



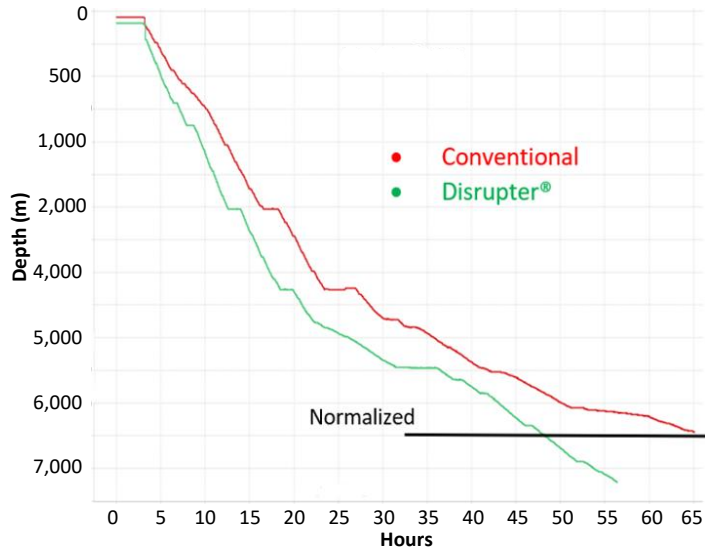
# Rotated Casing Case Study

## Disrupter® centralizers vs. Conventional centralizers



### Maximized Efficiency implementing the Disrupter®

- Both wells were run 1/jt from KOP – TD
- Circulated and rotated on both runs past 4,800m
- High torque/slim joint casing and stop collars used
- Disrupters® increased run speed by **42%**
- Disrupters® increased available HKLD at TD by **26%**
- Disrupters® run saved **17 hours** (normalized)
- Same pad, same rig



### Wellbore comparisons normalized @ 6,450m

Well	TD (m)	Lateral Length (m)	Tortuosity	HRS	Run Speed (m/hr)
Conventional	6,450	2,967	259.3	65.1	110.0
Disrupter®	6,450	3,012	279.5	47.76	156.7

### Wellbore comparisons to final TD

Well	TD (m)	Lateral Length (m)	Tortuosity	HRS	Run Speed (m/hr)
Conventional	6,450	2,967	259.3	65.1	110.0
Disrupter®	7,408	3,944	279.5	56.5	149.0

