

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 100423 Analyst Brandi Burnett Start Date 4/17/19

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 Airgas Lot AG805804 Exp 2/27/20
- ii. 0.040g/210L Mnf Airgas Lot AG733403 Exp 11/30/19
- iii. 0.080g/210L Mnf Airgas Lot AG826101 Exp 11/18/20 ^{BMB} 09/18/20
- iv. 0.100g/210L Mnf Airgas Lot AG805903 Exp 2/28/20
- v. 0.200g/210L Mnf Guth Lot 17340 Exp 10/9/19
 - 1. Simulator S/N DR4177 Date Calibrated 6/4/18
- vi. 0.300g/210L Mnf Guth Lot 17350 Exp 10/11/19
 - 1. Simulator S/N DR6267 Date Calibrated 6/4/18

5. Functional Tests (attached)

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

- i. Acetone - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20
 - 1. Simulator S/N SD1198 Date Calibrated 3/16/19 ^{BMB} 3/6/19 5/2/19
- ii. Isopropanol - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20
 - 1. Simulator S/N DR4176 Date Calibrated 6/4/18
- iii. Negative Control - Mnf Guth Lot 18070 Level 0.100 Exp 2/26/20
 - 1. Simulator S/N DR4163 Date Calibrated 6/4/18

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 4/19/19

DIAGNOSTIC RECORD

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/17/2019
Time: 09:38:05

VERSIONS

DMT: 3.02
PIC: 3.03
Modem: 2.6
Questions: 2.2

TEMPERATURES

Sample Chamber = 48.8°C PASSED
(44.0°C - 52.0°C)
Breath Tube = 48.1°C PASSED
(38.0°C - 50.0°C)

SETTINGS

Lamp Voltage = 1.73 V PASSED
(1.09 V - 2.53 V)
Cooler Voltage = 1.58 V PASSED
(0.97 V - 2.25 V)
Bias Voltage = 79 V PASSED
(48 V - 112 V)
Chopper Freq = 527 Hz PASSED
(475 Hz - 575 Hz)
Barometer = 29.3 in

PUMP INFO

Flow Rate = 4.760 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 = 0.093 0.47% (0.00% - 4.00%) PASSED

Technician Screen

DATAMASTER dmt: 100423

Date: 04/17/2019
Time: 9:51 AM

Temperatures (°C)

Sample Cell: 48.7°C
Breath Tube: 48.0°C

Current Barometer 29.3 in
Volume (Ltr) 1.59

Settings

Lamp: 1.79 V
Bias: 79 V
Cooler: 1.58 V
Chopper: 525 Hz

Voltages (V)

Flow: 1.06 V
Detector: 0.058 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 dmt: 100423

Date: 04/17/2019
Time: 09:52:30

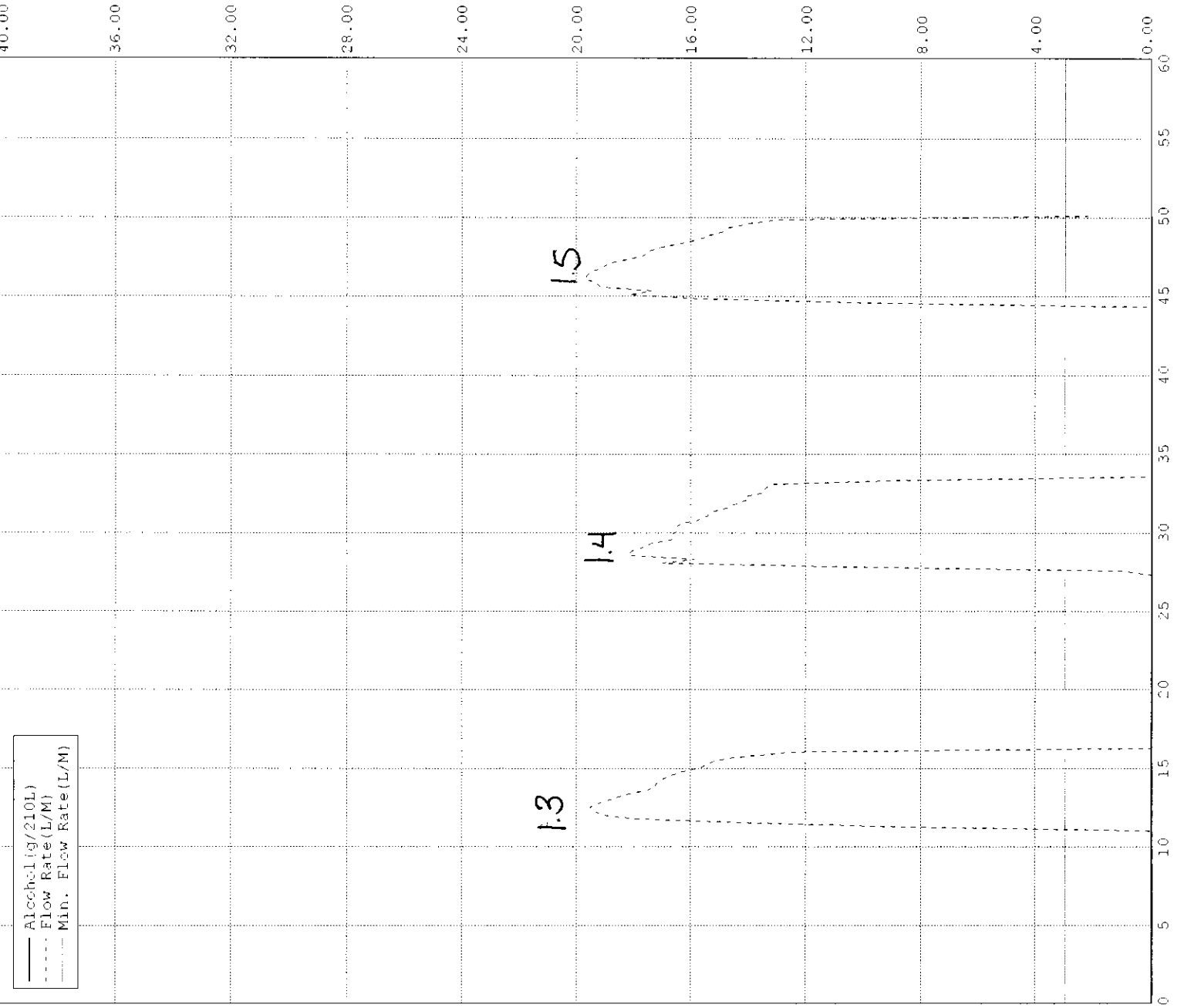

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.31: 0.078
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	09:54
BLANK TEST	0.000	09:54
INTERNAL STANDARD	VERIFIED	09:54
EXTERNAL STANDARD	0.077	09:54
BLANK TEST	0.000	09:55
SUBJECT SAMPLE (Vol=1.55L)	0.000	09:56
BLANK TEST	0.000	09:57
EXTERNAL STANDARD	0.077	09:57
BLANK TEST	0.000	09:58



LINEARITY CHECK

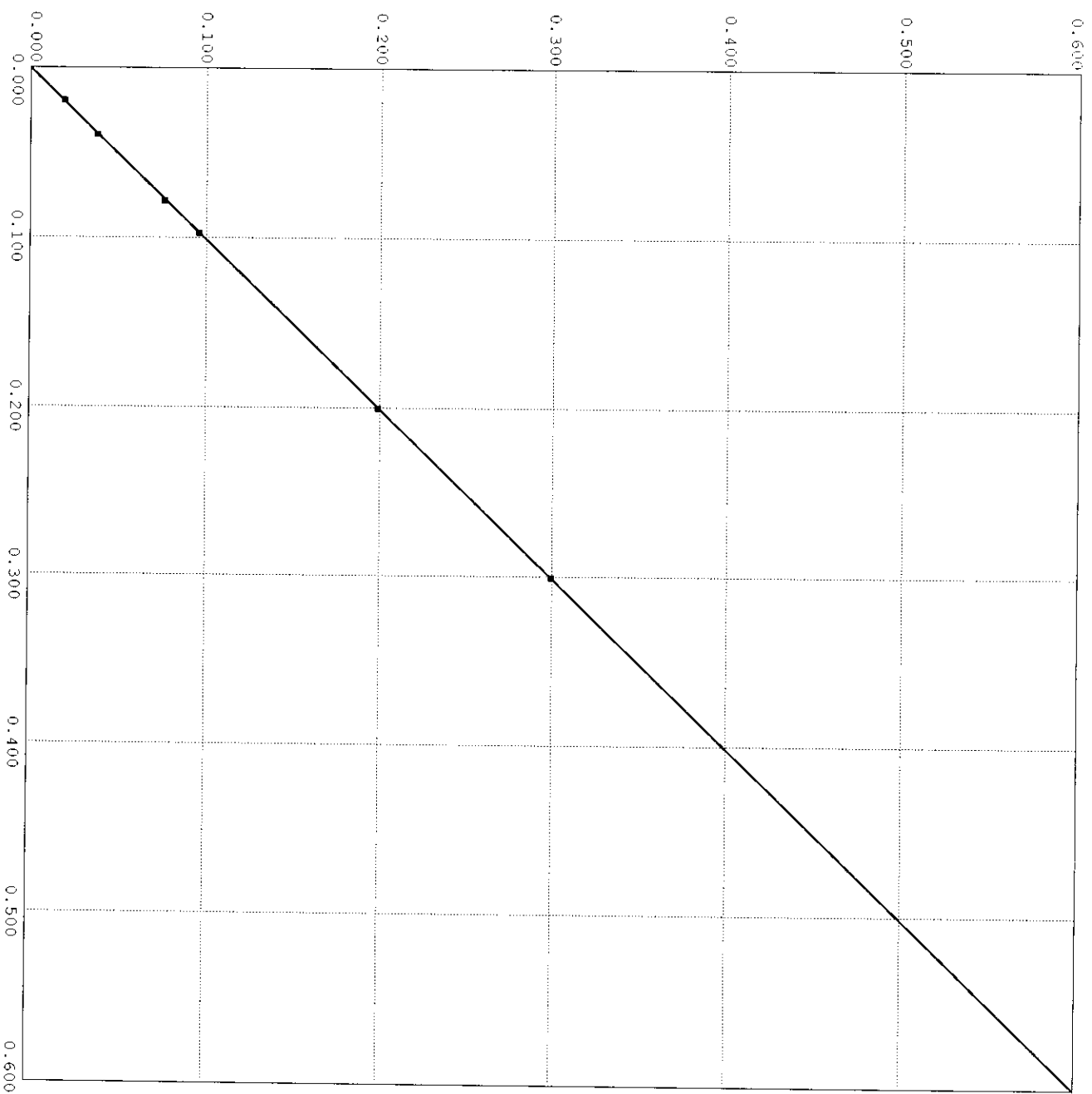
Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/18/2019
Time: 09:19:52

SUPERVISOR NAME:
BRANDI M BARNETT
OPERATOR'S #: 7038

TARGET	AVERAGE	STD. DEV.
0.019	0.0198	0.0004
0.039	0.0386	0.0005
0.078	0.0770	0.0000
0.097	0.0970	0.0000
0.200	0.1996	0.0005
0.300	0.3002	0.0004

SLOPE = 0.999988
R² = 0.999967



Handwritten signature/initials

LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety
DATAMASTER dmt: 100423

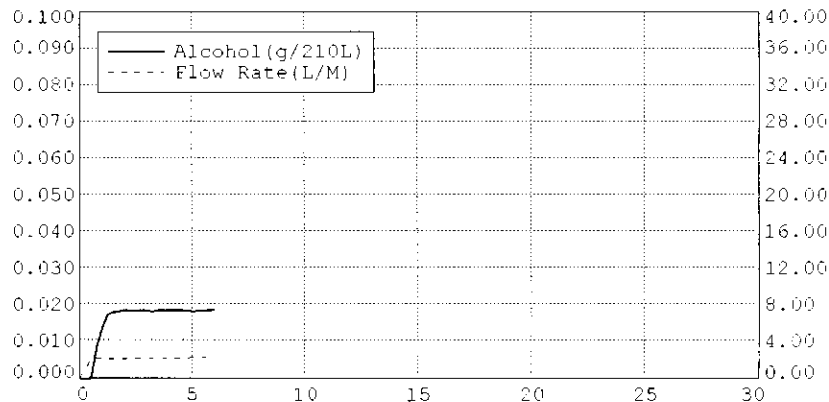
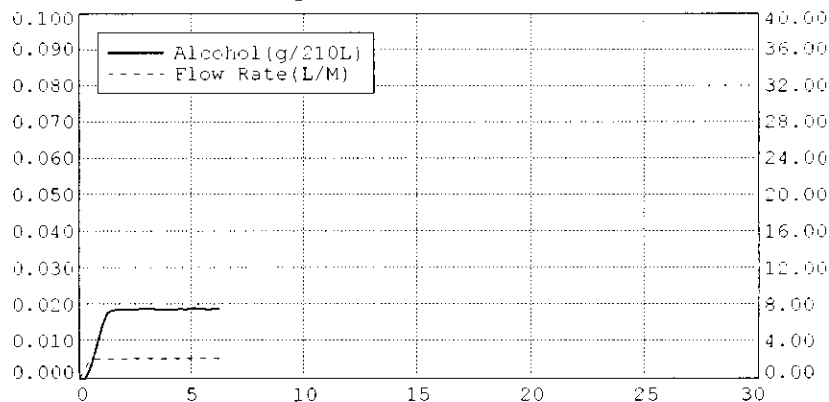
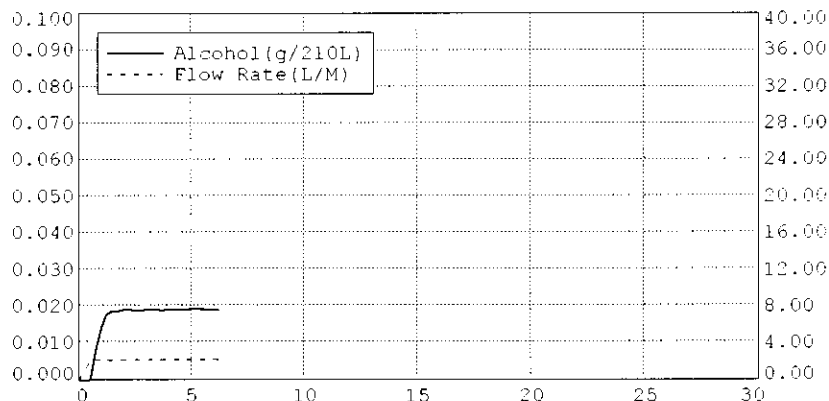
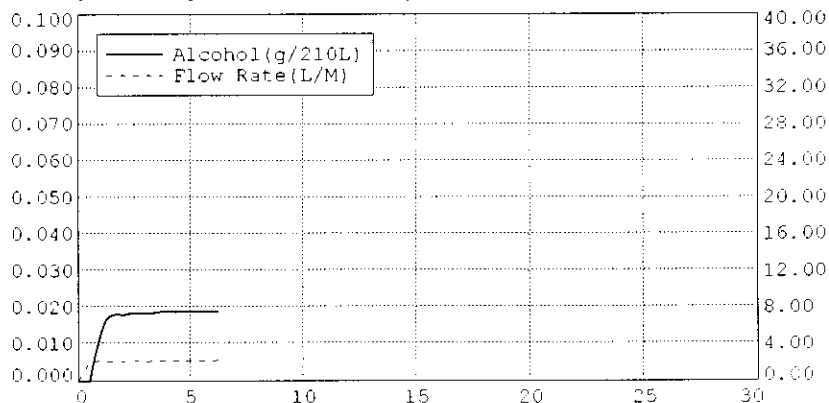
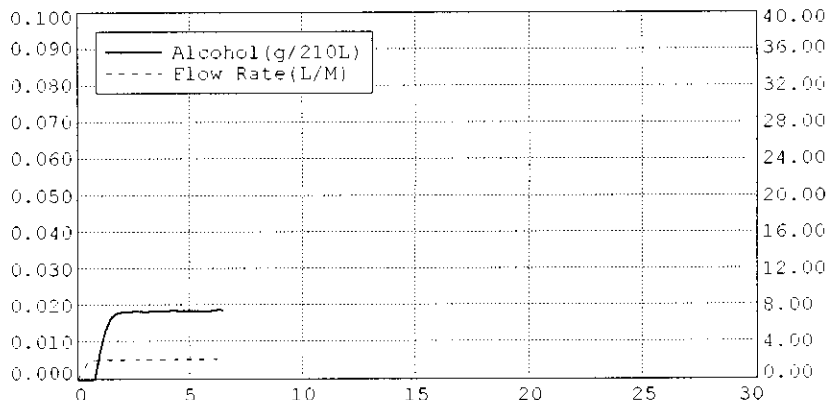
Date: 04/18/2019
Time: 09:19:54

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020
TARGET AT 29.16: 0.019
LOT #: AG805804
EXPIRATION: 02/27/2020
TANK PRESSURE: 737 psi

BLANK TEST	0.000	09:21
INTERNAL STANDARD	VERIFIED	09:21
EXTERNAL STANDARD	0.020	09:21
BLANK TEST	0.000	09:22
EXTERNAL STANDARD	0.020	09:22
BLANK TEST	0.000	09:23
EXTERNAL STANDARD	0.020	09:23
BLANK TEST	0.000	09:24
EXTERNAL STANDARD	0.020	09:24
BLANK TEST	0.000	09:25
EXTERNAL STANDARD	0.019	09:26
BLANK TEST	0.000	09:26

Average = 0.0198
Std Dev = 0.0004



LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety
 DATAMASTER dmt: 100423

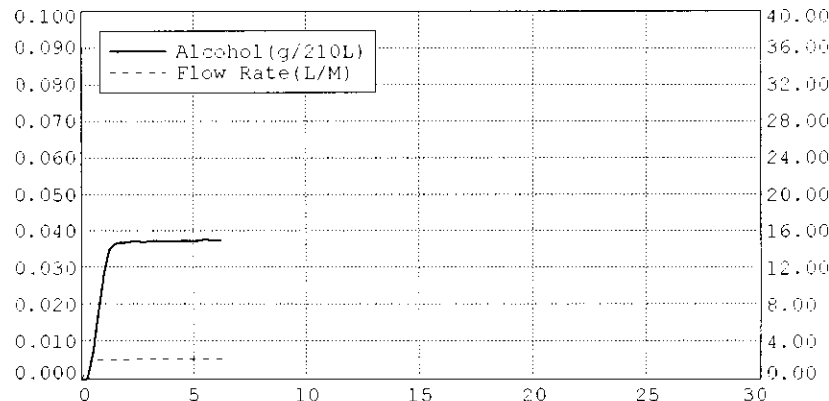
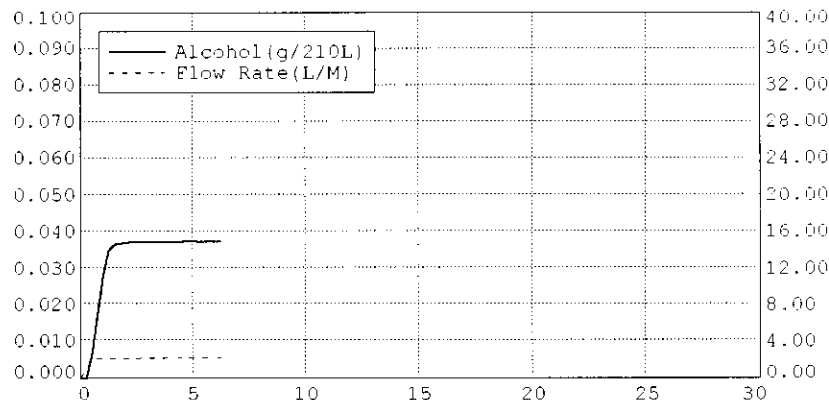
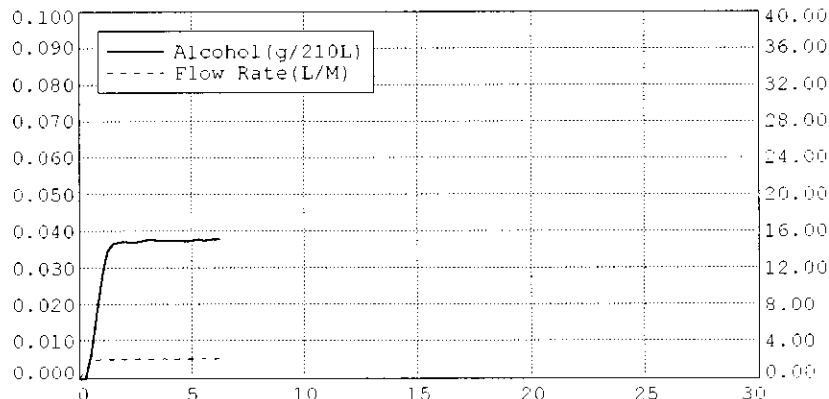
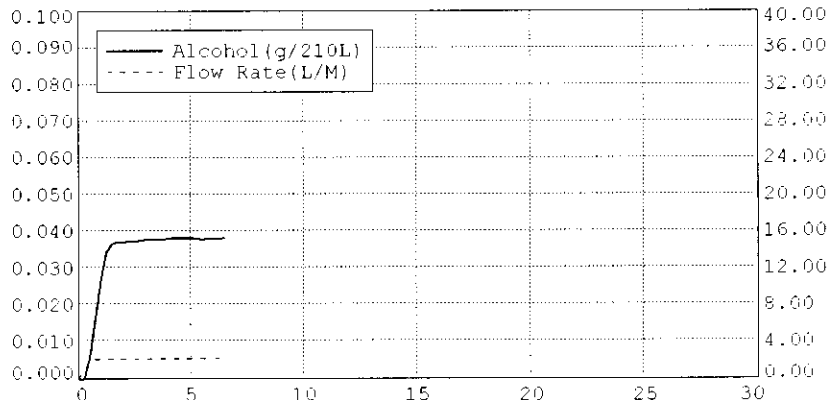
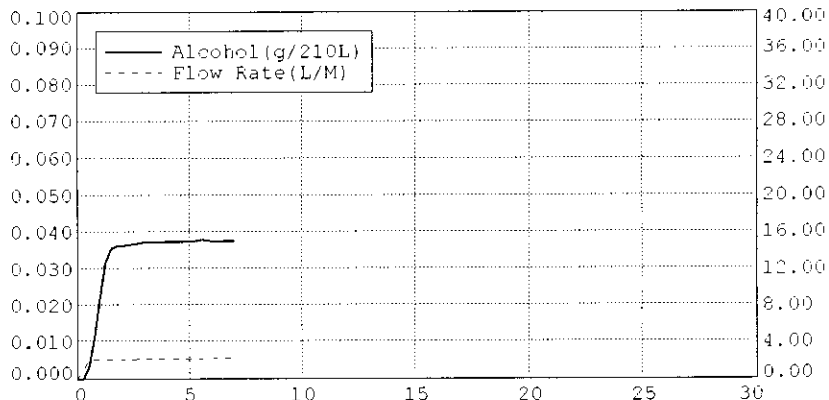
Date: 04/18/2019
 Time: 09:42:37

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040
 TARGET AT 29.15: 0.039
 LOT #: AG733403
 EXPIRATION: 11/30/2019
 TANK PRESSURE: 729 psi

BLANK TEST	0.000	09:43
INTERNAL STANDARD	VERIFIED	09:43
EXTERNAL STANDARD	0.039	09:44
BLANK TEST	0.000	09:44
EXTERNAL STANDARD	0.039	09:45
BLANK TEST	0.000	09:46
EXTERNAL STANDARD	0.039	09:46
BLANK TEST	0.000	09:47
EXTERNAL STANDARD	0.038	09:47
BLANK TEST	0.000	09:48
EXTERNAL STANDARD	0.038	09:48
BLANK TEST	0.000	09:49

Average = 0.0386
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety
 DATAMASTER dmt: 100423

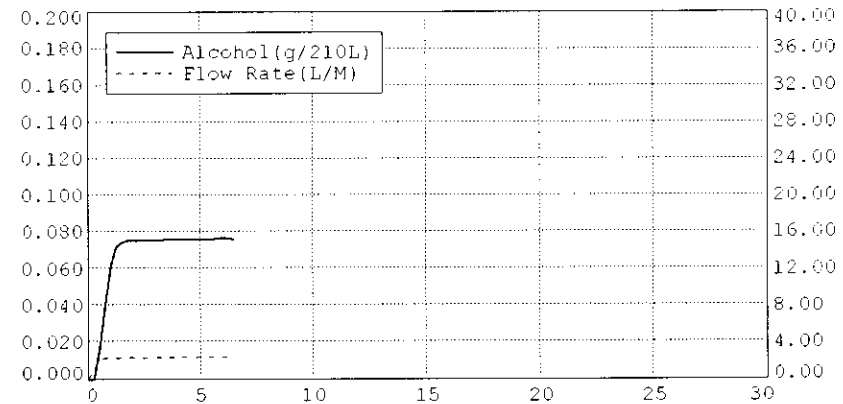
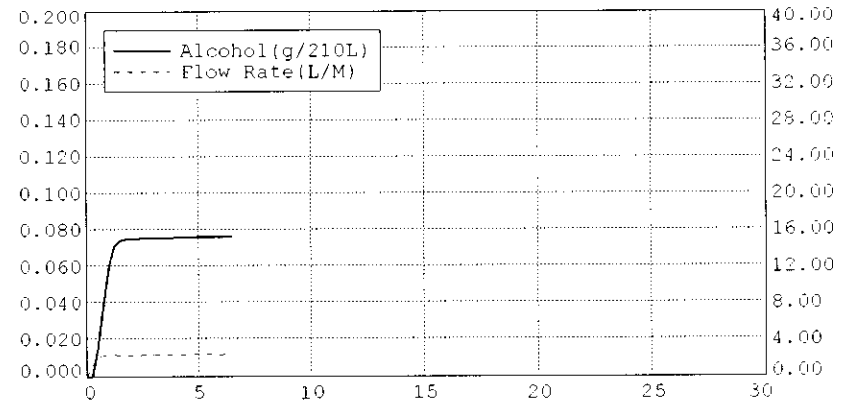
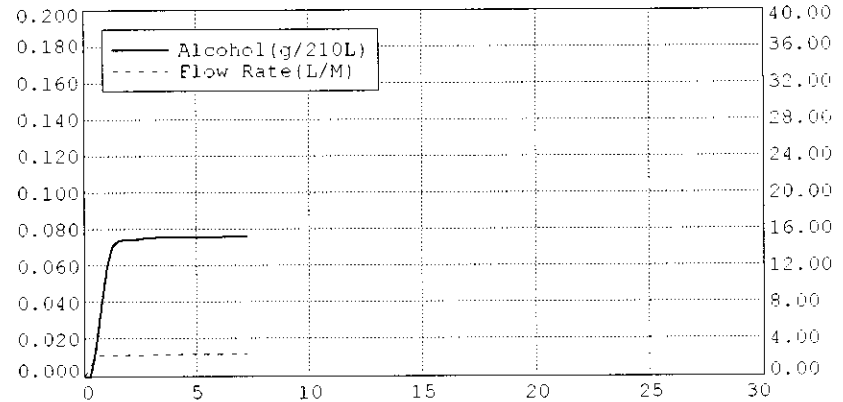
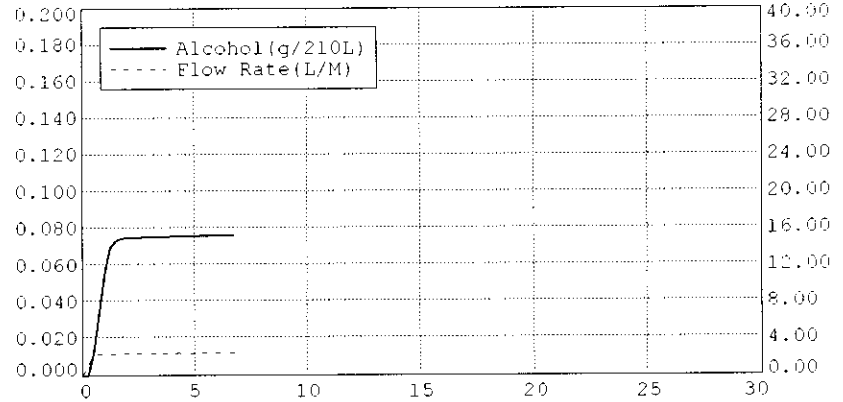
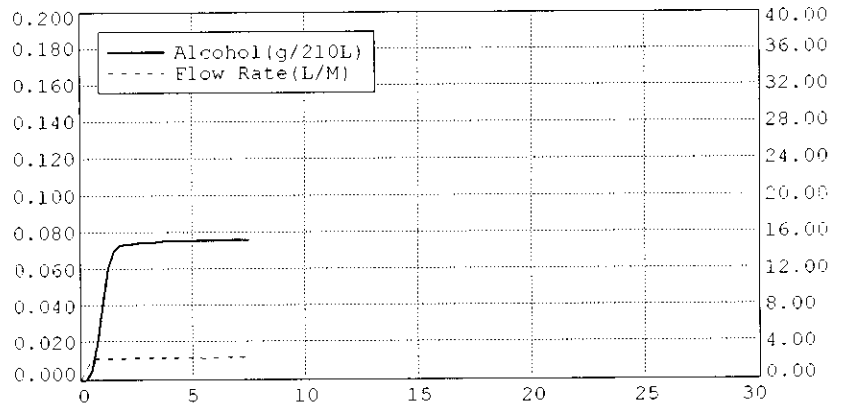
Date: 04/18/2019
 Time: 09:55:59

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
 TARGET AT 29.16: 0.078
 LOT #: AG826101
 EXPIRATION: 09/18/2020
 TANK PRESSURE: 1061 psi

BLANK TEST	0.000	09:59
INTERNAL STANDARD	VERIFIED	10:00
EXTERNAL STANDARD	0.077	10:00
BLANK TEST	0.000	10:01
EXTERNAL STANDARD	0.077	10:01
BLANK TEST	0.000	10:02
EXTERNAL STANDARD	0.077	10:02
BLANK TEST	0.000	10:03
EXTERNAL STANDARD	0.077	10:03
BLANK TEST	0.000	10:04
EXTERNAL STANDARD	0.077	10:04
BLANK TEST	0.000	10:05

Average = 0.0770
 Std Dev = 0.0000



LINEARITY CHECK: Control Test 4

Alaska Department of Public Safety
DATAMASTER dmt: 100423

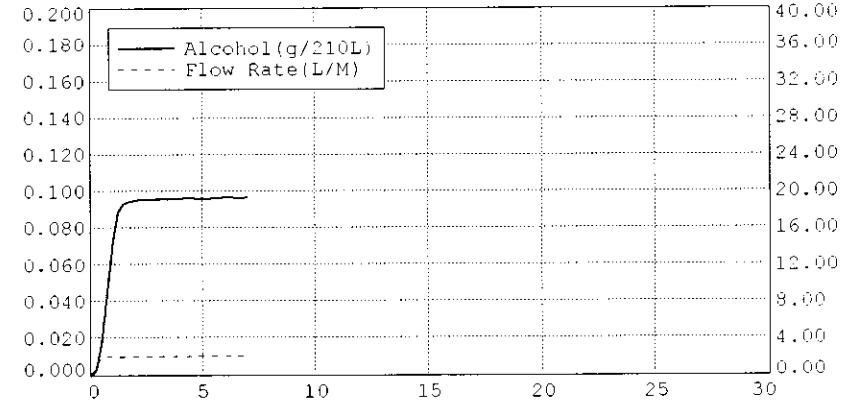
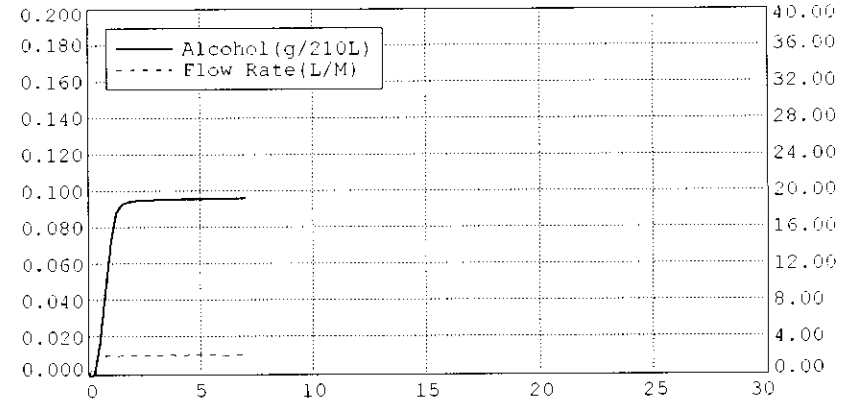
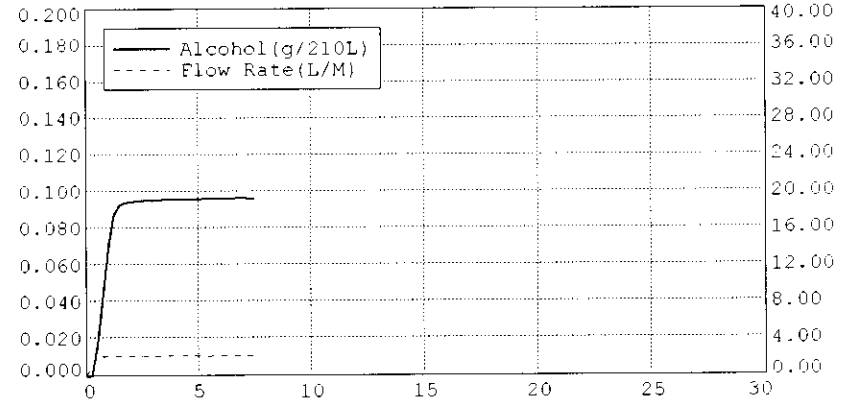
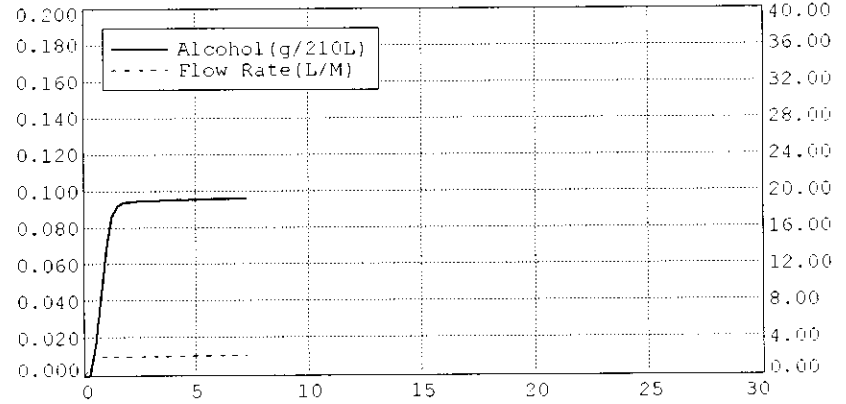
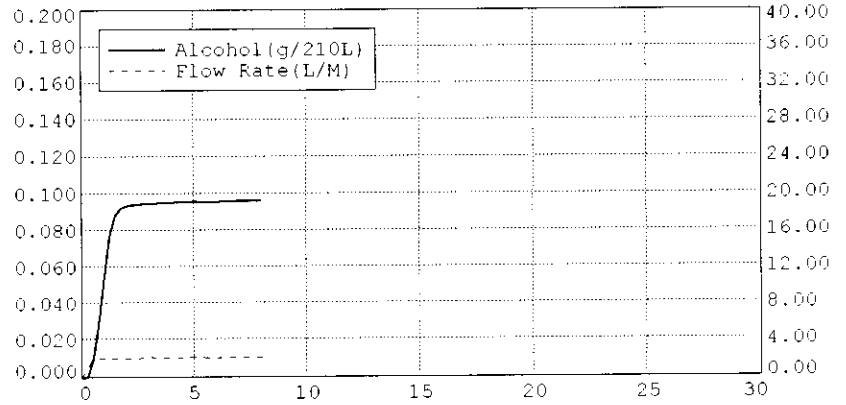
Date: 04/18/2019
Time: 10:09:19

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.100
TARGET AT 29.16: 0.097
LOT #: AG805903
EXPIRATION: 02/28/2020
TANK PRESSURE: 661 psi

BLANK TEST	0.000	10:10
INTERNAL STANDARD	VERIFIED	10:10
EXTERNAL STANDARD	0.097	10:10
BLANK TEST	0.000	10:11
EXTERNAL STANDARD	0.097	10:11
BLANK TEST	0.000	10:12
EXTERNAL STANDARD	0.097	10:13
BLANK TEST	0.000	10:13
EXTERNAL STANDARD	0.097	10:14
BLANK TEST	0.000	10:15
EXTERNAL STANDARD	0.097	10:15
BLANK TEST	0.000	10:16

Average = 0.0970
Std Dev = 0.0000



LINEARITY CHECK: Control Test 5

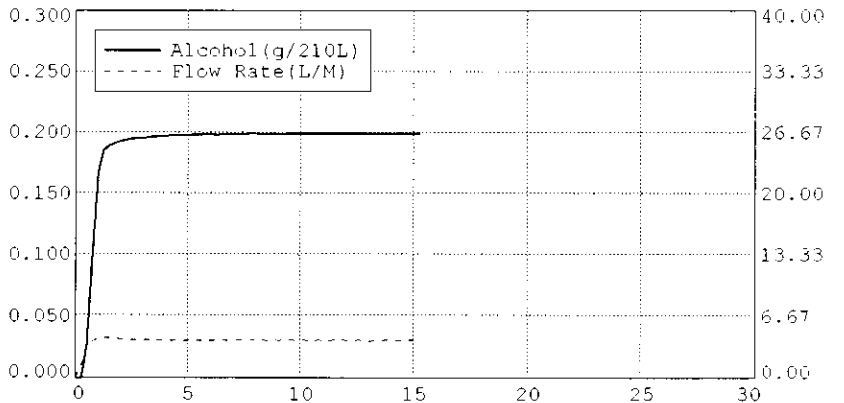
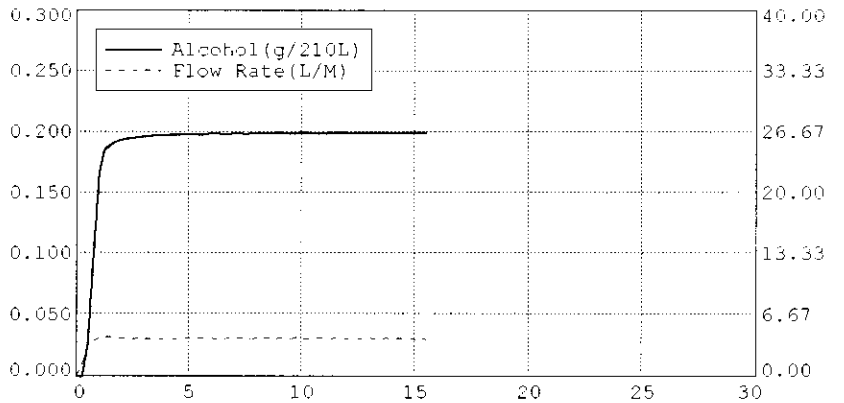
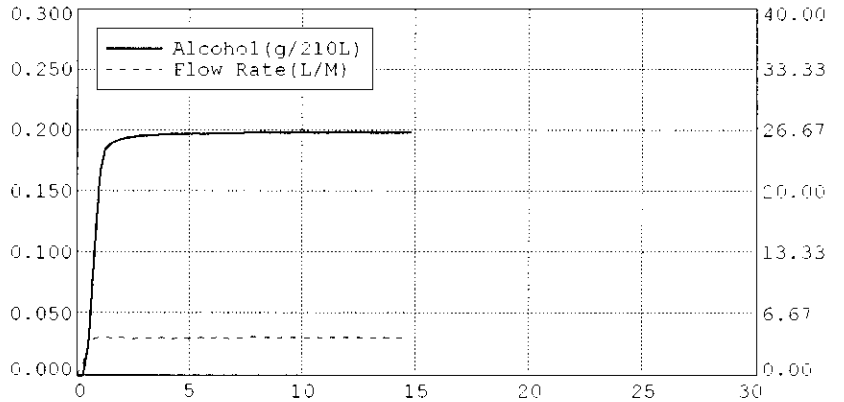
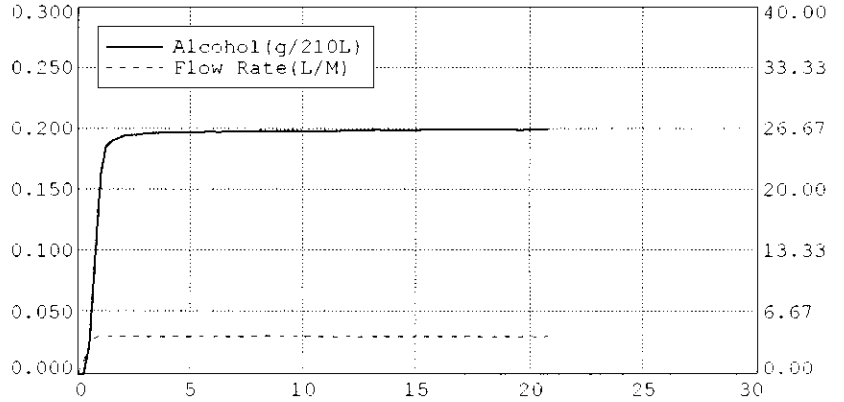
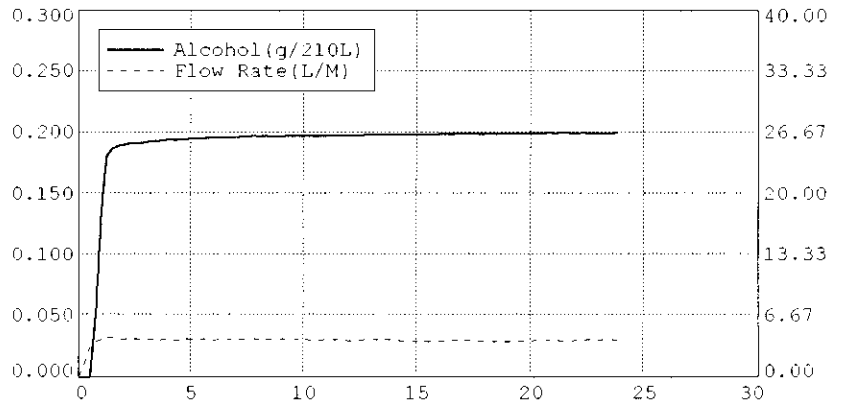
Alaska Department of Public Safety
 DATAMASTER dmt: 100423

Date: 04/18/2019
 Time: 10:19:07

EXTERNAL STANDARD INFORMATION
 NOMINAL: 0.200
 LOT #: GUTH 17340
 EXPIRATION: 10/09/2019

BLANK TEST	0.000	10:20
INTERNAL STANDARD	VERIFIED	10:20
EXTERNAL STANDARD	0.200	10:21
BLANK TEST	0.000	10:22
EXTERNAL STANDARD	0.200	10:22
BLANK TEST	0.000	10:23
EXTERNAL STANDARD	0.199	10:24
BLANK TEST	0.000	10:25
EXTERNAL STANDARD	0.199	10:25
BLANK TEST	0.000	10:26
EXTERNAL STANDARD	0.200	10:26
BLANK TEST	0.000	10:27

Average = 0.1996
 Std Dev = 0.0005



LINEARITY CHECK: Control Test 6

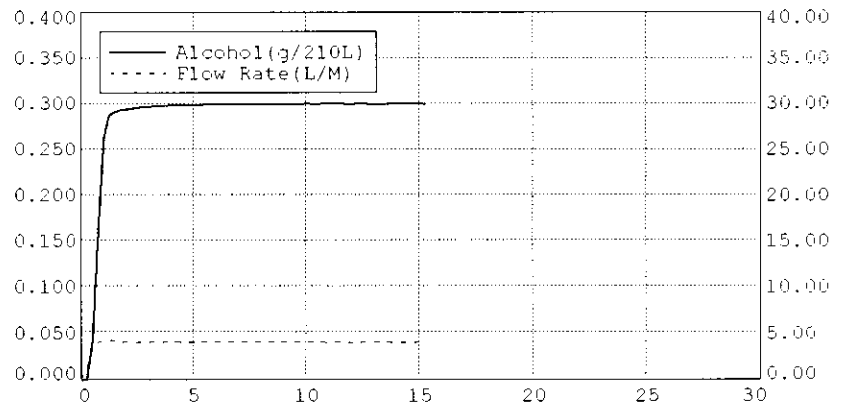
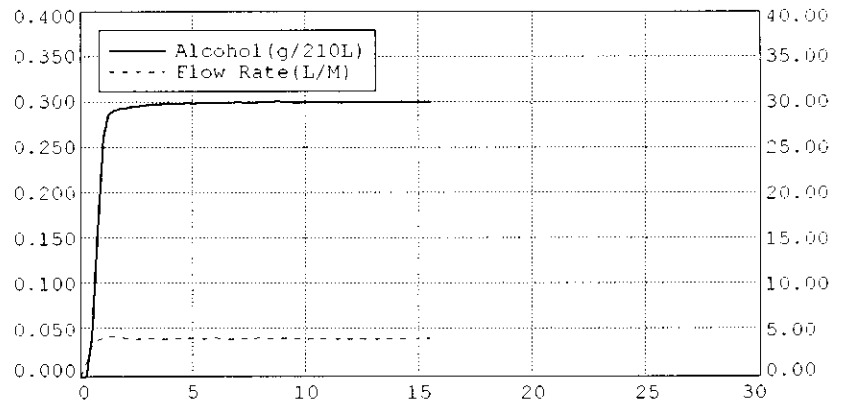
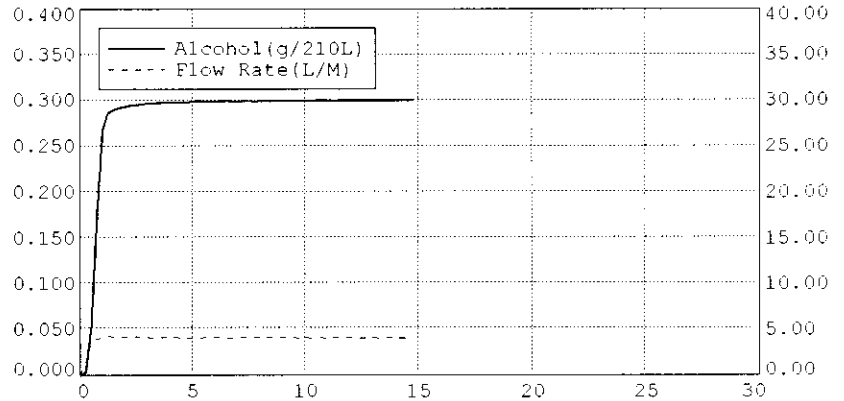
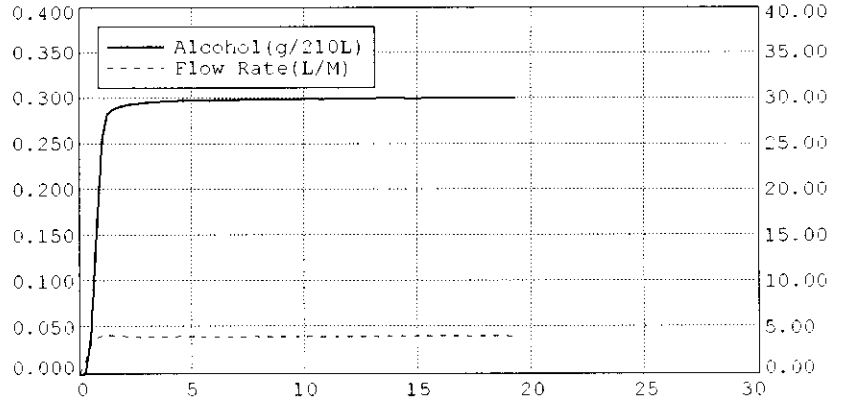
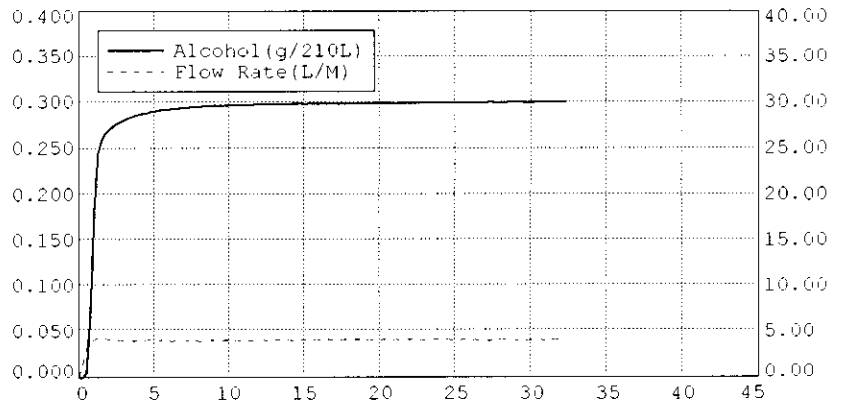
Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/18/2019
Time: 10:30:08

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.300
LOT #: GUTH 17350
EXPIRATION: 10/11/2019

BLANK TEST	0.000	10:31
INTERNAL STANDARD	VERIFIED	10:31
EXTERNAL STANDARD	0.300	10:32
BLANK TEST	0.000	10:32
EXTERNAL STANDARD	0.300	10:33
BLANK TEST	0.000	10:34
EXTERNAL STANDARD	0.300	10:34
BLANK TEST	0.000	10:35
EXTERNAL STANDARD	0.301	10:35
BLANK TEST	0.000	10:36
EXTERNAL STANDARD	0.300	10:37
BLANK TEST	0.000	10:38

Average = 0.3002
Std Dev = 0.0004



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/19/2019
Time: 12:34:12

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

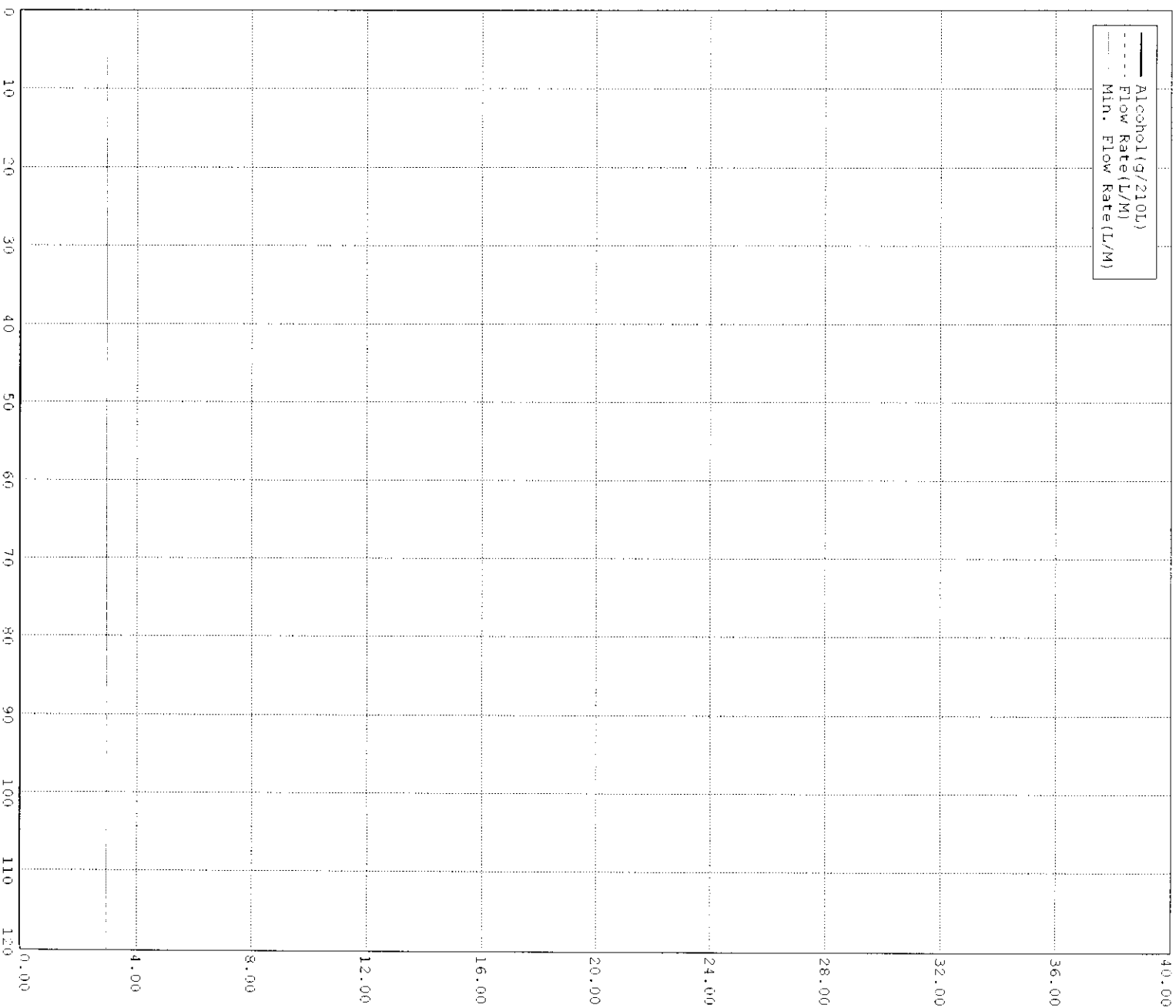
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:35
BLANK TEST	0.000	12:35
INTERNAL STANDARD	VERIFIED	12:35
EXTERNAL STANDARD	0.078	12:35
BLANK TEST	0.000	12:36
SUBJECT SAMPLE	INCOMPLETE	12:38

BMF



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/19/2019
Time: 12:42:21

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

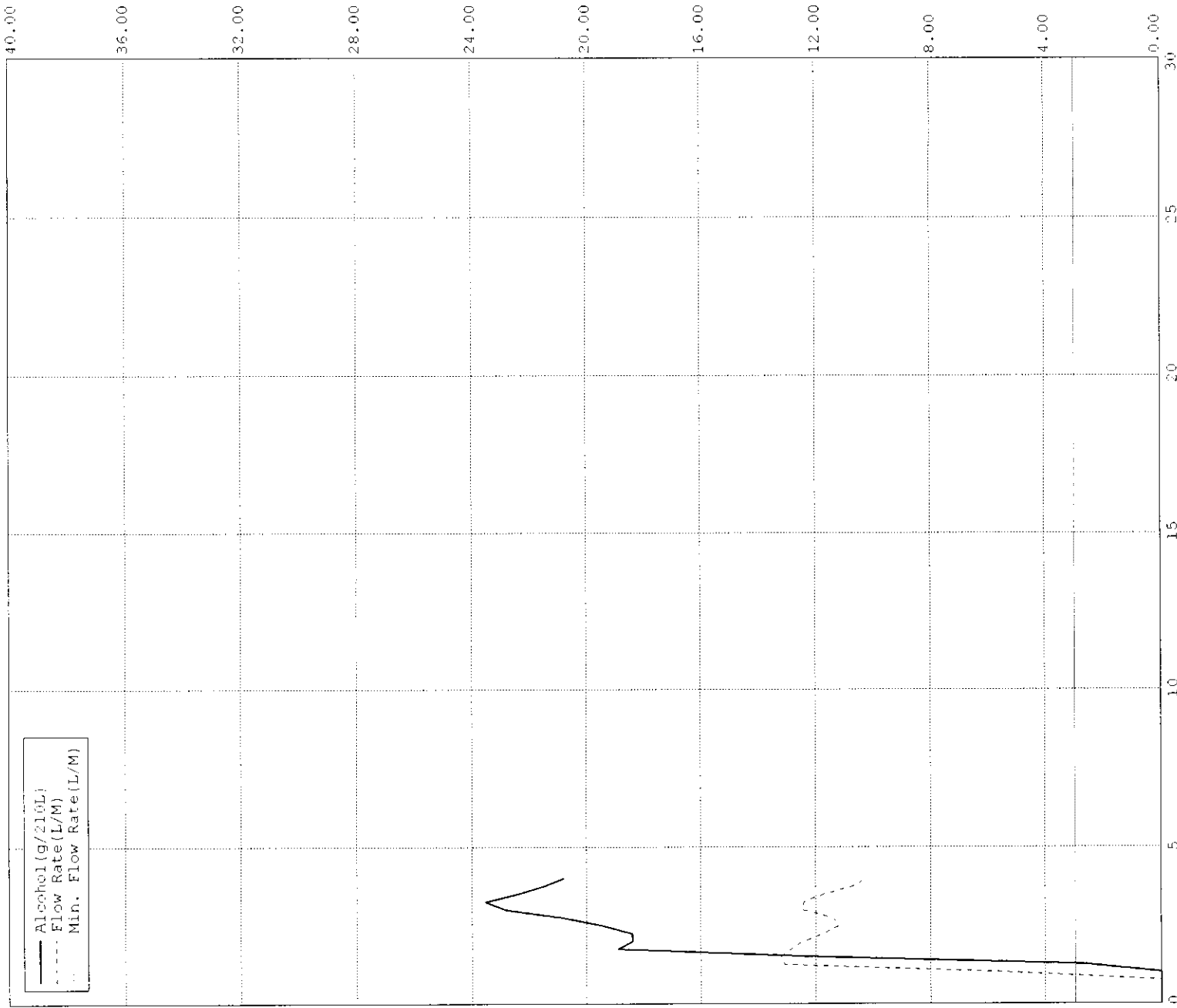
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:43
BLANK TEST	0.000	12:43
INTERNAL STANDARD	VERIFIED	12:43
EXTERNAL STANDARD	0.078	12:43
BLANK TEST	0.000	12:44
SUBJECT SAMPLE	INVALID	12:45



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/19/2019
Time: 12:49:38

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

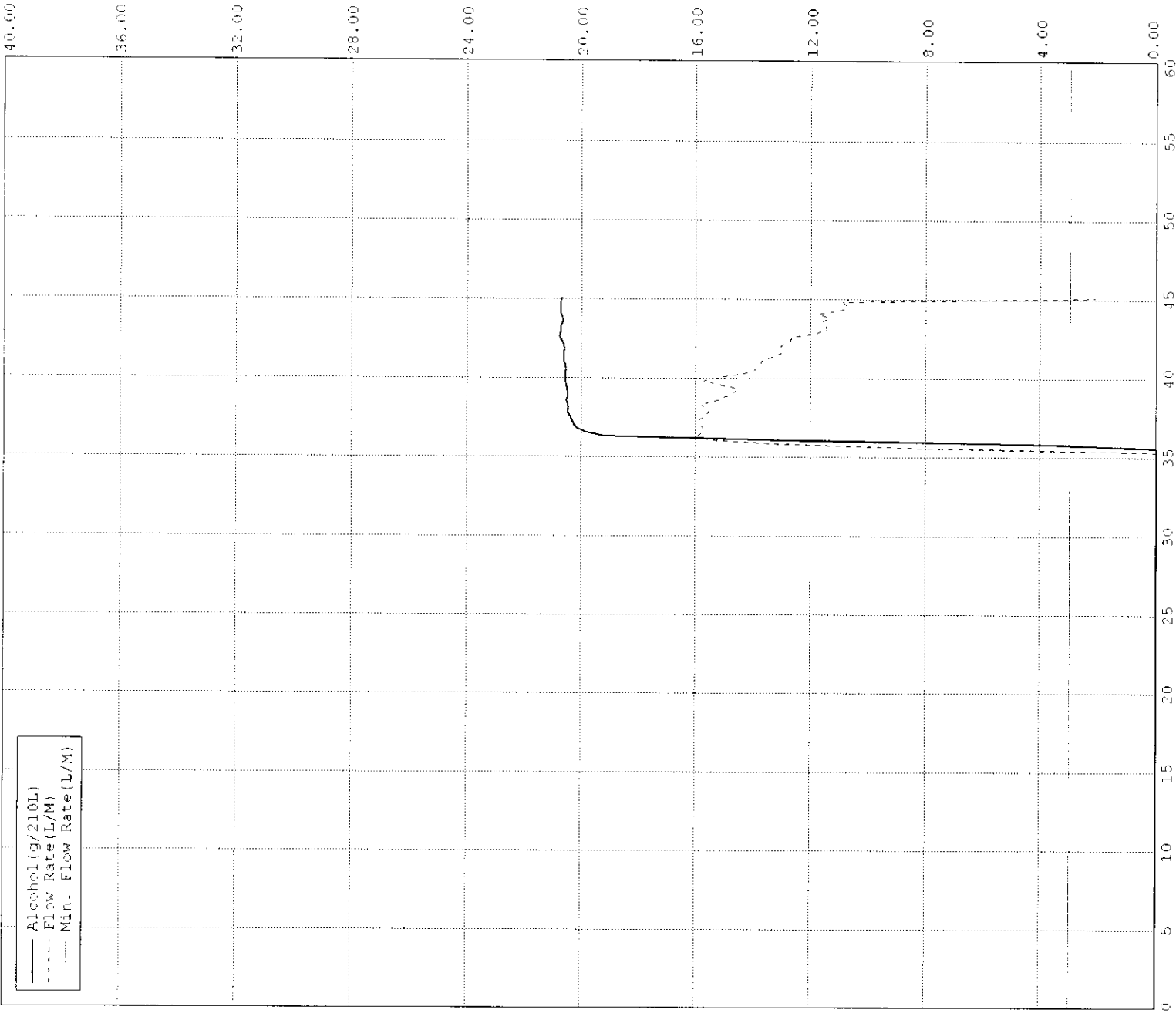
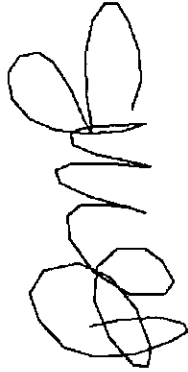
DEPT/AGENCY:
INTERFERENCE ACETONE
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	12:51
BLANK TEST	0.000	12:51
INTERNAL STANDARD	VERIFIED	12:51
Xq = 0.093 (0.56%)		
EXTERNAL STANDARD	0.078	12:51
X[1] = 0.0775 (-0.0012) (0.0015)		
BLANK TEST	0.000	12:52
SUBJECT SAMPLE	XXX	12:53
X[1] = 0.1041 (-0.0175) (-0.0006)		

Interference Detected

Filter 2 Avg: 0.0007
Filter 3 Avg: 0.0014



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/19/2019
Time: 12:57:01

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

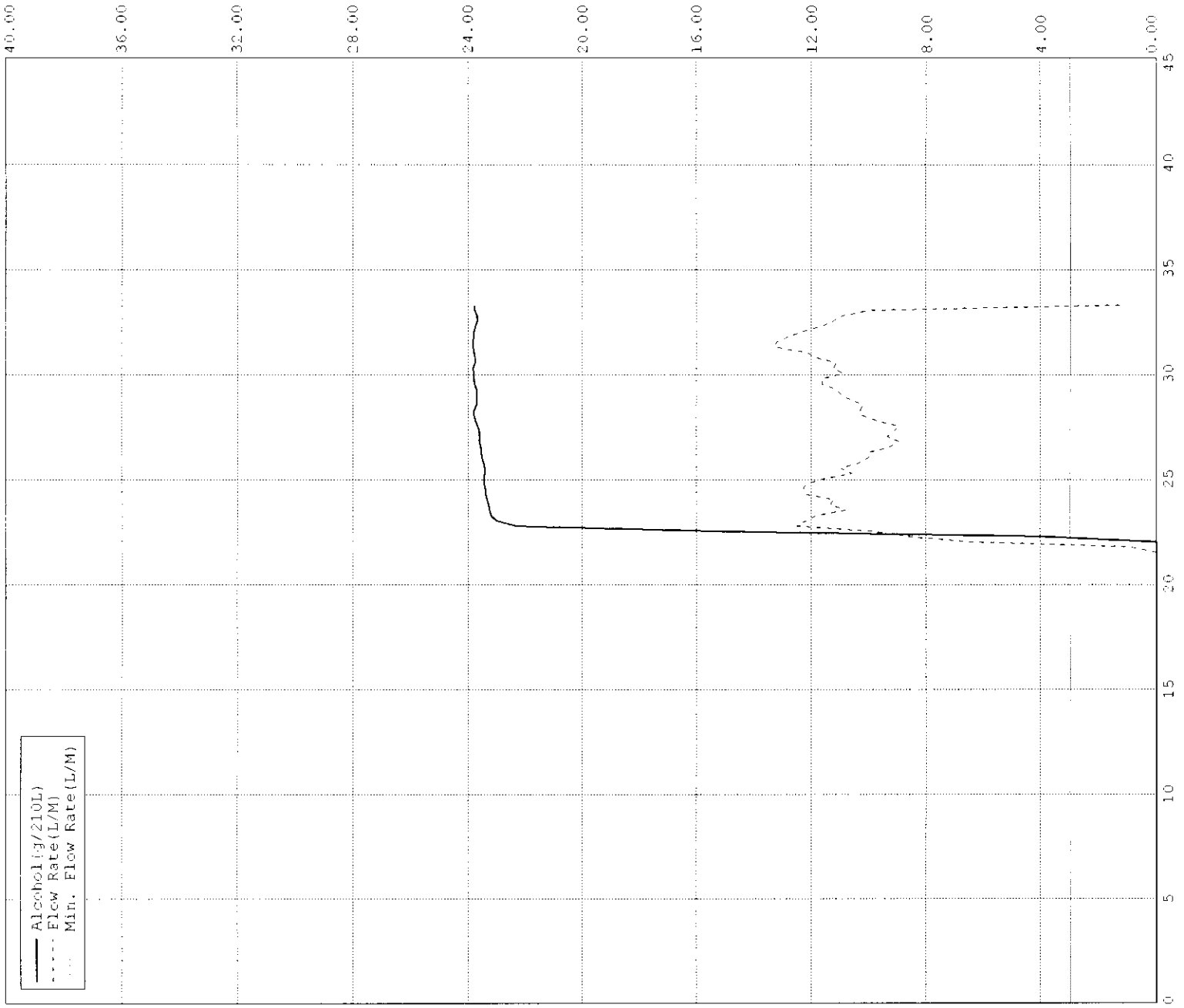
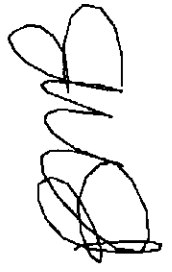
DEPT/AGENCY:
INTERFERENCE ISOPROPANOL
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 12:58
BLANK TEST 0.000 12:58
INTERNAL STANDARD VERIFIED 12:58
Xq = 0.093 (0.09%) 0.078 12:58
EXTERNAL STANDARD X[1] = 0.0779 (-0.0003) (0.0018) 0.000 12:59
BLANK TEST 0.000 XXX 13:00
SUBJECT SAMPLE X[1] = 0.1190 (-0.0222) (0.0000)

Interference Detected



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/19/2019
Time: 13:04:58

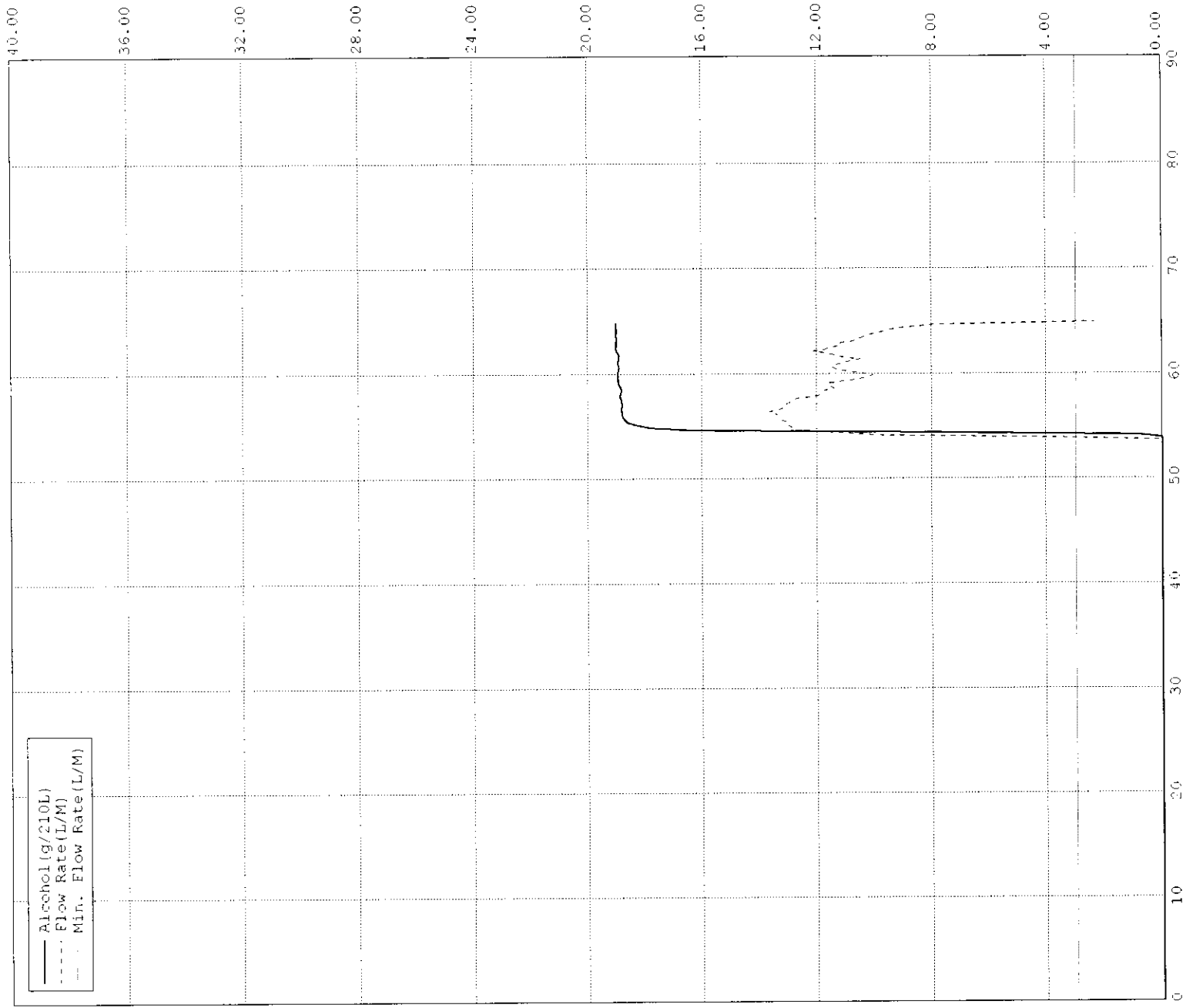
SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

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 29.51: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	13:06
BLANK TEST	0.000	13:06
INTERNAL STANDARD	VERIFIED	13:06
Xq = 0.093 (0.19%)		
EXTERNAL STANDARD	0.077	13:06
X[1] = 0.0774 (-0.0009) (0.0015)		
BLANK TEST	0.000	13:07
SUBJECT SAMPLE (Vol=2.08L)	0.095	13:08
X[1] = 0.0956 (0.0000) (0.0004)		
BLANK TEST	0.000	13:09
EXTERNAL STANDARD	0.078	13:09
X[1] = 0.0776 (-0.0003) (0.0009)		
BLANK TEST	0.000	13:10



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/19/2019
Time: 13:12:30

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

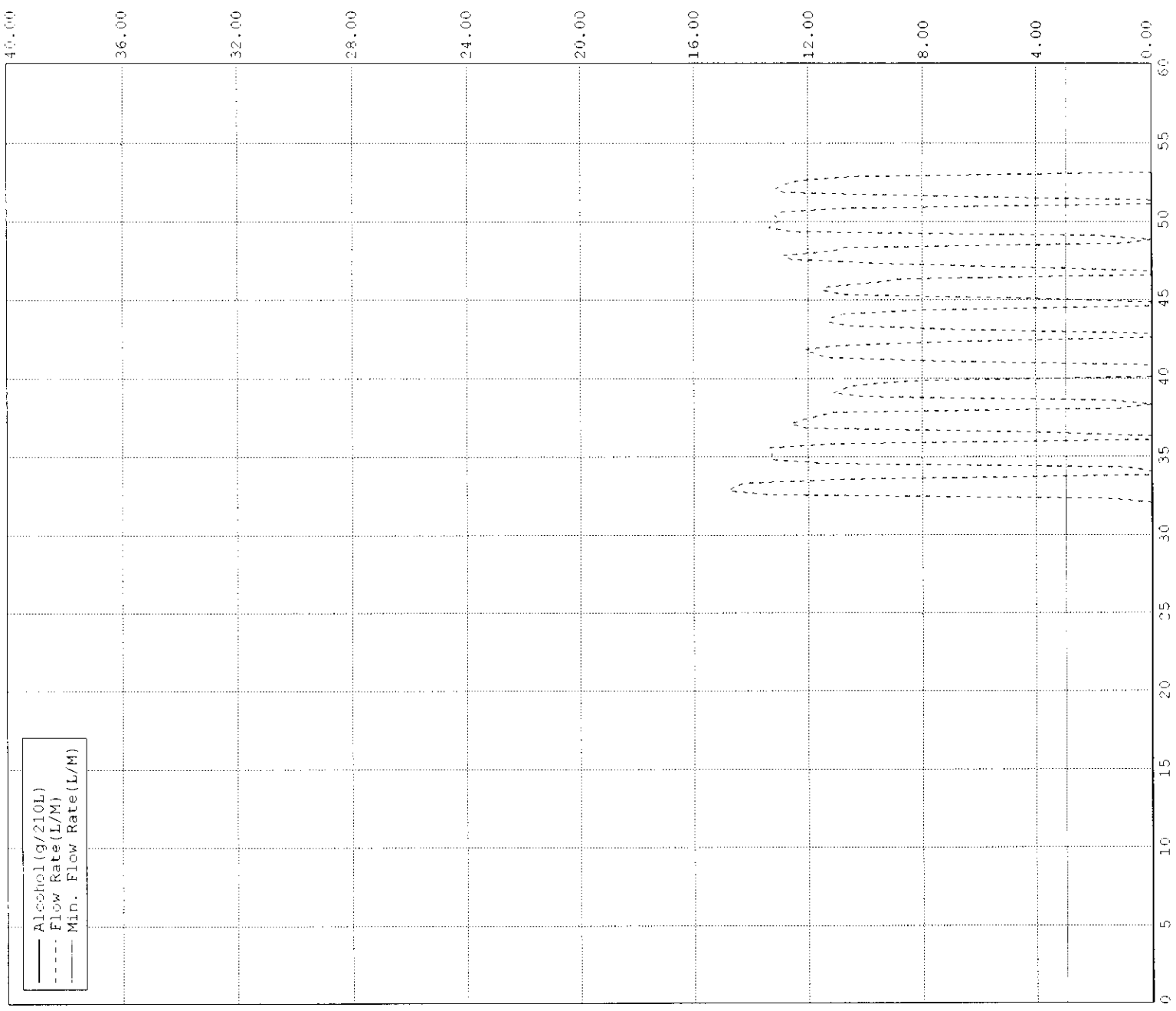
OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

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

EXTERNAL STANDARD INFORMATION
NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:14
BLANK TEST 0.000 13:14
INTERNAL STANDARD VERIFIED 13:14
EXTERNAL STANDARD 0.078 13:14
BLANK TEST 0.000 13:15
SUBJECT SAMPLE XXX 13:16

Maximum Attempts Exceeded



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/19/2019
Time: 13:19:35

SUBJECT NAME:
TEST TEST
LICENSE #: XXXX

OPERATOR NAME:
BRANDI BARNETT
OPERATOR'S #: 7038

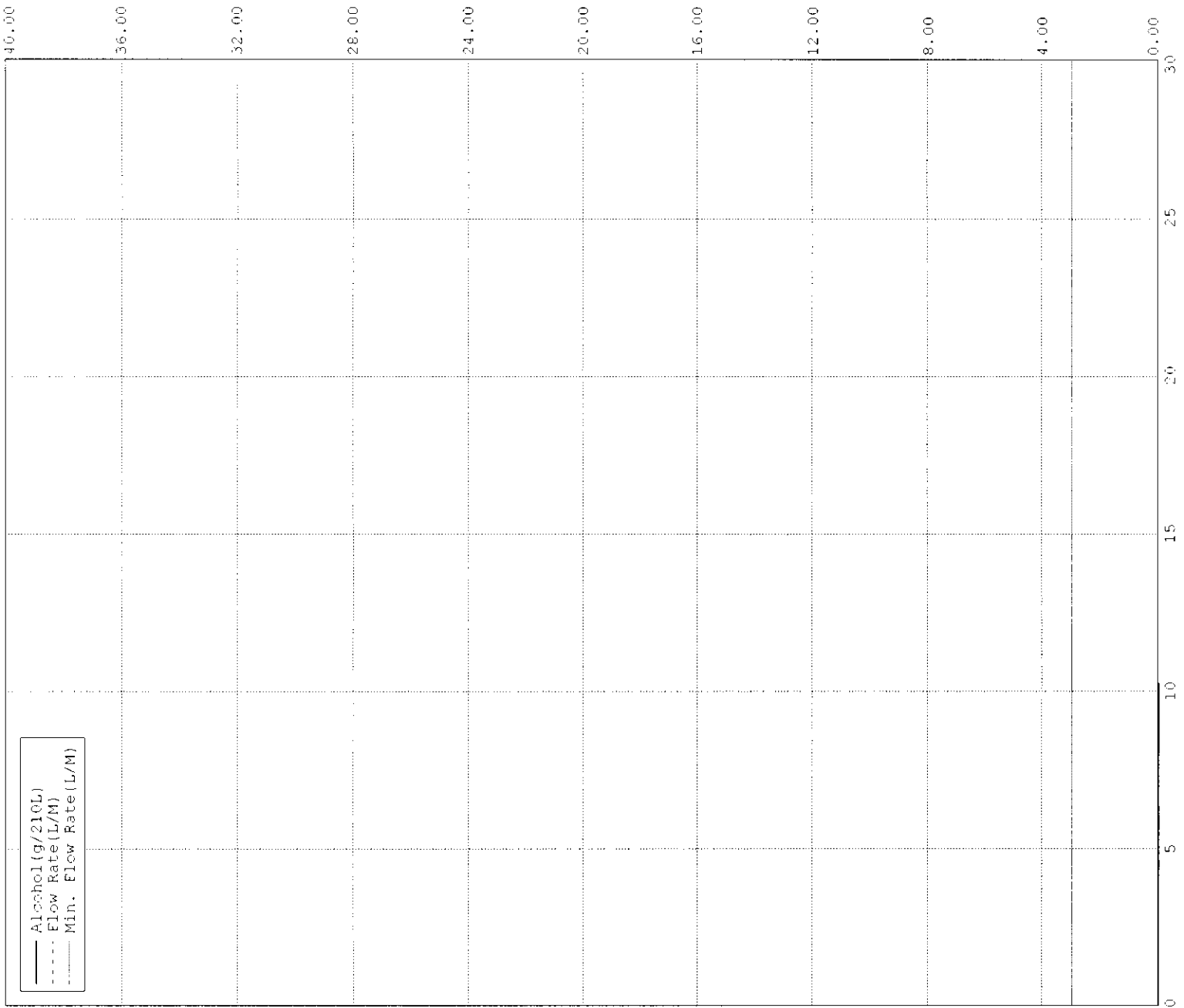
DEPT/AGENCY:
RFI
CASE/REPORT: XXXX
TEST TYPE: TEST

EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080
TARGET AT 29.51: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK PASSED 13:23
BLANK TEST 0.000 13:24
INTERNAL STANDARD VERIFIED 13:24
EXTERNAL STANDARD 0.078 13:24
BLANK TEST 0.000 13:25

RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety
DATAMASTER dmt: 100423

Date: 04/19/2019
Time: 13:51:19

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 29.5l: 0.079
LOT #: AG826101
EXPIRATION: 09/18/2020

DIAGNOSTIC CHECK	PASSED	TIME
BLANK TEST	0.000	13:52
INTERNAL STANDARD	VERIFIED	13:53
EXTERNAL STANDARD	0.078	13:53
BLANK TEST	0.000	13:54
SUBJECT SAMPLE (Vol=2.08L)	0.000	13:54
BLANK TEST	0.000	13:55
EXTERNAL STANDARD	0.078	13:56
BLANK TEST	0.000	13:57

