

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 100385 Analyst CTF Start Date 10/13/15

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 1.6 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 DR4162 Date Calibrated 1/19/15
- vi. 0.300g/210L Mnf Guth Lot 14270 Exp 12/2/16
 - 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 10/13/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 10:45:52

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 = 1.65 V PASSED
(0.94 V - 2.20 V)
Cooler Voltage = 1.56 V PASSED
(0.95 V - 2.21 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 542 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.5 in

PUMP INFO

Flow Rate = 4.856 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 = 0.091 0.57% (0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 10:59 AM

Temperatures (°C)
Sample Cell: 49.8°C
Breath Tube: 47.7°C

Current Barometer 29.4 in
Volume (Ltr) 1.50

Settings
Lamp: 1.65 V
Bias: 79 V
Cooler: 1.56 V
Chopper: 542 Hz

Voltages (V)
Flow: 1.05 V
Detector: 0.002 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 3/9/2011
Time: 12:02:20

Ca = 0.1000
CAL = 0.994034 0.800 <= CAL < 1.200
b1 = 0.0002 0.0000 <= b1 < 0.0040
b2 = 0.0044 0.0010 <= b2 < 0.0100
b3 = 0.0001 0.0000 <= b3 < 0.0040
Xq = 0.0918 0.0500 <= Xq < 0.2000
a21 = 1.184989 1.050 <= a21 < 1.300
a31 = 0.500132 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 11:54:26

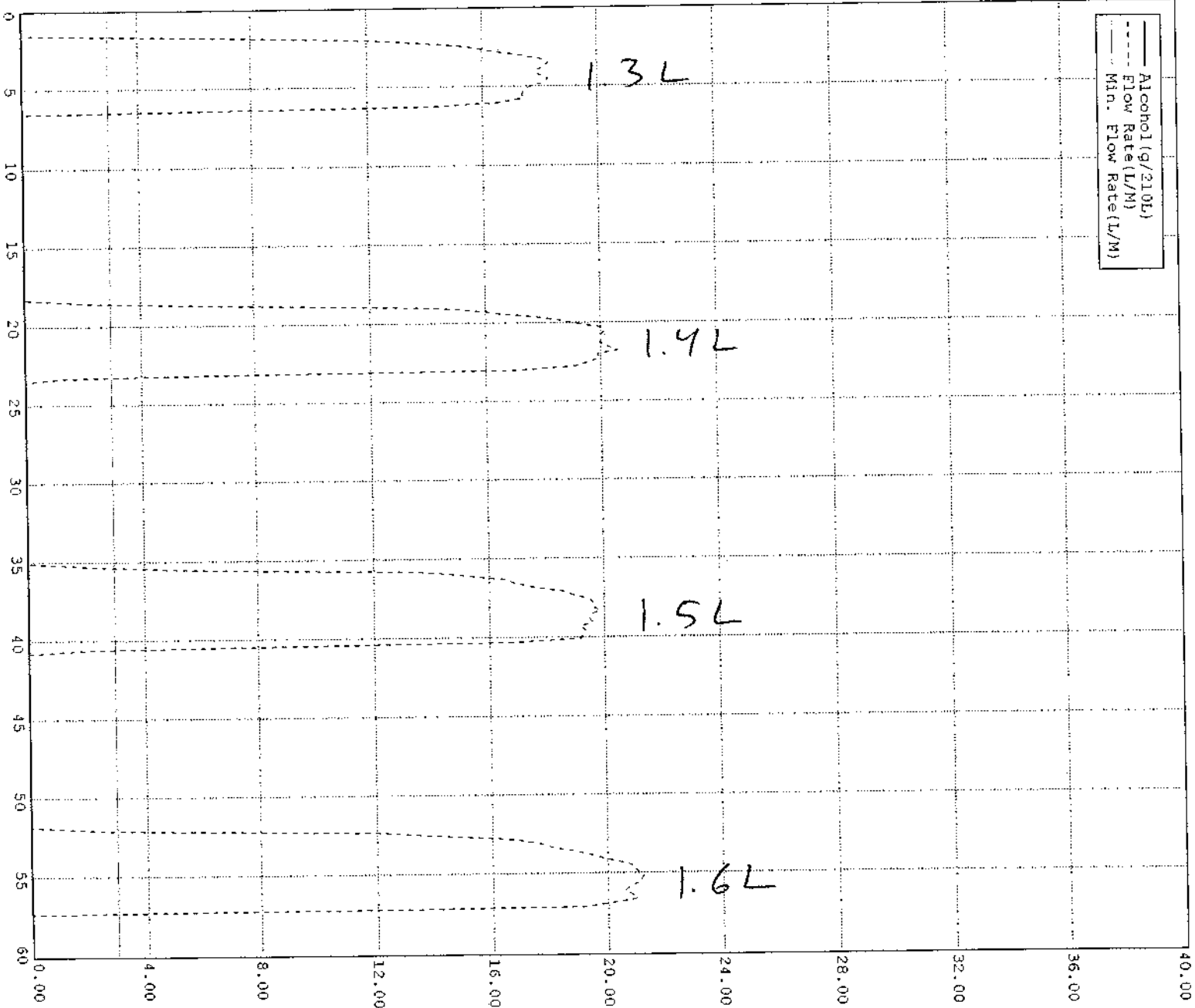
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.41: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

DIAGNOSTIC CHECK	PASSED	12:02
BLANK TEST	0.000	12:02
INTERNAL STANDARD	VERIFIED	12:02
EXTERNAL STANDARD	0.079	12:02
BLANK TEST	0.000	12:03
SUBJECT SAMPLE (Vol=1.61L)	0.000	12:04
BLANK TEST	0.000	12:05
EXTERNAL STANDARD	0.079	12:05
BLANK TEST	0.000	12:06



LINEARITY CHECK

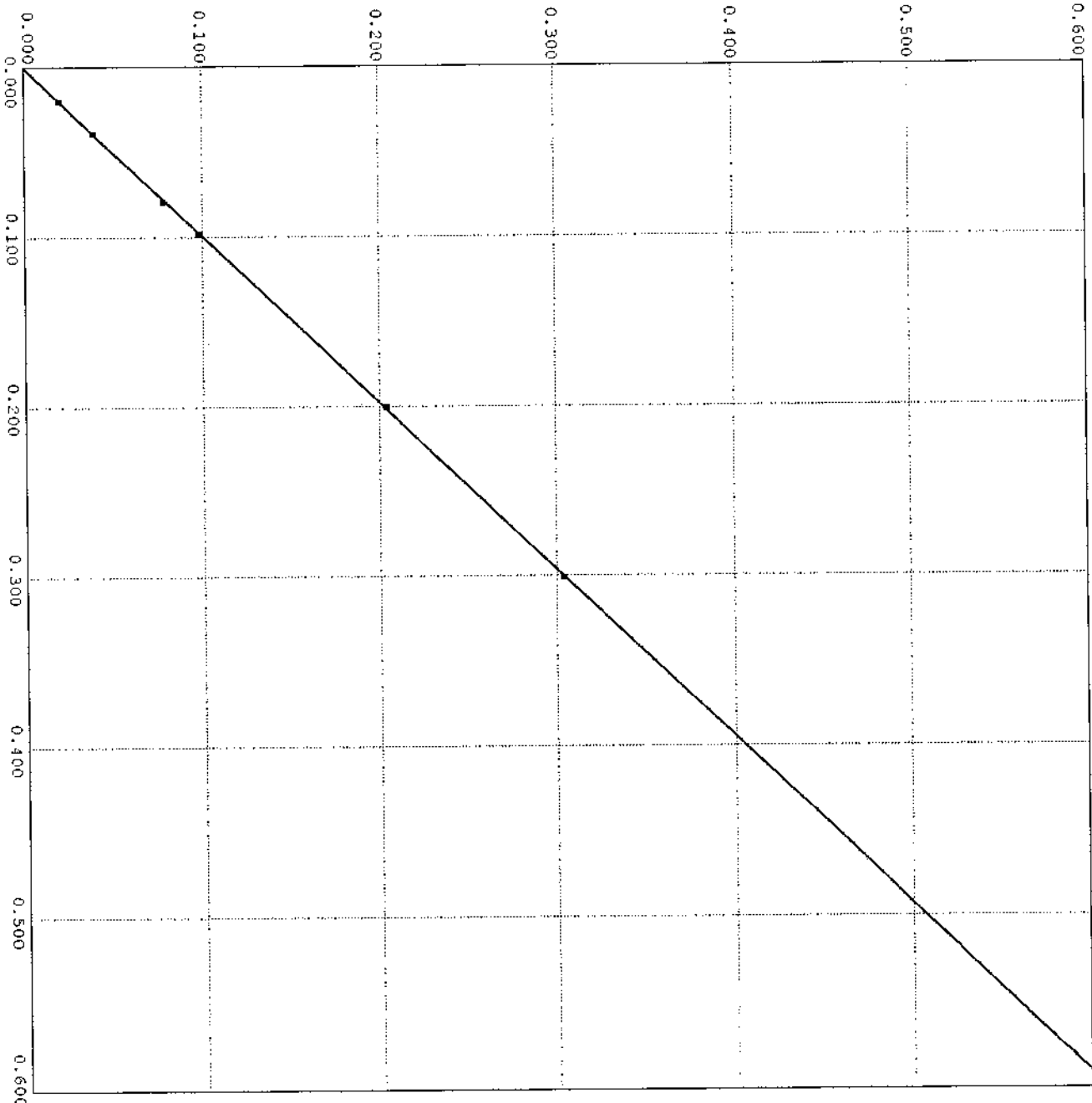
Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 12:17:52

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0206	0.0005
0.039	0.0400	0.0000
0.079	0.0790	0.0000
0.098	0.0990	0.0000
0.200	0.2046	0.0005
0.300	0.3046	0.0005

SLOPE = 1.017423
R² = 0.999932



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

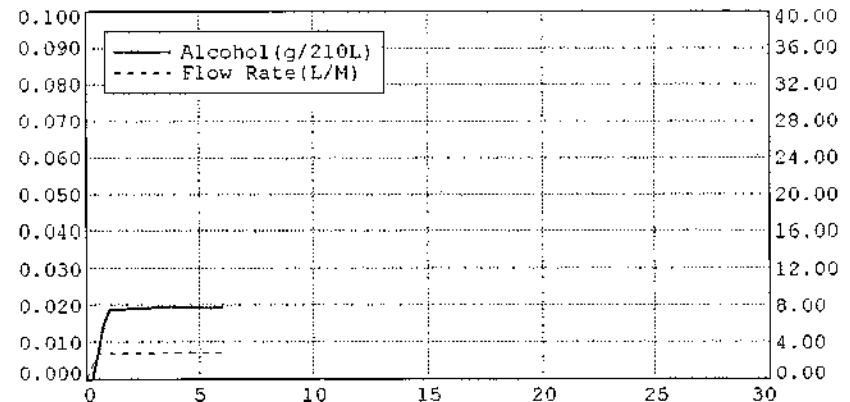
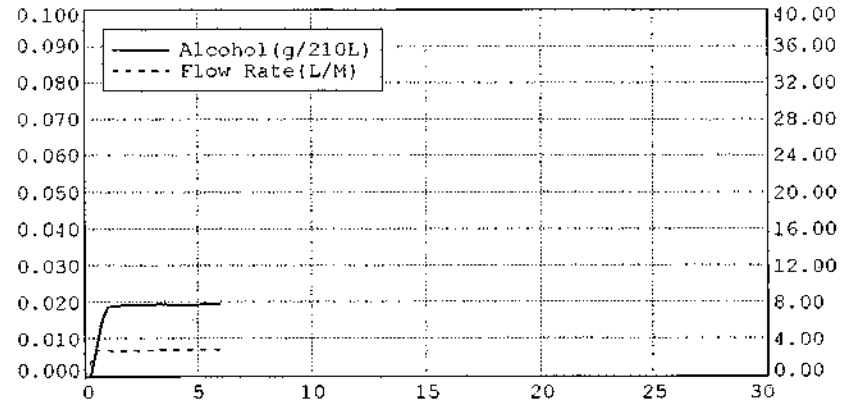
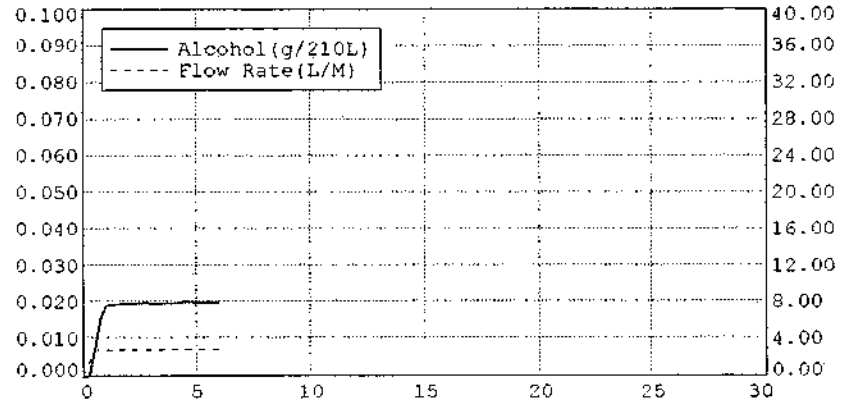
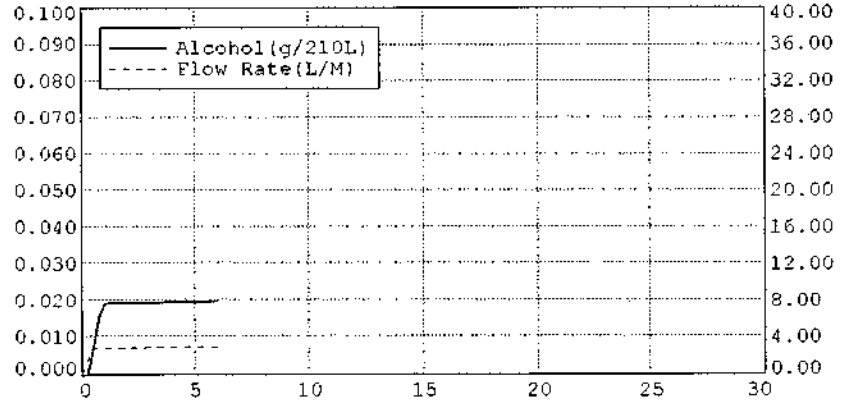
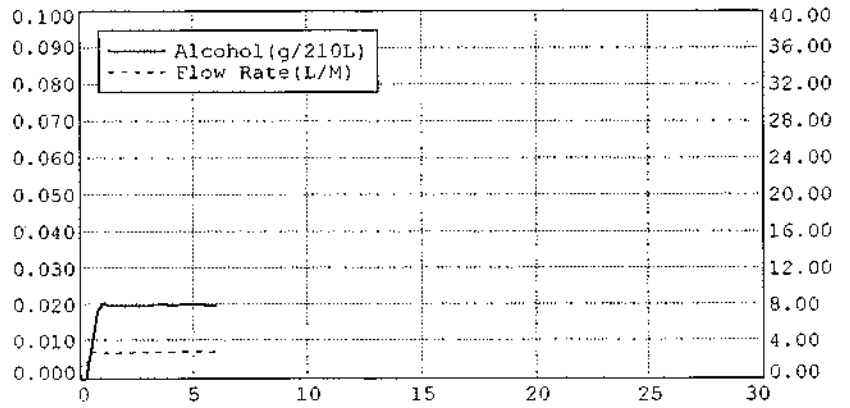
Date: 10/13/2015
 Time: 12:17:53

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.42: 0.020
 LOT #: 02915020A2
 EXPIRATION: 3/5/2017
 TANK PRESSURE: 982 psi

BLANK TEST	0.000	12:33
INTERNAL STANDARD	VERIFIED	12:33
EXTERNAL STANDARD	0.021	12:34
BLANK TEST	0.000	12:34
EXTERNAL STANDARD	0.021	12:35
BLANK TEST	0.000	12:36
EXTERNAL STANDARD	0.021	12:36
BLANK TEST	0.000	12:37
EXTERNAL STANDARD	0.020	12:37
BLANK TEST	0.000	12:38
EXTERNAL STANDARD	0.020	12:38
BLANK TEST	0.000	12:39

Average = 0.0206
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

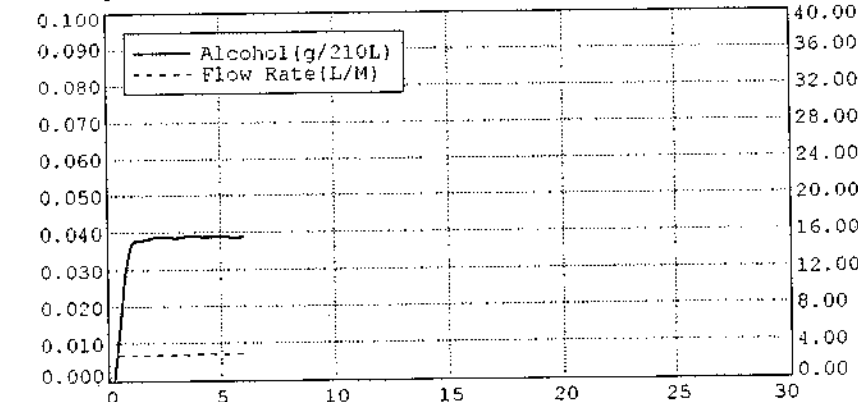
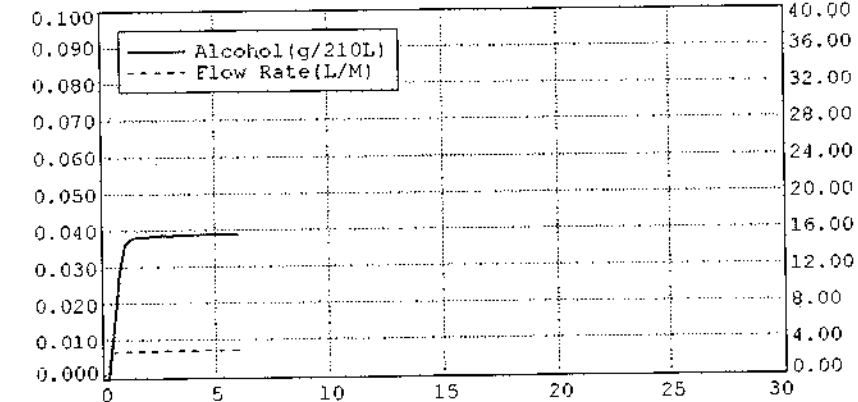
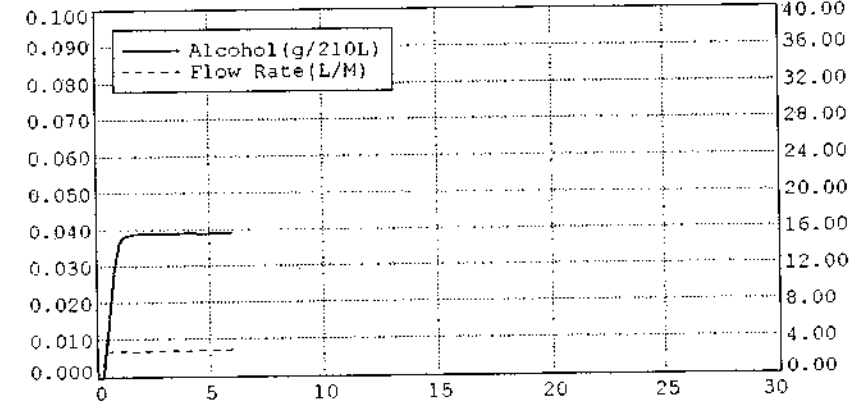
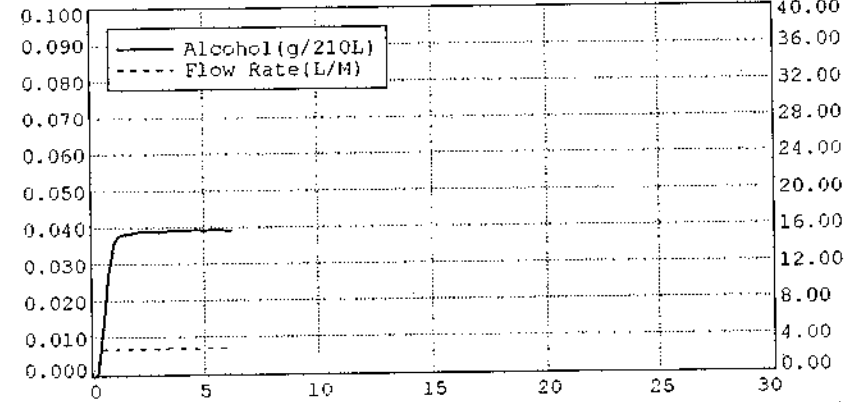
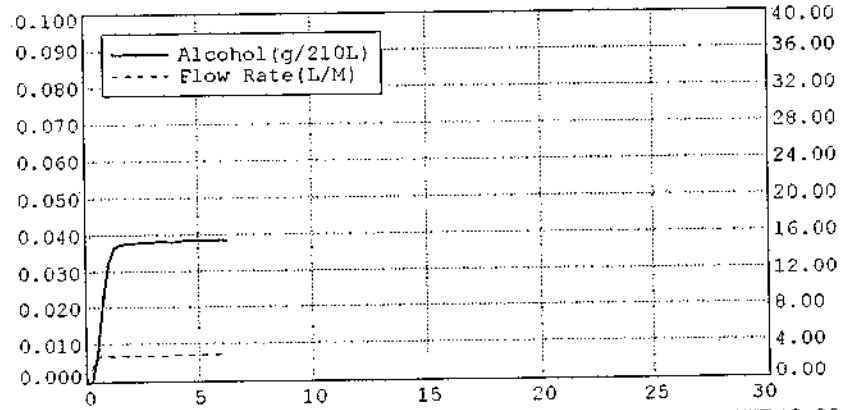
Date: 10/13/2015
 Time: 12:40:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.43: 0.039
 LOT #: 02915040A3
 EXPIRATION: 3/5/2017
 TANK PRESSURE: 1028 psi

BLANK TEST	0.000	12:41
INTERNAL STANDARD	VERIFIED	12:41
EXTERNAL STANDARD	0.040	12:41
BLANK TEST	0.000	12:42
EXTERNAL STANDARD	0.040	12:43
BLANK TEST	0.000	12:43
EXTERNAL STANDARD	0.040	12:44
BLANK TEST	0.000	12:45
EXTERNAL STANDARD	0.040	12:45
BLANK TEST	0.000	12:46
EXTERNAL STANDARD	0.040	12:46
BLANK TEST	0.000	12:47

Average = 0.0400
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

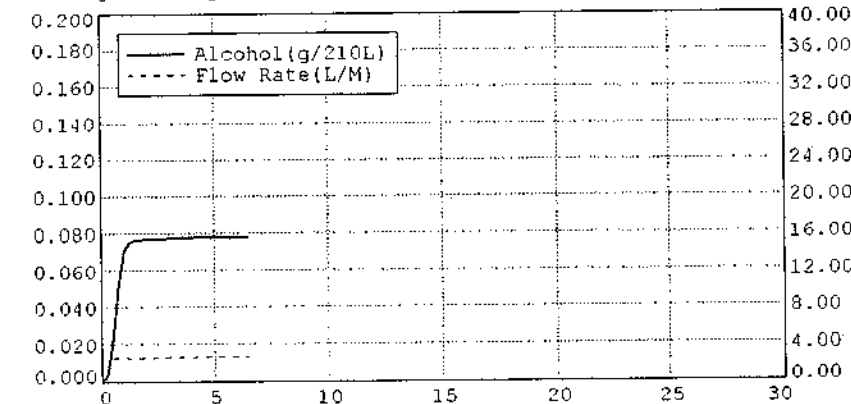
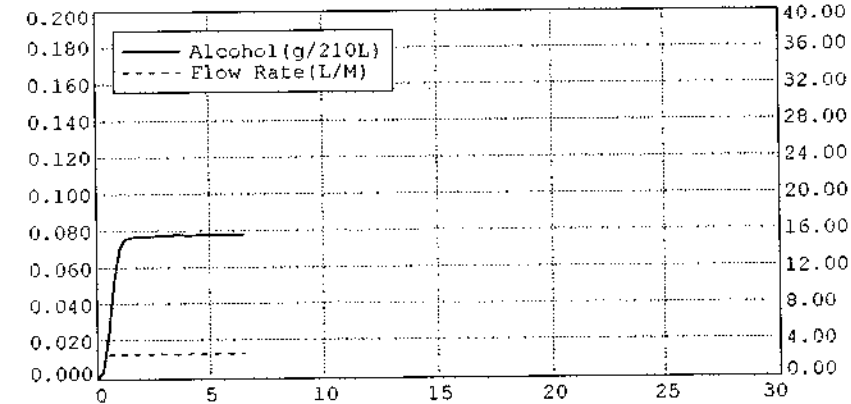
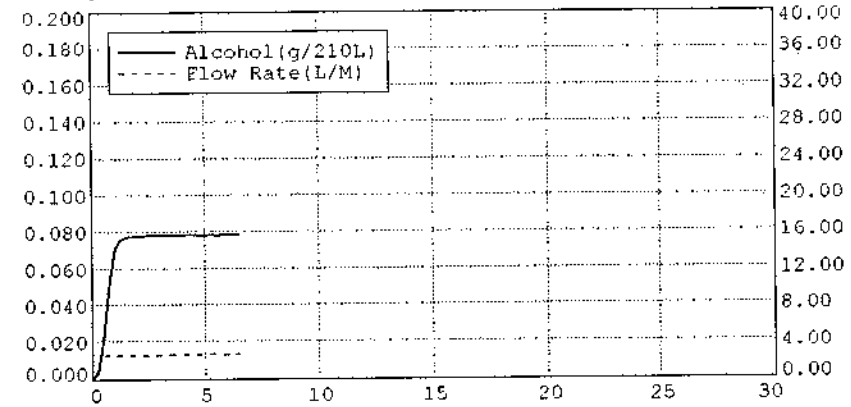
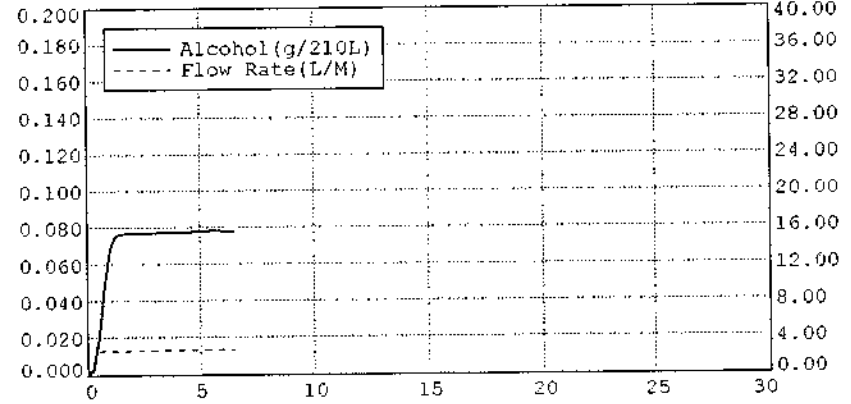
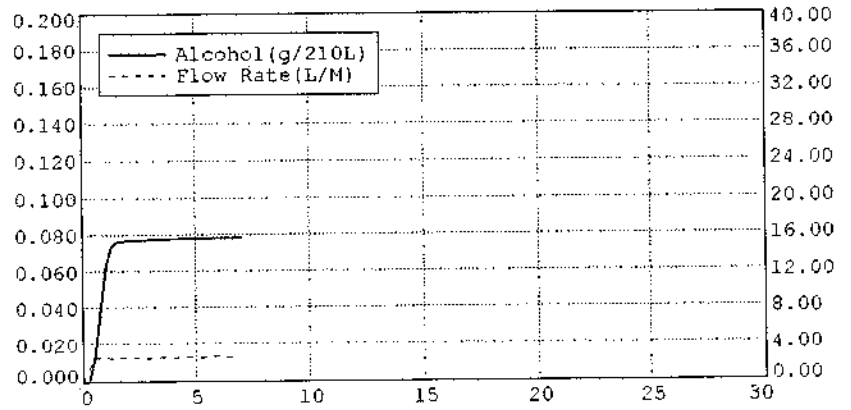
Date: 10/13/2015
 Time: 12:49:54

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.43: 0.079
 LOT #: 01315080A2
 EXPIRATION: 2/5/2017
 TANK PRESSURE: 454 psi

BLANK TEST	0.000	12:51
INTERNAL STANDARD	VERIFIED	12:51
EXTERNAL STANDARD	0.079	12:51
BLANK TEST	0.000	12:52
EXTERNAL STANDARD	0.079	12:52
BLANK TEST	0.000	12:53
EXTERNAL STANDARD	0.079	12:53
BLANK TEST	0.000	12:54
EXTERNAL STANDARD	0.079	12:54
BLANK TEST	0.000	12:55
EXTERNAL STANDARD	0.079	12:55
BLANK TEST	0.000	12:56

Average = 0.0790
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

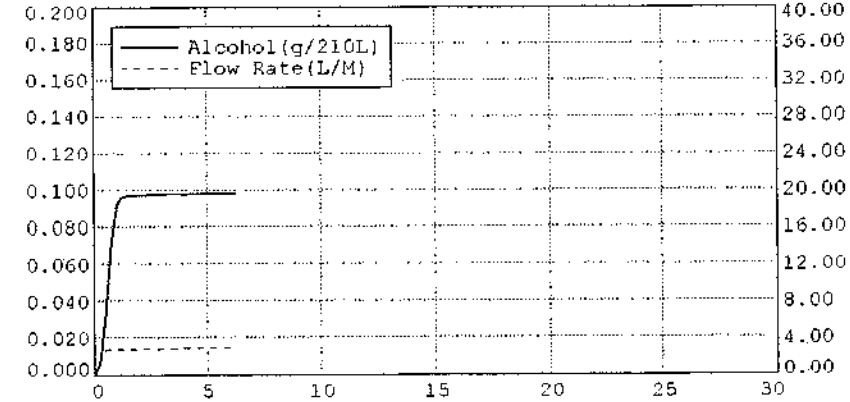
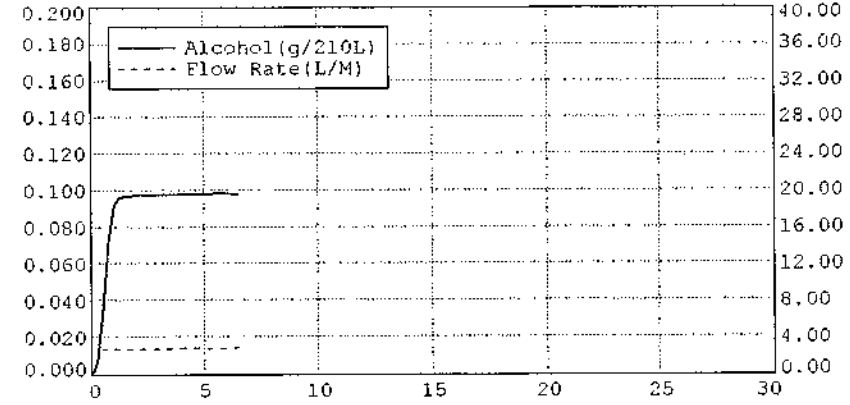
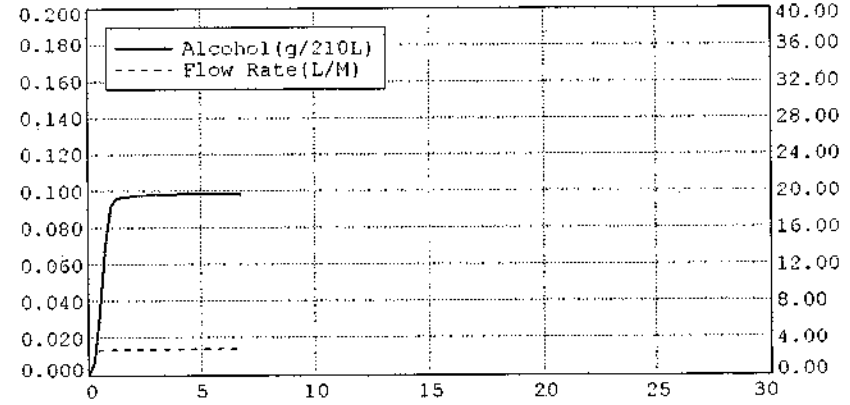
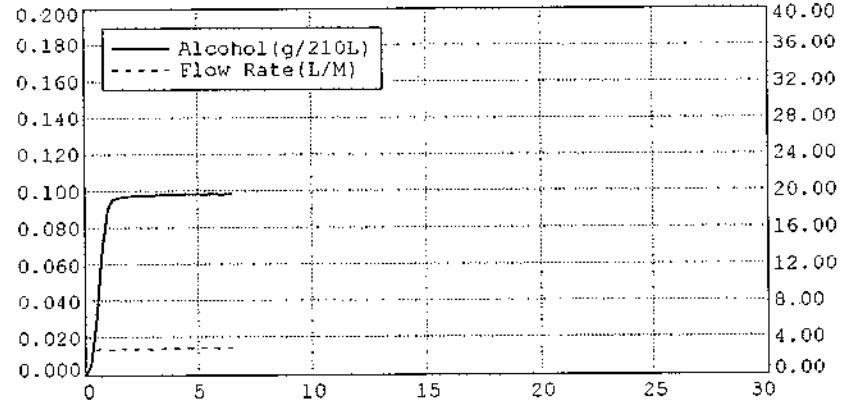
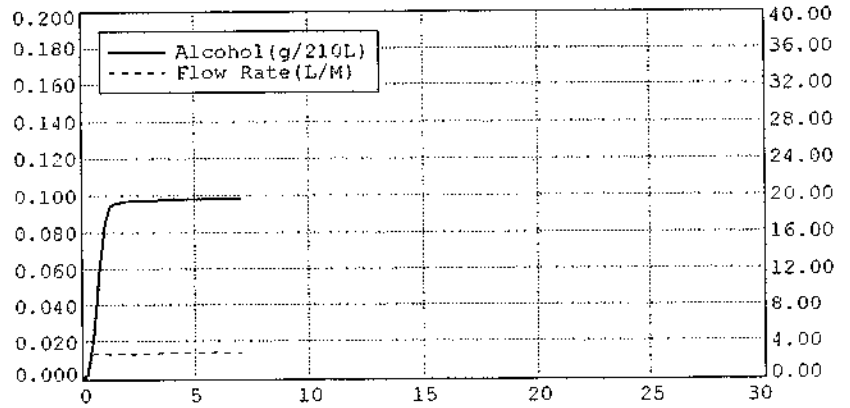
Date: 10/13/2015
 Time: 12:59:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.44: 0.098
 LOT #: 02915100A1
 EXPIRATION: 3/5/2017
 TANK PRESSURE: 1013 psi

BLANK TEST	0.000	13:00
INTERNAL STANDARD	VERIFIED	13:01
EXTERNAL STANDARD	0.099	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.099	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.099	13:03
BLANK TEST	0.000	13:04
EXTERNAL STANDARD	0.099	13:04
BLANK TEST	0.000	13:05
EXTERNAL STANDARD	0.099	13:05
BLANK TEST	0.000	13:06

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100385

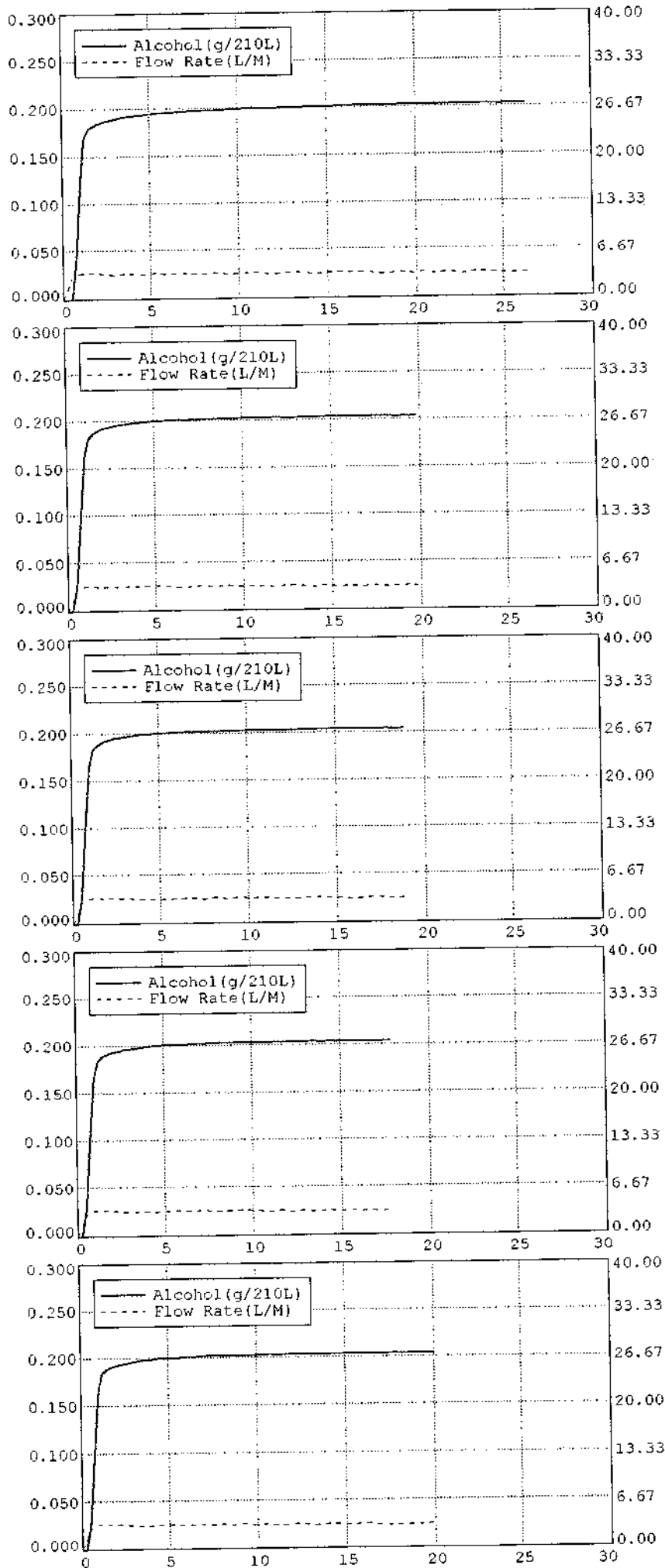
Date: 10/13/2015
 Time: 13:22:18

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 15130
 EXPIRATION: 5/11/2017

BLANK TEST	0.000	13:23
INTERNAL STANDARD	VERIFIED	13:23
EXTERNAL STANDARD	0.204	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.204	13:25
BLANK TEST	0.000	13:26
EXTERNAL STANDARD	0.205	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.205	13:28
BLANK TEST	0.000	13:29
EXTERNAL STANDARD	0.205	13:29
BLANK TEST	0.000	13:30

Average = 0.2046
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

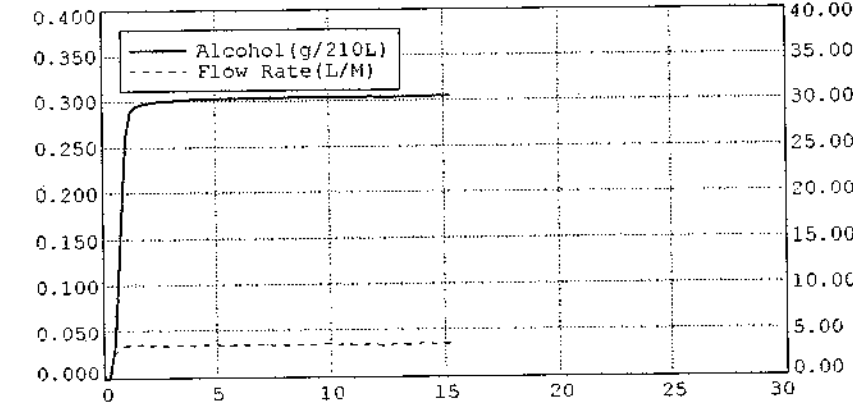
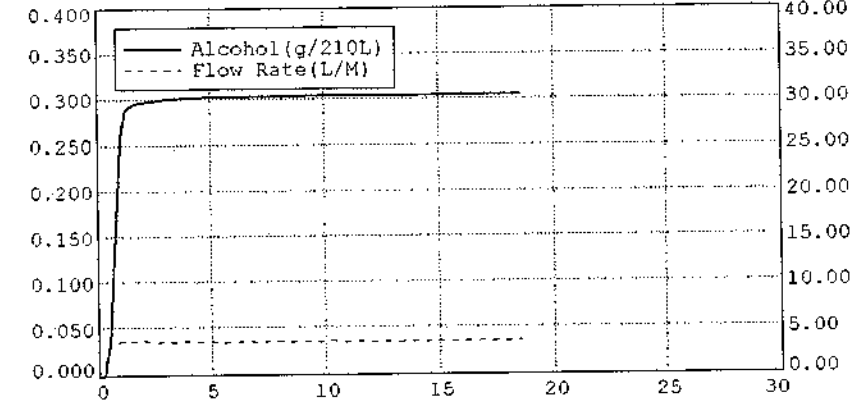
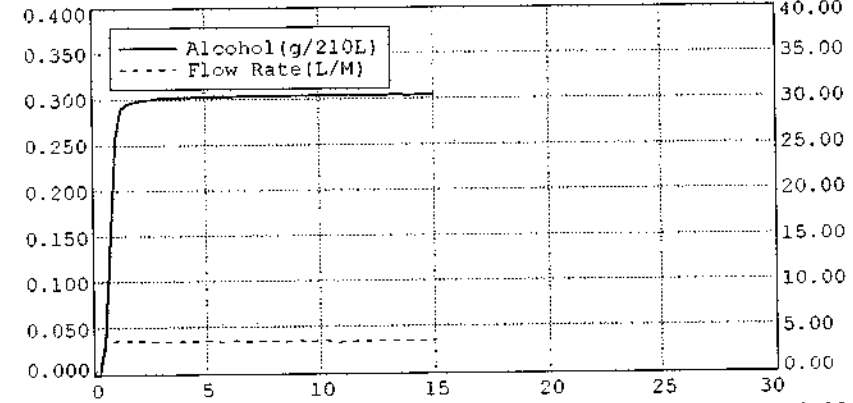
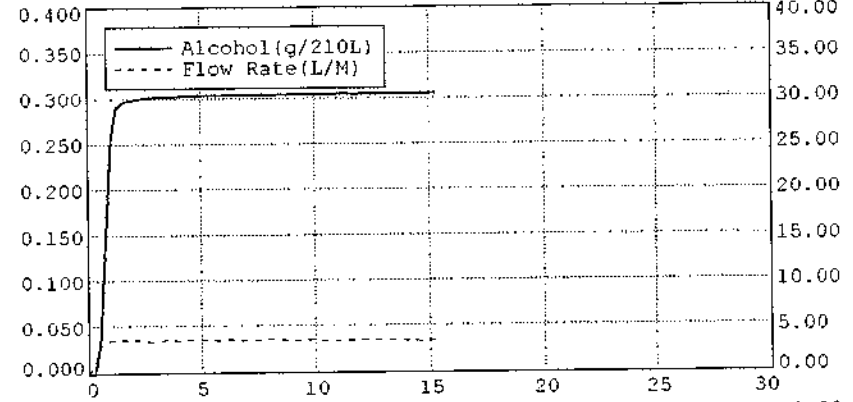
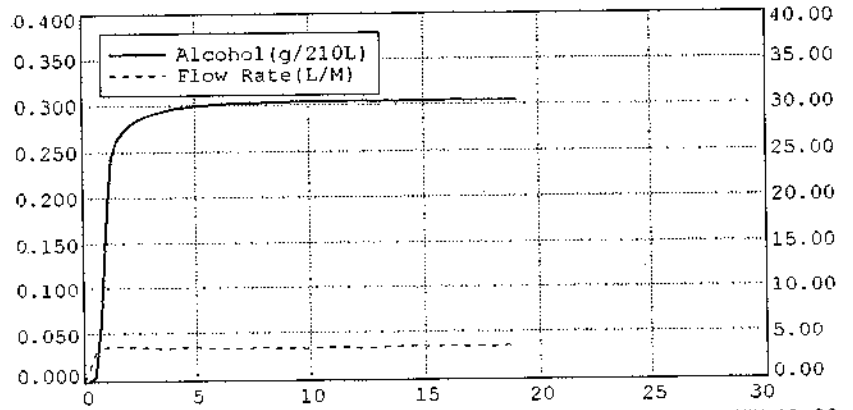
Alaska Department of Public Safety
 DATAMASTER dmt: 100385

Date: 10/13/2015
 Time: 13:31:43

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 14270
 EXPIRATION: 12/2/2016

BLANK TEST	0.000	13:32
INTERNAL STANDARD	VERIFIED	13:32
EXTERNAL STANDARD	0.304	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.305	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.304	13:36
BLANK TEST	0.000	13:36
EXTERNAL STANDARD	0.305	13:37
BLANK TEST	0.000	13:38
EXTERNAL STANDARD	0.305	13:38
BLANK TEST	0.000	13:39

Average = 0.3046
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100385

Date: 10/13/2015
Time: 13:53:15

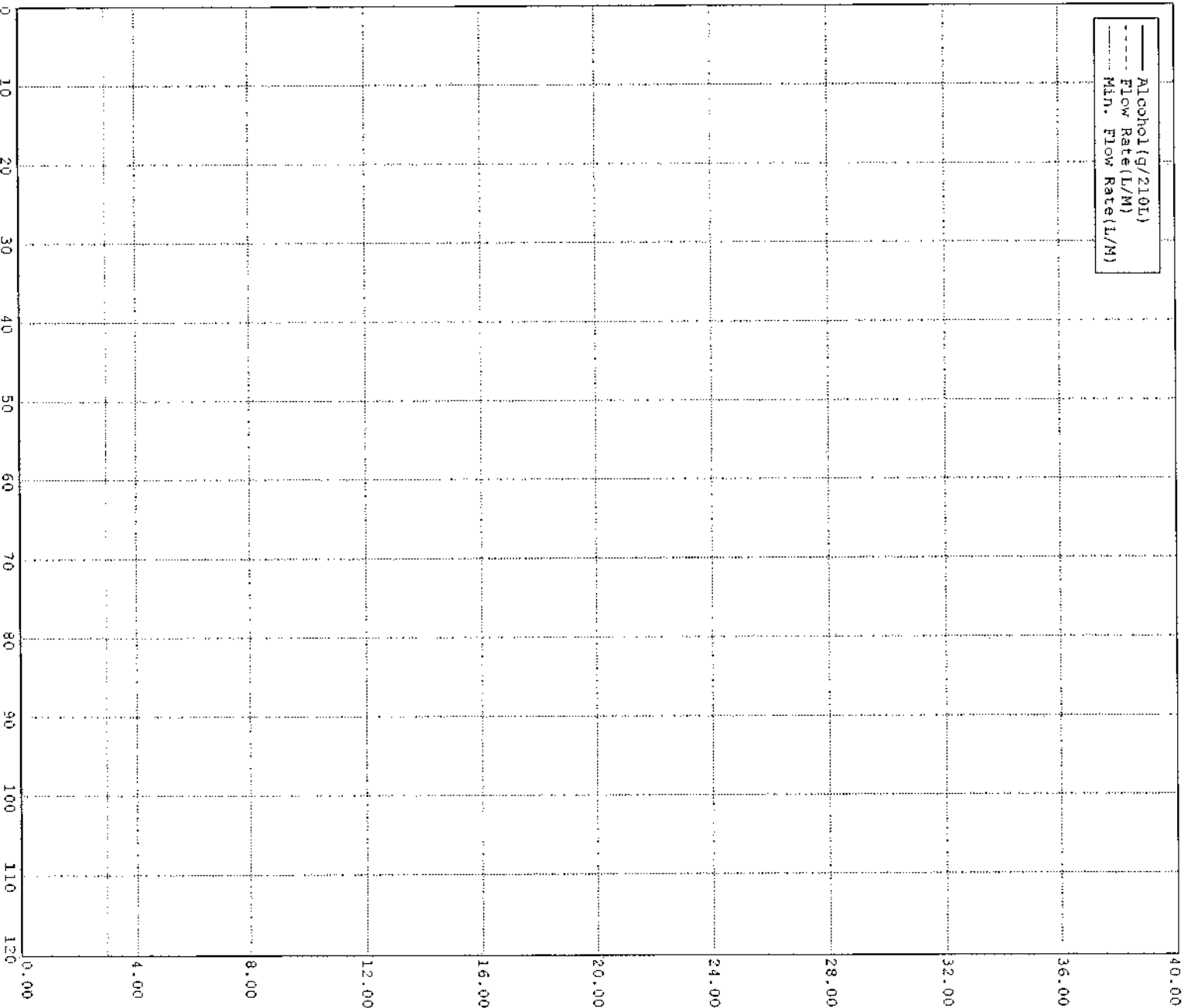
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.45: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

DIAGNOSTIC CHECK	PASSED	13:55
BLANK TEST	0.000	13:55
INTERNAL STANDARD	VERIFIED	13:55
EXTERNAL STANDARD	0.079	13:56
BLANK TEST	0.000	13:57
SUBJECT SAMPLE	INCOMPLETE	13:59



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 14:02:57

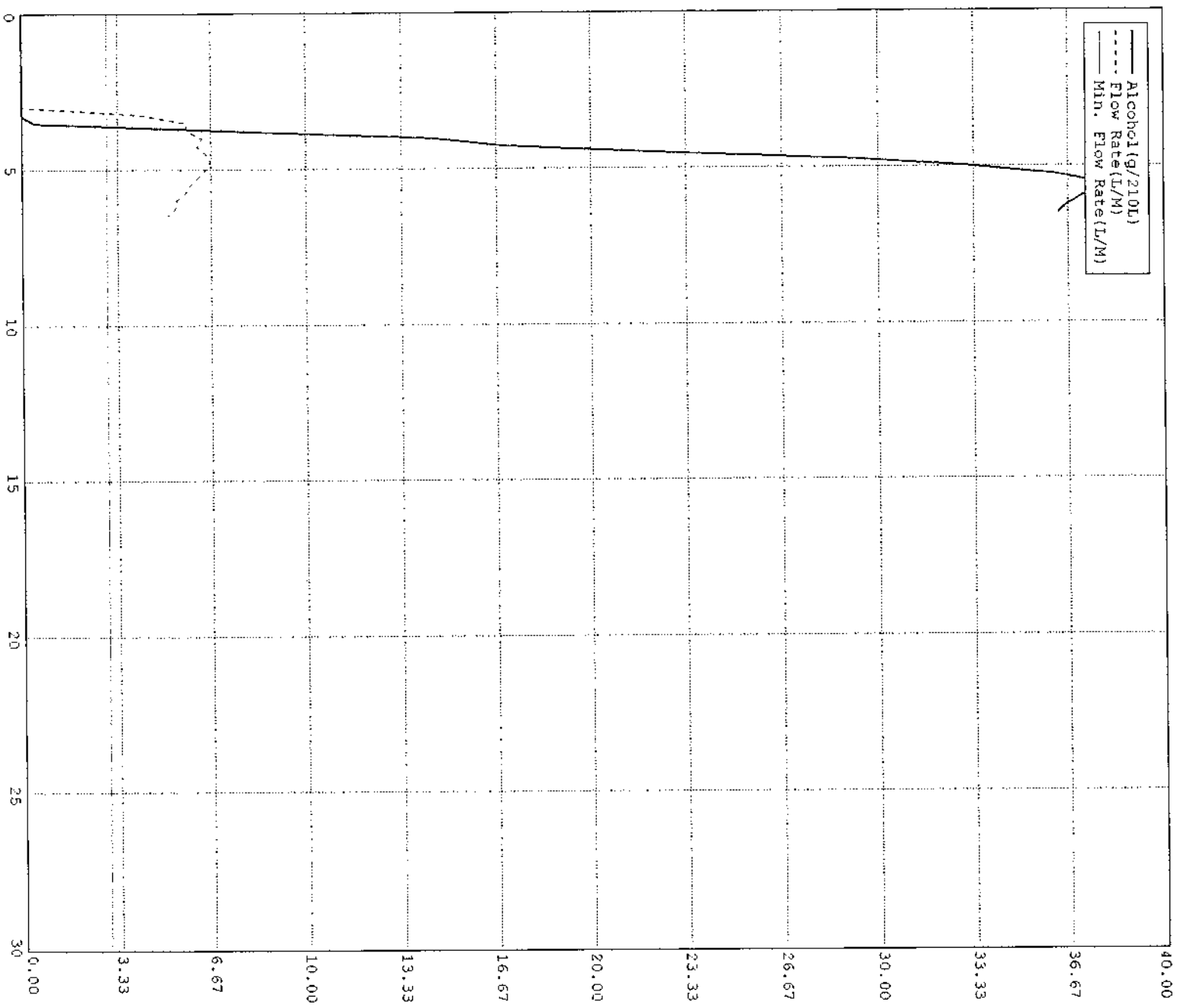
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MOUTH ETOH
OPERATOR'S #: XXXX

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.47: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

DIAGNOSTIC CHECK	PASSED	14:05
BLANK TEST	0.000	14:05
INTERNAL STANDARD	VERIFIED	14:05
EXTERNAL STANDARD	0.079	14:06
BLANK TEST	0.000	14:07
SUBJECT SAMPLE	INVALID	14:07



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 14:11:27

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE ACETONE
OPERATOR'S #: XXXX

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.48: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

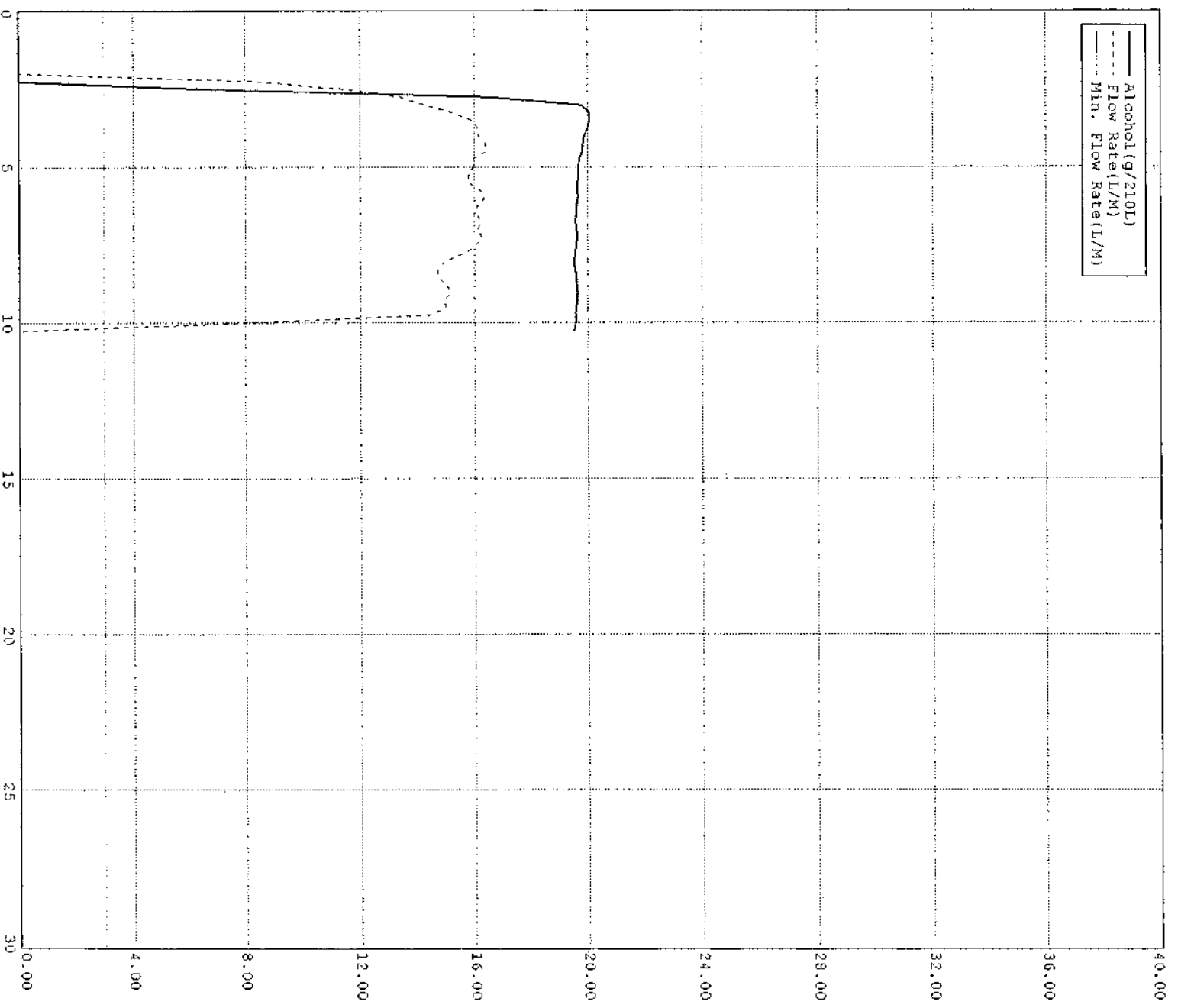
DIAGNOSTIC CHECK	PASSED	14:16
BLANK TEST	0.000	14:16
INTERNAL STANDARD	VERIFIED	14:16
Xq = 0.091 (-0.48%)		
EXTERNAL STANDARD	0.079	14:17
X[1] = 0.0788 (0.0001) (0.0036)		
BLANK TEST	0.000	14:17
SUBJECT SAMPLE	XXX	14:18
X[1] = 0.0979 (-0.0122) (0.0022)		

Interference Detected

Filter 2 Average = 0.0004

Filter 3 Average = 0.0033

CTF 10/13/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100385

Date: 10/13/2015
Time: 14:21:11

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

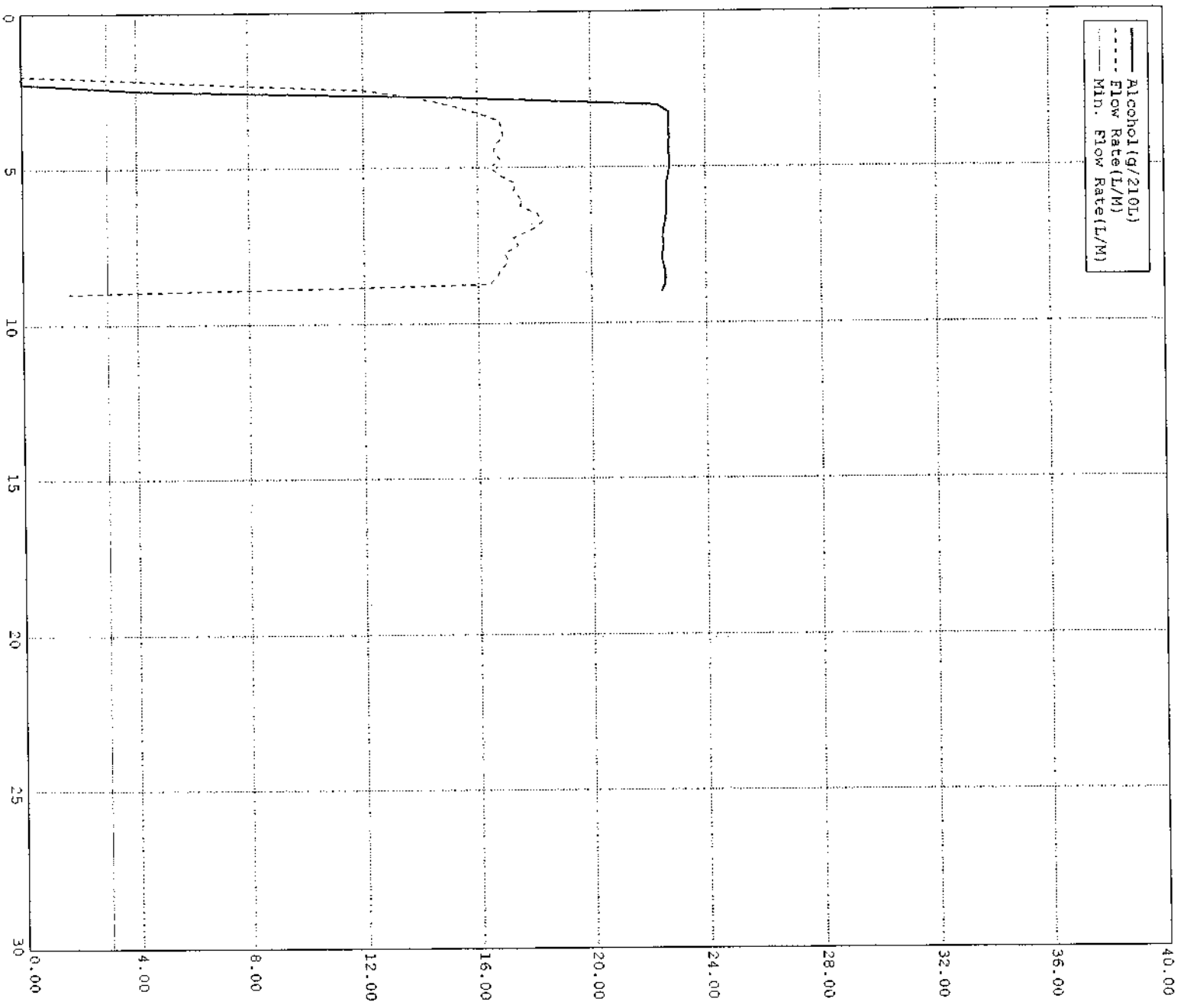
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.48: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

TEST TYPE	RESULT	TIME
DIAGNOSTIC CHECK	PASSED	14:24
BLANK TEST	0.000	14:24
INTERNAL STANDARD	VERIFIED	14:24
Xq = 0.092 (0.19%)		
EXTERNAL STANDARD	0.080	14:24
X[1] = 0.0797 (0.0012)	(0.0035)	
BLANK TEST	0.000	14:25
SUBJECT SAMPLE	XXX	14:26
X[1] = 0.1121 (-0.0230)	(0.0031)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 14:28:43

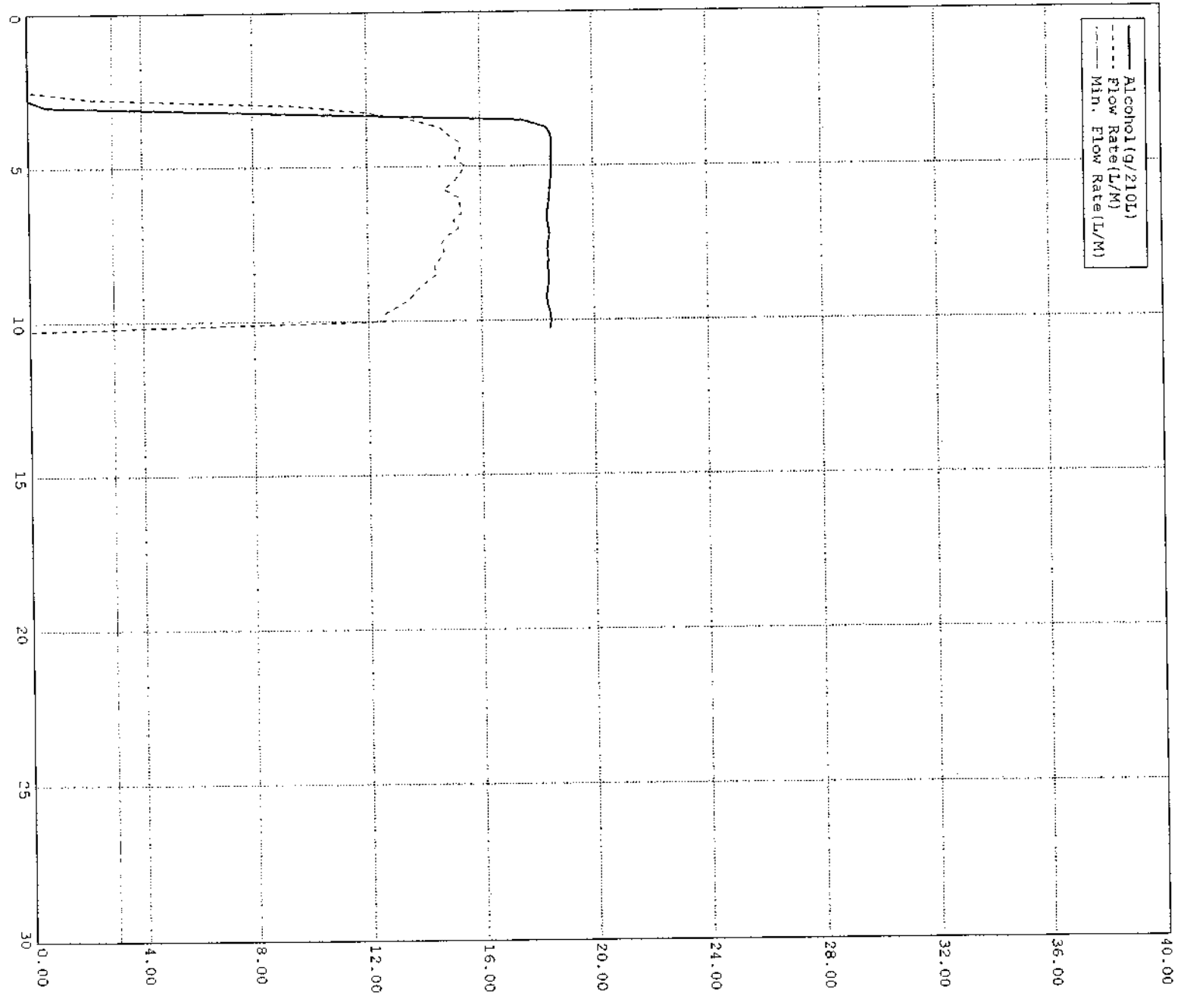
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.48: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

DIAGNOSTIC CHECK	PASSED	14:31
BLANK TEST	0.000	14:31
INTERNAL STANDARD	VERIFIED	14:32
Xq = 0.091 (0.57%)	0.079	14:32
EXTERNAL STANDARD	X[1] = 0.0787 (0.0000)	(0.0032)
BLANK TEST	0.000	14:33
SUBJECT SAMPLE (Vol=1.73L)	0.092	14:33
X[1] = 0.0926 (0.0007)	(0.0025)	
BLANK TEST	0.000	14:34
EXTERNAL STANDARD	0.079	14:34
X[1] = 0.0790 (0.0004)	(0.0030)	
BLANK TEST	0.000	14:35



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 15:00:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

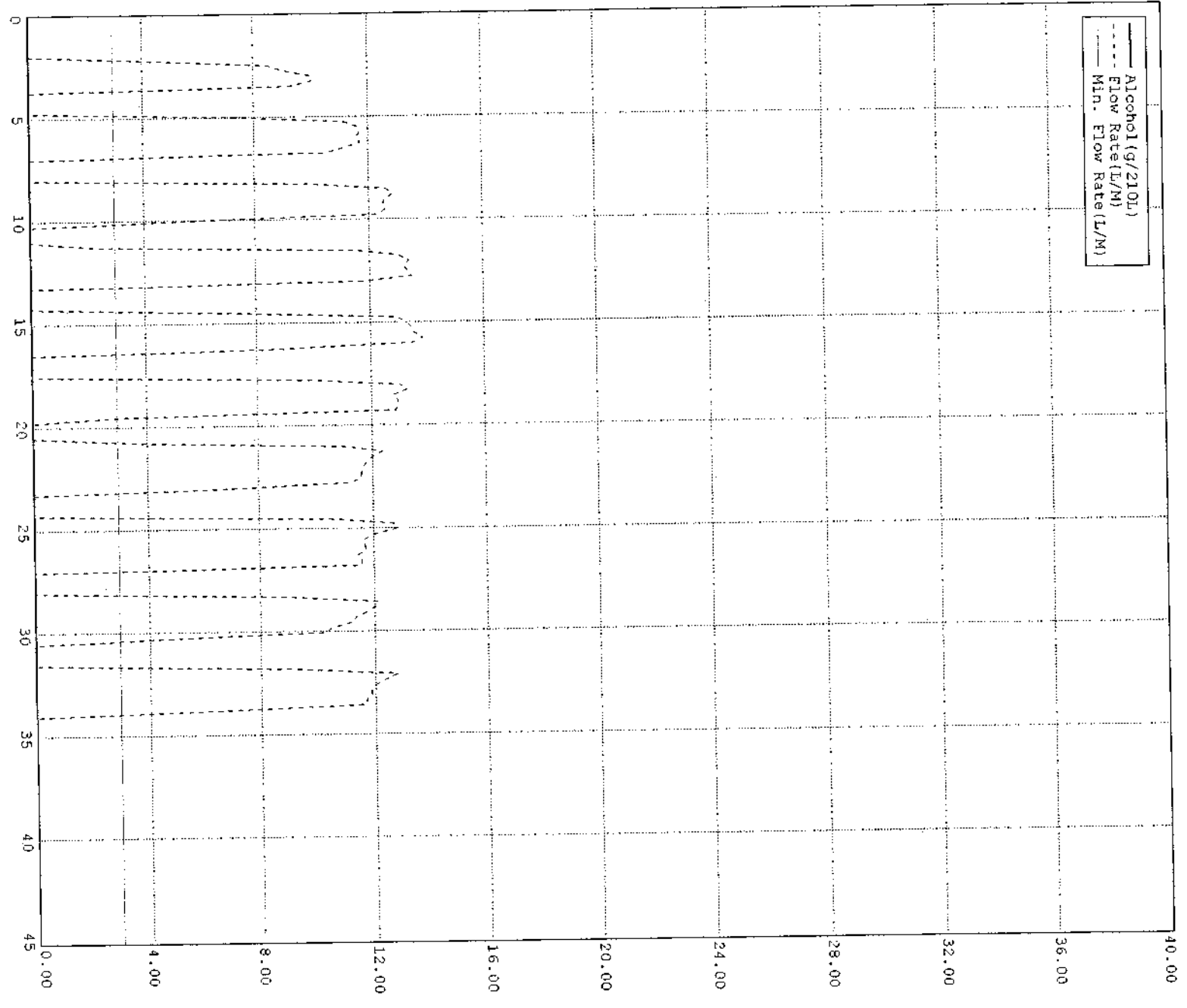
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXXX

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.48: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

DIAGNOSTIC CHECK	PASSED	15:05
BLANK TEST	0.000	15:05
INTERNAL STANDARD	VERIFIED	15:05
EXTERNAL STANDARD	0.080	15:05
BLANK TEST	0.000	15:06
SUBJECT SAMPLE	XXX	15:07

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 15:12:33

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

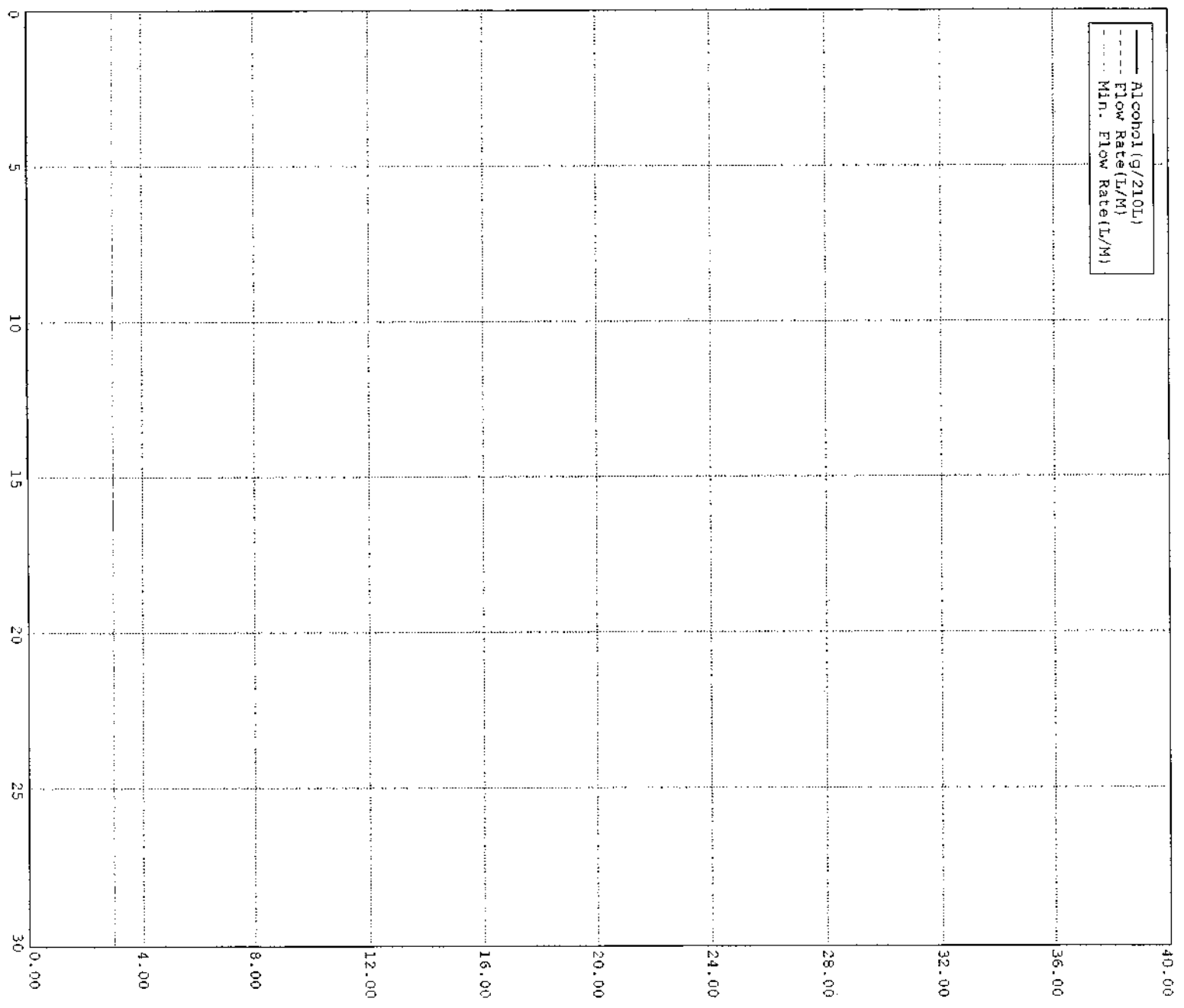
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.49: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

DIAGNOSTIC CHECK
BLANK TEST PASSED 15:13
INTERNAL STANDARD VERIFIED 15:14
EXTERNAL STANDARD 0.079 15:14
BLANK TEST 0.000 15:15

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100385

Date: 10/13/2015
Time: 15:28:56

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.50: 0.079
LOT #: 01315080A2
EXPIRATION: 2/5/2017

TEST TYPE	PASSED	15:31
DIAGNOSTIC CHECK	0.000	15:31
INTERNAL STANDARD	0.080	15:32
EXTERNAL STANDARD	0.000	15:33
INTERNAL STANDARD	0.000	15:33
EXTERNAL STANDARD	0.000	15:34
INTERNAL STANDARD	0.079	15:34
EXTERNAL STANDARD	0.000	15:35

