

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 100389 Analyst Colleen O'Bryant Start Date 1/14/16

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 02915020A2 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 DR6267 Date Calibrated 1/20/15

vi. 0.300g/210L Mnf Guth Lot 15170 Exp 7/20/17

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

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 DR4163 Date Calibrated 1/19/15

ii. Isopropanol - Mnf Guth Lot 15050 Level 0.100 Exp 3/9/17

1. Simulator S/N CD1176 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

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 1/19/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100389

Date: 01/14/2016
Time: 08:47:19

VERSIONS

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

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.0°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.71 V PASSED
(1.04 V - 2.44 V)
Cooler Voltage = 1.78 V PASSED
(0.99 V - 2.31 V)
Bias Voltage = 80 V PASSED
(48 V - 112 V)
Chopper Freq = 544 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.6 in

PUMP INFO

Flow Rate = 4.929 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 = 0.100 1.04% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100389

Date: 01/14/2016
Time: 10:19 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 47.9°C

Current Barometer 29.6 in
Volume (Ltr) 1.57

Settings

Lamp: 1.71 V
Bias: 80 V
Cooler: 1.78 V
Chopper: 543 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.093 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100389

Date: 04/12/2011
Time: 14:51:47

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

LOT #: GUTH100
BOTTLE #: 10260
EXPIRATION: 10/25/2012

Ca = 0.1000
CAL = 0.989059 0.800 <= CAL < 1.200
b1 = 0.0001 0.0000 <= b1 < 0.0040
b2 = 0.0045 0.0010 <= b2 < 0.0100
b3 = 0.0002 0.0000 <= b3 < 0.0040
Xq = 0.1009 0.0500 <= Xq < 0.2000
a21 = 1.173159 1.050 <= a21 < 1.300
a31 = 0.422527 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100389

Date: 01/14/2016
Time: 10:21:27

SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME TEST

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

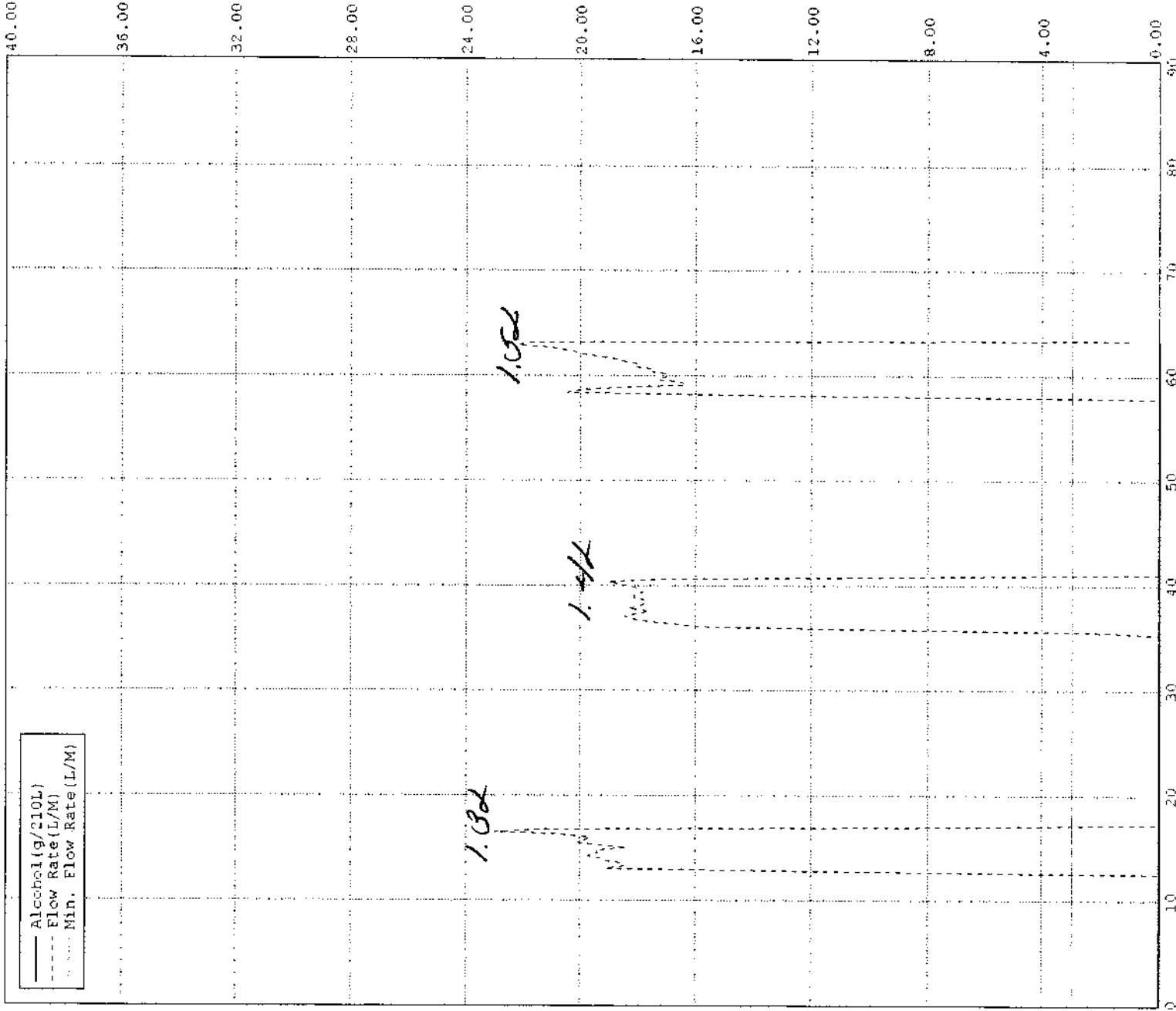
DEPT/AGENCY:
AAA1
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.56: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:22
BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:23
EXTERNAL STANDARD	0.078	10:23
BLANK TEST	0.000	10:24
SUBJECT SAMPLE (Vol=1.63L)	0.000	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.078	10:26
BLANK TEST	0.000	10:27

CAS



LINEARITY CHECK

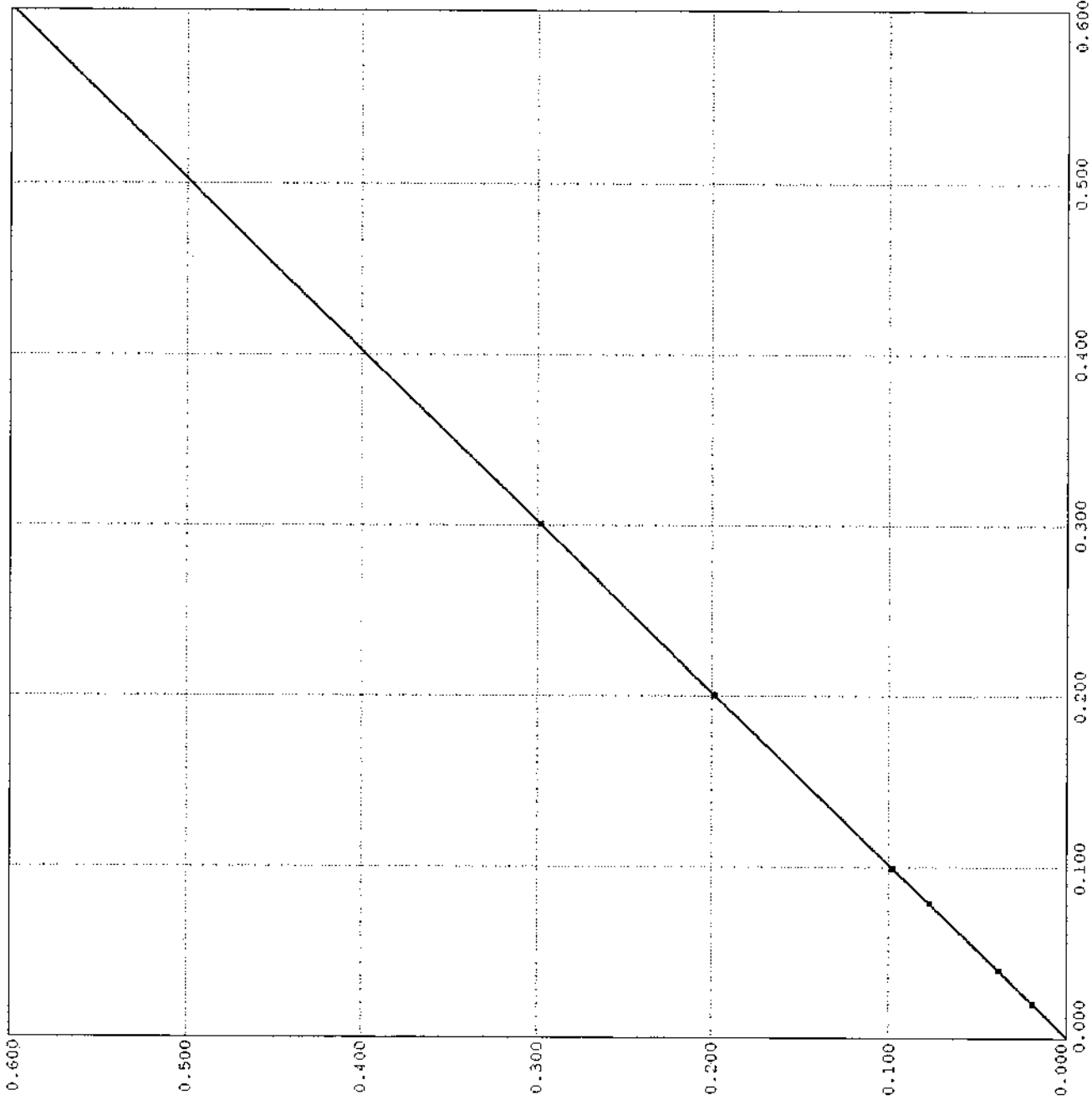
Alaska Department of Public Safety
 DATAMASTER dmt: 100389

Date: 01/14/2016
 Time: 10:58:03

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0394	0.0005
0.079	0.0780	0.0000
0.099	0.0990	0.0000
0.200	0.1994	0.0005
0.300	0.2988	0.0008

SLOPE = 0.997122
 R² = 0.999987



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100389

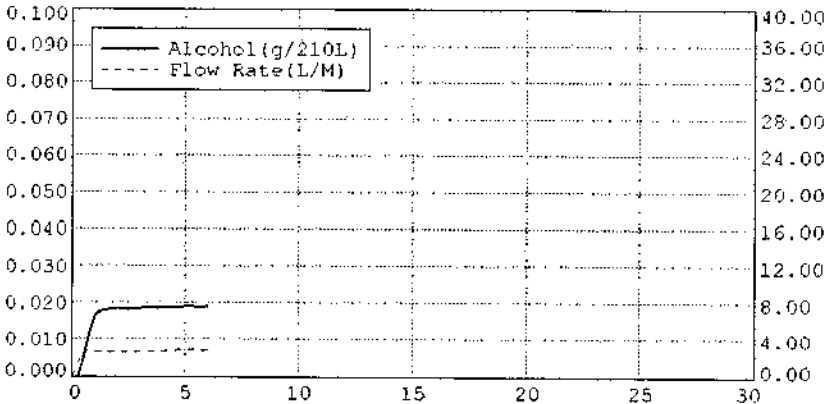
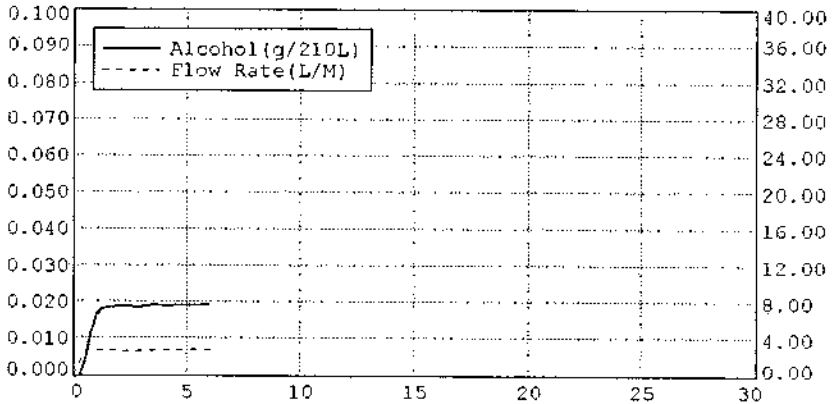
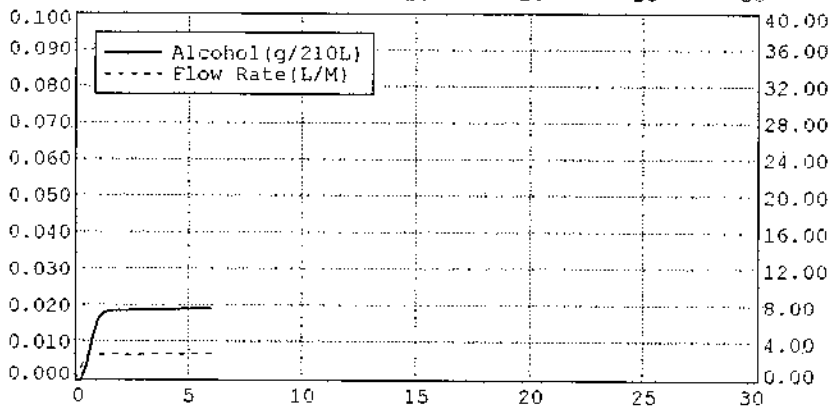
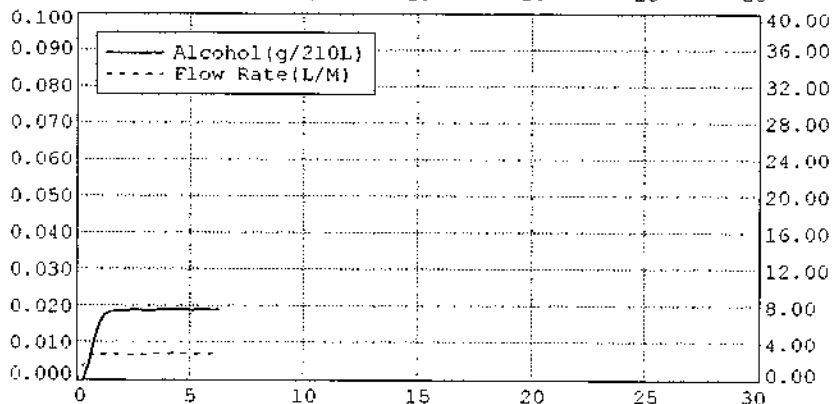
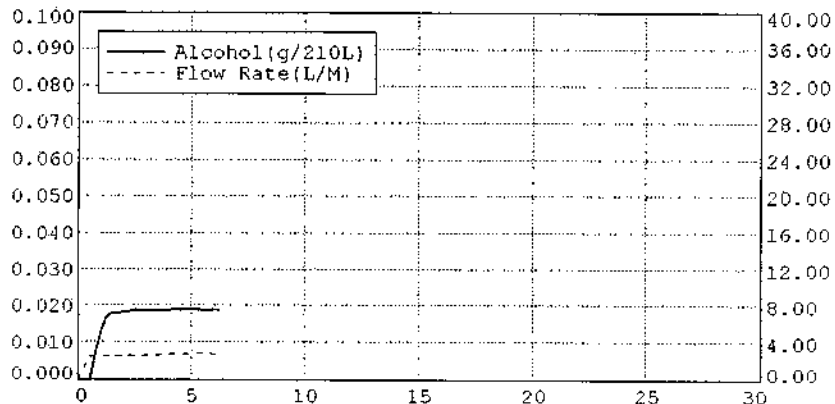
Date: 01/14/2016
 Time: 14:17:34

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.60: 0.020
 LOT #: 02915020A2
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 897 psi

BLANK TEST	0.000	14:19
INTERNAL STANDARD	VERIFIED	14:19
EXTERNAL STANDARD	0.020	14:19
BLANK TEST	0.000	14:20
EXTERNAL STANDARD	0.020	14:20
BLANK TEST	0.000	14:21
EXTERNAL STANDARD	0.020	14:21
BLANK TEST	0.000	14:22
EXTERNAL STANDARD	0.020	14:22
BLANK TEST	0.000	14:23
EXTERNAL STANDARD	0.020	14:23
BLANK TEST	0.000	14:24

Average = 0.0200
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100389

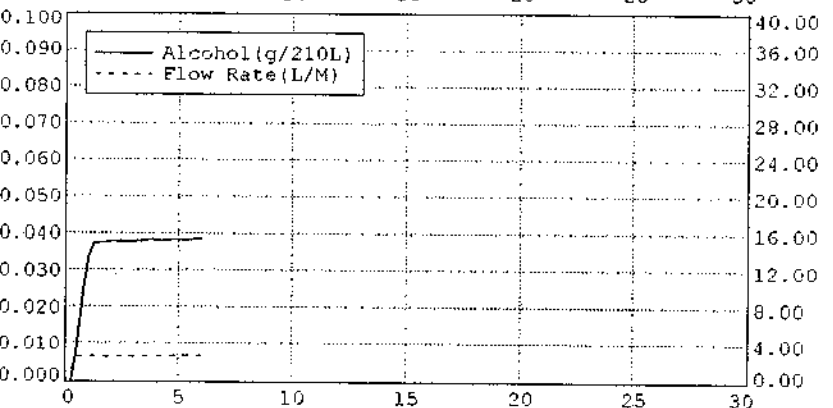
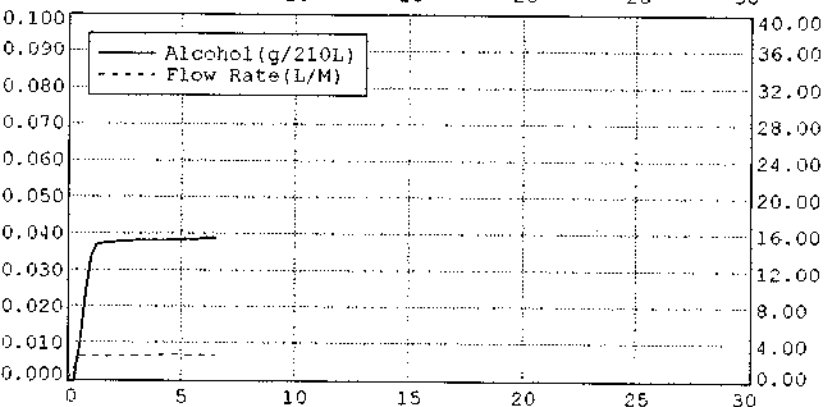
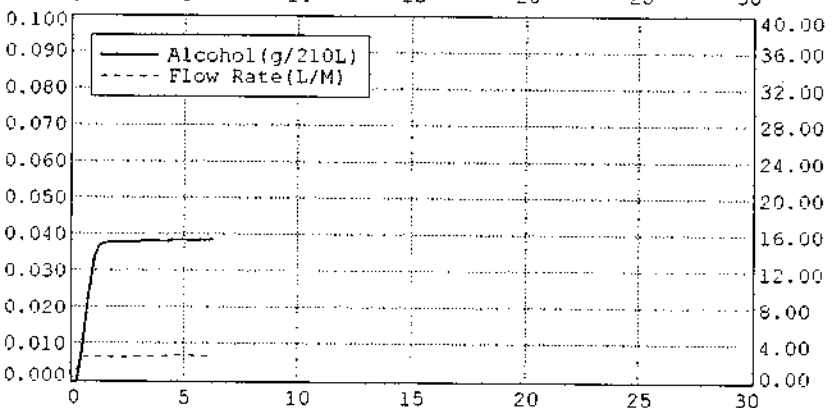
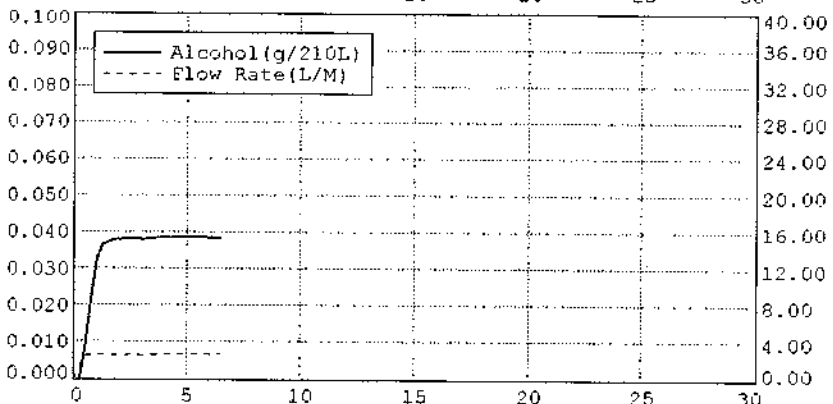
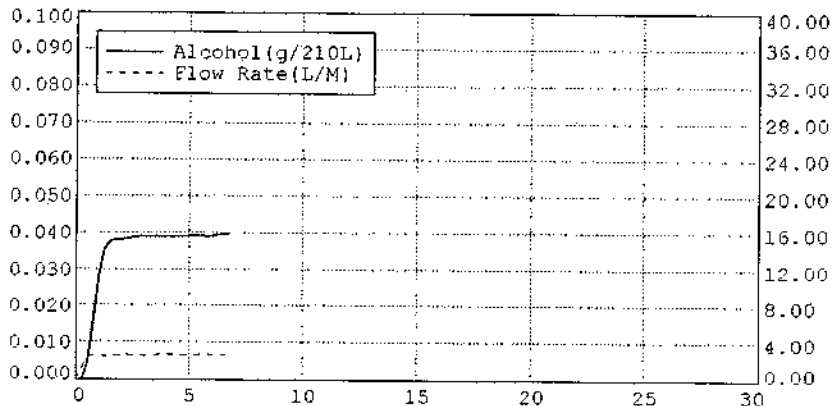
Date: 01/14/2016
 Time: 14:25:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.59: 0.040
 LOT #: 02915040A3
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 530 psi

BLANK TEST	0.000	14:26
INTERNAL STANDARD	VERIFIED	14:26
EXTERNAL STANDARD	0.040	14:26
BLANK TEST	0.000	14:27
EXTERNAL STANDARD	0.040	14:28
BLANK TEST	0.000	14:28
EXTERNAL STANDARD	0.039	14:29
BLANK TEST	0.000	14:30
EXTERNAL STANDARD	0.039	14:30
BLANK TEST	0.000	14:31
EXTERNAL STANDARD	0.039	14:31
BLANK TEST	0.000	14:32

Average = 0.0394
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100389

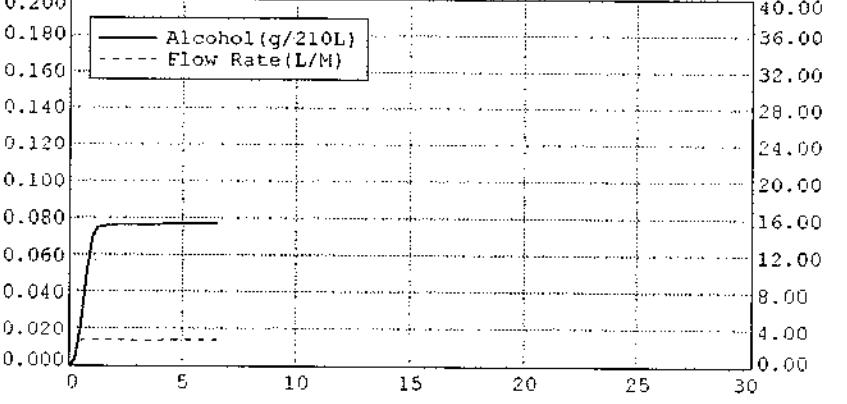
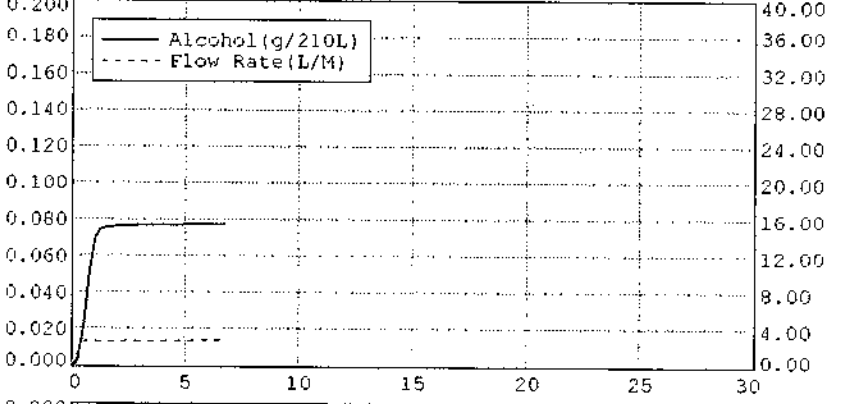
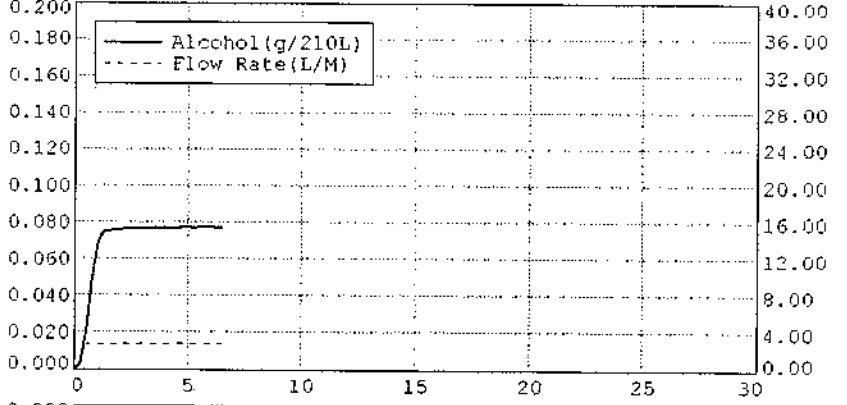
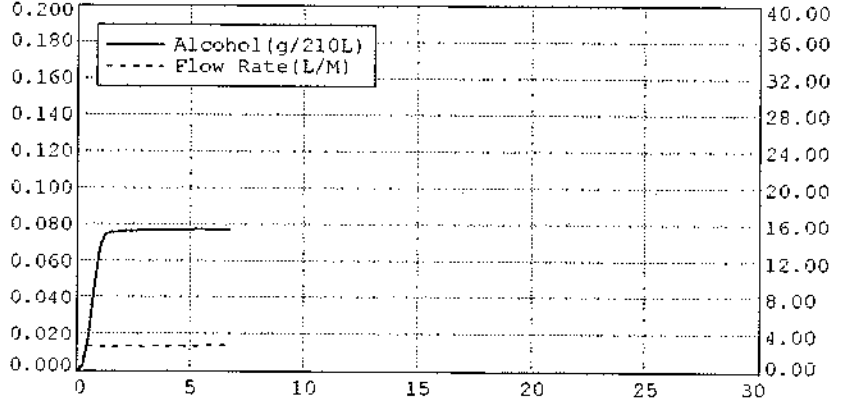
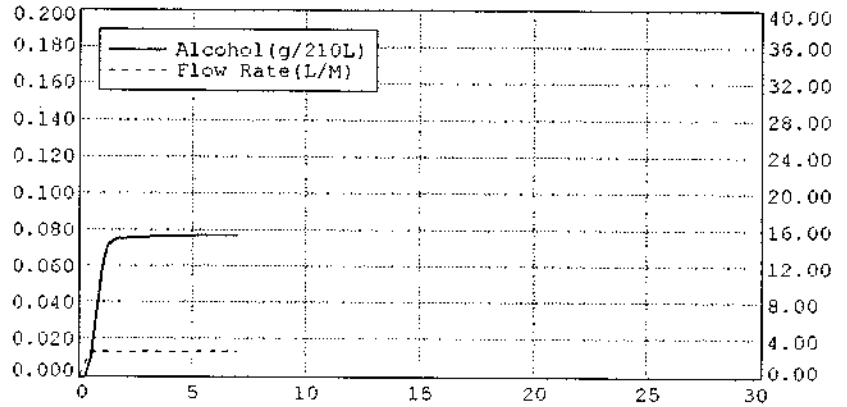
Date: 01/14/2016
 Time: 14:33:00

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.59: 0.079
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017
 TANK PRESSURE: 155 psi

BLANK TEST	0.000	14:34
INTERNAL STANDARD	VERIFIED	14:34
EXTERNAL STANDARD	0.078	14:34
BLANK TEST	0.000	14:35
EXTERNAL STANDARD	0.078	14:35
BLANK TEST	0.000	14:36
EXTERNAL STANDARD	0.078	14:36
BLANK TEST	0.000	14:37
EXTERNAL STANDARD	0.078	14:37
BLANK TEST	0.000	14:38
EXTERNAL STANDARD	0.078	14:39
BLANK TEST	0.000	14:39

Average = 0.0780
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100389

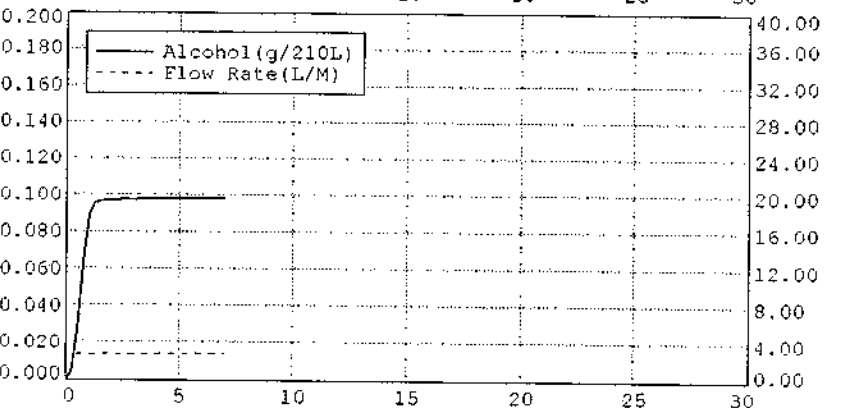
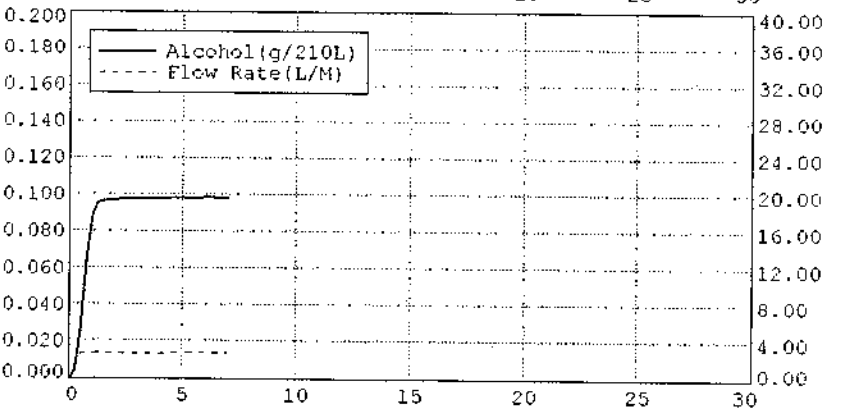
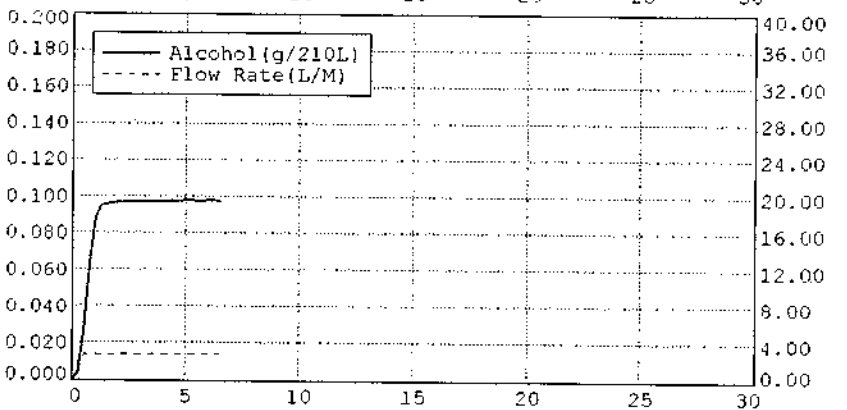
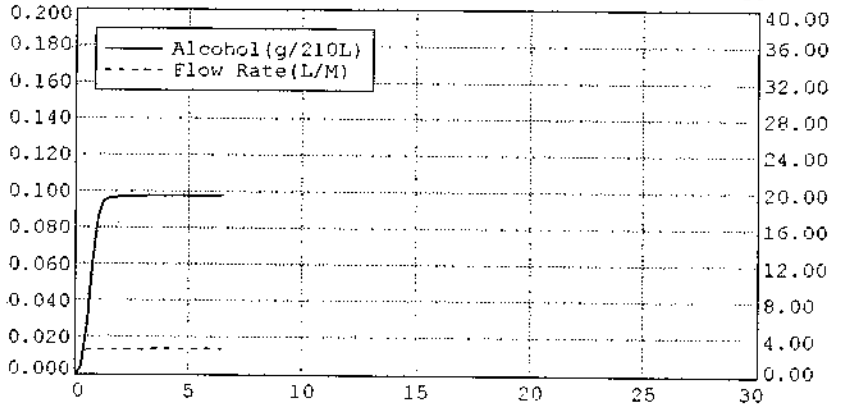
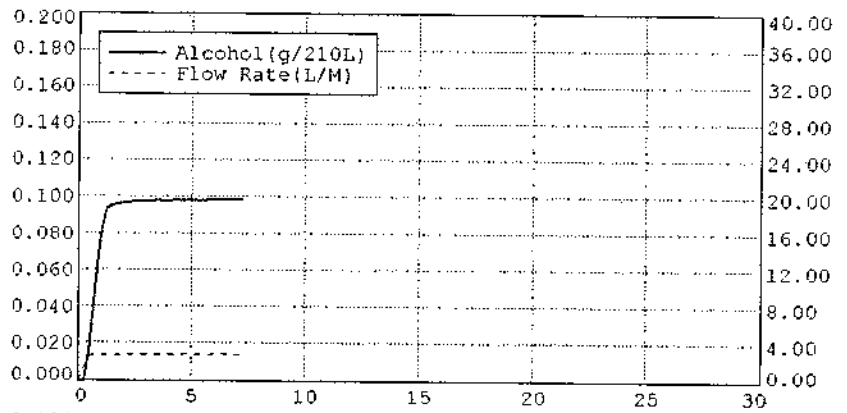
Date: 01/14/2016
 Time: 14:40:39

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.59: 0.099
 LOT #: 02915100A1
 EXPIRATION: 03/05/2017
 TANK PRESSURE: 237 psi

BLANK TEST	0.000	14:41
INTERNAL STANDARD	VERIFIED	14:41
EXTERNAL STANDARD	0.099	14:42
BLANK TEST	0.000	14:43
EXTERNAL STANDARD	0.099	14:43
BLANK TEST	0.000	14:44
EXTERNAL STANDARD	0.099	14:44
BLANK TEST	0.000	14:45
EXTERNAL STANDARD	0.099	14:45
BLANK TEST	0.000	14:46
EXTERNAL STANDARD	0.099	14:46
BLANK TEST	0.000	14:47

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

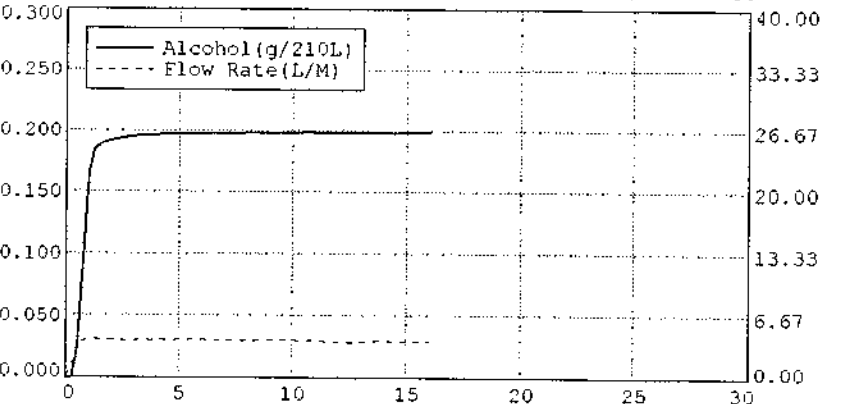
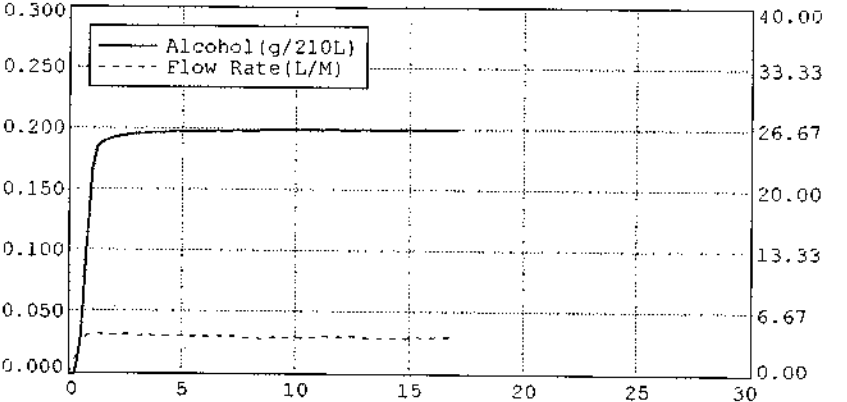
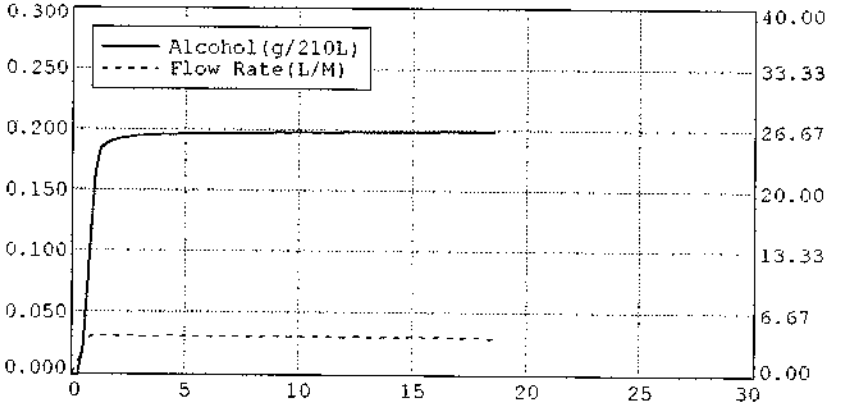
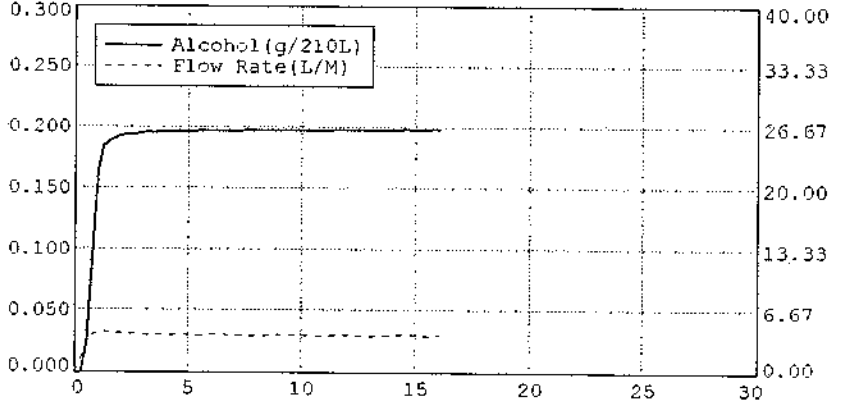
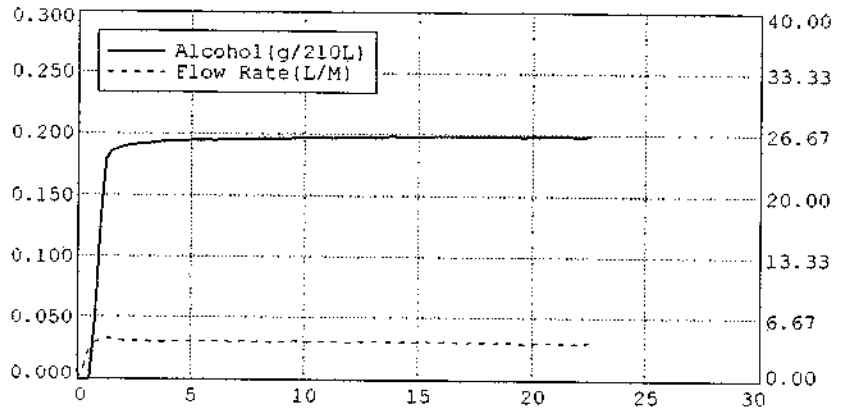
Alaska Department of Public Safety
 DATAMASTER dmt: 100389

Date: 01/14/2016
 Time: 14:48:36

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 15130
 EXPIRATION: 05/11/2017

BLANK TEST	0.000	14:49
INTERNAL STANDARD	VERIFIED	14:49
EXTERNAL STANDARD	0.199	14:50
BLANK TEST	0.000	14:51
EXTERNAL STANDARD	0.199	14:51
BLANK TEST	0.000	14:52
EXTERNAL STANDARD	0.199	14:53
BLANK TEST	0.000	14:53
EXTERNAL STANDARD	0.200	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.200	14:55
BLANK TEST	0.000	14:56

Average = 0.1994
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

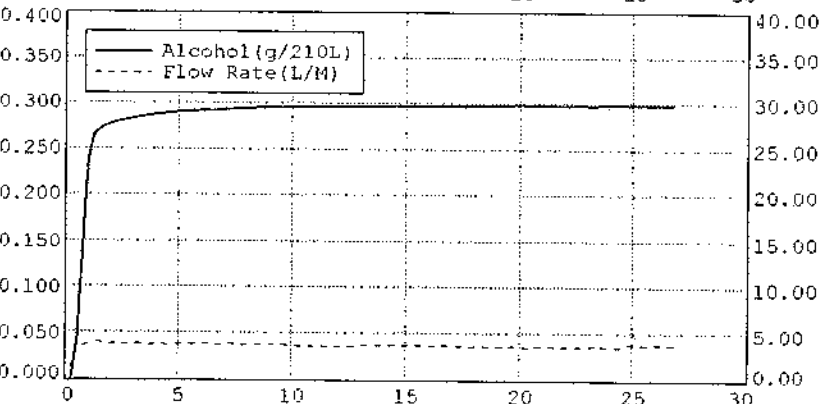
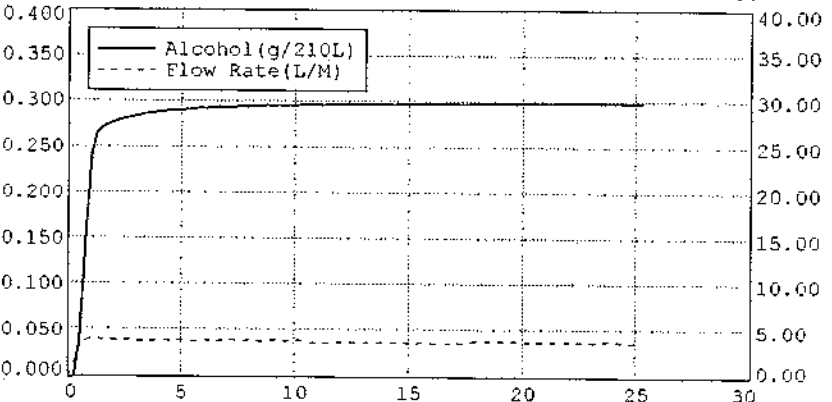
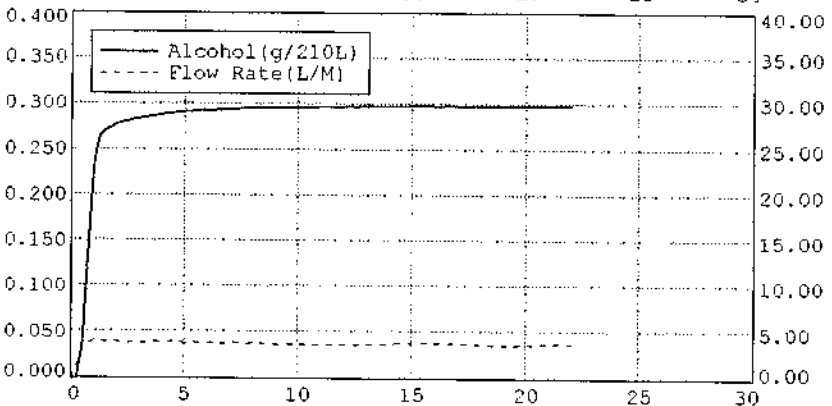
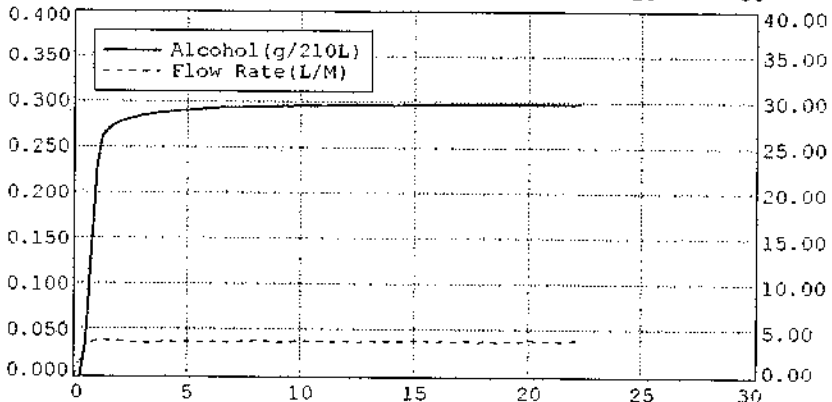
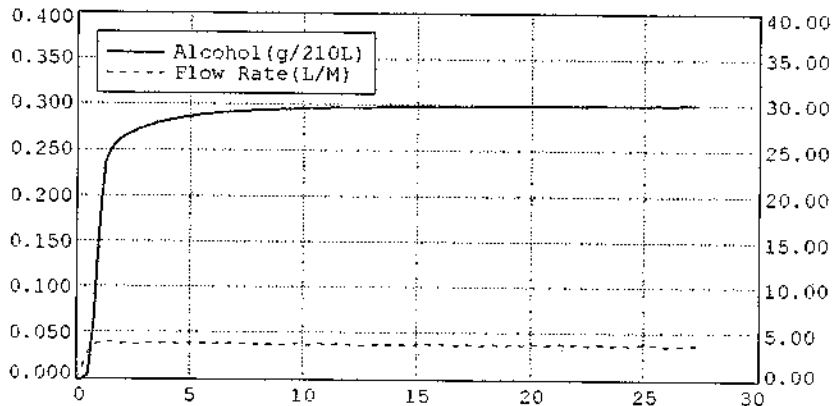
Alaska Department of Public Safety
 DATAMASTER dmt: 100389

Date: 01/14/2016
 Time: 14:57:57

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

BLANK TEST	0.000	14:59
INTERNAL STANDARD	VERIFIED	15:00
EXTERNAL STANDARD	0.300	15:00
BLANK TEST	0.000	15:01
EXTERNAL STANDARD	0.299	15:02
BLANK TEST	0.000	15:02
EXTERNAL STANDARD	0.298	15:03
BLANK TEST	0.000	15:04
EXTERNAL STANDARD	0.298	15:04
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.299	15:06
BLANK TEST	0.000	15:07

Average = 0.2988
 Std Dev = 0.0008



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100389

Date: 01/14/2016
Time: 15:11:04

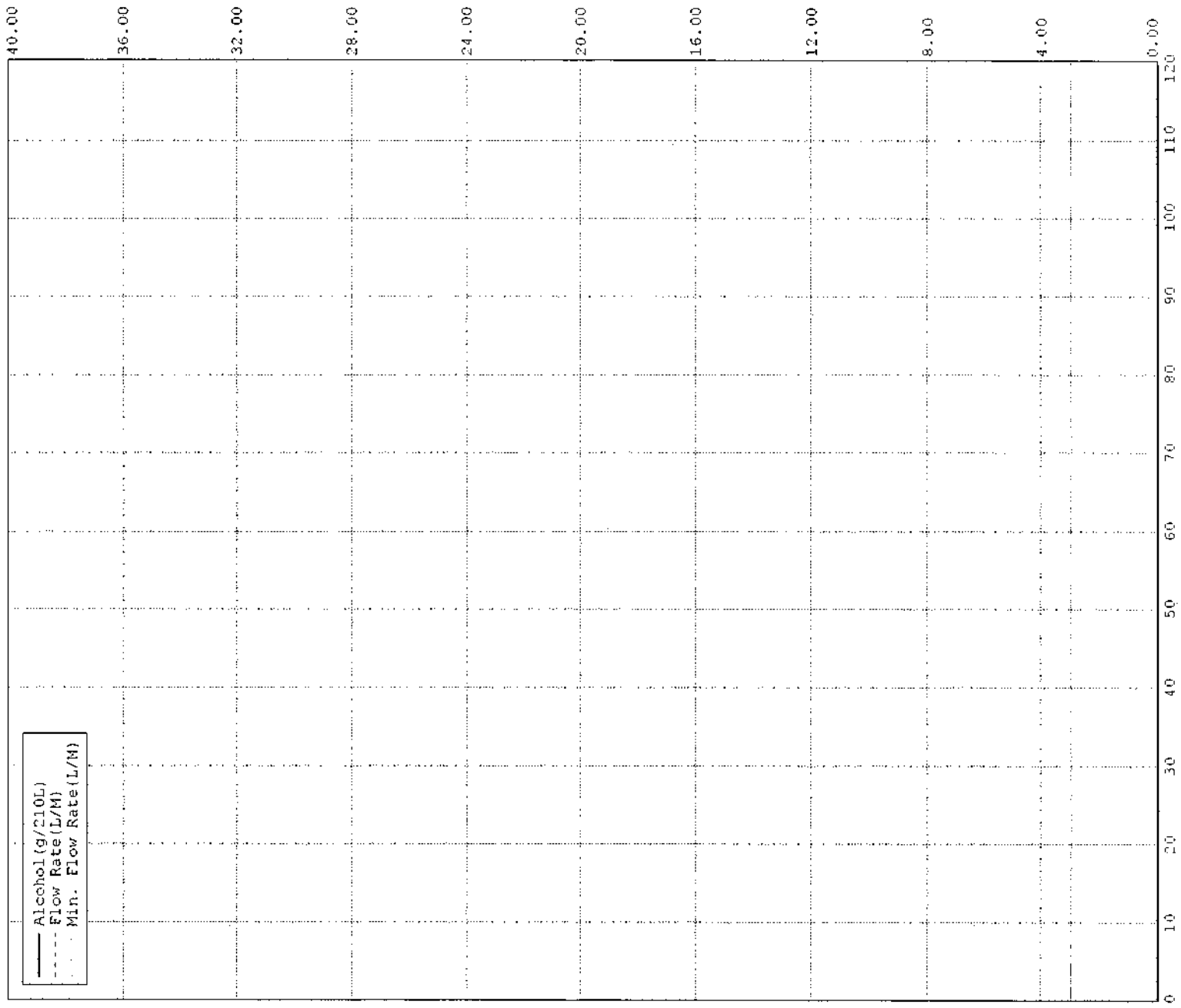
SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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 15:12
BLANK TEST 0.000 15:12
INTERNAL STANDARD VERIFIED 15:12
EXTERNAL STANDARD 0.078 15:12
BLANK TEST 0.000 15:13
SUBJECT SAMPLE INCOMPLETE 15:15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100389

Date: 01/14/2016
Time: 15:18:42

SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

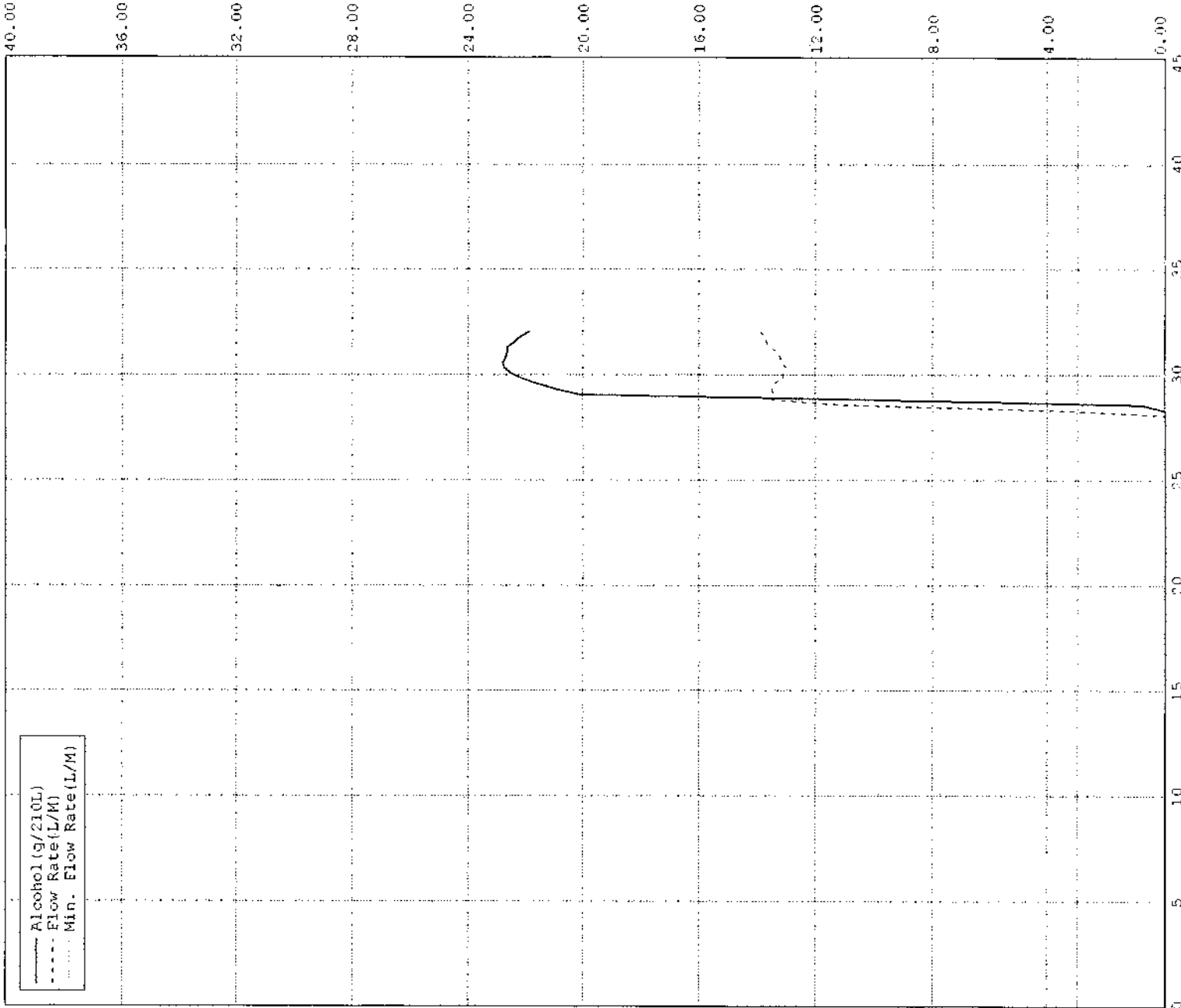
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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	15:19
BLANK TEST	0.000	15:19
INTERNAL STANDARD	VERIFIED	15:19
EXTERNAL STANDARD	0.079	15:20
BLANK TEST	0.000	15:21
SUBJECT SAMPLE	INVALID	15:21



SUBJECT TEST

Alaska Department of Public Safety
DAYMASTER dmt: 100389

Date: 01/14/2016
Time: 15:24:05

SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

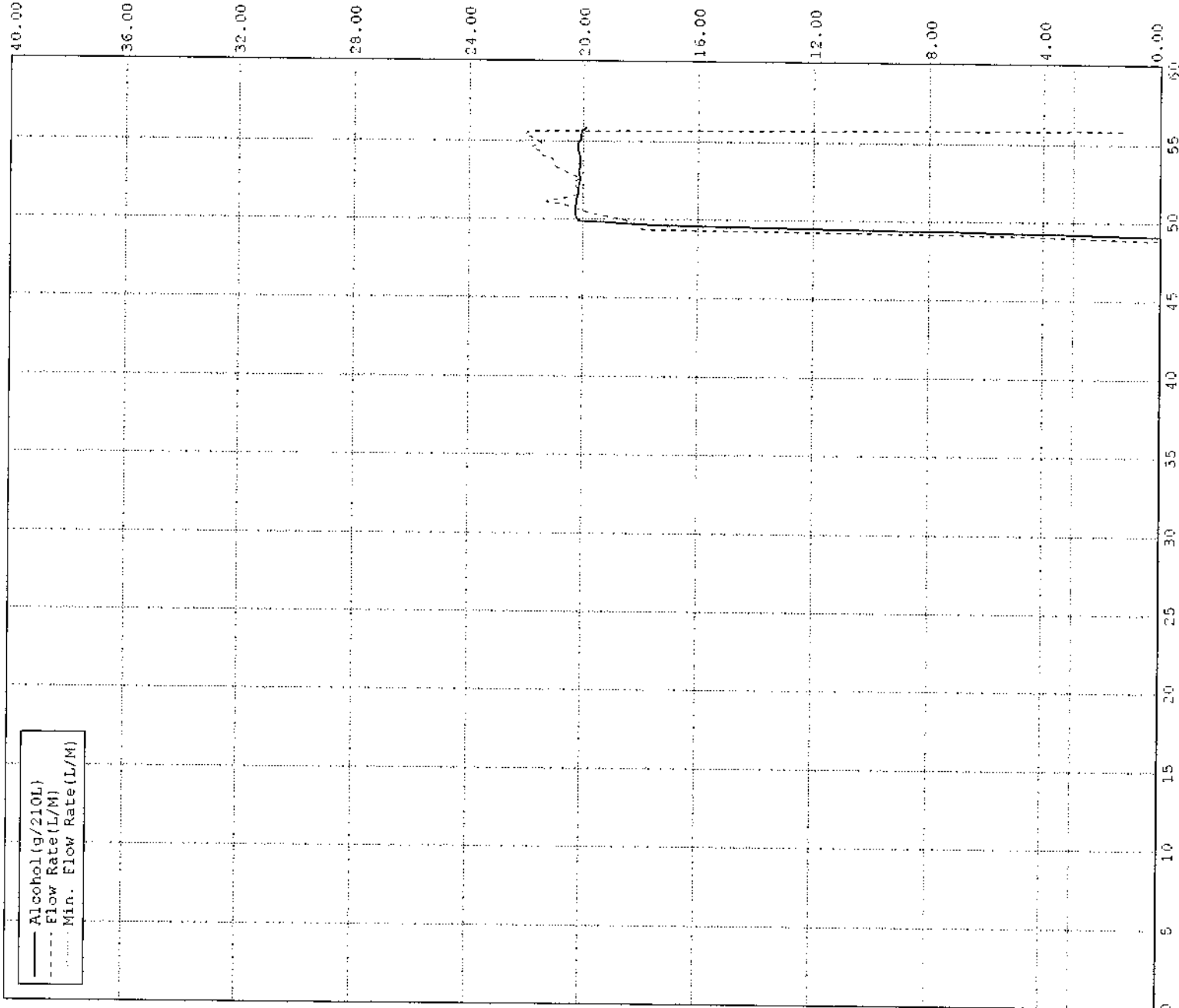
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

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

DIAGNOSTIC CHECK PASSED 15:26
BLANK TEST 0.000 15:26
INTERNAL STANDARD VERIFIED 15:26
Xq = 0.099 (1.56%)
EXTERNAL STANDARD 0.078 15:26
X[1] = 0.0784 (-0.0013) (0.0020)
BLANK TEST 0.000 15:27
SUBJECT SAMPLE XXX 15:28
X[1] = 0.0989 (-0.0142) (0.0011)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100389

Date: 01/14/2016
Time: 15:31:04

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

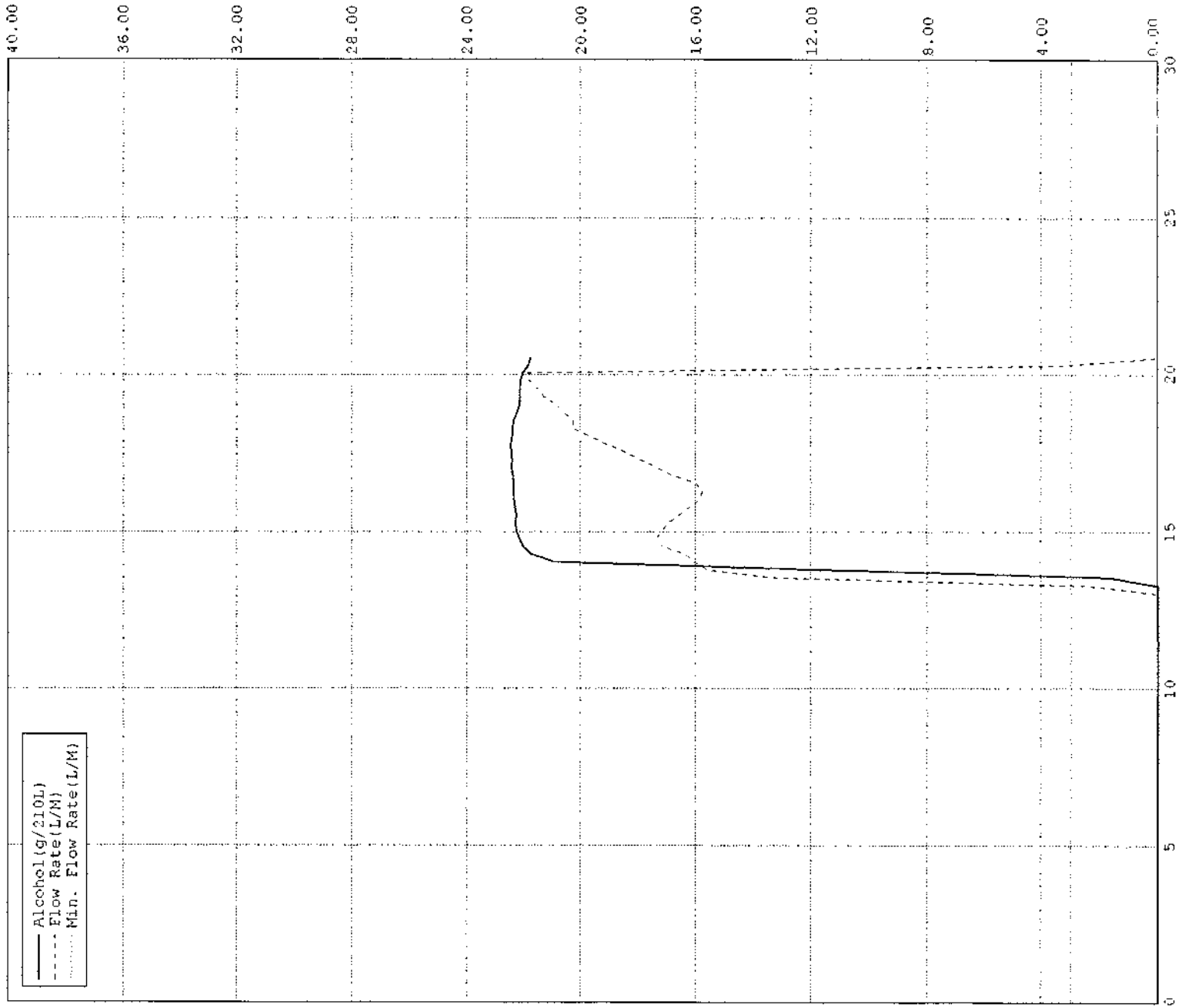
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

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

DIAGNOSTIC CHECK	PASSED	15:34
BLANK TEST	0.000	15:34
INTERNAL STANDARD	VERIFIED	15:34
Xq = 0.101 (0.35%)		
EXTERNAL STANDARD	0.080	15:34
X[1] = 0.0796 (-0.0001) (0.0022)		
BLANK TEST	0.000	15:35
SUBJECT SAMPLE	XXX	15:36
X[1] = 0.1092 (-0.0215) (0.0020)		

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100389

Date: 01/14/2016
Time: 15:38:10

SUBJECT NAME:
TEST TEST
LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
AAA1

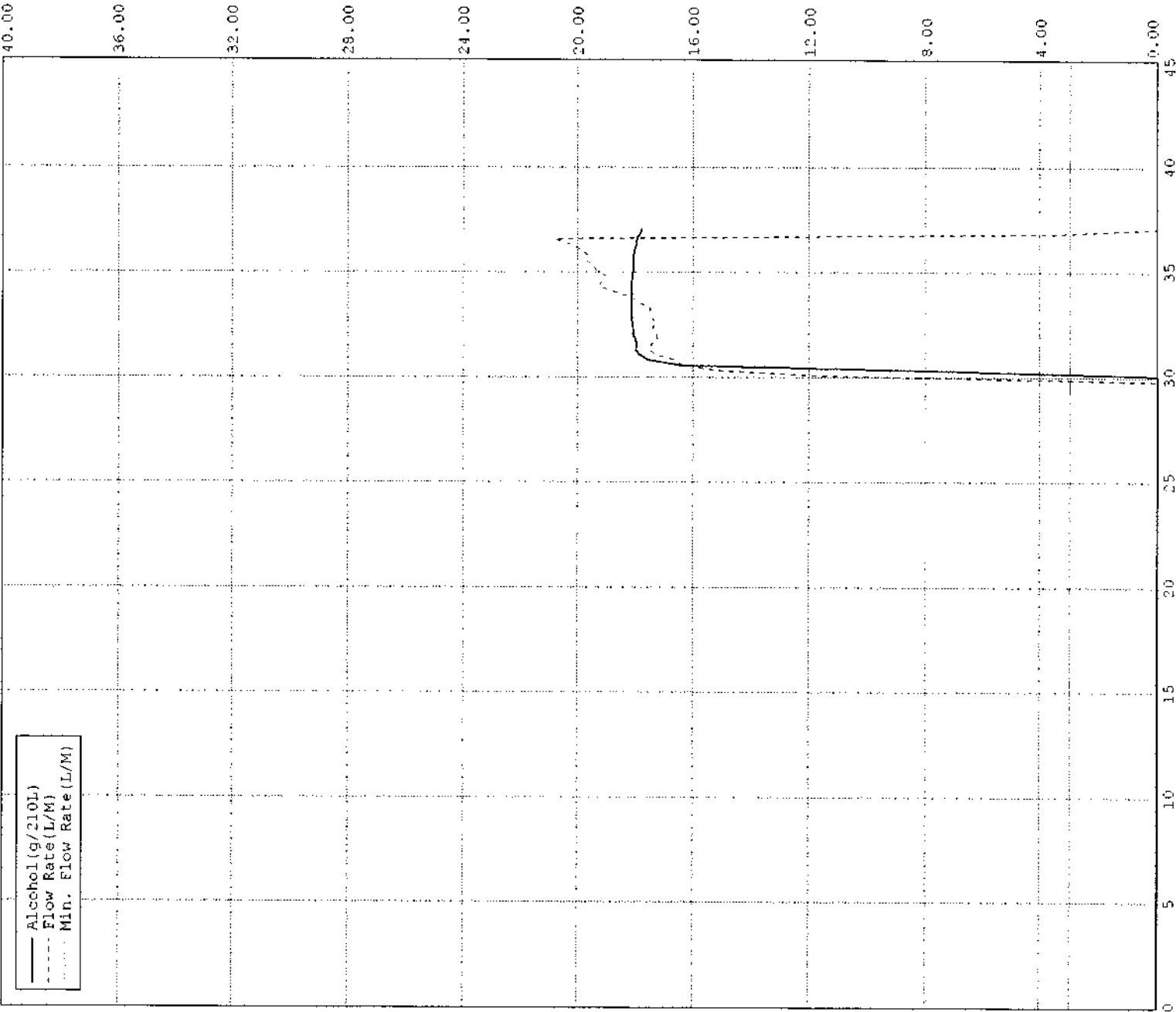
CASE/REPORT: 16-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.60: 0.079
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	15:39
BLANK TEST	0.000	15:39
INTERNAL STANDARD	VERIFIED	15:39
Xq = 0.100 (1.04%)		
EXTERNAL STANDARD	0.079	15:39
X[1] = 0.0786 (-0.0004) (0.0021)		
BLANK TEST	0.000	15:40
SUBJECT SAMPLE (Vol=2.04L)	0.089	15:41
X[1] = 0.0890 (-0.0007) (0.0010)		
BLANK TEST	0.000	15:42
EXTERNAL STANDARD	0.079	15:42
X[1] = 0.0787 (-0.0003) (0.0015)		
BLANK TEST	0.000	15:43

Filter 2 avg = -0.0005
Filter 3 avg = 0.0020



SUBJECT TEST

Alaska Department of Public Safety
DAYMASTER dmt: 100389

Date: 01/19/2016
Time: 09:33:08

SUBJECT NAME:
TEST TEST
LICENSE #: MAX ATTEMPTS

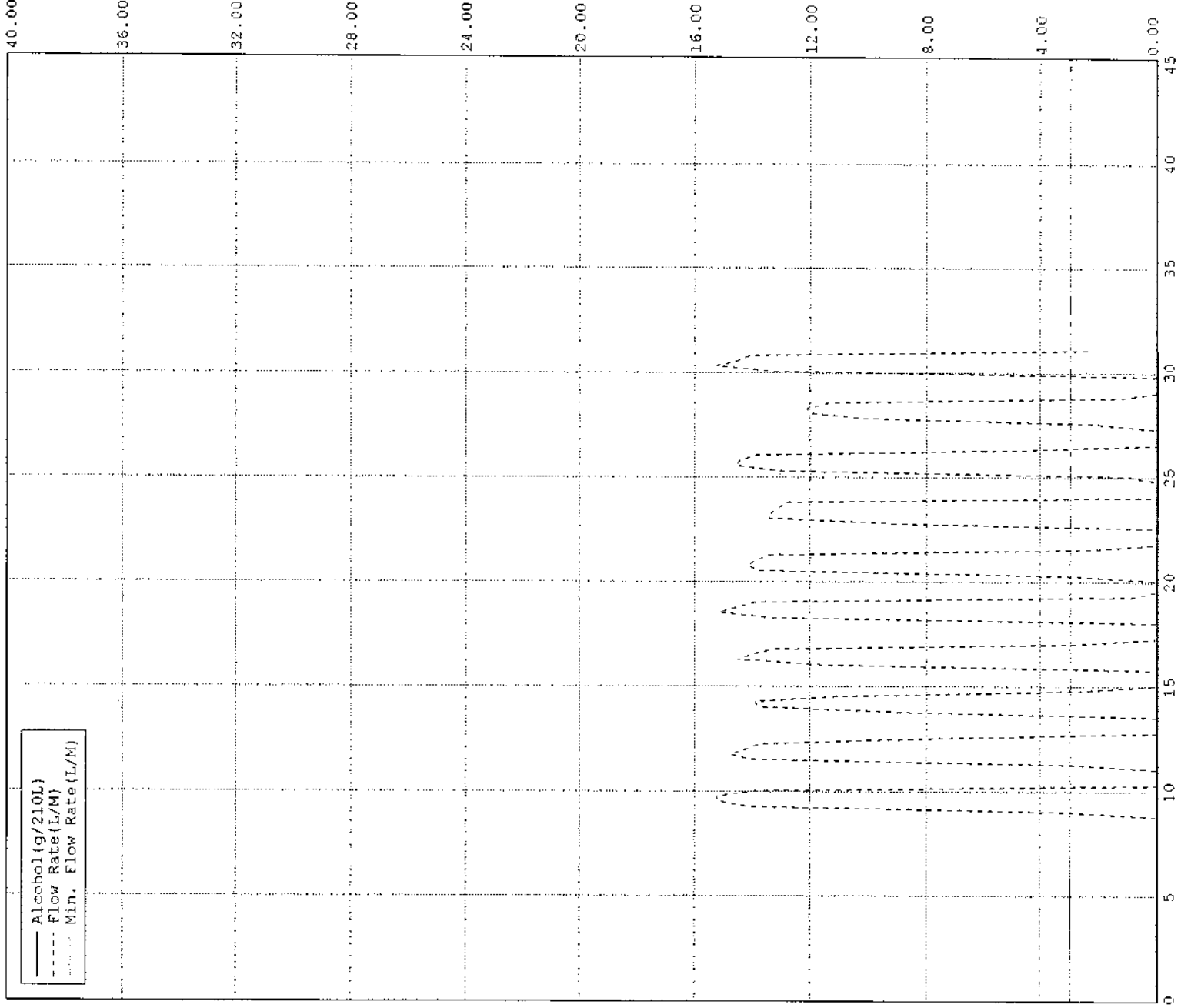
OPERATOR NAME:
COLLEEN S O'BRYAN
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.25: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:35
BLANK TEST 0.000 09:35
INTERNAL STANDARD VERIFIED 09:35
EXTERNAL STANDARD 0.078 09:35
BLANK TEST 0.000 09:36
SUBJECT SAMPLE XXX 09:37

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100389

Date: 01/19/2016
Time: 09:39:31

SUBJECT NAME:
TEST TEST
LICENSE #: RFI

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

DEPT/AGENCY:
AAA1

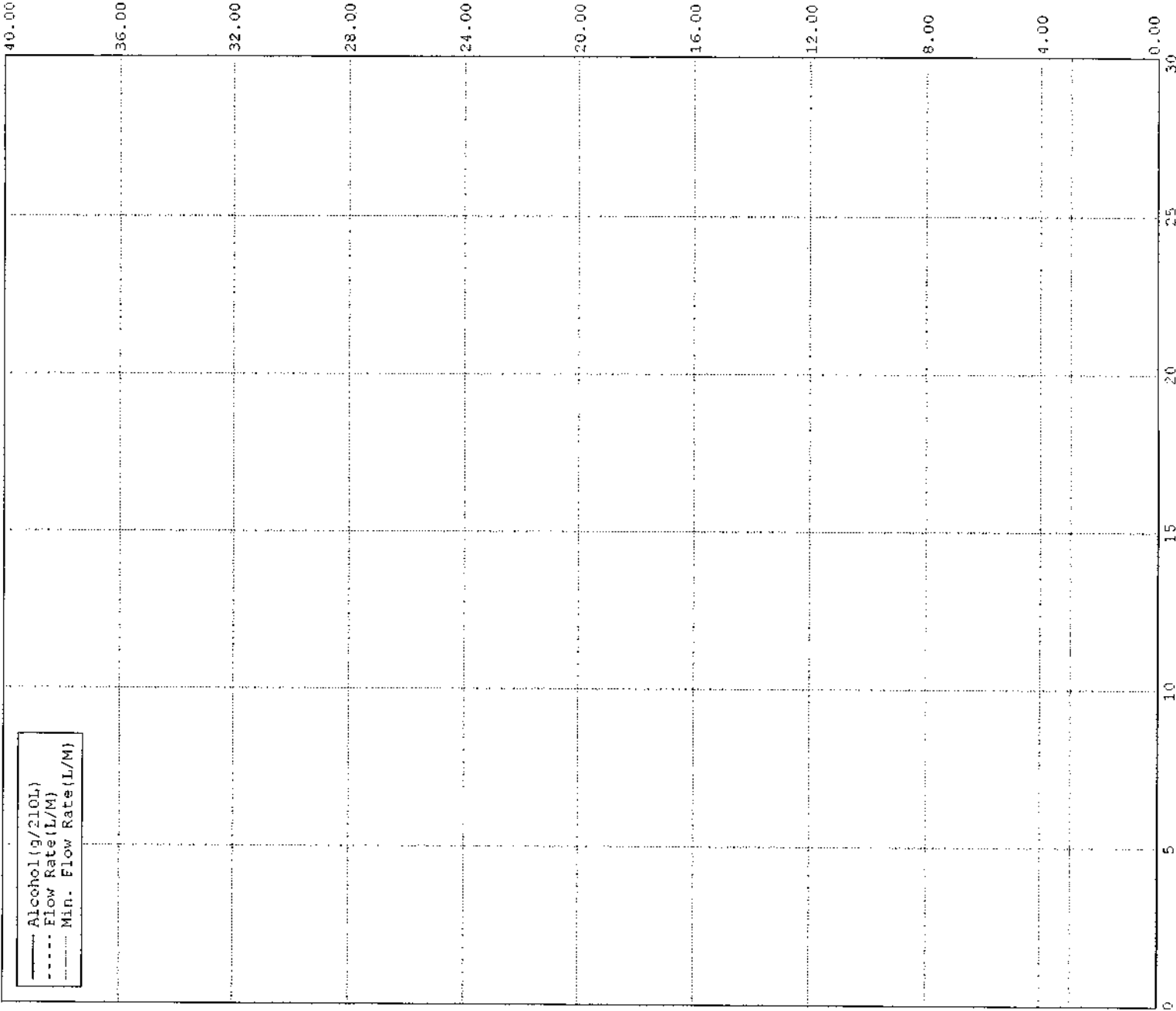
CASE/REPORT: 16-1234
TEST TYPE: TEST

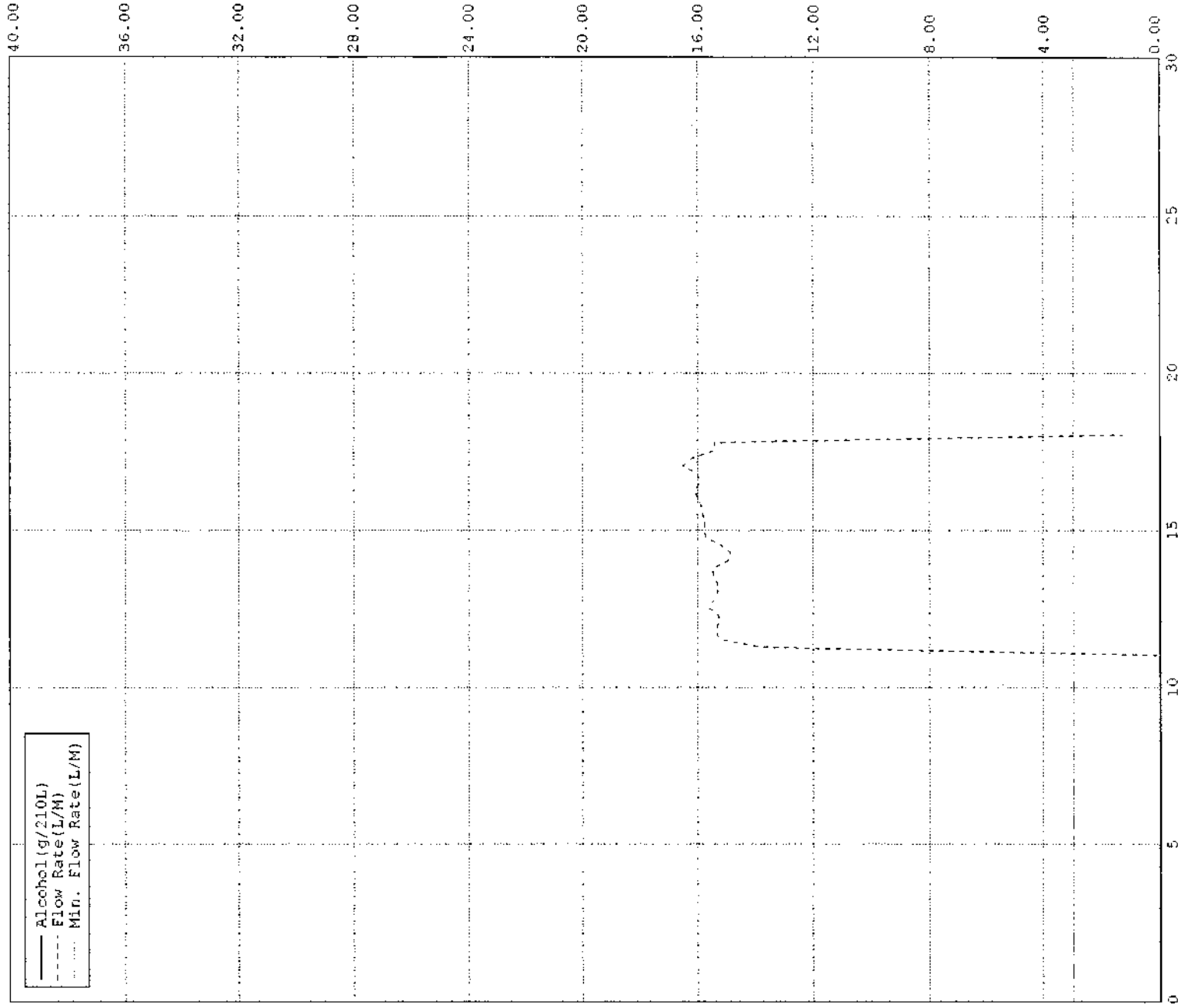
EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.25: 0.078
LOT #: 01315080A2
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 09:40
BLANK TEST 0.000 09:40
INTERNAL STANDARD VERIFIED 09:40
EXTERNAL STANDARD 0.079 09:40
BLANK TEST 0.000 09:41

RFI DETECTED





SUBJECT TEST

 Alaska Department of Public Safety
 DATAMASTER dmt: 100389

 Date: 01/19/2016
 Time: 09:56:49

SUBJECT NAME:
 TEST TEST
 LICENSE #: NONDRINKING

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 29.25: 0.078
 LOT #: 01315080A2
 EXPIRATION: 02/05/2017

TEST TYPE	DIAGNOSTIC CHECK	PASSED	TIME
BLANK TEST	0.000	0.000	09:58
INTERNAL STANDARD	0.079	0.079	09:58
EXTERNAL STANDARD	0.000	0.000	09:59
BLANK TEST	0.000	0.000	10:00
SUBJECT SAMPLE (Vol=1.75L)	0.000	0.000	10:00
BLANK TEST	0.079	0.079	10:01
EXTERNAL STANDARD	0.000	0.000	10:02
BLANK TEST	0.000	0.000	10:02

CS