



ANTI-COLLISION SERVICES

WHY ANTI-COLLISION NOW?

Technology limits of directional survey tools

- Magnetic tools vs. Gyroscopic tools

Pad drilling – has become “normal” on US land

- Dependent on SHL placement relative to lateral placement

Legacy Wells

- Vertical wells; S-wells; old existing wells need to be accounted for

Horizontal Wells

- Reservoir specific horizontals

Anti-Collision, Separation Factor monitoring & Survey Correction is done at rig site

When required, our well planners prepare anti-collision, ellipse of uncertainty, and torque & drag analysis reports.

- ISCWSA Error Model is our Standard
- 2 sigma confidence level (2σ)
- Use 3D Closest Approach scan method
- Ensure all surveys are assigned the appropriate IPM