Thirlwall Drive, Fordham





DRY

WELL

RESULTS

 Complete elimination of ragging incidents once DERAGGER[®] anti-ragging device installed.

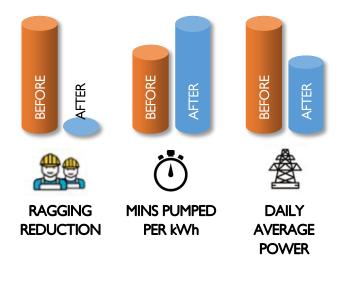
2 PUMPS

(c.5.5kW)

- Reduction in Average running current (Amps down from 13.28 to 9.0) and Average running power (kW down from 5.4 to 3.37)
- Minutes pumped per kWh went up from 15.7 without the DERAGGER[®], to 20.11 with DERAGGER[®].

CONCLUSION

- Despite heavy ragging issues, the DERAGGER[®] was able to detect and alleviate ragging issues in Pump 1 – there were zero blockage trips once the DERAGGER[®] was activated.
- Due to the DERAGGER[®]'s real-time ragging detection, which detects and addresses blockages before they are able to form, the pump was able to operate unimpeded by any form of blockage – this led to substantial energy reductions (an increase in Minutes pumped per kWh, and a reduction in Daily Average Power).



Data gathered by Clearwater Controls during dates specified, in collaboration with Anglian Water.

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INTRODUCTION

- Dry well with 2 pumps. Normal operating conditions are duty stand-by.
- DERAGGER[®] anti-ragging device installed on Pump 1.
- Benchmark data was collected from 19 Sep 2017 to 17 Dec 2017.
- Anti-ragging was switched on from 19 Dec 2017 to 22 Mar 2018.

INCREASE IN MINUTES PUMPED PER KWH WITH DERAGGER®: 28%

REDUCTION IN DAILY AVERAGE POWER WITH DERAGGER®: 37%

"We were really pleased with the DERAGGER[®]'s ability to both eliminate blockages and save significant energy. We found it easy to install and commission" Gordon M Anderson MIET, Maintenance Support Technician, Anglian Water Thirlwall Drive, Fordham

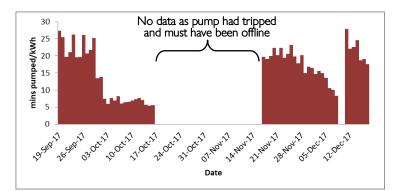
DETAILED RESULTS AND DATA

BEFORE DERAGGER®:

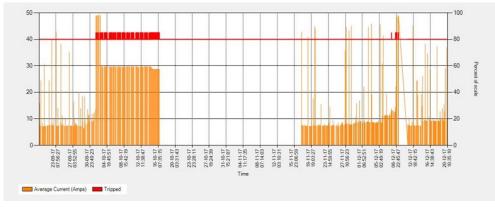
Average running current (A)	13.28
Average running power (kW)	5.4
Total energy consumed (kWh)	249
Pump runtime in minutes per kWh	15.7

🏓 Minutes pumped per kWh before DERAGGER®. 🔿

Current (Amps) & Trips before DERAGGER[®].



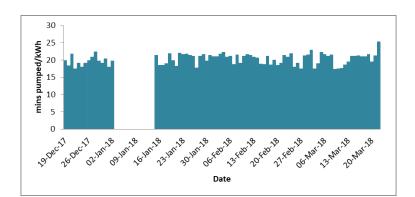
DERAGGER

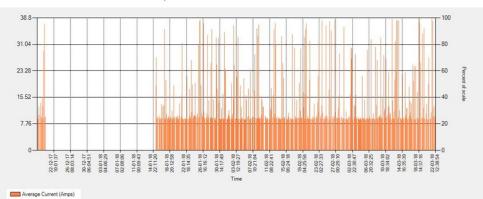


AFTER DERAGGER®:

Average running current (A)	9
Average running power (kW)	3.37
Total energy consumed (kWh)	369
Pump runtime in minutes per kWh	20.11

- Minutes pumped per kWh with DERAGGER[®] anti-ragging switched on.
- Current during period (Amps) with DERAGGER[®] anti-ragging switched on.





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