INTOXILYZER® 8000 CALIBRATION ADJUSTMENT

Intoxilyzer® 8000 Serial Number: 80-005946 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. 171 L/S X 60 Sec/min = 10.3 L/min
   b. 20 L/min: 0. 328 L/S X 60 Sec/min = 19.7 L/min
   c. X Flow Rates within ± 1 L/min of Expected Value

B. Gas Tank Sensor Check (Level 3,D,G)
1. Display: 709 psi Regulator: 700 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	(STATED) 0.000	(ACTUAL)	NA – MilliQ H_2O	NA – MilliQ H_2O	MP5289
2	0.040	0.040	201808D	8·22·20	MP5319
3	0.080	0.081	201807C	7·25·20	MP5290
4	0.150	0.151	201811E	11·26·20	MP5320
5	0.301	0.301	201803H	3·22·20	MP5321

3. 0.100 AC Calibration Gas for H2O Adjustment
   a. Lot No. 135180043 Cyl No. 6 Exp. Date: 8.5.20
4. Atmospheric Pressure
   a. 959 mbar Displayed by Intoxilyzer® 8000
   b. 958 mbar Adjusted to using barometer
   c. 957 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	4104	+	657	=	4761
9 μm	4195	+	566	=	4761

7. X Optical Bench Calibration Verification (Level 1, S and C)
   a. Wet Calibration Check
      i. Low AC Known Value ≤ 0.03 AC: 0.020 AC
      Sim. SN: MP3071 Lot No.: 2018 10D Exp. Date: 10.24.20
      ii. High AC Known Value ≥ 0.25 AC: 0.250 AC
      Sim. SN: DR7351 Lot No.: 2018036 Exp. Date: 3.22.20
   b. Dry Calibration Check: Known Value 0.08 AC
      Lot No. 349170804-3 Cyl No. 2 Exp. Date: 2.5.20
      Test 1 0.080 AC Test 4 0.080 AC Test 7 0.080 AC
      Test 2 0.081 AC Test 5 0.080 AC Test 8 0.079 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: CALIBRATION ADJUSTMENT PERFORMED AFTER CHECKING FOR POSSIBLE CONTAMINATION BETWEEN SEPT to DEC. 2019.

X Instrument is acceptable to be used in the field.

Breath Analyst Signature — Date: 1/16/2020

Reviewed by: NA — Date: NA

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

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-005946
Location = TOXL 8164.14.00 09/16
01/15/2020 14:31
Flow Rate Calibration********
1: Rate (Liters/min) = 5
SQRT(Diff)) = 2.828
2: Rate (Liters/min) = 15
SQRT(Diff)) = 10.293
3: Rate (Liters/min) = 30
SQRT(Diff)) = 22.000
Dependent Data Scale Factor = 100000 L/min
Independent Data Scale Factor = 256
Rounded Slope = 509
Rounded Intercept = 142434
Correlation = 0.99993

1/15/2020

NOTE: HAD TO WAIT FOR FLOW METERS TO BE RETURNED AFTER BEING SENT OUT FOR CALIBRATION CHECK.

CALIBRATION & ADJUSTMENT STARTED 12/20/19 AND FINISHED 1/16/20

1/16/20

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005946
12/20/2019 12:14:33

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	0.1370	(-0.0120)	0.2430	(-0.0230)
Sample #2	0.1300	(0.0420)	0.2160	(0.0060)
Sample #3	0.1310	(0.0590)	0.2400	(0.0030)
Sample #4	0.1010	(0.0870)	0.2240	(0.0220)
Avg % Abs	0.1207	(0.0627)	0.2267	(0.0103)
STD DEV	0.0170	(0.0227)	0.0122	(0.0102)
REL STD DEV	14.121	(36.260)	5.391	(98.849)
Solution = 0.040 g/210L or 0.1905 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.7940	(-0.0170)	1.5990	(-0.0060)
Sample #2	0.8180	(-0.0260)	1.6410	(-0.0250)
Sample #3	0.8150	(-0.0300)	1.6430	(-0.0460)
Sample #4	0.8150	(-0.0280)	1.6060	(-0.0320)
Avg % Abs	0.8160	(-0.0280)	1.6300	(-0.0343)
STD DEV	0.0017	(0.0020)	0.0208	(0.0107)
REL STD DEV	0.212	(7.143)	1.277	(31.144)
Solution = 0.081 g/210L or 0.3857 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.5160	(-0.0250)	3.0020	(-0.0180)
Sample #2	1.4960	(0.0000)	2.9660	(0.0200)
Sample #3	1.4290	(0.0460)	2.9210	(0.0550)
Sample #4	1.4910	(0.0250)	2.9320	(0.0620)
Avg % Abs	1.4720	(0.0237)	2.9397	(0.0457)
STD DEV	0.0373	(0.0230)	0.0235	(0.0225)
REL STD DEV	2.536	(97.305)	0.798	(49.274)
Solution = 0.151 g/210L or 0.7190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	2.6140	(-0.0230)	5.2050	(-0.0050)
Sample #2	2.5880	(0.0180)	5.1550	(0.0420)
Sample #3	2.5310	(0.0440)	5.1140	(0.0730)
Sample #4	2.5520	(0.0390)	5.1340	(0.0660)
Avg % Abs	2.5570	(0.0337)	5.1343	(0.0603)
STD DEV	0.0288	(0.0138)	0.0205	(0.0163)
REL STD DEV	1.127	(40.979)	0.399	(26.948)
Solution = 0.301 g/210L or 1.4333 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	4.9490	(-0.0170)	9.7280	(-0.0220)
Sample #2	4.8890	(0.0430)	9.6510	(0.0840)
Sample #3	4.8810	(0.0510)	9.6190	(0.0750)
Sample #4	4.8730	(0.0590)	9.6380	(0.0840)
Avg % Abs	4.8810	(0.0510)	9.6360	(0.0810)
STD DEV	0.0080	(0.0080)	0.0161	(0.0052)
REL STD DEV	0.164	(15.686)	0.167	(6.415)

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005946
12/20/2019 12:14:33

Auto Calibration

	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Zero Order Coef	-391.96	-349.15
First Order Coef	2860.61	1392.11
Second Order Coef	32.46	13.72

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	-0.001	0.0010	0.000	-0.001	0.0007
0.040	0.041	-0.0012	0.040	0.041	-0.0011
0.081	0.082	-0.0007	0.081	0.081	-0.0001
0.151	0.150	0.0012	0.151	0.150	0.0006
0.301	0.301	-0.0002	0.301	0.301	-0.0001

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

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

Sample	3um	9um
Sample #1	4226.00	4342.00
Sample #2	4041.00	4167.00
Sample #3	4086.00	4184.00
Sample #4	4186.00	4236.00
Avg	4104.3335	4195.6665
STD DEV	74.2181	35.9490
REL STD DEV	1.808	0.857
H2O adjust (mg/l*10k)	657	566

Atmospheric Pressure = 957

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

12/20/19

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005946
12/20/2019 12:14:33

Auto Calibration
Max Power Res Value = 18
Auto Range Res Value = 5

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

CMI, Inc. Intoxilyzer — Alcohol Analyzer
North Dakota Model 8000 — SN 80-005946
Location = TOXL — 8164.14.00 09/16
01/16/2020 — 10:16

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:17
02 Std. Sol.	0.017	10:18
03 Room Air	0.000	10:18
04 Std. Sol.	0.017	10:19
05 Room Air	0.000	10:20
06 Std. Sol.	0.017	10:20
07 Room Air	0.000	10:21

08 Sim Temp = 34.0°C

Simul Ser No = MP3071
Std Sol No = ~~2108~~10D
County = 08 2018 CEE — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: Low AC
0.020 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 80-005946
Location = TOXL — 8164.14.00 09/16
01/16/2020 — 10:34

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:34
02 Std. Sol.	0.249	10:35
03 Room Air	0.000	10:36
04 Std. Sol.	0.250	10:36
05 Room Air	0.000	10:37
06 Std. Sol.	0.248	10:38
07 Room Air	0.000	10:38

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 80-005946
Location = TOXL — 8164.14.00 09/16
01/16/2020 — 12:04

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	12:05
02 Std. Gas	0.080	12:05
03 Room Air	0.000	12:06
04 Std. Gas	0.081	12:06
05 Room Air	0.000	12:07
06 Std. Gas	0.080	12:07
07 Room Air	0.000	12:08

Lot No = 34917080A3
Cyl No = 2
Exp Date = 02/05/2020
County = 08 — Oper No. = 666666

Charles E Eder

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 80-005946
Location = TOXL — 8164.14.00 09/16
01/16/2020 — 12:08

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	12:08
02 Std. Gas	0.080	12:09
03 Room Air	0.000	12:09
04 Std. Gas	0.080	12:10
05 Room Air	0.000	12:10
06 Std. Gas	0.080	12:11
07 Room Air	0.000	12:11

Lot No = 34917080A3
Cyl No = 2
Exp Date = 02/05/2020
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 80-005946
Location = TOXL — 8164.14.00 09/16
01/16/2020 — 12:11

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	12:12
02 Std. Gas	0.080	12:12
03 Room Air	0.000	12:13
04 Std. Gas	0.079	12:13
05 Room Air	0.000	12:14
06 Std. Gas	0.080	12:14
07 Room Air	0.000	12:15

Lot No = 34917080A3
Cyl No = 2
Exp Date = 02/05/2020
County = 08 — Oper No. = 666666

Charles E Eder

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 AC

Form 106-I8000