INTOXILYZER® 8000 CALIBRATION ADJUSTMENT

Intoxilyzer® 8000 Serial Number: 80-005952 Location: TOXL

A. Flow Sensor Calibration and Verification Check (Level 3,M,C,F)
1. ☒ Replaced o-rings if damaged ADJUST VERIFY
2. Flow Meter Serial Number: 55260 & 40655
3. Air Supplied to Intoxilyzer® 8000 at:
   a. ☒ 5 L/min ☒ 15 L/min ☒ 30 L/min
4. ☒ Flow Rate Calibration Printout Attached
   a. ☒ Correlation ≥ 0.99000
5. ☒ 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: 0.324 L/S X 60 Sec/min = 19.44 L/min
   c. ☒ Flow Rates within ± 1 L/min of Expected Value

B. Gas Tank Sensor Check (Level 3,D,G)
1. Display: 945 psi Regulator: 950 psi
2. ☒ Display and Regulator within 50 psi
3. ☒ 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. ☒ Autocalibration Printout Attached
   a. ☒ Max Power Res Value ≥ 10
   b. ☒ Auto Range Res Value ≥ 4
2. Simulator Solutions for Optical Bench Calibration Adjustment
   a. ☒ Set # Solutions to Run at 5

Soln.	g/210 L	Lot No.	Exp. Date	Simulator SN
1	0.000 (STD) (ACTUAL)	NA – MilliQ H_2O	NA – MilliQ H_2O	MP3057
2	0.040 (0.041)	202003A	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. 9 Exp. Date: 5/5/22
4. Atmospheric Pressure
   a. 961 mbar Displayed by Intoxilyzer® 8000
   b. 962 mbar Adjusted to using barometer
   c. 961 mbar on Auto Calibration Report printout
5. ☒ Screen displayed "Calibration Success"

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

	Average		H_2O Adjust		
3 µm	4245	+	516	=	4761
9 µm	4438	+	323	=	4761

7. ☒ 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.: 2070 Exp. Date: 2·13·22
      ii. High AC Known Value ≥ 0.25 AC: 0.300 AC
         Sim. SN: MP5317 Lot No.: 202012A Exp. Date: 12·8·22
   b. Dry Calibration Check: Known Value 0.08 AC
      Lot No. 24119080A1 Cyl No. 6 Exp. Date: 11·05·21
      Test 1 0.080 AC Test 4 0.081 AC Test 7 0.081 AC
      Test 2 0.081 AC Test 5 0.081 AC Test 8 0.081 AC
      Test 3 0.081 AC Test 6 0.081 AC Test 9 0.081 AC
      Average 0.081 AC

   c. ☒ 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. ADJUST DUE TO INSTRUMENT CONSISTENTLY RETURNING 0.085 AC & 0.084 AC VALUES FOR A 0.080 AC STANDARD. DISCOVERED WHILE PREPARING CLASSROOM FOR 2020-21 TRAINING SESSIONS IN OCTOBER 2020.

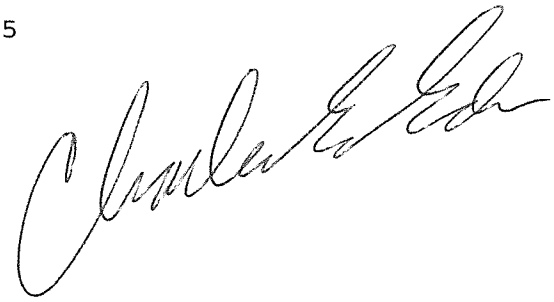
☒ Instrument is acceptable to be used in the field.

Breath Analyst Signature — Date: 4·16·21

Reviewed by — Date: 4-19-21

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

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-005952
Location = TOXL 8164.14.00 09/16
04/16/2021 12:58
Flow Rate Calibration********
1: Rate (Liters/min) = 5
SQRT(Diff)) = 7.680
2: Rate (Liters/min) = 15
SQRT(Diff)) = 12.922
3: Rate (Liters/min) = 30
SQRT(Diff)) = 22.426
Dependent Data Scale Factor = 100000 L/min
Independent Data Scale Factor = 256
Rounded Slope = 657
Rounded Intercept = -744615
Correlation = 0.99873



TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005952
04/16/2021 13:49:25

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	0.1650	(-0.0220)	0.1450	(-0.0140)
Sample #2	0.1210	(0.0670)	0.1360	(0.0330)
Sample #3	0.0890	(0.1090)	0.1180	(0.0430)
Sample #4	0.1030	(0.1240)	0.1300	(0.0440)
Avg % Abs	0.1043	(0.1000)	0.1280	(0.0400)
STD DEV	0.0160	(0.0295)	0.0092	(0.0061)
REL STD DEV	15.375	(29.547)	7.160	(15.207)
Solution = 0.041 g/210L or 0.1952 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.7940	(-0.0160)	1.5320	(-0.0270)
Sample #2	0.8210	(-0.0040)	1.5470	(0.0180)
Sample #3	0.7780	(0.0150)	1.5090	(0.0190)
Sample #4	0.7830	(0.0100)	1.5280	(0.0060)
Avg % Abs	0.7940	(0.0070)	1.5280	(0.0143)
STD DEV	0.0235	(0.0098)	0.0190	(0.0072)
REL STD DEV	2.962	(140.698)	1.243	(50.471)
Solution = 0.080 g/210L or 0.3810 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.4690	(-0.0070)	2.9020	(0.0140)
Sample #2	1.5020	(0.0090)	2.9320	(0.0290)
Sample #3	1.5220	(0.0230)	2.9230	(0.0300)
Sample #4	1.5110	(0.0220)	2.9190	(0.0420)
Avg % Abs	1.5117	(0.0180)	2.9247	(0.0337)
STD DEV	0.0100	(0.0078)	0.0067	(0.0072)
REL STD DEV	0.663	(43.390)	0.228	(21.488)
Solution = 0.102 g/210L or 0.4857 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.8640	(-0.0070)	3.6520	(0.0000)
Sample #2	1.8970	(-0.0080)	3.6780	(0.0150)
Sample #3	1.9070	(-0.0040)	3.6690	(0.0320)
Sample #4	1.8730	(0.0300)	3.6810	(0.0350)
Avg % Abs	1.8923	(0.0060)	3.6760	(0.0273)
STD DEV	0.0175	(0.0209)	0.0062	(0.0108)
REL STD DEV	0.923	(348.010)	0.170	(39.460)
Solution = 0.298 g/210L or 1.4190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	5.1770	(-0.0030)	10.0290	(-0.0220)
Sample #2	5.1880	(0.0020)	9.9940	(0.0310)
Sample #3	5.1960	(0.0100)	9.9870	(0.0380)
Sample #4	5.1900	(0.0080)	10.0070	(0.0260)
Avg % Abs	5.1913	(0.0067)	9.9960	(0.0317)
STD DEV	0.0042	(0.0042)	0.0101	(0.0060)
REL STD DEV	0.080	(62.450)	0.102	(19.035)

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005952
04/16/2021 13:49:25

Auto Calibration

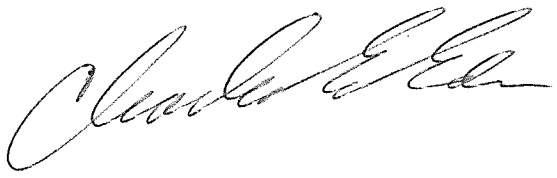
	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Zero Order Coef	-244.50	-146.39
First Order Coef	2661.54	1325.00
Second Order Coef	22.84	10.91

Act (g/210L)	Fit (g/210L)	Residual (g/210L)	Act (g/210L)	Fit (g/210L)	Residual (g/210L)
0.000	0.001	-0.0007	0.000	0.000	-0.0005
0.041	0.040	0.0015	0.041	0.040	0.0010
0.080	0.080	-0.0005	0.080	0.080	-0.0003
0.102	0.102	-0.0003	0.102	0.102	-0.0003
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	4278.00	4427.00
Sample #2	4171.00	4403.00
Sample #3	4281.00	4447.00
Sample #4	4284.00	4465.00
Avg	4245.3335	4438.3335
STD DEV	64.3920	31.8957
REL STD DEV	1.517	0.719
H2O adjust (mg/l*10k)	516	323

Atmospheric Pressure = 961

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



TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005952
04/16/2021 13:49:25

Auto Calibration
Max Power Res Value = 39
Auto Range Res Value = 17

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

CMI, Inc. Intoxilyzer — Alcohol Analyzer
North Dakota Model 8000 — SN 80-005952
Location = TOXL — 8164.14.00 09/16
04/16/2021 — 14:34

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	14:35
02 Std. Sol.	0.019	14:36
03 Room Air	0.000	14:36
04 Std. Sol.	0.018	14:37
05 Room Air	0.000	14:37
06 Std. Sol.	0.019	14:38
07 Room Air	0.000	14:39

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 80-005952
Location = TOXL — 8164.14.00 09/16
04/16/2021 — 14:39

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	14:40
02 Std. Sol.	0.299	14:41
03 Room Air	0.000	14:41
04 Std. Sol.	0.300	14:42
05 Room Air	0.000	14:42
06 Std. Sol.	0.300	14:43
07 Room Air	0.000	14:44

08 Sim Temp = 34.0°C

Simul Ser No = MP5317
Std Sol No = 202012A
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: HIGH AC
0.300 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 80-005952
Location = TOXL — 8164.14.00 09/16
04/16/2021 — 14:44

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	14:45
02 Std. Gas	0.080	14:45
03 Room Air	0.000	14:45
04 Std. Gas	0.081	14:46
05 Room Air	0.000	14:46
06 Std. Gas	0.081	14:47
07 Room Air	0.000	14:47

Lot No = 24119080A1
Cyl No = 6
Exp Date = 11/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080AC

Form 106-I8000

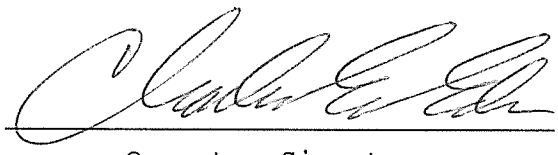
Intoxilyzer Test Record and Checklist
NDOAG Crime Lab. Div., Bismarck, ND 58501

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-005952
Location = TOXL 8164.14.00 09/16
04/16/2021 14:47

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	14:48
02 Std. Gas	0.081	14:48
03 Room Air	0.000	14:49
04 Std. Gas	0.081	14:49
05 Room Air	0.000	14:50
06 Std. Gas	0.081	14:50
07 Room Air	0.000	14:51

Lot No = 24119080A1
Cyl No = 6
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 80-005952
Location = TOXL — 8164.14.00 09/16
04/16/2021 — 14:51

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	14:51
02 Std. Gas	0.081	14:52
03 Room Air	0.000	14:52
04 Std. Gas	0.081	14:53
05 Room Air	0.000	14:53
06 Std. Gas	0.081	14:54
07 Room Air	0.000	14:54

Lot No = 24119080A1
Cyl No = 6
Exp Date = 11/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 AC

Form 106-I8000