

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 100404 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 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 5/11/17
 - 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: 100404

Date: 07/21/2015
Time: 14:45:25

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.0°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
(1.06 V - 2.48 V)
Cooler Voltage = 1.65 V PASSED
(1.01 V - 2.35 V)
Bias Voltage = 82 V PASSED
(49 V - 115 V)
Chopper Freq = 535 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.561 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 PASSED

Xq = 0.088 0.79% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100404

Date: 07/21/2015
Time: 3:04 PM

Temperatures (°C)
Sample Cell: 49.2°C
Breath Tube: 46.8°C

Current Barometer 29.6 in
Volume (Ltr) 1.44

Settings
Lamp: 1.75 V
Bias: 82 V
Cooler: 1.71 V
Chopper: 532 Hz

Voltages (V)
Flow: 1.06 V
Detector: -0.031 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 05/18/2011
Time: 14:02:44

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 10260
EXPIRATION: 01/01/2012

Ca	=	0.1000		
CAL	=	0.970035	0.800	<= CAL < 1.200
b1	=	0.0005	0.0000	<= b1 < 0.0040
b2	=	0.0071	0.0010	<= b2 < 0.0100
b3	=	0.0001	0.0000	<= b3 < 0.0040
Xq	=	0.0888	0.0500	<= Xq < 0.2000
a21	=	1.183100	1.050	<= a21 < 1.300
a31	=	0.434619	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/21/2015
Time: 15:06:00

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

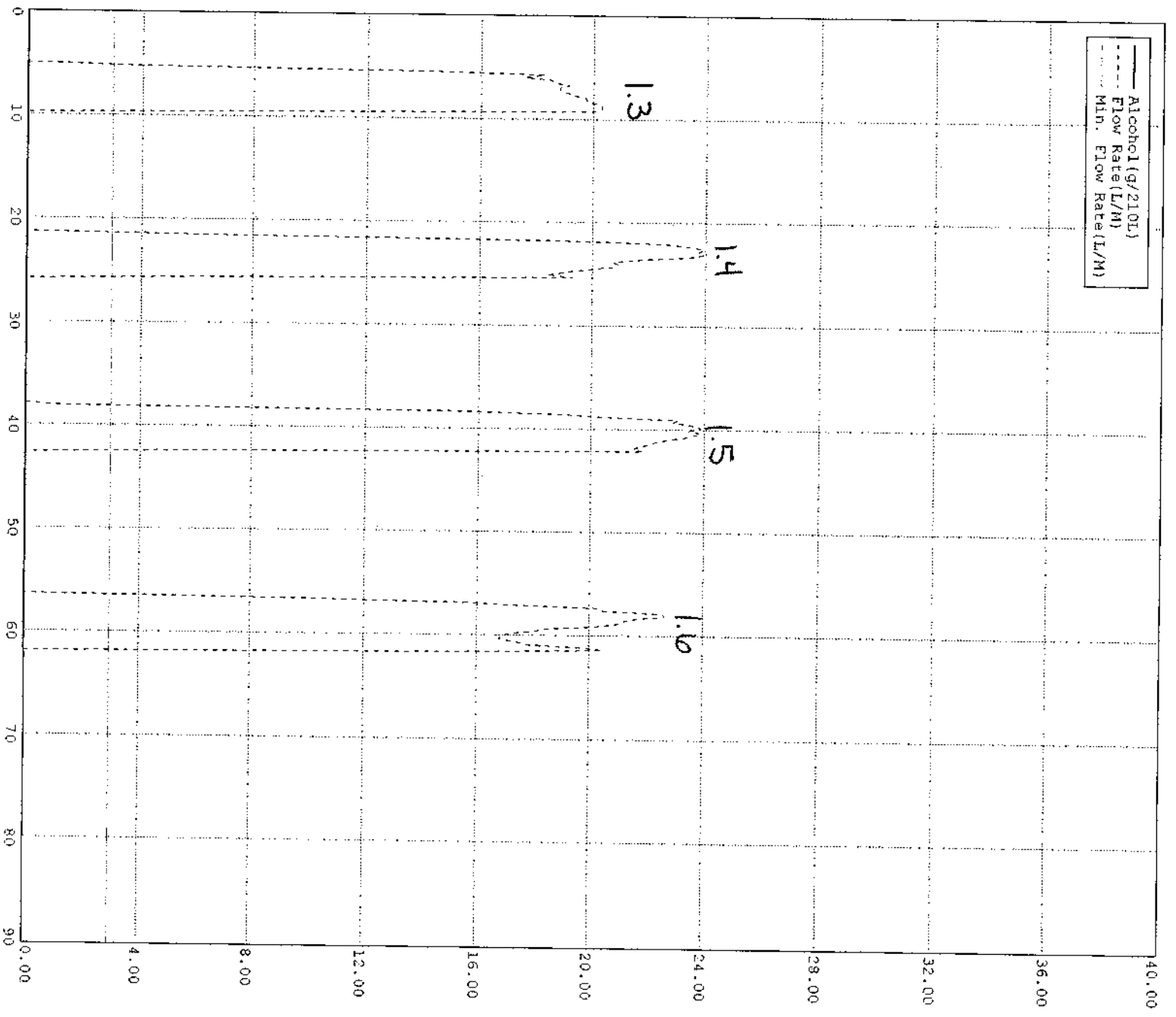
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.58: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:07
BLANK TEST	0.000	15:07
INTERNAL STANDARD	VERIFIED	15:07
EXTERNAL STANDARD	0.078	15:07
BLANK TEST	0.000	15:08
SUBJECT SAMPLE (Vol=1.63L)	0.000	15:09
BLANK TEST	0.000	15:10
EXTERNAL STANDARD	0.078	15:10
BLANK TEST	0.000	15:11

BMB



LINEARITY CHECK

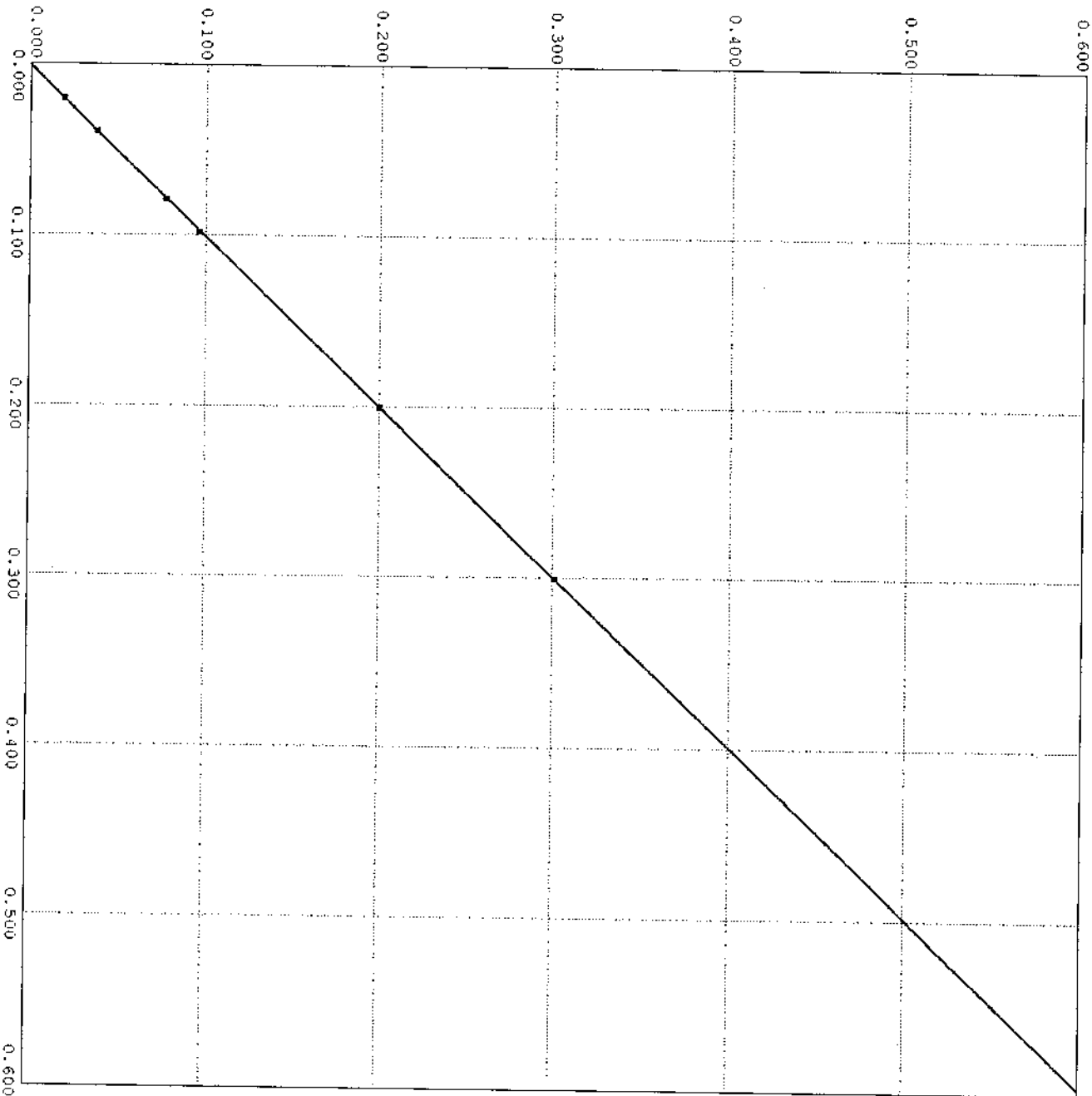
Alaska Department of Public Safety
DATAMASTER dnt: 100404

Date: 07/23/2015
Time: 10:14:31

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.039	0.0390	0.0000
0.079	0.0782	0.0004
0.098	0.0972	0.0004
0.200	0.2008	0.0004
0.300	0.3018	0.0004

SLOPE = 1.007580
R² = 0.999971



BMB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100404

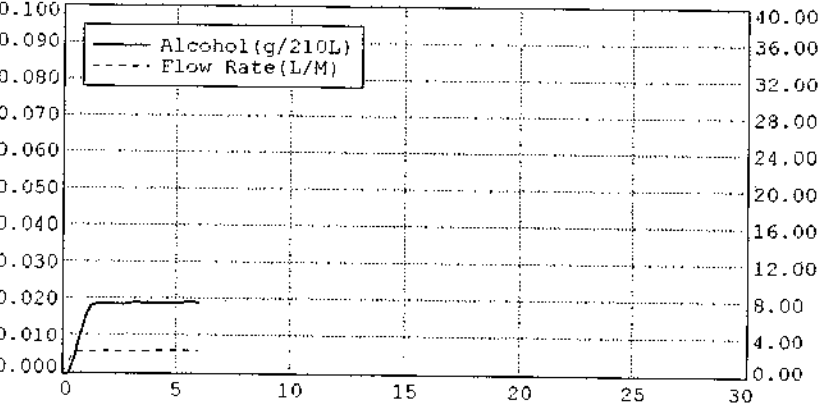
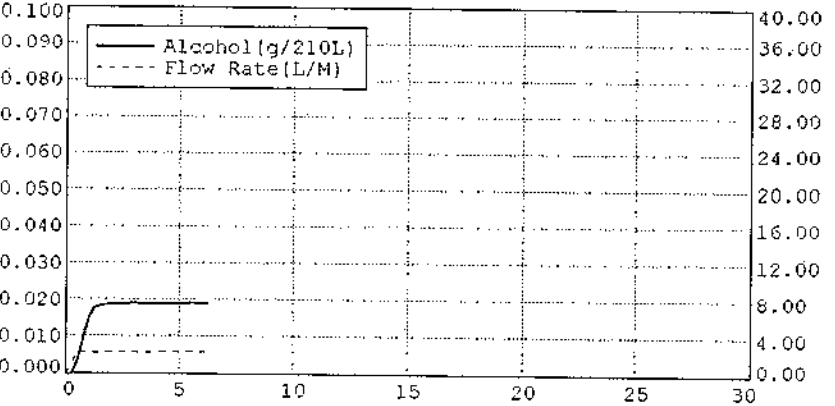
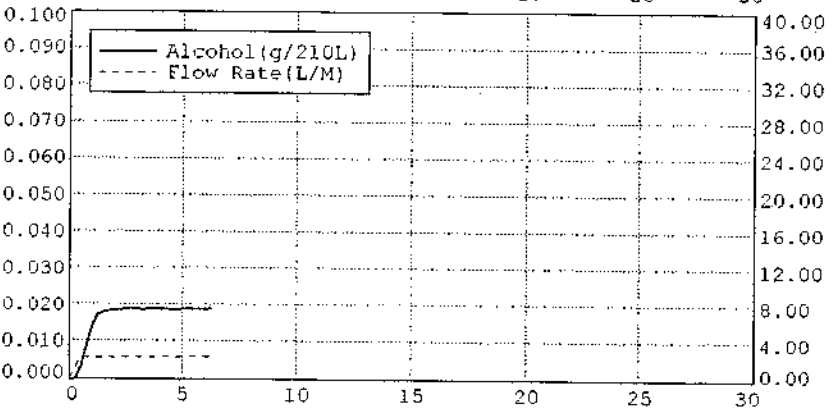
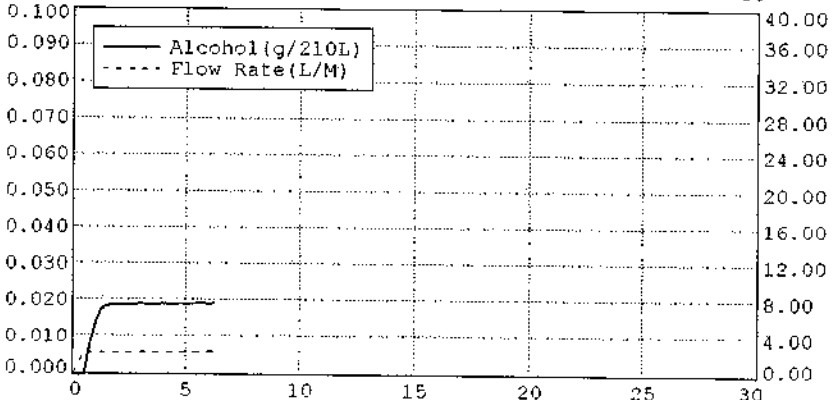
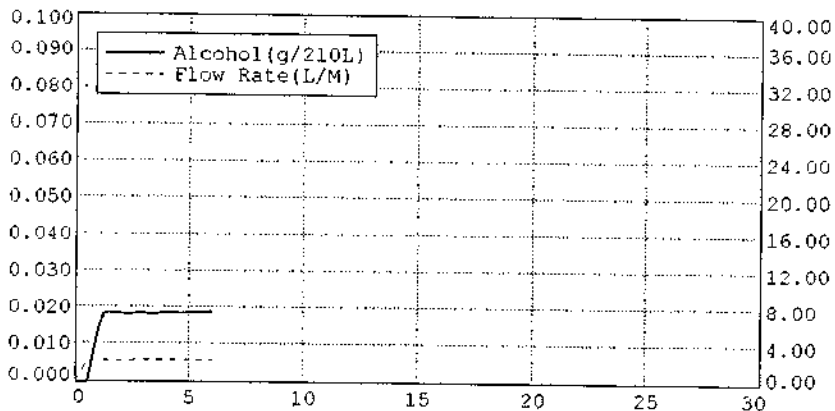
Date: 07/23/2015
 Time: 10:14:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.38: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 733 psi

BLANK TEST	0.000	10:15
INTERNAL STANDARD	VERIFIED	10:15
EXTERNAL STANDARD	0.020	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.020	10:17
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.020	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.020	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.020	10:20
BLANK TEST	0.000	10:21

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100404

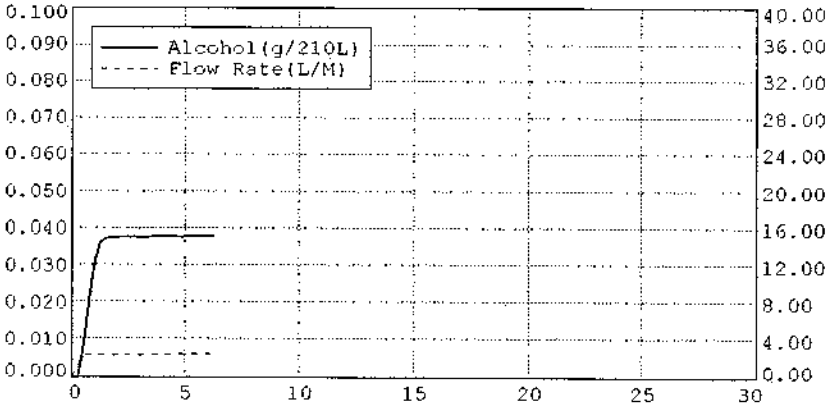
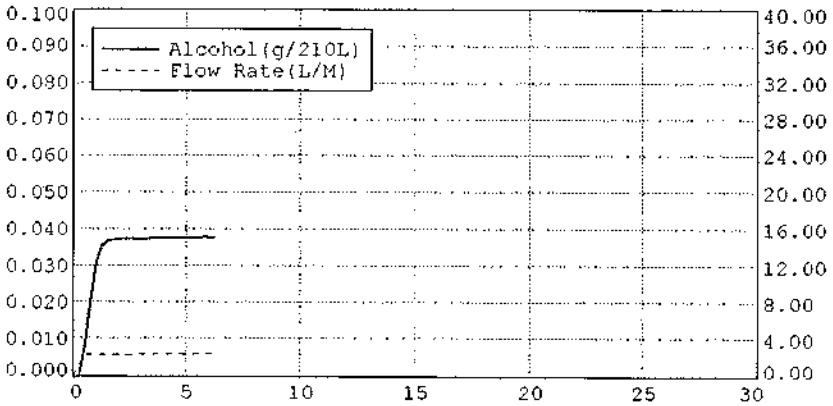
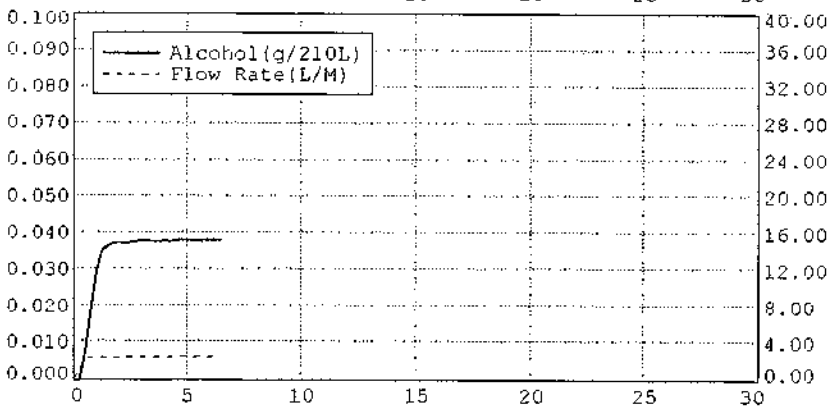
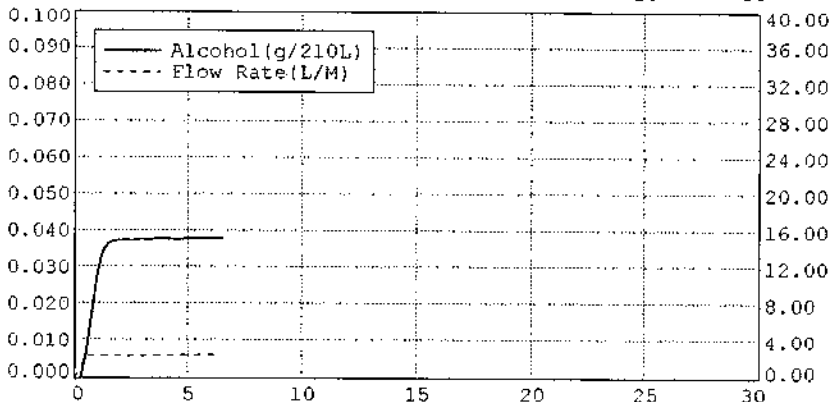
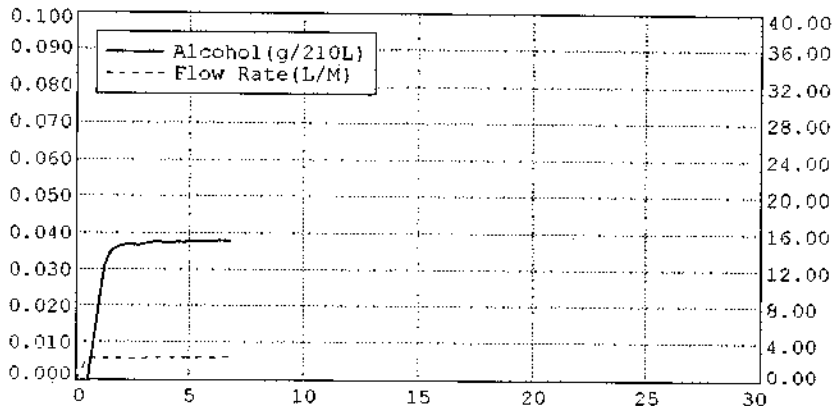
Date: 07/23/2015
 Time: 10:24:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.38: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 850 psi

BLANK TEST	0.000	10:25
INTERNAL STANDARD	VERIFIED	10:25
EXTERNAL STANDARD	0.039	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.039	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.039	10:28
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.039	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.039	10:30
BLANK TEST	0.000	10:31

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100404

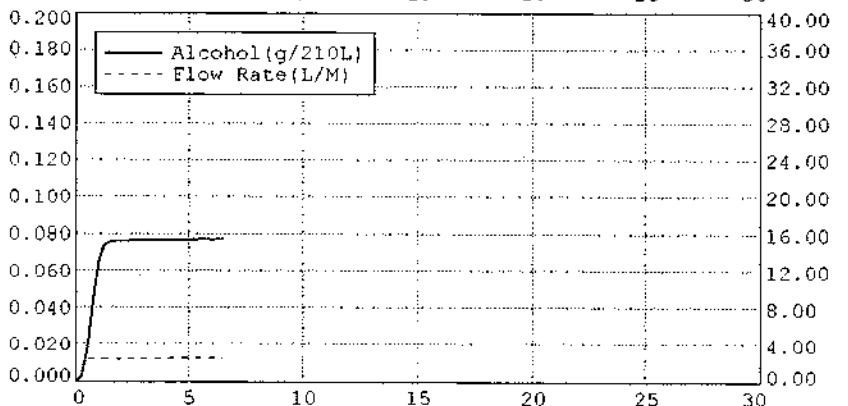
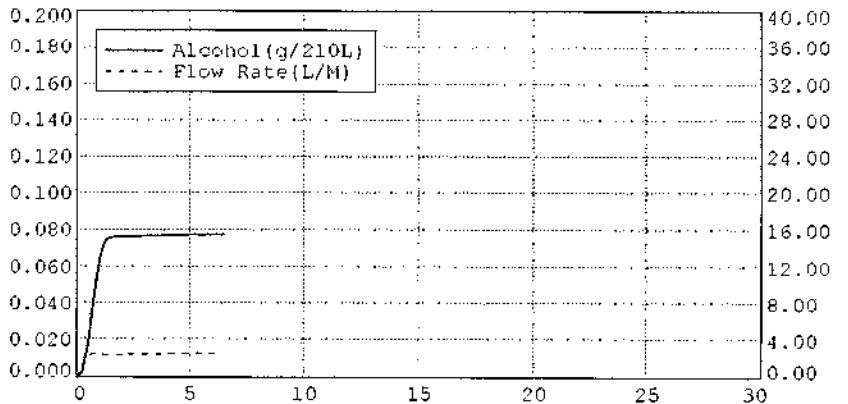
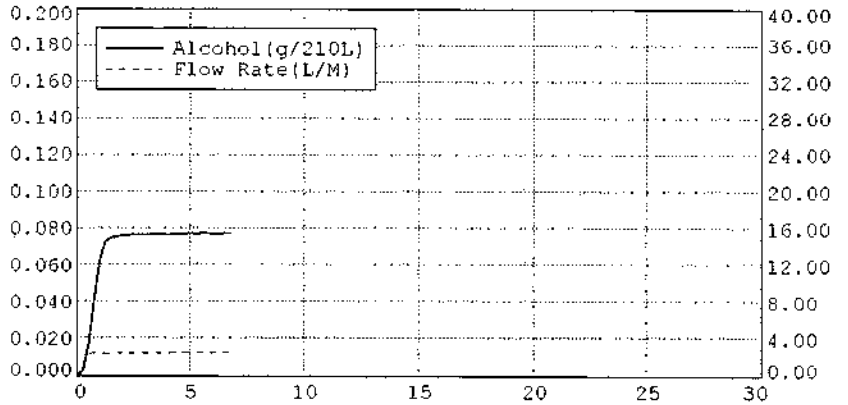
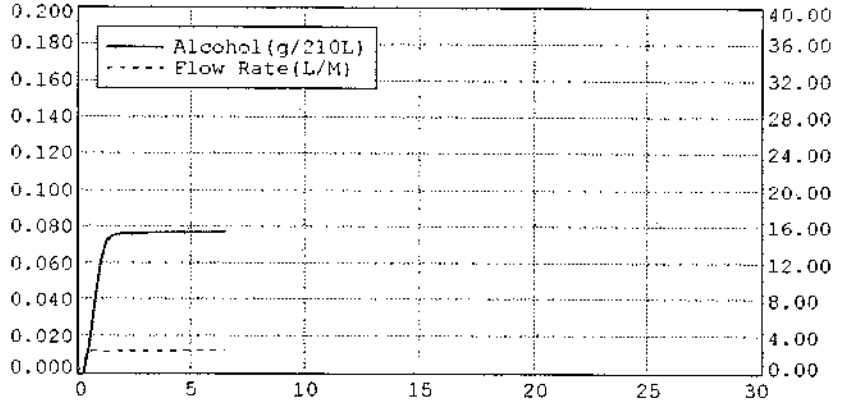
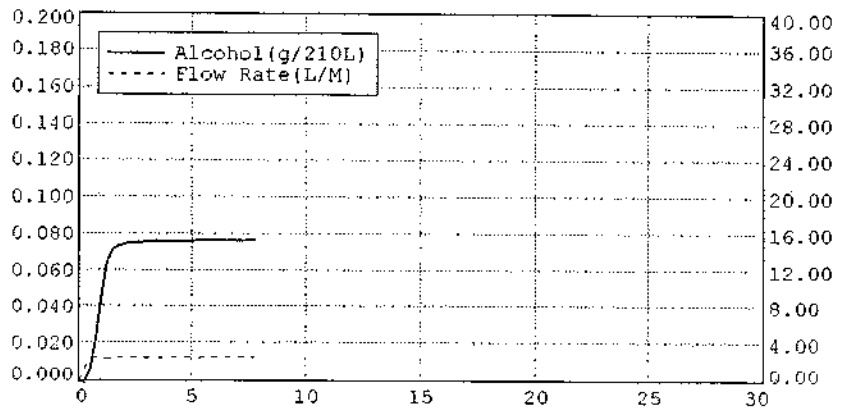
Date: 07/23/2015
 Time: 10:37:33

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.39: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 1110 psi

BLANK TEST	0.000	10:38
INTERNAL STANDARD	VERIFIED	10:38
EXTERNAL STANDARD	0.078	10:39
BLANK TEST	0.000	10:40
EXTERNAL STANDARD	0.078	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.078	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.078	10:42
BLANK TEST	0.000	10:43
EXTERNAL STANDARD	0.079	10:43
BLANK TEST	0.000	10:44

Average = 0.0782
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100404

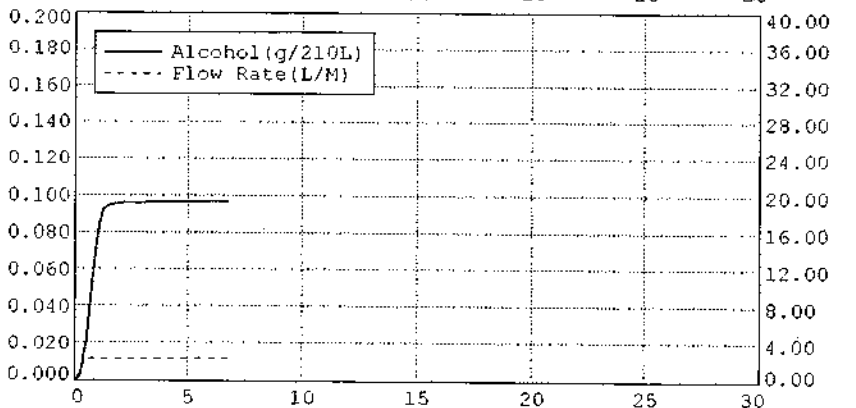
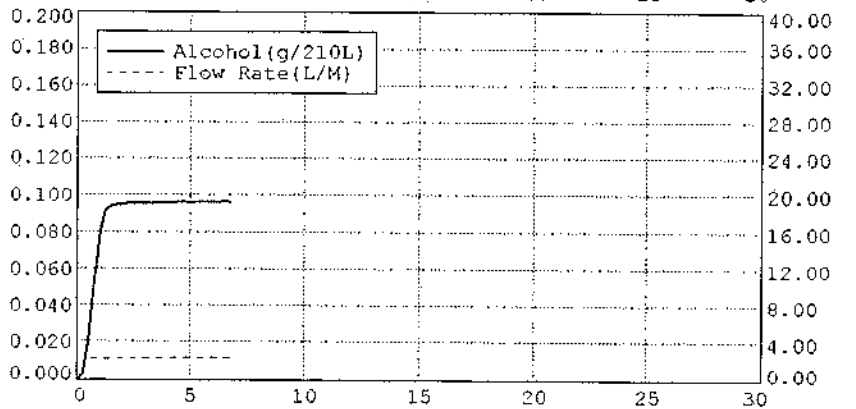
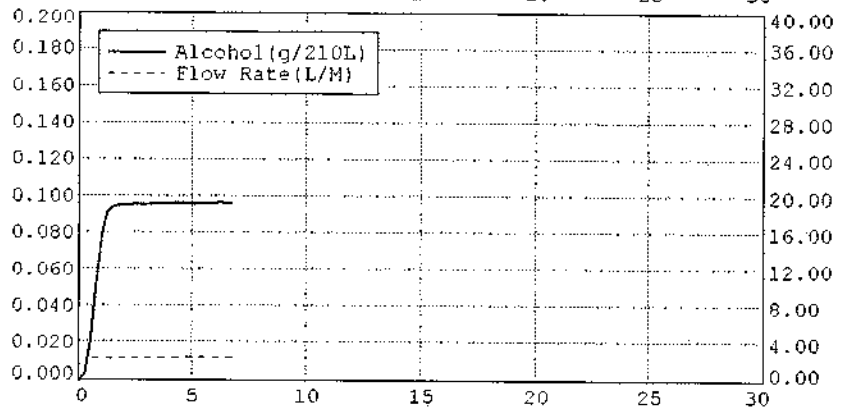
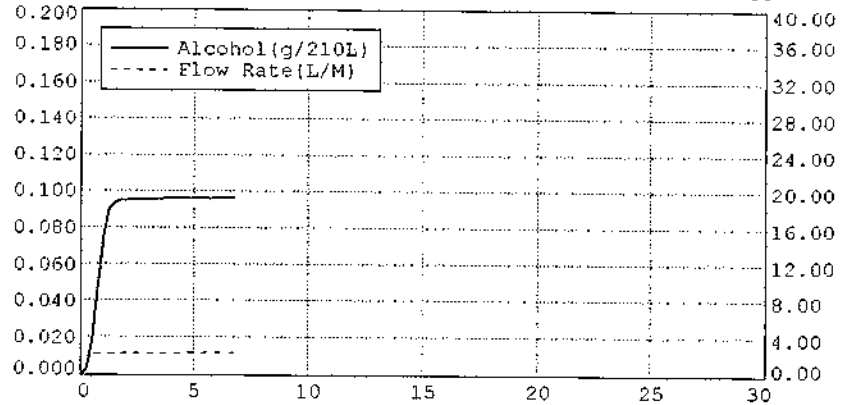
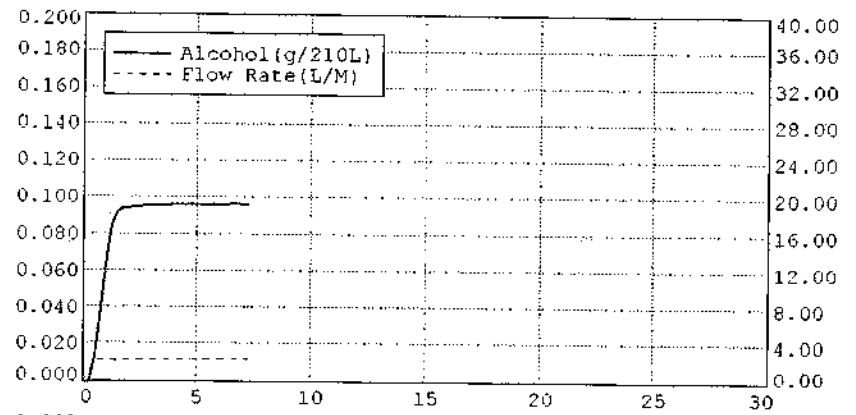
Date: 07/23/2015
 Time: 10:46:04

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.38: 0.098
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 719 psi

BLANK TEST	0.000	10:47
INTERNAL STANDARD	VERIFIED	10:47
EXTERNAL STANDARD	0.097	10:47
BLANK TEST	0.000	10:48
EXTERNAL STANDARD	0.097	10:48
BLANK TEST	0.000	10:49
EXTERNAL STANDARD	0.097	10:50
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.097	10:51
BLANK TEST	0.000	10:52
EXTERNAL STANDARD	0.098	10:52
BLANK TEST	0.000	10:53

Average = 0.0972
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100404

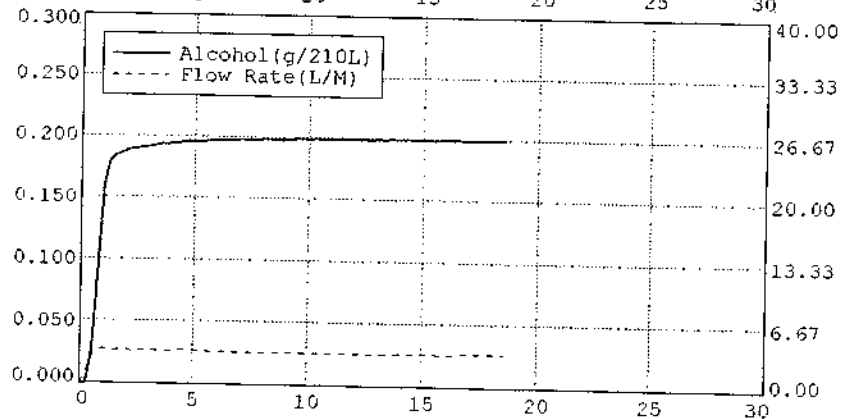
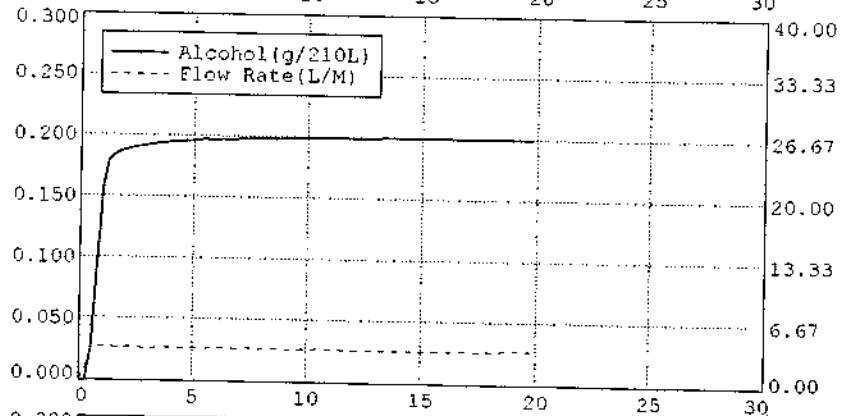
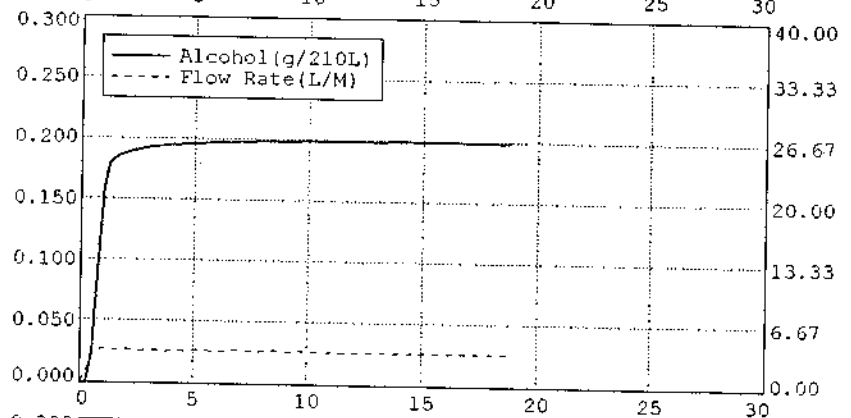
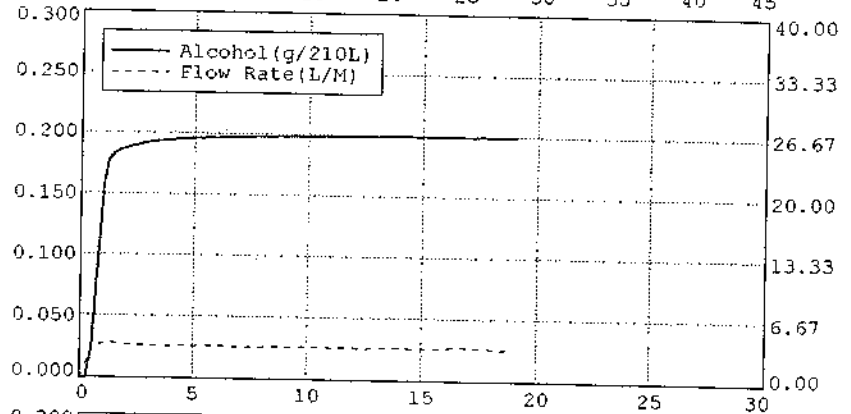
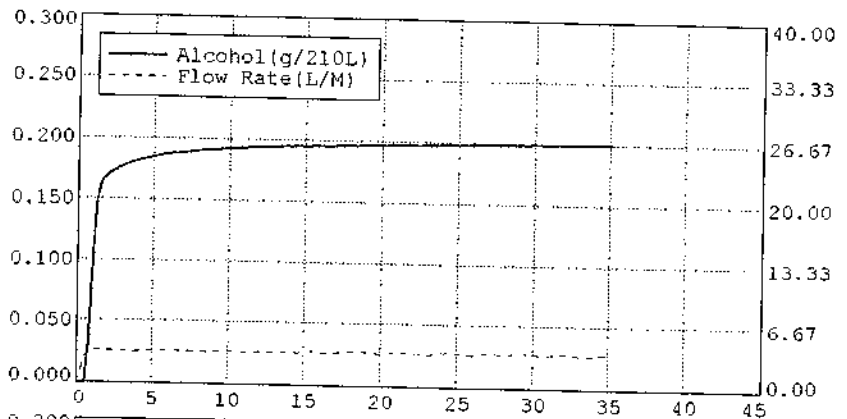
Date: 07/23/2015
 Time: 12:45:43

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	12:46
INTERNAL STANDARD	VERIFIED	12:46
EXTERNAL STANDARD	0.201	12:47
BLANK TEST	0.000	12:48
EXTERNAL STANDARD	0.201	12:49
BLANK TEST	0.000	12:49
EXTERNAL STANDARD	0.200	12:50
BLANK TEST	0.000	12:51
EXTERNAL STANDARD	0.201	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.201	12:53
BLANK TEST	0.000	12:53

Average = 0.2008
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100404

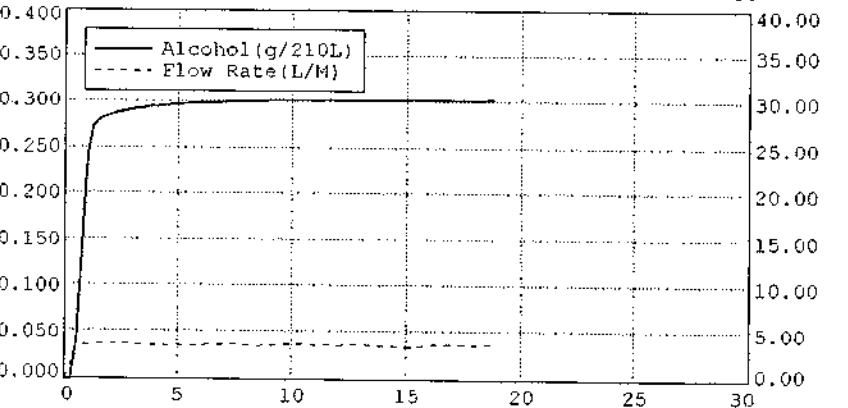
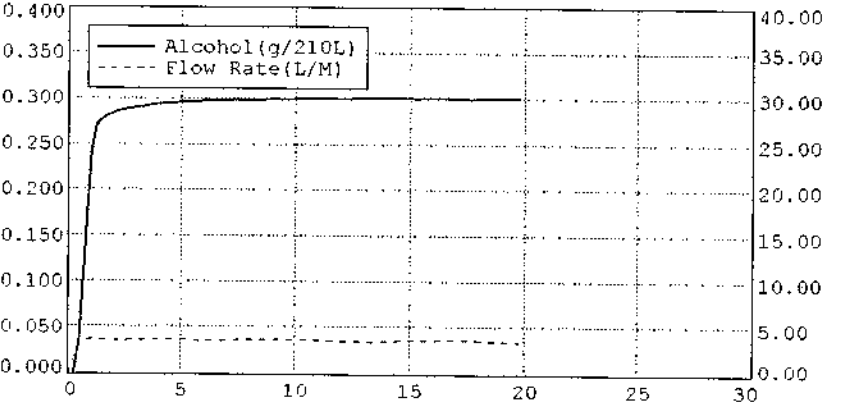
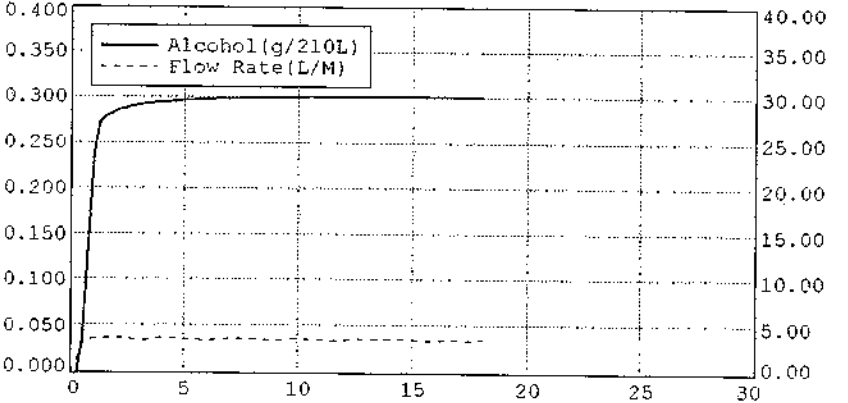
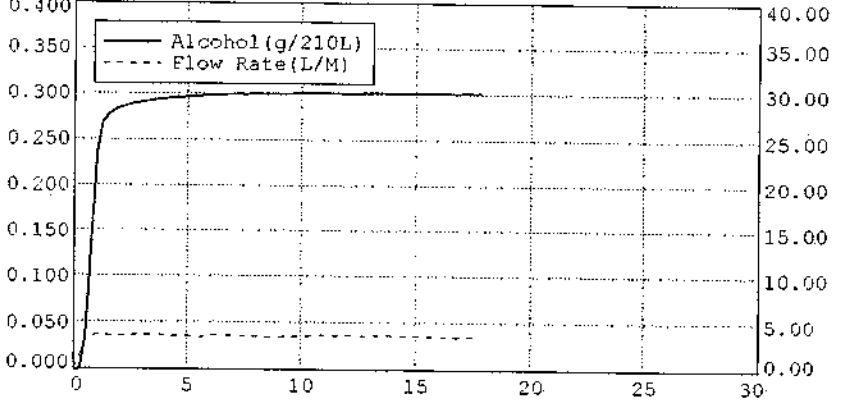
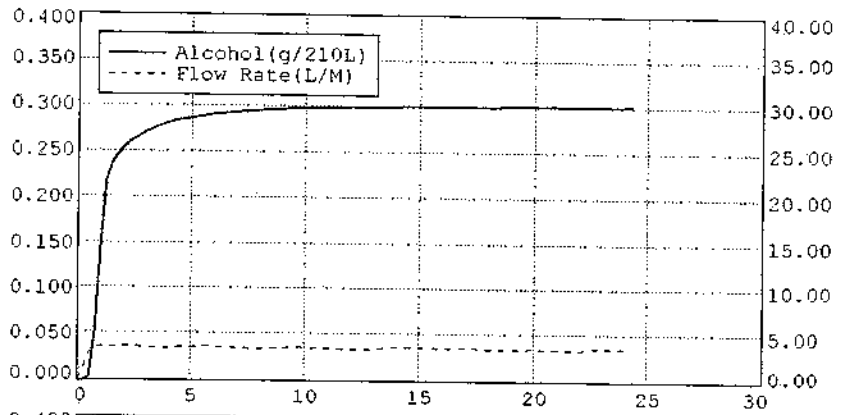
Date: 07/23/2015
 Time: 12:59:52

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	13:00
INTERNAL STANDARD	VERIFIED	13:01
EXTERNAL STANDARD	0.302	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.302	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.301	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.302	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.302	13:07
BLANK TEST	0.000	13:07

Average = 0.3018
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/23/2015
Time: 13:34:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

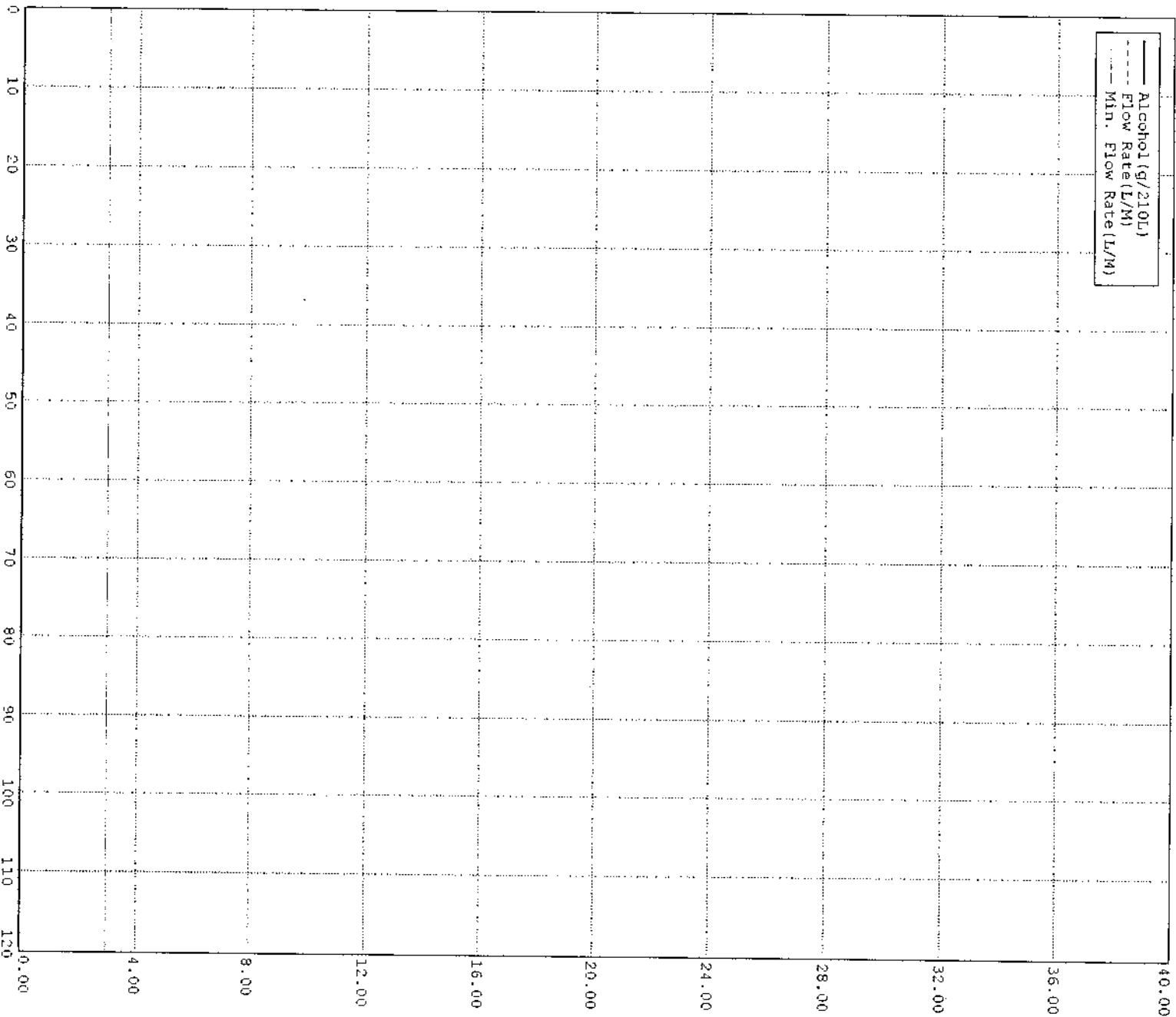
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

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

DIAGNOSTIC CHECK	PASSED	13:49
BLANK TEST	0.000	13:49
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.078	13:49
BLANK TEST	0.000	13:50
SUBJECT SAMPLE	INCOMPLETE	13:52

BNM



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/23/2015
Time: 13:54:43

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

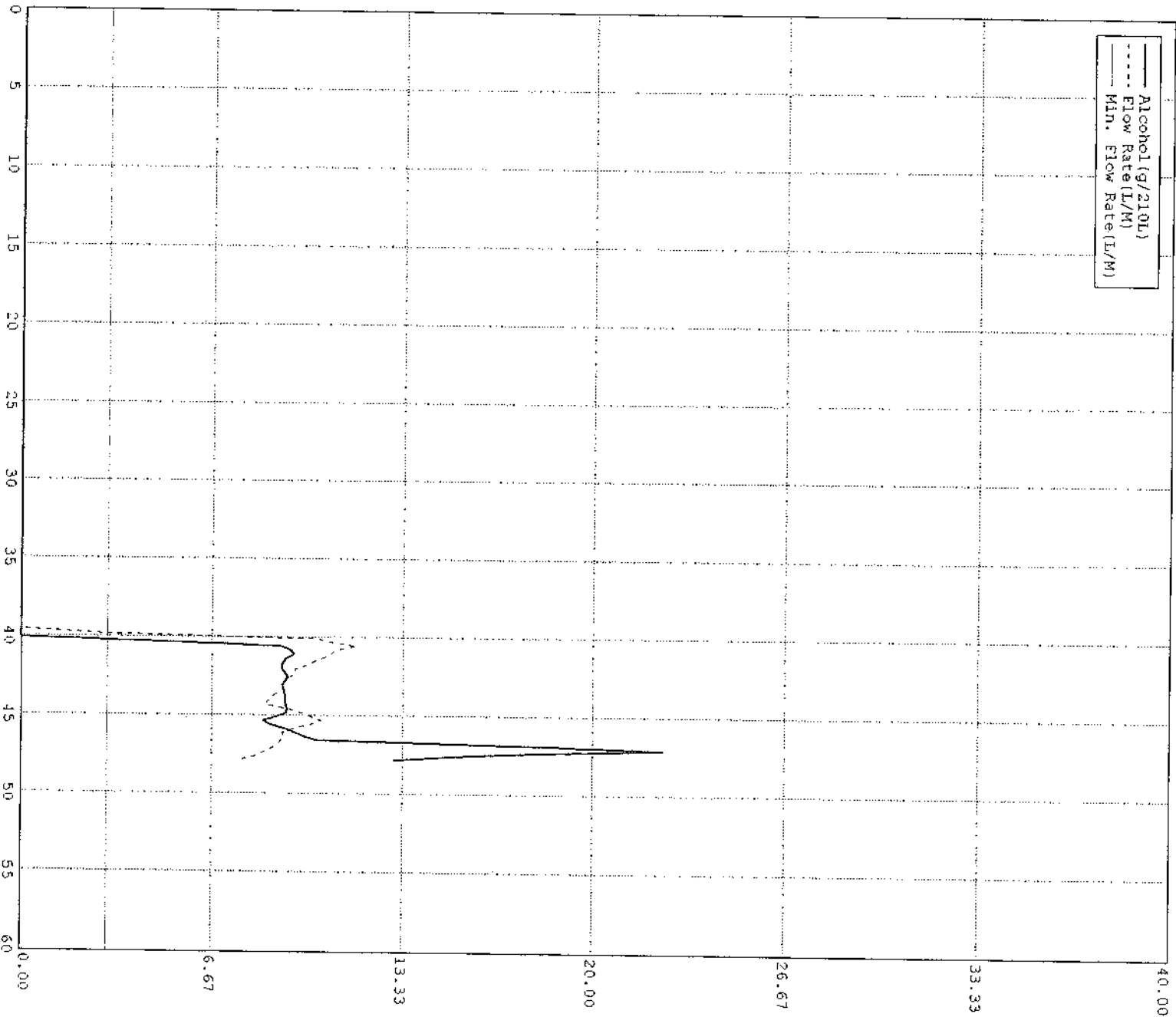
OPERATOR NAME:
BRANDI BARNEETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INVALID KNOWN MOUTH ALCOHOL
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	13:57
BLANK TEST	0.000	13:57
INTERNAL STANDARD	VERIFIED	13:57
EXTERNAL STANDARD	0.079	13:57
BLANK TEST	0.000	13:58
SUBJECT SAMPLE	INVALID	13:59

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/23/2015
Time: 14:01:44

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

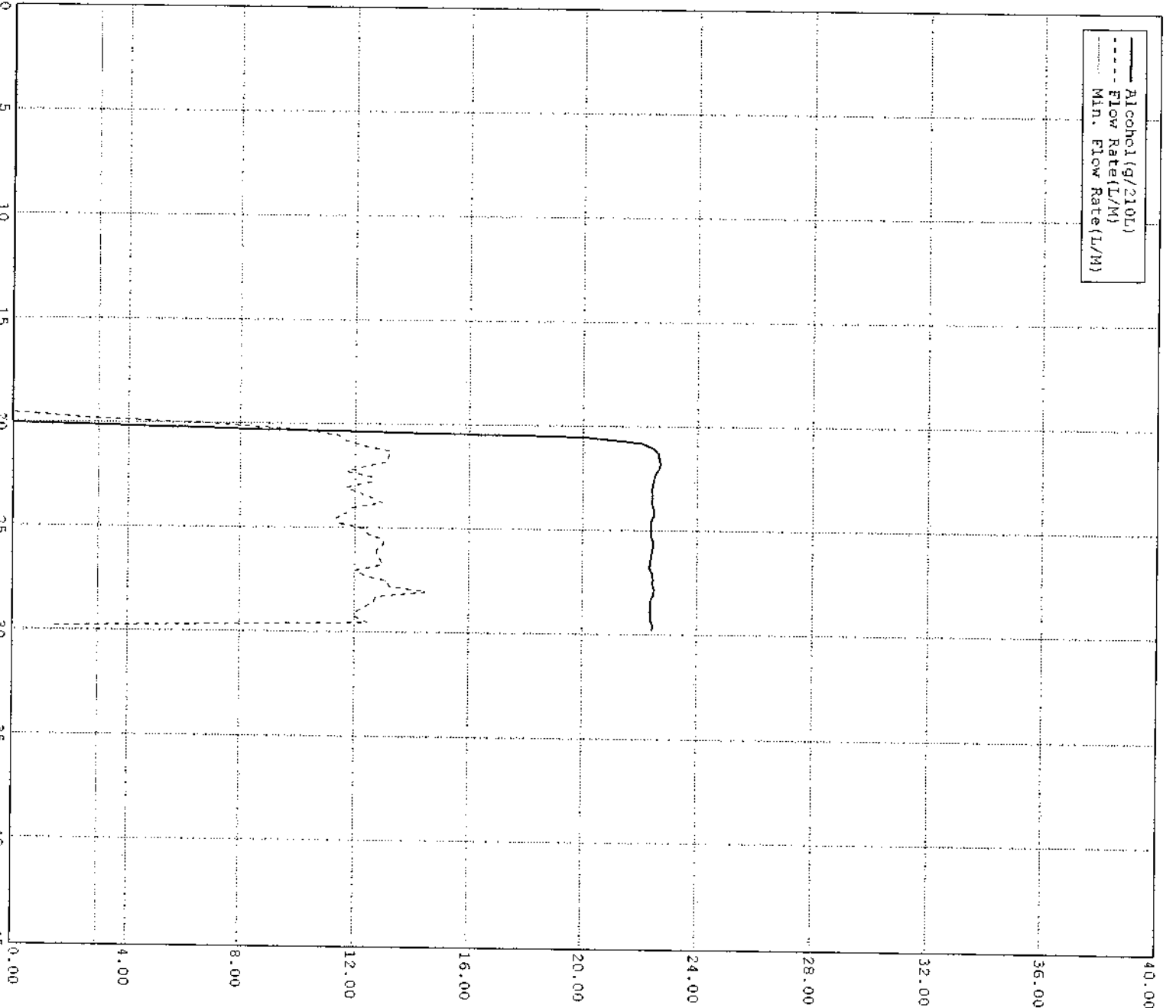
DIAGNOSTIC CHECK	PASSED	14:33
BLANK TEST	0.000	14:33
INTERNAL STANDARD	VERIFIED	14:33
Xq = 0.089 (0.498)		
EXTERNAL STANDARD	0.079	14:33
X[1] = 0.0787 (-0.0009)	(0.0022)	
BLANK TEST	0.000	14:34
SUBJECT SAMPLE	XXX	14:35
X[1] = 0.1125 (-0.0129)	(0.0025)	

Interference Detected

Filter 2 Avg = -0.0013
Filter 3 Avg = 0.0023

BRMB
7/27/15

BRMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/23/2015
Time: 14:38:22

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

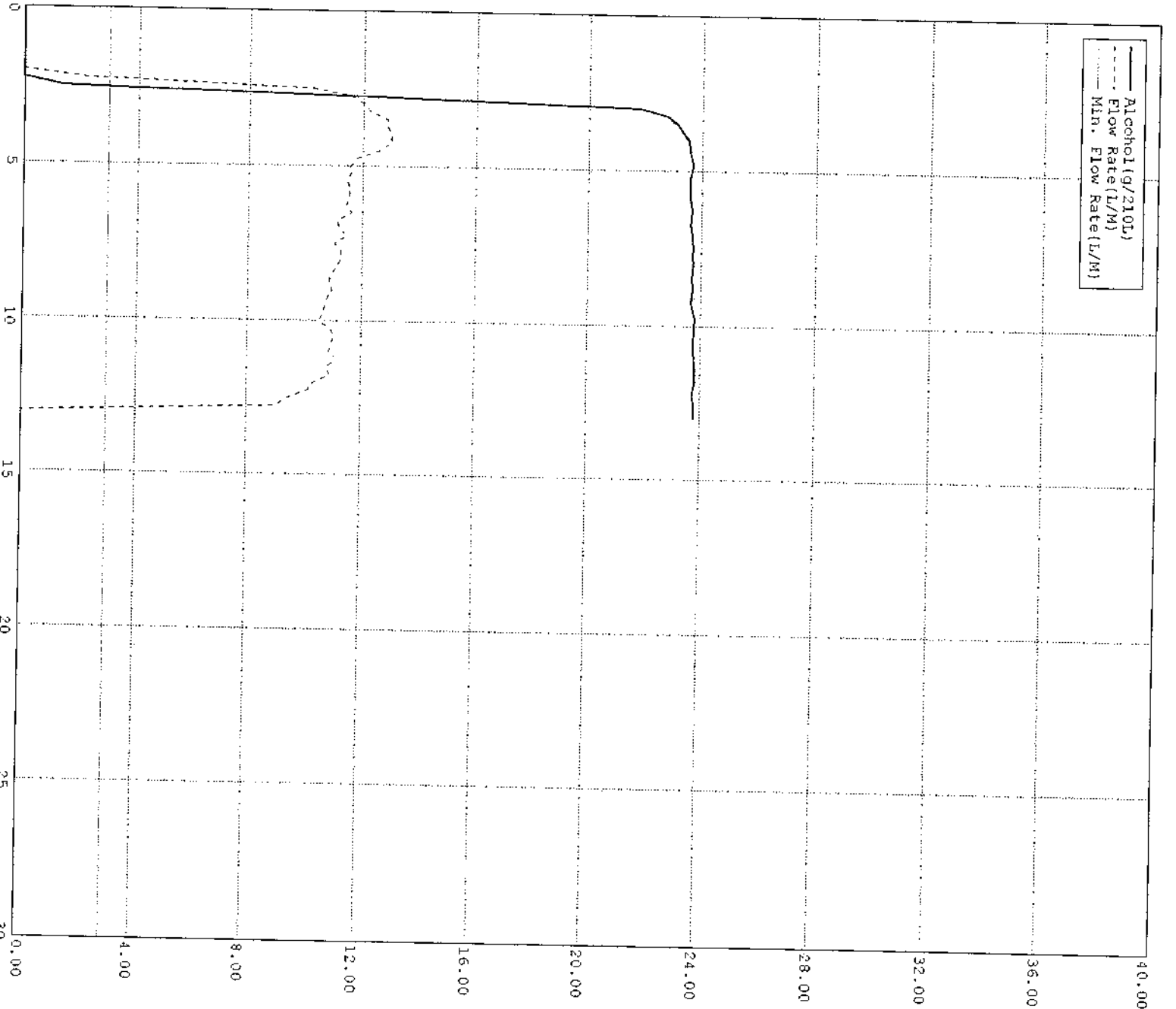
DEPT/AGENCY:
INTERFERENCE ISOPROPYL
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	14:40
BLANK TEST	0.000	14:40
INTERNAL STANDARD	VERIFIED	14:40
Xq = 0.089 (0.10%)		
EXTERNAL STANDARD	0.079	14:41
X[1] = 0.0785 (-0.0014)	(0.0026)	
BLANK TEST	0.000	14:42
SUBJECT SAMPLE	XXX	14:42
X[1] = 0.1195 (-0.0277)	(0.0014)	

Interference Detected

BMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/23/2015
Time: 14:47:36

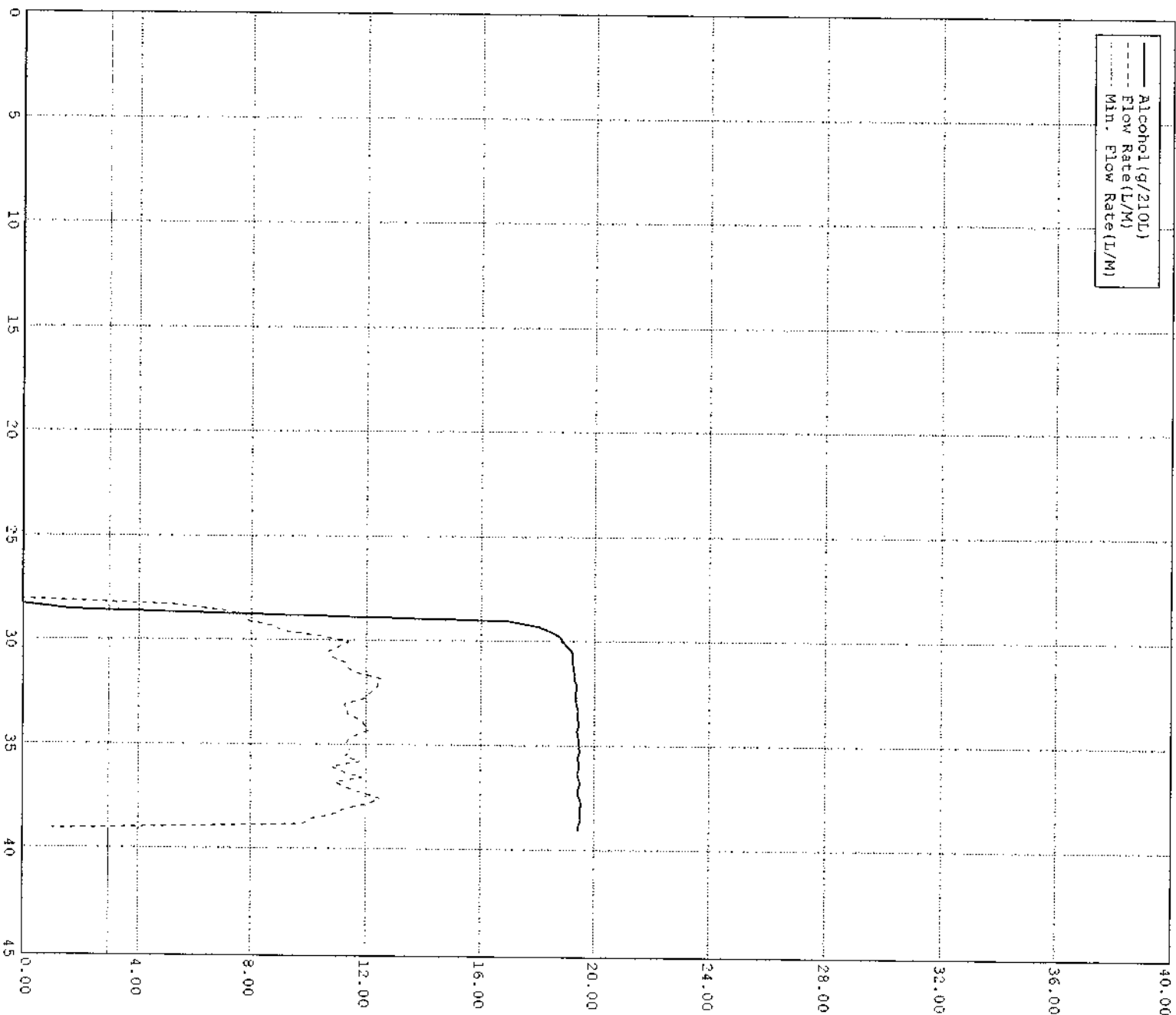
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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	14:54
BLANK TEST	0.000	14:55
INTERNAL STANDARD	VERIFIED	14:55
Xg = 0.089 (0.20%)		
EXTERNAL STANDARD	0.078	14:55
X[1] = 0.0785 (-0.0013)	(0.0023)	
BLANK TEST	0.000	14:56
SUBJECT SAMPLE (Vol=1.96L)	0.098	14:57
X[1] = 0.0983 (0.0012)	(0.0011)	
BLANK TEST	0.000	14:58
EXTERNAL STANDARD	0.078	14:58
X[1] = 0.0778 (-0.0017)	(0.0019)	
BLANK TEST	0.000	14:59



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/23/2015
Time: 15:38:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

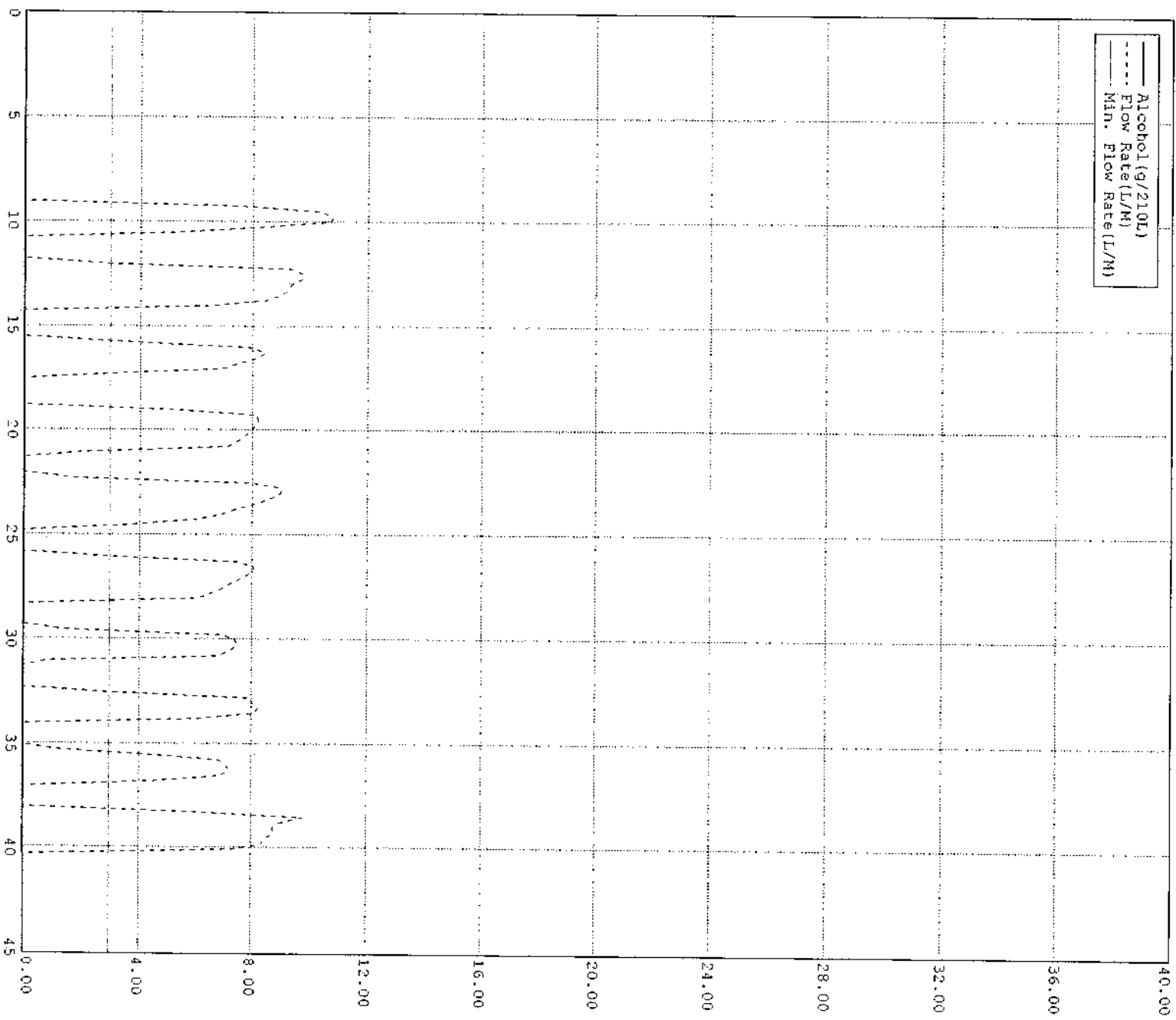
DEPT/AGENCY:
EXCEEDED ATTEMPTS
CASE/REPORT: XXXX
TEST TYPE: TEST

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

DIAGNOSTIC CHECK	PASSED	15:40
BLANK TEST	0.000	15:40
INTERNAL STANDARD	VERIFIED	15:40
EXTERNAL STANDARD	0.078	15:41
BLANK TEST	0.000	15:41
SUBJECT SAMPLE	XXX	15:42

Maximum Attempts Exceeded

BBMB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/23/2015
Time: 15:47:52

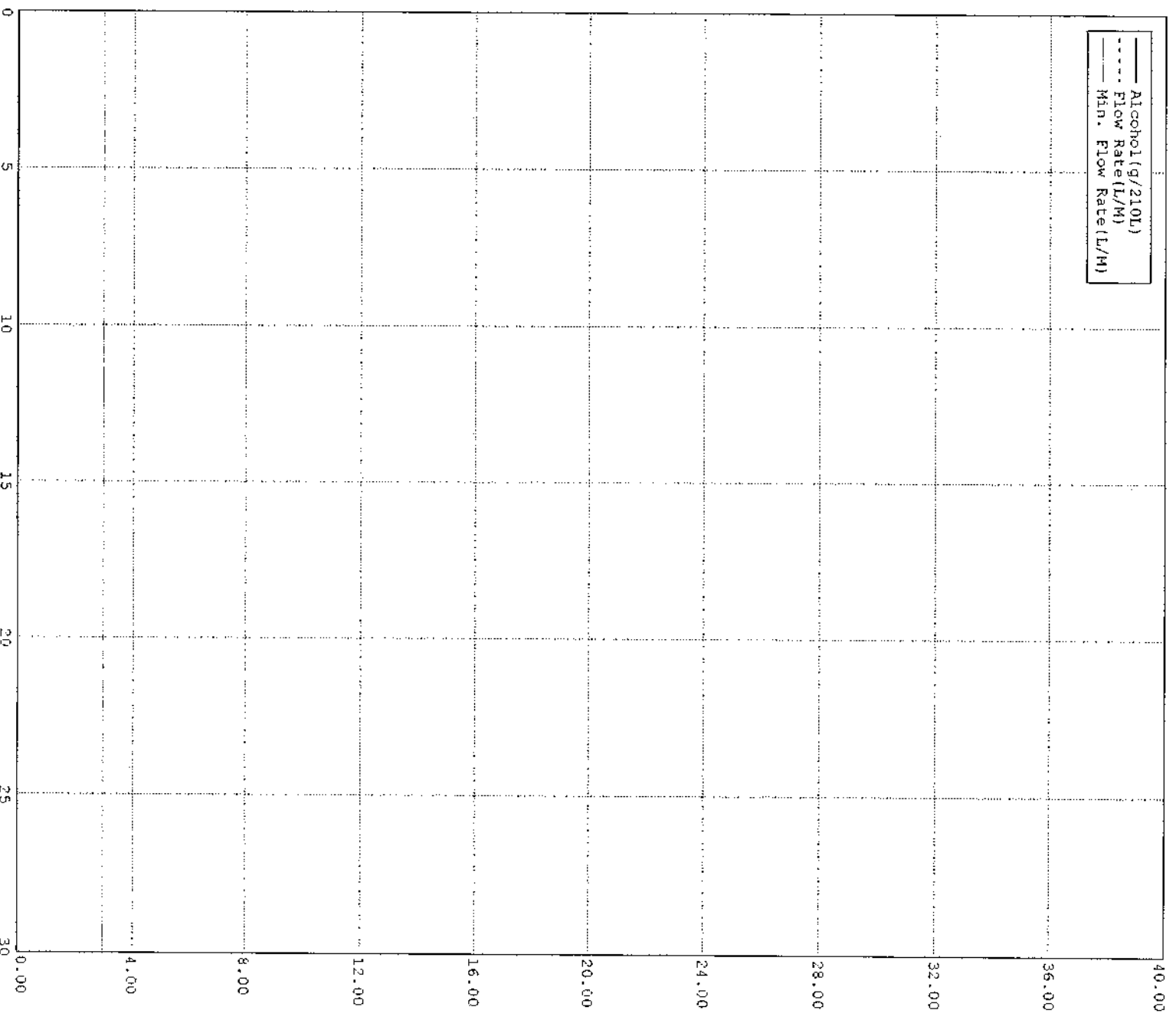
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 15:50
BLANK TEST 0.000 15:50
INTERNAL STANDARD VERIFIED 15:51
EXTERNAL STANDARD 0.078 15:51
BLANK TEST 0.000 15:52
RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100404

Date: 07/23/2015
Time: 16:13:07

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	16:14
BLANK TEST	0.000	16:14
INTERNAL STANDARD	VERIFIED	16:14
EXTERNAL STANDARD	0.079	16:14
BLANK TEST	0.000	16:15
SUBJECT SAMPLE (Vol=2.29L)	0.000	16:16
BLANK TEST	0.000	16:16
EXTERNAL STANDARD	0.079	16:17
BLANK TEST	0.000	16:18

BNB

