

Alaska Scientific Crime Detection Laboratory

DataMaster Evaluation Form

Effective: 1/18/2024

Version: 4.0

Instrument #: 100699

Analyst/Technician(s): Megan Crouse

Start Date: 5/16/24

Supervised by Derek Walton
JWR 05/16/24

Date Instrument Received: 5/16/24

Reason for instrument evaluation

Several standard out of range messages and the external standard is reading low.

Visual Inspection:

- Clean
- Cermetex Box (modem) is secure
- Double Check Valve secured to wall
- O-ring inspection and ensure 2 replacement O-rings in bag
- Attach VOC
- VOC Internal Standard ≤ 3.00%
- Replace missing screws
- Ensure modem cable present
- All tubing and connections secure
- Verify software version

Condition of item: No apparent damage Damaged

NOTE: As Found Linearity is required if the instrument is not damaged and the internal standard value is not more than 4.00%

As Found Conditions (if performed):

Barometric Pressure (inHg): 29.71 Temperature (C): 21.9 Relative Humidity (%): 22

Linearity Test Levels (g/210L): 0.020, 0.080, 0.300

Notes: Replaced O-ring

- Attach Non-Drinking Subject Test

Conclusion:

- Ready for Adjustment
- Needs Repair
- Ready for Calibration

Lab Work End Date: 5/16/24

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100699

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 05/16/2024

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG335202 NMC 5/16/24
EXPIRATION: 12/18/2025
TANK PRESSURE: 1133 psi

BLANK TEST	0.000	11:08
INTERNAL STANDARD	VERIFIED	11:08
Xq = 0.076	(1.57%)	
EXTERNAL STANDARD	0.077	11:09
X[1] = 0.0773 (-0.0019) (0.0023)		
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.079	11:10
X[1] = 0.0792 (-0.0008) (0.0019)		
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.079	11:11
X[1] = 0.0788 (0.0003) (0.0015)		
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.077	11:12
X[1] = 0.0771 (-0.0025) (0.0013)		
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.078	11:13
X[1] = 0.0779 (-0.0027) (0.0006)		
BLANK TEST	0.000	11:14

Average = 0.0780
Std Dev = 0.0010

*External standard lot # was typed
incorrectly, see second VOC. NMC 5/16/24*

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.0°C
(44.0°C - 52.0°C) PASSED
Breath Tube = 40.3°C
(38.0°C - 50.0°C) PASSED

SETTINGS

Lamp Voltage = 1.56 V
(0.94 V - 2.18 V) PASSED
Cooler Voltage = 1.51 V
(0.94 V - 2.18 V) PASSED
Bias Voltage = 80 V
(48 V - 112 V) PASSED
Chopper Freq = 524 Hz
(475 Hz - 575 Hz) PASSED
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.347 L/M
(3.500 L/M - 6.500 L/M) PASSED

DETECTOR INFO

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

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.077 0.00% (0.00% - 4.00%) PASSED

VERIFICATION OF CALIBRATION REPORT

of DataMaster dmt Breath Test Instrument

State of Alaska

Serial #: 100699

Scientific Crime Detection Laboratory - Statewide Breath Alcohol Program

Date: 05/16/2024

External Standard Test Values

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.78: 0.080
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 1056 psi

BLANK TEST	0.000	12:10
INTERNAL STANDARD	VERIFIED	12:10
Xq = 0.078	(1.24%)	
EXTERNAL STANDARD	0.080	12:11
X[1] = 0.0795	(-0.0024)	(-0.0007)
BLANK TEST	0.000	12:12
EXTERNAL STANDARD	0.080	12:12
X[1] = 0.0796	(-0.0007)	(0.0027)
BLANK TEST	0.000	12:13
EXTERNAL STANDARD	0.079	12:13
X[1] = 0.0791	(-0.0011)	(0.0001)
BLANK TEST	0.000	12:14
EXTERNAL STANDARD	0.079	12:14
X[1] = 0.0787	(-0.0004)	(-0.0004)
BLANK TEST	0.000	12:15
EXTERNAL STANDARD	0.079	12:15
X[1] = 0.0790	(-0.0004)	(-0.0005)
BLANK TEST	0.000	12:16

Average = 0.0794
Std Dev = 0.0005

Diagnostic Check

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.7 °C
(44.0 °C - 52.0 °C) PASSED
Breath Tube = 43.4 °C
(38.0 °C - 50.0 °C) PASSED

SETTINGS

Lamp Voltage = 1.56 V
(0.94 V - 2.18 V) PASSED
Cooler Voltage = 1.51 V
(0.94 V - 2.18 V) PASSED
Bias Voltage = 80 V
(48 V - 112 V) PASSED
Chopper Freq = 532 Hz
(475 Hz - 575 Hz) PASSED
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.341 L/M
(3.500 L/M - 6.500 L/M) PASSED

DETECTOR INFO

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

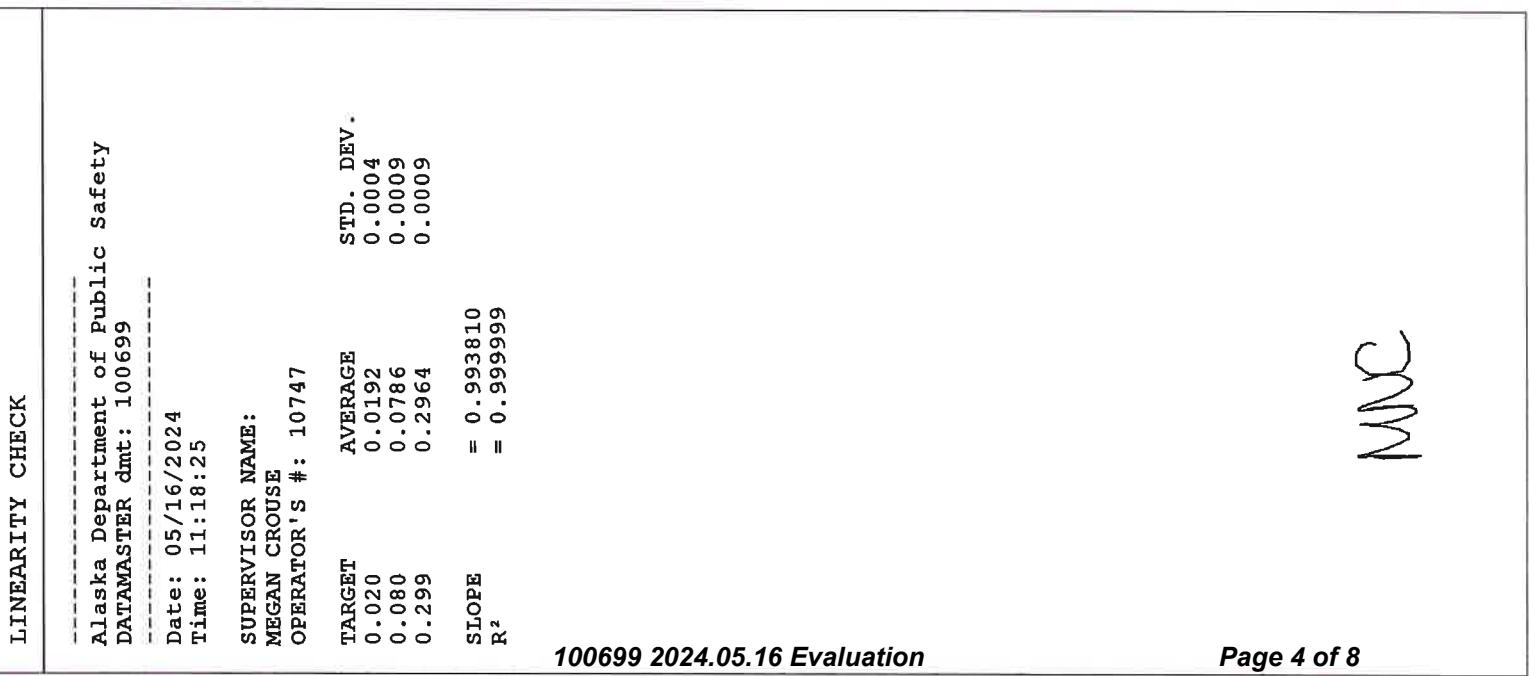
FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.076 1.46% (0.00% - 4.00%) PASSED

LINEARITY CHECK



0.600

0.500

0.300

0.200

0.100

0.000

0.600
0.500
0.400
0.300
0.200
0.100
0.000

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100699

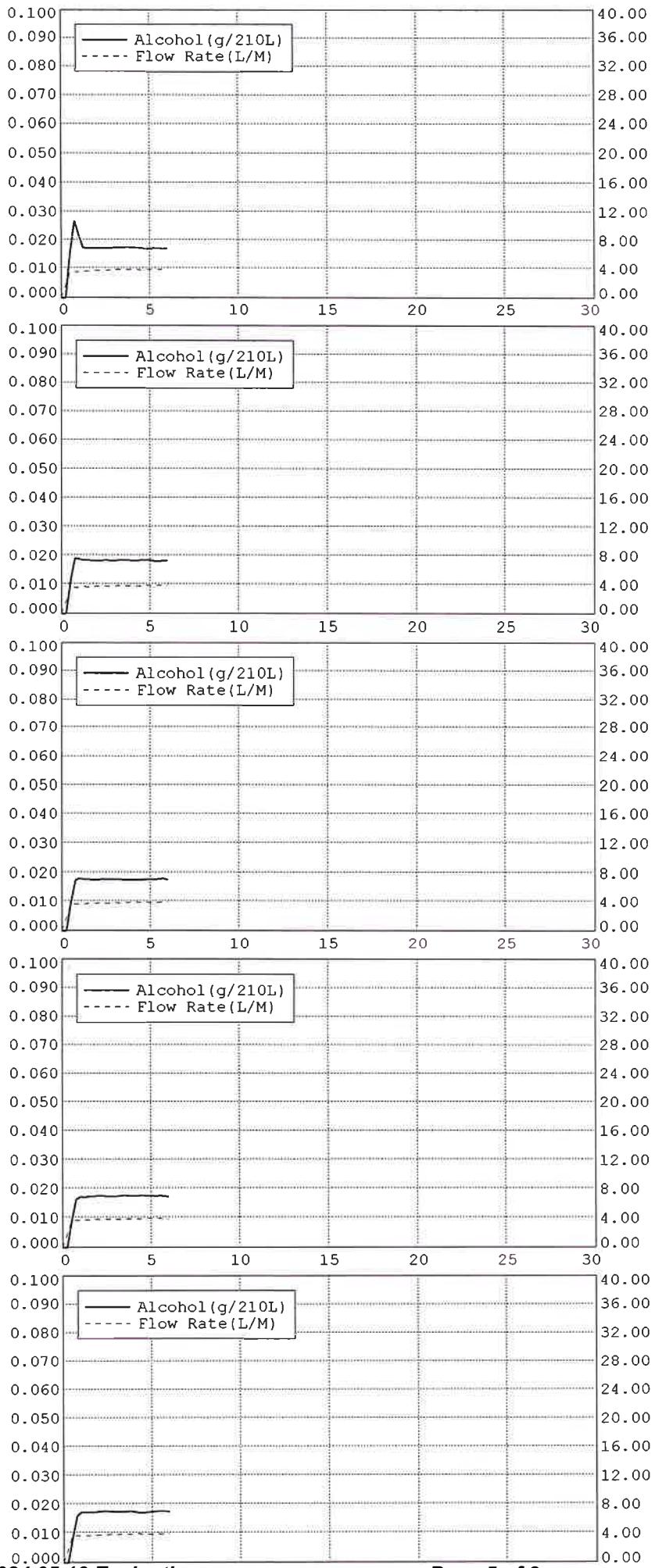
Date: 05/16/2024
Time: 11:18:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.79: 0.020
LOT #: AG217902
EXPIRATION: 06/28/2024
TANK PRESSURE: 480 psi

BLANK TEST	0.000	11:19
INTERNAL STANDARD	VERIFIED	11:19
EXTERNAL STANDARD	0.019	11:20
BLANK TEST	0.000	11:21
EXTERNAL STANDARD	0.020	11:21
BLANK TEST	0.000	11:22
EXTERNAL STANDARD	0.019	11:22
BLANK TEST	0.000	11:23
EXTERNAL STANDARD	0.019	11:23
BLANK TEST	0.000	11:24
EXTERNAL STANDARD	0.019	11:24
BLANK TEST	0.000	11:25

Average = 0.0192
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100699

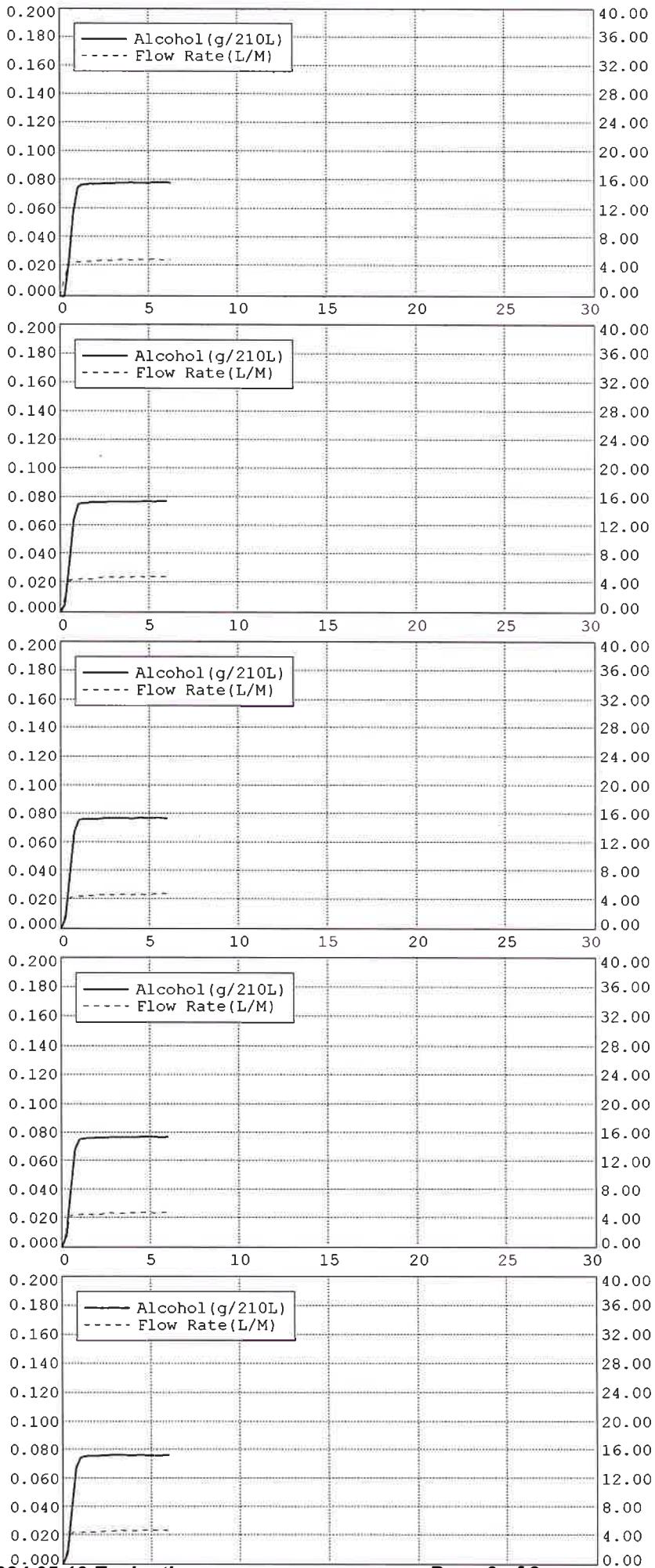
Date: 05/16/2024
Time: 11:27:08

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.79: 0.080
LOT #: AG335202
EXPIRATION: 12/18/2025
TANK PRESSURE: 1099 psi

BLANK TEST	0.000	11:28
INTERNAL STANDARD	VERIFIED	11:28
EXTERNAL STANDARD	0.080	11:28
BLANK TEST	0.000	11:29
EXTERNAL STANDARD	0.079	11:30
BLANK TEST	0.000	11:31
EXTERNAL STANDARD	0.078	11:31
BLANK TEST	0.000	11:32
EXTERNAL STANDARD	0.078	11:32
BLANK TEST	0.000	11:33
EXTERNAL STANDARD	0.078	11:33
BLANK TEST	0.000	11:34

Average = 0.0786
Std Dev = 0.0009



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100699

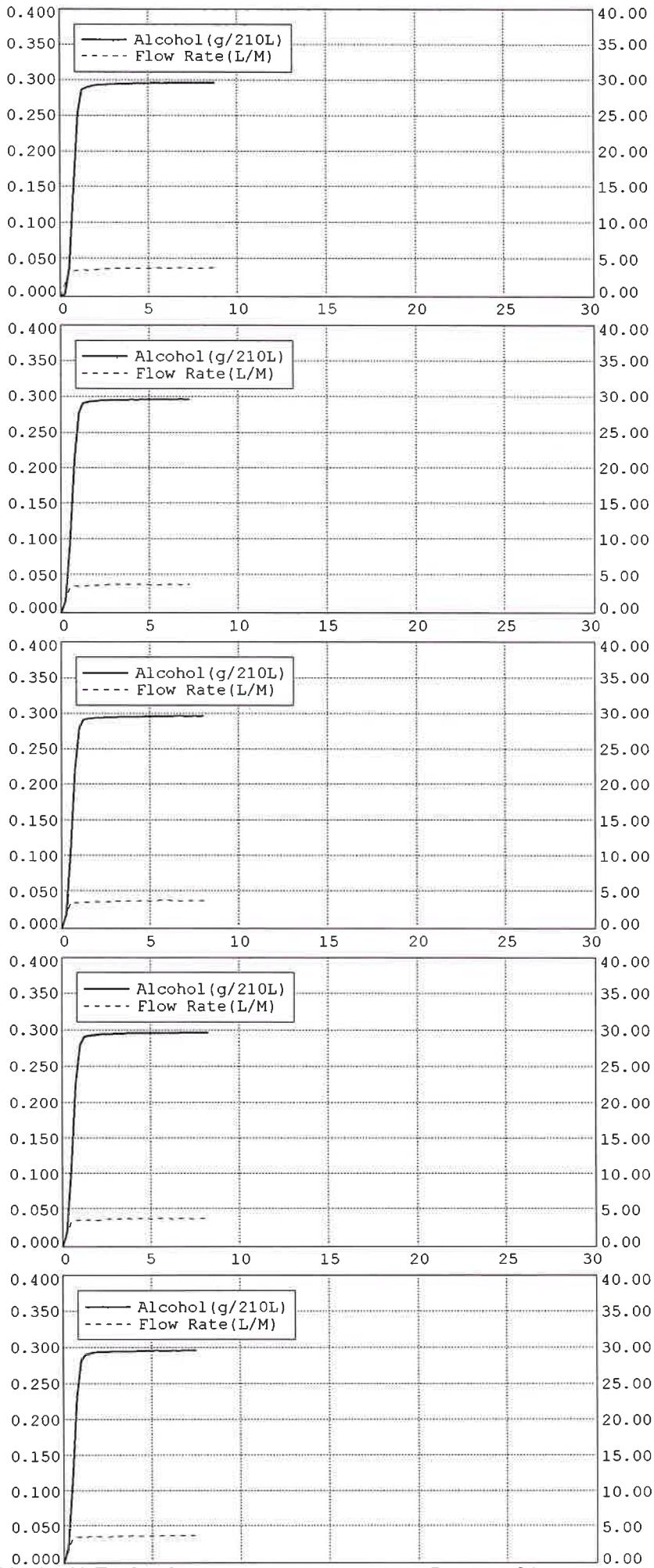
Date: 05/16/2024
Time: 11:37:08

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
TARGET AT 29.79: 0.299
LOT #: AG327804
EXPIRATION: 10/05/2025
TANK PRESSURE: 429 psi

BLANK TEST	0.000	11:38
INTERNAL STANDARD	VERIFIED	11:38
EXTERNAL STANDARD	0.296	11:38
BLANK TEST	0.000	11:39
EXTERNAL STANDARD	0.296	11:39
BLANK TEST	0.000	11:40
EXTERNAL STANDARD	0.298	11:40
BLANK TEST	0.000	11:41
EXTERNAL STANDARD	0.296	11:42
BLANK TEST	0.000	11:43
EXTERNAL STANDARD	0.296	11:43
BLANK TEST	0.000	11:44

Average = 0.2964
Std Dev = 0.0009

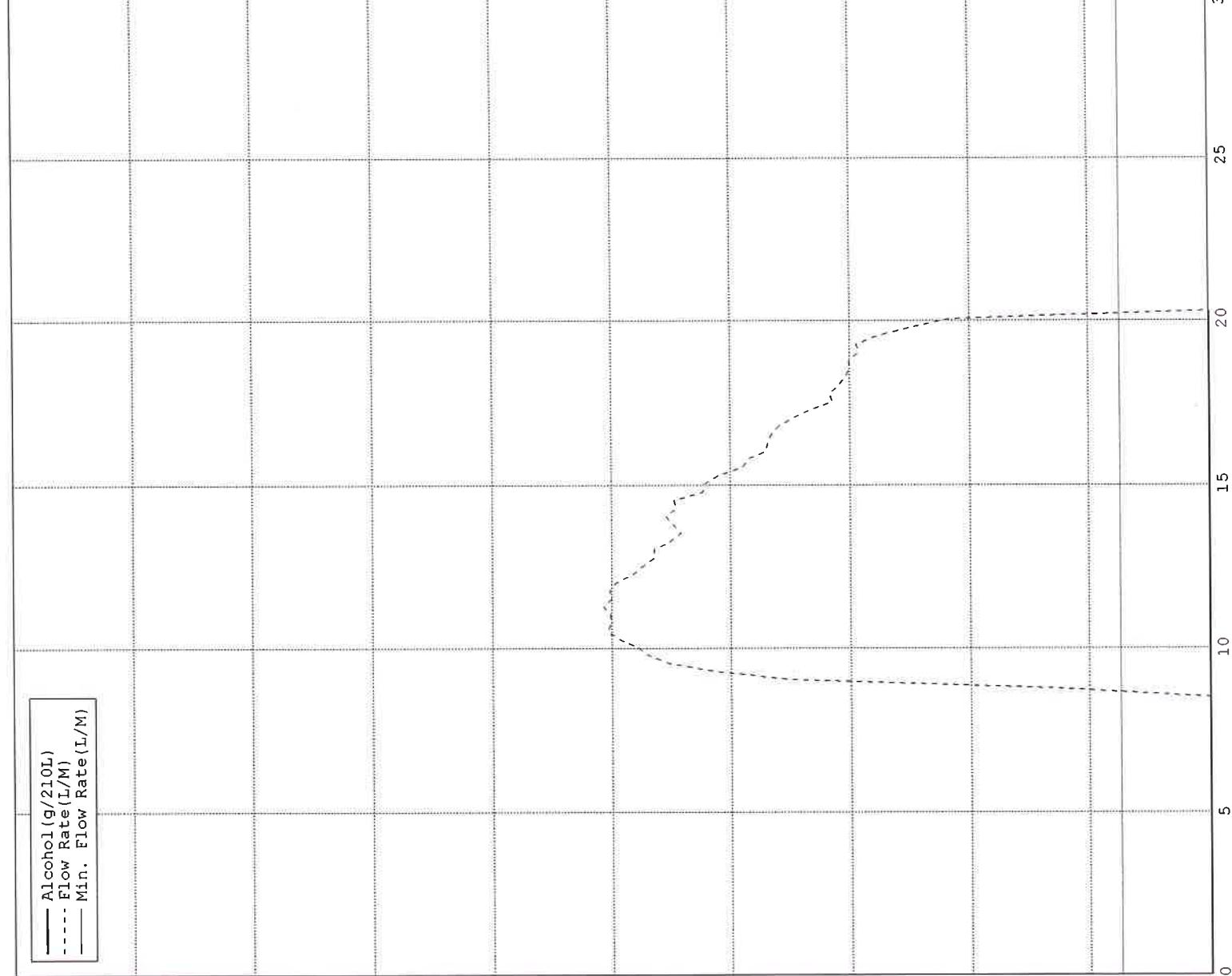


40.00

36.00

32.00

0.00

**SUBJECT TEST**

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 05/16/2024
Time: 12:19:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXX

OPERATOR NAME:
MEGAN CROUSE
OPERATOR'S #: 10747

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

EXTERNAL STANDARD INFORMATION

100NOMINAL: 0.080

TARGET AT 29.78: 0.080

LOT #: AG335202

EXPIRATION: 12/18/2025

DIAGNOSTIC CHECK
BLANK TEST
INTERNAL STANDARD
EXTERNAL STANDARD
BLANK TEST
SUBJECT SAMPLE (Vol=3.04L)
BLANK TEST
EXTERNAL STANDARD
BLANK TEST

	PASSED	12:20
BLANK TEST	0.000	12:20
INTERNAL STANDARD	VERIFIED	12:20
EXTERNAL STANDARD	0.079	12:21
BLANK TEST	0.000	12:21
SUBJECT SAMPLE (Vol=3.04L)	0.000	12:22
BLANK TEST	0.000	12:23
EXTERNAL STANDARD	0.080	12:23
BLANK TEST	0.000	12:24

MNC