CleanStim AUS$^{SM}$ Fracturing Fluid Service
Specifically Formulated for Australian Unconventional Formations

CleanStim AUS$^{SM}$ fracturing service uses a new fracturing fluid formulation made with ingredients sourced from the food industry.*

The CleanStim AUS fluid system components include a gelling agent, crosslinker/buffer, breakers and a surfactant. Before use, the CleanStim AUS formulation is mixed on-the-fly at the job site with the water provided by the operator.

**Excellent Fracturing Performance and Reduced Environmental Risk**

CleanStim AUS service is a major advance in fracturing fluid technology. In addition to environmental benefits, the CleanStim AUS fluid system provides excellent performance in terms of pumpability, proppant transport and retained conductivity. Laboratory tests showed over 90% retained conductivity after 24 hr of flow. The system is applicable over a broad temperature range providing up to 30 minutes pumping time at 225°F (107°C).

**Applicable to Gelled Fracs and Water Fracs**

The CleanStim AUS fluid system can be crosslinked and used for conventional gelled fracturing treatments that require a significant amount of proppant.

In addition, the components can be used to create a linear fluid system to provide friction reduction for water frac treatments commonly used in shale reservoirs.

**Other Significant Environmental Advancements**

**The Halliburton ADP™ Blender**

The Halliburton advanced dry polymer blender mixes the powdered gelling agent directly with water eliminating the need for carrier fluids. In addition, this means no more fluid is mixed than required for the treatment.

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*Intended Use - The CleanStim AUS formulation is designed for use in hydraulic fracturing. Even though all the ingredients are acquired from food suppliers, the CleanStim AUS fluid system should not be considered edible.
The CleanStim AUS fluid component materials are generally recognized as safe (GRAS) by the US Food and Drug Administration (USFDA) under sections 201(s) and 409 of the US Federal Food, Drug, and Cosmetic Act. http://www.fda.gov/Food/IngredientsPackagingLabeling/GRAS/default.htm

No modifications, with the possible exception of packaging, are made to the CleanStim AUS materials prior to their introduction to Halliburton’s well-site blending equipment.

**For more information about how CleanStim AUS SM fracturing service can help improve your fracturing operations in Australia, contact your local Halliburton representative or email stimulation@halliburton.com.**