BrW-005

BREATH ALCOHOL EQUIPMENT REPAIR AND MAINTENANCE

Instrument: 8000 Serial Number: 80-003069 Location: TOXL

1. Instrument repairs/maintenance performed:

Replaced RTC battery. Replaced O-rings on breath hase
and simulator return. Completed flow sensor and
optical bench calibration adjustment. See attached
optical bench calibration adjustment. See attached Brw-008 Intoxilyzer @ 8000 Calibration Adjustment
for SN 80-003069.

2.	Does the instrument require further testing?	(Yes or No
<i>2</i> .	If Yes, continue. If No, sign and date below.	
3.	If needed, set the time, date, and location.	<u> </u>
4.	Does the flow need to be calibrated? If Yes, attach paperwork.	Yes or No
5.	Does the optical bench need to be calibrated? If Yes, attach test records.	Yes or No
6.	Does the gas regulator need to be calibrated?	Yes or No
	PSI gauge reading $\underline{740}$ PSI display reading $\underline{73}$	
Set in	strument to Wet Bath and run tests:	
7.	Low AC. Use < 0.03 AC in ACA mode. Attach test record.	\checkmark
	Sim SN: DR7111 Lot #: 17160 AC: 0.020 AC	,
8.	Linearity Test. Use \geq 0.25 AC in ACA mode. Attach test record.	\checkmark
	Sim SN: DR3375 Lot #: 17350 AC: 0.300 AC	

BrW-005

Set instrument to Gas and ru

- 9. Print test. Attach test record.
- Interferent Check. Use a 0.10 AC ethanol plus 0.05% acetone in ABA mode! 10. Attach test record.

Sim SN: <u>DR7089</u> Lot #: <u>ICSS</u> AC: <u>D.10 AC+0.05%</u> Acetore

- RFI Check. Run in CMS mode. Key radio during any room air or subject test-11. Attach test record.
- 12. Calibration Check. Use a valid 0.080 AC Ethanol Gas Standard. Run three, calibration sets in ACA mode. Attach test records.

Lot No. 03417080A3 Cylinder No. Expiration Date 5 Mar 19

Test 1	0.081
Test 2	0.081
Test 3	0.082

Test 1	0.081
Test 2	0.081
Test 3	0.081

Test 1	0.082
Test 2	0.081
Test 3	0.081

Average 0.081

Field Inspector's Signature

Reviewed by

<u>19 Nov 18</u> Date <u>//. 19.2018</u>

CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/16/201811:30

WET CAL CHECK Test AC Time 01 Room Air 0.000 11:31 02 Std. Sol. 0.018 11:32 03 Room Air 0.000 11:32 04 Std. Sol. 0.018 11:33 05 Room Air 0.000 11:34 06 Std. Sol. 0.019 11:34 07 Room Air 0.000 11:35 08 Sim Temp = 34.0°C

Simul Ser No = DR7111 Std Sol No = 17160 County = 08 Oper No. = 888888

Roberta Hugu-nummi

Operator Signature ROBERTA GRIEGER-NIMMO

Exp. 8 Jun 19 Form 106-18000

0.020AC

Remarks: LOW AC

CMI, Inc. Intoxilyzer Alcohol Analyzer North Dakota Model 8000 SN 80-003069 Location = TOXL 8164.14.00 09/16 11/16/2018 11:48

	WET CAL CHECK	
Test	AC	Time
01 Room Air	0.000	11:48
02 Std. Sol.	0.300	11:49
03 Room Air	0.000	11:50
04 Std. Sol.	0.300	11:51
05 Room Air	0.000	11:51
06 Std. Sol.	0.299	11:52
07 Room Air	0.000	11:52
08 Sim Temp =	34.0°C	

Simul Ser No = DR3375			
Std Sol No = 17350			
County = 08	Oper No.	=	888888

Peterta <u>Hinger</u> ninmo Operator Signature

ROBERTA GRIEGER-NIMMO

Remarks: Linearity test 0.300 AC Exp. 11 Oct 19 Form 106-18000

Intoxilyzer Test Record and Checklist NDOAG Crime Lab. Div., Bismarck, ND 58501 CMI, Inc. Intoxilyzer Alcohol Analyzer North Dakota Model 8000 SN 80-003069 Location = TOXL8164.14.00 09/16 11/19/2018 10:02 abcdefghijklmnopqrstuvwxyz1234567890-=| ABCDEFGHIJKLMNOPQRSTUVWXYZ!@#\$%^&*() +? abcdefghijklmnopqrstuvwxyz1234567890-=| ABCDEFGHIJKLMNOPQRSTUVWXYZ!@#\$%^&*() +? Current Instrument Setup Data Entry Mode: Enabled Start Test Sequence: DABACABA Display Prelim Rslt? Yes Display Third Digit? Yes Inhib Printer(Y/N)? No Display Volume? No Disable On Memfull? Yes # of Print Copies? 1 Select Std (D/W/I)? Dry Standard Value? 0.080 ` 03417080A3 Standard Lot #? Standard Cyl #? 7 Standard Expiration? 03/05/2019 Oper No? 888888 Flow Cal. Date: 11/16/2018 Slope 624 Intercept -587323 IR Calibration Date: 11/16/2018 3um 9um _____. 0th Coef(*100): -22190 -14281 132600 1st Coef(*100):2756782nd Coef(*100):2091 1201 H2O adj(mq/l*10k): 559338 ********** Printer Test End **********

Óperator Signature ROBERTA GRIEGER-NIMMO

Remarks: Print test

Intoxilyzer Test Record and Checklist NDOAG Crime Lab. Div., Bismarck, ND 58501 CMI, Inc. Intoxilyzer Alcohol Analyzer North Dakota Model 8000 SN 80-003069 Location = TOXL 8164.14.00 09/16 11/19/2018 10:08 Test AC Time 01 Room Air 0.000 10:09 02 *Subject Test INT* 10:10 03 Room Air 0.000 10:11 *Invalid Test Interferent Detected Sub Name = DISCOVER, THE SPIRIT Sub DOB = 01/01/1982Sub Sex = Female Weight = 150Test = DUI Cit = INTERFERENT Dr. Lic. = ND/DIS821456Lot No = 03417080A3Cyl No = 7Expiration Date = 03/05/2019County = 08Oper No. = 888888

Keberta unqui mm

Operator Signature ROBERTA GRIEGER-NIMMO

Remarks: Interferent Check 0.10 AC+ 0.05% Acetone

Intoxilyzer Test Record and Checklist NDOAG Crime Lab. Div., Bismarck, ND 58501 CMI, Inc. Intoxilyzer Alcohol Analyzer North Dakota Model 8000 SN 80-003069 Location = TOXL 8164.14.00 09/16 11/19/2018 10:12 Test AC Time 01 Diagnostic OK 10:13 02 Room Air 0.000 10:14 03 *Subject Test RFI* 10:14 04 Room Air 0.000 10:14 *Invalid Test Inhibited - RFI Sub Name = DISCOVER, THE SPIRIT Sub DOB = 01/01/1982Sub Sex = Female Weight = 150Test = DUI Cit = RFI CHECK Dr. Lic. = ND/DIS821456Lot No = 03417080A3Cyl No = 7Expiration Date = 03/05/2019 County = 08Oper No. = 888888

I followed the Approved Method and the instructions displayed by the Intoxilyzer in conducting this test.

Koberta Suger ninno

Operator Šignature ROBERTA GRIEGER-NIMMO

Remarks:

RFI Check

CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/19/201810:15

ľK	DRY CAL CHECH			
Time	AC		est	Te
31 10:16 00 10:16 31 10:17 00 10:17 32 10:18	0.000 0.081 0.000 0.081 0.000 0.082	Gas Air Gas Air Gas	Room Std. Room Std. Room Std.	02 03 04 05 06
-	0.0		Std. Room	

Lot No = 03417080A3 Cyl No = 7 Exp Date = 03/05/2019 County = 08 Oper No. = 888888

Koberta n a Operator Signature

ROBERTA GRIEGER-NIMMO

Remarks: Calibration Check 0.080AC

Form 106-18000

1

CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/19/201810:19

DRY CAL CHECK Test AC Time 01 Room Air 0.000 10:20 02 Std. Gas 0.081 10:20 03 Room Air 0.000 10:21 04 Std. Gas 0.081 10:21 05 Room Air 0.000 10:22 06 Std. Gas 0.081 10:22 07 Room Air 0.000 10:23

Lot No = 03417080A3 Cyl No = 7 Exp Date = 03/05/2019 County = 08 Oper No. = 888888

Koberta de

Operator Signature ROBERTA GRIEGER-NIMMO

Remarks: Calibration Check 0.080 AC

CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/19/201810:23

	DRY CAL CHECK	
Test	AC	Time
01 Room Air	0.000	10:24
02 Std. Gas	0.082	10:24
03 Room Air	0.000	10:24
04 Std. Gas	0.081	10:25
05 Room Air	0.000	10:25
06 Std. Gas	0.081	10:26
07 Room Air	0.000	10:26

Lot No = 03417080A3 Cyl No = 7 Exp Date = 03/05/2019 County = 08 Oper No. = 888888

Koberta Operator Signature ninni

ROBERTA GRIEGER-NIMMO

Remarks: Calibration Check 0.080 AC

<u>BrW-008</u>

INTOXILYZER® 8000 CALIBRATION ADJUSTMENT

Intoxilyzer [®] 8000 Serial Number: <u>80-003069</u> Location: <u>TOXL</u>						
 A. Flow Sensor Calibration and Verification Check (Level 3,M,C,F) 1. A Replaced o-rings if damaged 2. Flow Meter Serial Number: <u>40655</u> 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. <u>160L/S X 60 Sec/min = <u>19.6</u> L/min</u> b. 20 L/min: 0. <u>328L/S X 60 Sec/min = <u>19.6</u> L/min</u> c. ▲ Flow Rates within ± 1 L/min of Expected Value 						
I	 B. Gas Tank Sensor Check (Level 3,D,G) 1. Display: <u>つろし</u> psi Regulator: <u>つし</u> psi 2.					
 C. Optical Bench Calibration and Verification Check (Level 3,M,C,O) 1. Autocalibration Printout Attached a. AMax Power Res Value ≥ 10 b. Auto Range Res Value ≥ 4 2. Simulator Solutions for Optical Bench Calibration Adjustment a. AStructure Solutions to Run at 5 						
Soln.						
1	0.000	NA – MilliQ H2O	NA – MilliQ H ₂ O	MP3067		
2	0.620	Beirios	15 Dec 19	мрзоьд		
3	0.080	JOHOTE	25 Jul 19	MP3069		
4	0.150	201705D	24 May 19	MP3070		

3. 0.100 AC Calibration Gas for H2O Adjustment

201803H

a. Lot No. <u>3316100A1</u> Cyl No. <u>2</u> Exp. Date: <u>1519</u> Atmospheric Pressure

22 Mar 20

- a. 955 mbar Displayed by Intoxilyzer[®] 8000
- b. $\overline{956}$ mbar Adjusted to using barometer
- c. 956 mbar on Auto Calibration Report printout
- 5. K Screen displayed "Calibration Success"

0.300

4.

5

MP307

Toxicology Section/Breath Alcohol Program Intoxilyzer® 8000 Calibration Adjustment

BrW-008

6. Z Calibration Adjustment Printout Attached \boxtimes Solution 1 Avg % Abs \leq 0.2500 a. b. \boxtimes Residual (g/210 L) Values for Solutions 1-5 \leq 0.0020 for 3 C. μ m and 9 μ m channels ☑/Dry Gas H2O Adjustment Sum for 3 µm and 9 µm d. channels within ± 10 H₂O Adjust Average = 4761.6665 3 µm 4202.6265 + 559 9 µm 4423.6665+ 338 = 4761.6665 Q Optical Bench Calibration Verification (Level 1, S and C) 7. a. Wet Calibration Check i. Low AC Known Value ≤ 0.03 AC: $0.0 \ge 0$ AC Sim. SN: ORTIN Lot No.: JUGO Exp. Date: 8 Jun 19 ii. High AC Known Value ≥ 0.25 AC: <u>0.300</u> AC Sim. SN: DR 3375 Lot No.: 17350 Exp. Date: 11 Oct 19 b. Dry Calibration Check: Known Value 0.08 AC Lot No. <u>03417080A3</u> Cyl No. <u>7</u> Exp. Date: <u>5Mar</u> 19 Test 1 <u>0.081</u> AC Test 4 <u>0.081</u> AC Test 7 <u>0.081</u> AC -AC Test 8 0.080 AC Test 2 0.09 AC Test 5 0.080 AC -AC-Test 3 D. DBDAC Test 6 0.08 AC Test 9 0.081 AC Average O cel AC c. K Wet Calibration Check and Dry Calibration Check AC results are within ± 0.005 or $\pm 5\%$ (whichever is greater) of stated value.

Remarks/Maintenance: Completed flow Sensor and D. optical bench calibration adjustment because 80-003069 was opened on 14 Nov 18 to replace RTC battery. See Repair and Maintenance form.

A Instrument is acceptable to be used in the field.

Koberta Muguen Breath Anályst Signature

<u>19 Nov 18</u> Date

CMI, Inc. Intoxilyzer Alcohol Analyzer North Dakota Model 8000 SN 80-003069 Location = TOXL 8164.14.00 09/16 11/16/2018 08:12 Flow Rate Calibration******* 1: Rate (Liters/min) = 5SQRT(Diff)) = 7.2772: Rate (Liters/min) = 15 SQRT(Diff)) = 12.3673: Rate (Liters/min) = 30 SQRT(Diff)) = 22.691Dependent Data Scale Factor = 100000 L/min Independent Data Scale Factor = 256 Rounded Slope = 624Rounded Intercept = -587323Correlation = 0.99691

> TOXL Intoxilyzer - Alconol Analyzer Model 8000 SN 80-003069 11/16/2018 10:20:56

Auto Calibration Max Power Res Value = 27 Auto Range Res Value = 18 TOXL Intoxilyzer - Alcohol Analyzer Model 8000 SN 80-003069 11/16/2018 10:20:56

Auto Calibration

pg 1 of 2

	<<<<	3um >	>>>>	<<<<<	9um	>>>>>
Sample Sample #1 Sample #2 Sample #3 Sample #4 Avg % Abs STD DEV	% Abs 0.0770 0.0670 0.0640 0.0940 0.0750	(% Abs R (-0.007 (0.0190 (0.0380 (0.0320 (0.0297 (0.0097	ef) 0)))))	Samples = 4, % Abs 0.1080 0.1030 0.0950 0.1090 0.1023 0.0070 6.864	(% Abs (-0.0 (0.00 (0.00 (0.00	Ref) 100) 70) 30) 40) 47) 21)
Sample Sample #1	<pre>% Abs 0.4370 0.4320 0.4160 0.4260 0.4247 0.0081</pre>	(% Abs R (0.0040	ef))))))	Samples = 4, % Abs 0.7880 0.8190 0.8200 0.8200 0.8107 0.0153 1.888	(% Abs (0.01 (0.00 (0.01 (0.00	Ref) 10) 00) 10) 20) 43) 59)
Sample Sample #1 Sample #2 Sample #3 Sample #4 Avg % Abs STD DEV	<pre>% Abs 1.4980 1.4590 1.4760 1.4530</pre>	(% Abs R (-0.023 (0.0000 (0.0040 (0.0060 (0.0033 (0.0031	ef) 0)))))	<pre>Samples = 4, % Abs 2.9320 2.9450 2.9470 2.9350 2.9423 0.0064 0.219</pre>	(% Abs (-0.0 (-0.0 (-0.0 (0.00 (-0.0	Ref) 080) 030) 030) 00) 020) 17)
Sample Sample #1 Sample #2 Sample #3 Sample #4 Avg % Abs	<pre>% Abs 2.6130 2.5960 2.5930 2.6310 2.6067</pre>	(% Abs R (0.0060 (0.0150 (0.0180 (0.0040 (0.0123 (0.0074	ef)))))	Samples = 4, % Abs 5.2450 5.1940 5.2170 5.2410 5.2173 0.0235 0.450	(% Abs (0.00 (0.04 (0.03 (0.02	Ref) 50) 50) 00) 40) 30) 08)
Sample Sample #1 Sample #2 Sample #3 Sample #4 Avg % Abs STD DEV	% Abs 5.0500	(% Abs R (0.0000 (0.0120 (0.0140 (0.0000 (0.0087 (0.0076	ef)))))	9.9880 10.0020 9.9780 9.9690 9.9830 0.0171 0.171	(% Abs (-0.0) (0.00) (0.02) (0.01) (0.01) (0.01)	Ref) 050) 30) 50) 20) 33) 11)

TOXL Intoxilyzer - Alcohol Analyzer Model 8000 SN 80-003069 11/16/2018 10:20:56

Auto Calibration

	<<<<<	3um	>>>>>	<<<<<	9um	>>>>
Zero Order C First Order Second Order	Coef 275				42.81 26.00 01	· · · ·
0.000 0.020 0.080	0.149	つし) 20 1 9	0.0003	(g/210L)	-0.0 0.02 0.08 0.14	Residual 0L) (g/210L) 00 0.0001 0 0.0003 1 -0.0011 9 0.0009 0 -0.0001
	<<<<<	3um	>>>>>	<<<<<	9um	>>>>
Solution = 0 Sample Sample #1	.100 g/210		.4762 mg/l	, Samples = 4,		ed = 1 0.00
			CE 00			

Sample		
Sample #1	4272.00	4460.00
Sample #2	4265.00	4413.00
Sample #3	4164.00	4423.00
Sample #4	4179.00	4435.00
Avg	4202.6665	4423.6665
STD DEV	54.5008	11.0151
REL STD DEV	1.297	0.249
H2O adjust (mg/l*10k)	559	338

Atmospheric Pressure = 956

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pg 2 of 2

CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/16/201811:25

	WET CAL CHECK	
Test	AC	Time
01 Room Air	0.000	11:26
02 Std. Sol.	0.019	11:27
03 Room Air	0.000	11:27
04 Std. Sol.	0.018	11:28
05 Room Air	0.000	11:29
06 Std. Sol.	0.019	11:29
07 Room Air	0.000	11:30
08 Sim Temp =	: 34.0°C	

Simul Ser No = DR7111			
Std Sol No = 17160			
County = 08	Oper No.	=	888888

Alceta, Henger-nemmo

Operator Signature ROBERTA GRIEGER-NIMMO

Remarks: LDW AC 0.020 AC

Form 106-18000

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CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/16/201811:43

	WET CAL CHECK	
Test	AC	Time
01 Room Air 02 Std. Sol. 03 Room Air 04 Std. Sol. 05 Room Air 06 Std. Sol. 07 Room Air	0.000 0.299 0.000 0.300 0.000 0.301 0.000	11:43 11:45 11:45 11:46 11:46 11:47 11:48
08 Sim Temp = Simul Ser No		

Simul Ser No = DR3375			
Std Sol No = 17350			
County = 08	Oper No.	Ξ	888888

Roberta Hunger nummer

Operator Signature ROBERTA GRIEGER-NIMMO

Remarks: High AC 0.300AC

CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/16/201811:53

	DRY CAL CHECK	
Test	AC	Time
01 Room Air	0.000	11:54
02 Std. Gas	0.081	11:54
03 Room Air	0.000	11:55
04 Std. Gas	0.081	11:55
05 Room Air	0.000	11:55
06 Std. Gas	0.080	11:56
07 Room Air	0.000	11:56

Lot No = 03417080A3 Cyl No = 7 Exp Date = 03/05/2019 County = 08 Oper No. = 888888

Koberta Huegu-numn Operator Signature mmo

ROBERTA GRIEGER-NIMMO

Remarks: Dry Calibration Check 0.080 AC

CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/16/201811:56

	DRY CAL CHECK	
Test	AC	Time
01 Room Air	0.000	11:57
02 Std. Gas	0.081	11:57
03 Room Air	0.000	11:58
04 Std. Gas	0.080	11:58
05 Room Air	0.000	11:59
06 Std. Gas	0.081	11:59
07 Room Air	0.000	12:00

Lot No = 03417080A3 Cyl No = 7 Exp Date = 03/05/2019 County = 08 Oper No. = 888888

Aberta Mu egei-ninno

Operator Signature ROBERTA GRIEGER-NIMMO

Dry Calibration Check Remarks: 0.080AC

CMI, Inc. IntoxilyzerAlcohol AnalyzerNorth Dakota Model 8000SN 80-003069Location = TOXL8164.14.00 09/1611/16/201812:00

	DRY CAL CHECK	
Test	AC	Time
01 Room Air	0.000	12:00
02 Std. Gas	0.081	12:01
03 Room Air	0.000	12:01
04 Std. Gas	0.080	12:02
05 Room Air	0.000	12:02
06 Std. Gas	0.081	12:02
07 Room Air	0.000	12:03

Lot No = 03417080A3 Cyl No = 7 Exp Date = 03/05/2019 County = 08 Oper No. = 888888

Koberta Burge ni mmo Operator Signature

ROBERTA GRIEGER-NIMMO

Remarks: Dry Calibration Check 0.080 AC