

Mission Accomplished?

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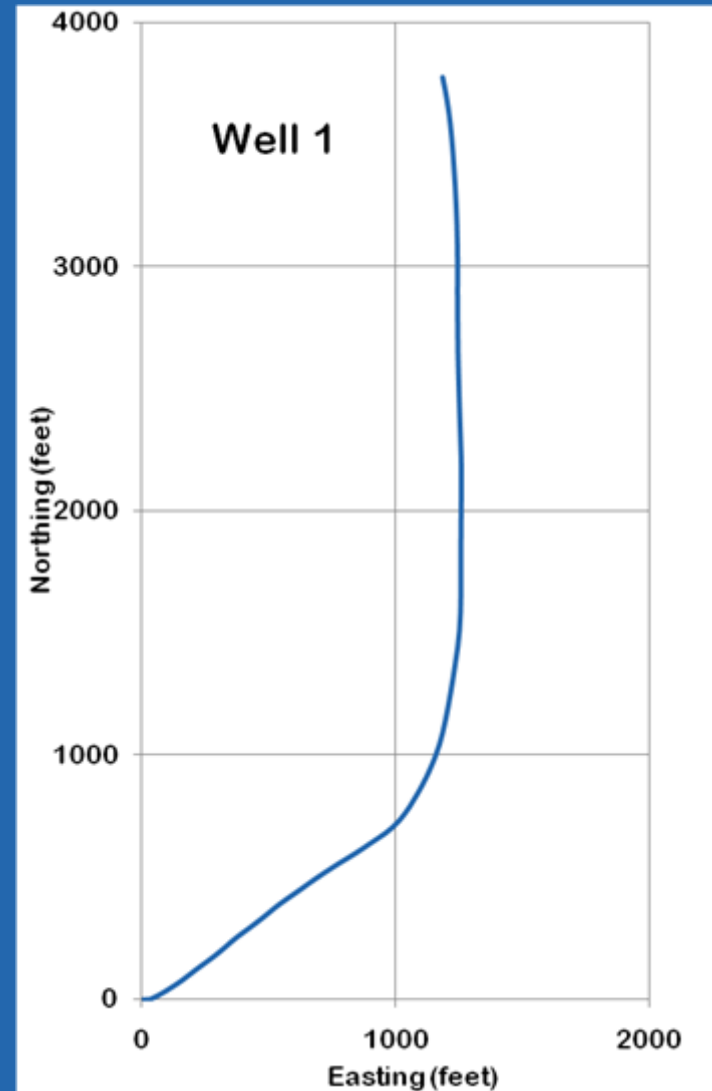
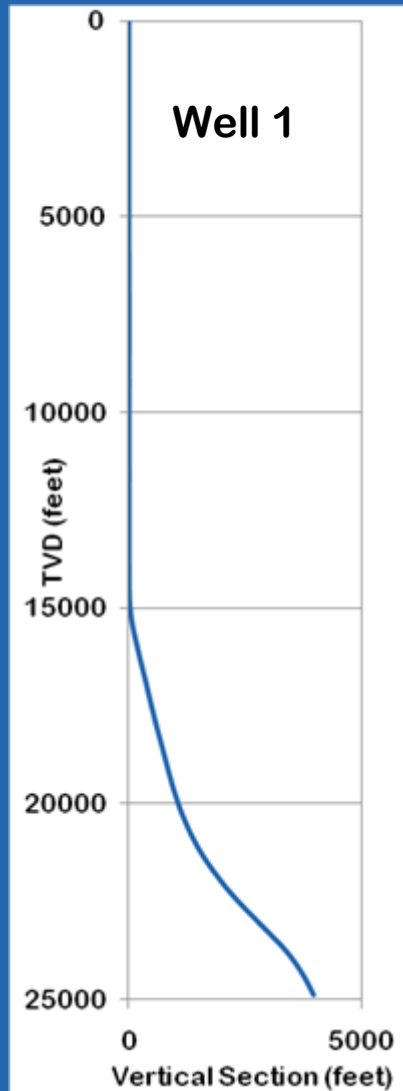
Legacy Statements

- The primary aim of this group is **to produce and maintain standards** for the industry relating to wellbore survey accuracy
- To set standards for terminology and accuracy specifications. Establish a standard framework for modeling and validation of tool performance. Raise awareness & understanding of wellbore survey accuracy issues across the industry.

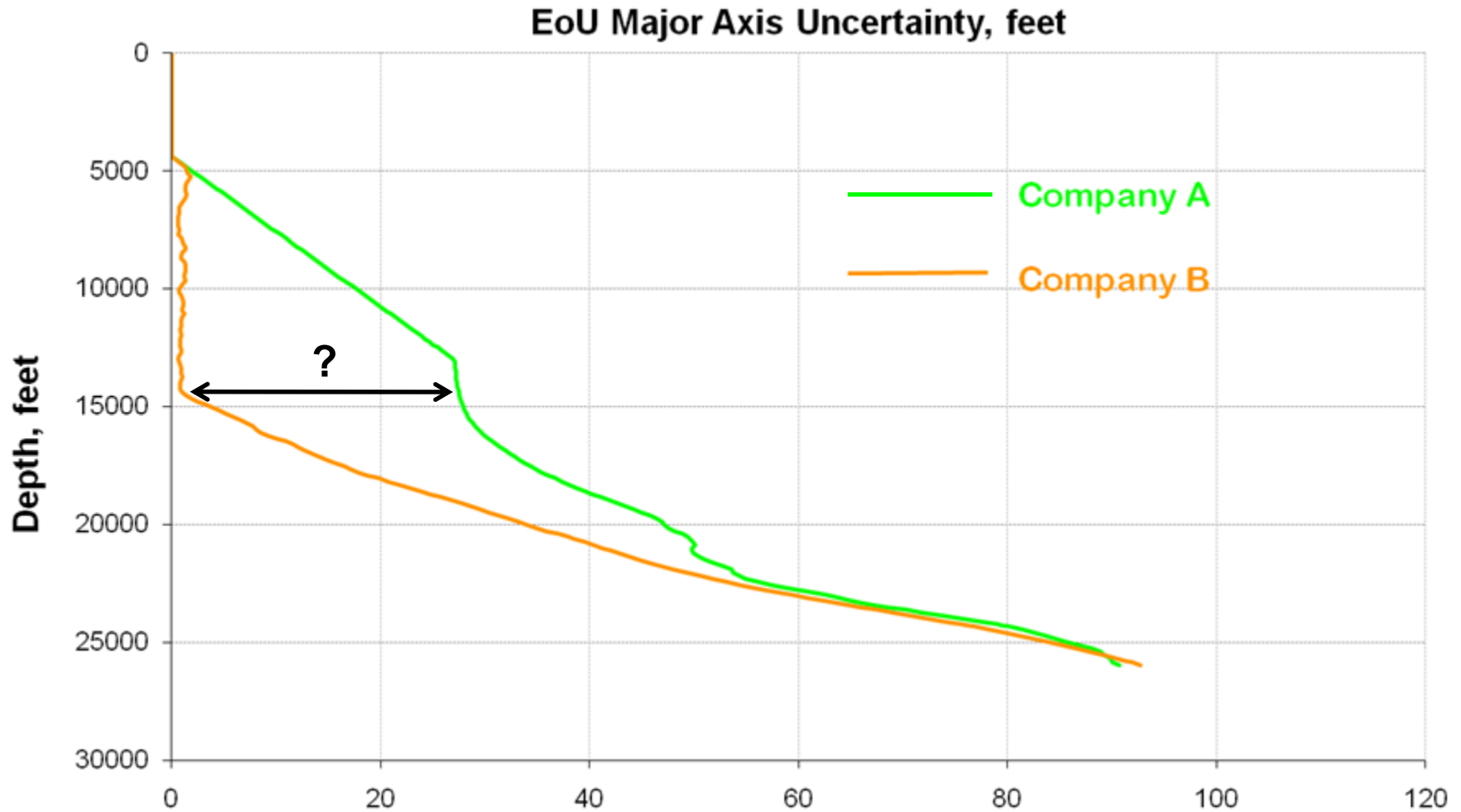
Flashback

- Position uncertainty is of critical importance for collision avoidance
- SPE-WPTS formed to promote consistency
- Have we achieved consistency ?

Wellpath: vertical to 15000 ft



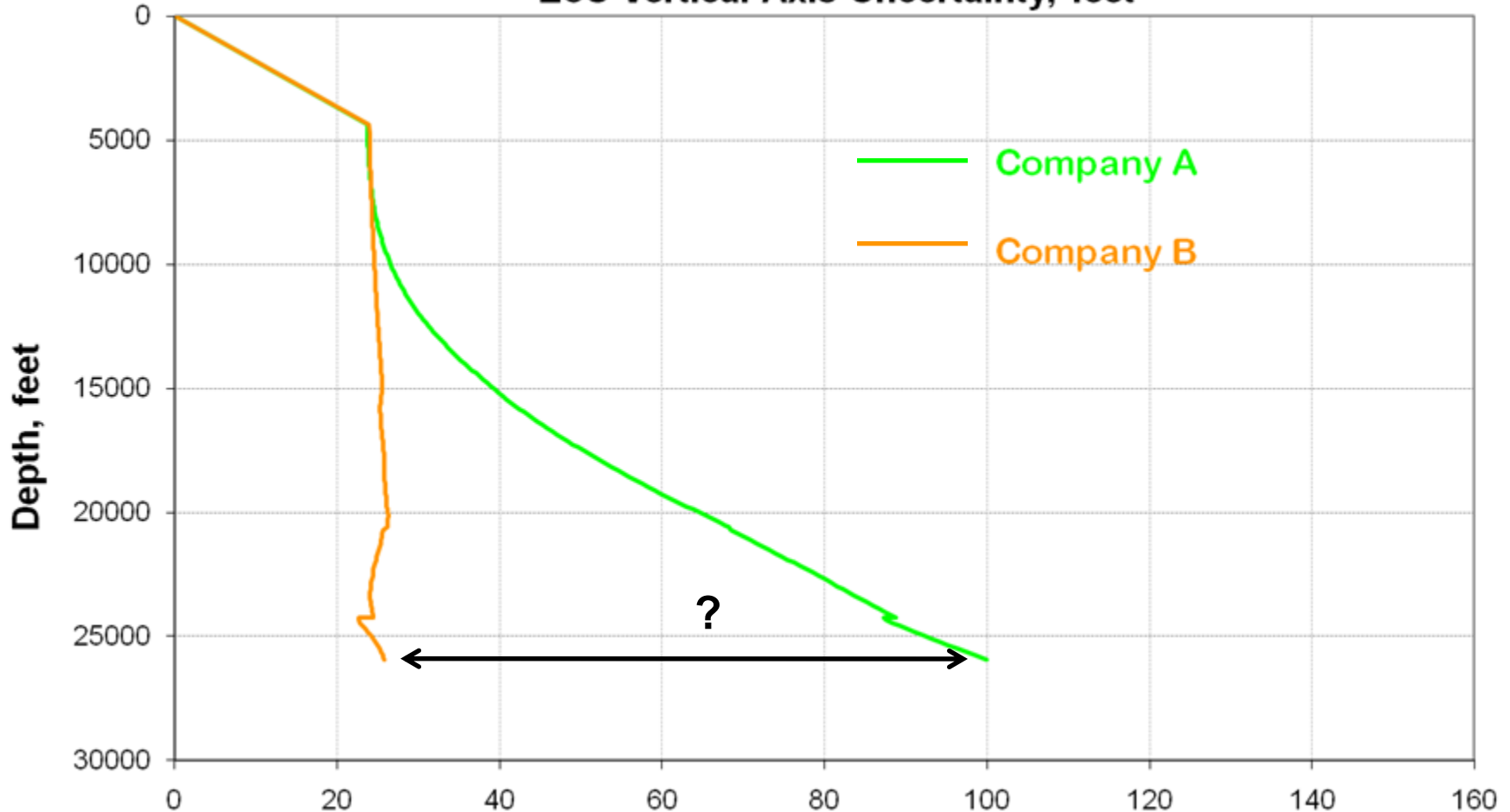
Cause for concern



SPE-WPTS MWD error model

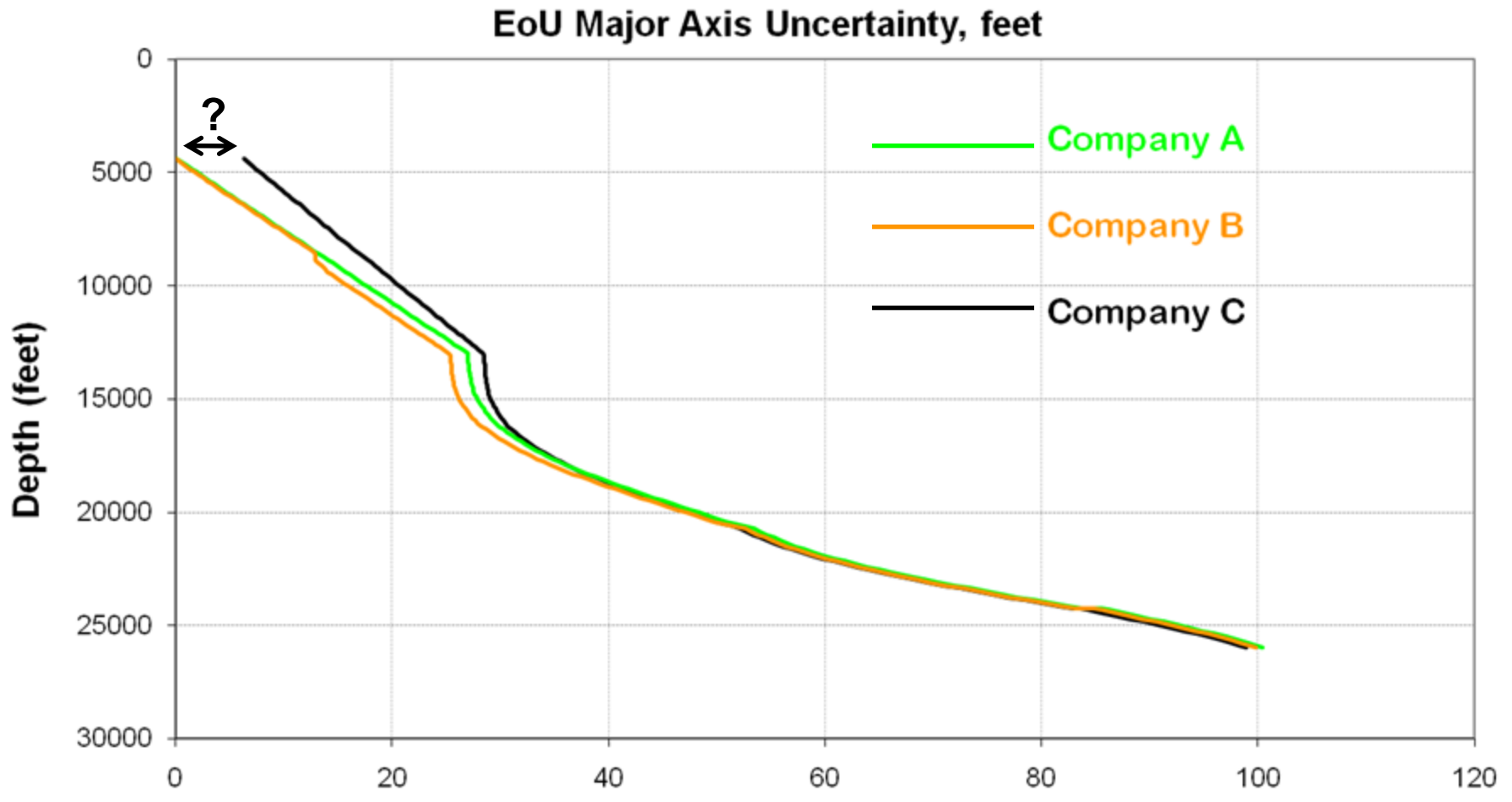
Cause for concern

EoU Vertical Axis Uncertainty, feet



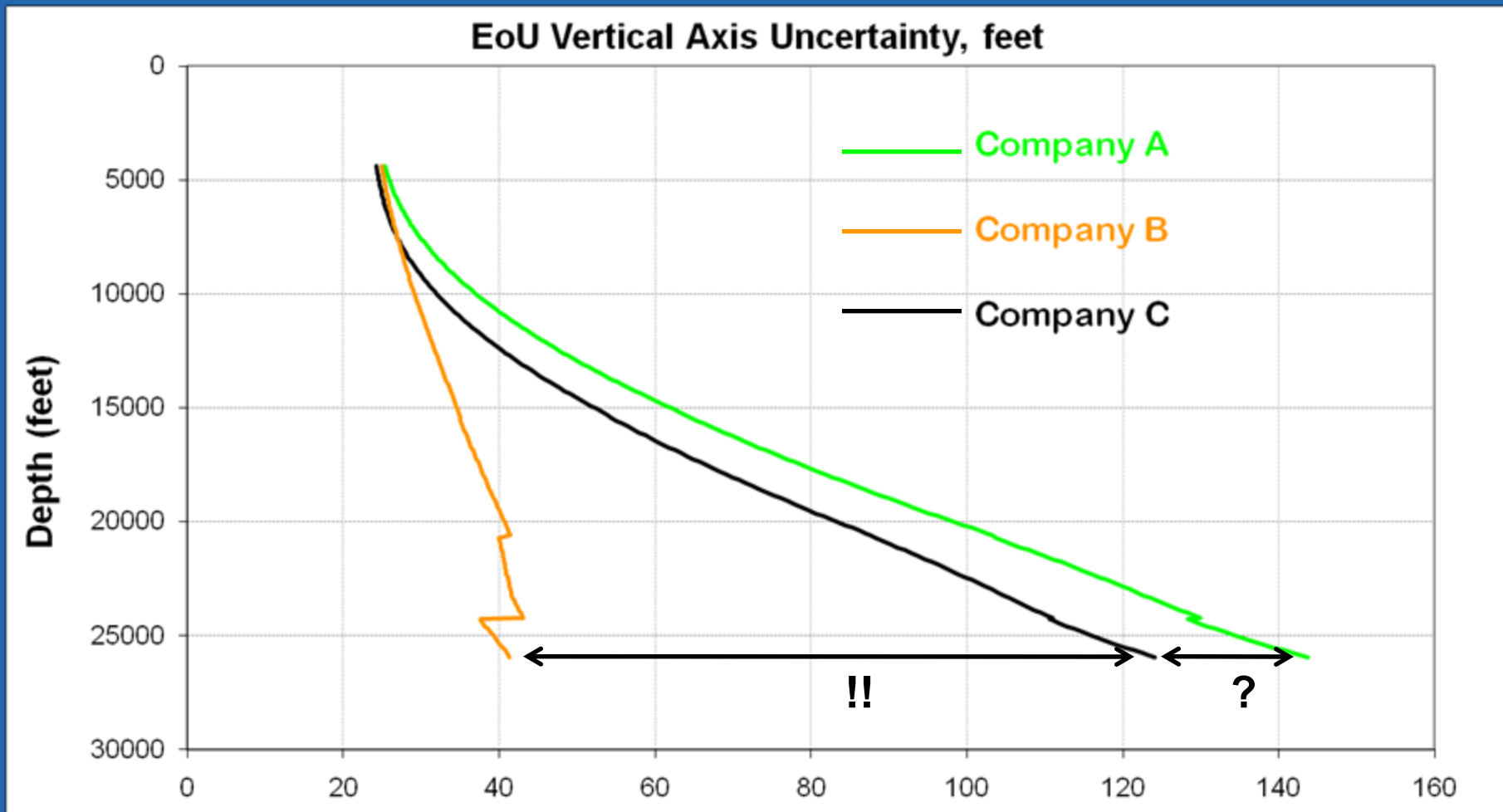
SPE-WPTS MWD error model

Comparison (1)



SPE-WPTS MWD Rev.2, 3σ , N-E-V, sag corrected

Comparison (2)



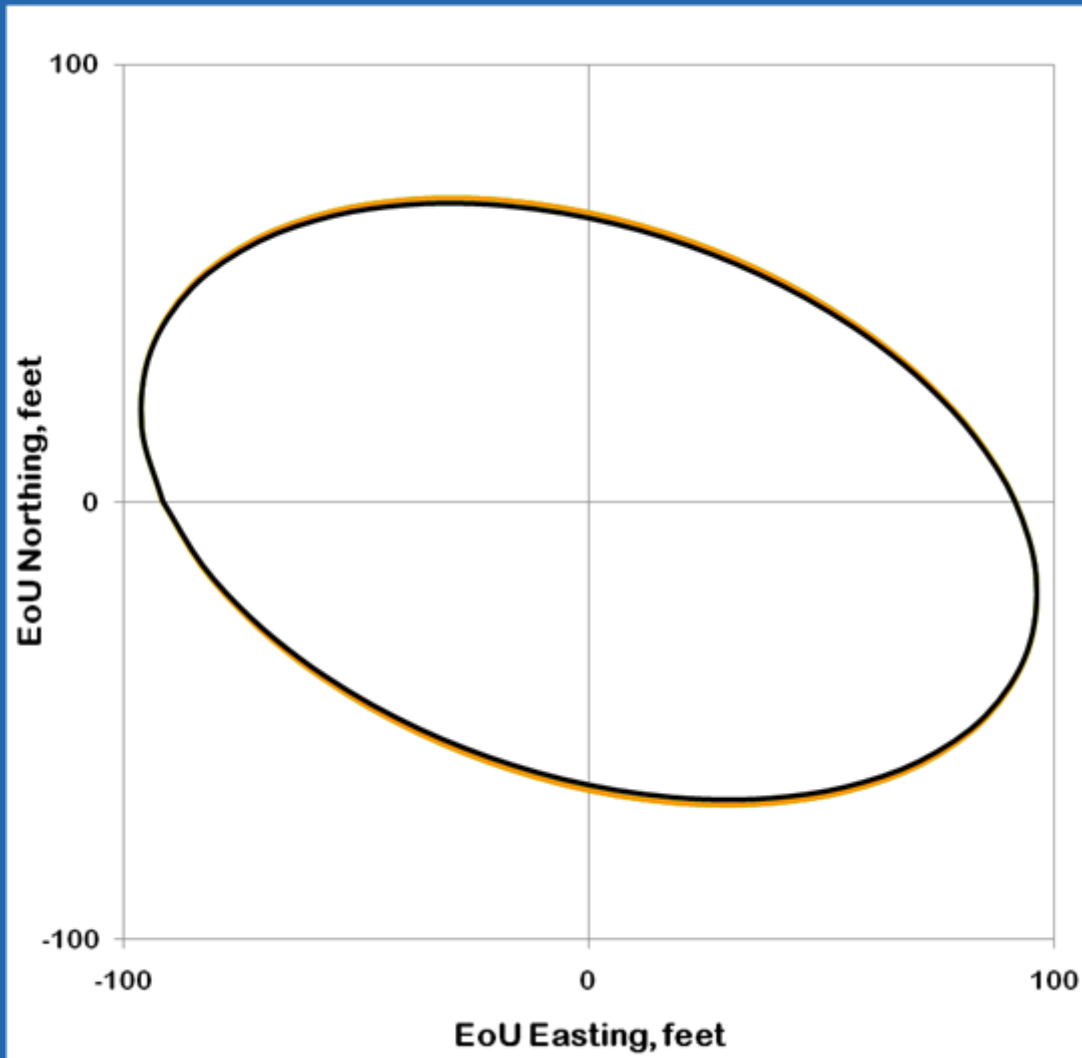
SPE-WPTS MWD Rev.2, 3σ , N-E-V, sag corrected

Reporting Inconsistencies

- Different model versions
- Different coordinate systems
- Different confidence levels



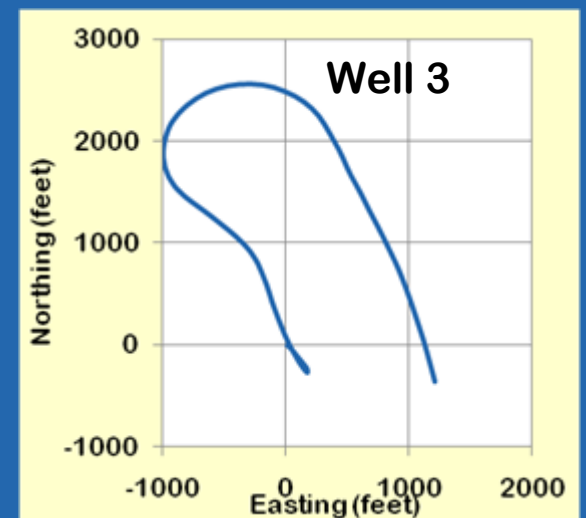
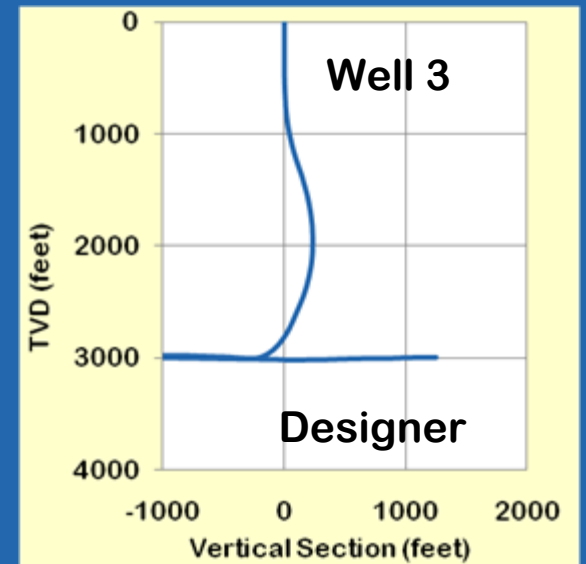
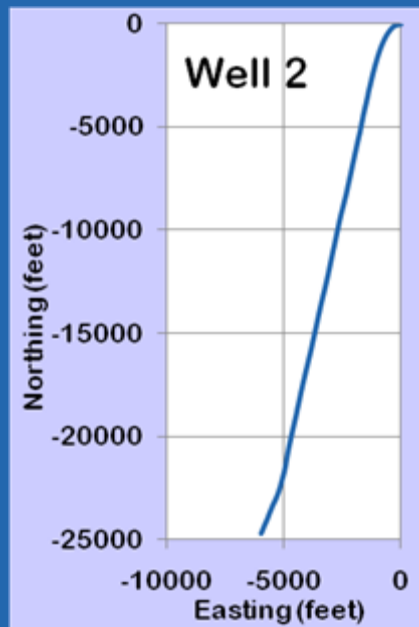
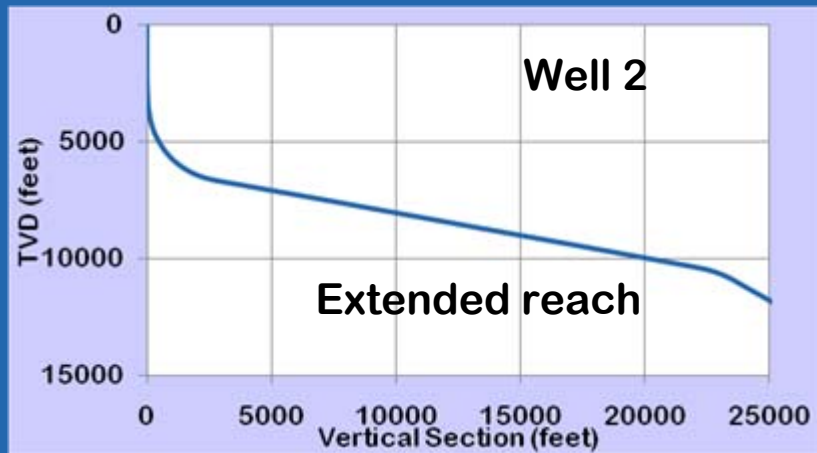
EoU at TD



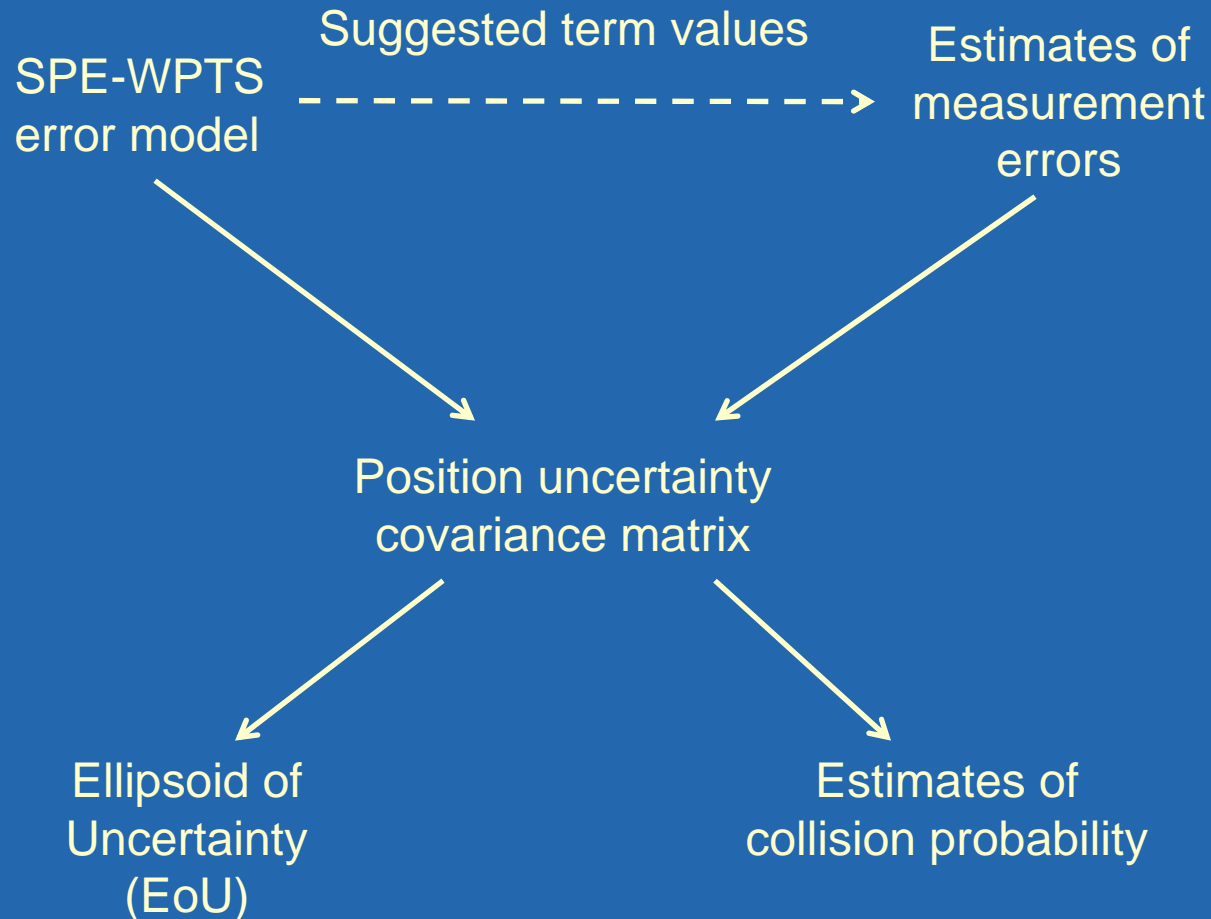
— Company A
— Company B
— Company C

SPE-WPTS Rev.2, 3σ , N-E-V, grid north, BGGM, floating installation, sag corrected, symmetric, no surface location uncertainty, errors start at seafloor, tied on at 12965', 20590', and 24236'.

Additional wellpaths tested



Application of error model



Discussion

- Minor implementation differences
- The SPE-WPTS model only provides a framework
- Results can be extremely sensitive to the terms and parameters chosen
- SPE 140183

Conclusions

- Where do we go from here? It's been over 15 years!
- Is standardization still part of our mission? Perhaps, a little more emphasis on implementation!
- Is it time for recommendations?



Thank you!

