Windsor PD 104309

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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 8/23/11
Sales Order No. 44587

Ship Date 9/2/11
Packing List No. 68830

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

Freight 25.00

Attn:

Ship Via FedEx

Comments Service for Instrument Serial Number 104309

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 104309						None Given	No Draw # / NONE / No Date
Serial Nos.	104309						

Received 9/7/11 1355 [illegible]
9-7-11 [illegible] opened

National Patent
Analytical Systems, Inc.

QA
100
9-1-11

On this date 8/23/11, NPAS received instrument # 104309.

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

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

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

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

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

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

Print Name of Evaluator: Michael J. Barbely Jr.

Signature of Evaluator and Date: Michael J. Barbely Jr. 8/31/11

Print Name of Reviewer: DAVID RADOMSKI

Signature of Reviewer and Date: David Radomski 9/2/11

9-7-11

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

DataMaster DMT Serial Number 104309

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 9-8-11 KEK	0.970478 KEK 9-8-11	34.0	GUTH 11050	9-8-11 0.100 KEK	G8228 KEK 9-16-11	9-8-11 KEK SKM 09/12/11	100% KEK 9-12-11	100% KEK 9-13-11 SKM	KEK 100% 9-12-11	100% KEK 9-8-11 SKM 09/12/11	100% KEK 9-12-11 SKM	100% KEK 9-13-11	100% KEK 9-13-11
		34.0	11-39-100	9-8-11 0.100 KEK									

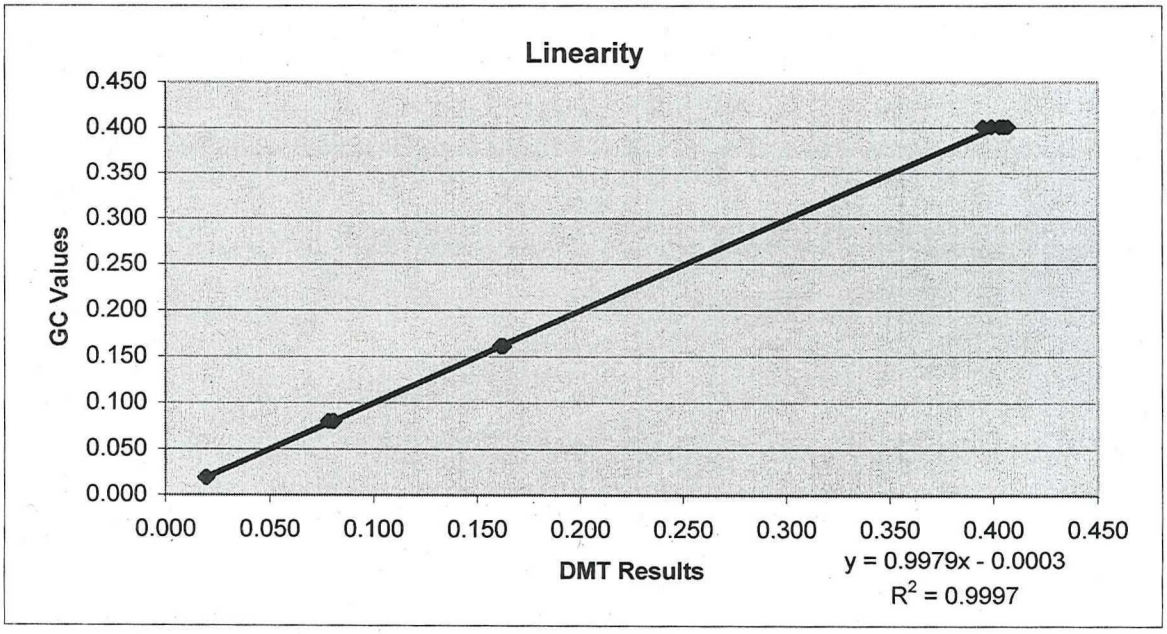
Linearity Test #1	Linearity Test #2	Linearity Test #3	Linearity Test #4	Linearity Test #5	Data Download	In-House & 2nd Source Calibration Check		
						NIST Temp.°C	Lot. #	Result (g/210L)
KEK 9-8-11 SKM 09/12/11	KEK 9-12-11 SKM	KEK 9-12-11 SKM	KEK 9-13-11 SKM	KEK 9-13-11 SKM	KEK 9-13-11 SKM	34.0	GUTH 11050	0.100 KEK 9-13-11 SKM
						34.1	11-39-100	0.099 KEK 9-13-11 SKM

Notes: Power up started 9/7/11 KEK
Calibration Solution NIST temp= 33.9°C KEK 9-8-11 SKM
Water Solution NIST temp= 34.0°C KEK 9-8-11 SKM
Clock reset after ~~Guth~~ inhouse std run from 06:48 to 10:06am KEK 9-8-11 SKM
Software updated 9/8/11 KEK 09/13/11 SKM
Multiple Breath Test Sequence Run for Cert. to show no Alcohol present > 0. KEK 9-14-11
SKM 09/20/11

Analyst: KEK 9-14-11 **Reviewer:** ABR 9/15/11 **Reviewer:** 09/20/11

DataMaster DMT Serial Number 104309

Operator	Date	GC Value	DMT Average	Std Dev	% Recovery
KLK	9/8/2011	0.019	0.020	0.000	105
KLK	9/8/2011	0.080	0.081	0.000	101
KLK	9/8/2011	0.161	0.163	0.000	101
KLK	9/8/2011	0.401	0.407	0.000	101
KLK	9/12/2011	0.019	0.019	0.000	100
KLK	9/12/2011	0.080	0.081	0.000	101
KLK	9/12/2011	0.161	0.162	0.000	100
KLK	9/12/2011	0.401	0.403	0.000	100
KLK	9/12/2011	0.019	0.019	0.000	100
KLK	9/12/2011	0.080	0.080	0.000	100
KLK	9/12/2011	0.161	0.163	0.000	101
KLK	9/12/2011	0.401	0.405	0.000	100
KLK	9/13/2011	0.019	0.019	0.000	100
KLK	9/13/2011	0.080	0.078	0.000	97
KLK	9/13/2011	0.161	0.161	0.000	100
KLK	9/13/2011	0.401	0.399	0.000	99
KLK	9/13/2011	0.019	0.019	0.000	100
KLK	9/13/2011	0.080	0.080	0.000	100
KLK	9/13/2011	0.161	0.163	0.000	101
KLK	9/13/2011	0.401	0.395	0.000	98
			Average	0.0000	100
			Std Dev	0.0000	
			Range		97-105



SECTION 2

POWER UP TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 104309
Location:
Calibration Date:
Certification Date:
Installation Date:
Test Date: 09/08/2011
Test Time: 05:06:16

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube = 47.1°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.67 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 535 Hz

PUMP INFO
Flow Rate = 5.784 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0213	-0.0175
MIN(V)	-0.0228	-0.0185

FILTER INFO

Filter 1	-0.018	Zero = true
Filter 2	0.270	Zero = true
Filter 3	0.009	Zero = true

CALIBRATION CHECK
Xq = 0.084 0.31%

CALIBRATION REPORT

DataMaster DMT: 104309
Calibration Date: 09/08/2011
Calibrated by: KIRK L KIMBALL
Lot: 11-37-100

```
Ca  = 0.100
CAL = 0.970478   0.800  <= CAL < 1.200
b1  = 0.000      0.000  <=  b1 < 0.004
b2  = 0.005      0.002  <=  b2 < 0.010
b3  = 0.000      0.000  <=  b3 < 0.004
Xq  = 0.084      0.050  <=  Xq < 0.200
a21 = 1.210557   1.050  <= a21 < 1.300
a31 = 0.439869   0.300  <= a31 < 0.800
```

Performed by KLK Date 09/08/2011

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/08/2011
Time: 05:59:11

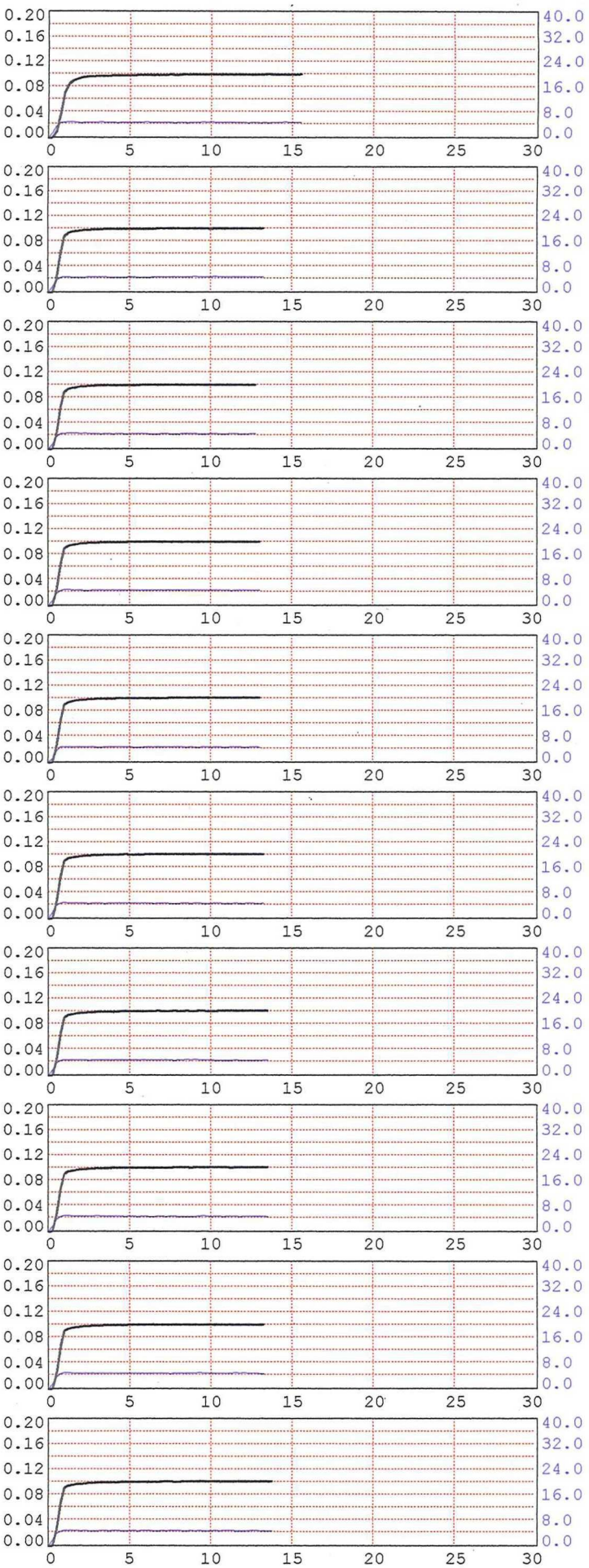
SUPERVISOR NAME:
KIRK L KIMBALL

SOLUTION LOT #: GUTH 11050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	06:00
CALIBRATION CHECK	PASSED	06:00
SIMULATOR VAPOR 34.1°C	0.100	06:00
SIMULATOR VAPOR 34.0°C	0.100	06:01
SIMULATOR VAPOR 34.0°C	0.100	06:02
SIMULATOR VAPOR 34.1°C	0.101	06:03
SIMULATOR VAPOR 34.1°C	0.101	06:04
SIMULATOR VAPOR 34.1°C	0.102	06:05
SIMULATOR VAPOR 34.1°C	0.101	06:07
SIMULATOR VAPOR 34.0°C	0.101	06:08
SIMULATOR VAPOR 34.0°C	0.101	06:09
SIMULATOR VAPOR 34.0°C	0.101	06:10
BLANK TEST	0.000	06:11

Average = 0.100
Std Dev = 0.000

0.100 KLK
2nd source
cal check
KLK
9-8-11



DIAGNOSTIC RESULT

DataMaster DMT: 104309
Location:
Calibration Date: 09/08/2011
Certification Date:
Installation Date:
Test Date: 09/08/2011
Test Time: 06:18:35

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

TEMPERATURES

Sample Chamber = 49.1°C
Breath Tube = 47.8°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 1.67 V
Cooler Voltage = 1.79 V
Bias Voltage = 81 V
Chopper Freq = 534 Hz

PUMP INFO
Flow Rate = 5.990 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0008	0.0024
MIN(V)	-0.0012	0.0012

FILTER INFO

Filter 1	0.002	Zero = true
Filter 2	0.290	Zero = true
Filter 3	0.043	Zero = true

CALIBRATION CHECK
Xq = 0.084 0.41%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/08/2011
Time: 06:21:52

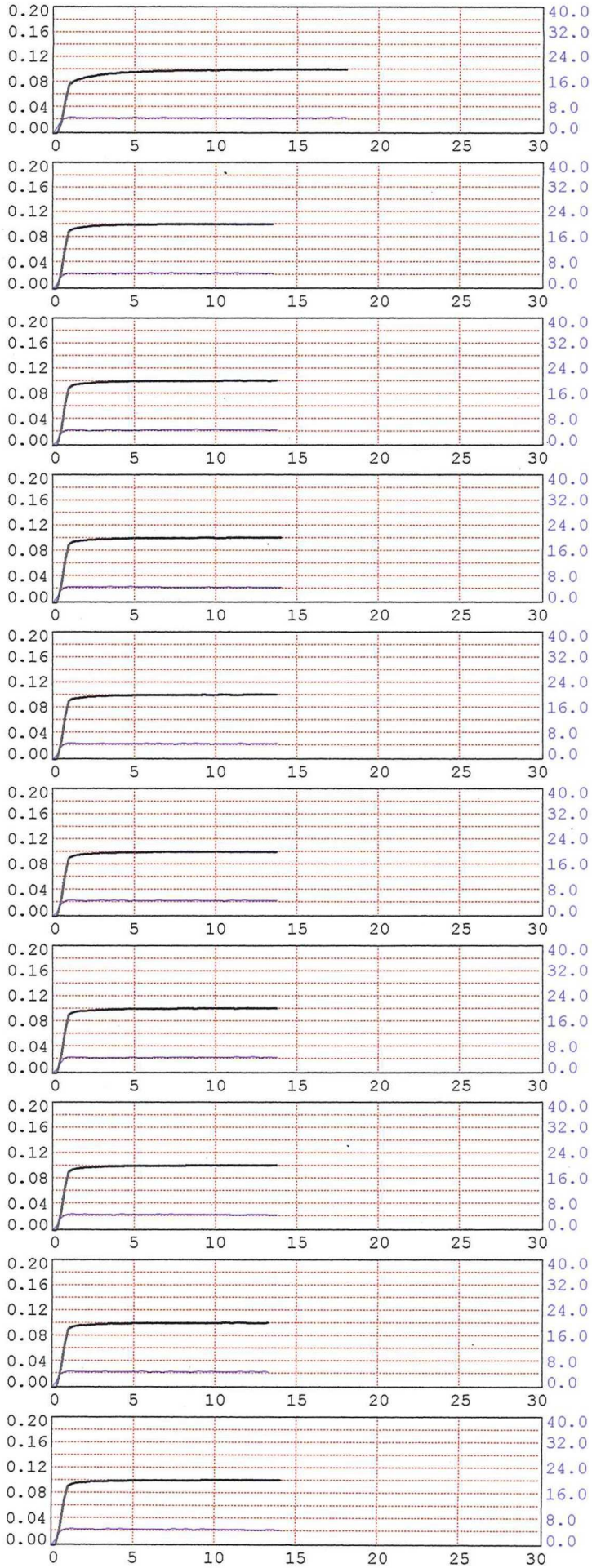
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	06:22
CALIBRATION CHECK	PASSED	06:22
SIMULATOR VAPOR 34.0°C	0.100	06:23
SIMULATOR VAPOR 34.0°C	0.101	06:24
SIMULATOR VAPOR 34.0°C	0.101	06:25
SIMULATOR VAPOR 34.0°C	0.101	06:26
SIMULATOR VAPOR 34.0°C	0.101	06:27
SIMULATOR VAPOR 34.0°C	0.101	06:28
SIMULATOR VAPOR 34.0°C	0.101	06:29
SIMULATOR VAPOR 34.0°C	0.101	06:30
SIMULATOR VAPOR 34.1°C	0.101	06:31
SIMULATOR VAPOR 34.0°C	0.101	06:33
BLANK TEST	0.000	06:33

Average = 0.100
Std Dev = 0.000

Inhouse
Cal check
KLK
9-8-11



CERTIFICATION REPORT

DataMaster DMT: 104309
Calibration Date: 09/08/2011
Certification Date: 09/08/2011
Certified by: KIRK L KIMBALL

Diagnostic Results

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube    = 47.7°C
Digital Sim    = 33.8°C

SETTINGS
Lamp Voltage   = 1.67 V
Cooler Voltage = 1.80 V
Bias Voltage   = 81 V
Chopper Freq   = 536 Hz

PUMP INFO
Flow Rate = 5.956 L/M

DETECTOR INFO
PUMP     ON        OFF
MAX(V)   0.0124    0.0152
MIN(V)   0.0112    0.0138

FILTER INFO
Filter 1   0.014  Zero = true
Filter 2   0.300  Zero = true
Filter 3   0.064  Zero = true

CALIBRATION CHECK
Xq  = 0.084  0.41%
```

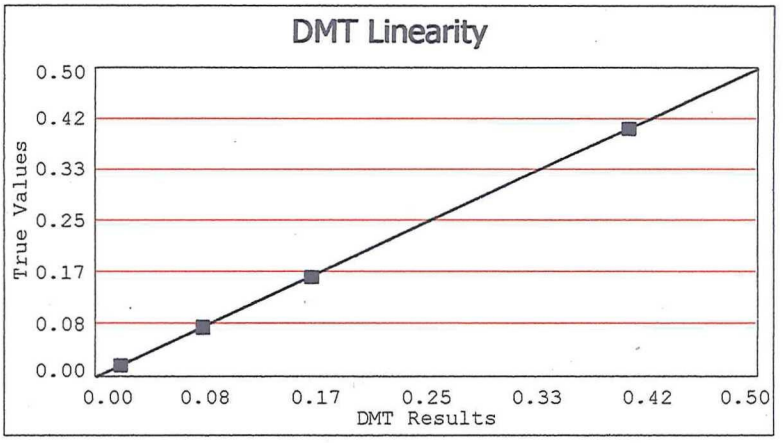
Options

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

Linearity Check Results

True Value	Reported Average	Std Dev
0.019 g/210L Lot # 12-07-020	0.019 g/210L	0.0000
0.080 g/210L Lot # 12-11-080	0.081 g/210L	0.0000
0.161 g/210L Lot # 12-12-160	0.163 g/210L	0.0000
0.401 g/210L Lot # 12-08-400	0.402 g/210L	0.0000

$R^2 = 1$



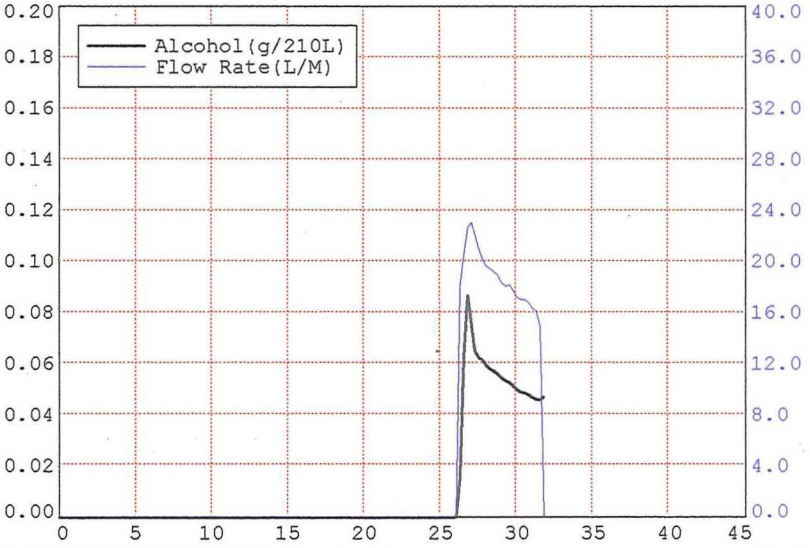
Acetone Interference Test

Lot # 12-09-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

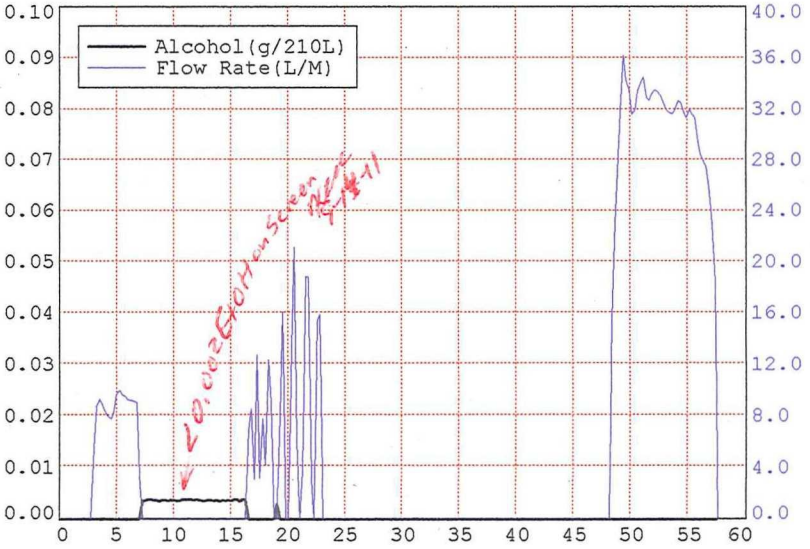


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

See attached sample acceptance test

Performed by KTK Date 09/08/2011

Reviewed by ABolda Date 9/15/11

MULTI-BREATH REPORT

STATE OF VERMONT

DataMater DMT: 104309
Certification Date: 09/08/2011

Date: 09/14/2011
Time: 14:49:04

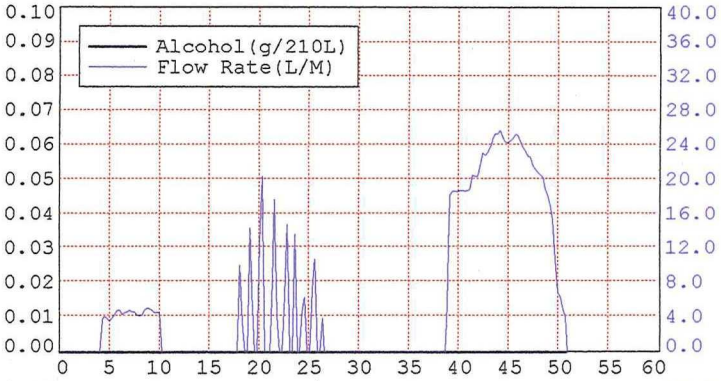
SUBJECT NAME:
KIRK L KIMBALL

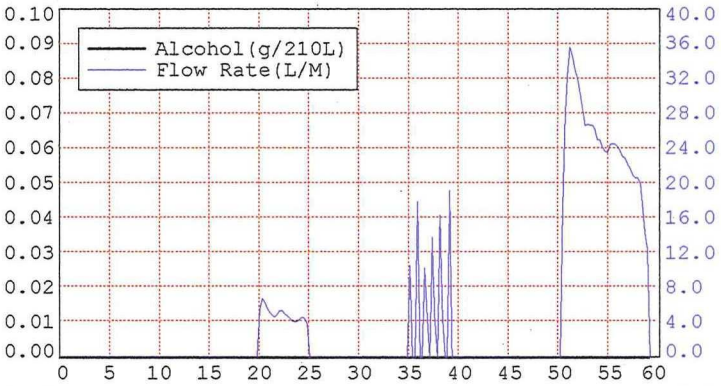
TEST OPERATOR NAME:
TEST TEST
COMMENT:
SAMPLE ACCEPTANCE TEST

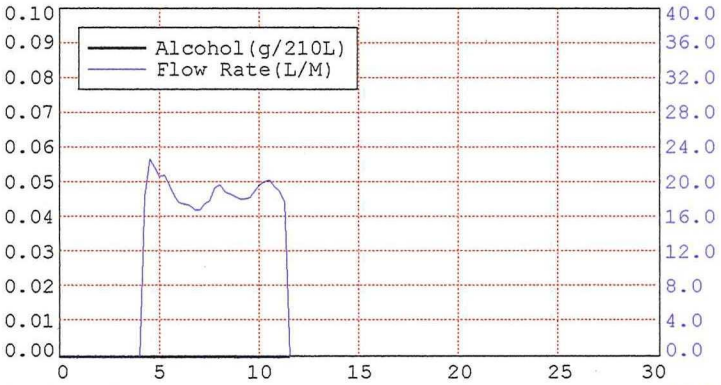
BLANK TEST	0.000	14:49
CALIBRATION CHECK	PASSED	14:50
SUBJECT SAMPLE (Vol=3.9L)	0.000	14:51
BLANK TEST	0.000	14:51
SUBJECT SAMPLE (Vol=3.6L)	0.000	14:52
BLANK TEST	0.000	14:53
SUBJECT SAMPLE (Vol=2.3L)	0.000	14:54
BLANK TEST	0.000	14:54
SUBJECT SAMPLE (Vol=1.7L)	0.000	14:55
BLANK TEST	0.000	14:56

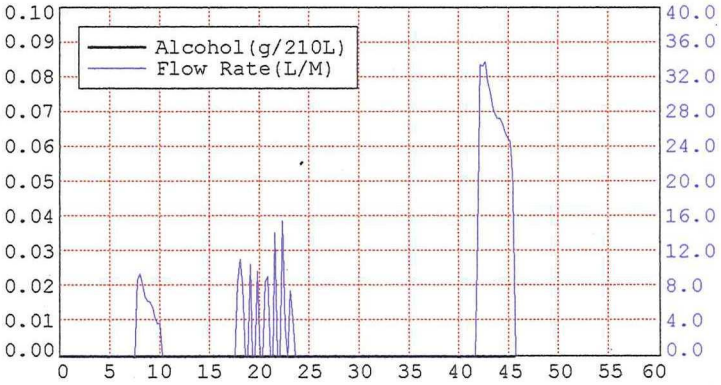
User Abort by KZC 9-14-11
4 breath Sample acceptance tests w/o any EtOH in the graph present.
KZC 9-14-11

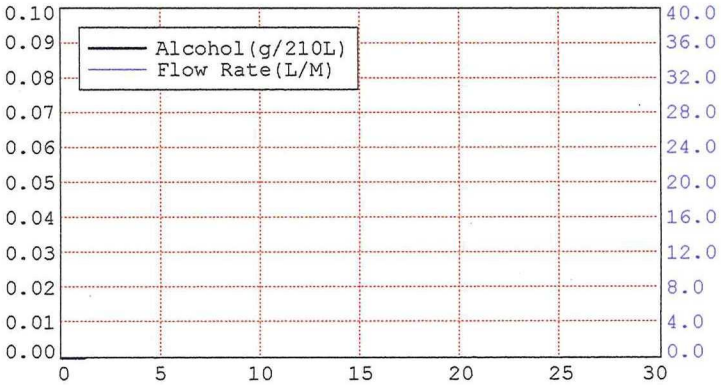
AB 9/15/11











SECTION 3

LINEARITY TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 104309
Location:
Calibration Date: 09/08/2011
Certification Date: 09/08/2011
Installation Date:
Test Date: 09/08/2011
Test Time: 15:29:49

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

TEMPERATURES

Sample Chamber = 49.0°C
Breath Tube = 47.3°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.66 V
Cooler Voltage = 1.80 V
Bias Voltage = 80 V
Chopper Freq = 533 Hz

PUMP INFO
Flow Rate = 5.951 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0148	-0.0120
MIN(V)	-0.0161	-0.0134

FILTER INFO

Filter 1	-0.013	Zero = true
Filter 2	0.278	Zero = true
Filter 3	0.009	Zero = true

CALIBRATION CHECK
Xq = 0.084 0.21%

DIAGNOSTIC RESULT

DataMaster DMT: 104309
Location:
Calibration Date: 09/08/2011
Certification Date: 09/08/2011
Installation Date:
Test Date: 09/08/2011
Test Time: 15:51:54

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 47.9°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.67 V
Cooler Voltage = 1.79 V
Bias Voltage = 80 V
Chopper Freq = 535 Hz

PUMP INFO
Flow Rate = 5.915 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0067	0.0087
MIN(V)	0.0049	0.0073

FILTER INFO

Filter 1	0.008	Zero = true
Filter 2	0.296	Zero = true
Filter 3	0.048	Zero = true

CALIBRATION CHECK
Xq = 0.084 0.31%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/08/2011
Time: 15:56:09

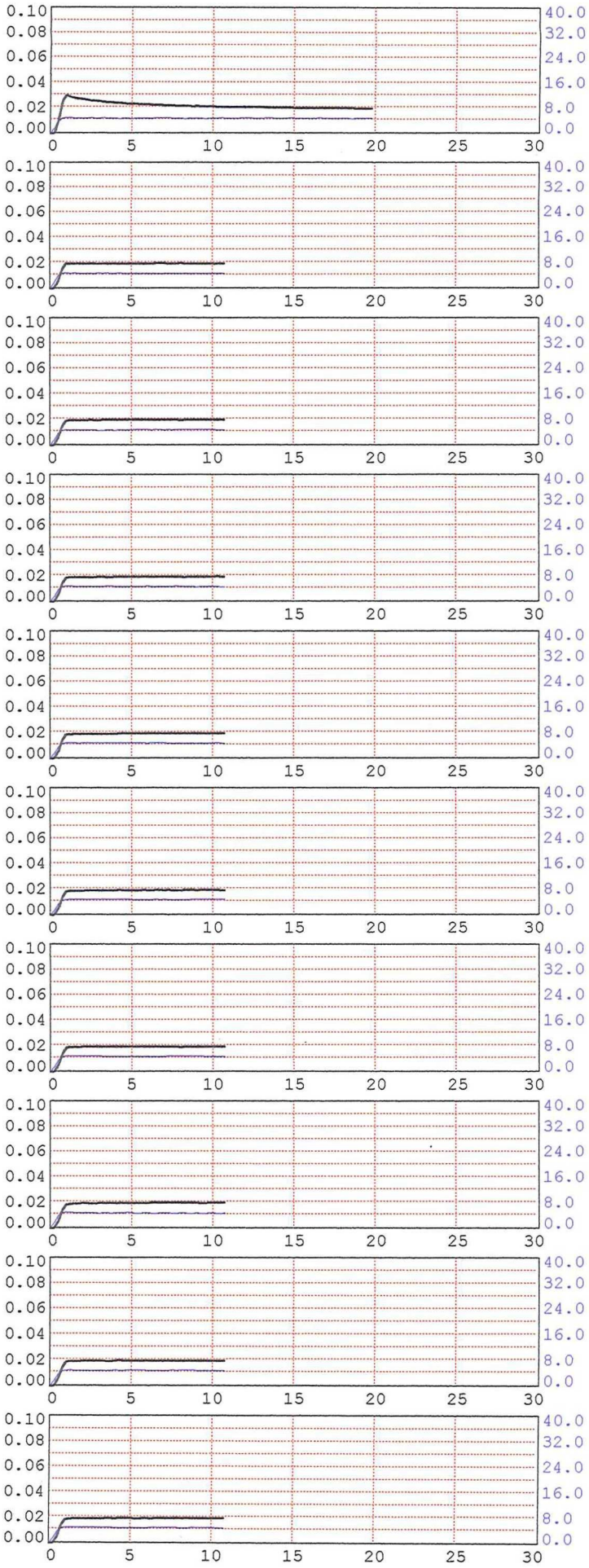
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	15:57
CALIBRATION CHECK	PASSED	15:57
SIMULATOR VAPOR 34.0°C	0.020	15:57
SIMULATOR VAPOR 34.0°C	0.020	15:58
SIMULATOR VAPOR 34.0°C	0.020	15:59
SIMULATOR VAPOR 33.9°C	0.020	16:00
SIMULATOR VAPOR 34.0°C	0.020	16:01
SIMULATOR VAPOR 34.0°C	0.020	16:02
SIMULATOR VAPOR 33.9°C	0.020	16:03
SIMULATOR VAPOR 34.0°C	0.020	16:04
SIMULATOR VAPOR 34.0°C	0.020	16:05
SIMULATOR VAPOR 33.9°C	0.020	16:06
BLANK TEST	0.000	16:07

Average = 0.020
Std Dev = 0.000

L-1
okaee
9-8-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/08/2011
Time: 16:15:26

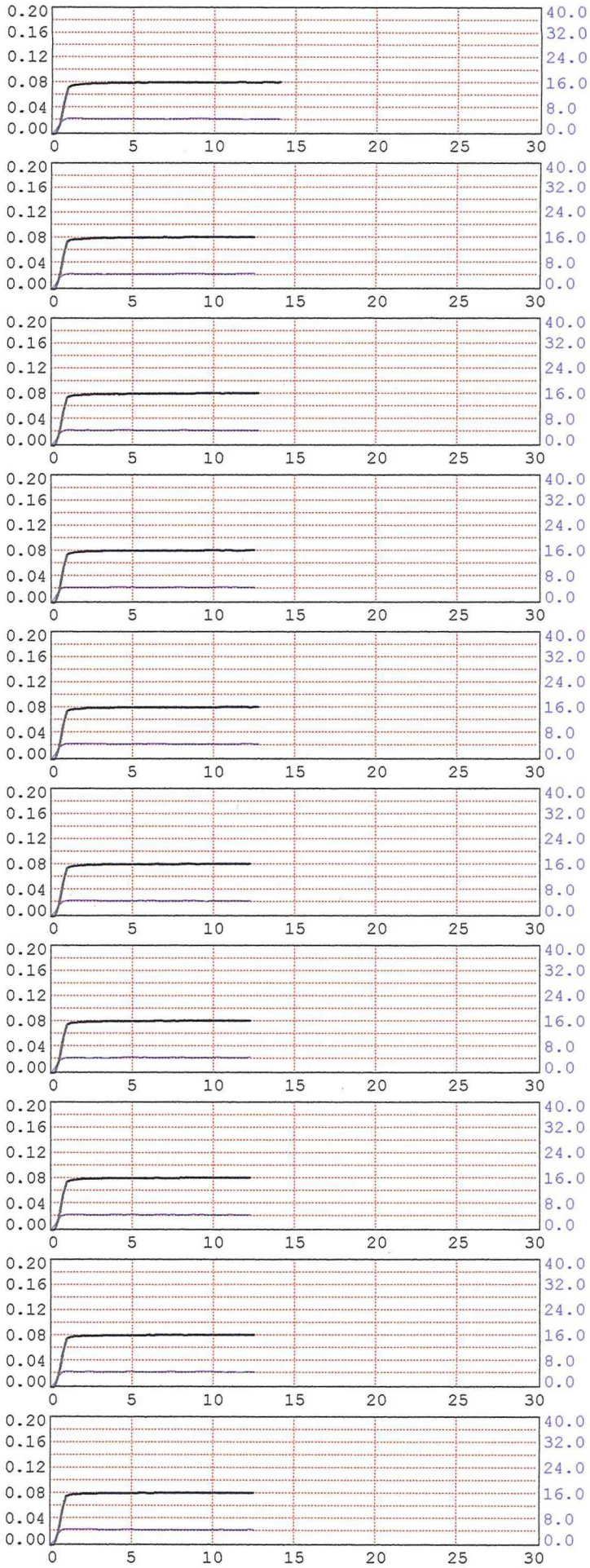
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	16:16
CALIBRATION CHECK	PASSED	16:16
SIMULATOR VAPOR 33.9°C	0.081	16:16
SIMULATOR VAPOR 33.9°C	0.082	16:17
SIMULATOR VAPOR 33.9°C	0.081	16:18
SIMULATOR VAPOR 33.9°C	0.081	16:19
SIMULATOR VAPOR 33.9°C	0.081	16:21
SIMULATOR VAPOR 33.9°C	0.082	16:22
SIMULATOR VAPOR 33.9°C	0.082	16:23
SIMULATOR VAPOR 33.9°C	0.082	16:24
SIMULATOR VAPOR 33.9°C	0.082	16:25
SIMULATOR VAPOR 34.0°C	0.082	16:26
BLANK TEST	0.000	16:27

Average = 0.081
Std Dev = 0.000

L-1
KLK
9-8-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/08/2011
Time: 16:30:12

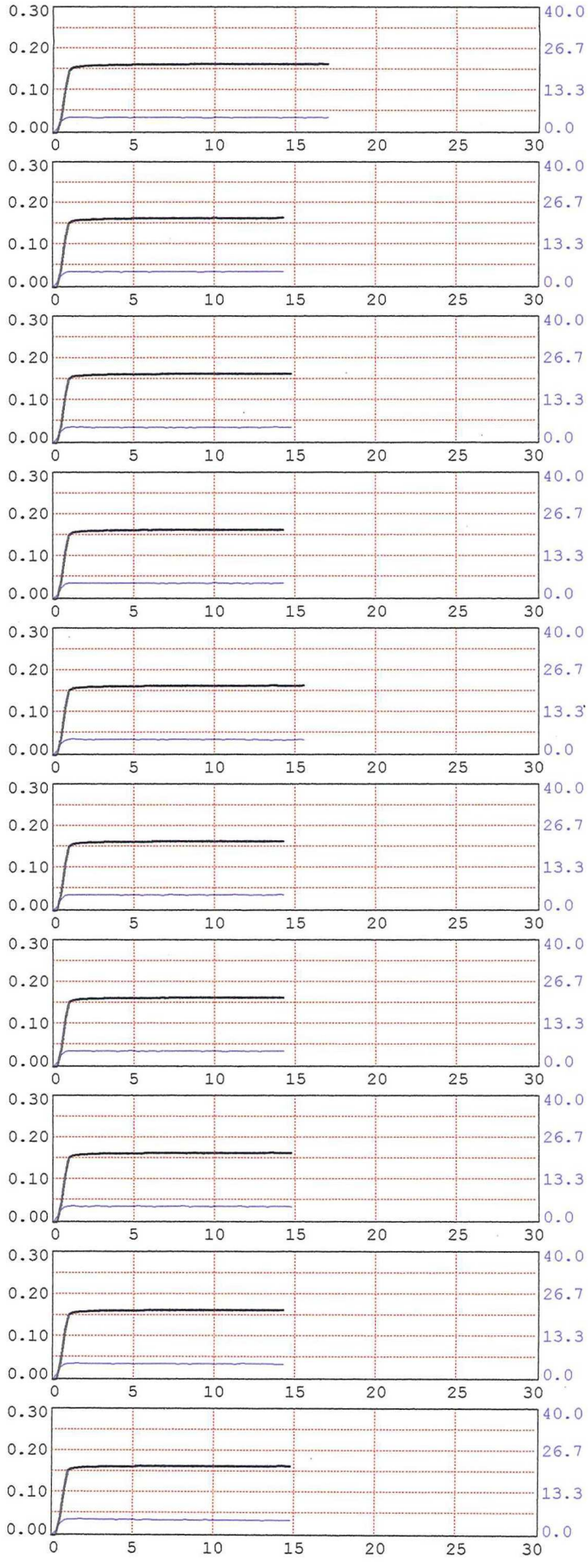
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	16:31
CALIBRATION CHECK	PASSED	16:31
SIMULATOR VAPOR 33.9°C	0.163	16:31
SIMULATOR VAPOR 33.9°C	0.163	16:32
SIMULATOR VAPOR 33.9°C	0.163	16:33
SIMULATOR VAPOR 33.9°C	0.163	16:34
SIMULATOR VAPOR 34.0°C	0.164	16:36
SIMULATOR VAPOR 33.9°C	0.163	16:37
SIMULATOR VAPOR 33.9°C	0.163	16:38
SIMULATOR VAPOR 33.9°C	0.163	16:39
SIMULATOR VAPOR 33.9°C	0.163	16:40
SIMULATOR VAPOR 34.0°C	0.163	16:41
BLANK TEST	0.000	16:42

Average = 0.163
Std Dev = 0.000

L-1
KLK
9-8-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/08/2011
Time: 16:51:32

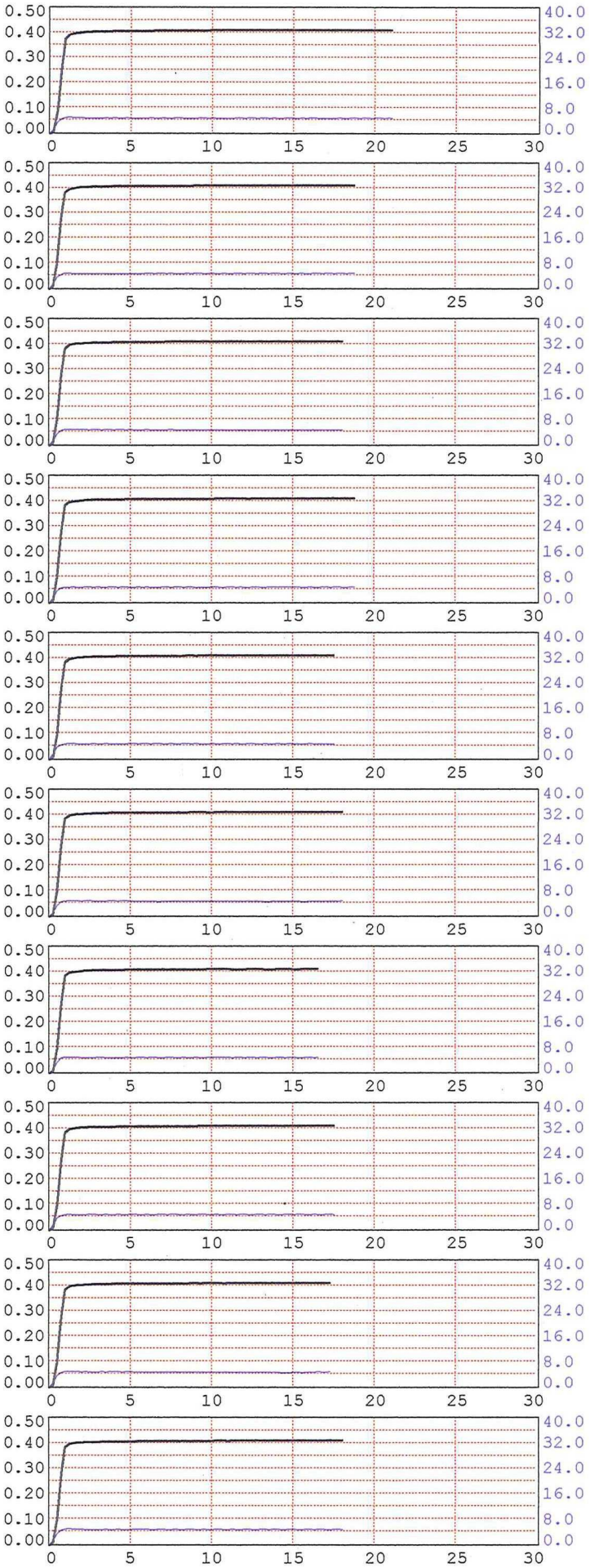
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	16:52
CALIBRATION CHECK	PASSED	16:52
SIMULATOR VAPOR 33.9°C	0.408	16:52
SIMULATOR VAPOR 33.9°C	0.408	16:54
SIMULATOR VAPOR 34.0°C	0.408	16:55
SIMULATOR VAPOR 33.9°C	0.408	16:56
SIMULATOR VAPOR 33.8°C	0.408	16:57
SIMULATOR VAPOR 33.9°C	0.407	16:58
SIMULATOR VAPOR 33.9°C	0.407	17:00
SIMULATOR VAPOR 33.9°C	0.408	17:01
SIMULATOR VAPOR 34.0°C	0.407	17:02
SIMULATOR VAPOR 33.9°C	0.408	17:03
BLANK TEST	0.000	17:04

Average = 0.407
Std Dev = 0.000

L-1
KLK
9-8-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/12/2011
Time: 07:48:14

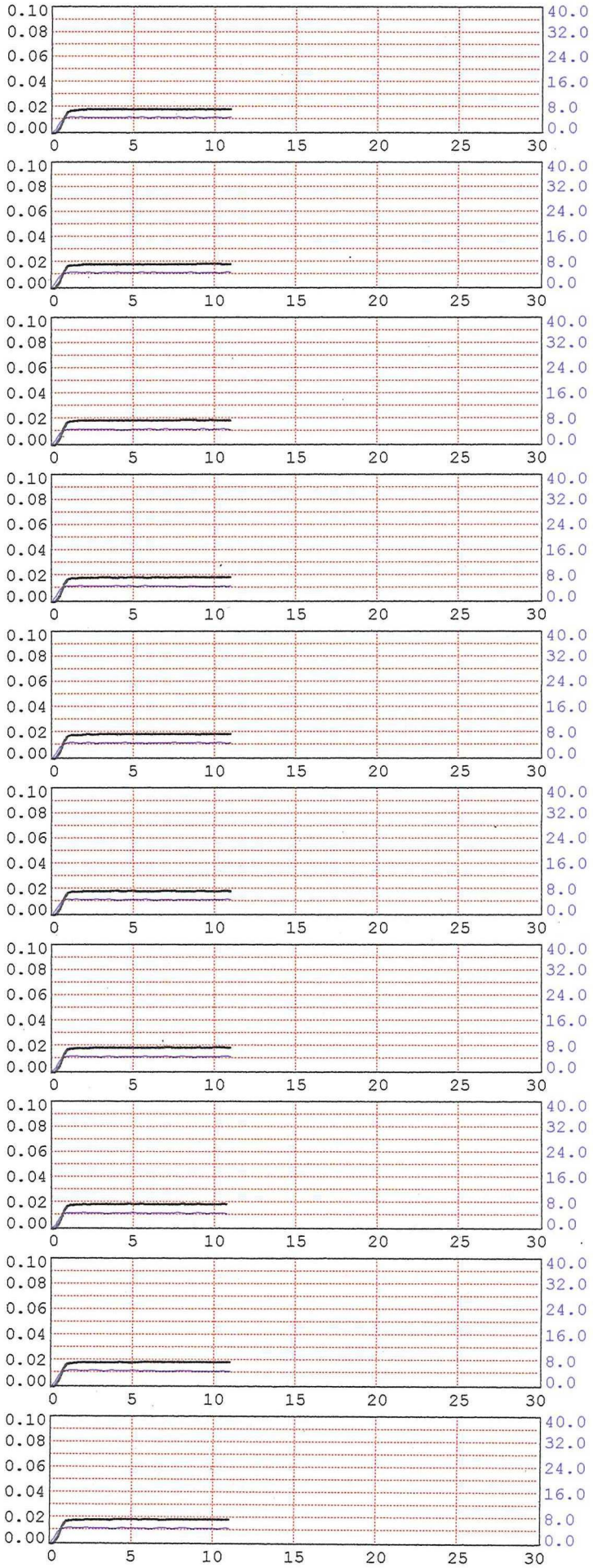
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	07:49
CALIBRATION CHECK	PASSED	07:49
SIMULATOR VAPOR 33.9°C	0.019	07:49
SIMULATOR VAPOR 33.9°C	0.019	07:50
SIMULATOR VAPOR 33.9°C	0.020	07:51
SIMULATOR VAPOR 33.9°C	0.019	07:52
SIMULATOR VAPOR 33.9°C	0.019	07:53
SIMULATOR VAPOR 33.9°C	0.019	07:54
SIMULATOR VAPOR 33.9°C	0.020	07:55
SIMULATOR VAPOR 33.9°C	0.020	07:56
SIMULATOR VAPOR 34.0°C	0.020	07:57
SIMULATOR VAPOR 33.9°C	0.019	07:58
BLANK TEST	0.000	07:59

Average = 0.019
Std Dev = 0.000

L-2
KLK
9-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/12/2011
Time: 08:45:15

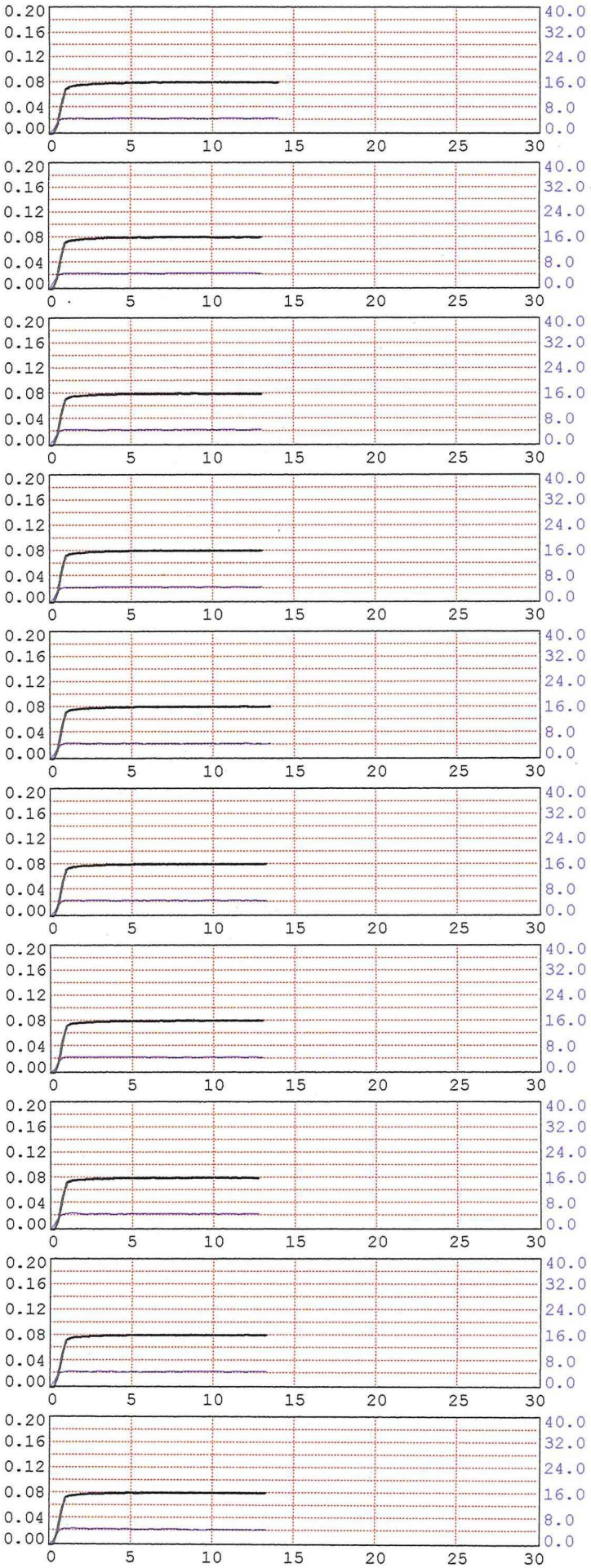
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	08:46
CALIBRATION CHECK	PASSED	08:46
SIMULATOR VAPOR 33.9°C	0.081	08:46
SIMULATOR VAPOR 33.9°C	0.081	08:47
SIMULATOR VAPOR 33.9°C	0.081	08:48
SIMULATOR VAPOR 34.0°C	0.081	08:49
SIMULATOR VAPOR 34.0°C	0.081	08:50
SIMULATOR VAPOR 33.9°C	0.081	08:51
SIMULATOR VAPOR 34.0°C	0.081	08:53
SIMULATOR VAPOR 34.0°C	0.081	08:54
SIMULATOR VAPOR 34.0°C	0.081	08:55
SIMULATOR VAPOR 34.0°C	0.081	08:56
BLANK TEST	0.000	08:57

Average = 0.081
Std Dev = 0.000

L-2
KLK
9-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/12/2011
Time: 09:20:31

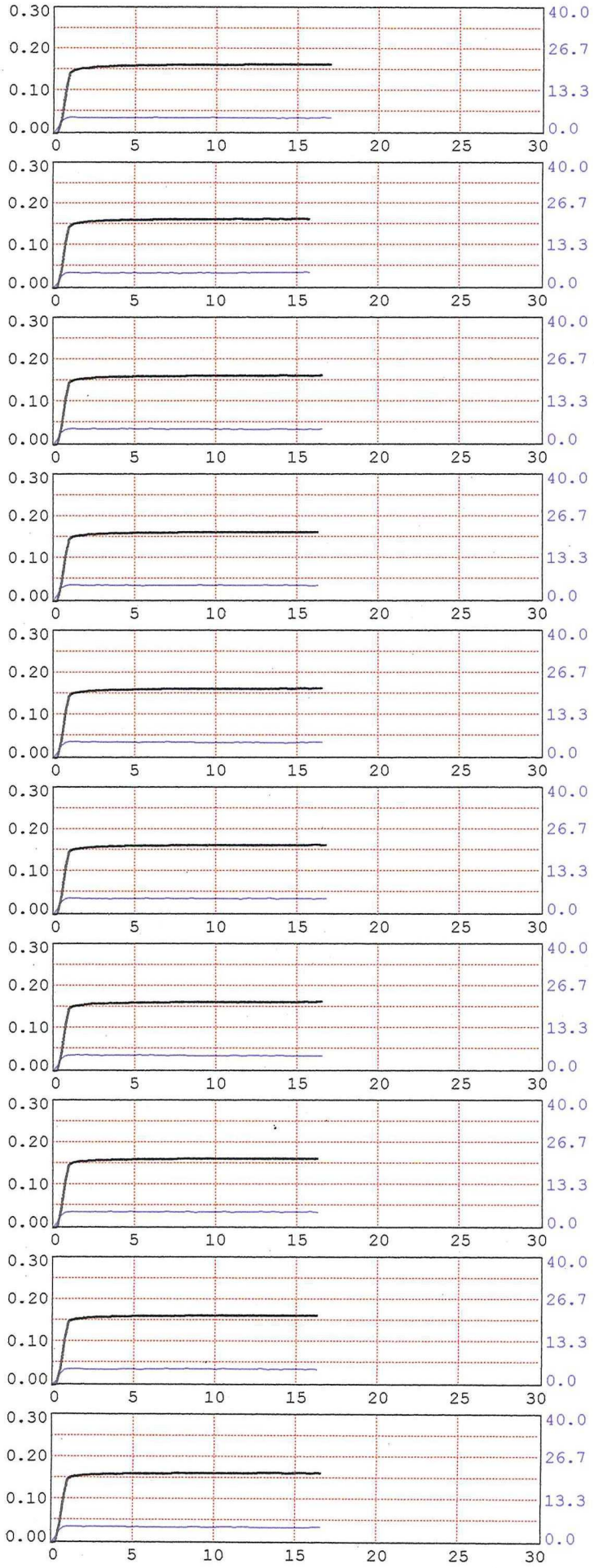
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	09:21
CALIBRATION CHECK	PASSED	09:21
SIMULATOR VAPOR 33.9°C	0.163	09:21
SIMULATOR VAPOR 34.0°C	0.162	09:23
SIMULATOR VAPOR 33.9°C	0.162	09:24
SIMULATOR VAPOR 33.9°C	0.162	09:25
SIMULATOR VAPOR 33.9°C	0.162	09:26
SIMULATOR VAPOR 33.9°C	0.162	09:27
SIMULATOR VAPOR 33.8°C	0.162	09:28
SIMULATOR VAPOR 34.0°C	0.162	09:29
SIMULATOR VAPOR 33.9°C	0.162	09:31
SIMULATOR VAPOR 33.9°C	0.162	09:32
BLANK TEST	0.000	09:33

Average = 0.162
Std Dev = 0.000

L+2
9-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/12/2011
Time: 09:41:51

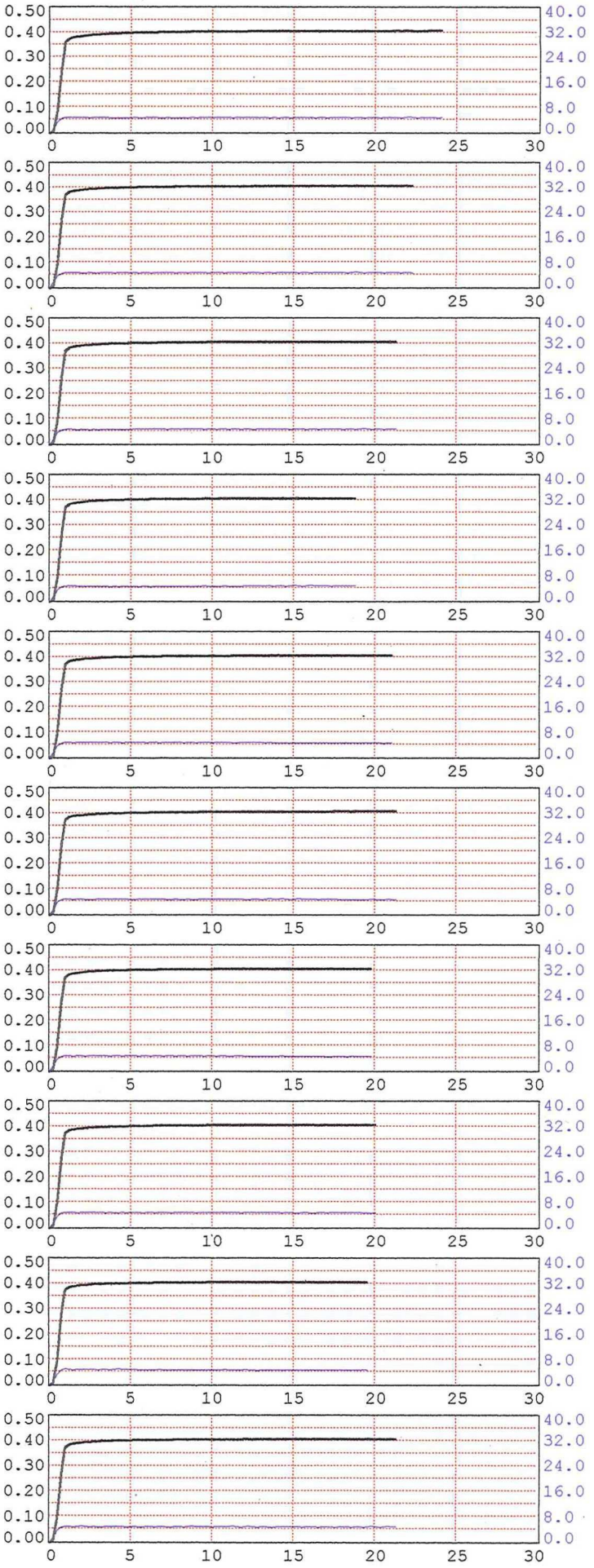
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	09:42
CALIBRATION CHECK	PASSED	09:42
SIMULATOR VAPOR 34.0°C	0.405	09:43
SIMULATOR VAPOR 33.9°C	0.403	09:44
SIMULATOR VAPOR 33.9°C	0.404	09:45
SIMULATOR VAPOR 33.9°C	0.403	09:47
SIMULATOR VAPOR 33.9°C	0.403	09:48
SIMULATOR VAPOR 34.0°C	0.405	09:49
SIMULATOR VAPOR 34.0°C	0.404	09:50
SIMULATOR VAPOR 33.9°C	0.404	09:51
SIMULATOR VAPOR 34.0°C	0.404	09:53
SIMULATOR VAPOR 34.0°C	0.404	09:54
BLANK TEST	0.000	09:55

Average = 0.403
Std Dev = 0.000

LJ 09/12/11



DIAGNOSTIC RESULT

DataMaster DMT: 104309
Location:
Calibration Date: 09/08/2011
Certification Date: 09/08/2011
Installation Date:
Test Date: 09/12/2011
Test Time: 11:05:27

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

TEMPERATURES

Sample Chamber = 48.7°C
Breath Tube = 46.7°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 1.67 V
Cooler Voltage = 1.80 V
Bias Voltage = 80 V
Chopper Freq = 535 Hz

PUMP INFO
Flow Rate = 5.863 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0400	0.0437
MIN(V)	0.0382	0.0427

FILTER INFO
Filter 1 0.043 Zero = true
Filter 2 0.327 Zero = true
Filter 3 0.074 Zero = true

CALIBRATION CHECK
Xq = 0.084 0.21%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/12/2011
Time: 11:27:04

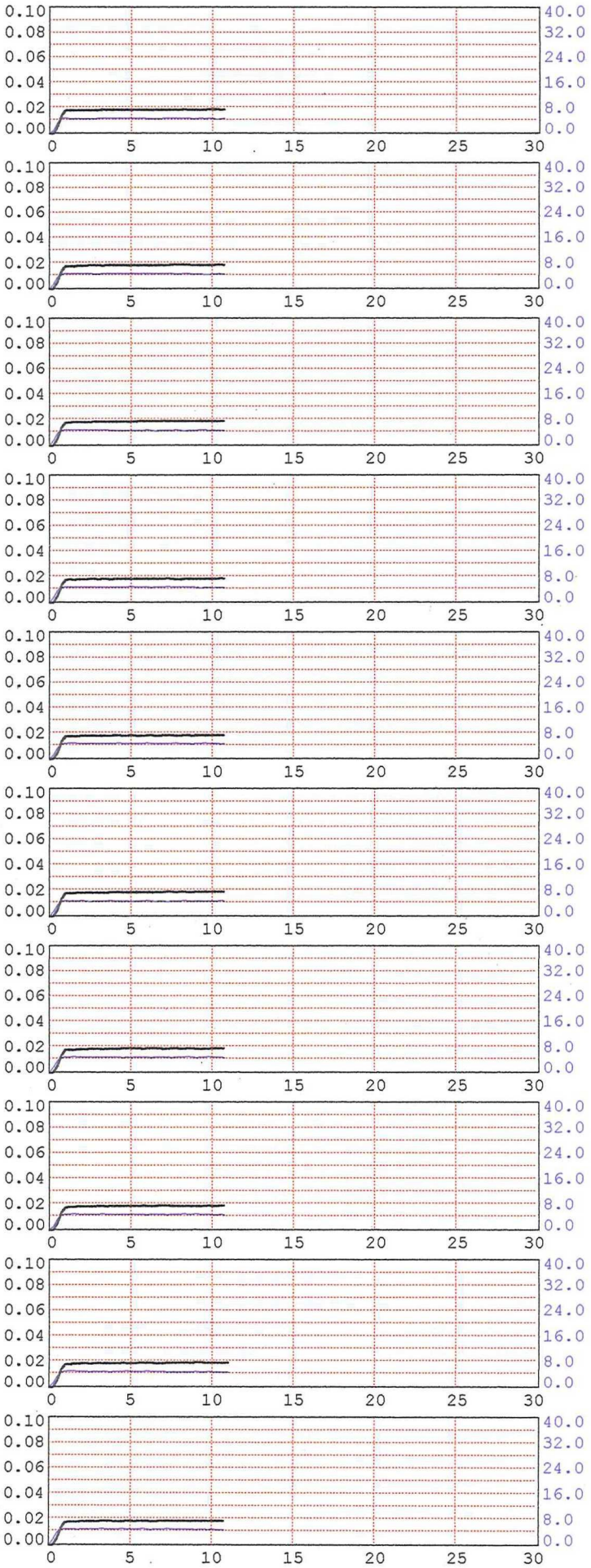
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	11:27
CALIBRATION CHECK	PASSED	11:28
SIMULATOR VAPOR 34.0°C	0.019	11:28
SIMULATOR VAPOR 33.9°C	0.020	11:29
SIMULATOR VAPOR 34.0°C	0.020	11:30
SIMULATOR VAPOR 34.0°C	0.019	11:31
SIMULATOR VAPOR 33.9°C	0.019	11:32
SIMULATOR VAPOR 34.0°C	0.020	11:33
SIMULATOR VAPOR 33.9°C	0.020	11:34
SIMULATOR VAPOR 33.9°C	0.020	11:35
SIMULATOR VAPOR 33.9°C	0.020	11:36
SIMULATOR VAPOR 34.0°C	0.019	11:37
BLANK TEST	0.000	11:38

Average = 0.019
Std Dev = 0.000

L-3
9-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/12/2011
Time: 11:45:43

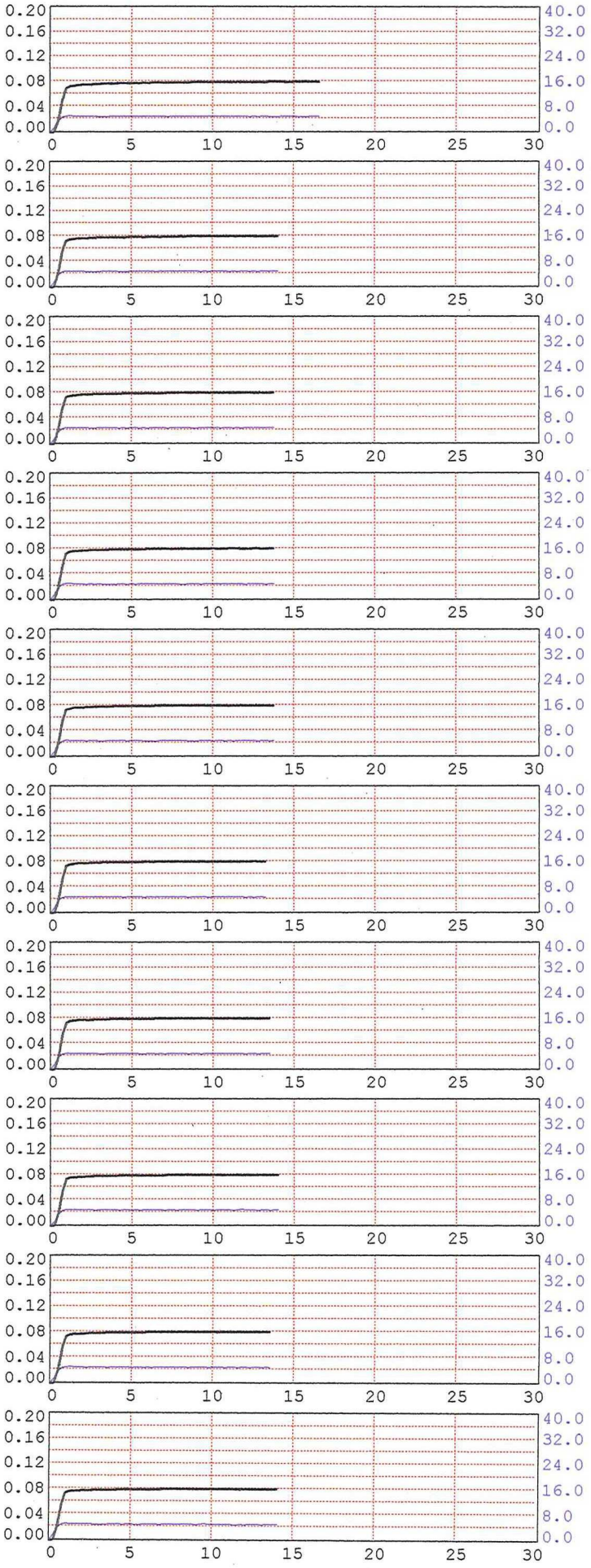
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	11:46
CALIBRATION CHECK	PASSED	11:46
SIMULATOR VAPOR 34.0°C	0.080	11:47
SIMULATOR VAPOR 33.9°C	0.080	11:48
SIMULATOR VAPOR 34.0°C	0.080	11:49
SIMULATOR VAPOR 33.9°C	0.081	11:50
SIMULATOR VAPOR 33.9°C	0.080	11:51
SIMULATOR VAPOR 33.9°C	0.080	11:52
SIMULATOR VAPOR 34.0°C	0.080	11:53
SIMULATOR VAPOR 34.0°C	0.080	11:54
SIMULATOR VAPOR 33.9°C	0.080	11:55
SIMULATOR VAPOR 34.0°C	0.080	11:56
BLANK TEST	0.000	11:57

Average = 0.080
Std Dev = 0.000

L-3
KLK
9-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/12/2011
Time: 12:05:39

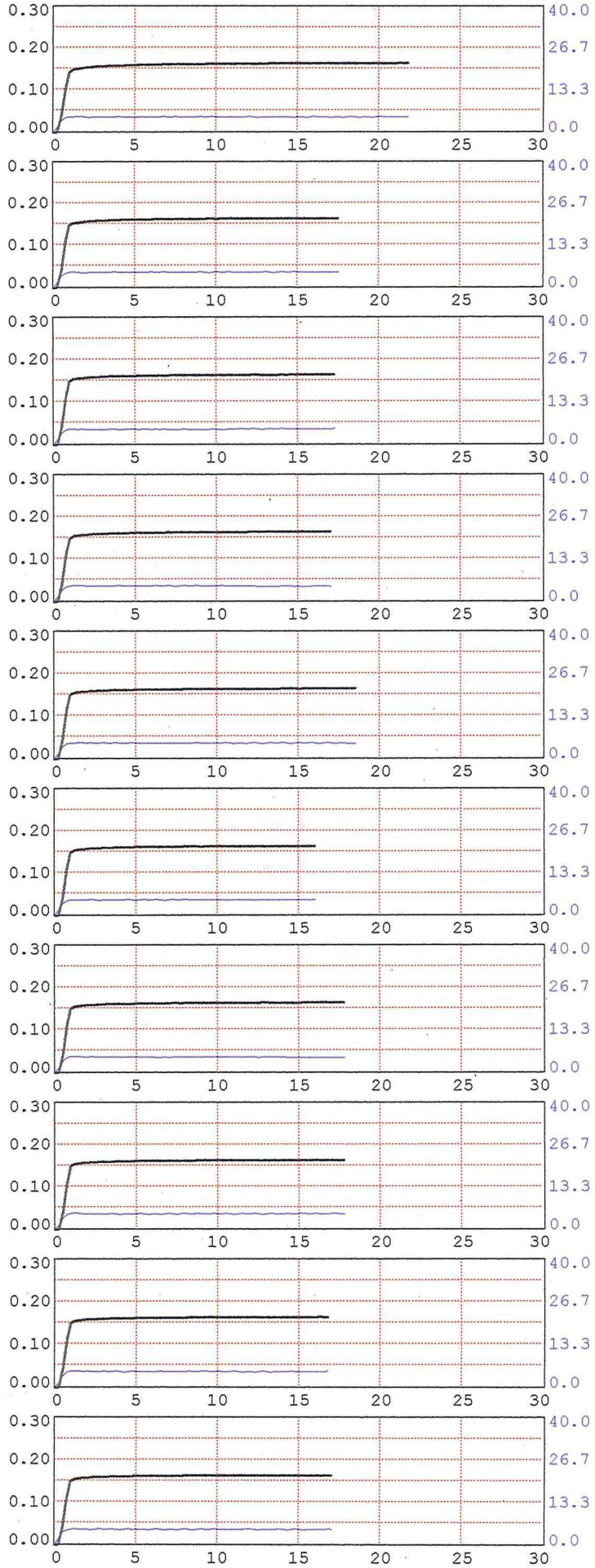
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	12:06
CALIBRATION CHECK	PASSED	12:06
SIMULATOR VAPOR 33.8°C	0.163	12:07
SIMULATOR VAPOR 33.7°C	0.163	12:08
SIMULATOR VAPOR 33.8°C	0.164	12:09
SIMULATOR VAPOR 33.8°C	0.164	12:10
SIMULATOR VAPOR 33.7°C	0.164	12:11
SIMULATOR VAPOR 33.8°C	0.163	12:12
SIMULATOR VAPOR 33.8°C	0.163	12:14
SIMULATOR VAPOR 33.8°C	0.163	12:15
SIMULATOR VAPOR 33.8°C	0.163	12:16
SIMULATOR VAPOR 33.8°C	0.163	12:17
BLANK TEST	0.000	12:18

Average = 0.163
Std Dev = 0.000

L-3
KLK
9-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/12/2011
Time: 12:39:36

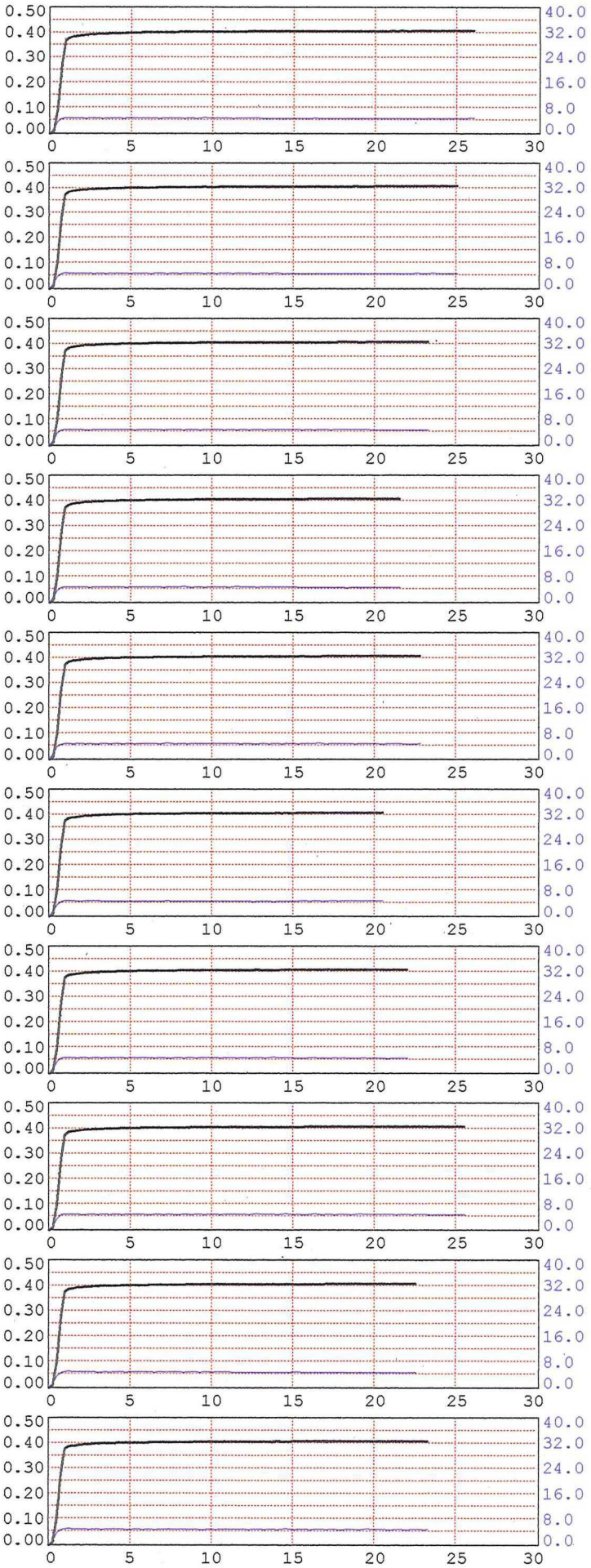
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	12:40
CALIBRATION CHECK	PASSED	12:40
SIMULATOR VAPOR 33.8°C	0.405	12:41
SIMULATOR VAPOR 33.8°C	0.405	12:42
SIMULATOR VAPOR 33.8°C	0.405	12:43
SIMULATOR VAPOR 33.9°C	0.405	12:44
SIMULATOR VAPOR 33.8°C	0.405	12:46
SIMULATOR VAPOR 33.9°C	0.405	12:47
SIMULATOR VAPOR 33.7°C	0.405	12:48
SIMULATOR VAPOR 33.8°C	0.406	12:49
SIMULATOR VAPOR 33.8°C	0.405	12:51
SIMULATOR VAPOR 33.8°C	0.406	12:52
BLANK TEST	0.000	12:53

Average = 0.405
Std Dev = 0.000

L-3
KLK
9-12-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/13/2011
Time: 09:40:40

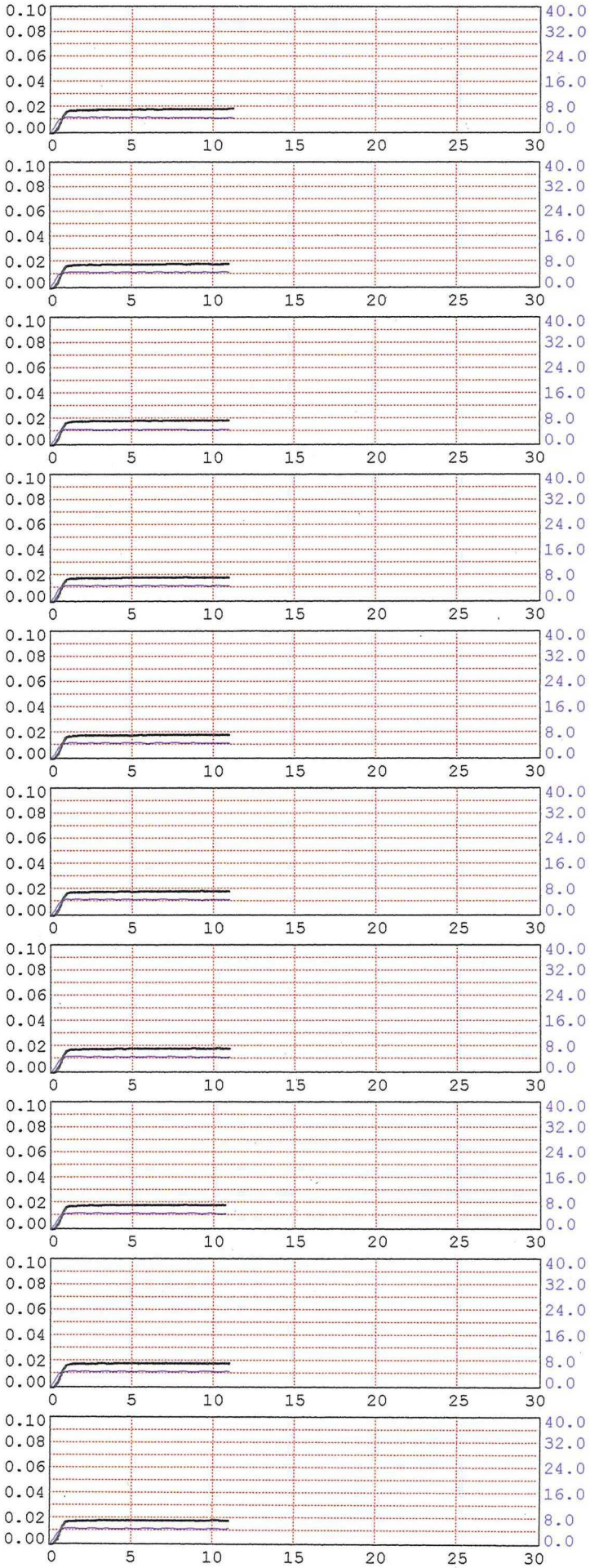
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	09:41
CALIBRATION CHECK	PASSED	09:41
SIMULATOR VAPOR 33.8°C	0.019	09:41
SIMULATOR VAPOR 33.8°C	0.019	09:42
SIMULATOR VAPOR 33.8°C	0.020	09:44
SIMULATOR VAPOR 33.8°C	0.019	09:45
SIMULATOR VAPOR 33.9°C	0.019	09:46
SIMULATOR VAPOR 33.8°C	0.019	09:47
SIMULATOR VAPOR 33.8°C	0.019	09:48
SIMULATOR VAPOR 33.8°C	0.019	09:49
SIMULATOR VAPOR 33.8°C	0.019	09:50
SIMULATOR VAPOR 33.8°C	0.019	09:51
BLANK TEST	0.000	09:52

Average = 0.019
Std Dev = 0.000

L-4
9-13-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/13/2011
Time: 09:59:45

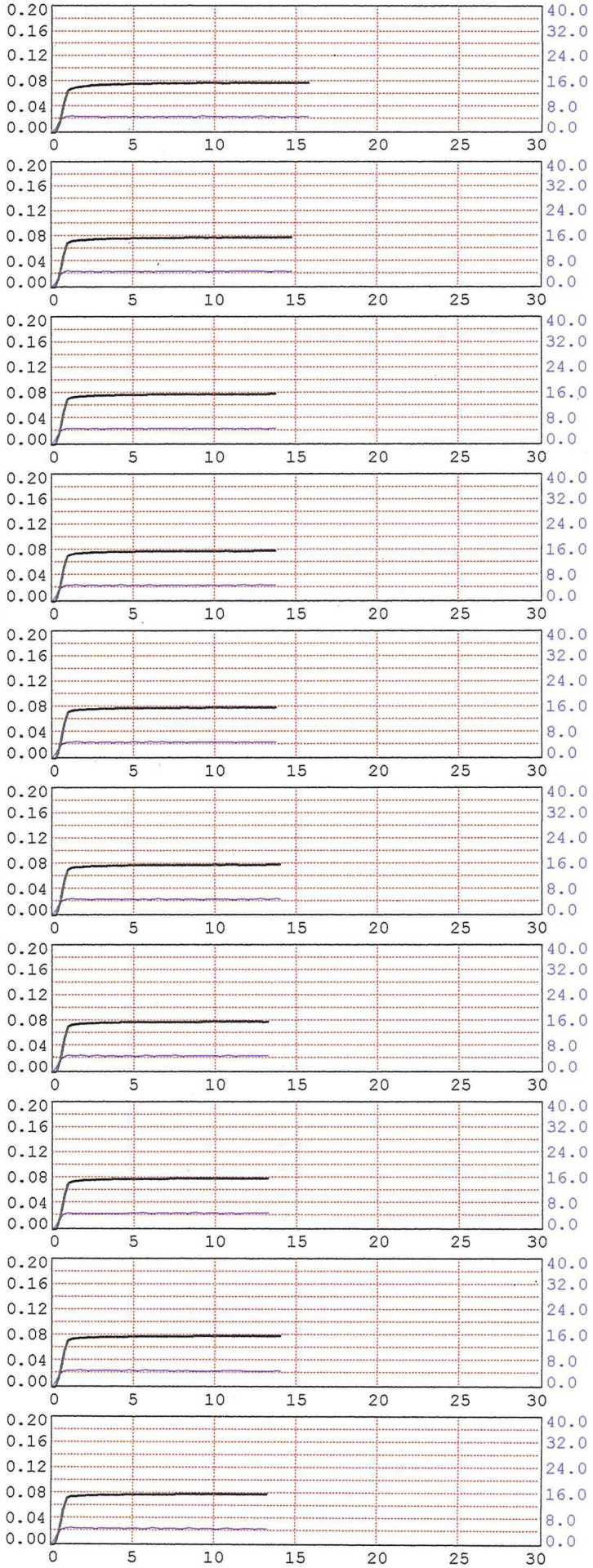
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	10:00
CALIBRATION CHECK	PASSED	10:00
SIMULATOR VAPOR 33.9°C	0.078	10:01
SIMULATOR VAPOR 33.8°C	0.078	10:02
SIMULATOR VAPOR 33.8°C	0.079	10:03
SIMULATOR VAPOR 33.8°C	0.079	10:04
SIMULATOR VAPOR 33.8°C	0.079	10:05
SIMULATOR VAPOR 33.8°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

L-4
KLK
9-13-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/13/2011
Time: 10:14:29

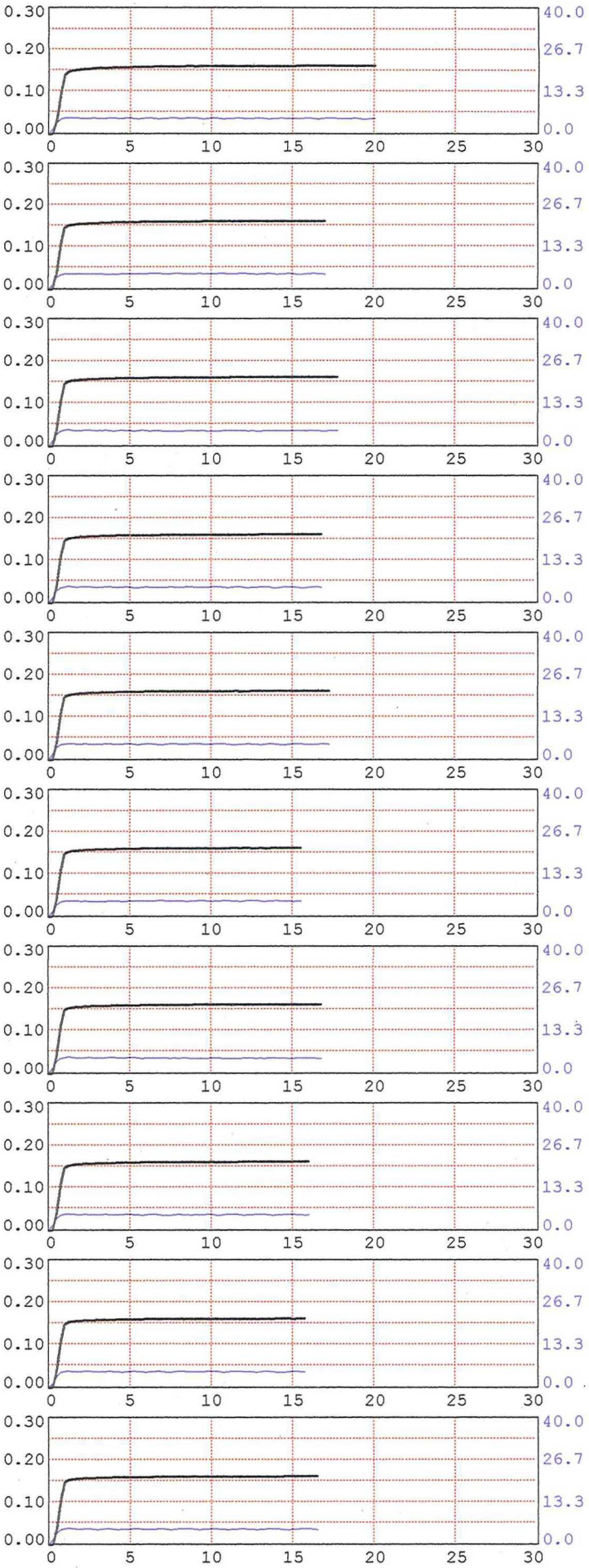
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	10:15
CALIBRATION CHECK	PASSED	10:15
SIMULATOR VAPOR 33.8°C	0.161	10:15
SIMULATOR VAPOR 33.7°C	0.161	10:17
SIMULATOR VAPOR 33.9°C	0.161	10:18
SIMULATOR VAPOR 33.8°C	0.161	10:19
SIMULATOR VAPOR 33.8°C	0.161	10:20
SIMULATOR VAPOR 33.8°C	0.161	10:21
SIMULATOR VAPOR 33.8°C	0.161	10:22
SIMULATOR VAPOR 33.8°C	0.161	10:23
SIMULATOR VAPOR 33.8°C	0.161	10:25
SIMULATOR VAPOR 33.8°C	0.161	10:26
BLANK TEST	0.000	10:27

Average = 0.161
Std Dev = 0.000

L-4
KLK
9-13-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/13/2011
Time: 10:38:21

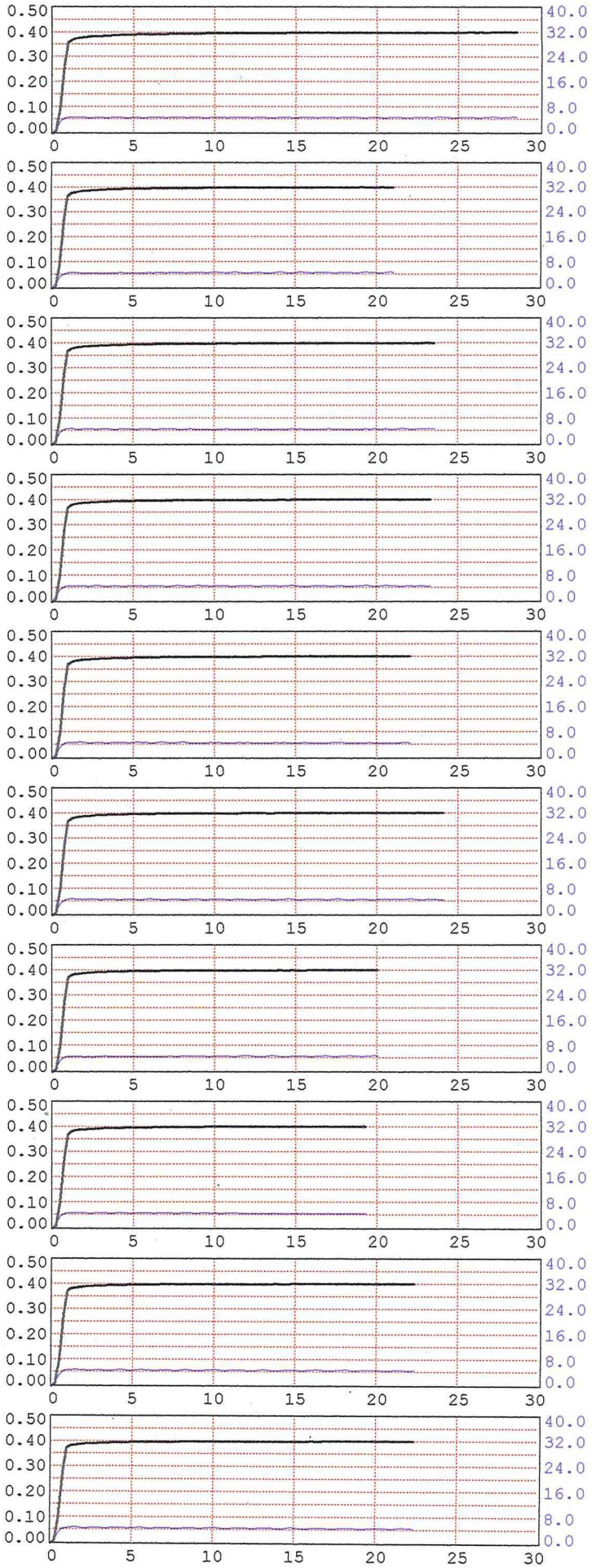
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	10:39
CALIBRATION CHECK	PASSED	10:39
SIMULATOR VAPOR 33.8°C	0.399	10:39
SIMULATOR VAPOR 33.8°C	0.398	10:41
SIMULATOR VAPOR 33.8°C	0.398	10:42
SIMULATOR VAPOR 33.8°C	0.400	10:43
SIMULATOR VAPOR 33.8°C	0.399	10:44
SIMULATOR VAPOR 33.8°C	0.400	10:46
SIMULATOR VAPOR 33.8°C	0.399	10:47
SIMULATOR VAPOR 33.8°C	0.399	10:48
SIMULATOR VAPOR 33.8°C	0.399	10:49
SIMULATOR VAPOR 33.8°C	0.399	10:51
BLANK TEST	0.000	10:51

Average = 0.399
Std Dev = 0.000

L-4
KLK
9-13-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/13/2011
Time: 11:32:33

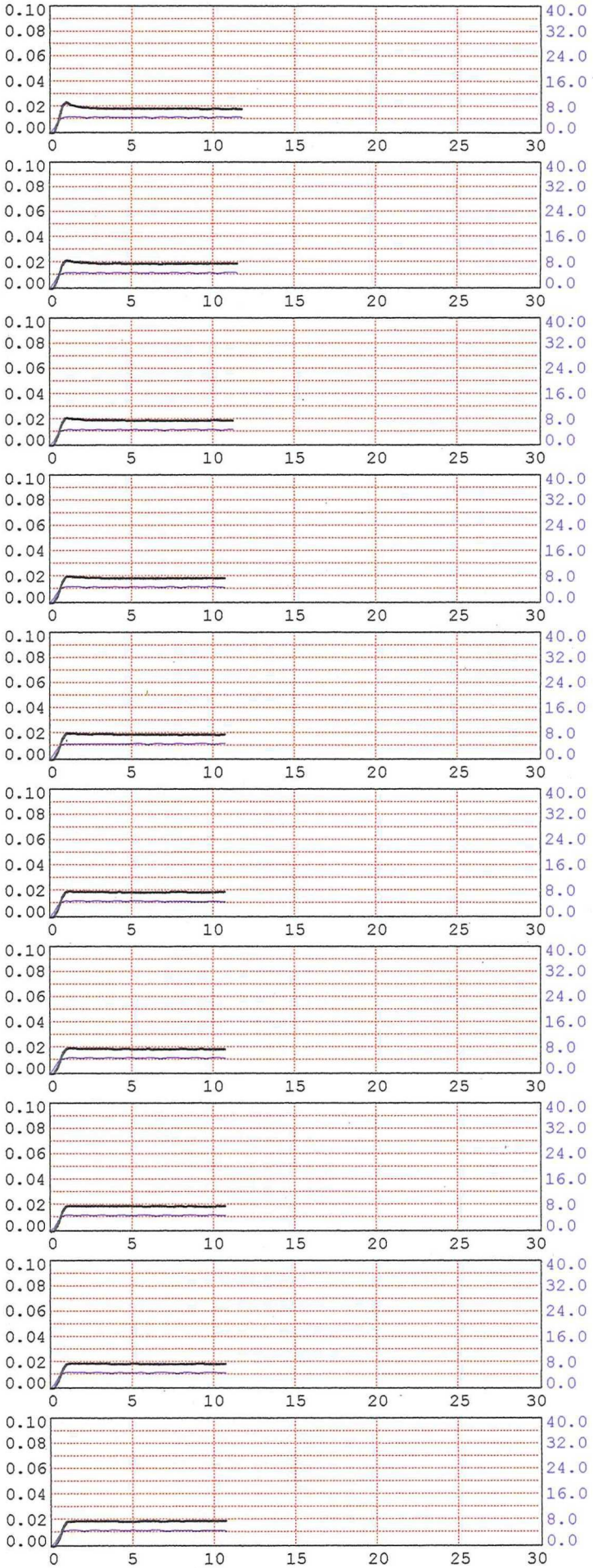
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	11:33
CALIBRATION CHECK	PASSED	11:33
SIMULATOR VAPOR 33.8°C	0.019	11:33
SIMULATOR VAPOR 33.8°C	0.020	11:34
SIMULATOR VAPOR 33.8°C	0.020	11:35
SIMULATOR VAPOR 33.8°C	0.020	11:36
SIMULATOR VAPOR 33.8°C	0.020	11:37
SIMULATOR VAPOR 33.8°C	0.020	11:38
SIMULATOR VAPOR 33.8°C	0.020	11:40
SIMULATOR VAPOR 33.8°C	0.020	11:41
SIMULATOR VAPOR 33.8°C	0.020	11:42
SIMULATOR VAPOR 33.8°C	0.020	11:43
BLANK TEST	0.000	11:43

Average = 0.019
Std Dev = 0.000

L-5
KLK
9-13-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/13/2011
Time: 11:59:45

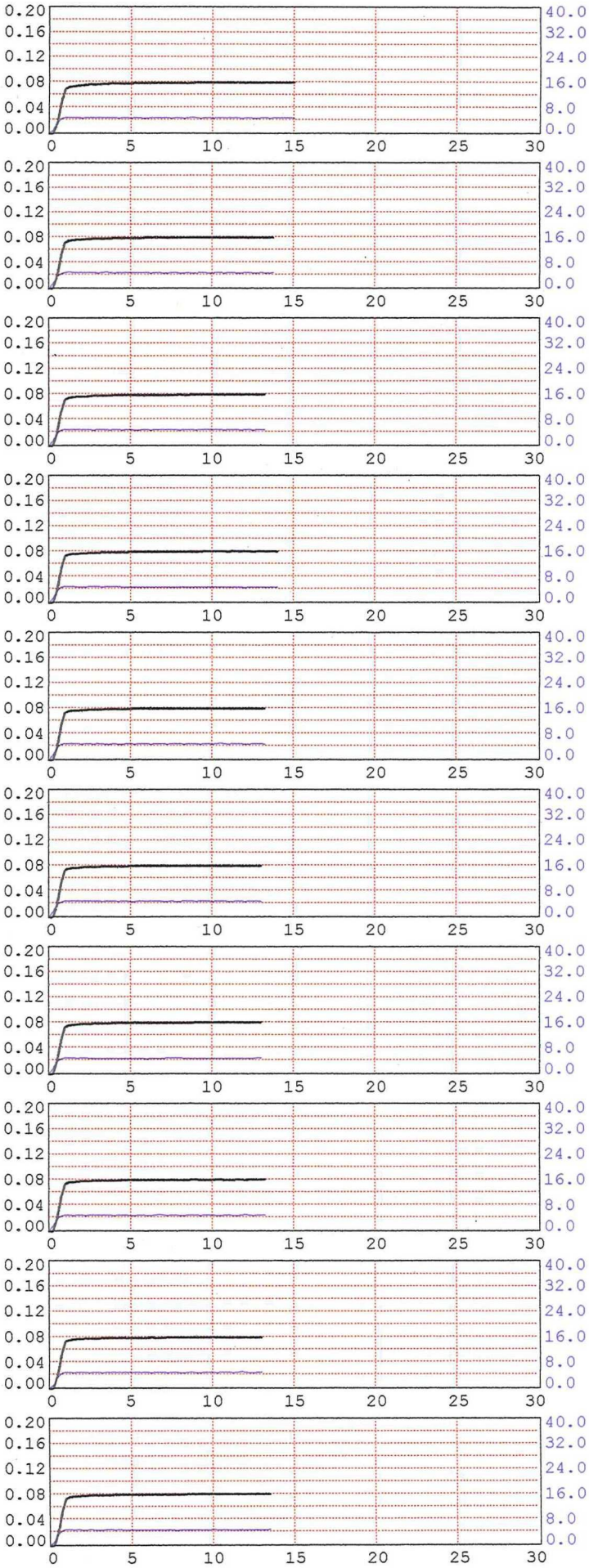
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	12:00
CALIBRATION CHECK	PASSED	12:00
SIMULATOR VAPOR 33.8°C	0.080	12:01
SIMULATOR VAPOR 33.7°C	0.080	12:02
SIMULATOR VAPOR 33.8°C	0.080	12:03
SIMULATOR VAPOR 33.8°C	0.081	12:04
SIMULATOR VAPOR 33.9°C	0.080	12:05
SIMULATOR VAPOR 33.8°C	0.080	12:06
SIMULATOR VAPOR 33.8°C	0.081	12:07
SIMULATOR VAPOR 33.8°C	0.081	12:08
SIMULATOR VAPOR 33.8°C	0.080	12:09
SIMULATOR VAPOR 33.8°C	0.081	12:10
BLANK TEST	0.000	12:11

Average = 0.080
Std Dev = 0.000

L-5
KLK
9-13-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 104309

Date: 09/13/2011
Time: 12:15:42

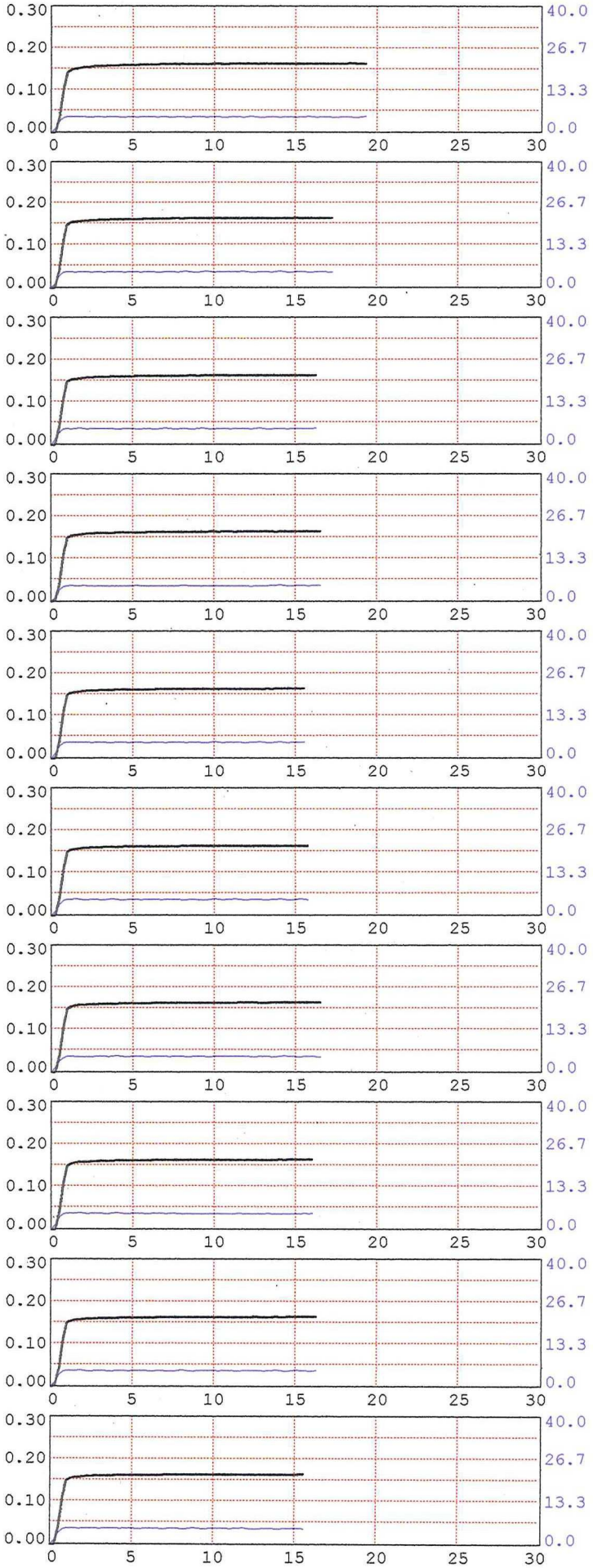
SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	12:16
CALIBRATION CHECK	PASSED	12:16
SIMULATOR VAPOR 33.8°C	0.163	12:17
SIMULATOR VAPOR 33.8°C	0.163	12:18
SIMULATOR VAPOR 33.8°C	0.163	12:19
SIMULATOR VAPOR 33.8°C	0.164	12:20
SIMULATOR VAPOR 33.8°C	0.163	12:21
SIMULATOR VAPOR 33.8°C	0.163	12:22
SIMULATOR VAPOR 33.8°C	0.164	12:23
SIMULATOR VAPOR 33.8°C	0.163	12:25
SIMULATOR VAPOR 33.8°C	0.163	12:26
SIMULATOR VAPOR 33.8°C	0.163	12:27
BLANK TEST	0.000	12:28

Average = 0.163
Std Dev = 0.000

L-5
KLK
9-13-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

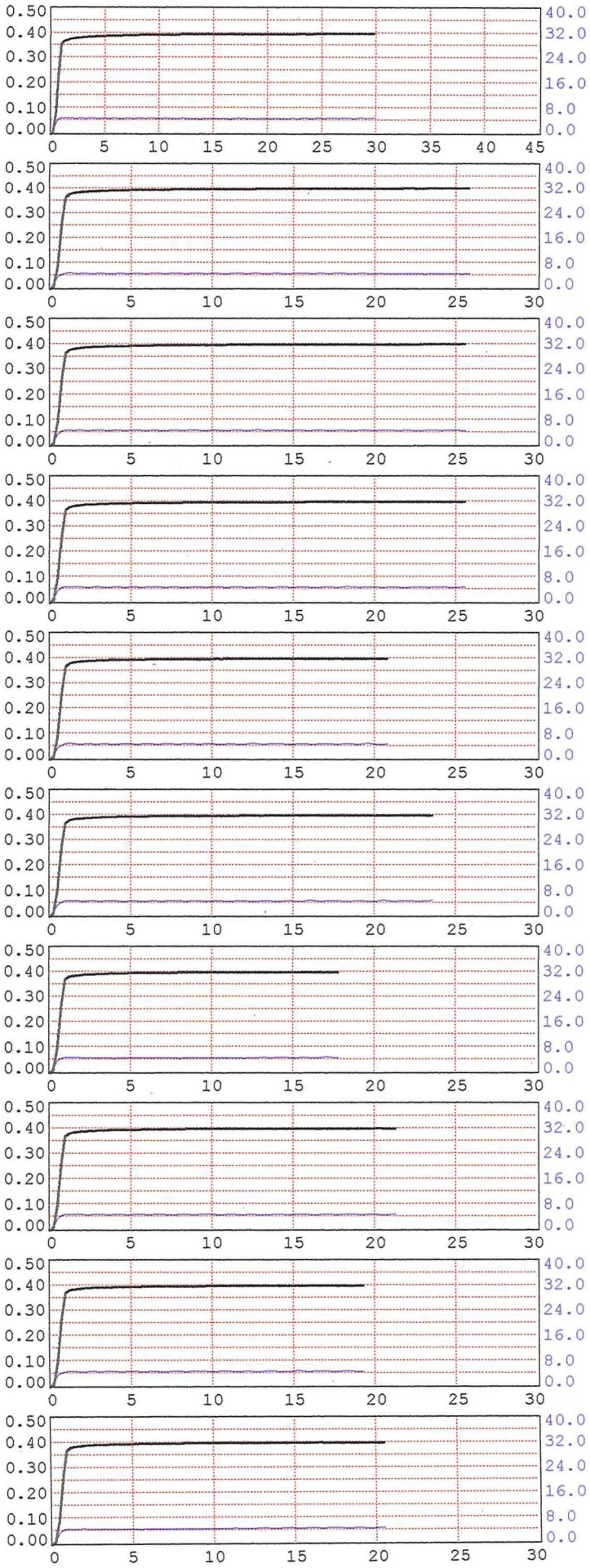
DataMater DMT: 104309

Date: 09/13/2011
Time: 12:31:47

SUPERVISOR NAME:
KIRK L KIMBALL

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

BLANK TEST	0.000	12:32
CALIBRATION CHECK	PASSED	12:32
SIMULATOR VAPOR 33.8°C	0.395	12:33
SIMULATOR VAPOR 33.8°C	0.396	12:34
SIMULATOR VAPOR 33.8°C	0.397	12:35
SIMULATOR VAPOR 33.8°C	0.395	12:37
SIMULATOR VAPOR 33.8°C	0.396	12:38
SIMULATOR VAPOR 33.8°C	0.396	12:39
SIMULATOR VAPOR 33.8°C	0.395	12:40
SIMULATOR VAPOR 33.8°C	0.397	12:42
SIMULATOR VAPOR 33.7°C	0.396	12:43
SIMULATOR VAPOR 33.8°C	0.396	12:44
BLANK TEST	0.000	12:45

Average = 0.395
Std Dev = 0.000

L-5
KLK
9-13-11