SECTION 4

INTERFERENCE TESTS

DIAGNOSTIC RESULT

DataMaster DMT: 100153
Location:
Calibration Date: 08/10/2011
Certification Date: 08/10/2011
Installation Date:
Test Date: 08/11/2011
Test Time: 07:53:09

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

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 45.5°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 1.78 V
Cooler Voltage = 1.84 V
Bias Voltage = 80 V
Chopper Freq = 531 Hz

PUMP INFO
Flow Rate = 5.432 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	-0.0045	-0.0012
MIN(V)	-0.0059	-0.0022

FILTER INFO
Filter 1 -0.002 Zero = true
Filter 2 0.232 Zero = true
Filter 3 0.591 Zero = true

CALIBRATION CHECK
Xq = 0.075 0.12%

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 08:00:45

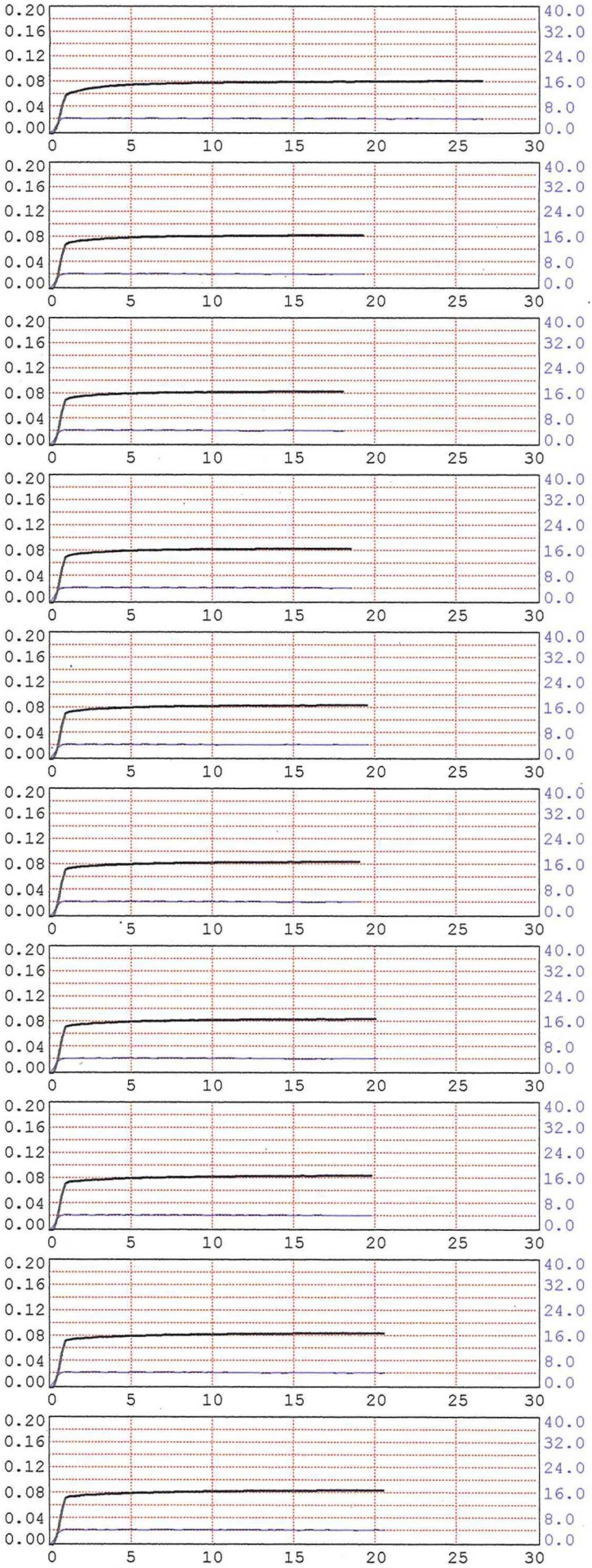
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-04-08A1
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	08:01
CALIBRATION CHECK	PASSED	08:01
SIMULATOR VAPOR 34.4°C	INTERFERENCE	08:02
SIMULATOR VAPOR 34.2°C	INTERFERENCE	08:03
SIMULATOR VAPOR 34.2°C	INTERFERENCE	08:04
SIMULATOR VAPOR 34.2°C	INTERFERENCE	08:05
SIMULATOR VAPOR 34.4°C	INTERFERENCE	08:06
SIMULATOR VAPOR 34.4°C	INTERFERENCE	08:08
SIMULATOR VAPOR 34.4°C	INTERFERENCE	08:09
SIMULATOR VAPOR 34.2°C	INTERFERENCE	08:10
SIMULATOR VAPOR 34.4°C	INTERFERENCE	08:11
SIMULATOR VAPOR 34.4°C	INTERFERENCE	08:12
BLANK TEST	0.000	08:13

0.01% Acetone in 0.08% EtOH
SAM 08/11/11

100% KAC 8-11-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 11:29:13

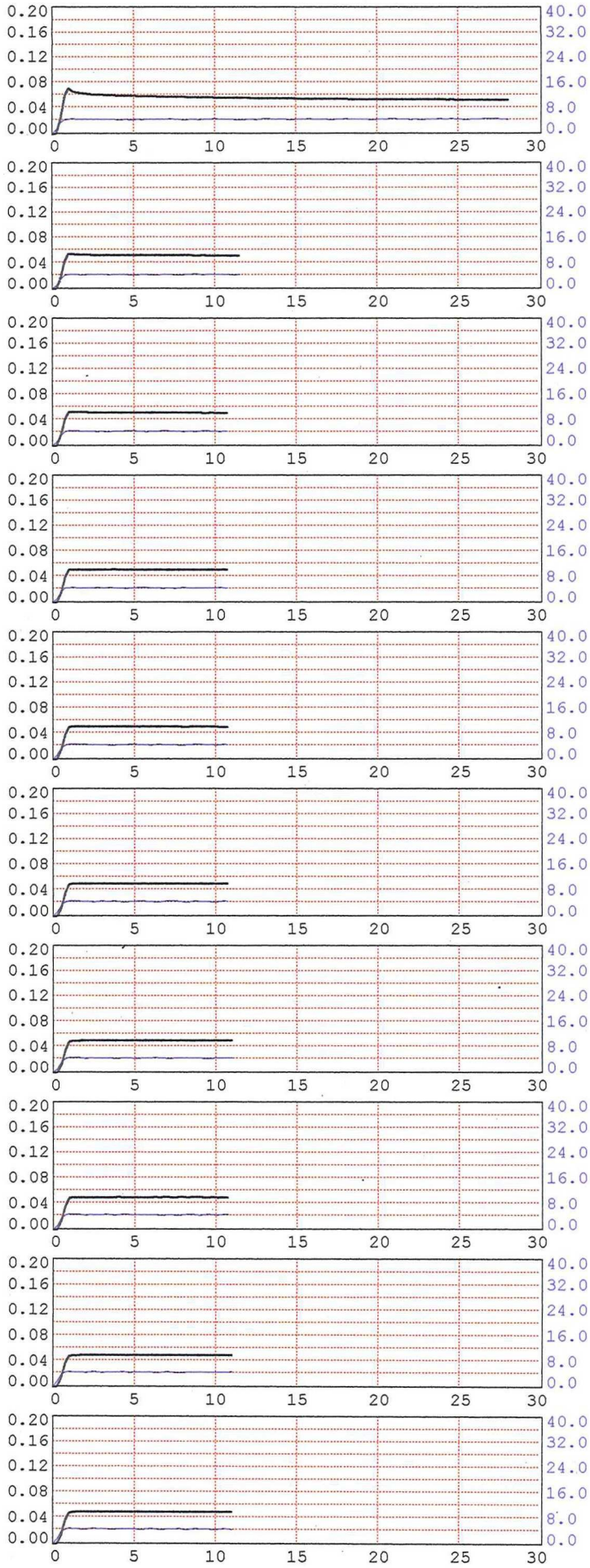
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-01-040A2
SOLUTION CONCENTRATION: 0.040

BLANK TEST	0.000	11:30
CALIBRATION CHECK	PASSED	11:30
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:30
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:31
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:32
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:33
SIMULATOR VAPOR 34.5°C	INTERFERENCE	11:34
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:35
SIMULATOR VAPOR 34.5°C	INTERFERENCE	11:36
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:38
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:39
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:40
BLANK TEST	0.000	11:40

100% 08/11/11

.02 Acetone in .04 EtOH 8/26/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 13:30:34

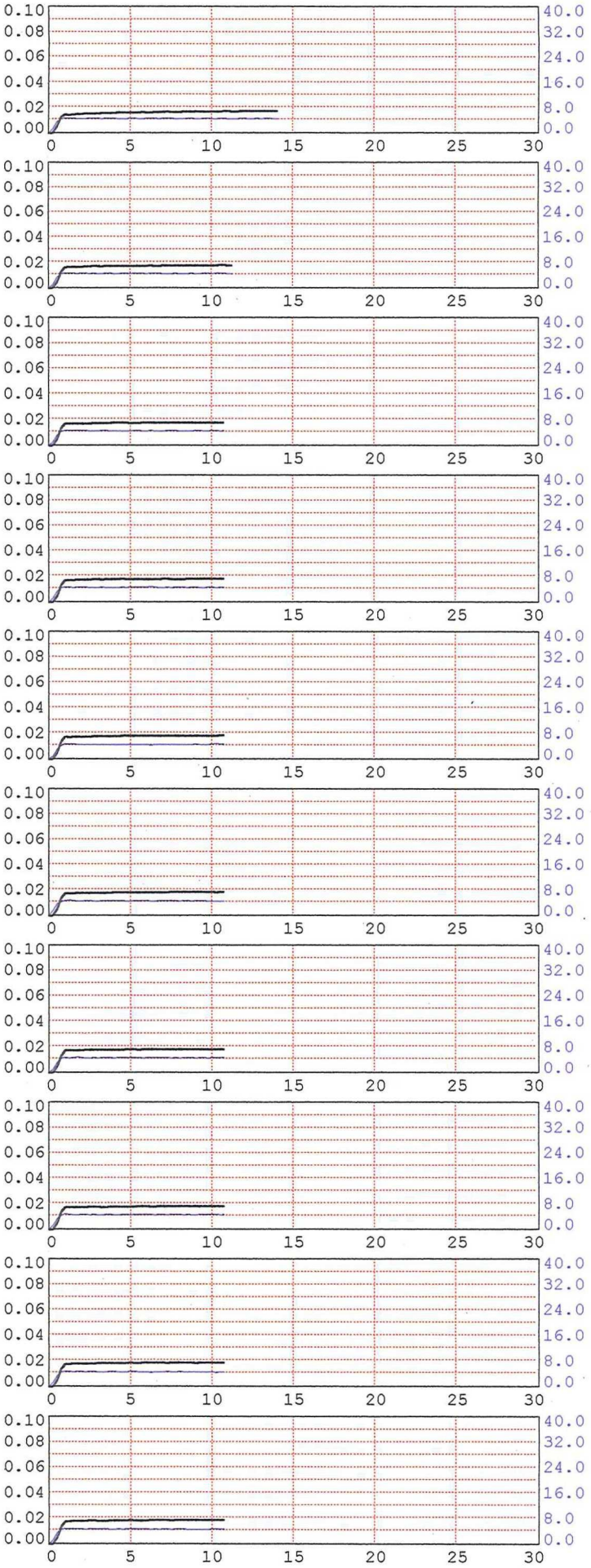
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-05-040M
SOLUTION CONCENTRATION: 0.040

BLANK TEST	0.000	13:31
CALIBRATION CHECK	PASSED	13:31
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:31
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:32
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:33
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:34
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:36
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:37
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:38
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:39
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:40
SIMULATOR VAPOR 34.4°C	INTERFERENCE	13:41
BLANK TEST	0.000	13:41

100% 08/11/11 SRM

.04 MeOH in H_2O 8/26/11 SRB



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 13:50:57

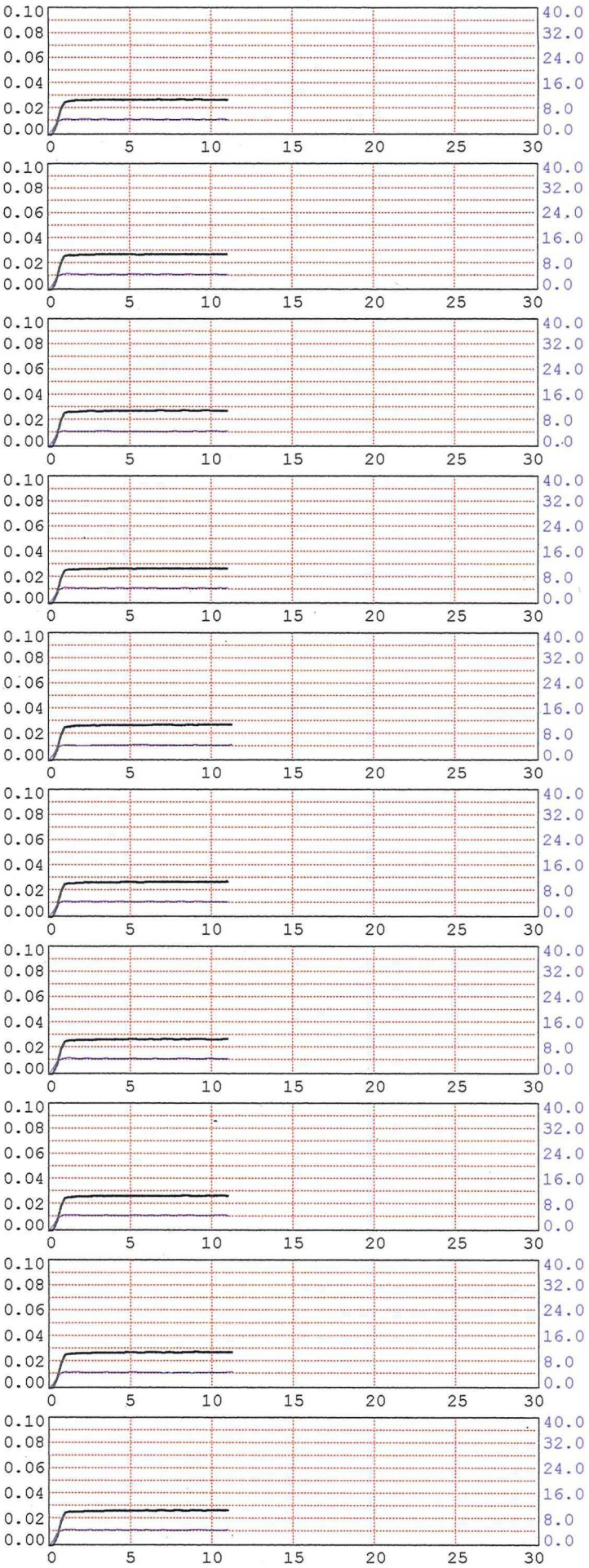
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 11-35-04I
SOLUTION CONCENTRATION: 0.040

BLANK TEST	0.000	13:51
CALIBRATION CHECK	PASSED	13:51
SIMULATOR VAPOR 34.1°C	INTERFERENCE	13:52
SIMULATOR VAPOR 34.1°C	INTERFERENCE	13:53
SIMULATOR VAPOR 34.1°C	INTERFERENCE	13:54
SIMULATOR VAPOR 34.0°C	INTERFERENCE	13:55
SIMULATOR VAPOR 34.0°C	INTERFERENCE	13:56
SIMULATOR VAPOR 34.0°C	INTERFERENCE	13:57
SIMULATOR VAPOR 34.0°C	INTERFERENCE	13:58
SIMULATOR VAPOR 34.1°C	INTERFERENCE	13:59
SIMULATOR VAPOR 34.1°C	INTERFERENCE	14:00
SIMULATOR VAPOR 34.0°C	INTERFERENCE	14:01
BLANK TEST	0.000	14:02

100% 08/11/11 [illegible]

.041 PA in H_2O 8/26/11 (A)



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/12/2011
Time: 10:57:21

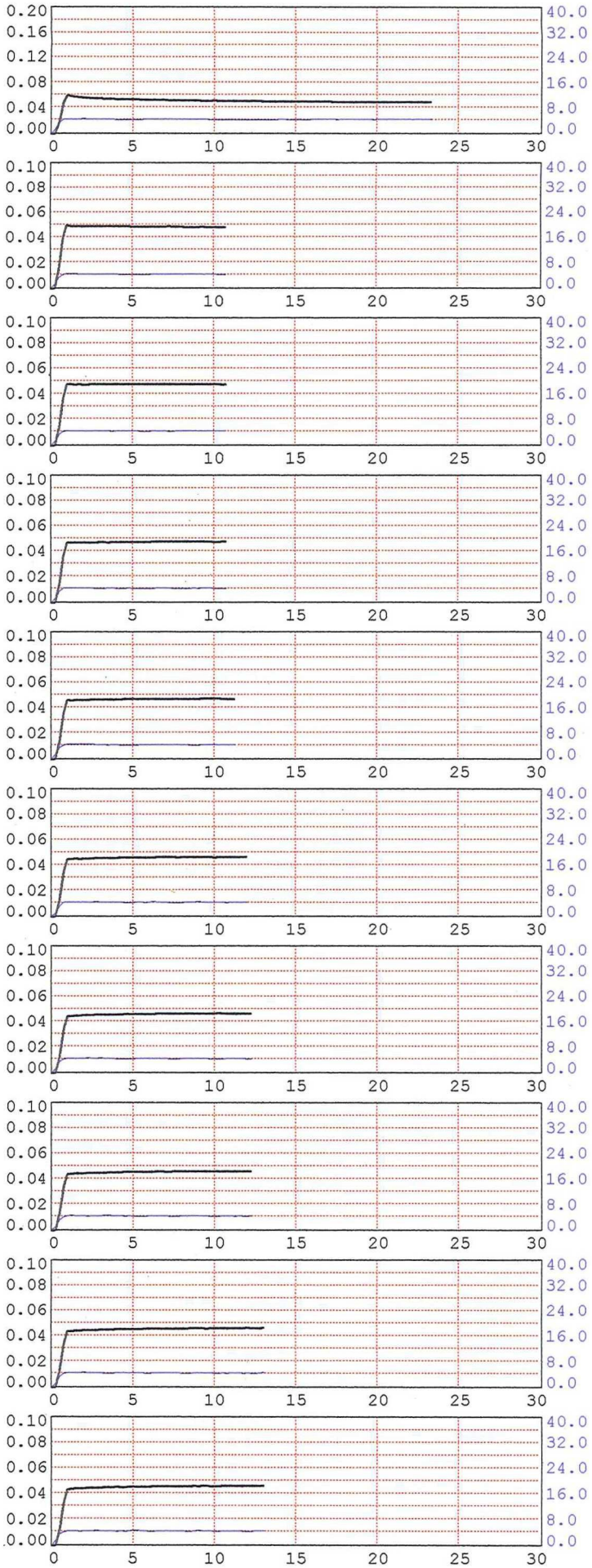
SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-01-040A1
SOLUTION CONCENTRATION: 0.040

BLANK TEST	0.000	10:58
CALIBRATION CHECK	PASSED	10:58
SIMULATOR VAPOR 34.0°C	INTERFERENCE	10:58
SIMULATOR VAPOR 33.9°C	INTERFERENCE	10:59
SIMULATOR VAPOR 33.9°C	INTERFERENCE	11:00
SIMULATOR VAPOR 34.0°C	INTERFERENCE	11:01
SIMULATOR VAPOR 34.0°C	INTERFERENCE	11:02
SIMULATOR VAPOR 34.0°C	INTERFERENCE	11:04
SIMULATOR VAPOR 33.9°C	INTERFERENCE	11:05
SIMULATOR VAPOR 33.9°C	INTERFERENCE	11:06
SIMULATOR VAPOR 34.0°C	INTERFERENCE	11:07
SIMULATOR VAPOR 33.9°C	INTERFERENCE	11:08
BLANK TEST	0.000	11:09

100% 08/12/11 Slm
AKMC 8-12-11

01 Acetone in .04 EtOH
8/20/11 (A)



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/15/2011
Time: 10:39:29

SUPERVISOR NAME:
STEVEN R MERRILL

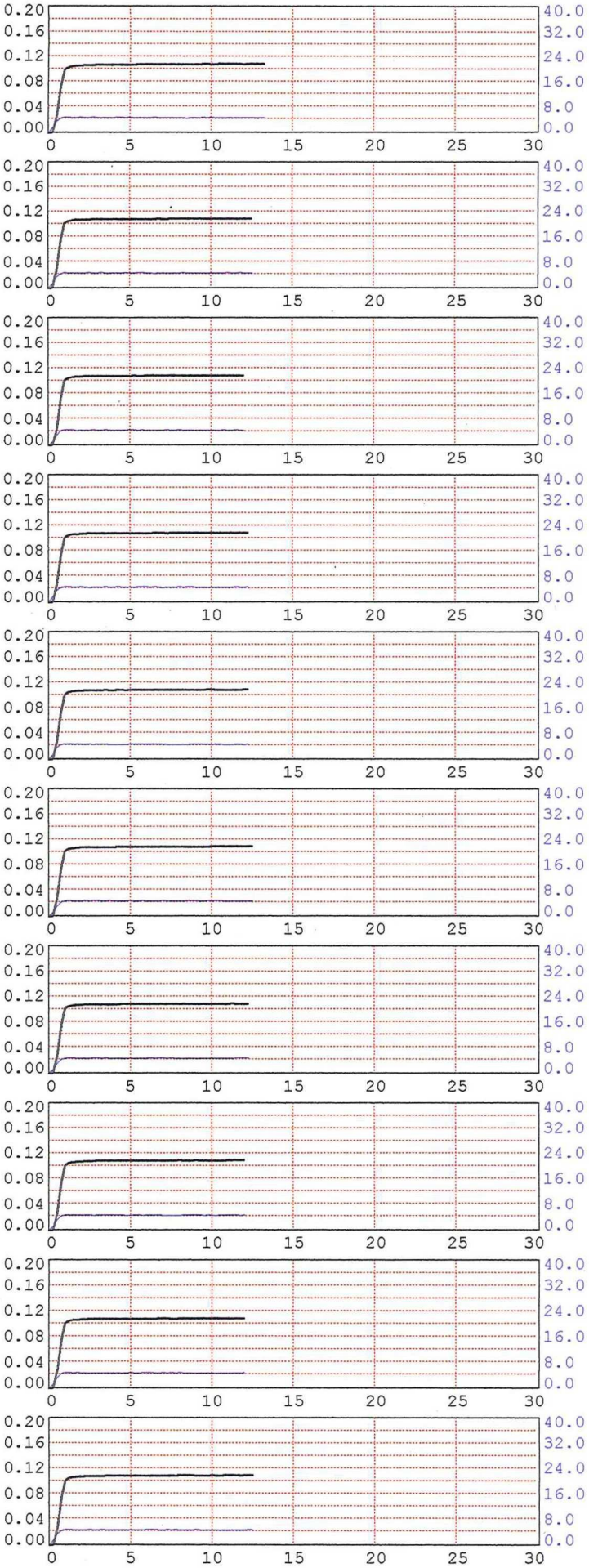
SOLUTION LOT #: 11-33-080I
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	10:40
CALIBRATION CHECK	PASSED	10:40
SIMULATOR VAPOR 34.1°C	INTERFERENCE	10:40
SIMULATOR VAPOR 33.9°C	INTERFERENCE	10:41
SIMULATOR VAPOR 34.1°C	INTERFERENCE	10:42
SIMULATOR VAPOR 34.0°C	INTERFERENCE	10:44
SIMULATOR VAPOR 34.1°C	INTERFERENCE	10:45
SIMULATOR VAPOR 34.1°C	INTERFERENCE	10:46
SIMULATOR VAPOR 34.0°C	INTERFERENCE	10:47
SIMULATOR VAPOR 34.1°C	INTERFERENCE	10:48
SIMULATOR VAPOR 34.1°C	INTERFERENCE	10:49
SIMULATOR VAPOR 34.1°C	INTERFERENCE	10:50
BLANK TEST	0.000	10:51

100% 08/15/11

8-22-11

.04 IPA in .08 EtOH 8/26/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/15/2011
Time: 10:57:32

SUPERVISOR NAME:
STEVEN R MERRILL

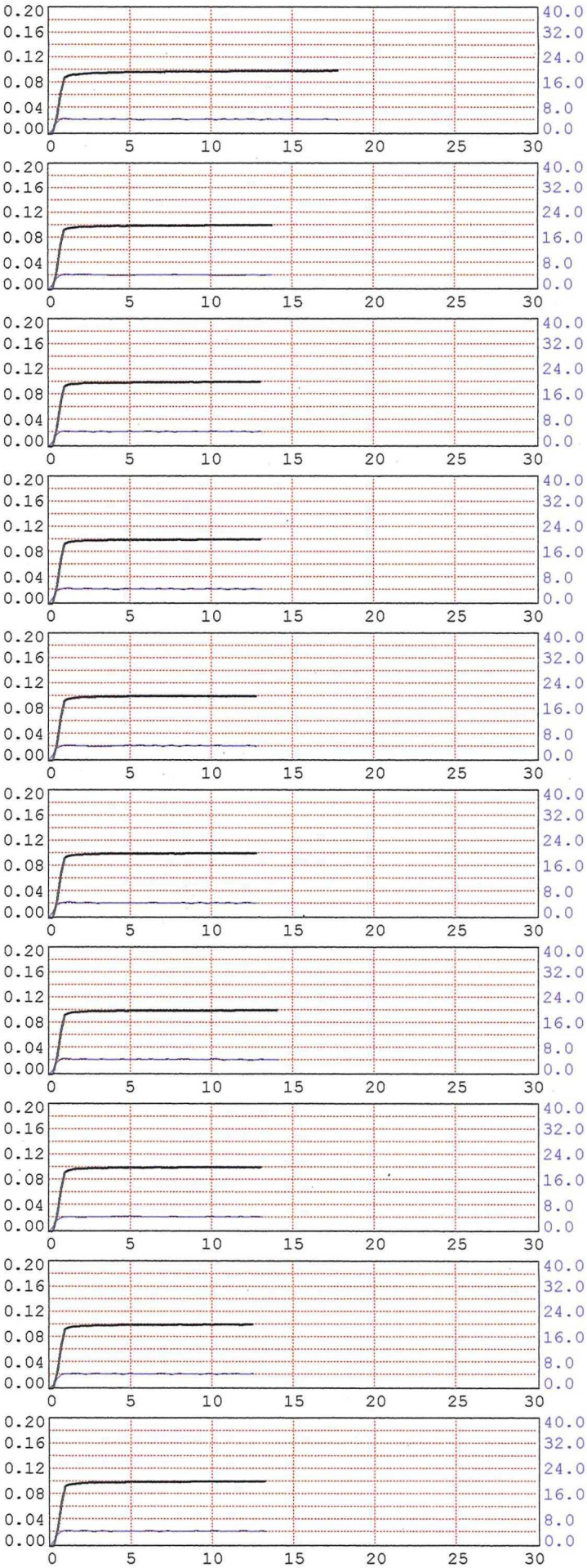
SOLUTION LOT #: 12-04-08M
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	10:58
CALIBRATION CHECK	PASSED	10:58
SIMULATOR VAPOR 34.4°C	INTERFERENCE	10:58
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:00
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:01
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:02
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:03
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:04
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:05
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:06
SIMULATOR VAPOR 34.5°C	INTERFERENCE	11:07
SIMULATOR VAPOR 34.4°C	INTERFERENCE	11:08
BLANK TEST	0.000	11:09

100% 08/15/11

RRK 8-22-11

.04 MeOH in .08 EtOH 8/26/11



SECTION 5

FINAL CALIBRATION CHECK TESTS

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/15/2011
Time: 11:32:36

SUPERVISOR NAME:
STEVEN R MERRILL

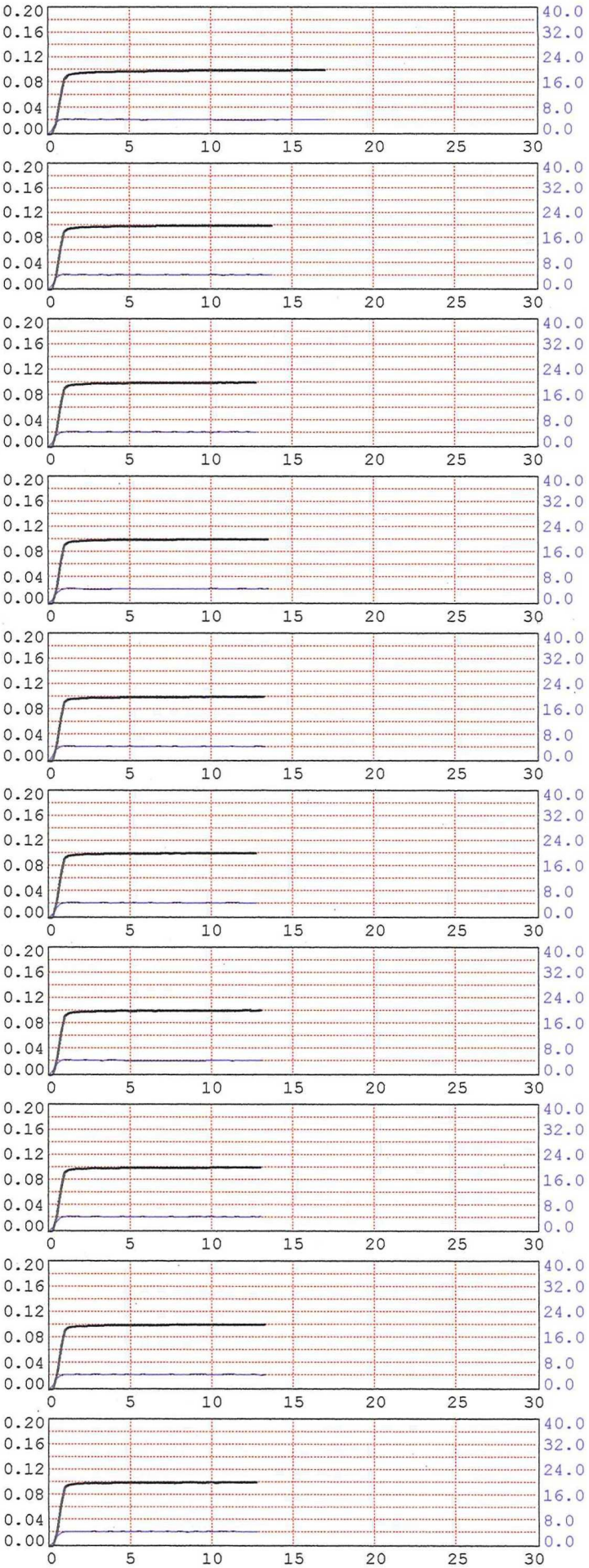
SOLUTION LOT #: 11-39-100
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	11:33
CALIBRATION CHECK	PASSED	11:33
SIMULATOR VAPOR 34.1°C	0.100	11:33
SIMULATOR VAPOR 33.9°C	0.100	11:35
SIMULATOR VAPOR 34.1°C	0.100	11:36
SIMULATOR VAPOR 34.0°C	0.101	11:37
SIMULATOR VAPOR 34.1°C	0.101	11:38
SIMULATOR VAPOR 34.0°C	0.100	11:39
SIMULATOR VAPOR 34.0°C	0.101	11:40
SIMULATOR VAPOR 34.1°C	0.101	11:41
SIMULATOR VAPOR 34.0°C	0.101	11:42
SIMULATOR VAPOR 34.0°C	0.100	11:43
BLANK TEST	0.000	11:44

Average = 0.100
Std Dev = 0.000

In-House Cal Check 08/15/11

RRC 8-15-11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/15/2011
Time: 14:41:44

SUPERVISOR NAME:
STEVEN R MERRILL

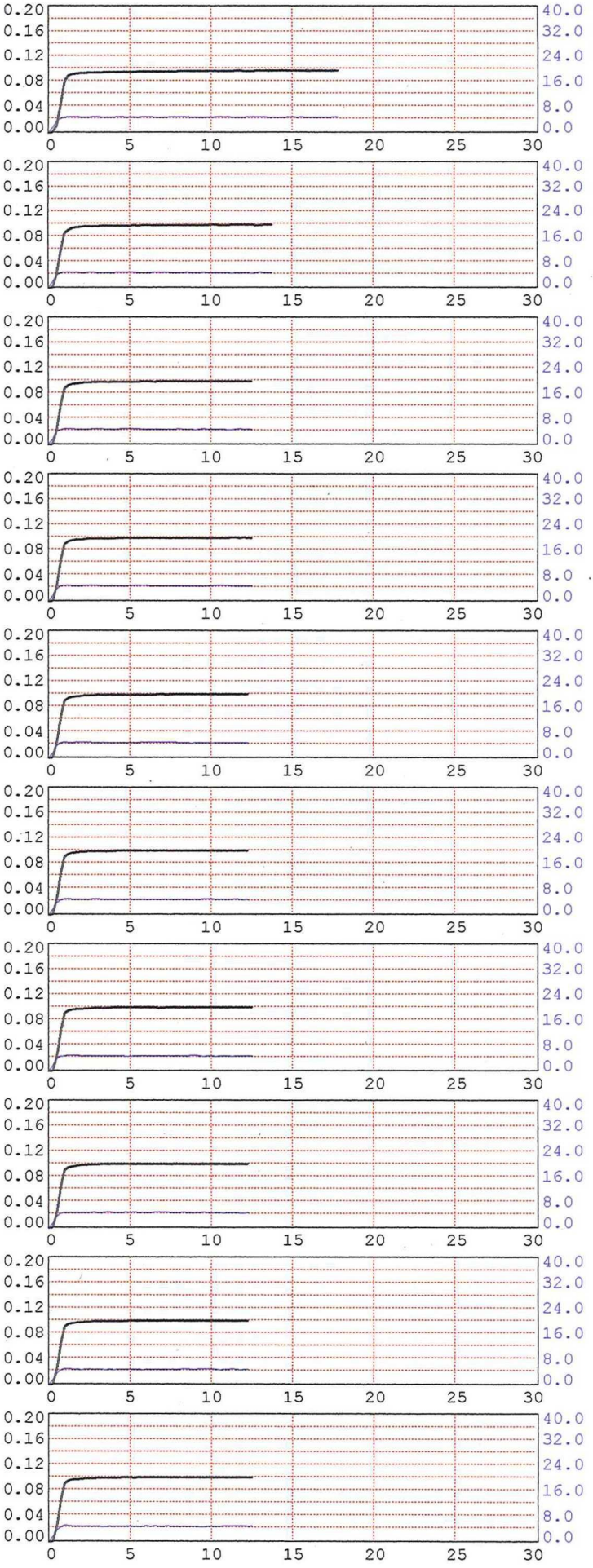
SOLUTION LOT #: GUTH 11050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	14:42
CALIBRATION CHECK	PASSED	14:42
SIMULATOR VAPOR 34.1°C	0.098	14:43
SIMULATOR VAPOR 34.0°C	0.099	14:44
SIMULATOR VAPOR 34.0°C	0.099	14:45
SIMULATOR VAPOR 34.0°C	0.099	14:46
SIMULATOR VAPOR 34.1°C	0.100	14:47
SIMULATOR VAPOR 34.1°C	0.100	14:48
SIMULATOR VAPOR 34.0°C	0.100	14:49
SIMULATOR VAPOR 34.0°C	0.100	14:50
SIMULATOR VAPOR 34.1°C	0.100	14:51
SIMULATOR VAPOR 34.1°C	0.100	14:52
BLANK TEST	0.000	14:53

Average = 0.099
Std Dev = 0.000

2nd Source 08/15/11

KRK 8-15-11



Log On Record History

Test Date	Test Time	Name
08/08/2011	15:27:53	Kirk Kimball
08/08/2011	15:30:22	Steven Merrill
08/09/2011	13:28:58	Steven Merrill
08/09/2011	15:32:20	Steven Merrill
08/10/2011	09:43:12	Steven Merrill
08/10/2011	10:23:50	Steven Merrill
08/10/2011	13:32:57	Steven Merrill
08/10/2011	14:11:11	Steven Merrill
08/11/2011	07:51:53	Steven Merrill
08/11/2011	09:36:35	Steven Merrill
08/11/2011	11:25:32	Steven Merrill
08/11/2011	13:21:22	Steven Merrill
08/12/2011	07:46:47	Steven Merrill
08/12/2011	08:02:42	Steven Merrill
08/12/2011	10:53:48	Steven Merrill
08/12/2011	14:11:07	Kirk Kimball
08/15/2011	08:14:48	Steven Merrill
08/15/2011	08:43:37	Steven Merrill
08/15/2011	09:23:08	Steven Merrill
08/15/2011	11:30:00	Steven Merrill
08/15/2011	14:40:38	Steven Merrill
08/15/2011	15:11:17	Steven Merrill

SECTION 6

ERROR REPORTS

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/10/2011
Time: 15:15:23

SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	15:16
CALIBRATION CHECK	PASSED	15:16

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/10/2011
Time: 15:34:37

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 11-34-400
SOLUTION CONCENTRATION: 0.400

BLANK TEST	0.000	15:35
CALIBRATION CHECK	PASSED	15:35

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 07:57:57

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-04-08A1
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	07:58
CALIBRATION CHECK	PASSED	07:58

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 09:05:04

SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	09:05
CALIBRATION CHECK	PASSED	09:06

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 09:40:57

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 11-34-400
SOLUTION CONCENTRATION: 0.400

BLANK TEST	0.000	09:41
CALIBRATION CHECK	PASSED	09:41

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 09:44:21

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 11-34-400
SOLUTION CONCENTRATION: 0.400

BLANK TEST	0.000	09:45
CALIBRATION CHECK	PASSED	09:45

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 11:26:12

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 12-01-040A2
SOLUTION CONCENTRATION: 0.040

BLANK TEST	0.000	11:27
CALIBRATION CHECK	PASSED	11:27

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 14:51:01

SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	14:51
CALIBRATION CHECK	PASSED	14:52

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/11/2011
Time: 15:10:59

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 11-34-400
SOLUTION CONCENTRATION: 0.400

BLANK TEST	0.000	15:11
CALIBRATION CHECK	PASSED	15:11

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/12/2011
Time: 08:35:09

SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	08:36
CALIBRATION CHECK	PASSED	08:36

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/15/2011
Time: 09:42:23

SUPERVISOR NAME:
STEVEN R MERRILL

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

BLANK TEST	0.000	09:43
CALIBRATION CHECK	PASSED	09:43

Simulator Timed Out

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100153

Date: 08/15/2011
Time: 10:36:44

SUPERVISOR NAME:
STEVEN R MERRILL

SOLUTION LOT #: 11-33-080I
SOLUTION CONCENTRATION: 0.080

BLANK TEST	0.000	10:37
CALIBRATION CHECK	PASSED	10:37

Simulator Timed Out