

U.S. DEPT. OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
CLIMATE MONITORING AND DIAGNOSTICS LABORATORY
DIGITAL OZONE SONDE CHECKLIST

FLT # H4620

Huntsville

INITIAL PREPARATION 3-7 DAYS BEFORE FLIGHT.

DATE (LOCAL): 4/27/2010
INITIALS: WTC
PUMP NUMBER: 278887

PUMP CURRENT: 82.10
PUMP PRESSURE: 11
PUMP VACUUM: 21

30 MINUTES HI O₃ (v)
5 MINUTE NO O₃ (v)

ADD 3.0 CC CATHODE SOLUTION: (v)
WAIT 2 MINUTES: (v)
ADD 1.5 CC ANODE SOLUTION: (v)
RUN 20 MINUTES ON NO O₃: (v)

Short the cell leads: (v)
Add about 2.5 CC more Cathode Solution (2Z) (v)
Place Instrument inside plastic bag: (v)
Store inside Styrofoam flight box: (v)

Record the current after the 20 MINUTES ON NO O₃: = 0.470 μ amps

FLIGHT PREPARATION IN LAB.

DATE (LOCAL): 5/1/2010
INITIALS: WTC

Cathode solution date written on bottle: Oct 14, 2009
CHANGE CATHODE SOLUTION (3cc): (v)
CHANGE ANODE SOLUTION (1.5cc): (Yes/No)
RUN ON NO O₃ FOR 5 MINUTES: (v)
RECORD THE NO O₃ BACKGRND#1: BG1 = 0.019 μ amps
RUN ON 5 microamps of O₃ for 10 Minutes: (v)

T100 FLOWRATE TIMES:

FLOWRATE #1: 29.57 sec
FLOWRATE #2: 29.58
FLOWRATE #3: 29.76
FLOWRATE #4: 29.62
FLOWRATE #5: 29.65

DRY T100
#1: 27.47
#2: 27.20
#3: 27.63
DRY AVG: 27.63

AVERAGE T100: 29.63

WET T100
#1: 28.24
#2: 28.32
#3: 28.26

WET AVG: 28.29

RESONSE TIME

SWITCH TO NO O₃ AIR.

RECORD: THE TIME TO DROP FROM 4 TO 1.5 μ amps: 33.83 sec.

*T100 Flowrate correction: 2.39 %

RECORD: ROOM TEMP (C) 24 ROOM REL. HUMID. (%) 34

RECORD: 5 - T100 FLOWRATE TIMES:

DAY OF FLIGHT @ THE LAUNCH SITE.

FLIGHT NUMBER: H4620
GMT DATE: 5/1/2010
GMT LAUNCH TIME: 18:00:10

LOCAL DATE: 5/1/2010
LOCAL TIME: 13:00:10

BALLOON TYPE 1200 Gram: Kaymont Scientific Sales (none)

O₃ BACKGROUND (μ amps from F9 key): ~~2.0~~

VAISALA NUMBER (9 digit): 148752752
SURFACE PRESSURE: /
SURFACE TEMP. (C): /
SURFACE HUMIDITY: /

SKY CONDITIONS: Cloudy

BURST PRESSURE (mb): /
Altitude: 34.25 km

REMARKS: _____

weighoff = _____ grams

*T100 flow corr (%) = [(WET/DRY)-1.0] X 100