

Subject: BRS update and injection Calibration

From: "Kurt Buck" <buku@mbari.org>

Date: 1/15/2013 3:49 PM

To: "Jim Barry" <barry@mbari.org>, "Bob Herlien" <bobh@mbari.org>

CC: "Okuda, Craig" <craig@mbari.org>, "Mike Risi" <mrisi@mbari.org>

I'm going to throw the beast in the small test tank sometime tomorrow, make sure everything else other than the injection pumps run.

Chamber	O2	Vol/min	Vol/min	CO2
1		93		113
2		74		123
3		106		116
4		121		112
5		112		116
6		116		118
7		120		124
8		NA		115

We had a failed CO2 injection pump on #7

-----Original Message-----

From: Jim Barry [<mailto:barry@mbari.org>]

Sent: Tuesday, January 15, 2013 3:24 PM

To: 'Bob Herlien'

Cc: 'Kurt Buck'; 'Okuda, Craig'; 'Mike Risi'

Subject: RE: modbus errors on blocks 7 & 8

HI Bob,

The syslog may not be so bad. I initially looked it over and thought it failed to record enough events to cover the entire deployment. Specifically, "Starting Period #X" only covered periods 1-13 (X = period). I expected there to be more like 55 periods. But I've now looked more closely and see that "Flushing flush1 for 600.0 secs" or other "Starting incubation..." include about 55 events each, which looks like it should. Maybe I just don't know what "Starting Period #x" means.

jim

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-----Original Message-----

From: Bob Herlien [<mailto:bobh@mbari.org>]

Sent: Tuesday, January 15, 2013 2:10 PM

To: Jim Barry

Cc: 'Kurt Buck'; 'Okuda, Craig'; 'Mike Risi'

Subject: Re: modbus errors on blocks 7 & 8

On 1/15/2013 1:58 PM, Jim Barry wrote:

Looked more closely at the data. Optodes seemed to work as mentioned earlier, except for C7. But the syslog is screwed up. Not only a bunch of Modbus errors, but it didn't record what actiitiy happened when beyond about 90 h into the deployment. What next?
j

Jim, can you be a little more specific about what you see are the problems in syslog.txt?

From my perspective (and I didn't look very carefully), it looks correct from deployment on 12/3 until low-power shutdown on 12/18 at 23:04. Yes, chambers 7 and 8 started throwing errors on about 12/16 at 12:12, but I assume that the reports in syslog.txt were correct on that point.

What I see as a problem is that, after low-power shutdown on 12/18 at 23:04, it would continually try to reboot and run, going almost immediately into low-power shutdown again. Lather, rinse, repeat. I believe that eventually, the battery got low enough that it started to trash syslog (and perhaps data files?) by trying to write when the voltage was too low to support it.

We need to rethink low-power shutdown, and come up with an algorithm that will permanently shut it down after it reboots some number of times.

-BOB