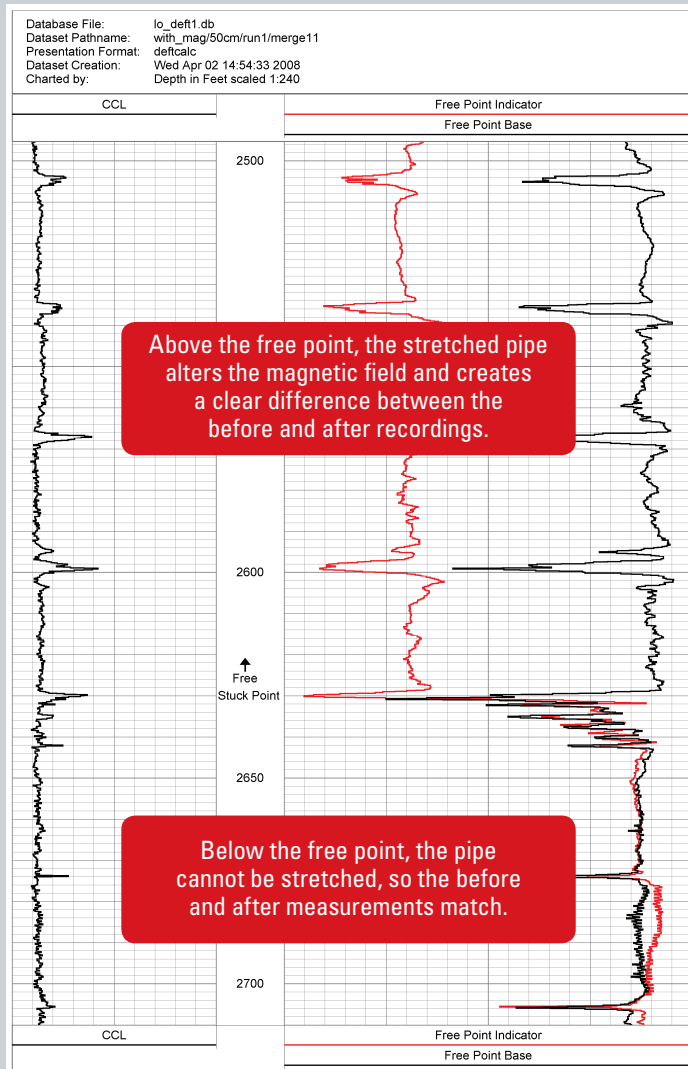


Revolutionary Advancement in Free-Point Determination

Halliburton Free Point Tool

Save time and money on pipe-recovery operations!



- ▶ Reduces rig time for stuck-point measurement
- ▶ Continuous log eliminates guesswork
- ▶ Improved wellsite HSE—does not require multiple stretch and/or torque applications

Halliburton Free-Point Tool (HFPT™) Technology

Global Efficiency Report 2010 – 2014:
Job Count / Efficiency – 681 / 96%

Gulf of Mexico Run History

	Minimum	Maximum
Depth	9,282 ft (2829 m)	27,710 ft (8446 m)
Deviation	0 degrees	65 degrees
BHP	3,122 psi	22,000 psi
BHT	140° F (60° C)	250° F (121° C)
Tubular	2.375-in. 4.7-lb wash pipe	Duoline 7-in. 32-lb
Fluid	8.6 SBM	16.0 WBM
Location	Shelf <1000 ft (305 m)	Ultra DW > 5000 ft (1,524 m)



Halliburton Free-Point Tool Success Stories

	Accurate Reading in Coated Pipe	Quick Decisions in Deviated Well	Superior Free-Point Technology
CHALLENGE	Operator made repeated unsuccessful attempts to obtain free-point reading in coated pipe with strain gauge free-point tool.	Drillpipe stuck in a 60 degree deviated open hole with several 10 degree doglegs and gas-cut mud around 12,500 ft.	Operator needed to identify free point in stuck pipe.
SOLUTION	Operator ran HFPT technology, which operates reliably in coated pipe with no strain gauge or bow springs.	HFPT technology with a single setting ran once through various drillpipe sizes and weights and accurately detected the free point.	Ran HFPT technology from 21,360 ft to 22,570 ft in just 16 minutes to locate free pipe.
RESULT	HFPT technology identified the free point quickly and safely. The pipe was then backed off at the drill collar.	Halliburton recommended a cut at 12,490 ft based on the HFPT log. Cut was successful, and pipe pulled free with little overpull.	Competitive “Wireless Pipe Recovery System” failed. Operator then called out HFPT technology, which quickly and accurately found free pipe at 21,685 ft.
VALUE	HFPT technology can locate the free point 50% faster, saving an estimated five hours of rig time.	HFPT technology provided a real-time log of detailed information for operator to select successful cut point, saving an estimated 15 hours of rig time.	Operator selected correct cut point, saving an estimated 10 hours of rig time.