

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 100395 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 1.6 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 DR5218 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: 100395

Date: 12/12/2018
Time: 09:20:59

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.80 V PASSED
(1.10 V - 2.56 V)
Cooler Voltage = 1.72 V PASSED
(1.03 V - 2.41 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 28.8 in

PUMP INFO

Flow Rate = 4.263 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 = 0.092 1.74% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100395

Date: 12/12/2018
Time: 9:44 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 47.9°C

Current Barometer 28.9 in
Volume (Ltr) 1.56

Settings

Lamp: 1.83 V
Bias: 80 V
Cooler: 1.72 V
Chopper: 534 Hz

Voltages (V)

Flow: 1.05 V
Detector: 0.083 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 05/01/2015
Time: 10:57:50

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

Ca = 0.1000
CAL = 0.974938 0.800 <= CAL < 1.200
b1 = 0.0007 0.0000 <= b1 < 0.0040
b2 = 0.0063 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0901 0.0500 <= Xq < 0.2000
a21 = 1.171322 1.050 <= a21 < 1.300
a31 = 0.371440 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 12/12/2018
Time: 09:46:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

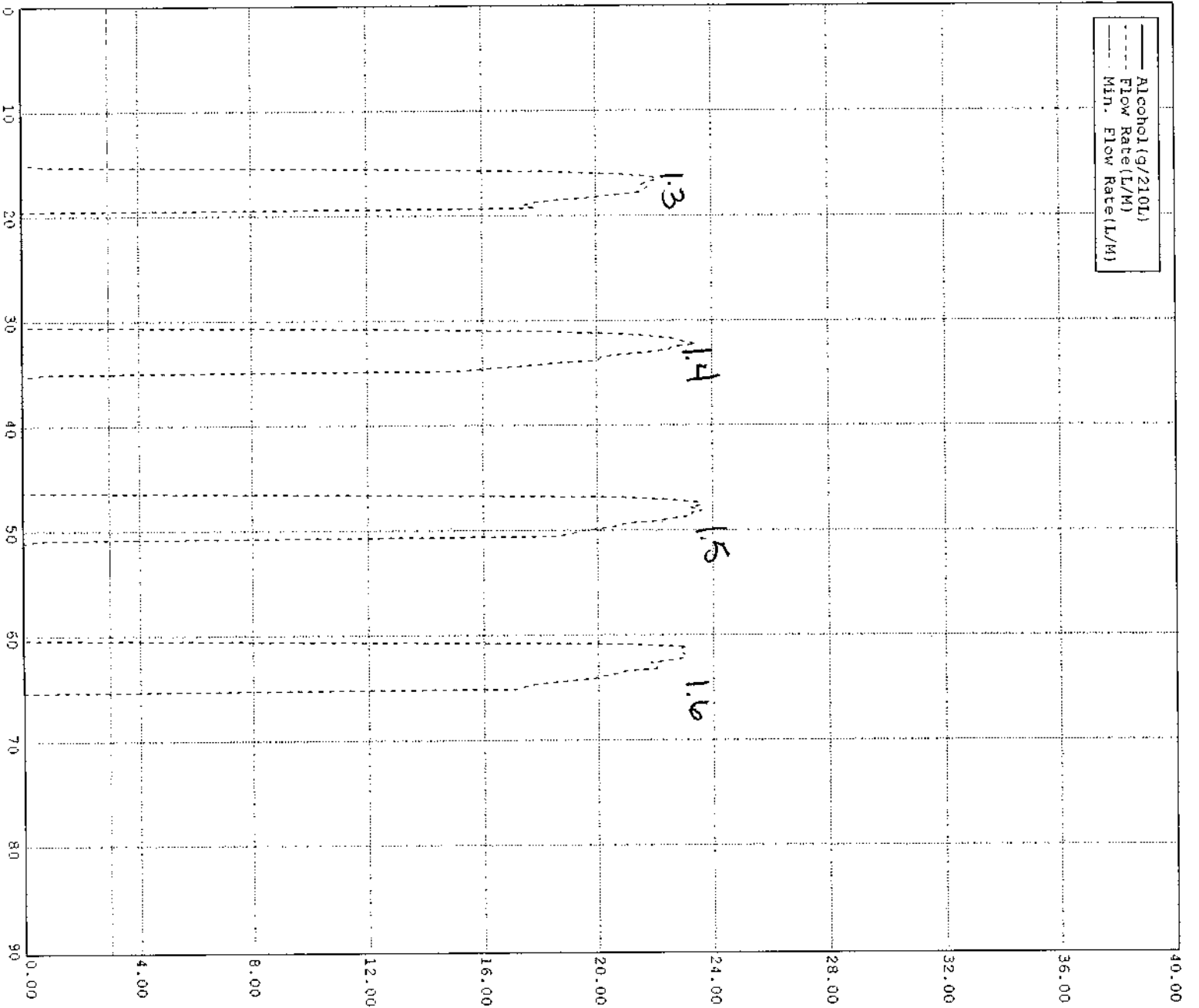
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 28.87: 0.077
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	09:49
BLANK TEST	0.000	09:49
INTERNAL STANDARD	VERIFIED	09:49
EXTERNAL STANDARD	0.076	09:49
BLANK TEST	0.000	09:50
SUBJECT SAMPLE (Vol=1.62L)	0.000	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.077	09:52
BLANK TEST	0.000	09:53

BMB



LINEARITY CHECK

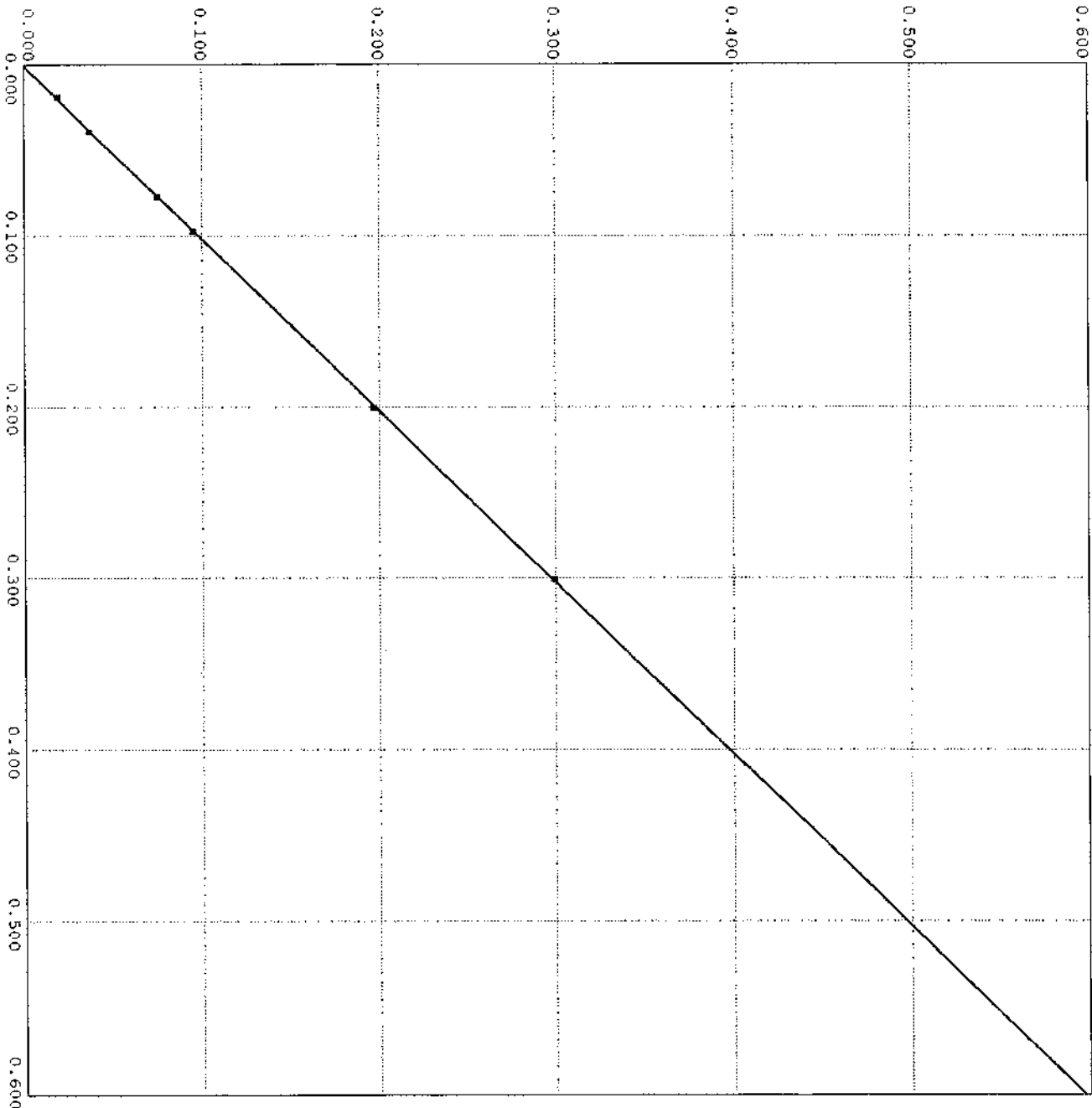
Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 12/12/2018
Time: 13:01:03

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	0.0960	0.0000
0.200	0.1976	0.0005
0.300	0.2998	0.0013

SLOPE = 0.997372
R² = 0.999910



BB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

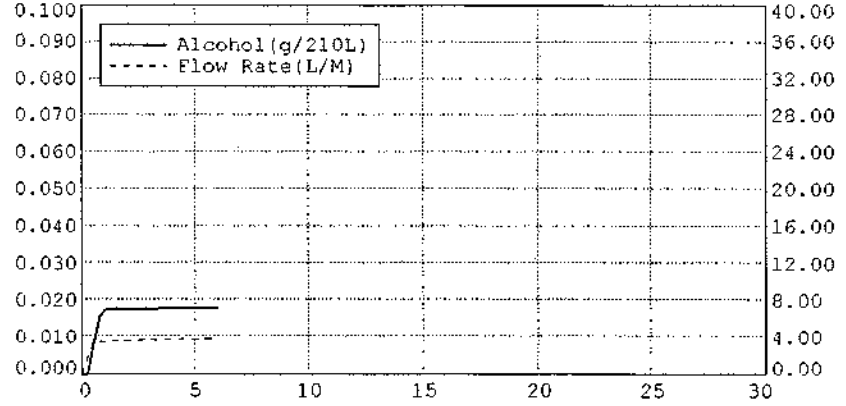
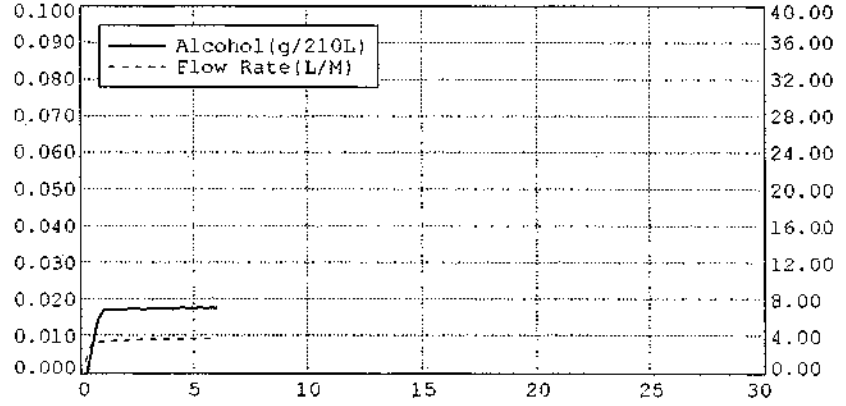
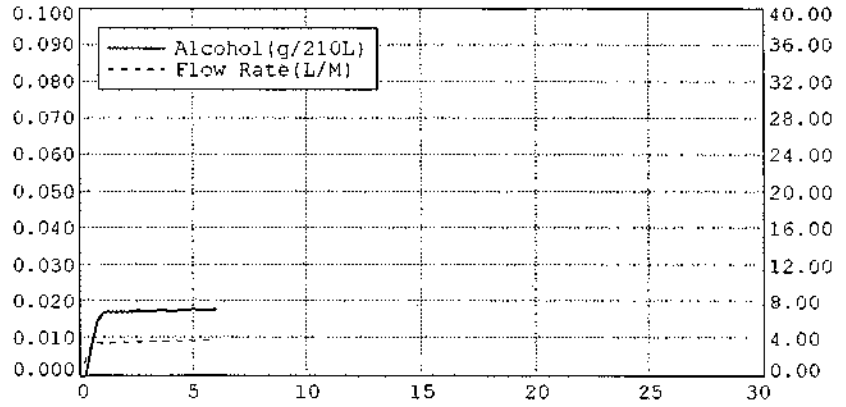
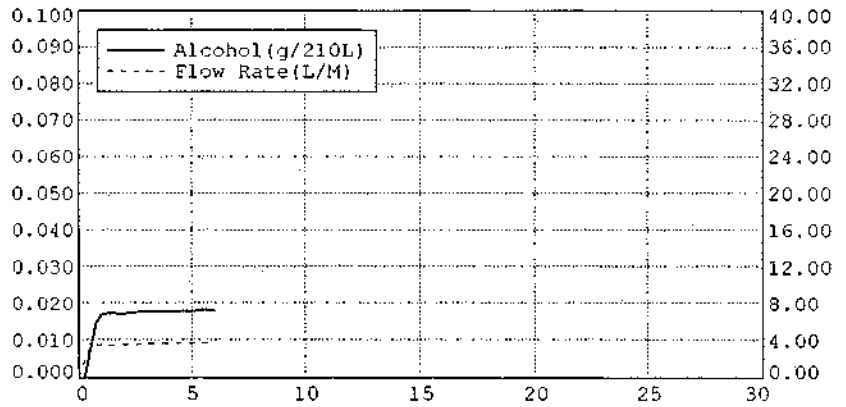
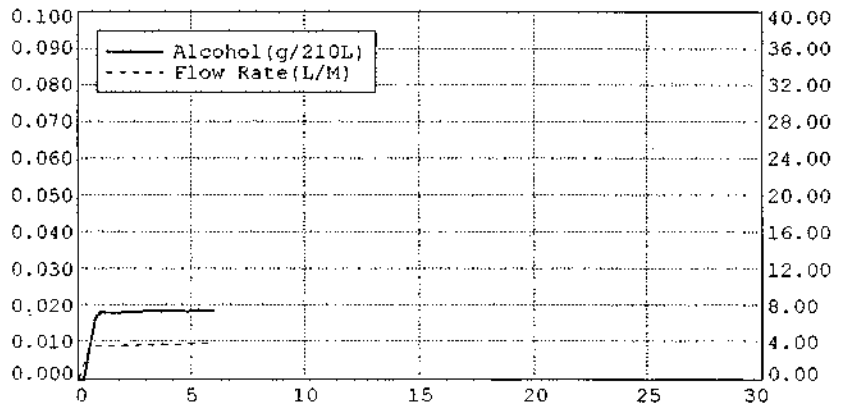
Date: 12/12/2018
 Time: 13:01:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 28.92: 0.019
 LOT #: ~~AG805903~~ AG805804 *BMB*
 EXPIRATION: ~~02/28/2020~~ 02/27/2020 12/14/18
 TANK PRESSURE: 839 psi

BLANK TEST	0.000	13:06
INTERNAL STANDARD	VERIFIED	13:06
EXTERNAL STANDARD	0.020	13:06
BLANK TEST	0.000	13:07
EXTERNAL STANDARD	0.020	13:08
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.019	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.020	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.020	13:11
BLANK TEST	0.000	13:12

Average = 0.0198
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

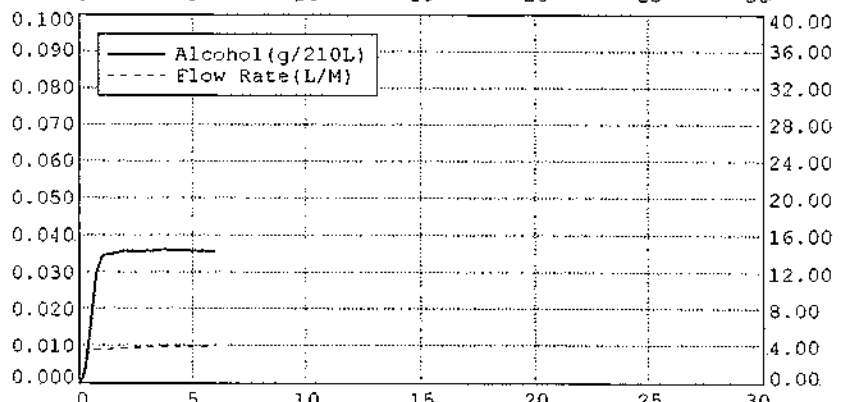
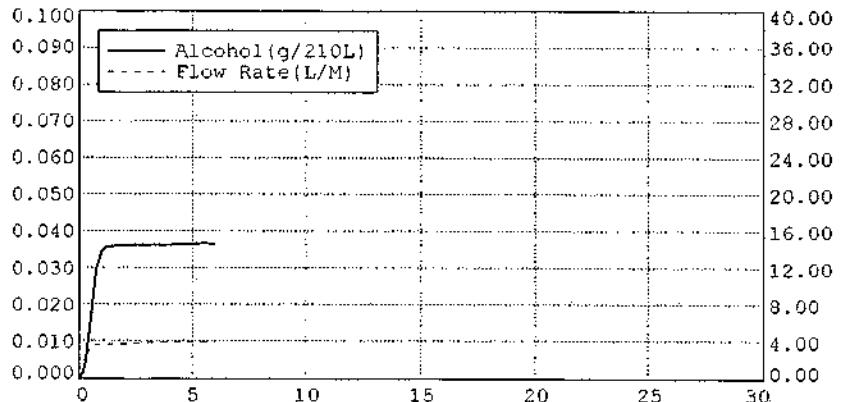
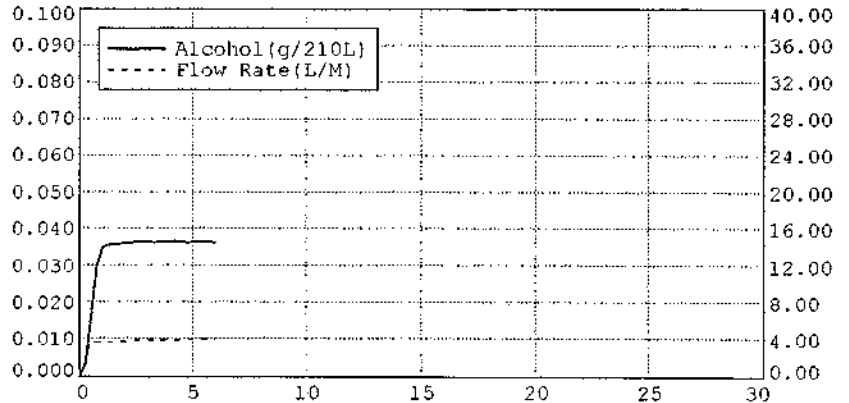
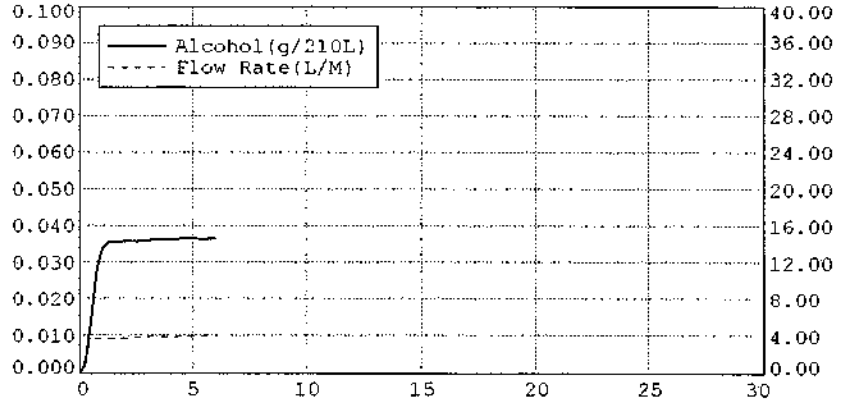
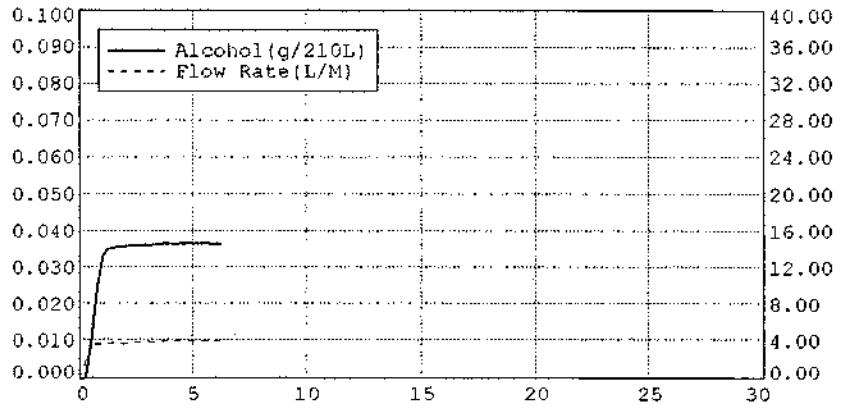
Date: 12/12/2018
 Time: 13:19:16

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 28.92: 0.039
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 1022 psi

BLANK TEST	0.000	13:20
INTERNAL STANDARD	VERIFIED	13:20
EXTERNAL STANDARD	0.038	13:20
BLANK TEST	0.000	13:21
EXTERNAL STANDARD	0.038	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.038	13:23
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.038	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.038	13:25
BLANK TEST	0.000	13:26

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

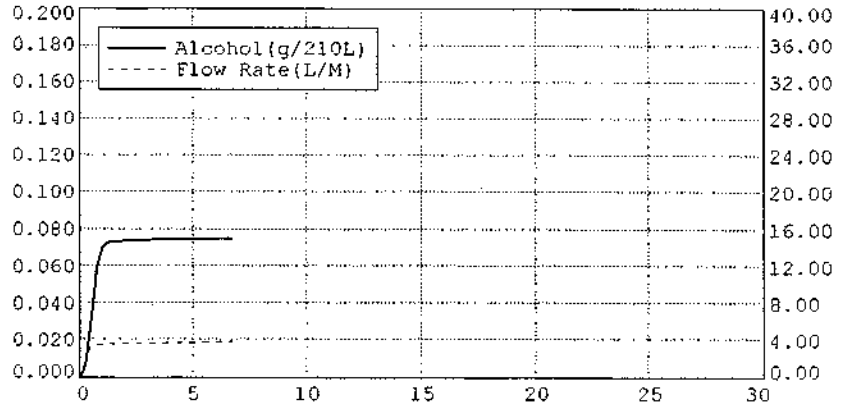
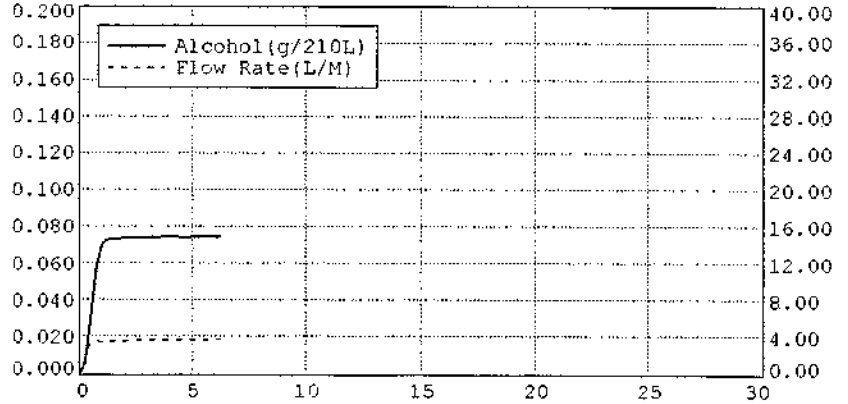
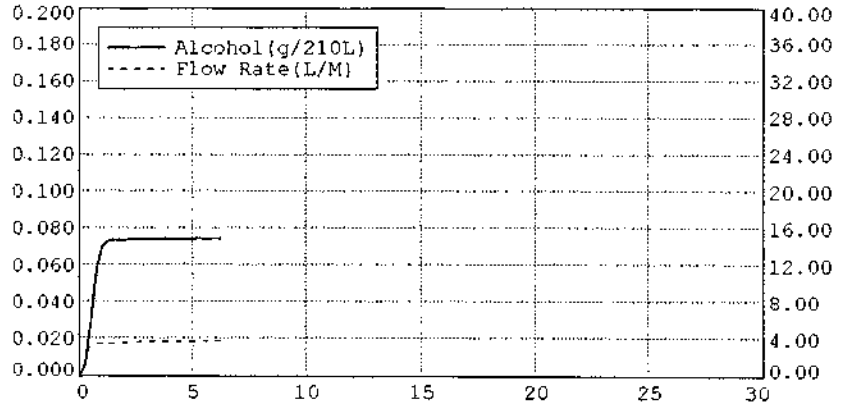
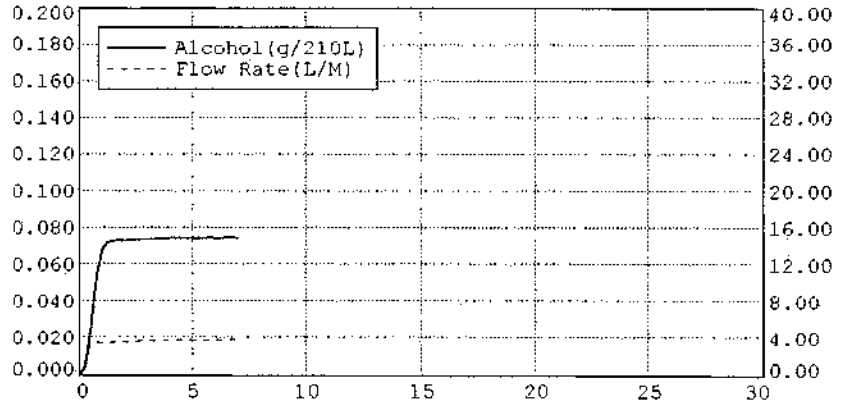
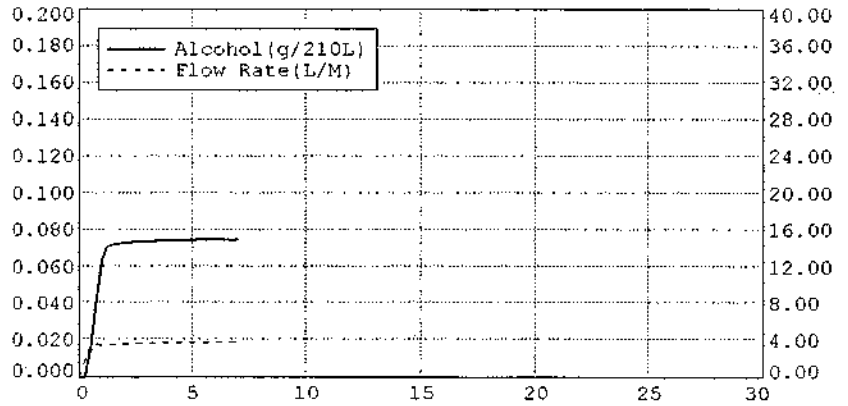
Date: 12/12/2018
 Time: 13:28:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 28.92: 0.077
 LOT #: AG735001
 EXPIRATION: 12/16/2019
 TANK PRESSURE: 792 psi

BLANK TEST	0.000	13:29
INTERNAL STANDARD	VERIFIED	13:29
EXTERNAL STANDARD	0.076	13:30
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.076	13:31
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.076	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.076	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.076	13:34
BLANK TEST	0.000	13:35

Average = 0.0760
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100395

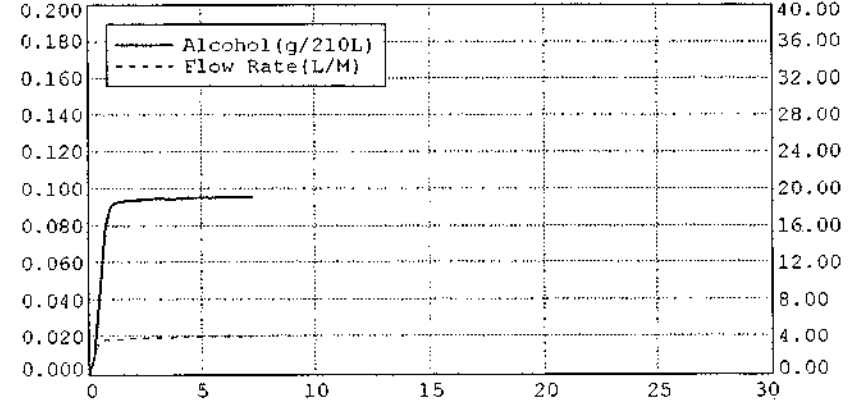
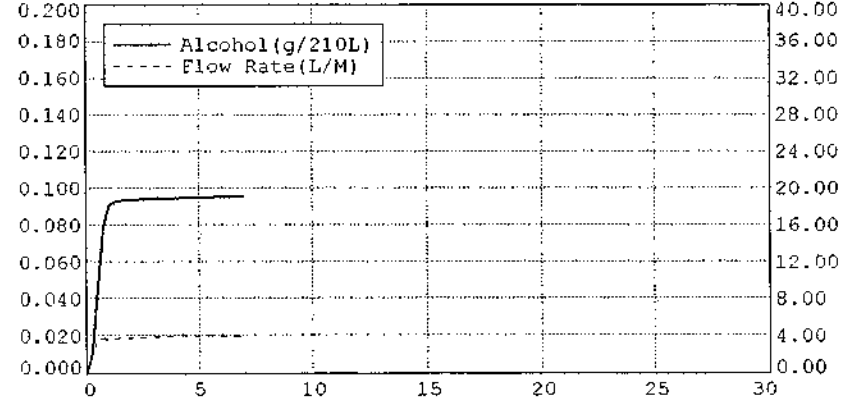
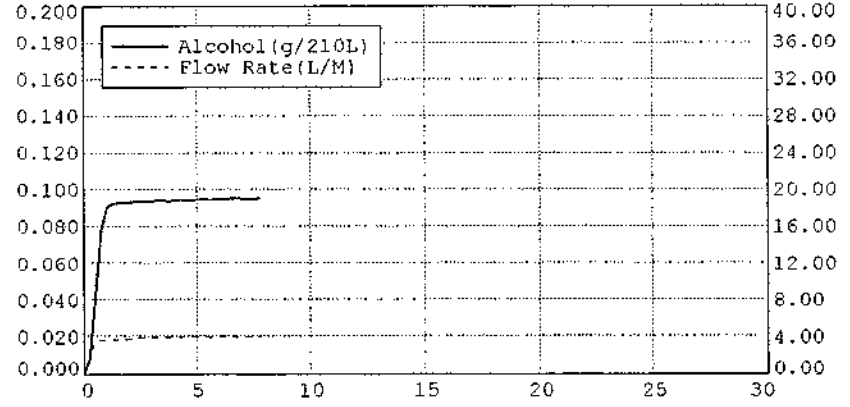
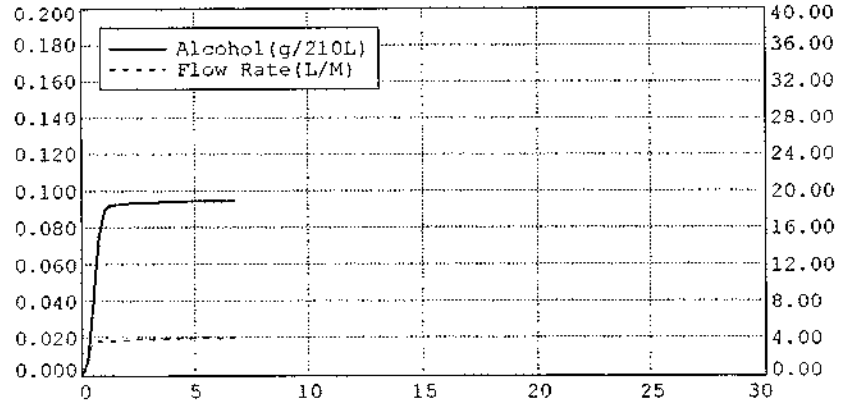
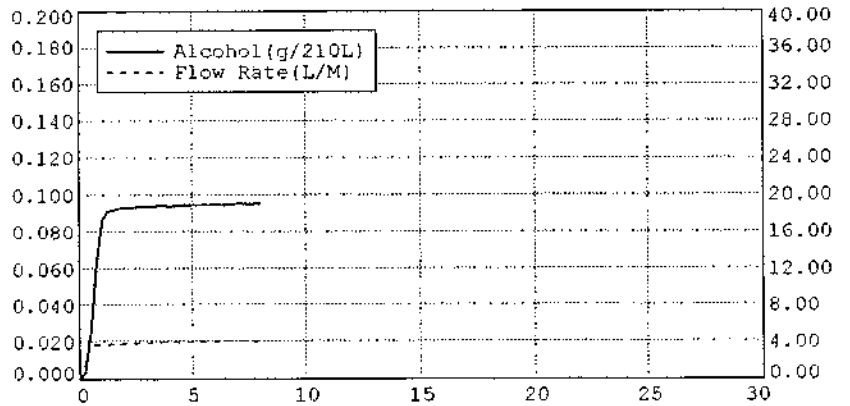
Date: 12/12/2018
Time: 13:37:05

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 28.92: 0.097
LOT #: AG805903
EXPIRATION: 02/28/2020
TANK PRESSURE: 1033 psi

BLANK TEST	0.000	13:48
INTERNAL STANDARD	VERIFIED	13:48
EXTERNAL STANDARD	0.096	13:48
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.096	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.096	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.096	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.096	13:52
BLANK TEST	0.000	13:53

Average = 0.0960
Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

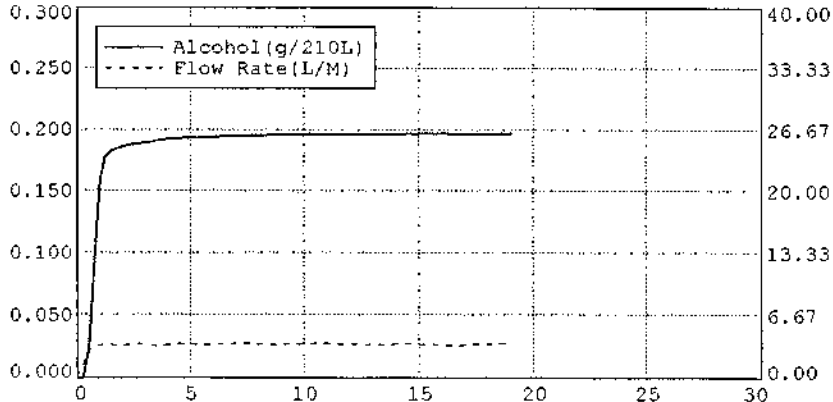
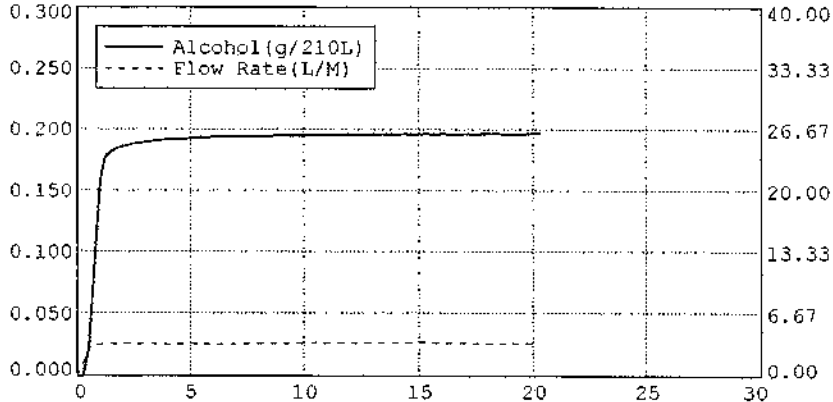
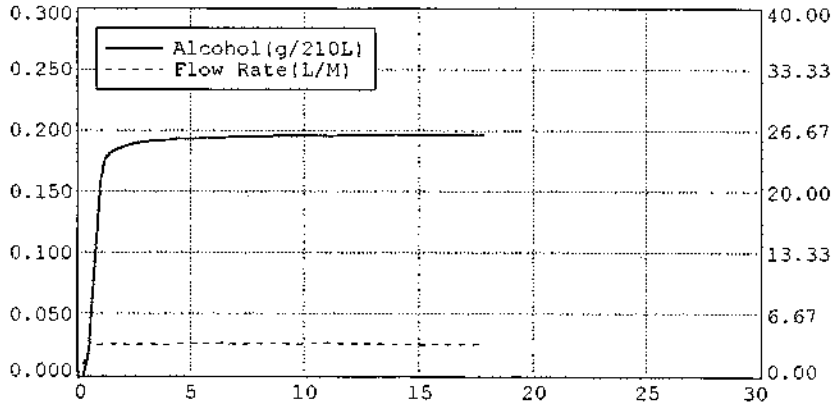
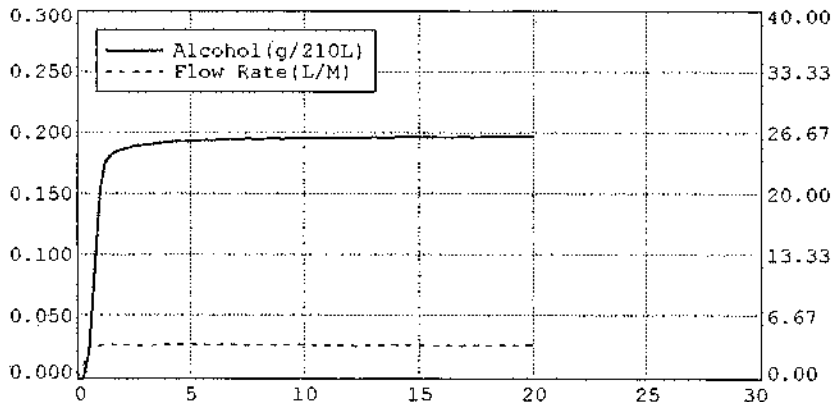
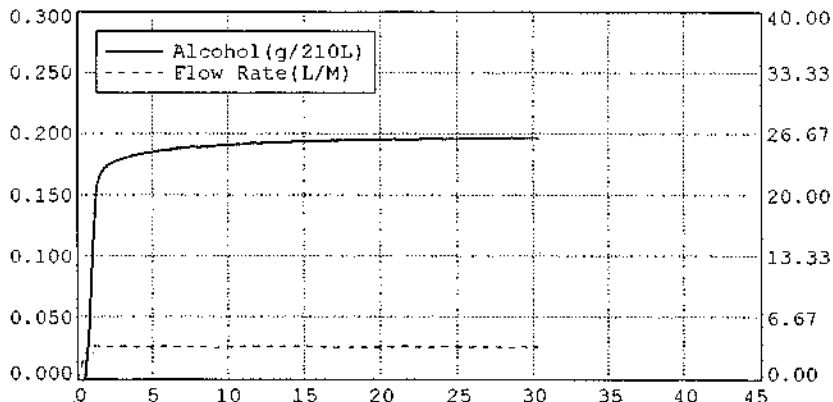
Date: 12/12/2018
 Time: 14:07:50

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:08
INTERNAL STANDARD	VERIFIED	14:09
EXTERNAL STANDARD	0.197	14:09
BLANK TEST	0.000	14:10
EXTERNAL STANDARD	0.198	14:11
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.197	14:12
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.198	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.198	14:15
BLANK TEST	0.000	14:15

Average = 0.1976
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

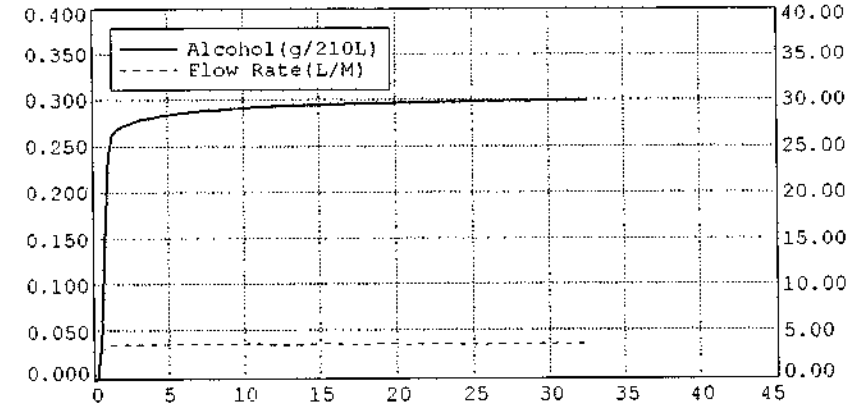
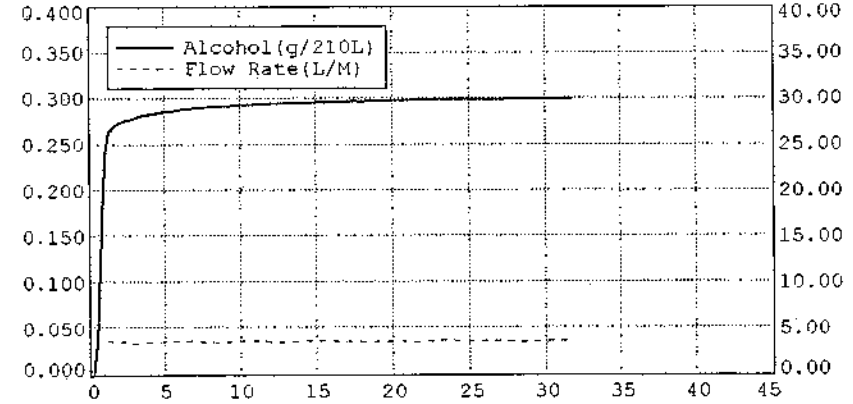
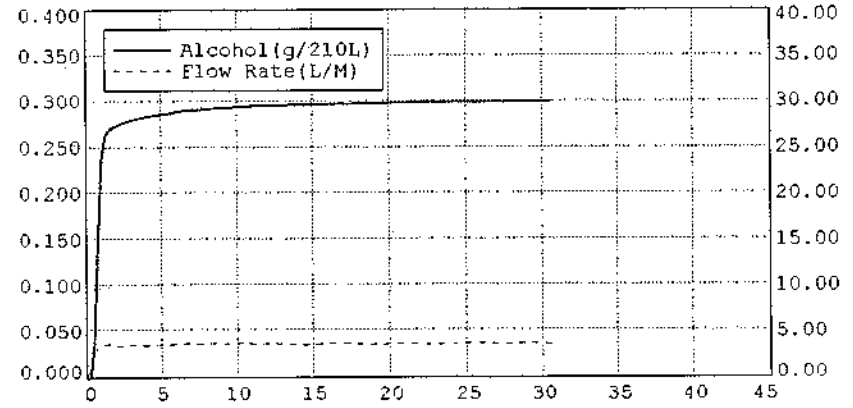
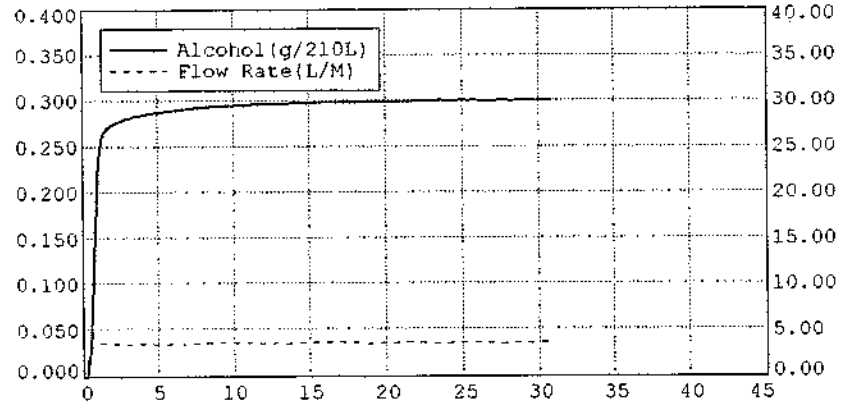
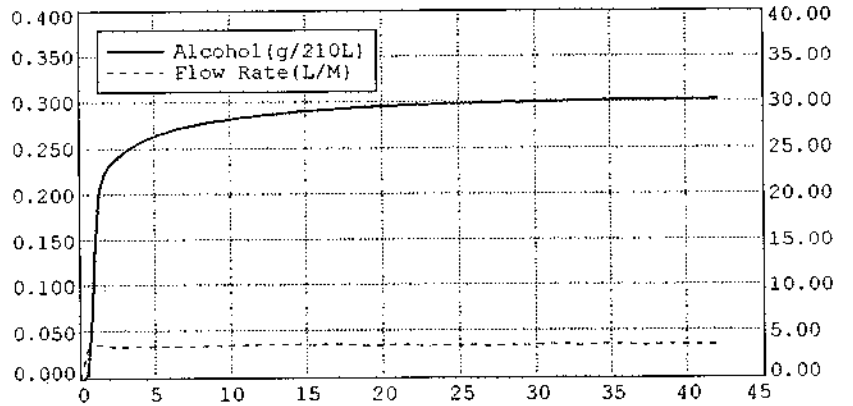
Alaska Department of Public Safety
 DATAMASTER dmt: 100395

Date: 12/12/2018
 Time: 14:21:10

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

BLANK TEST	0.000	14:22
INTERNAL STANDARD	VERIFIED	14:22
EXTERNAL STANDARD	0.302	14:23
BLANK TEST	0.000	14:24
EXTERNAL STANDARD	0.300	14:25
BLANK TEST	0.000	14:25
EXTERNAL STANDARD	0.299	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.299	14:28
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.299	14:29
BLANK TEST	0.000	14:30

Average = 0.2998
 Std Dev = 0.0013



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 12/13/2018
Time: 08:08:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

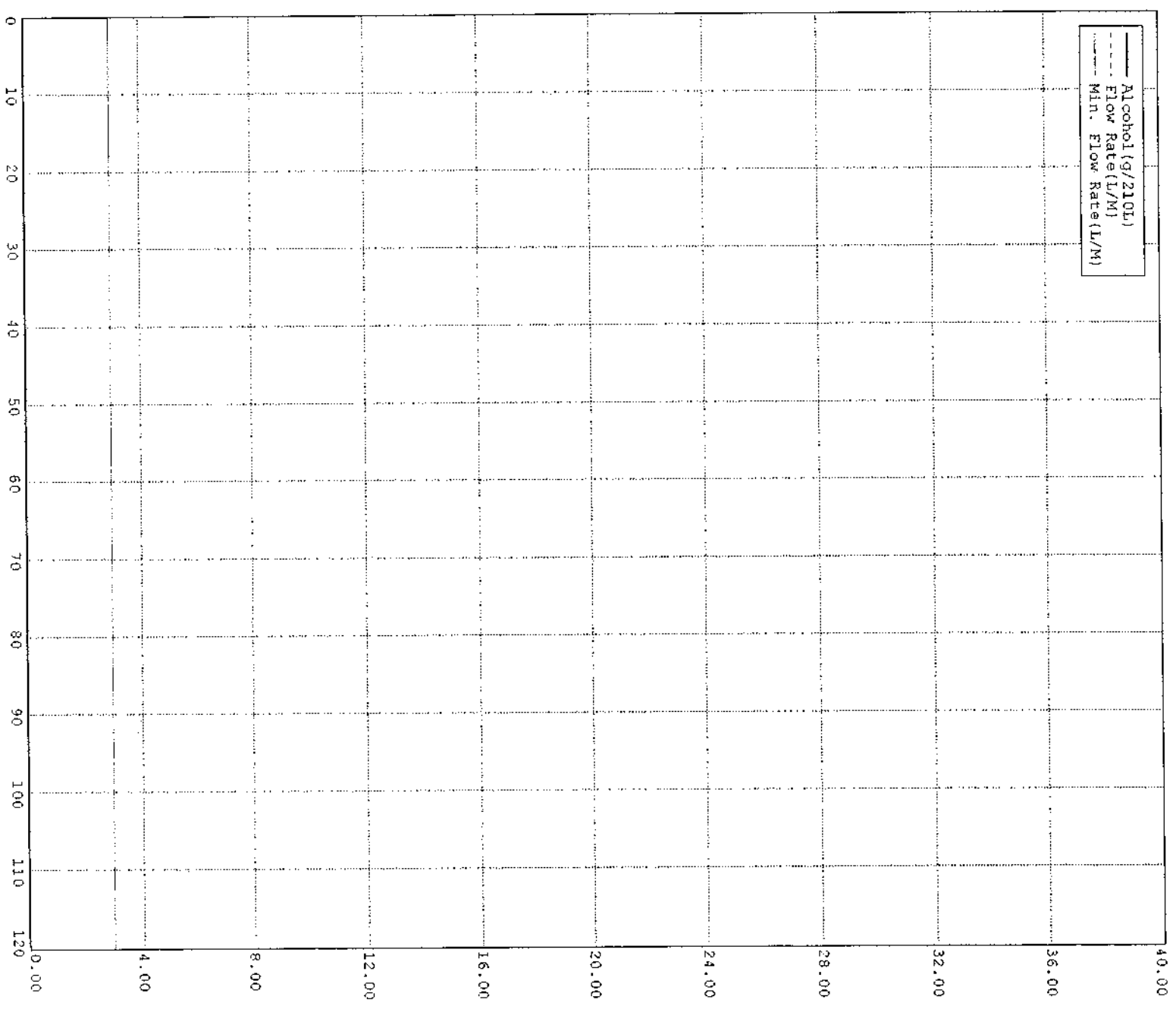
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.03: 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	0.076	08:11
BLANK TEST	0.000	08:12
SUBJECT SAMPLE	INCOMPLETE	08:14

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100395

Date: 12/13/2018
Time: 08:16:44

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

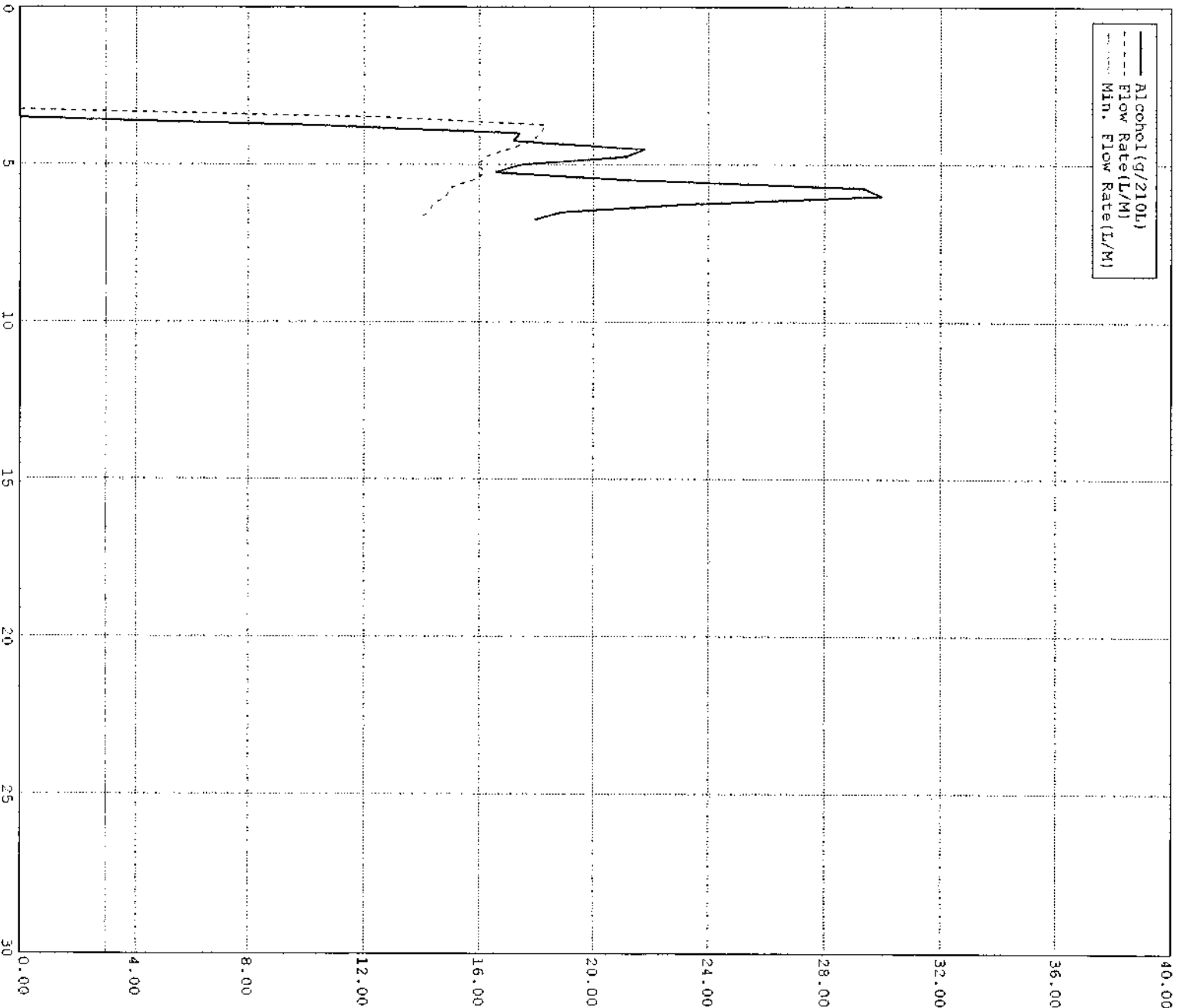
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.03: 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	0.076	08:19
BLANK TEST	0.000	08:20
SUBJECT SAMPLE	INVALID	08:21

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 12/13/2018
Time: 08:24:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

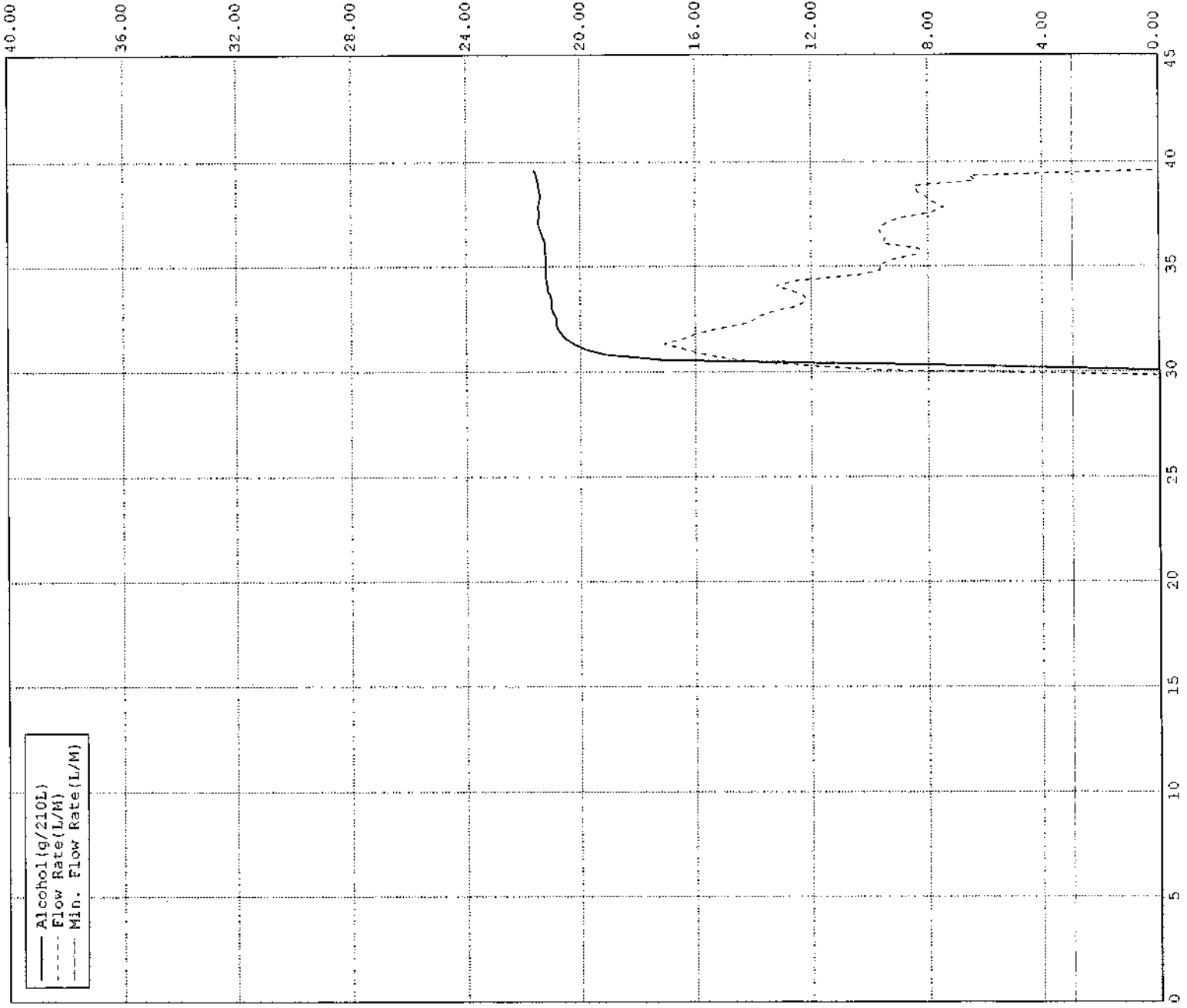
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:30
BLANK TEST	0.000	08:30
INTERNAL STANDARD	VERIFIED	08:30
Xg = 0.092 (2.62%)		
EXTERNAL STANDARD	0.077	08:31
X[1] = 0.0768 (-0.0010) (0.0017)		
BLANK TEST	0.000	08:32
SUBJECT SAMPLE	XXX	08:32
X[1] = 0.1080 (-0.0165) (-0.0005)		

Interference Detected

Filter 2 Avg: 0.0010
Filter 3 Avg: 0.0022
BMB 12/14/18



SUBJECT TEST

Alaska Department of Public Safety
DAPAMASTER dmt: 100395

Date: 12/13/2018
Time: 08:40:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

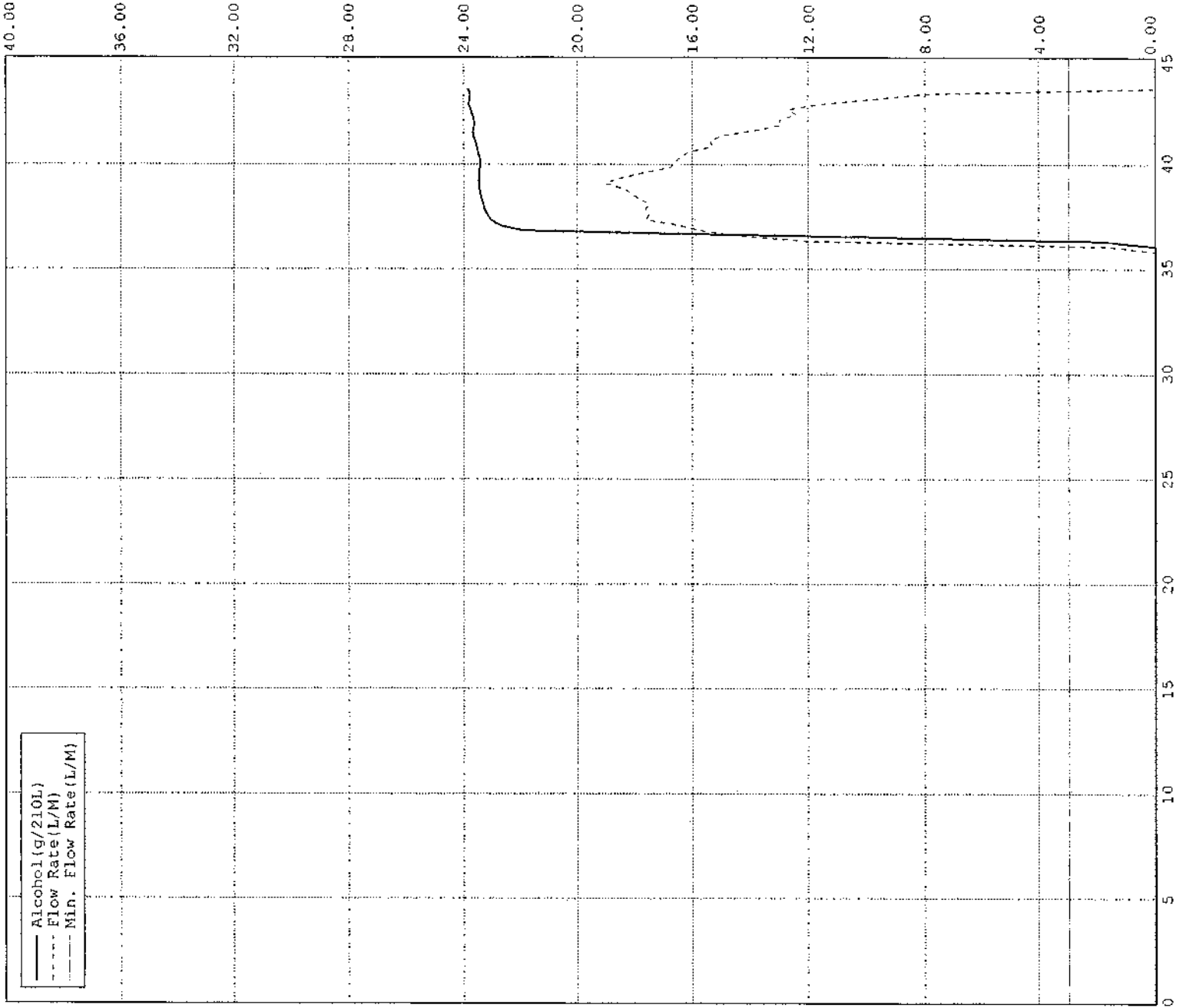
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:41
BLANK TEST	0.000	08:42
INTERNAL STANDARD	VERIFIED	08:42
Xq = 0.093 (2.91%)		
EXTERNAL STANDARD	0.076	08:42
X[1] = 0.0762 (-0.0007) (0.0026)		
BLANK TEST	0.000	08:43
SUBJECT SAMPLE	XXX	08:44
X[1] = 0.1190 (-0.0227) (0.0025)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 12/13/2018
Time: 08:47:37

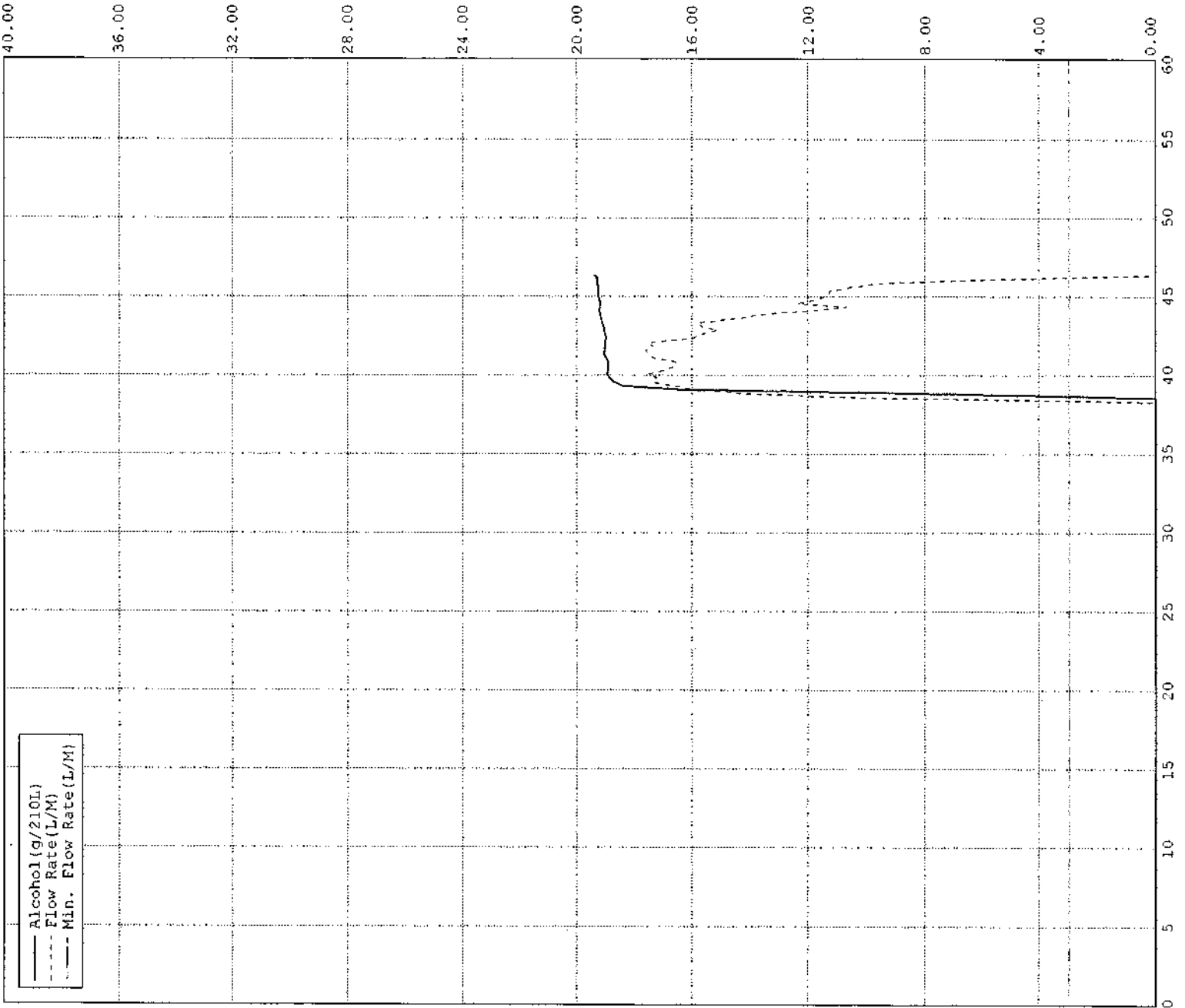
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

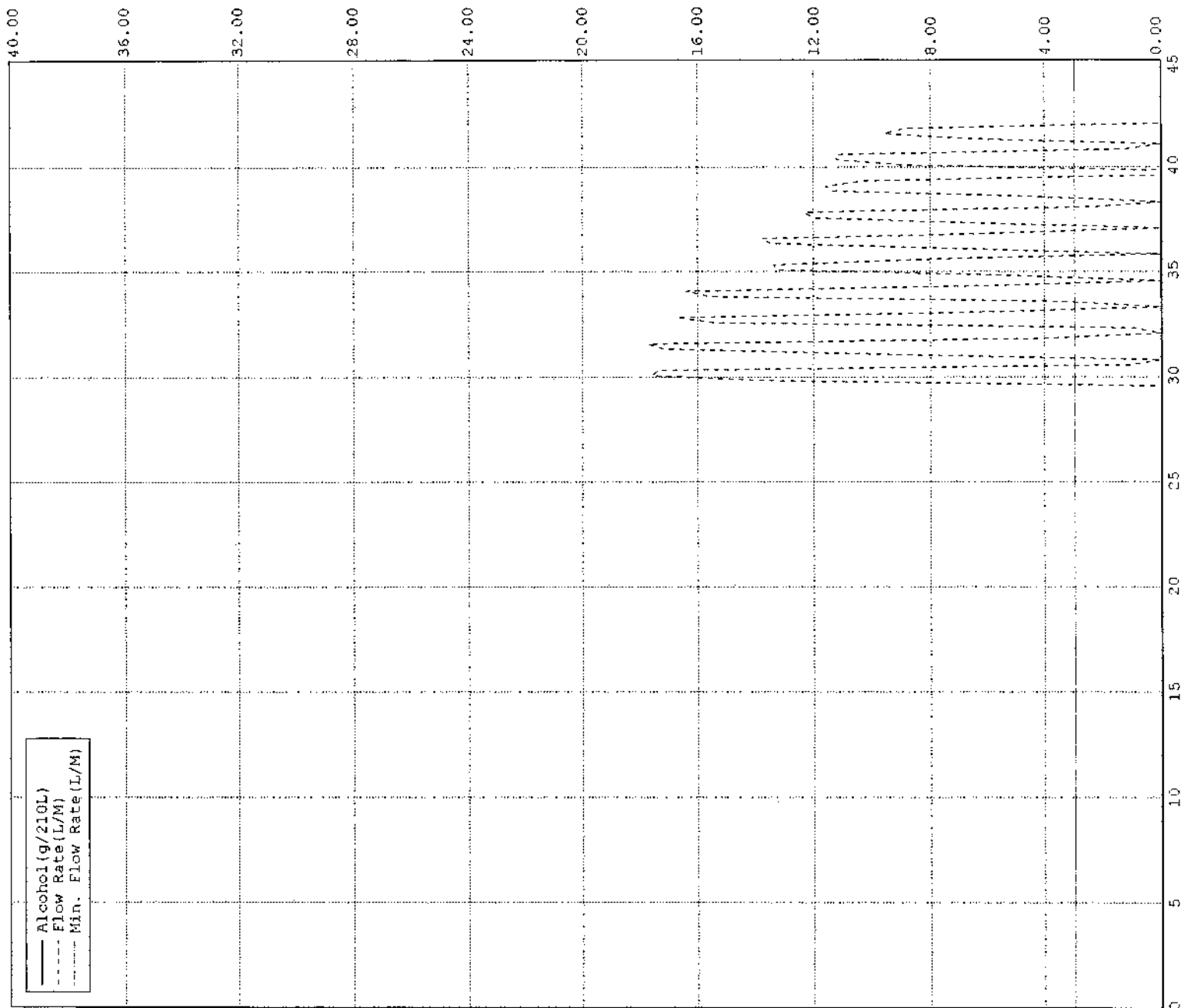
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.03: 0.078
LOT #: AG735001
EXPIRATION: 12/16/2019

DIAGNOSTIC CHECK	PASSED	08:50
BLANK TEST	0.000	08:50
INTERNAL STANDARD	VERIFIED	08:50
$X_q = 0.092$ (2.62%)		
EXTERNAL STANDARD	0.077	08:50
$X[1] = 0.0766$ (-0.0011) (0.0025)		
BLANK TEST	0.000	08:51
SUBJECT SAMPLE (Vol=1.87L)	0.096	08:52
$X[1] = 0.0968$ (0.0010) (0.0004)		
BLANK TEST	0.000	08:53
EXTERNAL STANDARD	0.076	08:53
$X[1] = 0.0761$ (-0.0010) (0.0019)		
BLANK TEST	0.000	08:54





SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100395

Date: 12/13/2018
 Time: 09:40:41

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 09:45
 BLANK TEST 0.000 09:45
 INTERNAL STANDARD VERIFIED 09:45
 EXTERNAL STANDARD 0.076 09:45
 BLANK TEST 0.000 09:46
 SUBJECT SAMPLE XXX 09:47

Maximum Attempts Exceeded

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 12/13/2018
Time: 09:59:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

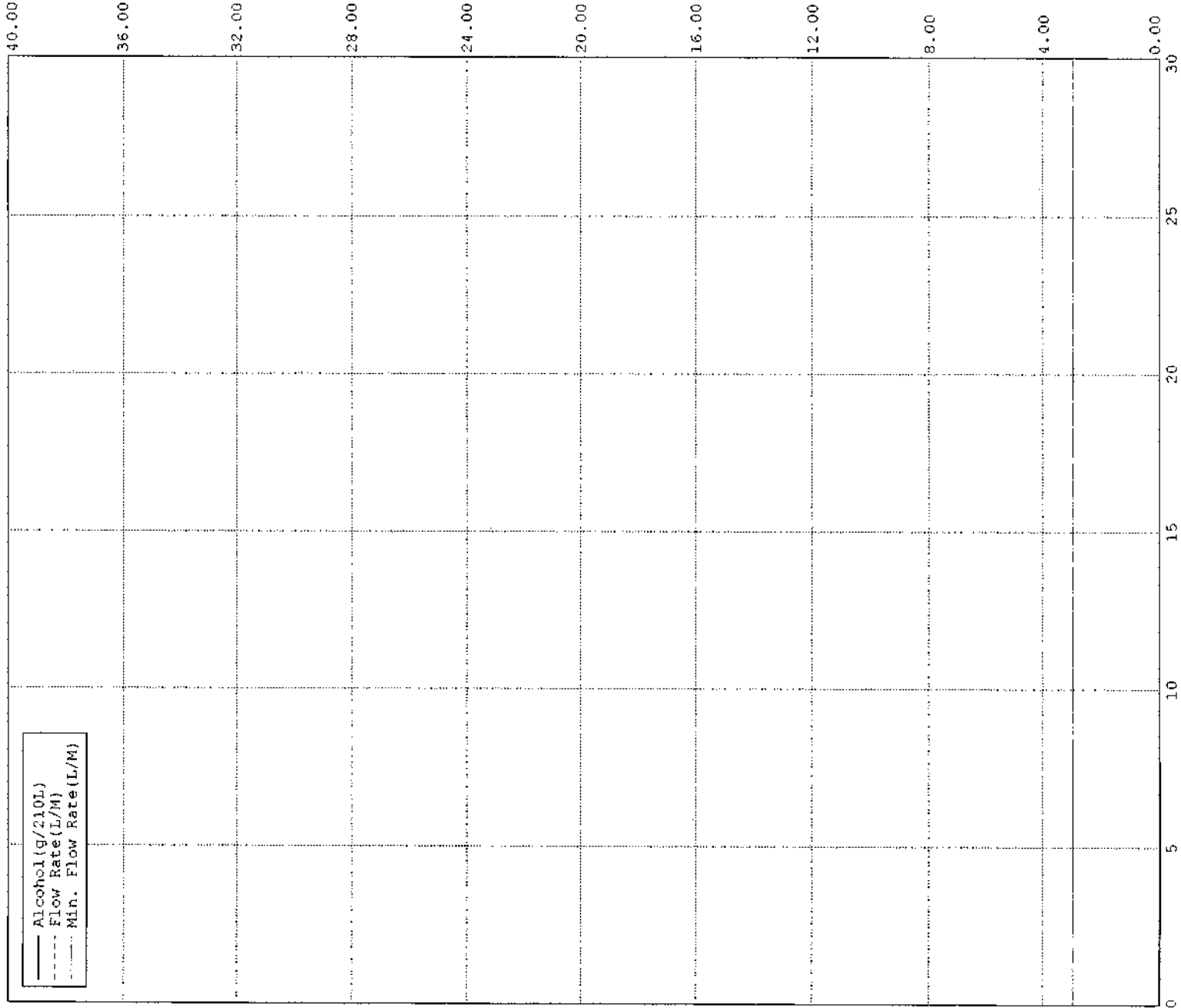
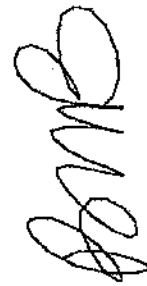
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 10:00
BLANK TEST 0.000 10:00
INTERNAL STANDARD VERIFIED 10:00
EXTERNAL STANDARD 0.076 10:00
BLANK TEST 0.000 10:01

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100395

Date: 12/13/2018
Time: 10:14:45

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 29.05: 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	0.076	10:16
BLANK TEST	0.000	10:17
SUBJECT SAMPLE (Vol=1.84L)	0.000	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.076	10:19
BLANK TEST	0.000	10:20

