

TECH DATA SHEET

RECEDO Thunder™

Dissolvable Frac Plug



OVERVIEW

Frontier Oil Tool's **RECEDO Thunder™** Dissolving Frac Plug has been uniquely designed to prove a solution for casing sealing issues when using dissolvable frac plugs.

A lengthened elastomer seal (approx. 1-1/2") has been developed for difficult casing ID sealing scenarios such as heavy scale, rust, and elongated casing ID issues. The plugs seal employs a "totally" dissolvable elastomer that provides an initial seal for a period but will ultimately break down into sand size particles.

The RECEDO Thunder™ employs all the benefits that the RECEDO Lightning™ has and uses the same WLAK for the same sizes.

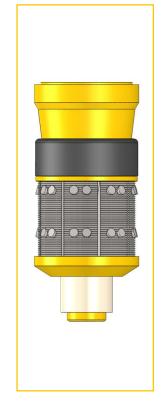
APPLICATIONS

- Plug-and-perf completions
- Cemented Liner
- Extended reach

- Isolation of individual zones for stimulation
- Can be used in highly deviated horizontal wells.

BENIFITS

- Pressure Rating 10,000 psi or above.
- Trip in speeds up to 800 ft/min.
- Compatible with most completion wellbore fluids; clean or dirty water.
- Ball-in-place or surface drop-ball designs are available upon request.
- Operational temperature 70-325°F (21-162°C).
- Dissolving removal but optional drill out with conventional tubing or coil tubing.
- Fewer anchoring buttons than other designs, means significantly reduced debris in the well.
- Button penetration into casing ID is less the others, minizine any casing ID damage and increasing casing integrity.
- Anchors securely in most casing grades, even Q-125.
- Sets with traditional wireline setting tools like the Baker E4 - #10 & #20.



CASING				TOOL OD		PRESSURE RATING	
OD	Weight	OD	Weight				
in	lb/ft	mm	kg/m	in	mm	psi	Mpa
5-1/2	20-23	139.7	29.8-34.2	4.375	111.1	10,000	69