

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 100411 Analyst C. 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 07214080A1 Exp 4/1/16
- 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 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 1/19/2015
- 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 8/4/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 08/03/2015
Time: 14:41:31

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.82 V PASSED
(1.10 V - 2.58 V)
Cooler Voltage = 1.77 V PASSED
(1.06 V - 2.48 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 537 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.8 in

PUMP INFO

Flow Rate = 5.200 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 = 0.087 0.91% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100411

Date: 08/03/2015

Time: 3:05 PM

Temperatures (°C)

Sample Cell: 48.9°C

Breath Tube: 48.1°C

Current Barometer 29.8 in

Volume (Ltr) 1.55

Settings

Lamp: 1.82 V

Bias: 80 V

Cooler: 1.80 V

Chopper: 536 Hz

Voltages (V)

Flow: 1.04 V

Detector: 0.056 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 07/06/2015
Time: 12:08:31

OPERATOR NAME:
M M M
CERTIFICATE #: GUTH 2100, DR7001, 34.0C

Ca = 0.1010
CAL = 1.001690 0.800 <= CAL < 1.200
b1 = 0.0002 0.0000 <= b1 < 0.0040
b2 = 0.0032 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0861 0.0500 <= Xq < 0.2000
a21 = 1.123352 1.050 <= a21 < 1.300
a31 = 0.462705 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 08/03/2015
Time: 15:17:32

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

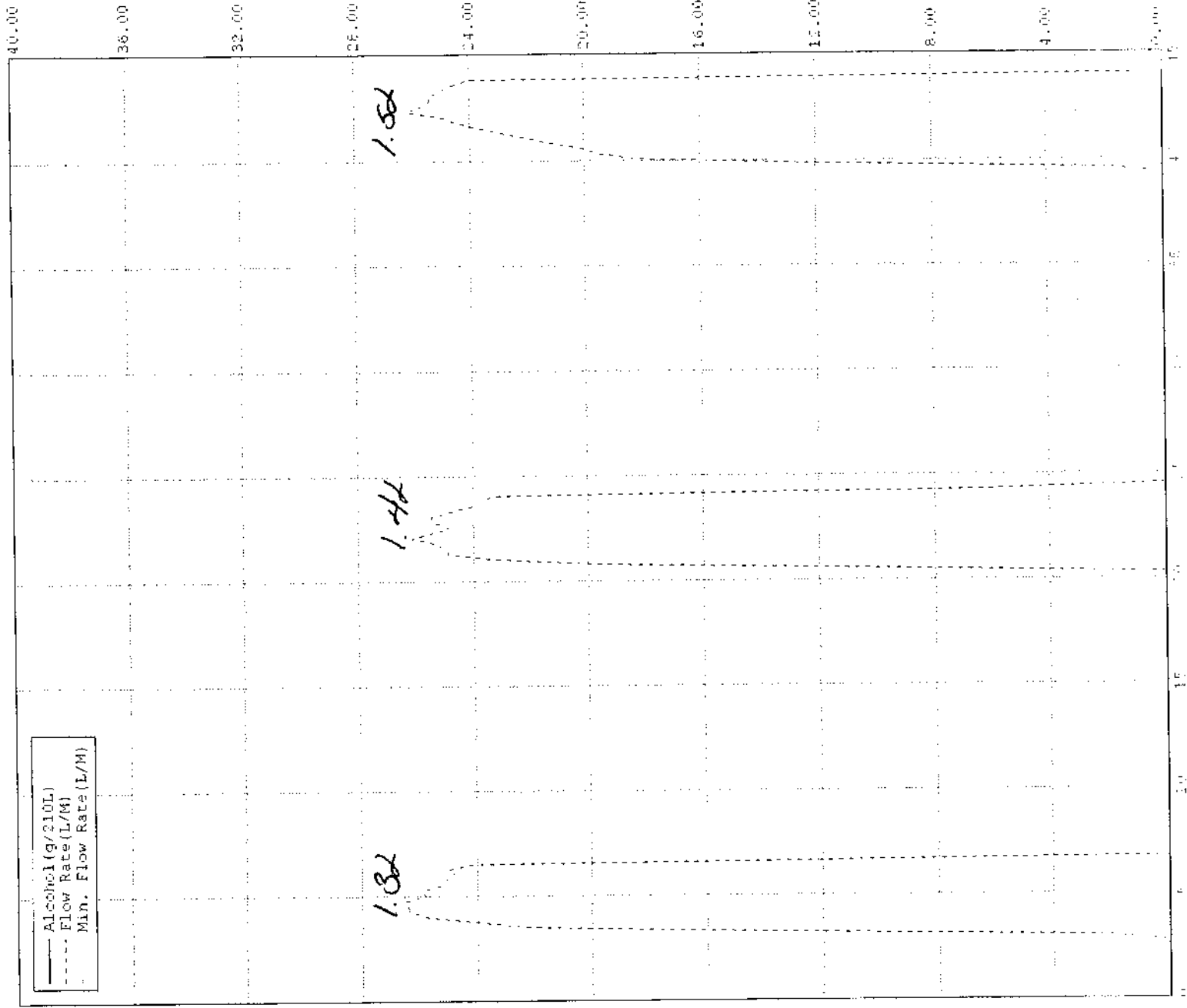
OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.81: 0.080
LOT #: 07214080A1
EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK	PASSED	15:20
BLANK TEST	0.000	15:20
INTERNAL STANDARD	VERIFIED	15:20
EXTERNAL STANDARD	0.080	15:20
BLANK TEST	0.000	15:21
SUBJECT SAMPLE (Vol=1.61L)	0.000	15:22
BLANK TEST	0.000	15:23
EXTERNAL STANDARD	0.080	15:23
BLANK TEST	0.000	15:24

CSB



LINEARITY CHECK

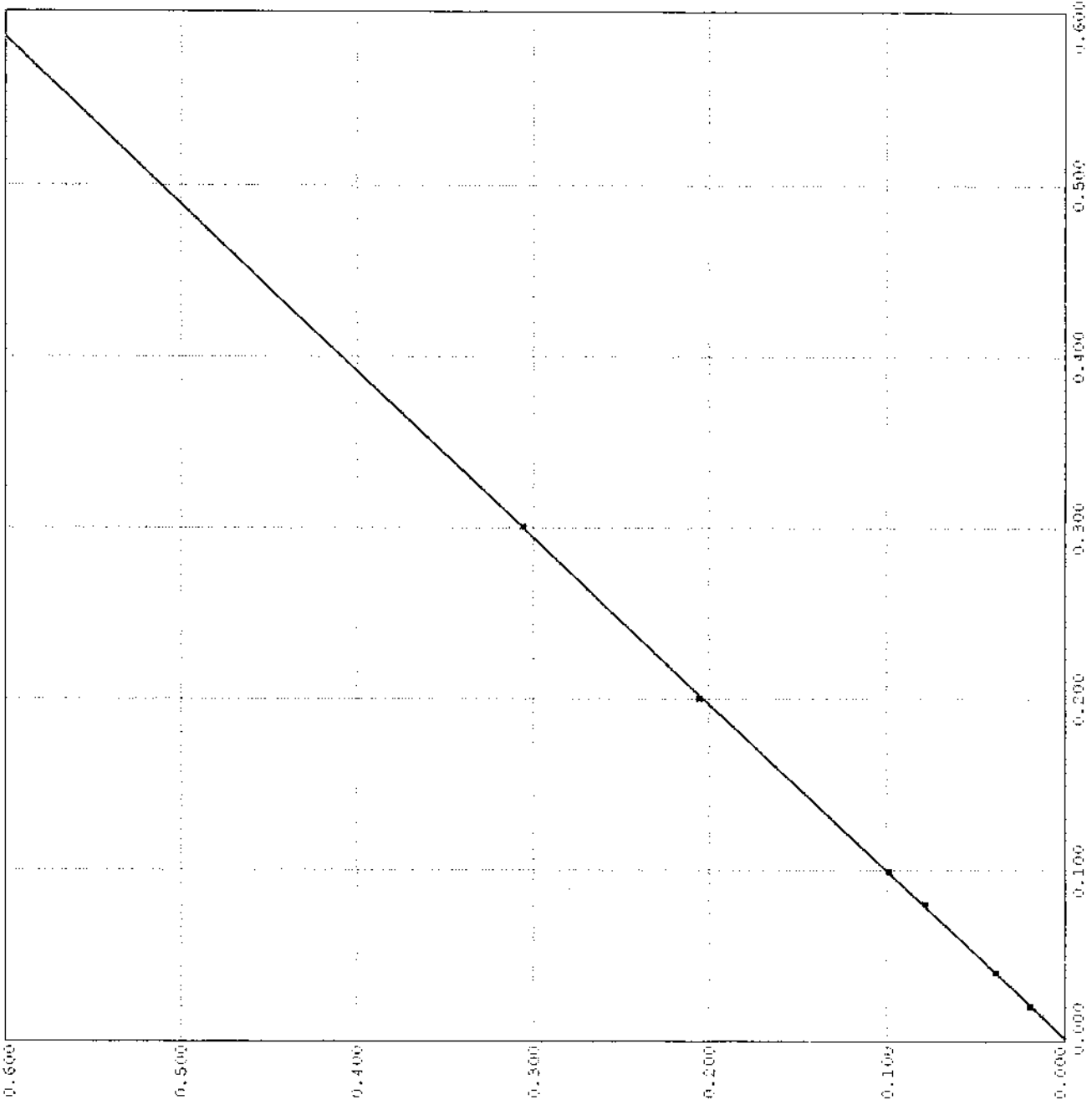
Alaska Department of Public Safety
 DATAMASTER dmt: 100411

Date: 08/04/2015
 Time: 08:57:00

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0204	0.0005
0.040	0.0398	0.0004
0.080	0.0796	0.0005
0.099	0.0996	0.0005
0.200	0.2062	0.0004
0.300	0.3064	0.0005

SLOPE = 1.027741
 R² = 0.999868



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

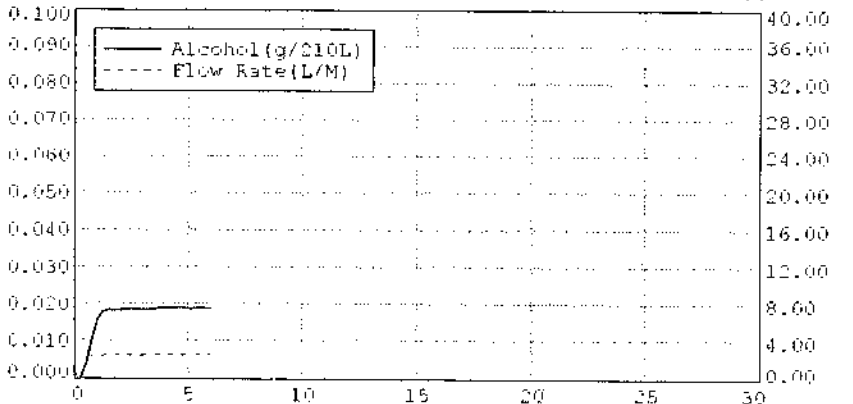
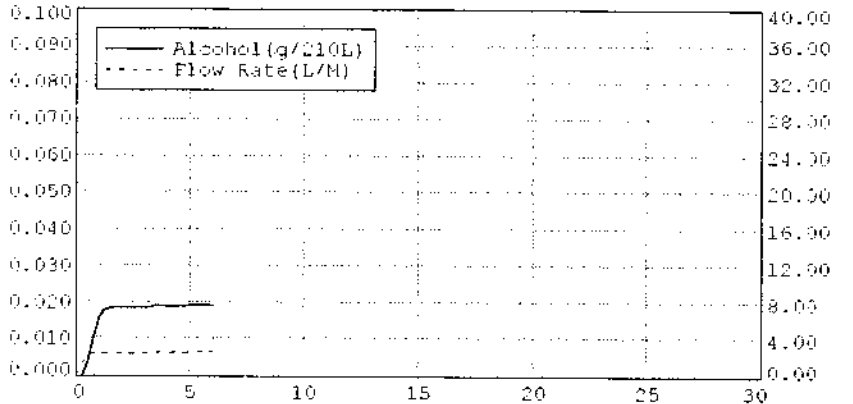
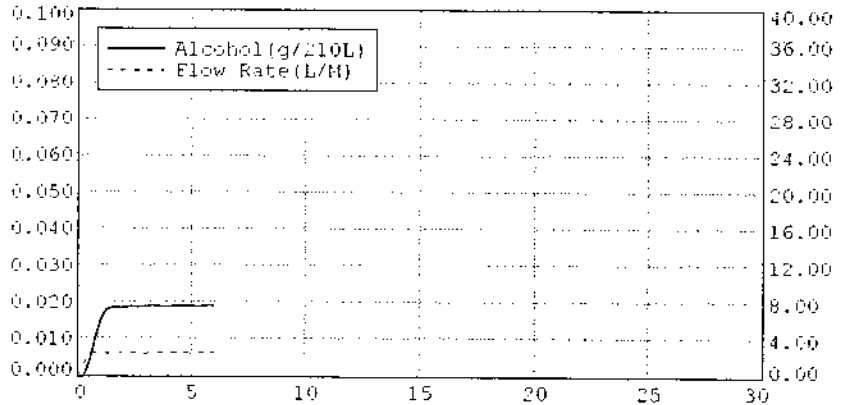
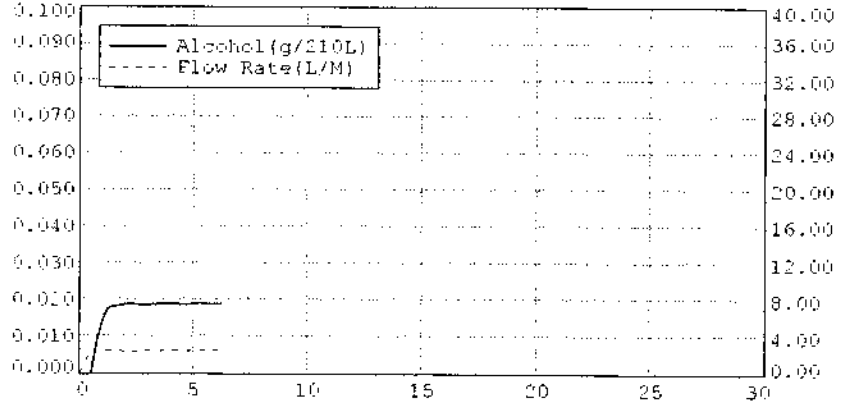
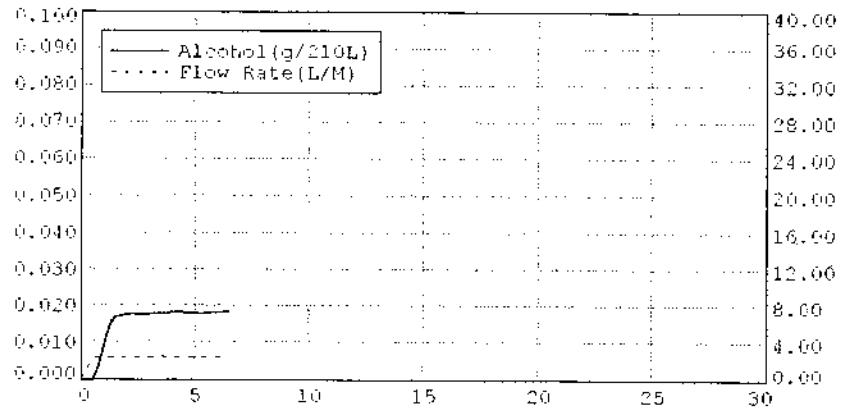
Date: 08/04/2015
 Time: 08:57:02

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.75: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 663 psi

BLANK TEST	0.000	09:03
INTERNAL STANDARD	VERIFIED	09:03
EXTERNAL STANDARD	0.020	09:03
BLANK TEST	0.000	09:04
EXTERNAL STANDARD	0.020	09:05
BLANK TEST	0.000	09:05
EXTERNAL STANDARD	0.020	09:06
BLANK TEST	0.000	09:06
EXTERNAL STANDARD	0.021	09:07
BLANK TEST	0.000	09:08
EXTERNAL STANDARD	0.021	09:08
BLANK TEST	0.000	09:09

Average = 0.0204
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

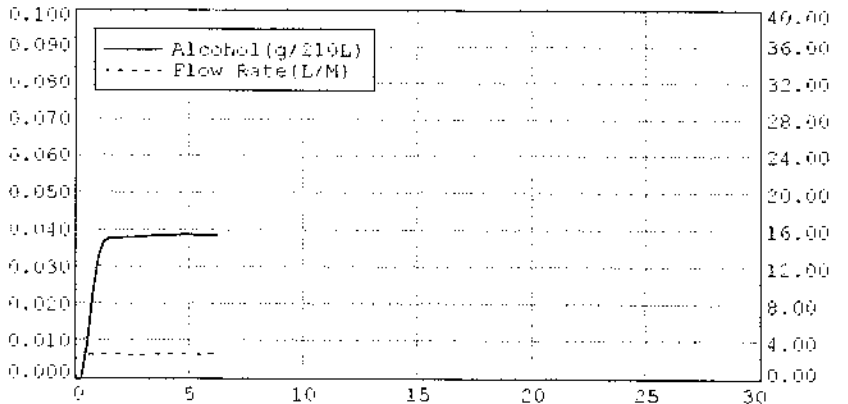
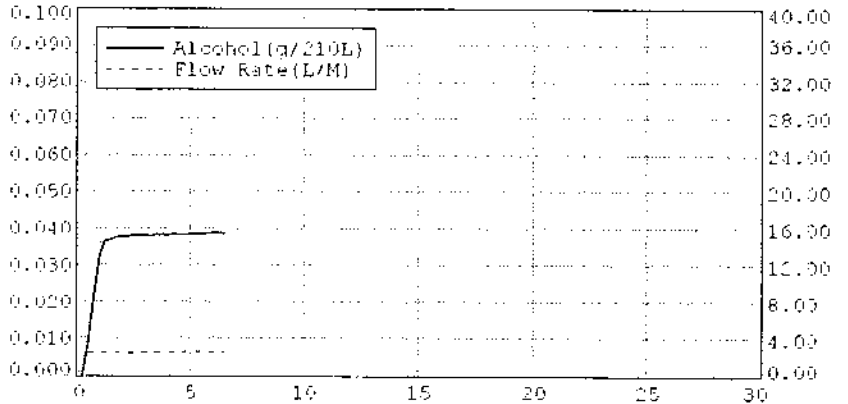
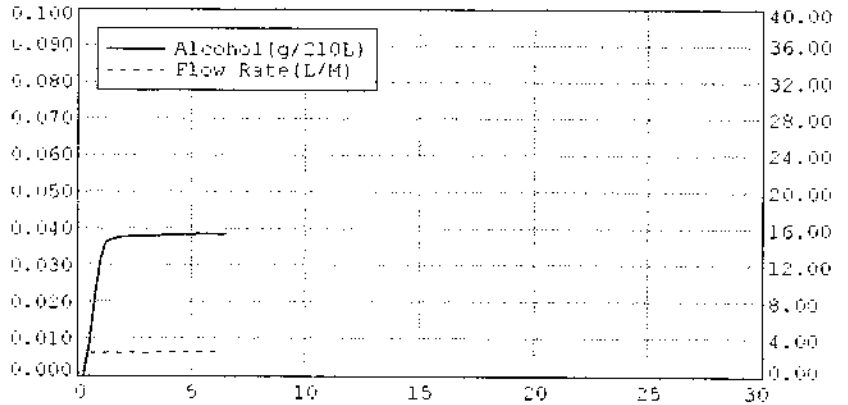
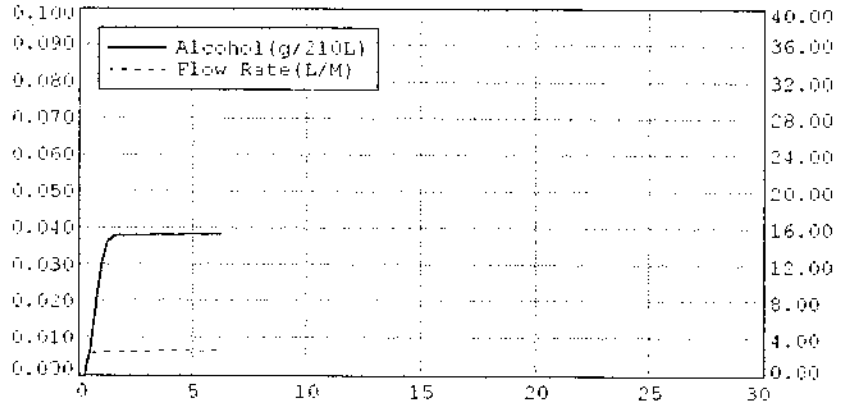
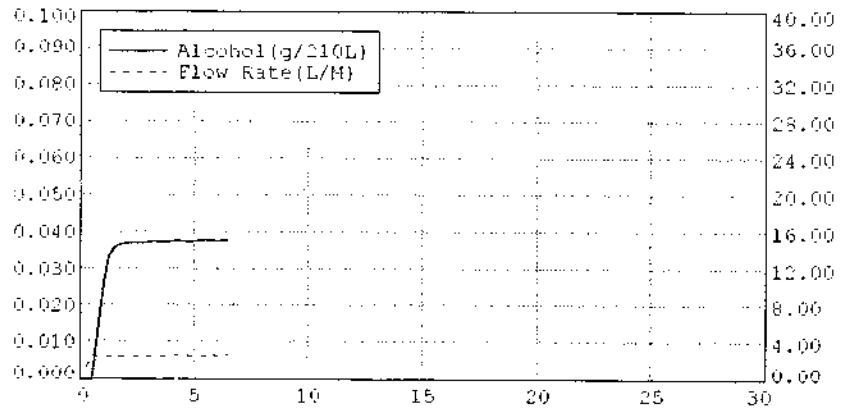
Date: 08/04/2015
 Time: 09:09:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.74: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 778 psi

BLANK TEST	0.000	09:11
INTERNAL STANDARD	VERIFIED	09:11
EXTERNAL STANDARD	0.039	09:11
BLANK TEST	0.000	09:12
EXTERNAL STANDARD	0.040	09:12
BLANK TEST	0.000	09:13
EXTERNAL STANDARD	0.040	09:14
BLANK TEST	0.000	09:14
EXTERNAL STANDARD	0.040	09:15
BLANK TEST	0.000	09:16
EXTERNAL STANDARD	0.040	09:16
BLANK TEST	0.000	09:17

Average = 0.0398
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

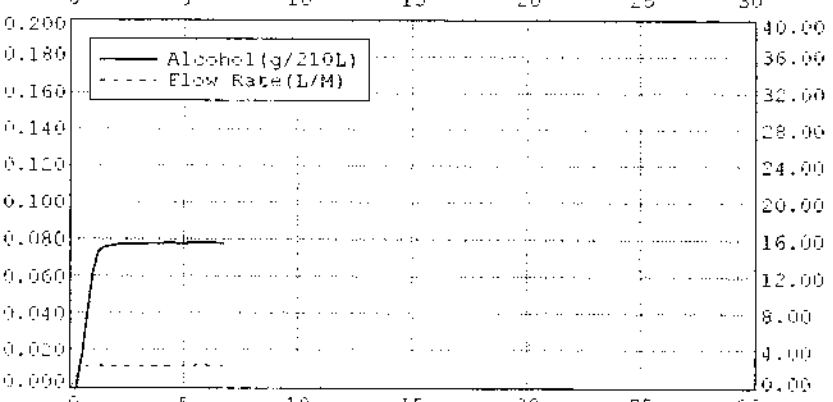
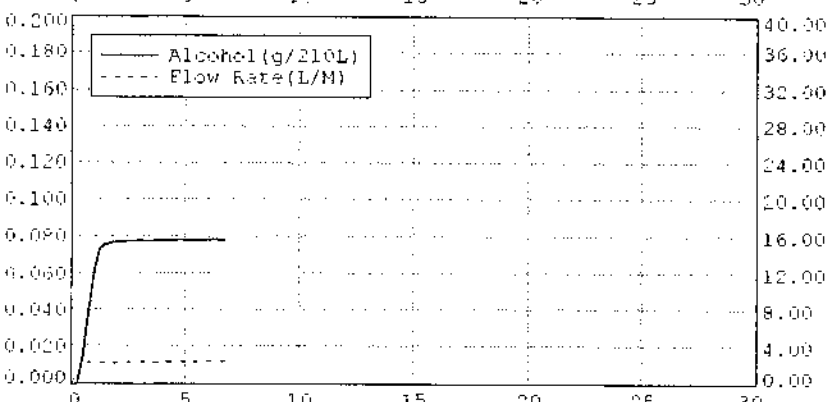
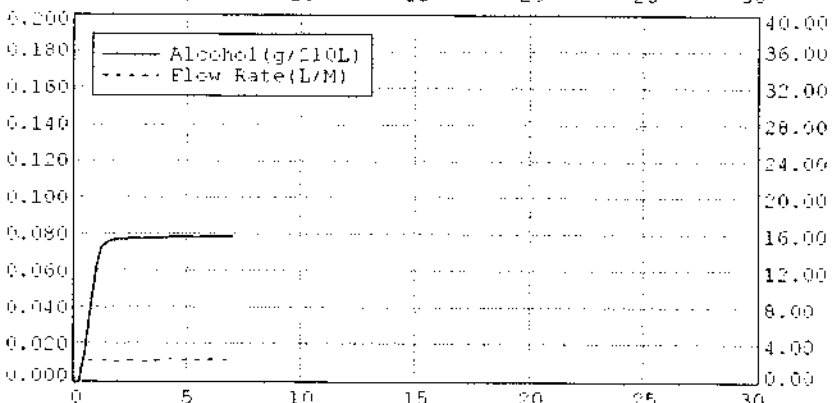
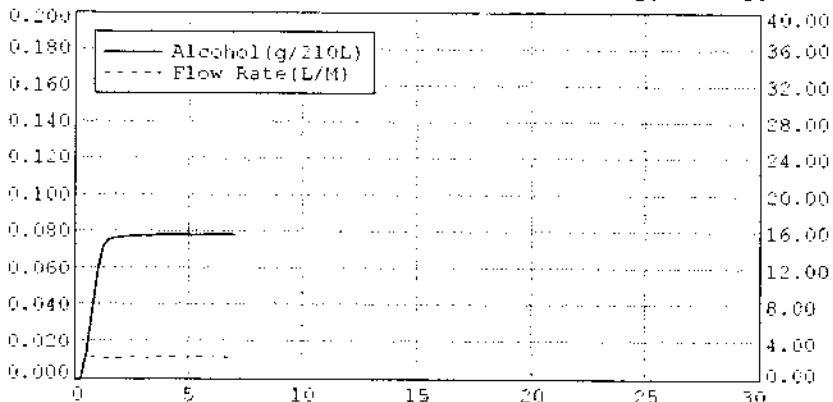
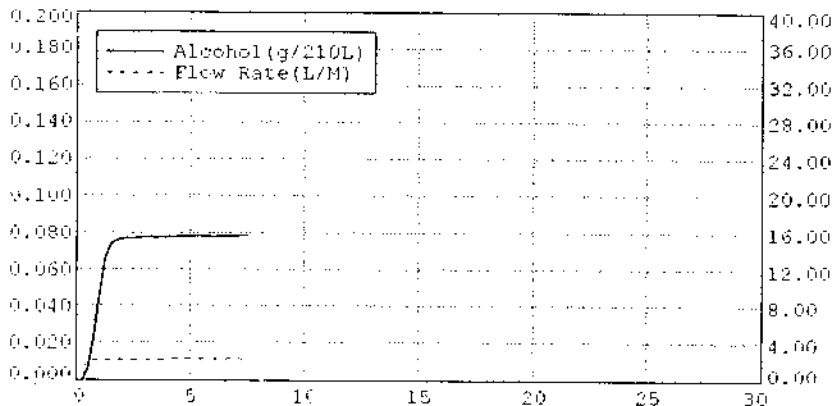
Date: 08/04/2015
 Time: 09:17:48

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.74: 0.080
 LOT #: 07214080A1
 EXPIRATION: 04/01/2016
 TANK PRESSURE: 372 psi

BLANK TEST	0.000	09:18
INTERNAL STANDARD	VERIFIED	09:19
EXTERNAL STANDARD	0.080	09:19
BLANK TEST	0.000	09:20
EXTERNAL STANDARD	0.079	09:20
BLANK TEST	0.000	09:21
EXTERNAL STANDARD	0.080	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.079	09:22
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.080	09:23
BLANK TEST	0.000	09:24

Average = 0.0796
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

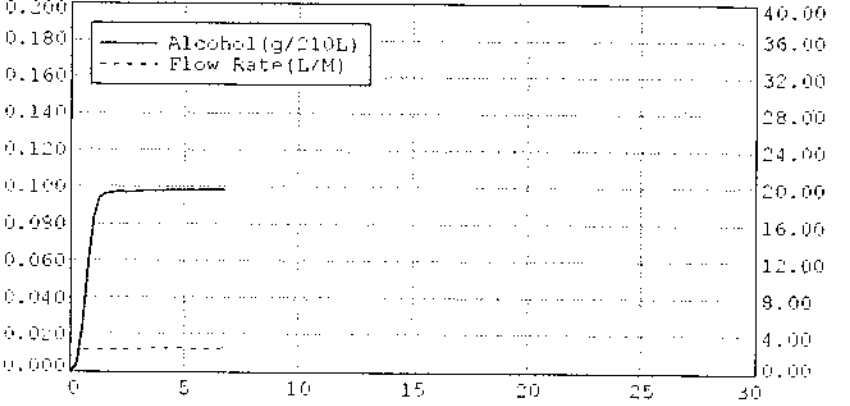
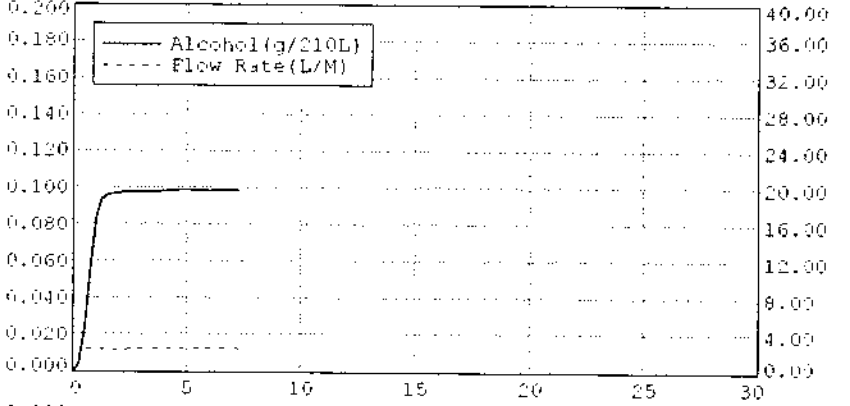
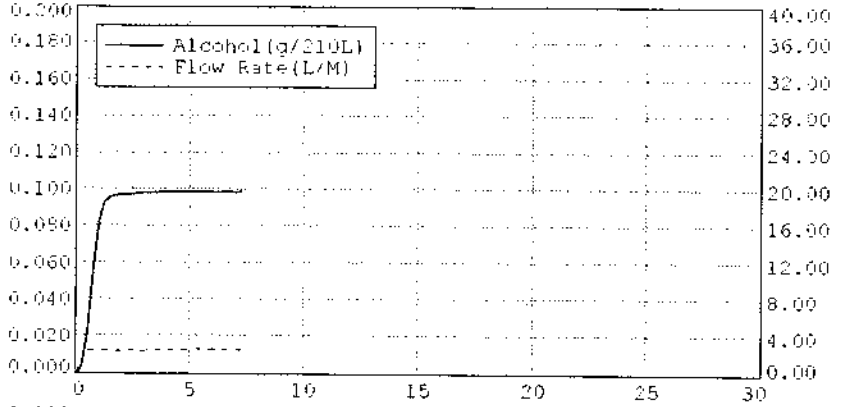
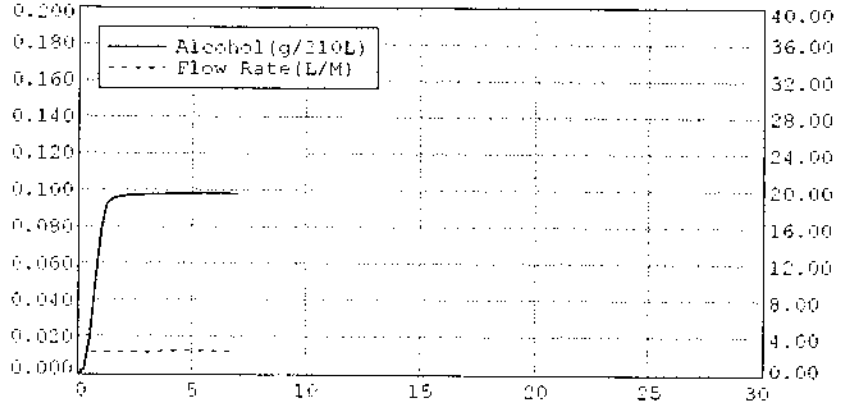
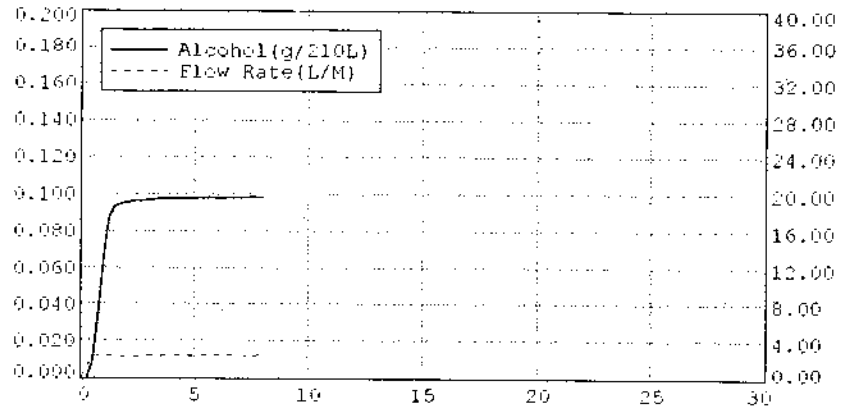
Date: 08/04/2015
 Time: 09:48:52

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.74: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 645 psi

BLANK TEST	0.000	09:49
INTERNAL STANDARD	VERIFIED	09:50
EXTERNAL STANDARD	0.100	09:50
BLANK TEST	0.000	09:51
EXTERNAL STANDARD	0.099	09:51
BLANK TEST	0.000	09:52
EXTERNAL STANDARD	0.100	09:52
BLANK TEST	0.000	09:53
EXTERNAL STANDARD	0.100	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.099	09:54
BLANK TEST	0.000	09:55

Average = 0.0996
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

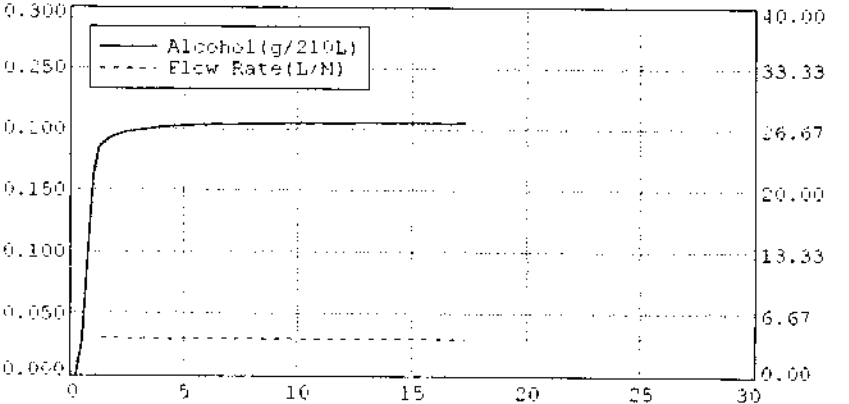
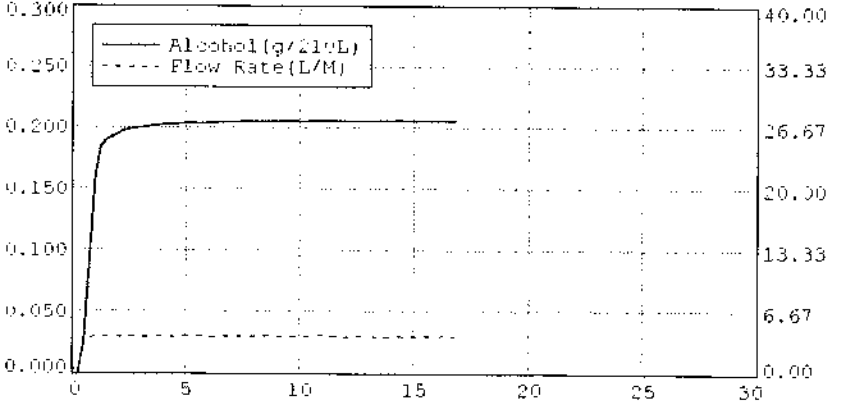
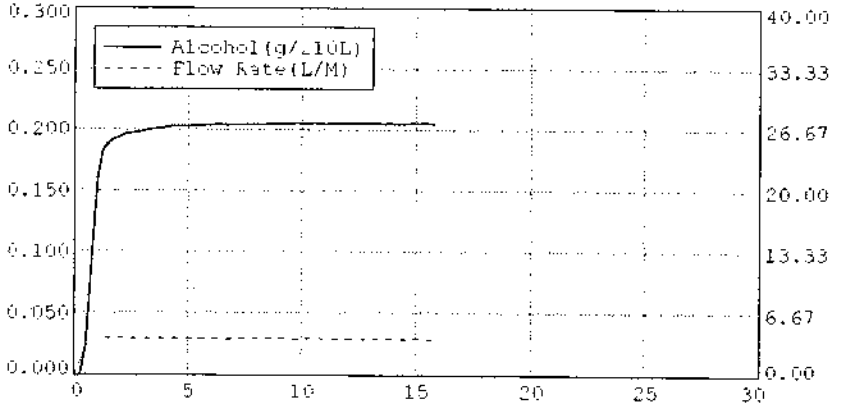
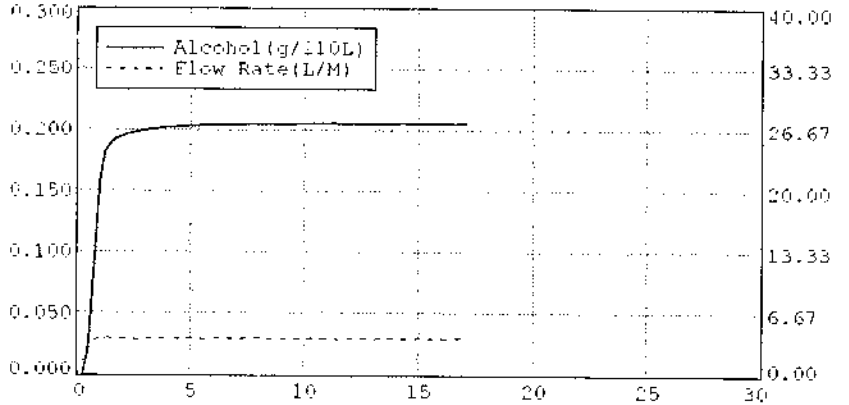
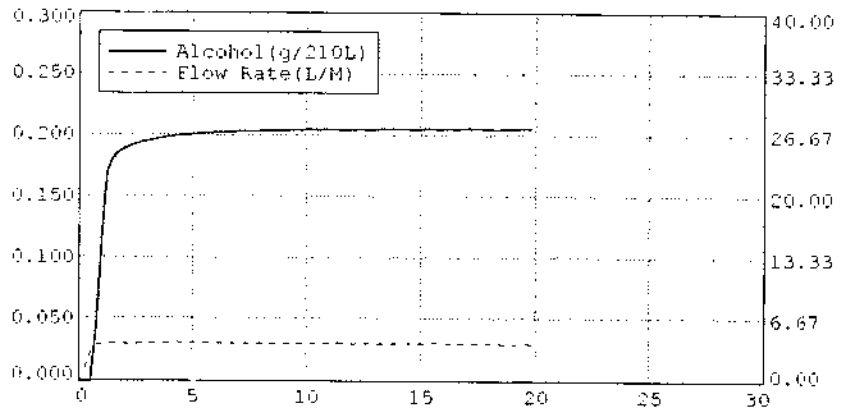
Date: 08/04/2015
 Time: 09:56:27

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	09:58
INTERNAL STANDARD	VERIFIED	09:58
EXTERNAL STANDARD	0.206	09:58
BLANK TEST	0.000	09:59
EXTERNAL STANDARD	0.206	09:59
BLANK TEST	0.000	10:00
EXTERNAL STANDARD	0.206	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.207	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.206	10:03
BLANK TEST	0.000	10:04

Average = 0.2062
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100411

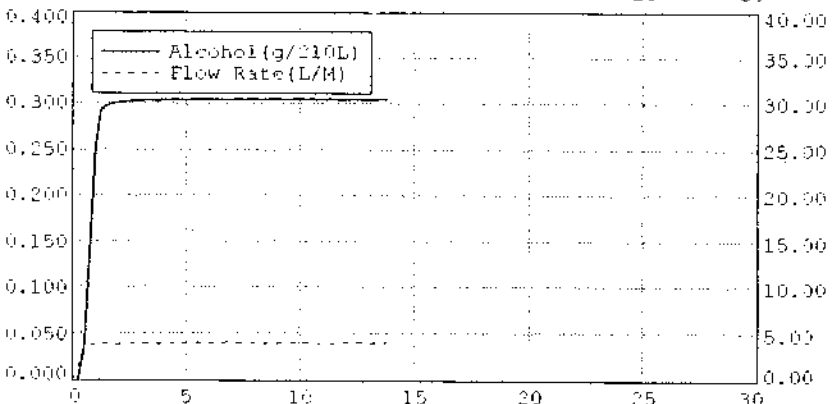
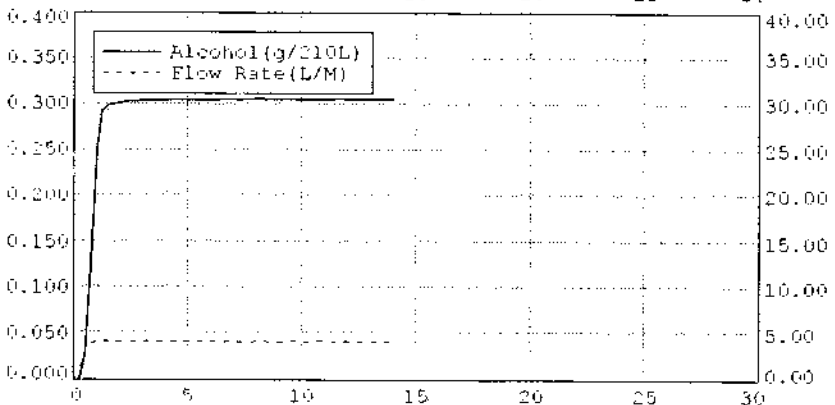
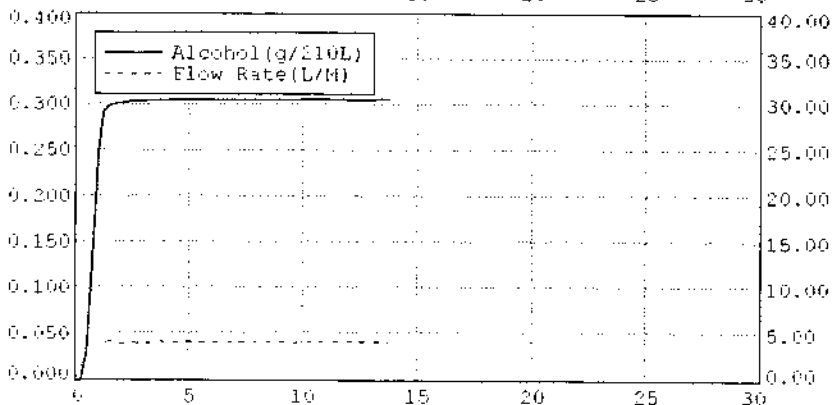
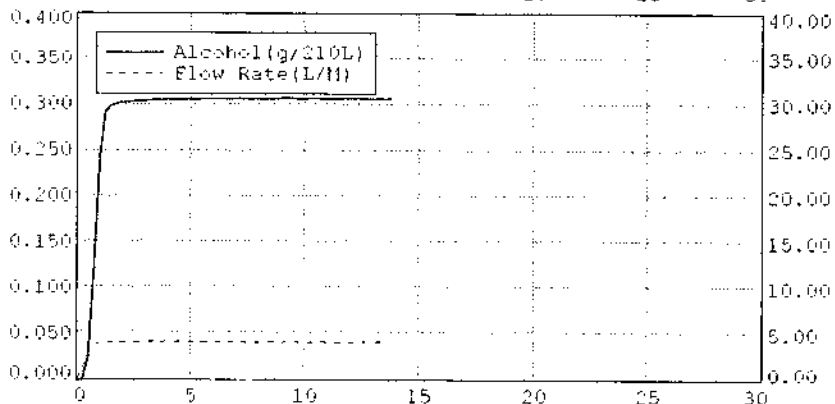
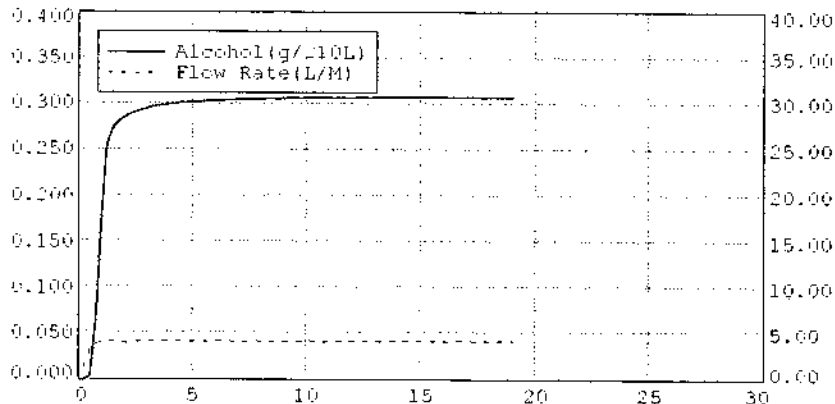
Date: 08/04/2015
 Time: 10:06:25

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	10:07
INTERNAL STANDARD	VERIFIED	10:07
EXTERNAL STANDARD	0.307	10:08
BLANK TEST	0.000	10:08
EXTERNAL STANDARD	0.307	10:09
BLANK TEST	0.000	10:10
EXTERNAL STANDARD	0.306	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.306	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.306	10:13
BLANK TEST	0.000	10:13

Average = 0.3064
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 08/04/2015
Time: 10:34:18

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 29.73: 0.079
LOT #: 07214080A1
EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK PASSED 10:35
BLANK TEST 0.000 10:35
INTERNAL STANDARD VERIFIED 10:35
EXTERNAL STANDARD 0.078 10:35
BLANK TEST 0.000 10:36
SUBJECT SAMPLE INCOMPLETE 10:38

Alcohol (g/210L)
Flow Rate (L/M)
Min. Flow Rate (L/M)

40.00

36.00

32.00

28.00

24.00

20.00

16.00

12.00

8.00

4.00

0.00

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 08/04/2015
Time: 10:41:31

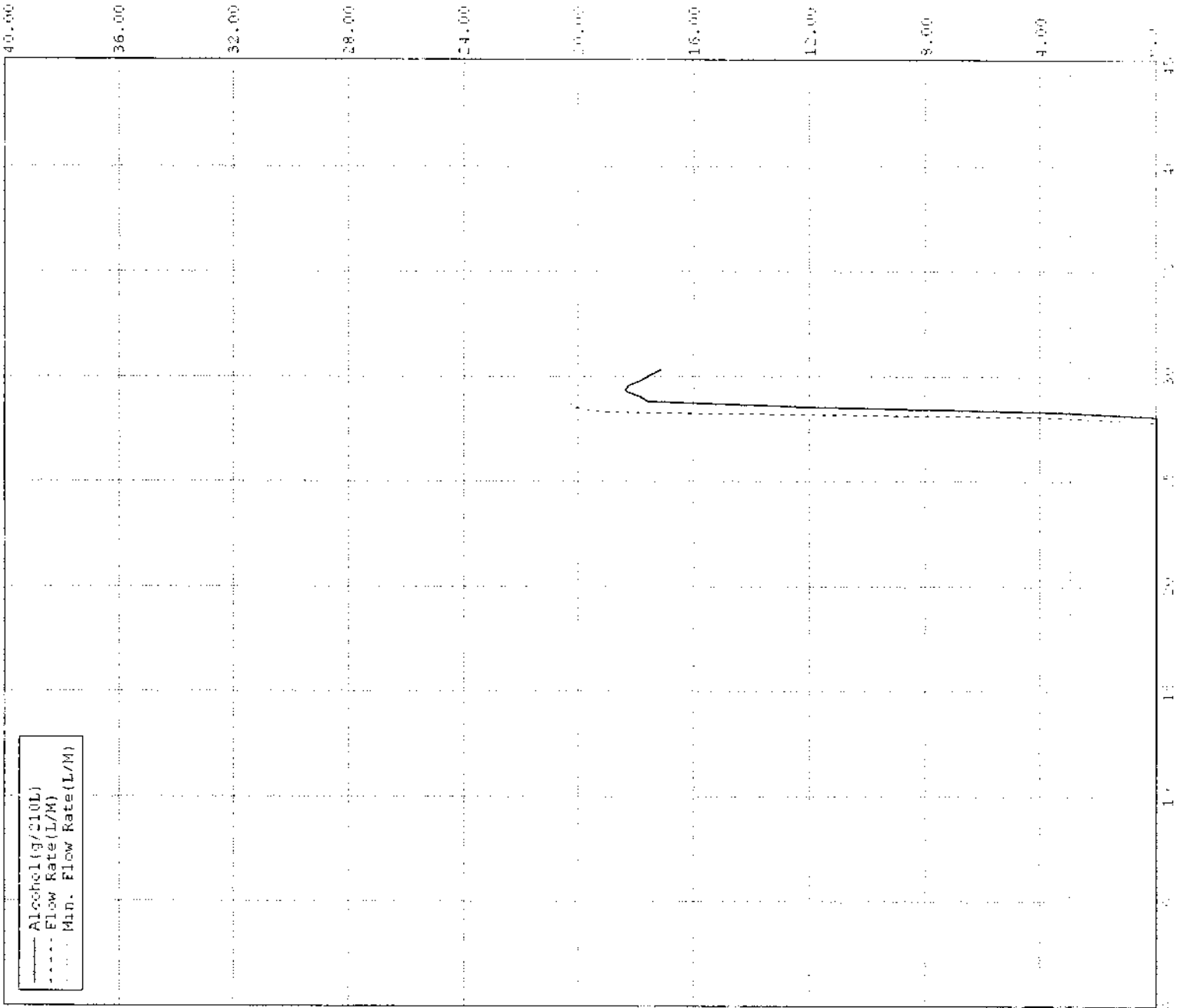
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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 29.72: 0.079
LOT #: 07214080A1
EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK PASSED 10:43
BLANK TEST 0.000 10:43
INTERNAL STANDARD VERIFIED 10:43
EXTERNAL STANDARD 0.079 10:43
BLANK TEST 0.000 10:44
SUBJECT SAMPLE INVALID 10:45



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100411

Date: 08/04/2015

Time: 12:42:11

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 29.71: 0.079

LOT #: 07214080A1

EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK

PASSED 12:43

BLANK TEST 0.000 12:43

INTERNAL STANDARD VERIFIED 12:43

Xg = 0.088 (1.82%)

EXTERNAL STANDARD 0.079 12:43

X[1] = 0.0794 (0.0020) (0.0022)

BLANK TEST 0.000 12:44

SUBJECT SAMPLE XXX 12:45

X[1] = 0.1061 (-0.0158) (-0.0003)

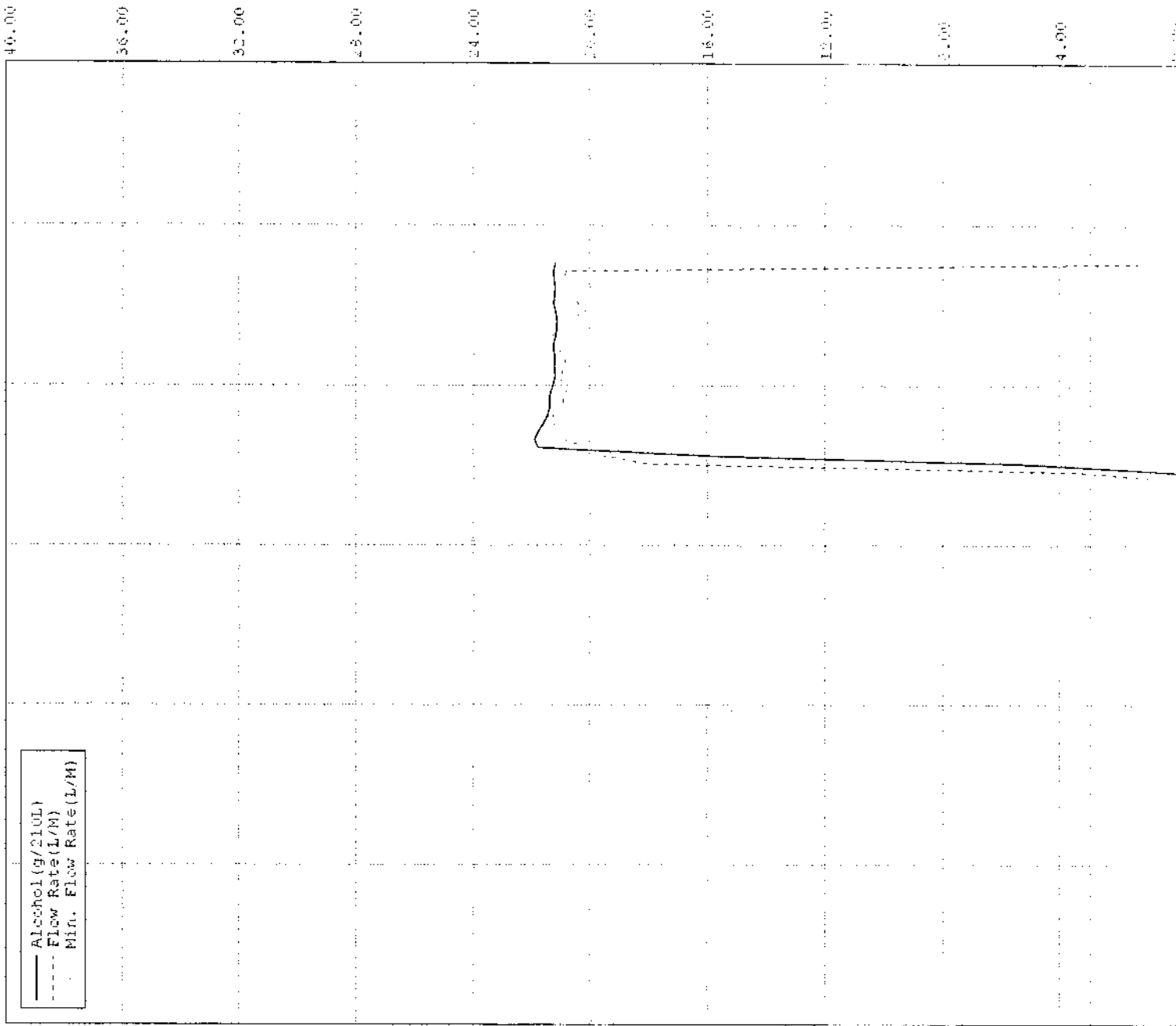
Interference Detected

Filter 2 avg = 0.0010

Filter 3 avg = 0.0019

NJB

— Alcohol (g/210L)
- - - - Flow Rate(L/M)
· · · · · Min. Flow Rate(L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 08/04/2015
Time: 12:48:29

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

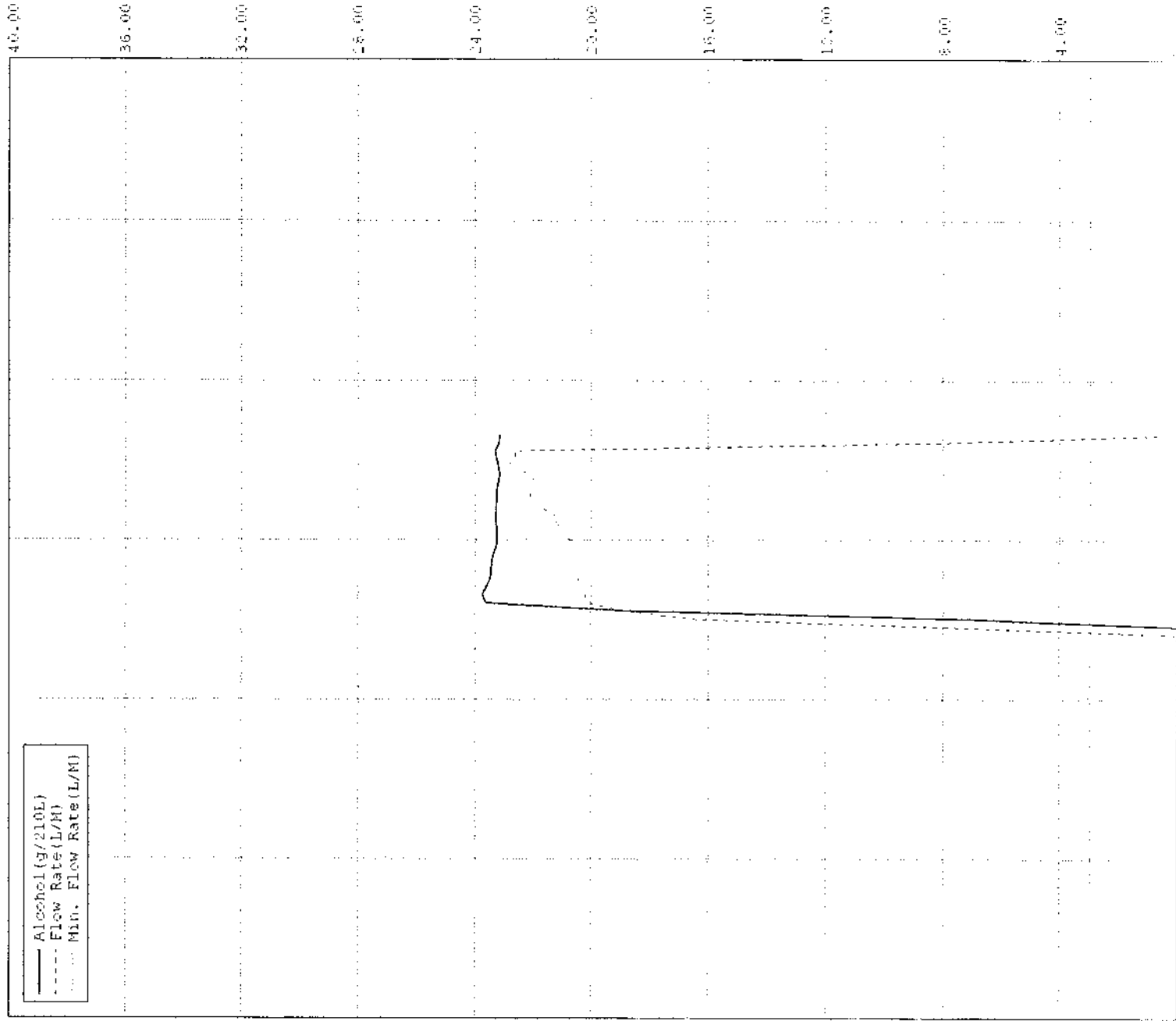
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.70: 0.079
LOT #: 07214080A1
EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK PASSED 12:50
BLANK TEST 0.000 12:50
INTERNAL STANDARD VERIFIED 12:50
Xq = 0.089 (3.34%)
EXTERNAL STANDARD 0.080 12:50
X[1] = 0.0797 (0.0012) (0.0014)
BLANK TEST 0.000 12:51
SUBJECT SAMPLE XXX 12:51
X[1] = 0.1158 (-0.0168) (-0.0006)

Interference Detected

Alcohol (g/210L)
Flow Rate (L/M)
Min. Flow Rate (L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 08/04/2015
Time: 12:55:35

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEG

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

DEPT/AGENCY:
AAA1

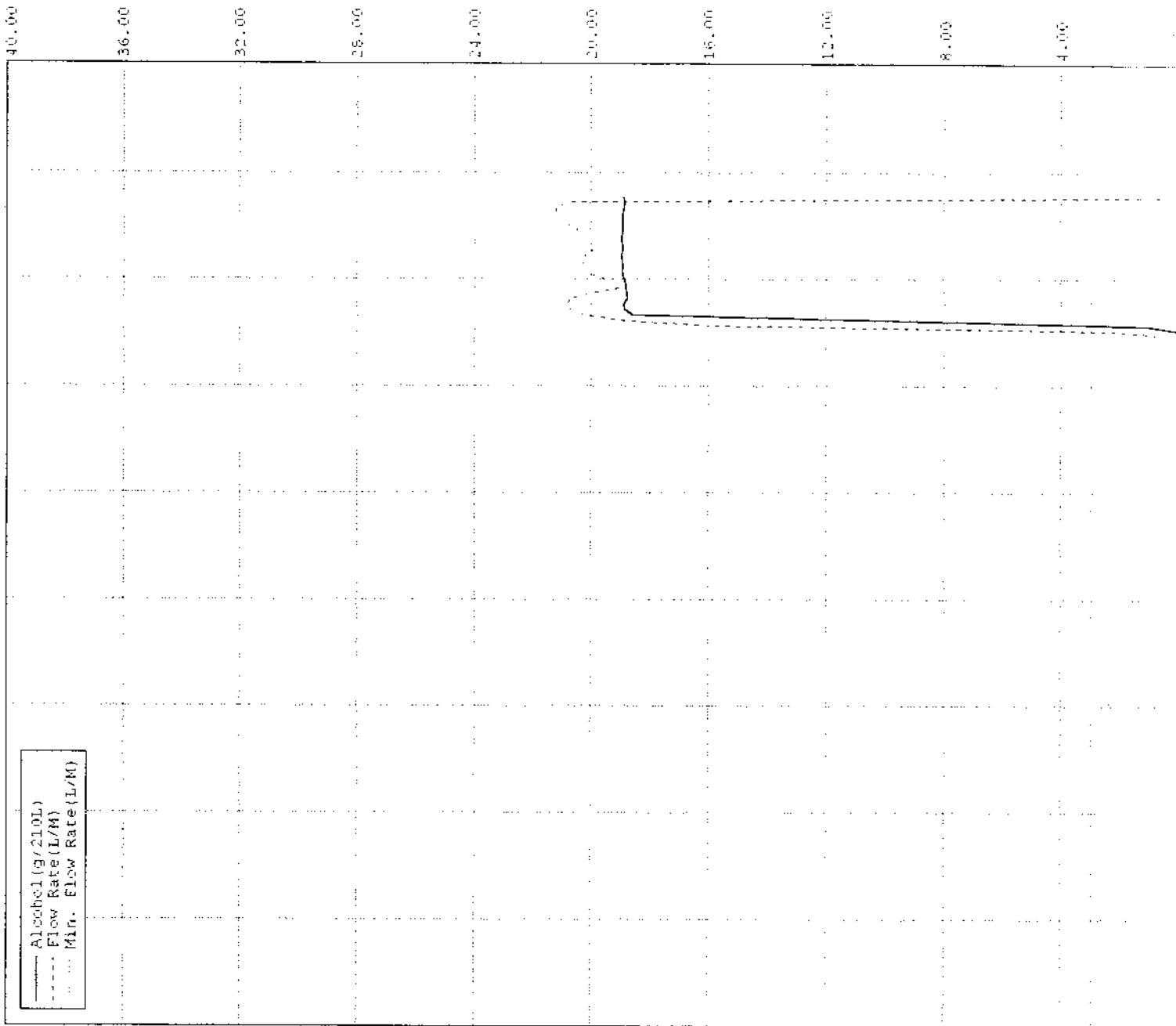
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.69: 0.079
LOT #: 07214080A1
EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK	PASSED	12:57
BLANK TEST	0.000	12:57
INTERNAL STANDARD	VERIFIED	12:57
Xq = 0.088 (2.73%)		
EXTERNAL STANDARD	0.080	12:57
X[1] = 0.0800 (0.0008)	(0.0020)	
BLANK TEST	0.000	12:58
SUBJECT SAMPLE (Vol=2.02L)	0.094	12:59
X[1] = 0.0943 (0.0009)	(0.0002)	
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.079	13:00
X[1] = 0.0787 (-0.0001)	(0.0021)	
BLANK TEST	0.000	13:01

Alcohol (g/210L)
Flow Rate(L/M)
Min. Flow Rate(L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 08/04/2015
Time: 13:04:17

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 15-1234
TEST TYPE: TEST

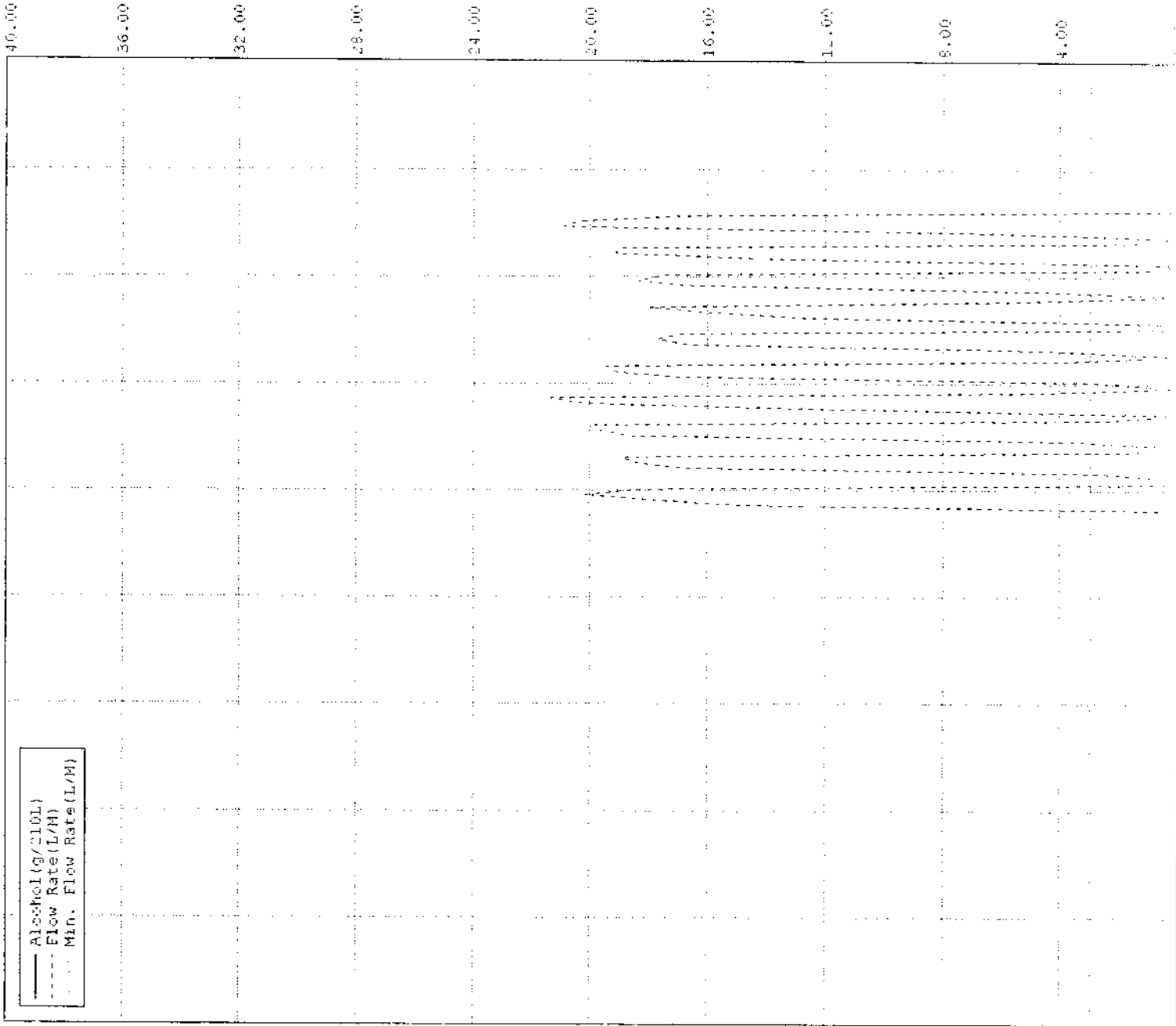
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.70: 0.079
LOT #: 07214080A1
EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK	PASSED	13:07
BLANK TEST	0.090	13:07
INTERNAL STANDARD	VERIFIED	13:07
EXTERNAL STANDARD	0.079	13:07
BLANK TEST	0.000	13:08
SUBJECT SAMPLE	XXX	13:09

Maximum Attempts Exceeded

— Alcohol (g/210L)
- - - Flow Rate (L/M)
· · · Min. Flow Rate (L/M)



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100411

Date: 08/04/2015

Time: 13:12:23

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 29.70: 0.079

LOT #: 07214080A1

EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK

BLANK TEST

INTERNAL STANDARD

EXTERNAL STANDARD

BLANK TEST

PASSED 13:13

0.000

VERIFIED 13:13

0.079

0.000 13:14

RFI DETECTED

Alcohol (g/210L)
Flow Rate (L/M)
Min. Flow Rate (L/M)

40.00

36.00

32.00

28.00

24.00

20.00

16.00

12.00

8.00

4.00

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100411

Date: 08/04/2015
Time: 13:31:44

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 #: 07214080A1
EXPIRATION: 04/01/2016

DIAGNOSTIC CHECK	PASSED	13:33
BLANK TEST	0.000	13:33
INTERNAL STANDARD	VERIFIED	13:33
EXTERNAL STANDARD	0.079	13:33
BLANK TEST	0.000	13:34
SUBJECT SAMPLE (Vol=1.77L)	0.000	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.080	13:35
BLANK TEST	0.000	13:36

COB

Alcohol(g/210L)
Flow Rate(L/M)
Min. Flow Rate(L/M)

