

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 7/10/2015
Effective: 7/10/2015

Version: DMCEF 2015 R1
Status: Active

Instrument S/N 100699 Analyst Derch Walton Start Date 01/08/20

1. Diagnostic Test (attached) Internal Standard value $\leq 3.00\%$ Yes
1. Voltage Checks
- a. Adjust voltages, if needed
 - i. Lamp (2.6V Maximum)
 - ii. Bias
 - iii. Cooler (2.0V Maximum)
 - iv. Chopper Frequency
 - v. Detector Voltage (-0.100V to 0.100V)
 - b. Set RFI
 - c. Adjust barometer reading to match NIST traceable barometer
 - d. Adjust volume setting, if needed (1.5L +/- 0.1L)
 - e. Print Technician Screen (attached)
2. Print Calibration Factors (attached)
3. Volume Test - Minimum 1.4 L (1.3L to 1.7L)
4. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf Airgas Lot AG805804 Exp 02/27/20
- ii. 0.040g/210L Mnf Airgas Lot AG915607 Exp 06/05/21
- iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 09/18/20
- iv. 0.100g/210L Mnf Airgas Lot AG924701 Exp 09/04/21
- v. 0.200g/210L Mnf Auth Lot 19040 Exp 01/29/21
 - 1. Simulator S/N DR4162 Date Calibrated 10/07/19
- vi. 0.300g/210L Mnf Auth Lot 19010 Exp 01/03/21
 - 1. Simulator S/N DR4178 Date Calibrated 10/04/19

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

- i. Acetone - Mnf Auth Lot 18370 Level 0.100 Exp 12/05/20
 - 1. Simulator S/N SD1199 Date Calibrated 03/06/19
- ii. Isopropanol - Mnf Auth Lot 18370 Level 0.100 Exp 12/05/20
 - 1. Simulator S/N DR4161 Date Calibrated 03/07/19
- iii. Negative Control - Mnf Auth Lot 18370 Level 0.100 Exp 12/05/20
 - 1. Simulator S/N SD1202 Date Calibrated 03/05/19

e. RFI

- 6. Verify stylus is calibrated
- 7. Reset Options
- 8. Clear Memory
- 9. Verification of Calibration
- 10. Non-Drinking Subject Test (attached)
- 11. Upload
- 13. Remove tank prior to shut down

End Date 01/10/20 DM 01/10/20
01/09/20

DM
01/08/20

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/08/2020
Time: 09:40:47

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 41.6°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.53 V PASSED
(0.92 V - 2.14 V)
Cooler Voltage = 1.46 V PASSED
(0.88 V - 2.04 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 554 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.388 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 = 0.074 0.46% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100699

Date: 01/08/2020
Time: 10:02 AM

Temperatures (°C)
Sample Cell: 49.1°C
Breath Tube: 41.8°C

Current Barometer 29.8 in
Volume (Ltr) 1.59

Settings
Lamp: 1.59 V
Bias: 79 V
Cooler: 1.43 V
Chopper: 554 Hz

Voltages (V)
Flow: 1.05 V
Detector: -0.021 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 09/14/2015
Time: 14:16:03

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca	=	0.1000		
CAL	=	0.952416	0.800	<= CAL < 1.200
b1	=	0.0003	0.0000	<= b1 < 0.0040
b2	=	0.0053	0.0010	<= b2 < 0.0100
b3	=	0.0000	0.0000	<= b3 < 0.0040
Xq	=	0.0746	0.0500	<= Xq < 0.2000
a21	=	1.147407	1.050	<= a21 < 1.300
a31	=	0.412118	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/08/2020
Time: 10:25:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

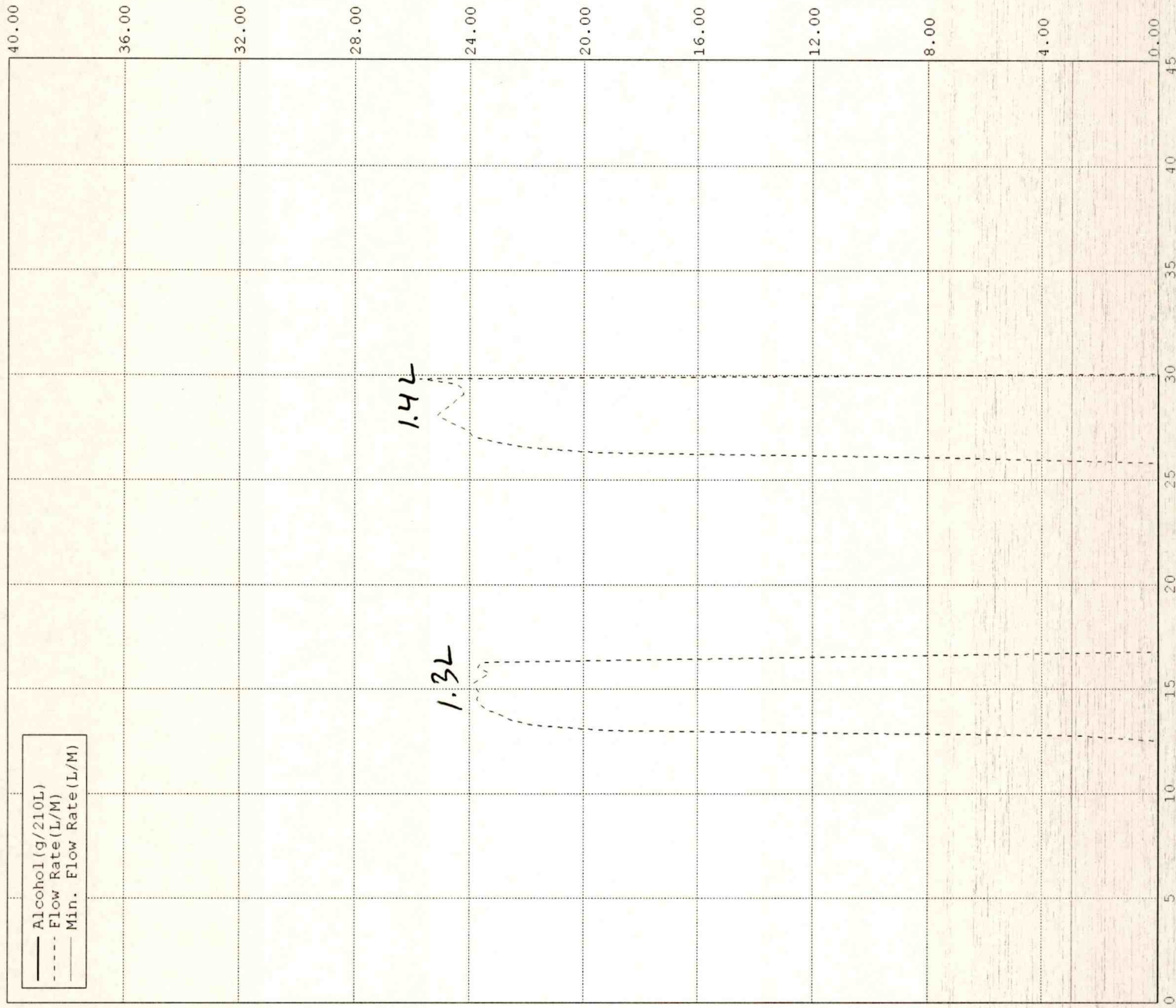
DEPT/AGENCY:
MINIMUM VOLUME
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.82: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:27
BLANK TEST	0.000	10:27
INTERNAL STANDARD	VERIFIED	10:27
EXTERNAL STANDARD	0.077	10:27
BLANK TEST	0.000	10:28
SUBJECT SAMPLE (Vol=1.53L)	0.000	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.077	10:30
BLANK TEST	0.000	10:31

SW



LINEARITY CHECK

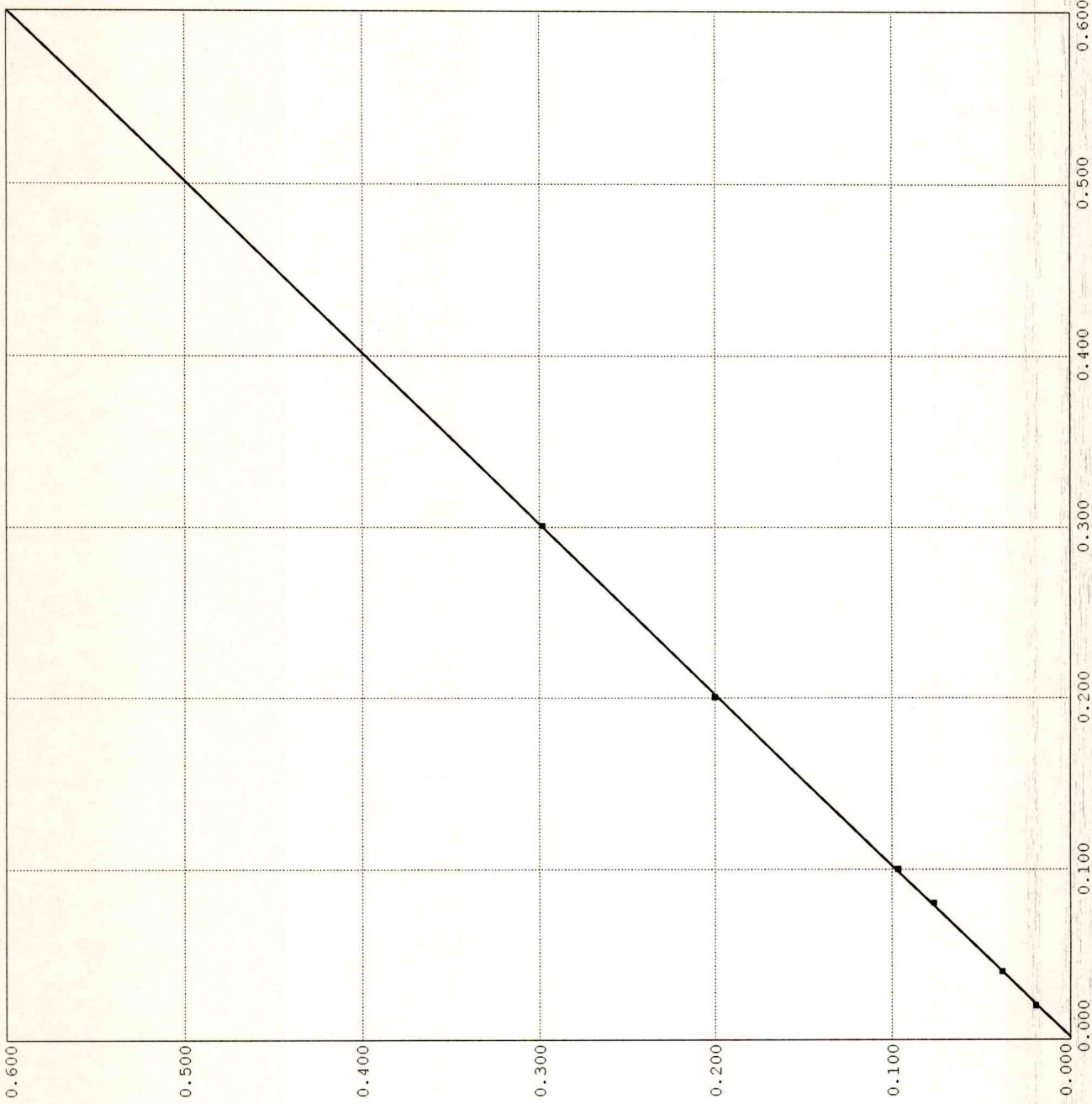
 Alaska Department of Public Safety
 DATAMASTER dmt: 100699

Date: 01/08/2020
 Time: 10:34:04

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0390	0.0000
0.080	0.0774	0.0005
0.100	0.0976	0.0005
0.200	0.2010	0.0000
0.300	0.2988	0.0008

SLOPE = 1.002042
 R² = 0.999838



JRW

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100699

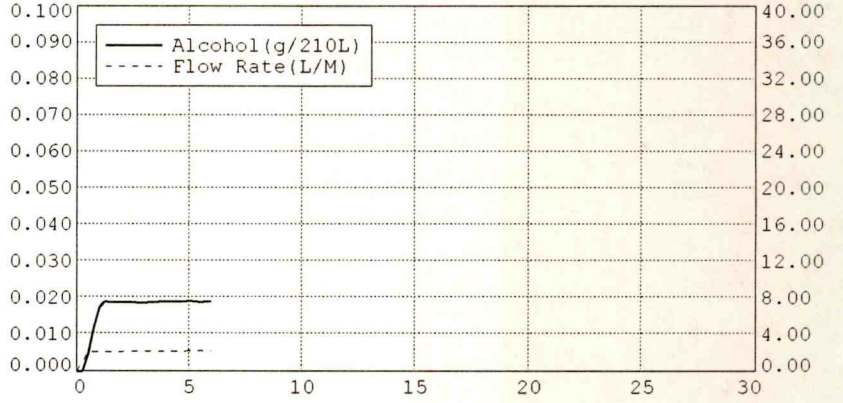
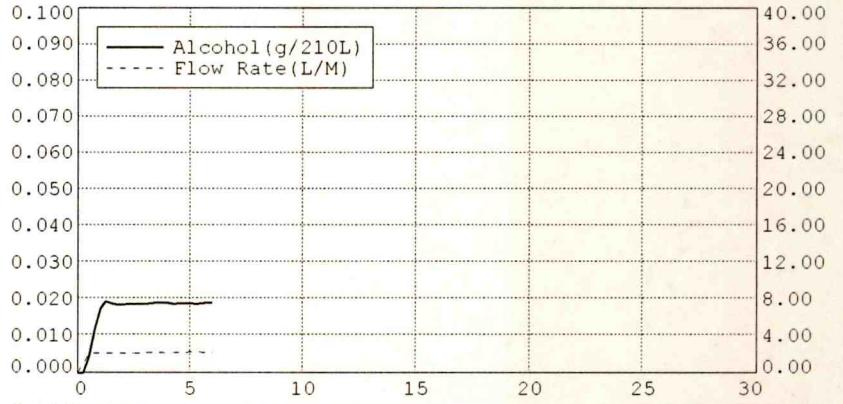
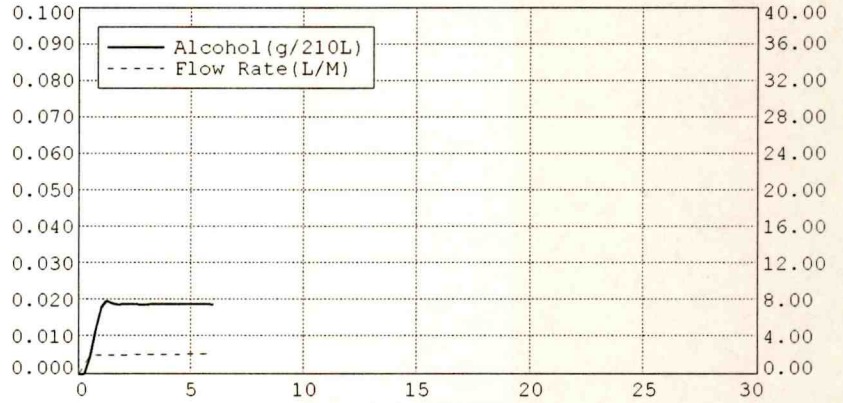
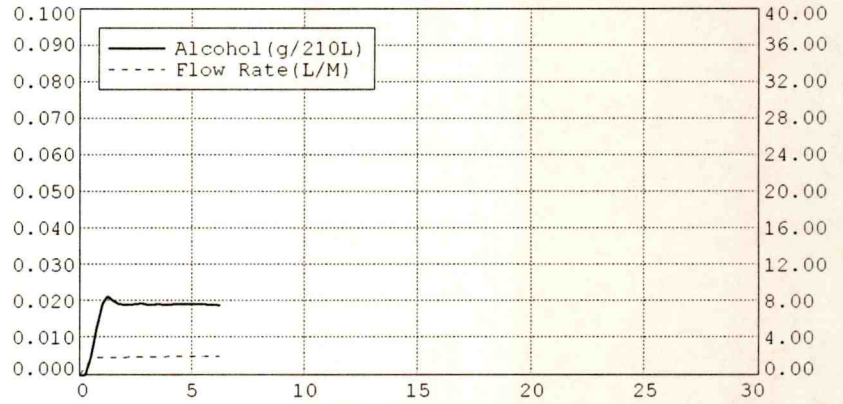
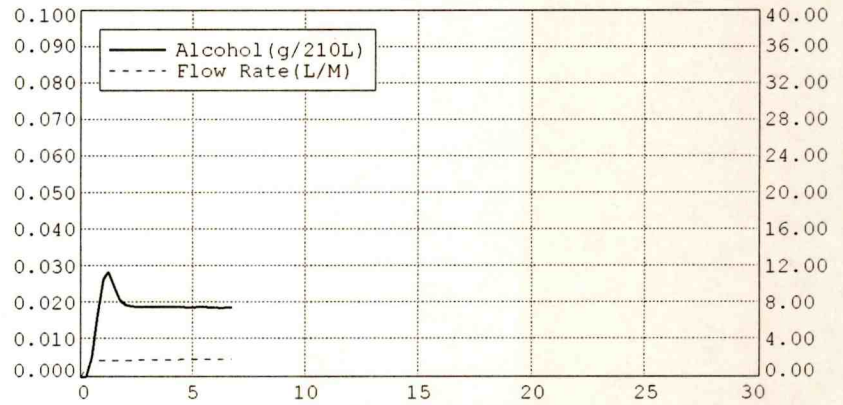
Date: 01/08/2020
Time: 10:34:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.83: 0.020
LOT #: AG805804
EXPIRATION: 02/27/2020
TANK PRESSURE: 194 psi

BLANK TEST	0.000	10:35
INTERNAL STANDARD	VERIFIED	10:35
EXTERNAL STANDARD	0.020	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.020	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.020	10:38
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.020	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.020	10:40
BLANK TEST	0.000	10:41

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100699

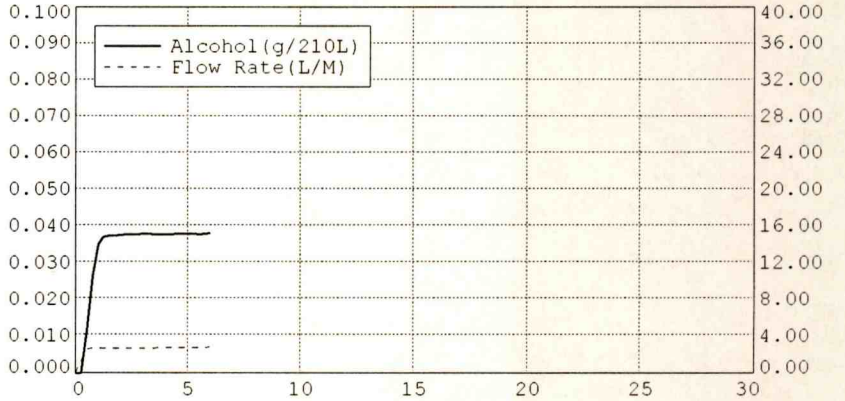
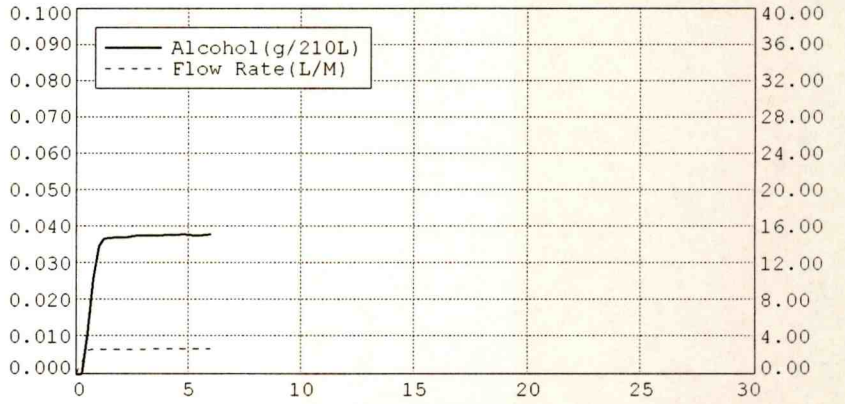
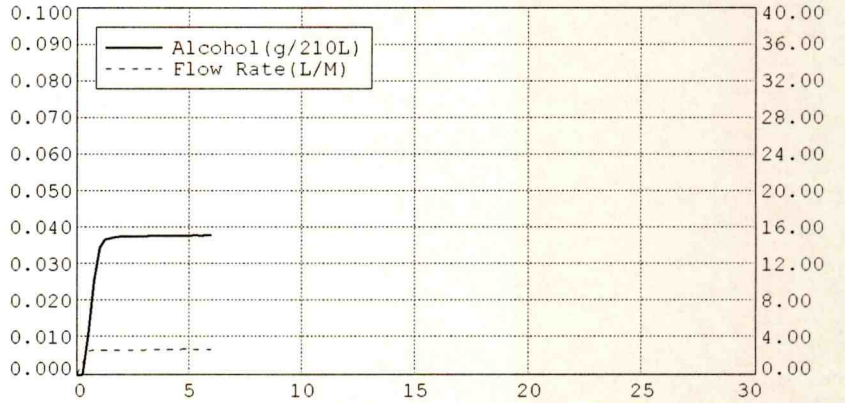
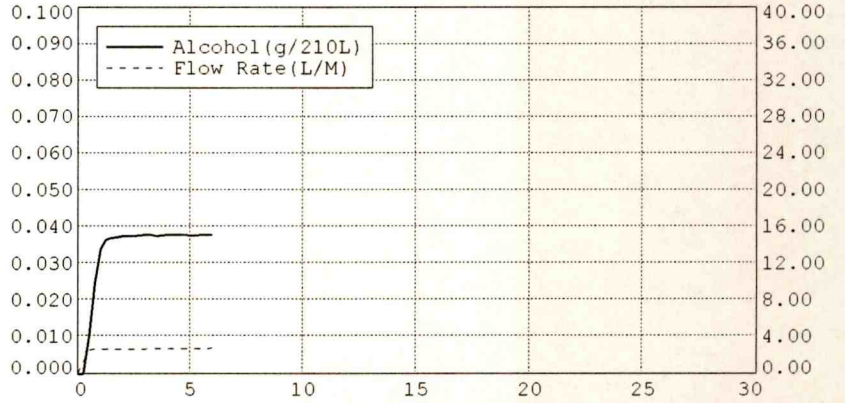
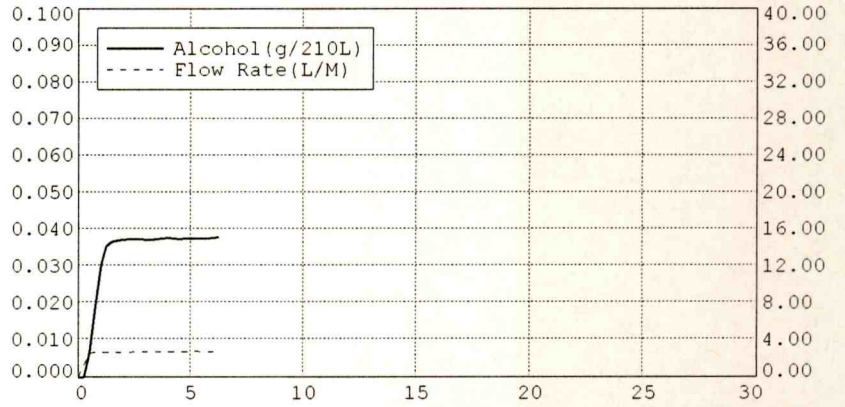
Date: 01/08/2020
Time: 10:43:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.83: 0.040
LOT #: AG915607
EXPIRATION: 06/05/2021
TANK PRESSURE: 1010 psi

BLANK TEST	0.000	10:44
INTERNAL STANDARD	VERIFIED	10:44
EXTERNAL STANDARD	0.039	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.039	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.039	10:46
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.039	10:48
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.039	10:49
BLANK TEST	0.000	10:50

Average = 0.0390
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100699

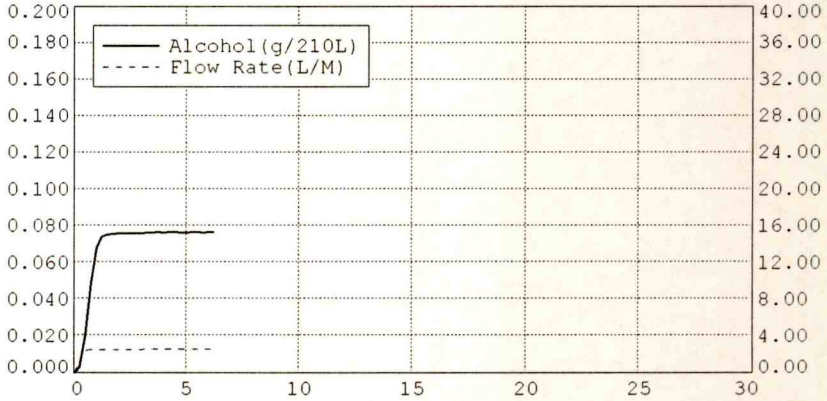
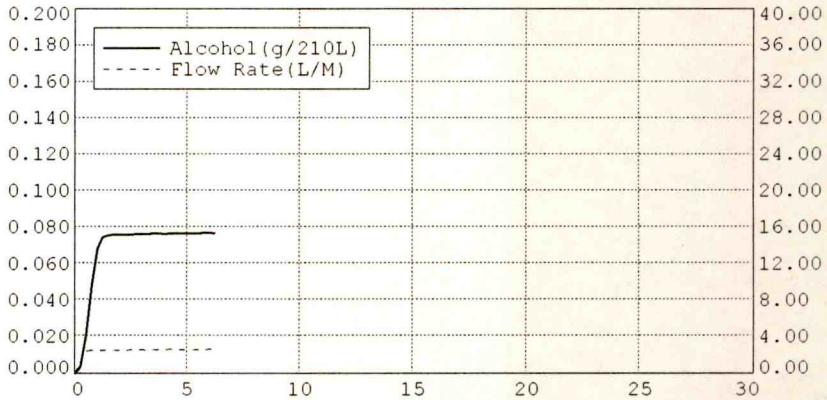
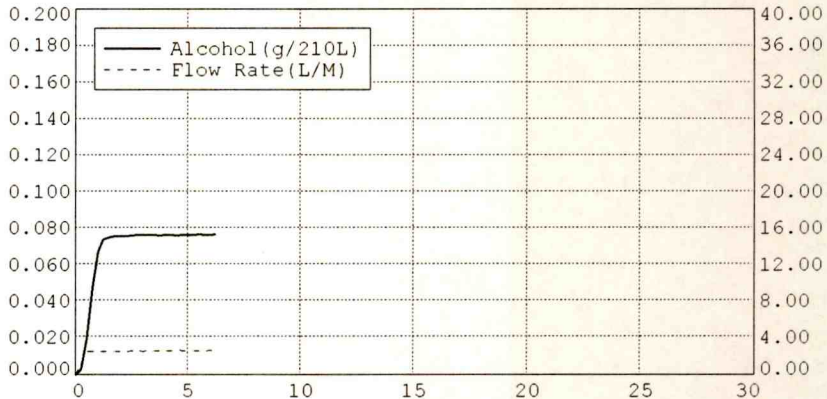
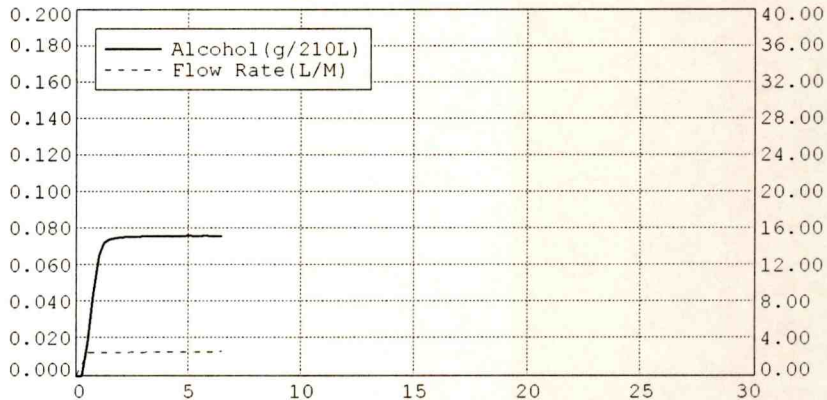
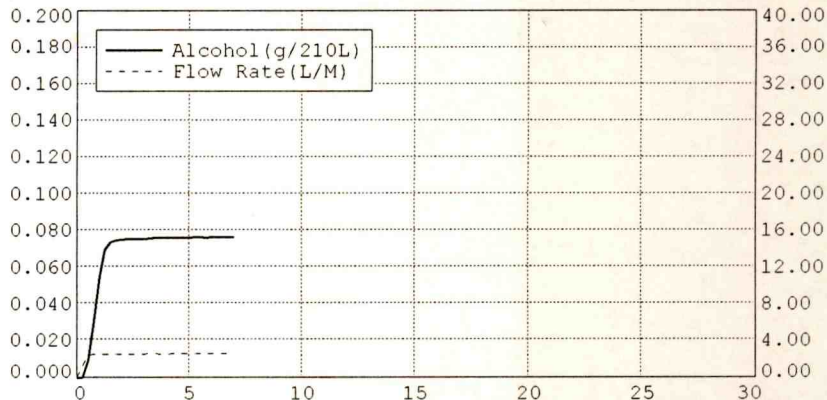
Date: 01/08/2020
 Time: 10:52:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.83: 0.080
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 733 psi

BLANK TEST	0.000	10:53
INTERNAL STANDARD	VERIFIED	10:53
EXTERNAL STANDARD	0.077	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.077	10:54
BLANK TEST	0.000	10:55
EXTERNAL STANDARD	0.078	10:56
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.078	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.077	10:58
BLANK TEST	0.000	10:59

Average = 0.0774
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100699

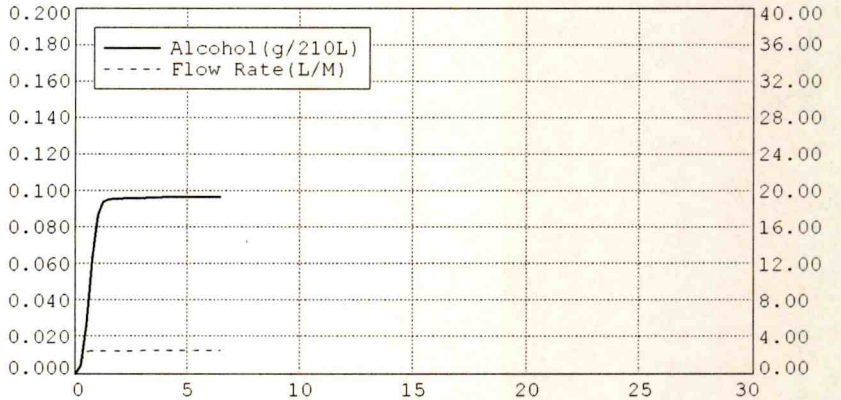
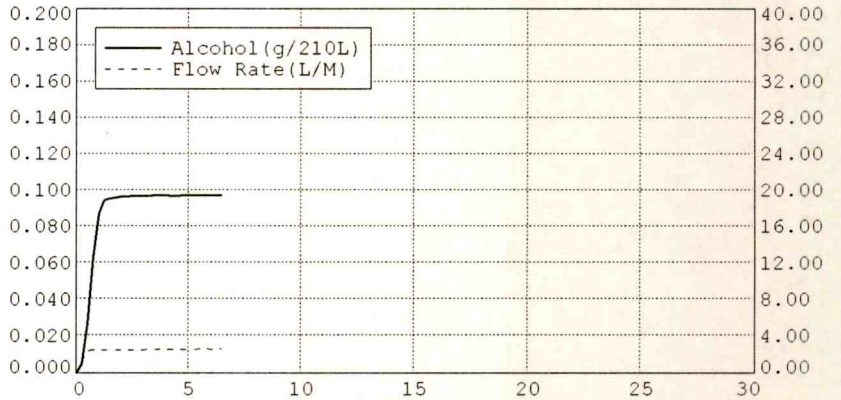
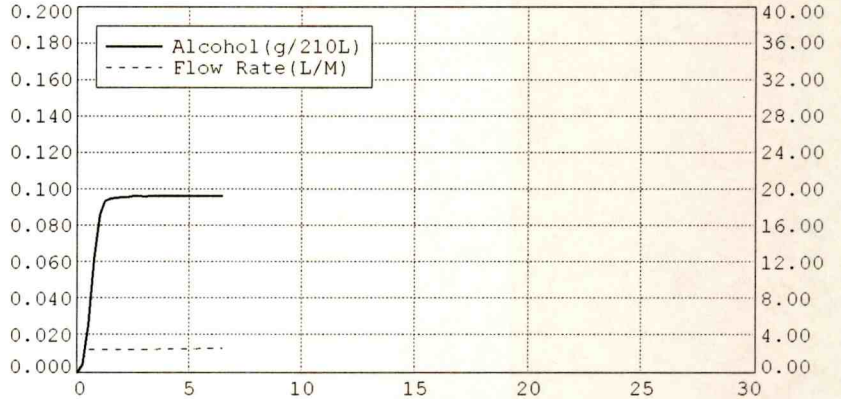
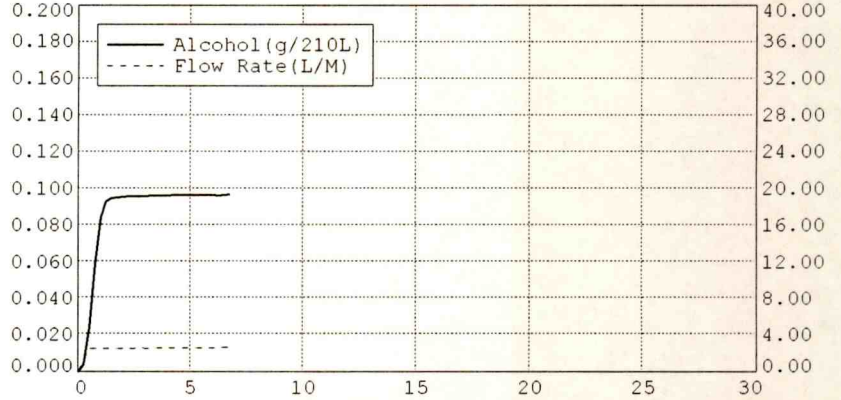
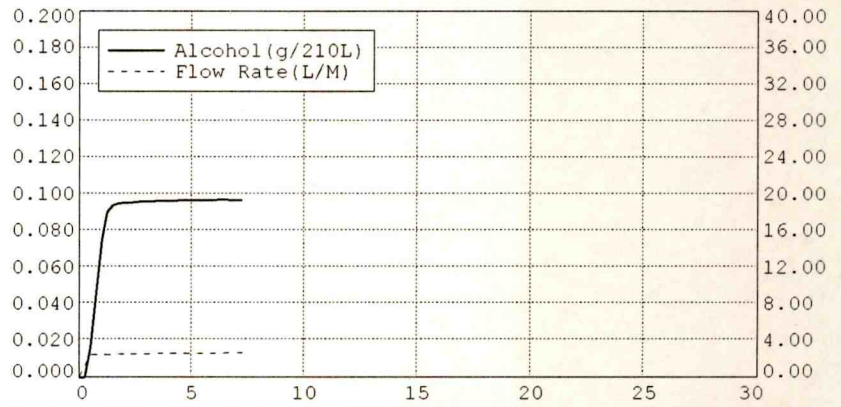
Date: 01/08/2020
 Time: 11:02:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.83: 0.100
 LOT #: AG924701
 EXPIRATION: 09/04/2021
 TANK PRESSURE: 749 psi

BLANK TEST	0.000	11:03
INTERNAL STANDARD	VERIFIED	11:03
EXTERNAL STANDARD	0.097	11:04
BLANK TEST	0.000	11:04
EXTERNAL STANDARD	0.097	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.098	11:06
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.098	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.098	11:08
BLANK TEST	0.000	11:09

Average = 0.0976
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

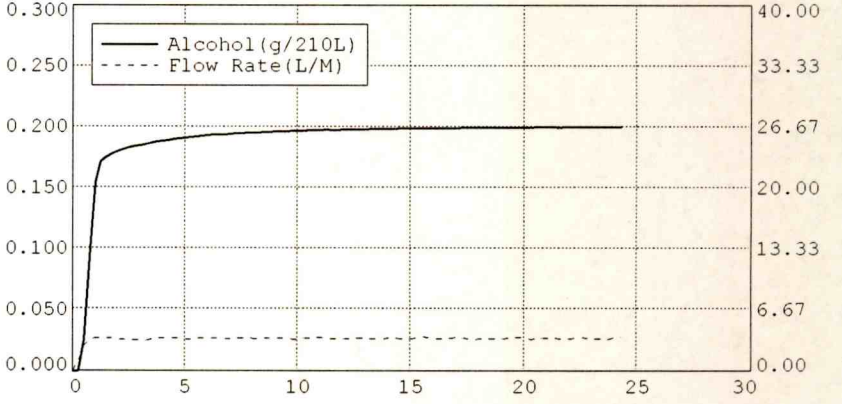
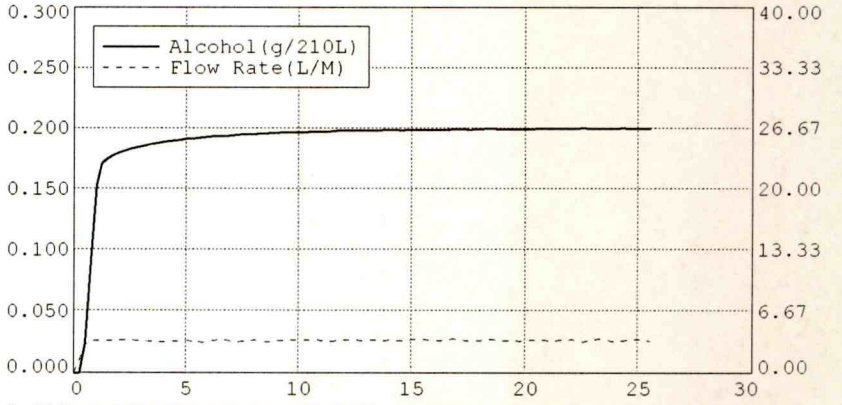
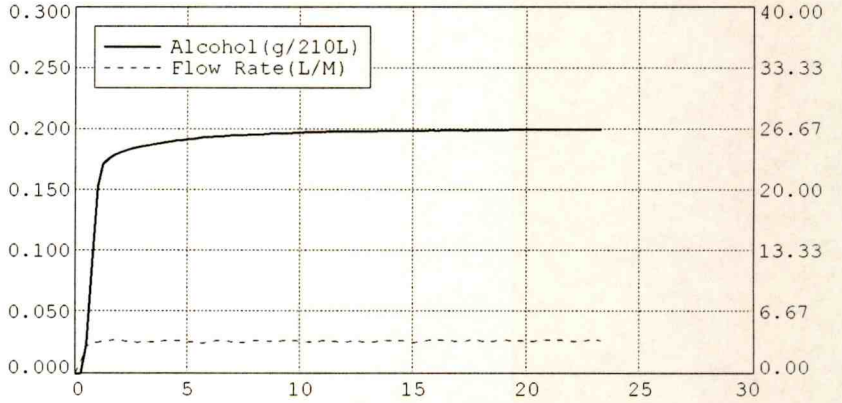
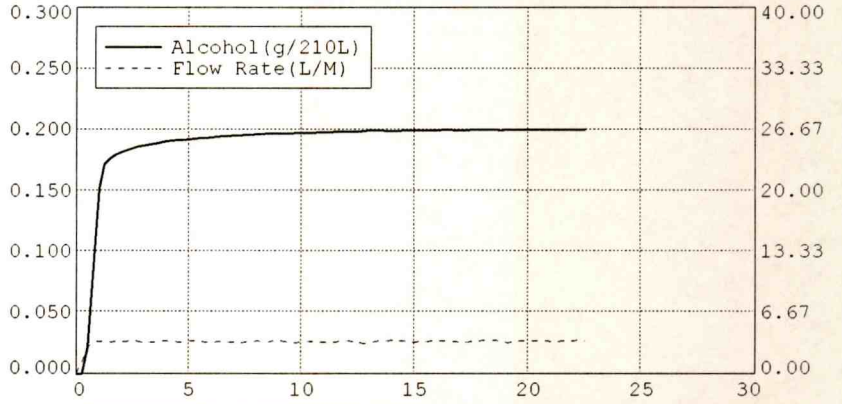
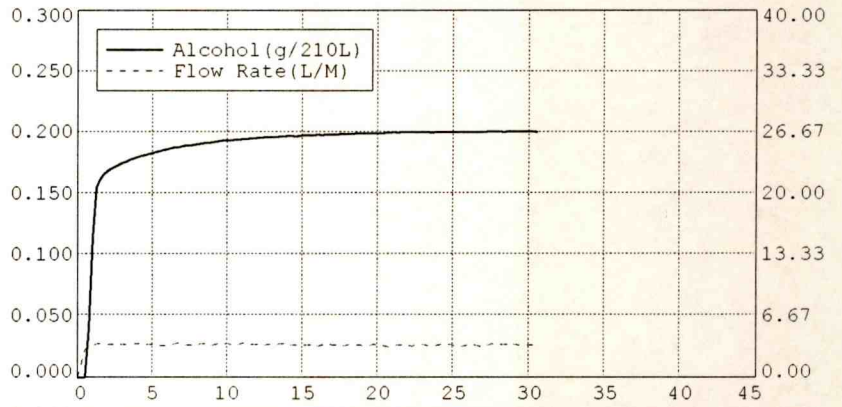
Alaska Department of Public Safety
 DATAMASTER dmt: 100699

Date: 01/08/2020
 Time: 11:14:03

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 19040
 EXPIRATION: 01/29/2021

BLANK TEST	0.000	11:17
INTERNAL STANDARD	VERIFIED	11:17
EXTERNAL STANDARD	0.201	11:18
BLANK TEST	0.000	11:19
EXTERNAL STANDARD	0.201	11:19
BLANK TEST	0.000	11:20
EXTERNAL STANDARD	0.201	11:21
BLANK TEST	0.000	11:22
EXTERNAL STANDARD	0.201	11:22
BLANK TEST	0.000	11:23
EXTERNAL STANDARD	0.201	11:23
BLANK TEST	0.000	11:24

Average = 0.2010
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

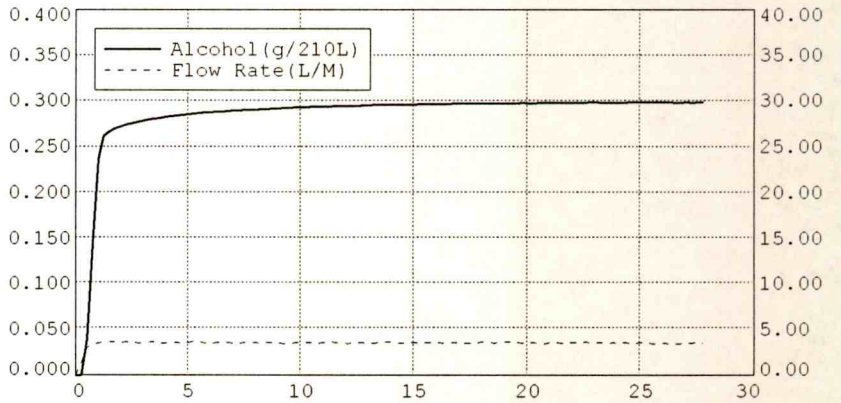
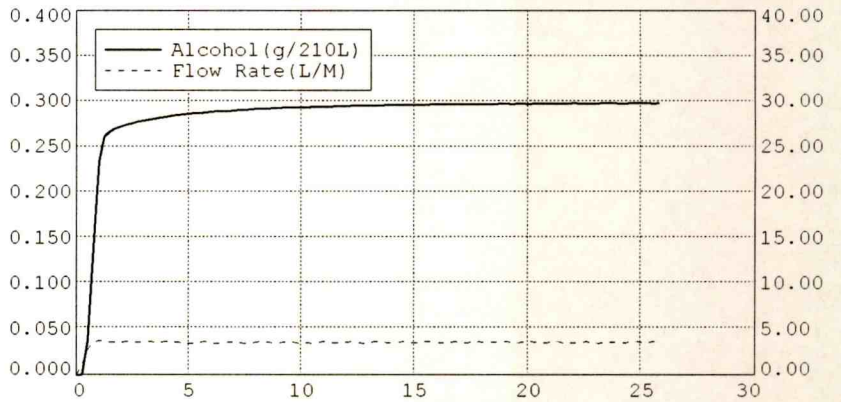
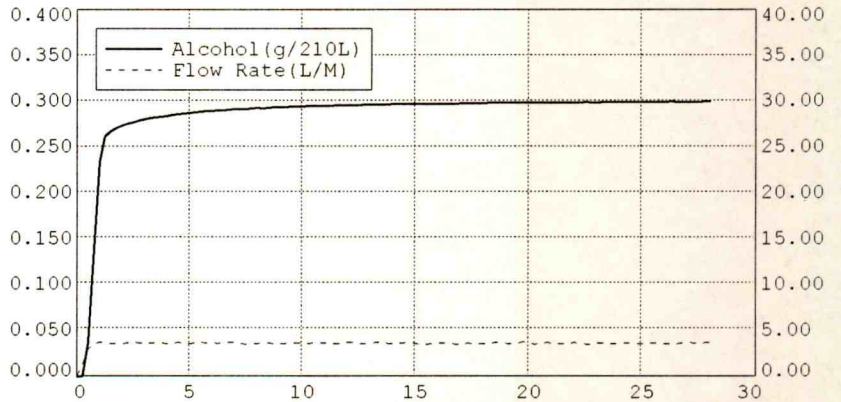
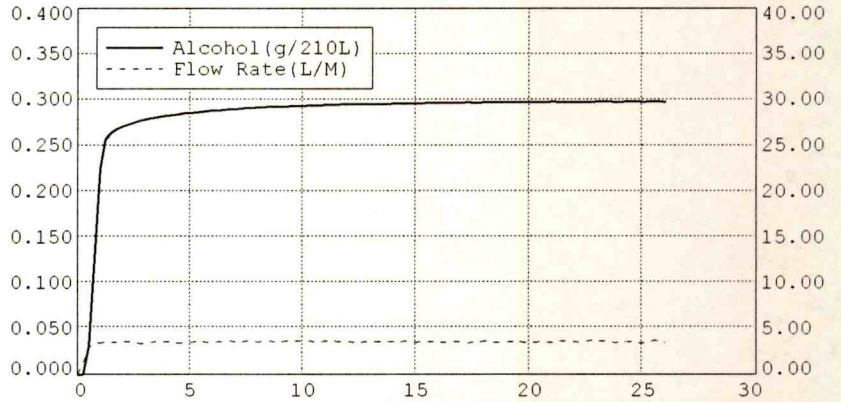
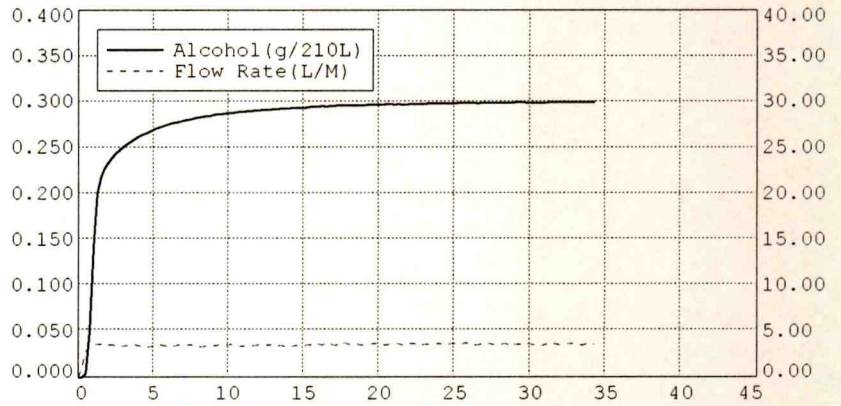
Alaska Department of Public Safety
 DATAMASTER dmt: 100699

Date: 01/08/2020
 Time: 11:28:34

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 19010
 EXPIRATION: 01/03/2021

BLANK TEST	0.000	11:29
INTERNAL STANDARD	VERIFIED	11:29
EXTERNAL STANDARD	0.300	11:30
BLANK TEST	0.000	11:31
EXTERNAL STANDARD	0.298	11:32
BLANK TEST	0.000	11:32
EXTERNAL STANDARD	0.299	11:33
BLANK TEST	0.000	11:34
EXTERNAL STANDARD	0.298	11:34
BLANK TEST	0.000	11:35
EXTERNAL STANDARD	0.299	11:36
BLANK TEST	0.000	11:37

Average = 0.2988
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/08/2020
Time: 11:47:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

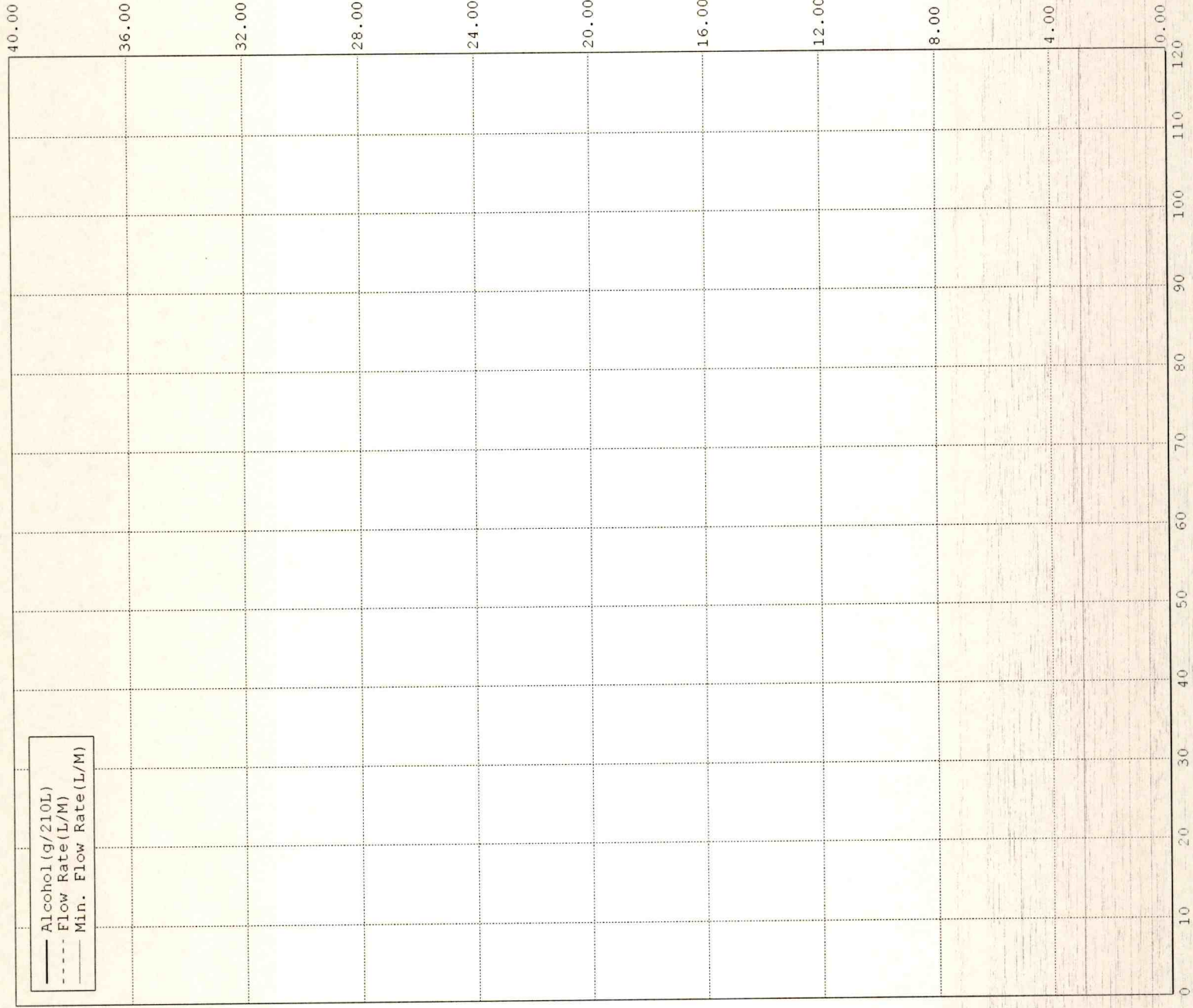
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.83: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:49
BLANK TEST 0.000 11:49
INTERNAL STANDARD VERIFIED 11:49
EXTERNAL STANDARD 0.077 11:49
BLANK TEST 0.000 11:50
SUBJECT SAMPLE INCOMPLETE 11:52

DW

Alcohol (g/210L)
Flow Rate (L/M)
Min. Flow Rate (L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/09/2020
Time: 09:33:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

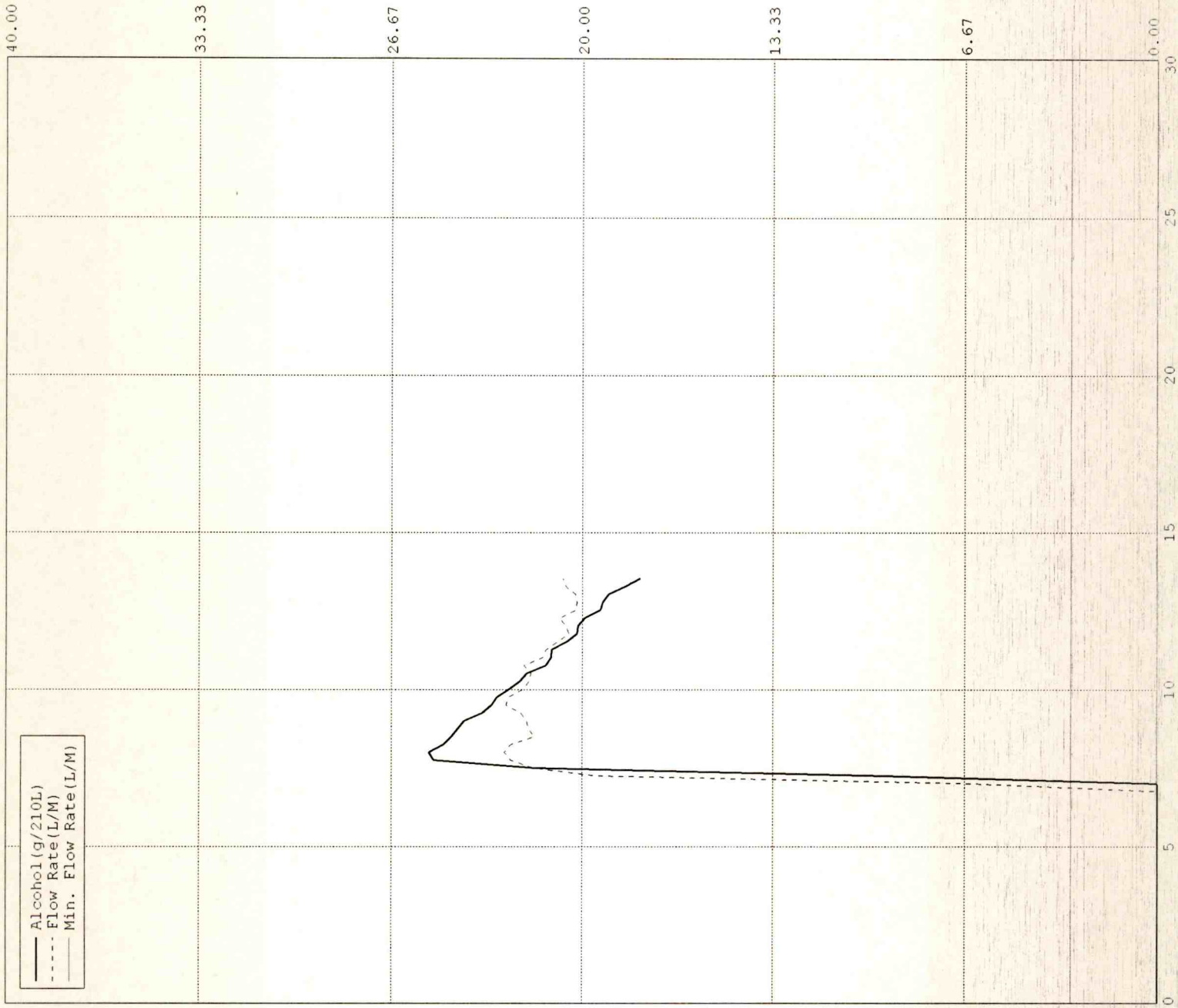
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 09:34
BLANK TEST 0.000 09:34
INTERNAL STANDARD VERIFIED 09:34
EXTERNAL STANDARD 0.077 09:35
BLANK TEST 0.000 09:36
SUBJECT SAMPLE INVALID 09:36

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/08/2020
Time: 15:25:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.86: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

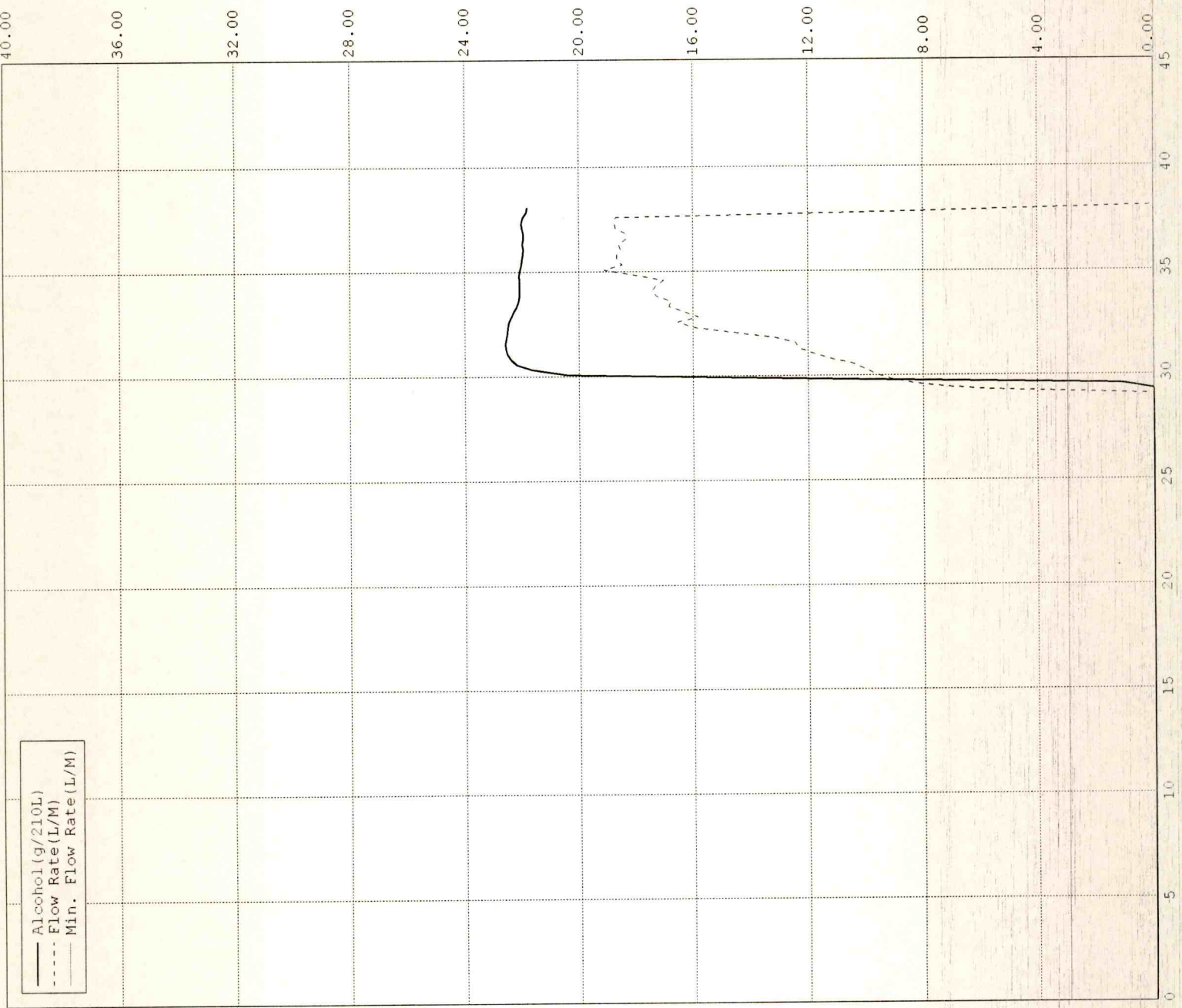
DIAGNOSTIC CHECK PASSED 15:26
BLANK TEST 0.000 15:26
INTERNAL STANDARD VERIFIED 15:26
Xq = 0.075 (1.05%)
EXTERNAL STANDARD 0.078 15:26
X[1] = 0.0776 (-0.0025) (0.0021)
BLANK TEST 0.000 15:27
SUBJECT SAMPLE XXX 15:28
X[1] = 0.1096 (-0.0182) (0.0005)

Interference Detected

Filter 2 Avg: -0.0028

Filter 3 Avg: 0.0014

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/10/2020
Time: 12:11:46

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

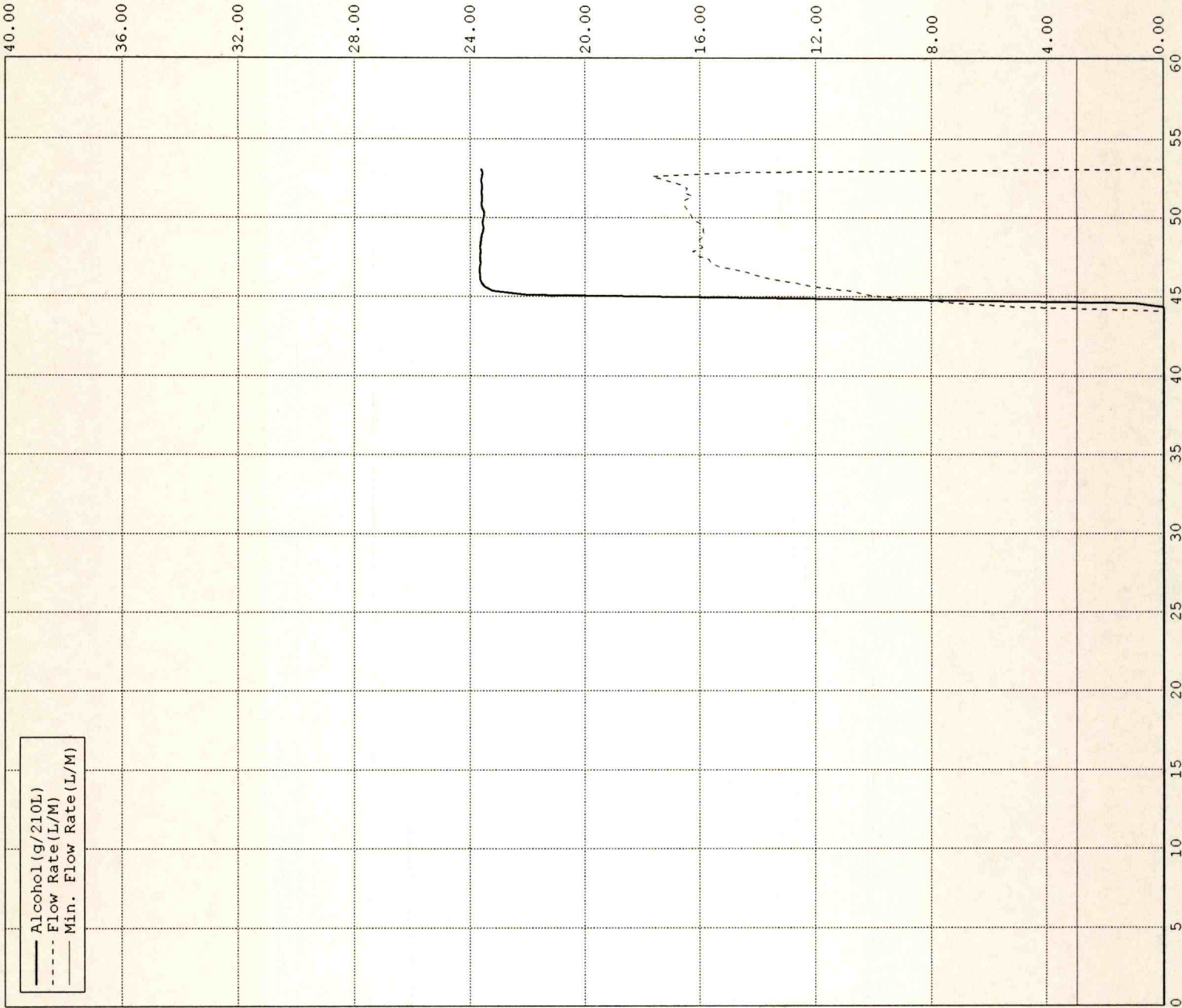
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.73: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:12
BLANK TEST	0.000	12:12
INTERNAL STANDARD	VERIFIED	12:13
xq = 0.075 (0.81%)		
EXTERNAL STANDARD	0.077	12:13
x[1] = 0.0768 (-0.0035) (0.0008)		
BLANK TEST	0.000	12:14
SUBJECT SAMPLE	XXX	12:15
x[1] = 0.1185 (-0.0310) (-0.0011)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/08/2020
Time: 15:43:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

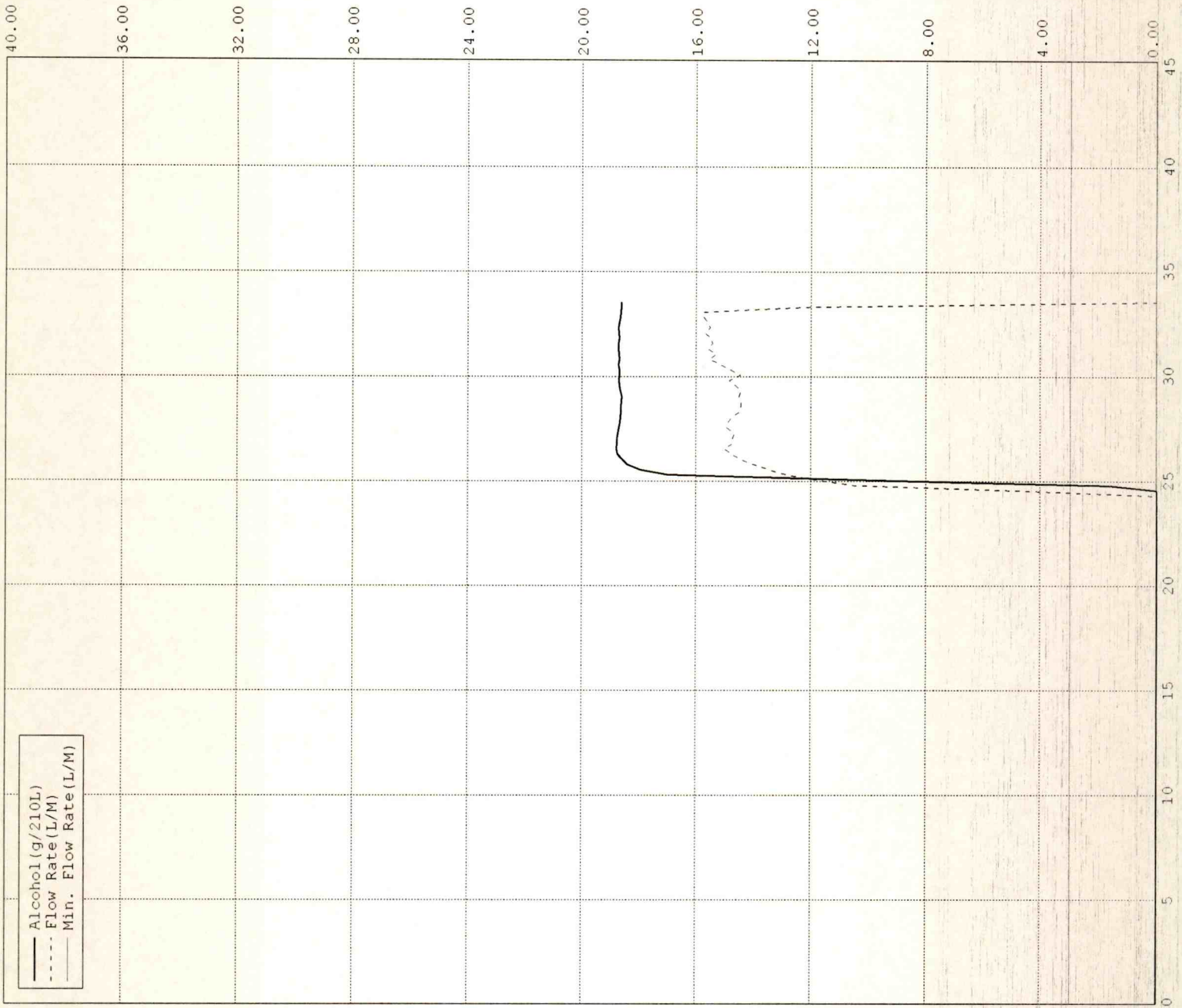
DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.87: 0.080
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:44
BLANK TEST	0.000	15:45
INTERNAL STANDARD	VERIFIED	15:45
$X_q = 0.075$ (0.81%)		
EXTERNAL STANDARD	0.077	15:45
$X[1] = 0.0775$ (-0.0025) (0.0015)		
BLANK TEST	0.000	15:46
SUBJECT SAMPLE (Vol=2.15L)	0.093	15:46
$X[1] = 0.0938$ (-0.0021) (-0.0007)		
BLANK TEST	0.000	15:47
EXTERNAL STANDARD	0.077	15:48
$X[1] = 0.0772$ (-0.0025) (0.0012)		
BLANK TEST	0.000	15:49

WJC



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/09/2020
Time: 09:24:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

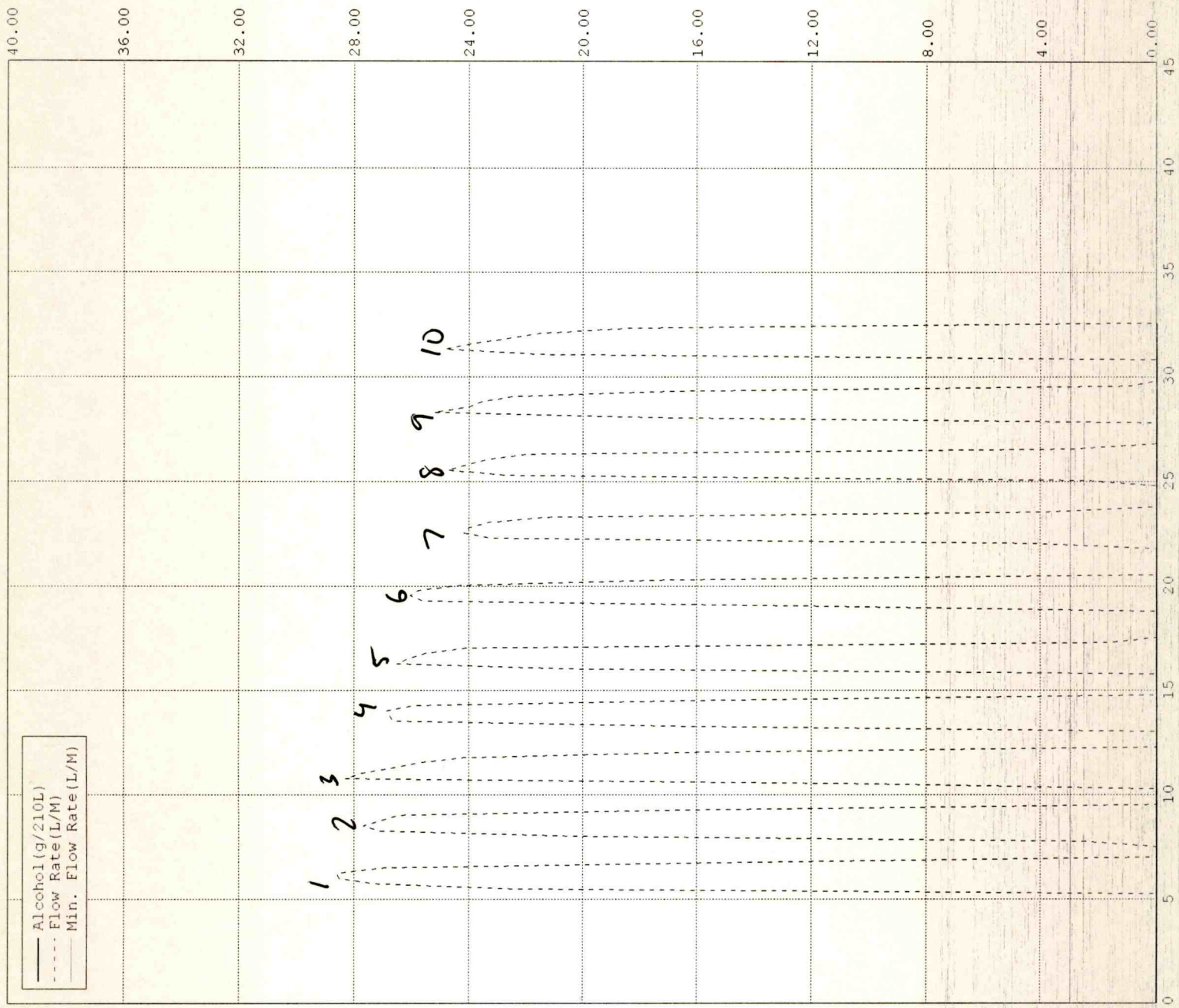
DEPT/AGENCY:
MAXIMUM ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 09:28
BLANK TEST 0.000 09:28
INTERNAL STANDARD VERIFIED 09:28
EXTERNAL STANDARD 0.077 09:29
BLANK TEST 0.000 09:30
SUBJECT SAMPLE XXX 09:30

Maximum Attempts Exceeded

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/09/2020
Time: 09:56:05

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

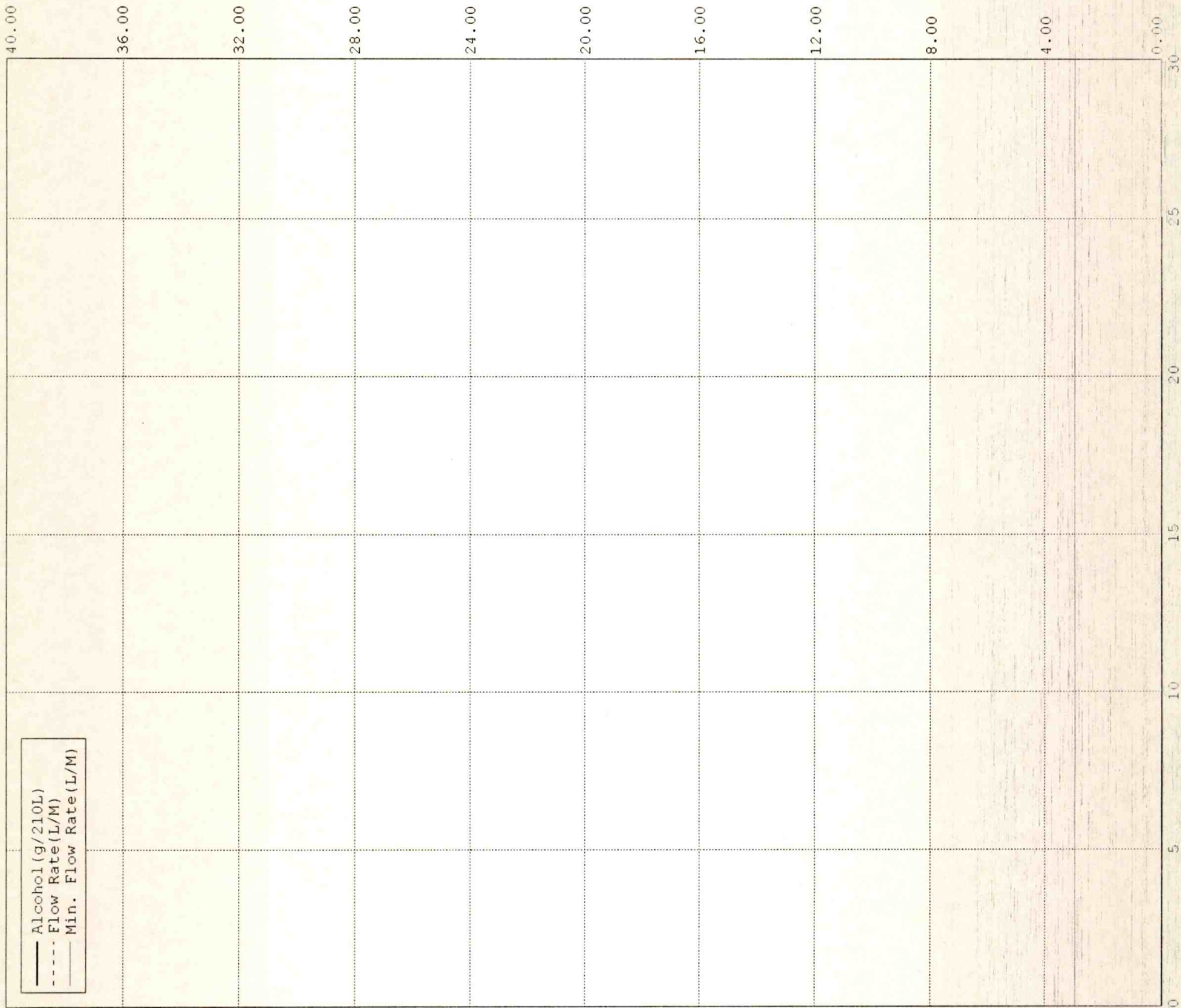
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 09:57
BLANK TEST 0.000 09:57
INTERNAL STANDARD VERIFIED 09:57
EXTERNAL STANDARD 0.077 09:57
BLANK TEST 0.000 09:58

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100699

Date: 01/09/2020
Time: 11:51:02

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 29.71: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	11:52
BLANK TEST	0.000	11:52
INTERNAL STANDARD	VERIFIED	11:52
EXTERNAL STANDARD	0.077	11:53
BLANK TEST	0.000	11:54
SUBJECT SAMPLE (Vol=3.60L)	0.000	11:54
BLANK TEST	0.000	11:55
EXTERNAL STANDARD	0.077	11:55
BLANK TEST	0.000	11:56

