CAPABILITY STATEMENT

ROV ASSET INSPECTION

GEO OCEANS

THE PURPOSE

This document is composed to assist our clients and the supply chain to understand our group operating structure along with a high-level understanding of the benefits, services and specialist packages associated with our ROV capabilities.

COMBINED SERVICES

Vertech, Sonomatic, Geo Oceans and Abseil Access have combined into a single group that compliments each other's strengths. As a cohesive unit we can provide a wide range of services and specialist packages tailored to the needs of each client. No matter what the scope, we offer the very best mechanical, coating, alternative access, rigging, visual inspection, ROV, and NDT services, all within one group.

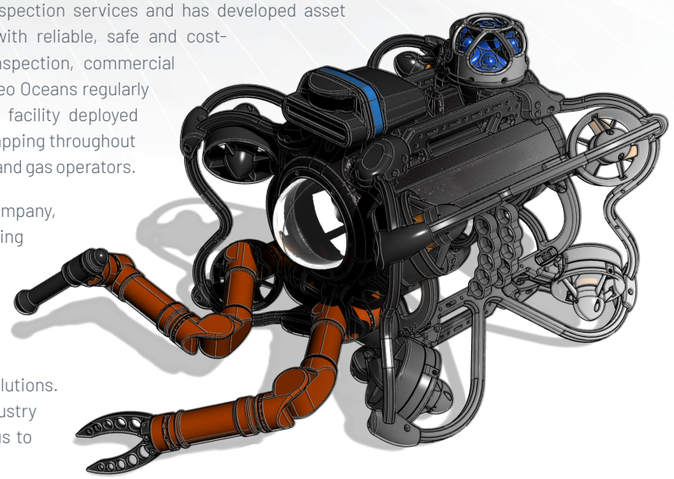
OWNERSHIP STRUCTURE

WE PRIDE OURSELVES ON OUR

CLIENT FOCUS | PEOPLE | SAFETY | QUALITY | INNOVATION

GEO OCEANS

Geo Oceans is a specialist provider of ROV inspection services and has developed asset deployed ROV technology to provide clients with reliable, safe and cost-effective alternatives to traditional manned inspection, commercial diving or work-class ROV inspection services. Geo Oceans regularly use this cutting-edge technology to complete facility deployed subsea surveys, asset inspections and ocean mapping throughout the Asia Pacific region for many of the largest oil and gas operators.



Geo Oceans works closely with its parent company, Vertech, to provide clients with industry-leading turnkey class inspection services on assets under Lloyds Register, Bureau Veritas, ABS and DNV GL classification society guidelines.

Group partner, Sonomatic, work with our techs on implementing advanced NDT inspection solutions. Being able to draw on their thirty years of industry experience is an invaluable resource, allowing us to create bespoke NDT tools for our ROV.

GROUP ACCREDITATIONS

- ISO 9001: 2015
- ISO 14001:2015
- ISO 29001:2010
- ISO 45001:2018
- ABS Hull Gauging Firm
- ABS Remote Inspection Techniques (ROV)
- ABS In-Water Survey
- BV Thickness Measurements of Hull Structures
- BV Remote Inspection Techniques
- BV In-Water Survey
- DNV Close up Survey
- DNV NDT on Classification Projects
- DNV Thickness Measuring
- DNV In-Water Survey (ROV)
- Lloyd's Register Remote Inspection Techniques (ROV)
- Lloyd's Register Thickness Measurements of Hull Structure
- NATA NDT Inspection

ROV SPECIFICATIONS

SPECIALIST ROV UNITS

Geo Oceans' ROVs can be deployed anywhere! They are specifically designed to eliminate the need for ROV support vessels and can be deployed from an asset or vessel of opportunity. Each of our ROV systems has a different specialisation and we will work with our clients to deploy the right ROV for the job.

GEO OCEANS RAP-ROV RAPID DEPLOYMENT

The RAP-ROV system is designed for rapid deployments on time-sensitive and low-risk ROV campaigns. This highly portable system can be operated by a small team of highly trained specialists. Speed and size haven't come at a cost of quality as this ROV system contains HD cameras and LED lighting for high quality image acquisition.

- HD visual inspections
- Light cleaning sheltered waters
- UTM NDT
- 15kg

GEO OCEANS CSS-ROV CLASS SURVEY SYSTEM

The Class Survey System (CSS) is Geo Oceans' most versatile asset deployed ROV system. This ROV has the flexibility to perform NDT & cleaning in many hazardous environments and is ideal for internal tank inspections or external jacket, hull, mooring and pipeline inspections.

- Spot cleaning for inspection
- UTM, CP, FMD NDT
- Light tooling
- 30kg

GEO OCEANS ADV-ROV ADVANCED ROBOTICS

This system is the latest ROV technology for projects where dexterity and finesse are critical to the subsea task. The ADV-ROV systems have 5-function robotic arms that can perform fine motor function, making it perfect for controlling highly sensitive NDT tools on the sea floor or on the bottom of tanks.

- Advanced manipulation NDT & cleaning
- Pitch control

GEO OCEANS HPV-ROV HIGH POWERED

Our most biggest and powerful ROV. The HPV excels in campaigns that requires a cumbersome payload, such as light tooling or high-pressure water blasters for bulk marine growth removal. Despite their size, these ROVs can still be deployed from assets or vessels of opportunity.

- Heaviest payload
- Longest excursions

SERVICES

HULL, RISER & SUBSEA INSPECTION

Our ROVs are deployed directly over the side or off vessels of opportunity, eliminating the need for support vessels.

Having the expertise to develop our own proprietary technology, we have many subsea tools that allow us to perform close visual, general visual and marine growth inspections, as well as damage, coating and corrosion analysis.

FPSO IWS/UWILD AND TANKS

Our project managers, ROV teams and asset inspectors work with clients to perform subsea inspection campaigns tailored to suit the specific class requirements and facility needs.

A brand new innovation is our 'link-to-shore' capability which allows clients to see the inspection in real-time. This not only gives the client a completely new understanding of the work we do, it also keeps them much more involved.

Our survey planning process is continually refined to help our clients streamline operations and is key factor in obtaining the most favourable conditions. If weather or SIMOPS should prove an issue, our team are trained to quickly adapt, being able to perform tank and other on-board inspections to still remain useful during delays. Our target is zero downtime.

ADVANCED NDT INSPECTION

Geo Oceans has proven experience in NDT inspection planning, advising clients on NDT methods, and providing solutions to ensure compliance to international standards.

Working with Sonomatic, we can provide a complete collection of NDT services, from commonly used conventional methods right the way up to bespoke advanced solutions. The ROV tools are operated using topside-controlled actuator arms and our technicians have hundreds of hours of flight experience, being able manoeuvre a vehicle with millimetre accuracy.

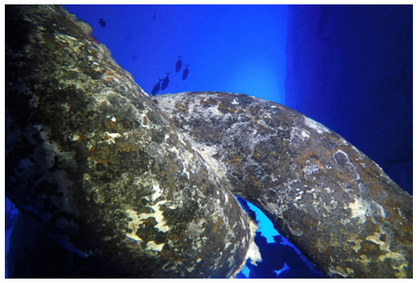
Our advanced NDT attachments can perform Ultrasonic Testing (UT) and Alternating Current Field Measurement (ACFM). We can also deploy advanced NDT equipment in a payload capacity.

MARINE GROWTH ASSESSMENT AND REMEDIATION

Geo Oceans conduct detailed jacket structure marine growth assessments and then model predictions of effective marine growth thickness for future periods, supporting asset life extension applications and engineering requirements.

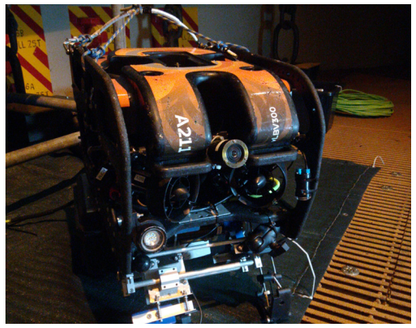
Any areas of the jacket that are covered in marine growth or are badly corroded can be cleaned for coating assessments, CVI, CP, UTM or advanced NDT inspections. Marine fouling can be removed without damaging the coatings or infrastructure, using tools including mechanical scrapers, brushes and high-pressure water blasters.

KEY PROJECT : SPECIALIST ASSET DEPLOYED ROV FPSO INSPECTION



Geo Oceans were recently contracted to complete a scope of work for a notable Oil and Gas company on their offshore FPSO facility. The facility featured a turret mooring system with one of the world's largest swivel stacks that has been engineered to date. This feature was implemented to allow the Facility to remain in-operation during cyclone conditions, which seasonally occur within the surrounding waters.

The primary challenge here being that the facility's turret had a large, submerged section which was situated below the facility's mean sea level. This area was permanently flooded with seawater due to an opening in the base of the turret. This essentially limited the client's ability to conduct inspections while the facility was in operation. Luckily however, Geo Oceans were able to utilise our mini-ROV Inspection Technology to perform visual and NDT inspection tasks within the submerged areas of the Turret.

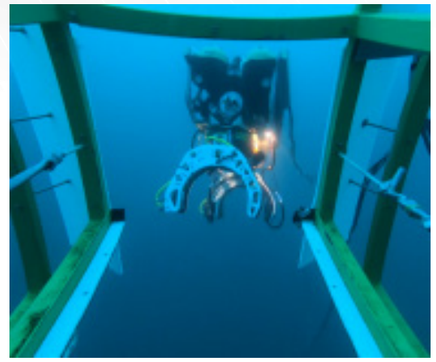


Overall, twelve different inspection locations were identified by the client for inspection and methodology evaluation. Of these twelve, six locations were inside the turret, with the remaining six being outside. The external locations required our ROV to fly through the annulus at the base of the turret and perform inspection tasks below the turret and hull, presenting an additional challenge due to the strong currents and water conditions surrounding the entry. The main factor impacting ROV access to the areas of interest was the space permitted for inspection within the structure due to the close proximity of equipment inside the turret, making it extremely congested. In-water surge and visibility were also considered as possible factors, which could influence ROV accessibility, but these did not present any challenges during the campaign due to our equipment's advanced in-flight capabilities.

In total, eight different inspection techniques were used within the inspection process. These methods ranged from GVI and CVI inspections in open areas, to advanced methods such as ACFM trials in very restricted access areas and external locations below the turret. In addition to this, Cathodic Protection (CP) and Ultrasonic Testing (UT) was also conducted, allowing for 3D modelling on areas such as the Mooring Chain. All the testing methodologies used were accompanied by cleaning services accomplished through using a high-pressure blaster equipped on our ROV. This allowed our teams to ensure that the surface of each area to be tested was correctly prepared before testing methodology was applied, enhancing the credibility and quality of results.

Overall, the execution of the project was very successful with the primary ROV used accessing all areas of interest inside and outside of the turret, including all three levels. This was an incredible outcome as it allowed our team to demonstrate the durability as well as capability of our ROVs in accessing out-of-sight, confined areas in harsher-than-usual conditions.

KEY PROJECT : JADESTONE SUBSEA FLOWLINE SCANNING



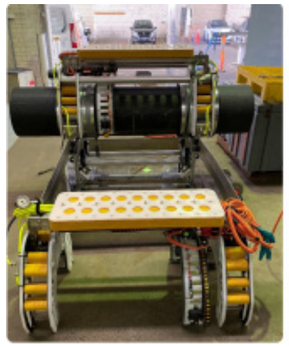
In July 2021, Geo Oceans, in collaboration with our sister company Sonomatic, were engaged by Jadestone Energy Australia to provide wall thickness scanning capabilities for use in the Montara Subsea Field. The aim of the project was to deploy tooling that would corrosion map the field joints at eight predetermined locations along the production flowline. By utilising small ROV systems to deploy the pipeline scanning tool, the system was able to be deployed from a vessel of opportunity.

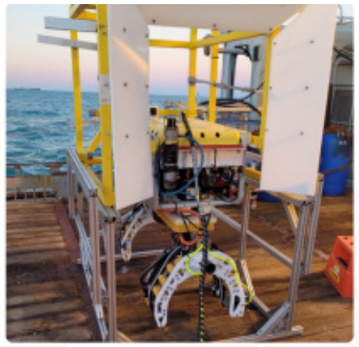
The team designed and developed an entire inspection suite that would address a range of challenges often experienced with wall thickness mapping on non-piggable subsea pipelines, whilst also significantly reducing cost by utilising a small ROV deployed from an already in-use and positioned vessel. The capability brought together a full vessel deployed ROV inspection suite with small ROV integrated tooling for circumferentially cleaning and scanning subsea flowlines

Miniaturisation of the tooling to suit integration with small ROVs presented considerable design challenges resulting in significant modification to the ROV system, data transmission and launch and recovery systems. This tooling system incorporated the necessary attachment mechanisms required to secure the tool to the pipe's weightcoat during scanning and provided thorough-tool cleaning for accurate marine growth removal. The need for reliable and safe deployment required the development of a bespoke launch and recovery system, unique to the small ROV and tooling.

The design philosophy for the entire tooling suite was based on the requirement to remain flexible and have the ability to rapidly mobilise and demobilise on short notice from vessels of opportunity or directly from assets. For survey positioning and support, Geo Oceans engaged Blue Ocean Marine Services who provided and operated the positioning equipment infield.

The synergy of these systems and teams enabled the successful completion of not only the project but parallel development of unique, complex technical systems that can be used for a range of applications in the future, whilst significantly reducing the cost of scanning subsea pipelines.





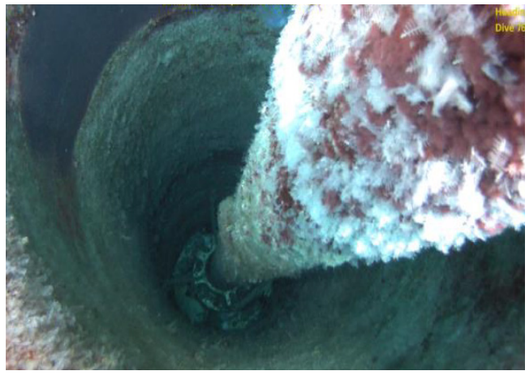
ADVANCED ROV & NDT

SUBSEA JACKET & RISER INSPECTIONS

Geo Oceans has extensive experience conducting jacket and subsea structure inspection scopes including cleaning, visual inspections, CP, UT and ACFM. Detailed experience schedules have been provided at Appendix A however a brief synopsis of our recent experience is presented in the subsequent sections below.

FPSO & CPF INSPECTIONS

Over the previous 4 years, Geo Oceans have maintained a consistent inspection and intervention contract with a client to conduct asset deployed ROV inspection scopes across their two floating offshore facilities: the Ichthys Venturer FPSO and the Ichthys Explorer CPF. Our services include provision of small ROV's equipped with NDT tooling to conduct tasks such as GVI, CVI, Cathodic Protection Measurements (Contact & Proximity), Ultrasonics and ACFM down to water depths of 130m. Through our thorough planning and consistent success across multiple campaigns, Geo Oceans have been able to ensure that both offshore facilities owned by the client, FPSO & CPF, retain their Classification status to remain operational in Australian waters.



JADESTONE ENERGY STAG & MONTARA JACKET INPSECTIONS

In 2020 & 2021 Jadestone Energy engaged with Geo Oceans to carry out a full jacket inspection of their Stag and Montara WH Platform on the North West Shelf and in the Timor Sea respectively. Geo Oceans provided both an asset deployed and vessel deployed ROV inspection solution working in challenging environmental conditions to deliver various scopes across the twofacilities and locations. The inspection of the Stag Jacket covered GVI, CVI and CP and identified a critical anomaly relating to a dislodged conductor spacer in the splash zone.

Following the campaign, Geo Oceans then engineered and proposed a diverless repair solution and later mobilised to the facility and repaired the conductor spacer using ROVs and rigging deployed from the platform without divers or a vessel. Geo Oceans also then proposed a cleaning method to present to NOPSEMA for the Stag Life Extension Programme and subsequently Geo Oceans were selected by Jadestone to provide bulk marine growth removal of the same platform. In addition to the Stag work, Geo Oceans performed complete jacket inspection on the Montara WH Platform covering GVI, some CVI and CP. Geo Oceans has extensive experience performing HP cleaning from small ROVs deployed from assets (FPSOs, CPFs, CALM Buoy's Jackets) or vessels of opportunity.

SUBSEA CLEANING

Geo Oceans has extensive experience performing HP cleaning from small ROVs deployed from asset (FPSOs, CPFs, CALM Buoy's Jackets) or vessels of opportunity.

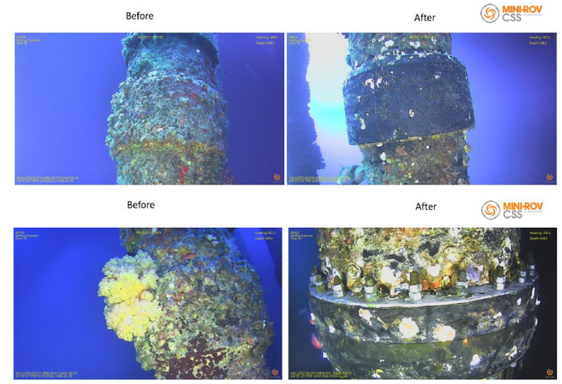
JADESTONE STAG CPF JACKET BULK CLEANING

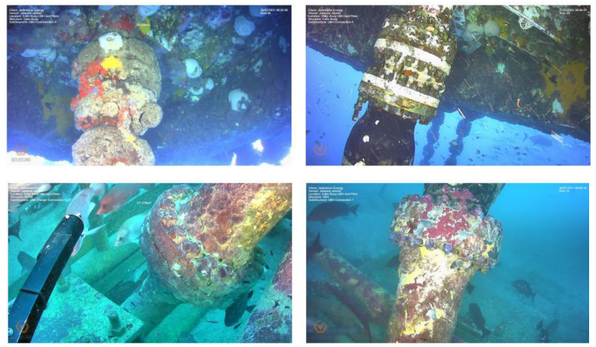
Geo Oceans were engaged by Jadestone energy to perform a marine growth cleaning program on the Stag CPF Jacket structure. The scope involved performing an assessment of marine growth across the entire structure, and then removing any marine growth from seawater level to mud line that protruded beyond 150mm from the structure, including through the splash zone. The Jacket has been in place for close to 30 years and has never been cleaned. It was found to have significant amounts of hard coral growth covering the structure with appurtenance up to 400mm in places. Geo Oceans are in the process of cleaning the structure using asset deployed ROV systems and HP Blasters which is providing the client with a very convenient, effective and cost efficient methodology to satisfy the facilities cleaning requirements. Once the Jacket is cleaned, Geo Oceans will be performing a GVI, some CVI, CP and FMD surveys across the Jacket Structure.

CPF HOSE BULK CLEANING

Geo Oceans proposed to use asset deployed ROVS (Falcons) with a large HP pump solution to perform bulk cleaning of Seawater intake hoses that extend 130m below the client's CPF facility offshore WA. Geo Oceans designed a HP pump solution using 22KW motors delivering up to 4000PSI at ~30LPM.

Geo Oceans then mobilised to the facility and has been successful in the work scope. The client also engaged Geo Oceans to perform additional cleaning tasks on other hoses on the CPF and on thrusters positioned on the FPSO using the same asset deployed methods and equipment.





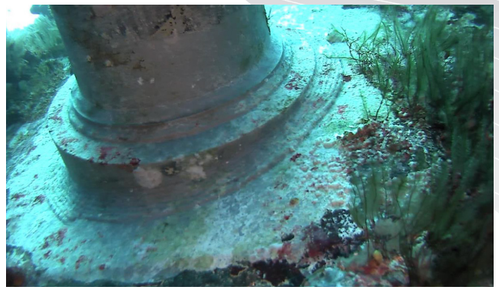
CALM BUOY UNDER BUOY HOSE & SUBSEA PLEM CLEANING

Geo Oceans were engaged by a client to clean an under buoy hose (UBH) and surrounding areas prior to a dive campaign intending to change the hose.

Falcon ROVs were deployed from a vessel and performed the cleaning using HP Blasters very efficiently n the splash zone and at seabed where the UBH joins the PLEM.

J TUBES & BOX SECTIONS CLEANING FOR ACFM

Geo Oceans performed asset deployed ROV cleaning of box sections and J Tubes on an FPSO RTM to prepare the surfaces for deployment of Sonomatic tooling for UT Corrosion Mapping and ACFM Array Probe scanning for crack detection. Geo Oceans utilised vLBV ROVs with an 18.5KW HP Pump solution for this project.



MONTARA SUBSEA FLOWLINE CLEANING FOR ADVANCED NDT

Geo Oceans and Sonomatic worked collaboratively to develop a tool based flowline cleaning solution to enable high accuracy circumferential cleaning of sections of Montara Flowline prior to advanced NDT scanning. The images below show the tool being tested pre-dive on deck, and then pre and post clean images recorded in July 2021.

MULTI-SITE JETTY & WHARF INSPECTION

Geo Oceans were contracted by Santos, Rio TInto and Woodside to deliver simultaneous jetty wharf inspetion campaigns. These inspections included GVI, CP and UT testing components as well as cleaning duties on selected jetty berths. All capabilities were delivered completely by our SRV-8 ROV from a vessel of opportunity, allowing for a rapid mobilisation with added ease. In addition to this, Geo Oceans also provided UAV isnepctions for out-of-water areas of insepction.

CONTACTS

GEO OCEANS

Nick Veitch
Managing Director
T: +61(8)6168 7611
E: Nick.Veitch@geooceans.com.au

Peter Tawse
Projects and Operations Manager - International
T: +1 281 769 7460
E: Peter.Tawse@geooceans.com.au

John Hebert
Operations Manager USA
T: +1 281 769 7460
E: John.Hebert@geooceans.com

SONOMATIC

Alex Cesan
Global General Manger
T: :+61(8)6240 2450
E: Alex.Cesan@sonomatic.com

Esteban Cesan
Americas Regional Manager
T: +1 281 769 1304
E: Esteban.Cesan@sonomatic.com

Zach McCann
South East Asia Regional Manager
T: +61 404 797 670
E: Zach.McCann@sonomatic.com

VERTECH

Tom Brennan
Managing Director
T: +61(8)6168 7600
E: Tom.Brennan@vertechgroup.com.au

Donovan Rheeders
Project Manager
T: +61(8)6270 4327
E: Donovan.Rheeders@vertechgroup.com.au

Bruce McKenzie
Offshore Department Manager
T: +61(8)6270 3432
E: Bruce.McKenzie@vertechgroup.com.au

Adam Haling
Project Manager - Vertech New Zealand
T: +61(8)6270 3423
E: Ada.Haling@vertechgroup.co.nz

Andy McKenzie
Operation Director - Vertech New Zealand
T: +64 6751 0910
E: Andy.McKenzie@vertechgroup.co.nz

VERTECH GROUP
www.vertechgroup.com.au

SONOMATIC
www.sonomatic.com.au

GEO OCEANS
www.geooceans.com