

## FDIR PLACEMENT VS MWD PLACEMENT

Production is impacted when surveys are not corrected.

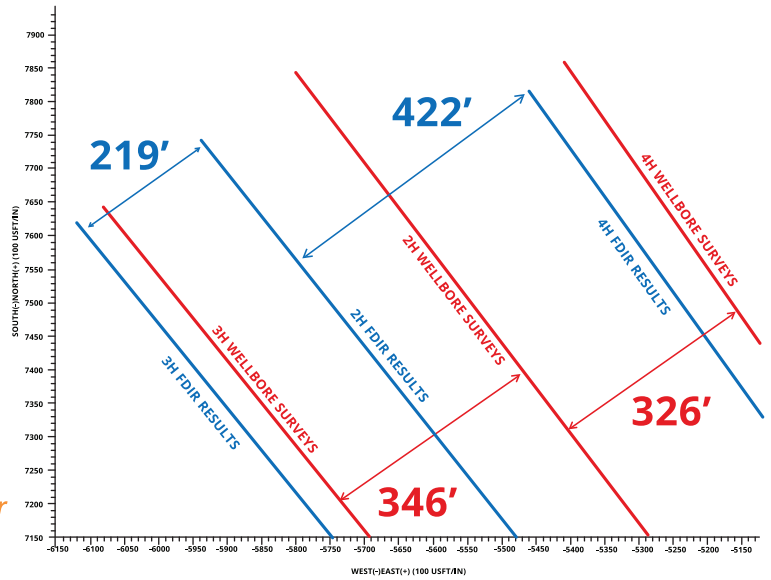
Real Time Wells were uncorrected and fell within Industry Standard Field Acceptance Criteria.

Post Well Analysis corrections identified the final well positions that explains production losses from the Pad

WELL NAME	% OF FORECASTED 1ST MONTH PRODUCTION
4H (RIGHT)	125%
2H (MIDDLE)	55%
3H (LEFT)	110%

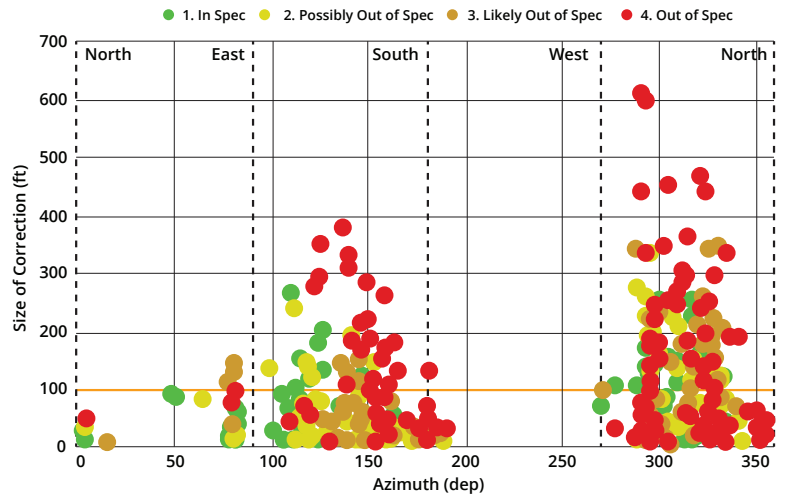
→ 127' Spacing Error

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## SIZE OF CORRECTION VS AZIMUTH

This 600 well Eagle Ford study of Size of Correction vs Azimuth revealed that 34% of the wells have a correction greater than 100'. Note that the above well which had 127' of corrections had a noticeable production loss. The study also revealed that over 40% of the wells, shown with red dots, had MWD surveys with at least one of the 27 possible errors out of spec with ISCWSA Error Models. This would indicate that your EOU might be inaccurate.



## FDIR IS THE ANSWER

FDIR (Fault Detection, Isolation and Recovery) is the industry leading automated survey correction software.

**REDUCES AVERAGE EOU\* 51% AND CORRECTS SURVEY ERRORS UP TO 600' REAL TIME.**

\*Ellipse of Uncertainty