

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 100349 Analyst Brandi Burnett Start Date 9/30/15

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 1.6 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 09214080A2 Exp 5/1/16
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Guth Lot 15130 Exp 5/1/17
 - 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 10/1/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 08:52:57

VERSIONS

DMT 3.01
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 = 1.75 V PASSED
(1.05 V - 2.45 V)
Cooler Voltage = 1.73 V PASSED
(1.01 V - 2.35 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 554 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.410 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 = 0.080 1.49% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100349

Date: 09/30/2015

Time: 9:12 AM

Temperatures (°C)

Sample Cell: 49.0°C

Breath Tube: 47.9°C

Current Barometer 29.4 in

Volume (Ltr) 1.42

Settings

Lamp: 1.75 V

Bias: 79 V

Cooler: 1.73 V

Chopper: 553 Hz

Voltages (V)

Flow: 1.05 V

Detector: -0.070 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 03/12/2012
Time: 02:18:09

OPERATOR NAME:
BRANDI BARNETT
CERTIFICATE #: 7038

Ca = 0.1000
CAL = 0.971258 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0065 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0816 0.0500 <= Xq < 0.2000
a21 = 1.176909 1.050 <= a21 < 1.300
a31 = 0.556498 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100349

Date: 09/30/2015
Time: 09:15:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

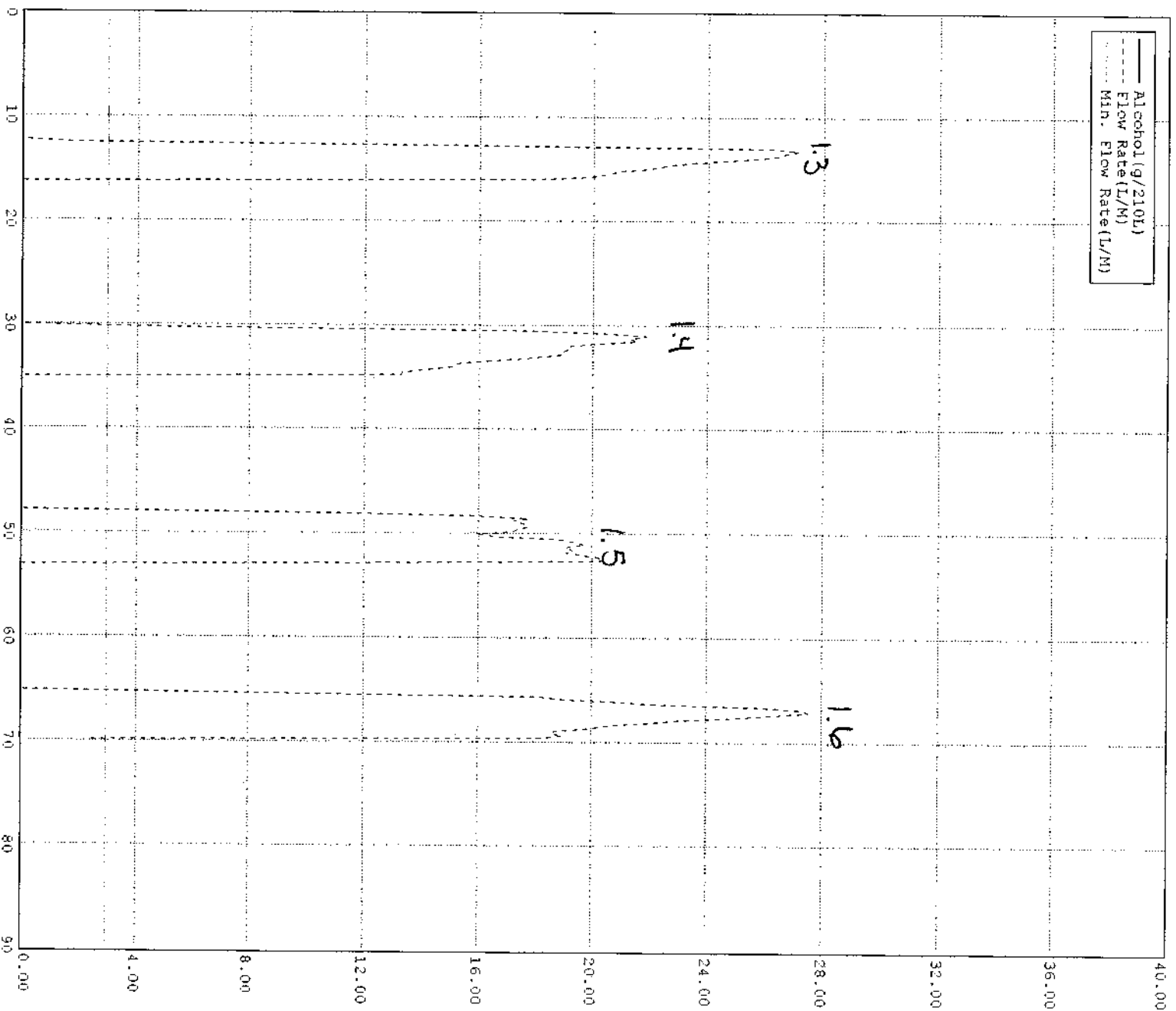
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.42: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	09:16
BLANK TEST	0.000	09:16
INTERNAL STANDARD	VERIFIED	09:16
EXTERNAL STANDARD	0.077	09:17
BLANK TEST	0.000	09:18
SUBJECT SAMPLE (Vol=1.59L)	0.000	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.077	09:20
BLANK TEST	0.000	09:21

BBMB



LINEARITY CHECK

Alaska Department of Public Safety
DATAMASTER dmt: 100349

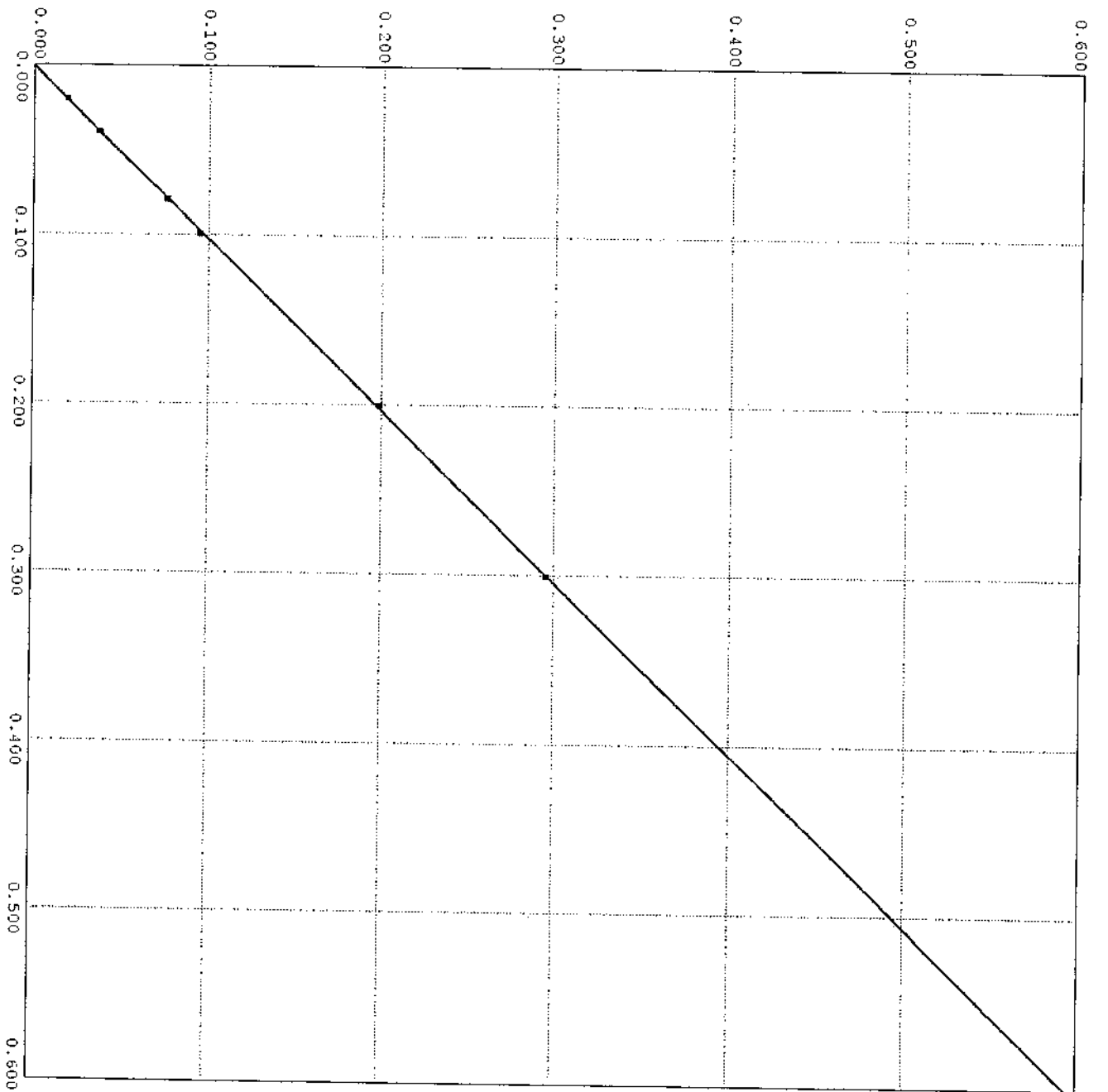
Date: 09/30/2015
Time: 10:00:05

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.039	0.0386	0.0005
0.079	0.0772	0.0008
0.099	0.0960	0.0000
0.200	0.1994	0.0005
0.300	0.2964	0.0009

SLOPE = 0.991292
R² = 0.999862

BMB



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100349

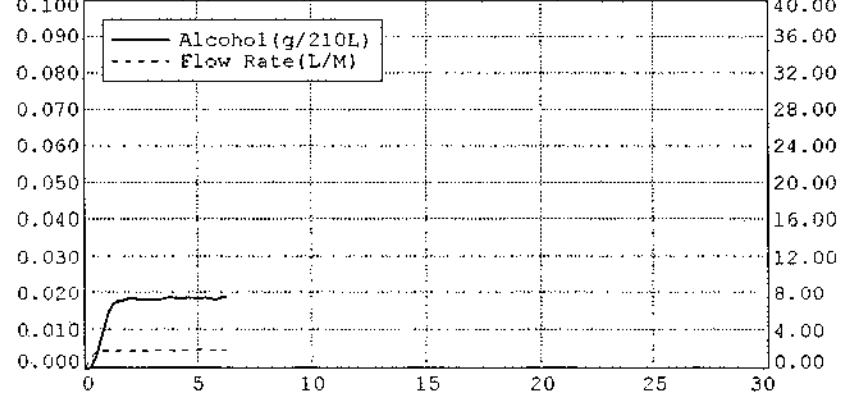
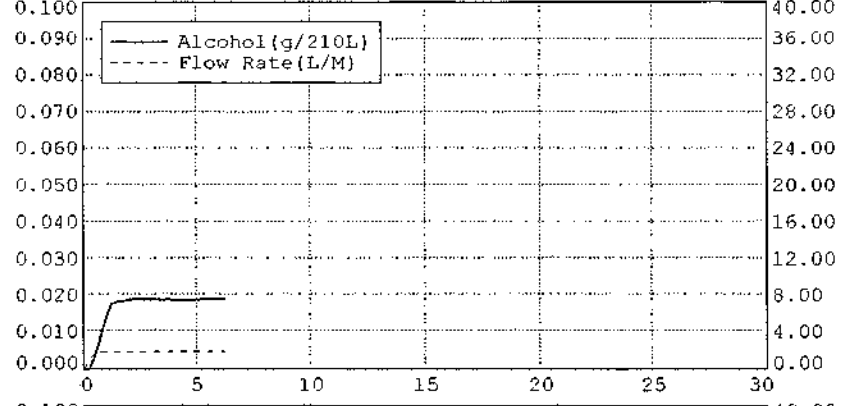
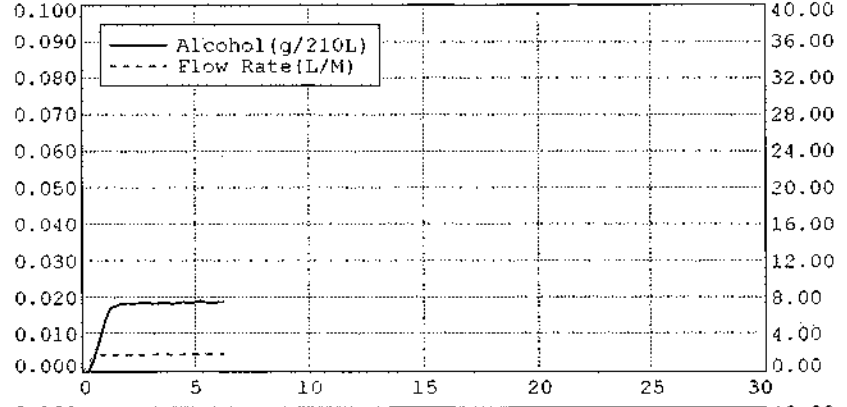
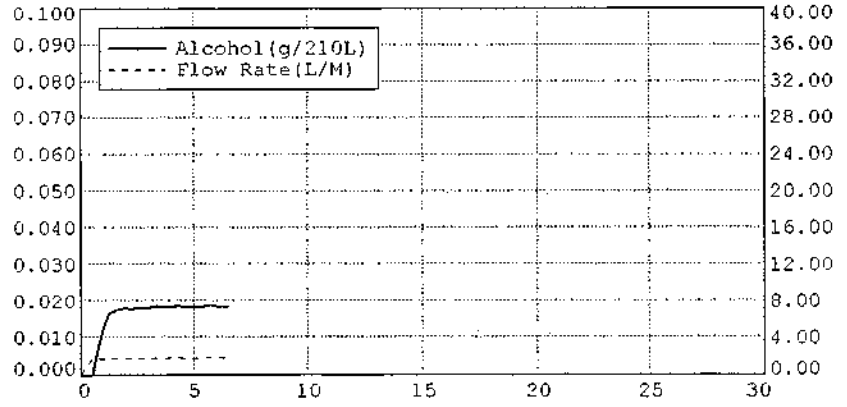
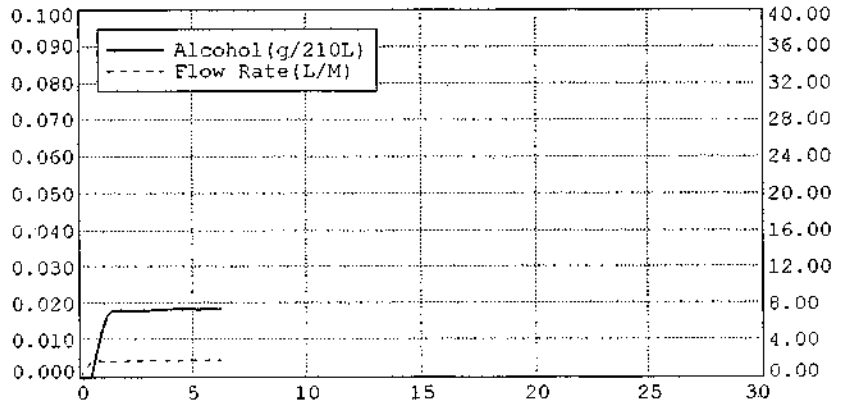
Date: 09/30/2015
Time: 10:00:07

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.44: 0.020
LOT #: 02915020A2
EXPIRATION: 03/05/2017
TANK PRESSURE: 286 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:01
EXTERNAL STANDARD	0.020	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.020	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.020	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.020	10:05
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.020	10:06
BLANK TEST	0.000	10:07

Average = 0.0200
Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

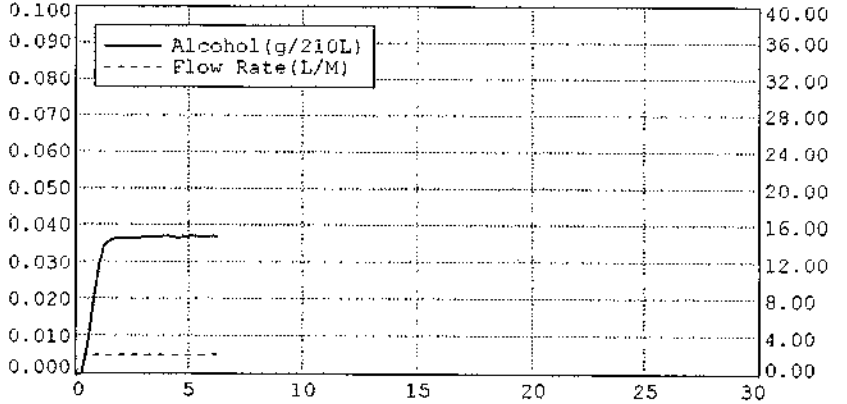
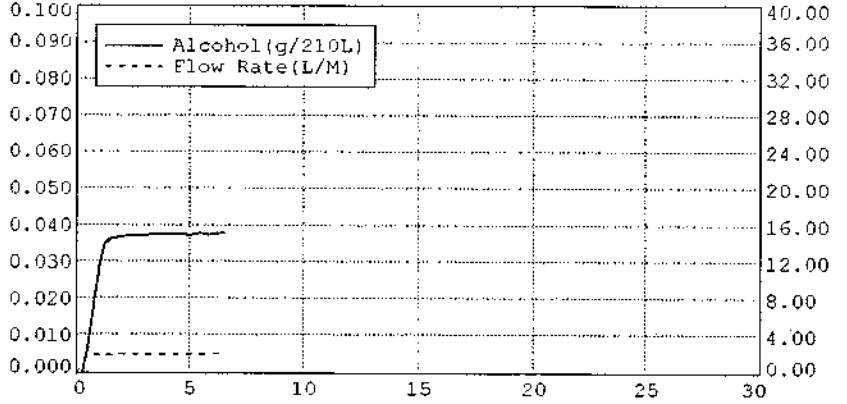
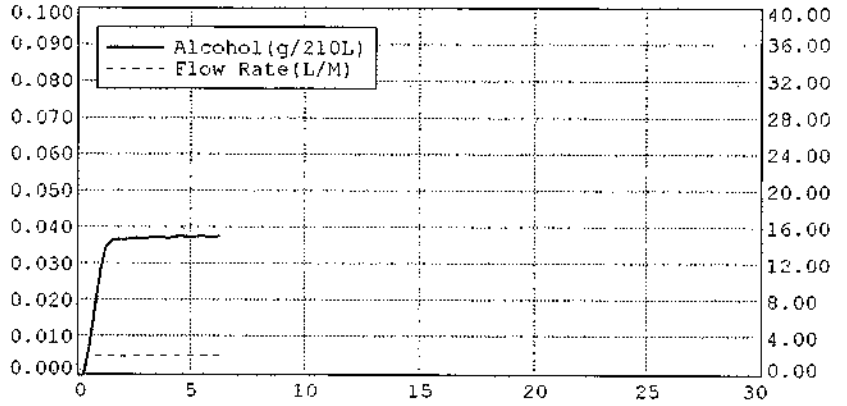
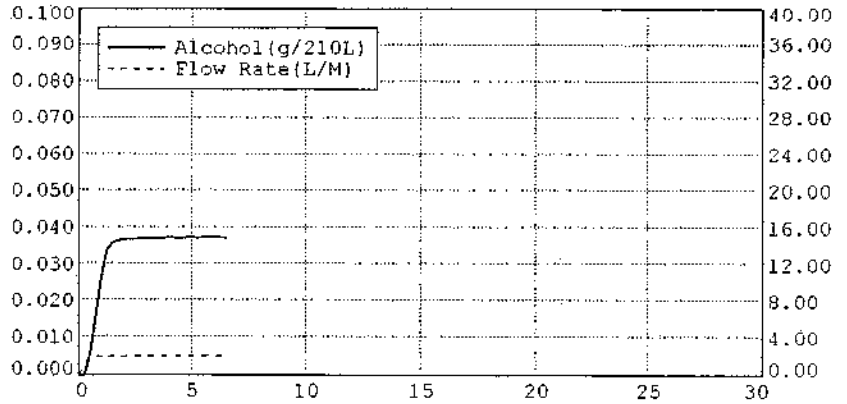
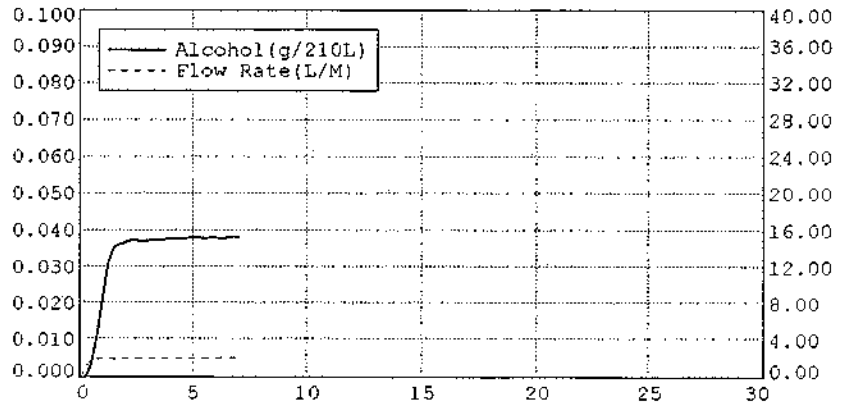
Date: 09/30/2015
 Time: 10:09:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.46: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 383 psi

BLANK TEST	0.000	10:10
INTERNAL STANDARD	VERIFIED	10:10
EXTERNAL STANDARD	0.039	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.038	10:12
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.039	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.039	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.038	10:15
BLANK TEST	0.000	10:16

Average = 0.0386
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

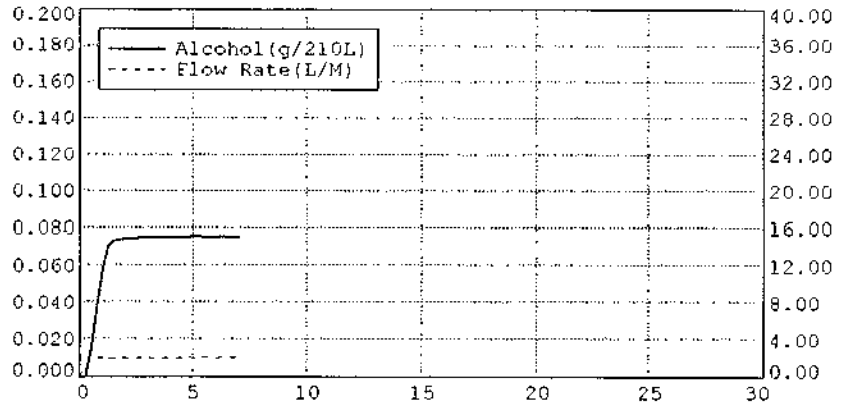
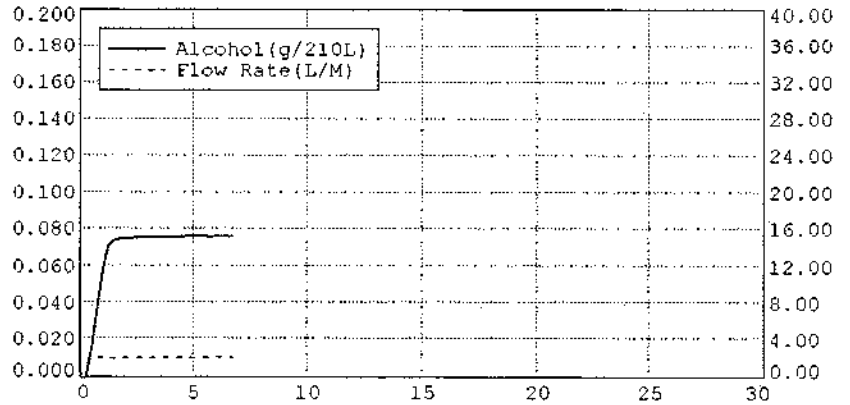
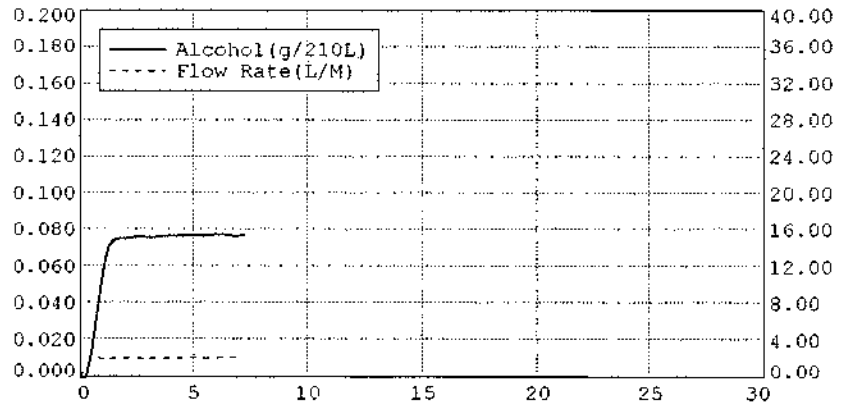
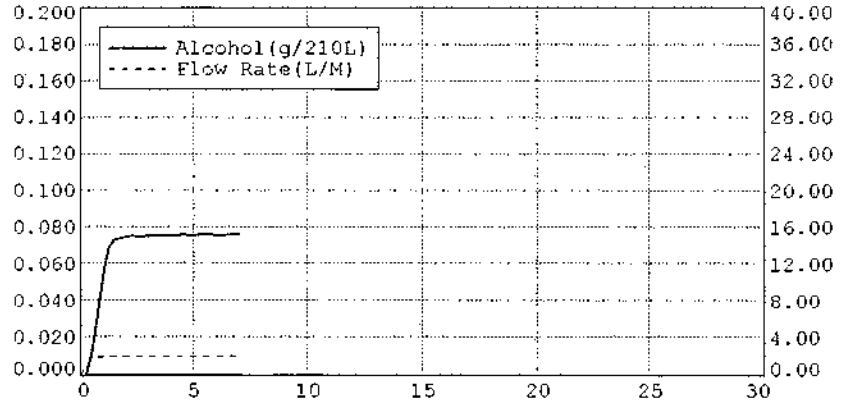
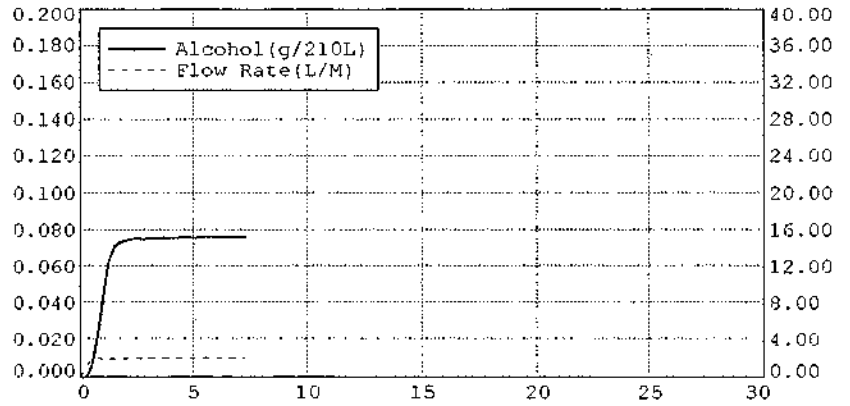
Date: 09/30/2015
 Time: 10:19:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.47: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 378 psi

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.078	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.077	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.078	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.077	10:24
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.076	10:25
BLANK TEST	0.000	10:26

Average = 0.0772
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 4

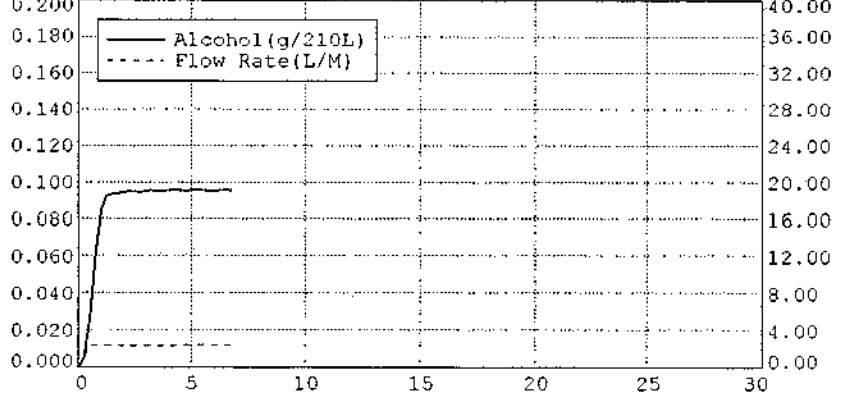
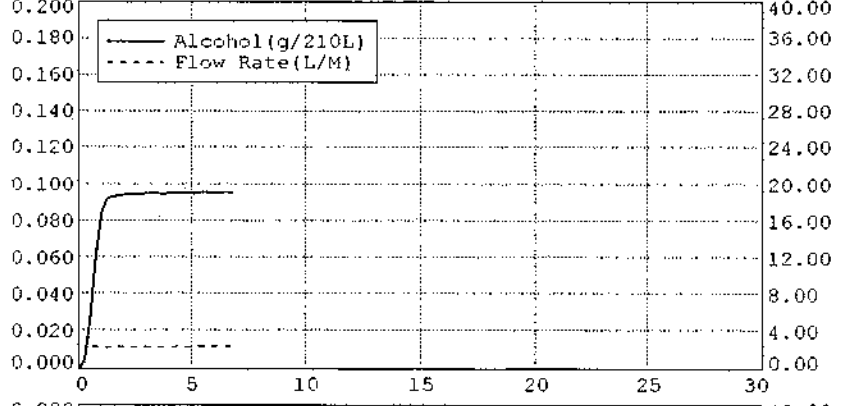
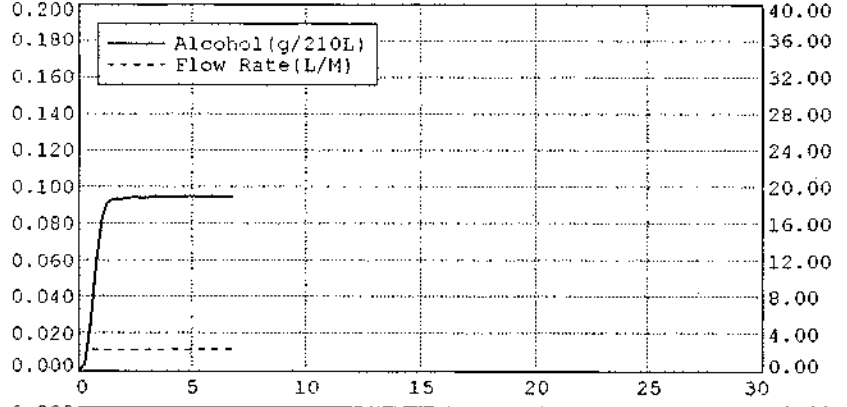
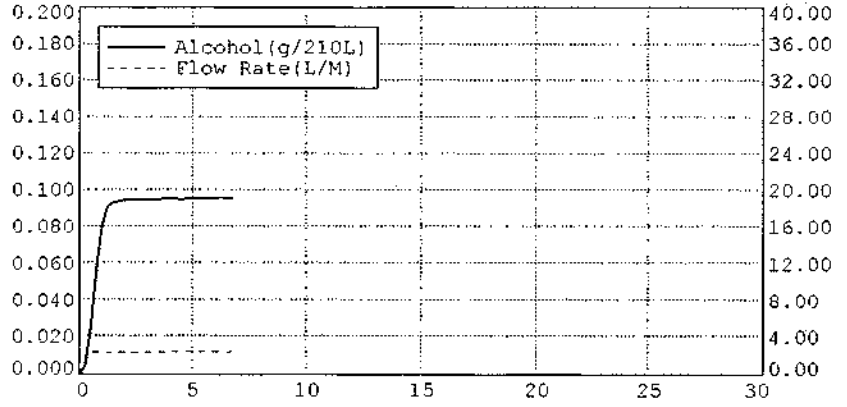
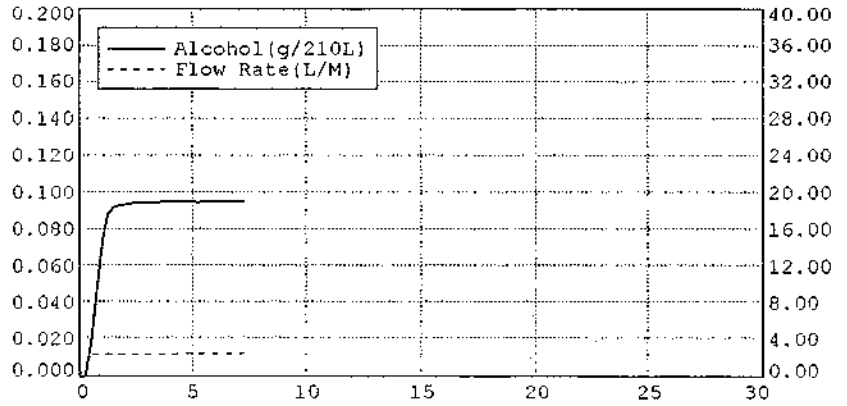
Alaska Department of Public Safety
 DATAMASTER dmt: 100349

Date: 09/30/2015
 Time: 10:28:18

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.100
 TARGET AT 29.48: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1081 psi

BLANK TEST	0.000	10:29
INTERNAL STANDARD	VERIFIED	10:29
EXTERNAL STANDARD	0.096	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.096	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.096	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.096	10:33
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.096	10:34
BLANK TEST	0.000	10:35

Average = 0.0960
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

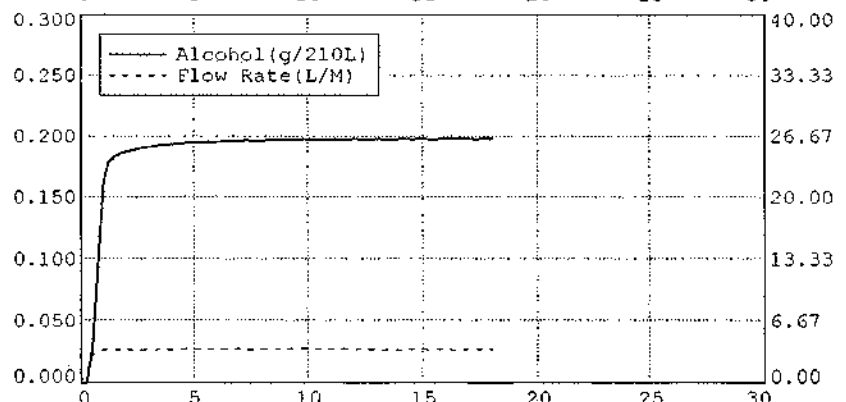
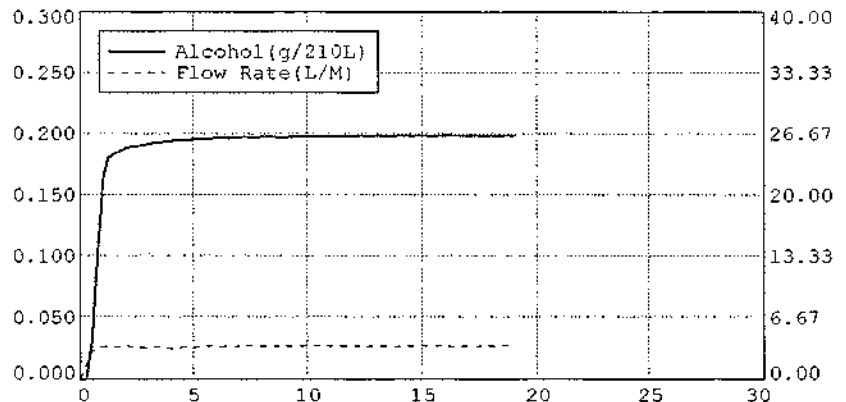
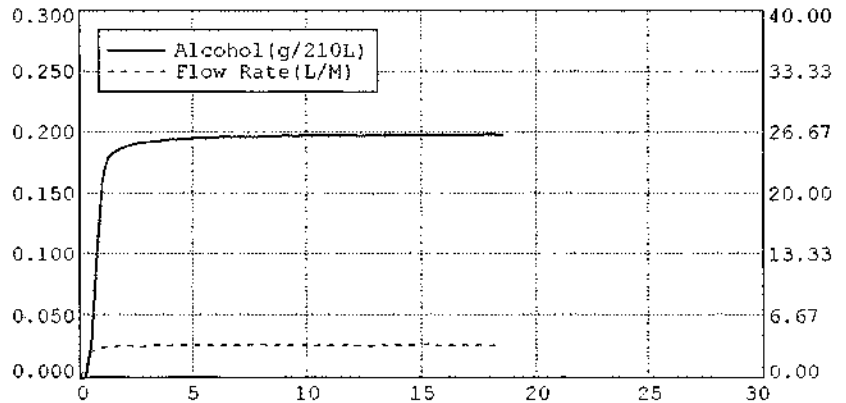
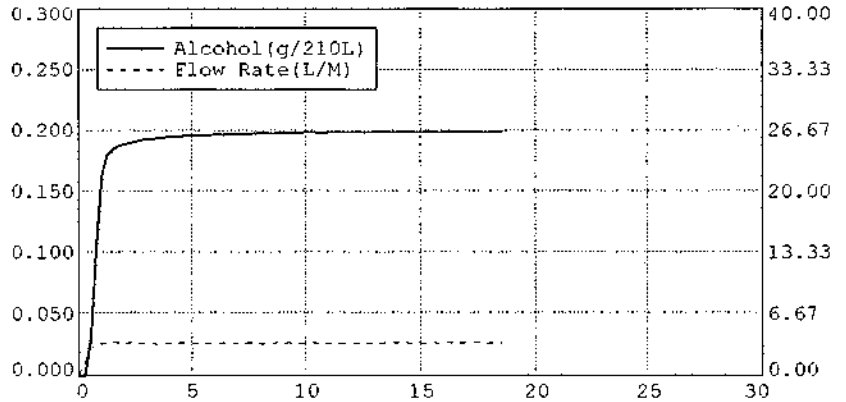
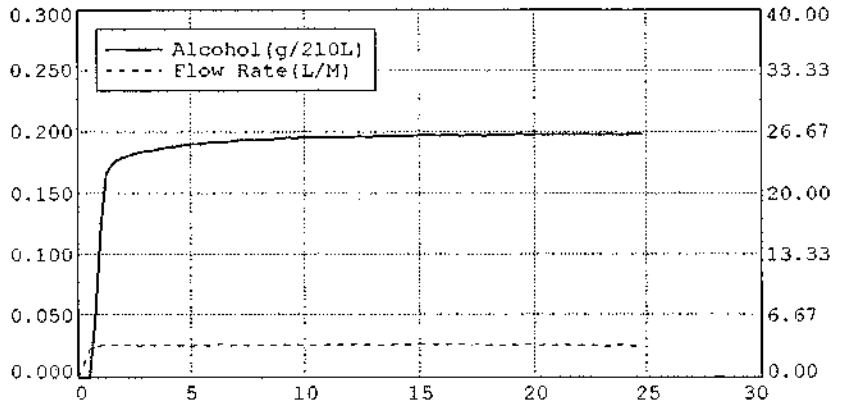
Date: 09/30/2015
 Time: 10:37:00

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:38
INTERNAL STANDARD	VERIFIED	10:38
EXTERNAL STANDARD	0.199	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.200	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.199	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.200	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.199	10:44
BLANK TEST	0.000	10:45

Average = 0.1994
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100349

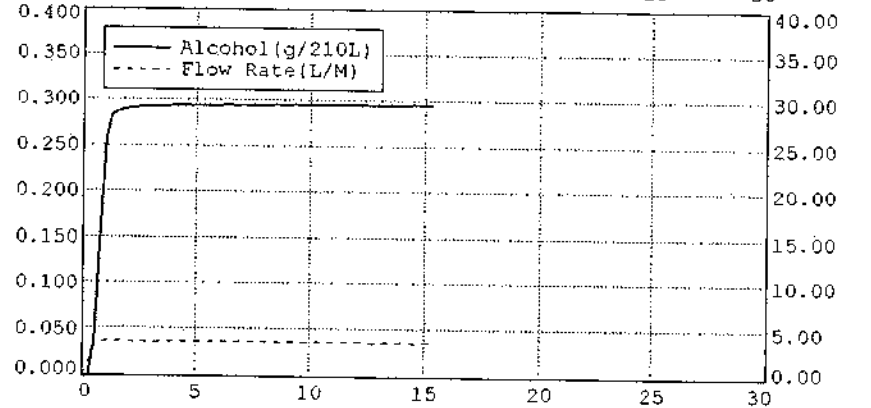
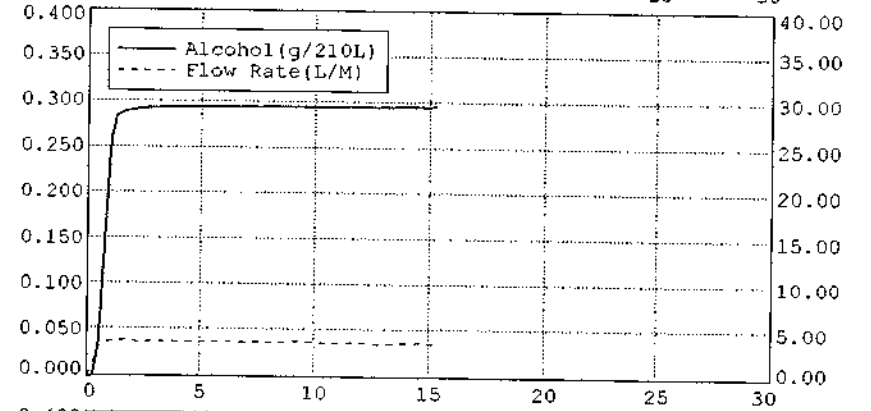
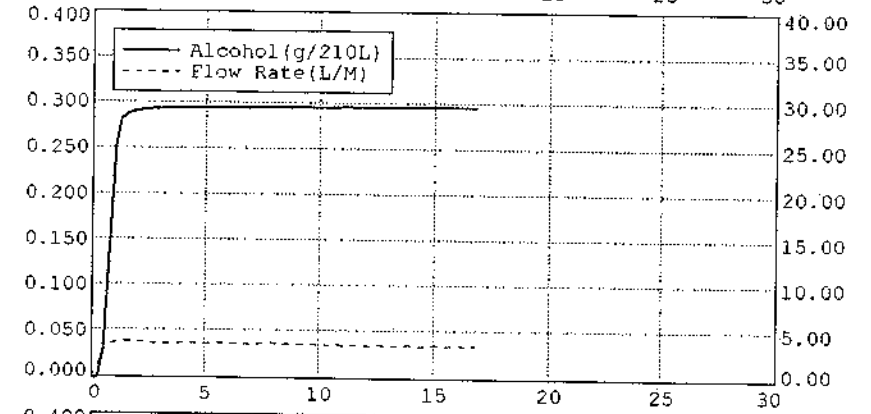
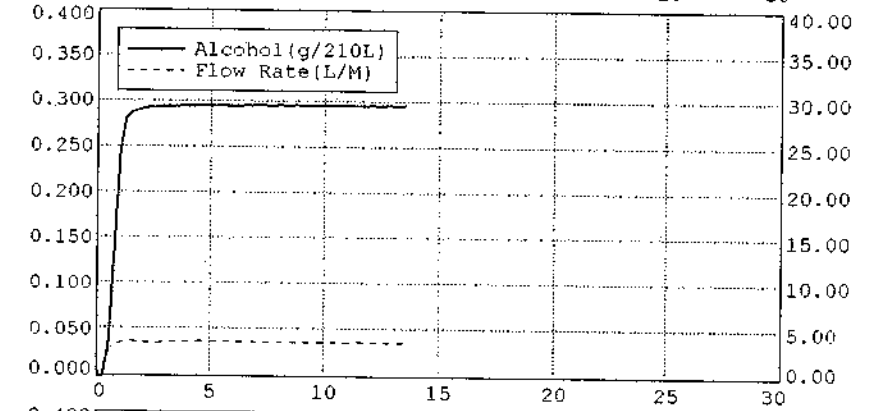
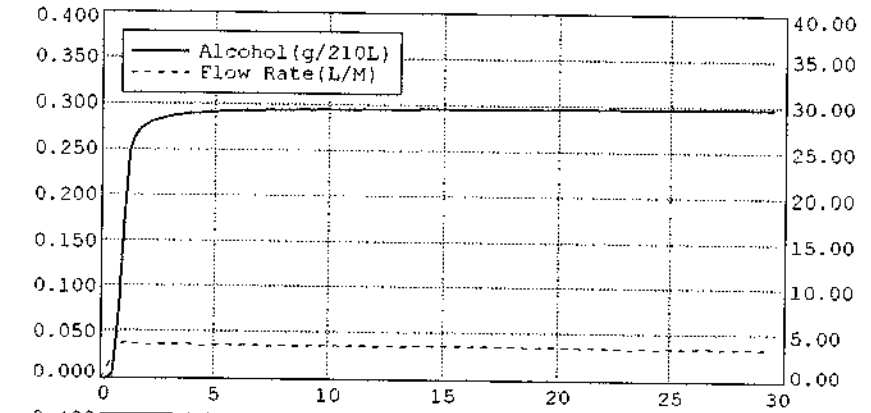
Date: 09/30/2015
 Time: 10:47:27

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:48
INTERNAL STANDARD	VERIFIED	10:48
EXTERNAL STANDARD	0.298	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.296	10:50
BLANK TEST	0.000	10:51
EXTERNAL STANDARD	0.296	10:52
BLANK TEST	0.000	10:52
EXTERNAL STANDARD	0.296	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.296	10:54
BLANK TEST	0.000	10:55

Average = 0.2964
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 13:08:33

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

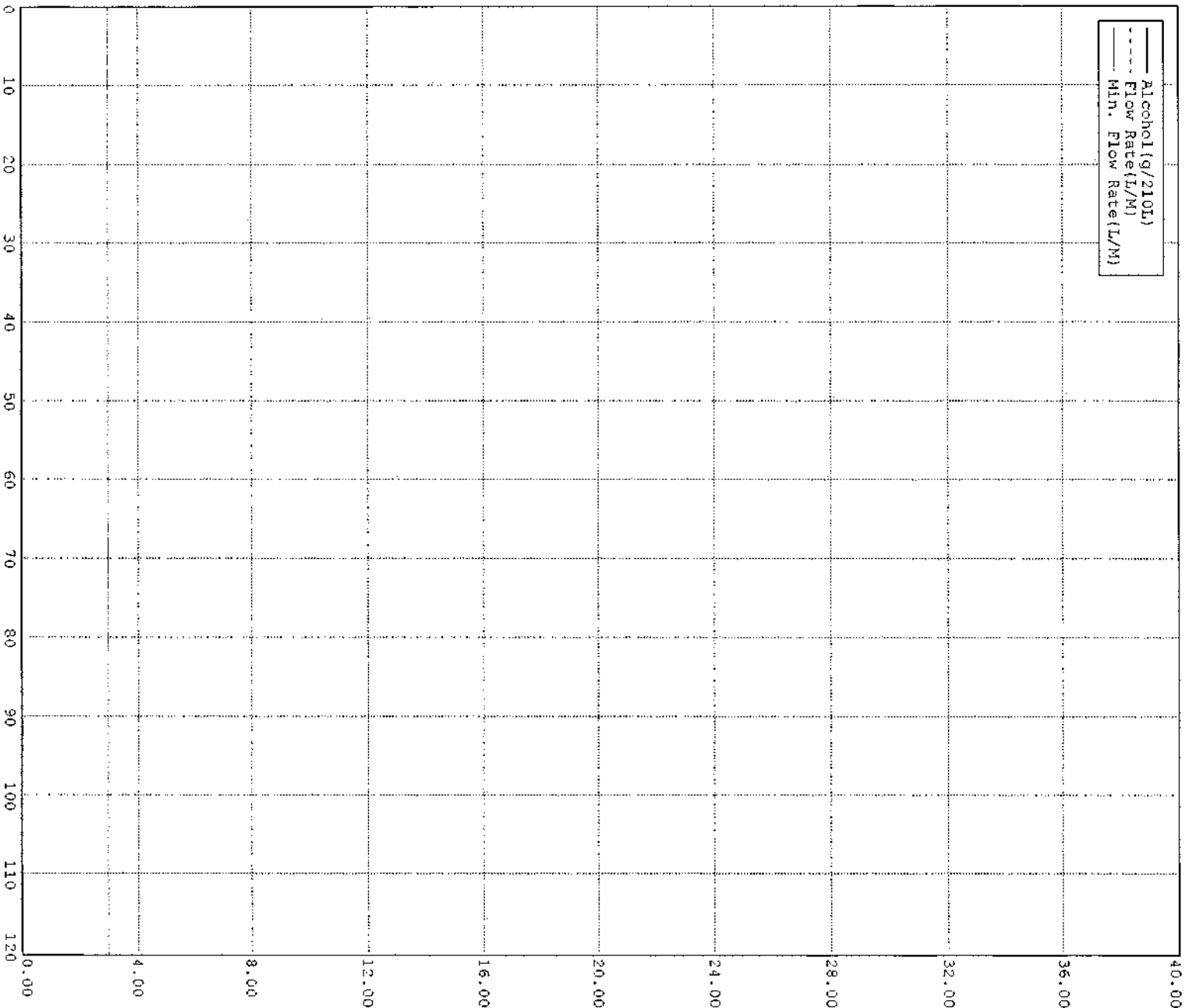
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:09
BLANK TEST	0.000	13:10
INTERNAL STANDARD	VERIFIED	13:10
EXTERNAL STANDARD	0.078	13:10
BLANK TEST	0.000	13:11
SUBJECT SAMPLE	INCOMPLETE	13:13

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 13:17:33

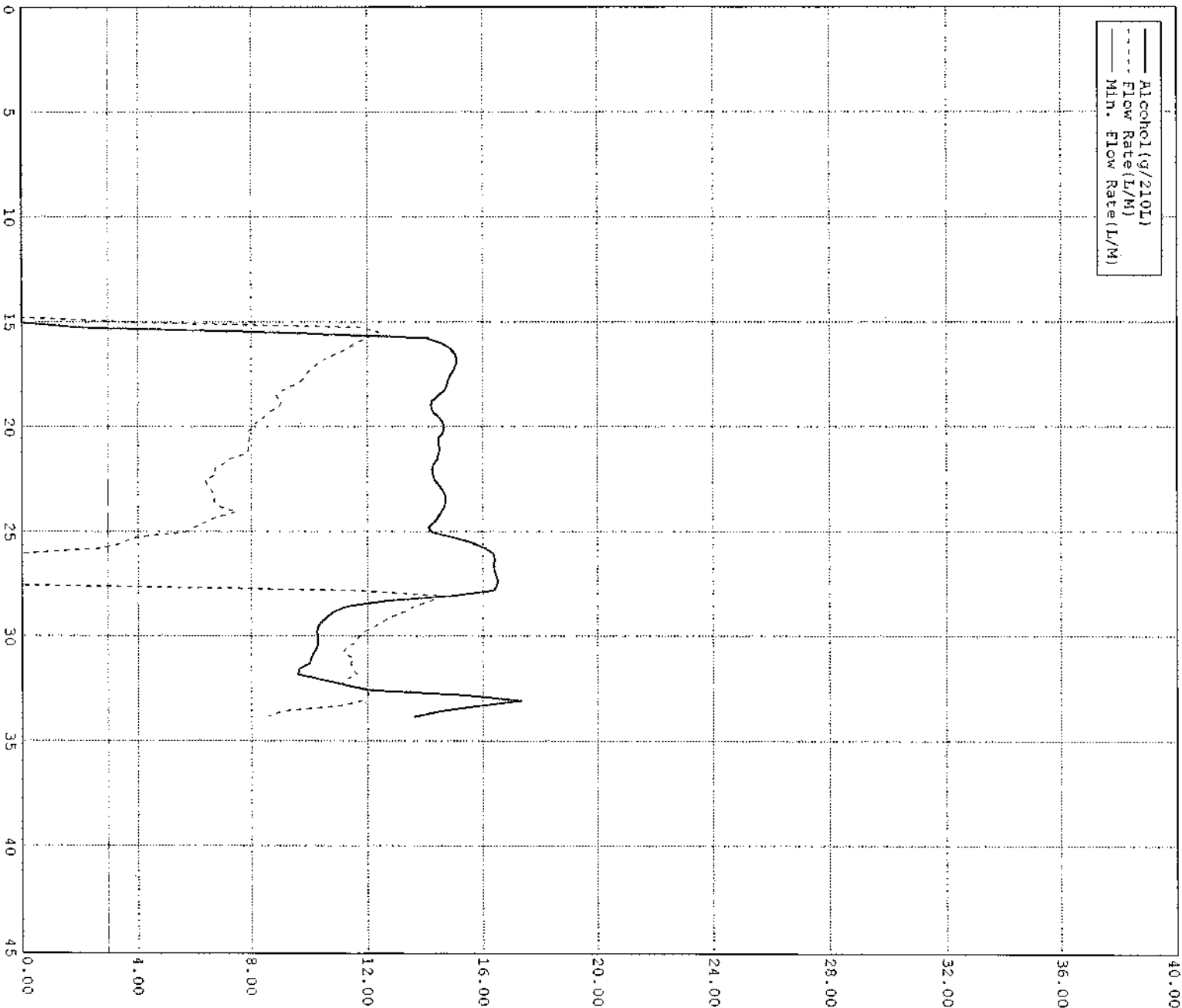
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:20
BLANK TEST	0.000	13:20
INTERNAL STANDARD	VERIFIED	13:20
EXTERNAL STANDARD	0.077	13:20
BLANK TEST	0.000	13:21
SUBJECT SAMPLE	INVALID	13:22

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 13:50:55

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

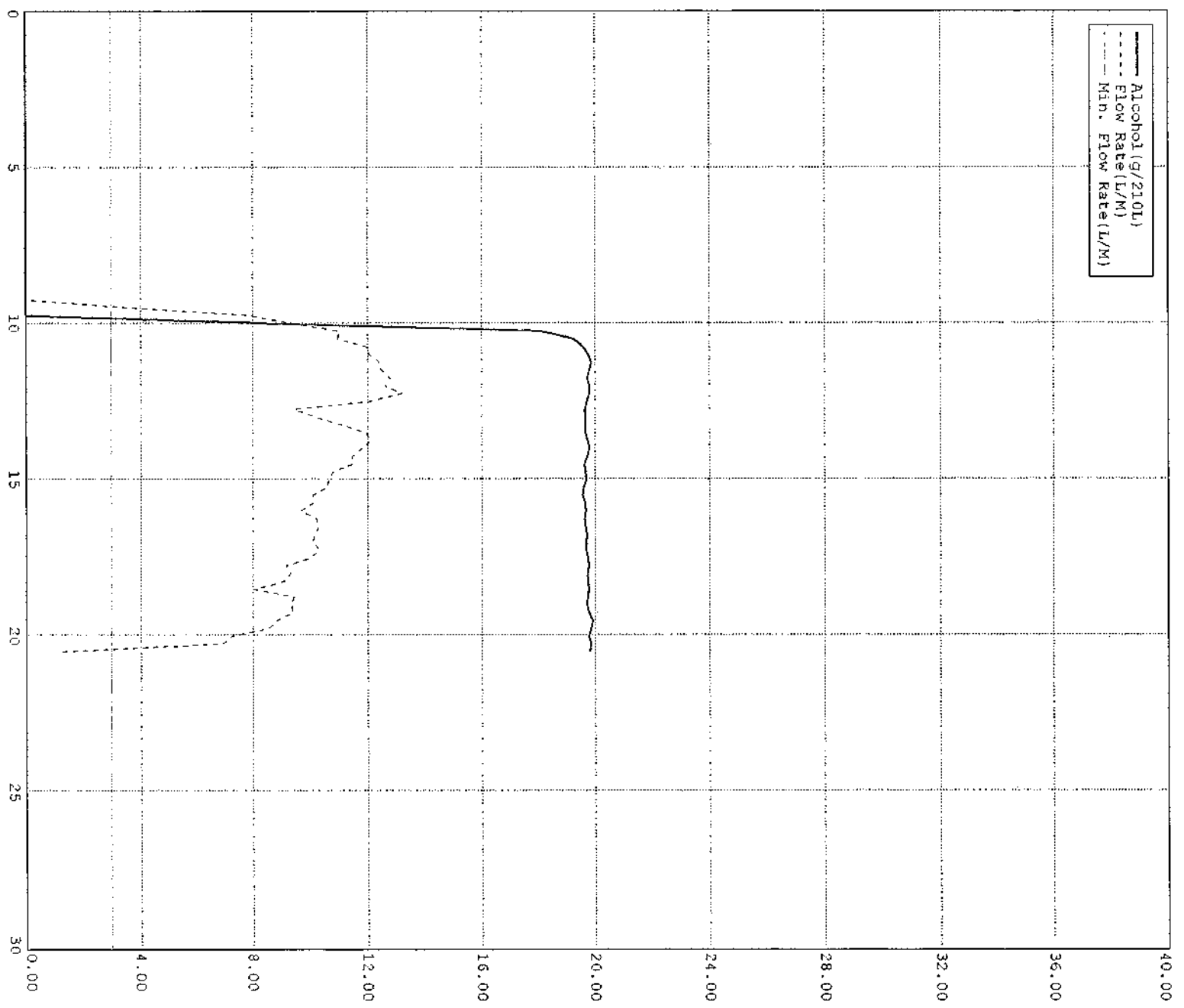
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:52
BLANK TEST	0.000	13:52
INTERNAL STANDARD	VERIFIED	13:53
Xg = 0.081 (0.53%)		
EXTERNAL STANDARD	0.077	13:53
X[1] = 0.0771 (-0.0025)	(0.0012)	
BLANK TEST	0.000	13:54
SUBJECT SAMPLE	XXX	13:54
X[1] = 0.0996 (-0.0125)	(0.0001)	

Interference Detected

Filter 2 Avg: -0.0020
Filter 3 Avg: 0.0022
10/1/15 BMB

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 14:03:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

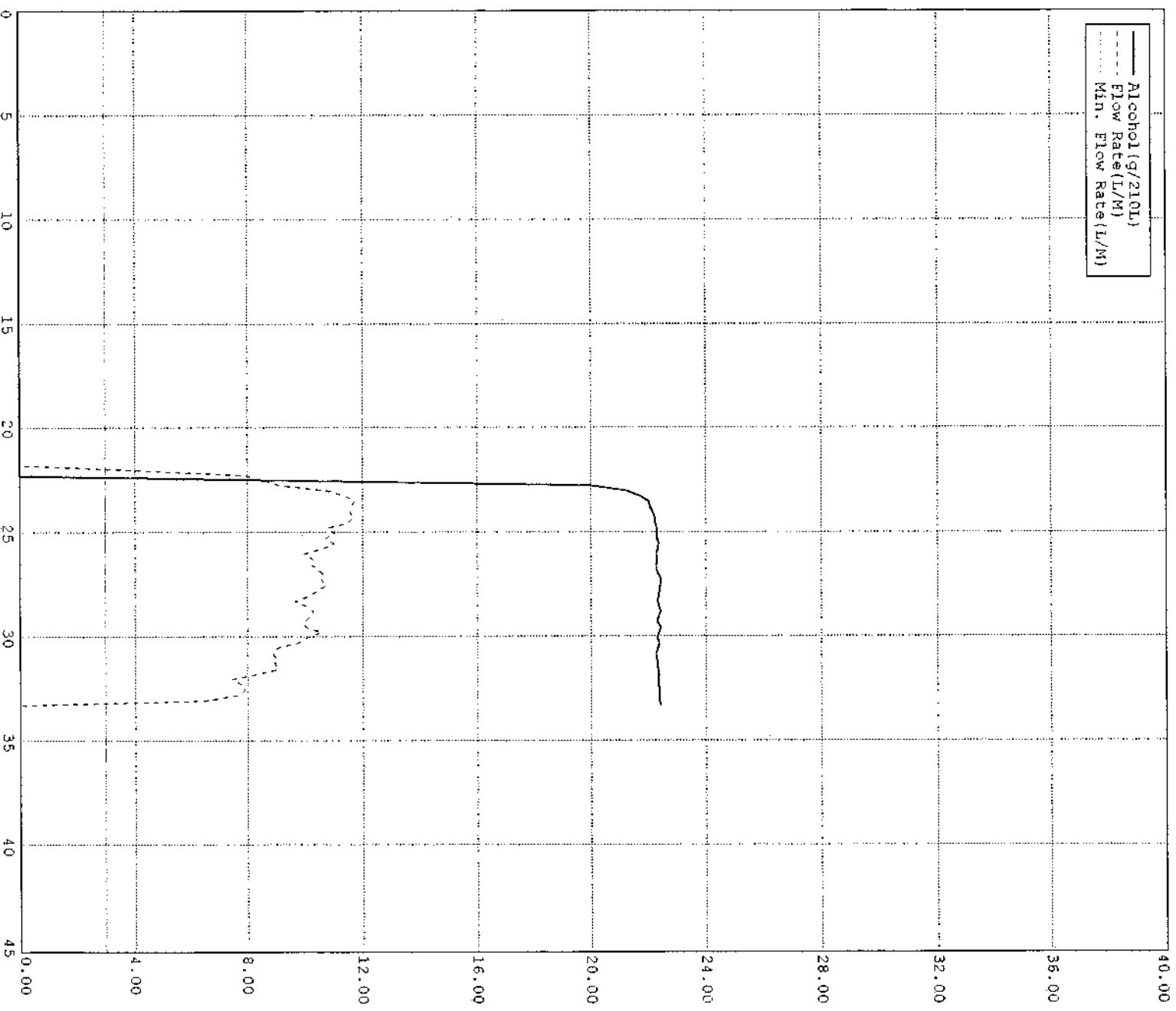
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:04
BLANK TEST	0.000	14:04
INTERNAL STANDARD	VERIFIED	14:05
Xg = 0.082 (0.43%)		
EXTERNAL STANDARD	0.078	14:05
X[1] = 0.0776 (-0.0011)	(0.0031)	
BLANK TEST	0.000	14:06
SUBJECT SAMPLE	XXX	14:06
X[1] = 0.1124 (-0.0236)	(0.0002)	

Interference Detected

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 14:09:32

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

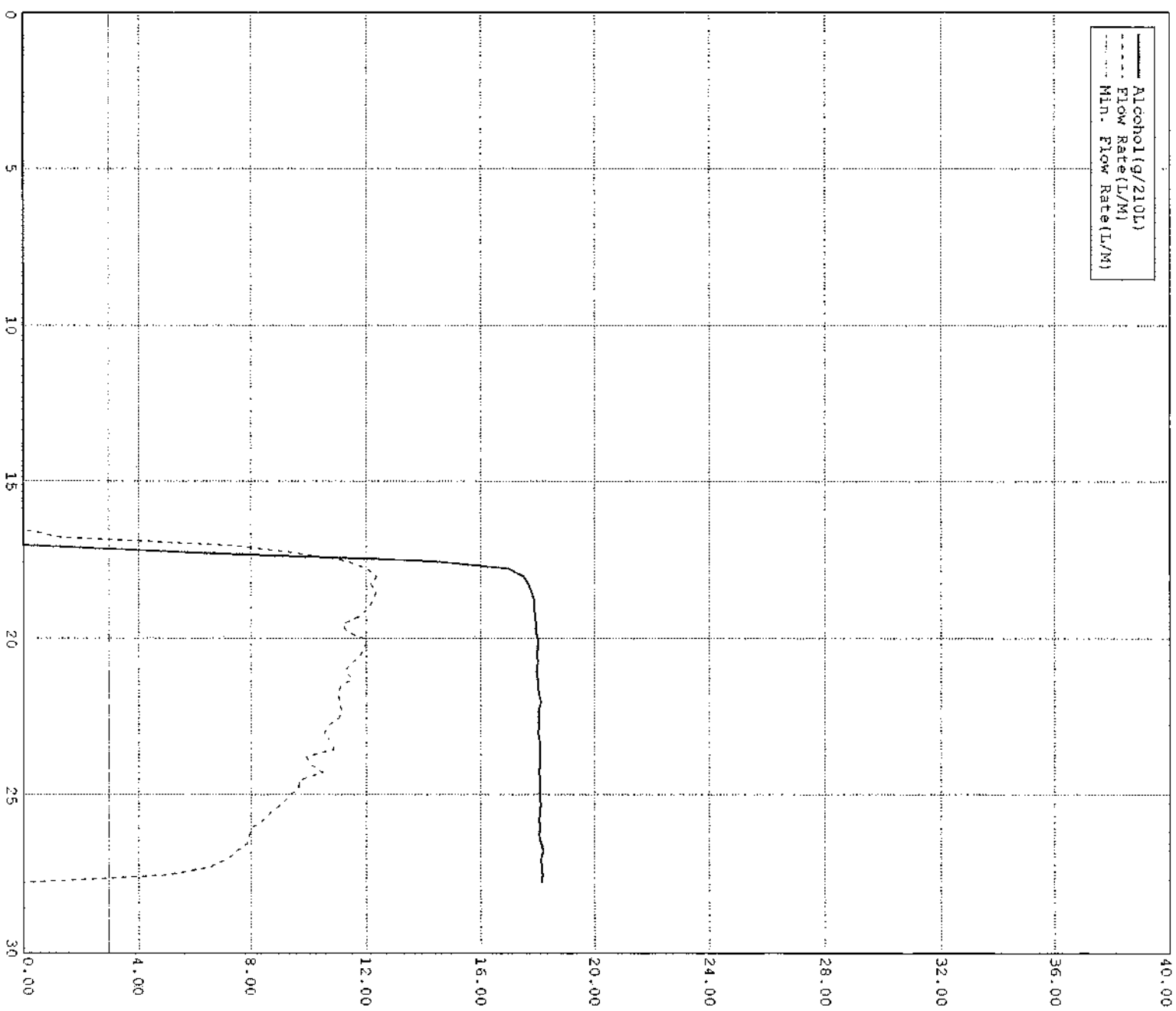
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:13
BLANK TEST	0.000	14:13
INTERNAL STANDARD	VERIFIED	14:13
Xq = 0.081 (0.648)		
EXTERNAL STANDARD	0.077	14:13
X[1] = 0.0770 (-0.0023)	(0.0027)	
BLANK TEST	0.000	14:14
SUBJECT SAMPLE (Vol=1.84L)	0.091	14:15
X[1] = 0.0913 (-0.0003)	(0.0000)	
BLANK TEST	0.000	14:16
EXTERNAL STANDARD	0.076	14:16
X[1] = 0.0765 (-0.0021)	(0.0019)	
BLANK TEST	0.000	14:17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 13:28:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

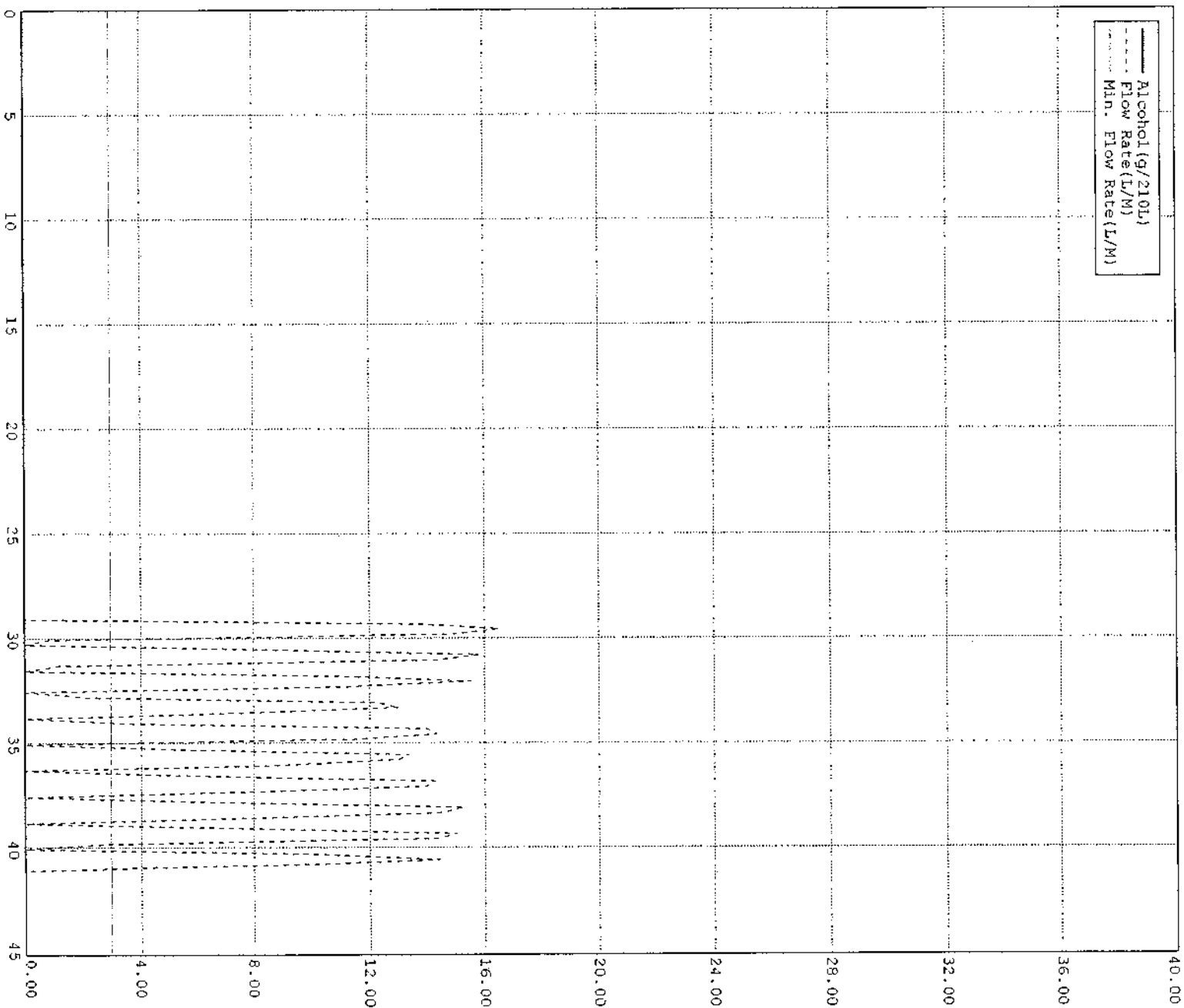
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:30
BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:30
EXTERNAL STANDARD	0.077	13:30
BLANK TEST	0.000	13:31
SUBJECT SAMPLE	XXX	13:32

Maximum Attempts Exceeded

BNB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 13:39:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

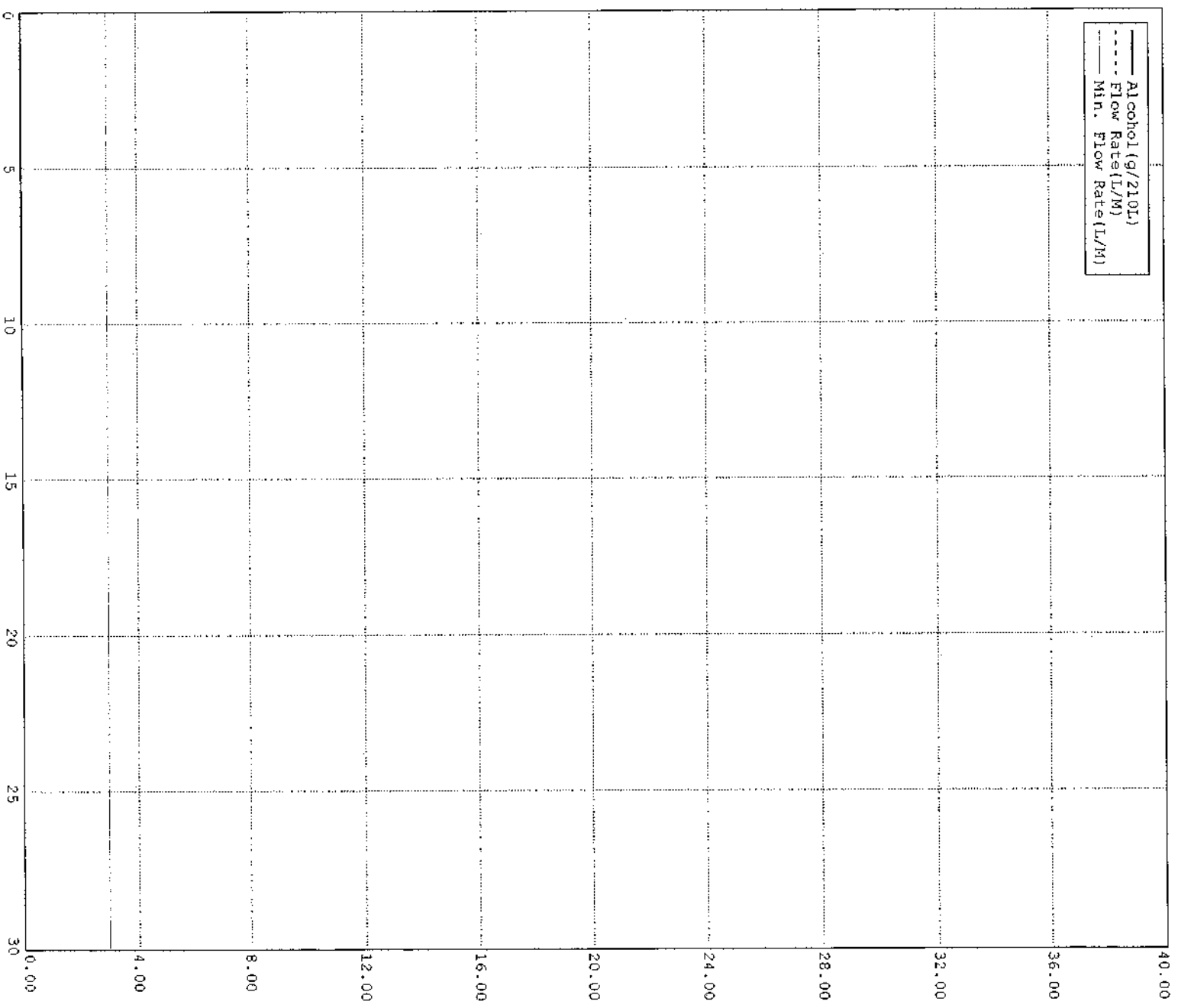
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK
BLANK TEST PASSED 13:42
INTERNAL STANDARD VERIFIED 13:42
EXTERNAL STANDARD 0.077 13:42
BLANK TEST 0.000 13:43

RFI DETECTED

BB MB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100349

Date: 09/30/2015
Time: 14:45:07

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 29.67: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:46
BLANK TEST	0.000	14:46
INTERNAL STANDARD	VERIFIED	14:46
EXTERNAL STANDARD	0.077	14:46
BLANK TEST	0.000	14:47
SUBJECT SAMPLE (Vol=2.23L)	0.000	14:48
BLANK TEST	0.000	14:48
EXTERNAL STANDARD	0.078	14:49
BLANK TEST	0.000	14:50

