

US EPA Region 4
Yellow Bluff Air Study
Wilcox County, Alabama
SESD Project Identification Number: 11-0068
November 2010 – December 2010

REACTIVE PARTICLES AND GASES IO-4.2

AIR SAMPLING LOGBOOK

LOGBOOK 1 OF 1

DATES: 1-24-2011 THRU: 1-28-2011



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US EPA Region 4
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Station I.D. YBB Sample I.D. YBBR01
<Station ID>/<media code>/<sequential sample number>

Site Description Roland Cooper State Park Cabin #6

Operator: Mike Crowe RTI Barcooag I

Sampler ID: 3-02BAA054
 Sodium Carbonate Denuder # 376 127268
 Citric Acid Denuder # 476 127304
 Filter Assembly # 383 128409

START Date: 1-24-11 Time: 1140 Elapsed Timer: 0? unknown
 Flow Rate Set Point: 10.01 slpm Leak Check Rate: 0.05 slpm ✓

 Flow Rate Actual: — lpm Temperature: 13.7 °C Buck C BP: 763.3 mmHg Buck mm Hg
 Flow Rate STP: 10.521 slpm Flow Std. ID: BIOS ML 800 STD

STOP Date: 1/25/11 Time: 11:11 Elapsed Timer: 25.9
 Flow Rate Indicated: 10.01 slpm Leak Check Rate: 0.01 slpm

 Flow Rate Actual: N/A lpm Temperature: 9.40 C BP: 755.11 mm Hg
 Flow Rate STP: 10.364 slpm Flow Std. ID: BIOS ML-800

Average Flow Rate: 10.44 slpm Elapsed Time: 1411 min. Sample Volume: 14731 std liters
BIOS x 1409 = 14710 1-28-11 mc

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Continuation of field record for sample YBBR01

Other Notes/Sketch (Include North and Scale)

SESD's BIOS ML-800 provides standardized flow
units without having to convert manually, therefore
recording Temp. & pressure and converting is not necessary

Sample Team Leader/Sampler Signature/Date

ML Crane 1-24-11

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Station I.D. YBA Sample I.D. YBAR01
<Station ID>/<media code>/<sequential sample number>

Site Description Yellow Bluff Town Hall ¹⁻²⁴⁻¹¹ ~~Csbia #~~

Operator: Mike Crowe

Sampler ID: <u>3 02 BAM - A040</u>	RTI Barcodes
Sodium Carbonate Denuder # <u>364</u>	127298
Citric Acid Denuder # <u>404</u>	127359
Filter Assembly # <u>046</u>	12838F

START	Date: <u>1-24-11</u>	Time: <u>1652</u>	Elapsed Timer: <u>0.0</u>
Flow Rate Set Point: <u>10.00</u> slpm	Leak Check Rate: <u>0.26</u> [✓] Fixed slpm		
Flow Rate Actual: <u>✓</u> lpm	Temperature: <u>✓</u> C	BP: <u>✓</u> mm Hg	
	<u>12.13</u>	<u>762.23</u>	
Flow Rate STP: <u>9.970</u> slpm	Flow Std. ID: <u>BIOS ML-800</u>		

- 8 vacuum e start

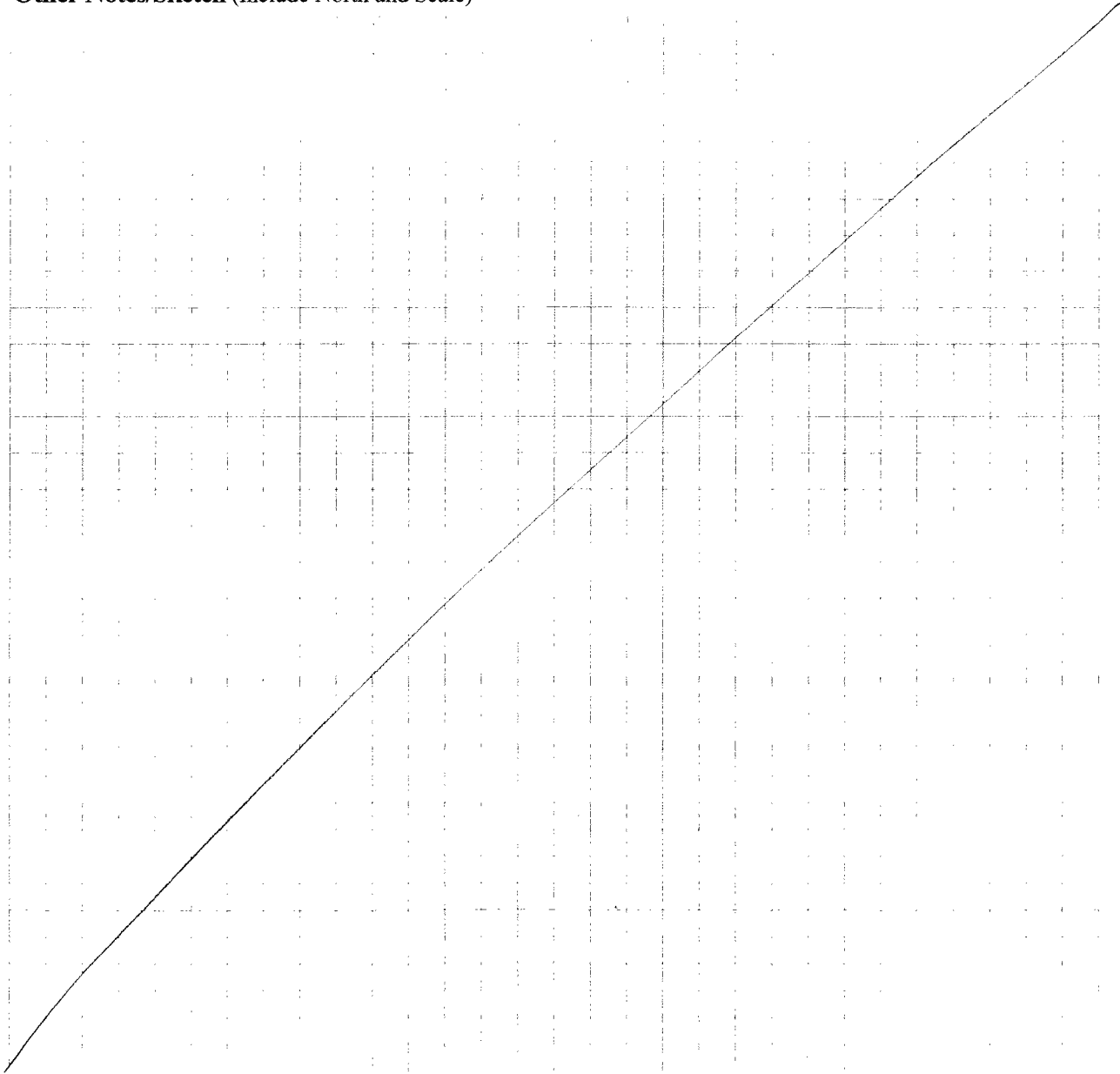
STOP	Date: <u>1-25-11</u>	Time: <u>1623</u>	Elapsed Timer: <u>23.5</u>
Flow Rate Indicated: <u>10.16</u> slpm	Leak Check Rate: <u>0</u> slpm		
Flow Rate Actual: <u>✓</u> lpm	Temperature: <u>11.02</u> C	BP: <u>753.56</u> mm Hg	
Flow Rate STP: <u>10.691</u> slpm	Flow Std. ID: <u>BIOS M 800</u>		

Average Flow Rate: 10.33 _{BIOS} slpm x Elapsed Time: 1409 min. = Sample Volume: 14555 std liters

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Continuation of field record for sample _____

Other Notes/Sketch (Include North and Scale)



Sample Team Leader/Sampler Signature/Date _____

McCrain 1-28-11

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Station I.D. YBA Sample I.D. YBAR91
<Station ID>/<media code>/<sequential sample number>

Site Description Yellow Bluff Town Hall Duplicate

Operator: Mike Crowe

Sampler ID: <u>3-02BAM-A042</u>	RTI Barcodes
Sodium Carbonate Denuder # <u>376</u>	127235
Citric Acid Denuder # <u>390</u>	12738C
Filter Assembly # <u>367</u>	12834B

START	Date: <u>1-24-11</u>	Time: <u>1652</u>	Elapsed Timer: <u>0:00</u>
Flow Rate Set Point: <u>11.20</u> 10.00 slpm	Leak Check Rate: <u>0.16</u> <input checked="" type="checkbox"/> Fixed slpm		
Flow Rate Actual: <input checked="" type="checkbox"/> lpm	Temperature: <u>12.13</u> C	BP: <u>762.23</u> mm Hg	
Flow Rate STP: <u>10.007</u> slpm	Flow Std. ID: <u>BIOS ML-800</u>		

- 5.5 vacuum e start

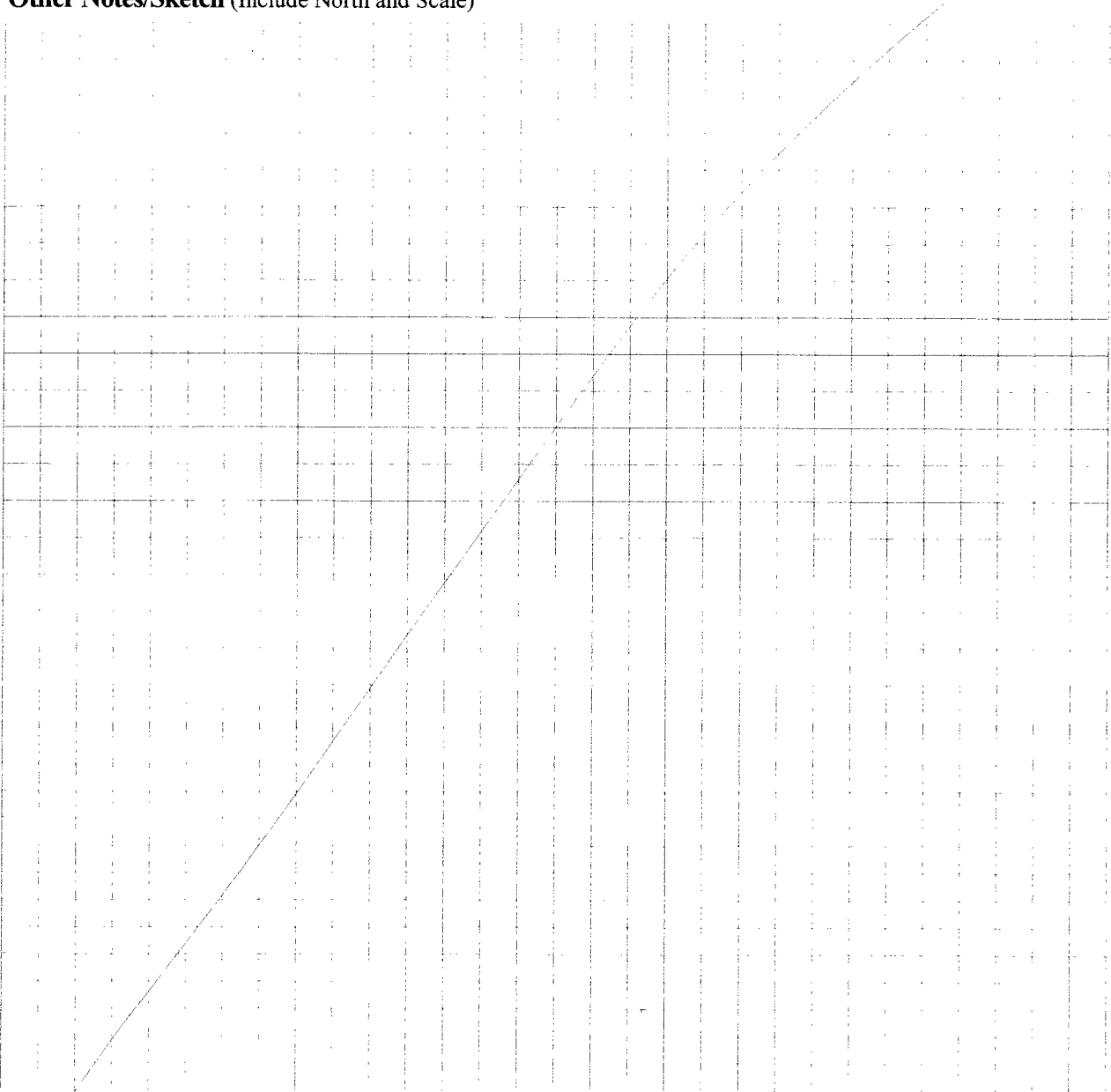
STOP	Date: <u>1-25-11</u>	Time: <u>1623</u>	Elapsed Timer: <u>23.5</u>
Flow Rate Indicated: <u>10.57</u> slpm	Leak Check Rate: <u>0.1</u> slpm		
Flow Rate Actual: <input checked="" type="checkbox"/> lpm	Temperature: <u>11.02</u> C	BP: <u>753.51</u> mm Hg	
Flow Rate STP: <u>11.300</u> slpm	Flow Std. ID: <u>BIOS ML-800</u>		

Average Flow Rate: 10.65 slpm x Elapsed Time: 1409 min. = Sample Volume: 15006 std liters

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Continuation of field record for sample _____

Other Notes/Sketch (Include North and Scale)



Sample Team Leader/Sampler Signature/Date *M. Cam* 1-28-11

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Station I.D. YBB Sample I.D. YBBR02
<Station ID>/<media code>/<sequential sample number>

Site Description Roland Cooper State Park Cabin #6

Operator: Mike Crowe

Sampler ID: 3-02BAA054 RTI Barcoles I
 Sodium Carbonate Denuder # 375 127246
 Citric Acid Denuder # 388 127390
 Filter Assembly # 001 128318

START Date: 1/25/11 Time: 11:38 Elapsed Timer: 000
 Flow Rate Set Point: ~~10.07~~ ^{10.36} _{1/25/11} slpm Leak Check Rate: 0.4 slpm

 Flow Rate Actual: N/A lpm Temperature: 10.35 C BP: 754.62 mm Hg
 Flow Rate STP: 10.138 slpm Flow Std. ID: BIOS ML-800

STOP Date: 1-26-11 Time: 11:11 Elapsed Timer: 23.5
 Flow Rate Indicated: 10.36 slpm Leak Check Rate: 0.2 slpm

 Flow Rate Actual: ✓ lpm Temperature: 9.1 C BP: 762.53 mm Hg
 Flow Rate STP: ~~10.714~~ ^{10.714} _{1/26-11} ~~9.024~~ ^{9.024} _{me} slpm Flow Std. ID: BIOS ML-800

Average Flow Rate: 10.43 slpm Elapsed Time: 1413 min. Sample Volume: 14738 std liters
 slpm x min. = std liters

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Other Notes/Sketch (Include North and Scale)



Sample Team Leader/Sampler Signature/Date *M. J. [Signature]* 1-28-11

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Station I.D. YBA Sample I.D. YBAR02
<Station ID><media code><sequential sample number>

Site Description Yellow Bluff Town Hall

Operator: Mike Crowe

Sampler ID: 302BAM-1040

Sodium Carbonate Denuder # 372

Citric Acid Denuder # ~~400~~ "125" 400

Filter Assembly # 027

RTI
 Barcode
 127279
 12736A
 12835C

START Date: 1-25-11 Time: 11:16:54 Elapsed Timer: 000
 Flow Rate Set Point: 10.04 slpm Leak Check Rate: 0.01 slpm

 Flow Rate Actual: N/A lpm Temperature: 10.66 C BP: 753.42 mm Hg
 Flow Rate STP: 9980 slpm Flow Std. ID: BIOS-ML-800

STOP Date: 1-26-11 Time: 16:05 Elapsed Timer: 23.2
 Flow Rate Indicated: 10.32 slpm Leak Check Rate: 0 slpm

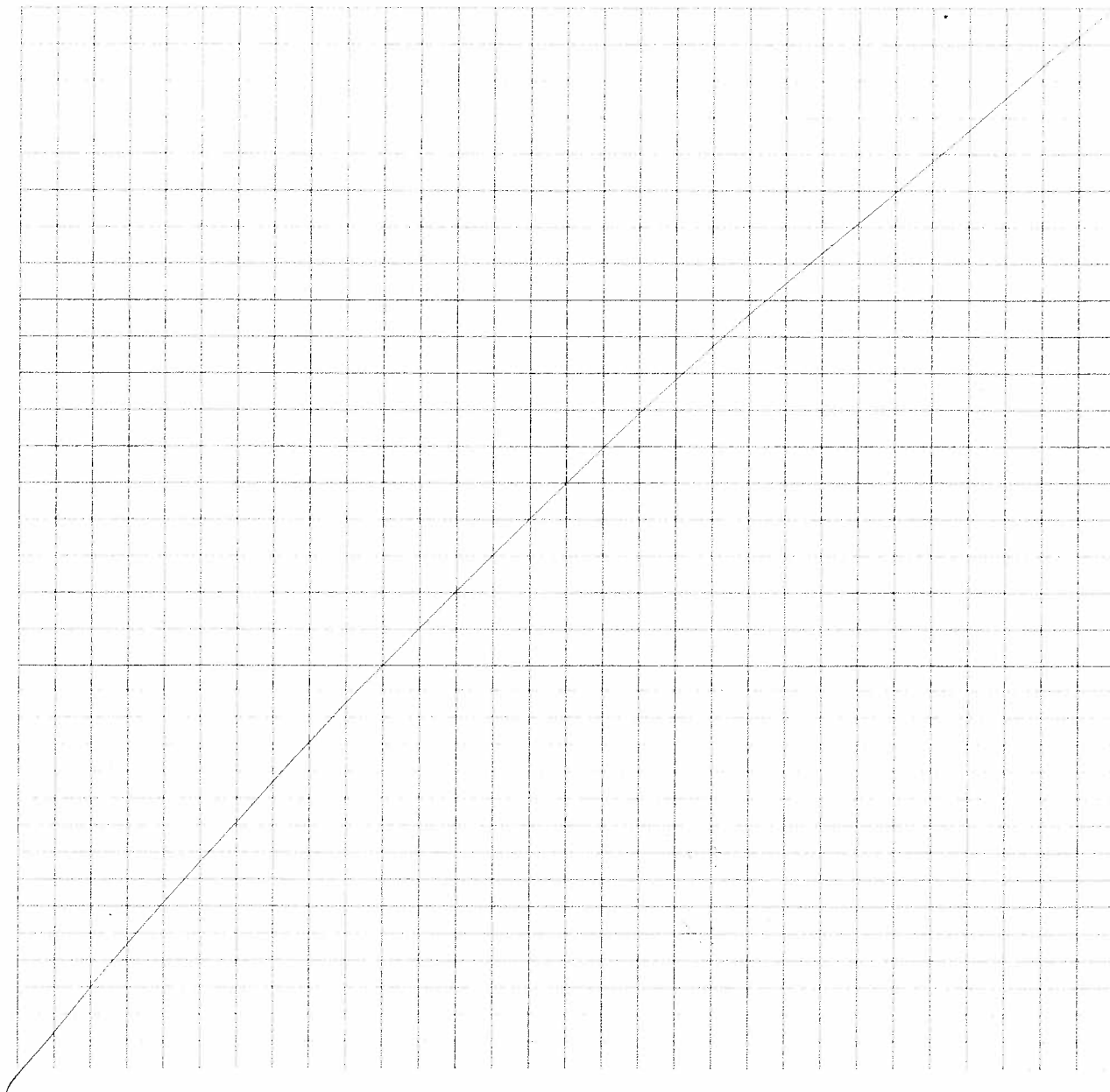
 Flow Rate Actual: ✓ lpm Temperature: 13.93 C BP: 761.69 mm Hg
 Flow Rate STP: 11,020 slpm Flow Std. ID: BIOS ML-800

Average Flow Rate: 10.5 slpm x Elapsed Time: 1391 min. = Sample Volume: 14606 std liters

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Continuation of field record for sample

Other Notes/Sketch (Include North and Scale)



Sample Team Leader/Sampler Signature/Date

McGraw 1-28-11

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Station I.D. YBA Sample I.D. YBAR92
<Station ID>/<media code>/<sequential sample number>

Site Description Yellow Bluff Town Hall - Duplicate

Operator: Mike Crowe

Sampler ID: 3-02BAM - 2042 RTI Barcode
 Sodium Carbonate Denuder # 374 127257
 Citric Acid Denuder # 474 127315
 Filter Assembly # 022 12837E

START Date: 1-25-11 Time: 16:54 Elapsed Timer: 000
 Flow Rate Set Point: 9.30 slpm Leak Check Rate: 0.20 slpm

 Flow Rate Actual: ✓ lpm Temperature: 10.66 C BP: 752.47 mm Hg
 Flow Rate STP: 10.170 slpm Flow Std. ID: B105-ML-800

STOP Date: 1-26-11 Time: 16:05 Elapsed Timer: 23.2
 Flow Rate Indicated: 7.22 slpm Leak Check Rate: 0 slpm

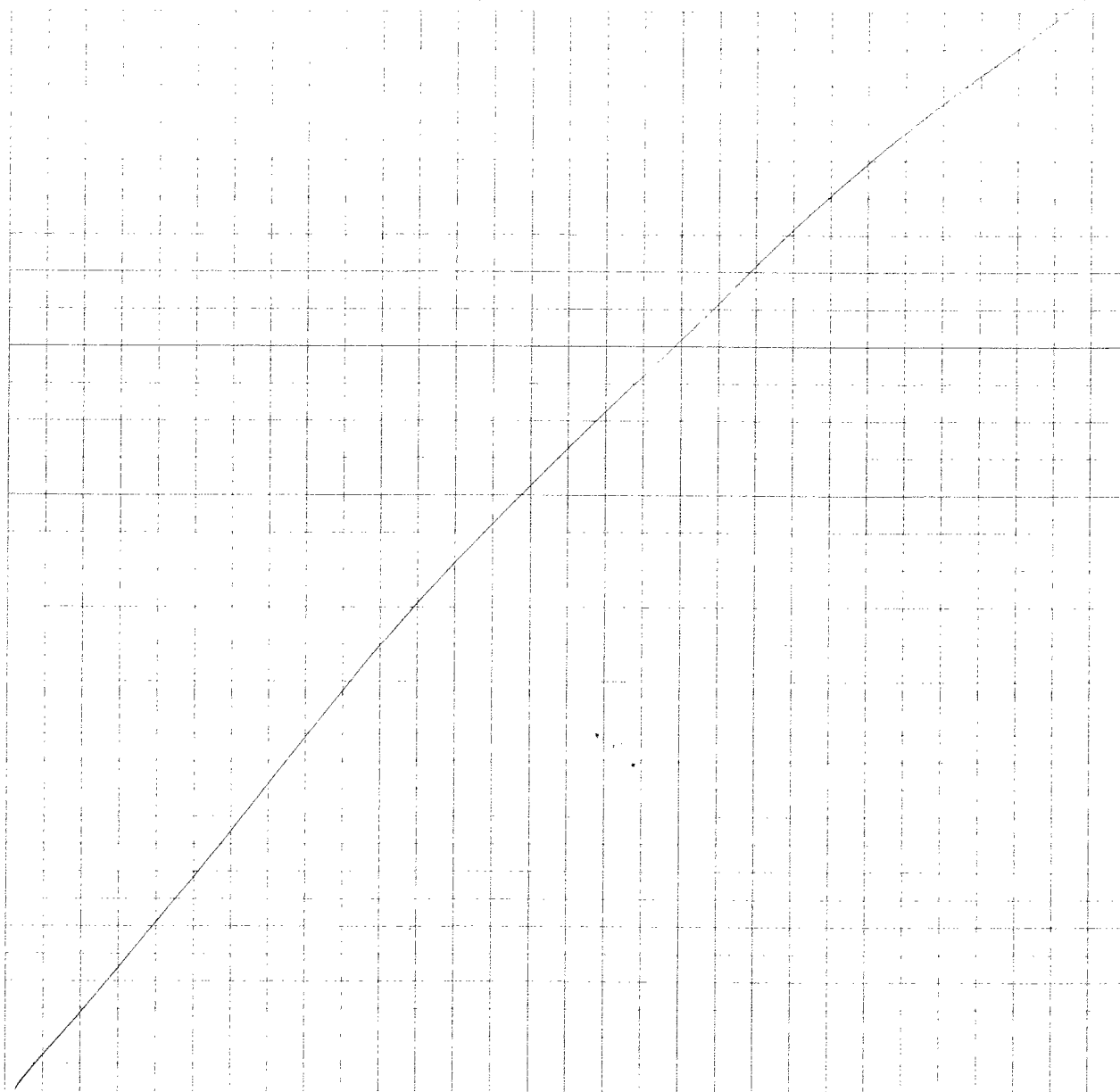
 Flow Rate Actual: - lpm Temperature: 13.93 C BP: 761.69 mm Hg
 Flow Rate STP: ~~8.0163~~ 8.0163 ^{1.28 v} slpm Flow Std. ID: B105-ML-800

Average Flow Rate: 9.10 slpm Elapsed Time: 1391 min. Sample Volume: 12658 std liters
 slpm x min. = std liters

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Continuation of field record for sample _____

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Sample Team Leader/Sampler Signature/Date

1-28-11 *Mark Green*

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Station I.D. YBB Sample I.D. YBBR03
<Station ID><media code><sequential sample number>

Site Description Roland Cooper State Park Cabin #6

Operator: Mike Crowe

Sampler ID: 3-02BAA054

Sodium Carbonate Denuder # 379

127224

Citric Acid Denuder # 458

127337

Filter Assembly # 364

128307

START Date: 1-26-11 Time: 11:30 Elapsed Timer: 0:00

Flow Rate Set Point: 10.35 slpm Leak Check Rate: 0.35 slpm

Flow Rate Actual: ✓ lpm Temperature: 11.3 C BP: 762.18 mm Hg

Flow Rate STP: 10.208 slpm

Flow Std. ID: BIOS ML-800

STOP Date: 1-27-11 Time: 10:37 Elapsed Timer: 23.1

Flow Rate Indicated: 10.36 slpm Leak Check Rate: 0.04 slpm

Flow Rate Actual: ✓ lpm Temperature: 8.55 C BP: 763.07 mm Hg

Flow Rate STP: 10.679 slpm

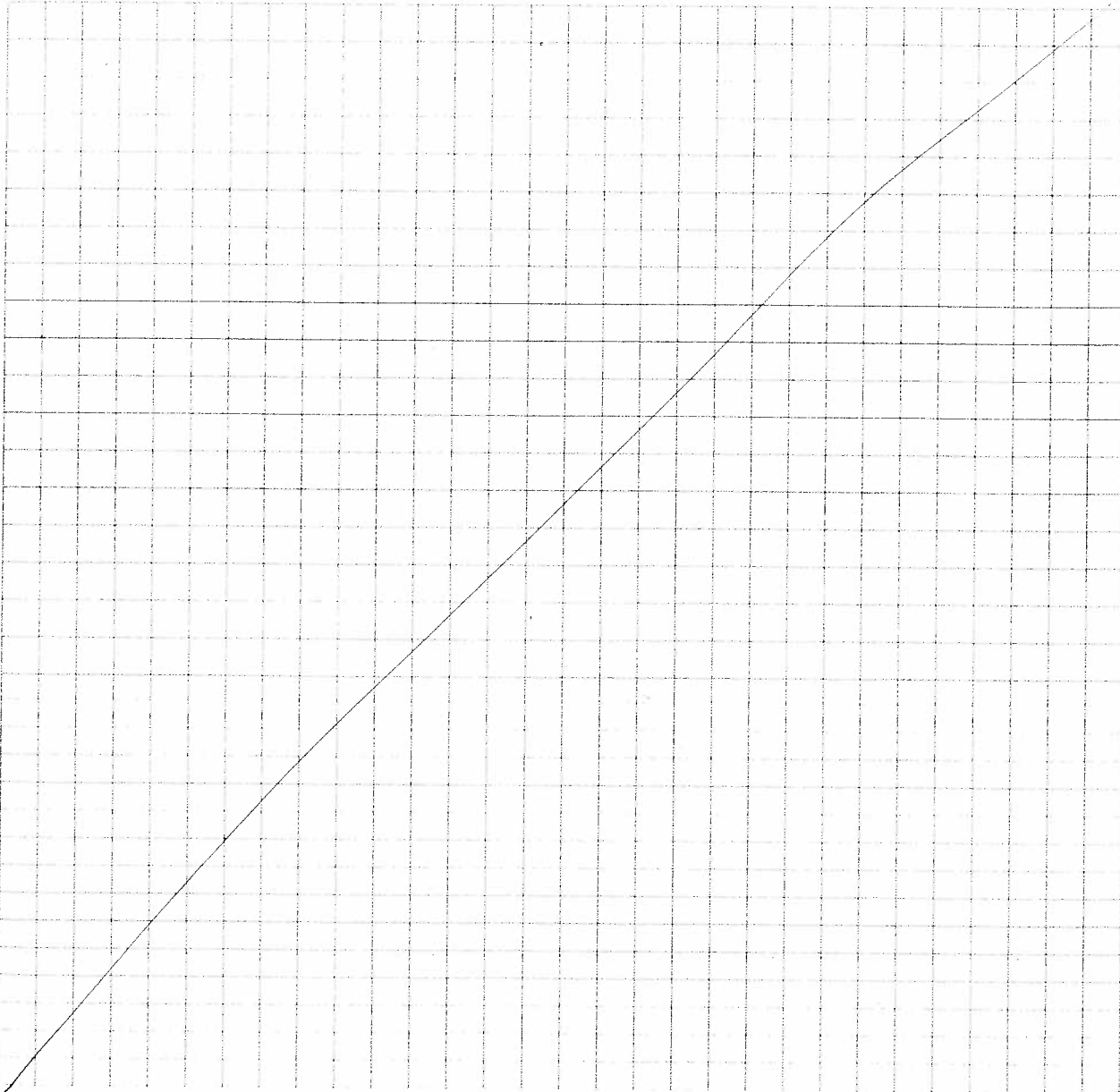
Flow Std. ID: BIOS ML-800

Average Flow Rate: 10.44 slpm x Elapsed Time: 1387 min. = Sample Volume: 14480 std liters

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Continuation of field record for sample

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Sample Team Leader/Sampler Signature/Date *McGraw* 1-28-11

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Station I.D. YBB Sample I.D. YBBRB3
<Station ID>/<media code>/<sequential sample number>

Site Description Roland Cooper State Park Cabin #6

Operator: Mike Crowe

Field Blank
Placed in sampler box
No air flowed thru sample.
Cap Inlet open to ambient a

Sampler ID: 3-02BAA059
Fabricated:
 Sodium Carbonate Denuder # 380
 Citric Acid Denuder # 398
 Filter Assembly # 960

127213
 127378
~~128396~~ 128396
 1-26-11

START	Date: <u>1-26-11</u>	Time: <u>11:20</u>	Elapsed Timer: <u>N/A</u>
Flow Rate Set Point:	<u>0</u> slpm	Leak Check Rate:	<u>0</u> slpm
Flow Rate Actual:	<u>✓</u> lpm	Temperature:	<u>—</u> C BP: <u>—</u> mm Hg
Flow Rate STP:	<u>0</u> slpm	Flow Std. ID:	<u>—</u>

STOP	Date: <u>1-27-11</u>	Time: <u>1030</u>	Elapsed Timer: <u>✓</u>
Flow Rate Indicated:	<u>✓</u> slpm	Leak Check Rate:	<u>—</u> slpm
Flow Rate Actual:	<u>✓</u> lpm	Temperature:	<u>—</u> C BP: <u>—</u> mm Hg
Flow Rate STP:	<u>✓</u> slpm	Flow Std. ID:	<u>—</u>

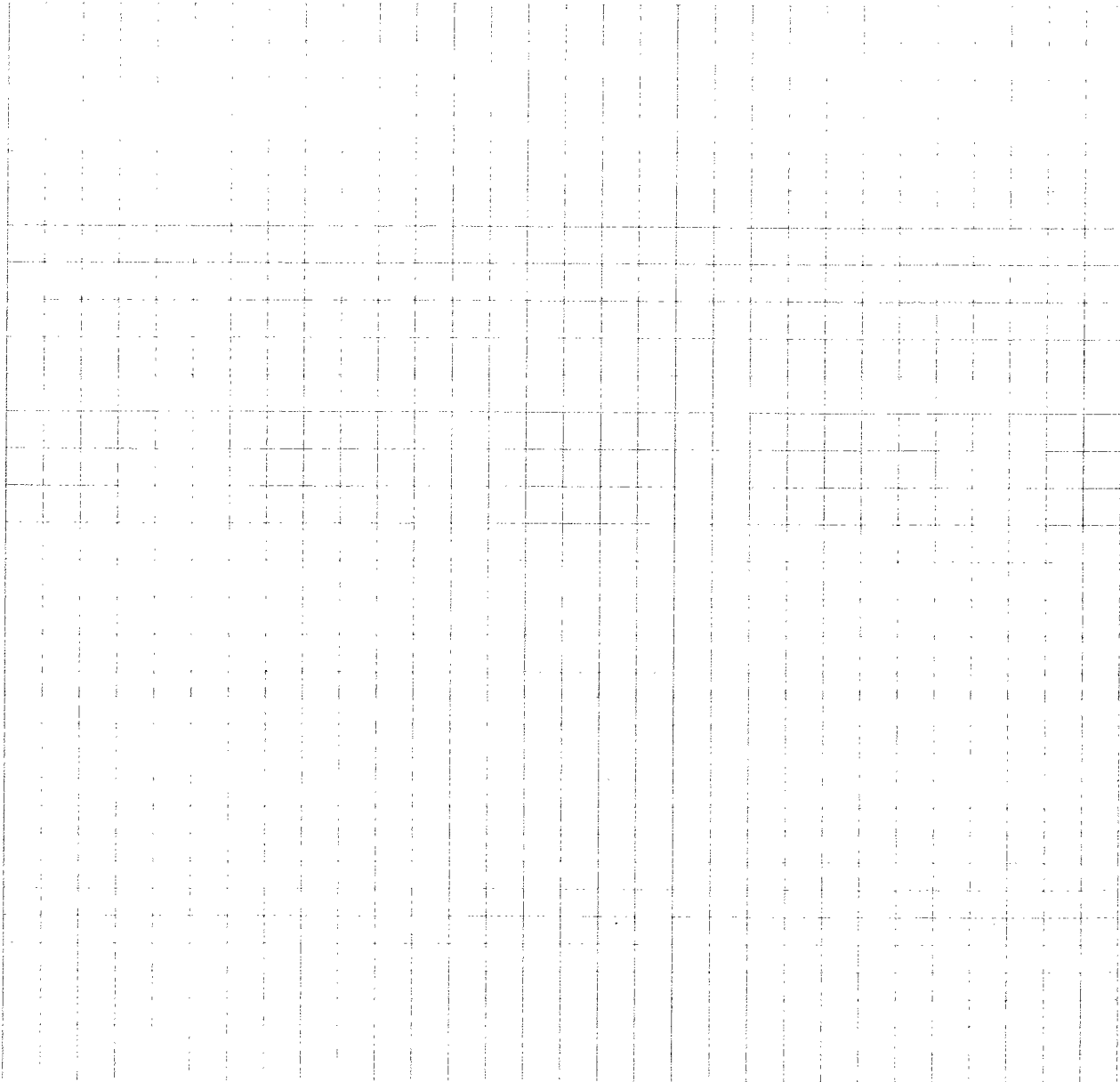
Average Flow Rate: ^{10.45}0 slpm x Elapsed Time: ¹³⁸⁸0 min. = Sample Volume: 0 std liters

Sample volume of 14.5 m³ reported to lab.

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Sample Team Leader/Sampler Signature/Date 11-28-11 *McGraw*

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Station I.D. YBA Sample I.D. YBAR03
<Station ID>/<media code>/<sequential sample number>

Site Description Yellow Bluff Town Hall

Operator: Mike Crowe

Sampler ID: 302BAM-A040

Sodium Carbonate Denuder # 367 12728A

Citric Acid Denuder # 457 127348

Filter Assembly # 029 12843C

START Date: 1-26-11 Time: 1623 Elapsed Timer: 0-00

Flow Rate Set Point: 10.11 slpm Leak Check Rate: 0.03 slpm

Flow Rate Actual: 10.450 lpm Temperature: 15.41 C BP: 761.89 mm Hg
1-26-11 me

Flow Rate STP: 10.540 slpm Flow Std. ID: BI05 ML-800

STOP Date: 1-27-11 Time: 1538 Elapsed Timer: 23.2

Flow Rate Indicated: 10.47 slpm Leak Check Rate: 0.05 slpm

Flow Rate Actual: 11.231 lpm Temperature: 18.3 C BP: 760.32 mm Hg
1-27-11 me 1-27-11 me

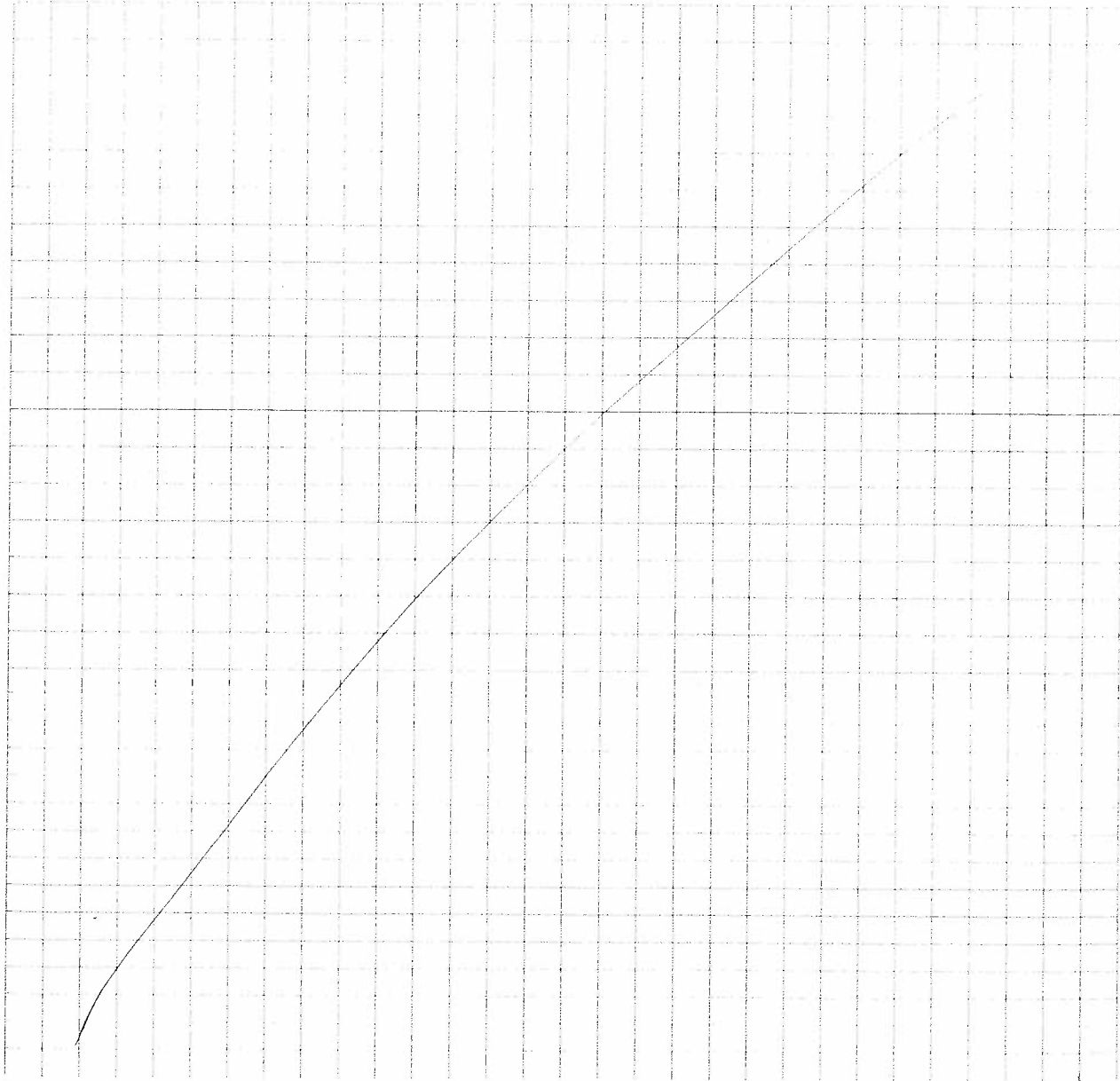
Flow Rate STP: 10.07 slpm Flow Std. ID: BI05-ML-800

Average Flow Rate: 10.84 slpm Elapsed Time: 1395 min. Sample Volume: 15122 std liters
slpm x min. = std liters

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Continuation of field record for sample _____

Other Notes/Sketch (Include North and Scale)



Sample Team Leader/Sampler Signature/Date _____

McCrain 1-28-11

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Station I.D. YBA Sample I.D. YBAR93
<Station ID>/<media code>/<sequential sample number>

Site Description Yellow Bluff Town Hall

Operator: Mike Crowe

Sampler ID: 3-02BAM-AD42 ^{1.26-11} ~~3-02BAM~~ RTE Barcode I
 Sodium Carbonate Denuder # 396 127202
 Citric Acid Denuder # 466 127326
 Filter Assembly # 357 12841A

START Date: 1-26 Time: 1623 Elapsed Timer: 0-00
 Flow Rate Set Point: 9.39 slpm Leak Check Rate: 0.13 slpm

 Flow Rate Actual: ✓ lpm Temperature: 15.20 C BP: 761.89 mm Hg
 Flow Rate STP: 10.31 slpm Flow Std. ID: BIOS ML-800

STOP Date: 1-27-11 Time: 1538 Elapsed Timer: 23.2
 Flow Rate Indicated: 9.30 slpm Leak Check Rate: 0.28 slpm

 Flow Rate Actual: ✓ lpm Temperature: 18.3 C BP: 760.32 mm Hg
 Flow Rate STP: 10.07 slpm Flow Std. ID: BIOS-ML-800

Average Flow Rate: 10.19 Elapsed Time: 1395 Sample Volume: 14215
BIOS slpm x min. = std liters

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Continuation of field record for sample _____

Other Notes/Sketch (Include North and Scale)

Sample Team Leader/Sampler Signature/Date

 1-28-11

1-28-11
me

End of logbook