CALIBRATION REPORT

DataMaster DMT: 100160
Calibration Date: 10/18/2011
Calibrated by: KIRK L KIMBALL
Lot: 11-37-100

Ca = 0.100			
CAL = 0.968478	0.800	<= CAL <	1.200
b1 = 0.001	0.000	<= b1 <	0.004
b2 = 0.004	0.002	<= b2 <	0.010
b3 = 0.000	0.000	<= b3 <	0.004
Xq = 0.087	0.050	<= Xq <	0.200
a21 = 1.172709	1.050	<= a21 <	1.300
a31 = 0.413916	0.300	<= a31 <	0.800

Calibration Solution NIST Temp = 34.0 °C KLK 10-18-11 SKm 10/18/11
H_2O Solution NIST Temp = 34.0 °C KLK 10-18-11 SKm 10/18/11

Performed by KLK Date 10/18/2011

Reviewed 10/19/11

DIAGNOSTIC RESULT

DataMaster DMT: 100160
Location:
Calibration Date: 10/18/2011
Certification Date:
Installation Date:
Test Date: 10/18/2011
Test Time: 11:59:22

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

TEMPERATURES

Sample Chamber = 48.9°C
Breath Tube = 44.1°C
Digital Sim = 33.7°C

SETTINGS
Lamp Voltage = 1.80 V
Cooler Voltage = 1.66 V
Bias Voltage = 80 V
Chopper Freq = 537 Hz

PUMP INFO
Flow Rate = 6.496 L/M

DETECTOR INFO

PUMP	ON	OFF
MAX(V)	0.0386	0.0415
MIN(V)	0.0352	0.0384

FILTER INFO
Filter 1 0.042 Zero = true
Filter 2 0.239 Zero = true
Filter 3 1.543 Zero = true

CALIBRATION CHECK
Xq = 0.088 0.40%

10/19/11

ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100160

Date: 10/18/2011
Time: 12:06:00

SUPERVISOR NAME:
KIRK L KIMBALL

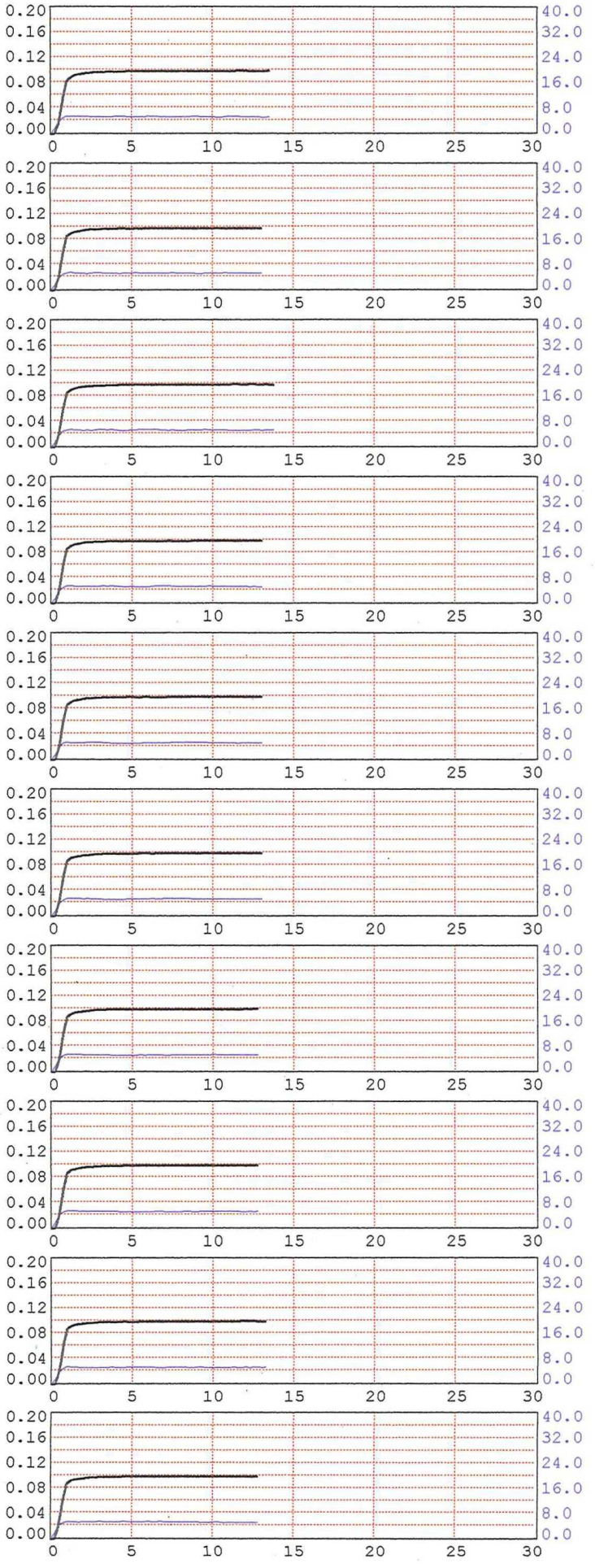
SOLUTION LOT #: GUTH 11050
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	12:06
CALIBRATION CHECK	PASSED	12:07
SIMULATOR VAPOR 33.6°C	0.099	12:07
SIMULATOR VAPOR 33.6°C	0.099	12:08
SIMULATOR VAPOR 33.6°C	0.099	12:09
SIMULATOR VAPOR 33.7°C	0.099	12:10
SIMULATOR VAPOR 33.6°C	0.099	12:11
SIMULATOR VAPOR 33.7°C	0.099	12:12
SIMULATOR VAPOR 33.6°C	0.099	12:13
SIMULATOR VAPOR 33.6°C	0.099	12:14
SIMULATOR VAPOR 33.7°C	0.099	12:15
SIMULATOR VAPOR 33.6°C	0.099	12:16
BLANK TEST	0.000	12:17

Average = 0.099
Std Dev = 0.000

2nd Source Cal Check
NIST Temp = 34.0°C
KLK
10-18-11
SAM 10/18/11

10/19/11



ACCURACY & PRECISION REPORT

STATE OF VERMONT

DataMater DMT: 100160

Date: 10/18/2011
Time: 13:28:35

SUPERVISOR NAME:
KIRK L KIMBALL

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

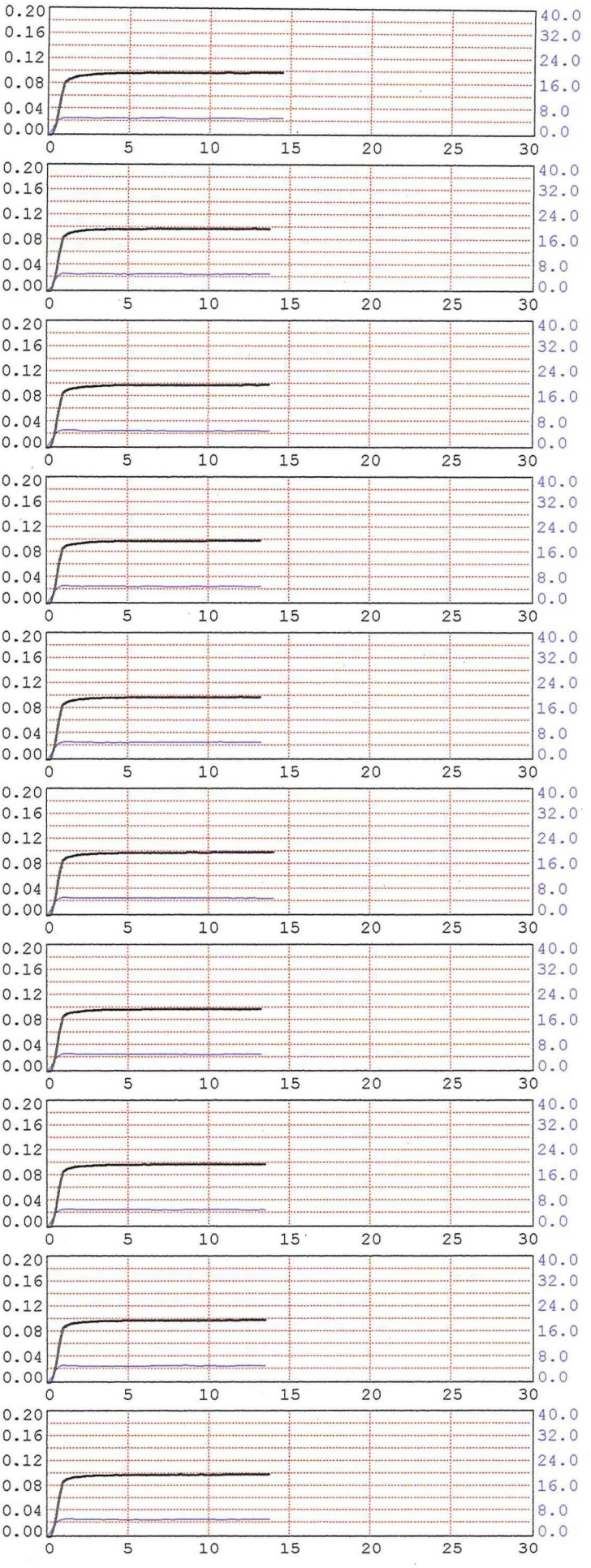
BLANK TEST	0.000	13:29
CALIBRATION CHECK	PASSED	13:29
SIMULATOR VAPOR 34.0°C	0.099	13:29
SIMULATOR VAPOR 33.9°C	0.099	13:31
SIMULATOR VAPOR 34.0°C	0.099	13:32
SIMULATOR VAPOR 33.9°C	0.099	13:33
SIMULATOR VAPOR 34.0°C	0.099	13:34
SIMULATOR VAPOR 33.9°C	0.099	13:35
SIMULATOR VAPOR 34.0°C	0.098	13:36
SIMULATOR VAPOR 33.9°C	0.099	13:37
SIMULATOR VAPOR 34.0°C	0.099	13:38
SIMULATOR VAPOR 34.0°C	0.099	13:39
BLANK TEST	0.000	13:40

Average = 0.098
Std Dev = 0.000

10-18-11
In house cal check.

NIST TEMP: 34.0°C
10/18/11

10/19/11



CERTIFICATION REPORT

DataMaster DMT: 100160
Calibration Date: 10/18/2011
Certification Date: 10/19/2011
Certified by: KIRK L KIMBALL

Diagnostic Results

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

TEMPERATURES

Sample Chamber = 48.8°C
Breath Tube    = 45.4°C
Digital Sim    = 0.0°C

SETTINGS
Lamp Voltage   = 1.80 V
Cooler Voltage = 1.66 V
Bias Voltage   = 80 V
Chopper Freq   = 537 Hz

PUMP INFO
Flow Rate = 6.469 L/M

DETECTOR INFO
PUMP     ON        OFF
MAX(V)   0.0390    0.0415
MIN(V)   0.0356    0.0388

FILTER INFO
Filter 1   0.042  Zero = true
Filter 2   0.240  Zero = true
Filter 3   1.552  Zero = true

CALIBRATION CHECK
Xq  = 0.088  0.90%
```

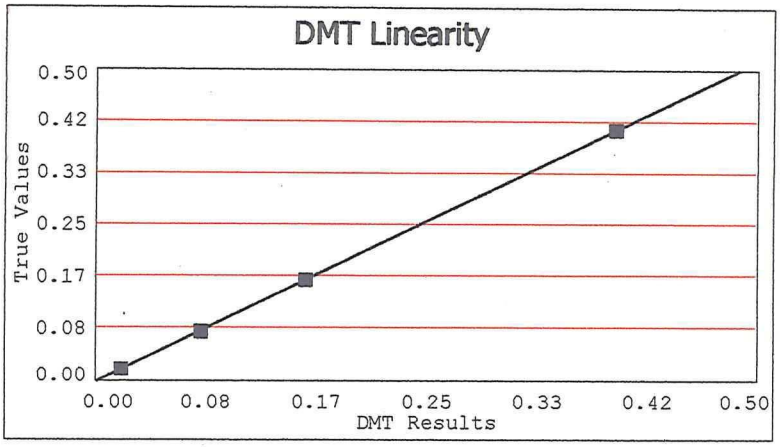
Options

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

Linearity Check Results

True Value	Reported Average	Std Dev
0.020 g/210L Lot # 12-19-020	0.019 g/210L	0.0000
0.080 g/210L Lot # 12-21-080	0.079 g/210L	0.0000
0.163 g/210L Lot # 12-24-160	0.158 g/210L	0.0000
0.404 g/210L Lot # 12-20-400	0.392 g/210L	0.0000

$R^2 = 1$



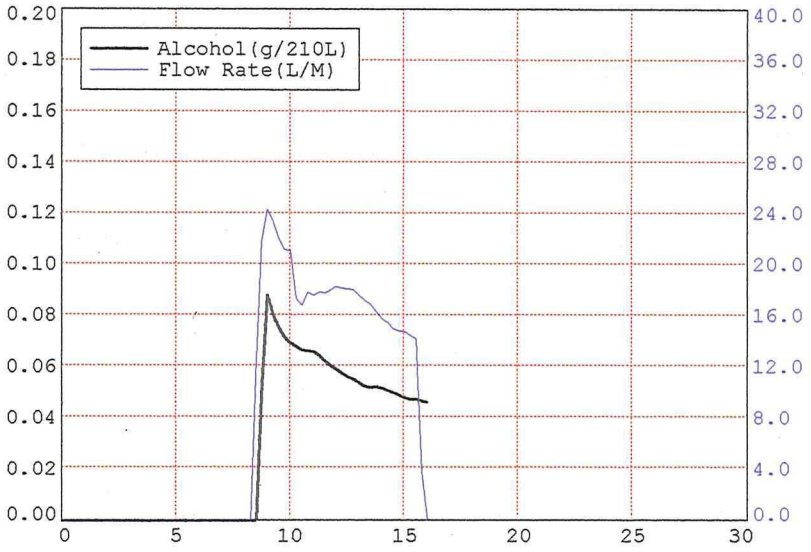
Acetone Interference Test

Lot # 12-21-080A1

Interference Detected

Mouth Alcohol Test

Mouth Alcohol Detected

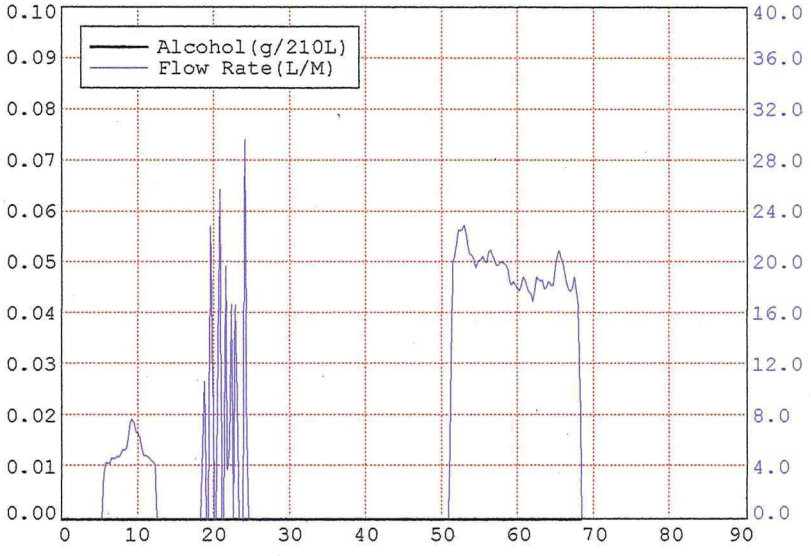


RF Detection Test

Passed

Sample Acceptance Test

Passed



CERTIFICATION PASSED

Performed by KLR Date 10/19/2011 deB 10/19/11

Reviewed by Date 10/19/11