



CASE HISTORY

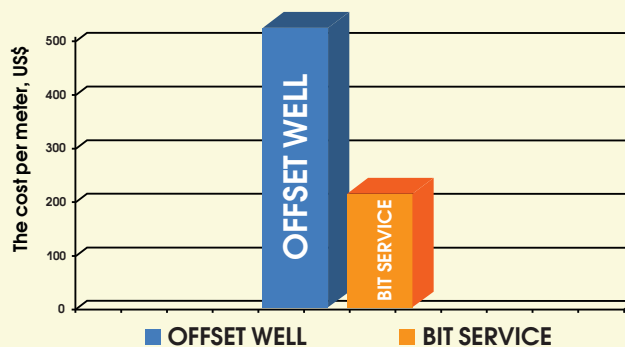
SAVINGS \$643,831.00 ON DRILLING 8 1/2" SECTION

Country:.....**Kazakhstan**
 Area:.....**Mangystau**
 Field:.....**West Zhetybai**
 Period...**January-February 2013**

8 1/2" Section	
OFFSET WELL	USES BIT SERVICE
Total bits used 9	Total bits used 4
Total bit runs 12	Total bit runs 5
Total interval 1894.7 m	Total interval 1968.9 m
Total drilling hours 812.4	Total drilling hours 280.7
Av. ROP 2.33 m/h	Av. ROP 7 m/h
Trip time for bit change 119 h*	Trip time for bit change 54 h*
Total hours 931.4	Total hours 334
Bit cost per meter US\$ 37.5	Bit cost per meter US\$ 33.0
Rig cost per hour US\$ 1000	Rig cost per hour US\$ 1000
Total cost per meter US\$ 529	Total cost per meter US\$ 202

RESULT: Total drilling savings on 8 1/2" well section is **US\$ 643,831.00**

8 1/2" section, cost per meter **OFFSET WELL = US\$ 529** and **BIT SERVICE = US\$ 202**



* - Trip time for change bit calculated according to depth and is not exact