Meeting Minutes
January 14, 2008
Conference call between NPAS and VDHL

Present for VDHL: Bob Drawbaugh
Darcy Richardson
Amanda Bolduc
Steven Harnois
Present for NPAS: John Fusco
Dave Radomski
Scott Marhefka

1. Dave from NPAS visited VDHL 1/3/08-1/4/08 for DMT training and to perform maintenance and upgrades to DMT units located at VDHL. (See memo from NPAS). Subsequent to upgrades, VDHL found performance issues with DMT units. Recoveries during linearity tests trended high. R^2 values remained at or near 1.0, however slopes of lines were approximately 1.09x. VDHL requests explanation of results from NPAS.

DMT Serial Number	Certified Value of solution	DMT Result	% Recovery
103006	0.020	0.019	95.0%
	0.082	0.087	106.1%
	0.162	0.172	106.2%
	0.397	0.432	108.8%
102606	0.020	0.019	95.0%
	0.020	0.02	100.0%
	0.082	0.087	106.1%
	0.082	0.088	107.3%
	0.162	0.170	104.9%
	0.162	0.170	104.9%
	0.397	0.429	108.0%
	0.397	0.435	109.6%
102806	0.020	0.02	100.0
	0.082	0.087	106.1%
	0.162	0.172	106.2%
	0.397	0.432	108.8%
	0.020	0.019	95.0%
	0.082	0.086	104.9%
	0.162	0.174	107.4%
	0.397	0.431	108.6%
103406	0.02	0.018	90.0%
	0.162	0.174	107.4%
	0.082	0.087	106.1%
	0.397	0.433	109.1%
102706	0.397	0.430	108.3%

2. Instrument 102606 displays alcohol concentrations higher during sampling that what is reported after analysis. Anomaly becomes greater as alcohol concentration increases. See table below for ~0.4 results. VDHL requests explanation of results from NPAS.

Screen Display during sampling	Reported concentration after analysis
0.447	0.437
0.444	0.436
0.443	0.433
	0.433
0.448	0.438
0.445	0.435
	0.435
0.443	0.433
	0.434
0.446	0.437

3. During testing of ~0.4EtOH solution, filter reading are significantly different from previous testing. VDHL requests explanation of results from NPAS.

4. During examination of instrument 102606, VDHL technician found the IR source was overheated during manufacturer assembly. Wires connecting IR source to power source were burned for approximately 1 inch from the IR source end. Solder points were discolored and appeared burned as well. VDHL technician was instructed by NPAS to remove the IR source from DMT #103306 and use to replace in DMT #102606. DMT #103306 to be returned to NPAS as instrument was retired from service 1/4/08.

VDHL agreed to NPAS's request to provide samples of solutions and copies of all tests generated since Dave Radomski's visit to VDHL so NPAS can diagnose and provide solutions to testing problems found by VDHL.

Training Topics Covered

VDHL staff attended a training course on the Theory of Operation, Supervisory functions and Maintenance and Repair as it pertains to the DataMaster DMT Infrared Breath Alcohol Analyzer and are authorized to use, maintain and perform repairs on the DataMaster DMT in accordance with the instruction received from National Patent Analytical Systems, Inc.

NPAS Work Performed

While at VDHL, NPAS staff performed mechanical upgrades as follows:

- DMT # 103306 was retired from testing and service. VDHL will receive a new instrument to replace 103306 due to numerous changes in non-critical mechanical components in newer instruments. All data previously collected on this instrument remains scientifically valid.

- DMT # 103406 received a new detector block assembly while maintaining the same filters and internal standard. Mechanical upgrade does not affect scientific validity of previously collected data. During mechanical upgrade, instrument memory was accidentally erased by NPAS staff. Hard copies of information remain, however electronic copies were lost.

- DMT # 103006 received a new detector block assembly while maintaining the same filters and internal standard. Mechanical upgrade does not affect scientific validity of previously collected data.

- DMT # 102606 received a new detector block assembly while maintaining the same filters and internal standard. Mechanical upgrade does not affect scientific validity of previously collected data.

- DMT # 102806 received a new detector block assembly while maintaining the same filters and internal standard. Mechanical upgrade does not affect scientific validity of previously collected data.

- NPAS informed VDHL of defective 'T' fittings on breath flow detector assemblies. Small imperfections in 'T' fittings causes air turbulence which can affect reported breath volumes. Instruments awaiting new 'T' fittings on breath flow detection assembly. VDHL technician will install new 'T' fittings when received as directed by Dave Radomski from NPAS..

Recal on all

Latest software on all 1/8

1028006 – cal
cert
inst.
Subj test

.176 on screen
.170 after analysis?

1026 – cal
cert

1034 – cal

1030 – cal

1/9

Recal 102806 @ .100

Recal 102606 @ .101

↓

reran linearity

ran linearity on 30 + 34
after initial cal .100 on 1/8

DUI Subject Test

STATE OF VERMONT

DataMaster DMT: 102806

Certification Date:
Installation Date:

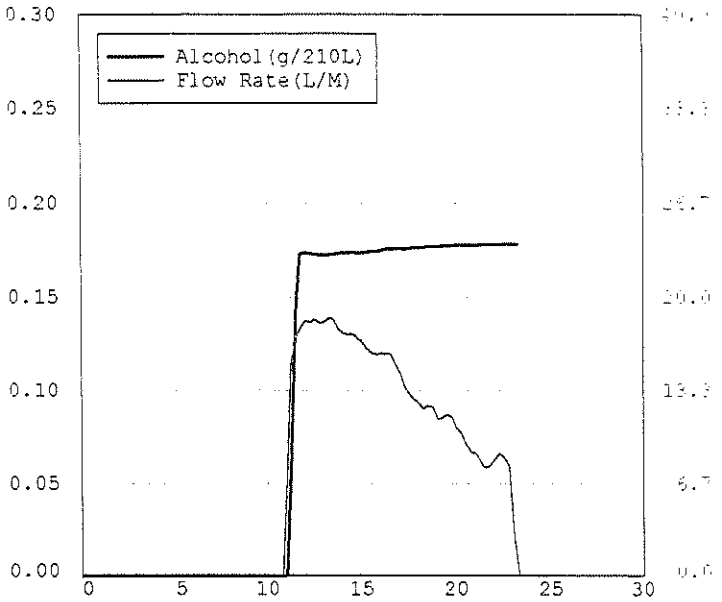
Date: 01/14/2008
Time: 09:25:27

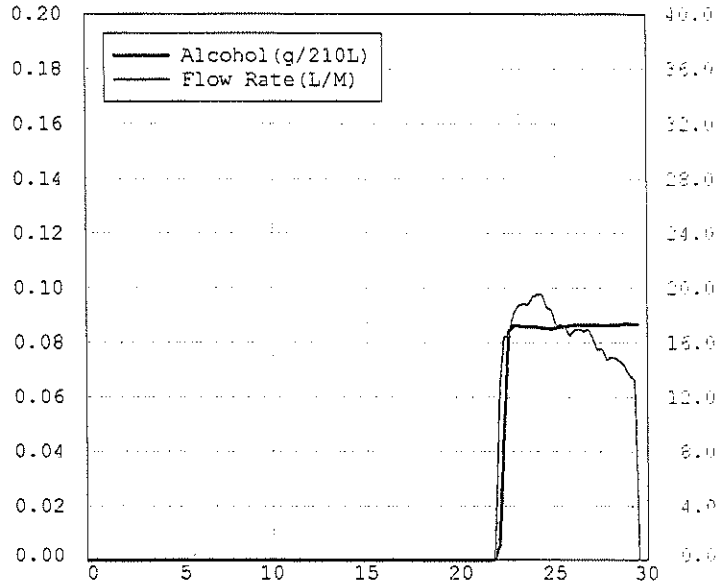
Subject Name: A L B

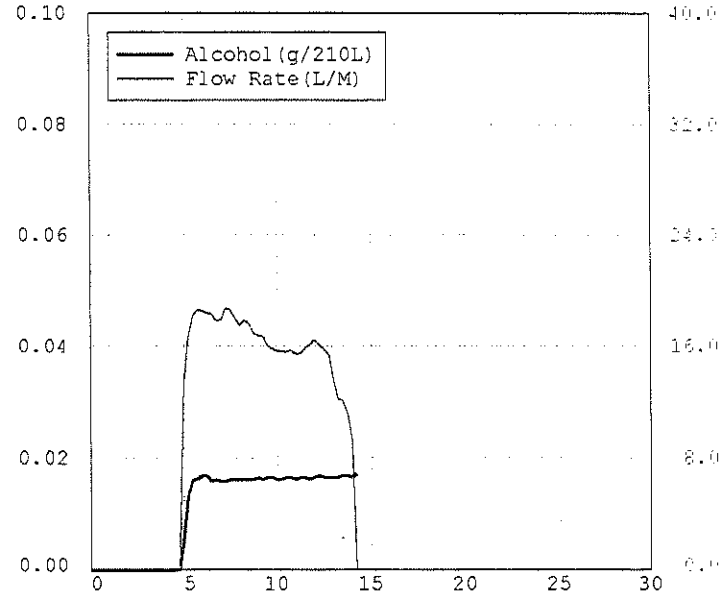
Test Operator Name: A L B
Comment: CAL CHECK

BLANK TEST	0.000	09:26
INTERNAL STANDARD	PASSED	09:26
SUBJECT SAMPLE (Vol=2.7L)	0.178	09:26
BLANK TEST	0.000	09:28
SUBJECT SAMPLE (Vol=2.0L)	0.087	09:28
BLANK TEST	0.000	09:29
SUBJECT SAMPLE (Vol=2.4L)	0.018	09:29

USER ABORT







01/14/2008 09:30

DUI Subject Test

STATE OF VERMONT

DataMaster DMT: 102806

Certification Date:
Installation Date:

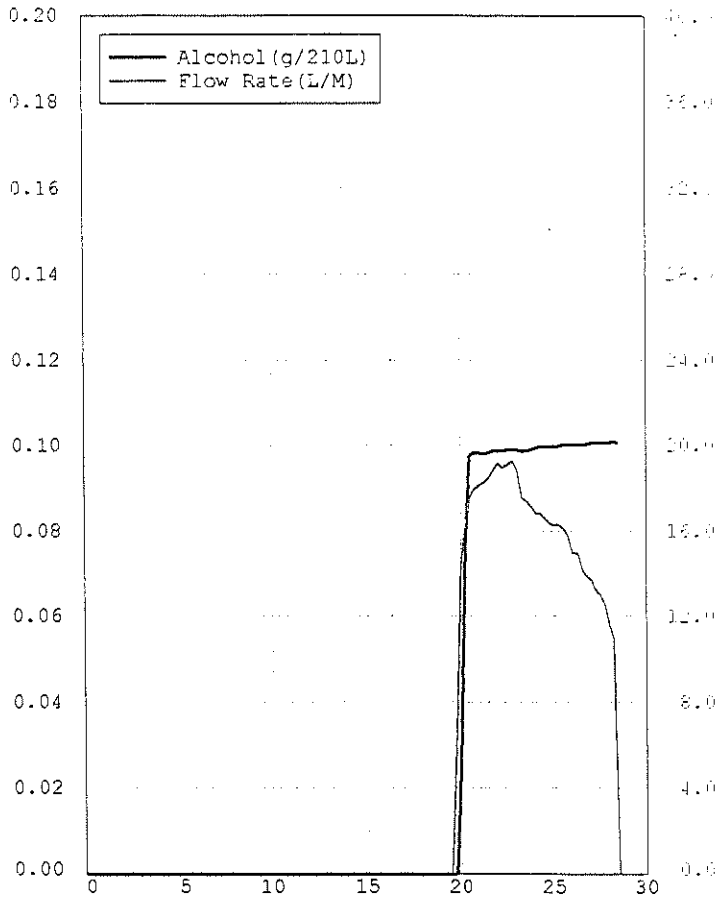
Date: 01/14/2008
Time: 09:20:37

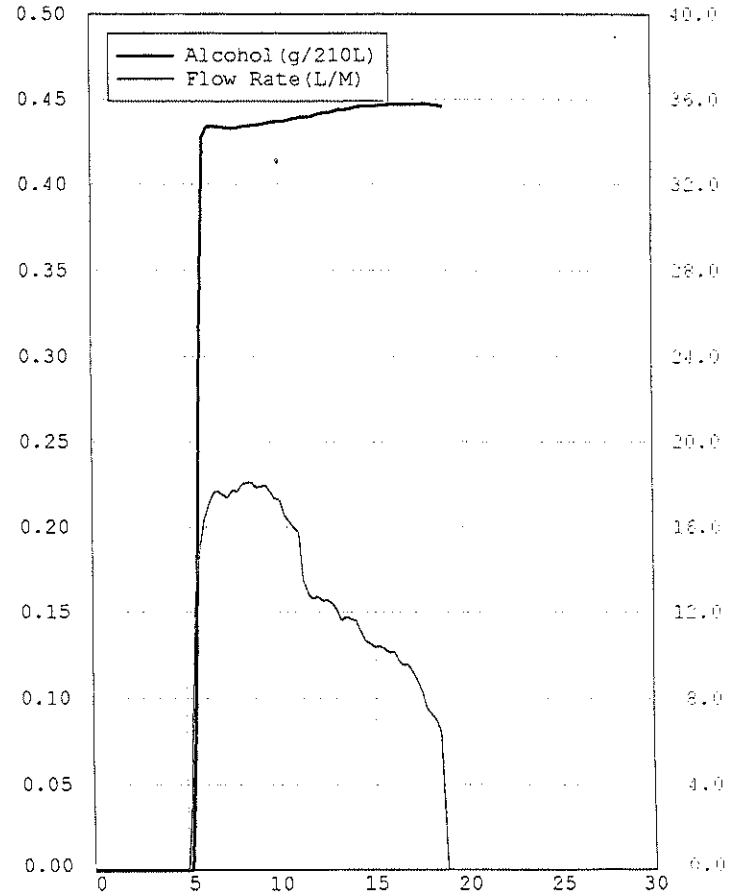
Subject Name: A L B

Test Operator Name: A L B
Comment: CAL CHECK

BLANK TEST	0.000	09:21
INTERNAL STANDARD	PASSED	09:21
SUBJECT SAMPLE (Vol=2.3L)	0.100	09:22
BLANK TEST	0.000	09:23
SUBJECT SAMPLE (Vol=2.9L)	0.444	09:23

USER ABORT





01/14/2008 09:24

CALIBRATION REPORT

DataMaster DMT: 102806
Calibration Date: 01/14/2008
Calibrated by: A L B

VERMONT
DEPARTMENT OF HEALTH

Ca =	0.100000		
CAL =	1.056815	0.800 <= CAL < 1.200	
b1 =	0.000000	0.000 <= b1 < 0.004	
b2 =	0.002309	0.002 <= b2 < 0.013	
b3 =	0.000073	0.000 <= b3 < 0.004	
Xq =	0.121390	0.050 <= Xq < 0.200	
a21 =	1.171073	1.050 <= a21 < 1.300	
a31 =	0.492344	0.300 <= a31 < 0.800	

Performed by _____ Date 01/14/2008

01/14/2008 09:19

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102706

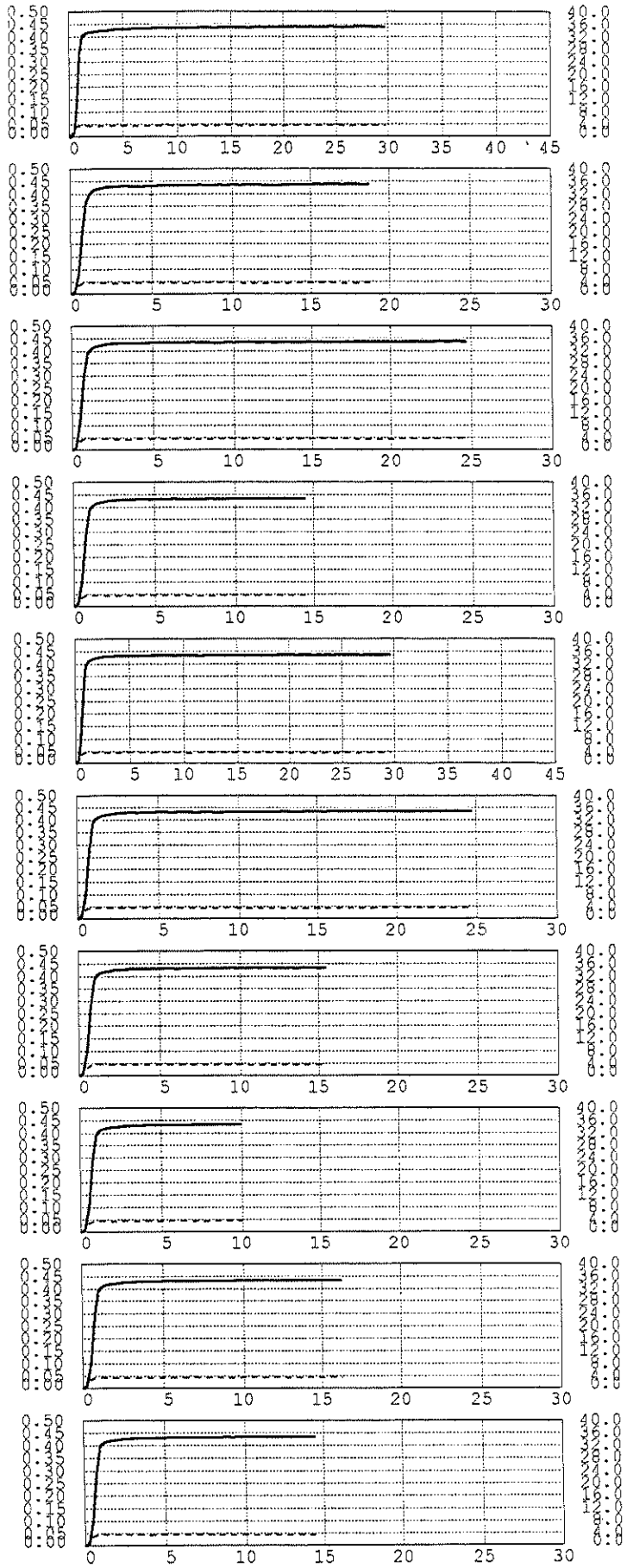
Date: 01/10/2008
Time: 13:57:37

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-12-400
SOLUTION CONCENTRATION: 0.397

BLANK TEST	0.000	13:58
INTERNAL STANDARD	PASSED	13:58
SIMULATOR VAPOR (33.9°C)	0.434	13:59
SIMULATOR VAPOR (33.9°C)	0.432	14:00
SIMULATOR VAPOR (34.0°C)	0.432	14:02
SIMULATOR VAPOR (34.0°C)	0.429	14:03
SIMULATOR VAPOR (34.0°C)	0.431	14:04
SIMULATOR VAPOR (34.0°C)	0.430	14:05
SIMULATOR VAPOR (34.0°C)	0.428	14:07
SIMULATOR VAPOR (34.0°C)	0.428	14:08
SIMULATOR VAPOR (33.9°C)	0.430	14:09
SIMULATOR VAPOR (34.0°C)	0.429	14:10
BLANK TEST	0.000	14:11

Average = 0.4303
Std Dev = 0.0019



ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

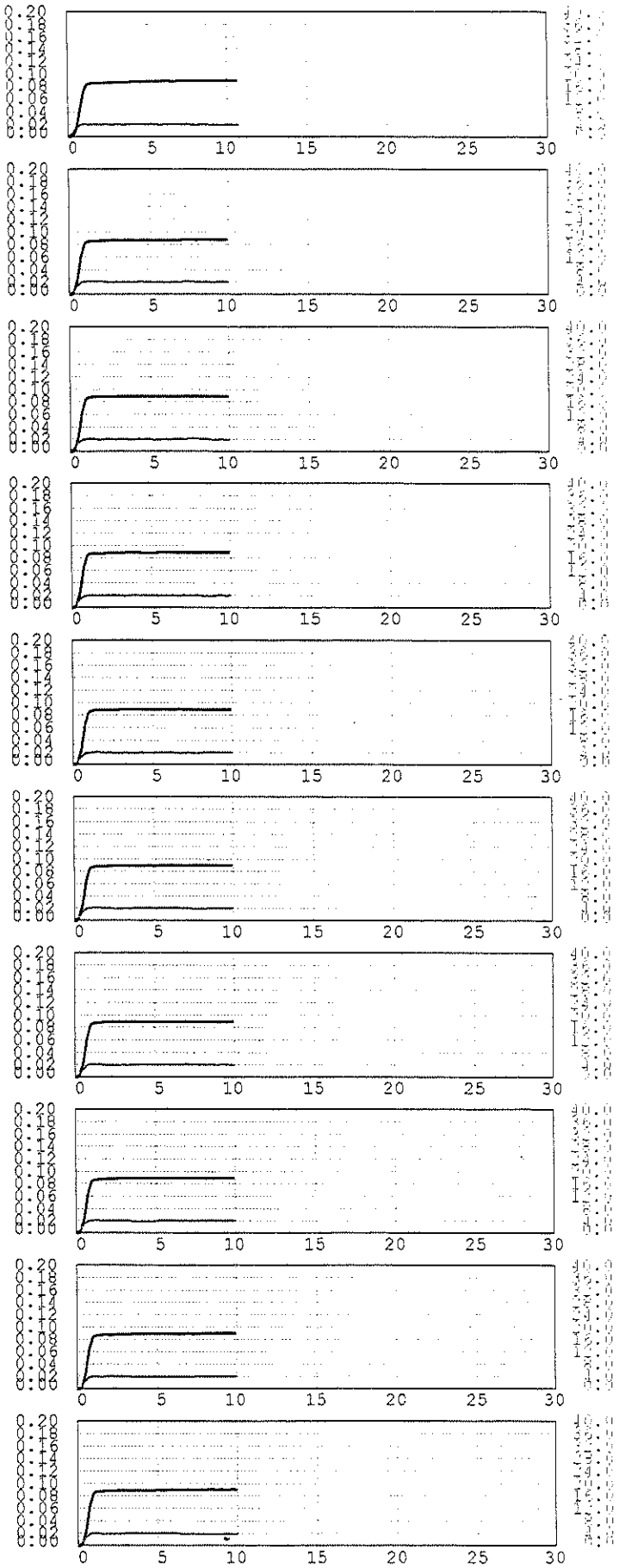
Date: 01/10/2008
Time: 13:53:38

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-09-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST	0.000	13:54
INTERNAL STANDARD	PASSED	13:54
SIMULATOR VAPOR (34.0°C)	0.087	13:55
SIMULATOR VAPOR (34.0°C)	0.086	13:55
SIMULATOR VAPOR (33.9°C)	0.088	13:56
SIMULATOR VAPOR (34.0°C)	0.087	13:57
SIMULATOR VAPOR (34.0°C)	0.087	13:58
SIMULATOR VAPOR (34.0°C)	0.089	13:59
SIMULATOR VAPOR (34.0°C)	0.088	14:00
SIMULATOR VAPOR (34.0°C)	0.088	14:01
SIMULATOR VAPOR (34.1°C)	0.088	14:02
SIMULATOR VAPOR (34.0°C)	0.089	14:03
BLANK TEST	0.000	14:04

Average = 0.0877
Std Dev = 0.0009



CALIBRATION REPORT

DataMaster DMT: 102706
Calibration Date: 01/10/2008
Calibrated by:

VERMONT
DEPARTMENT OF HEALTH

```
Ca  =  0.100000
CAL =  1.034099    0.800 <= CAL < 1.200
b1  =  0.000000    0.000 <=  b1 < 0.004
b2  =  0.003250    0.002 <=  b2 < 0.013
b3  =  0.000000    0.000 <=  b3 < 0.004
Xq  =  0.102338    0.050 <=  Xq < 0.200
a21 =  1.189405    1.050 <= a21 < 1.300
a31 =  0.465401    0.300 <= a31 < 0.800
```

Performed by

Date _____

01/10/2008 13:52

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

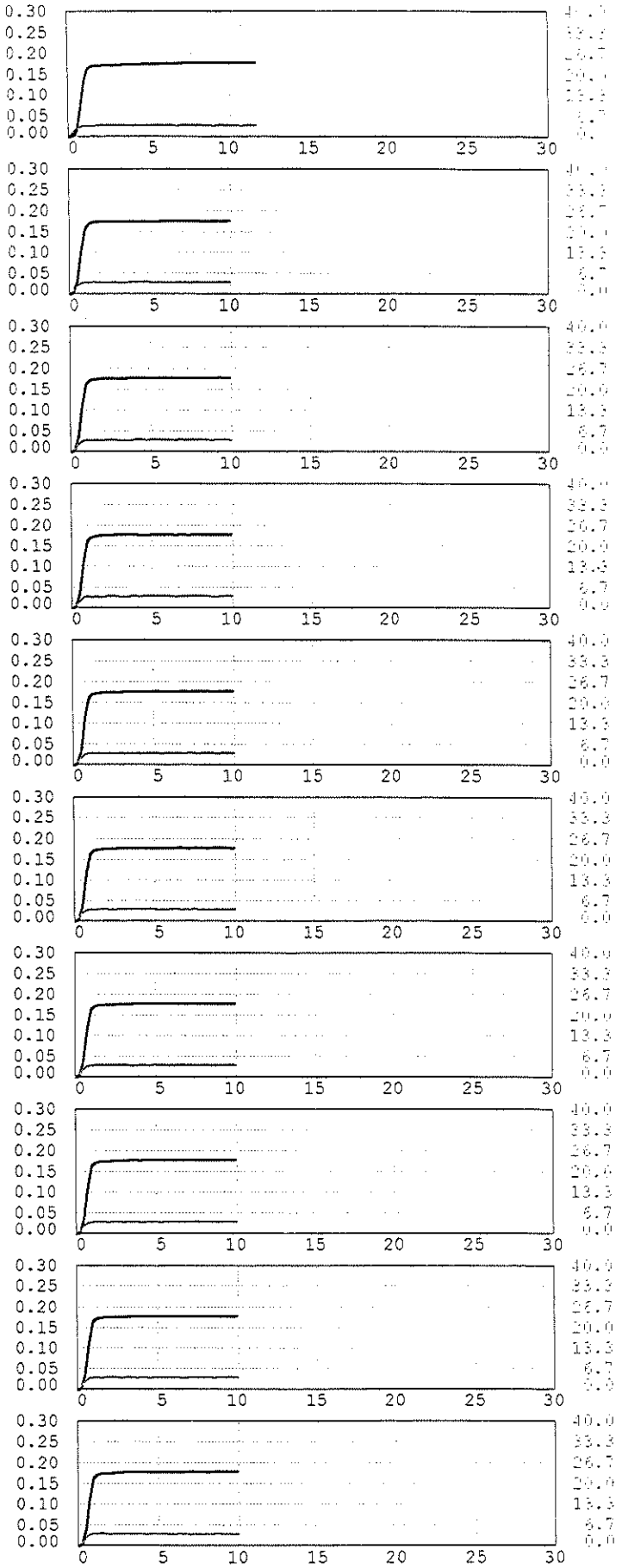
Date: 01/10/2008
Time: 13:37:43

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-08-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST	0.000	13:38
INTERNAL STANDARD	PASSED	13:38
Xq = 0.1341 (0.00%)		
SIMULATOR VAPOR (34.0°C)	0.170	13:39
X[1] = 0.1705 (-0.0013) (0.0000)		
SIMULATOR VAPOR (34.1°C)	0.170	13:40
X[1] = 0.1701 (-0.0027) (-0.0016)		
SIMULATOR VAPOR (34.1°C)	0.171	13:41
X[1] = 0.1715 (-0.0014) (-0.0010)		
SIMULATOR VAPOR (34.1°C)	0.170	13:42
X[1] = 0.1709 (-0.0016) (-0.0008)		
SIMULATOR VAPOR (34.1°C)	0.170	13:43
X[1] = 0.1708 (-0.0022) (-0.0015)		
SIMULATOR VAPOR (34.0°C)	0.172	13:44
X[1] = 0.1720 (-0.0012) (-0.0005)		
SIMULATOR VAPOR (34.0°C)	0.171	13:45
X[1] = 0.1711 (-0.0023) (-0.0009)		
SIMULATOR VAPOR (34.0°C)	0.171	13:46
X[1] = 0.1715 (-0.0022) (-0.0008)		
SIMULATOR VAPOR (34.1°C)	0.171	13:47
X[1] = 0.1711 (-0.0023) (-0.0005)		
SIMULATOR VAPOR (34.1°C)	0.171	13:48
X[1] = 0.1718 (-0.0007) (-0.0002)		
BLANK TEST	0.000	13:48

Average = 0.1707
Std Dev = 0.0007



01/10/2008 13:51

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

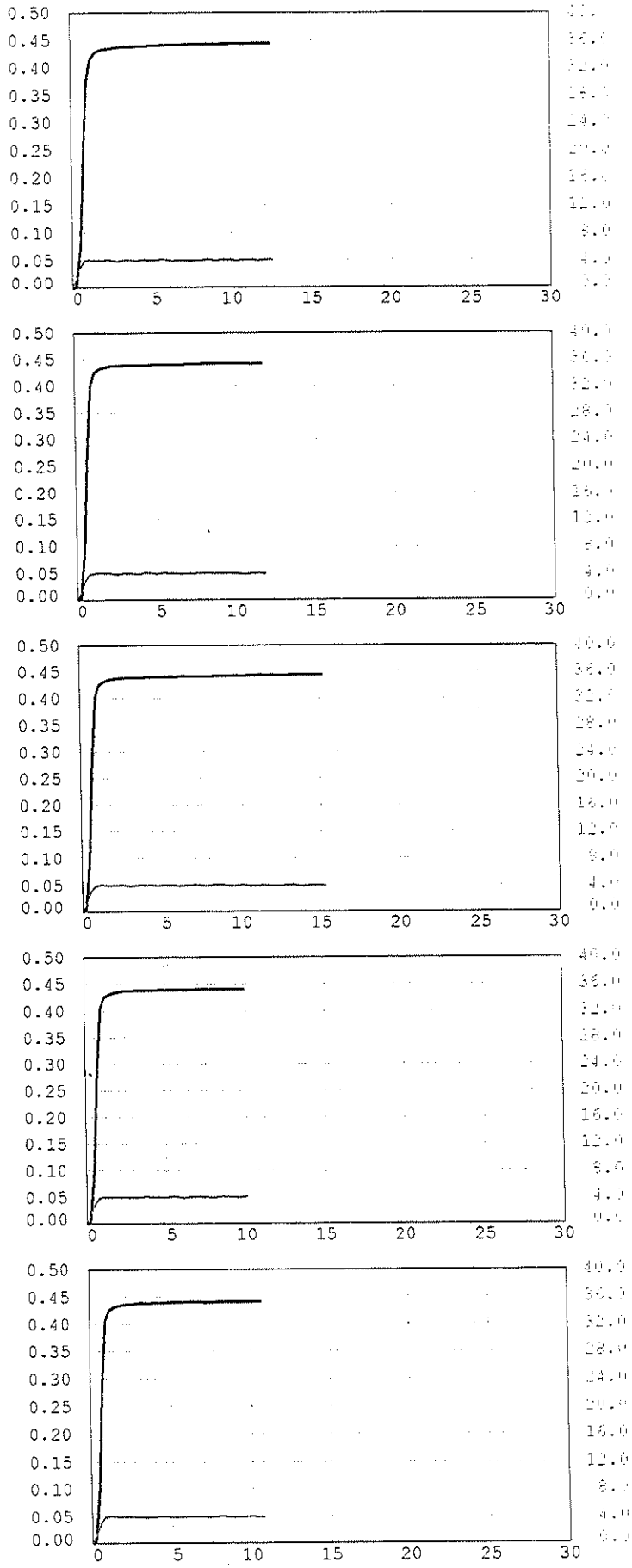
Date: 01/10/2008
Time: 11:26:42

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-12-400
SOLUTION CONCENTRATION: 0.397

BLANK TEST	0.000	11:27
INTERNAL STANDARD	PASSED	11:27
Xq = 0.1342 (0.078)		
SIMULATOR VAPOR (34.2°C)	0.435	11:28
X[1] = 0.4355 (-0.0015) (0.0021)		
SIMULATOR VAPOR (34.1°C)	0.433	11:29
X[1] = 0.4338 (-0.0017) (0.0017)		
SIMULATOR VAPOR (34.2°C)	0.434	11:30
X[1] = 0.4344 (-0.0021) (0.0017)		
SIMULATOR VAPOR (34.1°C)	0.431	11:31
X[1] = 0.4318 (-0.0012) (0.0015)		
SIMULATOR VAPOR (34.1°C)	0.432	11:32
X[1] = 0.4326 (-0.0026) (0.0016)		
BLANK TEST	0.000	11:33

Average = 0.4330
Std Dev = 0.0016



01/10/2008 13:35

CALIBRATION REPORT

DataMaster DMT: 102806
Calibration Date: 01/08/2008
Calibrated by: A L B

VERMONT
DEPARTMENT OF HEALTH

Ca =	0.100000		
CAL =	1.016036	0.800 <= CAL < 1.200	
b1 =	0.000000	0.000 <= b1 < 0.004	
b2 =	0.002581	0.002 <= b2 < 0.013	
b3 =	0.000000	0.000 <= b3 < 0.004	
Xq =	0.121566	0.050 <= Xq < 0.200	
a21 =	1.153526	1.050 <= a21 < 1.300	
a31 =	0.473220	0.300 <= a31 < 0.800	

Performed by _____ Date 01/08/2008

01/08/2008 09:53

CERTIFICATION REPORT

DataMaster DMT: 102806
Calibration Date:
Certification Date: 01/08/2008
Certified by: A L B

VERMONT
DEPARTMENT OF HEALTH

Diagnostic Results

VERSIONS
DMT 0.30
PIC 2.04
Modem 1.01
Questions 1.00
Reports 0.03

TEMPERATURES
Sample Chamber = 48.97°C
Breath Tube = 48.07°C
Digital Sim = 34.1°C

SETTINGS
Lamp Voltage = 2.10 V
Cooler Voltage = 1.68 V
Bias Voltage = 120.4 V
Chopper Freq = 536.4 Hz

PUMP INFO
Flow Rate = 5.037 L/M

DETECTOR INFO

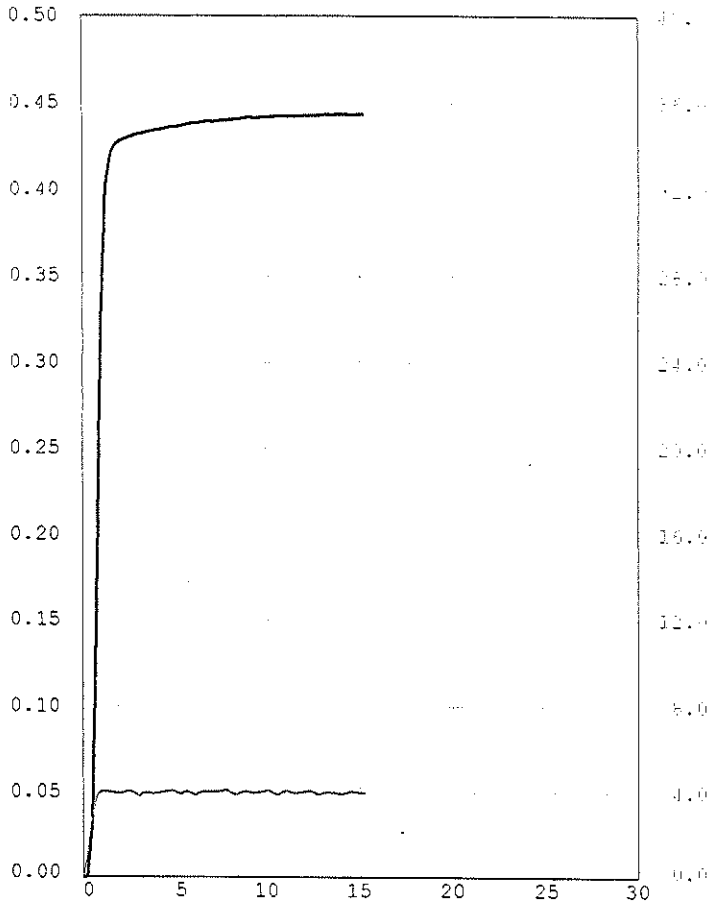
PUMP	ON	OFF
MAX(V)	0.0591	0.0596
MIN(V)	0.0571	0.0573

FILTER INFO
Filter 1 0.058 Zero = true
Filter 2 0.515 Zero = true
Filter 3 0.059 Zero = true

INTERNAL STANDARD
Xq = 0.1204 0.95%

Options

Printer: yes
Number of Copies: 1
Number of Supervisor Tests: 10
Tolerance Check: yes
Data Collection: yes
Units: g/210L
Simulator Check: yes
Uses Wet Bath Simulator: yes
Simulator Nominal: 0.100
Dry Gas PPM: 260.500
Digital Simulator: none
Simulator Before: yes
Simulator Between: yes
Simulator After: no
Number of Subject Tests: 2
AskQuestions: yes
Query Refusal: yes
Alcohol Display: yes
Show Two Digits: no
Volume Display: yes
Number of Calibration Tests: 1
Calibrate with Wet Bath: yes
Calibration Nominal: 0.100
Calibration PPM: 260.500



ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

Date: 01/10/2008
Time: 11:24:17

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-12-400
SOLUTION CONCENTRATION: 0.397

BLANK TEST	0.000	11:25
INTERNAL STANDARD	PASSED	11:25
SIMULATOR VAPOR (34.2°C)	0.433	11:25

STANDARD OUT OF RANGE

01/10/2008 11:26

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

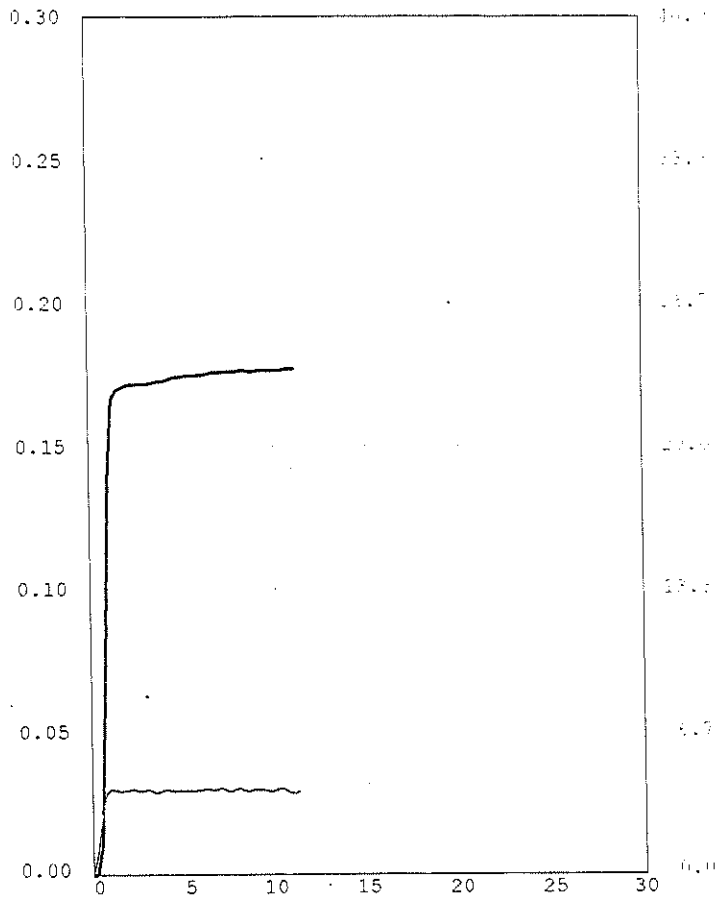
Date: 01/10/2008
Time: 11:21:40

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-08-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST	0.000	11:22
INTERNAL STANDARD	PASSED	11:22
SIMULATOR VAPOR (34.1°C)	0.170	11:23

STANDARD OUT OF RANGE

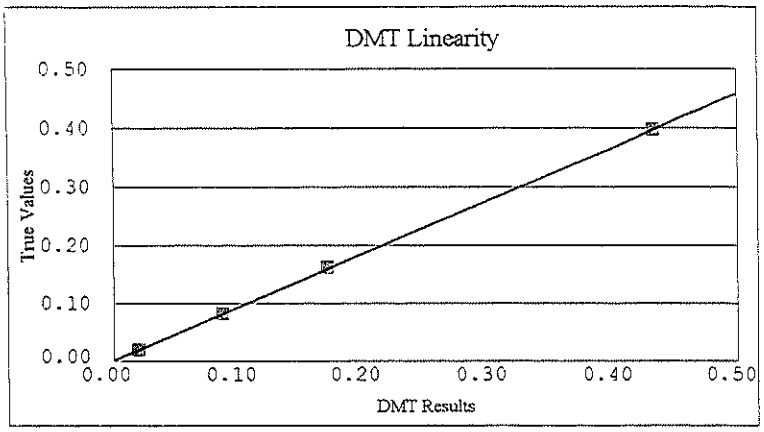


01/10/2008 11:23

Linearity Check Results

True Value	Reported Average	Std Dev
0.020g/210L Lot # 07-15-020	0.020g/210L	0.0005
0.082g/210L Lot # 07-09-080	0.087g/210L ↑6%	0.0000
0.162g/210L Lot # 07-08-160	0.172g/210L ↑6%	0.0008
0.397g/210L Lot # 07-12-400	0.432g/210L ↑9%	0.0016

$R^2 = 1.0000$



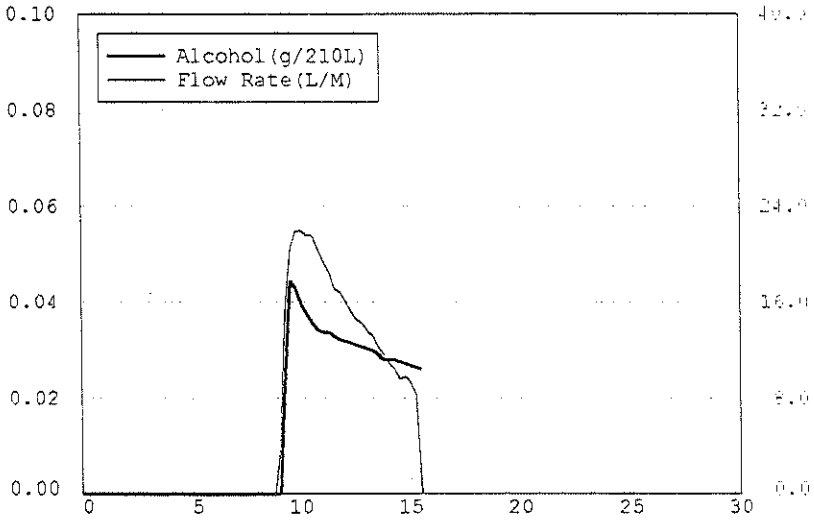
Acetone Interference Test

Lot # 10-10-100

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

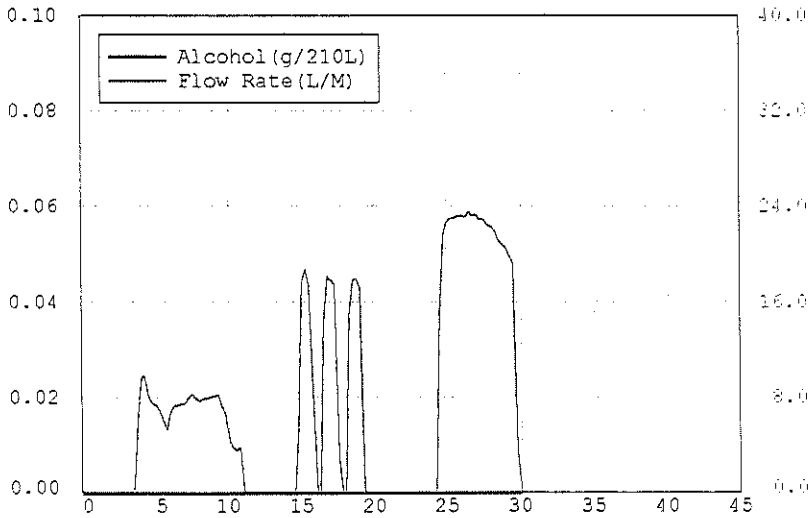


RFI Interference Test

RFI detected

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by x _____ Date 01/08/2008

Reviewed by _____ Date _____

INSTALLATION REPORT

DataMaster DMT: 102806
Location: VDHL
Calibration Date: 01/08/2008
Certification Date: 01/08/2008
Installation Date: 01/08/2008
Installed By: A L B

VERMONT
DEPARTMENT OF HEALTH

Site meets specification in doc P-ALC-210

Diagnostic Results

VERSIONS
DMT 0.30
PIC 2.04
Modem 1.01
Questions 1.00
Reports 0.03

TEMPERATURES
Sample Chamber = 48.80°C
Breath Tube = 48.07°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 2.10 V
Cooler Voltage = 1.68 V
Bias Voltage = 120.4 V
Chopper Freq = 533.1 Hz

PUMP INFO
Flow Rate = 4.960 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0573	0.0579
MIN(V)	0.0555	0.0557

FILTER INFO
Filter 1 0.057 Zero = true
Filter 2 0.514 Zero = true
Filter 3 0.057 Zero = true

INTERNAL STANDARD
Xq = 0.1205 0.80%

Accuracy and Precision Check

Concentration = 0.1000g/210L
Lot # = 07-04-100
Average =
Std Dev =

RFI Interference Test

Sample Acceptance Test

RFI detected [illegible]
1/8

INSTALLATION FAILED

Performed by Date _____

Reviewed by _____ Date _____

01/08/2008 14:15

INSTALLATION REPORT

DataMaster DMT: 102806
Location: VDHL
Calibration Date: 01/08/2008
Certification Date: 01/08/2008
Installation Date: 01/08/2008
Installed By: A L B

VERMONT
DEPARTMENT OF HEALTH

Site meets specification in doc P-ALC-210

Diagnostic Results

VERSIONS
DMT 0.30
PIC 2.04
Modem 1.01
Questions 1.00
Reports 0.03

TEMPERATURES
Sample Chamber = 48.80°C
Breath Tube = 47.63°C
Digital Sim = 34.0°C

SETTINGS
Lamp Voltage = 2.10 V
Cooler Voltage = 1.68 V
Bias Voltage = 120.4 V
Chopper Freq = 534.2 Hz

PUMP INFO
Flow Rate = 4.939 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0577	0.0585
MIN(V)	0.0557	0.0567

FILTER INFO
Filter 1 0.056 Zero = true
Filter 2 0.515 Zero = true
Filter 3 0.057 Zero = true

INTERNAL STANDARD
Xq = 0.1209 0.51%

Accuracy and Precision Check

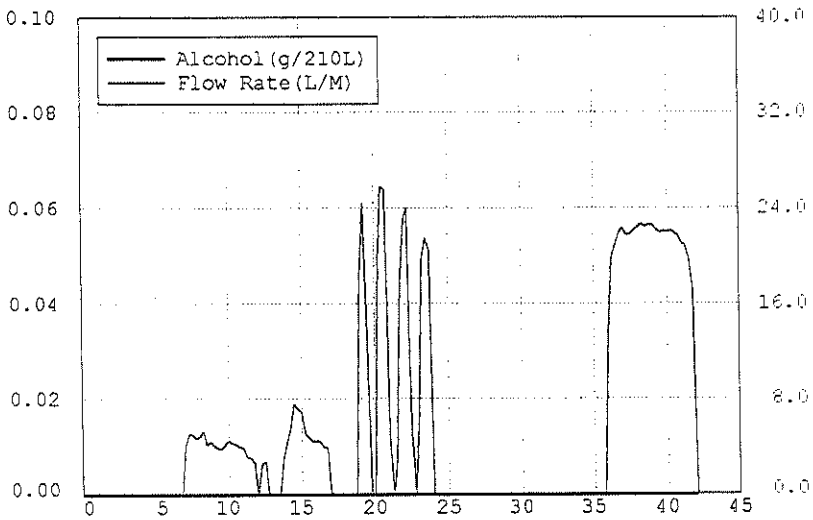
Concentration = 0.1000g/210L
Lot # = 07-04-100
Average = 0.0984g/210L
Std Dev = 0.0005

RFI Interference Test

RFI detected

Sample Acceptance Test

Passed



INSTALLATION PASSED

Performed by _____ Date 01/08/2008

Reviewed by _____ Date _____

01/08/2008 14:28

DUI Subject Test

STATE OF VERMONT

DataMaster DMT: 102806

Certification Date: 01/08/2008
Installation Date: 01/08/2008

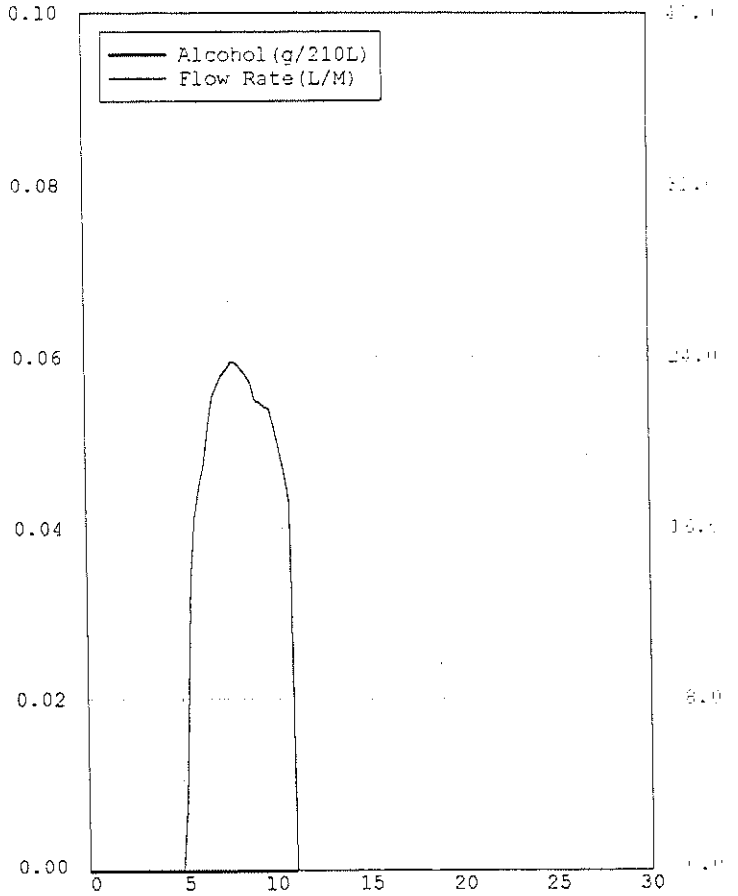
Date: 01/08/2008
Time: 15:40:48

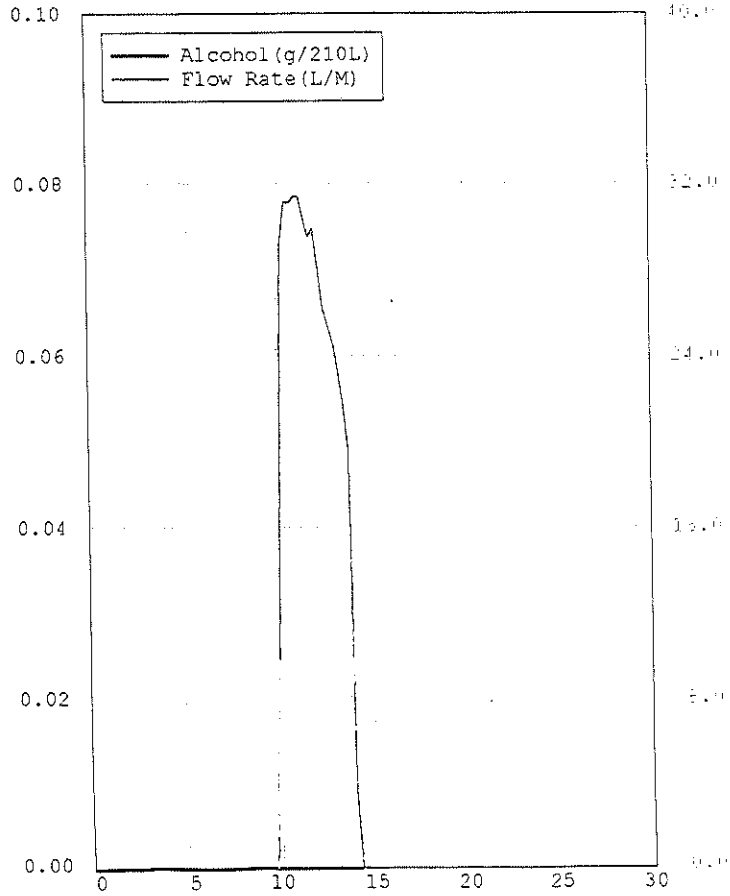
Subject Name: A L B
Date of Birth: 10/06/1980 Age: 27
Gender: F
License #: 1 VT

Case #: 1
Time of Operation: 14:50
Location of Incident: SOFTWARE CHECK
Town: ADDISON
County: ADDISON

Test Operator Name: A L B
Agency: VDHL

Obs. Period Start:		15:40
BLANK TEST	0.000	15:41
INTERNAL STANDARD	PASSED	15:41
SIMULATOR VAPOR	0.098	15:42
BLANK TEST	0.000	15:42
SUBJECT SAMPLE (Vol=1.9L)	0.000	15:43
BLANK TEST	0.000	15:44
INTERNAL STANDARD	PASSED	15:44
SIMULATOR VAPOR	0.099	15:44
BLANK TEST	0.000	15:45
SUBJECT SAMPLE (Vol=1.7L)	0.000	15:45





01/08/2008 15:54

CALIBRATION REPORT

DataMaster DMT: 102806
Calibration Date: 01/09/2008
Calibrated by: A L B

VERMONT
DEPARTMENT OF HEALTH

Ca =	0.100000		
CAL =	1.026199	0.800 <= CAL < 1.200	
b1 =	0.000000	0.000 <= b1 < 0.004	
b2 =	0.002644	0.002 <= b2 < 0.013	
b3 =	0.000000	0.000 <= b3 < 0.004	
Xq =	0.120948	0.050 <= Xq < 0.200	
a21 =	1.165781	1.050 <= a21 < 1.300	
a31 =	0.471487	0.300 <= a31 < 0.800	

Performed by x _____ Date 01/09/2008

01/09/2008 14:31

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102806

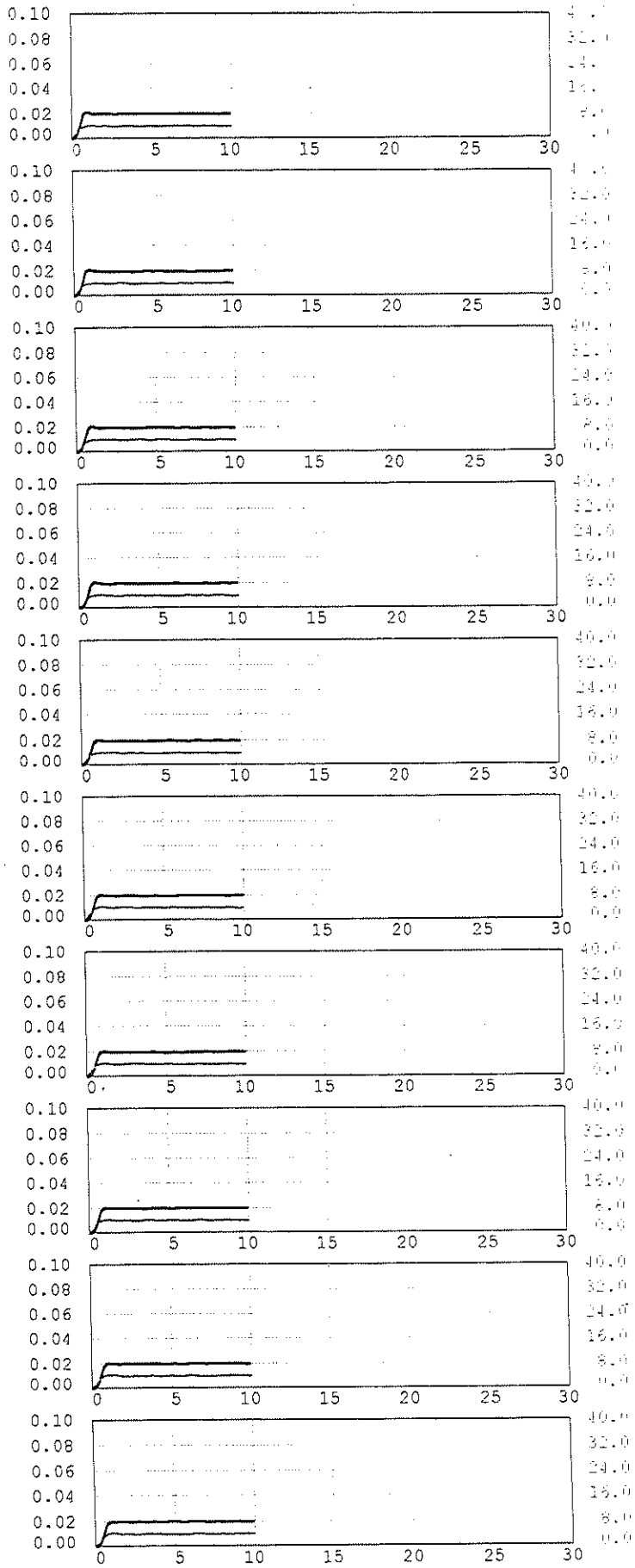
Date: 01/09/2008
Time: 15:27:50

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-15-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST	0.000	15:28
INTERNAL STANDARD	PASSED	15:28
SIMULATOR VAPOR (33.7°C)	0.019	15:29
SIMULATOR VAPOR (33.7°C)	0.019	15:30
SIMULATOR VAPOR (33.7°C)	0.019	15:31
SIMULATOR VAPOR (33.7°C)	0.019	15:32
SIMULATOR VAPOR (33.7°C)	0.019	15:33
SIMULATOR VAPOR (33.7°C)	0.019	15:34
SIMULATOR VAPOR (33.7°C)	0.019	15:35
SIMULATOR VAPOR (33.6°C)	0.019	15:36
SIMULATOR VAPOR (33.7°C)	0.019	15:37
SIMULATOR VAPOR (33.7°C)	0.019	15:38
BLANK TEST	0.000	15:38

Average = 0.0190
Std Dev = 0.0000



01/09/2008 15:39

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102806

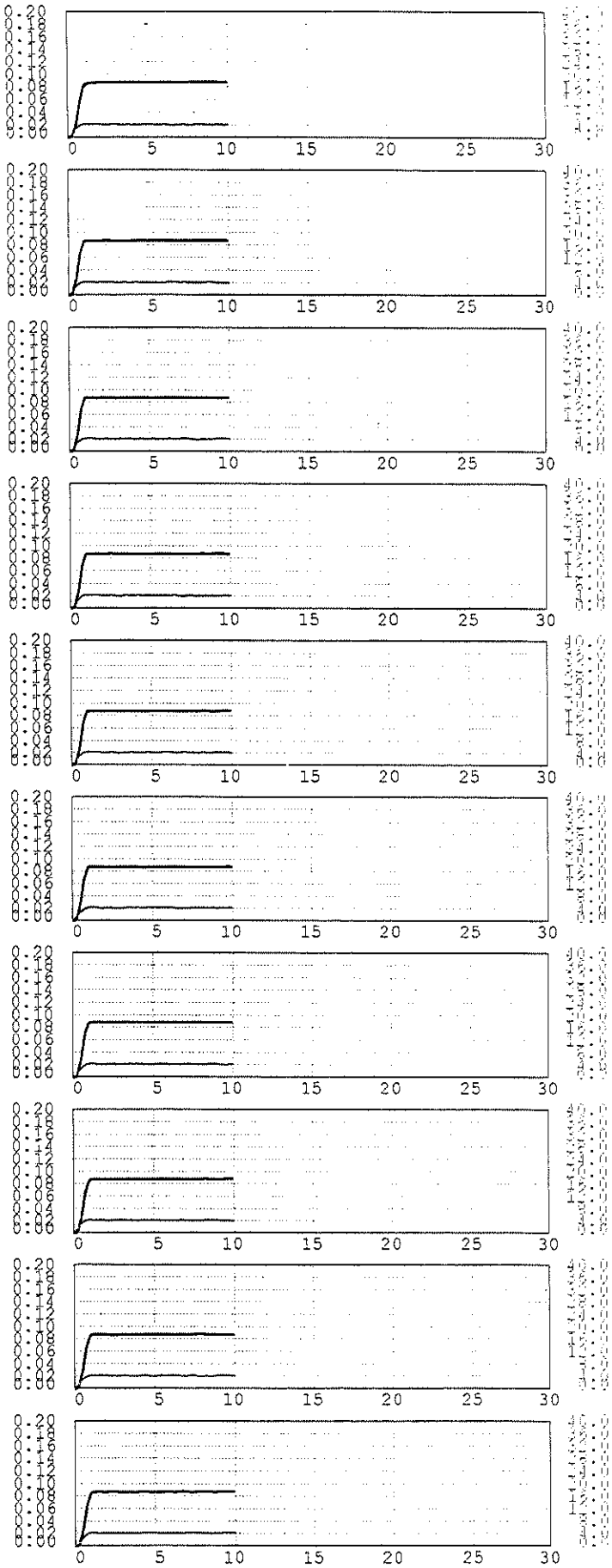
Date: 01/09/2008
Time: 15:10:51

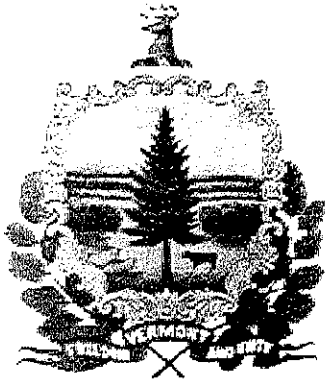
SUPERVISOR NAME: A L B

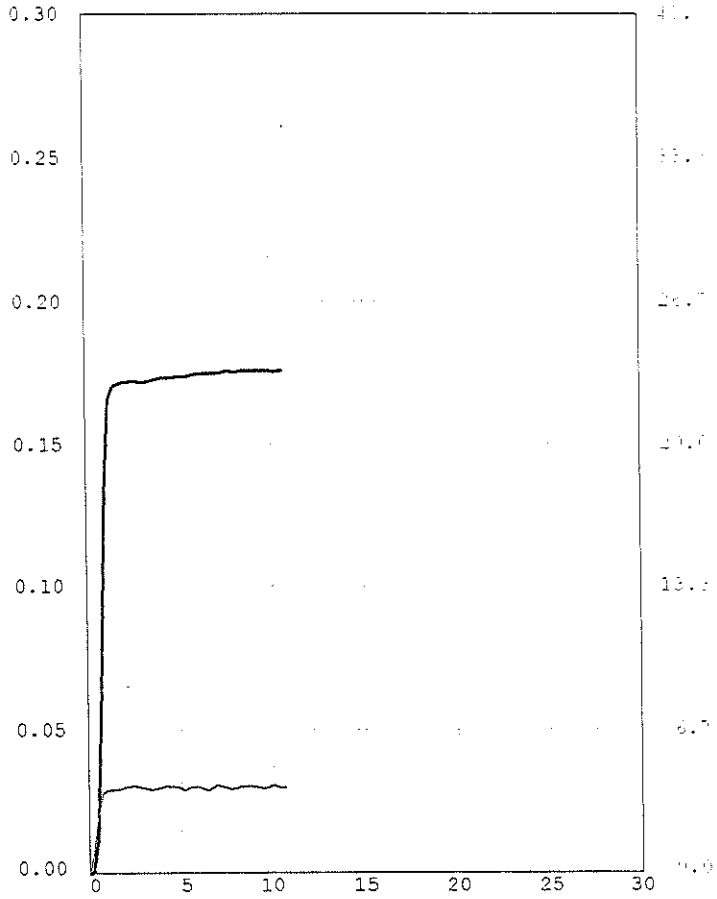
SOLUTION LOT #: 07-09-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST	0.000	15:11
INTERNAL STANDARD	PASSED	15:11
Xq = 0.1219 (0.81%)		
SIMULATOR VAPOR (33.8°C)	0.087	15:12
X[1] = 0.0873 (0.0000) (0.0006)		
SIMULATOR VAPOR (33.9°C)	0.087	15:13
X[1] = 0.0872 (-0.0004) (0.0010)		
SIMULATOR VAPOR (33.9°C)	0.087	15:14
X[1] = 0.0873 (-0.0005) (0.0007)		
SIMULATOR VAPOR (33.8°C)	0.087	15:15
X[1] = 0.0875 (-0.0012) (-0.0007)		
SIMULATOR VAPOR (33.9°C)	0.087	15:16
X[1] = 0.0875 (-0.0005) (0.0008)		
SIMULATOR VAPOR (33.9°C)	0.087	15:17
X[1] = 0.0874 (-0.0007) (0.0001)		
SIMULATOR VAPOR (33.9°C)	0.087	15:18
X[1] = 0.0878 (-0.0001) (0.0002)		
SIMULATOR VAPOR (33.9°C)	0.087	15:19
X[1] = 0.0875 (-0.0006) (0.0005)		
SIMULATOR VAPOR (33.9°C)	0.087	15:20
X[1] = 0.0872 (-0.0003) (0.0003)		
SIMULATOR VAPOR (33.8°C)	0.086	15:21
X[1] = 0.0867 (-0.0016) (-0.0004)		
BLANK TEST	0.000	15:22

Average = 0.0869
Std Dev = 0.0003







ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102806

Date: 01/09/2008
Time: 14:33:29

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-08-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST	0.000	14:34
INTERNAL STANDARD	PASSED	14:34
SIMULATOR VAPOR (33.9°C)	0.175	14:34

STANDARD OUT OF RANGE

01/09/2008 14:35

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102806

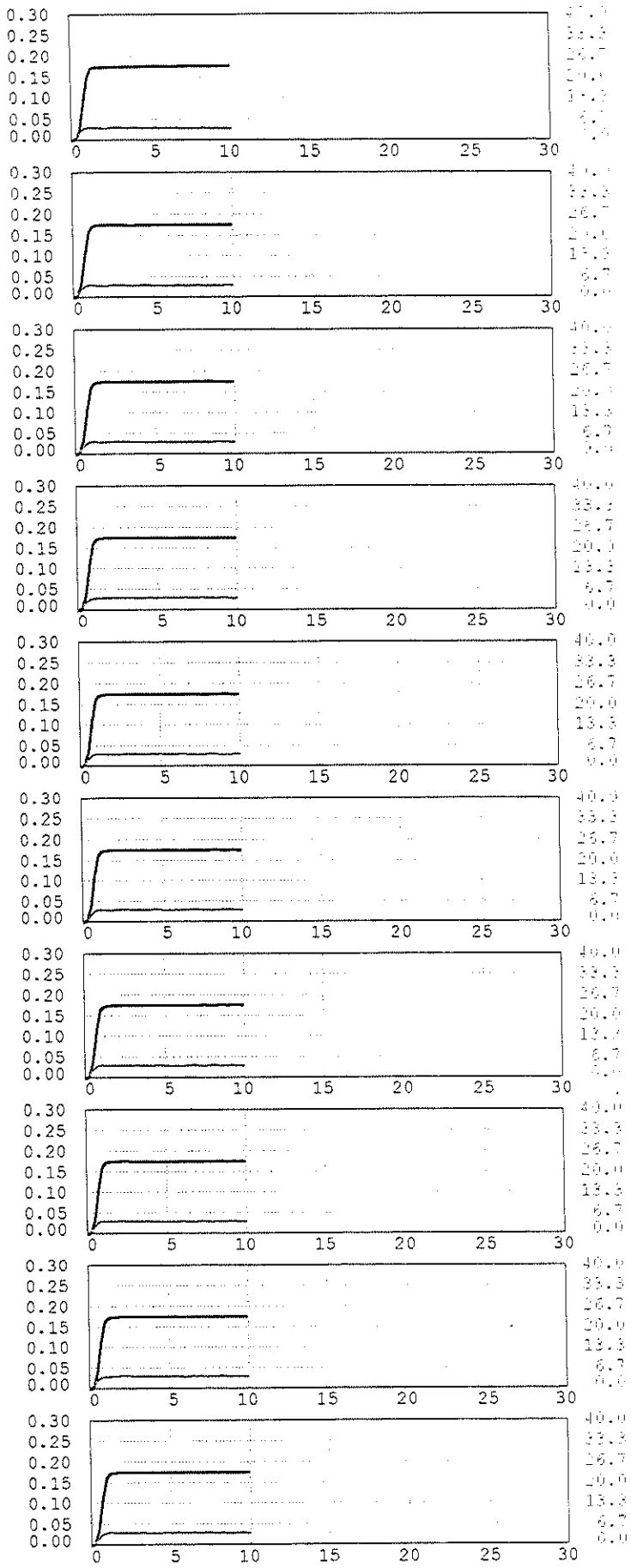
Date: 01/09/2008
Time: 14:35:45

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-08-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST		0.000	14:36
INTERNAL STANDARD		PASSED	14:36
Xq = 0.1213 (0.29%)			
SIMULATOR VAPOR (33.9°C)		0.175	14:37
X[1] = 0.1751 (0.0012)	(-0.0008)		
SIMULATOR VAPOR (33.9°C)		0.174	14:38
X[1] = 0.1741 (0.0005)	(-0.0012)		
SIMULATOR VAPOR (33.9°C)		0.174	14:39
X[1] = 0.1746 (0.0005)	(-0.0010)		
SIMULATOR VAPOR (33.9°C)		0.174	14:40
X[1] = 0.1741 (0.0003)	(-0.0009)		
SIMULATOR VAPOR (33.9°C)		0.174	14:41
X[1] = 0.1741 (0.0001)	(-0.0007)		
SIMULATOR VAPOR (33.9°C)		0.174	14:42
X[1] = 0.1747 (0.0005)	(-0.0007)		
SIMULATOR VAPOR (33.9°C)		0.175	14:43
X[1] = 0.1751 (0.0009)	(-0.0015)		
SIMULATOR VAPOR (33.9°C)		0.174	14:44
X[1] = 0.1746 (0.0006)	(-0.0006)		
SIMULATOR VAPOR (33.8°C)		0.174	14:45
X[1] = 0.1743 (0.0008)	(-0.0007)		
SIMULATOR VAPOR (33.9°C)		0.174	14:46
X[1] = 0.1745 (0.0001)	(-0.0001)		
BLANK TEST		0.000	14:46

Average = 0.1742
Std Dev = 0.0004



01/09/2008 14:49

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102806

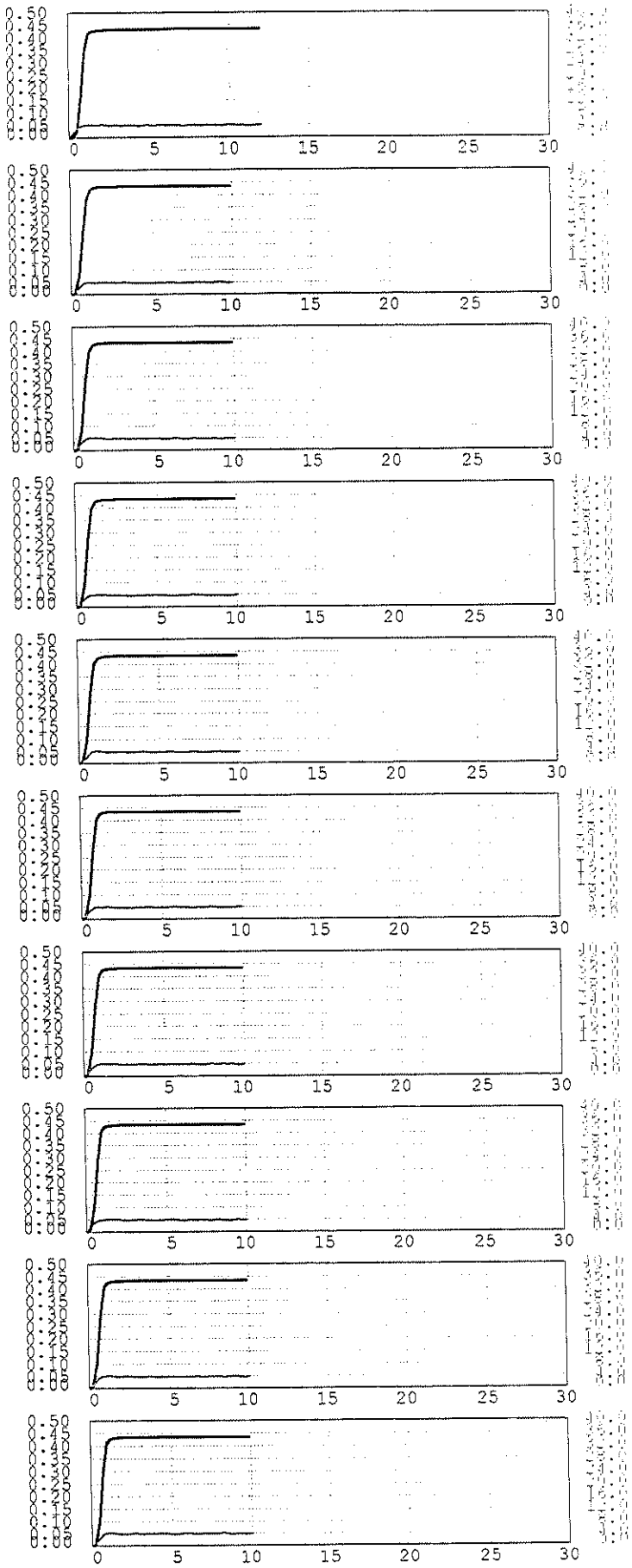
Date: 01/09/2008
Time: 14:53:20

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-12-400
SOLUTION CONCENTRATION: 0.397

BLANK TEST		0.000	14:54
INTERNAL STANDARD		PASSED	14:54
Xq = 0.1212 (0.22%)			
SIMULATOR VAPOR (34.0°C)		0.431	14:54
X[1] = 0.4319	(0.0086)	(0.0019)	
SIMULATOR VAPOR (34.0°C)		0.432	14:55
X[1] = 0.4320	(0.0072)	(0.0013)	
SIMULATOR VAPOR (34.0°C)		0.432	14:56
X[1] = 0.4320	(0.0078)	(0.0003)	
SIMULATOR VAPOR (34.0°C)		0.431	14:57
X[1] = 0.4317	(0.0063)	(0.0004)	
SIMULATOR VAPOR (34.0°C)		0.432	14:58
X[1] = 0.4321	(0.0073)	(0.0005)	
SIMULATOR VAPOR (34.0°C)		0.432	14:59
X[1] = 0.4326	(0.0081)	(0.0005)	
SIMULATOR VAPOR (34.0°C)		0.431	15:00
X[1] = 0.4319	(0.0068)	(-0.0002)	
SIMULATOR VAPOR (34.0°C)		0.432	15:01
X[1] = 0.4326	(0.0069)	(0.0004)	
SIMULATOR VAPOR (34.0°C)		0.431	15:02
X[1] = 0.4319	(0.0074)	(0.0005)	
SIMULATOR VAPOR (34.0°C)		0.432	15:03
X[1] = 0.4323	(0.0072)	(0.0011)	
BLANK TEST		0.000	15:04

Average = 0.4316
Std Dev = 0.0005



CALIBRATION REPORT

DataMaster DMT: 102606
Calibration Date: 01/08/2008
Calibrated by: A L B

VERMONT
DEPARTMENT OF HEALTH

Ca	=	0.100000					
CAL	=	1.036394	0.800	<=	CAL	<	1.200
b1	=	0.001922	0.000	<=	b1	<	0.004
b2	=	0.004987	0.002	<=	b2	<	0.013
b3	=	0.002685	0.000	<=	b3	<	0.004
Xq	=	0.134549	0.050	<=	Xq	<	0.200
a21	=	1.169801	1.050	<=	a21	<	1.300
a31	=	0.441921	0.300	<=	a31	<	0.800

= 100
1/9

Performed by x _____ Date 01/08/2008

01/08/2008 10:11

CERTIFICATION REPORT

DataMaster DMT: 102606
Calibration Date:
Certification Date: 01/08/2008
Certified by: A L B

VERMONT
DEPARTMENT OF HEALTH

Diagnostic Results

VERSIONS
DMT 0.30
PIC 2.04
Modem 1.01
Questions 1.00
Reports 0.03

TEMPERATURES
Sample Chamber = 48.74°C
Breath Tube = 48.07°C
Digital Sim = 0.0°C

SETTINGS
Lamp Voltage = 2.37 V
Cooler Voltage = 1.98 V
Bias Voltage = 121.1 V
Chopper Freq = 547.1 Hz

PUMP INFO
Flow Rate = 4.703 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.3108	0.3112
MIN(V)	0.3075	0.3085

FILTER INFO
Filter 1 0.310 Zero = true
Filter 2 0.640 Zero = true
Filter 3 0.310 Zero = true

INTERNAL STANDARD
Xq = 0.1349 0.26%

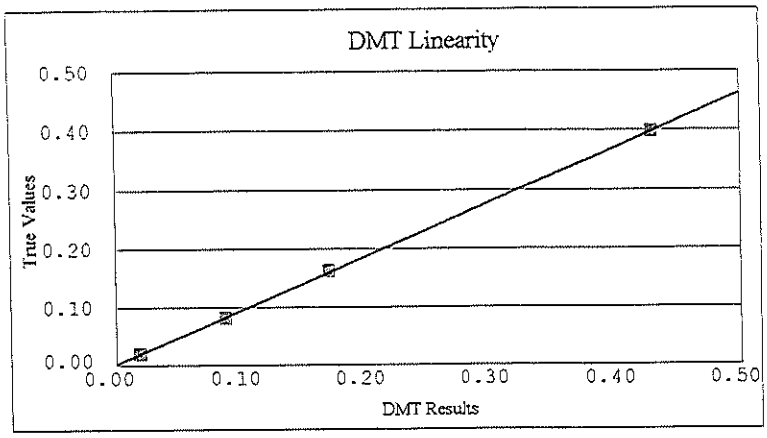
Options

Printer: yes
Number of Copies: 1
Number of Supervisor Tests: 10
Tolerance Check: yes
Data Collection: yes
Units: g/210L
Simulator Check: yes
Uses Wet Bath Simulator: yes
Simulator Nominal: 0.100
Dry Gas PPM: 260.500
Digital Simulator: none
Simulator Before: yes
Simulator Between: yes
Simulator After: no
Number of Subject Tests: 2
AskQuestions: yes
Query Refusal: yes
Alcohol Display: yes
Show Two Digits: no
Volume Display: yes
Number of Calibration Tests: 1
Calibrate with Wet Bath: yes
Calibration Nominal: 0.100
Calibration PPM: 260.500

Linearity Check Results

True Value	Reported Average	Std Dev
0.020g/210L Lot # 07-15-020	0.019g/210L	0.0005
0.082g/210L Lot # 07-09-080	0.087g/210L ↑6%	0.0000
0.162g/210L Lot # 07-08-160	0.170g/210L	0.0005
0.397g/210L Lot # 07-12-400	0.429g/210L ↑8%	0.0014

$R^2 = 0.9998$



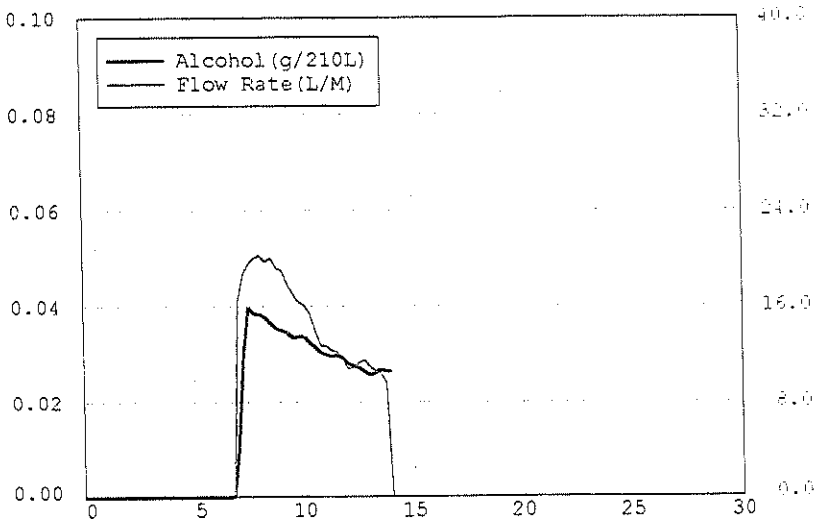
Acetone Interference Test

Lot # 10-10-100

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

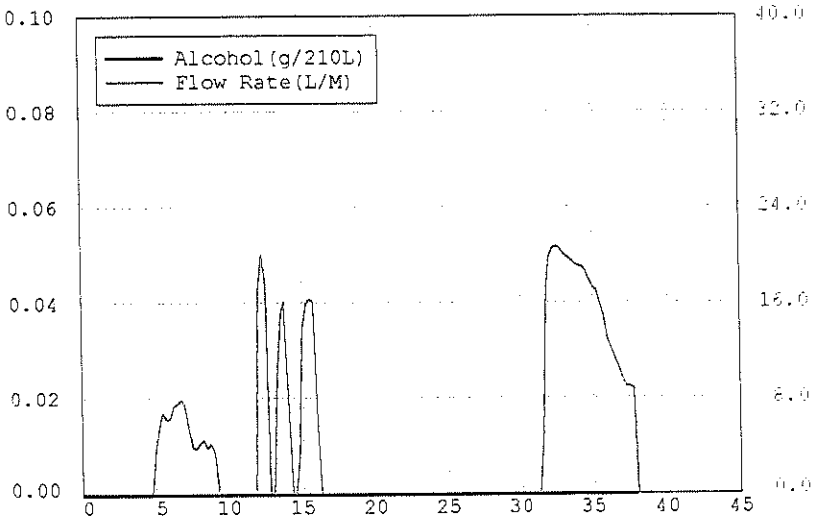


RFI Interference Test

RFI detected

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by _____ Date 01/08/2008

Reviewed by _____ Date _____

CALIBRATION REPORT

DataMaster DMT: 102606
Calibration Date: 01/09/2008
Calibrated by: A L B

VERMONT
DEPARTMENT OF HEALTH

Ca	=	0.101000	
CAL	=	1.052198	0.800 <= CAL < 1.200
b1	=	0.001797	0.000 <= b1 < 0.004
b2	=	0.005385	0.002 <= b2 < 0.013
b3	=	0.001264	0.000 <= b3 < 0.004
Xq	=	0.134192	0.050 <= Xq < 0.200
a21	=	1.150089	1.050 <= a21 < 1.300
a31	=	0.456025	0.300 <= a31 < 0.800

.101 1/9

Performed by _____ Date 01/09/2008

01/09/2008 14:50

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

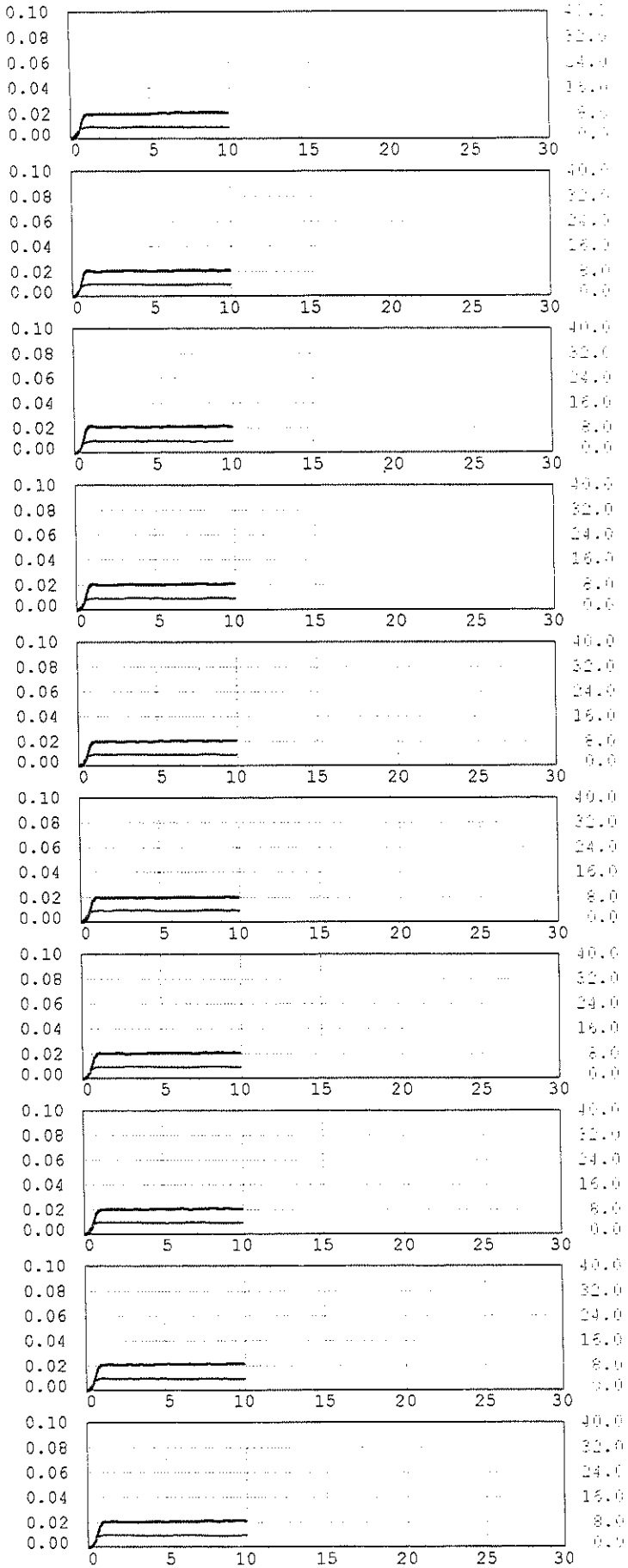
Date: 01/09/2008
Time: 15:23:40

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-15-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST		0.000	15:24
INTERNAL STANDARD		PASSED	15:24
Xq = 0.1341	(0.078)		
SIMULATOR VAPOR (33.8°C)		0.020	15:25
X[1] = 0.0204	(-0.0014)	(-0.0005)	
SIMULATOR VAPOR (33.8°C)		0.020	15:26
X[1] = 0.0207	(-0.0018)	(-0.0009)	
SIMULATOR VAPOR (33.8°C)		0.020	15:27
X[1] = 0.0208	(-0.0009)	(-0.0005)	
SIMULATOR VAPOR (33.8°C)		0.020	15:27
X[1] = 0.0204	(-0.0007)	(-0.0012)	
SIMULATOR VAPOR (33.8°C)		0.020	15:28
X[1] = 0.0202	(-0.0017)	(-0.0004)	
SIMULATOR VAPOR (33.8°C)		0.020	15:29
X[1] = 0.0201	(-0.0017)	(-0.0015)	
SIMULATOR VAPOR (33.8°C)		0.020	15:30
X[1] = 0.0204	(-0.0012)	(-0.0003)	
SIMULATOR VAPOR (33.8°C)		0.020	15:31
X[1] = 0.0206	(-0.0013)	(-0.0001)	
SIMULATOR VAPOR (33.8°C)		0.020	15:32
X[1] = 0.0207	(-0.0010)	(-0.0010)	
SIMULATOR VAPOR (33.8°C)		0.020	15:33
X[1] = 0.0206	(-0.0014)	(-0.0008)	
BLANK TEST		0.000	15:34

Average = 0.0200
Std Dev = 0.0000



01/09/2008 15:35

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

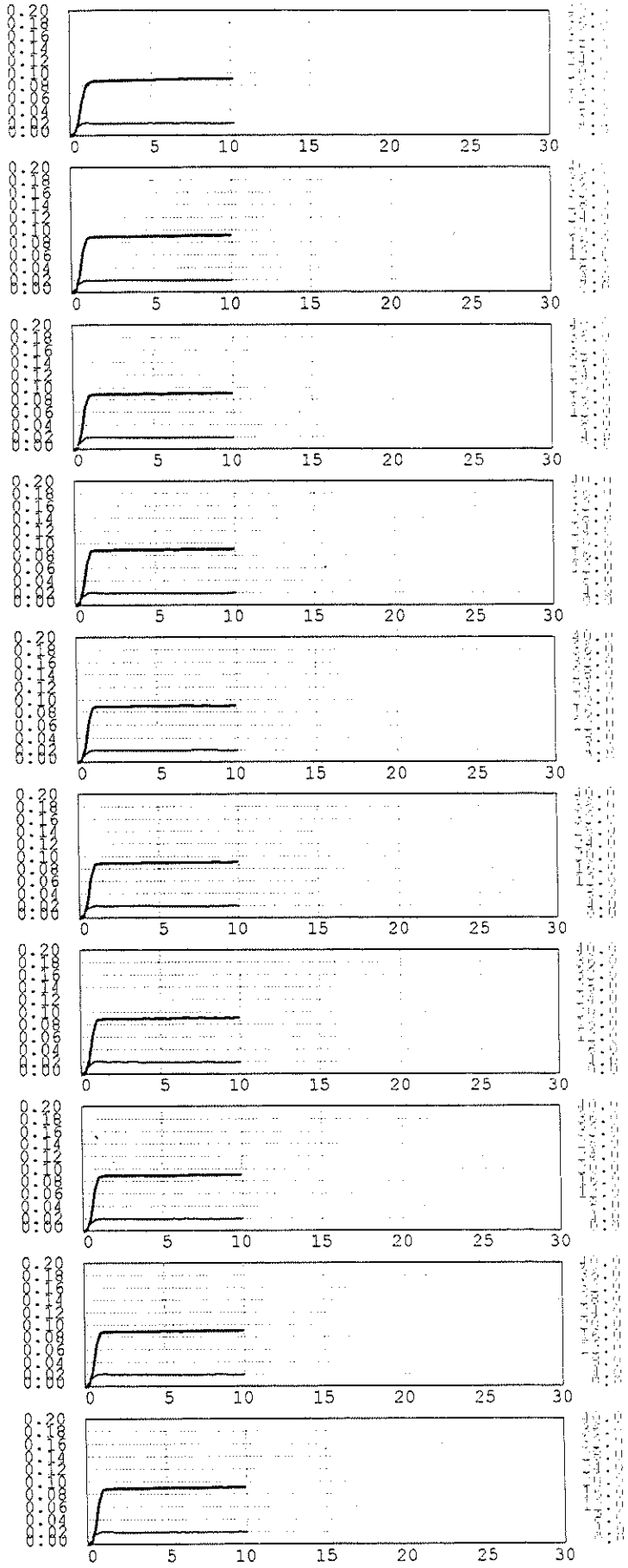
Date: 01/09/2008
Time: 15:09:05

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-09-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST		0.000	15:10
INTERNAL STANDARD		PASSED	15:10
Xq = 0.1341 (0.008)			
SIMULATOR VAPOR (34.0°C)		0.089	15:10
X[1] = 0.0896	(-0.0009)	(0.0003)	
SIMULATOR VAPOR (33.9°C)		0.089	15:11
X[1] = 0.0893	(-0.0006)	(-0.0003)	
SIMULATOR VAPOR (33.9°C)		0.089	15:12
X[1] = 0.0894	(-0.0013)	(-0.0008)	
SIMULATOR VAPOR (34.0°C)		0.089	15:13
X[1] = 0.0893	(-0.0015)	(-0.0002)	
SIMULATOR VAPOR (34.0°C)		0.089	15:14
X[1] = 0.0894	(-0.0009)	(0.0002)	
SIMULATOR VAPOR (34.0°C)		0.088	15:15
X[1] = 0.0889	(-0.0013)	(-0.0008)	
SIMULATOR VAPOR (34.0°C)		0.089	15:16
X[1] = 0.0892	(-0.0015)	(0.0001)	
SIMULATOR VAPOR (33.9°C)		0.088	15:17
X[1] = 0.0883	(-0.0024)	(0.0002)	
SIMULATOR VAPOR (33.9°C)		0.088	15:18
X[1] = 0.0886	(-0.0012)	(0.0003)	
SIMULATOR VAPOR (34.0°C)		0.089	15:19
X[1] = 0.0891	(-0.0025)	(-0.0009)	
BLANK TEST		0.000	15:20

Average = 0.0887
Std Dev = 0.0005



ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

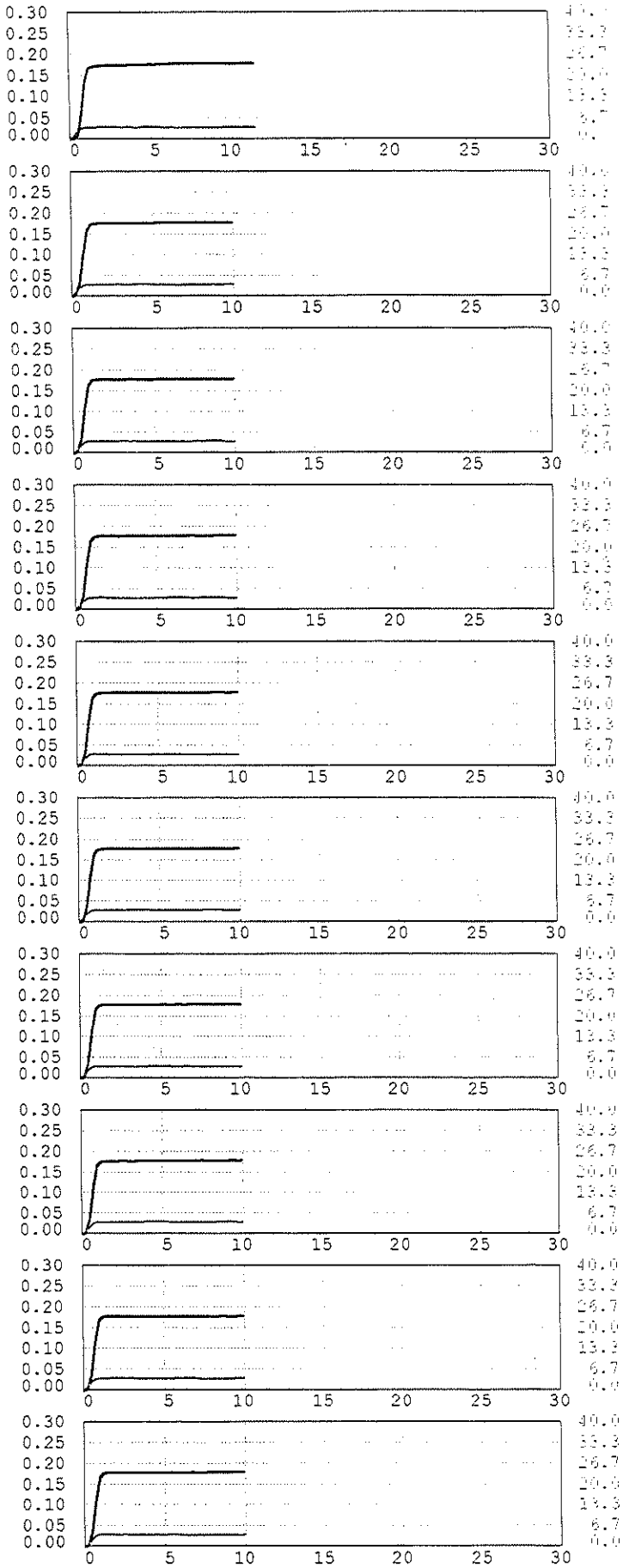
Date: 01/09/2008
Time: 15:50:11

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-08-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST	0.000	15:51
INTERNAL STANDARD	PASSED	15:51
Xq = 0.1346 (0.33%)		
SIMULATOR VAPOR (34.0°C)	0.170	15:51
X[1] = 0.1707 (-0.0004) (0.0032)		
SIMULATOR VAPOR (34.0°C)	0.170	15:52
X[1] = 0.1701 (-0.0020) (0.0025)		
SIMULATOR VAPOR (33.9°C)	0.172	15:53
X[1] = 0.1721 (0.0003) (0.0025)		
SIMULATOR VAPOR (34.0°C)	0.171	15:54
X[1] = 0.1717 (-0.0011) (0.0020)		
SIMULATOR VAPOR (34.0°C)	0.171	15:55
X[1] = 0.1716 (-0.0016) (0.0021)		
SIMULATOR VAPOR (34.0°C)	0.171	15:56
X[1] = 0.1711 (-0.0011) (0.0024)		
SIMULATOR VAPOR (34.0°C)	0.170	15:57
X[1] = 0.1708 (-0.0018) (0.0025)		
SIMULATOR VAPOR (34.0°C)	0.170	15:58
X[1] = 0.1708 (-0.0017) (0.0018)		
SIMULATOR VAPOR (34.0°C)	0.171	15:59
X[1] = 0.1712 (-0.0015) (0.0015)		
SIMULATOR VAPOR (34.0°C)	0.171	16:00
X[1] = 0.1714 (-0.0014) (0.0024)		
BLANK TEST	0.000	16:01

Average = 0.1707
Std Dev = 0.0007



01/09/2008 16:05

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 102606

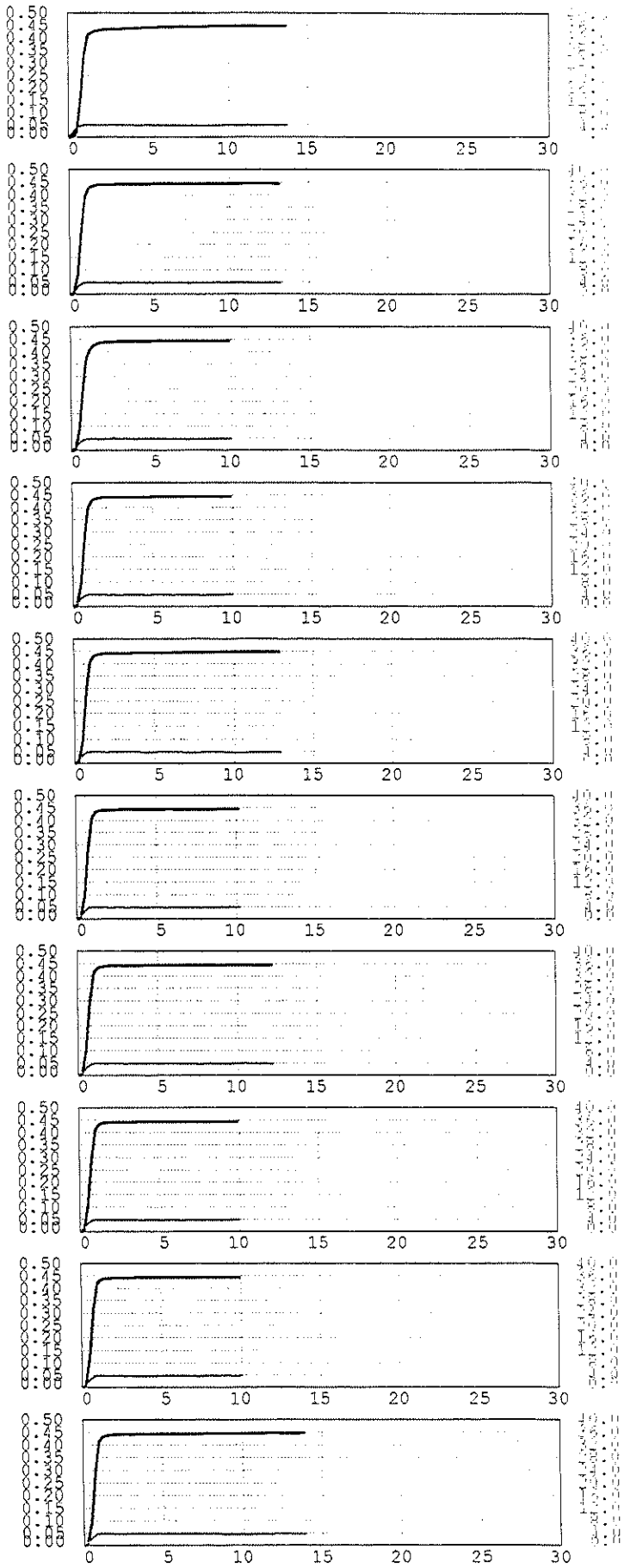
Date: 01/09/2008
Time: 14:52:13

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-12-400
SOLUTION CONCENTRATION: 0.397

BLANK TEST		0.000	14:53
INTERNAL STANDARD		PASSED	14:53
Xq = 0.1341 (0.07%)			
SIMULATOR VAPOR (34.2°C)		0.437	14:53
X[1] = 0.4376	(0.0004)	(0.0053)	
SIMULATOR VAPOR (34.2°C)		0.436	14:54
X[1] = 0.4362	(-0.0013)	(0.0041)	
SIMULATOR VAPOR (34.2°C)		0.433	14:55
X[1] = 0.4336	(-0.0010)	(0.0035)	
SIMULATOR VAPOR (34.1°C)		0.433	14:56
X[1] = 0.4335	(-0.0012)	(0.0034)	
SIMULATOR VAPOR (34.2°C)		0.438	14:57
X[1] = 0.4380	(0.0002)	(0.0044)	
SIMULATOR VAPOR (34.1°C)		0.435	14:58
X[1] = 0.4359	(0.0000)	(0.0041)	
SIMULATOR VAPOR (34.1°C)		0.435	14:59
X[1] = 0.4352	(-0.0004)	(0.0035)	
SIMULATOR VAPOR (34.1°C)		0.433	15:00
X[1] = 0.4338	(-0.0015)	(0.0040)	
SIMULATOR VAPOR (34.2°C)		0.434	15:01
X[1] = 0.4350	(-0.0013)	(0.0044)	
SIMULATOR VAPOR (34.0°C)		0.437	15:02
X[1] = 0.4377	(-0.0007)	(0.0044)	
BLANK TEST		0.000	15:03

Average = 0.4352
Std Dev = 0.0018



Screen	print-out
.447	.437
.444	.436
.443	.433
?	.433
.448	.438
.445	.435
?	.435
.443	.433
?	.434
.446	.437

CALIBRATION REPORT

DataMaster DMT: 103006
Calibration Date: 01/08/2008
Calibrated by: A L B

VERMONT
DEPARTMENT OF HEALTH

Ca	=	0.100000						
CAL	=	1.026430	0.800	<=	CAL	<	1.200
b1	=	0.000000	0.000	<=	b1	<	0.004
b2	=	0.002152	0.002	<=	b2	<	0.013
b3	=	0.000000	0.000	<=	b3	<	0.004
Xq	=	0.140534	0.050	<=	Xq	<	0.200
a21	=	1.169158	1.050	<=	a21	<	1.300
a31	=	0.449574	0.300	<=	a31	<	0.800

Performed by _____ Date 01/08/2008

01/08/2008 10:25

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 103006

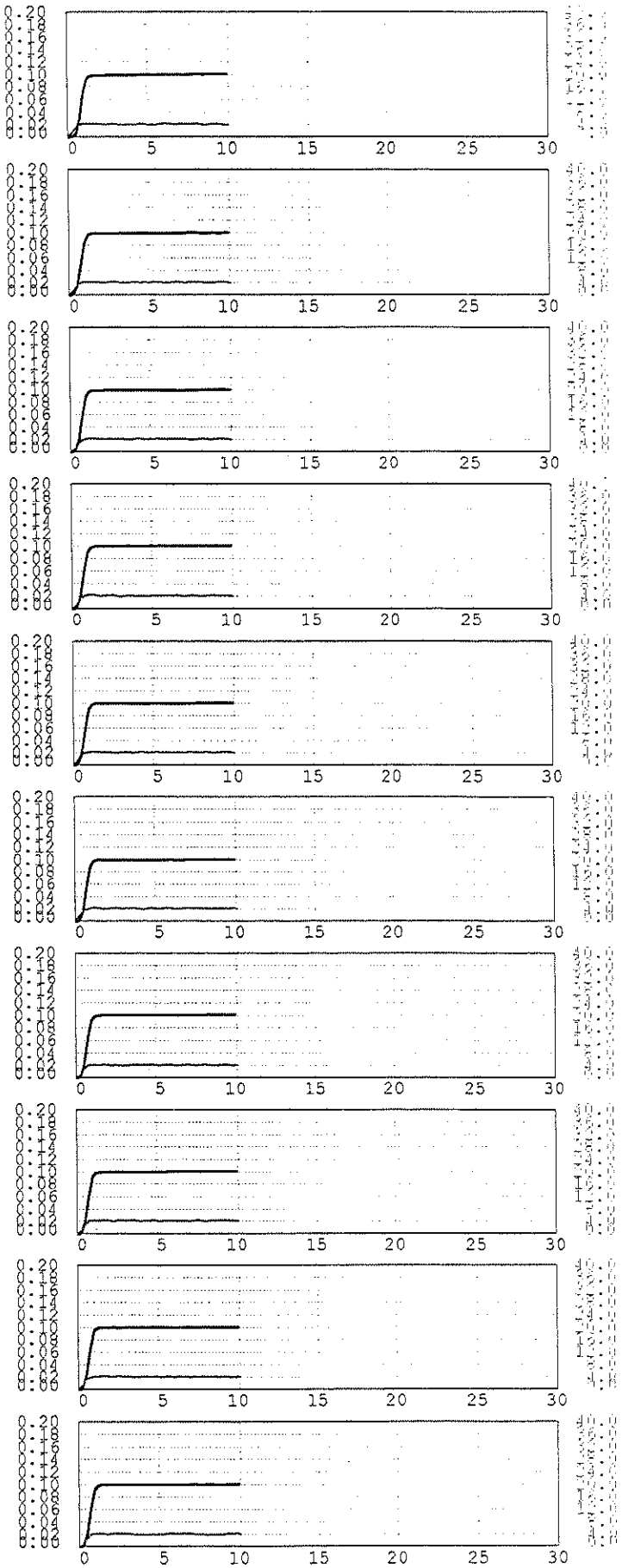
Date: 01/08/2008
Time: 10:55:58

SUPERVISOR NAME: A L B

SOLUTION LOT #: 07-04-100
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	10:56
INTERNAL STANDARD	PASSED	10:57
SIMULATOR VAPOR (34.1°C)	0.099	10:57
SIMULATOR VAPOR (34.1°C)	0.100	10:58
SIMULATOR VAPOR (34.1°C)	0.100	10:59
SIMULATOR VAPOR (34.1°C)	0.100	11:00
SIMULATOR VAPOR (34.1°C)	0.100	11:01
SIMULATOR VAPOR (34.1°C)	0.100	11:02
SIMULATOR VAPOR (34.0°C)	0.100	11:03
SIMULATOR VAPOR (34.1°C)	0.100	11:04
SIMULATOR VAPOR (34.2°C)	0.100	11:05
SIMULATOR VAPOR (34.0°C)	0.100	11:06
BLANK TEST	0.000	11:07

Average = 0.0999
Std Dev = 0.0003



ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 103006

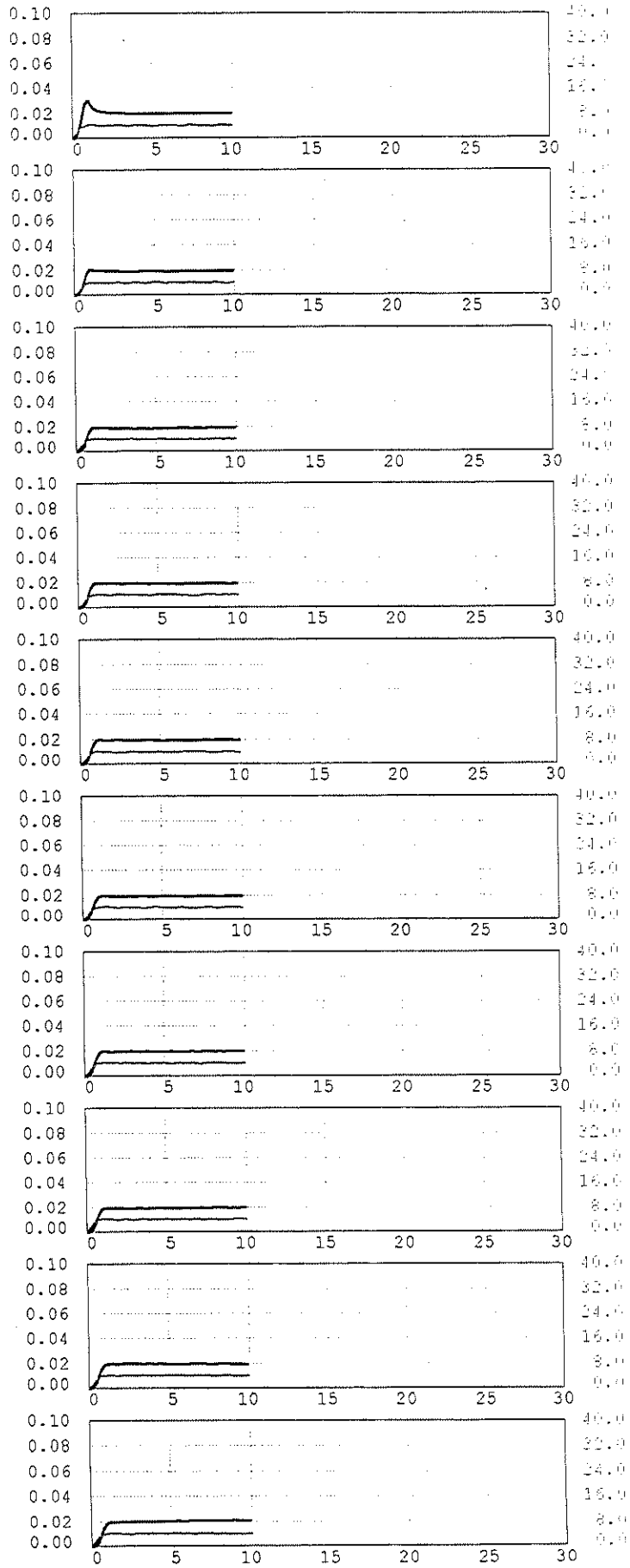
Date: 01/09/2008
Time: 14:51:33

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-15-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST		0.000	14:52
INTERNAL STANDARD		PASSED	14:52
Xq = 0.1410 (0.38%)			
SIMULATOR VAPOR (33.8°C)		0.020	14:52
X[1] = 0.0200	(-0.0020)	(0.0010)	
SIMULATOR VAPOR (33.7°C)		0.019	14:53
X[1] = 0.0196	(-0.0028)	(0.0000)	
SIMULATOR VAPOR (33.8°C)		0.019	14:54
X[1] = 0.0199	(-0.0028)	(0.0004)	
SIMULATOR VAPOR (33.8°C)		0.019	14:55
X[1] = 0.0195	(-0.0026)	(-0.0002)	
SIMULATOR VAPOR (33.8°C)		0.019	14:56
X[1] = 0.0198	(-0.0027)	(0.0002)	
SIMULATOR VAPOR (33.8°C)		0.019	14:57
X[1] = 0.0195	(-0.0030)	(0.0002)	
SIMULATOR VAPOR (33.8°C)		0.019	14:58
X[1] = 0.0198	(-0.0025)	(-0.0002)	
SIMULATOR VAPOR (33.7°C)		0.019	14:59
X[1] = 0.0197	(-0.0022)	(-0.0001)	
SIMULATOR VAPOR (33.7°C)		0.019	15:00
X[1] = 0.0196	(-0.0023)	(-0.0001)	
SIMULATOR VAPOR (33.8°C)		0.021	15:01
X[1] = 0.0210	(-0.0009)	(0.0004)	
BLANK TEST		0.000	15:03

Average = 0.0193
Std Dev = 0.0007



01/09/2008 15:03

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 103006

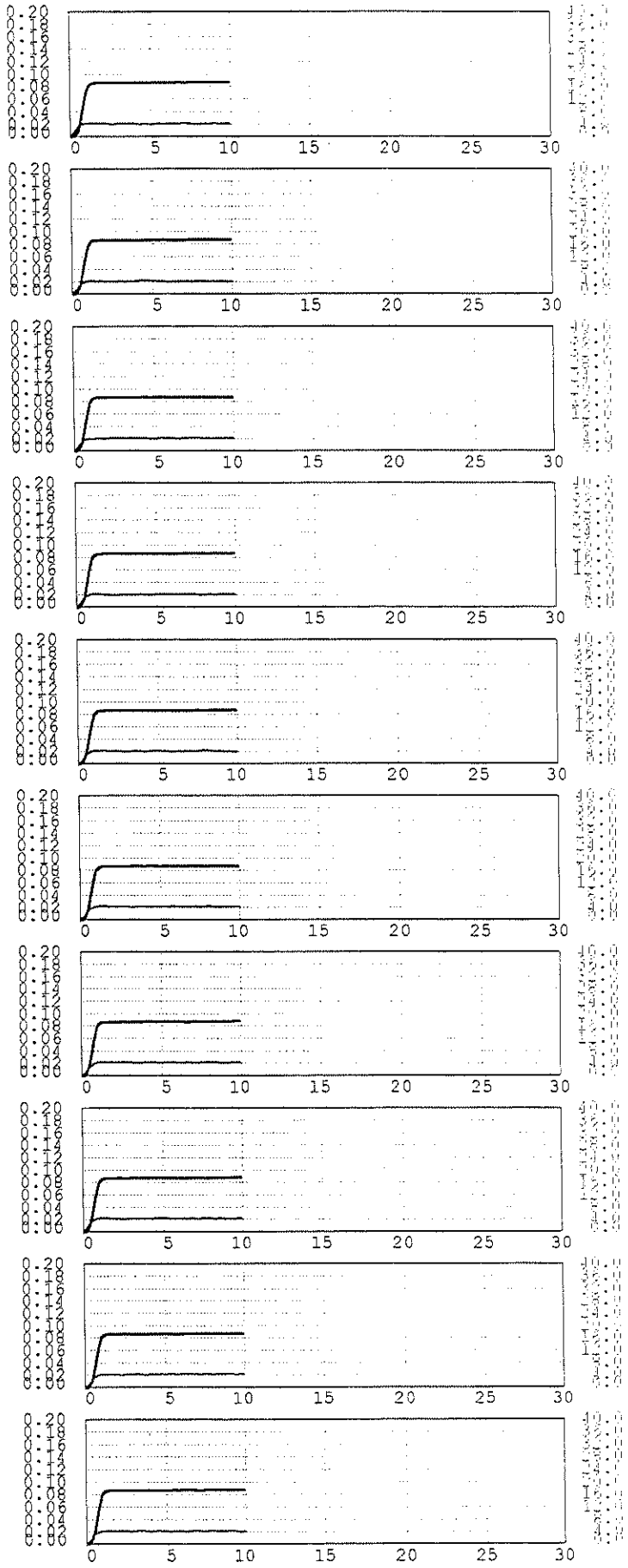
Date: 01/09/2008
Time: 14:35:14

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-09-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST		0.000	14:36
INTERNAL STANDARD		PASSED	14:36
Xq = 0.1412	(0.518)		
SIMULATOR VAPOR (33.9°C)		0.087	14:36
X[1] = 0.0875	(-0.0002)	(0.0002)	
SIMULATOR VAPOR (34.0°C)		0.087	14:37
X[1] = 0.0876	(-0.0002)	(-0.0006)	
SIMULATOR VAPOR (34.0°C)		0.087	14:38
X[1] = 0.0877	(-0.0004)	(-0.0002)	
SIMULATOR VAPOR (33.9°C)		0.087	14:39
X[1] = 0.0876	(-0.0009)	(-0.0007)	
SIMULATOR VAPOR (33.9°C)		0.087	14:40
X[1] = 0.0873	(-0.0013)	(-0.0002)	
SIMULATOR VAPOR (34.0°C)		0.087	14:41
X[1] = 0.0878	(-0.0003)	(-0.0002)	
SIMULATOR VAPOR (34.0°C)		0.087	14:42
X[1] = 0.0877	(-0.0015)	(-0.0012)	
SIMULATOR VAPOR (34.0°C)		0.087	14:43
X[1] = 0.0876	(-0.0010)	(-0.0007)	
SIMULATOR VAPOR (34.0°C)		0.087	14:44
X[1] = 0.0875	(-0.0007)	(-0.0009)	
SIMULATOR VAPOR (33.9°C)		0.087	14:45
X[1] = 0.0875	(-0.0010)	(-0.0002)	
BLANK TEST		0.000	14:46

Average = 0.0870
Std Dev = 0.0000



01/09/2008 14:48

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 103006

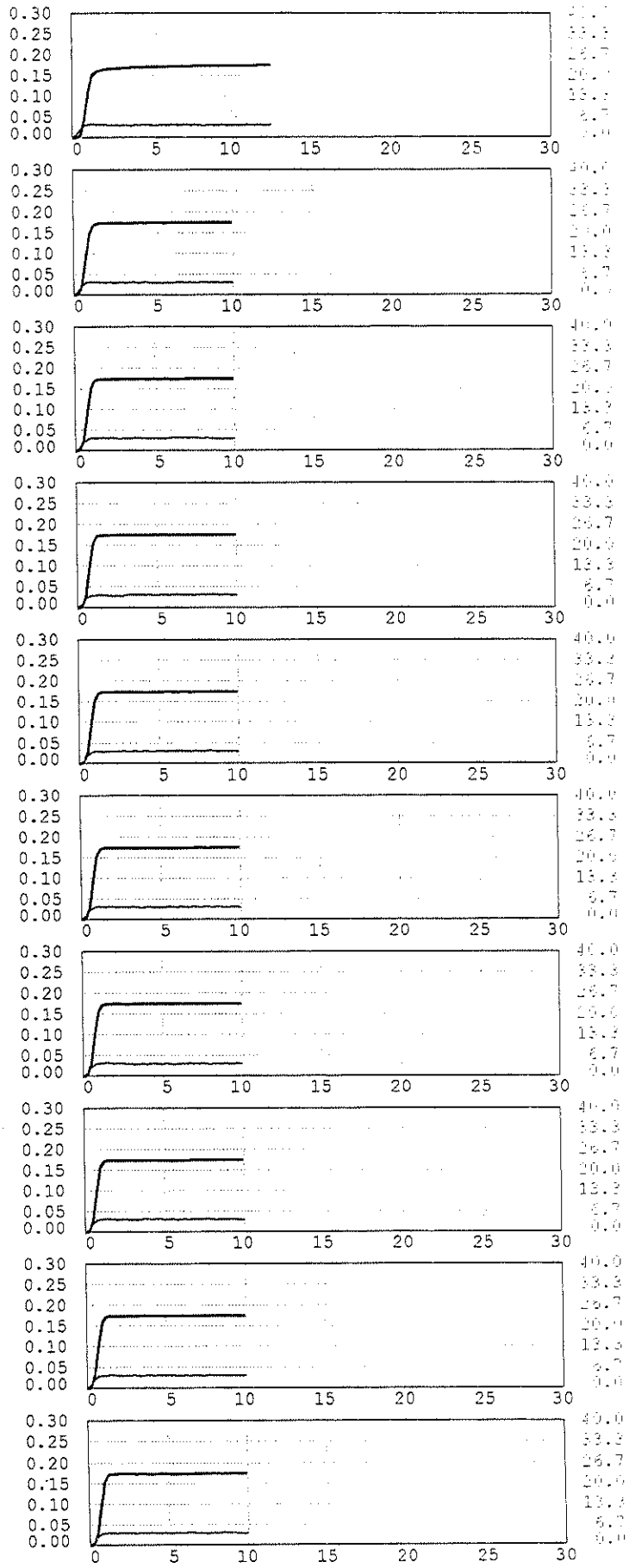
Date: 01/09/2008
Time: 15:08:23

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-08-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST		0.000	15:09
INTERNAL STANDARD		PASSED	15:09
Xq = 0.1408 (0.198)			
SIMULATOR VAPOR (34.0°C)		0.172	15:09
X[1] = 0.1727 (0.0014)	(0.0005)		
SIMULATOR VAPOR (34.0°C)		0.173	15:10
X[1] = 0.1734 (0.0016)	(0.0005)		
SIMULATOR VAPOR (34.0°C)		0.172	15:11
X[1] = 0.1723 (0.0018)	(-0.0005)		
SIMULATOR VAPOR (34.0°C)		0.172	15:12
X[1] = 0.1726 (0.0024)	(0.0003)		
SIMULATOR VAPOR (34.0°C)		0.172	15:13
X[1] = 0.1724 (0.0009)	(-0.0005)		
SIMULATOR VAPOR (34.0°C)		0.172	15:14
X[1] = 0.1723 (0.0008)	(-0.0001)		
SIMULATOR VAPOR (34.0°C)		0.172	15:15
X[1] = 0.1728 (0.0013)	(-0.0003)		
SIMULATOR VAPOR (34.0°C)		0.172	15:16
X[1] = 0.1726 (0.0015)	(-0.0001)		
SIMULATOR VAPOR (34.0°C)		0.172	15:17
X[1] = 0.1722 (0.0016)	(-0.0002)		
SIMULATOR VAPOR (33.9°C)		0.172	15:18
X[1] = 0.1726 (0.0015)	(-0.0008)		
BLANK TEST		0.000	15:19

Average = 0.1721
Std Dev = 0.0003



ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 103006

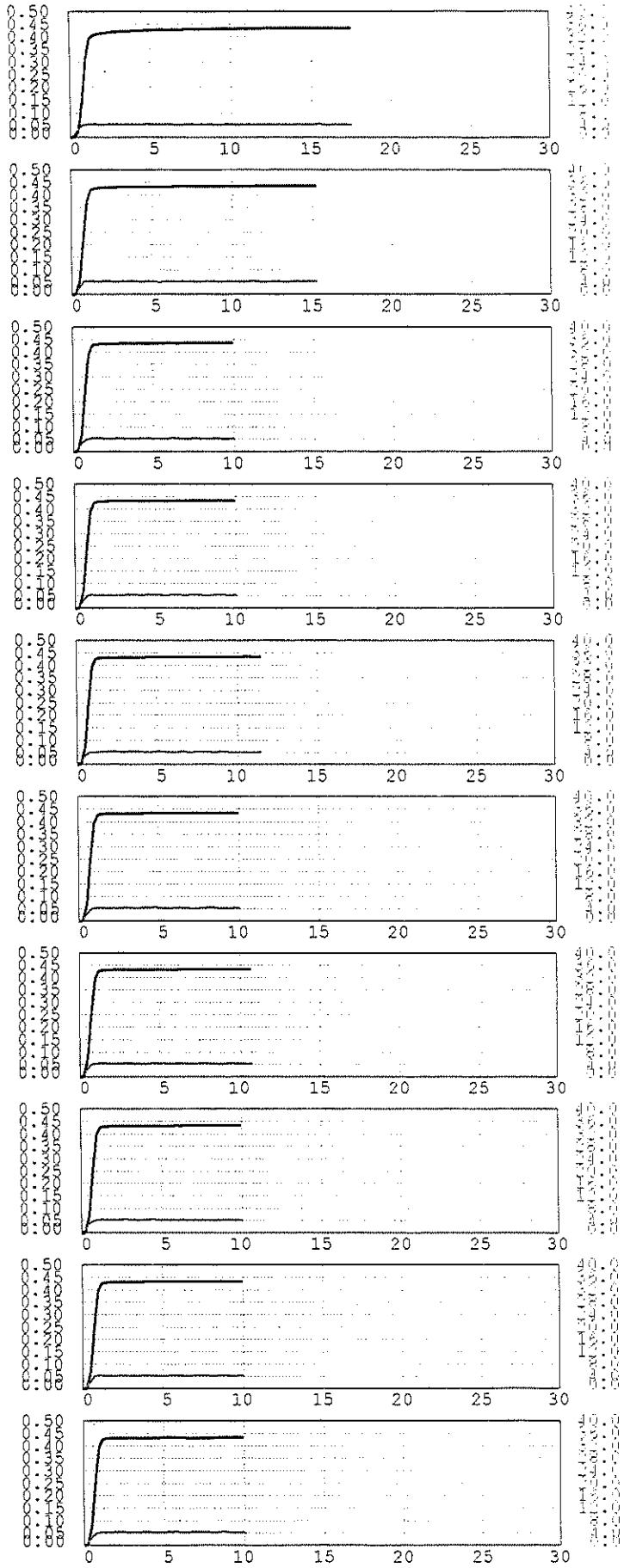
Date: 01/09/2008
Time: 15:25:47

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-12-400
SOLUTION CONCENTRATION: 0.397

BLANK TEST		0.000	15:26
INTERNAL STANDARD		PASSED	15:26
Xq = 0.1403	(0.13%)		
SIMULATOR VAPOR (34.1°C)		0.432	15:27
X[1] = 0.4322	(0.0100)	(0.0021)	
SIMULATOR VAPOR (34.0°C)		0.434	15:28
X[1] = 0.4342	(0.0090)	(0.0013)	
SIMULATOR VAPOR (34.0°C)		0.433	15:29
X[1] = 0.4338	(0.0100)	(0.0017)	
SIMULATOR VAPOR (34.1°C)		0.431	15:31
X[1] = 0.4316	(0.0094)	(0.0012)	
SIMULATOR VAPOR (34.1°C)		0.432	15:32
X[1] = 0.4324	(0.0088)	(0.0014)	
SIMULATOR VAPOR (34.1°C)		0.432	15:33
X[1] = 0.4322	(0.0100)	(0.0008)	
SIMULATOR VAPOR (34.1°C)		0.432	15:34
X[1] = 0.4321	(0.0094)	(0.0009)	
SIMULATOR VAPOR (34.1°C)		0.431	15:35
X[1] = 0.4311	(0.0085)	(0.0007)	
SIMULATOR VAPOR (34.1°C)		0.432	15:36
X[1] = 0.4324	(0.0089)	(0.0014)	
SIMULATOR VAPOR (34.1°C)		0.431	15:37
X[1] = 0.4312	(0.0091)	(0.0002)	
BLANK TEST		0.000	15:38

Average = 0.4320
Std Dev = 0.0009



CALIBRATION REPORT

DataMaster DMT: 103406
Calibration Date: 01/08/2008
Calibrated by: ALB BOLDUC

VERMONT
DEPARTMENT OF HEALTH

```
Ca  =  0.100000
CAL =  1.025623    0.800 <= CAL < 1.200
b1  =  0.000000    0.000 <=  b1 < 0.004
b2  =  0.002863    0.002 <=  b2 < 0.013
b3  =  0.000000    0.000 <=  b3 < 0.004
Xq  =  0.145727    0.050 <=  Xq < 0.200
a21 =  1.161514    1.050 <= a21 < 1.300
a31 =  0.460273    0.300 <= a31 < 0.800
```

Performed by _____ Date 01/08/2008

01/08/2008 11:24

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 103406

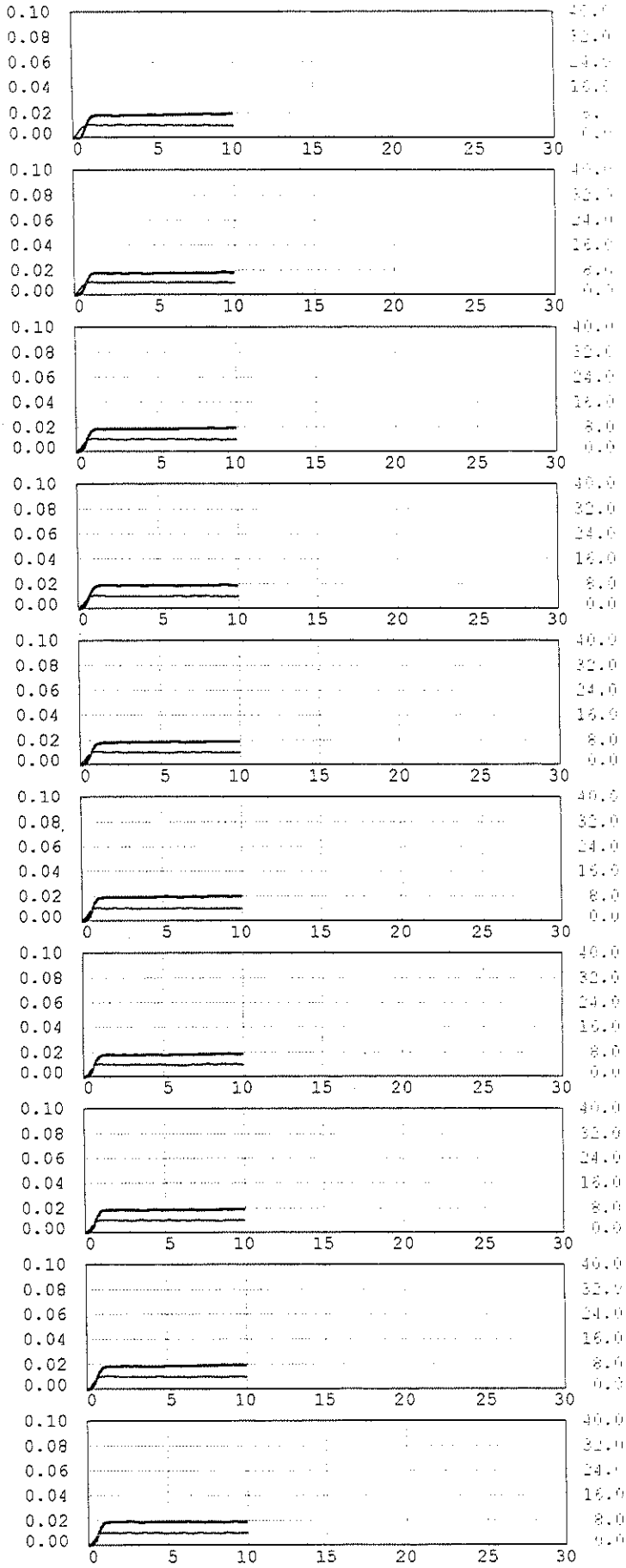
Date: 01/09/2008
Time: 15:42:40

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-15-020
SOLUTION CONCENTRATION: 0.020

BLANK TEST		0.000	15:43
INTERNAL STANDARD		PASSED	15:43
Xq = 0.1450 (0.49%)			
SIMULATOR VAPOR (33.6°C)		0.019	15:44
X[1] = 0.0190	(-0.0016)	(0.0008)	
SIMULATOR VAPOR (33.7°C)		0.018	15:45
X[1] = 0.0185	(-0.0039)	(0.0004)	
SIMULATOR VAPOR (33.6°C)		0.019	15:46
X[1] = 0.0193	(-0.0023)	(0.0002)	
SIMULATOR VAPOR (33.6°C)		0.019	15:47
X[1] = 0.0195	(-0.0021)	(0.0003)	
SIMULATOR VAPOR (33.6°C)		0.019	15:48
X[1] = 0.0193	(-0.0024)	(0.0006)	
SIMULATOR VAPOR (33.7°C)		0.019	15:49
X[1] = 0.0199	(-0.0019)	(0.0006)	
SIMULATOR VAPOR (33.6°C)		0.019	15:50
X[1] = 0.0191	(-0.0022)	(0.0003)	
SIMULATOR VAPOR (33.6°C)		0.019	15:51
X[1] = 0.0193	(-0.0022)	(-0.0003)	
SIMULATOR VAPOR (33.6°C)		0.019	15:52
X[1] = 0.0190	(-0.0030)	(-0.0003)	
SIMULATOR VAPOR (33.6°C)		0.019	15:53
X[1] = 0.0195	(-0.0019)	(0.0000)	
BLANK TEST		0.000	15:53

Average = 0.0189
Std Dev = 0.0003



01/09/2008 15:56

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 103406

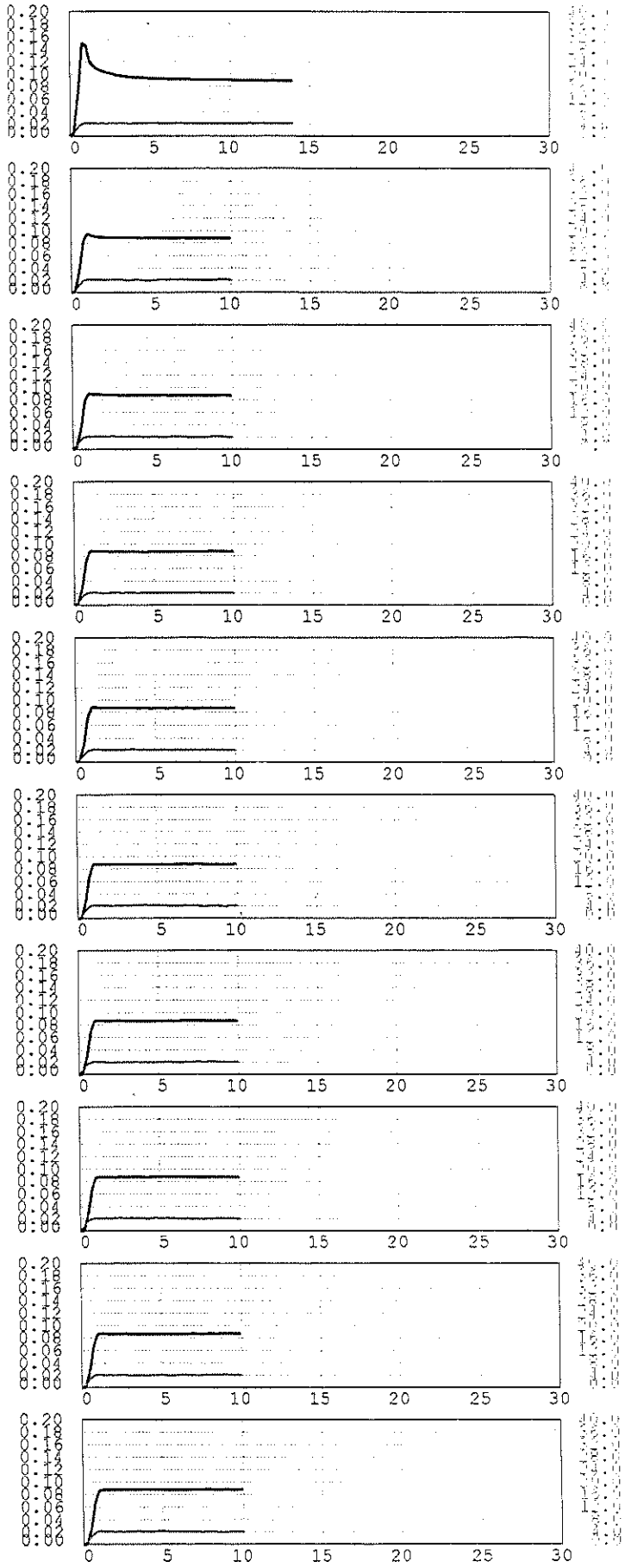
Date: 01/09/2008
Time: 16:34:42

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-09-080
SOLUTION CONCENTRATION: 0.082

BLANK TEST		0.000	16:35
INTERNAL STANDARD		PASSED	16:35
Xq = 0.1463 (0.43%)			
SIMULATOR VAPOR (33.7°C)		0.089	16:36
X[1] = 0.0891	(-0.0017)	(0.0019)	
SIMULATOR VAPOR (33.8°C)		0.088	16:37
X[1] = 0.0883	(-0.0008)	(0.0021)	
SIMULATOR VAPOR (33.8°C)		0.087	16:38
X[1] = 0.0874	(-0.0017)	(0.0010)	
SIMULATOR VAPOR (33.8°C)		0.087	16:39
X[1] = 0.0873	(-0.0017)	(0.0006)	
SIMULATOR VAPOR (33.8°C)		0.087	16:40
X[1] = 0.0876	(-0.0014)	(0.0007)	
SIMULATOR VAPOR (33.7°C)		0.087	16:41
X[1] = 0.0876	(-0.0015)	(0.0006)	
SIMULATOR VAPOR (33.8°C)		0.086	16:42
X[1] = 0.0867	(-0.0014)	(0.0004)	
SIMULATOR VAPOR (33.7°C)		0.087	16:43
X[1] = 0.0872	(-0.0014)	(0.0013)	
SIMULATOR VAPOR (33.8°C)		0.087	16:44
X[1] = 0.0870	(-0.0014)	(0.0008)	
SIMULATOR VAPOR (33.8°C)		0.087	16:45
X[1] = 0.0873	(-0.0010)	(0.0011)	
BLANK TEST		0.000	16:45

Average = 0.0872
Std Dev = 0.0008



01/09/2008 16:47

ACCURACY AND PRECISION TEST

STATE OF VERMONT

DataMaster DMT: 103406

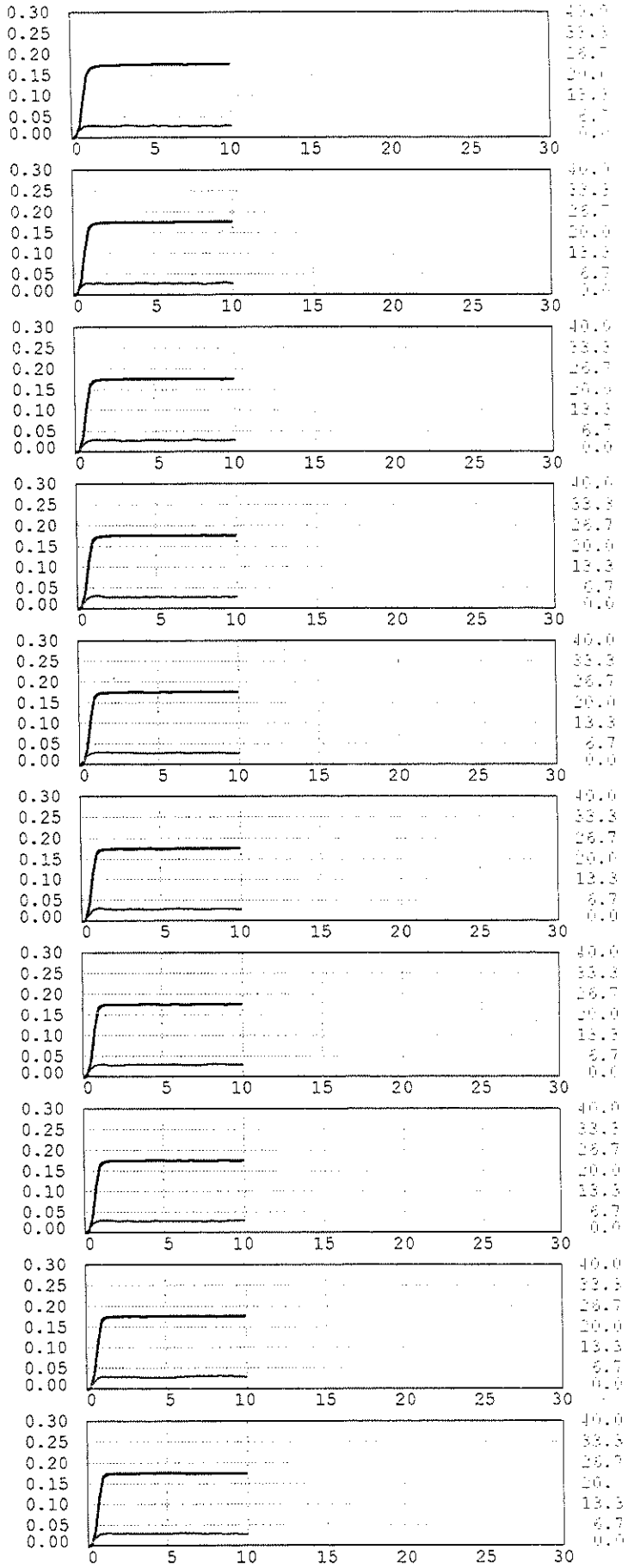
Date: 01/09/2008
Time: 16:00:22

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-08-160
SOLUTION CONCENTRATION: 0.162

BLANK TEST	0.000	16:01
INTERNAL STANDARD	PASSED	16:01
Xq = 0.1459 (0.18%)		
SIMULATOR VAPOR (33.8°C)	0.174	16:01
X[1] = 0.1749 (-0.0001) (0.0005)		
SIMULATOR VAPOR (33.7°C)	0.175	16:02
X[1] = 0.1750 (-0.0003) (0.0006)		
SIMULATOR VAPOR (33.8°C)	0.174	16:03
X[1] = 0.1747 (-0.0003) (0.0005)		
SIMULATOR VAPOR (33.8°C)	0.175	16:04
X[1] = 0.1754 (0.0005) (0.0012)		
SIMULATOR VAPOR (33.8°C)	0.174	16:05
X[1] = 0.1748 (-0.0005) (0.0001)		
SIMULATOR VAPOR (33.8°C)	0.175	16:06
X[1] = 0.1752 (-0.0001) (0.0005)		
SIMULATOR VAPOR (33.8°C)	0.175	16:07
X[1] = 0.1755 (-0.0004) (0.0012)		
SIMULATOR VAPOR (33.9°C)	0.174	16:08
X[1] = 0.1749 (-0.0006) (0.0007)		
SIMULATOR VAPOR (33.8°C)	0.175	16:09
X[1] = 0.1751 (0.0004) (0.0011)		
SIMULATOR VAPOR (33.8°C)	0.175	16:10
X[1] = 0.1751 (0.0000) (0.0004)		
BLANK TEST	0.000	16:11

Average = 0.1746
Std Dev = 0.0005



01/09/2008 16:12

ACCURACY AND PRECISION TEST

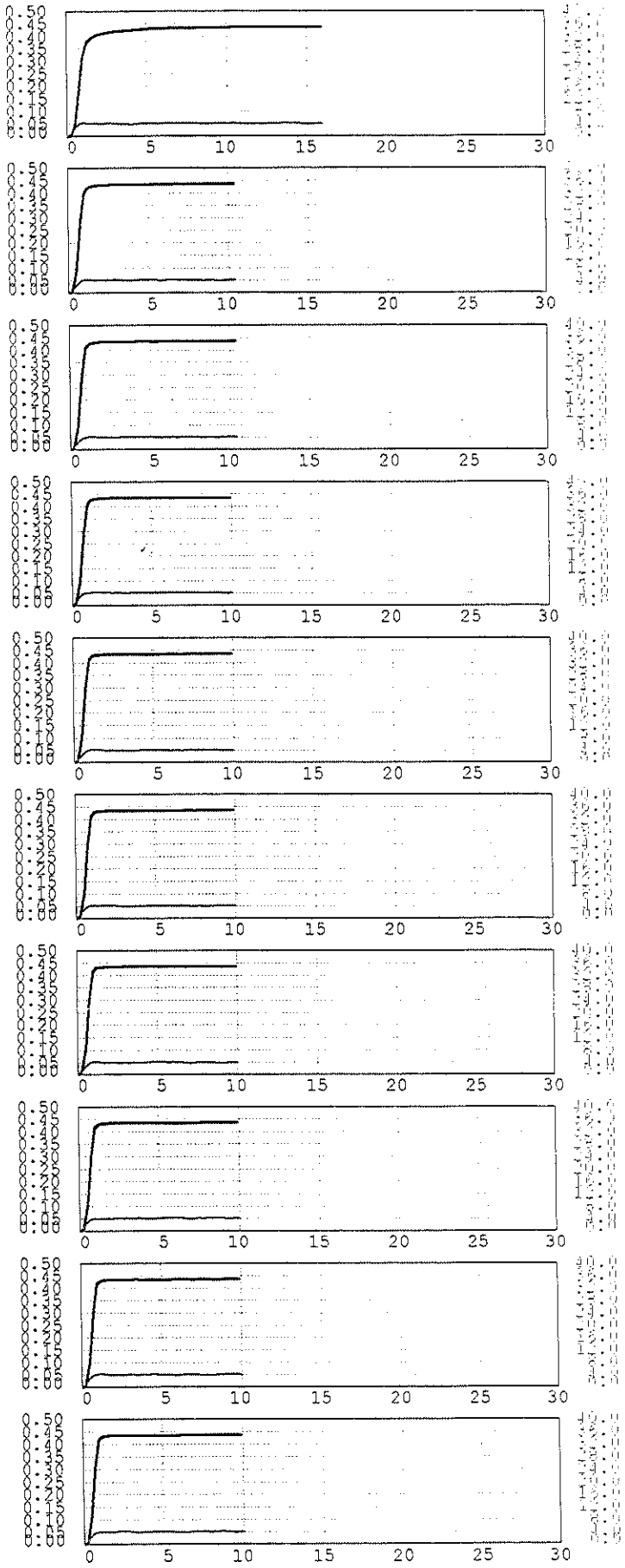
STATE OF VERMONT

DataMaster DMT: 103406

Date: 01/09/2008
Time: 16:18:24

SUPERVISOR NAME: D M R

SOLUTION LOT #: 07-12-400
SOLUTION CONCENTRATION: 0.397

BLANK TEST		0.000	16:19
INTERNAL STANDARD		PASSED	16:19
Xq = 0.1463 (0.43%)			
SIMULATOR VAPOR (34.0°C)		0.434	16:19
X[1] = 0.4345 (0.0060)	(0.0052)		
SIMULATOR VAPOR (33.9°C)		0.433	16:21
X[1] = 0.4334 (0.0041)	(0.0038)		
SIMULATOR VAPOR (33.9°C)		0.433	16:22
X[1] = 0.4338 (0.0042)	(0.0035)		
SIMULATOR VAPOR (33.9°C)		0.432	16:23
X[1] = 0.4324 (0.0044)	(0.0031)		
SIMULATOR VAPOR (33.9°C)		0.433	16:24
X[1] = 0.4330 (0.0041)	(0.0037)		
SIMULATOR VAPOR (33.9°C)		0.433	16:25
X[1] = 0.4336 (0.0058)	(0.0039)		
SIMULATOR VAPOR (33.9°C)		0.433	16:26
X[1] = 0.4336 (0.0052)	(0.0049)		
SIMULATOR VAPOR (33.9°C)		0.433	16:27
X[1] = 0.4331 (0.0041)	(0.0040)		
SIMULATOR VAPOR (33.9°C)		0.433	16:28
X[1] = 0.4334 (0.0051)	(0.0037)		
SIMULATOR VAPOR (33.9°C)		0.433	16:29
X[1] = 0.4334 (0.0060)	(0.0048)		
BLANK TEST		0.000	16:29

Average = 0.4330
Std Dev = 0.0005