

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 100362 Analyst Brandi Barnett Start Date 10/20/15

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 ILMO Lot 02915020A2 Exp 3/5/17
- ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
- iii. 0.080g/210L Mnf ILMO Lot 01315080A2 Exp 2/5/17
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/11/17
 - 1. Simulator S/N DR4162 Date Calibrated 1/19/15
- vi. 0.300g/210L Mnf Guth Lot 14270 Exp 12/2/16
 - 1. Simulator S/N DR6267 Date Calibrated 1/20/15

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

- i. Acetone - Mnf Guth Lot 14110 Level 0.100 Exp 5/1/16
 - 1. Simulator S/N DR4163 Date Calibrated 1/19/15
- ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N SD1176 Date Calibrated 1/20/15
- iii. Negative Control - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N DR4178 Date Calibrated 1/19/15

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 10/21/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/20/2015
Time: 13:02:04

VERSIONS
DMT: 3.01
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.2°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.77 V PASSED
(1.10 V - 2.56 V)
Cooler Voltage = 1.86 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 532 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.951 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 = 0.073 0.24% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100362

Date: 10/20/2015

Time: 1:10 PM

Temperatures (°C)

Sample Cell: 49.4°C

Breath Tube: 46.4°C

Current Barometer 29.3 in

Volume (Ltr) 1.57

Settings

Lamp: 1.79 V

Bias: 79 V

Cooler: 1.86 V

Chopper: 531 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.009 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 03/15/2011
Time: 07:01:28

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 9380
EXPIRATION: 12/17/2011

Ca = 0.1000
CAL = 0.977426 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0058 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0727 0.0500 <= Xq < 0.2000
a21 = 1.161401 1.050 <= a21 < 1.300
a31 = 0.532998 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/20/2015
Time: 13:10:59

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

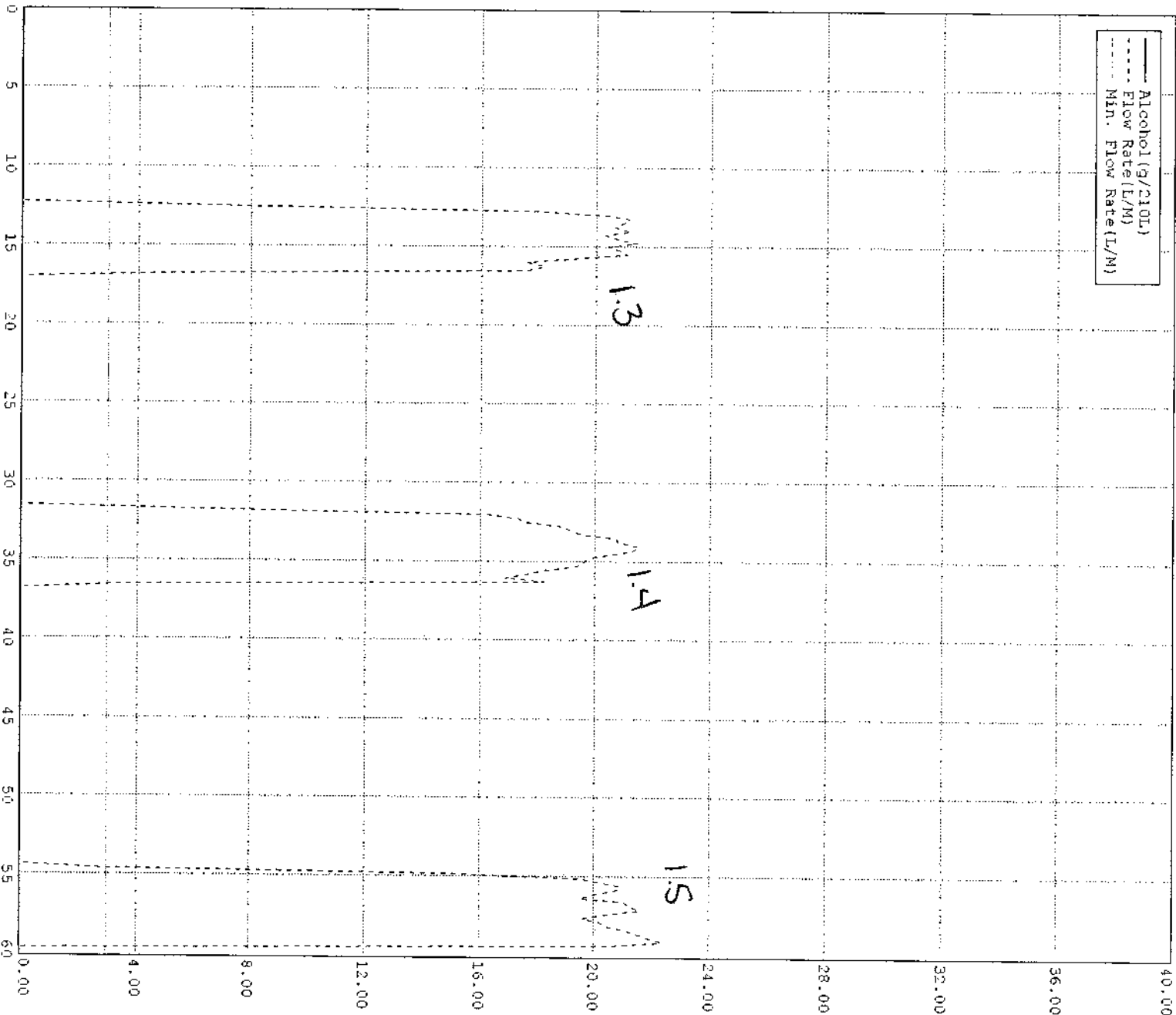
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.30: 0.078
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:11
BLANK TEST	0.000	13:12
INTERNAL STANDARD	VERIFIED	13:12
EXTERNAL STANDARD	0.077	13:12
BLANK TEST	0.000	13:13
SUBJECT SAMPLE (Vol=1.62L)	0.000	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.078	13:15
BLANK TEST	0.000	13:16

BBB



LINEARITY CHECK

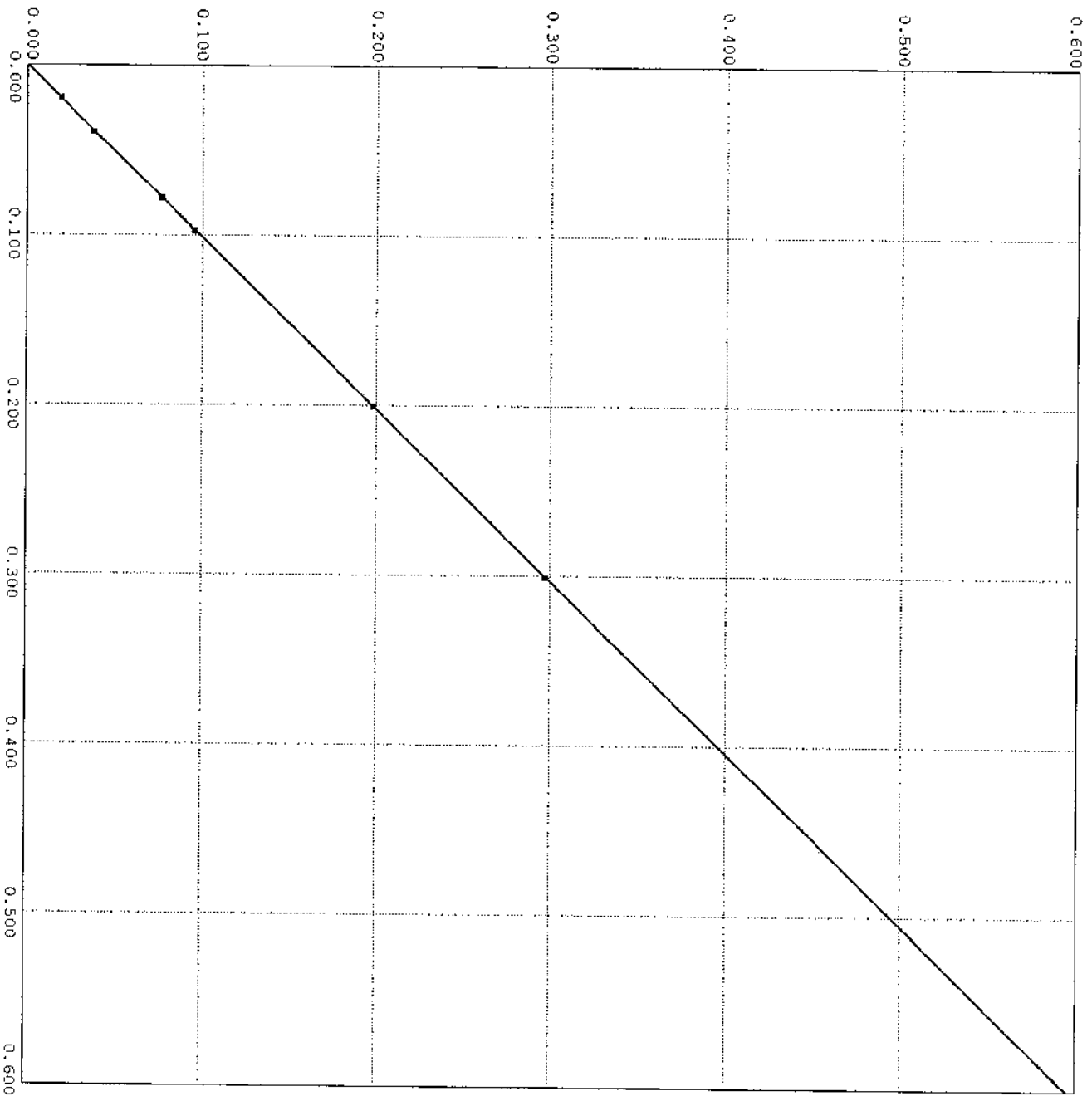
Alaska Department of Public Safety
DATAMASTER dnt: 100362

Date: 10/21/2015
Time: 08:55:34

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0200	0.0000
0.039	0.0388	0.0004
0.078	0.0774	0.0005
0.097	0.0964	0.0005
0.200	0.1990	0.0007
0.300	0.2980	0.0007

SLOPE = 0.991726
R² = 0.999985



BBB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

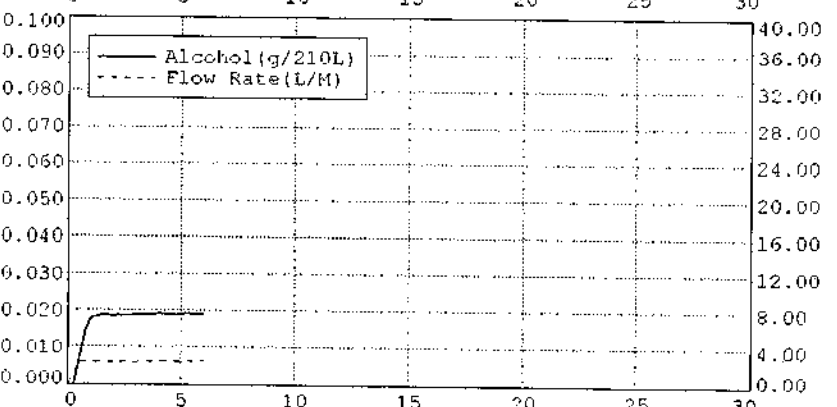
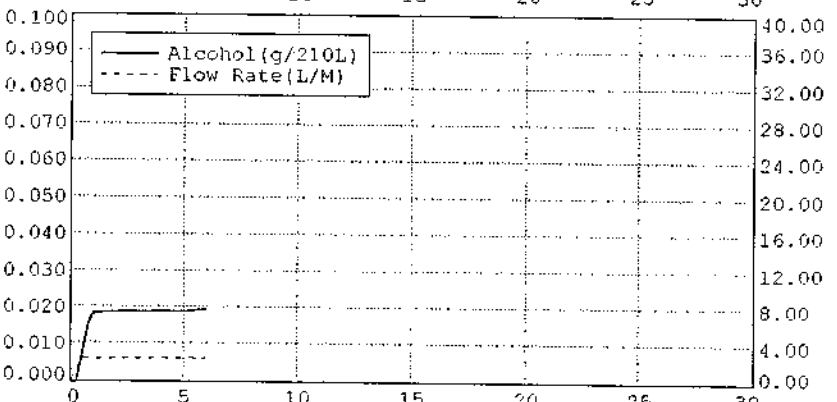
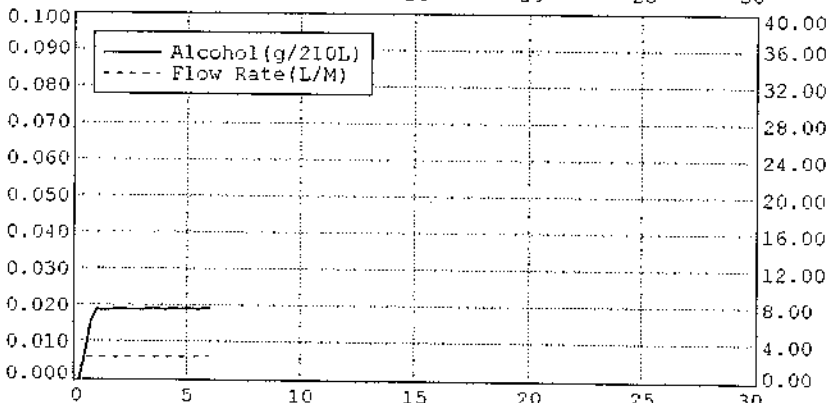
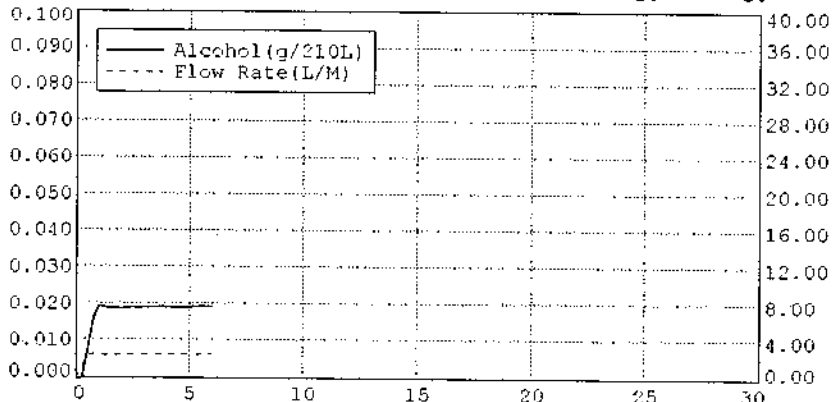
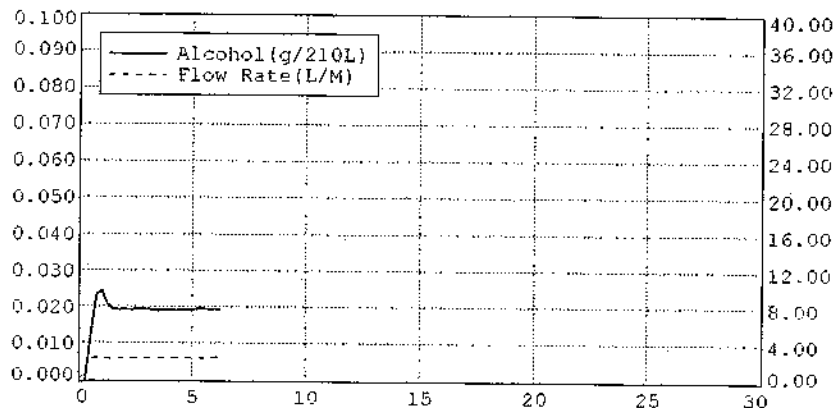
Date: 10/21/2015
 Time: 08:55:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.15: 0.019
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 914 psi

BLANK TEST	0.000	08:57
INTERNAL STANDARD	VERIFIED	08:57
EXTERNAL STANDARD	0.020	08:57
BLANK TEST	0.000	08:58
EXTERNAL STANDARD	0.020	08:58
BLANK TEST	0.000	08:59
EXTERNAL STANDARD	0.020	08:59
BLANK TEST	0.000	09:00
EXTERNAL STANDARD	0.020	09:00
BLANK TEST	0.000	09:01
EXTERNAL STANDARD	0.020	09:01
BLANK TEST	0.000	09:02

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

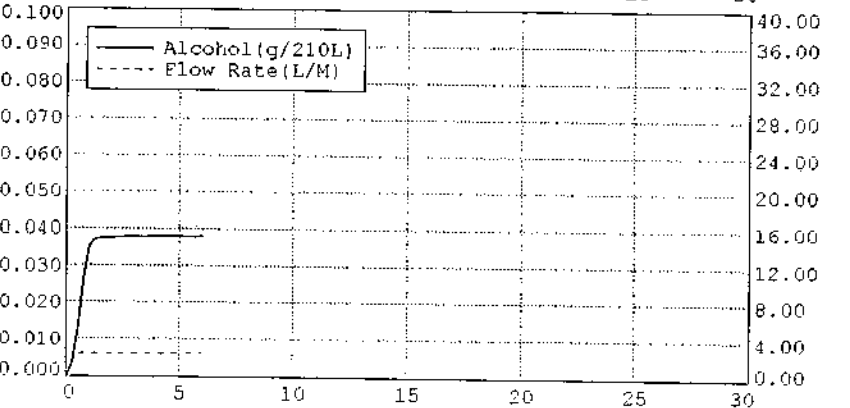
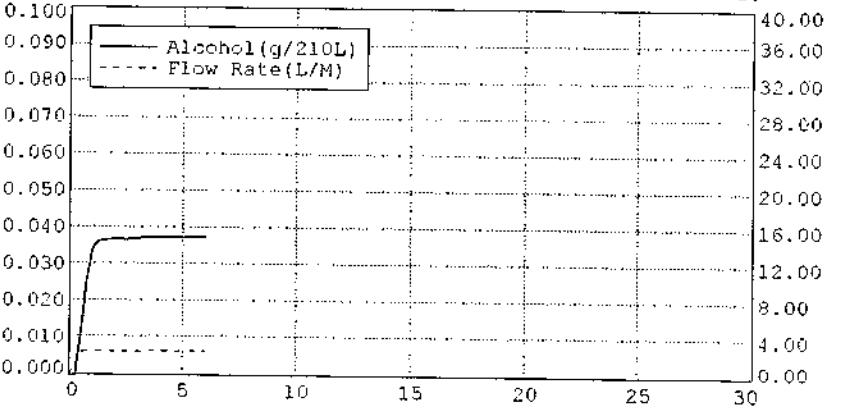
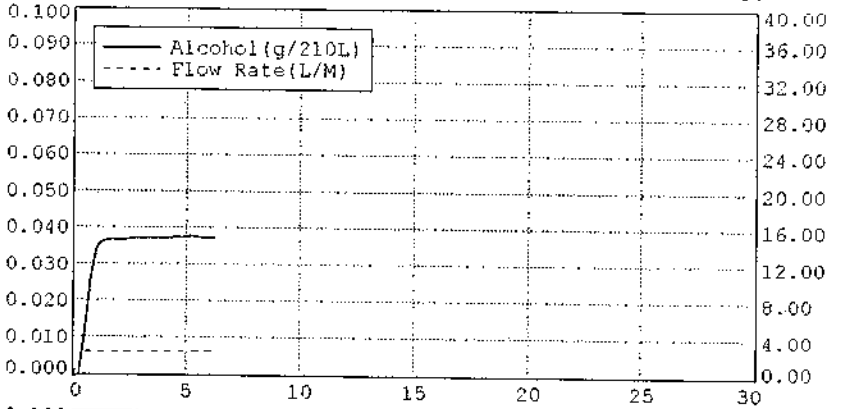
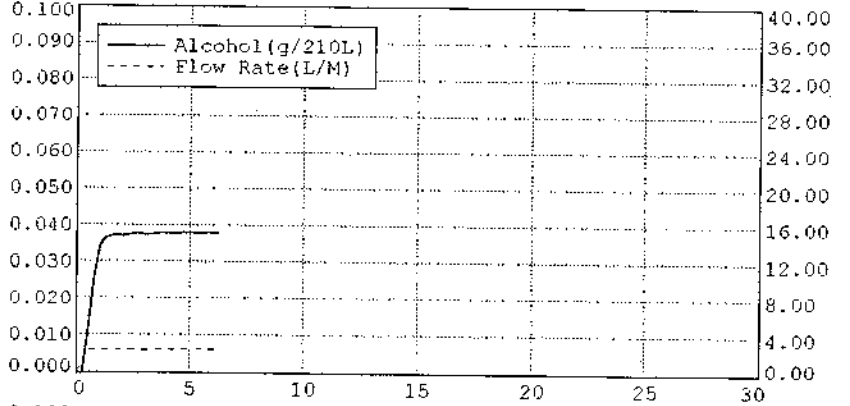
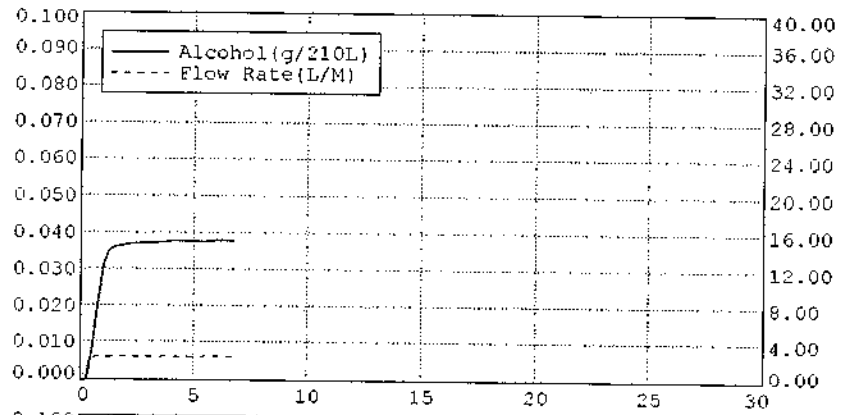
Date: 10/21/2015
 Time: 09:03:32

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.14: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 952 psi

BLANK TEST	0.000	09:04
INTERNAL STANDARD	VERIFIED	09:05
EXTERNAL STANDARD	0.039	09:05
BLANK TEST	0.000	09:06
EXTERNAL STANDARD	0.039	09:06
BLANK TEST	0.000	09:07
EXTERNAL STANDARD	0.039	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.038	09:08
BLANK TEST	0.000	09:09
EXTERNAL STANDARD	0.039	09:09
BLANK TEST	0.000	09:10

Average = 0.0388
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

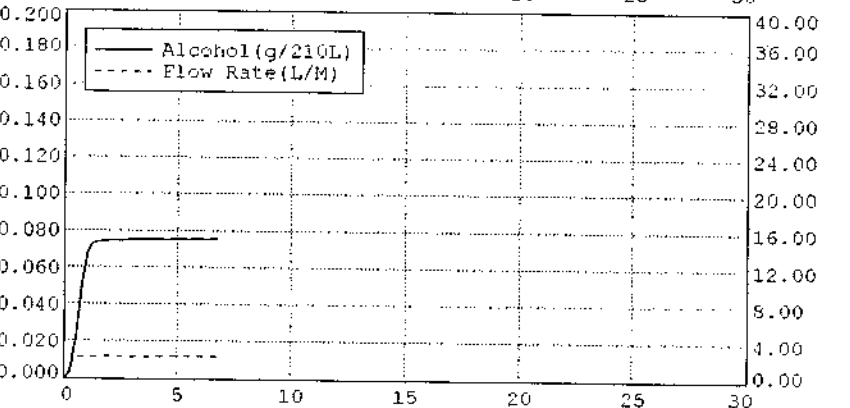
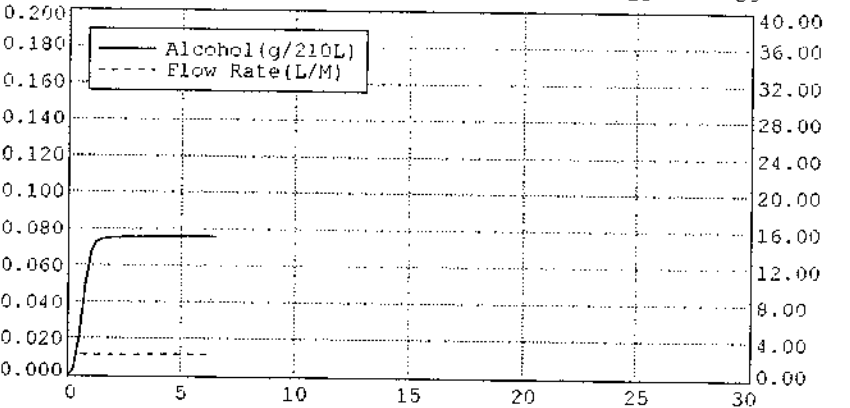
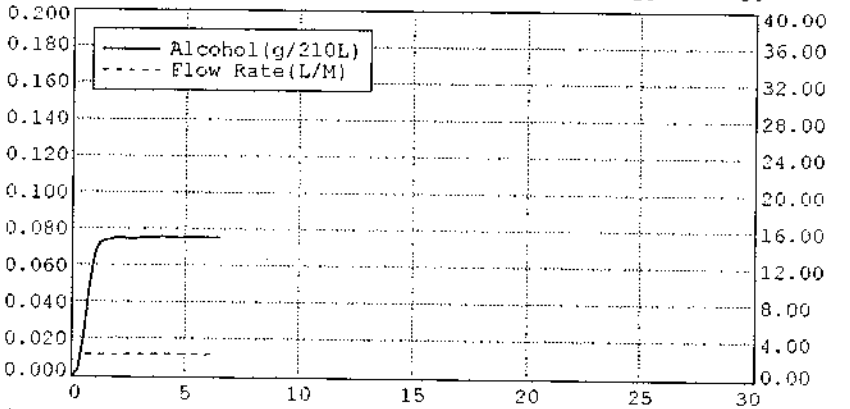
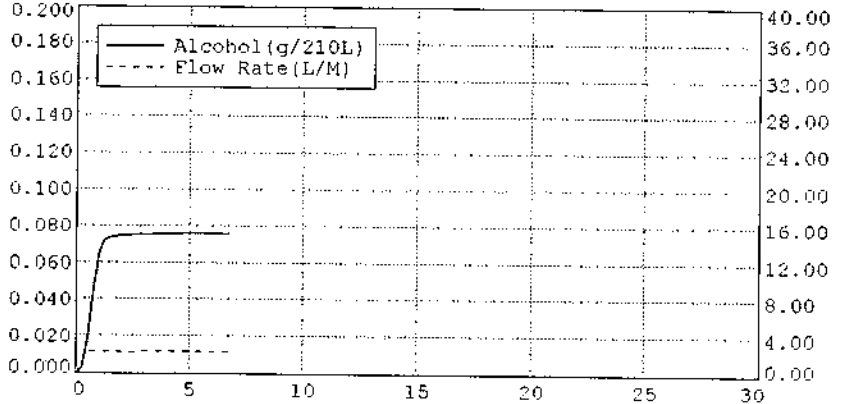
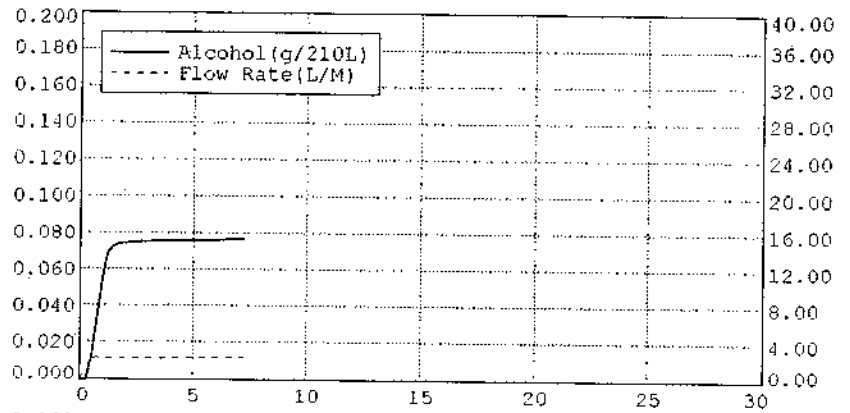
Date: 10/21/2015
 Time: 09:13:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.14: 0.078
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 718 psi

BLANK TEST	0.000	09:15
INTERNAL STANDARD	VERIFIED	09:15
EXTERNAL STANDARD	0.078	09:15
BLANK TEST	0.000	09:16
EXTERNAL STANDARD	0.077	09:16
BLANK TEST	0.000	09:17
EXTERNAL STANDARD	0.077	09:17
BLANK TEST	0.000	09:18
EXTERNAL STANDARD	0.078	09:18
BLANK TEST	0.000	09:19
EXTERNAL STANDARD	0.077	09:19
BLANK TEST	0.000	09:20

Average = 0.0774
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

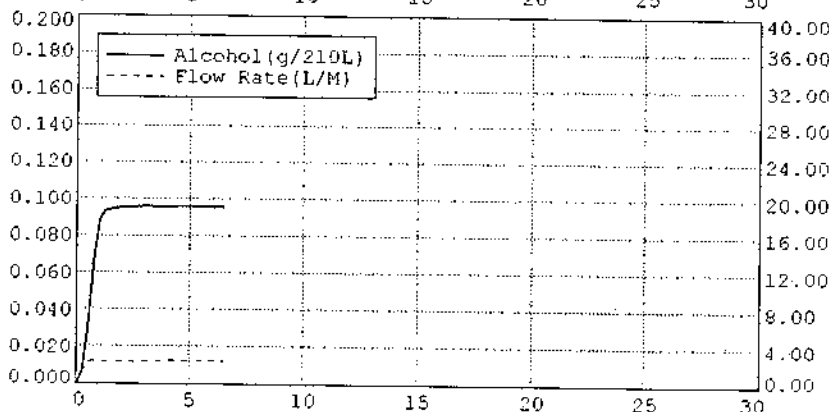
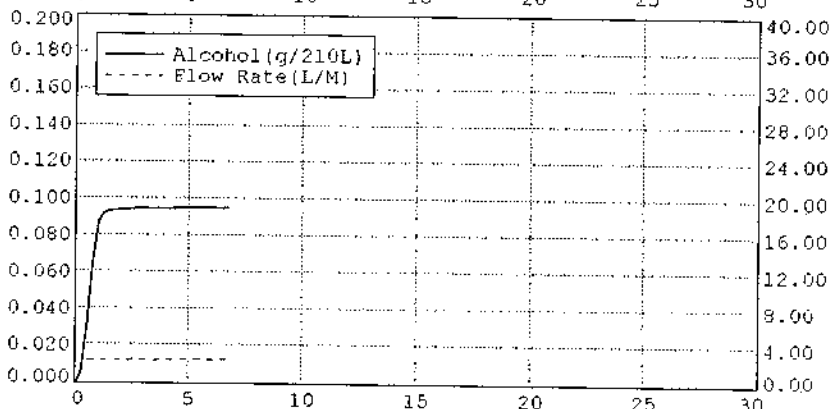
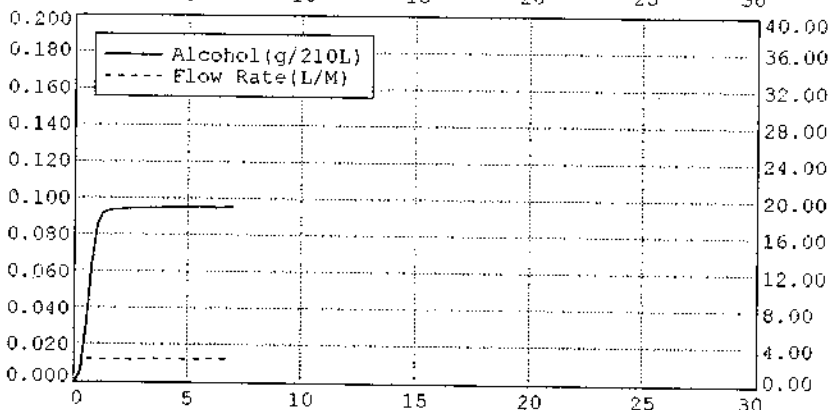
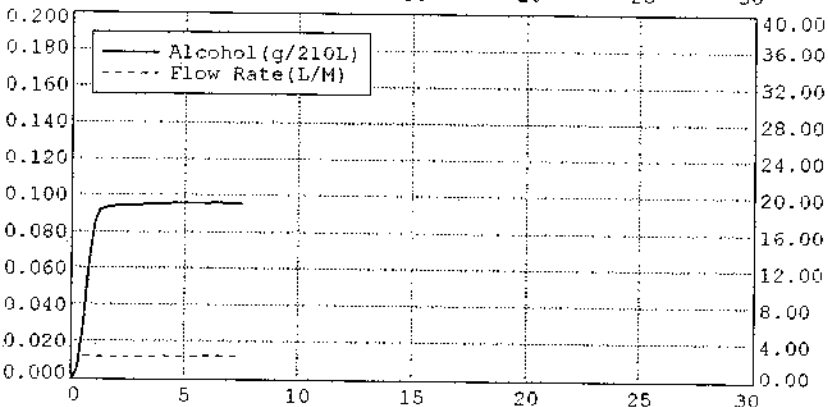
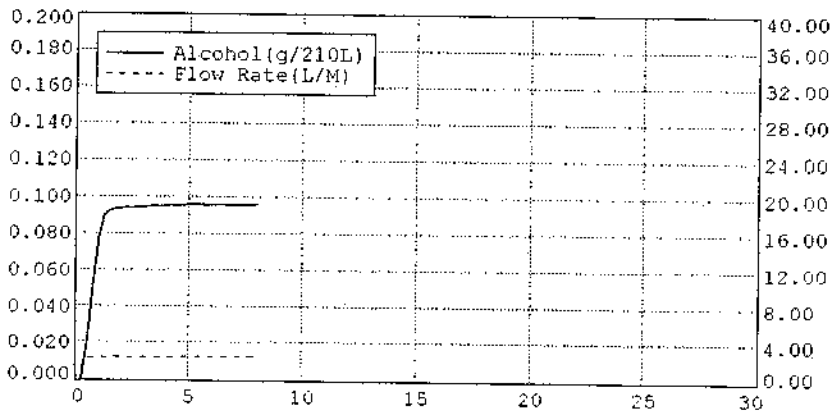
Date: 10/21/2015
 Time: 09:29:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.14: 0.097
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 943 psi

BLANK TEST	0.000	09:30
INTERNAL STANDARD	VERIFIED	09:30
EXTERNAL STANDARD	0.097	09:30
BLANK TEST	0.000	09:31
EXTERNAL STANDARD	0.097	09:31
BLANK TEST	0.000	09:32
EXTERNAL STANDARD	0.096	09:33
BLANK TEST	0.000	09:33
EXTERNAL STANDARD	0.096	09:34
BLANK TEST	0.000	09:35
EXTERNAL STANDARD	0.096	09:35
BLANK TEST	0.000	09:36

Average = 0.0964
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100362

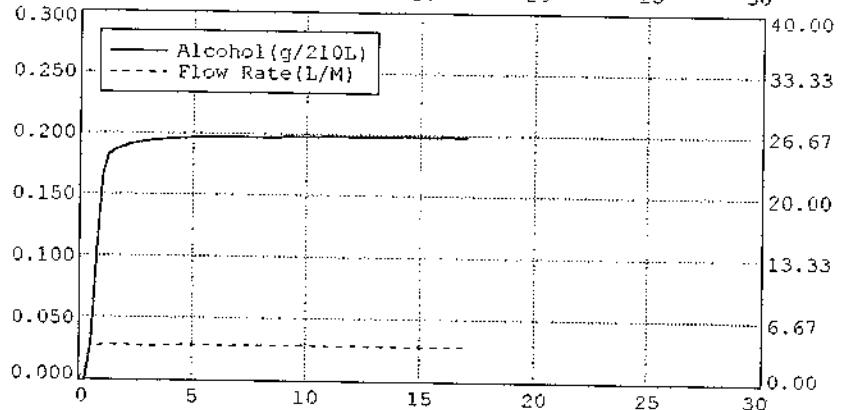
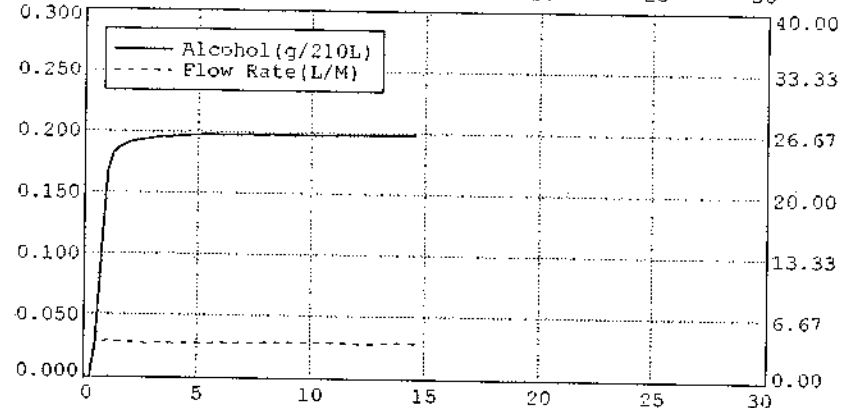
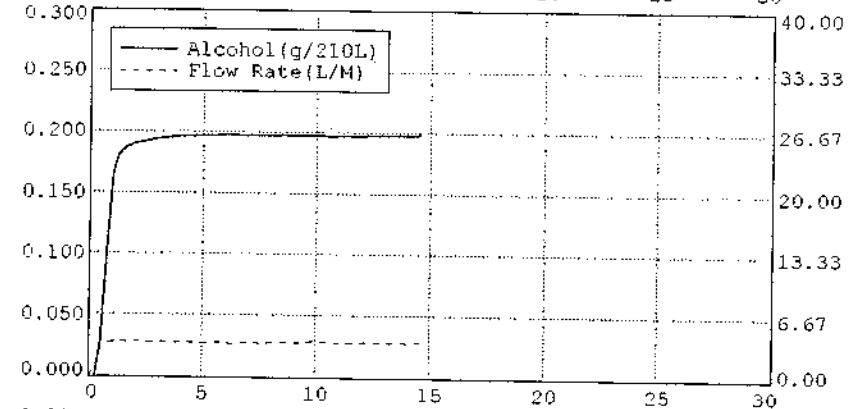
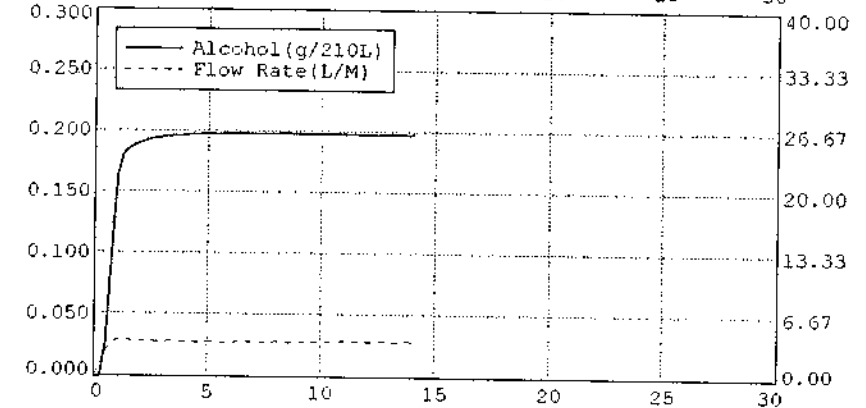
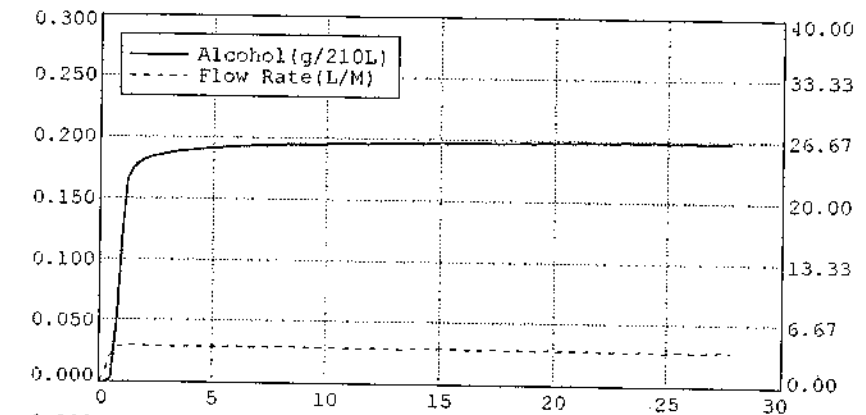
Date: 10/21/2015
 Time: 09:42:42

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:44
INTERNAL STANDARD	VERIFIED	09:44
EXTERNAL STANDARD	0.198	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.199	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.199	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.200	09:48
BLANK TEST	0.000	09:49
EXTERNAL STANDARD	0.199	09:50
BLANK TEST	0.000	09:51

Average = 0.1990
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 6

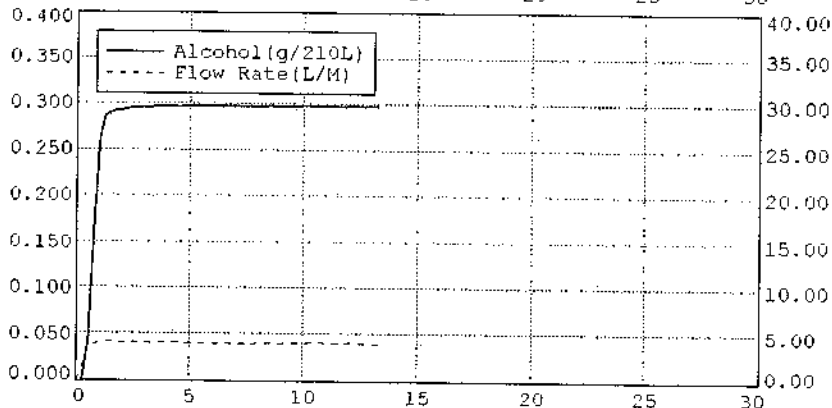
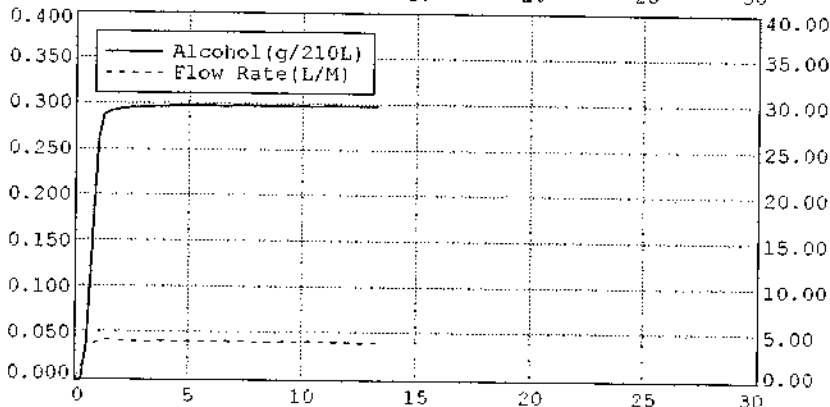
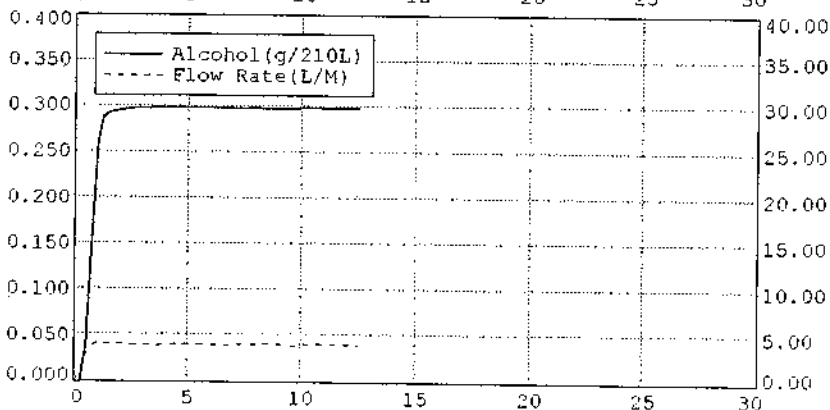
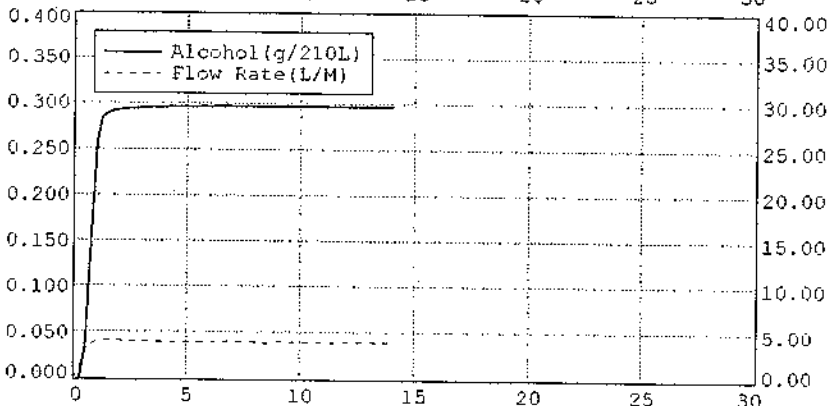
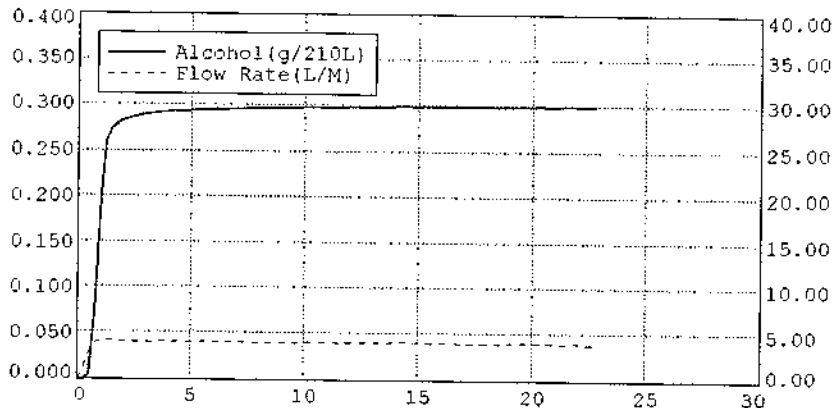
Alaska Department of Public Safety
 DATAMASTER dmt: 100362

Date: 10/21/2015
 Time: 09:54:14

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: GUTH 14270
 EXPIRATION: 12/02/2016

BLANK TEST	0.000	09:56
INTERNAL STANDARD	VERIFIED	09:56
EXTERNAL STANDARD	0.299	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.297	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.298	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.298	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.298	10:01
BLANK TEST	0.000	10:02

Average = 0.2980
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/20/2015
Time: 13:26:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

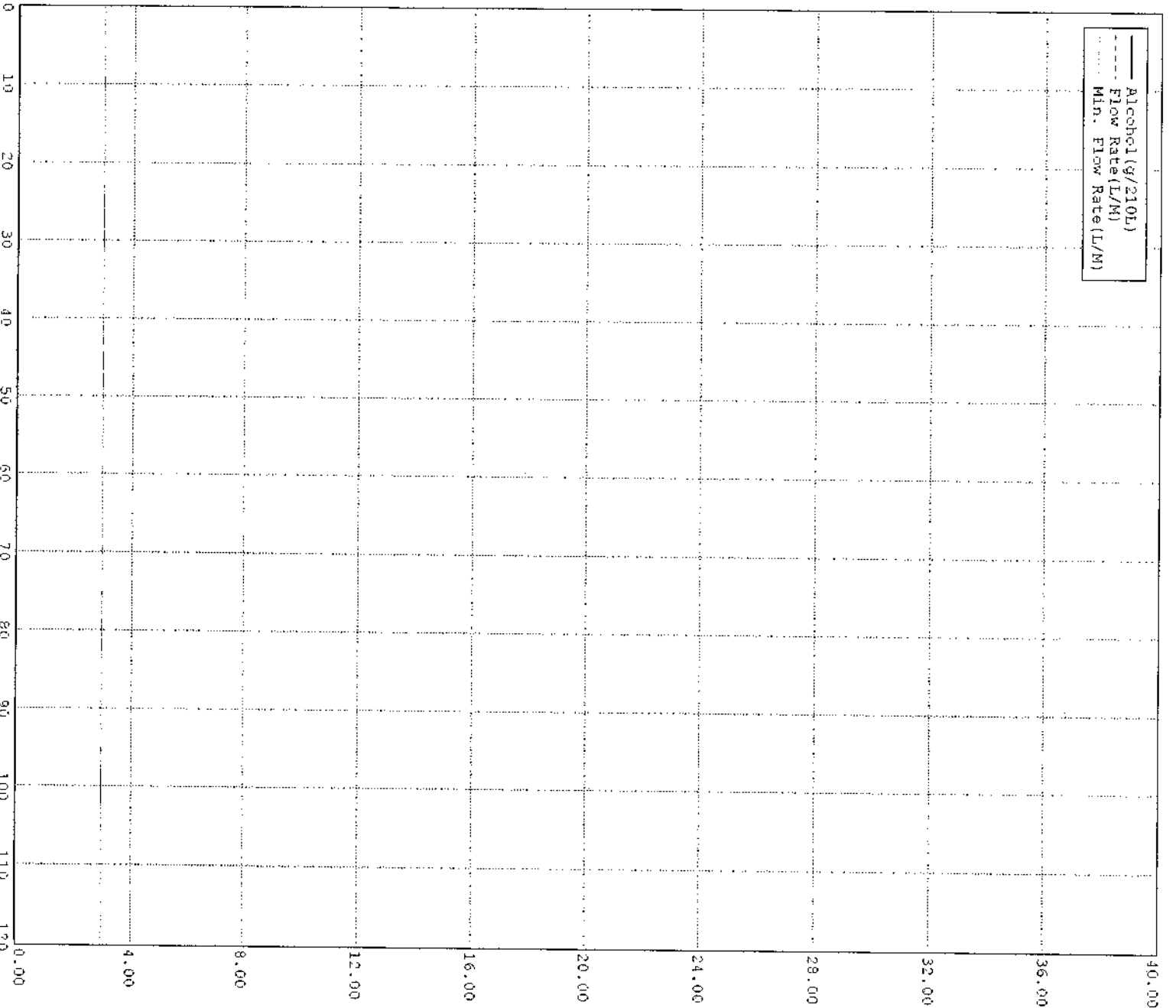
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:29
BLANK TEST	0.000	13:29
INTERNAL STANDARD	VERIFIED	13:29
EXTERNAL STANDARD	0.077	13:29
BLANK TEST	0.000	13:30
SUBJECT SAMPLE	INCOMPLETE	13:32

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/20/2015
Time: 13:40:58

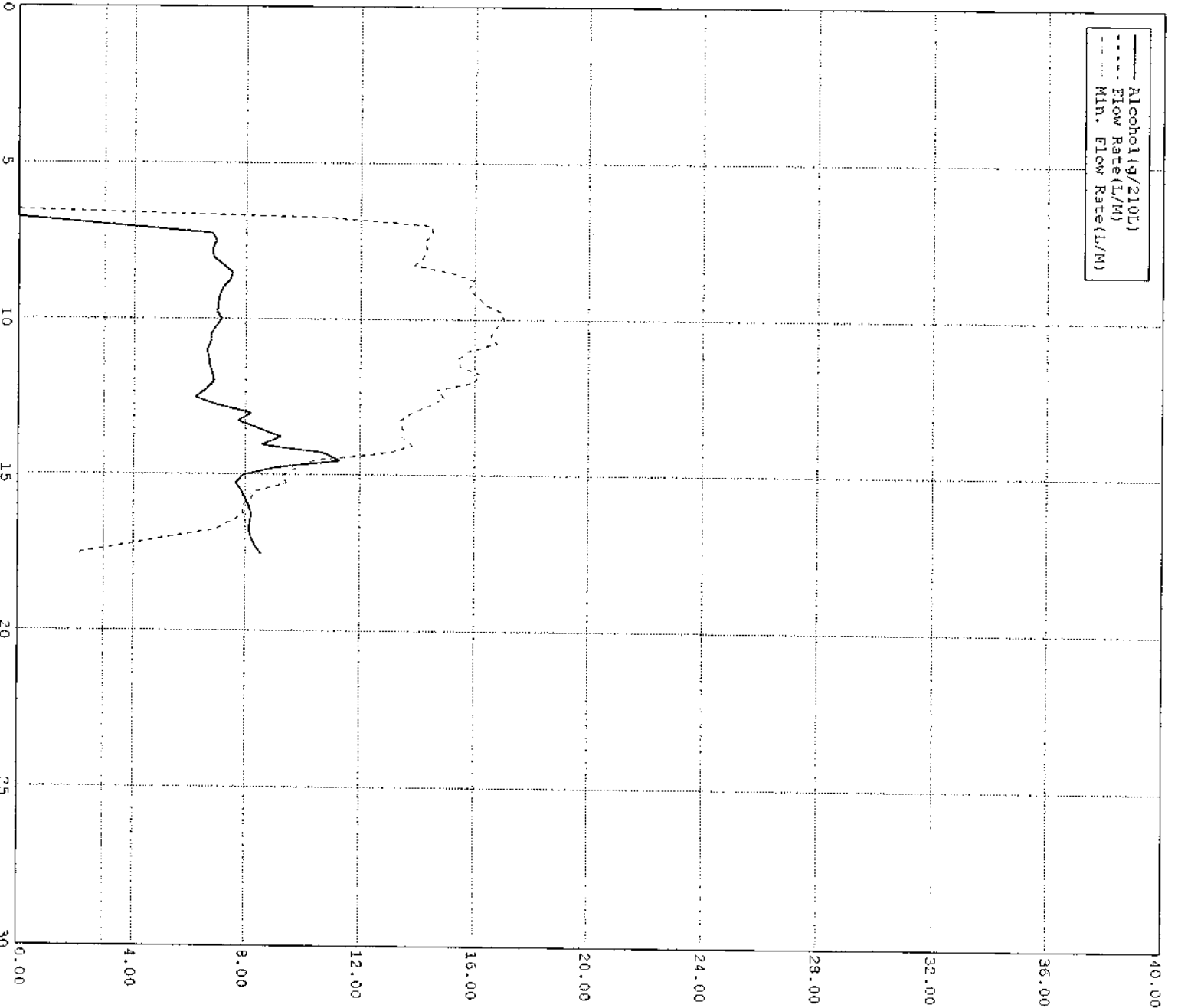
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INVALID KNOWN MOUTH ALCOHOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:41
BLANK TEST	0.000	13:42
INTERNAL STANDARD	VERIFIED	13:42
EXTERNAL STANDARD	0.078	13:42
BLANK TEST	0.000	13:43
SUBJECT SAMPLE	INVALID	13:43

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/21/2015
Time: 08:12:15

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 29.13: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

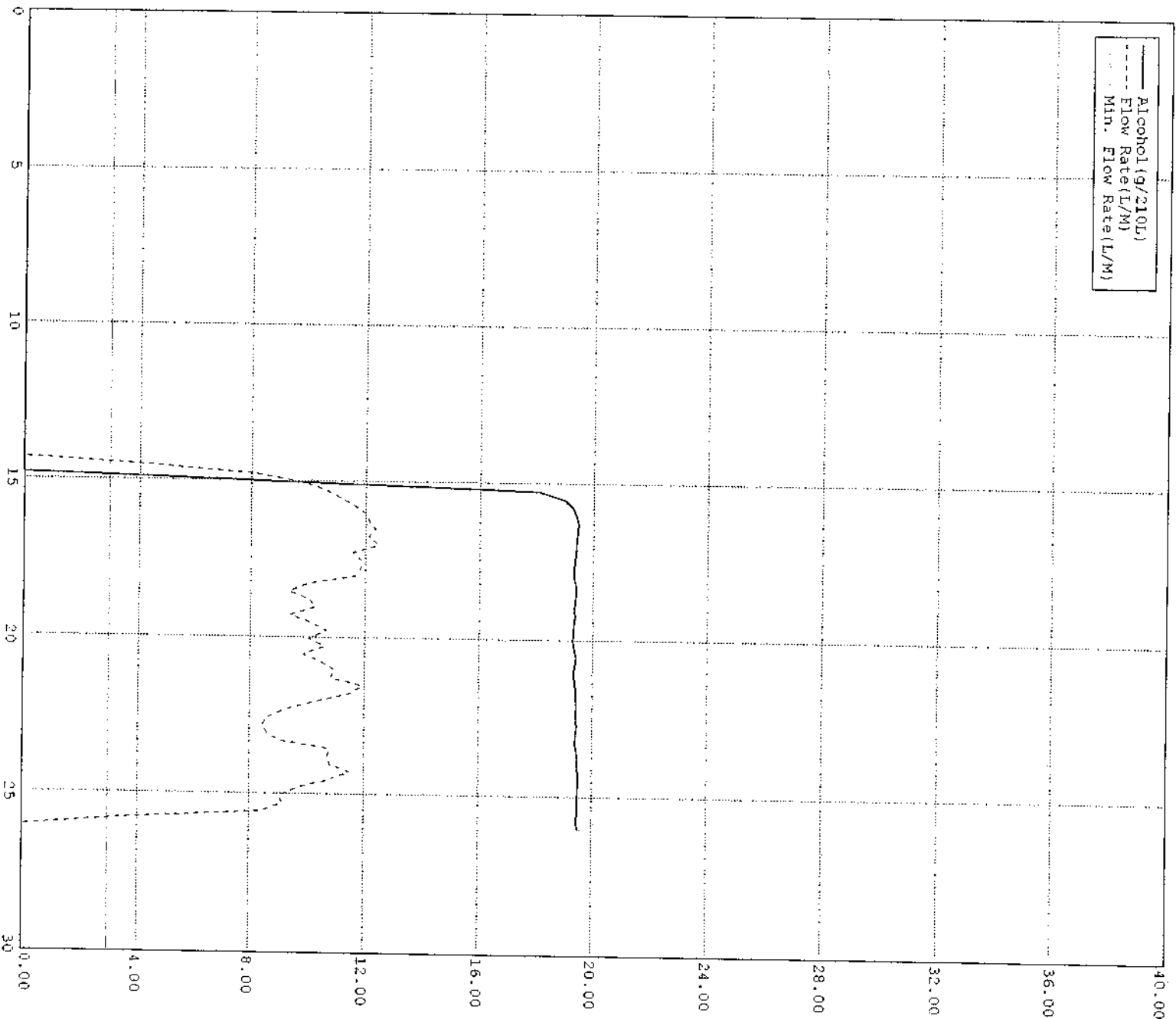
DIAGNOSTIC CHECK	PASSED	08:13
BLANK TEST	0.000	08:13
INTERNAL STANDARD	VERIFIED	08:13
Xq = 0.072 (1.07%)		
EXTERNAL STANDARD	0.077	08:13
X[1] = 0.0767 (-0.0019)	(0.0026)	
BLANK TEST	0.000	08:14
SUBJECT SAMPLE	XXX	08:15
X[1] = 0.0981 (-0.0120)	(0.0006)	

Interference Detected

Averages -
Filter 2: -0.0017
Filter 3: 0.0019

BMB 10/21/15

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/21/2015
Time: 08:17:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

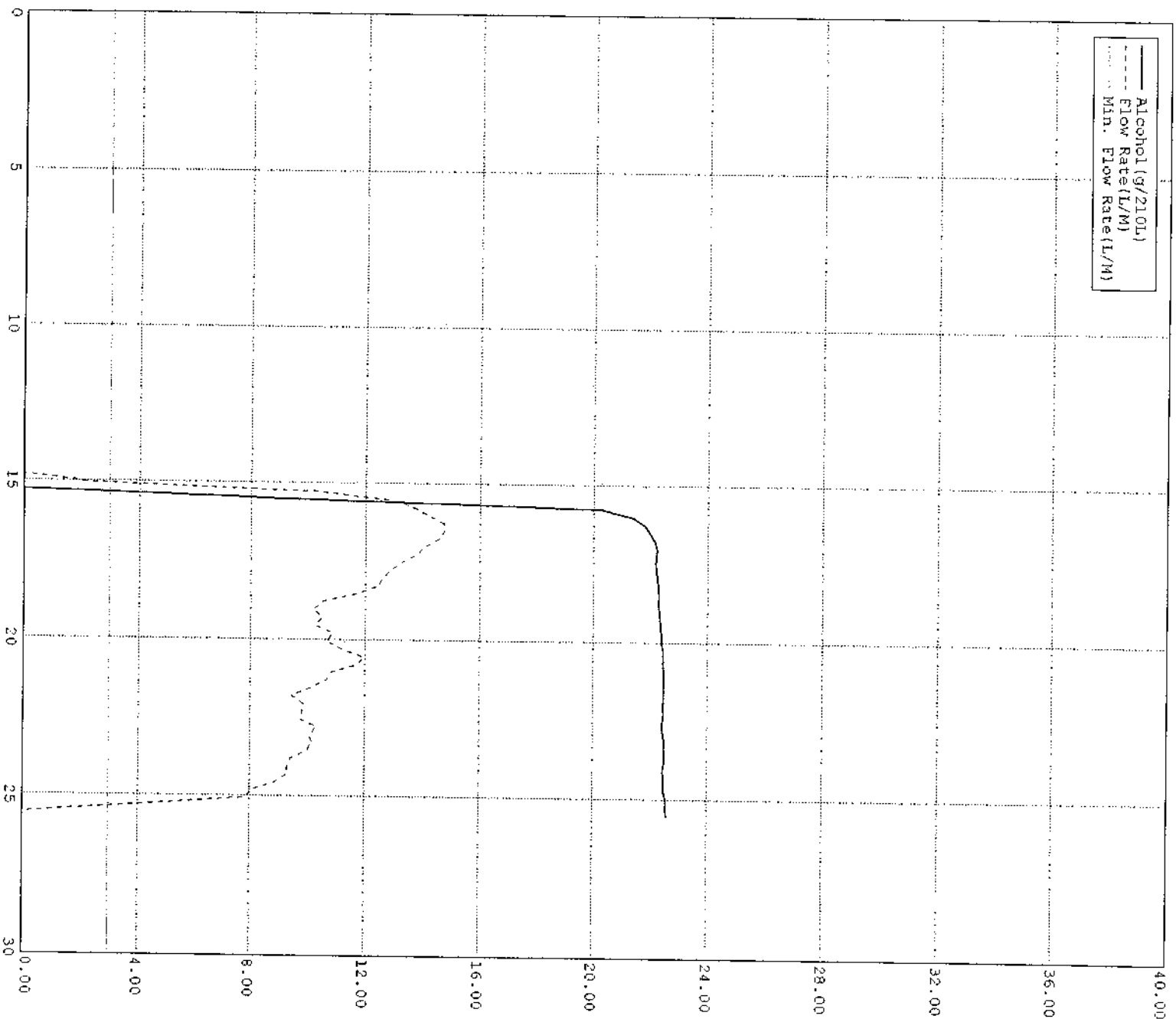
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.14: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	08:18
BLANK TEST	0.000	08:18
INTERNAL STANDARD	VERIFIED	08:18
Xq = 0.072 (0.60%)		
EXTERNAL STANDARD	0.077	08:19
X[1] = 0.0773 (-0.0016)	(0.0017)	
BLANK TEST	0.000	08:19
SUBJECT SAMPLE	XXX	08:20
X[1] = 0.1133 (-0.0221)	(0.0004)	

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/21/2015
Time: 08:23:23

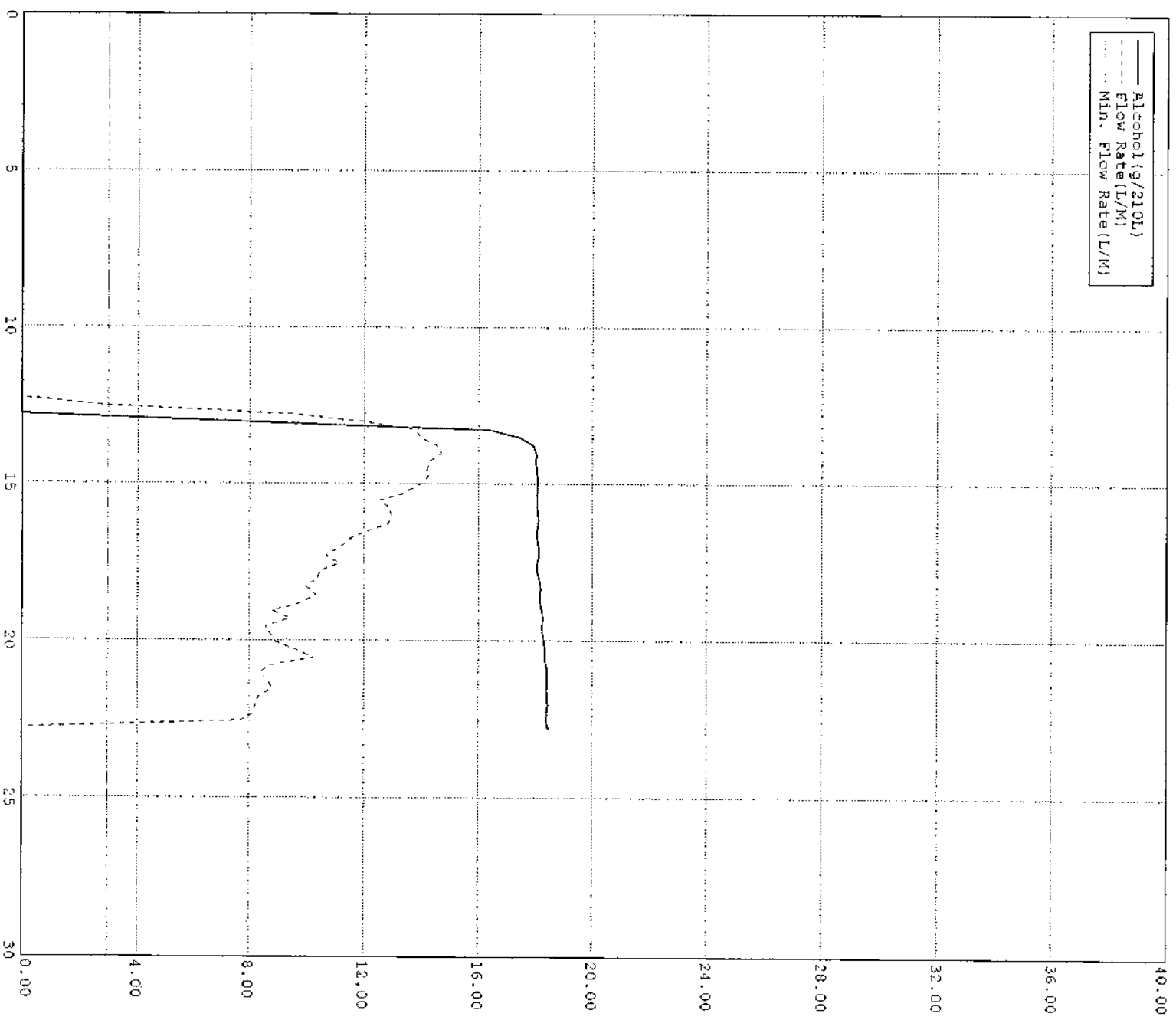
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.14: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	08:24
BLANK TEST	0.000	08:24
INTERNAL STANDARD	VERIFIED	08:24
Xq = 0.072 (0.83%)		
EXTERNAL STANDARD	0.077	08:25
X[1] = 0.0773 (-0.0018)	(0.0022)	
BLANK TEST	0.000	08:26
SUBJECT SAMPLE (Vol=1.83L)	0.092	08:26
X[1] = 0.0924 (0.0001)	(0.0005)	
BLANK TEST	0.000	08:27
EXTERNAL STANDARD	0.077	08:27
X[1] = 0.0768 (-0.0016)	(0.0011)	
BLANK TEST	0.000	08:28



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/20/2015
Time: 13:51:01

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

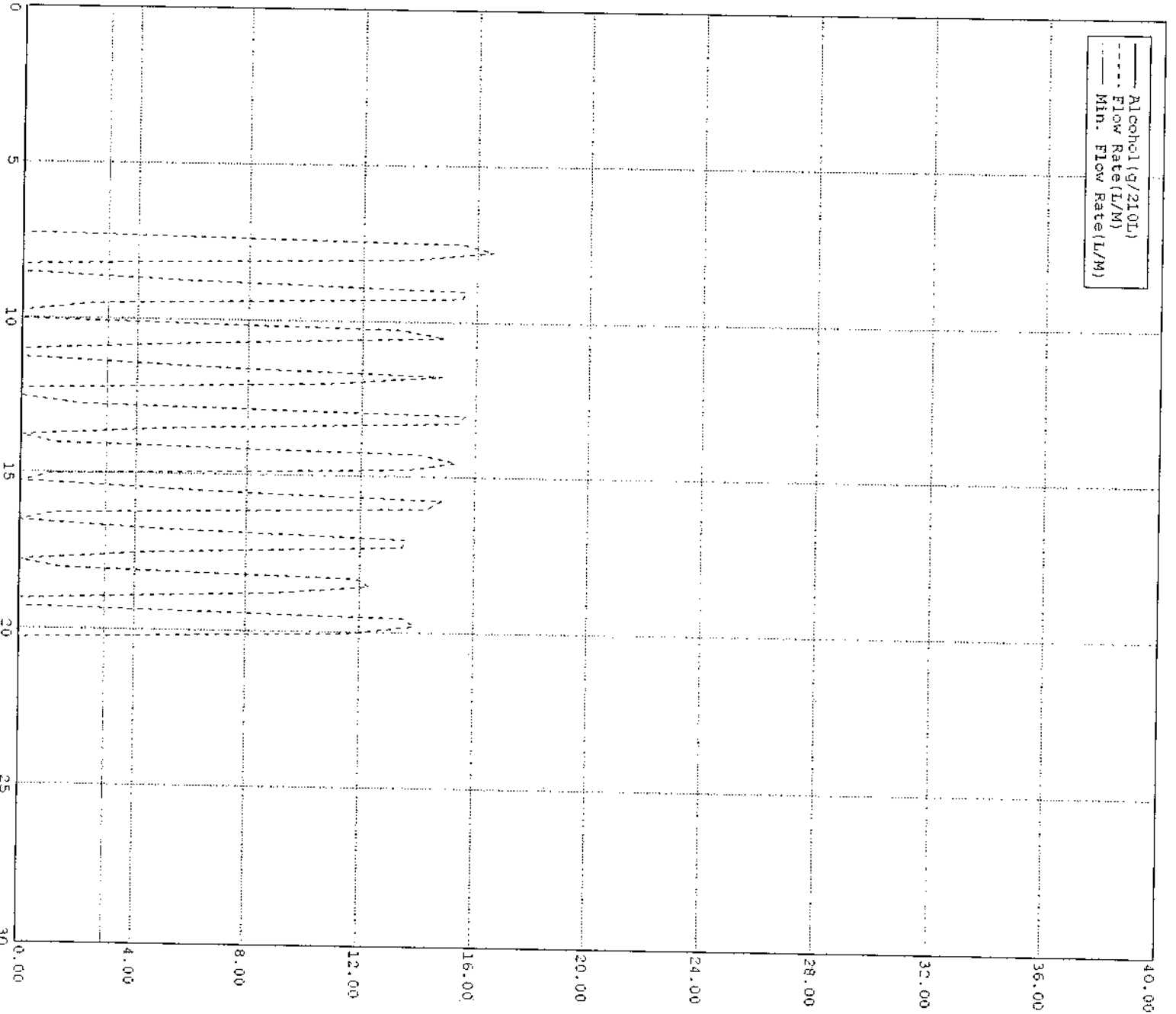
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.28: 0.078
LOF #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:52
BLANK TEST	0.000	13:53
INTERNAL STANDARD	VERIFIED	13:53
EXTERNAL STANDARD	0.077	13:53
BLANK TEST	0.000	13:54
SUBJECT SAMPLE	XXX	13:54

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100362

Date: 10/20/2015
Time: 13:45:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

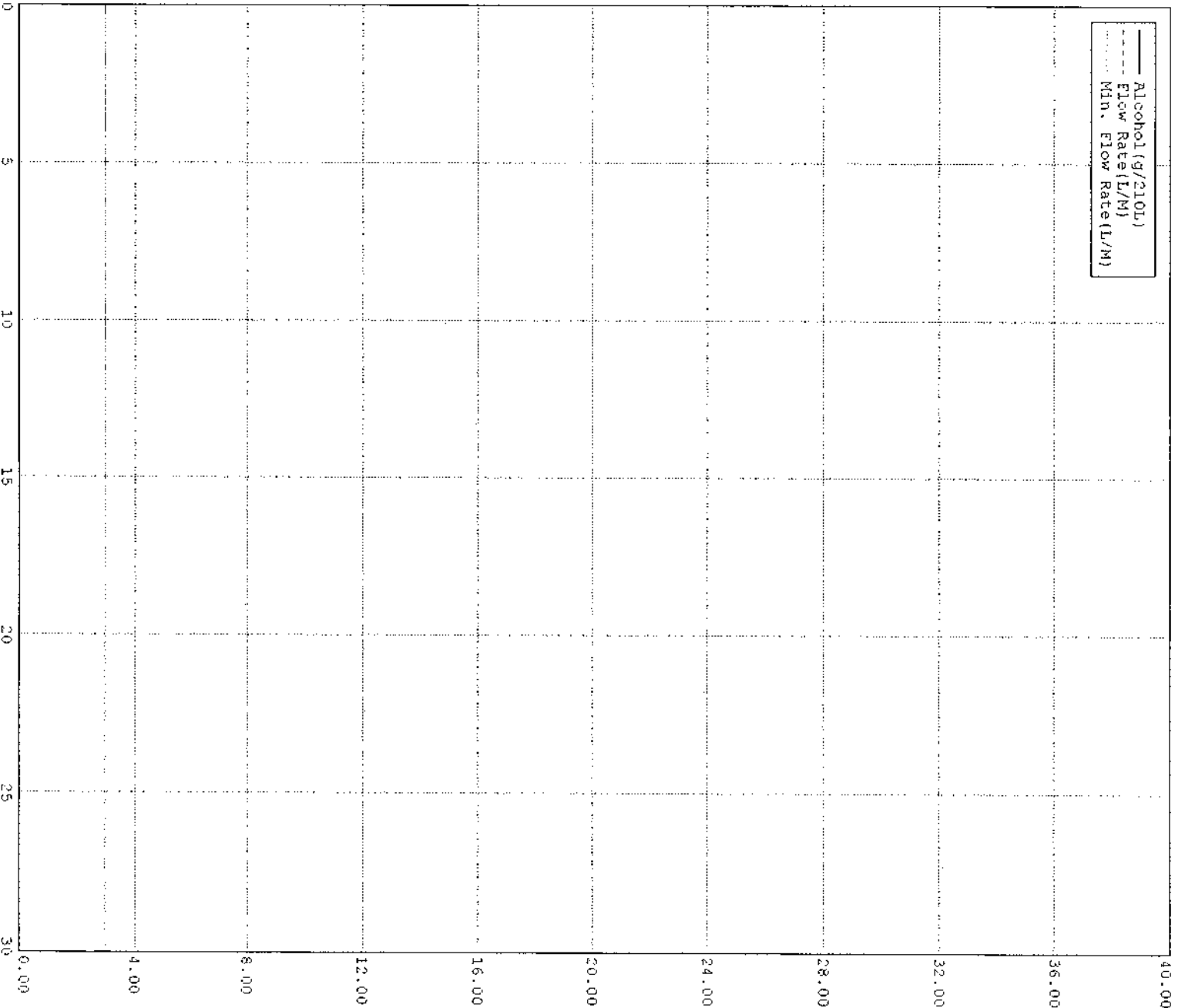
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.29: 0.078
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK
BLANK TEST PASSED 13:46
INTERNAL STANDARD 0.000 13:46
EXTERNAL STANDARD VERIFIED 13:46
0.077 13:46
BLANK TEST 0.000 13:47

RFI DETECTED

RFI



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100362

Date: 10/21/2015
Time: 10:19:02

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 29.16: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:20
BLANK TEST	0.000	10:20
INTERNAL STANDARD	0.076	10:20
EXTERNAL STANDARD	0.000	10:21
BLANK TEST	0.000	10:21
SUBJECT SAMPLE (Vol=2.01L)	0.000	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.078	10:22
BLANK TEST	0.000	10:23

BME

