



## DECOMMISSIONING

When a project field has reached its operational life or has one stage complete, Aquatic, an Acteon company, will decommission the reel-able infrastructure and dispose of the recycled product through an accredited recycling partner. With close ties to our sister companies, structures can also be recovered and disposed of easily and appropriately.

Aquatic is a specialist in the decommissioning of flexible product. Our skilled teams and industry-renowned kit, strategically positioned around the world in key locations, are available to support your next project.

## THE OPPORTUNITY

With current market conditions bringing decommissioning to the fore, you need partners who have experience, both of working with you and similar contractors, as well as in the technical complexity of each decommissioning operation. Aquatic has been working in the North Sea for over four decades and has many years' experience working on decommissioning projects in Europe and the Gulf of Mexico. Our strength in depth in decommissioning means we have the people, equipment and understanding of what you require for operations large and small, anywhere in the world.

## THE PARTNERSHIP

Aquatic has Acteon sister companies who can work together with us to deliver a solution that encompasses the full decommissioning process. Our sister companies specialise in a range of overlapping and complementary services and skills and the Acteon offering means that we can be part of a wider partnership to manage the decommissioning project you require.

## THE OUTCOME

Working with Aquatic gives our customers the benefits of our strength and depth across HSEQ, commercial practices, highly trained people, range of equipment, and industry understanding. Decommissioning projects have to be carefully and skilfully managed, with product properly recycled to everyone's satisfaction and peace of mind. No one works with you more closely than Aquatic to deliver the success, value and security decommissioning operations demand. If you've worked with us before on subsea installation projects, you already understand how we do what we say and can have confidence in our track record. If you're new to Aquatic, don't just take our word for it, talk to industry colleagues and speak to our people, scrutinise our credentials and experience our strength in depth first hand.

## NORTH SEA ANASURIA DECOMMISSIONING PROJECT

The Anasuria Decommissioning Project is an excellent example of how a multi-skilled team managed the entire retrieval program for a major operator; the scope included recovery, cutting and disposal of a dynamic umbilical, and the laying of a replacement. The customer requested that both operations took place at the same time, and so one of the many challenges for Aquatic was to design a deck layout to include all required equipment in a limited space.

- Phase 1 involved detailed engineering and disposal management planning.
- Phase 2 was the offshore campaign; Aquatic supplied personnel and equipment to recover the 16.25cm umbilical. The dynamic control umbilical was 290metres long and weighed 60kg/m. The Aquatic engineering team developed packing drawings to determine wrap and termination hang off point and fastening configuration. They also ran calculations to determine the maximum grip force across the 2.35m contact length to ensure the product would not be damaged.

The vessel deck was congested with the product coming over the starboard side of the vessel and over the Aquatic inclined lay ramp. On the back of the lay ramp was an Aquatic 15Te 2-track tensioner at an angle of 26 degrees. The product was bent around a chute and reeled onto an 8.5m reel using a 400Te modular drive system with tracks. In addition, Aquatic deployed the new umbilical from a 9.2m reel.

- Phase 3, was the onshore campaign, which included testing, flushing and purging of product, cutting, waste management and finally recycling of the product.

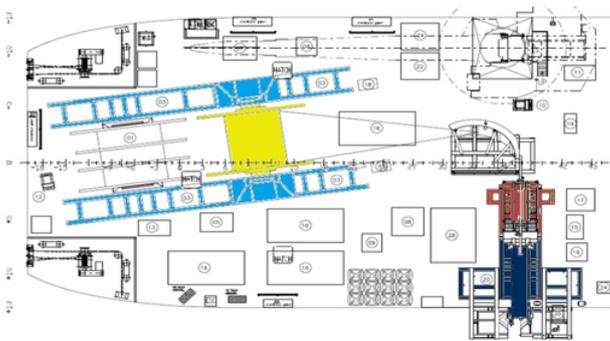
Prior to offloading the umbilical, Aquatic conducted a NORM (Naturally Occurring Radioactive Material) test to ensure there was no presence of radioactive material in the umbilical. A 10m section behind the bend stiffener was removed for the customer to test their product.

With the umbilical remaining on the reel, water was injected to dilute and displace the umbilical content into waste tanks. The water was stored and disposed of by a specialist partner. Once flushed with water the line was purged with nitrogen to remove any contaminated water and leave a nitrogen blanket in the line.

During the cutting and disposal process Aquatic took significant safety precautions to ensure no personnel were injured and the environment was protected. It is important that no contamination gets into the substructure so as an extra precaution polyurethane drain covers were used to prevent liquids migrating into the yards separation systems. The offshore campaign was successfully completed and the product was transferred to Wallsend in the North East of England.

The project was executed successfully for both campaigns.

### Phase 2 Offshore campaign: Deck layout



- 8.5m reel
- 400Te modular drive system with tracks
- 15Te 2-track tensioner
- Lay ramp



AQUATIC is a Registered Trade Mark of Aquatic Engineering & Construction Ltd

The Americas | Europe, Middle East & Africa | Asia Pacific

[www.aquaticsubsea.com](http://www.aquaticsubsea.com)

an **ACTEON** company