



BOREHOLE REFURBISHMENT & REMEDIATION

EXPERTLY CONSTRUCTED, DEVELOPED AND COMMISSIONED BOREHOLES CAN PROVIDE MANY YEARS OF UNINTERRUPTED SERVICE. HOWEVER, JUST LIKE ANY OTHER CONSTRUCTION, OCCASIONAL REFURBISHMENT MAY BE REQUIRED.

IT IS IMPORTANT TO MONITOR YOUR BOREHOLE PERFORMANCE TO ENSURE THAT ANY REDUCTION IN THE AMOUNT OF WATER DELIVERED OR INCREASING PUMPING COSTS ARE NOTED. IF EITHER OF THESE SITUATIONS ARISE, IT IS LIKELY THAT YOUR BOREHOLE NEEDS REFURBISHING.

WHEN WATER IS TRAVELLING THROUGH THE AQUIFER TO THE PUMP, IT CAN CARRY FINE SEDIMENT AND DISSOLVED MINERALS THAT EVENTUALLY BUILD UP AND BLOCK THE SCREEN. NATURALLY OCCURRING ELEMENTS SUCH AS IRON BACTERIA, IF PRESENT, WILL EVENTUALLY BLOCK INFLOW OF WATER. ALTERNATIVELY THE PROBLEM COULD BE AS SIMPLE AS A WORN SUBMERSIBLE PUMP.



BOREHOLE ENGINEERING SERVICES

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IF A BOREHOLE IS SUSPECTED OF MALFUNCTION, CALL BOREHOLE ENGINEERING SERVICES.

ENGINEERS FROM BOREHOLE ENGINEERING SERVICES, A DIVISION OF DRILCORP LTD, ARE EXPERTS IN BOREHOLE REMEDIATION AND WILL INVESTIGATE THE PROBLEM AND RECOMMEND A SOLUTION. THIS COULD INVOLVE CHEMICAL TREATMENT, SCRUBBING OF THE BOREHOLE WALLS, GAS INJECTION, OR MAY BE AS SIMPLE AS REPLACING A WORN PUMP.

BES WILL ALSO ADVISE ON ANY REFURBISHMENT REQUIRED TO BRING A DISUSED BOREHOLE BACK INTO PRODUCTION.

SUCCESSFUL BOREHOLE REFURBISHMENT BRINGS BOREHOLE BACK INTO SERVICE

A LARGE COMMERCIAL BOREHOLE HAD STARTED YIELDING LESS WATER AND WAS USING MORE POWER TO PUMP THE WATER TO THE SURFACE PLANT. THE OWNER OF THE BREWERY WHICH THE BOREHOLE SUPPLIED COMMISSIONED BOREHOLE ENGINEERING SERVICES, A DIVISION OF DRILCORP TO CARRY OUT A SURVEY OF THE BOREHOLE TO FIND OUT THE PROBLEM.

THE SUBMERSIBLE PUMP AND RISING MAIN WERE REMOVED WITH A MOBILE CRANE AND IT WAS IMMEDIATELY OBVIOUS BY THE THICK RED SLUDGE ON THE REMOVED PARTS THAT THE BOREHOLE HAD A PROBLEM WITH A BUILD-UP OF IRON BACTERIA. A SUBSEQUENT CCTV SURVEY SHOWED THAT THE SCREEN HAD BLOCKED WITH SLUDGE WHICH WAS PARTIALLY BLOCKING THE INFLOW OF GROUNDWATER. WHEN THE PUMP WAS RUNNING, IT WAS DRAWING THE WATER LEVEL DOWN, REDUCING THE EFFICIENCY OF THE PUMP WHICH HAD TO WORK HARDER TO PUSH WATER OUT TO THE SURFACE AND THEREFORE USING MORE POWER.

A DETAILED REMEDIATION PROGRAMME WAS PUT TO THE CLIENT WHO READILY ACCEPTED THE PROPOSAL. THE BOREHOLE WAS ESSENTIAL FOR HIS BUSINESS.

WORKS INVOLVED SCRUBBING THE BOREHOLE THROUGHOUT WITH A WIRE BRUSH CONNECTED TO A DRILL RIG. THE BOREHOLE WAS THEN TREATED WITH AN IRON REMOVAL CHEMICAL. ALL LOOSENED DEBRIS WAS THEN REMOVED FROM THE BOREHOLE WITH AN AIR LIFT EDUCATOR.

A CCTV SURVEY SHOWED THAT THE BOREHOLE WAS NOW BACK LOOKING 'AS NEW' WITH A PERFECTLY CLEAN SCREEN WHICH WOULD ALLOW THE FREE FLOW OF GROUNDWATER. THE BOREHOLE WAS THEN SANITISED WITH HYPOCHLORITE. THE PUMP AND RISING MAIN WERE SCRUPULOUSLY CLEANED OF ANY TRACES OF IRON BACTERIA BEFORE REPLACING IN THE BOREHOLE.

THE CLIENT WAS DELIGHTED TO FIND THAT HIS BOREHOLE WAS PUMPING MORE WATER AT A REDUCED COST.

BOREHOLES ARE OUR BUSINESS