

# 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 100674 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 01815080A2 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 DR6207 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 DR1176 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: 100674

Date: 01/14/2016  
Time: 09:45:41

VERSIONS

DMT: 3.01  
PIC: 3.03  
Modem: 2.6  
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED  
(44.0°C - 52.0°C)  
Breath Tube = 46.0°C PASSED  
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.71 V PASSED  
(1.04 V - 2.44 V)  
Cooler Voltage = 1.83 V PASSED  
(1.05 V - 2.45 V)  
Bias Voltage = 80 V PASSED  
(48 V - 112 V)  
Chopper Freq = 532 Hz PASSED  
(475 Hz - 575 Hz)  
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.208 L/M PASSED  
(3.500 L/M - 6.500 L/M)

DETECTOR INFO

PUMP ON PASSED  
(0.004 V <= 0.010 V)  
PUMP OFF PASSED  
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED  
Filter 2 PASSED  
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.104 0.50% PASSED  
(0.00% - 4.00%)

Technician Screen

-----  
DATAMASTER dmt: 100674  
-----

Date: 01/14/2016  
Time: 11:01 AM

Temperatures (°C)

Sample Cell: 48.7°C  
Breath Tube: 47.1°C

Current Barometer 29.6 in  
Volume (Ltr) 1.47

Settings

Lamp: 1.82 V  
Bias: 80 V  
Cooler: 1.75 V  
Chopper: 530 Hz

Voltages (V)

Flow: 1.03 V  
Detector: -0.055 V

CALIBRATION FACTORS

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Alaska Department of Public Safety  
DATAMASTER dmt: 100674  
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Date: 05/16/2013  
Time: 07:20:44

OPERATOR NAME:  
COLLEEN S OBRYANT  
CERTIFICATE #: 6237

Ca	=	0.1000		
CAL	=	0.978600	0.800	<= CAL < 1.200
b1	=	0.0015	0.0000	<= b1 < 0.0040
b2	=	0.0055	0.0010	<= b2 < 0.0100
b3	=	0.0006	0.0000	<= b3 < 0.0040
Xq	=	0.1049	0.0500	<= Xq < 0.2000
a21	=	1.116940	1.050	<= a21 < 1.300
a31	=	0.416219	0.300	<= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100674

Date: 01/14/2016  
Time: 11:03:30

SUBJECT NAME:  
TEST TEST  
LICENSE #: VOLUME TEST

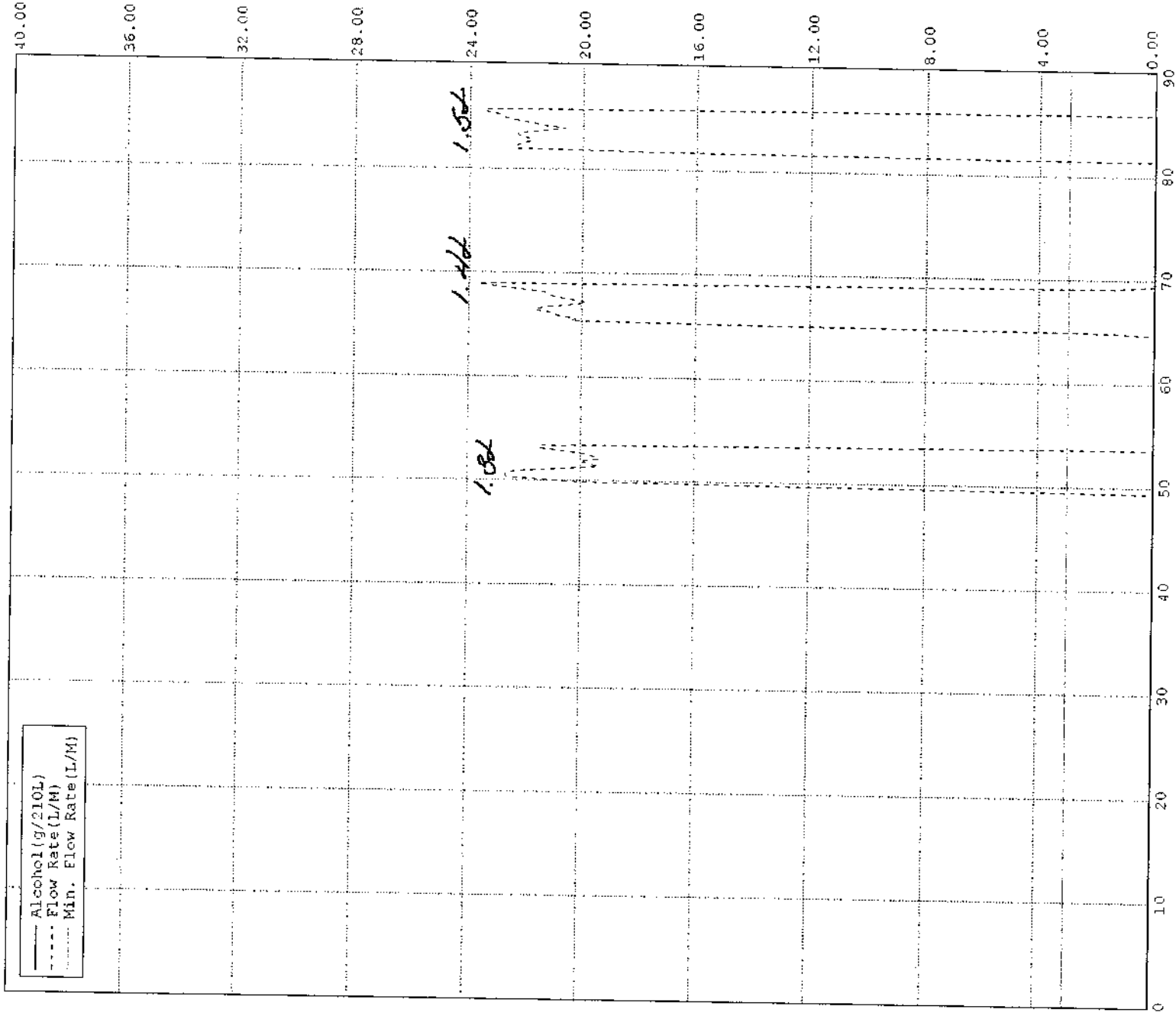
OPERATOR NAME:  
COLLEEN S O'BRYAN  
OPERATOR'S #: 6237

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.55: 0.079  
LOT #: 01315080A2  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	11:04
BLANK TEST	0.000	11:04
INTERNAL STANDARD	VERIFIED	11:04
EXTERNAL STANDARD	0.077	11:05
BLANK TEST	0.000	11:06
SUBJECT SAMPLE (Vol=1.55L)	0.000	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.078	11:08
BLANK TEST	0.000	11:09



LINEARITY CHECK

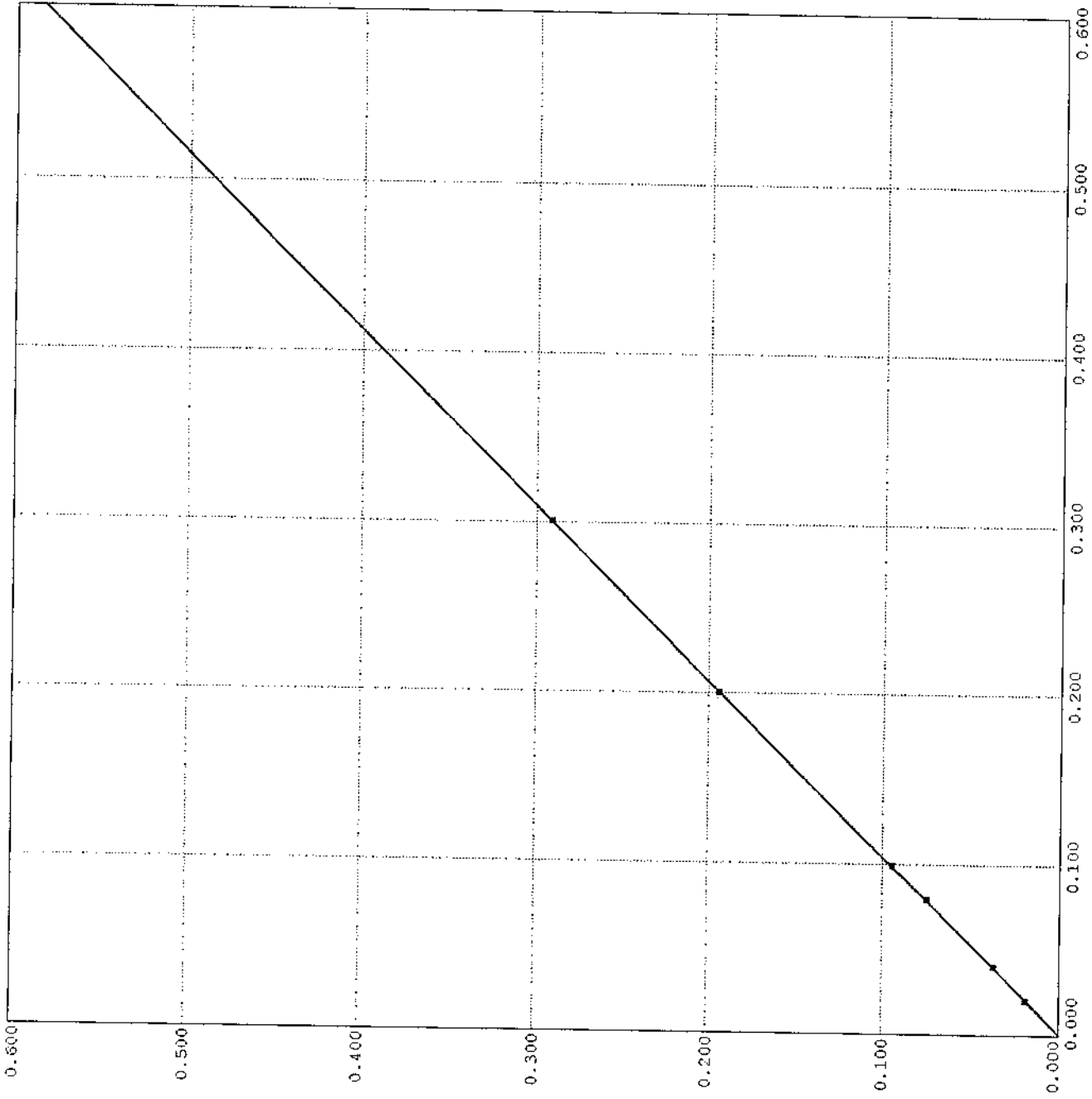
Alaska Department of Public Safety  
 DATAMASTER dmt: 100674

Date: 01/14/2016  
 Time: 11:41:11

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

TARGET	AVERAGE	STD. DEV.
0.020	0.0198	0.0004
0.040	0.0382	0.0004
0.079	0.0762	0.0004
0.099	0.0956	0.0009
0.200	0.1950	0.0000
0.300	0.2920	0.0007

SLOPE = 0.975096  
 R<sup>2</sup> = 0.999977



*CS*

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
 DATAMASTER dmt: 100674

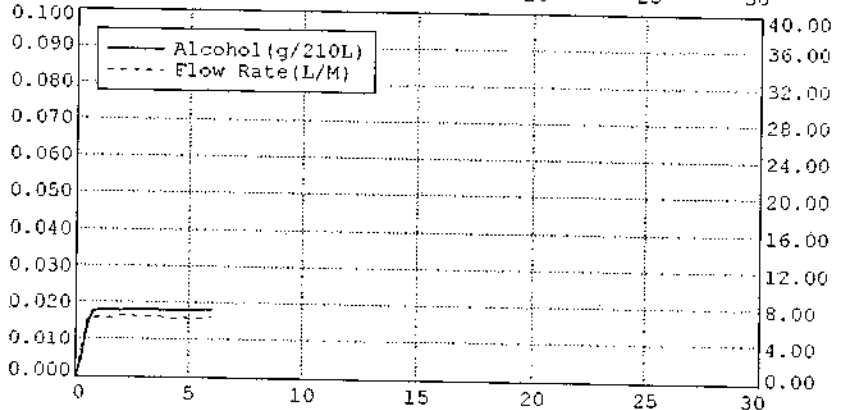
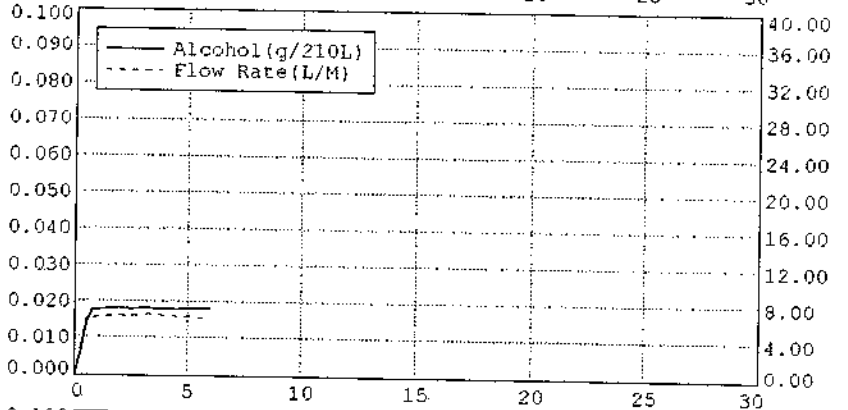
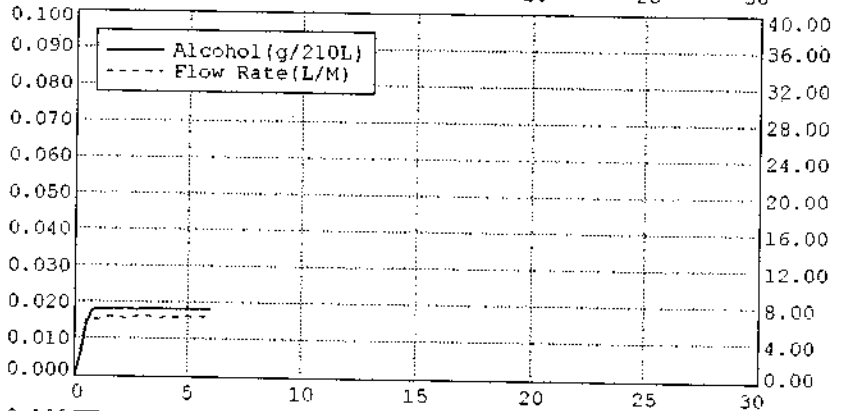
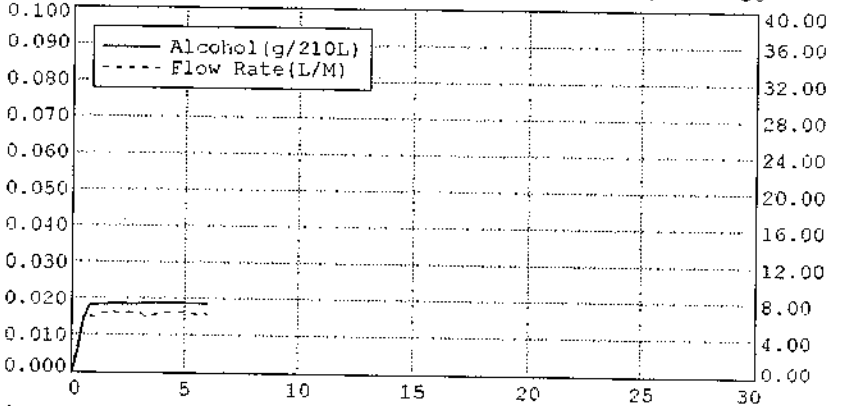
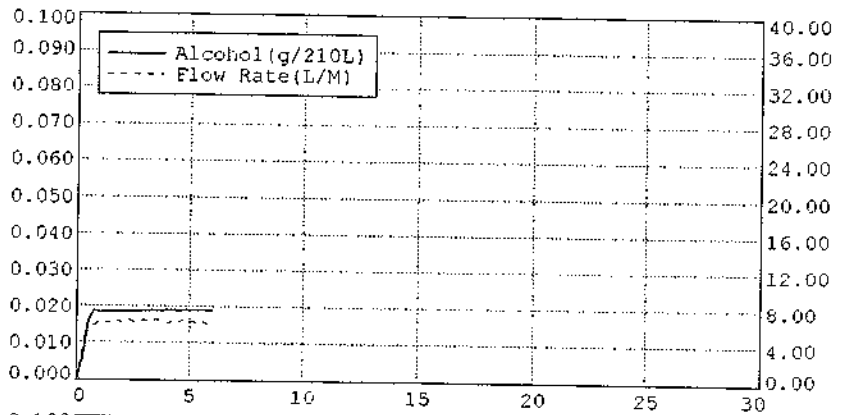
Date: 01/14/2016  
 Time: 11:41:12

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
 TARGET AT 29.57: 0.020  
 LOT #: 02915020A2  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 948 psi

BLANK TEST	0.000	11:45
INTERNAL STANDARD	VERIFIED	11:45
EXTERNAL STANDARD	0.020	11:45
BLANK TEST	0.000	11:46
EXTERNAL STANDARD	0.020	11:47
BLANK TEST	0.000	11:47
EXTERNAL STANDARD	0.020	11:48
BLANK TEST	0.000	11:49
EXTERNAL STANDARD	0.019	11:49
BLANK TEST	0.000	11:50
EXTERNAL STANDARD	0.020	11:50
BLANK TEST	0.000	11:51

Average = 0.0198  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
 DATAMASTER dmt: 100674

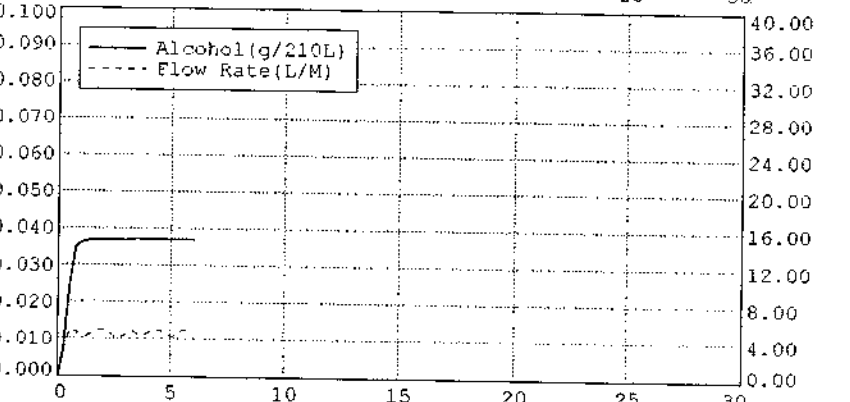
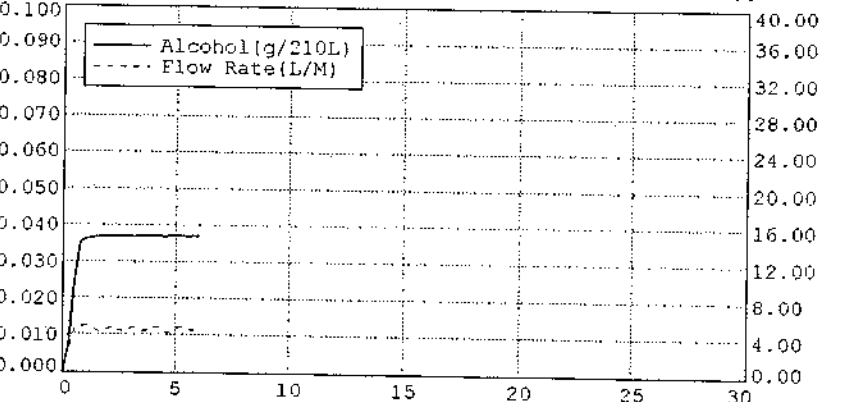
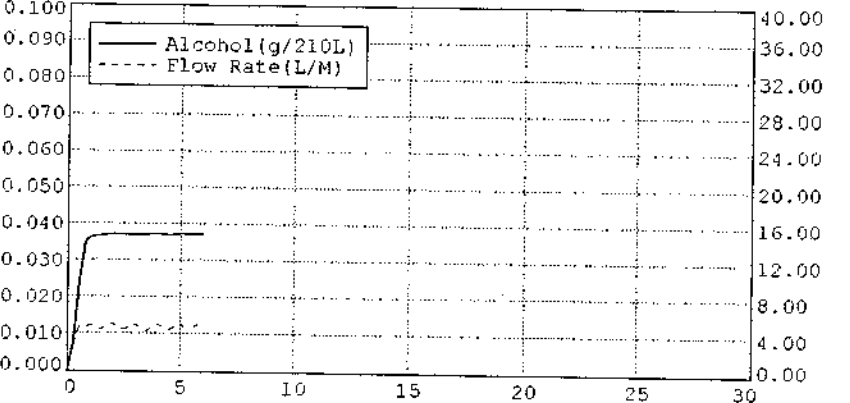
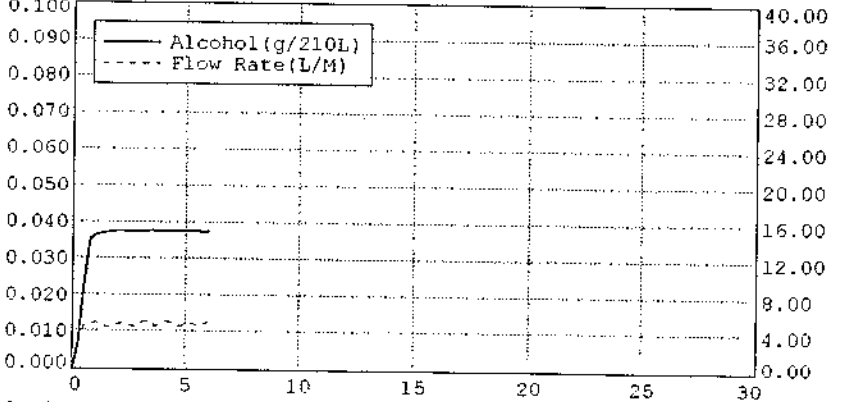
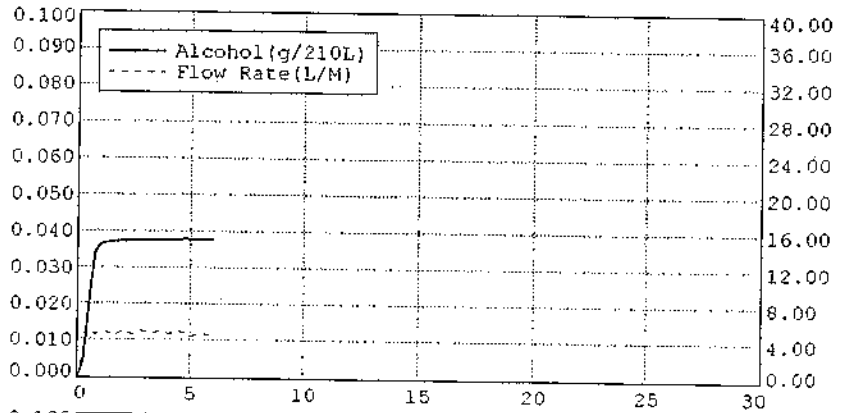
Date: 01/14/2016  
 Time: 11:54:42

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
 TARGET AT 29.57: 0.040  
 LOT #: 02915040A3  
 EXPIRATION: 03/05/2017  
 TANK PRESSURE: 567 psi

BLANK TEST	0.000	11:56
INTERNAL STANDARD	VERIFIED	11:56
EXTERNAL STANDARD	0.039	11:56
BLANK TEST	0.000	11:57
EXTERNAL STANDARD	0.038	11:57
BLANK TEST	0.000	11:58
EXTERNAL STANDARD	0.038	11:58
BLANK TEST	0.000	11:59
EXTERNAL STANDARD	0.038	11:59
BLANK TEST	0.000	12:00
EXTERNAL STANDARD	0.038	12:00
BLANK TEST	0.000	12:01

Average = 0.0382  
 Std Dev = 0.0004





LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
 DATAMASTER dmt: 100674

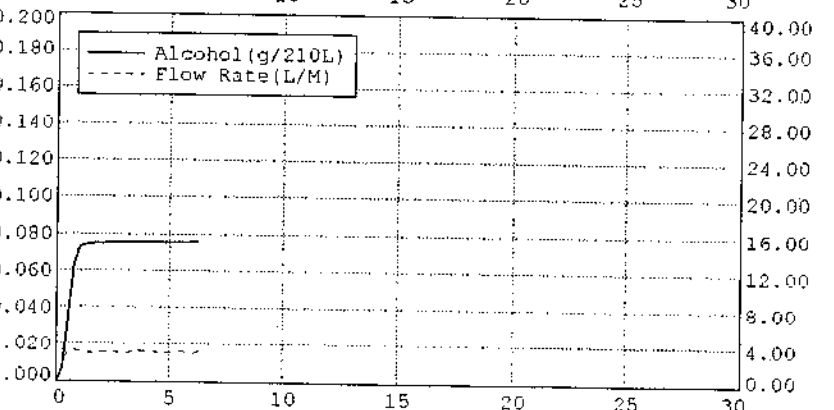
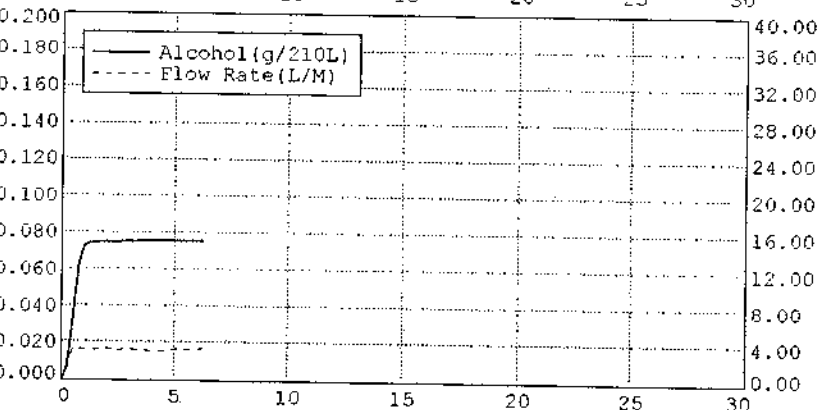
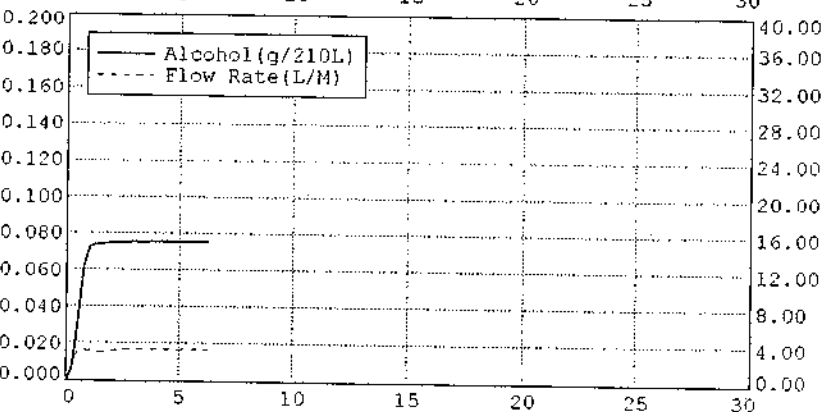
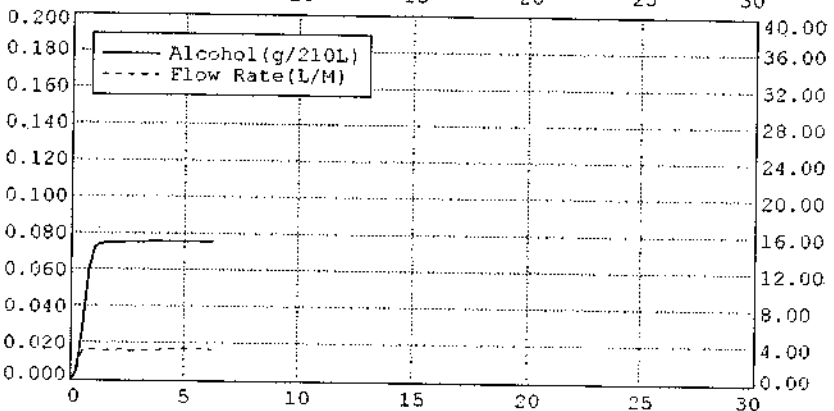
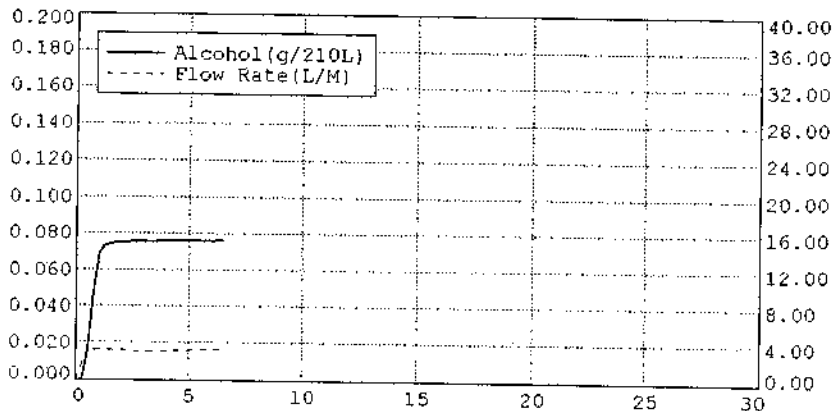
Date: 01/14/2016  
 Time: 15:14:50

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
 TARGET AT 29.61: 0.079  
 LOT #: 01315080A2  
 EXPIRATION: 02/05/2017  
 TANK PRESSURE: 174 psi

BLANK TEST	0.000	15:16
INTERNAL STANDARD	VERIFIED	15:16
EXTERNAL STANDARD	0.077	15:16
BLANK TEST	0.000	15:17
EXTERNAL STANDARD	0.076	15:17
BLANK TEST	0.000	15:18
EXTERNAL STANDARD	0.076	15:18
BLANK TEST	0.000	15:19
EXTERNAL STANDARD	0.076	15:19
BLANK TEST	0.000	15:20
EXTERNAL STANDARD	0.076	15:20
BLANK TEST	0.000	15:21

Average = 0.0762  
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety  
 DATAMASTER dmt: 100674

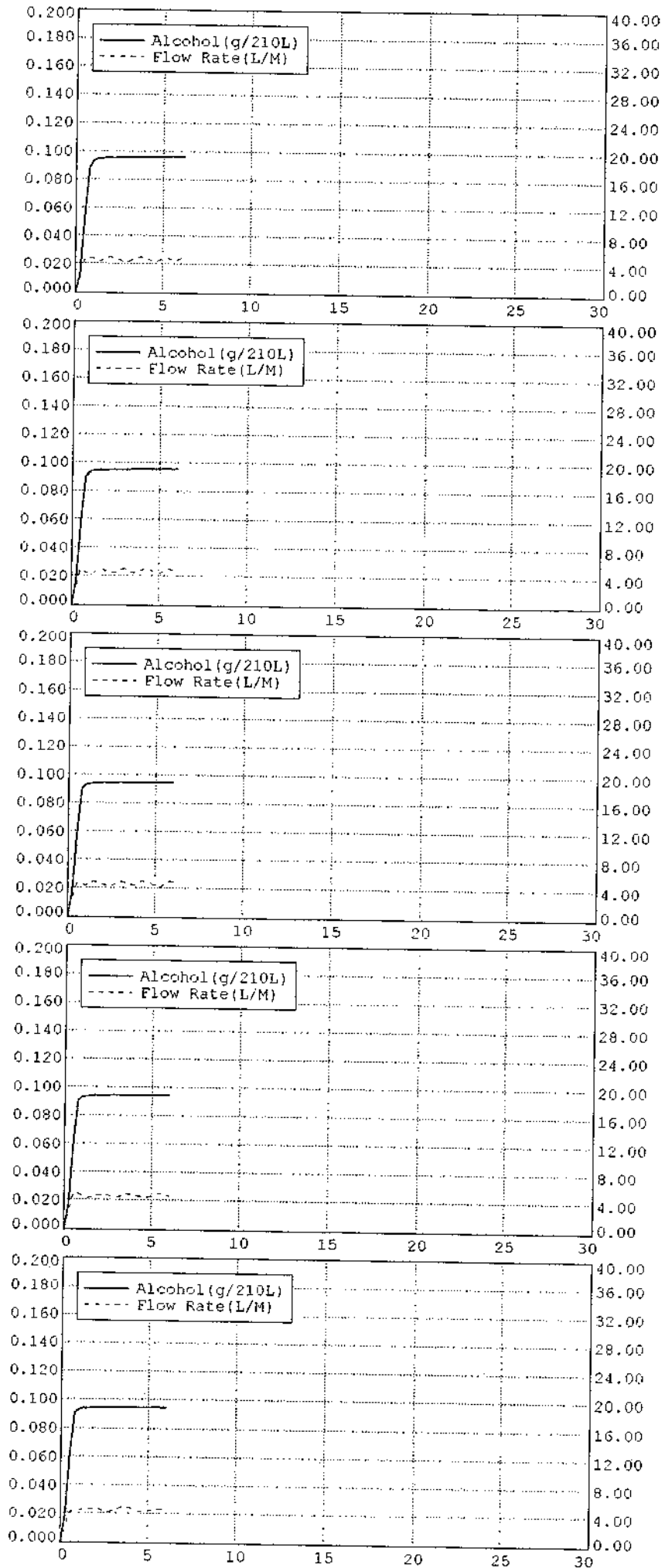
Date: 01/14/2016  
 Time: 15:22:27

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100  
 TARGET AT 29.61: 0.099  
 LOT #: ~~02911510021~~ *0291510021* *CUG*  
 EXPIRATION: ~~03/02/2017~~ *03/06/2017* *1/20/16*  
 TANK PRESSURE: 538 psi

BLANK TEST	0.000	15:23
INTERNAL STANDARD	VERIFIED	15:23
EXTERNAL STANDARD	0.097	15:23
BLANK TEST	0.000	15:24
EXTERNAL STANDARD	0.096	15:25
BLANK TEST	0.000	15:26
EXTERNAL STANDARD	0.095	15:26
BLANK TEST	0.000	15:27
EXTERNAL STANDARD	0.095	15:27
BLANK TEST	0.000	15:28
EXTERNAL STANDARD	0.095	15:28
BLANK TEST	0.000	15:29

Average = 0.0956  
 Std Dev = 0.0009



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
 DATAMASTER dmt: 100674

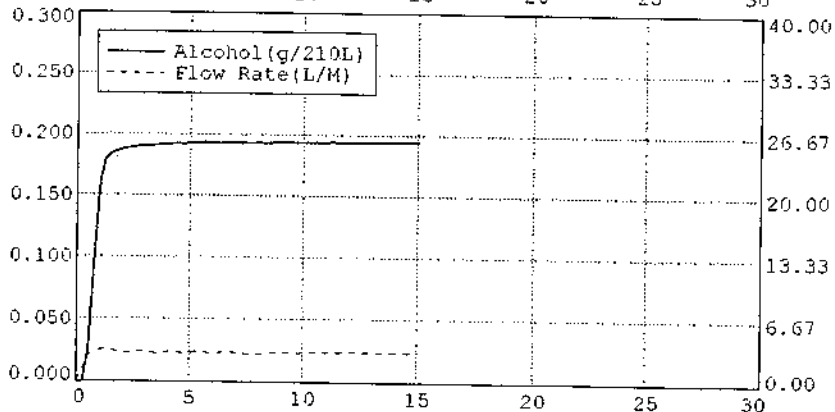
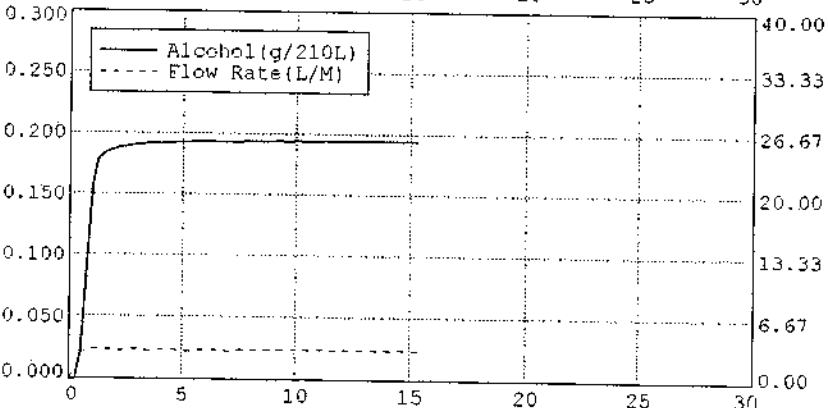
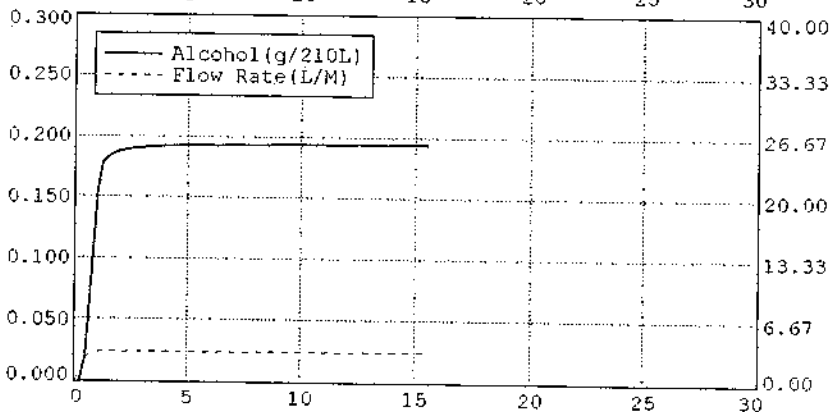
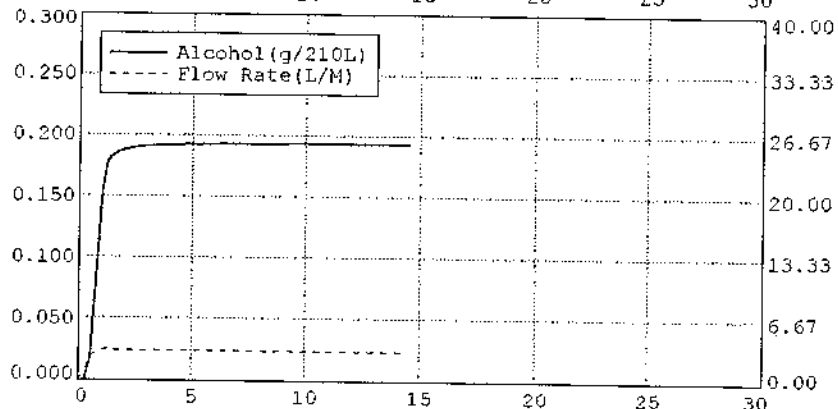
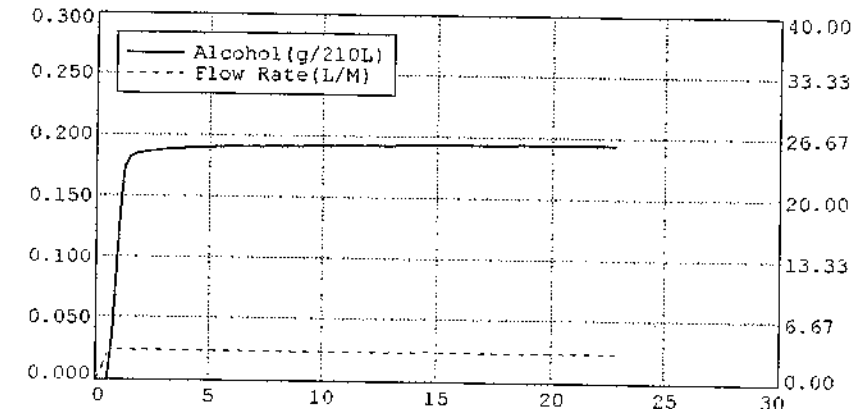
Date: 01/14/2016  
 Time: 15:30:17

EXTERNAL STANDARD INFORMATION

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

BLANK TEST	0.000	15:31
INTERNAL STANDARD	VERIFIED	15:31
EXTERNAL STANDARD	0.195	15:31
BLANK TEST	0.000	15:32
EXTERNAL STANDARD	0.195	15:33
BLANK TEST	0.000	15:34
EXTERNAL STANDARD	0.195	15:34
BLANK TEST	0.000	15:35
EXTERNAL STANDARD	0.195	15:35
BLANK TEST	0.000	15:36
EXTERNAL STANDARD	0.195	15:37
BLANK TEST	0.000	15:37

Average = 0.1950  
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
 DATAMASTER dmt: 100674

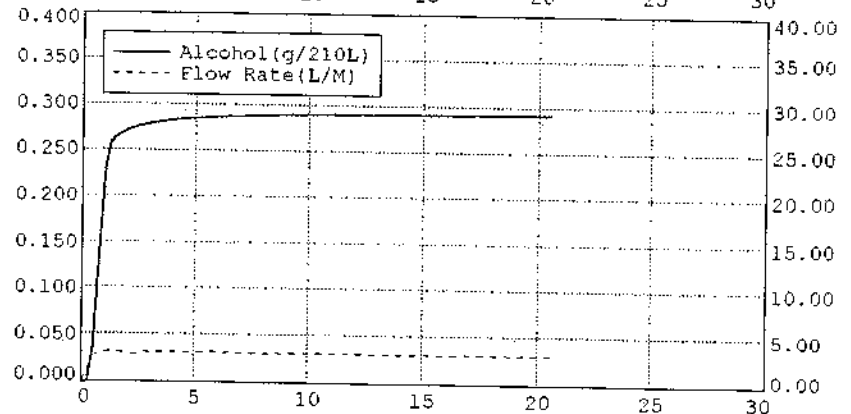
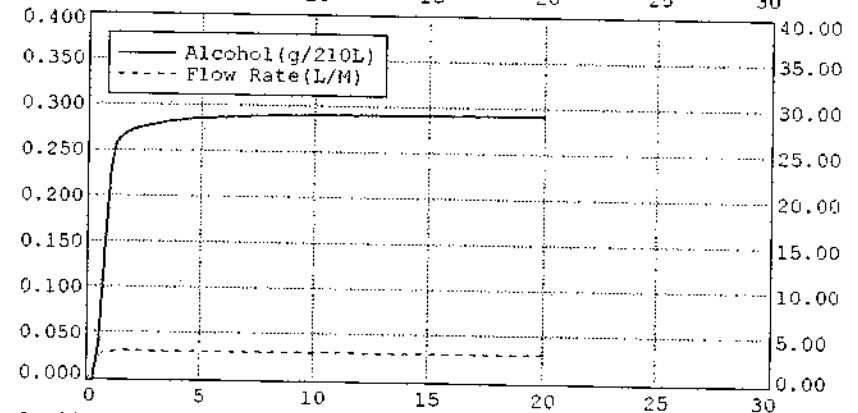
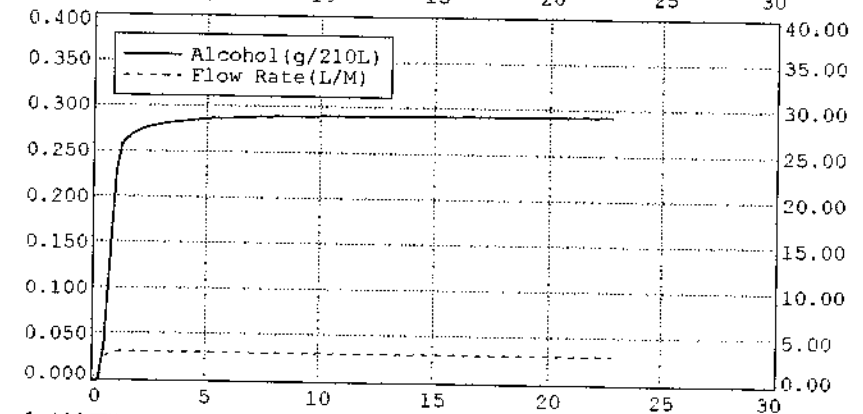
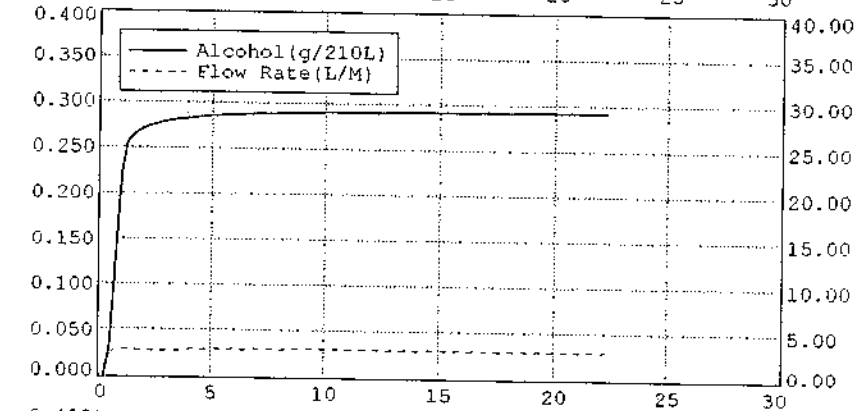
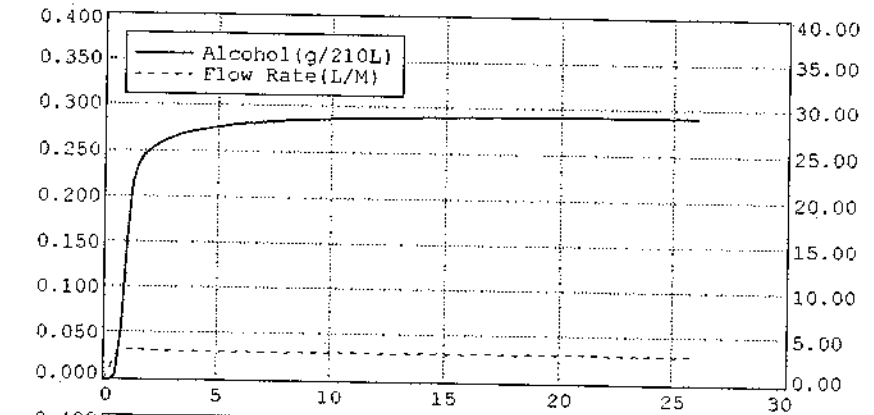
Date: 01/14/2016  
 Time: 15:40:47

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
 LOT #: 15170  
 EXPIRATION: 07/20/2017

BLANK TEST	0.000	15:43
INTERNAL STANDARD	VERIFIED	15:43
EXTERNAL STANDARD	0.291	15:43
BLANK TEST	0.000	15:44
EXTERNAL STANDARD	0.292	15:45
BLANK TEST	0.000	15:46
EXTERNAL STANDARD	0.293	15:46
BLANK TEST	0.000	15:47
EXTERNAL STANDARD	0.292	15:47
BLANK TEST	0.000	15:48
EXTERNAL STANDARD	0.292	15:49
BLANK TEST	0.000	15:50

Average = 0.2920  
 Std Dev = 0.0007



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dnt: 100674

Date: 01/14/2016  
Time: 15:55:34

SUBJECT NAME:  
TEST TEST  
LICENSE #: INCOMPLETE

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

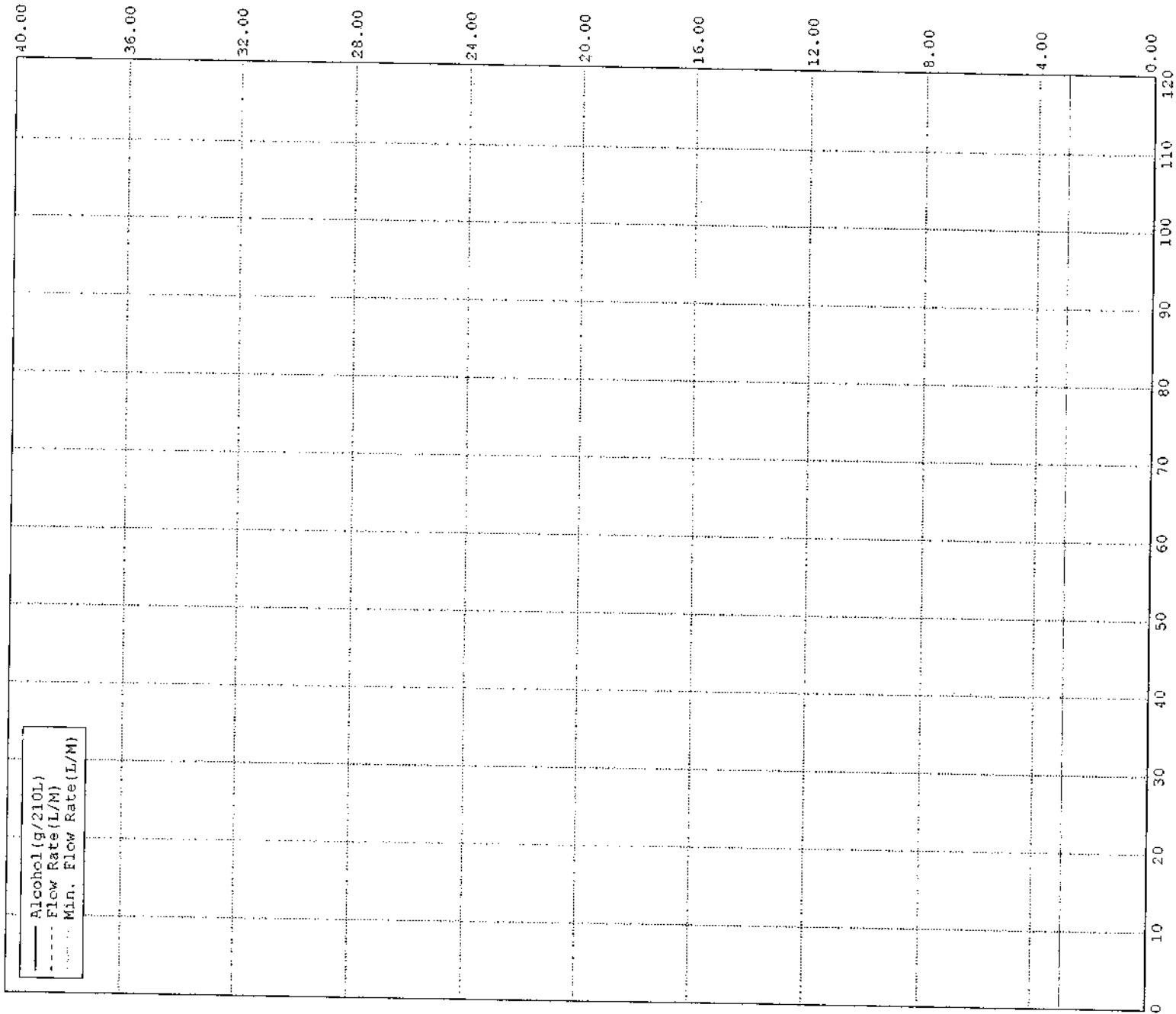
DEPT/AGENCY:  
AAAI

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 16:10  
BLANK TEST 0.000 16:10  
INTERNAL STANDARD VERIFIED 16:10  
EXTERNAL STANDARD 0.077 16:11  
BLANK TEST 0.000 16:12  
SUBJECT SAMPLE INCOMPLETE 16:14



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100674

Date: 01/14/2016  
Time: 16:16:18

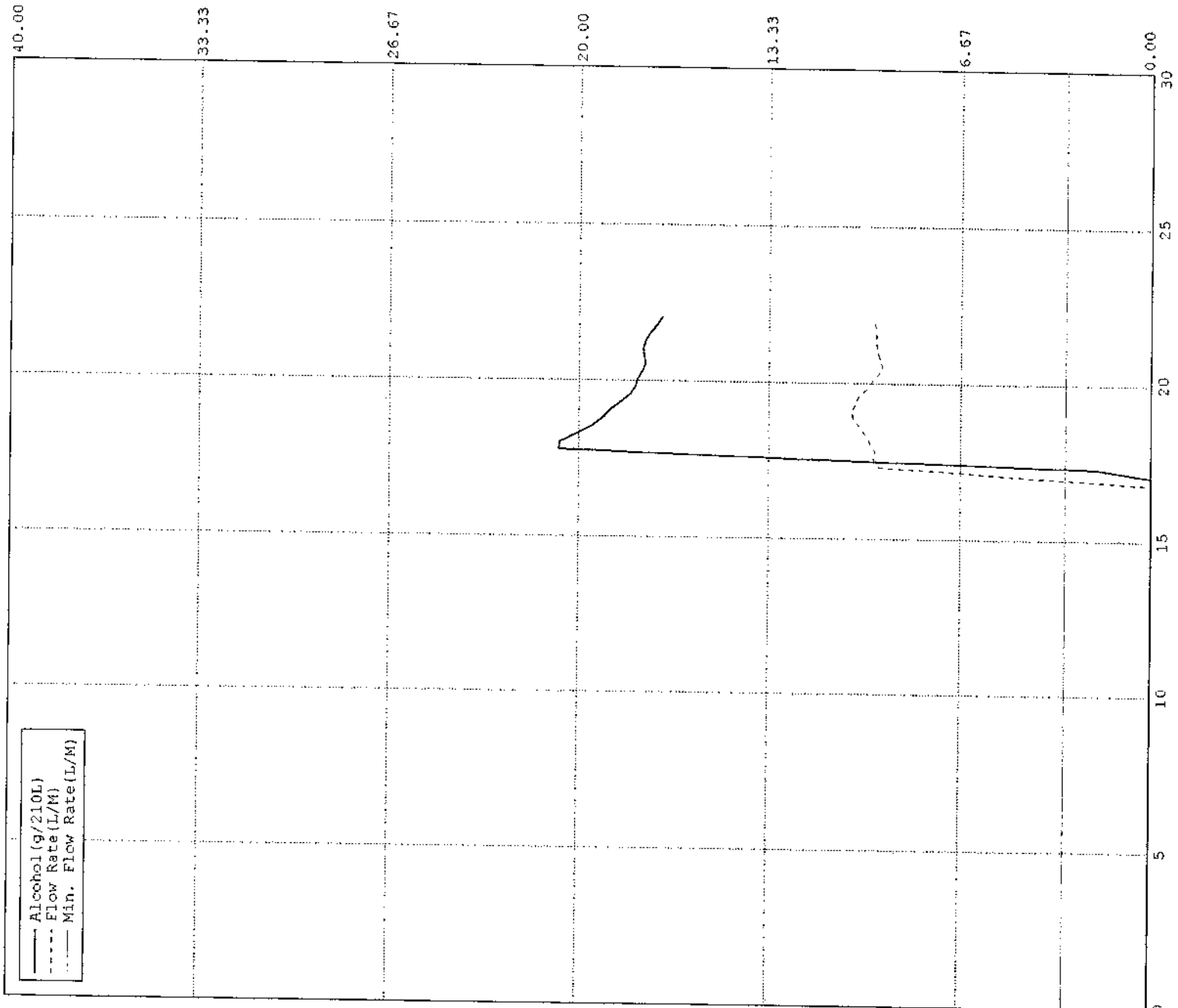
SUBJECT NAME:  
TEST TEST  
LICENSE #: INVALID

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

DEPT/AGENCY:  
AAAI  
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	16:18
BLANK TEST	0.000	16:18
INTERNAL STANDARD	VERIFIED	16:18
EXTERNAL STANDARD	0.077	16:18
BLANK TEST	0.000	16:19
SUBJECT SAMPLE	INVALID	16:20



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100674

Date: 01/14/2016  
Time: 16:21:40

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:  
AAA1

CASE/REPORT: 16-1234  
TEST TYPE: TEST

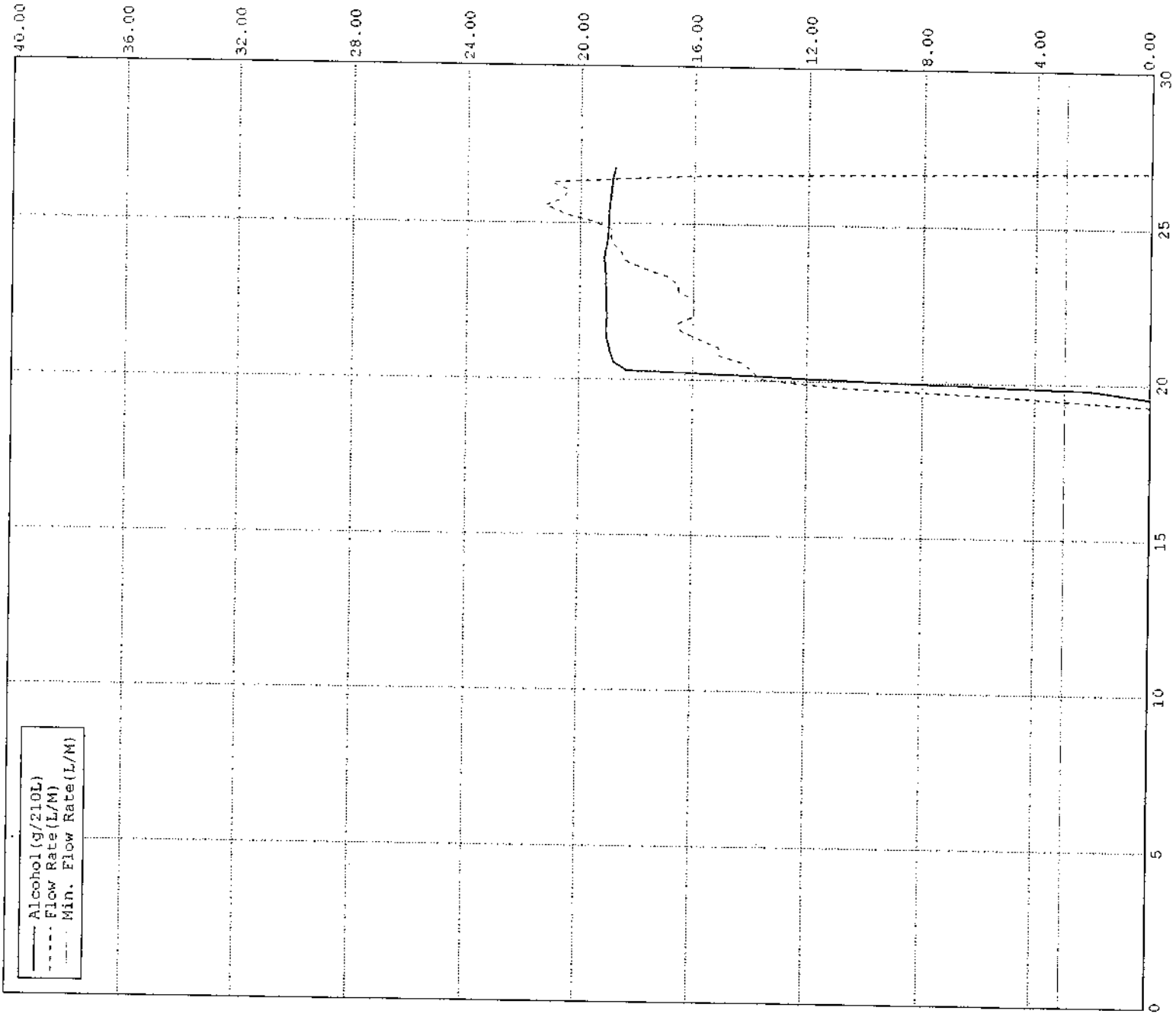
EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	16:24
BLANK TEST	0.000	16:24
INTERNAL STANDARD	VERIFIED	16:24
$X_q = 0.105$ (0.34%)		
EXTERNAL STANDARD	0.077	16:24
$X\{1\} = 0.0769$ (-0.0011) (0.0019)		
BLANK TEST	0.000	16:25
SUBJECT SAMPLE	XXX	16:26
$X\{1\} = 0.0938$ (-0.0158) (-0.0007)		

Interference Detected

*CVS*



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100674

Date: 01/14/2016  
Time: 16:28:20

SUBJECT NAME:  
TEST TEST  
LICENSE #: INT-IPA

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

DEPT/AGENCY:  
AAA1

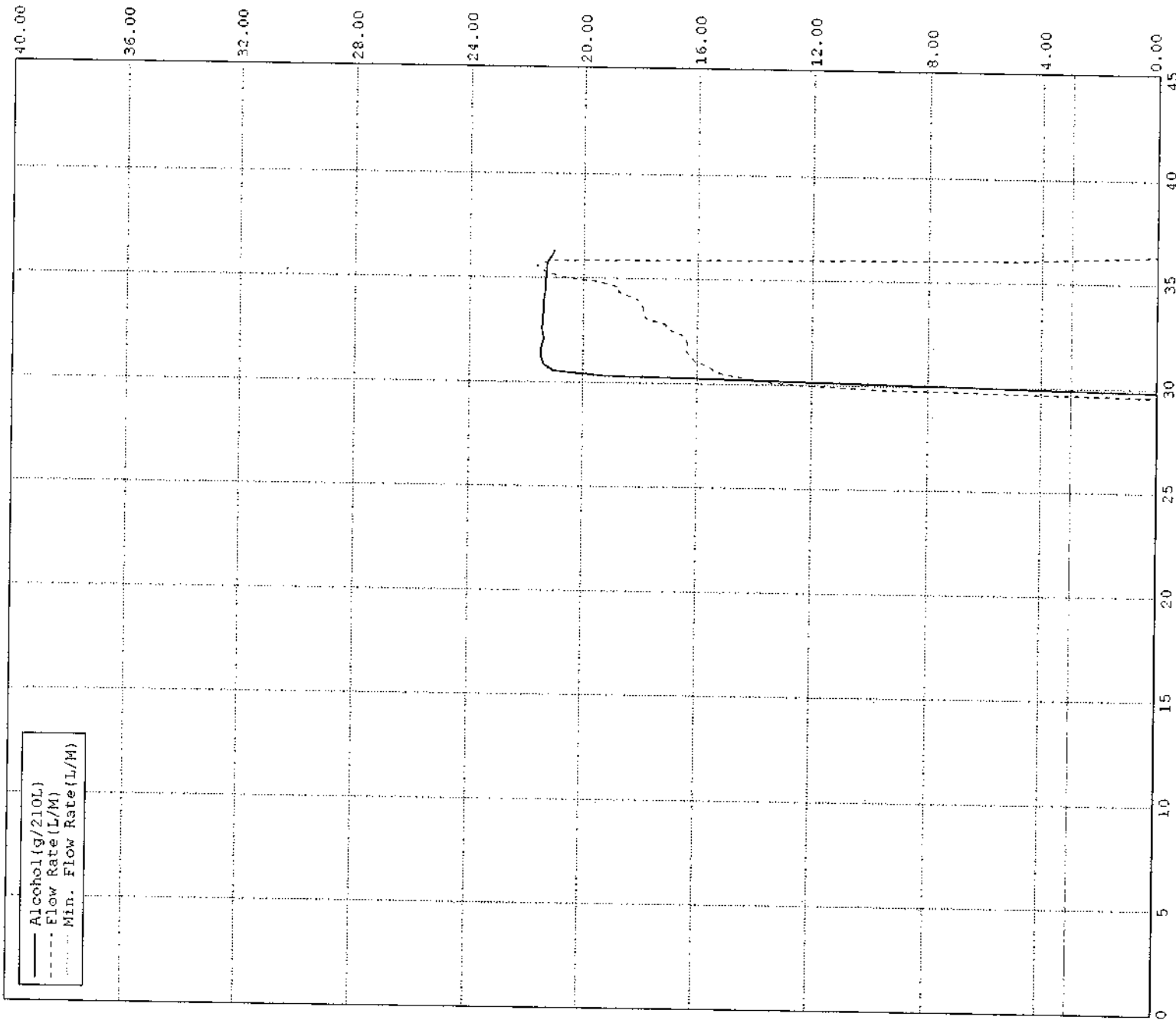
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK PASSED 16:29  
BLANK TEST 0.000 16:29  
INTERNAL STANDARD VERIFIED 16:30  
Xq = 0.105 (0.25%)  
EXTERNAL STANDARD 0.077 16:30  
X{1} = 0.0766 (-0.0007) (0.0024)  
BLANK TEST 0.000 16:31  
SUBJECT SAMPLE XXX 16:31  
X{1} = 0.1052 (-0.0158) (0.0010)

Interference Detected





SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100674

Date: 01/14/2016  
 Time: 16:35:06

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:  
 AAA1

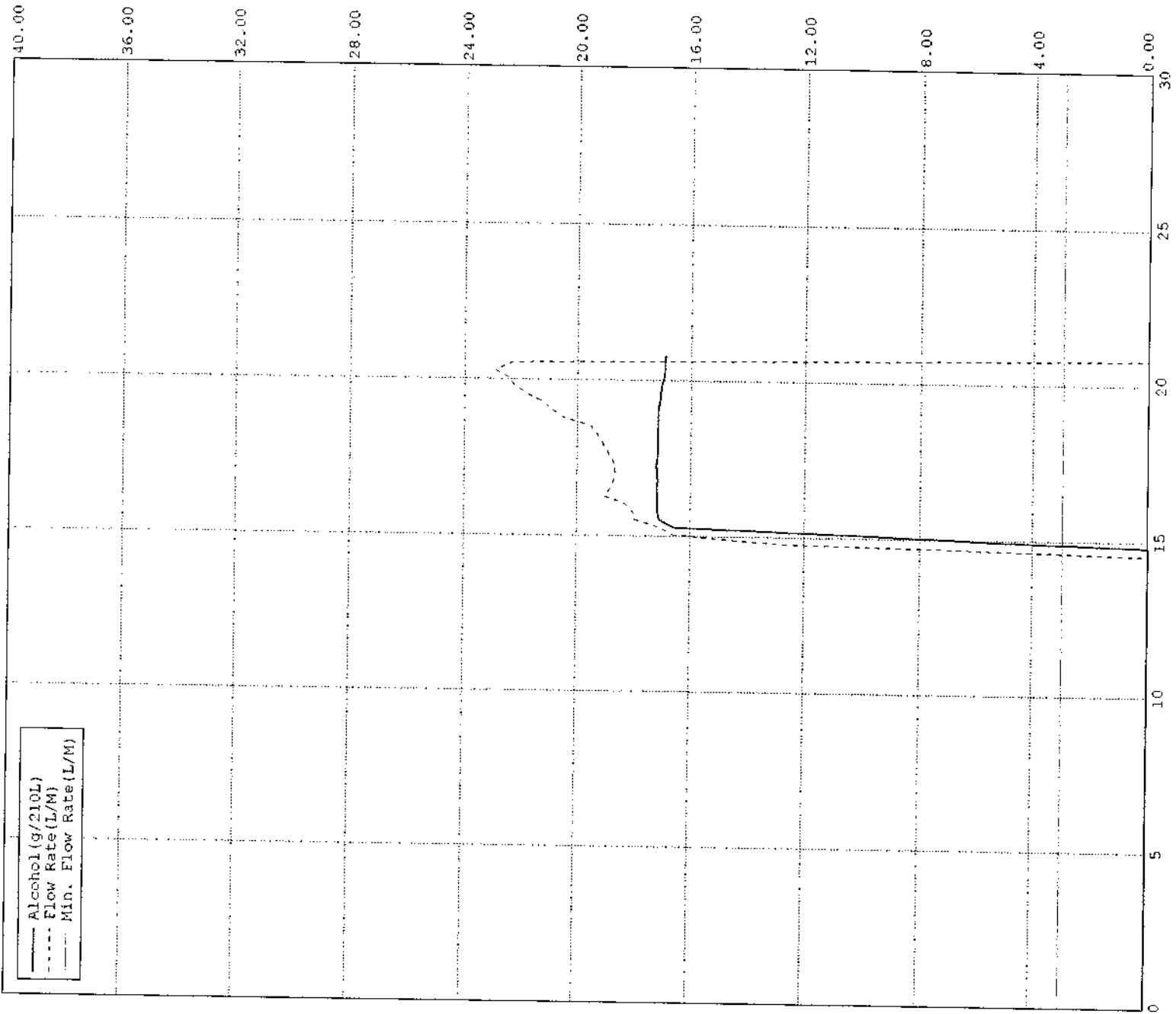
CASE/REPORT: 16-1234  
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

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

DIAGNOSTIC CHECK	PASSED	16:36
BLANK TEST	0.000	16:36
INTERNAL STANDARD	VERIFIED	16:36
$X_q = 0.105$ (0.08%)		
EXTERNAL STANDARD	0.077	16:36
$X\{1\} = 0.0772$ (-0.0003)	(0.0030)	
BLANK TEST	0.000	16:37
SUBJECT SAMPLE (Vol=1.94L)	0.084	16:38
$X\{1\} = 0.0843$ (-0.0007)	(-0.0002)	
BLANK TEST	0.000	16:39
EXTERNAL STANDARD	0.077	16:39
$X\{1\} = 0.0773$ (-0.0004)	(0.0019)	
BLANK TEST	0.000	16:40

Filter 2 avg = -0.0006  
 Filter 3 avg = 0.0023



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100674

Date: 01/19/2016  
Time: 10:31:14

SUBJECT NAME:  
TEST TEST  
LICENSE #: MAX ATTEMPTS

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

DEPT/AGENCY:  
AAA1

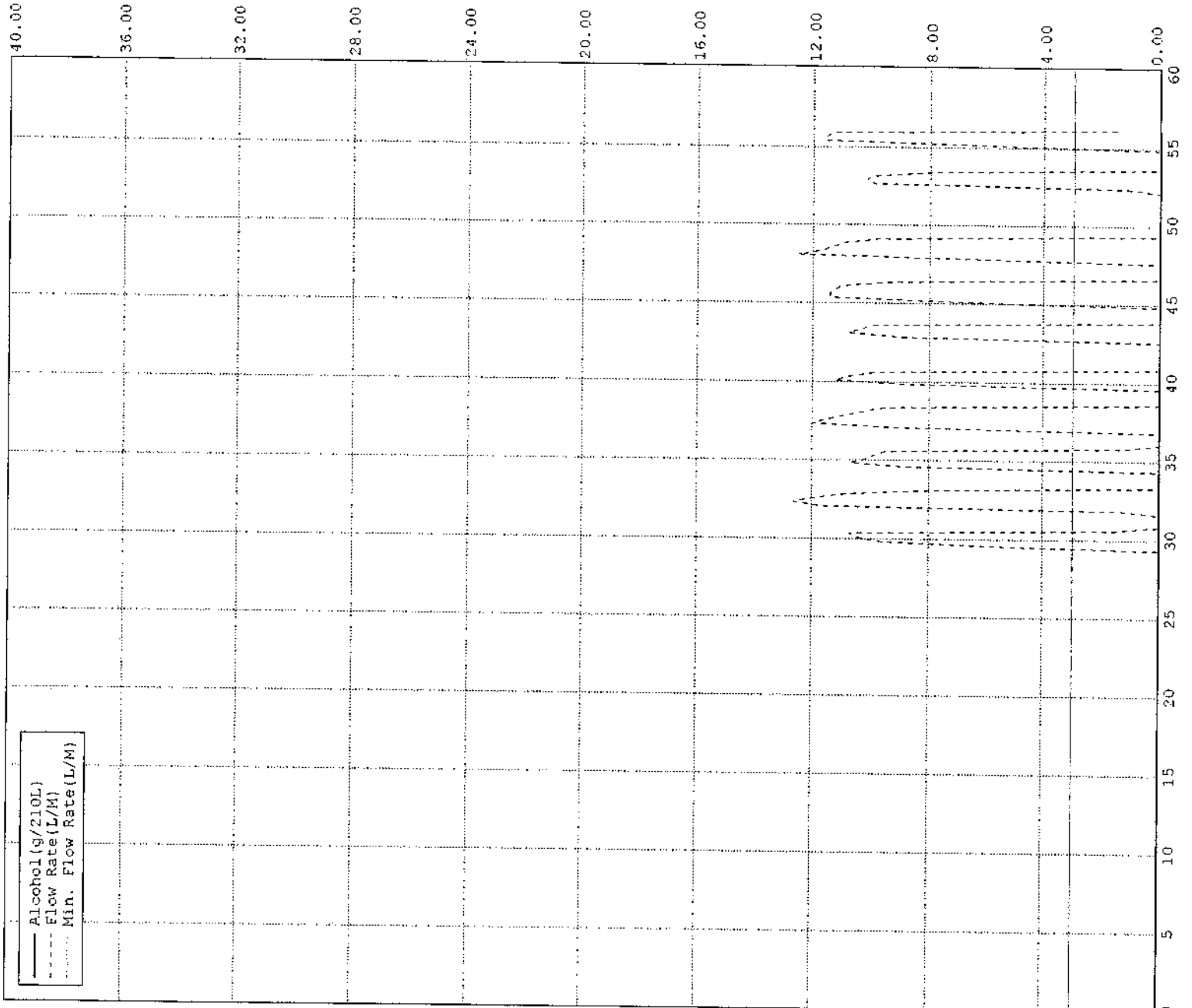
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.27: 0.078  
LOT #: 01315080A2  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:32  
BLANK TEST 0.000 10:32  
INTERNAL STANDARD VERIFIED 10:32  
EXTERNAL STANDARD 0.077 10:32  
BLANK TEST 0.000 10:33  
SUBJECT SAMPLE XXX 10:34

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100674

Date: 01/19/2016  
Time: 10:37:57

SUBJECT NAME:  
TEST TEST  
LICENSE #: RFI

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

DEPT/AGENCY:  
AAA1

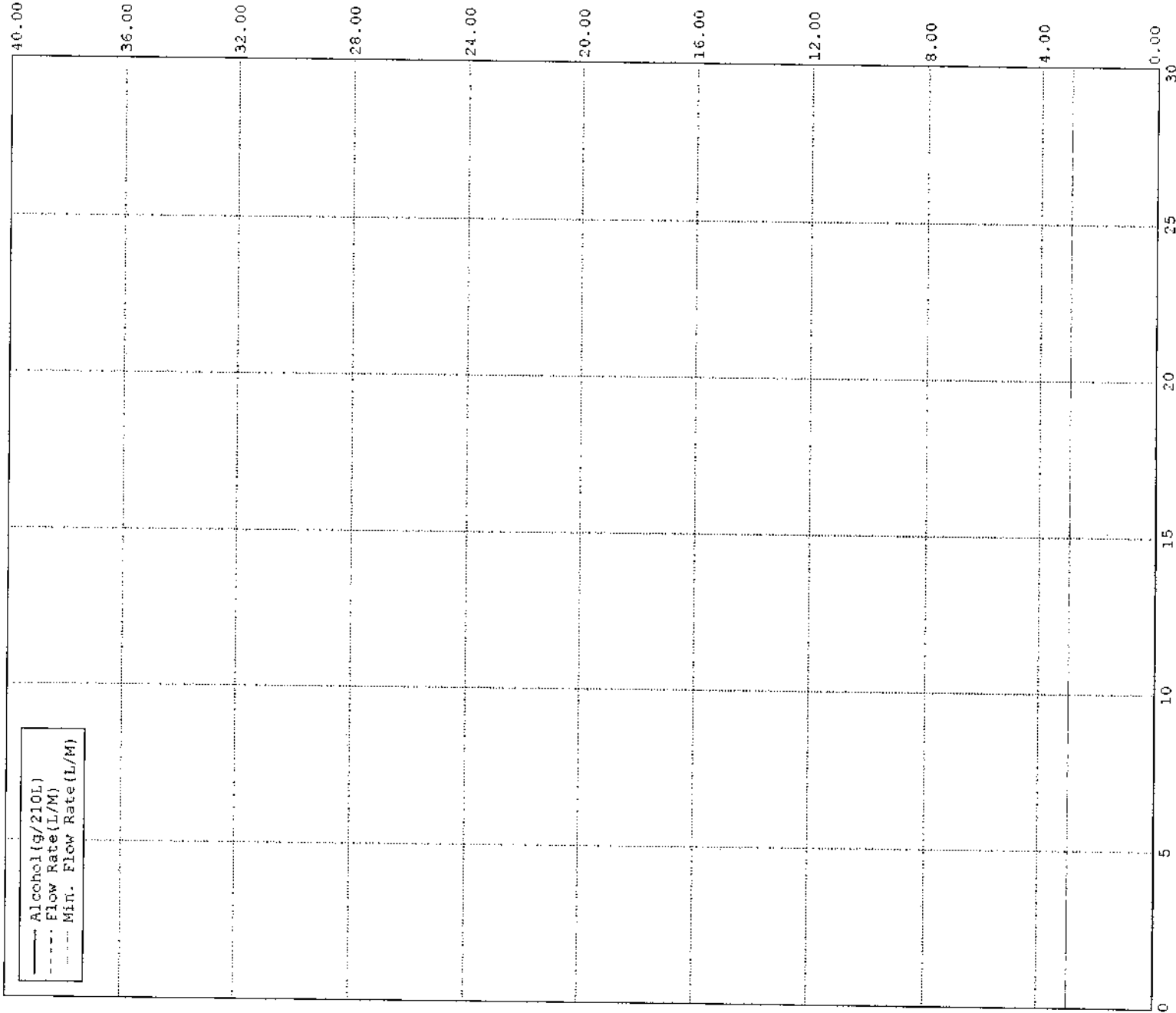
CASE/REPORT: 16-1234  
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.27: 0.078  
LOT #: 01315080A2  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK PASSED 10:39  
BLANK TEST 0.000 10:39  
INTERNAL STANDARD VERIFIED 10:39  
EXTERNAL STANDARD 0.077 10:39  
BLANK TEST 0.000 10:40

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100674

Date: 01/19/2016  
Time: 10:55:11

SUBJECT NAME:  
TEST TEST  
LICENSE #: NONDRINKING

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 29.27: 0.078  
LOT #: 01315080A2  
EXPIRATION: 02/05/2017

DIAGNOSTIC CHECK	PASSED	10:56
BLANK TEST	0.000	10:56
INTERNAL STANDARD	VERIFIED	10:56
EXTERNAL STANDARD	0.077	10:56
BLANK TEST	0.000	10:57
SUBJECT SAMPLE (Vol=1.63L)	0.000	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.077	10:59
BLANK TEST	0.000	11:00

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

