INTOXILYZER® 8000 CALIBRATION ADJUSTMENT

Intoxilyzer® 8000 Serial Number: 80-004938 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: 0.160 L/S X 60 Sec/min = 9.60 L/min
   b. 20 L/min: 0.324 L/S X 60 Sec/min = 19.44 L/min
   c. X Flow Rates within ± 1 L/min of Expected Value

B. Gas Tank Sensor Check (Level 3,D,G)
1. Display: 933 psi Regulator: 950 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	DR7111
2	0.040 (0.040)	201808D	8.22.20	DR7347
3	0.080 (0.081)	201807C	7.25.20	DR5114
4	0.150 (0.151)	201811E	11.26.20	DR5131
5	0.300 (0.298)	19010	1.3.21	DR7346

3. 0.100 AC Calibration Gas for H2O Adjustment
   a. Lot No. 13518100A3 Cyl No. 4 Exp. Date: 8.5.2020
4. Atmospheric Pressure
   a. 923 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	4406	+	355	=	4761
9 μm	4391	+	370	=	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: MP3064 Lot No.: 20070 Exp. Date: 2·13·22
      ii. High AC Known Value ≥ 0.25 AC: ~~0.300~~ CEE AC 0.250 AC
      Sim. SN: MP3067 Lot No.: 20191B Exp. Date: 11·5·21
   b. Dry Calibration Check: Known Value 0.08 AC
      Lot No. 24119080A1 Cyl No. 9 Exp. Date: 11·5·21

Test 1	0.081 AC	Test 4	0.079 AC	Test 7	0.079 AC
Test 2	0.081 AC	Test 5	0.080 AC	Test 8	0.079 AC
Test 3	0.080 AC	Test 6	0.079 AC	Test 9	0.079 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 ADJUST DUE TO ATMOSPHERIC MONITOR READING 923 mbar WHEN ACTUAL ATMOSPHERIC PRESSURE IS 952 mbar. TAPED FRAYING/~~TARE~~ CEE TEAR IN BREATH HOSE PROTECTOR.

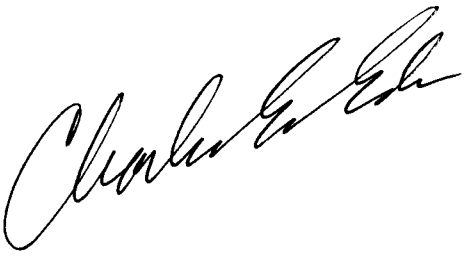
X Instrument is acceptable to be used in the field.

Breath Analyst Signature — Date: 6·10·20

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 80-004938
Location = TOXL 8164.14.00 09/16
06/10/2020 11:39
Flow Rate Calibration********
1: Rate (Liters/min) = 5
SQRT(Diff)) = 6.082
2: Rate (Liters/min) = 15
SQRT(Diff)) = 11.488
3: Rate (Liters/min) = 30
SQRT(Diff)) = 22.469
Dependent Data Scale Factor = 100000 L/min
Independent Data Scale Factor = 256
Rounded Slope = 587
Rounded Intercept = -338327
Correlation = 0.99688



TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004938
06/10/2020 12:29:04

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	0.1100	(0.0100)	0.1500	(0.0070)
Sample #2	0.0860	(0.0990)	0.1610	(0.0330)
Sample #3	0.0740	(0.1540)	0.1670	(0.0430)
Sample #4	0.0620	(0.1970)	0.1590	(0.0590)
Avg % Abs	0.0740	(0.1500)	0.1623	(0.0450)
STD DEV	0.0120	(0.0491)	0.0042	(0.0131)
REL STD DEV	16.216	(32.748)	2.565	(29.144)
Solution = 0.040 g/210L or 0.1905 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.7920	(-0.0030)	1.5710	(0.0180)
Sample #2	0.7930	(0.0190)	1.5560	(0.0400)
Sample #3	0.8040	(0.0400)	1.5550	(0.0510)
Sample #4	0.7960	(0.0560)	1.5720	(0.0500)
Avg % Abs	0.7977	(0.0383)	1.5610	(0.0470)
STD DEV	0.0057	(0.0186)	0.0095	(0.0061)
REL STD DEV	0.713	(48.408)	0.611	(12.942)
Solution = 0.081 g/210L or 0.3857 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.5080	(-0.0080)	2.9150	(0.0000)
Sample #2	1.5160	(0.0160)	2.9240	(-0.0010)
Sample #3	1.5140	(0.0150)	2.9440	(0.0000)
Sample #4	1.5040	(0.0280)	2.9250	(0.0000)
Avg % Abs	1.5113	(0.0197)	2.9310	(-0.0003)
STD DEV	0.0064	(0.0072)	0.0113	(0.0006)
REL STD DEV	0.425	(36.784)	0.384	(173.205)
Solution = 0.151 g/210L or 0.7190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	2.6980	(0.0040)	5.2770	(0.0000)
Sample #2	2.7250	(0.0080)	5.2770	(0.0230)
Sample #3	2.7050	(0.0130)	5.2420	(0.0420)
Sample #4	2.7020	(0.0280)	5.2430	(0.0460)
Avg % Abs	2.7107	(0.0163)	5.2540	(0.0370)
STD DEV	0.0125	(0.0104)	0.0199	(0.0123)
REL STD DEV	0.461	(63.724)	0.379	(33.211)
Solution = 0.298 g/210L or 1.4190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	5.2080	(0.0000)	9.9580	(0.0110)
Sample #2	5.2430	(0.0120)	9.9370	(0.0550)
Sample #3	5.2440	(0.0240)	9.9460	(0.0560)
Sample #4	5.2500	(0.0150)	9.9300	(0.0620)
Avg % Abs	5.2457	(0.0170)	9.9377	(0.0577)
STD DEV	0.0038	(0.0062)	0.0080	(0.0038)
REL STD DEV	0.072	(36.735)	0.081	(6.565)

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004938
06/10/2020 12:29:04

Auto Calibration

	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Zero Order Coef	-224.34	-231.79
First Order Coef	2698.49	1367.90
Second Order Coef	9.63	8.40

Act (g/210L)	Fit (g/210L)	Residual (g/210L)	Act (g/210L)	Fit (g/210L)	Residual (g/210L)
0.000	-0.001	0.0005	0.000	-0.000	0.0002
0.040	0.041	-0.0006	0.040	0.040	-0.0004
0.081	0.081	-0.0004	0.081	0.081	0.0002
0.151	0.150	0.0006	0.151	0.151	0.0001
0.298	0.298	-0.0001	0.298	0.298	-0.0000

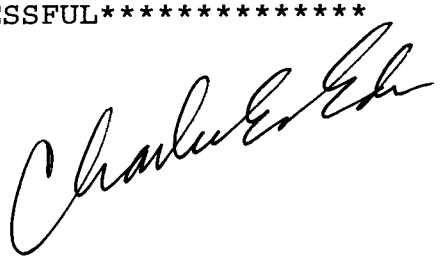
	<<<<< 3um >>>>>	<<<<< 9um >>>>>

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

Sample		
Sample #1	4422.00	4405.00
Sample #2	4370.00	4395.00
Sample #3	4405.00	4383.00
Sample #4	4445.00	4395.00
Avg	4406.6665	4391.0000
STD DEV	37.5278	6.9282
REL STD DEV	0.852	0.158
H2O adjust (mg/l*10k)	355	370

Atmospheric Pressure = 952

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



TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004938
06/10/2020 12:29:04

Auto Calibration

Max Power Res Value = 41
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 80-004938
Location = TOXL — 8164.14.00 09/16
06/10/2020 — 13:11

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	13:11
02 Std. Sol.	0.020	13:12
03 Room Air	0.000	13:13
04 Std. Sol.	0.020	13:13
05 Room Air	0.000	13:14
06 Std. Sol.	0.020	13:15
07 Room Air	0.000	13:15

08 Sim Temp = 34.0°C

Simul Ser No = MP3064
Std Sol No = 20070
County = 08 — 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 80-004938
Location = TOXL — 8164.14.00 09/16
06/10/2020 — 13:17

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	13:18
02 Std. Sol.	0.254	13:18
03 Room Air	0.000	13:19
04 Std. Sol.	0.253	13:20
05 Room Air	0.000	13:20
06 Std. Sol.	0.253	13:21
07 Room Air	0.000	13:22

08 Sim Temp = 34.0°C

Simul Ser No = MP3067
Std Sol No = 201911B
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 80-004938
Location = TOXL — 8164.14.00 09/16
06/10/2020 — 13:28

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	13:29
02 Std. Gas	0.081	13:29
03 Room Air	0.000	13:30
04 Std. Gas	0.081	13:30
05 Room Air	0.000	13:30
06 Std. Gas	0.080	13:31
07 Room Air	0.000	13:31

Lot No = 24119080A1
Cyl No = 9
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 80-004938
Location = TOXL — 8164.14.00 09/16
06/10/2020 — 13:32

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	13:32
02 Std. Gas	0.079	13:32
03 Room Air	0.000	13:33
04 Std. Gas	0.080	13:33
05 Room Air	0.000	13:34
06 Std. Gas	0.079	13:34
07 Room Air	0.000	13:35

Lot No = 24119080A1
Cyl No = 9
Exp Date = 11/05/2021
County = 08 — Oper No. = 666666

Charles E Eder

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 80-004938
Location = TOXL — 8164.14.00 09/16
06/10/2020 — 13:36

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	13:37
02 Std. Gas	0.079	13:37
03 Room Air	0.000	13:37
04 Std. Gas	0.079	13:38
05 Room Air	0.000	13:38
06 Std. Gas	0.079	13:39
07 Room Air	0.000	13:39

Lot No = 24119080A1
Cyl No = 9
Exp Date = 11/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080AC

Form 106-I8000