

BREATH ALCOHOL EQUIPMENT
REPAIR AND MAINTENANCE

Instrument: 8000 Serial Number: 80-006493 Location: TOXL

1. Instrument repairs/maintenance performed:

- FIELD INSPECTOR ENCOUNTERED PURGE FAIL DURING INSTALL. LAB ASKED FOR INSTRUMENT TO BE EXCHANGED. STARTED TESTING ON 8/22/16

- RAN MULTIPLE ADA, ACA & CMS MORE TESTS. COULD NOT REPLICATE PURGE FAIL. TESTS WERE PERFORMED ON 8/22, 8/23, 8/24, 8/25 & 8/26.

- INSTRUMENT WILL BE USED FOR TRAINING IN CLASSROOM. IF NO PURGE FAILS APPEAR, IT WILL BE PUT BACK INTO FIELD SERVICE.

* CALIBRATION ADJUSTMENT PERFORMED TO AID IN DEVELOPMENT OF UNCERTAINTY OF MEASUREMENT PROCEDURE.

2. Does the instrument require further testing?
If Yes, continue.
If No, sign and date below.

Yes or No

3. If needed, set the time, date, and location.

SET TO
CENTRAL
TIME

4. Does the flow need to be calibrated?
If Yes, attach paperwork.

Yes or No

5. Does the optical bench need to be calibrated?
If Yes, attach test records. RECORDS ATTACHED

Yes or No *

6. Does the gas regulator need to be calibrated?

Yes or No

PSI gauge reading _____ PSI display reading _____

Set instrument to Wet Bath and run tests:

7. Low AC. Use < 0.03 AC in ACA mode. Attach test record.

✓

Sim SN: DR5114 Lot #: 201603H AC: 0.010 AC

8. Linearity Test. Use ≥ 0.25 AC in ACA mode. Attach test record.

✓

Sim SN: MP3048 Lot #: 201603A AC: 0.300 AC

Set instrument to Gas and run tests:

9. Print test. Attach test record. ✓

10. Interferent Check. Use a 0.10 AC ethanol plus 0.05% acetone in ABA mode. Attach test record. ✓

Sim SN: DR5135 Lot #: ICS 4 AC: ^{0.05%}0.10 AC + 0.05% ACETONE

11. RFI Check. Run in CMS mode. Key radio during any room air or subject test. Attach test record. ✓

12. Calibration Check. Use a valid 0.080 AC Ethanol Gas Standard. Run three calibration sets in ACA mode. Attach test records. ✓

Lot No. 19615080A5 Cylinder No. 026 Expiration Date 9/5/2017

Test 1 0.080

Test 1 0.079

Test 1 0.080

Test 2 0.080

Test 2 0.079

Test 2 0.081

Test 3 0.080

Test 3 0.080

Test 3 0.080

Average 0.080

Charles E. Eda

Field Inspector's Signature

8/26/2016

Date

Deb Shanaver

Reviewed by

26 Aug 16

Date

ToxL
~~BOWM~~ ~~CPE~~

Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-006493
08/22/2016 15:11:25

Auto Calibration

pg 1 of 2

<<<<< 3um >>>>> <<<<< 9um >>>>>

Solution = 0.000 g/210L or 0.0000 mg/l, Samples = 4, Discarded = 1 *0.000 AC*

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.0600	(0.0000)	0.1150	(-0.0160)
Sample #2	0.0580	(0.0210)	0.1080	(-0.0070)
Sample #3	0.0770	(0.0310)	0.1170	(-0.0080)
Sample #4	0.1120	(0.0300)	0.1360	(-0.0060)
Avg % Abs	0.0823	(0.0273)	0.1203	(-0.0070)
STD DEV	0.0274	(0.0055)	0.0143	(0.0010)
REL STD DEV	33.270	(20.150)	11.879	(14.286)

*MILLI QH₂O
MP3064*

Solution = 0.050 g/210L or 0.2381 mg/l, Samples = 4, Discarded = 1 *0.050 AC*

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.9700	(-0.0180)	1.8280	(-0.0090)
Sample #2	0.9540	(0.0060)	1.8090	(0.0070)
Sample #3	0.9530	(0.0150)	1.8320	(0.0050)
Sample #4	0.9930	(0.0030)	1.8630	(0.0050)
Avg % Abs	0.9667	(0.0080)	1.8347	(0.0057)
STD DEV	0.0228	(0.0062)	0.0271	(0.0012)
REL STD DEV	2.360	(78.062)	1.477	(20.377)

*LOT: 201503J
Exp. 03/31/2017
MP3067*

Solution = 0.100 g/210L or 0.4762 mg/l, Samples = 4, Discarded = 1 *0.100 AC*

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.8000	(-0.0070)	3.4670	(-0.0130)
Sample #2	1.8170	(0.0020)	3.4860	(0.0060)
Sample #3	1.8200	(0.0050)	3.4830	(0.0090)
Sample #4	1.8390	(0.0120)	3.4950	(0.0250)
Avg % Abs	1.8253	(0.0063)	3.4880	(0.0133)
STD DEV	0.0119	(0.0051)	0.0062	(0.0102)
REL STD DEV	0.654	(81.025)	0.179	(76.608)

*LOT: 15050
Exp. 03/09/2017
MP3059*

Solution = 0.200 g/210L or 0.9524 mg/l, Samples = 4, Discarded = 1 *0.200 AC*

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	3.4630	(-0.0170)	6.6020	(-0.0200)
Sample #2	3.5000	(-0.0150)	6.6070	(-0.0020)
Sample #3	3.4870	(-0.0020)	6.6250	(0.0160)
Sample #4	3.5000	(-0.0150)	6.6330	(0.0230)
Avg % Abs	3.4957	(-0.0107)	6.6217	(0.0123)
STD DEV	0.0075	(0.0075)	0.0133	(0.0129)
REL STD DEV	0.215	(70.365)	0.201	(104.571)

*LOT: 15240
Exp. 11/11/2017
MP3070*

Solution = 0.400 g/210L or 1.9048 mg/l, Samples = 4, Discarded = 1 *0.400 AC*

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	6.6540	(0.0070)	12.4480	(0.0040)
Sample #2	6.6640	(0.0210)	12.4440	(0.0570)
Sample #3	6.6780	(0.0230)	12.4890	(0.0480)
Sample #4	6.7310	(0.0120)	12.4900	(0.0650)
Avg % Abs	6.6910	(0.0187)	12.4743	(0.0567)
STD DEV	0.0353	(0.0059)	0.0263	(0.0085)
REL STD DEV	0.528	(31.390)	0.211	(15.009)

*LOT: 16102
Exp. 03/22/2018*

Charles E. Edwards

TOXL
~~BOWM~~ CEE

Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-006493
08/22/2016 15:11:25

Auto Calibration

pg 2 of 2

<<<<< 3um >>>>>			<<<<< 9um >>>>>		
Zero Order Coef	-230.64			-175.86	
First Order Coef	2684.83			1373.11	
Second Order Coef	29.39			13.48	
Act (g/210L)	Fit (g/210L)	Residual (g/210L)	Act (g/210L)	Fit (g/210L)	Residual (g/210L)
0.000	-0.000	0.0002	0.000	-0.000	0.0002
0.050	0.050	-0.0002	0.050	0.050	-0.0002
0.100	0.100	-0.0001	0.100	0.100	-0.0003
0.200	0.200	0.0002	0.200	0.200	0.0003
0.400	0.400	-0.0000	0.400	0.400	-0.0001

<<<<< 3um >>>>>			<<<<< 9um >>>>>		
Solution = 0.080 g/210L or 0.3810 mg/l, Samples = 4, Discarded = 1					
Sample					0.080 AC E.G.S.
Sample #1	3136.00		3346.00		
Sample #2	3157.00		3390.00		Lot: 29614080A2
Sample #3	3196.00		3372.00		Exp: 12/5/2016
Sample #4	3168.00		3366.00		
Avg	3173.6667		3376.0000		CYL: 012
STD DEV	20.1080		12.4900		
REL STD DEV	0.634		0.370		
H2O adjust (mg/l*10k)	636		433		

Atmospheric Pressure = 943

*****CALIBRATION SUCCESSFUL*****



- ADJUSTED DUE TO HELP AID IN THE DEVELOPMENT OF A CALIBRATION PROCEDURE TO DETERMINE AN UNCERTAINTY OF MEASUREMENT. INITIAL STAGE OF DEVELOPMENT.

Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

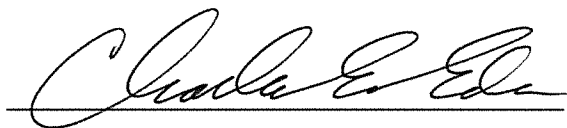
CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-006493
Location = TOXL 8164.13.00 06/09
08/26/2016 09:53

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	09:54
02 Std. Sol.	0.008	09:55
03 Room Air	0.000	09:55
04 Std. Sol.	0.009	09:56
05 Room Air	0.000	09:57
06 Std. Sol.	0.009	09:57
07 Room Air	0.000	09:58

08 Sim Temp = 34.0°C

Simul Ser No = DR5114
Std Sol No = 201603H
County = 08 Oper No. = 666666



Operator Signature
CHARLES EDER

Remarks: *Low AC*
 0.010 AC

Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

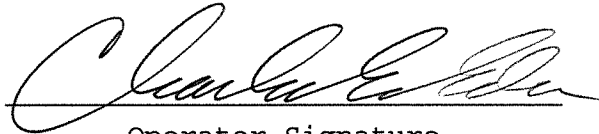
CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-006493
Location = TOXL 8164.13.00 06/09
08/26/2016 10:17

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:18
02 Std. Sol.	0.301	10:19
03 Room Air	0.000	10:19
04 Std. Sol.	0.301	10:20
05 Room Air	0.000	10:21
06 Std. Sol.	0.301	10:22
07 Room Air	0.000	10:22

08 Sim Temp = 34.0°C

Simul Ser No = MP3048
Std Sol No = 201603A
County = 08 Oper No. = 666666



Operator Signature
CHARLES EDER

Remarks: *LINEARITY TEST*
0.300 AC

Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-006493
Location = TOXL 8164.13.00 06/09
08/26/2016 10:25

***** Printer Test *****

abcdefghijklmnopqrstuvwxy1234567890-|=|
ABCDEFGHIJKLMNopqrstuvwxyz!@#%&^*()_+?

abcdefghijklmnopqrstuvwxy1234567890-|=|
ABCDEFGHIJKLMNopqrstuvwxyz!@#%&^*()_+?

Current Instrument Setup

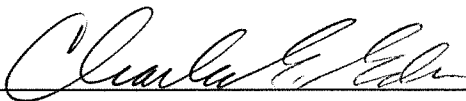
Data Entry Mode: Enabled
Start Test Sequence: DABACABA
Display Prelim Rslt? Yes
Display Third Digit? Yes
Inhib Printer(Y/N)? No
Display Volume? No
Disable On Memfull? Yes
of Print Copies? 1
Select Std (D/W/I)? Dry
Standard Value? 0.080
Standard Lot #? 19615080A5
Standard Cyl #? 26
Standard Expiration? 09/05/2017
Oper No? 666666

Flow Cal. Date: 02/12/2016
Slope 691
Intercept -663384

IR Calibration Date: 08/22/2016

	3um	9um
0th Coef(*100):	-23064	-17586
1st Coef(*100):	268483	137311
2nd Coef(*100):	2939	1348
H2O adj(mg/l*10k):	636	433

***** Printer Test End *****


Operator Signature
CHARLES EDER

Remarks: *PRINT TEST*

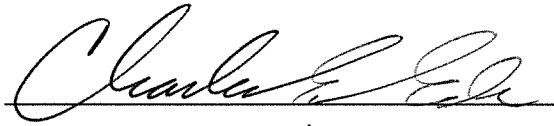
Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-006493
Location = TOXL 8164.13.00 06/09
08/26/2016 10:26

Test	AC	Time
01 Room Air	0.000	10:27
02 *Subject Test	INT*	10:27
03 Room Air	0.000	10:28

*Invalid Test
Interferent Detected

Sub Name = DISCOVER, THE SPIRIT
Sub DOB = 01/01/1982
Sub Sex = Female Weight = 150
Test = DUI Cit = INTERFERENT
Dr. Lic. = ND/DIS821456
Lot No = 19615080A5
Cyl No = 26
Expiration Date = 09/05/2017
County = 08 Oper No. = 666666



Operator Signature
CHARLES EDER

Remarks: *Interferent Check*
0.10AC + 0.05% ACETONE

Form 106-I8000

Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-006493
Location = TOXL 8164.13.00 06/09
08/26/2016 10:29

Test	AC	Time
01 Diagnostic	OK	10:29
02 Room Air	0.000	10:30
03 *Subject Test	RFI*	10:30
04 Room Air	0.000	10:30

*Invalid Test
Inhibited - RFI

Sub Name = DISCOVER, THE SPIRIT
Sub DOB = 01/01/1982
Sub Sex = Female Weight = 150
Test = DUI Cit = RFI CHECK
Dr. Lic. = ND/DIS821456
Lot No = 19615080A5
Cyl No = 26
Expiration Date = 09/05/2017
County = 08 Oper No. = 666666

I followed the Approved Method and the instructions displayed by the Intoxilyzer in conducting this test.



Operator Signature
CHARLES EDER

Remarks:

RFI CHECK

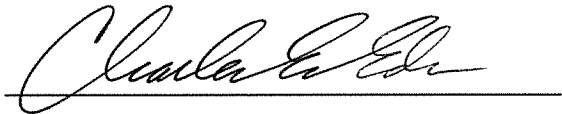
Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-006493
Location = TOXL 8164.13.00 06/09
08/26/2016 10:32

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:33
02 Std. Gas	0.080	10:33
03 Room Air	0.000	10:34
04 Std. Gas	0.080	10:34
05 Room Air	0.000	10:35
06 Std. Gas	0.080	10:35
07 Room Air	0.000	10:35

Lot No = 19615080A5
Cyl No = 26
Exp Date = 09/05/2017
County = 08 Oper No. = 666666



Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 AC

Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-006493
Location = TOXL 8164.13.00 06/09
08/26/2016 10:36

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:37
02 Std. Gas	0.079	10:37
03 Room Air	0.000	10:37
04 Std. Gas	0.079	10:38
05 Room Air	0.000	10:38
06 Std. Gas	0.080	10:39
07 Room Air	0.000	10:39

Lot No = 19615080A5
Cyl No = 26
Exp Date = 09/05/2017
County = 08 Oper No. = 666666



Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080AC

Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-006493
Location = TOXL 8164.13.00 06/09
08/26/2016 10:40

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:40
02 Std. Gas	0.080	10:40
03 Room Air	0.000	10:41
04 Std. Gas	0.081	10:41
05 Room Air	0.000	10:42
06 Std. Gas	0.080	10:42
07 Room Air	0.000	10:43

Lot No = 19615080A5
Cyl No = 26
Exp Date = 09/05/2017
County = 08 Oper No. = 666666



Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 AC