

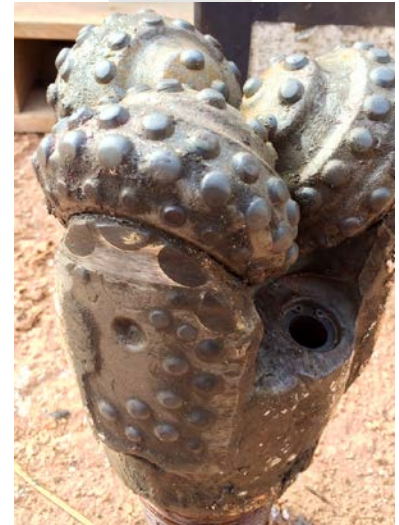
Compass™ Drills 39% Faster

6-1/8" CM53D3PZ, Woods County, Oklahoma

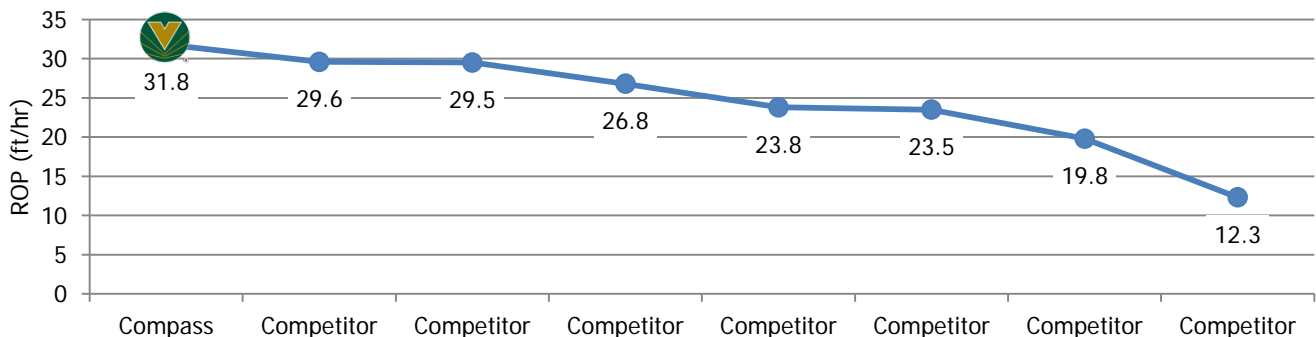
CHALLENGE: To improve ROP in the Mississippi Limestone lateral of Northern Oklahoma. Bits in this area are prone to heavy shirttail wear and frequently encounter chert causing chipped and broken teeth. The average ROP in this application is 22.8 ft/hr (6.9 m/hr).

SOLUTION: Engineered with application specific technology, the Compass Series provides excellent steerability and high rates of penetration even when weight on bit is limited. The bearing provides long, reliable performance in deep hole, long reach sections where increased RPMs in motor applications are commonly encountered. This 6-1/8" CM53D3PZ also features Varel's patented EdgeGuard™ technology wherein tungsten carbide microshields are brazed into shallow receptacles along the shirttail for maximum downhole protection.

RESULTS: After drilling 867 ft (264 m) at 31.8 ft/hr (9.7 m/hr), this bit was POOH with a 4-4-WT-A-E-IN-RG-TD dull grade. One of only two offset bits to achieve TD and drilling 39% faster than the offsets, the Compass series has proven itself in the North Oklahoma/South Kansas region. The shirttail received heavy downhole abuse but, thanks to its EdgeGuard protection, remained durable to TD.



Varel's EdgeGuard provided much needed shirttail protection, thus minimizing the external damage to the shirttail protecting the bearing seal from exposure to due wear.



For more information on this bit and proposed applications please speak to your local Varel representative.