



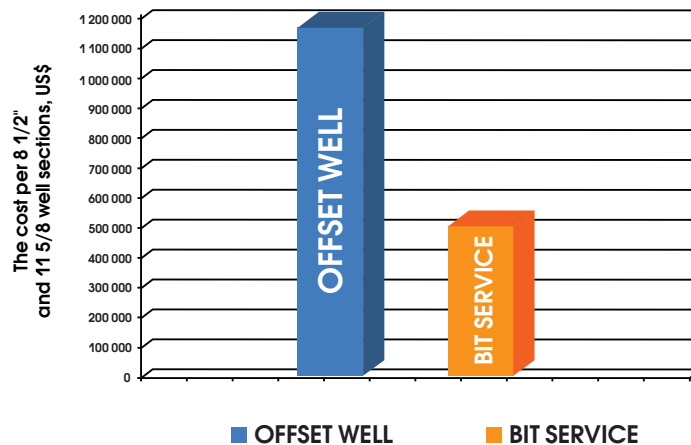
# CASE HISTORY

## SAVINGS \$669,449.7 ON BIT SERVICE WELL vs. OFFSET WELL

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

OFFSET WELL	USES BIT SERVICES
<b>DRILLED 8 1/2" AND 11 5/8" SECTION</b>	
Total bits used 11	Total bits used 5
Total bit runs 14	Total bit runs 6
Total intervals 2692 m	Total intervals 2742 m
Total drilling hours 880	Total drilling hours 324
Av. ROP 3.05 m/h	Av. ROP 8.46 m/h
Trip time for bit change 127 h*	Trip time for bit change 54 h*
Total hours 1007	Total hours 378
Bit cost per meter US\$ 37.5	Bit cost per meter US\$ 33.0
Rig cost per hour US\$ 1000	
<b>RESULT:</b> Total drilling savings on 8 1/2" and 11 5/8" well sections is <b>US\$ 669,449.7</b>	

**8 1/2" and 11 5/8" sections, drilling cost**



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