



In August, 2009 Questar asked us at SBT to invent and build a BiCenter Sub (BCS) that would drift through 6" and open a 6 1/2" hole up to 7". Our BCS was NOT built like a bicenter drill bit which has cutter geometry facing down hole...ours was based on cutter geometry that would be free to cut sideways into the hole wall.

This was run first with a conventional concentric reamer and finally with a purpose built concentric PDC reamer CRS.

This basic design is still being used by QEP both in LA and the Bakken. This combination could not be run while drilling, only on a dedicated reamer run.