



**VERMONT FORENSIC LABORATORY**

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**DATAMASTER TECHNICAL SUPPORT INQUIRY**

Agency/Site: Ludlow PD DataMaster Serial #: 104509

Date: 7/11/2015 Requestor: Richard King

Instrument Supervisor: Richard King Phone #: (802) 228-4411

Taken By: Robert Driscoll

Problem: Printer only printing in one color  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Laboratory Response: Alcohol program staff will troubleshoot onsite.  
\_\_\_\_\_  
\_\_\_\_\_

Work Performed: Replaced one of the print heads and that resolved the printing problem. Detector voltage above 0.600V so brought the instrument back to the lab to have the detector voltage optimized. Adjusted lamp and cooler voltages to set detector voltage at filter 1 to +/- 0.100v. Installed a new communication PCB, uploaded the latest software, and replaced the noisy chopper wheel motor. The instrument has been calibrated, certified, and is now ready for installation at the agency.  
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\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

On Site     In-house

Attachments: 7 pages

Performed By: Robert Driscoll

Date: 7/16/15

Final Review: [Signature]

Date: 7/16/15

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*AS 7/16/15*

**Driscoll, Rob**

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**From:** King, Richard  
**Sent:** Tuesday, July 14, 2015 5:34 PM  
**To:** Driscoll, Rob  
**Subject:** RE: Printer Issues

No problem

Sergeant Richard King  
Ludlow Police Department  
P.O. Box 359  
Ludlow, VT 05149  
DRE# 016261  
(802) 228-4411  
[richard.king@state.vt.us](mailto:richard.king@state.vt.us) (Please note the new email address)

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**From:** Driscoll, Rob  
**Sent:** Tuesday, July 14, 2015 9:41 AM  
**To:** King, Richard  
**Subject:** RE: Printer Issues

Rick,

I'm sorry I told you I'd come grab your instrument today. I actually have a company picnic today so I will be there to grab it tomorrow and hope to have it back to you Thursday. Sorry for the confusion.

Rob

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**From:** King, Richard  
**Sent:** Monday, July 13, 2015 12:16 PM  
**To:** Driscoll, Rob  
**Subject:** RE: Printer Issues

Perfect!!!!

Sergeant Richard King  
Ludlow Police Department  
P.O. Box 359  
Ludlow, VT 05149  
DRE# 016261  
(802) 228-4411  
[richard.king@state.vt.us](mailto:richard.king@state.vt.us) (Please note the new email address)

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**From:** Driscoll, Rob  
**Sent:** Monday, July 13, 2015 10:43 AM  
**To:** King, Richard  
**Subject:** RE: Printer Issues

Rick,

I spoke with the Chief and he told me there's a port available to hook your DMT to. I will take a ride out there tomorrow to grab your DMT. I will bring it back to the lab and hopefully get it back to you by Wednesday (with a new printer)

Thanks,  
Rob

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**From:** King, Richard  
**Sent:** Monday, July 13, 2015 10:09 AM  
**To:** Driscoll, Rob  
**Subject:** RE: Printer Issues

Rob:

I'm not sure if it has an Ethernet cable. I think it does but I'm no where near my office to confirm. You can give the chief a call and he can check for you. The printer has stopped printing so we need to do something.

Thanks,

Rick

Sergeant Richard King  
Ludlow Police Department  
P.O. Box 359  
Ludlow, VT 05149  
DRE# 016261  
(802) 228-4411  
[richard.king@state.vt.us](mailto:richard.king@state.vt.us) (Please note the new email address)

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**From:** Driscoll, Rob  
**Sent:** Monday, July 13, 2015 8:59 AM  
**To:** King, Richard  
**Subject:** RE: Printer Issues

Rick,

In talking with Amanda, she does not want me going to Ludlow today as we are trying to start rolling out the new software upgrade for the DMT's. Do you have an Ethernet port available for the instrument (I can't remember)? If so, I can come grab your instrument to install the new hardware, software and get your printer fixed sooner. If not, in the meantime, the odd colored printouts will have to do.

Sorry,

Rob

Robert Driscoll  
Vermont Forensics Laboratory  
103 South Main Street  
Waterbury, VT 05671  
Electronics Technician  
[Rob.Driscoll@state.vt.us](mailto:Rob.Driscoll@state.vt.us)  
Desk: (802) 241-5817

Cell: (802) 585-0123

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**From:** King, Richard  
**Sent:** Saturday, July 11, 2015 5:59 PM  
**To:** Driscoll, Rob  
**Subject:** Printer Issues

Rob:

My printer is only printing in one color. I have tried troubleshooting it to include both manual and automatic printer head cleanings, and checking alignments. Nothing is working so I think we will need a new printer. Can you either troubleshoot the printer and/or replace the printer? Let me know.

Rick

Sergeant Richard King  
Ludlow Police Department  
P.O. Box 359  
Ludlow, VT 05149  
DRE# 016261  
(802) 228-4411  
[richard.king@state.vt.us](mailto:richard.king@state.vt.us) (Please note the new email address)

# CALIBRATION REPORT

DataMaster DMT: 104509  
Calibration Date: 07/15/2015  
Calibrated by: ROBERT DRISCOLL  
Lot: 15-08-100



Ca	=	0.100		
CAL	=	1.028803	0.800	<= CAL < 1.200
b1	=	0.000	0.000	<= b1 < 0.004
b2	=	0.004	0.002	<= b2 < 0.010
b3	=	0.000	0.000	<= b3 < 0.004
Xq	=	0.105	0.050	<= Xq < 0.200
a21	=	1.217050	1.050	<= a21 < 1.300
a31	=	0.539095	0.300	<= a31 < 0.800

Performed by

RD

Date

07/15/2015



**ACCURACY & PRECISION REPORT**

STATE OF VERMONT

DataMaster DMT: 104509

Date: 07/15/2015  
Time: 15:03:43

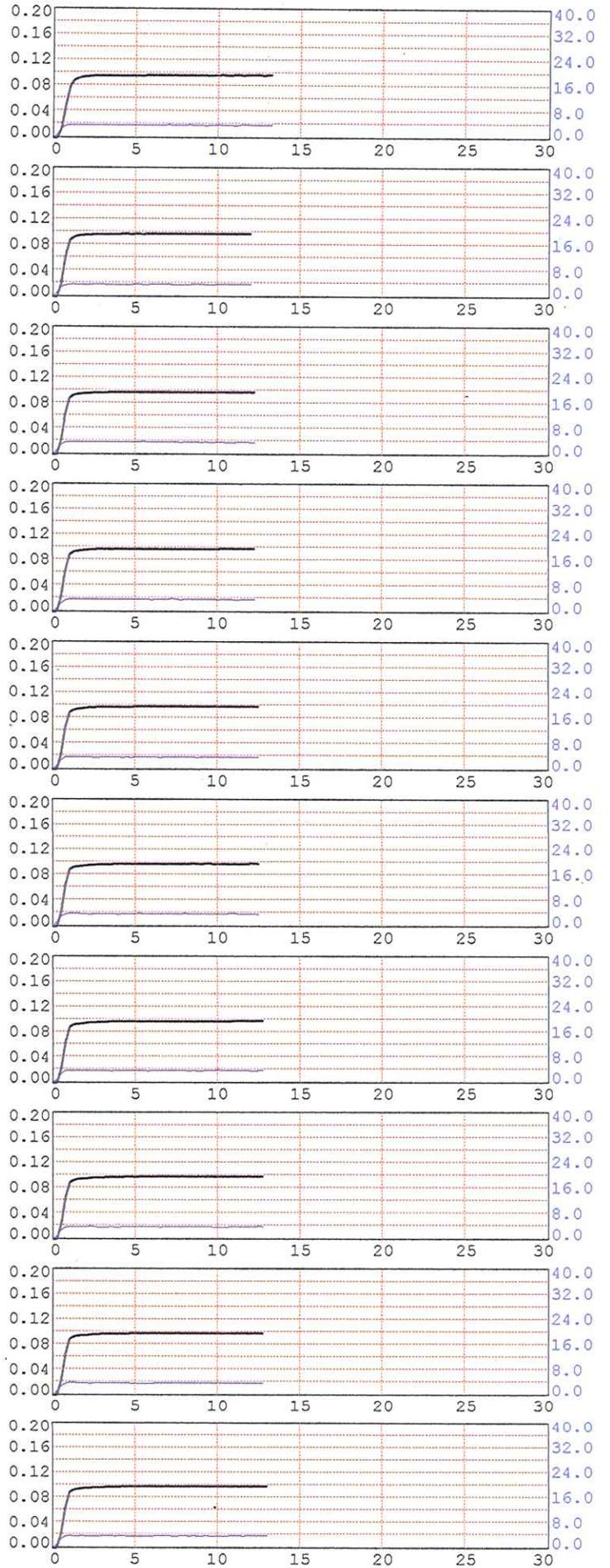
SUPERVISOR NAME:  
RCD CAL CHECK

SOLUTION LOT #: GUTH 14110  
SOLUTION CONCENTRATION: 0.100

BLANK TEST	0.000	15:04
CALIBRATION CHECK	PASSED	15:04
SIMULATOR VAPOR 34.4°C	0.097	15:05
SIMULATOR VAPOR 34.4°C	0.097	15:06
SIMULATOR VAPOR 34.2°C	0.098	15:07
SIMULATOR VAPOR 34.4°C	0.098	15:08
SIMULATOR VAPOR 34.2°C	0.098	15:09
SIMULATOR VAPOR 34.2°C	0.098	15:10
SIMULATOR VAPOR 34.2°C	0.098	15:11
SIMULATOR VAPOR 34.4°C	0.098	15:12
SIMULATOR VAPOR 34.2°C	0.098	15:13
SIMULATOR VAPOR 34.2°C	0.098	15:14
BLANK TEST	0.000	15:15

Average = 0.097  
Std Dev = 0.0004

*NIST traceable thermometer slw  
111014517 33.9°C  
RCD Flisler*



# CERTIFICATION REPORT

DataMaster DMT: 104509  
Calibration Date: 07/15/2015  
Certification Date: 07/15/2015  
Certified by: ROBERT DRISCOLL



## Diagnostic Results

### VERSIONS

DMT: 2.00  
PIC: 2.05  
Modem: 2.6  
Questions: 2.1

### TEMPERATURES

Sample Chamber = 48.7°C  
Breath Tube = 46.8°C  
Digital Sim = 34.2°C

### SETTINGS

Lamp Voltage = 1.77 V  
Cooler Voltage = 1.83 V  
Bias Voltage = 80 V  
Chopper Freq = 536 Hz

### PUMP INFO

Flow Rate = 4.658 L/M

### DETECTOR INFO

PUMP	ON	OFF
MAX (V)	0.0404	0.0433
MIN (V)	0.0390	0.0423

### FILTER INFO

Filter 1	0.043	Zero = true
Filter 2	0.619	Zero = true
Filter 3	0.239	Zero = true

### CALIBRATION CHECK

Xq = 0.105 0.08%

## Options

### OPTIONS

#### Units

Alcohol..... g/210L

#### Simulator

Tolerance Check..... yes  
Standard Type..... wet  
Nominal..... 0.100  
Digital Simulator..... Guth34CNP

#### Subject

Ask Questions..... yes  
Number of Tests..... 2  
Alcohol Display..... yes  
Volume Display..... yes  
Query Refusal..... yes  
Copies..... 3  
Simulator Before..... yes  
Simulator Between..... yes  
Simulator After..... no  
Observation Time..... 0

#### Supervisor

Number of Tests..... 10

#### Calibration

Standard Type..... wet  
Nominal..... 0.100  
Nominal (Dry Gas)..... 0.100  
Number of Tests..... 1

#### Printer

Printer On..... yes

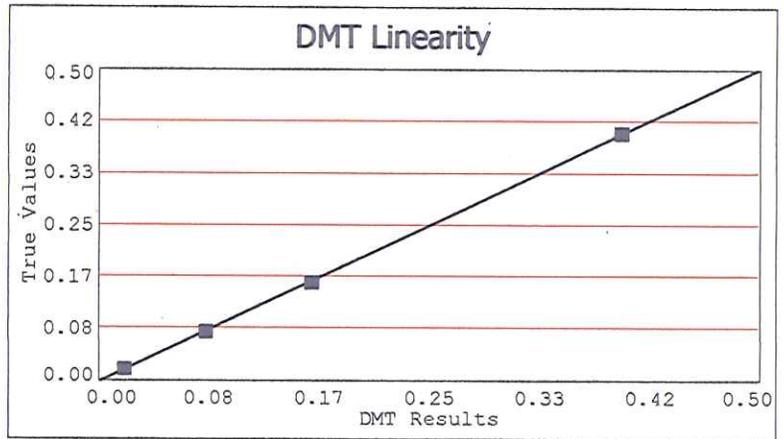
#### Software Configuration

Data Collection..... yes

**Linearity Check Results**

True Value	Reported Average	Std Dev
0.020 g/210L	0.019 g/210L	0.0003
Lot # 14-13-020		
0.080 g/210L	0.081 g/210L	0.0000
Lot # 15-04-080		
0.159 g/210L	0.161 g/210L	0.0003
Lot # 15-03-160		
0.398 g/210L	0.395 g/210L	0.0005
Lot # 14-09-400		

R<sup>2</sup> = 0.9999



**Acetone Interference Test**

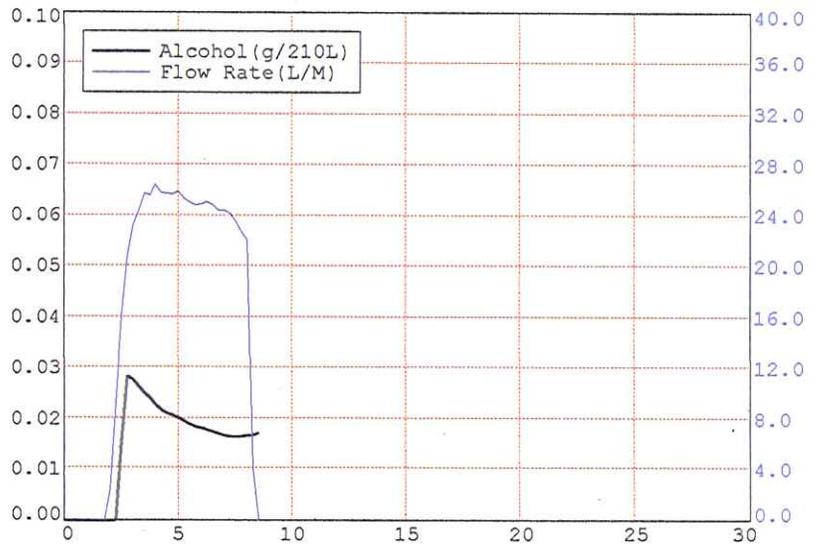
Lot # 15-04-08A1  
Interference Detected

**Mouth Alcohol Test**

Mouth Alcohol Detected

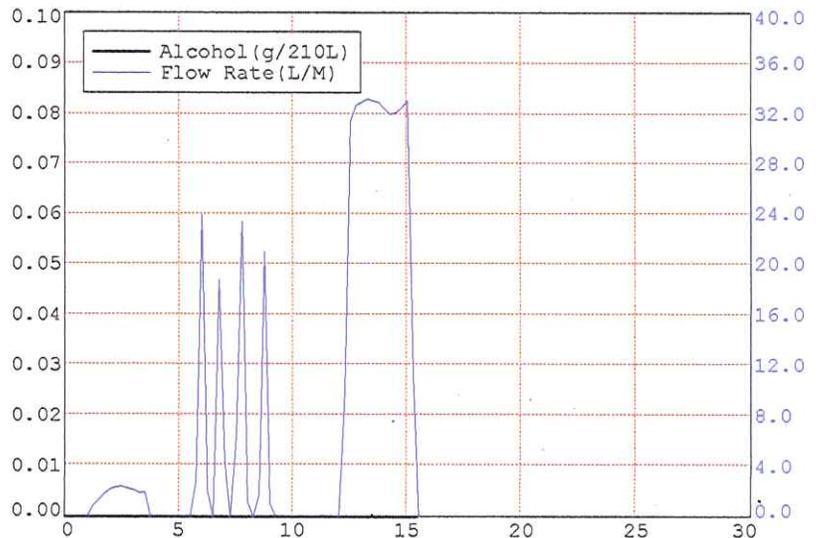
**RF Detection Test**

Passed



**Sample Acceptance Test**

Passed



**CERTIFICATION PASSED**

Performed by SR ROD

Date 07/15/2015

Reviewed by [Signature]

Date 7/16/15