



## MALAYSIA, CONOCO PHILLIPS

TUR CENTRALIZERS PULLED THROUGH A FMC SUB-MUDLINE RECEPTACLE WITH NO ISSUES

<b>Region:</b>	Asia Pacific
<b>Location:</b>	Off the Niger Delta

<b>Country:</b>	Malaysia
<b>Field:</b>	BOC-23 AB

### THE CHALLENGE

A vertical (2 degree) well with a depth of 1,110 in Malaysia. A FMC sub-mudline receptacle with a restriction of 17.183" was in the 20" casing at ~920m.

### THE SOLUTION

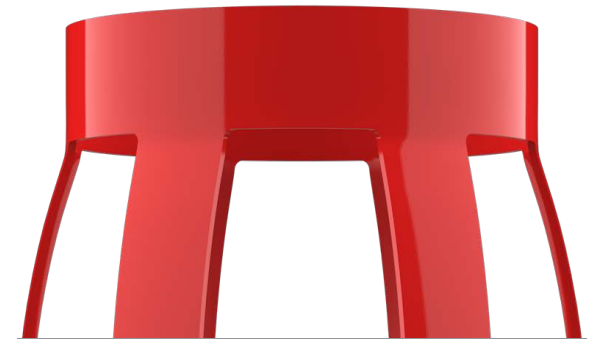
The customer ran 600m of 16" liner with 1 Centek TUR 16" x 20" centralizer per 4 joints in open hole (based on inclinations <1deg). No issues were observed running the centralizers through the wellhead and the SML hanger restriction. Unfortunately, a problem was encountered when landing the SML hanger in the receptacle and the liner had to be pulled. The customer encountered no problems pulling the centralizers back through the restriction and was able to re-run them through the restriction and into the hole

### THE RESULT

The liner was not pulled back far enough to verify the condition of any of the centralizers and stop collars but there was no Centek equipment bunched up underneath the hanger proving that all centralizer equipment stayed in place and worked as intended.

“ Again, Centek equipment has shown itself to be well-suited to a difficult application ”

**Luke Morris, Conoco Phillips**



### TUR Under-ream single piece centralizer

- Proven tool for under-reamed sections
- Dramatically reduced initial insertion forces into previous casing
- Reduces restart force on RIH
- Reduced running force and drag, saves rig time on RIH
- Non-welded smooth bow profile overall
- Integral bow design for increased strength and performance
- Zero weak points
- Minimum rotational torque losses
- Minimize stall out effect
- Enhanced rotation due to optimized centralization

EXCELLENCE TO THE CORE