IPI’s inflatable packers yet again outperform standard technology—now during intensive Queensland coal methane well testing operations

This is a picture of a North American oilfield style packer element following several “DST” well tests in Queensland. This testing, in what are expected to become the world’s biggest coal bed methane fields, is highly intensive “24/7” activity. Several manufacturers make this type of inflatable packer in the USA and Canada and the construction is a common format in the worldwide oil and gas industry. Queensland well testing specialists report that these packers last for 6 or 7 tests on average in coal bed methane wells, but no single element in several years of operations has been known to exceed 14 tests - sometimes they even fail on their first test.

The second picture shows a pair of Australian designed and made inflatable packers - one of the first pair failed after 27 tests with one of the big four Queensland CBM companies. The pair were then “retired” by the client, although the second could have continued to run.

This inflatable packer is of a type originally developed in Western Australia for deep water wells and, following further development by IPI of both the packer technology and the tools that go with it, is now in use in Queensland, having previously been used within the CBM industry in India, Asia and Africa.

The rust has mainly accumulated since their last run, but this performance is no fluke. At the time of photo a second pair (third picture) had done 24 tests and both are still in good working order.

IPI inflatable packers are designed and manufactured in Perth in Western Australia and can work at temperatures up to 150C(302F), 12,000 psi and expand their diameter by 300%. These maximums cannot be achieved concurrently - there is a trade off. For this type of well water packer made by IPI the best performance is below 80C (176F) - which covers the vast majority of CBM operations. IPI acknowledge that for operations 100C ( 212 F) to 150C (302F) the common style of oilfield packer will have a better performance trade off compared to their current mainstream product.

IPI packers are used in a wide variety of industries, including ore body fracturing in the worlds largest underground copper mines in Chile as well as permeability testing in remote mine sites, such as within the Arctic Circle.

Commercial Director Howard Kenworthy commented: “We have always known that whilst our type of inflatable packer was very durable at lower temperatures, we did not have a great performance at over 100C compared to the conventional type of inflatable packer found in the oilfield industry. But that is not an issue in CBM. We already knew that our type of packers were better for repeated hydrofracture type work, such as in the copper mines, as well as far superior to the classic type of gas packer still commonly used for permeability testing. So we again have a clear comparison within one of our target markets that demonstrates the superior performance of our type of packers—this time indicating something like 4 times their durability compared to what is the most common type of packer technology in the world. This is great news for the CBM industry here and very encouraging for the other developments we are making” - Ends.