OPEN-LOOP CHALK WELLS

CLIENT CONFIDENTIAL DURATION 3 MONTHS VALUE £350,000

PROJECT INVOLVEMENT

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

INTRODUCTION

In 2016, Project Dewatering Limited (PDL) were appointed by the client to install and test new Chalk wells as part of a open-loop ground source heating and cooling system for the a prestigious development in central London. The system is designed to provide renewable heating and cooling to the property using circulated water from the Chalk aquifer of the London Basin.

THE WORKS

Project Dewatering drilled 4 No. 130 m deep chalk wells using reverse circulation techniques at 500 mm diameter. A permanent steel casing of 320 mm diameter was installed and sealed into the top of the Chalk aquifer at depth of approximately 80 m, with the remainder of the borehole left as an open-hole section through the competent Chalk. The reverse circulation drilling ensured both increased borehole stability during drilling and improved cuttings removal leading to a better developed final product.



Each well was acidised by our specialist borehole development crew by the controlled injection of 5 tonnes of hydrochloric acid into the sealed borehole. A programme of airlift development and intermittent development pumping was carried out to ensure the wells met strict criteria, specifically that the abstracted water would have a low fouling potential when passed through a plate heat exchanger and then re-injected back to the aquifer. A pumping test regime included individual step tests, constant rate tests and abstraction-recharge testing on multiple wells.



EXTRACT MONITOR CONTROL

Call us now on **01473 658807** or email us at **enquiries@project-dewatering.co.uk**

www.project-dewatering.co.uk