Please fill in the name of the event you are preparing this manuscript for.	2020 International Petroleum Technology Conference
Please fill in your 5-digit IPTC manuscript number.	IPTC-19679-Abstract
Please fill in your manuscript title.	Stuck Casing Wellhead Slips Due to Misalignment and Premature Cement Set - A Case History
Please fill in your author name(s) and company affiliation.	
Given Name Surna	ne Company
Mahmoud Mohamed K Omar	Saudi Aramco
Ahmad A. Al-Om	air Saudi Aramco
Ahmad A. Al-Om	ılr Saudi Aramco

Abstract

Objectives/Scope:

This paper aims to describe the planning, execution and results of a challenge which is stuck casing wellhead. This paper also shows the creative solution to overcome that challenge. This case study will detail how overcoming of the challenge of stuck casing slips in the wellhead. The main reason of stuck slips is due to misalignment and premature cement set around non-centered casing. The solution is a unique process and an enabler of setting casing slips again to avoid losing metal to metal seal isolation. This approach provides an effective and efficient cost saving method without losing to the well integrity.

Methods, Procedures, Process:

The problem of non-centered casing happens due to main reason which is rig alignment. The challenge becomes more complex if the cement sets quickly around the non-centered casing, which precludes setting the casing slips after nippling down the BOP. To overcome this challenge, the wellhead company fabricated and keep stock of a special adjustable donut spool with specified dimensions. With this spool ready at rig location, breaded head spool (BHS) is cut, and welded to the donut spool. The casing is moved until getting the inner casing fully centered in the BHS. At this position, the donut spool is welded to the surface casing and the casing slips are set.

Results, Observations, Conclusions:

This simple yet effective method was applied to few wells having non-centered and/or the misaligned casing. This allowed this Middle East operator to avoid the consequences of compromising the well integrity by losing an important metal to metal seal barrier, which is a mandatory well control requirement. Eliminating this barrier may result in communication of the undesired formation fluids to surface if the cement sheath deteriorates with time, potentially having a big impact on the environment. By using this method, it ensures the well integrity and avoid all these risks.

Novel/Additive Information:

The adjustable donut spool provides an effective solution to the challenge of non-centered casing and the consequence of not able to set the casing slips, which may lead to loss of well integrity.