

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 100352 Analyst Brandi Barnett Start Date 3/29/17

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 AG 616504 Exp 6/13/18
- ii. 0.040g/210L Mnf Airgas Lot AG 630101 Exp 10/27/18
- iii. 0.080g/210L Mnf Airgas Lot AG 634001 Exp 12/5/18
- iv. 0.100g/210L Mnf Airgas Lot AG 629304 Exp 10/19/18
- v. 0.200g/210L Mnf Guth Lot 16190 Exp 8/15/18
 - 1. Simulator S/N DR 5298 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 DR 4161 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 3/30/17

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 03/29/2017
Time: 11:17:32

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 = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.75 V PASSED
(1.03 V - 2.41 V)
Cooler Voltage = 1.67 V PASSED
(1.03 V - 2.41 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 4.857 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.095 0.09% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100352

Date: 03/29/2017

Time: 11:24 AM

Temperatures (°C)

Sample Cell: 48.8°C

Breath Tube: 47.5°C

Current Barometer 29.3 in

Volume (Ltr) 1.49

Settings

Lamp: 1.75 V

Bias: 80 V

Cooler: 1.75 V

Chopper: 525 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.022 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 09/15/2015
Time: 09:24:17

OPERATOR NAME:
NPAS TECH
CERTIFICATE #: 34C, G12921, 34.0C, 15040

Ca = 0.1010
CAL = 0.966346 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0042 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0952 0.0500 <= Xq < 0.2000
a21 = 1.146264 1.050 <= a21 < 1.300
a31 = 0.447190 0.300 <= a31 < 0.800

G12921 34.0^c
15040
2-16-16

SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100352

Date: 03/29/2017
Time: 11:26:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

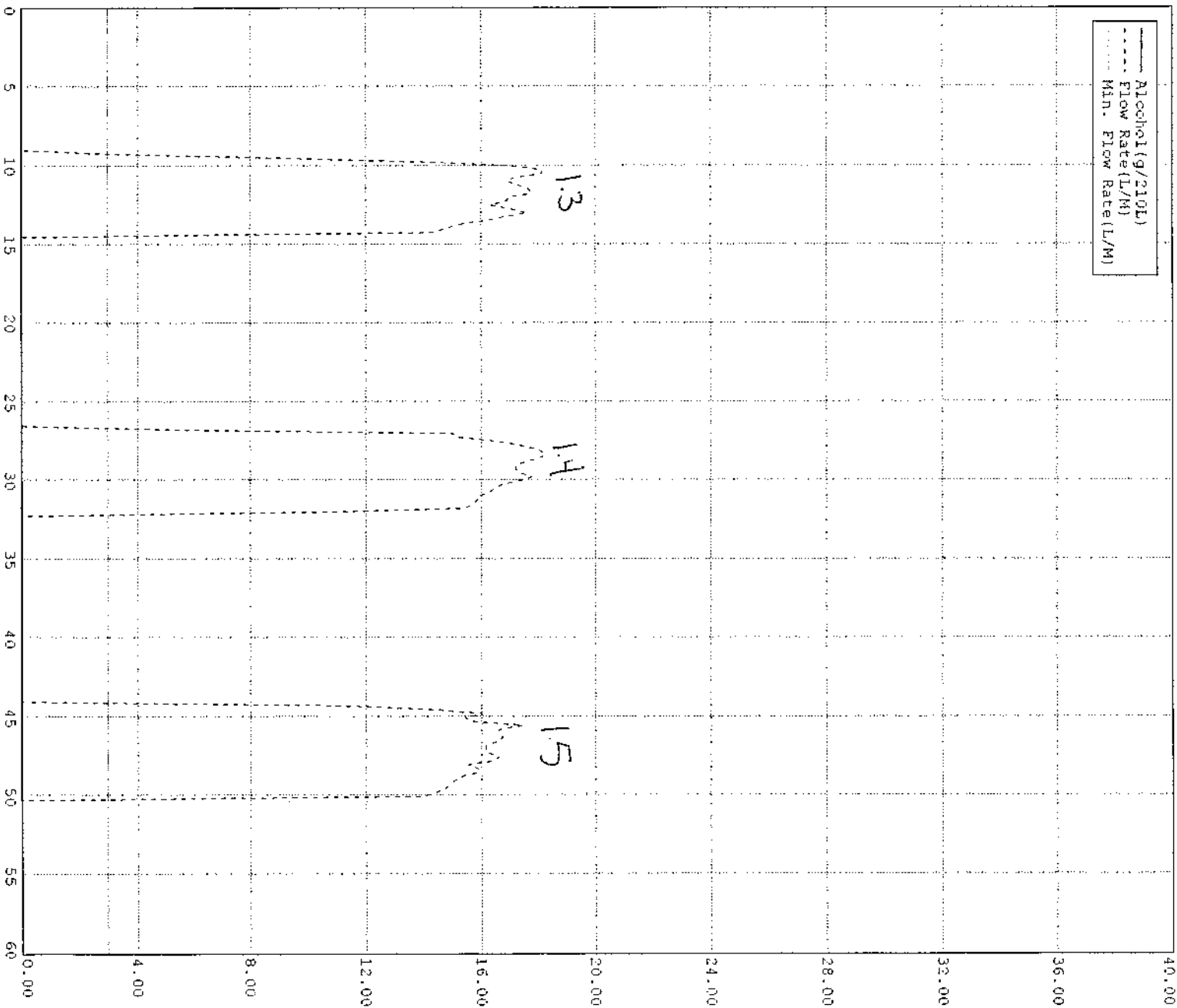
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.35: 0.078
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	11:28
BLANK TEST	0.000	11:28
INTERNAL STANDARD	VERIFIED	11:28
EXTERNAL STANDARD	0.078	11:28
BLANK TEST	0.000	11:29
SUBJECT SAMPLE (Vol=1.56L)	0.000	11:30
BLANK TEST	0.000	11:31
EXTERNAL STANDARD	0.079	11:31
BLANK TEST	0.000	11:32

Handwritten signature/initials



LINEARITY CHECK

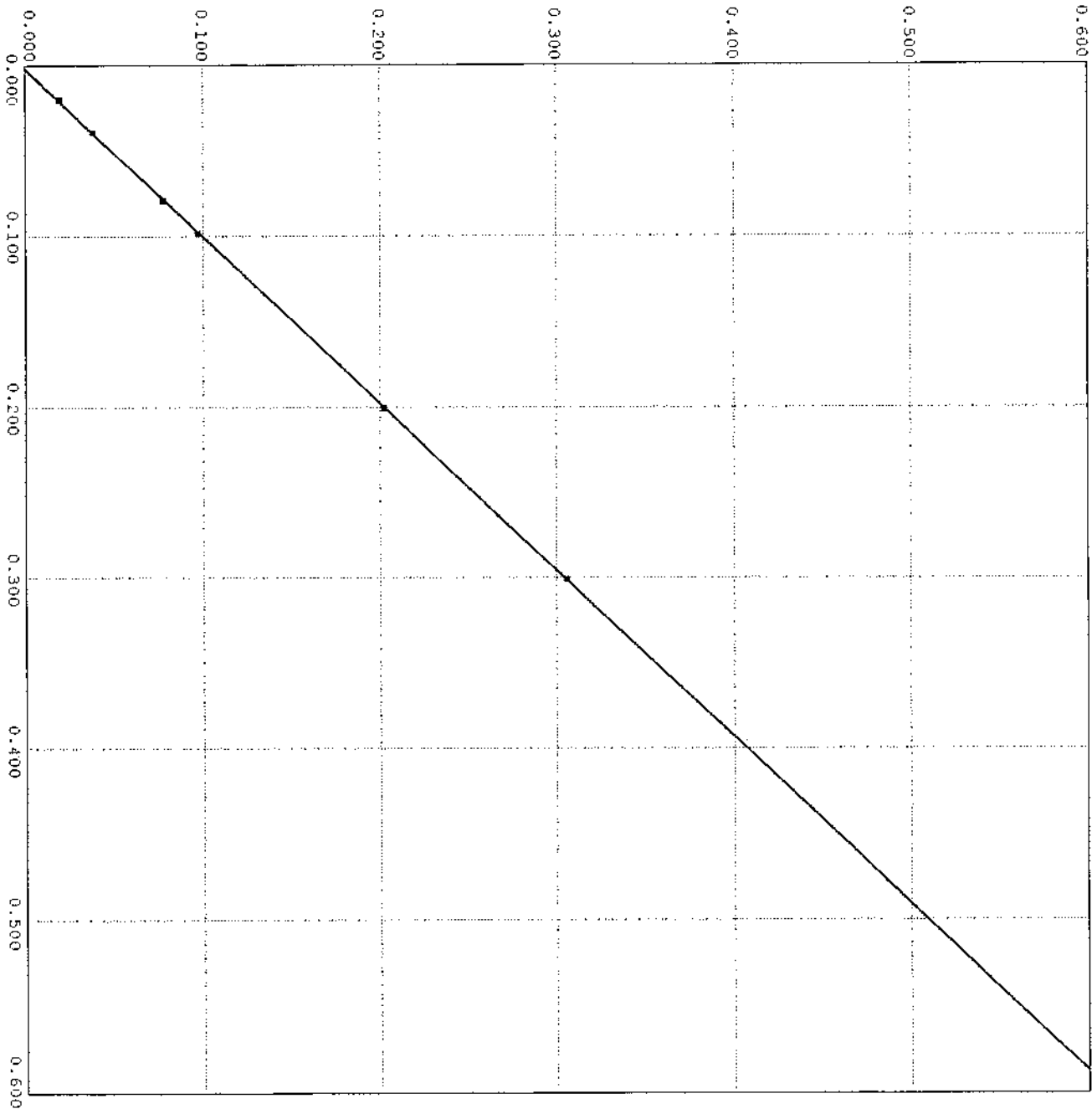
Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 03/29/2017
Time: 12:52:58

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.039	0.0390	0.0000
0.079	0.0784	0.0005
0.098	0.0980	0.0000
0.200	0.2030	0.0000
0.300	0.3064	0.0005

SLOPE = 1.024235
R² = 0.999939



BB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100352

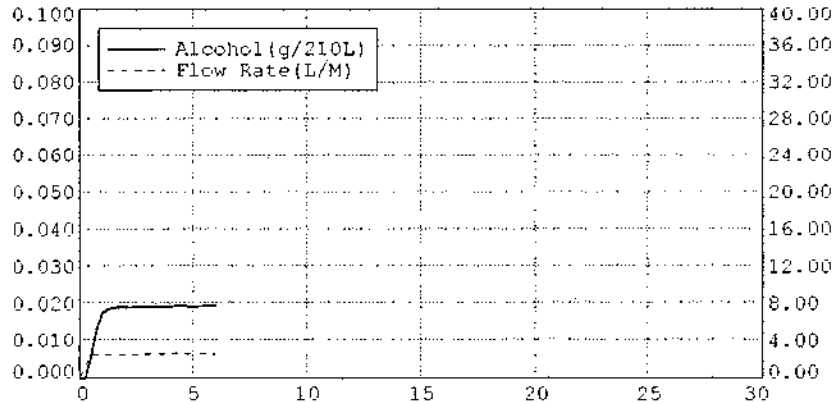
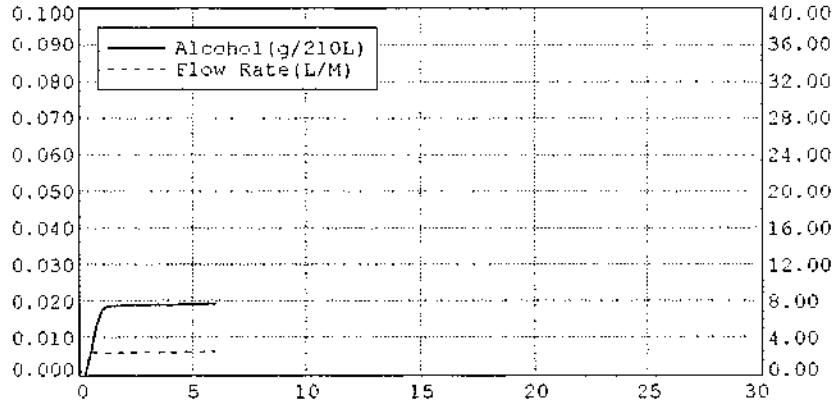
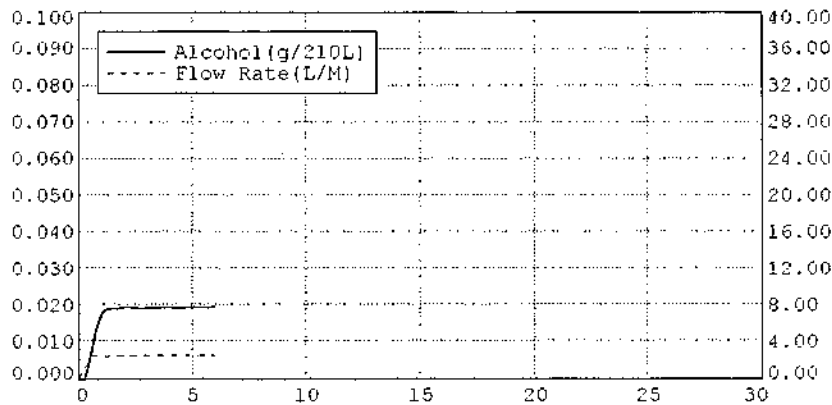
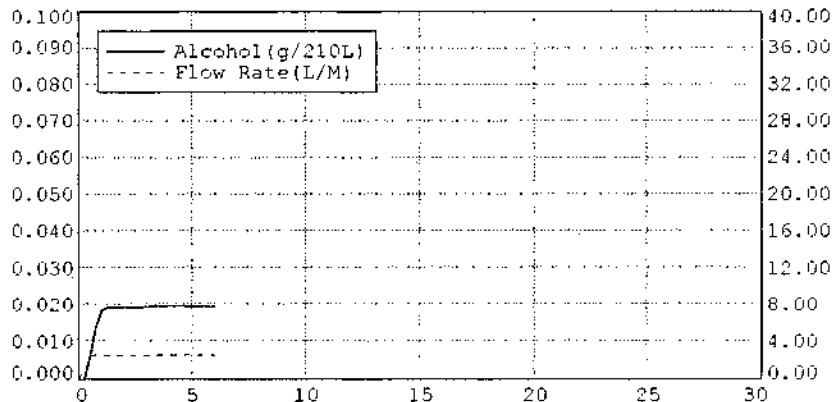
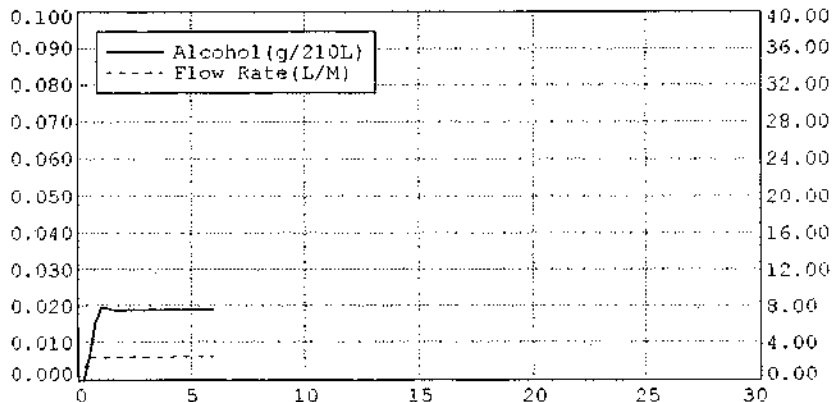
Date: 03/29/2017
 Time: 12:53:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.36: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 1038 psi

BLANK TEST	0.000	12:54
INTERNAL STANDARD	VERIFIED	12:54
EXTERNAL STANDARD	0.020	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.020	12:55
BLANK TEST	0.000	12:56
EXTERNAL STANDARD	0.020	12:57
BLANK TEST	0.000	12:57
EXTERNAL STANDARD	0.020	12:58
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.020	12:59
BLANK TEST	0.000	13:00

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100352

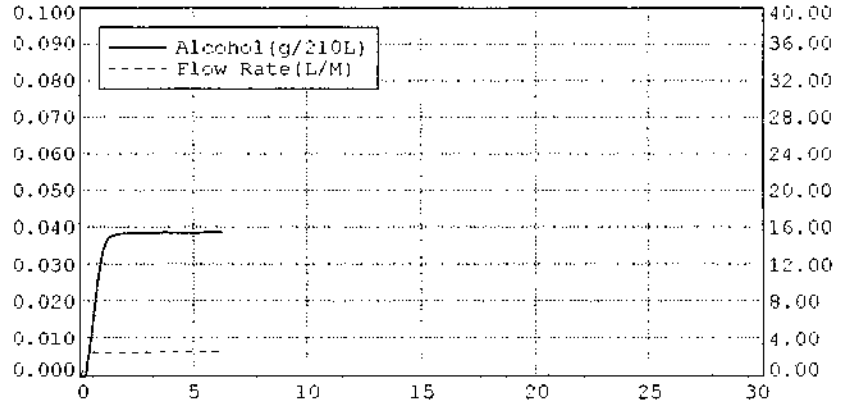
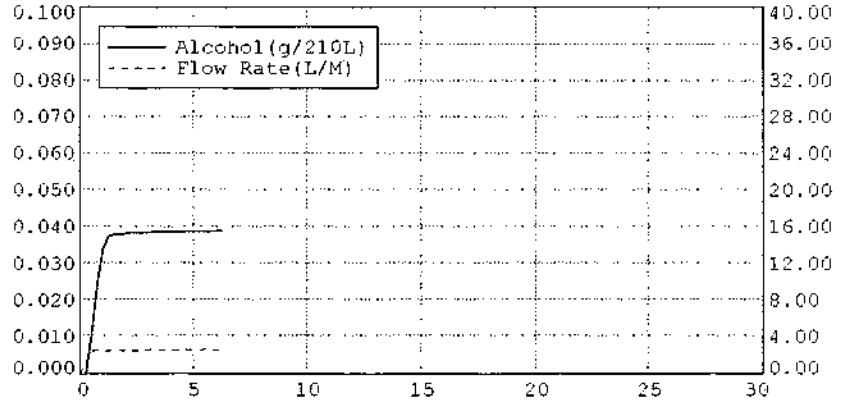
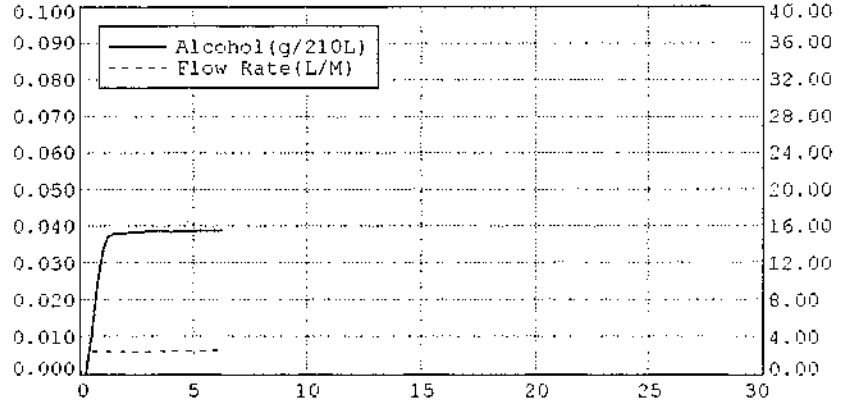
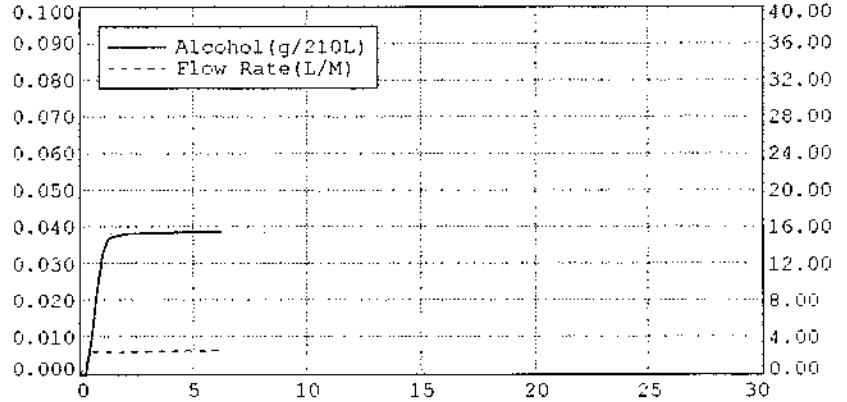
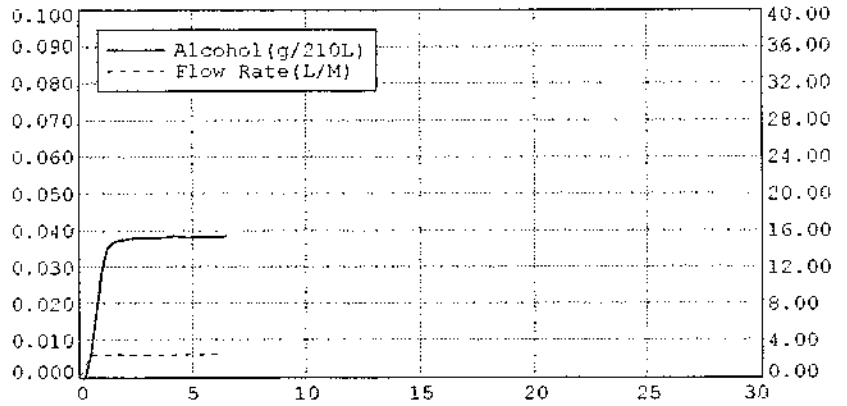
Date: 03/29/2017
Time: 13:05:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.36: 0.039
LOT #: AG630101
EXPIRATION: 10/27/2018
TANK PRESSURE: 1043 psi

BLANK TEST	0.000	13:06
INTERNAL STANDARD	VERIFIED	13:07
EXTERNAL STANDARD	0.039	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.039	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.039	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.039	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.039	13:11
BLANK TEST	0.000	13:12

Average = 0.0390
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100352

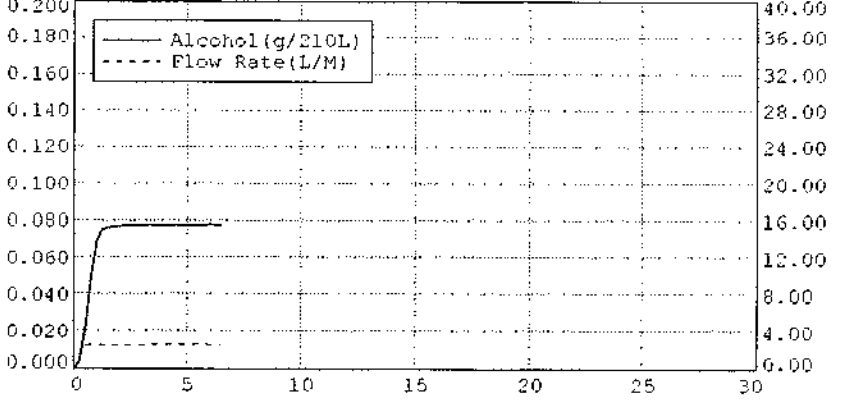
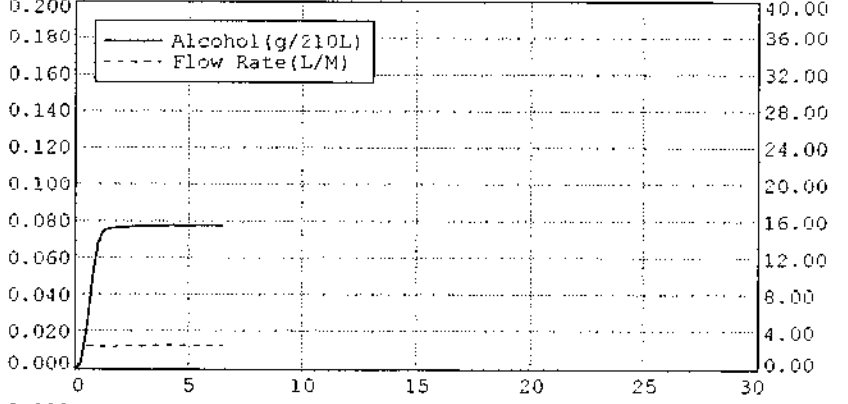
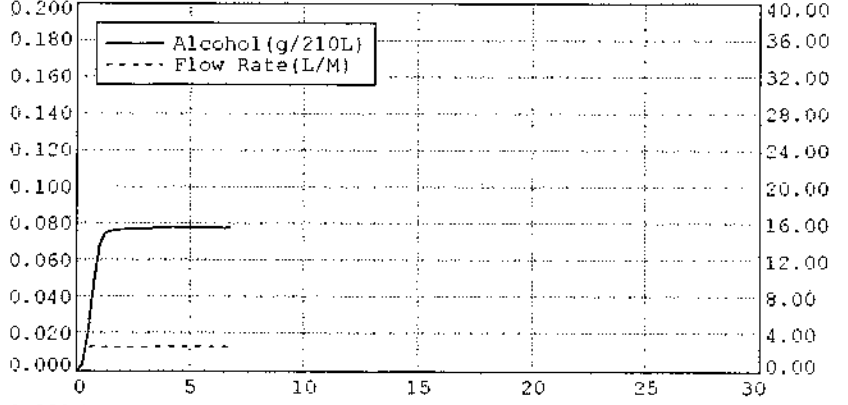
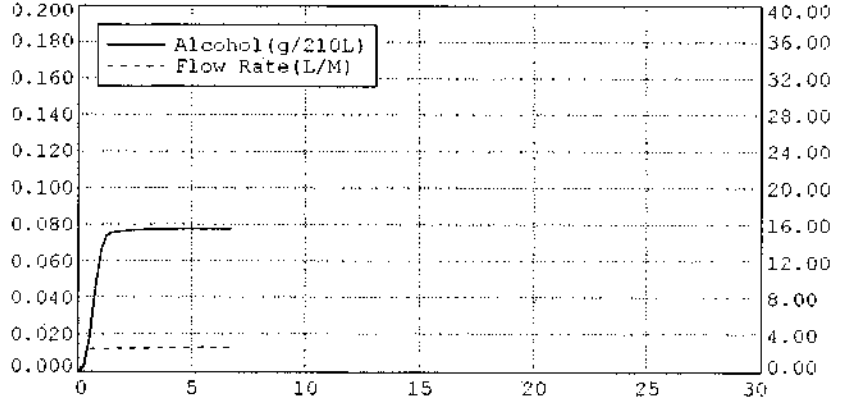
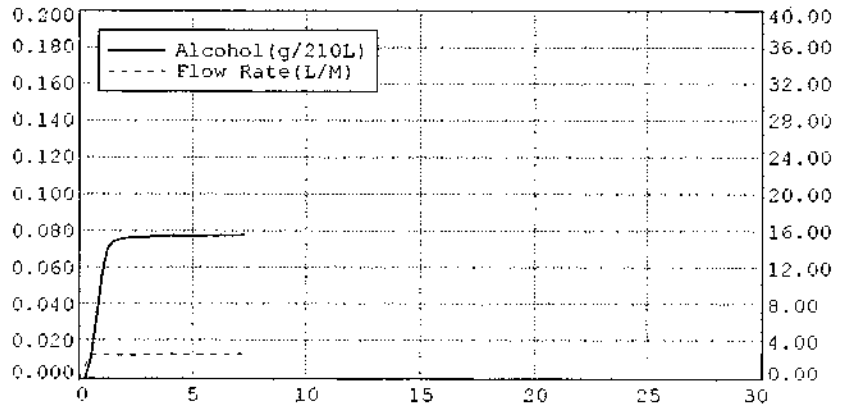
Date: 03/29/2017
 Time: 13:15:16

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.36: 0.079
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 1115 psi

BLANK TEST	0.000	13:18
INTERNAL STANDARD	VERIFIED	13:18
EXTERNAL STANDARD	0.079	13:18
BLANK TEST	0.000	13:19
EXTERNAL STANDARD	0.078	13:19
BLANK TEST	0.000	13:20
EXTERNAL STANDARD	0.079	13:20
BLANK TEST	0.000	13:21
EXTERNAL STANDARD	0.078	13:21
BLANK TEST	0.000	13:22
EXTERNAL STANDARD	0.078	13:23
BLANK TEST	0.000	13:23

Average = 0.0784
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100352

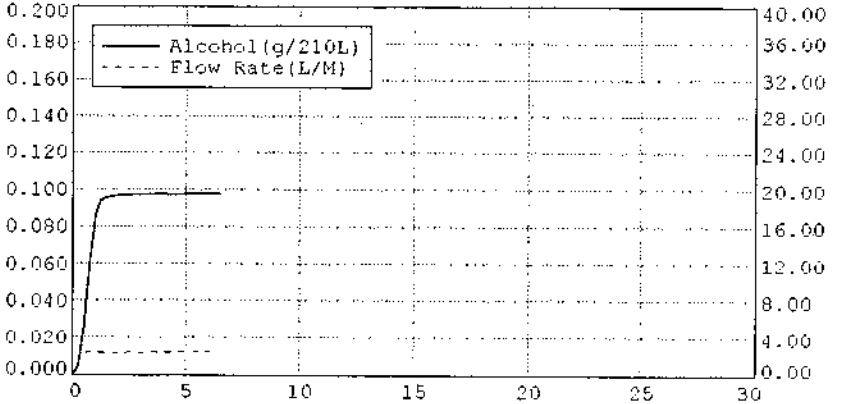
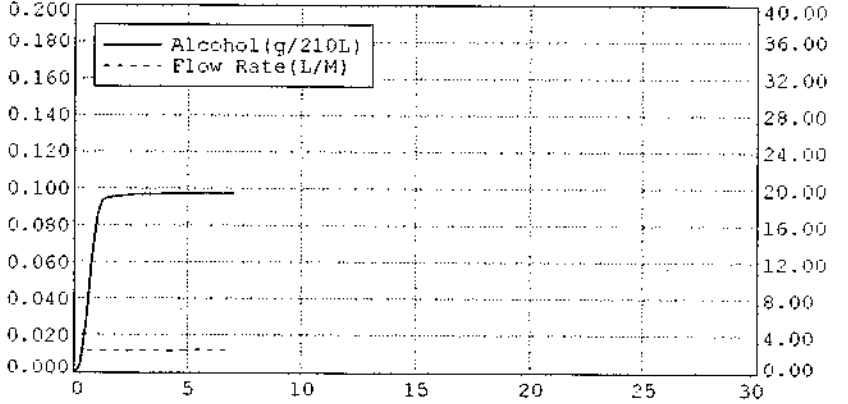
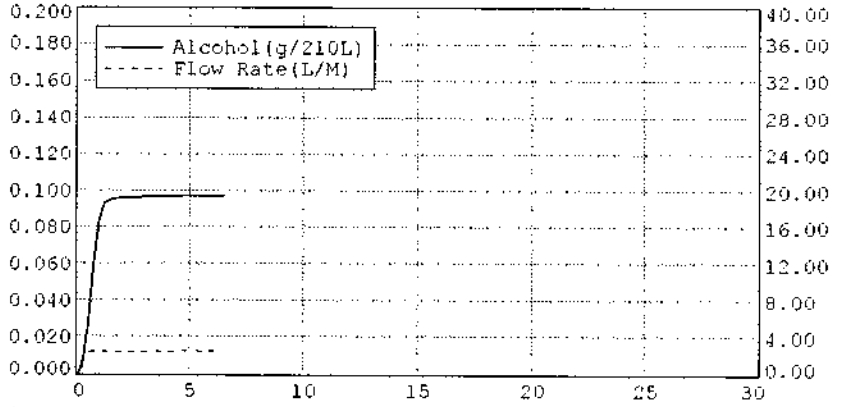
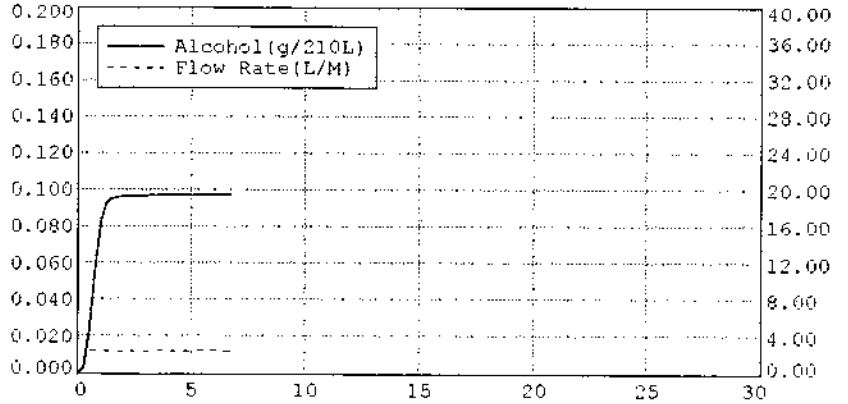
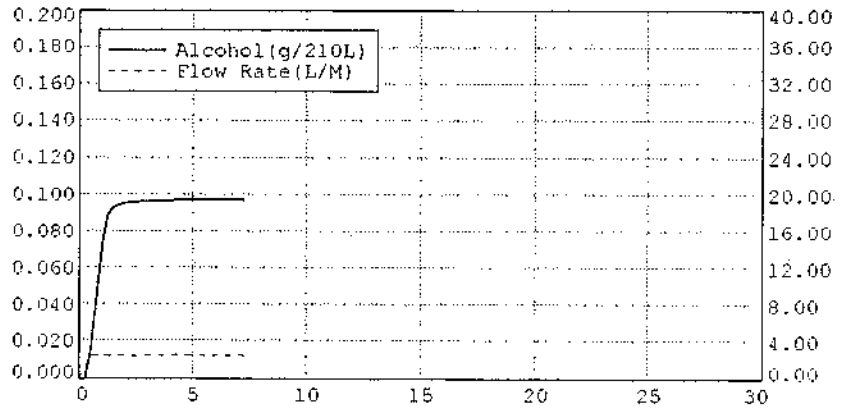
Date: 03/29/2017
 Time: 13:29:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.36: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 995 psi

BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:31
EXTERNAL STANDARD	0.098	13:31
BLANK TEST	0.000	13:32
EXTERNAL STANDARD	0.098	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.098	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.098	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.098	13:35
BLANK TEST	0.000	13:36

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100352

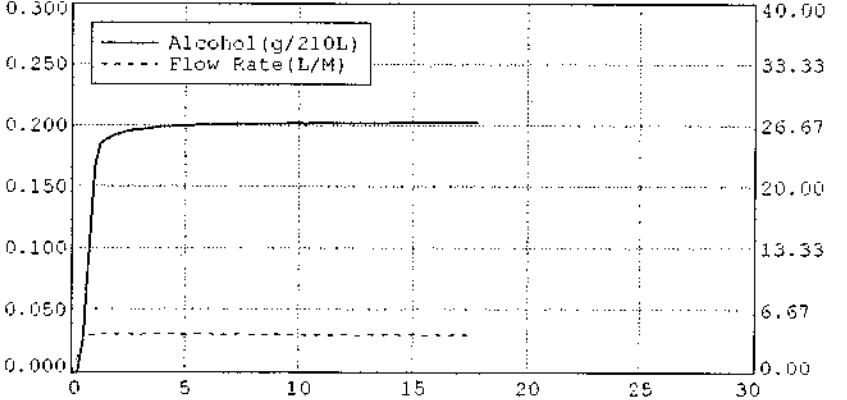
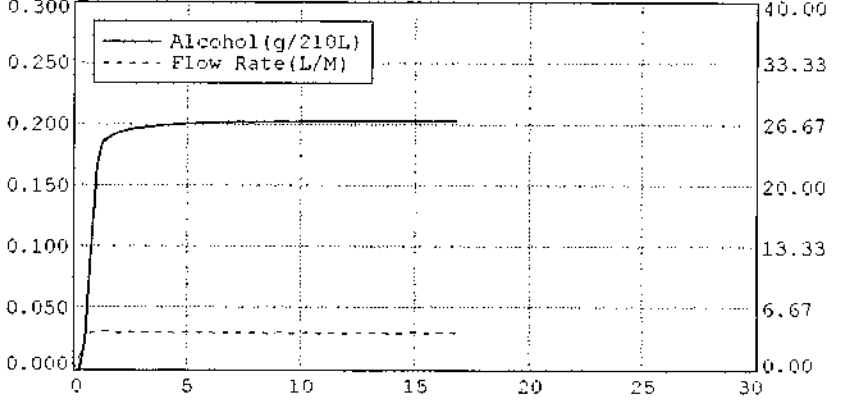
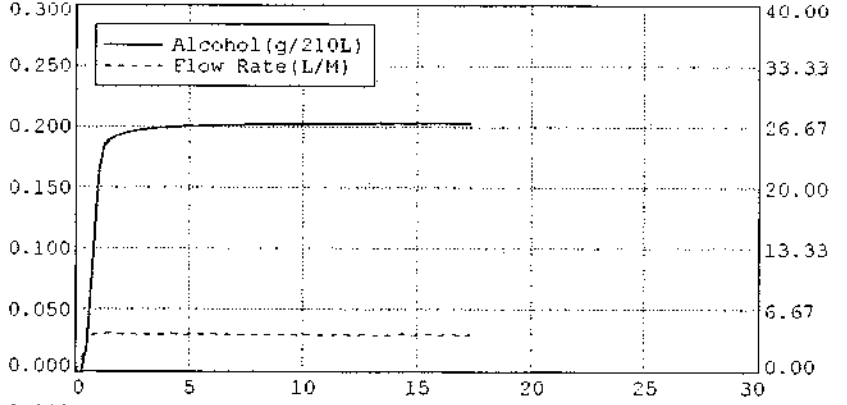
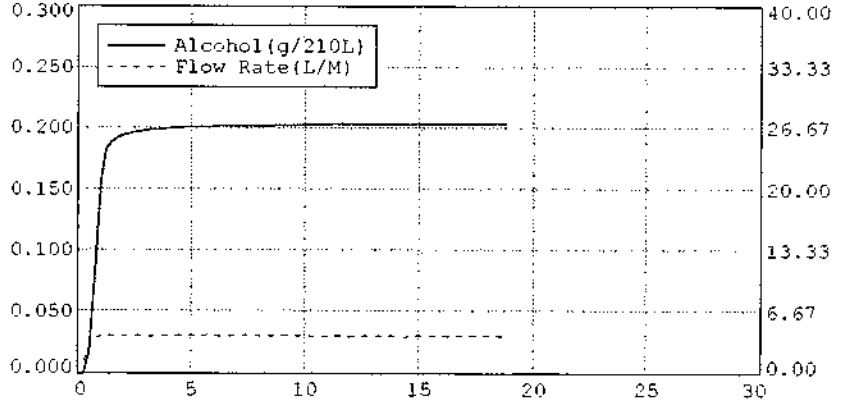
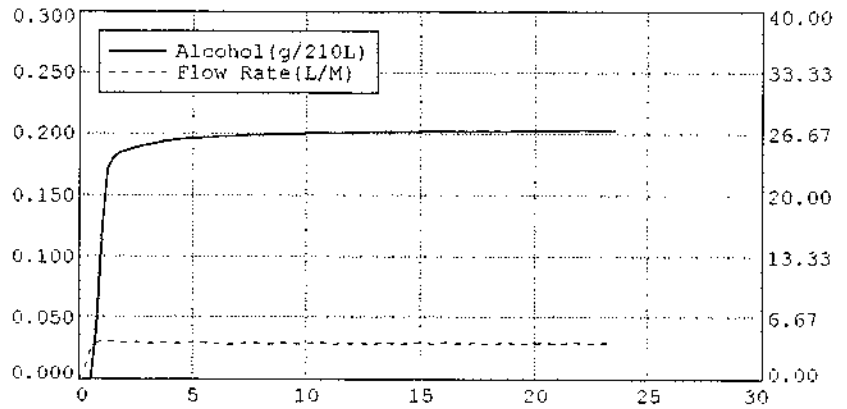
Date: 03/29/2017
 Time: 13:40:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: GUTH 16190
 EXPIRATION: 08/15/2018

BLANK TEST	0.000	13:44
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.203	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.203	13:46
BLANK TEST	0.000	13:47
EXTERNAL STANDARD	0.203	13:47
BLANK TEST	0.000	13:48
EXTERNAL STANDARD	0.203	13:49
BLANK TEST	0.000	13:49
EXTERNAL STANDARD	0.203	13:50
BLANK TEST	0.000	13:51

Average = 0.2030
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100352

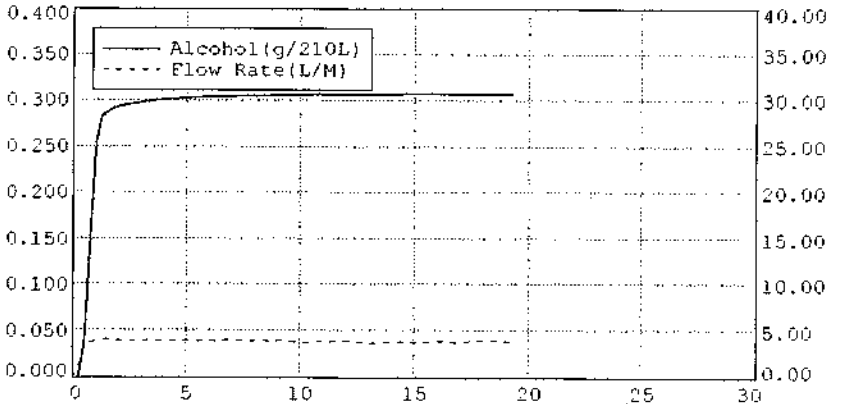
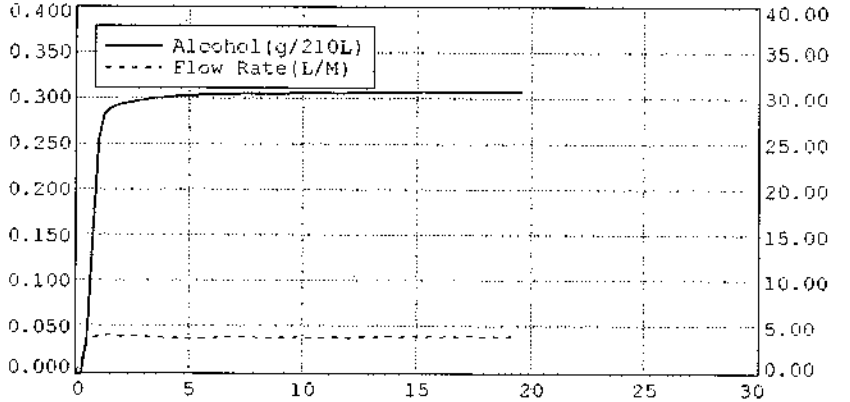
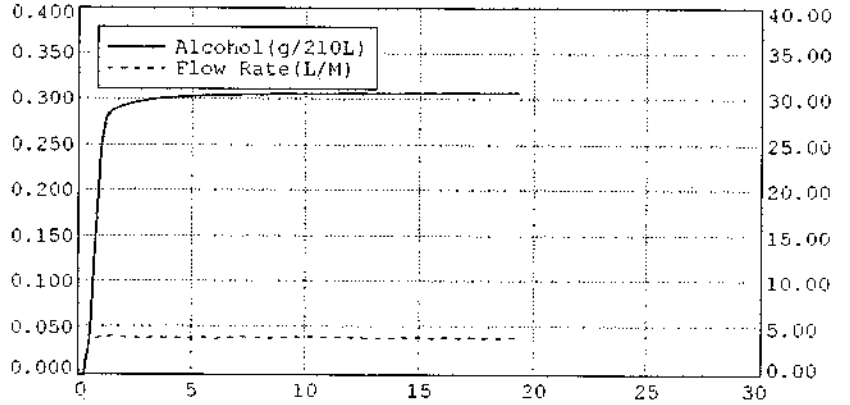
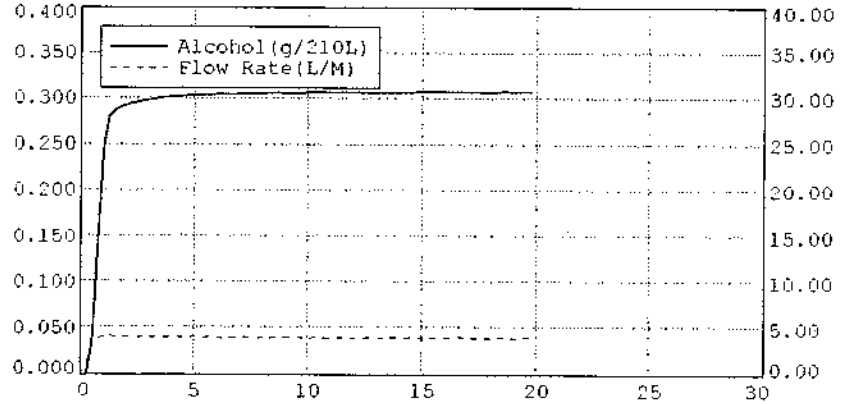
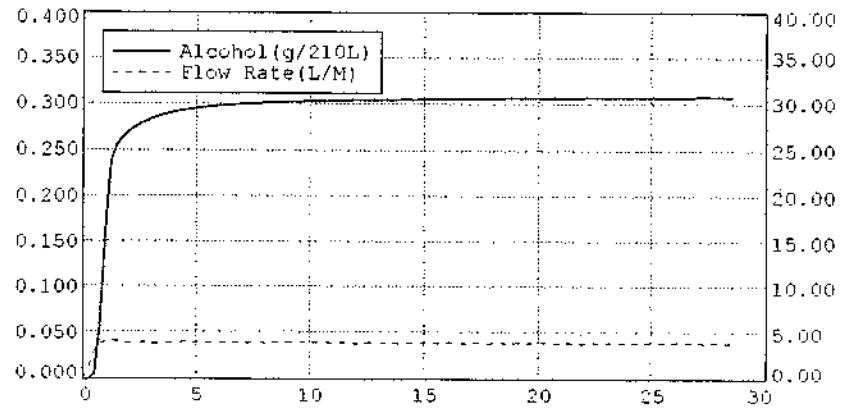
Date: 03/29/2017
 Time: 13:53:47

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:55
INTERNAL STANDARD	VERIFIED	13:55
EXTERNAL STANDARD	0.306	13:56
BLANK TEST	0.000	13:57
EXTERNAL STANDARD	0.307	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.306	13:59
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.306	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.307	14:02
BLANK TEST	0.000	14:02

Average = 0.3064
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 03/30/2017
Time: 09:15:34

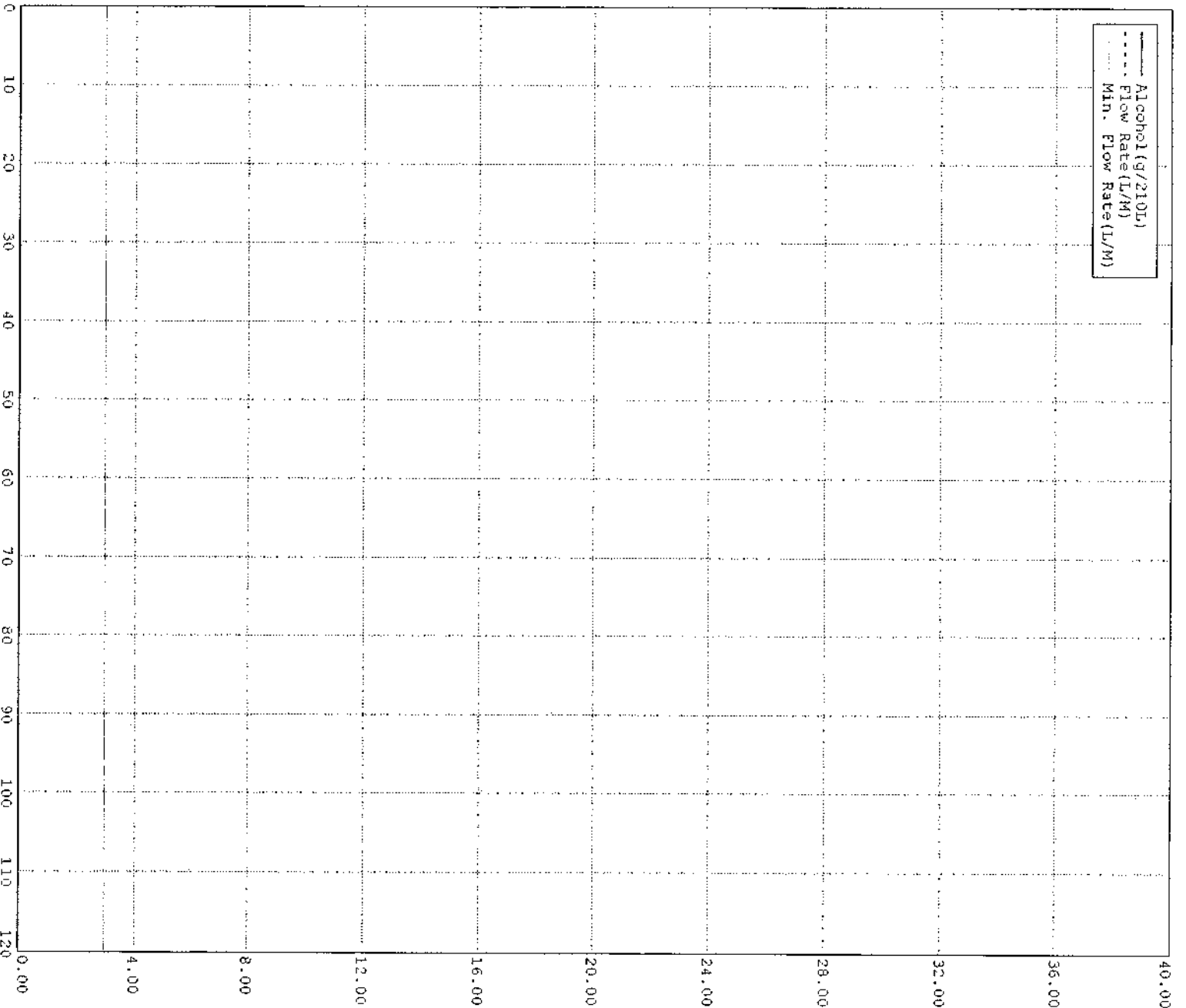
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.44: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:18
BLANK TEST	0.000	09:18
INTERNAL STANDARD	VERIFIED	09:18
EXTERNAL STANDARD	0.078	09:18
BLANK TEST	0.000	09:19
SUBJECT SAMPLE	INCOMPLETE	09:21



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 03/30/2017
Time: 09:28:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

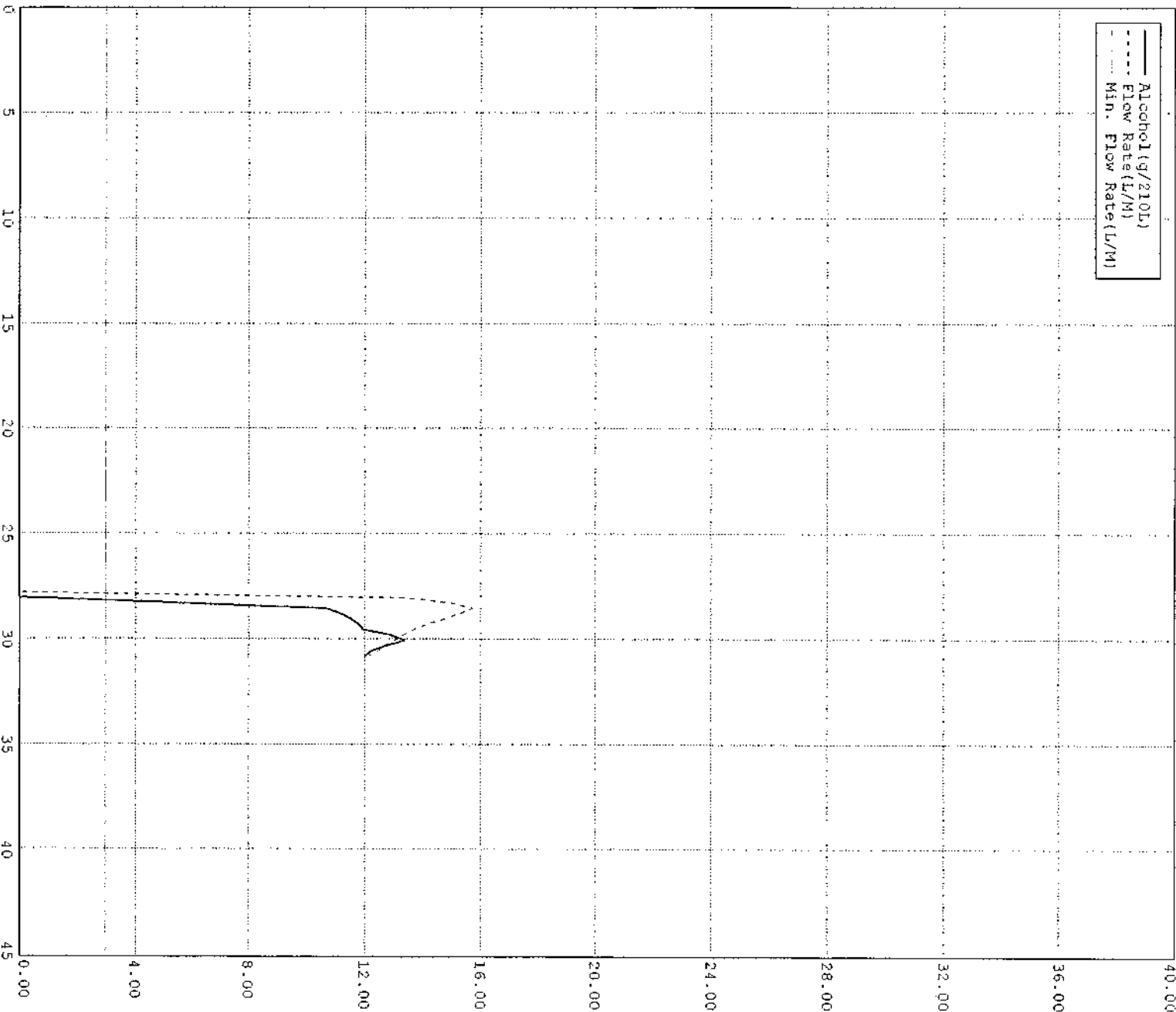
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AF 29.45: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:30
BLANK TEST	0.000	09:30
INTERNAL STANDARD	VERIFIED	09:30
EXTERNAL STANDARD	0.078	09:30
BLANK TEST	0.000	09:31
SUBJECT SAMPLE	INVALID	09:32

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 03/30/2017
Time: 09:55:48

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

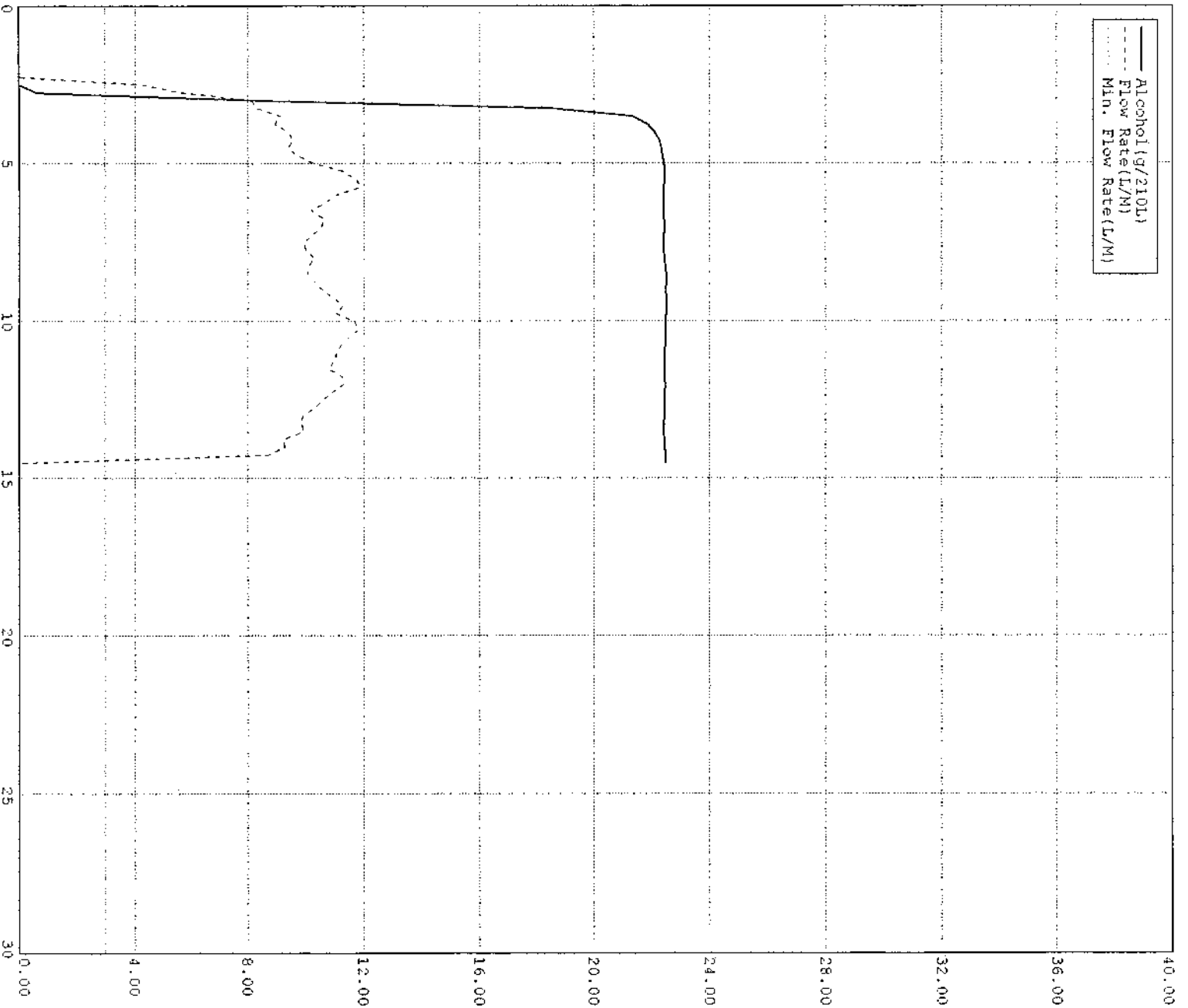
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AF 29.44: 0.079
LOF #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:56
BLANK TEST	0.000	09:56
INTERNAL STANDARD	VERIFIED	09:57
Xq = 0.095 (0.288)		
EXTERNAL STANDARD	0.078	09:57
X[1] = 0.0783 (-0.0004)	(0.0025)	
BLANK TEST	0.000	09:58
SUBJECT SAMPLE	XXX	09:58
X[1] = 0.1124 (-0.0143)	(0.0017)	

Interference Detected

Filter 2 Avg: -0.0009
Filter 3 Avg: 0.0018
BMB 3/30/17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 03/30/2017
Time: 10:01:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

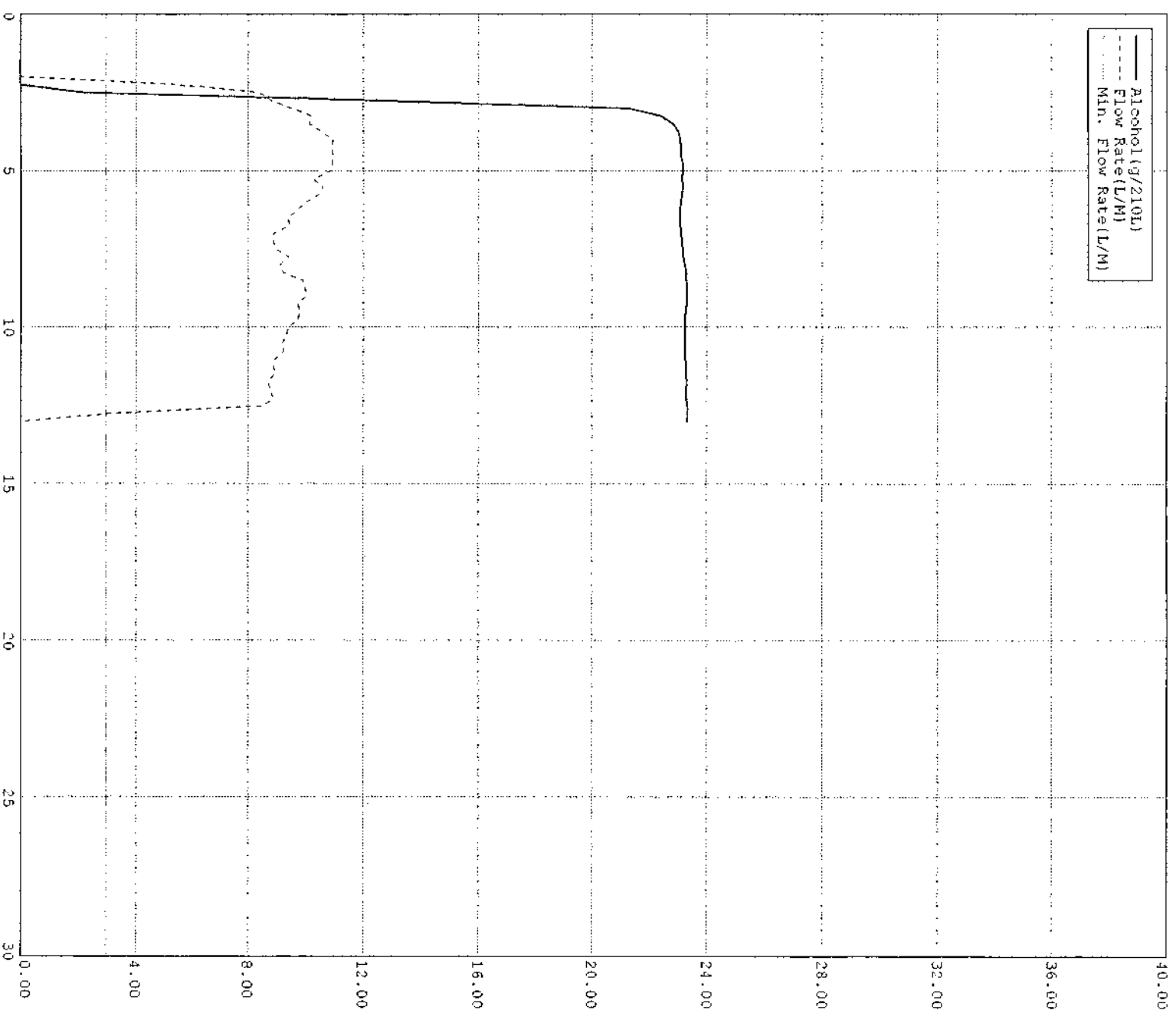
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.43: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 10:02
BLANK TEST 0.000 10:03
INTERNAL STANDARD VERIFIED 10:03
Xq = 0.095 (0.28%)
EXTERNAL STANDARD 0.078 10:03
X[1] = 0.0781 (-0.0010) (0.0020)
BLANK TEST 0.000 10:04
SUBJECT SAMPLE XXX 10:04
X[1] = 0.1169 (-0.0239) (0.0006)

Interference Detected

BBNB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 03/30/2017
Time: 10:07:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

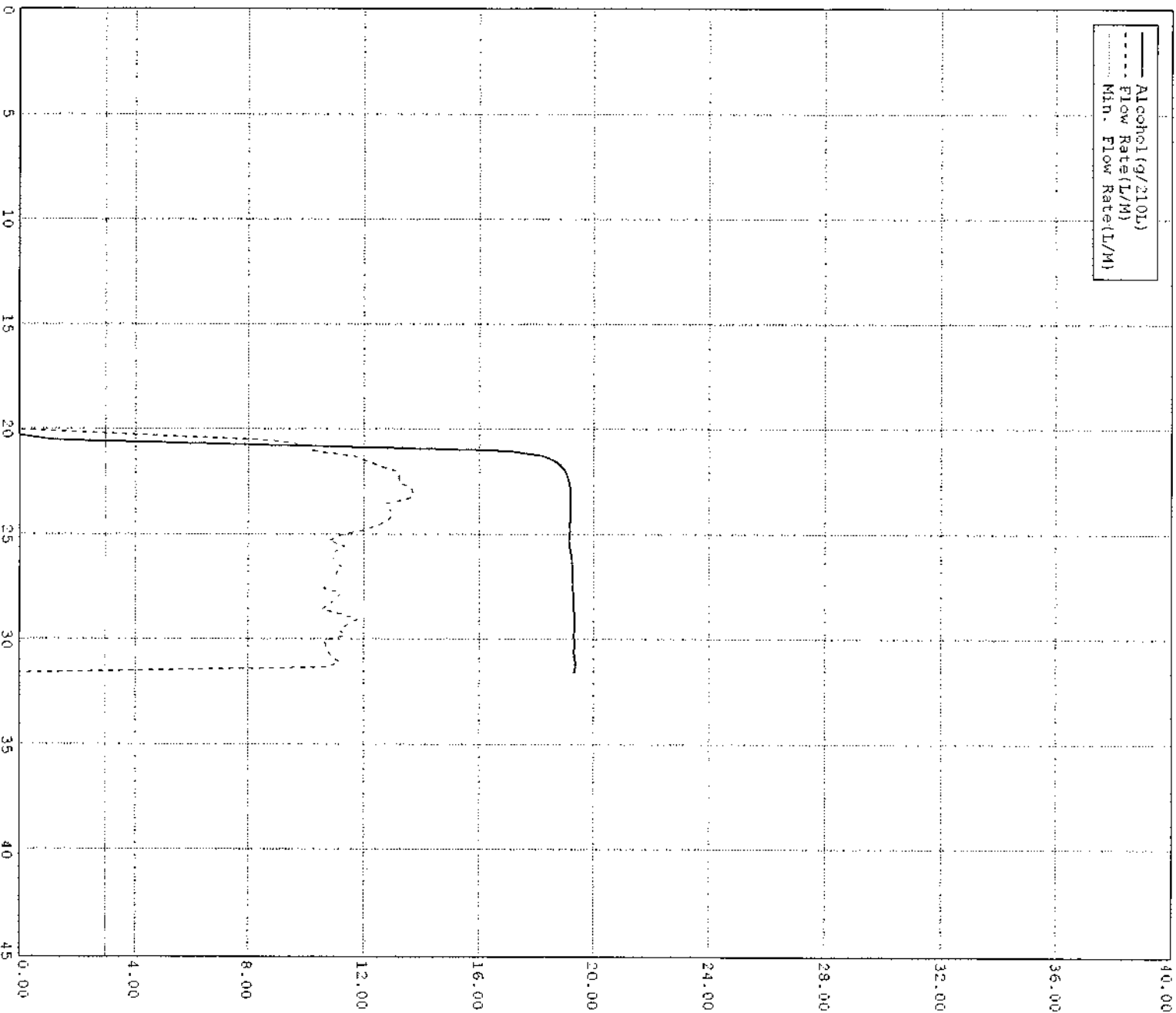
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.43: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	10:08
BLANK TEST	0.000	10:08
INTERNAL STANDARD	VERIFIED	10:08
Xq = 0.096 (0.288)	0.078	10:08
EXTERNAL STANDARD	X[1] = 0.0784 (-0.0007)	(0.0020)
BLANK TEST	0.000	10:09
SUBJECT SAMPLE (Vol=2.14L)	0.097	10:10
X[1] = 0.0970 (-0.0004)	(0.0001)	
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.078	10:11
X[1] = 0.0781 (-0.0013)	(0.0007)	
BLANK TEST	0.000	10:12

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100352

Date: 03/30/2017
Time: 09:44:42

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

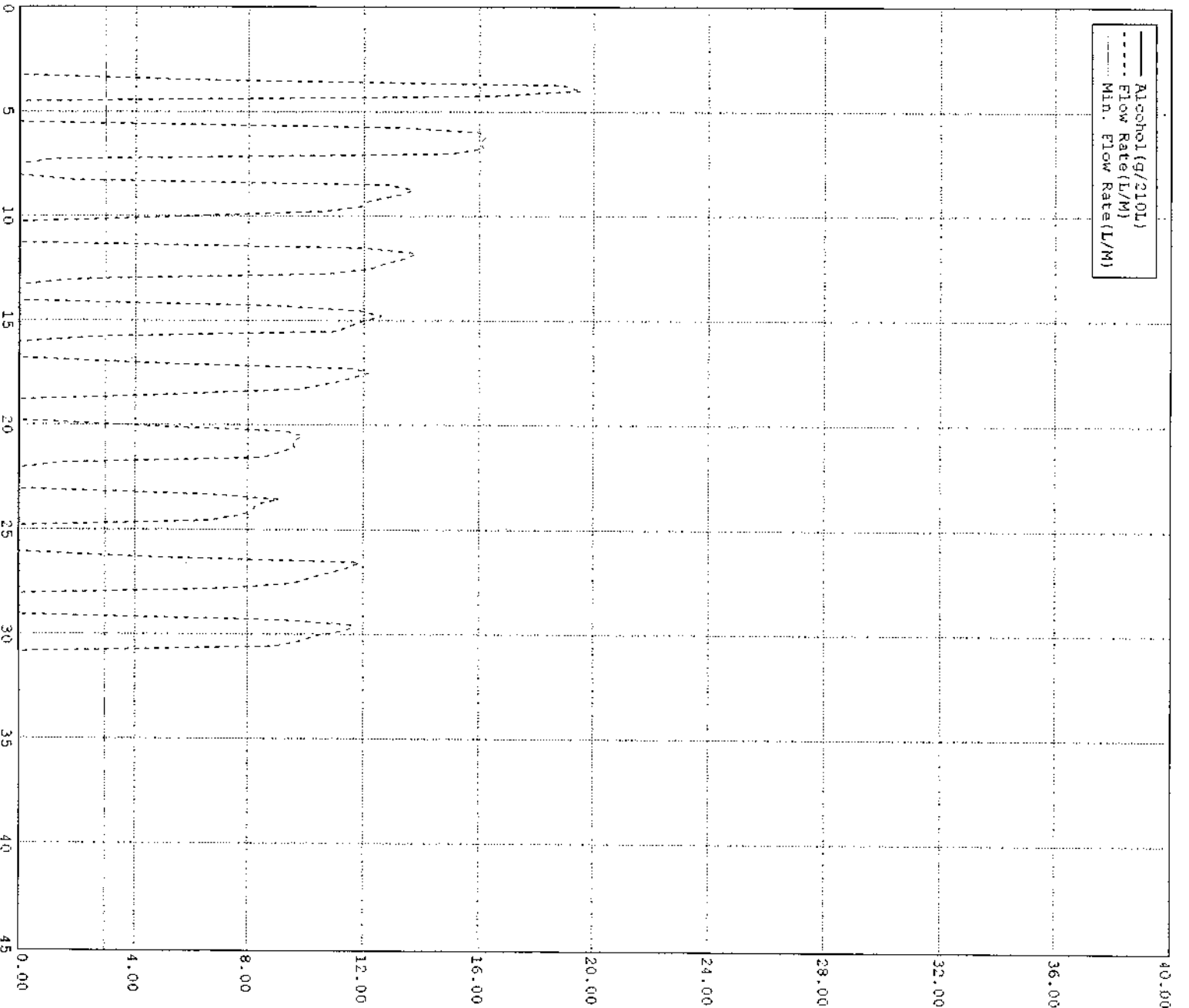
DEPT/AGENCY:
MAXIMUM ATTEMPTS EXCEEDED
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.44: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:45
BLANK TEST	0.000	09:45
INTERNAL STANDARD	VERIFIED	09:45
EXTERNAL STANDARD	0.079	09:46
BLANK TEST	0.000	09:47
SUBJECT SAMPLE	XXX	09:47

Maximum Attempts Exceeded

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100352

Date: 03/30/2017
Time: 09:34:25

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

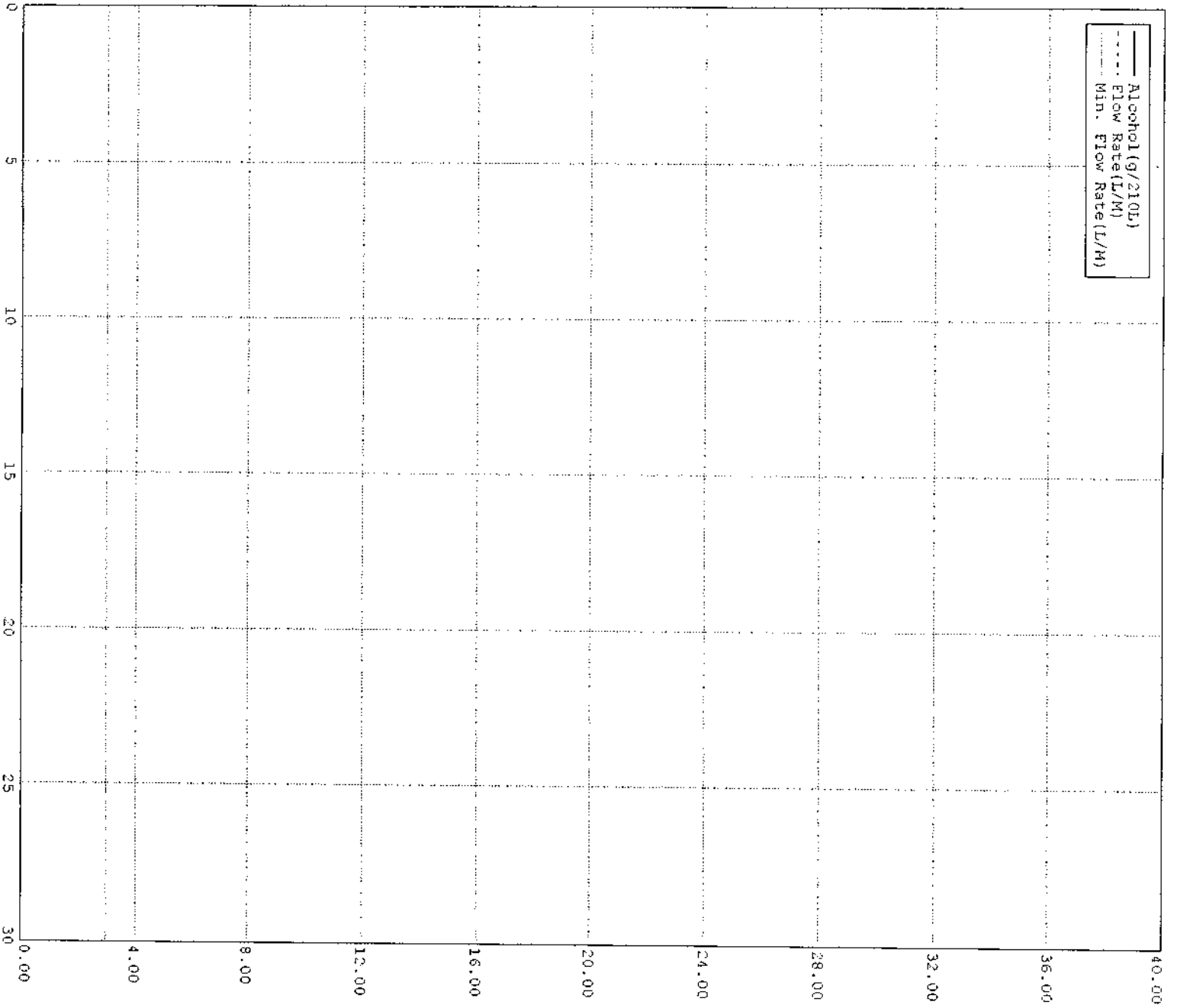
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.44: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK PASSED 09:35
BLANK TEST 0.000 09:35
INTERNAL STANDARD VERIFIED 09:35
EXTERNAL STANDARD 0.078 09:35
BLANK TEST 0.000 09:36

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100352

Date: 03/30/2017
Time: 10:31:55

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 29.42: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	10:33
BLANK TEST	0.000	10:33
INTERNAL STANDARD	VERIFIED	10:34
EXTERNAL STANDARD	0.078	10:34
BLANK TEST	0.000	10:35
SUBJECT SAMPLE (Vol=1.69L)	0.000	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.079	10:36
BLANK TEST	0.000	10:37

BBMB

