

## Tom Compas

**From:** Mike A Gonzalez  
**Sent:** Friday, February 12, 2010 12:10 PM  
**To:** Steve Broy  
**Cc:** Tom Compas; Zhenhe Sun  
**Subject:** RE: R22D-AP Testing  
**Attachments:** R22D-AP TComp 2-12-10.xls; B77322-0 R22D-AP Spec.pdf

Steve/Tom,

Testing on three (3) R22D-AP sensors has been completed.

Here is a summary of Results (actual data & chart can be seen on attachment 1:

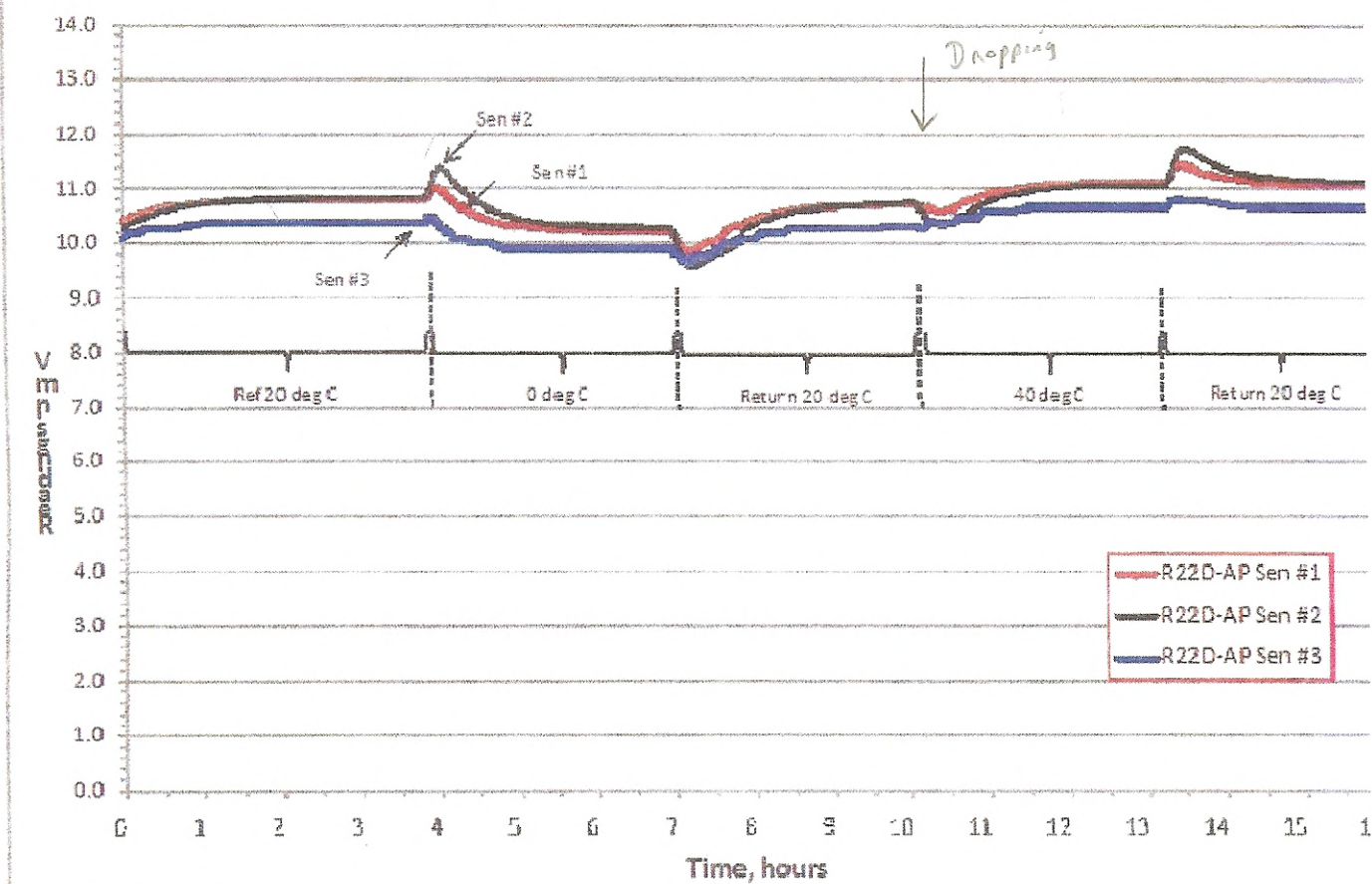
Note duration time at each temp setting = 3 hours, sensor readings in mV.

Temp, C	Sen #1 Reading	O2 % Error	Sen #2 Reading	O2 % Error	Sen #3 Reading	O2 % Error
Ref 20	10.783	Ref	10.813	Ref	10.370	Ref
0	10.197	-1.1	10.281	-1.0	9.873	-1.0
40	11.089	0.6	11.051	0.5	10.658	0.6

### Conclusion:

- All three sensors Sen #1, 2 & 3 gave comp error going from 20 deg C (ref) to cold cycle 0 deg C: **-1.0 to -1.1% O2.**
- All three sensors Sen #1, 2 & 3 gave comp error going from 20 deg C (ref) to hot cycle 40 deg C: **+0.5 to +0.6% O2.**
- As can be seen, test results on 3 R22D-AP look good (see Spec Control dwg attachment 2).

R22D-AP Sensors: Temp Comp test 2-11-10 to 2-12-10,  
0-40 deg C, Chart: Time vs mV readings



Michael

**From:** Steve Broy  
**Sent:** Thursday, February 11, 2010 1:32 PM  
**To:** Mike A Gonzalez  
**Cc:** Tom Compas; Zhenhe Sun  
**Subject:** Re: R22D-AP

A diver complained to AP that our cells seems different in temp comp recently  
 - although the differences in construction are very minor and hard to imagine this would be contributory, we want to do an A B comparison

**From:** Mike A Gonzalez  
**To:** Steve Broy  
**Cc:** Tom Compas; Zhenhe Sun  
**Sent:** Thu Feb 11 13:21:27 2010  
**Subject:** RE: R22D-AP  
 Steve,