

TerraPULSE Utilized In Abrasive Sand Perforating

Client completes 3 separate perforation jobs on a single pad without encountering any lock-up by using the TerraPULSE CT Agitator in Karnes county, Texas

Challenge:

To provide a friction reduction tool that would mitigate lock-up on the client's coiled tubing as sand slurries pass through the remainder of the BHA after deactivation of the sand perforating tool.

Solution:

The 3½-in. TerraPULSE™ CT Agitator™ was selected to generate axial oscillations within the coiled tubing in order to enable sand and small debris to pass through BHA with ease. The TerraPULSE generates up to 66% more energy than legacy CT Agitator systems, which would mitigate lock-up in these extended reach perforation jobs while operating within the client's desired flow rate.

Results:

The TerraPULSE CT Agitator BHAs successfully reached PBTD and allowed the customer to perform the sand perforating operation for each well without NPT. Over the course of these jobs, the TerraPULSE provided the following benefits:

- Successfully reached PBTD on all three wells without NPT
- No lock-up incidence encountered
- No screen sub was needed
- Tool operated effectively over a wide flow range (84 - 230 gpm)
- Customer was pleased with the performance of all three tools
- Awarded additional work for this application

Well	PBTD (ft)	Average Flow rate (bbls)	TerraPULSE Circulating Hours	Perforating Hours	Total Hours Downhole
1	16,720	2.9	31.3	1.7	33
2	16,760	3.0	20.8	1.8	23
3	16,932	2.7	16.6	2.3	19



Client:	Confidential
Well Name:	Confidential (Multiple)
Field/Block:	Eagle Ford
County:	Karnes
State:	Texas
Country:	USA
Date:	Q3 2020



3½-in. TerraPULSE CT Agitator Tool Specifications

Length:	52-in.
Weight:	73 lbs
Recommended Mud Weight:	8 to 10.5 ppg
Recommended Flow Rate:	84 to 230 gpm
Temperature Range:	150 - 320°F
Pressure Rating:	10,000 psi
Max Tensile:	216,000 lbs
Rig Connections:	2½-in. REG