

Alaska Scientific Crime Detection Laboratory

DataMaster Calibration Form

Effective: 10/10/2022

Version: 3.0

Instrument #: 100695 Analyst: Carlie Haister Start Date: 10/31/23

- Diagnostic Test (attached)
- Adjust voltages, if needed
 - Lamp (2.60 V Maximum)
 - Bias
 - Cooler (2.00 V Maximum)
- Internal Standard value \leq 3.00%
 - Chopper Frequency
 - Detector Voltage (-0.100V to 0.100V)
- Set RFI Sensitivity
- Adjust internal barometer reading to match NIST-traceable barometer
- Adjust volume setting, if needed (1.50 L +/- 0.10 L)
- Print Technician Screen (attached)
- Print Calibration Factors (attached)
- Minimum Volume Test 1.5 L (1.3L to 1.7L)

As Left Conditions:

Barometric Pressure (in Hg): 29.83 Temperature (C): 21.3 Relative Humidity (%) 22

Linearity Test (attached)

0.020g/210L Mnf: <u>Airgas</u>	Lot: <u>AG-217902</u>	Exp: <u>6/28/24</u>
0.040g/210L Mnf: <u>Airgas</u>	Lot: <u>AG-217904</u>	Exp: <u>6/28/24</u>
0.080g/210L Mnf: <u>Ilmo</u>	Lot: <u>09523080A1</u>	Exp: <u>5/5/25</u>
0.100g/210L Mnf: <u>Airgas</u>	Lot: <u>AG-211003</u>	Exp: <u>4/20/24</u>
0.150g/210L Mnf: <u>Airgas</u>	Lot: <u>AG-134205</u>	Exp: <u>12/8/23</u>
0.300g/210L Mnf: <u>Airgas</u>	Lot: <u>AG-217903</u>	Exp: <u>6/28/24</u>

Functional Tests (attached)

- Incomplete
- Maximum Attempts Exceeded
- Interference (Volatiles)
- Invalid Internal standard error 4.20%
- Radio Frequency Interference (RFI)

Acetone Mnf: _____ Lot: _____ Level: 0.100 Exp: _____

Simulator S/N: _____ Verification Performed?

Isopropanol Mnf: _____ Lot: _____ Level: 0.100 Exp: _____

Simulator S/N: _____ Verification Performed?

Neg. Control Mnf: _____ Lot: _____ Level: 0.100 Exp: _____

Simulator S/N: _____ Verification Performed?

Calibrated External Thermometer:

Thermometer S/N: 210958384 Calibration Due Date: 11/9/23

- Verify stylus is calibrated
- Reset Options
- Clear Memory
- Verification of Calibration (VOC)
- Non-Drinking Subject Test
- Upload
- Remove Tank Prior to Shutdown

Calibration End Date: 10/31/23 - Failed

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 10/31/2023
Time: 09:44:05

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

TEMPERATURES

Sample Chamber = 48.7°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.79 V PASSED
(0.95 V - 2.23 V)
Cooler Voltage = 1.63 V PASSED
(0.95 V - 2.21 V)
Bias Voltage = 80 V PASSED
(49 V - 113 V)
Chopper Freq = 550 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.404 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

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

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.112 2.26% (0.00% - 4.00%) PASSED

Calibration Rejected

Technician Screen

DATAMASTER dmt: 100695

Date: 10/31/2023
Time: 9:52 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 45.7°C

Current Barometer 29.8 in
Volume (Ltr) 1.58

Settings
Lamp: 1.79 V
Bias: 80 V
Cooler: 1.79 V
Chopper: 553 Hz

Voltages (V)
Flow: 1.04 V
Detector: 0.069 V

Calibration Rejected

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 11/03/2011
Time: 11:06:42

Ca	=	0.1000			
CAL	=	0.983513	0.800	<=	CAL < 1.200
b1	=	0.0004	0.0000	<=	b1 < 0.0040
b2	=	0.0038	0.0010	<=	b2 < 0.0100
b3	=	0.0001	0.0000	<=	b3 < 0.0040
Xq	=	0.1092	0.0500	<=	Xq < 0.2000
a21	=	1.156617	1.050	<=	a21 < 1.300
a31	=	0.538073	0.300	<=	a31 < 0.800

Calibration Rejected

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 10/31/2023
Time: 09:55:10

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

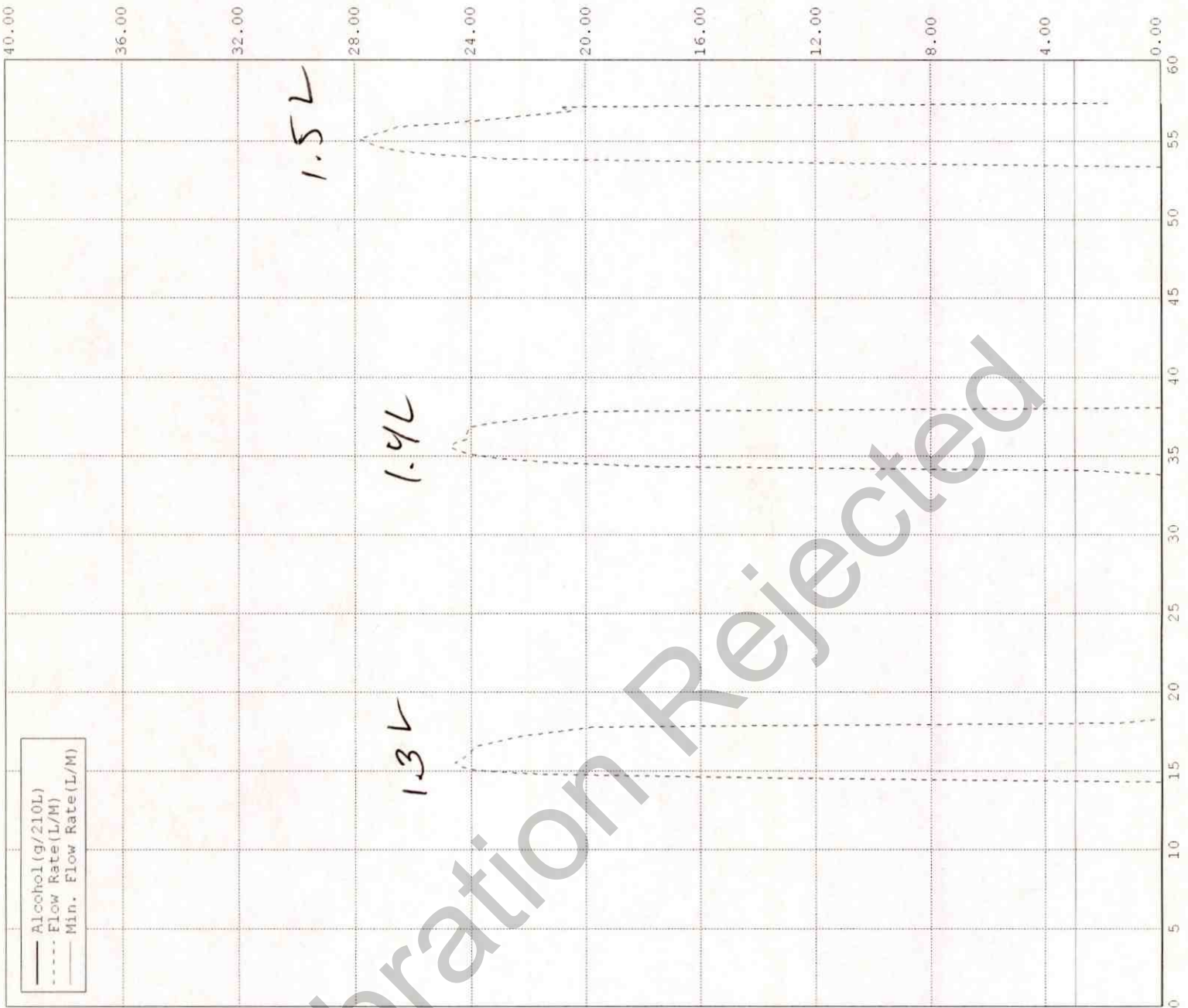
OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.85: 0.080
LOT #: 09523080A1
EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK	PASSED	09:56
BLANK TEST	0.000	09:56
INTERNAL STANDARD	VERIFIED	09:56
EXTERNAL STANDARD	0.080	09:56
BLANK TEST	0.000	09:57
SUBJECT SAMPLE (Vol=1.51L)	0.000	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.079	09:59
BLANK TEST	0.000	10:00

CKW



LINEARITY CHECK

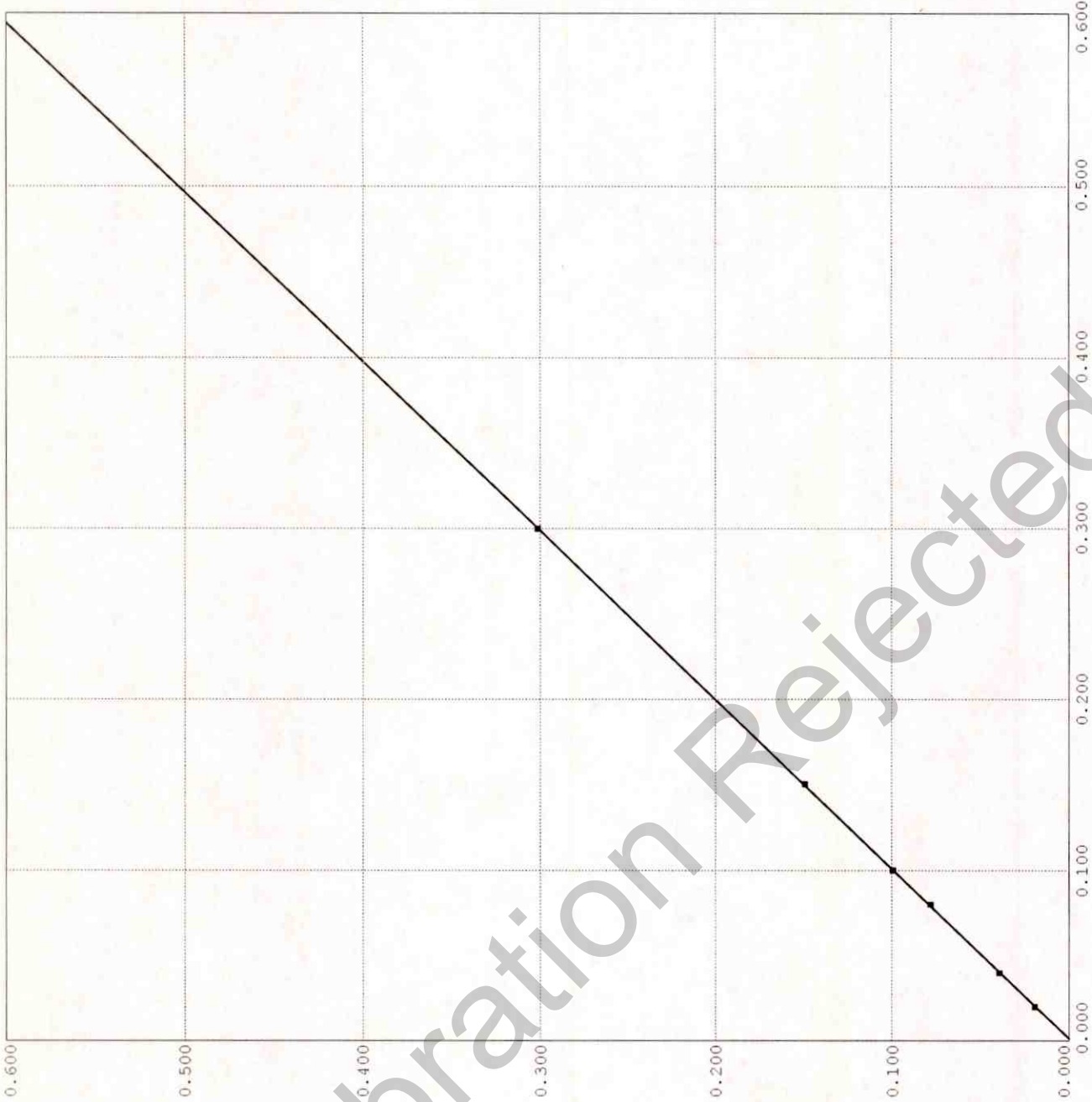
Alaska Department of Public Safety
 DATAMASTER dmt: 100695

Date: 10/31/2023
 Time: 12:37:04

SUPERVISOR NAME:
 CARLIE GLAISTER
 OPERATOR'S #: 10436

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0400	0.0000
0.080	0.0792	0.0004
0.100	0.1002	0.0004
0.150	0.1500	0.0000
0.299	0.3020	0.0000

SLOPE = 1.011282
 R² = 0.999958



Calibration Rejected

CKG

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100695

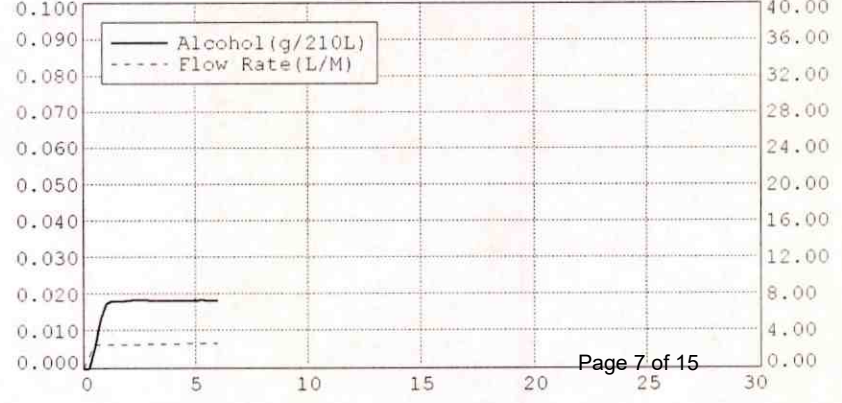
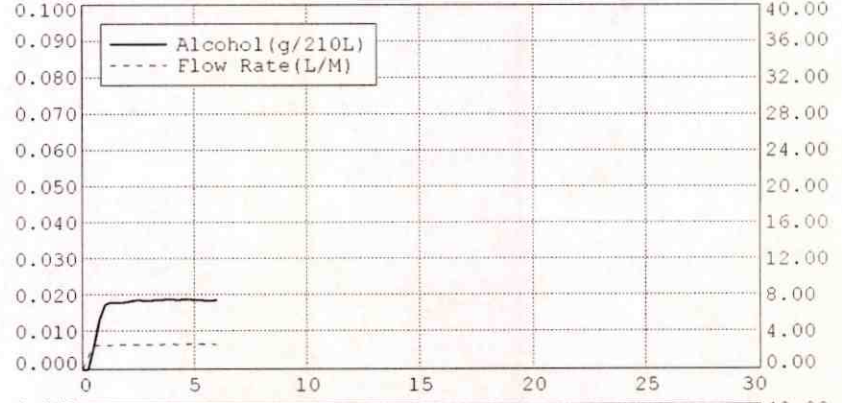
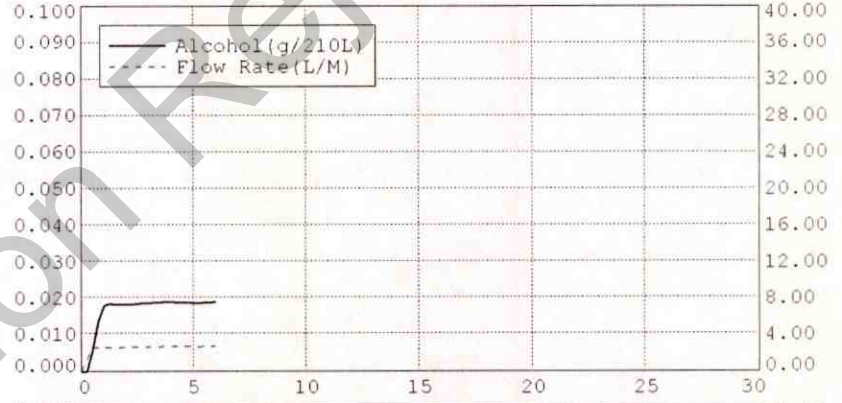
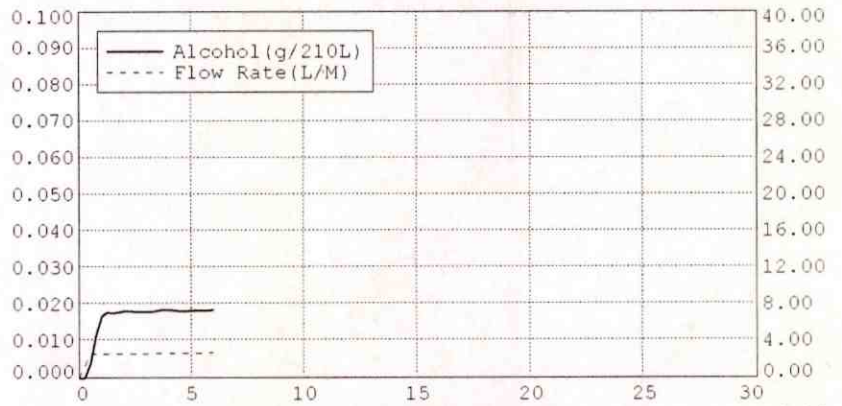
Date: 10/31/2023
Time: 12:37:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.85: 0.020
LOT #: AG217902
EXPIRATION: 06/28/2024
TANK PRESSURE: 741 psi

TEST TYPE	CONCENTRATION	TIME
BLANK TEST	0.000	12:38
INTERNAL STANDARD	VERIFIED	12:38
EXTERNAL STANDARD	0.020	12:38
BLANK TEST	0.000	12:39
EXTERNAL STANDARD	0.020	12:40
BLANK TEST	0.000	12:40
EXTERNAL STANDARD	0.020	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.020	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.020	12:43
BLANK TEST	0.000	12:44

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100695

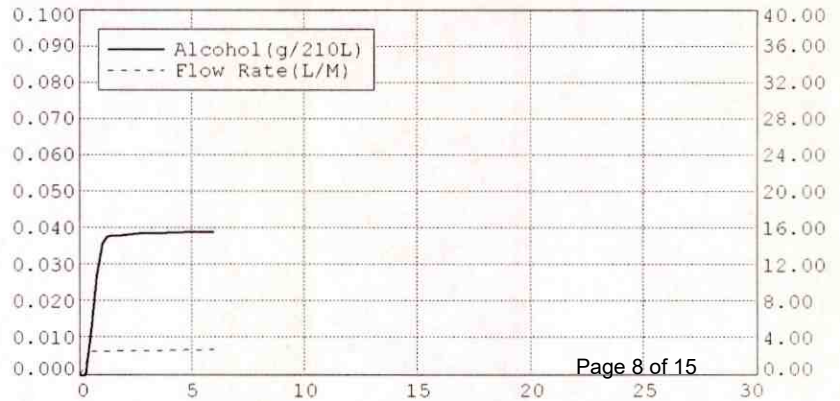
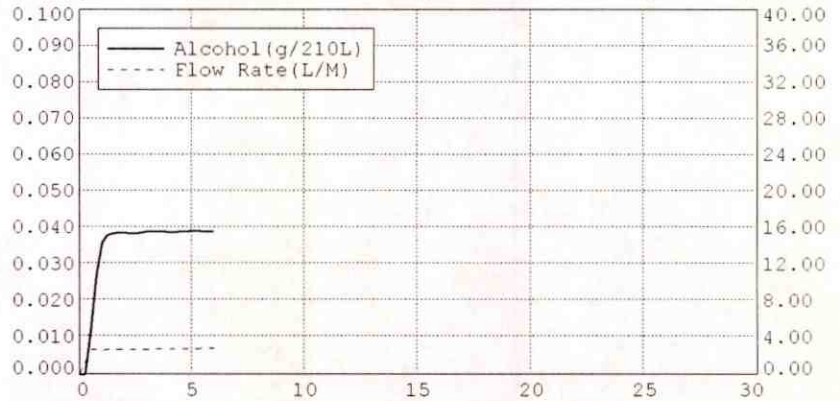
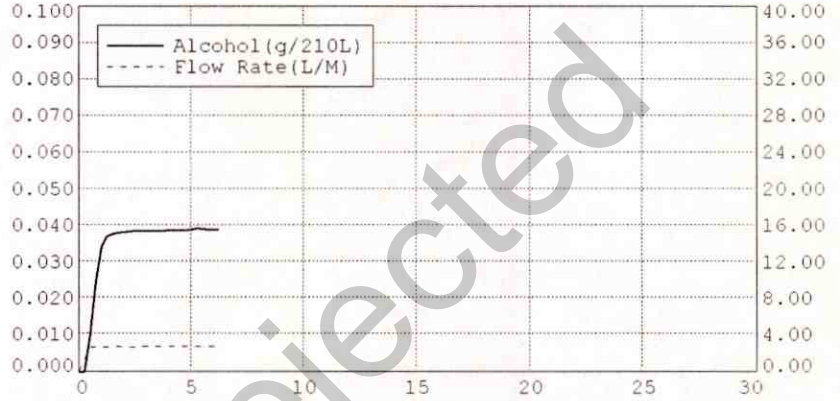
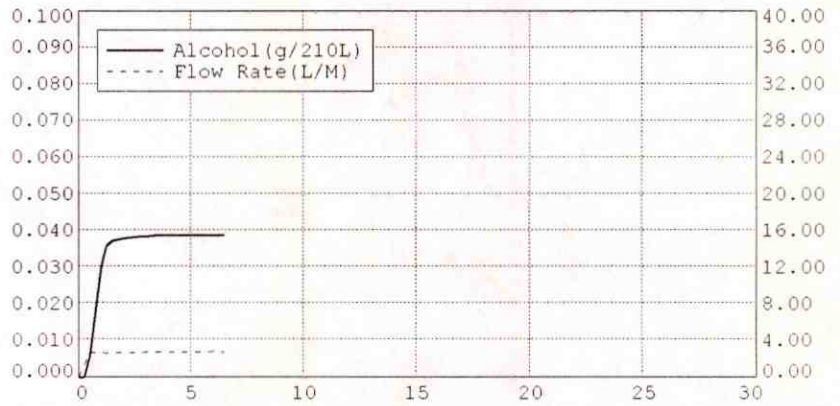
Date: 10/31/2023
Time: 12:45:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.85: 0.040
LOT #: AG217904
EXPIRATION: 06/28/2024
TANK PRESSURE: 854 psi

BLANK TEST	0.000	12:46
INTERNAL STANDARD	VERIFIED	12:46
EXTERNAL STANDARD	0.040	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.040	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.040	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.040	12:50
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.040	12:51
BLANK TEST	0.000	12:52

Average = 0.0400
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

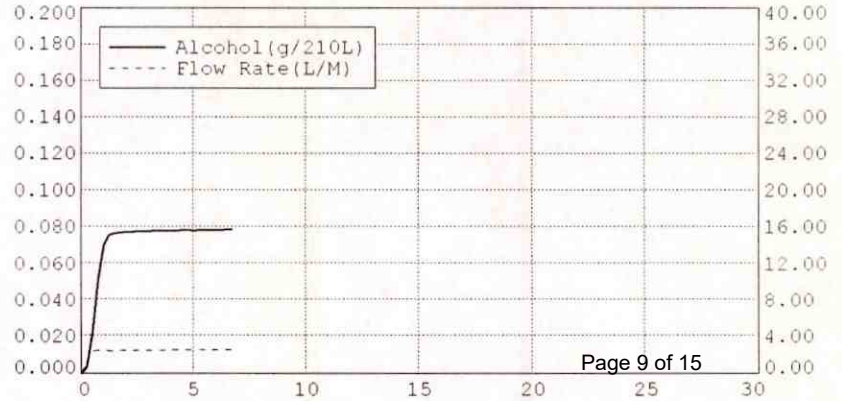
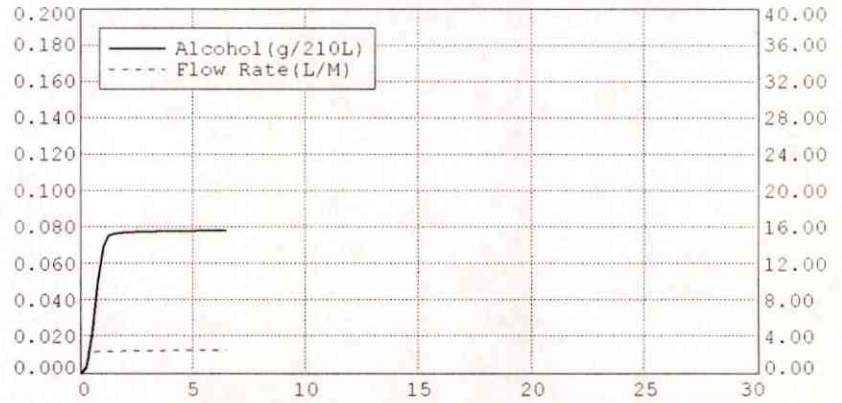
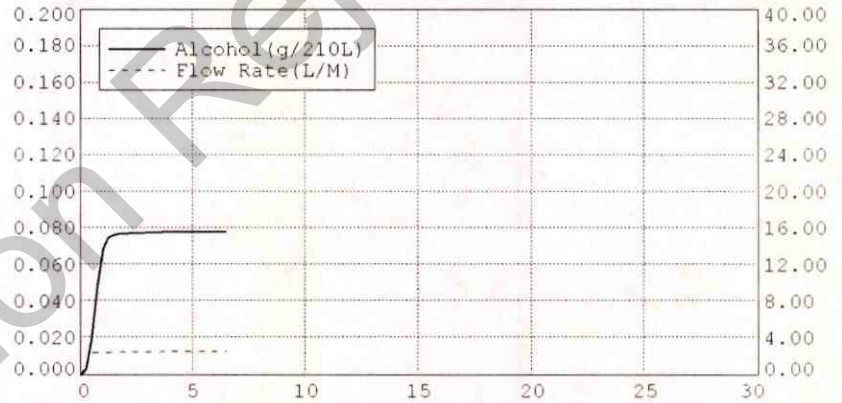
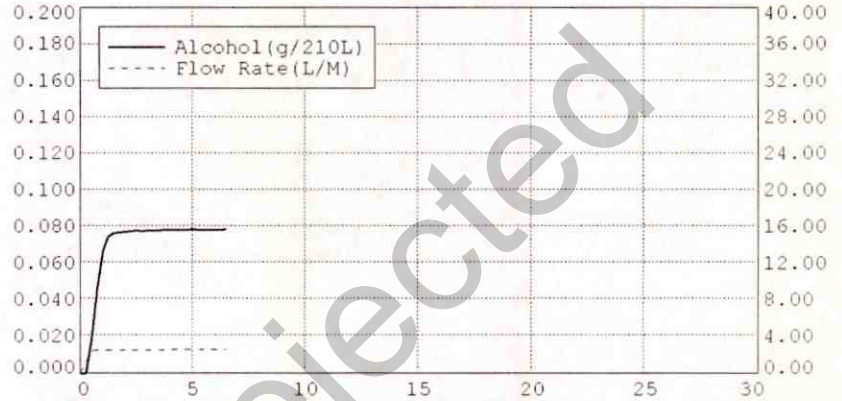
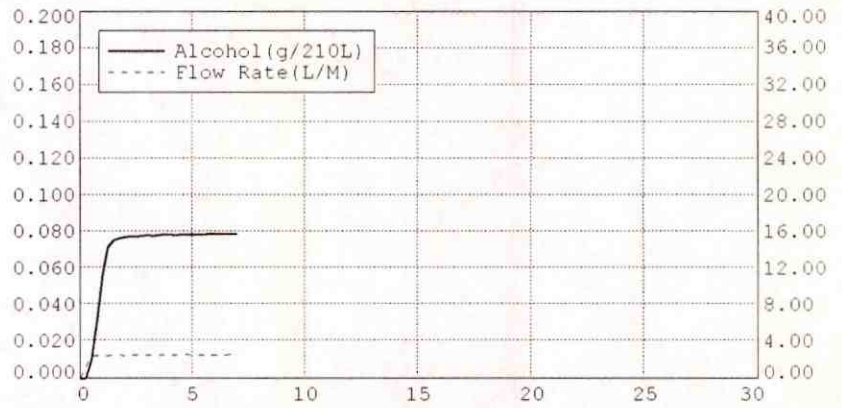
Date: 10/31/2023
 Time: 12:53:54

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.85: 0.080
 LOT #: 09523080A1
 EXPIRATION: 05/05/2025
 TANK PRESSURE: 439 psi

BLANK TEST	0.000	12:55
INTERNAL STANDARD	VERIFIED	12:55
EXTERNAL STANDARD	0.080	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.079	12:56
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.079	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.079	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.079	13:00
BLANK TEST	0.000	13:00

Average = 0.0792
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

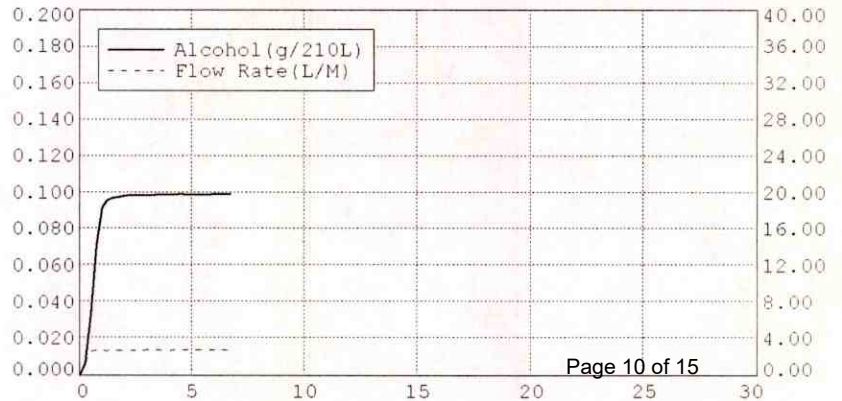
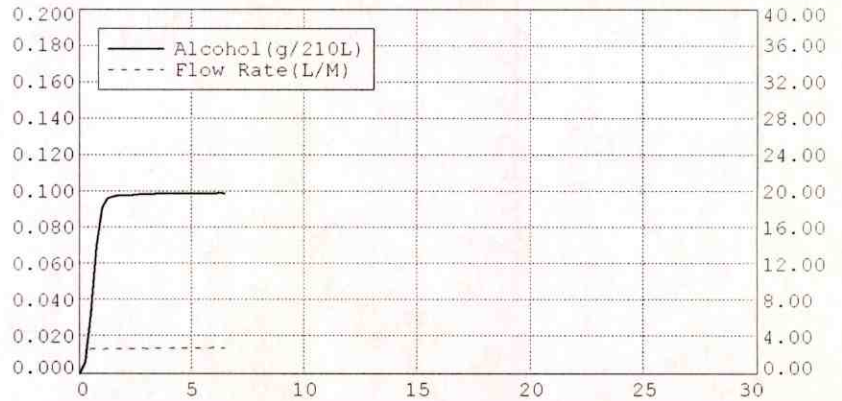
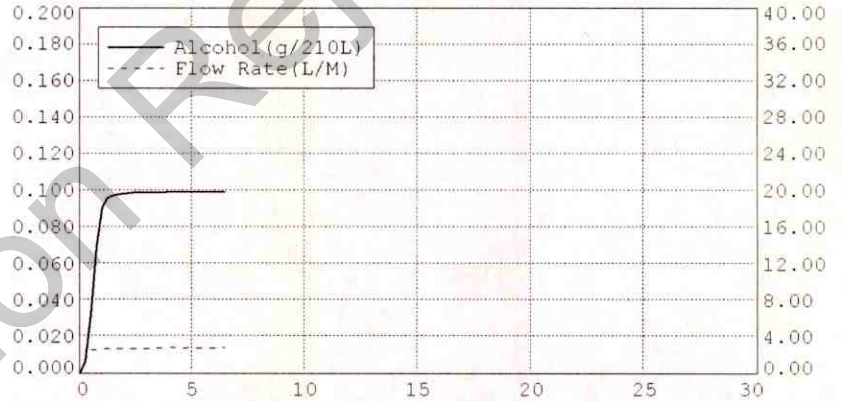
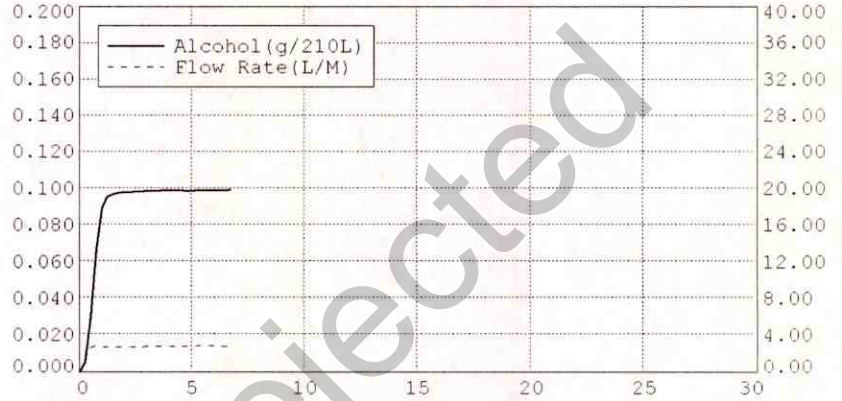
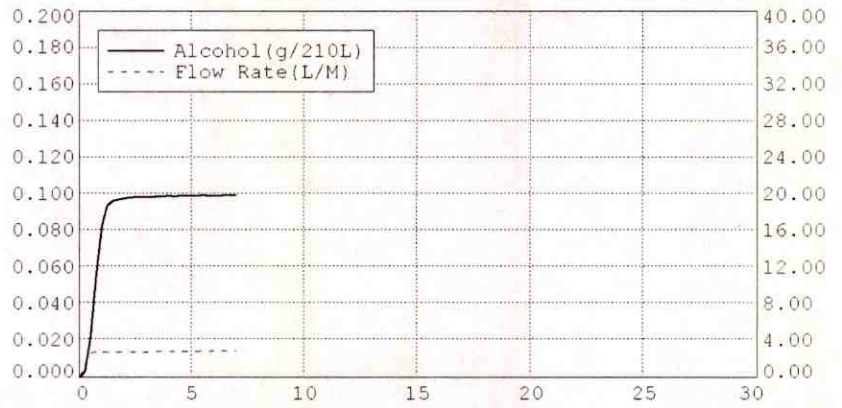
Date: 10/31/2023
 Time: 13:01:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.84: 0.100
 LOT #: AG211003
 EXPIRATION: 04/20/2024
 TANK PRESSURE: 1048 psi

BLANK TEST	0.000	13:03
INTERNAL STANDARD	VERIFIED	13:03
EXTERNAL STANDARD	0.100	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.100	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.101	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.100	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.100	13:07
BLANK TEST	0.000	13:08

Average = 0.1002
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

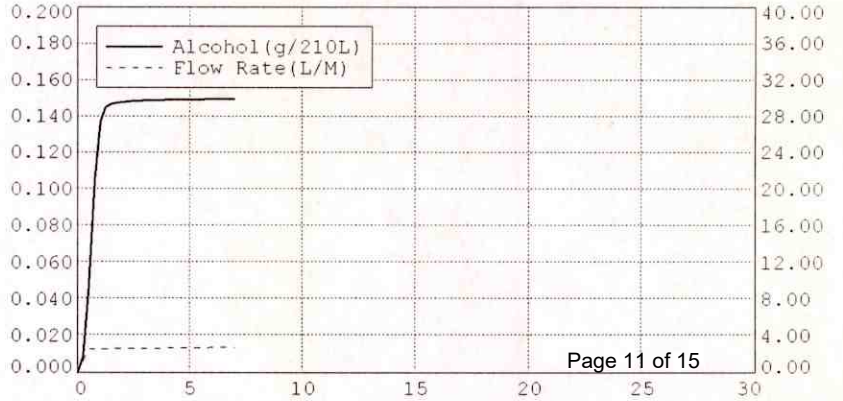
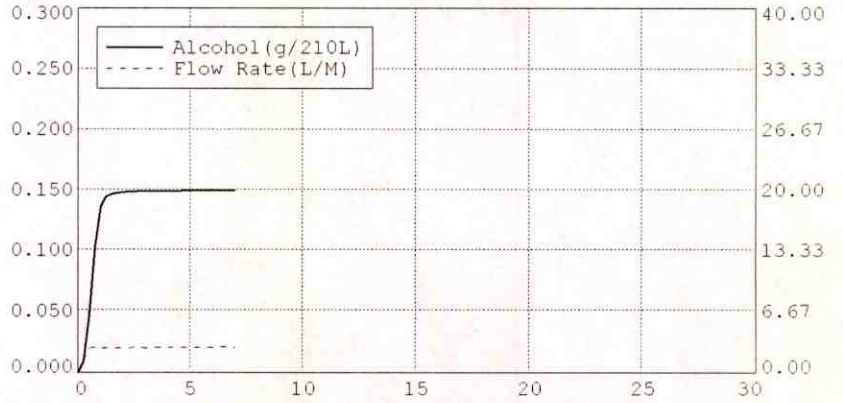
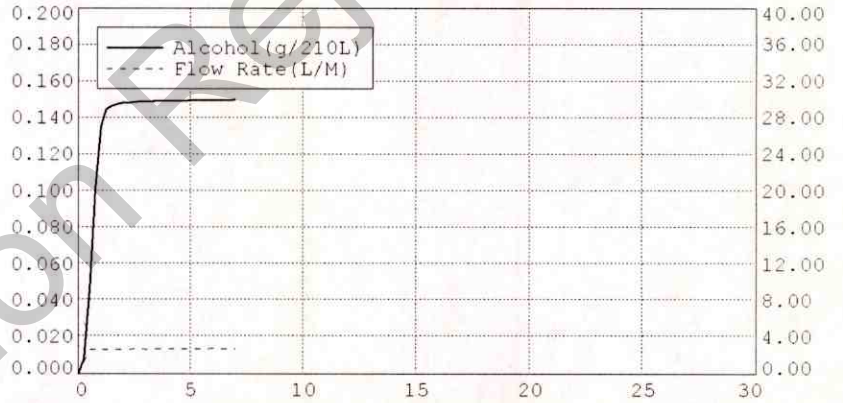
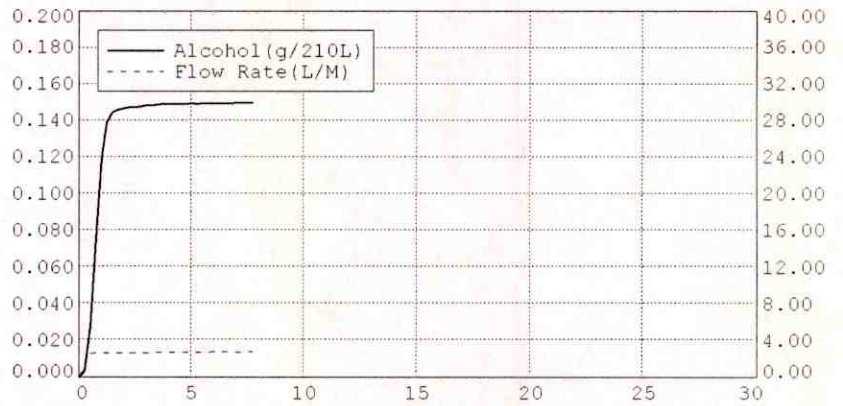
Date: 10/31/2023
 Time: 13:12:16

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.150
 TARGET AT 29.84: 0.150
 LOT #: AG134205
 EXPIRATION: 12/08/2023
 TANK PRESSURE: 891 psi

BLANK TEST	0.000	13:13
INTERNAL STANDARD	VERIFIED	13:13
EXTERNAL STANDARD	0.150	13:14
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.150	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.150	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.150	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.150	13:18
BLANK TEST	0.000	13:19

Average = 0.1500
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
DATAMASTER dmt: 100695

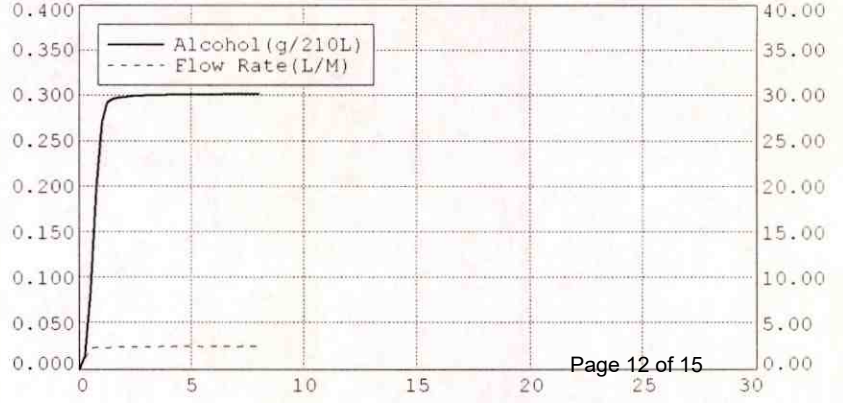
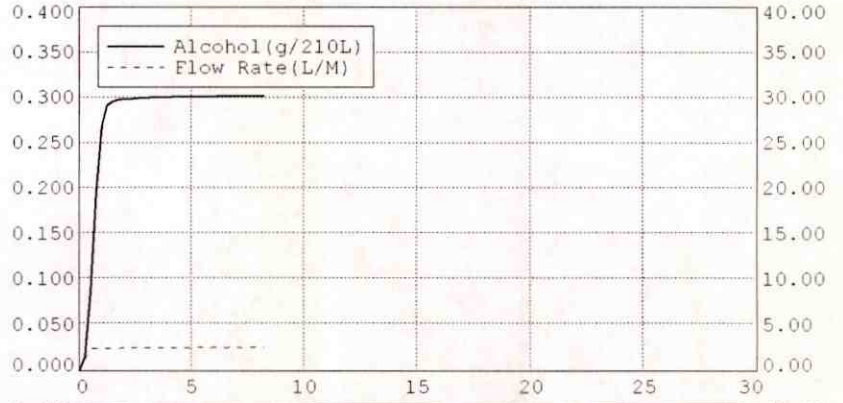
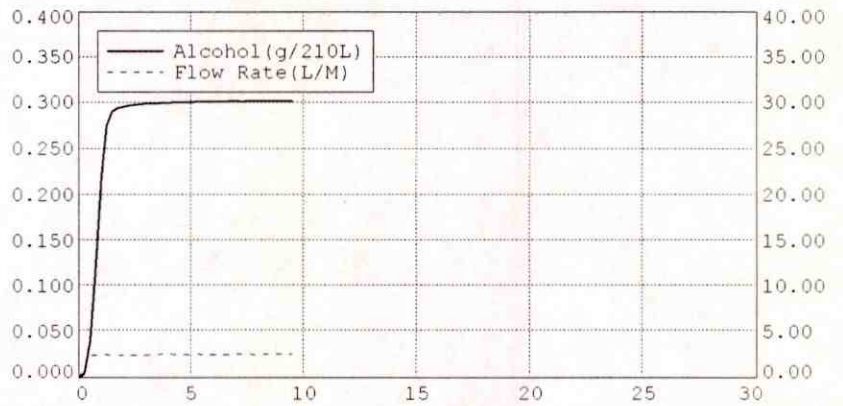
Date: 10/31/2023
Time: 13:20:10

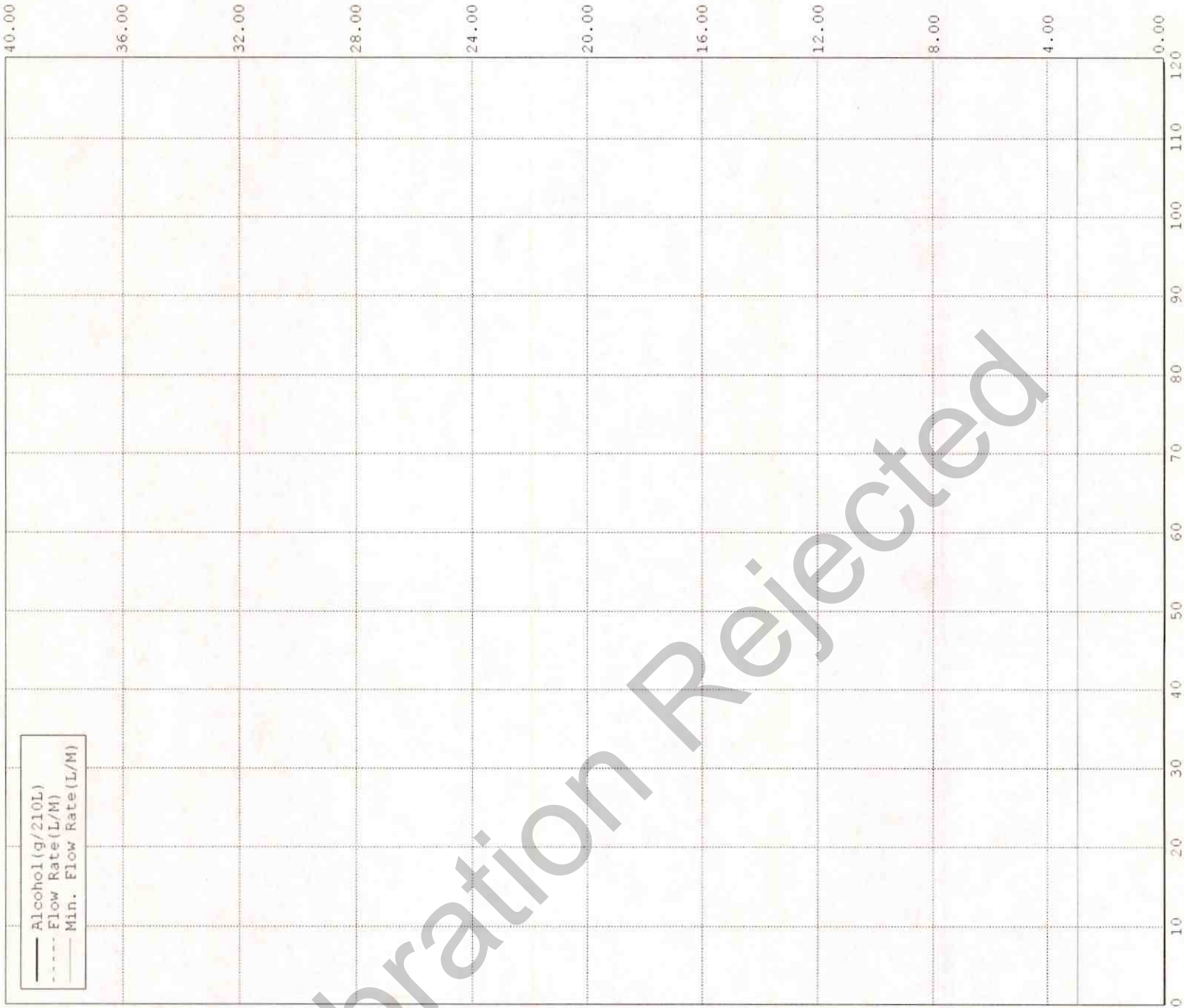
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
TARGET AT 29.84: 0.299
LOT #: AG217903
EXPIRATION: 06/28/2024
TANK PRESSURE: 415 psi

BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:21
EXTERNAL STANDARD	0.302	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.302	13:23
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.302	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.302	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.302	13:26
BLANK TEST	0.000	13:27

Average = 0.3020
Std Dev = 0.0000





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100695

 Date: 10/31/2023
 Time: 13:36:16

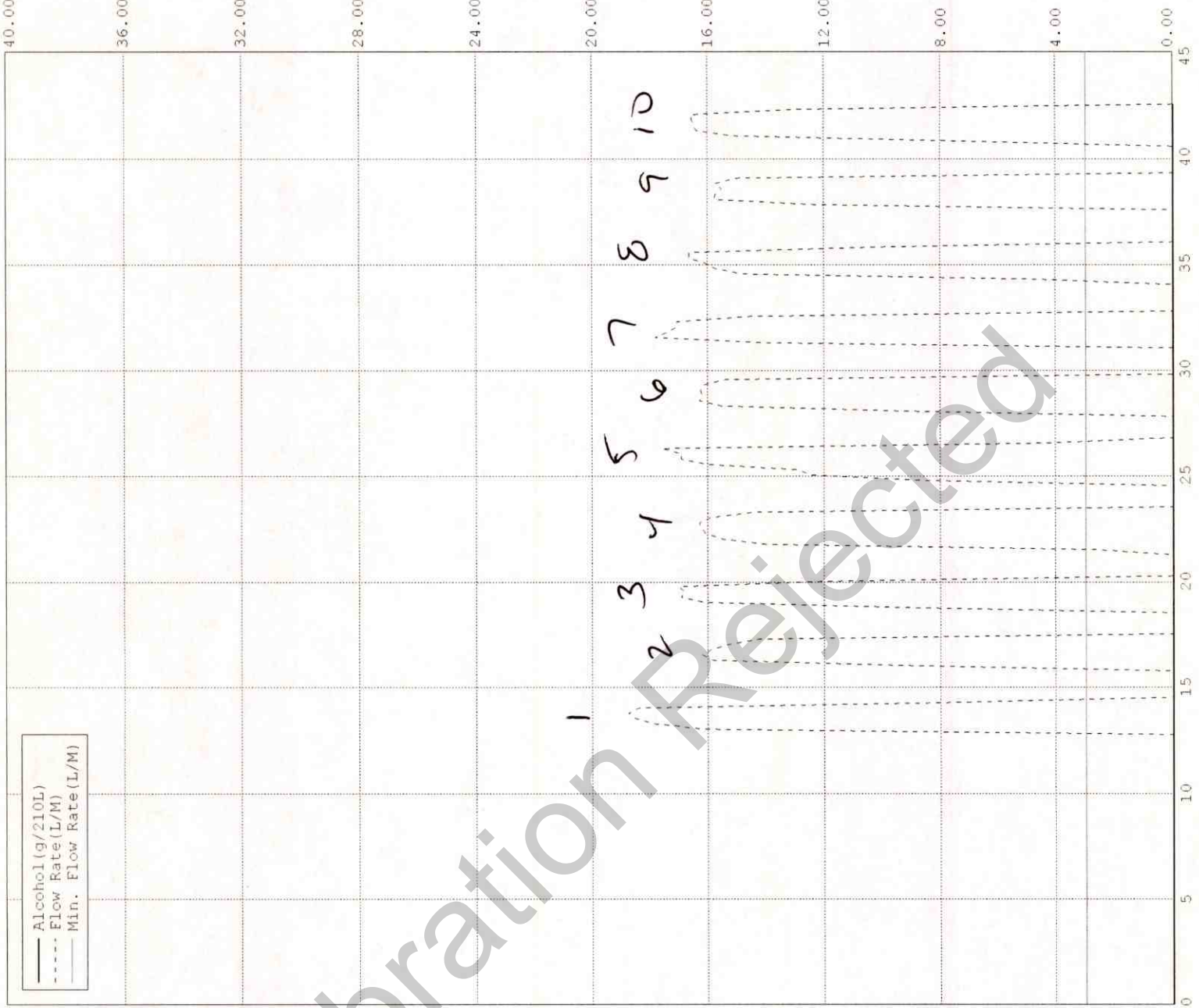
 SUBJECT NAME:
 TEST TEST
 LICENSE #: XXXX
 OPERATOR NAME:
 CARLIE GLAISTER
 OPERATOR'S #: 10436
 DEPT/AGENCY:
 INCOMPLETE
 CASE/REPORT: XXXX
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.83: 0.080
 LOT #: 09523080A1
 EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK PASSED 13:37
 BLANK TEST 0.000 13:37
 INTERNAL STANDARD VERIFIED 13:37
 EXTERNAL STANDARD 0.080 13:37
 BLANK TEST 0.000 13:38
 SUBJECT SAMPLE INCOMPLETE 13:40

CKG

100695 2023.10.31 Calibration - Rejected



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100695

Date: 10/31/2023
 Time: 13:43:10

SUBJECT NAME:
 TEST TEST
 LICENSE #: XXXX

OPERATOR NAME:
 CARLIE GLAISTER
 OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.83: 0.080
 LOT #: 09523080A1
 EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK	PASSED	13:44
BLANK TEST	0.000	13:44
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.080	13:45
BLANK TEST	0.000	13:46
SUBJECT SAMPLE	XXX	13:46

Maximum Attempts Exceeded

CKC

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100695

Date: 10/31/2023
Time: 13:48:58

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
CARLIE GLAISTER
OPERATOR'S #: 10436

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.83: 0.080
LOT #: 09523080A1
EXPIRATION: 05/05/2025

DIAGNOSTIC CHECK PASSED 13:50
BLANK TEST 0.000 13:50
INTERNAL STANDARD ERROR 13:50
Xq = 0.114 (4.20%)

Internal Standard Error

Calibration Rejected

CKG