

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

FLT# 00015

June 2004

RICE UNIV. (0.5% buffered)

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

- | | | |
|--------------------------------|--|---|
| DATE (LOCAL): <u>5/4/06</u> | 1. Run zero air 10 minutes <input checked="" type="checkbox"/> (✓) | 4. PUMP VAC : <u>22</u> |
| INITIALS: <u>MT</u> | 2. PUMP CURRENT: <u>95</u> | 5. 30 MINUTES HI O ₃ <input checked="" type="checkbox"/> (✓) |
| PUMP NUMBER: <u>225621-6PS</u> | 3. PUMP PRESSURE: <u>14</u> | 6. 5 MINUTES NO O ₃ <input checked="" type="checkbox"/> (✓) |
-
- | | |
|---|---|
| 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: = 350.57 <u>50.57</u> μ amps | 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>58.19</u> sec. | |

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): ~~5/10/06~~ 5-12-06
 INITIALS: MT/GM
 Cathode solution # or date written on bottle: 1/15/06
 CHANGE CATHODE SOLUTION (3cc): (✓)
 CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
 RUN ON NO O₃ FOR 5 MINUTES: (✓)
 RECORD THE NO O₃ BACKGRND#1: BG1= ~~0.00~~ 0.00 μ amps
 RUN ON 5 microamps of O₃ for 5 Minutes: (✓)

T100 FLOWRATE TIMES:

FLOWRATE #1: 27.54 sec 28.87
 FLOWRATE #2: 27.16 28.92 AVG:
 FLOWRATE #3: 28.37 28.92

FLOWRATE #4: 27.29 28.90
 FLOWRATE #5: 27.28 28.95

AVERAGE T100: 27.28 28.92

DRY T100

#1: _____

#2: _____

#3: _____

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: 27.06 sec. 35

RECORD: ROOM TEMP (C) 22.4 ROOM REL. HUMID. (%) 47

RECORD: 5 - T100 FLOWRATE TIMES:

*T100 Flowrate correction. %

SONDE= _____ ppbv @ CALIB= _____

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: 00015
 GMT DATE (YYMMDD): 060512 LOCAL DATE: 5/12/06
 GMT LAUNCH TIME: ~~19:01:19~~ LOCAL TIME: 2:01 pm

BALLOON TYPE 350 Gram : Kaymont Scientific Sales _____ (✓one)

O₃ BACKGROUND (μ amps or HEX value in Y channel): ~~0.024~~ 0.012

VAISALA NUMBER (9 digit): 635201645 SKY CONDITIONS: cloudy - thin rain

SURFACE PRESSURE: 950

SURFACE TEMP. (C): 16.7

SURFACE HUMIDITY: 45

~ BURST PRESSURE (mb): 60.04

REMARKS: Mercy & Anna 41.52N 86.10W

weighoff = 1780 grams use rate avg ~ 750 sl/min Ventilation Holes: _____

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