

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

FLT# VU017

June 2004

RICE UNIV. (0.5% buffered)

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

- DATE (LOCAL): May 10th, 2006
 INITIALS: SH
 PUMP NUMBER: 22 5620-6PS
- | | |
|--|---|
| 1. Run zero air 10 minutes <input checked="" type="checkbox"/> (v) | 4. PUMP VAC: <u>23 mm Hg</u> |
| 2. PUMP CURRENT: <u>97 mA</u> | 5. 30 MINUTES HI O ₃ <input checked="" type="checkbox"/> (v) |
| 3. PUMP PRESSURE: <u>13 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>0.55</u> μ amps <input checked="" type="checkbox"/> | 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, 62 sec.</u> | |

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): May 16th, 2006
 INITIALS: SH
 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=0.00 μ amps
 RUN ON 5 microamps of O₃ for 5 Minutes: (v)

T100 FLOWRATE TIMES:
 FLOWRATE #1: 28.94 sec
 FLOWRATE #2: 28.94
 FLOWRATE #3: 28.93
 FLOWRATE #4: 29.06
 FLOWRATE #5: 28.88
AVERAGE T100: 28.95

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: 20.47 sec.

*T100 Flowrate correction. _____ %

RECORD: ROOM TEMP (C) 23.2 ROOM REL. HUMID: (%) 39

RECORD: 5 - T100 FLOWRATE TIMES:

SONDE= _____ ppbv @ CALIB= _____

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: VU017
 GMT DATE (YYMMDD): 060516 LOCAL DATE: May 16th, 2006
 GMT LAUNCH TIME: _____ LOCAL TIME: _____

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

O₃ BACKGROUND (μ amps or HEX value in Y channel): 2015 uA

VAISALA NUMBER (9 digit): 634530107 CONDITIONS: cloudy lt drizzle
 SURFACE PRESSURE: 983
 SURFACE TEMP. (C): 15.4
 SURFACE HUMIDITY: 66 SURF PRESSURE (mb): _____

REMARKS: Fwd by chase team predicted 41.0963N landing lat
786.9227W 10.7

weighoff = 2100 grams

*T100 flowrate correction [(WET/DRY)-1.0] X 100