

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 100367 Analyst Colleen O'Bryen Start Date 5/4/16

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 02915080A2 Exp 3/5/17
- ii. 0.040g/210L Mnf ILMO Lot 02915040A3 Exp 3/5/17
- iii. 0.080g/210L Mnf ILMO Lot 01315080A2 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 DR5298 Date Calibrated 8/5/15
- vi. 0.300g/210L Mnf GUTH Lot 15170 Exp 7/20/17
 - 1. Simulator S/N SD1198 Date Calibrated 8/5/15

5. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference
- d. Exceeded attempts

- i. Acetone - Mnf GUTH Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N SD1199 Date Calibrated 8/5/15
- ii. Isopropanol - Mnf GUTH Lot 15050 Level 0.100 Exp 3/9/17
 - 1. Simulator S/N SD1177 Date Calibrated 8/5/15
- iii. Negative Control - Mnf GUTH Lot 15220 Level 0.100 Exp 9/28/17
 - 1. Simulator S/N DR4161 Date Calibrated 8/5/15

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 5/5/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/04/2016
Time: 09:36:36

VERSIONS
DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 49.1°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 46.5°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.52 V PASSED
(0.90 V - 2.10 V)
Cooler Voltage = 1.61 V PASSED
(1.06 V - 2.48 V)
Bias Voltage = 80 V PASSED
(47 V - 111 V)
Chopper Freq = 542 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.7 in

PUMP INFO

Flow Rate = 4.270 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 = 0.081 0.64% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100367

Date: 05/04/2016
Time: 10:46 AM

Temperatures (°C)
Sample Cell: 48.7°C
Breath Tube: 46.0°C

Current Barometer 29.6 in
Volume (Ltr) 1.51

Settings
Lamp: 1.52 V
Bias: 80 V
Cooler: 1.61 V
Chopper: 541 Hz

Voltages (V)
Flow: 1.03 V
Detector: 0.061 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 09/30/2013
Time: 09:33:37

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca = 0.1000
CAL = 0.942606 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0048 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0814 0.0500 <= Xq < 0.2000
a21 = 1.173194 1.050 <= a21 < 1.300
a31 = 0.380707 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100367

Date: 05/04/2016

Time: 12:42:32

SUBJECT NAME:

TEST TEST

LICENSE #: VOLUME TEST

OPERATOR NAME:

COLLEEN S OBRyant

OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 16-1234

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.64: 0.079

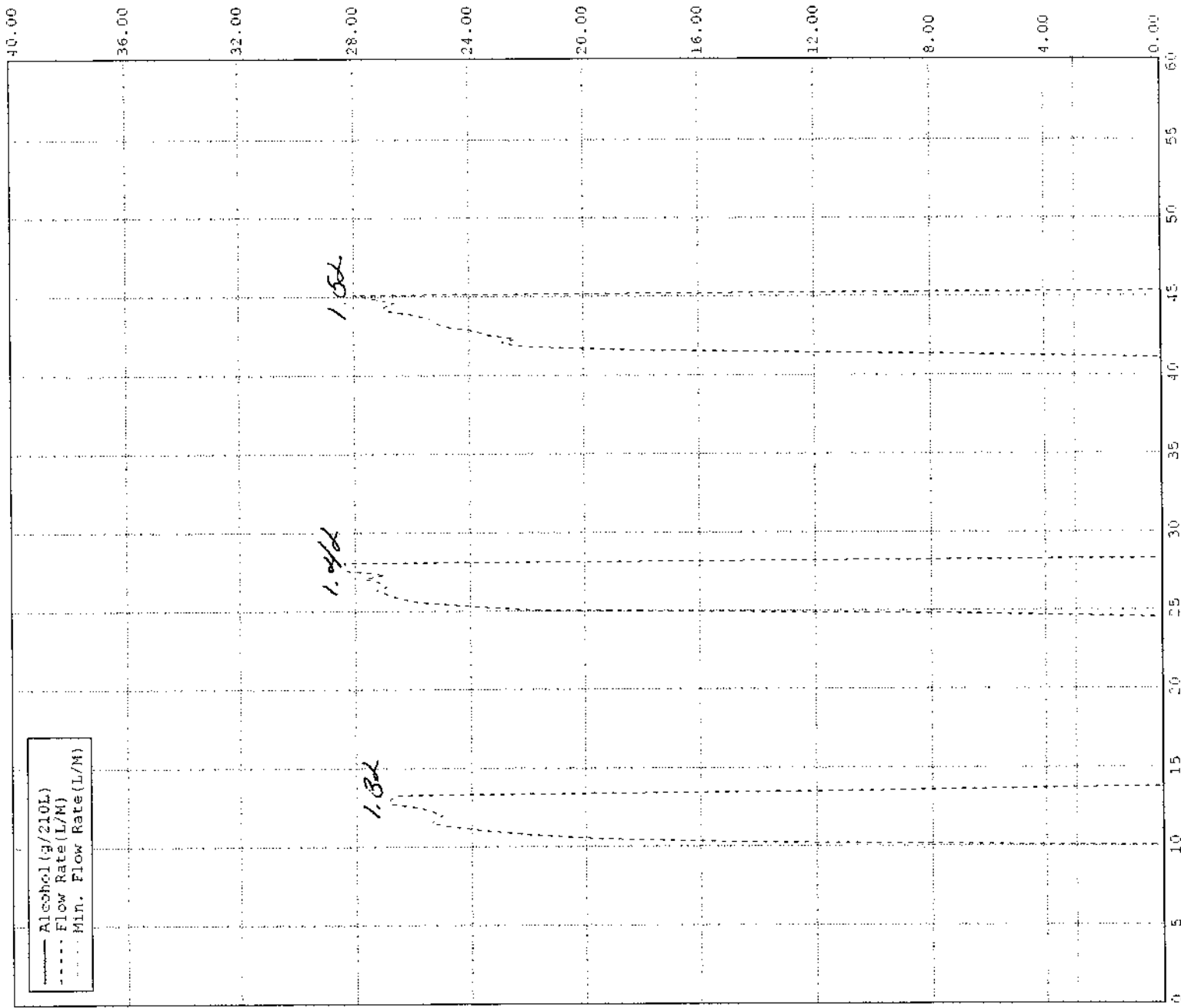
LOT #: 01315080A2

EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK

BLANK TEST	0.000	PASSED	12:43
INTERNAL STANDARD	0.075	VERIFIED	12:43
EXTERNAL STANDARD	0.000		12:44
BLANK TEST	0.000		12:45
SUBJECT SAMPLE (Vol=1.58L)	0.000		12:45
BLANK TEST	0.000		12:46
EXTERNAL STANDARD	0.076		12:46
BLANK TEST	0.000		12:47

CAB



LINEARITY CHECK

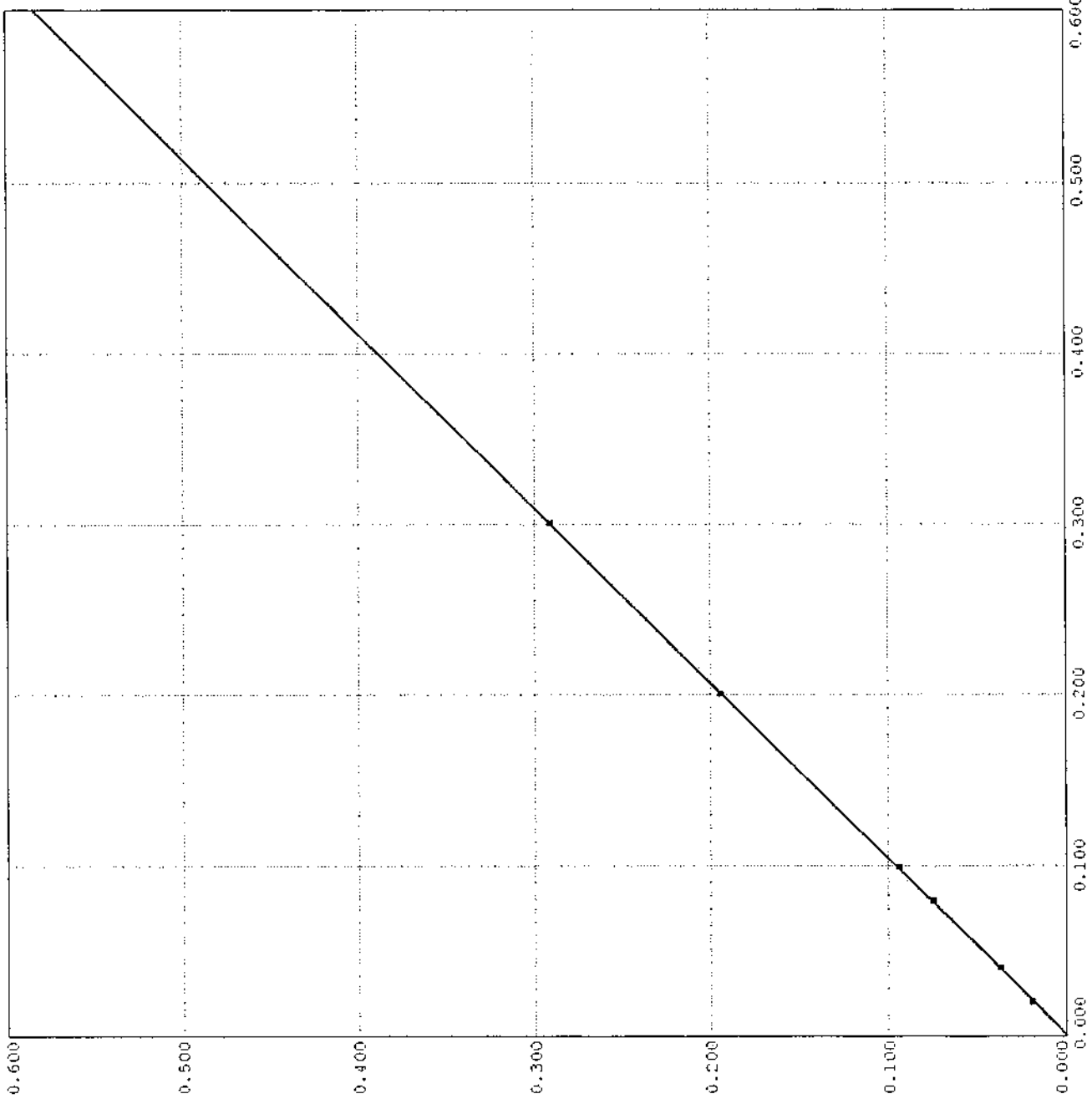
Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/04/2016
Time: 13:18:47

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0380	0.0000
0.079	0.0758	0.0004
0.099	0.0950	0.0000
0.200	0.1952	0.0004
0.300	0.2920	0.0000

SLOPE = 0.975854
R² = 0.999941



COB

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100367

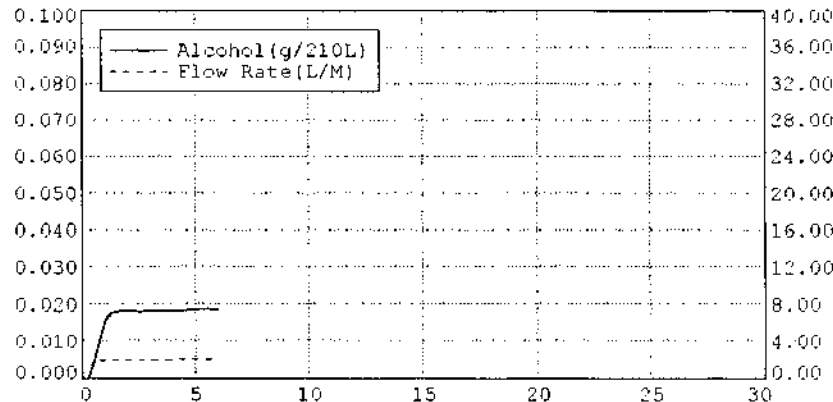
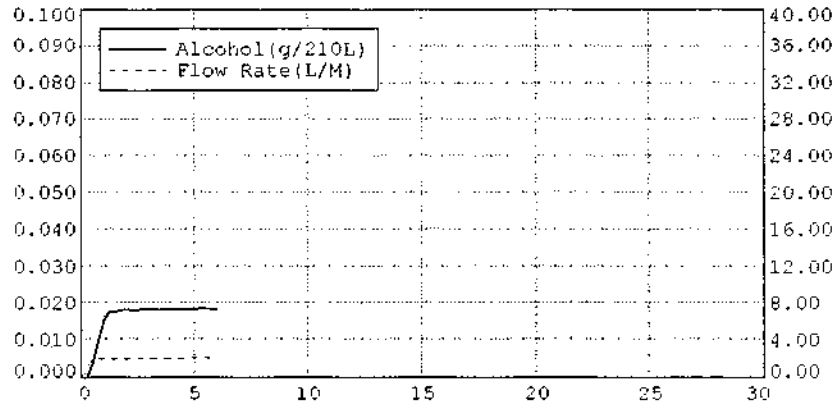
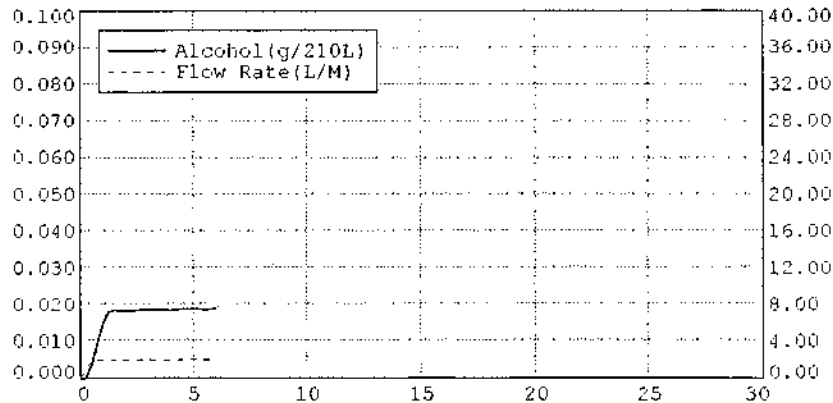
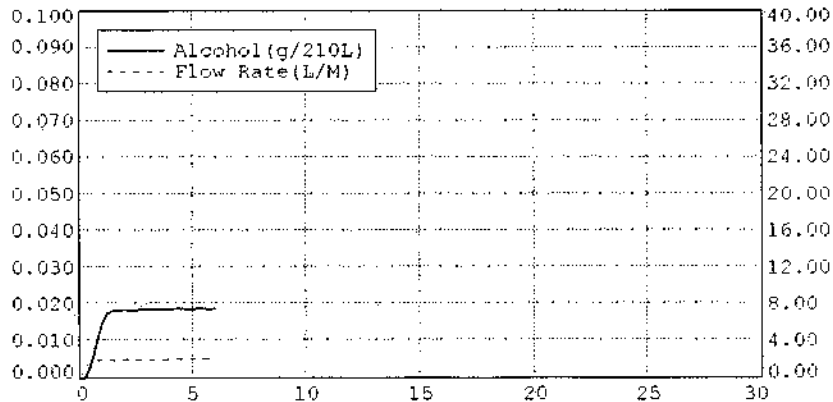
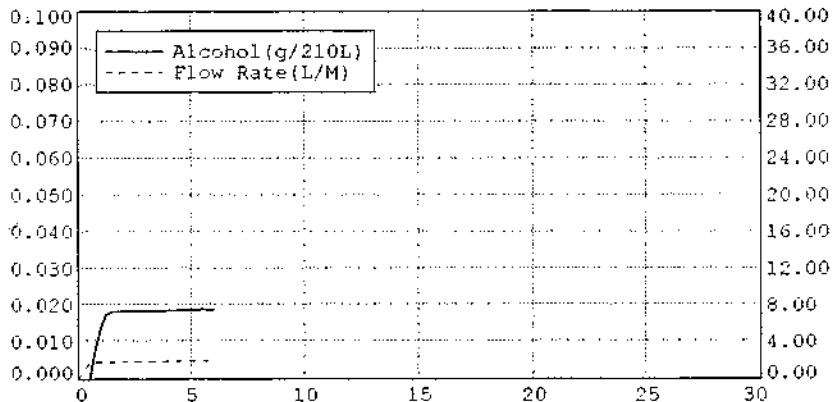
Date: 05/04/2016
 Time: 13:18:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.63: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 843 psi

BLANK TEST	0.000	13:32
INTERNAL STANDARD	VERIFIED	13:32
EXTERNAL STANDARD	0.020	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.020	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.020	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.020	13:35
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.020	13:36
BLANK TEST	0.000	13:37

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100367

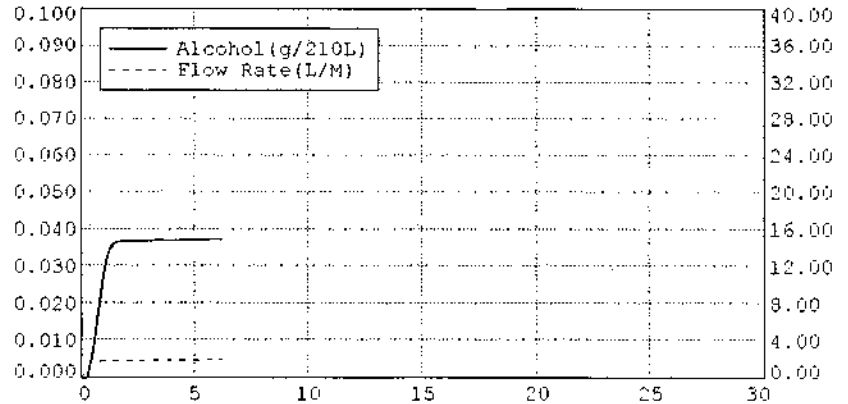
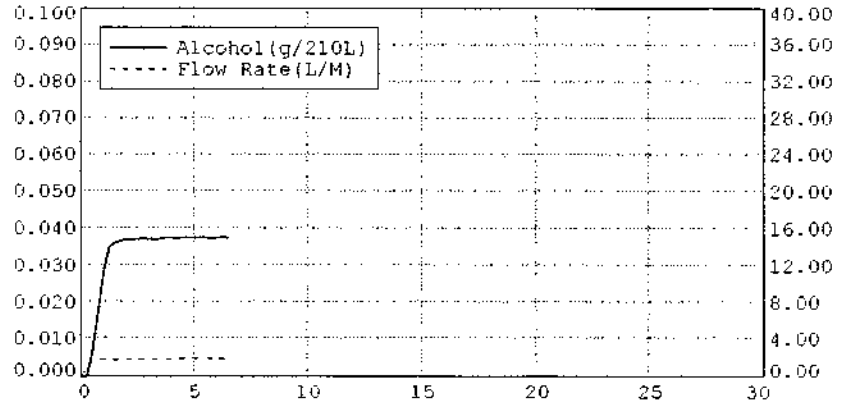
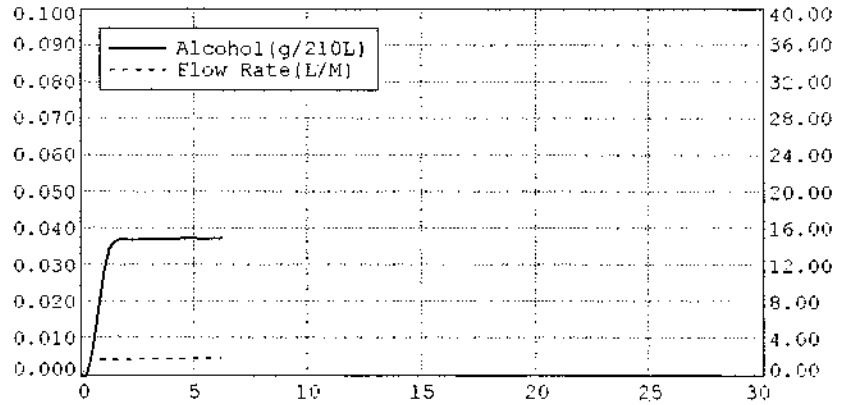
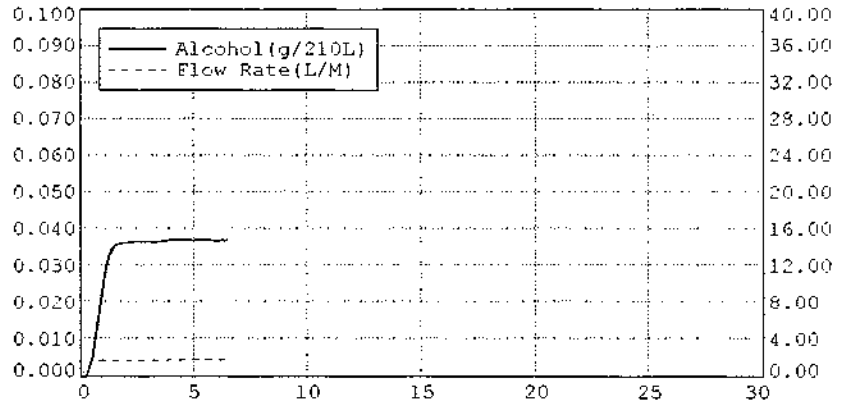
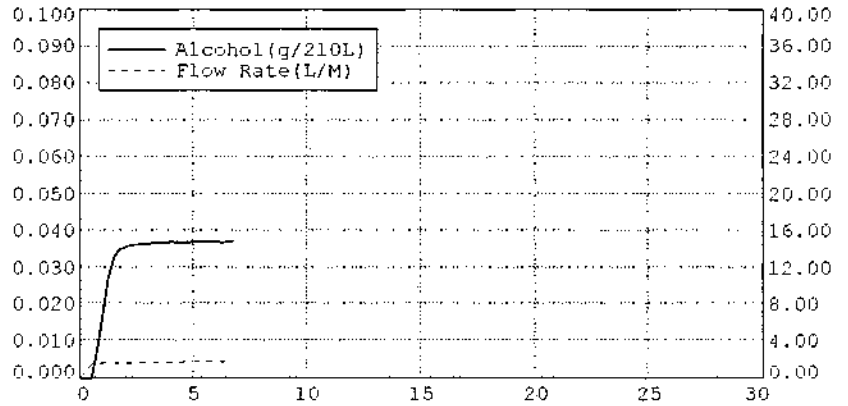
Date: 05/04/2016
 Time: 13:40:01

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.63: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 312 psi

BLANK TEST	0.000	13:41
INTERNAL STANDARD	VERIFIED	13:41
EXTERNAL STANDARD	0.038	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.038	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.038	13:43
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.038	13:44
BLANK TEST	0.000	13:45
EXTERNAL STANDARD	0.038	13:45
BLANK TEST	0.000	13:46

Average = 0.0380
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100367

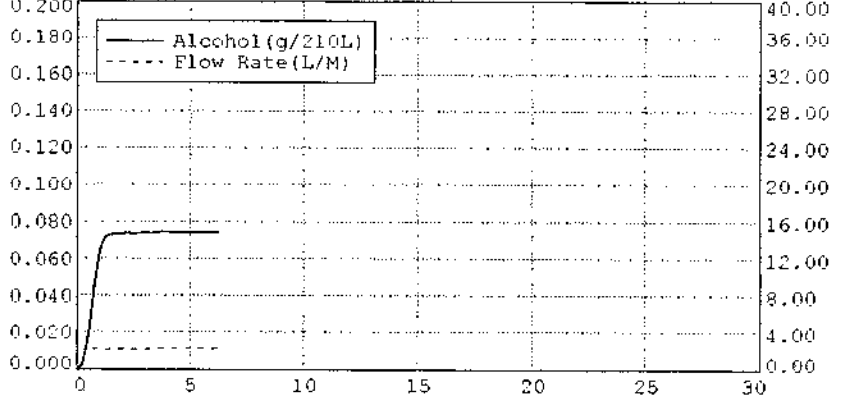
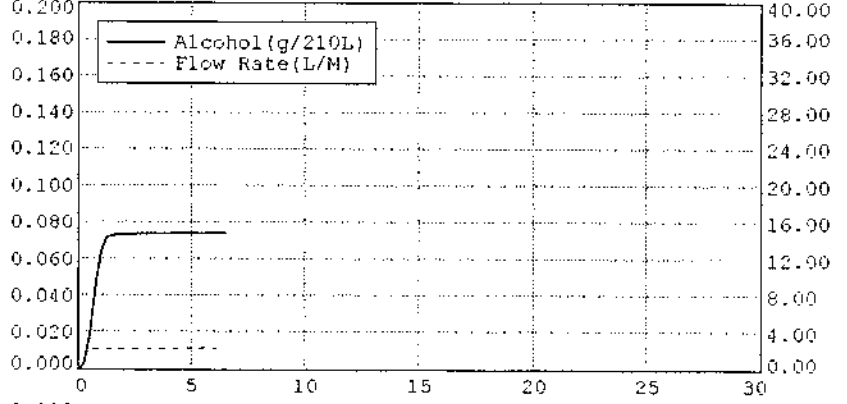
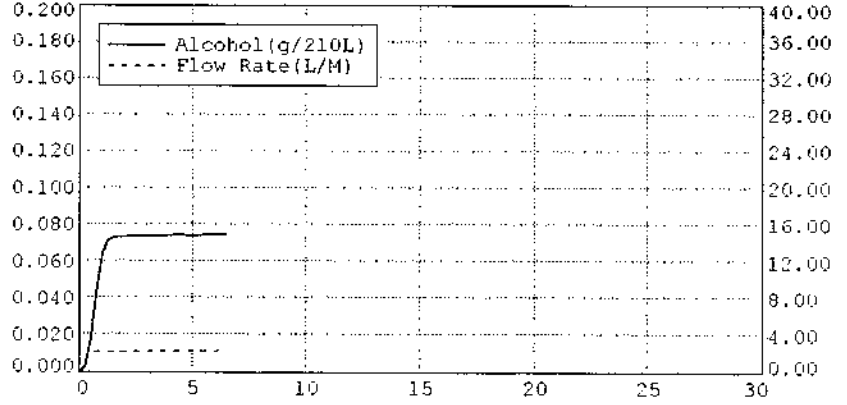
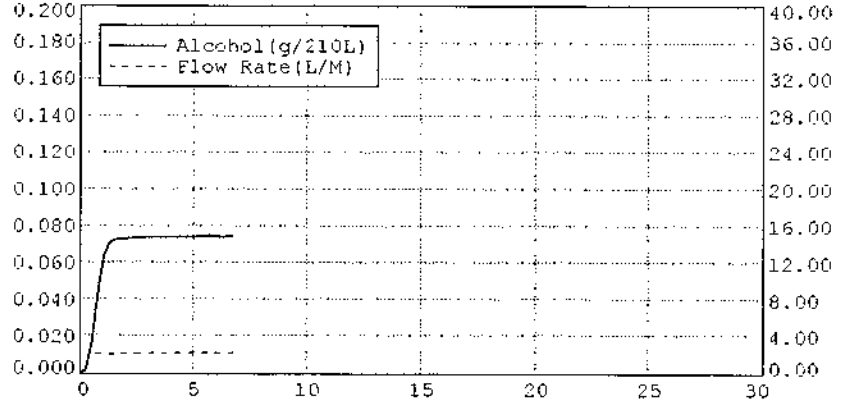
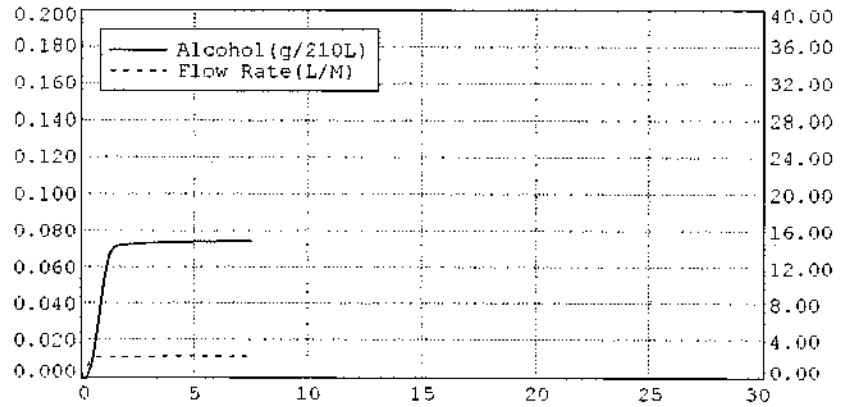
Date: 05/04/2016
 Time: 13:47:43

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.63: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 907 psi

BLANK TEST	0.000	13:48
INTERNAL STANDARD	VERIFIED	13:49
EXTERNAL STANDARD	0.076	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.076	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.076	13:51
BLANK TEST	0.000	13:52
EXTERNAL STANDARD	0.075	13:52
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.076	13:53
BLANK TEST	0.000	13:54

Average = 0.0758
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100367

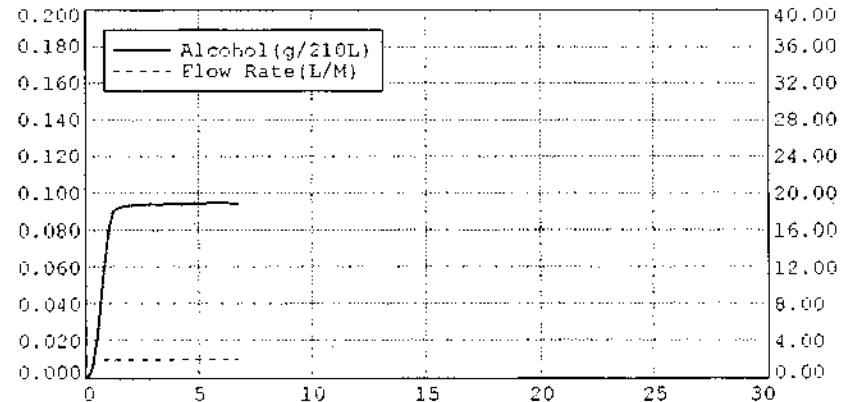
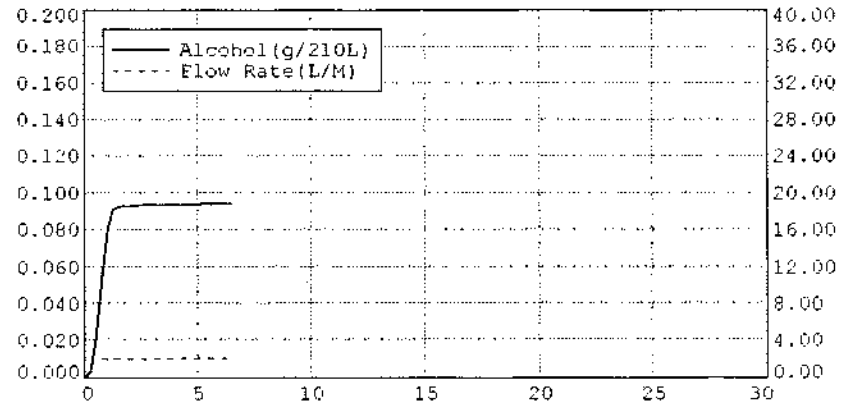
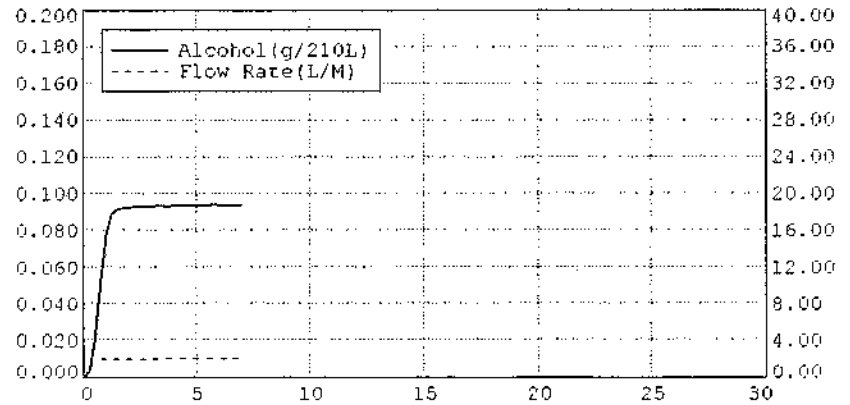
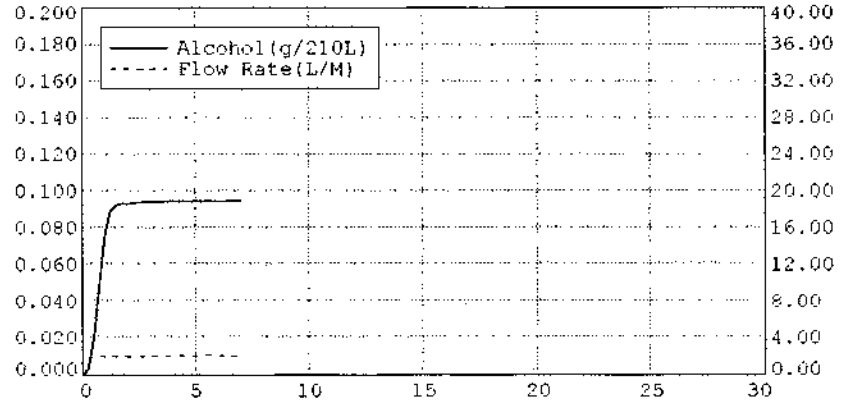
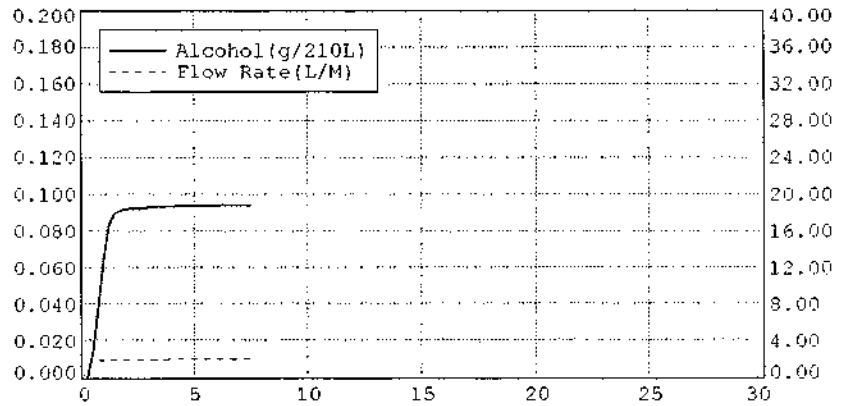
Date: 05/04/2016
 Time: 13:55:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.63: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 582 psi

BLANK TEST	0.000	13:56
INTERNAL STANDARD	VERIFIED	13:57
EXTERNAL STANDARD	0.095	13:57
BLANK TEST	0.000	13:58
EXTERNAL STANDARD	0.095	13:58
BLANK TEST	0.000	13:59
EXTERNAL STANDARD	0.095	13:59
BLANK TEST	0.000	14:00
EXTERNAL STANDARD	0.095	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.095	14:01
BLANK TEST	0.000	14:02

Average = 0.0950
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100367

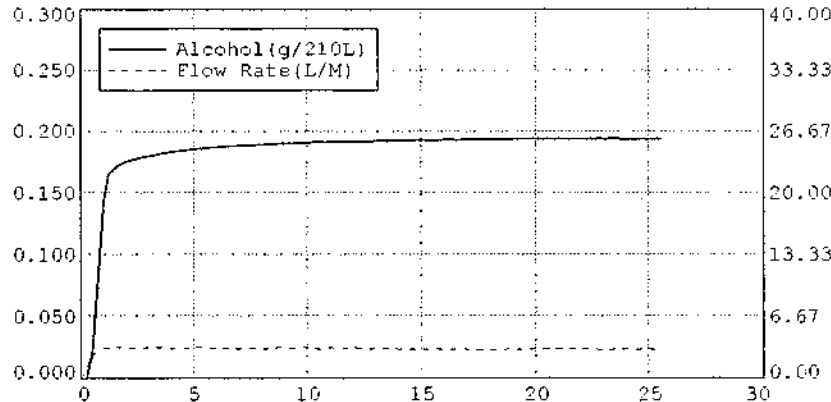
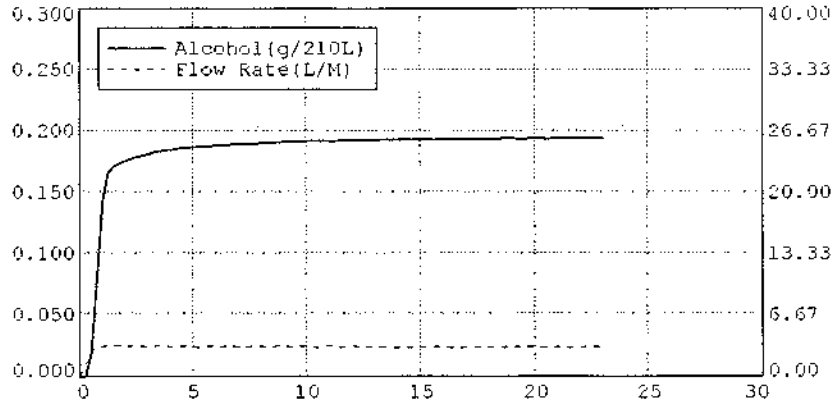
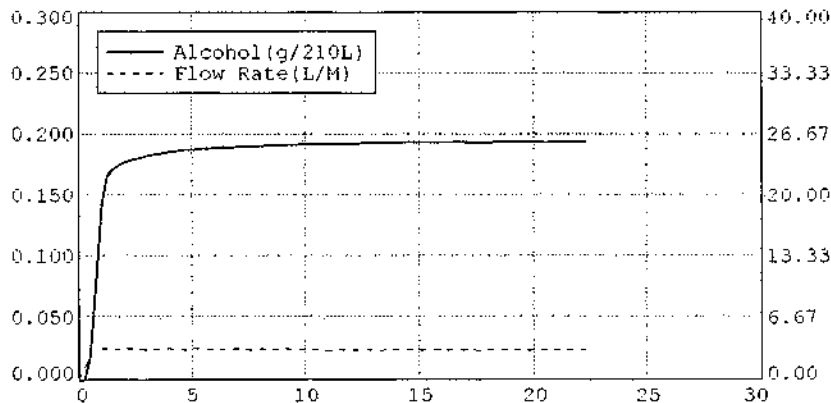
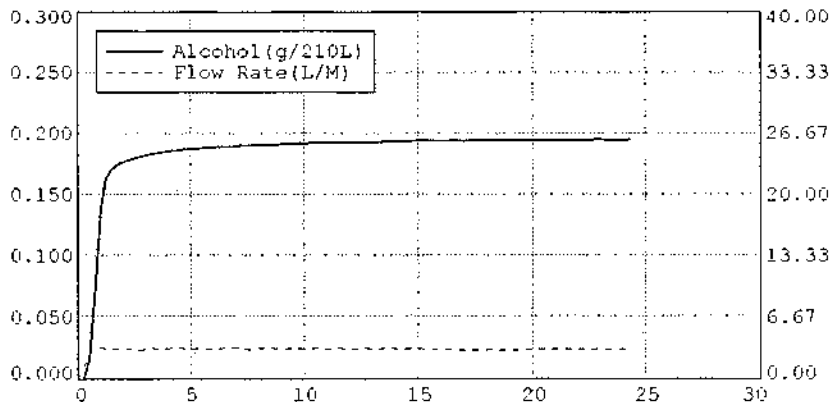
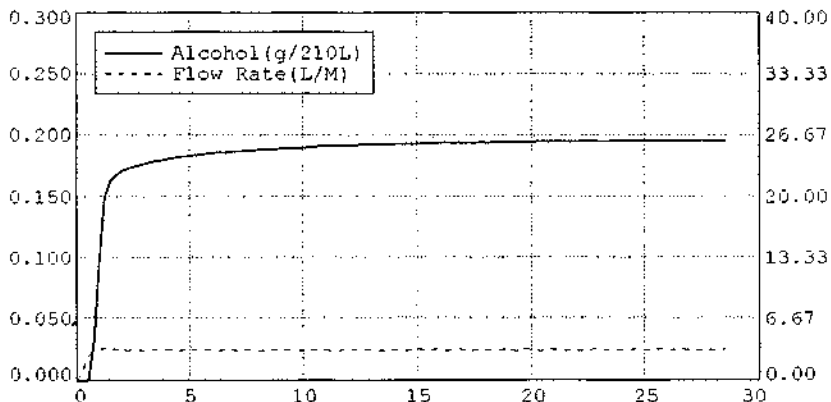
Date: 05/04/2016
 Time: 14:03:18

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	14:05
INTERNAL STANDARD	VERIFIED	14:05
EXTERNAL STANDARD	0.196	14:05
BLANK TEST	0.000	14:06
EXTERNAL STANDARD	0.195	14:07
BLANK TEST	0.000	14:08
EXTERNAL STANDARD	0.195	14:08
BLANK TEST	0.000	14:09
EXTERNAL STANDARD	0.195	14:10
BLANK TEST	0.000	14:11
EXTERNAL STANDARD	0.195	14:11
BLANK TEST	0.000	14:12

Average = 0.1952
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 6

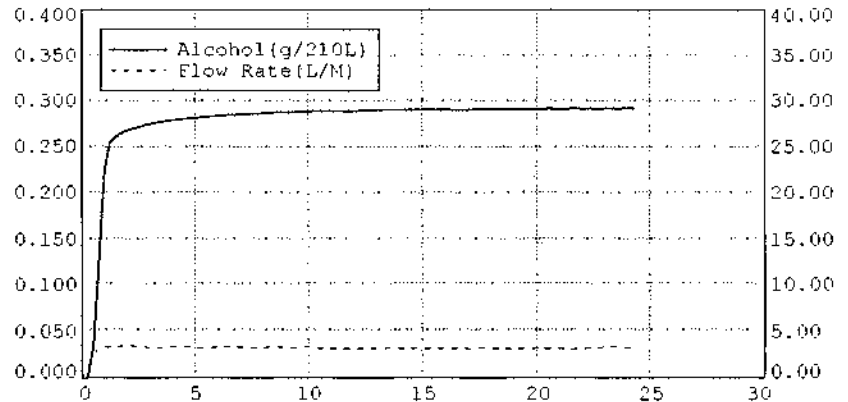
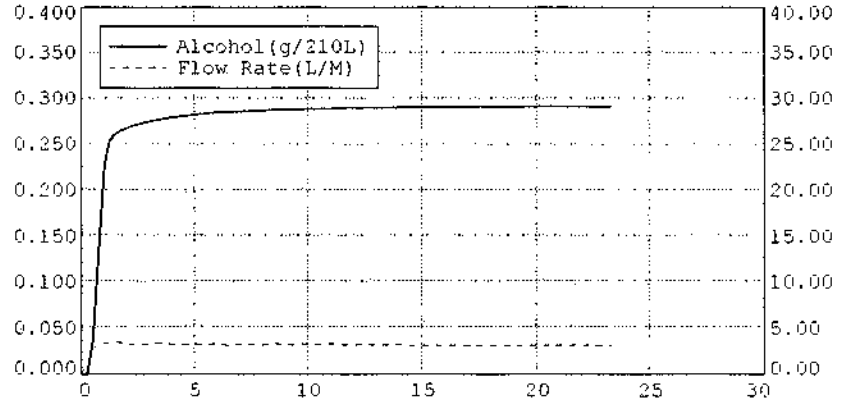
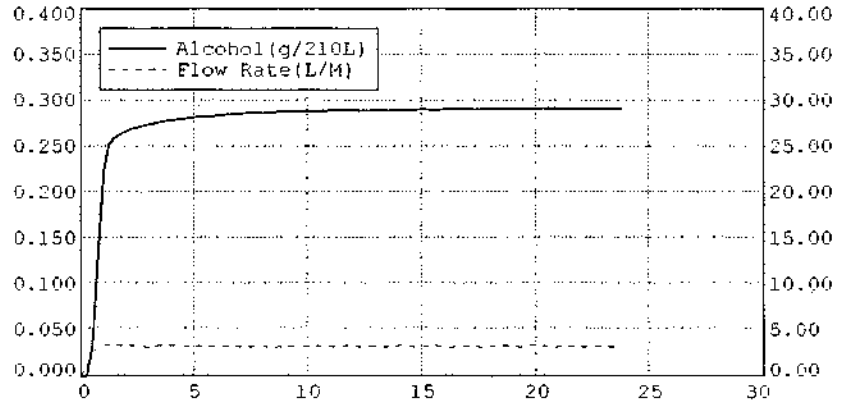
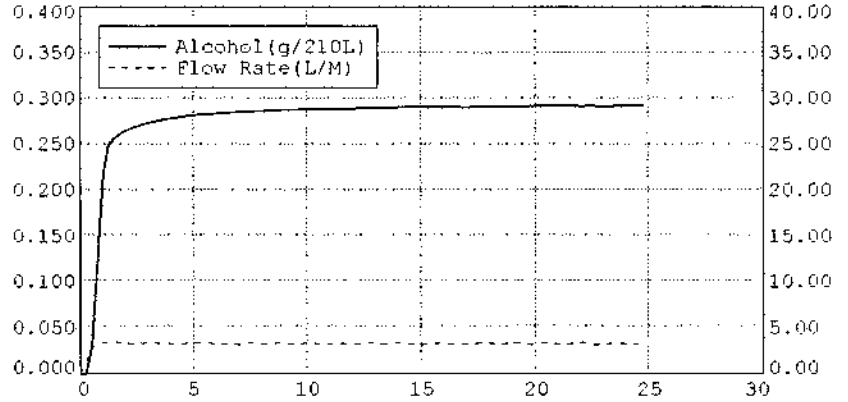
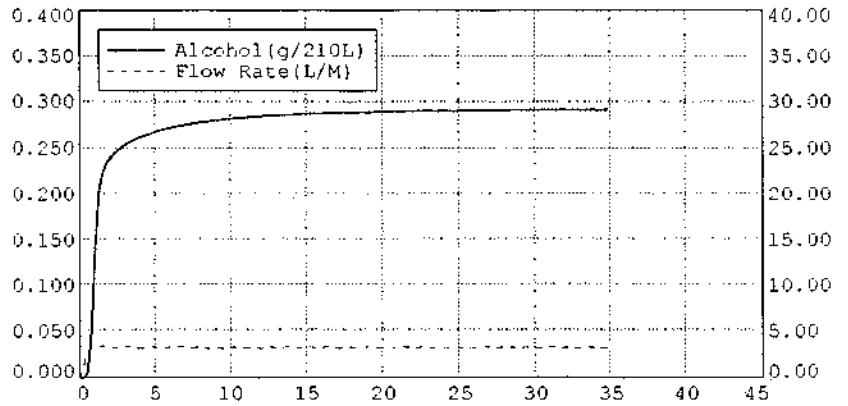
Alaska Department of Public Safety
 DATAMASTER dmt: 100367

Date: 05/04/2016
 Time: 14:16:22

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 15170
 EXPIRATION: 07/20/2017

BLANK TEST	0.000	14:17
INTERNAL STANDARD	VERIFIED	14:17
EXTERNAL STANDARD	0.292	14:18
BLANK TEST	0.000	14:19
EXTERNAL STANDARD	0.292	14:19
BLANK TEST	0.000	14:20
EXTERNAL STANDARD	0.292	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.292	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.292	14:24
BLANK TEST	0.000	14:24

Average = 0.2920
 Std Dev = 0.0000



SUBJECT TEST

Alaska Department of Public Safety

DATAMASTER dmt: 100367

Date: 05/04/2016

Time: 14:29:14

SUBJECT NAME:

TEST TEST

LICENSE #: INCOMPLETE

OPERATOR NAME:

COLLEEN S BRYANT

OPERATOR'S #: 6237

DEPT/AGENCY:

AAA1

CASE/REPORT: 16-12343

TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080

TARGET AT 29.63: 0.079

LOT #: 01315080A2

EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK

PASSED

14:30

BLANK TEST

0.000

14:30

INTERNAL STANDARD

VERIFIED

14:30

EXTERNAL STANDARD

0.075

14:30

BLANK TEST

0.000

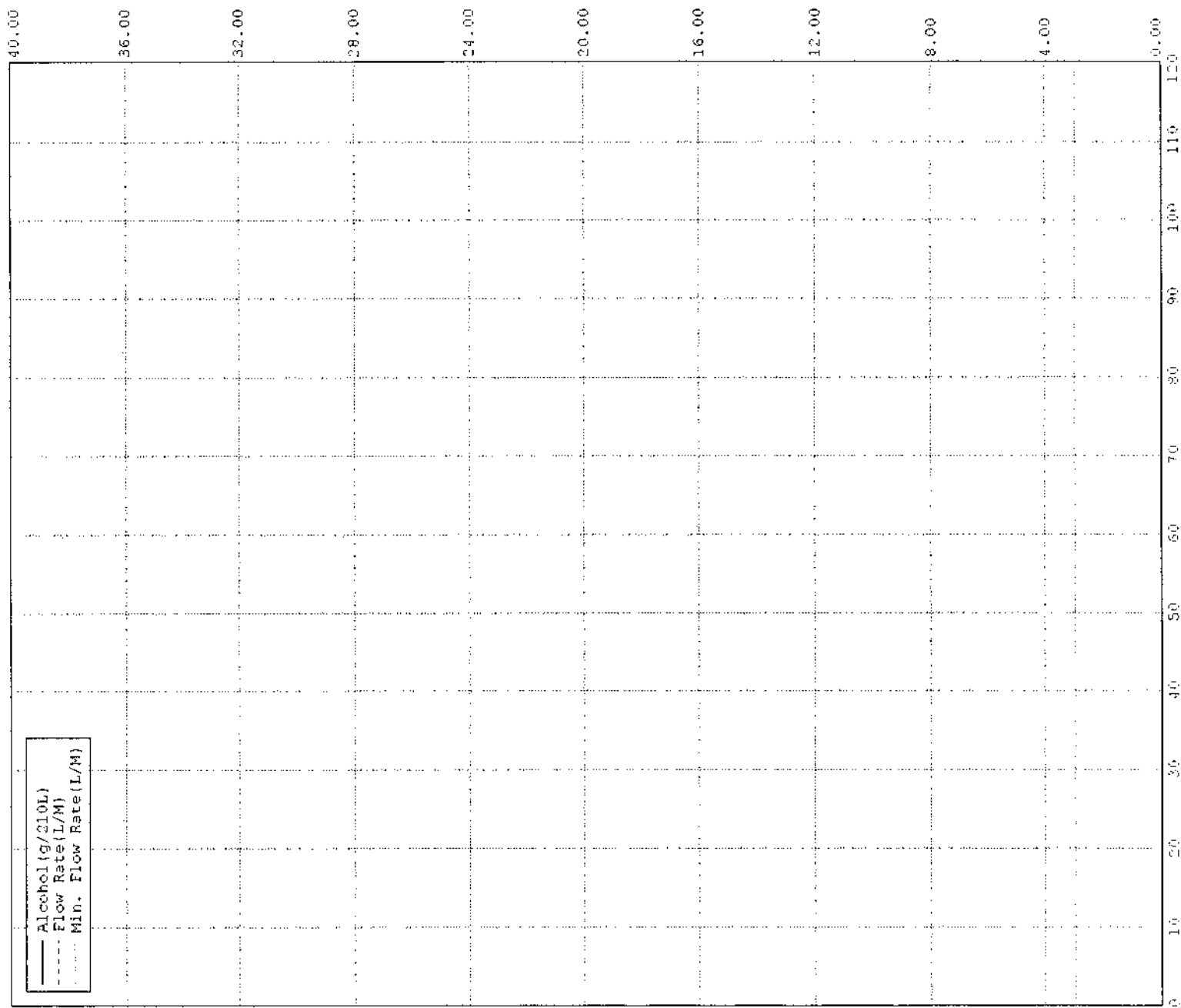
14:31

SUBJECT SAMPLE

INCOMPLETE

14:33

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/04/2016
Time: 14:35:55

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

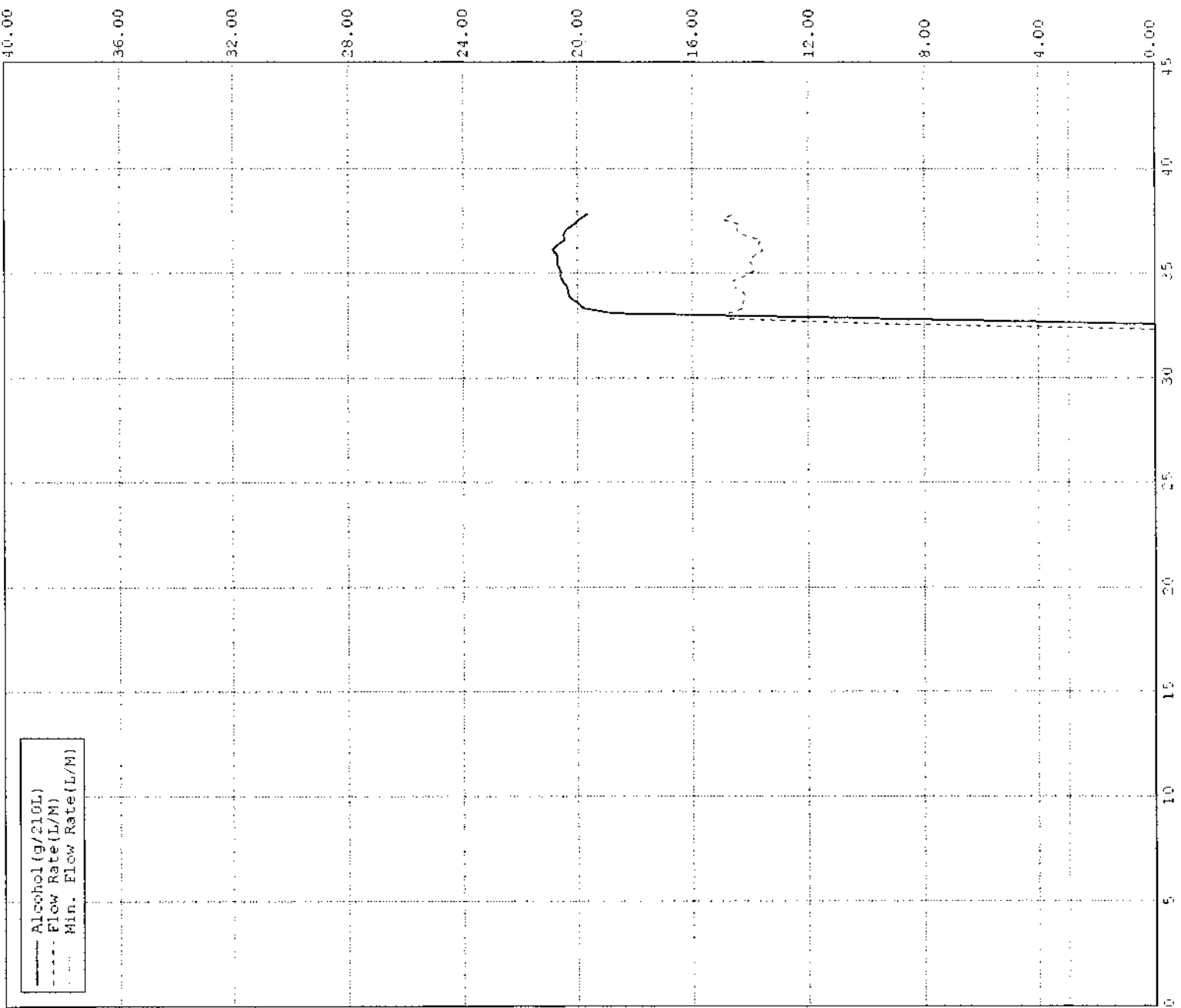
OPERATOR NAME:
COLLEEN S O'BRYANT
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	14:36
BLANK TEST	0.000	14:37
INTERNAL STANDARD	VERIFIED	14:37
EXTERNAL STANDARD	0.076	14:37
BLANK TEST	0.000	14:38
SUBJECT SAMPLE	INVALID	14:39



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/04/2016
Time: 14:59:29

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

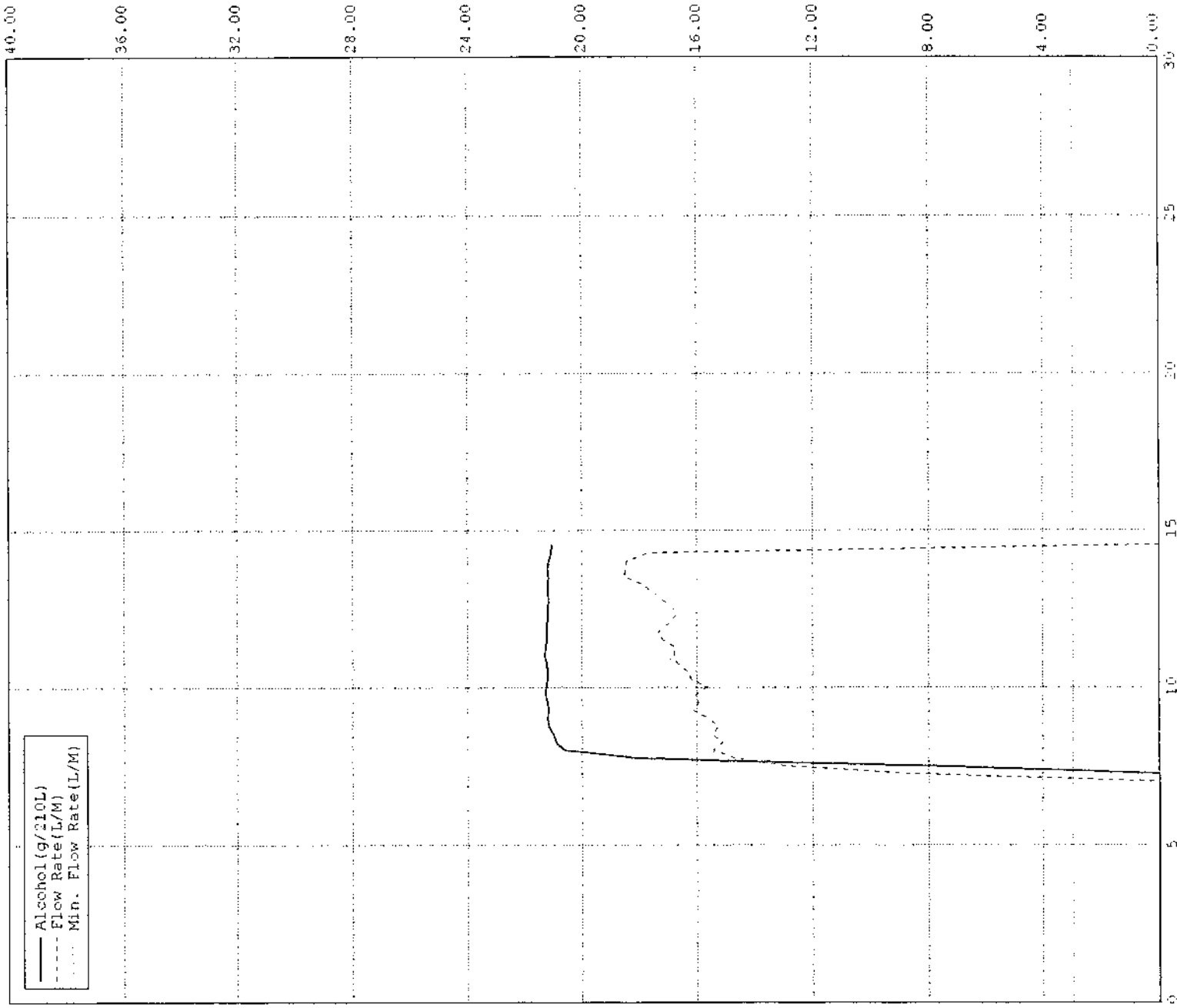
DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 15:01
BLANK TEST 0.000 15:01
INTERNAL STANDARD VERIFIED 15:01
Xq = 0.082 (0.43%)
EXTERNAL STANDARD 0.075 15:01
X[1] = 0.0750 (-0.0009) (0.0016)
BLANK TEST 0.000 15:02
SUBJECT SAMPLE XXX 15:02
X[1] = 0.1056 (-0.0158) (-0.0007)

Interference Detected

COB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/04/2016
Time: 15:05:48

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

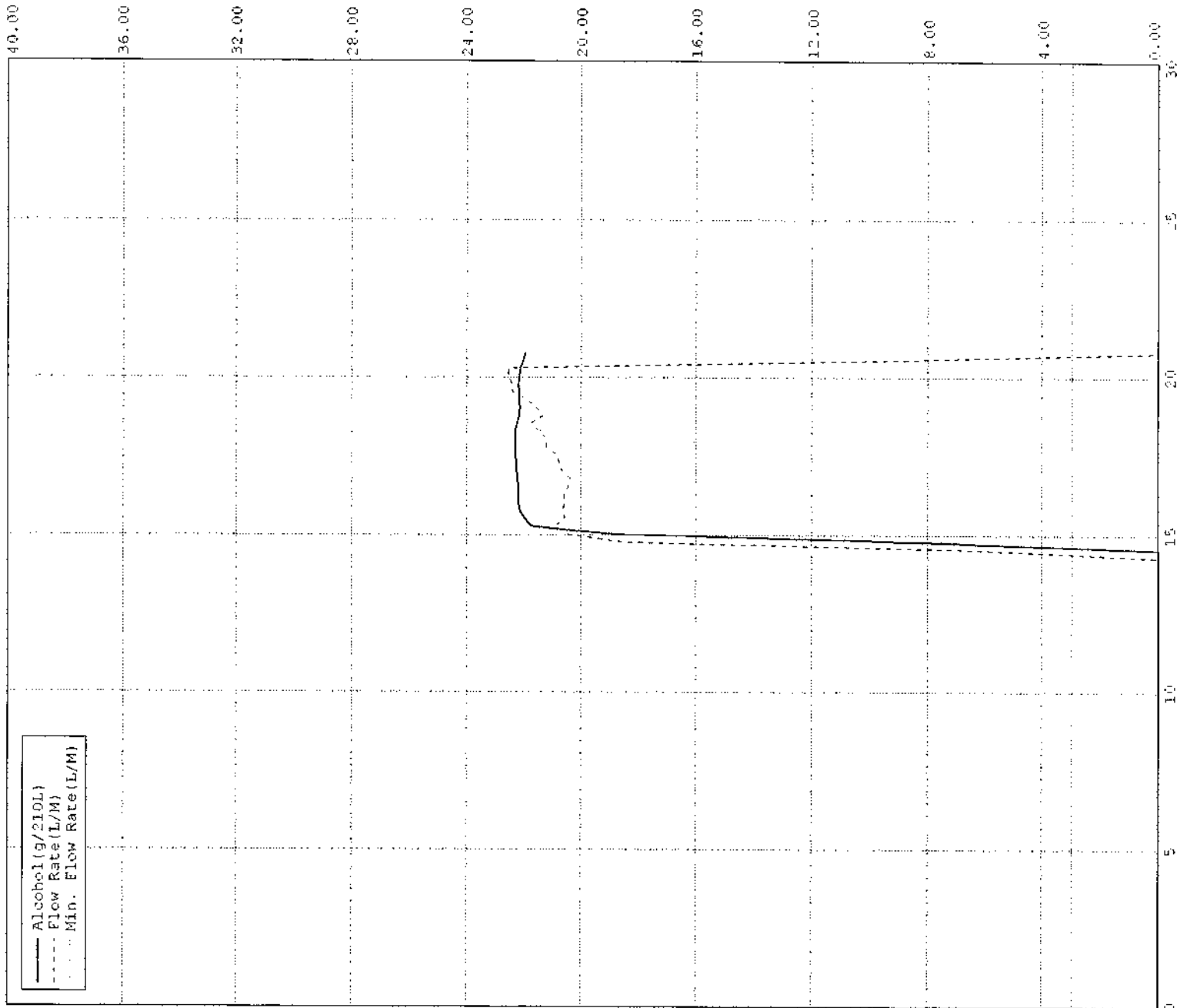
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 15:06
BLANK TEST 0.000 15:06
INTERNAL STANDARD VERIFIED 15:07
 $X_q = 0.082 (0.64\%)$
EXTERNAL STANDARD 0.075 15:07
 $X[1] = 0.0754 (-0.0006) (0.0010)$
BLANK TEST 0.000 15:08
SUBJECT SAMPLE XXX 15:08
 $X[1] = 0.1102 (-0.0268) (0.0003)$

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/04/2016
Time: 15:11:04

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

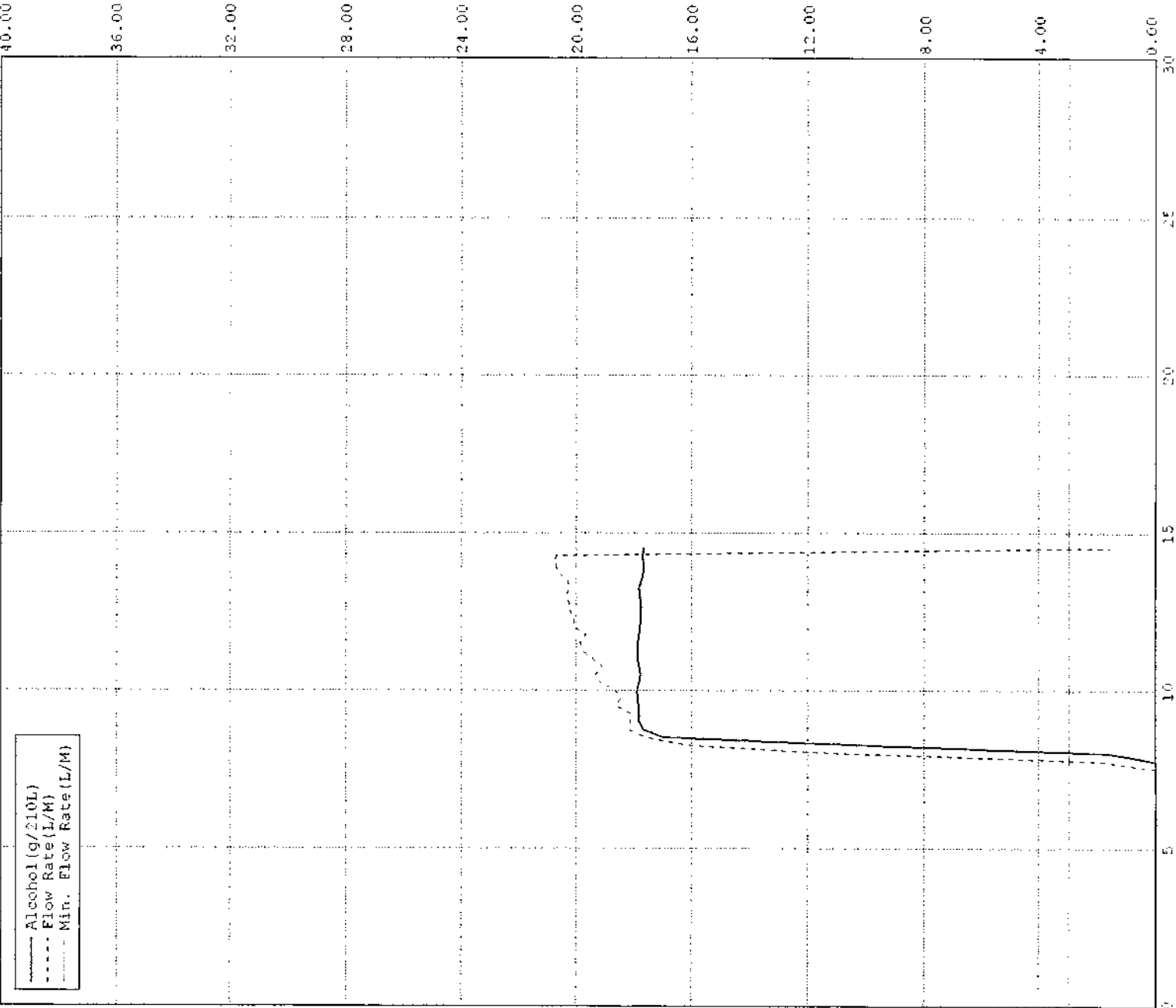
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.63: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:12
BLANK TEST	0.000	15:12
INTERNAL STANDARD	VERIFIED	15:12
Xq = 0.082 (0.75%)		
EXTERNAL STANDARD	0.076	15:13
X[1] = 0.0756 (-0.0008)	(0.0008)	
BLANK TEST	0.000	15:13
SUBJECT SAMPLE (Vol=2.06L)	0.088	15:14
X[1] = 0.0888 (-0.0011)	(-0.0011)	
BLANK TEST	0.000	15:15
EXTERNAL STANDARD	0.075	15:15
X[1] = 0.0754 (-0.0006)	(0.0004)	
BLANK TEST	0.000	15:16

Filter 2 avg = -0.0007

Filter 3 avg = 0.0010

CB



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/05/2016
Time: 10:30:50

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

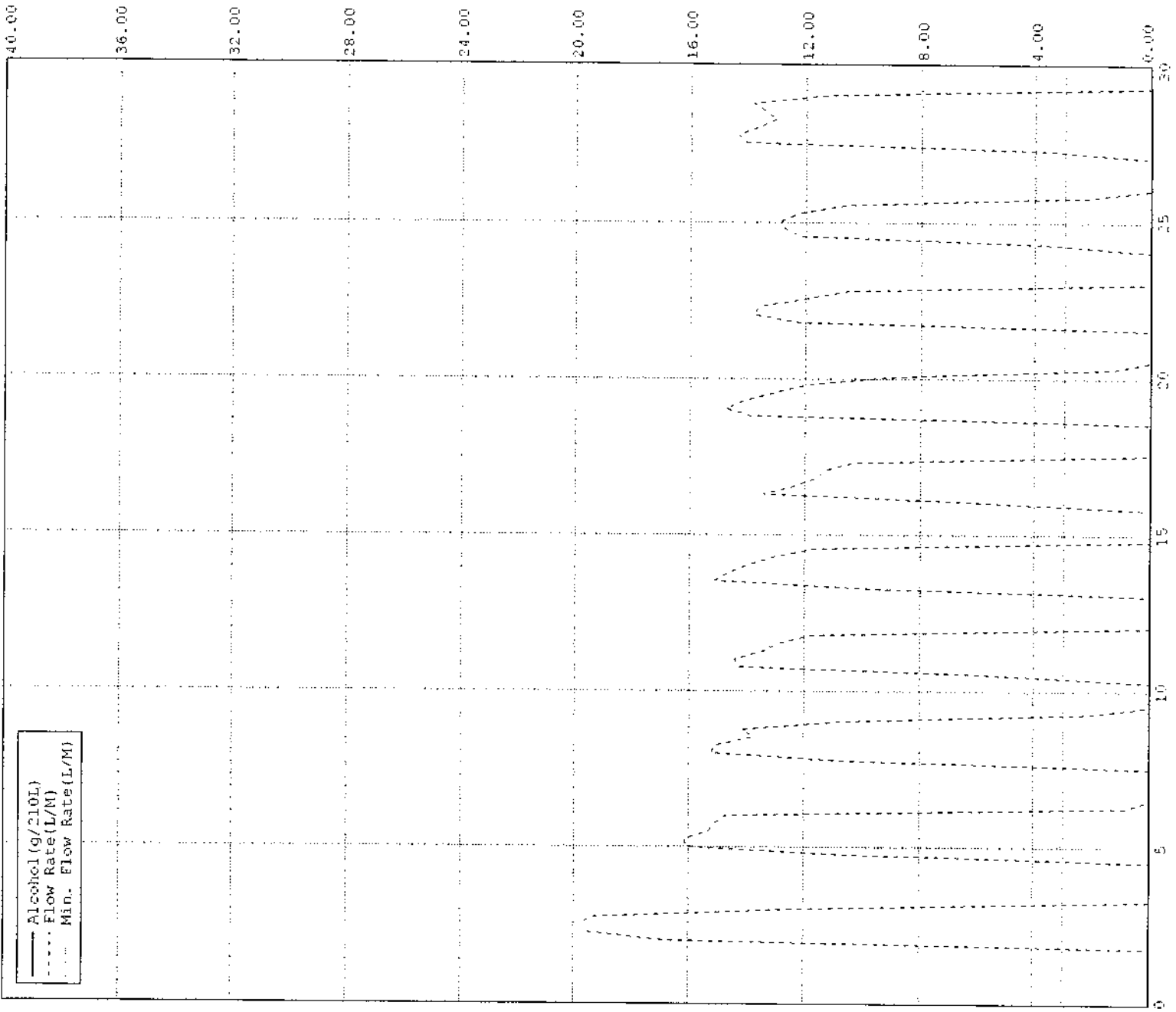
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:31
BLANK TEST 0.000 10:31
INTERNAL STANDARD VERIFIED 10:32
EXTERNAL STANDARD 0.075 10:32
BLANK TEST 0.000 10:33
SUBJECT SAMPLE XXX 10:33

Maximum Attempts Exceeded

CS



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/05/2016
Time: 10:36:05

SUBJECT NAME:
TEST TEST
LICENSE #: RFI\

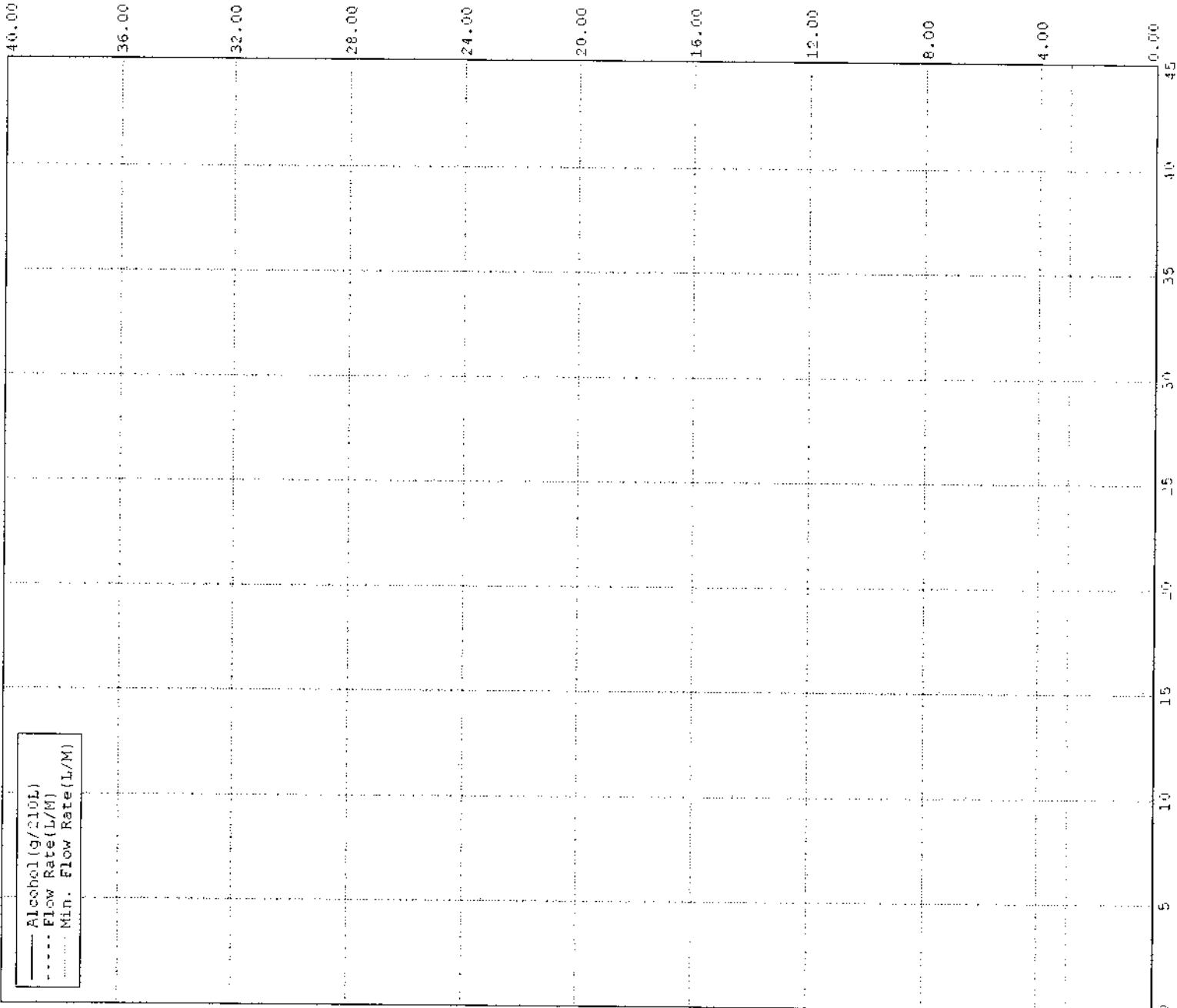
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:39
BLANK TEST 0.000 10:39
INTERNAL STANDARD VERIFIED 10:39
EXTERNAL STANDARD 0.075 10:39
BLANK TEST 0.000 10:40

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100367

Date: 05/05/2016
Time: 10:57:03

SUBJECT NAME:
TEST TEST
LICENSE #: NON-DRINKING

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

DEPT/AGENCY:
AAA1

CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	TIME
BLANK TEST	0.000	10:58
INTERNAL STANDARD	VERIFIED	10:58
EXTERNAL STANDARD	0.075	10:58
BLANK TEST	0.000	10:59
SUBJECT SAMPLE (Vol=1.57L)	0.000	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.076	11:01
BLANK TEST	0.000	11:01

