

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 100380 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 AG735001 Exp 12/16/19
- 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 1/24/18
- 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 01/24/18
- 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: 100380

Date: 12/12/2018
Time: 09:19:31

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

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 47.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.66 V PASSED
(0.97 V - 2.25 V)
Cooler Voltage = 1.56 V PASSED
(0.95 V - 2.23 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 543 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 28.9 in

PUMP INFO

Flow Rate = 4.436 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

Xq = 0.086 1.44% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100380

Date: 12/12/2018
Time: 9:43 AM

Temperatures (°C)

Sample Cell: 49.1°C
Breath Tube: 46.5°C

Current Barometer 28.9 in
Volume (Ltr) 1.46

Settings

Lamp: 1.66 V
Bias: 80 V
Cooler: 1.56 V
Chopper: 534 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.036 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 03/04/2011
Time: 10:42:19

Ca	=	0.1000		
CAL	=	0.981773	0.800	<= CAL < 1.200
b1	=	0.0000	0.0000	<= b1 < 0.0040
b2	=	0.0046	0.0010	<= b2 < 0.0100
b3	=	0.0000	0.0000	<= b3 < 0.0040
Xq	=	0.0849	0.0500	<= Xq < 0.2000
a21	=	1.212608	1.050	<= a21 < 1.300
a31	=	0.452285	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 12/12/2018
Time: 09:43:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

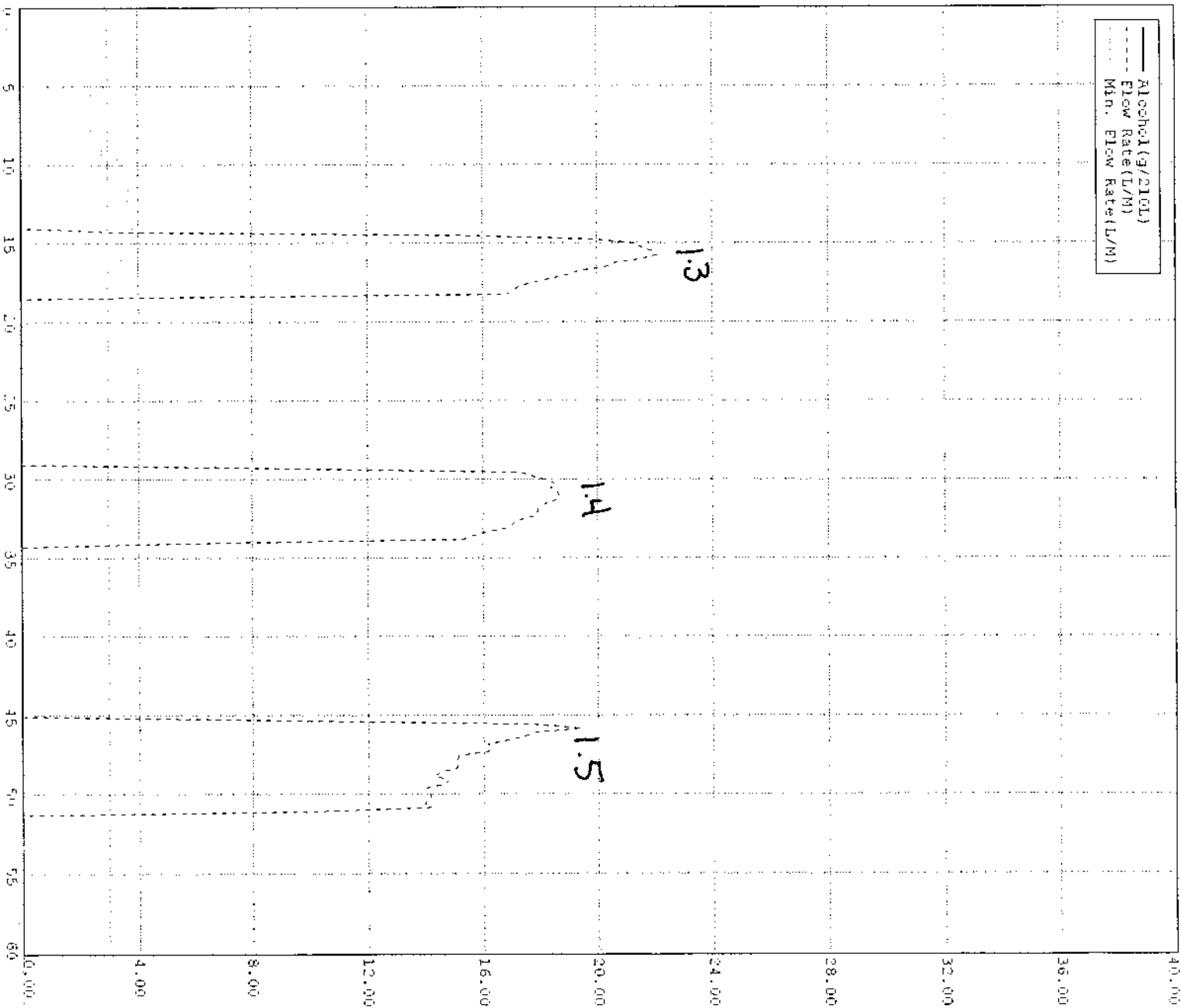
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 28.86: 0.077
LOT #: AG735001
EXPIRATION: 12/16/2019

TEST TYPE	PASSED	09:45
DIAGNOSTIC CHECK	0.000	09:45
BLANK TEST	0.000	09:46
INTERNAL STANDARD	0.077	09:46
EXTERNAL STANDARD	0.000	09:47
BLANK TEST	0.000	09:48
SUBJECT SAMPLE (Vol=1.50L)	0.000	09:49
BLANK TEST	0.077	09:49
EXTERNAL STANDARD	0.000	09:50
BLANK TEST	0.000	09:50

BMB



LINEARITY CHECK

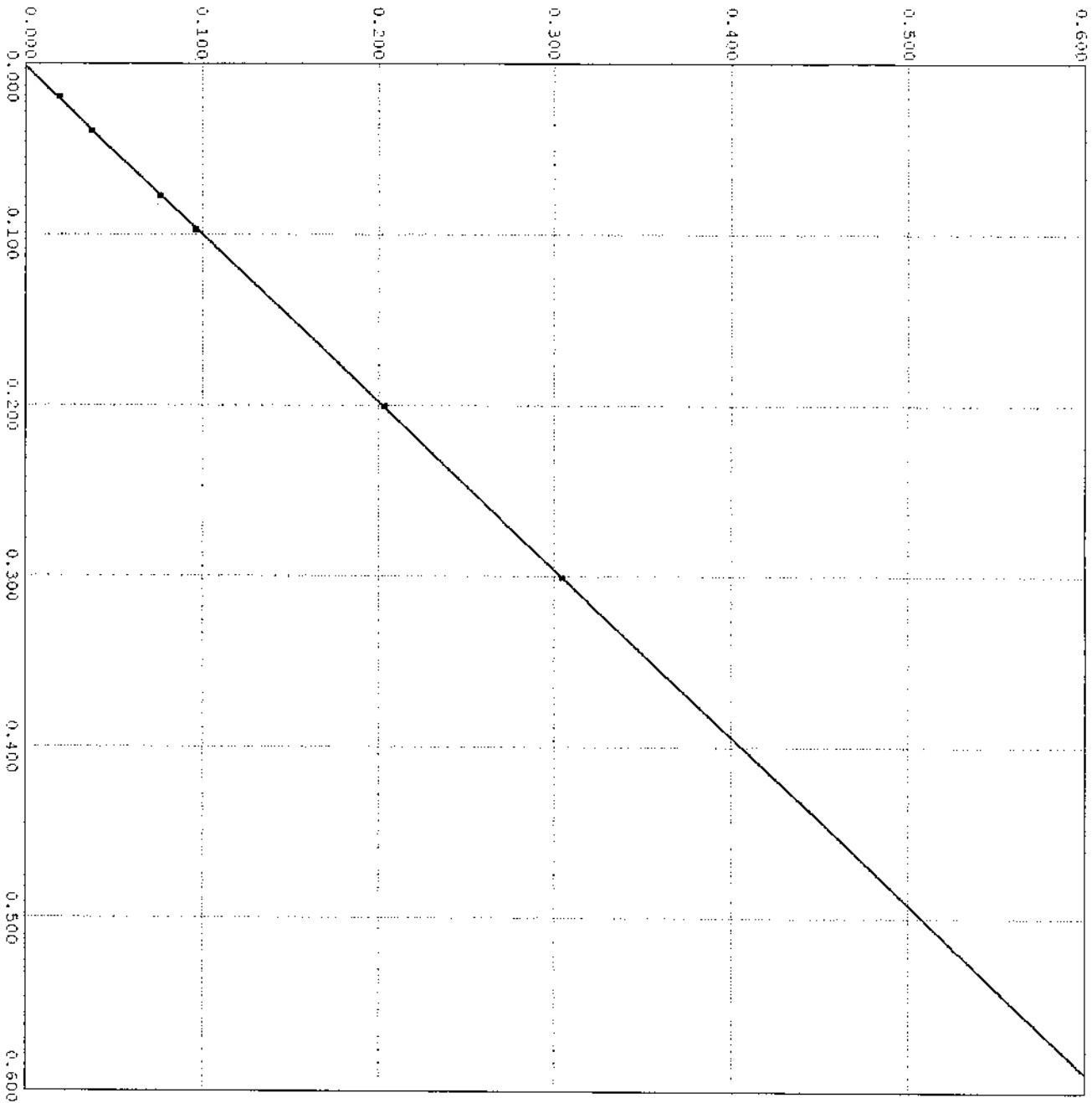
Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 12/12/2018
Time: 12:46:55

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0198	0.0004
0.039	0.0386	0.0005
0.077	0.0770	0.0000
0.097	0.0970	0.0007
0.200	0.2040	0.0000
0.300	0.3052	0.0008

SLOPE = 1.020519
R² = 0.999932



BRB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

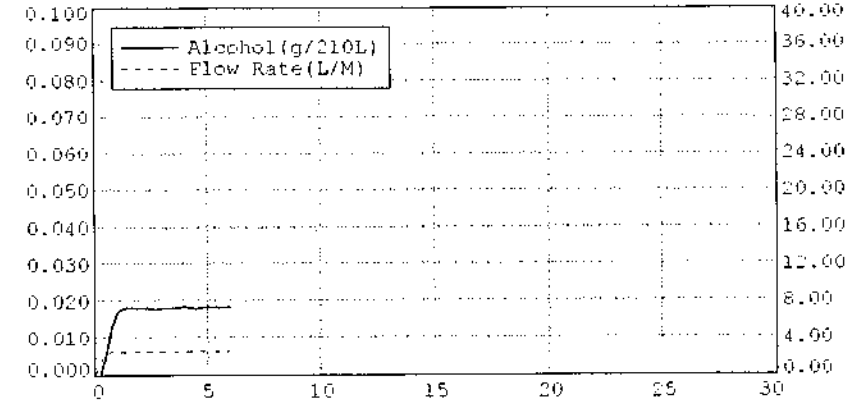
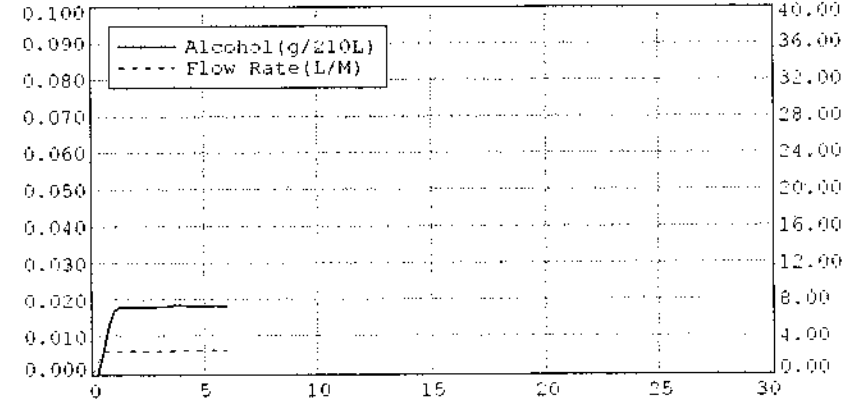
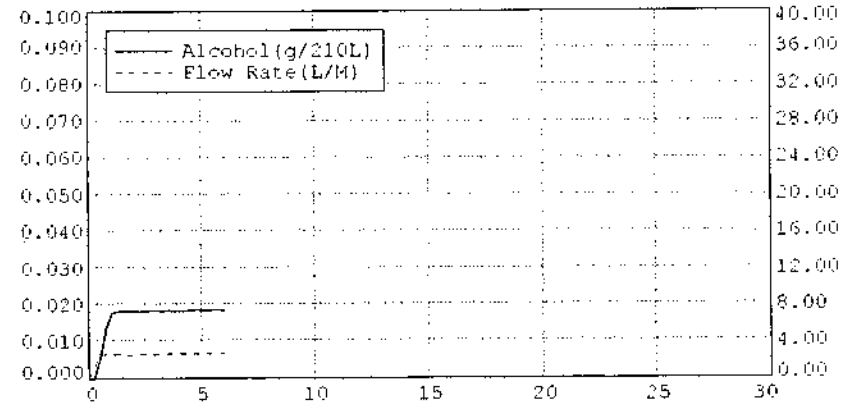
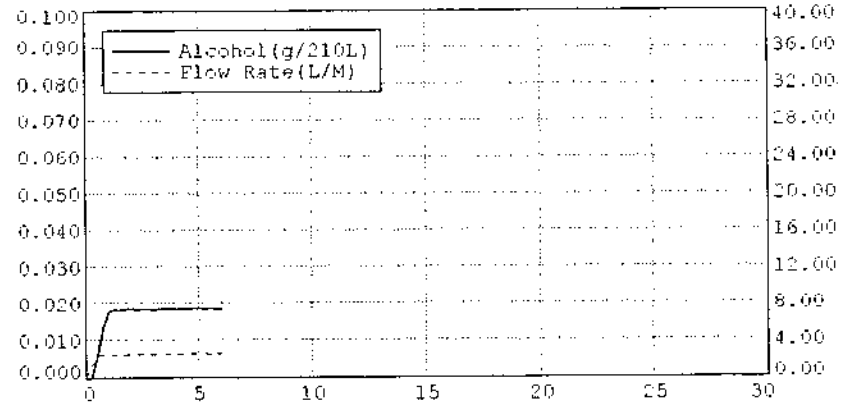
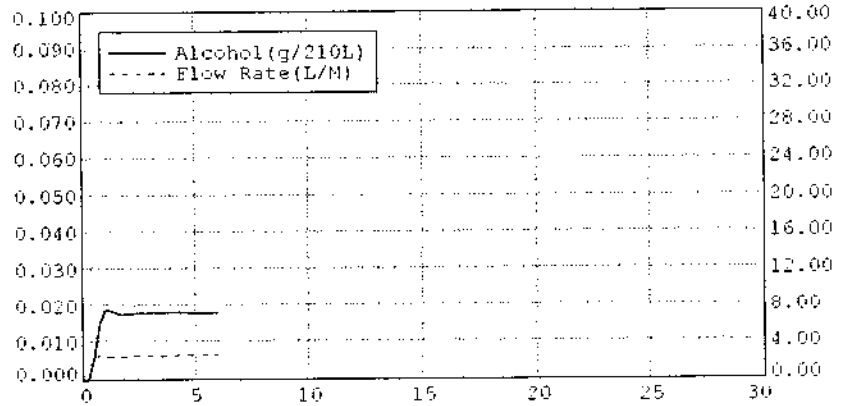
Date: 12/12/2018
 Time: 12:46:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 28.91: 0.019
 LOT #: AG805804
 EXPIRATION: 02/27/2020
 TANK PRESSURE: 878 psi

BLANK TEST	0.000	12:49
INTERNAL STANDARD	VERIFIED	12:49
EXTERNAL STANDARD	0.019	12:49
BLANK TEST	0.000	12:50
EXTERNAL STANDARD	0.020	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.020	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.020	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.020	12:54
BLANK TEST	0.000	12:54

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

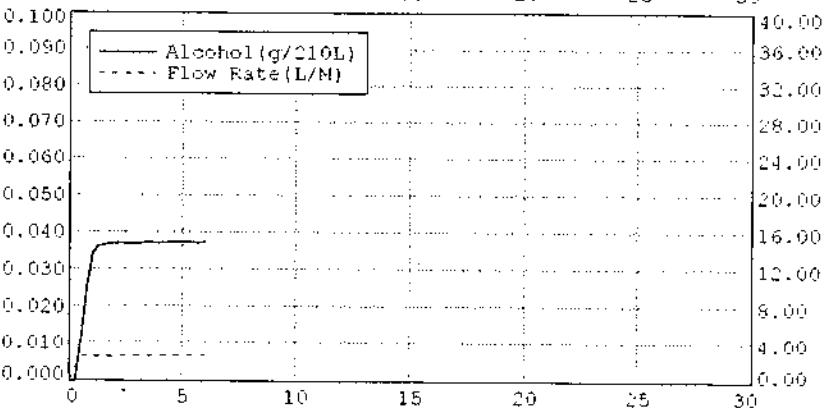
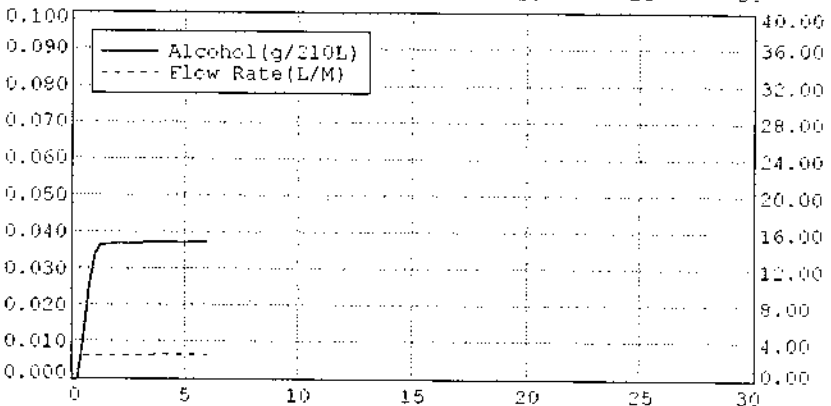
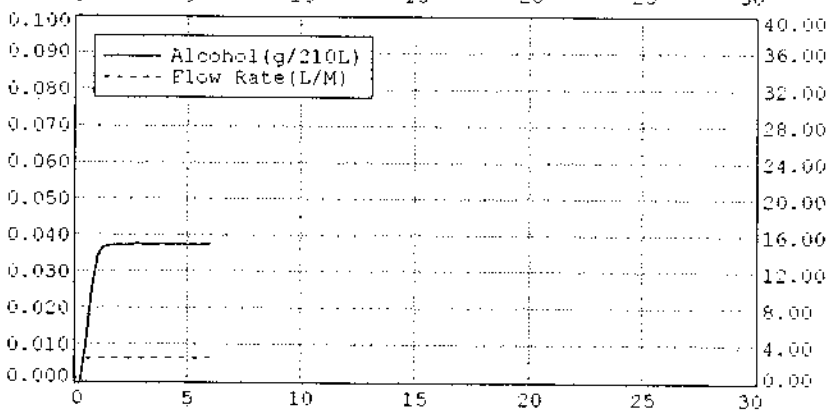
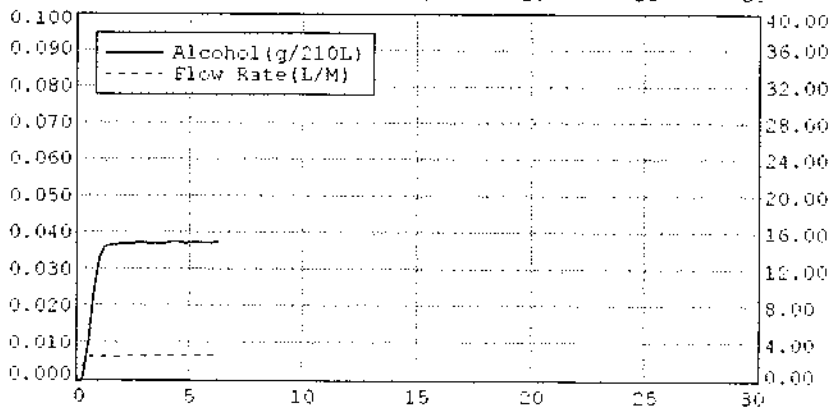
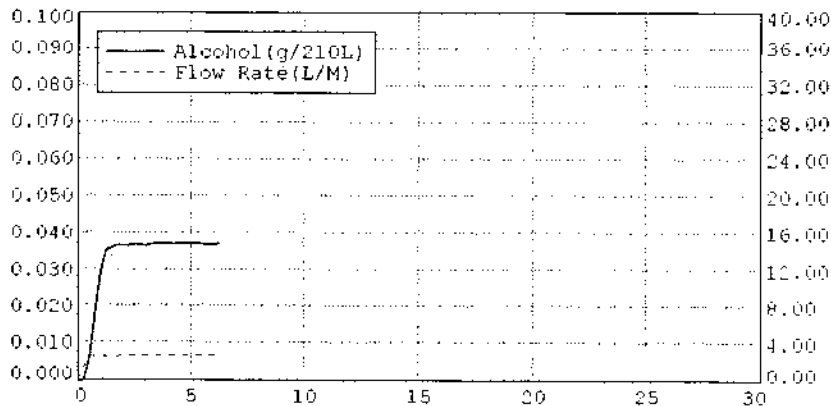
Date: 12/12/2018
 Time: 12:56:15

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 28.91: 0.039
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 1083 psi

BLANK TEST	0.000	12:58
INTERNAL STANDARD	VERIFIED	12:58
EXTERNAL STANDARD	0.039	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.038	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.039	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.038	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.039	13:02
BLANK TEST	0.000	13:03

Average = 0.0386
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

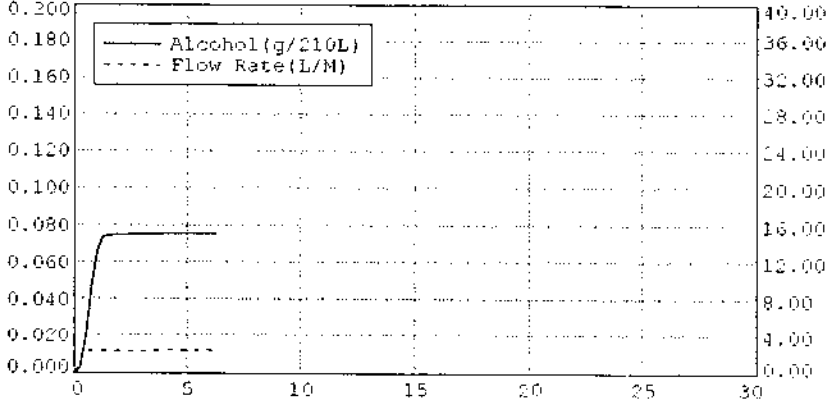
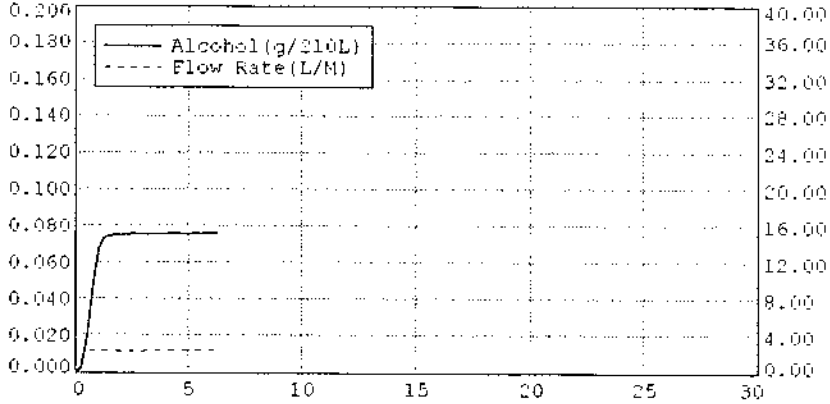
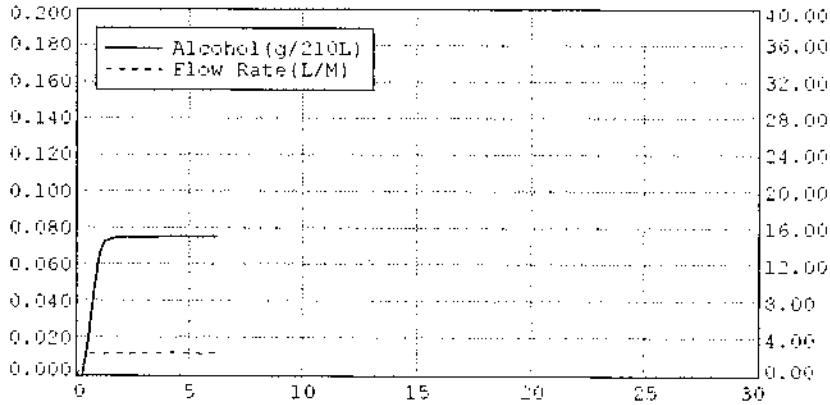
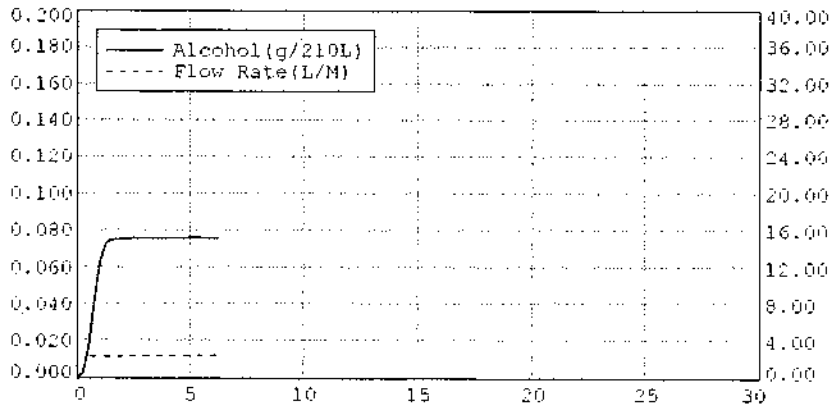
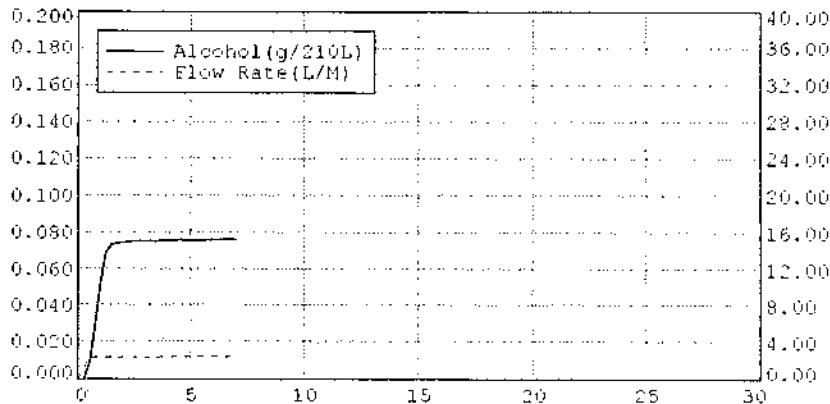
Date: 12/12/2018
 Time: 13:07:02

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 28.91: 0.077
 LOT #: AG735001
 EXPIRATION: 12/16/2019
 TANK PRESSURE: 471 psi

BLANK TEST	0.000	13:09
INTERNAL STANDARD	VERIFIED	13:09
EXTERNAL STANDARD	0.077	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.077	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.077	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.077	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.077	13:14
BLANK TEST	0.000	13:14

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

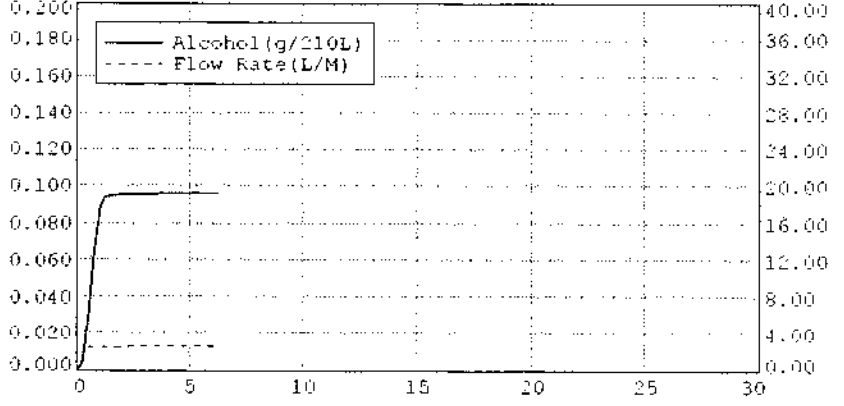
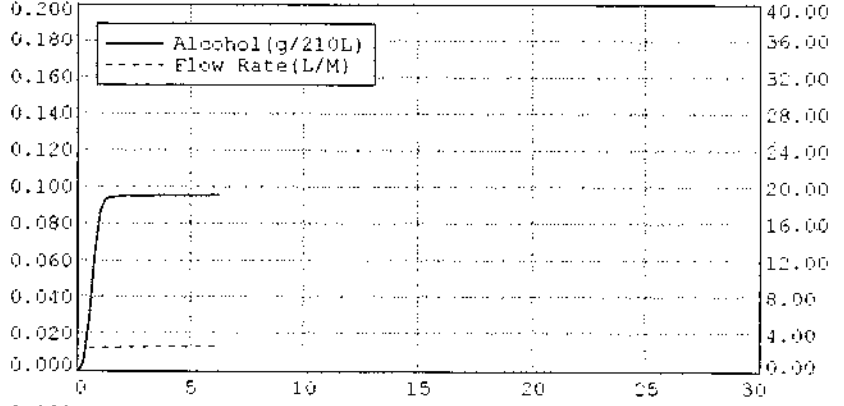
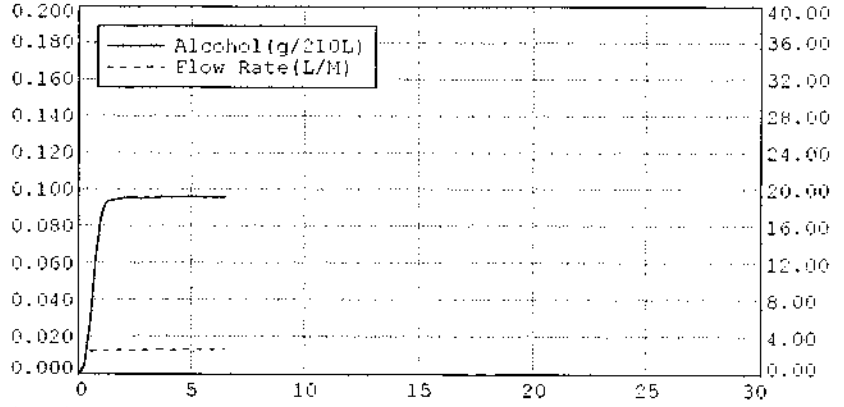
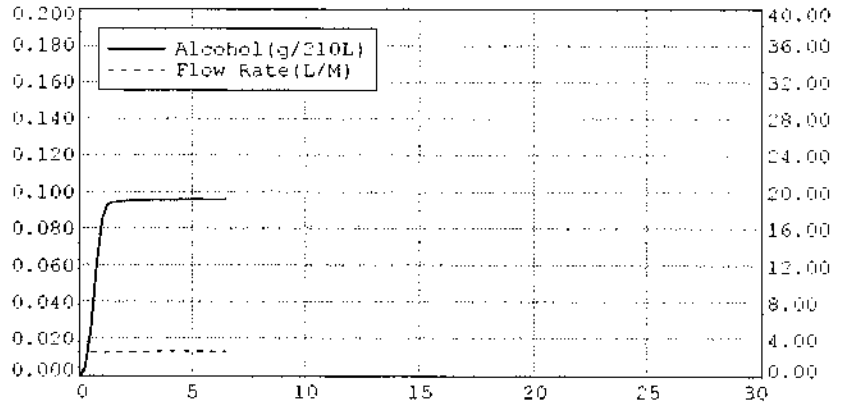
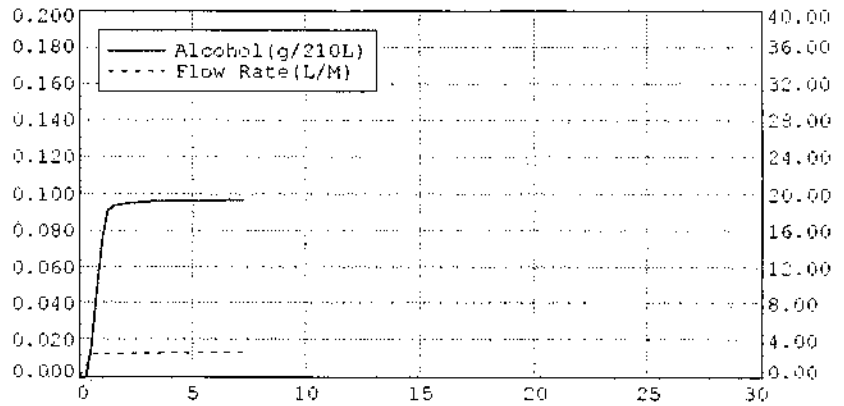
Date: 12/12/2018
 Time: 13:23:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 28.91: 0.097
 LOT #: AG805903
 EXPIRATION: 02/28/2020
 TANK PRESSURE: 1078 psi

BLANK TEST	0.000	13:25
INTERNAL STANDARD	VERIFIED	13:25
EXTERNAL STANDARD	0.098	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.097	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.097	13:27
BLANK TEST	0.000	13:28
EXTERNAL STANDARD	0.096	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.097	13:29
BLANK TEST	0.000	13:30

Average = 0.0970
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

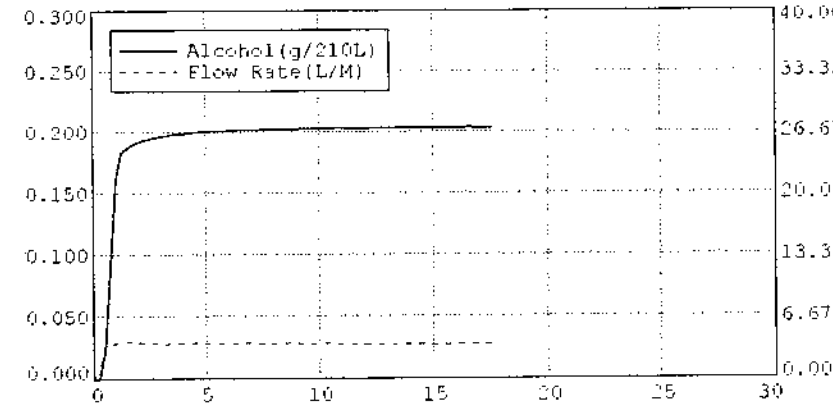
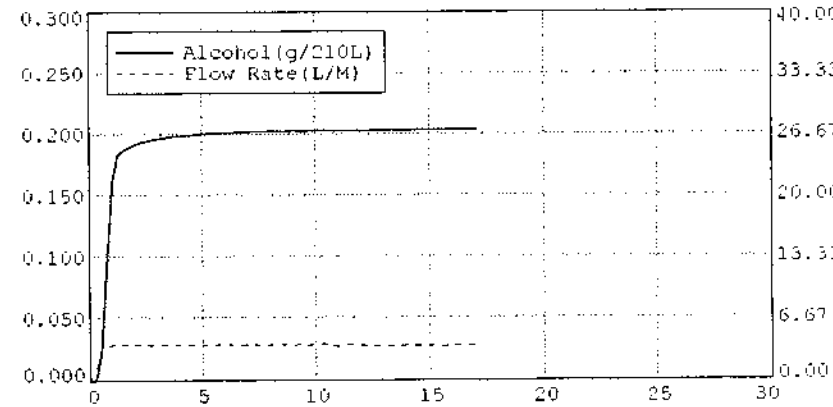
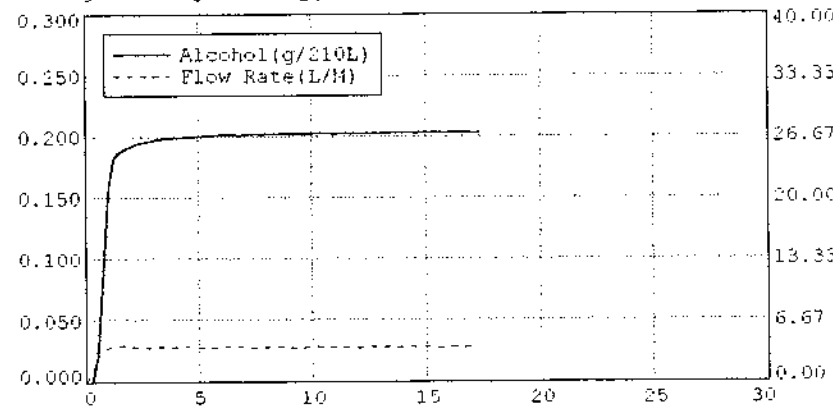
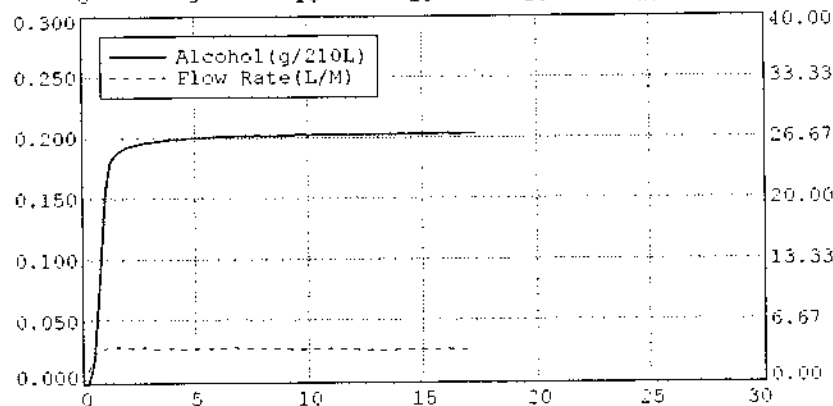
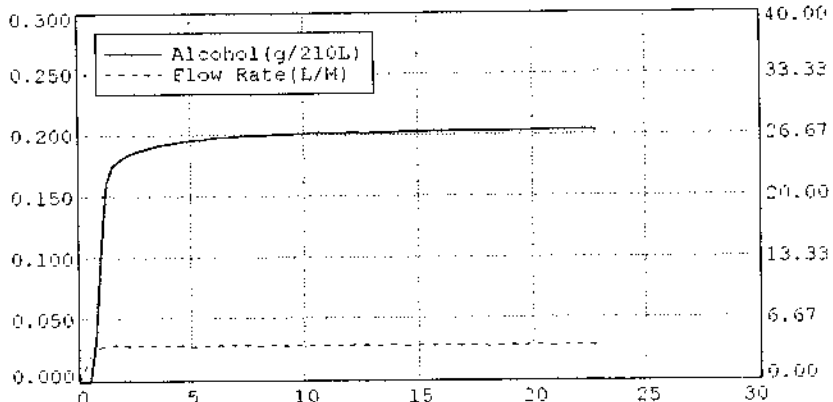
Date: 12/12/2018
 Time: 13:32:17

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:33
INTERNAL STANDARD	VERIFIED	13:33
EXTERNAL STANDARD	0.204	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.204	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.204	13:36
BLANK TEST	0.000	13:37
EXTERNAL STANDARD	0.204	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.204	13:39
BLANK TEST	0.000	13:40

Average = 0.2040
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100380

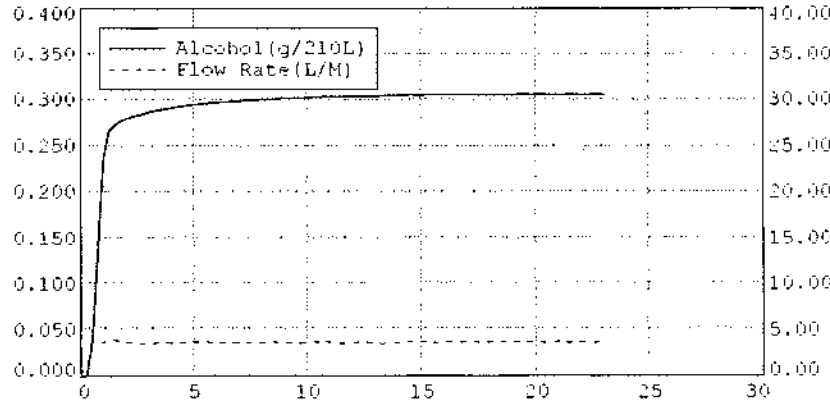
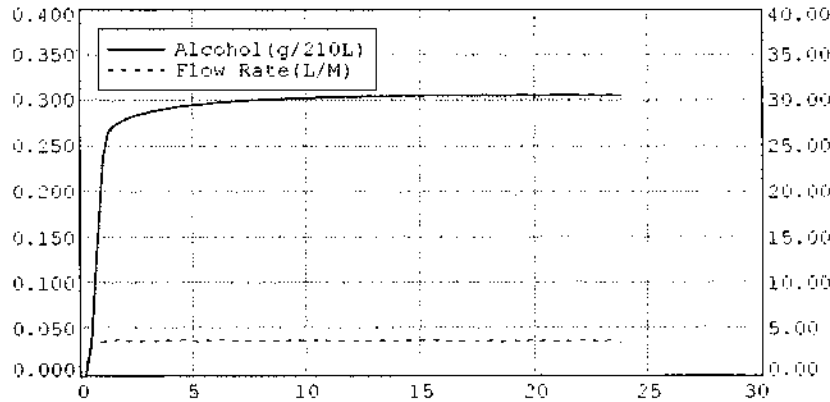
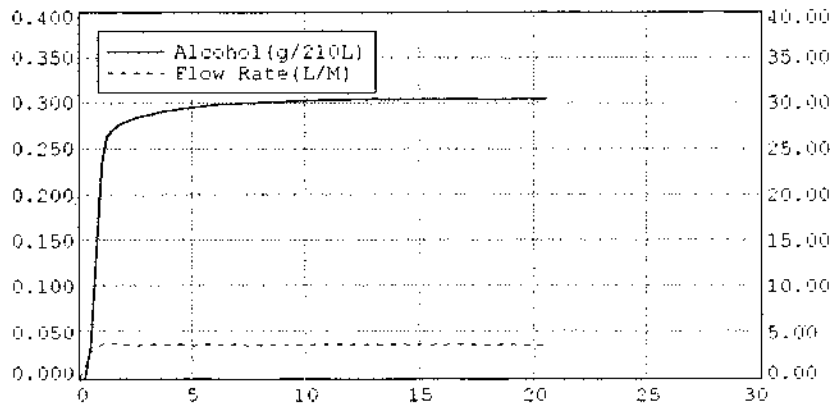
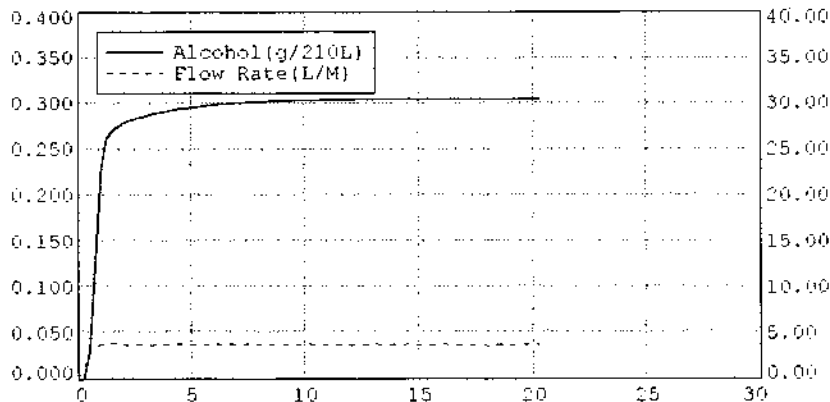
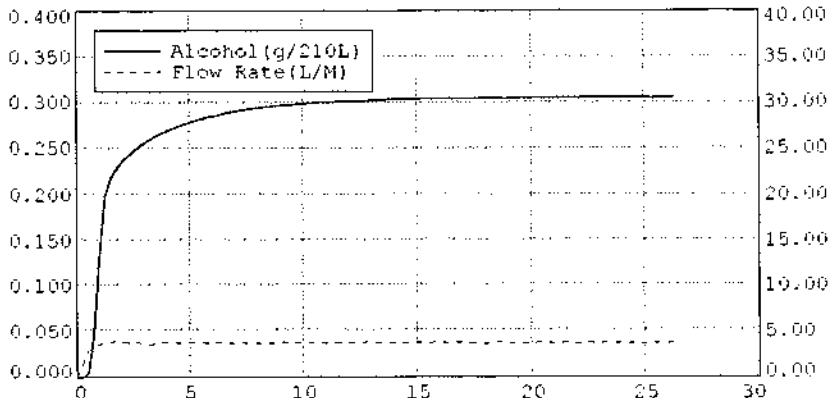
Date: 12/12/2018
 Time: 13:48:35

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.305	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.304	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.305	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.306	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.306	13:56
BLANK TEST	0.000	13:56

Average = 0.3052
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100380

Date: 12/13/2018
Time: 08:07:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

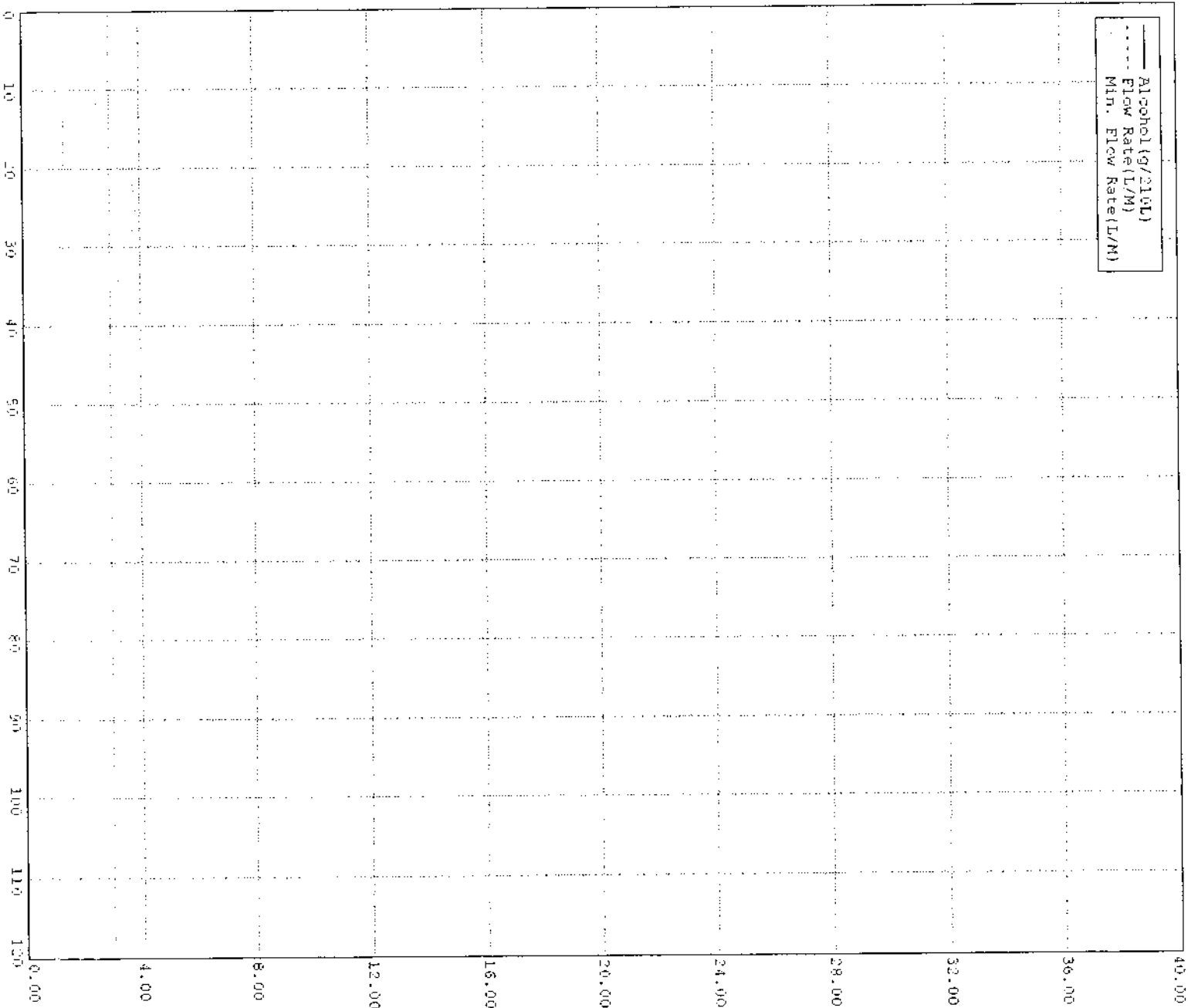
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:10
BLANK TEST	0.000	08:10
INTERNAL STANDARD	VERIFIED	08:10
EXTERNAL STANDARD	0.077	08:11
BLANK TEST	0.000	08:12
SUBJECT SAMPLE	INCOMPLETE	08:14

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 12/13/2018
Time: 08:16:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

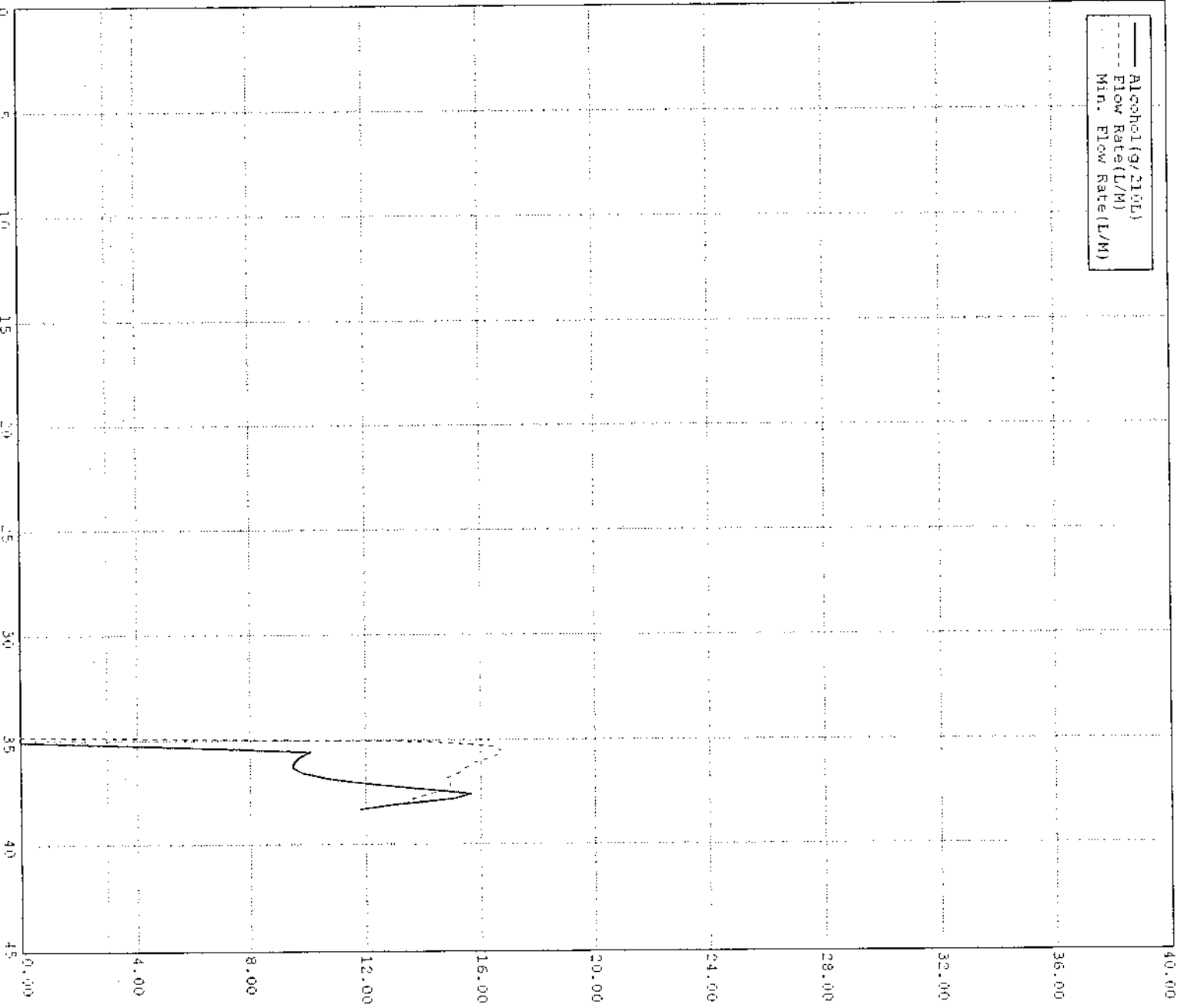
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:18
BLANK TEST	0.000	08:18
INTERNAL STANDARD	VERIFIED	08:19
EXTERNAL STANDARD	0.077	08:19
BLANK TEST	0.000	08:20
SUBJECT SAMPLE	INVALID	08:21

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 12/13/2018
Time: 08:26:24

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 29.01: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK PASSED 08:27
BLANK TEST 0.000 08:27
INTERNAL STANDARD VERIFIED 08:27
Xq = 0.086 (1.54%) 0.077 08:27
EXTERNAL STANDARD X[1] = 0.0772 (-0.0002) (0.0007) 0.000 08:28
BLANK TEST XXX 08:29
SUBJECT SAMPLE X[1] = 0.1092 (-0.0148) (-0.0008)

Interference Detected

Filter 2 Avg: 0.0001
Filter 3 Avg: 0.0011
BMB 12/14/18



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 12/13/2018
Time: 08:34:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

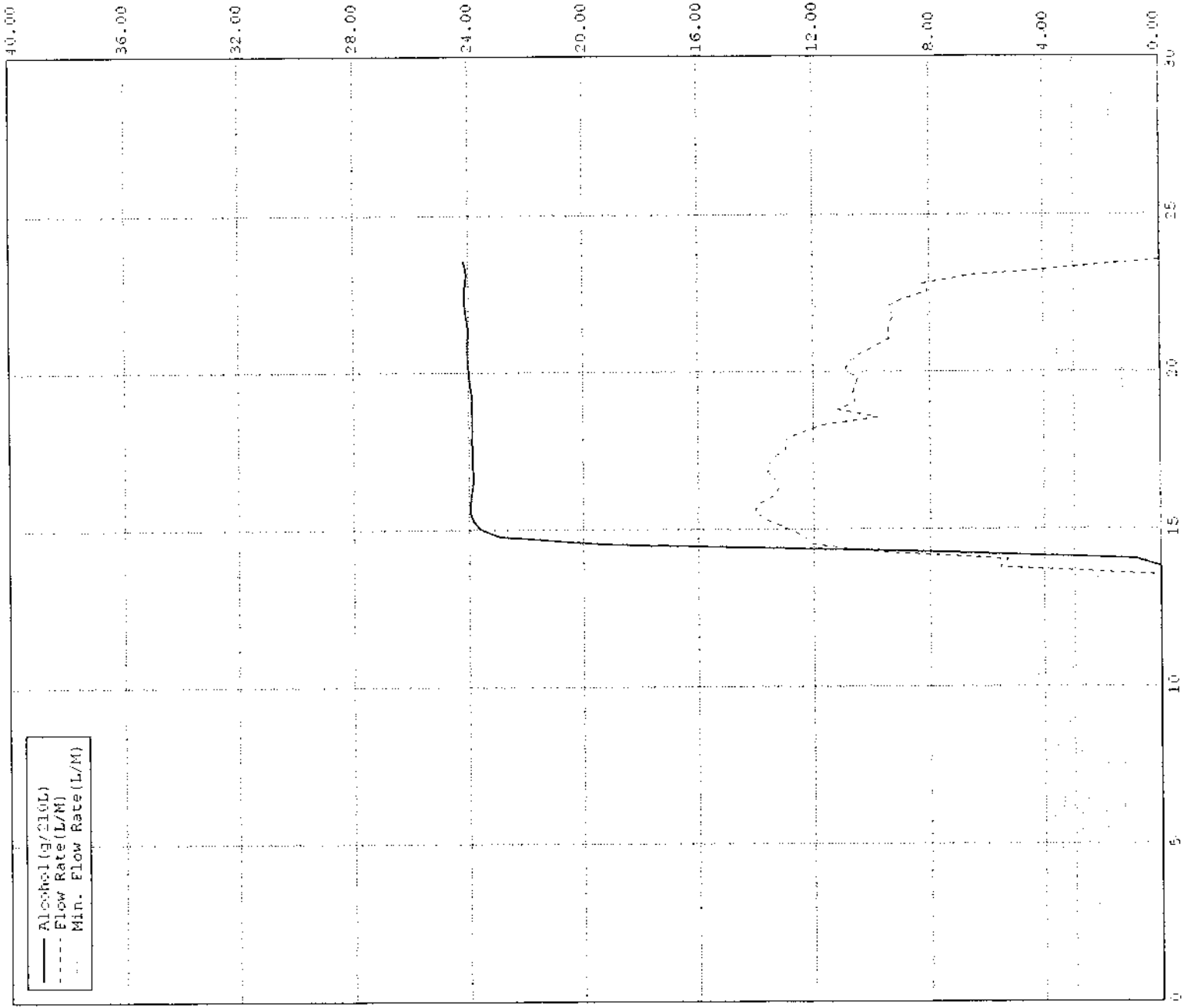
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.01: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:38
BLANK TEST	0.000	08:38
INTERNAL STANDARD	VERIFIED	08:38
xg = 0.087 (2.36%)		
EXTERNAL STANDARD	0.078	08:38
X[1] = 0.0779 (0.0002) (0.0004)		
BLANK TEST	0.000	08:39
SUBJECT SAMPLE	XXX	08:40
X[1] = 0.1210 (-0.0301) (-0.0020)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DAYMASTER dmt: 100380

Date: 12/13/2018
Time: 08:54:40

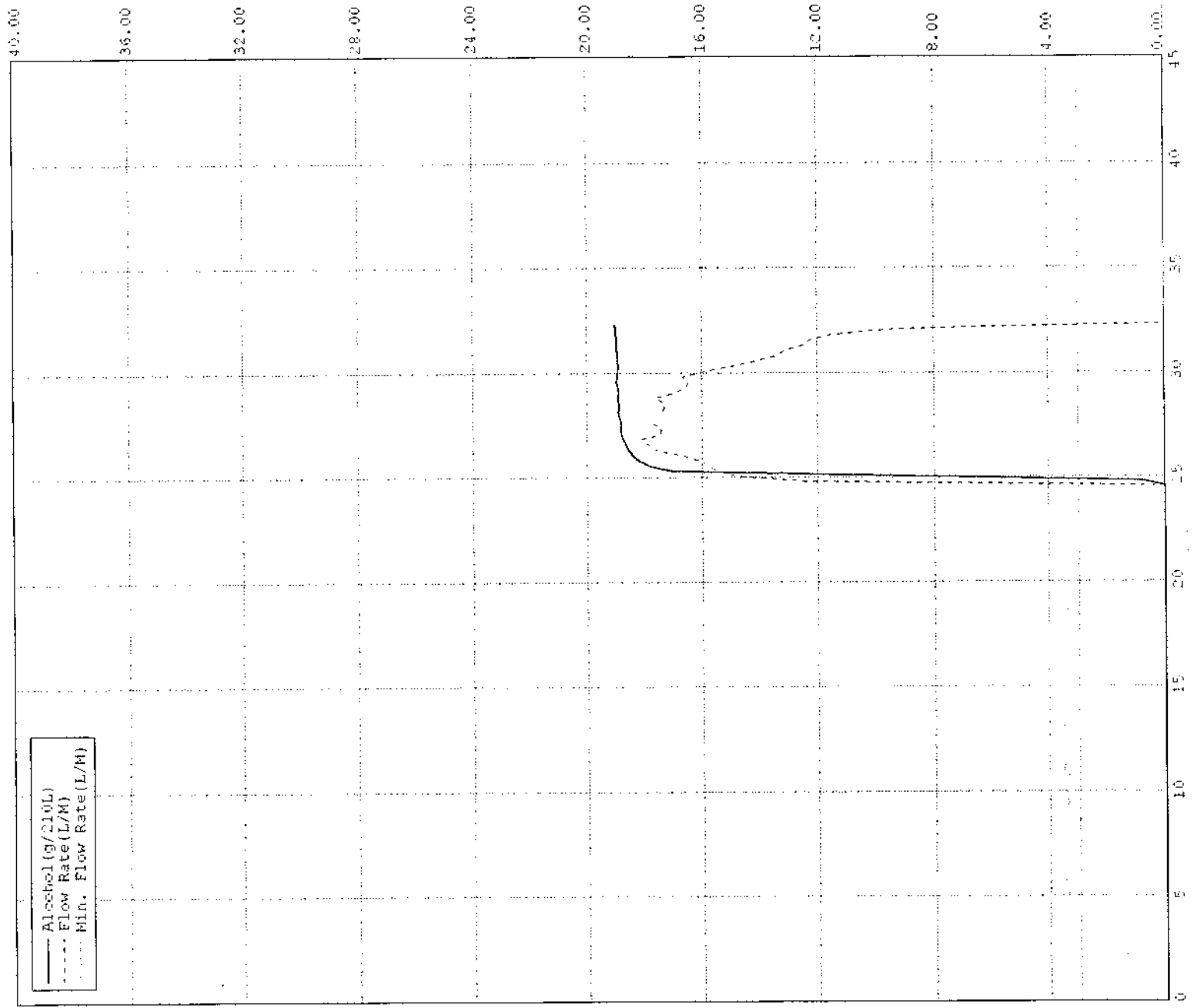
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:55
BLANK TEST	0.000	08:55
INTERNAL STANDARD	VERIFIED	08:55
$X_q = 0.086$ (1.33%)		
EXTERNAL STANDARD	0.077	08:56
$X[1] = 0.0768$ (-0.0001) (0.0014)		
BLANK TEST	0.000	08:57
SUBJECT SAMPLE (Vol=1.95L)	0.095	08:57
$X[1] = 0.0959$ (-0.0009) (0.0000)		
BLANK TEST	0.000	08:58
EXTERNAL STANDARD	0.076	08:58
$X[1] = 0.0764$ (0.0004) (0.0018)		
BLANK TEST	0.000	08:59



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 12/13/2018
Time: 09:39:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

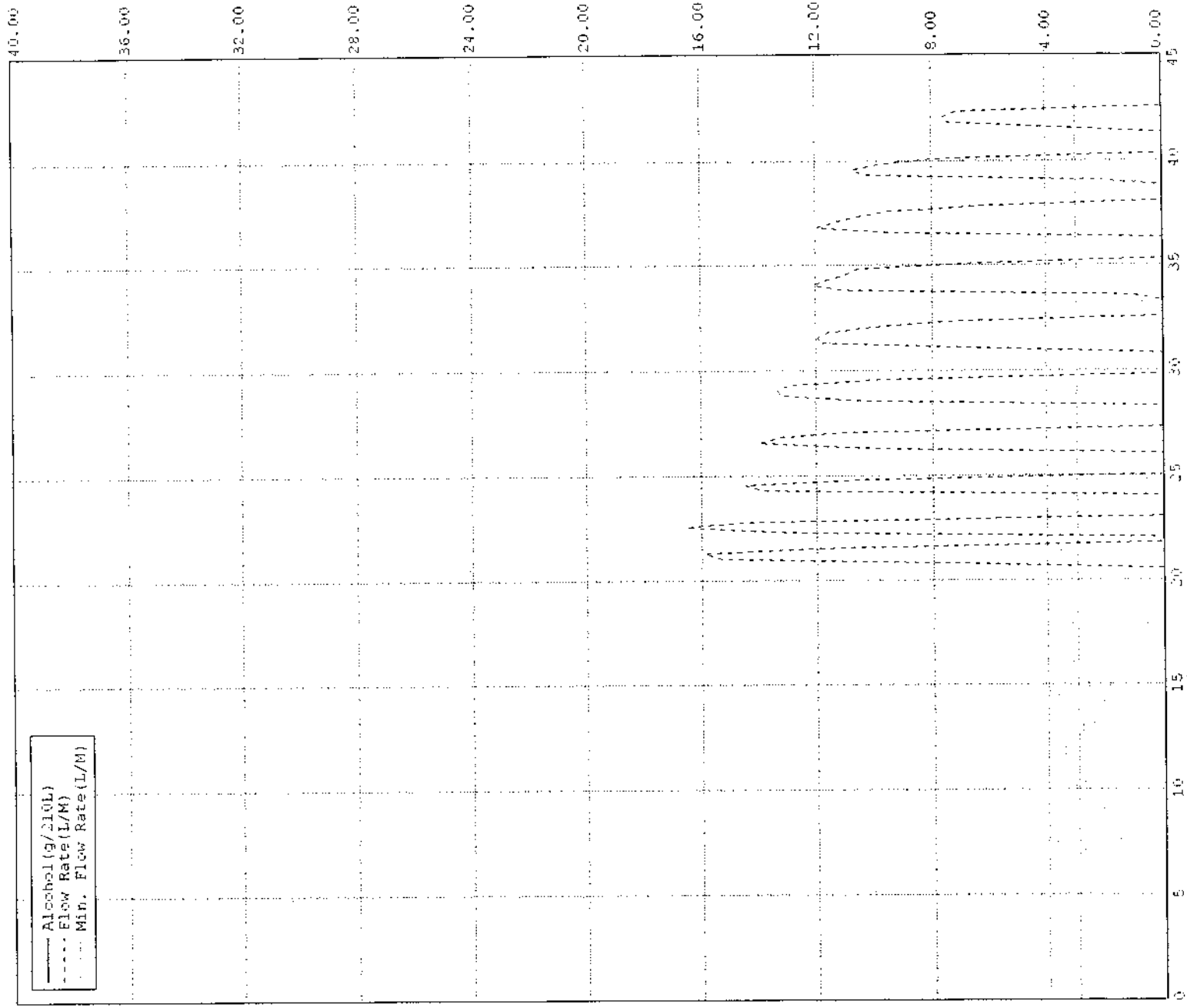
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK PASSED 09:42
BLANK TEST 0.000 09:42
INTERNAL STANDARD VERIFIED 09:42
EXTERNAL STANDARD 0.077 09:42
BLANK TEST 0.000 09:43
SUBJECT SAMPLE XXX 09:44

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 12/13/2018
Time: 09:46:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:

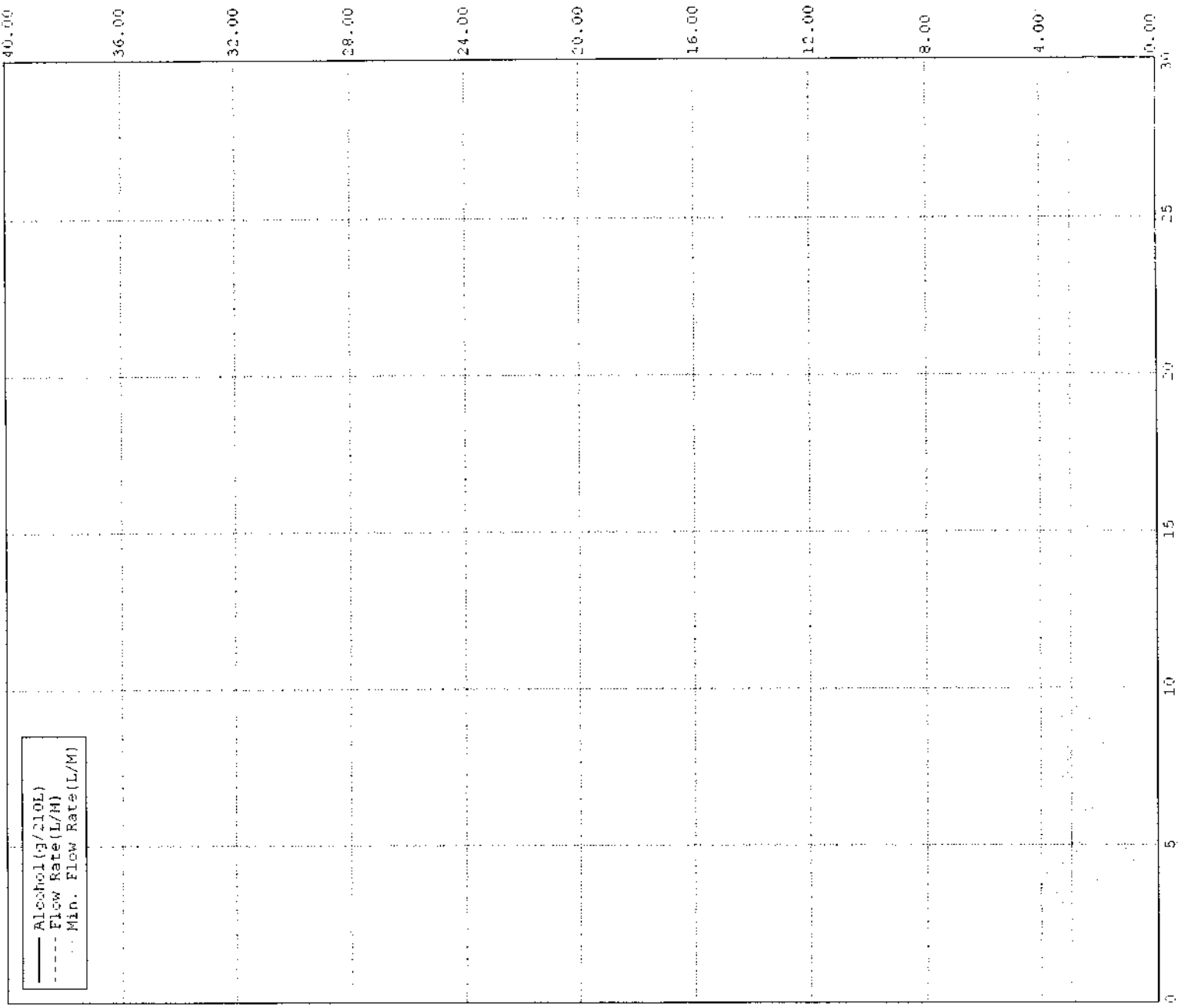
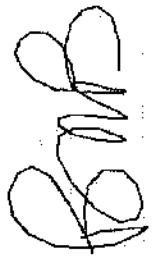
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.04: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK PASSED 09:56
BLANK TEST 0.000 09:56
INTERNAL STANDARD VERIFIED 09:56
EXTERNAL STANDARD 0.078 09:56
BLANK TEST 0.000 09:57

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100380

Date: 12/13/2018
Time: 10:14:04

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 29.04: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	10:16
BLANK TEST	0.000	10:16
INTERNAL STANDARD	VERIFIED	10:16
EXTERNAL STANDARD	0.077	10:16
BLANK TEST	0.000	10:17
SUBJECT SAMPLE (Vol=1.64L)	0.000	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.078	10:19
BLANK TEST	0.000	10:20

