



## Provision of Advanced NDT Inspection of Slug Catcher and for Corrosion under Pipe Support Services

### THE ISSUE

The client operates a 6-train liquified natural gas (LNG) plant based on Bonny Island Rivers State Nigeria from where it produces LNG for export to global markets. They required the services of a contractor to provide non-intrusive inspection (rapid corrosion mapping) large bore piping ( slug catcher piping), their circumferential weld joints , vessel bottom dome and inspection of gas piping corrosion under supports using applicable advanced NDT techniques.

### PROJECT SCOPE

Ofserv was Contracted to Provide Advanced NDT Inspection of Slug Catcher and Corrosion under Pipe Supports . The Rapid automated corrosion mapping( 3-9 O' clock position) of Slug Catcher Fingers Straight Pipes of the GTS 1, 2 &4 , Rapid automated inspection of Slug Catcher Fingers circumferential welds, Rapid automated corrosion mapping of bottom dome Inside skirt of Six (6) feed gas separator vessels, and Rapid automated inspection for gas piping corrosion under saddle Supports was covered in three separate campaigns . The specialized NDT equipment utilized includes Sonomatic Raptor AUT Scanner, Chime/ Multiskip Scanner, Dome-End Scanner and TOFD. Subsequent campaigns for the GTS -3 & 5 is expected 1

### OUR SOLUTION

The Project which is still ongoing, has so far been executed in three stages. A team of 4 NDT Level 1 & 2 specialists was deployed at each stage.

Personnel deployed included a Lead Technician, two Support Technicians, and one Reporting Technician The first and second stage took a total of 18 and 9 days respectively to successfully execute the data collection. Inspections carried out included Rapid automated corrosion mapping of Slug Catcher Fingers Straight Pipes, Rapid automated inspection of Slug Catcher Fingers circumferential welds, Rapid automated corrosion mapping of bottom dome inside skirt of Six feed gas separator vessels, Rapid automated corrosion mapping of 1/4 of the bottom dome and 100% automated corrosion mapping of the nozzle neck, Rapid automated inspection for gas piping corrosion under saddle Supports, and indicative piping support inspection.

The above inspections were successfully implemented using Multiskip screening technique implemented using a bespoke Slug Catcher scanner as well as a high resolution corrosion mapping technique implemented using a Raptor AS scanner.



#### Location

Bonny Island, Nigeria

#### ManHours

4,208

#### Safety Statistics

Zero LTI

#### Status

Active