

V02- DCS Opened Node Validation - BER Electrical

This test is done while the sea node is still opened so that corrections can be made if necessary. It is a final check on the electrical portion excluding the sub sea routers, of the DCS subsea system using a BER tester.

The setup for this test is shown on the next page. The magenta circles are points where the optical system is tapped into for insertion of the BER tester.

- 1) ON THE SHORE SIDE Remove the East .98 SFP with fibers from the CISCO 91-01 Router (The SFP at port 25) and place it in an SFP socket of the BERT tester.
- 2) Place an electrical SFP in the other BERT tester socket
- 3) ON THE SUBSEA NODE Attach the ethernet output of the 0.98 East OE converter to the BER tester with a straight thru ethernet cable. The .98 converters are the ones to the rear of the node as it faces you.
- 4) Run a BERT test for 30 minutes
- 6) Repeat this test for the following channels
 - East .75 (The SFP at port 26 on CISCO router 91-02)
 - West .98 (The SFP at port 25 on CISCO router 91-02)
 - West .75 (The SFP at port 26 on CISCO router 91-01)
- 7) If there are errors you will need to
 - a) clean fibers
 - b) Check power levels per V01 - Optical Validations
 - c) Swap NE Cards
 - d) Swap SFPs

V02- DCS Opened Node Validation -Testing Electrical BER (East Side Shown Only)

SHORE

SEA

