

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 100685 Analyst C. O'Byrne 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 1.4 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 01815080A2 Exp 2/5/17

iv. 0.100g/210L Mnf ILMO Lot 02915100A1 Exp 3/5/17

v. 0.200g/210L Mnf Both Lot 15130 Exp 5/11/17

1. Simulator S/N DR4162 Date Calibrated 1/19/15

vi. 0.300g/210L Mnf Both 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 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 DR1176 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

9. Verification of Calibration

7. Reset Options

10. Non-Drinking Subject Test (attached)

8. Clear Memory

11. Upload

13. Remove tank prior to shut down

End Date 9/30/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100685

Date: 09/30/2015
Time: 09:23:31

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 = 46.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.66 V PASSED
(0.98 V - 2.30 V)
Cooler Voltage = 1.65 V PASSED
(0.96 V - 2.24 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 547 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 5.570 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 = 0.080 2.89% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100685

Date: 09/30/2015
Time: 9:36 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 46.4°C

Current Barometer 29.5 in
Volume (Ltr) 1.59

Settings
Lamp: 1.74 V
Bias: 80 V
Cooler: 1.64 V
Chopper: 547 Hz

Voltages (V)
Flow: 1.06 V
Detector: 0.011 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100685

Date: 10/24/2011
Time: 07:27:49

Ca = 0.1000
CAL = 0.998718 0.800 <= CAL < 1.200
b1 = 0.0009 0.0000 <= b1 < 0.0040
b2 = 0.0053 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0781 0.0500 <= Xq < 0.2000
a21 = 1.161762 1.050 <= a21 < 1.300
a31 = 0.498372 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100685

Date: 09/30/2015
Time: 09:53:18

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

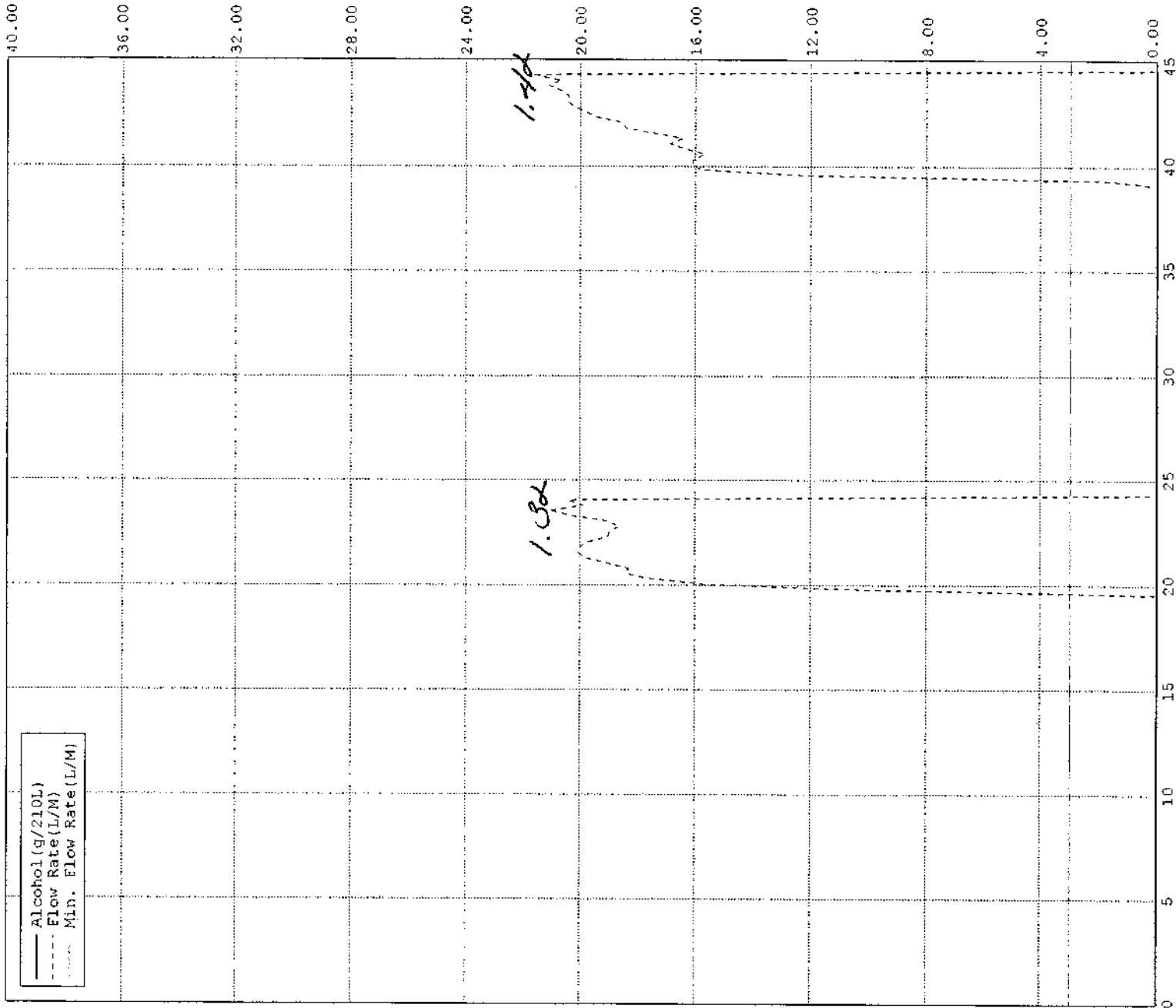
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.53: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:54
BLANK TEST	0.000	09:54
INTERNAL STANDARD	VERIFIED	09:54
EXTERNAL STANDARD	0.079	09:54
BLANK TEST	0.000	09:55
SUBJECT SAMPLE (Vol=1.52L)	0.000	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.080	09:57
BLANK TEST	0.000	09:58

CAS



LINEARITY CHECK

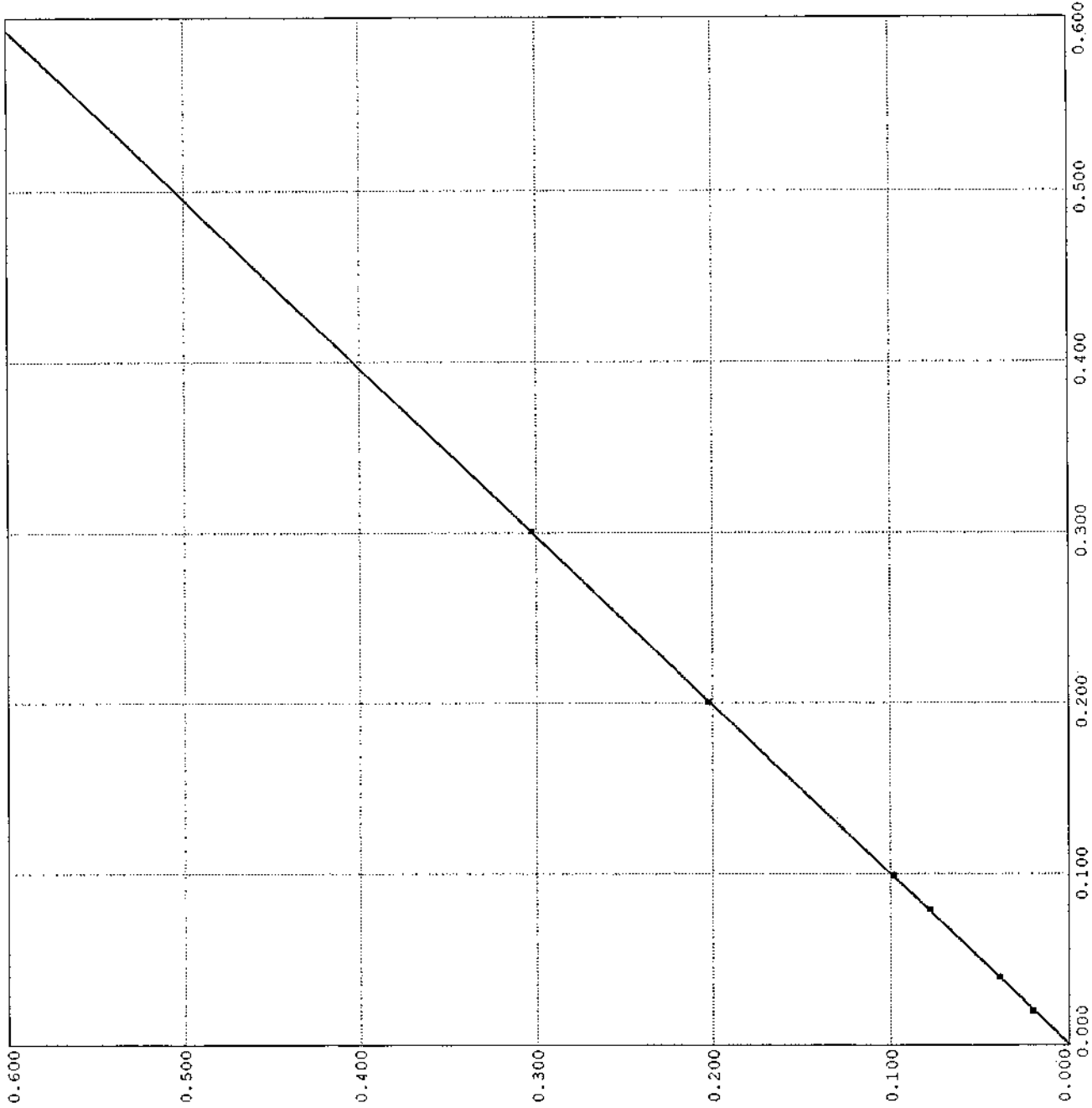
Alaska Department of Public Safety
DATAMASTER dmt: 100685

Date: 09/30/2015
Time: 10:07:33

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0210	0.0000
0.040	0.0400	0.0000
0.079	0.0790	0.0000
0.099	0.0992	0.0004
0.200	0.2032	0.0004
0.300	0.3034	0.0009

SLOPE = 1.012929
R² = 0.999947



CB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100685

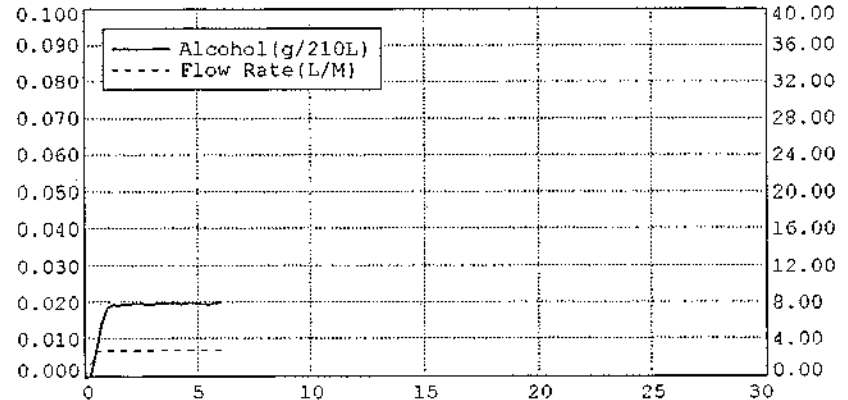
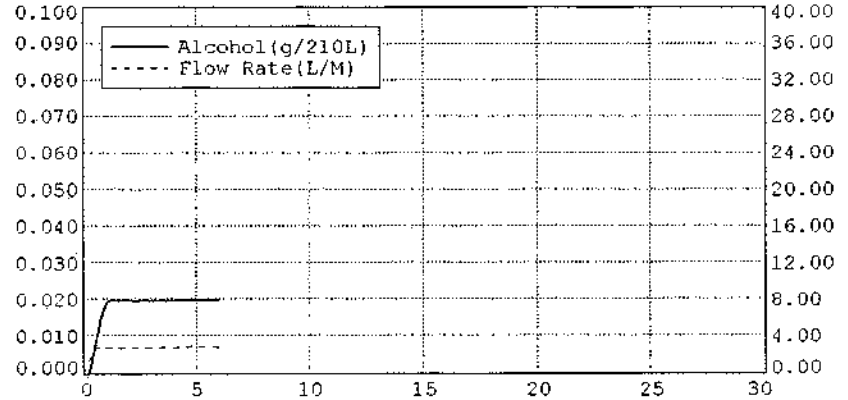
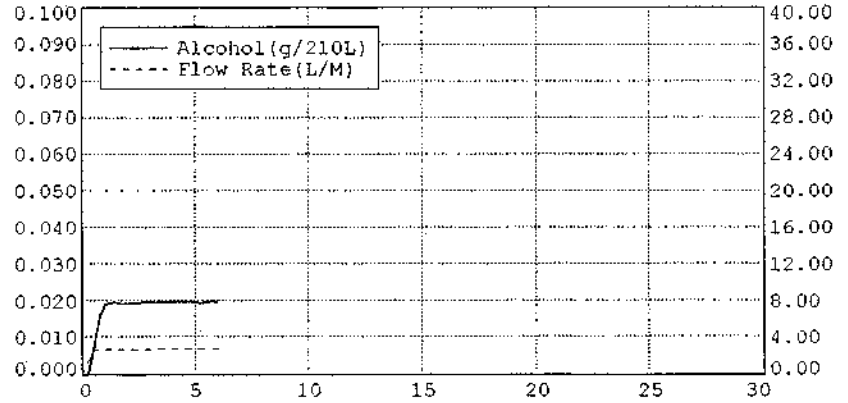
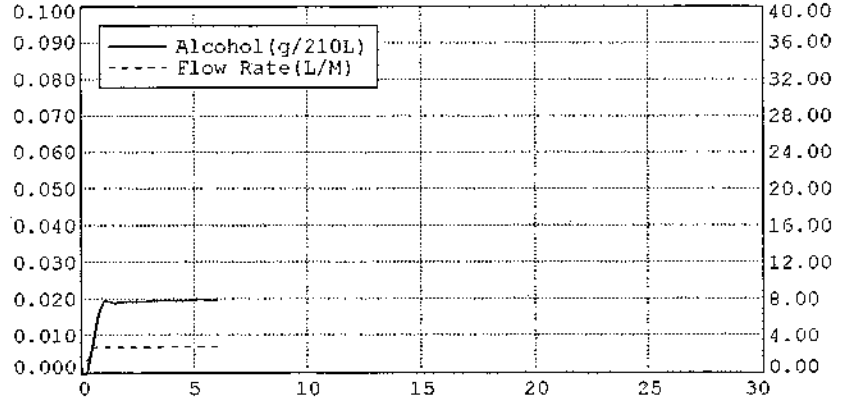
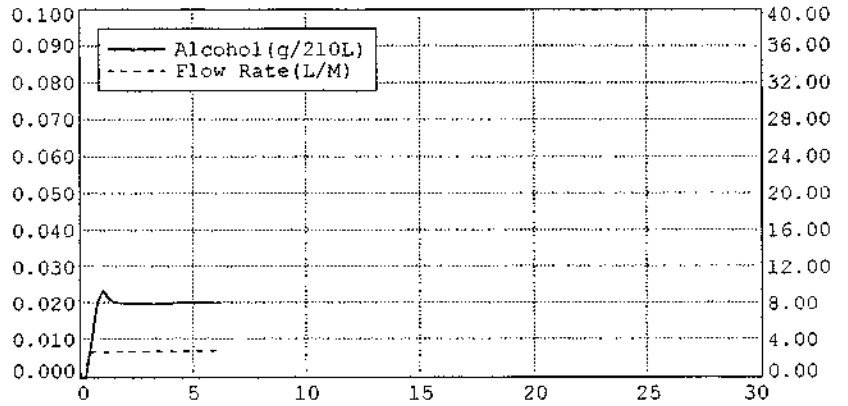
Date: 09/30/2015
 Time: 10:07:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.55: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1051 psi

BLANK TEST	0.000	10:13
INTERNAL STANDARD	VERIFIED	10:13
EXTERNAL STANDARD	0.021	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.021	10:15
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.021	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.021	10:17
BLANK TEST	0.000	10:18
EXTERNAL STANDARD	0.021	10:18
BLANK TEST	0.000	10:19

Average = 0.0210
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100685

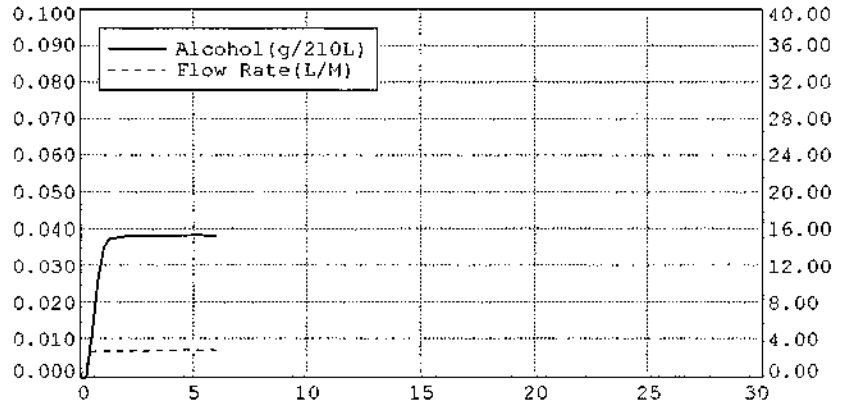
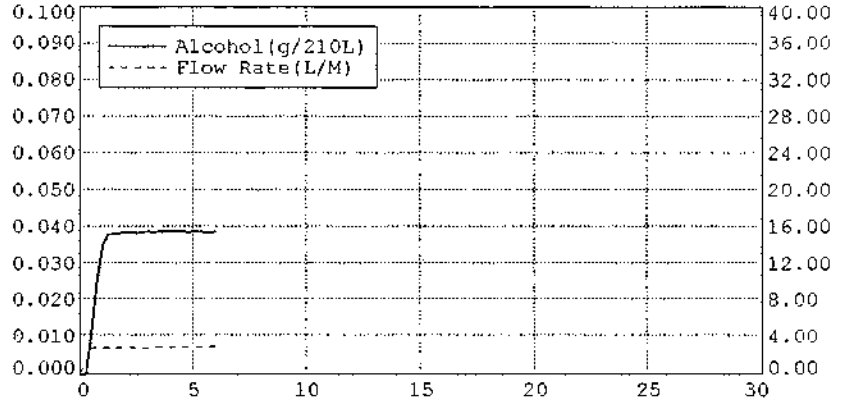
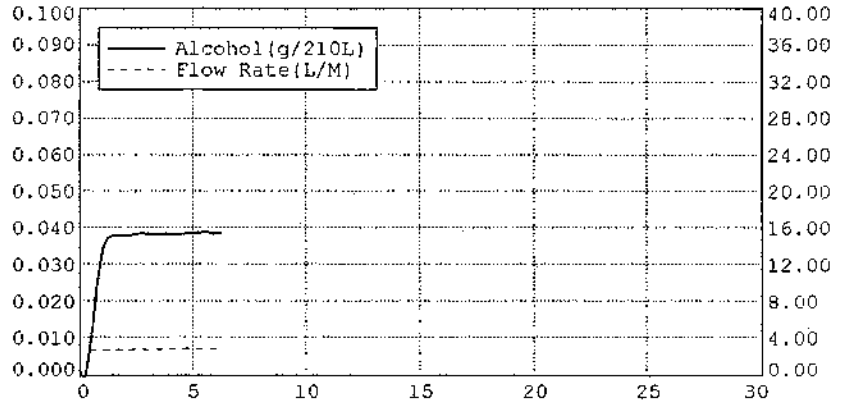
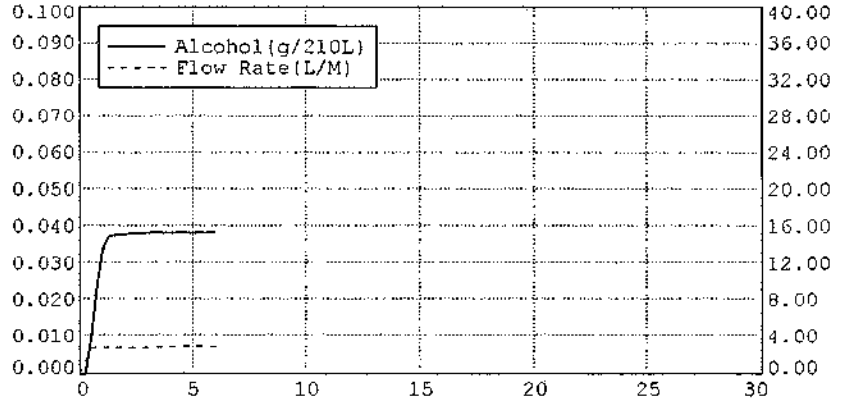
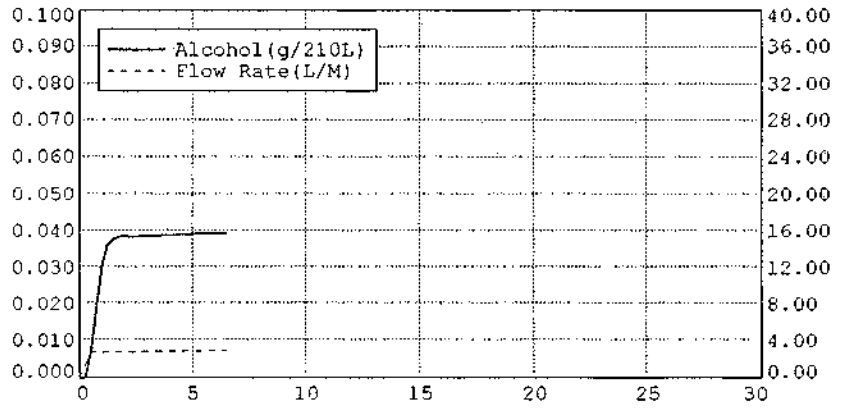
Date: 09/30/2015
 Time: 10:20:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.56: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1098 psi

BLANK TEST	0.000	10:21
INTERNAL STANDARD	VERIFIED	10:21
EXTERNAL STANDARD	0.040	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.040	10:23
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.040	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.040	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.040	10:26
BLANK TEST	0.000	10:27

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100685

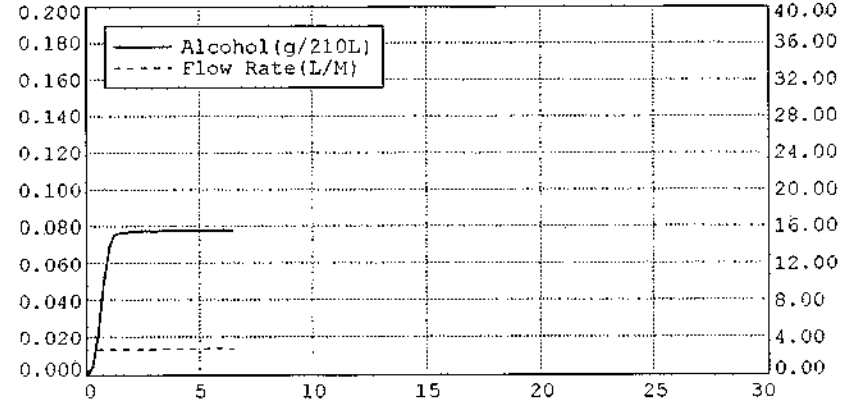
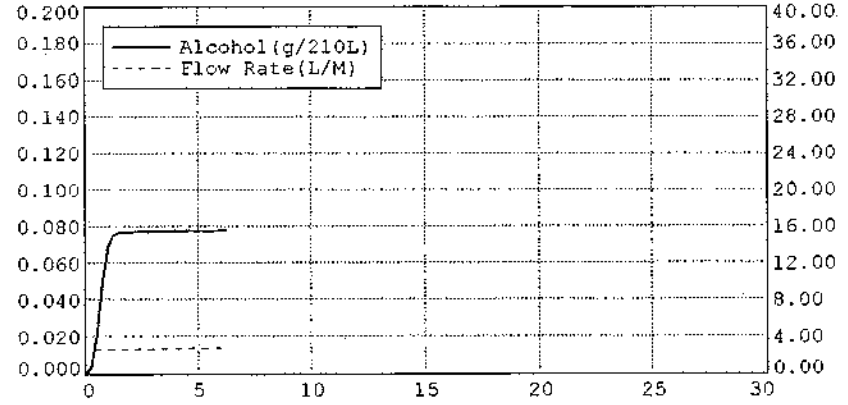
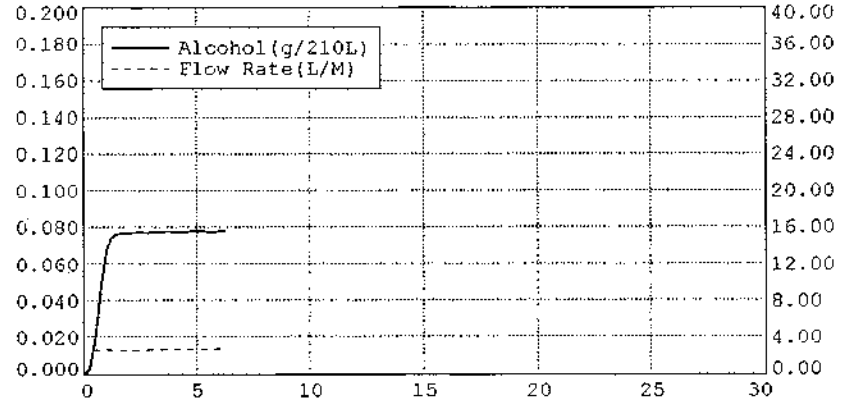
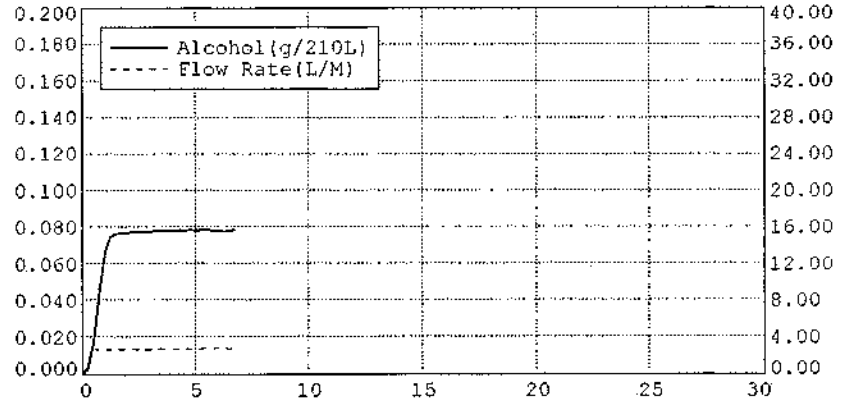
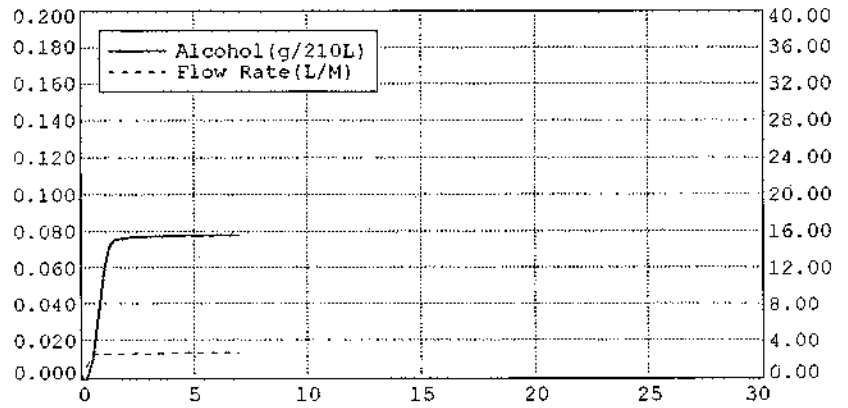
Date: 09/30/2015
 Time: 10:28:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.57: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 944 psi

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

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100685

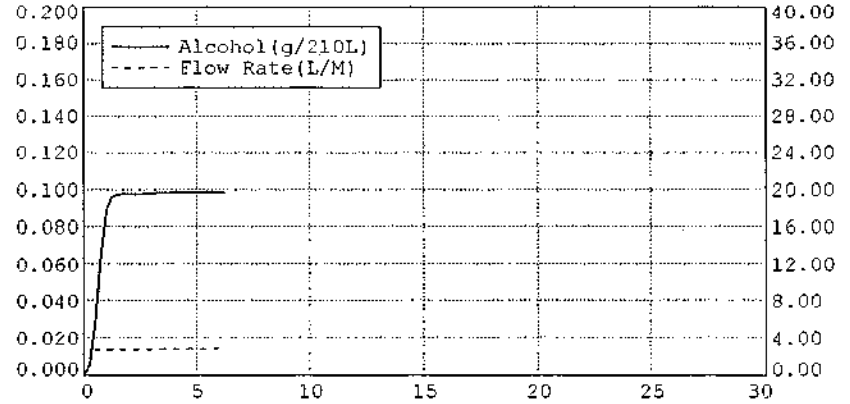
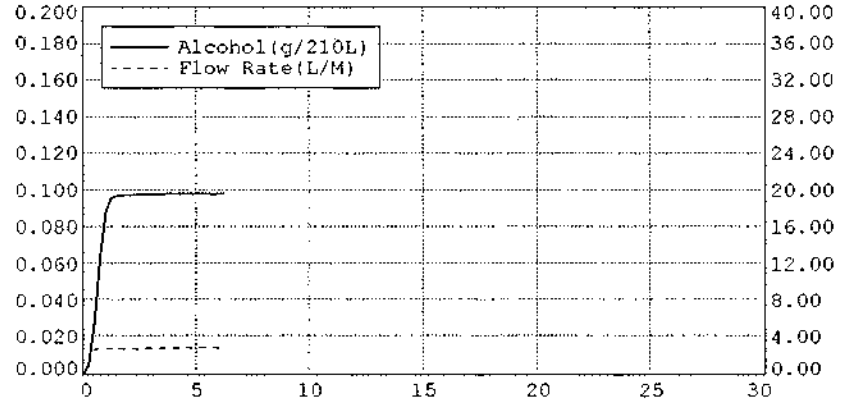
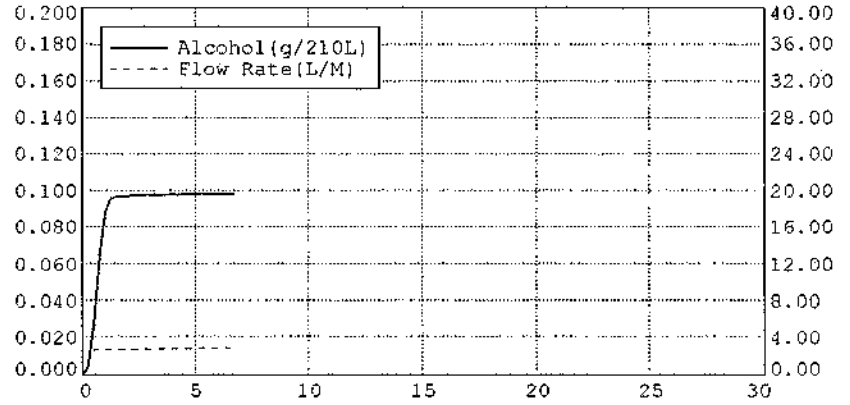
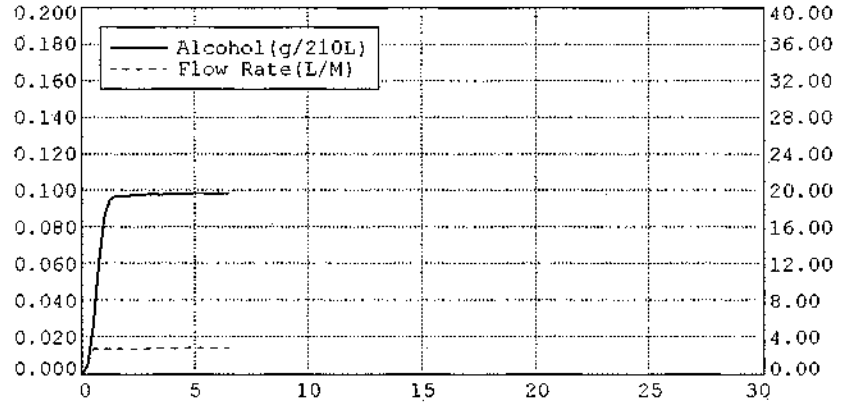
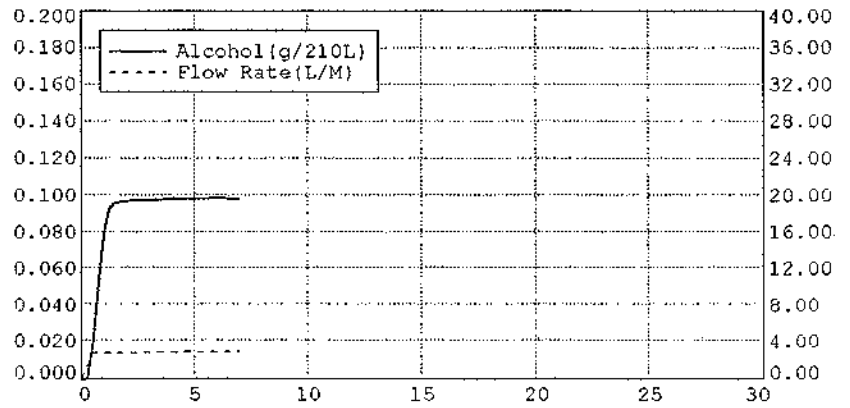
Date: 09/30/2015
 Time: 10:36:17

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.58: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1138 psi

BLANK TEST	0.000	10:37
INTERNAL STANDARD	VERIFIED	10:37
EXTERNAL STANDARD	0.099	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.099	10:39
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.099	10:40
BLANK TEST	0.000	10:41
EXTERNAL STANDARD	0.099	10:41
BLANK TEST	0.000	10:42
EXTERNAL STANDARD	0.100	10:42
BLANK TEST	0.000	10:43

Average = 0.0992
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100685

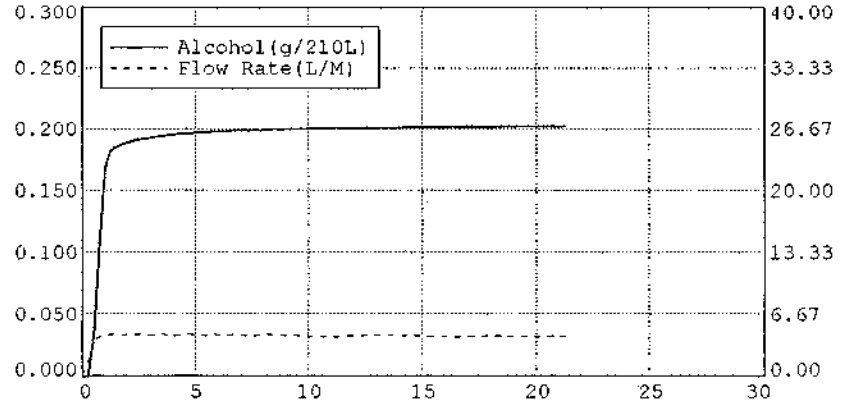
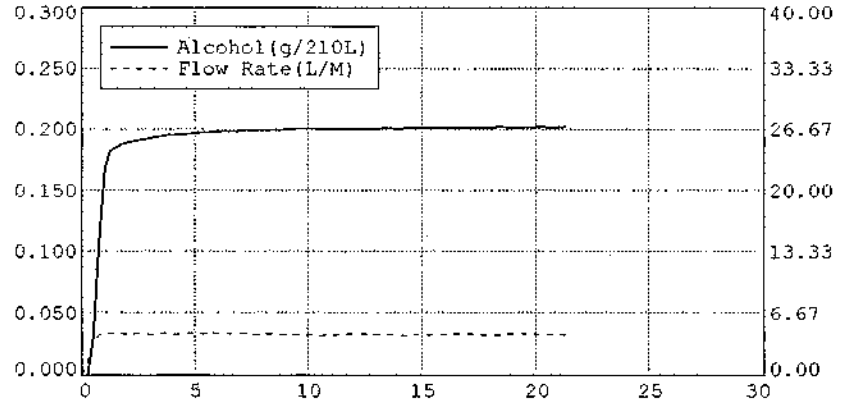
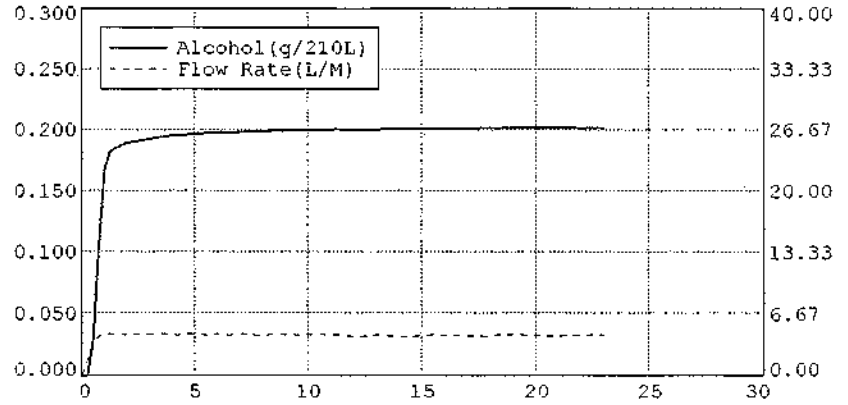
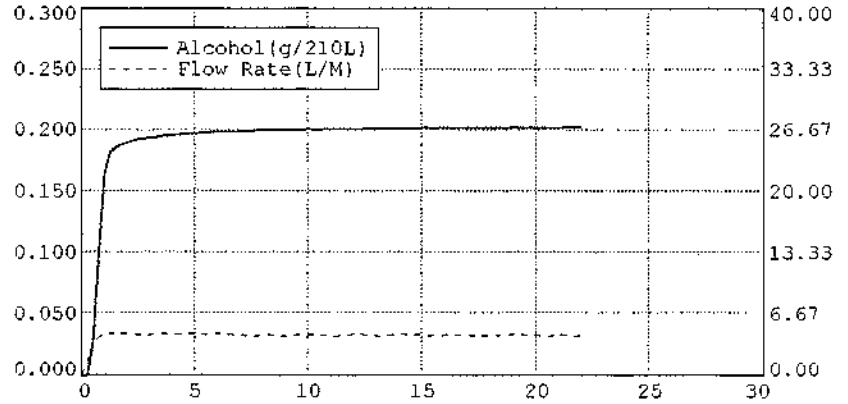
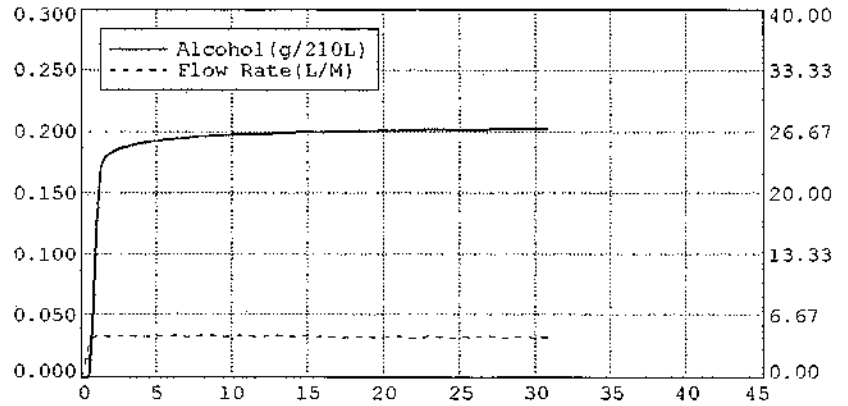
Date: 09/30/2015
 Time: 10:56:32

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:04
INTERNAL STANDARD	VERIFIED	11:04
EXTERNAL STANDARD	0.204	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.203	11:07
BLANK TEST	0.000	11:07
EXTERNAL STANDARD	0.203	11:08
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.203	11:09
BLANK TEST	0.000	11:10
EXTERNAL STANDARD	0.203	11:11
BLANK TEST	0.000	11:12

Average = 0.2032
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

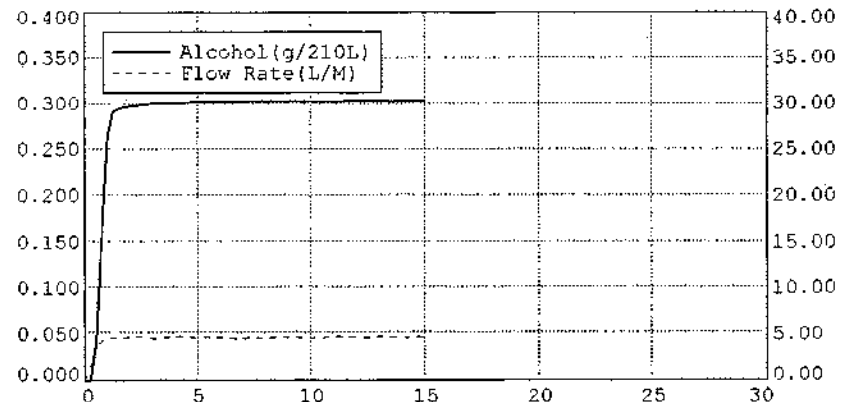
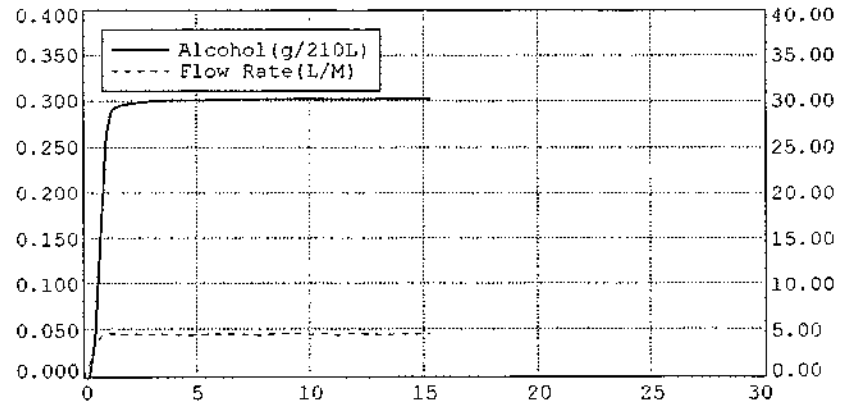
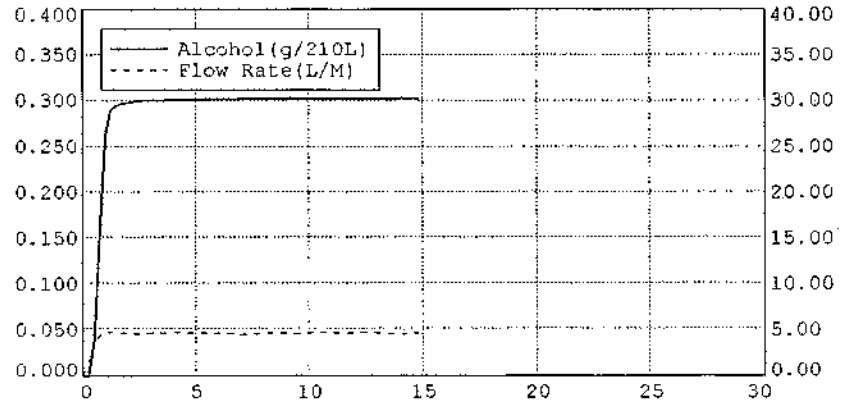
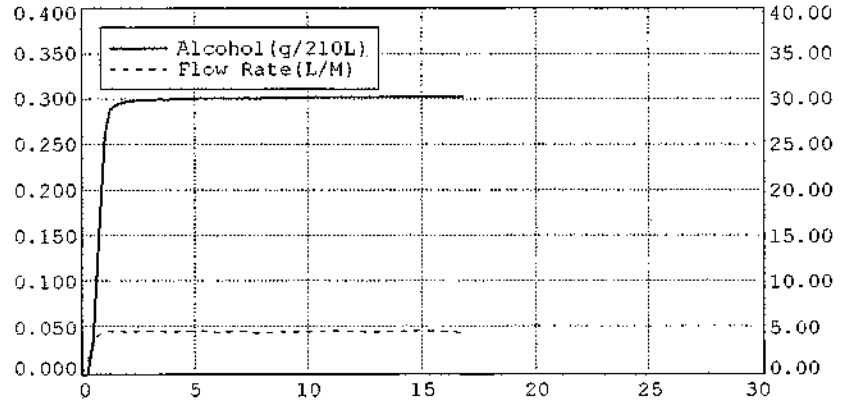
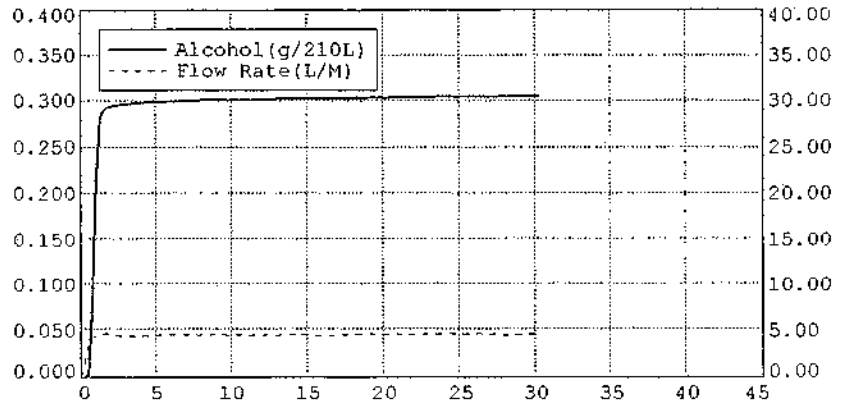
Alaska Department of Public Safety
 DATAMASTER dmt: 100685

Date: 09/30/2015
 Time: 13:03:41

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 14270
 EXPIRATION: 12/02/2016

BLANK TEST	0.000	13:05
INTERNAL STANDARD	VERIFIED	13:05
EXTERNAL STANDARD	0.305	13:05
BLANK TEST	0.000	13:06
EXTERNAL STANDARD	0.303	13:07
BLANK TEST	0.000	13:08
EXTERNAL STANDARD	0.303	13:08
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.303	13:09
BLANK TEST	0.000	13:10
EXTERNAL STANDARD	0.303	13:10
BLANK TEST	0.000	13:11

Average = 0.3034
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100685

Date: 09/30/2015
Time: 13:44:06

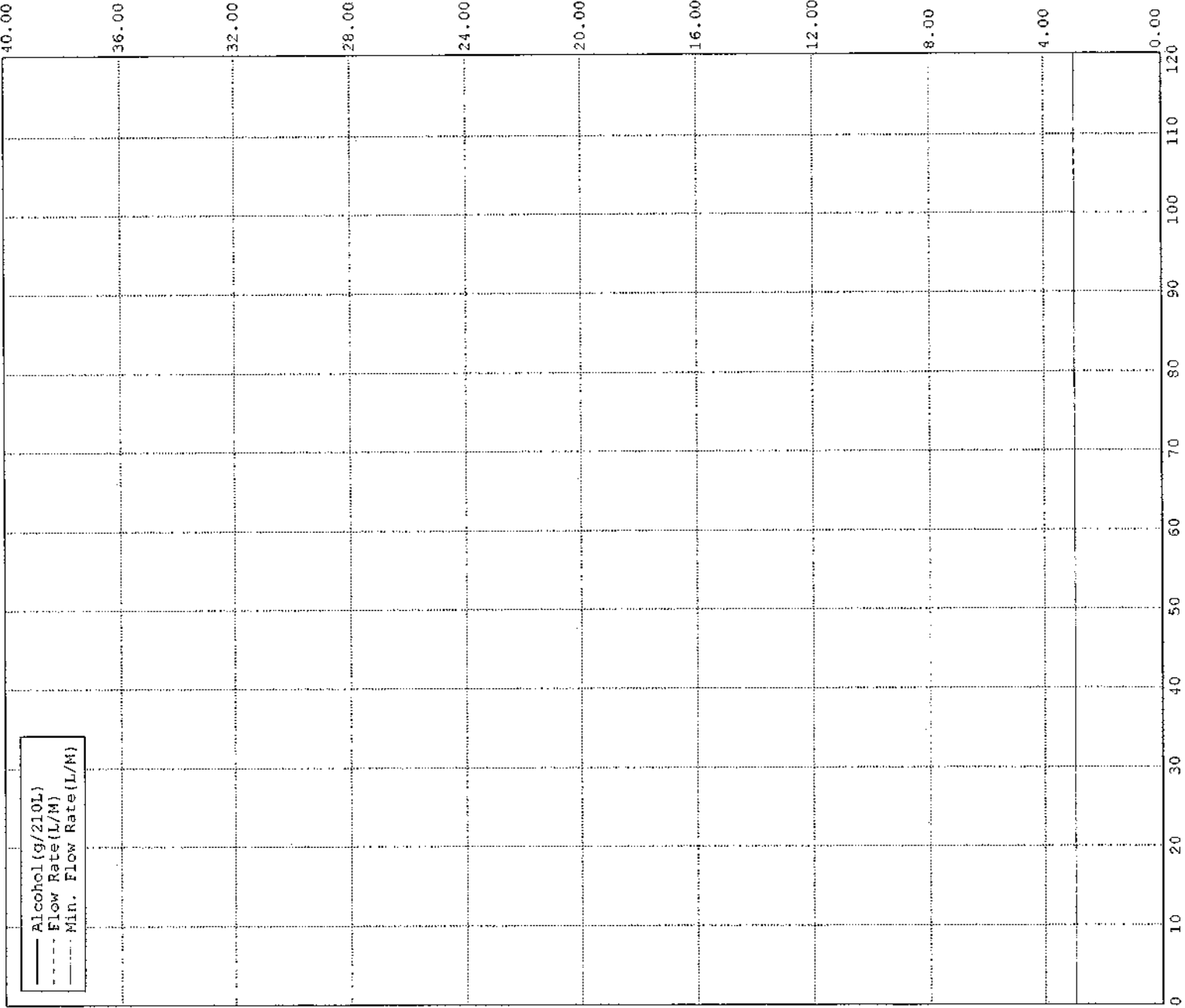
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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 29.71: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 13:45
BLANK TEST 0.000 13:45
INTERNAL STANDARD VERIFIED 13:45
EXTERNAL STANDARD 0.080 13:46
BLANK TEST 0.000 13:47
SUBJECT SAMPLE INCOMPLETE 13:49



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100685

Date: 09/30/2015
Time: 13:50:45

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

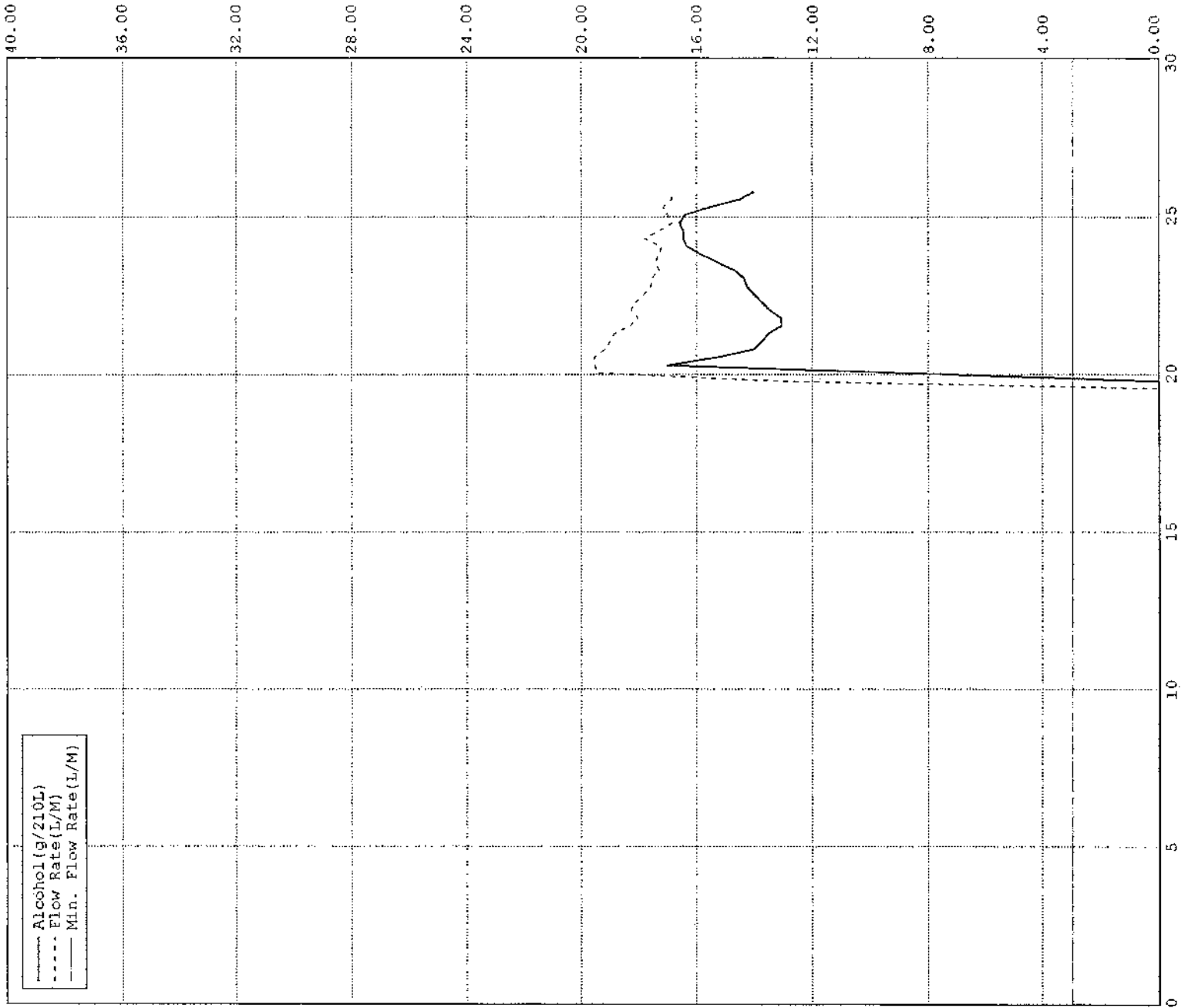
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

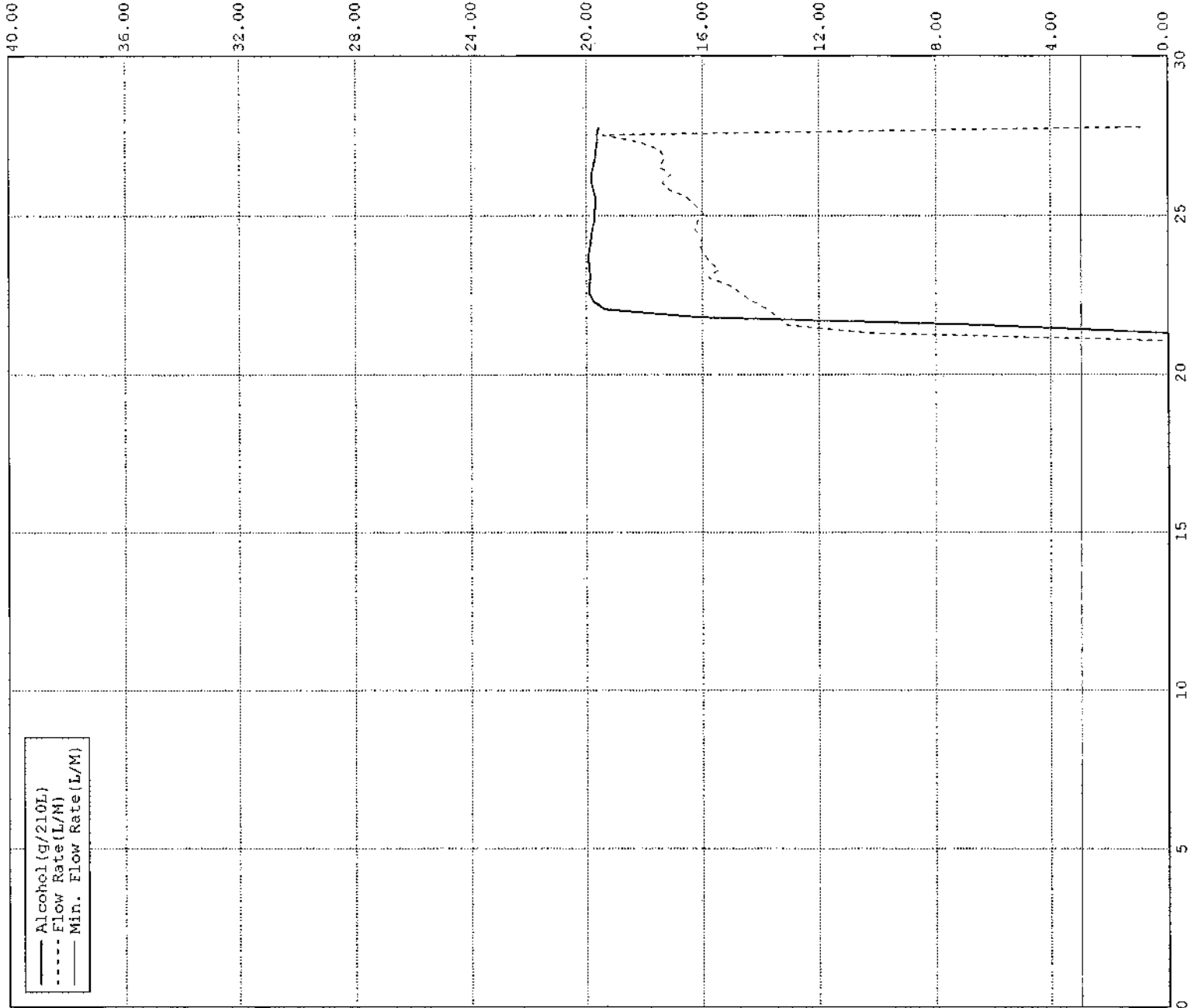
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

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

CS





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100685

 Date: 09/30/2015
 Time: 14:06:36

SUBJECT NAME:
 TEST TEST
 LICENSE #: INT-ACETONE

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

DEPT/AGENCY:
 AAA1

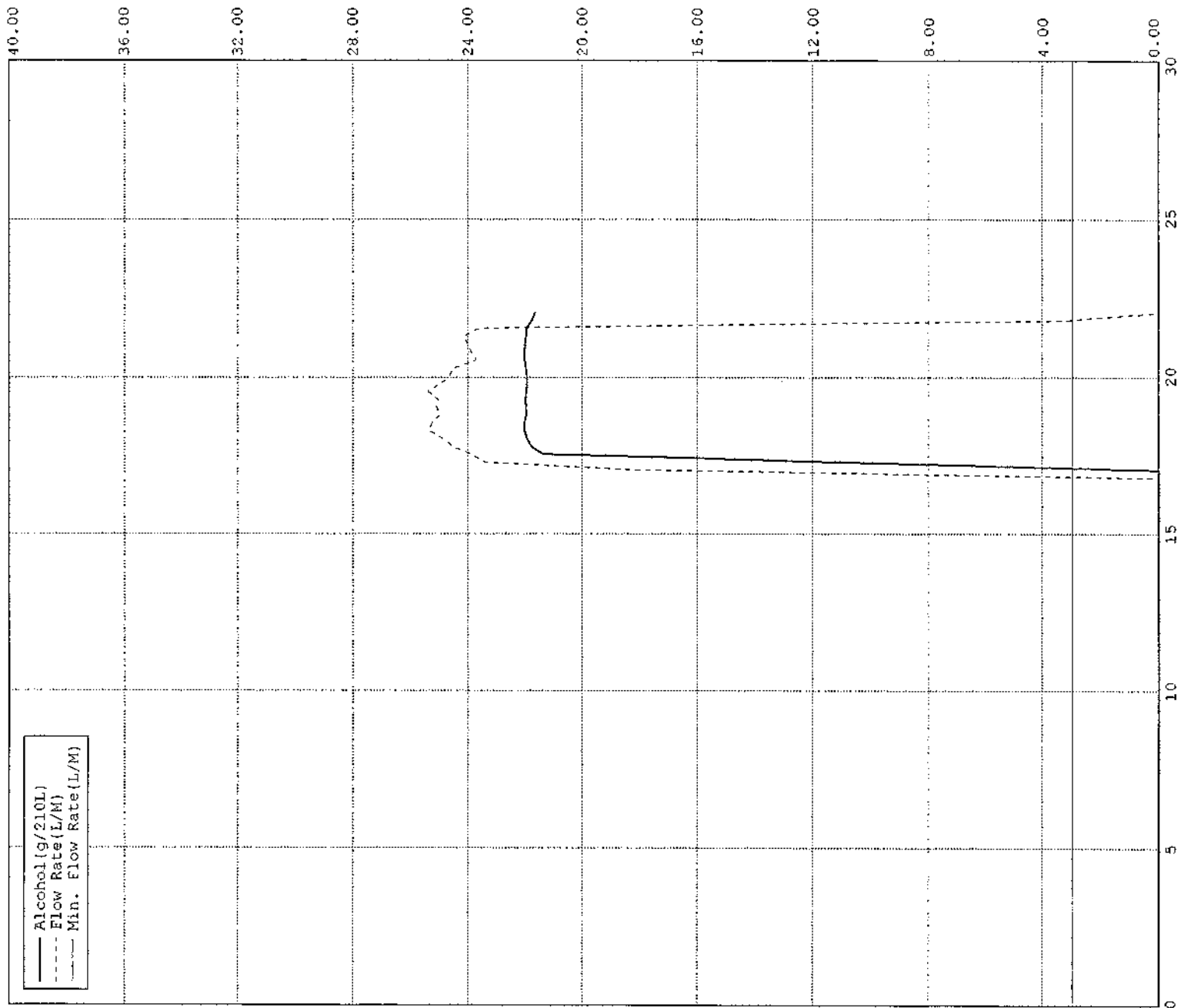
CASE/REPORT: 15-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.73: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 14:10
 BLANK TEST 0.000 14:10
 INTERNAL STANDARD VERIFIED 14:10
 Xg = 0.081 (3.56%)
 EXTERNAL STANDARD 0.080 14:11
 X[1] = 0.0798 (-0.0008) (0.0033)
 BLANK TEST 0.000 14:12
 SUBJECT SAMPLE XXX 14:12
 X[1] = 0.0981 (-0.0133) (0.0011)

Interference Detected

COB



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100685

 Date: 09/30/2015
 Time: 14:17:57

SUBJECT NAME:
 TEST TEST
 LICENSE #: INT-IPA

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

DEPT/AGENCY:
 AAA1

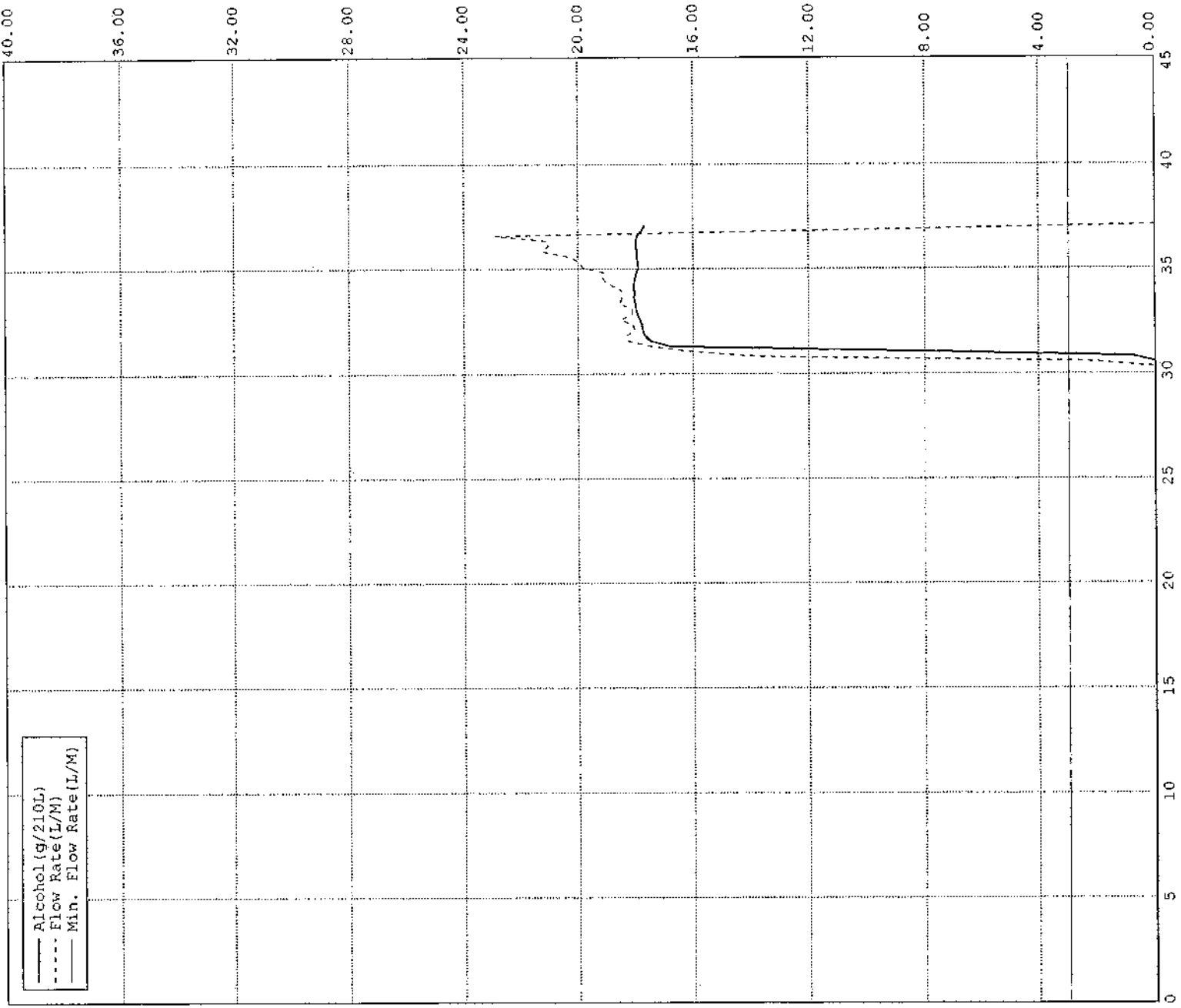
CASE/REPORT: 15-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.080
 TARGET AT 29.73: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:18
BLANK TEST	0.000	14:19
INTERNAL STANDARD	VERIFIED	14:19
Xq = 0.080 (2.78%)		
EXTERNAL STANDARD	0.080	14:19
X[1] = 0.0796 (-0.0004) (0.0043)		
BLANK TEST	0.000	14:20
SUBJECT SAMPLE	XXX	14:20
X[1] = 0.1089 (-0.0196) (0.0036)		

Interference Detected

COB



SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100685

 Date: 09/30/2015
 Time: 14:27:28

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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 29.73: 0.080
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:29
BLANK TEST	0.000	14:29
INTERNAL STANDARD	VERIFIED	14:29
Xq = 0.080 (2.11%)		
EXTERNAL STANDARD	0.079	14:29
X[1] = 0.0791 (-0.0011) (0.0036)		
BLANK TEST	0.000	14:30
SUBJECT SAMPLE (Vol=1.94L)	0.089	14:31
X[1] = 0.0890 (-0.0003) (0.0019)		
BLANK TEST	0.000	14:32
EXTERNAL STANDARD	0.079	14:32
X[1] = 0.0792 (-0.0004) (0.0034)		
BLANK TEST	0.000	14:33

Filter 2 avg = -0.0007
Filter 3 avg = 0.0007

COO

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100685

Date: 09/30/2015
Time: 13:56:20

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

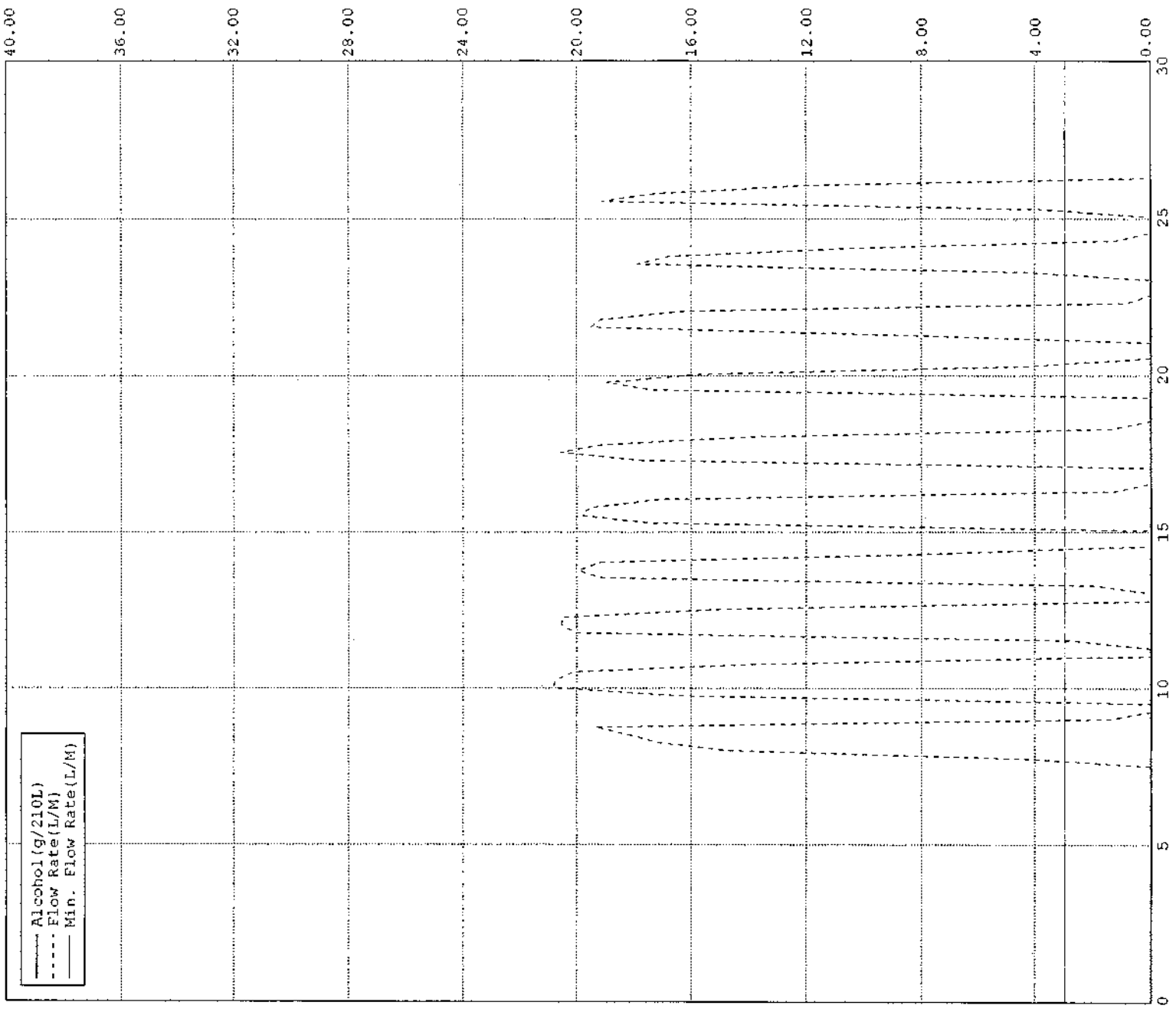
OPERATOR NAME:
COLLEEN S OBRYANT
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.72: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 13:57
BLANK TEST 0.000 13:58
INTERNAL STANDARD VERIFIED 13:58
EXTERNAL STANDARD 0.080 13:58
BLANK TEST 0.000 13:59
SUBJECT SAMPLE XXX 13:59

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100685

Date: 09/30/2015
Time: 13:36:07

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

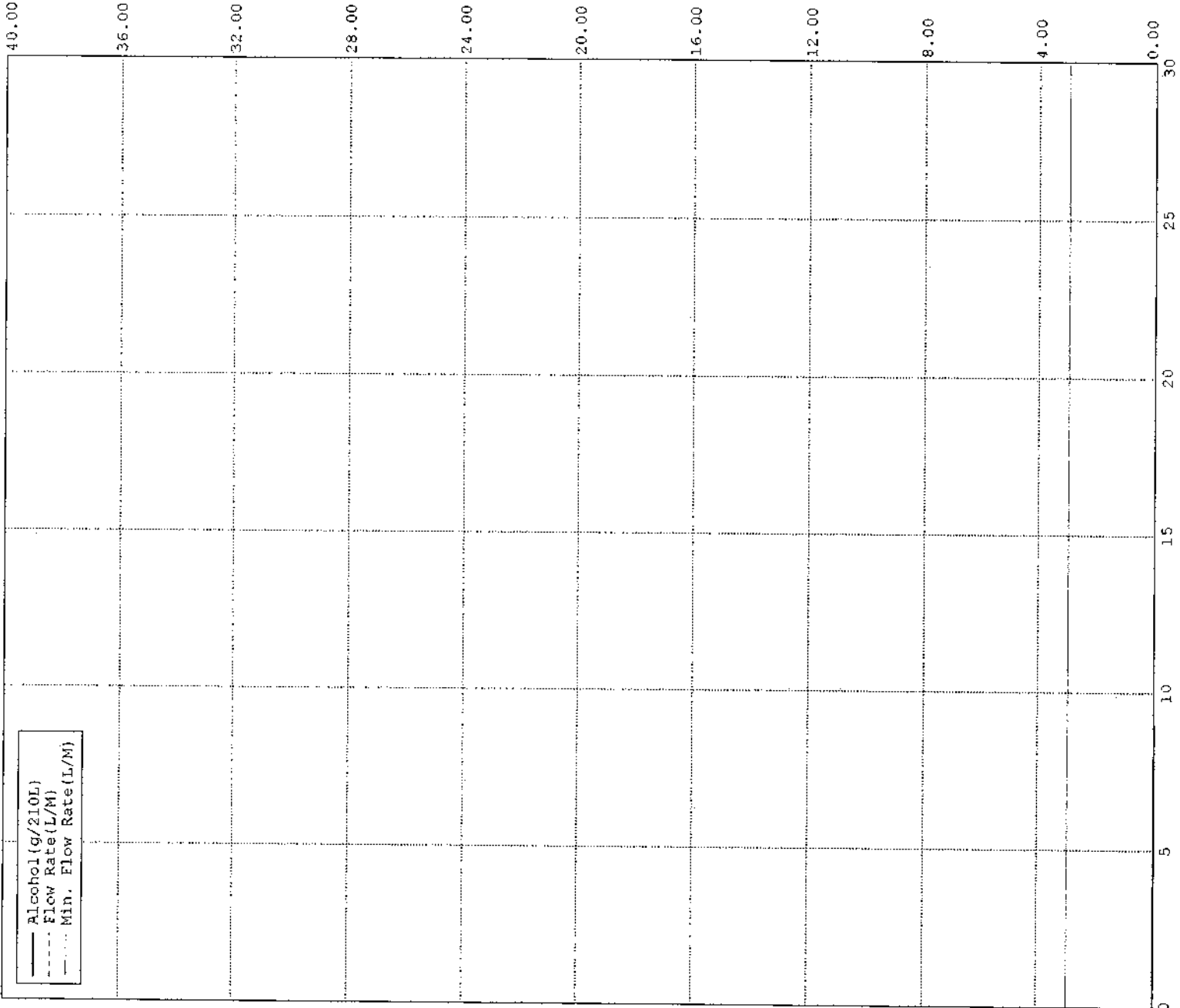
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.71: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 13:38
BLANK TEST 0.000 13:38
INTERNAL STANDARD VERIFIED 13:39
EXTERNAL STANDARD 0.080 13:39
BLANK TEST 0.000 13:40

RFI DETECTED

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100685

Date: 09/30/2015
Time: 14:57:52

SUBJECT NAME:
TEST TEST
LICENSE #: NON-DRINKING

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 29.76: 0.080
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 14:59
BLANK TEST 0.000 14:59
INTERNAL STANDARD VERIFIED 14:59
EXTERNAL STANDARD 0.079 14:59
BLANK TEST 0.000 15:00
SUBJECT SAMPLE (Vol=2.16L) 0.000 15:00
BLANK TEST 0.000 15:01
EXTERNAL STANDARD 0.080 15:01
BLANK TEST 0.000 15:02

