

Seacions August 2013

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

FLT # 74814

INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 08/20/2013 1. Run zero air 10 minutes ☒ (✓) 5. Bypass cell ☒ (✓)
INITIALS: NLP 2. PUMP CURRENT: 86.82 6. Add 5-6cc cathode ☒ (✓)
PUMP# (add x,y,z,R): 2224645 3. PUMP PRESSURE: >1.0 7. 30 MINUTES HI O₃ ☒ (✓)
4. ENSCI Press/vac: 31.20 in Hg 8. 3 MINUTES NO O₃ ☒ (✓)

9. DUMP CATHODE RINSE: ☒ (✓) 16. Run sonde for 10 minutes on NO O₃ AIR ☒ (✓)
10. ADD 3.0 CC FRESH CATHODE # ☒ (✓) 17. Short the cell leads: ☒ (✓)
11. ADD 1.5 CC ANODE SOLUTION: ☒ (✓) 18. Intake tube stored in sonde frame: ☒ (✓)
12. RUN 10 MINUTES on NO O₃ ☒ (✓) 19. Place Instrument inside plastic bag: ☒ (✓)
13. RECORD CURRENT: BG = 0.113 μ amps 20. Store inside Styrofoam flight box: ☒ (✓)
14. RUN 10 MINUTES on 5 μ amps O₃ ☒ (✓) - then switch to NO O₃ AIR.
15. RECORD: TIME TO DROP FROM 4 TO 1.5 μ amps: 30.19 sec.

2-5 DAYS AFTER INITIAL PREP: REPLACE SOLUTIONS: DATE (LOCAL): 08/22/2013

1. Replace Cathode/Anode ☒ (✓) 6. RECORD TIME TO DROP FROM 4 TO 1.5 μ amps: 29.33 sec
2. RUN 5 MINS on NO O₃ ☒ (✓) 7. RUN 5 MINS on NO O₃ ☒ (✓)
3. RECORD CURRENT: 0.078 μ amps 8. Short cell leads ☒ (✓)
4. RUN 5 MINS on 5 μ amps O₃ ☒ (✓) 9. Store inside Styrofoam flight box: ☒ (✓)
5. Switch to NO O₃ AIR

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 08/26/2013
INITIALS: NLP

T100 FLOWRATE TIMES:

ROOM TEMP (C): 24.0, ROOM RH (%): 40.39
Flowrate Correction: 1.91 (%) 26.96

1. Cathode solution # or date written on bottle: 238
2. CHANGE CATHODE SOLUTION (3cc): ☒ (✓)
3. CHANGE ANODE SOLUTION (1.5cc): ☒ (Yes/No)
4. RUN ON NO O₃ FOR 10 MINUTES: ☒ (✓)
5. RECORD THE NO O₃ BACKGRND#1: BG1 = 0.034 μ amps
6. RUN ON 5 microamps of O₃ for 10 Minutes: ☒ (✓)
7. SWITCH TO NO O₃ AIR.
8. RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 22.24 sec
9. RECORD: 5 - T100 FLOWRATE TIMES:

FLOWRATE #1: 26.82 sec
FLOWRATE #2: 26.72 sec
FLOWRATE #3: 26.75 sec
FLOWRATE #4: 26.81 sec
FLOWRATE #5: 26.84 sec
• AVERAGE T100: 26.82 sec

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: 74814
GMT DATE (YYMMDD): 08/26/2013 LOCAL DATE: 08/26/2013
GMT LAUNCH TIME: 18:13 LOCAL TIME: 10:13:13
Operator Initials: NLP

BALLOON SIZE: 1000 Grams: TOTEX _____ Hwoyee ☒ (✓ one)
PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 30.19 (km)

O₃ sn: 2224645 O₃ CELL BACKGROUND (μ amps): 0.034
O₃ Flowrate: 26.82 (sec) O₃ Flowrate Correction: 1.91 (%)

Radiosonde s/n: 20965 Freq: 403 (MHz)

SURFACE PRES: 1000.3 (hPa)
SURFACE TEMP: 29 (C)
SURFACE RH: 39.2 (%)

Sky Conditions: Partly Cloudy, Wind Speed Calm, Humidity 37%, Barometer 30.20 in Dew Pt. 12
REMARKS:

per NOAA Weather