

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 100678 Analyst Brandi Barnett 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 1.5 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 0291500A1 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: 100678

Date: 09/30/2015
Time: 08:59:51

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

TEMPERATURES

Sample Chamber = 49.0°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.60 V PASSED
(0.98 V - 2.28 V)
Cooler Voltage = 1.55 V PASSED
(0.99 V - 2.31 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 532 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.954 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 = 0.082 0.11% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dnt: 100678

Date: 09/30/2015
Time: 9:12 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 47.4°C

Current Barometer 29.4 in
Volume (Ltr) 1.59

Settings

Lamp: 1.60 V
Bias: 80 V
Cooler: 1.58 V
Chopper: 531 Hz

Voltages (V)

Flow: 1.07 V
Detector: 0.027 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100678

Date: 10/26/2011
Time: 06:16:45

Ca	=	0.1000		
CAL	=	0.980683	0.800	<= CAL < 1.200
b1	=	0.0003	0.0000	<= b1 < 0.0040
b2	=	0.0025	0.0010	<= b2 < 0.0100
b3	=	0.0000	0.0000	<= b3 < 0.0040
Xq	=	0.0821	0.0500	<= Xq < 0.2000
a21	=	1.104995	1.050	<= a21 < 1.300
a31	=	0.461169	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100678

Date: 09/30/2015
Time: 09:14:31

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

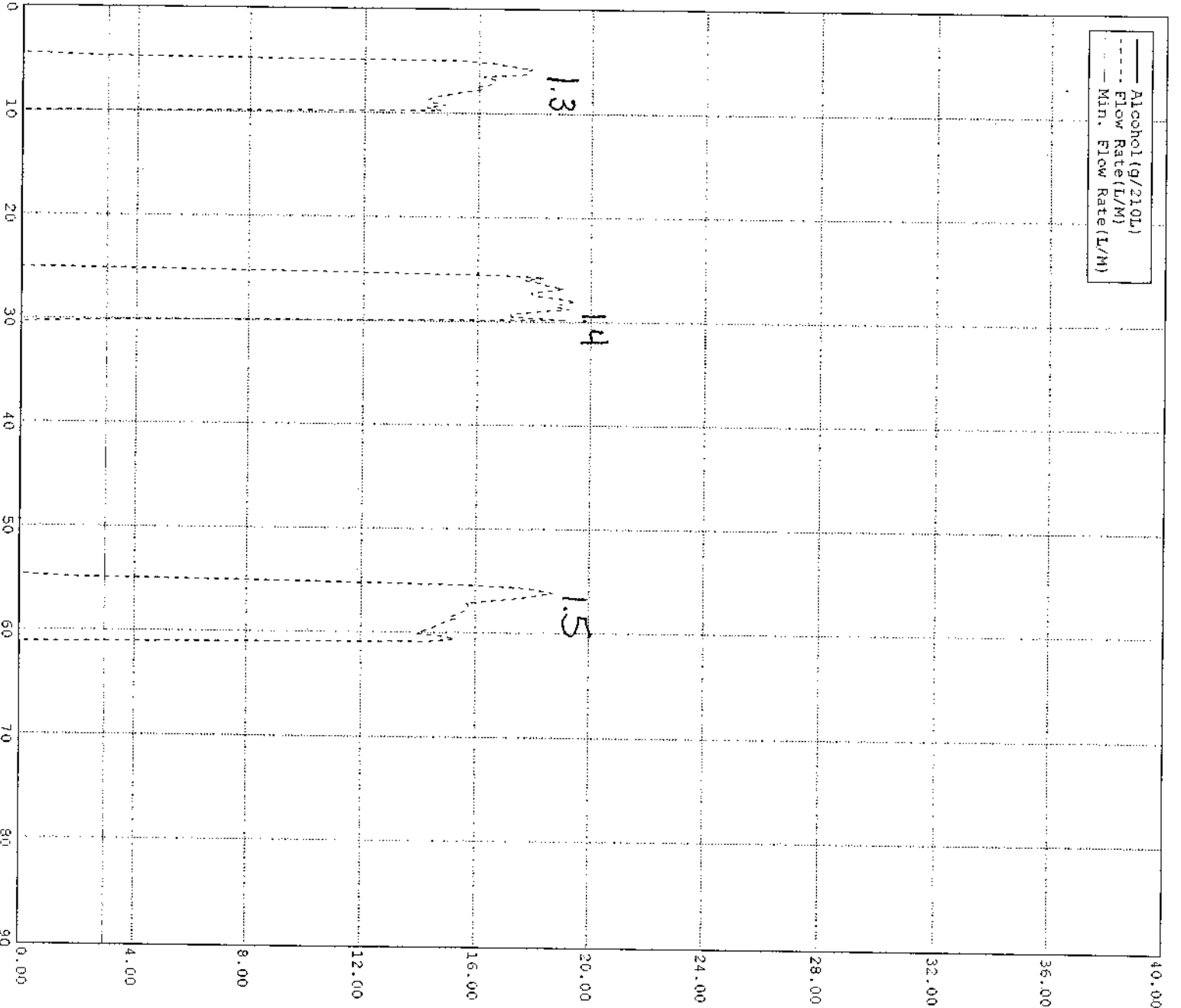
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	09:18
BLANK TEST	0.000	09:18
INTERNAL STANDARD	VERIFIED	09:18
EXTERNAL STANDARD	0.078	09:18
BLANK TEST	0.000	09:19
SUBJECT SAMPLE (Vol=1.55L)	0.000	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.078	09:21
BLANK TEST	0.000	09:22

BBMB



LINEARITY CHECK

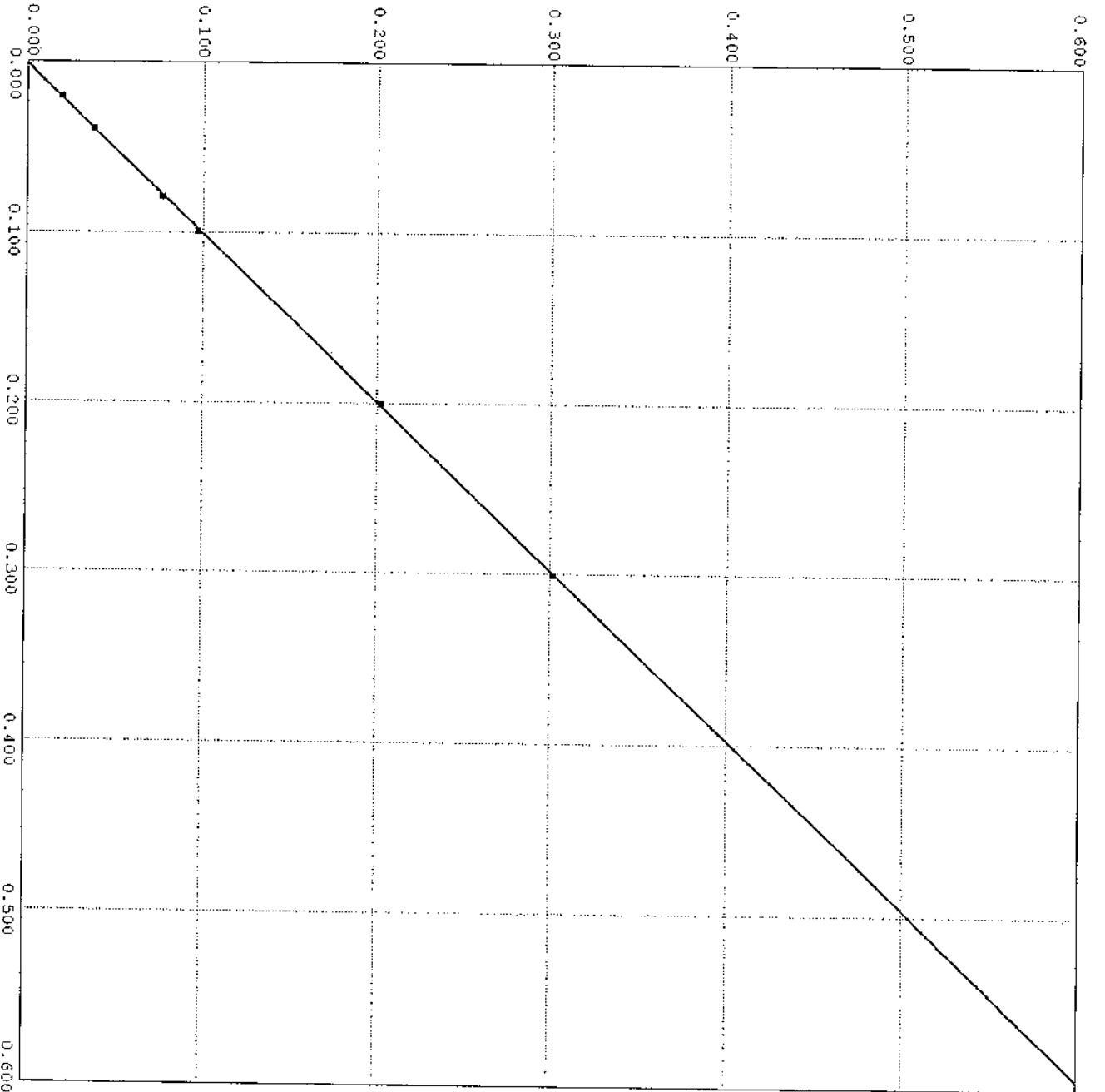
Alaska Department of Public Safety
DATA MASTER dmt: 100678

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

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0202	0.0004
0.039	0.0390	0.0000
0.079	0.0778	0.0004
0.099	0.0980	0.0000
0.200	0.2032	0.0004
0.300	0.3024	0.0005

SLOPE = 1.012675
R² = 0.999880



BSMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dnt: 100678

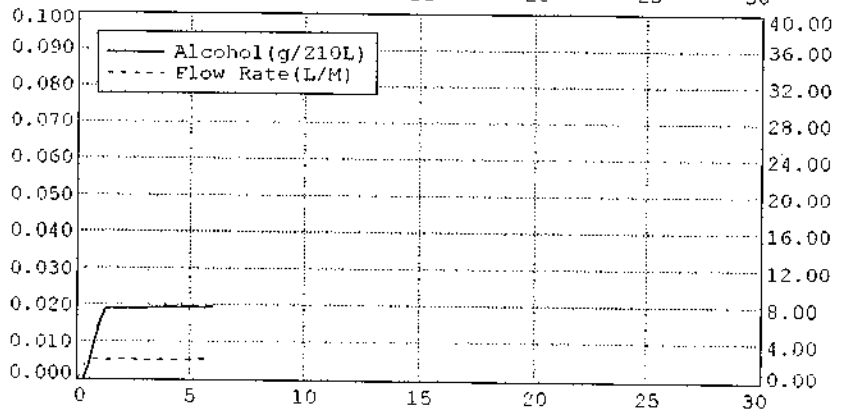
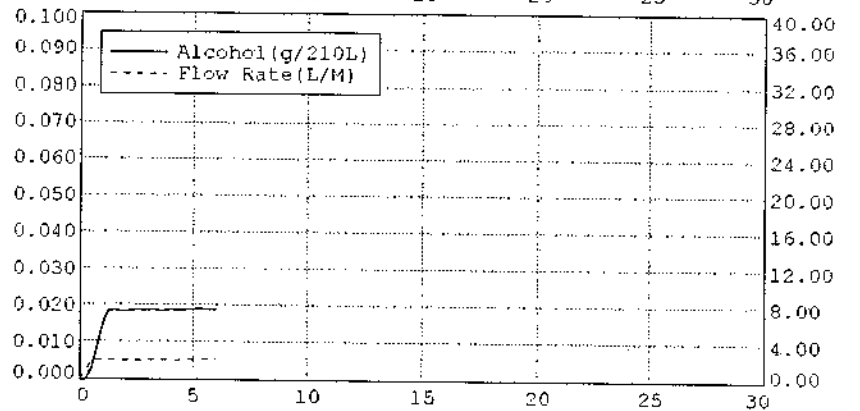
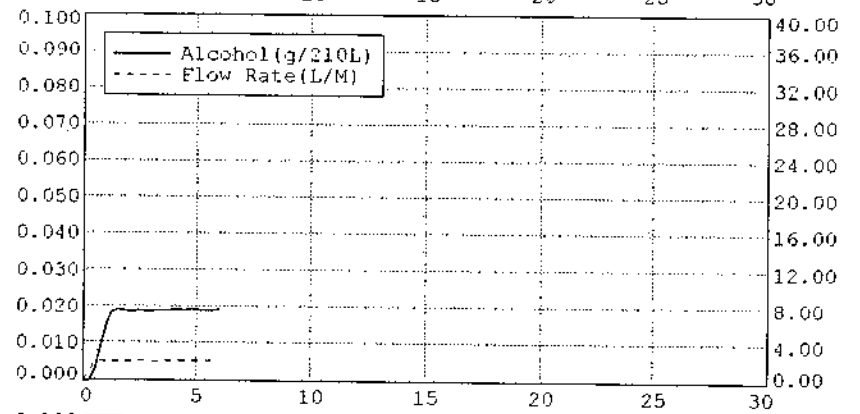
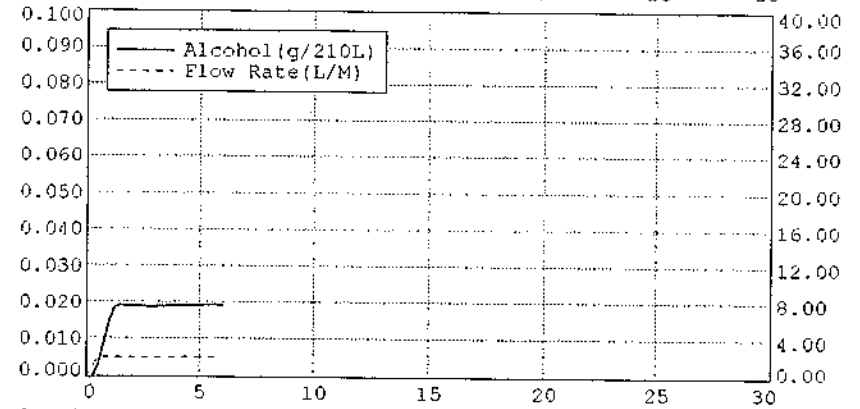
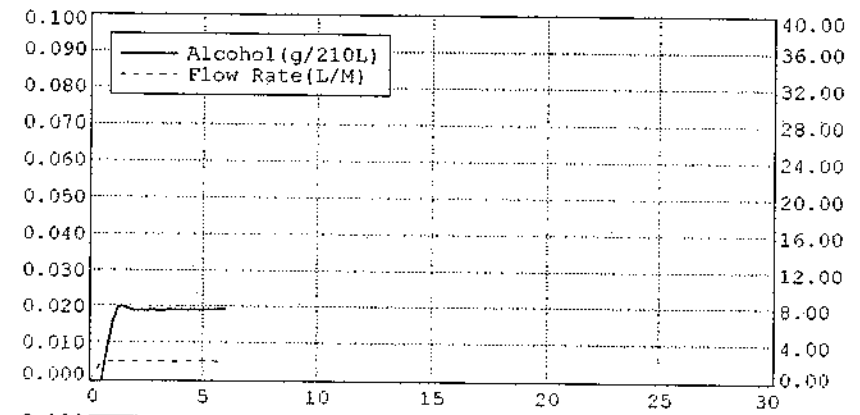
Date: 09/30/2015
 Time: 09:55:32

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.45: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 290 psi

BLANK TEST	0.000	09:56
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.020	09:57
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.020	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.020	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.020	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.021	10:01
BLANK TEST	0.000	10:02

Average = 0.0202
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100678

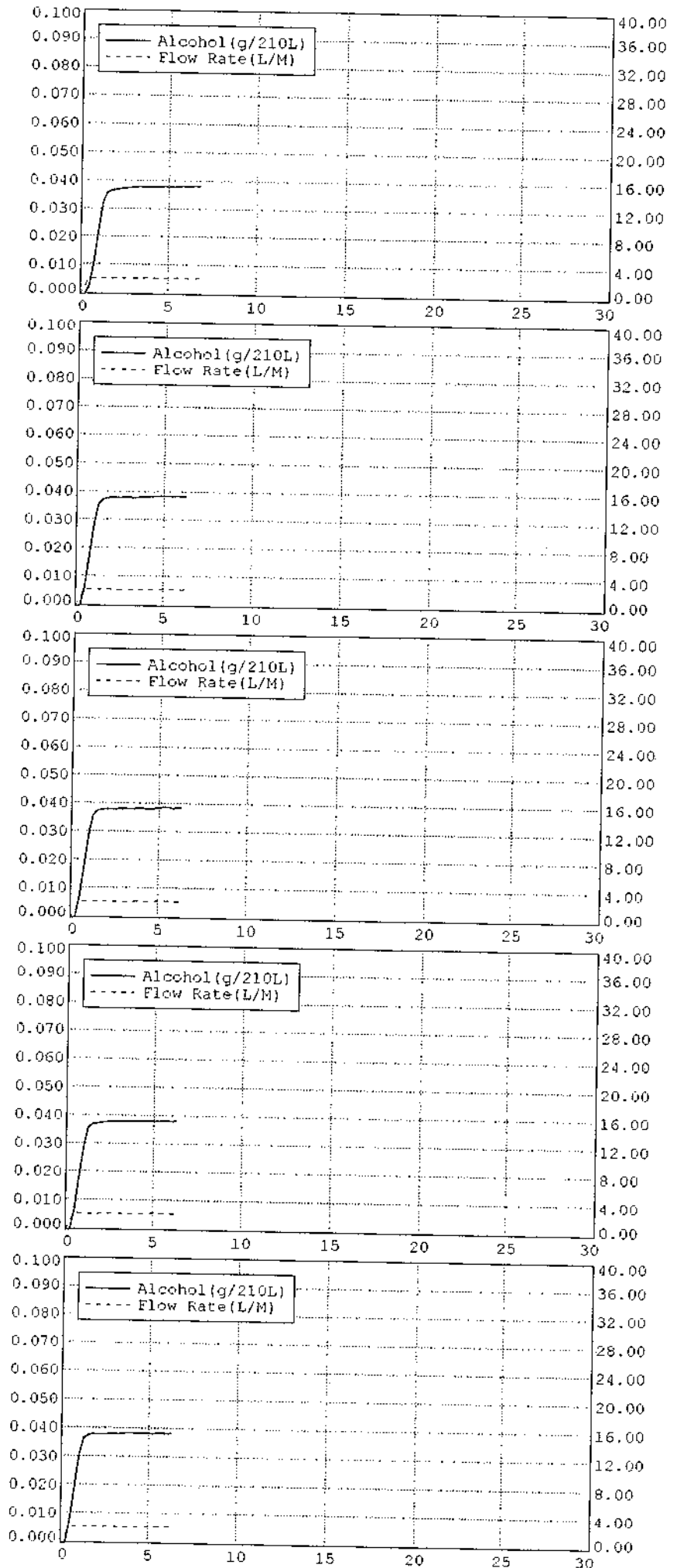
Date: 09/30/2015
 Time: 10:05:20

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.45: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 386 psi

BLANK TEST	0.000	10:07
INTERNAL STANDARD	VERIFIED	10:07
EXTERNAL STANDARD	0.039	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.039	10:08
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.039	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.039	10:11
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.039	10:12
BLANK TEST	0.000	10:13

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100678

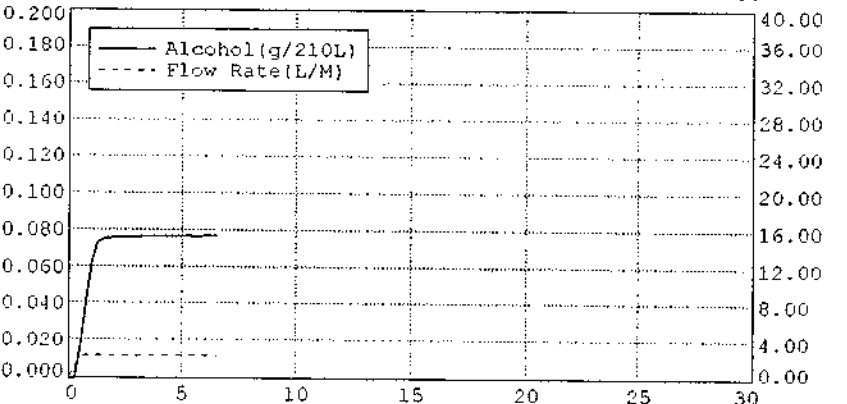
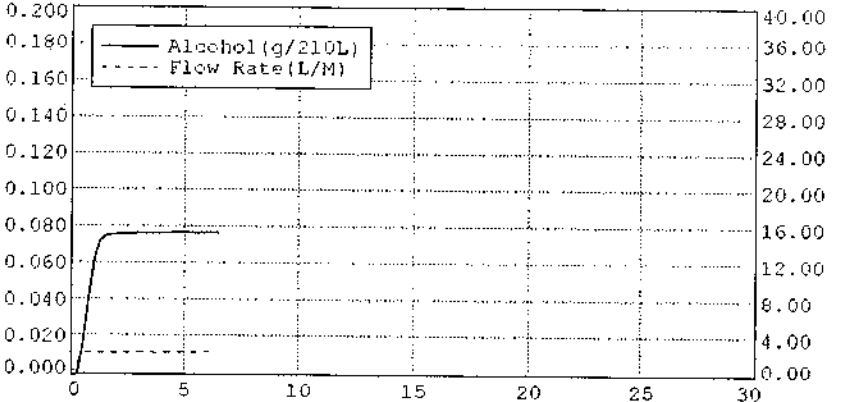
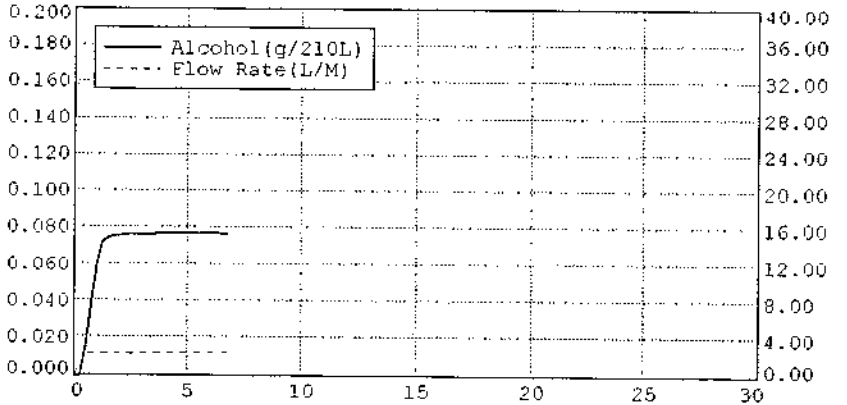
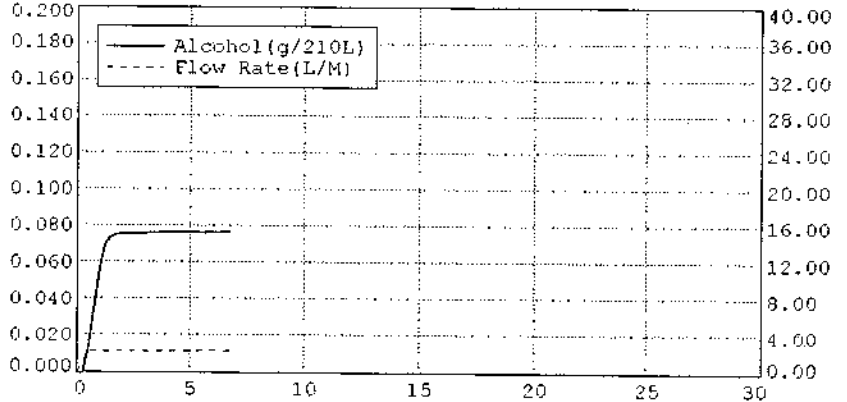
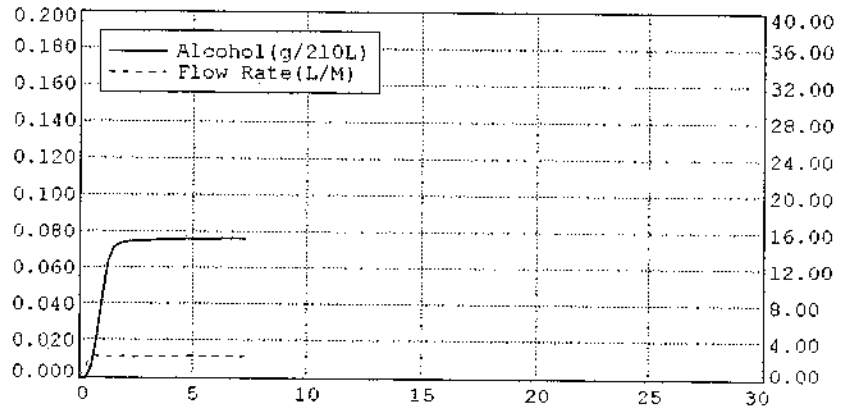
Date: 09/30/2015
 Time: 10:15:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.47: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 591 psi

BLANK TEST	0.000	10:16
INTERNAL STANDARD	VERIFIED	10:16
EXTERNAL STANDARD	0.077	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.078	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.078	10:19
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.078	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.078	10:21
BLANK TEST	0.000	10:22

Average = 0.0778
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100678

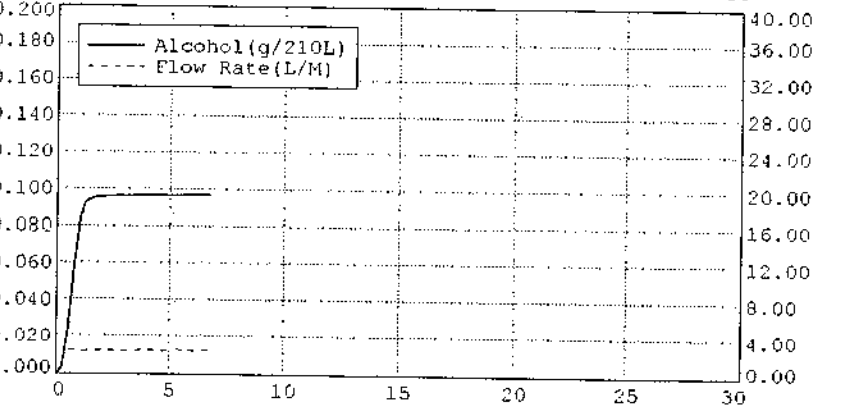
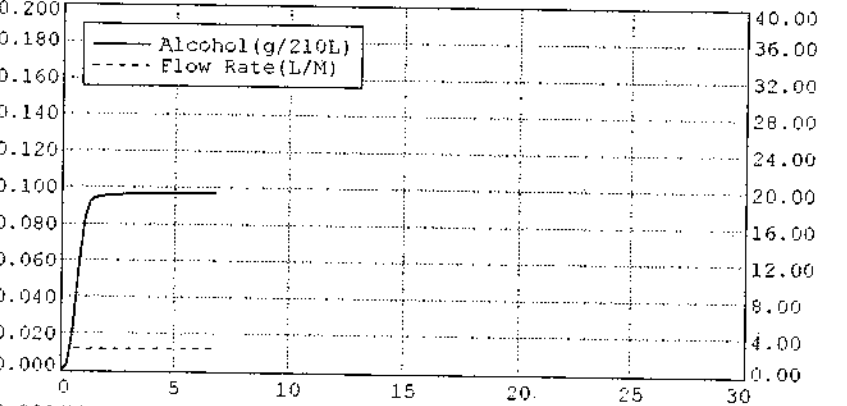
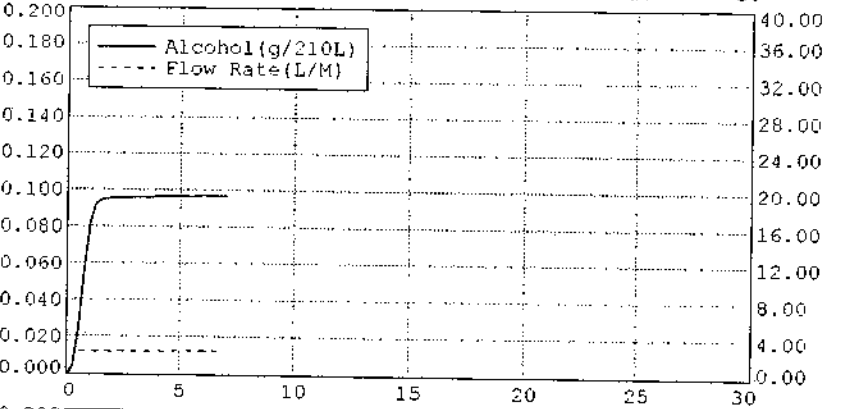
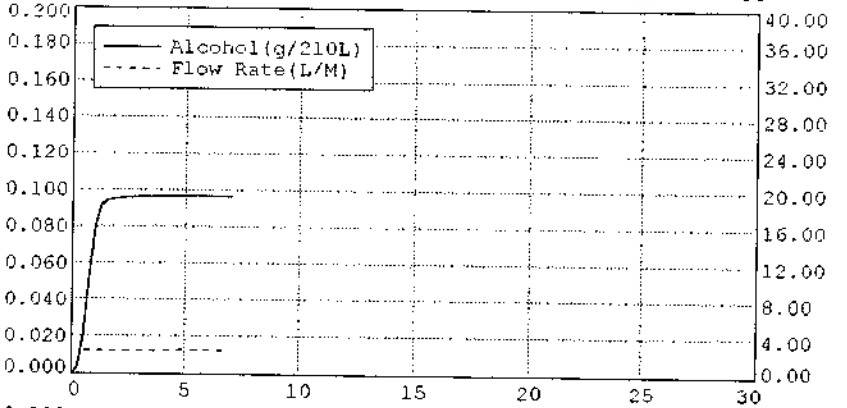
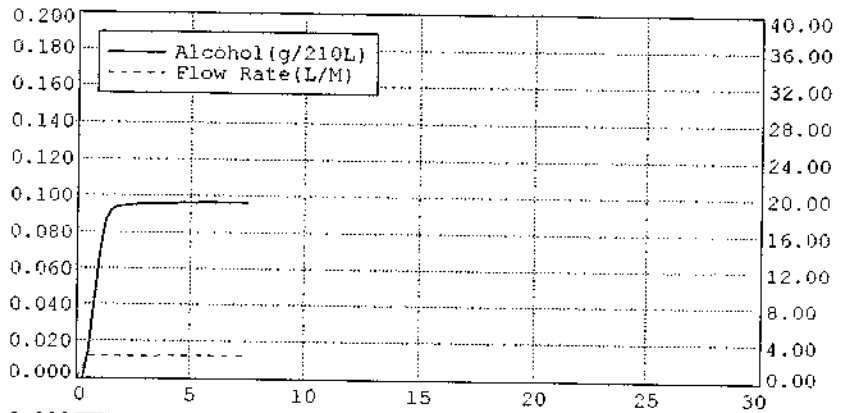
Date: 09/30/2015
 Time: 10:23:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.48: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1079 psi

BLANK TEST	0.000	10:24
INTERNAL STANDARD	VERIFIED	10:25
EXTERNAL STANDARD	0.098	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.098	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.098	10:27
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.098	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.098	10:29
BLANK TEST	0.000	10:30

Average = 0.0980
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

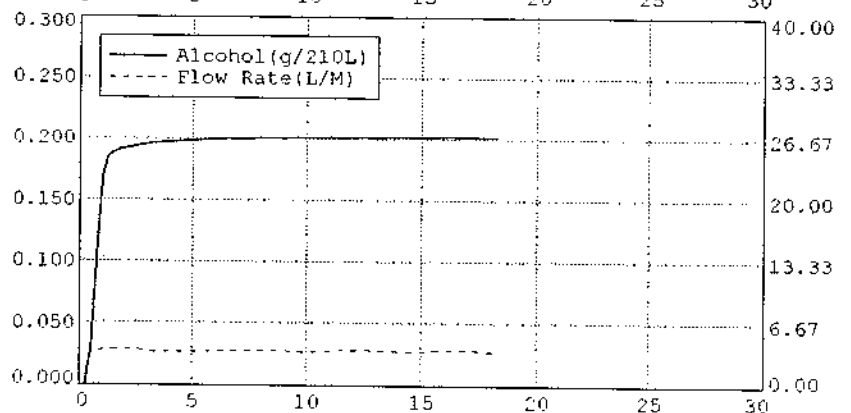
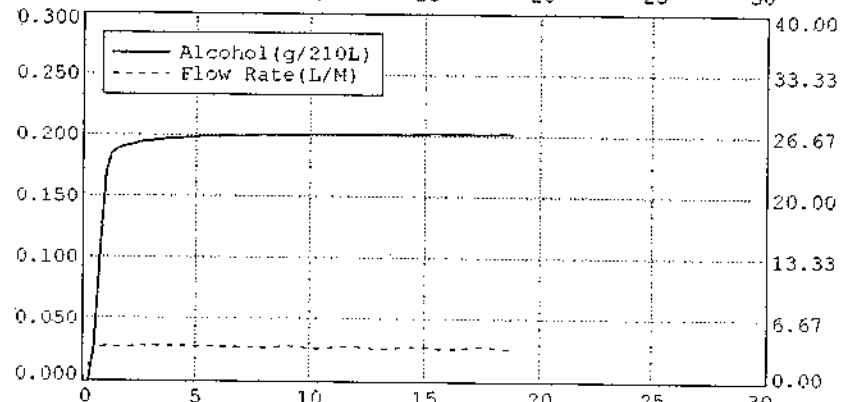
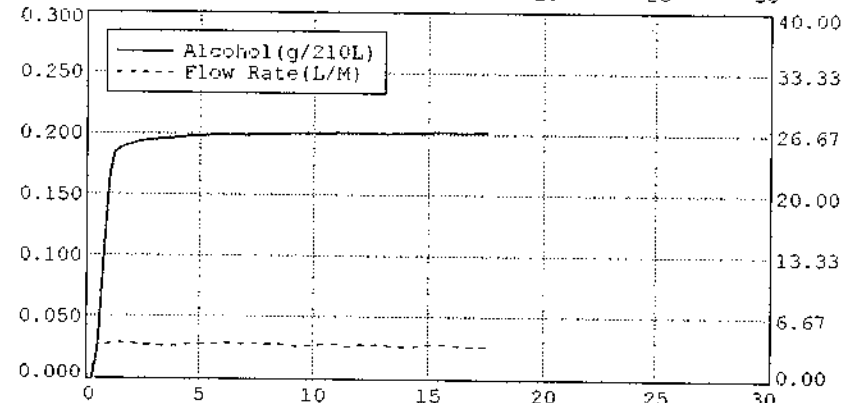
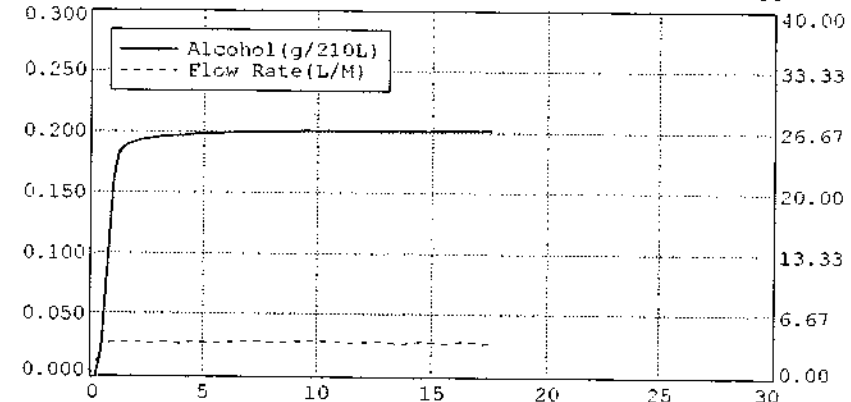
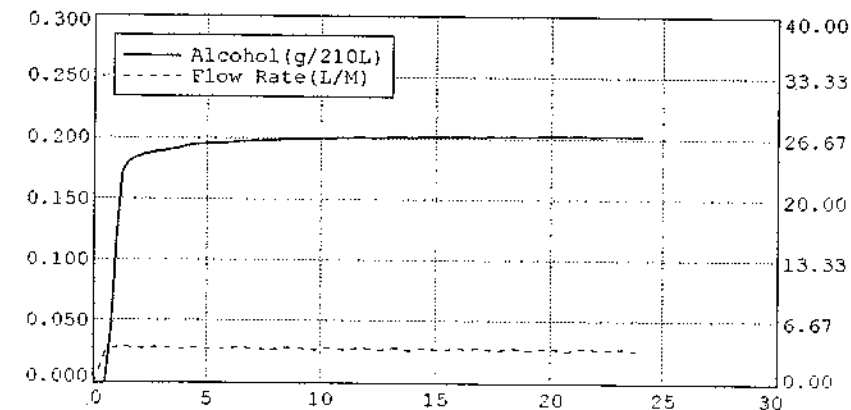
Alaska Department of Public Safety
 DATAMASTER dmt: 100678

Date: 09/30/2015
 Time: 10:32:24

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

BLANK TEST	0.000	10:33
INTERNAL STANDARD	VERIFIED	10:33
EXTERNAL STANDARD	0.204	10:34
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.203	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.203	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.203	10:38
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.203	10:39
BLANK TEST	0.000	10:40

Average = 0.2032
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100678

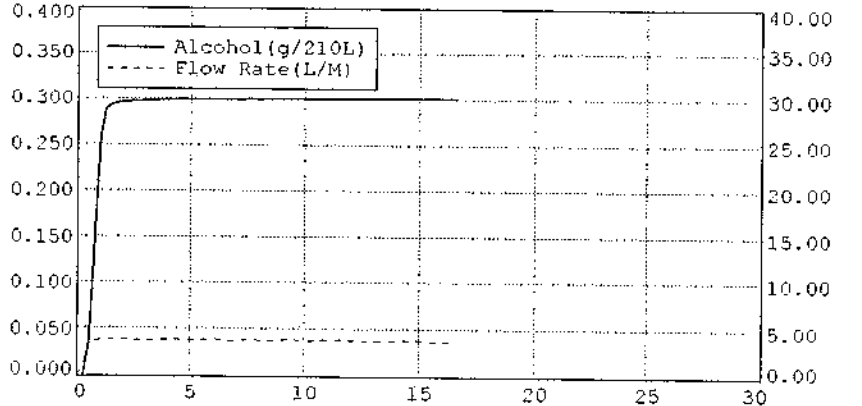
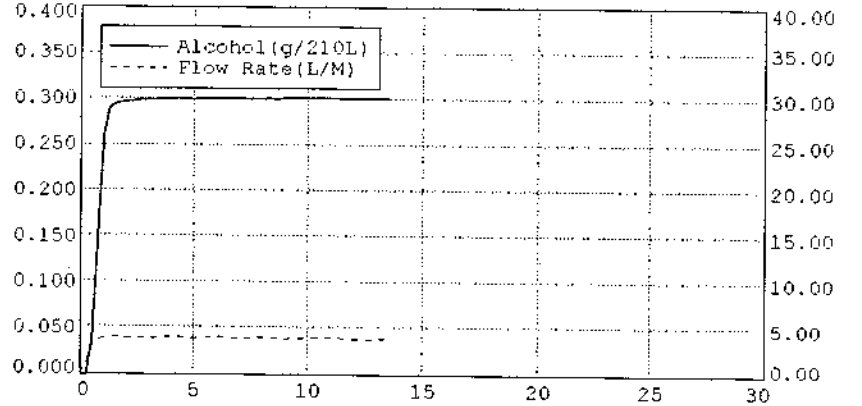
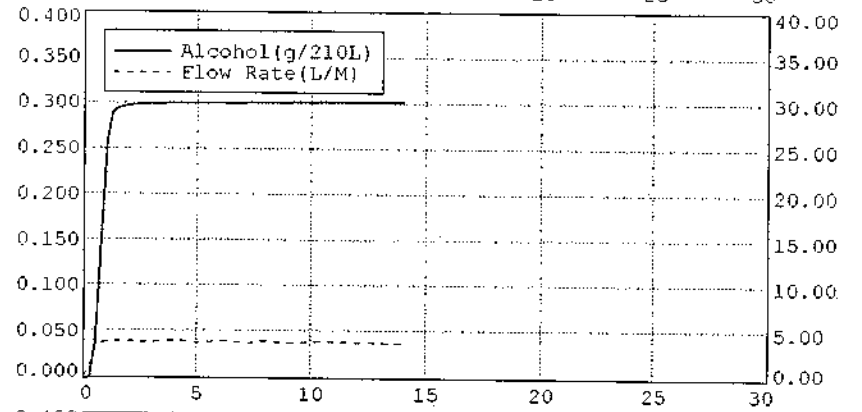
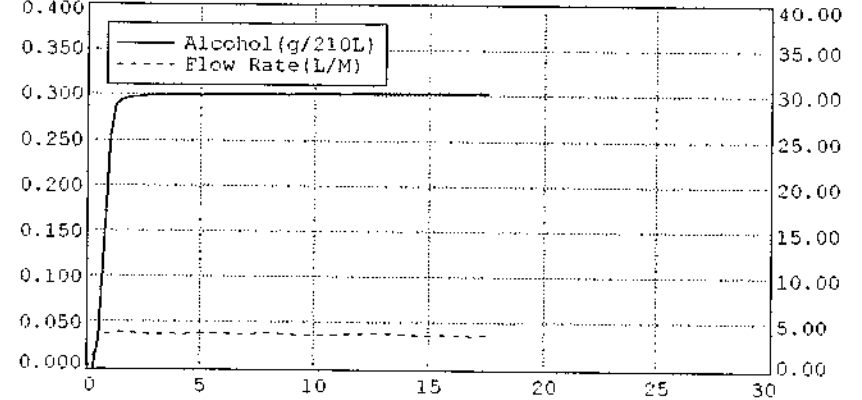
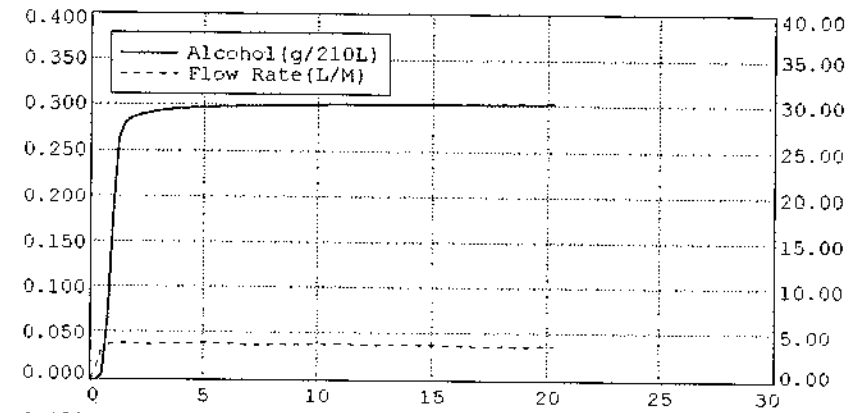
Date: 09/30/2015
 Time: 10:44:00

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:45
INTERNAL STANDARD	VERIFIED	10:45
EXTERNAL STANDARD	0.303	10:45
BLANK TEST	0.000	10:46
EXTERNAL STANDARD	0.303	10:47
BLANK TEST	0.000	10:47
EXTERNAL STANDARD	0.302	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.302	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.302	10:50
BLANK TEST	0.000	10:51

Average = 0.3024
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100678

Date: 09/30/2015
Time: 13:14:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

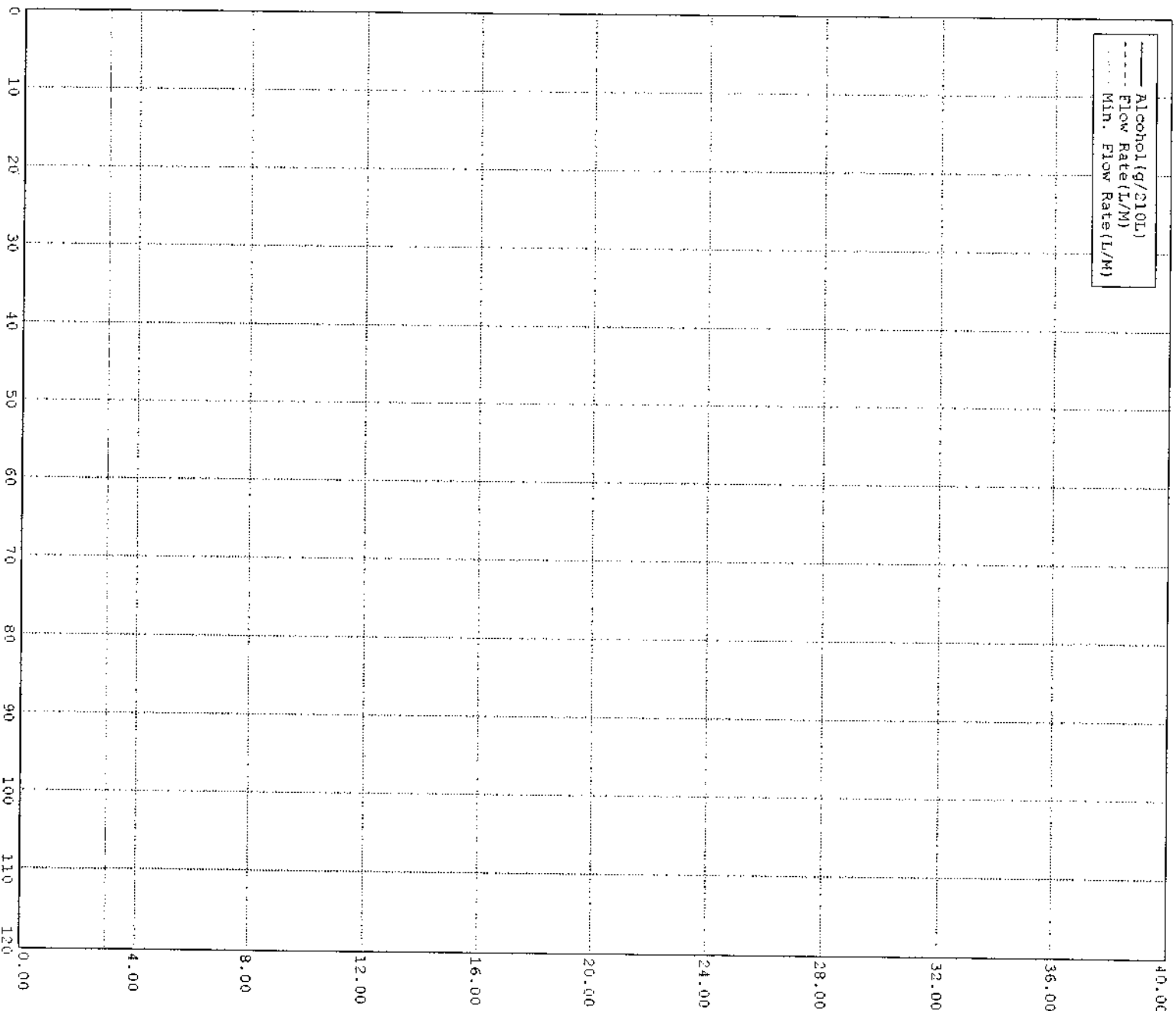
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	13:15
BLANK TEST	0.000	13:15
INTERNAL STANDARD	VERIFIED	13:16
EXTERNAL STANDARD	0.078	13:16
BLANK TEST	0.000	13:17
SUBJECT SAMPLE	INCOMPLETE	13:19

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100678

Date: 09/30/2015
Time: 13:23:54

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

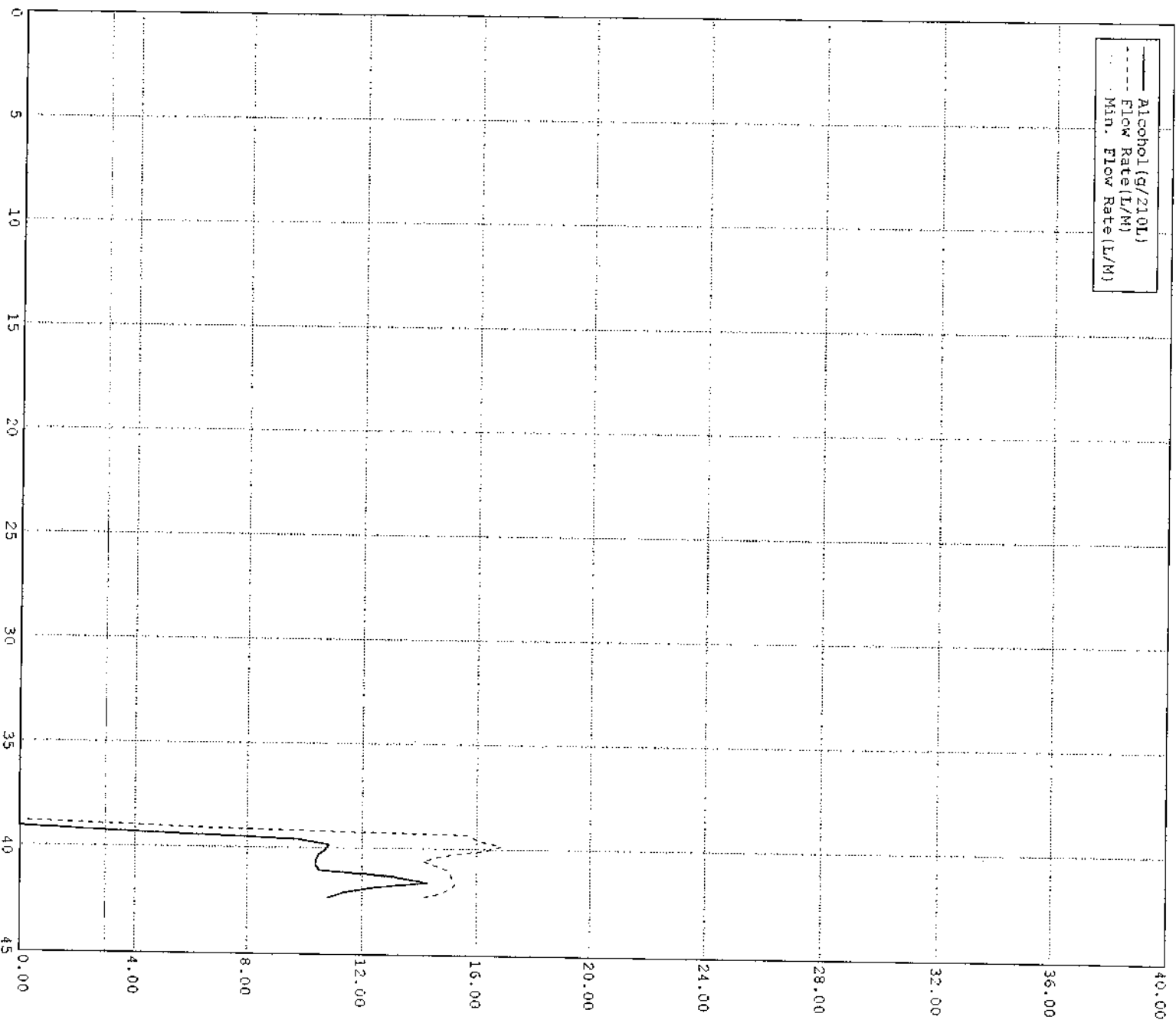
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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	13:26
BLANK TEST	0.000	13:26
INTERNAL STANDARD	VERIFIED	13:26
EXTERNAL STANDARD	0.078	13:26
BLANK TEST	0.000	13:27
SUBJECT SAMPLE	INVALID	13:28

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100678

Date: 09/30/2015
Time: 13:54:51

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

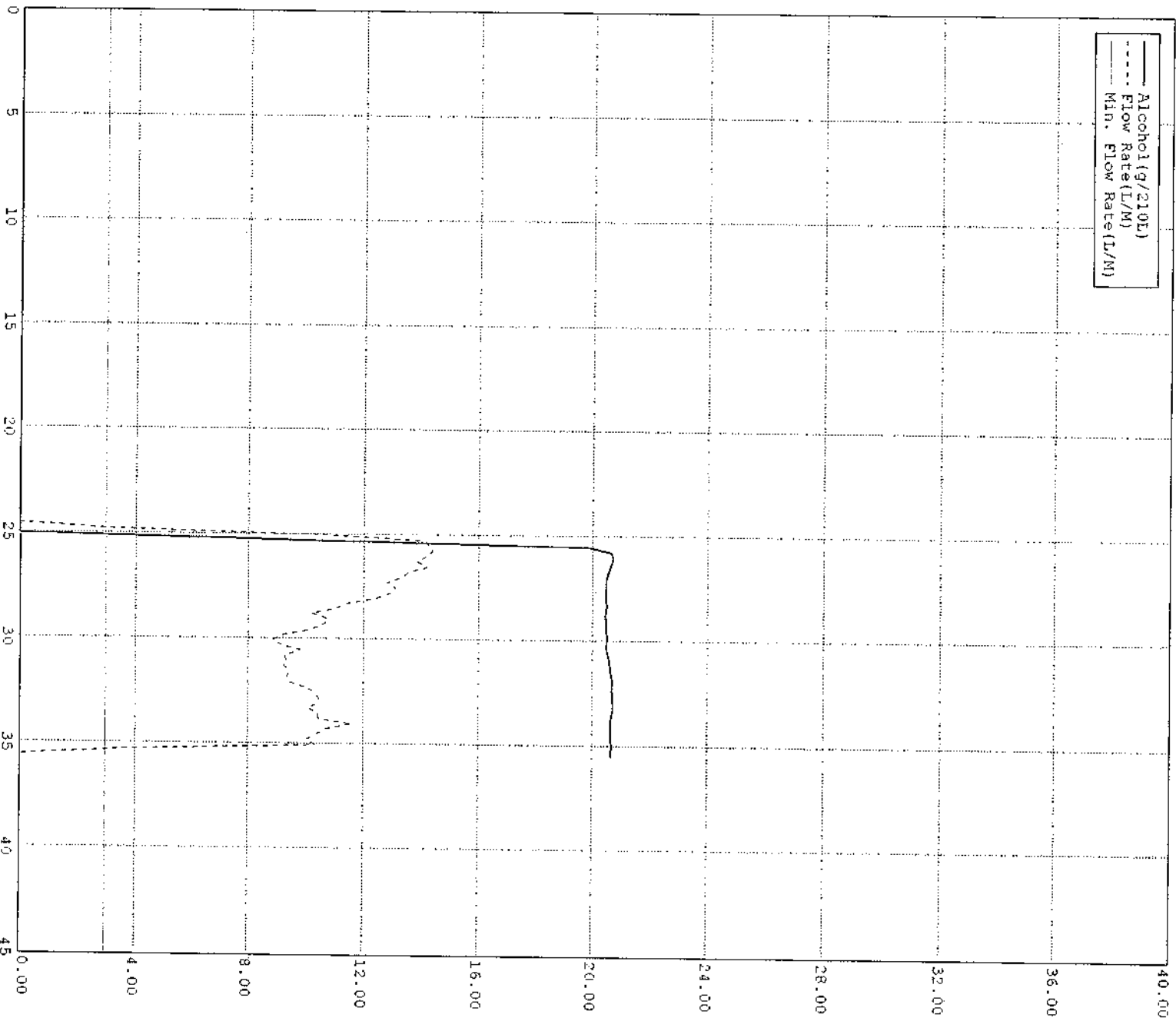
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:56
BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:56
Xq = 0.082 (0.21%)		
EXTERNAL STANDARD	0.078	13:56
X[1] = 0.0780 (0.0003)	(0.0028)	
BLANK TEST	0.000	13:57
SUBJECT SAMPLE	XXX	13:58
X[1] = 0.1039 (-0.0115)	(0.0010)	

Interference Detected

Filter 2 Avg: 0.0005
Filter 3 Avg: 0.0027
10/1/15 BMB

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100678

Date: 09/30/2015
Time: 14:05:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

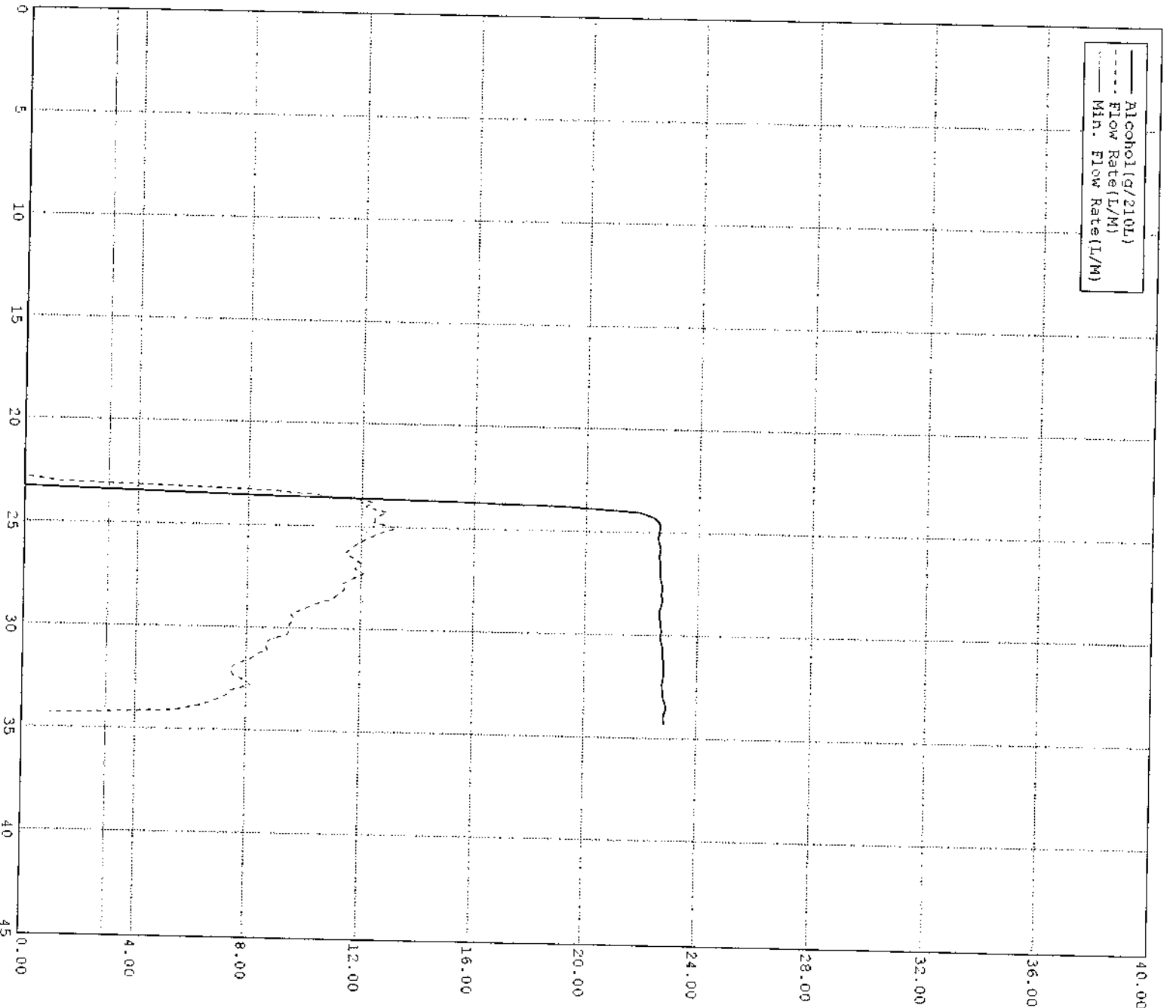
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:06
BLANK TEST	0.000	14:06
INTERNAL STANDARD	VERIFIED	14:07
Xq = 0.082 (0.11%)		
EXTERNAL STANDARD	0.078	14:07
X[1] = 0.0778 (0.0004) (0.0035)		
BLANK TEST	0.000	14:08
SUBJECT SAMPLE	XXX	14:08
X[1] = 0.1147 (-0.0171) (0.0012)		

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100678

Date: 09/30/2015
Time: 14:11:34

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

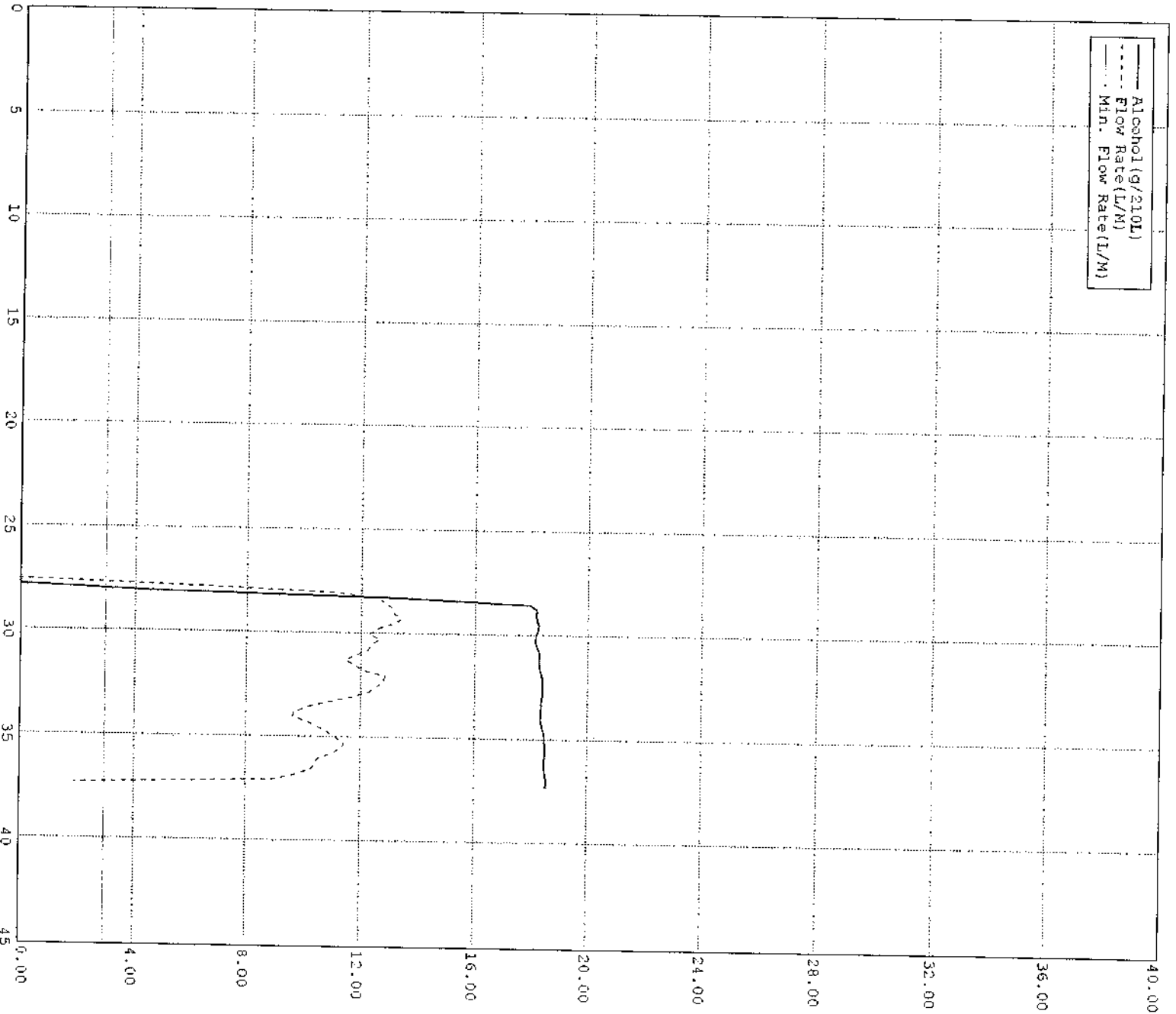
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	14:13
INTERNAL STANDARD	0.000	14:13
EXTERNAL STANDARD	0.078 (0.74%)	14:13
INTERNAL STANDARD	0.000	14:14
EXTERNAL STANDARD	0.078 (0.0025)	14:14
SUBJECT SAMPLE (Vol=1.81L)	0.093	14:15
INTERNAL STANDARD	0.000 (0.0000)	14:16
EXTERNAL STANDARD	0.078	14:16
INTERNAL STANDARD	0.000	14:17
EXTERNAL STANDARD	0.000 (0.0021)	14:17

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100678

Date: 09/30/2015
Time: 13:34:01

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

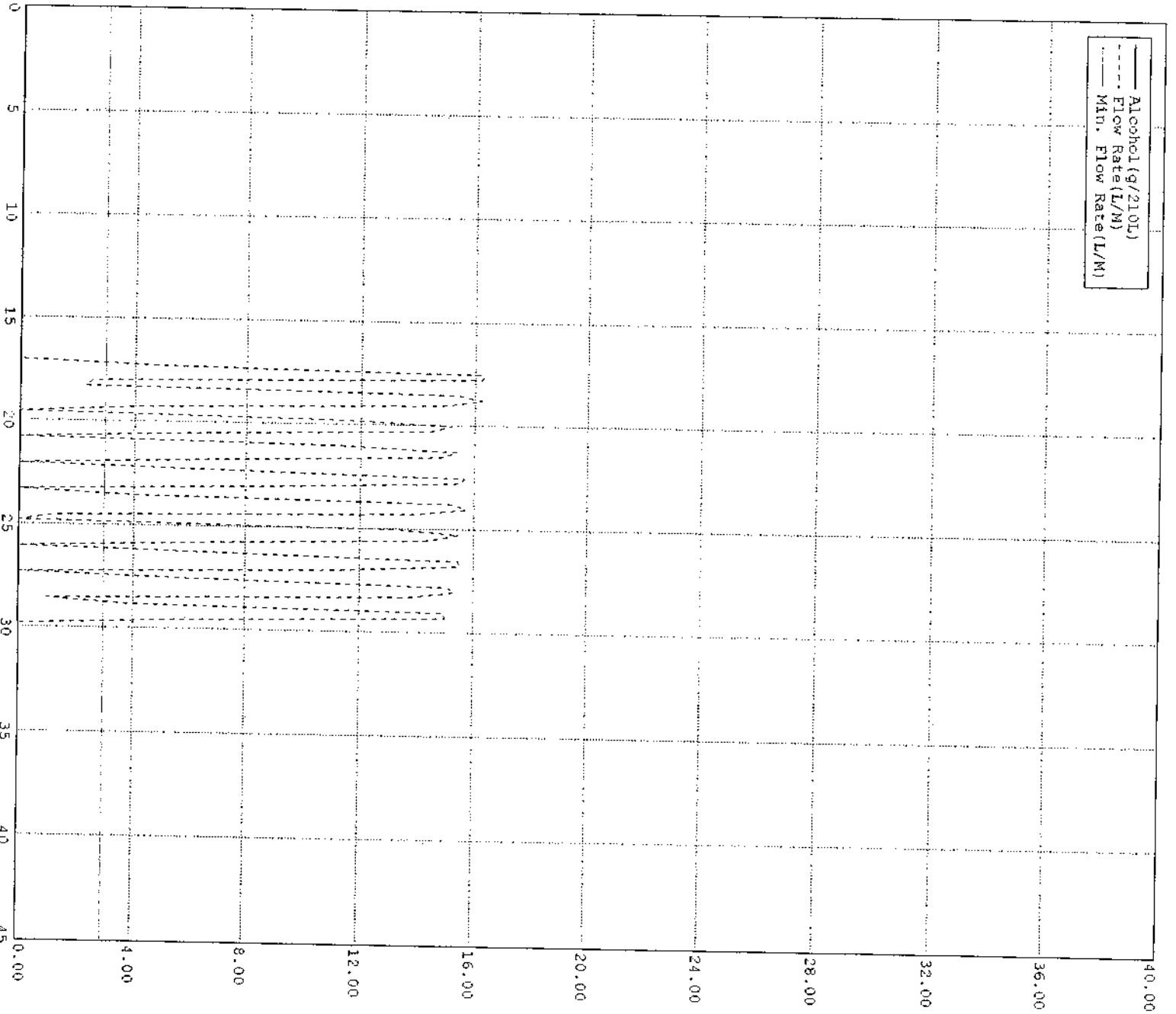
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	13:35
BLANK TEST	0.000	13:36
INTERNAL STANDARD	0.078	13:36
EXTERNAL STANDARD	0.000	13:37
BLANK TEST	XXX	13:37

Maximum Attempts Exceeded

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100678

Date: 09/30/2015
Time: 13:45:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

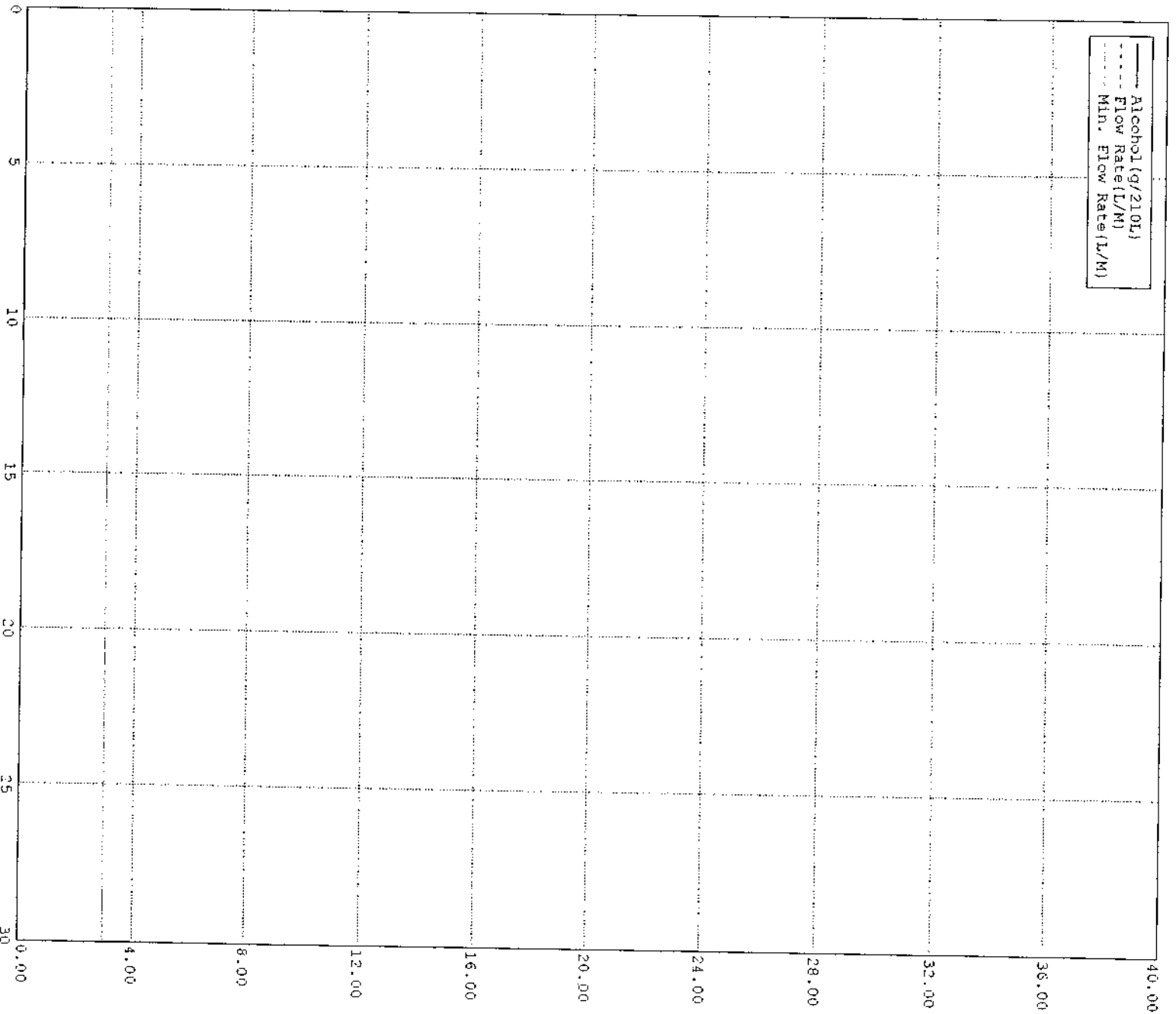
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.090
TARGET AT 29.62: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 13:48
BLANK TEST 0.000 13:48
INTERNAL STANDARD VERIFIED 13:48
EXTERNAL STANDARD 0.078 13:48
BLANK TEST 0.000 13:49

RFI DETECTED

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100678

Date: 09/30/2015
Time: 14:50:40

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: XXXX

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	14:52
BLANK TEST	0.000	14:52
INTERNAL STANDARD	VERIFIED	14:52
EXTERNAL STANDARD	0.078	14:52
BLANK TEST	0.000	14:53
SUBJECT SAMPLE (VOL=2.15L)	0.000	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.079	14:55
BLANK TEST	0.000	14:56

BYMB

