INTOXILYZER® 8000 CALIBRATION ADJUSTMENT

Intoxilyzer® 8000 Serial Number: 80-00 4956 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 = 10.26 L/min
   b. 20 L/min: 0.332 L/S X 60 Sec/min = 19.98 L/min
   c. X Flow Rates within ± 1 L/min of Expected Value

B. Gas Tank Sensor Check (Level 3,D,G)
1. Display: 505 psi Regulator: 500 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	MP 3066
2	0.040 (0.040)	2018081	8.22.20	MP 3067
3	0.080 (0.082)	201707E	7.25.19	MP 3068
4	0.150 (0.151)	201811E	11.26.20	MP 3069
5	0.300 (0.301)	2018031+	3.22.20	MP 3070

3. 0.100 AC Calibration Gas for H2O Adjustment
   a. Lot No. 13518100A3 Cyl No. 6 Exp. Date: 8/5/20
4. Atmospheric Pressure
   a. 949 mbar Displayed by Intoxilyzer® 8000
   b. 953 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	4217	+	544	=	4761
9 μm	4259	+	502	=	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: DR3378 Lot No.: 201712B Exp. Date: 12.12.19
      ii. High AC Known Value ≥ 0.25 AC: 0.300 AC
      Sim. SN: DR7350 Lot No.: 17350 Exp. Date: 10.11.19
   b. Dry Calibration Check: Known Value 0.08 AC
      Lot No. 34418080A2 Cyl No. 45 Exp. Date: 2.5.21
      Test 1 0.080 AC Test 4 0.080 AC Test 7 0.080 AC
      Test 2 0.079 AC Test 5 0.079 AC Test 8 0.079 AC
      Test 3 0.080 AC Test 6 0.079 AC Test 9 0.079 AC
      Average 0.079 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: ADJUSTMENT DUE TO 0.015AC STD. RETURNING RESULT OF 0.012AC. STILL WITHIN +/- 0.005 AC

X Instrument is acceptable to be used in the field.

Breath Analyst Signature — Date: 6/13/2019

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 80-004956
Location = TOXL 8164.14.00 09/16
06/13/2019 09:22
Flow Rate Calibration********
1: Rate (Liters/min) = 5
SQRT(Diff)) = 7.277
2: Rate (Liters/min) = 15
SQRT(Diff)) = 13.000
3: Rate (Liters/min) = 30
SQRT(Diff)) = 23.258
Dependent Data Scale Factor = 100000 L/min
Independent Data Scale Factor = 256
Rounded Slope = 606
Rounded Intercept = -586035
Correlation = 0.99887

Charles E Ede

FLOW SENSOR CALIBRATION

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004956
06/13/2019 09:32:13

Auto Calibration
Max Power Res Value = 18
Auto Range Res Value = 13

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004956
06/13/2019 09:32:13

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	0.0940	(-0.0080)	0.1970	(-0.0070)
Sample #2	0.0850	(0.0090)	0.1610	(0.0320)
Sample #3	0.0700	(0.0260)	0.1650	(0.0200)
Sample #4	0.0640	(0.0380)	0.1560	(0.0290)
Avg % Abs	0.0730	(0.0243)	0.1607	(0.0270)
STD DEV	0.0108	(0.0146)	0.0045	(0.0062)
REL STD DEV	14.817	(59.884)	2.807	(23.130)
Solution = 0.040 g/210L or 0.1905 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.8090	(-0.0090)	1.5310	(-0.0160)
Sample #2	0.7850	(0.0150)	1.5510	(-0.0110)
Sample #3	0.8030	(0.0070)	1.5440	(-0.0010)
Sample #4	0.8180	(0.0140)	1.5590	(-0.0110)
Avg % Abs	0.8020	(0.0120)	1.5513	(-0.0077)
STD DEV	0.0165	(0.0044)	0.0075	(0.0058)
REL STD DEV	2.060	(36.324)	0.484	(75.307)
Solution = 0.082 g/210L or 0.3905 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.5330	(-0.0080)	2.8890	(0.0040)
Sample #2	1.5420	(-0.0040)	2.9110	(0.0150)
Sample #3	1.5280	(0.0100)	2.9320	(0.0320)
Sample #4	1.5240	(0.0140)	2.9250	(0.0150)
Avg % Abs	1.5313	(0.0067)	2.9227	(0.0207)
STD DEV	0.0095	(0.0095)	0.0107	(0.0098)
REL STD DEV	0.617	(141.774)	0.366	(47.492)
Solution = 0.151 g/210L or 0.7190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	2.7790	(-0.0230)	5.1920	(-0.0140)
Sample #2	2.7450	(-0.0030)	5.2000	(0.0020)
Sample #3	2.7310	(0.0090)	5.1870	(0.0120)
Sample #4	2.7520	(0.0040)	5.2060	(-0.0070)
Avg % Abs	2.7427	(0.0033)	5.1977	(0.0023)
STD DEV	0.0107	(0.0060)	0.0097	(0.0095)
REL STD DEV	0.390	(180.831)	0.187	(407.331)
Solution = 0.301 g/210L or 1.4333 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	5.2470	(-0.0230)	9.7080	(-0.0200)
Sample #2	5.2670	(0.0020)	9.7600	(0.0250)
Sample #3	5.2740	(0.0110)	9.7600	(0.0280)
Sample #4	5.2860	(0.0150)	9.7710	(0.0360)
Avg % Abs	5.2757	(0.0093)	9.7637	(0.0297)
STD DEV	0.0096	(0.0067)	0.0064	(0.0057)
REL STD DEV	0.182	(71.339)	0.065	(19.167)

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-004956
06/13/2019 09:32:13

Auto Calibration

	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Zero Order Coef	-199.86	-218.91
First Order Coef	2632.89	1360.02
Second Order Coef	23.09	13.32

Act (g/210L)	Fit (g/210L)	Residual (g/210L)	Act (g/210L)	Fit (g/210L)	Residual (g/210L)
0.000	-0.000	0.0002	0.000	-0.000	0.0000
0.040	0.040	-0.0005	0.040	0.040	-0.0004
0.082	0.082	0.0004	0.082	0.081	0.0007
0.151	0.151	-0.0001	0.151	0.151	-0.0004
0.301	0.301	0.0000	0.301	0.301	0.0001

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

Sample	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Sample #1	4272.00	4231.00
Sample #2	4229.00	4241.00
Sample #3	4250.00	4268.00
Sample #4	4174.00	4268.00
Avg	4217.6665	4259.0000
STD DEV	39.2471	15.5885
REL STD DEV	0.931	0.366
H2O adjust (mg/l*10k)	544	502

Atmospheric Pressure = 952

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

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

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-004956
Location = TOXL 8164.14.00 09/16
06/13/2019 10:21

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:22
02 Std. Sol.	0.019	10:22
03 Room Air	0.000	10:23
04 Std. Sol.	0.020	10:24
05 Room Air	0.000	10:24
06 Std. Sol.	0.020	10:25
07 Room Air	0.000	10:25

08 Sim Temp = 34.0°C

Simul Ser No = DR3378
Std Sol No = 201712B
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 80-004956
Location = TOXL — 8164.14.00 09/16
06/13/2019 — 10:26

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:27
02 Std. Sol.	0.298	10:27
03 Room Air	0.000	10:28
04 Std. Sol.	0.298	10:29
05 Room Air	0.000	10:29
06 Std. Sol.	0.299	10:30
07 Room Air	0.000	10:30

08 Sim Temp = 34.0°C

Simul Ser No = DR7089
Std Sol No = 17350
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: H164 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 80-004956
Location = TOXL — 8164.14.00 09/16
06/13/2019 — 10:32

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:33
02 Std. Gas	0.080	10:33
03 Room Air	0.000	10:33
04 Std. Gas	0.079	10:34
05 Room Air	0.000	10:34
06 Std. Gas	0.080	10:35
07 Room Air	0.000	10:35

Lot No = 34418080A2
Cyl No = 45
Exp Date = 02/05/2021
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 80-004956
Location = TOXL — 8164.14.00 09/16
06/13/2019 — 10:36

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:36
02 Std. Gas	0.080	10:37
03 Room Air	0.000	10:37
04 Std. Gas	0.079	10:37
05 Room Air	0.000	10:38
06 Std. Gas	0.079	10:38
07 Room Air	0.000	10:39

Lot No = 34418080A2
Cyl No = 45
Exp Date = 02/05/2021
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 80-004956
Location = TOXL — 8164.14.00 09/16
06/13/2019 — 10:39

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	10:40
02 Std. Gas	0.080	10:40
03 Room Air	0.000	10:41
04 Std. Gas	0.079	10:41
05 Room Air	0.000	10:42
06 Std. Gas	0.079	10:42
07 Room Air	0.000	10:42

Lot No = 34418080A2
Cyl No = 45
Exp Date = 02/05/2021
County = 08 — Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: CALIBRATION CHECK
0.080 gc

Form 106-I8000