

July 2005

Application sheet 014: Ormen Lange Gas Field Norway

## **July 2005: BioTector Series 4 plus TOC analyser delivered to the gas processing facility for the Ormen Lange gas field in Nyhamna, Norway.**

In July 2005, Pollution Control Systems Ltd delivered a BioTector Series 4 plus TOC analyser to the gas processing facility in Nyhamna which is located in the west of Norway. The facility in Nyhamna is used to process the natural gas from the new Ormen Lange gas field, which is about 100km off the west coast of Norway. The processing of the gas involves the separation of the gas from condensate, water and antifreeze, all of which are found in the untreated gas pumped ashore from the gas platform. The condensate is stored and exported by tanker, while the antifreeze is re-used. The water is cleaned and discharged to the sea.

As the water discharged to the sea contains high levels of salt, the BioTector Series 4 plus TOC analyser, with Hastelloy C276 and PFA wetted parts was chosen to monitor the water discharge, and ensure that it complied with EPA requirements. The project management group AnoxKaldnes selected the BioTector after a careful investigation of all possible alternatives. AnoxKaldnes carried out a detailed study into the requirements of the Nyhamna processing plant, and after carefully checking references from previously installed BioTector TOC analysers, were satisfied that the BioTector TOC analyser could meet the high levels of reliability, durability, safety and environmental controls required by the oil and gas industry.

“I am very pleased that the BioTector Series 4 TOC analyser complies with high standards imposed by the oil and gas industry”, said Mr Martin Horan, Managing Director of Pollution Control Systems Ltd. “Providing a high reliability, low maintenance system in a high salt and particulate environment is a one of the BioTectors successes.”

Background on the Ormen Lange project:

The Ormen Lange project is one of the largest construction projects in Europe, with a construction budget exceeding 9 billion Euros. The Ormen Lange gas field is expected to produce 20 billion standard cubic meters of gas annually. The gas is first processed at Nyhamna in Norway, before being transported through the North Sea to Easington in England in the new Langeled gas export system.

The Langeled gas pipeline is the world's longest undersea pipeline, with a length of 1200km, and an average diameter exceeding 1.1 meters. Its construction will require approximately 1 million tons of steel.

For additional information on the Ormen Lange project, please see the website: [www.ormenlange.com](http://www.ormenlange.com)

Pollution Control Systems Ltd.

Pollution Control Systems Ltd is a highly respected manufacturer of on-line TOC analysers, with manufacturing and R&D facilities located in Ireland. They specialize in high reliability, low maintenance solutions for difficult applications where the sample typically may contain high levels of salt and particulates. The installed base includes corporate customers such as DOW Chemicals, Shell, Degussa, Pfizer Pharmaceuticals, Eli Lilly and Nippon Paper.

For additional information, please see Pollution Control Systems website: [www.biotector.com](http://www.biotector.com)