

# Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Issued: 2/2/2015  
Effective: 2/2/2015

Version: DMCEF 2015 R0  
Status: Active

Instrument S/N 100371 Analyst Brandi Burnett Start Date 5/26/15

- 1. Diagnostic Test (attached)
- 2. Voltage Checks
  - a. Adjust voltages, if needed 
    - i. Lamp (2.6V Maximum)
    - ii. Bias
    - iii. Cooler (2.0V Maximum)
  - 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)
- iv. Chopper Frequency
- v. Detector Voltage (-0.100V to 0.100V)

- 3. Print Calibration Factors (attached)
- 4. Volume Test - Minimum 1.5 L (1.3L to 1.7L)
- 5. 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 <sup>SNB</sup>
  - iv. 0.100g/210L Mnf ILMO Lot 0291500A1 Exp 3/5/17
  - v. 0.200g/210L Mnf Guth Lot 13220 Exp 8/5/15
    - 1. Simulator S/N SD1206 Date Calibrated 1/20/15
  - vi. 0.300g/210L Mnf Guth Lot 14270 Exp 12/2/16
    - 1. Simulator S/N DR6267 Date Calibrated 1/20/15

- 6. 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 DR4162 Date Calibrated 1/19/15
- ii. Isopropanol - Mnf Guth Lot 14110 Level 0.100 Exp 5/1/16
  - 1. Simulator S/N DR4163 Date Calibrated 1/19/15
- iii. Negative Control - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
  - 1. Simulator S/N DR4178 Date Calibrated 1/19/15

e. RFI

- 7. Verify stylus is calibrated
- 8. Reset Options
- 9. Clear Memory
- 10. Verification of Calibration
- 11. Non-Drinking Subject Test (attached)
- 12. Upload
- 13. Remove tank prior to shut down

End Date 5/27/15

DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100371  
-----

Date: 05/26/2015  
Time: 10:11:51

VERSIONS

DMT: 3.01  
PIC: 3.02  
Modem: 2.6  
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED  
Breath Tube = 47.8°C PASSED

PUMP INFO

Flow Rate = 4.597 L/M PASSED

DETECTOR INFO

PUMP ON PASSED  
PUMP OFF PASSED

FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD PASSED

Technician Screen

-----  
DATAMASTER dmt: 100371  
-----

Date: 05/26/2015  
Time: 10:21 AM

Temperatures (°C)

Sample Cell: 50.1°C  
Breath Tube: 46.4°C

Current Barometer 29.9 in  
Volume (ltr) 1.56

Settings

Lamp: 1.69 V  
Bias: 79 V  
Cooler: 1.76 V  
Chopper: 549 Hz

Voltages (V)

Flow: 1.05 V  
Detector: -0.027 V

CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100371  
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Date: 05/01/2015  
Time: 11:24:39

OPERATOR NAME:  
CHARLES FOSTER  
CERTIFICATE #: 7734

Ca = 0.1000  
CAL = 0.965707    0.800 <= CAL < 1.200  
b1 = 0.0002    0.0000 <= b1 < 0.0040  
b2 = 0.0060    0.0010 <= b2 < 0.0100  
b3 = 0.0002    0.0000 <= b3 < 0.0040  
Xq = 0.0779    0.0500 <= Xq < 0.2000  
a21 = 1.173473    1.050 <= a21 < 1.300  
a31 = 0.488428    0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100371

Date: 05/26/2015  
Time: 15:34:05

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

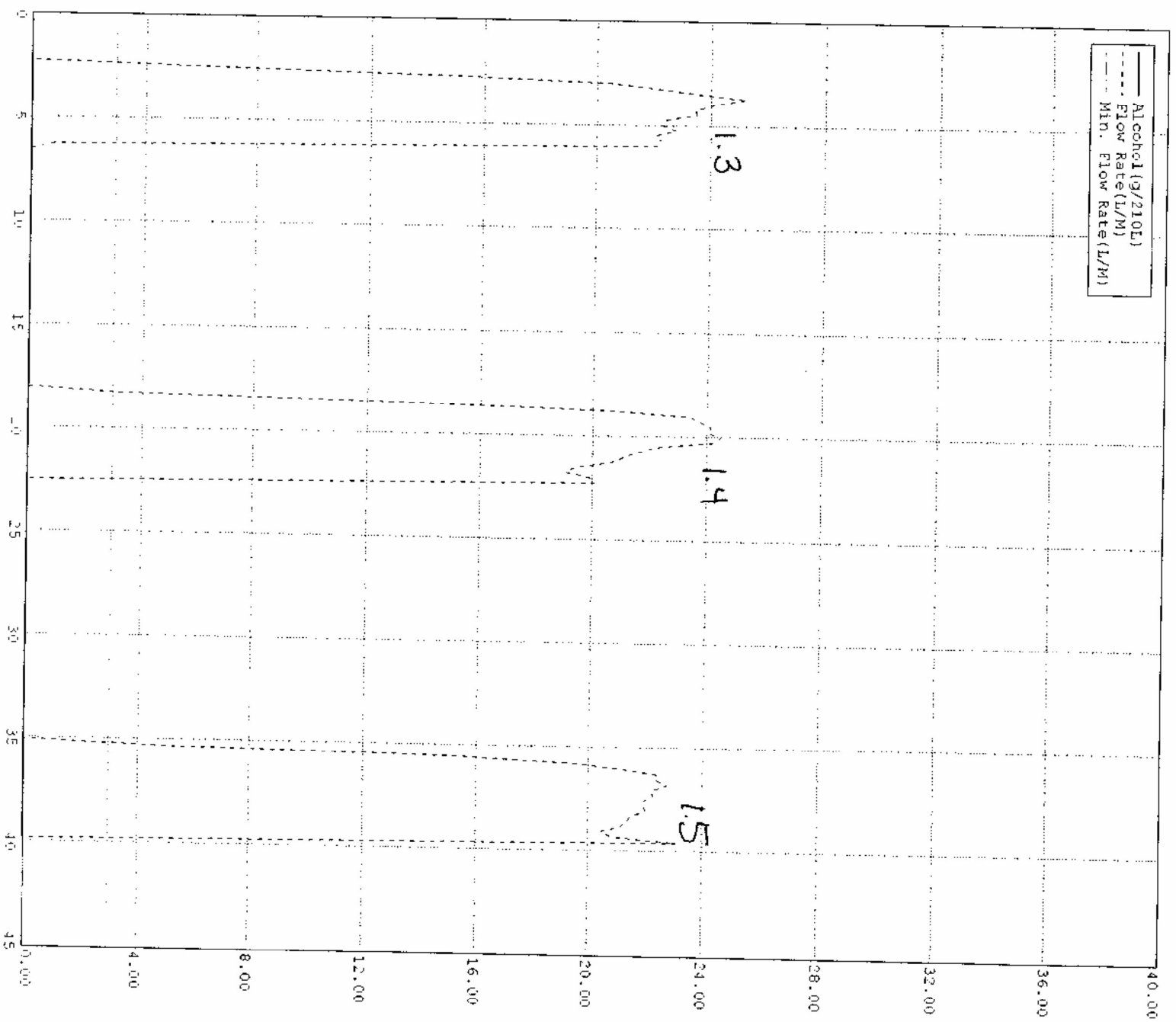
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: 09214080A2  
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:35
BLANK TEST	0.000	15:35
INTERNAL STANDARD	VERIFIED	15:35
EXTERNAL STANDARD	0.077	15:36
BLANK TEST	0.000	15:37
SUBJECT SAMPLE (Vol=1.53L)	0.000	15:37
BLANK TEST	0.000	15:38
EXTERNAL STANDARD	0.078	15:39
BLANK TEST	0.000	15:39

*BBMB*



LINEARITY CHECK

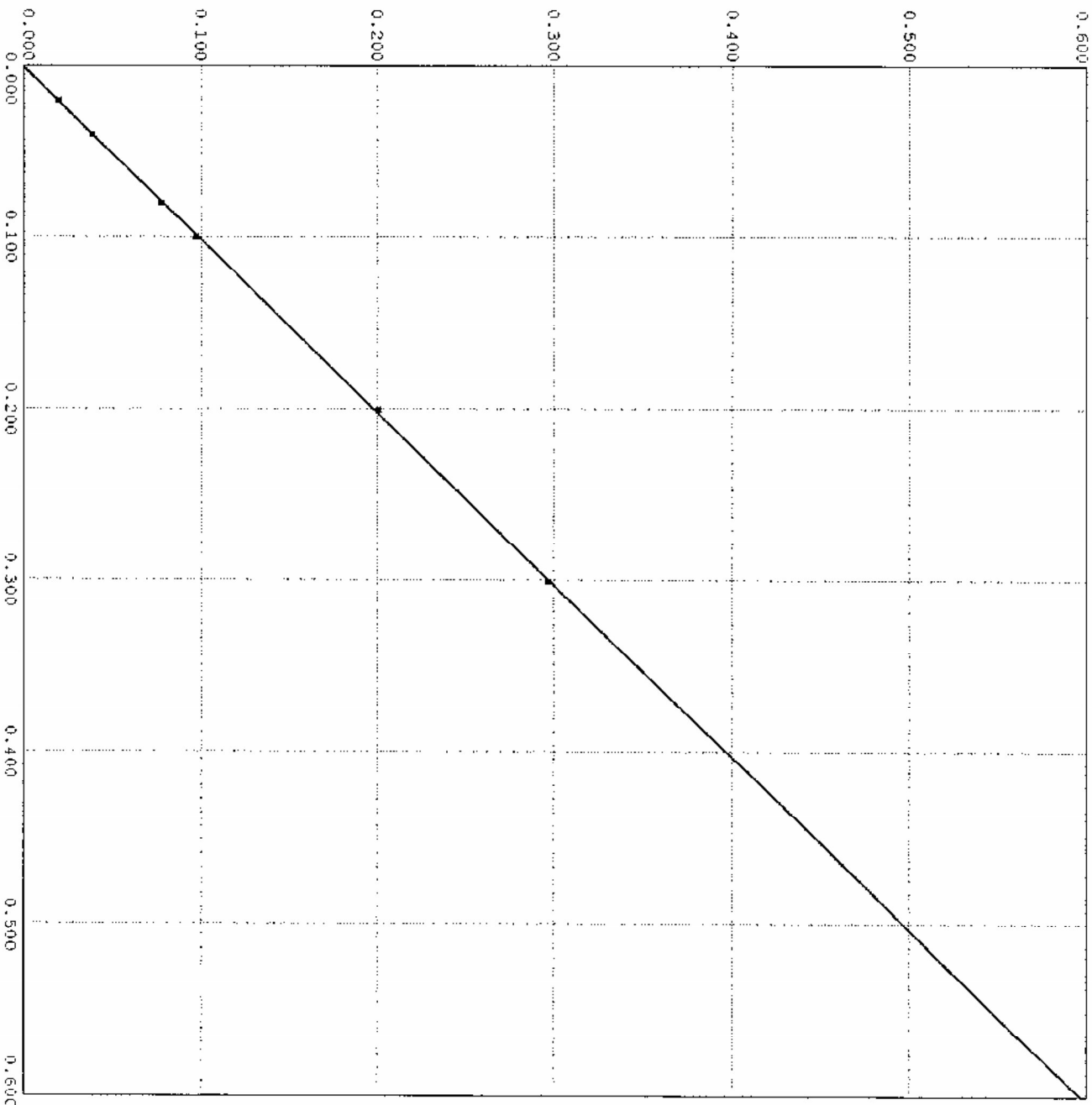
Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

Date: 05/27/2015  
 Time: 09:59:50

SUPERVISOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0008
0.040	0.0396	0.0005
0.080	0.0782	0.0008
0.100	0.0978	0.0008
0.200	0.2014	0.0011
0.300	0.2974	0.0011

SLOPE = 0.996324  
 R<sup>2</sup> = 0.999800



*Handwritten signature: BMB*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

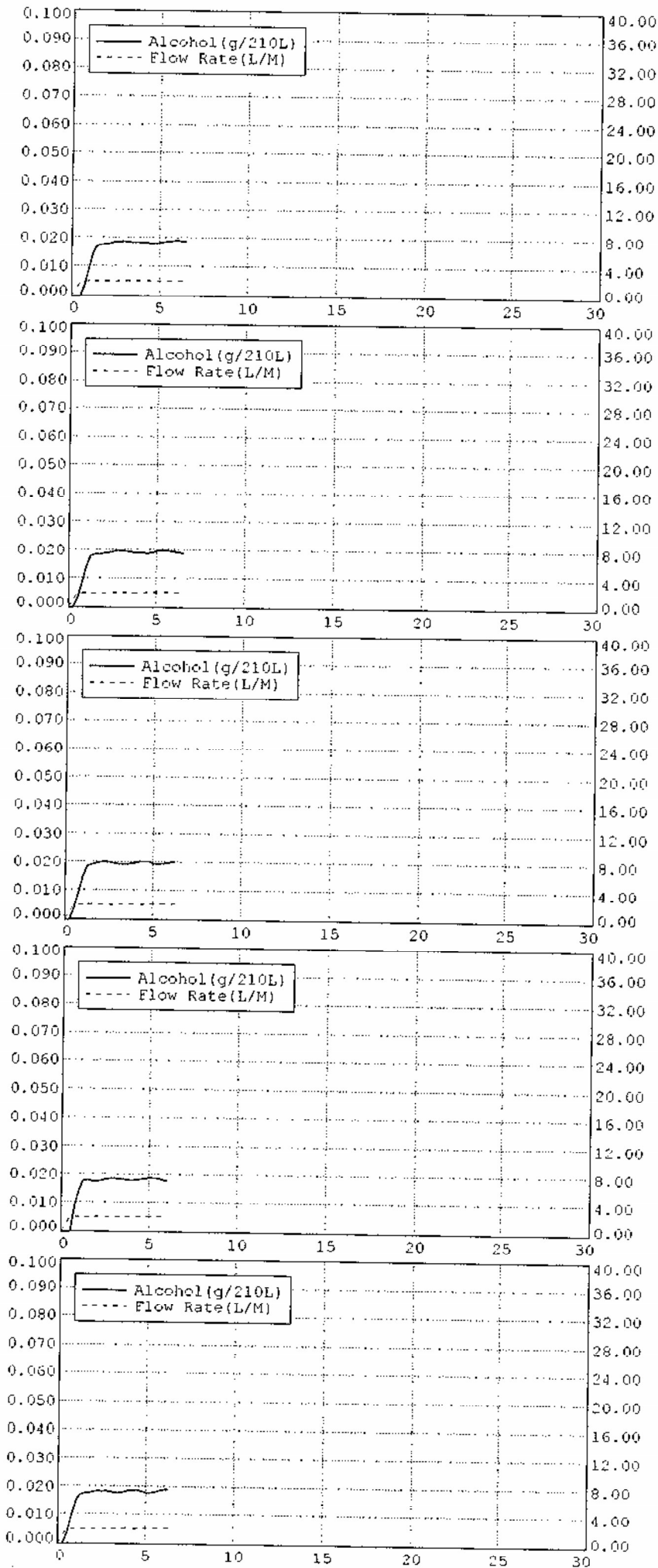
Date: 05/27/2015  
 Time: 09:59:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 30.06: 0.020  
 LOT #: 02915020A2  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 857 psi

BLANK TEST	0.000	10:01
INTERNAL STANDARD	VERIFIED	10:01
EXTERNAL STANDARD	0.019	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.021	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.021	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.020	10:04
BLANK TEST	0.000	10:05
EXTERNAL STANDARD	0.020	10:05
BLANK TEST	0.000	10:06

Average = 0.0202  
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

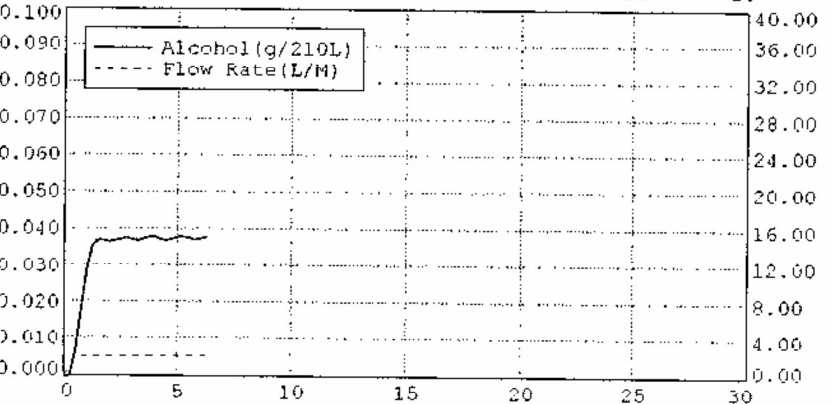
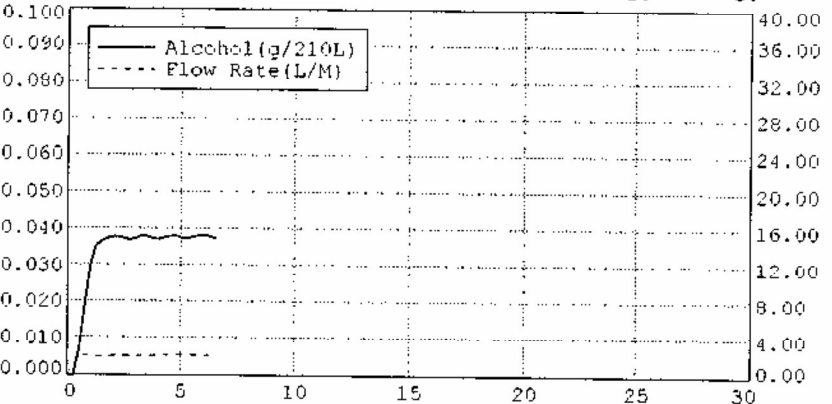
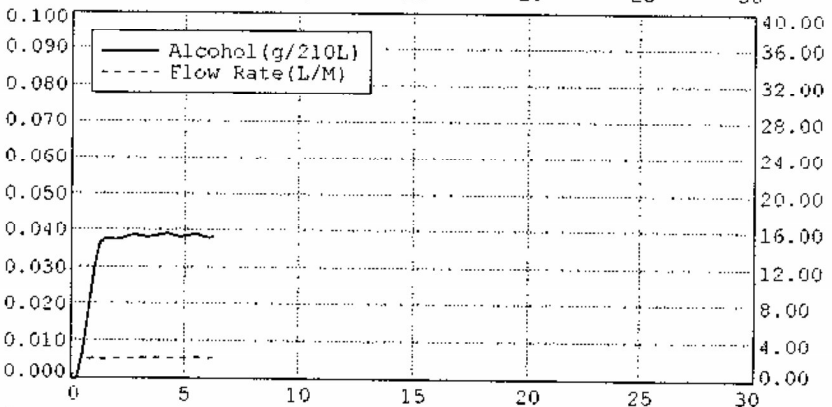
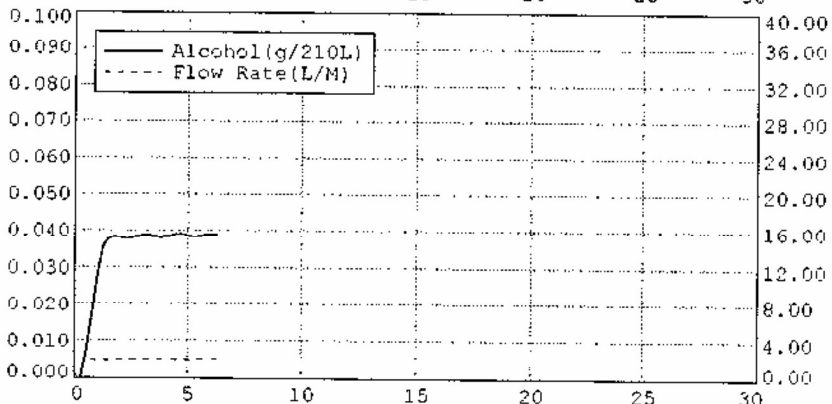
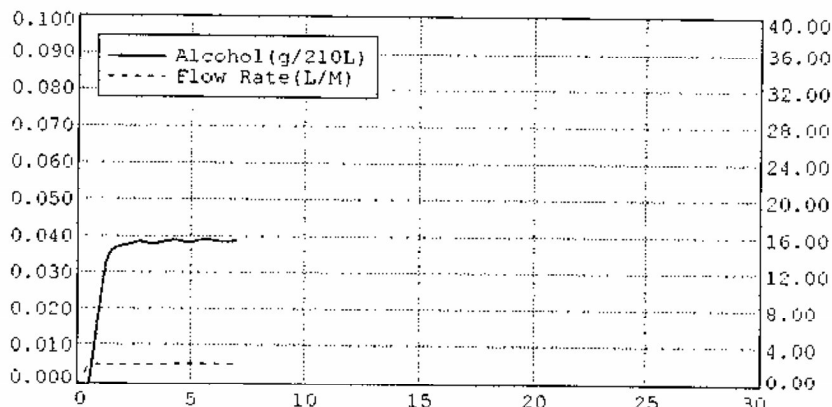
Date: 05/27/2015  
 Time: 10:14:24

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 30.06: 0.040  
 LOT #: 02915040A3  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 919 psi

BLANK TEST	0.000	10:15
INTERNAL STANDARD	VERIFIED	10:15
EXTERNAL STANDARD	0.040	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.040	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.040	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.039	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.039	10:20
BLANK TEST	0.000	10:21

Average = 0.0396  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

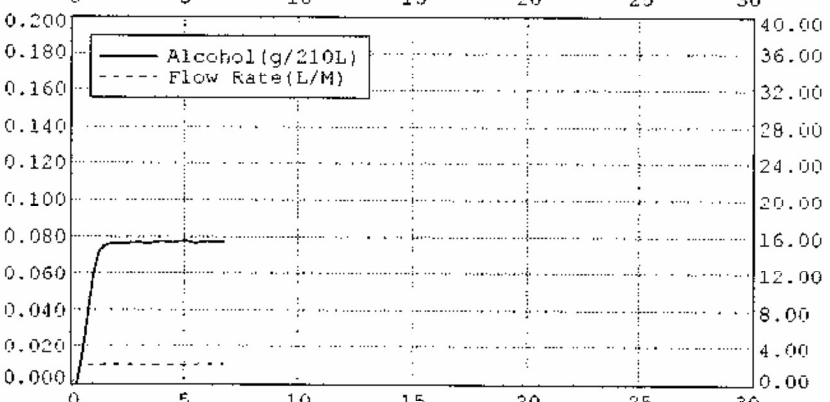
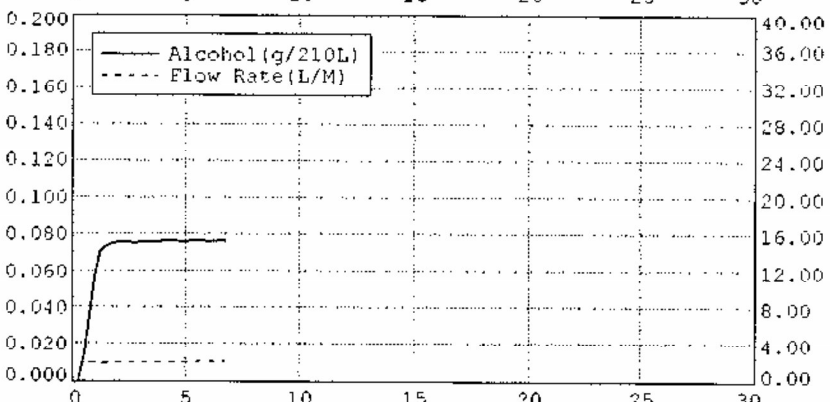
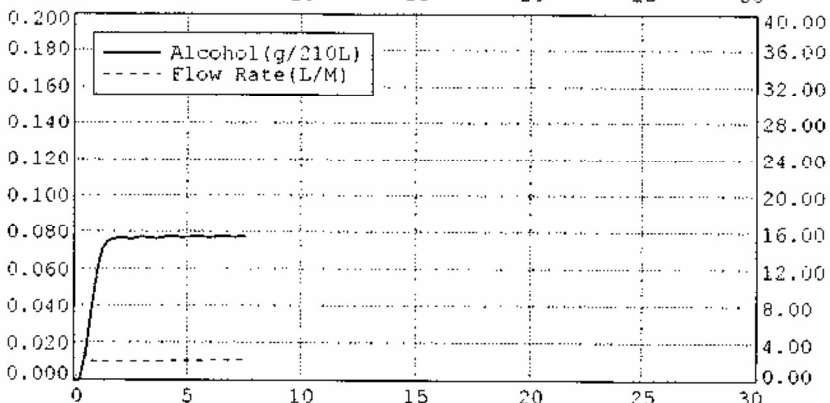
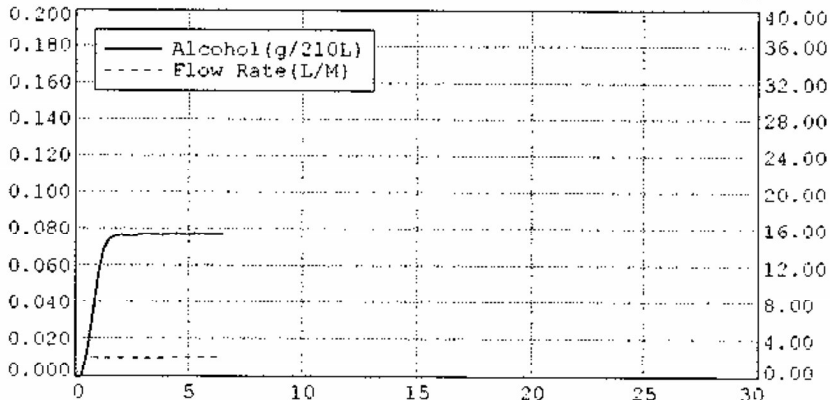
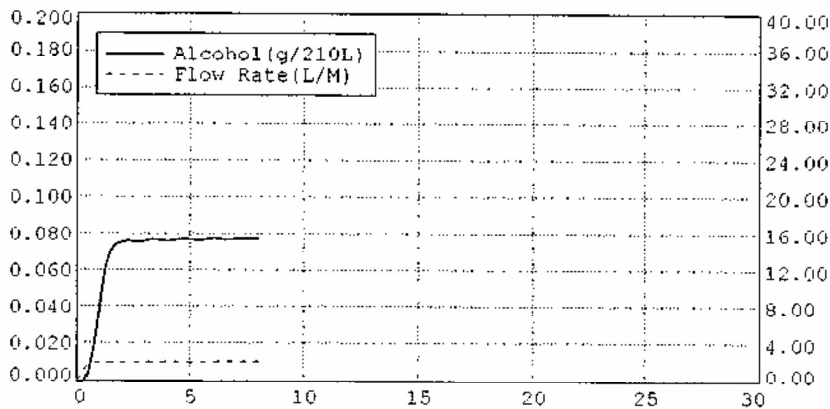
Date: 05/27/2015  
 Time: 10:29:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 30.05: 0.080  
 LOT #: 09214080A2  
 EXPIRATION: 05/01/2016  
 TANK PRESSURE: 716 psi

BLANK TEST	0.000	10:30
INTERNAL STANDARD	VERIFIED	10:30
EXTERNAL STANDARD	0.078	10:31
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.078	10:32
BLANK TEST	0.000	10:33
EXTERNAL STANDARD	0.079	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.077	10:34
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.079	10:35
BLANK TEST	0.000	10:36

Average = 0.0782  
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

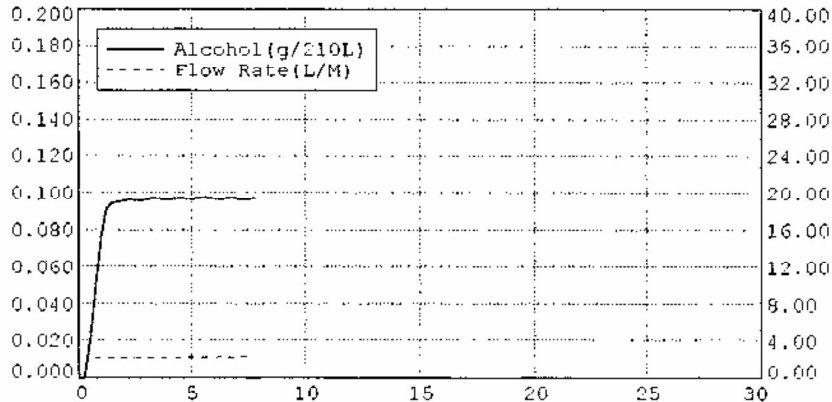
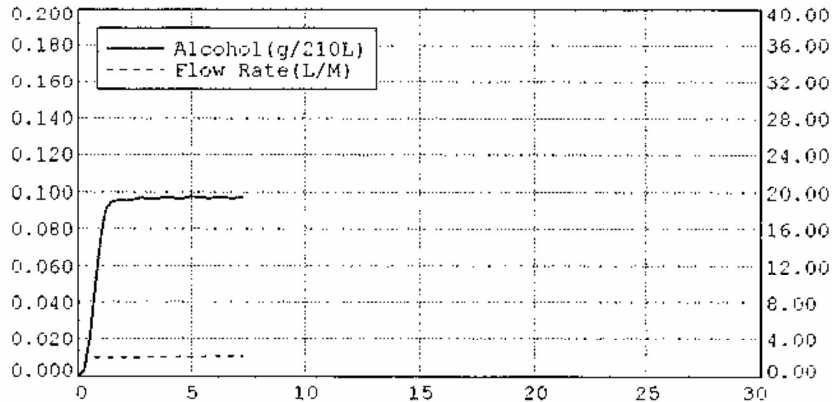
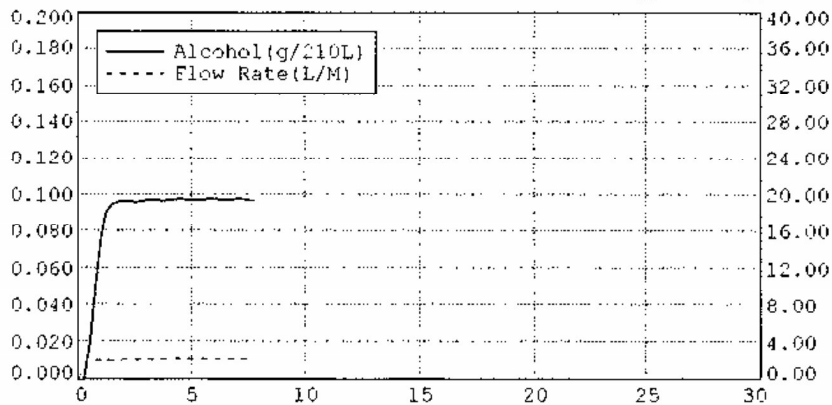
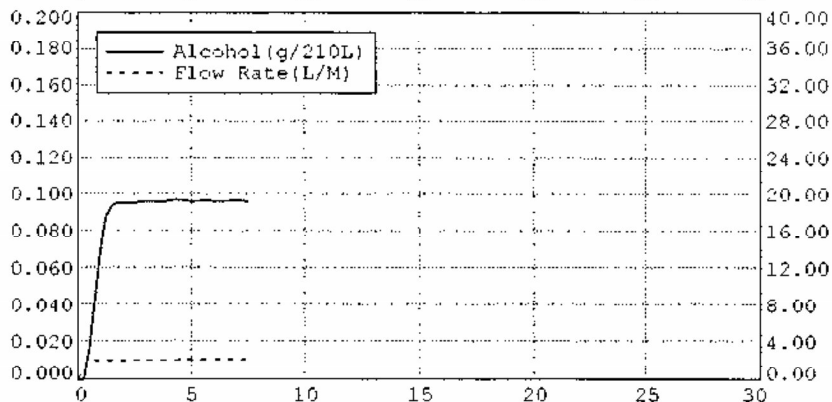
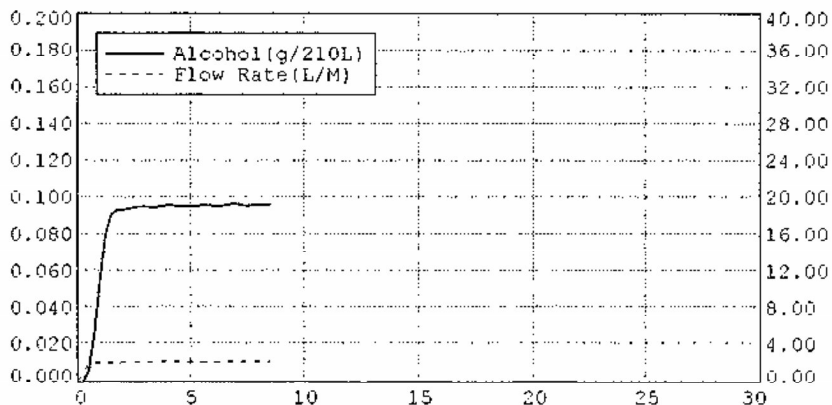
Date: 05/27/2015  
 Time: 10:53:41

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 30.05: 0.100  
 LOT #: 02915100A1  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 865 psi

BLANK TEST	0.000	10:54
INTERNAL STANDARD	VERIFIED	10:55
EXTERNAL STANDARD	0.097	10:55
BLANK TEST	0.000	10:56
EXTERNAL STANDARD	0.097	10:56
BLANK TEST	0.000	10:57
EXTERNAL STANDARD	0.098	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.099	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.098	10:59
BLANK TEST	0.000	11:00

Average = 0.0978  
 Std Dev = 0.0008



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

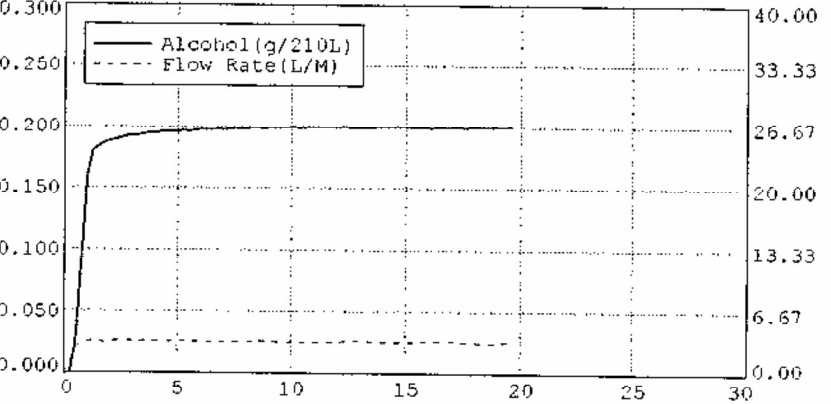
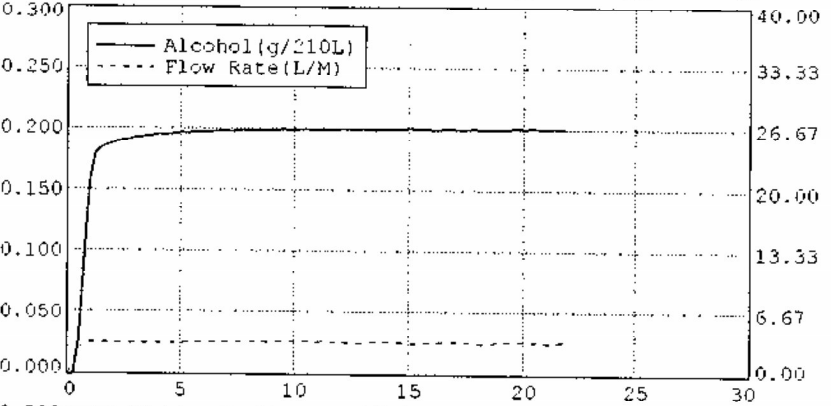
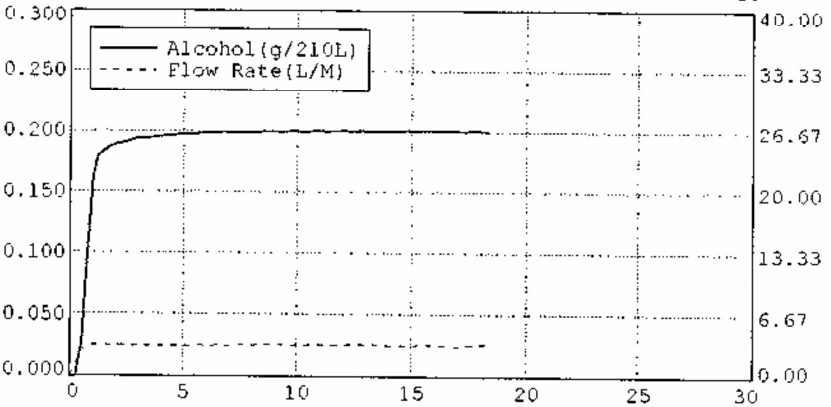
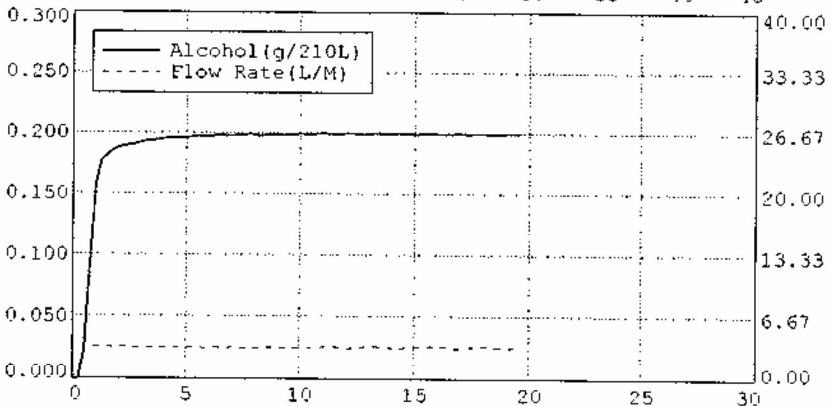
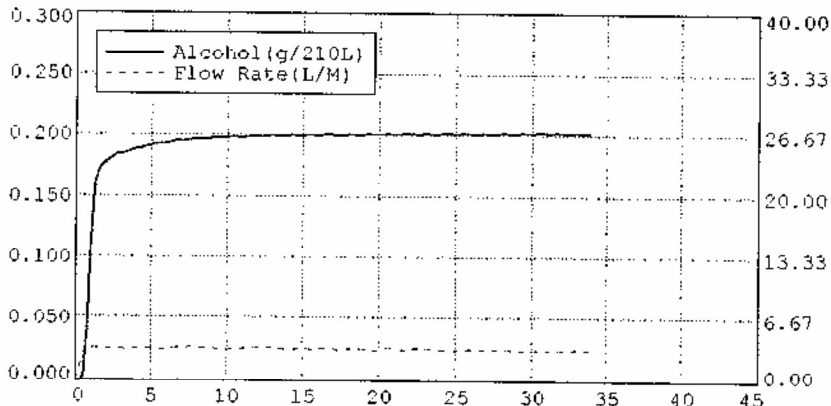
Date: 05/27/2015  
 Time: 11:07:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200  
 LOT #: GUTH 13220  
 EXPIRATION: 08/05/2015

BLANK TEST	0.000	11:08
INTERNAL STANDARD	VERIFIED	11:08
EXTERNAL STANDARD	0.203	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.200	11:10
BLANK TEST	0.000	11:11
EXTERNAL STANDARD	0.202	11:12
BLANK TEST	0.000	11:13
EXTERNAL STANDARD	0.201	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.201	11:14
BLANK TEST	0.000	11:15

Average = 0.2014  
 Std Dev = 0.0011



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100371

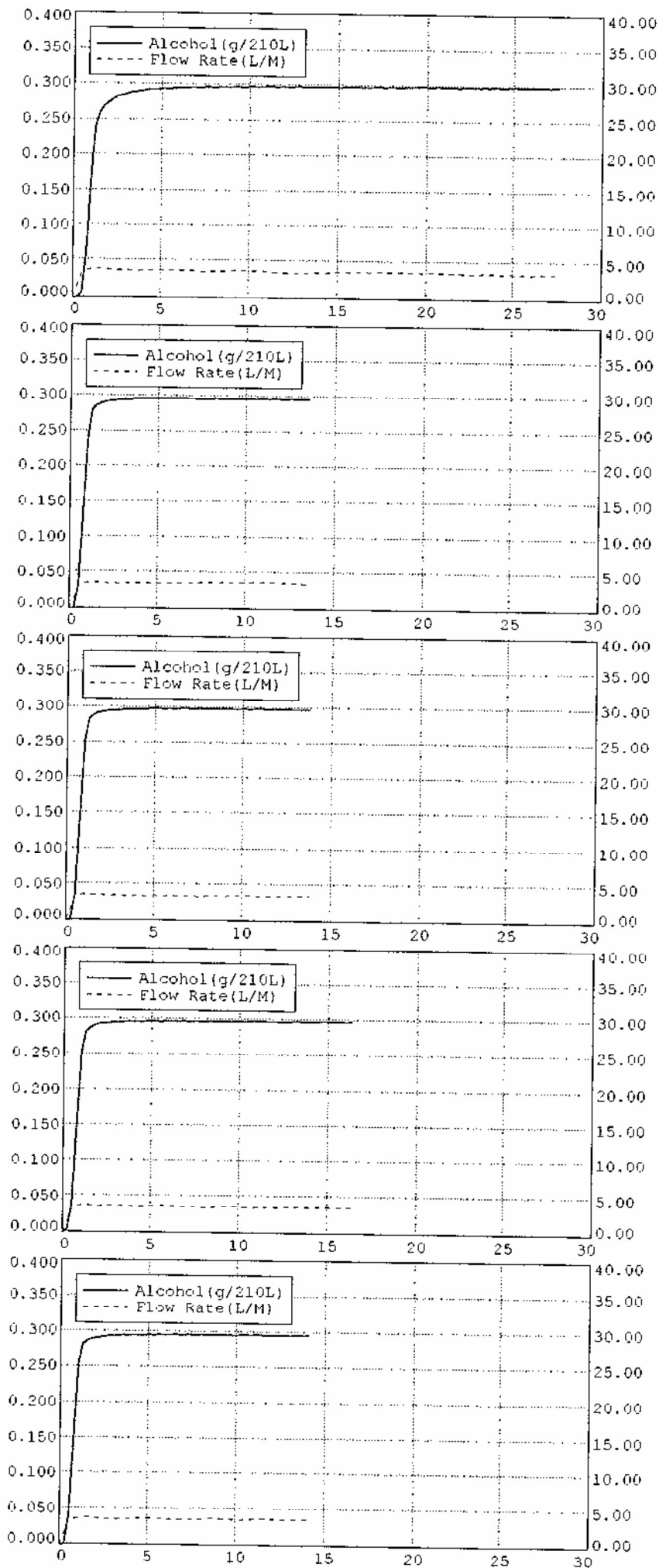
Date: 05/27/2015  
 Time: 11:23:07

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:24
INTERNAL STANDARD	VERIFIED	11:24
EXTERNAL STANDARD	0.299	11:25
BLANK TEST	0.000	11:26
EXTERNAL STANDARD	0.297	11:26
BLANK TEST	0.000	11:27
EXTERNAL STANDARD	0.298	11:27
BLANK TEST	0.000	11:28
EXTERNAL STANDARD	0.297	11:29
BLANK TEST	0.000	11:29
EXTERNAL STANDARD	0.296	11:30
BLANK TEST	0.000	11:31

Average = 0.2974  
 Std Dev = 0.0011



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100371

Date: 05/26/2015  
Time: 15:44:47

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

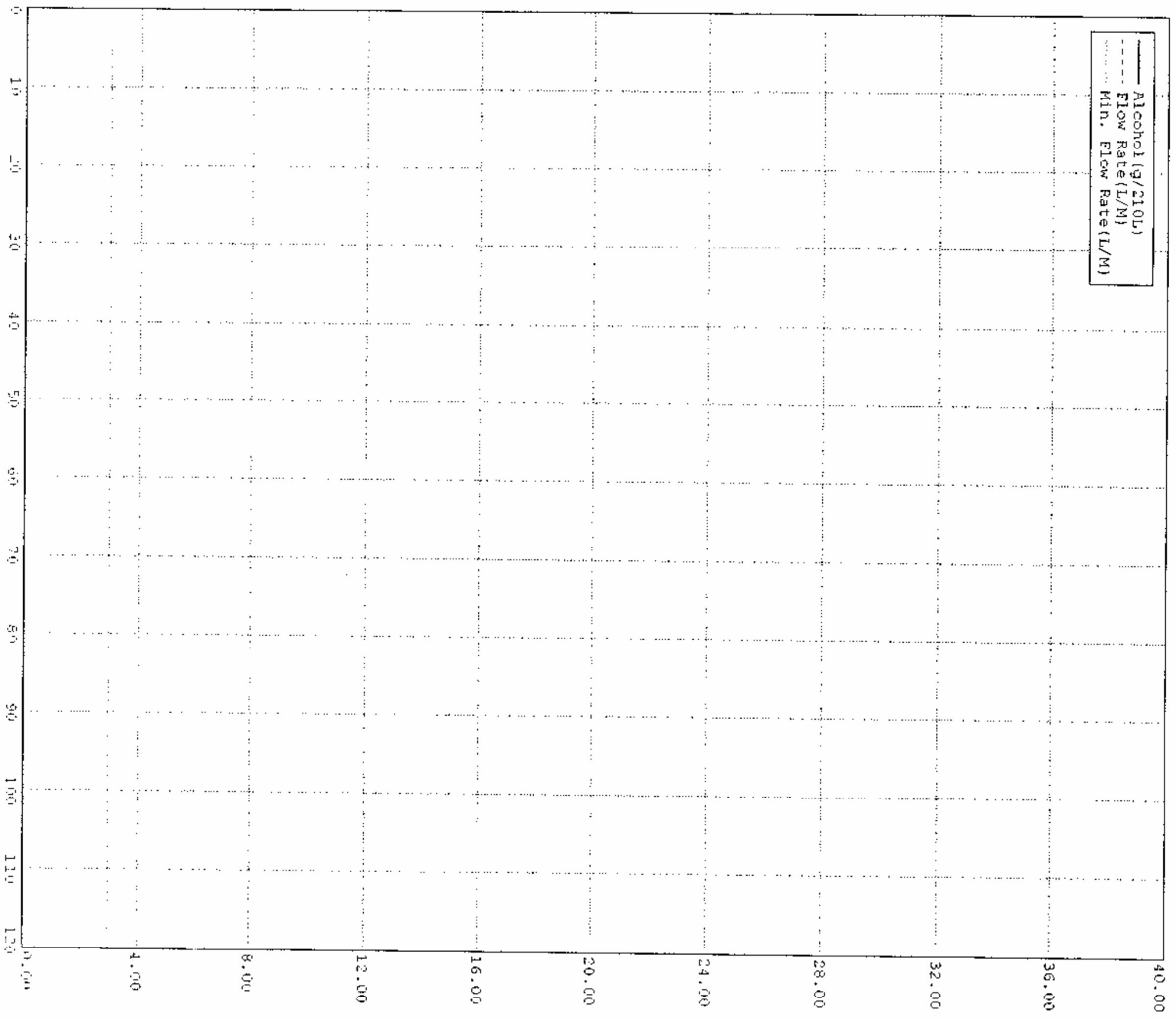
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: 09214080A2  
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:46
BLANK TEST	0.000	15:46
INTERNAL STANDARD	VERIFIED	15:46
EXTERNAL STANDARD	0.079	15:46
BLANK TEST	0.000	15:47
SUBJECT SAMPLE	INCOMPLETE	15:49

*BRMB*



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dmt: 100371

Date: 05/26/2015  
Time: 15:53:07

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

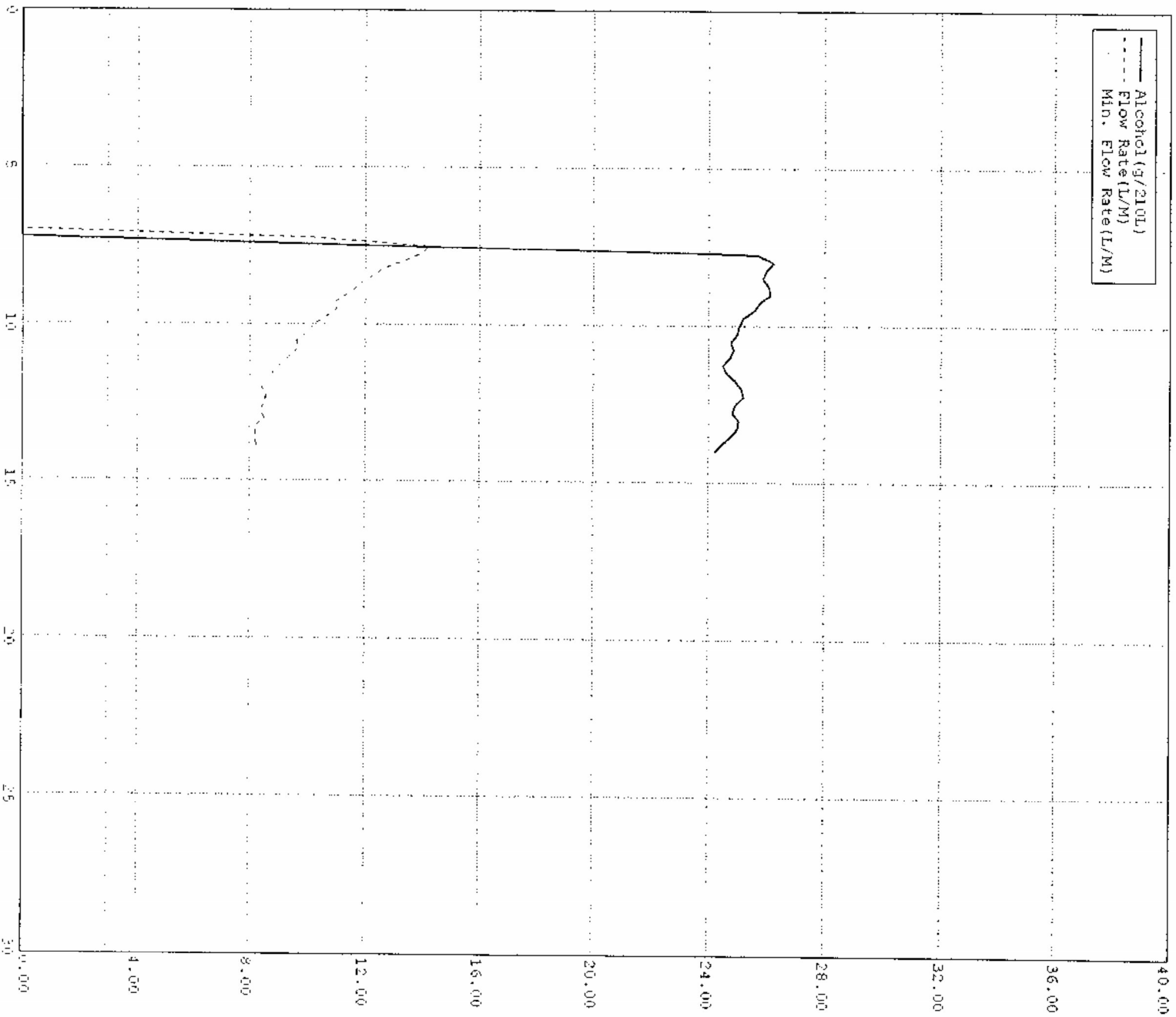
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: 09214080A2  
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:55
BLANK TEST	0.000	15:55
INTERNAL STANDARD	VERIFIED	15:55
EXTERNAL STANDARD	0.079	15:55
BLANK TEST	0.000	15:56
SUBJECT SAMPLE	INVALID	15:56

*BBMB*



SUBJECT TEST

Alaska Department of Public Safety  
 DAFMASTER dmt: 100371

Date: 05/27/2015  
 Time: 12:22:50

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

OPERATOR NAME:  
 BRANDI BARNETT  
 OPERATOR'S #: 7038

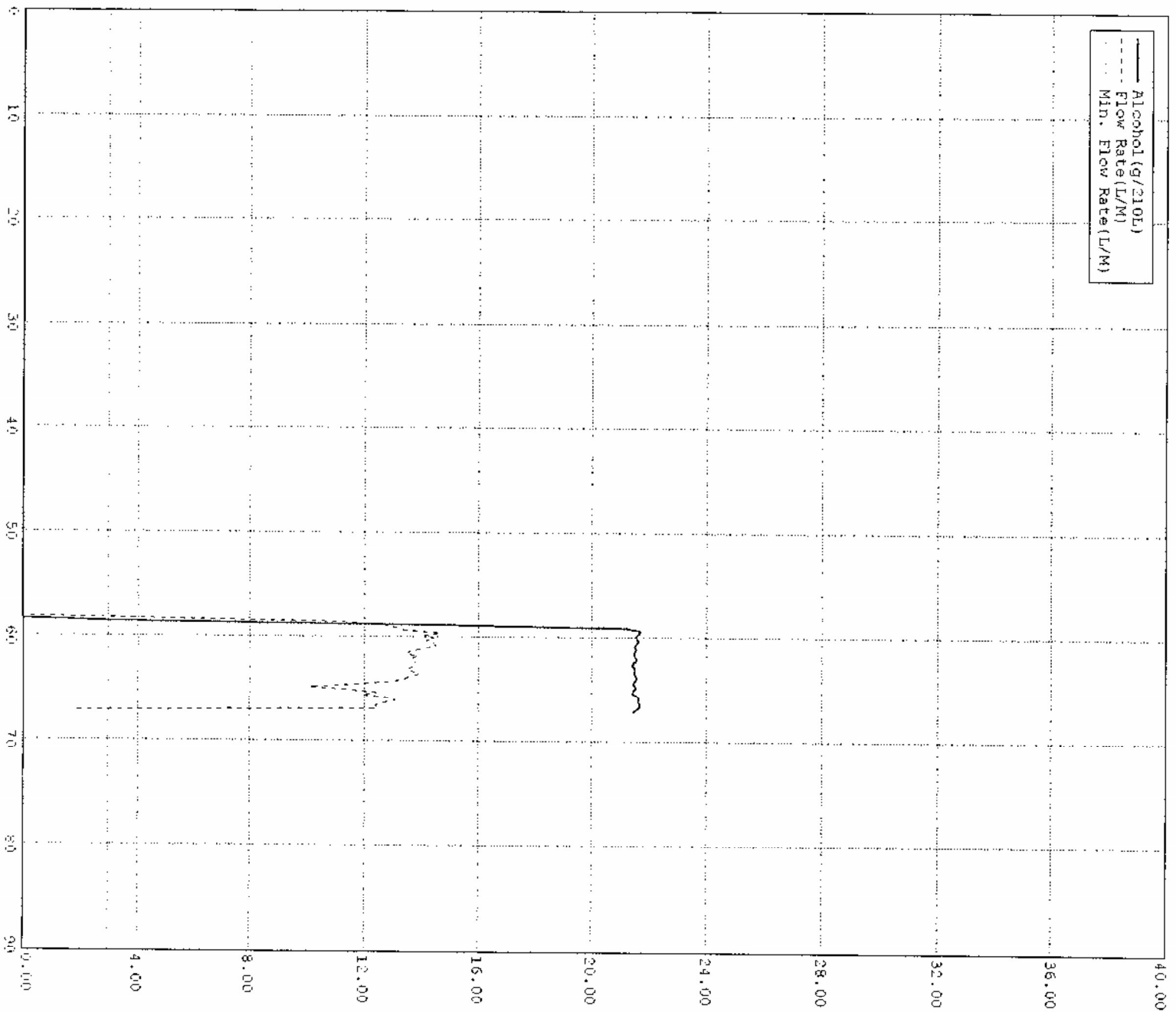
DEPT/AGENCY:  
 INTERPERE ACETONE  
 CASE/REPORT: XXXX  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 30.03: 0.080  
 LOT #: 09214080A2  
 EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:24
BLANK TEST	0.000	12:24
INTERNAL STANDARD	VERIFIED	12:24
Xq = 0.079 (1.00%)		
EXTERNAL STANDARD	0.078	12:24
X[1] = 0.0783 (-0.0015)	(0.0032)	
BLANK TEST	0.000	12:25
SUBJECT SAMPLE	XXX	12:26
X[1] = 0.1088 (-0.0127)	(0.0031)	

Interference Detected

Filter 2 Avg = -0.0015  
 Filter 3 Avg = 0.0025  
 BMB 5/28/15



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100371

Date: 05/27/2015  
Time: 12:36:03

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

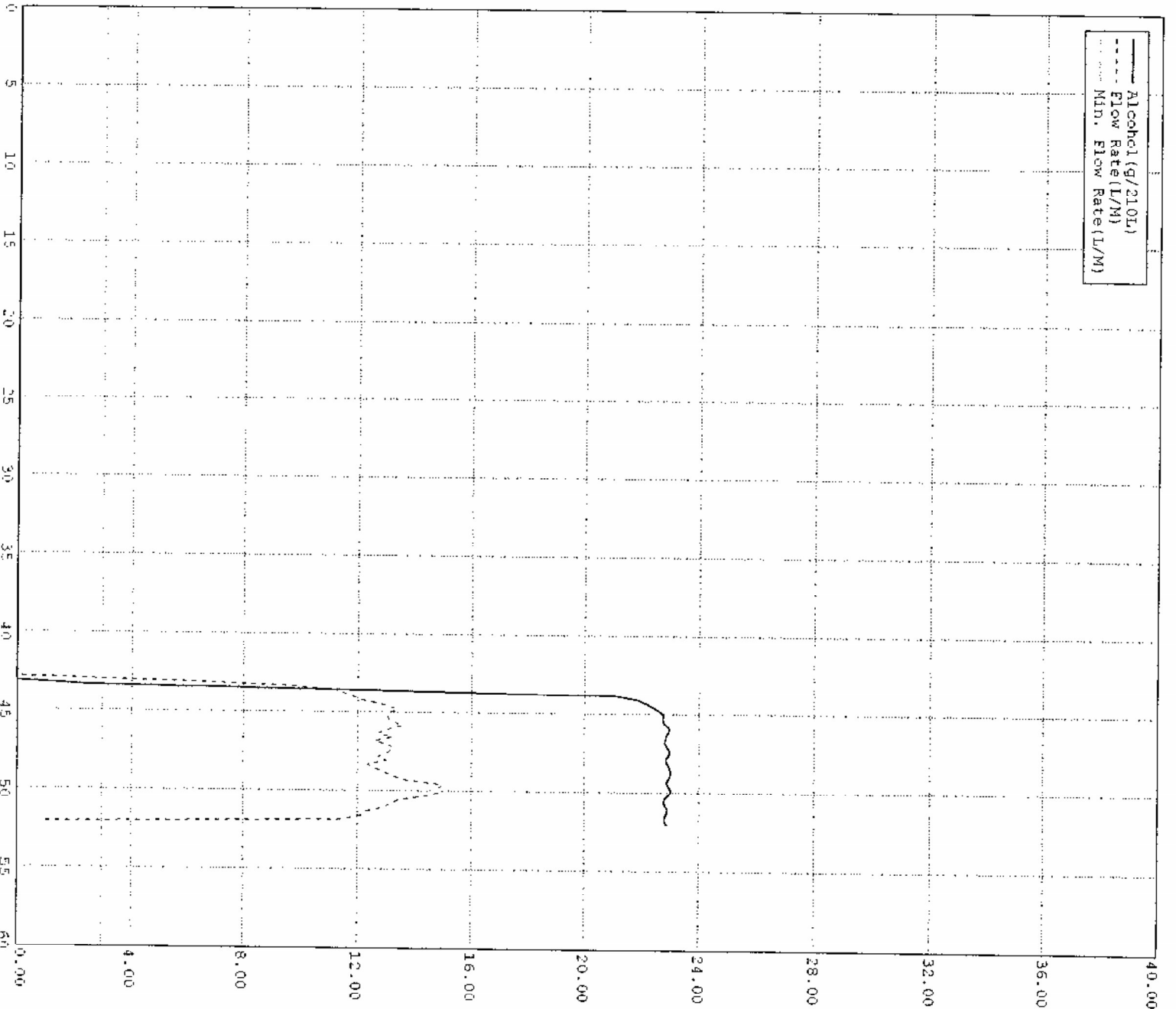
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.04: 0.080  
LOT #: 09214080A2  
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:37
BLANK TEST	0.000	12:37
INTERNAL STANDARD	VERIFIED	12:37
Xq = 0.077 (0.67%)		
EXTERNAL STANDARD	0.078	12:37
X[1] = 0.0778 (-0.0023)	(0.0022)	
BLANK TEST	0.000	12:38
SUBJECT SAMPLE	XXX	12:39
X[1] = 0.1154 (-0.0239)	(0.0006)	

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100371

Date: 05/27/2015  
Time: 12:41:14

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

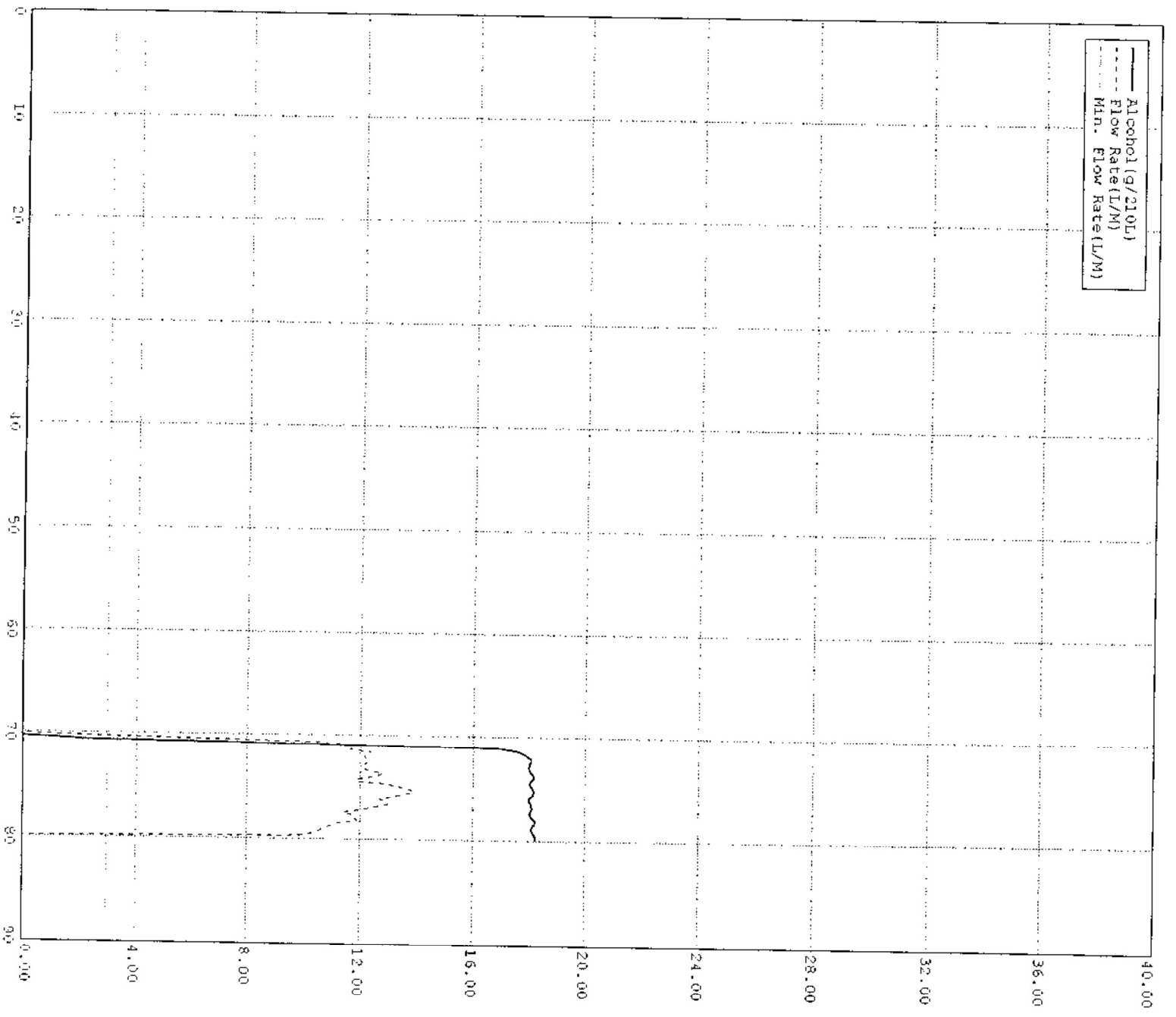
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.02: 0.080  
LOT #: 09214080A2  
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:42
BLANK TEST	0.000	12:42
INTERNAL STANDARD	VERIFIED	12:42
Xq = 0.078 (0.45%)		
EXTERNAL STANDARD	0.078	12:42
X[1] = 0.0777 (-0.0020)	(0.0029)	
BLANK TEST	0.000	12:43
SUBJECT SAMPLE (Vol=1.88l)	0.092	12:45
X[1] = 0.0921 (0.0008)	(0.0004)	
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.078	12:46
X[1] = 0.0782 (-0.0003)	(0.0018)	
BLANK TEST	0.000	12:47

BNB



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100371

Date: 05/26/2015  
Time: 16:09:30

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

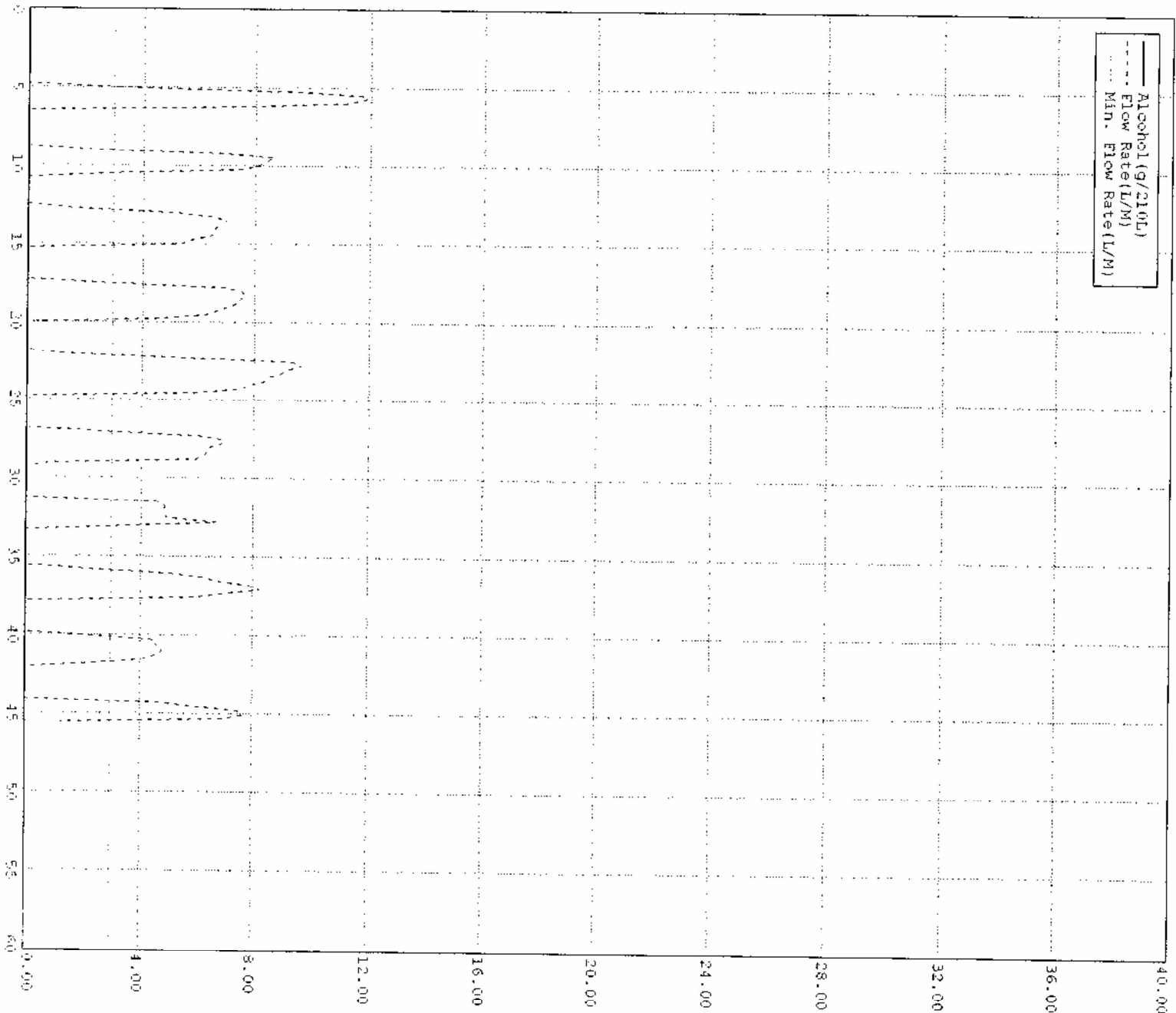
DEPT/AGENCY:  
MAXIMUM ATTEMPTS  
CASE/REPORT: XXXX  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: 09214080A2  
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	16:10
BLANK TEST	0.000	16:10
INTERNAL STANDARD	VERIFIED	16:10
EXTERNAL STANDARD	0.078	16:10
BLANK TEST	0.000	16:11
SUBJECT SAMPLE	XXX	16:12

Maximum Attempts Exceeded

*BBMB*



SUBJECT TEST

Alaska Department of Public Safety  
DATA MASTER dnt: 100371

Date: 05/26/2015  
Time: 16:00:07

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

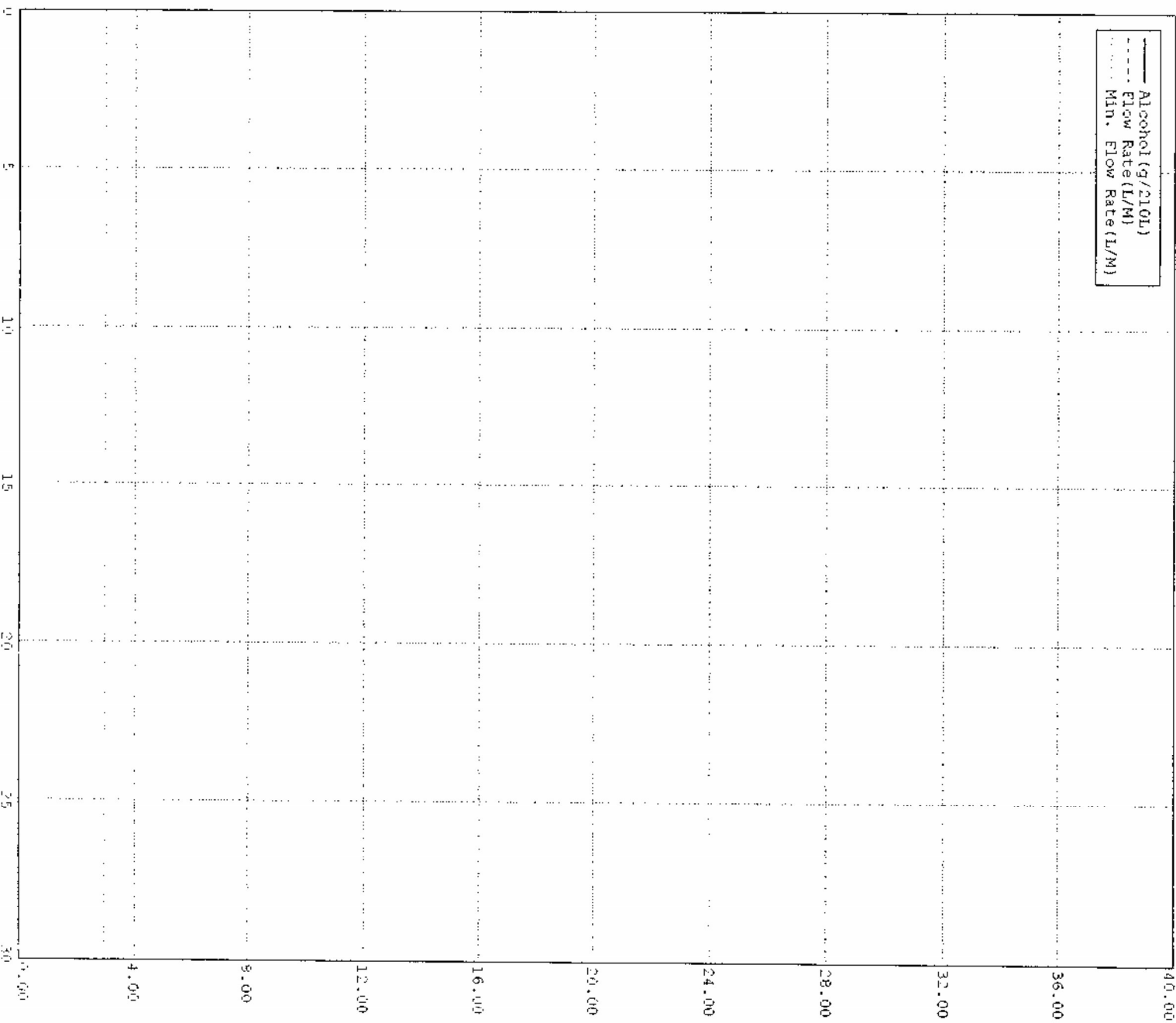
OPERATOR NAME:  
BRANDI BARNETT  
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.92: 0.080  
LOT #: 09214080A2  
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK  
BLANK TEST PASSED 16:01  
INTERNAL STANDARD VERIFIED 16:01  
EXTERNAL STANDARD 0.079 16:01  
BLANK TEST 0.000 16:02  
RPI DETECTED

*BMB*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100371

Date: 05/27/2015  
Time: 13:08:58

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 30.02: 0.080  
LOT #: 09214080A2  
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:10
BLANK TEST	0.000	13:10
INTERNAL STANDARD	VERIFIED	13:10
EXTERNAL STANDARD	0.080	13:10
BLANK TEST	0.000	13:11
SUBJECT SAMPLE (Vol=1.50L)	0.000	13:11
BLANK TEST	0.000	13:12
EXTERNAL STANDARD	0.078	13:12
BLANK TEST	0.000	13:13

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