

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 100689 Analyst Brandi Barnett Start Date 4/3/19

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 AG 805804 Exp 2/27/20
- ii. 0.040g/210L Mnf Airgas Lot AG 733403 Exp 11/30/19
- iii. 0.080g/210L Mnf Airgas Lot AG 826001 Exp 9/18/20
- iv. 0.100g/210L Mnf Airgas Lot AG 805903 Exp 2/28/20
- v. 0.200g/210L Mnf Guth Lot 17340 Exp 10/9/19
 1. Simulator S/N DR4177 Date Calibrated 6/4/18
- vi. 0.300g/210L Mnf Guth Lot 17350 Exp 10/11/19
 1. Simulator S/N DR6267 Date Calibrated 6/4/18

5. Functional Tests (attached)

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

- i. Acetone - Mnf Guth Lot 18070 Level 0.100 Exp 5/4/19 02/26/20
 1. Simulator S/N SD1200 Date Calibrated 6/1/18 BMB 4/10/19
- ii. Isopropanol - Mnf Guth Lot 18070 Level 0.100 Exp 5/4/19 02/26/20
 1. Simulator S/N DR4176 Date Calibrated 6/4/18 BMB 4/10/19
- iii. Negative Control - Mnf Guth Lot 18070 Level 0.100 Exp 5/4/19 02/26/20
 1. Simulator S/N DR4163 Date Calibrated 6/4/18 BMB 4/10/19

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 4/5/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/03/2019
Time: 13:08:18

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 = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.73 V PASSED
(1.04 V - 2.42 V)
Cooler Voltage = 1.70 V PASSED
(1.02 V - 2.38 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 539 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.235 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
(0.003 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.096 0.00% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100689

Date: 04/03/2019
Time: 1:20 PM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 48.0°C

Current Barometer 29.4 in
Volume (Ltr) 1.51

Settings
Lamp: 1.81 V
Bias: 79 V
Cooler: 1.70 V
Chopper: 535 Hz

Voltages (V)
Flow: 0.99 V
Detector: -0.007 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/01/2019
Time: 09:20:44

OPERATOR NAME:
DEREK WALTON
CERTIFICATE #: 9508

Ca = 0.1000
CAL = 0.980396 0.800 <= CAL < 1.200
b1 = 0.0018 0.0000 <= b1 < 0.0040
b2 = 0.0079 0.0010 <= b2 < 0.0100
b3 = 0.0017 0.0000 <= b3 < 0.0040
Xq = 0.0965 0.0500 <= Xq < 0.2000
a21 = 1.222021 1.050 <= a21 < 1.300
a31 = 0.538967 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100689

Date: 04/03/2019
Time: 13:21:08

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

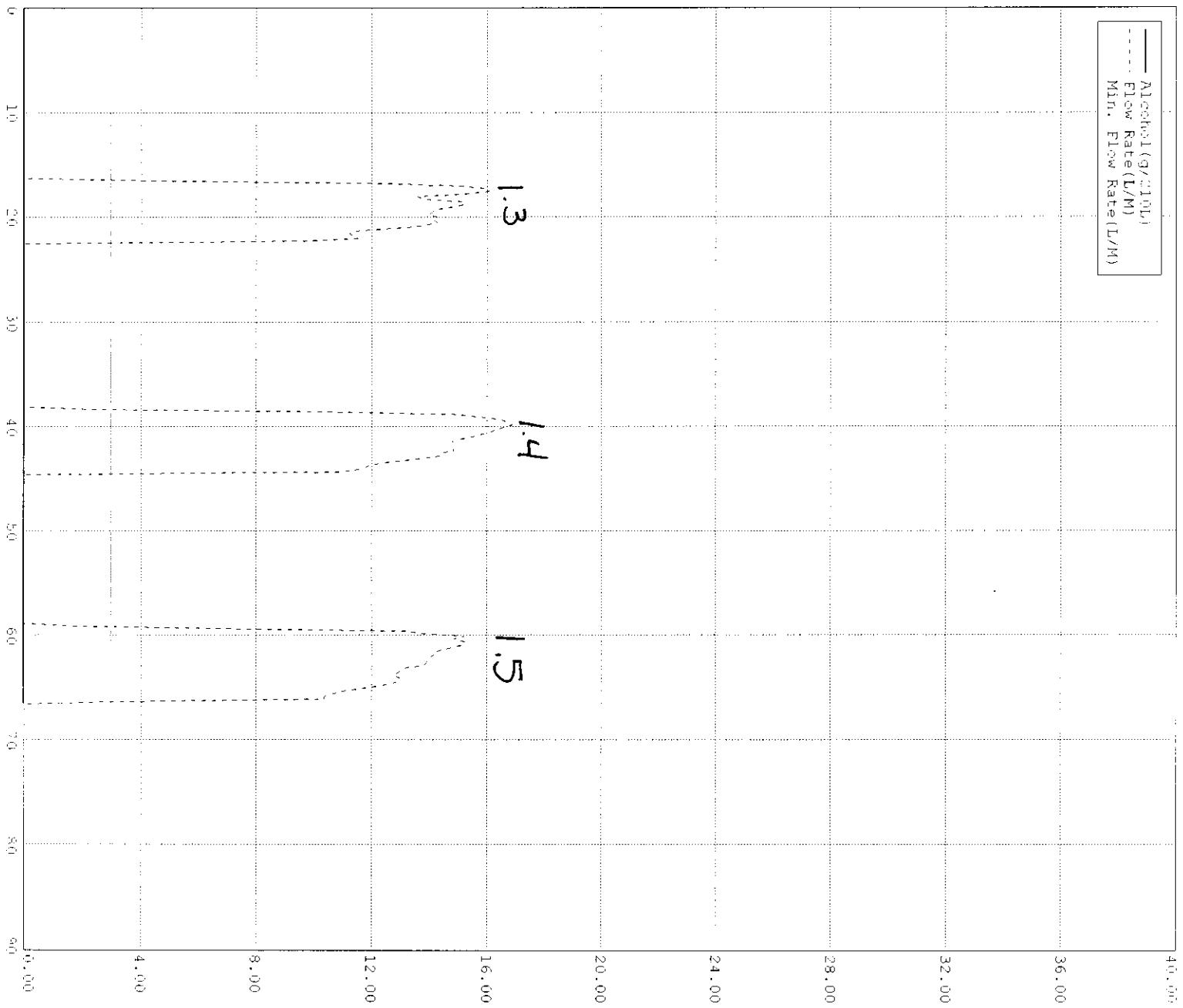
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.36: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:22
BLANK TEST	0.000	13:22
INTERNAL STANDARD	VERIFIED	13:22
EXTERNAL STANDARD	0.078	13:22
BLANK TEST	0.000	13:23
SUBJECT SAMPLE (Vol=1.54L)	0.000	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.078	13:26
BLANK TEST	0.000	13:26

BMB



LINEARITY CHECK

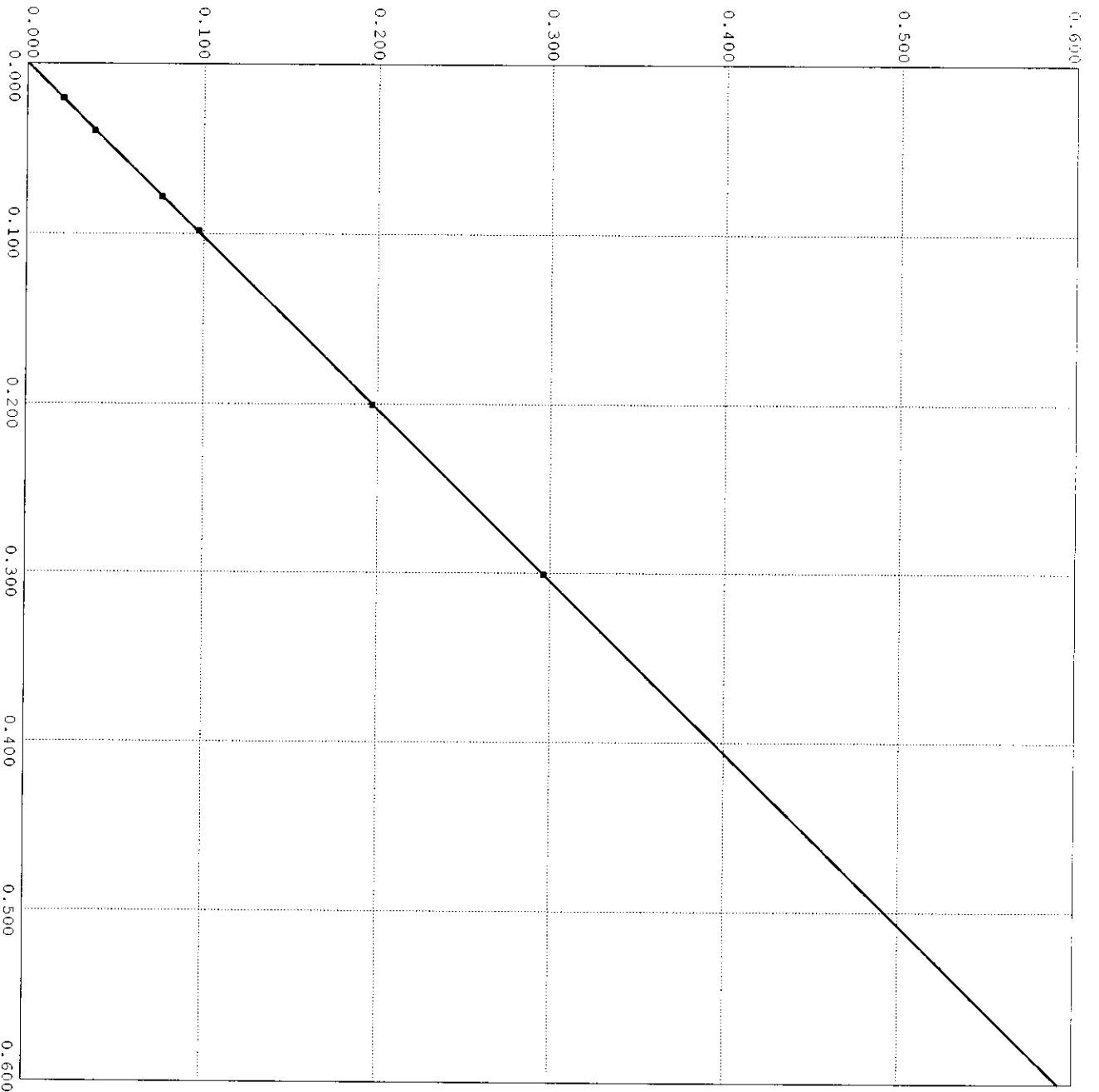
Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/04/2019
Time: 10:35:06

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.039	0.0390	0.0000
0.078	0.0774	0.0005
0.098	0.0982	0.0008
0.200	0.1978	0.0004
0.300	0.2968	0.0008

SLOPE = 0.985771
R² = 0.999982



BB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100689

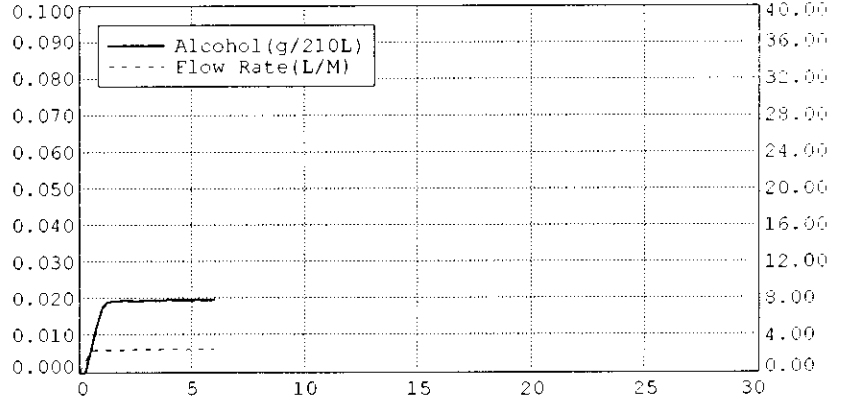
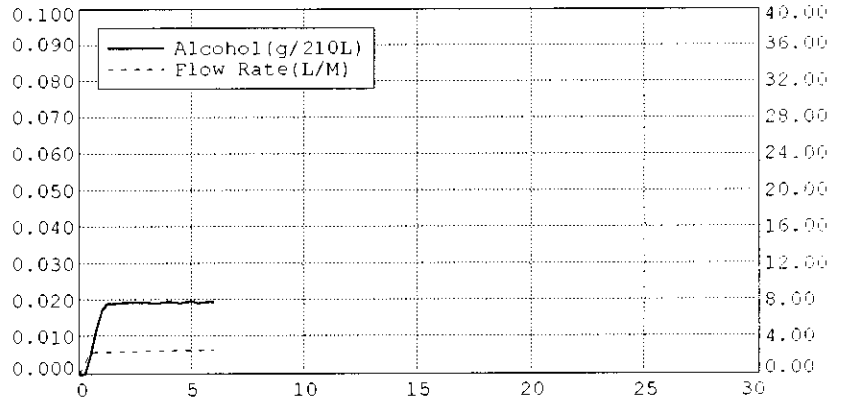
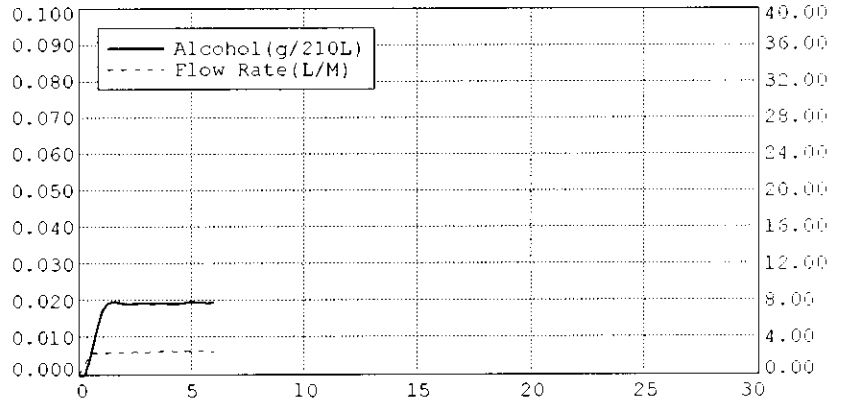
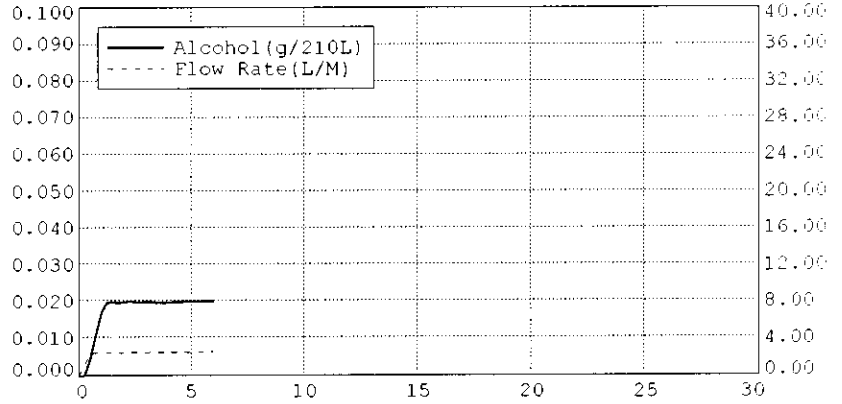
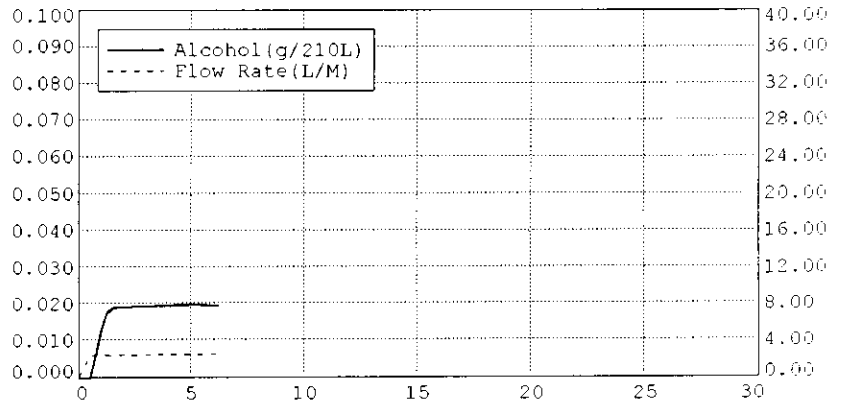
Date: 04/04/2019
 Time: 10:35:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.35: 0.020
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 731 psi

BLANK TEST	0.000	10:36
INTERNAL STANDARD	VERIFIED	10:36
EXTERNAL STANDARD	0.021	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.021	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.021	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.021	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.021	10:40
BLANK TEST	0.000	10:41

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100689

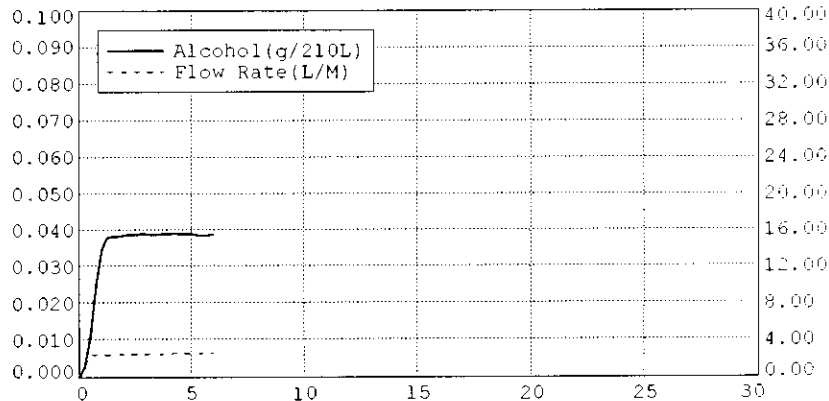
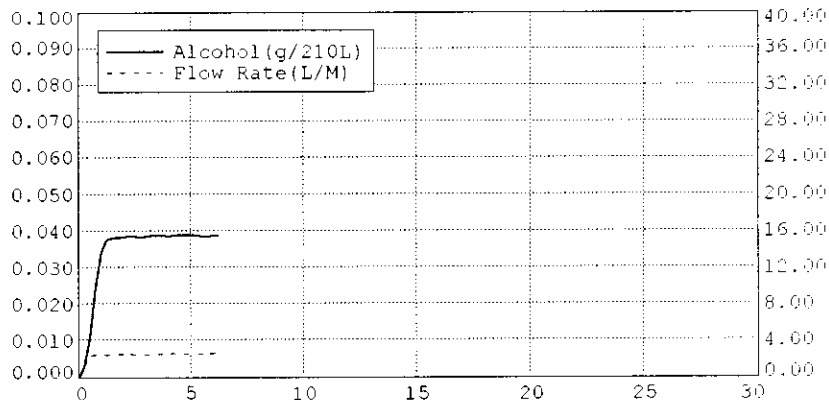
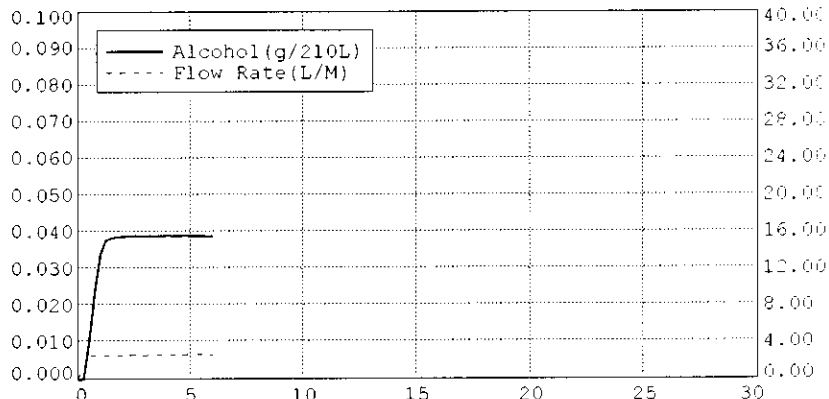
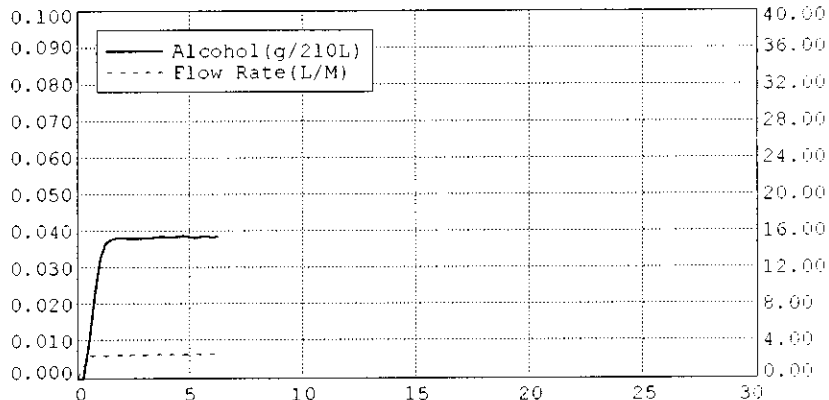
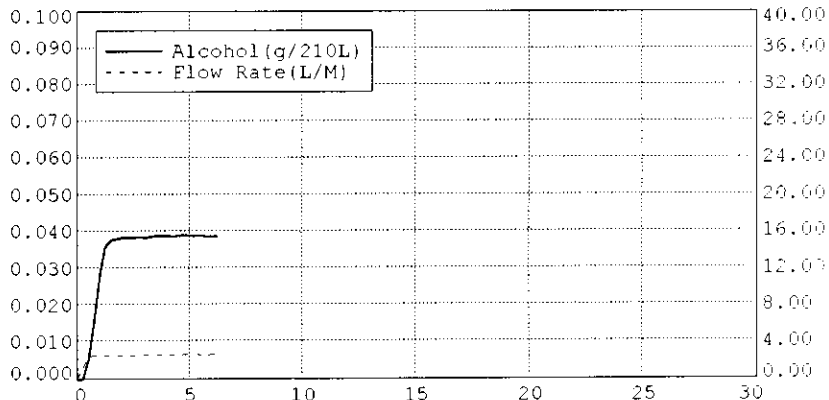
Date: 04/04/2019
 Time: 10:43:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.36: 0.039
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 849 psi

BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	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	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.039	10:48
BLANK TEST	0.000	10:49
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: 100689

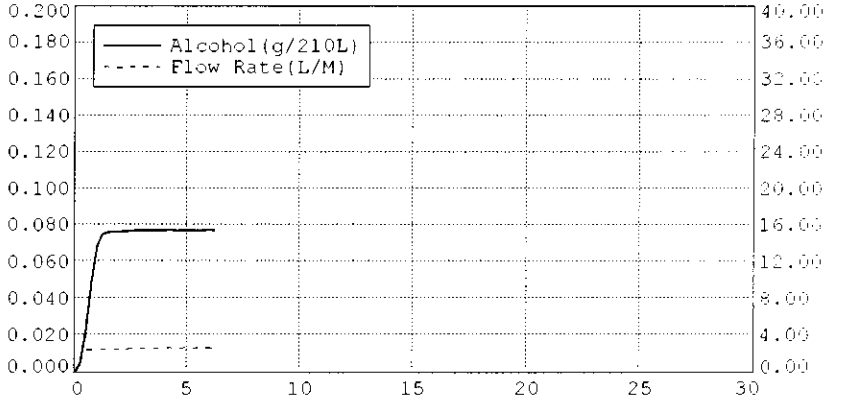
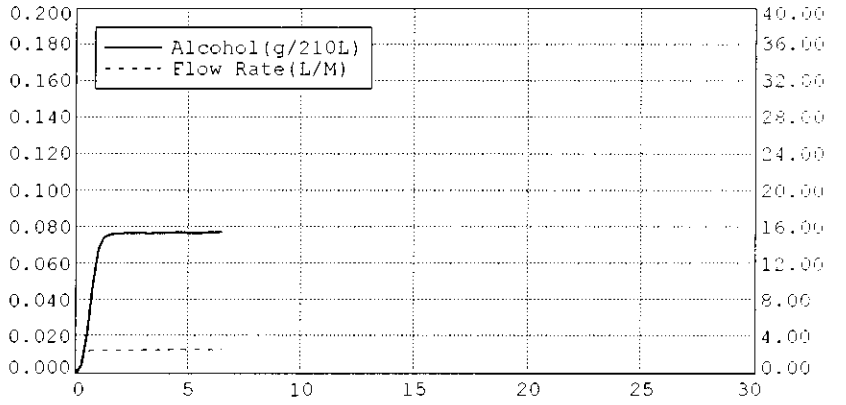
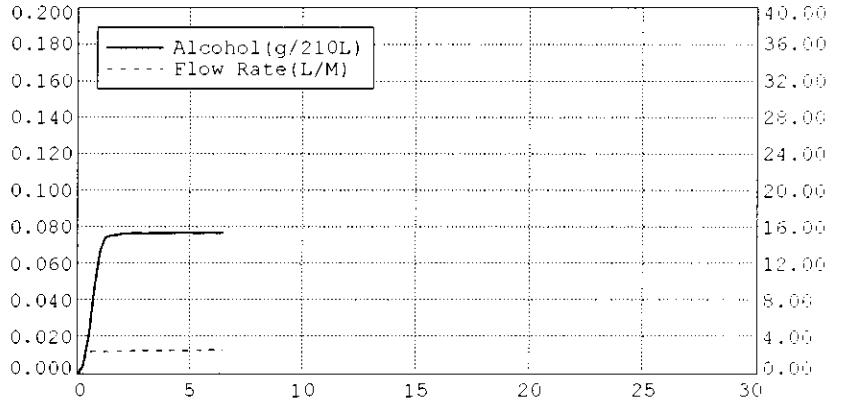
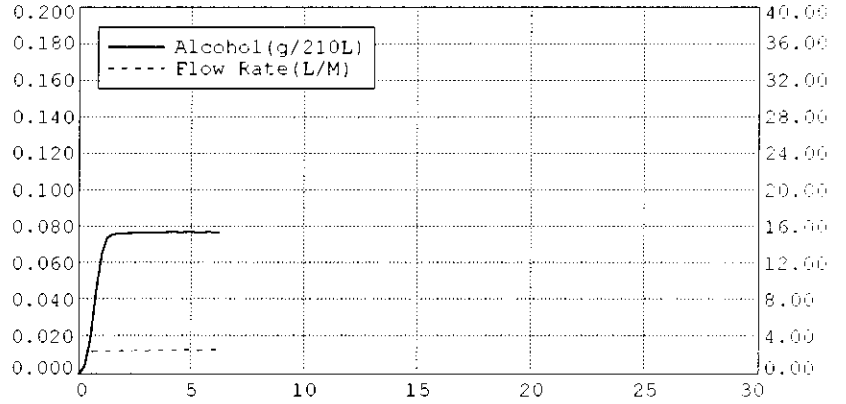
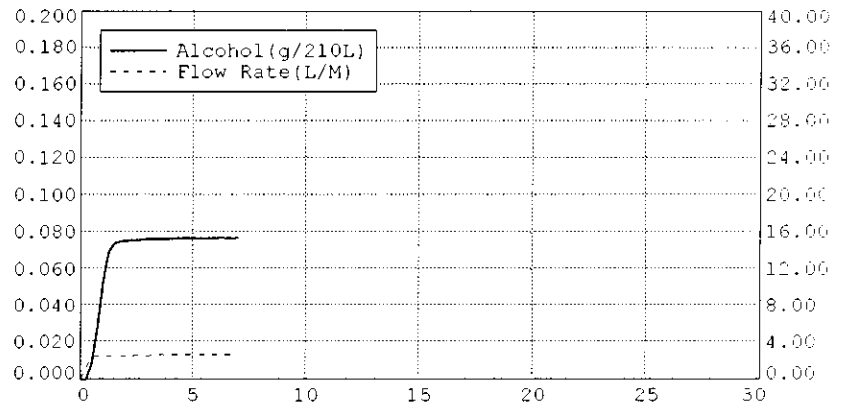
Date: 04/04/2019
 Time: 10:53:14

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.34: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 811 psi

BLANK TEST	0.000	10:55
INTERNAL STANDARD	VERIFIED	10:55
EXTERNAL STANDARD	0.077	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.078	10:56
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.077	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.078	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.077	10:59
BLANK TEST	0.000	11:00

Average = 0.0774
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100689

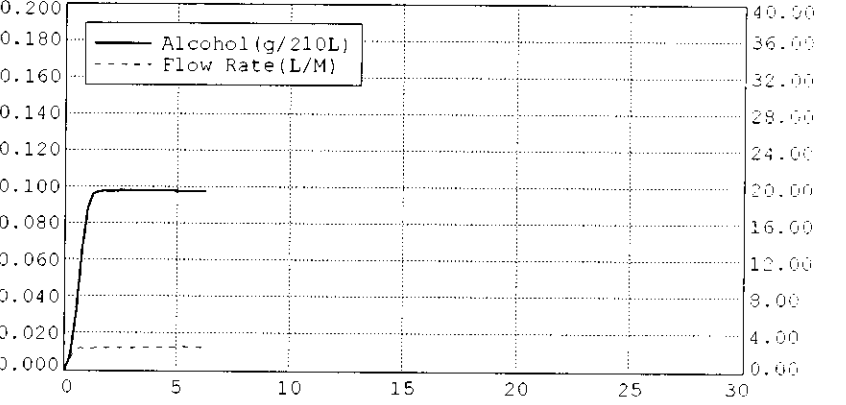
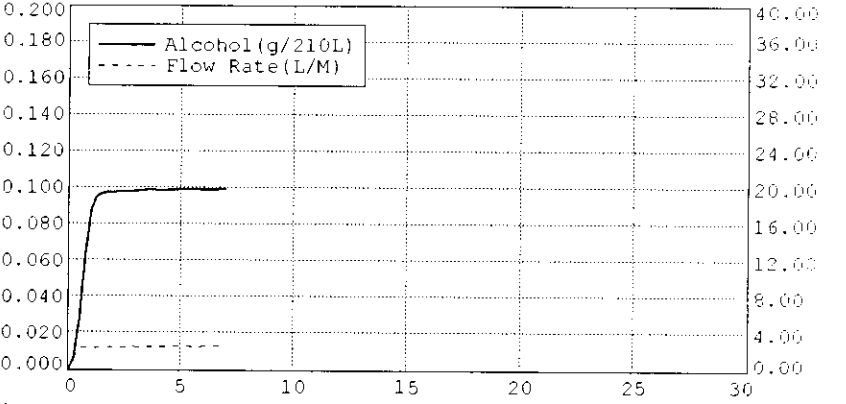
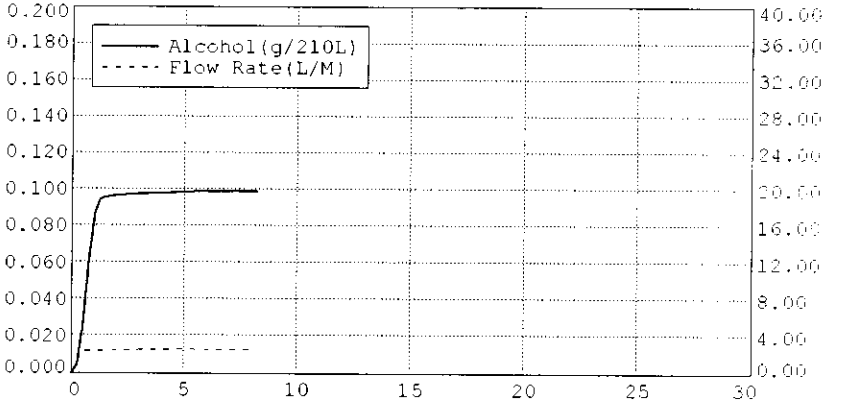
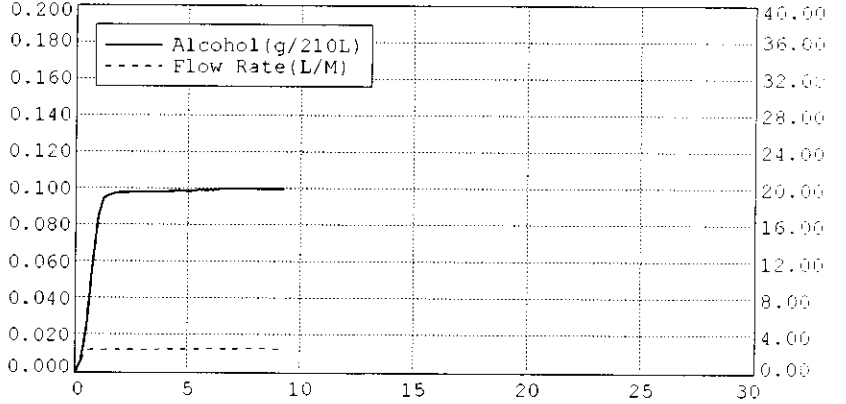
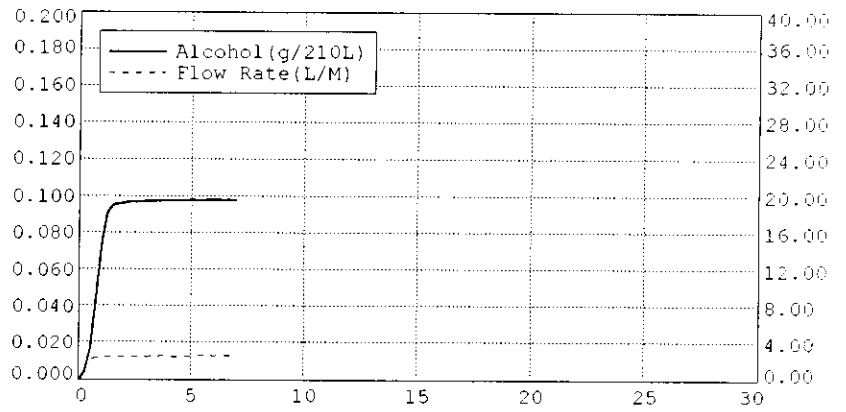
Date: 04/04/2019
 Time: 11:06:15

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.36: 0.098
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 797 psi

BLANK TEST	0.000	11:07
INTERNAL STANDARD	VERIFIED	11:07
EXTERNAL STANDARD	0.099	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.099	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.097	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.098	11:11
BLANK TEST	0.000	11:12
EXTERNAL STANDARD	0.098	11:12
BLANK TEST	0.000	11:13

Average = 0.0982
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 5

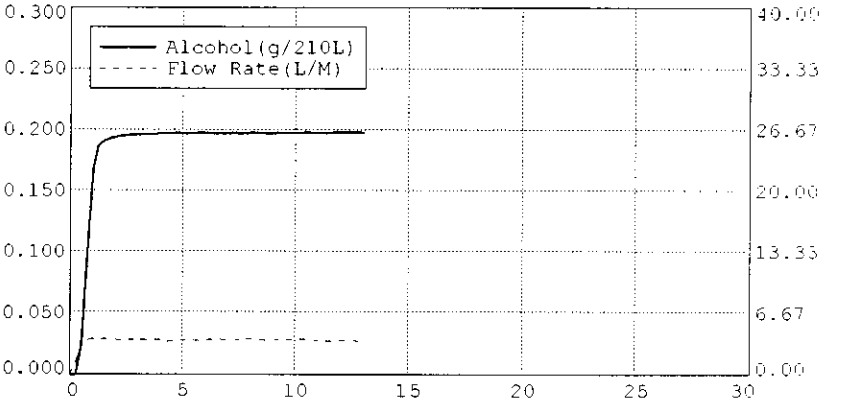
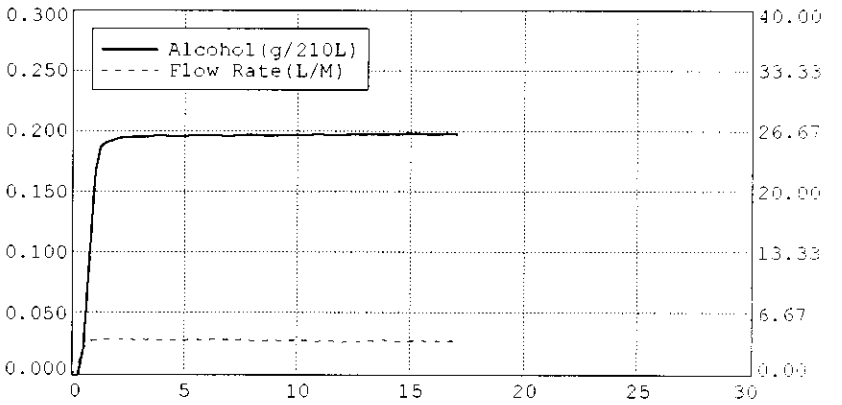
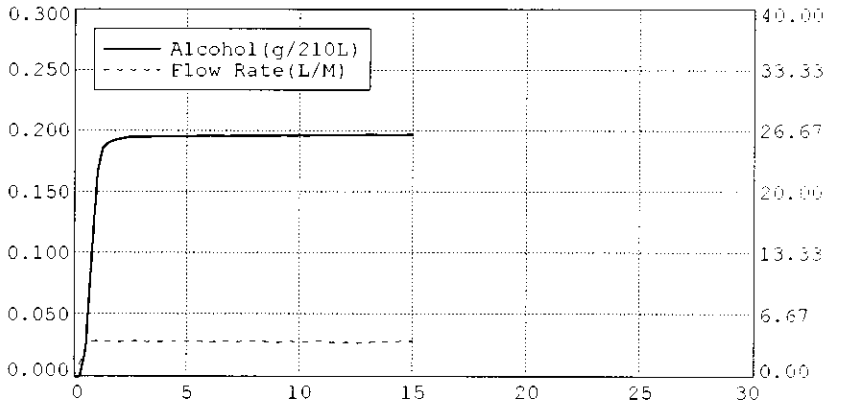
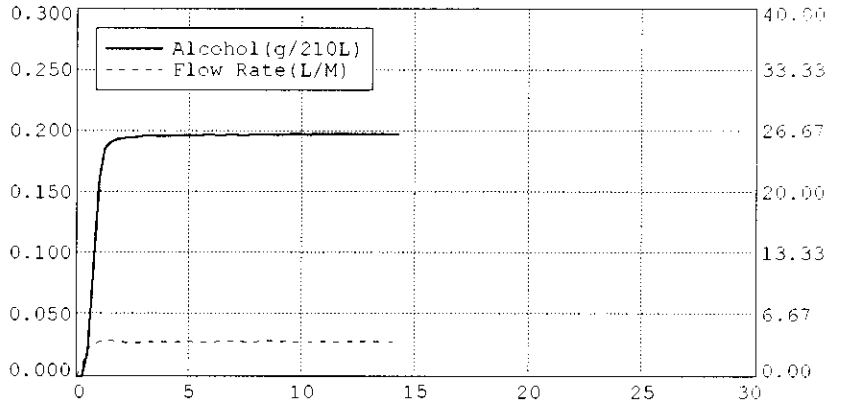
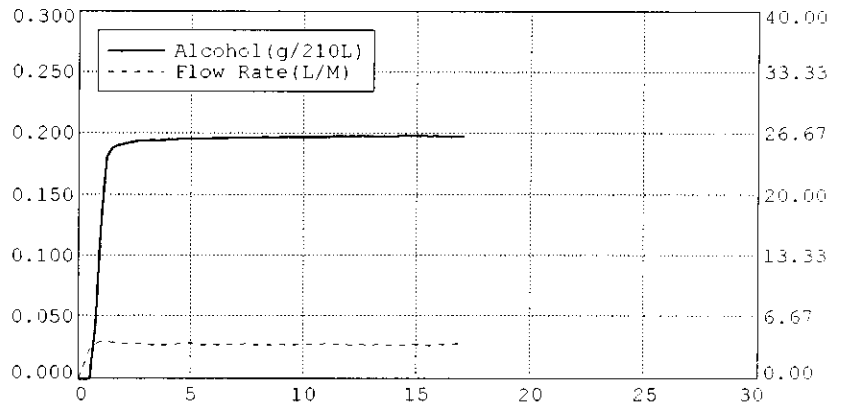
Alaska Department of Public Safety
 DATAMASTER dmt: 100689

Date: 04/04/2019
 Time: 12:38:26

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: GUTH 17340
 EXPIRATION: 10/09/2019

BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:40
EXTERNAL STANDARD	0.198	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.198	12:42
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.197	12:43
BLANK TEST	0.000	12:44
EXTERNAL STANDARD	0.198	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.198	12:46
BLANK TEST	0.000	12:47

Average = 0.1978
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

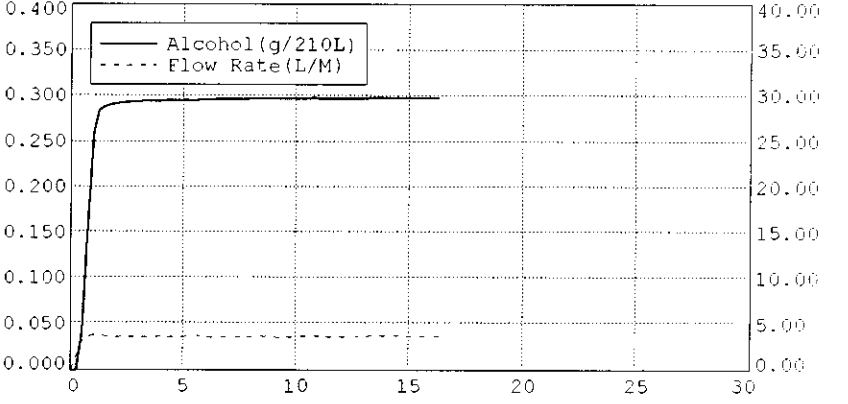
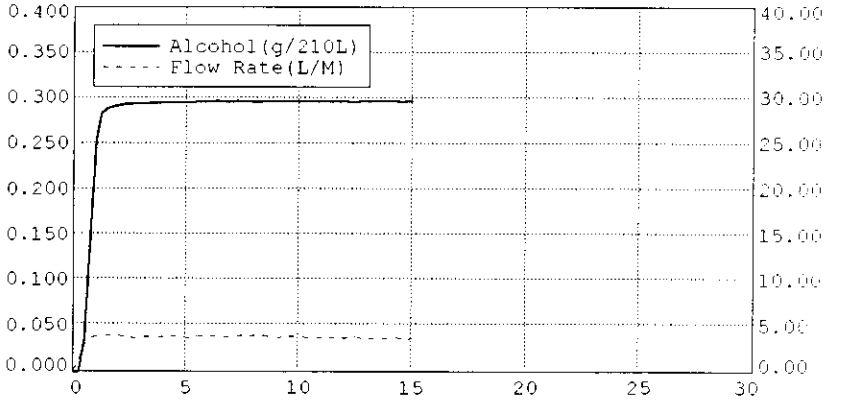
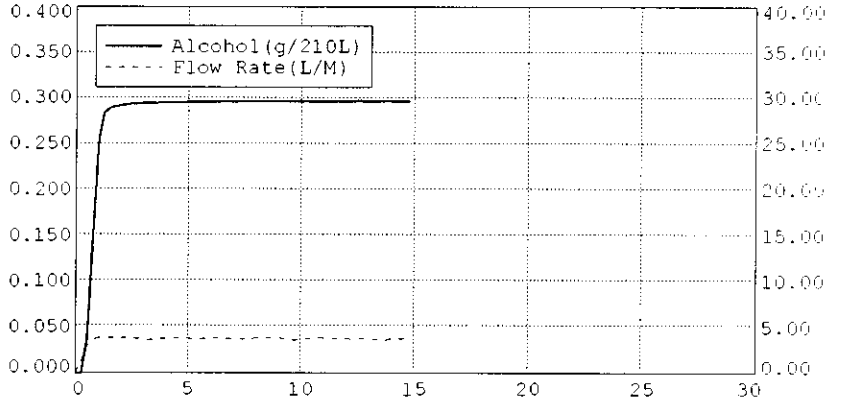
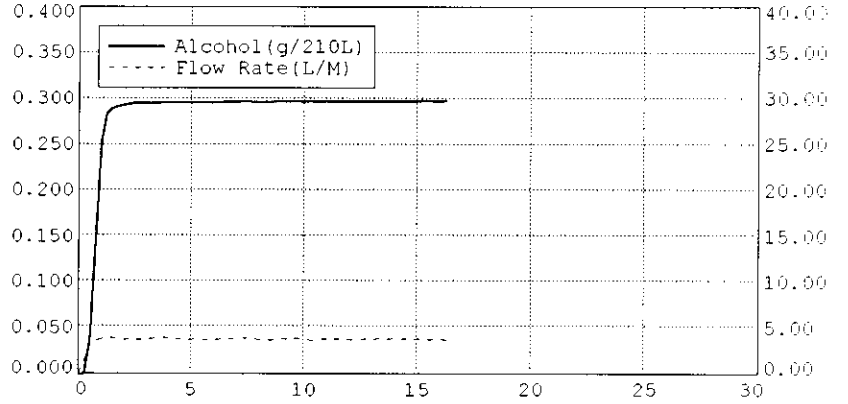
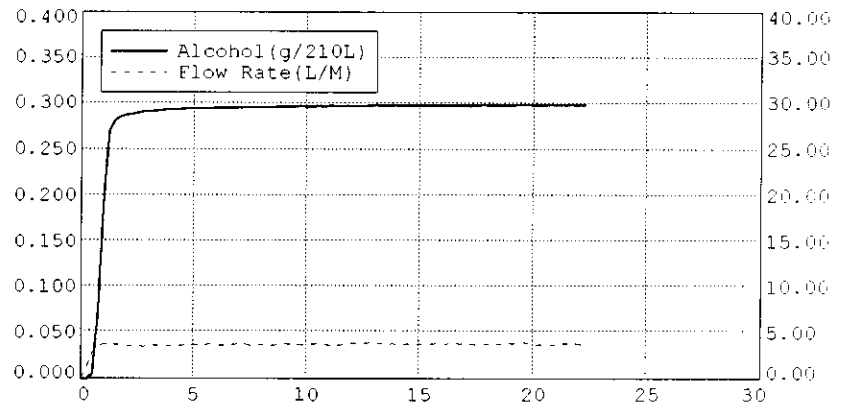
Alaska Department of Public Safety
 DATAMASTER dmt: 100689

Date: 04/04/2019
 Time: 12:48:53

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: GUTH 17350
 EXPIRATION: 10/11/2019

BLANK TEST	0.000	12:49
INTERNAL STANDARD	VERIFIED	12:50
EXTERNAL STANDARD	0.298	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.297	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.296	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.296	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.297	12:55
BLANK TEST	0.000	12:56

Average = 0.2968
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2019
Time: 10:43:16

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

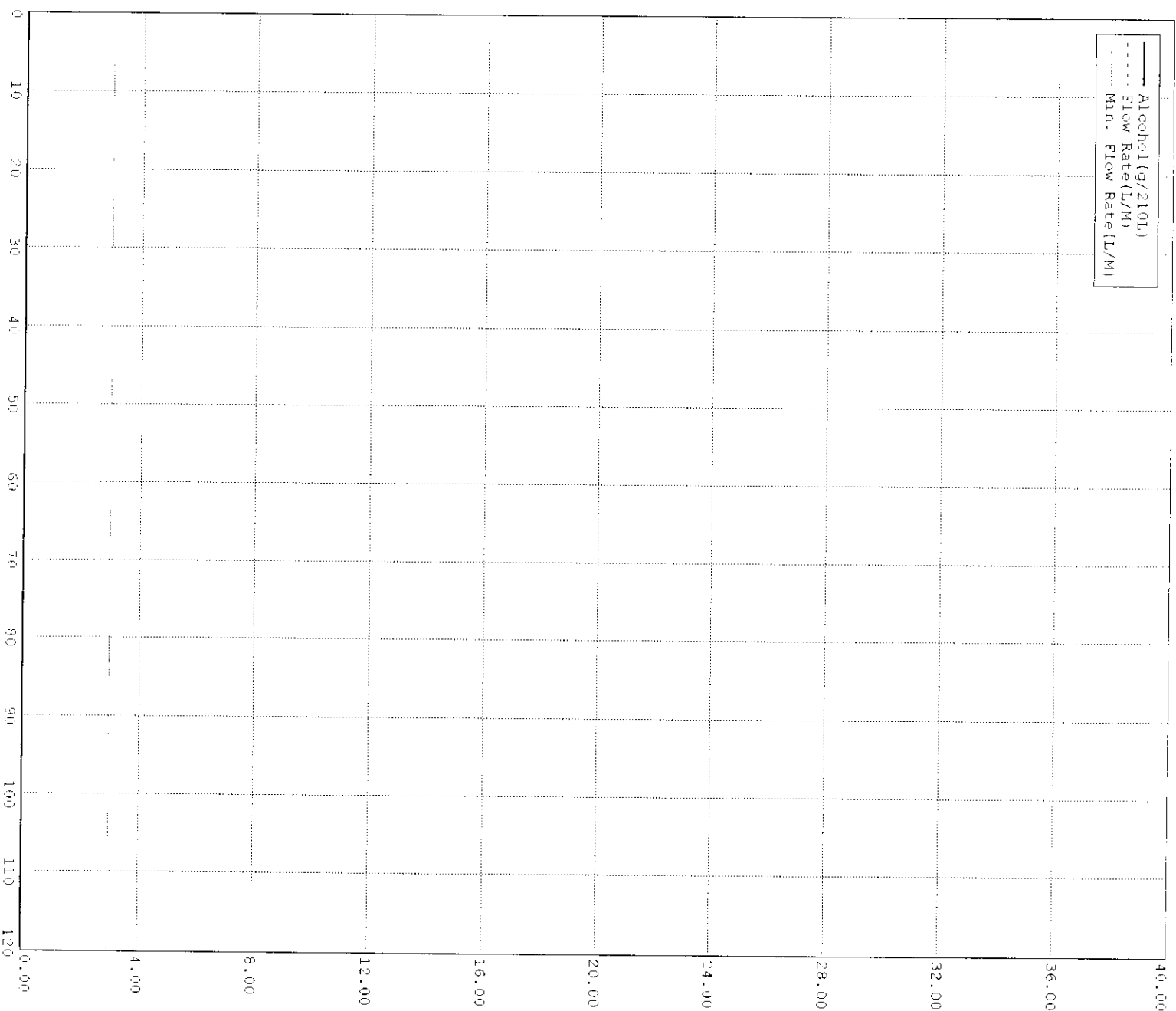
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.22: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:45
BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.077	10:45
BLANK TEST	0.000	10:46
SUBJECT SAMPLE	INCOMPLETE	10:48

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100689

Date: 04/05/2019
Time: 10:50:49

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

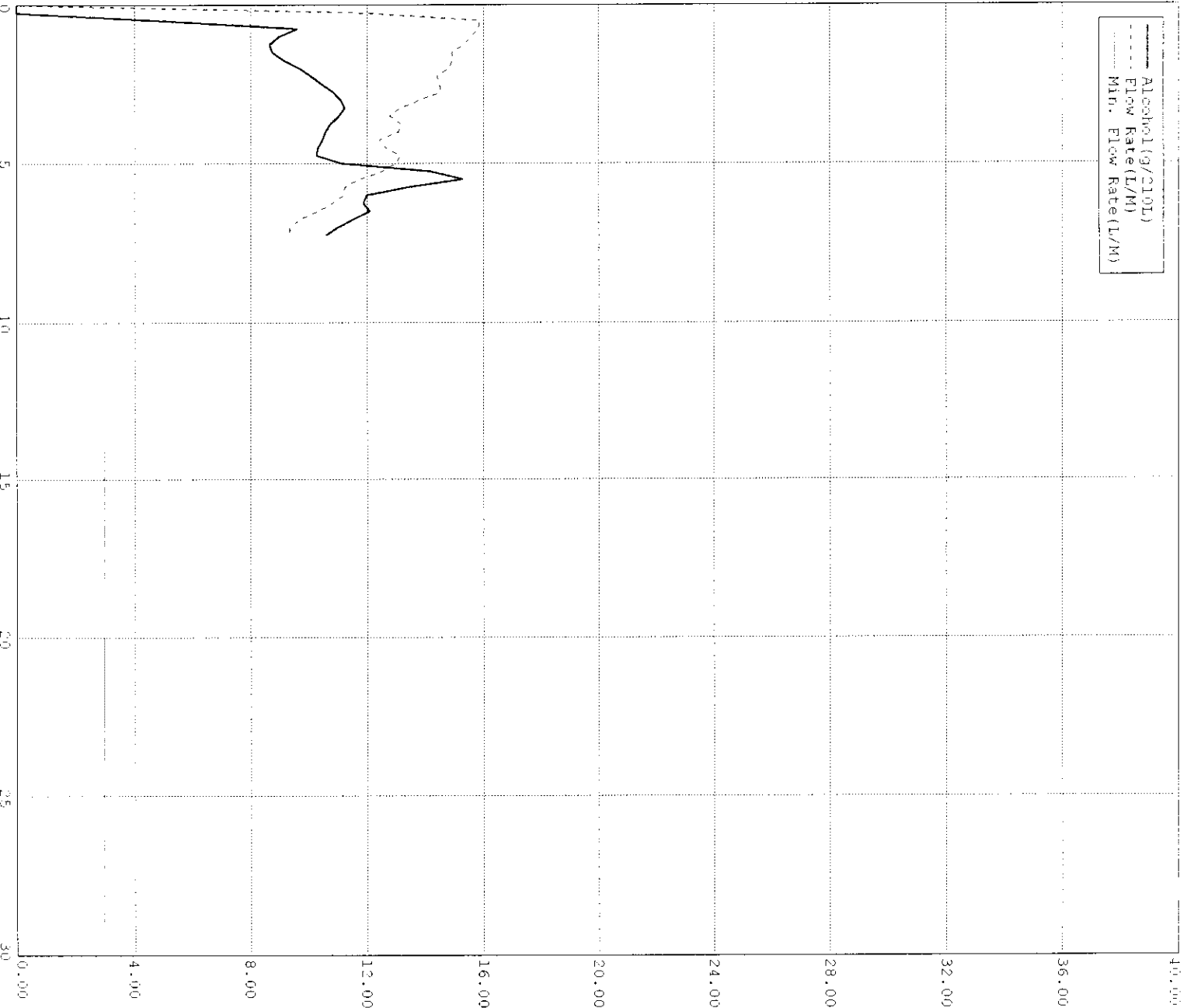
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.22: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:53
BLANK TEST	0.000	10:53
INTERNAL STANDARD	0.077	10:53
EXTERNAL STANDARD	0.000	10:54
BLANK TEST	INVALID	10:55

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2019
Time: 12:16:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

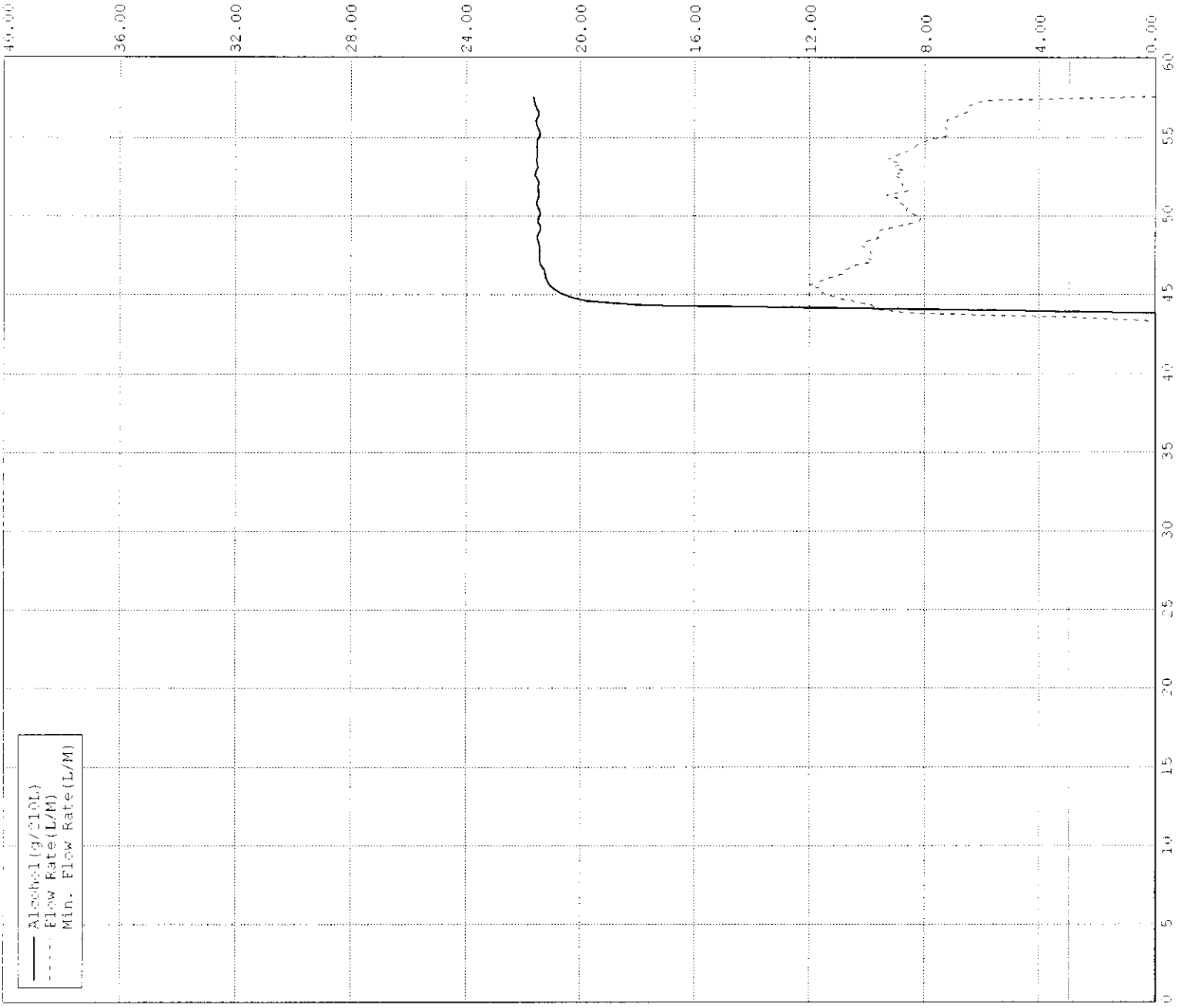
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:19
BLANK TEST	0.000	12:20
INTERNAL STANDARD	VERIFIED	12:20
Xq = 0.097 (0.18%)		
EXTERNAL STANDARD	0.078	12:20
X[1] = 0.0782 (0.0002) (0.0025)		
BLANK TEST	0.000	12:21
SUBJECT SAMPLE	XXX	12:22
X[1] = 0.1086 (-0.0176) (0.0011)		

Interference Detected

Filter 2 Aug: -0.0004
Filter 3 Aug: 0.0017
BMB 4/5/19

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2019
Time: 12:26:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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 12:27
BLANK TEST 0.000 12:27
INTERNAL STANDARD VERIFIED 12:28
Xq = 0.097 (0.64%)
EXTERNAL STANDARD 0.078 12:28
X[1] = 0.0777 (-0.0004) (0.0020)
BLANK TEST 0.000 12:29
SUBJECT SAMPLE XXX 12:29
X[1] = 0.1180 (-0.0288) (0.0006)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2019
Time: 12:33:53

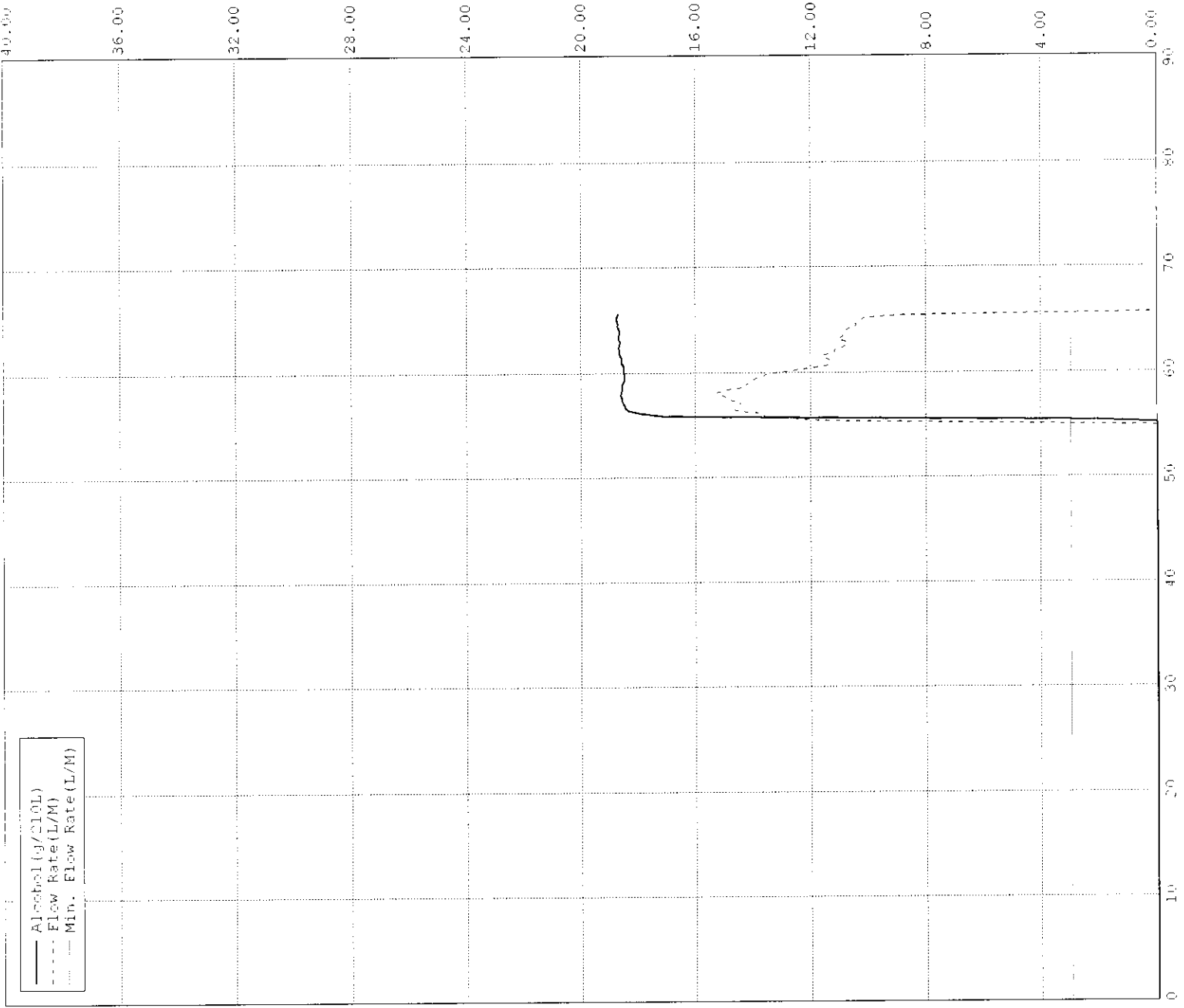
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.18: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:35
BLANK TEST	0.000	12:35
INTERNAL STANDARD	VERIFIED	12:35
$X_q = 0.096$ (0.54%)		
EXTERNAL STANDARD	0.077	12:35
$X[1] = 0.0774$ (-0.0004)	(0.0018)	
BLANK TEST	0.000	12:36
SUBJECT SAMPLE (Vol=2.15L)	0.093	12:37
$X[1] = 0.0937$ (-0.0008)	(0.0006)	
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.077	12:38
$X[1] = 0.0767$ (-0.0011)	(0.0006)	
BLANK TEST	0.000	12:39



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2019
Time: 10:58:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

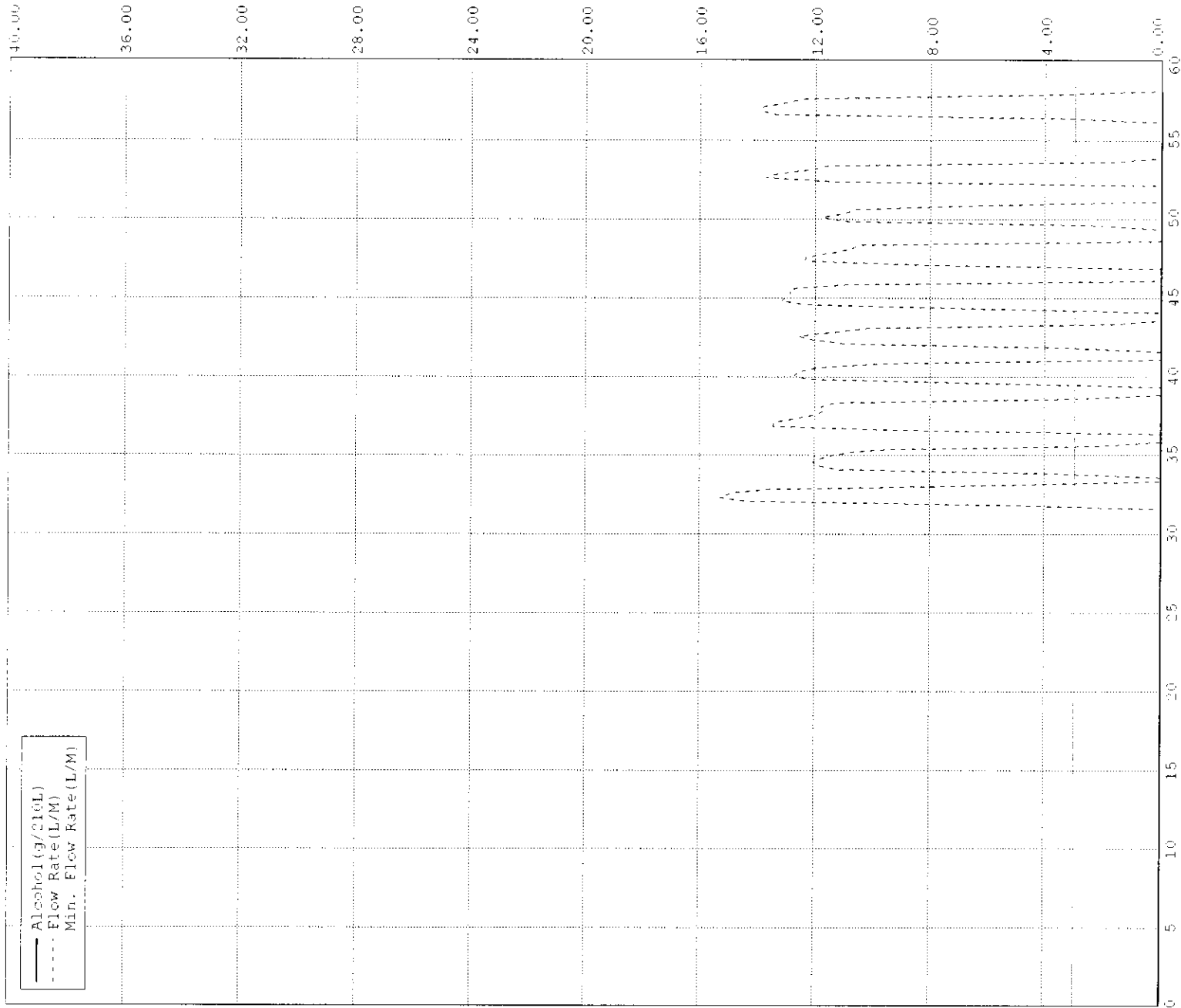
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.22: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 11:00
BLANK TEST 0.000 11:00
INTERNAL STANDARD VERIFIED 11:01
EXTERNAL STANDARD 0.077 11:01
BLANK TEST 0.000 11:02
SUBJECT SAMPLE XXX 11:03

Maximum Attempts Exceeded

B7MB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2019
Time: 11:59:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

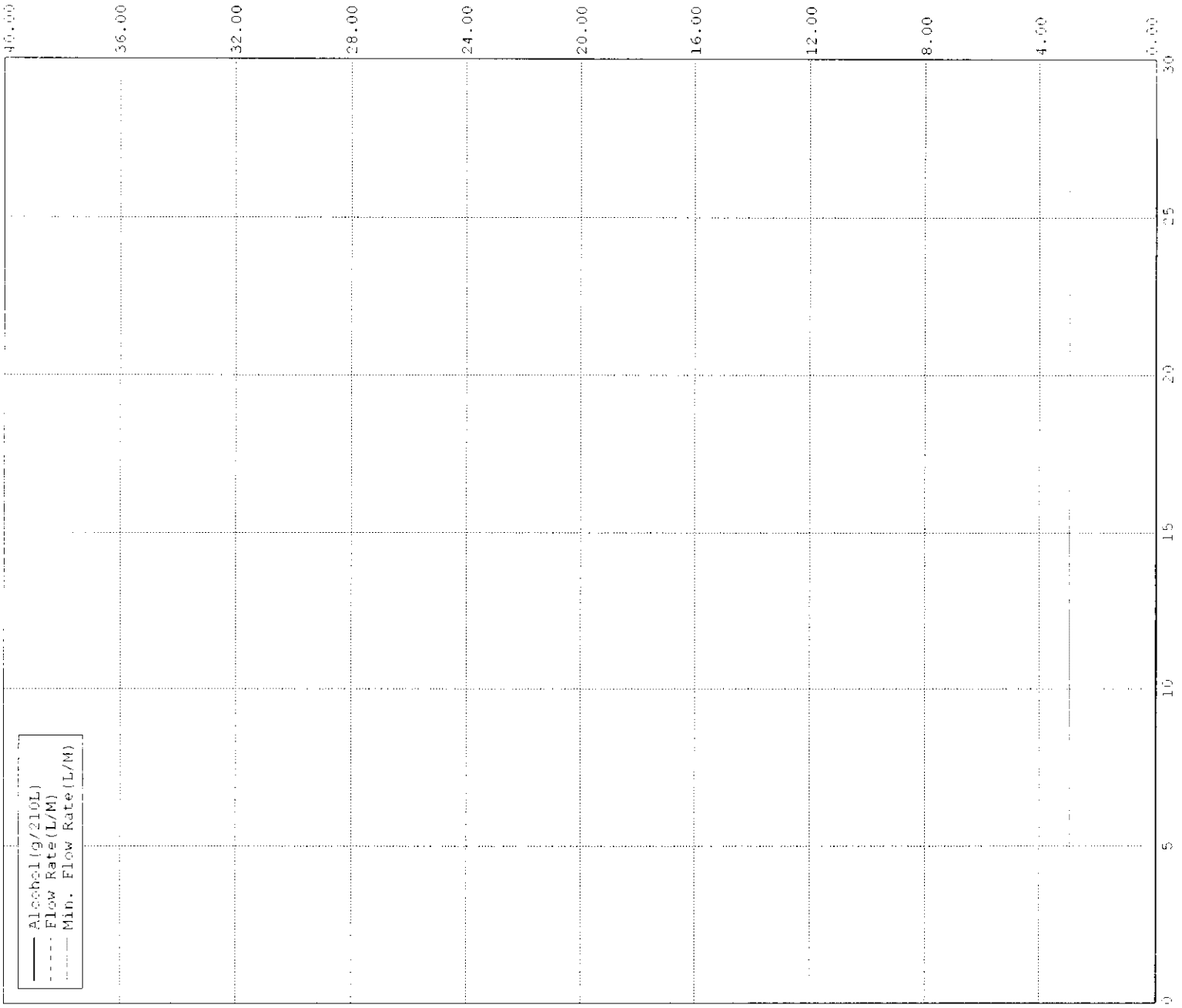
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 12:01
BLANK TEST 0.000 12:01
INTERNAL STANDARD VERIFIED 12:01
EXTERNAL STANDARD 0.078 12:01
BLANK TEST 0.000 12:02

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100689

Date: 04/05/2019
Time: 12:57:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
NONDRINKING SUBJECT TEST
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.17: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:58
BLANK TEST	0.000	12:58
INTERNAL STANDARD	VERIFIED	12:58
EXTERNAL STANDARD	0.076	12:59
BLANK TEST	0.000	12:59
SUBJECT SAMPLE (Vol=2.04L)	0.000	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.076	13:01
BLANK TEST	0.000	13:02

