**GMT Exploration Improves Footage and ROP, Saves 2.5 Drilling Days Using StingBlade Bits**

Conical diamond element bits boost performance in three consecutive wells, saving trips and increasing ROP in interbedded formation, Permian basin.

**CHALLENGE**
Drill three horizontal wells in interbedded formations and high unconfined compressive strength (UCS) while improving ROP and run length.

**SOLUTION**
Use StingBlade* conical diamond element bits to drill through hard, transitional formations. Place Stinger* conical diamond elements across the bit face using the IDEAS* integrated drillbit design platform to ensure maximum durability for longer runs with high sustained ROP.

**RESULTS**
- Saved 2.5 days between three wells.
- Drilled the same interval on three consecutive wells, saving a trip on each.
- Increased footage by 77%, 73%, and 44% with corresponding ROP increases of 29%, 26%, and 10%, respectively, compared with offset well averages.

“The StingBlade bits exceeded our performance expectations, drilling further, faster, and with less damage than ever before.”

Gema Volek
GMT drilling engineer

Offset analysis results show that StingBlade bits achieved some of the longest runs and fastest penetration rates compared with conventional PDC bits.
**CASE STUDY:** StingBlade bits save 2.5 days for GMT Exploration, Permian basin

**Optimize drilling using StingBlade bits**
To improve bit durability and ROP, Smith Bits, a Schlumberger company, recommended StingBlade bits with Stinger conical diamond elements across the bit face. Engineers used the IDEAS platform to determine the optimal placement of the Stinger elements for the specific application. The Stinger elements’ 3D conical shape is designed to fail high-compressive-strength rock with a concentrated point load while maximizing strength and durability with a thicker diamond layer. This enables StingBlade bits to drill farther through formations that typically cause impact damage to PDC bits while also sustaining higher ROPs throughout the run.

**Saved 2.5 days across three wells**
One StingBlade bit drilled 4,030 ft at 57 ft/h, which increased footage by 77% and ROP by 29% when compared with the average performance of bits used in offset wells. On the following two consecutive wells, StingBlade bits repeated the performance improvements over the average offsets; the second run had 73% greater footage and 26% greater ROP, and the third run had 44% improved footage and 10% higher ROP. Between the three wells, GMT Exploration saved a total of 2.5 drilling days.

---

*Mark of Schlumberger
Other company, product, and service names are the properties of their respective owners.
Copyright © 2014 Schlumberger. All rights reserved. 14-BT-0036

---

The wells that used StingBlade bits completed the interval in the shortest times compared with offset wells.