

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 100363 Analyst C. O'Bryant 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 1.5 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 0135080A2 Exp 2/5/17
- 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 12/10/16
 - 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 1/19/15
- 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 9/30/15 ^{10/1/15} _{COB 10/1/15}

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 09:25:12

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 = 47.6°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.74 V PASSED
(1.04 V - 2.44 V)
Cooler Voltage = 1.71 V PASSED
(1.03 V - 2.39 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 532 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 4.372 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 = 0.097 (0.99%) (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 9:49 AM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 47.7°C

Current Barometer 29.4 in
Volume (Ltr) 1.43

Settings

Lamp: 1.69 V
Bias: 80 V
Cooler: 1.71 V
Chopper: 532 Hz

Voltages (V)

Flow: 1.05 V
Detector: 0.074 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 08/26/2015
Time: 05:04:59

OPERATOR NAME:
NEAS

CERTIFICATE #: DR7001, 15040, 34.0C

Ca = 0.1010
CAL = 0.986652 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0042 0.0010 <= b2 < 0.0100
b3 = 0.0004 0.0000 <= b3 < 0.0040
Xq = 0.0976 0.0500 <= Xq < 0.2000
a21 = 1.169205 1.050 <= a21 < 1.300
a31 = 0.435578 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 09:50:21

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

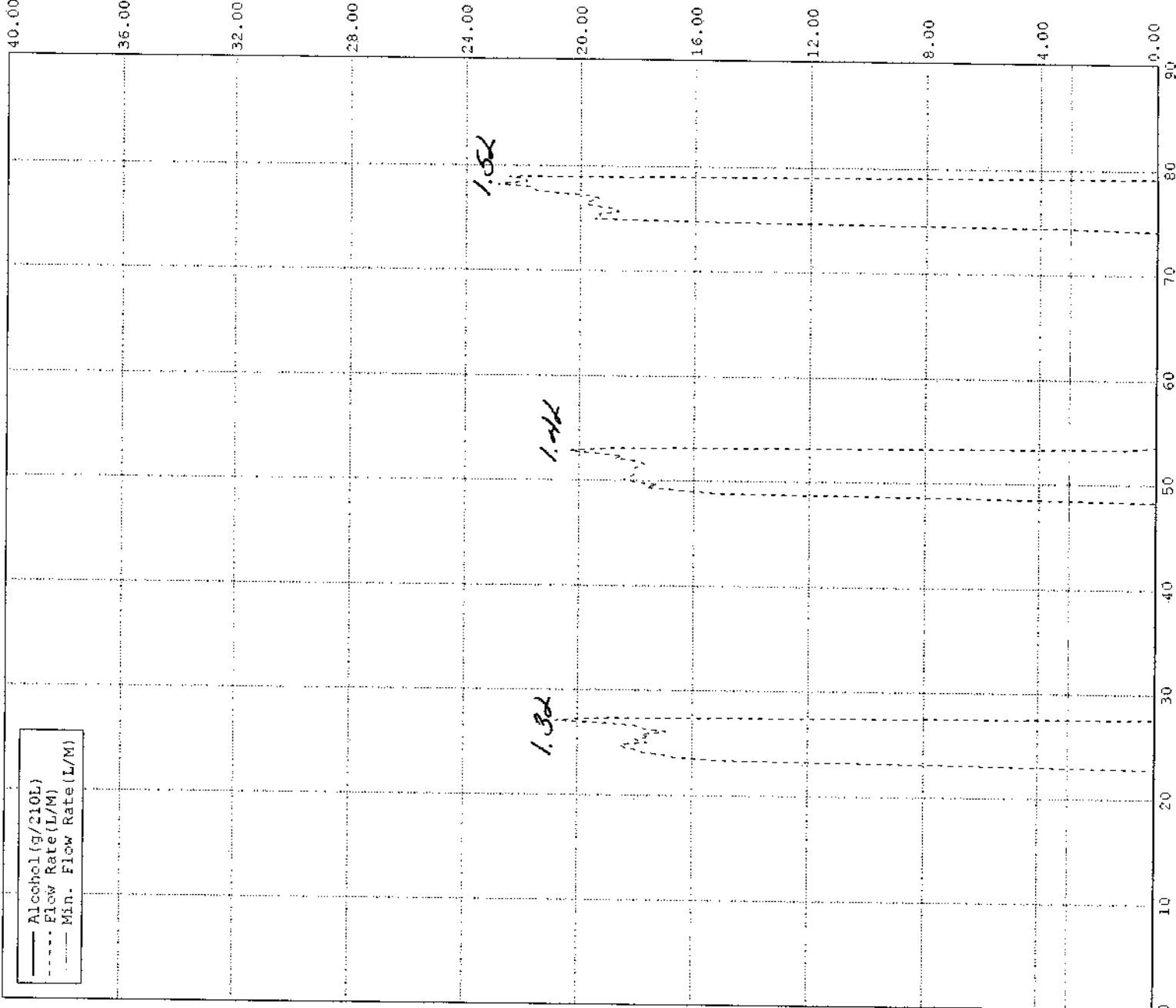
DEPT/AGENCY:
AAA1

CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	09:51
BLANK TEST	0.000	09:51
INTERNAL STANDARD	VERIFIED	09:51
EXTERNAL STANDARD	0.078	09:51
BLANK TEST	0.000	09:52
SUBJECT SAMPLE (Vol=1.52L)	0.000	09:54
BLANK TEST	0.000	09:55
EXTERNAL STANDARD	0.078	09:55
BLANK TEST	0.000	09:56



LINEARITY CHECK

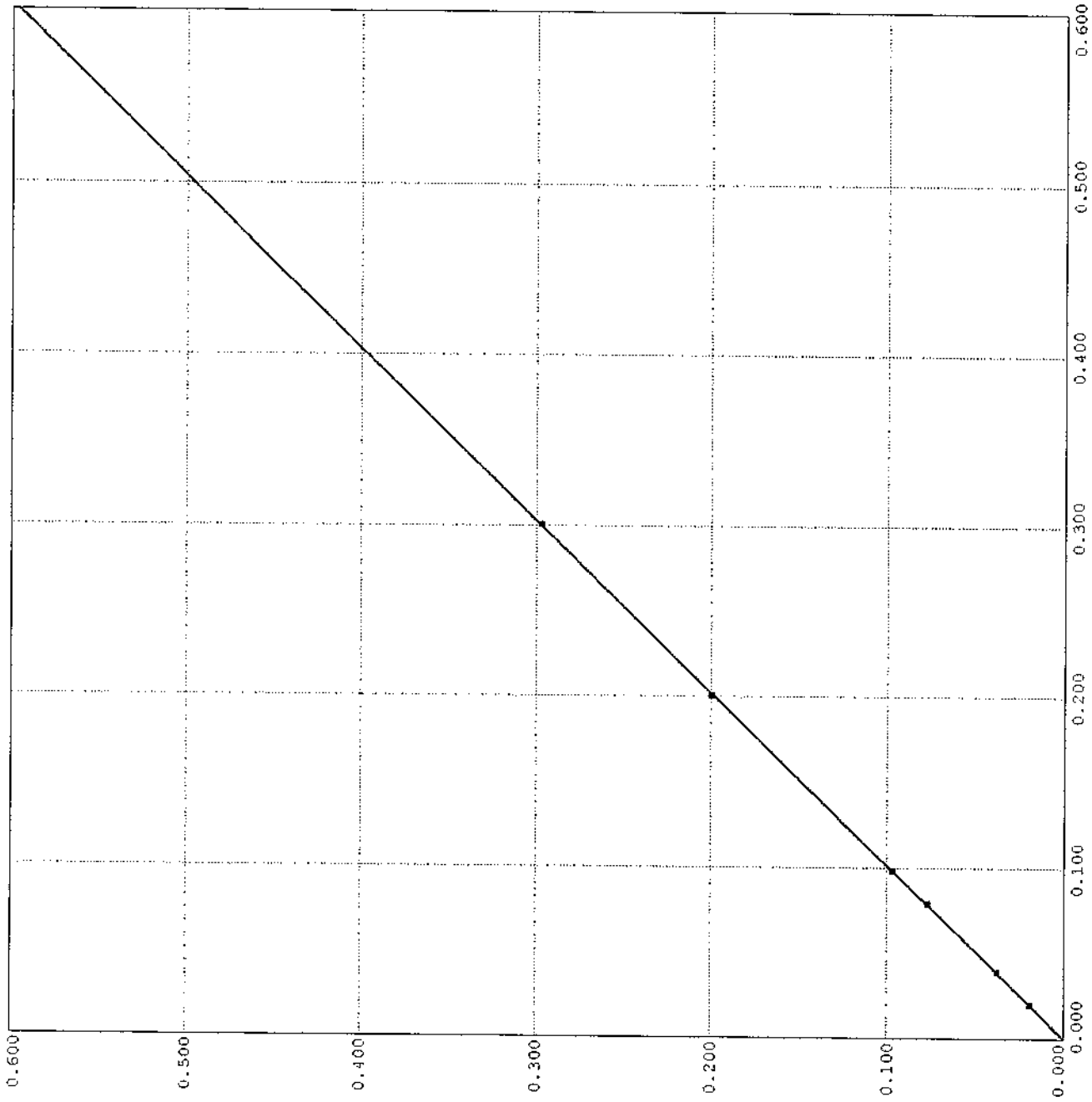
Alaska Department of Public Safety
 DATAMASTER dmt: 100363

Date: 09/30/2015
 Time: 10:10:11

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.039	0.0390	0.0000
0.079	0.0780	0.0000
0.098	0.0978	0.0004
0.200	0.2004	0.0005
0.300	0.2978	0.0008

SLOPE = 0.994597
 R² = 0.999950



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100363

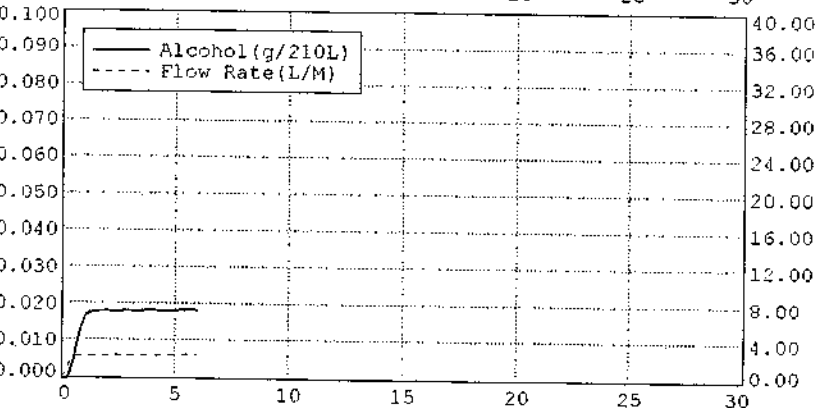
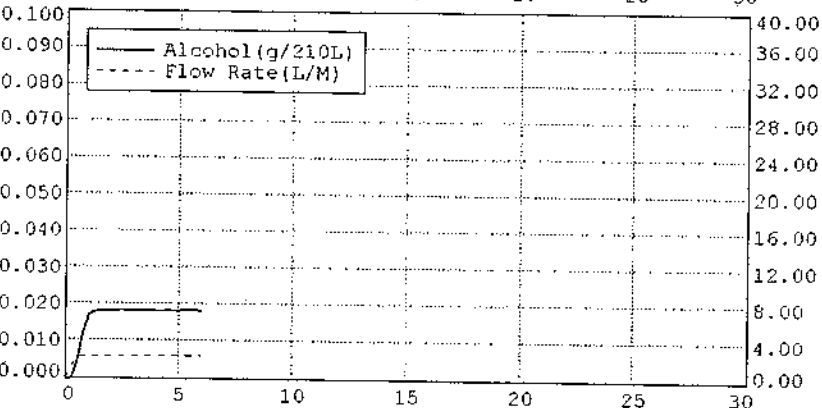
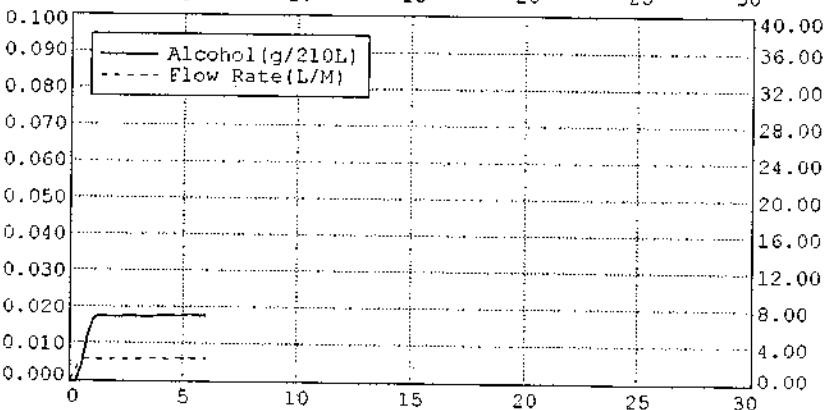
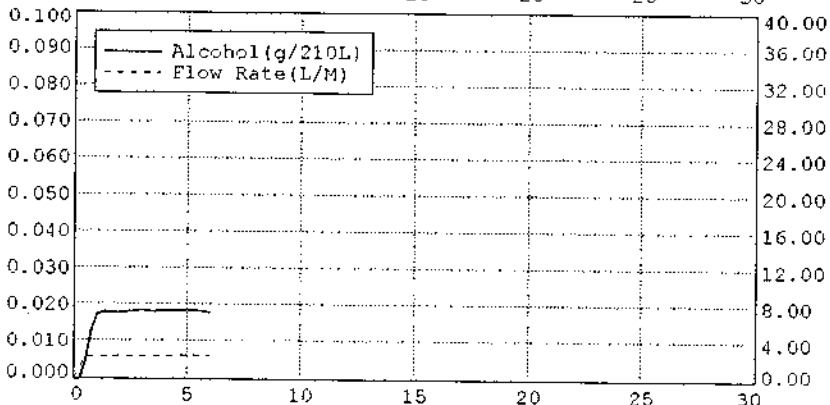
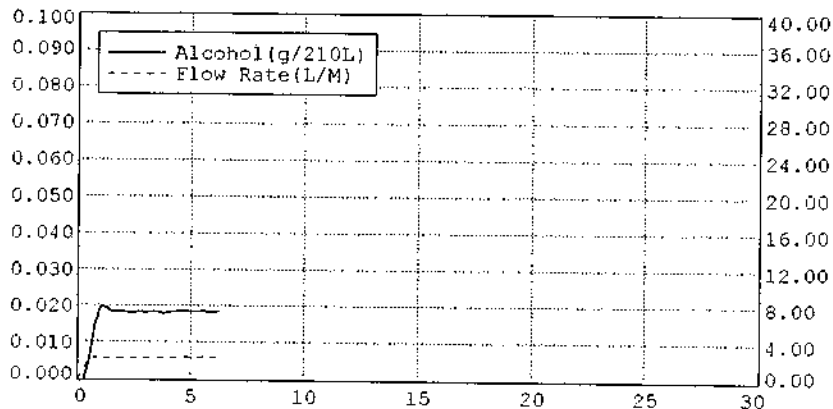
Date: 09/30/2015
 Time: 10:10:13

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.45: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1058 psi

BLANK TEST	0.000	10:11
INTERNAL STANDARD	VERIFIED	10:11
EXTERNAL STANDARD	0.020	10:12
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.020	10:13
BLANK TEST	0.000	10:14
EXTERNAL STANDARD	0.020	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.020	10:15
BLANK TEST	0.000	10:16
EXTERNAL STANDARD	0.020	10:16
BLANK TEST	0.000	10:17

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100363

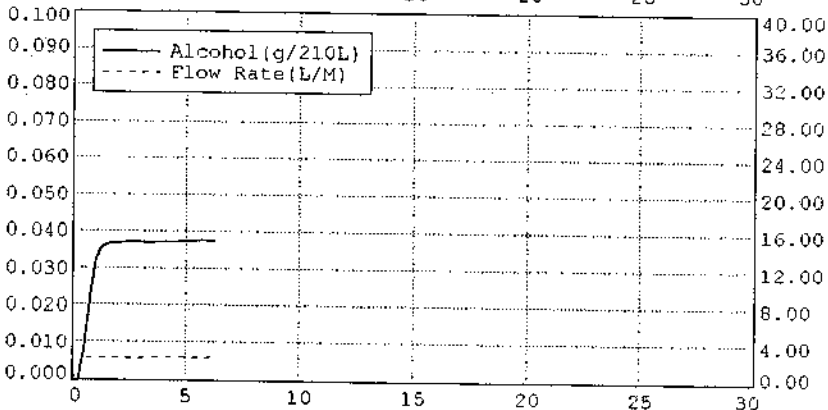
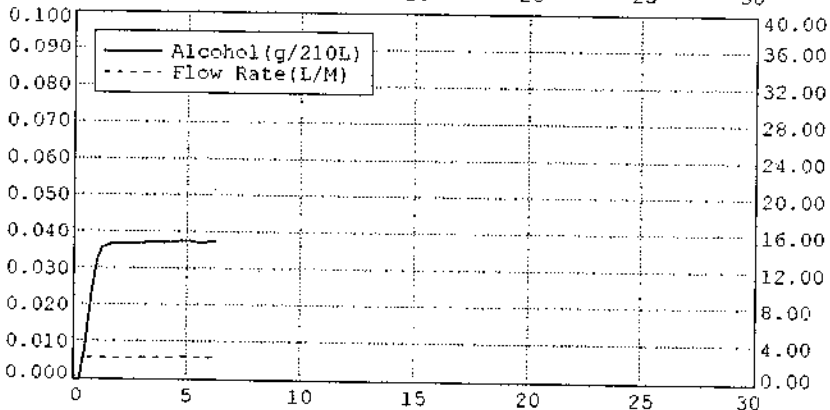
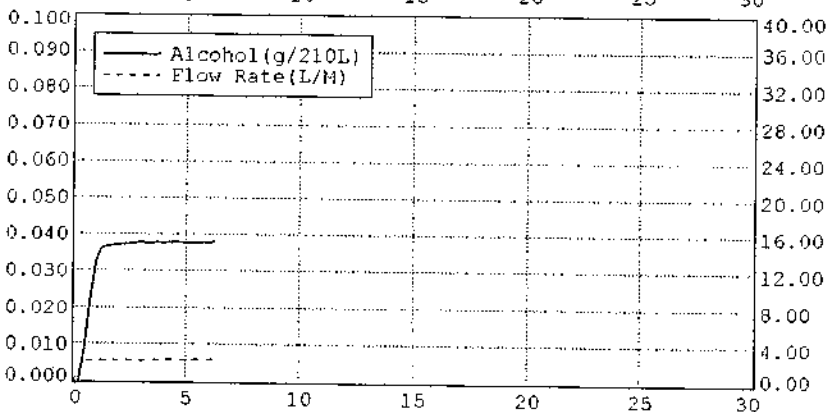
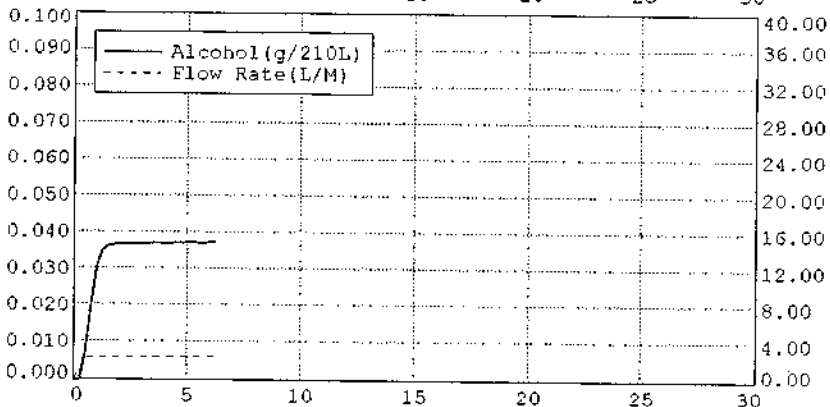
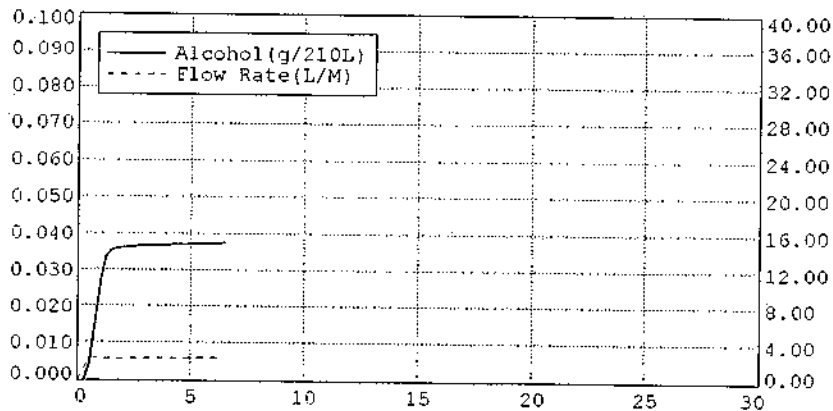
Date: 09/30/2015
 Time: 10:17:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.46: 0.039
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1111 psi

BLANK TEST	0.000	10:19
INTERNAL STANDARD	VERIFIED	10:19
EXTERNAL STANDARD	0.039	10:19
BLANK TEST	0.000	10:20
EXTERNAL STANDARD	0.039	10:20
BLANK TEST	0.000	10:21
EXTERNAL STANDARD	0.039	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.039	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.039	10:23
BLANK TEST	0.000	10:24

Average = 0.0390
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100363

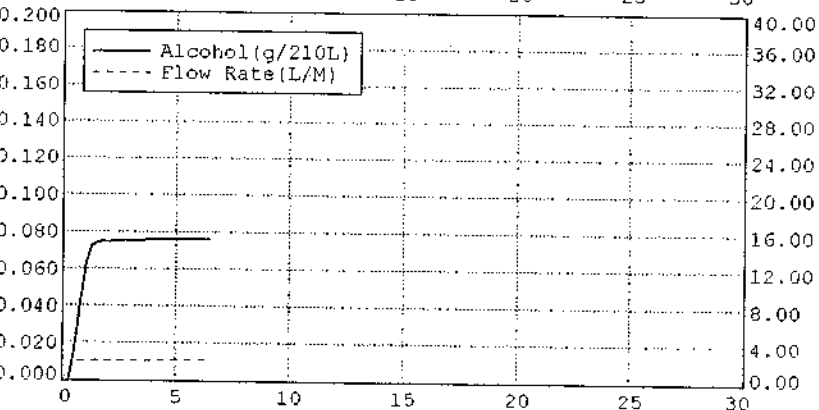
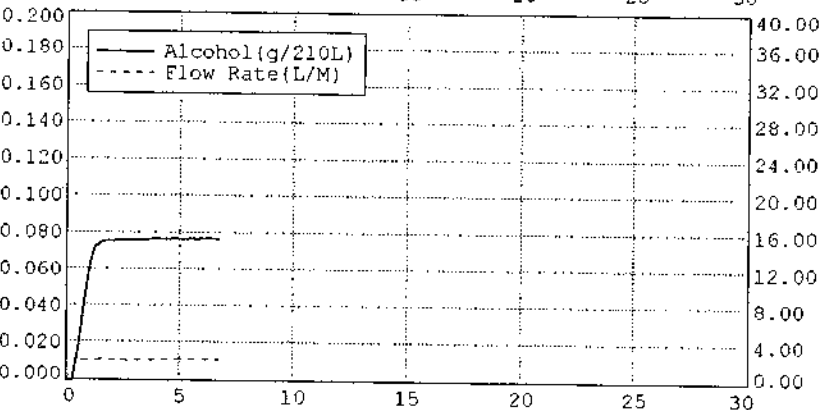
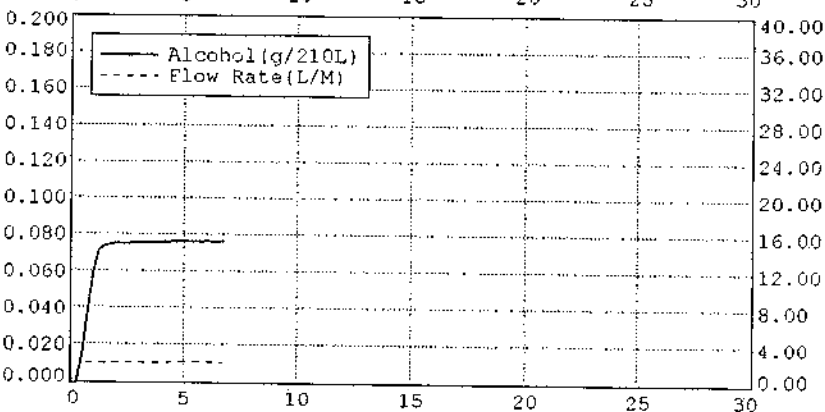
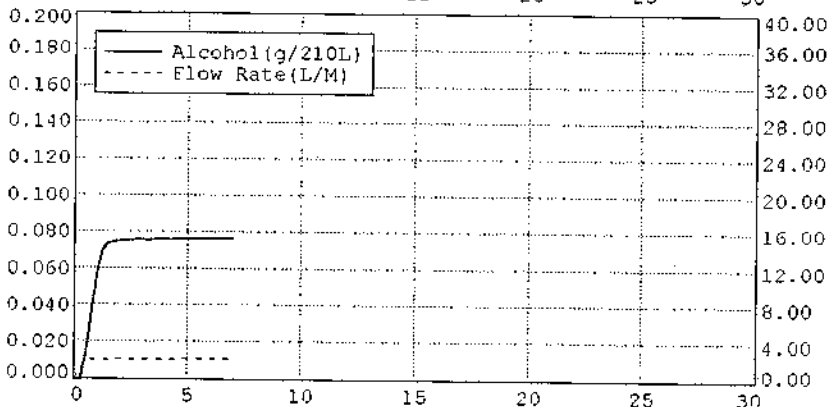
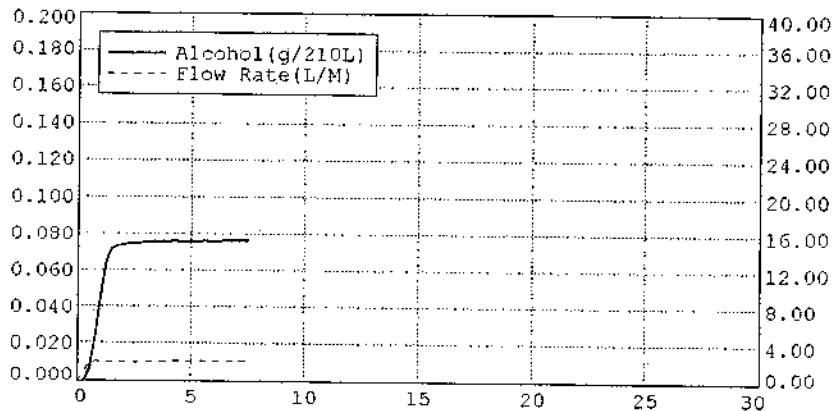
Date: 09/30/2015
 Time: 10:25:10

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.47: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 545 psi

BLANK TEST	0.000	10:26
INTERNAL STANDARD	VERIFIED	10:26
EXTERNAL STANDARD	0.078	10:27
BLANK TEST	0.000	10:28
EXTERNAL STANDARD	0.078	10:28
BLANK TEST	0.000	10:29
EXTERNAL STANDARD	0.078	10:29
BLANK TEST	0.000	10:30
EXTERNAL STANDARD	0.078	10:30
BLANK TEST	0.000	10:31
EXTERNAL STANDARD	0.078	10:31
BLANK TEST	0.000	10:32

Average = 0.0780
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100363

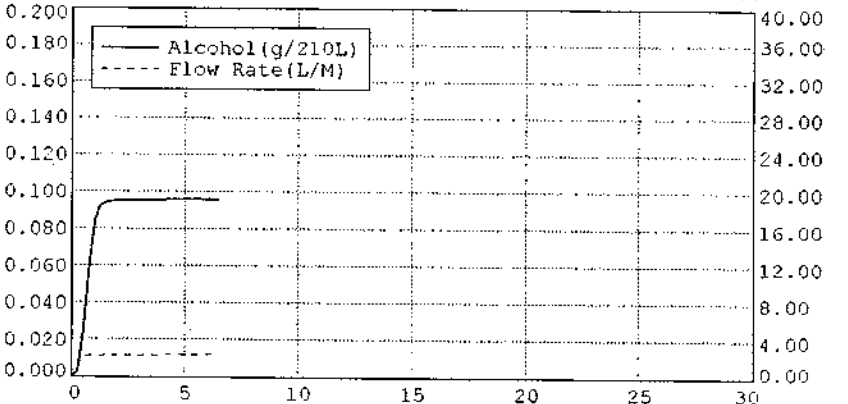
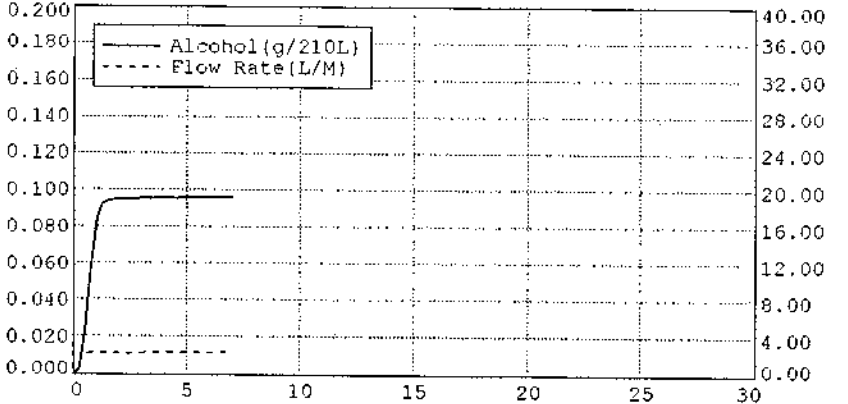
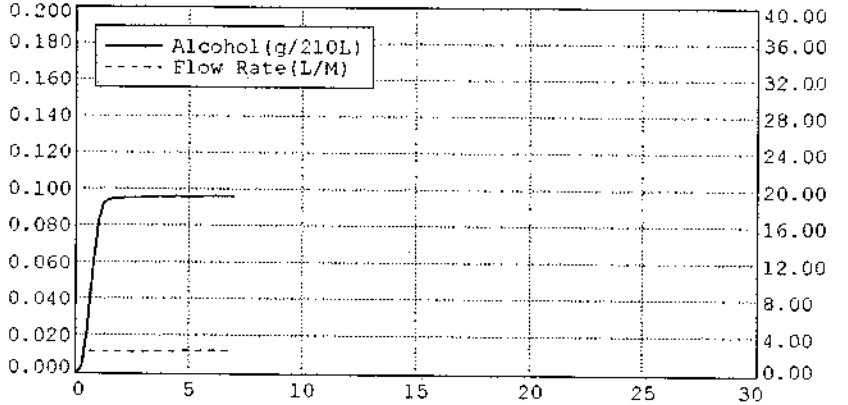
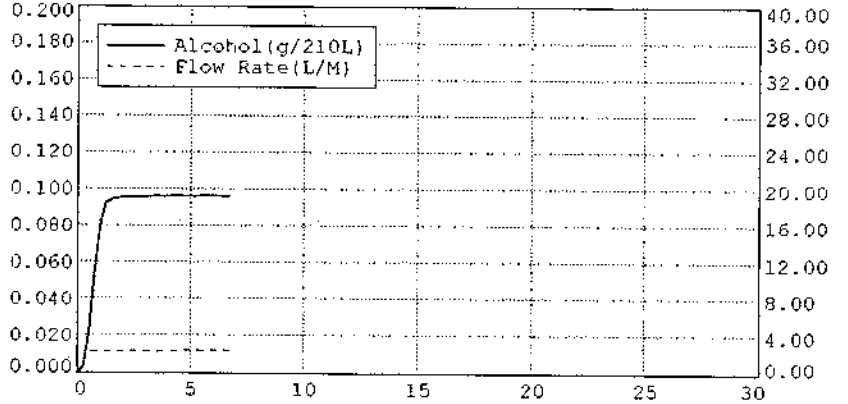
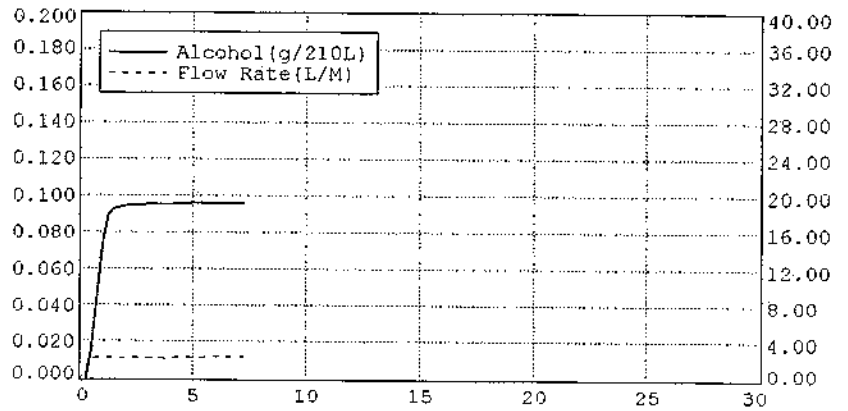
Date: 09/30/2015
 Time: 10:33:28

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.47: 0.098
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 1151 psi

BLANK TEST	0.000	10:35
INTERNAL STANDARD	VERIFIED	10:35
EXTERNAL STANDARD	0.098	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.098	10:36
BLANK TEST	0.000	10:37
EXTERNAL STANDARD	0.098	10:37
BLANK TEST	0.000	10:38
EXTERNAL STANDARD	0.098	10:38
BLANK TEST	0.000	10:39
EXTERNAL STANDARD	0.097	10:40
BLANK TEST	0.000	10:40

Average = 0.0978
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100363

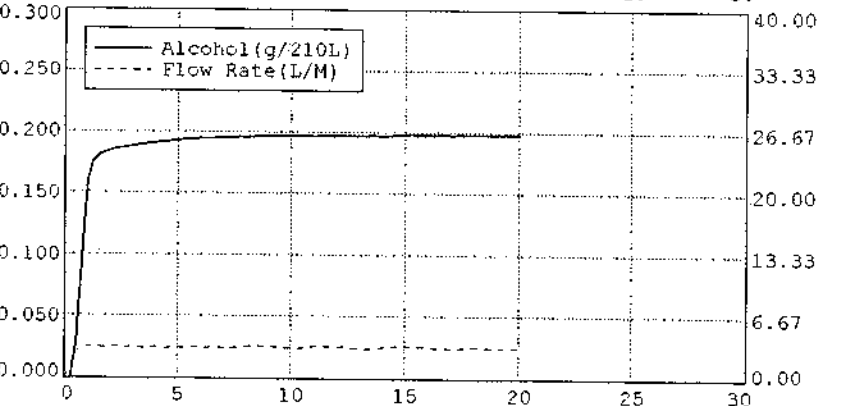
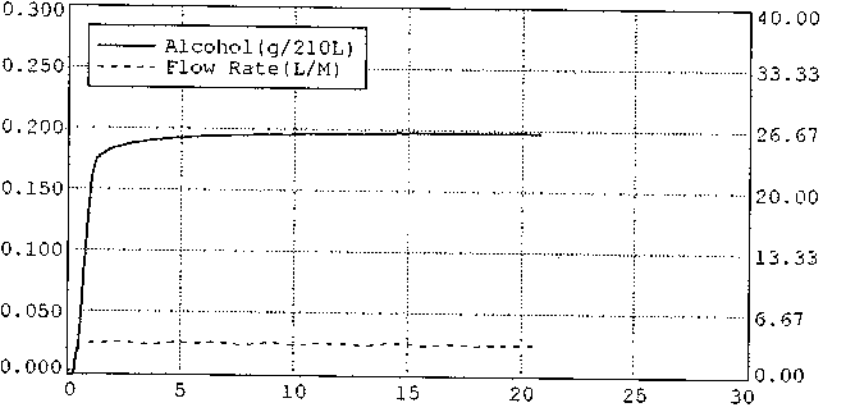
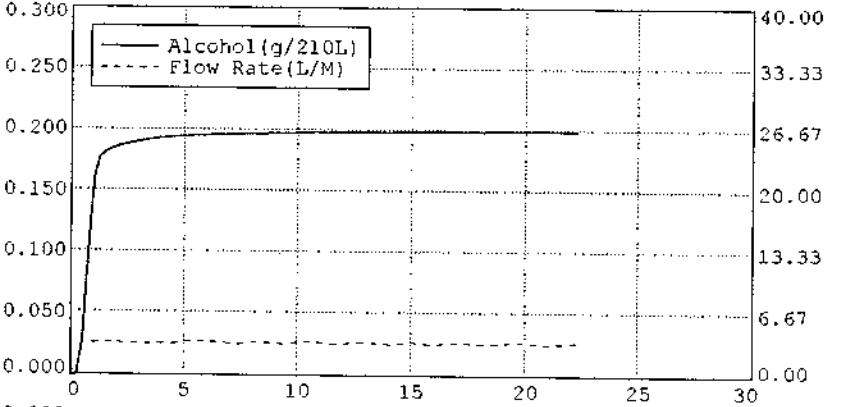
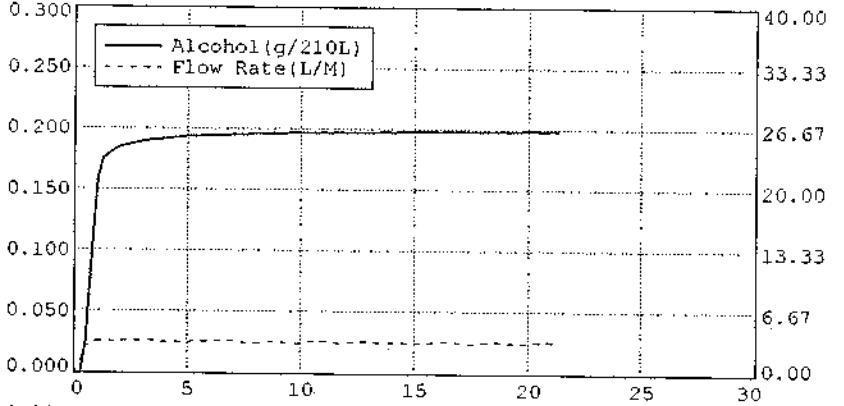
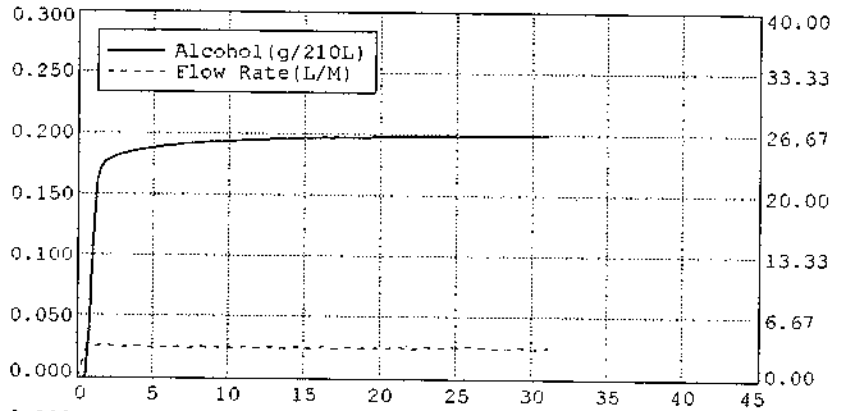
Date: 09/30/2015
 Time: 11:01:12

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:02
INTERNAL STANDARD	VERIFIED	11:02
EXTERNAL STANDARD	0.201	11:03
BLANK TEST	0.000	11:03
EXTERNAL STANDARD	0.200	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.201	11:05
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.200	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.200	11:08
BLANK TEST	0.000	11:09

Average = 0.2004
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100363

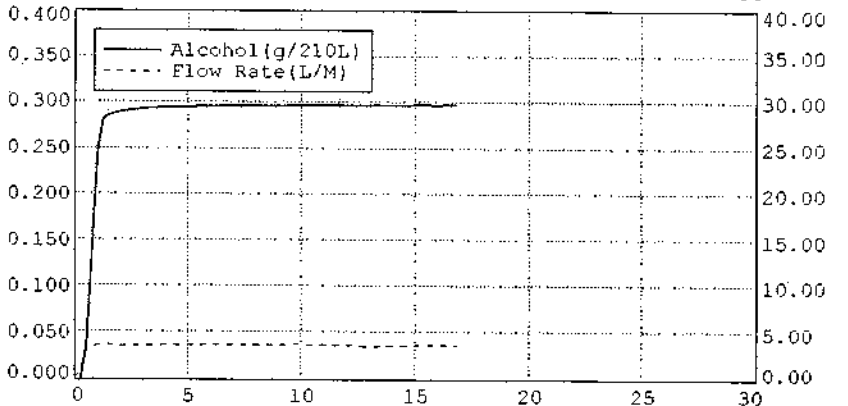
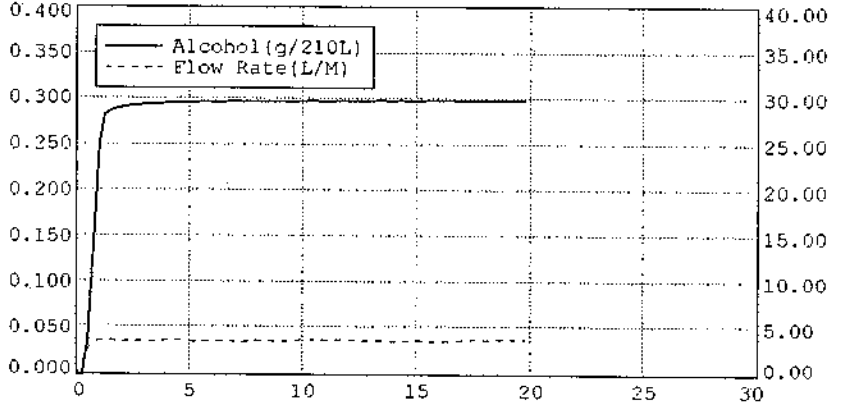
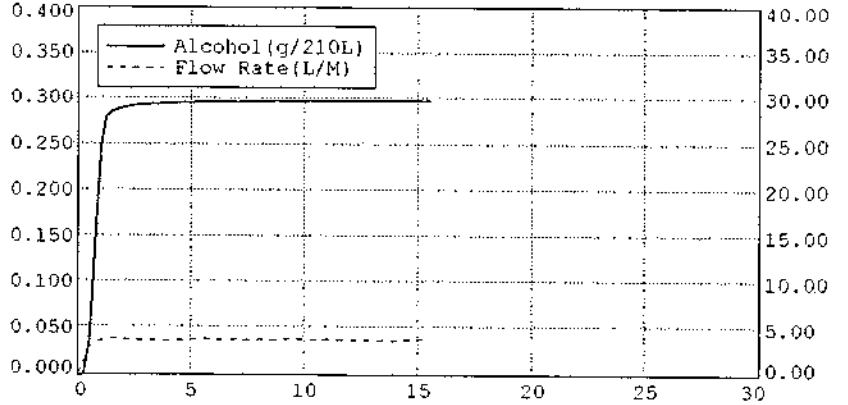
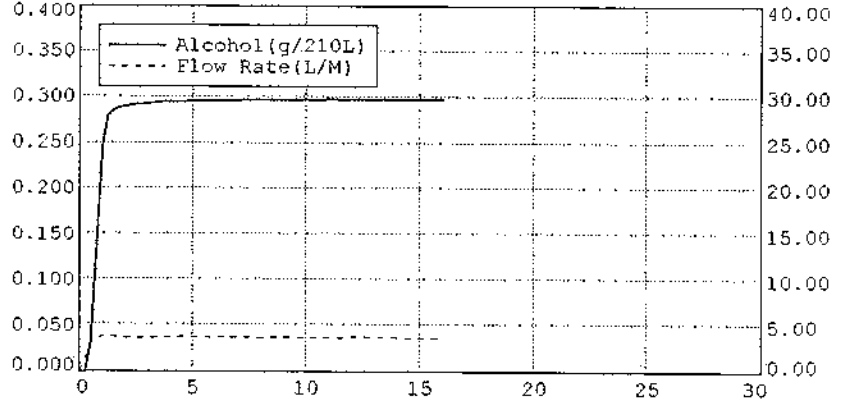
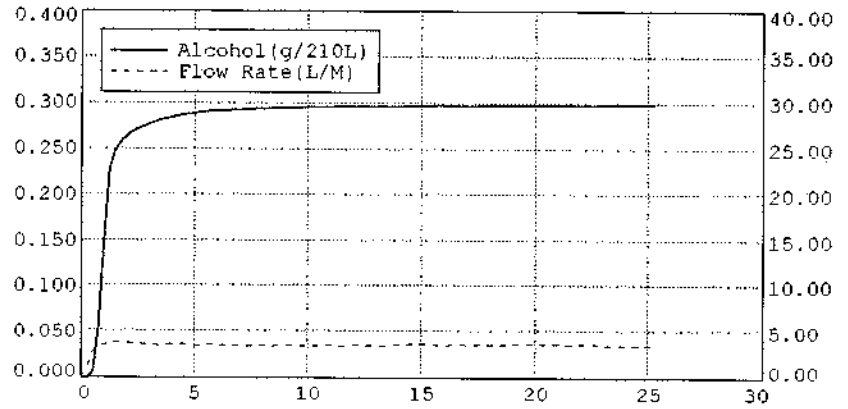
Date: 09/30/2015
 Time: 11:11:14

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	11:13
INTERNAL STANDARD	VERIFIED	11:13
EXTERNAL STANDARD	0.299	11:13
BLANK TEST	0.000	11:14
EXTERNAL STANDARD	0.297	11:15
BLANK TEST	0.000	11:16
EXTERNAL STANDARD	0.297	11:16
BLANK TEST	0.000	11:17
EXTERNAL STANDARD	0.298	11:17
BLANK TEST	0.000	11:18
EXTERNAL STANDARD	0.298	11:19
BLANK TEST	0.000	11:19

Average = 0.2978
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 13:50:16

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

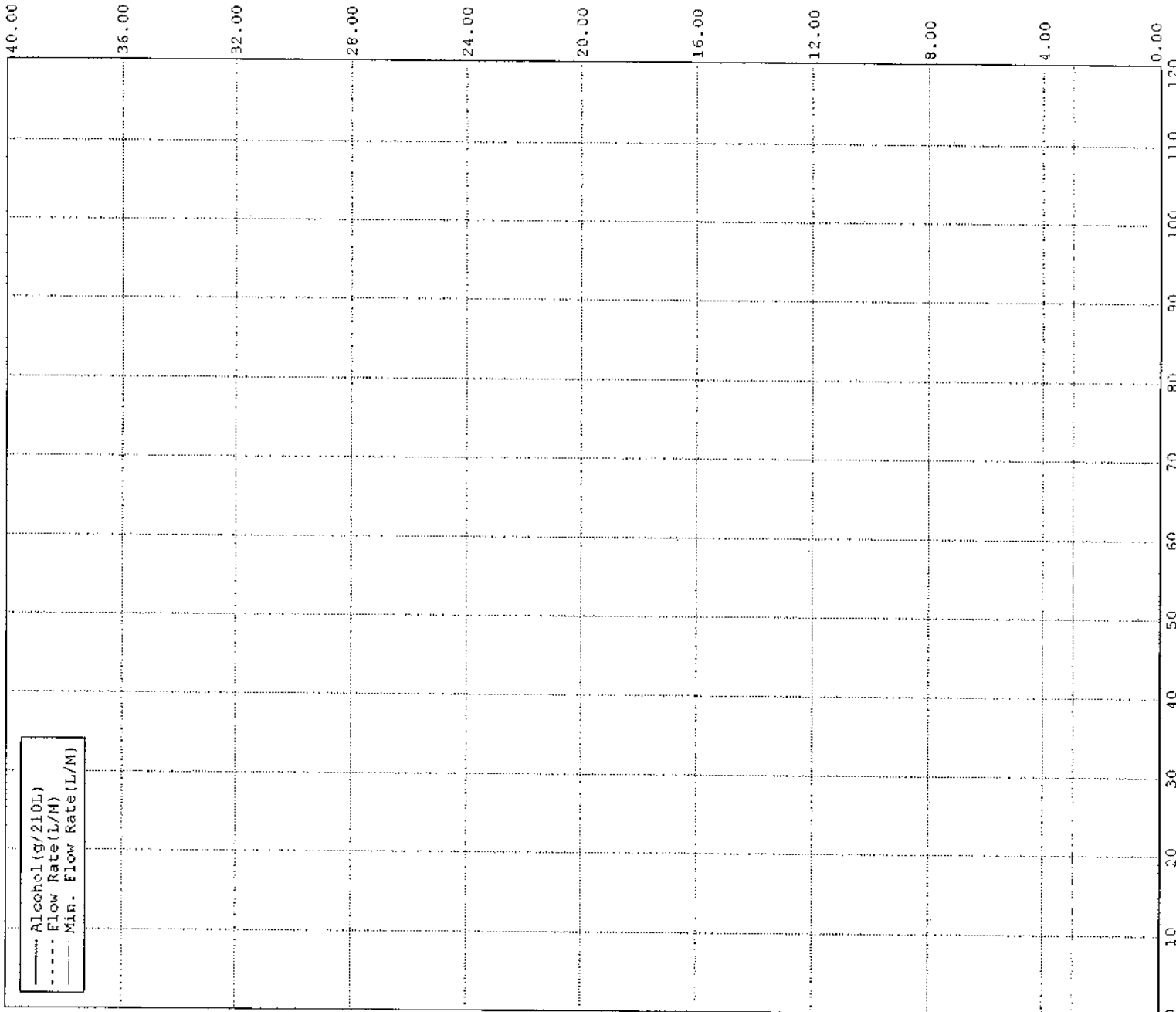
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 13:51
BLANK TEST 0.000 13:51
INTERNAL STANDARD VERIFIED 13:51
EXTERNAL STANDARD 0.079 13:52
BLANK TEST 0.000 13:53
SUBJECT SAMPLE INCOMPLETE 13:55

COB



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100363

Date: 09/30/2015
Time: 13:56:55

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

DEPT/AGENCY:
AAA1

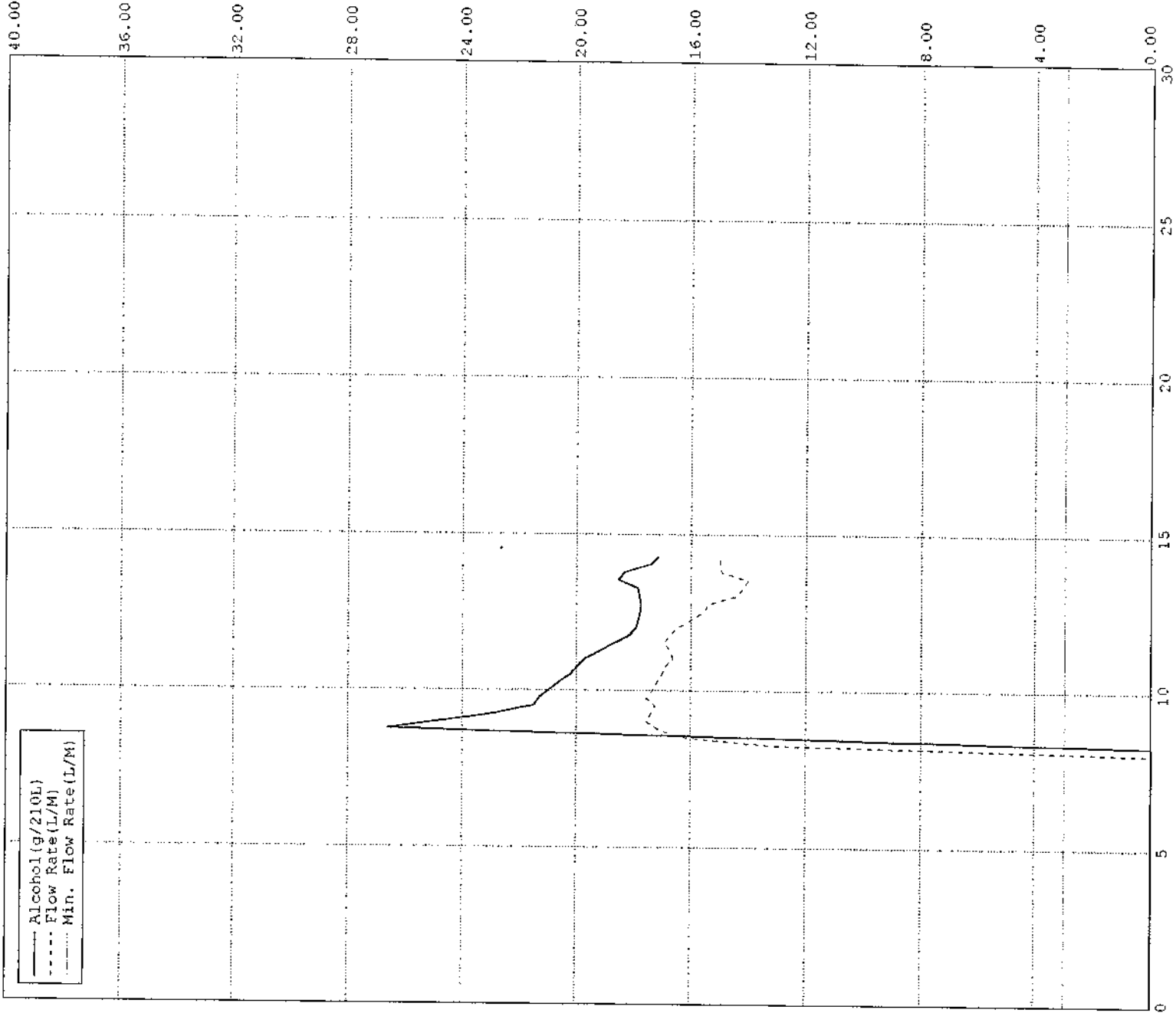
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.61: 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	0.079	13:58
BLANK TEST	0.000	13:59
SUBJECT SAMPLE	INVALID	13:59

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 14:11:12

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

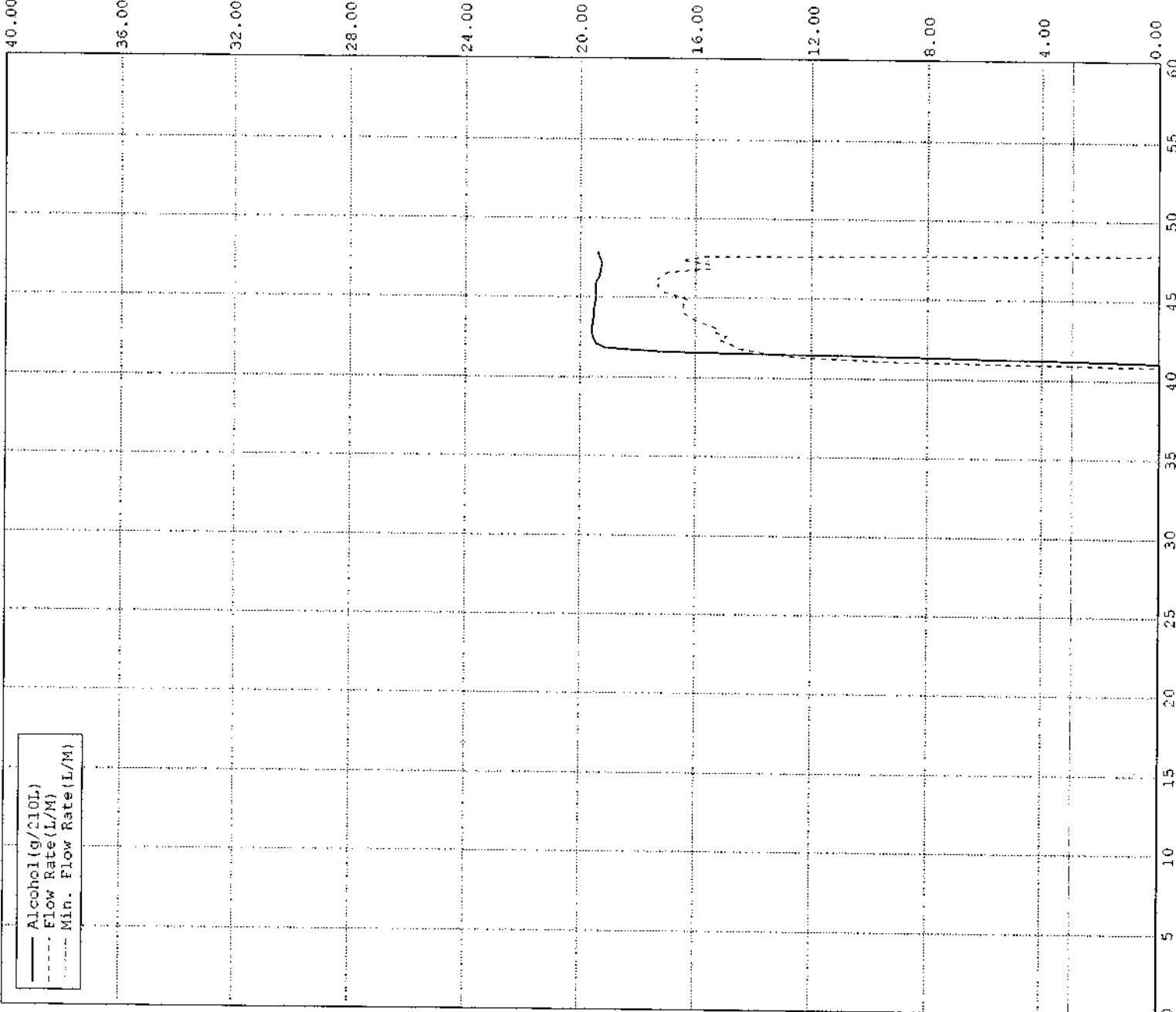
OPERATOR NAME:
COLLEEN S OBRyant
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 14:12
BLANK TEST 0.000 14:12
INTERNAL STANDARD VERIFIED 14:12
Xq = 0.097 (0.81%) 0.079 14:12
EXTERNAL STANDARD X[1] = 0.0785 (0.0000) (0.0019) 0.000 14:13
BLANK TEST XXX 14:14
SUBJECT SAMPLE X[1] = 0.0977 (-0.0129) (0.0000)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 10/01/2015
Time: 09:28:29

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

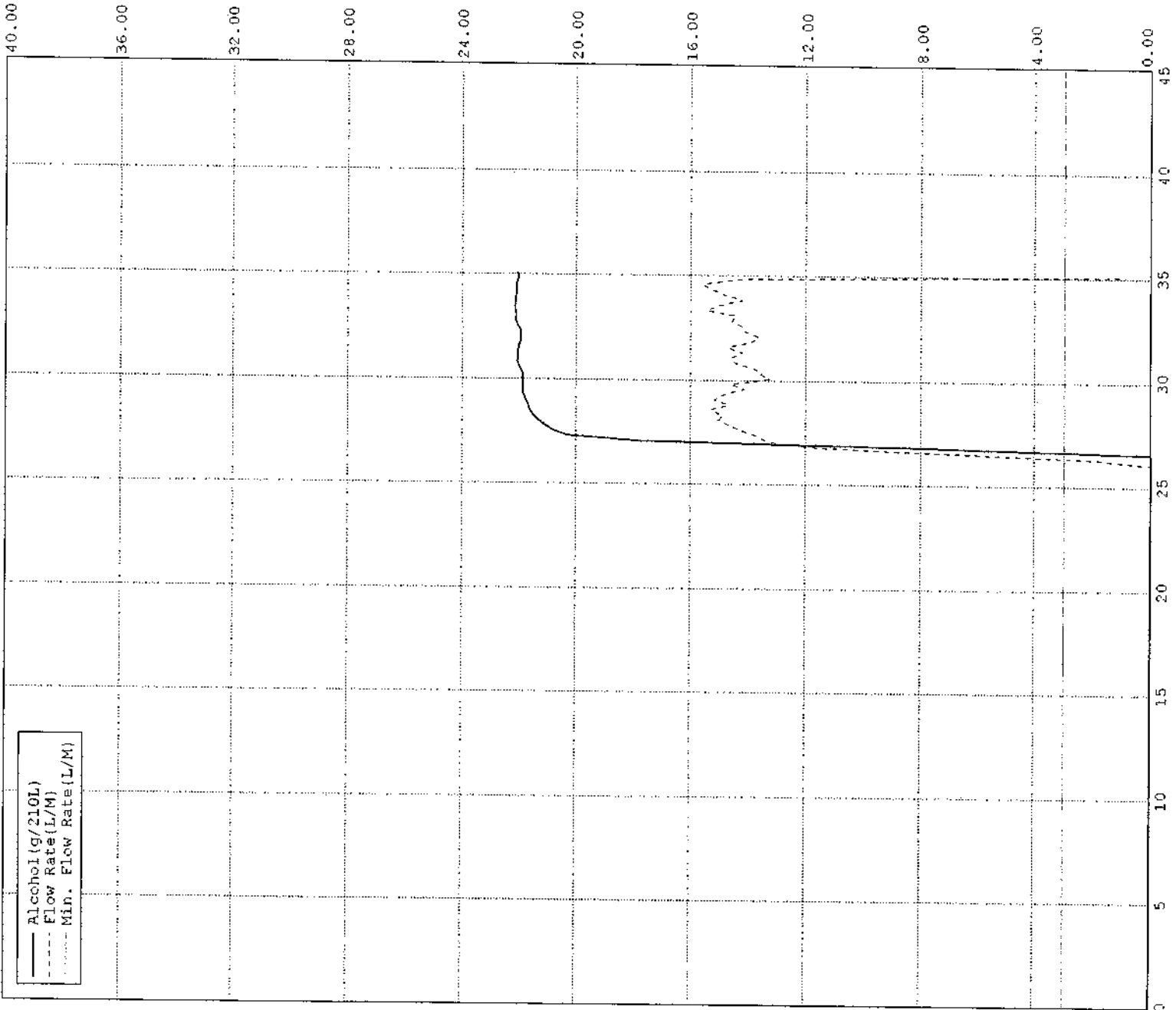
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 30.18: 0.081
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:29
BLANK TEST 0.000 09:29
INTERNAL STANDARD VERIFIED 09:29
Xq = 0.096 (1.17%)
EXTERNAL STANDARD 0.080 09:29
X[1] = 0.0801 (-0.0026) (-0.0020)
BLANK TEST 0.000 09:30
SUBJECT SAMPLE XXX 09:31
X[1] = 0.1124 (-0.0277) (-0.0039)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 14:25:52

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

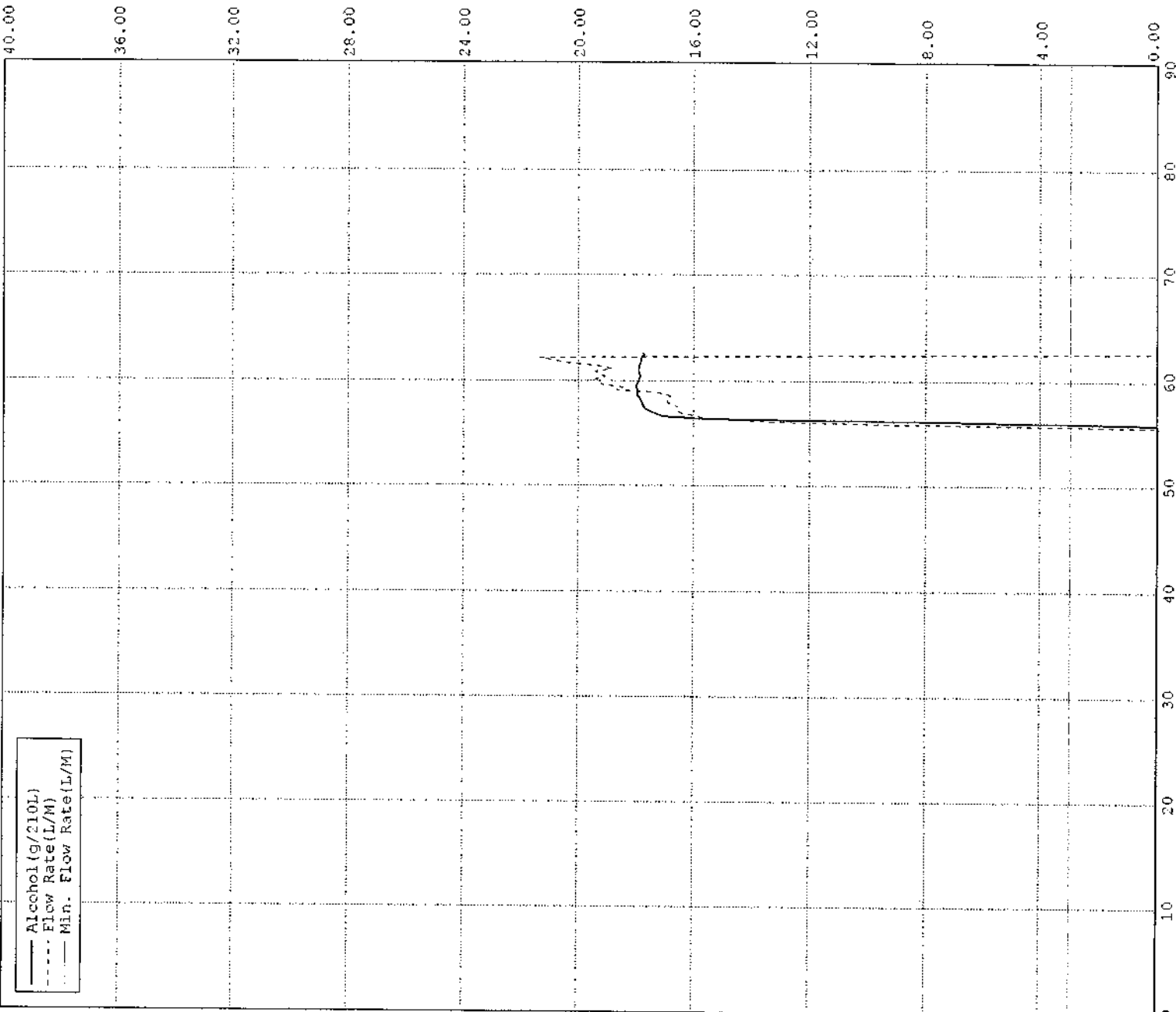
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:26
BLANK TEST	0.000	14:27
INTERNAL STANDARD	VERIFIED	14:27
Xg = 0.097 (0.72%)		
EXTERNAL STANDARD	0.078	14:27
X[1] = 0.0781 (-0.0006)	(0.0016)	
BLANK TEST	0.000	14:28
SUBJECT SAMPLE (Vol=1.96L)	0.089	14:29
X[1] = 0.0891 (-0.0007)	(0.0004)	
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.078	14:30
X[1] = 0.0779 (-0.0006)	(0.0010)	
BLANK TEST	0.000	14:31

Filter 2 avg = -0.0010

Filter 3 avg = 0.0006



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 14:04:23

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

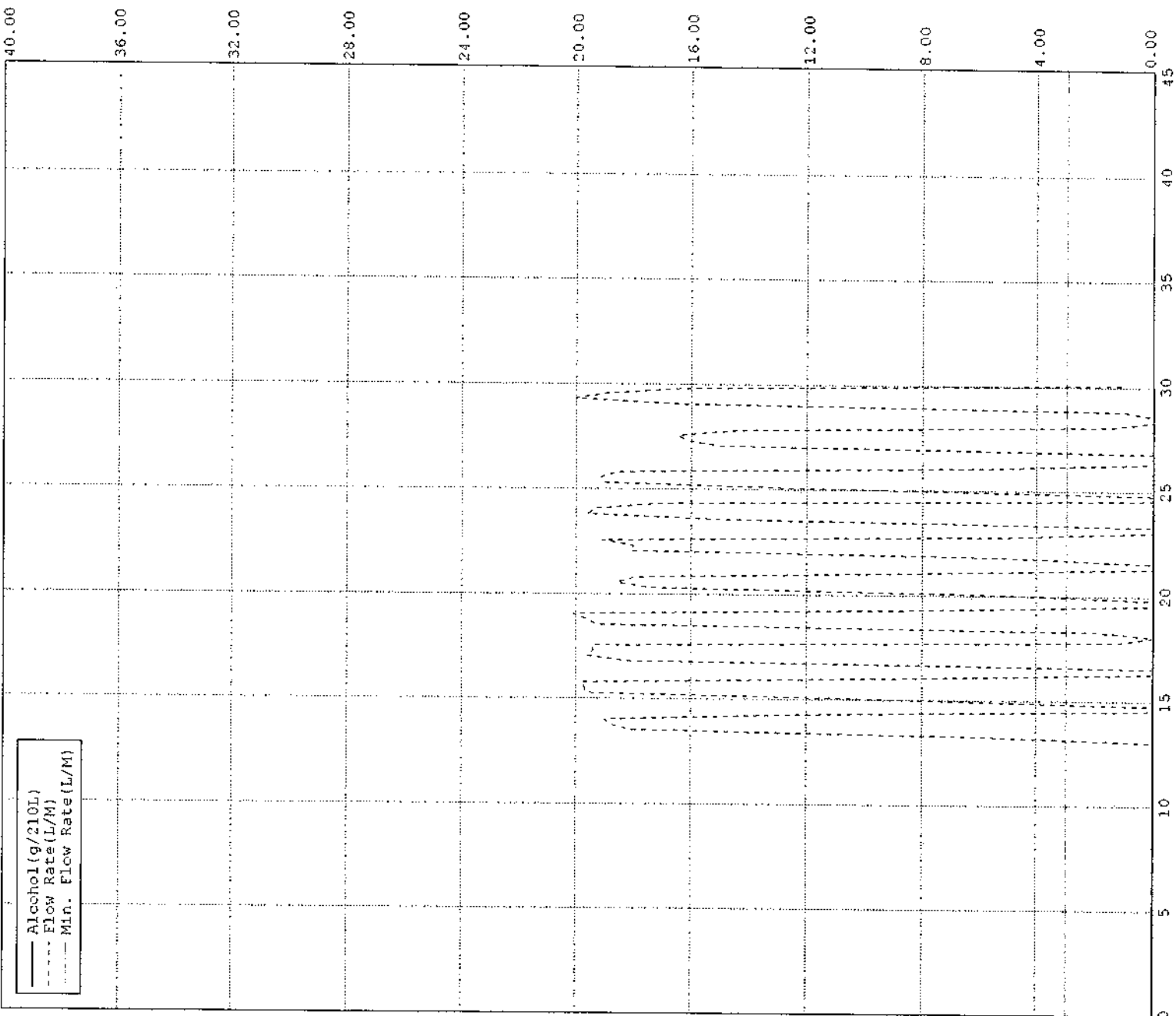
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.62: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 14:05
BLANK TEST 0.000 14:05
INTERNAL STANDARD VERIFIED 14:05
EXTERNAL STANDARD 0.078 14:05
BLANK TEST 0.000 14:06
SUBJECT SAMPLE XXX 14:07

Maximum Attempts Exceeded

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 13:42:44

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

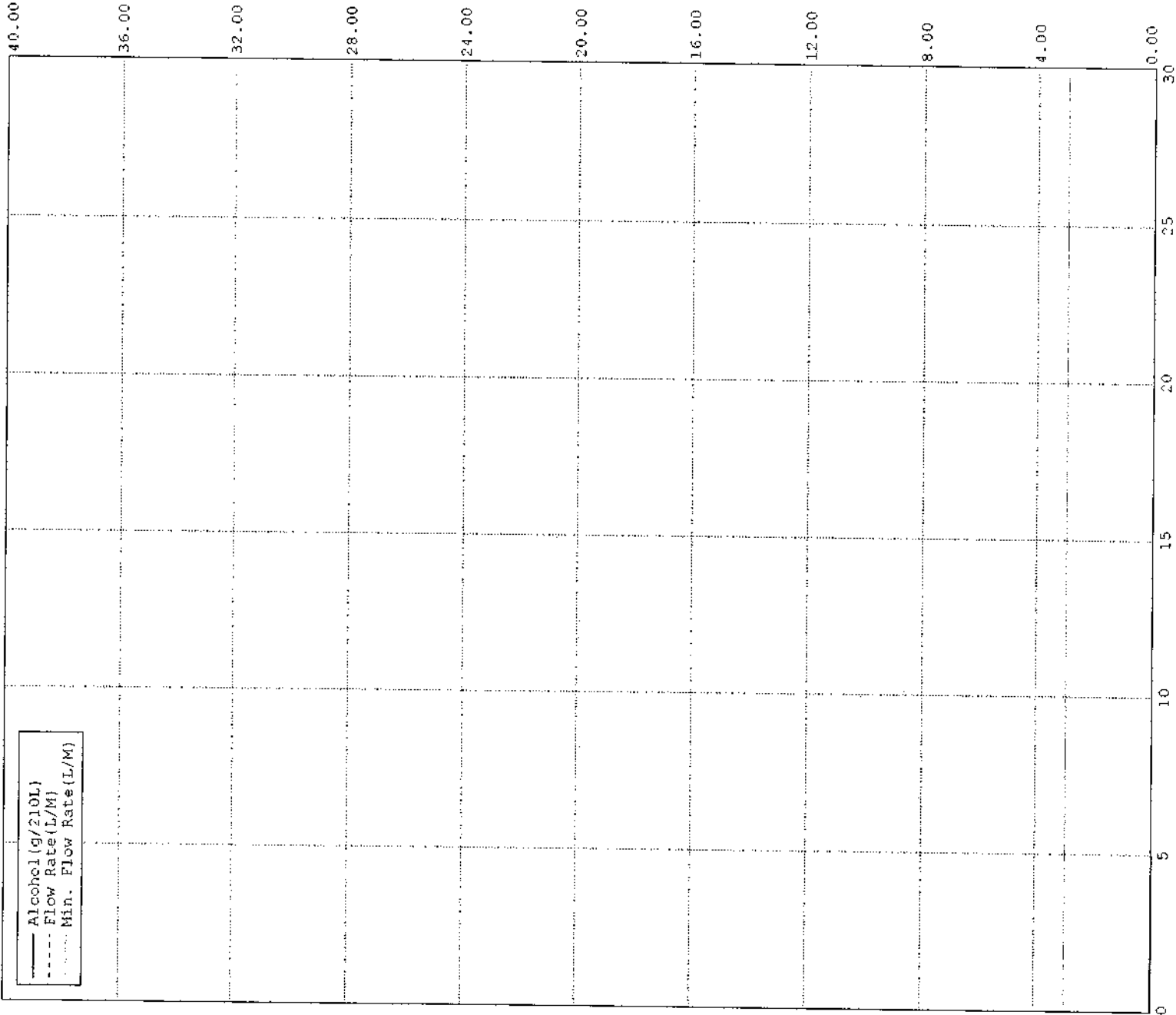
DEPT/AGENCY:
AAA1
CASE/REPORT: 15-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.61: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 13:44
BLANK TEST 0.000 13:44
INTERNAL STANDARD VERIFIED 13:45
EXTERNAL STANDARD 0.078 13:45
BLANK TEST 0.000 13:46

RFI DETECTED

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100363

Date: 09/30/2015
Time: 15:04:12

SUBJECT NAME:
TEST TEST
LICENSE #: NON-DRINKING

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 29.66: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:05
BLANK TEST	0.000	15:05
INTERNAL STANDARD	VERIFIED	15:05
EXTERNAL STANDARD	0.079	15:06
BLANK TEST	0.000	15:06
SUBJECT SAMPLE (Vol=1.58L)	0.000	15:07
BLANK TEST	0.000	15:08
EXTERNAL STANDARD	0.079	15:09
BLANK TEST	0.000	15:10

