

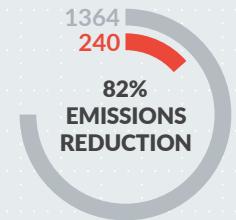
# Rubblizer™ Saves 456 Hours Rig Time.

Within the Chinese offshore P&A and Slot Recovery market, the Rubblizer™ tool was run for a 4th time. Successful completion of all four runs since July this year has saved the operator 19 days rig time, completing the operations in a total of just 4 days compared to the 23 days it would have taken conventional pilot or section milling operations. This has helped reduce time in the red zone and multiple BHA handling requirements.



## IN NUMBERS

Conventional Technology  
Rubblizer™



**1,126MT LESS CO2 EMITTED**

The Rubblizer™ reduced 1,126MT of CO2 emissions, helping operator towards their net zero targets.

### THE CHALLENGE

In one of their largest fields, a major Chinese Operator underwent a slot recovery project in June 2022.

Rig operational limits on overpull and cement located behind casing made the attempt at pulling casing challenging. If the operator was unable to recover casing the contingency option was to pilot mill down to the required depth from surface. To avoid this the Rubblizer™ was mobilised.

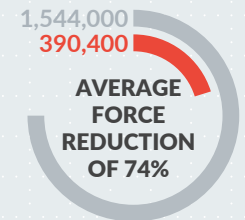
### THE SOLUTION

Across all four runs the Rubblizer™ was utilised to break the cement sheath and bond, allowing longer sections of casing to be recovered whilst reducing the force required to recover these sections of casing.

Using the Rubblizer™ meant that the operational pull force limits, set by the company representative, were not exceeded during the casing recovery process, enabling casing on deck after each run.

### THE RESULT

Job	Section Rubblized	Force Reduction
1	524 ft	90% - 297 Klbs
2	636 ft	59% - 207 Klbs
3	213 ft	70% - 326 Klbs
4	393 ft	80% - 355 Klbs



**1,153,600 LBS LESS FORCE**

Average force reduction of 74% in pull force required for the recovery of sections across all four projects.

### Rubblizer™ Saves 456 Hours Rig Time



### Casing Not Requiring Milling

