

Seacions August 2013

DIGITAL OZONESONDE CHECKLIST

FLT# 44810

INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 08/14/2013  
 INITIALS: NLP  
 PUMP# (add x,y,z,R): 2224632
- |                                                                    |                                                                         |
|--------------------------------------------------------------------|-------------------------------------------------------------------------|
| 1. Run zero air 10 minutes <input checked="" type="checkbox"/> (v) | 5. Bypass cell <input checked="" type="checkbox"/> (v)                  |
| 2. PUMP CURRENT: <u>102.14</u>                                     | 6. Add 5-6cc cathode <input checked="" type="checkbox"/> (v)            |
| 3. PUMP PRESSURE: <u>&gt;1.0</u>                                   | 7. 30 MINUTES HI O <sub>3</sub> <input checked="" type="checkbox"/> (v) |
| 4. ENSCI Press/vac: <u>26/20 in Hg</u>                             | 8. 3 MINUTES NO O <sub>3</sub> <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 <sub>3</sub> 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 <sub>3</sub> <input checked="" type="checkbox"/> (v)                                                   | 19. Place Instrument inside plastic bag: <input checked="" type="checkbox"/> (v)              |
| 13. RECORD CURRENT: BG = <u>0.140</u> $\mu$ amps                                                                                  | 20. Store inside Styrofoam flight box: <input checked="" type="checkbox"/> (v)                |
| 14. RUN 10 MINUTES on 5 $\mu$ amps O <sub>3</sub> <input checked="" type="checkbox"/> (v) - then switch to NO O <sub>3</sub> AIR. |                                                                                               |
| 15. RECORD: TIME TO DROP FROM 4 TO 1.5 $\mu$ amps: <u>34,35</u> sec.                                                              |                                                                                               |

2-5 DAYS AFTER INITIAL PREP: REPLACE SOLUTIONS: DATE (LOCAL): 08/19/2013

- |                                                                                      |                                                                               |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 1. Replace Cathode/Anode <input checked="" type="checkbox"/> (v)                     | 6. RECORD TIME TO DROP FROM 4 TO 1.5 $\mu$ amps: <u>23.53</u> sec             |
| 2. RUN 5 MINS on NO O <sub>3</sub> <input checked="" type="checkbox"/> (v)           | 7. RUN 5 MINS on NO O <sub>3</sub> <input checked="" type="checkbox"/> (v)    |
| 3. RECORD CURRENT: <u>0.076</u> $\mu$ amps                                           | 8. Short cell leads <input checked="" type="checkbox"/> (v)                   |
| 4. RUN 5 MINS on 5 $\mu$ amps O <sub>3</sub> <input checked="" type="checkbox"/> (v) | 9. Store inside Styrofoam flight box: <input checked="" type="checkbox"/> (v) |
| 5. Switch to NO O <sub>3</sub> AIR                                                   |                                                                               |

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 08/21/2013  
INITIALS: NLP

T100 FLOWRATE TIMES:

ROOM TEMP (C): 24.4, ROOM RH (%): 41  
 Flowrate Correction: 1.95 (%)  
 FLOWRATE #1: 27.69 sec  
 FLOWRATE #2: 27.68 sec  
 FLOWRATE #3: 27.63 sec  
 FLOWRATE #4: 27.58 sec  
 FLOWRATE #5: 27.62 sec  
 \*AVERAGE T100: 27.64 sec

1. Cathode solution # or date written on bottle: # 238
- |                                                                                                 |
|-------------------------------------------------------------------------------------------------|
| 2. CHANGE CATHODE SOLUTION (3cc): <input checked="" type="checkbox"/> (v)                       |
| 3. CHANGE ANODE SOLUTION (1.5cc): <input checked="" type="checkbox"/> (Yes/No)                  |
| 4. RUN ON NO O <sub>3</sub> FOR 10 MINUTES: <input checked="" type="checkbox"/> (v)             |
| 5. RECORD THE NO O <sub>3</sub> BACKGRND#1: BG1 = <u>0.031</u> $\mu$ amps                       |
| 6. RUN ON 5 microamps of O <sub>3</sub> for 10 Minutes: <input checked="" type="checkbox"/> (v) |
| 7. SWITCH TO NO O <sub>3</sub> AIR.                                                             |
| 8. RECORD: THE TIME TO DROP FROM 4 TO 1.5 $\mu$ amps: <u>24.61</u> sec                          |
| 9. RECORD: 5 - T100 FLOWRATE TIMES:                                                             |

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: 44810  
 GMT DATE (YYMMDD): 08/21/2013 LOCAL DATE: 08/21/2013  
 GMT LAUNCH TIME: 18:21 LOCAL TIME: 13:21  
 Operator Initials: WTC  
 BALLOON SIZE: 1000 Grams: TOTEX \_\_\_\_\_ Hwoyee  (v one)  
 PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 28.33 (km)

O<sub>3</sub> sn: 2224632 O<sub>3</sub> CELL BACKGROUND ( $\mu$ amps): 0.031  
 O<sub>3</sub> Flowrate: 27.64 (sec) O<sub>3</sub> Flowrate Correction: 1.95 (%)

Radiosonde s/n: 20962 Freq: 403 (MHz)

SURFACE PRES: 997.4 (hPa)  
 SURFACE TEMP: 29 (C)  
 SURFACE RH: 65.6 (%)

Sky Conditions: \_\_\_\_\_

REMARKS: \_\_\_\_\_