

VIEWPORT3

EST 2017

viewport3.com

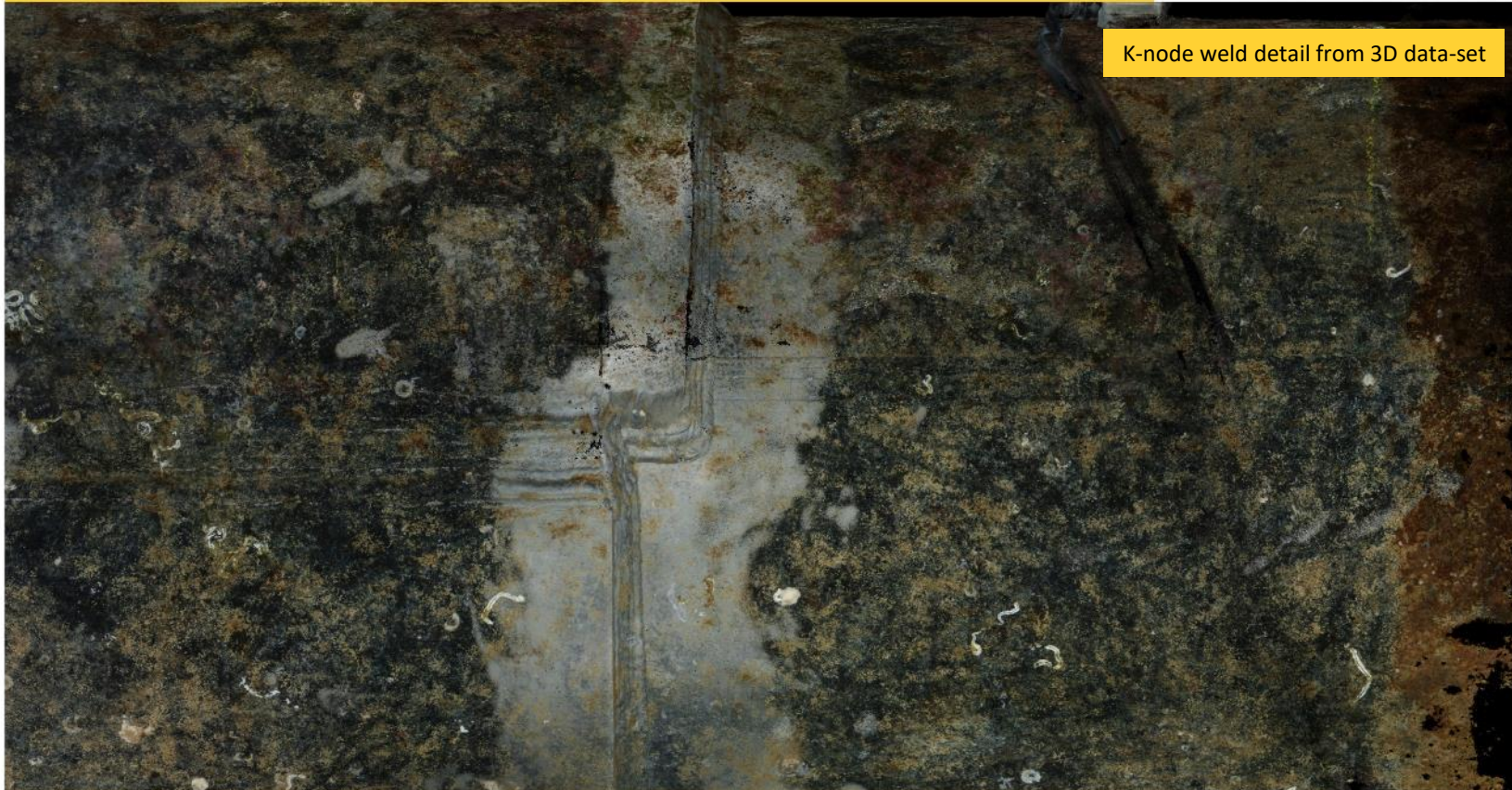
Collaborating for efficiency



Brief

- Assist divers in optimising cleaning methods
- Design and build diver-friendly capture system
- Retrieve k-node geometry at <math><1\text{mm}</math> accuracy
- Issue 3D point cloud to clamp design contractor

Collaborating for efficiency



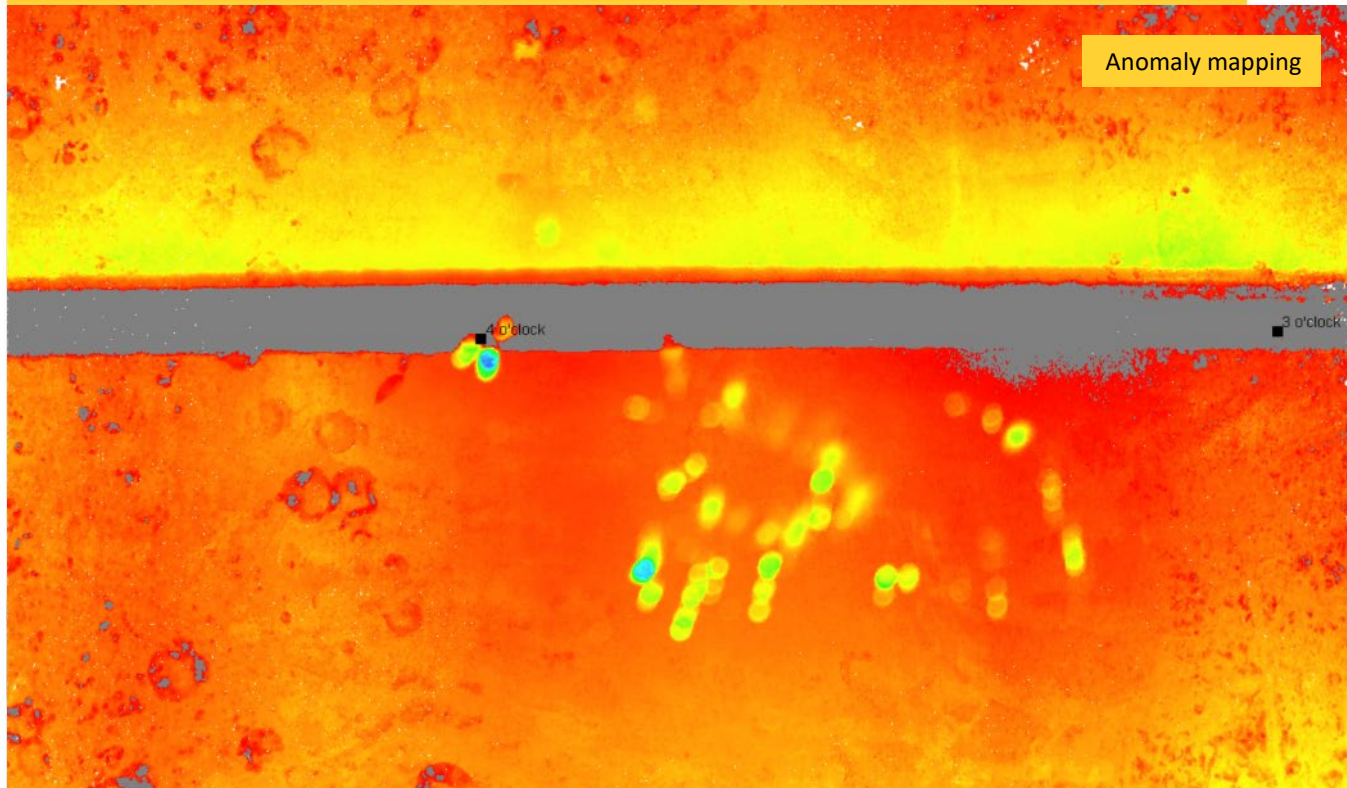
Result

Using the custom designed diver capture system, high quality data was retrieved, beating the client's <math><1\text{mm}</math> stipulation.

Data transmitted to engineering house as 3D geometry.

First-time clamp installation aided project efficiency.

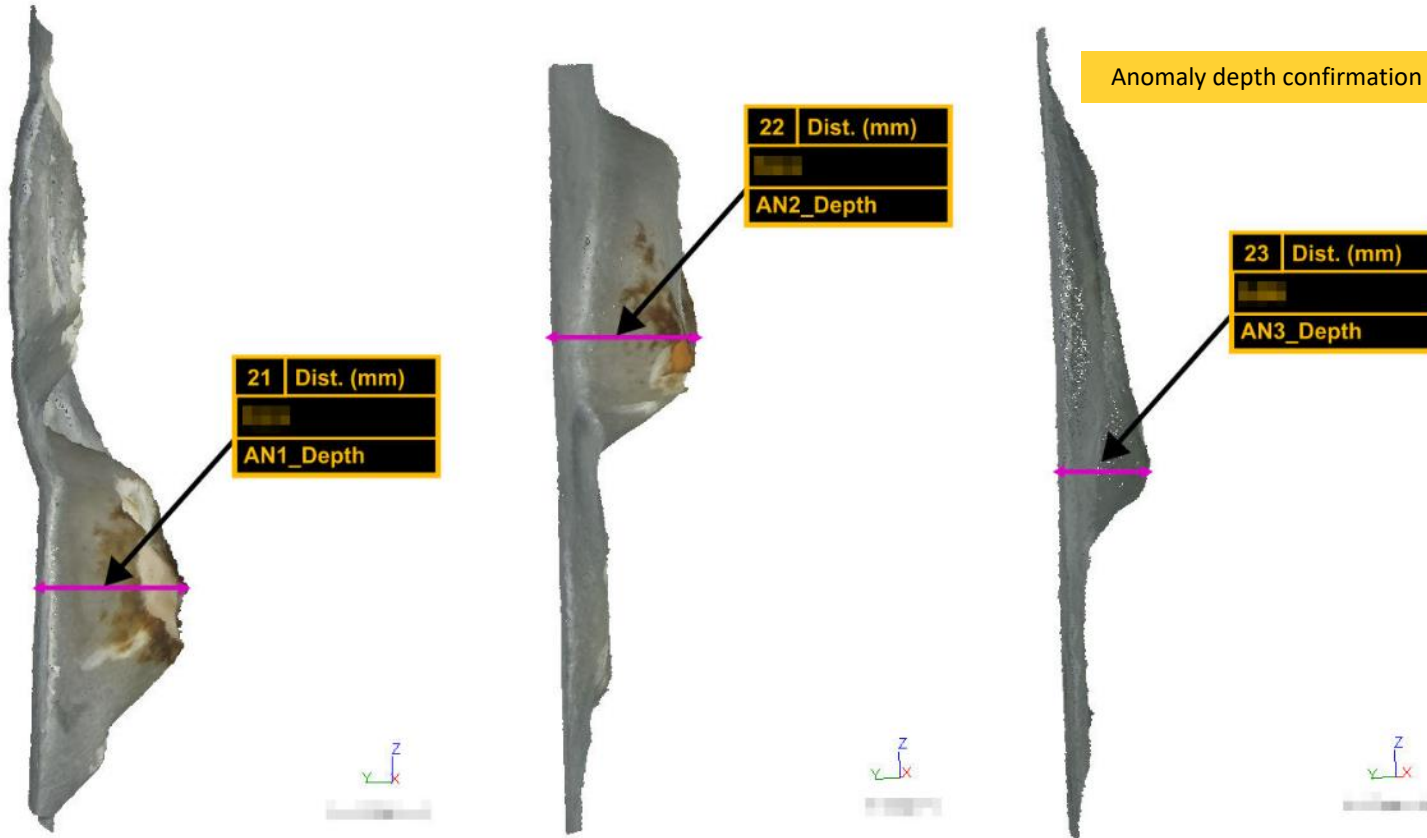
Increased understanding through collaboration



Brief

- Liaise with ROV team to design workflow which negates Viewport3 offshore attendance
- Mitigate photographic issues caused by reflective surface
- Ensure depth of pitting is accurately recorded
- Provide basis for future deviation mapping

Increased understanding through collaboration



Result

Project completed with indicated accuracy of 62 microns (0.062mm).

All anomalies fully captured and measurable.

Simplified and inclusive report issued to customer.

Retain data for comparison with future scans to enable propagation study.

Pre-lift 3D Scanning (decom)

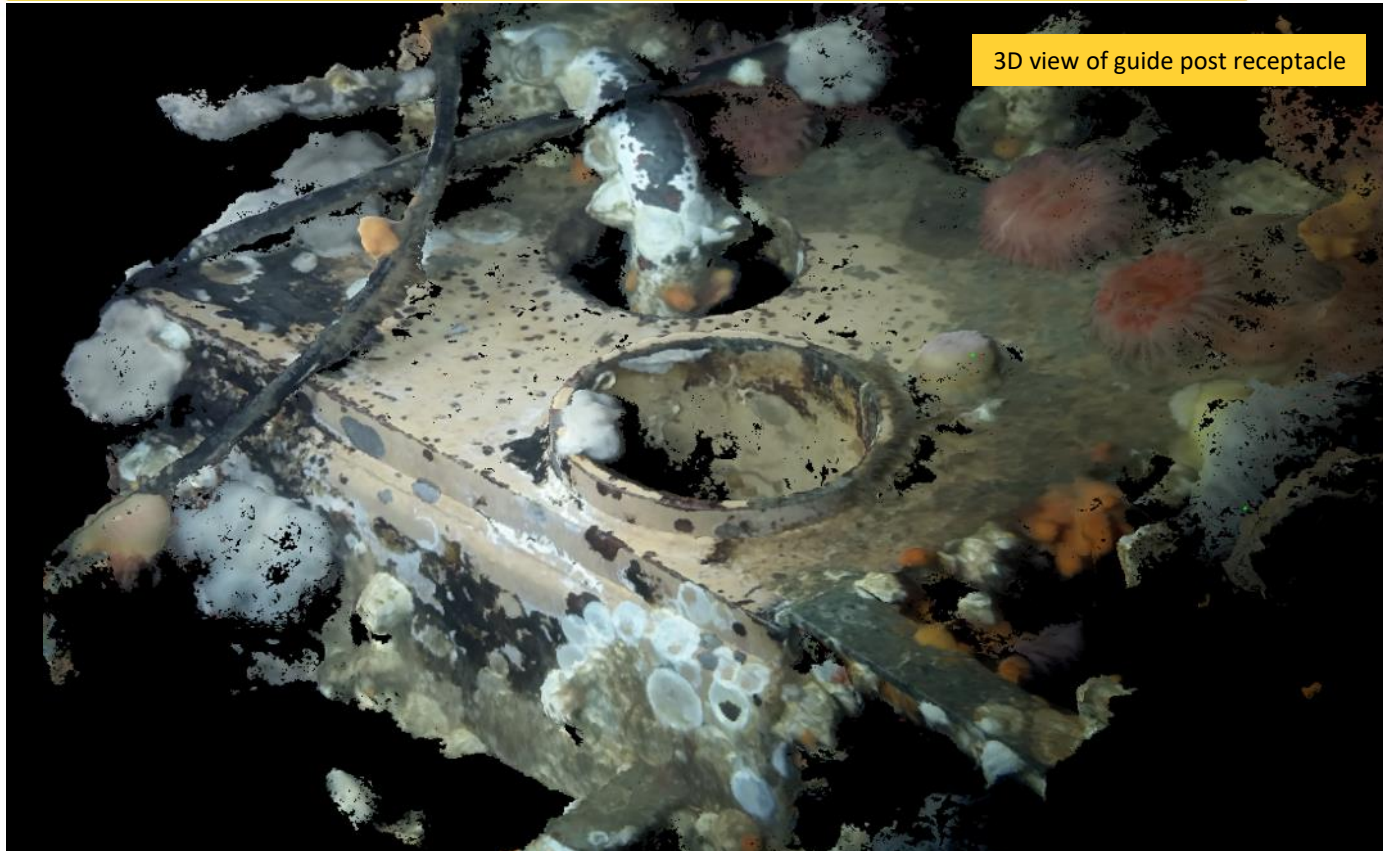


Lifting point detail from un-cleaned hardware

Brief

- Minimise cleaning requirements
- Capture lifting points
- Capture guide posts and receptacles
- Capture John Brown Interface
- Capture pile connectors
- Capture TVM interface joint
- Capture template flanges
- Verify TVM against CAD

Pre-lift 3D Scanning (decom)



Result

Comprehensive coverage of stipulated targets and ad-hoc items added by client during campaign.

All results verified on-board to client satisfaction.

3D understanding of the geometry as an aid to planning lift operations.

FPSO Internal Turret 3D Scan (decom)



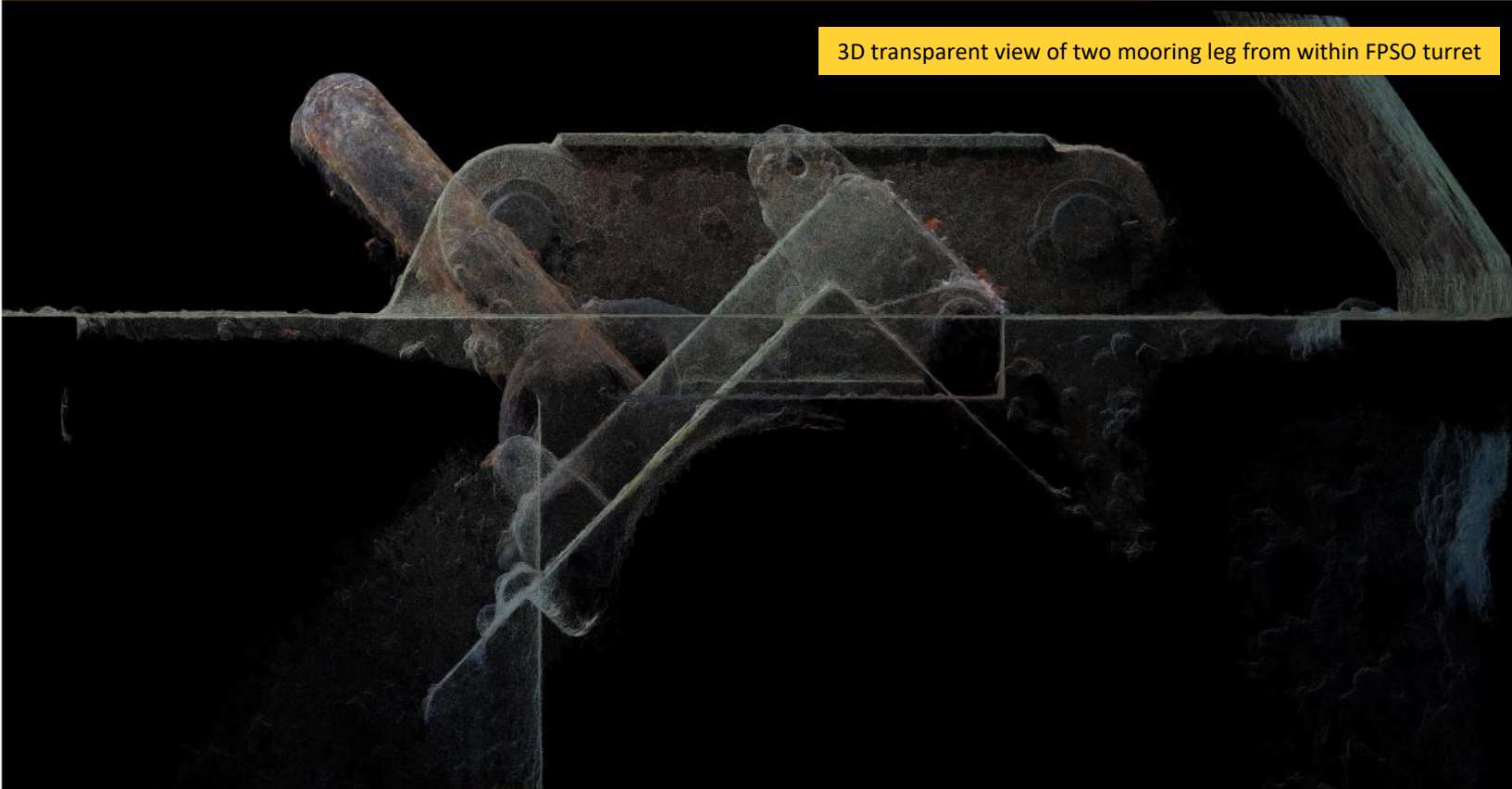
Brief

- Record chain table turret in 3D geometry
- Capture tie-back points and chain stoppers in high detail
- Highlight any issues likely to hinder line change out operations
- Provide images, 3D fly-through and live 3D options for divers / removal contractor use during planning operations

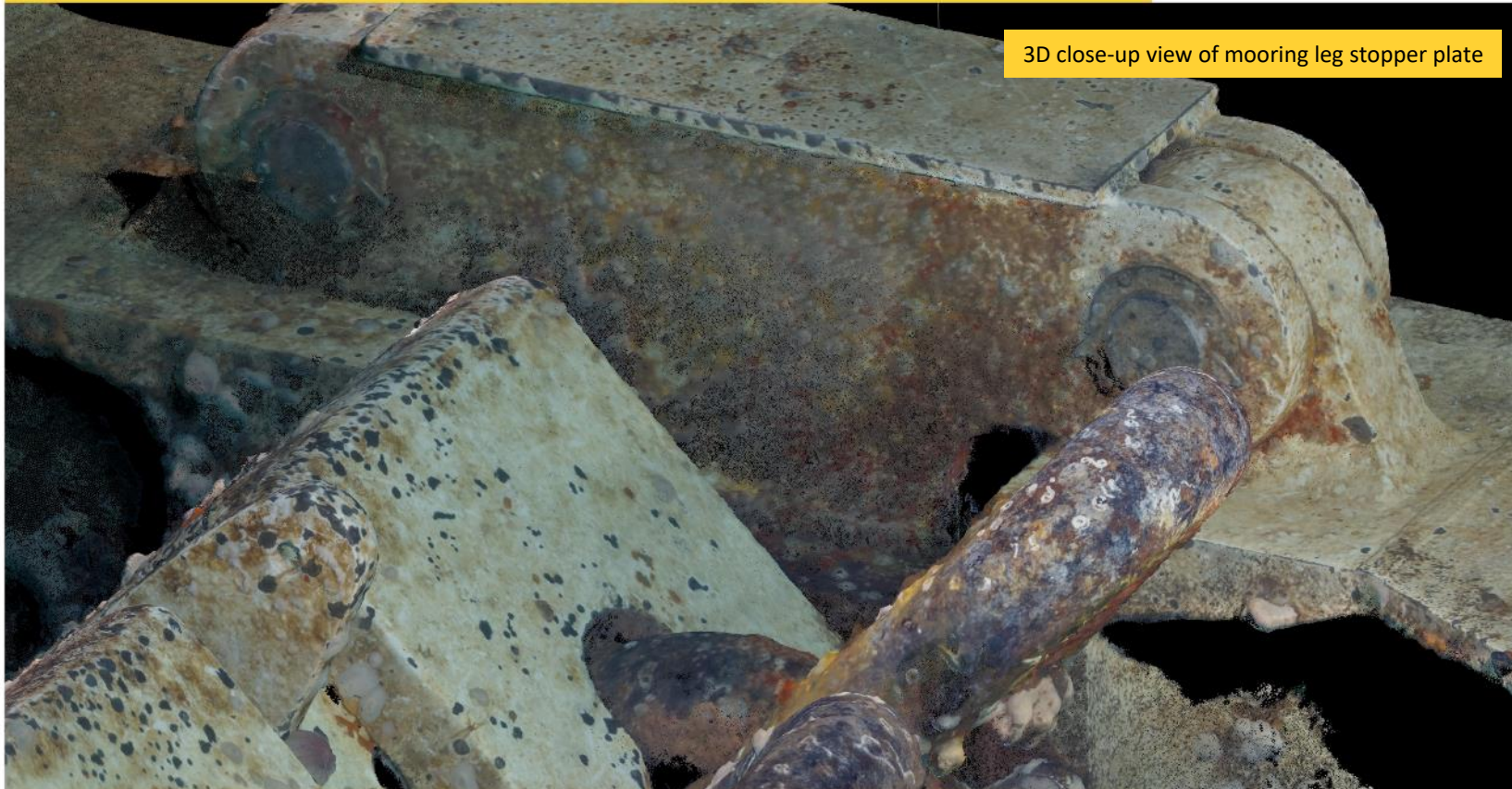
FPSO Internal Turret 3D Scan (decom)



3D transparent view of two mooring leg from within FPSO turret



FPSO Internal Turret 3D Scan (decom)



3D close-up view of mooring leg stopper plate

FPSO Internal Turret 3D Scan (decom)



3D Overview of chain table from within FPSO turret



Result

Comprehensive coverage of stipulated targets.

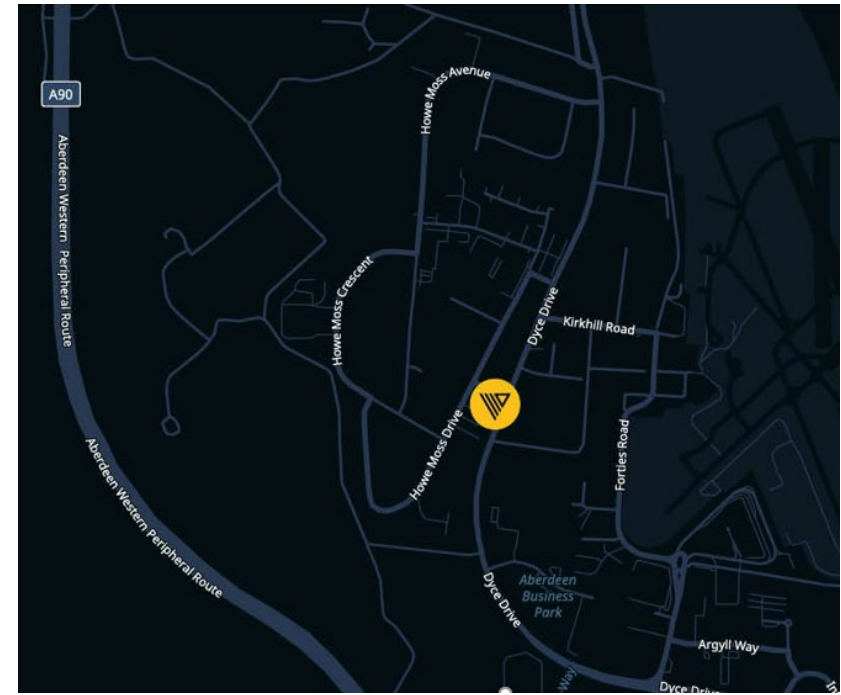
All results verified on-board to client satisfaction.

Essential geometry confirmed as being in good condition.

Issue media to customer to aid planning operations.

Come visit us to see;

- Full detail RAW clouds in native 3D environment
- Reporting methods used
- Reverse engineering techniques
- Intelligent data interrogation
- Deviation mapping examples



VIEWPORT3

EST 2017

viewport3.com