

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 100415 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 1.6 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 AG634801 Exp 12/5/18
- iv. 0.100g/210L Mnf Airgas Lot AG629304 Exp 10/19/18
- v. 0.200g/210L Mnf Guth Lot 16190 Exp 8/15/18
 - 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 DR416d 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: 100415

Date: 03/29/2017
Time: 12:11:22

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 = 44.9°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.73 V PASSED
(1.04 V - 2.42 V)
Cooler Voltage = 1.73 V PASSED
(1.03 V - 2.39 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 537 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 4.714 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
(0.002 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.096 0.72% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100415

Date: 03/29/2017

Time: 12:26 PM

Temperatures (°C)

Sample Cell: 49.2°C

Breath Tube: 44.9°C

Current Barometer 29.4 in

Volume (Ltr) 1.45

Settings

Lamp: 1.76 V

Bias: 79 V

Cooler: 1.73 V

Chopper: 537 Hz

Voltages (V)

Flow: 1.06 V

Detector: -0.055 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100415

Date: 06/02/2011
Time: 07:25:35

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: REPC0100
BOTTLE #: 10003
EXPIRATION: 09/08/2012

Ca	=	0.1000			
CAL	=	1.001237	0.800	<=	CAL < 1.200
b1	=	0.0006	0.0000	<=	b1 < 0.0040
b2	=	0.0044	0.0010	<=	b2 < 0.0100
b3	=	0.0000	0.0000	<=	b3 < 0.0040
Xq	=	0.0970	0.0500	<=	Xq < 0.2000
a21	=	1.190898	1.050	<=	a21 < 1.300
a31	=	0.428205	0.300	<=	a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100415

Date: 03/29/2017
Time: 12:32:09

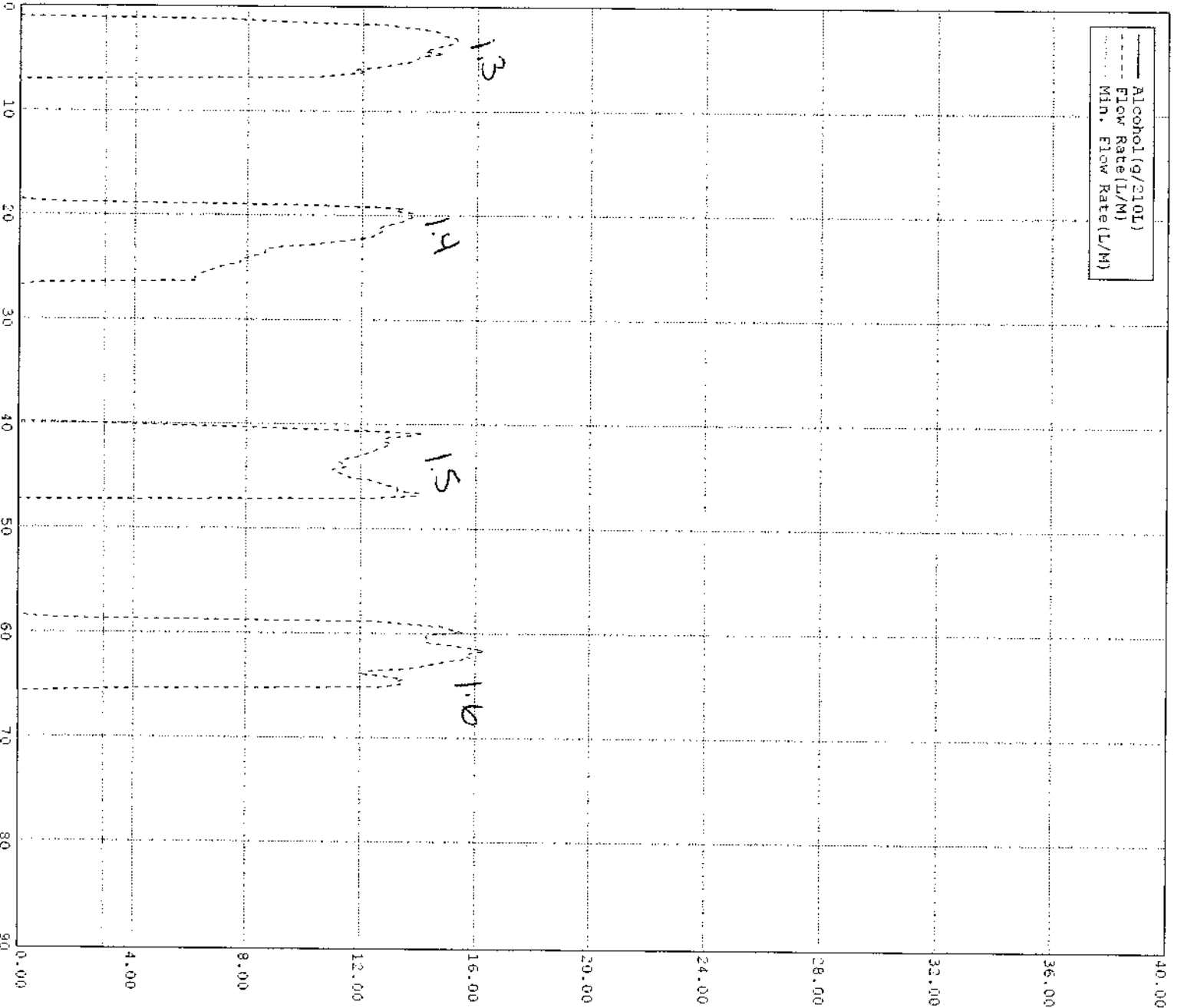
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	12:33
BLANK TEST	0.000	12:33
INTERNAL STANDARD	VERIFIED	12:33
EXTERNAL STANDARD	0.080	12:33
BLANK TEST	0.000	12:34
SUBJECT SAMPLE (Vol=1.56L)	0.000	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.080	12:36
BLANK TEST	0.000	12:37

Handwritten signature: BMB



LINEARITY CHECK

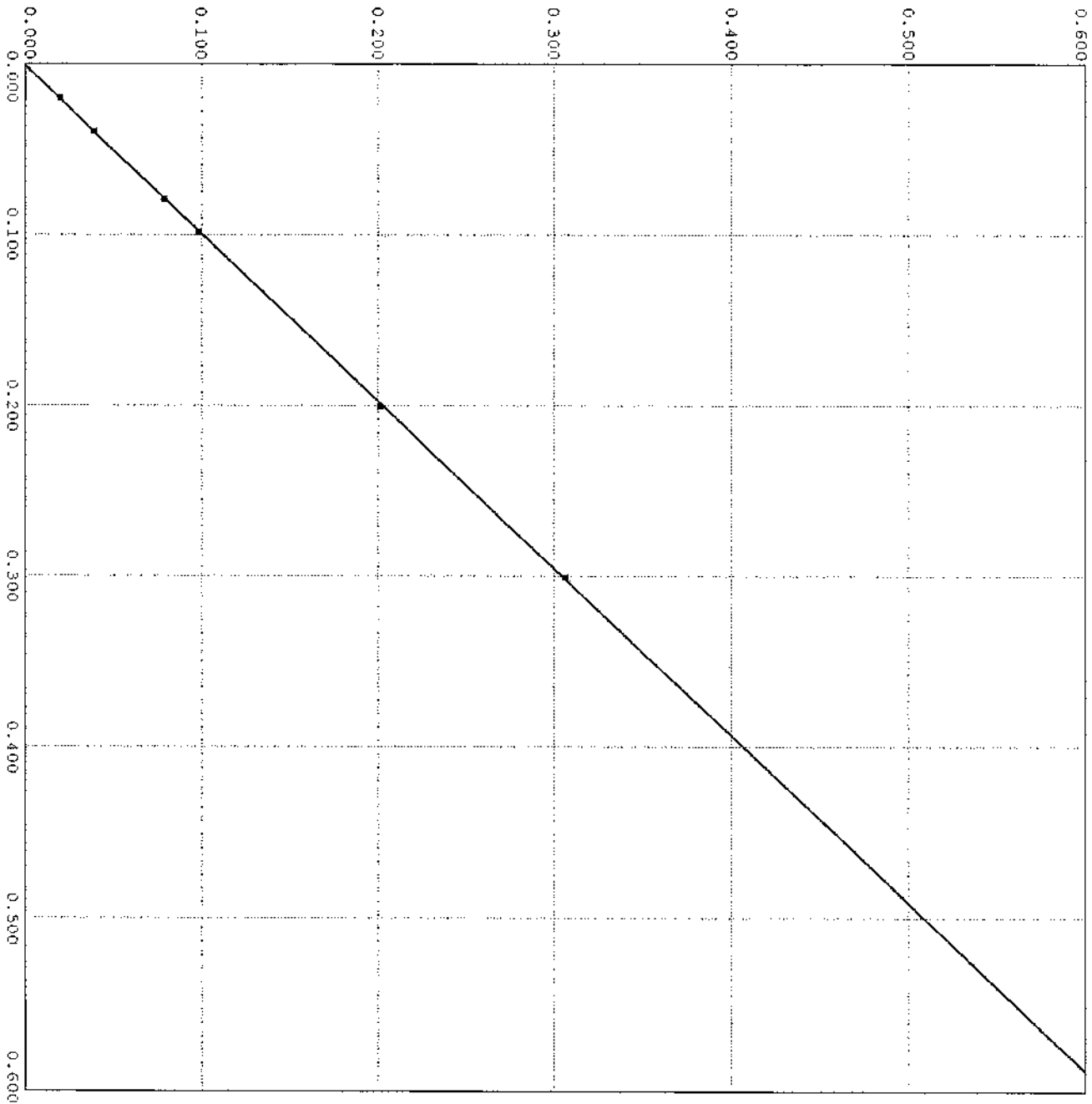
Alaska Department of Public Safety
DATAMASTER dmt: 100415

Date: 03/29/2017
Time: 13:09:53

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.039	0.0400	0.0000
0.079	0.0796	0.0005
0.098	0.0990	0.0000
0.200	0.2020	0.0007
0.300	0.3072	0.0004

SLOPE = 1.021490
R² = 0.999894



BBMB

LINEARITY CHECK: Control Test 1

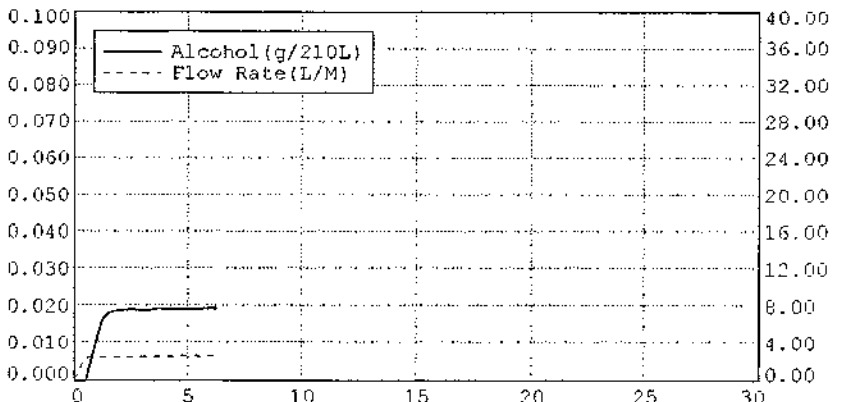
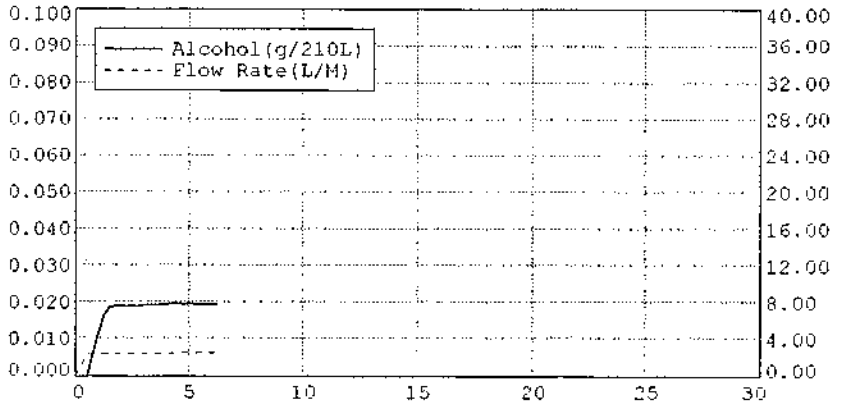
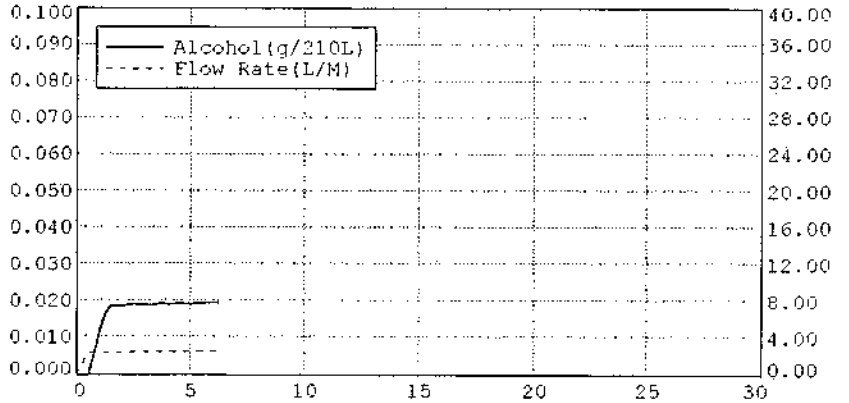
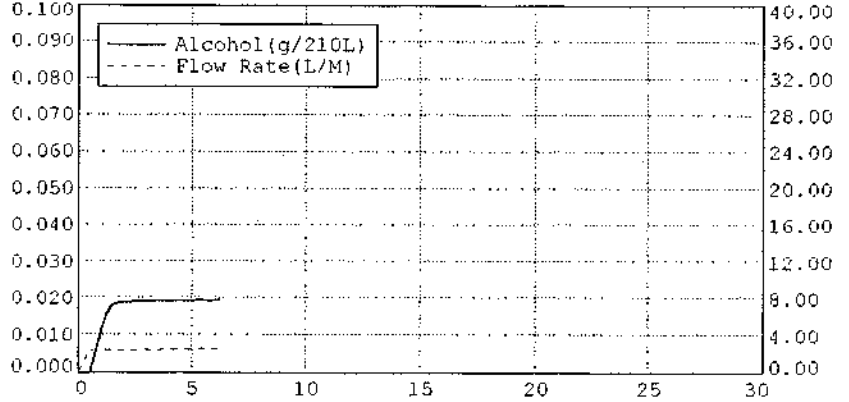
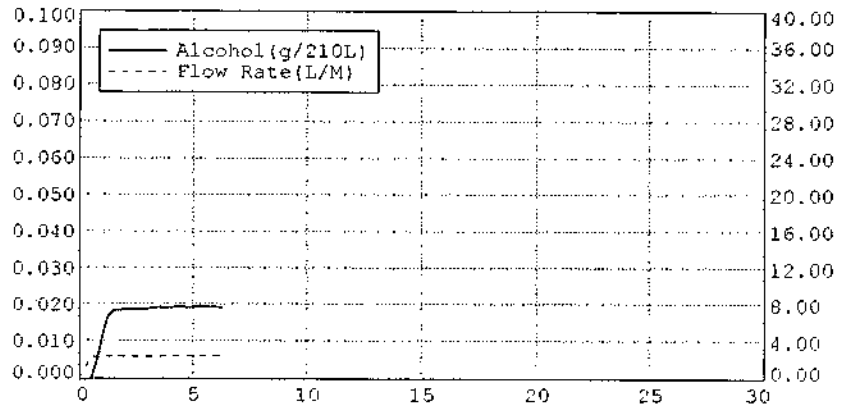
Alaska Department of Public Safety
 DATAMASTER dmt: 100415

Date: 03/29/2017
 Time: 13:09:55

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.020
 TARGET AT 29.36: 0.020
 LOT #: AG616504
 EXPIRATION: 06/13/2018
 TANK PRESSURE: 992 psi

BLANK TEST	0.000	13:11
INTERNAL STANDARD	VERIFIED	13:11
EXTERNAL STANDARD	0.020	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.020	13:13
BLANK TEST	0.000	13:14
EXTERNAL STANDARD	0.021	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.021	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.021	13:16
BLANK TEST	0.000	13:17

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100415

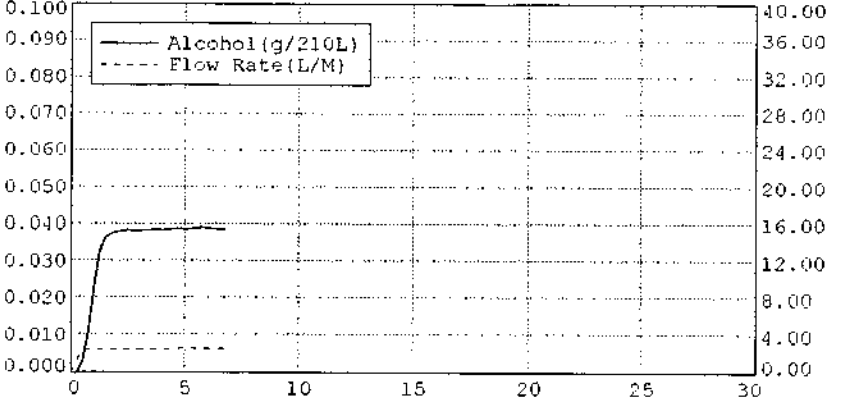
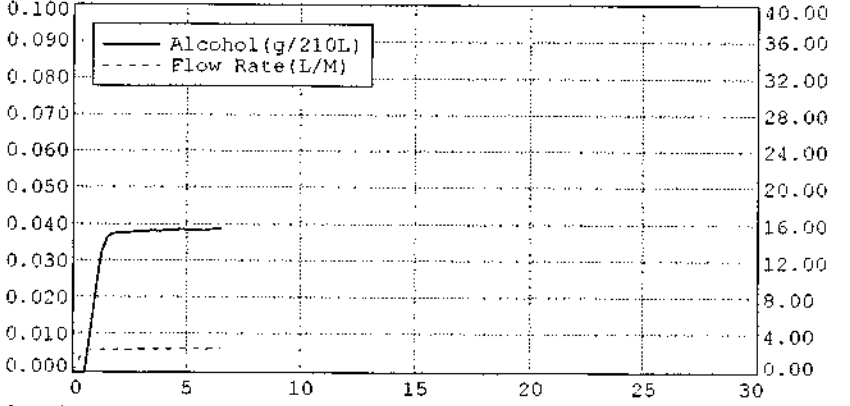
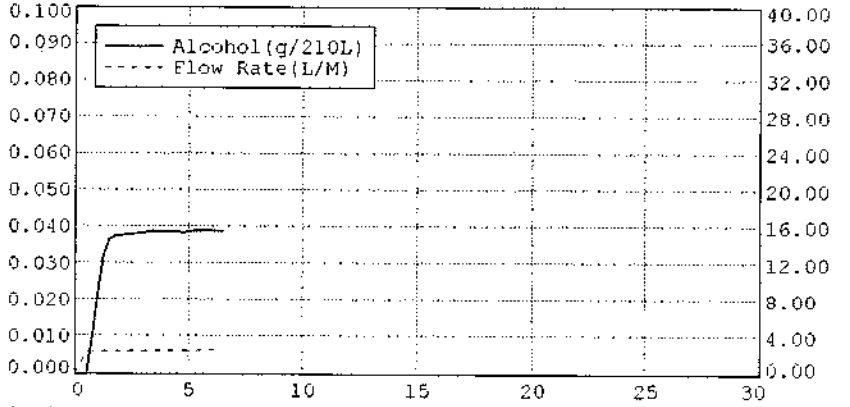
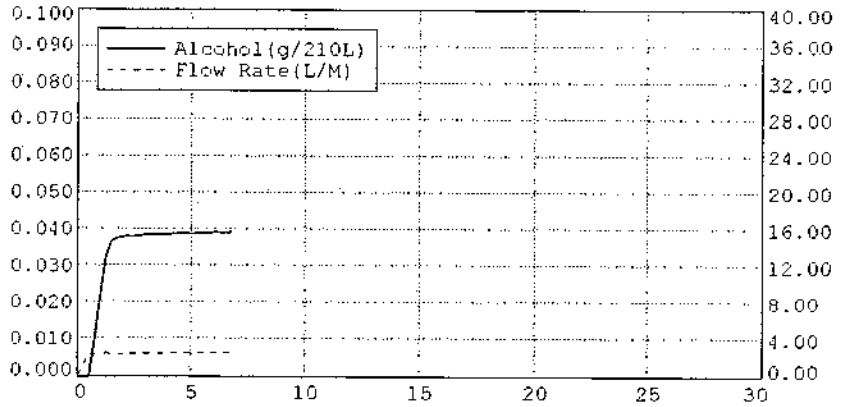
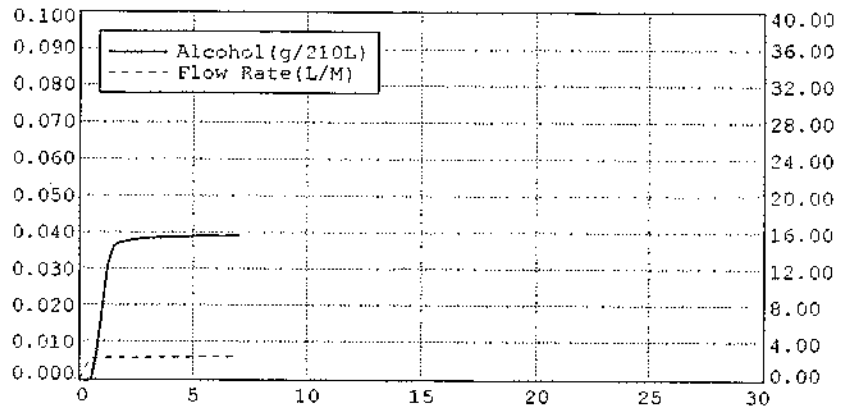
Date: 03/29/2017
 Time: 13:23:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.36: 0.039
 LOT #: AG630101
 EXPIRATION: 10/27/2018
 TANK PRESSURE: 994 psi

BLANK TEST	0.000	13:24
INTERNAL STANDARD	VERIFIED	13:24
EXTERNAL STANDARD	0.040	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.040	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.040	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.040	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.040	13:29
BLANK TEST	0.000	13:30

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100415

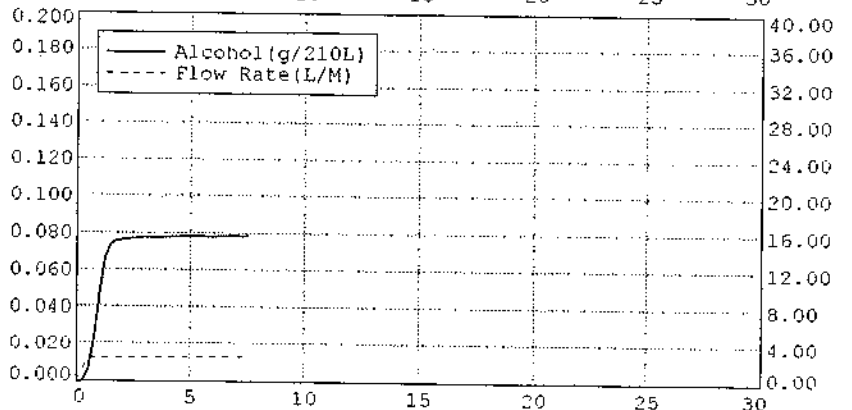
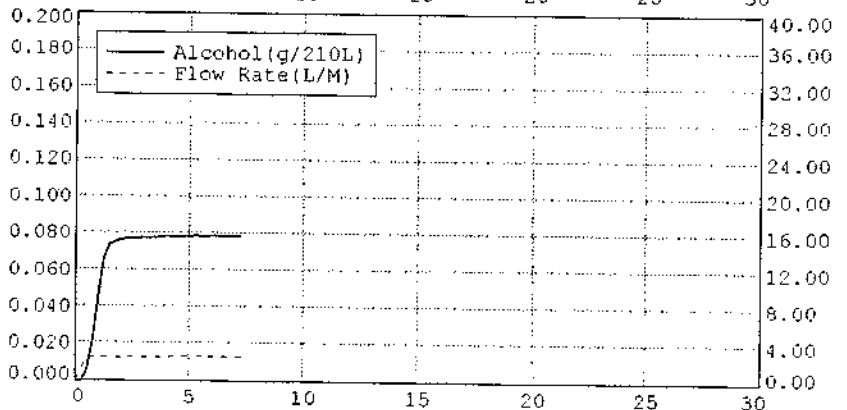
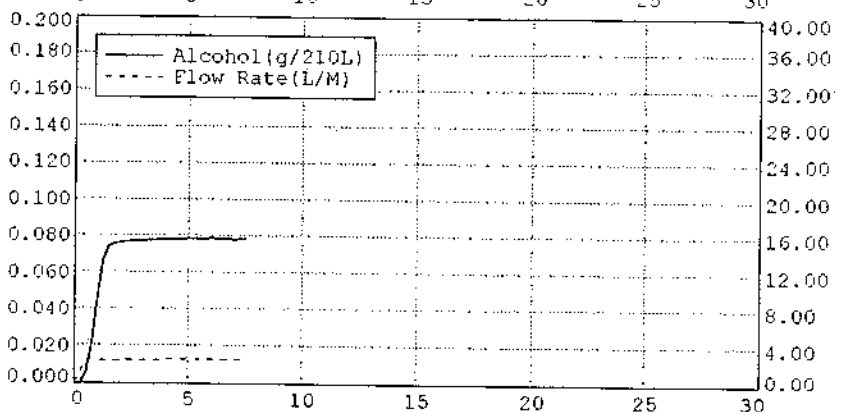
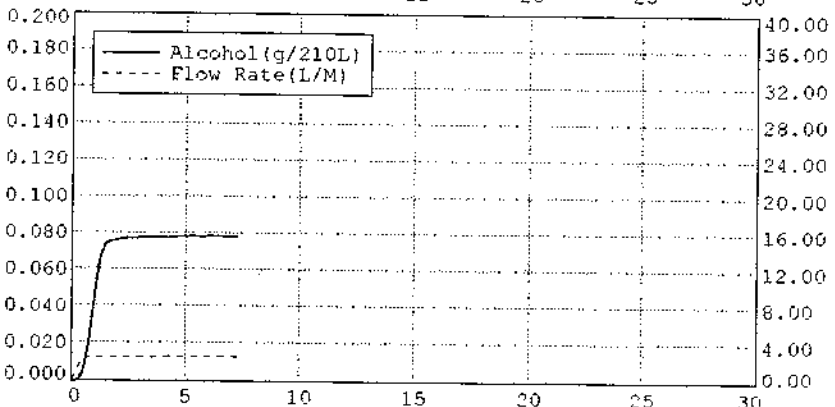
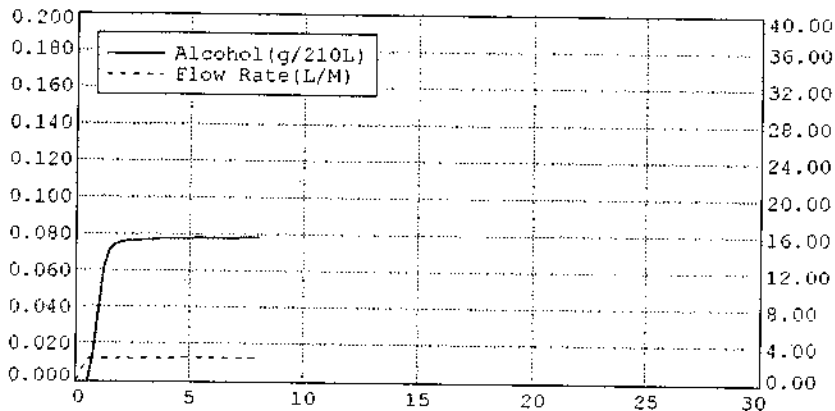
Date: 03/29/2017
 Time: 13:36:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.36: 0.079
 LOT #: AG634001
 EXPIRATION: 12/05/2018
 TANK PRESSURE: 1053 psi

BLANK TEST	0.000	13:37
INTERNAL STANDARD	VERIFIED	13:37
EXTERNAL STANDARD	0.079	13:38
BLANK TEST	0.000	13:39
EXTERNAL STANDARD	0.080	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.080	13:40
BLANK TEST	0.000	13:41
EXTERNAL STANDARD	0.079	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.080	13:42
BLANK TEST	0.000	13:43

Average = 0.0796
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100415

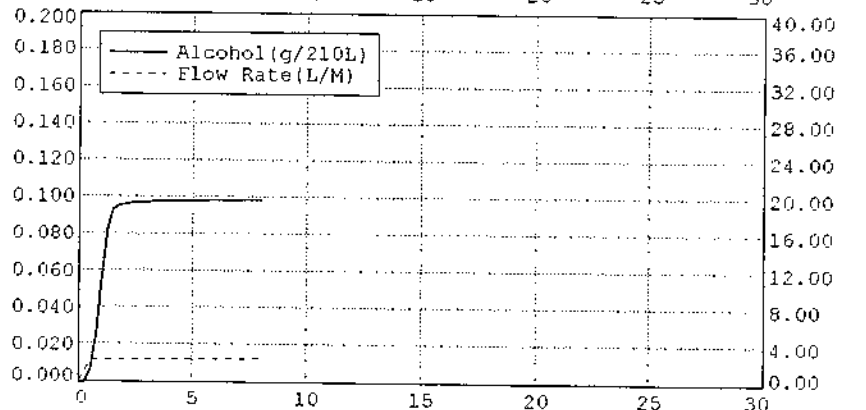
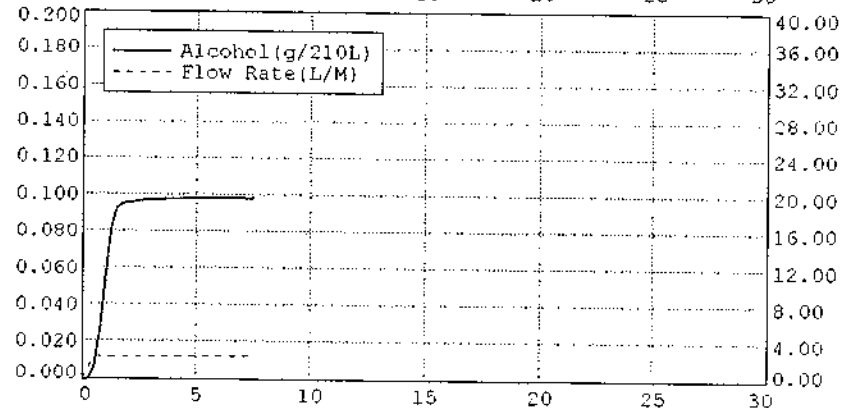
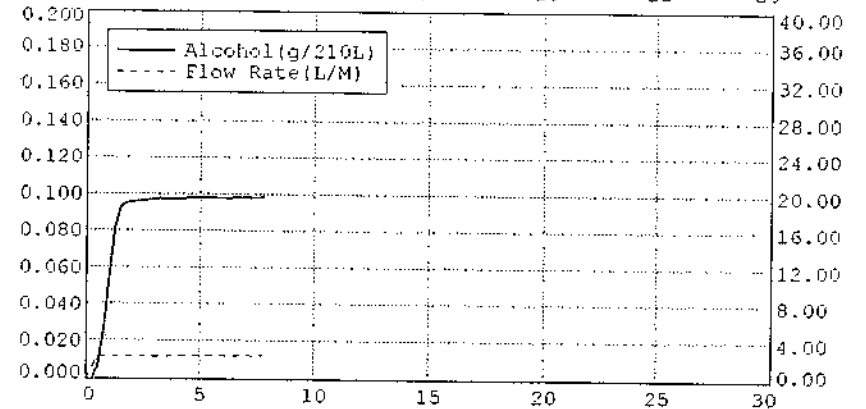
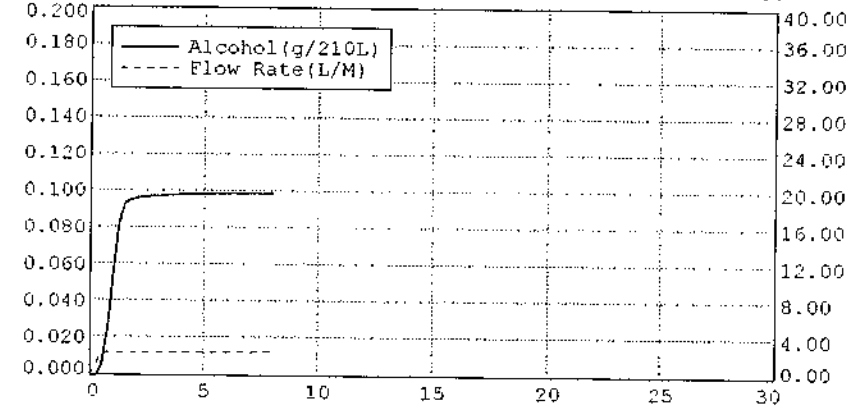
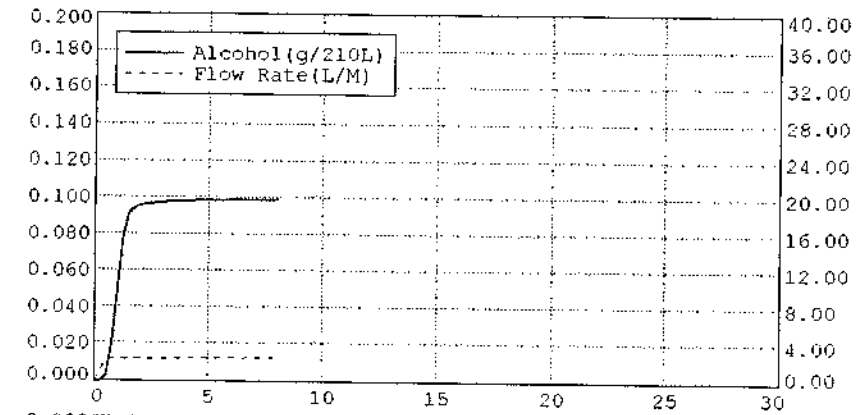
Date: 03/29/2017
 Time: 13:48:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.36: 0.098
 LOT #: AG629304
 EXPIRATION: 10/19/2018
 TANK PRESSURE: 941 psi

BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.099	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.099	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.099	13:52
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.099	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.099	13:54
BLANK TEST	0.000	13:55

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100415

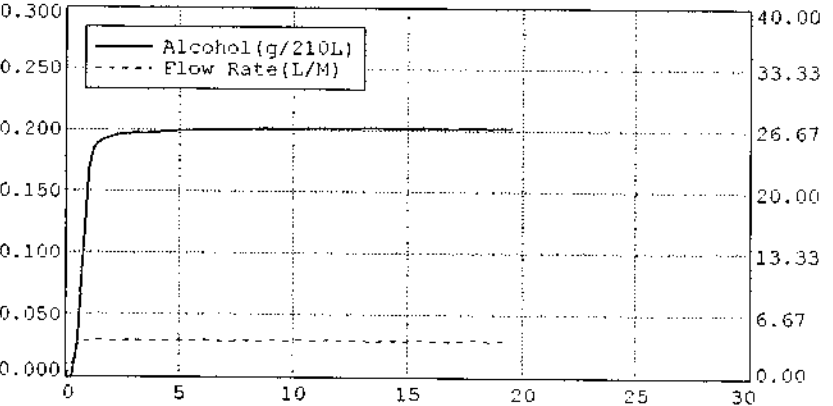
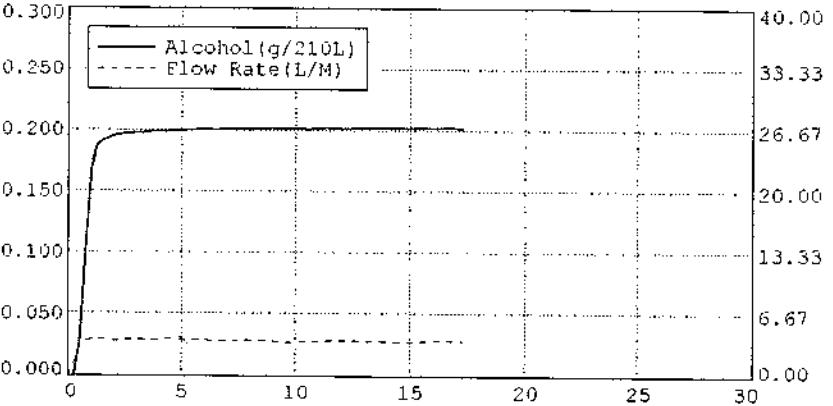
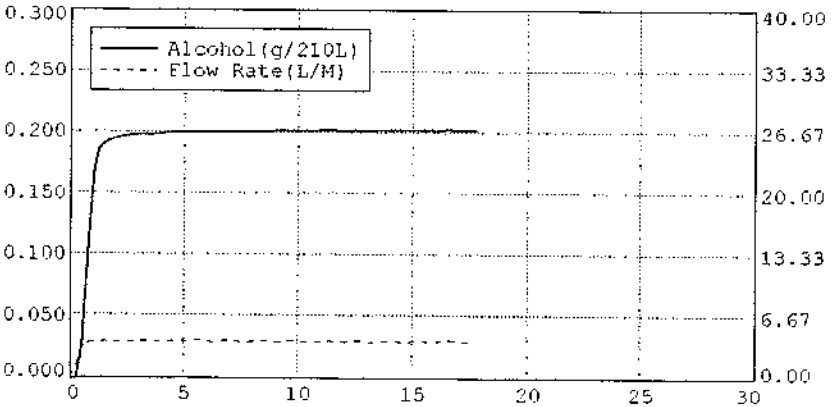
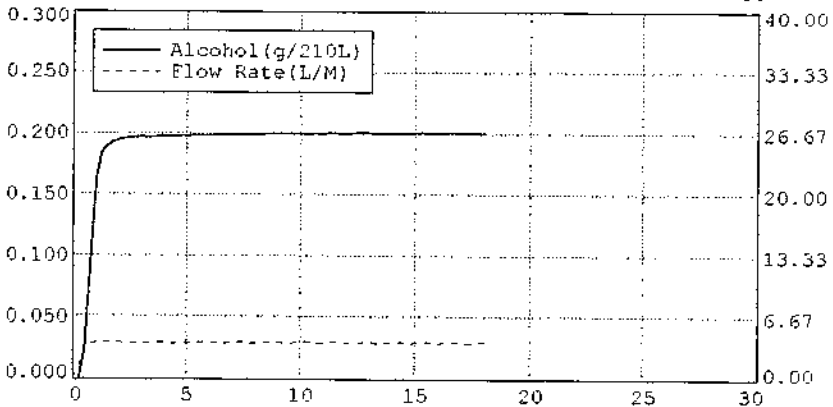
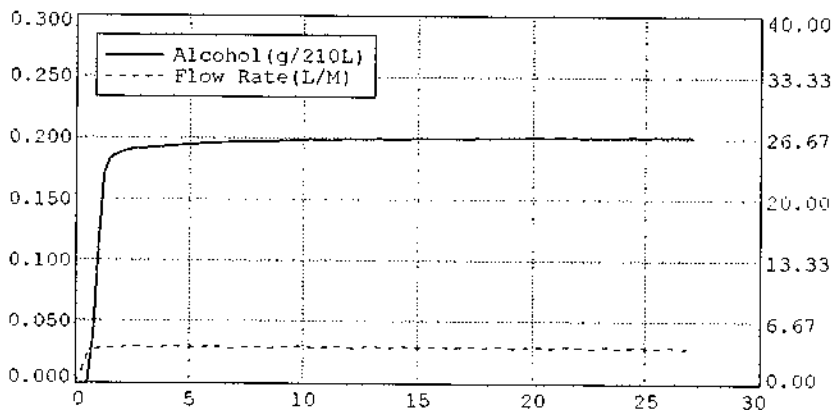
Date: 03/29/2017
 Time: 13:58:28

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:59
INTERNAL STANDARD	VERIFIED	13:59
EXTERNAL STANDARD	0.202	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.201	14:01
BLANK TEST	0.000	14:02
EXTERNAL STANDARD	0.202	14:03
BLANK TEST	0.000	14:03
EXTERNAL STANDARD	0.203	14:04
BLANK TEST	0.000	14:05
EXTERNAL STANDARD	0.202	14:05
BLANK TEST	0.000	14:06

Average = 0.2020
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dat: 100415

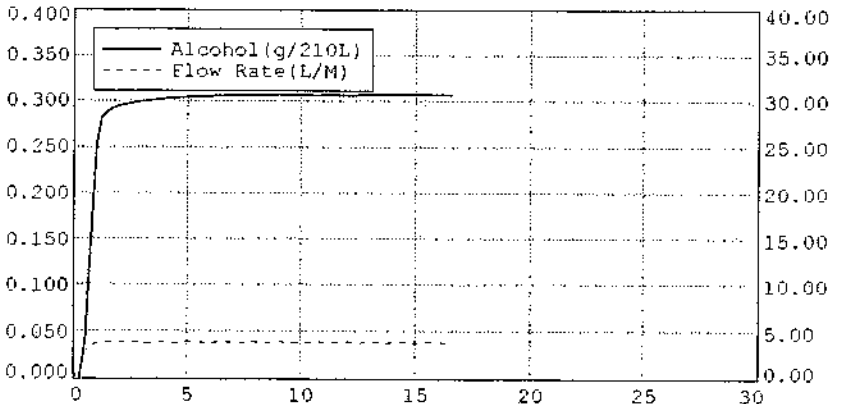
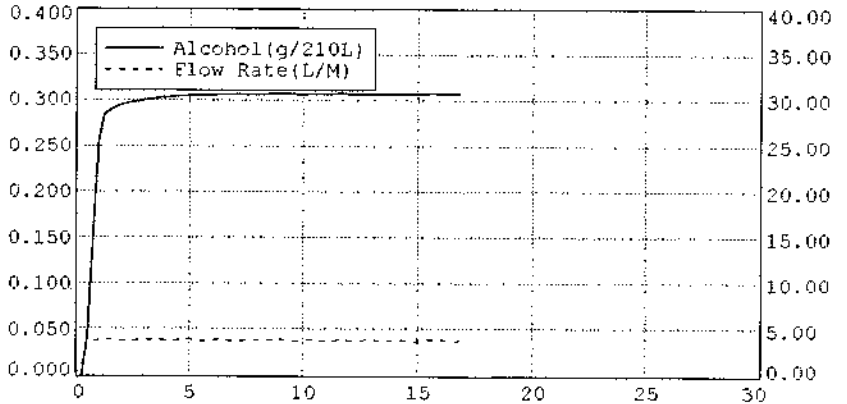
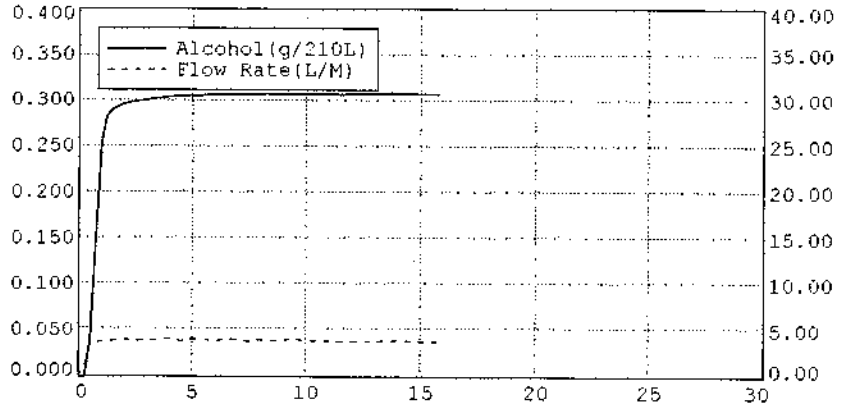
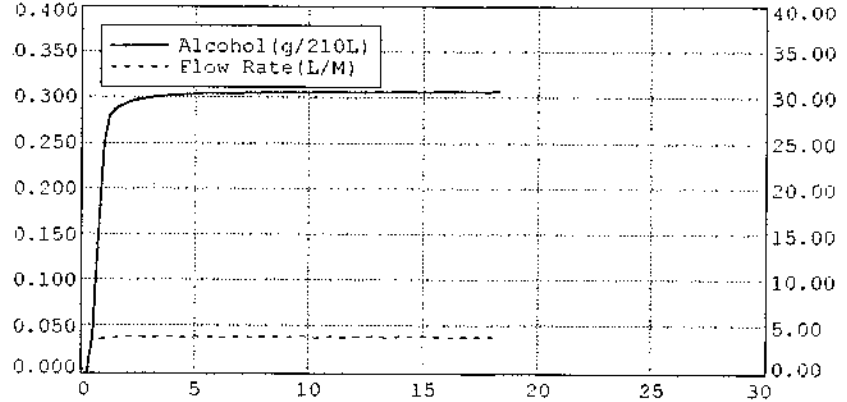
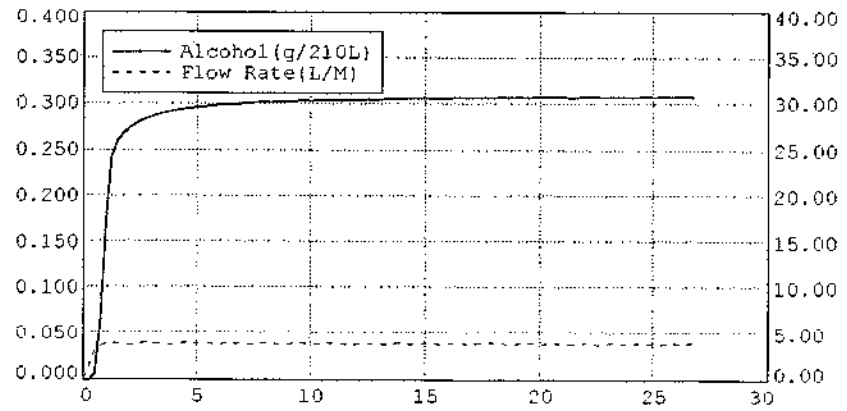
Date: 03/29/2017
 Time: 14:08:38

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:09
INTERNAL STANDARD	VERIFIED	14:09
EXTERNAL STANDARD	0.307	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.307	14:11
BLANK TEST	0.000	14:12
EXTERNAL STANDARD	0.307	14:13
BLANK TEST	0.000	14:14
EXTERNAL STANDARD	0.308	14:14
BLANK TEST	0.000	14:15
EXTERNAL STANDARD	0.307	14:15
BLANK TEST	0.000	14:16

Average = 0.3072
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100415

Date: 03/30/2017
Time: 09:16:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

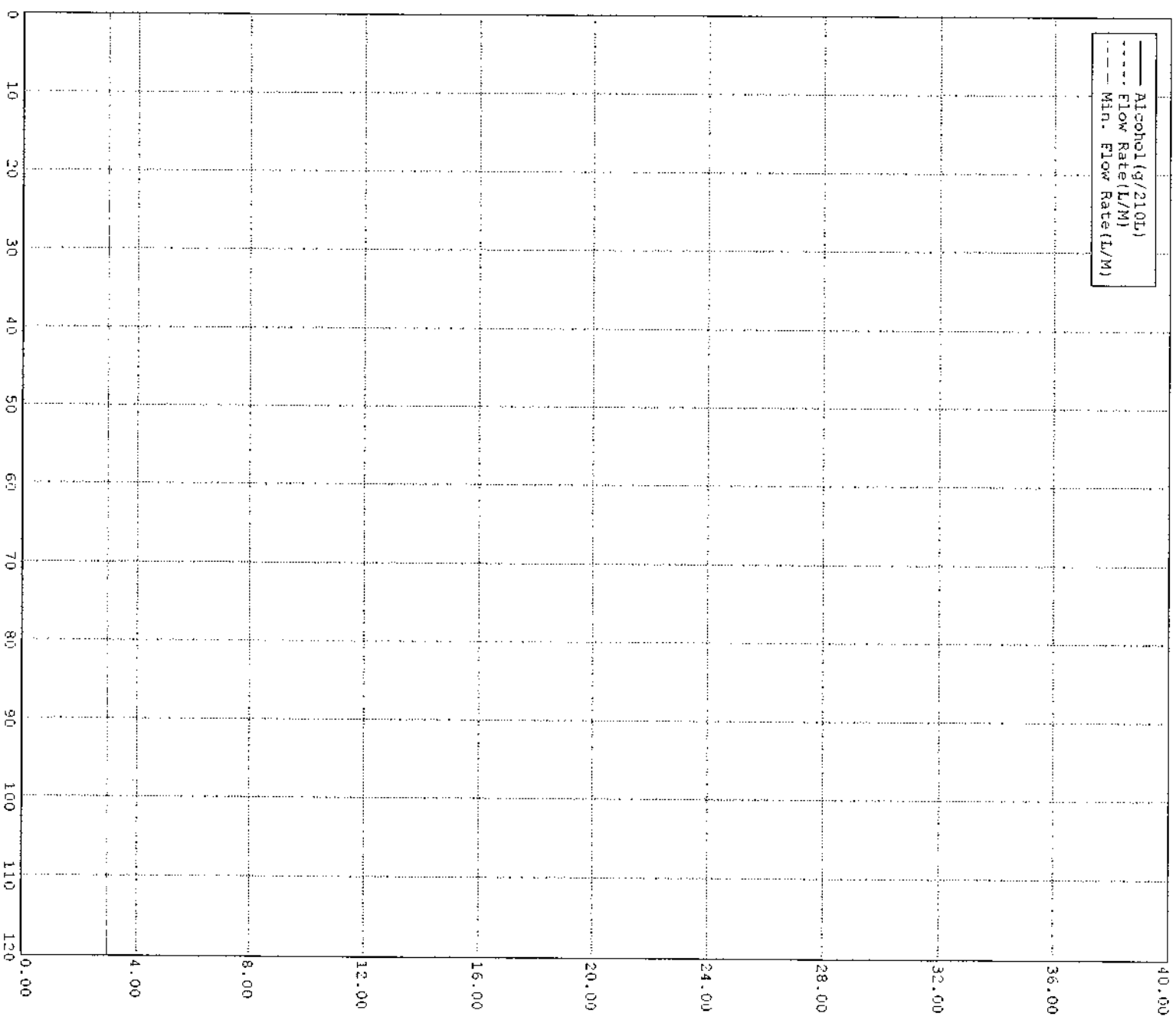
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	09:17
BLANK TEST	0.000	09:17
INTERNAL STANDARD	VERIFIED	09:17
EXTERNAL STANDARD	0.080	09:18
BLANK TEST	0.000	09:19
SUBJECT SAMPLE	INCOMPLETE	09:21

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100415

Date: 03/30/2017
Time: 09:22:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

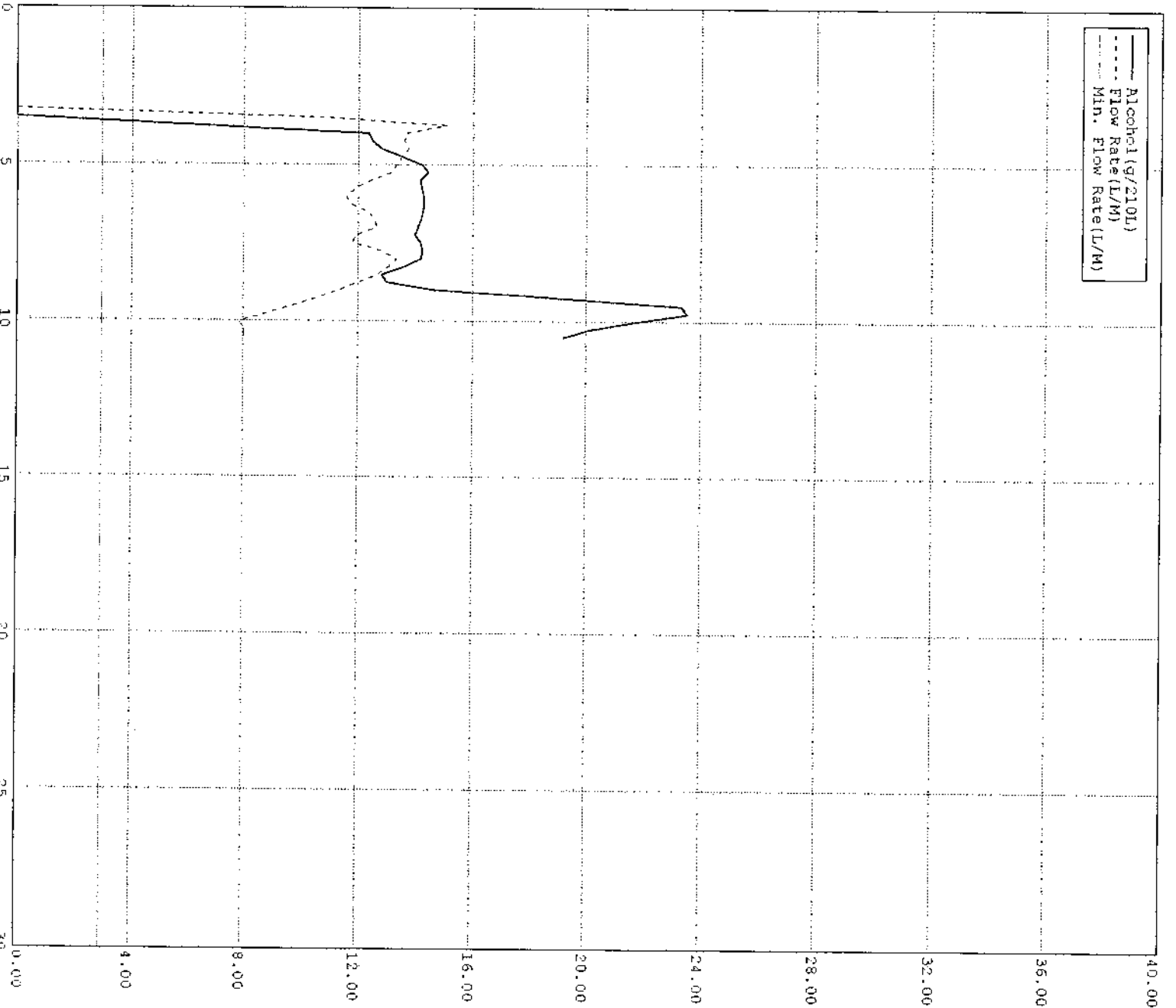
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	09:23
BLANK TEST	0.000	09:24
INTERNAL STANDARD	VERIFIED	09:24
EXTERNAL STANDARD	0.080	09:24
BLANK TEST	0.000	09:25
SUBJECT SAMPLE	INVALID	09:26

BBB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100415

Date: 03/30/2017
Time: 09:47:14

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

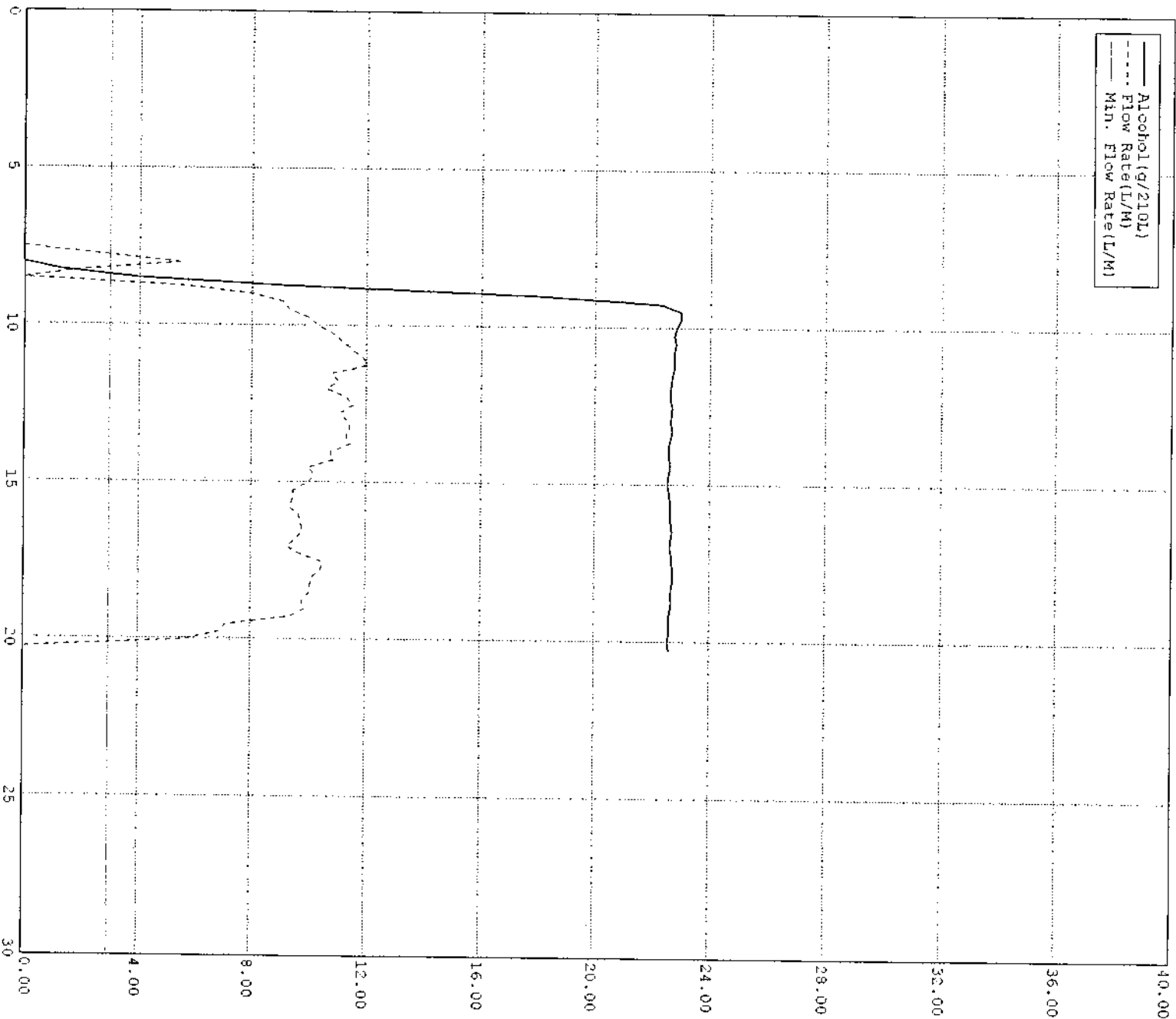
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.44: 0.079
LOT #: AG634001
EXPIRATION: 12/05/2018

DIAGNOSTIC CHECK	PASSED	09:48
BLANK TEST	0.000	09:48
INTERNAL STANDARD	VERIFIED	09:48
Xq = 0.097 (0.18%)		
EXTERNAL STANDARD	0.080	09:48
X[1] = 0.0796 (-0.0002) (0.0034)		
BLANK TEST	0.000	09:49
SUBJECT SAMPLE	XXX	09:50
X[1] = 0.1136 (-0.0156) (0.0023)		

Interference Detected

Filter 2 Avg: -0.0004
Filter 3 Avg: 0.0027
BWB 3/30/17

BWB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100415

Date: 03/30/2017
Time: 09:54:01

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

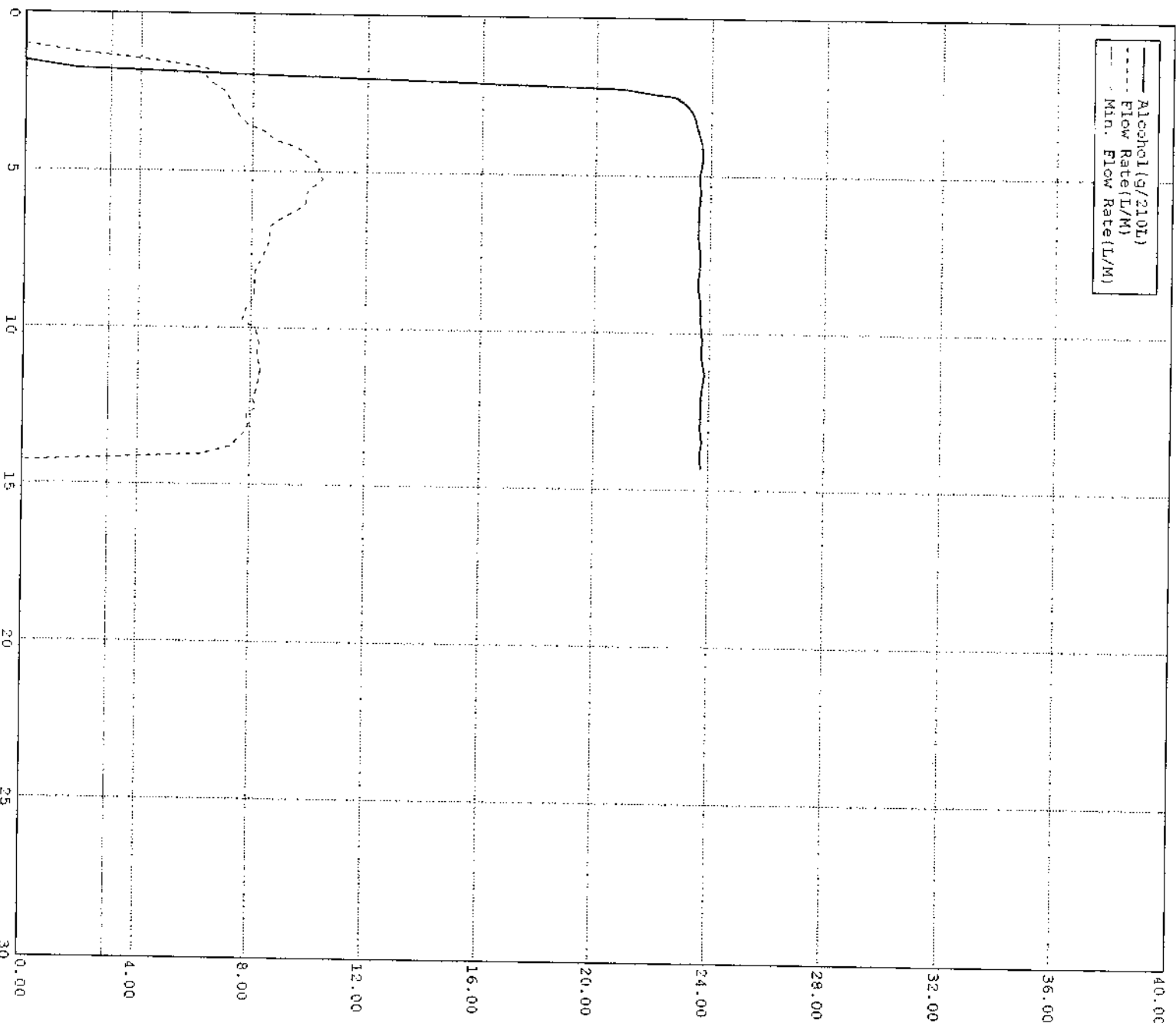
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	09:55
BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:55
Xq = 0.097 (0.09%)		
EXTERNAL STANDARD	0.080	09:55
X[1] = 0.0798 (-0.0011)	(0.0029)	
BLANK TEST	0.000	09:56
SUBJECT SAMPLE	XXX	09:56
X[1] = 0.1193 (-0.0294)	(0.0017)	

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100415

Date: 03/30/2017
Time: 09:59:36

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

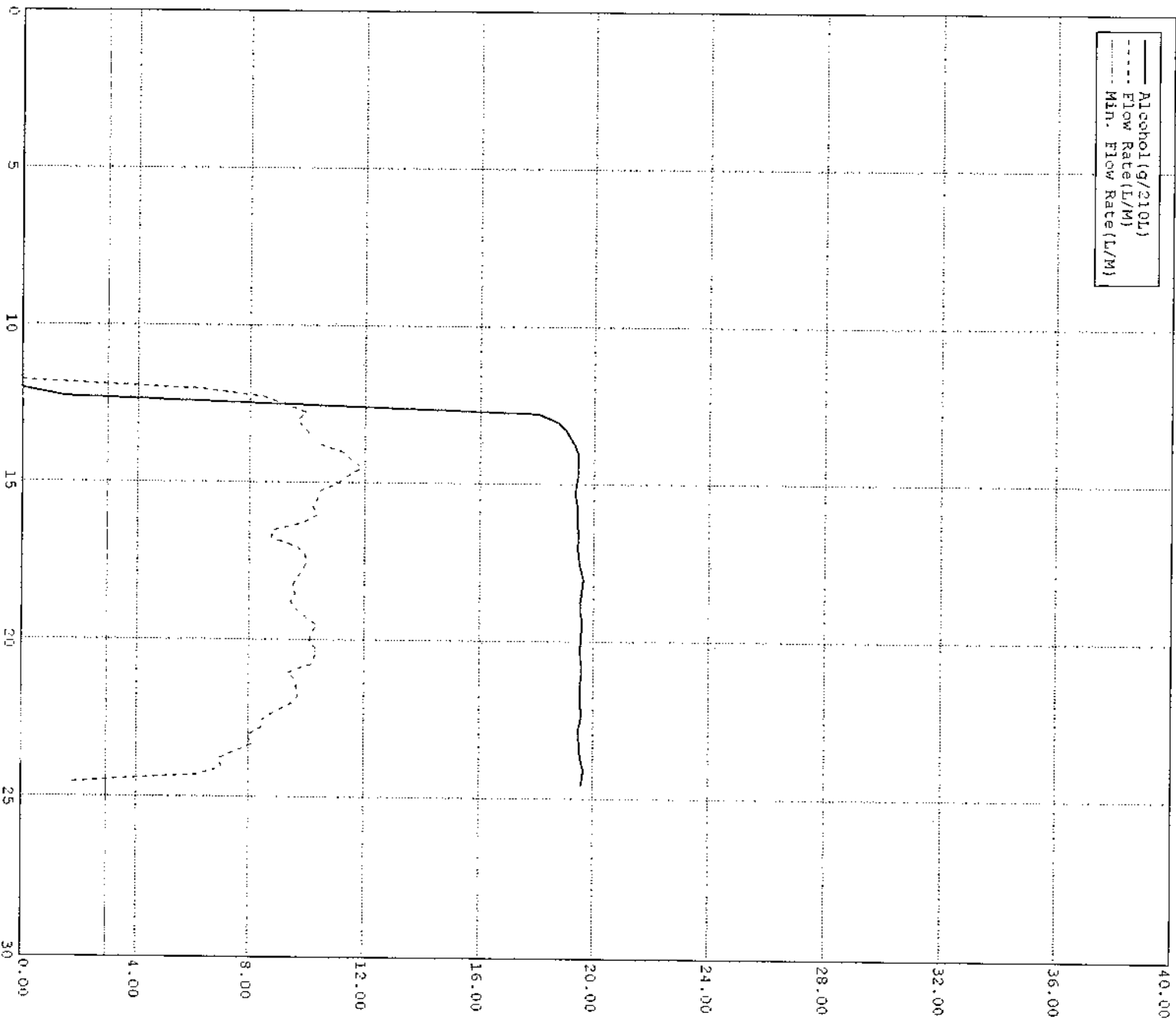
DEPT/AGENCY:
INTERFERENCE NEGATIVE CONTROL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	10:00
BLANK TEST	0.000	10:00
INTERNAL STANDARD	VERIFIED	10:00
Xq = 0.096 (0.54%)		
EXTERNAL STANDARD	0.080	10:01
X[1] = 0.0798 (0.0000)	(0.0023)	
BLANK TEST	0.000	10:02
SUBJECT SAMPLE (Vol=1.99L)	0.098	10:02
X[1] = 0.0985 (-0.0006)	(0.0010)	
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.080	10:03
X[1] = 0.0795 (-0.0001)	(0.0020)	
BLANK TEST	0.000	10:04

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100415

Date: 03/30/2017
Time: 09:33:07

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

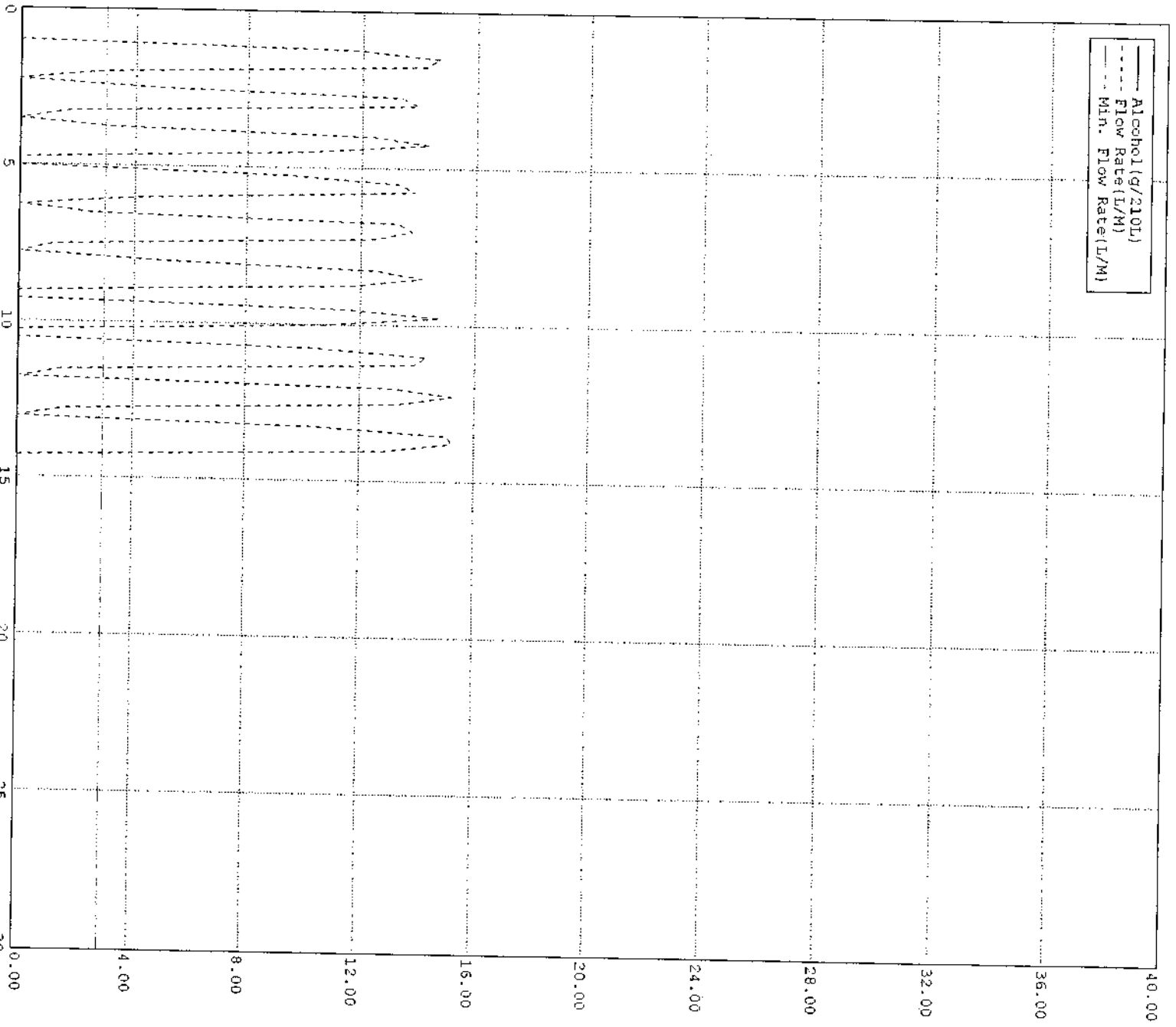
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	09:34
BLANK TEST	0.000	09:34
INTERNAL STANDARD	0.080	09:34
EXTERNAL STANDARD	0.080	09:34
BLANK TEST	0.000	09:35
SUBJECT SAMPLE	XXX	09:35

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100415

Date: 03/30/2017
Time: 09:27:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

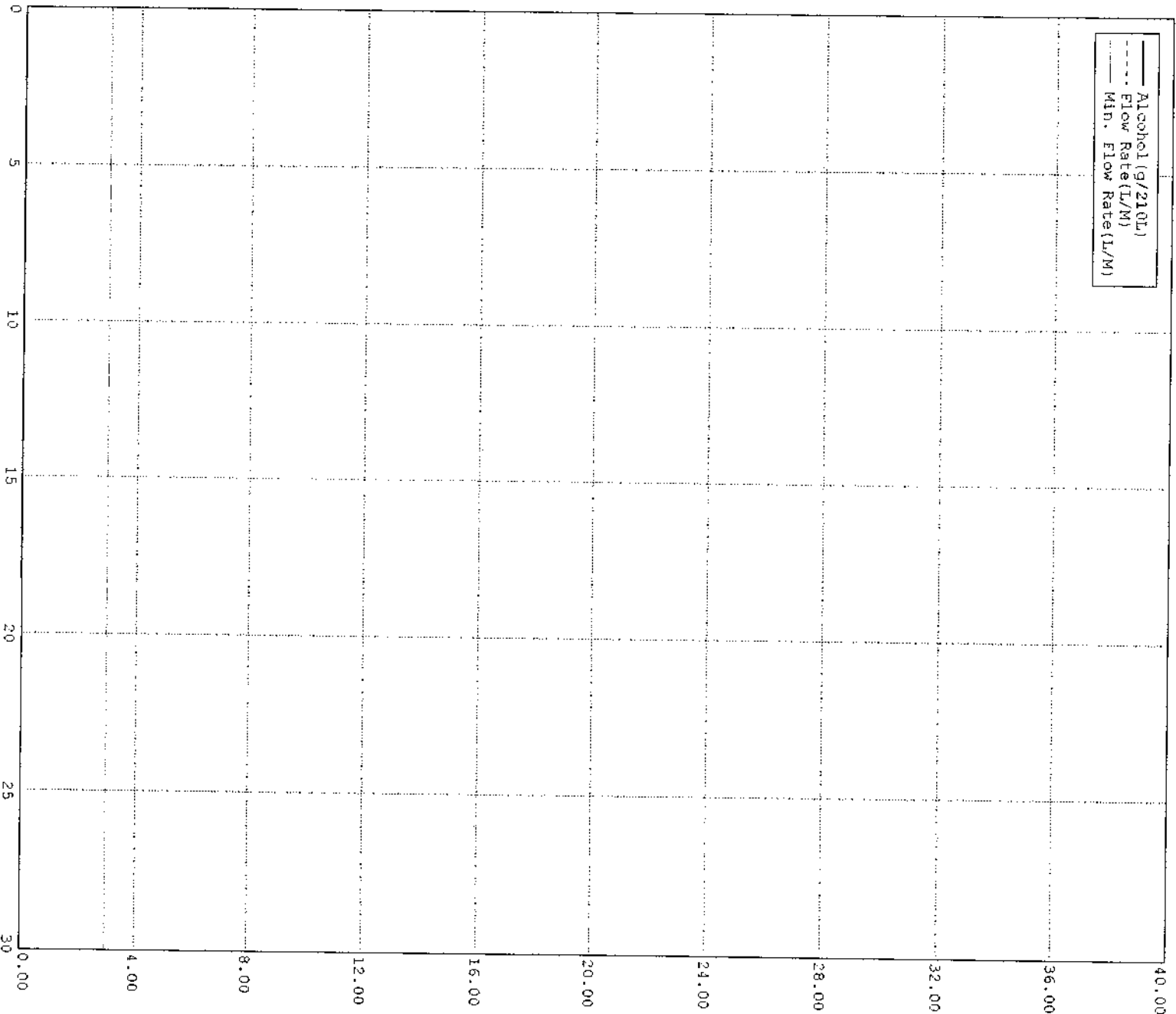
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK
BLANK TEST PASSED 09:29
INTERNAL STANDARD VERIFIED 09:29
EXTERNAL STANDARD 0.080 09:29
BLANK TEST 0.000 09:30

RFI DETECTED

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100415

Date: 03/30/2017
Time: 10:26:31

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	10:27
BLANK TEST	0.000	10:27
INTERNAL STANDARD	VERIFIED	10:27
EXTERNAL STANDARD	0.080	10:27
BLANK TEST	0.000	10:28
SUBJECT SAMPLE (Vol=1.56L)	0.000	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.080	10:30
BLANK TEST	0.000	10:31

