

To: Transocean – DWH Internal Investigation Team, Greg Childs –
WEST Engineering Services.

Date: 5 August 2011

From: Chris Tolleson–WEST Engineering Services

Page 1 of 7

FORM OP-001

REV 04/2011

Daily Report 8/5/2011 — Deepwater Enterprise
WEST Job #3936

Workscope Accomplished:

- Conducted data capture of dual coil voltage driver during AMF sequences.

Recommendations:

None

Discussion:

Yesterday, subsea engineers facilitated the change of the following AMF batteries: SEM B 9 Volt, 27 Volt pod batteries, SEM A 9 Volt battery.

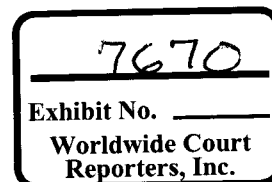
The Enterprise's Cameron Control system is functionally equivalent to the Horizon's system and allowed additional testing of the solenoids.

The data collection and test setup used yesterday evening after the batteries were replaced would not capture the voltage readings correctly. **Six AMF activation tests employing a reversed coil wiring, while not captured by equipment correctly, confirmed the AMF sequence activated the solenoid.** A plan was formed to get the rig's Fluke Scopemeter or other recording equipment and re-configure the tests for today, 8-5-2011.

Using the rig's Fluke ScopeMeter 120 Oscilloscope, multiple AMF sequence activations were captured in two configurations: a) Coil A wired correctly with respect to Coil B, b) Coil A wired in reverse with respect to Coil B. The Fluke ScopeMeter software had to be loaded on the WEST computer in order to complete the transfers of the captured data.

Test Name	Approximate test time	Coil Wiring	Results Summary
AMF Run 1	9:34 am	(Test run for setup) Coil A wired in Reverse with respect to Coil B	Heard the solenoid plunger "clunk" – solenoid activated.
AMF Run 2	9:40 am	(Test run for setup) Coil A wired in Reverse with respect to Coil B	Heard the solenoid plunger "clunk" – solenoid activated.

CONFIDENTIAL



TRN-MDL-02971987

TDR133-000008

Test Name	Approximate test time	Coil Wiring	Results Summary
AMF Run 3	9:48 am	Test Run Coil A wired in Reverse with respect to Coil B	Heard the solenoid plunger "clunk" – solenoid activated.
AMF Run 4	9:58 am	Coil A and B wired correctly	Heard the solenoid plunger "clunk" – solenoid activated.
AMF Run 5	10:03 am	Coil A wired with reverse polarity with respect to Coil B	Heard the solenoid plunger activate.
AMF Run 6	10:08 am	Coil A wired with reverse polarity with respect to Coil B	Heard the solenoid plunger activate.
AMF Run 7	10:15 am	Coil A and B wired correctly	Heard the solenoid plunger activate.
AMF Run 8	10:21 am	Coil A wired with reverse polarity with respect to Coil B	Heard the solenoid plunger activate.
AMF Run 9	10:28 am	Coil A wired with reverse polarity with respect to Coil B	Scope lead detached from spring action invalidating scope capture. (did hear plunger)
AMF Run 10	10:39 am	Coil A wired with reverse polarity with respect to Coil B	Heard plunger. Scope time base set to 100 mSec/Div – not able to see that waveform is out of phase.
AMF Run 11	10:50 am	Coil A and B wired correctly	Heard plunger
AMF Run 12	10:57 am	Coil A wired with reverse polarity with respect to Coil B	Heard the solenoid plunger activate.

Projected Workscope:

Clean up and properly store test equipment. Disassemble test equipment. Prepare to leave rig.

Comments/Corrections:

None

Attachments:

- A. AMF Test run data captures

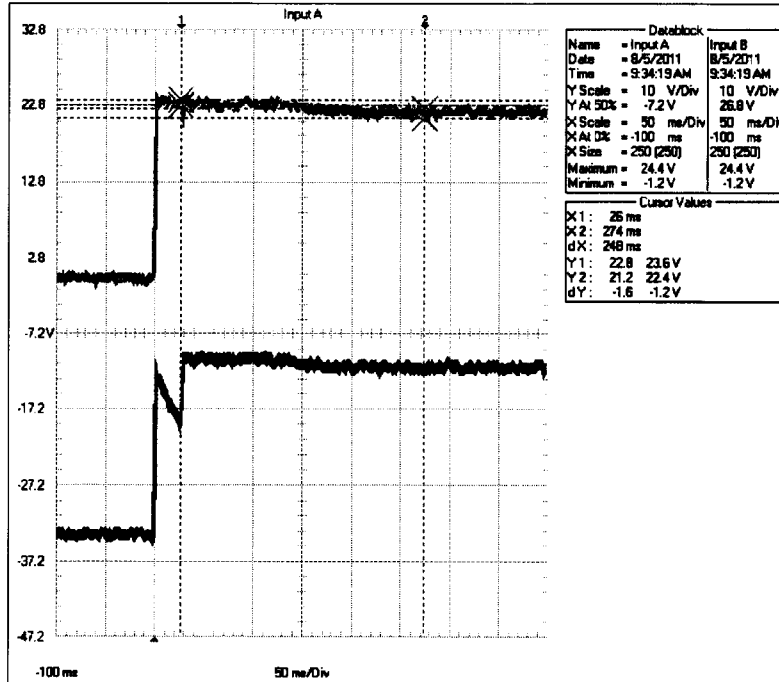
Best Regards,

Chris Tolleson -- WEST S&C Surveyor

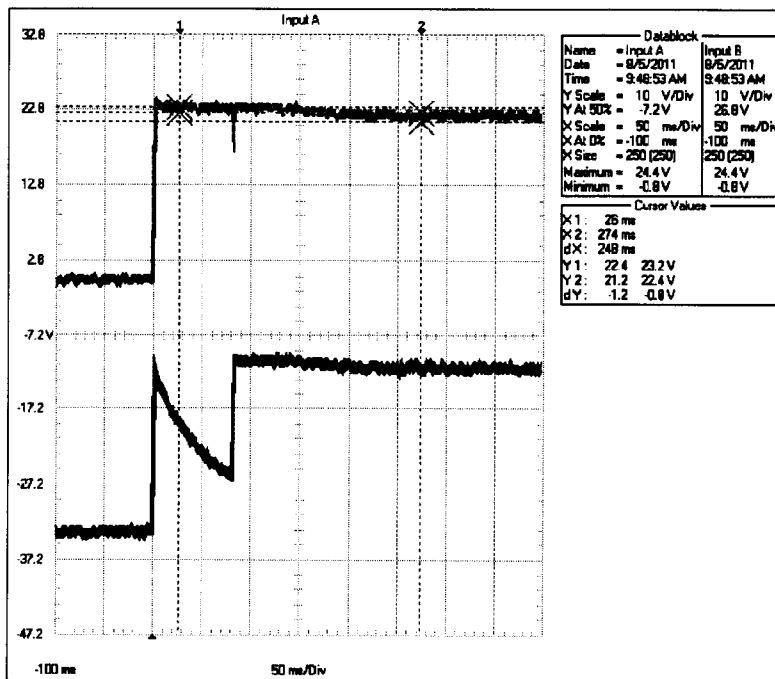
Attachment A

AMF Test Run Data Captures

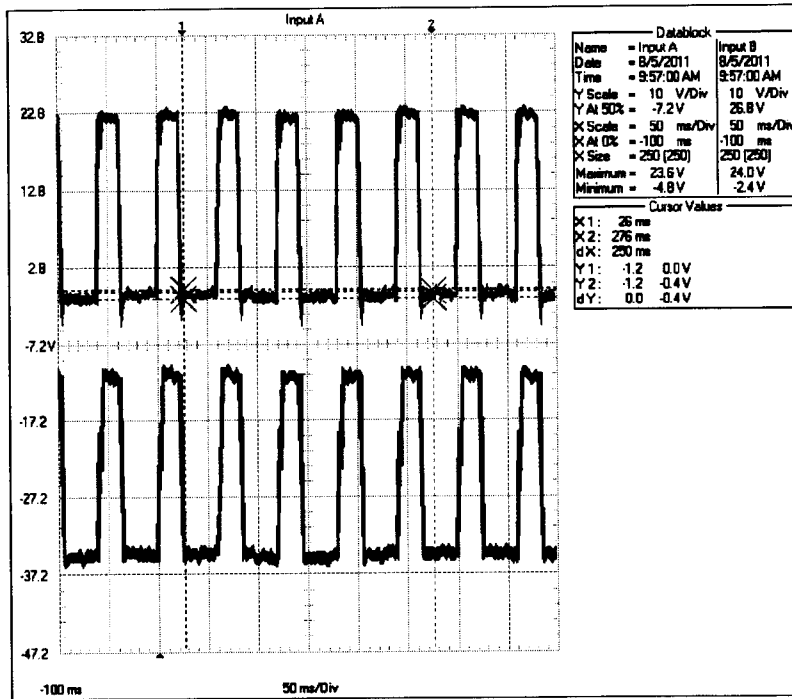
AMF Test Setup run 1 – 9:34 am



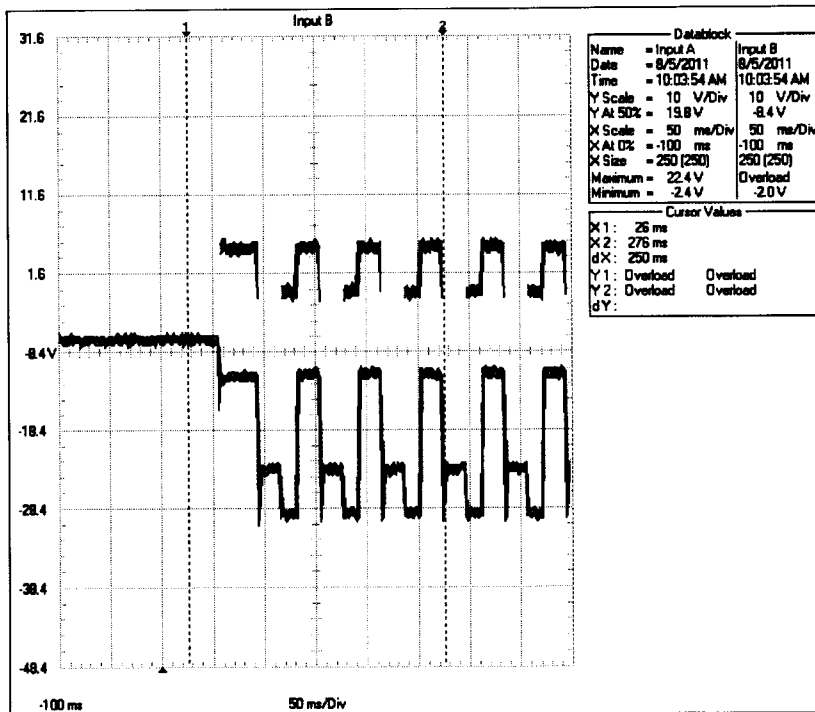
AMF Test run 3 for set up 9:48 am



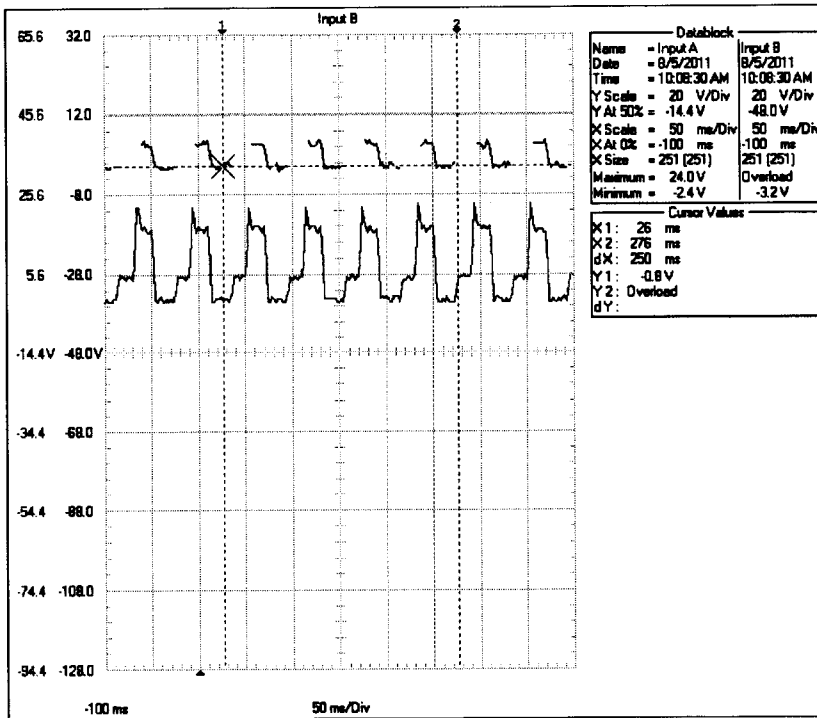
AMF Run 4 9:57 am



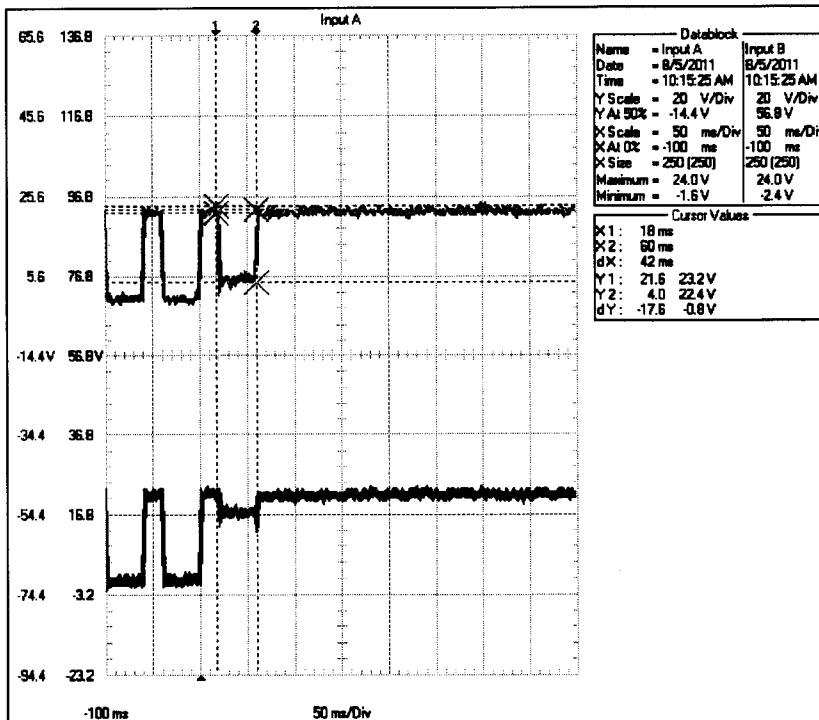
AMF Test 5 10:03 am



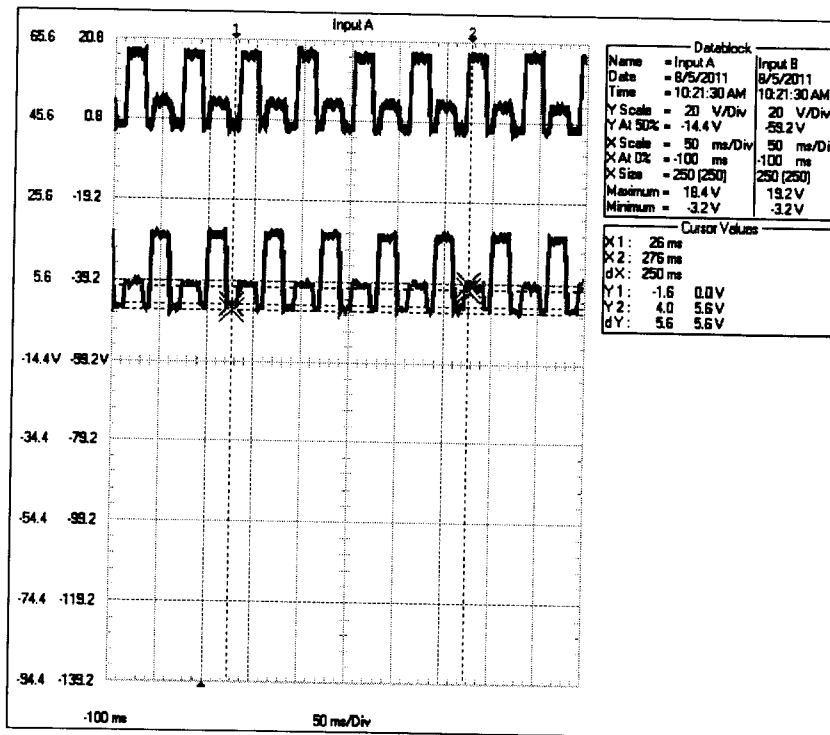
AMF Test 6 10:08 am



AMF Test 7 10:15 AM.

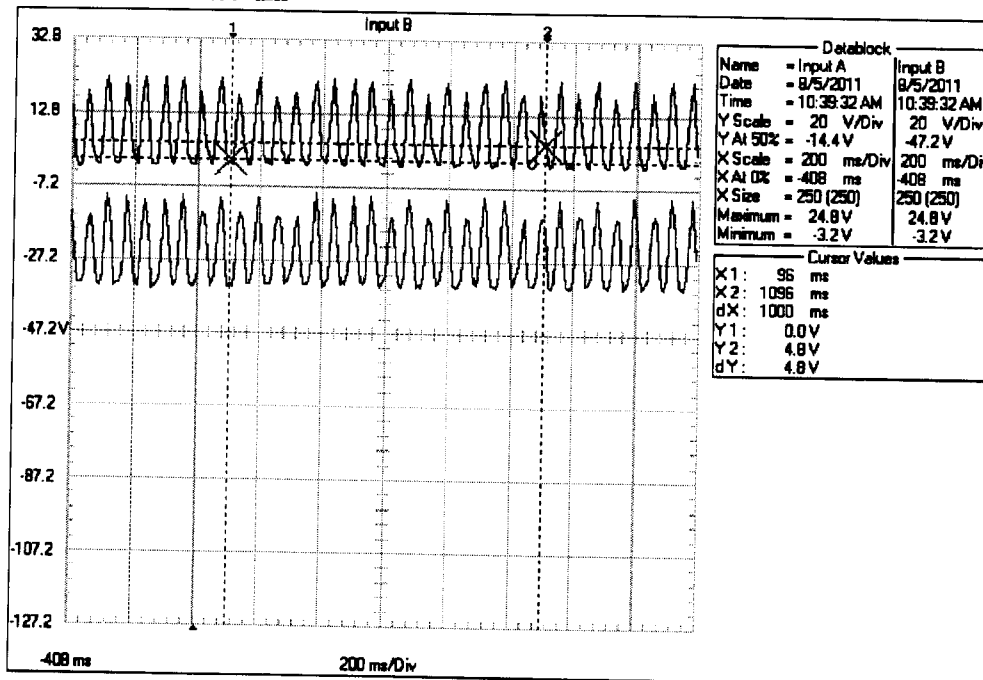


AMF Test 8 10:21 am

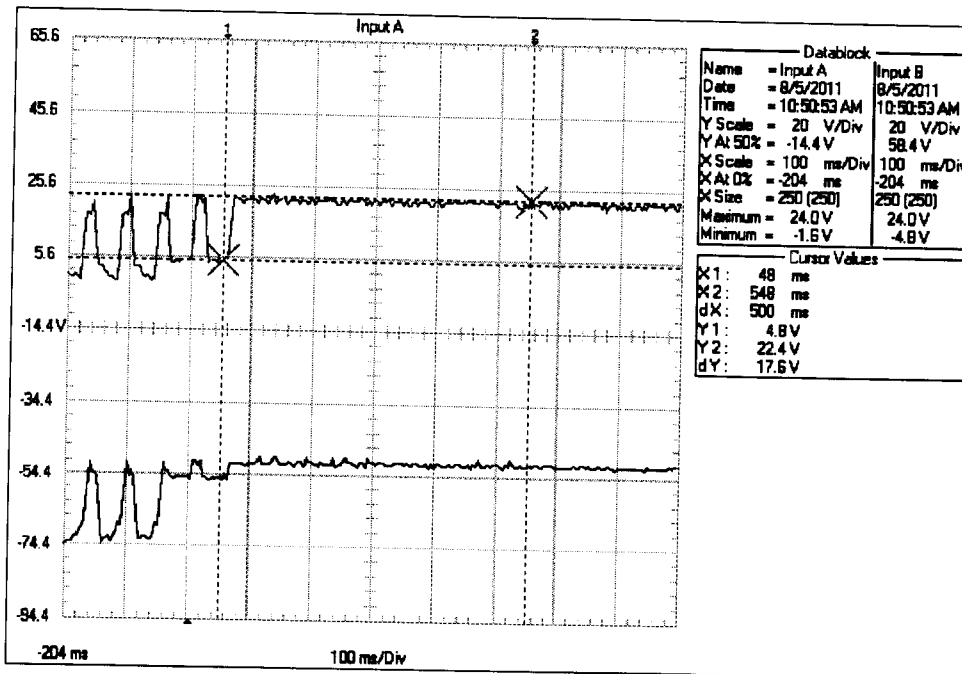


AMF Test 9 – No scope capture due to scope lead jumping off from spring action.

AMF Test 10 10:39 am



AMF Test 11 - 10:50 am



AMF Test 12 10:57 am

