


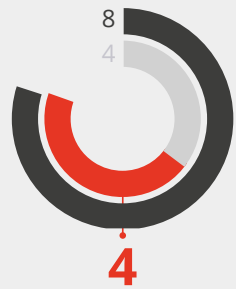


ONE TOOL BOX, A DAY OF SAVINGS.

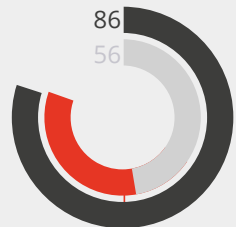
New service approach saves operator time and money.



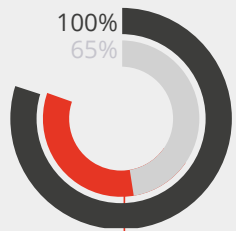
Industry Standard 
 Ardyne Operation 
 Customer Savings 



TRIPS SAVED



HOURS SAVED



EFFICIENCY GAIN

The Operation

Ardyne's unique casing recovery toolbox was mobilised for expert, late-life asset and decommissioning operator, Fairfield in order to improve their project efficiencies - saving more than a day of rig time.

Planned operations to achieve a rock to rock barrier included cutting and recovering 9 5/8" & 13 3/8" casing.

Using conventional technology it was expected that the project would be a 3.5 day operation. However, Ardyne's Casing Recovery Toolbox saved 35% rig time, and over a day of time and cost savings.

The Challenge

Fairfield wanted to engage with an oilfield services company that could use innovative and forward thinking technology to actively drive best practice in decommissioning.

The Solution

Ardyne's Casing Recovery Toolbox incorporates a full suite of services and bottom hole assembly (BHA) systems that, combined with the team's decades of operational expertise, has resulted in the best downhole BHA systems for well abandonment, slot recovery and workover solutions.

The Result

- 1.5 hours saved on 9 5/8" section
- 3.2 hours saved on 13 3/8" casing recovery
- 24.5 hours saved on 13 3/8" short piece
- Improved efficiencies of 35%



Tools L-R - Downhole Power Tool (DHPT), TRIDENT System, FRM Spear Loading basket for shipment

FAIRFIELD RECOGNISED THAT TREATING CASING RECOVERY AS A NICHE SERVICE COULD RESULT IN BIG SAVINGS

ONE TOOL BOX, A DAY OF SAVINGS.

New service approach saves operator time and money.



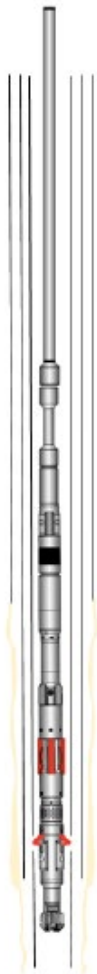
TRIDENT System 9 5/8" Casing Recovery



9.5%
EFFICIENCY GAIN

Steps

- Single Trip
- Cut at 3 255ft
 - Lifted casing 4 ft and verified free
 - Release and pulled back to hanger
 - Set TRIDENT in 10 3/4 and circulate fluid annulus
 - Pulled from hanger



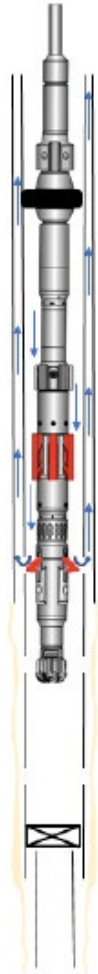
TRIDENT System 13 3/8" Casing Recovery



15.5%
EFFICIENCY GAIN

Steps

- Single Trip
- Cut at 2 400ft
 - Attempt to pull - no go
 - Cut at 2 275ft
 - Attempted to pull from depth - no go
 - Cut at 1 938ft
 - Verified free from depth
 - Pull from hanger
 - Circulate annulus
 - Recover casing



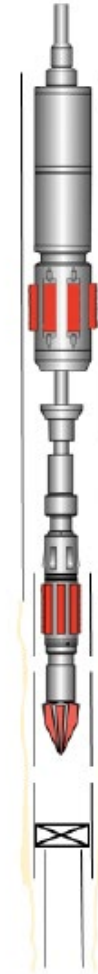
DHPT & FRM 13 3/8" Short Piece



50%
EFFICIENCY GAIN

Steps

- Single Trip
- Attempted to pull casing from 1 938ft to 2 275ft in open hole
 - Activated Down Hole Power Tool and pulled free with 3 strokes and 625k lbs
 - Recover casing



Rock to Rock Barrier in place



30
HOURS SAVED

- Total Operation
- 28 hours in front of plan

