

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 100697 Analyst Brandi Barnett Start Date 3/15/17

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 AG616504 Exp 6/3/18

ii. 0.040g/210L Mnf Airgas Lot AG630101 Exp 10/27/18

iii. 0.080g/210L Mnf Airgas Lot AG634001 Exp 12/5/18

iv. 0.100g/210L Mnf Airgas Lot AG629304 Exp 10/19/18

v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/11/17

1. Simulator S/N DR5298 Date Calibrated 9/14/16

vi. 0.300g/210L Mnf Guth Lot 16210 Exp 8/22/18

1. Simulator S/N SD1177 Date Calibrated 9/13/16

5. Functional Tests (attached)

a. Incomplete

b. Invalid

c. Interference

d. Exceeded attempts

i. Acetone - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17

1. Simulator S/N SD1199 Date Calibrated 9/13/16

ii. Isopropanol - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17

1. Simulator S/N SD1088 Date Calibrated 9/13/16

iii. Negative Control - Mnf Guth Lot 15220 Level 0.100 Exp 9/28/17

1. Simulator S/N DR4161 Date Calibrated 9/14/16

e. RFI

6. Verify stylus is calibrated

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload

13. Remove tank prior to shut down

End Date 3/15/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/15/2017
Time: 08:56:25

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 = 47.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.61 V PASSED
(0.97 V - 2.25 V)
Cooler Voltage = 1.66 V PASSED
(1.00 V - 2.32 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 553 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.329 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.003 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 = 0.083 0.10% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dat: 100697

Date: 03/15/2017

Time: 9:18 AM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 46.0°C

Current Barometer 29.3 in

Volume (Ltr) 1.52

Settings

Lamp: 1.67 V

Bias: 80 V

Cooler: 1.66 V

Chopper: 535 Hz

Voltages (V)

Flow: 1.07 V

Detector: -0.040 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/14/2017
Time: 13:50:40

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.986690 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0052 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0831 0.0500 <= Xq < 0.2000
a21 = 1.123354 1.050 <= a21 < 1.300
a31 = 0.485384 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/15/2017
Time: 09:19:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

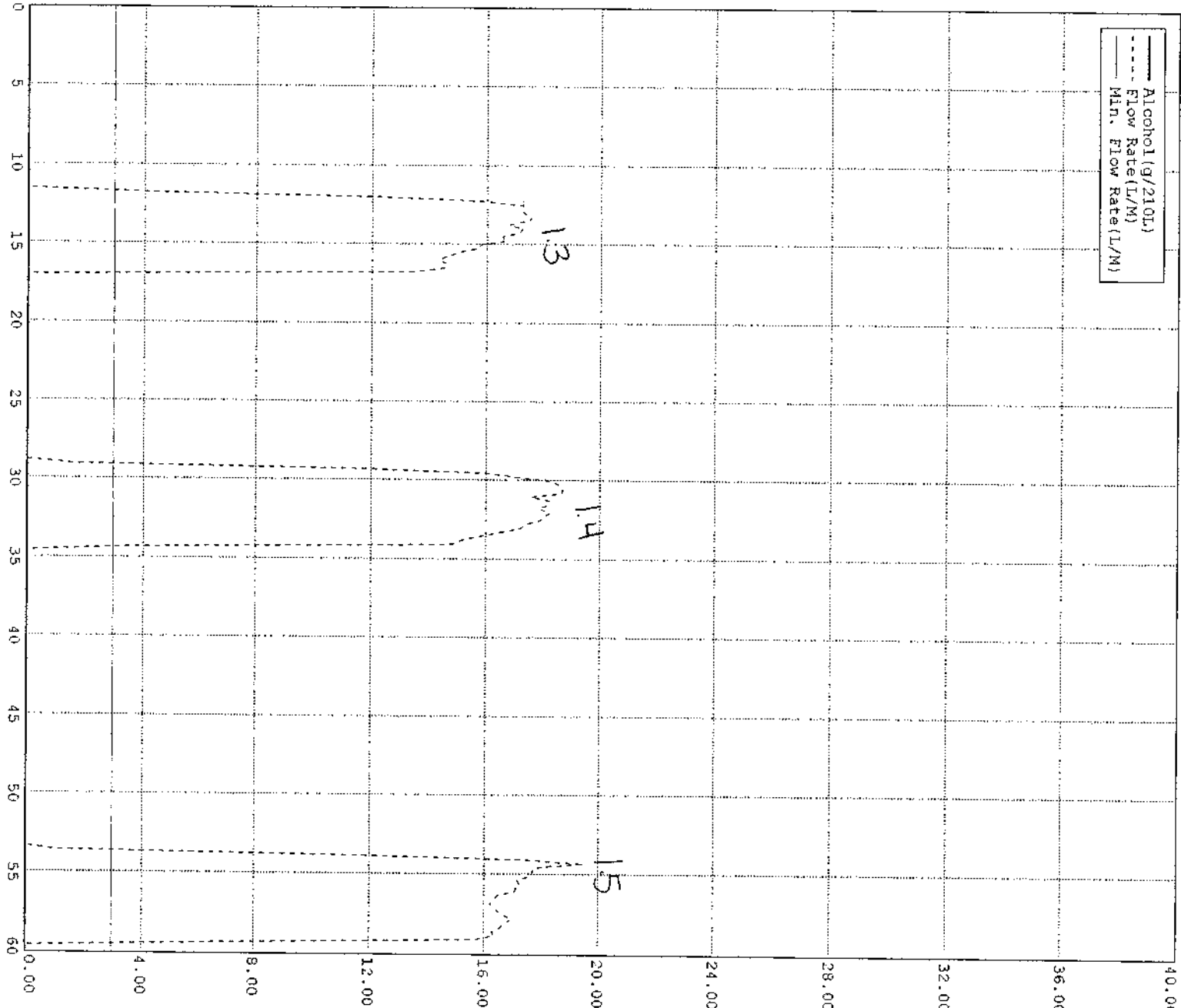
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:20
BLANK TEST	0.000	09:20
INTERNAL STANDARD	VERIFIED	09:20
EXTERNAL STANDARD	0.076	09:21
BLANK TEST	0.000	09:21
SUBJECT SAMPLE (Vol=1.56L)	0.000	09:23
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.076	09:24
BLANK TEST	0.000	09:25

BMB



LINEARITY CHECK

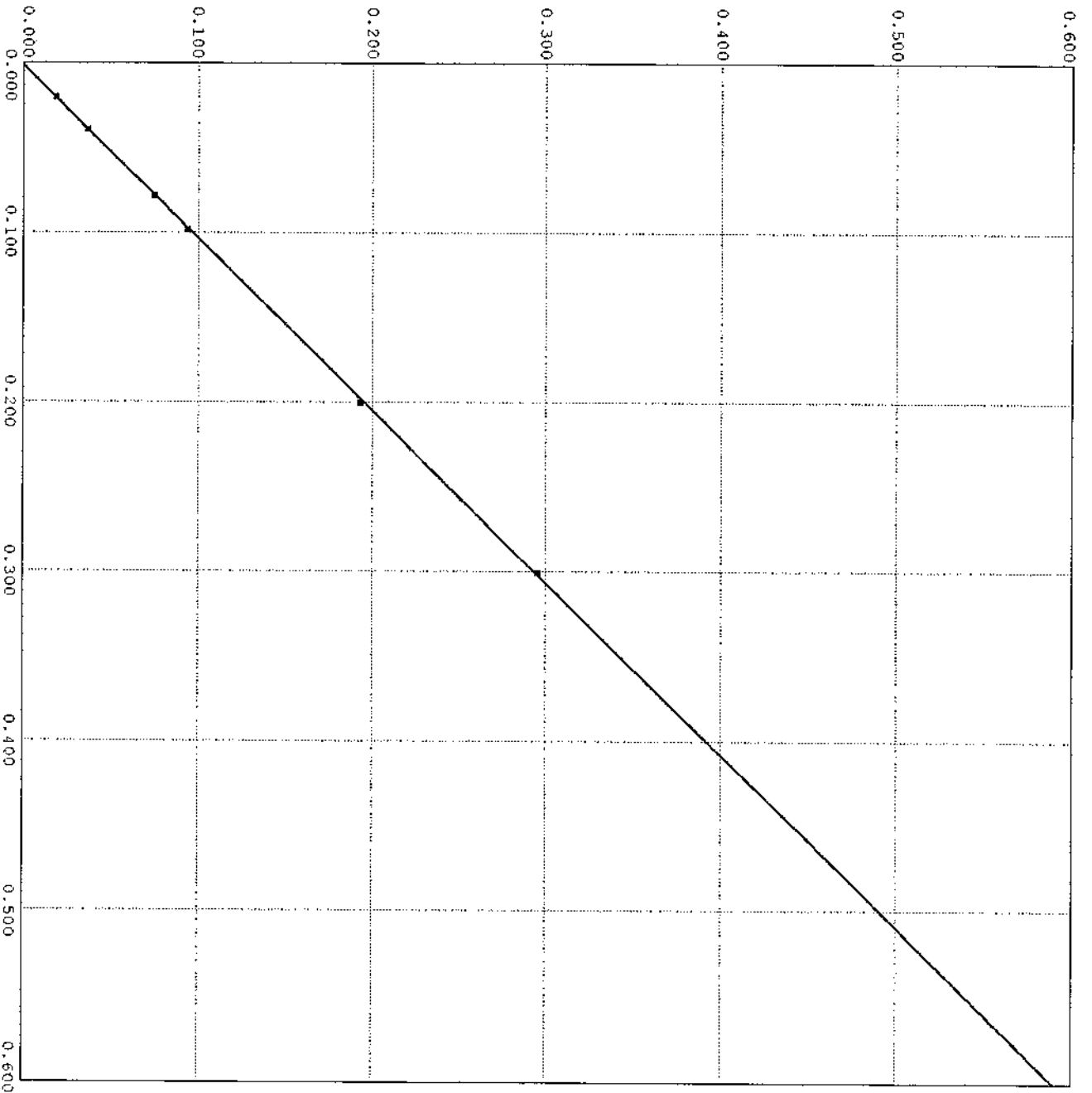
Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/15/2017
Time: 10:00:08

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0194	0.0005
0.039	0.0378	0.0004
0.078	0.0758	0.0004
0.098	0.0950	0.0000
0.200	0.1940	0.0000
0.300	0.2962	0.0004

SLOPE = 0.985993
R² = 0.999862



BBB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

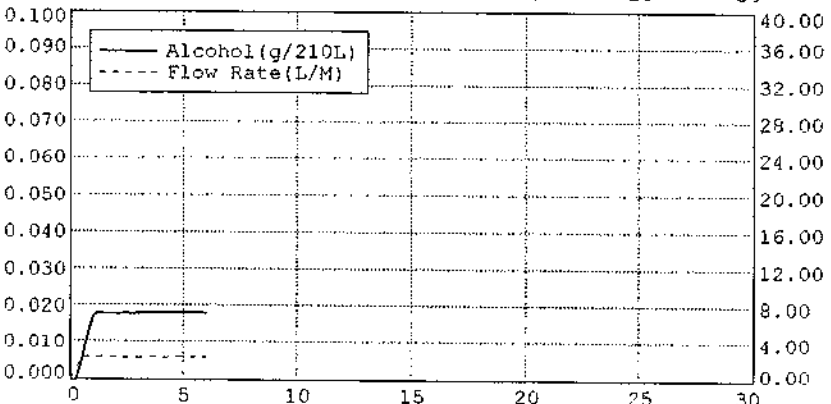
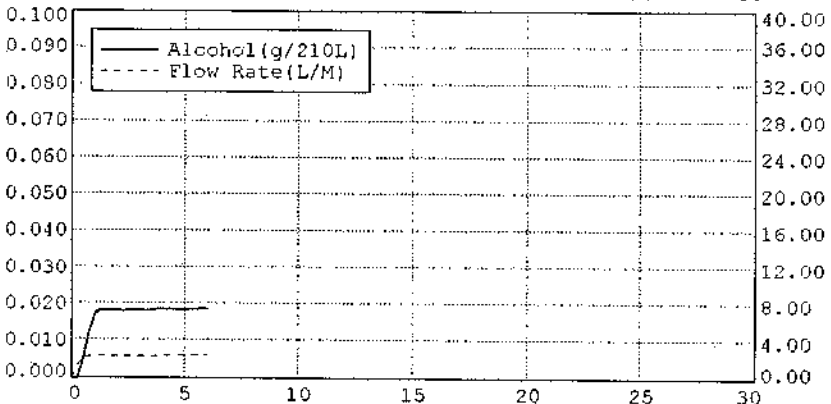
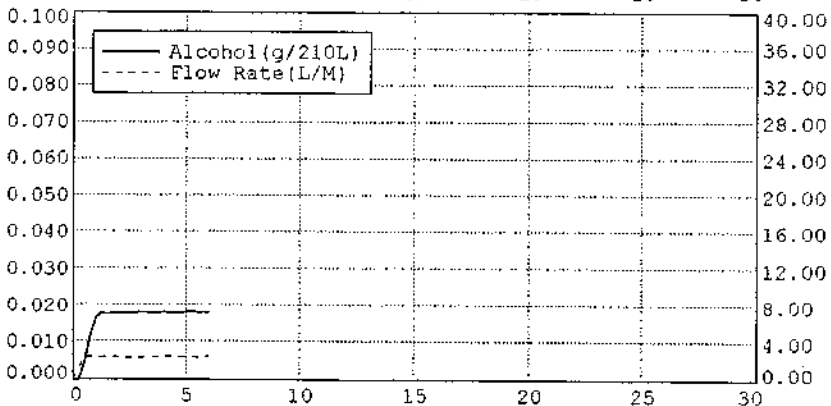
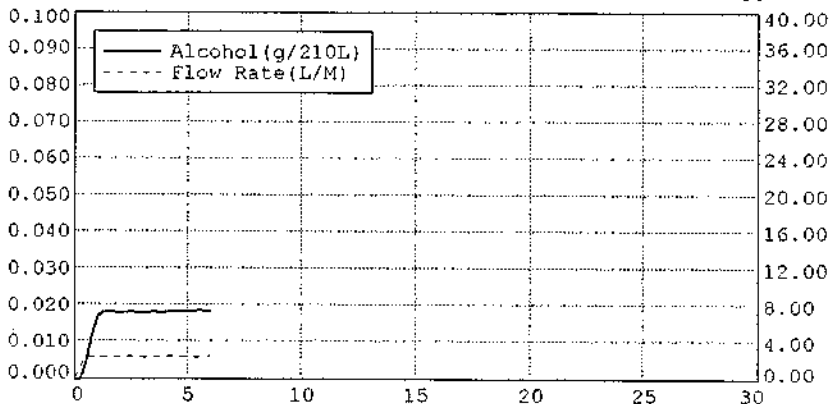
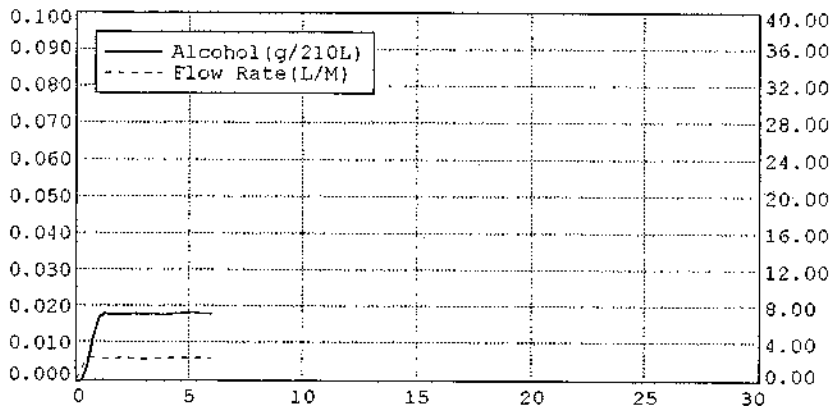
Date: 03/15/2017
 Time: 10:00:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.26: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 1120 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:01
EXTERNAL STANDARD	0.019	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.019	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.019	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.020	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.020	10:05
BLANK TEST	0.000	10:06

Average = 0.0194
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

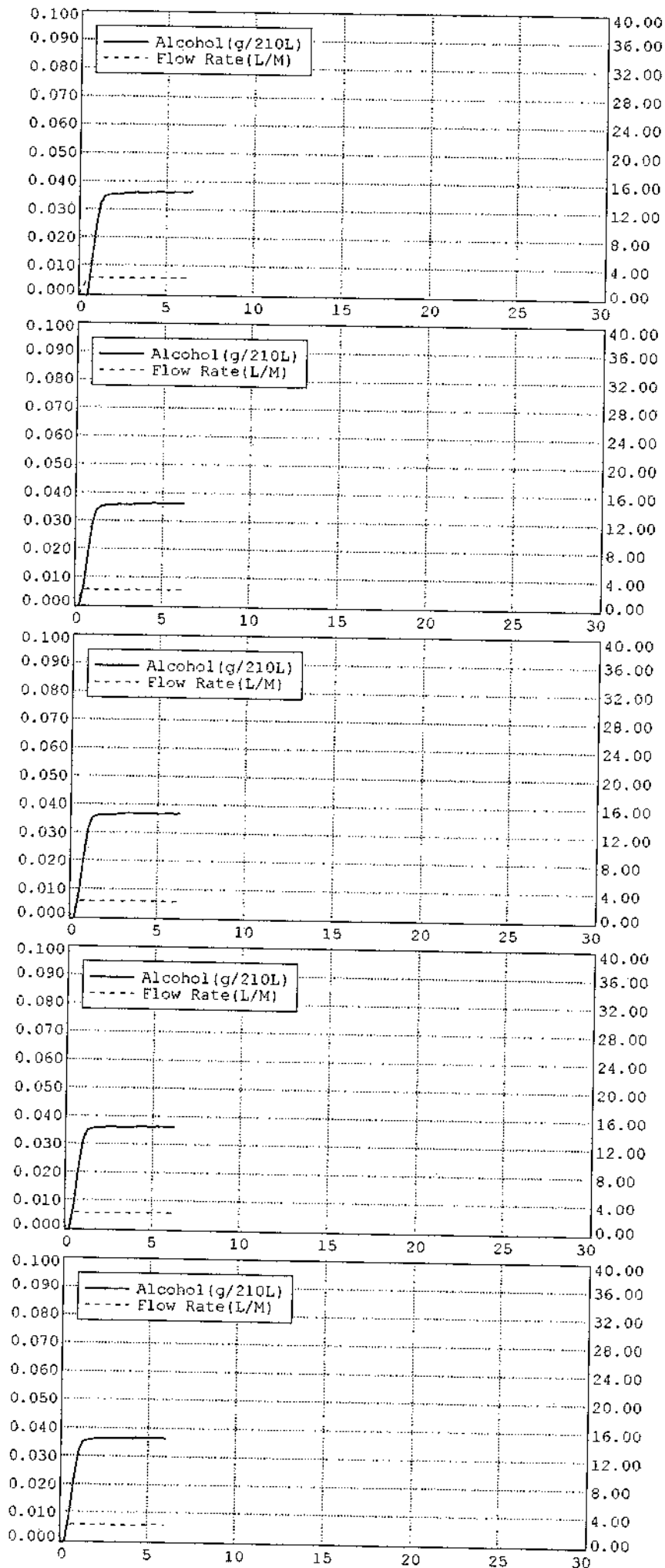
Date: 03/15/2017
 Time: 11:51:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.26: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 1073 psi

BLANK TEST	0.000	11:52
INTERNAL STANDARD	VERIFIED	11:53
EXTERNAL STANDARD	0.038	11:53
BLANK TEST	0.000	11:54
EXTERNAL STANDARD	0.037	11:54
BLANK TEST	0.000	11:55
EXTERNAL STANDARD	0.038	11:55
BLANK TEST	0.000	11:56
EXTERNAL STANDARD	0.038	11:56
BLANK TEST	0.000	11:57
EXTERNAL STANDARD	0.038	11:57
BLANK TEST	0.000	11:58

Average = 0.0378
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100697

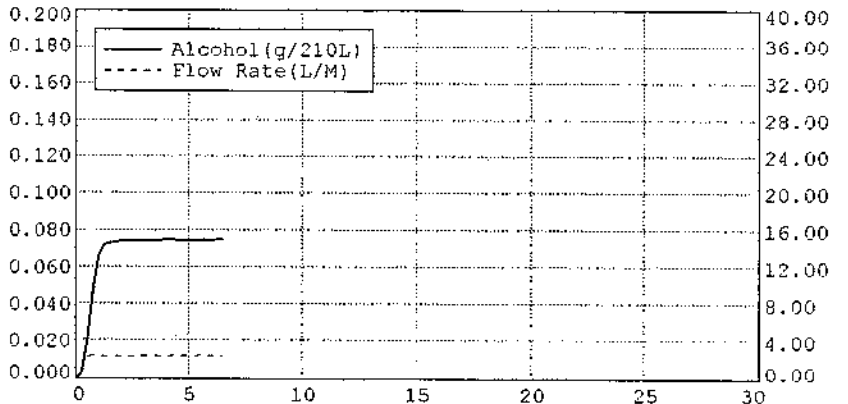
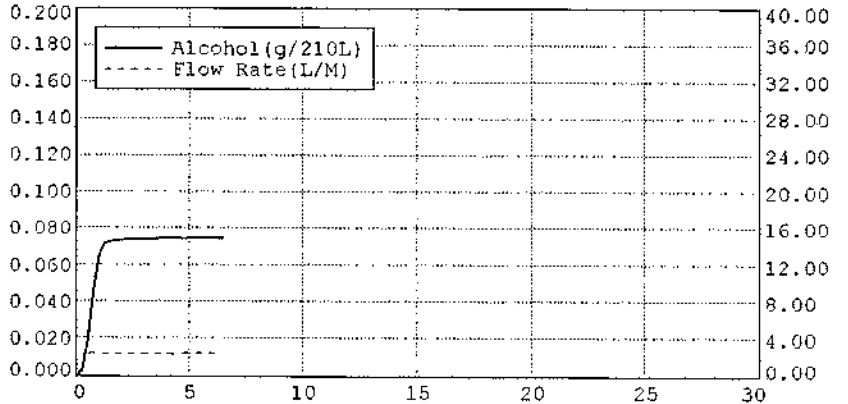
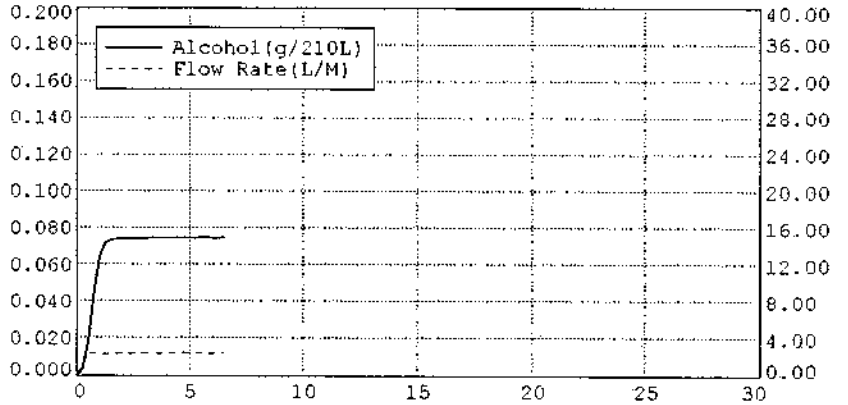
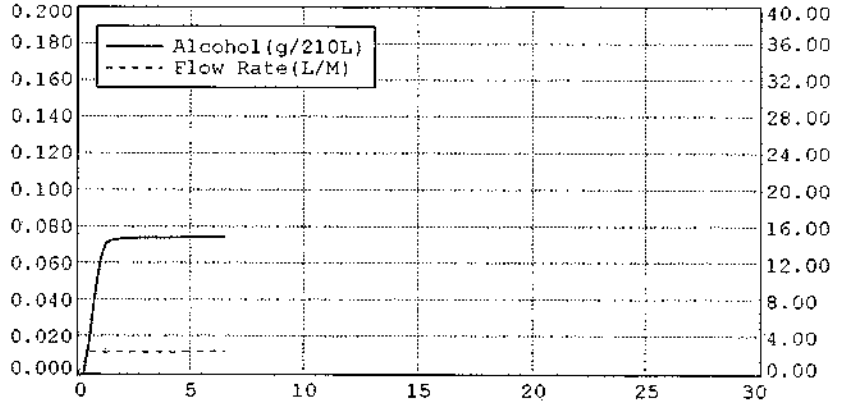
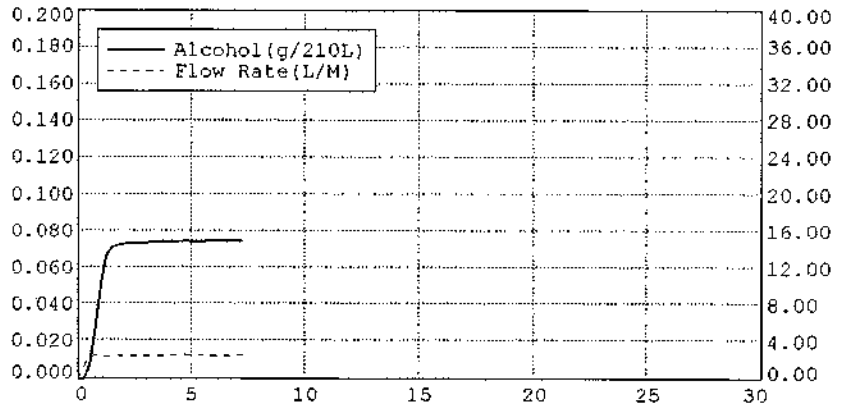
Date: 03/15/2017
Time: 12:04:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018
TANK PRESSURE: 1165 psi

BLANK TEST	0.000	12:05
INTERNAL STANDARD	VERIFIED	12:05
EXTERNAL STANDARD	0.076	12:06
BLANK TEST	0.000	12:06
EXTERNAL STANDARD	0.075	12:07
BLANK TEST	0.000	12:08
EXTERNAL STANDARD	0.076	12:08
BLANK TEST	0.000	12:09
EXTERNAL STANDARD	0.076	12:09
BLANK TEST	0.000	12:10
EXTERNAL STANDARD	0.076	12:10
BLANK TEST	0.000	12:11

Average = 0.0758
Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

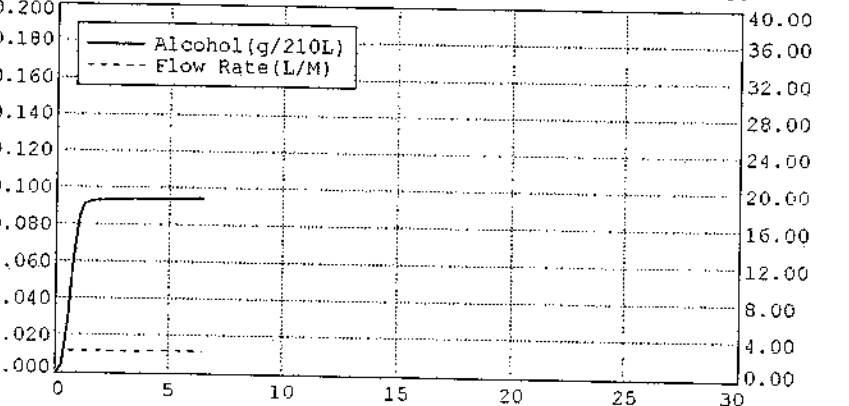
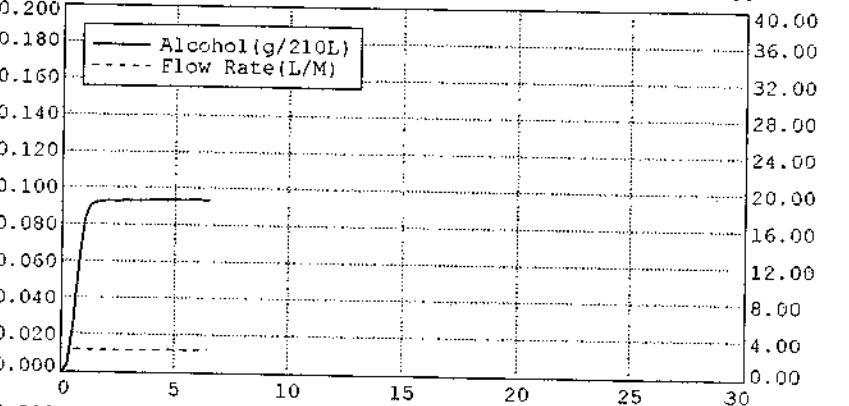
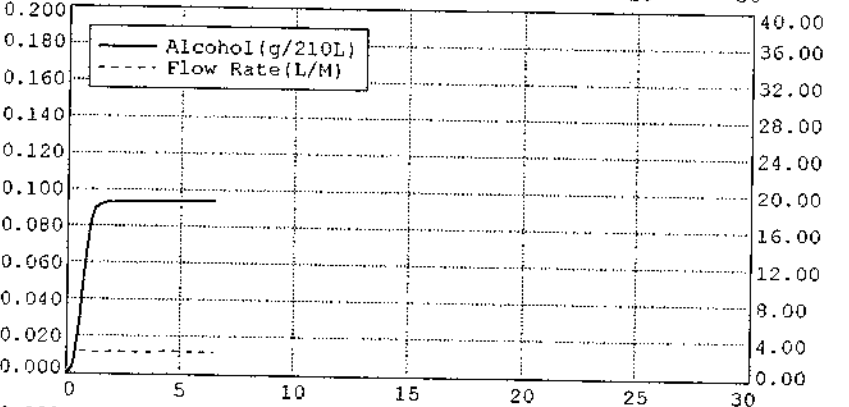
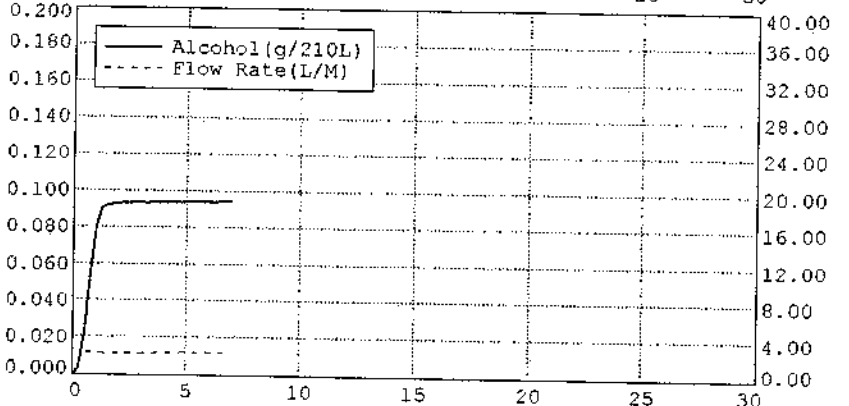
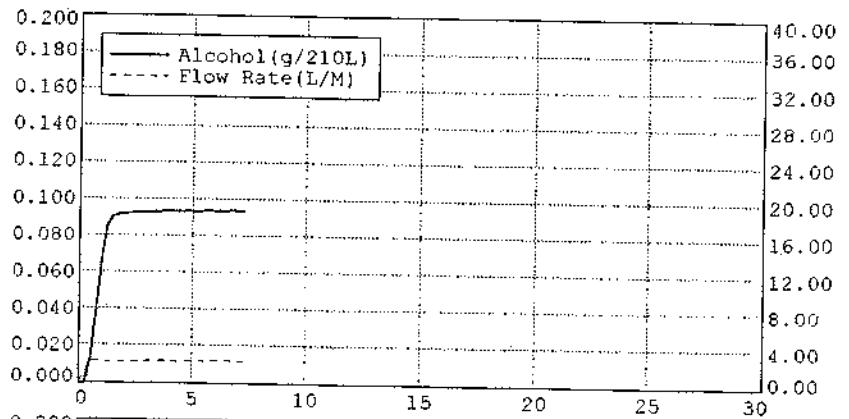
Date: 03/15/2017
 Time: 12:16:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.26: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 1088 psi

BLANK TEST	0.000	12:18
INTERNAL STANDARD	VERIFIED	12:18
EXTERNAL STANDARD	0.095	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.095	12:20
BLANK TEST	0.000	12:21
EXTERNAL STANDARD	0.095	12:21
BLANK TEST	0.000	12:22
EXTERNAL STANDARD	0.095	12:22
BLANK TEST	0.000	12:23
EXTERNAL STANDARD	0.095	12:23
BLANK TEST	0.000	12:24

Average = 0.0950
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

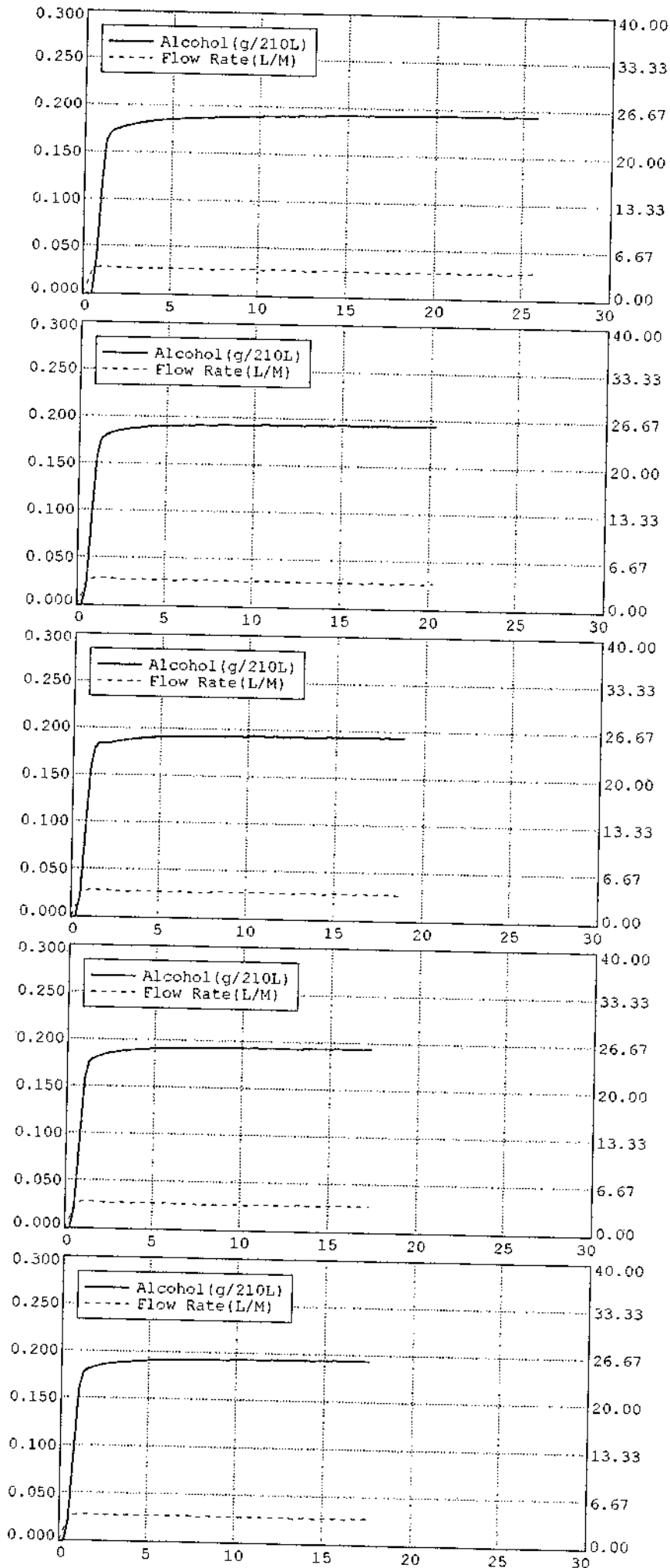
Alaska Department of Public Safety
 DATAMASTER dmt: 100697

Date: 03/15/2017
 Time: 12:28:19

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: GUTH 15130
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	12:30
INTERNAL STANDARD	VERIFIED	12:30
EXTERNAL STANDARD	0.194	12:30
BLANK TEST	0.000	12:31
EXTERNAL STANDARD	0.194	12:32
BLANK TEST	0.000	12:33
EXTERNAL STANDARD	0.194	12:33
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.194	12:34
BLANK TEST	0.000	12:35
EXTERNAL STANDARD	0.194	12:36
BLANK TEST	0.000	12:37

Average = 0.1940
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100697

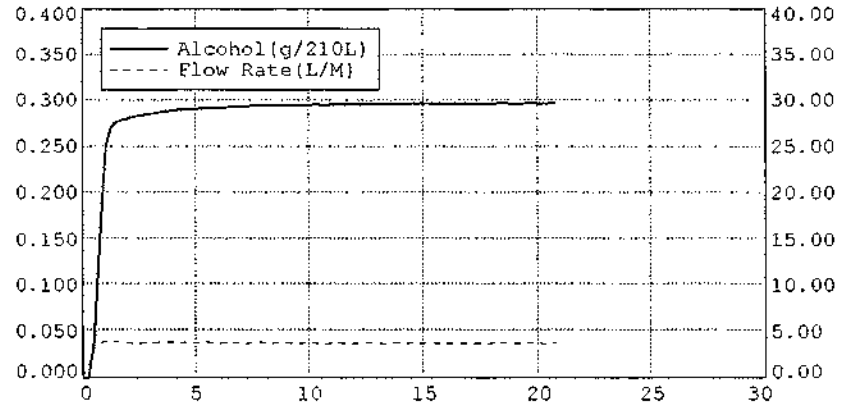
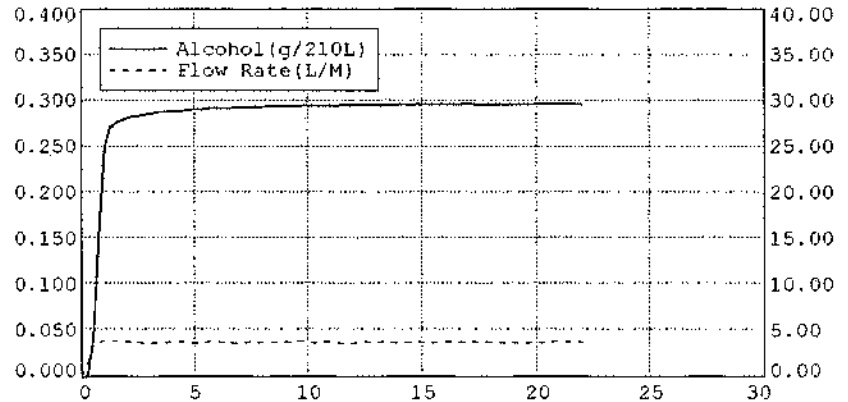
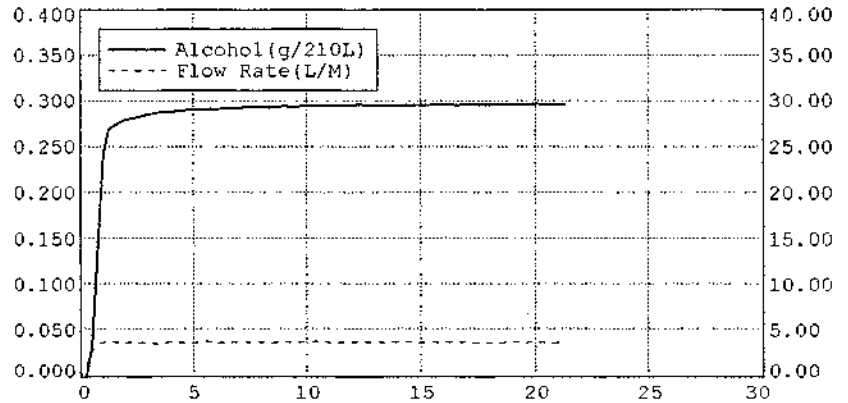
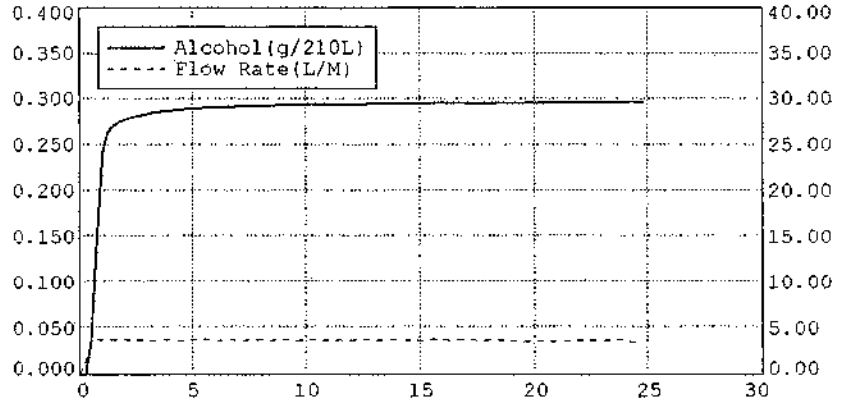
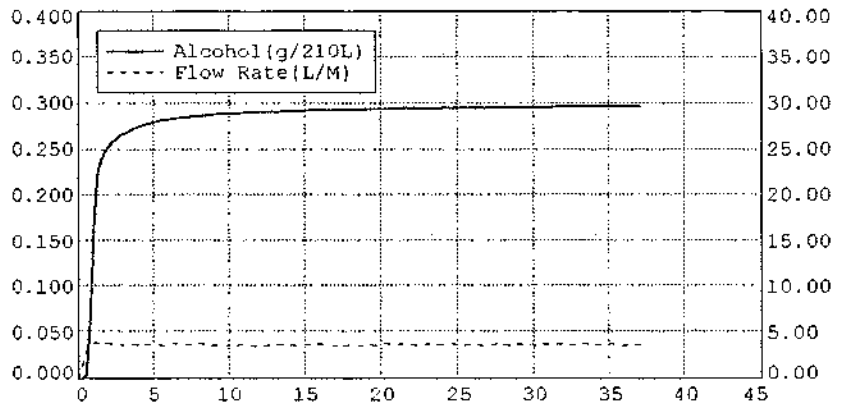
Date: 03/15/2017
 Time: 12:48:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: GUTH 16210
 EXPIRATION: 08/22/2018

BLANK TEST	0.000	12:50
INTERNAL STANDARD	VERIFIED	12:50
EXTERNAL STANDARD	0.297	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.296	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.296	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.296	12:55
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.296	12:56
BLANK TEST	0.000	12:57

Average = 0.2962
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100697

Date: 03/15/2017
Time: 13:06:15

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

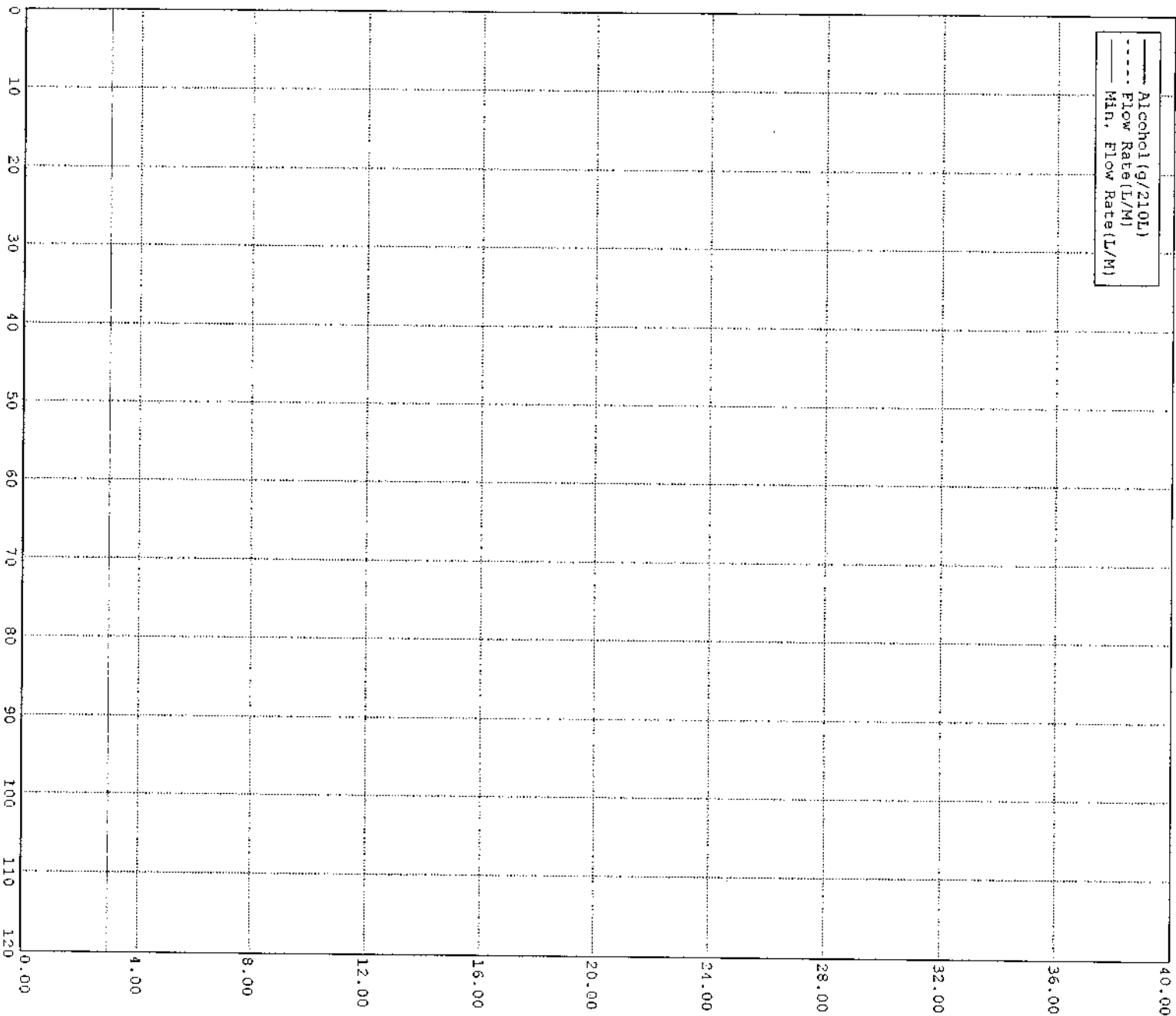
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:07
BLANK TEST	0.000	13:07
INTERNAL STANDARD	VERIFIED	13:08
EXTERNAL STANDARD	0.076	13:08
BLANK TEST	0.000	13:09
SUBJECT SAMPLE	INCOMPLETE	13:11

B11B



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/15/2017
Time: 13:15:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

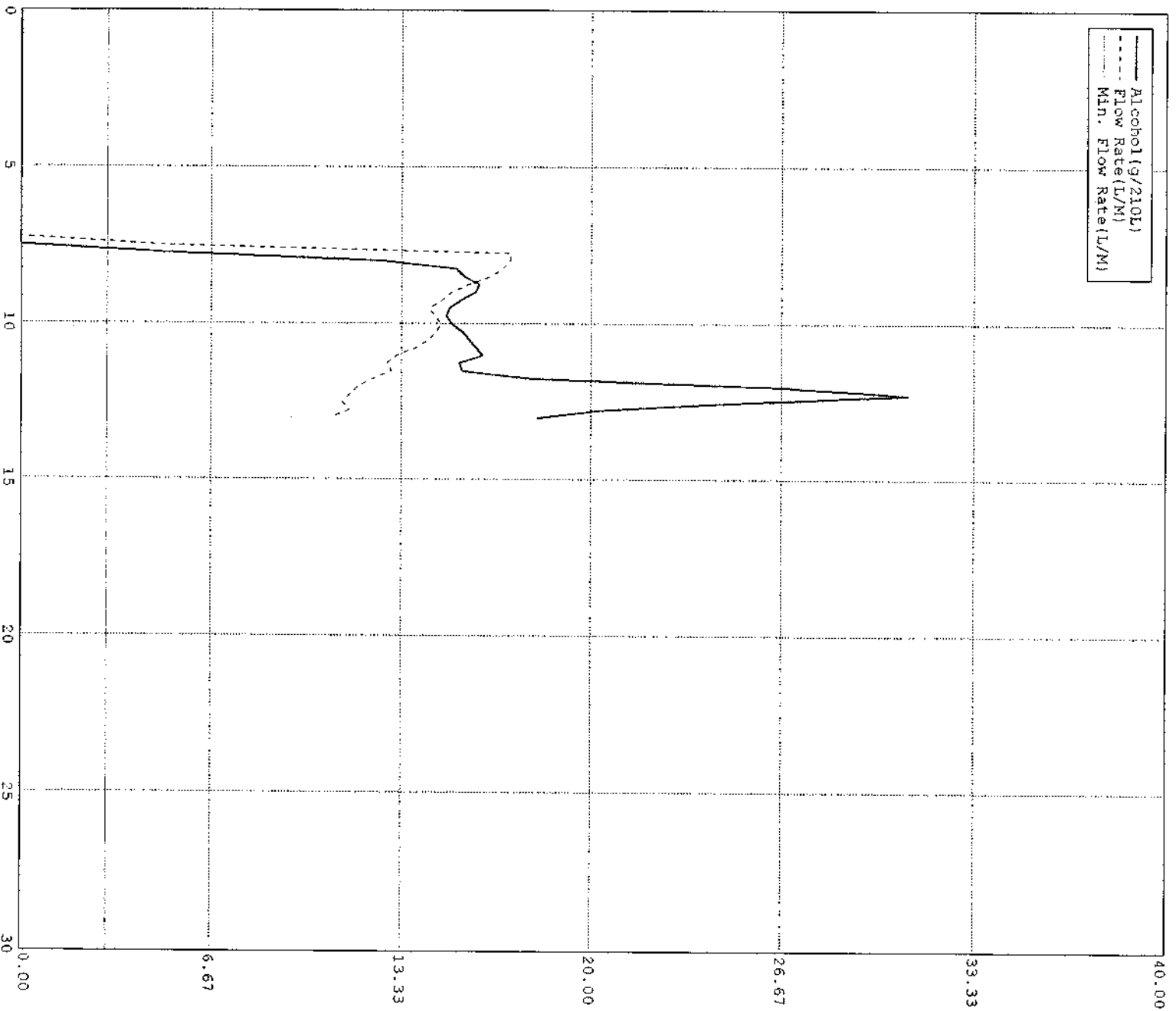
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:16
BLANK TEST	0.000	13:17
INTERNAL STANDARD	VERIFIED	13:17
EXTERNAL STANDARD	0.075	13:17
BLANK TEST	0.000	13:18
SUBJECT SAMPLE	INVALID	13:18

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100697

Date: 03/15/2017
Time: 13:53:53

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

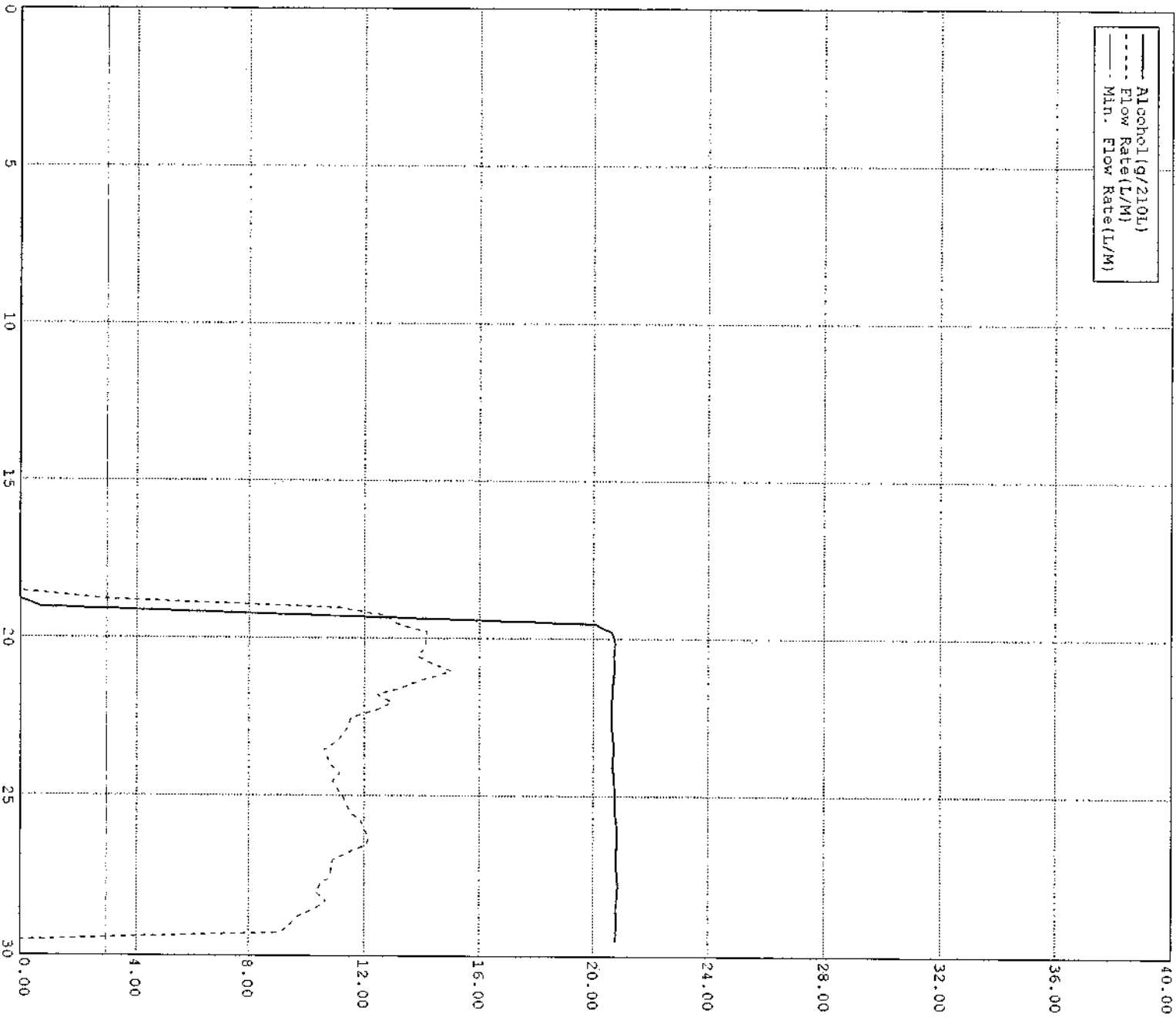
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 13:55
BLANK TEST 0.000 13:55
INTERNAL STANDARD VERIFIED 13:55
Xq = 0.084 (0.63%)
EXTERNAL STANDARD 0.076 13:56
X[1] = 0.0759 (-0.0026) (0.0025)
BLANK TEST 0.000 13:56
SUBJECT SAMPLE XXX 13:57
X[1] = 0.1046 (-0.0198) (-0.0003)

Interference Detected

Filter 2 Avg: -0.0028
Filter 3 Avg: 0.0019

BMB 3/15/17



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/15/2017
Time: 13:59:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

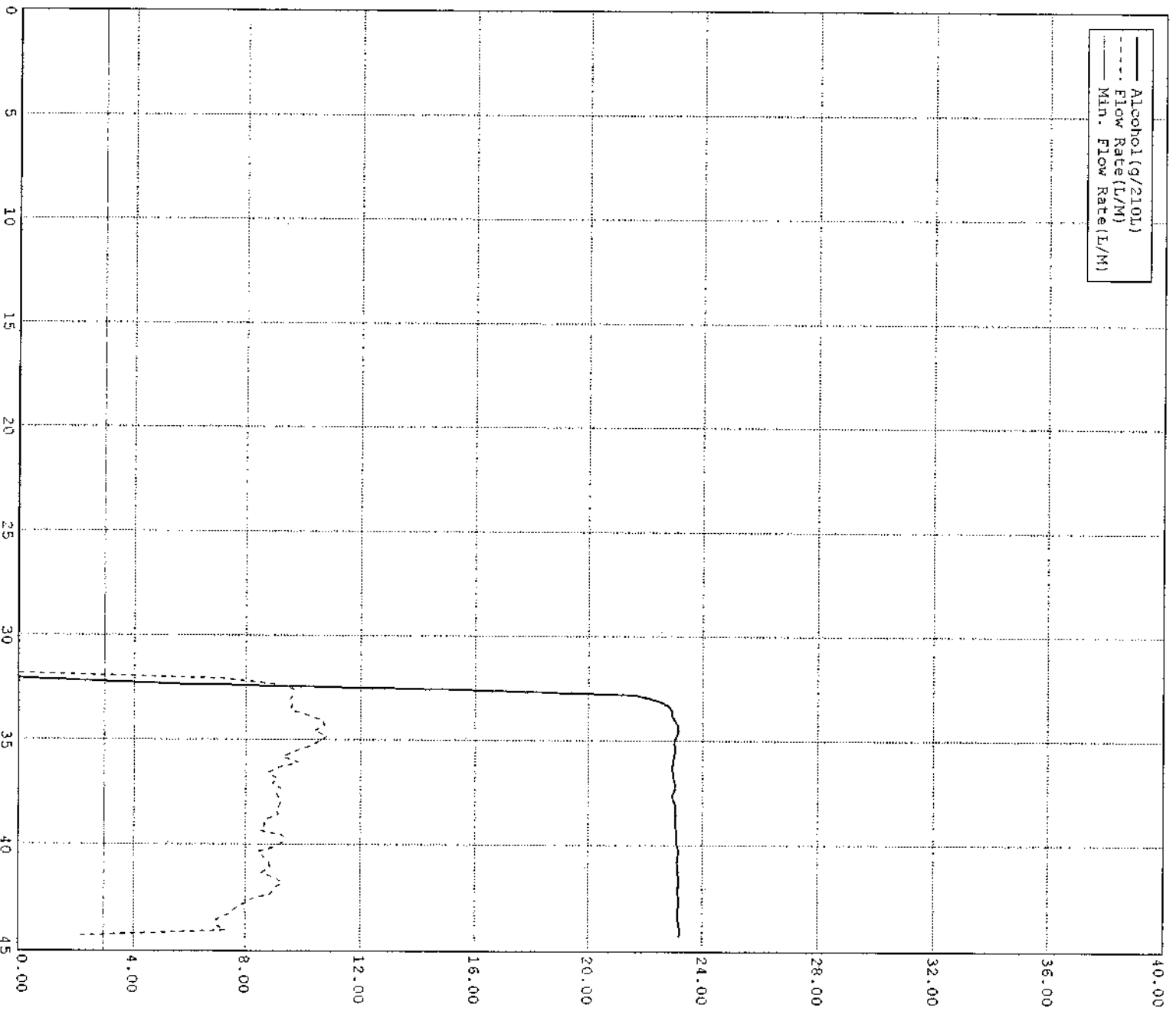
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:01
BLANK TEST	0.000	14:01
INTERNAL STANDARD	VERIFIED	14:01
Xg = 0.083 (0.31%)		
EXTERNAL STANDARD	0.076	14:01
X[1] = 0.0756 (-0.0028) (0.0018)		
BLANK TEST	0.000	14:02
SUBJECT SAMPLE	XXX	14:03
X[1] = 0.1165 (-0.0181) (0.0013)		

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/15/2017
Time: 14:06:38

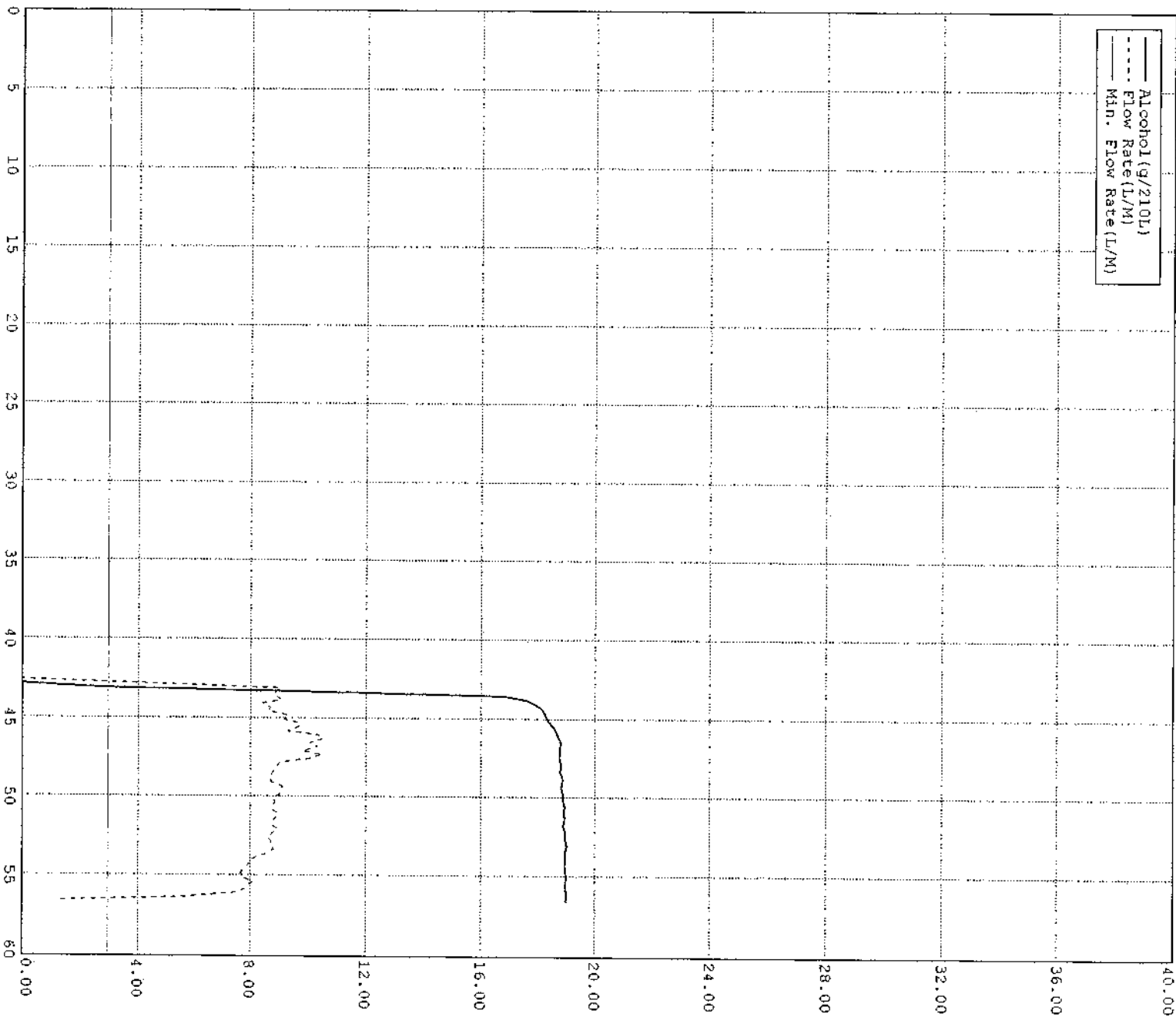
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.25: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	14:07
BLANK TEST	0.000	14:08
INTERNAL STANDARD	VERIFIED	14:08
Xq = 0.083 (0.31%)		
EXTERNAL STANDARD	0.076	14:08
X[1] = 0.0757 (-0.0026)	(0.0017)	
BLANK TEST	0.000	14:09
SUBJECT SAMPLE (Vc1=2.01L)	0.095	14:10
X[1] = 0.0955 (-0.0004)	(0.0004)	
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.075	14:11
X[1] = 0.0752 (-0.0033)	(0.0014)	
BLANK TEST	0.000	14:12



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dnt: 100697

Date: 03/15/2017
Time: 13:28:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

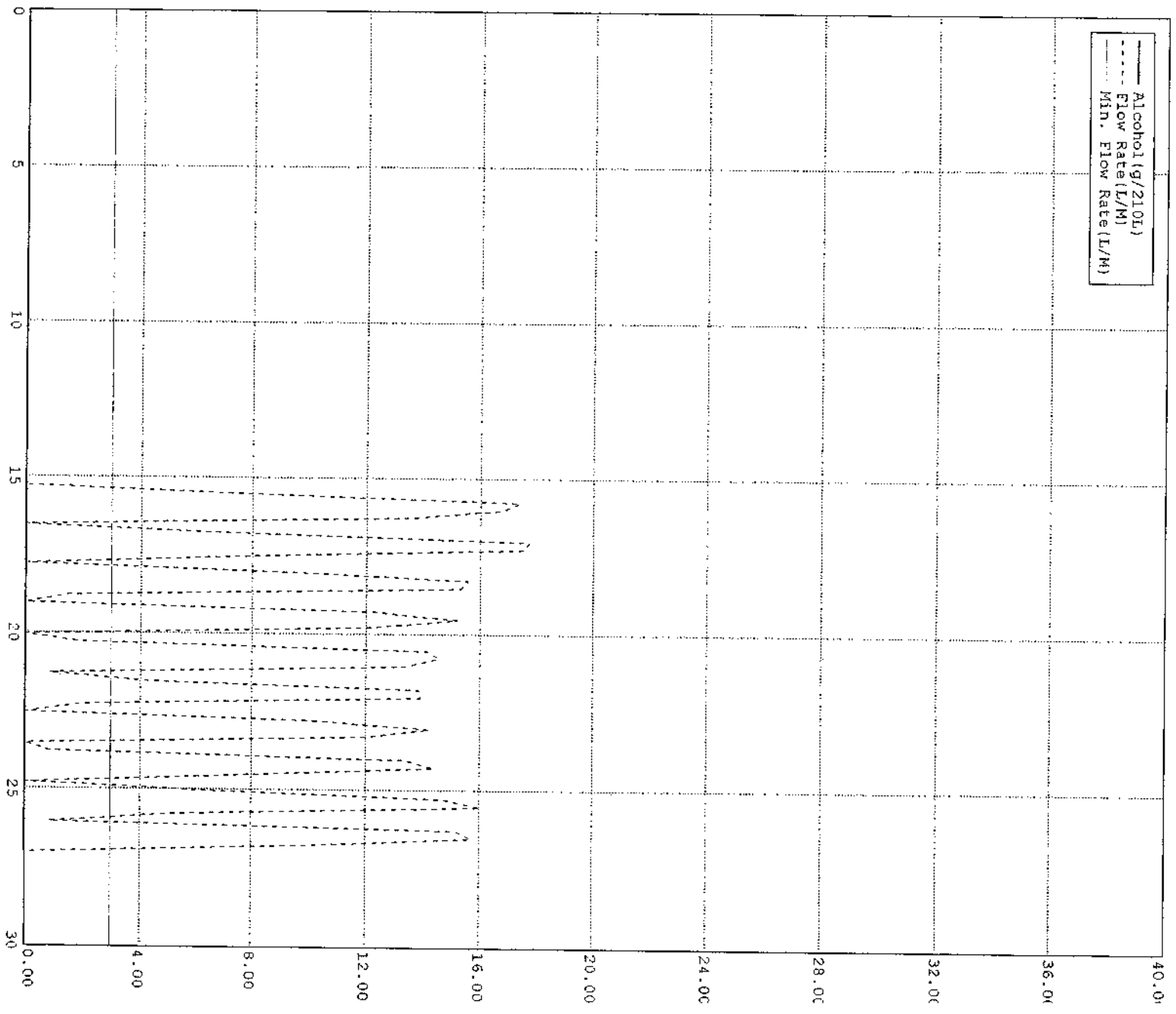
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: A6634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:29
BLANK TEST	0.000	13:29
INTERNAL STANDARD	0.076	13:30
EXTERNAL STANDARD	0.000	13:30
BLANK TEST	0.000	13:31
SUBJECT SAMPLE	XXX	13:31

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/15/2017
Time: 13:22:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARRETT
OPERATOR'S #: 7038

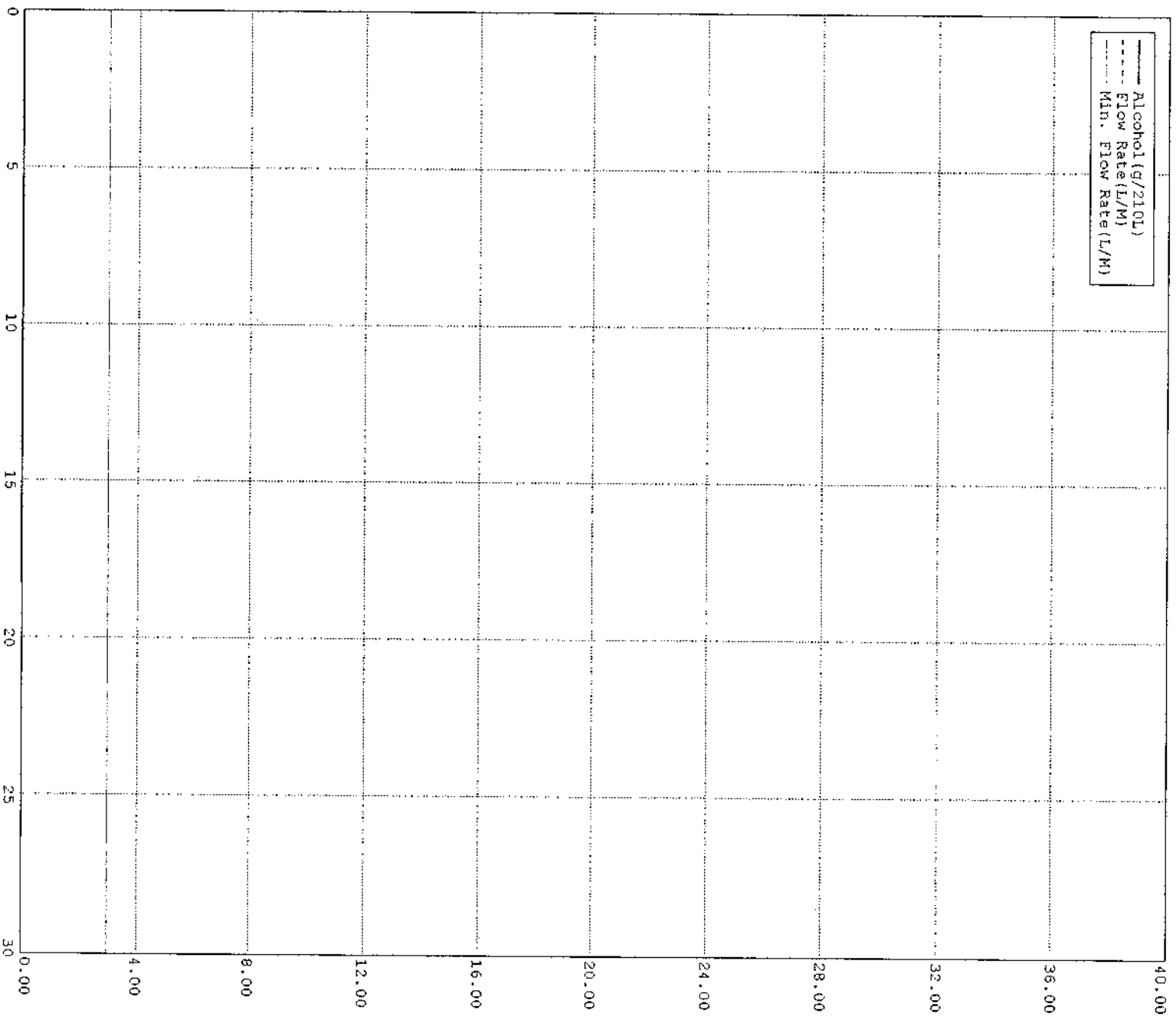
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK
BLANK TEST PASSED 13:23
INTERNAL STANDARD VERIFIED 13:24
EXTERNAL STANDARD 0.076 13:24
BLANK TEST 0.000 13:25

RFI DETECTED

Handwritten signature: BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100697

Date: 03/15/2017
Time: 14:28:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.26: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	14:30
BLANK TEST	0.000	14:30
INTERNAL STANDARD	VERIFIED	14:30
EXTERNAL STANDARD	0.076	14:30
BLANK TEST	0.000	14:31
SUBJECT SAMPLE (Vol=1.54L)	0.000	14:31
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.076	14:32
BLANK TEST	0.000	14:33

BMB

