

# Alaska Scientific Crime Detection Laboratory

## DataMaster Evaluation Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100389

Analyst(s): Dereu Watten

Start Date: 11/09/22

Date Received: 11/09/22

Reason for instrument evaluation

Preventative maintenance due

### Visual Inspection

- Clean
- Replace missing screws
- Cermetex Box (modem) is secure
- Ensure modem cable present
- Double Check Valve secured to wall
- All tubing and connections secure
- O-ring inspection and ensure 2 replacement O-rings in bag

As Found Conditions:

Barometric Pressure (inHg): 29.34 Temperature (C): 21.7 Relative Humidity (%) 20

Linearity Test (attached)

0.020g/210L Mnf: Airgas Lot: AG100401 Exp: 01/04/23

0.080g/210L Mnf: Airgas Lot: AG135024 Exp: 12/16/23

0.300g/210L Mnf: Airgas Lot: AG130502 Exp: 11/01/23

Notes

Replaced o-ring, added bag with o-rings, routed filter wires separately

- VOC (attached)
- Verify software version
- VOC Internal Standard value  $\leq 3.00\%$
- Non-Drinking Subject Test (attached)

Condition of item:  Good  Needs Repair

Ready for Adjustment

Ready for Calibration

End Date: 11/09/22

LINEARITY CHECK

Alaska Department of Public Safety  
DATAMASTER dmt: 100389

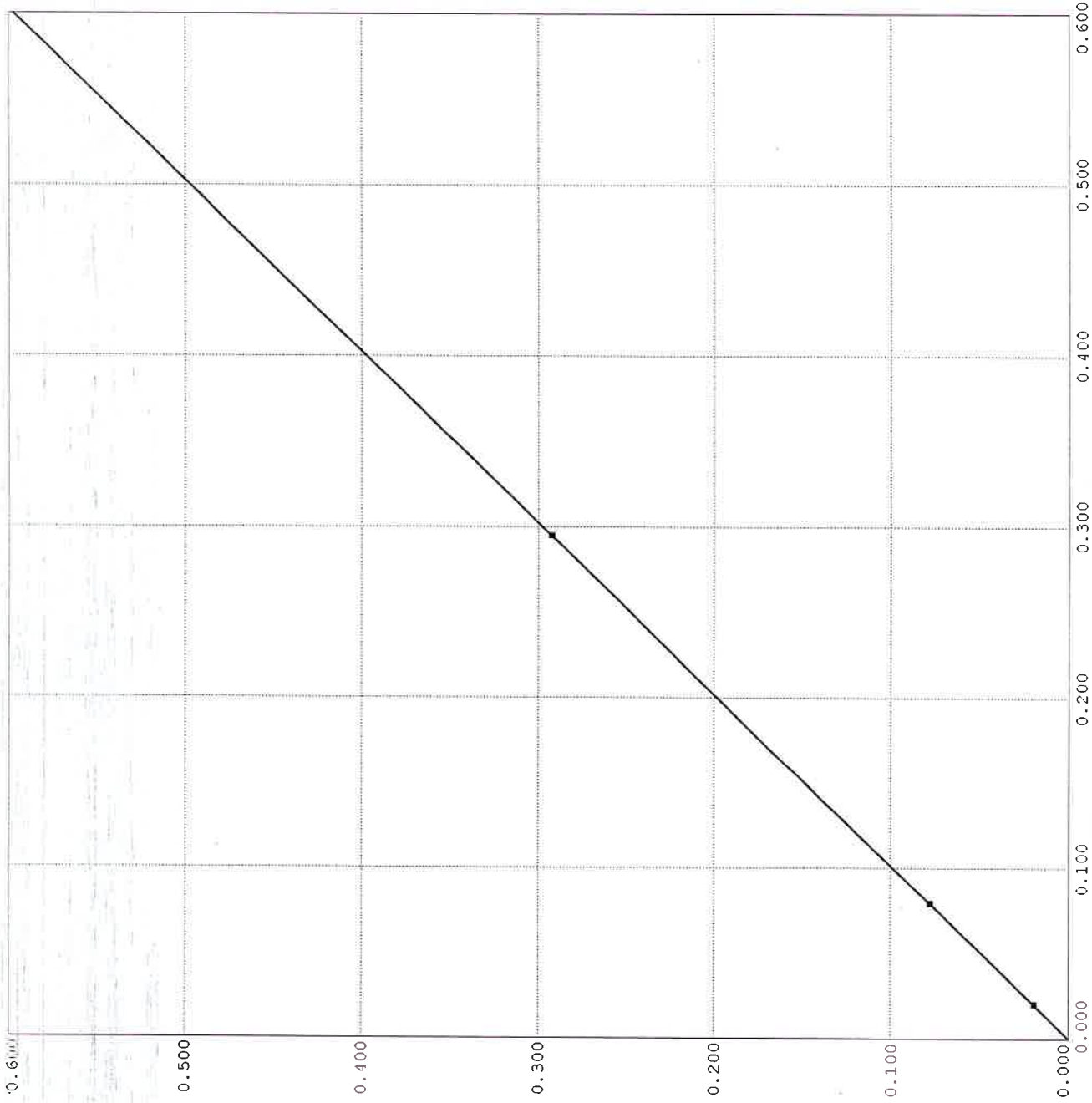
Date: 11/09/2022  
Time: 14:28:08

SUPERVISOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.079	0.0788	0.0004
0.294	0.2930	0.0000

SLOPE = 0.996331  
R<sup>2</sup> = 1.000000

100389 2022.11.09 Evaluation



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100389

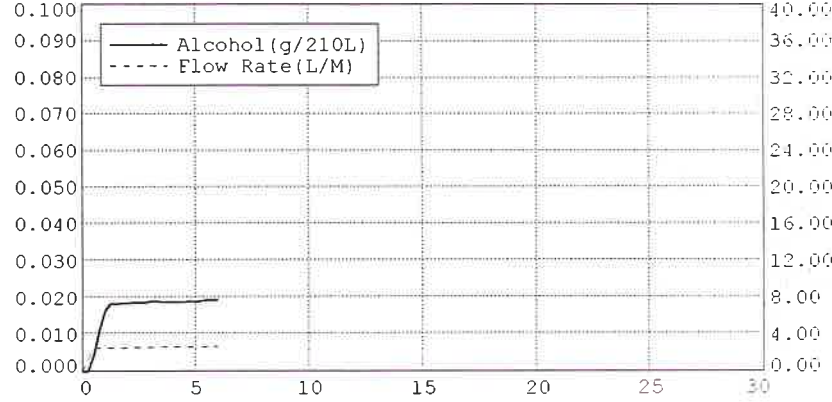
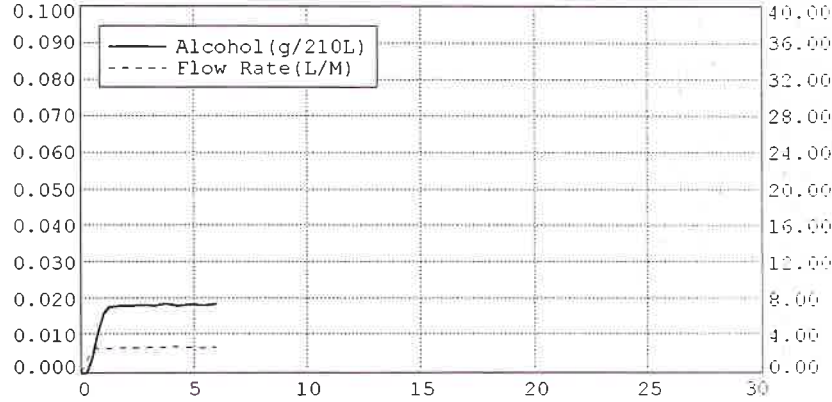
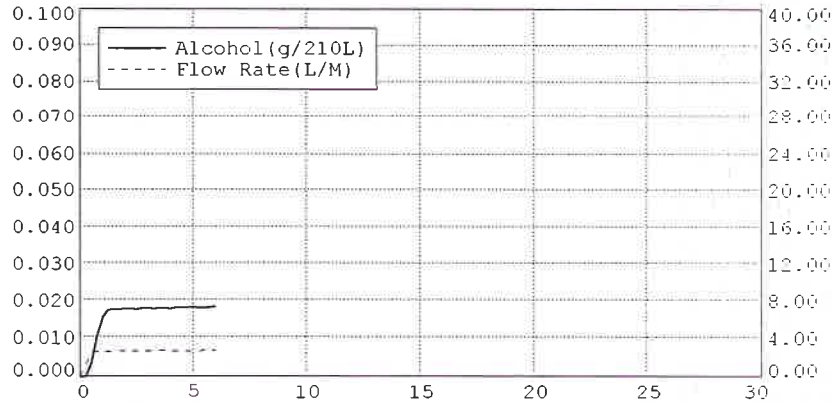
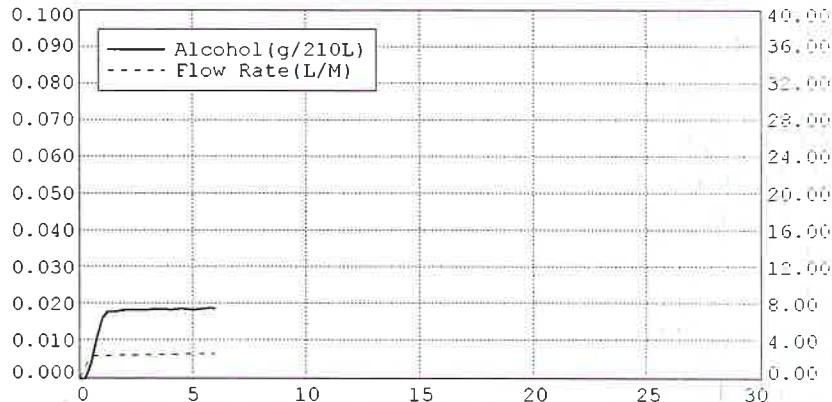
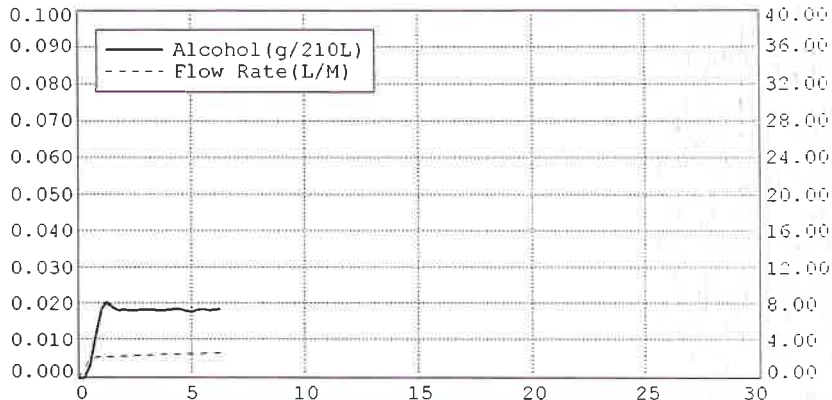
Date: 11/09/2022  
 Time: 14:28:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.36: 0.020  
 LOT #: AG100401  
 EXPIRATION: 01/04/2023  
 TANK PRESSURE: 274 psi

BLANK TEST	0.000	14:29
INTERNAL STANDARD	VERIFIED	14:29
EXTERNAL STANDARD	0.020	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.020	14:30
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.020	14:31
BLANK TEST	0.000	14:32
EXTERNAL STANDARD	0.020	14:33
BLANK TEST	0.000	14:33
EXTERNAL STANDARD	0.020	14:34
BLANK TEST	0.000	14:35

Average = 0.0200  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100389

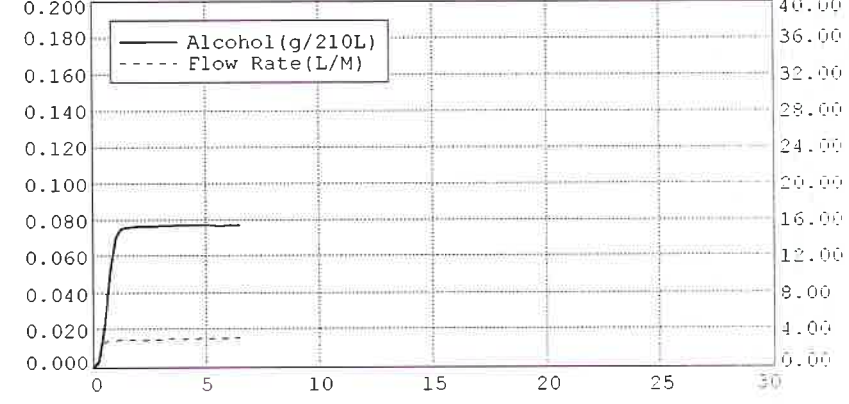
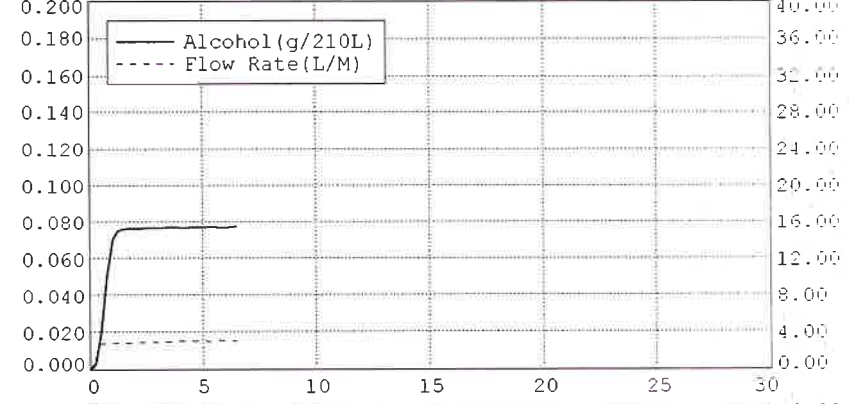
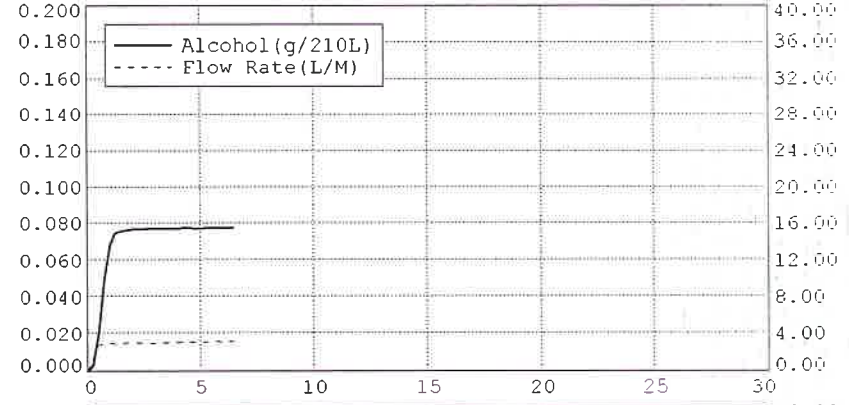
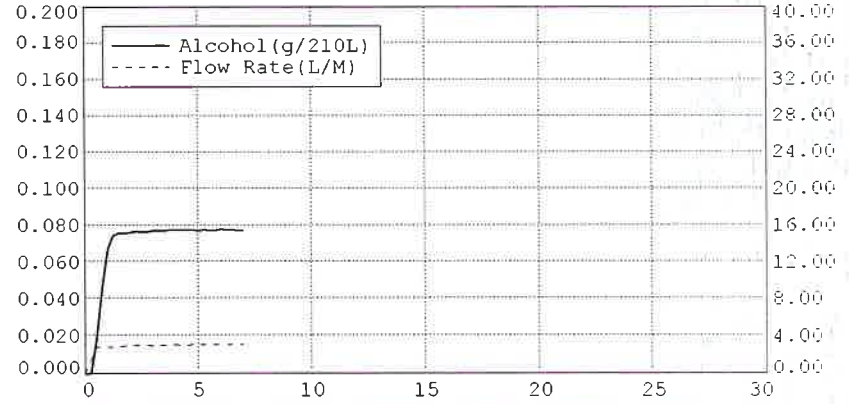
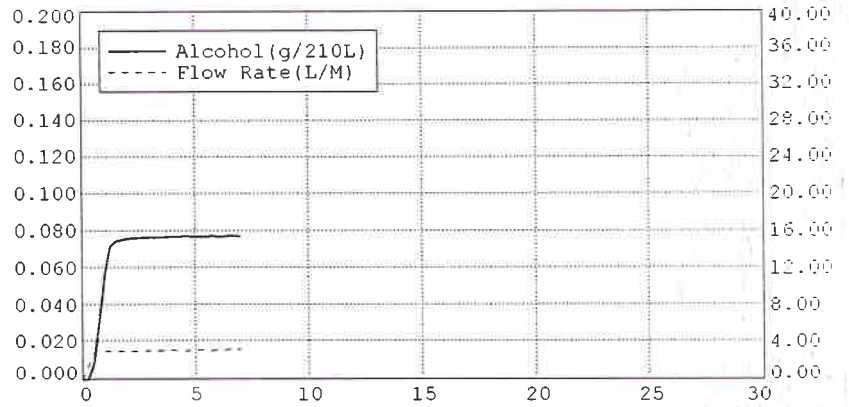
Date: 11/09/2022  
Time: 14:36:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.36: 0.079  
LOT #: AG135004  
EXPIRATION: 12/16/2023  
TANK PRESSURE: 1146 psi

BLANK TEST	0.000	14:38
INTERNAL STANDARD	VERIFIED	14:38
EXTERNAL STANDARD	0.078	14:38
BLANK TEST	0.000	14:39
EXTERNAL STANDARD	0.079	14:39
BLANK TEST	0.000	14:40
EXTERNAL STANDARD	0.079	14:40
BLANK TEST	0.000	14:41
EXTERNAL STANDARD	0.079	14:41
BLANK TEST	0.000	14:42
EXTERNAL STANDARD	0.079	14:42
BLANK TEST	0.000	14:43

Average = 0.0788  
Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
DATAMASTER dmt: 100389

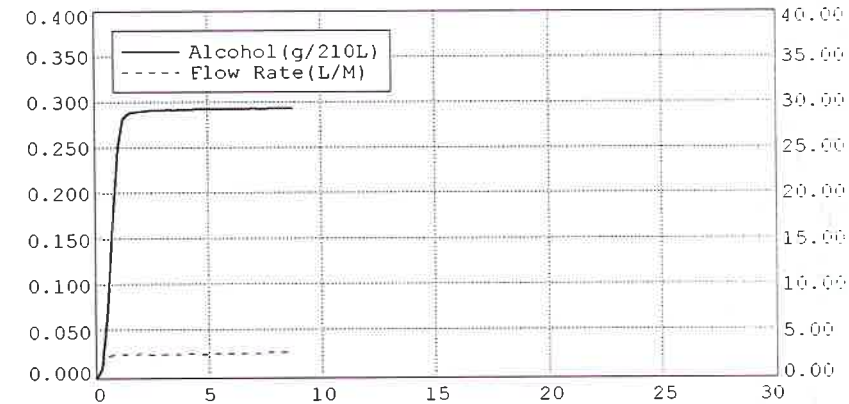
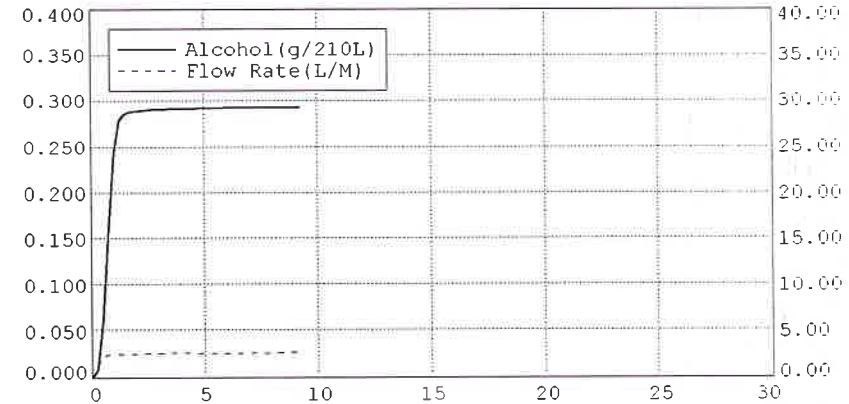
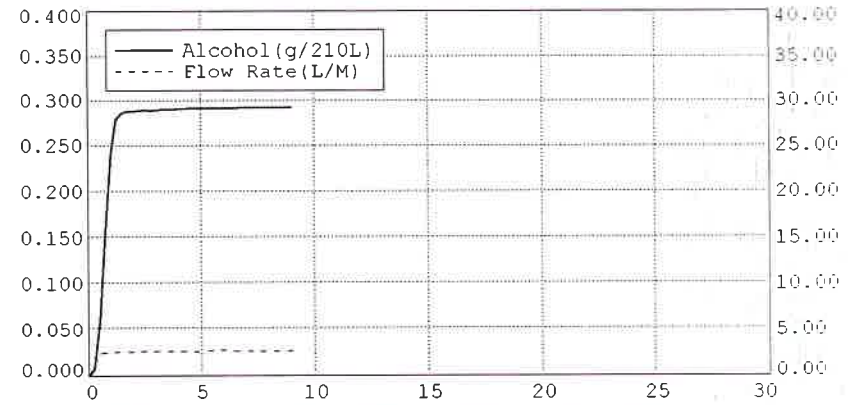
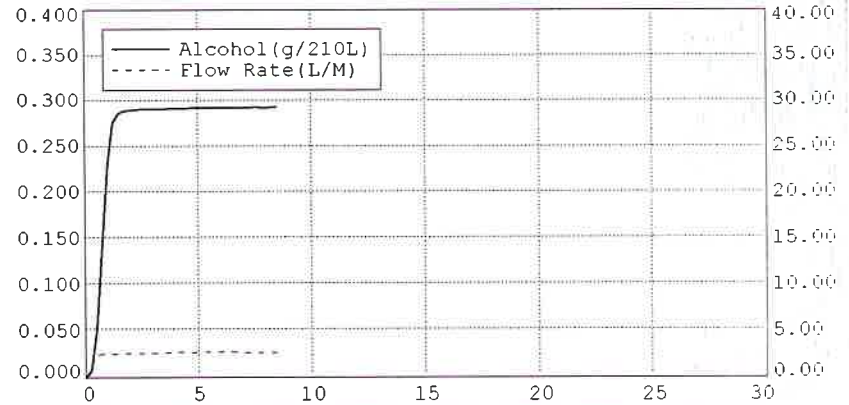
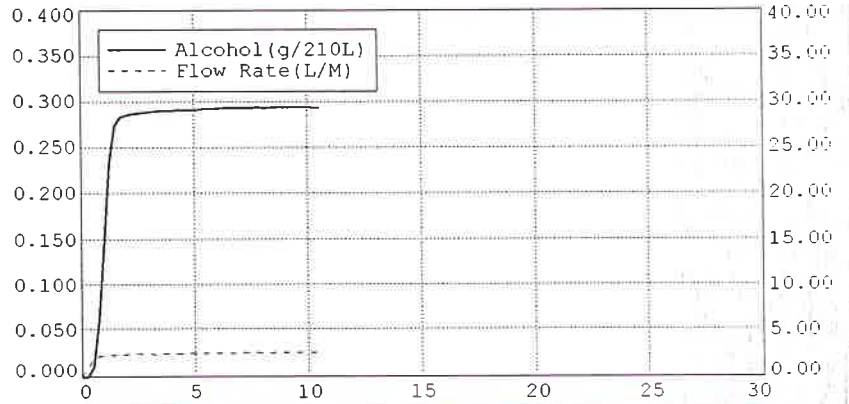
Date: 11/09/2022  
Time: 14:47:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
TARGET AT 29.36: 0.294  
LOT #: AG130502  
EXPIRATION: 11/01/2023  
TANK PRESSURE: 216 psi

BLANK TEST	0.000	14:49
INTERNAL STANDARD	VERIFIED	14:49
EXTERNAL STANDARD	0.293	14:49
BLANK TEST	0.000	14:50
EXTERNAL STANDARD	0.293	14:50
BLANK TEST	0.000	14:51
EXTERNAL STANDARD	0.293	14:51
BLANK TEST	0.000	14:52
EXTERNAL STANDARD	0.293	14:52
BLANK TEST	0.000	14:53
EXTERNAL STANDARD	0.293	14:54
BLANK TEST	0.000	14:54

Average = 0.2930  
Std Dev = 0.0000



# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100389

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 11/09/2022

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.38: 0.079  
LOT #: AG135004  
EXPIRATION: 12/16/2023  
TANK PRESSURE: 1116 psi

BLANK TEST	0.000	15:01
INTERNAL STANDARD	✓ VERIFIED	15:01
Xq = 0.100 (0.78%)		
EXTERNAL STANDARD	0.079	15:01
X[1] = 0.0794 (-0.0015) (0.0007)		
BLANK TEST	0.000	15:02
EXTERNAL STANDARD	0.079	15:02
X[1] = 0.0793 (-0.0006) (0.0005)		
BLANK TEST	0.000	15:03
EXTERNAL STANDARD	0.079	15:03
X[1] = 0.0792 (-0.0015) (0.0004)		
BLANK TEST	0.000	15:04
EXTERNAL STANDARD	0.080	15:04
X[1] = 0.0796 (-0.0002) (0.0012)		
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.079	15:05
X[1] = 0.0789 (-0.0013) (0.0007)		
BLANK TEST	0.000	15:06

Average = 0.0792  
Std Dev = 0.0004

## Diagnostic Check

### VERSIONS

DMT: 3.02 ✓  
PIC: 3.02  
Modem: 2.6  
Questions: 2.2

### TEMPERATURES

Sample Chamber = 48.7°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 45.3°C PASSED  
(38.0°C - 50.0°C)

### SETTINGS

Lamp Voltage = 1.68 V PASSED  
(1.04 V - 2.44 V)  
Cooler Voltage = 1.76 V PASSED  
(0.99 V - 2.31 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 541 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.4 in

### PUMP INFO

Flow Rate = 4.682 L/M PASSED  
(3.500 L/M - 6.500 L/M)

### DETECTOR INFO

PUMP ON PASSED  
(0.002 V <= 0.010 V)  
PUMP OFF PASSED  
(0.002 V <= 0.010 V)

### FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD ✓ PASSED  
Xq = 0.100 0.70% (0.00% - 4.00%)

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100389

Date: 11/09/2022  
Time: 15:11:06

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
DEREK WALTON  
OPERATOR'S #: 9508

DEPT/AGENCY:  
NON-DRINKING SUBJECT  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.37: 0.079  
LOT #: AG135004  
EXPIRATION: 12/16/2023

DIAGNOSTIC CHECK	PASSED	15:13
BLANK TEST	0.000	15:13
INTERNAL STANDARD	VERIFIED	15:13
EXTERNAL STANDARD	0.079	15:14
BLANK TEST	0.000	15:14
SUBJECT SAMPLE (Vol=2.88L)	0.000	15:15
BLANK TEST	0.000	15:16
EXTERNAL STANDARD	0.080	15:16
BLANK TEST	0.000	15:17

