INTOXILYZER® 8000 CALIBRATION ADJUSTMENT

Intoxilyzer® 8000 Serial Number: 80-005360 Location: TOXL

A. Flow Sensor Calibration and Verification Check (Level 3,M,C,F)
1. [X] Replaced o-rings if damaged ADJUST & VERIFY
2. Flow Meter Serial Number: 40655 & 55260
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: 0.175 L/S X 60 Sec/min = 10.50 L/min
   b. 20 L/min: 0.332 L/S X 60 Sec/min = 19.92 L/min
   c. [X] Flow Rates within ± 1 L/min of Expected Value

B. Gas Tank Sensor Check (Level 3,D,G)
1. Display: 920 psi Regulator: 900 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	MP3057
2	0.040 (0.041)	20203AA (03A) CEE	3.10.22	MP3059
3	0.080 (0.080)	21050	2.15.23	MP5318
4	0.100 (0.102)	202010E	10.20.22	MP3003
5	0.300 (0.298)	20030	1.21.22	MP3069

3. 0.100 AC Calibration Gas for H2O Adjustment
   a. Lot No. 07220100A1 Cyl No. 4 Exp. Date: 5.5.22
4. Atmospheric Pressure
   a. 916 mbar Displayed by Intoxilyzer® 8000
   b. 952 mbar Adjusted to using barometer
   c. 952 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	4593	+	168	=	4761
9 μm	4486	+	275	=	4761

7. [X] Optical Bench Calibration Verification (Level 1, S and C)
   a. Wet Calibration Check
      i. Low AC Known Value ≤ 0.03 AC: 0.030 AC
      Sim. SN: MP5289 Lot No.: 201911E Exp. Date: 11.19.21
      ii. High AC Known Value ≥ 0.25 AC: 0.400 AC
      Sim. SN: MP3062 Lot No.: 202103E Exp. Date: 3.24.23
   b. Dry Calibration Check: Known Value 0.08 AC
      Lot No. 24119080A1 Cyl No. 5 Exp. Date: 11.5.21

Test 1	0.080 AC	Test 4	0.081 AC	Test 7	0.080 AC
Test 2	0.080 AC	Test 5	0.080 AC	Test 8	0.081 AC
Test 3	0.080 AC	Test 6	0.080 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: CAL. ADJ. DUE TO ATMOSPHERIC SENSOR (BAROMETER) READING 916 mbar WHEN ACTUAL ATMOSPHERIC PRESSURE WAS 952 mbar.

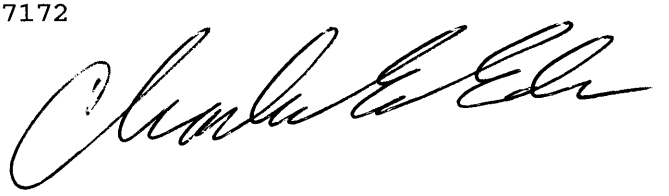
[X] Instrument is acceptable to be used in the field.

Breath Analyst Signature — Date: 6/16/21

Reviewed by — Date: 6-21-21

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

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-005360
Location = TOXL 8164.14.00 09/16
06/16/2021 14:24
Flow Rate Calibration********
1: Rate (Liters/min) = 5
SQRT(Diff)) = 2.000
2: Rate (Liters/min) = 15
SQRT(Diff)) = 10.582
3: Rate (Liters/min) = 30
SQRT(Diff)) = 20.949
Dependent Data Scale Factor = 100000 L/min
Independent Data Scale Factor = 256
Rounded Slope = 517
Rounded Intercept = 187172
Correlation = 0.99816



TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005360
06/16/2021 15:53:31

Auto Calibration

	<<<<< 3um >>>>>		<<<<< 9um >>>>>	
Solution = 0.000 g/210L or 0.0000 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.0360	(0.0190)	0.1490	(-0.0150)
Sample #2	0.0230	(0.0480)	0.1050	(0.0270)
Sample #3	0.0330	(0.0560)	0.1220	(0.0020)
Sample #4	0.0040	(0.1090)	0.1270	(0.0050)
Avg % Abs	0.0200	(0.0710)	0.1180	(0.0113)
STD DEV	0.0147	(0.0332)	0.0115	(0.0137)
REL STD DEV	73.655	(46.692)	9.773	(120.445)
Solution = 0.041 g/210L or 0.1952 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.7230	(0.0180)	1.4100	(0.0270)
Sample #2	0.7840	(0.0260)	1.4500	(0.0120)
Sample #3	0.7540	(0.0560)	1.4690	(0.0300)
Sample #4	0.7620	(0.0610)	1.4540	(0.0290)
Avg % Abs	0.7667	(0.0477)	1.4577	(0.0237)
STD DEV	0.0155	(0.0189)	0.0100	(0.0101)
REL STD DEV	2.026	(39.713)	0.687	(42.744)
Solution = 0.080 g/210L or 0.3810 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.4190	(0.0120)	2.6860	(0.0390)
Sample #2	1.4620	(0.0090)	2.6790	(0.0460)
Sample #3	1.4010	(0.0540)	2.5980	(0.0750)
Sample #4	1.4180	(0.0450)	2.6110	(0.0800)
Avg % Abs	1.4270	(0.0360)	2.6293	(0.0670)
STD DEV	0.0315	(0.0238)	0.0435	(0.0184)
REL STD DEV	2.206	(66.144)	1.654	(27.399)
Solution = 0.102 g/210L or 0.4857 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.7630	(0.0130)	3.3680	(0.0140)
Sample #2	1.7850	(0.0210)	3.3530	(0.0390)
Sample #3	1.8420	(0.0130)	3.3580	(0.0370)
Sample #4	1.7770	(0.0450)	3.3450	(0.0600)
Avg % Abs	1.8013	(0.0263)	3.3520	(0.0453)
STD DEV	0.0354	(0.0167)	0.0066	(0.0127)
REL STD DEV	1.968	(63.240)	0.196	(28.105)
Solution = 0.298 g/210L or 1.4190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	5.1700	(0.0180)	9.2570	(0.0000)
Sample #2	5.1980	(0.0530)	9.3100	(0.0330)
Sample #3	5.1720	(0.0260)	9.2650	(0.0110)
Sample #4	5.1500	(0.0480)	9.2400	(0.0200)
Avg % Abs	5.1733	(0.0423)	9.2717	(0.0213)
STD DEV	0.0240	(0.0144)	0.0355	(0.0111)
REL STD DEV	0.464	(33.931)	0.383	(51.846)

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005360
06/16/2021 15:53:31

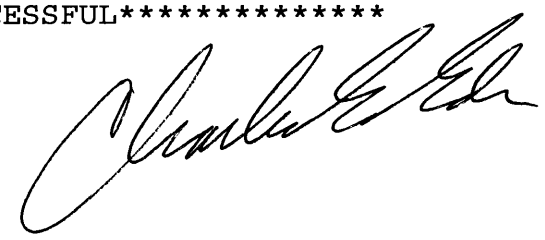
Auto Calibration

	<<<<< 3um >>>>>		<<<<< 9um >>>>>	
Zero Order Coef	-79.08		-188.79	
First Order Coef	2709.05		1486.36	
Second Order Coef	9.59		6.96	
	Act (g/210L)	Fit (g/210L)	Act (g/210L)	Fit (g/210L)
	0.000	-0.001	0.000	-0.000
	0.041	0.042	0.041	0.042
	0.080	0.080	0.080	0.079
	0.102	0.101	0.102	0.102
	0.298	0.298	0.298	0.298

	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Solution = 0.100 g/210L or 0.4762 mg/l, Samples = 4, Discarded = 1		
Sample		
Sample #1	4640.00	4531.00
Sample #2	4572.00	4505.00
Sample #3	4632.00	4479.00
Sample #4	4576.00	4475.00
Avg	4593.3335	4486.3335
STD DEV	33.5460	16.2891
REL STD DEV	0.730	0.363
H2O adjust (mg/l*10k)	168	275

Atmospheric Pressure = 952

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



TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005360
06/16/2021 15:53:31

Auto Calibration
Max Power Res Value = 38
Auto Range Res Value = 20

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

CMI, Inc. Intoxilyzer — Alcohol Analyzer
North Dakota Model 8000 — SN 80-005360
Location = TOXL — 8164.14.00 09/16
06/16/2021 — 16:32

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:33
02 Std. Sol.	0.030	16:34
03 Room Air	0.000	16:34
04 Std. Sol.	0.029	16:35
05 Room Air	0.000	16:36
06 Std. Sol.	0.030	16:36
07 Room Air	0.000	16:37

08 Sim Temp = 34.0°C

Simul Ser No = MP5289
Std Sol No = 201911E
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: Low AC
0.030 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 80-005360
Location = TOXL — 8164.14.00 09/16
06/16/2021 — 16:37

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:38
02 Std. Sol.	0.397	16:39
03 Room Air	0.000	16:39
04 Std. Sol.	0.397	16:40
05 Room Air	0.000	16:41
06 Std. Sol.	0.397	16:41
07 Room Air	0.000	16:42

08 Sim Temp = 34.0°C

Simul Ser No = MP3062
Std Sol No = 202103E
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: HIGH AC
0.400 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 80-005360
Location = TOXL 8164.14.00 09/16
06/16/2021 16:42

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:43
02 Std. Gas	0.080	16:43
03 Room Air	0.000	16:44
04 Std. Gas	0.080	16:44
05 Room Air	0.000	16:45
06 Std. Gas	0.080	16:45
07 Room Air	0.000	16:46

Lot No = 24119080A1
Cyl No = 5
Exp Date = 11/05/2021
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 80-005360
Location = TOXL — 8164.14.00 09/16
06/16/2021 — 16:46

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:46
02 Std. Gas	0.081	16:47
03 Room Air	0.000	16:47
04 Std. Gas	0.080	16:48
05 Room Air	0.000	16:48
06 Std. Gas	0.080	16:48
07 Room Air	0.000	16:49

Lot No = 24119080A1
Cyl No = 5
Exp Date = 11/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080AC

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 80-005360
Location = TOXL — 8164.14.00 09/16
06/16/2021 — 16:49

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:50
02 Std. Gas	0.080	16:50
03 Room Air	0.000	16:51
04 Std. Gas	0.081	16:51
05 Room Air	0.000	16:52
06 Std. Gas	0.080	16:52
07 Room Air	0.000	16:52

Lot No = 24119080A1
Cyl No = 5
Exp Date = 11/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 AC

Form 106-I8000