

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 100690 Analyst Derch Walton Start Date 12/11/19

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 1.5 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 AG805903 Exp 02/28/20
 - v. 0.200g/210L Mnf Wuth Lot 19040 Exp 01/29/21
 1. Simulator S/N DR4162 Date Calibrated 10/07/19
 - vi. 0.300g/210L Mnf Wuth 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 Wuth Lot 18370 Level 0.100 Exp 12/05/20
 1. Simulator S/N SD1199 Date Calibrated 03/06/19
 - ii. Isopropanol - Mnf Wuth Lot 18370 Level 0.100 Exp 12/05/20
 1. Simulator S/N DR4161 Date Calibrated 03/07/19
 - iii. Negative Control - Mnf Wuth 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 12/12/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 09:52:56

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 = 47.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.83 V PASSED
(1.10 V - 2.56 V)
Cooler Voltage = 1.93 V PASSED
(1.16 V - 2.70 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 534 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.245 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

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

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED

Xq = 0.104 0.34% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100690

Date: 12/11/2019

Time: 10:11 AM

Temperatures (°C)

Sample Cell: 49.0°C

Breath Tube: 46.2°C

Current Barometer 29.2 in

Volume (Ltr) 1.50

Settings

Lamp: 1.99 V

Bias: 79 V

Cooler: 1.83 V

Chopper: 527 Hz

Voltages (V)

Flow: 1.05 V

Detector: 0.028 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 10/04/2019
Time: 09:30:09

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.979179 0.800 <= CAL < 1.200
b1 = 0.0025 0.0000 <= b1 < 0.0040
b2 = 0.0056 0.0010 <= b2 < 0.0100
b3 = 0.0015 0.0000 <= b3 < 0.0040
Xq = 0.1033 0.0500 <= Xq < 0.2000
a21 = 1.134181 1.050 <= a21 < 1.300
a31 = 0.436506 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 10:50:06

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

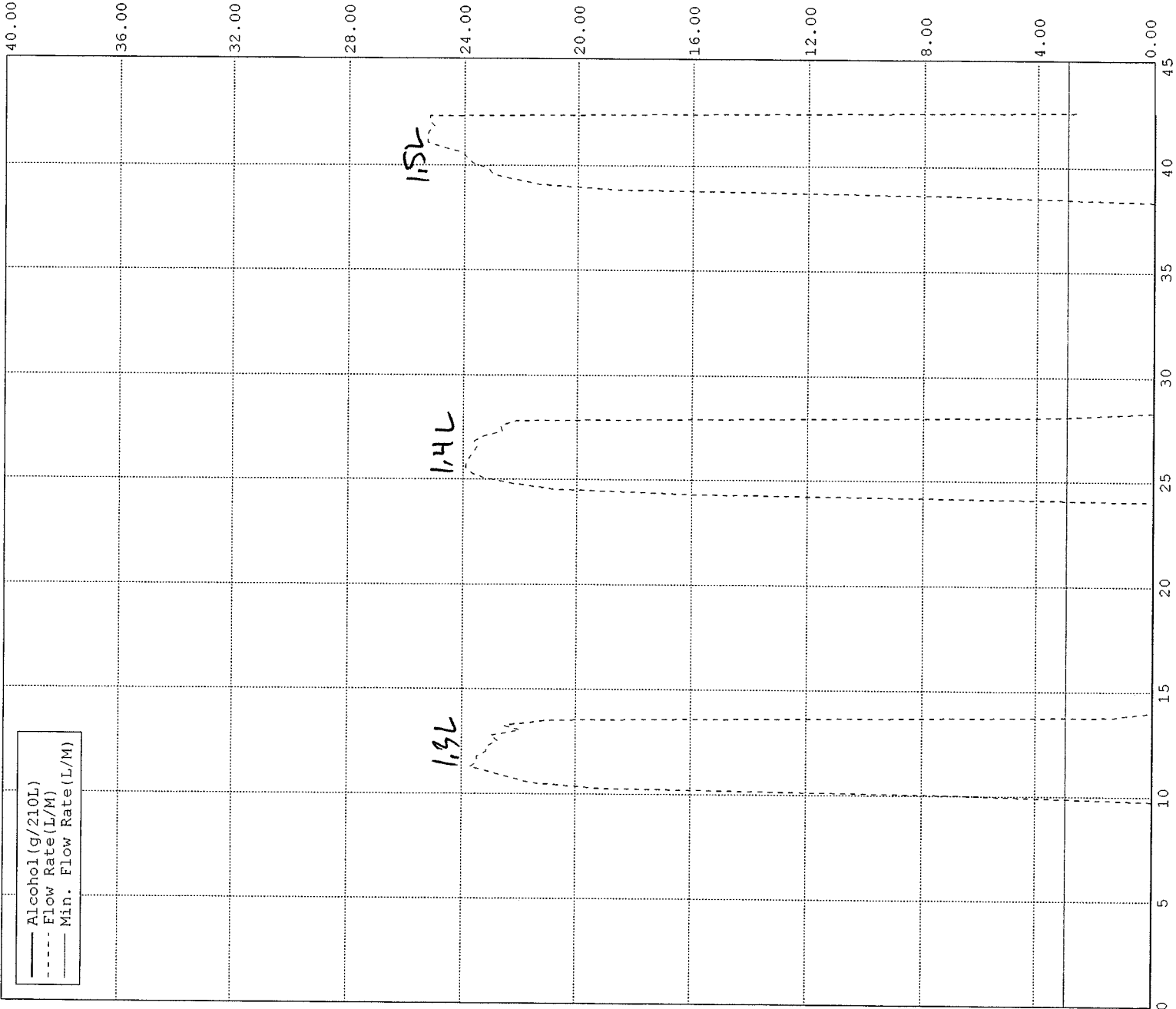
OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.23: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:51
BLANK TEST	0.000	10:51
INTERNAL STANDARD	VERIFIED	10:51
EXTERNAL STANDARD	0.078	10:51
BLANK TEST	0.000	10:52
SUBJECT SAMPLE (Vol=1.51L)	0.000	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.078	10:54
BLANK TEST	0.000	10:55



LINEARITY CHECK

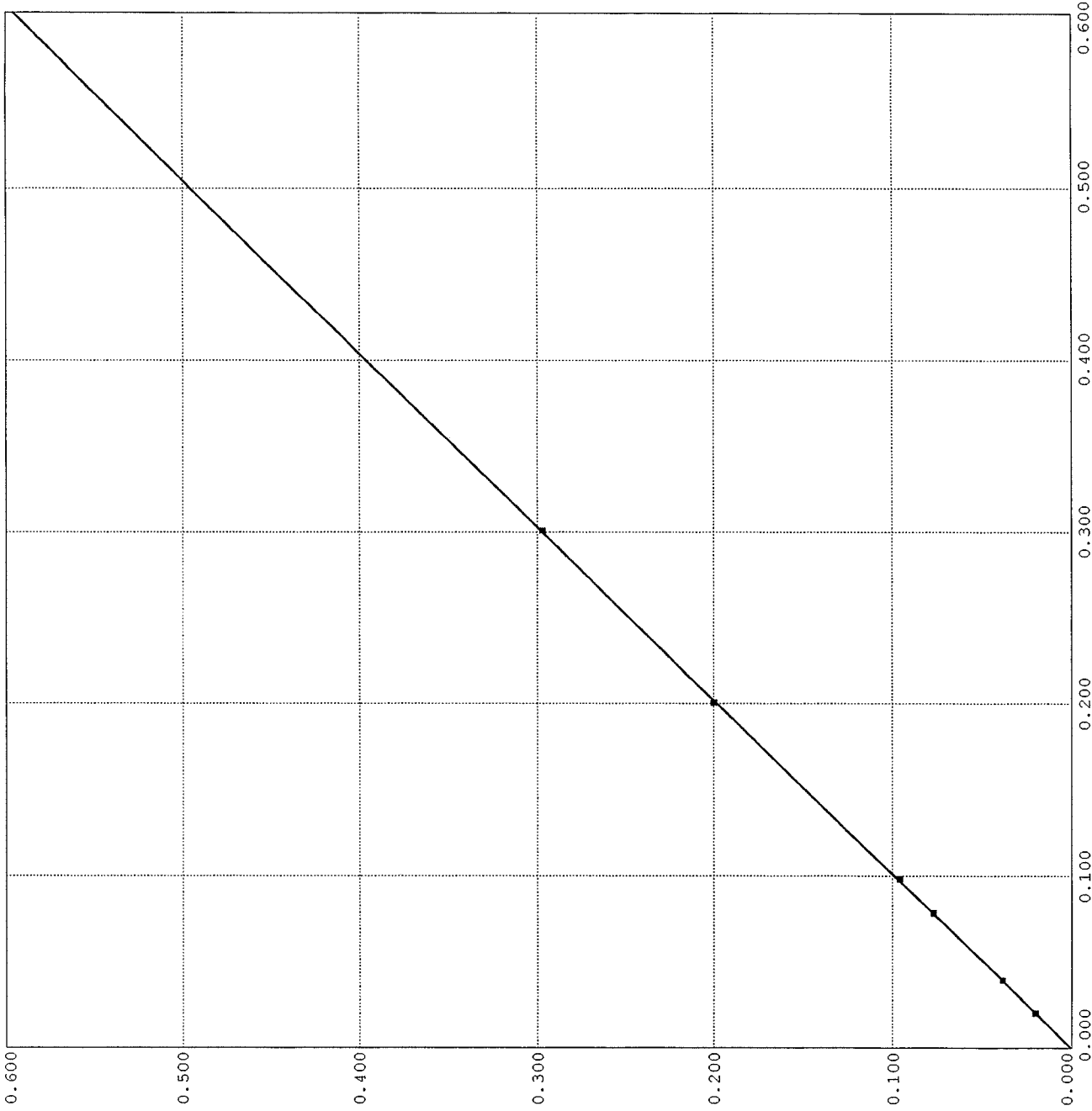
Alaska Department of Public Safety
 DATAMASTER dmt: 100690

Date: 12/11/2019
 Time: 11:04:35

SUPERVISOR NAME:
 DEREK WALTON
 OPERATOR'S #: 9508

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.039	0.0396	0.0005
0.078	0.0780	0.0000
0.098	0.0970	0.0000
0.200	0.2006	0.0005
0.300	0.2978	0.0004

SLOPE = 0.991800
 R² = 0.999938



DM

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100690

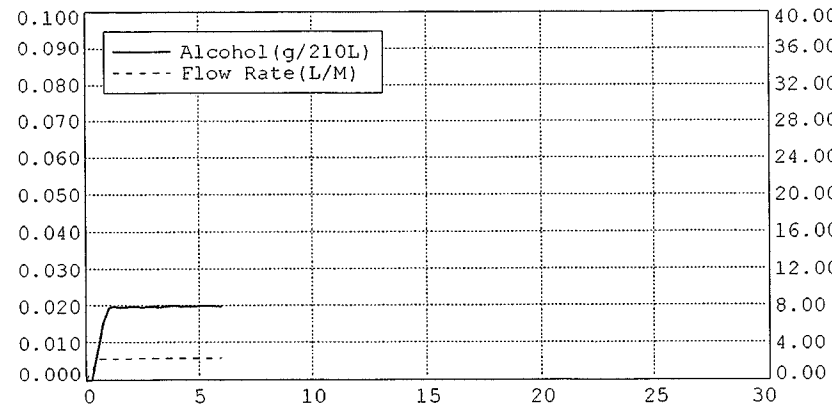
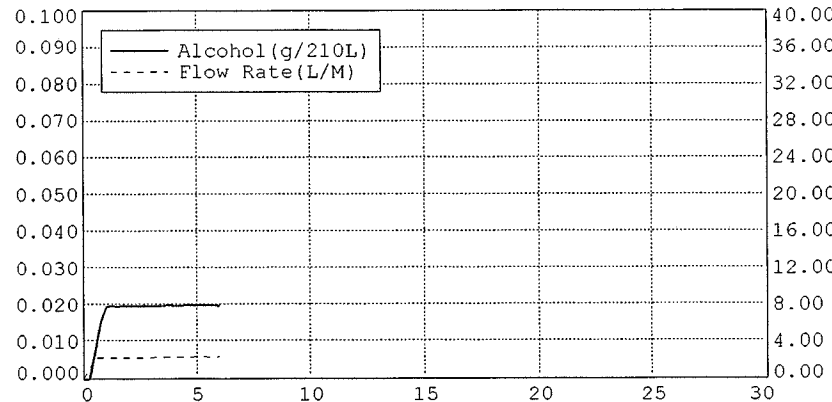
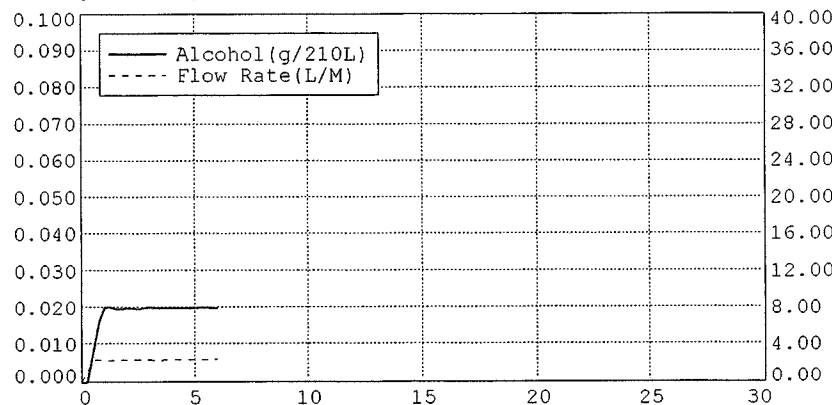
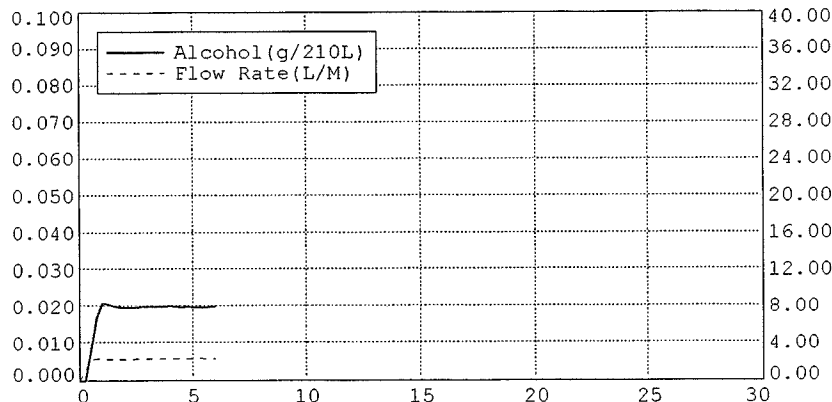
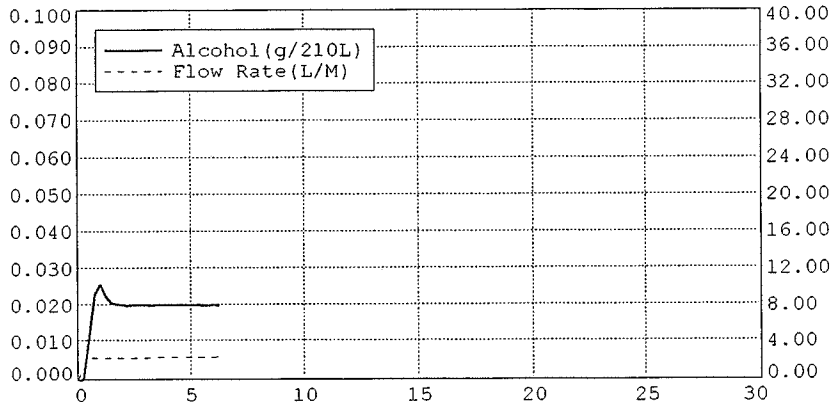
Date: 12/11/2019
Time: 11:04:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.22: 0.020
LOT #: AG805804
EXPIRATION: 02/27/2020
TANK PRESSURE: 540 psi

BLANK TEST	0.000	11:06
INTERNAL STANDARD	VERIFIED	11:06
EXTERNAL STANDARD	0.021	11:06
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.021	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.021	11:09
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.021	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.021	11:11
BLANK TEST	0.000	11:12

Average = 0.0210
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

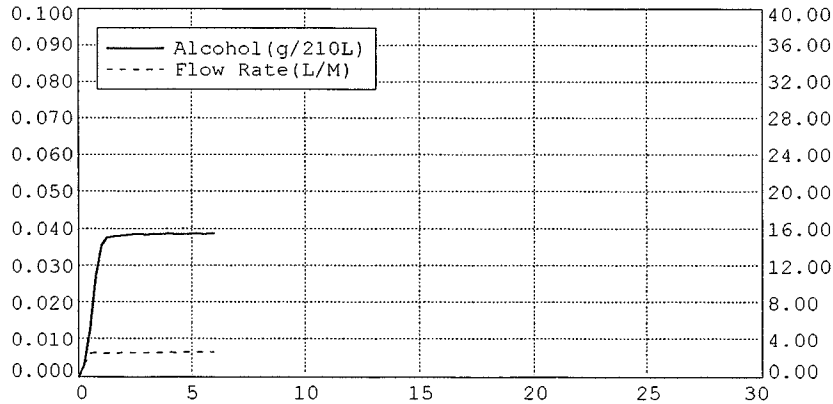
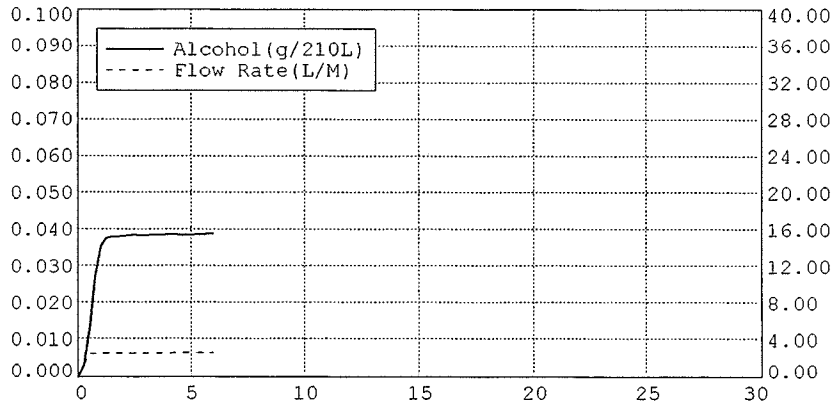
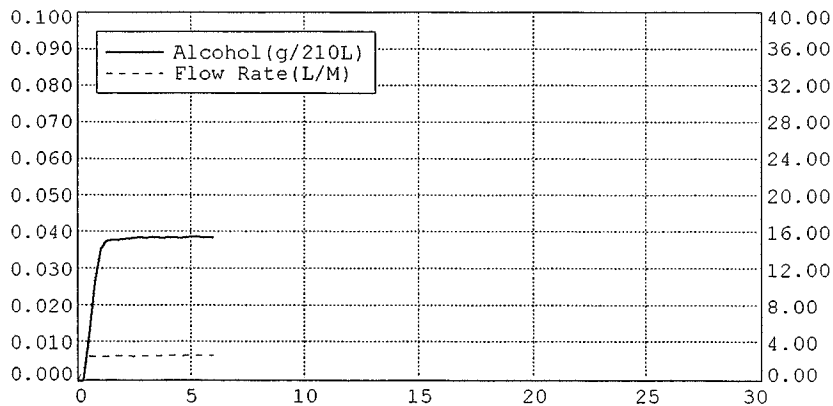
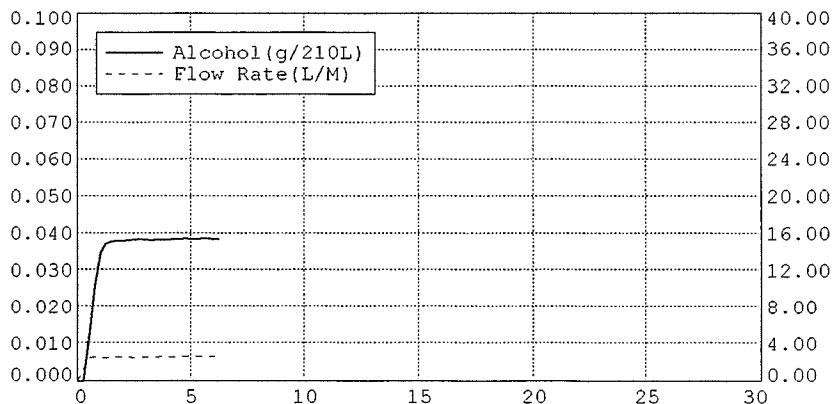
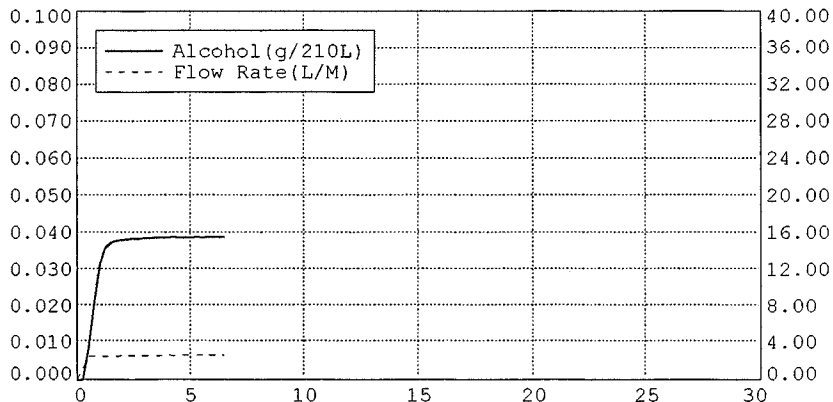
Date: 12/11/2019
 Time: 11:12:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.22: 0.039
 LOT #: AG915607
 EXPIRATION: 06/05/2021
 TANK PRESSURE: 1108 psi

BLANK TEST	0.000	11:13
INTERNAL STANDARD	VERIFIED	11:14
EXTERNAL STANDARD	0.040	11:14
BLANK TEST	0.000	11:15
EXTERNAL STANDARD	0.039	11:15
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.039	11:16
BLANK TEST	0.000	11:17
EXTERNAL STANDARD	0.040	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.040	11:18
BLANK TEST	0.000	11:19

Average = 0.0396
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

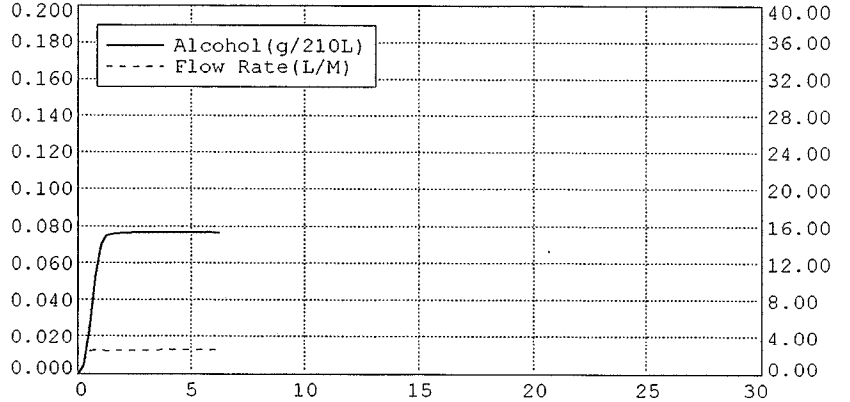
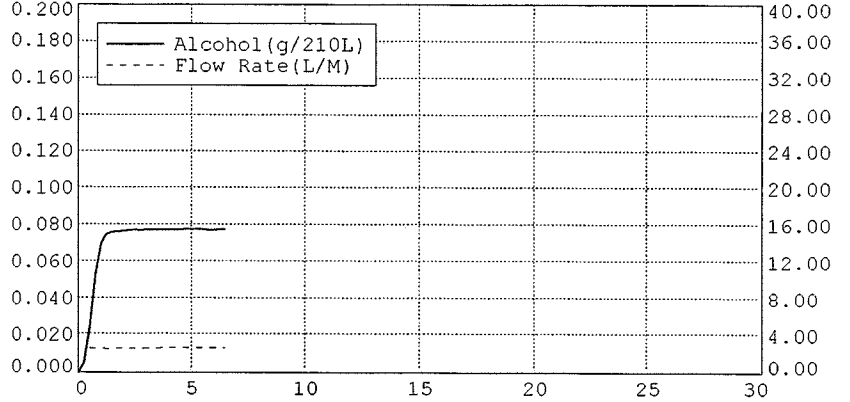
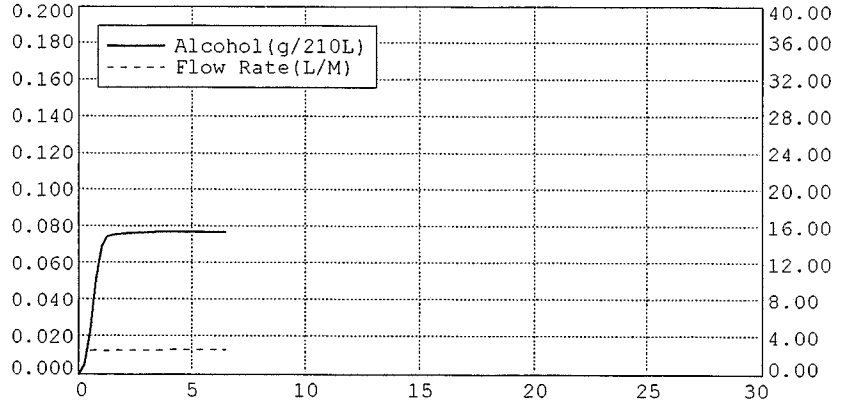
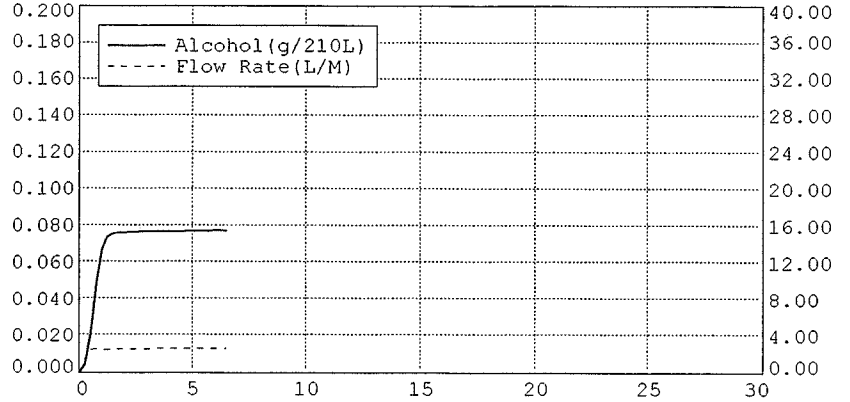
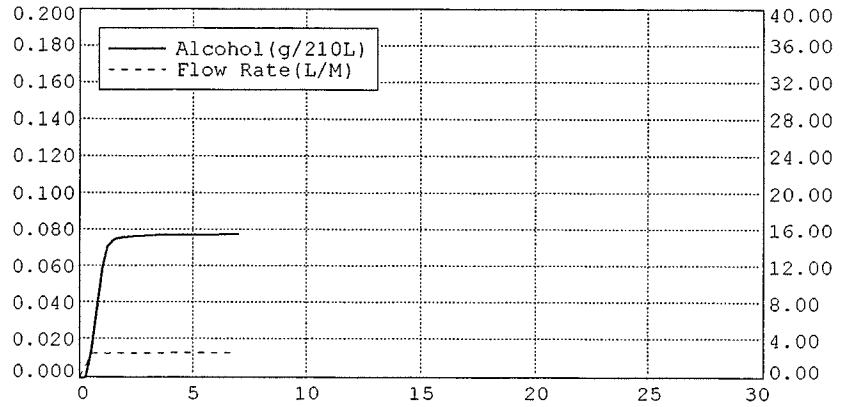
Date: 12/11/2019
 Time: 11:21:05

EXTERNAL STANDARD INFORMATION:

NOMINAL: 0.080
 TARGET AT 29.22: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 1181 psi

BLANK TEST	0.000	11:22
INTERNAL STANDARD	VERIFIED	11:22
EXTERNAL STANDARD	0.078	11:22
BLANK TEST	0.000	11:23
EXTERNAL STANDARD	0.078	11:23
BLANK TEST	0.000	11:24
EXTERNAL STANDARD	0.078	11:24
BLANK TEST	0.000	11:25
EXTERNAL STANDARD	0.078	11:26
BLANK TEST	0.000	11:26
EXTERNAL STANDARD	0.078	11:27
BLANK TEST	0.000	11:28

Average = 0.0780
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

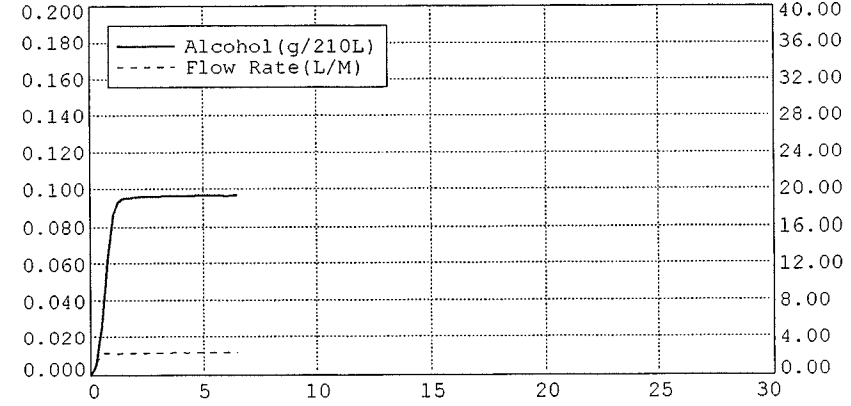
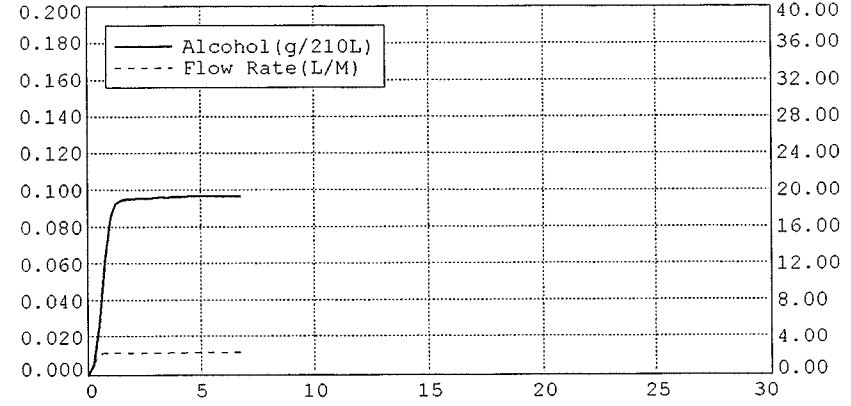
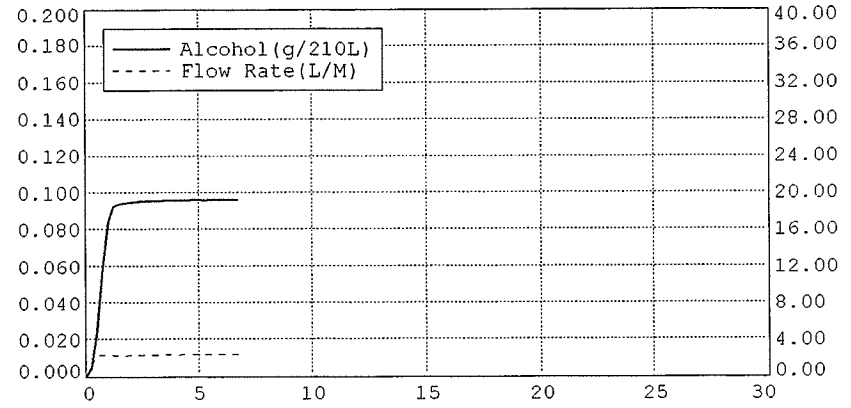
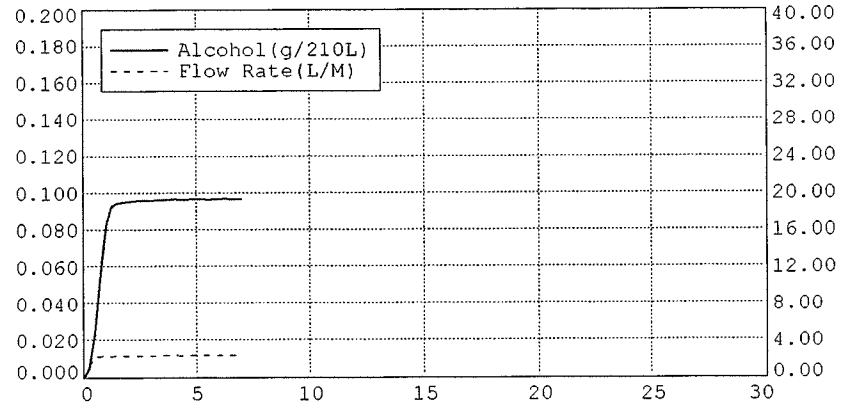
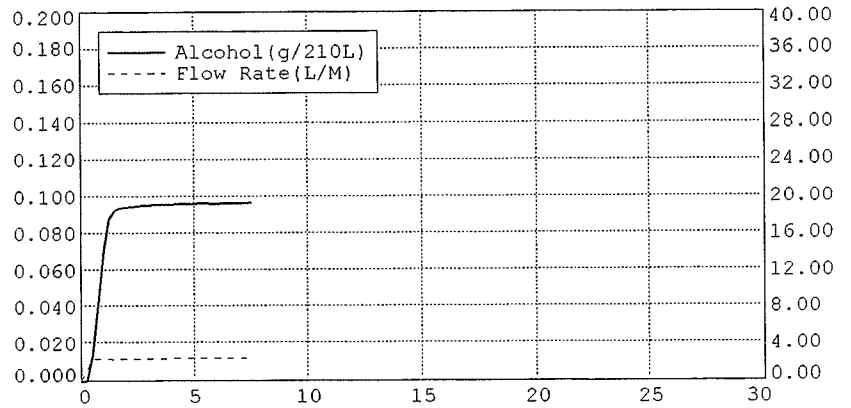
Date: 12/11/2019
 Time: 11:44:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.22: 0.098
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 654 psi

BLANK TEST	0.000	11:45
INTERNAL STANDARD	VERIFIED	11:45
EXTERNAL STANDARD	0.097	11:45
BLANK TEST	0.000	11:46
EXTERNAL STANDARD	0.097	11:47
BLANK TEST	0.000	11:47
EXTERNAL STANDARD	0.097	11:48
BLANK TEST	0.000	11:49
EXTERNAL STANDARD	0.097	11:49
BLANK TEST	0.000	11:50
EXTERNAL STANDARD	0.097	11:50
BLANK TEST	0.000	11:51

Average = 0.0970
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

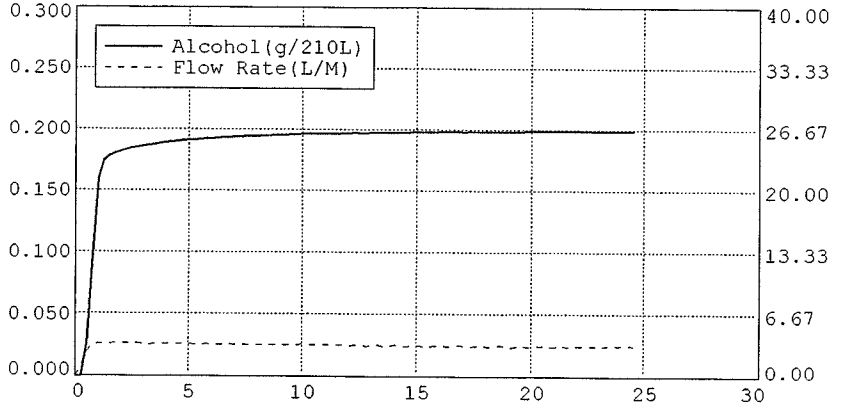
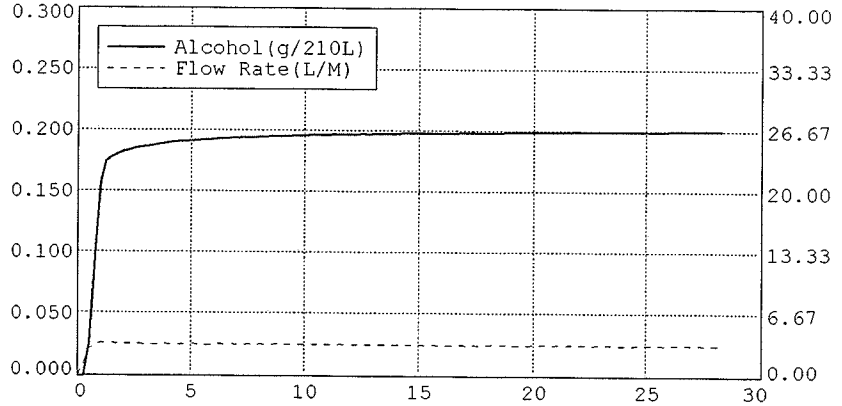
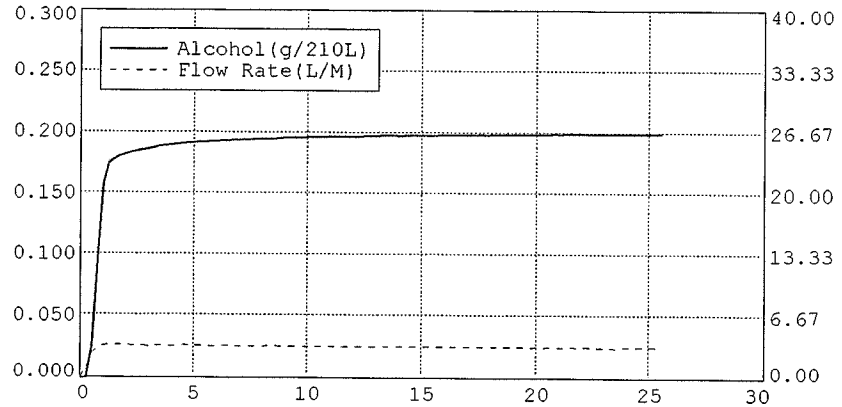
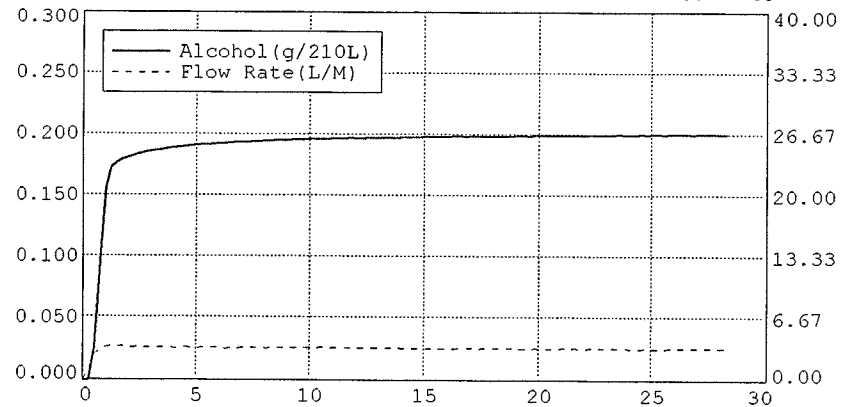
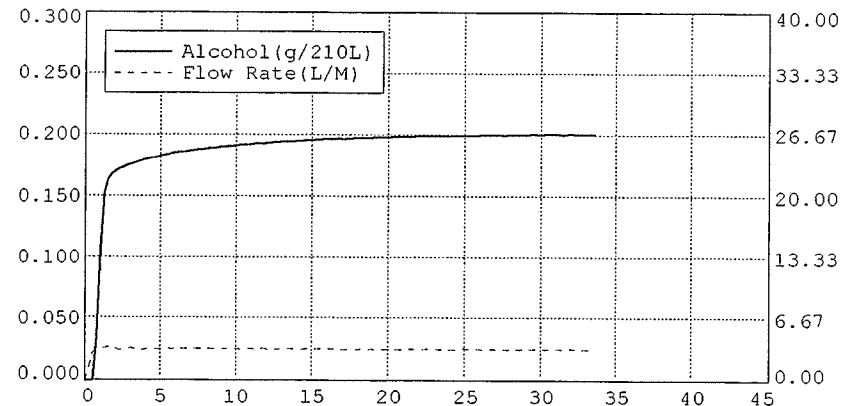
Alaska Department of Public Safety
 DATAMASTER dmt: 100690

Date: 12/11/2019
 Time: 11:51:40

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

BLANK TEST	0.000	11:53
INTERNAL STANDARD	VERIFIED	11:53
EXTERNAL STANDARD	0.201	11:54
BLANK TEST	0.000	11:55
EXTERNAL STANDARD	0.201	11:55
BLANK TEST	0.000	11:56
EXTERNAL STANDARD	0.200	11:57
BLANK TEST	0.000	11:58
EXTERNAL STANDARD	0.201	11:58
BLANK TEST	0.000	11:59
EXTERNAL STANDARD	0.200	12:00
BLANK TEST	0.000	12:01

Average = 0.2006
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100690

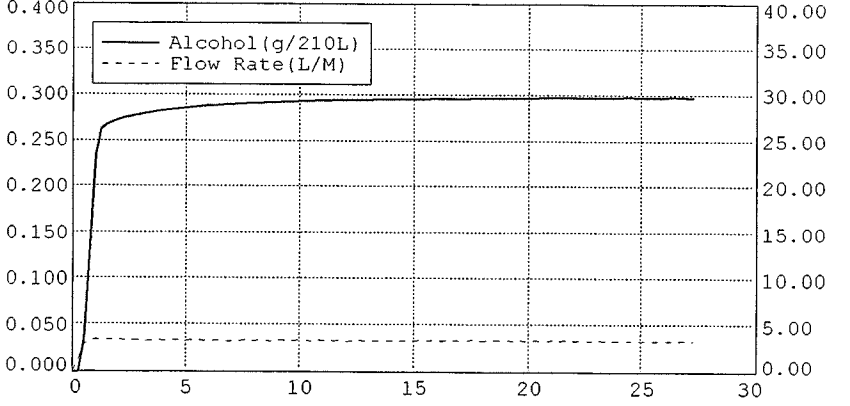
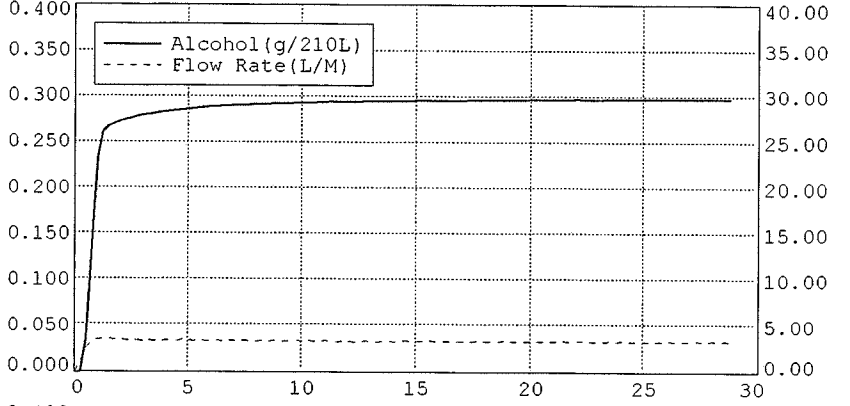
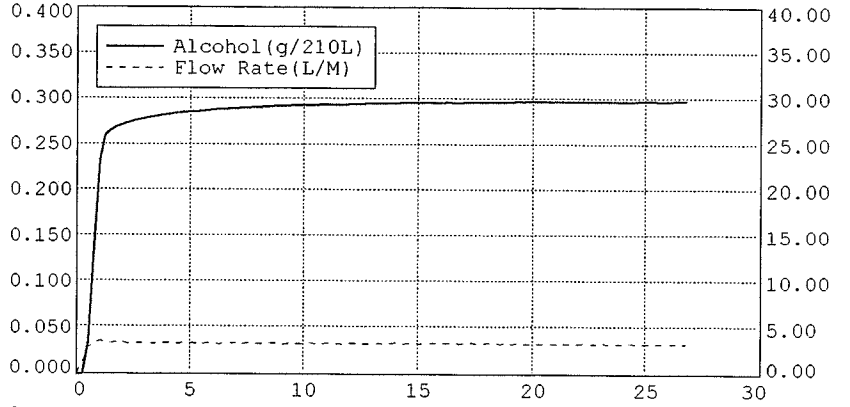
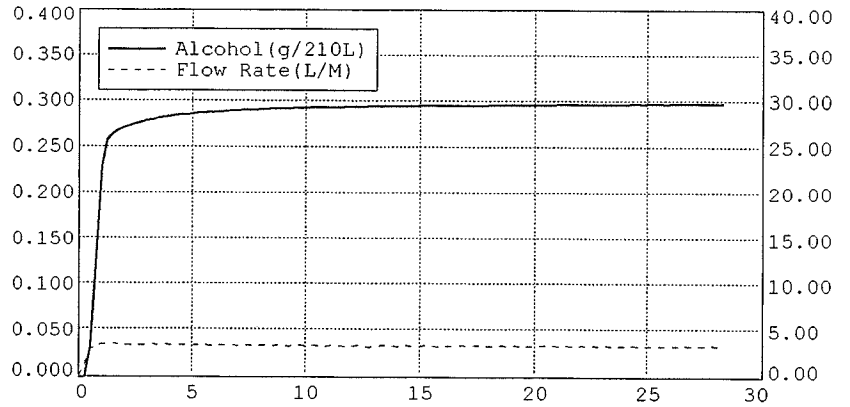
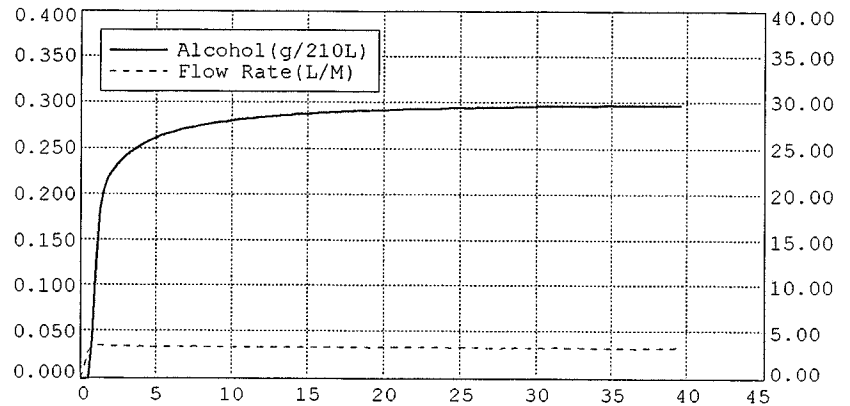
Date: 12/11/2019
 Time: 12:07:21

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 19010
 EXPIRATION: 01/03/2021

BLANK TEST	0.000	12:08
INTERNAL STANDARD	VERIFIED	12:08
EXTERNAL STANDARD	0.297	12:09
BLANK TEST	0.000	12:10
EXTERNAL STANDARD	0.298	12:10
BLANK TEST	0.000	12:11
EXTERNAL STANDARD	0.298	12:12
BLANK TEST	0.000	12:13
EXTERNAL STANDARD	0.298	12:13
BLANK TEST	0.000	12:14
EXTERNAL STANDARD	0.298	12:15
BLANK TEST	0.000	12:16

Average = 0.2978
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 12:20:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

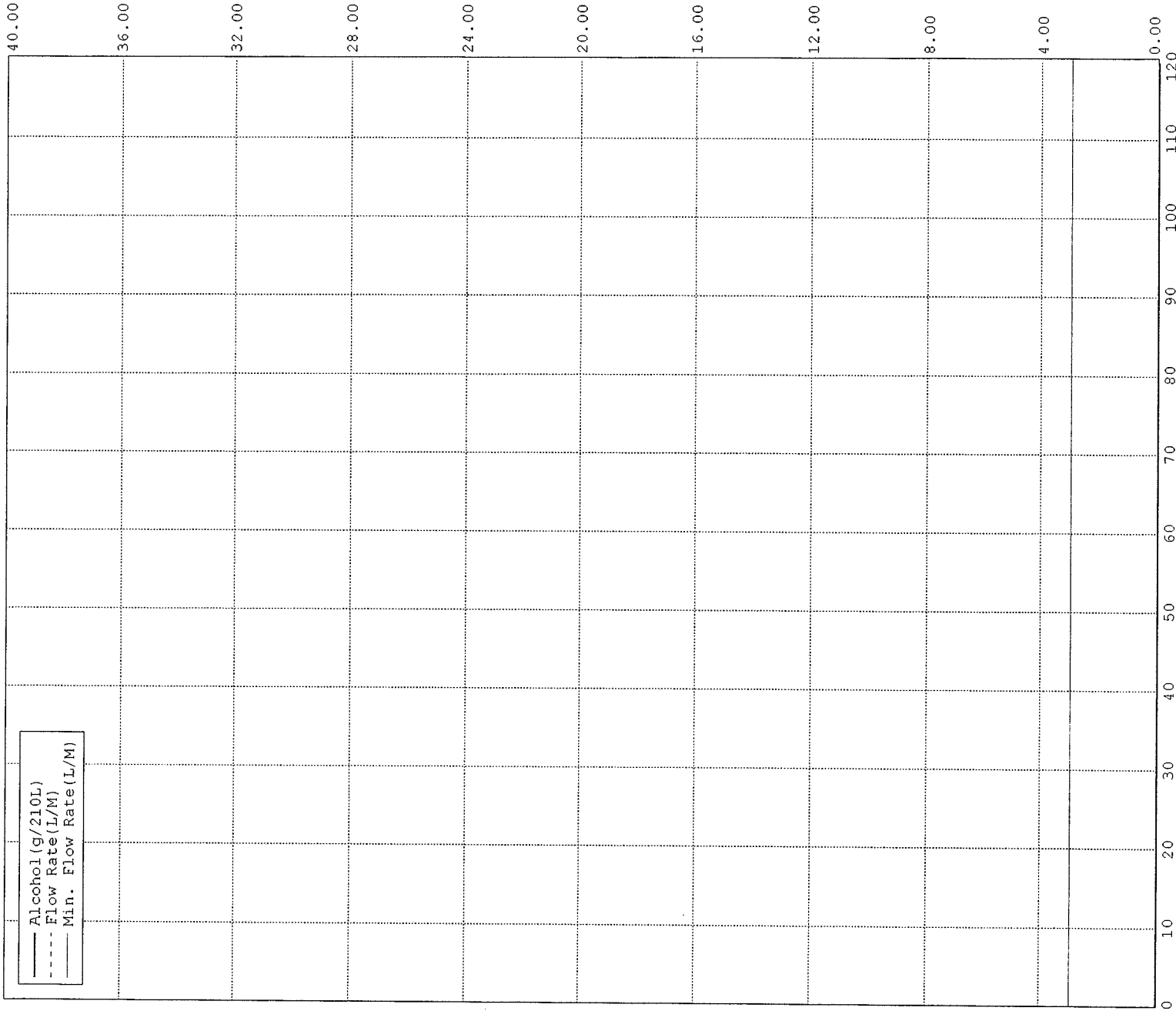
DEPT/AGENCY:
INCOMPLETE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.20: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 12:21
BLANK TEST 0.000 12:21
INTERNAL STANDARD VERIFIED 12:21
EXTERNAL STANDARD 0.077 12:22
BLANK TEST 0.000 12:23
SUBJECT SAMPLE INCOMPLETE 12:25

Handwritten initials: DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 12:27:29

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 29.19: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

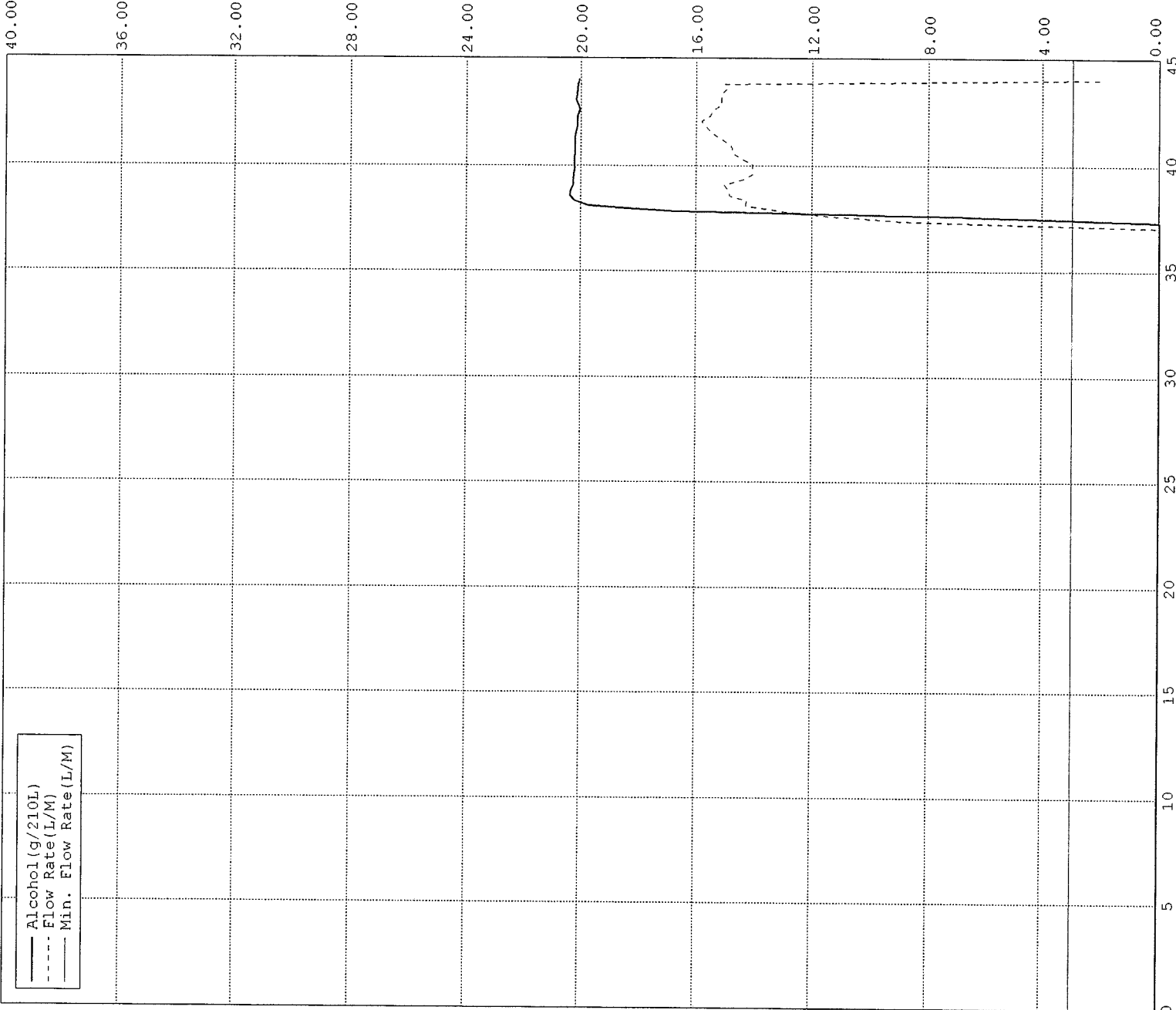
DIAGNOSTIC CHECK PASSED 12:28
BLANK TEST 0.000 12:28
INTERNAL STANDARD VERIFIED 12:28
Xq = 0.103 (0.00%)
EXTERNAL STANDARD 0.078 12:29
X[1] = 0.0776 (-0.0007) (0.0026)
BLANK TEST 0.000 12:29
SUBJECT SAMPLE XXX 12:30
X[1] = 0.1000 (-0.0210) (0.0014)

Interference Detected

Filter 2 Avg: -0.0005

Filter 3 Avg: 0.0027

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 12:33:18

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

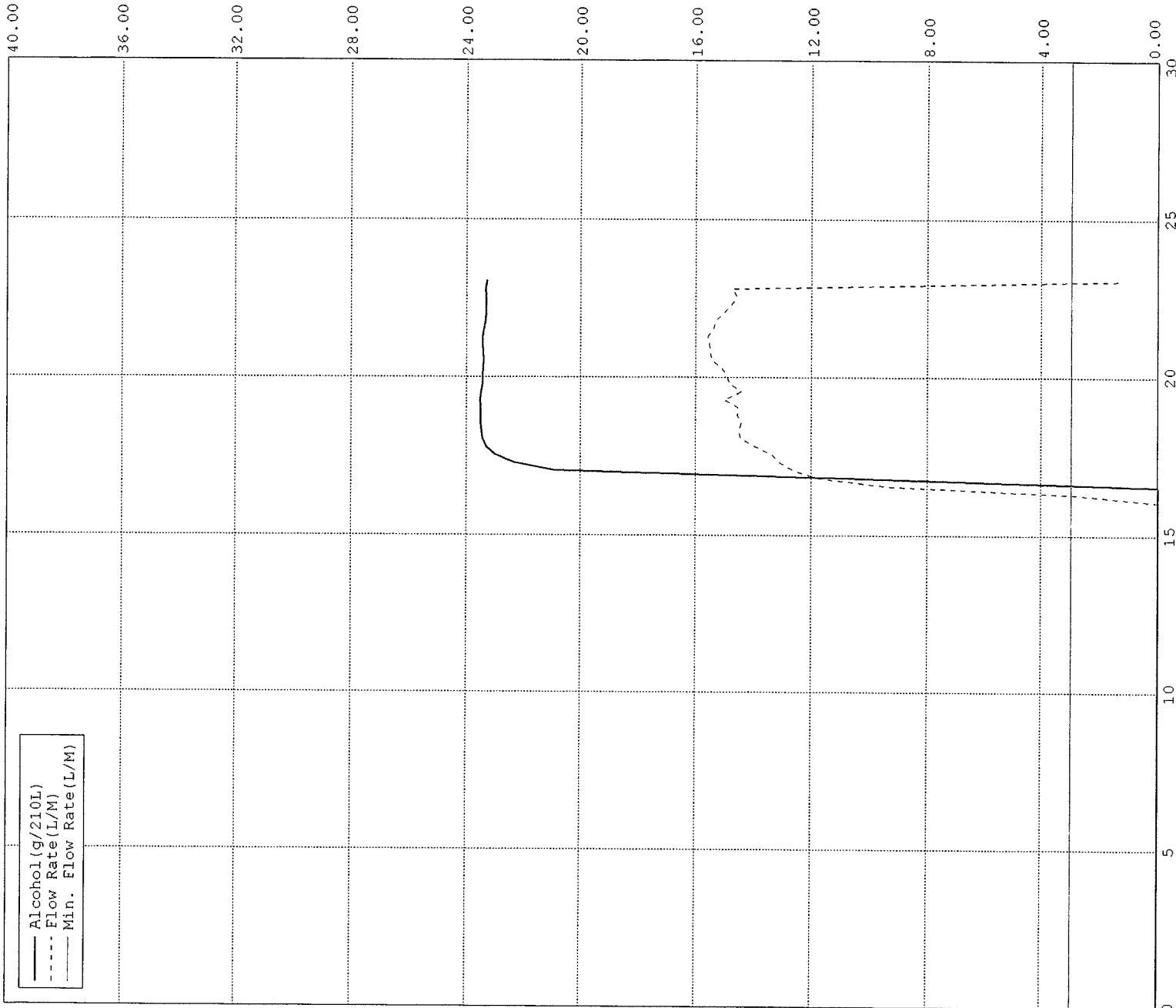
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:34
BLANK TEST	0.000	12:34
INTERNAL STANDARD	VERIFIED	12:34
Xq = 0.104 (0.68%)		
EXTERNAL STANDARD	0.078	12:34
X[1] = 0.0777 (-0.0013) (0.0032)		
BLANK TEST	0.000	12:35
SUBJECT SAMPLE	XXX	12:36
X[1] = 0.1159 (-0.0236) (0.0036)		

Interference Detected

DM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 12:38:17

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

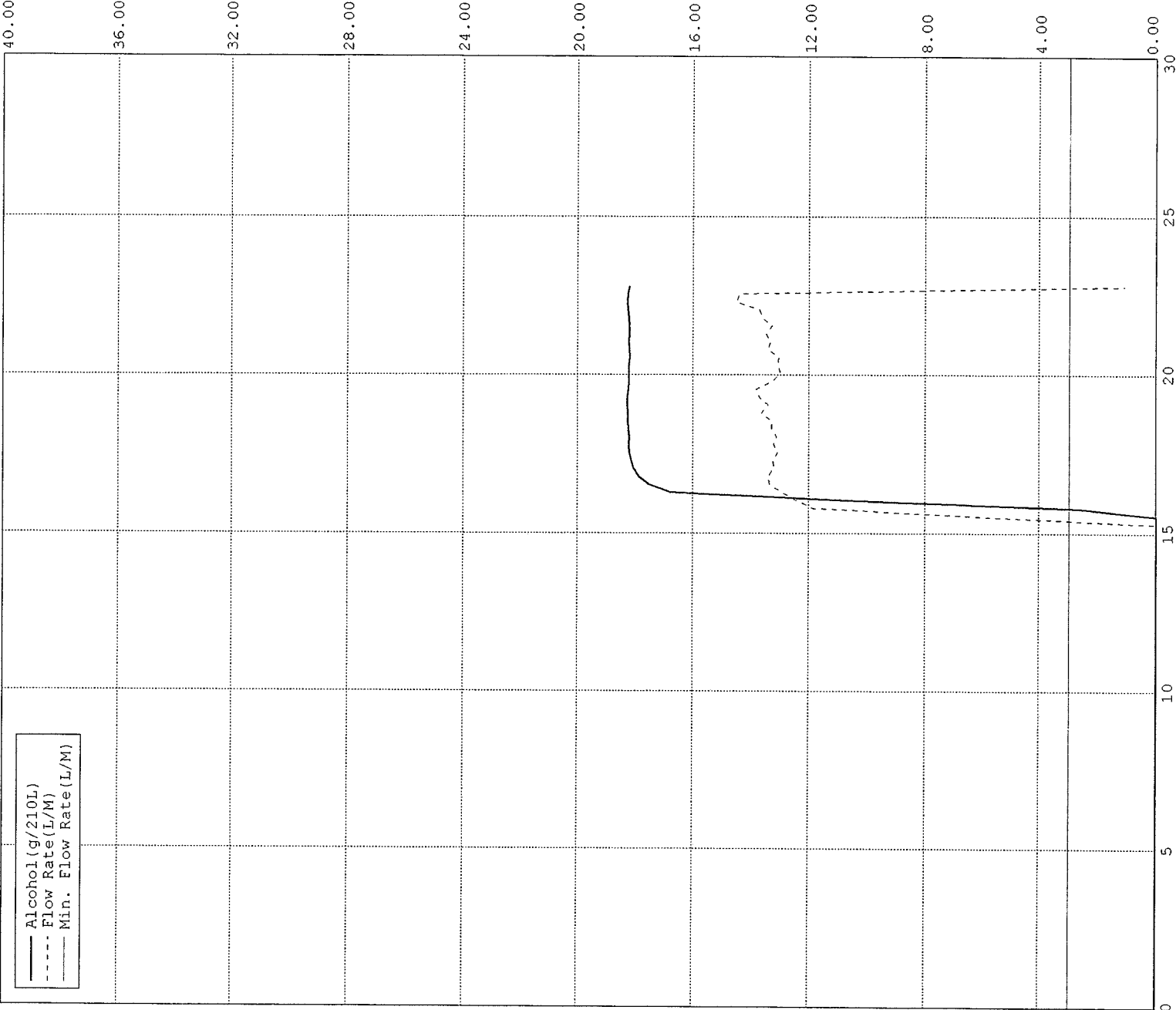
DEPT/AGENCY:
INTERFERENCE NEGATIVE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:39
BLANK TEST	0.000	12:39
INTERNAL STANDARD	VERIFIED	12:39
Xq = 0.104 (0.34%)		
EXTERNAL STANDARD	0.077	12:39
X[1] = 0.0773 (-0.0004) (0.0026)		
BLANK TEST	0.000	12:40
SUBJECT SAMPLE (Vol=1.58L)	0.090	12:41
X[1] = 0.0904 (-0.0022) (0.0021)		
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.077	12:42
X[1] = 0.0773 (0.0005) (0.0025)		
BLANK TEST	0.000	12:43

DW



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 12:48:08

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

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

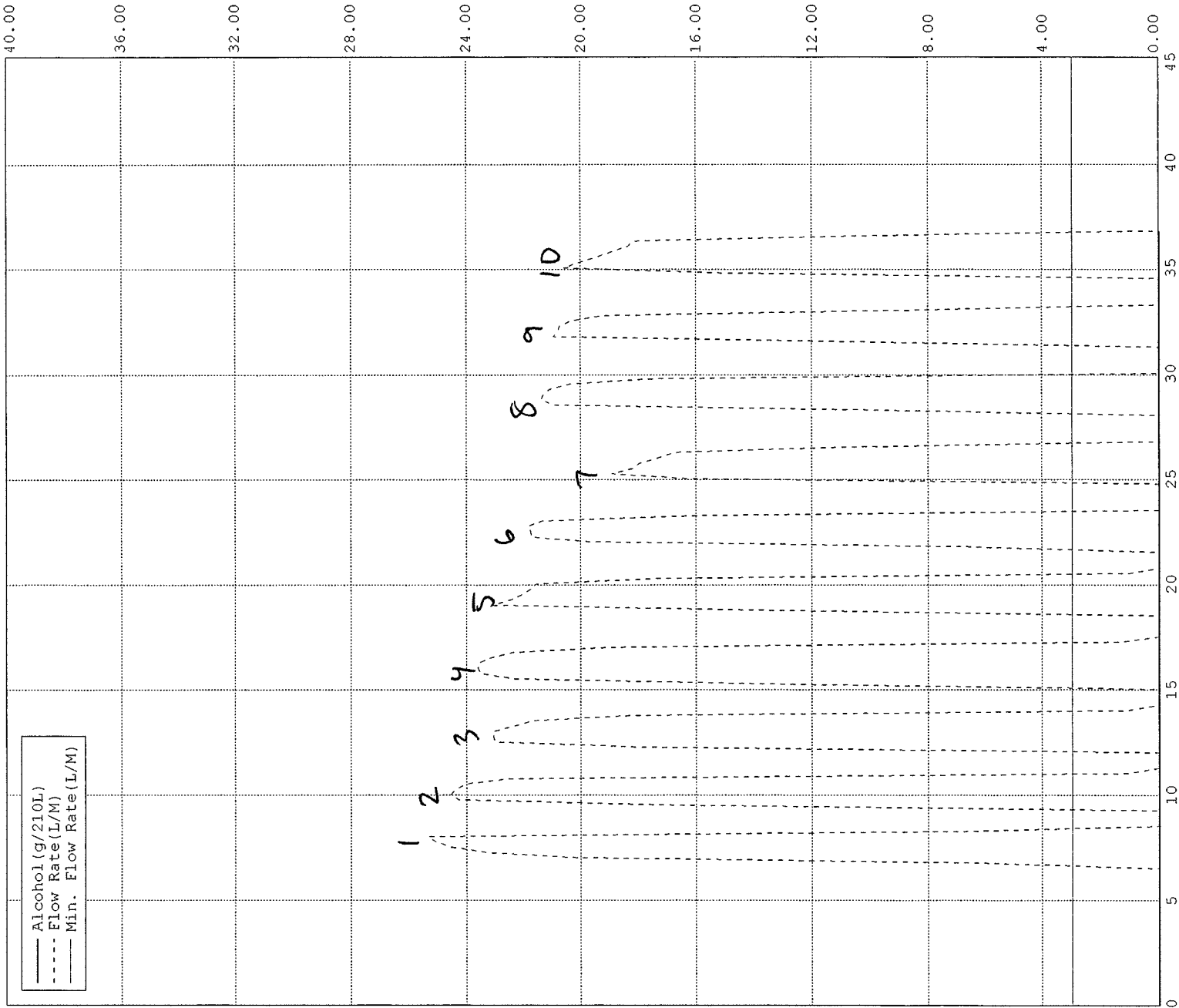
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.19: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 12:49
BLANK TEST 0.000 12:49
INTERNAL STANDARD VERIFIED 12:49
EXTERNAL STANDARD 0.077 12:49
BLANK TEST 0.000 12:50
SUBJECT SAMPLE XXX 12:51

Maximum Attempts Exceeded

DW



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 15:55:18

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

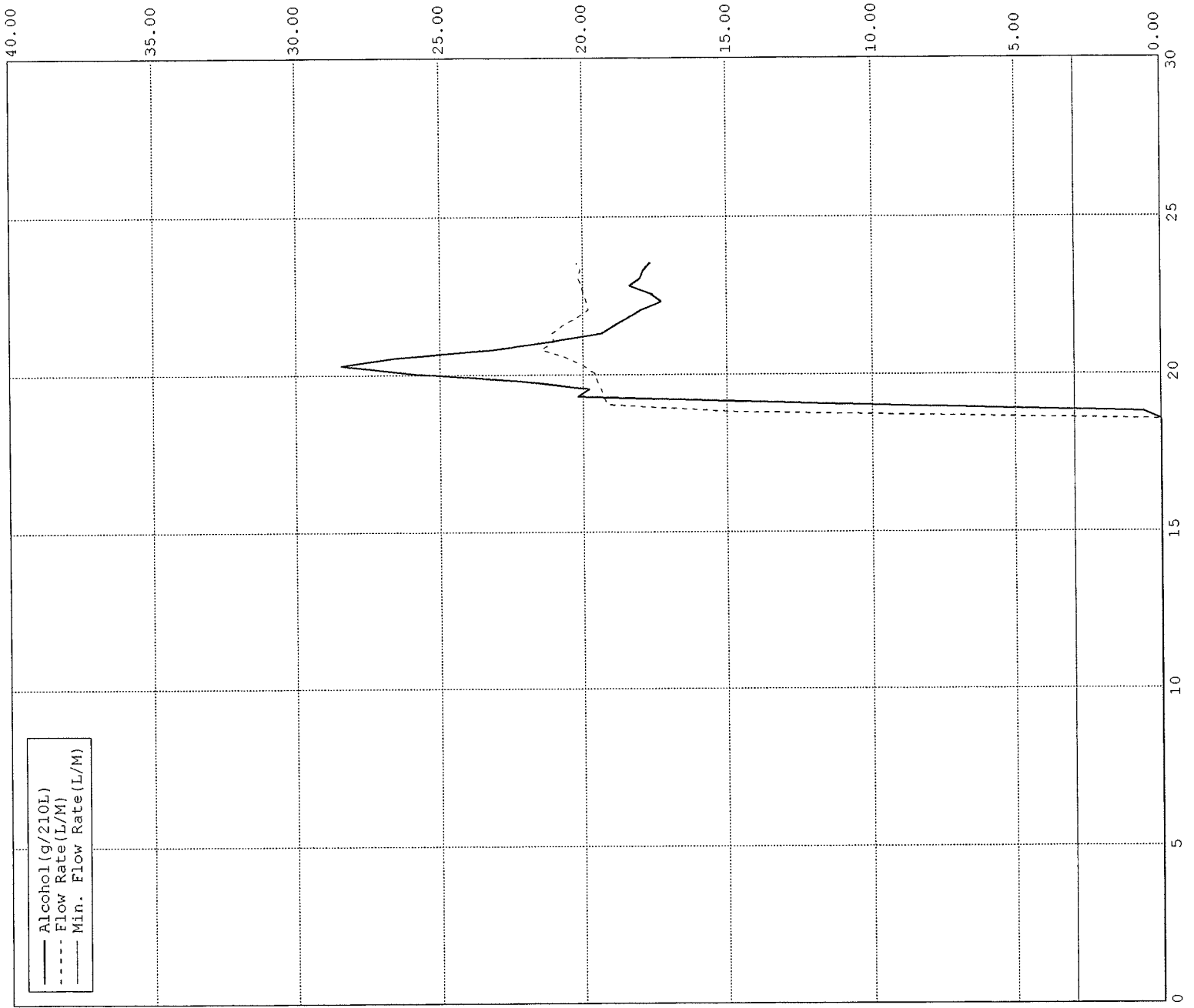
DEPT/AGENCY:
INVALID
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.15: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	15:57
BLANK TEST	0.000	15:57
INTERNAL STANDARD	VERIFIED	15:57
EXTERNAL STANDARD	0.078	15:57
BLANK TEST	0.000	15:58
SUBJECT SAMPLE	INVALID	15:59

MJC



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/11/2019
Time: 16:02:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
DEREK WALTON
OPERATOR'S #: 9508

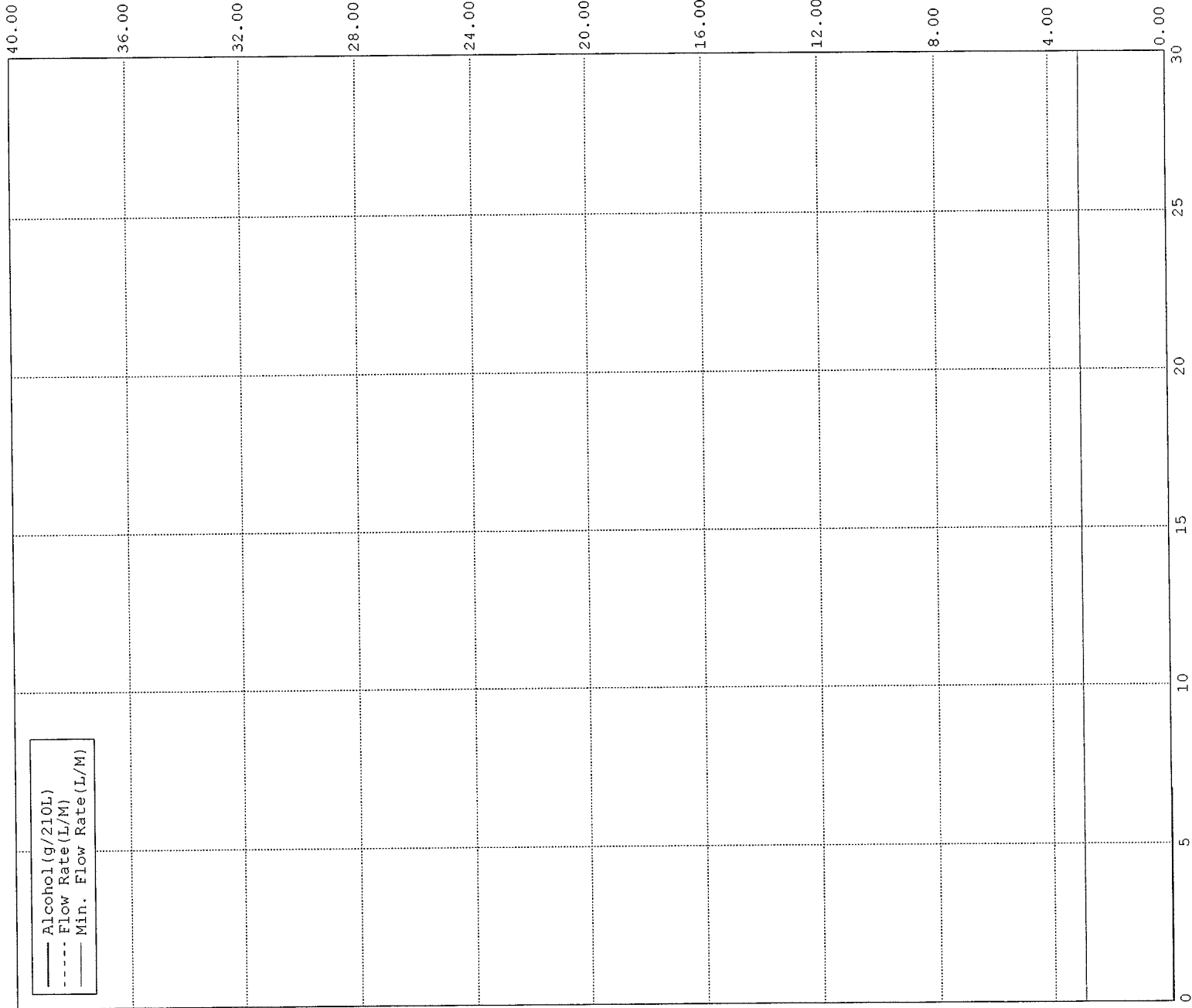
DEPT/AGENCY:
RADIO FREQUENCY
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 16:03
BLANK TEST 0.000 16:03
INTERNAL STANDARD VERIFIED 16:03
EXTERNAL STANDARD 0.078 16:03
BLANK TEST 0.000 16:04

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100690

Date: 12/12/2019
Time: 11:51:52

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 29.06: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:52
BLANK TEST 0.000 11:53
INTERNAL STANDARD VERIFIED 11:53
EXTERNAL STANDARD 0.077 11:53
BLANK TEST 0.000 11:54
SUBJECT SAMPLE (Vol=2.64L) 0.000 11:54
BLANK TEST 0.000 11:55
EXTERNAL STANDARD 0.078 11:55
BLANK TEST 0.000 11:56

DM

