

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 100351 Analyst C. O'Bryant Start Date 8/3/15

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 09214080A3 Exp 5/1/16
- iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17
- v. 0.200g/210L Mnf Both Lot 13220 Exp 8/5/15
 - 1. Simulator S/N DR4162 Date Calibrated 1/19/15
- vi. 0.300g/210L Mnf Both Lot 14270 Exp 3/9/17
 - 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 Both Lot 14110 Level 0.100 Exp 5/1/16
 - 1. Simulator S/N DR4163 Date Calibrated 1/19/15
- ii. Isopropanol - Mnf Both Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N SD1176 Date Calibrated 1/20/15
- iii. Negative Control - Mnf Both 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 8/4/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 08/03/2015
Time: 14:42:49

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.7°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.82 V PASSED
(1.10 V - 2.58 V)
Cooler Voltage = 1.91 V PASSED
(1.13 V - 2.63 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 541 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 4.282 L/M PASSED
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED
(0.001 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 = 0.114 0.39% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100351

Date: 08/03/2015

Time: 3:08 PM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 46.3°C

Current Barometer 29.8 in

Volume (Ltr) 1.53

Settings

Lamp: 1.82 V

Bias: 80 V

Cooler: 1.91 V

Chopper: 541 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.084 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 06/30/2015
Time: 06:33:25

OPERATOR NAME:

M M M

CERTIFICATE #: GUTH 2100, DR7001, 34.0C

Ca = 0.1010
CAL = 0.994218 0.800 <= CAL < 1.200
b1 = 0.0000 0.0000 <= b1 < 0.0040
b2 = 0.0034 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.1132 0.0500 <= Xq < 0.2000
a21 = 1.172976 1.050 <= a21 < 1.300
a31 = 0.463814 0.300 <= a31 < 0.800

DR7001 15046 34.0C
2/16/16

SUBJECT TEST

Alaska Department of Public Safety

DATA MASTER dmt: 100351

Date: 08/03/2015
Time: 15:15:30

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1

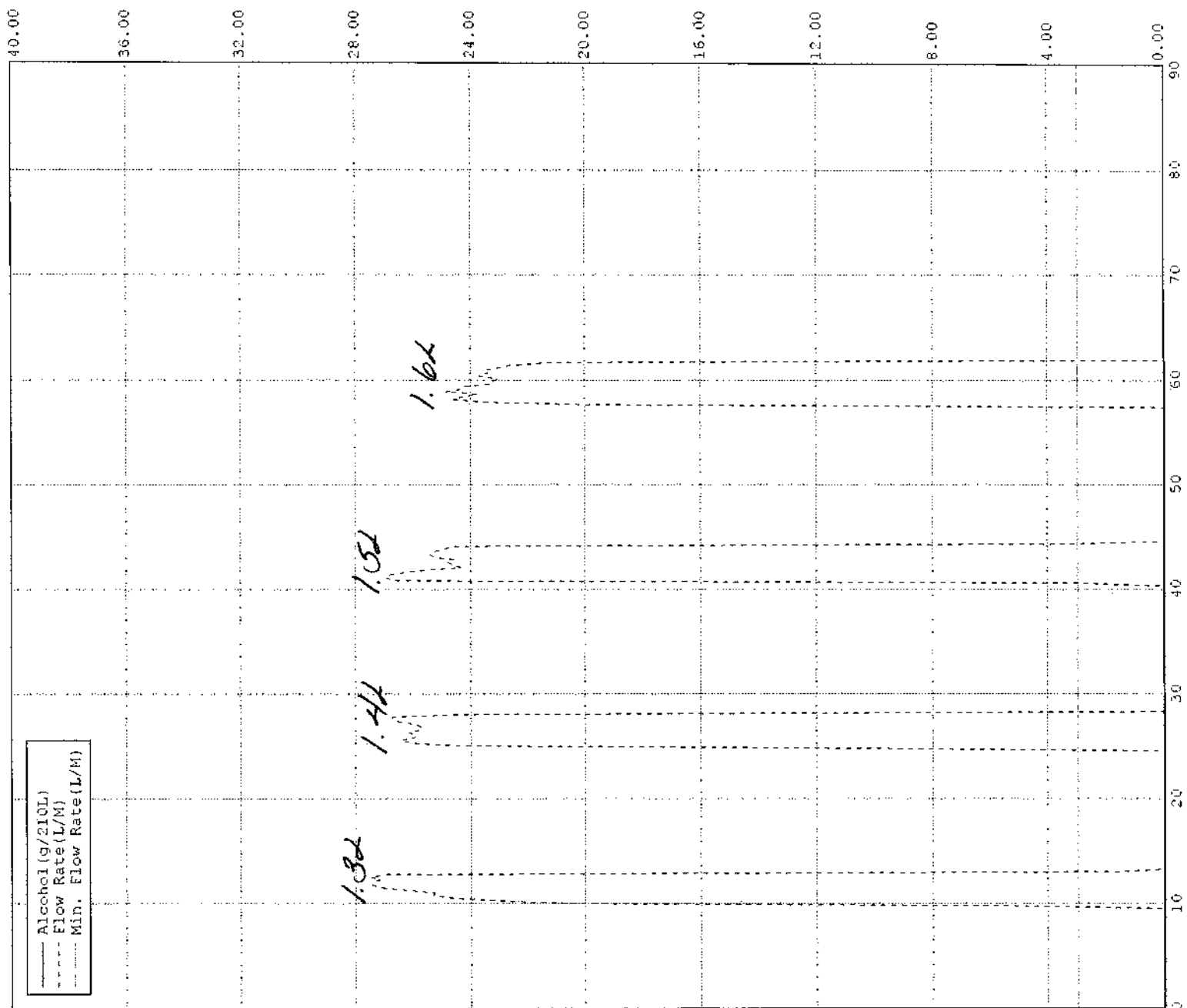
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:19
BLANK TEST	0.000	15:19
INTERNAL STANDARD	VERIFIED	15:19
EXTERNAL STANDARD	0.080	15:19
BLANK TEST	0.000	15:20
SUBJECT SAMPLE (Vol=1.65L)	0.000	15:21
BLANK TEST	0.000	15:22
EXTERNAL STANDARD	0.080	15:22
BLANK TEST	0.000	15:23

CS



LINEARITY CHECK

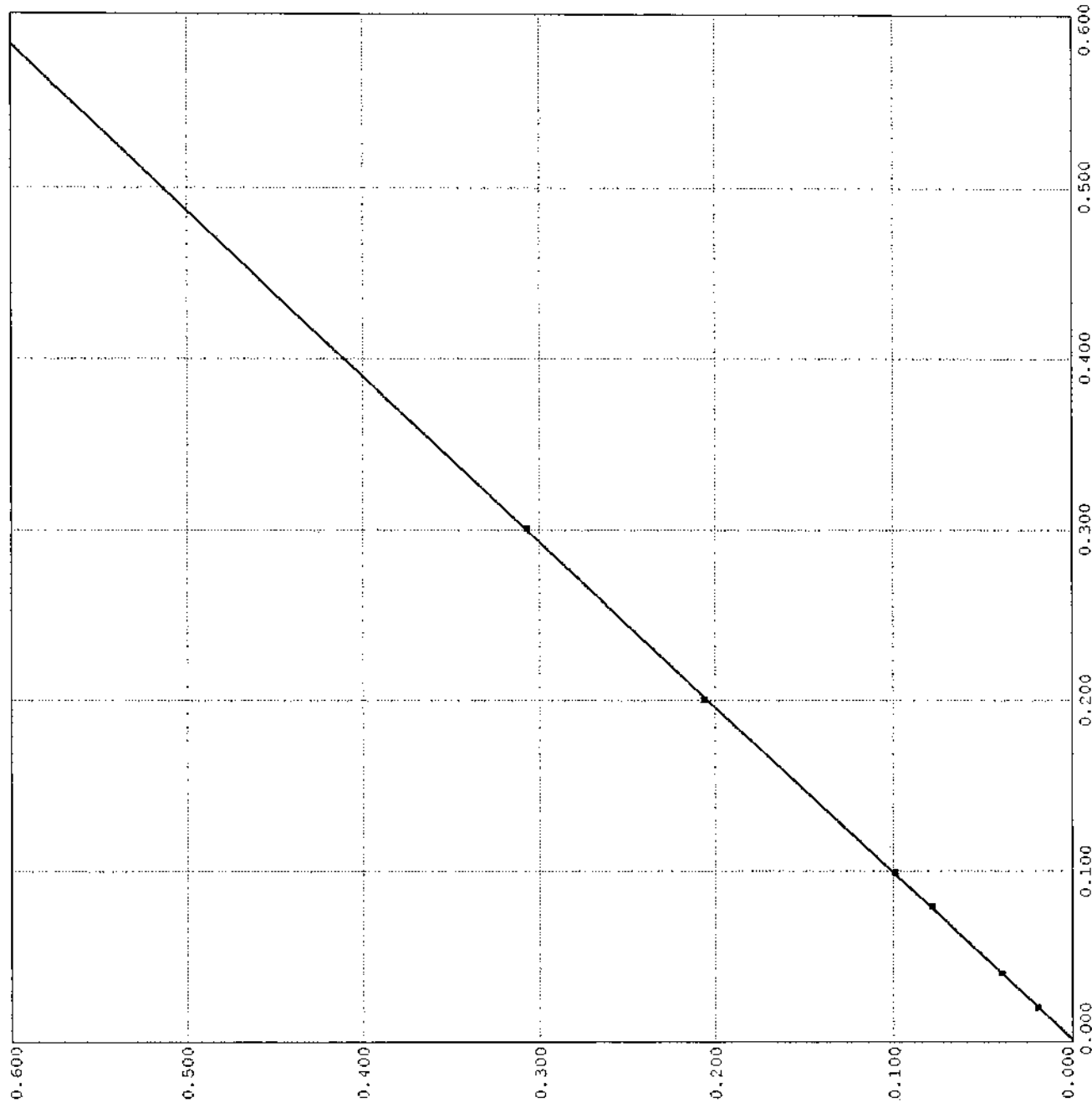
Alaska Department of Public Safety
 DATAMASTER dmt: 100351

Date: 08/04/2015
 Time: 09:05:43

SUPERVISOR NAME:
 COLLEEN S O'BRYAN
 OPERATOR'S #: 6237

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0400	0.0000
0.079	0.0794	0.0005
0.099	0.1000	0.0000
0.200	0.2070	0.0000
0.300	0.3078	0.0008

SLOPE = 1.032793
 R² = 0.999907



QAB

LINEARITY CHECK: Control Test 1

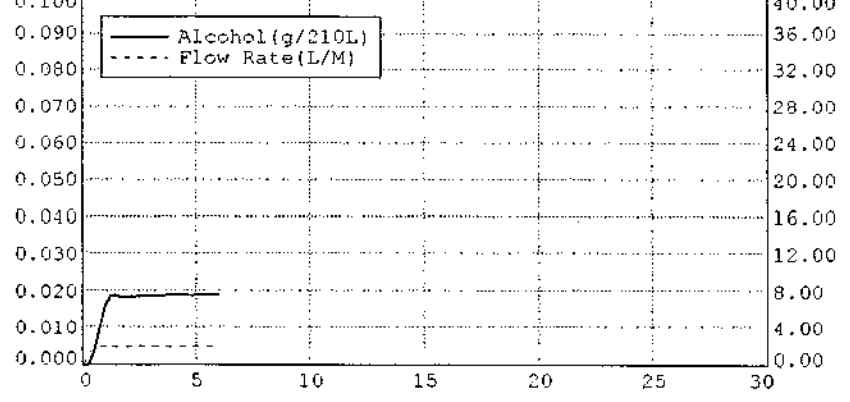
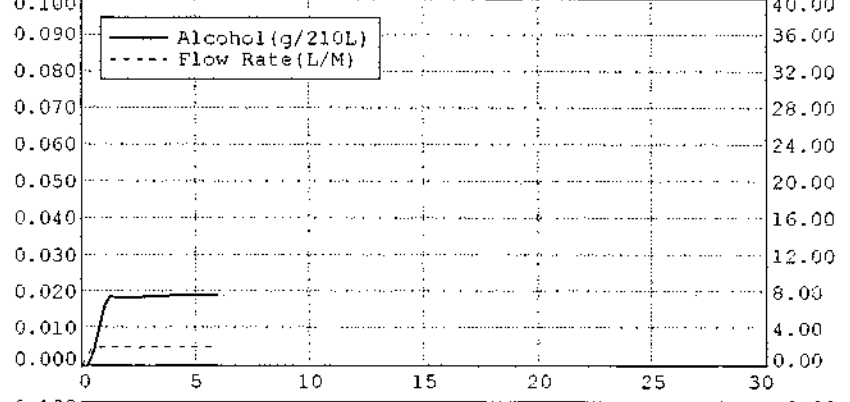
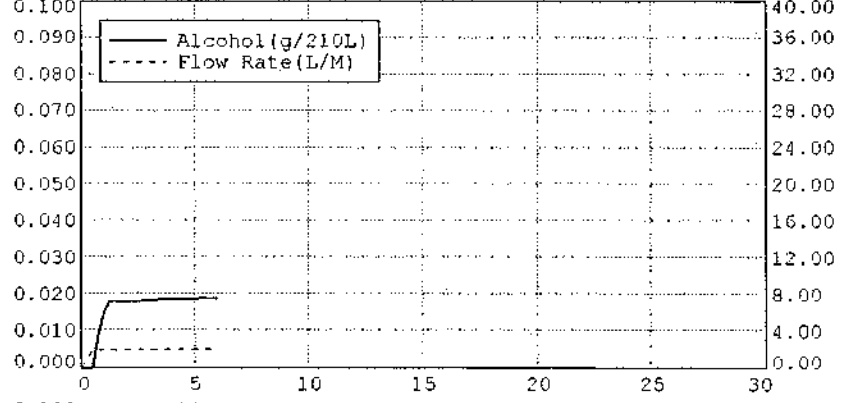
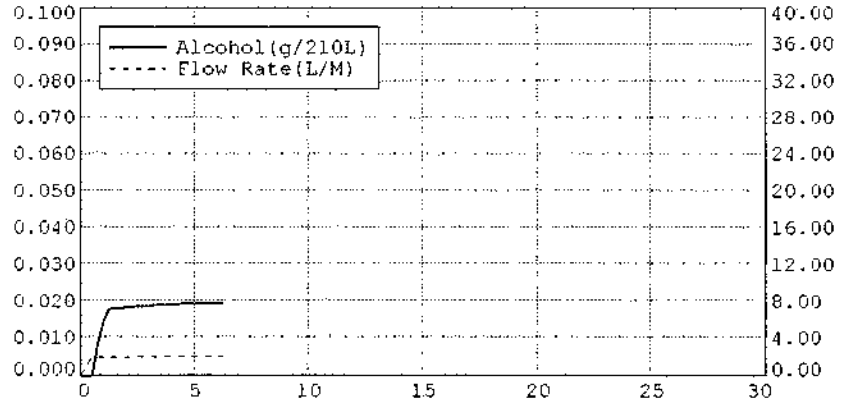
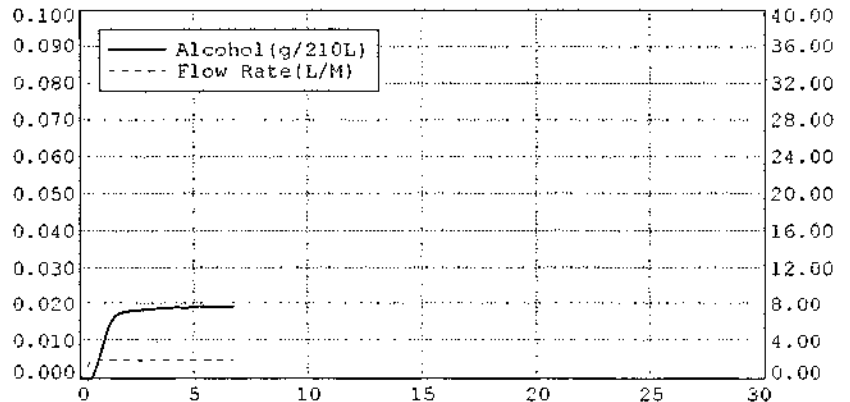
Alaska Department of Public Safety
 DATAMASTER dmt: 100351

Date: 08/04/2015
 Time: 09:05:45

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.020
 TARGET AT 29.74: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 649 psi

BLANK TEST	0.000	09:12
INTERNAL STANDARD	VERIFIED	09:12
EXTERNAL STANDARD	0.020	09:12
BLANK TEST	0.000	09:13
EXTERNAL STANDARD	0.020	09:13
BLANK TEST	0.000	09:14
EXTERNAL STANDARD	0.020	09:14
BLANK TEST	0.000	09:15
EXTERNAL STANDARD	0.020	09:15
BLANK TEST	0.000	09:16
EXTERNAL STANDARD	0.020	09:16
BLANK TEST	0.000	09:17

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
DATAMASTER dmt: 100351

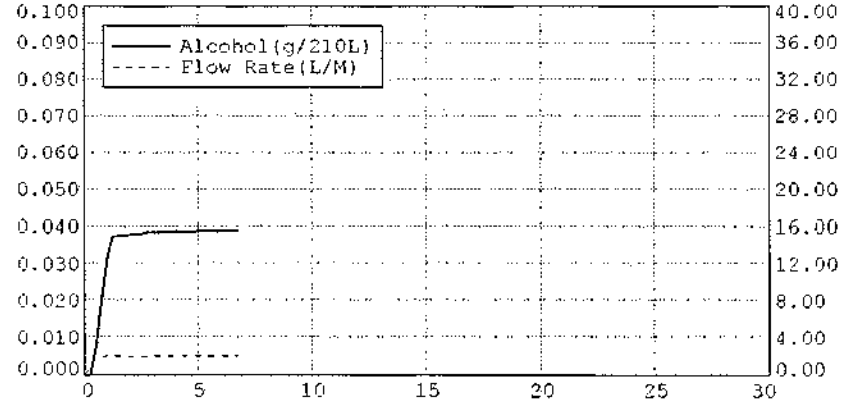
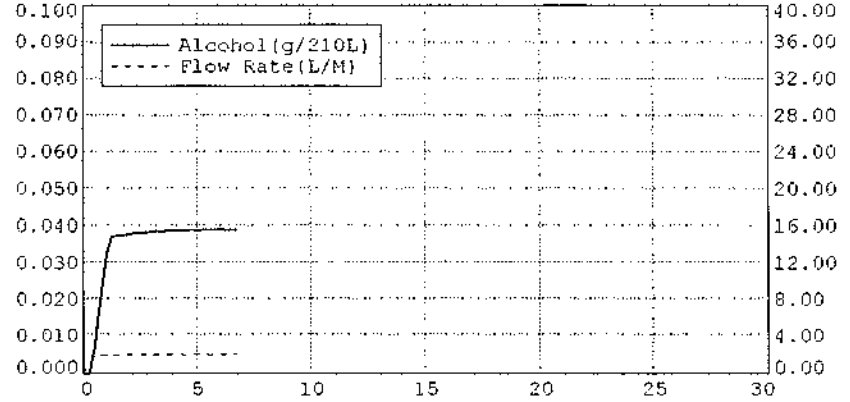
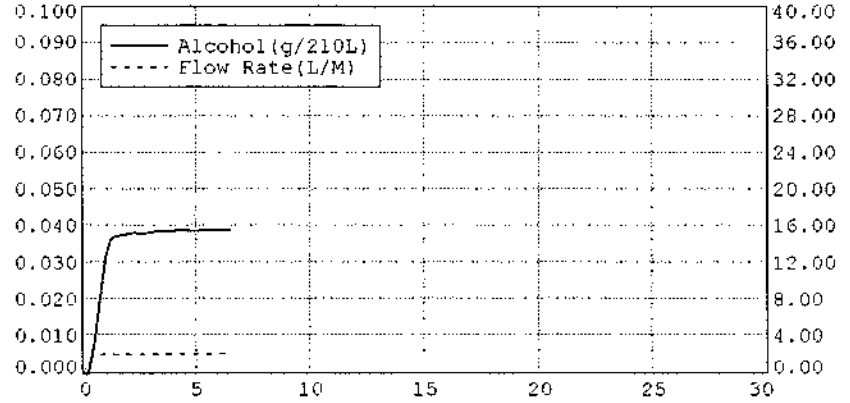
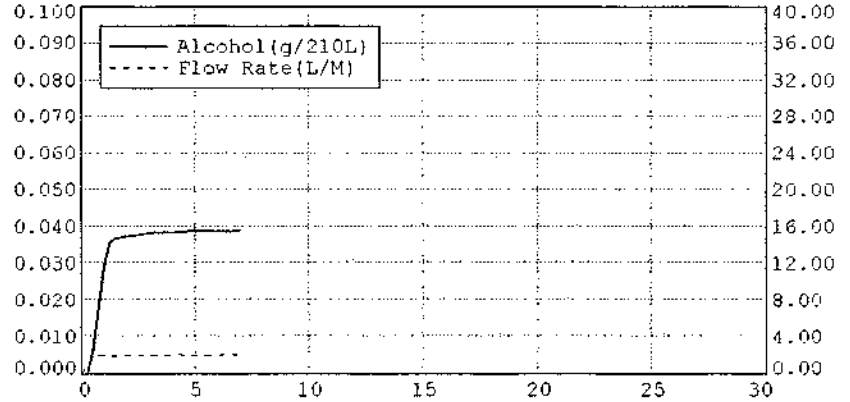
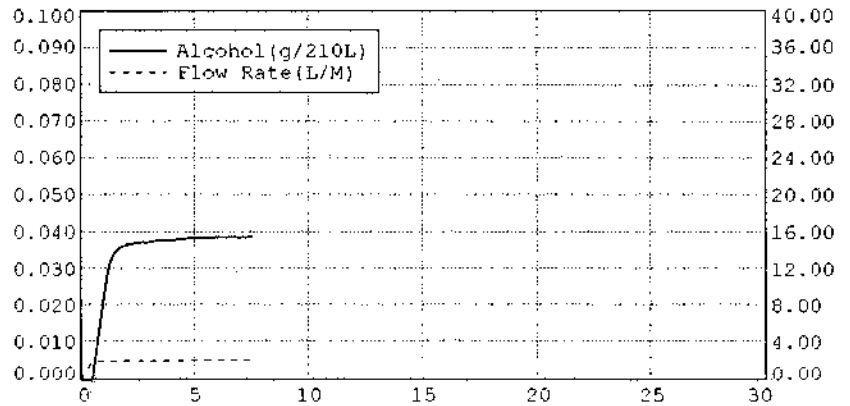
Date: 08/04/2015
Time: 09:19:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
TARGET AT 29.74: 0.040
LOT #: 02915040A3
EXPIRATION: 03/05/2017
TANK PRESSURE: 761 psi

BLANK TEST	0.000	09:20
INTERNAL STANDARD	VERIFIED	09:21
EXTERNAL STANDARD	0.040	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.040	09:22
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.040	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.040	09:24
BLANK TEST	0.000	09:25
EXTERNAL STANDARD	0.040	09:25
BLANK TEST	0.000	09:26

Average = 0.0400
Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

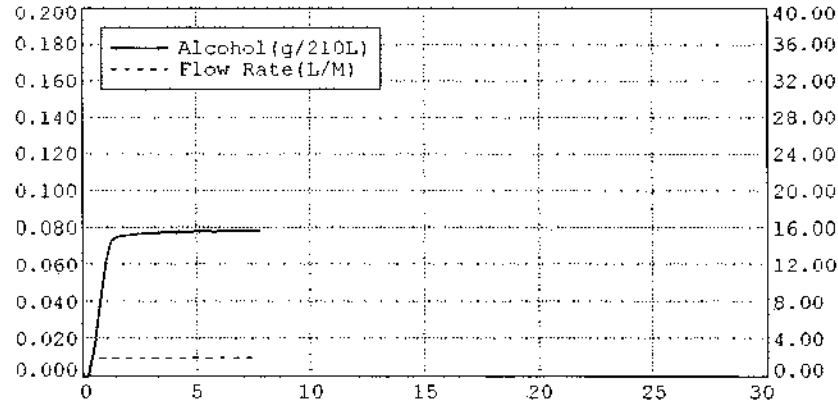
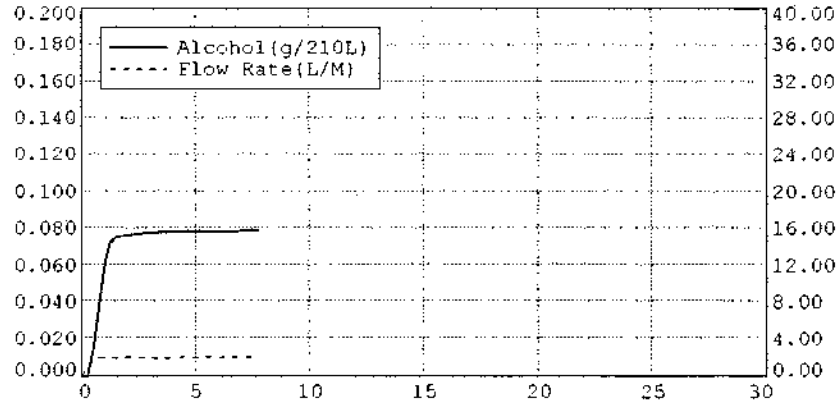
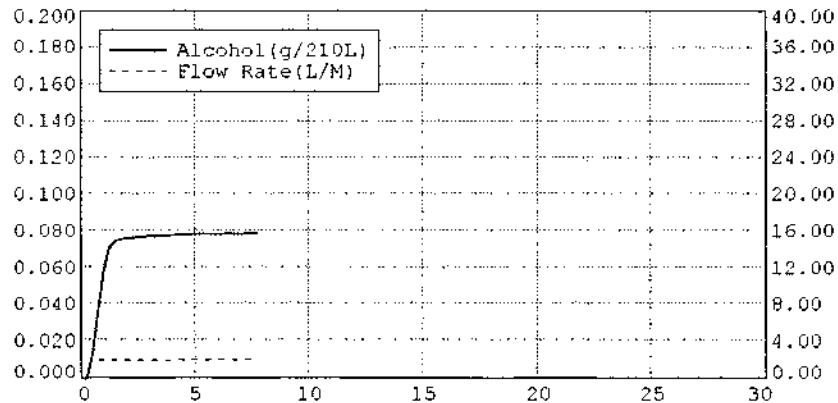
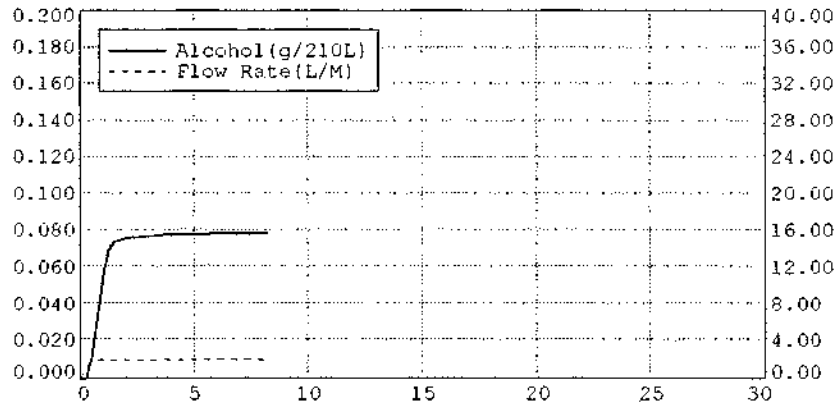
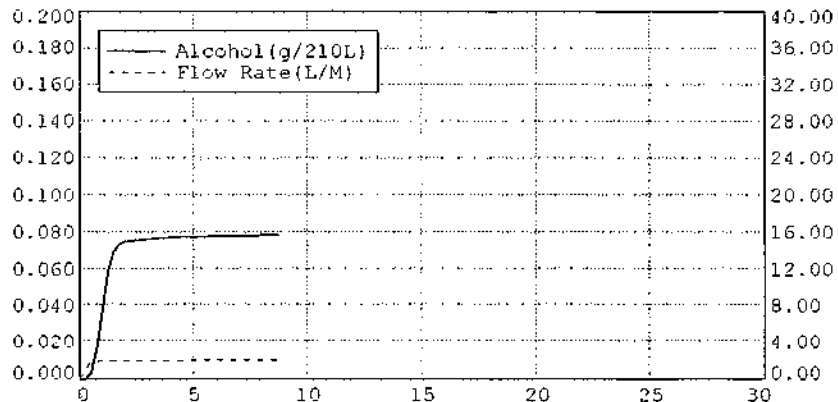
Date: 08/04/2015
 Time: 09:48:43

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.73: 0.079
 LOT #: 09214080A3
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 613 psi

BLANK TEST	0.000	09:49
INTERNAL STANDARD	VERIFIED	09:50
EXTERNAL STANDARD	0.079	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.079	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.079	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.080	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.080	09:54
BLANK TEST	0.000	09:55

Average = 0.0794
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

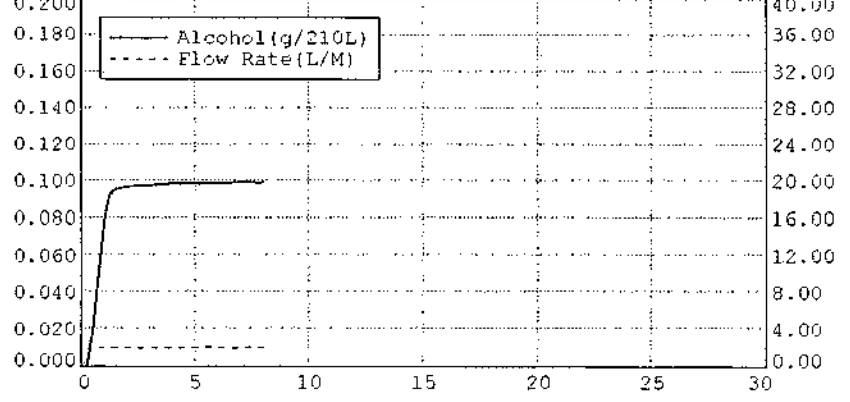
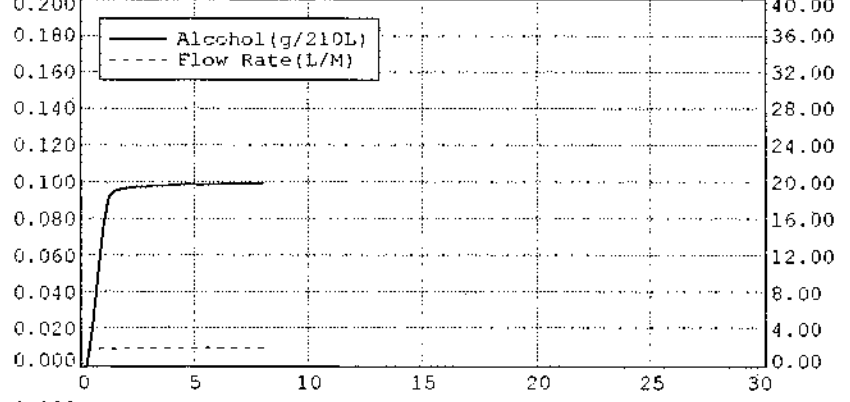
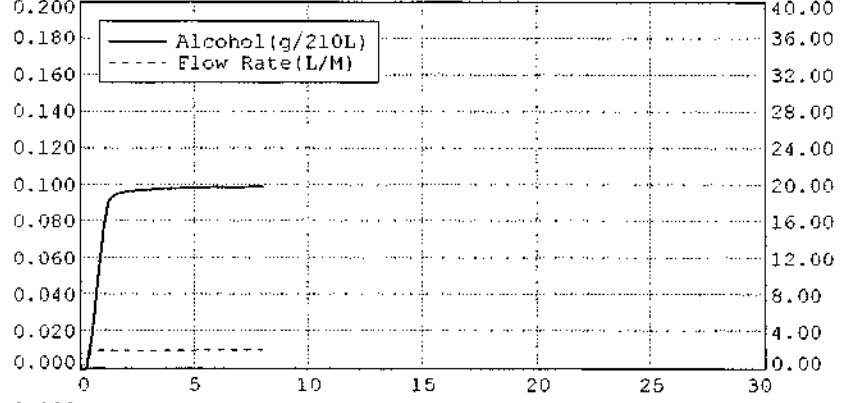
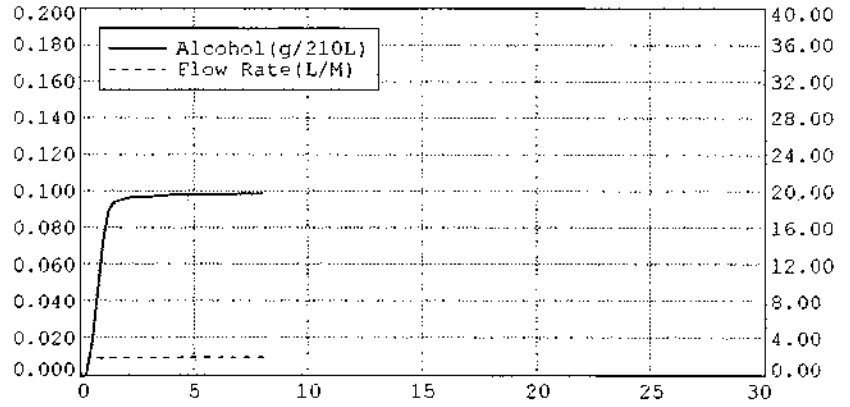
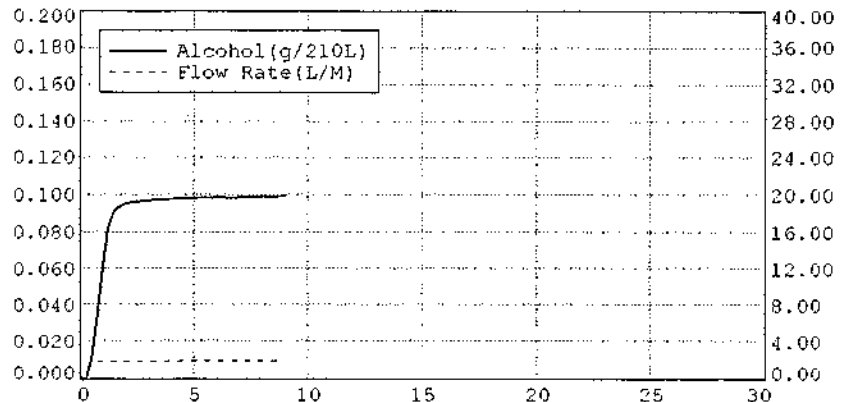
Date: 08/04/2015
 Time: 09:56:29

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.73: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 630 psi

BLANK TEST	0.000	09:58
INTERNAL STANDARD	VERIFIED	09:58
EXTERNAL STANDARD	0.100	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.100	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.100	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.100	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.100	10:03
BLANK TEST	0.000	10:04

Average = 0.1000
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

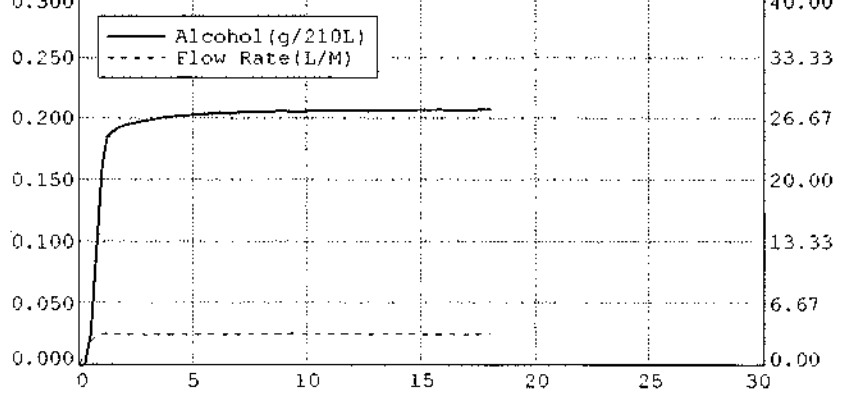
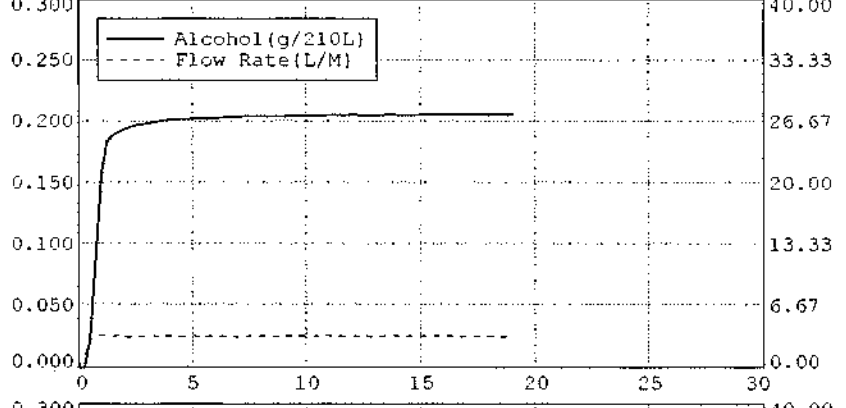
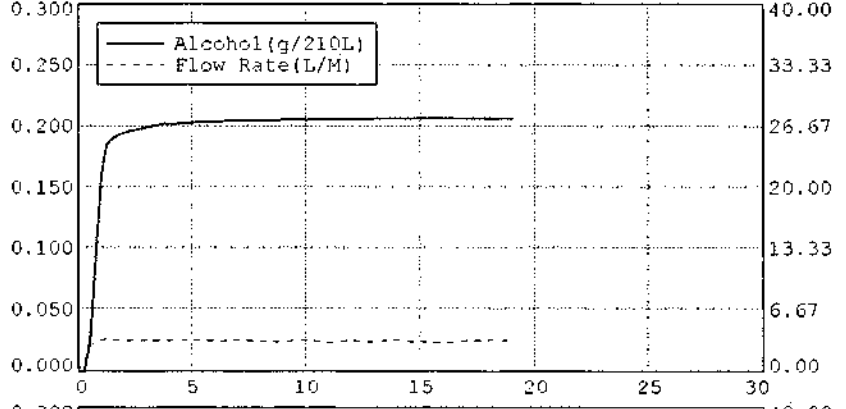
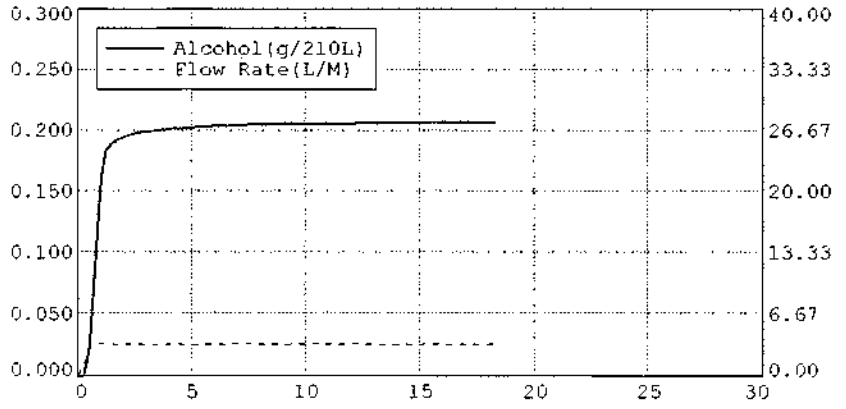
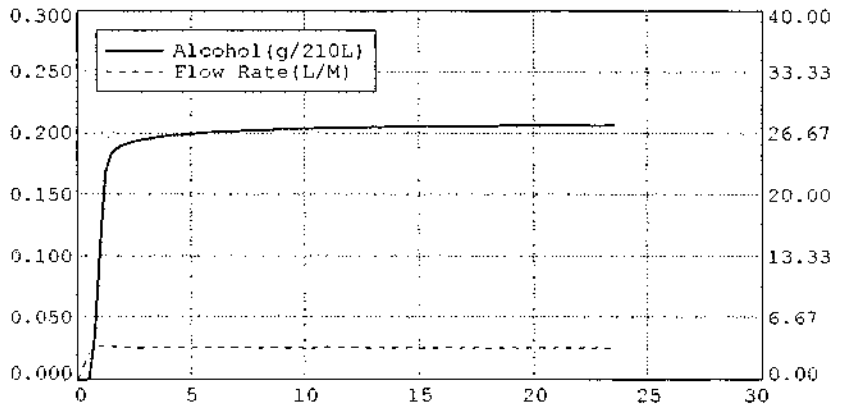
Alaska Department of Public Safety
 DATAMASTER dmt: 100351

Date: 08/04/2015
 Time: 10:04:58

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 13220
 EXPIRATION: 08/05/2015

BLANK TEST	0.000	10:07
INTERNAL STANDARD	VERIFIED	10:07
EXTERNAL STANDARD	0.207	10:07
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.207	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.207	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.207	10:12
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.207	10:13
BLANK TEST	0.000	10:14

Average = 0.2070
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100351

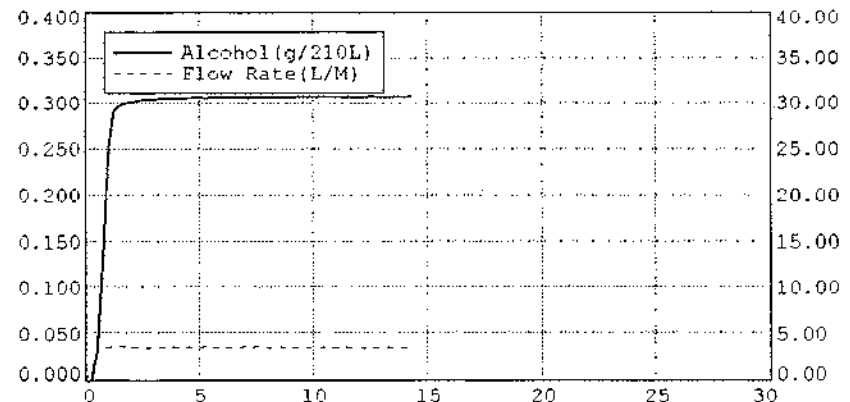
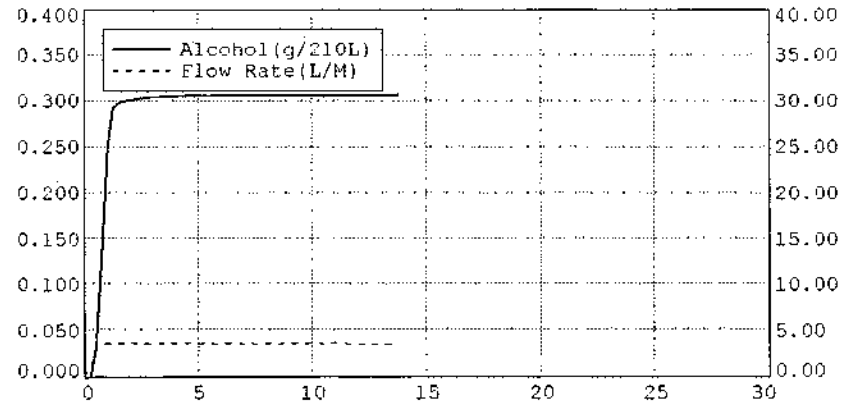
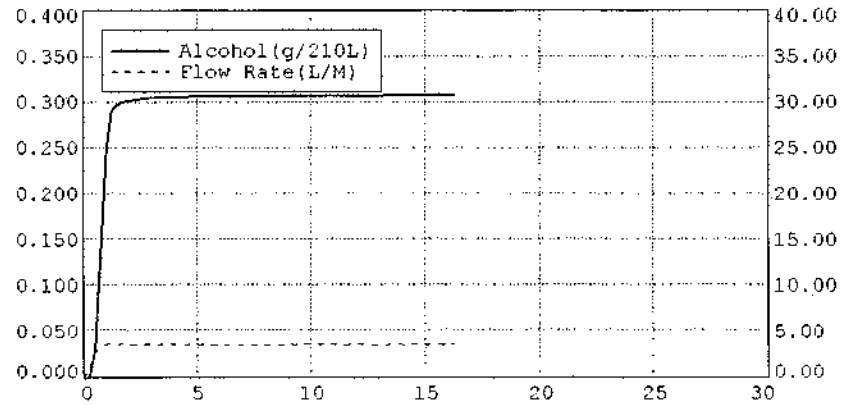
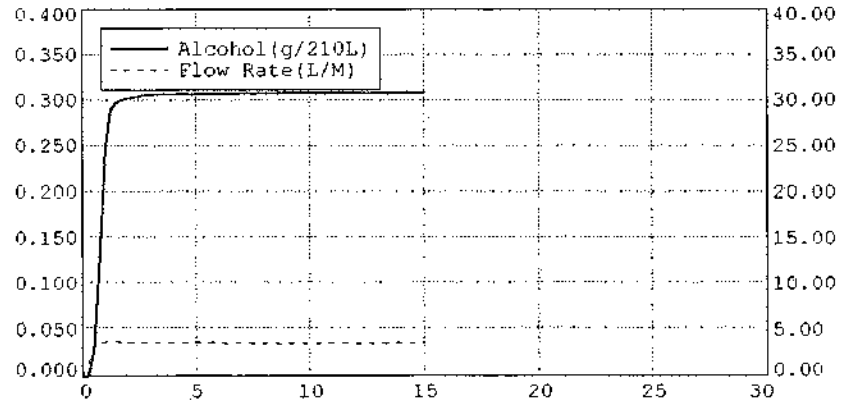
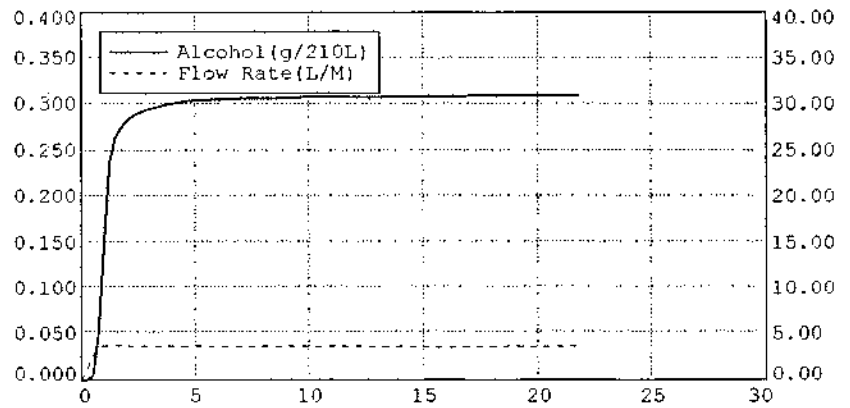
Date: 08/04/2015
 Time: 10:15:48

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:16
INTERNAL STANDARD	VERIFIED	10:16
EXTERNAL STANDARD	0.309	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.308	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.308	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.307	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.307	10:22
BLANK TEST	0.000	10:23

Average = 0.3078
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100351

Date: 08/04/2015
Time: 10:35:31

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:

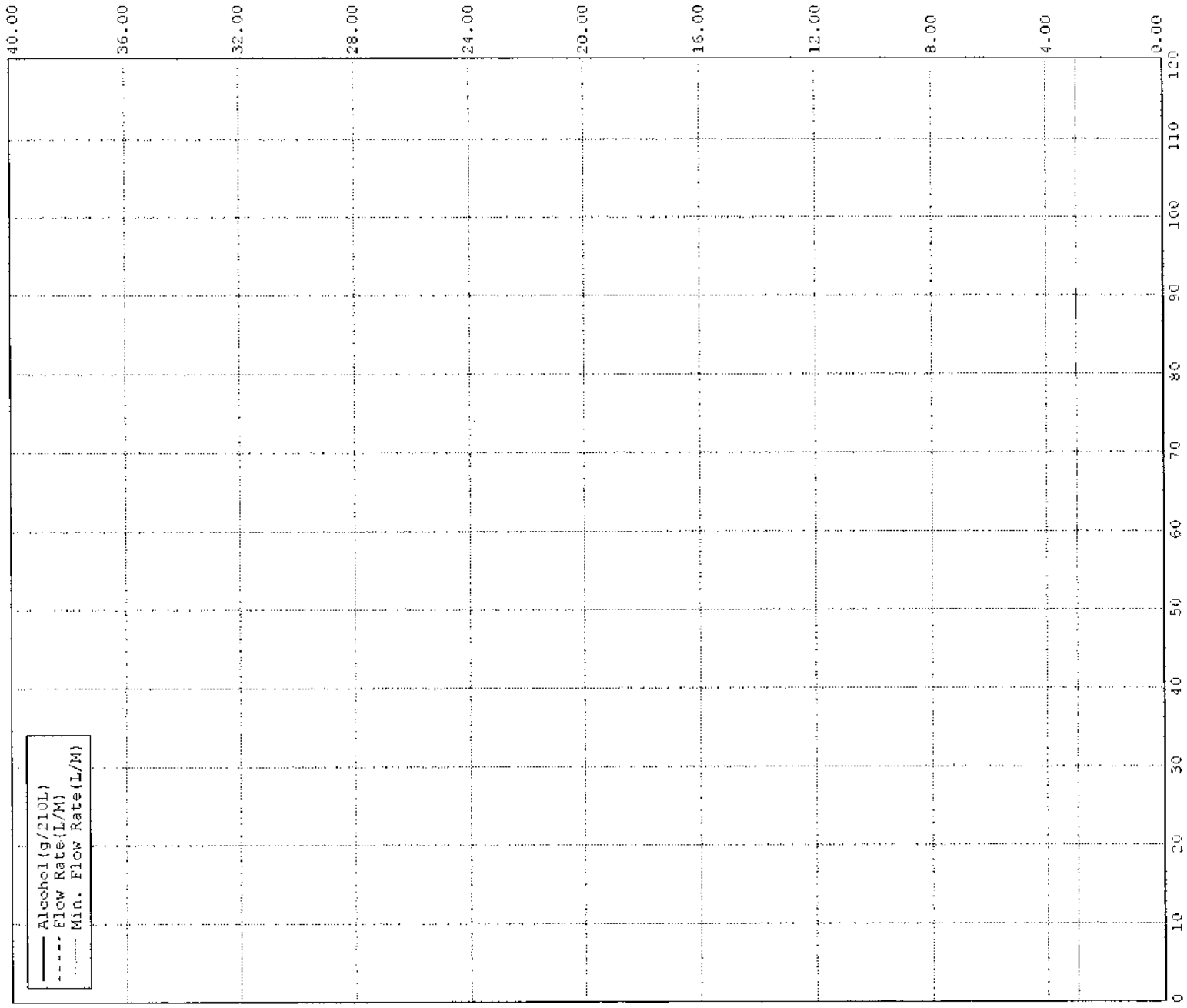
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 10:36
BLANK TEST 0.000 10:36
INTERNAL STANDARD VERIFIED 10:36
EXTERNAL STANDARD 0.080 10:37
BLANK TEST 0.000 10:37
SUBJECT SAMPLE INCOMPLETE 10:40

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 08/04/2015
Time: 10:42:58

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

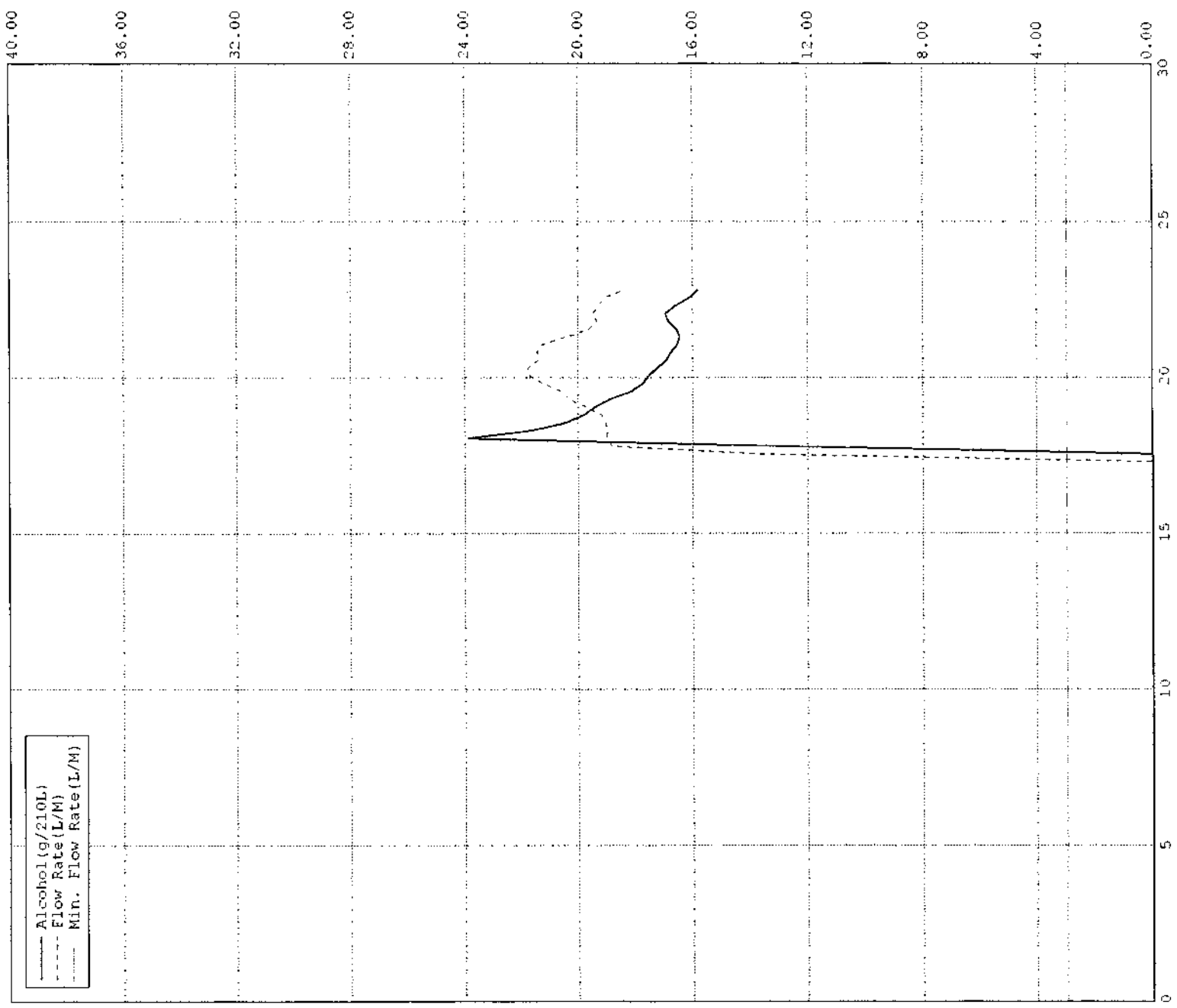
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	10:44
BLANK TEST	0.000	10:44
INTERNAL STANDARD	VERIFIED	10:44
EXTERNAL STANDARD	0.079	10:44
BLANK TEST	0.000	10:45
SUBJECT SAMPLE	INVALID	10:46

CB



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100351

Date: 08/04/2015

Time: 12:43:43

SUBJECT NAME:

TEST TEST

LICENSE #: INT-ACETONE

OPERATOR NAME:

COLLEEN S O'BRYAN

OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 15-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.69: 0.079

LOT #: 09214080A3

EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK

PASSED 12:45

BLANK TEST

0.000 12:45

INTERNAL STANDARD

VERIFIED 12:46

Xq = 0.114 (0.398)

EXTERNAL STANDARD

0.079 12:46

X[1] = 0.0791 (0.0008) (0.0014)

0.000 12:47

BLANK TEST

XXX 12:47

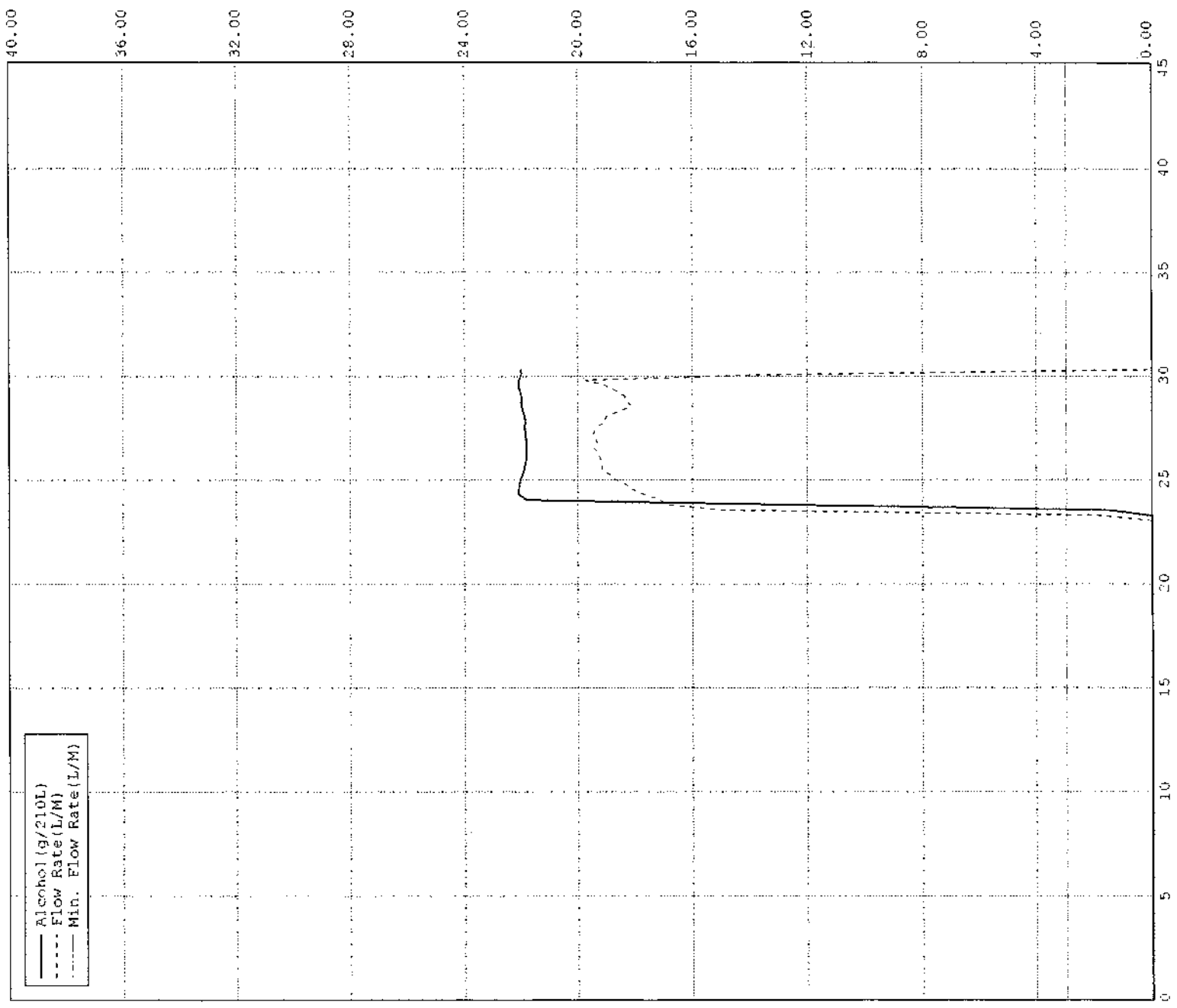
SUBJECT SAMPLE

X[1] = 0.1105 (-0.0147) (0.0004)

Interference Detected

Filter 2 avg = 0.0005

Filter 3 avg = 0.0013



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 08/04/2015
Time: 12:51:05

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

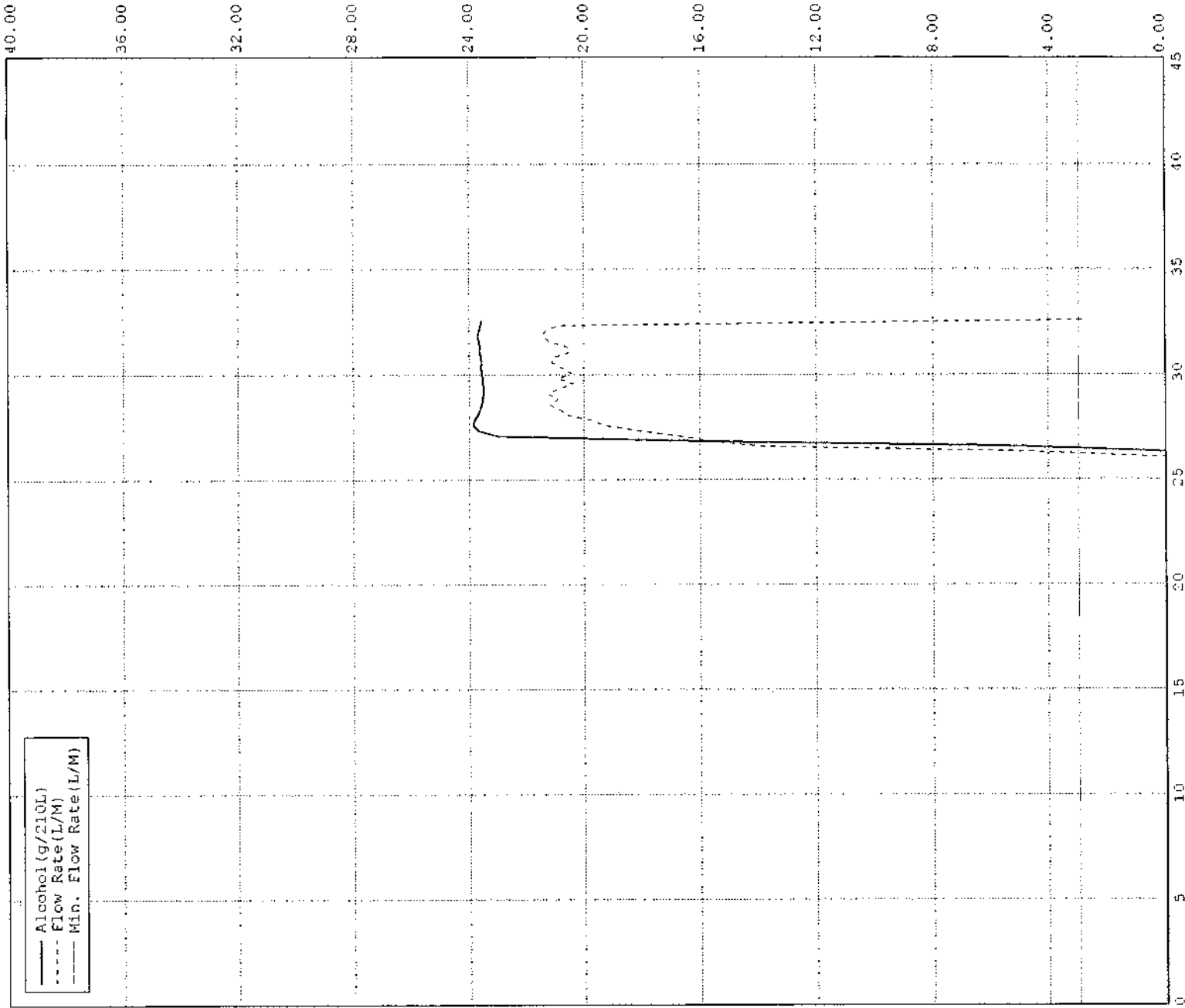
OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:52
BLANK TEST	0.000	12:52
INTERNAL STANDARD	VERIFIED	12:52
Xq = 0.114 (0.558)		
EXTERNAL STANDARD	0.079	12:52
X[1] = 0.0794 (0.0007) (0.0014)		
BLANK TEST	0.000	12:53
SUBJECT SAMPLE	XXX	12:54
X[1] = 0.1181 (-0.0241) (0.0003)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100351

Date: 08/04/2015
Time: 12:56:58

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEG

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

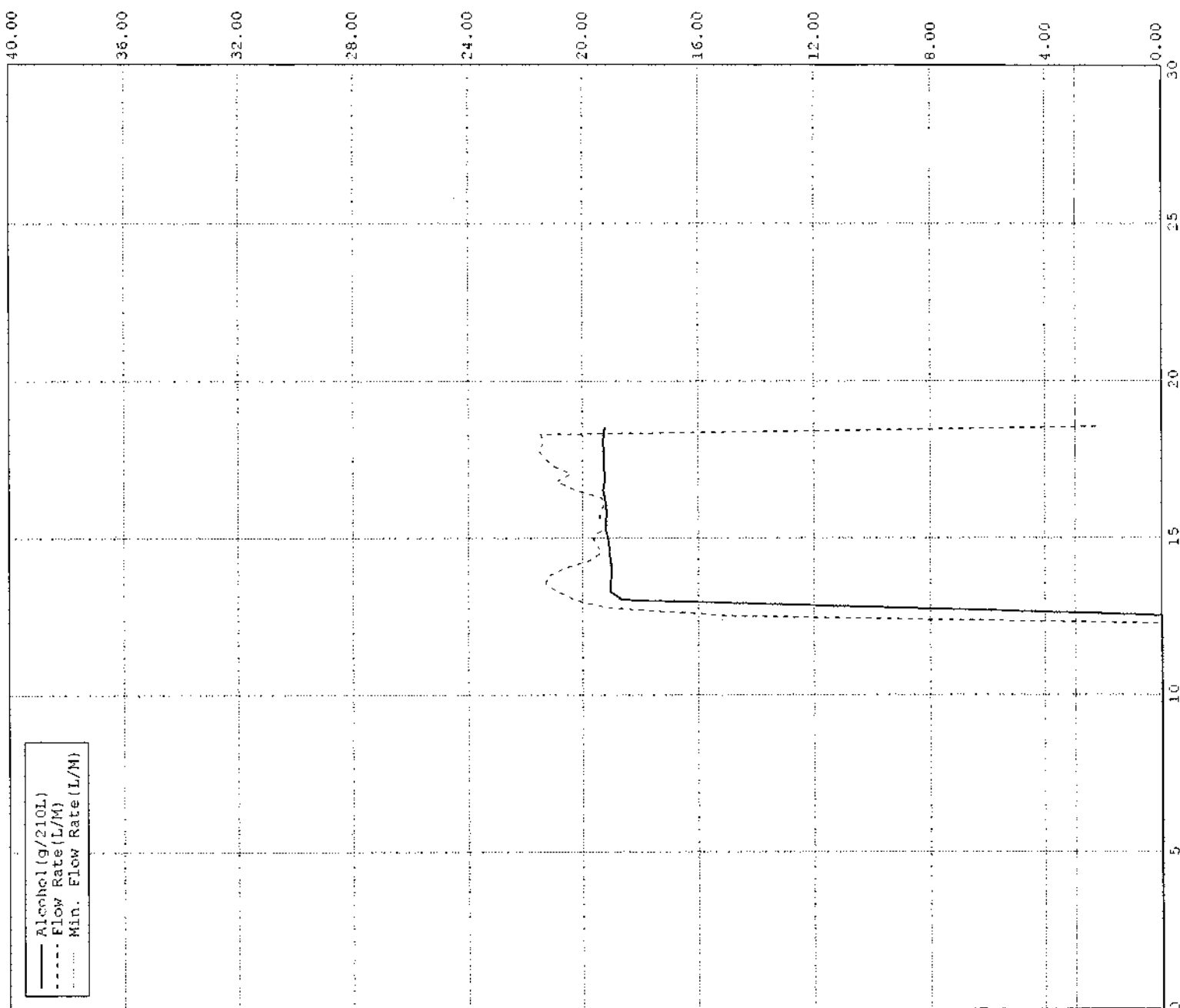
DEPT/AGENCY:

AAAA
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:00
BLANK TEST	0.000	13:00
INTERNAL STANDARD	VERIFIED	13:00
$X_q = 0.114 (0.47\%)$		
EXTERNAL STANDARD	0.079	13:00
$X[1] = 0.0794 (0.0003) (0.0010)$		
BLANK TEST	0.000	13:01
SUBJECT SAMPLE (Vol=2.01L)	0.096	13:01
$X[1] = 0.0964 (-0.0003) (-0.0012)$		
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.079	13:03
$X[1] = 0.0791 (0.0003) (0.0015)$		
BLANK TEST	0.000	13:03



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100351

Date: 08/04/2015
Time: 13:07:20

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1

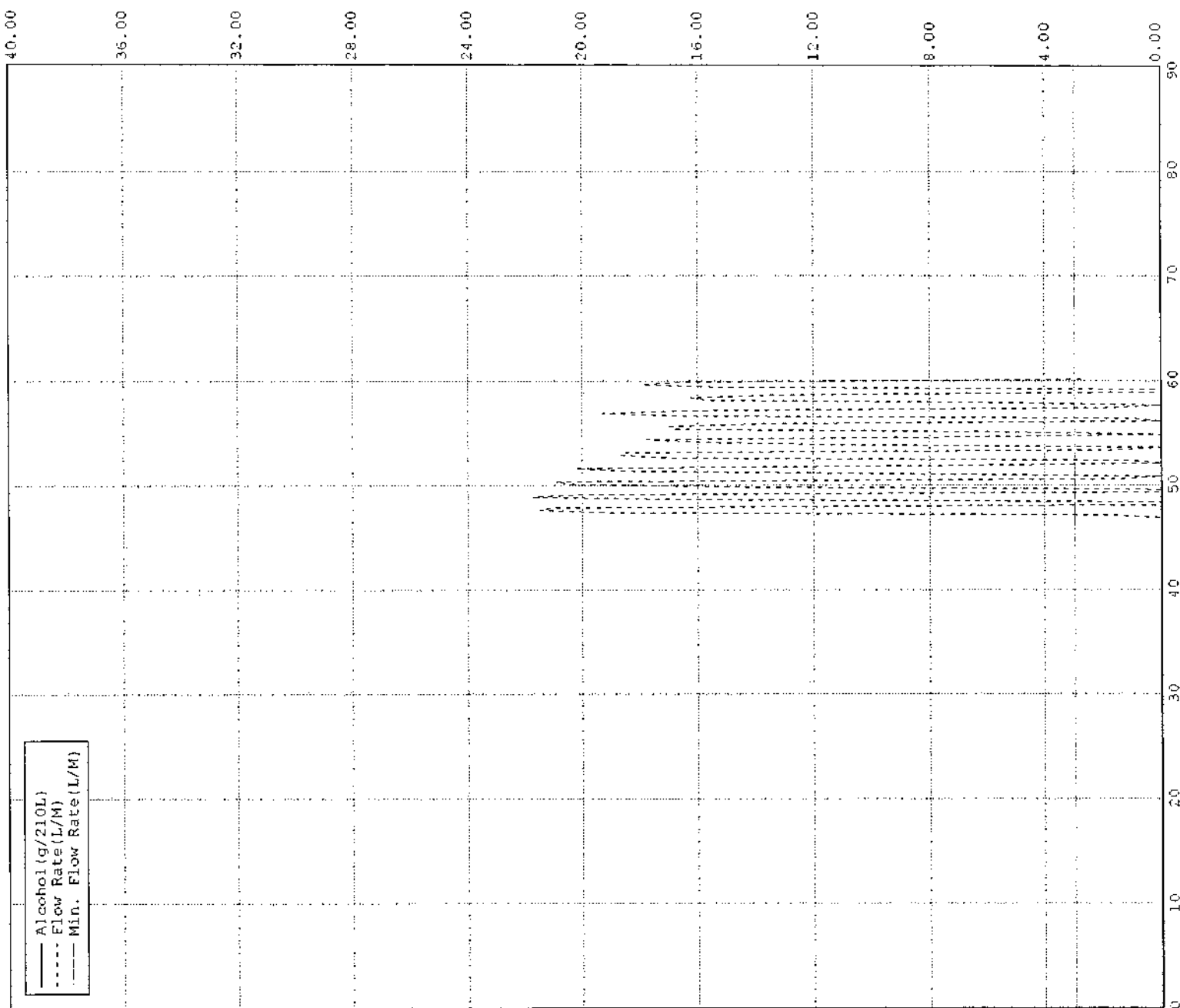
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:08
BLANK TEST	0.000	13:08
INTERNAL STANDARD	VERIFIED	13:08
EXTERNAL STANDARD	0.079	13:08
BLANK TEST	0.000	13:09
SUBJECT SAMPLE	XXX	13:10

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100351

Date: 08/04/2015
Time: 13:13:29

SUBJECT NAME:
TEST TEST
LICENSE #: REI

OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1

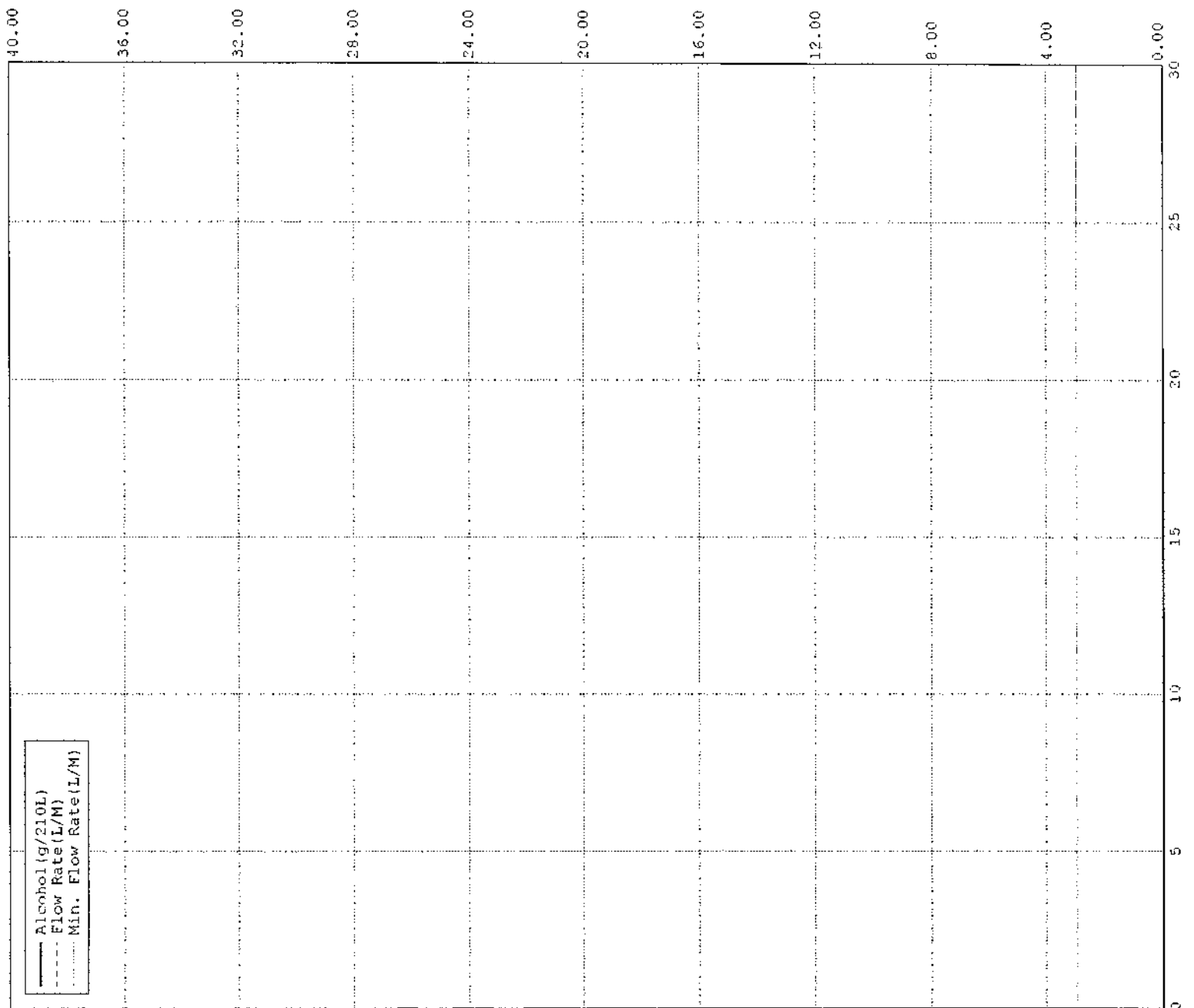
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 13:14
BLANK TEST 0.000 13:14
INTERNAL STANDARD VERIFIED 13:15
EXTERNAL STANDARD 0.079 13:15
BLANK TEST 0.000 13:16

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100351

Date: 08/04/2015
Time: 13:30:56

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:31
BLANK TEST	0.000	13:32
INTERNAL STANDARD	VERIFIED	13:32
EXTERNAL STANDARD	0.080	13:32
BLANK TEST	0.000	13:33
SUBJECT SAMPLE (Vol=1.92L)	0.000	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.080	13:34
BLANK TEST	0.000	13:35

CS

