

## 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 100255 Analyst Colleen O'Bryant Start Date 7/13/16

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 ARGAS Lot AG608504 Exp 3/25/18
- 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 DR5098 Date Calibrated 8/5/15
- vi. 0.300g/210L Mnf GUTH Lot 15140 Exp 7/20/17
  - 1. Simulator S/N SD1108 Date Calibrated 8/5/15

5. Functional Tests (attached)

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

i. Acetone - Mnf GUTH Lot 15220 Level 0.100 Exp 9/28/17

1. Simulator S/N SD1199 Date Calibrated 8/5/15

ii. Isopropanol - Mnf GUTH Lot 15220 Level 0.100 Exp 9/28/17

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 DE4161 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 7/14/16

DIAGNOSTIC RECORD

Alaska Department of Public Safety  
DATAMASTER dmt: 100255

Date: 07/13/2016  
Time: 13:07:55

VERSIONS  
DMT: 3.02  
PIC: 2.05  
Modem: 2.6  
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 45.9°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.61 V PASSED  
(0.97 V - 2.25 V)  
Cooler Voltage = 1.59 V PASSED  
(0.95 V - 2.23 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 538 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.9 in

PUMP INFO

Flow Rate = 4.506 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 = 0.077 0.45% (0.00% - 4.00%) PASSED

Technician Screen

-----  
DATAMASTER dmt: 100255  
-----

Date: 07/13/2016  
Time: 2:08 PM

Temperatures (°C)  
Sample Cell: 48.7°C  
Breath Tube: 46.3°C

Current Barometer 30.0 in  
Volume (Ltr) 1.51

Settings  
Lamp: 1.61 V  
Bias: 80 V  
Cooler: 1.59 V  
Chopper: 538 Hz

Voltages (V)  
Flow: 1.03 V  
Detector: -0.033 V

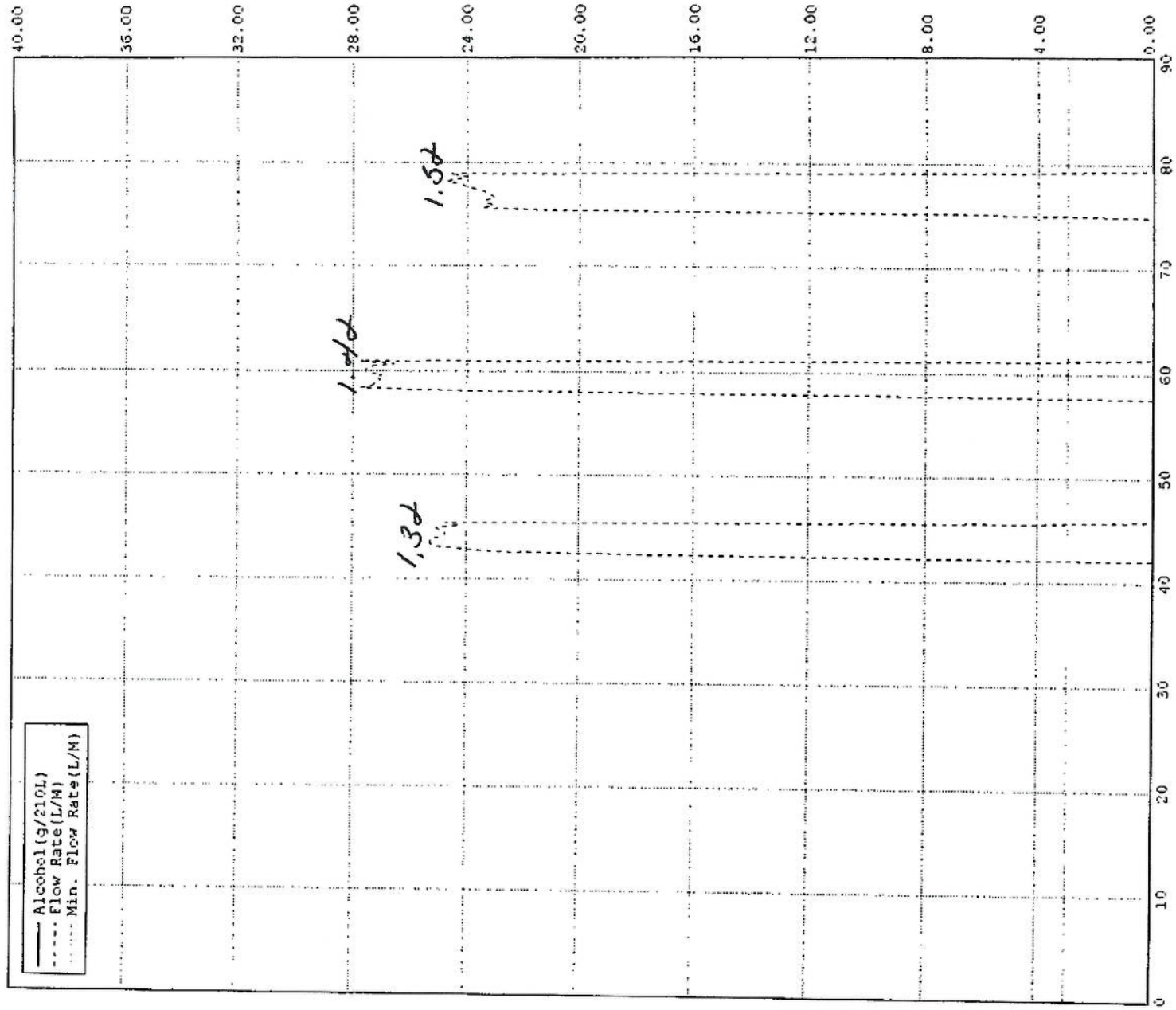
CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100255  
-----

Date: 06/13/2016  
Time: 09:42:02

OPERATOR NAME:  
Q Q Q  
CERTIFICATE #: Q

Ca	=	0.1500		
CAL	=	1.000437	0.800	<= CAL < 1.200
b1	=	0.0014	0.0000	<= b1 < 0.0040
b2	=	0.0079	0.0010	<= b2 < 0.0100
b3	=	0.0011	0.0000	<= b3 < 0.0040
Xq	=	0.0769	0.0500	<= Xq < 0.2000
a21	=	1.209080	1.050	<= a21 < 1.300
a31	=	0.429320	0.300	<= a31 < 0.800



**SUBJECT TEST**

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100255  
 -----  
 Date: 07/13/2016  
 Time: 14:09:23

**SUBJECT NAME:**  
**TEST TEST**  
**LICENSE #: VOLUME TEST**

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

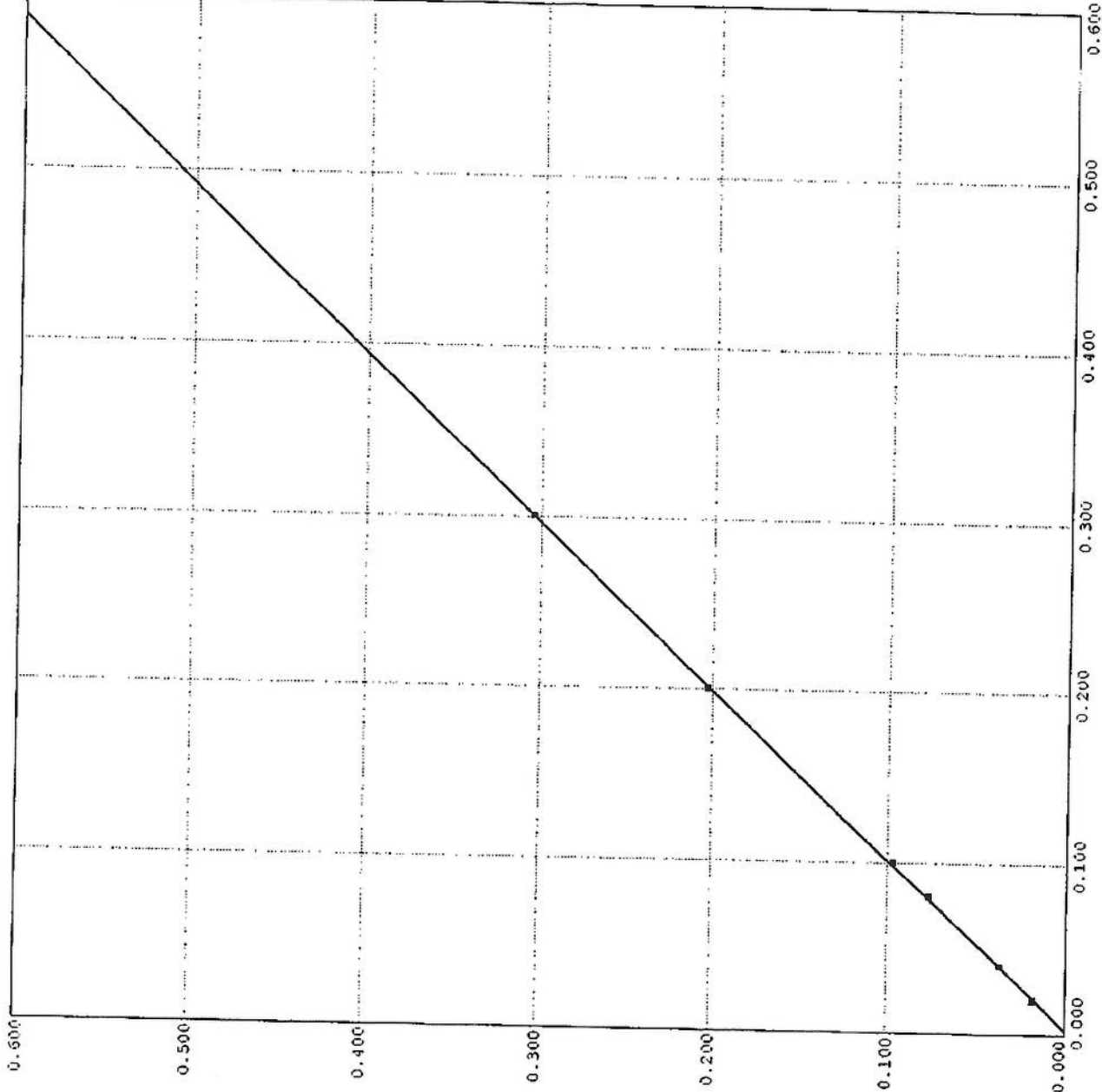
**DEPT/AGENCY:**  
 AAA1

**CASE/REPORT:** 16-1234  
**TEST TYPE:** TEST

**EXTERNAL STANDARD INFORMATION**  
 NOMINAL: 0.080  
 TARGET AT 29.96: 0.080  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	14:10
BLANK TEST	0.000	14:10
INTERNAL STANDARD	VERIFIED	14:10
EXTERNAL STANDARD	0.079	14:10
BLANK TEST	0.000	14:11
SUBJECT SAMPLE (Vol=1.52L)	0.000	14:13
BLANK TEST	0.000	14:13
EXTERNAL STANDARD	0.079	14:14
BLANK TEST	0.000	14:15

*COB*



**LINEARITY CHECK**

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100255  
 -----  
 Date: 07/13/2016  
 Time: 14:38:52

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0196	0.0005
0.040	0.0386	0.0005
0.080	0.0782	0.0004
0.100	0.0980	0.0007
0.200	0.2034	0.0005
0.300	0.3050	0.0000

SLOPE = 1.024971  
 R<sup>2</sup> = 0.999850

*COB*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100255

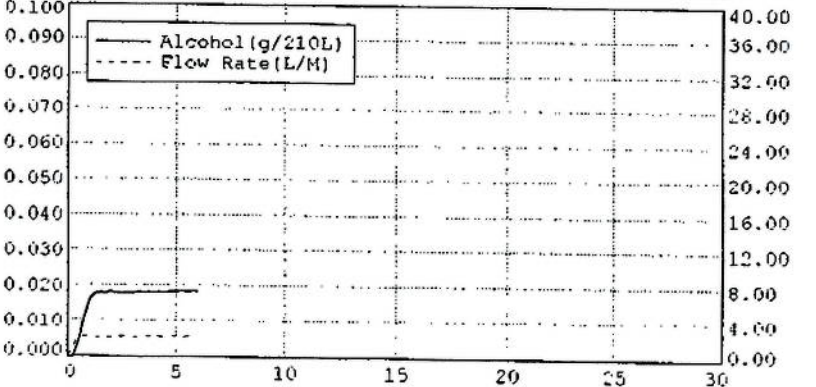
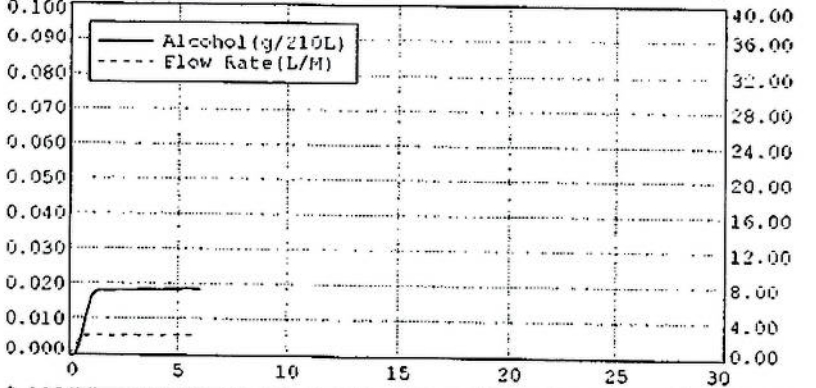
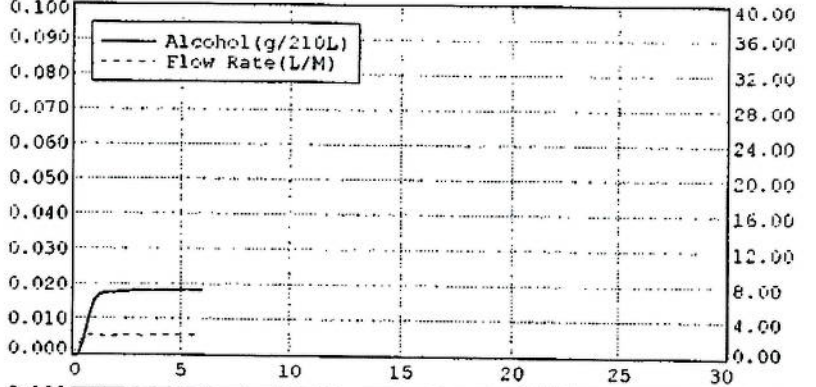
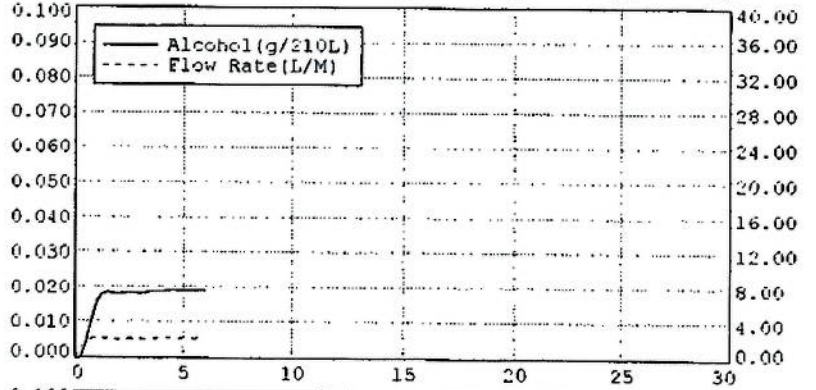
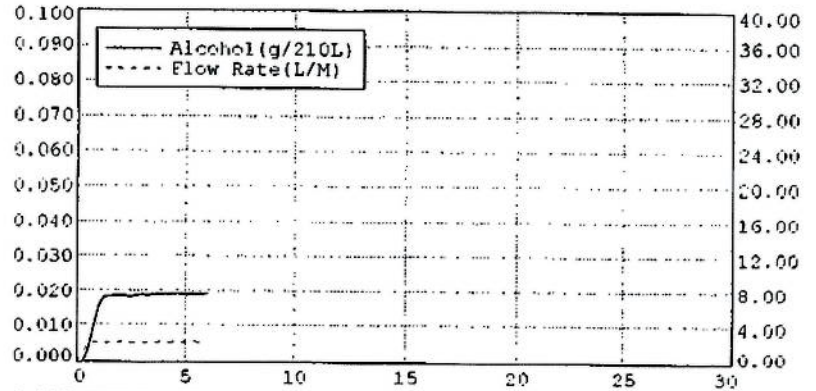
Date: 07/13/2016  
 Time: 14:38:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.96: 0.020  
 LOT #: 02915020A2  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 786 psi

BLANK TEST	0.000	14:53
INTERNAL STANDARD	VERIFIED	14:53
EXTERNAL STANDARD	0.020	14:53
BLANK TEST	0.000	14:54
EXTERNAL STANDARD	0.020	14:54
BLANK TEST	0.000	14:55
EXTERNAL STANDARD	0.019	14:55
BLANK TEST	0.000	14:56
EXTERNAL STANDARD	0.020	14:56
BLANK TEST	0.000	14:57
EXTERNAL STANDARD	0.019	14:57
BLANK TEST	0.000	14:58

Average = 0.0196  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100255

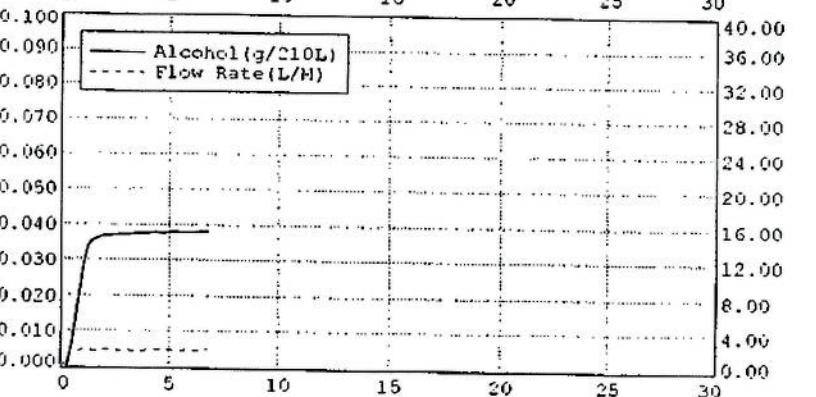
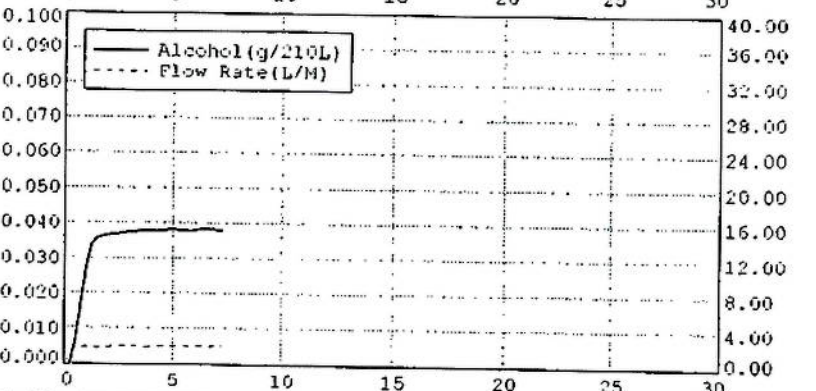
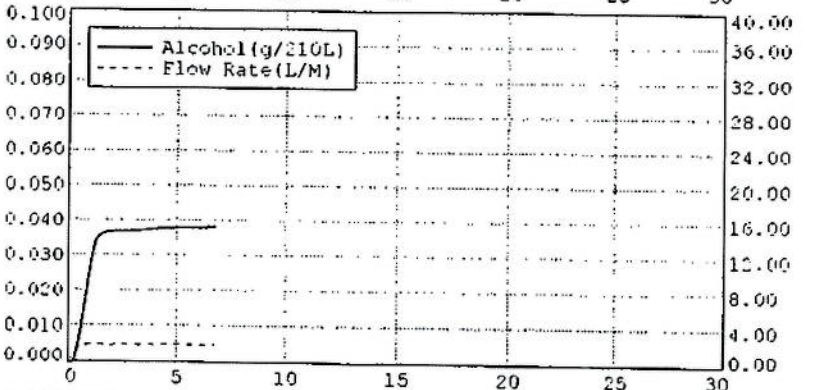
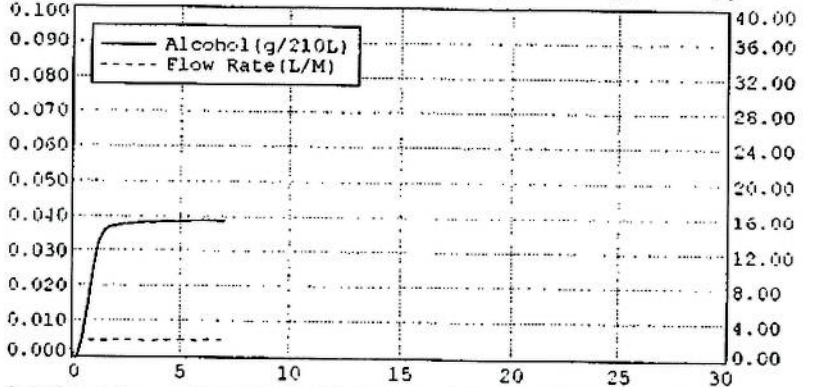
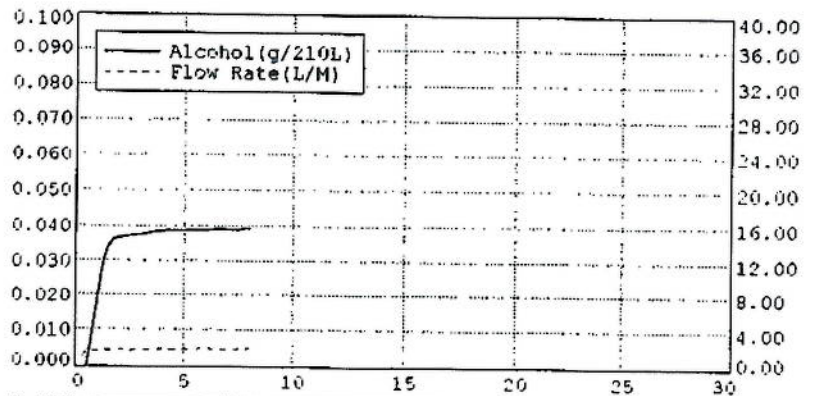
Date: 07/13/2016  
 Time: 15:01:09

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.98: 0.040  
 LOT #: 02915040A3  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 248 psi

BLANK TEST	0.000	15:02
INTERNAL STANDARD	VERIFIED	15:02
EXTERNAL STANDARD	0.039	15:02
BLANK TEST	0.000	15:03
EXTERNAL STANDARD	0.039	15:03
BLANK TEST	0.000	15:04
EXTERNAL STANDARD	0.038	15:04
BLANK TEST	0.000	15:05
EXTERNAL STANDARD	0.039	15:05
BLANK TEST	0.000	15:06
EXTERNAL STANDARD	0.038	15:06
BLANK TEST	0.000	15:07

Average = 0.0386  
 Std Dev = 0.0005





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100255

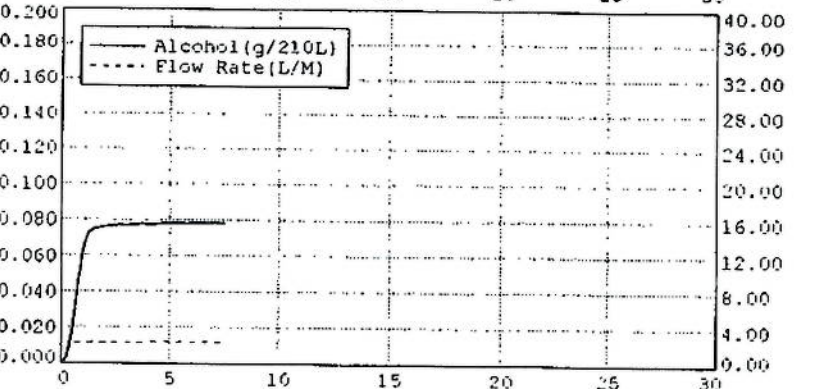
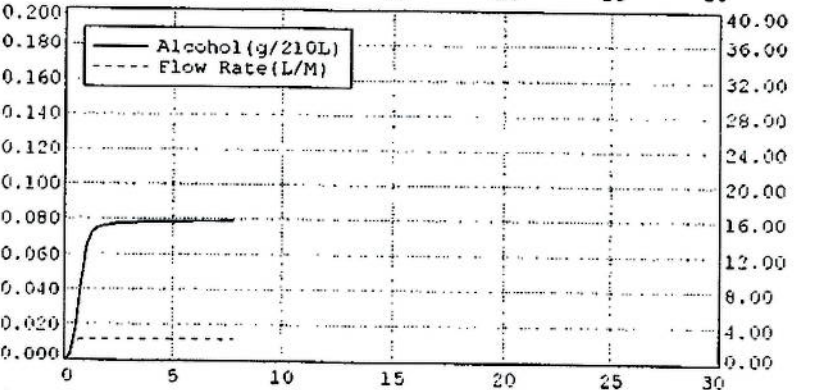
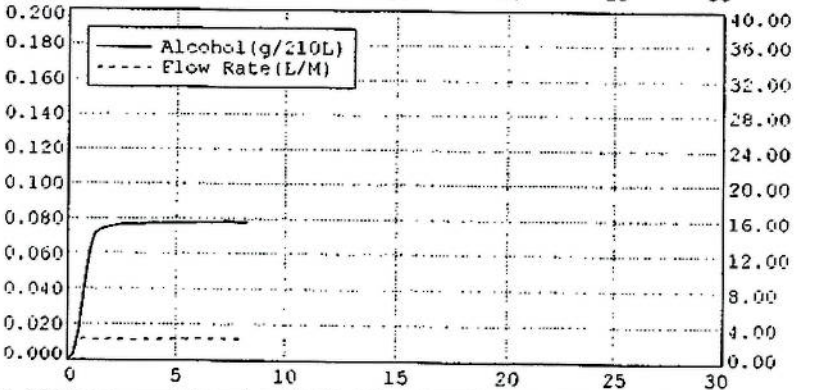
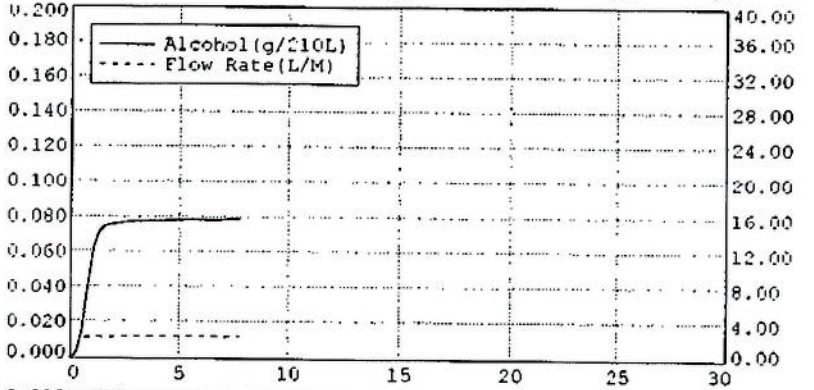
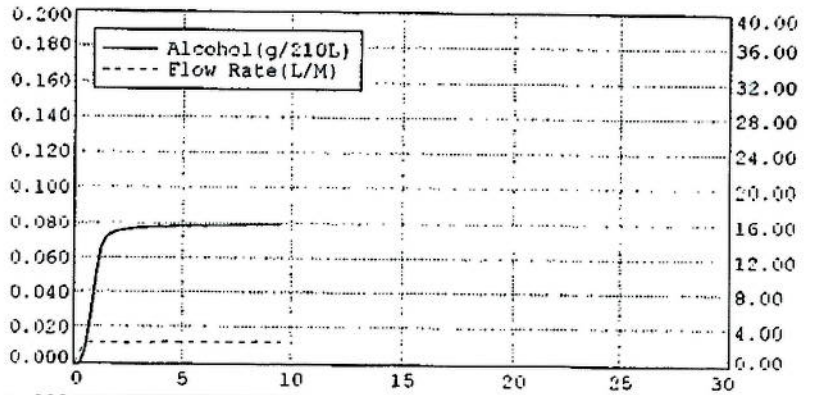
Date: 07/13/2016  
 Time: 15:09:55

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.98: 0.080  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018  
 TANK PRESSURE: 1083 psi

BLANK TEST	0.000	15:11
INTERNAL STANDARD	VERIFIED	15:11
EXTERNAL STANDARD	0.079	15:11
BLANK TEST	0.000	15:12
EXTERNAL STANDARD	0.078	15:12
BLANK TEST	0.000	15:13
EXTERNAL STANDARD	0.078	15:13
BLANK TEST	0.000	15:14
EXTERNAL STANDARD	0.078	15:14
BLANK TEST	0.000	15:15
EXTERNAL STANDARD	0.078	15:15
BLANK TEST	0.000	15:16

Average = 0.0782  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100255

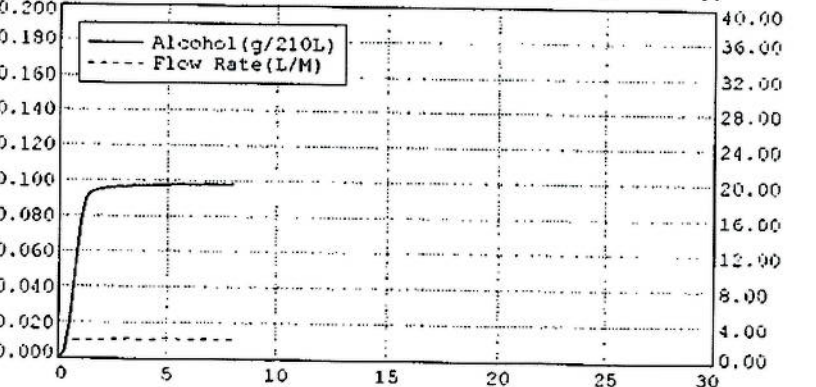
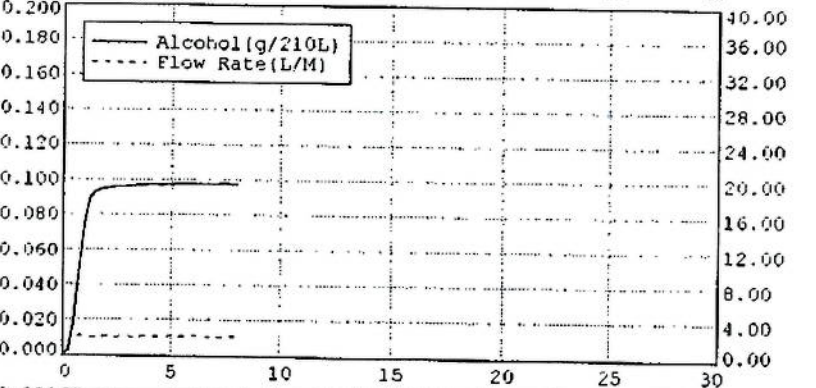
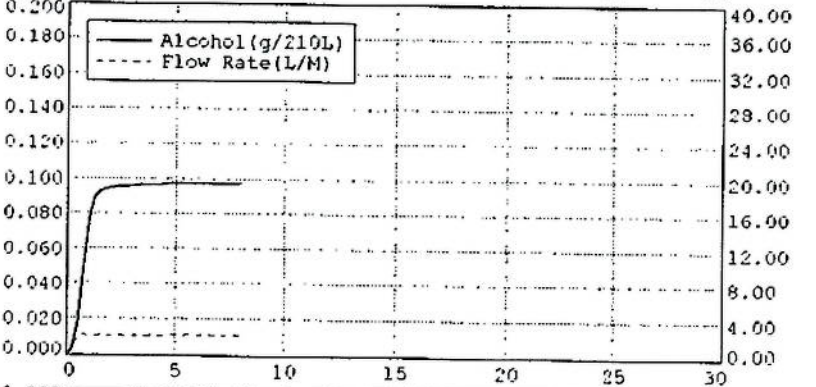
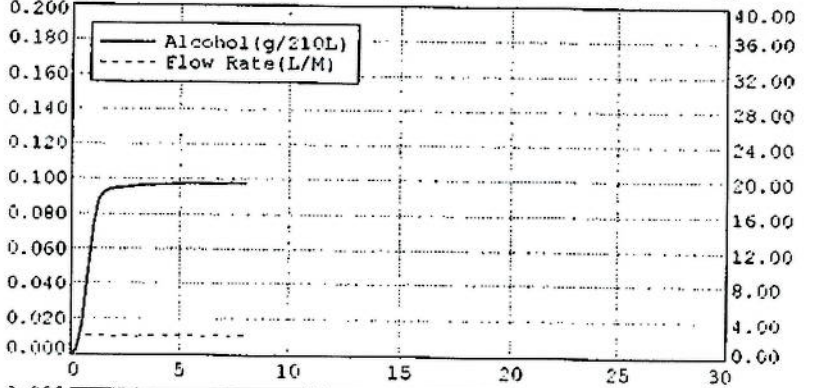
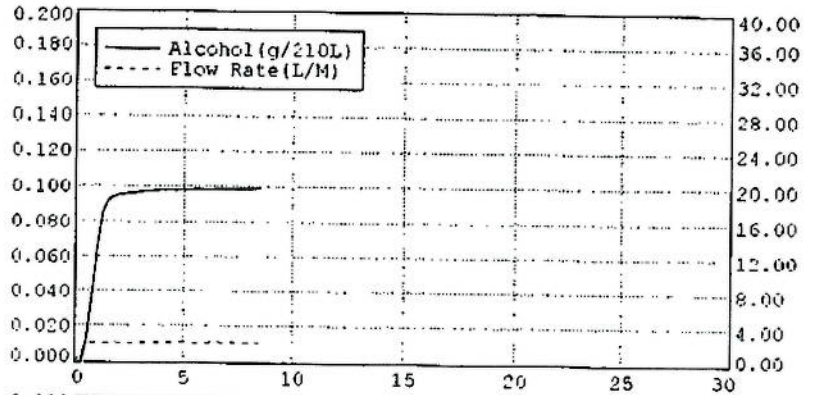
Date: 07/13/2016  
 Time: 15:17:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.98: 0.100  
 LOT #: 02915100A1  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 505 psi

BLANK TEST	0.000	15:19
INTERNAL STANDARD	VERIFIED	15:19
EXTERNAL STANDARD	0.099	15:19
BLANK TEST	0.000	15:20
EXTERNAL STANDARD	0.097	15:20
BLANK TEST	0.000	15:21
EXTERNAL STANDARD	0.098	15:21
BLANK TEST	0.000	15:22
EXTERNAL STANDARD	0.098	15:22
BLANK TEST	0.000	15:23
EXTERNAL STANDARD	0.098	15:23
BLANK TEST	0.000	15:24

Average = 0.0980  
 Std Dev = 0.0007



LINEARITY CHECK: Control Test 5

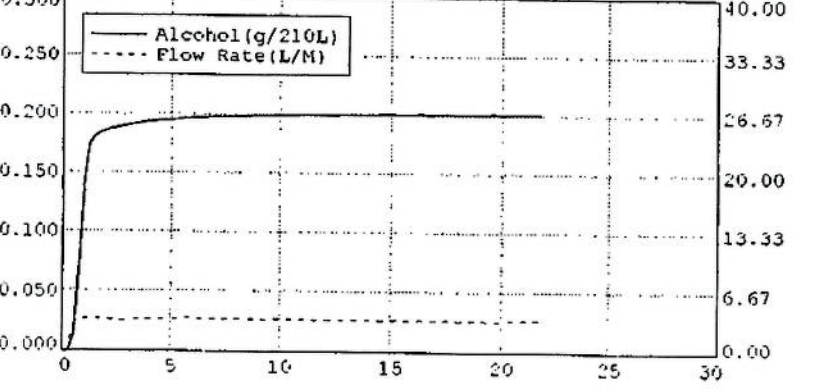
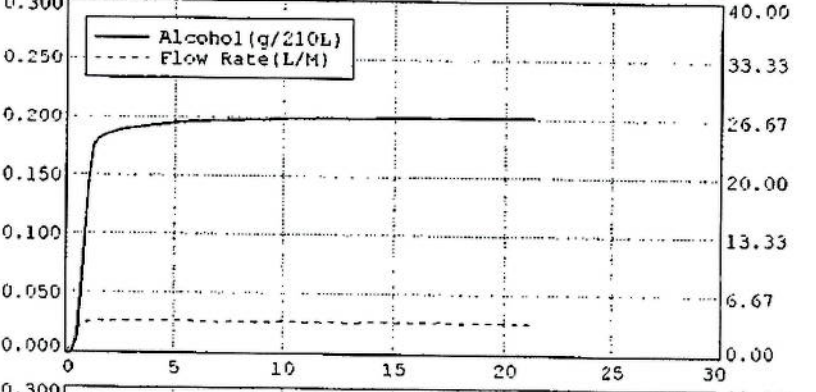
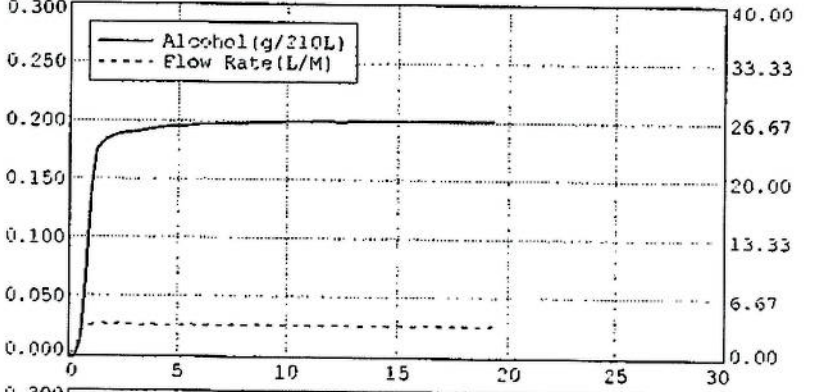
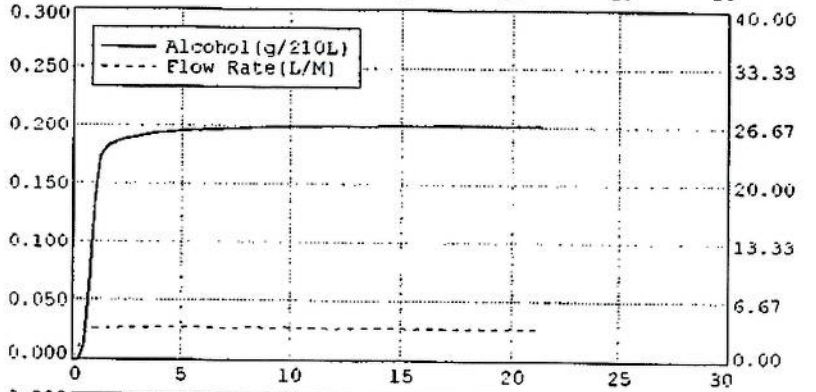
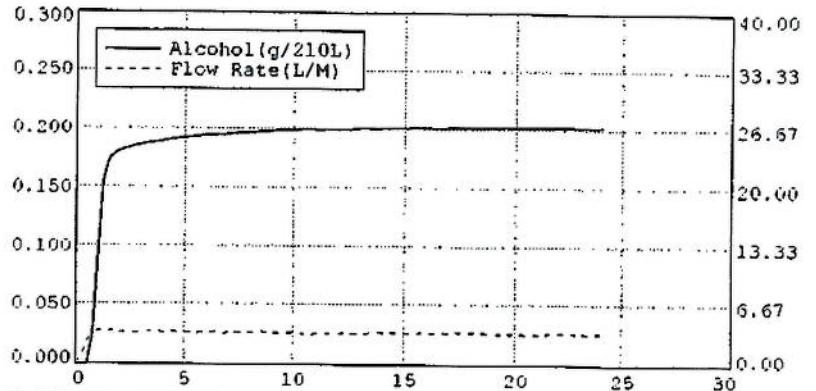
Alaska Department of Public Safety  
 DATAMASTER dmt: 100255

Date: 07/13/2016  
 Time: 15:24:45

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

BLANK TEST	0.000	15:26
INTERNAL STANDARD	VERIFIED	15:26
EXTERNAL STANDARD	0.204	15:26
BLANK TEST	0.000	15:27
EXTERNAL STANDARD	0.203	15:27
BLANK TEST	0.000	15:28
EXTERNAL STANDARD	0.203	15:29
BLANK TEST	0.000	15:30
EXTERNAL STANDARD	0.203	15:30
BLANK TEST	0.000	15:31
EXTERNAL STANDARD	0.204	15:31
BLANK TEST	0.000	15:32

Average = 0.2034  
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

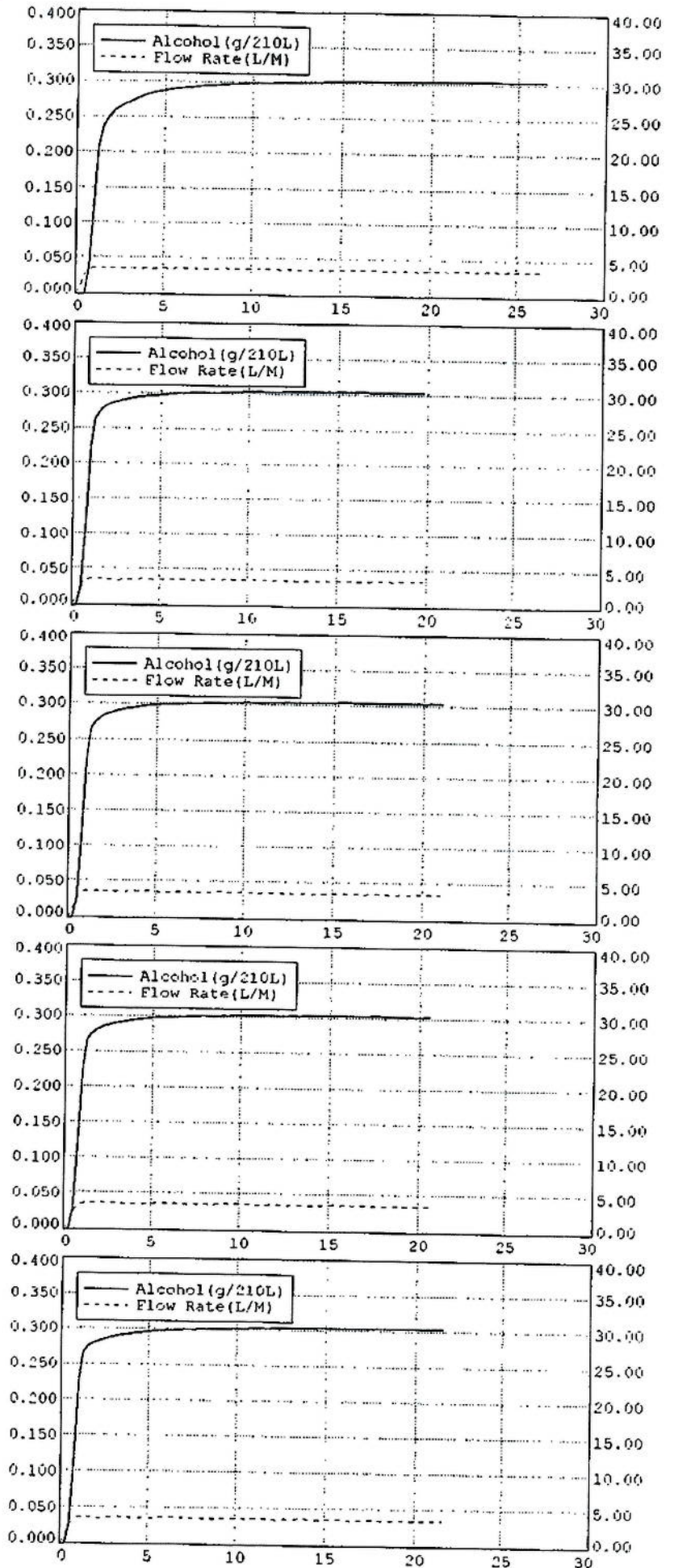
Alaska Department of Public Safety  
 DATAMASTER dmt: 100255

Date: 07/13/2016  
 Time: 15:53:42

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

BLANK TEST	0.000	15:54
INTERNAL STANDARD	VERIFIED	15:54
EXTERNAL STANDARD	0.305	15:55
BLANK TEST	0.000	15:56
EXTERNAL STANDARD	0.305	15:56
BLANK TEST	0.000	15:57
EXTERNAL STANDARD	0.305	15:58
BLANK TEST	0.000	15:58
EXTERNAL STANDARD	0.305	15:59
BLANK TEST	0.000	16:00
EXTERNAL STANDARD	0.305	16:00
BLANK TEST	0.000	16:01

Average = 0.3050  
 Std Dev = 0.0000



**SUBJECT TEST**

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100255  
 -----  
 Date: 07/14/2016  
 Time: 07:35:31

**SUBJECT NAME:**  
**TEST TEST**  
**LICENSE #:** INCOMPLETE

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

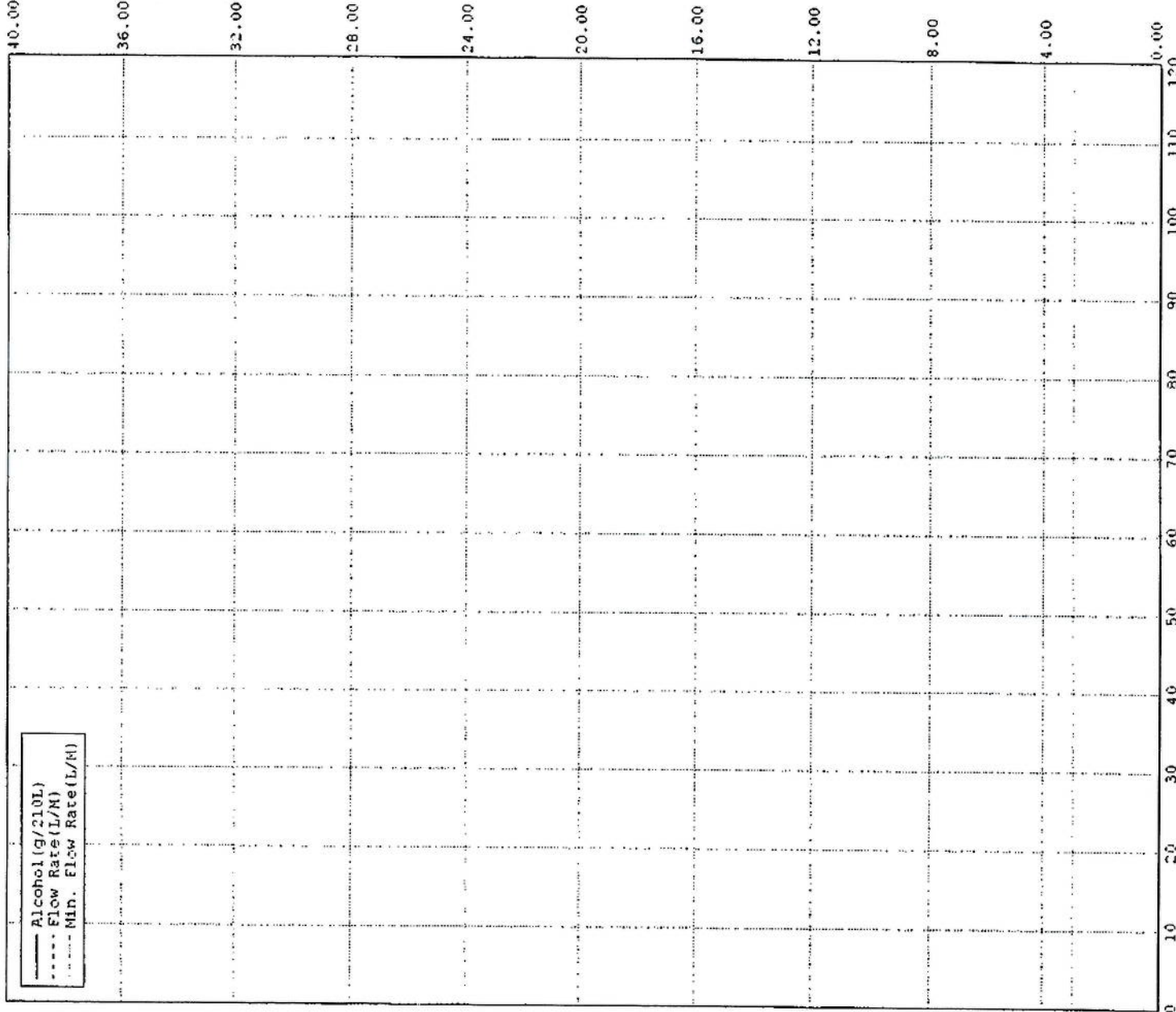
**DEPT/AGENCY:**  
 AAA1

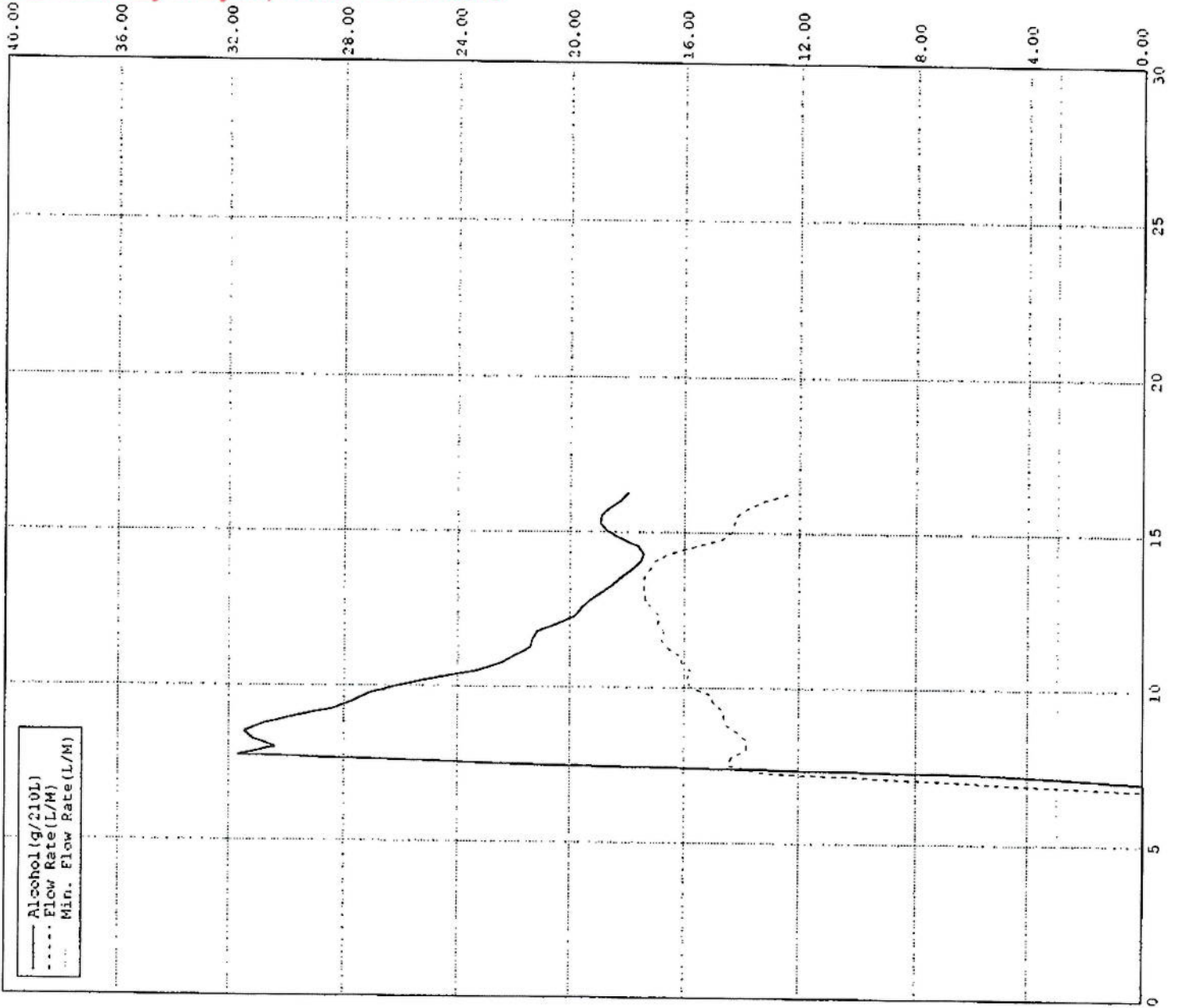
**CASE/REPORT:** 16-1234  
**TEST TYPE:** TEST

**EXTERNAL STANDARD INFORMATION**  
**NOMINAL:** 0.080  
**TARGET AT 30.11:** 0.081  
**LOT #:** AG608504  
**EXPIRATION:** 03/25/2018

**DIAGNOSTIC CHECK** PASSED 07:37  
**BLANK TEST** 0.000 07:37  
**INTERNAL STANDARD** VERIFIED 07:37  
**EXTERNAL STANDARD** 0.079 07:37  
**BLANK TEST** 0.000 07:38  
**SUBJECT SAMPLE** INCOMPLETE 07:40

*CSB*





**SUBJECT TEST**

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100255  
 -----  
 Date: 07/14/2016  
 Time: 07:42:07

**SUBJECT NAME:**  
**TEST TEST**  
**LICENSE #:** INVALID

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

**DEPT/AGENCY:**  
 AAAA

**CASE/REPORT:** 16-1234  
**TEST TYPE:** TEST

**EXTERNAL STANDARD INFORMATION**  
 NOMINAL: 0.080  
 TARGET AT 30.13: 0.081  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018

**DIAGNOSTIC CHECK** PASSED 07:43  
**BLANK TEST** 0.000 07:43  
**INTERNAL STANDARD** VERIFIED 07:43  
**EXTERNAL STANDARD** 0.079 07:43  
**BLANK TEST** 0.000 07:44  
**SUBJECT SAMPLE** INVALID 07:44

*COB*

SUBJECT TEST

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100255  
 -----  
 Date: 07/14/2016  
 Time: 07:51:43

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: ACETONE -INT

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

DEPT/AGENCY:  
 AAAA

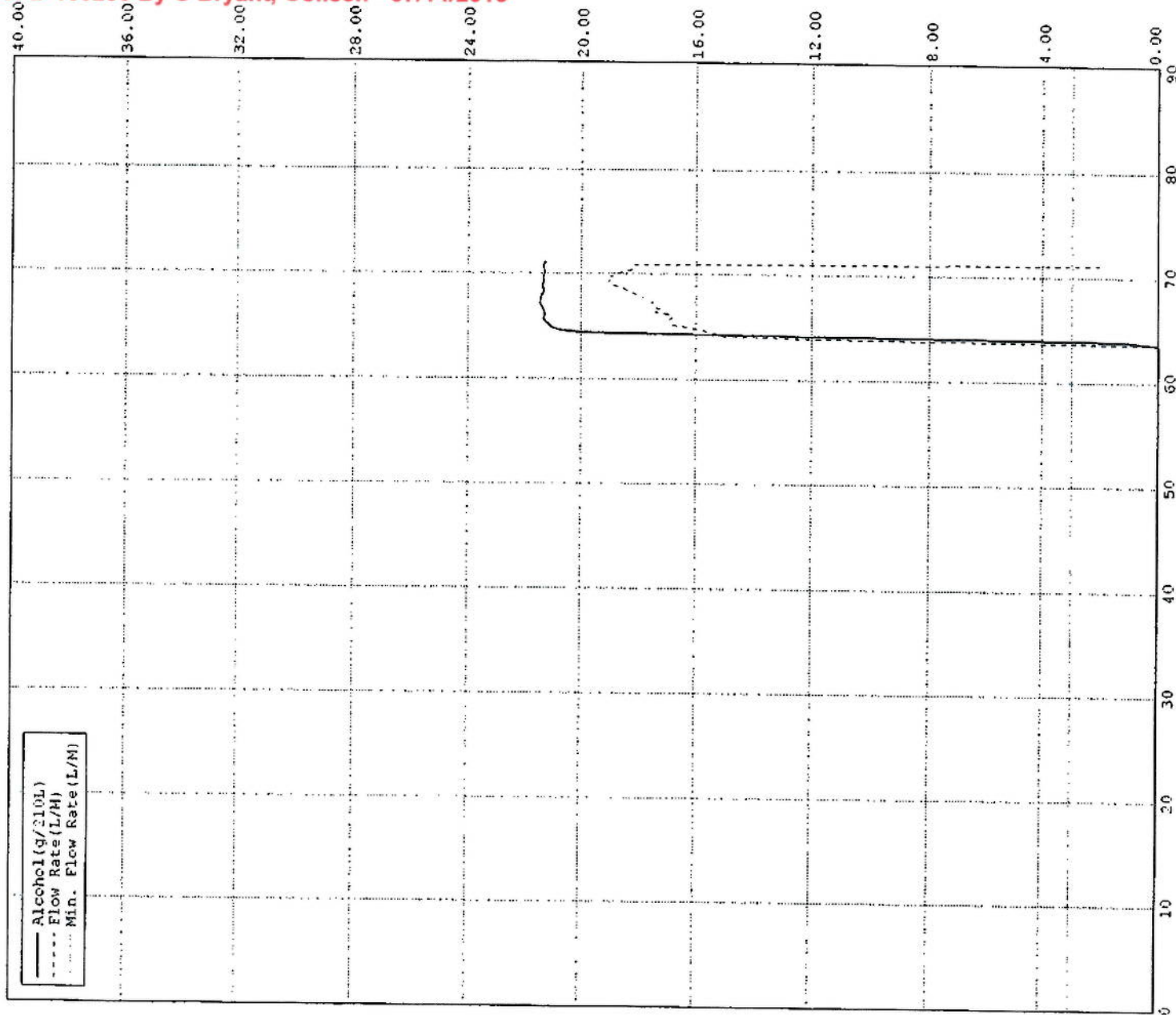
CASE/REPORT: 16-1234  
 TEST TYPE: TEST

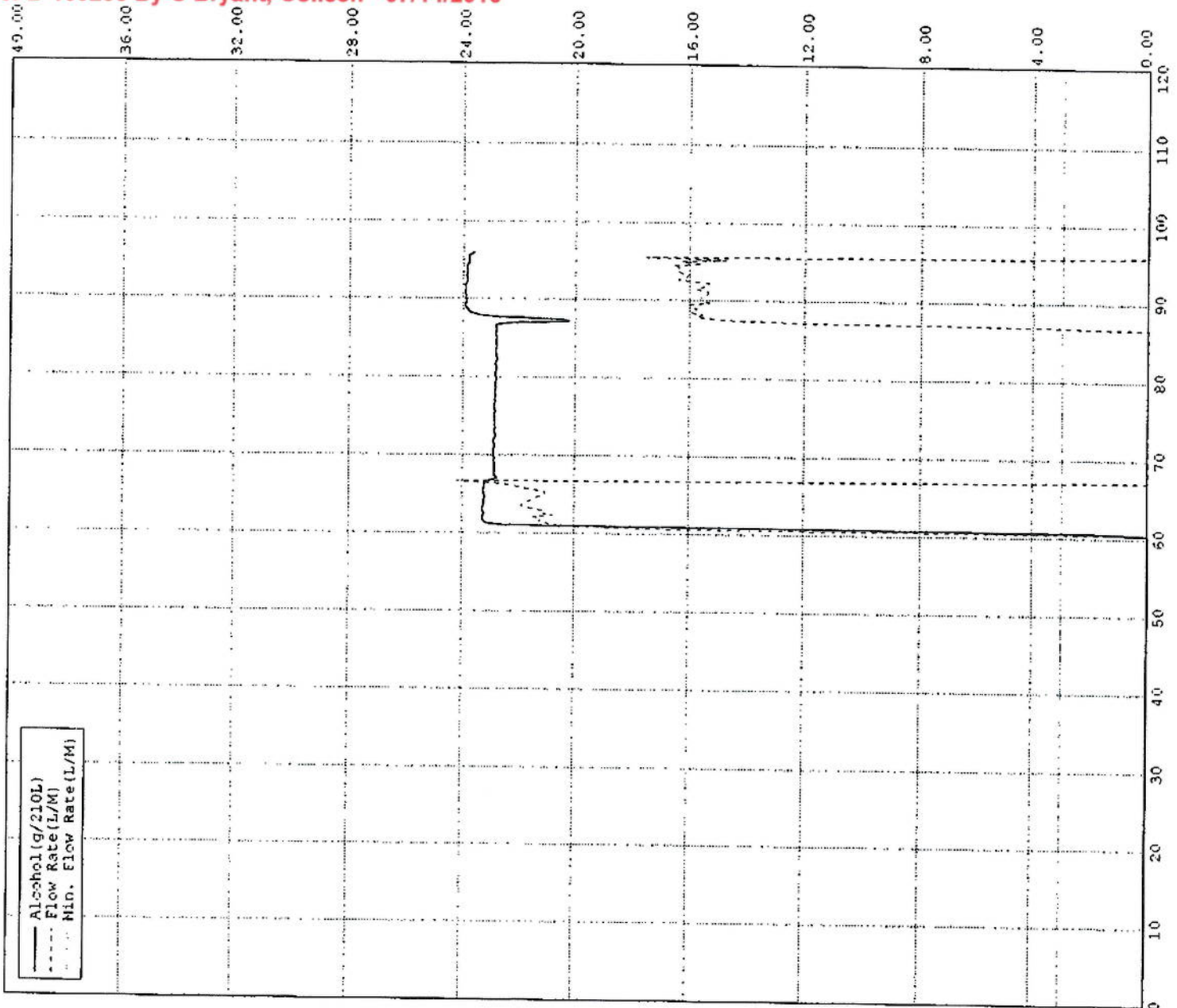
EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 30.13: 0.081  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	07:52
BLANK TEST	0.000	07:52
INTERNAL STANDARD	VERIFIED	07:52
Xg = 0.077 (0.23%)		
EXTERNAL STANDARD	0.079	07:53
X[l] = 0.0790 (0.0009) (0.0039)		
BLANK TEST	0.000	07:53
SUBJECT SAMPLE	XXX	07:55
X[l] = 0.1074 (-0.0174) (0.0008)		

Interference Detected

*Colleen*





SUBJECT TEST

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100255  
 -----  
 Date: 07/14/2016  
 Time: 07:58:43

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: IPA - INT

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 30.13: 0.081  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:00
BLANK TEST	0.000	08:00
INTERNAL STANDARD	VERIFIED	08:00
Xg = 0.077 (0.11%)		
EXTERNAL STANDARD	0.080	08:00
X[1] = 0.0795 (0.0008) (0.0026)		
BLANK TEST	0.000	08:01
SUBJECT SAMPLE	XXX	08:03
X[1] = 0.1187 (-0.0279) (0.0004)		

Interference Detected

*COB*



SUBJECT TEST

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100255  
 -----  
 Date: 07/14/2016  
 Time: 08:06:25

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: NEGATIVE INT

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

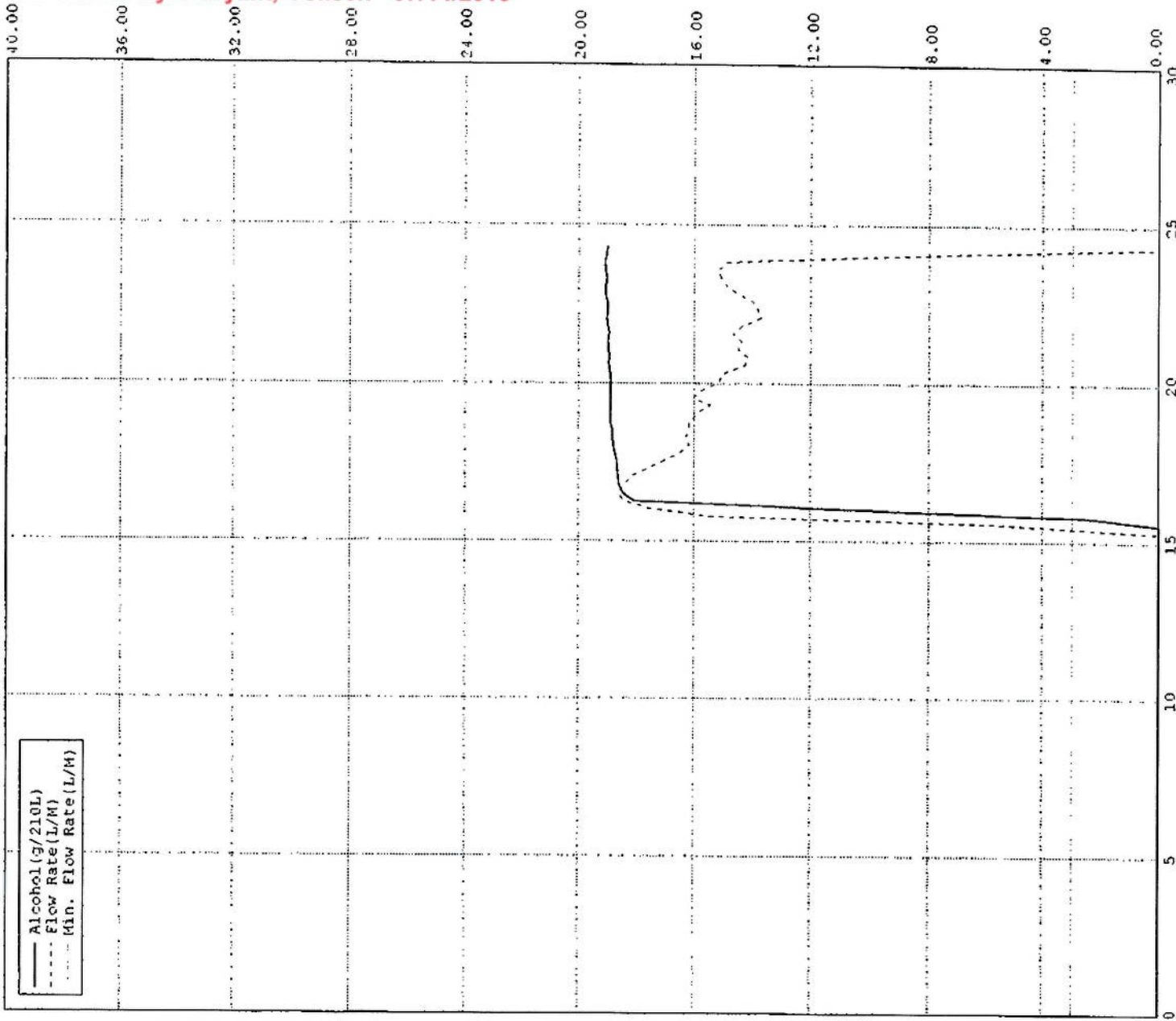
DEPT/AGENCY:  
 AAA1  
 CASE/REPORT: 16-1234  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 30.11: 0.081  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK	PASSED	08:07
BLANK TEST	0.000	08:07
INTERNAL STANDARD	VERIFIED	08:07
Xg = 0.076 (0.68%)		
EXTERNAL STANDARD	0.079	08:07
X[1] = 0.0788 (0.0008) (0.0027)		
BLANK TEST	0.000	08:08
SUBJECT SAMPLE (Vol=2.22L)	0.095	08:09
X[1] = 0.0959 (0.0002) (0.0000)		
BLANK TEST	0.000	08:10
EXTERNAL STANDARD	0.078	08:10
X[1] = 0.0782 (0.0010) (0.0022)		
BLANK TEST	0.000	08:11

*Filter 2 avg = 0.0009*  
*Filter 3 avg = 0.0009*

*OK*



SUBJECT TEST

Alaska Department of Public Safety  
DAYMASTER dmt: 100255

Date: 07/14/2016  
Time: 08:13:37

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

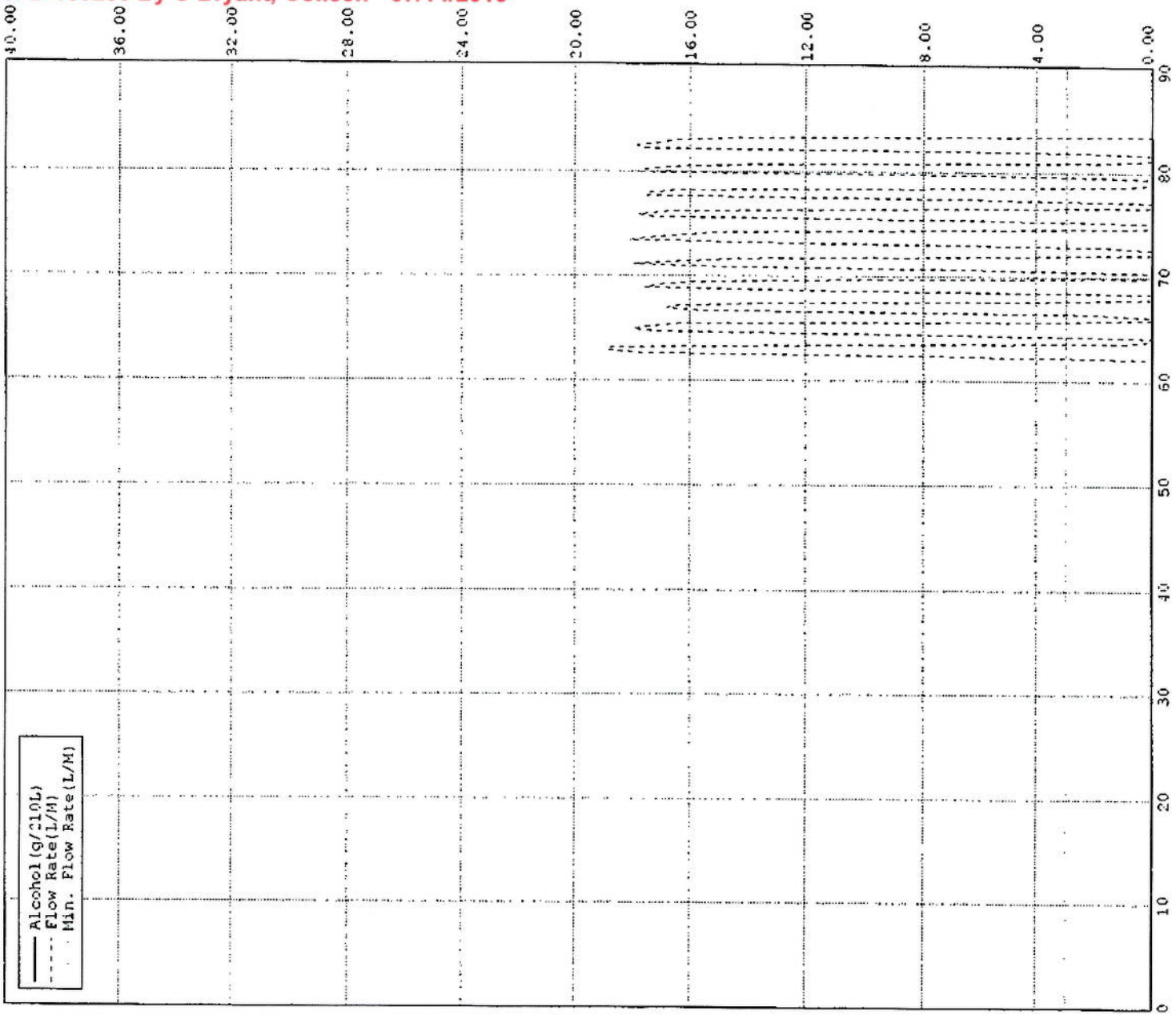
OPERATOR NAME:  
COLLEEN S O'BRYANT  
OPERATOR'S #: 6237

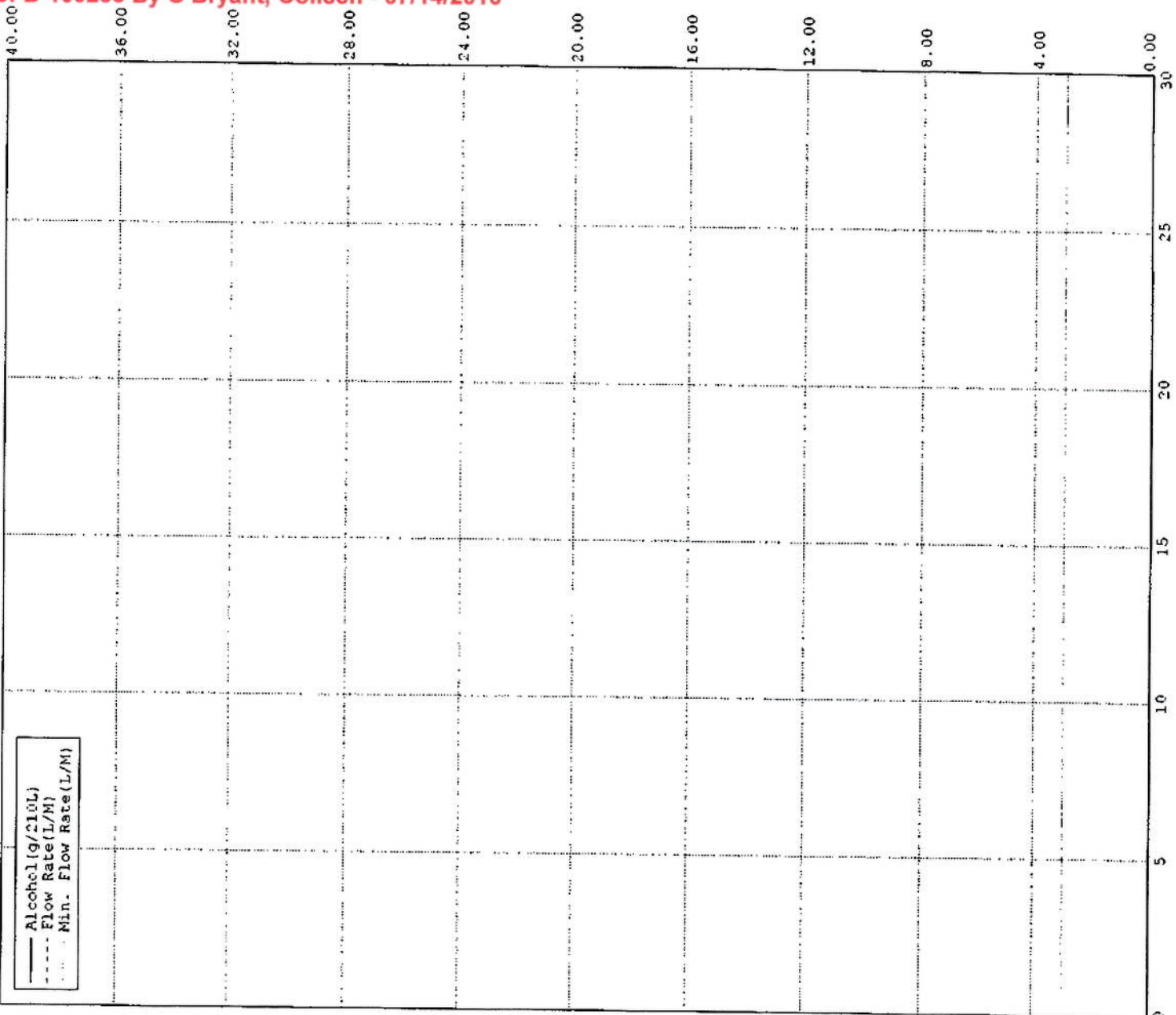
DEPT/AGENCY:  
AAA1  
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 30.13: 0.081  
LOT #: AG608504  
EXPIRATION: 03/25/2018

DIAGNOSTIC CHECK PASSED 08:14  
BLANK TEST 0.000 08:14  
INTERNAL STANDARD VERIFIED 08:14  
EXTERNAL STANDARD 0.079 08:15  
BLANK TEST 0.000 08:15  
SUBJECT SAMPLE XXX 08:17

Maximum Attempts Exceeded



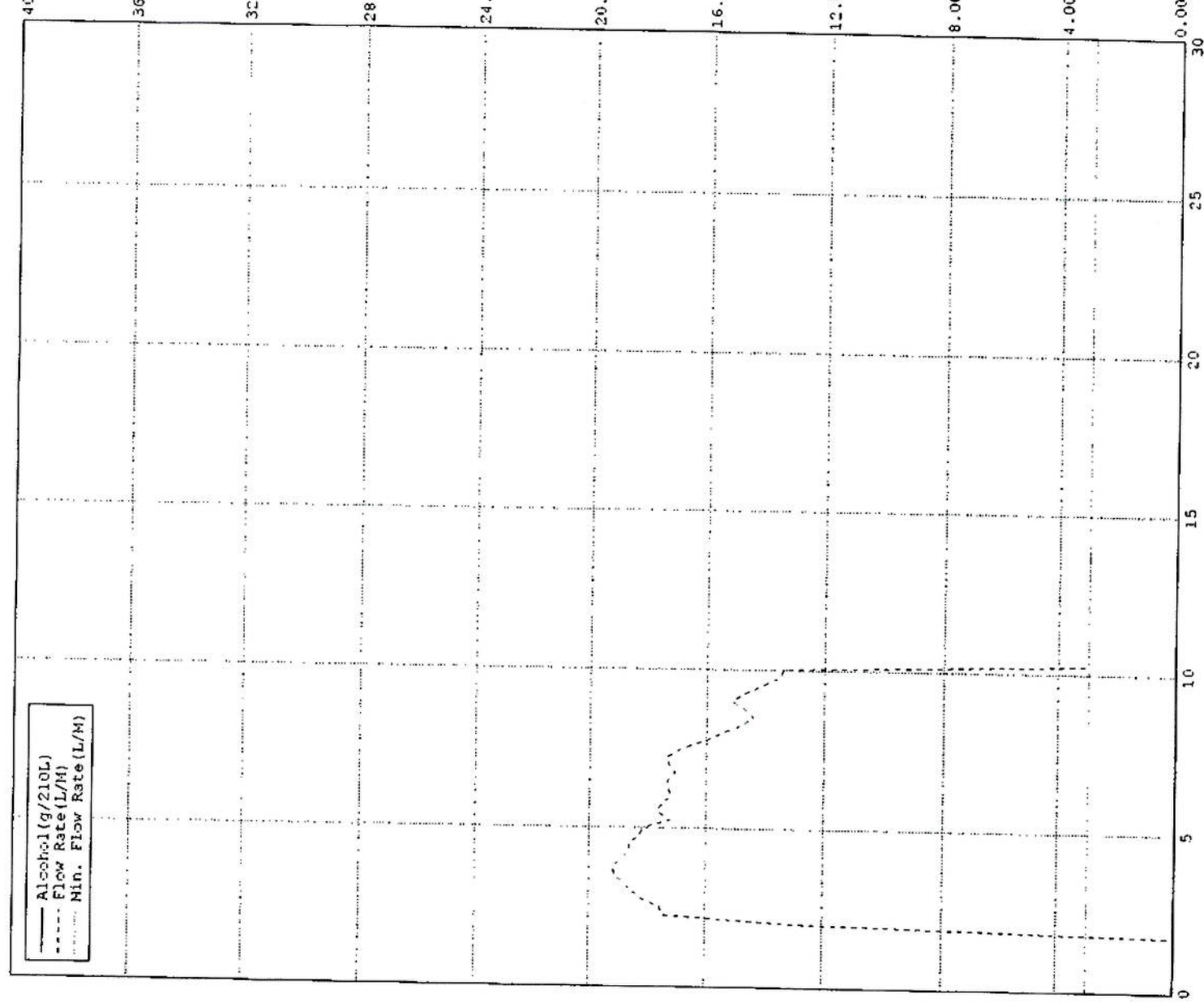


— Alcohol (g/210L)  
 - - - Flow Rate (L/M)  
 . . . Min. Flow Rate (L/M)

**SUBJECT TEST**

-----  
 Alaska Department of Public Safety  
 DATAMASTER dmt: 100255  
 -----  
 Date: 07/14/2016  
 Time: 08:19:29  
 -----  
 SUBJECT NAME:  
 TEST TEST  
 LICENSE #: RFI  
 -----  
 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 30.13: 0.081  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018  
 -----  
 DIAGNOSTIC CHECK PASSED 08:20  
 BLANK TEST 0.000 08:20  
 INTERNAL STANDARD VERIFIED 08:20  
 EXTERNAL STANDARD 0.080 08:20  
 BLANK TEST 0.000 08:21  
 -----  
 RFI DETECTED

*CAB*



**SUBJECT TEST**

-----  
 Alaska Department of Public Safety  
 DATAMASTER dnt: 100255  
 -----  
 Date: 07/14/2016  
 Time: 08:37:38

**SUBJECT NAME:**  
**TEST TEST**  
**LICENSE #:** NON DRINKING

**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 30.11: 0.081  
 LOT #: AG608504  
 EXPIRATION: 03/25/2018

<b>DIAGNOSTIC CHECK</b>	PASSED	08:39
BLANK TEST	0.000	08:39
INTERNAL STANDARD	VERIFIED	08:39
EXTERNAL STANDARD	0.080	08:39
BLANK TEST	0.000	08:40
SUBJECT SAMPLE (Vol=2.31L)	0.000	08:40
BLANK TEST	0.000	08:41
EXTERNAL STANDARD	0.080	08:41
BLANK TEST	0.000	08:42

*COB*