

U.S. DEPT. OF COMMERCE
NOAA Earth System Research Lab
DIGITAL OZONESONDE CHECKLIST

Seacions August 2013

FLT# HU799

INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

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|-------------------------------------|--|---|
| DATE (LOCAL): <u>7/27/2013</u> | 1. Run zero air 10 minutes <input checked="" type="checkbox"/> (v) | 5. Bypass cell <input checked="" type="checkbox"/> (v) |
| INITIALS: <u>WTC</u> | 2. PUMP CURRENT: <u>100.98</u> | 6. Add 5-6cc cathode <input checked="" type="checkbox"/> (v) |
| PUMP# (add x,y,z,R): <u>2224741</u> | 3. PUMP PRESSURE: <u>>11</u> | 7. 30 MINUTES HI O ₃ <input checked="" type="checkbox"/> (v) |
| | 4. ENSCI Press/vac: <u>28/20 inHg</u> | 8. 3 MINUTES NO O ₃ <input checked="" type="checkbox"/> (v) |
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| 9. DUMP CATHODE RINSE: <input checked="" type="checkbox"/> (v) | 16. Run sonde for 10 minutes on NO O ₃ AIR <input checked="" type="checkbox"/> (v) |
| 10. ADD 3.0 CC FRESH CATHODE # <input checked="" type="checkbox"/> (v) | 17. Short the cell leads: <input checked="" type="checkbox"/> (v) |
| 11. ADD 1.5 CC ANODE SOLUTION: <input checked="" type="checkbox"/> (v) | 18. Intake tube stored in sonde frame: <input checked="" type="checkbox"/> (v) |
| 12. RUN 10 MINUTES on NO O ₃ <input checked="" type="checkbox"/> (v) | 19. Place Instrument inside plastic bag: <input checked="" type="checkbox"/> (v) |
| 13. RECORD CURRENT: BG = <u>0.046</u> μ amps | 20. Store inside Styrofoam flight box: <input checked="" type="checkbox"/> (v) |
| 14. RUN 10 MINUTES on 5 μ amps O ₃ <input checked="" type="checkbox"/> (v) - then switch to NO O ₃ AIR. | |
| 15. RECORD: TIME TO DROP FROM 4 TO 1.5 μ amps: <u>25.37</u> sec. | |

2-5 DAYS AFTER INITIAL PREP: REPLACE SOLUTIONS: DATE (LOCAL): ~~8/07/2013~~ 8/6/2013

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|--|---|
| 1. Replace Cathode/Anode <input checked="" type="checkbox"/> (v) | 6. RECORD TIME TO DROP FROM 4 TO 1.5 μ amps: <u>23.59</u> sec |
| 2. RUN 5 MINS on NO O ₃ <input checked="" type="checkbox"/> (v) | 7. RUN 5 MINS on NO O ₃ <input checked="" type="checkbox"/> (v) |
| 3. RECORD CURRENT: <u>0.036</u> μ amps | 8. Short cell leads <input checked="" type="checkbox"/> (v) |
| 4. RUN 5 MINS on 5 μ amps O ₃ <input checked="" type="checkbox"/> (v) | 9. Store inside Styrofoam flight box: <input checked="" type="checkbox"/> (v) |
| 5. Switch to NO O ₃ AIR | |

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 8/8/2013
INITIALS: WTC NP

T100 FLOWRATE TIMES:
ROOM TEMP (C): 24, ROOM RH (%): 42
Flowrate Correction: 2.92 (%)
FLOWRATE #1: 27.96 sec
FLOWRATE #2: 27.99 sec
FLOWRATE #3: 27.94 sec
FLOWRATE #4: 28.07 sec
FLOWRATE #5: 28.09 sec
AVERAGE T100: 28.01 sec

- Cathode solution # or date written on bottle: 230
- CHANGE CATHODE SOLUTION (3cc): (v)
- CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
- RUN ON NO O₃ FOR 10 MINUTES: (v)
- RECORD THE NO O₃ BACKGRND#1: BG1 = 0.022 μ amps
- RUN ON 5 microamps of O₃ for 10 Minutes: (v)
- SWITCH TO NO O₃ AIR.
- RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 22.75 sec
- RECORD: 5 - T100 FLOWRATE TIMES:

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: HU 799
GMT DATE (YYMMDD): 130808 LOCAL DATE: 130808
GMT LAUNCH TIME: 17:36 LOCAL TIME: 13:36
Operator Initials: WTC NP
BALLOON SIZE: 1000 Grams: TOTEX _____ Hwoyee (v one)
PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 30.7 (km)

O₃ sn: 2224741 O₃ CELL BACKGROUND (μ amps): 0.022
O₃ Flowrate: 28.01 (sec) O₃ Flowrate Correction: 2.92 (%)

Radiosonde s/n: 17763 Freq: 402 (MHz)

SURFACE PRES: 990.2 (hPa)
SURFACE TEMP: 23 (C)
SURFACE RH: 90 (%)
Sky Conditions: Partly Cloudy

REMARKS: _____