

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 100410 Analyst Brandi Barnett Start Date 12/12/18

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 2/27/20
- ii. 0.040g/210L Mnf Airgas Lot AG733403 Exp 11/30/19
- iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 9/10/20
- iv. 0.100g/210L Mnf Airgas Lot AG805903 Exp 2/28/20
- v. 0.200g/210L Mnf Guth Lot 17340 Exp 10/9/19
 - 1. Simulator S/N DR5298 Date Calibrated 1/24/2018
- vi. 0.300g/210L Mnf Guth Lot 17350 Exp 10/11/19
 - 1. Simulator S/N SD1198 Date Calibrated 1/23/18

5. Functional Tests (attached)

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

- i. Acetone - Mnf Guth Lot 18070 Level 0.100 Exp 02/26/20
 - 1. Simulator S/N SD1177 Date Calibrated 1/24/18
- ii. Isopropanol - Mnf Guth Lot 18070 Level 0.100 Exp 02/26/20
 - 1. Simulator S/N SD1199 Date Calibrated 01/24/2018
- iii. Negative Control - Mnf Guth Lot 18070 Level 0.100 Exp 02/26/20
 - 1. Simulator S/N SD1088 Date Calibrated 01/24/18

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 12/13/18

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100410

Date: 12/12/2018
Time: 09:23:21

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 43.6°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.67 V PASSED
(1.01 V - 2.35 V)
Cooler Voltage = 1.72 V PASSED
(1.03 V - 2.41 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 521 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 28.9 in

PUMP INFO

Flow Rate = 4.292 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.086 1.20% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100410

Date: 12/12/2018
Time: 9:32 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 43.0°C

Current Barometer 28.9 in
Volume (Ltr) 1.49

Settings
Lamp: 1.70 V
Bias: 80 V
Cooler: 1.72 V
Chopper: 521 Hz

Voltages (V)
Flow: 1.05 V
Detector: -0.039 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100410

Date: 06/01/2011
Time: 09:04:36

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: REPC0100
BOTTLE #: 10003
EXPIRATION: 09/08/2012

Ca = 0.1000
CAL = 0.973587 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0066 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0869 0.0500 <= Xq < 0.2000
a21 = 1.207265 1.050 <= a21 < 1.300
a31 = 0.452869 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100410

Date: 12/12/2018
Time: 09:34:33

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

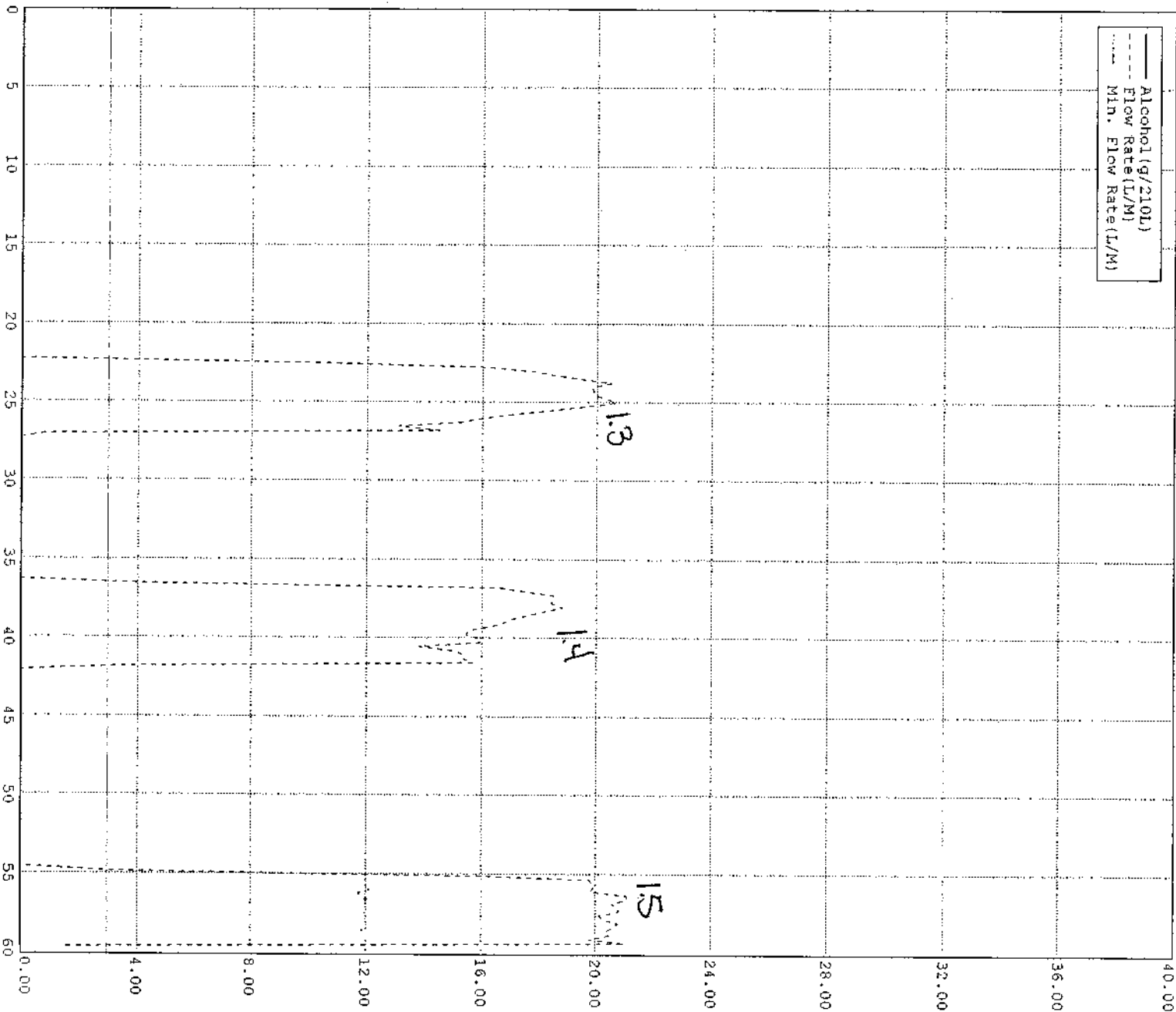
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 28.86: 0.077
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	09:36
BLANK TEST	0.000	09:37
INTERNAL STANDARD	VERIFIED	09:37
EXTERNAL STANDARD	0.076	09:37
BLANK TEST	0.000	09:38
SUBJECT SAMPLE (Vol=1.53L)	0.000	09:39
BLANK TEST	0.000	09:40
EXTERNAL STANDARD	0.077	09:40
BLANK TEST	0.000	09:41

BBMB



LINEARITY CHECK

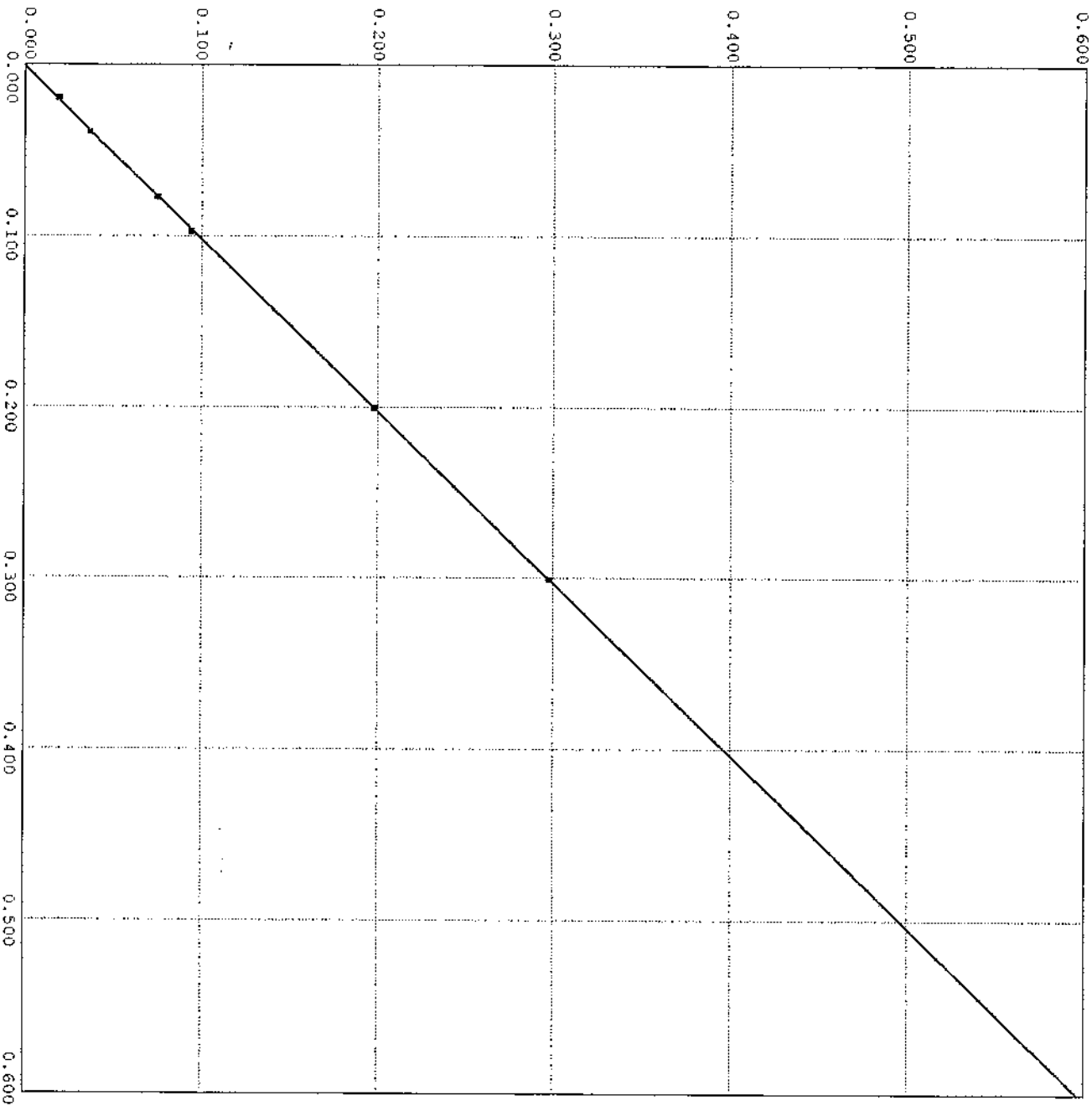
Alaska Department of Public Safety
PARAMASTER dmt: 100410

Date: 12/12/2018
Time: 12:39:08

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0198	0.0004
0.039	0.0380	0.0000
0.077	0.0760	0.0000
0.097	0.0950	0.0000
0.200	0.1988	0.0008
0.300	0.2984	0.0009

SLOPE = 0.995117
R² = 0.999943



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100410

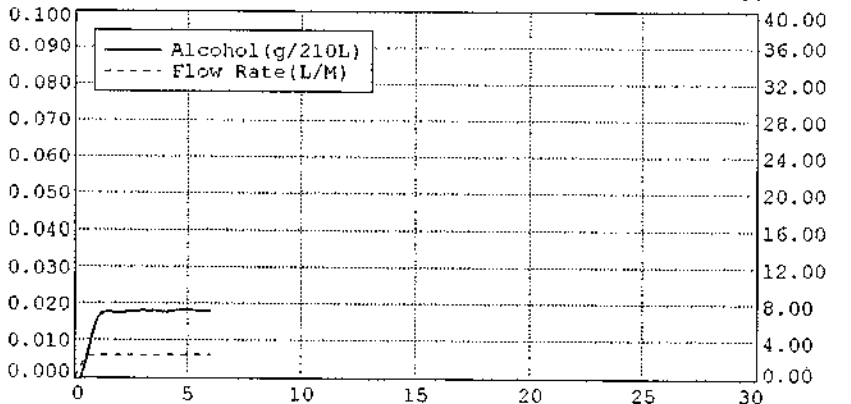
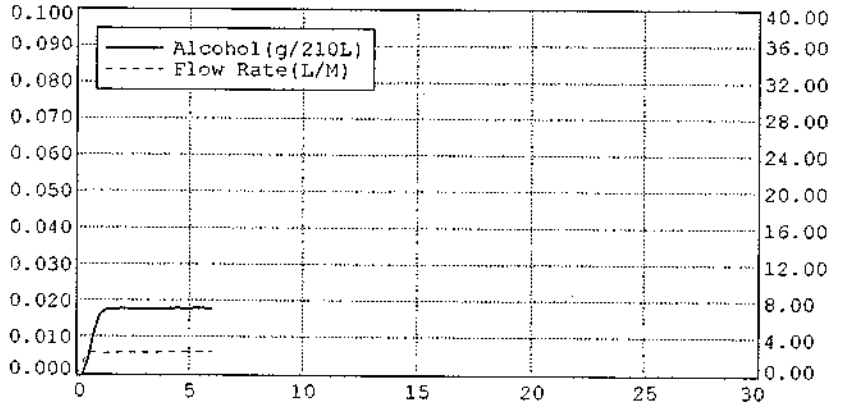
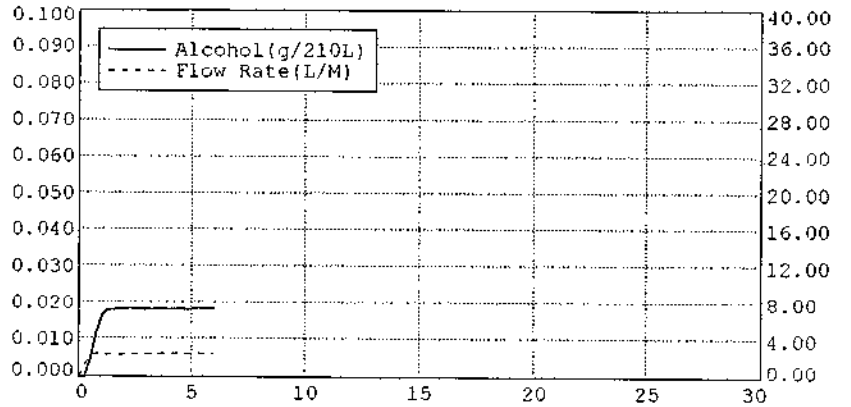
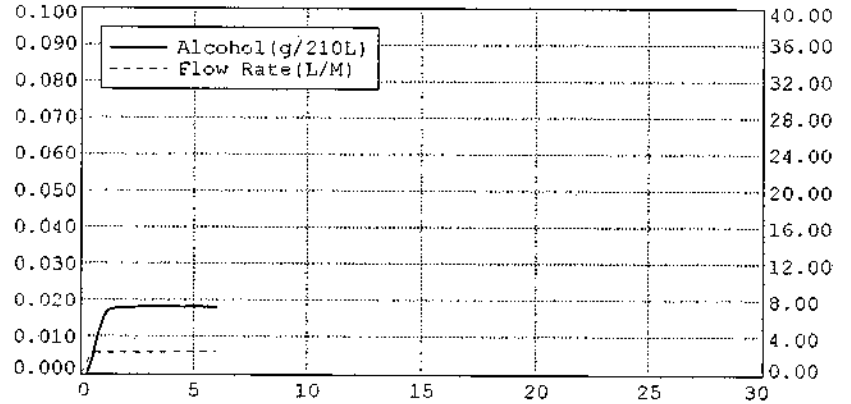
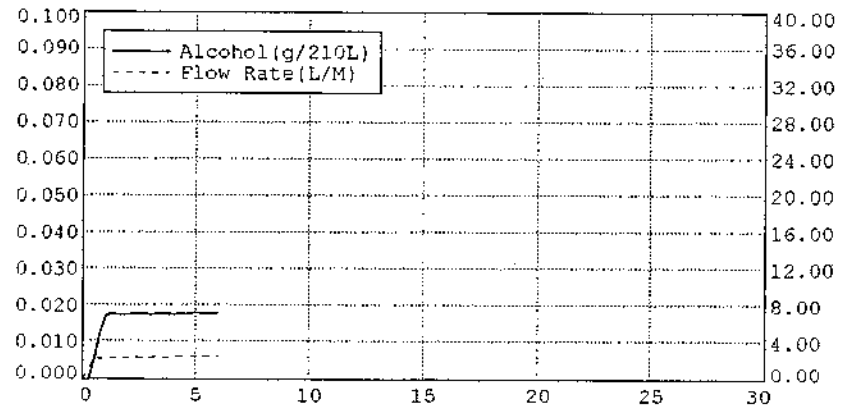
Date: 12/12/2018
 Time: 12:39:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 28.90: 0.019
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 890 psi

BLANK TEST	0.000	12:40
INTERNAL STANDARD	VERIFIED	12:40
EXTERNAL STANDARD	0.019	12:40
BLANK TEST	0.000	12:41
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
EXTERNAL STANDARD	0.020	12:44
BLANK TEST	0.000	12:45

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100410

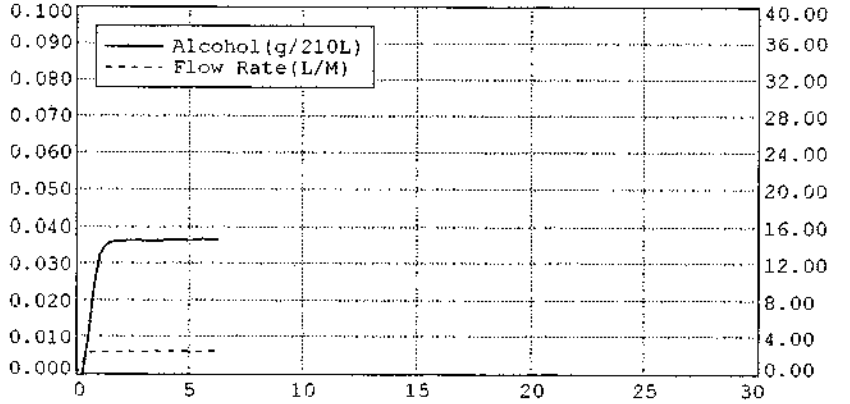
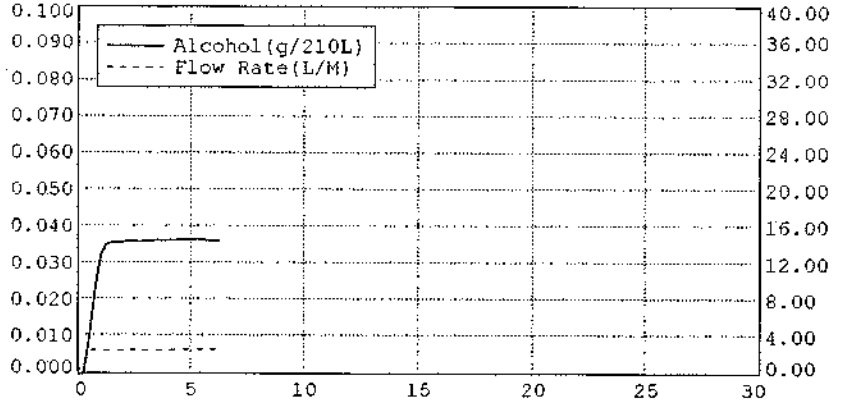
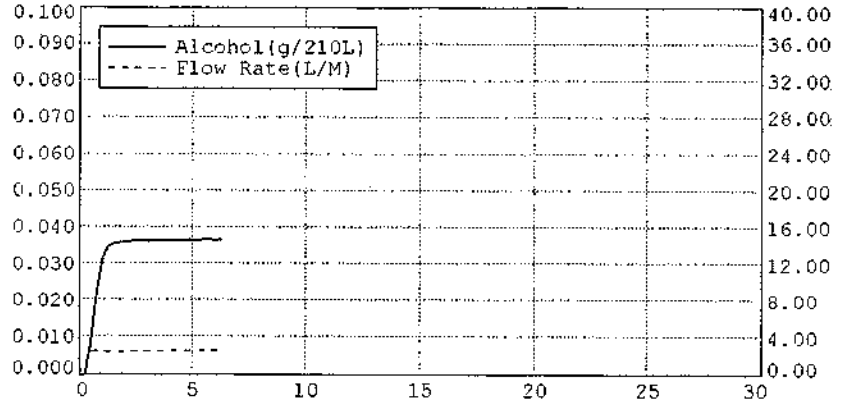
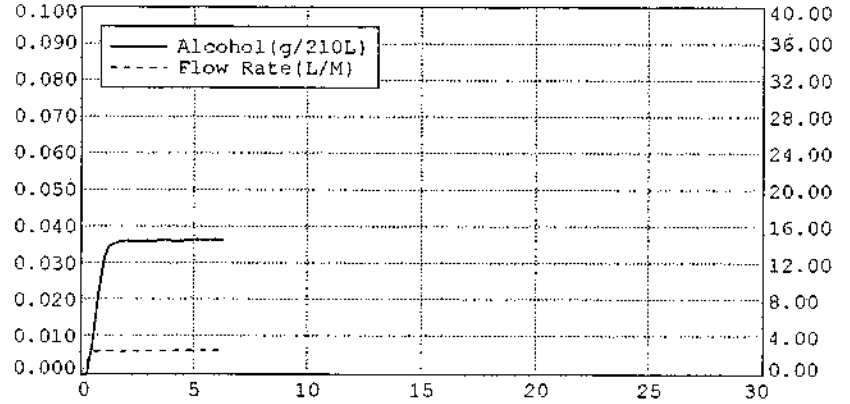
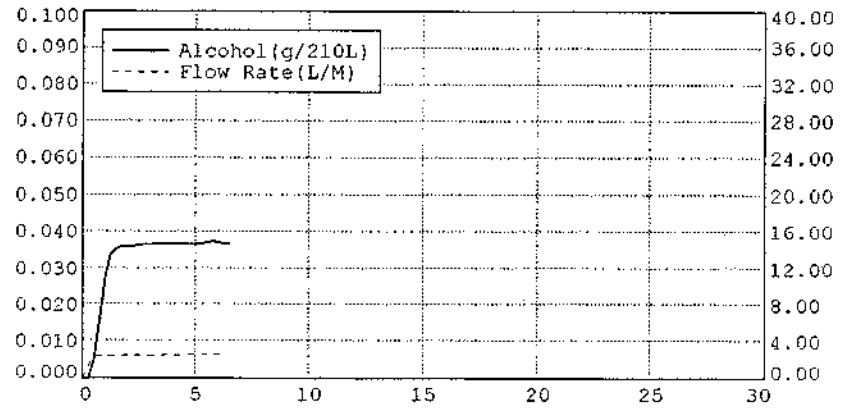
Date: 12/12/2018
Time: 12:47:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 28.91: 0.039
LOT #: AG733403
EXPIRATION: 11/30/2019
TANK PRESSURE: 1096 psi

BLANK TEST	0.000	12:48
INTERNAL STANDARD	VERIFIED	12:48
EXTERNAL STANDARD	0.038	12:48
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.038	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.038	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.038	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.038	12:52
BLANK TEST	0.000	12:53

Average = 0.0380
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100410

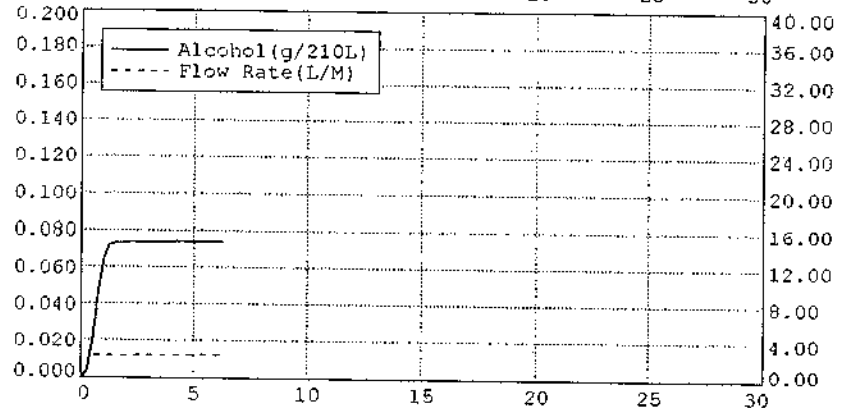
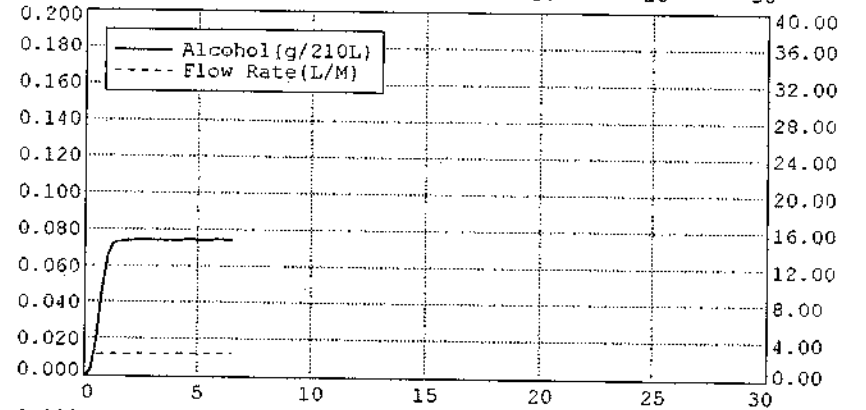
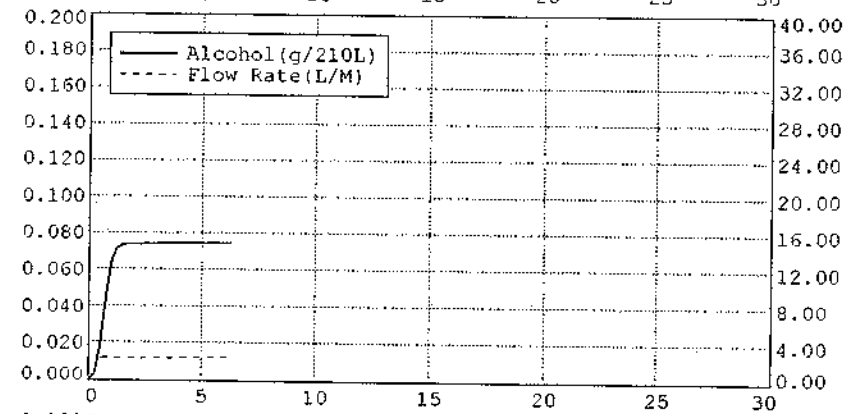
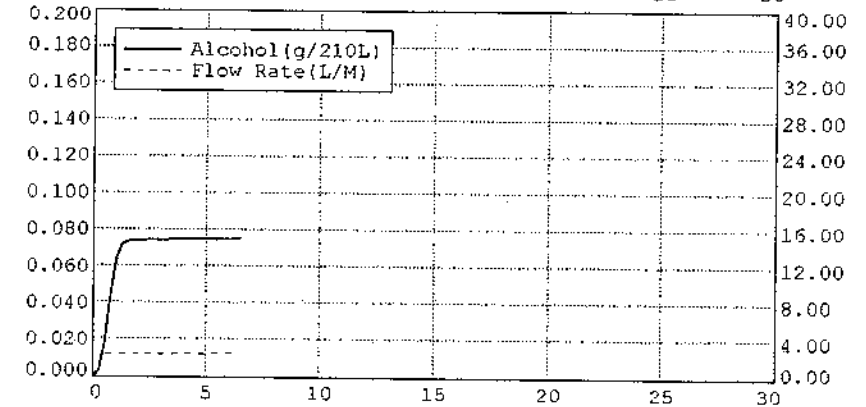
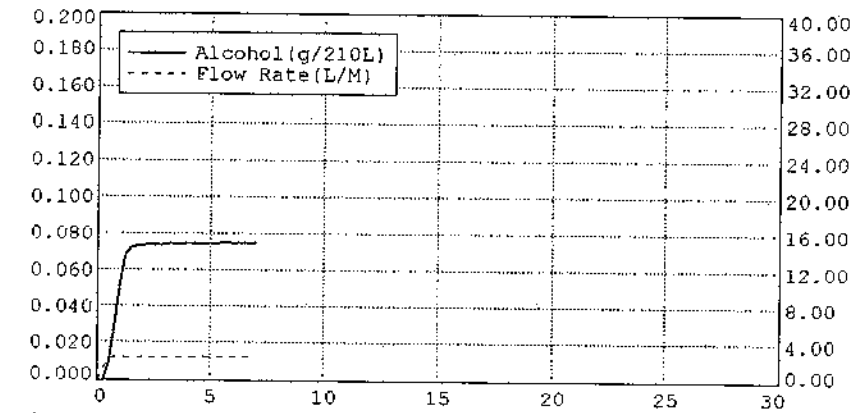
Date: 12/12/2018
 Time: 12:55:01

EXTERNAL STANDARD INFORMATION

NCMINAL: 0.080
 TARGET AT 28.91: 0.077
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 1174 psi

BLANK TEST	0.000	12:57
INTERNAL STANDARD	VERIFIED	12:57
EXTERNAL STANDARD	0.076	12:57
BLANK TEST	0.000	12:58
EXTERNAL STANDARD	0.076	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.076	13:00
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.076	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.076	13:02
BLANK TEST	0.000	13:03

Average = 0.0760
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100410

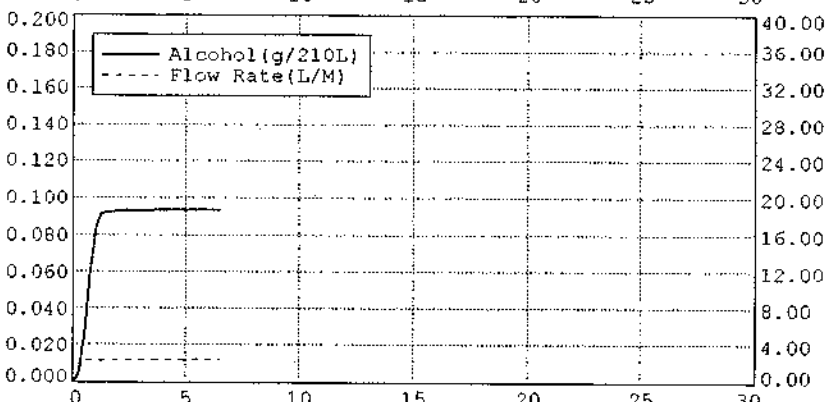
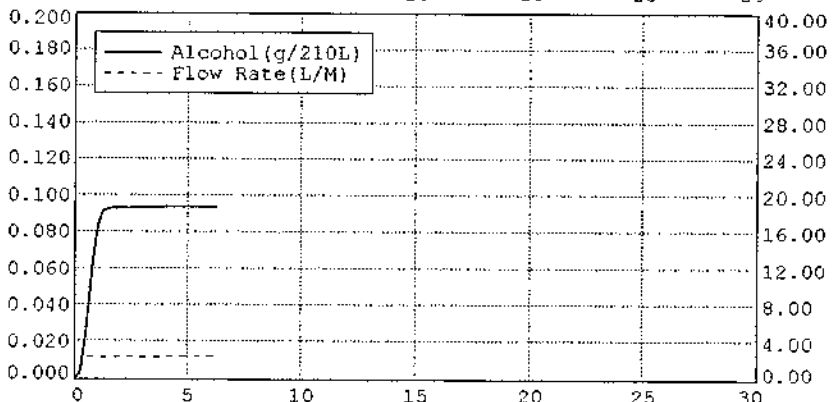
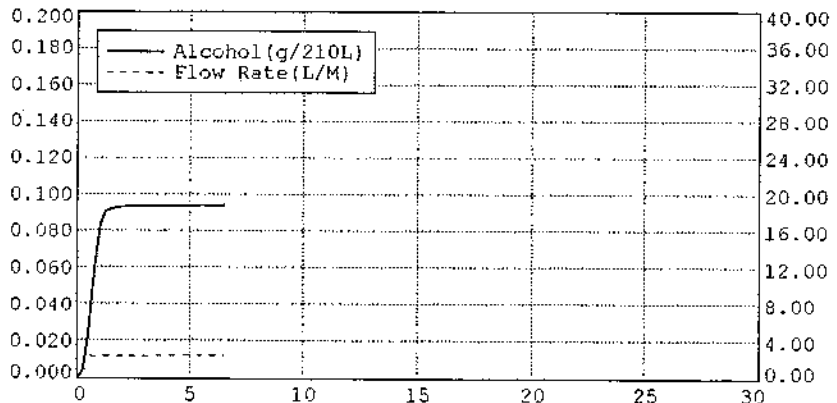
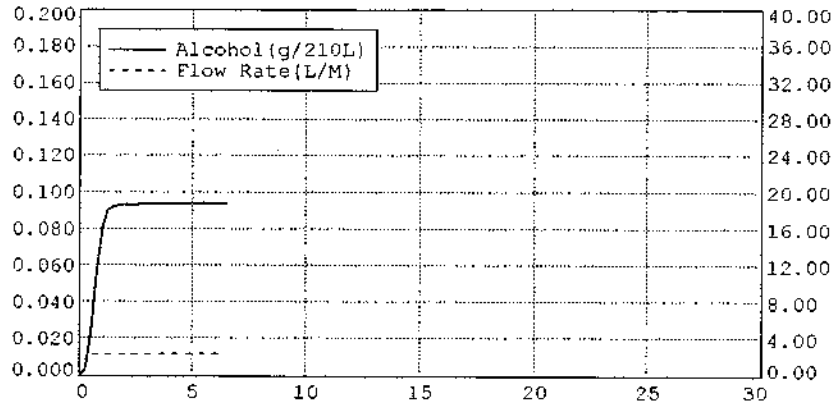
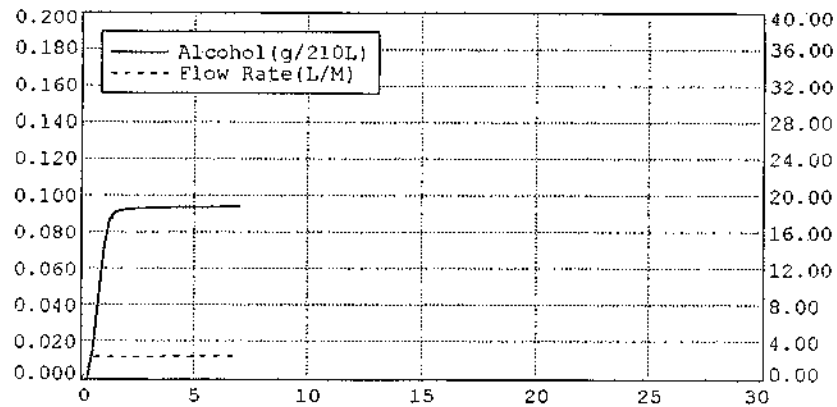
Date: 12/12/2018
 Time: 13:07:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 28.91: 0.097
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 1090 psi

BLANK TEST	0.000	13:08
INTERNAL STANDARD	VERIFIED	13:08
EXTERNAL STANDARD	0.095	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.095	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.095	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.095	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.095	13:13
BLANK TEST	0.000	13:13

Average = 0.0950
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

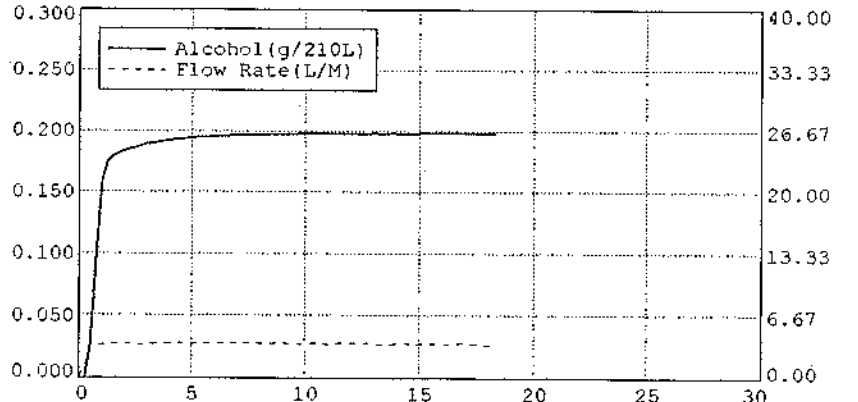
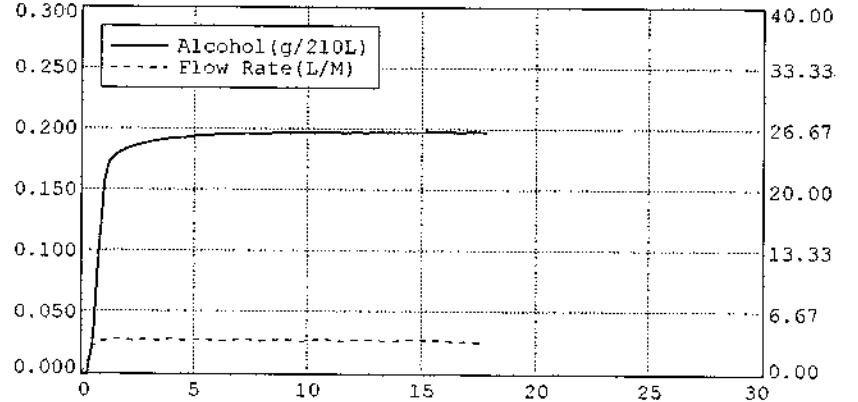
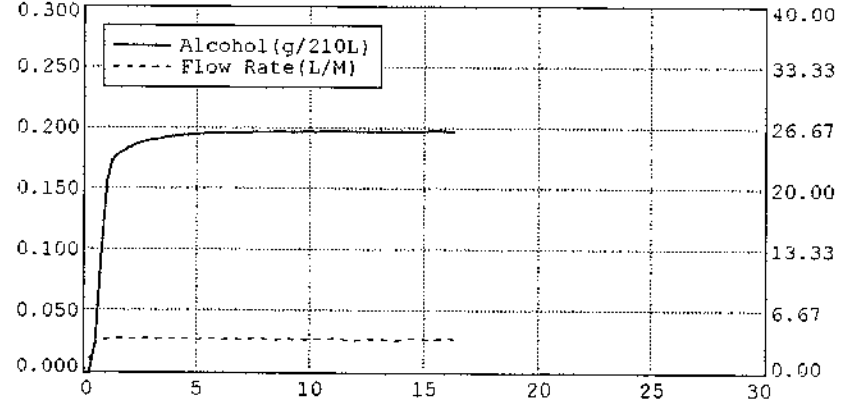
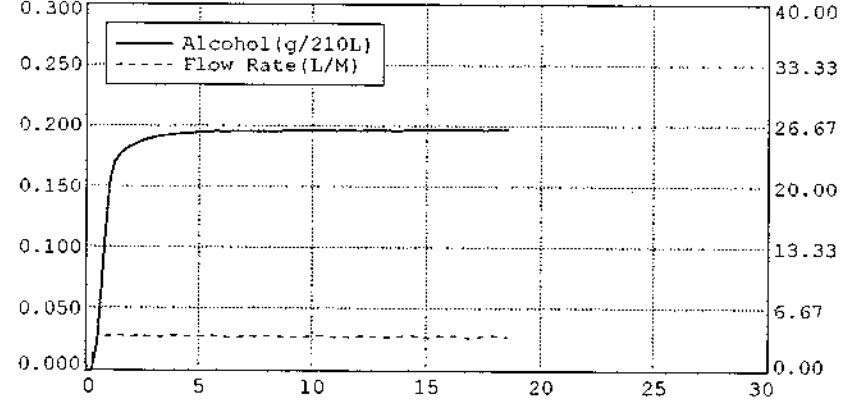
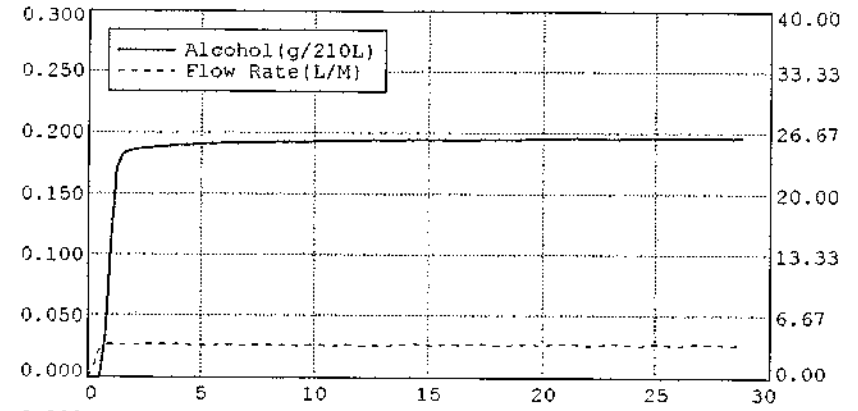
Alaska Department of Public Safety
 DATAMASTER dmt: 100410

Date: 12/12/2018
 Time: 13:20:22

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

BLANK TEST	0.000	13:21
INTERNAL STANDARD	VERIFIED	13:21
EXTERNAL STANDARD	0.198	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.198	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.199	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.199	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.200	13:27
BLANK TEST	0.000	13:28

Average = 0.1988
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100410

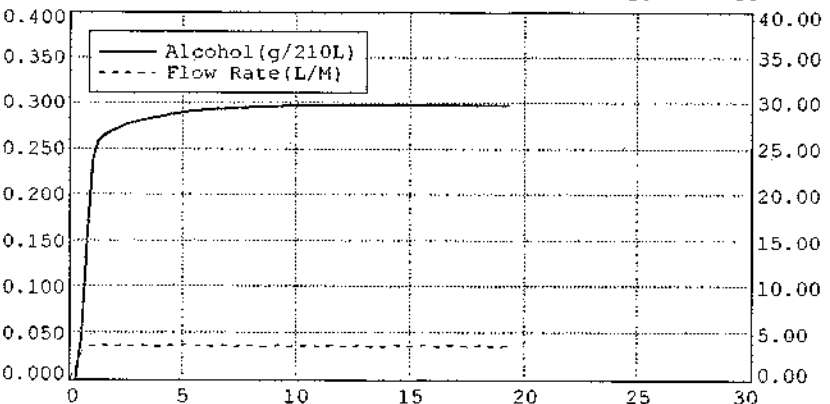
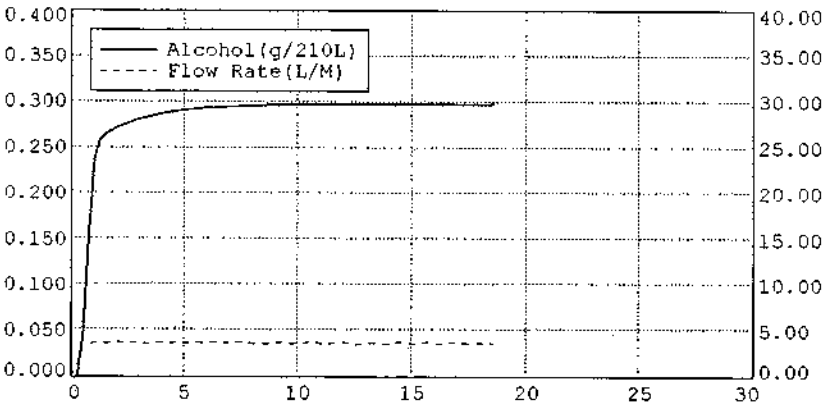
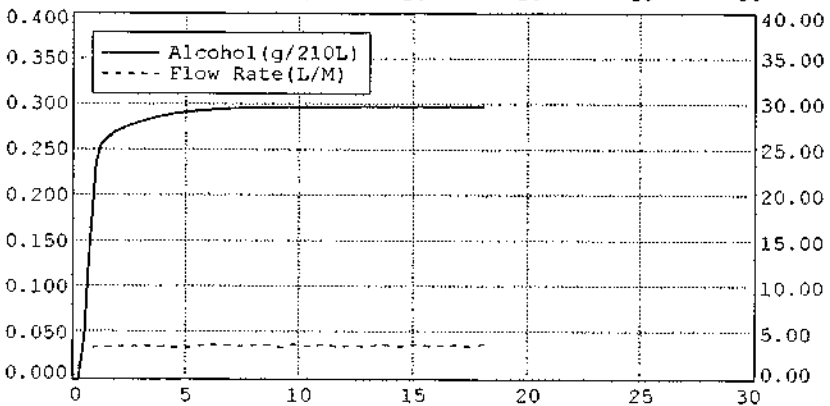
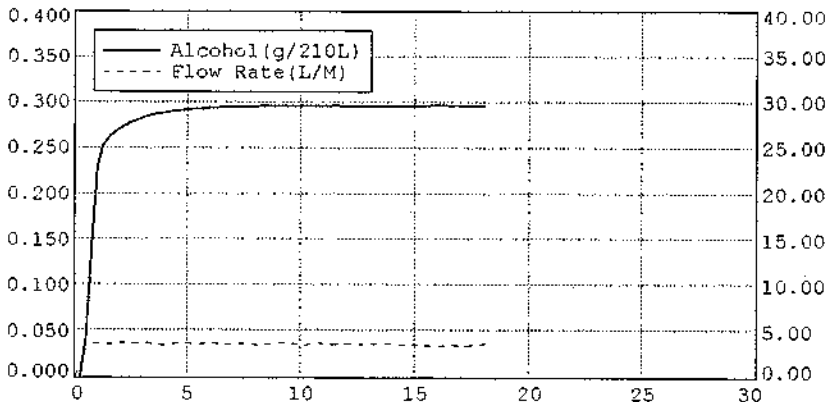
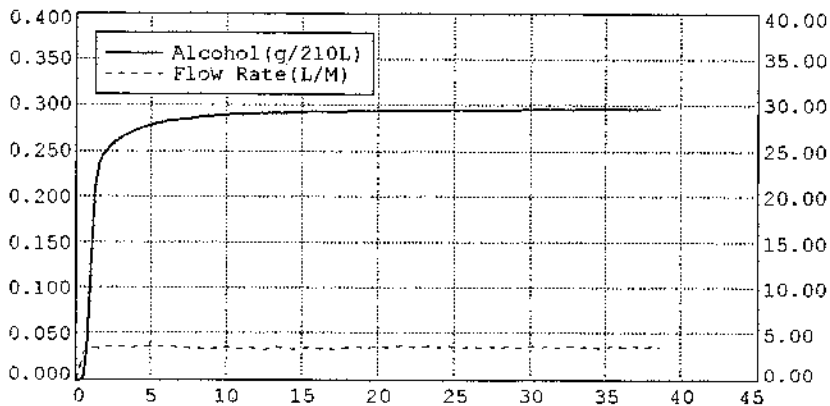
Date: 12/12/2018
 Time: 13:32:05

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:33
INTERNAL STANDARD	VERIFIED	13:33
EXTERNAL STANDARD	0.297	13:34
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.298	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.299	13:36
BLANK TEST	0.000	13:37
EXTERNAL STANDARD	0.299	13:38
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.299	13:39
BLANK TEST	0.000	13:40

Average = 0.2984
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100410

Date: 12/13/2018
Time: 08:08:52

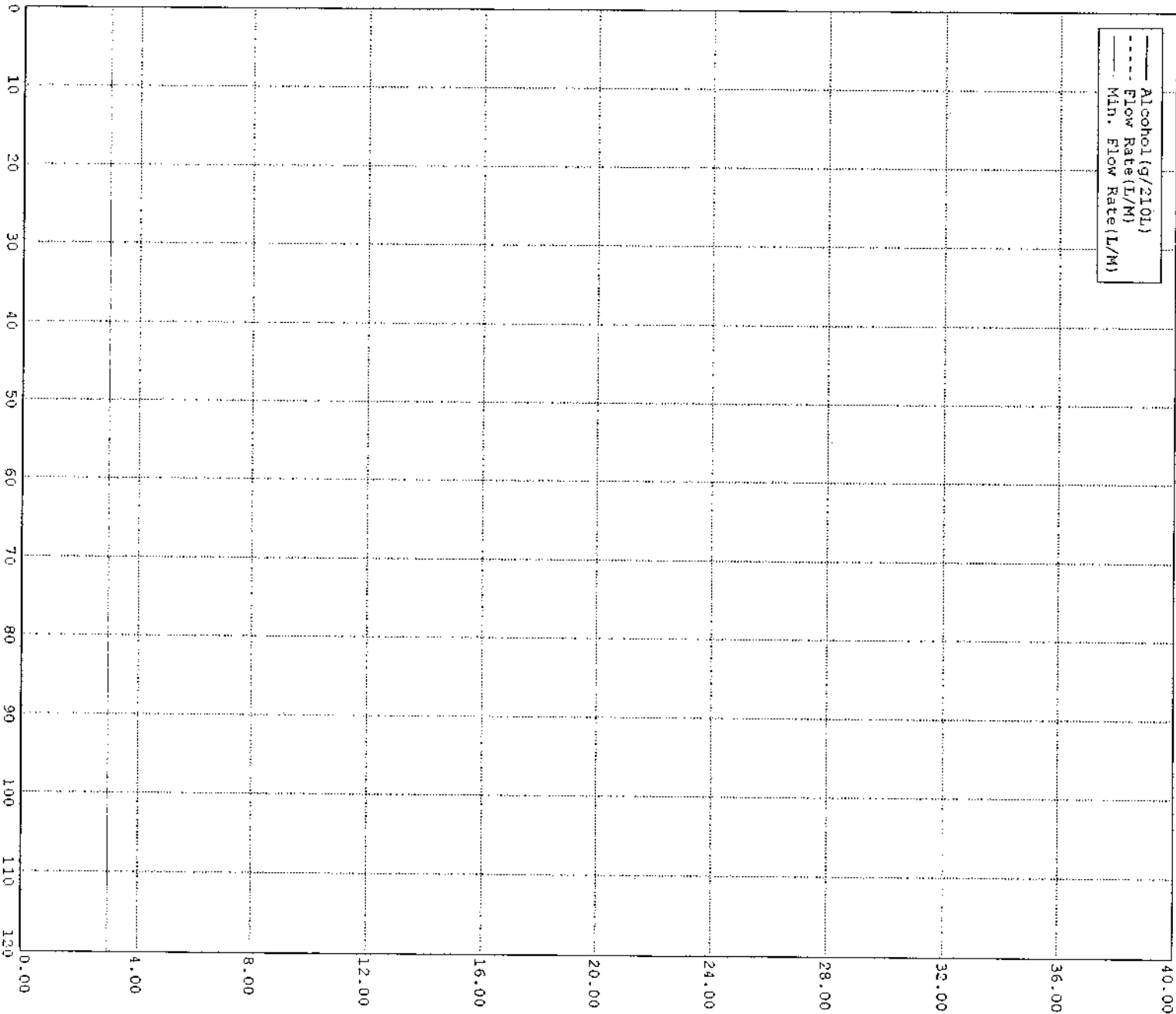
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:09
BLANK TEST	0.000	08:10
INTERNAL STANDARD	VERIFIED	08:10
EXTERNAL STANDARD	0.077	08:10
BLANK TEST	0.000	08:11
SUBJECT SAMPLE	INCOMPLETE	08:13



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100410

Date: 12/13/2018
Time: 08:15:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

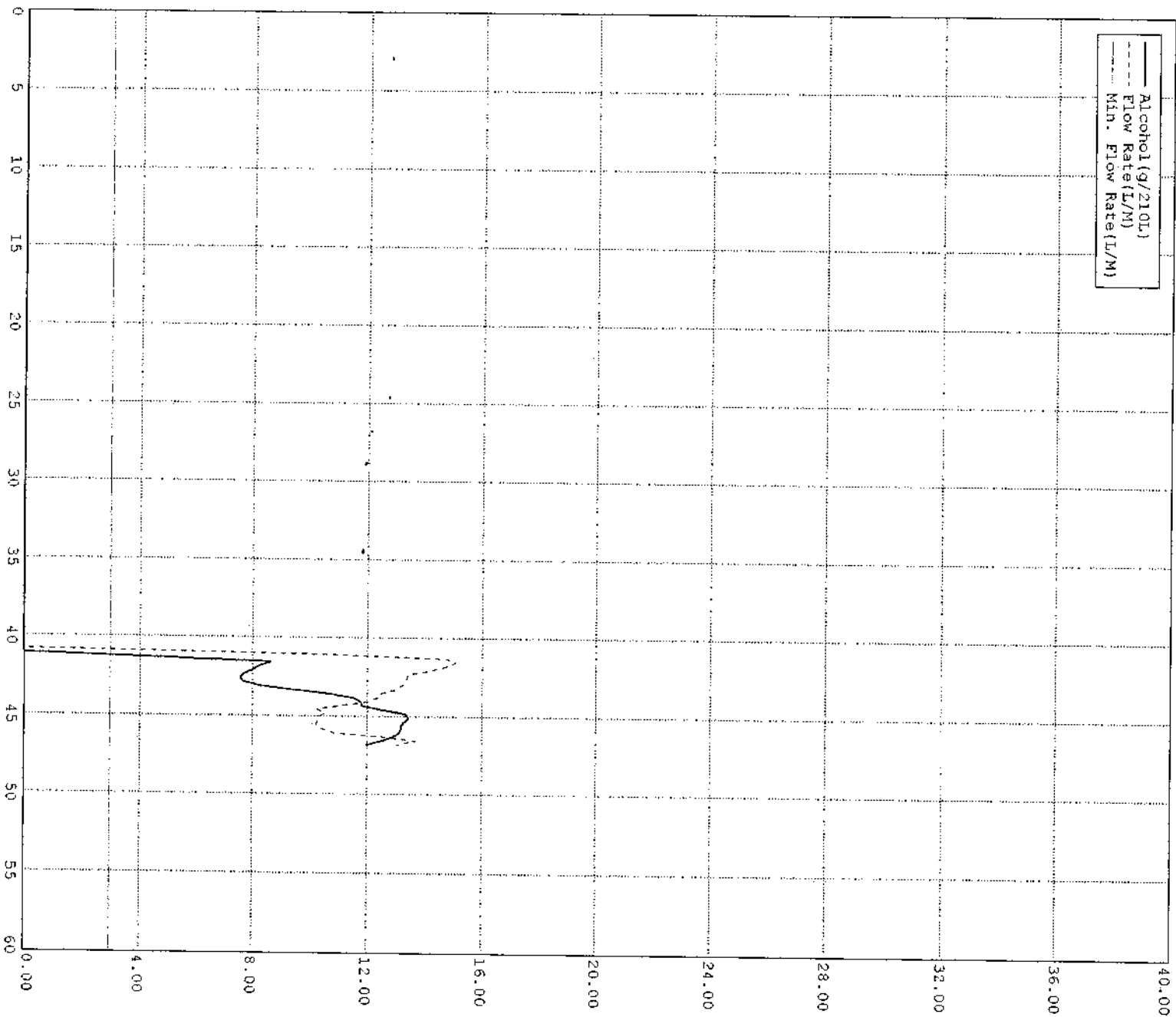
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:18
BLANK TEST	0.000	08:18
INTERNAL STANDARD	VERIFIED	08:18
EXTERNAL STANDARD	0.077	08:18
BLANK TEST	0.000	08:19
SUBJECT SAMPLE	INVALID	08:20

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100410

Date: 12/13/2018
Time: 08:22:04

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY: *Inference BMB*
~~ALCOHOL~~ ACETONE 12/13/18

CASE/REPORT: XXXX
TEST TYPE: TEST

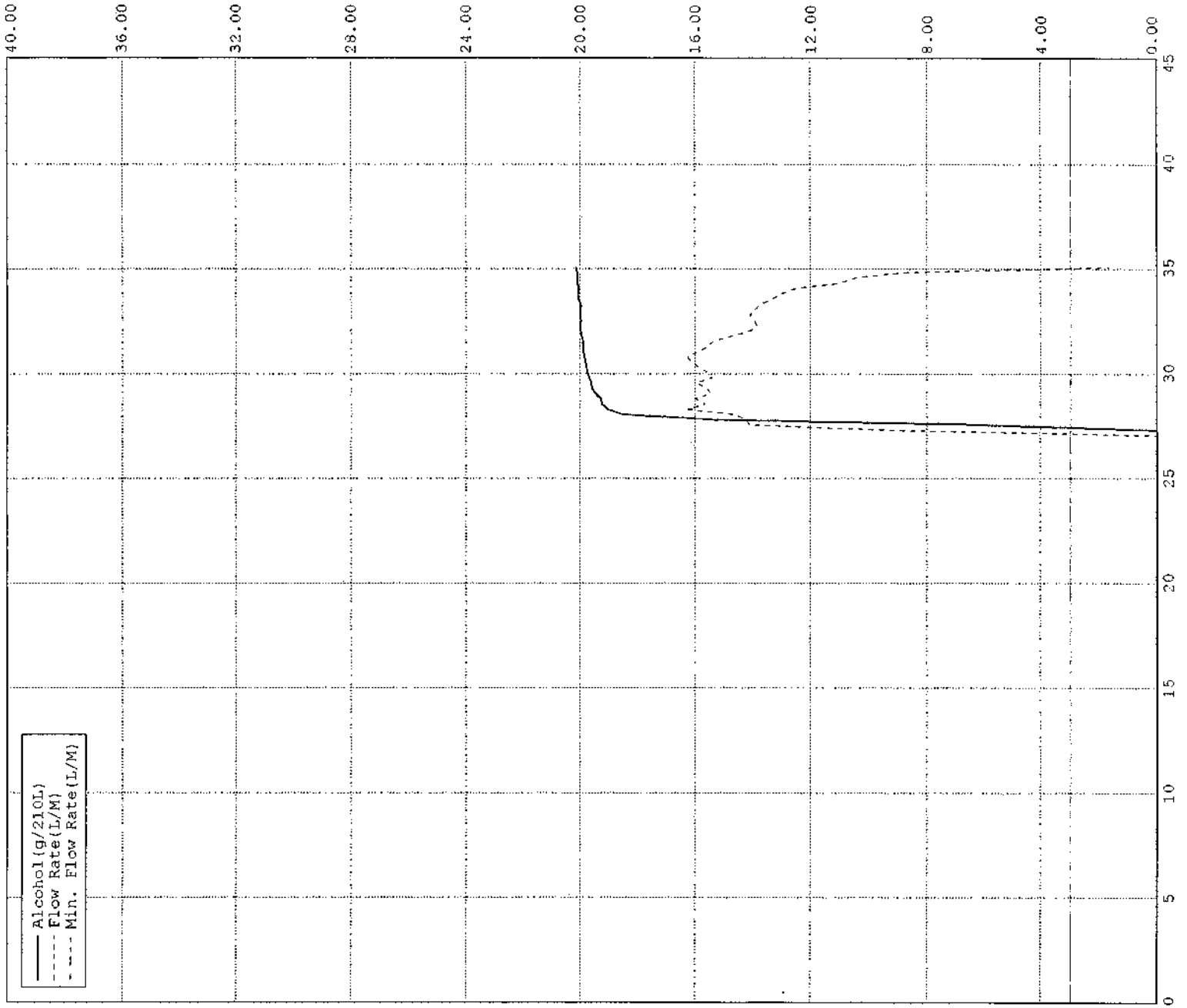
EXTERNAL STANDARD INFORMATION

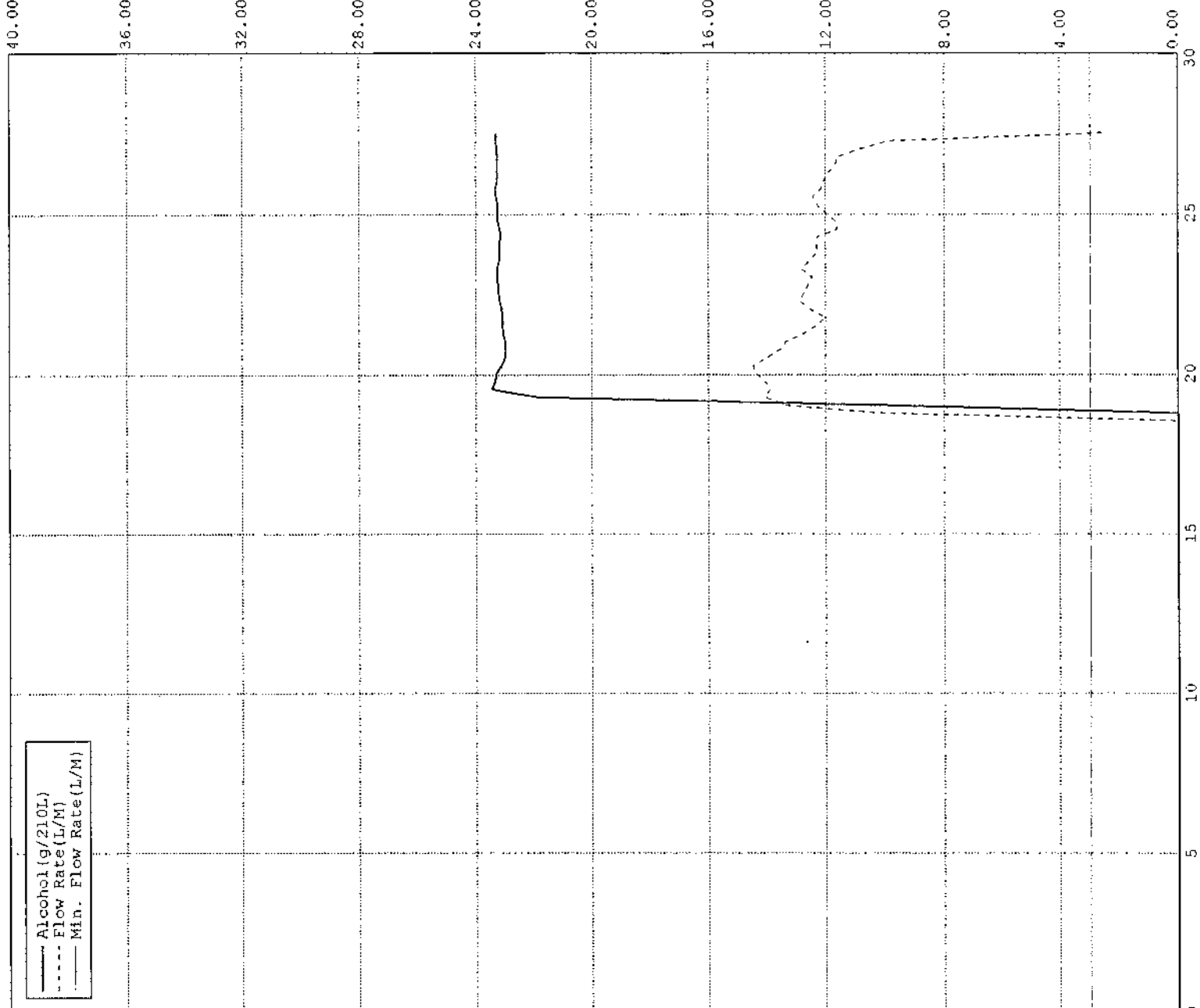
NOMINAL: 0.090
TARGET AT 29.01: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:23
BLANK TEST	0.000	08:23
INTERNAL STANDARD	VERIFIED	08:23
Xq = 0.087 (0.40%)		
EXTERNAL STANDARD	0.076	08:23
X[1] = 0.0761 (-0.0028) (0.0012)		
BLANK TEST	0.000	08:24
SUBJECT SAMPLE	XXX	08:25
X[1] = 0.1020 (-0.0184) (-0.0005)		

Interference Detected

Filter 2 Avg: -0.0022
Filter 3 Avg: 0.0018
BMB 12/14/18





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100410

 Date: 12/13/2018
 Time: 08:31:22

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 29.01: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:35
BLANK TEST	0.000	08:35
INTERNAL STANDARD	VERIFIED	08:35
$x_q = 0.087$ (0.40%)		
EXTERNAL STANDARD	0.077	08:35
$x_{[1]} = 0.0765$ (-0.0018) (0.0021)		
BLANK TEST	0.000	08:36
SUBJECT SAMPLE	XXX	08:37
$x_{[1]} = 0.1174$ (-0.0295) (0.0007)		

Interference Detected

BMB

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100410

Date: 12/13/2018
Time: 08:46:18

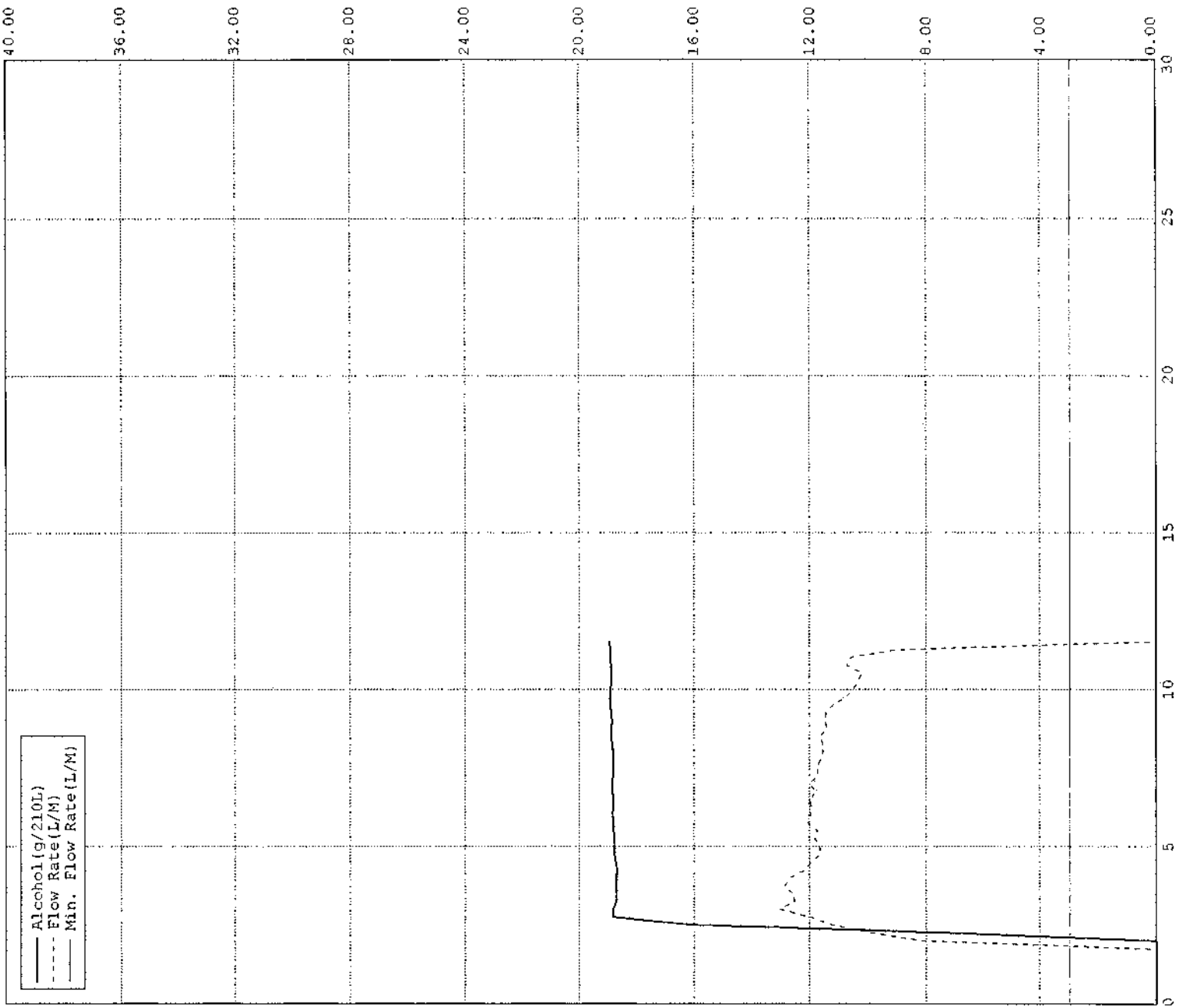
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.01: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	08:47
BLANK TEST	0.000	08:48
INTERNAL STANDARD	VERIFIED	08:48
Xq = 0.087 (0.10%)		
EXTERNAL STANDARD	0.077	08:48
X[1] = 0.0767 (-0.0019) (0.0024)		
BLANK TEST	0.000	08:49
SUBJECT SAMPLE (Vol=1.82L)	0.095	08:49
X[1] = 0.0959 (-0.0012) (0.0001)		
BLANK TEST	0.000	08:50
EXTERNAL STANDARD	0.076	08:50
X[1] = 0.0759 (-0.0023) (0.0014)		
BLANK TEST	0.000	08:51



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100410

Date: 12/13/2018
Time: 09:38:39

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

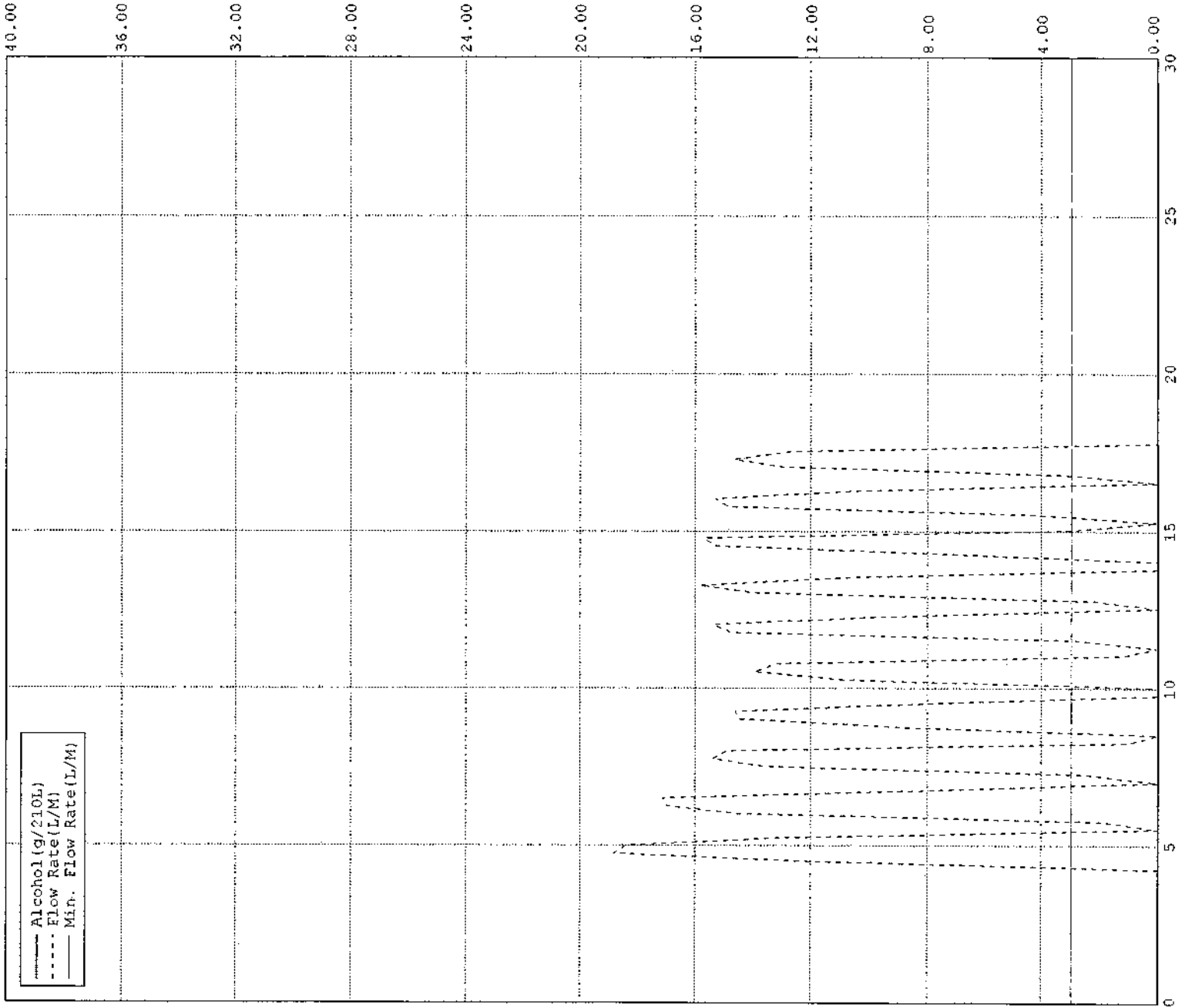
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 09:41
BLANK TEST 0.000 09:41
INTERNAL STANDARD VERIFIED 09:41
EXTERNAL STANDARD 0.076 09:41
BLANK TEST 0.000 09:42
SUBJECT SAMPLE XXX 09:43

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100410

Date: 12/13/2018
Time: 09:45:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

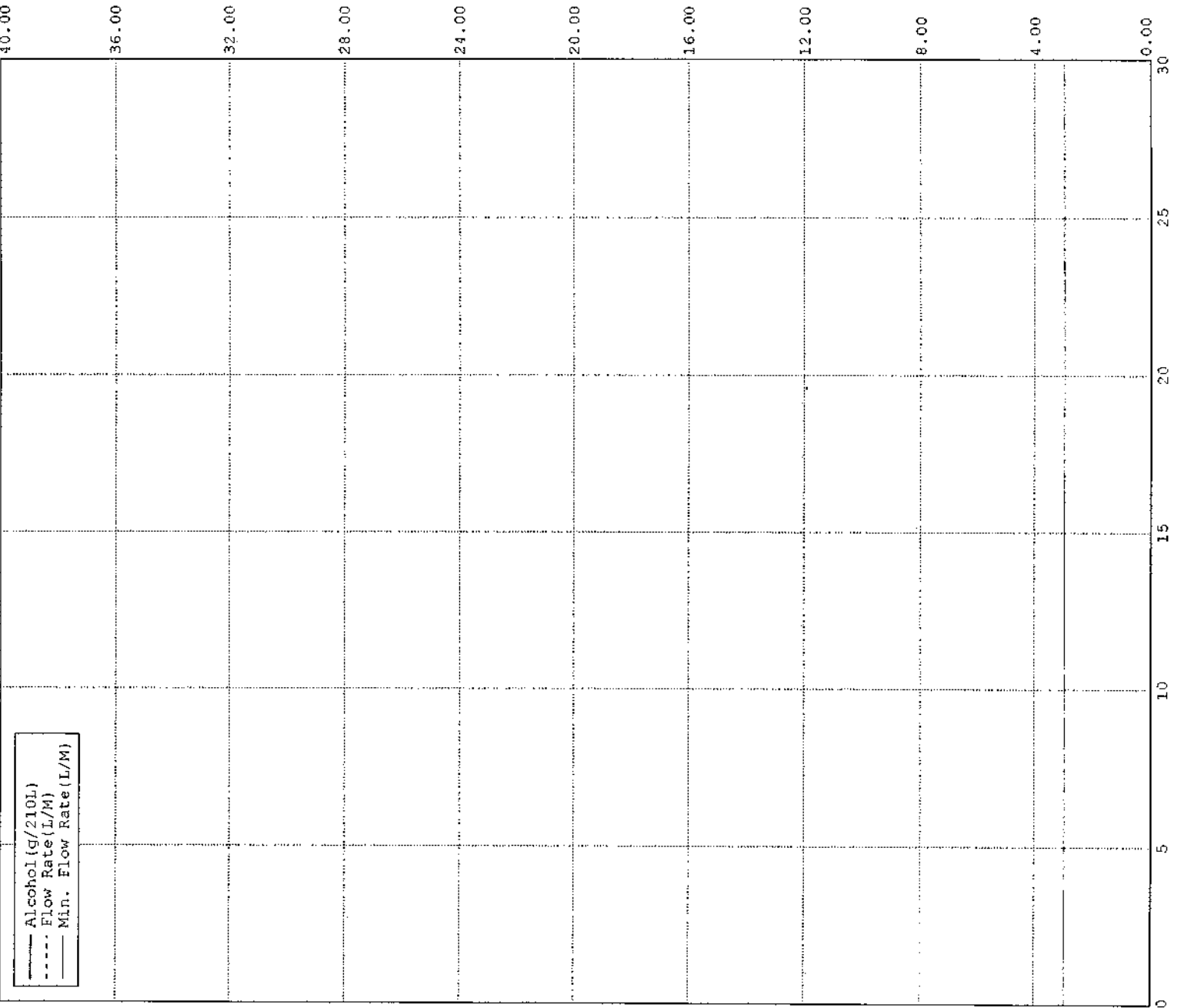
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 09:55
BLANK TEST 0.000 09:55
INTERNAL STANDARD VERIFIED 09:55
EXTERNAL STANDARD 0.076 09:55
BLANK TEST 0.000 09:56

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100410

Date: 12/13/2018
Time: 10:12:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
NON DRINKING SUBJECT TEST
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.02: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	10:15
BLANK TEST	0.000	10:15
INTERNAL STANDARD	VERIFIED	10:15
EXTERNAL STANDARD	0.077	10:15
BLANK TEST	0.000	10:16
SUBJECT SAMPLE (Vol=1.80L)	0.000	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.077	10:18
BLANK TEST	0.000	10:19

