

Seacions August 2013

DIGITAL OZONESONDE CHECKLIST

FLT# H4804

INITIAL PREPARATION ~7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 8/8/2013
INITIALS: WTC NLP
PUMP# (add x,y,z,R): 2224646

1. Run zero air 10 minutes ☒ (✓)
2. PUMP CURRENT: 86.20
3. PUMP PRESSURE: 711
4. ENSCI Press/vac: 28/20 in Hg

5. Bypass cell ☒ (✓)
6. Add 5-6cc cathode ☒ (✓)
7. 30 MINUTES HI O₃ ☒ (✓)
8. 3 MINUTES NO O₃ ☒ (✓)

9. DUMP CATHODE RINSE: ☒ (✓)
10. ADD 3.0 CC FRESH CATHODE # ☒ (✓)
11. ADD 1.5 CC ANODE SOLUTION: ☒ (✓)
12. RUN 10 MINUTES on NO O₃ ☒ (✓)
13. RECORD CURRENT: BG = 0.315 μ amps
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: 40.19 sec.

16. Run sonde for 10 minutes on NO O₃ AIR ☒ (✓)
17. Short the cell leads: ☒ (✓)
18. Intake tube stored in sonde frame: ☒ (✓)
19. Place Instrument inside plastic bag: ☒ (✓)
20. Store inside Styrofoam flight box: ☒ (✓)

2-5 DAYS AFTER INITIAL PREP: REPLACE SOLUTIONS: DATE (LOCAL): 08/10/2013

1. Replace Cathode/Anode ☒ (✓)
2. RUN 5 MINS on NO O₃ ☒ (✓)
3. RECORD CURRENT: ☒ (✓) μ amps
4. RUN 5 MINS on 5 μ amps O₃ 0.102 (✓)
5. Switch to NO O₃ AIR

6. RECORD TIME TO DROP FROM 4 TO 1.5 μ amps: 26.98 sec
7. RUN 5 MINS on NO O₃ ☒ (✓)
8. Short cell leads ☒ (✓)
9. Store inside Styrofoam flight box: ☒ (✓)

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 08/14/2013
INITIALS: NLP

T100 FLOWRATE TIMES:

ROOM TEMP (C): 24.3, ROOM RH (%): 42
Flowrate Correction: 3.40 (%)

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 = 0.038 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: 22.41 sec
9. RECORD: 5 - T100 FLOWRATE TIMES:

FLOWRATE #1: 27.73 sec
FLOWRATE #2: 28.01 sec
FLOWRATE #3: 27.99 sec
FLOWRATE #4: 27.91 sec
FLOWRATE #5: 27.90 sec
AVERAGE T100: 27.91 sec

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: H4804

GMT DATE (YYMMDD): 08/14/2013 LOCAL DATE: 08/14/2013

GMT LAUNCH TIME: 18:33 LOCAL TIME: 13:33

Operator Initials: NLP

BALLOON SIZE: 1200 Grams: TOTEX _____ Hwoyee ☒ (✓ one)

PAY-OFF-WEIGHT: 1700 Grams: Burst Alt: 18 (km)

O₃ sn: 2224646 O₃ CELL BACKGROUND (μ amps): 0.038
O₃ Flowrate: 27.91 (sec) O₃ Flowrate Correction: 3.40 (%)

Radiosonde s/n: 17367 Freq: 402 (MHz)

SURFACE PRES: 991.3 (hPa)

SURFACE TEMP: 27 (C)

SURFACE RH: 51.3 (%)

Sky Conditions: Partly Cloudy

REMARKS: _____