INTOXILYZER® 8000 CALIBRATION ADJUSTMENT

Intoxilyzer® 8000 Serial Number: 80-007093 Location: TOXL

~~A.~~ NA CEE 12/16/19 Flow Sensor Calibration and Verification Check (Level 3,M,C,F)

No Flow Sensor Calibration. Flow meters have been sent in for calibration check. CEE 12/16/19

1. ☐ Replaced o-rings if damaged
2. Flow Meter Serial Number: _____
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. _ _ _ L/S X 60 Sec/min = _____ L/min
   b. 20 L/min: 0. _ _ _ L/S X 60 Sec/min = _____ L/min
   c. ☐ Flow Rates within ± 1 L/min of Expected Value

B. Gas Tank Sensor Check (Level 3,D,G)
1. Display: 755 psi Regulator: 750 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	(STD) 0.000 ACTUAL	NA – MilliQ H_2O	NA – MilliQ H_2O	MP5289
2	(0.040) 0.040	20180BD	8.22.20	MP5319
3	(0.080) 0.081	201807C	7.25.20	MP5290
4	(0.150) 0.151	20181IE	11.26.20	MP5320
5	(0.300) 0.301	201803H	3.22.20	MP5321

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. 957 mbar Displayed by Intoxilyzer® 8000
   b. 958 mbar Adjusted to using barometer
   c. 958 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	4392	+	369	=	4761
9 µm	4140	+	621	=	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.: 18020 Exp. Date: 1.9.20
      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. 34917080A3 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	0.079 AC	Test 5	0.079 AC	Test 8	0.080 AC
Test 3	0.080 AC	Test 6	0.079 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 DUE TO SOME 0.084 AC RETURNS FOR THE 0.080 AC STANDARD. 0.084 AC VALUE STILL WITHIN TOLERANCE. REPLACED GAS REGULATOR. WIRES ~~FRAYED~~ CREASED RUBBED AGAINST CASE. EXPOSED.

X Instrument is acceptable to be used in the field.

Breath Analyst Signature — Date 12/16/2019

Reviewed by NA — Date NA

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-007093
12/16/2019 15:37:01

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	0.0630	(-0.0080)	0.2370	(-0.0120)
Sample #2	0.0670	(0.0280)	0.2270	(-0.0020)
Sample #3	0.0210	(0.0680)	0.2060	(0.0120)
Sample #4	0.0590	(0.0760)	0.2370	(0.0110)
Avg % Abs	0.0490	(0.0573)	0.2233	(0.0070)
STD DEV	0.0246	(0.0257)	0.0158	(0.0078)
REL STD DEV	50.156	(44.854)	7.084	(111.575)
Solution = 0.040 g/210L or 0.1905 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	0.7780	(-0.0150)	1.6250	(-0.0220)
Sample #2	0.7680	(0.0060)	1.6000	(0.0000)
Sample #3	0.7900	(0.0160)	1.5990	(0.0090)
Sample #4	0.7460	(0.0460)	1.5630	(0.0200)
Avg % Abs	0.7680	(0.0227)	1.5873	(0.0097)
STD DEV	0.0220	(0.0208)	0.0211	(0.0100)
REL STD DEV	2.865	(91.838)	1.328	(103.621)
Solution = 0.081 g/210L or 0.3857 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	1.5070	(-0.0290)	2.9610	(-0.0250)
Sample #2	1.5300	(-0.0120)	2.9540	(0.0140)
Sample #3	1.4830	(0.0110)	2.9170	(0.0210)
Sample #4	1.5090	(0.0010)	2.9400	(0.0210)
Avg % Abs	1.5073	(0.0000)	2.9370	(0.0187)
STD DEV	0.0235	(0.0115)	0.0187	(0.0040)
REL STD DEV	1.562	(0.000)	0.636	(21.651)
Solution = 0.151 g/210L or 0.7190 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	2.6890	(-0.0050)	5.1660	(0.0070)
Sample #2	2.6560	(0.0280)	5.1240	(0.0410)
Sample #3	2.6850	(0.0310)	5.1380	(0.0420)
Sample #4	2.6850	(0.0310)	5.1430	(0.0300)
Avg % Abs	2.6753	(0.0300)	5.1350	(0.0377)
STD DEV	0.0167	(0.0017)	0.0098	(0.0067)
REL STD DEV	0.626	(5.773)	0.192	(17.677)
Solution = 0.301 g/210L or 1.4333 mg/l, Samples = 4, Discarded = 1				
Sample	% Abs	(% Abs Ref)	% Abs	(% Abs Ref)
Sample #1	5.1790	(0.0000)	9.6520	(0.0000)
Sample #2	5.1930	(0.0150)	9.6490	(0.0280)
Sample #3	5.1640	(0.0280)	9.6420	(0.0300)
Sample #4	5.1590	(0.0300)	9.6280	(0.0440)
Avg % Abs	5.1720	(0.0243)	9.6397	(0.0340)
STD DEV	0.0184	(0.0081)	0.0107	(0.0087)
REL STD DEV	0.355	(33.471)	0.111	(25.641)

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-007093
12/16/2019 15:37:01

Auto Calibration

	<<<<< 3um >>>>>	<<<<< 9um >>>>>
Zero Order Coef	-146.10	-323.56
First Order Coef	2646.15	1389.33
Second Order Coef	29.92	13.64

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	-0.000	0.0003	0.000	-0.000	0.0003
0.040	0.040	0.0000	0.040	0.040	-0.0002
0.081	0.082	-0.0011	0.081	0.081	-0.0004
0.151	0.150	0.0009	0.151	0.151	0.0004
0.301	0.301	-0.0001	0.301	0.301	-0.0001

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

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

Sample		
Sample #1	4486.00	4221.00
Sample #2	4351.00	4147.00
Sample #3	4428.00	4159.00
Sample #4	4397.00	4116.00
Avg	4392.0000	4140.6665
STD DEV	38.7427	22.1886
REL STD DEV	0.882	0.536
H2O adjust (mg/l*10k)	369	621

Atmospheric Pressure = 958

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

TOXL
Intoxilyzer - Alcohol Analyzer
Model 8000 SN 80-007093
12/16/2019 15:37:01

Auto Calibration
Max Power Res Value = 95
Auto Range Res Value = 77

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

CMI, Inc. Intoxilyzer Alcohol Analyzer
North Dakota Model 8000 SN 80-007093
Location = TOXL 8164.16.00 09/18
12/16/2019 16:21

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:21
02 Std. Sol.	0.020	16:22
03 Room Air	0.000	16:23
04 Std. Sol.	0.020	16:23
05 Room Air	0.000	16:24
06 Std. Sol.	0.020	16:25
07 Room Air	0.000	16:25

08 Sim Temp = 34.0°C

Simul Ser No = DR3378
Std Sol No = 18020
County = 08 Oper No. = 666666

Operator Signature
CHARLES EDER

Remarks: Low AC
0.020 AC

Form 106-I8000

SN 80-007093

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

CMI, Inc. Intoxilyzer — Alcohol Analyzer
North Dakota Model 8000 — SN 80-007093
Location = TOXL — 8164.16.00 09/18
12/16/2019 — 16:26

WET CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:26
02 Std. Sol.	0.246	16:27
03 Room Air	0.000	16:28
04 Std. Sol.	0.247	16:28
05 Room Air	0.000	16:29
06 Std. Sol.	0.248	16:30
07 Room Air	0.000	16:30

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

Uploaded 12/19/2019 CEE

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

CMI, Inc. Intoxilyzer — Alcohol Analyzer
North Dakota Model 8000 — SN 80-007093
Location = TOXL — 8164.16.00 09/18
12/16/2019 — 16:31

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:31
02 Std. Gas	0.080	16:32
03 Room Air	0.000	16:32
04 Std. Gas	0.079	16:33
05 Room Air	0.000	16:33
06 Std. Gas	0.080	16:34
07 Room Air	0.000	16:34

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

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

CMI, Inc. Intoxilyzer 8000 — Alcohol Analyzer
North Dakota Model — SN 80-007093
Location = TOXL — 8164.16.00 09/18
12/16/2019 — 16:34

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:35
02 Std. Gas	0.080	16:35
03 Room Air	0.000	16:36
04 Std. Gas	0.079	16:36
05 Room Air	0.000	16:37
06 Std. Gas	0.079	16:37
07 Room Air	0.000	16:38

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

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

CMI, Inc. Intoxilyzer 8000 — Alcohol Analyzer
North Dakota Model — SN 80-007093
Location = TOXL — 8164.16.00 09/18
12/16/2019 — 16:38

DRY CAL CHECK

Test	AC	Time
01 Room Air	0.000	16:38
02 Std. Gas	0.080	16:39
03 Room Air	0.000	16:39
04 Std. Gas	0.080	16:40
05 Room Air	0.000	16:40
06 Std. Gas	0.080	16:40
07 Room Air	0.000	16:41

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

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