

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 100348 Analyst Brandi Barnett Start Date 8/21/15

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 1.5 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 09214080A3 Exp 5/1/17
- 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 JD1174 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 8/25/15

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/21/2015
Time: 09:14:31

VERSIONS
DMT: 3.01
PIC: 2.02
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.9°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 45.4°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.74 V PASSED
(1.04 V - 2.44 V)
Cooler Voltage = 1.64 V PASSED
(0.98 V - 2.30 V)
Bias Voltage = 79 V PASSED
(47 V - 111 V)
Chopper Freq = 536 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.4 in

PUMP INFO

Flow Rate = 4.470 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
(0.001 V <= 0.010 V)

FILTER INFO

Filter 1 PASSED
Filter 2 PASSED
Filter 3 PASSED

INTERNAL STANDARD

Xq = 0.09% 0.29% PASSED
(0.00% - 4.00%)

Technician Screen

DATAMASTER dmt: 100348

Date: 08/21/2015
Time: 9:27 AM

Temperatures (°C)

Sample Cell: 48.8°C
Breath Tube: 46.9°C

Current Barometer 29.7 in
Volume (Ltr) 1.50

Settings

Lamp: 1.76 V
Bias: 79 V
Cooler: 1.69 V
Chopper: 536 Hz

Voltages (V)

Flow: 1.04 V
Detector: 0.080 V

CALIBRATION FACTORS

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/12/2015
Time: 10:31:02

OPERATOR NAME:
COLLEEN S OBRYANT
CERTIFICATE #: 6237

Ca	=	0.1000			
CAL	=	0.943328	0.800	<=	CAL < 1.200
b1	=	0.0005	0.0000	<=	b1 < 0.0040
b2	=	0.0059	0.0010	<=	b2 < 0.0100
b3	=	0.0004	0.0000	<=	b3 < 0.0040
Xq	=	0.0896	0.0500	<=	Xq < 0.2000
a21	=	1.178630	1.050	<=	a21 < 1.300
a31	=	0.545030	0.300	<=	a31 < 0.800

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/21/2015
Time: 09:31:45

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

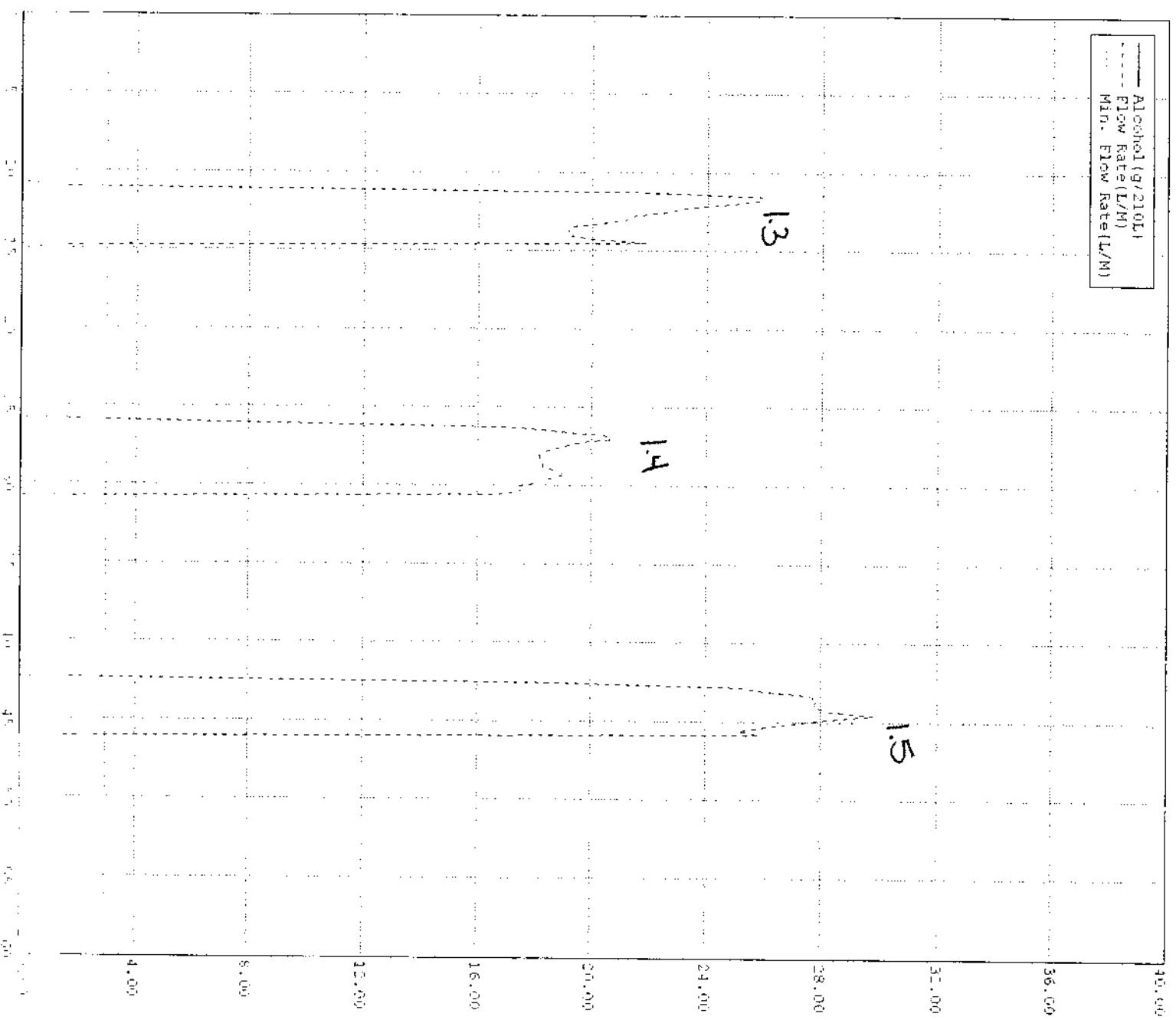
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.65: 0.079
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	09:32
BLANK TEST	0.000	09:33
INTERNAL STANDARD	VERIFIED	09:33
EXTERNAL STANDARD	0.076	09:33
BLANK TEST	0.000	09:34
SUBJECT SAMPLE (Vol=1.55u)	0.000	09:35
BLANK TEST	0.000	09:36
EXTERNAL STANDARD	0.076	09:36
BLANK TEST	0.000	09:37

BMB



LINEARITY CHECK

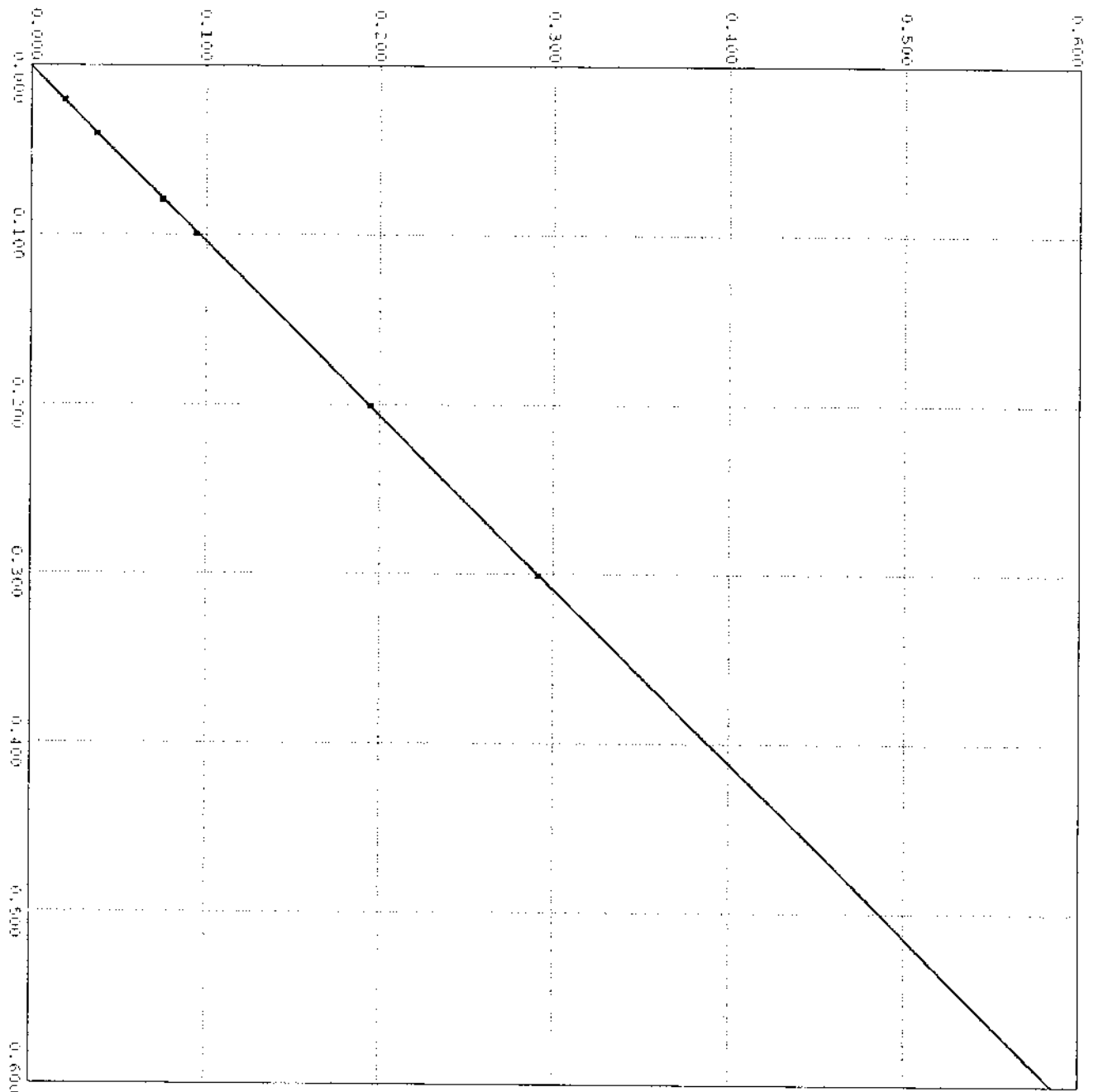
Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/21/2015
Time: 09:56:06

SUPERVISOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.020	0.0200	0.0000
0.040	0.0386	0.0005
0.079	0.0760	0.0000
0.099	0.0952	0.0004
0.200	0.1956	0.0005
0.300	0.2922	0.0004

SLOPE = 0.975903
R² = 0.999945



BMB

NEARITY CHECK: Control Test 1

Alaska Department of Public Safety
 DATA MASTER dmt: 100348

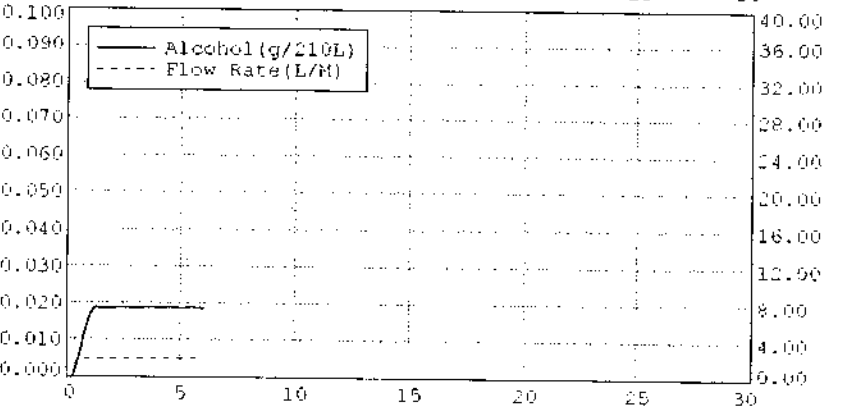
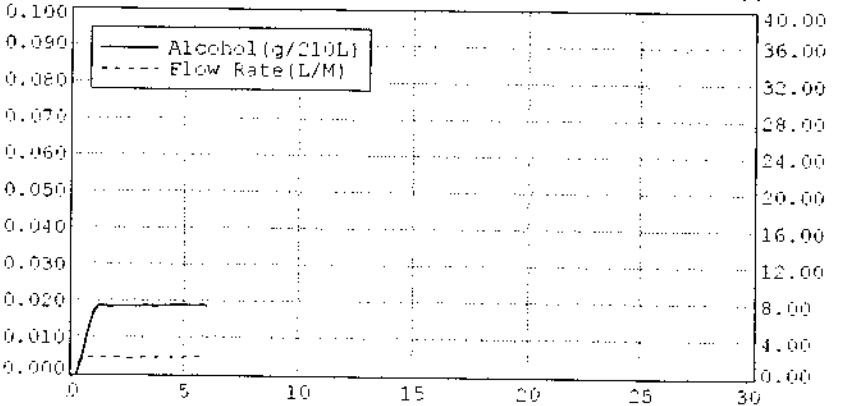
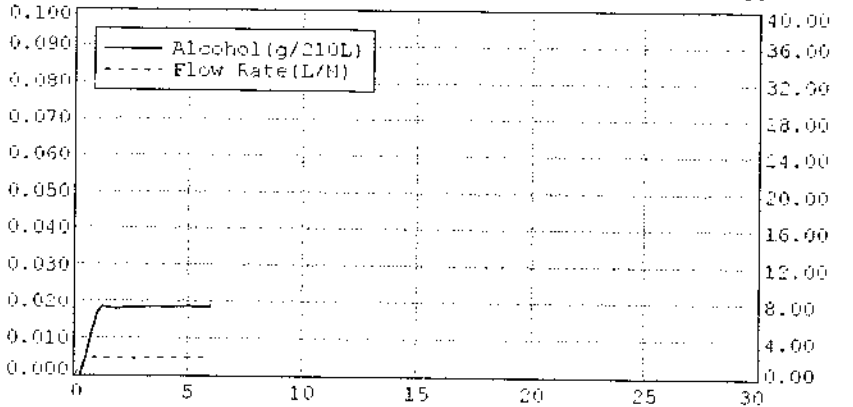
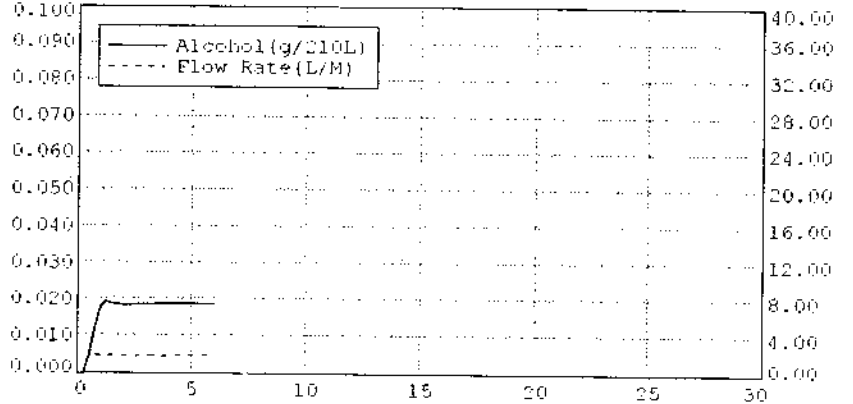
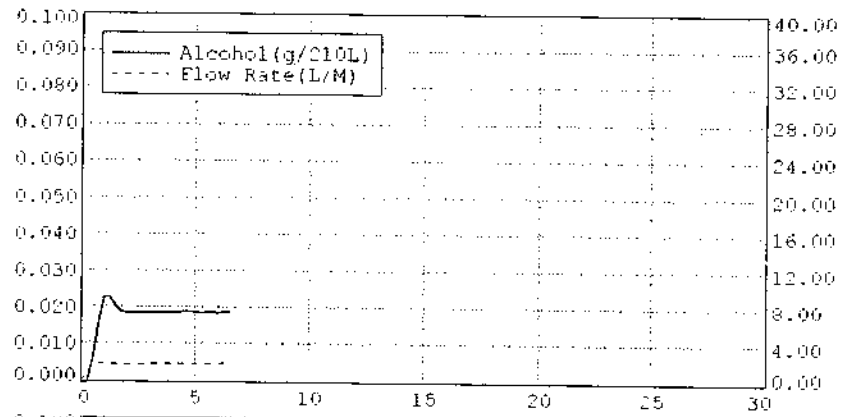
Date: 08/21/2015
 Time: 09:56:08

INTERNAL STANDARD INFORMATION

NOMINAL: 0.020
 TARGET AT 29.65: 0.020
 L# #: 02915020A2
 EXPIRATION: 03/05/2017
 TARGET PRESSURE: 543 psi

BLANK TEST	0.000	09:57
INTERNAL STANDARD	VERIFIED	09:57
INTERNAL STANDARD	0.020	09:57
BLANK TEST	0.000	09:58
INTERNAL STANDARD	0.020	09:58
BLANK TEST	0.000	09:59
INTERNAL STANDARD	0.020	09:59
BLANK TEST	0.000	10:00
INTERNAL STANDARD	0.020	10:01
BLANK TEST	0.000	10:01
INTERNAL STANDARD	0.020	10:02
BLANK TEST	0.000	10:03

Target range = 0.0200
 Dev = 0.0000



HEARITY CHECK: Control Test 2

aska Department of Public Safety
 MASTER dmt: 100348

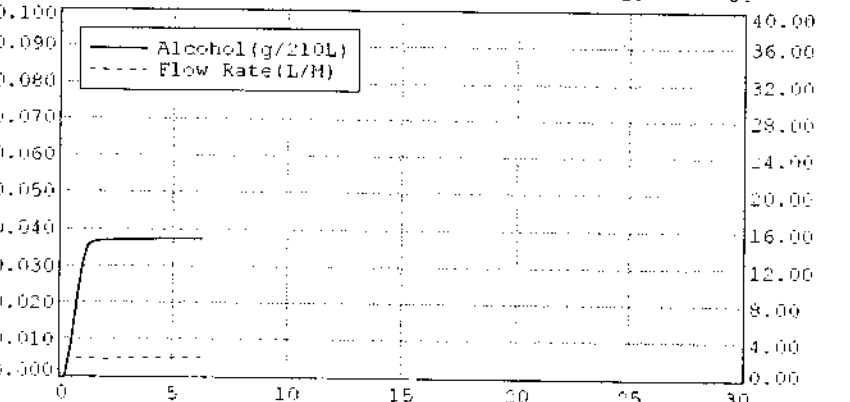
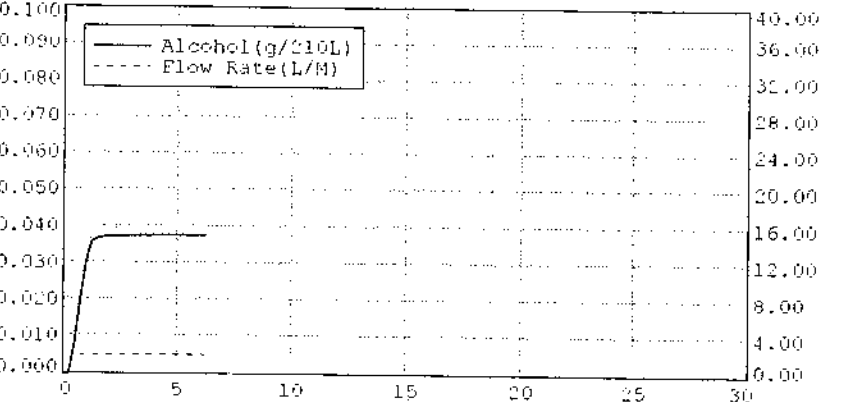
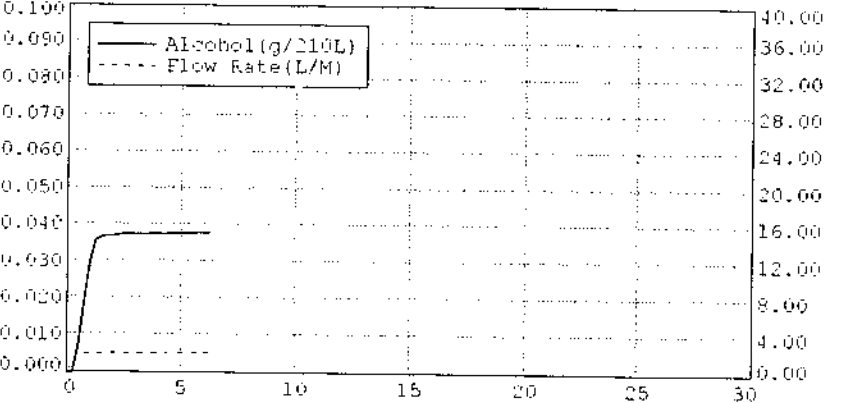
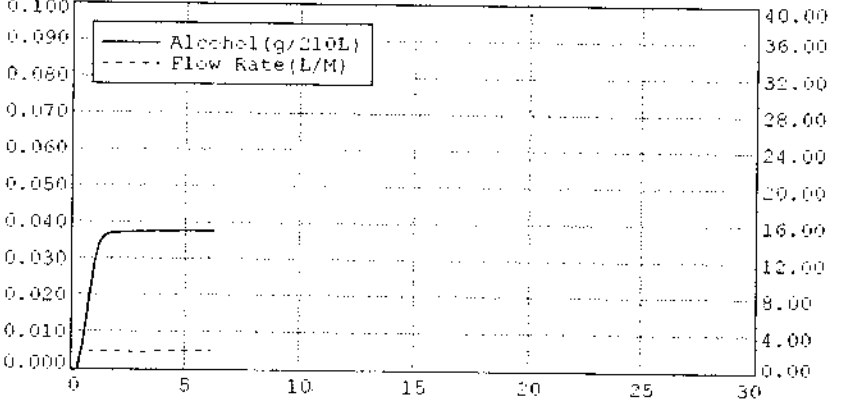
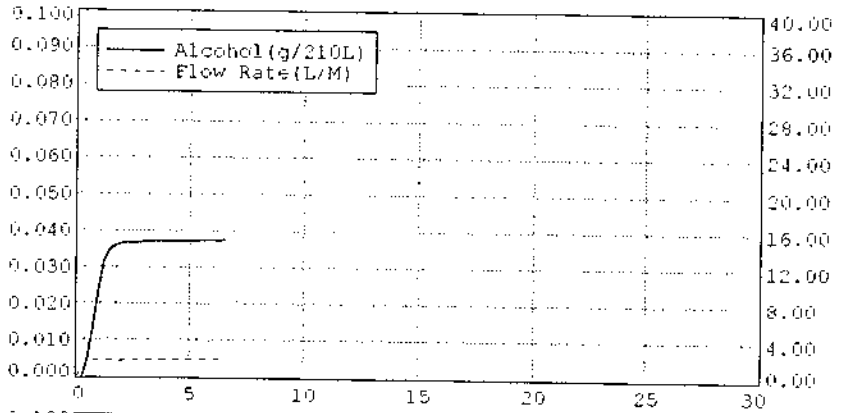
date: 08/21/2015
 time: 10:04:50

INTERNAL STANDARD INFORMATION

MINIMAL: 0.040
 GET AT 29.64: 0.040
 #: ~~02915040A2~~ 02915040A3 *BMB 8/26/15*
 IRATION: 03/85/2017
 BK PRESSURE: 644 psi

BK TEST	0.000	10:06
INTERNAL STANDARD	VERIFIED	10:06
INTERNAL STANDARD	0.038	10:06
BK TEST	0.000	10:07
INTERNAL STANDARD	0.039	10:07
BK TEST	0.000	10:08
INTERNAL STANDARD	0.039	10:08
BK TEST	0.000	10:09
INTERNAL STANDARD	0.039	10:09
BK TEST	0.000	10:10
INTERNAL STANDARD	0.038	10:10
BK TEST	0.000	10:11

page = 0.0386
 dev = 0.0005



SECURITY CHECK: Control Test 3

aska Department of Public Safety
MASTER dmt: 100348

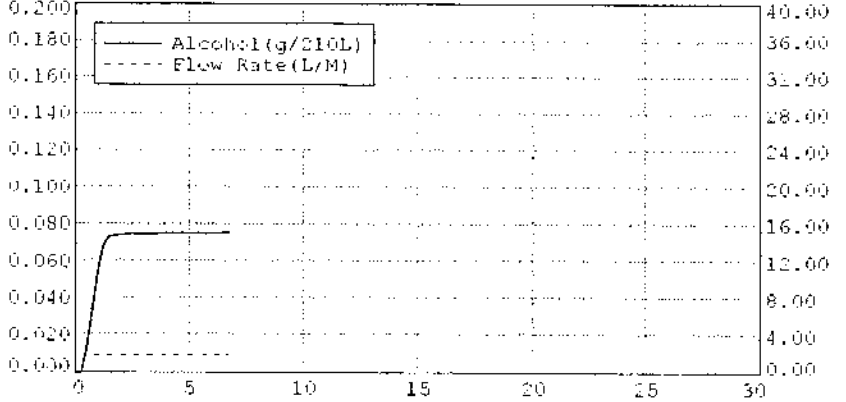
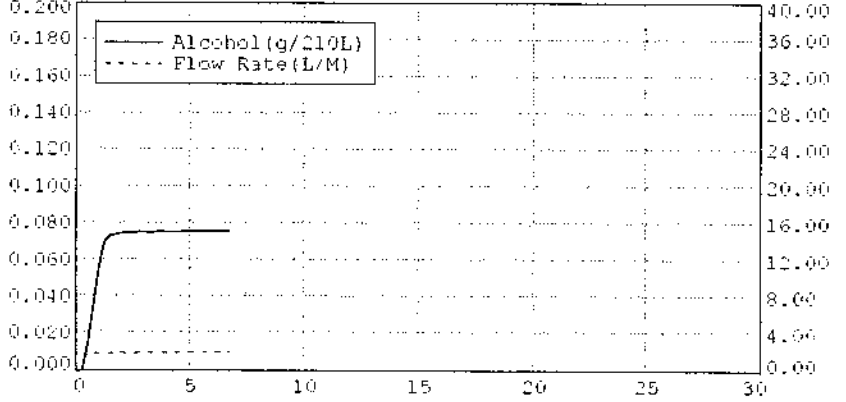
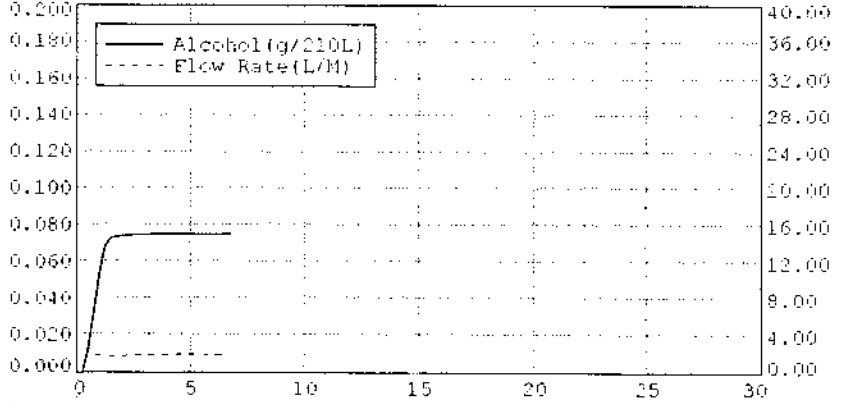
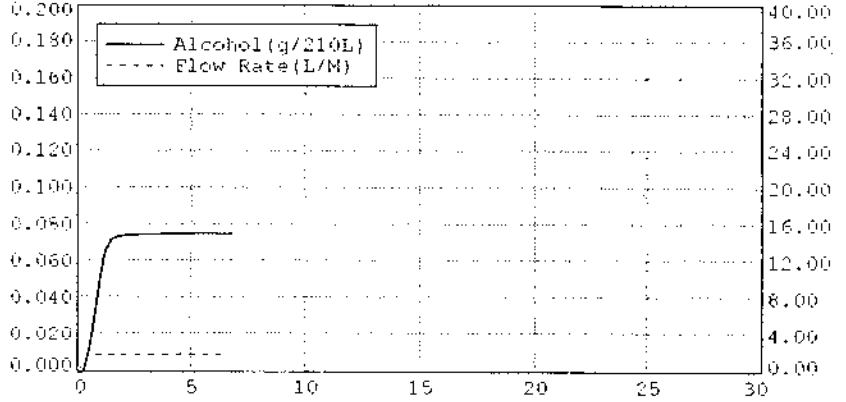
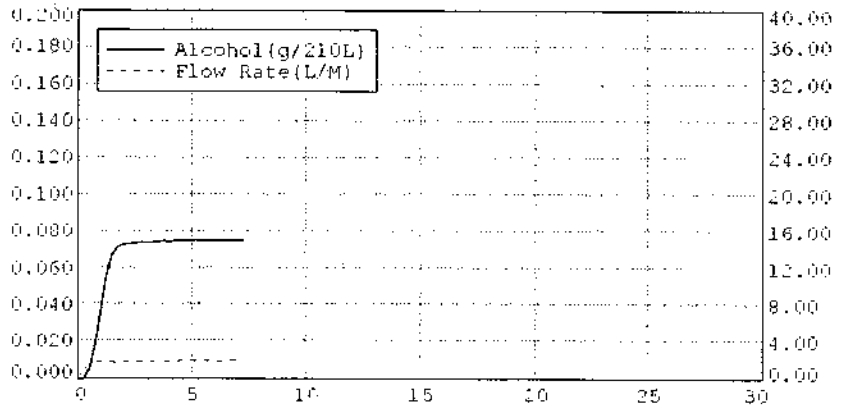
date: 08/21/2015
time: 10:15:21

INTERNAL STANDARD INFORMATION

INTERNAL: 0.080
TARGET AT 29.65: 0.079
ID #: 09214080A3
CALIBRATION: 05/01/2016
BACK PRESSURE: 355 psi

BACK TEST	0.000	10:16
INTERNAL STANDARD	VERIFIED	10:16
INTERNAL STANDARD	0.076	10:16
BACK TEST	0.000	10:17
INTERNAL STANDARD	0.076	10:17
BACK TEST	0.000	10:18
INTERNAL STANDARD	0.076	10:18
BACK TEST	0.000	10:19
INTERNAL STANDARD	0.076	10:20
BACK TEST	0.000	10:21
INTERNAL STANDARD	0.076	10:21
BACK TEST	0.000	10:22

range = 0.0760
Dev = 0.0000



HEARITY CHECK: Control Test 4

aska Department of Public Safety
 AMASTER dmt: 100348

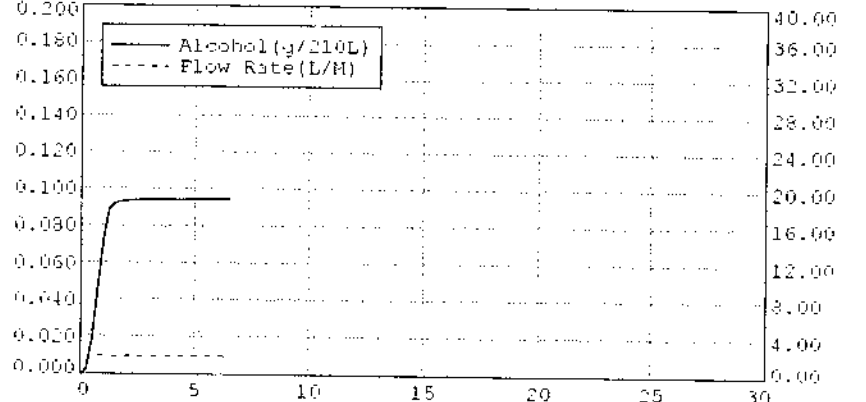
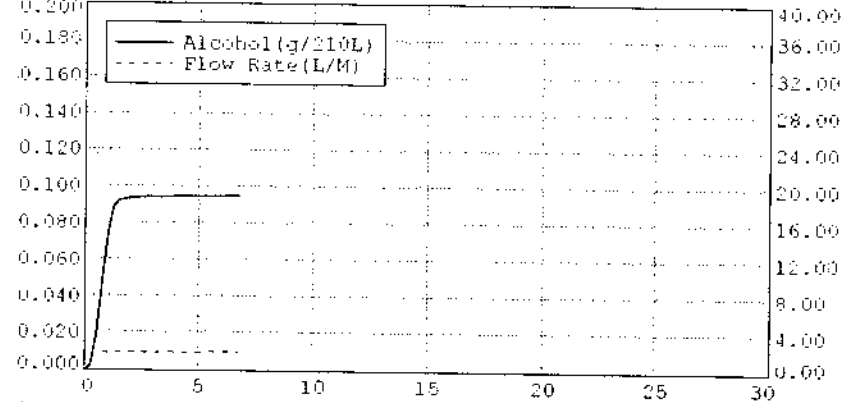
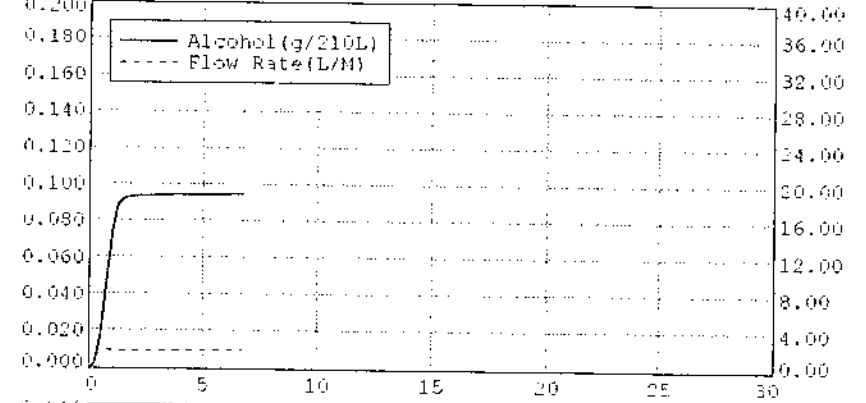
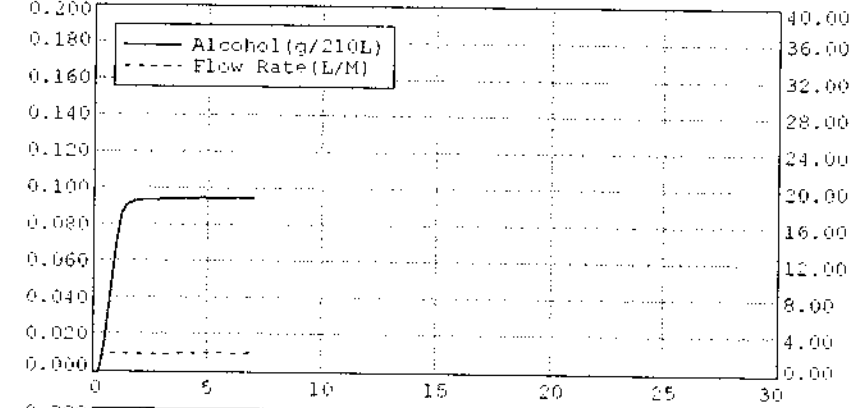
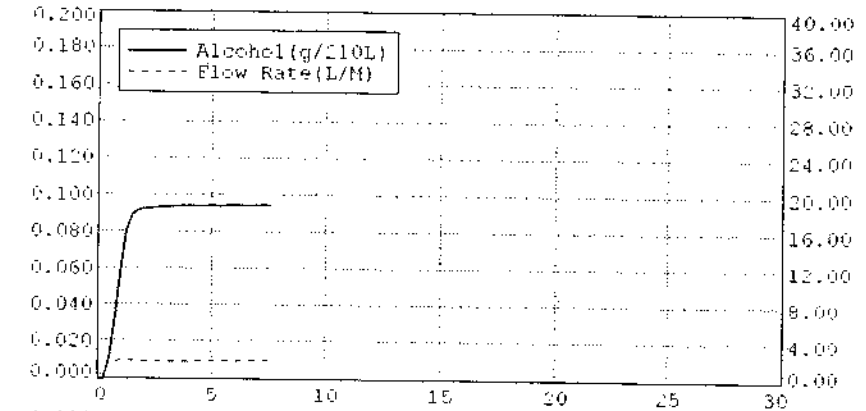
date: 08/21/2015
 time: 10:25:09

INTERNAL STANDARD INFORMATION

INTERNAL: 0.100
 WGT AT 29.64: 0.099
 #: 02915100A1
 DATE: 03/05/2017
 AIR PRESSURE: 501 psi

NK TEST	0.000	10:26
INTERNAL STANDARD	VERIFIED	10:26
INTERNAL STANDARD	0.095	10:26
NK TEST	0.000	10:27
INTERNAL STANDARD	0.095	10:27
NK TEST	0.000	10:28
INTERNAL STANDARD	0.095	10:29
NK TEST	0.000	10:29
INTERNAL STANDARD	0.096	10:30
NK TEST	0.000	10:31
INTERNAL STANDARD	0.095	10:31
NK TEST	0.000	10:32

Wgt = 0.0952
 Wgt = 0.0004



NEARITY CHECK: Control Test 5

aska Department of Public Safety
 MASTER dmt: 100348

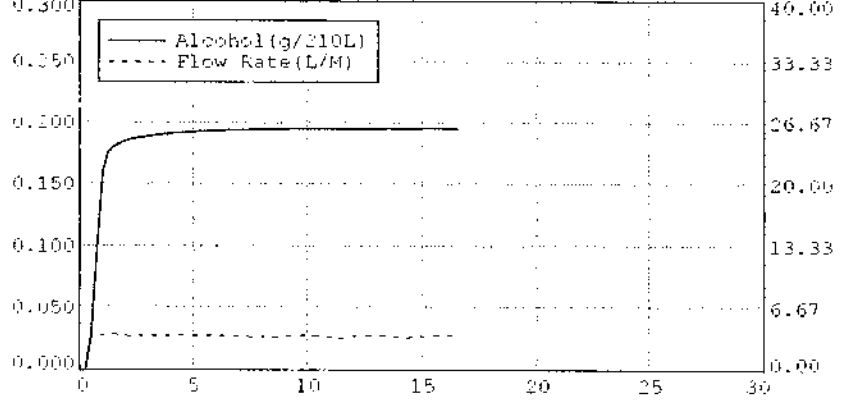
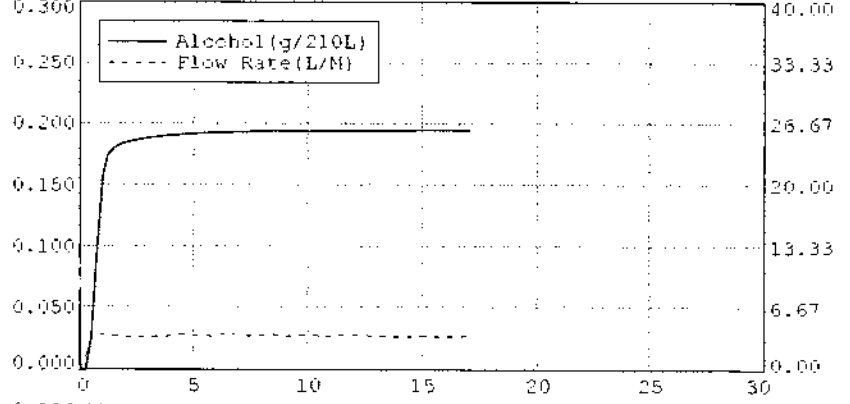
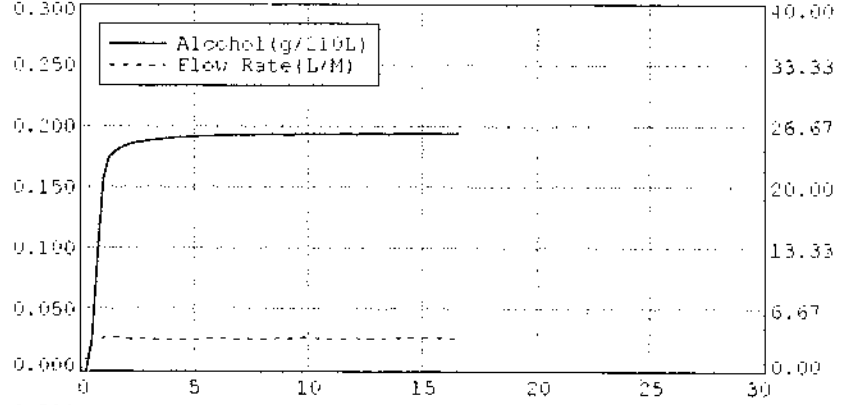
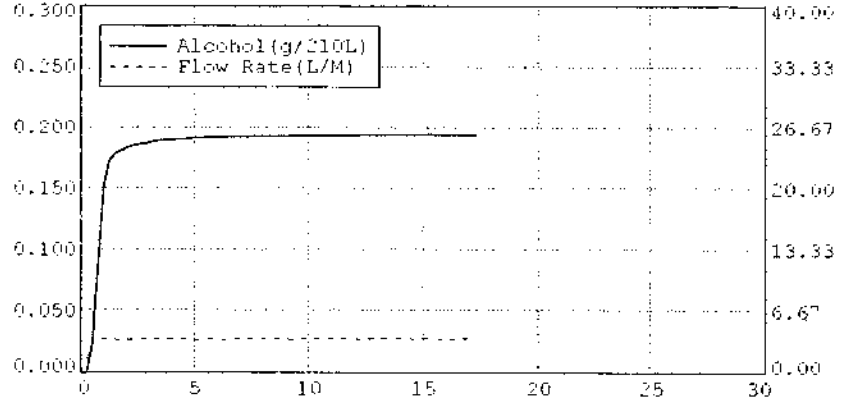
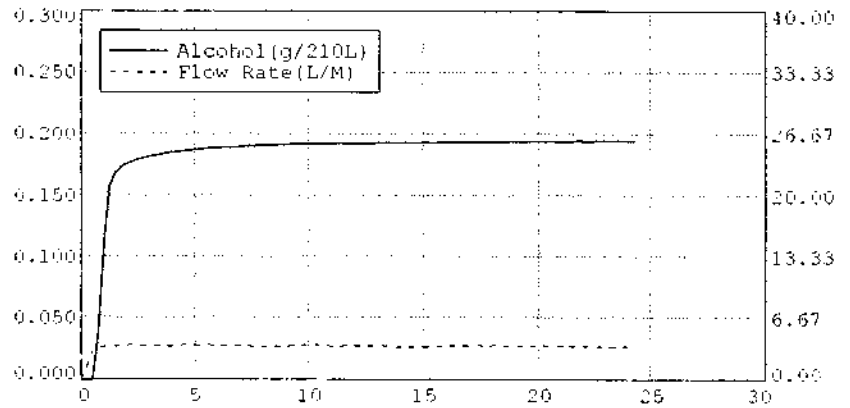
Date: 08/21/2015
 Time: 13:11:44

GENERAL STANDARD INFORMATION

MINIMAL: 0.200
 GUTH 15130
 DATE: 05/11/2017

LINK TEST	0.000	13:13
GENERAL STANDARD	VERIFIED	13:13
GENERAL STANDARD	0.195	13:13
LINK TEST	0.000	13:14
GENERAL STANDARD	0.195	13:15
LINK TEST	0.000	13:15
GENERAL STANDARD	0.196	13:16
LINK TEST	0.000	13:17
GENERAL STANDARD	0.196	13:17
LINK TEST	0.000	13:18
GENERAL STANDARD	0.196	13:18
LINK TEST	0.000	13:19

ave = 0.1956
 dev = 0.0005



LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety
 ATAMASTER dmt: 100348

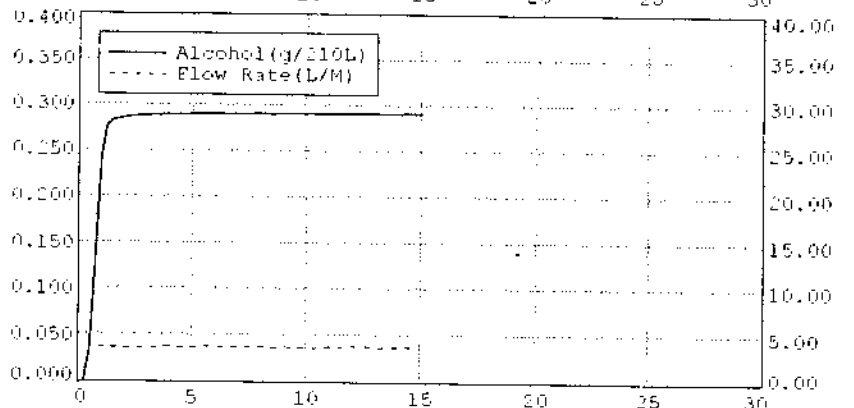
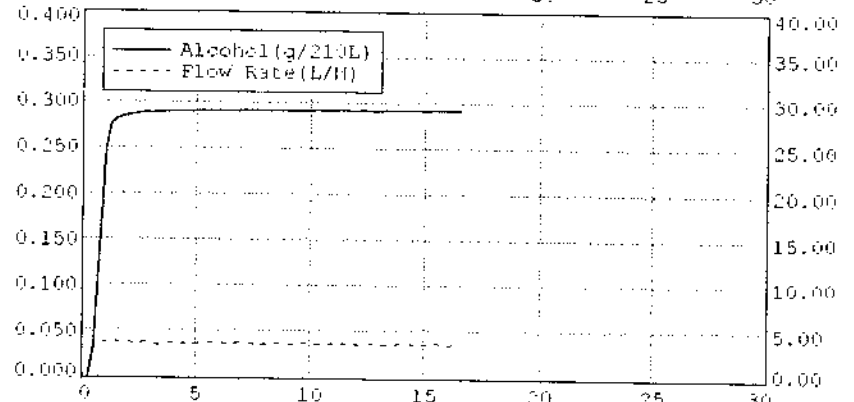
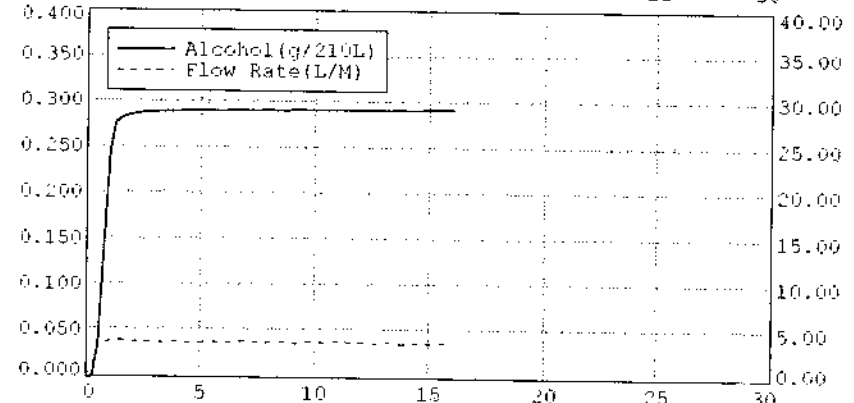
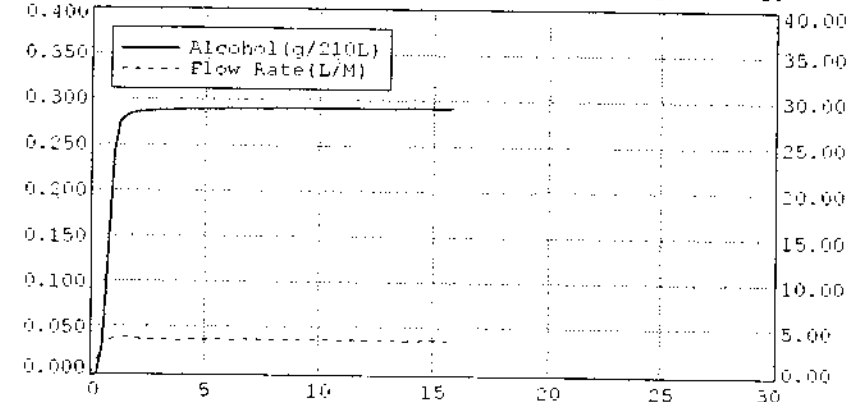
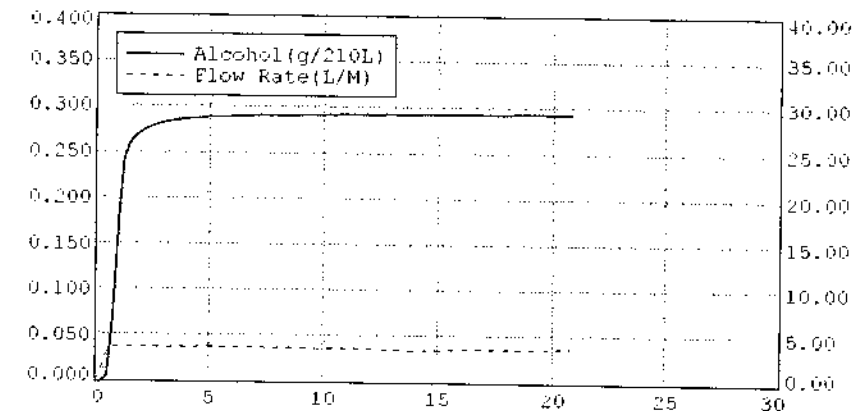
Date: 08/21/2015
 Time: 13:26:04

INTERNAL STANDARD INFORMATION

NOMINAL: 0.300
 LOT #: GUTH 14270
 EXPIRATION: 12/02/2016

WANK TEST	0.000	13:27
INTERNAL STANDARD	VERIFIED	13:27
INTERNAL STANDARD	0.293	13:27
WANK TEST	0.000	13:28
INTERNAL STANDARD	0.292	13:29
WANK TEST	0.000	13:30
INTERNAL STANDARD	0.292	13:30
WANK TEST	0.000	13:31
INTERNAL STANDARD	0.292	13:31
WANK TEST	0.000	13:32
INTERNAL STANDARD	0.292	13:32
WANK TEST	0.000	13:33

Range = 0.2922
 Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100348

Date: 08/25/2015
Time: 09:16:33

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.97: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK
BLANK TEST PASSED 09:17
INTERNAL STANDARD VERIFIED 09:17
EXTERNAL STANDARD 0.076 09:18
BLANK TEST 0.000 09:18
SUBJECT SAMPLE INCOMPLETE 09:20

BNB

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

40.00
36.00
32.00
28.00
24.00
20.00
16.00
12.00
8.00
4.00

SUBJECT TEST

Alaska Department of Public Safety
DATA MASTER dmt: 100348

Date: 08/25/2015
Time: 09:23:09

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

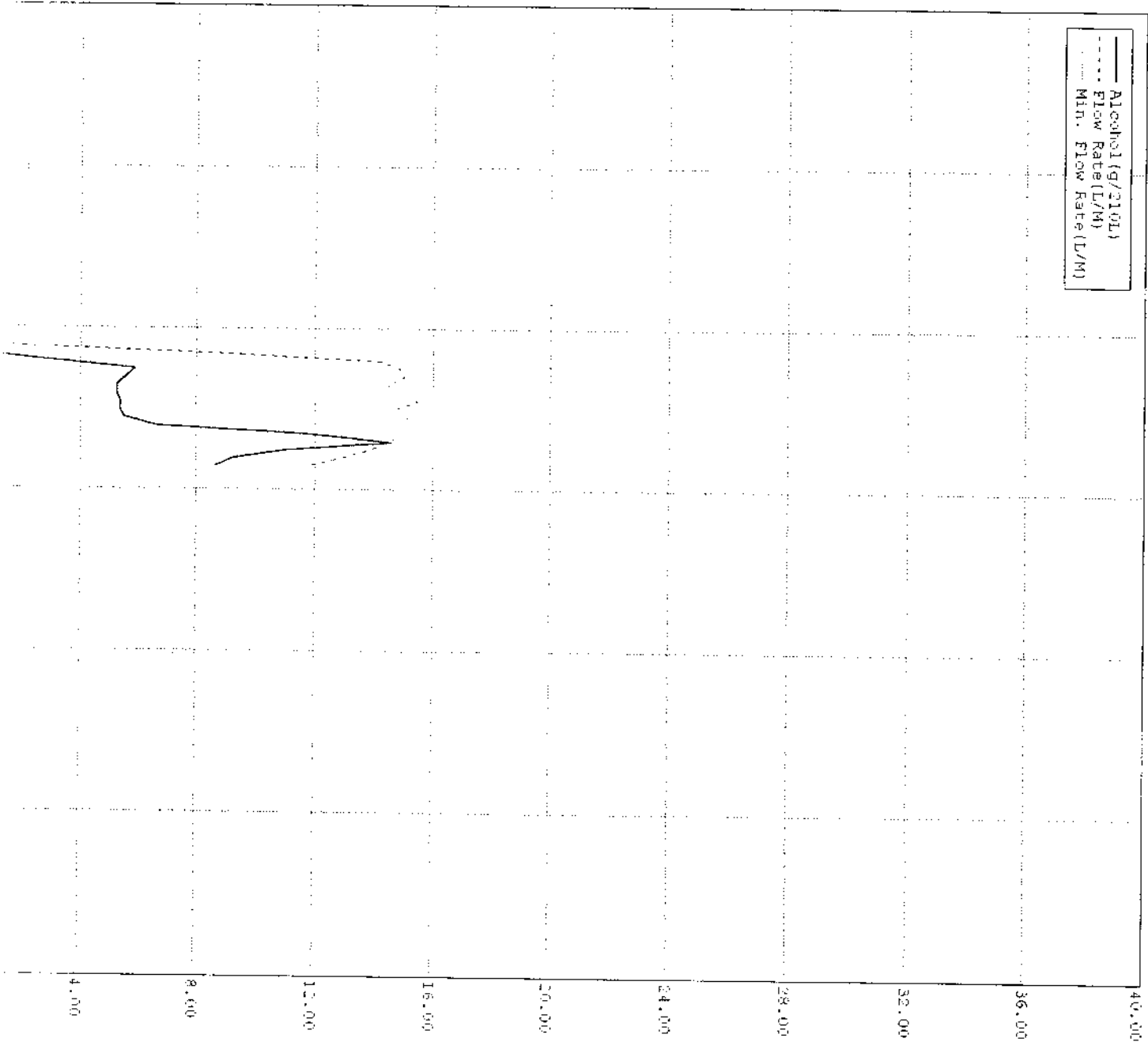
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
INVALID KNOWN MOUTH ALCOHOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.96: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	09:24
BLANK TEST	0.000	09:24
INTERNAL STANDARD	VERIFIED	09:24
EXTERNAL STANDARD	0.077	09:24
BLANK TEST	0.000	09:25
SUBJECT SAMPLE	INVALID	09:25

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



BMB

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/25/2015
Time: 09:41:19

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.96: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

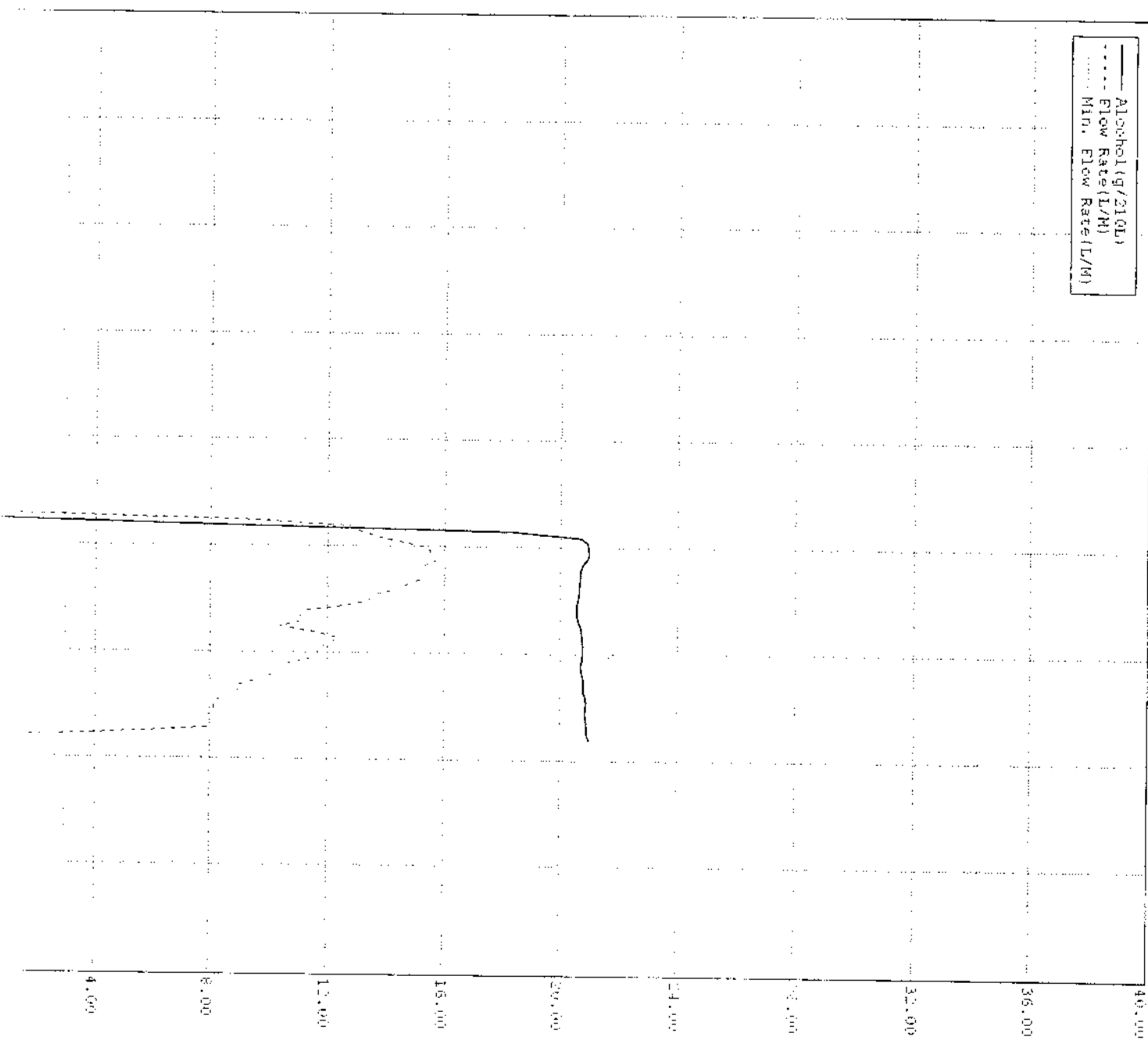
DIAGNOSTIC CHECK	PASSED	09:42
BLANK TEST	0.000	09:42
INTERNAL STANDARD	VERIFIED	09:42
Xq = 0.090 (0.68%)		
EXTERNAL STANDARD	0.077	09:43
X[1] = 0.0774 (-0.0002) (0.0021)		
BLANK TEST	0.000	09:44
SUBJECT SAMPLE	XXX	09:44
X[1] = 0.1055 (-0.0136) (0.0021)		

Interference Detected

F2 Avg: -0.0005
F3 Avg: 0.0025

BMB

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/25/2015
Time: 09:46:47

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

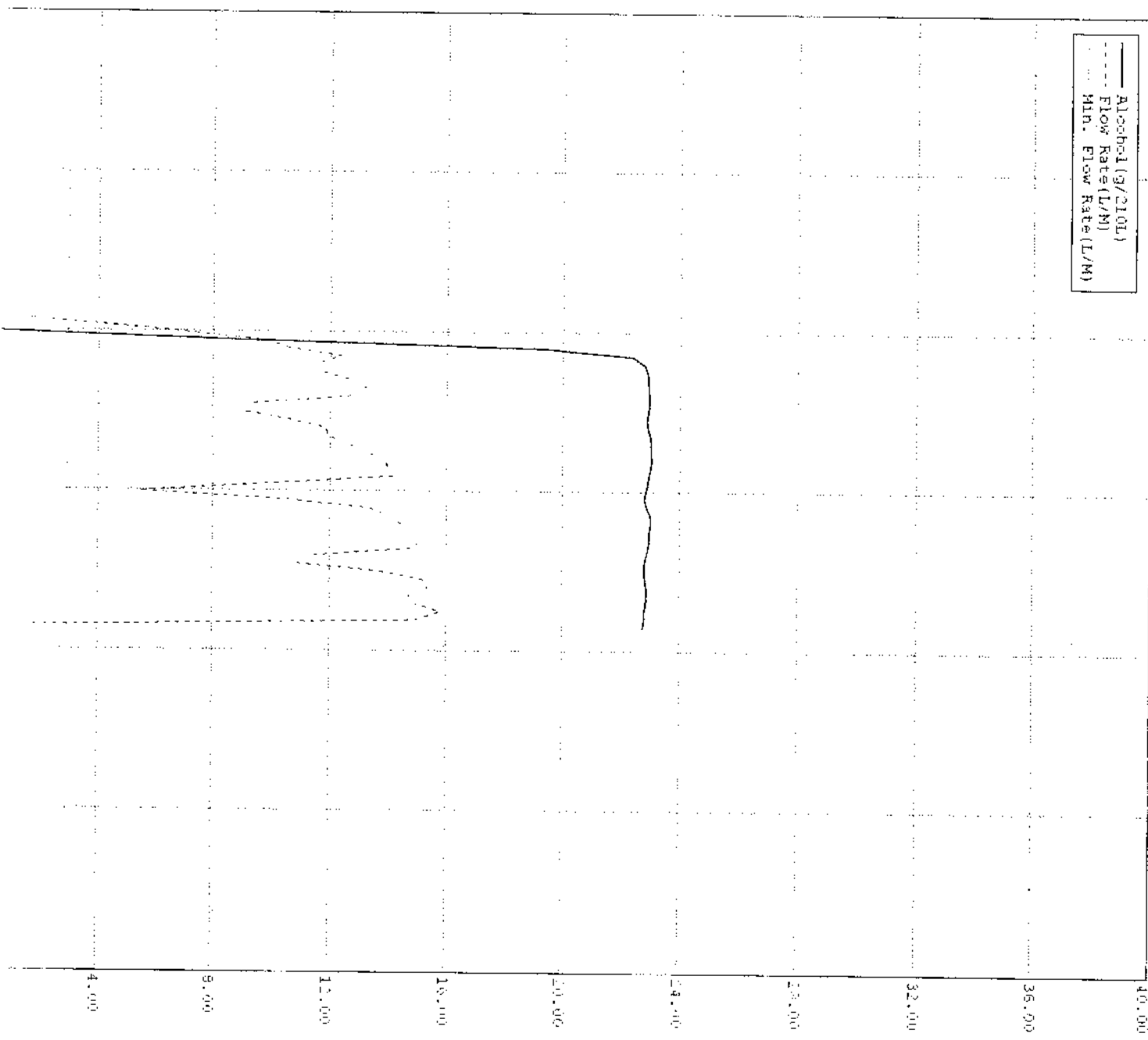
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.97: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK PASSED 09:48
BLANK TEST 0.000 09:48
INTERNAL STANDARD VERIFIED 09:48
Xq = 0.090 (0.39%)
EXTERNAL STANDARD 0.077 09:49
X[1] = 0.0769 (-0.0007) (0.0025)
BLANK TEST 0.000 09:49
SUBJECT SAMPLE XXX 09:50
X[1] = 0.1141 (-0.0232) (0.0016)

Interference Detected

BMB

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/25/2015
Time: 09:52:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

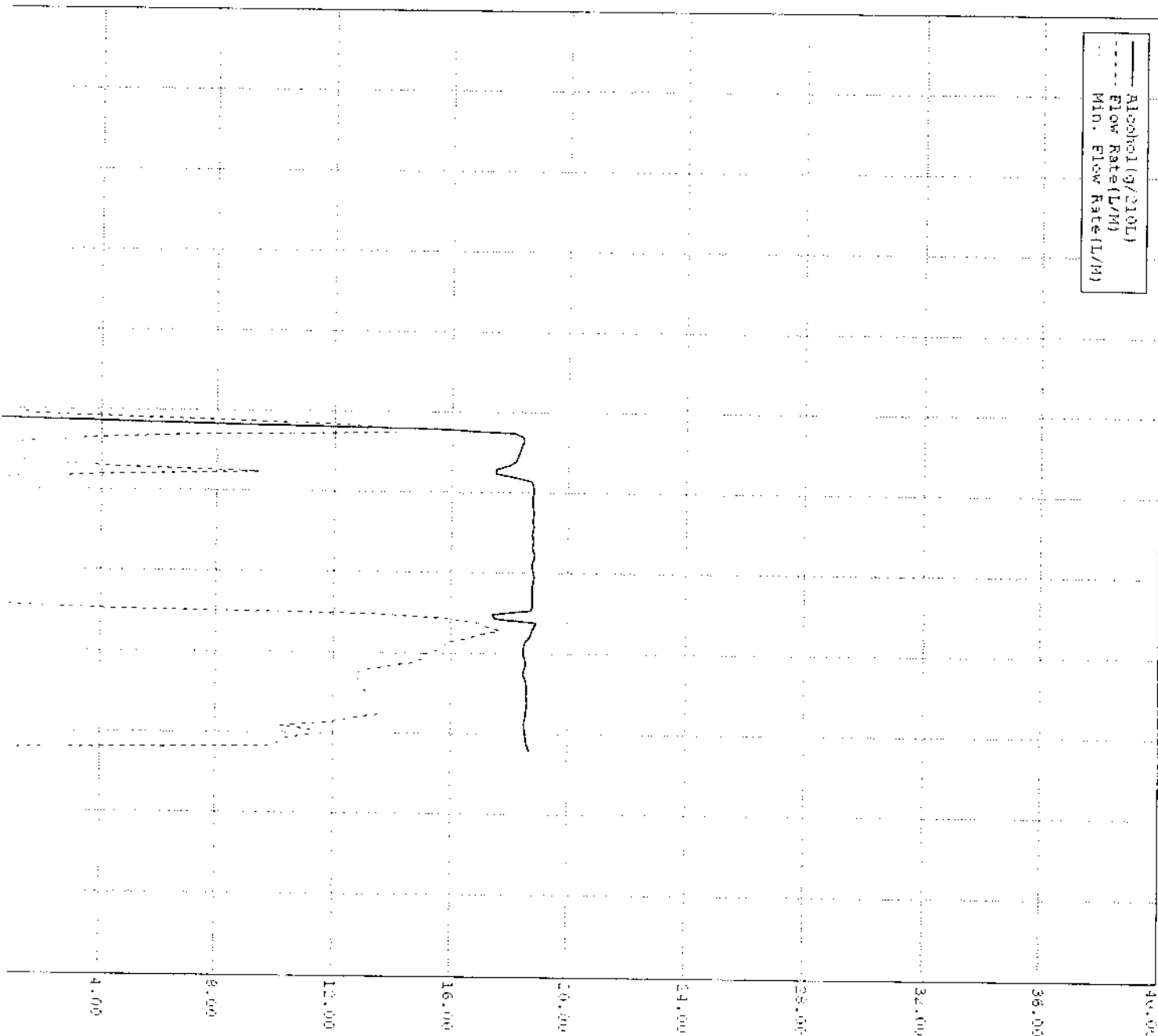
DEPT/AGENCY:
INTERFERENCE NEGATIVE CONTROL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.97: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	09:53
BLANK TEST	0.000	09:53
INTERNAL STANDARD	VERIFIED	09:53
Xq = 0.090 (0.10%)		
EXTERNAL STANDARD	0.077	09:53
X[1] = 0.0768 (-0.0007) (0.0030)		
BLANK TEST	0.000	09:54
SUBJECT SAMPLE (Vol=1.96L)	0.094	09:55
X[1] = 0.0940 (0.0006) (0.0008)		
BLANK TEST	0.000	09:56
EXTERNAL STANDARD	0.076	09:56
X[1] = 0.0764 (-0.0005) (0.0024)		
BLANK TEST	0.000	09:57

BMB

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



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/25/2015
Time: 09:34:49

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

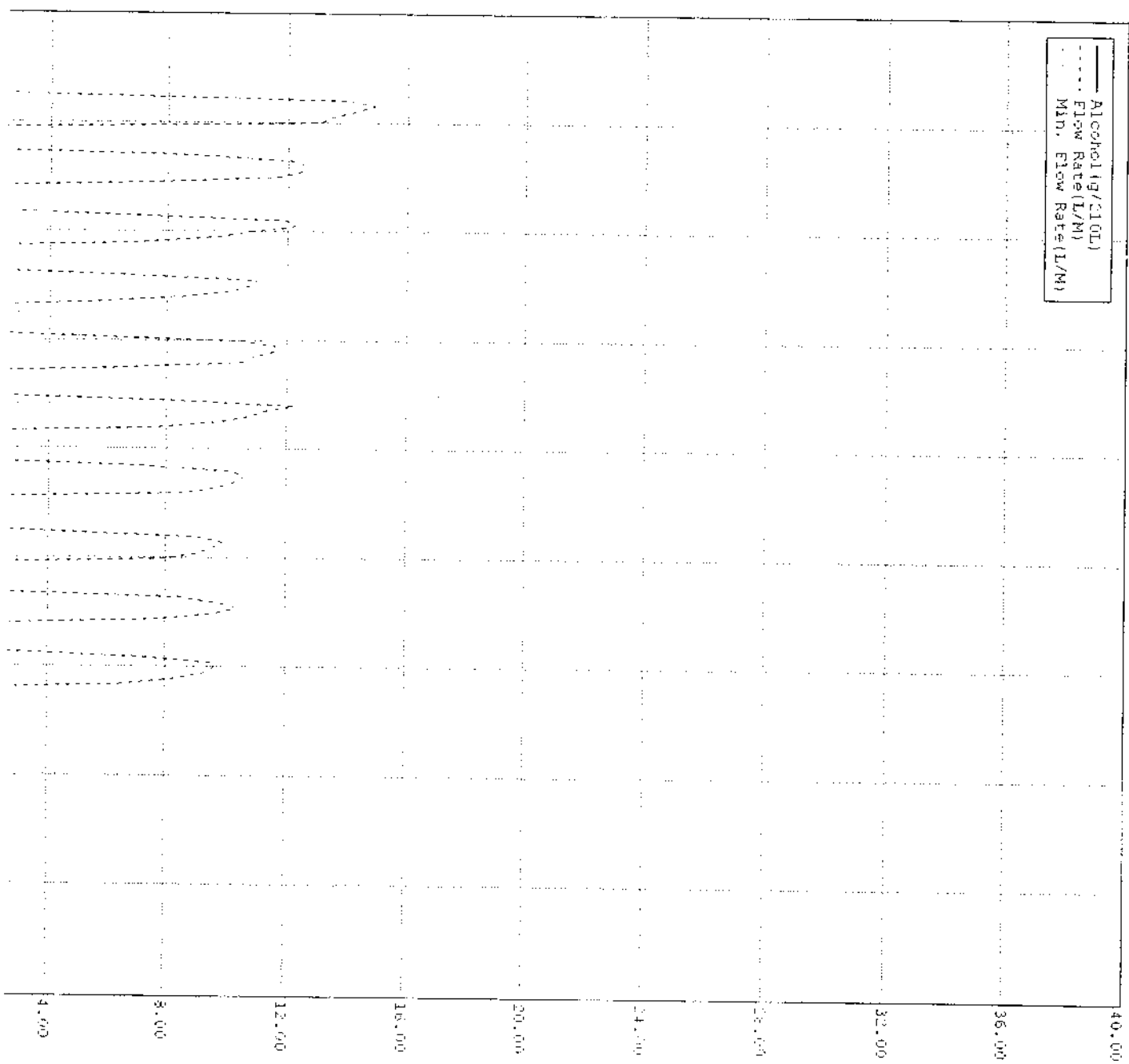
EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.97: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	09:37
BLANK TEST	0.000	09:37
INTERNAL STANDARD	VERIFIED	09:37
EXTERNAL STANDARD	0.077	09:38
BLANK TEST	0.000	09:39
SUBJECT SAMPLE	XXX	09:39

Maximum Attempts Exceeded

BRB

Alcohol(g/100L)
Flow Rate(L/M)
Min. Flow Rate(L/M)



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/25/2015
Time: 09:29:33

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

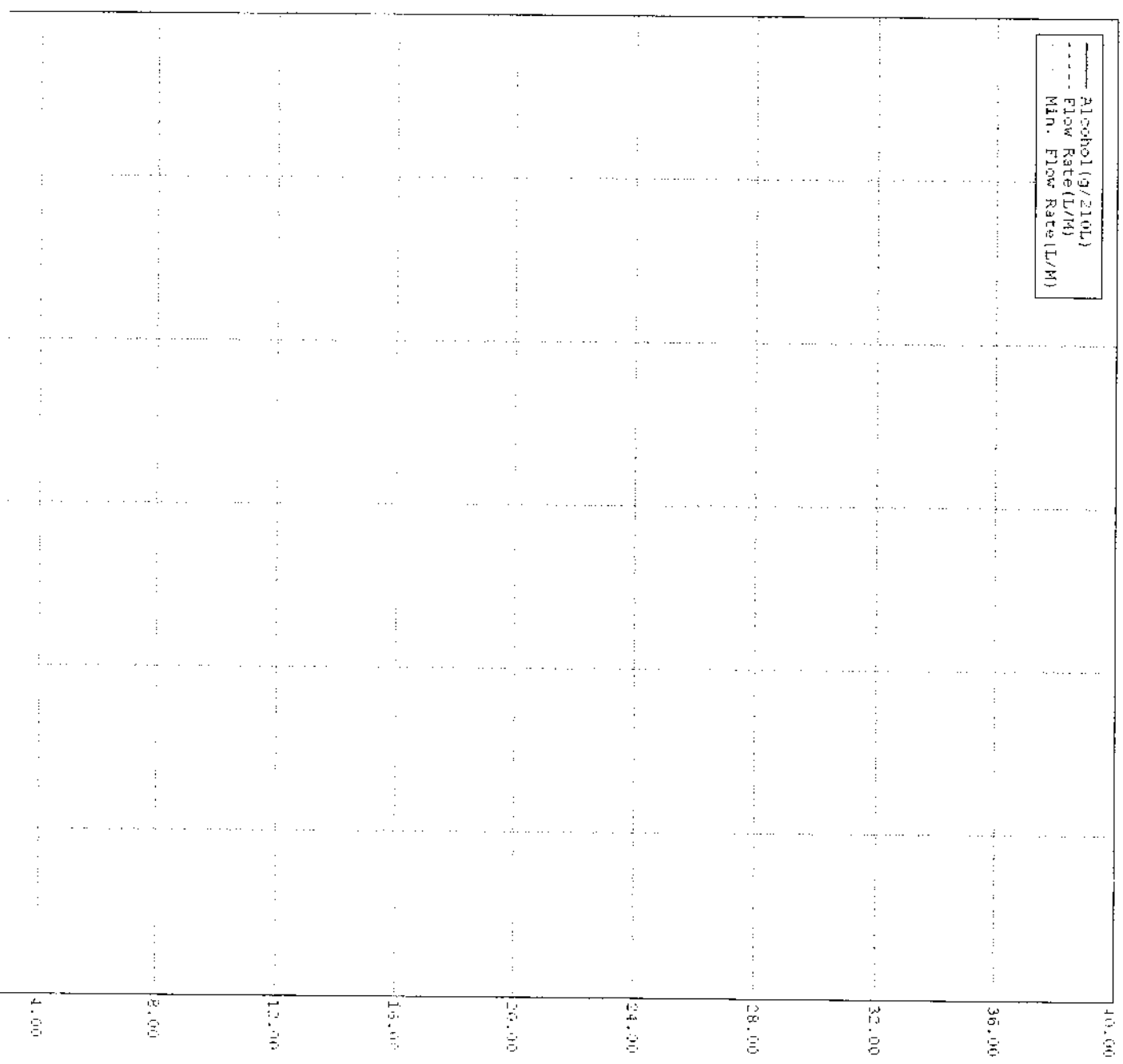
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.97: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK
BLANK TEST PASSED 09:30
INTERNAL STANDARD VERIFIED 09:31
EXTERNAL STANDARD 0.077 09:31
BLANK TEST 0.000 09:32

RFI DETECTED

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



BMB

SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100348

Date: 08/25/2015
Time: 10:11:10

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

DEPT/AGENCY:
NON DRINKING SUBJECT TEST
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.96: 0.080
LOT #: 09214080A3
EXPIRATION: 05/01/2016

DIAGNOSTIC CHECK	PASSED	10:12
BLANK TEST	0.000	10:12
INTERNAL STANDARD	VERIFIED	10:12
EXTERNAL STANDARD	0.077	10:12
BLANK TEST	0.000	10:13
SUBJECT SAMPLE (Vol=1.91L)	0.000	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.077	10:15
BLANK TEST	0.000	10:16

BBMB

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

