

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 100346 Analyst Brandi Barnett Start Date 7/21/15

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 02915020 A2 Exp 3/5/17
- ii. 0.040g/210L Mnf ILMO Lot 02915040 A3 Exp 3/5/17
- iii. 0.080g/210L Mnf ILMO Lot 09214080 A2 Exp 5/1/16
- iv. 0.100g/210L Mnf ILMO Lot 02915100 A1 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 SD1200 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 01/20/15

iii. Negative Control - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17

1. Simulator S/N DR4178 Date Calibrated 01/19/15

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 7/24/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/21/2015
Time: 14:40:36

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

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.64 V PASSED
(1.00 V - 2.32 V)
Cooler Voltage = 1.61 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 546 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.640 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 = 0.104 0.42% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100346

Date: 07/21/2015
Time: 3:05 PM

Temperatures (°C)

Sample Cell: 49.7°C
Breath Tube: 48.1°C

Current Barometer 29.6 in
Volume (Ltr) 1.54

Settings

Lamp: 1.64 V
Bias: 80 V
Cooler: 1.61 V
Chopper: 541 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.042 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 09/29/2011
Time: 12:03:26

Ca = 0.1010
CAL = 0.996244 0.800 <= CAL < 1.200
b1 = 0.0012 0.0000 <= b1 < 0.0040
b2 = 0.0057 0.0010 <= b2 < 0.0100
b3 = 0.0020 0.0000 <= b3 < 0.0040
Xq = 0.1035 0.0500 <= Xq < 0.2000
a21 = 1.188211 1.050 <= a21 < 1.300
a31 = 0.410666 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100346

Date: 07/21/2015
Time: 15:08:20

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

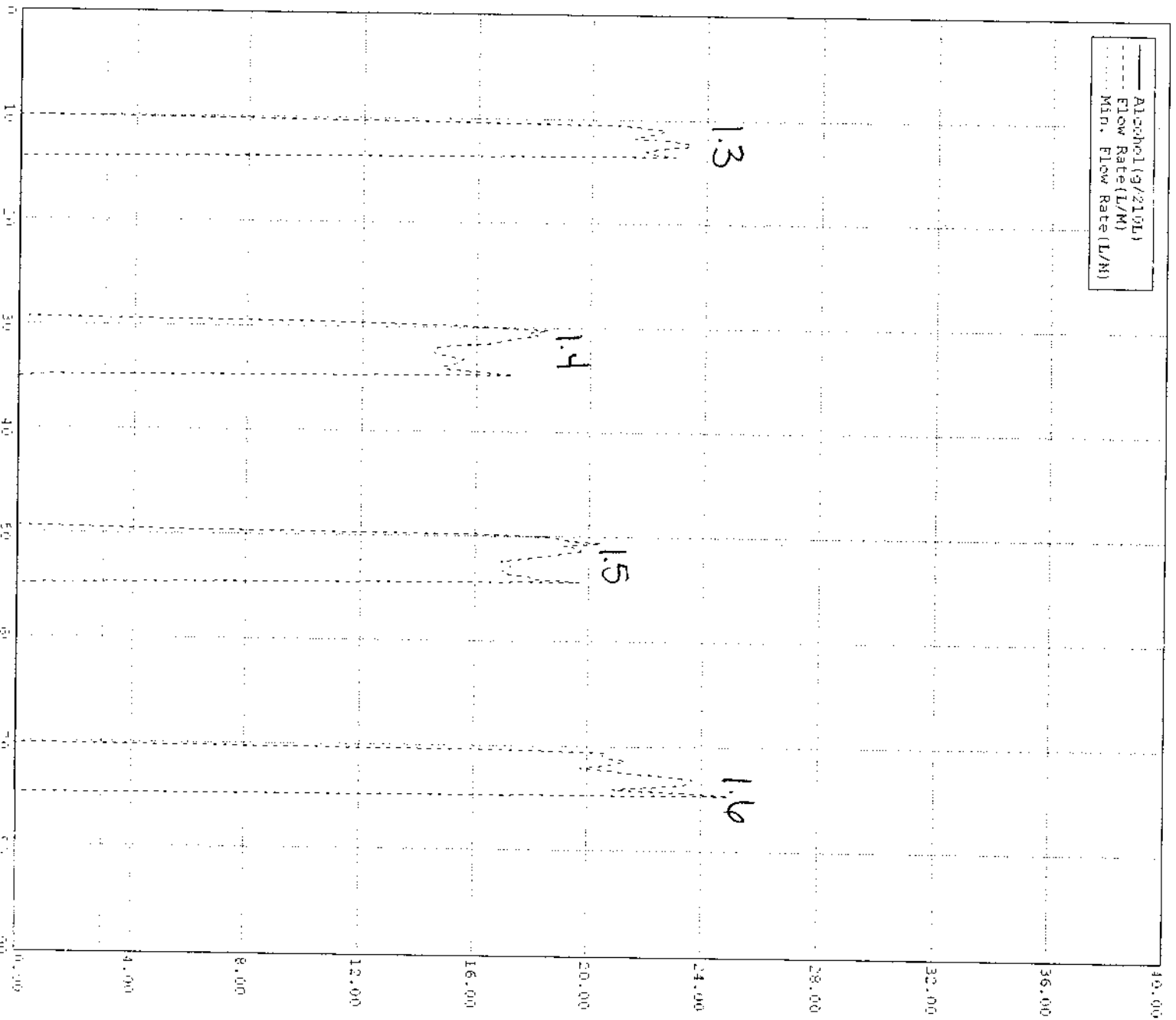
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.57: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:09
BLANK TEST	0.000	15:09
INTERNAL STANDARD	VERIFIED	15:09
EXTERNAL STANDARD	0.081	15:09
BLANK TEST	0.000	15:10
SUBJECT SAMPLE (Vol=1.62L)	0.000	15:12
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.082	15:13
BLANK TEST	0.000	15:14

BMB



LINEARITY CHECK

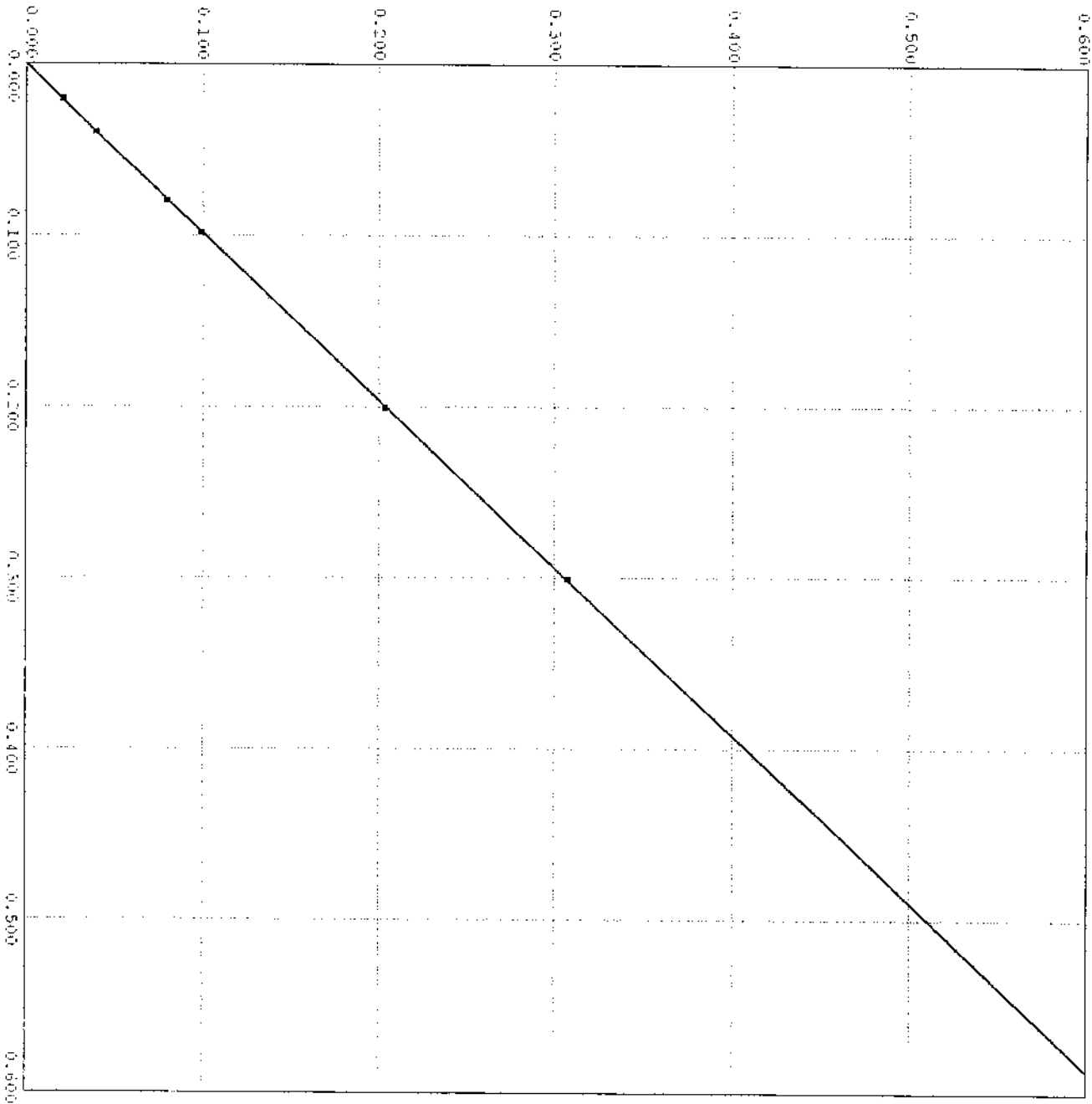
Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/23/2015
Time: 10:18:33

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0216	0.0005
0.039	0.0406	0.0009
0.079	0.0806	0.0005
0.098	0.1000	0.0000
0.200	0.2042	0.0011
0.300	0.3080	0.0007

SLOPE = 1.023070
 R^2 = 0.999957



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100346

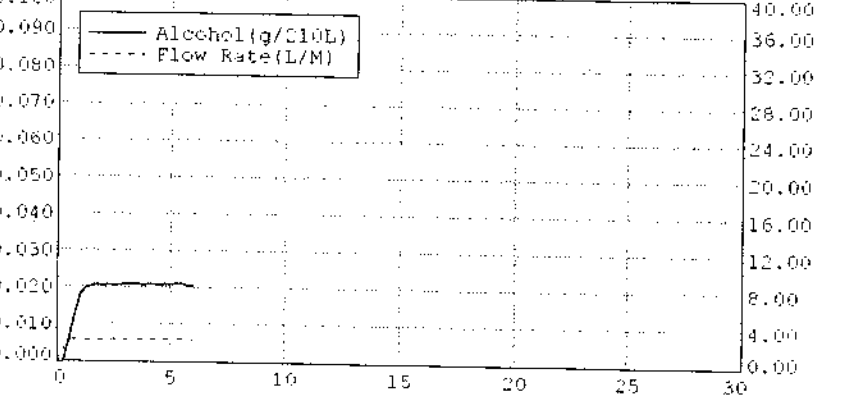
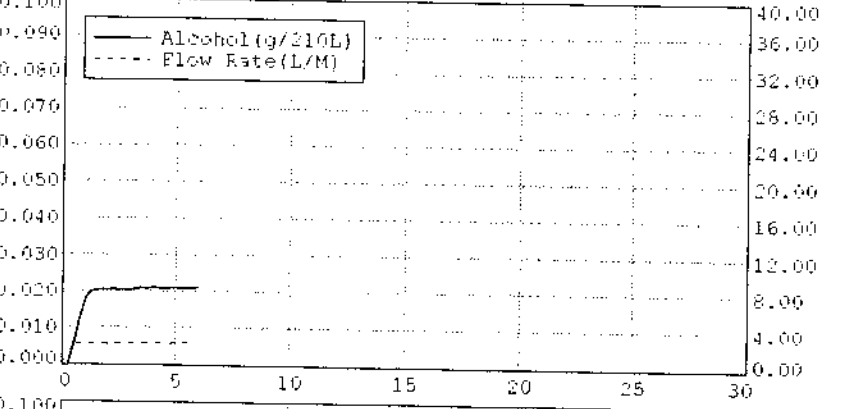
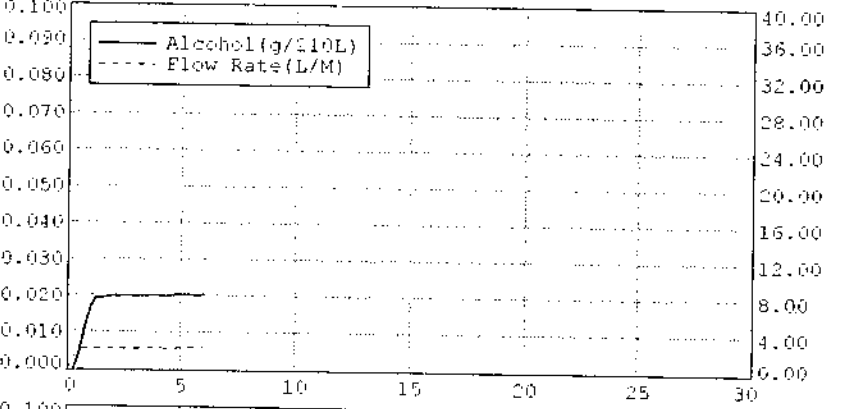
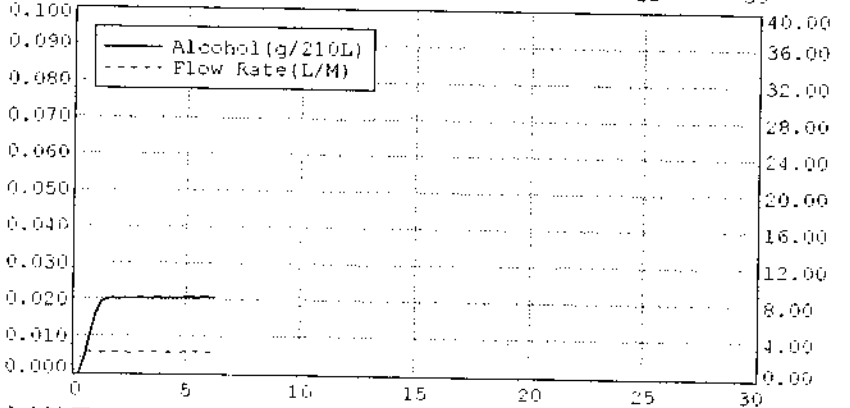
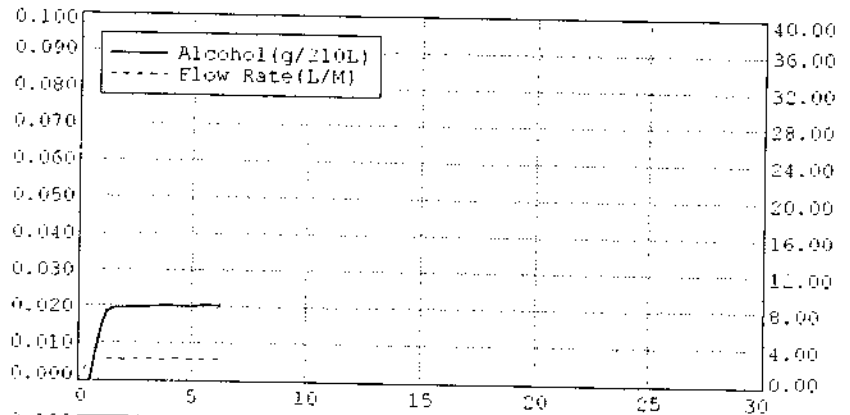
Date: 07/23/2015
 Time: 10:18:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.38: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 737 psi

BLANK TEST	0.000	10:19
INTERNAL STANDARD	VERIFIED	10:19
EXTERNAL STANDARD	0.021	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.022	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.021	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.022	10:23
BLANK TEST	0.000	10:24
EXTERNAL STANDARD	0.022	10:24
BLANK TEST	0.000	10:25

Average = 0.0216
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100346

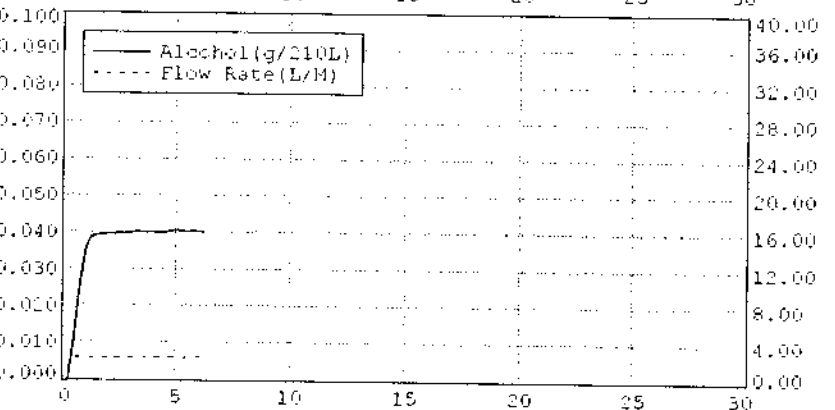
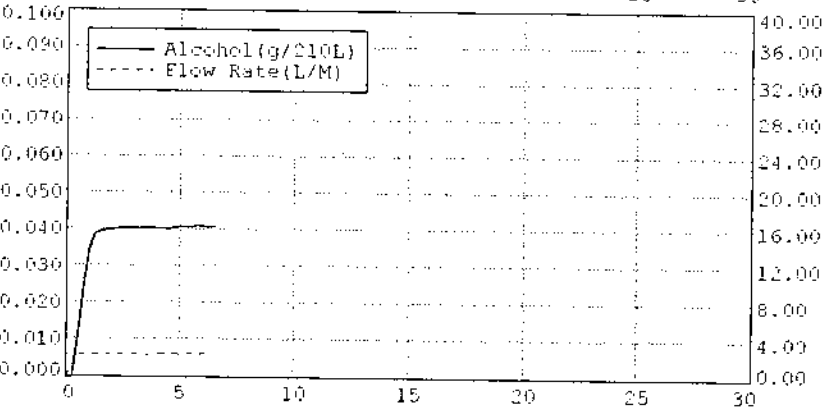
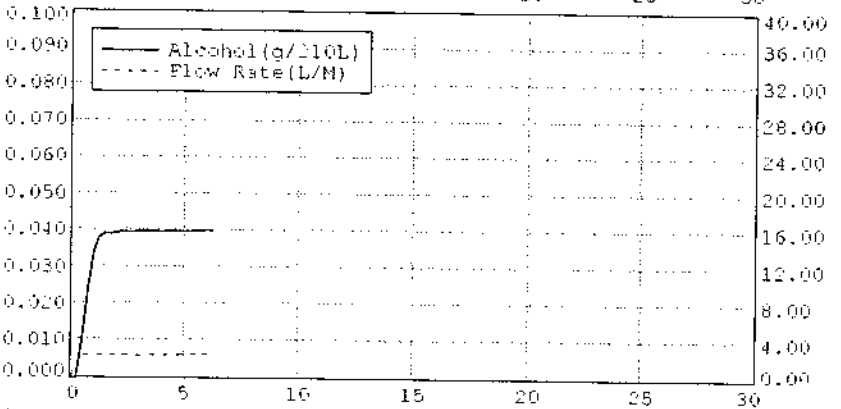
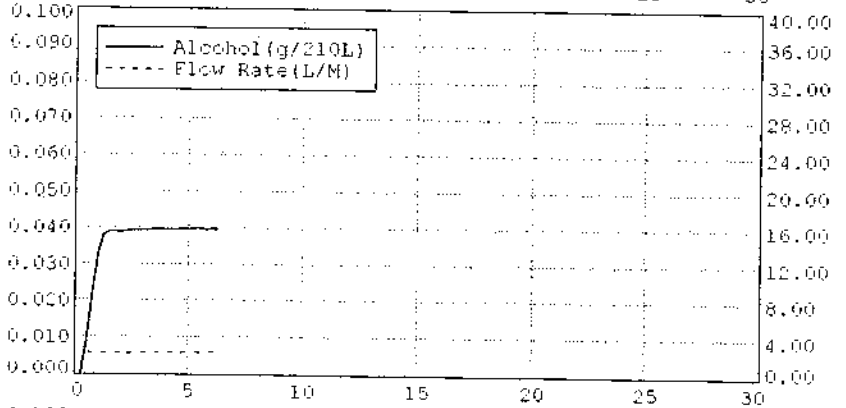
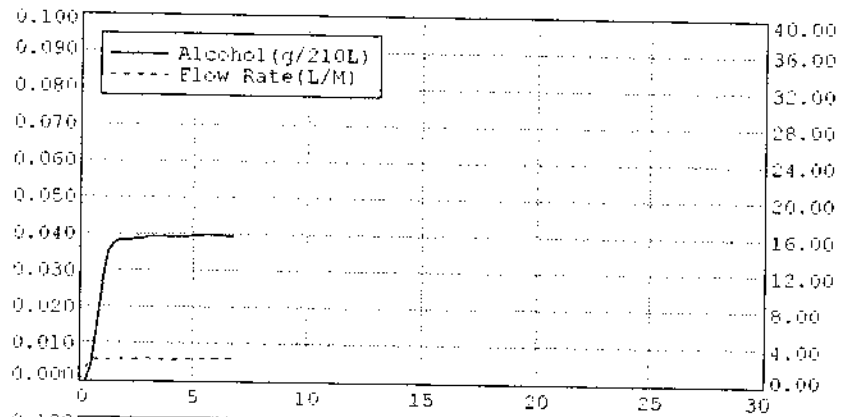
Date: 07/23/2015
 Time: 10:30:06

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.39: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 855 psi

BLANK TEST	0.000	10:31
INTERNAL STANDARD	VERIFIED	10:31
EXTERNAL STANDARD	0.040	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.040	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.040	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.042	10:35
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.041	10:36
BLANK TEST	0.000	10:37

Average = 0.0406
 Std Dev = 0.0009



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100346

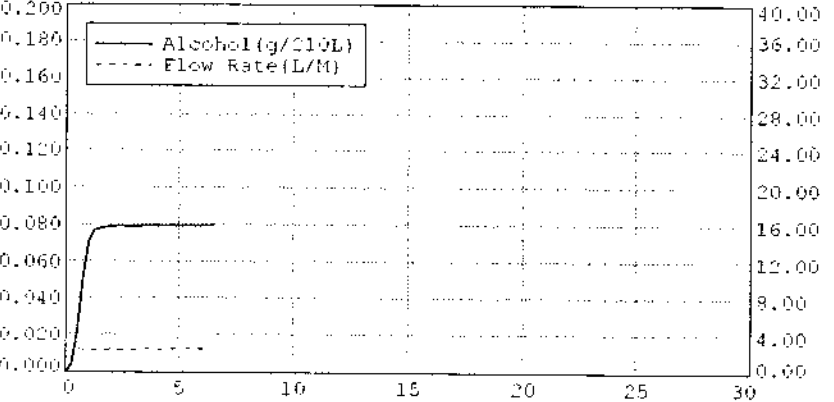
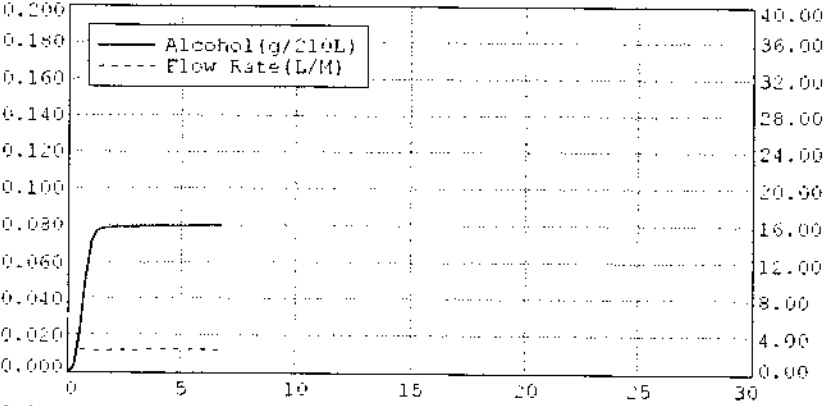
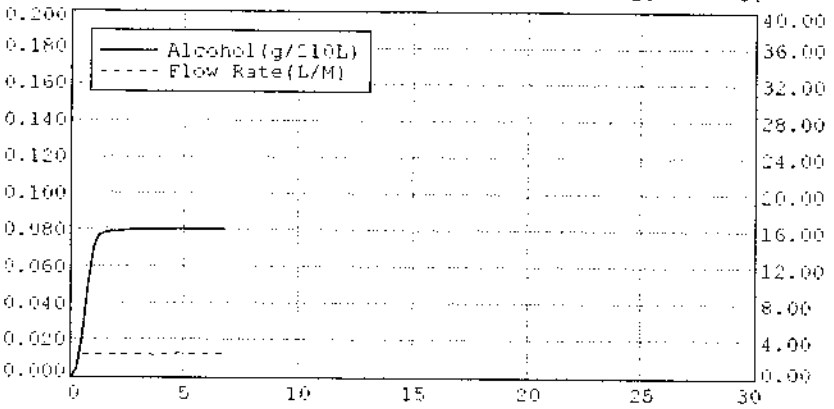
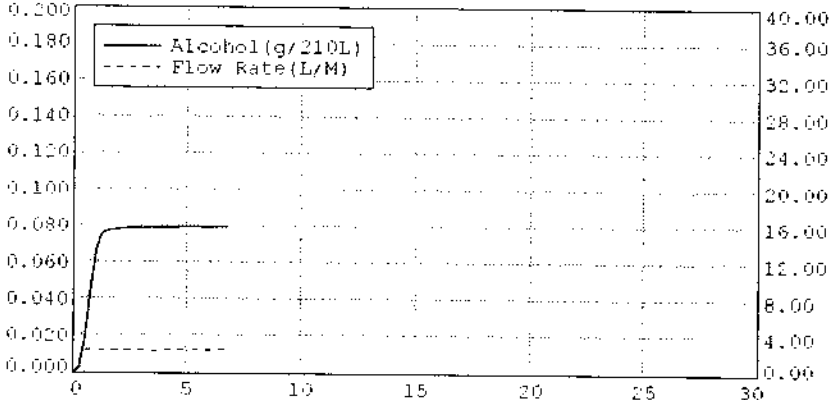
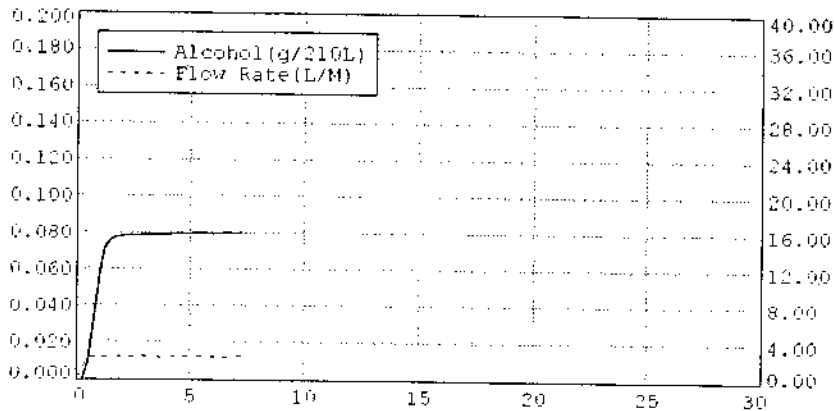
Date: 07/23/2015
 Time: 10:39:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.39: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 1113 psi

BLANK TEST	0.000	10:40
INTERNAL STANDARD	VERIFIED	10:41
EXTERNAL STANDARD	0.081	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.080	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.081	10:43
BLANK TEST	0.000	10:44
EXTERNAL STANDARD	0.081	10:44
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.080	10:45
BLANK TEST	0.000	10:46

Average = 0.0806
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100346

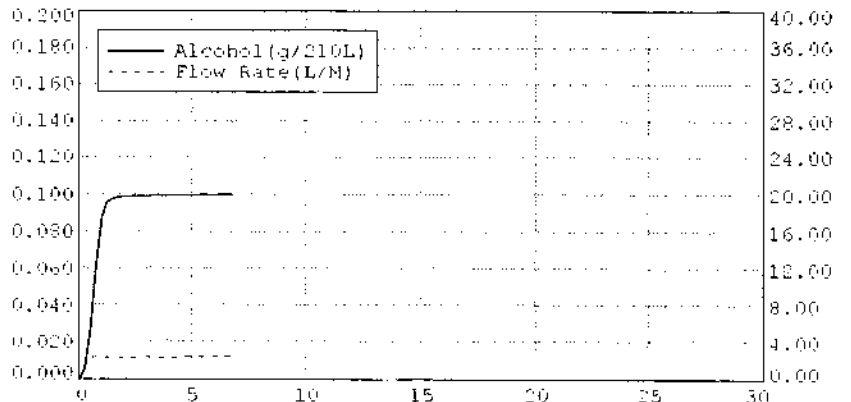
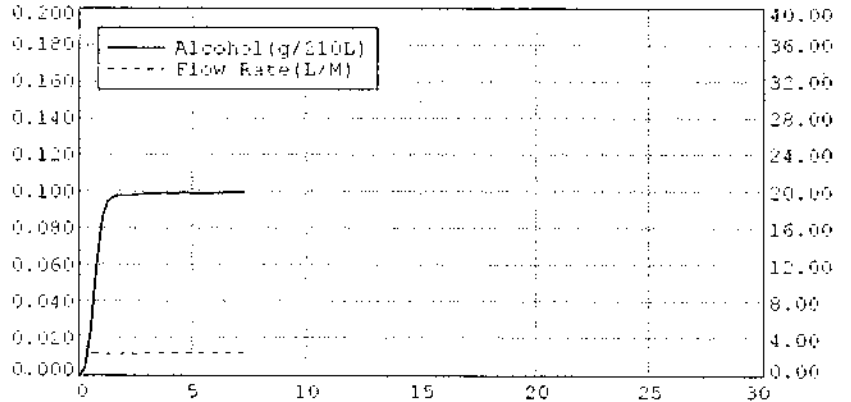
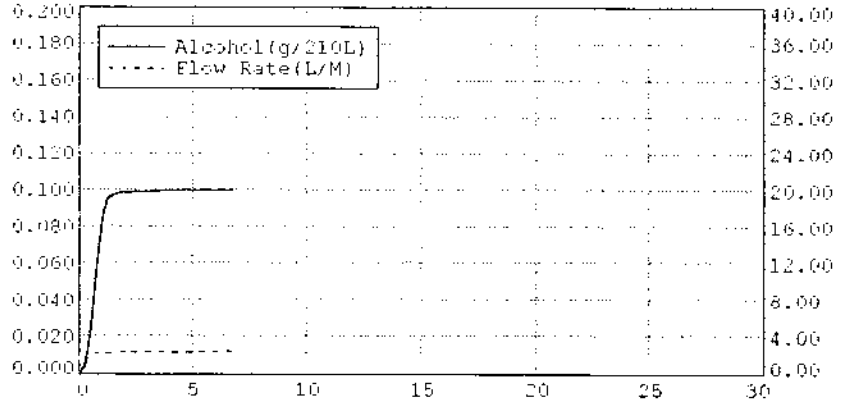
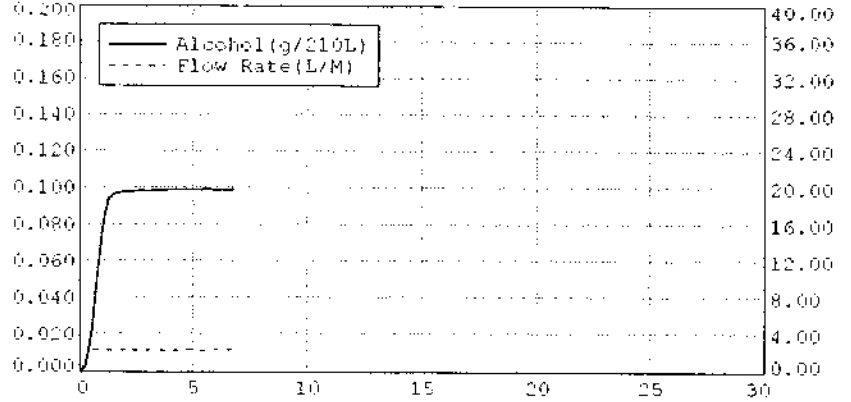
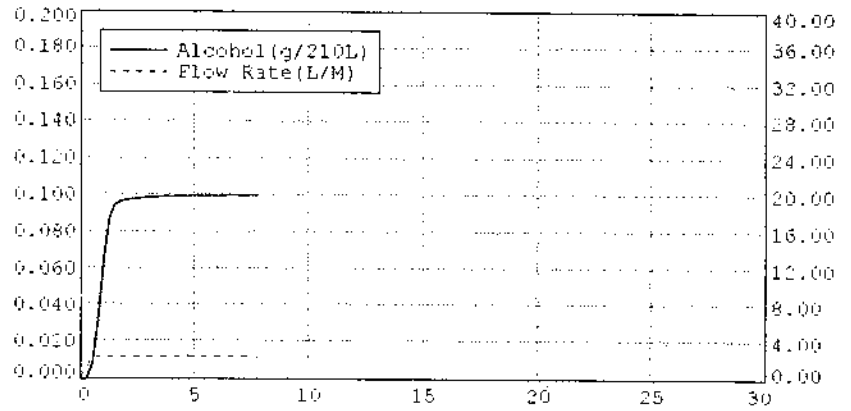
Date: 07/23/2015
 Time: 12:42:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.39: 0.098
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 729 psi

BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
EXTERNAL STANDARD	0.100	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.100	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.100	12:46
BLANK TEST	0.000	12:47
EXTERNAL STANDARD	0.100	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.100	12:48
BLANK TEST	0.000	12:49

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100346

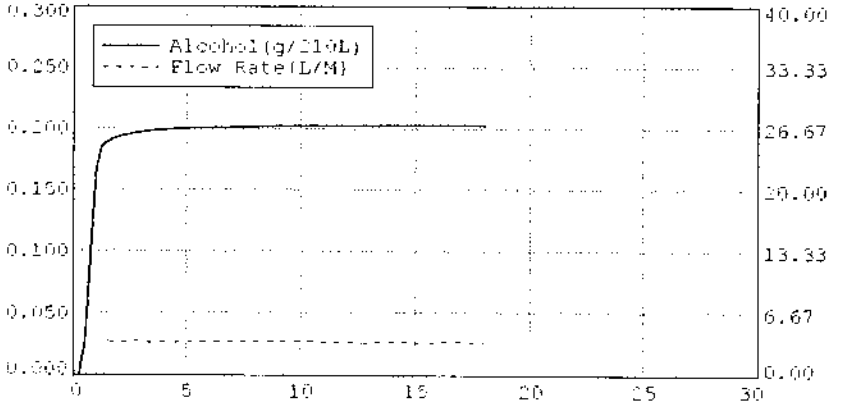
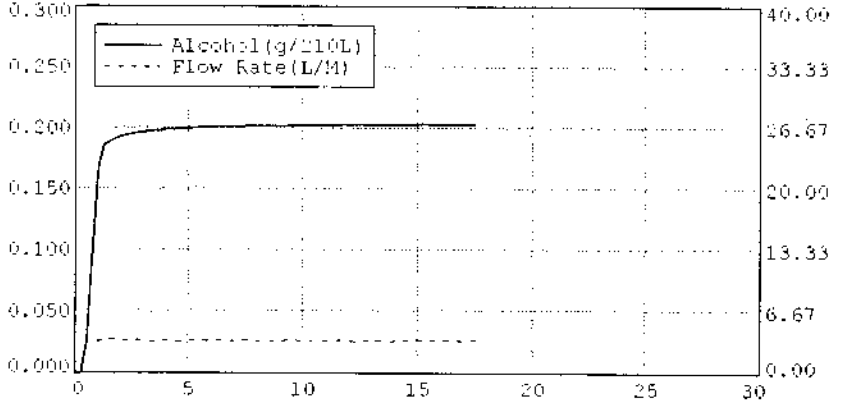
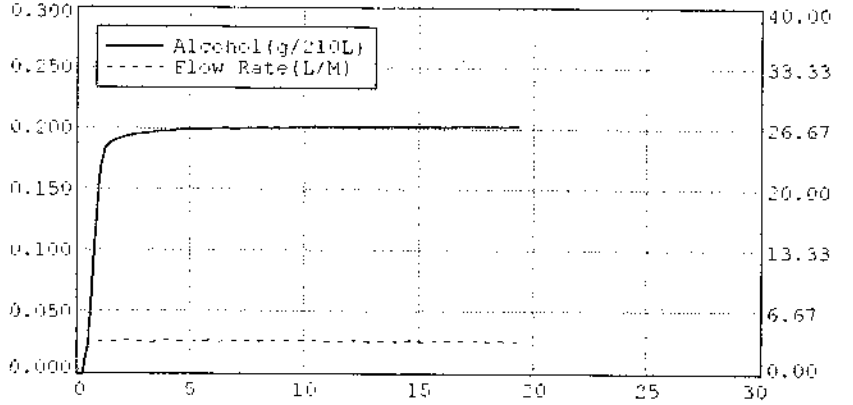
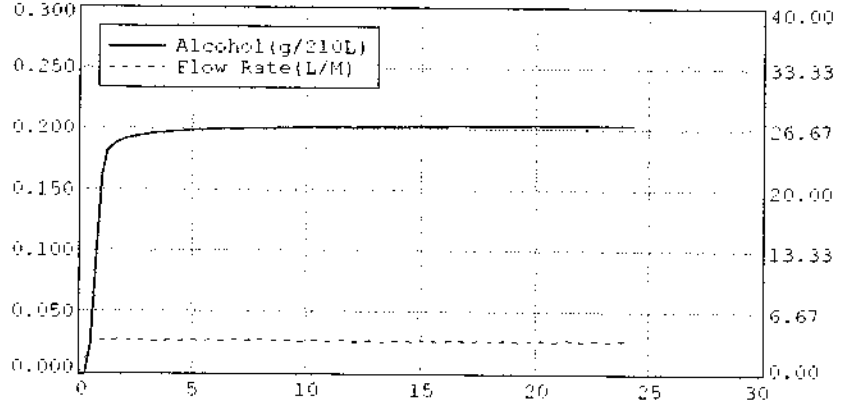
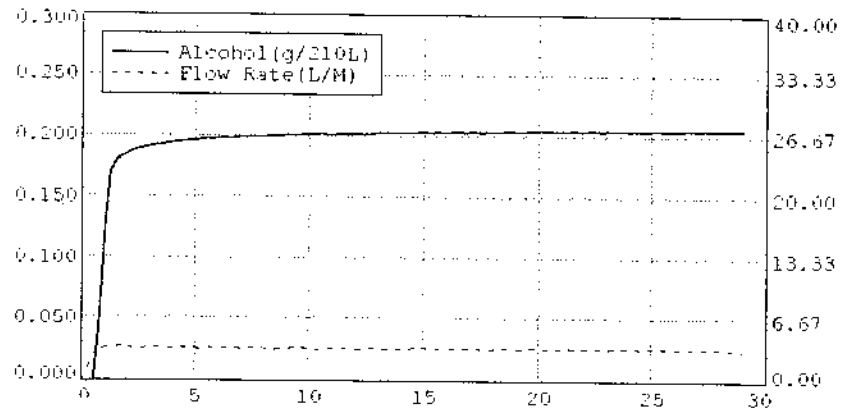
Date: 07/23/2015
 Time: 12:55:08

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:57
INTERNAL STANDARD	VERIFIED	12:57
EXTERNAL STANDARD	0.206	12:57
BLANK TEST	0.000	12:59
EXTERNAL STANDARD	0.204	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.203	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.204	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.204	13:03
BLANK TEST	0.000	13:04

Average = 0.2042
 Std Dev = 0.0011



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100346

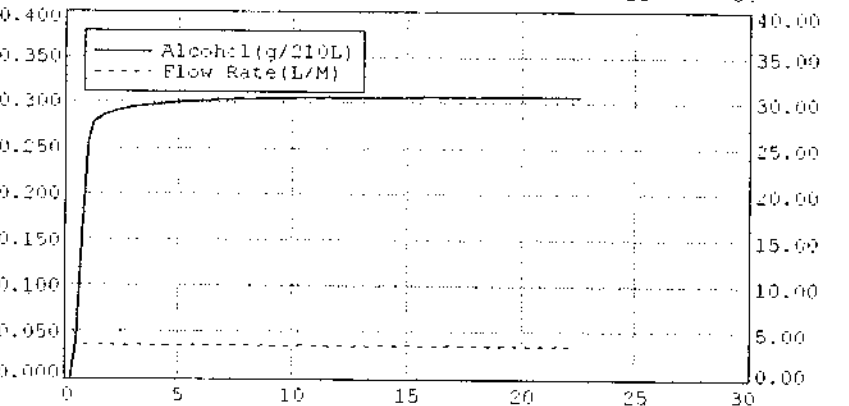
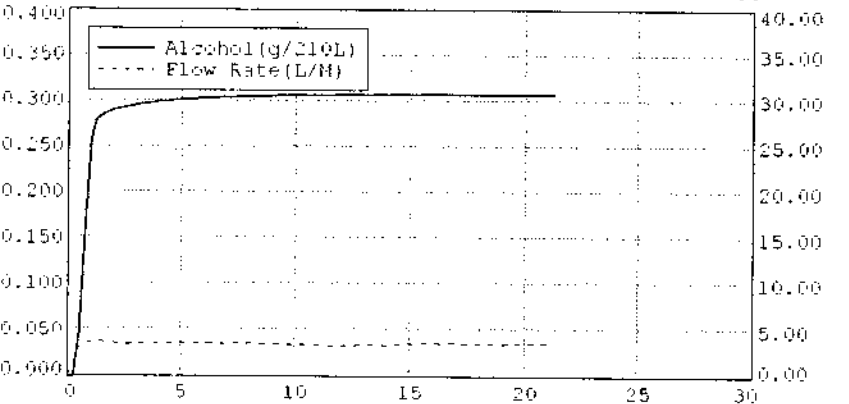
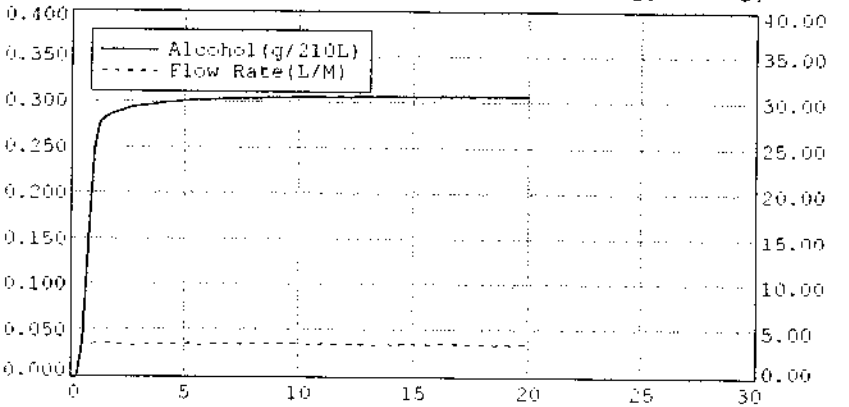
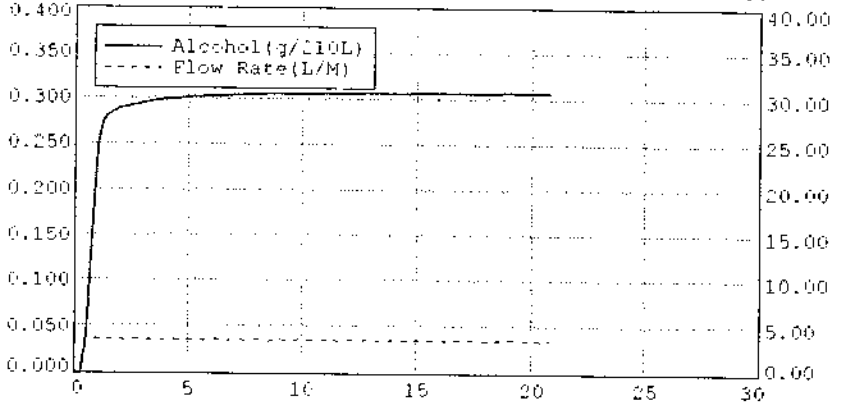
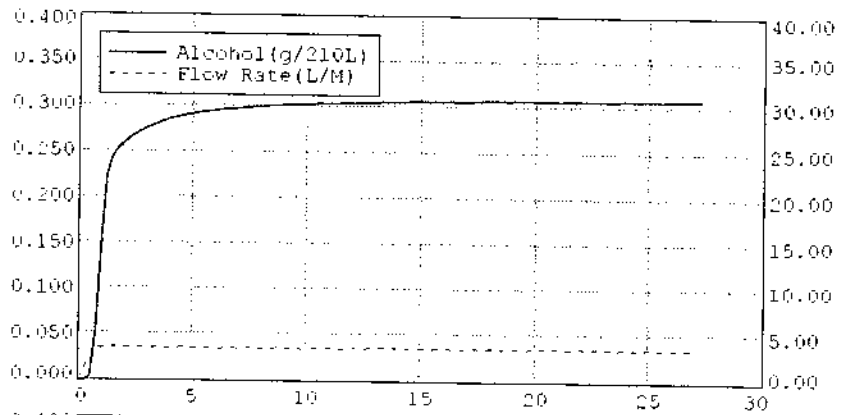
Date: 07/23/2015
 Time: 13:06:52

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:08
INTERNAL STANDARD	VERIFIED	13:08
EXTERNAL STANDARD	0.309	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.307	13:10
BLANK TEST	0.000	13:11
EXTERNAL STANDARD	0.308	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.308	13:12
BLANK TEST	0.000	13:13
EXTERNAL STANDARD	0.308	13:14
BLANK TEST	0.000	13:15

Average = 0.3080
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/23/2015
Time: 13:29:18

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

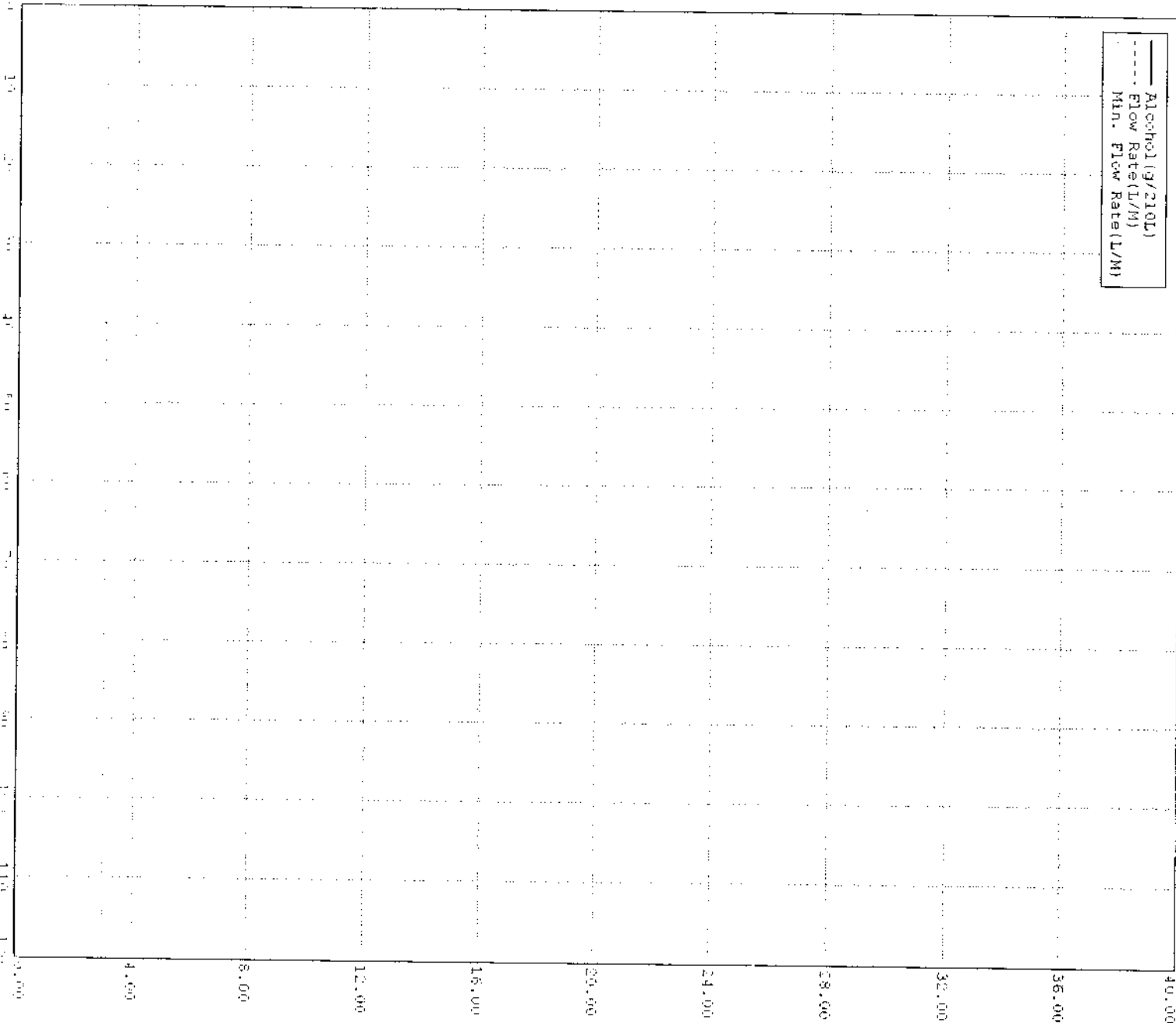
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.40: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:43
BLANK TEST	0.000	13:43
INTERNAL STANDARD	VERIFIED	13:44
EXTERNAL STANDARD	0.081	13:44
BLANK TEST	0.000	13:45
SUBJECT SAMPLE	INCOMPLETE	13:47

Alcohol (g/210L)
Flow Rate (L/M)
Min. Flow Rate (L/M)



BMB

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/23/2015
Time: 13:49:44

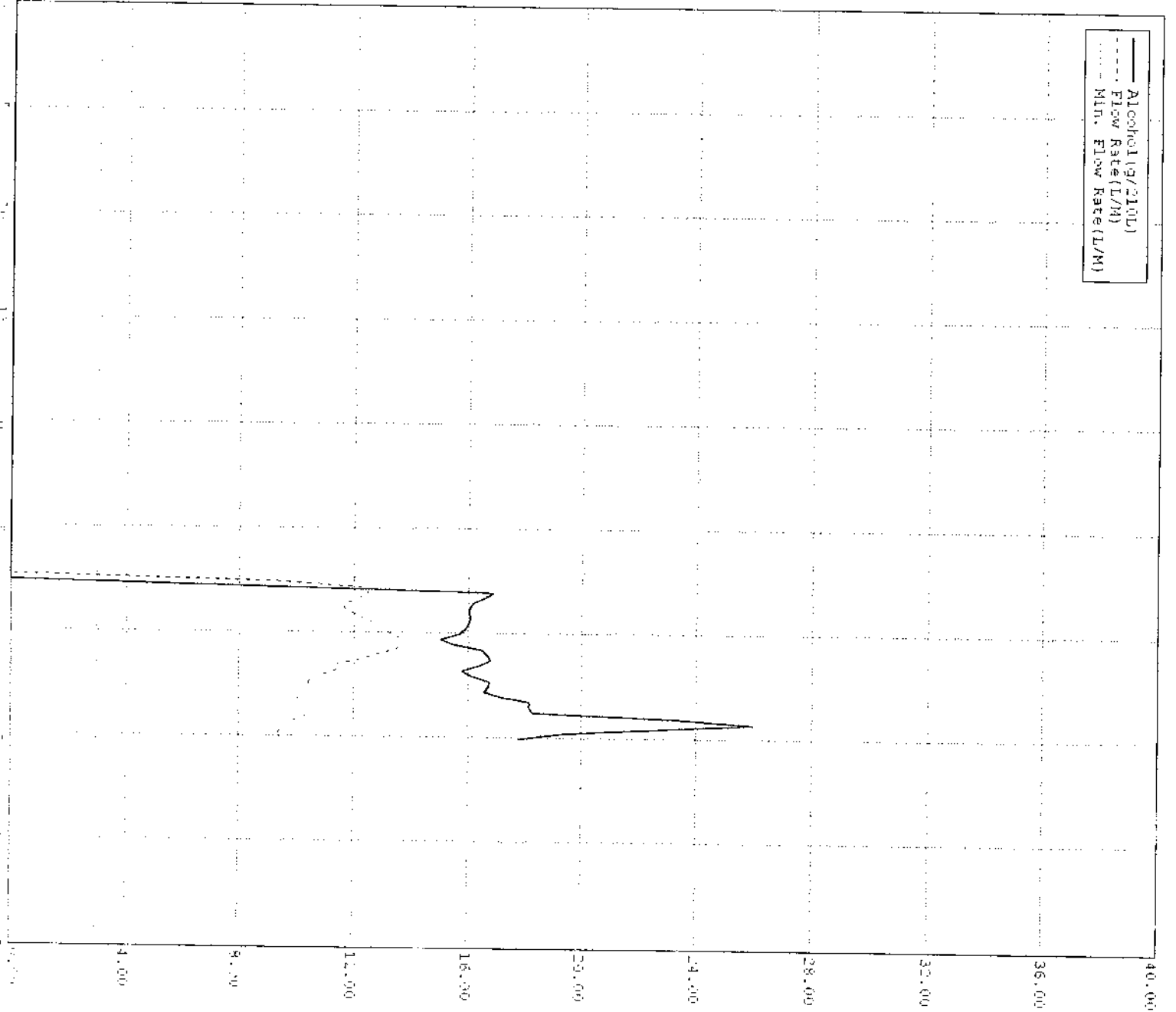
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.39: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:51
BLANK TEST	0.000	13:52
INTERNAL STANDARD	VERIFIED	13:52
EXTERNAL STANDARD	0.080	13:52
BLANK TEST	0.000	13:53
SUBJECT SAMPLE	INVALID	13:53

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100346

Date: 07/23/2015
Time: 13:56:18

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

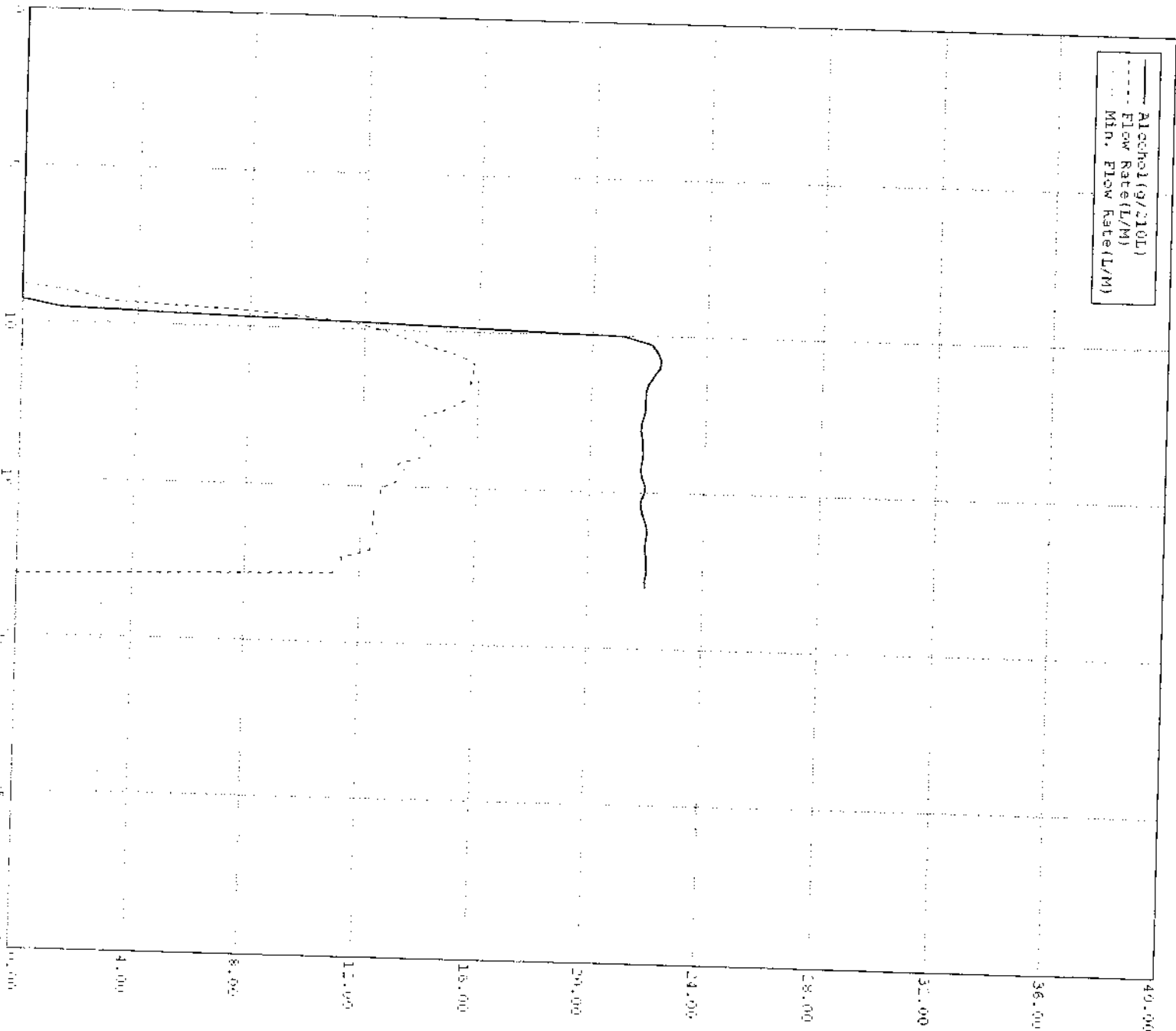
NOMINAL: 0.080
TARGET AT 29.39: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:26
BLANK TEST	0.000	14:26
INTERNAL STANDARD	VERIFIED	14:26
XQ = 0.104 (0.68%)		
EXTERNAL STANDARD	0.081	14:26
X[1] = 0.0810 (0.0012) (0.0020)		
BLANK TEST	0.000	14:27
SUBJECT SAMPLE	XXX	14:27
X[1] = 0.1109 (-0.0170) (0.0017)		

Interference Detected

Filter 2 Avg = ~~0.0016~~ 0.0011 ^{BMB} 7/21/15
Filter 3 Avg = 0.0016
BMB 7/27/15

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/23/2015
Time: 14:31:18

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

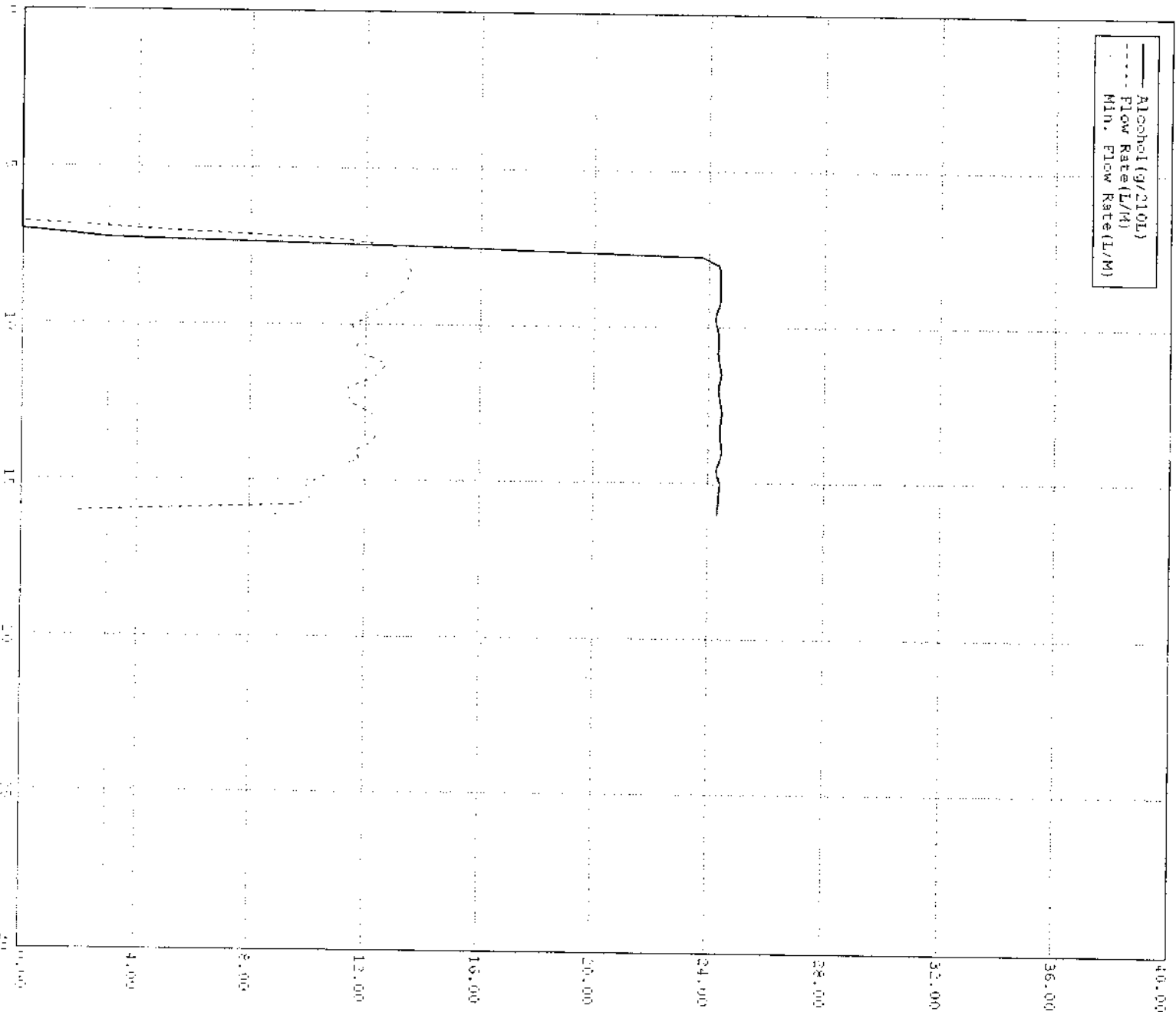
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.39: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:33
BLANK TEST	0.000	14:33
INTERNAL STANDARD	VERIFIED	14:33
Xq = 0.104 (0.68%)		
EXTERNAL STANDARD	0.081	14:33
X[1] = 0.0806 (0.0007) (0.0018)		
BLANK TEST	0.000	14:34
SUBJECT SAMPLE	XXX	14:35
X[1] = 0.1221 (-0.0251) (0.0028)		

Interference Detected

BOMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/23/2015
Time: 14:39:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

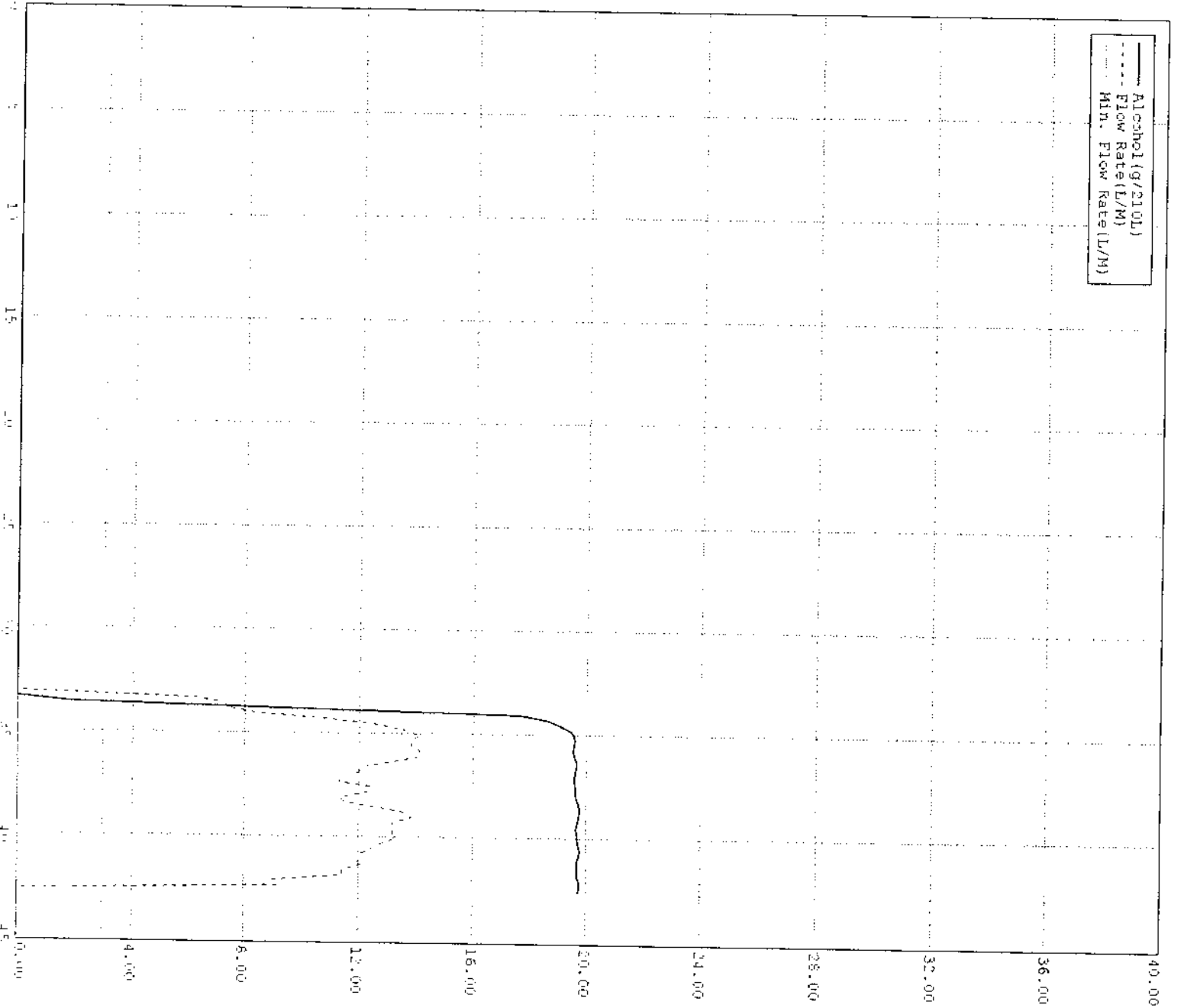
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.39: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:46
BLANK TEST	0.000	14:46
INTERNAL STANDARD	VERIFIED	14:46
Xq = 0.104 (0.08%)		
EXTERNAL STANDARD	0.081	14:46
X[1] = 0.0808 (0.0012) (0.0013)		
BLANK TEST	0.000	14:47
SUBJECT SAMPLE (Vol=1.84L)	0.099	14:48
X[1] = 0.0992 (0.0005) (0.0026)		
BLANK TEST	0.000	14:49
EXTERNAL STANDARD	0.080	14:49
X[1] = 0.0798 (0.0012) (0.0014)		
BLANK TEST	0.000	14:50

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAWASTER dmt: 100346

Date: 07/23/2015
Time: 15:35:26

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

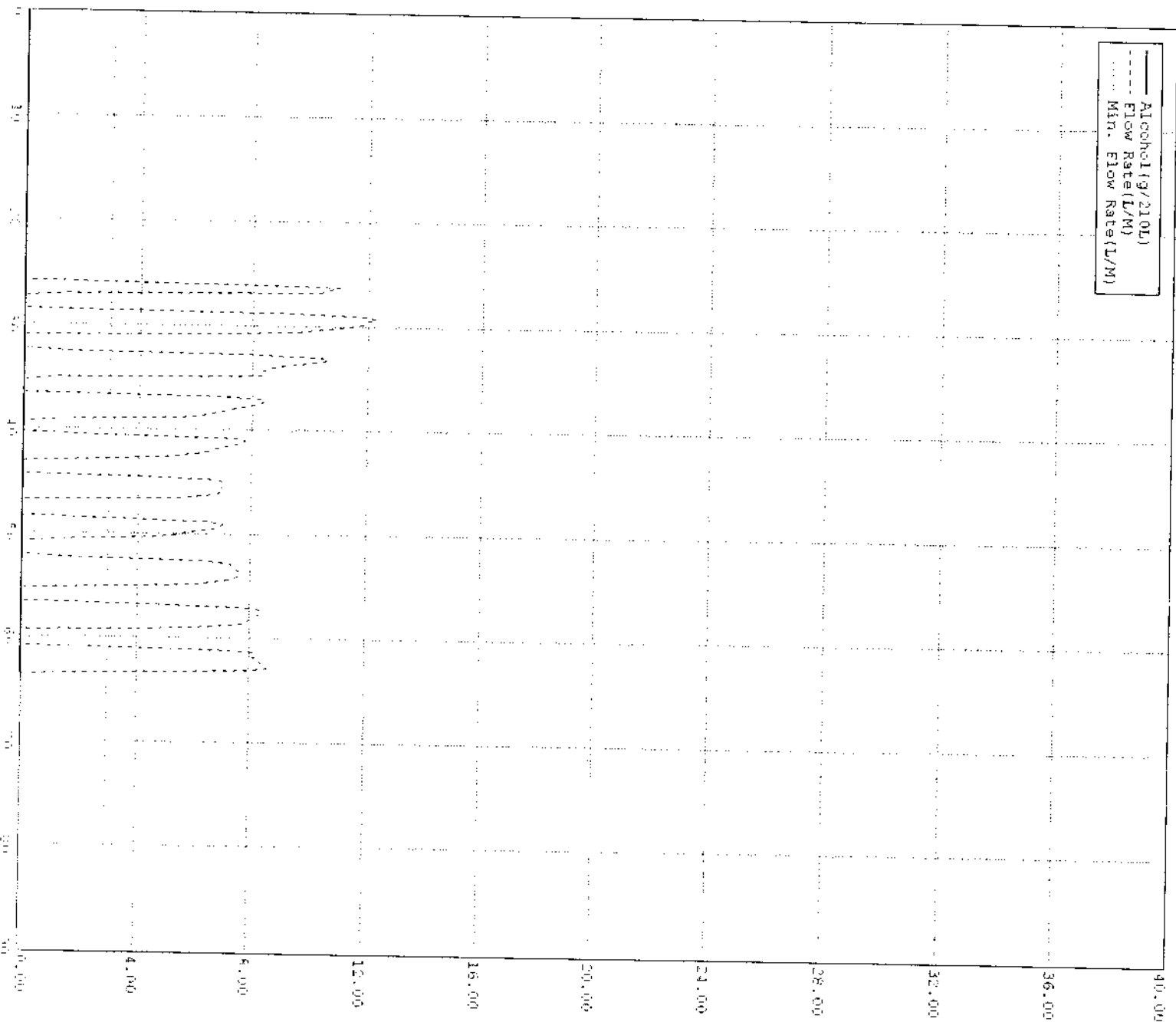
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.38: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:36
BLANK TEST	0.000	15:36
INTERNAL STANDARD	VERIFIED	15:36
EXTERNAL STANDARD	0.080	15:37
BLANK TEST	0.000	15:38
SUBJECT SAMPLE	XXX	15:39

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/23/2015
Time: 15:42:41

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

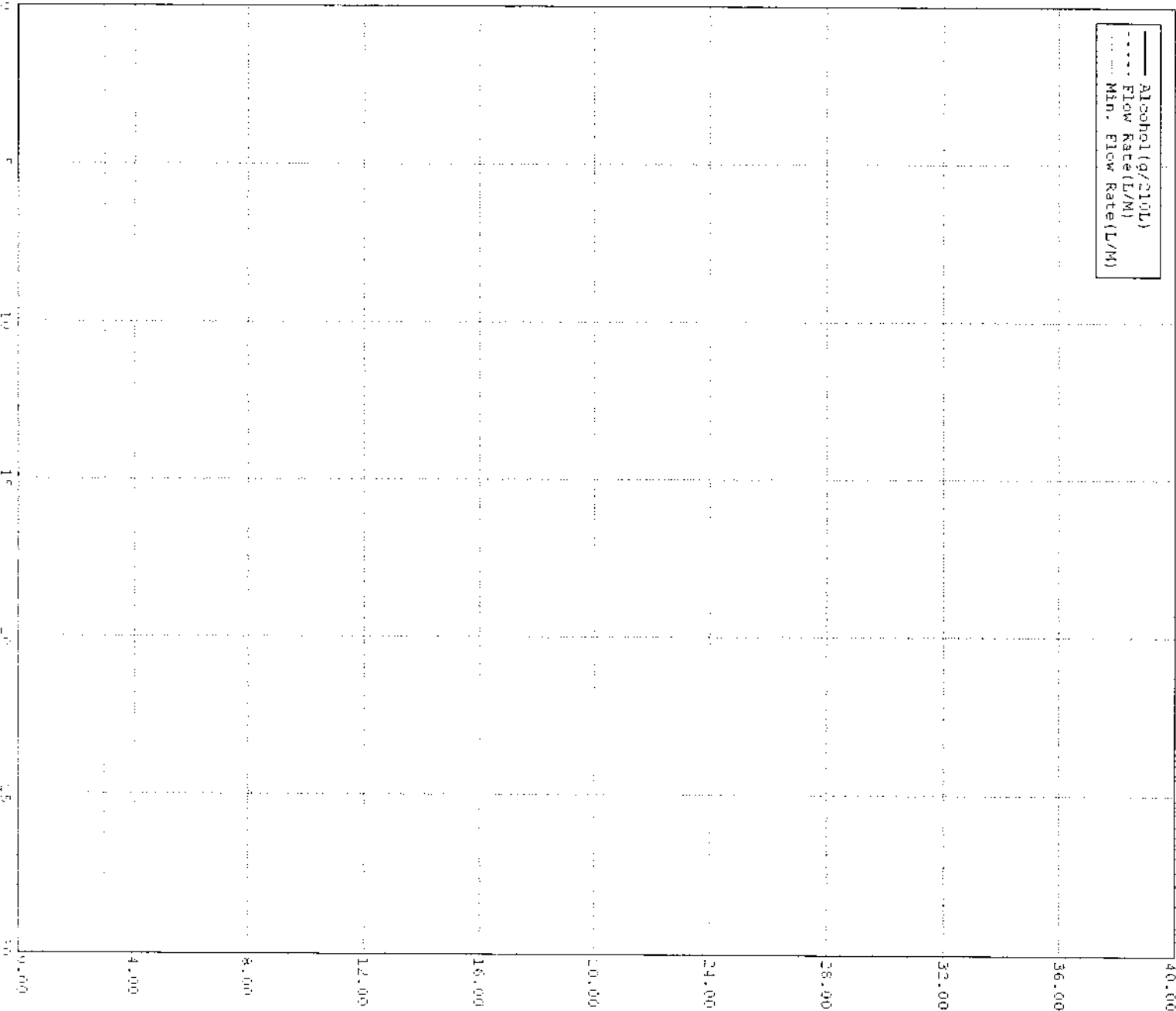
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.38: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:45
BLANK TEST	0.000	15:45
INTERNAL STANDARD	VERIFIED	15:45
EXTERNAL STANDARD	0.081	15:45
BLANK TEST	0.000	15:46

RFI DETECTED

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100346

Date: 07/23/2015
Time: 16:01:45

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 29.38: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	16:02
INTERNAL STANDARD	0.000	16:02
EXTERNAL STANDARD	0.082	16:03
BLANK TEST	0.000	16:04
SUBJECT SAMPLE (Vol=2.23L)	0.000	16:05
BLANK TEST	0.000	16:06
EXTERNAL STANDARD	0.082	16:06
BLANK TEST	0.000	16:07

BBB

