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. ☒ Replaced o-rings if damaged ADJUST VERIFY
2. Flow Meter Serial Number: 40655 & 55260
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: 0.174 L/S X 60 Sec/min = 10.44 L/min
   b. 20 L/min: 0.332 L/S X 60 Sec/min = 19.92 L/min
   c. ☒ Flow Rates within ± 1 L/min of Expected Value

B. Gas Tank Sensor Check (Level 3,D,G)
1. Display: 982 psi Regulator: 1000 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 (ACTUAL)	NA – MilliQ H_2O	NA – MilliQ H_2O	DR7111
2	0.040 (0.040)	201808D	8.22.20	DR7347 CEE 51
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. 135181003A3 Cyl No. 4 Exp. Date: 8.5.20
4. Atmospheric Pressure
   a. 928 mbar Displayed by Intoxilyzer® 8000
   b. 960 mbar Adjusted to using barometer
   c. 960 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	4616	+	145	=	4761
9 µm	4512	+	249	=	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: MP3061 Lot No.: 201810D Exp. Date: 10.24.20
      ii. High AC Known Value ≥ 0.25 AC: 0.250 AC
      Sim. SN: MP3067 Lot No.: 201911B 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	0.079 AC	Test 4	0.080 AC	Test 7	0.080 AC
Test 2	0.080 AC	Test 5	0.079 AC	Test 8	0.079 AC
Test 3	0.079 AC	Test 6	0.080 AC	Test 9	0.080 AC

      Average 0.080 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: CALIBRATION ADJUST DUE TO ATMOSPHERIC SENSOR READING 928 mbar WHEN ACTUAL READING IS 960 mbar.

☒ Instrument is acceptable to be used in the field.

Breath Analyst Signature — Date: 5/7/2020

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 80-005360
Location = TOXL 8164.14.00 09/16
05/07/2020 13:53
Flow Rate Calibration********
1: Rate (Liters/min) = 5
SQRT(Diff)) = 6.324
2: Rate (Liters/min) = 15
SQRT(Diff)) = 11.180
3: Rate (Liters/min) = 30
SQRT(Diff)) = 21.211
Dependent Data Scale Factor = 100000 L/min
Independent Data Scale Factor = 256
Rounded Slope = 645
Rounded Intercept = -464870
Correlation = 0.99655

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005360
05/07/2020 14:47:57

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	0.0490	(0.0070)	0.1490	(0.0150)
Sample #2	0.0540	(0.0580)	0.1490	(0.0310)
Sample #3	0.0500	(0.0860)	0.1470	(0.0350)
Sample #4	0.0230	(0.1230)	0.1650	(0.0380)
Avg % Abs	0.0423	(0.0890)	0.1537	(0.0347)
STD DEV	0.0169	(0.0326)	0.0099	(0.0035)
REL STD DEV	39.832	(36.633)	6.420	(10.130)
Solution = 0.040 g/210L or 0.1905 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.7470	(-0.0070)	1.4370	(0.0070)
Sample #2	0.7920	(-0.0120)	1.4600	(-0.0050)
Sample #3	0.7660	(0.0440)	1.4330	(0.0380)
Sample #4	0.7680	(0.0420)	1.4690	(0.0130)
Avg % Abs	0.7753	(0.0247)	1.4540	(0.0153)
STD DEV	0.0145	(0.0318)	0.0187	(0.0216)
REL STD DEV	1.866	(128.797)	1.289	(140.835)
Solution = 0.081 g/210L or 0.3857 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.4080	(0.0150)	2.7510	(-0.0100)
Sample #2	1.4670	(-0.0090)	2.7280	(0.0080)
Sample #3	1.4870	(0.0060)	2.7130	(0.0230)
Sample #4	1.4820	(0.0190)	2.7020	(0.0280)
Avg % Abs	1.4787	(0.0053)	2.7143	(0.0197)
STD DEV	0.0104	(0.0140)	0.0131	(0.0104)
REL STD DEV	0.704	(262.723)	0.481	(52.924)
Solution = 0.151 g/210L or 0.7190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	2.6710	(-0.0150)	4.9180	(-0.0150)
Sample #2	2.6930	(-0.0020)	4.9050	(0.0240)
Sample #3	2.6200	(0.0230)	4.8760	(0.0450)
Sample #4	2.6580	(0.0270)	4.8830	(0.0330)
Avg % Abs	2.6570	(0.0160)	4.8880	(0.0340)
STD DEV	0.0365	(0.0157)	0.0151	(0.0105)
REL STD DEV	1.374	(98.226)	0.310	(30.987)
Solution = 0.298 g/210L or 1.4190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	5.1740	(0.0090)	9.3380	(-0.0070)
Sample #2	5.1880	(0.0190)	9.3020	(0.0470)
Sample #3	5.1870	(0.0200)	9.2980	(0.0590)
Sample #4	5.2260	(0.0130)	9.3150	(0.0450)
Avg % Abs	5.2003	(0.0173)	9.3050	(0.0503)
STD DEV	0.0222	(0.0038)	0.0089	(0.0076)
REL STD DEV	0.428	(21.842)	0.096	(15.043)

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005360
05/07/2020 14:47:57

Auto Calibration

	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Zero Order Coef	-160.59	-241.46
First Order Coef	2730.73	1485.52
Second Order Coef	5.93	7.04

Act (g/210L)	Fit (g/210L)	Residual (g/210L)	Act (g/210L)	Fit (g/210L)	Residual (g/210L)
0.000	-0.001	0.0009	0.000	-0.000	0.0003
0.040	0.041	-0.0012	0.040	0.041	-0.0006
0.081	0.082	-0.0007	0.081	0.081	0.0003
0.151	0.150	0.0011	0.151	0.151	0.0001
0.298	0.298	-0.0002	0.298	0.298	-0.0000

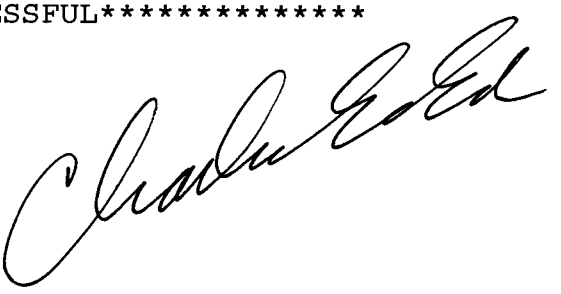
	<<<<< 3um >>>>>	<<<<< 9um >>>>>

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

Sample		
Sample #1	4529.00	4480.00
Sample #2	4590.00	4515.00
Sample #3	4554.00	4485.00
Sample #4	4706.00	4538.00
Avg	4616.6665	4512.6665
STD DEV	79.4313	26.5769
REL STD DEV	1.721	0.589
H2O adjust (mg/l*10k)	145	249

Atmospheric Pressure = 960

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



TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-005360
05/07/2020 14:47:57

Auto Calibration
Max Power Res value = 36
Auto Range Res value = 13

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
05/07/2020 15:27

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	15:28
02 Std. Sol.	0.020	15:29
03 Room Air	0.000	15:29
04 Std. Sol.	0.019	15:30
05 Room Air	0.000	15:30
06 Std. Sol.	0.020	15:31
07 Room Air	0.000	15:32

08 Sim Temp = 34.0°C

Simul Ser No = MP3061
Std Sol No = 201810D
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 80-005360
Location = TOXL 8164.14.00 09/16
05/07/2020 15:32

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	15:33
02 Std. Sol.	0.254	15:33
03 Room Air	0.000	15:34
04 Std. Sol.	0.257	15:35
05 Room Air	0.000	15:35
06 Std. Sol.	0.258	15:36
07 Room Air	0.000	15:37

08 Sim Temp = 34.0°C

Simul Ser No = MP3067
Std Sol No = 201911B
County = 08 Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: HGH 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 80-005360
Location = TOXL 8164.14.00 09/16
05/07/2020 15:37

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	15:38
02 Std. Gas	0.079	15:38
03 Room Air	0.000	15:38
04 Std. Gas	0.080	15:39
05 Room Air	0.000	15:39
06 Std. Gas	0.079	15:40
07 Room Air	0.000	15:40

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 80-005360
Location = TOXL — 8164.14.00 09/16
05/07/2020 — 15:40

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	15:41
02 Std. Gas	0.080	15:41
03 Room Air	0.000	15:42
04 Std. Gas	0.079	15:42
05 Room Air	0.000	15:43
06 Std. Gas	0.080	15:43
07 Room Air	0.000	15:44

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 80-005360
Location = TOXL 8164.14.00 09/16
05/07/2020 15:44

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	15:44
02 Std. Gas	0.080	15:45
03 Room Air	0.000	15:45
04 Std. Gas	0.079	15:45
05 Room Air	0.000	15:46
06 Std. Gas	0.080	15:46
07 Room Air	0.000	15:47

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