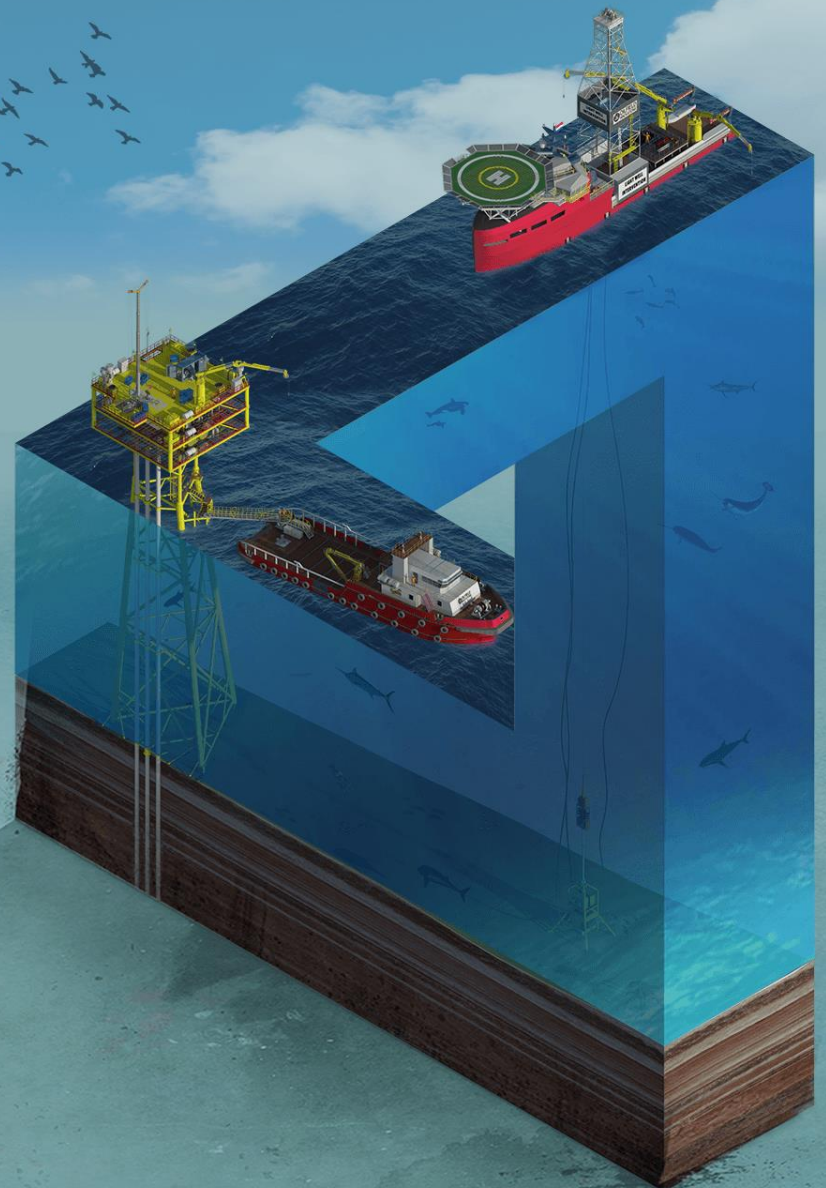




*SAFER LOWER COST
ENVIRONMENTALLY RESPONSIBLE
RIGLESS WELL ABANDONMENT*

*THANKS TO THE WORK OF:
Oil and Gas Technology Centre
Oil and Gas Innovation Centre
HireTech Limited and the
University of Glasgow*

*WITH DONATIONS OF:
UK Government (Taxpayers)
Spirit Energy (Centrica)
Chrysaor (ConocoPhillips UK)
EnQuest*



OFFSHORE WELL P&A



KEEP CALM

Its not Rocket Science;
Its putting cement into
a Hole-in-the-Ground.

**OGTC / OGIC
STATED FUNDED
PROJECTS
W/ UNIVERSITY
OF GLASGOW**

**CUT
HERE**



**PUSH
HERE**



**PUT
CEMENT
HERE**

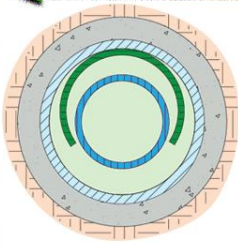


BEFORE

AFTER



RIGLESS OPTION



"Push" One Pipe into Another?

4-6 PEOPLE

NO PIPE HANDLING

NO "NORM" RISKS

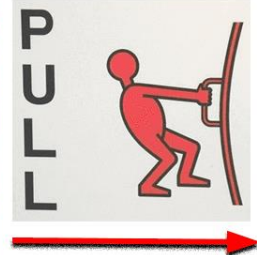
LOW COST

"Pull" ALL the pipe out of the Hole?

40-60 PEOPLE

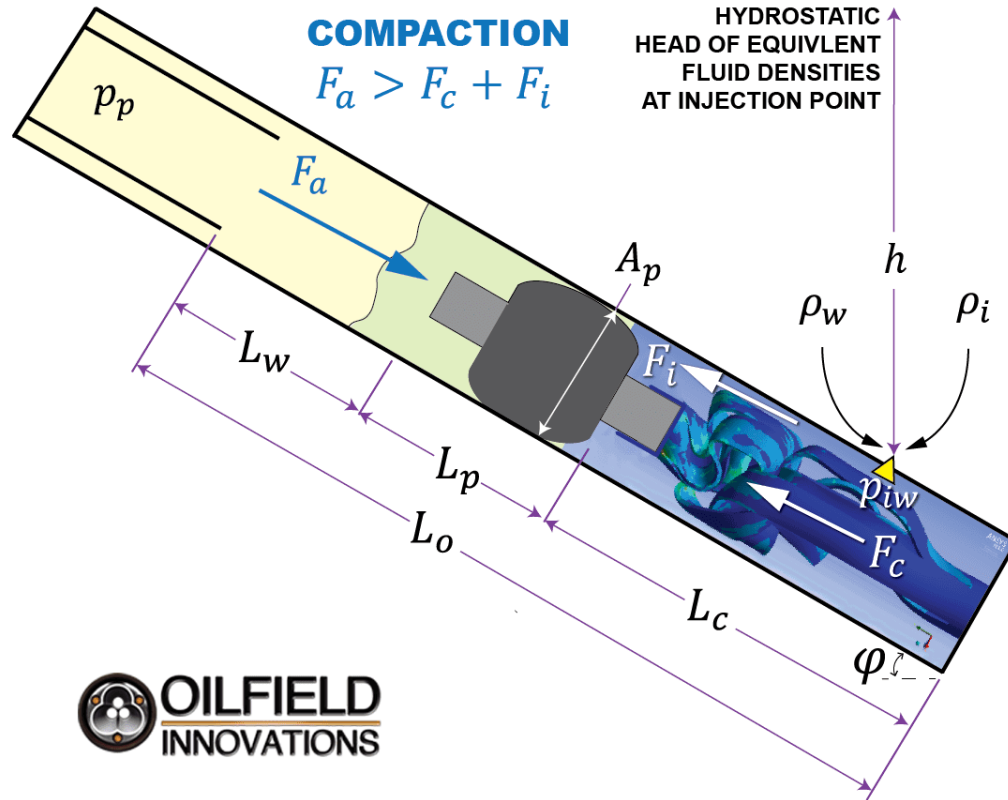
ALL PIPE HANDLING

**LARGE "NORM" RISKS
HIGH COST**



RIG OPTION





1. Cut Tubing
2. Inflate Piston, Pump to Compact
3. Log Casing Cement, Pump Cement





**FULL SCALE NORTH SEA TUBING COMPACTION
USING A RUBBER CEMENT WIPER PLUG**



**FUNCTIONAL 5 1/2" 17-PPF L80 13CR TUBING RETRIEVED FROM A WELL
BY A RIG AND... SUBSEQUENTLY CRUSHED BY A CEMENT WIPER PLUG**