

March 2014 NEW

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 6-26-14
- INITIALS: CLC
- PUMP# (add x,y,z,R): 2226395
- 1. Run zero air 10 minutes (v)
- 2. PUMP CURRENT: 89.75
- 3. PUMP PRESSURE: 710 lba
- 4. ENSCI Press/vac: 26/21
- 5. Bypass cell (v)
- 6. Add 5-6cc cathode (v)
- 7. 30 MINUTES HI O₃ (v)
- 8. 3 MINUTES NO O₃ (v)
- 9. DUMP CATHODE RINSE: (v)
- 10. ADD 3.0 CC FRESH CATHODE # 239
- 11. ADD 1.5 CC ANODE SOLUTION: (v)
- 12. RUN 10 MINUTES on NO O₃ (v)
- 13. RECORD CURRENT: BG = 0.188 μamps
- 14. RUN 10 MINUTES on 5 μamps O₃ (v) - then switch to NO O₃ AIR.
- 15. RECORD: TIME TO DROP FROM 4 TO 1.5 μamps: 31.58 sec.
- 16. Run sonde for 10 minutes on NO O₃ AIR (v)
- 17. Short the cell leads: (v)
- 18. Intake tube stored in sonde frame: (v)
- 19. Place Instrument inside plastic bag: (v)
- 20. Store inside Styrofoam flight box: (v)

AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): 7/9/14 *bad sol'n for 1st attempt at this step.*

- 1. RUN 5 MINS on NO O₃ (v), 222 μamps
- 2. RECORD CURRENT: 1.114 μamps
- 3. RUN 5 MINS on 5 μamps O₃ (v) - then switch to NO O₃ AIR
- 4. RECORD TIME TO DROP FROM 4 TO 1.5 μamps: 27.91 sec
- 5. Short cell leads and Store in Styrofoam flight box: (v)

FLIGHT PREPARATION IN LAB. (Under 24 hours to launch)

DATE (LOCAL): 7/12/14
 INITIALS: CLC
 ROOM TEMP (C): 25.3, ROOM RH (%): 38%
 Flowrate Correction: 1.6 (%)

- 1. Cathode solution # or date written on bottle: 244
 - 2. CHANGE CATHODE SOLUTION (3cc): (v)
 - 3. CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
 - 4. RUN ON NO O₃ FOR 10 MINUTES: (v)
 - 5. RECORD THE NO O₃ BACKGRND#1: BG1 = 0.100 μamps
 - 6. RUN ON 5 microamps of O₃ for 10 Minutes: (v)
 - 7. SWITCH TO NO O₃ AIR.
 - 8. RECORD: THE TIME TO DROP FROM 4 TO 1.5 μamps: 23.73 sec
 - 9. RECORD: 5 - T100 FLOWRATE TIMES:
- | T100 FLOWRATE TIMES: | | | | | |
|--------------------------------|--------------|------------|-------|-------|---------|
| FLOWRATE #1: | <u>29.68</u> | sec | | | |
| FLOWRATE #2: | <u>29.63</u> | sec | | | |
| FLOWRATE #3: | <u>29.59</u> | sec | | | |
| FLOWRATE #4: | <u>29.49</u> | sec | | | |
| FLOWRATE #5: | <u>29.31</u> | sec | | | |
| AVERAGE T100: <u>29.58</u> sec | | | | | |
| | Wet | 27.81 | 27.82 | 27.80 | 27.81 |
| | Dry | 27.43 | 27.37 | 27.33 | 27.3767 |
| | | <u>avg</u> | | | |

DAY OF FLIGHT @ THE LAUNCH SITE.

Results: O₃ Sonde TCO extrap: _____ (DU)

FLIGHT NUMBER: H0874
 GMT DATE (YYMMDD): 7/12/14 LOCAL DATE: 7/12/14
 GMT LAUNCH TIME: 18:12:13 LOCAL TIME: 1:12
 Operator Initials: CLC

BALLOON SIZE: 800 Grams: TOTEX _____ Hwoyee _____ PAWAN _____ (none) *Kaymont* ✓
 PAY-OFF-WEIGHT: _____ Grams: Burst Alt: 230 (km) Turn/Burst: 300

O₃ sn: 2226395 O₃ CELL BACKGROUND (μamps): _____ O₃ Ventilation Holes: (Y/N) _____
 O₃ Flowrate: 29.58 (sec) O₃ Flowrate Correction: _____ (%)
 Radiosonde #: 26883 Freq: 403 (MHz) If Vais RS-80, Pressure offset written on bag: _____ (hPa)
 NOAA FPH sn: _____
 Other instruments: _____

SURFACE PRES: _____ (hPa)
 SURFACE TEMP: _____ (C)
 SURFACE RH: _____ (%)
 Sky Conditions: Cloudy / Partially Cloudy
 REMARKS: _____