

# YSI REPAIR CENTER

## CALIBRATION VALUES

### SONDE CALIBRATION RECORD

Model 6920V2 S/N 08H100354 Date 4-6-11

Customer National Park Service

#### Dissolved Oxygen – Before Lot#/SN: 08H101101

	Actual	Measured	Barometer	Delta	Charge
DO % Nit.	<u>0</u>	<u>2.4</u>	<u>721.2</u>	<u>2.4</u>	<u>N/A</u>
DO % Sat.	<u>100</u>	<u>98.5</u>	<u>721.2</u>	<u>1.5</u>	<u>N/A</u>

#### Dissolved Oxygen – After Lot#/SN: 08H101101

	Actual	Measured	Barometer	Delta	Charge
DO % Nit.	<u>0</u>	<u>1.9</u>	<u>760</u>	<u>1.9</u>	<u>N/A</u>
DO % Sat.	<u>100</u>	<u>100</u>	<u>760</u>	<u>0</u>	<u>N/A</u>

#### Conductivity – Before Lot# 08G100604

	Actual	Measured	Delta
Sp/ Conductance 10,000uS	<u>10.0mS</u>	<u>10.13mS</u>	<u>.13</u>

#### Conductivity – After Lot# 08G100604

	Actual	Measured	Delta
Sp/ Conductance 10,000uS	<u>10mS</u>	<u>10mS</u>	<u>0</u>

#### Temperature – Before Lot# 08G100604

	Actual	Measured	Delta
Celsius	<u>22.8</u>	<u>22.8</u>	<u>0</u>

#### Temperature – After Lot# 08G100604

	Actual	Measured	Delta
Celsius	<u>22.3</u>	<u>22.3</u>	<u>0</u>

#### pH – Before Lot# 08G

	Actual	Measured	Delta	mV
4.0 Buffer	<u>4</u>	<u>4.37</u>	<u>.37</u>	<u>140.5</u>
7.0 Buffer	<u>7</u>	<u>7.32</u>	<u>.32</u>	<u>-37.7</u>
10.0 Buffer	<u>10</u>	<u>10.22</u>	<u>.22</u>	<u>-211.9</u>

**pH – After**

Lot# 086

	Actual	Measured	Delta	mV
4.0 Buffer	<u>4</u>	<u>4</u>	<u>0</u>	<u>141.1</u>
7.0 Buffer	<u>7</u>	<u>7</u>	<u>0</u>	<u>-35.1</u>
10.0 Buffer	<u>10</u>	<u>10</u>	<u>0</u>	<u>-212.0</u>

**ORP – Before**

Lot# \_\_\_\_\_

	Actual	Measured	Delta
Zobell	235	_____	_____

**ORP – After**

Lot# \_\_\_\_\_

	Actual	Measured	Delta
Zobell	235	_____	_____

**Depth - Before**

Actual	Measured	Delta
_____	_____	_____

**Depth - After**

Actual	Measured	Delta
_____	_____	_____

**Turbidity – Before**

SN: \_\_\_\_\_

	Actual	Measured	Delta
0NTU	_____	_____	_____
_____ NTU	_____	_____	_____

**Turbidity – After**

SN: \_\_\_\_\_

	Actual	Measured	Delta
0NTU	_____	_____	_____
_____ NTU	_____	_____	_____

**Chlorophyll – Before**

SN: \_\_\_\_\_

	Actual	Measured	Delta
0 ug/L	_____	_____	_____
_____ ug/L	_____	_____	_____

**Chlorophyll – After**

SN: \_\_\_\_\_

	Actual	Measured	Delta
0 ug/L	_____	_____	_____
_____ ug/L	_____	_____	_____

NOTES:

Updated software to ver 3.10.  
Replaced ROX DO membrane

This sonde identified by the above serial number has been calibrated and tested according to YSI specs on 4/6/11 by I. Mc Cobe

Joe Katala



# Certificate of Calibration and Traceability

We certify that this product has been tested and calibrated using standards whose calibrations are traceable to the National Institute of Standards and Technology (NIST) or are derived from values of natural physical constants.

As tested, it met or exceeded its current published specifications.

- Product meet specifications as received.
- Adjustment required to meet specifications.

Model no. sonde c/t Probe 692002/000560 Serial no. sonde c/t 08H100354/08G100604  
 Calibrated by J. McCabe Order no. 634/85  
Joe Kolesar  
 Received date 2-7-11 Calibration date 4-6-11  
 Test performed Test/cal Ambient temperature 23°C

Test equipment used for this calibration:

ID no.	Last cal. date	Cal. due date
<u>62/2</u>	<u>2-15-11</u>	<u>5-15-11</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

Additional data attached. Number of pages 1

Report shall not be reproduced except in full, without the written approval of YSI.

# Certificate of Analysis



**YSI Incorporated**

Yellow Springs Instrument Co., Yellow Springs, Ohio 45387 USA

Phone (937) 767-7241 (800) 765-4974 Fax (937) 767-9353

**Product Model Number:**

3163

**Conductivity Calibration  
Solution**

**Lot Number:**

11B101895

**Testing of Production Standard with a Metrology Calibrated Cell**

**Nominal Conductivity  
(microsiemens/cm):**

10K

**Specification Range,  
(microsiemens/cm):**

9,975 - 10,025

**Test Result,  
(microsiemens/cm):**

9985

**Lot Result:**

Accepted

**Inspected by::**

J. Jenkins

**Date Tested:**

01-Mar-11



A handwritten signature in blue ink, appearing to read 'Lisa M. Abel'.

Lisa M. Abel  
Director, Quality and Corporate  
Responsibility



# Certificate of Calibration and Traceability

We certify that this product has been tested and calibrated using standards whose calibrations are traceable to the National Institute of Standards and Technology (NIST) or are derived from values of natural physical constants.

As tested, it met or exceeded its current published specifications.

- Product meet specifications as received.
- Adjustment required to meet specifications.

Model no. sonde Ph 6920V2/006561 Serial no. sonde Ph 08H100354/08G  
 Calibrated by J. McGee Order no. 634185  
Joe Keenan  
 Received date 2-7-11 Calibration date 4-6-11  
 Test performed Test/cal Ambient temperature 23°C

Test equipment used for this calibration:

ID no.	Last cal. date	Cal. due date
<u>Ph7: 3822-10K2S</u>	_____	_____
<u>Ph4: 3821-10K2R</u>	_____	_____
<u>Ph10: 3823-10K2T</u>	_____	_____
_____	_____	_____

Additional data attached. Number of pages 0

Report shall not be reproduced except in full, without the written approval of YSI.



# Certificate of Calibration and Traceability

We certify that this product has been tested and calibrated using standards whose calibrations are traceable to the National Institute of Standards and Technology (NIST) or are derived from values of natural physical constants.

As tested, it met or exceeded its current published specifications.

- Product meet specifications as received.
- Adjustment required to meet specifications.

Model no. sonde DO 692012/6150 Serial no. sonde DO 08H100354/08H101101  
 Calibrated by J. McGarr Order no. 634185  
La Kelau  
 Received date 2-7-11 Calibration date 4-6-11  
 Test performed Test/cal Ambient temperature 23°C

Test equipment used for this calibration:

ID no.	Last cal. date	Cal. due date
<u>Tested and calibrated probe using O2O Nitrogen</u>		
<u>and 100% saturation water both.</u>		
_____	_____	_____
_____	_____	_____

Additional data attached. Number of pages 0

Report shall not be reproduced except in full, without the written approval of YSI.

# Sonde Leak Tester

File Fixture Help

Sonde Instrument Number (I.N)

OPTICAL PROBE - ROX

NOTE: An \* (asterisk) following the Sonde IN indicates the Sonde settings were not properly verified when added

START TEST

STOP TEST

Test Status

Stop Test

PSI applied Measured PSI

0.0



0.064

## Results



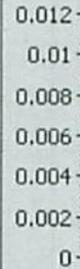
PASS

Sonde SN

08H101101

Gross Leak 1 Pass/Fail

Decay 1 Decay 1 Pass/Fail



Wait Time (sec)

120

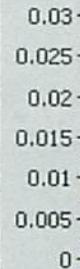
Elapsed Time

01:01

Rebound 1 Pass/Fail

Gross Leak 2 Pass/Fail

Decay 2 Decay 2 Pass/Fail



Wait Time 2 (sec)

120

Elapsed Time 2

01:01

Rebound 2 Pass/Fail

# Sonde Leak Tester

File Fixture Help

Sonde Instrument Number (I.N)

6920V2-01

NOTE: An \* (asterisk) following the Sonde IN indicates the Sonde settings were not properly verified when added

START TEST

STOP TEST

Test Status

Standby

PSI applied Measured PSI

0.0



0.065

## Results



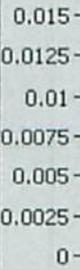
PASS

Sonde SN

08H100354

Gross Leak 1 Pass/Fail

Decay 1 Decay 1 Pass/Fail



Wait Time (sec)

120

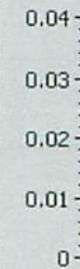
Elapsed Time

01:01

Rebound 1 Pass/Fail

Gross Leak 2 Pass/Fail

Decay 2 Decay 2 Pass/Fail



Wait Time 2 (sec)

120

Elapsed Time 2

01:01

Rebound 2 Pass/Fail