ILONA ROSE HOUSE

CLIENT G-CORE LIMITED | DURATION 2.5 MONTHS | VALUE £325,000

PROJECT INVOLVEMENT

DRILLING OF DEEP CHALK WELLS, CARRYING OUR WELL DEVELOPMENT AND ACIDISATION, UNDERTAKING PUMPING TESTS

INTRODUCTION

In 2017, Project Dewatering Limited (PDL) were chosen by ground source energy experts G-Core Limited as their specialist sub-contractor to drill and install an array of deep open-loop boreholes on a congested central London construction site. The borehole will be integrated into a system providing renewable heating and cooling for a mixed-use development of shops, offices and restaurants.

THE WORKS

Project Dewatering used reverse circulation drilling to successfully complete 4 No. 185 m deep chalk wells. Permanent steel casing of 340 mm diameter was installed and sealed into the top of the Chalk aquifer at depth of approximately 65m. The boreholes were designed with an extended open-hole section through the competent Chalk in order to maximise the vertical separation of abstracted and re-injected groundwater and mitigate the risk of thermal breakthrough where borehole were closely spaced on this compact site. The airlift reverse circulation drilling was critical to ensuring a clean and stable bore into which the permanent casing was installed, in addition to guaranteeing effective removal of drilling cuttings at depth without requiring large drilling pumps. Our experience with this drilling methodology, working in busy London construction sites and the availability of specialist instrumented RC drilling rigs and tooling within our parent company group, gave the client and consultant the confidence that a high quality finished wells could be installed within the site constraints.





MONITOR | CONTROL EXTRACT