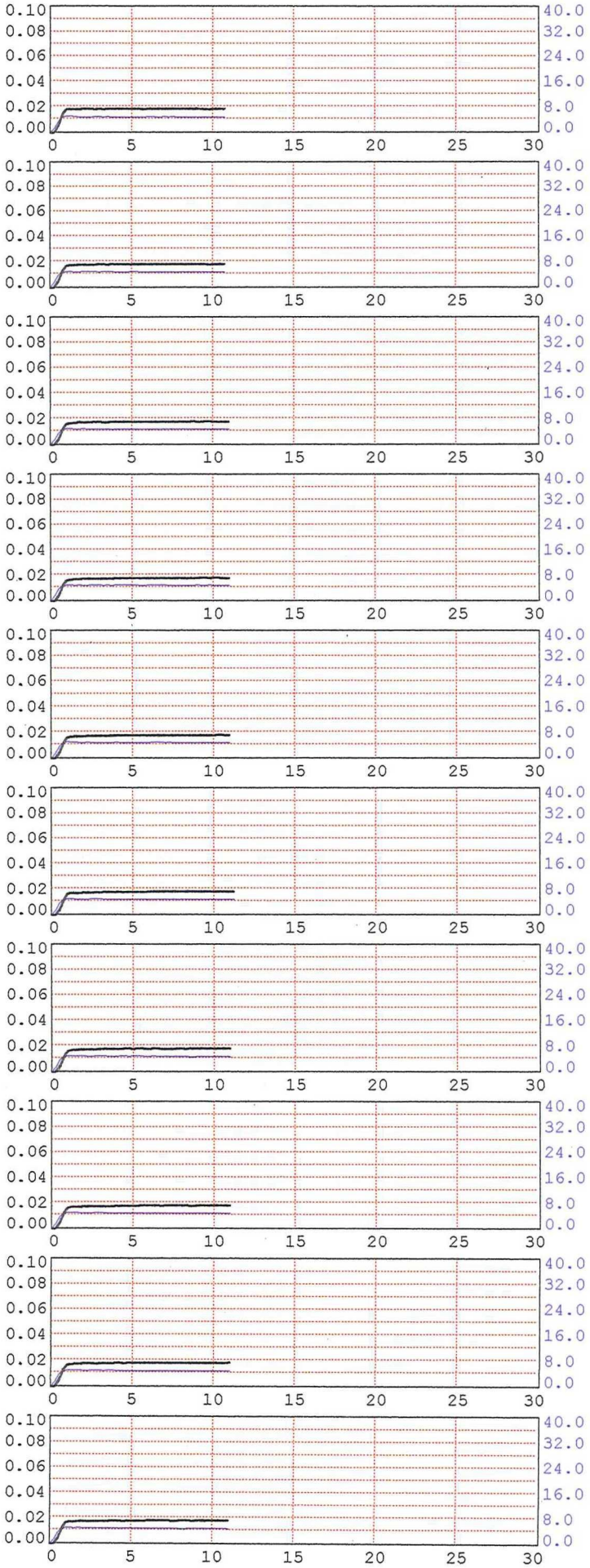
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	08:51
CALIBRATION CHECK	PASSED	08:51
SIMULATOR VAPOR 34.2°C	0.019	08:52
SIMULATOR VAPOR 34.1°C	0.019	08:53
SIMULATOR VAPOR 34.1°C	0.019	08:54
SIMULATOR VAPOR 34.1°C	0.019	08:55
SIMULATOR VAPOR 34.1°C	0.019	08:56
SIMULATOR VAPOR 34.1°C	0.019	08:57
SIMULATOR VAPOR 34.2°C	0.019	08:58
SIMULATOR VAPOR 34.2°C	0.019	08:59
SIMULATOR VAPOR 34.2°C	0.019	09:00
SIMULATOR VAPOR 34.2°C	0.019	09:01
BLANK TEST	0.000	09:02

Average = 0.019
Std Dev = 0.000

L-1
KLK
11-15-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/15/2011
Time: 09:12:02

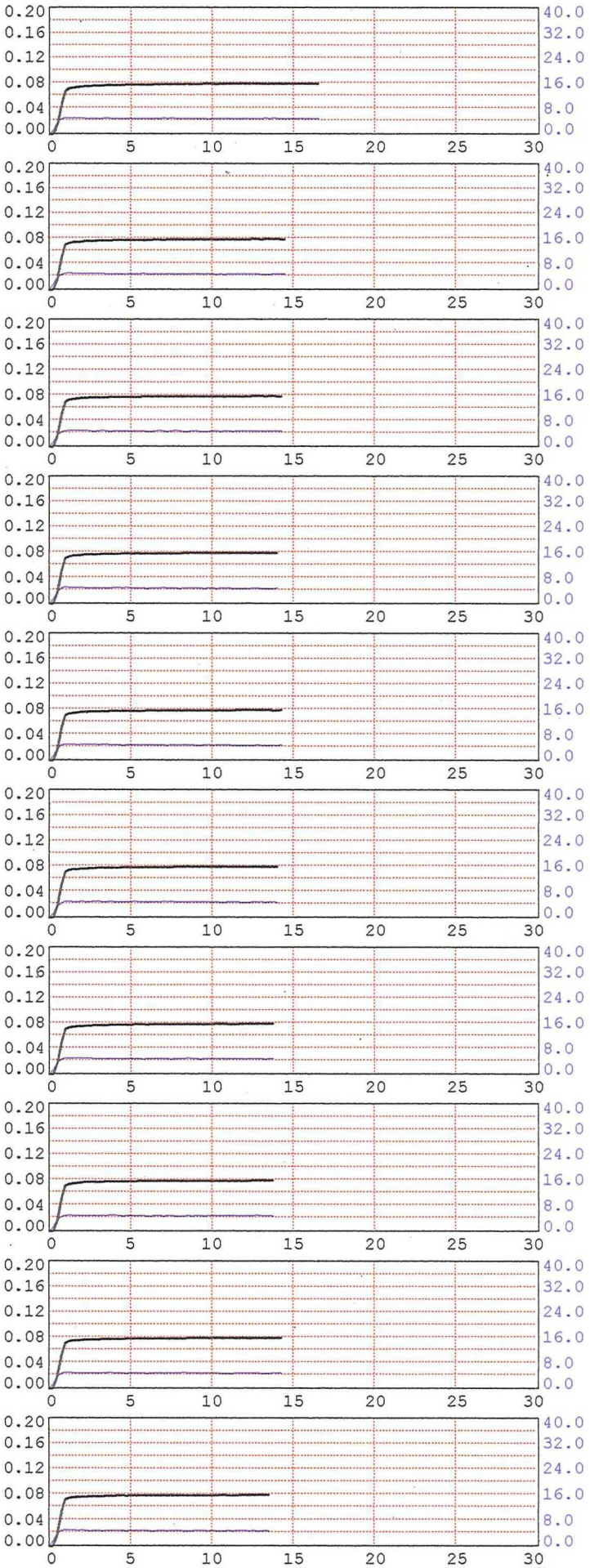
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	09:12
CALIBRATION CHECK	PASSED	09:13
SIMULATOR VAPOR 34.1°C	0.080	09:13
SIMULATOR VAPOR 34.2°C	0.079	09:14
SIMULATOR VAPOR 34.1°C	0.079	09:15
SIMULATOR VAPOR 34.1°C	0.079	09:16
SIMULATOR VAPOR 34.1°C	0.079	09:17
SIMULATOR VAPOR 34.1°C	0.080	09:18
SIMULATOR VAPOR 34.1°C	0.079	09:19
SIMULATOR VAPOR 34.1°C	0.079	09:21
SIMULATOR VAPOR 34.2°C	0.080	09:22
SIMULATOR VAPOR 34.2°C	0.079	09:23
BLANK TEST	0.000	09:23

Average = 0.079
Std Dev = 0.000

L-1
KLK
11-15-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/15/2011
Time: 09:29:28

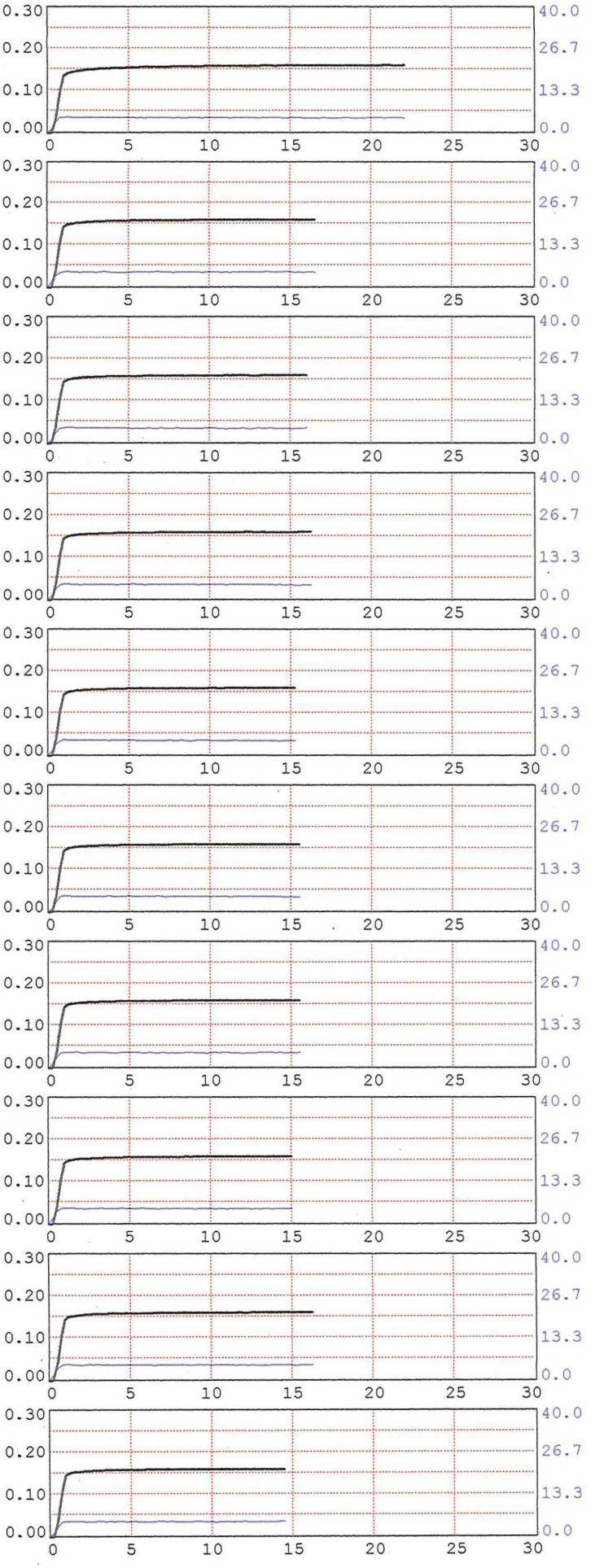
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	09:30
CALIBRATION CHECK	PASSED	09:30
SIMULATOR VAPOR 34.2°C	0.160	09:30
SIMULATOR VAPOR 34.2°C	0.160	09:32
SIMULATOR VAPOR 34.1°C	0.160	09:33
SIMULATOR VAPOR 34.1°C	0.160	09:34
SIMULATOR VAPOR 34.2°C	0.160	09:35
SIMULATOR VAPOR 34.2°C	0.160	09:36
SIMULATOR VAPOR 34.2°C	0.159	09:37
SIMULATOR VAPOR 34.1°C	0.159	09:38
SIMULATOR VAPOR 34.2°C	0.160	09:39
SIMULATOR VAPOR 34.1°C	0.159	09:41
BLANK TEST	0.000	09:41

Average = 0.159
Std Dev = 0.000

L-1
Reece
11-15-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/15/2011
Time: 09:48:31

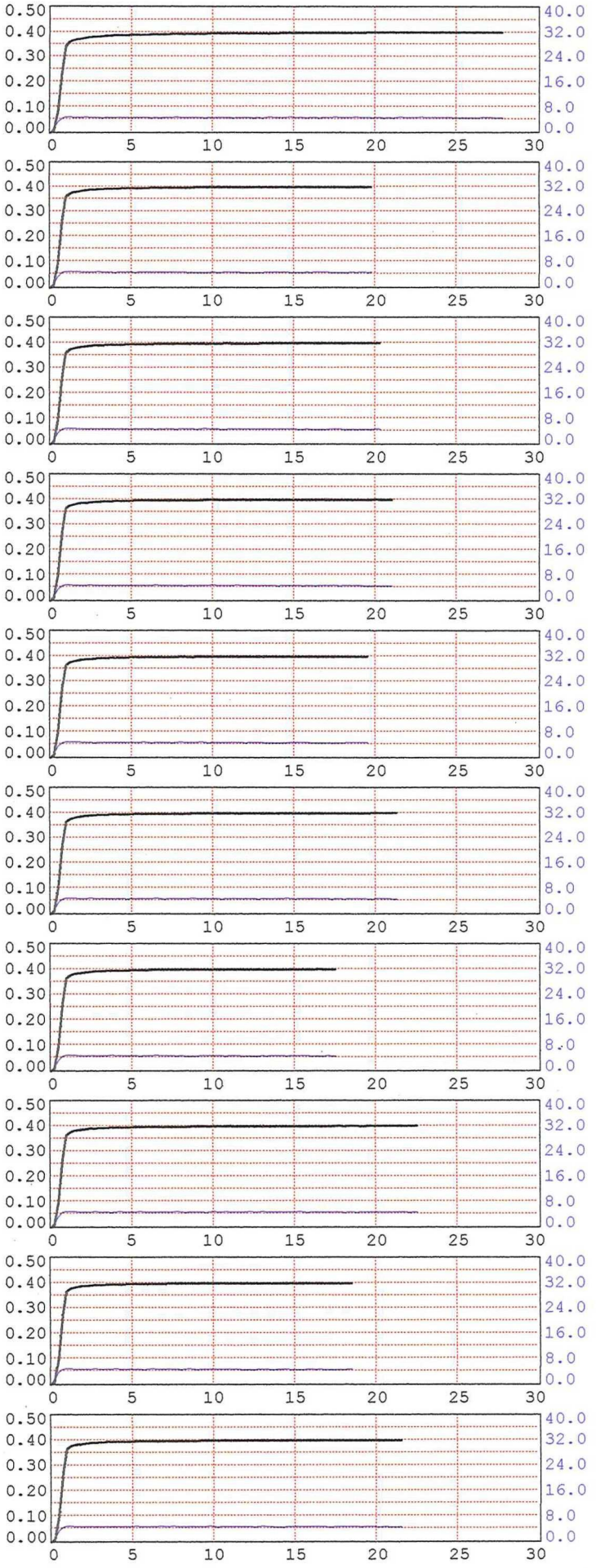
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-34-400
SOLUTION CONCENTRATION: 0.403

BLANK TEST	0.000	09:49
CALIBRATION CHECK	PASSED	09:49
SIMULATOR VAPOR 34.2°C	0.397	09:50
SIMULATOR VAPOR 34.2°C	0.396	09:51
SIMULATOR VAPOR 34.2°C	0.395	09:52
SIMULATOR VAPOR 34.2°C	0.396	09:53
SIMULATOR VAPOR 34.1°C	0.396	09:54
SIMULATOR VAPOR 34.2°C	0.397	09:56
SIMULATOR VAPOR 34.1°C	0.396	09:57
SIMULATOR VAPOR 34.2°C	0.397	09:58
SIMULATOR VAPOR 34.2°C	0.396	09:59
SIMULATOR VAPOR 34.2°C	0.396	10:00
BLANK TEST	0.000	10:01

Average = 0.396
Std Dev = 0.000

L-1
KLK
11-15-11



DIAGNOSTIC RESULT

DataMaster DMT: 100136
Location:
Calibration Date: 11/14/2011
Certification Date: 11/14/2011
Installation Date:
Test Date: 11/15/2011
Test Time: 11:26:35

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

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 47.2°C
Digital Sim = 34.1°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 531 Hz

PUMP INFO
Flow Rate = 5.944 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0185	0.0207
MIN(V)	0.0167	0.0193

FILTER INFO

Filter 1	0.020	Zero = true
Filter 2	0.457	Zero = true
Filter 3	1.355	Zero = true

CALIBRATION CHECK
Xq = 0.083 0.11%

DIAGNOSTIC RESULT

DataMaster DMT: 100136
Location:
Calibration Date: 11/14/2011
Certification Date: 11/14/2011
Installation Date:
Test Date: 11/15/2011
Test Time: 11:55:00

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 47.4°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 530 Hz

PUMP INFO
Flow Rate = 6.051 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0110	0.0132
MIN(V)	0.0091	0.0120

FILTER INFO
Filter 1 0.012 Zero = true
Filter 2 0.449 Zero = true
Filter 3 1.346 Zero = true

CALIBRATION CHECK
Xq = 0.083 0.11%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/15/2011
Time: 11:58:16

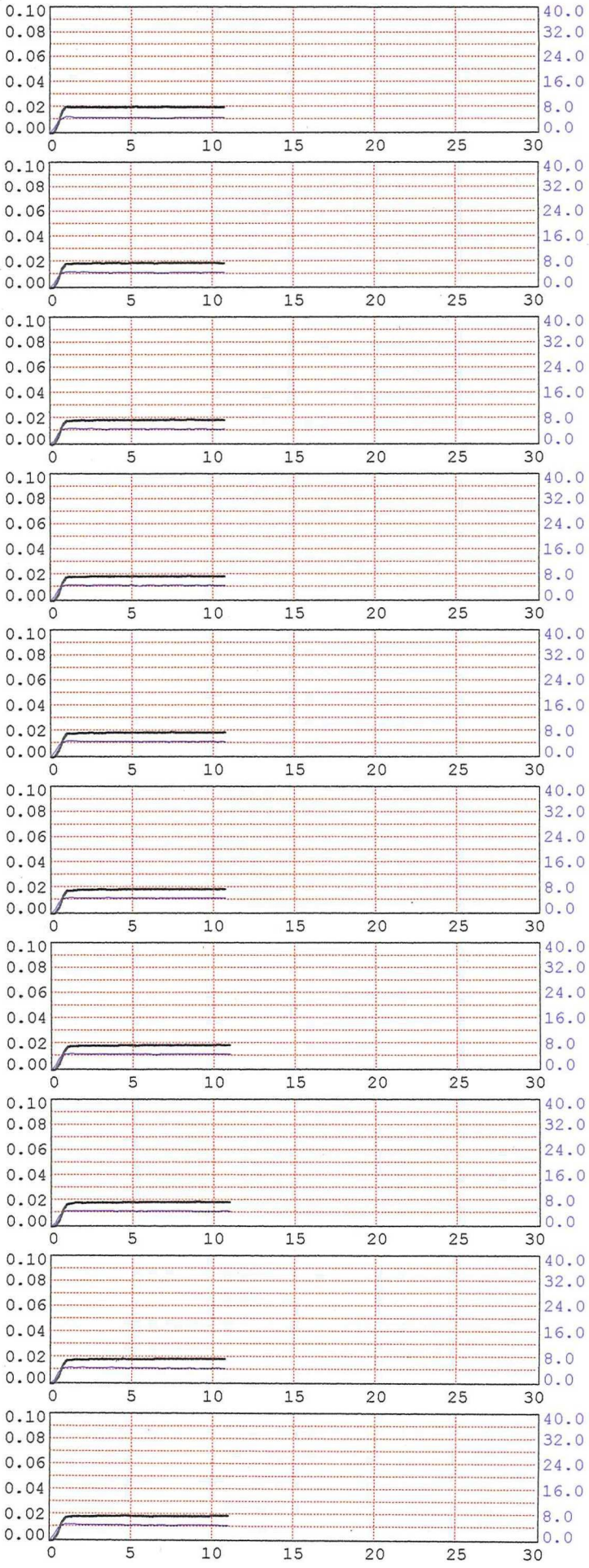
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	11:59
CALIBRATION CHECK	PASSED	11:59
SIMULATOR VAPOR 34.1°C	0.021	11:59
SIMULATOR VAPOR 34.1°C	0.020	12:00
SIMULATOR VAPOR 34.1°C	0.020	12:01
SIMULATOR VAPOR 34.2°C	0.020	12:02
SIMULATOR VAPOR 34.1°C	0.020	12:03
SIMULATOR VAPOR 34.1°C	0.020	12:04
SIMULATOR VAPOR 34.1°C	0.020	12:05
SIMULATOR VAPOR 34.1°C	0.020	12:06
SIMULATOR VAPOR 34.1°C	0.019	12:07
SIMULATOR VAPOR 34.2°C	0.020	12:08
BLANK TEST	0.000	12:09

Average = 0.020
Std Dev = 0.000

L-2
KLK
11-15-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/15/2011
Time: 12:14:13

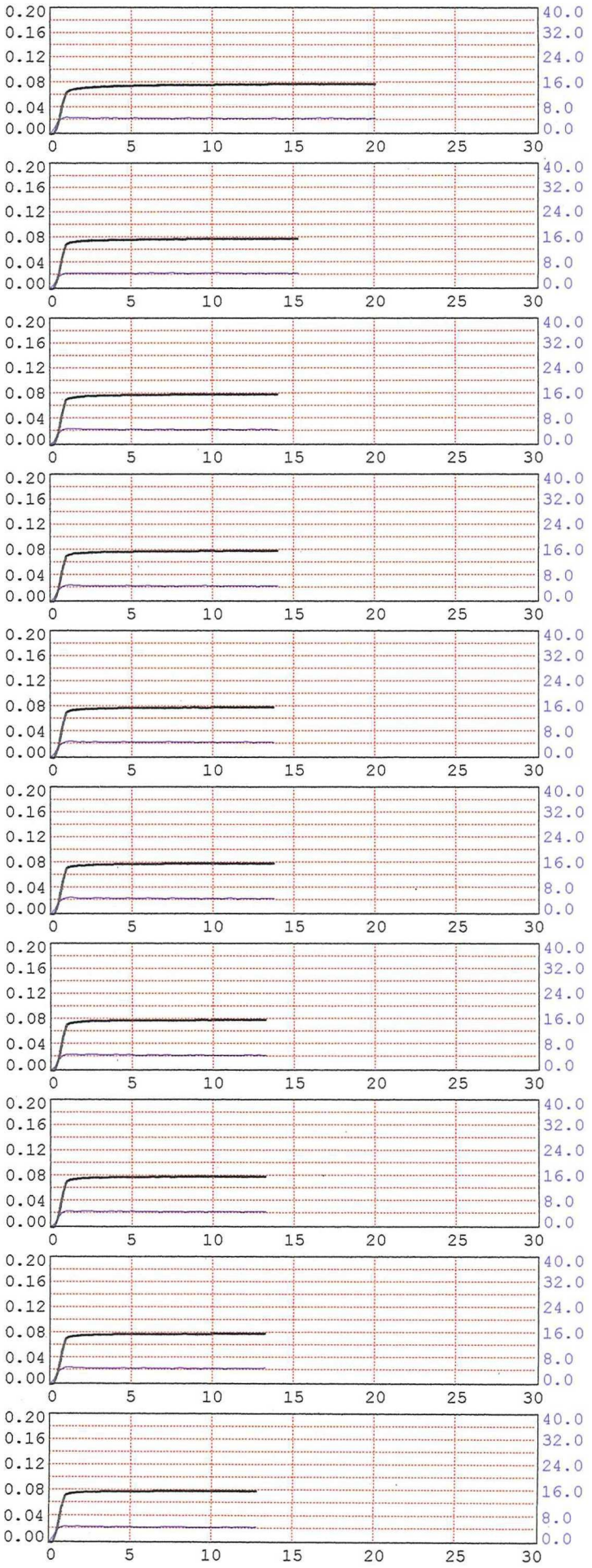
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	12:15
CALIBRATION CHECK	PASSED	12:15
SIMULATOR VAPOR 34.2°C	0.079	12:15
SIMULATOR VAPOR 34.1°C	0.079	12:16
SIMULATOR VAPOR 34.1°C	0.079	12:17
SIMULATOR VAPOR 34.1°C	0.079	12:18
SIMULATOR VAPOR 34.1°C	0.079	12:20
SIMULATOR VAPOR 34.1°C	0.080	12:21
SIMULATOR VAPOR 34.1°C	0.079	12:22
SIMULATOR VAPOR 34.2°C	0.079	12:23
SIMULATOR VAPOR 34.1°C	0.079	12:24
SIMULATOR VAPOR 34.1°C	0.079	12:25
BLANK TEST	0.000	12:26

Average = 0.079
Std Dev = 0.000

L-2
KLK
11-15-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/15/2011
Time: 13:53:35

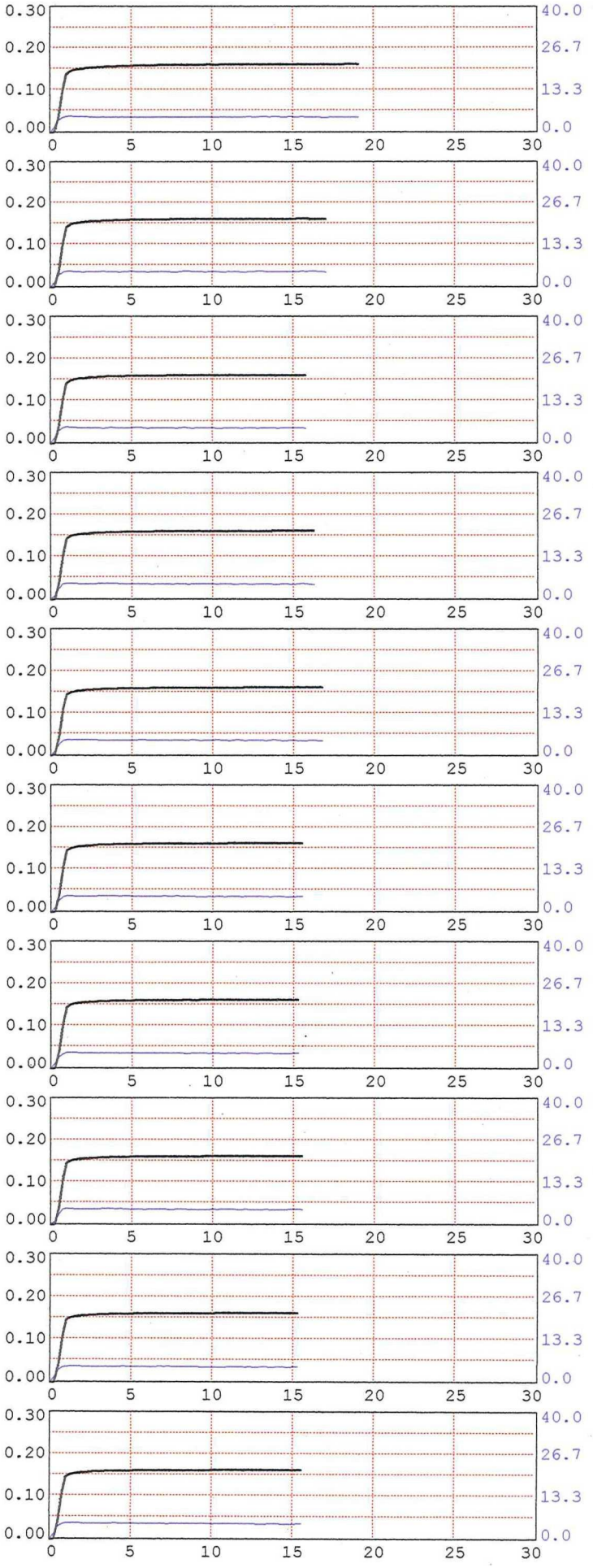
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	13:54
CALIBRATION CHECK	PASSED	13:54
SIMULATOR VAPOR 34.1°C	0.161	13:55
SIMULATOR VAPOR 34.2°C	0.161	13:56
SIMULATOR VAPOR 34.1°C	0.161	13:57
SIMULATOR VAPOR 34.1°C	0.161	13:58
SIMULATOR VAPOR 34.1°C	0.161	13:59
SIMULATOR VAPOR 34.1°C	0.161	14:00
SIMULATOR VAPOR 34.1°C	0.162	14:01
SIMULATOR VAPOR 34.2°C	0.161	14:02
SIMULATOR VAPOR 34.0°C	0.161	14:04
SIMULATOR VAPOR 34.1°C	0.161	14:05
BLANK TEST	0.000	14:05

Average = 0.161
Std Dev = 0.000

L-2
KLK
11-15-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/15/2011
Time: 14:10:58

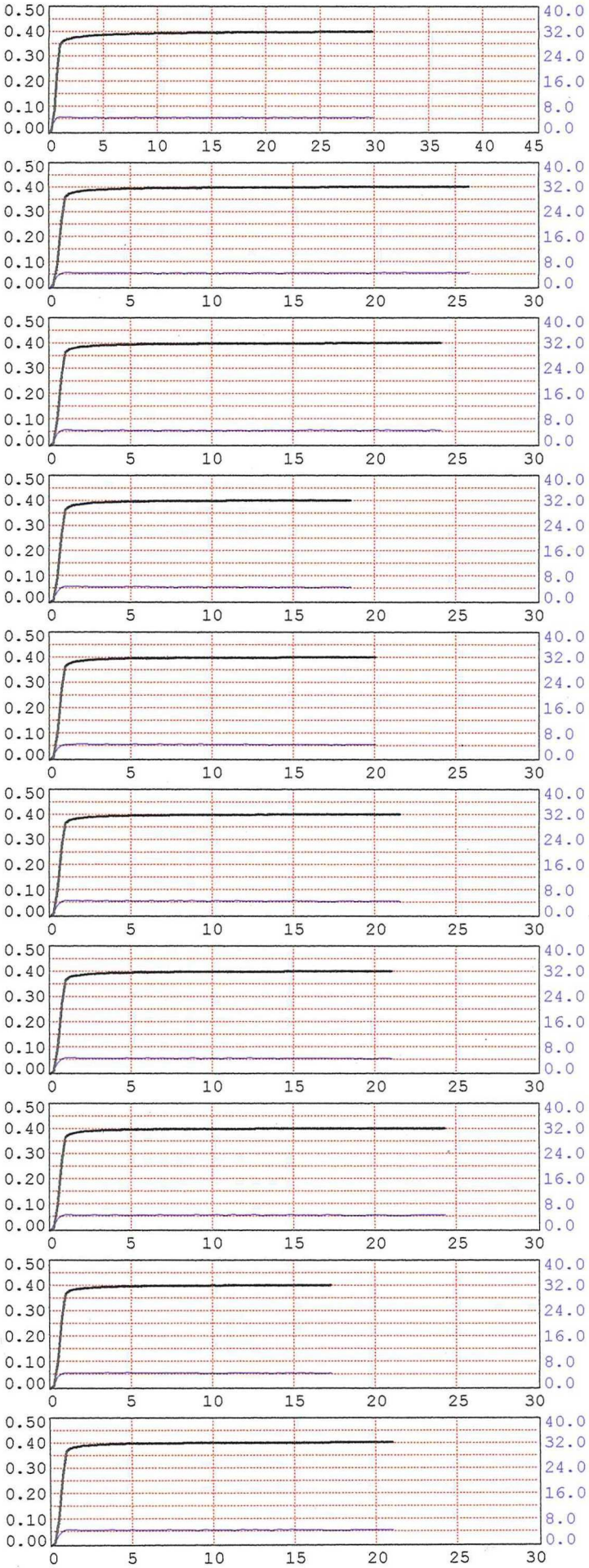
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-34-400
SOLUTION CONCENTRATION: 0.403

BLANK TEST	0.000	14:11
CALIBRATION CHECK	PASSED	14:11
SIMULATOR VAPOR 34.1°C	0.399	14:12
SIMULATOR VAPOR 34.1°C	0.399	14:13
SIMULATOR VAPOR 34.2°C	0.399	14:15
SIMULATOR VAPOR 34.2°C	0.400	14:16
SIMULATOR VAPOR 34.1°C	0.399	14:17
SIMULATOR VAPOR 34.1°C	0.399	14:18
SIMULATOR VAPOR 34.1°C	0.399	14:19
SIMULATOR VAPOR 34.1°C	0.400	14:21
SIMULATOR VAPOR 34.1°C	0.399	14:22
SIMULATOR VAPOR 34.1°C	0.401	14:23
BLANK TEST	0.000	14:24

Average = 0.399
Std Dev = 0.000

L-2
KLK
11-15-11



DIAGNOSTIC RESULT

DataMaster DMT: 100136
Location:
Calibration Date: 11/14/2011
Certification Date: 11/14/2011
Installation Date:
Test Date: 11/16/2011
Test Time: 07:10:53

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 44.7°C
Digital Sim = 34.1°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 531 Hz

PUMP INFO
Flow Rate = 6.043 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0209	-0.0163
MIN(V)	-0.0228	-0.0177

FILTER INFO
Filter 1 -0.016 Zero = true
Filter 2 0.420 Zero = true
Filter 3 1.306 Zero = true

CALIBRATION CHECK
Xq = 0.082 1.26%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/16/2011
Time: 07:16:13

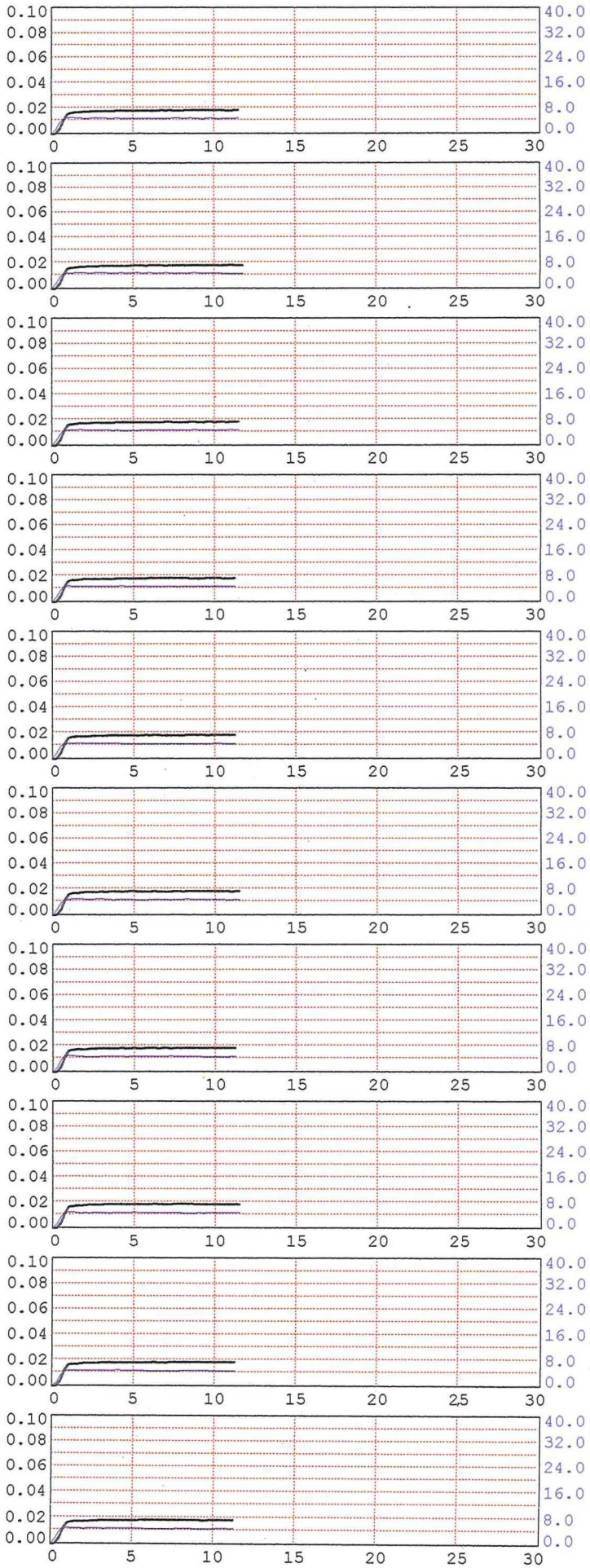
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	07:17
CALIBRATION CHECK	PASSED	07:17
SIMULATOR VAPOR 34.1°C	0.019	07:17
SIMULATOR VAPOR 34.1°C	0.019	07:18
SIMULATOR VAPOR 34.1°C	0.019	07:19
SIMULATOR VAPOR 34.1°C	0.019	07:20
SIMULATOR VAPOR 34.1°C	0.019	07:21
SIMULATOR VAPOR 34.1°C	0.019	07:22
SIMULATOR VAPOR 34.1°C	0.019	07:23
SIMULATOR VAPOR 34.1°C	0.019	07:24
SIMULATOR VAPOR 34.1°C	0.019	07:25
SIMULATOR VAPOR 34.2°C	0.019	07:26
BLANK TEST	0.000	07:27

Average = 0.019
Std Dev = 0.000

L-3
KLK
11-16-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/16/2011
Time: 07:32:15

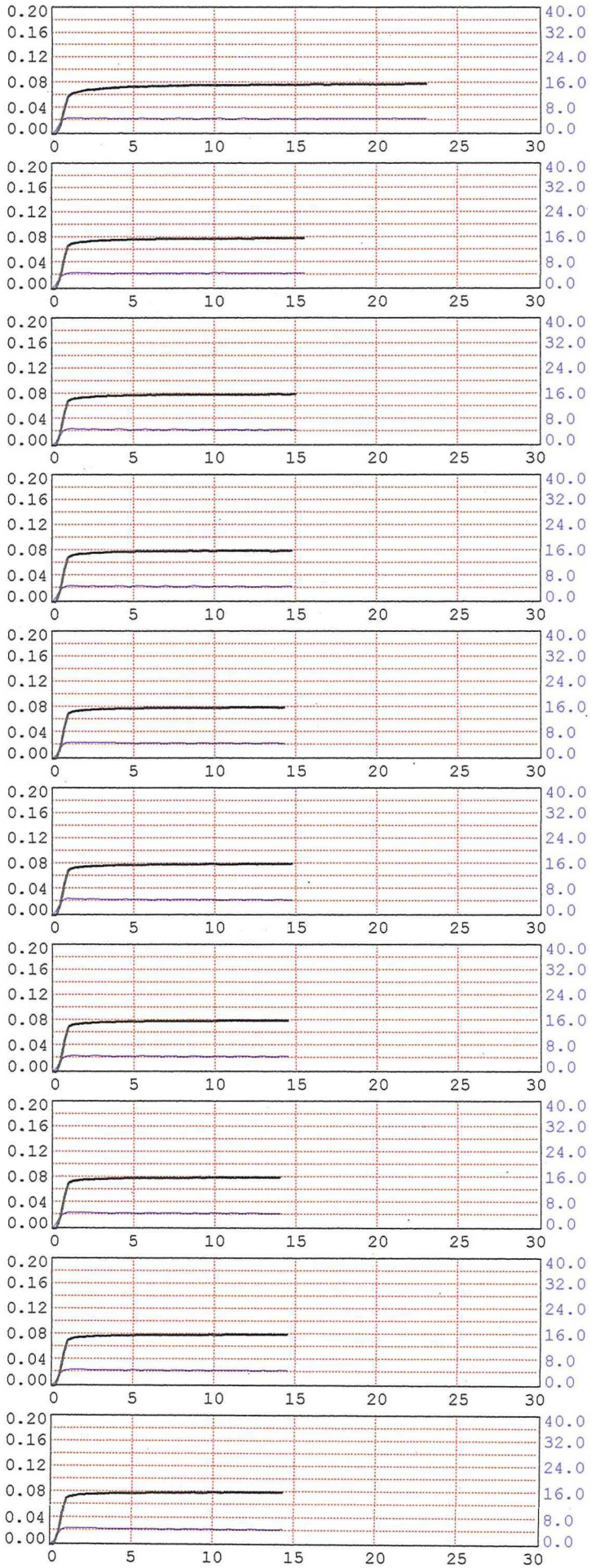
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	07:33
CALIBRATION CHECK	PASSED	07:33
SIMULATOR VAPOR 34.1°C	0.079	07:33
SIMULATOR VAPOR 34.1°C	0.080	07:34
SIMULATOR VAPOR 34.1°C	0.080	07:35
SIMULATOR VAPOR 34.1°C	0.080	07:37
SIMULATOR VAPOR 34.2°C	0.080	07:38
SIMULATOR VAPOR 34.1°C	0.080	07:39
SIMULATOR VAPOR 34.2°C	0.080	07:40
SIMULATOR VAPOR 34.1°C	0.080	07:41
SIMULATOR VAPOR 34.1°C	0.080	07:42
SIMULATOR VAPOR 34.1°C	0.080	07:43
BLANK TEST	0.000	07:44

Average = 0.079
Std Dev = 0.000

L-3
11-16-11
KZK



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/16/2011
Time: 07:47:30

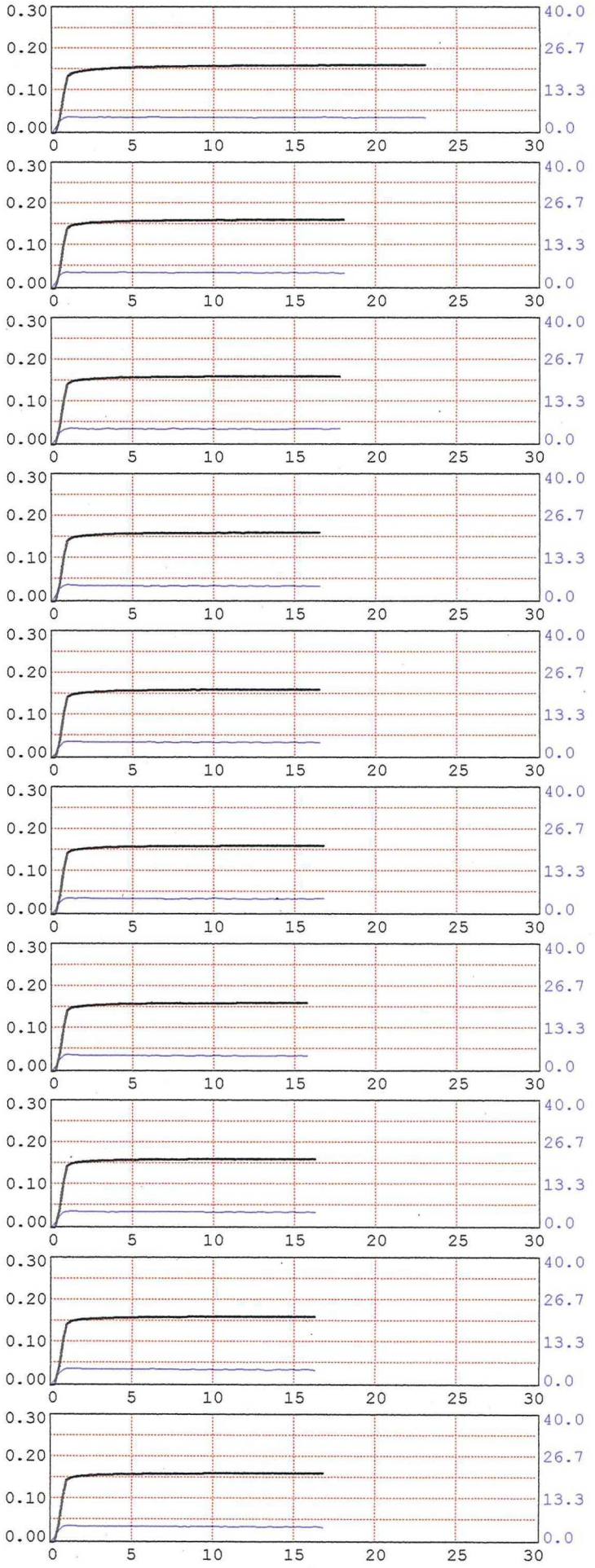
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	07:48
CALIBRATION CHECK	PASSED	07:48
SIMULATOR VAPOR 34.1°C	0.160	07:48
SIMULATOR VAPOR 34.1°C	0.160	07:50
SIMULATOR VAPOR 34.1°C	0.161	07:51
SIMULATOR VAPOR 34.1°C	0.160	07:52
SIMULATOR VAPOR 34.1°C	0.160	07:53
SIMULATOR VAPOR 34.1°C	0.160	07:54
SIMULATOR VAPOR 34.2°C	0.160	07:55
SIMULATOR VAPOR 34.1°C	0.160	07:56
SIMULATOR VAPOR 34.1°C	0.160	07:58
SIMULATOR VAPOR 34.1°C	0.161	07:59
BLANK TEST	0.000	08:00

Average = 0.160
Std Dev = 0.000

L-3
RDC
11-16-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/16/2011
Time: 08:09:52

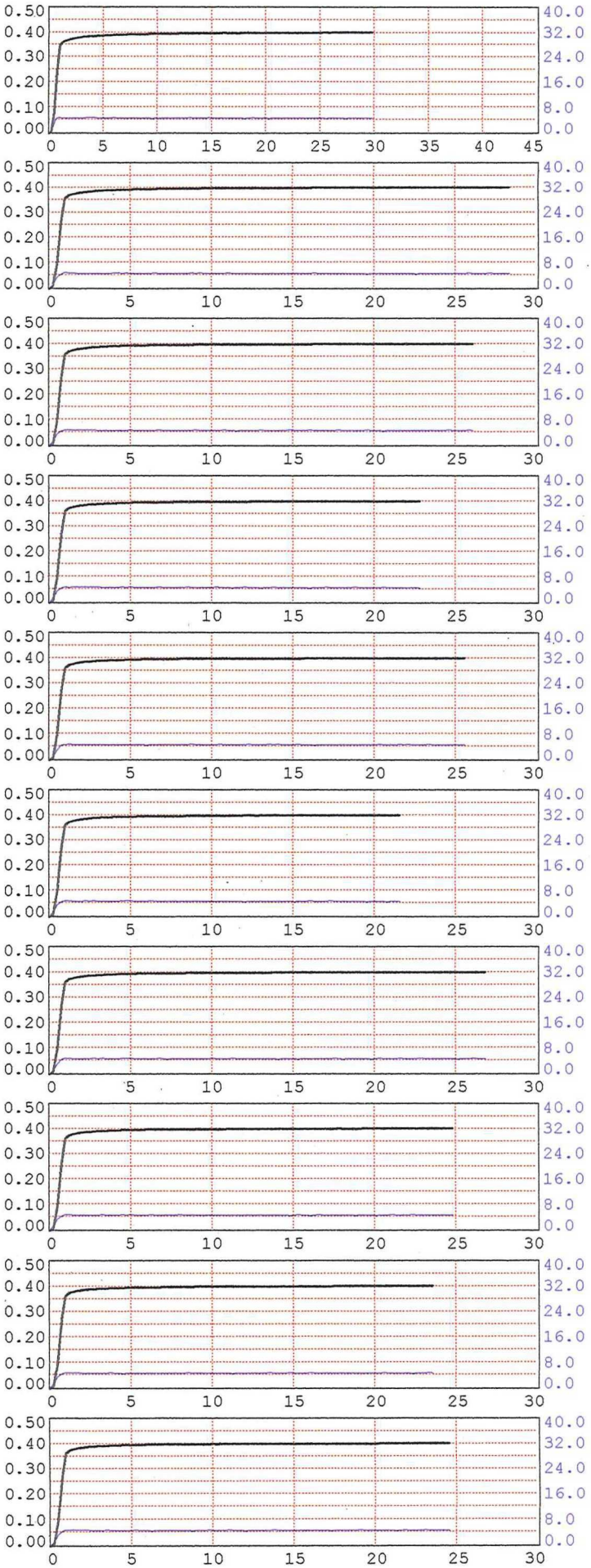
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-34-400
SOLUTION CONCENTRATION: 0.403

BLANK TEST	0.000	08:10
CALIBRATION CHECK	PASSED	08:10
SIMULATOR VAPOR 34.1°C	0.399	08:11
SIMULATOR VAPOR 34.1°C	0.399	08:12
SIMULATOR VAPOR 34.1°C	0.398	08:14
SIMULATOR VAPOR 34.1°C	0.399	08:15
SIMULATOR VAPOR 34.2°C	0.399	08:16
SIMULATOR VAPOR 34.1°C	0.398	08:17
SIMULATOR VAPOR 34.1°C	0.399	08:19
SIMULATOR VAPOR 34.1°C	0.399	08:20
SIMULATOR VAPOR 34.1°C	0.399	08:21
SIMULATOR VAPOR 34.1°C	0.399	08:23
BLANK TEST	0.000	08:23

Average = 0.398
Std Dev = 0.000

L-3
11-16-11



DIAGNOSTIC RESULT

DataMaster DMT: 100136
Location:
Calibration Date: 11/14/2011
Certification Date: 11/14/2011
Installation Date:
Test Date: 11/16/2011
Test Time: 08:33:26

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

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 45.1°C
Digital Sim = 34.1°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.912 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0142	0.0163
MIN(V)	0.0106	0.0152

FILTER INFO

Filter 1	0.016	Zero = true
Filter 2	0.454	Zero = true
Filter 3	1.347	Zero = true

CALIBRATION CHECK
Xq = 0.082 0.21%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/16/2011
Time: 09:23:11

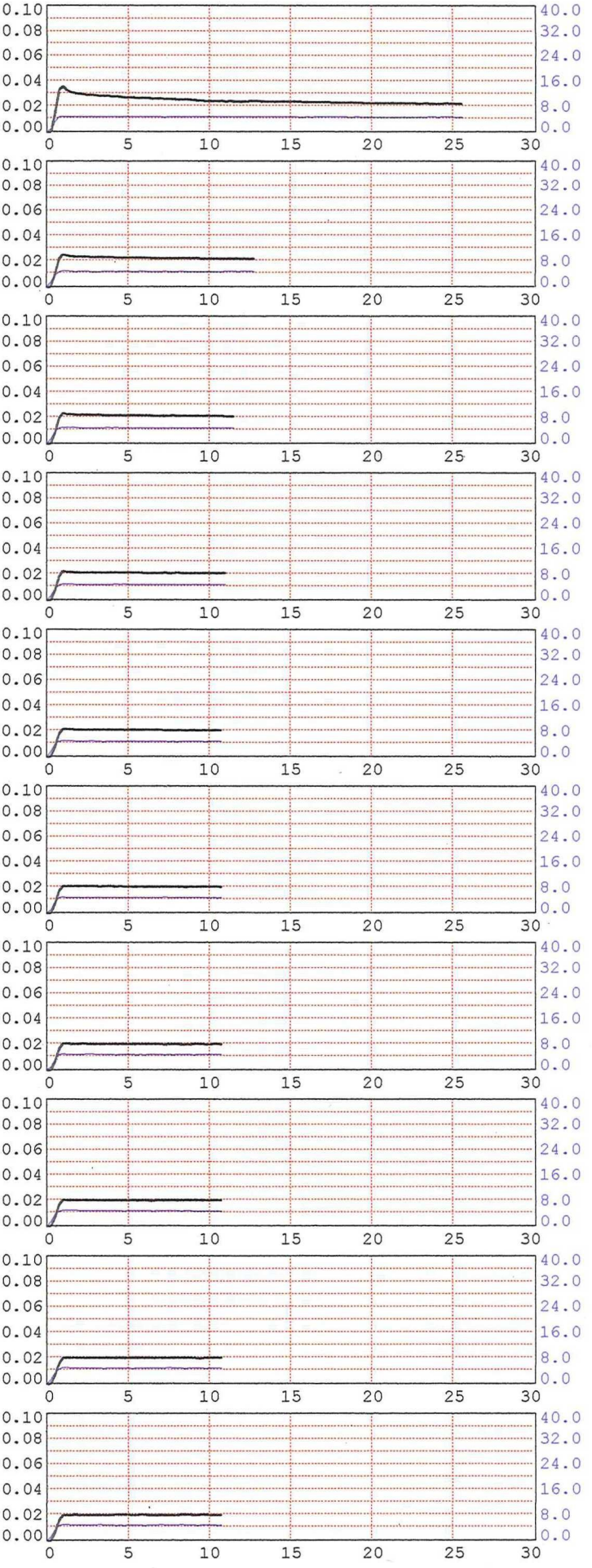
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	09:24
CALIBRATION CHECK	PASSED	09:24
SIMULATOR VAPOR 34.1°C	0.023	09:24
SIMULATOR VAPOR 34.1°C	0.023	09:25
SIMULATOR VAPOR 34.1°C	0.022	09:26
SIMULATOR VAPOR 34.1°C	0.022	09:27
SIMULATOR VAPOR 34.1°C	0.022	09:28
SIMULATOR VAPOR 34.2°C	0.021	09:29
SIMULATOR VAPOR 34.1°C	0.021	09:30
SIMULATOR VAPOR 34.2°C	0.021	09:31
SIMULATOR VAPOR 34.1°C	0.021	09:32
SIMULATOR VAPOR 34.2°C	0.021	09:33
BLANK TEST	0.000	09:34

Average = 0.021
Std Dev = 0.000

L-4
KLK
11-16-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/16/2011
Time: 09:40:08

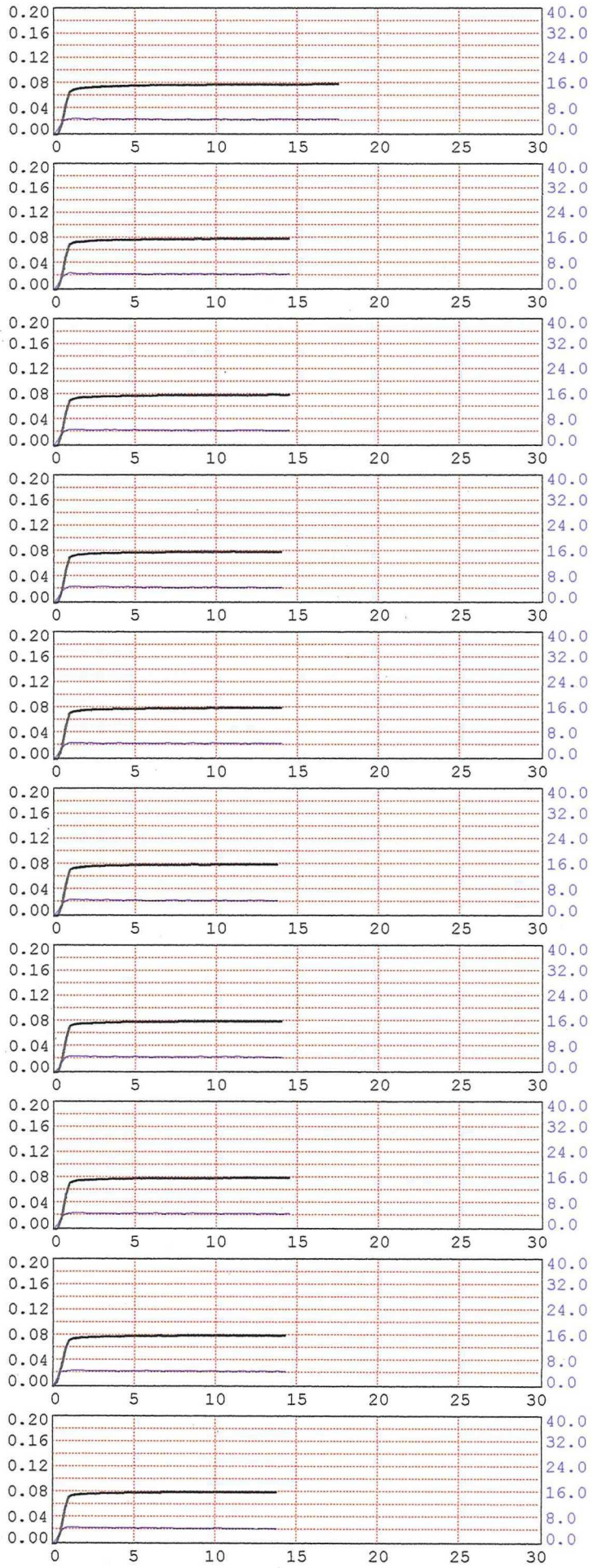
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	09:41
CALIBRATION CHECK	PASSED	09:41
SIMULATOR VAPOR 34.1°C	0.079	09:41
SIMULATOR VAPOR 34.1°C	0.079	09:42
SIMULATOR VAPOR 34.2°C	0.080	09:43
SIMULATOR VAPOR 34.1°C	0.080	09:44
SIMULATOR VAPOR 34.1°C	0.080	09:45
SIMULATOR VAPOR 34.1°C	0.080	09:46
SIMULATOR VAPOR 34.1°C	0.080	09:48
SIMULATOR VAPOR 34.2°C	0.080	09:49
SIMULATOR VAPOR 34.1°C	0.080	09:50
SIMULATOR VAPOR 34.2°C	0.080	09:51
BLANK TEST	0.000	09:52

Average = 0.079
Std Dev = 0.000

KLK
11-16-11
L-4



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/16/2011
Time: 10:11:46

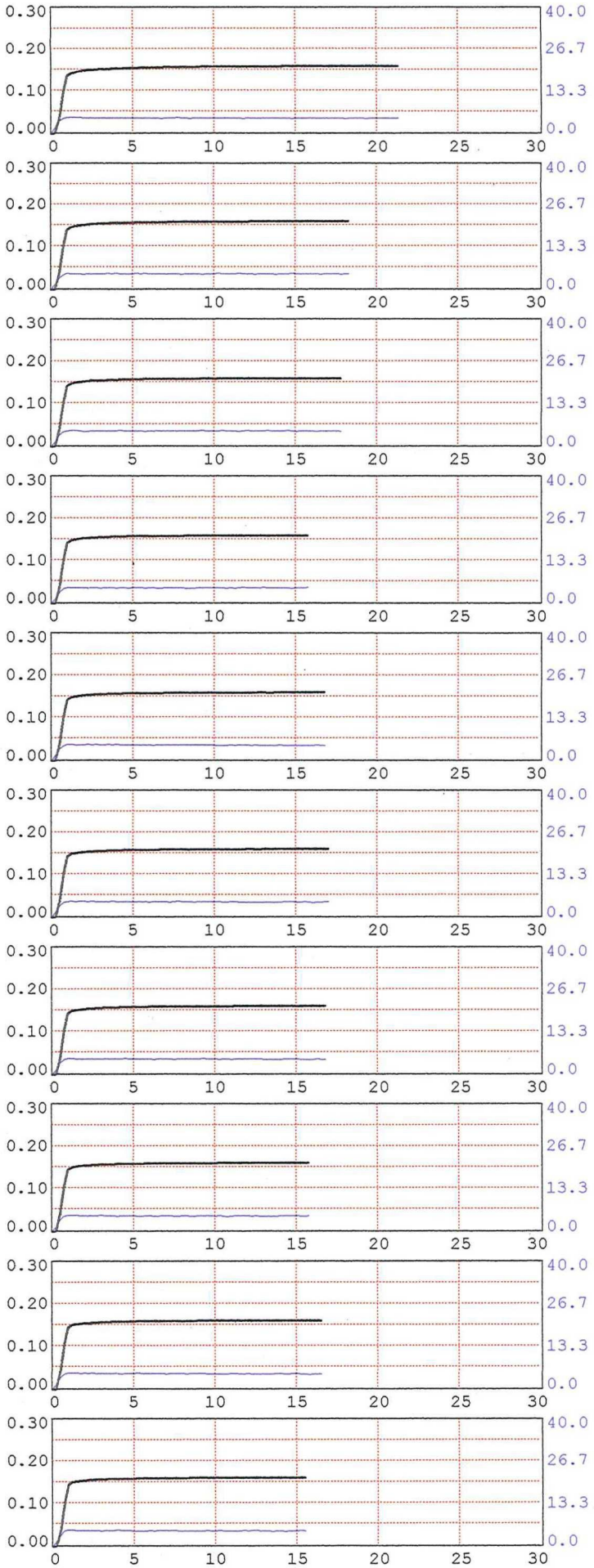
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	10:12
CALIBRATION CHECK	PASSED	10:12
SIMULATOR VAPOR 34.2°C	0.159	10:13
SIMULATOR VAPOR 34.1°C	0.159	10:14
SIMULATOR VAPOR 34.1°C	0.160	10:15
SIMULATOR VAPOR 34.1°C	0.160	10:16
SIMULATOR VAPOR 34.2°C	0.160	10:17
SIMULATOR VAPOR 34.1°C	0.160	10:18
SIMULATOR VAPOR 34.1°C	0.160	10:20
SIMULATOR VAPOR 34.2°C	0.161	10:21
SIMULATOR VAPOR 34.1°C	0.161	10:22
SIMULATOR VAPOR 34.1°C	0.160	10:23
BLANK TEST	0.000	10:24

Average = 0.160
Std Dev = 0.000

L-4
KLK
11-16-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/16/2011
Time: 11:34:06

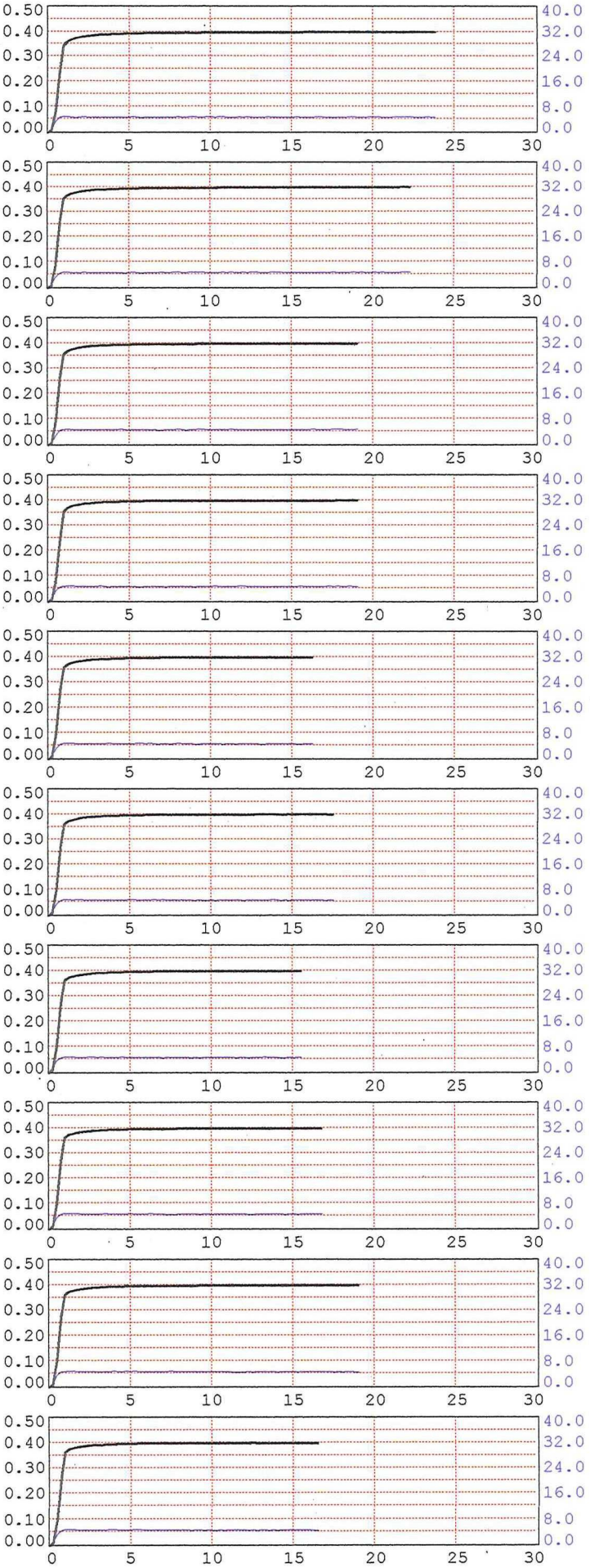
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: 12-34-400
SOLUTION CONCENTRATION: 0.403

BLANK TEST	0.000	11:34
CALIBRATION CHECK	PASSED	11:35
SIMULATOR VAPOR 34.1°C	0.397	11:35
SIMULATOR VAPOR 34.1°C	0.396	11:36
SIMULATOR VAPOR 34.1°C	0.396	11:38
SIMULATOR VAPOR 34.1°C	0.397	11:39
SIMULATOR VAPOR 34.1°C	0.395	11:40
SIMULATOR VAPOR 34.0°C	0.396	11:41
SIMULATOR VAPOR 34.1°C	0.395	11:42
SIMULATOR VAPOR 34.1°C	0.396	11:43
SIMULATOR VAPOR 34.1°C	0.396	11:45
SIMULATOR VAPOR 34.1°C	0.396	11:46
BLANK TEST	0.000	11:46

Average = 0.396
Std Dev = 0.000

L-4
KLK
11-16-11



DIAGNOSTIC RESULT

DataMaster DMT: 100136
Location:
Calibration Date: 11/14/2011
Certification Date: 11/14/2011
Installation Date:
Test Date: 11/16/2011
Test Time: 13:45:17

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 46.4°C
Digital Sim = 33.8°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 532 Hz

PUMP INFO
Flow Rate = 6.035 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0222	0.0248
MIN(V)	0.0209	0.0236

FILTER INFO

Filter 1	0.023	Zero = true
Filter 2	0.463	Zero = true
Filter 3	1.360	Zero = true

CALIBRATION CHECK
Xq = 0.083 0.11%

DIAGNOSTIC RESULT

DataMaster DMT: 100136
Location:
Calibration Date: 11/14/2011
Certification Date: 11/14/2011
Installation Date:
Test Date: 11/17/2011
Test Time: 08:29:54

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

TEMPERATURES

Sample Chamber = 49.0°C
Breath Tube = 43.9°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 529 Hz

PUMP INFO
Flow Rate = 6.083 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0244	-0.0199
MIN(V)	-0.0258	-0.0213

FILTER INFO
Filter 1 -0.020 Zero = true
Filter 2 0.416 Zero = true
Filter 3 1.298 Zero = true

CALIBRATION CHECK
Xq = 0.082 0.84%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/17/2011
Time: 09:31:03

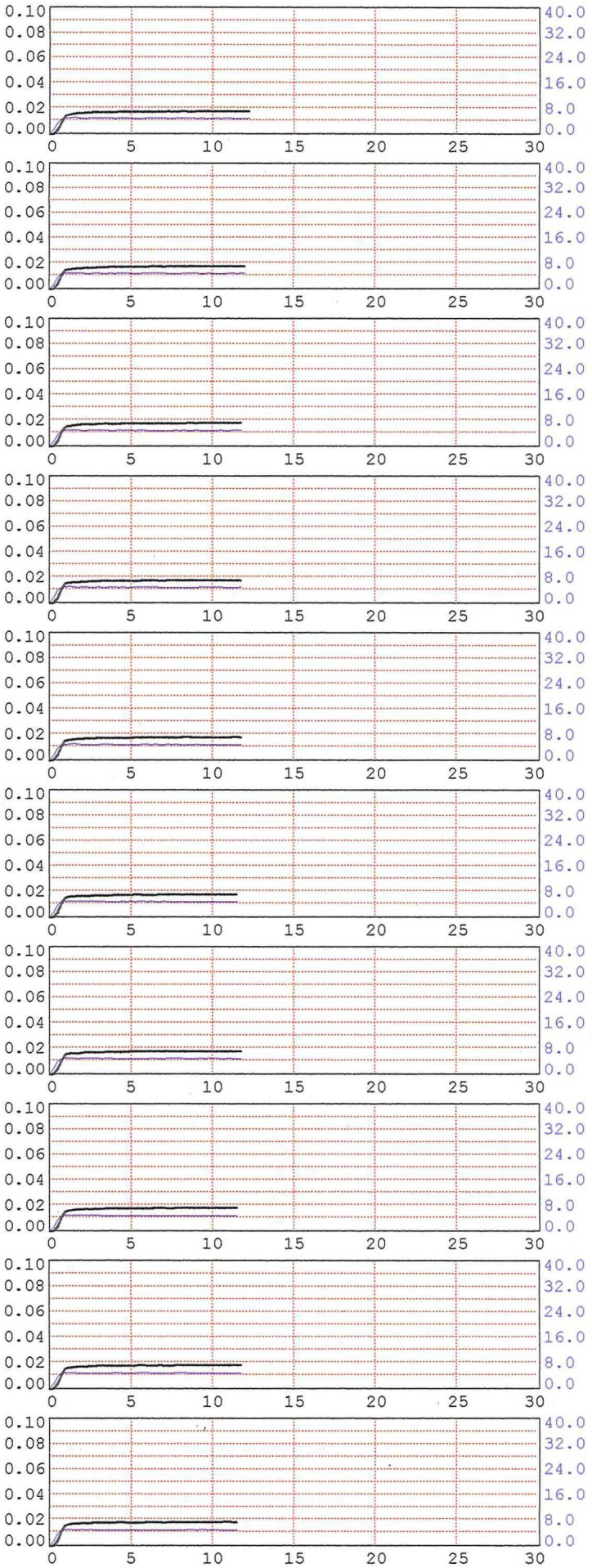
SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	09:31
CALIBRATION CHECK	PASSED	09:32
SIMULATOR VAPOR 33.8°C	0.019	09:32
SIMULATOR VAPOR 33.8°C	0.019	09:33
SIMULATOR VAPOR 33.8°C	0.019	09:34
SIMULATOR VAPOR 33.8°C	0.019	09:35
SIMULATOR VAPOR 33.8°C	0.019	09:36
SIMULATOR VAPOR 33.8°C	0.019	09:37
SIMULATOR VAPOR 33.8°C	0.019	09:38
SIMULATOR VAPOR 33.8°C	0.019	09:39
SIMULATOR VAPOR 33.7°C	0.019	09:40
SIMULATOR VAPOR 33.8°C	0.019	09:41
BLANK TEST	0.000	09:42

Average = 0.019
Std Dev = 0.000

LS 11/17/11 SR



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/17/2011
Time: 09:59:38

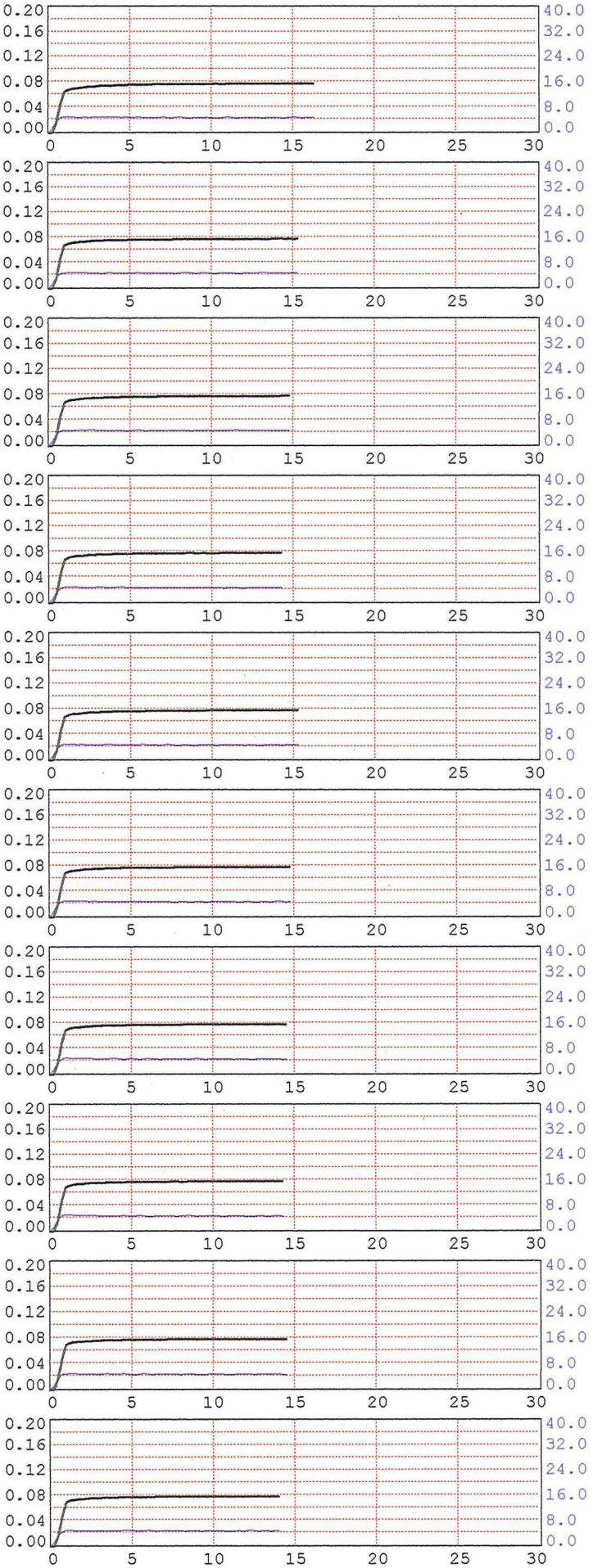
SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	10:00
CALIBRATION CHECK	PASSED	10:00
SIMULATOR VAPOR 33.8°C	0.078	10:01
SIMULATOR VAPOR 33.8°C	0.078	10:02
SIMULATOR VAPOR 33.8°C	0.078	10:03
SIMULATOR VAPOR 33.8°C	0.079	10:04
SIMULATOR VAPOR 33.8°C	0.079	10:05
SIMULATOR VAPOR 33.7°C	0.079	10:06
SIMULATOR VAPOR 33.8°C	0.079	10:07
SIMULATOR VAPOR 33.8°C	0.079	10:08
SIMULATOR VAPOR 33.8°C	0.079	10:09
SIMULATOR VAPOR 33.8°C	0.079	10:10
BLANK TEST	0.000	10:11

Average = 0.078
Std Dev = 0.000

L5 11/17/11 SM



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100136

Date: 11/17/2011
Time: 10:31:46

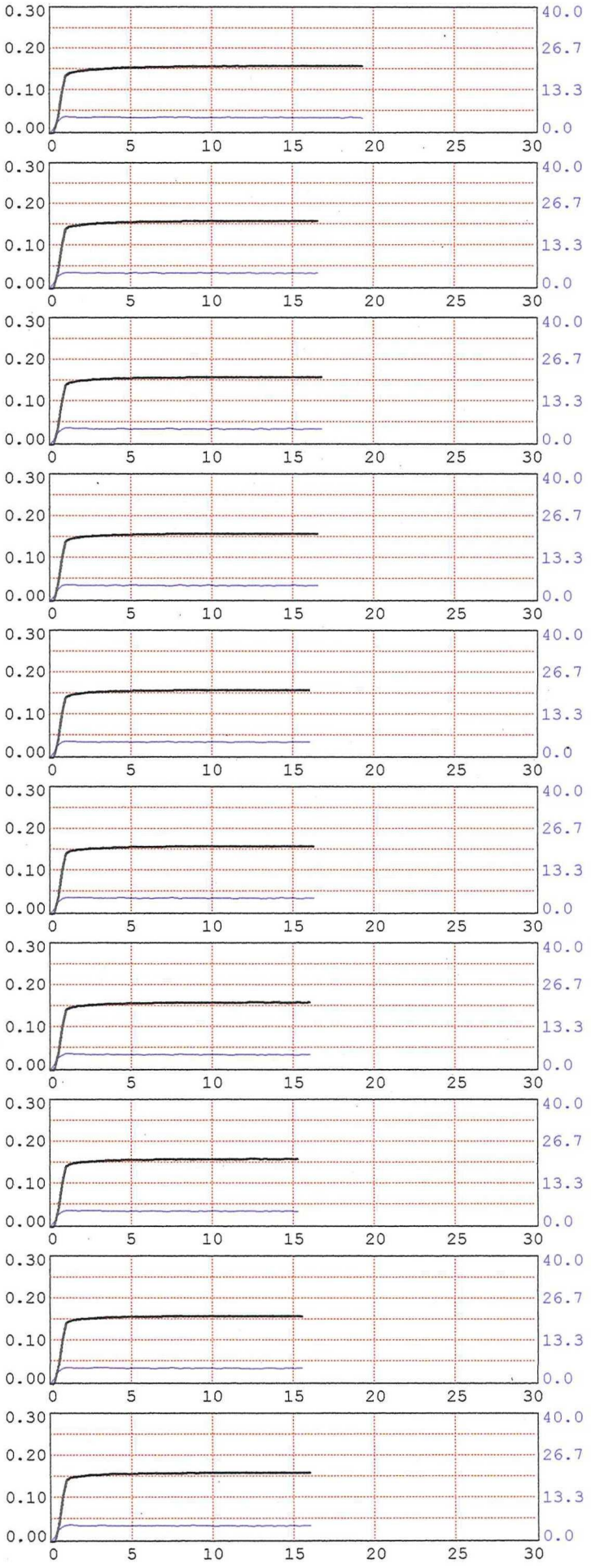
SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	10:32
CALIBRATION CHECK	PASSED	10:32
SIMULATOR VAPOR 33.8°C	0.158	10:33
SIMULATOR VAPOR 33.8°C	0.158	10:34
SIMULATOR VAPOR 33.8°C	0.158	10:35
SIMULATOR VAPOR 33.8°C	0.158	10:36
SIMULATOR VAPOR 33.8°C	0.158	10:37
SIMULATOR VAPOR 33.7°C	0.159	10:38
SIMULATOR VAPOR 33.8°C	0.158	10:39
SIMULATOR VAPOR 33.8°C	0.158	10:41
SIMULATOR VAPOR 33.8°C	0.158	10:42
SIMULATOR VAPOR 33.8°C	0.159	10:43
BLANK TEST	0.000	10:44

Average = 0.158
Std Dev. = 0.000

LS 11/17/11 SR



ACCURACY & PRECISION REPORT

STATE OF VERMONT

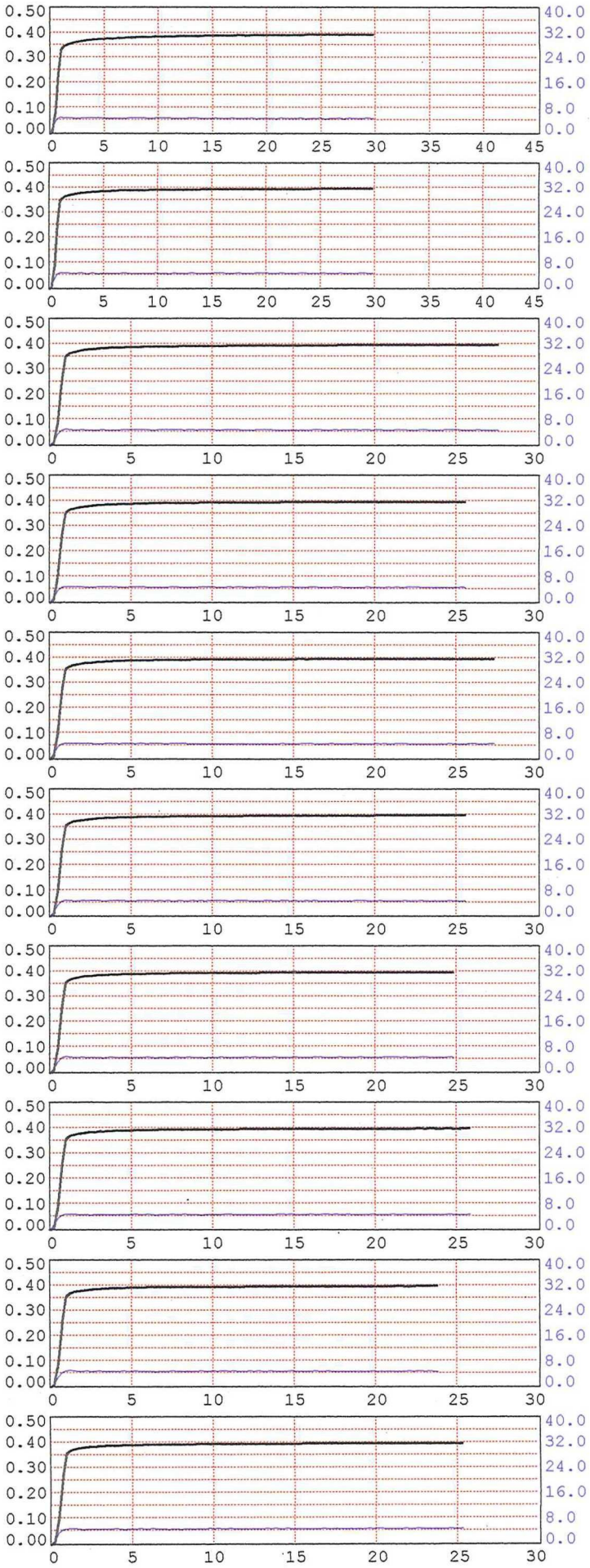
DataMater DMT: 100136

Date: 11/17/2011
Time: 11:08:55

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-34-400
SOLUTION CONCENTRATION: 0.403

BLANK TEST	0.000	11:09
CALIBRATION CHECK	PASSED	11:09
SIMULATOR VAPOR 33.8°C	0.391	11:10
SIMULATOR VAPOR 33.8°C	0.393	11:11
SIMULATOR VAPOR 33.8°C	0.394	11:13
SIMULATOR VAPOR 33.8°C	0.394	11:14
SIMULATOR VAPOR 33.8°C	0.395	11:15
SIMULATOR VAPOR 33.8°C	0.395	11:17
SIMULATOR VAPOR 33.8°C	0.394	11:18
SIMULATOR VAPOR 33.8°C	0.395	11:19
SIMULATOR VAPOR 33.8°C	0.395	11:21
SIMULATOR VAPOR 33.8°C	0.394	11:22
BLANK TEST	0.000	11:23

Average = 0.394
Std Dev = 0.001

L5 11/17/11 SRM