



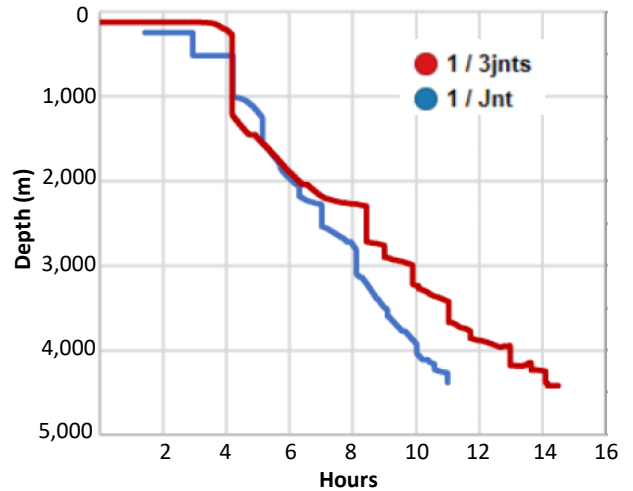
Disrupter® Placement Strategy Case Study



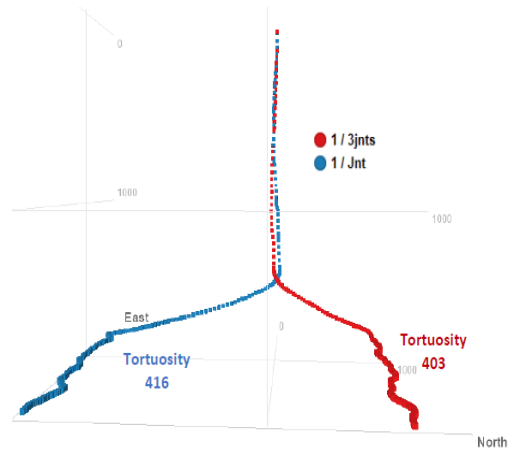
Disrupter® centralizers 1 per joint vs. 1 per 3 joints

Maximized Efficiency implementing the Disrupter®

- Disrupters® 1/jt increased run speed by **30%**
- Disrupters® 1/jt increased available HKLD at TD by **10%**
- Disrupters® reduced FF in open hole by **15%**
- Both runs floated in lateral, without rotation
- Both wells had a Tortuosity index over 400
- Same pad, same rig



Well	TD (m)	Lateral Length (m)	HRS	Run Speed (m/hr)
Well 1 1 per 3 jnts	4,281	2,483	13.63	353
Well 2 1 per jt	4,371	2,390	9.6	535



Reached TD in a more tortuous well, 30% faster and with more HKLD available at TD

