

Alaska Scientific Crime Detection Laboratory

DataMaster Certification Form

Issued: 10/9/2014
Effective: 10/9/2014

Version: DMCEF 2014 R1
Status: Active

Instrument S/N 100423 Analyst Colleen O'Bryant Start Date 11/21/14

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 1500⁰⁰⁸ L (1.3L to 1.7L)

5. Linearity Test (attached) 1.5

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 Both Lot 14130 Exp 5/12/16
 1. Simulator S/N DR5298 Date Calibrated 2/19/14
- vi. 0.300g/210L Mnf Both Lot 14150 Exp 6/2/16
 1. Simulator S/N SD1177 Date Calibrated 2/20/14

6. Functional Tests (attached)

- a. Incomplete
- b. Invalid
- c. Interference

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

d. 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 11/25/14

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 11/21/2014
Time: 13:52:03

VERSIONS

DMT: 2.00
PIC: 3.03
Modem: 2.3
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
Breath Tube = 48.1°C PASSED

PUMP INFO

Flow Rate = 4.562 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: 100423

Date: 11/21/2014
Time: 1:54 PM

Temperatures (°C)

Sample Cell: 48.9°C
Breath Tube: 47.9°C

Current Barometer 28.7 in
Volume (Ltr) 1.56

Settings

Lamp: 1.76 V
Bias: 80 V
Cooler: 1.61 V
Chopper: 528 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.069 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 09/30/2014
Time: 10:52:52

OPERATOR NAME:
NPAS TECH
CERTIFICATE #: GUTH2100 DR7001 13340, 34.0C

Ca = 0.1000
CAL = 0.989254 0.800 <= CAL < 1.200
b1 = 0.0003 0.0000 <= b1 < 0.0040
b2 = 0.0038 0.0010 <= b2 < 0.0100
b3 = 0.0003 0.0000 <= b3 < 0.0040
Xq = 0.0933 0.0500 <= Xq < 0.2000
a21 = 1.151649 1.050 <= a21 < 1.300
a31 = 0.545950 0.300 <= a31 < 0.800

RLM

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100423

Date: 11/21/2014
Time: 13:56:54

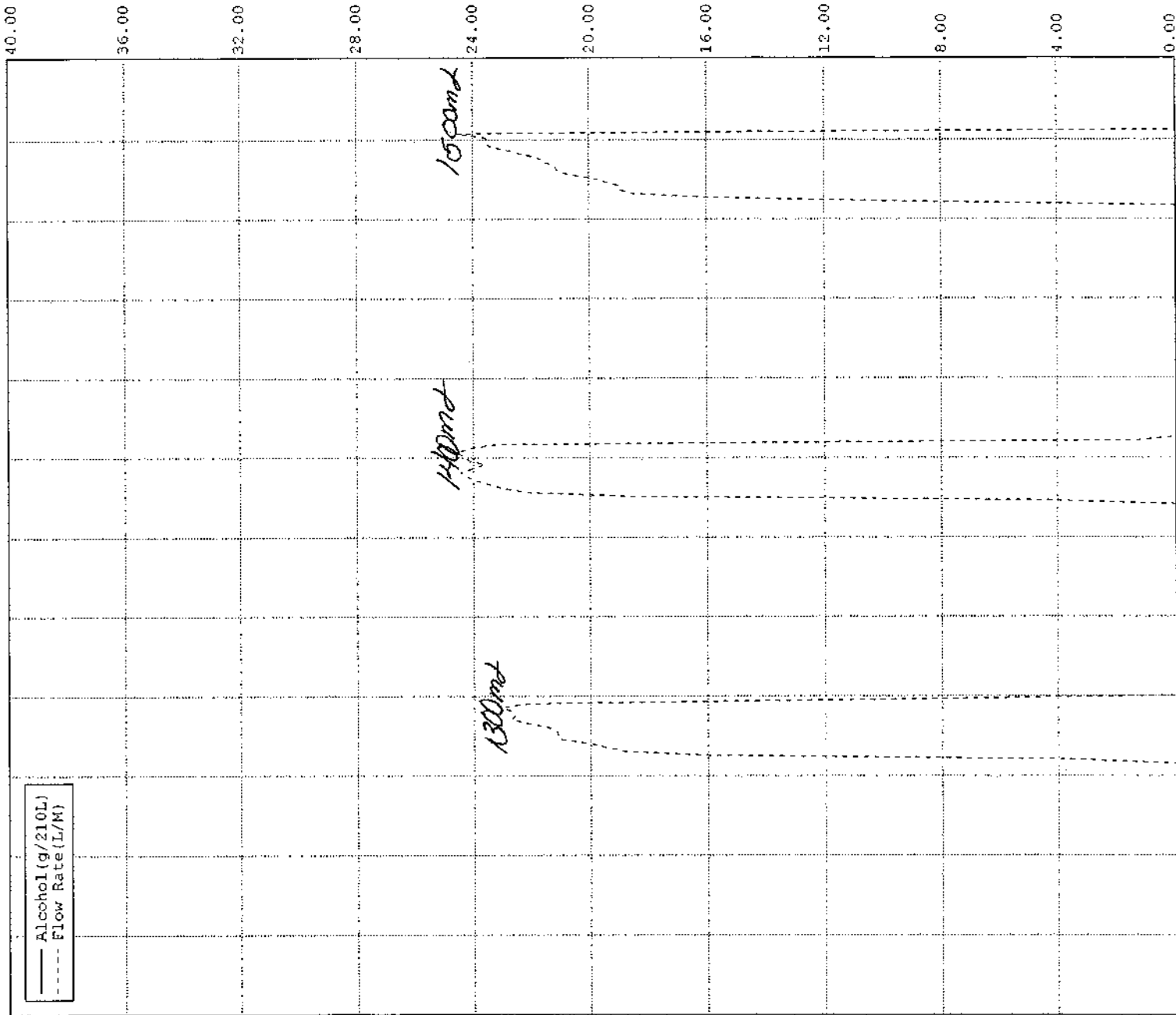
SUBJECT NAME:
TEST TEST
LICENSE #: VOLUME

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 28.66: 0.076
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	13:58
BLANK TEST	0.000	13:58
INTERNAL STANDARD	VERIFIED	13:58
EXTERNAL STANDARD	0.076	13:58
BLANK TEST	0.000	13:59
SUBJECT SAMPLE	0.000	14:00
BLANK TEST	0.000	14:01
EXTERNAL STANDARD	0.076	14:01
BLANK TEST	0.000	14:02



LINEARITY CHECK

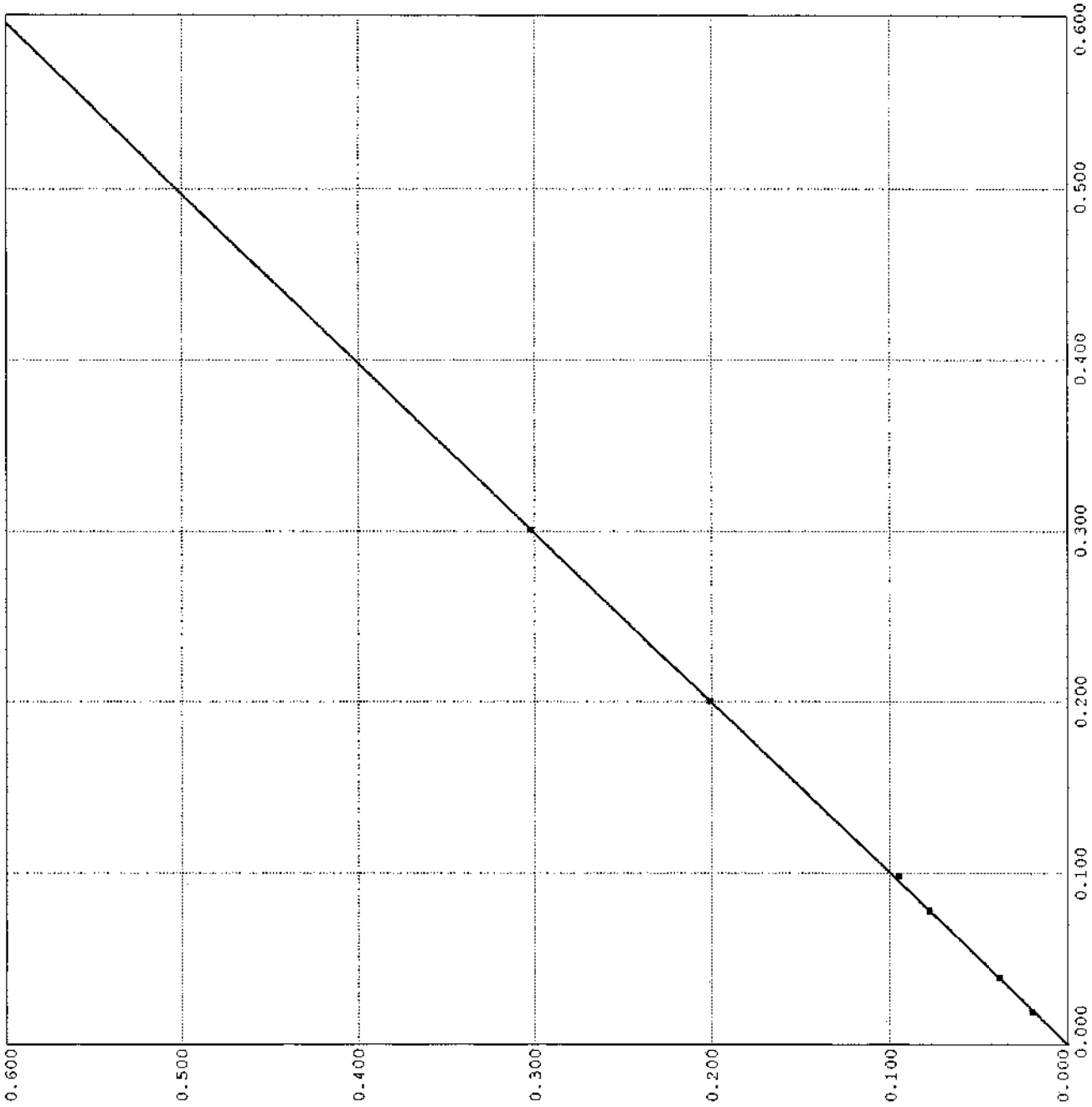
Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 11/24/2014
 Time: 10:48:21

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

TARGET	AVERAGE	STD. DEV.
0.019	0.0206	0.0003
0.039	0.0393	0.0002
0.078	0.0790	0.0002
0.098	0.0960	0.0003
0.200	0.2020	0.0003
0.300	0.3029	0.0009

SLOPE = 1.008513
 R² = 0.999829



CS

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100423

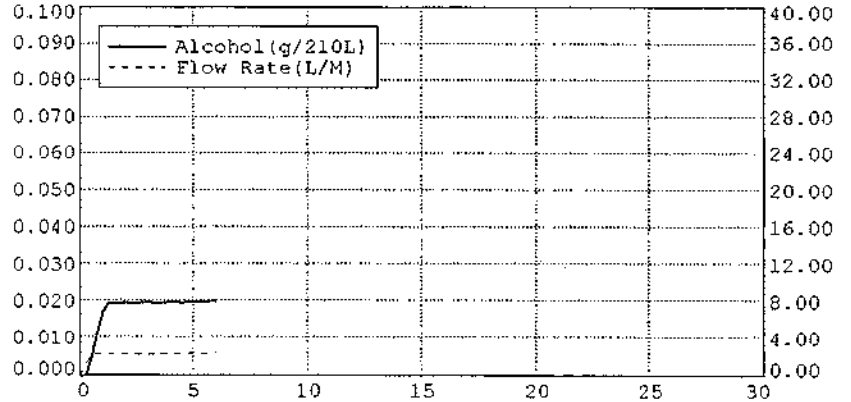
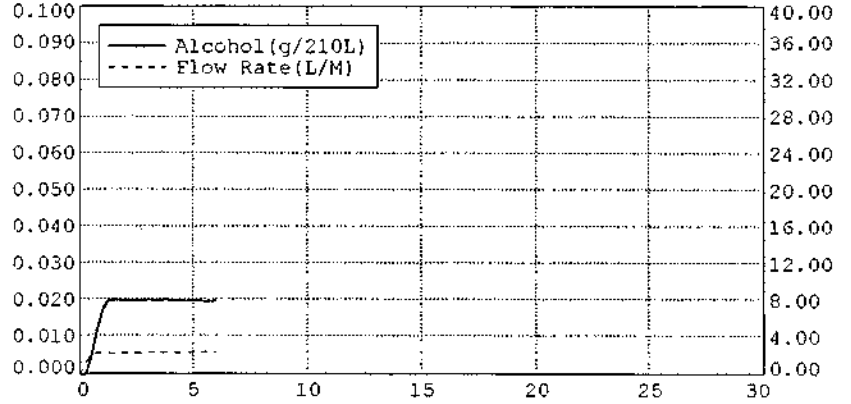
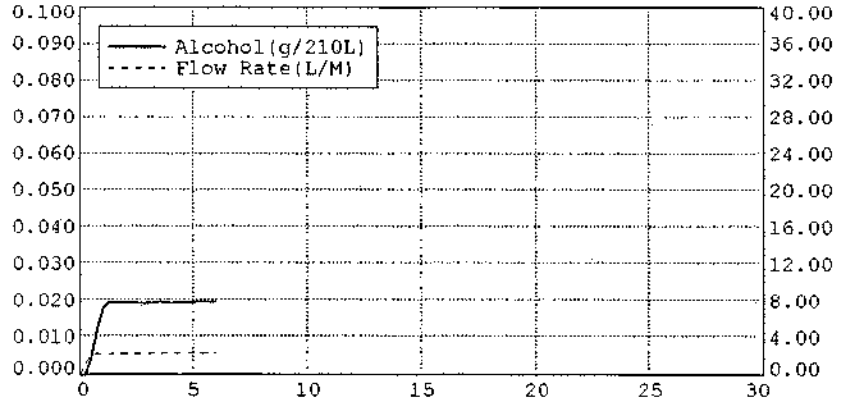
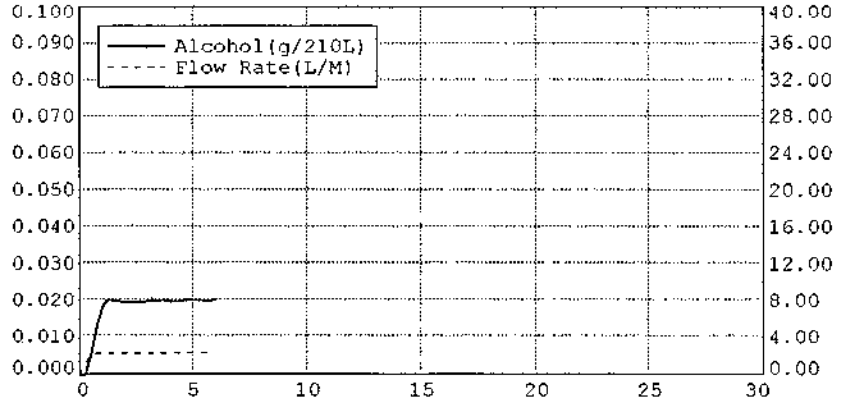
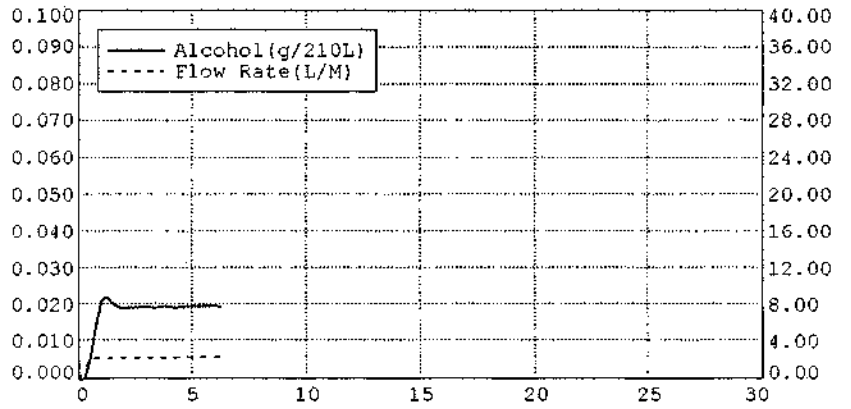
Date: 11/24/2014
Time: 10:48:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.46: 0.019
LOT #: 00813020A1
EXPIRATION: 03/01/2015

BLANK TEST	0.000	10:49
INTERNAL STANDARD	VERIFIED	10:49
EXTERNAL STANDARD	0.020	10:49
BLANK TEST	0.000	10:50
EXTERNAL STANDARD	0.020	10:51
BLANK TEST	0.000	10:51
EXTERNAL STANDARD	0.020	10:52
BLANK TEST	0.000	10:53
EXTERNAL STANDARD	0.020	10:53
BLANK TEST	0.000	10:54
EXTERNAL STANDARD	0.020	10:54
BLANK TEST	0.000	10:55

Average = 0.0206
Std Dev = 0.0003



LINEARITY CHECK: Control Test 2

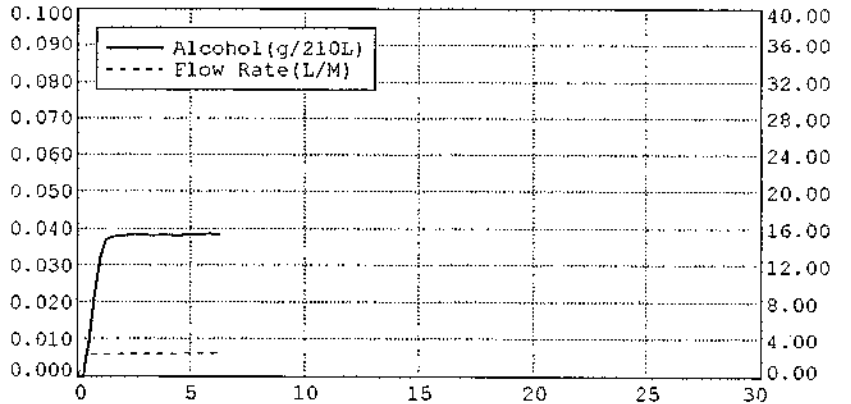
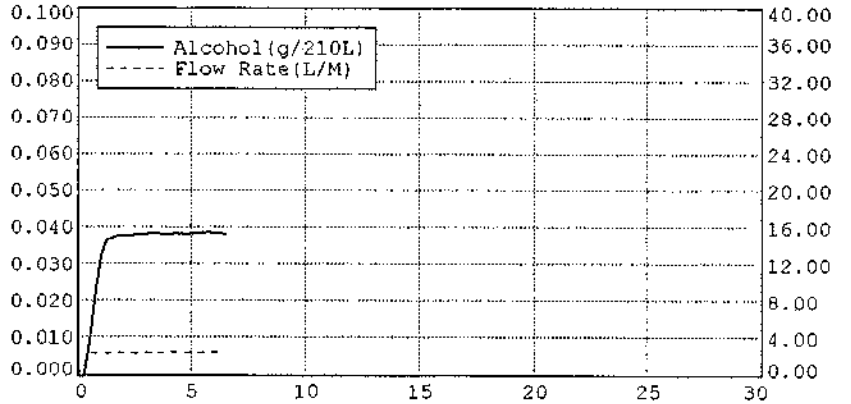
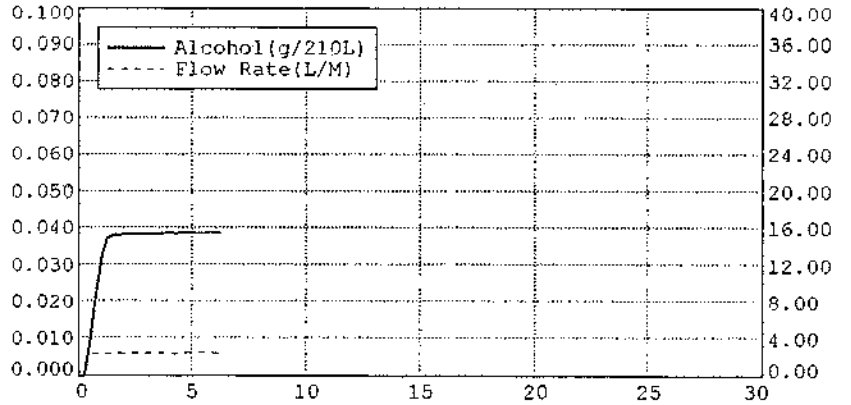
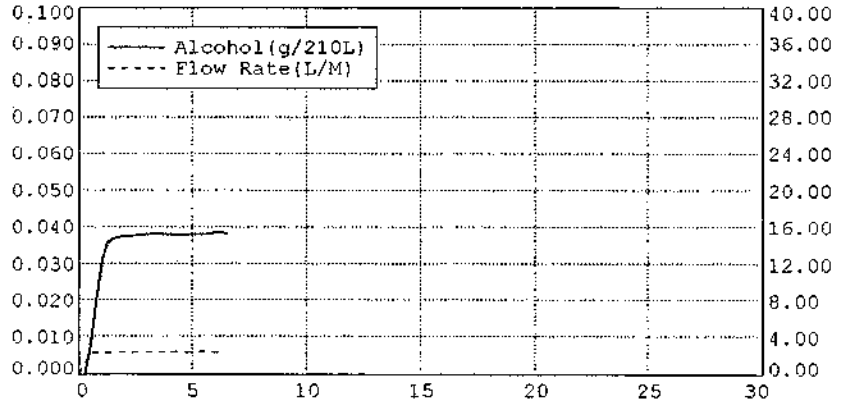
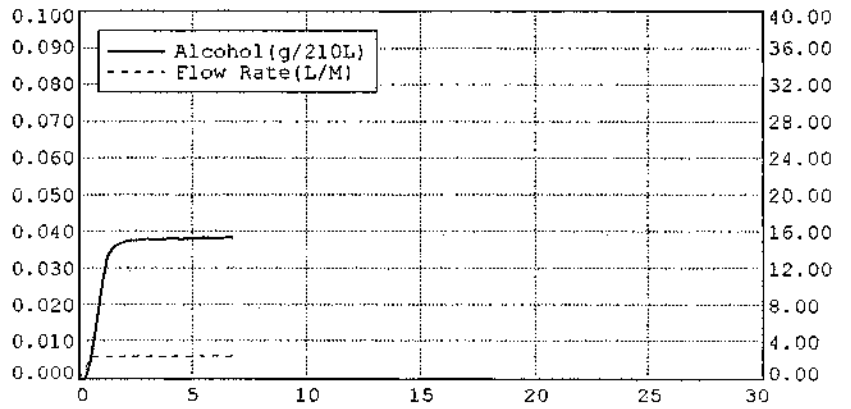
Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 11/24/2014
Time: 10:55:31

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.040
TARGET AT 29.46: 0.039
LOT #: 00813040A2
EXPIRATION: 03/01/2015

BLANK TEST	0.000	10:56
INTERNAL STANDARD	VERIFIED	10:56
EXTERNAL STANDARD	0.039	10:57
BLANK TEST	0.000	10:58
EXTERNAL STANDARD	0.039	10:58
BLANK TEST	0.000	10:59
EXTERNAL STANDARD	0.039	10:59
BLANK TEST	0.000	11:00
EXTERNAL STANDARD	0.039	11:00
BLANK TEST	0.000	11:01
EXTERNAL STANDARD	0.039	11:01
BLANK TEST	0.000	11:02

Average = 0.0393
Std Dev = 0.0002



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
DATAMASTER dmt: 100423

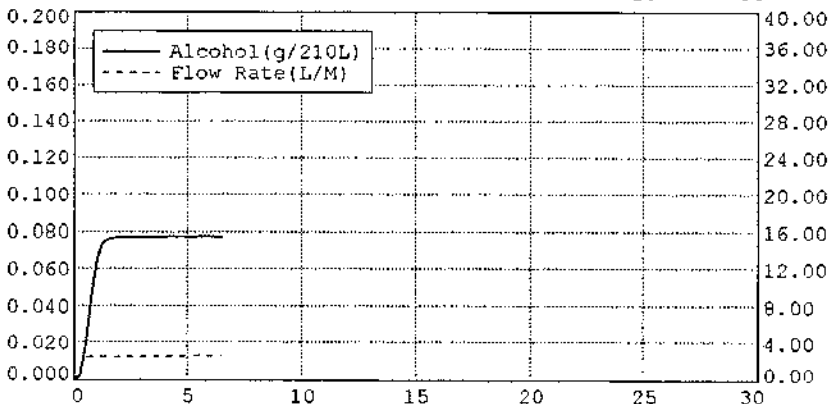
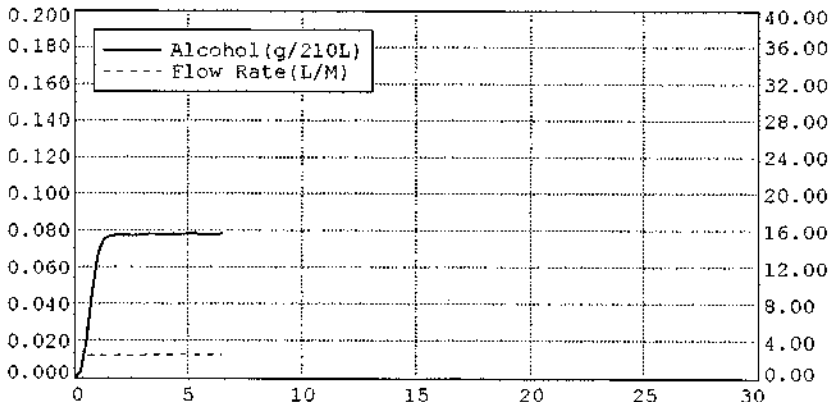
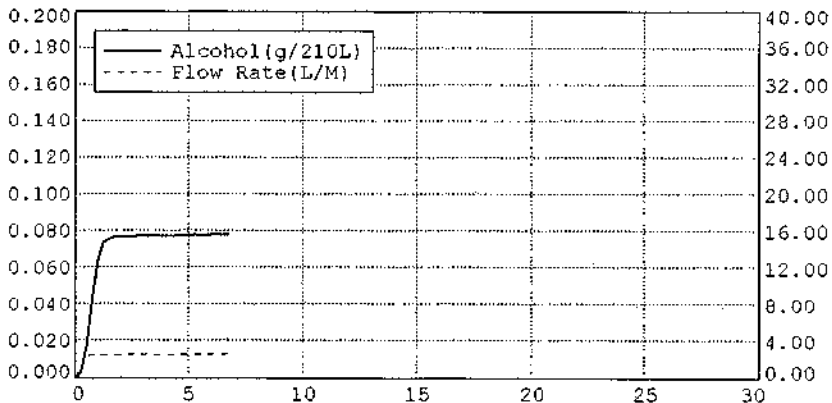
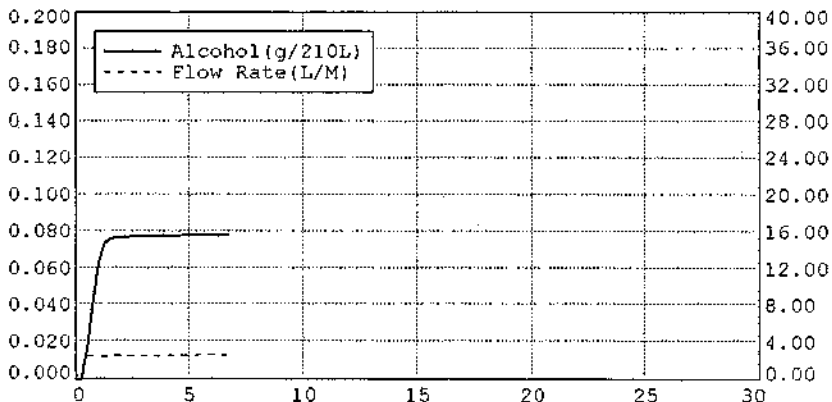
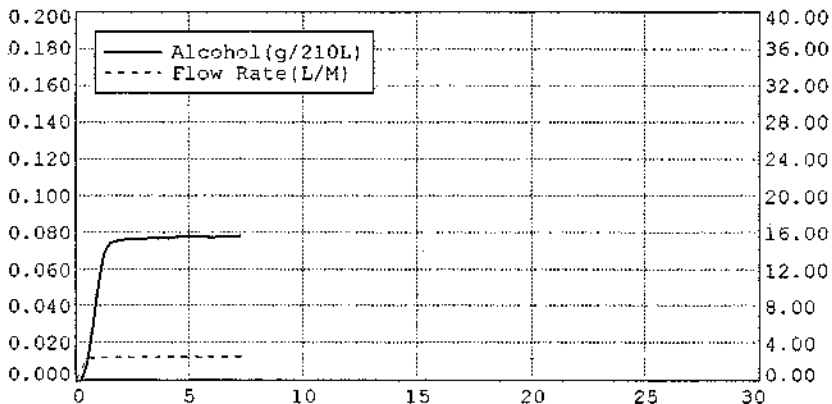
Date: 11/24/2014
Time: 11:03:23

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.46: 0.078
LOT #: 11313080A1
EXPIRATION: 06/01/2015

BLANK TEST	0.000	11:04
INTERNAL STANDARD	VERIFIED	11:04
EXTERNAL STANDARD	0.079	11:04
BLANK TEST	0.000	11:05
EXTERNAL STANDARD	0.078	11:06
BLANK TEST	0.000	11:06
EXTERNAL STANDARD	0.079	11:07
BLANK TEST	0.000	11:08
EXTERNAL STANDARD	0.079	11:08
BLANK TEST	0.000	11:09
EXTERNAL STANDARD	0.078	11:09
BLANK TEST	0.000	11:10

Average = 0.0790
Std Dev = 0.0002



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
 DATAMASTER dmt: 100423

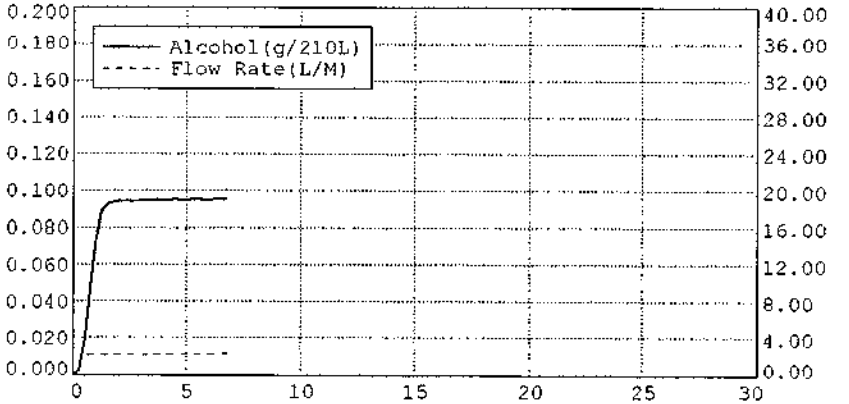
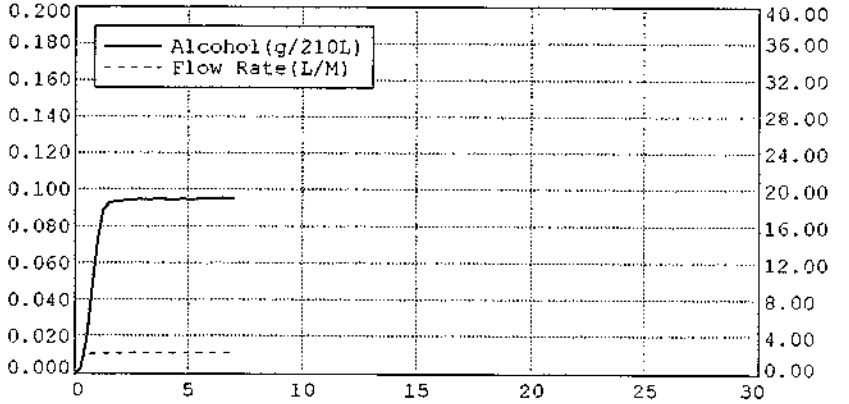
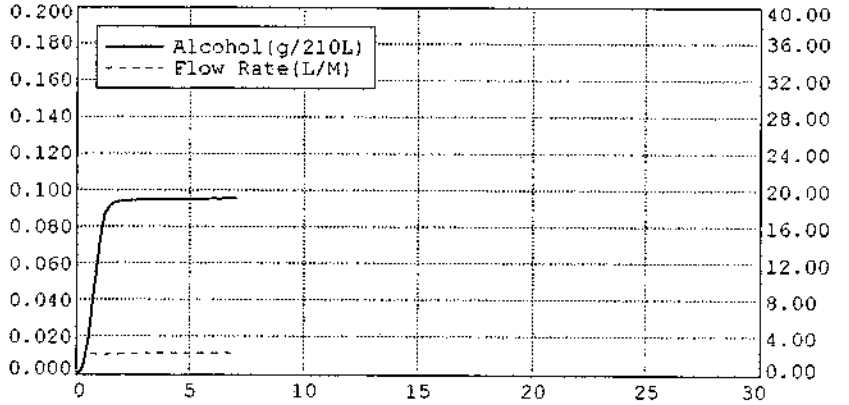
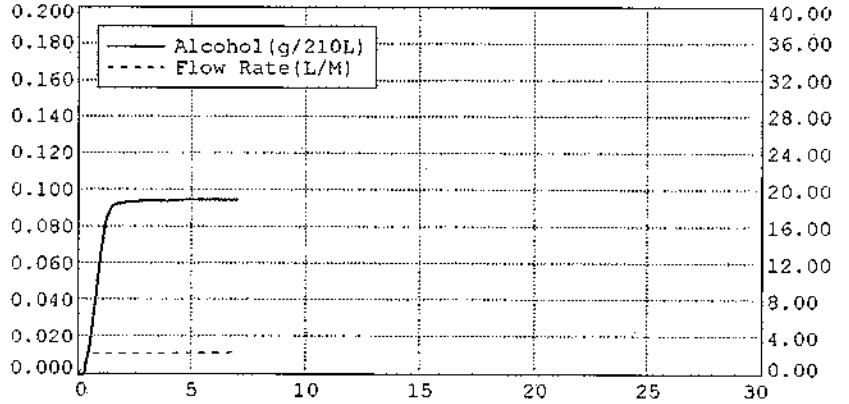
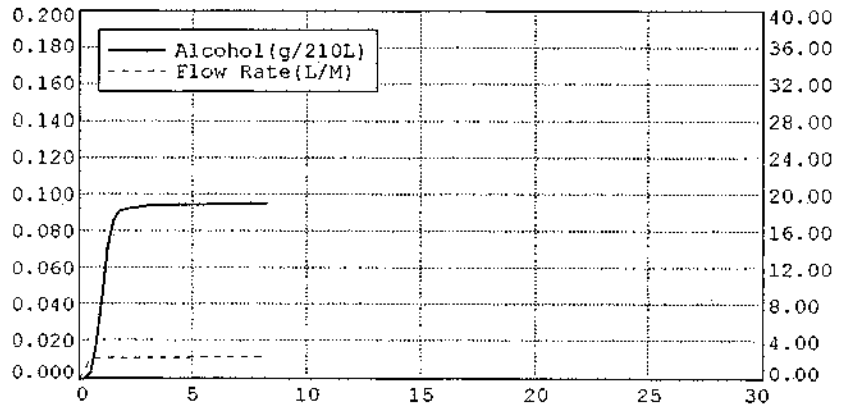
Date: 11/24/2014
 Time: 15:19:22

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
 TARGET AT 29.51: 0.098
 LOT #: 00813100A3
 EXPIRATION: 03/01/2015

BLANK TEST	0.000	15:20
INTERNAL STANDARD	VERIFIED	15:20
EXTERNAL STANDARD	0.096	15:21
BLANK TEST	0.000	15:22
EXTERNAL STANDARD	0.095	15:22
BLANK TEST	0.000	15:23
EXTERNAL STANDARD	0.096	15:23
BLANK TEST	0.000	15:24
EXTERNAL STANDARD	0.096	15:24
BLANK TEST	0.000	15:25
EXTERNAL STANDARD	0.096	15:25
BLANK TEST	0.000	15:26

Average = 0.0960
 Std Dev = 0.0003



LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety
 DATAMASTER dmt: 100423

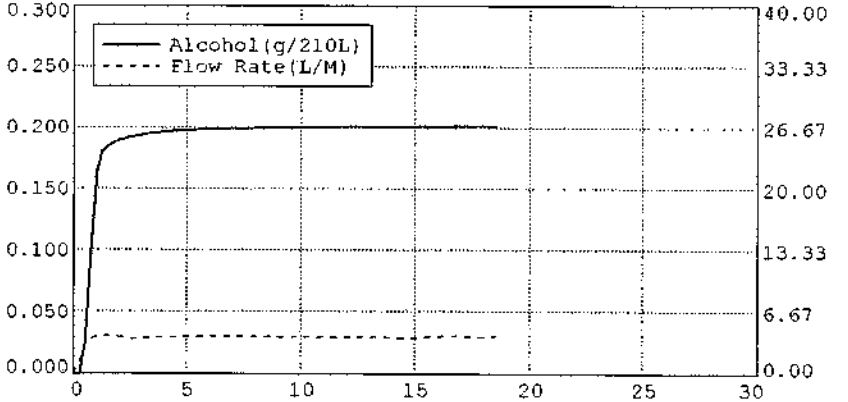
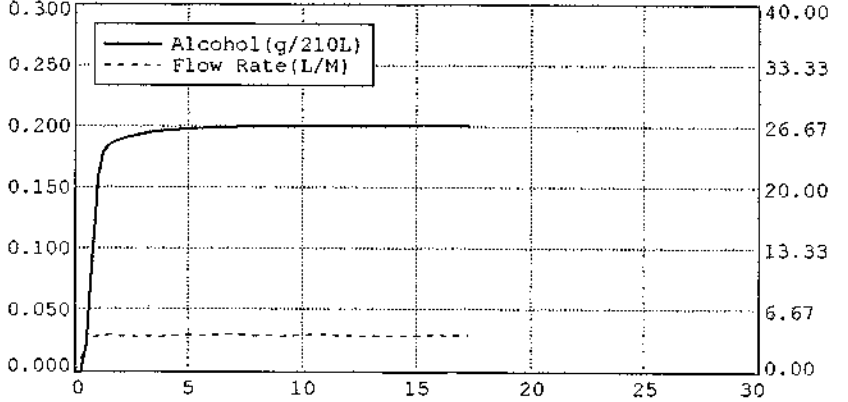
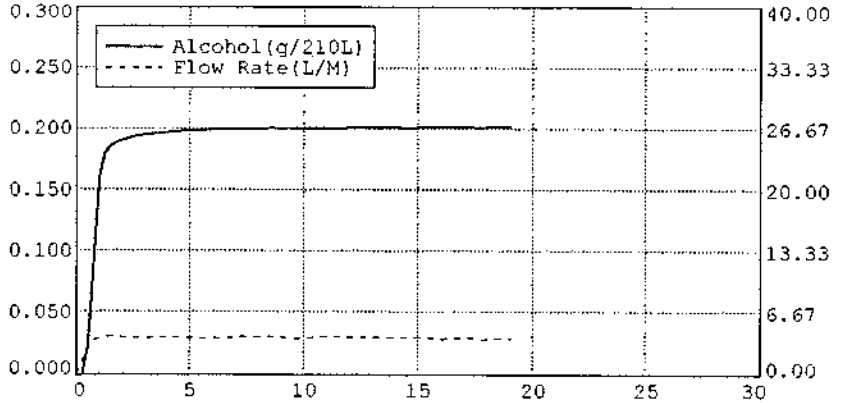
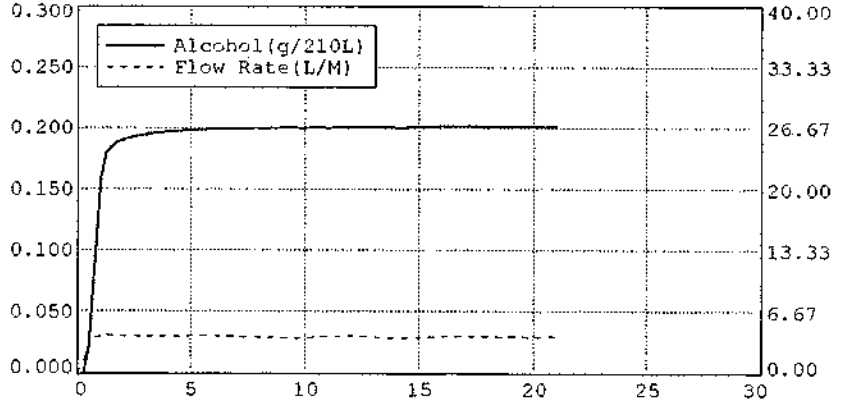
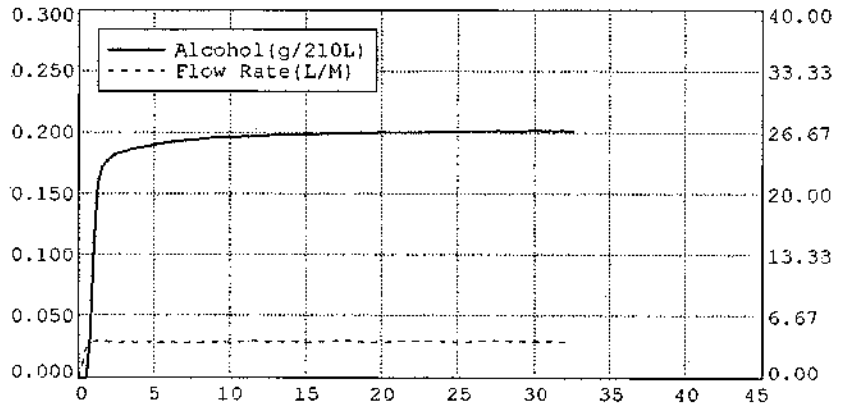
Date: 11/24/2014
 Time: 15:27:25

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200
 LOT #: 14130
 EXPIRATION: 05/12/2016

BLANK TEST	0.000	15:28
INTERNAL STANDARD	VERIFIED	15:28
EXTERNAL STANDARD	0.202	15:29
BLANK TEST	0.000	15:30
EXTERNAL STANDARD	0.202	15:30
BLANK TEST	0.000	15:31
EXTERNAL STANDARD	0.202	15:31
BLANK TEST	0.000	15:32
EXTERNAL STANDARD	0.201	15:33
BLANK TEST	0.000	15:34
EXTERNAL STANDARD	0.201	15:34
BLANK TEST	0.000	15:35

Average = 0.2020
 Std Dev = 0.0003



LINEARITY CHECK: Control Test 6

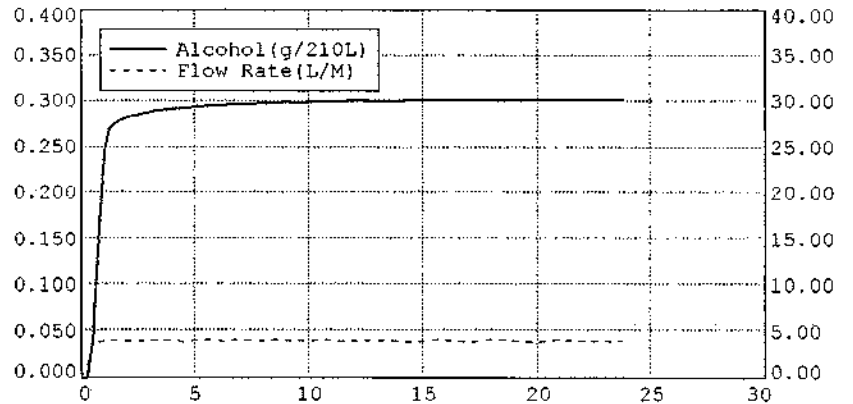
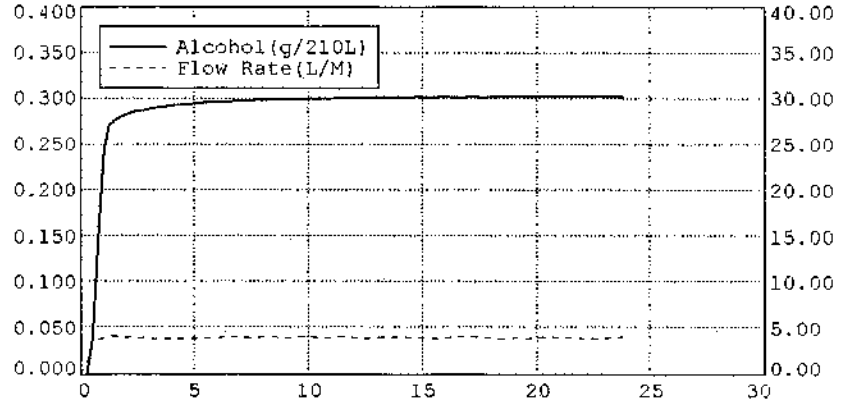
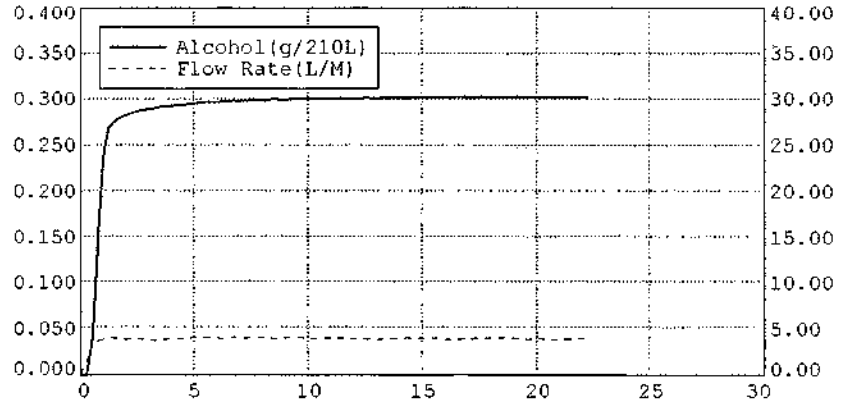
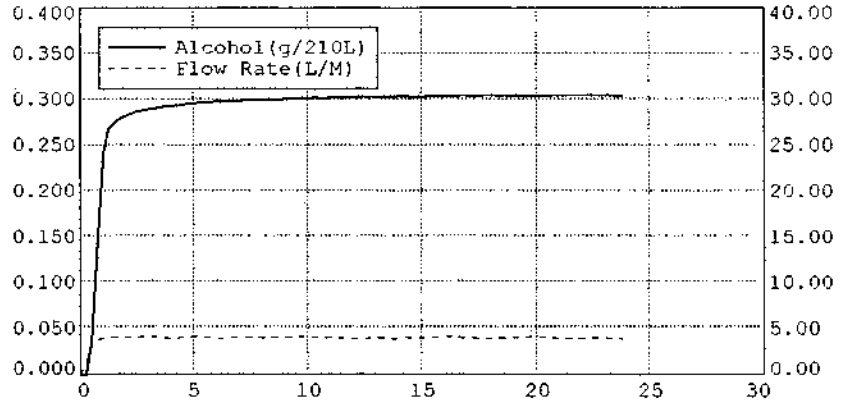
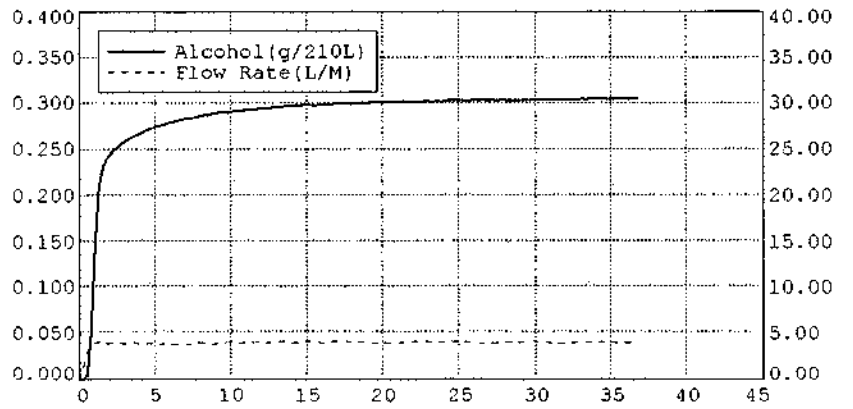
Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 11/24/2014
 Time: 15:37:00

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.300
 LOT #: 14150
 EXPIRATION: 06/02/2016

BLANK TEST	0.000	15:38
INTERNAL STANDARD	VERIFIED	15:38
EXTERNAL STANDARD	0.304	15:38
BLANK TEST	0.000	15:39
EXTERNAL STANDARD	0.303	15:40
BLANK TEST	0.000	15:41
EXTERNAL STANDARD	0.302	15:41
BLANK TEST	0.000	15:42
EXTERNAL STANDARD	0.302	15:43
BLANK TEST	0.000	15:44
EXTERNAL STANDARD	0.302	15:44
BLANK TEST	0.000	15:45

Average = 0.3029
 Std Dev = 0.0009



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 11/24/2014
Time: 15:53:12

SUBJECT NAME:
TEST TEST
LICENSE #: INCOMPLETE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.52: 0.078
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK PASSED 15:54
BLANK TEST 0.000 15:54
INTERNAL STANDARD VERIFIED 15:54
EXTERNAL STANDARD 0.078 15:54
BLANK TEST 0.000 15:55
SUBJECT SAMPLE INCOMPLETE 15:57

Alcohol (g/210L)	Flow Rate (L/M)
40.00	
36.00	
32.00	
28.00	
24.00	
20.00	
16.00	
12.00	
8.00	
4.00	
0.00	

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 11/25/2014
Time: 08:28:17

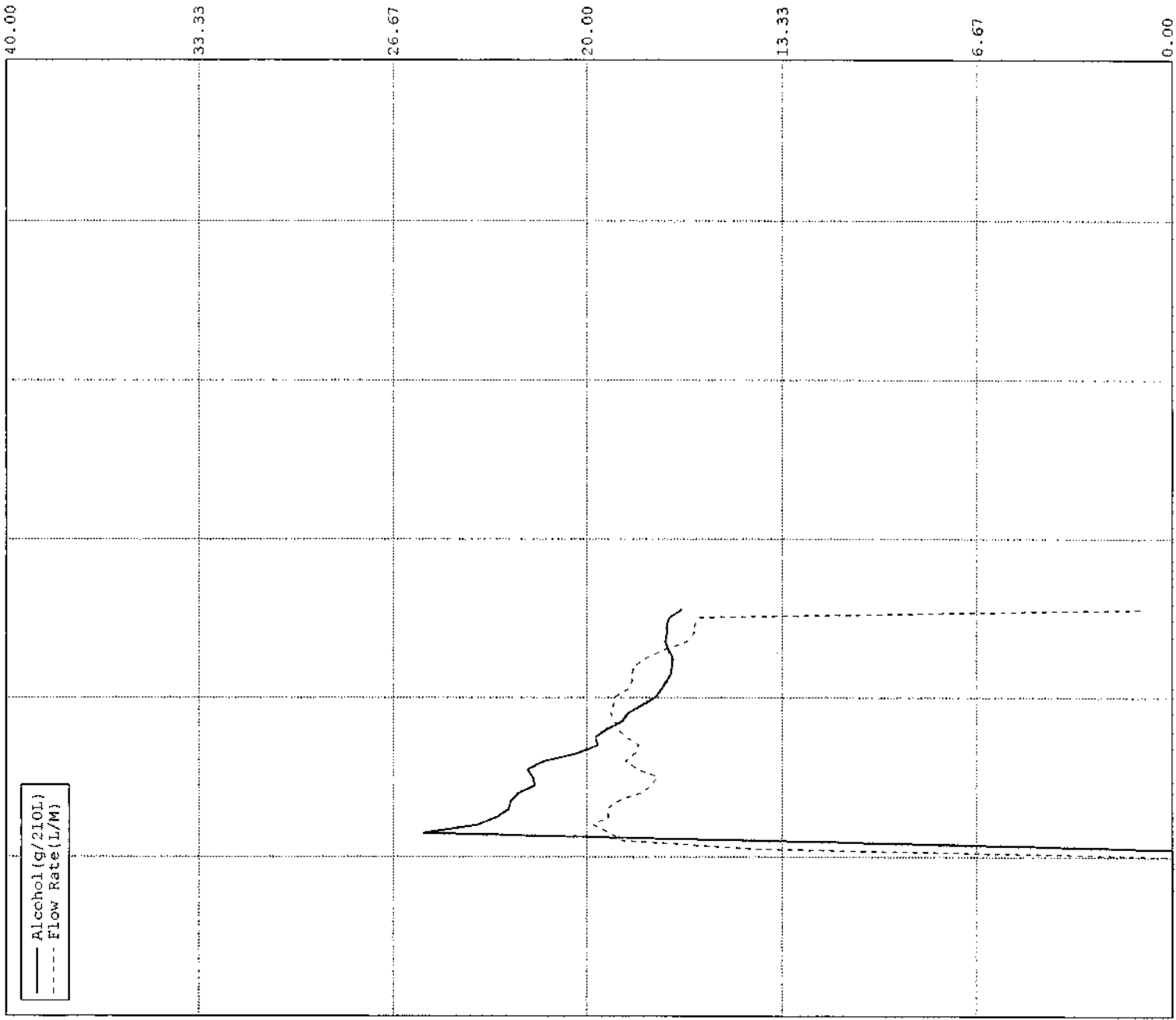
SUBJECT NAME:
TEST TEST
LICENSE #: INVALID

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.89: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK
BLANK TEST PASSED 08:30
INTERNAL STANDARD VERIFIED 08:30
EXTERNAL STANDARD 0.079 08:30
BLANK TEST 0.000 08:31
SUBJECT SAMPLE INVALID 08:32



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 11/25/2014
Time: 08:47:56

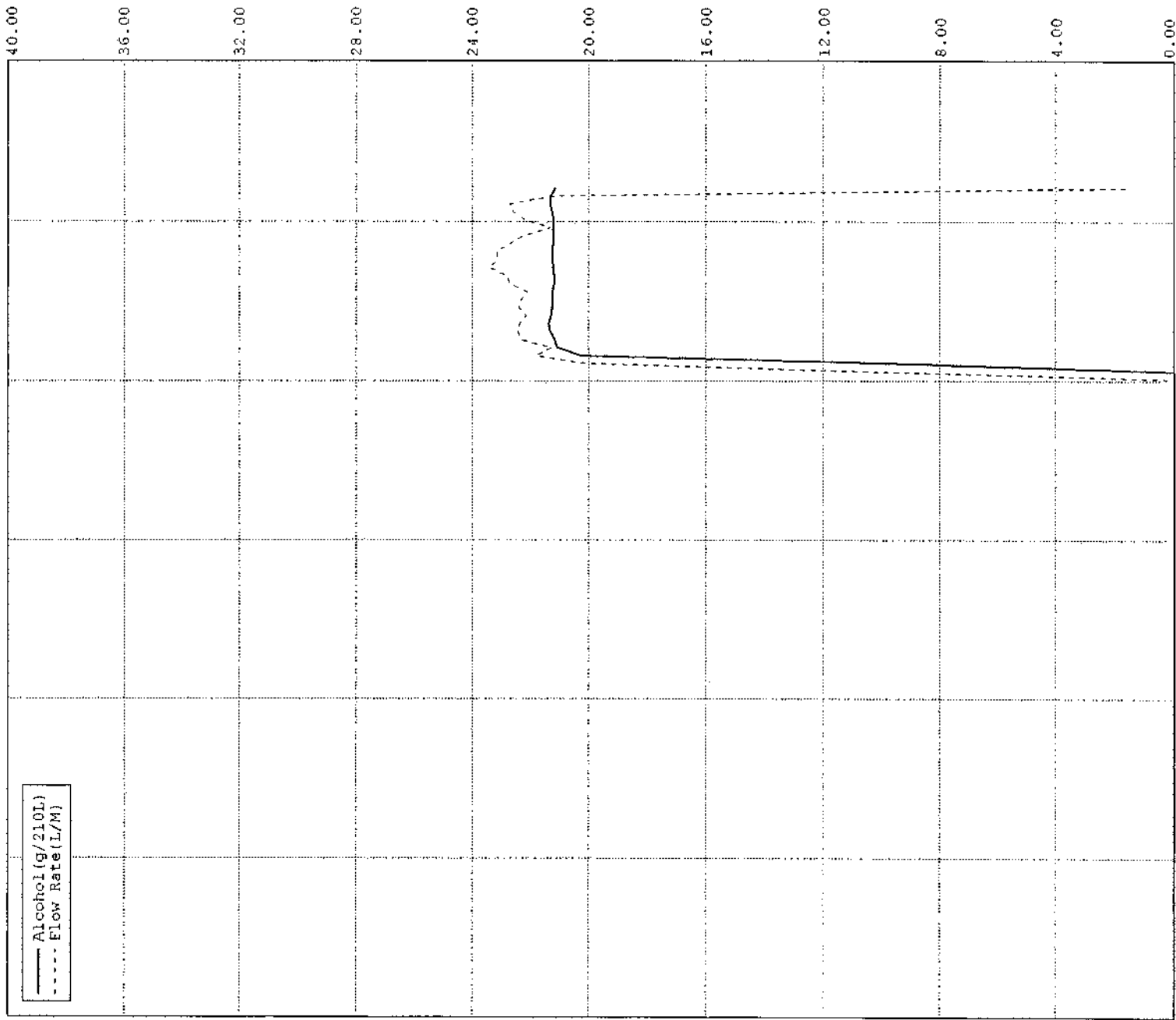
SUBJECT NAME:
TEST TEST
LICENSE #: INT-ACETONE

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.89: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK PASSED 08:49
BLANK TEST 0.000 08:49
INTERNAL STANDARD VERIFIED 08:50
Xq = 0.093 (0.84%) 0.079 08:50
EXTERNAL STANDARD X[1] = 0.0798 (0.0001) (0.0019)
BLANK TEST 0.000 08:51
SUBJECT SAMPLE INTERFERENCE 08:51
X[1] = 0.1059 (-0.0197) (-0.0001)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 11/25/2014
Time: 08:56:00

SUBJECT NAME:
TEST TEST
LICENSE #: INT-IPA

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

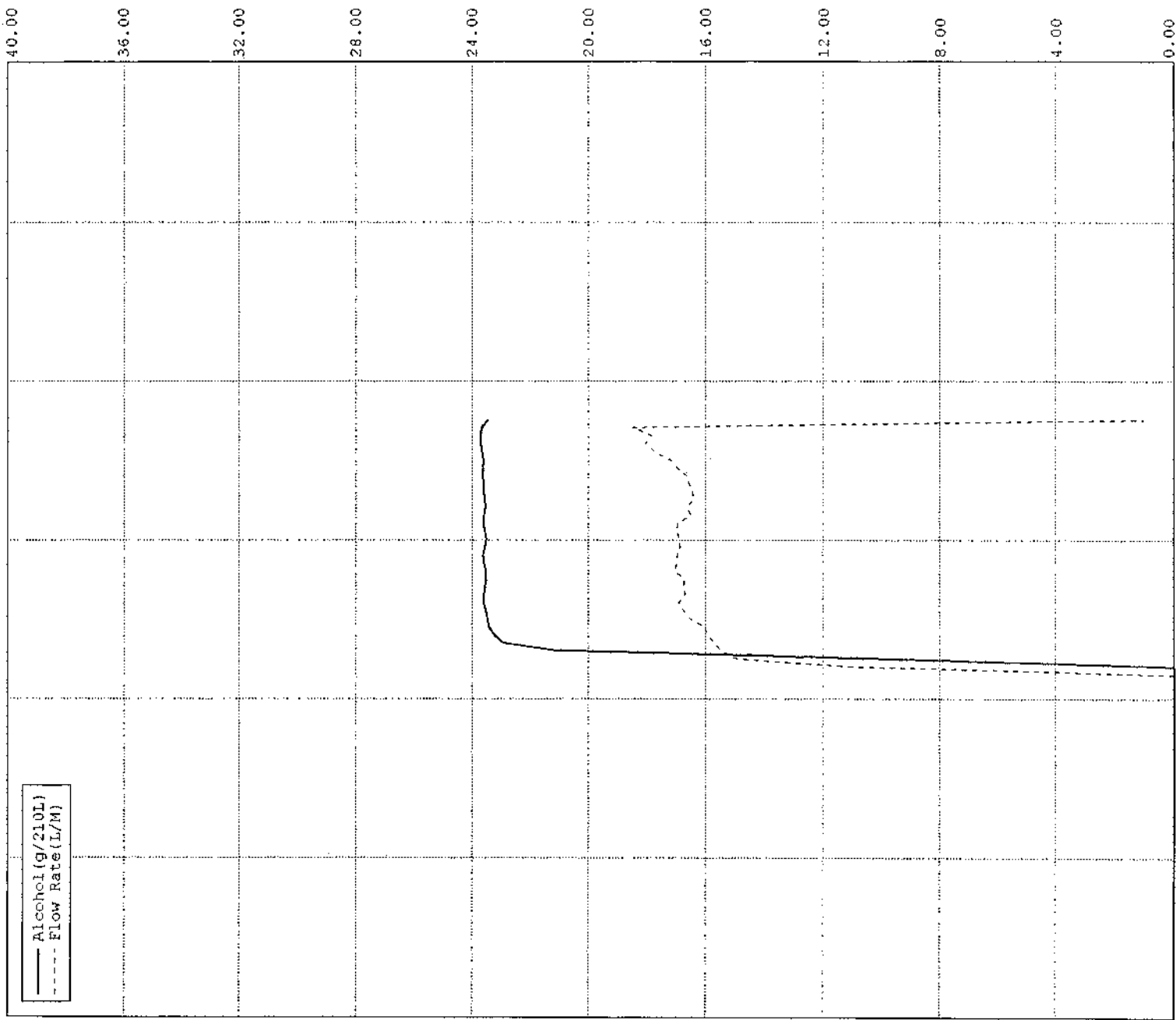
DEPT/AGENCY:
AAA1

CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.89: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK PASSED 08:57
BLANK TEST 0.000 08:57
INTERNAL STANDARD VERIFIED 08:57
Xq = 0.092 (1.31%)
EXTERNAL STANDARD 0.079 08:57
X[1] = 0.0794 (-0.0011) (0.0011)
BLANK TEST 0.000 08:58
SUBJECT SAMPLE INTERFERENCE 08:59
X[1] = 0.1176 (-0.0221) (0.0006)



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 11/25/2014
 Time: 09:01:26

SUBJECT NAME:
 TEST TEST
 LICENSE #: INT-NEGATIVE

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

DEPT/AGENCY:
 AAA1

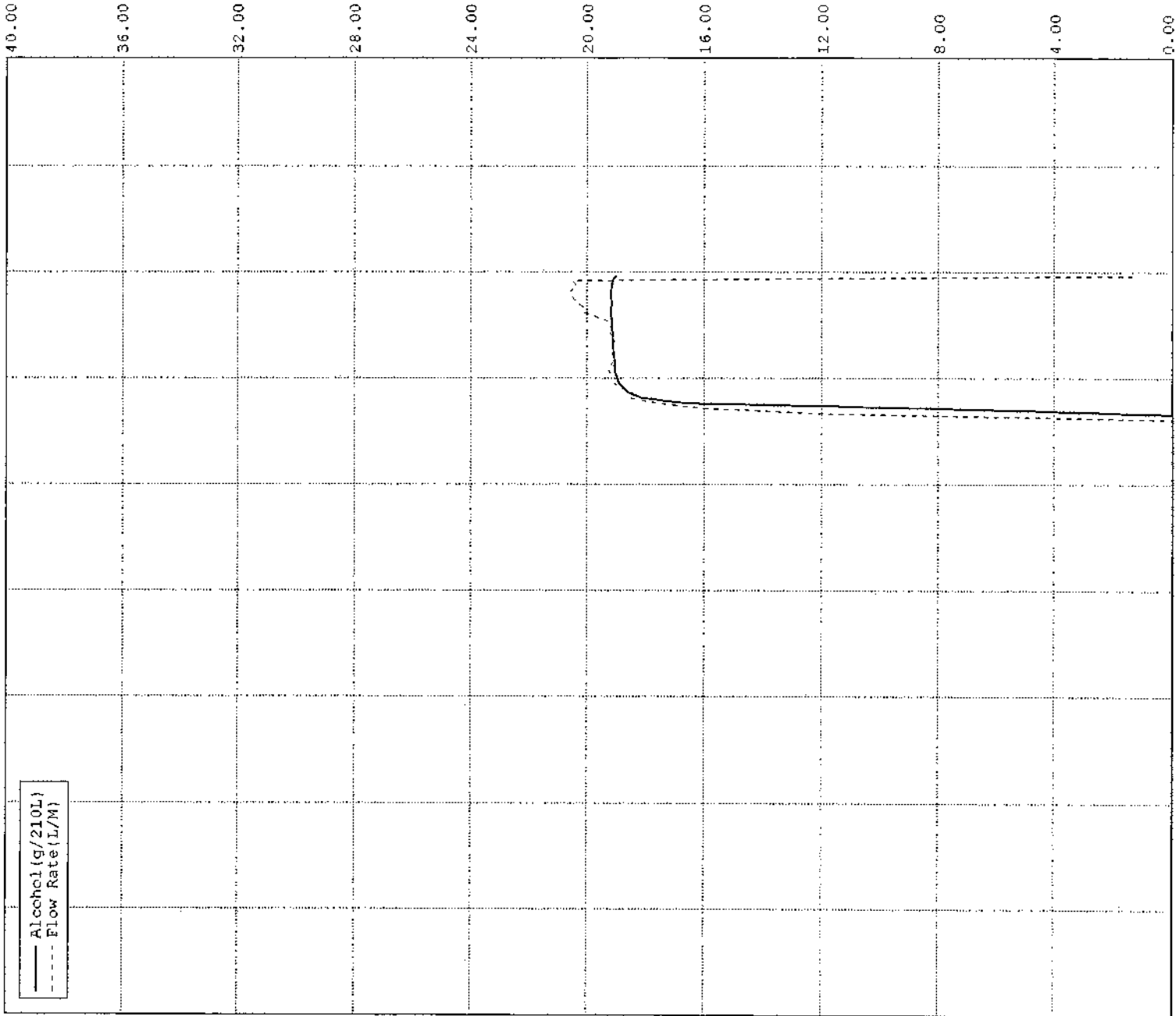
CASE/REPORT: 14-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.90: 0.079
 LOT #: 11313080A1
 EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	09:03
BLANK TEST	0.000	09:03
INTERNAL STANDARD	VERIFIED	09:03
Xq = 0.093 (0.66%)	0.080	09:03
EXTERNAL STANDARD	X[1] = 0.0801 (-0.0003)	(0.0020)
BLANK TEST	0.000	09:04
SUBJECT SAMPLE (Vol=2.05L)	0.094	09:05
X[1] = 0.0947 (-0.0014)	(0.0002)	
BLANK TEST	0.000	09:06
EXTERNAL STANDARD	0.079	09:06
X[1] = 0.0796 (-0.0006)	(0.0013)	
BLANK TEST	0.000	09:07

Filter 2 average -0.0005
~~0.000708~~^{11/25/14}
Filter 3 average 0.0015
~~0.0015~~^{11/25/14}
 0.0016



SUBJECT TEST

Alaska Department of Public Safety
 DATAMASTER chrt: 100423

Date: 11/25/2014
 Time: 09:09:46

SUBJECT NAME:
 TEST TEST
 LICENSE #: RFI

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

DEPT/AGENCY:
 AAAA

CASE/REPORT: 14-1234
 TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.91: 0.079
 LOT #: 11313080A1
 EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK PASSED 09:10
 BLANK TEST 0.000 09:10
 INTERNAL STANDARD VERIFIED 09:11
 EXTERNAL STANDARD 0.079 09:11
 BLANK TEST 0.000 09:12

RFI DETECTED

Alcohol (g/210L)	Flow Rate (L/M)
40.00	
36.00	
32.00	
28.00	
24.00	
20.00	
16.00	
12.00	
8.00	
4.00	
0.00	

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dnt: 100423

Date: 11/25/2014
Time: 09:37:29

SUBJECT NAME:
TEST TEST
LICENSE #: NONDRINKING

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

DEPT/AGENCY:
AAA1
CASE/REPORT: 14-1234
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.91: 0.079
LOT #: 11313080A1
EXPIRATION: 06/01/2015

DIAGNOSTIC CHECK	PASSED	09:38
BLANK TEST	0.000	09:38
INTERNAL STANDARD	VERIFIED	09:38
EXTERNAL STANDARD	0.080	09:38
BLANK TEST	0.000	09:39
SUBJECT SAMPLE	0.000	09:40
BLANK TEST	0.000	09:41
EXTERNAL STANDARD	0.080	09:41
BLANK TEST	0.000	09:42

