

SelectShift Motor With New ERT Power Section Drills A Fast Vertical

7½-in. SelectShift downhole-adjustable motor outfit with a new 725ERT7872 power section provides excellent performance while drilling a vertical to TD in Dunn county, North Dakota

Challenge:

To provide a high-performance motor capable of drilling the client's upper and lower 8¾-in. vertical sections to TD in while maintaining a competitive ROP.

Solution:

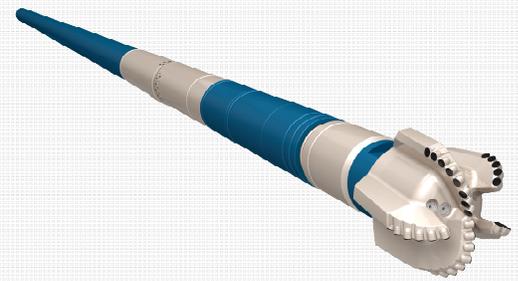
The operator selected the 7½-in. Vector™ Series 50 SelectShift™ drilling motor paired with a newly developed 7/8 lobe, 7.2 stage ERT™ power section to complete the vertical section of the well. The Vector Series 50 SelectShift drilling motor provides industry leading torque output capability with 100% flow to the drill bit. Engineered to be 35% stronger than previous generations of motor technology, this motor can be run on our strongest ERT™ power sections.

A 8¾-in. ReedHycalog™ Tektonic™ TKC66-P1 drill bit was selected to provide an aggressive ROP and consistent toolface control while drilling the vertical section of the well.

Results:

The 7½-in. Vector SelectShift motor and 8¾-in. Tektonic TKC66-P1 Bit combo BHA performed well drilling from 2,586 ft MD, reaching the desired depth of 9,773 ft MD in 52.0 total drilling hours, achieving an overall ROP of 138.2 ft./hr. Over the course drilling this section, the Vector Series 50 SelectShift motor BHA delivered the following results:

- Drilled 7,187 ft in the vertical section
- Average ROP of 138.2 ft/hr over 52 drilling hours



County:	Dunn
State:	North Dakota
Country:	USA
Date:	Q4 2020



725ERT7872 Power Section Specifications

Flow Range	500-800 GPM
Rev per Unit Volume	0.26 Rev/Gal
Speed Range	130-208 RPM
No Load Pressure Loss	238 psi
	POB
Max Rec Pressure	2,000 psi
Torque @ Max Pressure	20,914 ft-lbs
Stall Pressure	3,640 psi
Stall Torque	38,168 ft-lbs