INTOXILYZER® 8000 CALIBRATION ADJUSTMENT

Intoxilyzer® 8000 Serial Number: 80-004200 Location: TOXL

A. Flow Sensor Calibration and Verification Check (Level 3,M,C,F)
1. [X] Replaced o-rings if damaged 40655 & 55260
2. Flow Meter Serial Number: ADJUST & VERIFY
3. Air Supplied to Intoxilyzer® 8000 at:
   a. [X] 5 L/min [X] 15 L/min [X] 30 L/min
4. [X] Flow Rate Calibration Printout Attached
   a. [X] Correlation ≥ 0.99000
5. [X] Flow Sensor Calibration Verification (Level 3,D,F)
   a. 10 L/min: 0. 164 L/S X 60 Sec/min = 9.84 L/min
   b. 20 L/min: 0. 320 L/S X 60 Sec/min = 19.20 L/min
   c. [X] Flow Rates within ± 1 L/min of Expected Value

B. Gas Tank Sensor Check (Level 3,D,G)
1. Display: 864 psi Regulator: 875 psi
2. [X] Display and Regulator within 50 psi
3. [X] Completed tare of tank sensor if needed (Level 3,M,C,G)

C. Optical Bench Calibration and Verification Check (Level 3,M,C,O)
1. [X] Autocalibration Printout Attached
   a. [X] Max Power Res Value ≥ 10
   b. [X] Auto Range Res Value ≥ 4
2. Simulator Solutions for Optical Bench Calibration Adjustment
   a. [X] Set # Solutions to Run at 5

Soln.	g/210 L	Lot No.	Exp. Date	Simulator SN
1	0.000 (ACTUAL)	NA – MilliQ H_2O	NA – MilliQ H_2O	MP3066
2	0.040 (0.040)	2018081	8.22.20	MP 3067
3	0.080 (0.082)	201707E	7.28.19 5 CEE	MP 3068
4	0.150 (0.151)	201811E	11.26.20	MP 3069
5	0.300 (0.301)	2018031H	3.22.20	MP 3070

3. 0.100 AC Calibration Gas for H2O Adjustment
   a. Lot No. 13518100A3 Cyl No. 6 Exp. Date: 8.5.20
4. Atmospheric Pressure
   a. 927 mbar Displayed by Intoxilyzer® 8000
   b. 951 mbar Adjusted to using barometer
   c. 951 mbar on Auto Calibration Report printout
5. [X] Screen displayed "Calibration Success"

6. [X] Calibration Adjustment Printout Attached
   a. [X] Solution 1 Avg % Abs ≤ 0.2500
   b. [X] Solution 2-5 REL STD DEV ≤ 3.000
   c. [X] Residual (g/210 L) Values for Solutions 1-5 ≤ 0.0020 for 3 μm and 9 μm channels
   d. [X] Dry Gas H2O Adjustment Sum for 3 μm and 9 μm channels within ± 10

	Average		H_2O Adjust		
3 μm	4358	+	403	=	4761
9 μm	4316	+	445	=	4761

7. [X] Optical Bench Calibration Verification (Level 1, S and C)
   a. Wet Calibration Check
      i. Low AC Known Value ≤ 0.03 AC: 0.015 AC
      Sim. SN: DR5113 Lot No.: 201805C Exp. Date: 5.30.20
      ii. High AC Known Value ≥ 0.25 AC: 0.250 AC
      Sim. SN: DR7351 Lot No.: 201803G Exp. Date: 3.22.20
   b. Dry Calibration Check: Known Value 0.08 AC
      Lot No 34418080A2 Cyl No. 40 Exp. Date: 2.5.21

Test 1	0.080 AC	Test 4	0.080 AC	Test 7	0.080 AC
Test 2	0.080 AC	Test 5	0.080 AC	Test 8	0.080 AC
Test 3	0.079 AC	Test 6	0.079 AC	Test 9	0.080 AC

      Average 0.080 AC

   c. [X] Wet Calibration Check and Dry Calibration Check AC results are within ± 0.005 or ± 5% (whichever is greater) of stated value.

D. Remarks/Maintenance: CALIBRATION DUE TO 0.080 AC STD READING 0.084 AC. ALSO ATMOSPHERIC PRESSURE WAS READING 927 CEE WITH VS. CURRENT ATMOS PRESSURE OF 951.

[X] Instrument is acceptable to be used in the field.

Charles E Ee
Breath Analyst Signature

6.25.2019
Date

NA
Reviewed by

NA
Date

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

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-004200
Location = TOXL 8164.14.00 09/16
06/25/2019 09:17
Flow Rate Calibration********
1: Rate (Liters/min) = 5
SQRT(Diff)) = 7.348
2: Rate (Liters/min) = 15
SQRT(Diff)) = 12.082
3: Rate (Liters/min) = 30
SQRT(Diff)) = 22.867
Dependent Data Scale Factor = 100000 L/min
Independent Data Scale Factor = 256
Rounded Slope = 614
Rounded Intercept = -551153
Correlation = 0.99434

FLOW SENSOR CALIBRATION

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004200
06/25/2019 09:24:53

Auto Calibration
Max Power Res Value = 20
Auto Range Res Value = 9

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004200
06/25/2019 09:24:53

Auto Calibration

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

Sample	<<<<< 3um >>>>> % Abs	<<<<< 3um >>>>> (% Abs Ref)	<<<<< 9um >>>>> % Abs	<<<<< 9um >>>>> (% Abs Ref)
Sample #1	0.0720	(-0.0100)	0.1490	(-0.0060)
Sample #2	0.0760	(0.0340)	0.1510	(0.0080)
Sample #3	0.0570	(0.0610)	0.1490	(0.0100)
Sample #4	0.0790	(0.0620)	0.1760	(0.0040)
Avg % Abs	0.0707	(0.0523)	0.1587	(0.0073)
STD DEV	0.0119	(0.0159)	0.0150	(0.0031)
REL STD DEV	16.883	(30.354)	9.482	(41.660)

Solution = 0.040 g/210L or 0.1905 mg/l, Samples = 4, Discarded = 1

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.7910	(-0.0020)	1.4880	(-0.0130)
Sample #2	0.7680	(0.0270)	1.4830	(0.0070)
Sample #3	0.7850	(0.0280)	1.4810	(0.0040)
Sample #4	0.7840	(0.0350)	1.5070	(0.0070)
Avg % Abs	0.7790	(0.0300)	1.4903	(0.0060)
STD DEV	0.0095	(0.0044)	0.0145	(0.0017)
REL STD DEV	1.225	(14.530)	0.971	(28.868)

Solution = 0.082 g/210L or 0.3905 mg/l, Samples = 4, Discarded = 1

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.5030	(0.0020)	2.8570	(0.0050)
Sample #2	1.5290	(0.0070)	2.8810	(0.0100)
Sample #3	1.5310	(0.0070)	2.8770	(0.0010)
Sample #4	1.4890	(0.0310)	2.8500	(0.0360)
Avg % Abs	1.5163	(0.0150)	2.8693	(0.0157)
STD DEV	0.0237	(0.0139)	0.0169	(0.0182)
REL STD DEV	1.562	(92.376)	0.588	(116.011)

Solution = 0.151 g/210L or 0.7190 mg/l, Samples = 4, Discarded = 1

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	2.6610	(0.0100)	5.0110	(-0.0090)
Sample #2	2.7030	(0.0070)	5.0620	(-0.0070)
Sample #3	2.7100	(0.0160)	5.0630	(0.0000)
Sample #4	2.7210	(0.0130)	5.0780	(-0.0020)
Avg % Abs	2.7113	(0.0120)	5.0677	(-0.0030)
STD DEV	0.0091	(0.0046)	0.0090	(0.0036)
REL STD DEV	0.335	(38.188)	0.177	(120.185)

Solution = 0.301 g/210L or 1.4333 mg/l, Samples = 4, Discarded = 1

Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	5.2540	(-0.0210)	9.5950	(-0.0020)
Sample #2	5.2410	(0.0000)	9.6320	(0.0090)
Sample #3	5.2300	(0.0240)	9.6190	(0.0190)
Sample #4	5.2570	(0.0080)	9.6260	(0.0150)
Avg % Abs	5.2427	(0.0107)	9.6257	(0.0143)
STD DEV	0.0136	(0.0122)	0.0065	(0.0050)
REL STD DEV	0.259	(114.564)	0.068	(35.116)

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004200
06/25/2019 09:24:53

Auto Calibration

	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Zero Order Coef	-187.92	-221.64
First Order Coef	2670.01	1407.77
Second Order Coef	19.03	10.83

3um Act (g/210L)	3um Fit (g/210L)	3um Residual (g/210L)	9um Act (g/210L)	9um Fit (g/210L)	9um Residual (g/210L)
0.000	0.000	-0.0000	0.000	0.000	-0.0000
0.040	0.040	0.0000	0.040	0.040	0.0001
0.082	0.082	0.0000	0.082	0.082	-0.0000
0.151	0.151	-0.0000	0.151	0.151	-0.0000
0.301	0.301	0.0000	0.301	0.301	0.0000

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

Sample	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Sample #1	4339.00	4355.00
Sample #2	4335.00	4314.00
Sample #3	4379.00	4334.00
Sample #4	4360.00	4301.00
Avg	4358.0000	4316.3335
STD DEV	22.0681	16.6233
REL STD DEV	0.506	0.385
H2O adjust (mg/l*10k)	403	445

Atmospheric Pressure = 951

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

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

CMI, Inc. Intoxilyzer — Alcohol Analyzer
North Dakota Model 8000 — SN 80-004200
Location = TOXL — 8164.14.00 09/16
06/25/2019 — 10:30

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:30
02 Std. Sol.	0.014	10:31
03 Room Air	0.000	10:32
04 Std. Sol.	0.014	10:32
05 Room Air	0.000	10:33
06 Std. Sol.	0.015	10:34
07 Room Air	0.000	10:34

08 Sim Temp = 34.0°C

Simul Ser No = DR5113
Std Sol No = 201805C
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: Low AC
0.015 AC

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 80-004200
Location = TOXL — 8164.14.00 09/16
06/25/2019 — 10:36

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:36
02 Std. Sol.	0.246	10:37
03 Room Air	0.000	10:37
04 Std. Sol.	0.248	10:38
05 Room Air	0.000	10:39
06 Std. Sol.	0.248	10:39
07 Room Air	0.000	10:40

08 Sim Temp = 34.0°C

Simul Ser No = DR7351
Std Sol No = 201803G
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: HIGH AC
0.250 AC

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 80-004200
Location = TOXL — 8164.14.00 09/16
06/25/2019 — 10:54

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:55
02 Std. Gas	0.080	10:55
03 Room Air	0.000	10:56
04 Std. Gas	0.080	10:56
05 Room Air	0.000	10:57
06 Std. Gas	0.079	10:57
07 Room Air	0.000	10:58

Lot No = 34418080A2
Cyl No = 40
Exp Date = 02/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 AC

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 80-004200
Location = TOXL — 8164.14.00 09/16
06/25/2019 — 10:58

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:58
02 Std. Gas	0.080	10:59
03 Room Air	0.000	10:59
04 Std. Gas	0.080	11:00
05 Room Air	0.000	11:00
06 Std. Gas	0.079	11:00
07 Room Air	0.000	11:01

Lot No = 34418080A2
Cyl No = 40
Exp Date = 02/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 AC

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 80-004200
Location = TOXL — 8164.14.00 09/16
06/25/2019 — 11:02

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	11:03
02 Std. Gas	0.080	11:03
03 Room Air	0.000	11:03
04 Std. Gas	0.080	11:04
05 Room Air	0.000	11:04
06 Std. Gas	0.080	11:05
07 Room Air	0.000	11:05

Lot No = 34418080A2
Cyl No = 40
Exp Date = 02/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 AC

Form 106-I8000