



# GRAND VALLEY, ROCKIES

INCREASING THE NUMBER OF CENTRALIZERS PER JOINT CAN DRAMATICALLY IMPROVE ROTATION AT TOTAL DEPTH

<b>Region:</b>	Rockies
<b>Location:</b>	WPX GM 701-4 HN1

<b>Country:</b>	USA
<b>Field:</b>	Grand Valley

## THE CHALLENGE

To successfully rotate the liner while cementing in the horizontal section using 5 1/2" casing in an unfriendly drilled manner for casing running with mud issues.

## THE SOLUTION

Centek's centralizer programme recommended more centralizers on the liner with 3 centralizers per 2 joints to ensure:

- A high stand-off ratio
- Casing was centralized
- Reduced torque
- Casing sag was minimized.

## THE RESULT

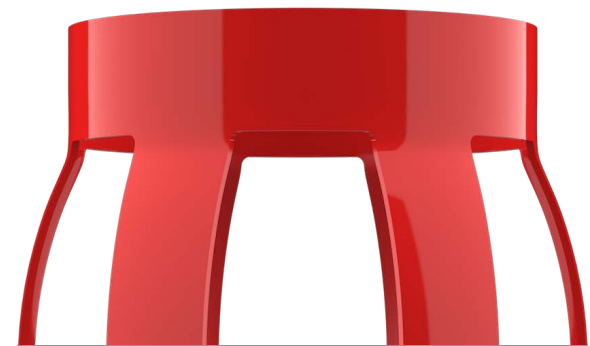
Although there were unrelated mud issues to resolve that had a big impact on casing running

for the first well, the casing was successfully rotated at 60rpm when on bottom at 16,676ft.



“ It was like having ball bearings in the hole! ”

Comment from Operator Engineer



## S2 Award Winning Innovation

- Designed for well applications and geometries for vertical, horizontal ERD, close tolerance, or under reamed well conditions
- API Rated
- Non-welded smooth bow profile overall
- Integral bow design for increased strength and performance
- Zero weak points
- Zero start and running force with exceptional restoring force
- Low friction coefficient
- Minimum rotational torque losses
- Minimize stall out effect
- Enhanced rotation due to optimized centralization

EXCELLENCE TO THE CORE