

CASE STUDY**SCORPION™ COMPOSITE PLUG****20,000 Feet of Complex Lateral, 144 Plugs, One Bit for Millout****OPERATOR SAVES TIME AND BIT—BY QUITE A BIT**

Challenge: Maximize cost and operational efficiencies in a complex, 20,000-foot horizontal well in the Utica Basin with an exceedingly large number of plugs.

Solution: Deploy the Scorpion Composite Plug, which features a shorter design than conventional plugs, minimizing bit wear and resulting in significantly faster millout times.

Results: Drilled out all 144 composite plugs with a single bit, completely eliminating the costly process of removing the tubing and replacing the bit.



144 Scorpion Composite Plugs can be milled out with a single bit with visibly less wear than when milling out competitor plugs.

NINE'S SCORPION COMPOSITE PLUG SAVES THOUSANDS OF DOLLARS BY ELIMINATING MULTIPLE TRIPS

A Northeast operator streamlined their millout procedures in one of the longest laterals in North America.

Drilling longer horizontal wells comes with considerable complications. Using numerous frac plugs calls for the use of multiple drill bits and trips. The milling out process can be timely and cost defective. The Scorpion Composite Plug from Nine Energy Service provides an ideal solution for these kinds of challenging conditions. Manufactured almost entirely of composite material, it is significantly shorter than most plugs of its kind, allowing for a much faster millout. Other features include a scientifically molded construction for greater reliability, a compression-energized single elastomer element segmented backup rings, and ceramic gripping buttons.

Scorpion plugs were deployed on an extremely long lateral—over 20,000 feet requiring 144 composite plugs. Normally on a well this length, one drill bit would be able to mill out 80 plugs or so. After that, most operators would be required to pull the tubing to snub point, snub out, replace the bit, snub back in, and resume drilling.

Short on time, long on results

The shorter length and overall design helped the operator drill out all of the 144 Scorpion Composite plugs using a single drill bit. At a 10-minute average millout time, the operator was time efficient and saved thousands of dollars from foregoing multiple bit trips.