

U.S. DEPT. OF COMMERCE
 NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
 CLIMATE MONITORING AND DIAGNOSTICS LABORATORY
DIGITAL OZONESONDE CHECKLIST

FLT# VU0016

June 2004

RICE UNIV. (0.5% buffered)

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

- DATE (LOCAL): May 5th 2006
 INITIALS: Sff
 PUMP NUMBER: 225617-GPS
- | | |
|--|---|
| 1. Run zero air 10 minutes <input checked="" type="checkbox"/> (v) | 4. PUMP VAC: <u>23 mm Hg</u> |
| 2. PUMP CURRENT: <u>98 μA</u> | 5. 30 MINUTES HI O ₃ <input checked="" type="checkbox"/> (v) |
| 3. PUMP PRESSURE: <u>15 psi</u> | 6. 5 MINUTES NO O ₃ <input checked="" type="checkbox"/> (v) |
-
- | | |
|---|---|
| 7. ADD 3.0 CC FRESH CATHODE: <input checked="" type="checkbox"/> (v) | 14. Run sonde for 10 minutes on NO O ₃ AIR <input checked="" type="checkbox"/> (v) |
| 8. WAIT 2 Minutes: <input checked="" type="checkbox"/> (v) | 15. Short the cell leads: <input checked="" type="checkbox"/> (v) |
| 9. ADD 1.5 CC ANODE SOLUTION: <input checked="" type="checkbox"/> (v) | 16. Add about 2 to 2.5 CC more Cathode Solution <input checked="" type="checkbox"/> (v) |
| 10. RUN 10 MINUTES on NO O ₃ <input checked="" type="checkbox"/> (v) | 17. Place Instrument inside plastic bag: <input checked="" type="checkbox"/> (v) |
| 11. RECORD CURRENT: = <u>0.6</u> μ amps | 18. Store inside Styrofoam flight box: <input checked="" type="checkbox"/> (v) |
| 12. RUN 10 MINUTES on 5 μ amps O ₃ <input checked="" type="checkbox"/> (v) - then switch to NO O ₃ AIR. | |
| 13. RECORD: TIME TO DROP FROM 4 TO 1.5 μ amps: <u>1:00:04</u> sec. | |

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 5-15-06
 INITIALS: MT
 Cathode solution # or date written on bottle: 1-25-06
 CHANGE CATHODE SOLUTION (3cc): (v)
 CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
 RUN ON NO O₃ FOR 5 MINUTES: (v)
 RECORD THE NO O₃ BACKGRND#1: BG1 = 0.01 μ amps
 RUN ON 5 microamps of O₃ for 5 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 28.53 sec

FLOWRATE #2: 28.57

FLOWRATE #3: 28.50

FLOWRATE #4: 28.50

FLOWRATE #5: 28.52

AVERAGE T100: 28.52

DRY T100

#1: _____

#2: _____

#3: _____

DRY AVG: _____

WET T100

#1: _____

#2: _____

#3: _____

WET AVG: _____

RESONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 22.34 sec.

*T100 Flowrate correction: _____ %

RECORD: ROOM TEMP (C) 22.8 ROOM REL. HUMID. (%) 42

RECORD: 5 - T100 FLOWRATE TIMES:

SONDE= _____ ppbv @ CALIB= _____

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: VU0016

GMT DATE (YYMMDD): 060515

LOCAL DATE: 05/15/06

GMT LAUNCH TIME: 18:57:52

LOCAL TIME: 1:58 PM

BALLOON TYPE 600 Gram: Kaymont Scientific Sales (v one)

O₃ BACKGROUND (μ amps or HEX value in Y channel): 0.022

VAISALA NUMBER (9 digit): 634530109

SKY CONDITIONS: overcast

SURFACE PRESSURE: 985

SURFACE TEMP. (C): 14.40 °C

SURFACE HUMIDITY: 65%

~ BURST PRESSURE (mb): 14
97.5kft

REMARKS: entered mid rate at ~700ft/min

41.07° N
87.32° W

Ventilation Holes: _____

weighoff = 2100 grams

*T100 flow corr (%) = [(WET/DRY)-1.0] X 100