

## Alaska Scientific Crime Detection Laboratory

## DataMaster Certification Form

Issued: 01/27/2012  
Effective: 01/27/2012

Version: DMCEF2012 R0  
Status: Active

Instrument S/N 100362Analyst CRFStart Date 2/28/12

Updated software to 2.00, Ran USB Fixer  
Diagnostic Test (attached) ☒

## 1. Voltage Checks

a. Adjust voltages, if needed ☒

i. Lamp (2.6V Maximum)

ii. Bias (80V)

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 1500 mL (1.3L to 1.7L) ☒

## 4. Linearity Test (attached)

a. Levels Used ☒i. 0.020g/210L Mnf ILMO Lot 02811020A1 Exp 2/1/13ii. 0.040g/210L Mnf ILMO Lot 15210040A2 Exp 7/1/12iii. 0.080g/210L Mnf ILMO Lot 02511080A2 Exp 2/1/13iv. 0.100g/210L Mnf ILMO Lot 07611100A3 Exp 3/1/13v. 0.200g/210L Mnf Guth Lot 11120 Exp 7/19/131. Simulator S/N SD1176 Date Calibrated 8/17/11vi. 0.300g/210L Mnf Guth Lot 11110 Exp 7/13/131. Simulator S/N SD1202 Date Calibrated 8/17/11

## 5. Functional Tests (attached)

a. Incomplete ☒b. Invalid ☒c. Interference ☒i. Acetone - Mnf Repro Lot 9905 Level 0.080 Exp 11/4/11 CRF1. Simulator S/N SD1199 Date Calibrated 1/1/12ii. Isopropanol - Mnf Guth Lot 10280 Level 0.080 Exp 11/17/121. Simulator S/N DR6267 Date Calibrated 1/10/12d. RFI ☒6. Verify stylus is calibrated ☒10. Verification of Calibration ☒7. Verify card reader is functional ☒11. Non-Drinking Subject Test (attached) ☒8. Reset Options ☒12. Upload ☒9. Clear Memory ☒13. Update agency information and polling status in DM Host Calling Program W/AEnd Date 3/1/12

## DIAGNOSTIC RECORD

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100362  
-----

Date: 02/28/2012  
Time: 13:01:58

## VERSIONS

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

## TEMPERATURES

|                         |        |
|-------------------------|--------|
| Sample Chamber = 49.0°C | PASSED |
| Breath Tube = 47.5°C    | PASSED |

## PUMP INFO

|                       |        |
|-----------------------|--------|
| Flow Rate = 4.680 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 |
|-------------------|--------|

2/18  
CRF

## Technician Screen

-----  
DATAMASTER dmt: 100362  
-----

Date: 02/28/2012

Time: 1:13 PM

## Temperatures (°C)

Sample Cell: 48.8°C

Breath Tube: 46.3°C

Current Barometer 29.5 in

Volume (Ltr) 1.47

## Settings

Lamp: 1.79 V

Bias: 79 V

Cooler: 1.81 V

Chopper: 541 Hz

## Voltages (V)

Flow: 1.04 V

Detector: 0.017 V

3/18  
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## CALIBRATION FACTORS

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100362  
-----

Date: 03/15/2011  
Time: 07:01:28

OPERATOR NAME:  
COLLEEN S OBRYANT  
CERTIFICATE #: 6237

LOT #: GUTH100  
BOTTLE #: 9380  
EXPIRATION: 12/17/2011

Ca = 0.1000  
CAL = 0.977426    0.800 <= CAL < 1.200  
b1 = 0.0004    0.0000 <= b1 < 0.0040  
b2 = 0.0058    0.0010 <= b2 < 0.0100  
b3 = 0.0000    0.0000 <= b3 < 0.0040  
Xq = 0.0727    0.0500 <= Xq < 0.2000  
a21 = 1.161401    1.050 <= a21 < 1.300  
a31 = 0.532998    0.300 <= a31 < 0.800

4/18  
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# SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100362

Date: 02/28/2012  
Time: 14:40:36

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

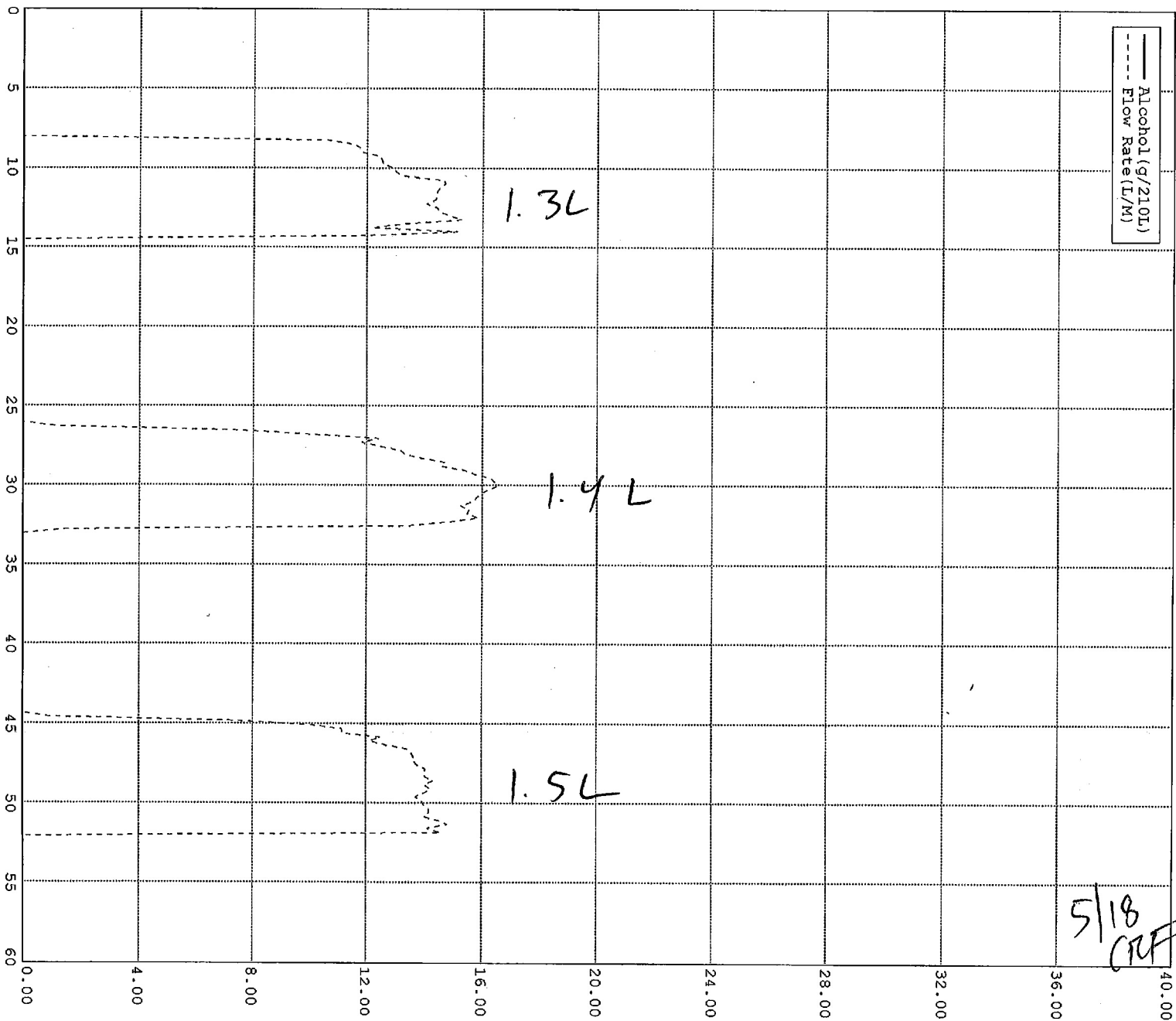
OPERATOR NAME:  
MINIMUM VOLUME  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.46: 0.078  
LOT #: 02511080A2  
EXPIRATION: 02/01/2013

| DIAGNOSTIC CHECK  | PASSED   | 14:41 |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 14:41 |
| INTERNAL STANDARD | VERIFIED | 14:41 |
| EXTERNAL STANDARD | 0.075    | 14:42 |
| BLANK TEST        | 0.000    | 14:43 |
| SUBJECT SAMPLE    | 0.000    | 14:43 |
| BLANK TEST        | 0.000    | 14:44 |
| EXTERNAL STANDARD | 0.076    | 14:45 |
| BLANK TEST        | 0.000    | 14:46 |

CRT



## LINEARITY CHECK

Alaska Department of Public Safety  
DATA MASTER dmt: 100362

Date: 02/28/2012

Time: 14:51:42

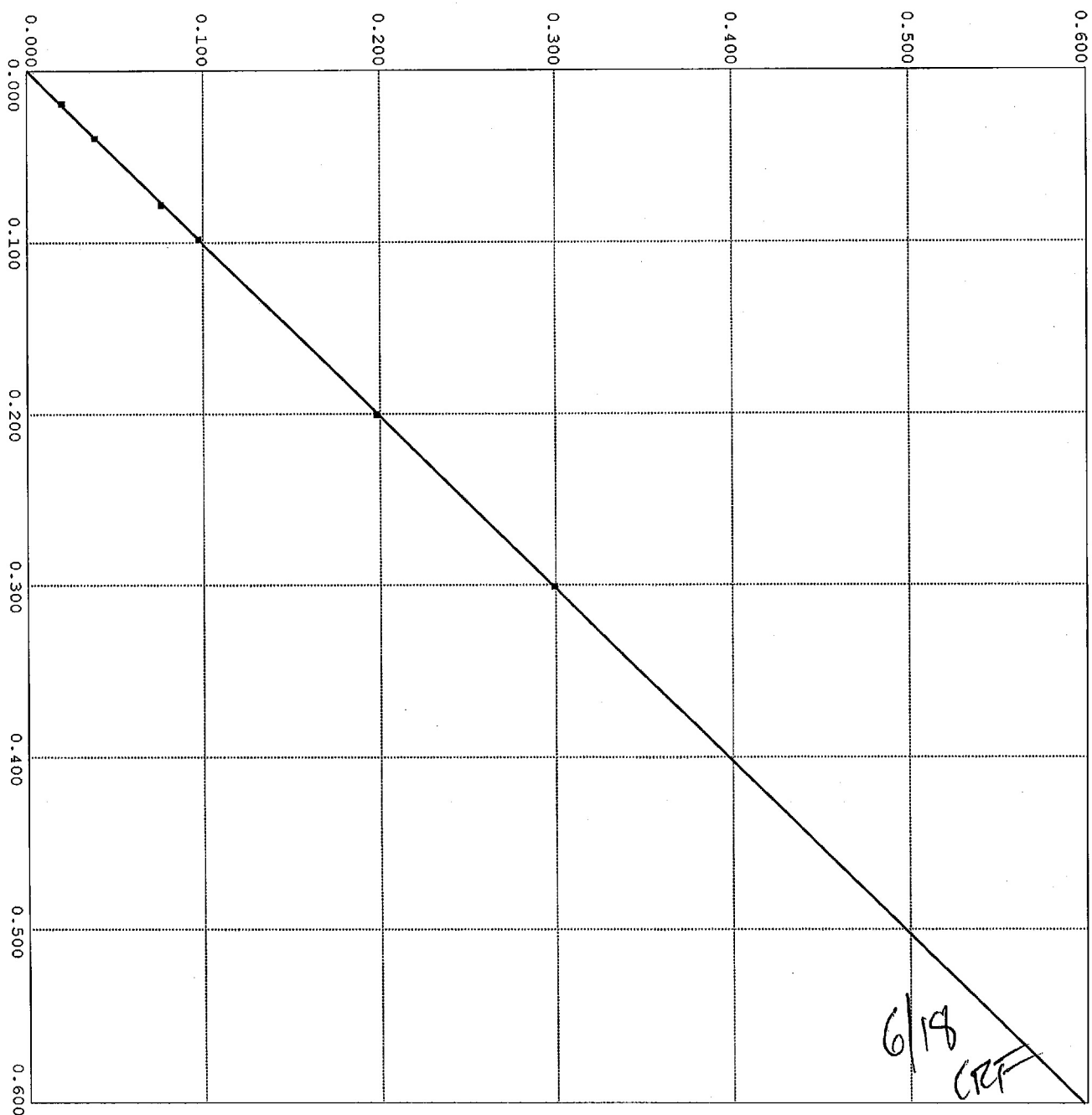
SUPERVISOR NAME:  
CHARLES FOSTER  
OPERATOR'S #: 7734

| TARGET | AVERAGE | STD. DEV. |
|--------|---------|-----------|
| 0.019  | 0.0207  | 0.0002    |
| 0.039  | 0.0396  | 0.0003    |
| 0.078  | 0.0768  | 0.0003    |
| 0.098  | 0.0983  | 0.0002    |
| 0.200  | 0.1989  | 0.0008    |
| 0.300  | 0.3002  | 0.0007    |

|                |            |
|----------------|------------|
| SLOPE          | = 0.996016 |
| R <sup>2</sup> | = 0.993916 |

CRF



## LINEARITY CHECK: Control Test 1

Alaska Department of Public Safety  
DATAMASTER dmt: 100362

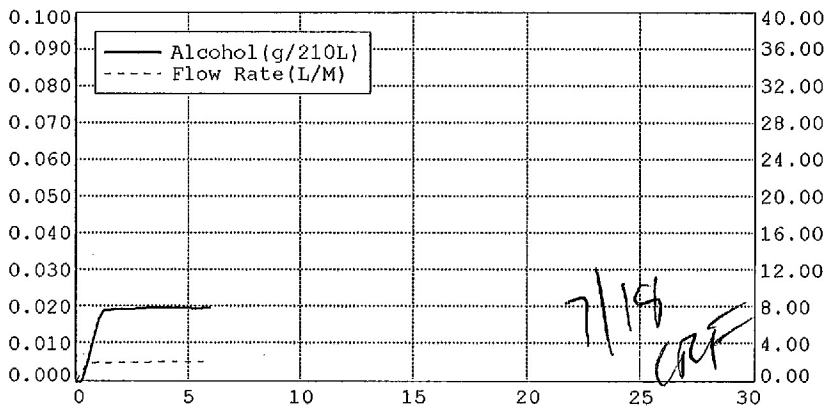
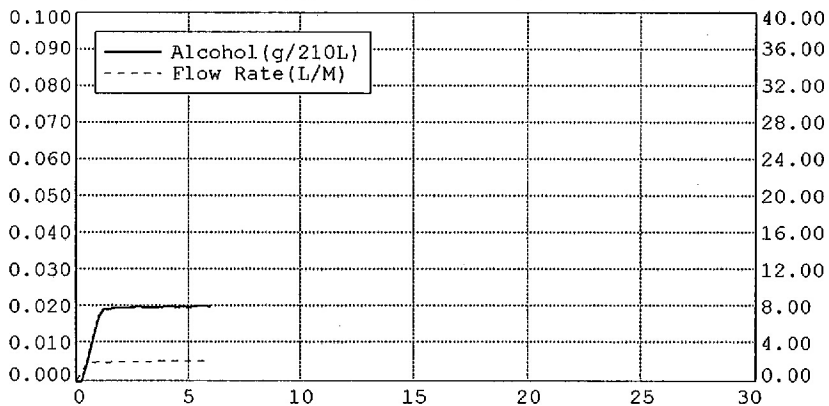
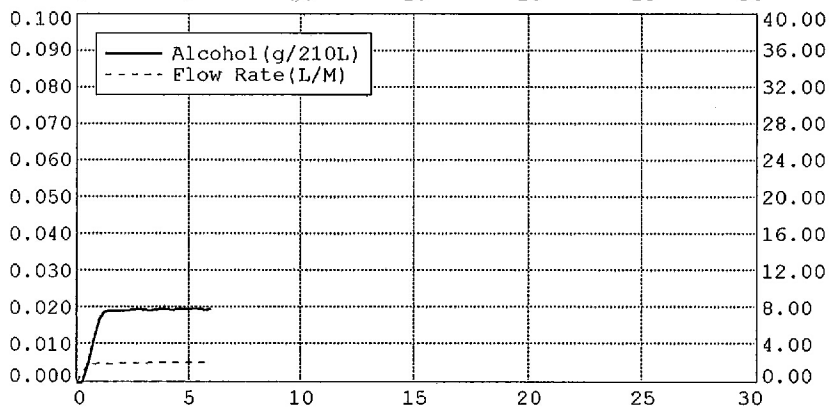
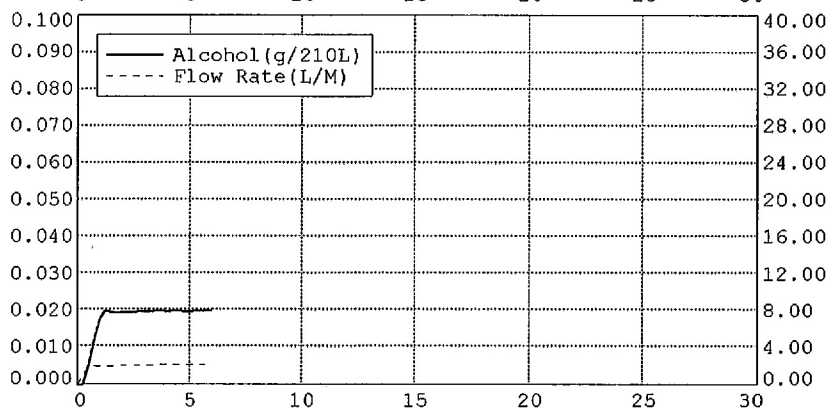
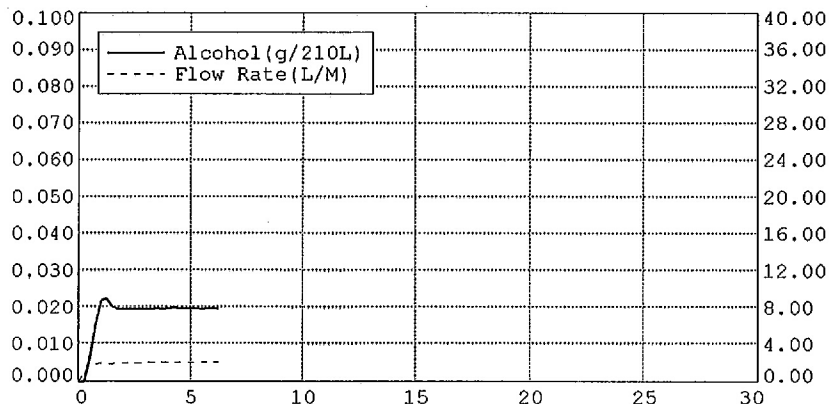
Date: 02/28/2012  
Time: 14:51:44

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.020  
TARGET AT 29.46: 0.019  
LOT #: 02811020A1  
EXPIRATION: 02/01/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 14:53 |
| INTERNAL STANDARD | VERIFIED | 14:53 |
| EXTERNAL STANDARD | 0.020    | 14:54 |
| BLANK TEST        | 0.000    | 14:54 |
| EXTERNAL STANDARD | 0.020    | 14:55 |
| BLANK TEST        | 0.000    | 14:56 |
| EXTERNAL STANDARD | 0.020    | 14:56 |
| BLANK TEST        | 0.000    | 14:57 |
| EXTERNAL STANDARD | 0.021    | 14:57 |
| BLANK TEST        | 0.000    | 14:58 |
| EXTERNAL STANDARD | 0.020    | 14:58 |
| BLANK TEST        | 0.000    | 14:59 |

Average = 0.0207  
Std Dev = 0.0002



## LINEARITY CHECK: Control Test 2

Alaska Department of Public Safety  
DATAMASTER dmt: 100362

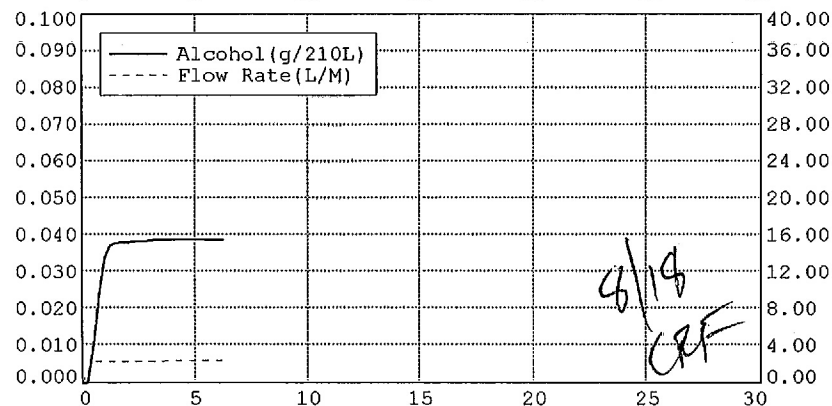
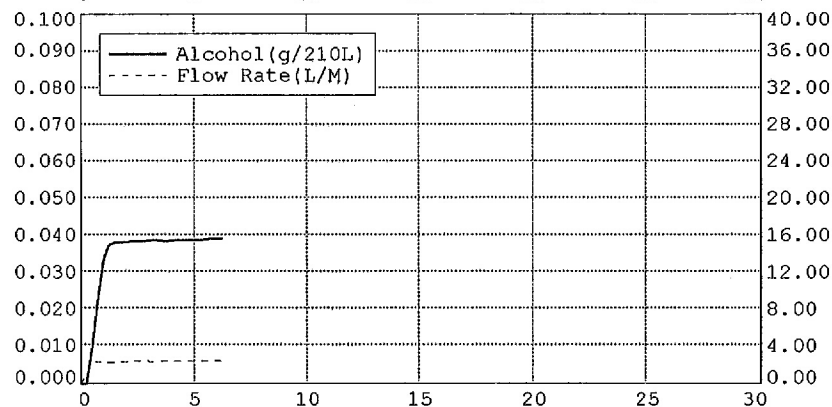
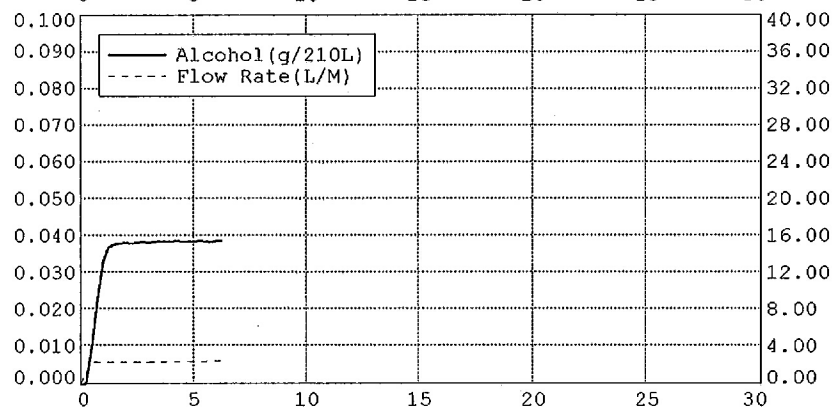
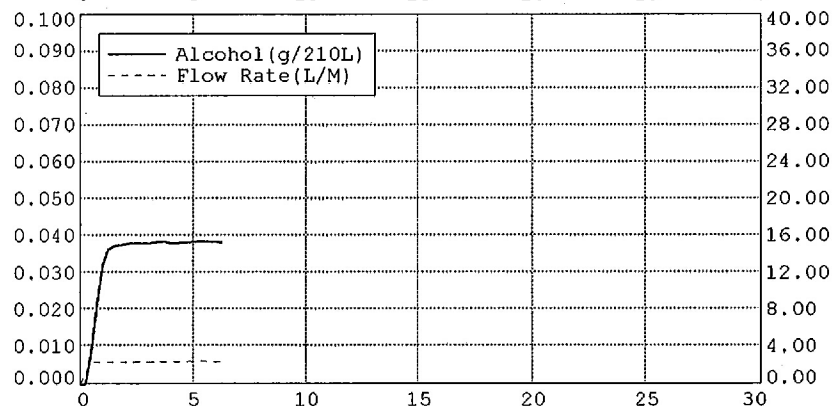
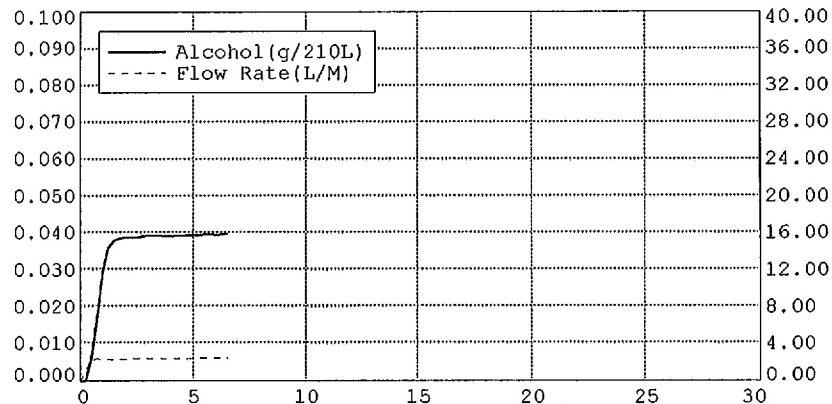
Date: 02/28/2012  
Time: 15:04:13

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.040  
TARGET AT 29.46: 0.039  
LOT #: 15210040A2  
EXPIRATION: 07/01/2012

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 15:05 |
| INTERNAL STANDARD | VERIFIED | 15:05 |
| EXTERNAL STANDARD | 0.040    | 15:05 |
| BLANK TEST        | 0.000    | 15:06 |
| EXTERNAL STANDARD | 0.039    | 15:06 |
| BLANK TEST        | 0.000    | 15:07 |
| EXTERNAL STANDARD | 0.039    | 15:07 |
| BLANK TEST        | 0.000    | 15:08 |
| EXTERNAL STANDARD | 0.039    | 15:08 |
| BLANK TEST        | 0.000    | 15:09 |
| EXTERNAL STANDARD | 0.039    | 15:10 |
| BLANK TEST        | 0.000    | 15:10 |

Average = 0.0396  
Std Dev = 0.0003



## LINEARITY CHECK: Control Test 3

Alaska Department of Public Safety  
DATAMASTER dmt: 100362

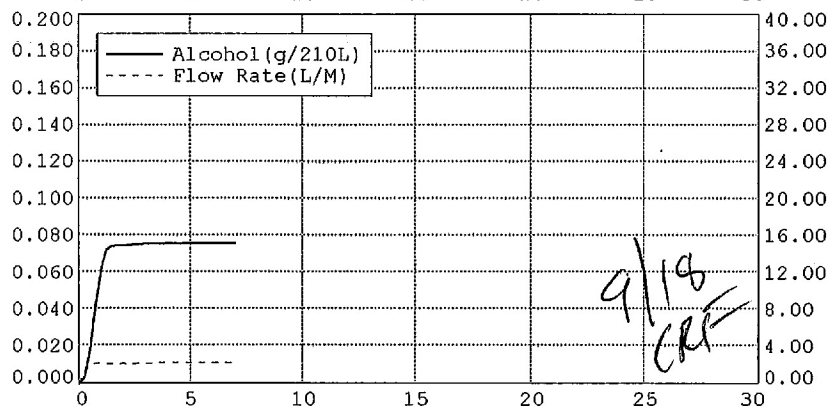
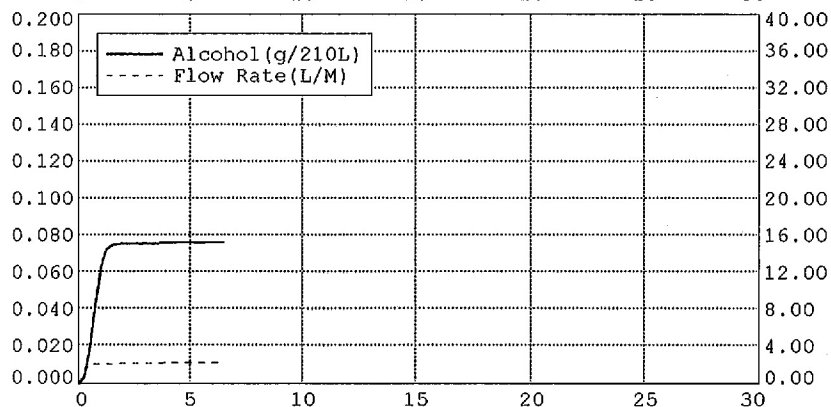
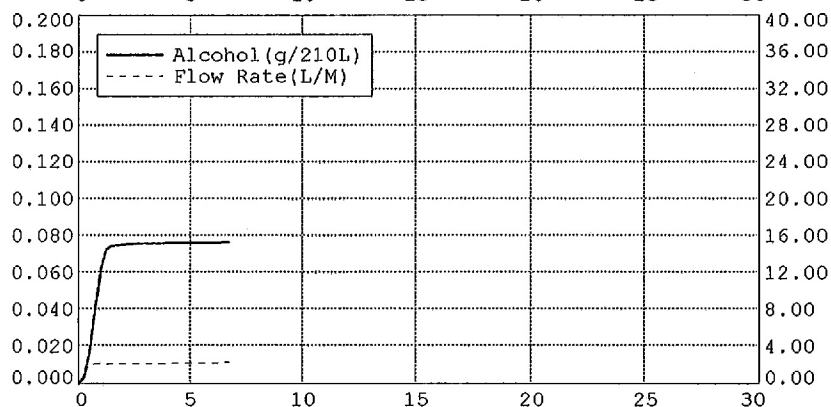
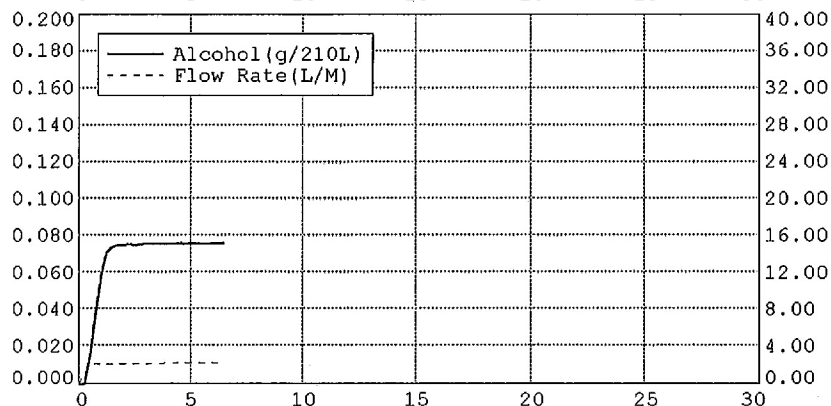
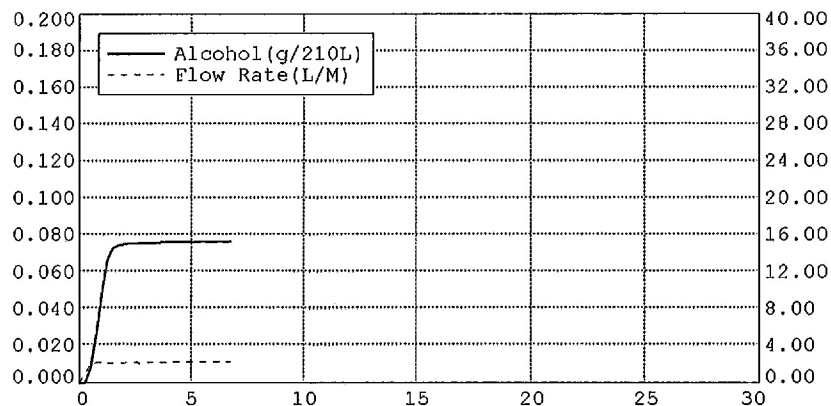
Date: 02/28/2012  
Time: 15:13:35

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.080  
TARGET AT 29.46: 0.078  
LOT #: 02511080A2  
EXPIRATION: 02/01/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 15:15 |
| INTERNAL STANDARD | VERIFIED | 15:15 |
| EXTERNAL STANDARD | 0.077    | 15:15 |
| BLANK TEST        | 0.000    | 15:16 |
| EXTERNAL STANDARD | 0.076    | 15:16 |
| BLANK TEST        | 0.000    | 15:17 |
| EXTERNAL STANDARD | 0.077    | 15:17 |
| BLANK TEST        | 0.000    | 15:18 |
| EXTERNAL STANDARD | 0.077    | 15:18 |
| BLANK TEST        | 0.000    | 15:19 |
| EXTERNAL STANDARD | 0.076    | 15:19 |
| BLANK TEST        | 0.000    | 15:20 |

Average = 0.0768  
Std Dev = 0.0003





## LINEARITY CHECK: Control Test 4

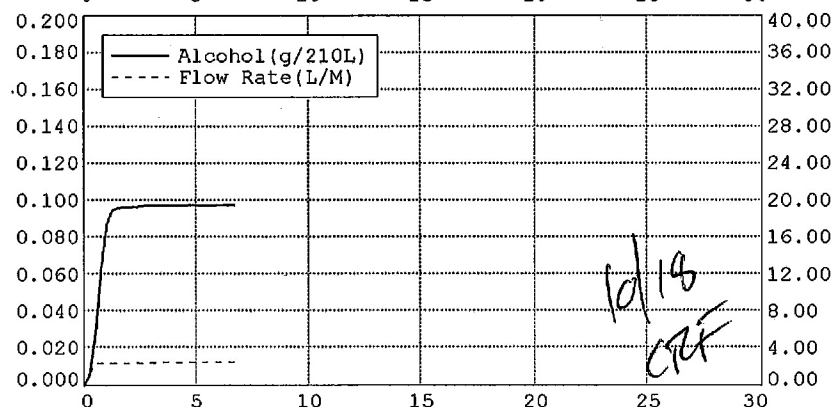
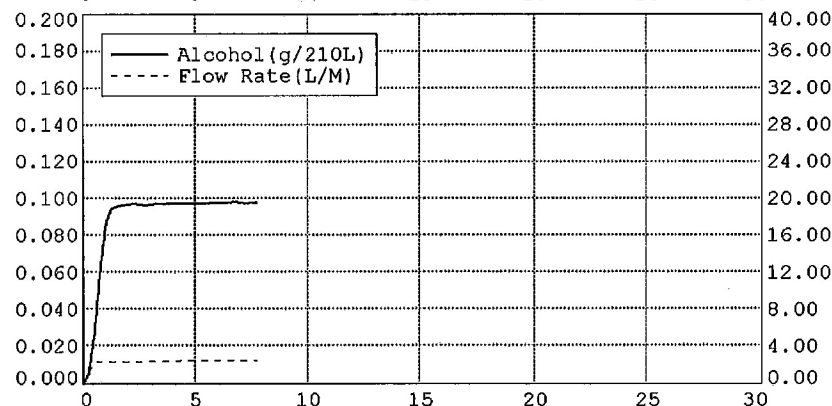
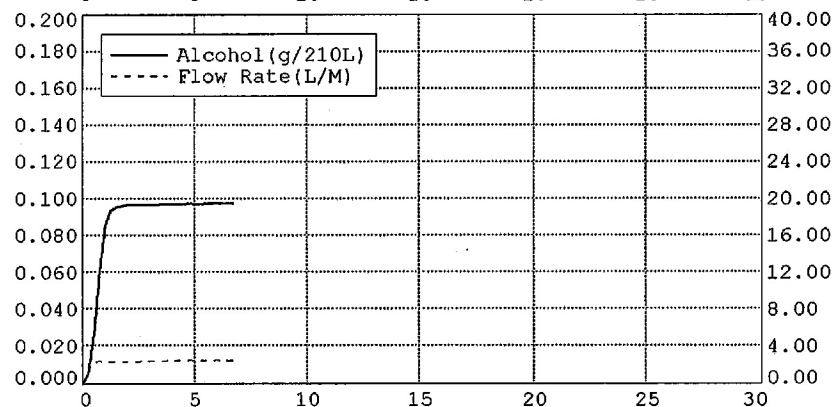
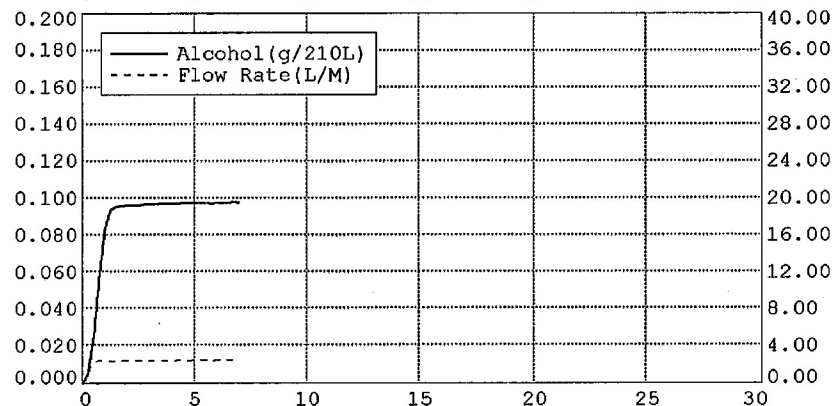
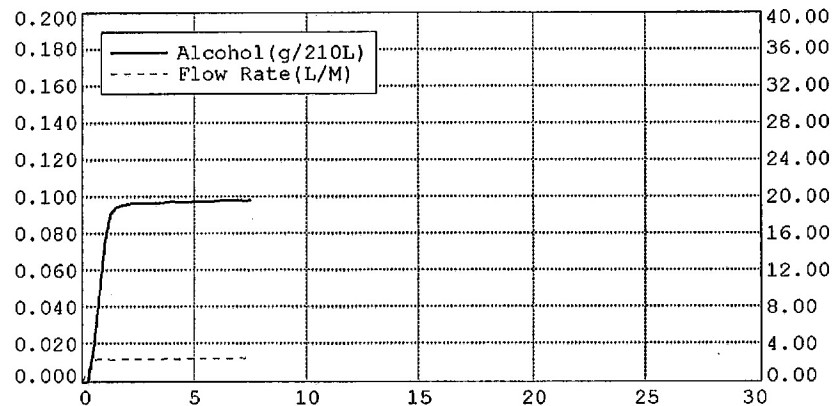
Alaska Department of Public Safety  
DATAMASTER dmt: 100362

Date: 02/28/2012  
Time: 15:22:18

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.100  
TARGET AT 29.46: 0.098  
LOT #: 07611100A3  
EXPIRATION: 03/01/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 15:24 |
| INTERNAL STANDARD | VERIFIED | 15:24 |
| EXTERNAL STANDARD | 0.098    | 15:24 |
| BLANK TEST        | 0.000    | 15:25 |
| EXTERNAL STANDARD | 0.098    | 15:25 |
| BLANK TEST        | 0.000    | 15:26 |
| EXTERNAL STANDARD | 0.098    | 15:26 |
| BLANK TEST        | 0.000    | 15:27 |
| EXTERNAL STANDARD | 0.098    | 15:27 |
| BLANK TEST        | 0.000    | 15:28 |
| EXTERNAL STANDARD | 0.098    | 15:29 |
| BLANK TEST        | 0.000    | 15:29 |

Average = 0.0983  
Std Dev = 0.0002



## LINEARITY CHECK: Control Test 5

Alaska Department of Public Safety  
DATAMASTER dmt: 100362

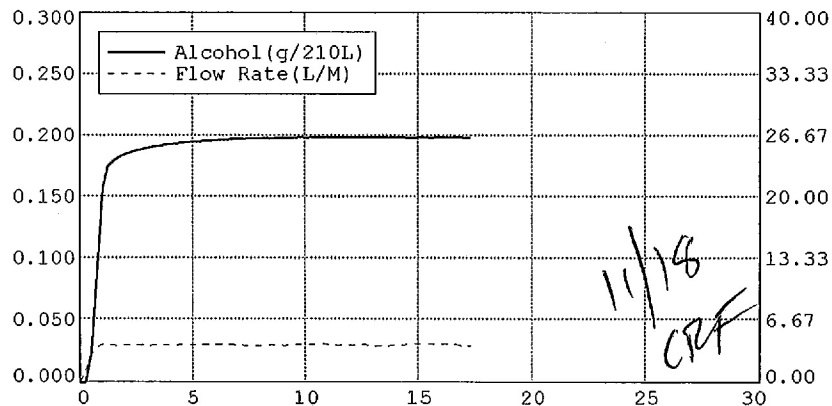
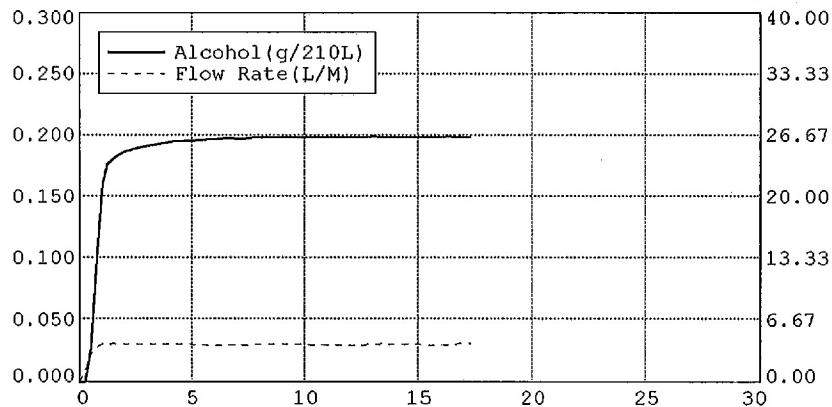
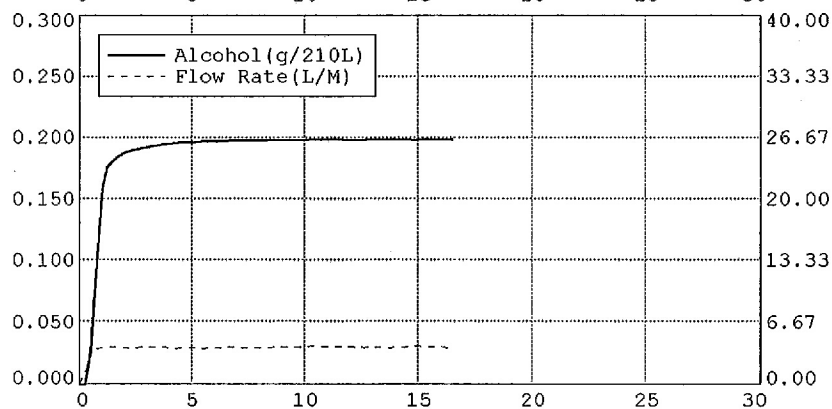
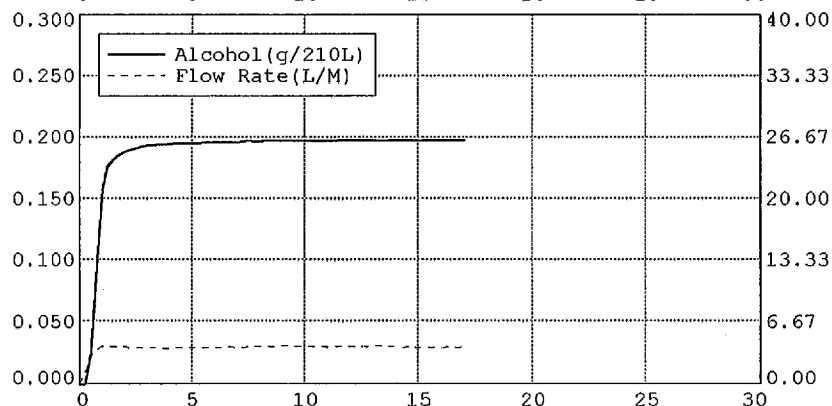
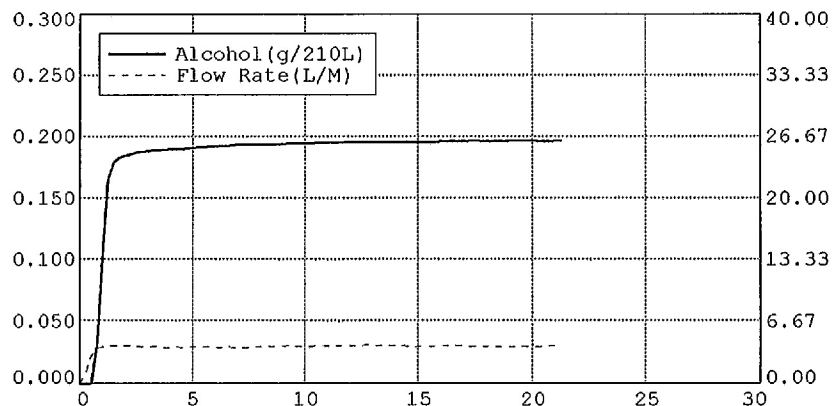
Date: 02/28/2012  
Time: 15:33:28

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.200  
LOT #: 11120  
EXPIRATION: 07/19/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 15:34 |
| INTERNAL STANDARD | VERIFIED | 15:34 |
| EXTERNAL STANDARD | 0.197    | 15:35 |
| BLANK TEST        | 0.000    | 15:36 |
| EXTERNAL STANDARD | 0.198    | 15:36 |
| BLANK TEST        | 0.000    | 15:37 |
| EXTERNAL STANDARD | 0.199    | 15:37 |
| BLANK TEST        | 0.000    | 15:38 |
| EXTERNAL STANDARD | 0.199    | 15:39 |
| BLANK TEST        | 0.000    | 15:40 |
| EXTERNAL STANDARD | 0.199    | 15:40 |
| BLANK TEST        | 0.000    | 15:41 |

Average = 0.1989  
Std Dev = 0.0008



## LINEARITY CHECK: Control Test 6

Alaska Department of Public Safety  
DATAMASTER dmt: 100362

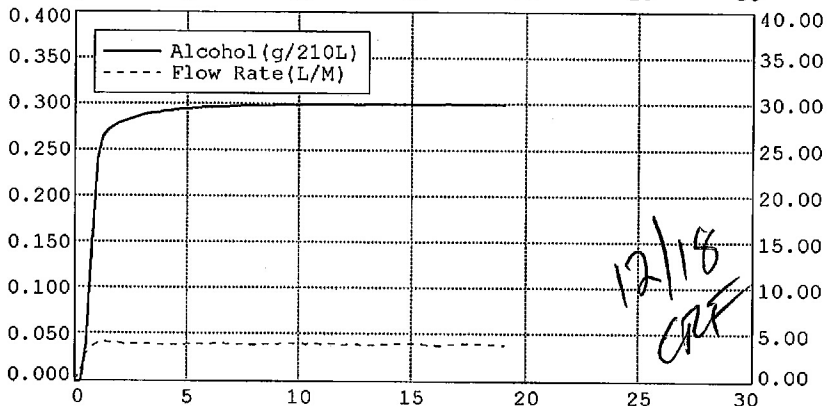
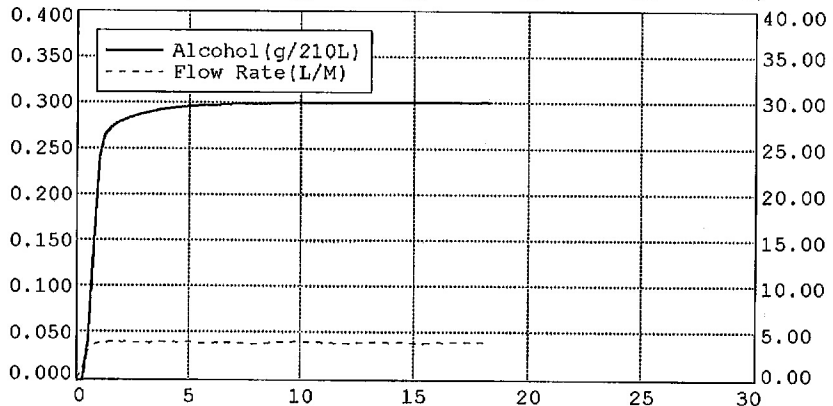
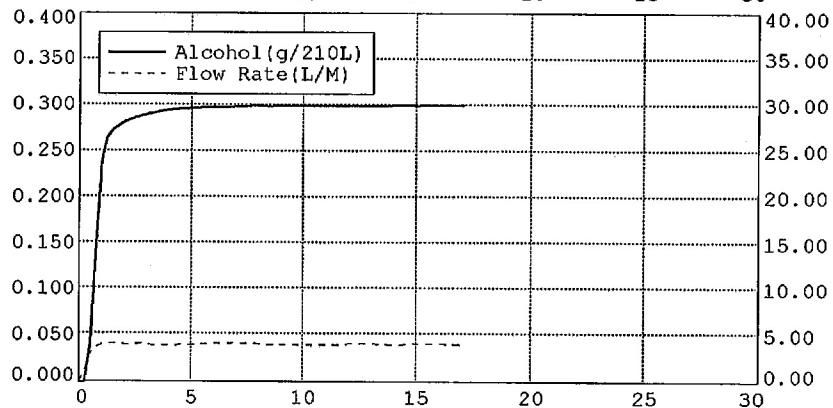
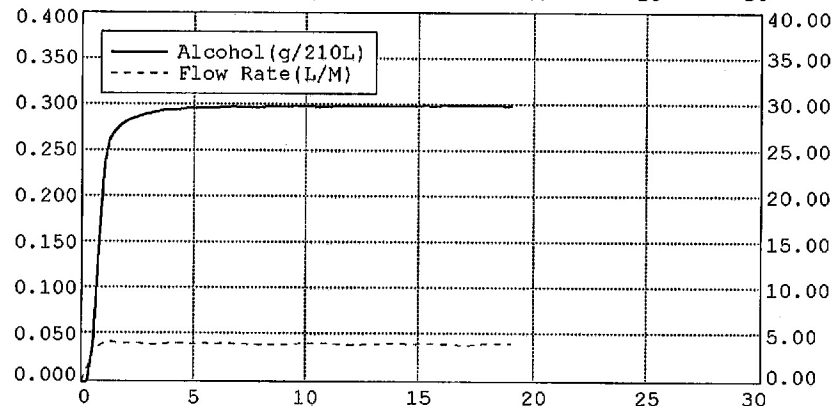
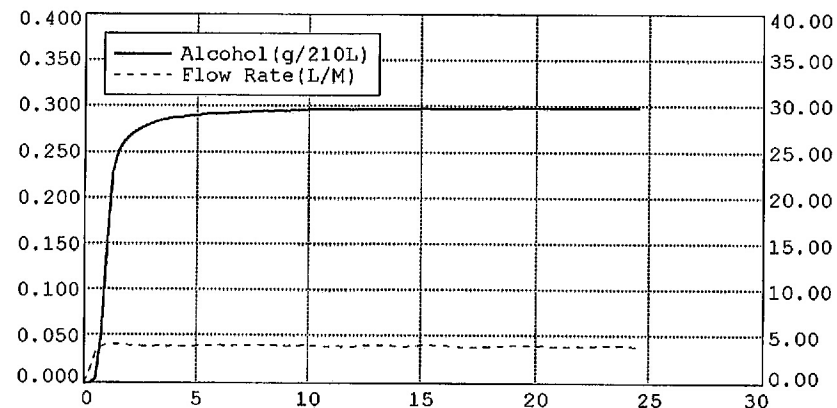
Date: 02/28/2012  
Time: 15:45:19

## EXTERNAL STANDARD INFORMATION

NOMINAL: 0.300  
LOT #: 11110  
EXPIRATION: 07/13/2013

|                   |          |       |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 15:46 |
| INTERNAL STANDARD | VERIFIED | 15:46 |
| EXTERNAL STANDARD | 0.299    | 15:47 |
| BLANK TEST        | 0.000    | 15:48 |
| EXTERNAL STANDARD | 0.299    | 15:48 |
| BLANK TEST        | 0.000    | 15:49 |
| EXTERNAL STANDARD | 0.300    | 15:49 |
| BLANK TEST        | 0.000    | 15:50 |
| EXTERNAL STANDARD | 0.301    | 15:51 |
| BLANK TEST        | 0.000    | 15:52 |
| EXTERNAL STANDARD | 0.300    | 15:52 |
| BLANK TEST        | 0.000    | 15:53 |

Average = 0.3002  
Std Dev = 0.0007





SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100362

Date: 02/29/2012  
 Time: 13:01:30

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

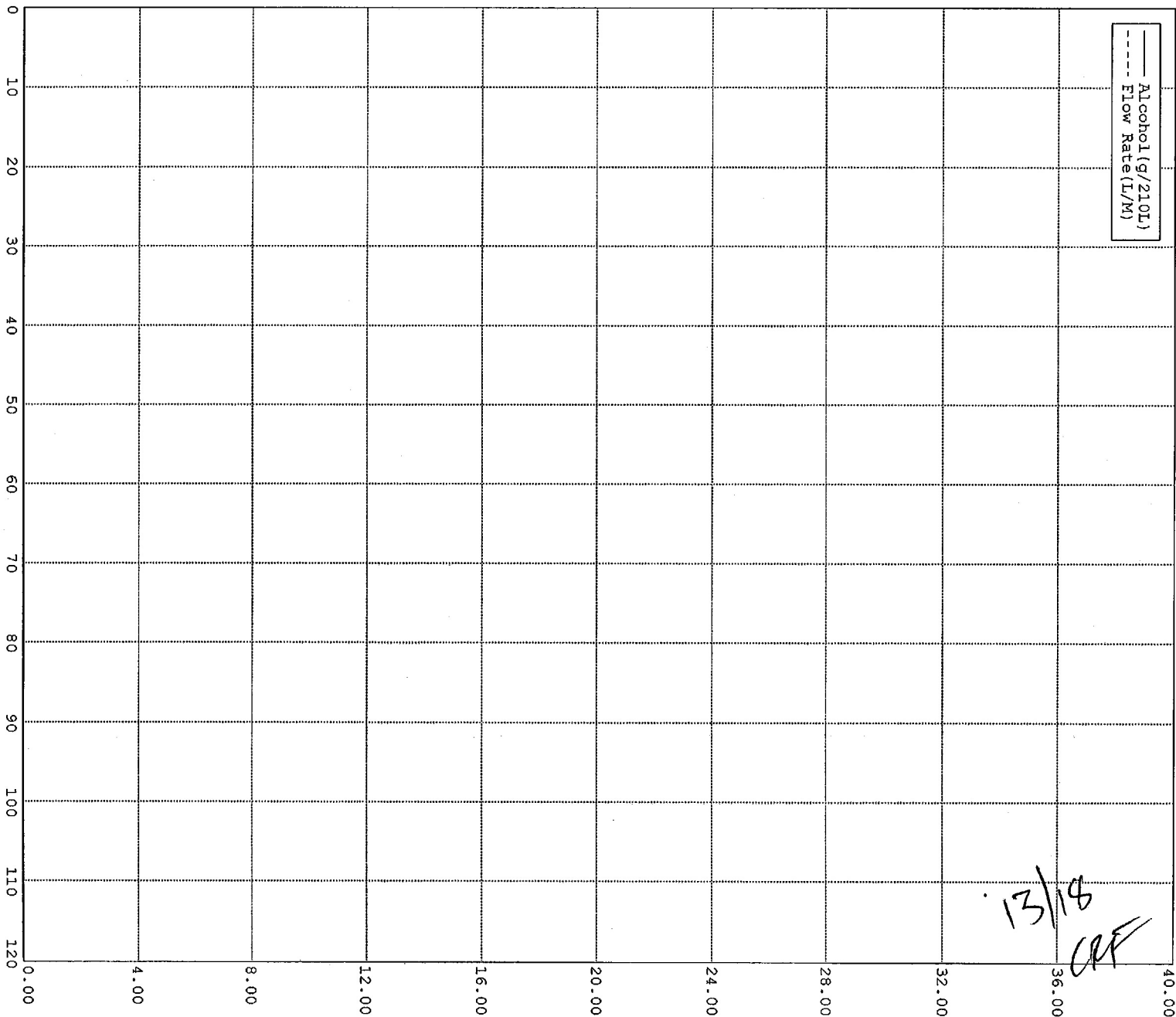
OPERATOR NAME:  
 INCOMPLETE XXXX  
 OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.46: 0.078  
 LOT #: 02511080A2  
 EXPIRATION: 02/01/2013

|                   |            |       |
|-------------------|------------|-------|
| DIAGNOSTIC CHECK  | PASSED     | 13:02 |
| BLANK TEST        | 0.000      | 13:02 |
| INTERNAL STANDARD | VERIFIED   | 13:02 |
| EXTERNAL STANDARD | 0.076      | 13:03 |
| BLANK TEST        | 0.000      | 13:03 |
| SUBJECT SAMPLE    | INCOMPLETE | 13:05 |

CTCF



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100362

Date: 02/29/2012  
Time: 13:15:52

SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

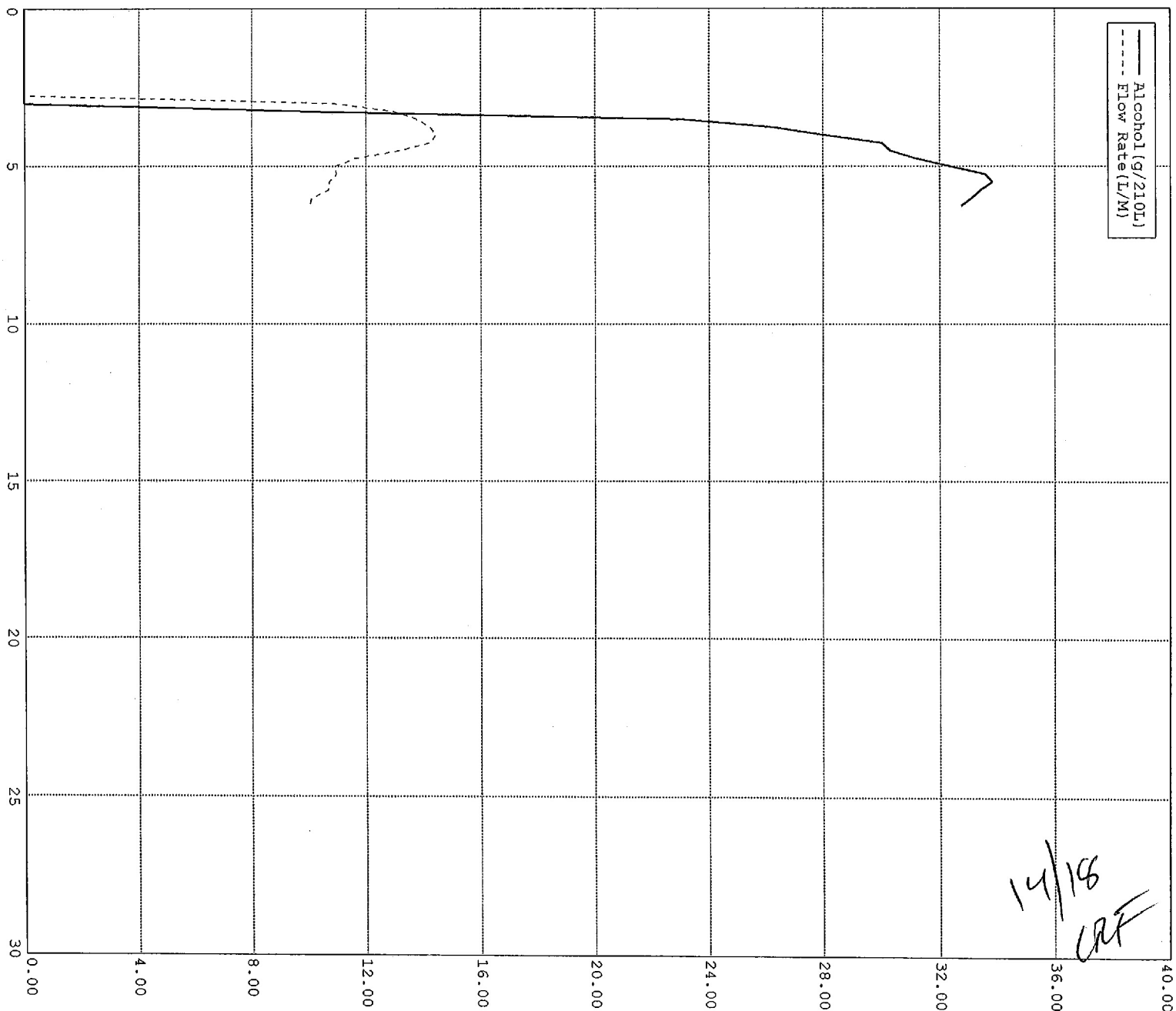
OPERATOR NAME:  
INVALID MOUTH ETOH  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.45: 0.078  
LOT #: 02511080A2  
EXPIRATION: 02/01/2013

| DIAGNOSTIC CHECK  | PASSED   | 13:19 |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 13:19 |
| INTERNAL STANDARD | VERIFIED | 13:19 |
| EXTERNAL STANDARD | 0.077    | 13:19 |
| BLANK TEST        | 0.000    | 13:20 |
| SUBJECT SAMPLE    | INVALID  | 13:21 |

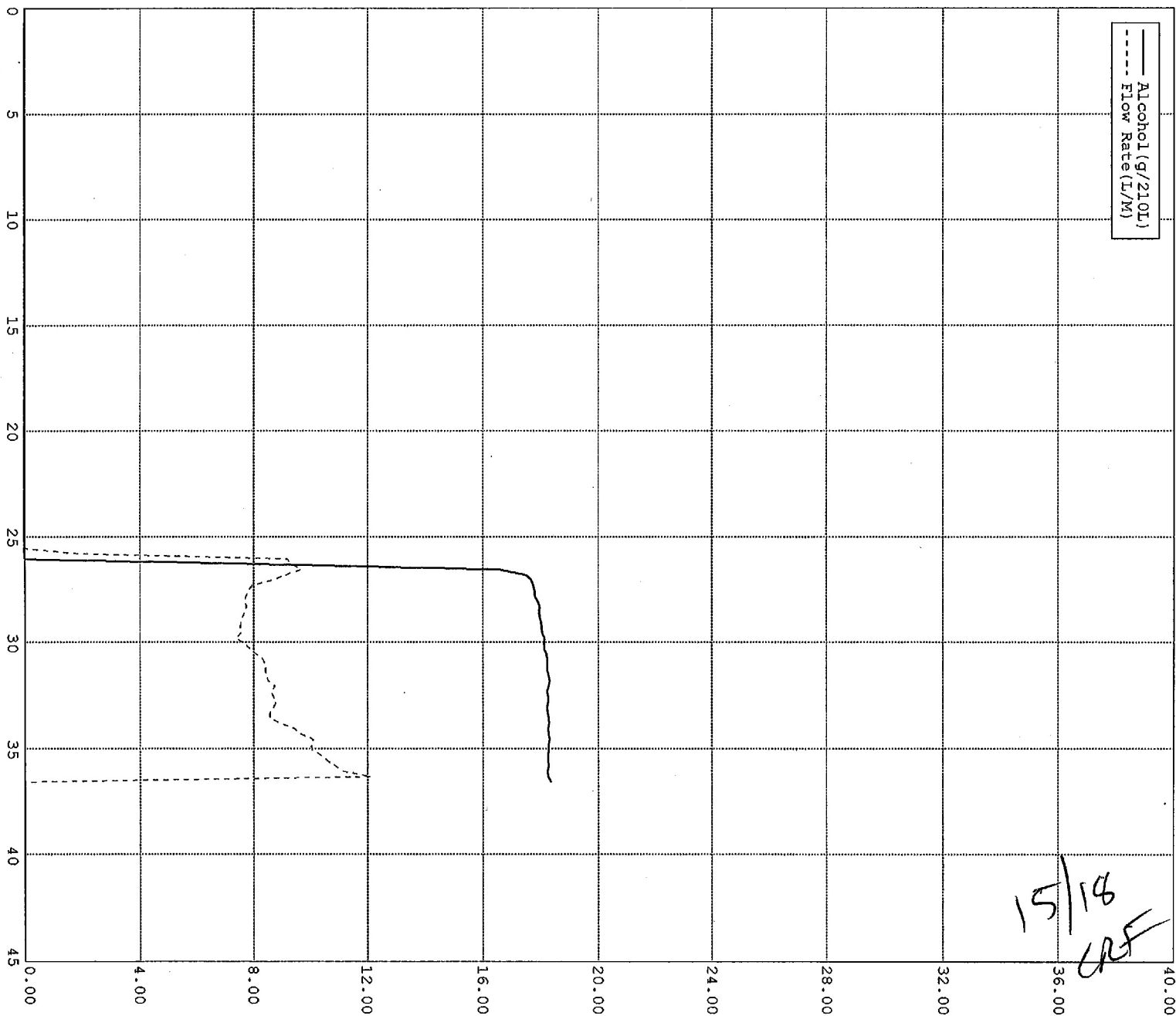
CRF



## SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100362Date: 02/29/2012  
Time: 14:28:27SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXXOPERATOR NAME:  
INTERFERENCE ETOH AND ACETONE  
OPERATOR'S #: XXXXDEPT/AGENCY:  
XXXX  
CASE/REPORT: XXXX  
TEST TYPE: TESTEXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.45: 0.078  
LOT #: 02511080A2  
EXPIRATION: 02/01/2013

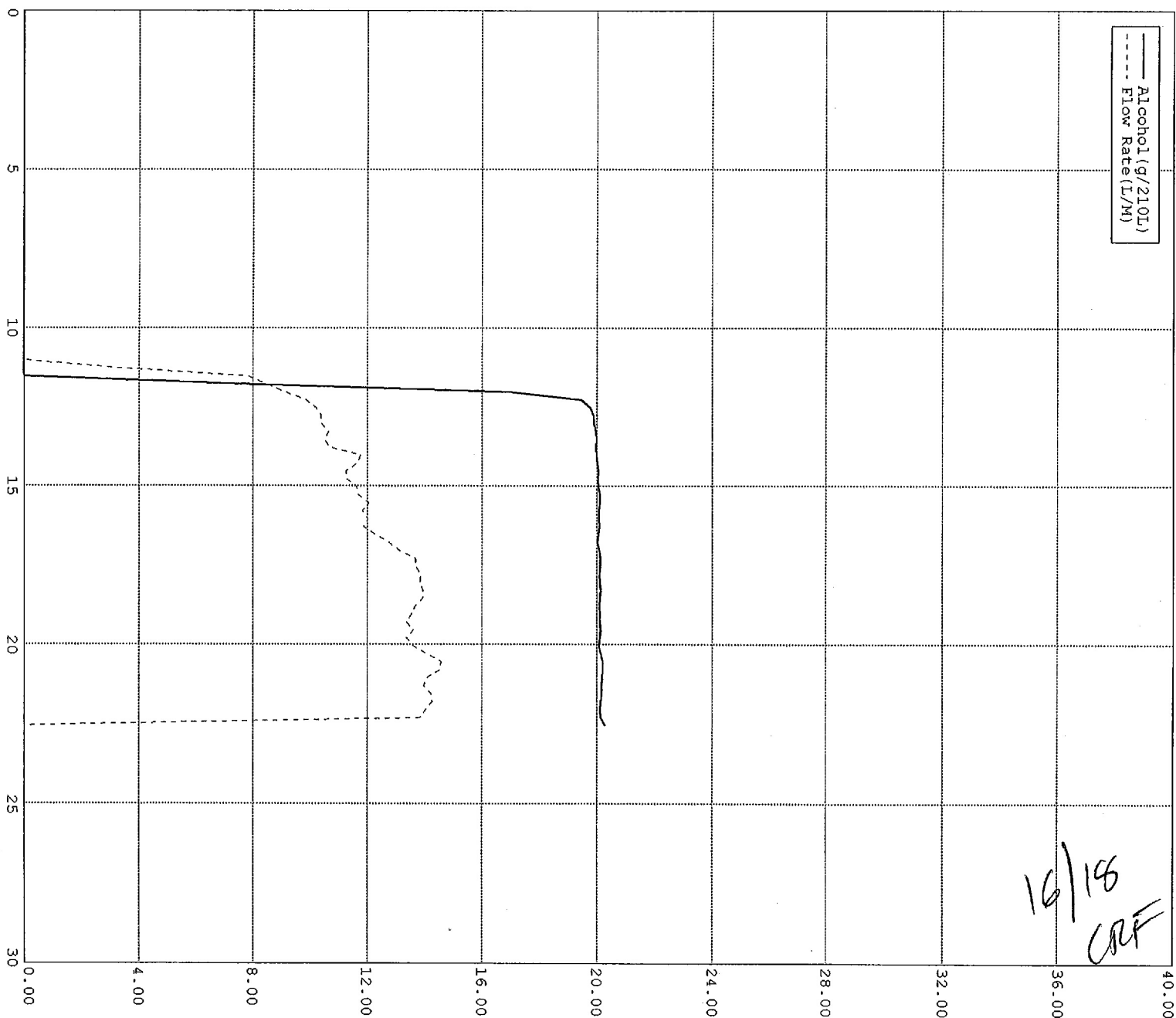
| DIAGNOSTIC CHECK  | PASSED       | 14:31 |
|-------------------|--------------|-------|
| BLANK TEST        | 0.000        | 14:31 |
| INTERNAL STANDARD | VERIFIED     | 14:31 |
| EXTERNAL STANDARD | 0.076        | 14:31 |
| BLANK TEST        | 0.000        | 14:32 |
| SUBJECT SAMPLE    | INTERFERENCE | 14:33 |



## SUBJECT TEST

-----  
Alaska Department of Public Safety  
DATAMASTER dmt: 100362  
-----Date: 02/29/2012  
Time: 14:38:40SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXXOPERATOR NAME:  
INTERFERENCE ETOH AND IPA  
OPERATOR'S #: XXXXDEPT/AGENCY:  
XXXX  
CASE/REPORT: XXXX  
TEST TYPE: TESTEXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.45: 0.078  
LOT #: 02511080A2  
EXPIRATION: 02/01/2013DIAGNOSTIC CHECK  
BLANK TEST PASSED 14:41  
INTERNAL STANDARD VERIFIED 14:41  
EXTERNAL STANDARD 0.076 14:41  
BLANK TEST 0.000 14:42  
SUBJECT SAMPLE INTERFERENCE 14:42

CTCF



SUBJECT TEST

Alaska Department of Public Safety  
DATAMASTER dmt: 100362

Date: 02/29/2012  
Time: 14:56:18

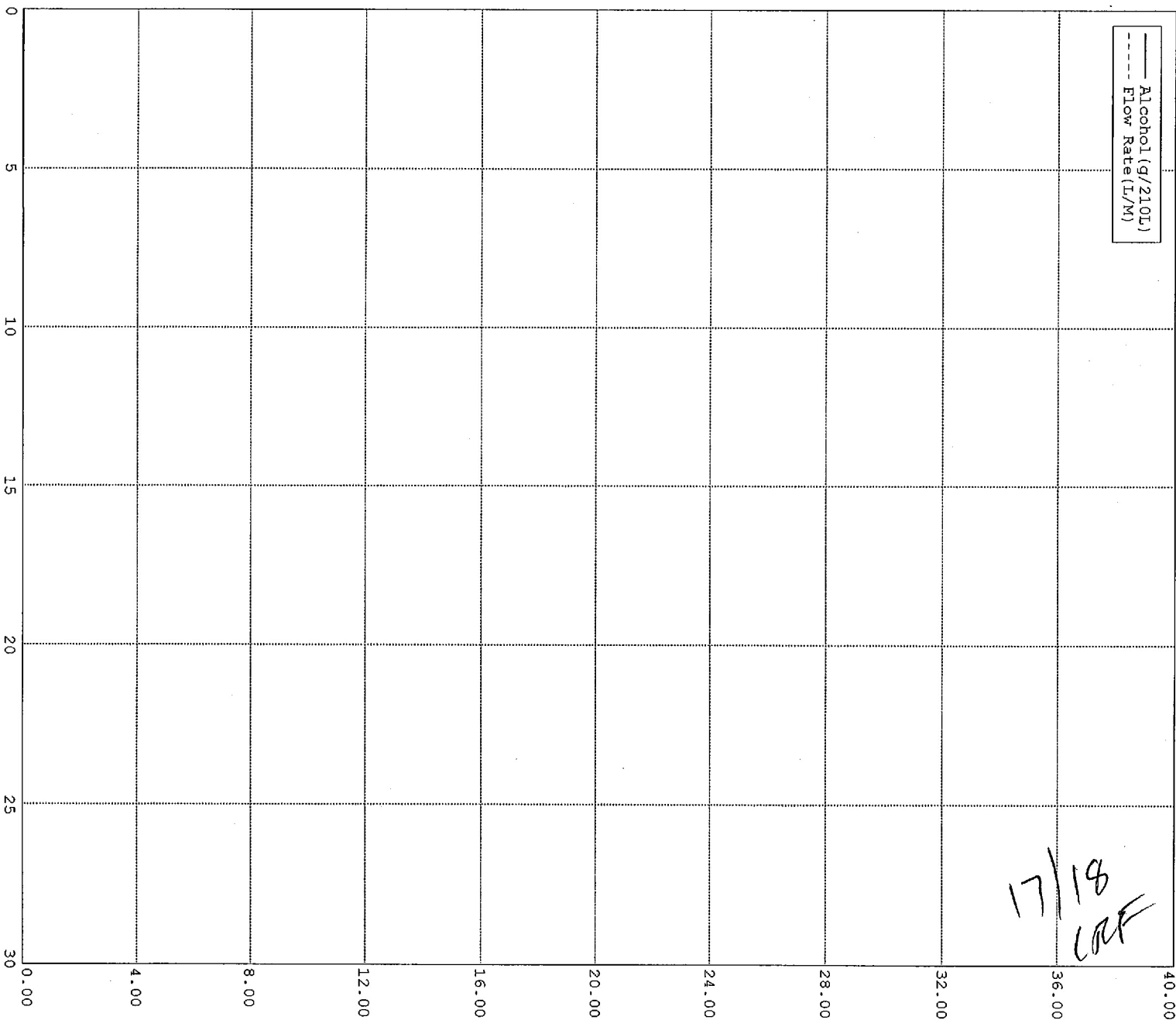
SUBJECT NAME:  
TEST TEST  
LICENSE #: XXXX

OPERATOR NAME:  
RFI XXXX  
OPERATOR'S #: XXXX

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

EXTERNAL STANDARD INFORMATION  
NOMINAL: 0.080  
TARGET AT 29.45: 0.078  
LOT #: 02511080A2  
EXPIRATION: 02/01/2013

DIAGNOSTIC CHECK  
BLANK TEST PASSED 14:58  
INTERNAL STANDARD VERIFIED 14:58  
EXTERNAL STANDARD 0.076 14:59  
BLANK TEST 0.000 15:00  
RFI DETECTED



SUBJECT TEST

Alaska Department of Public Safety  
 DATAMASTER dmt: 100362

Date: 02/29/2012  
 Time: 16:10:00

SUBJECT NAME:  
 TEST TEST  
 LICENSE #: XXXX

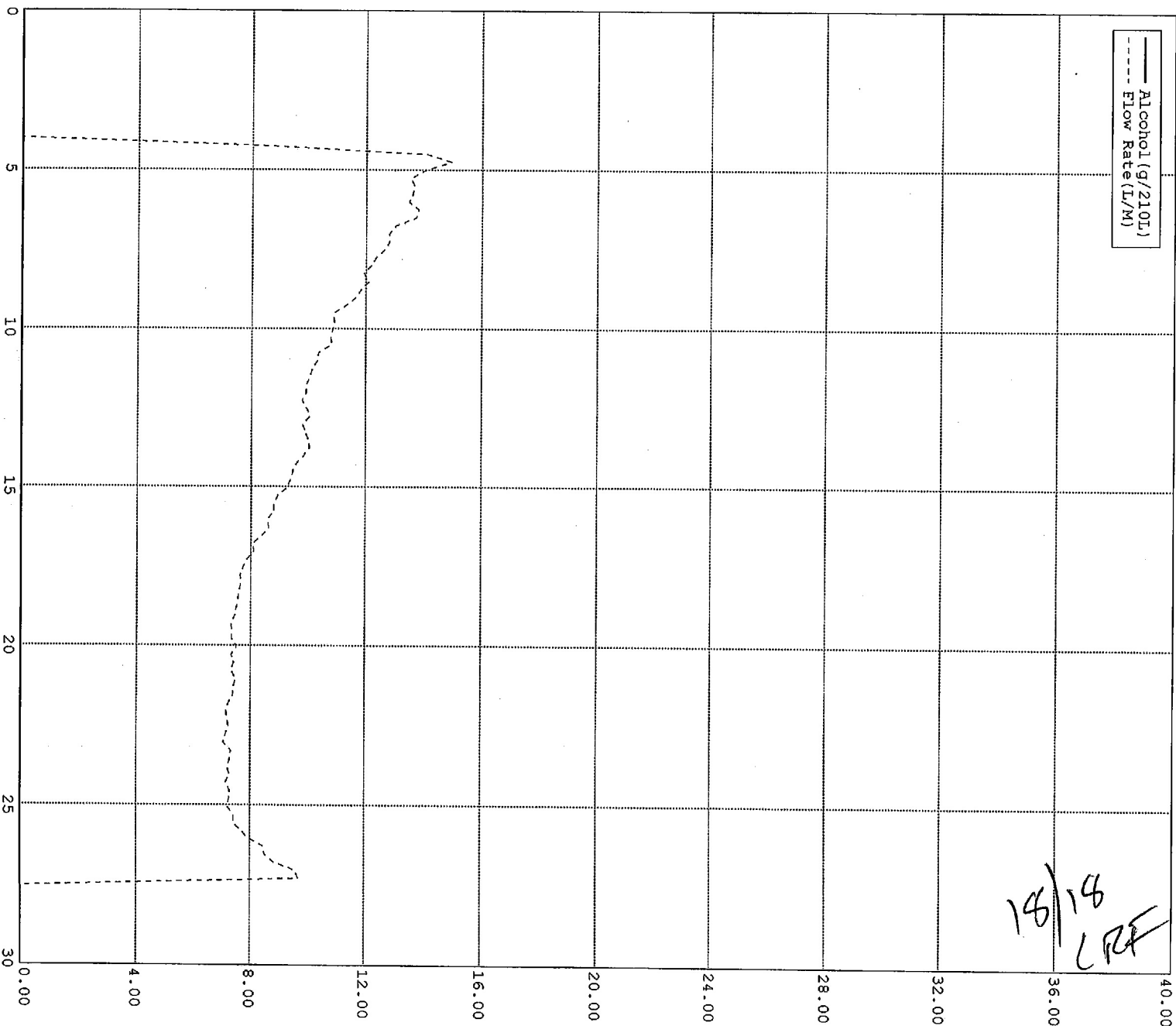
OPERATOR NAME:  
 CHARLES FOSTER  
 OPERATOR'S #: 7734

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

EXTERNAL STANDARD INFORMATION  
 NOMINAL: 0.080  
 TARGET AT 29.46: 0.078  
 LOT #: 02511080A2  
 EXPIRATION: 02/01/2013

| DIAGNOSTIC CHECK  | PASSED   | 16:12 |
|-------------------|----------|-------|
| BLANK TEST        | 0.000    | 16:12 |
| INTERNAL STANDARD | VERIFIED | 16:13 |
| EXTERNAL STANDARD | 0.076    | 16:13 |
| BLANK TEST        | 0.000    | 16:14 |
| SUBJECT SAMPLE    | 0.000    | 16:14 |
| BLANK TEST        | 0.000    | 16:15 |
| EXTERNAL STANDARD | 0.077    | 16:15 |
| BLANK TEST        | 0.000    | 16:16 |

Alcohol(g/210L)  
 ----- Flow Rate(L/M)



18/18  
 CRF

CRF