

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

FLT# U 008

June 2004

RICE UNIV. (0.5% buffered)

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

- | | | |
|--------------------------------|--|---|
| DATE (LOCAL): <u>4/22/06</u> | 1. Run zero air 10 minutes <input checked="" type="checkbox"/> (✓) | 4. PUMP VAC : <u>23</u> |
| INITIALS: <u>EM</u> | 2. PUMP CURRENT: <u>90</u> | 5. 30 MINUTES HI O ₃ <input checked="" type="checkbox"/> (✓) |
| PUMP NUMBER: <u>225637-GRS</u> | 3. PUMP PRESSURE: <u>14.5</u> | 6. 5 MINUTES NO O ₃ <input checked="" type="checkbox"/> (✓) |
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- | | |
|---|---|
| 7. ADD 3.0 CC FRESH CATHODE: <input checked="" type="checkbox"/> (✓) | 14. Run sonde for 10 minutes on NO O ₃ AIR <input checked="" type="checkbox"/> (✓) |
| 8. WAIT 2 Minutes : <input checked="" type="checkbox"/> (✓) | 15. Short the cell leads: <input checked="" type="checkbox"/> (✓) |
| 9. ADD 1.5 CC ANODE SOLUTION: <input checked="" type="checkbox"/> (✓) | 16. Add about 2 to 2.5 CC more Cathode Solution <input checked="" type="checkbox"/> (✓) |
| 10. RUN 10 MINUTES on NO O ₃ <input checked="" type="checkbox"/> (✓) | 17. Place Instrument inside plastic bag: <input checked="" type="checkbox"/> (✓) |
| 11. RECORD CURRENT: = <u>0.33</u> μ amps <input checked="" type="checkbox"/> (✓) | 18. Store inside Styrofoam flight box: <input checked="" type="checkbox"/> (✓) |
| 12. RUN 10 MINUTES on 5 μ amps O ₃ <input checked="" type="checkbox"/> (✓) - then switch to NO O ₃ AIR. | |
| 13. RECORD: TIME TO DROP FROM 4 TO 1.5 μ amps: <u>55.0</u> sec. | |

FLIGHT PREPARATION IN LAB.

- DATE (LOCAL): 4-28-06
 INITIALS: MT
 Cathode solution # or date written on bottle: 1-25-06
 CHANGE CATHODE SOLUTION (3cc): (✓)
 CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
 RUN ON NO O₃ FOR 5 MINUTES: (✓)
 RECORD THE NO O₃ BACKGRND#1: BGI = 0.01 μ amps
 RUN ON 5 microamps of O₃ for 5 Minutes: (✓)

T100 FLOWRATE TIMES:

- FLOWRATE #1: 28.41 sec
 FLOWRATE #2: 28.37
 FLOWRATE #3: 28.43
 FLOWRATE #4: 28.41
 FLOWRATE #5: 28.38
AVERAGE T100: 28.40

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: 24.65 sec.

RECORD: ROOM TEMP (C) 23.5 ROOM REL. HUMID. (%) 30

RECORD: 5 - T100 FLOWRATE TIMES:

*T100 Flowrate correction. _____ %

SONDE= _____ ppbv @ CALIB= _____

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: VU008
 GMT DATE (YYMMDD): 060428 LOCAL DATE: 04/28/06
 GMT LAUNCH TIME: 1359 LOCAL TIME: 1:59 pm

BALLOON TYPE 800 Gram : Kaymont Scientific Sales _____ (None)

O₃ BACKGROUND (μ amps or HEX value in Y channel): 0.017

VAISALA NUMBER (9 digit): 635108812
 SURFACE PRESSURE: 989
 SURFACE TEMP. (C): 20.2
 SURFACE HUMIDITY : 29

SKY CONDITIONS: "Clear as a bell" - Stephen breezy, some high cirrus

~ BURST PRESSURE (mb) : ~~12.188~~ 12.188 mb
97.7 kPa 29,892 Km
 microtops : 361.5 DU
359.2 DU

REMARKS: Stephen, Ashley, Marc
Check computer data for GRS cond?

Ventilation Holes: _____

weighoff = 2100 grams

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