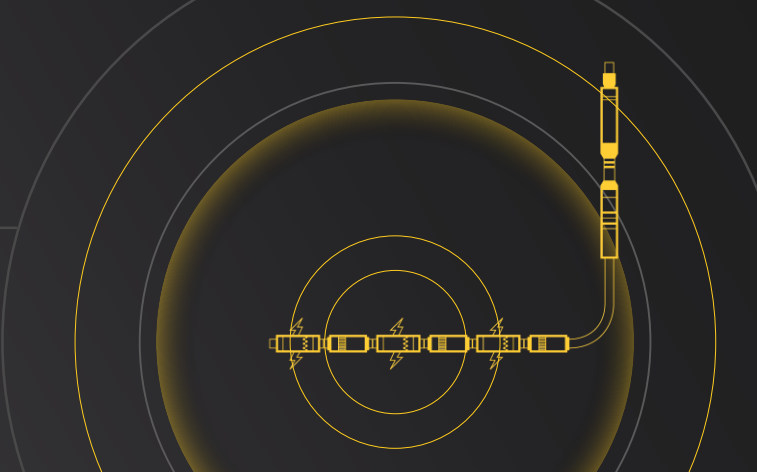


TECH DATA SHEET

RECEDO Lightning™

Dissolvable Frac Plug

Product Number: FOT 7DF-101



OVERVIEW

Frontier Oil Tool's **RECEDO Lightning™** Dissolving Frac Plug has been designed and extensively tested to seal with frac pressure of 10,000 psi. The simple but effective design is a balance of compactness and strength. It uses fewer anchoring buttons, less than other designs on the market, but is reliable and rock-solid.

The **RECEDO Lightning™** provides both a small, but effective, elastomer and a metal-to-metal seal that provides a barrier for numerous casing ID conditions, even during low pressure tests.

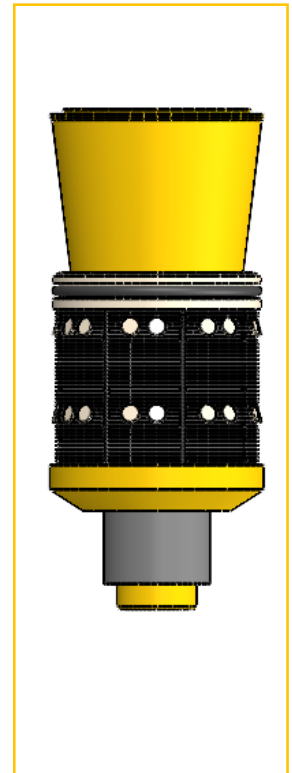
The **RECEDO Lightning™** materials can be made-to-order to dissolve in a few hours or in days, reducing rig time and eliminating the need for coil tubing clean up runs which adds higher costs and time.

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, minimize 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		SPECIAL		PRESSURE RATING	
OD in	Weight lb/ft	OD mm	Weight kg/m	in	mm	psi	Mpa
4-1/2	11.6-13.5	114.3	17.3-20.1	3.66	92.7	10,000	69
4-1/2	15.1-16.9	144.3	22.5-25.2	3.55	90.2	10,000	69
5-1/2	20-23	139.7	29.8-34.2	4.375	111.1	11,000	75
5-1/2	26	139.7	38.7	4.13	104.9	12,000	82
6	23-26	152.4	34.2-38.7	4.90	124.5	10,000	69

