

July 2, 2014

DIGITAL OZONESONDE CHECKLIST

INITIAL PREPARATION 10-14 DAYS BEFORE FLIGHT.

- DATE (LOCAL): 3-18-15
 INITIALS: BW
 PUMP#: 2728112
- Run zero air 10 minutes (✓)
 - PUMP CURRENT: 96.66 (mA)
 - PUMP PRESSURE: >10 (psi)
 - DMT Press/vac: 30 / 20 (in Hg)
 - Bypass cell (✓)
 - Add 5-6cc cathode (✓)
 - 30 MINUTES HI O₃ (✓)
 - 3 MINUTES NO O₃ (✓)
-
- DUMP CATHODE RINSE: (✓)
 - ADD 3.0 CC FRESH CATHODE # (✓)
 - ADD 1.5 CC ANODE SOLUTION: (✓)
 - RUN 10 MINUTES on NO O₃ (✓)
 - RECORD CURRENT BEFORE O₃: BG = 0.188 μA
 - RUN 10 MINS on 5 μA O₃ (✓) - then switch to NO O₃ AIR.
 - RECORD: TIME TO DROP FROM 4 TO 1.5 μA: 29.17 sec.
 - Run sonde for 10 mins on NO O₃ (✓)
 - RECORD CURRENT: BG = 0.196 uA
 - Short the cell leads: (✓)
 - Intake tube stored in sonde frame: (✓)
 - Place Sonde inside plastic bag: (✓)
 - Store inside Styrofoam flight box: (✓)

AFTER 1 WEEK: REPLACE SOLUTIONS: DATE (LOCAL): 3-26-15

- RUN 5 MINS on NO O₃ (✓)
- RECORD CURRENT: 0.90 μamps
- RUN 5 MINS on 5 μamps O₃ (✓) - then switch to NO O₃ AIR
- RECORD TIME TO DROP FROM 4 TO 1.5 μamps: 23.2 sec
- Short cell leads and Store in Styrofoam flight box: (✓)

FLIGHT PREPARATION IN LAB.

- DATE (LOCAL): 4-4-15
 INITIALS: BW
- Cathode solution # or date written on bottle: Dec 1, 2014
 - CHANGE CATHODE SOLUTION (3cc): (✓)
 - CHANGE ANODE SOLUTION (1.5cc): Yes (Yes/No)
 - RUN ON NO O₃ FOR 10 MINUTES: (✓)
 - RECORD THE NO O₃ BACKGRND#1: BG1 = 0.085 μamps
 - RUN ON 5 microamps of O₃ for 10 Minutes: (✓)
 - SWITCH TO NO O₃ AIR
 - RECORD: DECAY TIME TO DROP FROM 4 TO 1.5 μamps: 27.84 sec
 - RECORD: 5 - T100 FLOWRATE TIMES:
- T100 FLOWRATE TIMES:*
- ROOM TEMP (C): 16.0, ROOM RH (%): 29
 Flowrate Correction: 2.2 (%)
- | | | |
|---------------|--------------|-----|
| FLOWRATE #1: | <u>29.81</u> | sec |
| FLOWRATE #2: | <u>29.84</u> | sec |
| FLOWRATE #3: | <u>29.87</u> | sec |
| FLOWRATE #4: | <u>29.76</u> | sec |
| FLOWRATE #5: | <u>29.86</u> | sec |
| AVERAGE T100: | <u>29.83</u> | sec |
- | | | | | |
|-----|--------------|--------------|--------------|--------------|
| | 1 | 2 | 3 | Average |
| dry | <u>29.59</u> | <u>28.63</u> | <u>28.82</u> | <u>28.68</u> |
| wet | <u>29.33</u> | <u>29.22</u> | <u>29.42</u> | <u>29.32</u> |

DAY OF FLIGHT @ THE LAUNCH SITE.

- FLIGHT NUMBER: HU911
 GMT DATE (YYMMDD): 4-4-2015 LOCAL DATE: 4-4-2015
 GMT LAUNCH TIME: 6:40 PM LOCAL TIME: 1:40 PM
 Operator Initials: BW
- BALLOON SIZE: _____ Grams: _____ TOTEX _____ Hwoyee _____ PAWAN _____ (✓ one)
 PAY-OFF-WEIGHT: _____ Grams: _____ Burst Alt: _____ (km) Turn/Burst: _____
- O₃ sn: _____ O₃ CELL BACKGROUND (μamps): _____ O₃ Ventilation Holes: _____
 O₃ Flowrate: _____ (sec) O₃ Flowrate Correction: _____ (%)
 Radiosonde sn: 28301 Freq: _____ (MHz)
- NOAA FPH sn: _____ (if using Frost Point Hygrometer.)
- SURFACE PRES: _____ (hPa)
 SURFACE TEMP: _____ (C)
 SURFACE RH: _____ (%)
- Sky Conditions: _____
- REMARKS: Pump not stable. flight after a project done, thus later than
1:50