

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 2/2/2015
Effective: 2/2/2015

Version: DMCEF 2015 R0
Status: Active

Instrument S/N 100416 Analyst CTF Start Date 2/18/15

1. Diagnostic Test (attached)
2. 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)

3. Print Calibration Factors (attached)

4. Volume Test - Minimum 1.5 L (1.3L to 1.7L)

5. Linearity Test (attached)

a. Levels Used

- i. 0.020g/210L Mnf ILMO Lot 00813020A1 Exp 3/1/15
- ii. 0.040g/210L Mnf ILMO Lot 00813040A2 Exp 3/1/15
- iii. 0.080g/210L Mnf ILMO Lot 11313080A1 Exp 6/1/15
- iv. 0.100g/210L Mnf ILMO Lot 00813100A3 Exp 3/1/15
- v. 0.200g/210L Mnf Guth Lot 13220 Exp 8/5/15
 1. Simulator S/N DRS298 Date Calibrated 2/19/14
- vi. 0.300g/210L Mnf Guth Lot 13080 Exp 3/19/15
 1. Simulator S/N SD1177 Date Calibrated 2/20/14

6. Functional Tests (attached)

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

- i. Acetone - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
 1. Simulator S/N SD1198 Date Calibrated 2/20/14
- ii. Isopropanol - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
 1. Simulator S/N SD1202 Date Calibrated 2/20/14
- iii. Negative Control - Mnf Guth Lot 14030 Level 0.100 Exp 1/20/16
 1. Simulator S/N DR4161 Date Calibrated 2/19/14

e. RFI

7. Verify stylus is calibrated
8. Reset Options
9. Clear Memory
10. Verification of Calibration
11. Non-Drinking Subject Test (attached)
12. Upload
13. Remove tank prior to shut down

End Date 2/19/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 02/18/2015
Time: 08:57:27

VERSIONS
DMT: 3.00
PIC: 3.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.7°C PASSED
Breath Tube = 47.7°C PASSED

PUMP INFO
Flow Rate = 4.394 L/M PASSED

DETECTOR INFO
PUMP ON PASSED
PUMP OFF PASSED

FILTER INFO
Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD PASSED

Technician Screen

DATAMASTER dmt: 100416

Date: 02/18/2015

Time: 9:26 AM

Temperatures (°C)

Sample Cell: 48.7°C

Breath Tube: 47.7°C

Current Barometer 29.6 in

Volume (Ltr) 1.49

Settings

Lamp: 1.66 V

Bias: 82 V

Cooler: 1.66 V

Chopper: 533 Hz

Voltages (V)

Flow: 1.06 V

Detector: -0.022 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 05/03/2011
Time: 14:30:54

Ca = 0.1080
CAL = 0.991812 0.800 <= CAL < 1.200
b1 = 0.0002 0.0000 <= b1 < 0.0040
b2 = 0.0037 0.0010 <= b2 < 0.0100
b3 = 0.0000 0.0000 <= b3 < 0.0040
Xq = 0.0855 0.0500 <= Xq < 0.2000
a21 = 1.194383 1.050 <= a21 < 1.300
a31 = 0.559018 0.300 <= a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 02/18/2015
Time: 09:50:07

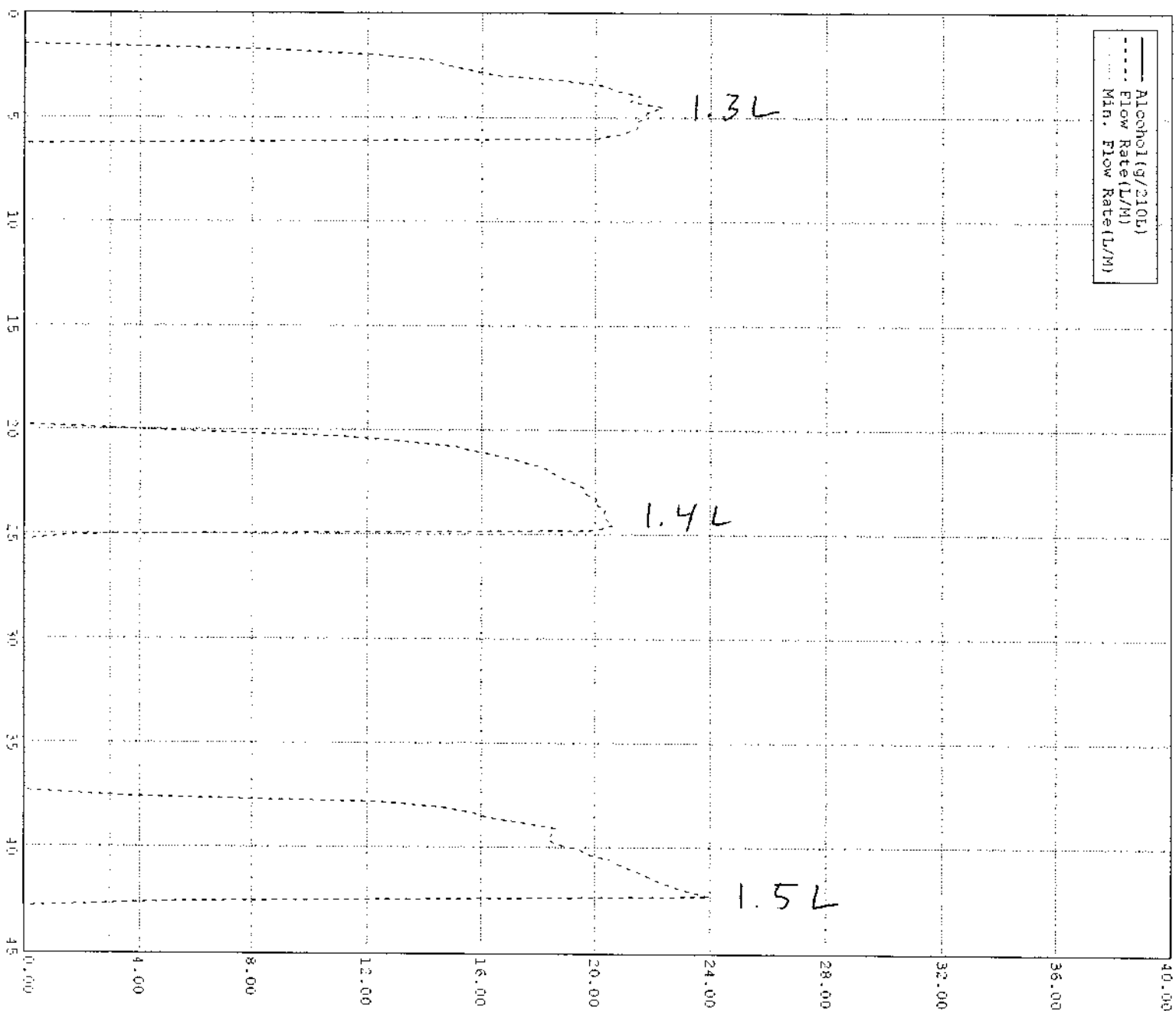
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
MINIMUM VOLUME
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.59: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	09:51
BLANK TEST	0.000	09:51
INTERNAL STANDARD	VERIFIED	09:51
EXTERNAL STANDARD	0.082	09:51
BLANK TEST	0.000	09:52
SUBJECT SAMPLE (Vol=1.57L)	0.000	09:53
BLANK TEST	0.000	09:54
EXTERNAL STANDARD	0.082	09:54
BLANK TEST	0.000	09:55



LINEARITY CHECK

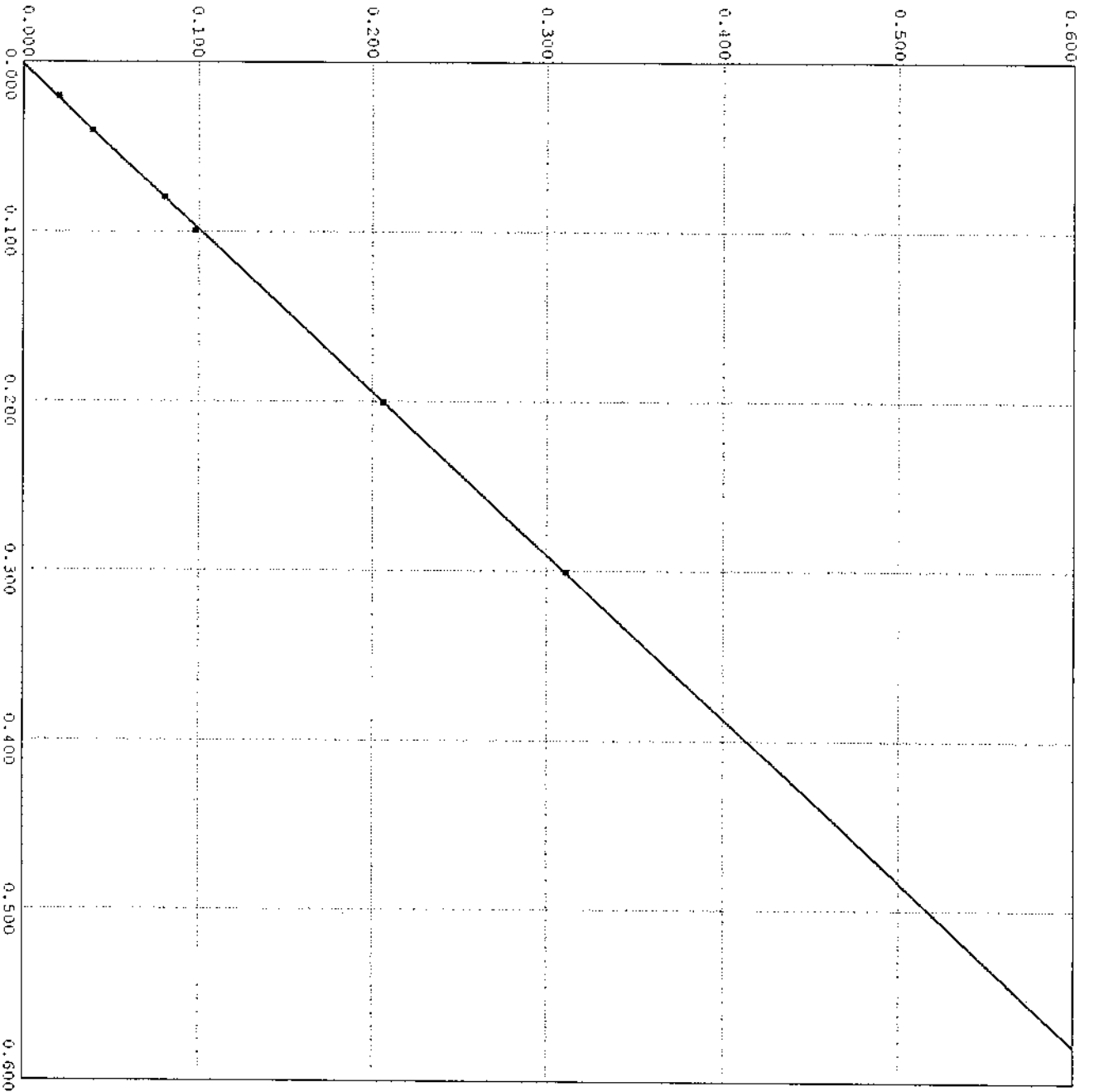
Alaska Department of Public Safety
DATAMASTER dnt: 100416

Date: 02/18/2015
Time: 12:53:35

SUPERVISOR NAME:
CHARLES FOSTER
OPERATOR'S #: 7734

TARGET	AVERAGE	STD. DEV.
0.020	0.0212	0.0004
0.040	0.0408	0.0004
0.079	0.0816	0.0005
0.099	0.0990	0.0000
0.200	0.2070	0.0000
0.300	0.3116	0.0005

SLOPE = 1.039949
R² = 0.999818



LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

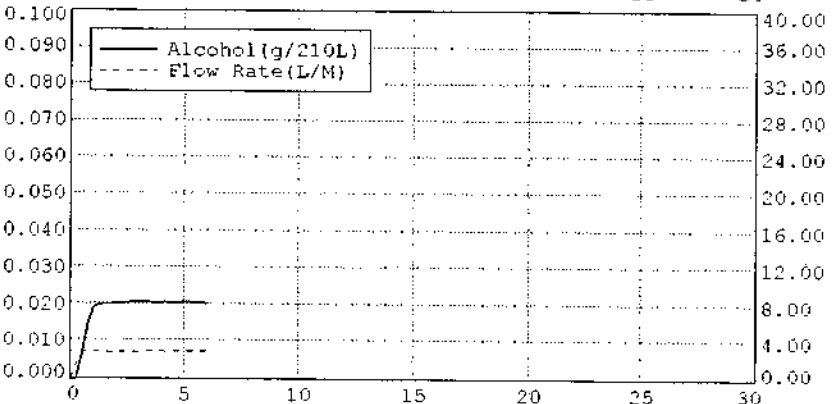
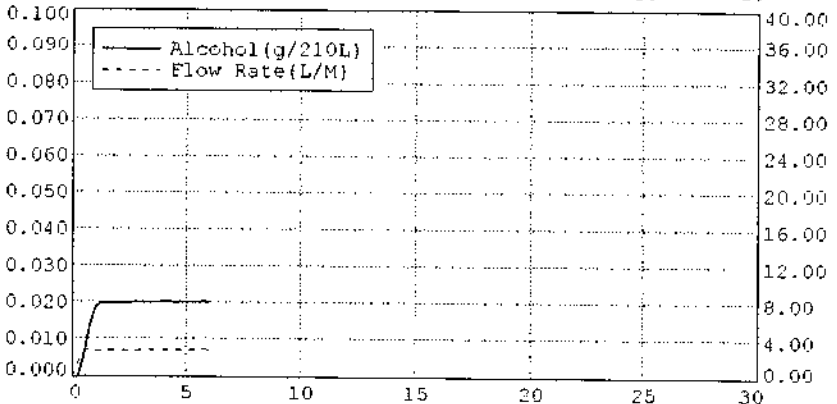
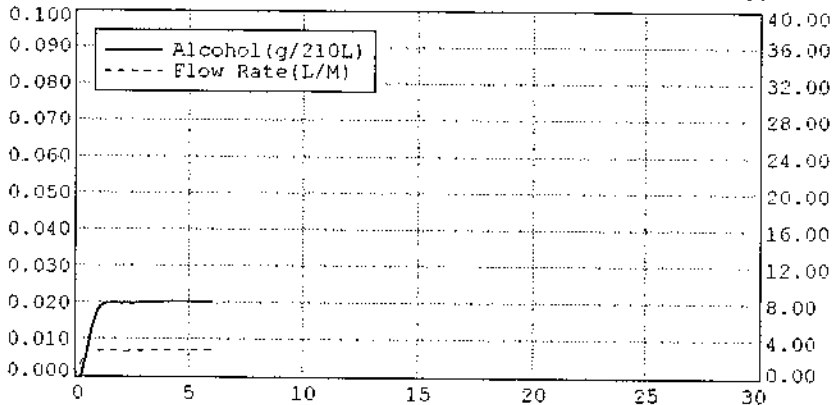
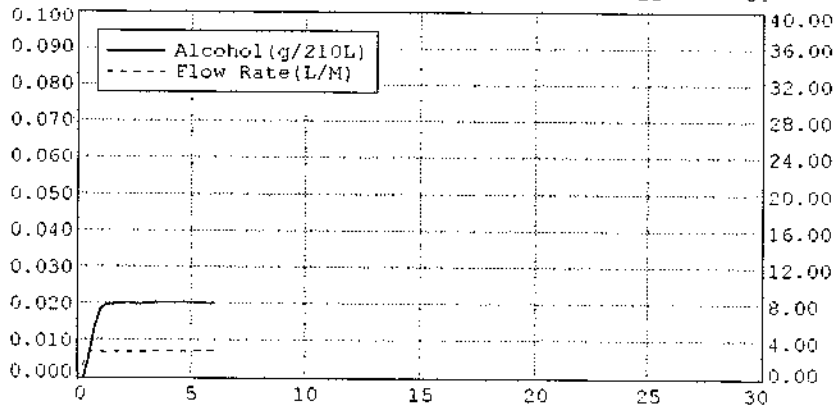
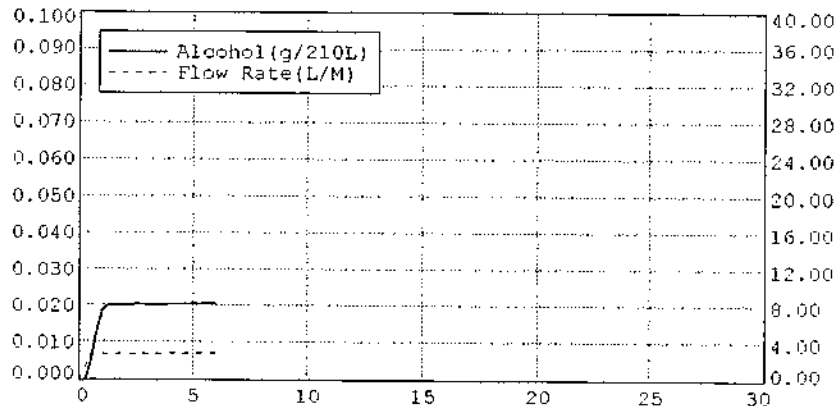
Date: 02/18/2015
 Time: 12:53:36

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.61: 0.020
 LOT #: 00813020A1
 EXPIRATION: 03/01/2015
 TANK PRESSURE: 376 psi

BLANK TEST	0.000	12:58
INTERNAL STANDARD	VERIFIED	12:58
EXTERNAL STANDARD	0.022	12:59
BLANK TEST	0.000	13:00
EXTERNAL STANDARD	0.021	13:00
BLANK TEST	0.000	13:01
EXTERNAL STANDARD	0.021	13:01
BLANK TEST	0.000	13:02
EXTERNAL STANDARD	0.021	13:02
BLANK TEST	0.000	13:03
EXTERNAL STANDARD	0.021	13:03
BLANK TEST	0.000	13:04

Average = 0.0212
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

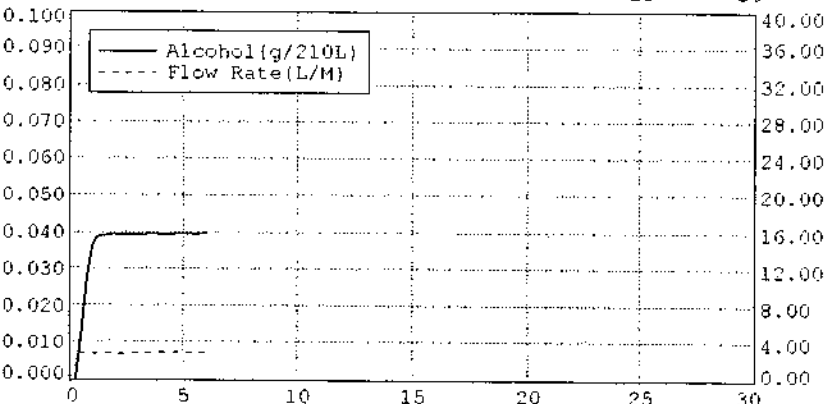
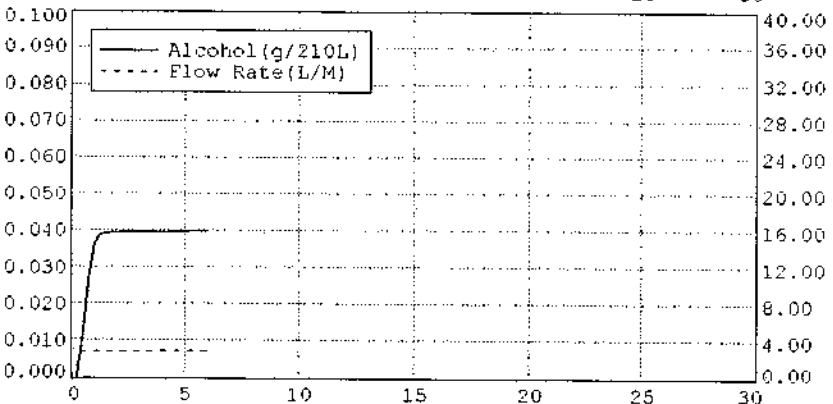
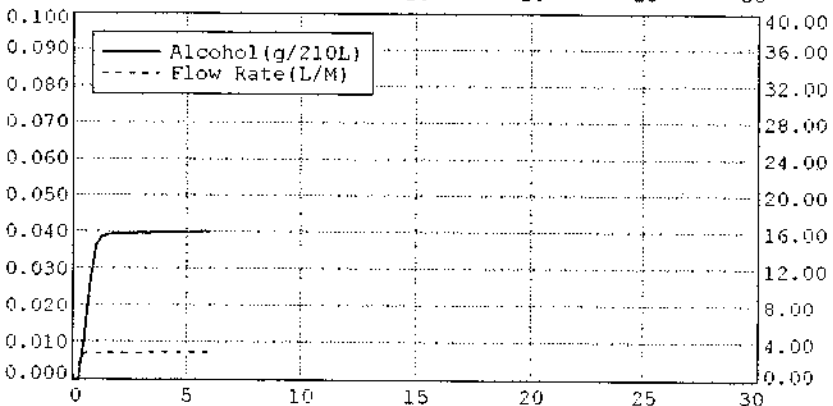
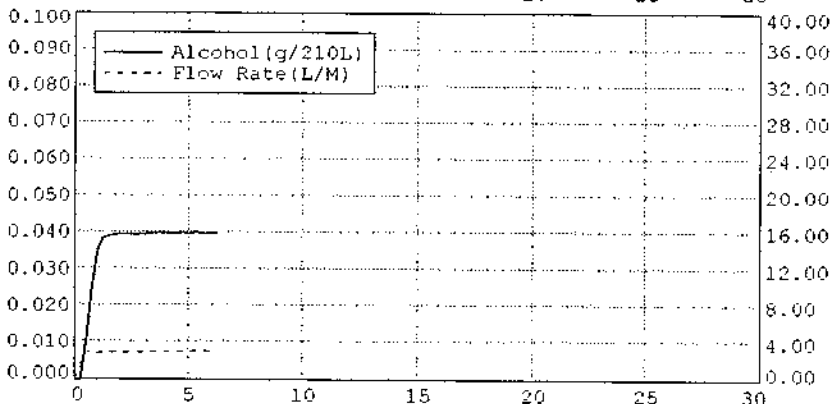
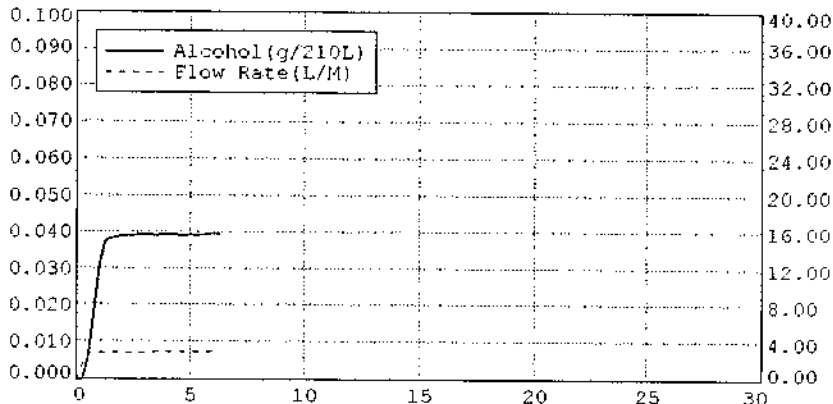
Date: 02/18/2015
 Time: 13:12:35

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.61: 0.040
 LOT #: 00813040A2
 EXPIRATION: 03/01/2015
 TANK PRESSURE: 649 psi

BLANK TEST	0.000	13:13
INTERNAL STANDARD	VERIFIED	13:13
EXTERNAL STANDARD	0.040	13:14
BLANK TEST	0.000	13:15
EXTERNAL STANDARD	0.041	13:15
BLANK TEST	0.000	13:16
EXTERNAL STANDARD	0.041	13:16
BLANK TEST	0.000	13:17
EXTERNAL STANDARD	0.041	13:17
BLANK TEST	0.000	13:18
EXTERNAL STANDARD	0.041	13:18
BLANK TEST	0.000	13:19

Average = 0.0408
 Std Dev = 0.0004



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

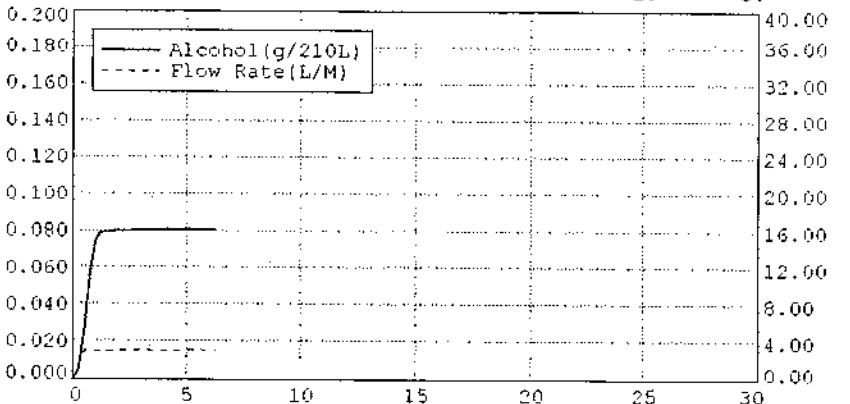
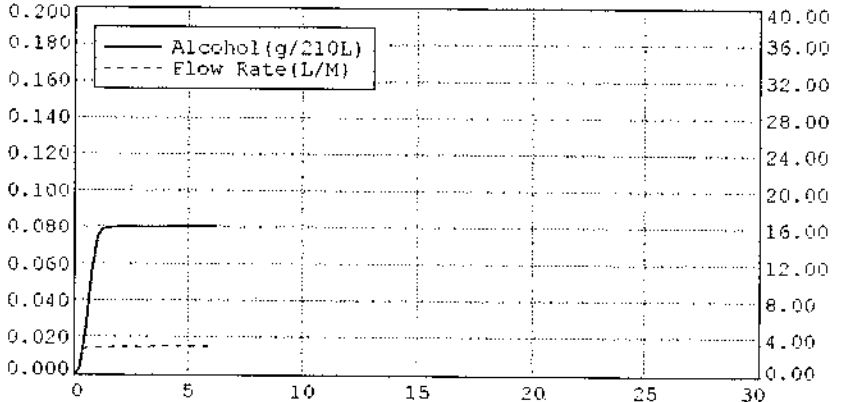
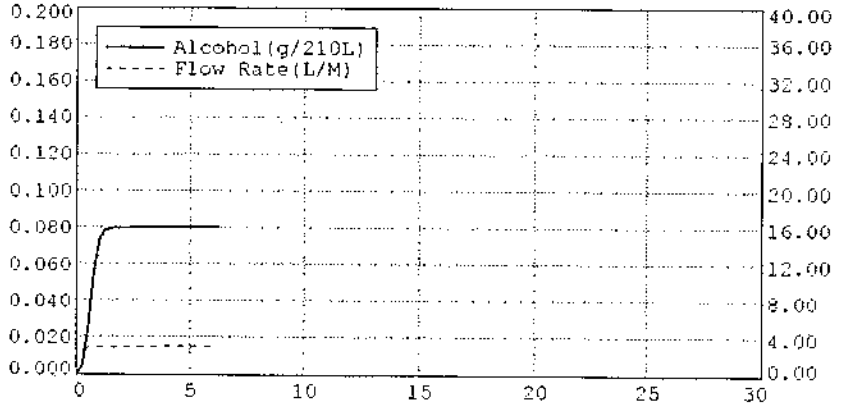
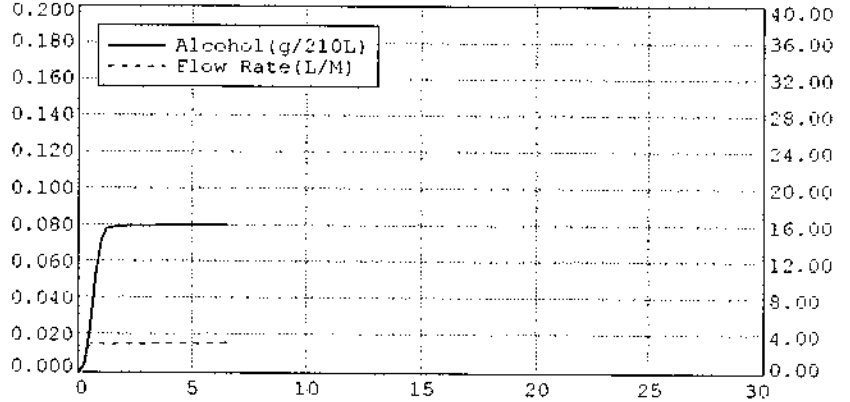
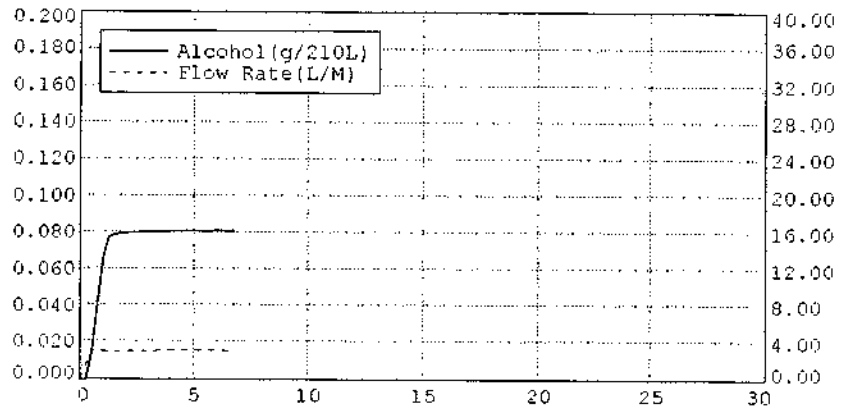
Date: 02/18/2015
 Time: 13:20:49

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.62: 0.079
 LOT #: 11313080A1
 EXPIRATION: 06/01/2015
 TANK PRESSURE: 1015 psi

BLANK TEST	0.000	13:22
INTERNAL STANDARD	VERIFIED	13:22
EXTERNAL STANDARD	0.082	13:22
BLANK TEST	0.000	13:23
EXTERNAL STANDARD	0.081	13:23
BLANK TEST	0.000	13:24
EXTERNAL STANDARD	0.081	13:24
BLANK TEST	0.000	13:25
EXTERNAL STANDARD	0.082	13:26
BLANK TEST	0.000	13:27
EXTERNAL STANDARD	0.082	13:27
BLANK TEST	0.000	13:28

Average = 0.0816
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

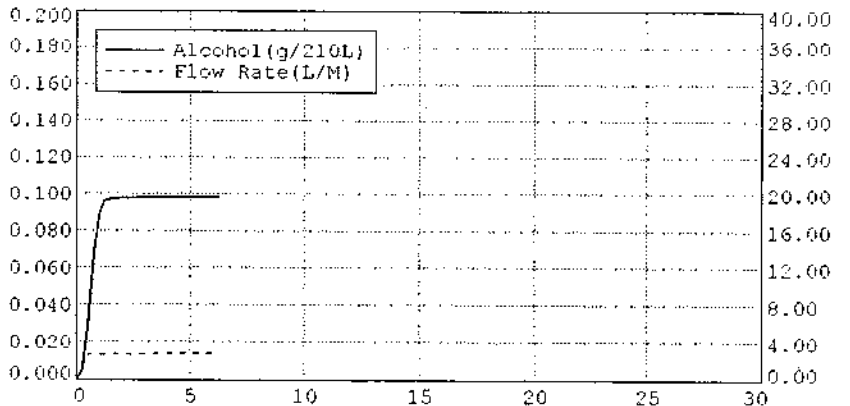
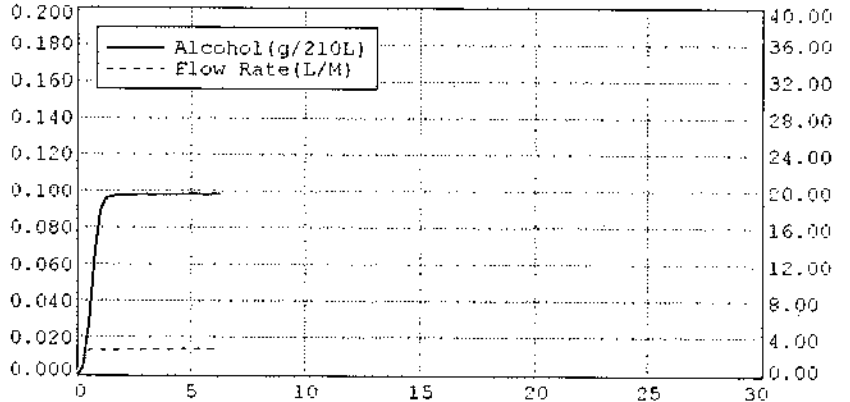
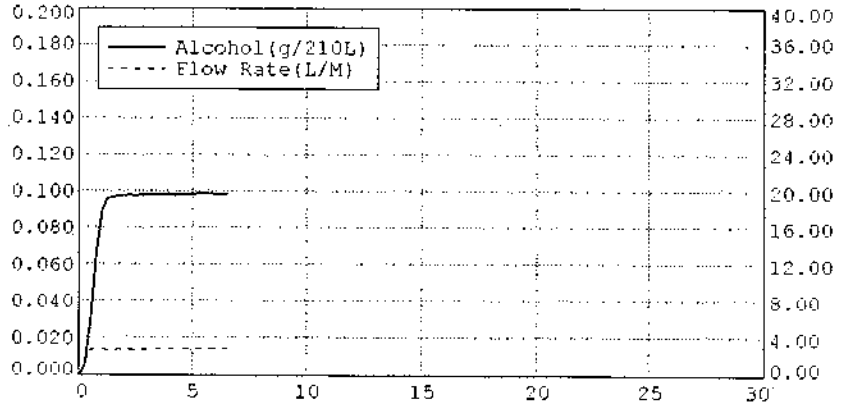
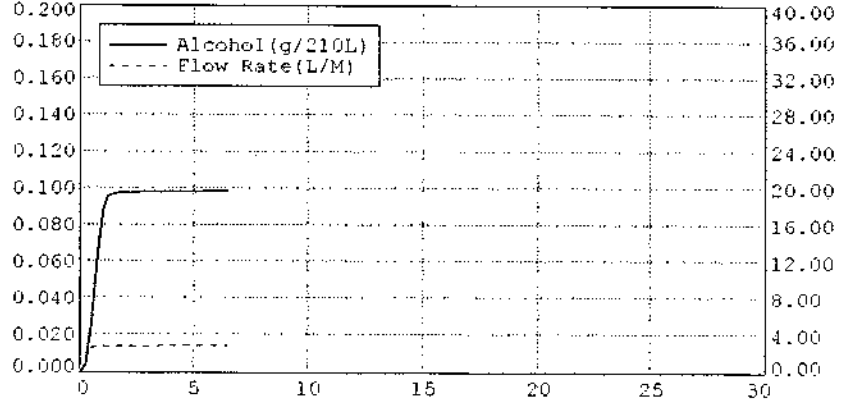
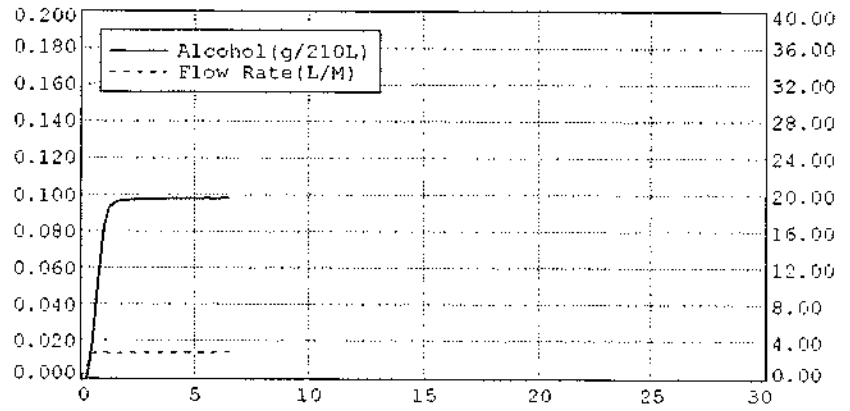
Date: 02/18/2015
 Time: 13:29:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.61: 0.099
 LOT #: 00813100A3
 EXPIRATION: 03/01/2015
 TANK PRESSURE: 383 psi

BLANK TEST	0.000	13:30
INTERNAL STANDARD	VERIFIED	13:30
EXTERNAL STANDARD	0.099	13:31
BLANK TEST	0.000	13:31
EXTERNAL STANDARD	0.099	13:32
BLANK TEST	0.000	13:33
EXTERNAL STANDARD	0.099	13:33
BLANK TEST	0.000	13:34
EXTERNAL STANDARD	0.099	13:34
BLANK TEST	0.000	13:35
EXTERNAL STANDARD	0.099	13:35
BLANK TEST	0.000	13:36

Average = 0.0990
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

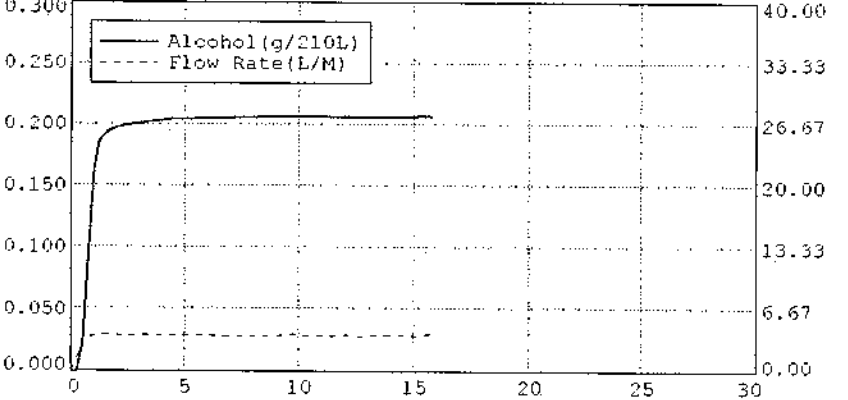
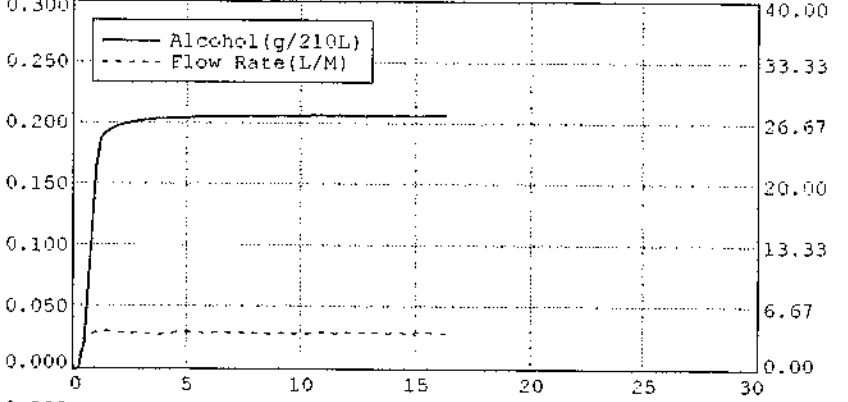
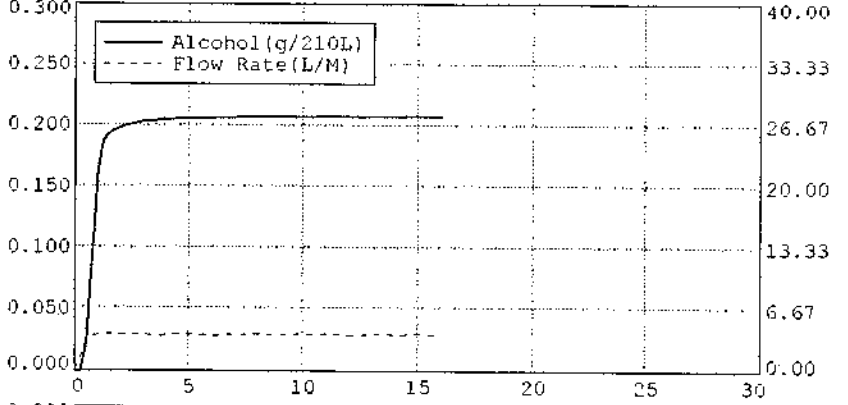
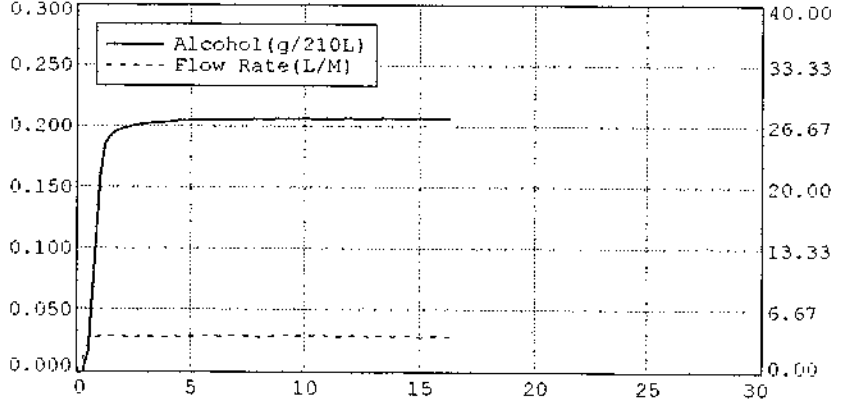
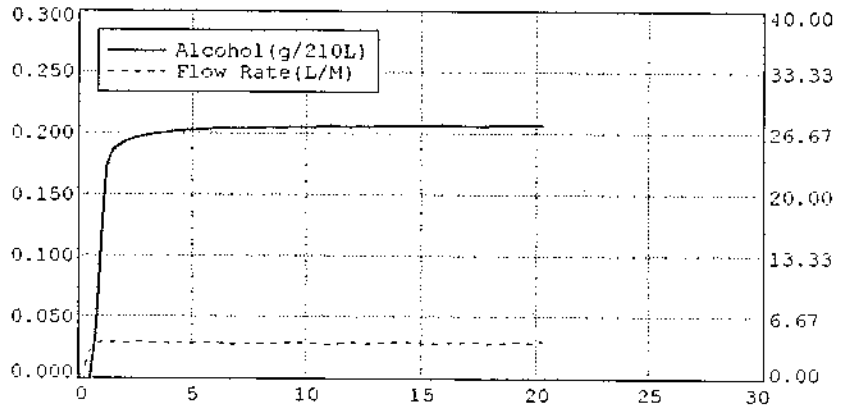
Alaska Department of Public Safety
 DATAMASTER dmt: 100416

Date: 02/18/2015
 Time: 13:37:46

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: 13220
 EXPIRATION: 08/05/2015

BLANK TEST	0.000	13:39
INTERNAL STANDARD	VERIFIED	13:39
EXTERNAL STANDARD	0.207	13:39
BLANK TEST	0.000	13:40
EXTERNAL STANDARD	0.207	13:41
BLANK TEST	0.000	13:42
EXTERNAL STANDARD	0.207	13:42
BLANK TEST	0.000	13:43
EXTERNAL STANDARD	0.207	13:43
BLANK TEST	0.000	13:44
EXTERNAL STANDARD	0.207	13:45
BLANK TEST	0.000	13:46

Average = 0.2070
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 DATAMASTER dmt: 100416

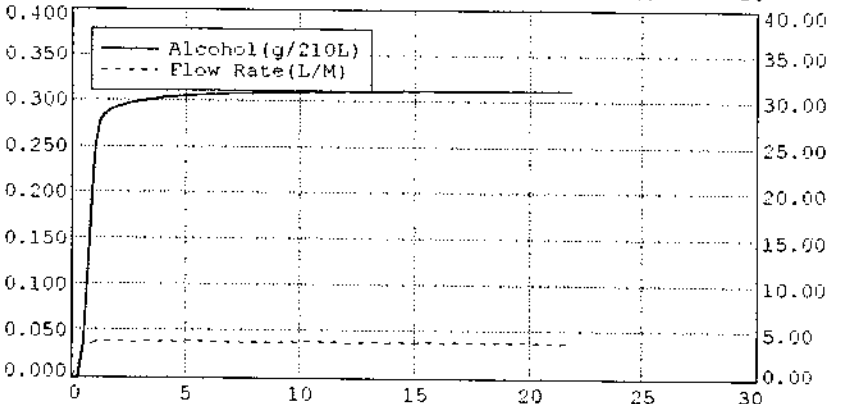
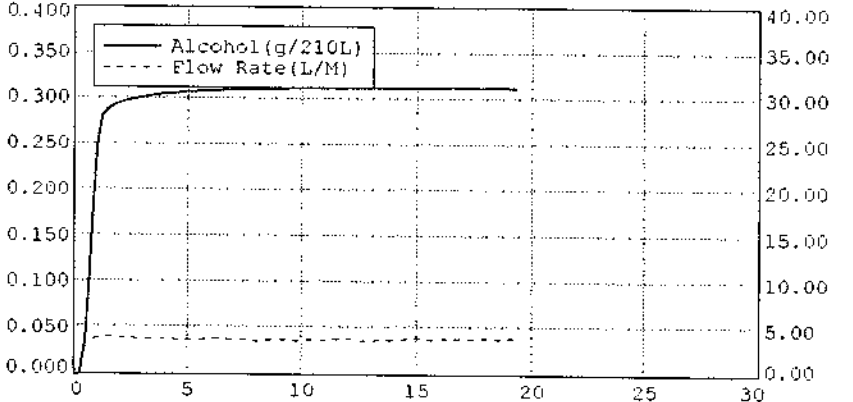
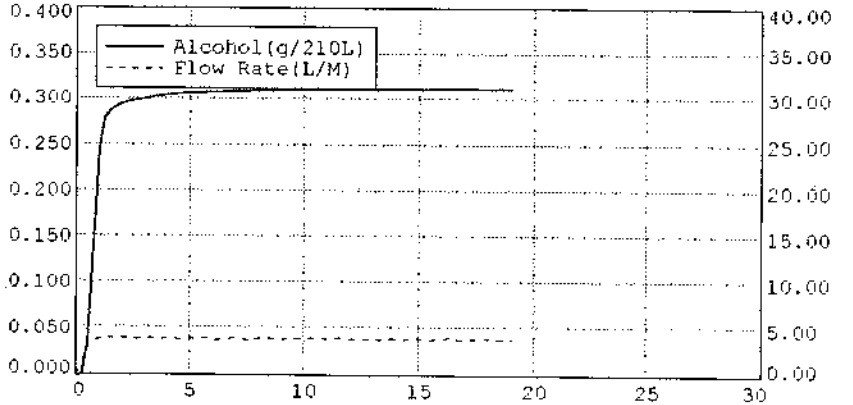
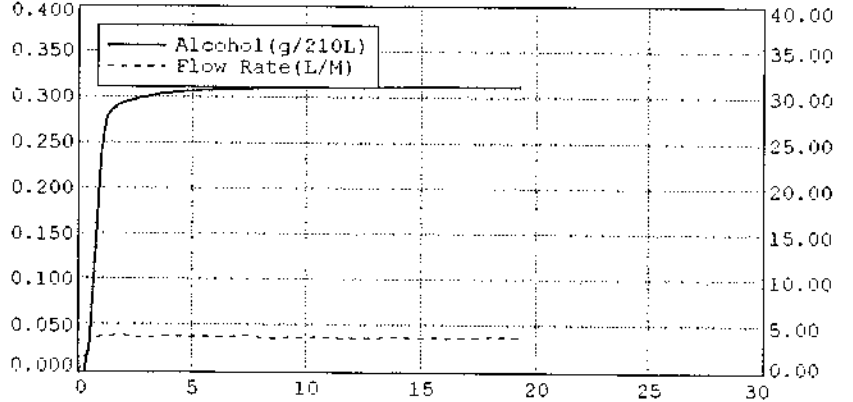
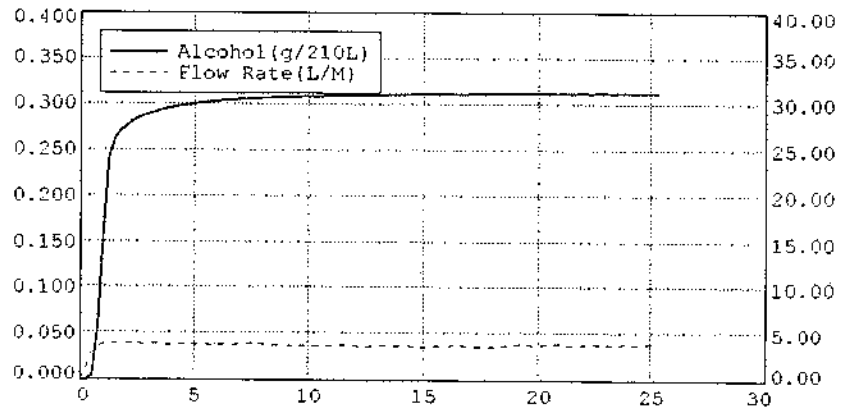
Date: 02/18/2015
 Time: 13:47:31

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: 13080
 EXPIRATION: 03/19/2015

BLANK TEST	0.000	13:48
INTERNAL STANDARD	VERIFIED	13:48
EXTERNAL STANDARD	0.312	13:49
BLANK TEST	0.000	13:50
EXTERNAL STANDARD	0.312	13:50
BLANK TEST	0.000	13:51
EXTERNAL STANDARD	0.311	13:52
BLANK TEST	0.000	13:53
EXTERNAL STANDARD	0.311	13:53
BLANK TEST	0.000	13:54
EXTERNAL STANDARD	0.312	13:54
BLANK TEST	0.000	13:55

Average = 0.3116
 Std Dev = 0.0005



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100416

Date: 02/19/2015
Time: 09:44:14

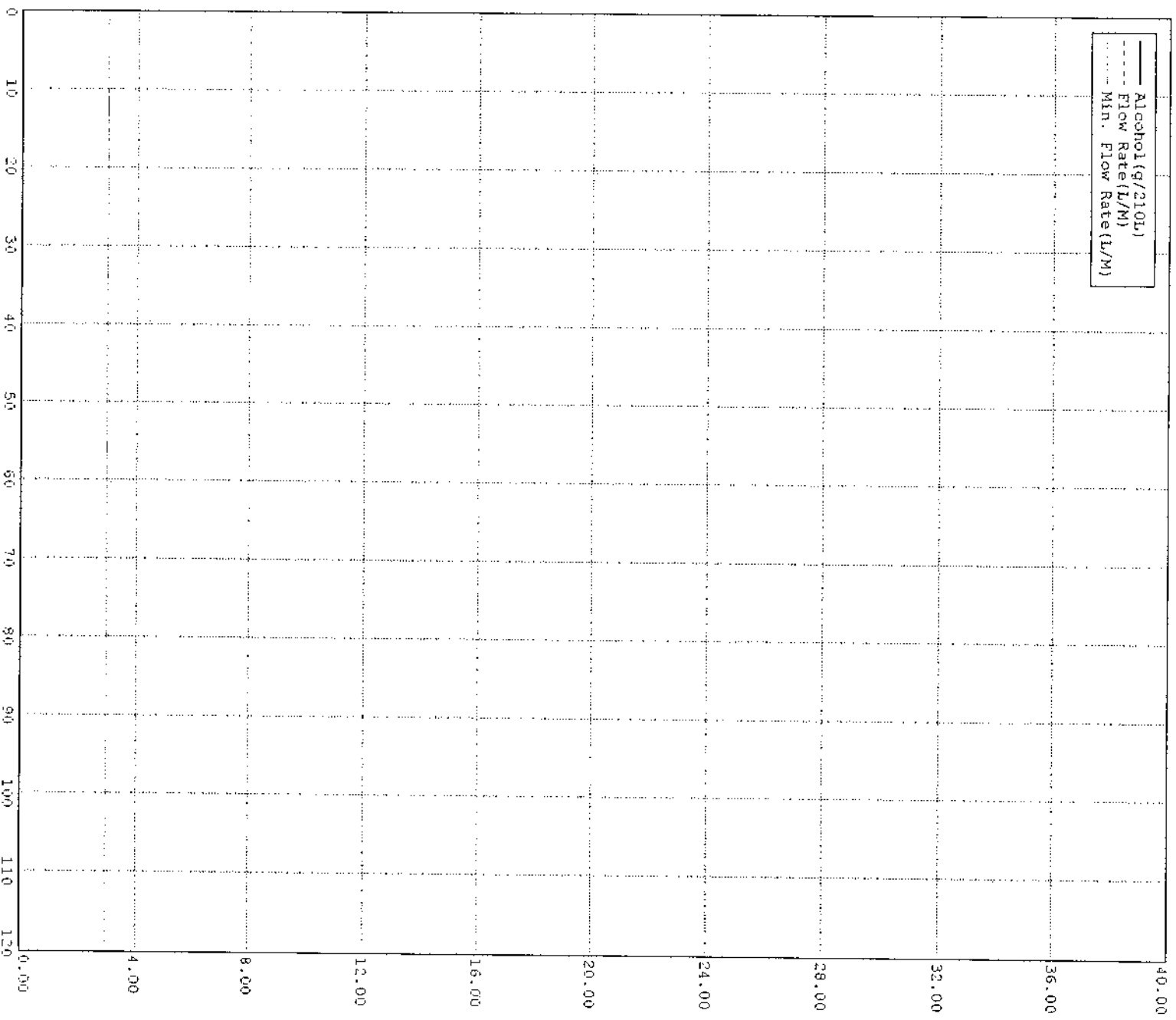
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INCOMPLETE XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.86: 0.080
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	09:46
BLANK TEST	0.000	09:46
INTERNAL STANDARD	VERIFIED	09:46
EXTERNAL STANDARD	0.083	09:46
BLANK TEST	0.000	09:47
SUBJECT SAMPLE	INCOMPLETE	09:49



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmc: 100416

Date: 02/19/2015
Time: 09:52:09

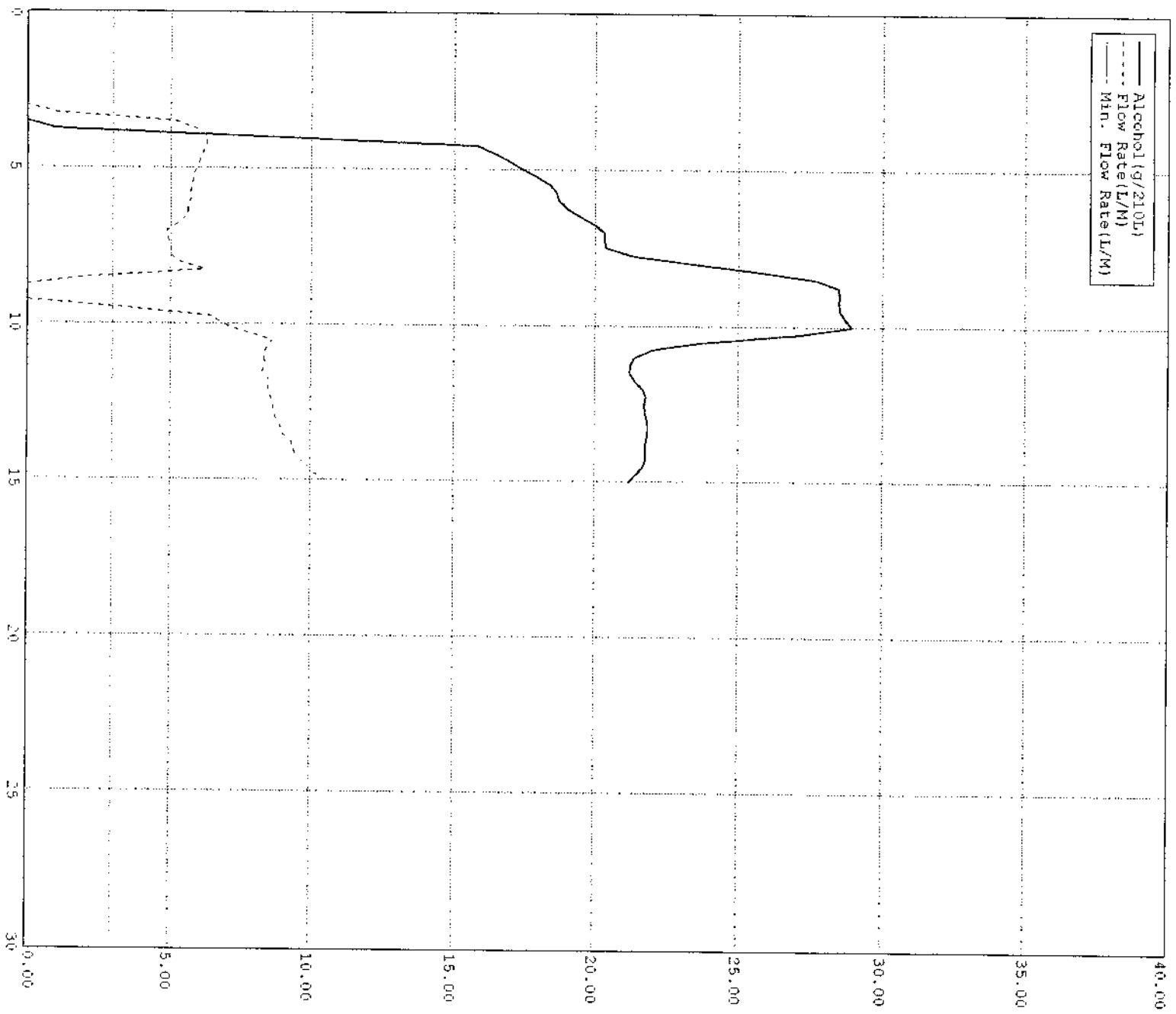
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INVALID XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.87: 0.080
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	09:55
BLANK TEST	0.000	09:55
INTERNAL STANDARD	VERIFIED	09:55
EXTERNAL STANDARD	0.083	09:55
BLANK TEST	0.000	09:56
SUBJECT SAMPLE	INVALID	09:57



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 02/19/2015
Time: 10:20:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

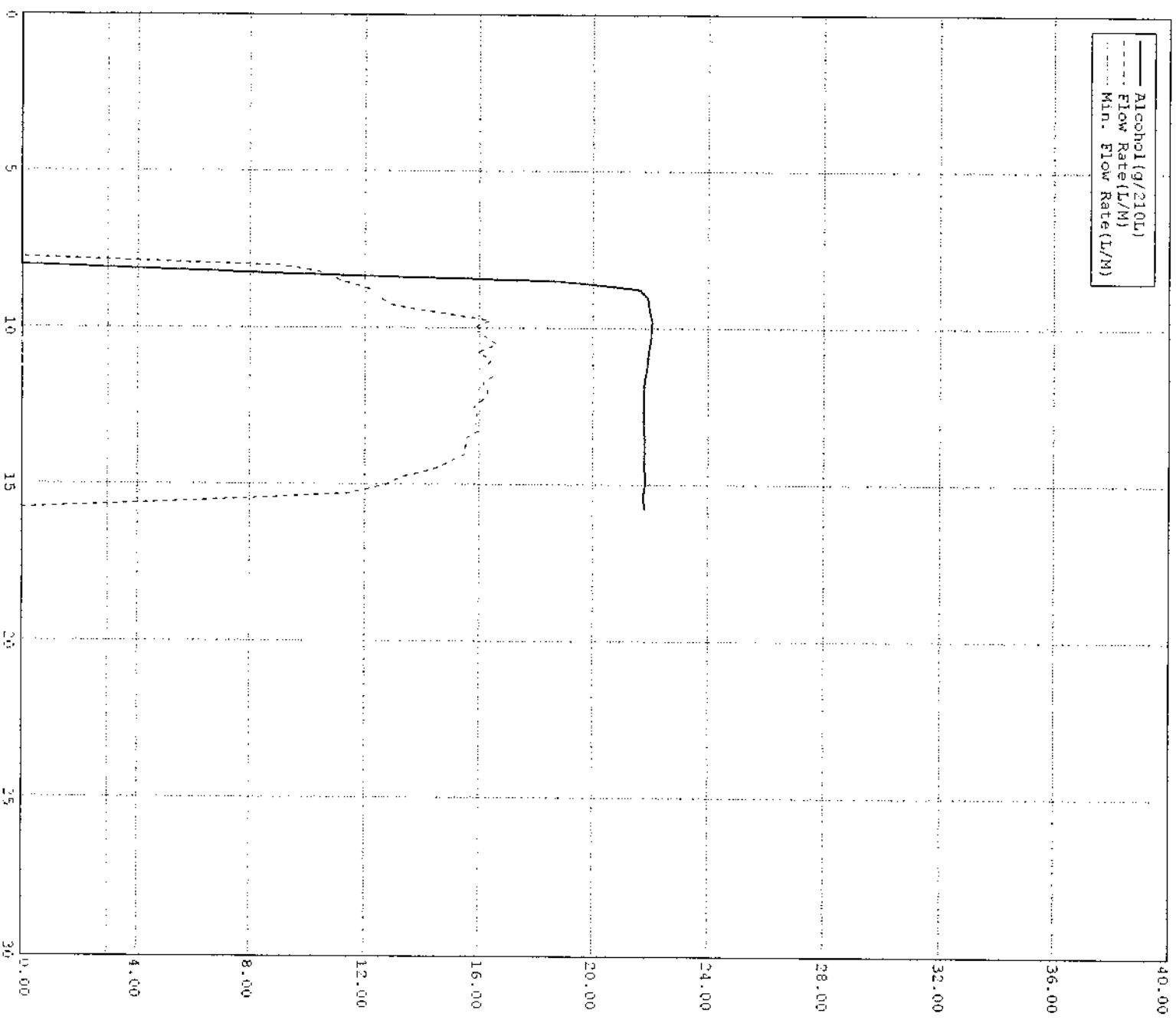
OPERATOR NAME:
INTERFERENCE ACETONE
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.87: 0.080
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	10:22
BLANK TEST	0.000	10:22
INTERNAL STANDARD	VERIFIED	10:22
Xq = 0.085 (0.92%)		
EXTERNAL STANDARD	0.082	10:22
X[1] = 0.0822 (0.0002)	(0.0018)	
BLANK TEST	0.000	10:23
SUBJECT SAMPLE	XXX	10:23
X[1] = 0.1097 (-0.0145)	(0.0028)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 02/19/2015
Time: 10:29:23

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

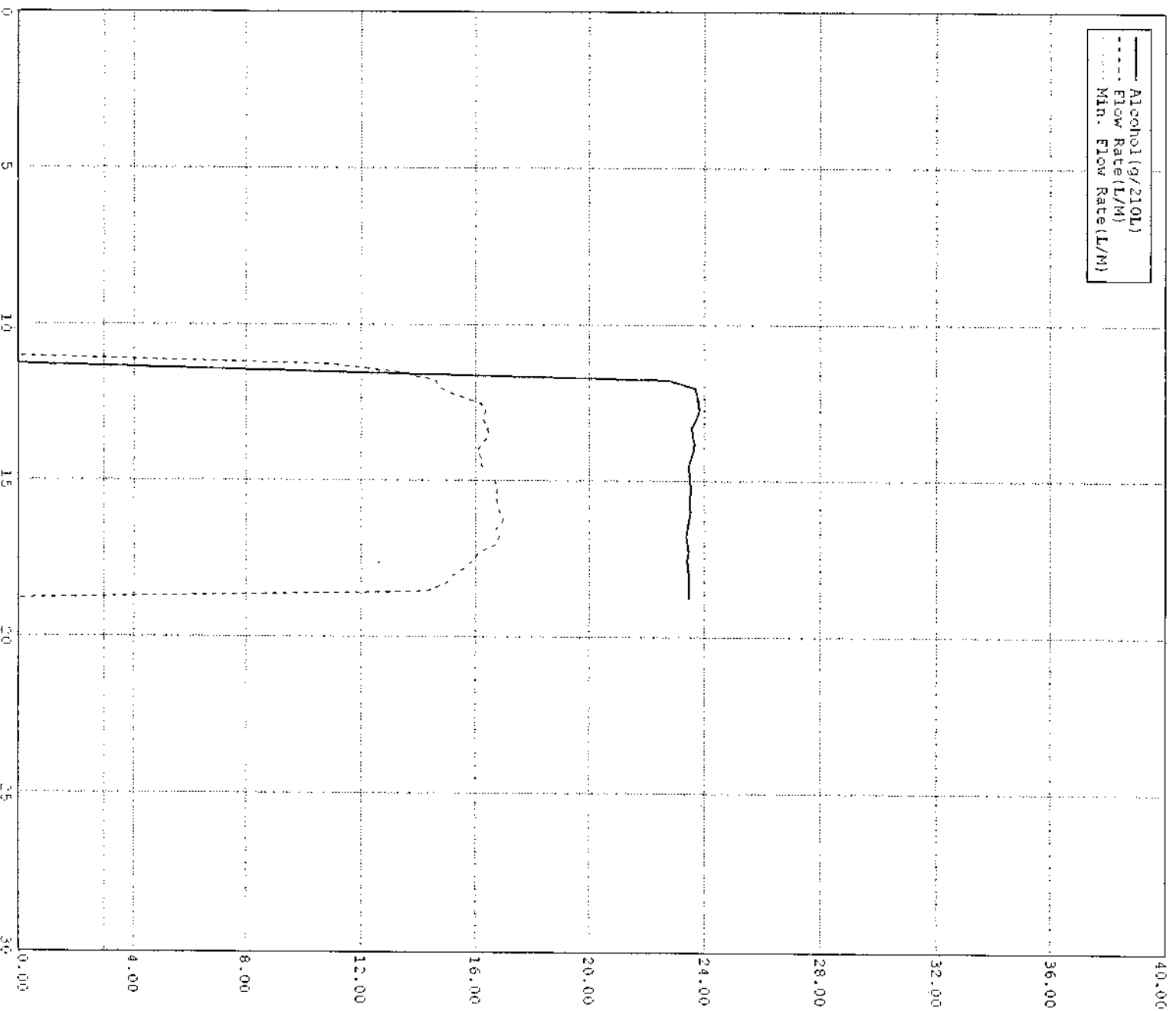
OPERATOR NAME:
INTERFERENCE IPA
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.87: 0.080
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	10:33
BLANK TEST	0.000	10:33
INTERNAL STANDARD	VERIFIED	10:33
Xq = 0.085 (0.61%)		
EXTERNAL STANDARD	0.082	10:33
X[1] = 0.0823 (0.0006)	(0.0027)	
BLANK TEST	0.000	10:34
SUBJECT SAMPLE	XXX	10:35
X[1] = 0.1176 (-0.0281)	(0.0012)	

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100416

Date: 02/19/2015
Time: 10:39:04

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
INTERFERENCE NEGATIVE
OPERATOR'S #: XXXX

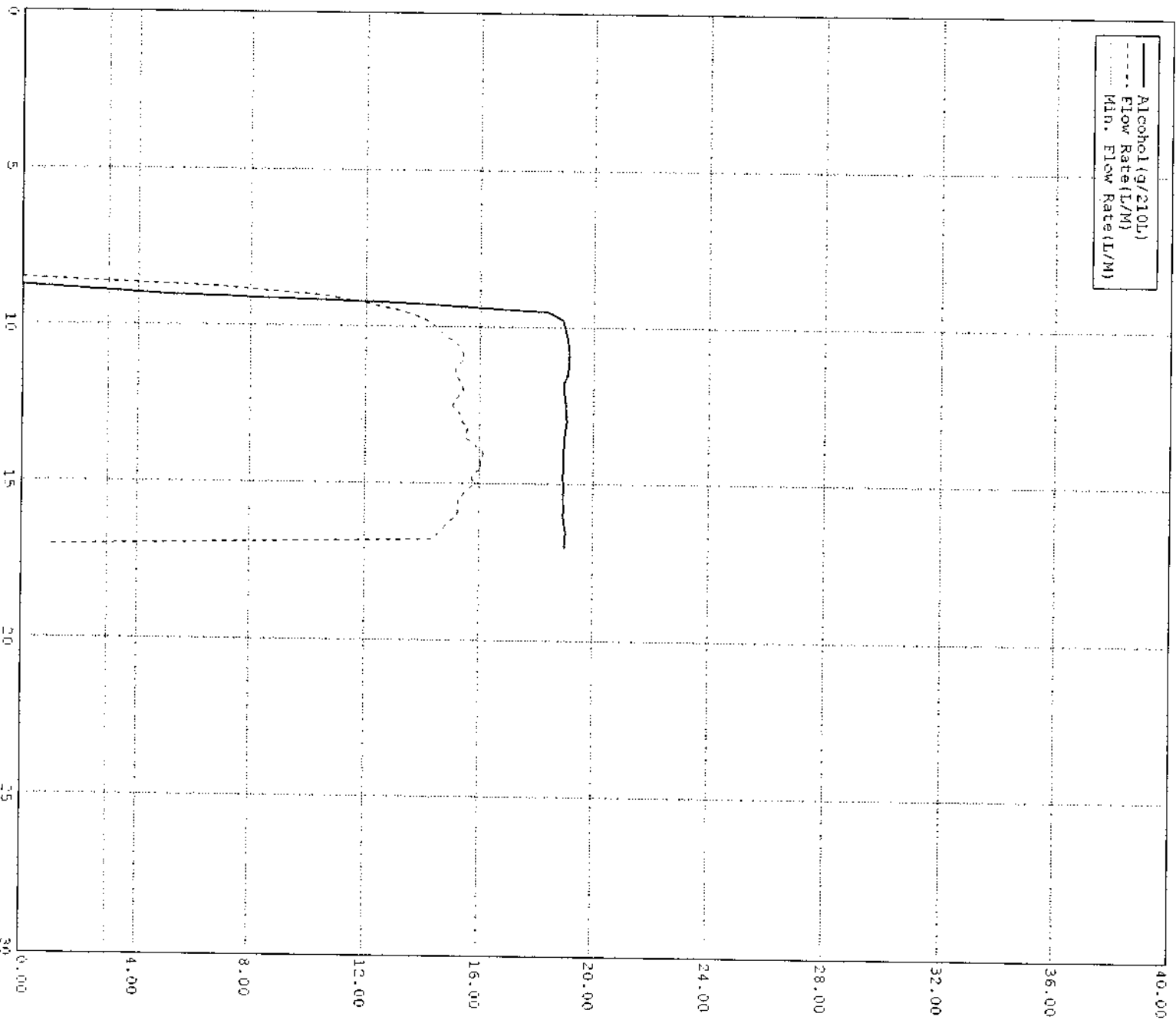
DEPT/AGENCY:
XXXX
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AP 29.87: 0.080
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	10:42
INTERNAL STANDARD	0.000	10:42
INTERNAL STANDARD	VERIFIED	10:42
Xq = 0.085 (1.12%)		
EXTERNAL STANDARD	0.083	10:42
X[1] = 0.0826 (0.0009)	(0.0021)	
BLANK TEST	0.000	10:43
SUBJECT SAMPLE (Vol=2.03L)	0.095	10:44
X[1] = 0.0958 (-0.0007)	(0.0008)	
BLANK TEST	0.000	10:45
EXTERNAL STANDARD	0.082	10:45
X[1] = 0.0824 (0.0005)	(0.0027)	
BLANK TEST	0.000	10:46

Fiber 2 Average = 0.0006
Fiber 3 Average = 0.0023

CTE 2/19/15



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100416

Date: 02/19/2015
Time: 11:57:20

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

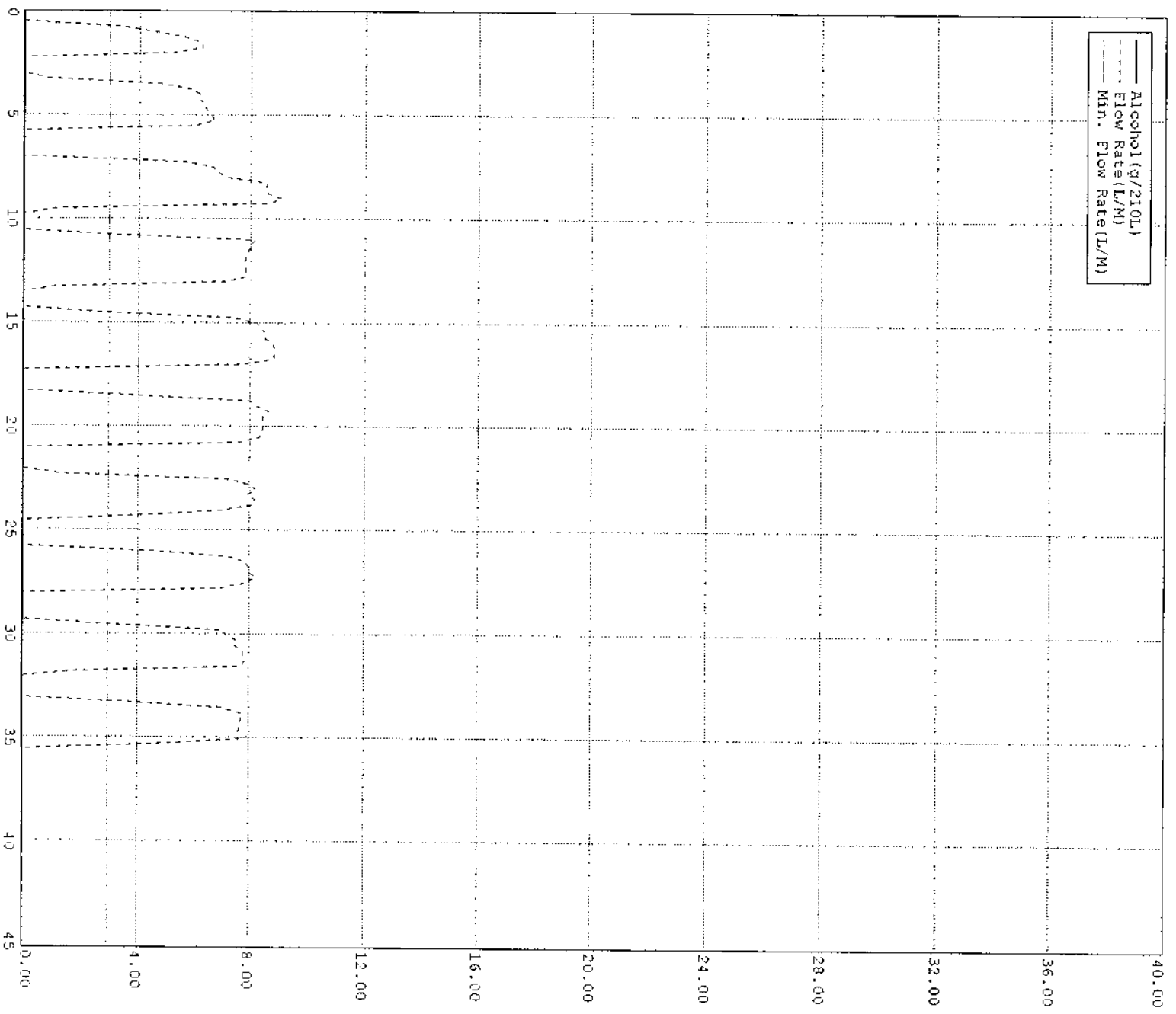
OPERATOR NAME:
EXCEEDED ATTEMPTS
OPERATOR'S #: XXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.90: 0.080
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	11:58
BLANK TEST	0.000	11:58
INTERNAL STANDARD	0.082	11:58
EXTERNAL STANDARD	0.000	11:59
BLANK TEST	0.000	11:59
SUBJECT SAMPLE	XXX	12:00

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 02/19/2015
Time: 12:09:52

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

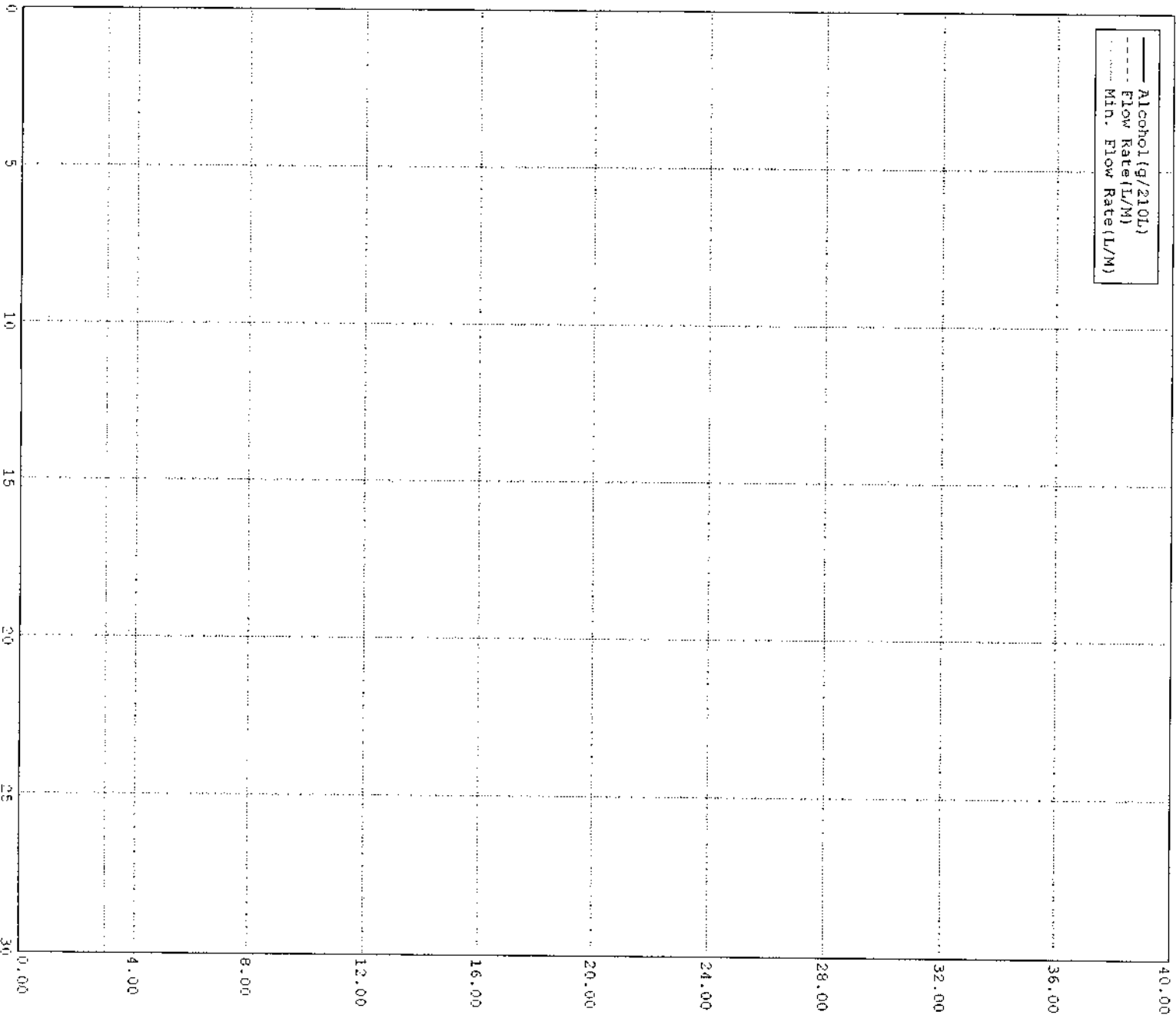
OPERATOR NAME:
RFI XXXX
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.90: 0.080
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK
BLANK TEST PASSED 12:11
INTERNAL STANDARD VERIFIED 12:11
EXTERNAL STANDARD 0.083 12:12
BLANK TEST 0.000 12:12

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100416

Date: 02/19/2015
Time: 12:26:35

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 29.89: 0.080
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	12:27
BLANK TEST	0.000	12:27
INTERNAL STANDARD	VERIFIED	12:27
EXTERNAL STANDARD	0.083	12:28
BLANK TEST	0.000	12:29
SUBJECT SAMPLE (Vol=2.15L)	0.000	12:29
BLANK TEST	0.000	12:30
EXTERNAL STANDARD	0.083	12:30
BLANK TEST	0.000	12:31

