

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 100378 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 6/13/18
- 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

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 3/15/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 03/15/2017
Time: 08:52:00

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 = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.55 V PASSED
(0.93 V - 2.17 V)
Cooler Voltage = 1.49 V PASSED
(0.89 V - 2.09 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 543 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.2 in

PUMP INFO

Flow Rate = 4.489 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 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 = 0.080 2.12% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100378

Date: 03/15/2017
Time: 9:11 AM

Temperatures (°C)
Sample Cell: 48.9°C
Breath Tube: 47.7°C

Current Barometer 29.3 in
Volume (Ltr) 1.53

Settings
Lamp: 1.58 V
Bias: 80 V
Cooler: 1.46 V
Chopper: 536 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.003 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 03/14/2017
Time: 13:30:46

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca	=	0.1000		
CAL	=	0.953584	0.800	<= CAL < 1.200
b1	=	0.0004	0.0000	<= b1 < 0.0040
b2	=	0.0063	0.0010	<= b2 < 0.0100
b3	=	0.0003	0.0000	<= b3 < 0.0040
Xq	=	0.0818	0.0500	<= Xq < 0.2000
a21	=	1.171909	1.050	<= a21 < 1.300
a31	=	0.455791	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

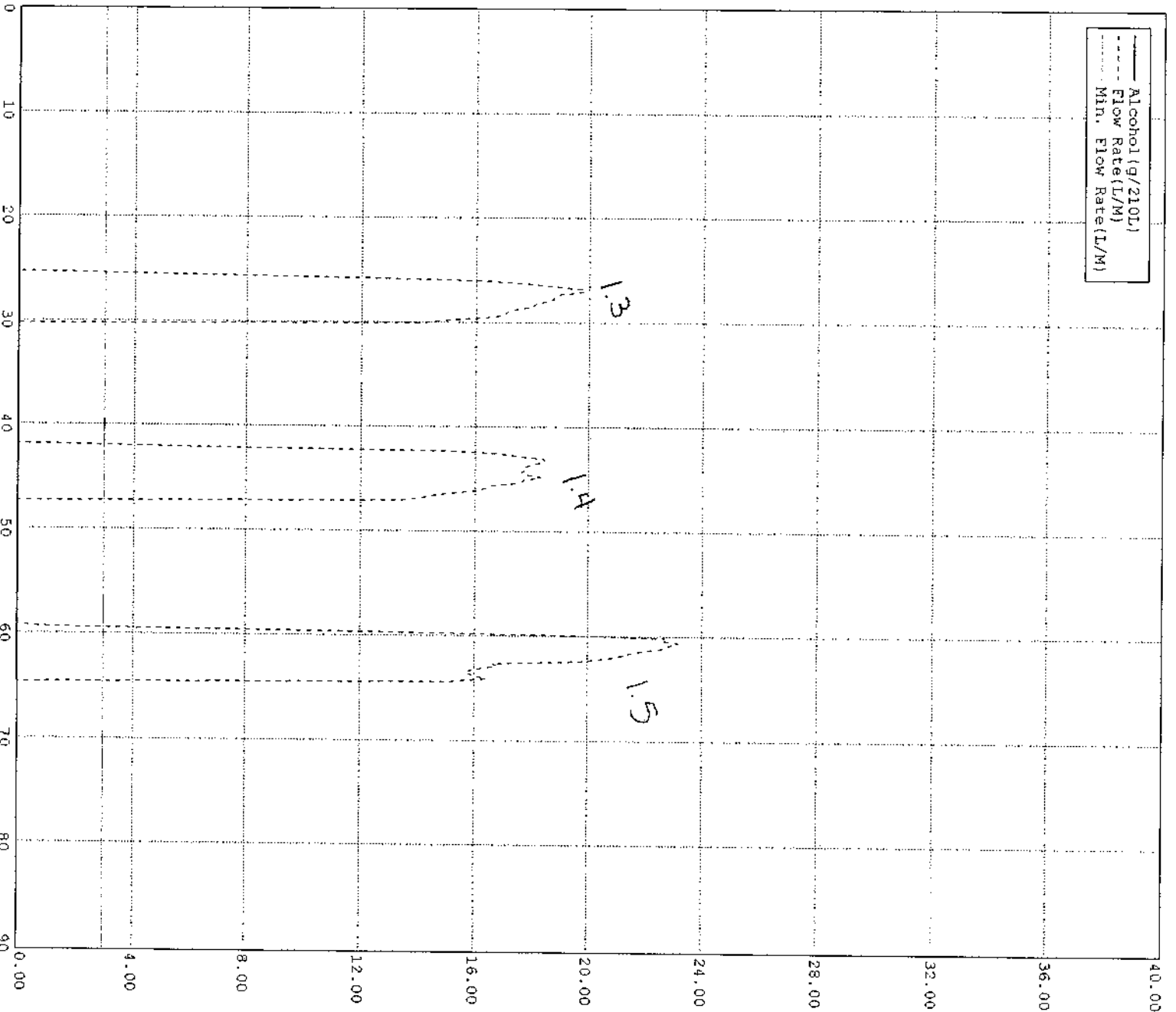
Date: 03/15/2017
Time: 09:12:47

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

DIAGNOSTIC CHECK	PASSED	09:14
BLANK TEST	0.000	09:15
INTERNAL STANDARD	VERIFIED	09:15
EXTERNAL STANDARD	0.077	09:15
BLANK TEST	0.060	09:16
SUBJECT SAMPLE (Vol=1.571L)	0.000	09:17
BLANK TEST	0.000	09:18
EXTERNAL STANDARD	0.077	09:18
BLANK TEST	0.000	09:19



LINEARITY CHECK

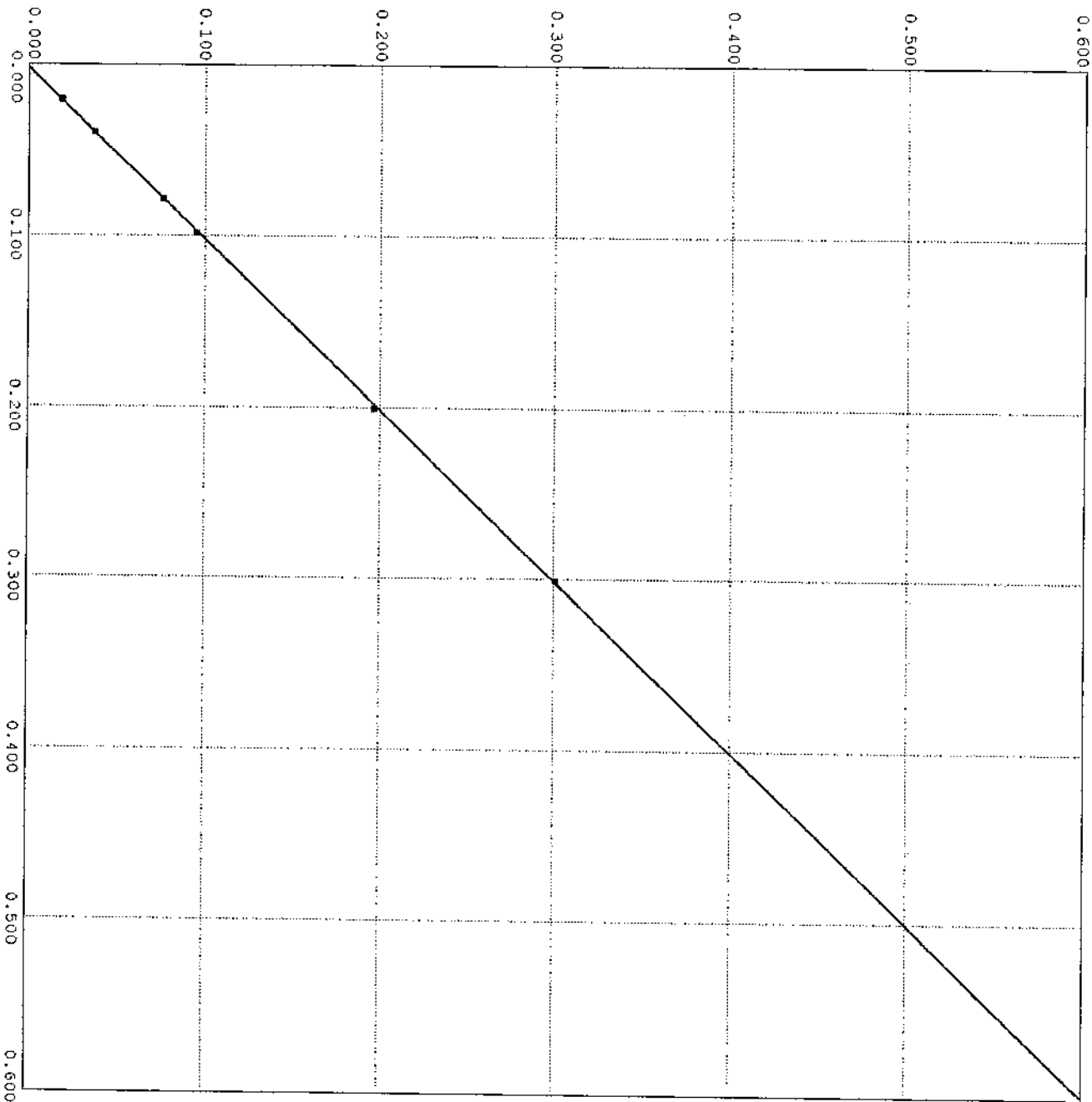
Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 03/15/2017
Time: 09:44:07

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0196	0.0005
0.039	0.0382	0.0004
0.078	0.0770	0.0000
0.098	0.0962	0.0004
0.200	0.1974	0.0005
0.300	0.3016	0.0005

SLOPE = 1.004844
R² = 0.999848



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

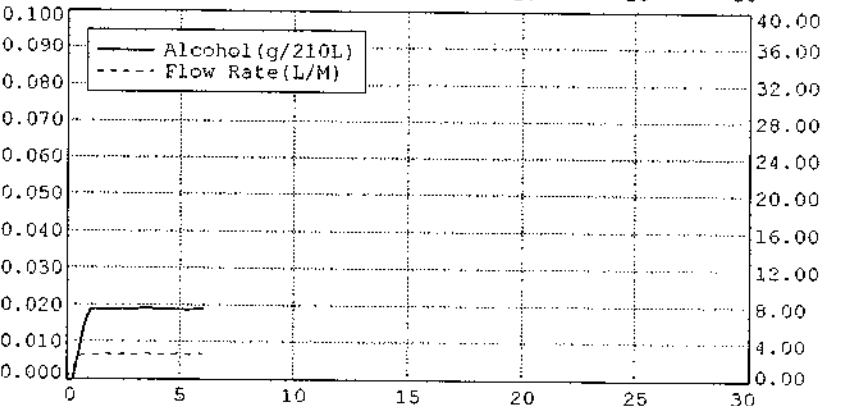
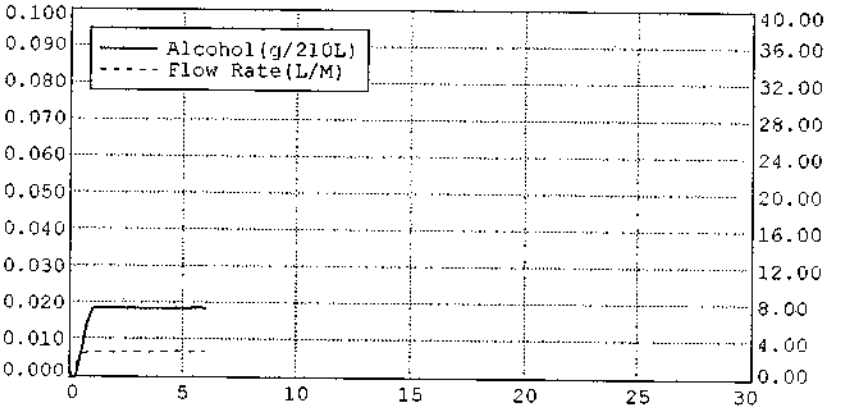
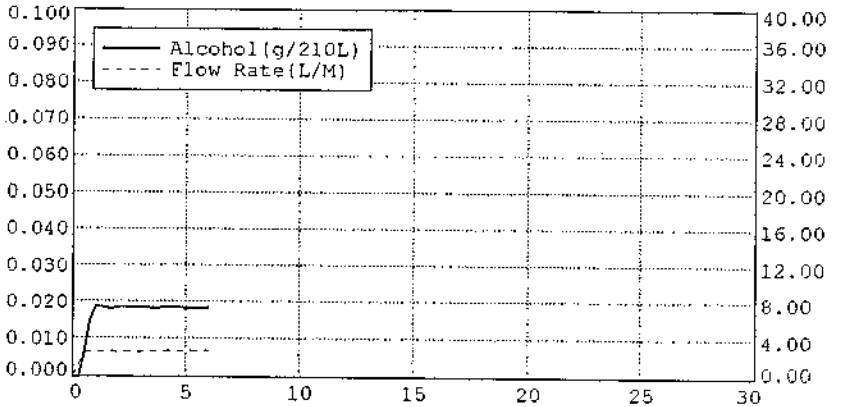
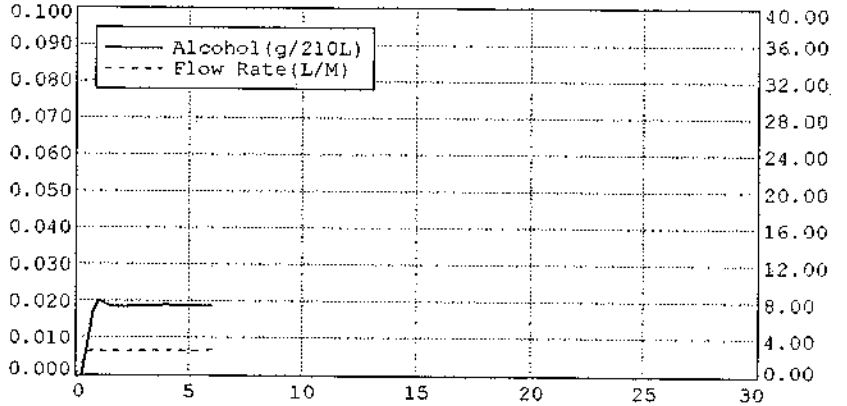
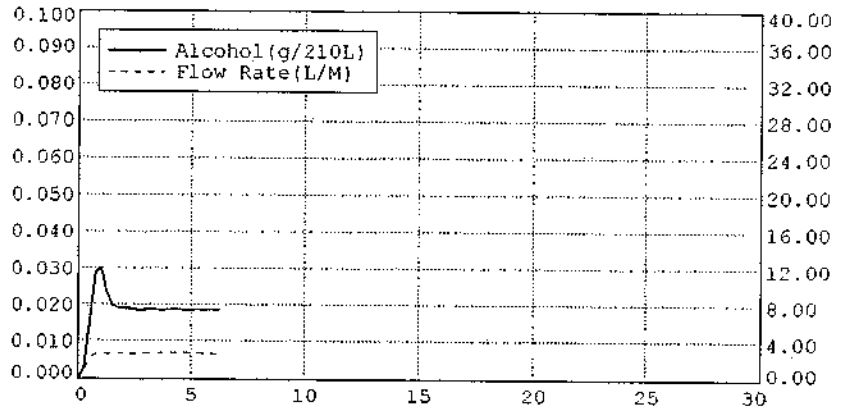
Date: 03/15/2017
 Time: 09:44:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.26: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 1149 psi

BLANK TEST	0.000	09:45
INTERNAL STANDARD	VERIFIED	09:45
EXTERNAL STANDARD	0.020	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.020	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.019	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.019	09:48
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.020	09:49
BLANK TEST	0.000	09:50

Average = 0.0196
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

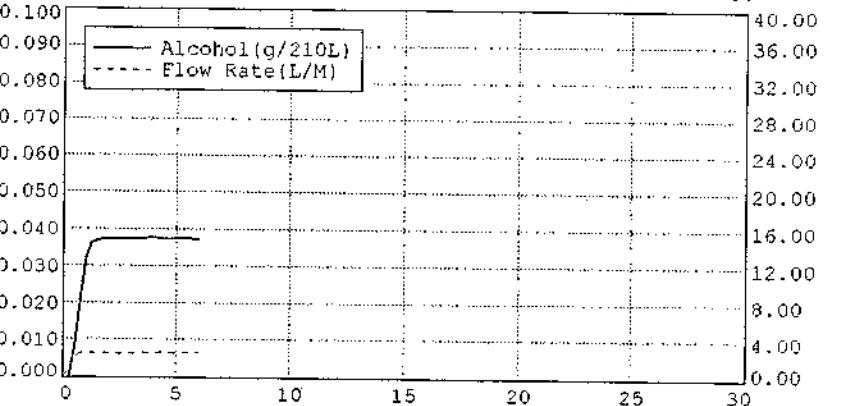
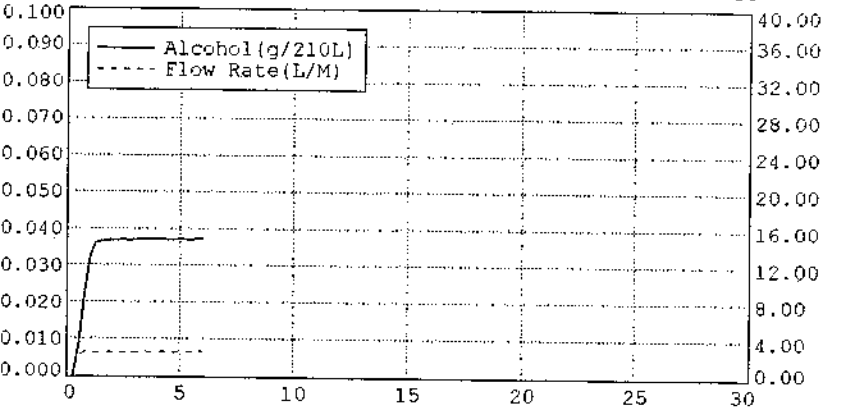
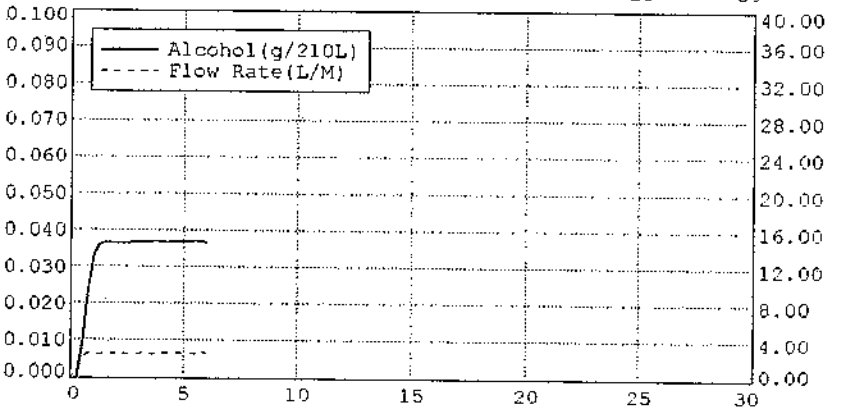
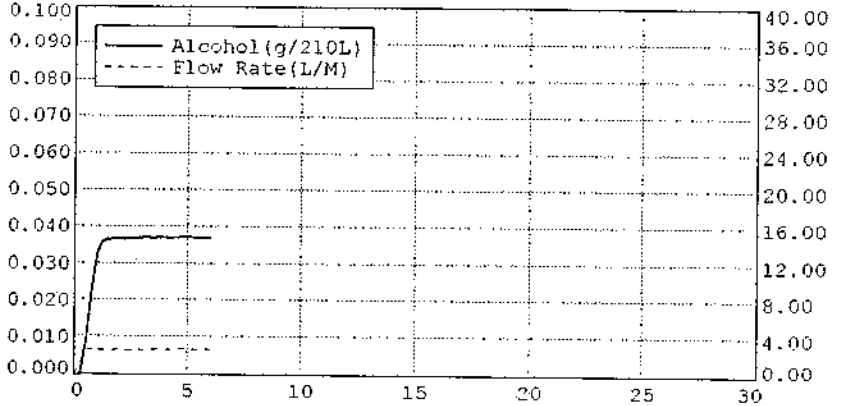
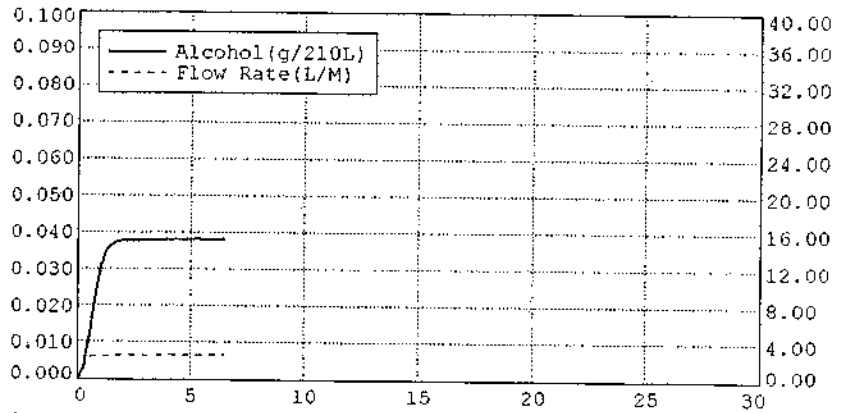
Date: 03/15/2017
 Time: 09:55:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.26: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 1102 psi

BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.039	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.038	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.038	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.038	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.038	10:02
BLANK TEST	0.000	10:02

Average = 0.0382
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

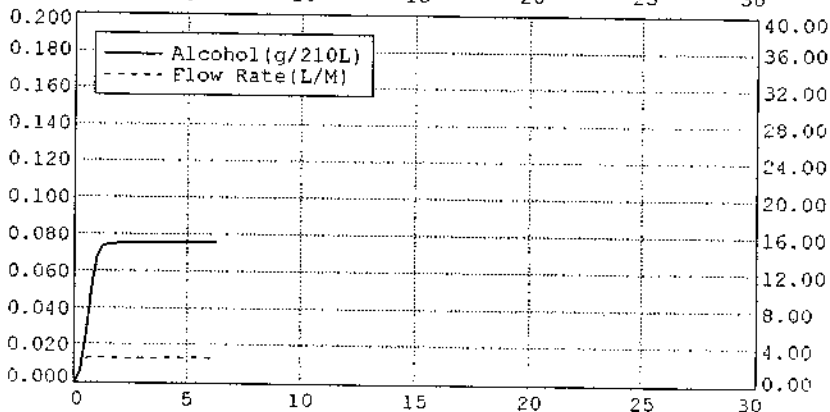
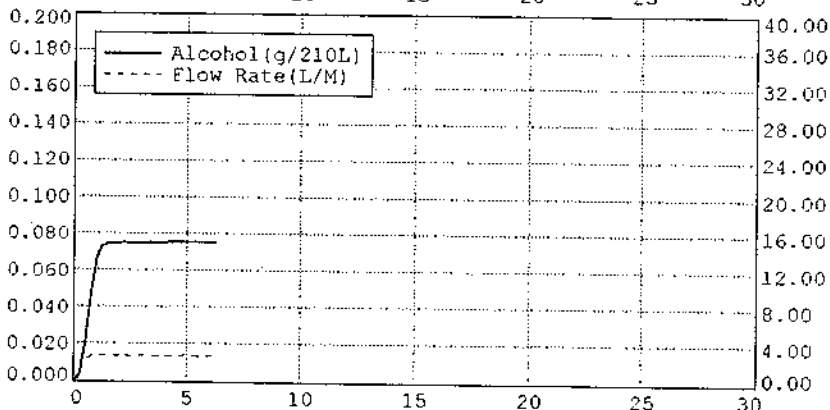
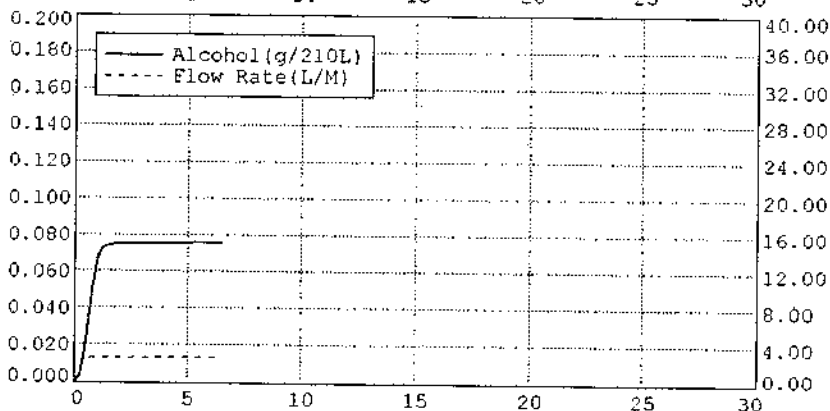
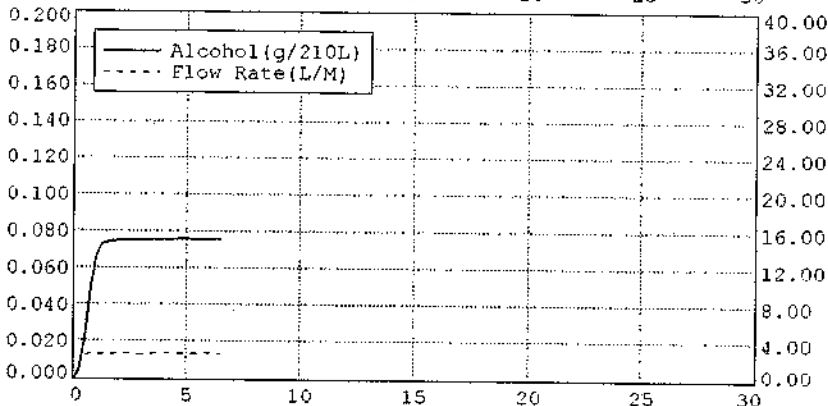
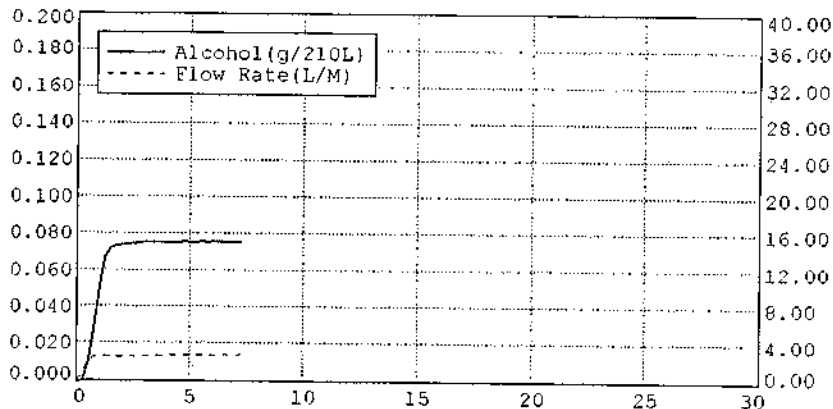
Date: 03/15/2017
 Time: 11:46:57

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.26: 0.078
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 1174 psi

BLANK TEST	0.000	11:48
INTERNAL STANDARD	VERIFIED	11:49
EXTERNAL STANDARD	0.077	11:49
BLANK TEST	0.000	11:50
EXTERNAL STANDARD	0.077	11:50
BLANK TEST	0.000	11:51
EXTERNAL STANDARD	0.077	11:51
BLANK TEST	0.000	11:52
EXTERNAL STANDARD	0.077	11:52
BLANK TEST	0.000	11:53
EXTERNAL STANDARD	0.077	11:53
BLANK TEST	0.000	11:54

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

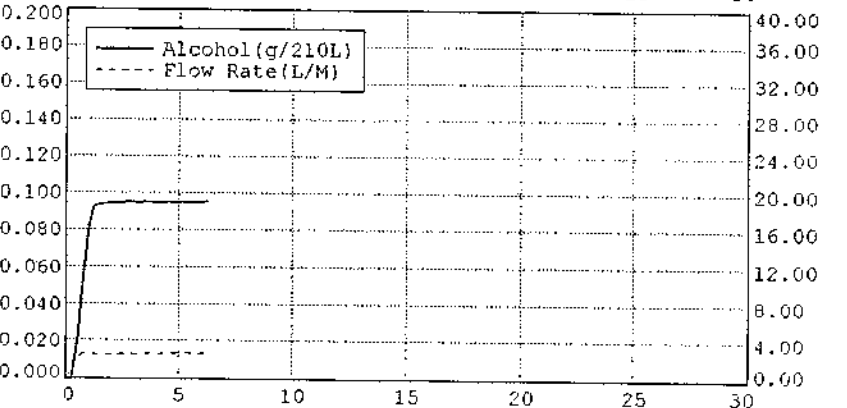
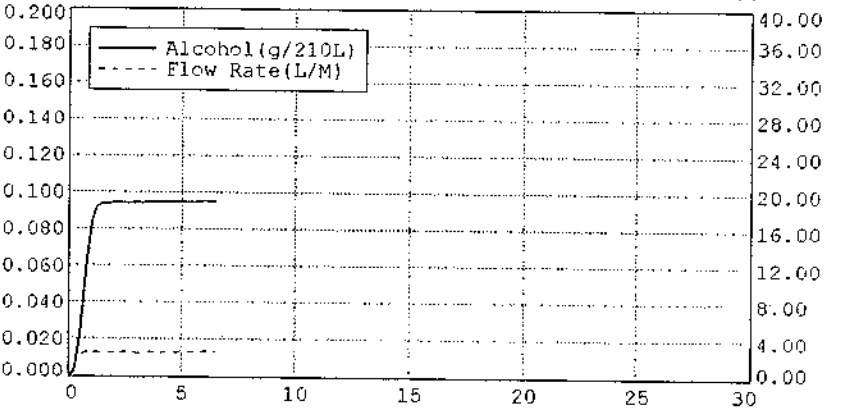
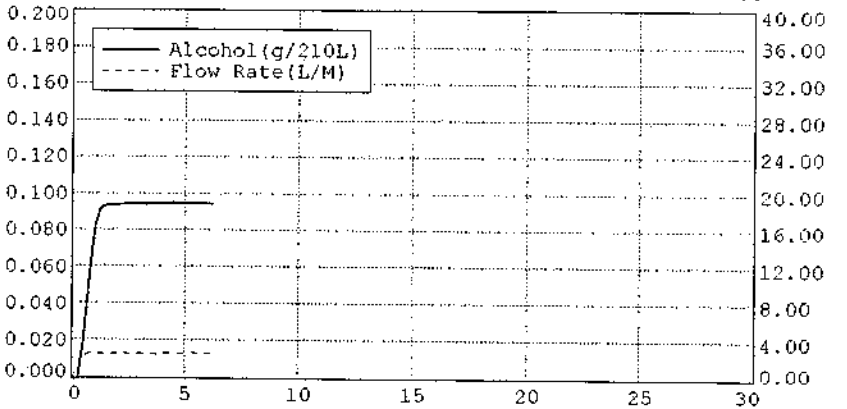
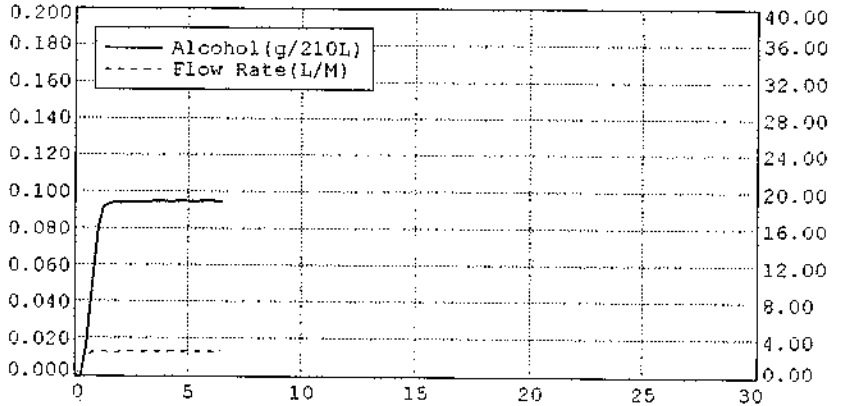
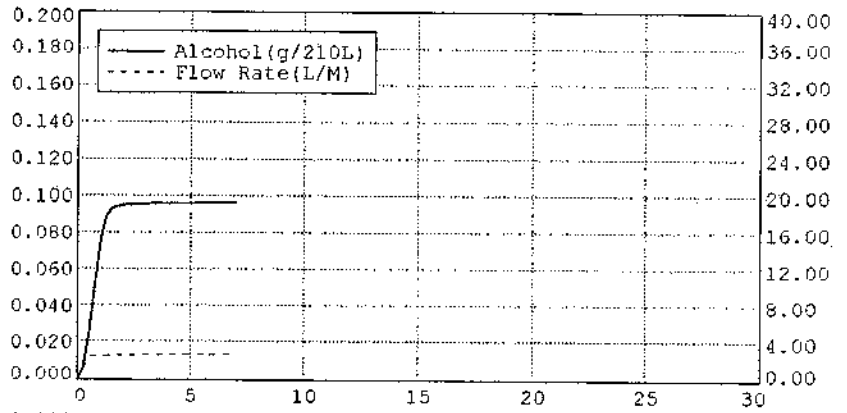
Date: 03/15/2017
 Time: 11:59:46

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.26: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 1126 psi

BLANK TEST	0.000	12:01
INTERNAL STANDARD	VERIFIED	12:01
EXTERNAL STANDARD	0.097	12:02
BLANK TEST	0.000	12:02
EXTERNAL STANDARD	0.096	12:03
BLANK TEST	0.000	12:04
EXTERNAL STANDARD	0.096	12:04
BLANK TEST	0.000	12:05
EXTERNAL STANDARD	0.096	12:05
BLANK TEST	0.000	12:06
EXTERNAL STANDARD	0.096	12:06
BLANK TEST	0.000	12:07

Average = 0.0962
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

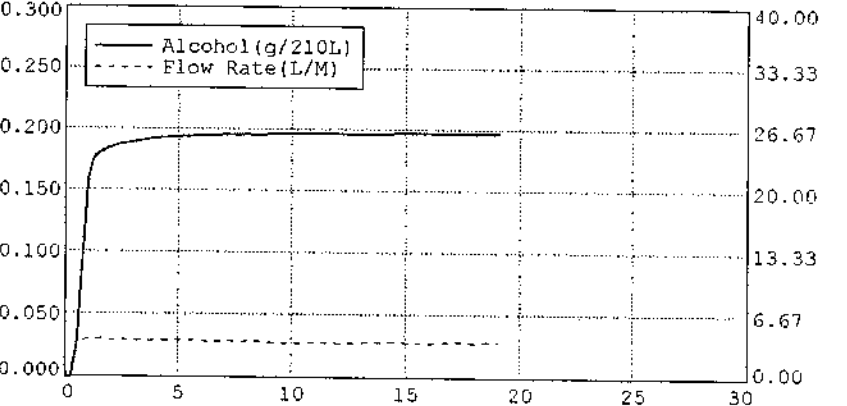
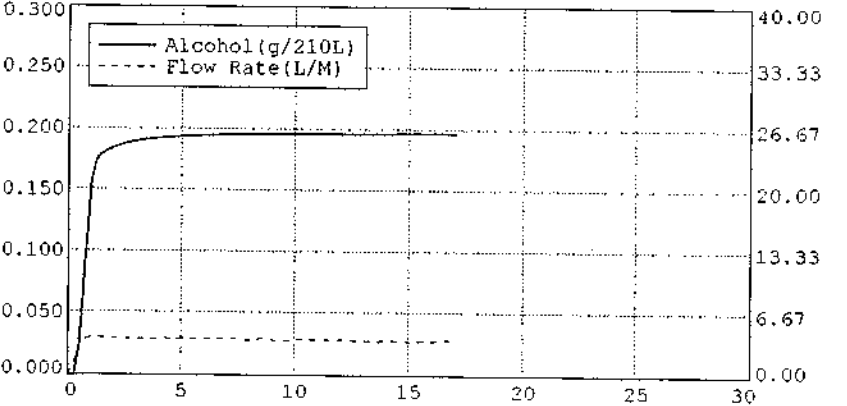
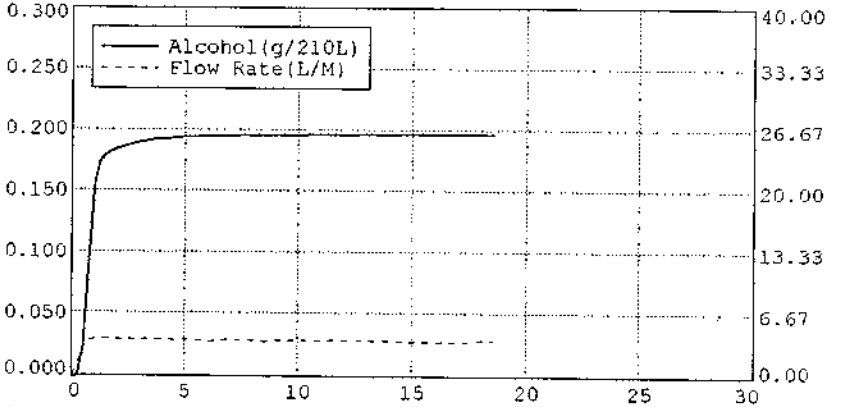
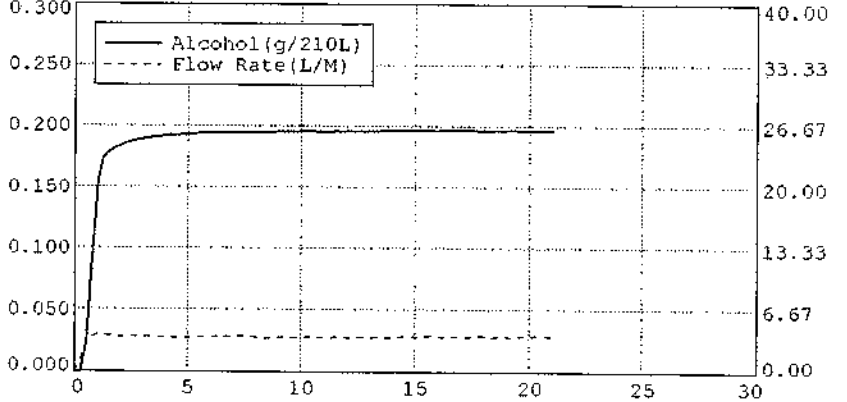
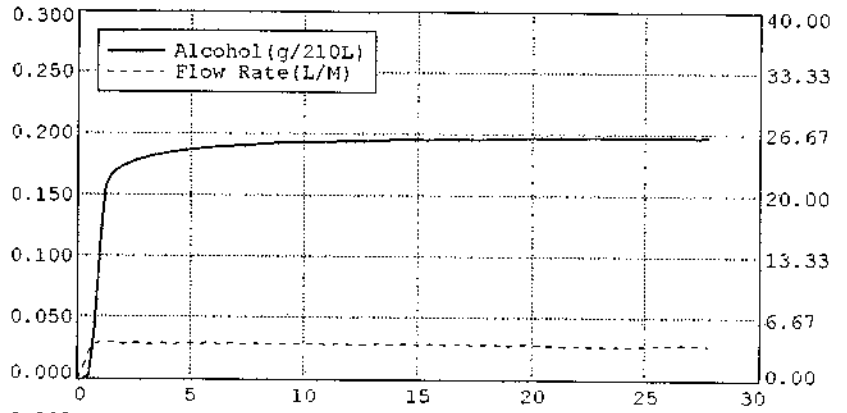
Alaska Department of Public Safety
 DATAMASTER dmt: 100378

Date: 03/15/2017
 Time: 12:11:46

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

BLANK TEST	0.000	12:14
INTERNAL STANDARD	VERIFIED	12:14
EXTERNAL STANDARD	0.198	12:15
BLANK TEST	0.000	12:16
EXTERNAL STANDARD	0.197	12:16
BLANK TEST	0.000	12:17
EXTERNAL STANDARD	0.197	12:18
BLANK TEST	0.000	12:19
EXTERNAL STANDARD	0.197	12:19
BLANK TEST	0.000	12:20
EXTERNAL STANDARD	0.198	12:20
BLANK TEST	0.000	12:21

Average = 0.1974
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100378

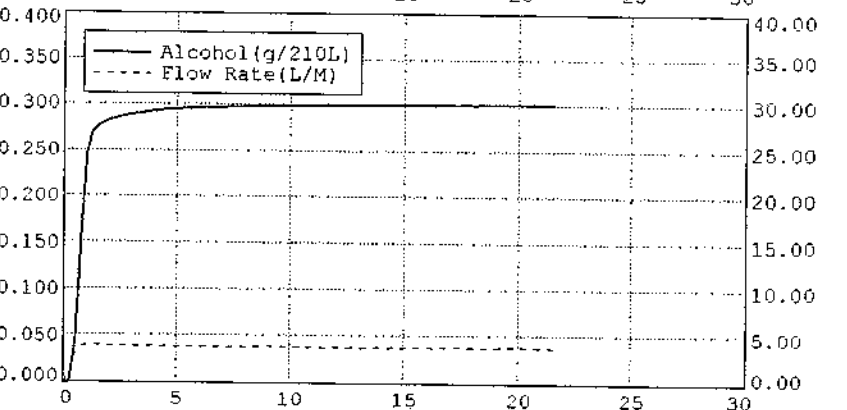
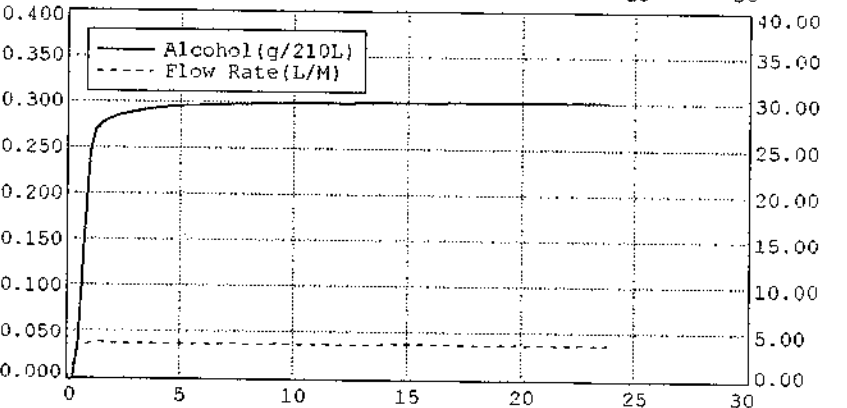
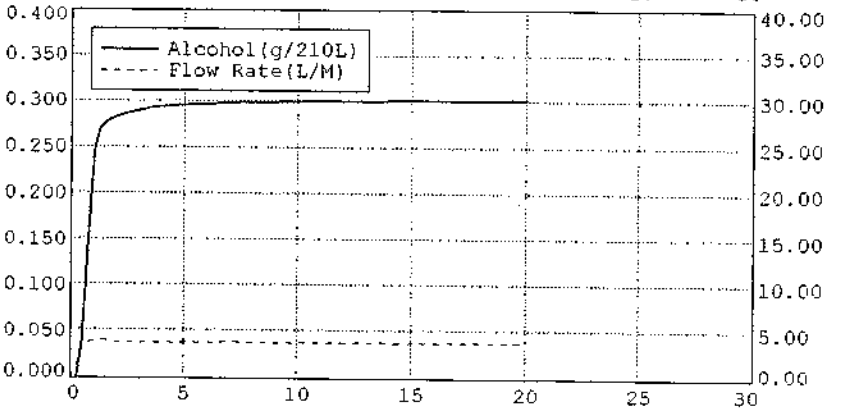
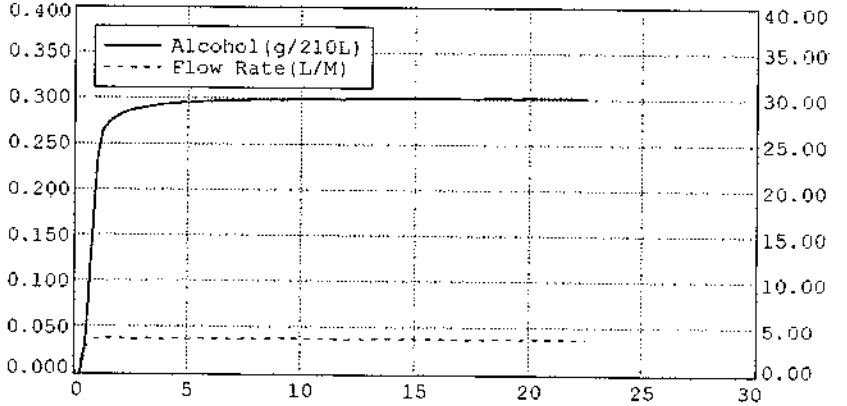
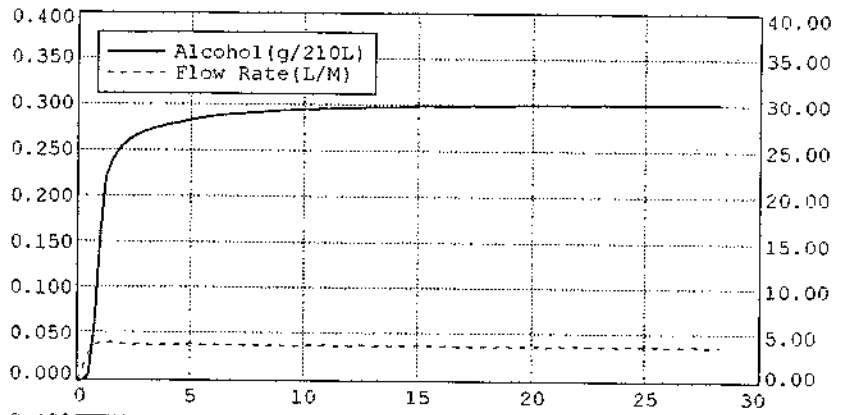
Date: 03/15/2017
 Time: 12:25:09

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:26
INTERNAL STANDARD	VERIFIED	12:26
EXTERNAL STANDARD	0.302	12:26
BLANK TEST	0.000	12:28
EXTERNAL STANDARD	0.302	12:28
BLANK TEST	0.000	12:29
EXTERNAL STANDARD	0.301	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.302	12:31
BLANK TEST	0.000	12:32
EXTERNAL STANDARD	0.301	12:32
BLANK TEST	0.000	12:33

Average = 0.3016
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100378

Date: 03/15/2017
Time: 13:02:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

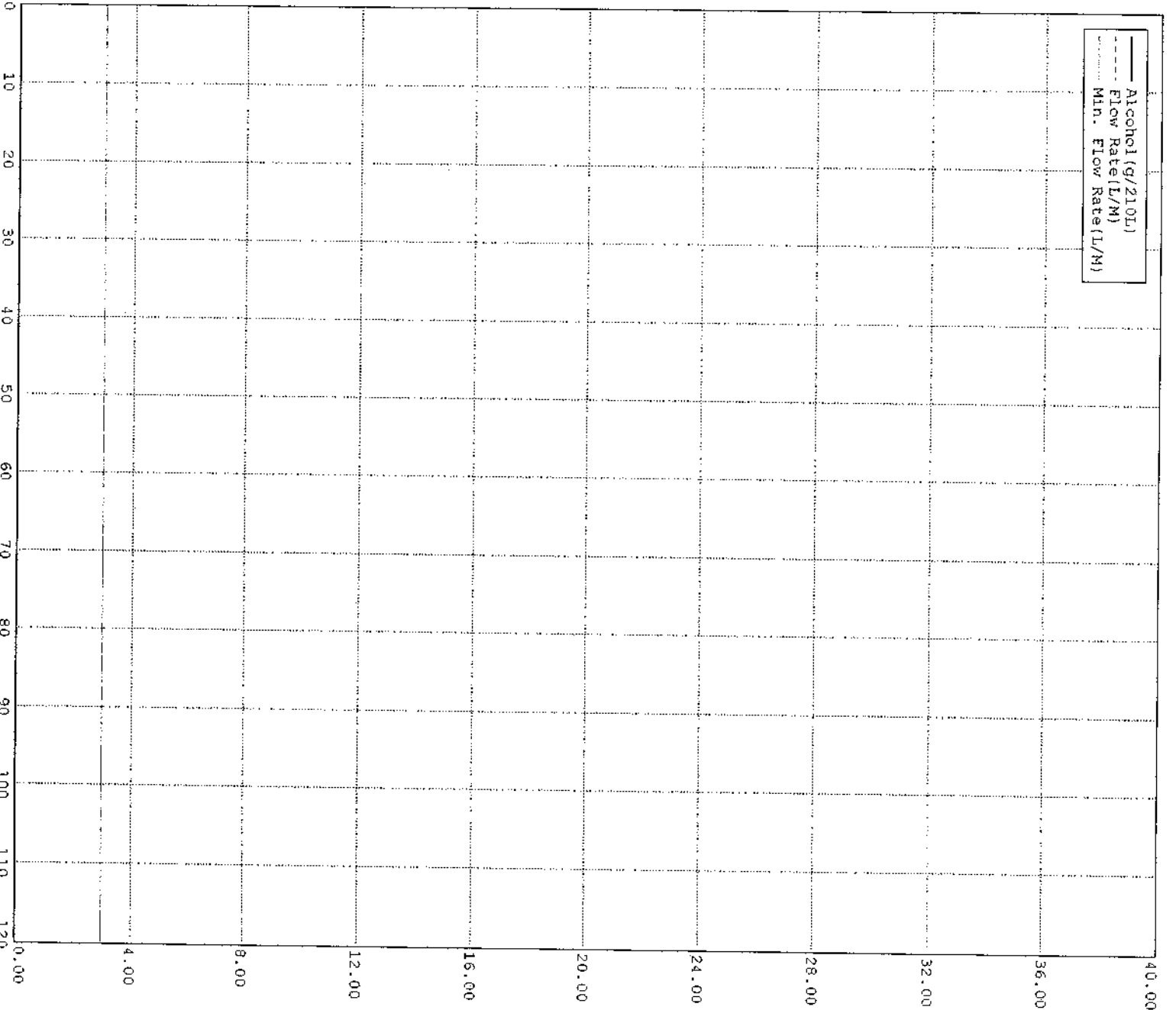
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	13:03
BLANK TEST	0.000	13:03
INTERNAL STANDARD	VERIFIED	13:03
EXTERNAL STANDARD	0.077	13:04
BLANK TEST	0.000	13:05
SUBJECT SAMPLE	INCOMPLETE	13:07

BRB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 03/15/2017
Time: 13:12:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

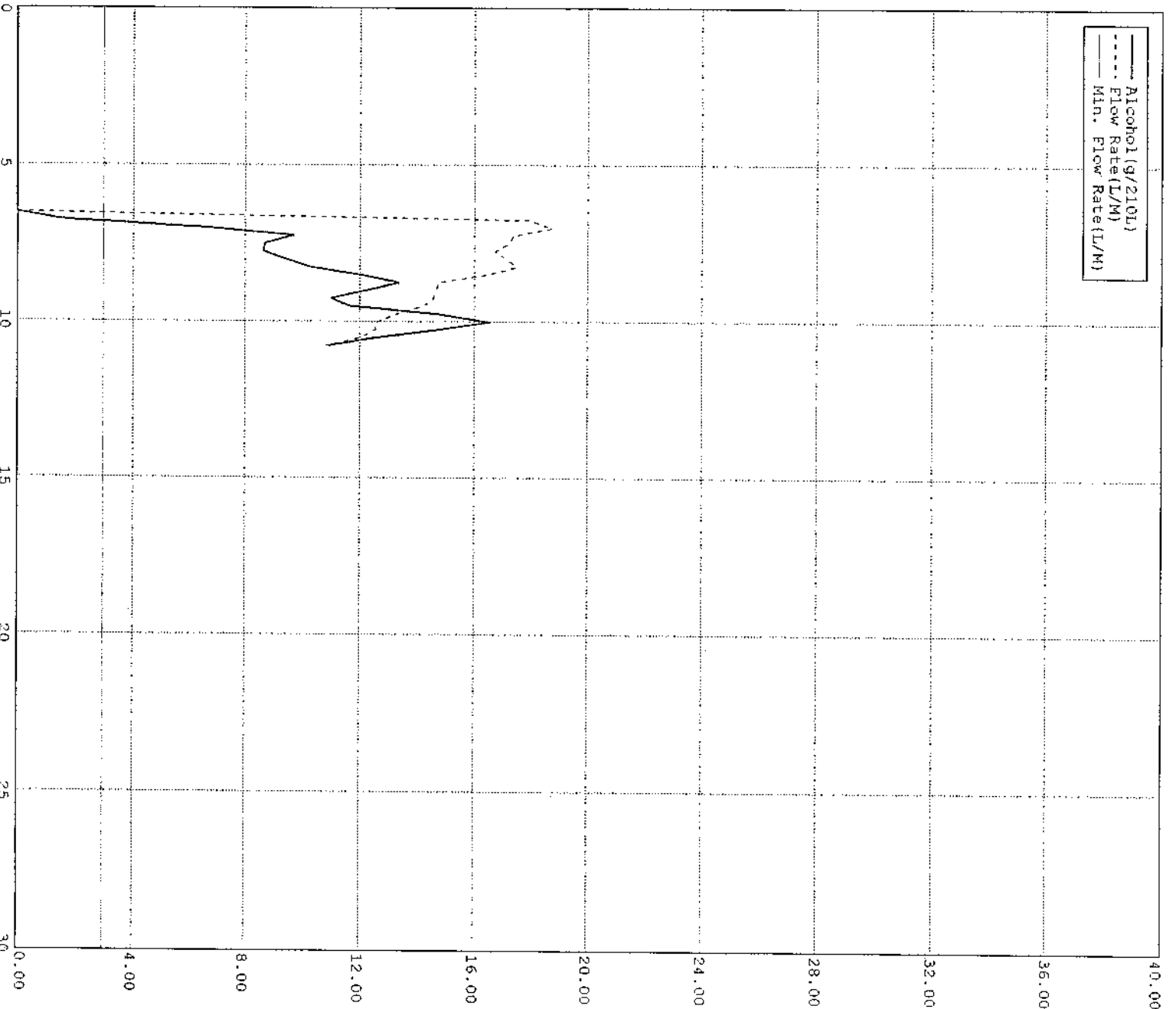
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	13:15
BLANK TEST	0.000	13:15
INTERNAL STANDARD	VERIFIED	13:15
EXTERNAL STANDARD	0.077	13:15
BLANK TEST	0.000	13:16
SUBJECT SAMPLE	INVALID	13:17

BIB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 03/15/2017
Time: 13:49:33

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

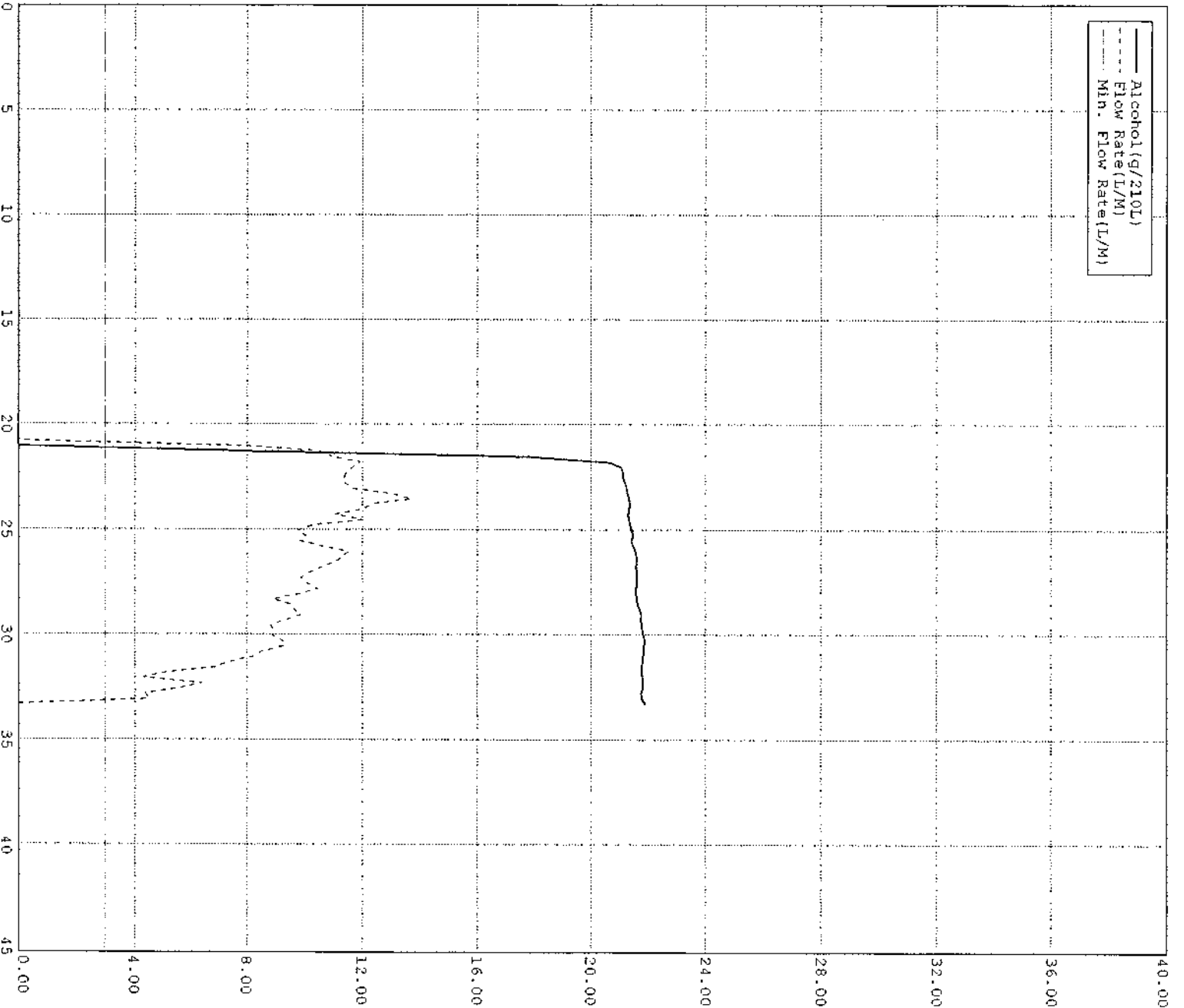
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.25: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	13:50
BLANK TEST	0.000	13:51
INTERNAL STANDARD	VERIFIED	13:51
Xq = 0.080 (1.708)		
EXTERNAL STANDARD	0.077	13:51
X[1] = 0.0770 (-0.0022)	(0.0028)	
BLANK TEST	0.000	13:52
SUBJECT SAMPLE	XXX	13:52
X[1] = 0.1096 (-0.0164)	(0.0017)	

Interference Detected

Filter 2 Avg: -0.0019
Filter 3 Avg: 0.0023
BMB 3/15/17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 03/15/2017
Time: 13:54:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

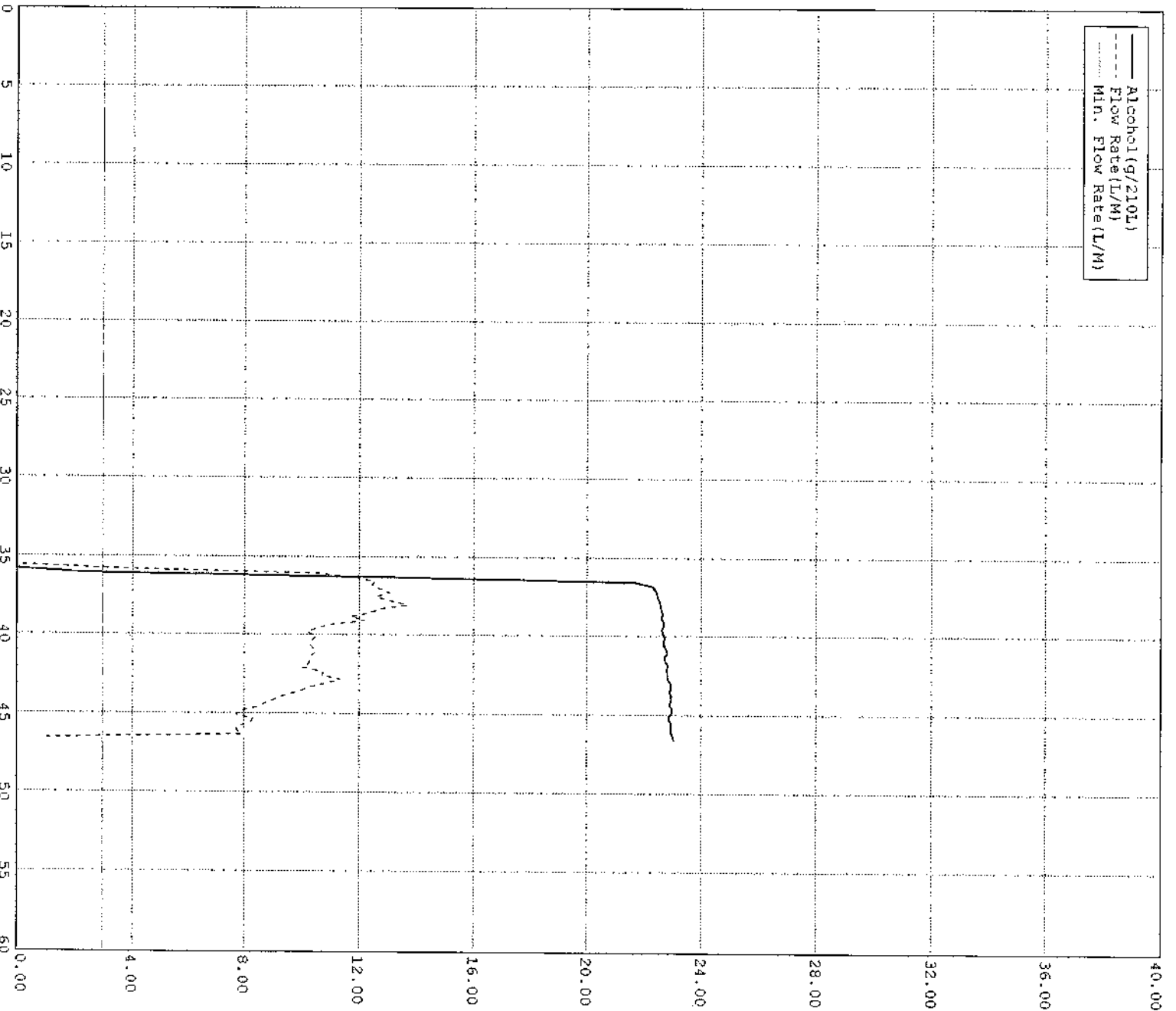
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	13:55
BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:56
Xq = 0.081 (1.49%)		
EXTERNAL STANDARD	0.077	13:56
X[1] = 0.0771 (-0.0015)	(0.0020)	
BLANK TEST	0.000	13:57
SUBJECT SAMPLE	XXX	13:58
X[1] = 0.1156 (-0.0269)	(0.0012)	

Interference Detected

BSYB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dntc: 100378

Date: 03/15/2017
Time: 14:02:26

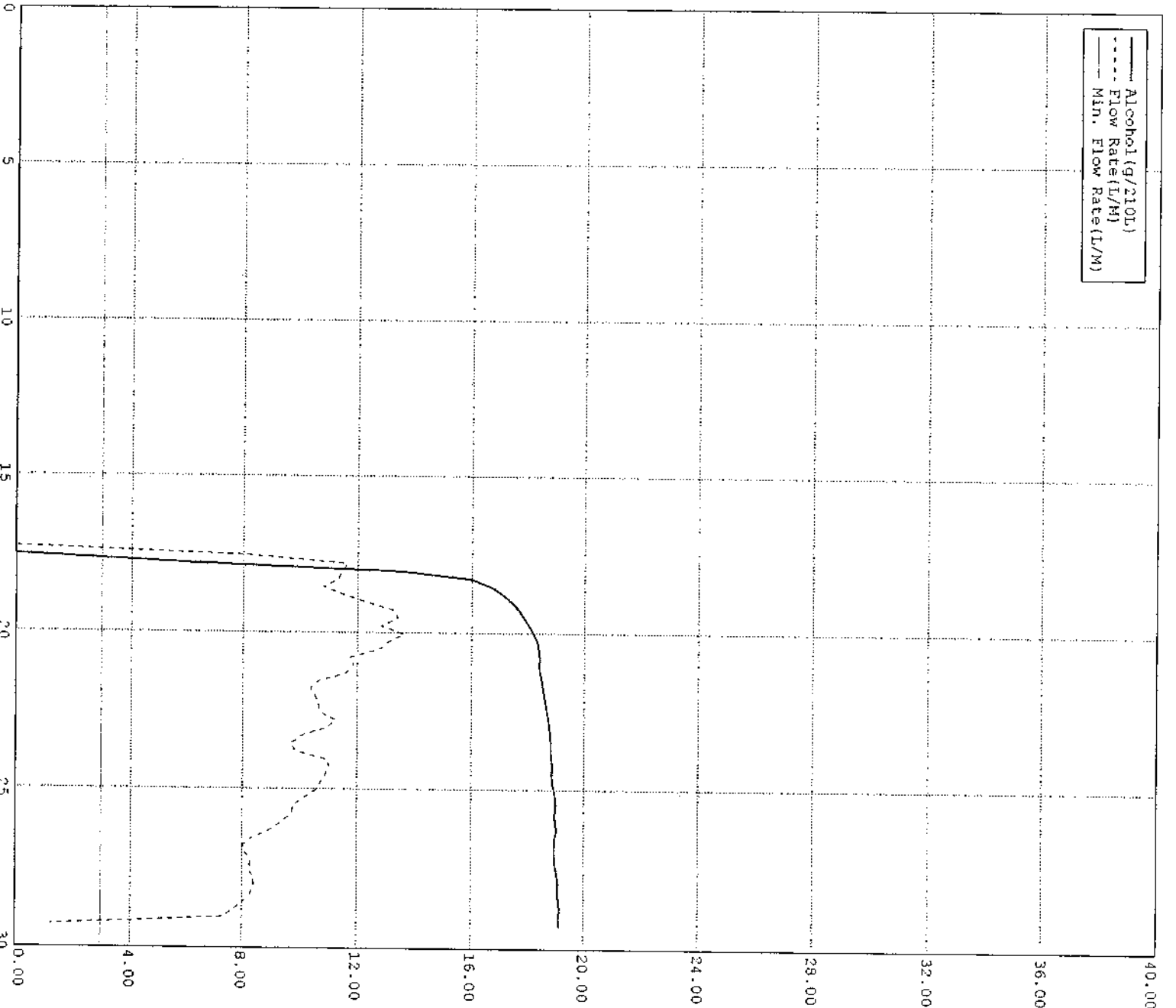
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	14:03
BLANK TEST	0.000	14:03
INTERNAL STANDARD	VERIFIED	14:03
Xq = 0.080 (2.12%)	0.077	14:04
EXTERNAL STANDARD	X[1] = 0.0771 (-0.0018)	(0.0023)
BLANK TEST	0.000	14:05
SUBJECT SAMPLE (Vol=2.04L)	0.096	14:05
X[1] = 0.0962 (0.0001)	(0.0011)	
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.076	14:06
X[1] = 0.0762 (-0.0019)	(0.0020)	
BLANK TEST	0.000	14:07

BIB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 03/15/2017
Time: 13:24:10

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

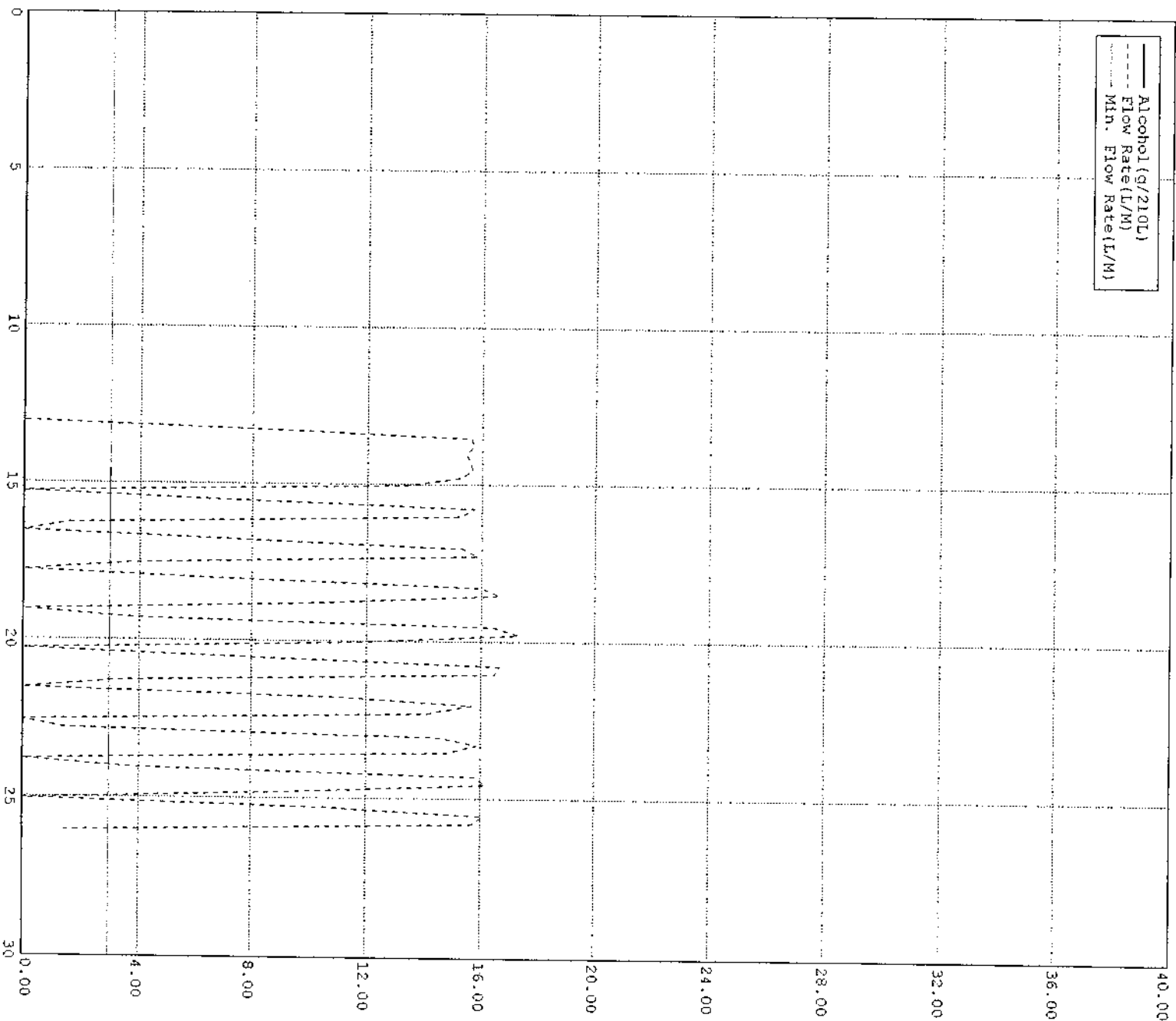
DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	13:25
BLANK TEST	0.000	13:25
INTERNAL STANDARD	VERIFIED	13:25
EXTERNAL STANDARD	0.077	13:25
BLANK TEST	0.000	13:26
SUBJECT SAMPLE	XXX	13:27

Maximum Attempts Exceeded

BSMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 190378

Date: 03/15/2017
Time: 13:18:49

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

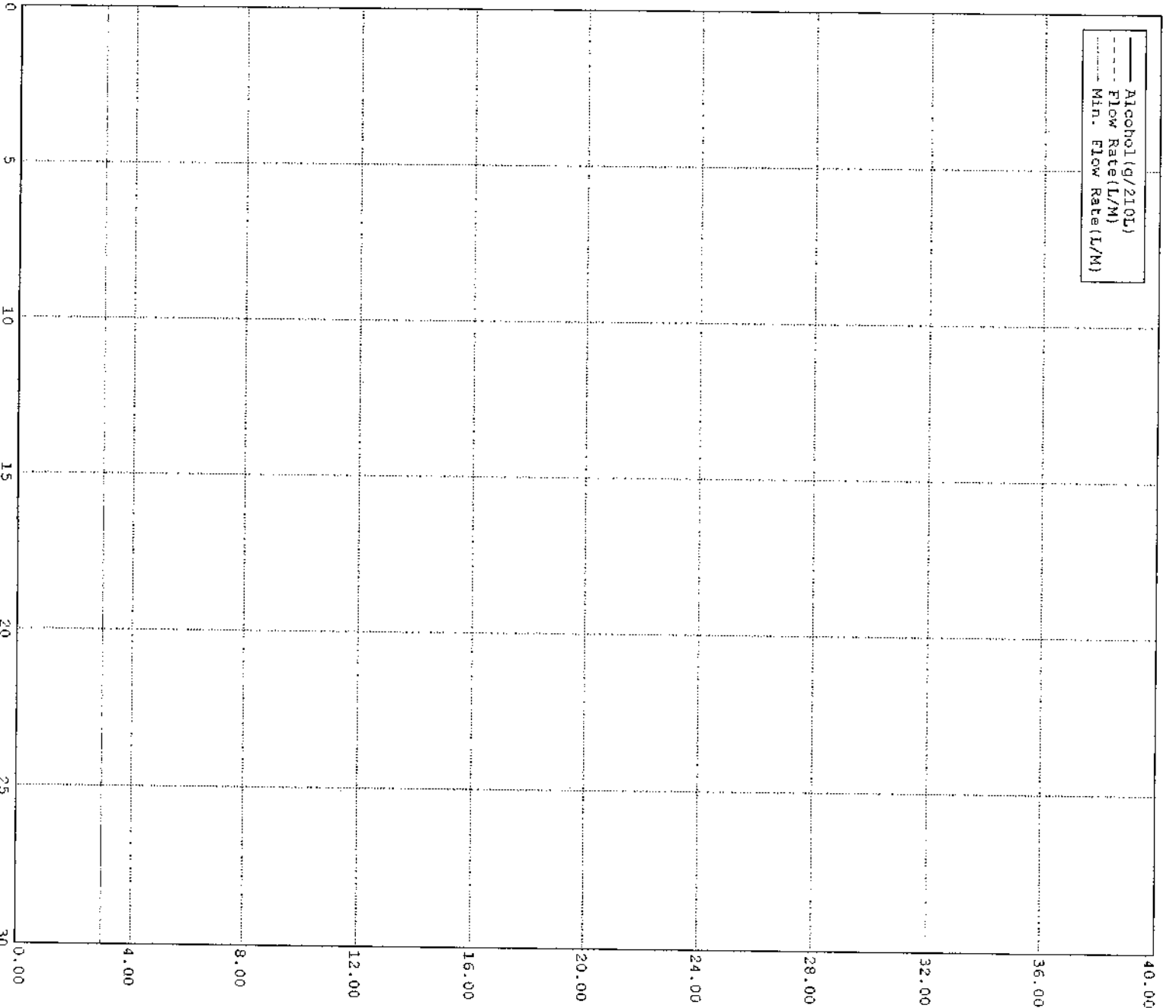
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK PASSED 13:19
BLANK TEST 0.000 13:20
INTERNAL STANDARD VERIFIED 13:20
EXTERNAL STANDARD 0.077 13:20
BLANK TEST 0.000 13:21

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100378

Date: 03/15/2017
Time: 14:25:08

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

DIAGNOSTIC CHECK	PASSED	14:26
BLANK TEST	0.000	14:26
INTERNAL STANDARD	VERIFIED	14:26
EXTERNAL STANDARD	0.077	14:26
BLANK TEST	0.000	14:27
SUBJECT SAMPLE (Vol=1.62L)	0.000	14:28
BLANK TEST	0.000	14:29
EXTERNAL STANDARD	0.977	14:29
BLANK TEST	0.000	14:30

BRMB

