

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 100721 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 1.5 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 13220 Exp 8/5/15

1. Simulator S/N DE4162 Date Calibrated 1/19/15

vi. 0.300g/210L Mnf Guth Lot 14270 Exp 12/2/15-16 ^{008 5/1/15}

1. Simulator S/N DE6267 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 DE4163 Date Calibrated 1/19/15

ii. Isopropanol - Mnf Buth 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 DE4178 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 8/4/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/03/2015
Time: 14:43:34

VERSIONS

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

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.75 V PASSED
(1.02 V - 2.38 V)
Cooler Voltage = 1.62 V PASSED
(1.01 V - 2.35 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 539 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 5.038 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 = 0.103 1.47% (0.00% - 4.00%)

Technician Screen

Joint Base Elmendorf - Richardson
DATAMASTER dmt: 100421

Date: 08/03/2015
Time: 3:12 PM

Temperatures (°C)
Sample Cell: 48.1°C
Breath Tube: 46.8°C

Current Barometer 29.8 in
Volume (Ltr) 1.49

Settings
Lamp: 1.78 V
Bias: 80 V
Cooler: 1.68 V
Chopper: 536 Hz

Voltages (V)
Flow: 1.08 V
Detector: -0.090 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 07/28/2011
Time: 14:46:11

OPERATOR NAME:
CHARLES FOSTER
CERTIFICATE #: 7734

LOT #: 11050
BOTTLE #: 705
EXPIRATION: 04/06/2013

Ca = 0.1000
CAL = 1.000419 0.800 <= CAL < 1.200
b1 = 0.0004 0.0000 <= b1 < 0.0040
b2 = 0.0027 0.0010 <= b2 < 0.0100
b3 = 0.0007 0.0000 <= b3 < 0.0040
Xq = 0.1013 0.0500 <= Xq < 0.2000
a21 = 1.117763 1.050 <= a21 < 1.300
a31 = 0.453616 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/03/2015
Time: 15:14:21

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

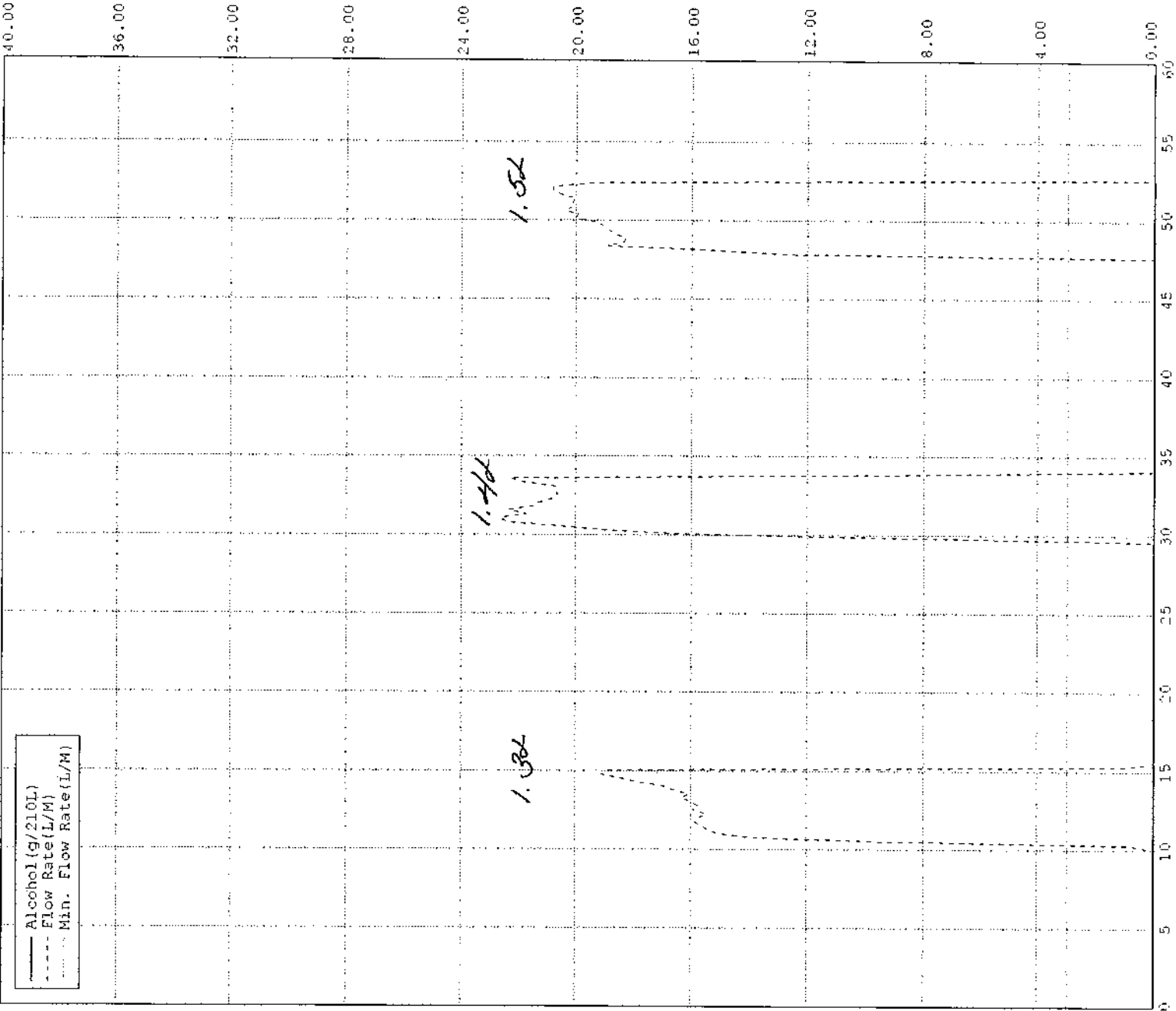
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.80: 0.080
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	15:15
BLANK TEST	0.000	15:15
INTERNAL STANDARD	VERIFIED	15:15
INTERNAL STANDARD	0.080	15:15
BLANK TEST	0.000	15:16
SUBJECT SAMPLE (Vol=1.51L)	0.000	15:17
BLANK TEST	0.000	15:18
EXTERNAL STANDARD	0.081	15:18
BLANK TEST	0.000	15:19

CS



LINEARITY CHECK

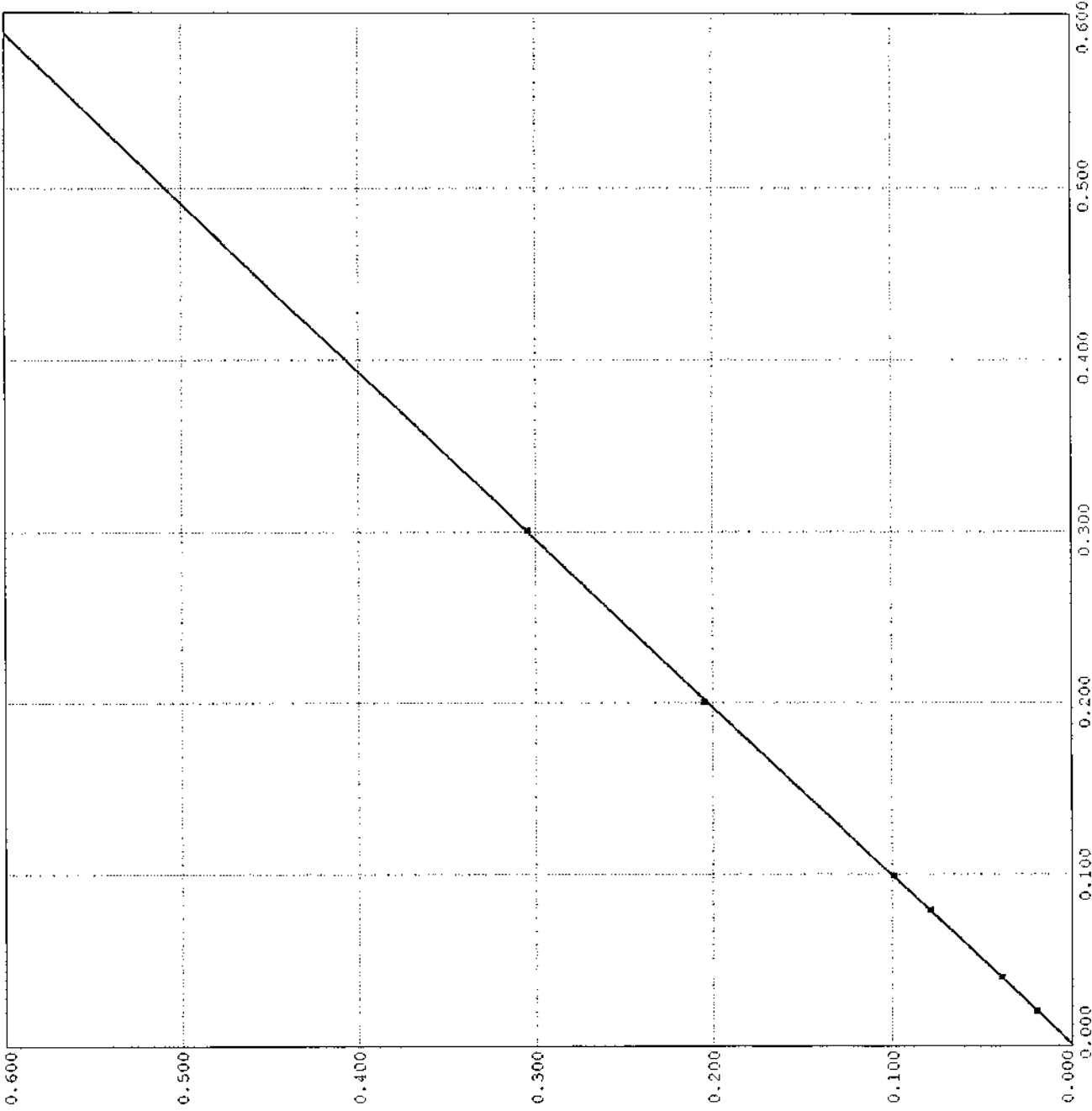
Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/04/2015
Time: 09:12:09

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0204	0.0005
0.040	0.0400	0.0000
0.079	0.0798	0.0004
0.099	0.0998	0.0004
0.200	0.2056	0.0005
0.300	0.3052	0.0004

SLOPE = 1.021932
R² = 0.999917



703

LINEARITY CHECK: Control Test 1

 Alaska Department of Public Safety
 DATAMASTER dmt: 100421

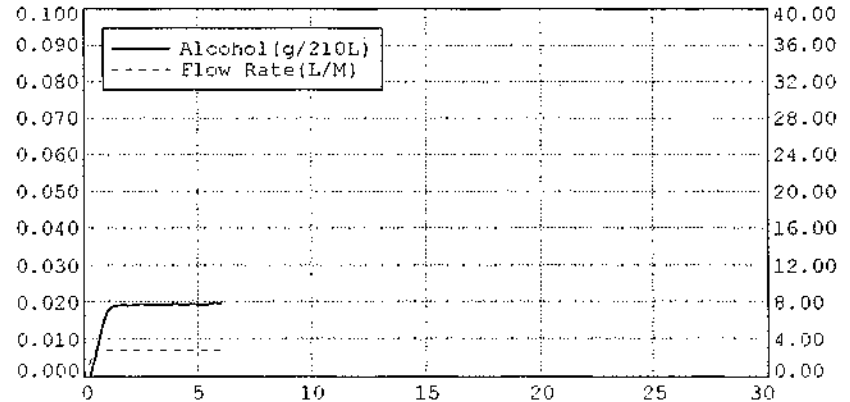
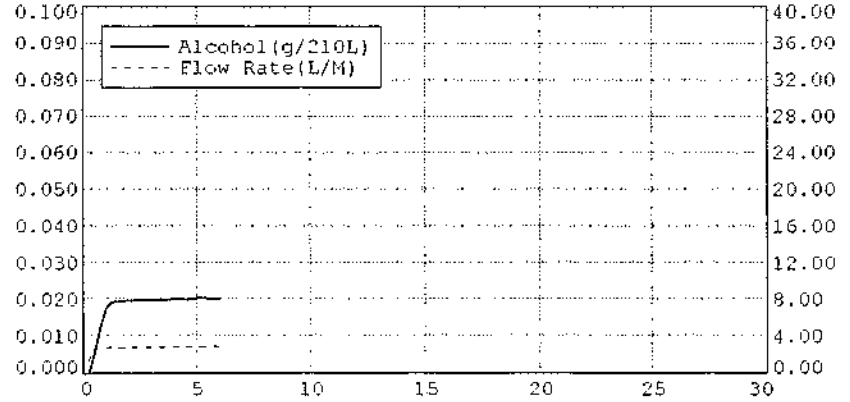
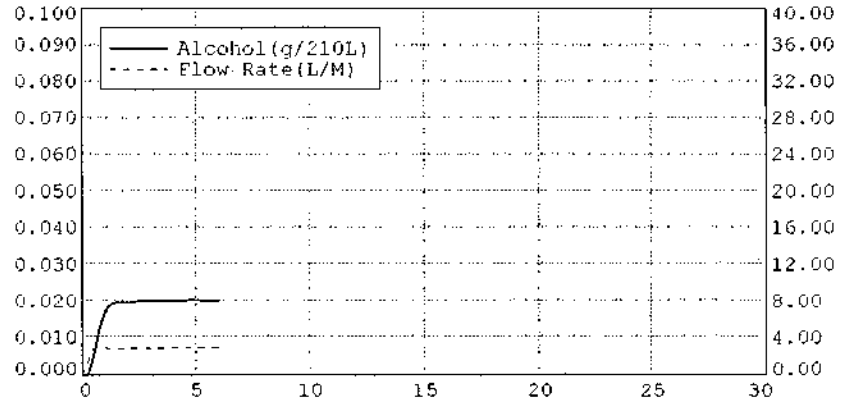
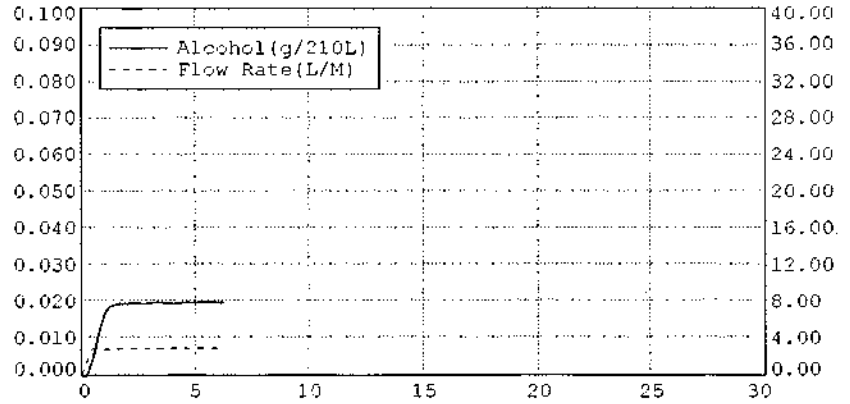
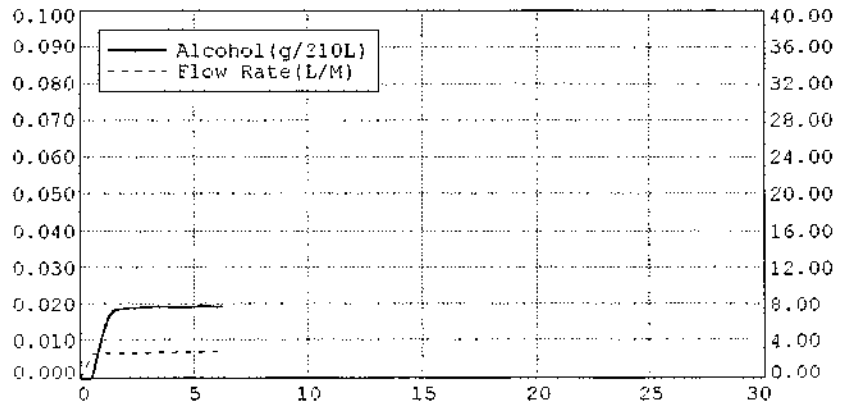
Date: 08/04/2015
 Time: 09:12:11

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.73: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 634 psi

BLANK TEST	0.000	09:20
INTERNAL STANDARD	VERIFIED	09:20
EXTERNAL STANDARD	0.020	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.020	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.021	09:22
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.021	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.020	09:24
BLANK TEST	0.000	09:25

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

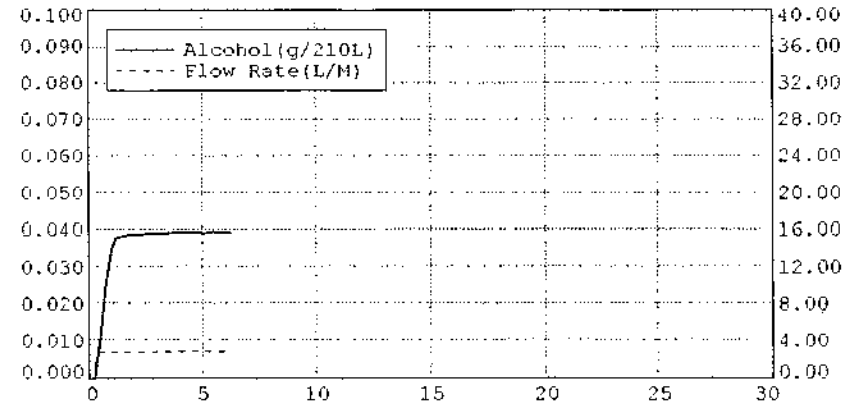
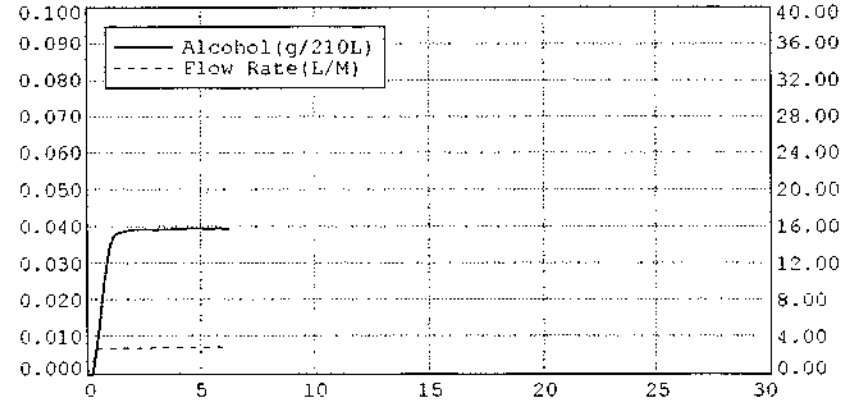
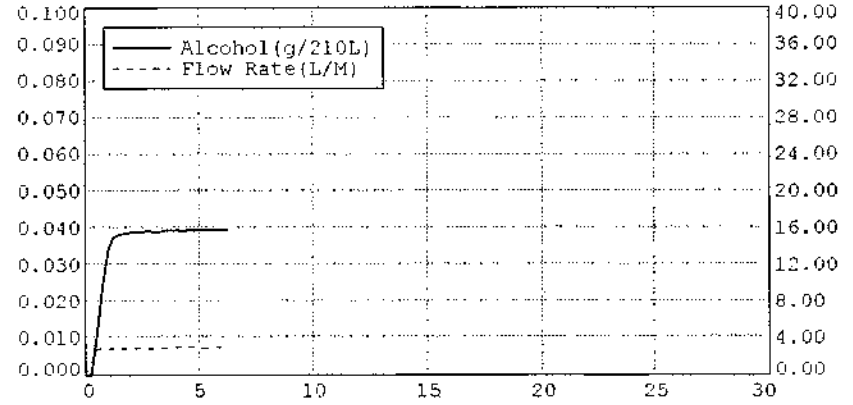
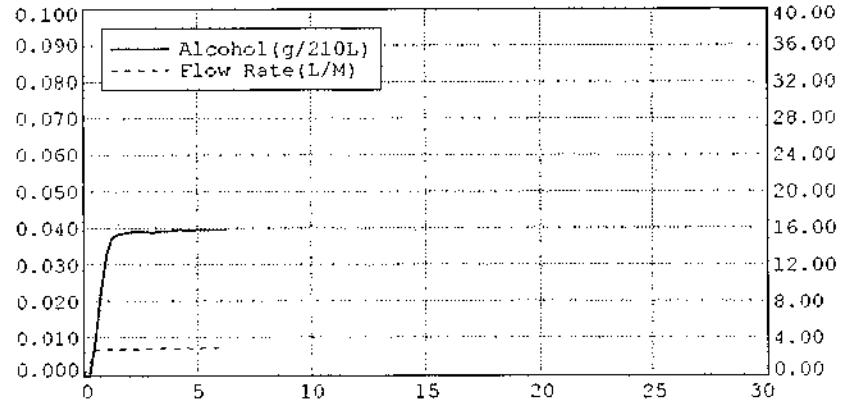
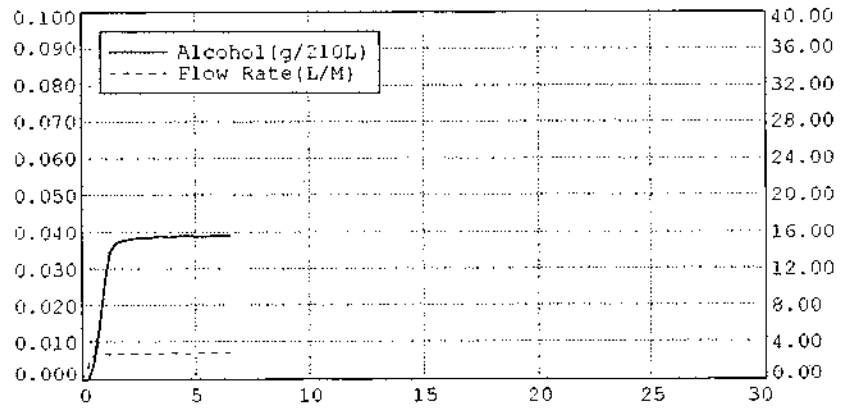
Date: 08/04/2015
 Time: 09:48:43

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.72: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 743 psi

BLANK TEST	0.000	09:49
INTERNAL STANDARD	VERIFIED	09:50
EXTERNAL STANDARD	0.040	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.040	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.040	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.040	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.040	09:54
BLANK TEST	0.000	09:55

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

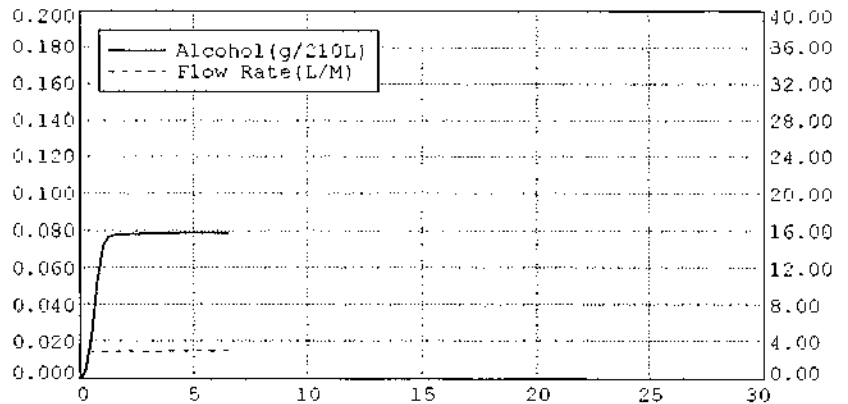
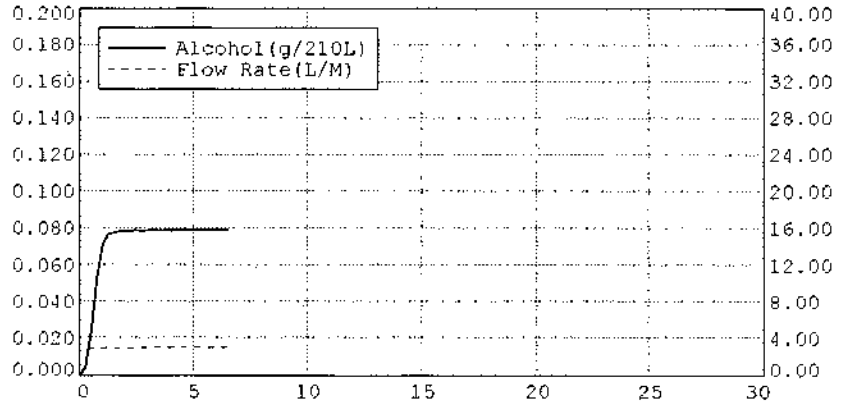
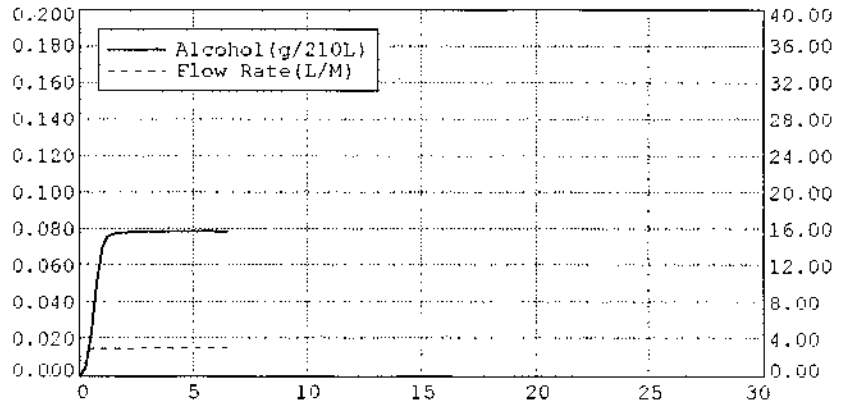
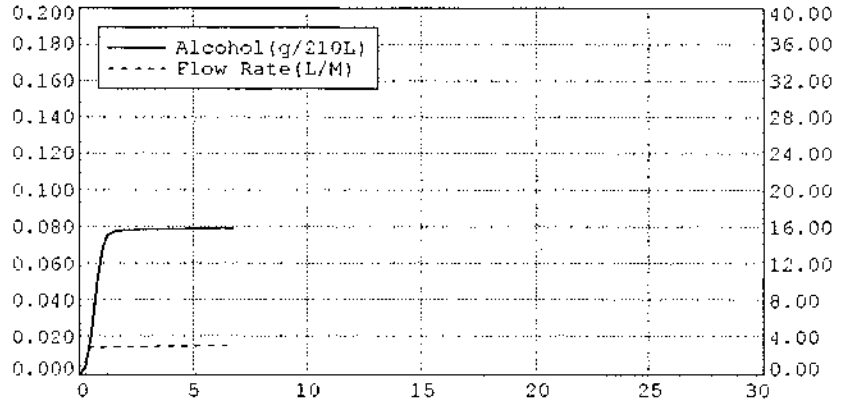
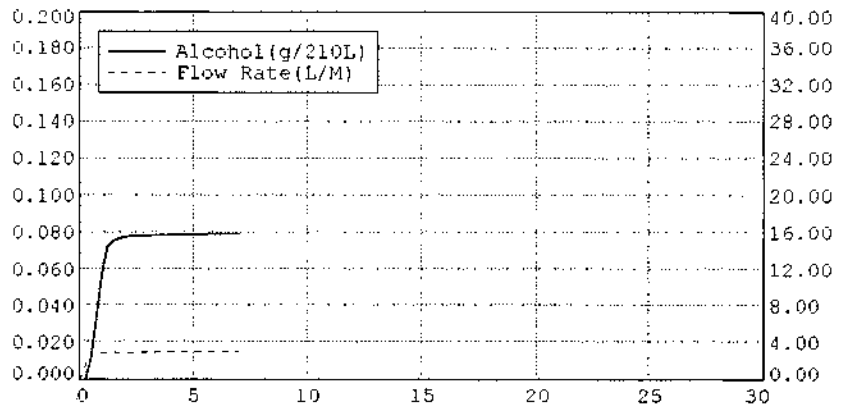
Date: 08/04/2015
 Time: 09:56:32

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.71: 0.079
 LOT #: 09214080A2
 EXPIRATION: 05/01/2016
 TANK PRESSURE: 1010 psi

BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
EXTERNAL STANDARD	0.080	09:58
BLANK TEST	0.000	09:58
EXTERNAL STANDARD	0.080	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.079	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.080	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.080	10:02
BLANK TEST	0.000	10:03

Average = 0.0798
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

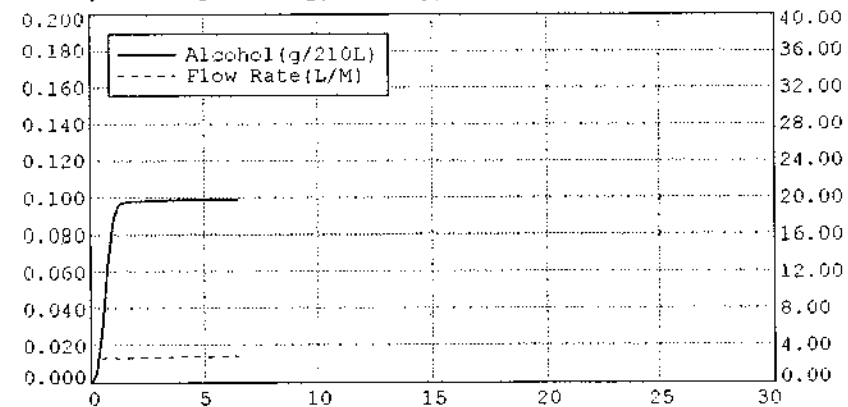
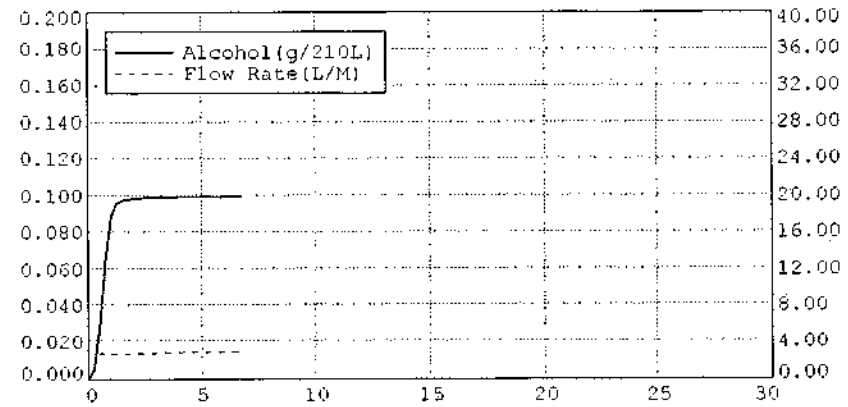
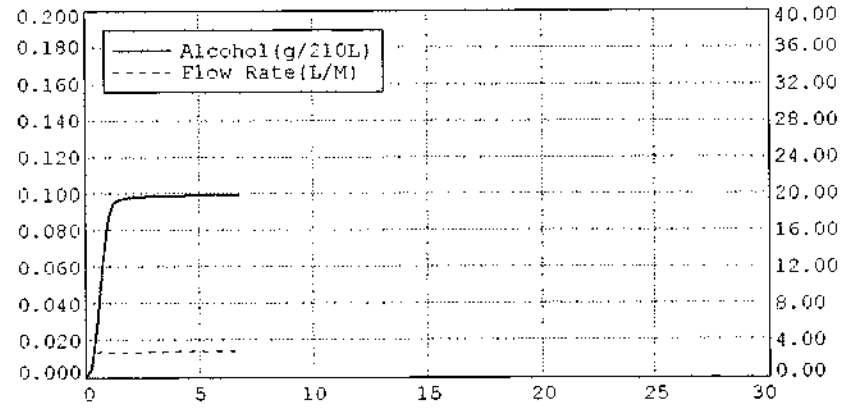
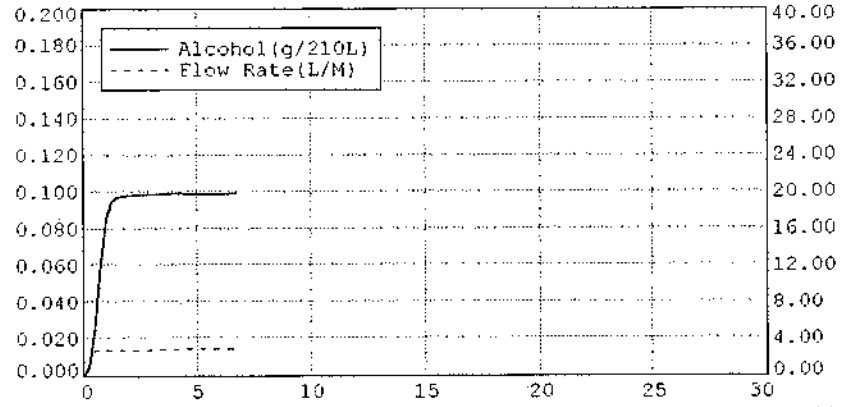
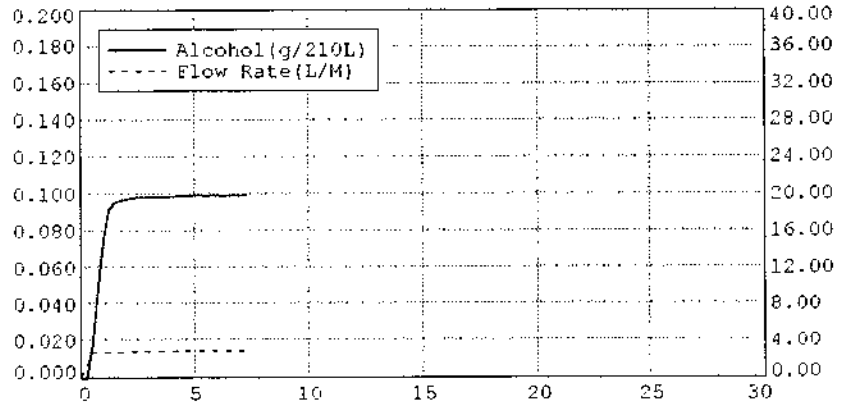
Date: 08/04/2015
 Time: 10:03:58

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.72: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 608 psi

BLANK TEST	0.000	10:05
INTERNAL STANDARD	VERIFIED	10:05
EXTERNAL STANDARD	0.100	10:05
BLANK TEST	0.000	10:06
EXTERNAL STANDARD	0.099	10:07
BLANK TEST	0.000	10:07
EXTERNAL STANDARD	0.100	10:08
BLANK TEST	0.000	10:09
EXTERNAL STANDARD	0.100	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.100	10:10
BLANK TEST	0.000	10:11

Average = 0.0998
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100421

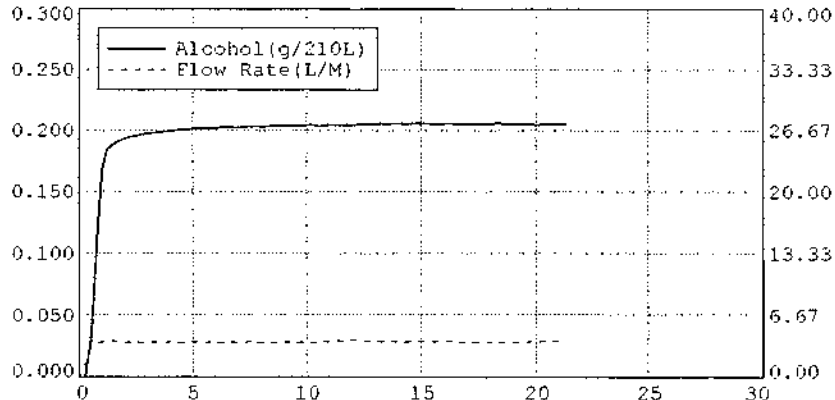
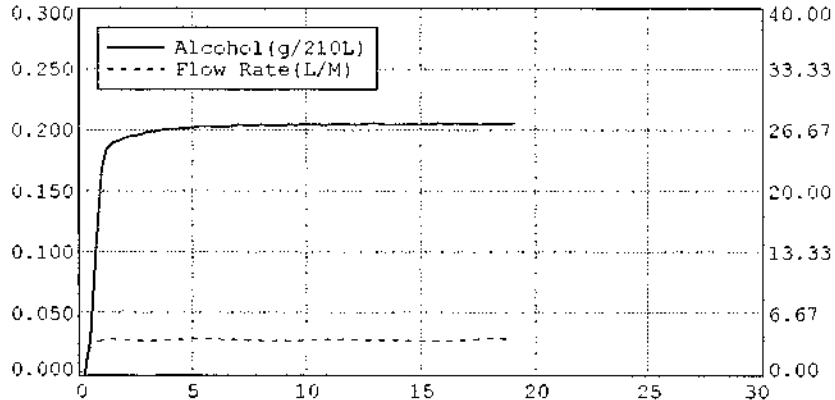
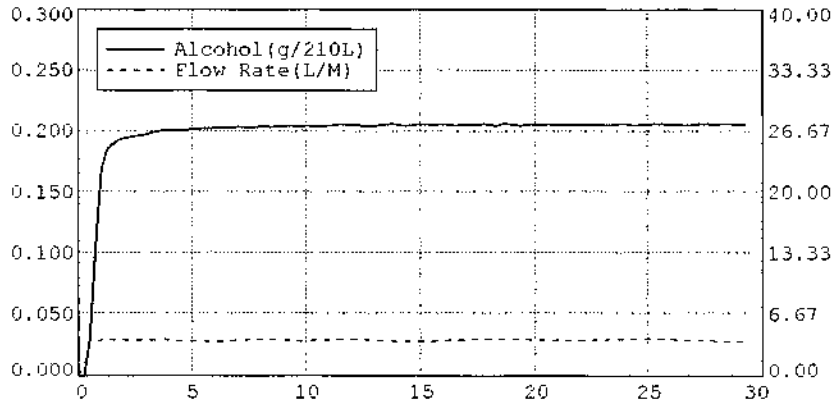
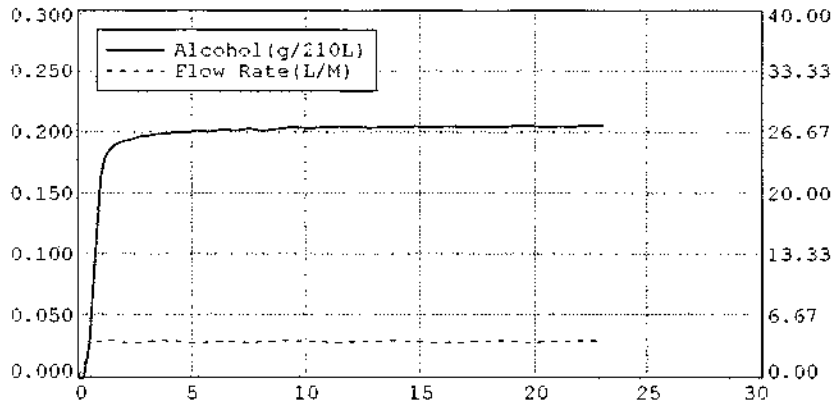
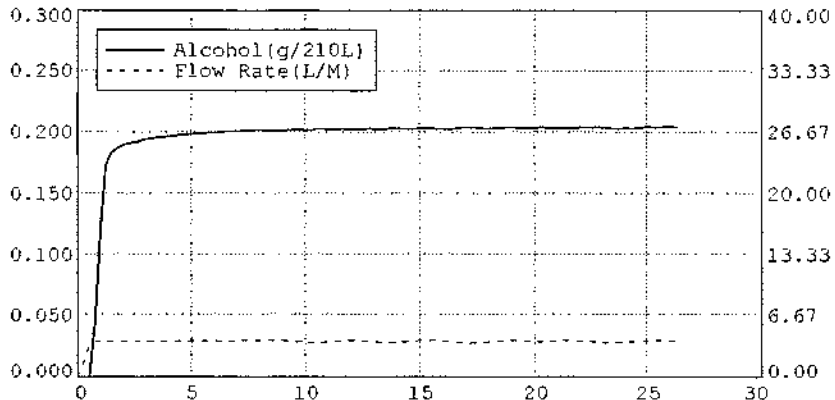
Date: 08/04/2015
 Time: 10:12:22

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:14
INTERNAL STANDARD	VERIFIED	10:14
EXTERNAL STANDARD	0.205	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.205	10:16
BLANK TEST	0.000	10:17
EXTERNAL STANDARD	0.206	10:18
BLANK TEST	0.000	10:19
EXTERNAL STANDARD	0.206	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.206	10:21
BLANK TEST	0.000	10:22

Average = 0.2056
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

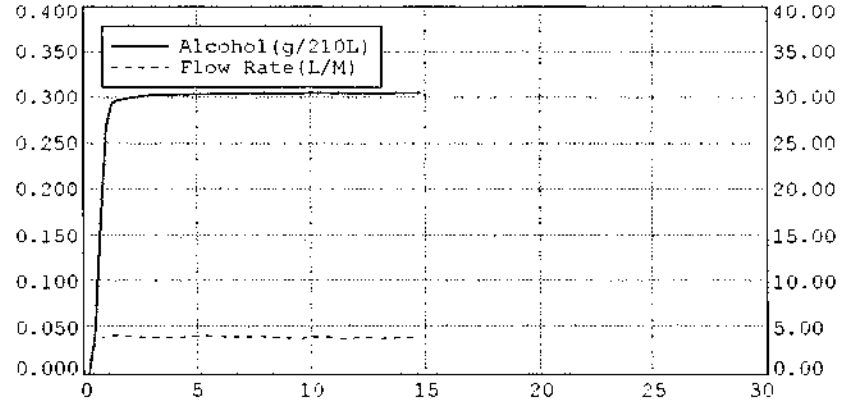
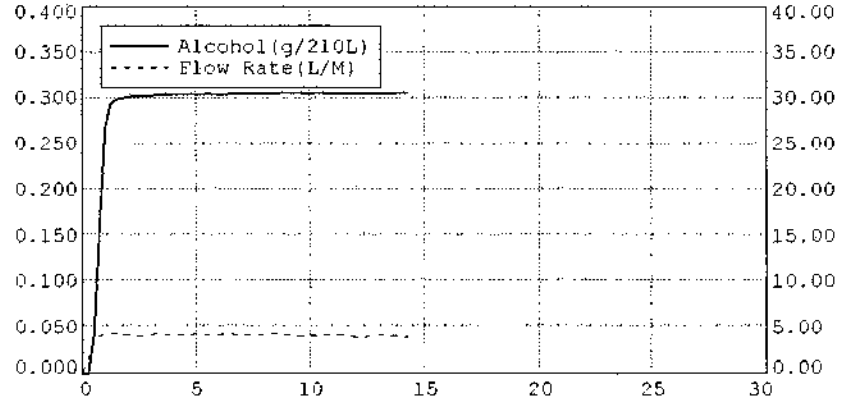
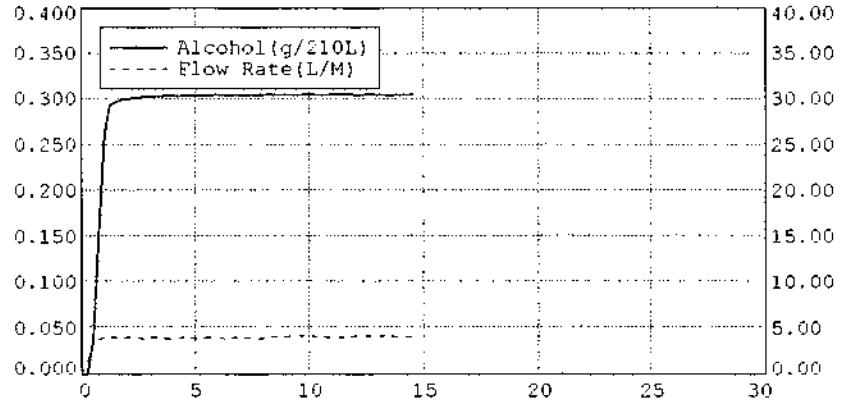
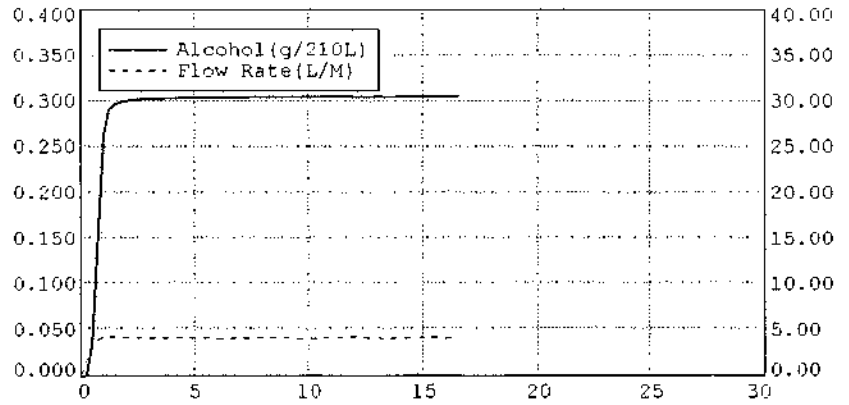
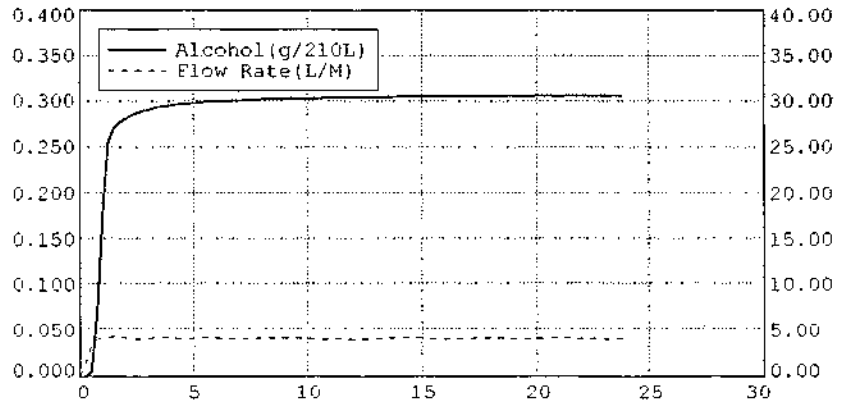
Alaska Department of Public Safety
 DATAMASTER dmt: 100421

Date: 08/04/2015
 Time: 10:23:23

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

BLANK TEST	0.000	10:24
INTERNAL STANDARD	VERIFIED	10:24
EXTERNAL STANDARD	0.306	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.305	10:26
BLANK TEST	0.000	10:27
EXTERNAL STANDARD	0.305	10:27
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.305	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.305	10:30
BLANK TEST	0.000	10:31

Average = 0.3052
 Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/04/2015
Time: 10:34:56

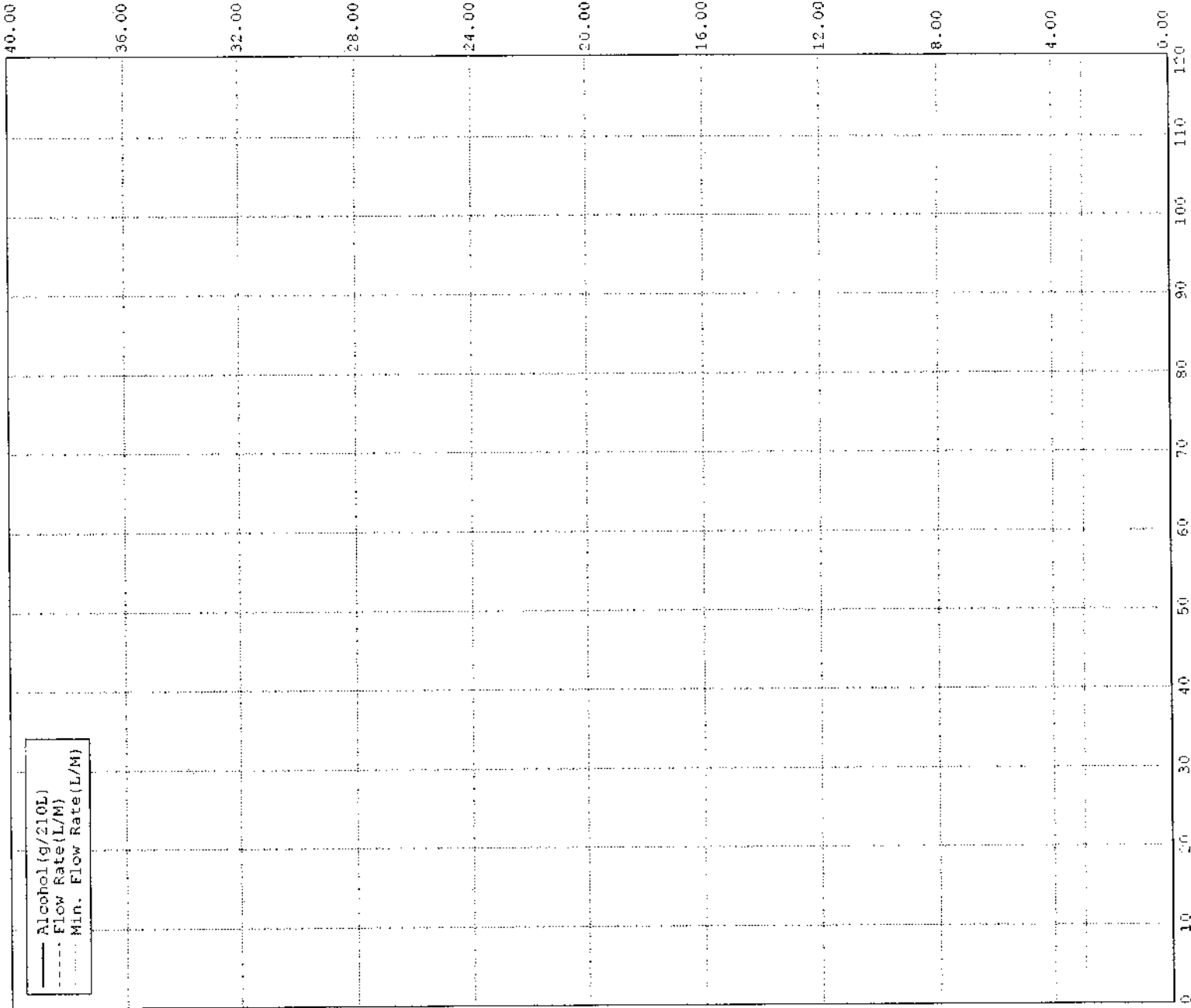
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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 #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 10:35
BLANK TEST 0.000 10:36
INTERNAL STANDARD VERIFIED 10:36
EXTERNAL STANDARD 0.080 10:36
BLANK TEST 0.000 10:37
SUBJECT SAMPLE INCOMPLETE 10:39



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/04/2015
Time: 11:24:48

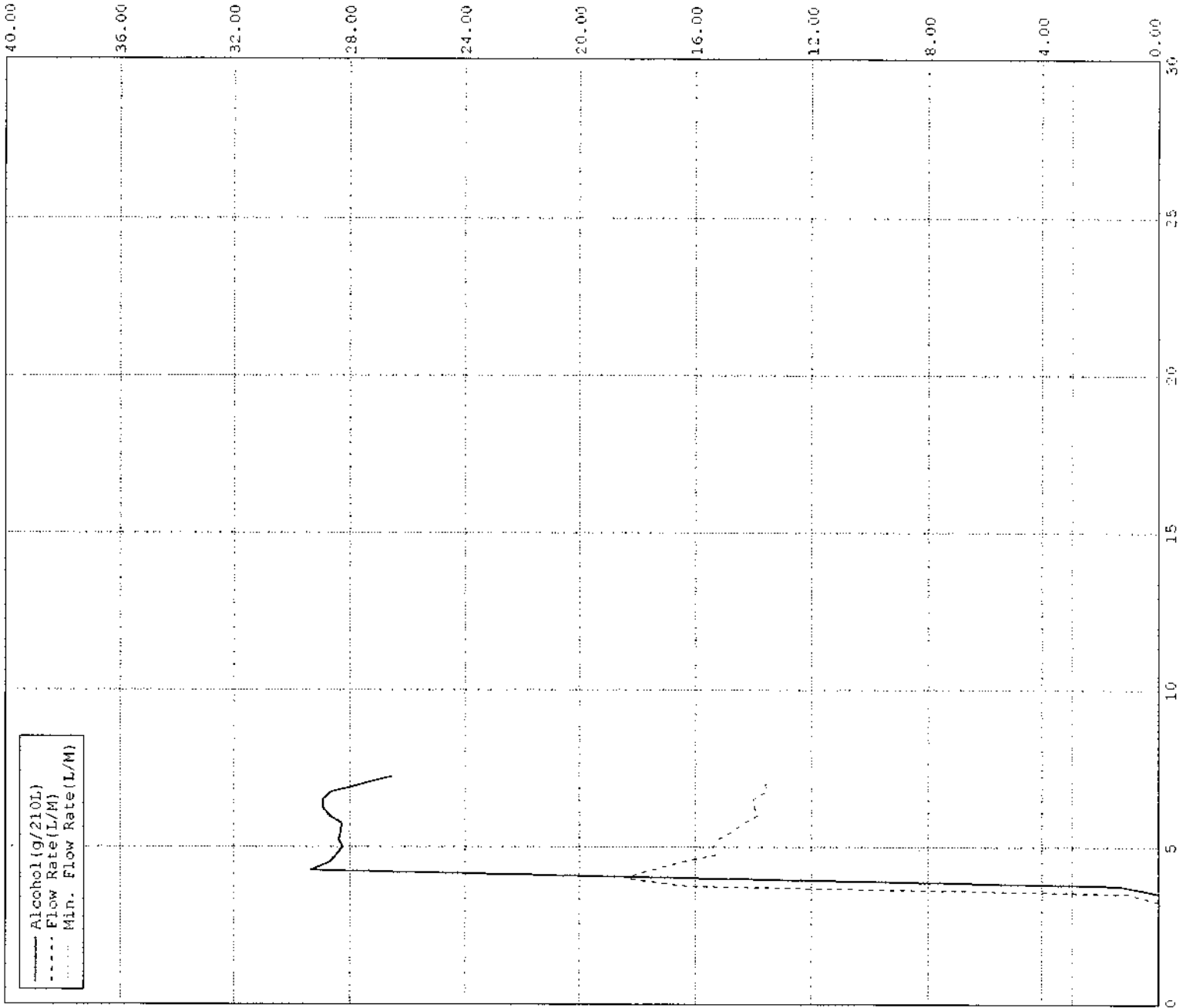
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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 #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	11:25
BLANK TEST	0.000	11:25
INTERNAL STANDARD	VERIFIED	11:26
EXTERNAL STANDARD	0.079	11:26
BLANK TEST	0.000	11:27
SUBJECT SAMPLE	INVALID	11:27



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/04/2015
Time: 12:44:40

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

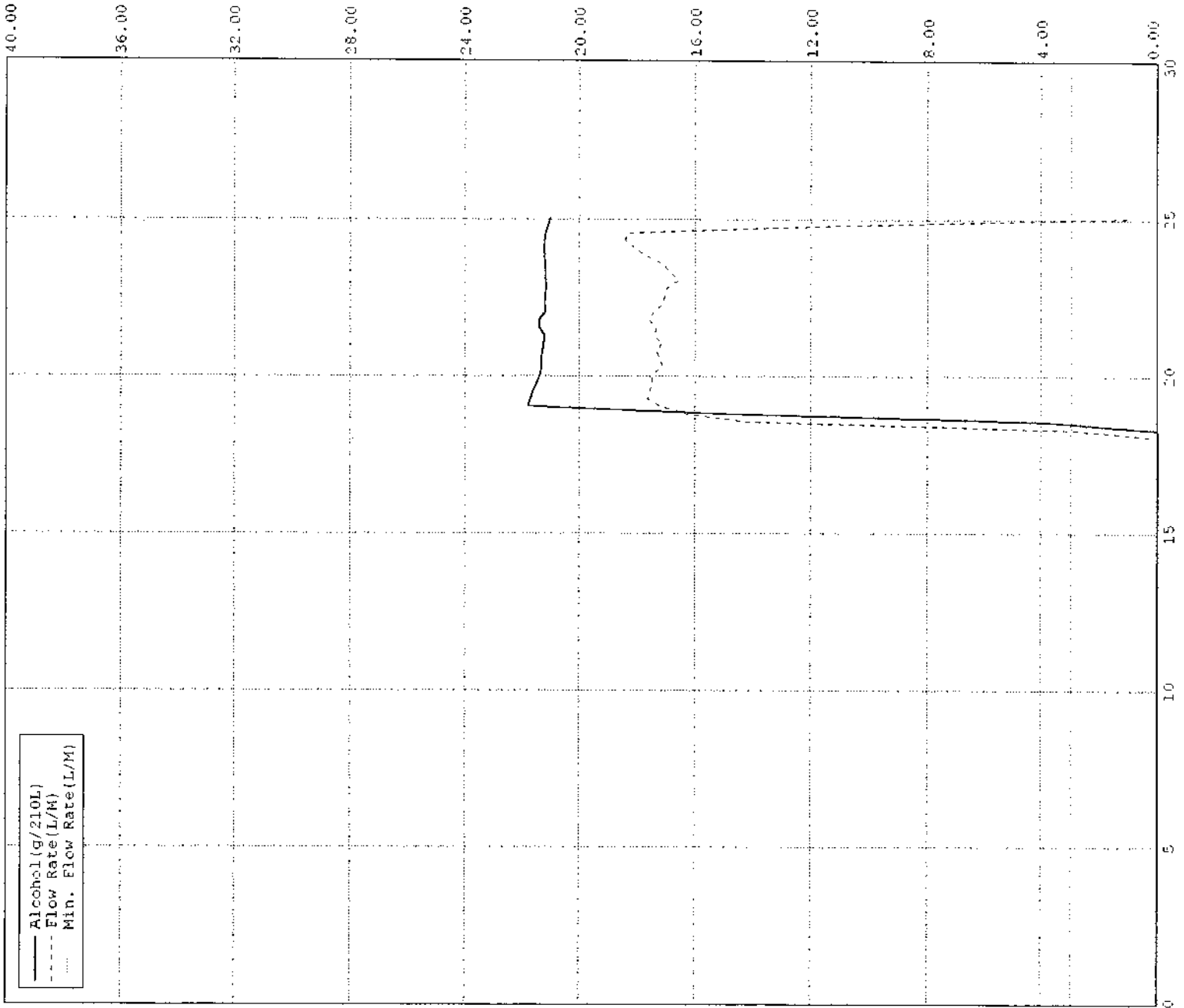
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.70: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:47
BLANK TEST	0.000	12:47
INTERNAL STANDARD	VERIFIED	12:47
Xg = 0.103 (1.30%)		
EXTERNAL STANDARD	0.080	12:48
X[1] = 0.0804 (0.0007) (0.0005)		
BLANK TEST	0.000	12:49
SUBJECT SAMPLE	XXX	12:49
X[1] = 0.1048 (-0.0175) (-0.0002)		

Interference Detected

Filter 2 avg = 0.0007
Filter 3 avg = 0.0013

CAB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/04/2015
Time: 12:54:02

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

DEPT/AGENCY:
AAA1

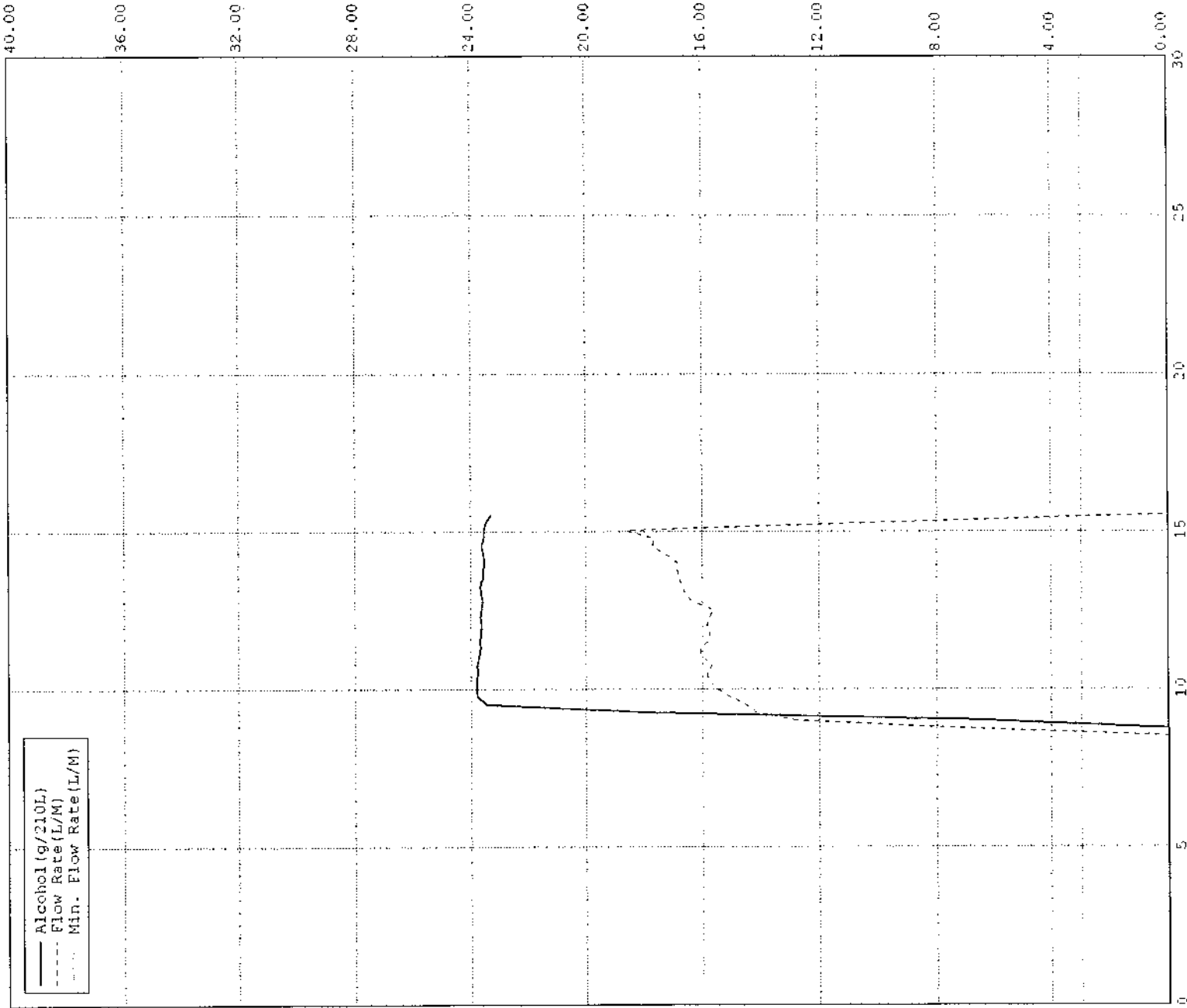
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	12:55
BLANK TEST	0.000	12:55
INTERNAL STANDARD	VERIFIED	12:55
Xq = 0.102 (0.52%)		
EXTERNAL STANDARD	0.080	12:55
X[1] = 0.0801 (0.0006)	(0.0015)	
BLANK TEST	0.000	12:56
SUBJECT SAMPLE	XXX	12:56
X[1] = 0.1163 (-0.0190)	(0.0009)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/04/2015
Time: 12:59:23

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEG

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

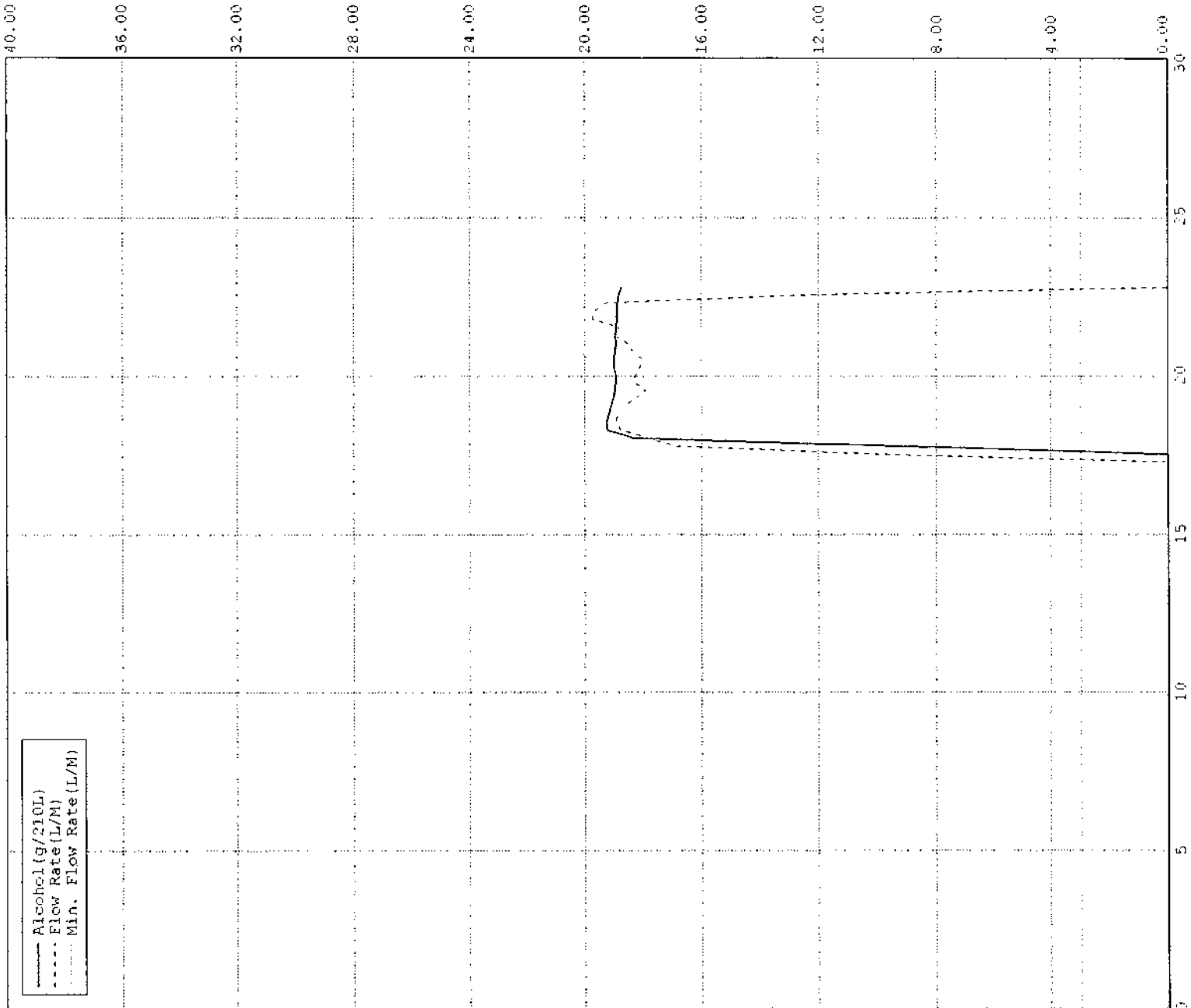
DEPT/AGENCY:
AAA1

CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:00
INTERNAL STANDARD	0.000	13:00
INTERNAL STANDARD	VERIFIED	13:00
Xq = 0.102 (0.95%)		
EXTERNAL STANDARD	0.080	13:00
X[1] = 0.0801 (0.0005)	(0.0018)	
BLANK TEST	0.000	13:01
SUBJECT SAMPLE (Vol=1.56L)	0.093	13:02
X[1] = 0.0934 (-0.0013)	(0.0004)	
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.080	13:03
X[1] = 0.0798 (0.0009)	(0.0015)	
BLANK TEST	0.000	13:04



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100421

Date: 08/04/2015
Time: 13:07:01

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

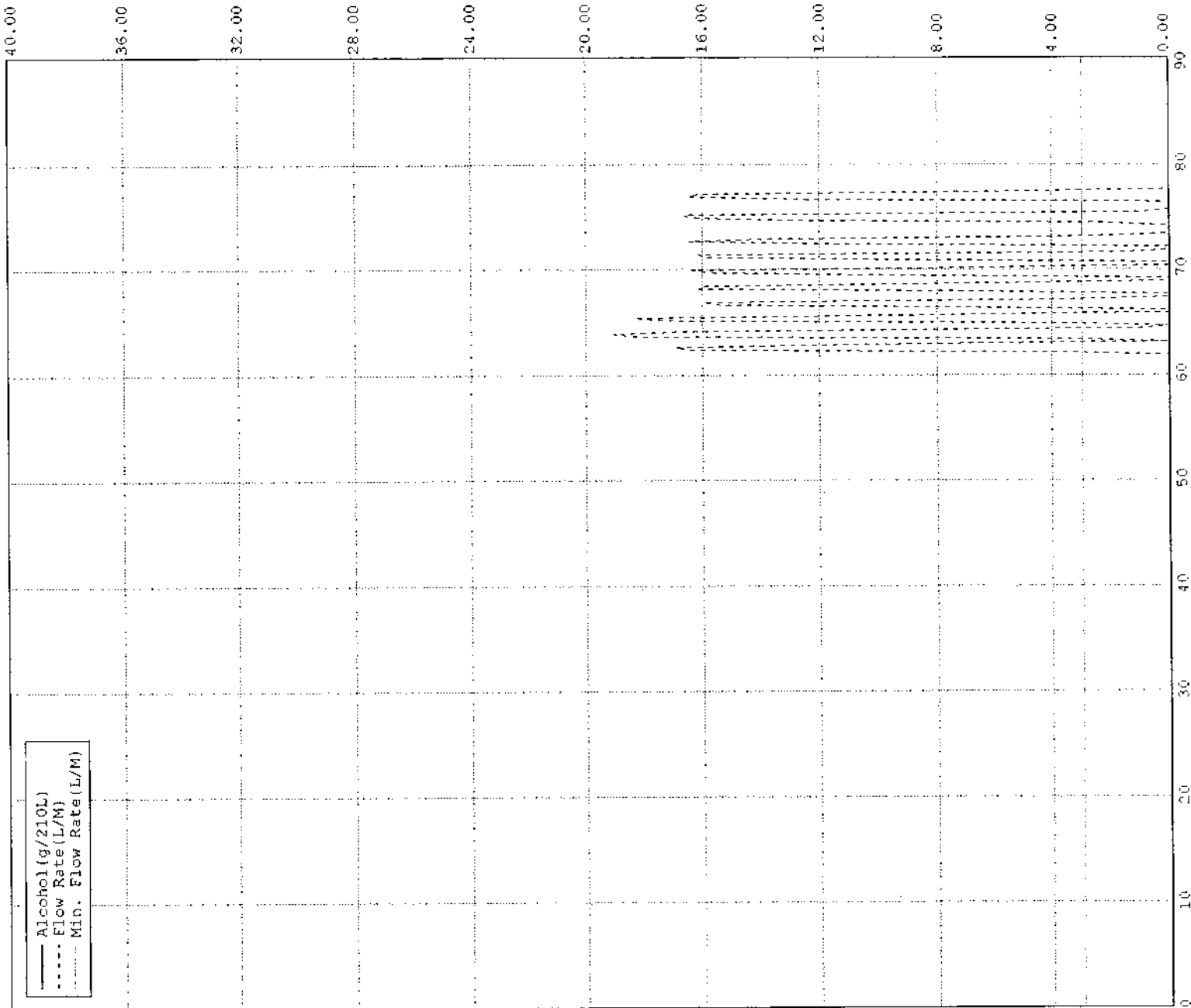
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 13:08
BLANK TEST 0.000 13:08
INTERNAL STANDARD VERIFIED 13:08
EXTERNAL STANDARD 0.081 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: 100421

Date: 08/04/2015
Time: 13:12:48

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

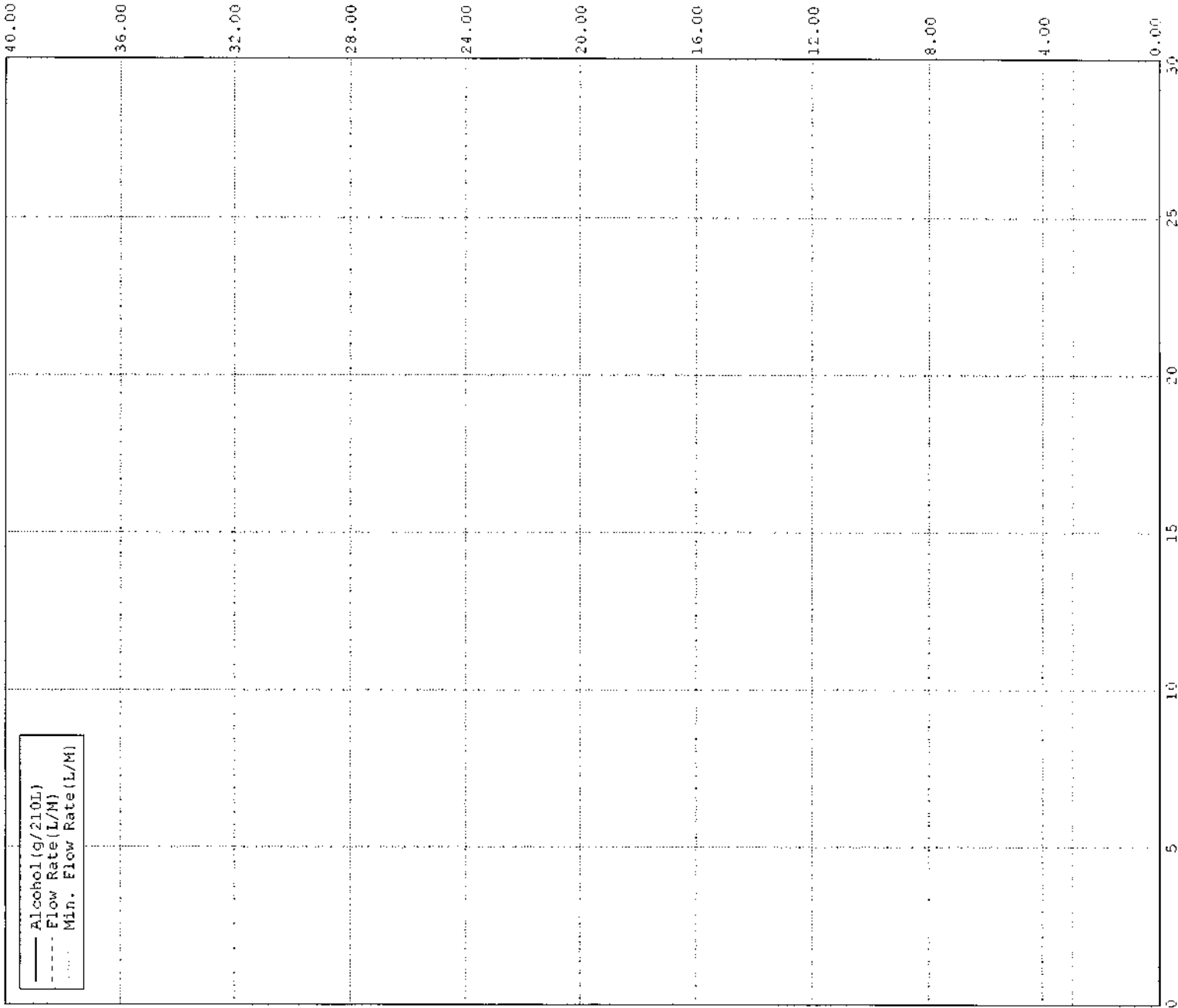
EXTERNAL STANDARD INFORMATION

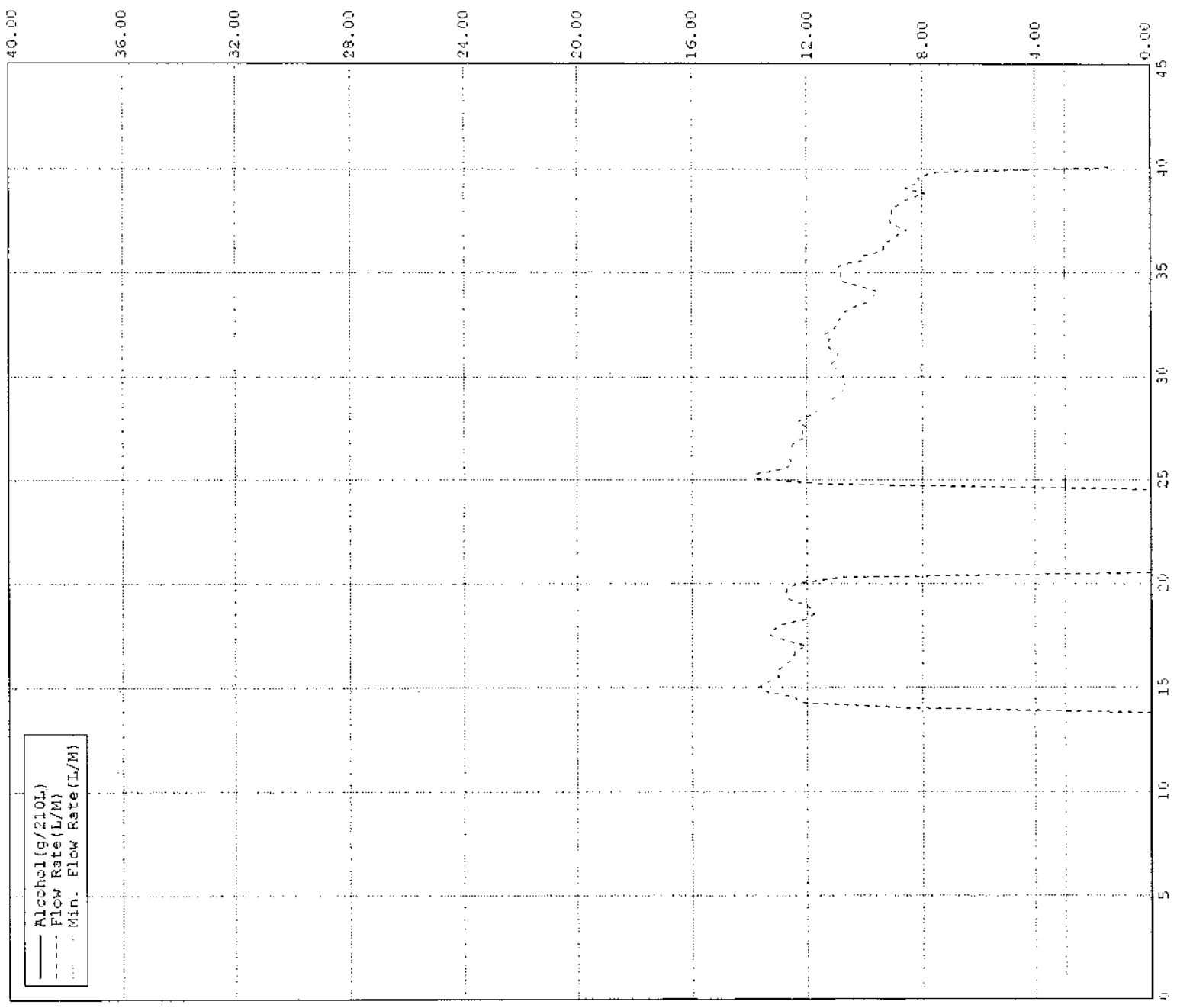
NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 09214080A2
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 13:14
BLANK TEST 0.000 13:14
INTERNAL STANDARD VERIFIED 13:14
EXTERNAL STANDARD 0.080 13:14
BLANK TEST 0.000 13:15

RFI DETECTED

CB





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100421

 Date: 08/04/2015
 Time: 13:32:13

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

OPERATOR NAME:
 COLLEEN S OBRYANT
 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 #: 09214080A2
 EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	13:33
BLANK TEST	0.000	13:34
INTERNAL STANDARD	VERIFIED	13:34
EXTERNAL STANDARD	0.080	13:34
BLANK TEST	0.000	13:35
SUBJECT SAMPLE (Vol=2.71L)	0.000	13:36
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.081	13:37
BLANK TEST	0.000	13:38

CS