

# Alaska Scientific Crime Detection Laboratory

## DataMaster Calibration Form

Effective: 1/23/2024

Version: 4.0

Instrument #: 100676 Analyst or Technician Name: Megan Carlock

DataMaster DMT Calibration Start Date: 6/17/24

### Diagnostic Test

- Perform Diagnostic Test (View Details)
- Internal Standard Value  $\leq$  3.00%

Supervised case room with  
Derek Walker 06/17/24  
DMV

### Technician Screen and Calibration Factors

- Adjust Voltages (if needed)
  - Lamp (2.60 V Maximum)
  - Bias
  - Cooler (2.00 V Maximum)
  - Chopper Frequency
  - Detector Voltage (-0.100V to 0.100V)
- Set RFI Sensitivity
- Adjust internal barometer reading to match NIST-traceable barometer  
Barometer/Thermometer/Hygrometer S/N: 230307229  
Calibration Due Date: 5/2/25
- Verify Volume Setting (1.50 L +/- 0.10 L), adjust if needed
- Print Technician Screen
- Print "Cal Factors"

Rejected due to  
internal standard  
values. MNC 6/17/24

### Minimum Volume Test

- Perform Minimum Volume (Subject) Test: 1.5 liters (1.3 L to 1.7 L)

### As Left Linearity Testing

Barometric Pressure (in Hg) 29.88 Temperature(C) 21.0 Relative Humidity(%) 43  
Approved Concentrations (g/210L): 0.020, 0.040, 0.080, 0.100, 0.150, 0.300

### Functional Tests

- Incomplete
- Invalid
- Interference (Volatiles) - *Print with View Details*
- Maximum Attempts Exceeded
- Radio Frequency Interference (RFI)

1. Acetone Reagent Lot Number: 20240501KS Expiration Date: 8/1/24  
Simulator S/N: SD1088 Thermometer Verification Performed?
2. Isopropanol Reagent Lot Number: 20240501MNC Expiration Date: 8/1/24  
Simulator S/N: DR4161 Thermometer Verification Performed?
3. Negative (Ethanol Only) Lot Number: 22HP41201 Expiration Date: 8/1/24  
Simulator S/N: SD1177 Thermometer Verification Performed?

Calibrated External Thermometer S/N: 230631106  
Calibration Due Date: 9/19/25

### Administrative

- Verify Stylus Calibration
- Reset Options
- Clear Memory
- Verification of Calibration (VOC)
- Perform Non-Drinking Subject Test
- Upload Instrument
- Remove Dry Gas Tank Before Shutdown
- Add Ready for Tech Review Note

### Completion

Lab Work End Date: 6/17/24  
Data Interpretation Date (Technician): \_\_\_\_\_ (if applicable)  
Data Interpretation Date (Analyst): 6/17/24

All printed copies are uncontrolled.

Approved by: Chemistry Supervisor

DIAGNOSTIC RECORD

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 10:24:30

VERSIONS  
DMT: 3.02  
PIC: 3.03  
Modem: 2.6  
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.0°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 46.5°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.62 V PASSED  
(0.96 V - 2.24 V)  
Cooler Voltage = 1.62 V PASSED  
(0.94 V - 2.20 V)  
Bias Voltage = 79 V PASSED  
(47 V - 111 V)  
Chopper Freq = 527 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.318 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

Xq = 0.091 2.77% PASSED  
(0.00% - 4.00%)

Rejected

Technician Screen

-----  
DATAMASTER dmt: 100676  
-----

Date: 06/17/2024  
Time: 10:35 AM

Temperatures (°C)  
Sample Cell: 49.0°C  
Breath Tube: 46.7°C

Current Barometer 29.9 in  
Volume (ltr) 1.51

Settings  
Lamp: 1.67 V  
Bias: 79 V  
Cooler: 1.72 V  
Chopper: 528 Hz

Voltages (V)  
Flow: 1.06 V  
Detector: 0.016 V

Rejected

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100676  
-----

Date: 10/26/2011  
Time: 07:46:55

Ca = 0.1000  
CAL = 1.005681    0.800 <= CAL < 1.200  
b1 = 0.0000    0.0000 <= b1 < 0.0040  
b2 = 0.0043    0.0010 <= b2 < 0.0100  
b3 = 0.0000    0.0000 <= b3 < 0.0040  
Xq = 0.0882    0.0500 <= Xq < 0.2000  
a21 = 1.239164    1.050 <= a21 < 1.300  
a31 = 0.566145    0.300 <= a31 < 0.800

Rejected

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 10:36:38

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

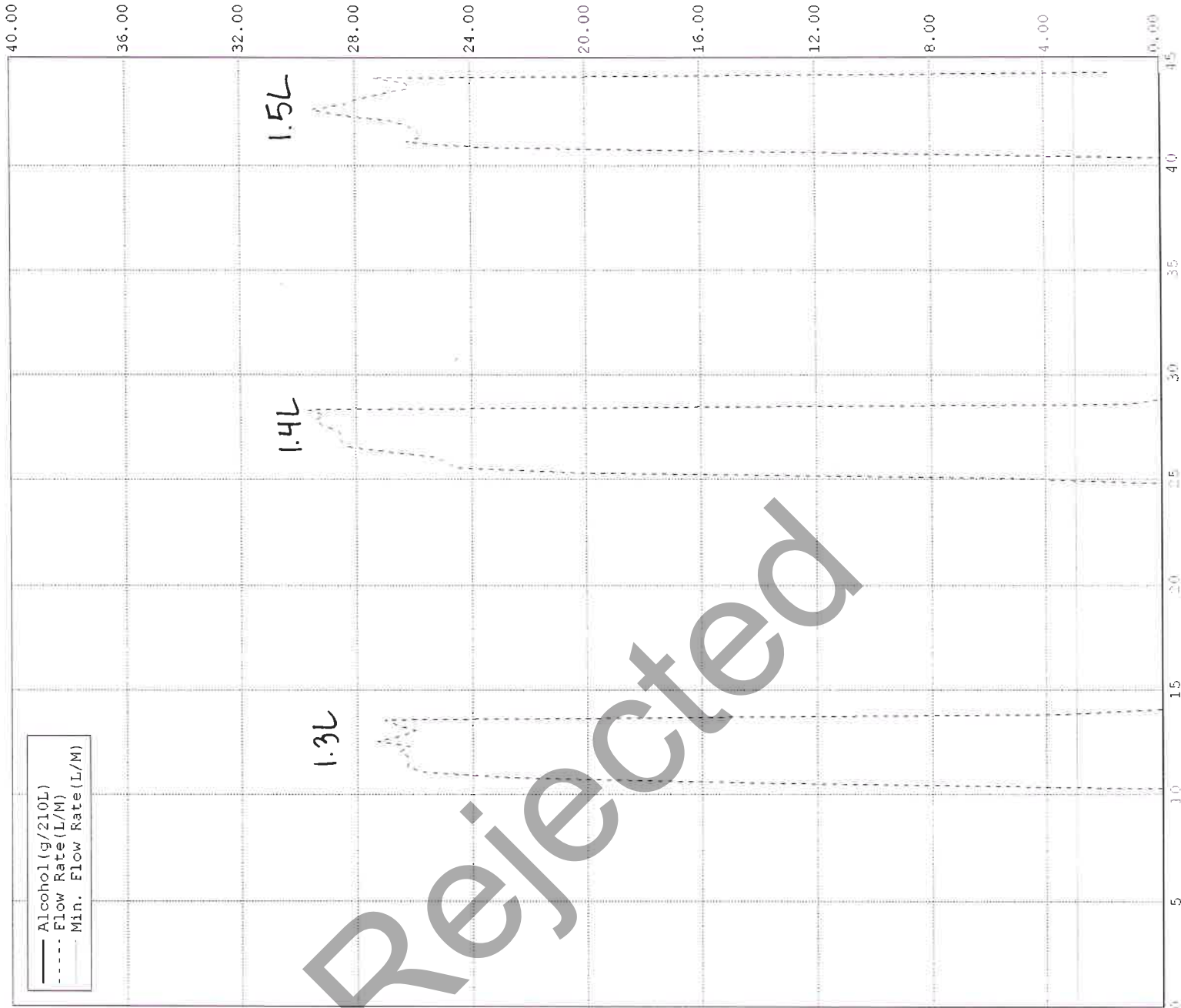
DEPT/AGENCY:  
MINIMUM VOLUME TEST  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK	PASSED	10:37
BLANK TEST	0.000	10:37
INTERNAL STANDARD	VERIFIED	10:37
EXTERNAL STANDARD	0.080	10:38
BLANK TEST	0.000	10:39
SUBJECT SAMPLE (Vol=1.61L)	0.000	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.079	10:40
BLANK TEST	0.000	10:41

MNC



LINEARITY CHECK

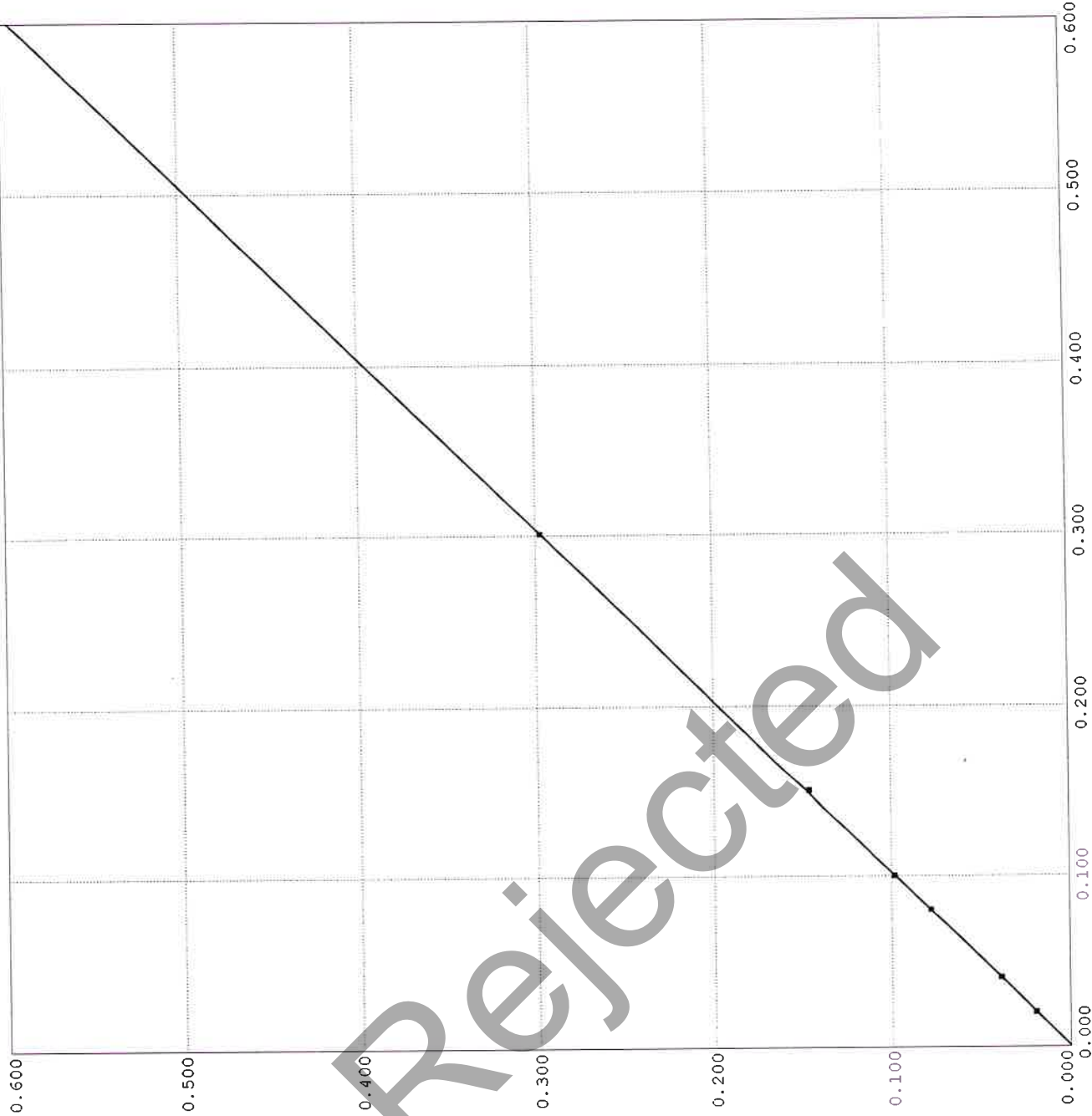
Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 10:43:27

SUPERVISOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.040	0.0394	0.0005
0.080	0.0790	0.0000
0.100	0.0994	0.0005
0.150	0.1470	0.0000
0.300	0.2980	0.0000

SLOPE = 0.992881  
R<sup>2</sup> = 0.999941



MNC

LINEARITY CHECK: Control Test 1

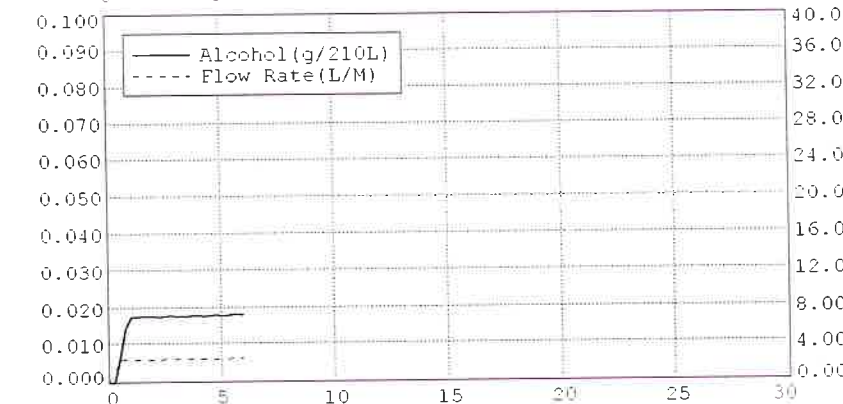
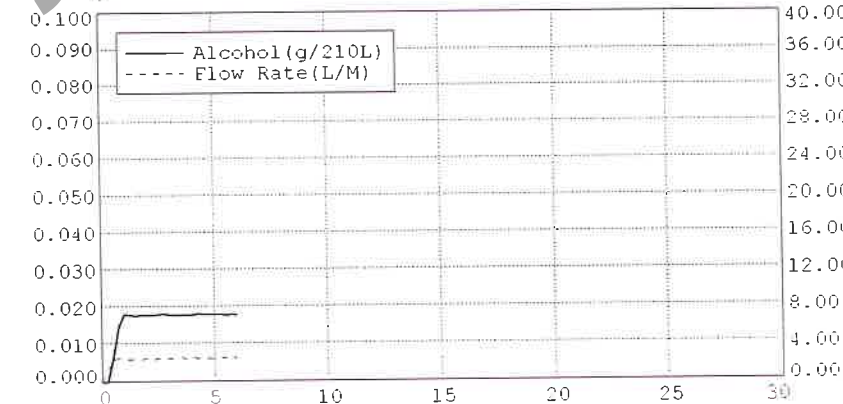
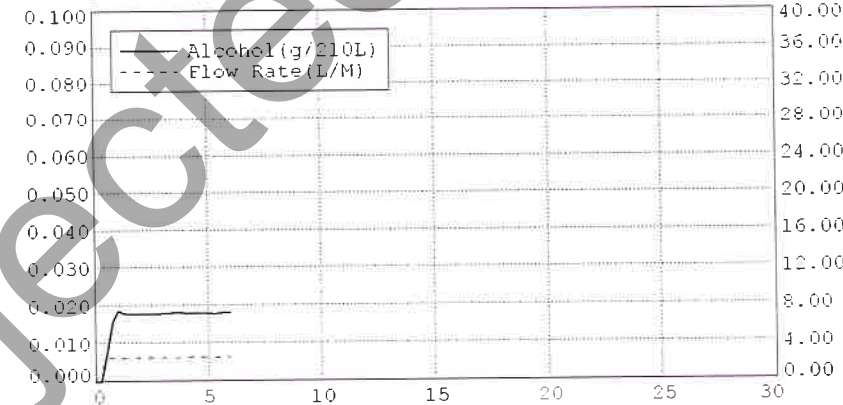
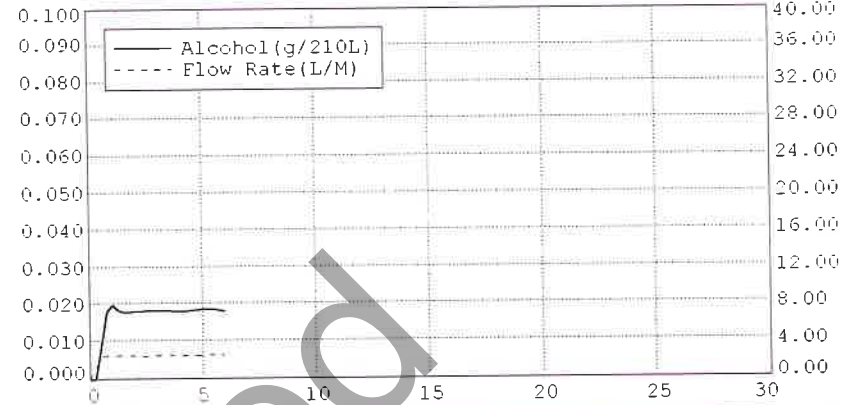
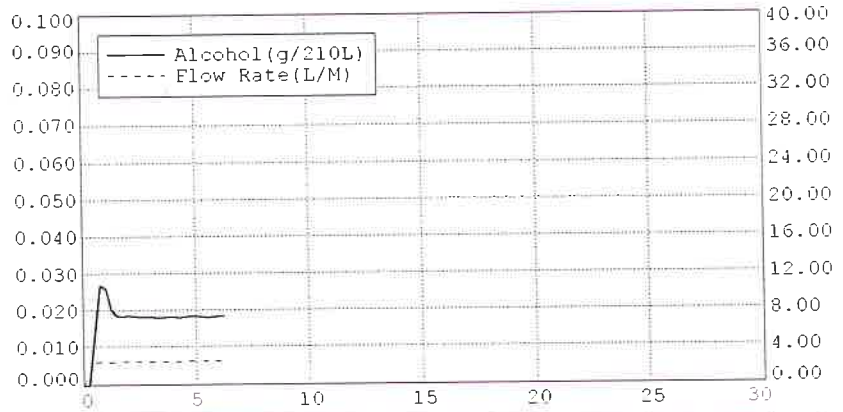
Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 10:43:29

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.020  
TARGET AT 29.89: 0.020  
LOT #: AG217902  
EXPIRATION: 06/28/2024  
TANK PRESSURE: 644 psi

BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.020	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.020	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.020	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.019	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.020	10:49
BLANK TEST	0.000	10:50

Average = 0.0198  
Std Dev = 0.0004



Rejected



LINEARITY CHECK: Control Test 2

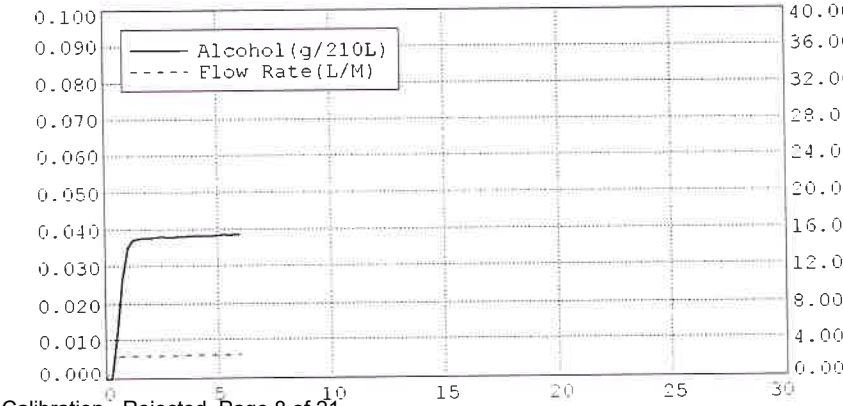
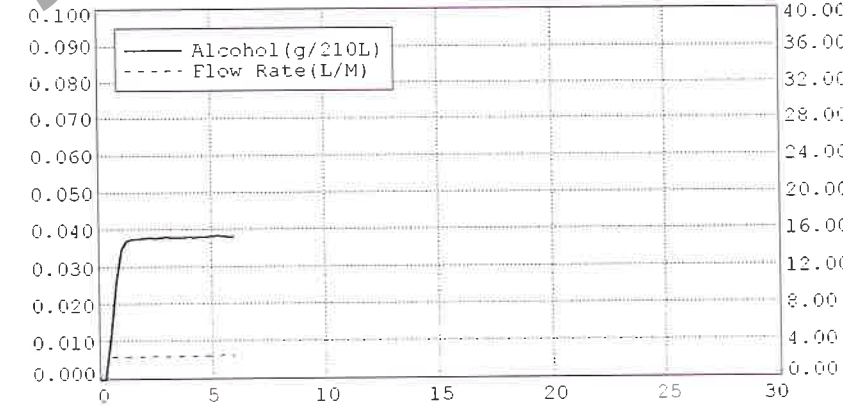
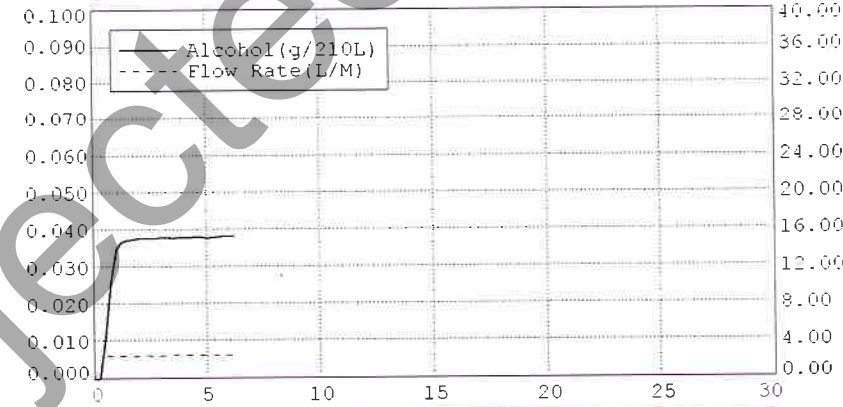
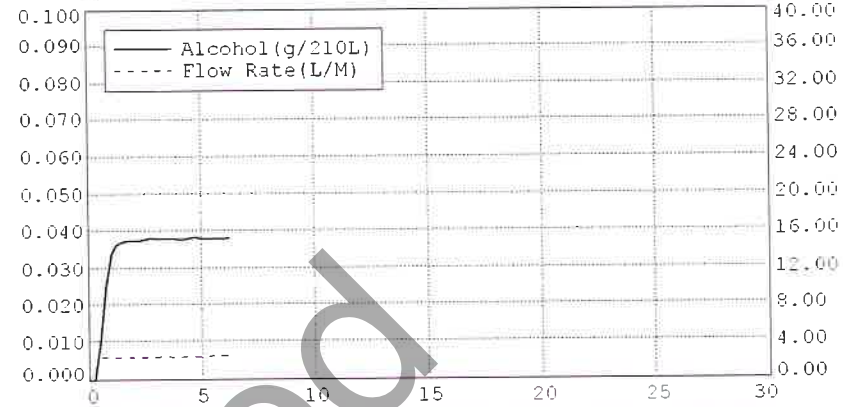
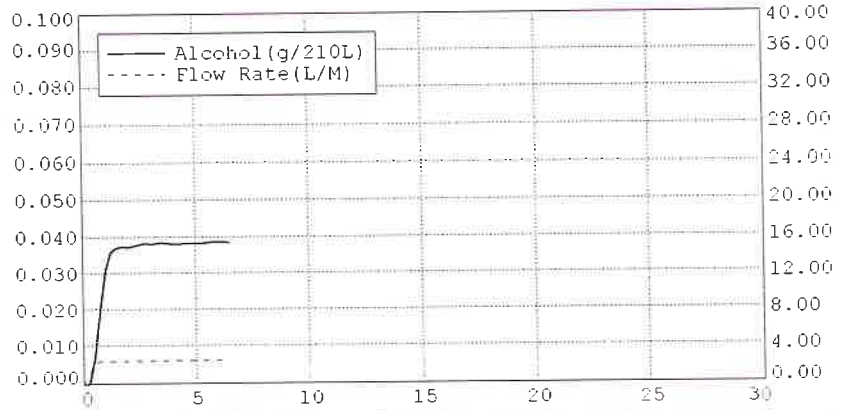
Alaska Department of Public Safety  
 DATAMASTER dmt: 100676

Date: 06/17/2024  
 Time: 10:51:40

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.040  
 TARGET AT 29.89: 0.040  
 LOT #: AG217904  
 EXPIRATION: 06/28/2024  
 TANK PRESSURE: 583 psi

BLANK TEST	0.000	10:53
INTERNAL STANDARD	VERIFIED	10:53
EXTERNAL STANDARD	0.040	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.039	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.039	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.039	10:56
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.040	10:58
BLANK TEST	0.000	10:58

Average = 0.0394  
 Std Dev = 0.0005



Rejected



LINEARITY CHECK: Control Test 3

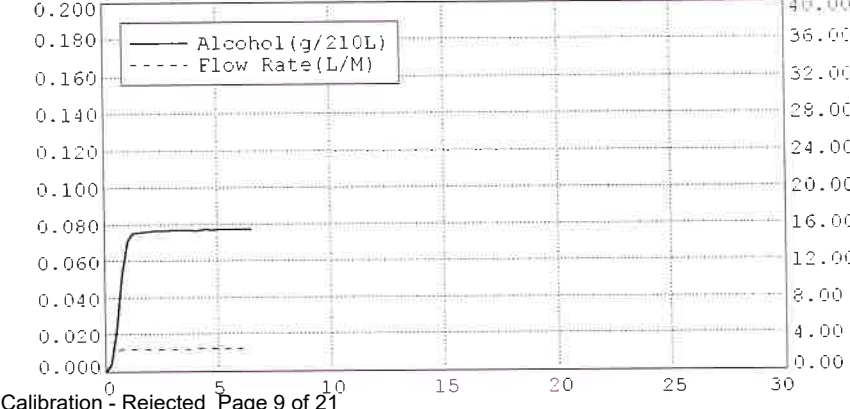
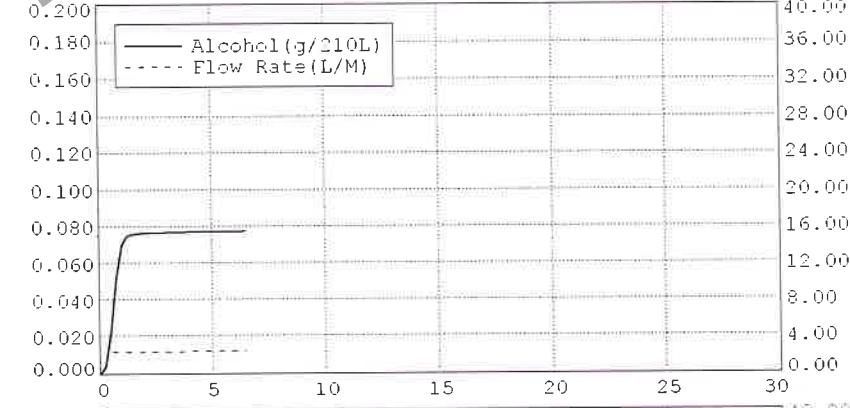
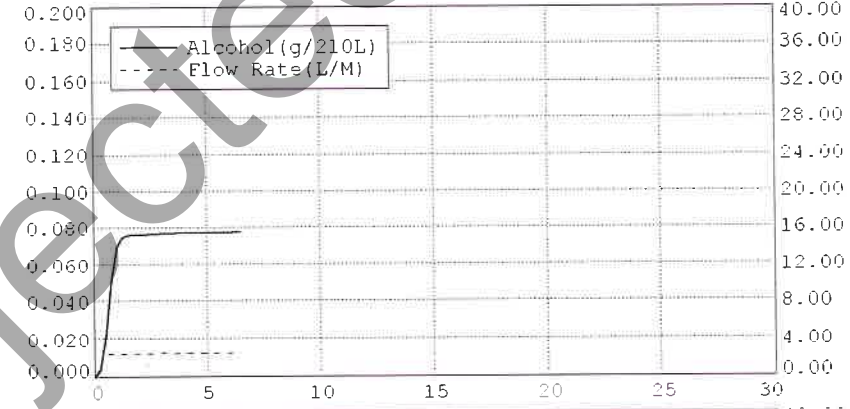
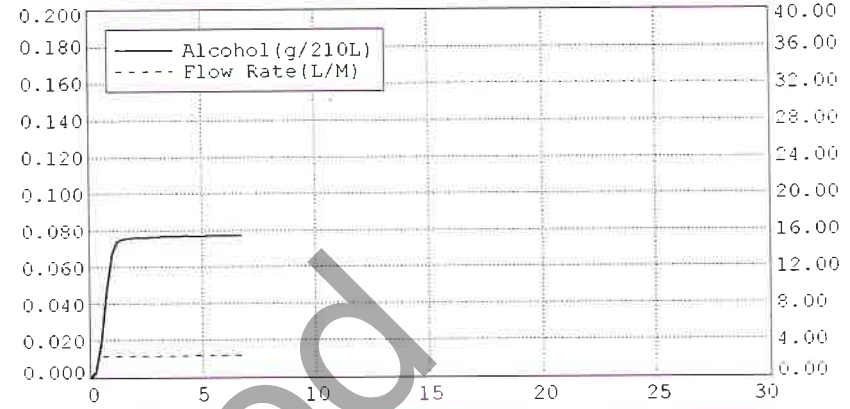
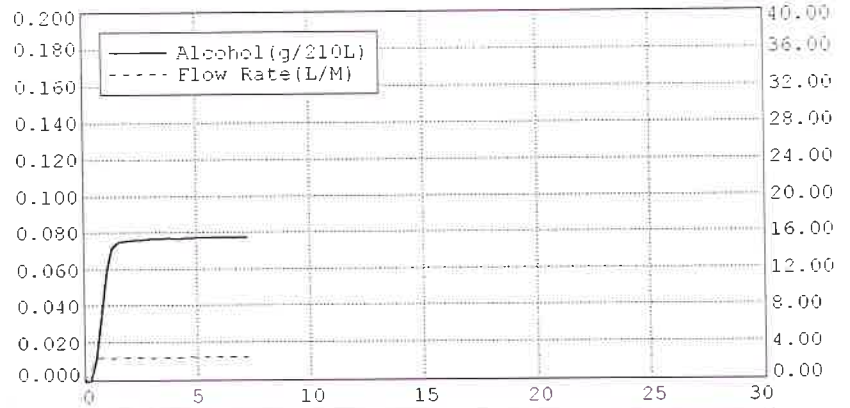
Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 11:00:40

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 12/19/2025  
TANK PRESSURE: 542 psi

BLANK TEST	0.000	11:02
INTERNAL STANDARD	VERIFIED	11:02
EXTERNAL STANDARD	0.079	11:02
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.079	11:04
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.079	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.079	11:06
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.079	11:07
BLANK TEST	0.000	11:08

Average = 0.0790  
Std Dev = 0.0000



Rejected

LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

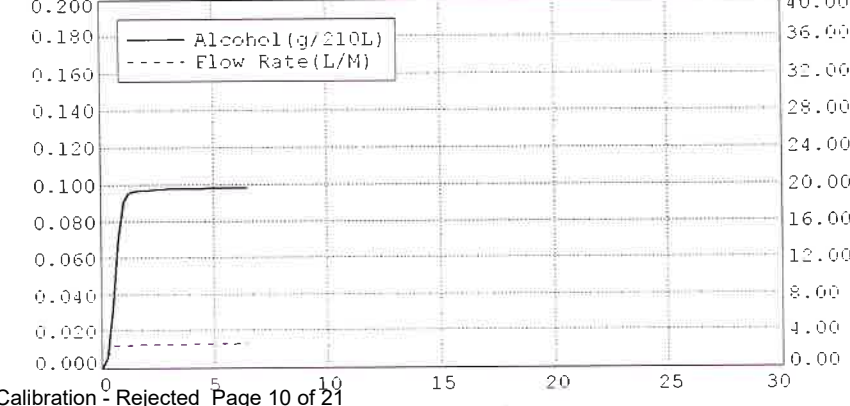
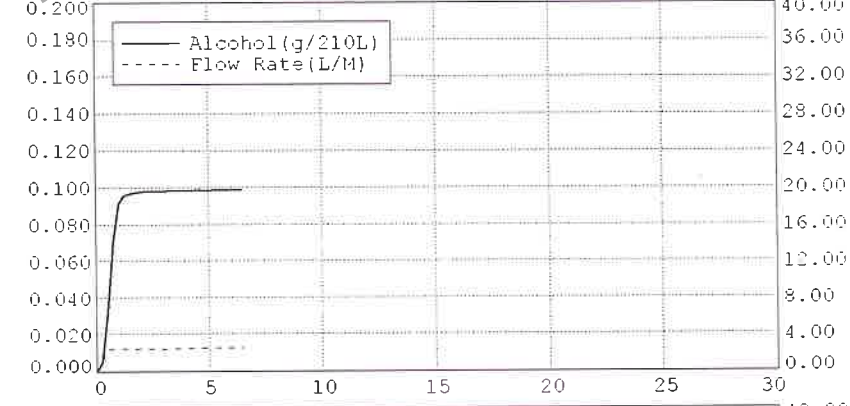
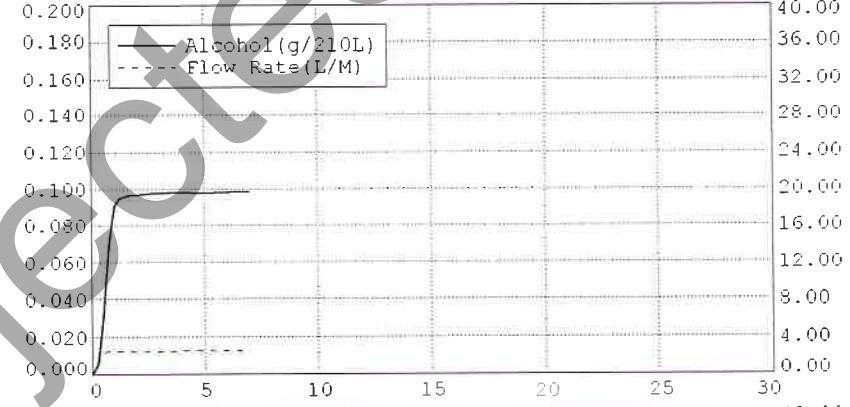
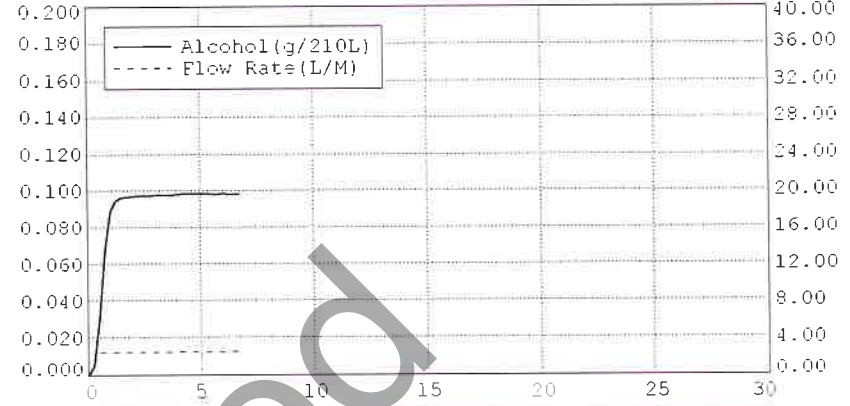
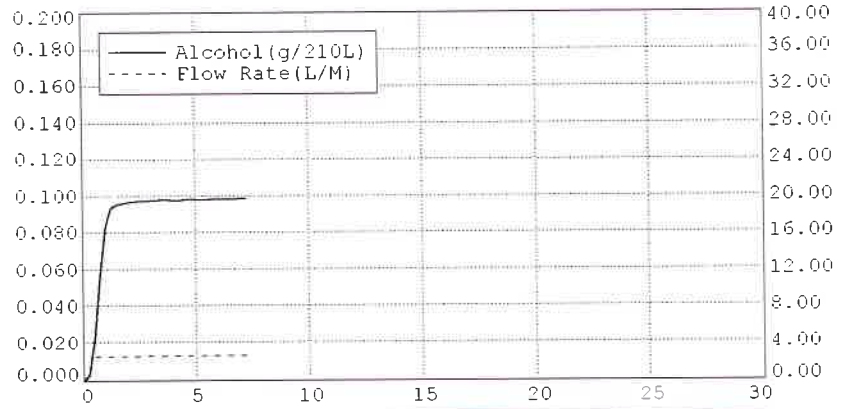
Date: 06/17/2024  
Time: 11:09:03

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
TARGET AT 29.88: 0.100  
LOT #: AG333401  
EXPIRATION: 11/30/2025  
TANK PRESSURE: 893 psi

BLANK TEST	0.000	11:10
INTERNAL STANDARD	VERIFIED	11:10
EXTERNAL STANDARD	0.099	11:11
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.099	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.100	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.100	11:14
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.099	11:15
BLANK TEST	0.000	11:16

Average = 0.0994  
Std Dev = 0.0005



Rejected

LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

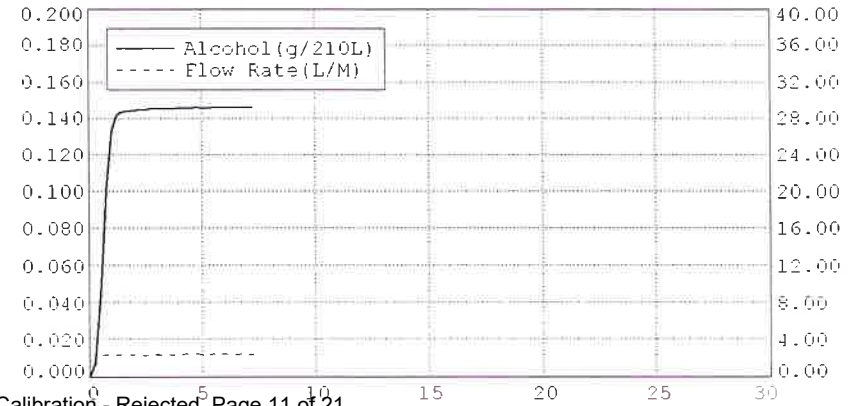
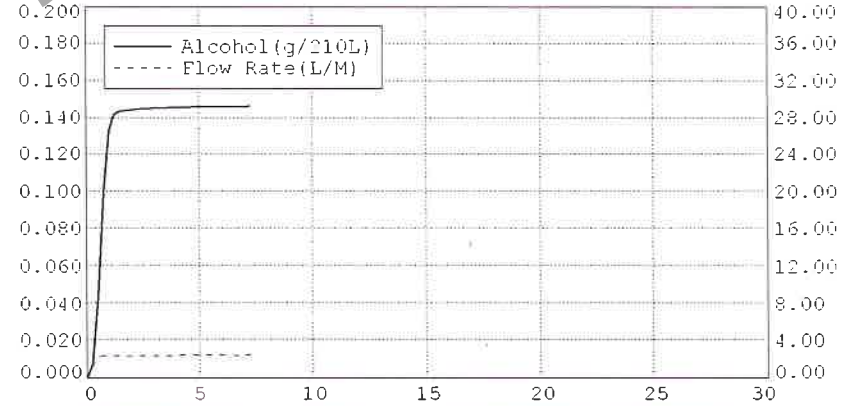
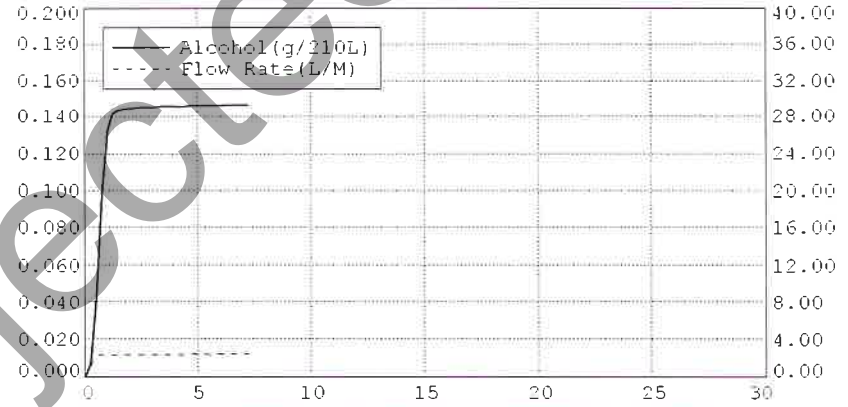
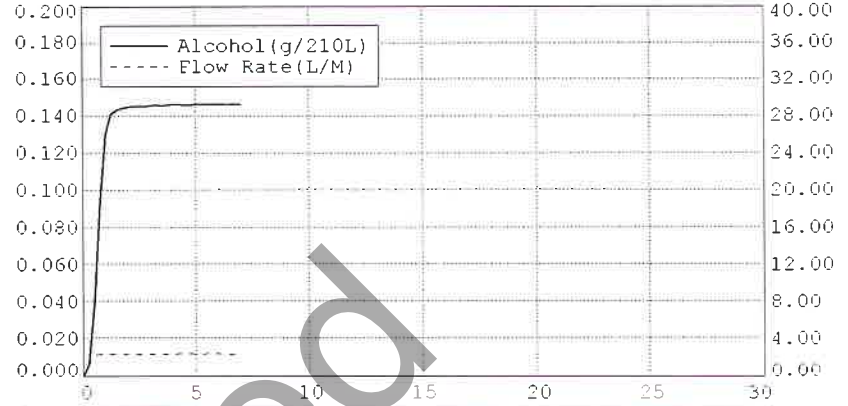
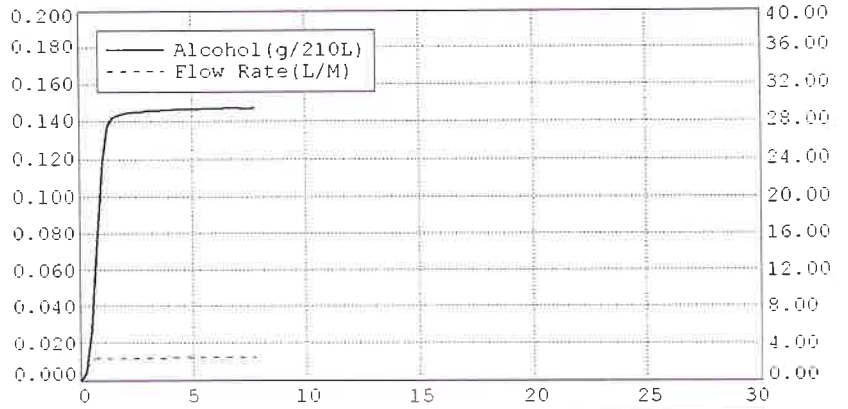
Date: 06/17/2024  
Time: 11:16:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.150  
TARGET AT 29.88: 0.150  
LOT #: AG332004  
EXPIRATION: 11/16/2025  
TANK PRESSURE: 540 psi

TEST TYPE	CONCENTRATION (g/210L)	TIME
BLANK TEST	0.000	11:18
INTERNAL STANDARD	VERIFIED	11:18
EXTERNAL STANDARD	0.147	11:18
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.147	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.147	11:21
BLANK TEST	0.000	11:22
EXTERNAL STANDARD	0.147	11:22
BLANK TEST	0.000	11:23
EXTERNAL STANDARD	0.147	11:23
BLANK TEST	0.000	11:24

Average = 0.1470  
Std Dev = 0.0000



Rejected

LINEARITY CHECK: Control Test 6

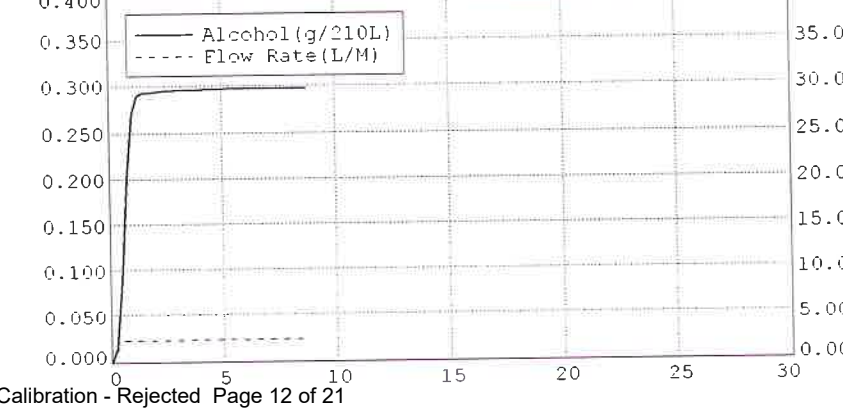
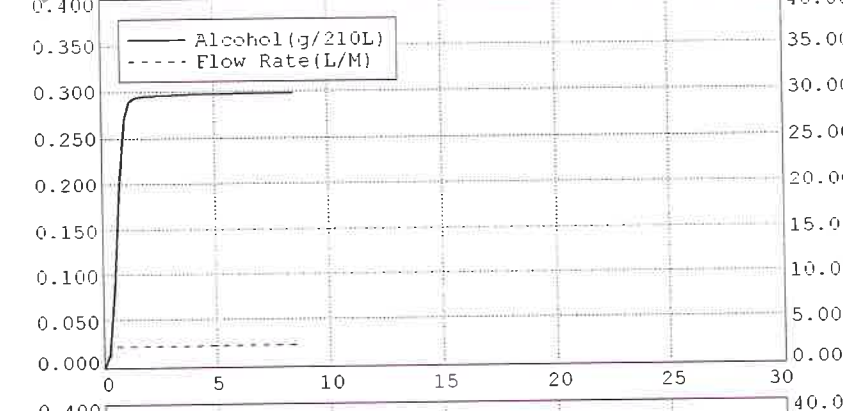
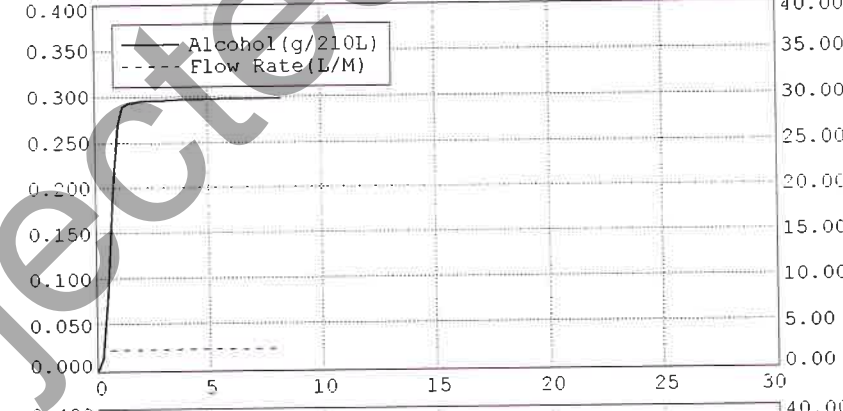
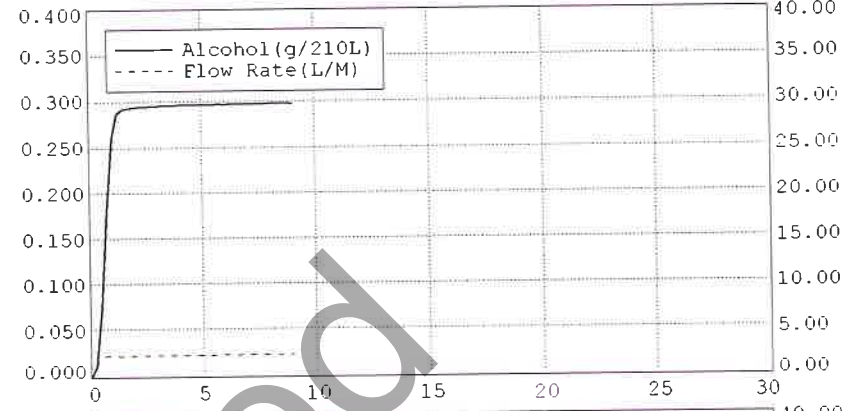
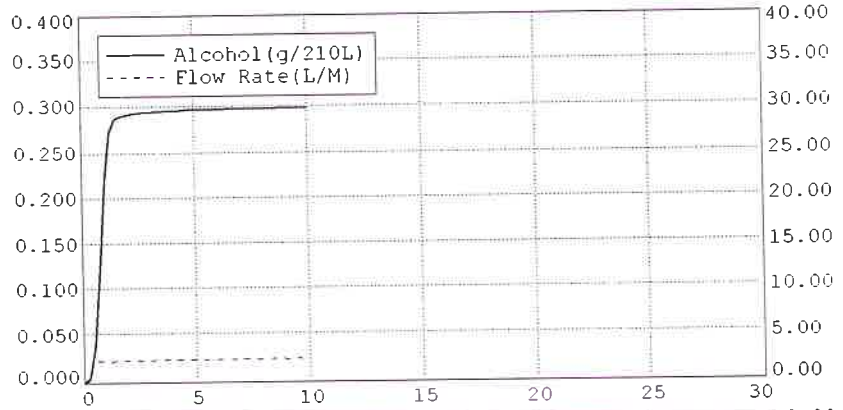
Alaska Department of Public Safety  
 DATAMASTER dmt: 100676

Date: 06/17/2024  
 Time: 11:25:12

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.300  
 TARGET AT 29.88: 0.300  
 LOT #: AG327804  
 EXPIRATION: 10/05/2025  
 TANK PRESSURE: 142 psi

BLANK TEST	0.000	11:27
INTERNAL STANDARD	VERIFIED	11:27
EXTERNAL STANDARD	0.298	11:27
BLANK TEST	0.000	11:28
EXTERNAL STANDARD	0.298	11:28
BLANK TEST	0.000	11:29
EXTERNAL STANDARD	0.298	11:29
BLANK TEST	0.000	11:30
EXTERNAL STANDARD	0.298	11:30
BLANK TEST	0.000	11:31
EXTERNAL STANDARD	0.298	11:32
BLANK TEST	0.000	11:33

Average = 0.2980  
 Std Dev = 0.0000



Rejected



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 11:37:58

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

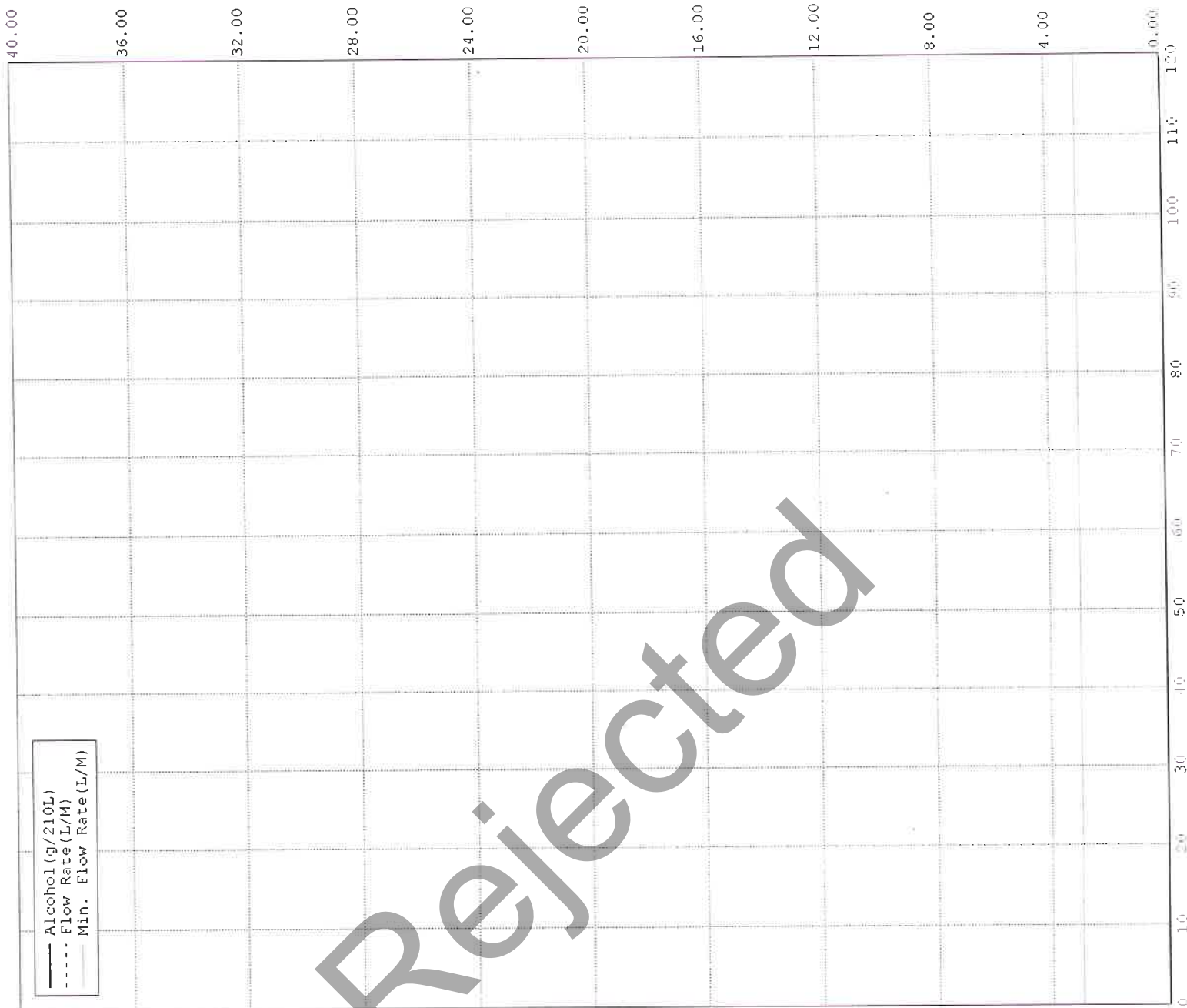
OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

DEPT/AGENCY:  
INCOMPLETE  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.87: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK PASSED 11:39  
BLANK TEST 0.000 11:39  
INTERNAL STANDARD VERIFIED 11:39  
EXTERNAL STANDARD 0.079 11:39  
BLANK TEST 0.000 11:40  
SUBJECT SAMPLE INCOMPLETE 11:42

MNC



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 11:45:37

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

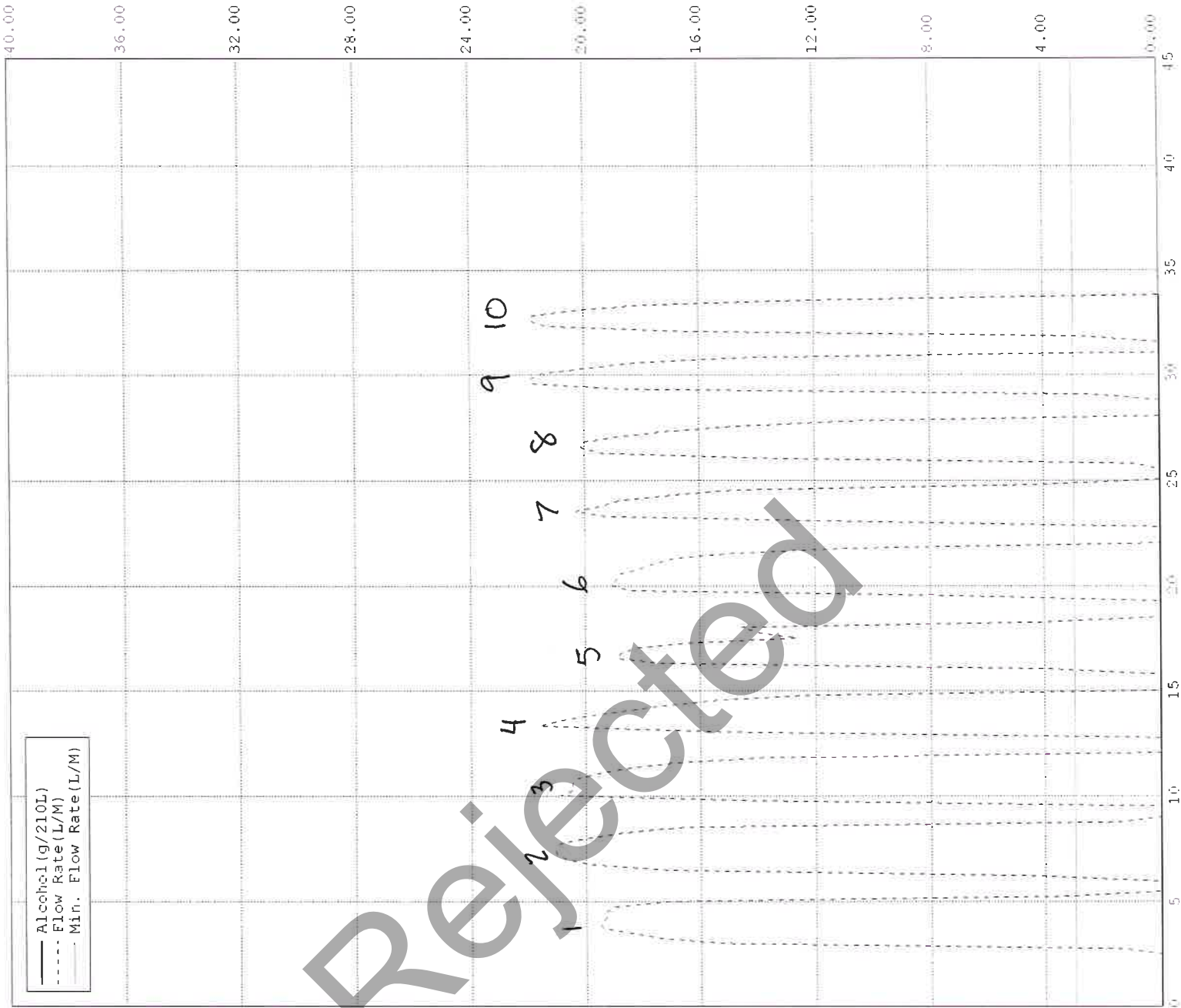
DEPT/AGENCY:  
MAXIMUM ATTEMPTS EXCEEDED  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.87: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK PASSED 11:47  
BLANK TEST 0.000 11:47  
INTERNAL STANDARD VERIFIED 11:47  
EXTERNAL STANDARD 0.080 11:48  
BLANK TEST 0.000 11:49  
SUBJECT SAMPLE XXX 11:49

Maximum Attempts Exceeded

MNC





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 11:51:47

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

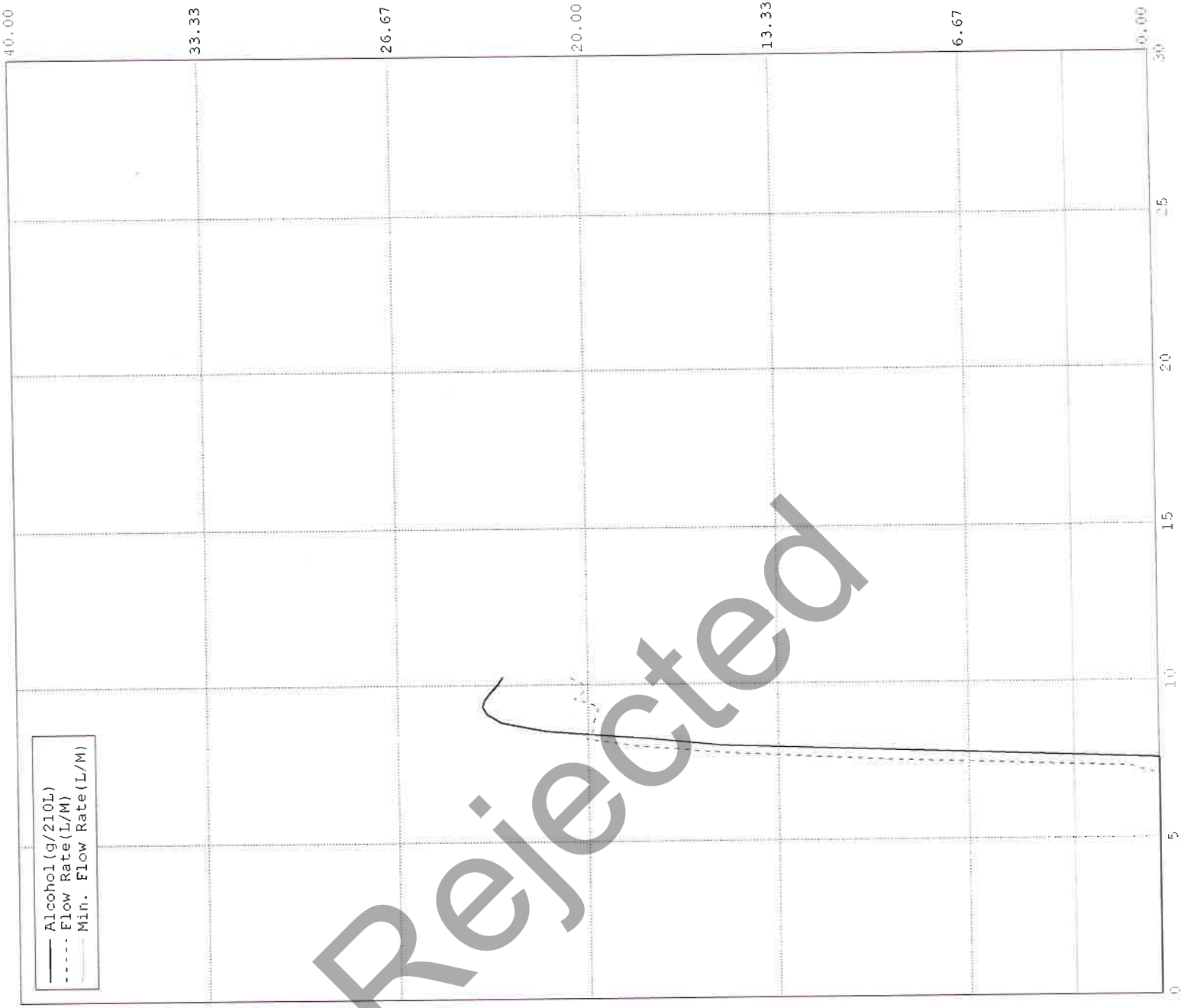
OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

DEPT/AGENCY:  
INVALID  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK PASSED 11:52  
BLANK TEST 0.000 11:52  
INTERNAL STANDARD VERIFIED 11:53  
EXTERNAL STANDARD 0.079 11:53  
BLANK TEST 0.000 11:54  
SUBJECT SAMPLE INVALID 11:54

MNC



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 12:11:46

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

DEPT/AGENCY:  
RFI  
CASE/REPORT: XXX  
TEST TYPE: TEST

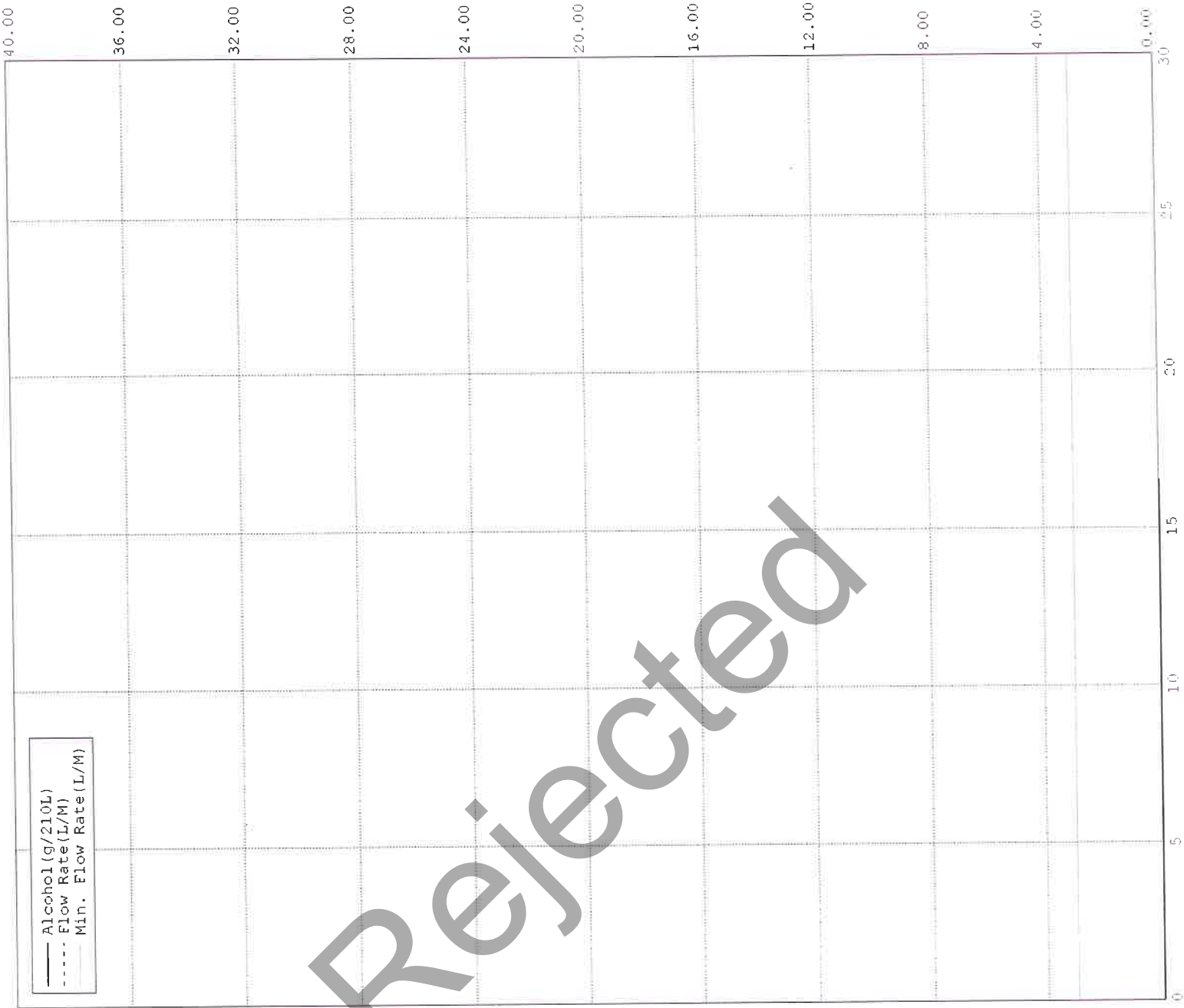
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK PASSED 12:12  
BLANK TEST 0.000 12:12  
INTERNAL STANDARD VERIFIED 12:13  
EXTERNAL STANDARD 0.078 12:13  
BLANK TEST 0.000 12:14

RFI DETECTED

MNC



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 13:08:54

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

DEPT/AGENCY:  
INTERFERENCE - ACETONE  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK PASSED 13:09  
BLANK TEST 0.000 13:10  
INTERNAL STANDARD VERIFIED 13:10  
Xq = 0.090 (2.57%)  
EXTERNAL STANDARD 0.078 13:10  
X[1] = 0.0784 (0.0005) (0.0006)  
BLANK TEST 0.000 13:11  
SUBJECT SAMPLE XXX 13:11  
X[1] = 0.1038 (-0.0206) (-0.0018)

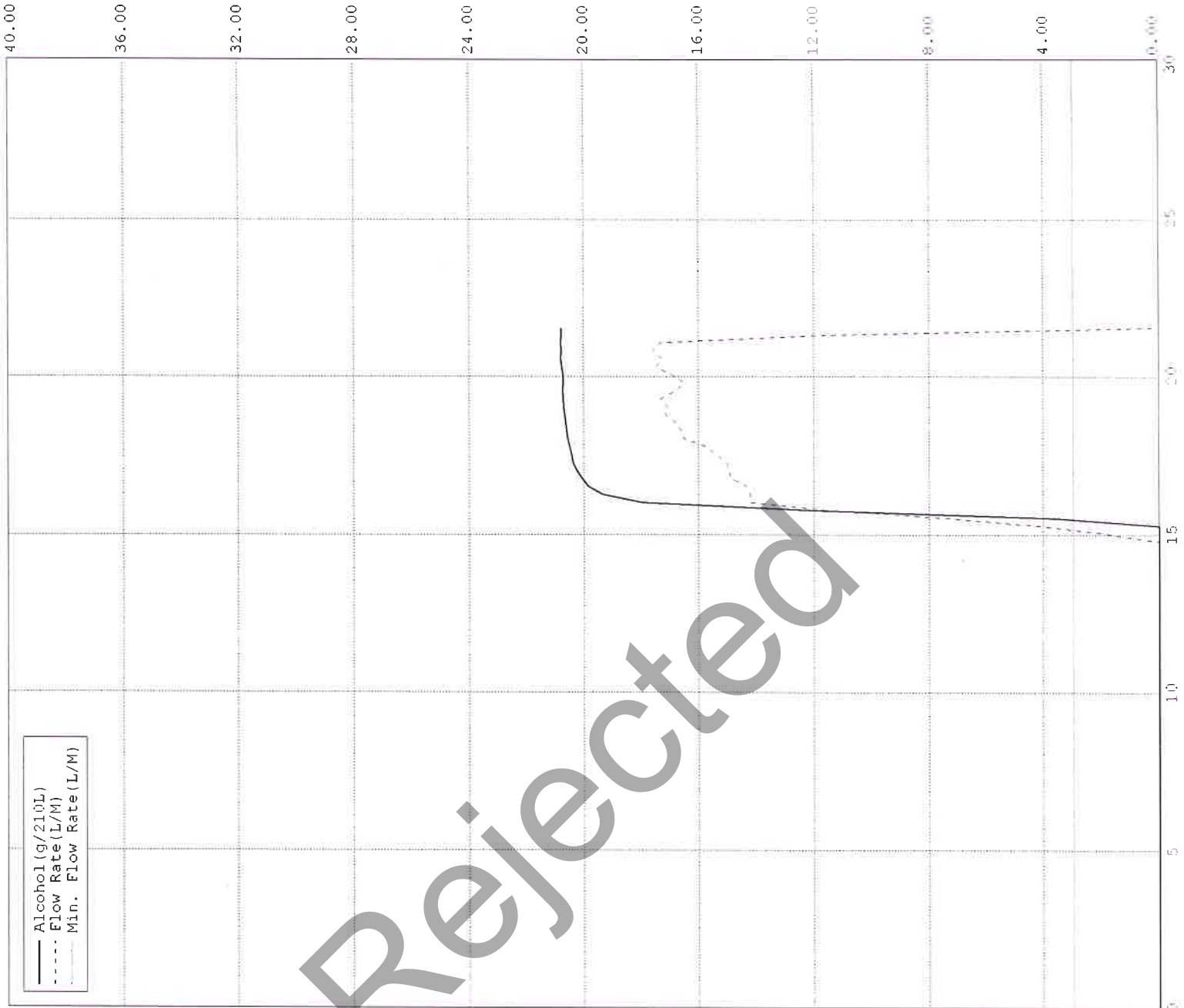
Interference Detected

Filter 2 Average: 0.0012

Filter 3 Average: 0.0008

MNC 6/17/24

MNC JM 06/17/24



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 13:13:45

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

DEPT/AGENCY:  
INTERFERENCE - IPA  
CASE/REPORT: XXX  
TEST TYPE: TEST

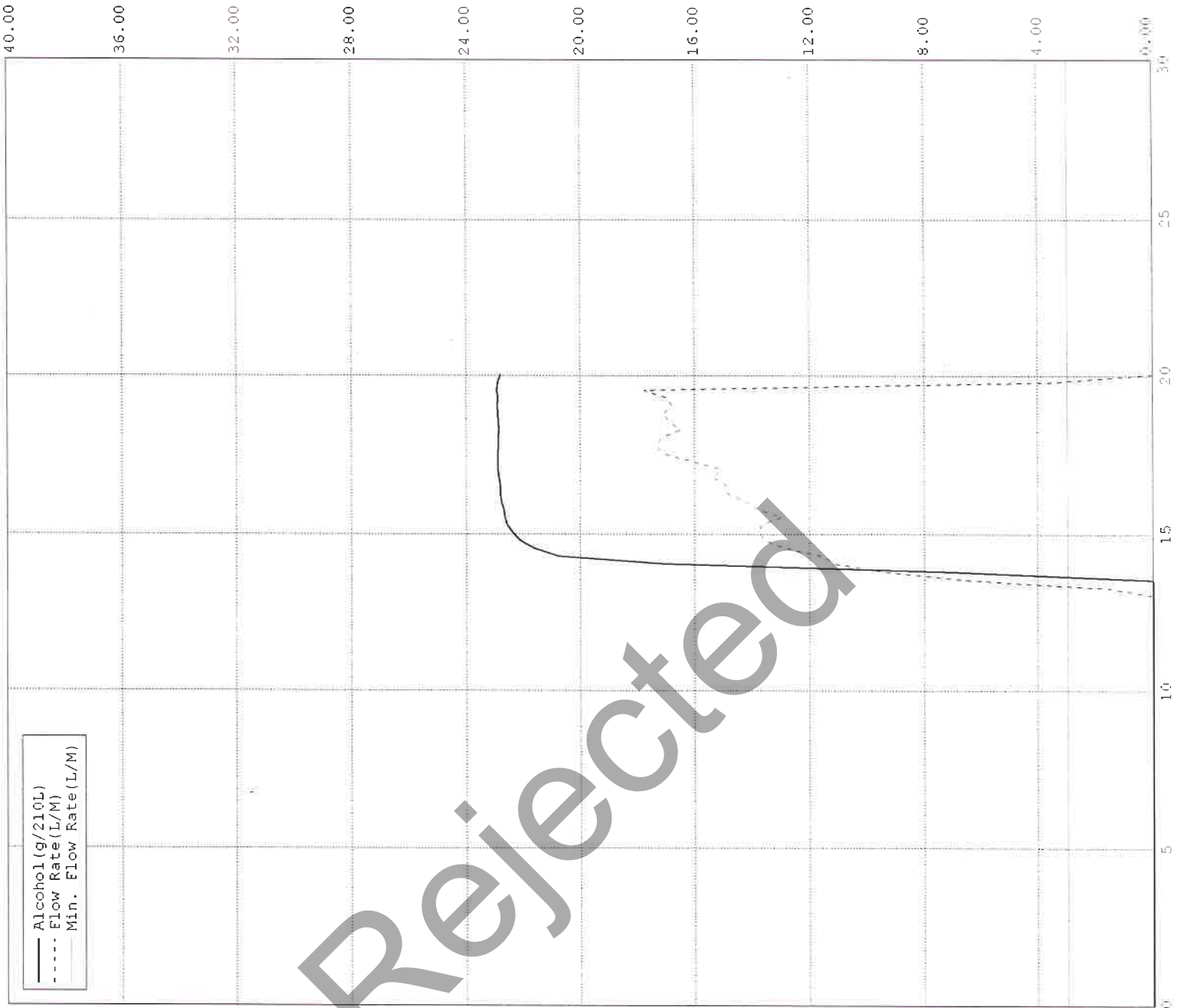
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK PASSED 13:14  
BLANK TEST 0.000 13:14  
INTERNAL STANDARD VERIFIED 13:14  
Xq = 0.091 (3.27%)  
EXTERNAL STANDARD 0.079 13:15  
X[1] = 0.0789 (0.0012) (0.0004)  
BLANK TEST 0.000 13:16  
SUBJECT SAMPLE XXX 13:16  
X[1] = 0.1141 (-0.0264) (-0.0005)

Interference Detected

MNC



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 13:01:26

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

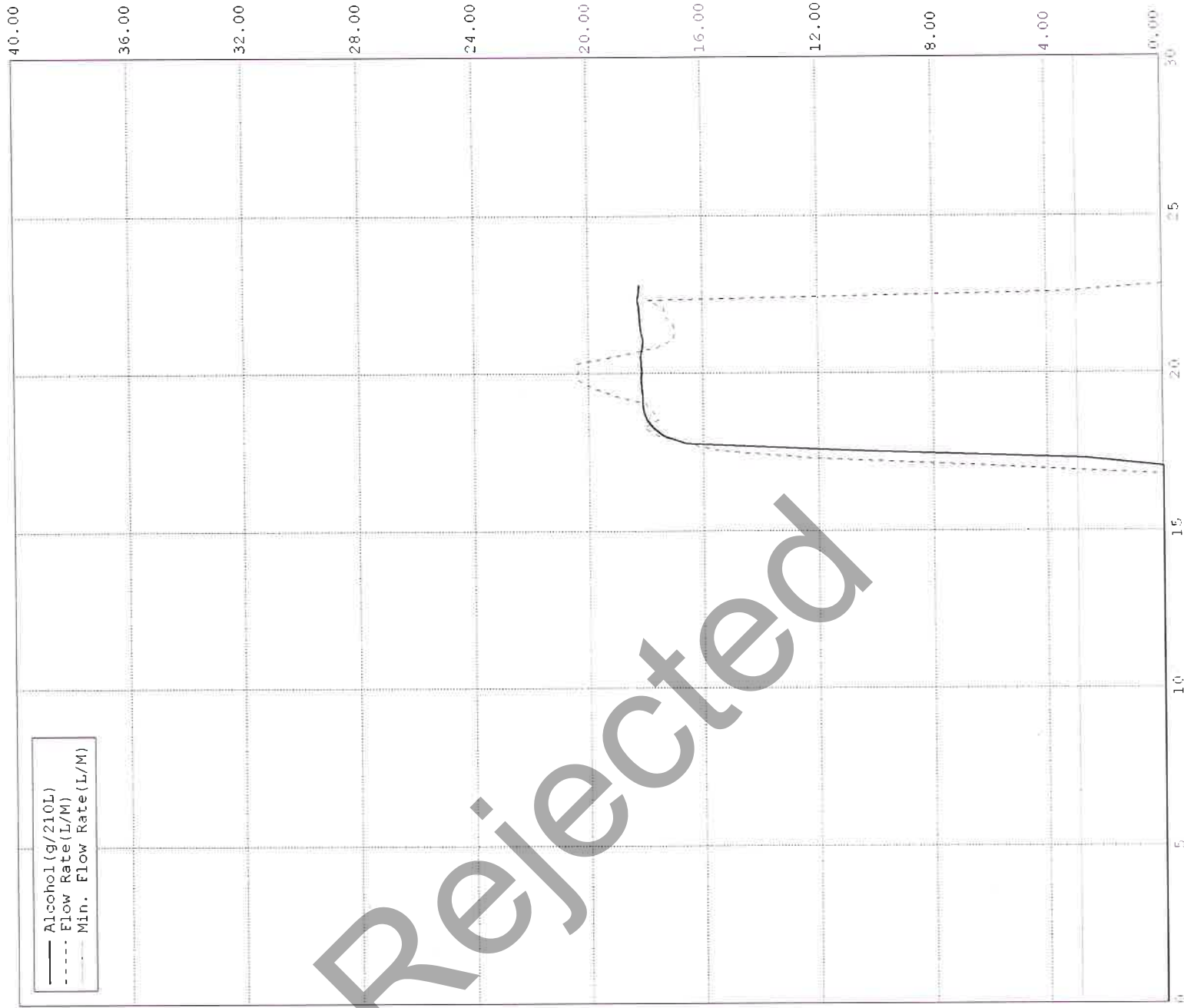
OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

DEPT/AGENCY:  
INTERFERENCE - NEGATIVE  
CASE/REPORT: XXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK	PASSED	13:02
BLANK TEST	0.000	13:02
INTERNAL STANDARD	VERIFIED	13:02
Xq = 0.090 (2.57%)	0.079	13:02
EXTERNAL STANDARD	X[1] = 0.0020	13:03
BLANK TEST	0.000	13:04
SUBJECT SAMPLE (Vol=1.60L)	0.091	13:04
X[1] = 0.0912 (-0.0005)	(-0.0011)	13:05
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.078	13:05
X[1] = 0.0784 (0.0012)	(0.0003)	13:06
BLANK TEST	0.000	13:06

MNC



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100676

Date: 06/17/2024  
Time: 13:31:19

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXX

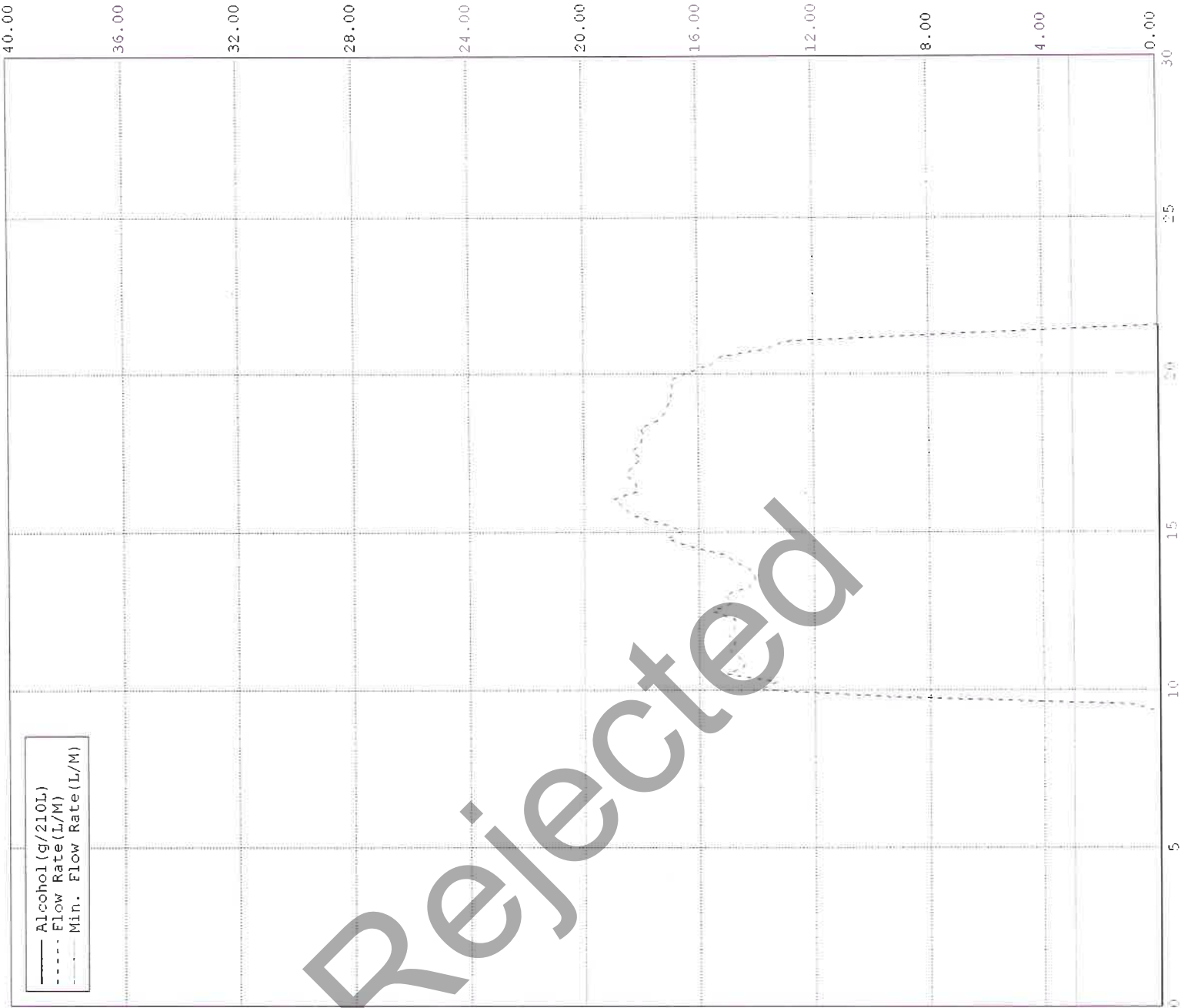
OPERATOR NAME:  
MEGAN CARLOCK  
OPERATOR'S #: 10747

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025

DIAGNOSTIC CHECK	PASSED	13:32
BLANK TEST	0.000	13:32
INTERNAL STANDARD	VERIFIED	13:32
EXTERNAL STANDARD	0.079	13:32
BLANK TEST	0.000	13:33
SUBJECT SAMPLE (Vol=3.10L)	0.000	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.079	13:35
BLANK TEST	0.000	13:36

MNC





# VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100676

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 06/17/2024

## External Standard Test Values

### EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.88: 0.080  
LOT #: AG310901  
EXPIRATION: 04/19/2025  
TANK PRESSURE: 497 psi

BLANK TEST	0.000	13:24
INTERNAL STANDARD	VERIFIED	13:24
EXTERNAL STANDARD	0.079	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.079	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.079	13:27
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.079	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.079	13:29
BLANK TEST	0.000	13:30

Average = 0.0790  
Std Dev = 0.0000

## Diagnostic Check

### VERSIONS

DMT: 3.02  
PIC: 3.03  
Modem: 2.6  
Questions: 2.2

### TEMPERATURES

Sample Chamber = 48.7°C	PASSED
Breath Tube = 46.7°C	PASSED

### PUMP INFO

Flow Rate = 4.212 L/M	PASSED
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### DETECTOR INFO

PUMP ON	PASSED
PUMP OFF	PASSED

### FILTER INFO

Filter 1	PASSED
Filter 2	PASSED
Filter 3	PASSED

### INTERNAL STANDARD

INTERNAL STANDARD	PASSED
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Rejected