

Wraith™ Frac Ball Addresses Complex Conditions Encountered

An existing well completion partner in China chose the Wraith Frac Ball to isolate a total of 9 zones across two horizontal shale gas wells.

Each well required a different approach to the setting and stimulation processes due to the varying complex lithological profiles and operational requirements.








The first well's TVD measured 9,759 ft with bottomhole temperatures reaching up to 225° F. A total of 3 fracturing stages were successfully performed utilizing frac sleeves. The Wraith Frac Balls used ranged in diameter from 2.125" – 2.325" with the diameter increasing by 0.125" for each successive stage to match the graduated seat interference sizes.

The operation took up to 3.5 hours of pump time per stage to reach a maximum pressure of 8,122 psi and realized a 100% success rate with zero failures.

The second well featured a TVD of 10,978 ft and a MD of 13,885 ft with bottomhole temperatures ranging from 190° F – 205° F. The crew completed 6 fracturing stages using frac plugs run in on wireline and 2.25" diameter Wraith Frac Balls.

Each stage required an average of 3.7 hours of pump time to reach a maximum 11,313 psi and realized a 100% success rate with zero failures.

Quick Facts

	Location	China
	Wellbore	Horizontal
	Lithology	Shale
	Wells	2
	Stages	9
	Ball Profile	2.125-2.325"
	Frac Fluid	Guar Gum

Highlights

Involved HP Conditions

Required No Additional Interventions

100% Success Rate